



Filed by:
Michael Austin, Site Development Specialist II - SBA Communications
134 Flanders Rd., Suite 125, Westborough, MA 01581
508.251.0720 x 3807 - Maustin@sbsite.com

September 21, 2022

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

Notice of Exempt Modification
60 Rice Lane, Beacon Falls, CT 06403
Latitude : 41.455689
Longitude : -73.039866
T-Mobile #: CT11299D_Anchor

Dear Ms. Bachman:

T-Mobile currently maintains eleven (11) antennas at the 142-foot level of the existing 160-foot Monopole Tower at 60 Rice Lane in Beacon Falls, CT. The tower is owned by SBA Properties. The property is owned by Charles Edwards. T-Mobile plans to remove (3) three 1900/2100 MHz antennas and replace with (3) three new 2500MHz antennas install one (1) 2500 MHz antenna for a total of twelve (12) antennas.

The new antennas would support 5G services and would be installed at the 142-foot level of the tower.

Planned Modifications:

TOWER

Remove:

- N/A

Remove and Replace:

- (3) Ericsson AIR21 B2A/B4P (Remove) – (3) Ericsson AIR6419 B41 2500 MHz Antenna (Replace)
- (3) 1-5/8" Coax (Remove) – (2) 1.9" Fiber (Replace)



Install New:

- (1) Ericsson AIR6419 B41 2500 MHz Antenna
- (3) Ericsson Radio 4460 B25 +B66 RRUs
- (3) Modified T-Arms w/Handrail & Kickers

Existing Equipment to Remain:

- (1) Ericsson Radio 4415 B66A RRU
- (4) Ericsson Radio 4449 B71+B12 RRUs
- (3) Ericsson KRY 112 144/1 TMAs
- (4) Ericsson AIR32 KRD901146-1-B66_B2A 1900/2100 MHz antennas
- (3) Ericsson RFS APXVAARR24_43-U-NA20 600/700 MHz antennas
- (1) Ericsson RFS APXVAARR18_43-U-NA20 600/700 MHz antenna
- Platform w/Handrail and V-brace @ 142'
- (7) 1-5/8" Coax
- (2) 1-5/8" Fiber
- (2) 1-1/4" Fiber

Entitlements:

- (4) 1-5/8" Coax
- (2) 1-1/4" fiber

GROUND

Install New:

- Equipment inside existing 6131 cabinet
- (2) Ericsson B160 Battery Cabinet

Existing Equipment to Remain:

- (1) 1/2" Coax for GPS antenna
- (1) RBS 6131 Equipment cabinet

This facility was approved by the Town of Beacon Falls' Planning & Zoning Commission during their Regular Meeting of December 16, 1999. Approval was given for a monopole tower. The fire department was to be given space for their 12' whip antennas at 80' above ground level for zero compensation. SBA was additionally to cover the cost of the whip antenna, cabling and installation. Easement materials were to be filed and a Performance Bond set. There were no post construction stipulations made. 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 Beacon Falls' First Selectman, Christopher Bielik, and Zoning Enforcement Officer, Mike Mormile, as well as to the property owner. (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,

Michael Austin
Site Development Specialist II
SBA COMMUNICATIONS CORPORATION
134 Flanders Rd., Suite 125
Westborough, MA 01581
508.251.0720 x3804 + T
508.366.2610 + F
443.367.8100 + C
MAustin@sbsite.com

Attachments

- cc: First Selectman Christopher Bielik / with attachments
Town of Beacon Falls, 10 Maple Ave., Beacon Falls, CT 06403
Mike Mormile, Zoning Enforcement Officer / with attachments
Town of Beacon Falls, 10 Maple Ave., Beacon Falls, CT 06403
Charles Edwards / with attachments
30 Lorraine Drive, Beacon Falls, CT 06403



Exhibit List

Exhibit 1	Check Copy	tbd
Exhibit 2	Notification Receipts	X
Exhibit 3	Property Card	X
Exhibit 4	Property Map	X
Exhibit 5	Original Zoning Approval	Town of Beacon Falls P&Z Commission 12/16/99
Exhibit 6	Construction Drawings	Chappell Engineering 7/12/22
Exhibit 7	Structural Analysis	TES 7/18/2022
Exhibit 8	Post-Mod Mount Analysis	TES 7/18/2022
Exhibit 9	Mount Mod Drawings	TES 1/4/2021
Exhibit 10	EME Report	EBI Consulting 8/11/2022

EXHIBIT 1

EXHIBIT 2

ORIGIN ID:BBFA (508) 768-7960
JOHN MORRISON
134 FLANDERS
SUITE 125
WESTBOROUGH MA 01581
UNITED STATES US

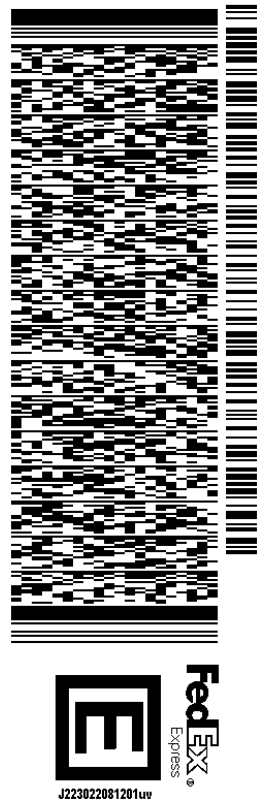
SHIP DATE: 23SEP22
ACTWGST: 1.00 LB
CAD: 255382542INNET4530

BILL SENDER

TO **MIKE MORMILE**

**TOWN OF BEACON FALLS
ZONING ENFORCEMENT OFFICER
BEACON CT 06403**

REF: 10-56-92009-6089
(443) 367-8100
INV#
PO: CT11299D DEPT:



TRK# 7700 2077 4086
#0201
MON - 26 SEP 4:30P
STANDARD OVERNIGHT

XE BNHA
06403
CT-US BDL

- 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 Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ORIGIN ID:BBFA (508) 768-7960
JOHN MORRISON

134 FLANDERS
SUITE 125
WESTBOROUGH MA 01581
UNITED STATES US

SHIP DATE: 23SEP22
ACTWGST: 1.00 LB
CAD: 255382542INET4530

BILL SENDER

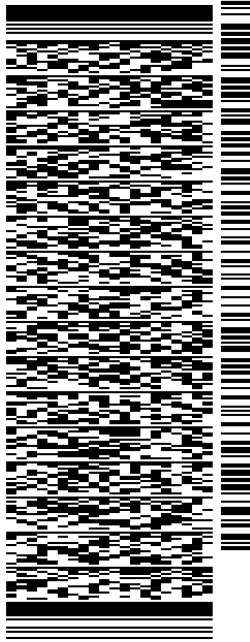
TO CHRISTOPHER BIELIK

TOWN OF BEACON FALLS

FIRST SELECTMAN

BEACON FALLS CT 06403

(443) 367-8100 REF: 10-56-92009-6089
INV/ PO: CT11299D DEPT:

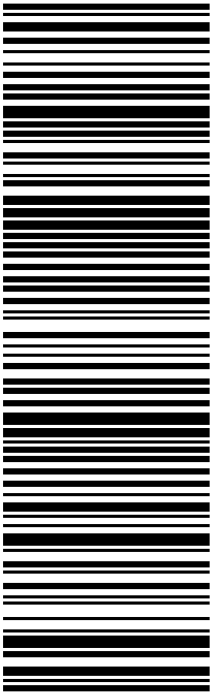


TRK# 7700 2082 3776
0201

MON - 26 SEP 4:30P
STANDARD OVERNIGHT

XE BNHA

06403
CT-US BDL



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 Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

ORIGIN ID:BBFA (508) 768-7960
JOHN MORRISON

134 FLANDERS
SUITE 125
WESTBOROUGH MA 01581
UNITED STATES US

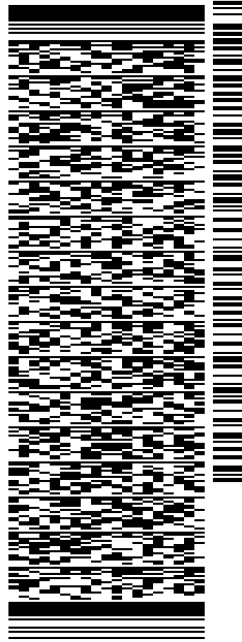
SHIP DATE: 23SEP22
ACTWGST: 1.00 LB
CAD: 255382542INET4530
BILL SENDER

TO **CHARLES EDWARDS**

30 LORRAINE DRIVE

BEACON FALLS CT 06403

(443) 367-8100 REF: 10-56-92009-6089
INV/ PO: CT11299D DEPT:



J223022081201uv

581J1/EC8C/FE2D

TRK# 7700 2086 4695
0201

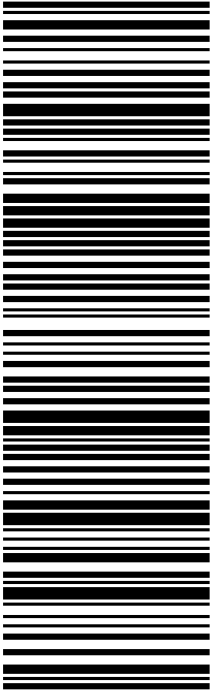
MON - 26 SEP 8:00P
STANDARD OVERNIGHT

RES

06403

CT-US BDL

XE BNHA



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 Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

EXHIBIT 3

EDWARDS CHARLES
 30 LORRAINE DRIVE
 BEACON FALLS, CT 06403
 Census: 3411

Transfer of Ownership

Owner	Consideration	Transfer Date	Deed Type	Deed Book/Page
EDWARDS	0	08/29/2002		131 14 & 30
NA	0	05/25/1999		112 411

Neighborhood Number

I

Neighborhood Name
 East Side

TAXING DISTRICT INFORMATION

Jurisdiction Name BEACON FALLS
 Area 006
 Routing Number 017-002-0002

Valuation Record

Site Description

Topography
 Public Utilities
 Street or Road
 Neighborhood
 Legal Acres:

Assessment Year								
Reason for Change	2006 Reval		2011 Reval	2016 Reval				
2016 Market	348520	348520	259360	202480				
	0	0	0	0				
	348520	348520	259360	202480				
70% Assessed	78170	78170	48160	81070				
	0	0	0	0				
	78170	78170	48160	81070				

Land Type

Primary Commercial
 Res Excess Acres
 PA490 Forest

Land Size
 Frontage
 Effective Frontage

0.5200
 49.2400
 49.2400

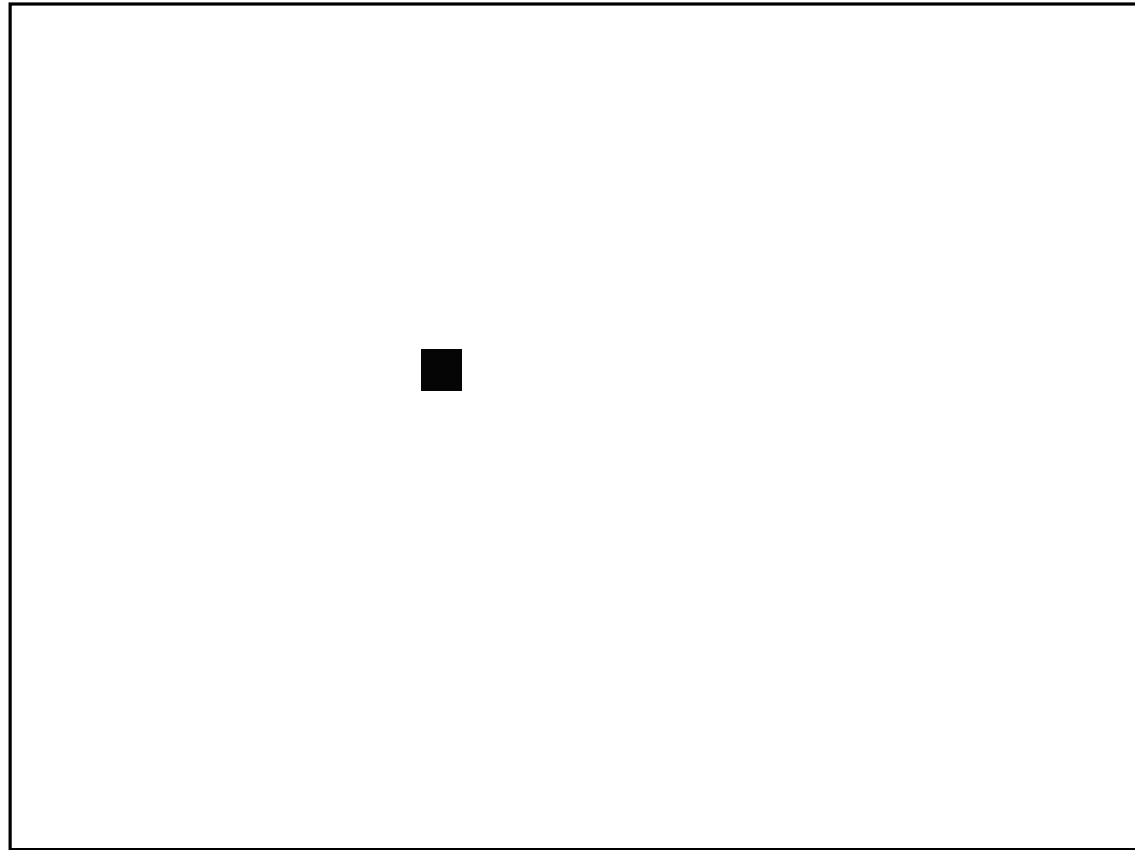
Square Feet
 Effective

U 100%

Influence Factor

Physical Characteristics

Empty box for Physical Characteristics.



Special Features

Description

Empty box for Special Features Description.

Summary of Improvements

ID

USE

01

TOWERMON

[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	A	[REDACTED]	[REDACTED]
------------	------------	------------	------------	---	------------	------------

EXHIBIT 4

8

0002
49.76Ac

@)

0001
21.57Ac



EXHIBIT 5

TOWN OF BEACON FALLS
Planning and Zoning Commission
10 Main Street
Beacon Falls CT 06403

DEC 20 1999
3:40 PM
Paula D. Balazs

**Regular Meeting
December 16, 1999
Minutes**

Subject to Modification - Prior to Approval

I. Call to Order

Chairman Harvey called the Regular Meeting of the Beacon Falls Planning and Zoning Commission to order at 11:30 PM in the Public Meeting Room.

Chairman Harvey received the Regular Meeting at 11:31 PM to commence the Public Hearing,

present: Chairman Mary Harvey, Commissioner Evan Bena, David Moran, Donald Porkl and Lynn Sirowich

Absent: Commissioner David D'Amico, Miss Schultz and William Ambrosini.

Chairman Harvey reconvened the Regular Meeting at 11:55 PM

II. Approval of Minutes

November 18, 1999 Public Hearing Application P-99-86, Frank Kmki
Correction: Page 1, Commissioner Sirowich - 1101 present at the meeting,

Motion: Commissioner Moran made a motion seconded by Commissioner Perlina that was approved as submitted the revised minutes of the November 18, 1999 Public Hearing. All voted in favor of the motion - **carried 5-0.**

November 18, 1999 Regular Meeting

Correction: Page 1, Section 1 should reflect that the motion was carried 5-0.

Motion: Commissioner Perlans made a motion seconded by Commissioner Betts to approve as submitted the revised minutes of the November 18, 1999 meeting. All voted in favor and the motion was **carried 5-0.**

III. Correspondence and Payment of Bills

Correspondence and Payment of Bills was handled at the January 21, 1999 meeting.

IV. Comments from the Public

There were no comments from the Public.

V. Zoning Enforcement Officer's Report

Zoning Enforcement Officer's report was not presented and no report was submitted.

VI. Town Administration Report

Beacon Falls

SITE# 12(-C)Q'3.
FILETYPE k\? N\ IVf
SECTION y0 >1
CV 1

C

Town Engineer's Report dated Dec. 16, 1999 and J'Oliewood activity
penalizing to the Stop & Shop Development

L. Town Engineer's Report (Continued)

Motion: Commissioner [unclear] made a motion seconded by Commissioner Sirowich to approve and include the Town Engineer's Report in the minutes... All voted, in favor, the motion carried 5-0.

JJ. Grava!
No Activity, no discussion

Madon: Commissioner Perkins, made a motion to add to the [unclear] and [unclear] Old 811 11th Sprint Application [unclear] and Douglas Crossley [unclear] /16. Seconded by Commissioner Btaa.

nn. Old 110ab1eu1

1. Application P-94-30, Hockanum Glen - S11bdvi,ic,n (Monthly Report)
Noon waa pmem n,pre 1011ting the applicanc. Town F.nllin-Sudimick ubd if tbo Plllllling and **Zooning** Commil lio n bl ever lla ll co.l..apo...Jenoc to tbe Firat Selewnan'I Office reprdinsthe **aeep** **Uqt** of **theroad** ill Hockanum Glen. Commiuoner ll'arwy uid she would **look** into the llwler.

2. Application P-98-67, Haley Ridge Subdivision, Jama Manin (Monthly Report)
Mr. Manin stated that the Driveway Maintenance & Eucment Aazeemcala w.n,lUod today ll the Town Hall for Lots 19,20,21 & 22.
Mr. Manin req-..d hla bond be redimd to 10%. Ho **wu** nd'crrcd to tbe Town ll'neineer'a Report whiclt nor.a itoma to **be** completed prior to **approval** of a reduction in, lbo bond.

3. Application P-99-&S, Rebecca Betkowski, Proposed Child Development Center
Di-»ion by lho Commil lio nen

Motion: Commil lio n' Perkins made a motio• tccnded by Commissioner Sirowich to table this applimtion to the January 21, 1999 Juular MNling to **allow** the members of the **PIIMina** & l.oning Commil lio n to in voatipr, the concern() the Beacon Street lll lidenu.

4. Application P-99-83, C.B.L, Inc., Wood Rjdg Sktion 2 Subdivil ion.
Tabled lll lll il th o Janumy 21, 1999 Roauar Meeting.

5. Sprint PCS

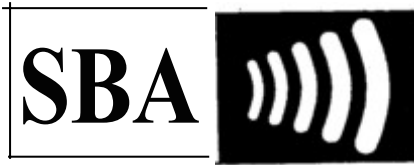
St°""T. Cany, representing Sprint u llle **Enaineer** for tho pmjct aubmiuocl revilld pi..that have addreued concerns of Town Et'sineor Sudimick.

Motion: Conunisaioner Sirowich made a niotion ..-idcd by Commlauon **Betta** that the pllllllu1 aubllitted be appro'Od with CMldiri OPI that the Eucment must be filod in tht Beacon Fib Land Reciorda IPCI thlia Performance Bond beaet. All voled in favor lll lld th o motion wiscanid S-0.

6. Doug Cro..ley, repraonted by Attorney Mark Malloy. Mr. Malley prqenled a lot lino rmalon for a parcel of land oa Bethany Road. Mr. Croaaley currenly owns l hreo parcel of land whicllar, adjacent to one anocbor. Two of the **lots** are on Bethany Road and ll re each 7' ltel wide by 1'0 fNt deep. Tii e twoperccb1 n l one behind lbo odiorso that there ia only 75 foot & ontaao on

- SPRINT ASSIGNED lease to
SBA - 12/99

DEC 20 1999



Beacon Falls
CT 02049-5

Zoning

November 28, 1999

Ted Smith
Chief
Beacon Hose Co. #1
35 North Main St
Beacon Falls, CT 06403

RE: 10125-003/Beacon Falls(11/23/99mtttiac)

Dear Ted,

As per our meeting last Tuesday, the following is a summary of the issues we discussed:

- 1) SBA Inc. will provide space on our monopole tower for your 12ft. whip antenna at 80ft. AGL (Above Ground Level). Rent for this space on the tower will be \$100 per month.
 - 2) SBA Inc. will install your antenna and the approx. 6ft. side mount on our tower at no cost to Beacon Hose Co. #1.
 - 3) SBA Inc. will pay for your 12ft. whip antenna and coax cable, which the total shall not exceed \$1000.
 - 4) Beacon Hose Co. #1 will be responsible for: a) equipment shed b) emergency power c) utilities to **power your antenna.**
- I understand that emergency power is a concern for you. However, there probably will not be a **generator at the site for some time.**
 - Please mail me back the completed "Collocation Application" as soon as possible so we can begin to make the appropriate arrangements. Thank you for your cooperation. SBA Inc. looks forward to building a relationship with Beacon Hose Co. #1.
 - I look forward to seeing you again at the **DK. 16, 1999** Beacon Falls Zoning Commission meeting.

Sincerely yours,

John Tassone
Project Manager
SBA, Inc.

- cc. Julie Reibold (NE Communications)
- Randy Freschlin (SBA)
- Steven Carty (SEA Consultants)
- Charlie Edwards (Land Owner)
- Paul McGinn (SBA)

JFT:jft

EXHIBIT 6

SPECIAL CONSTRUCTION NOTE (SBA-PROVIDED ANTENNA MOUNT STRUCTURAL MOD SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL ANTENNA MOUNT STRUCTURAL AUGMENTS (STRUCTURAL MODIFICATIONS) AT
THE T-MOBILE RAD/VERTICAL EQUIPMENT SPACE PER RECOMMENDATIONS FROM SBA-PROVIDED ANTENNA MOUNT STRUCTURAL
ANALYSIS AND ANY SUPPLEMENTAL CONSTRUCTION DRAWINGS (PROVIDED BY OTHERS).



By Stephen Roth at 3:51:22 PM, 9/13/2022

CT BEACON FALLS/RT 8

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

60 RICE LANE
 BEACON FALLS, CT 06403

SITE NO.: CT11299D

RF DESIGN GUIDELINE: 4SEC-67D5A997DB OUTDOOR

SCOPE OF WORK

- | | |
|--|--|
| REMOVE: | INSTALL: |
| <ul style="list-style-type: none"> 3 ANTENNAS 3 TMAs 1 NORTEL CABINET 1 100A-2P BREAKER 1 50A-2P BREAKER ALL 1-3/8" COAX CABLES 2 1-1/4" HCS FIBER CABLES | <ul style="list-style-type: none"> 4 ANTENNAS 4 RADIOS 2 HYBRID FIBER CABLES 1 6160 EQUIPMENT CABINET 1 B160 BATTERY CABINET 1 PURCELL RAC24 CABINET 1 SLACKBOX 1 150A-2P BREAKER 1 125A-2P BREAKER 1 25A-1P BREAKER |

SITE NOTES

- 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.
- 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.
- 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.

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

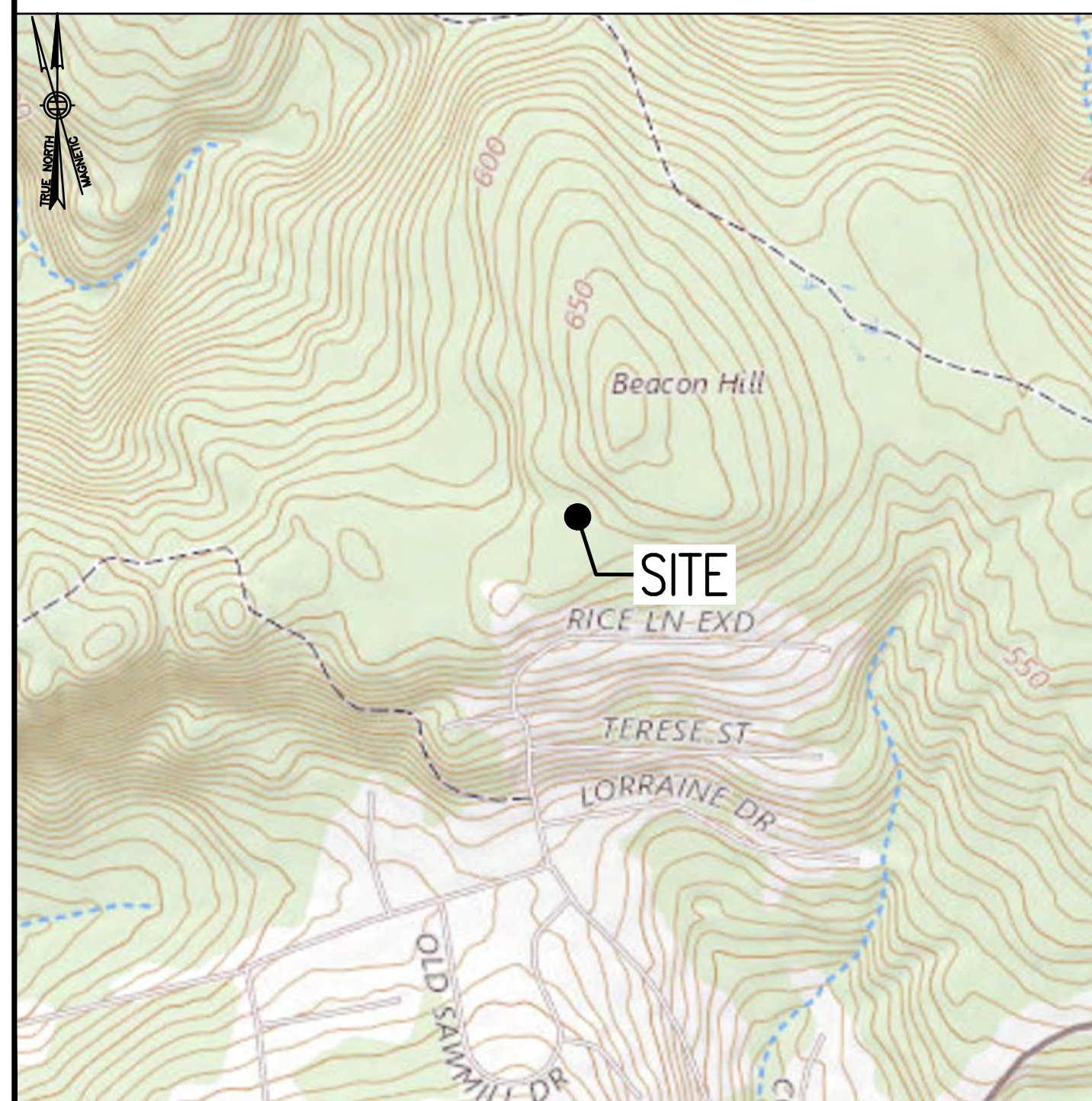
GENERAL NOTES

- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT AND THE MATERIALS INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES.
- THE ARCHITECT/ENGINEER HAVE MADE EVERY EFFORT TO SET FORTH IN THE CONSTRUCTION AND 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.
- THE CONTRACTOR OR BIDDER SHALL BEAR THE RESPONSIBILITY OF NOTIFYING (IN WRITING) THE OMNIPOT 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.
- 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.
- THE CONTRACTOR SHALL VISIT THE JOB SITE PRIOR TO THE SUBMISSION OF BIDS OR PERFORMING WORK TO FAMILIARIZE HIMSELF WITH THE FIELD CONDITIONS AND TO VERIFY THAT THE PROJECT CAN BE CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL OBTAIN AUTHORIZATION TO PROCEED WITH CONSTRUCTION PRIOR TO STARTING WORK ON ANY ITEM NOT CLEARLY DEFINED BY THE CONSTRUCTION DRAWINGS/CONTRACT DOCUMENTS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS ACCORDING TO THE MANUFACTURER'S/VENDOR'S SPECIFICATIONS UNLESS NOTED OTHERWISE OR WHERE LOCAL CODES OR ORDINANCES TAKE PRECEDENCE.
- THE CONTRACTOR SHALL PROVIDE A FULL SET OF CONSTRUCTION DOCUMENTS AT THE SITE UPDATED WITH THE LATEST REVISIONS AND ADDENDUMS OR CLARIFICATIONS AVAILABLE FOR THE USE BY ALL PERSONNEL INVOLVED WITH THE PROJECT.
- THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 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.
- 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.
- THE CONTRACTOR SHALL MAKE NECESSARY PROVISIONS TO PROTECT EXISTING IMPROVEMENTS, EASEMENTS, PAVING, CURBING, ETC. DURING CONSTRUCTION. UPON COMPLETION OF WORK, THE CONTRACTOR SHALL REPAIR ANY DAMAGE THAT MAY HAVE OCCURRED DUE TO CONSTRUCTION ON OR ABOUT THE PROPERTY.
- THE CONTRACTOR SHALL KEEP THE GENERAL WORK AREA CLEAN AND HAZARD FREE DURING CONSTRUCTION AND DISPOSE OF ALL DIRT, DEBRIS, RUBBISH AND REMOVE EQUIPMENT NOT SPECIFIED AS REMAINING ON THE PROPERTY. PREMISES SHALL BE LEFT IN CLEAN CONDITION AND FREE FROM PAINT SPOTS, DUST, OR SMUDGES OF ANY NATURE.
- THE CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS AS THEY APPLY TO THIS PROJECT.
- 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.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, PROPERTY LINES, ETC. ON THE JOB.
- 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



VICINITY MAP: 1"=1000'



DIRECTIONS

FROM COMMERCE WAY TRAVELING NE TOWARDS N BOUNDARY RD/S WASHINGTON ST, CONTINUE ONTO S. WASHINGTON ST TO TAKE A RIGHT ONTO MA-123 E, TURN LEFT TO MERGE ONTO I-495 N TOWARD MANSFIELD, MARLBORO, FOLLOW I-495 N, I-90 W AND I-84, TAKE EXIT 25A FOR AUSTIN ROAD, TAKE SCOTT ROAD, CT-69S AND CT-42 W TO RICE LANE IN BEACON FALLS, STAY ON RICE LANE, 60 RICE LANE WILL BE ON THE LEFT, TAKE LEFT ONTO SPRUCE LANE, FOLLOW SPRUCE LANE, DESTINATION WILL BE AT THE END OF SPRUCE LANE.

SHEET INDEX

SHT. NO.	DESCRIPTION	VER.
T-1	TITLE SHEET	2
GN-1	GENERAL NOTES	2
A-1	COMPOUND & EQUIPMENT PLANS	2
A-2	ELEVATION & ANTENNA PLANS	2
A-3	SITE DETAILS	2
A-4	ANTENNA & FEEDLINE CHARTS	2
S-1	ANTENNA MOUNTING 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: CT11299D
 SITE NAME: CT BEACON FALLS/RT 8
 SBA SITE NUMBER: CT02049-S
 SBA SITE NAME: BEACON FALLS
 SITE ADDRESS: 60 RICE LANE, BEACON FALLS, CT 06403
 ASSESSOR'S PARCEL NO.: 017-002-002
 ZONING DISTRICT: RESIDENTIAL (R-1)
 CONSTRUCTION TYPE: ANCHOR UPGRADE
 LAND OWNER: EDWARDS CHARLES, 20 LORRAINE DRIVE, BEACON FALLS, CT 06403
 TOWER OWNER: SBA PROPERTIES, INC., 8501 CONGRESS AVENUE, BOCA RATON, FL 33487, PHONE: 561-226-9523
 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: 41.45580000° N41°27'20.88", LONGITUDE: -73.03930000° W73°02'21.48"

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).



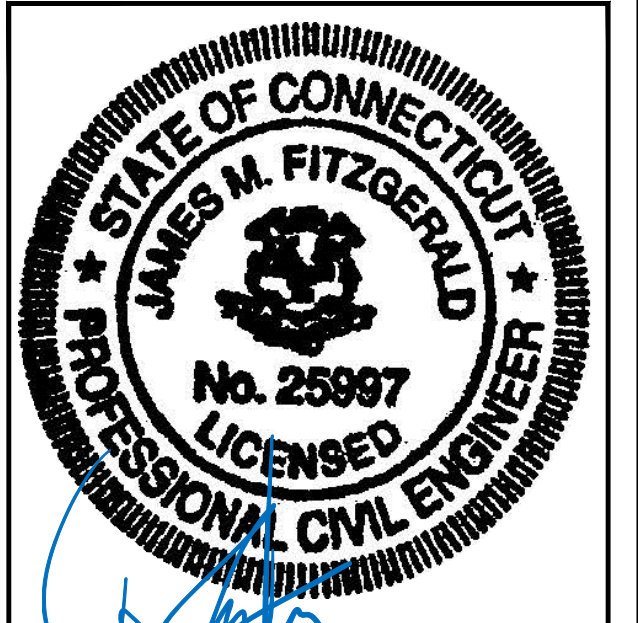
T-MOBILE NORTHEAST LLC
 15 COMMERCE WAY, SUITE B
 NORTON, MA 02766
 OFFICE: (508) 286-2700



SBA COMMUNICATIONS CORP.
 134 FLANDERS ROAD, SUITE 125
 WESTBOROUGH, MA 01581
 (508) 251-0720



R.K. EXECUTIVE CENTRE
 201 BOSTON POST ROAD WEST, SUITE 101
 MARLBOROUGH, MA 01752
 (508) 481-7400
 www.chappellengineering.com



CHECKED BY: [Signature] JMT
 APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
2	07/12/22	CONSTRUCTION REVISED	BDJ
1	02/09/21	ISSUED FOR CONSTRUCTION	BDJ
0	11/21/20	ISSUED FOR REVIEW	BDJ

SITE NUMBER:
CT11299D
 SITE ADDRESS:
 60 RICE LANE
 BEACON FALLS, CT 06403

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

GENERAL NOTES:

- 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
- 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.
- 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.
- 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.
- DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- 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.
- 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.
- EQUIPMENT SHALL BE LEGALLY AND PROPERLY DISPOSED OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.
- 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.
- 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.
- CONSTRUCTION SHALL COMPLY WITH ALL T-MOBILE STANDARDS AND SPECIFICATIONS.
- 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.
- 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.
- 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:

- THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 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.
- ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- 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.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 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.
- 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.
- 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.
- THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE T-MOBILE SPECIFICATION FOR SITE SIGNAGE.

CONCRETE AND REINFORCING STEEL NOTES:

- 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.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (400PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS
- 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.
- 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 LARGER2 IN.
#5 AND SMALLER & WWF1½ IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER
OR NOT CAST AGAINST THE GROUND:
SLAB AND WALL¾ IN.
BEAMS AND COLUMNS½ IN.
- A CHAMFER ¾" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- 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.
- CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (BC1905.6.2.3) 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.
- 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.
- 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:

- 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".
- 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.
- BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (¾") AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ¾" DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL.
- ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

- EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.
- COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
- 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.
- 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.
- 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:

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

CONSTRUCTION NOTES:

- FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, T-MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.
- COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.
- 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:

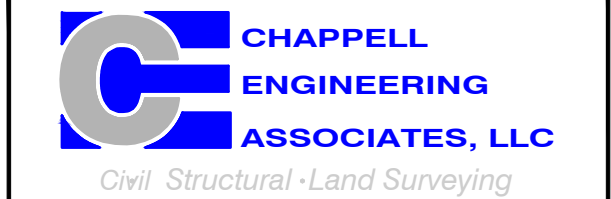
- WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
- SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS.
- 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.
- 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.
- 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).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- 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.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#8 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.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
- 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.
- 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).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND NEC.
- NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- 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.
- ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- 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.
- LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND NEC.
- CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- 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.
- 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.
- 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.
- 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.
- THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- 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.
- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.



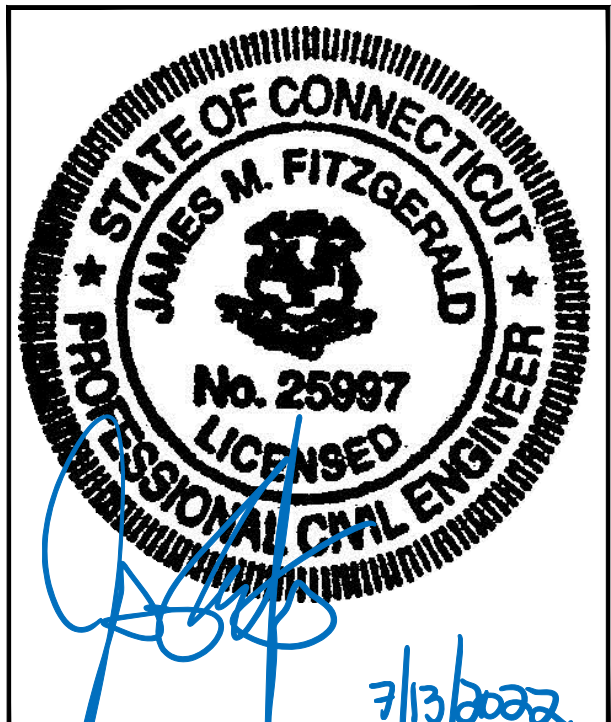
T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
OFFICE: (508) 286-2700



SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
(508) 251-0720



R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
2	07/12/22	CONSTRUCTION REVISED	BDJ
1	02/09/21	ISSUED FOR CONSTRUCTION	BDJ
0	11/21/20	ISSUED FOR REVIEW	BDJ

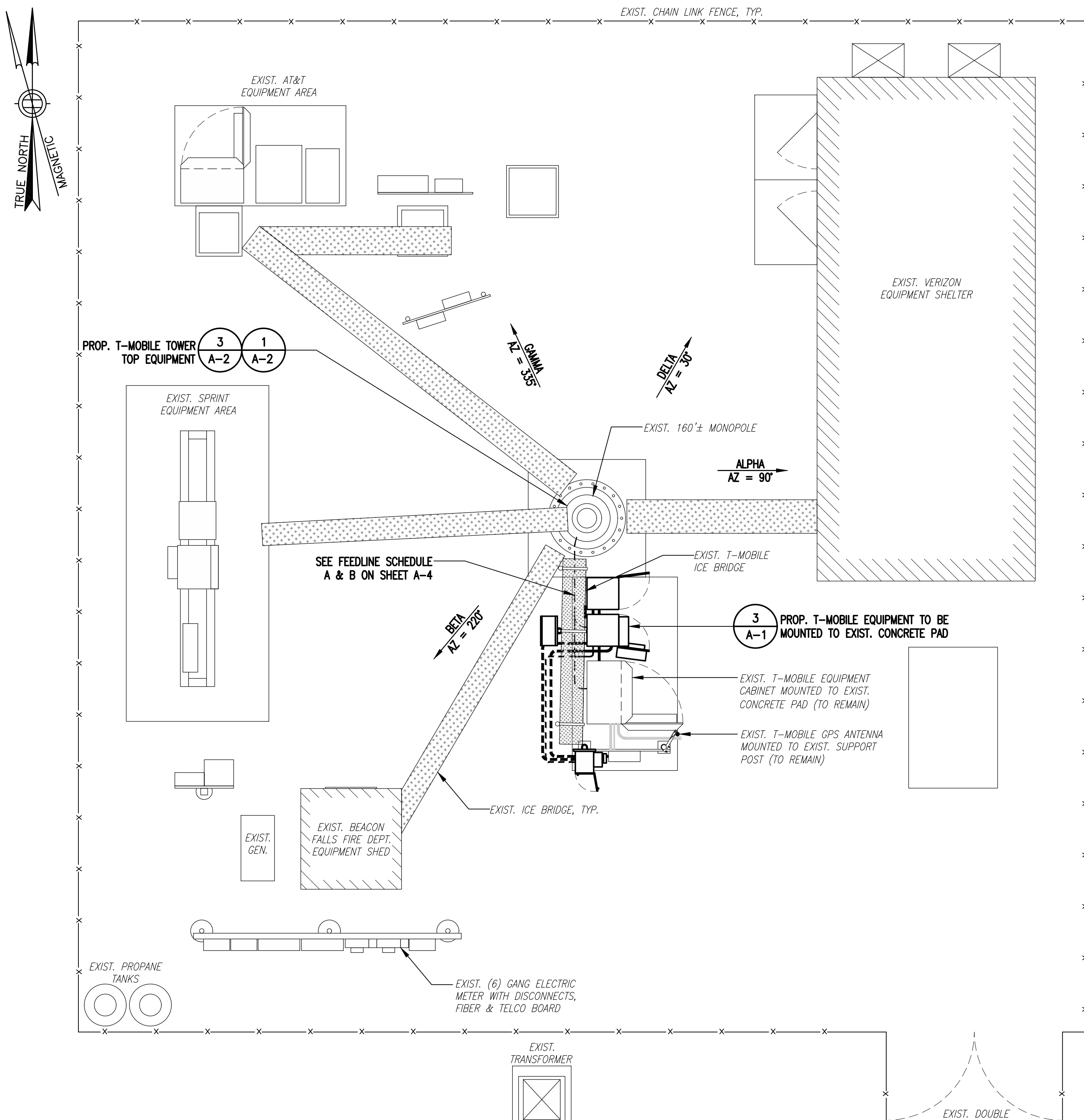
SITE NUMBER:
CT11299D

SITE ADDRESS:
60 RICE LANE
BEACON FALLS, CT 06403

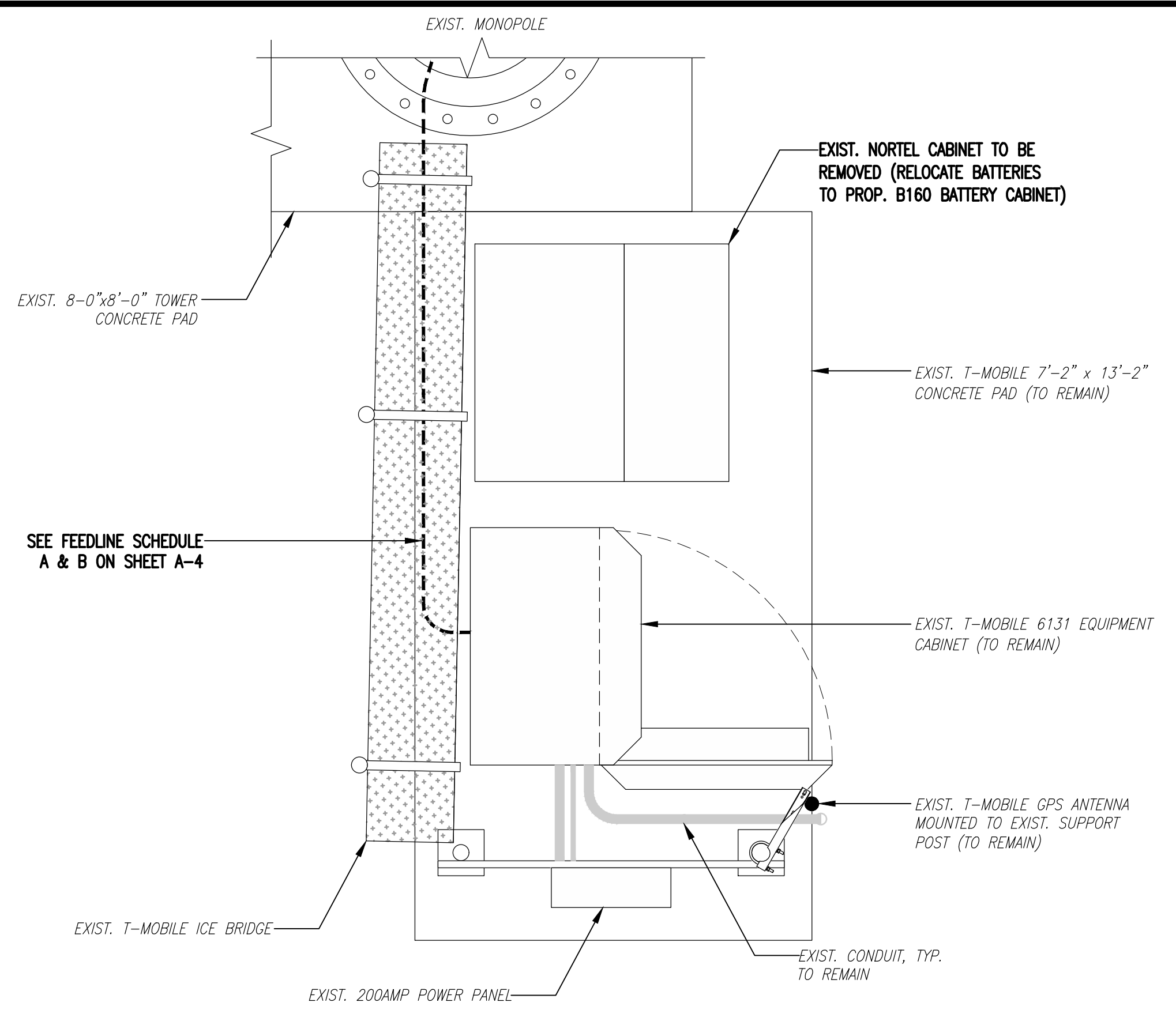
SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1

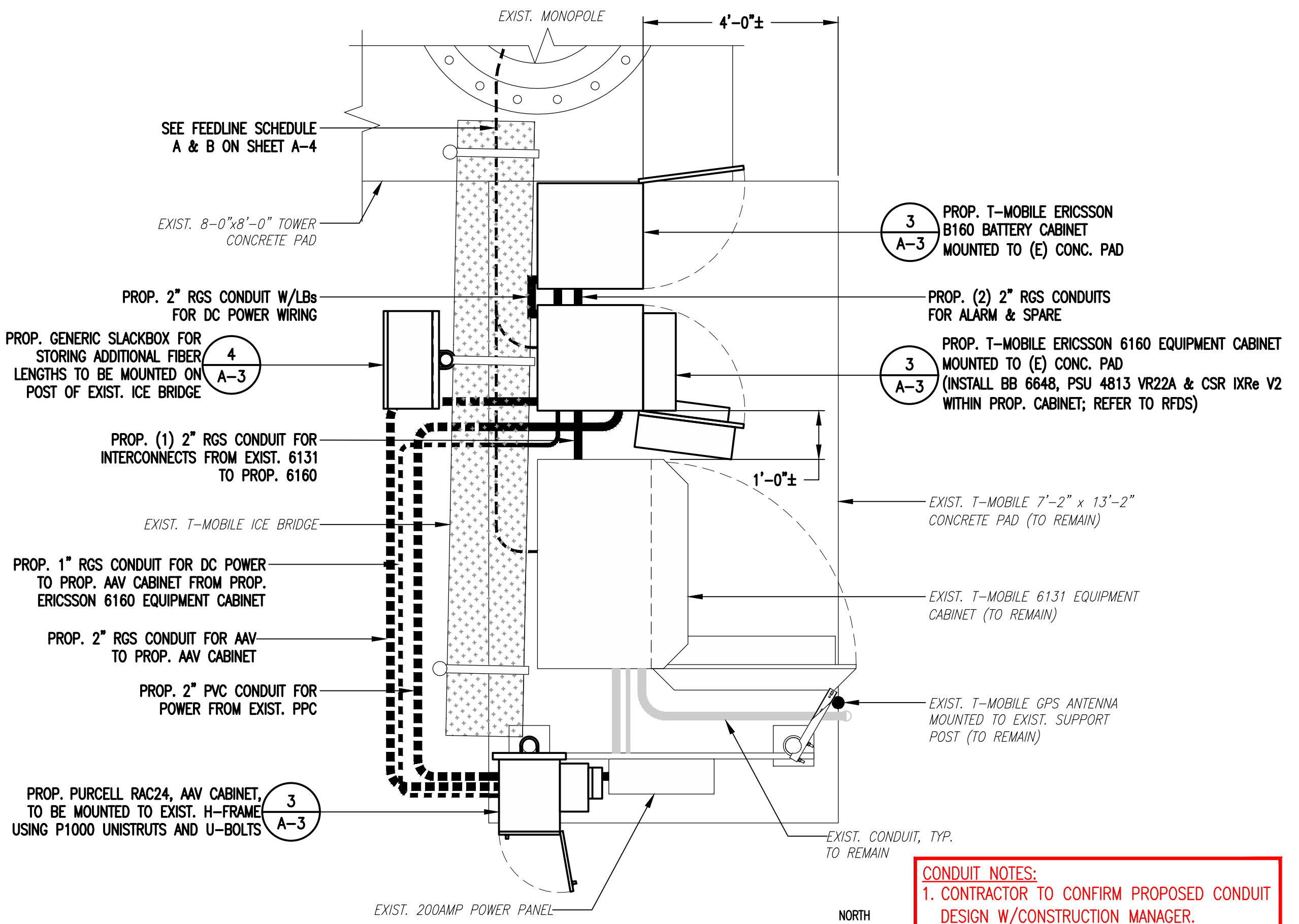
SPECIAL PRE-CONSTRUCTION WORK NOTE (SBA-PROVIDED TOWER STRUCTURAL ANALYSIS SPECIAL EQUIPMENT INSTALLATION REQUIREMENTS):
 GENERAL CONTRACTOR SHALL FURNISH AND INSTALL ALL SPECIAL OR SUPPLEMENTAL ADDITIONAL TOWER-MOUNTED EQUIPMENT PER
 RECOMMENDATIONS FROM SBA-PROVIDED TOWER STRUCTURAL ANALYSIS FOR ANY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



COMPOUND PLAN
 SCALE: 1" = 4'-0"
 1 A-1



EXISTING EQUIP PLAN
 SCALE: 1" = 2'-0"
 2 A-1



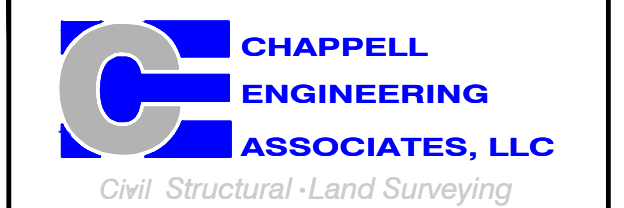
PROPOSED EQUIP PLAN
 SCALE: 1" = 2'-0"
 3 A-1

CONDUIT NOTES:
 1. CONTRACTOR TO CONFIRM PROPOSED CONDUIT DESIGN W/CONSTRUCTION MANAGER.
 2. PROPOSED CONDUITS SHALL BE BURIED TO AVOID TRIP HAZARD, WHERE APPLICABLE.
 3. ALL BURIED CONDUITS SHALL BE PVC. ALL ABOVE GROUND CONDUITS SHALL BE RGS.

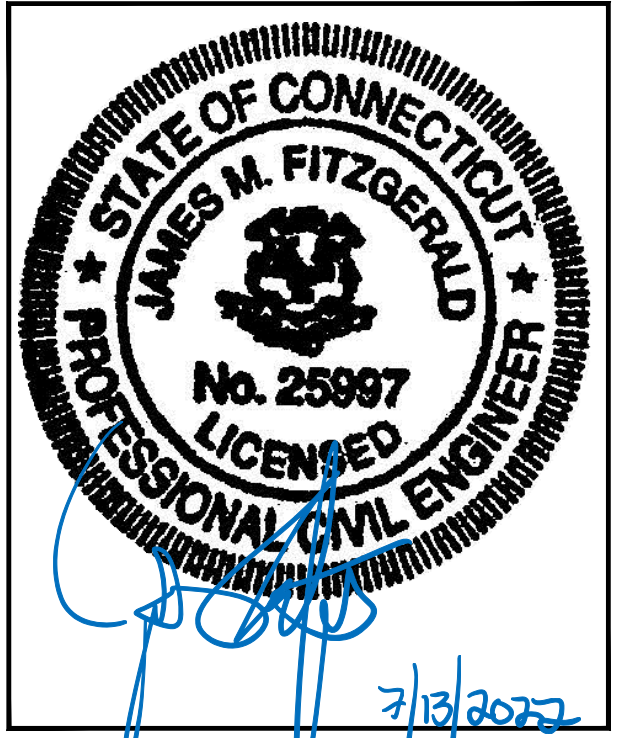
T-Mobile
 T-MOBILE NORTHEAST LLC
 15 COMMERCE WAY, SUITE B
 NORTON, MA 02766
 OFFICE: (508) 286-2700



SBA COMMUNICATIONS CORP.
 134 FLANDERS ROAD, SUITE 125
 WESTBOROUGH, MA 01581
 (508) 251-0720



R.K. EXECUTIVE CENTRE
 201 BOSTON POST ROAD WEST, SUITE 101
 MARLBOROUGH, MA 01752
 (508) 481-7400
 www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
2	07/12/22	CONSTRUCTION REVISED	BDJ
1	02/09/21	ISSUED FOR CONSTRUCTION	BDJ
0	11/21/20	ISSUED FOR REVIEW	BDJ

SITE NUMBER:
CT11299D

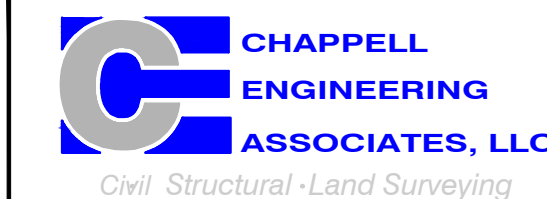
SITE ADDRESS:
 60 RICE LANE
 BEACON FALLS, CT 06403

SHEET TITLE
COMPOUND PLAN & EQUIPMENT PLANS

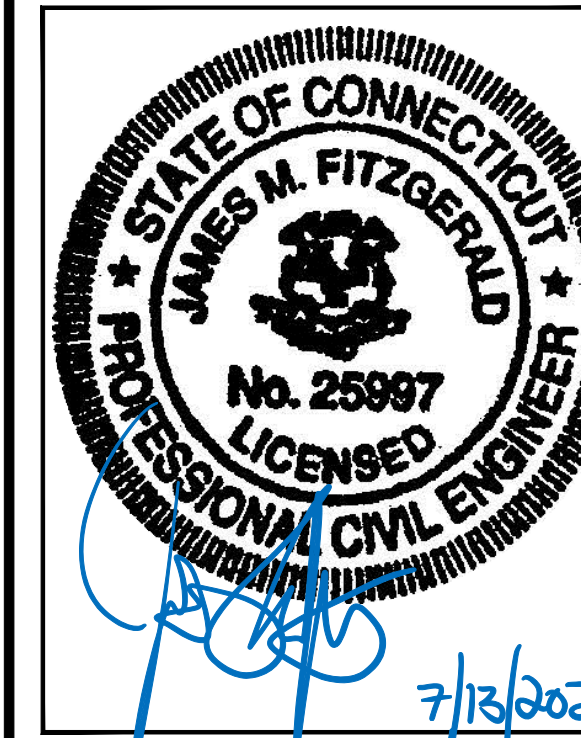
SHEET NUMBER
A-1



SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
(508) 251-0720



R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
2	07/12/22	CONSTRUCTION REVISED	BDJ
1	02/09/21	ISSUED FOR CONSTRUCTION	BDJ
0	11/21/20	ISSUED FOR REVIEW	BDJ

SITE NUMBER:

CT11299D

SITE ADDRESS:

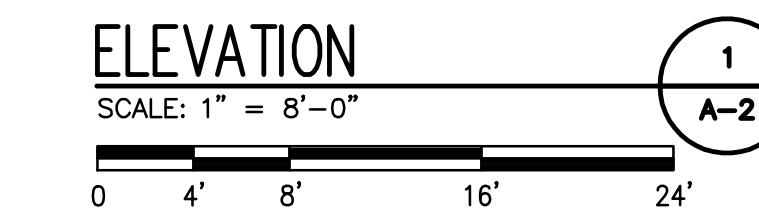
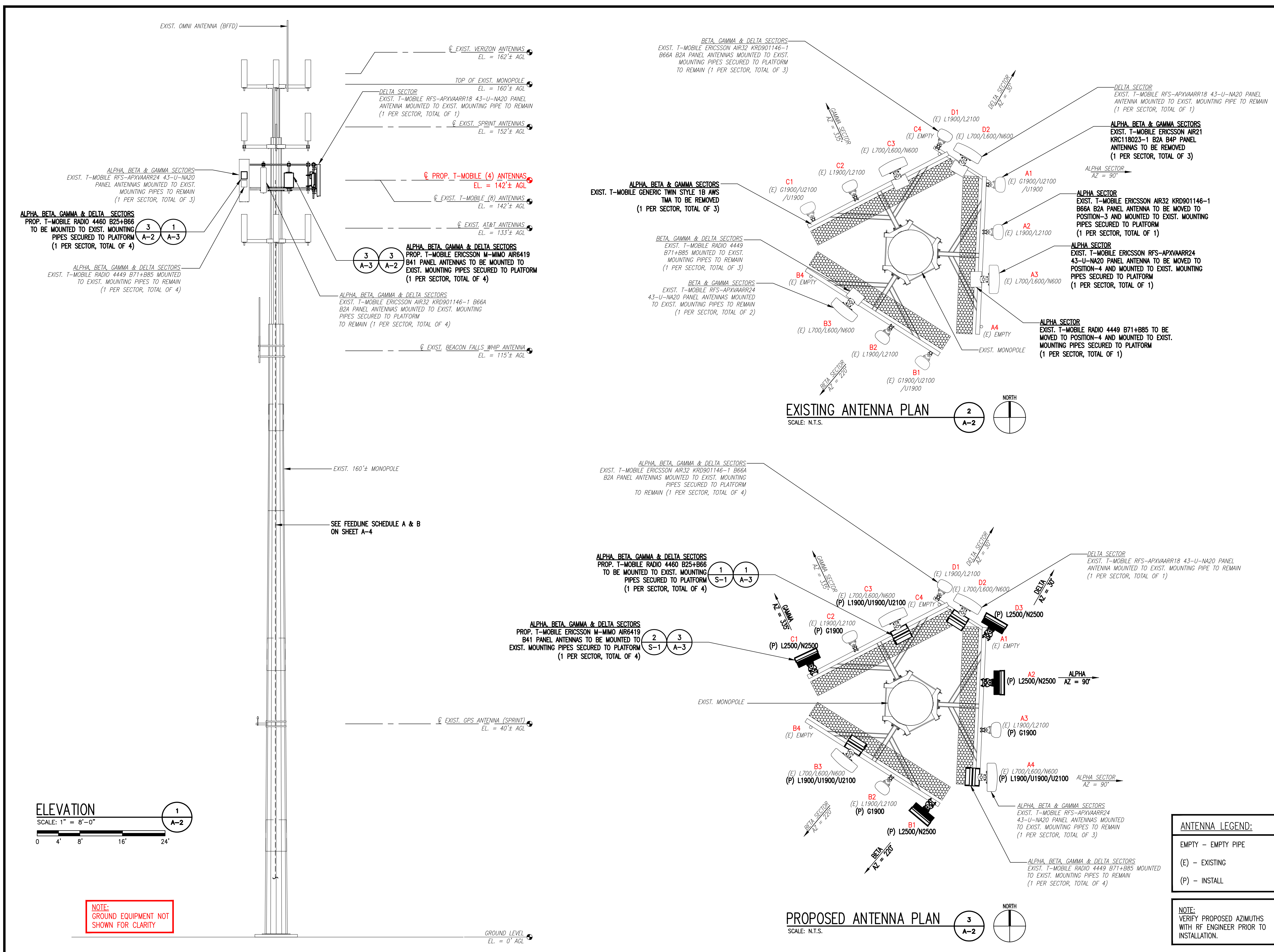
60 RICE LANE
BEACON FALLS, CT 06403

SHEET TITLE

ELEVATION & ANTENNA PLANS

SHEET NUMBER

A-2



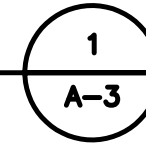
NOTE:
GROUND EQUIPMENT NOT SHOWN FOR CLARITY



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

RADIO DETAILS

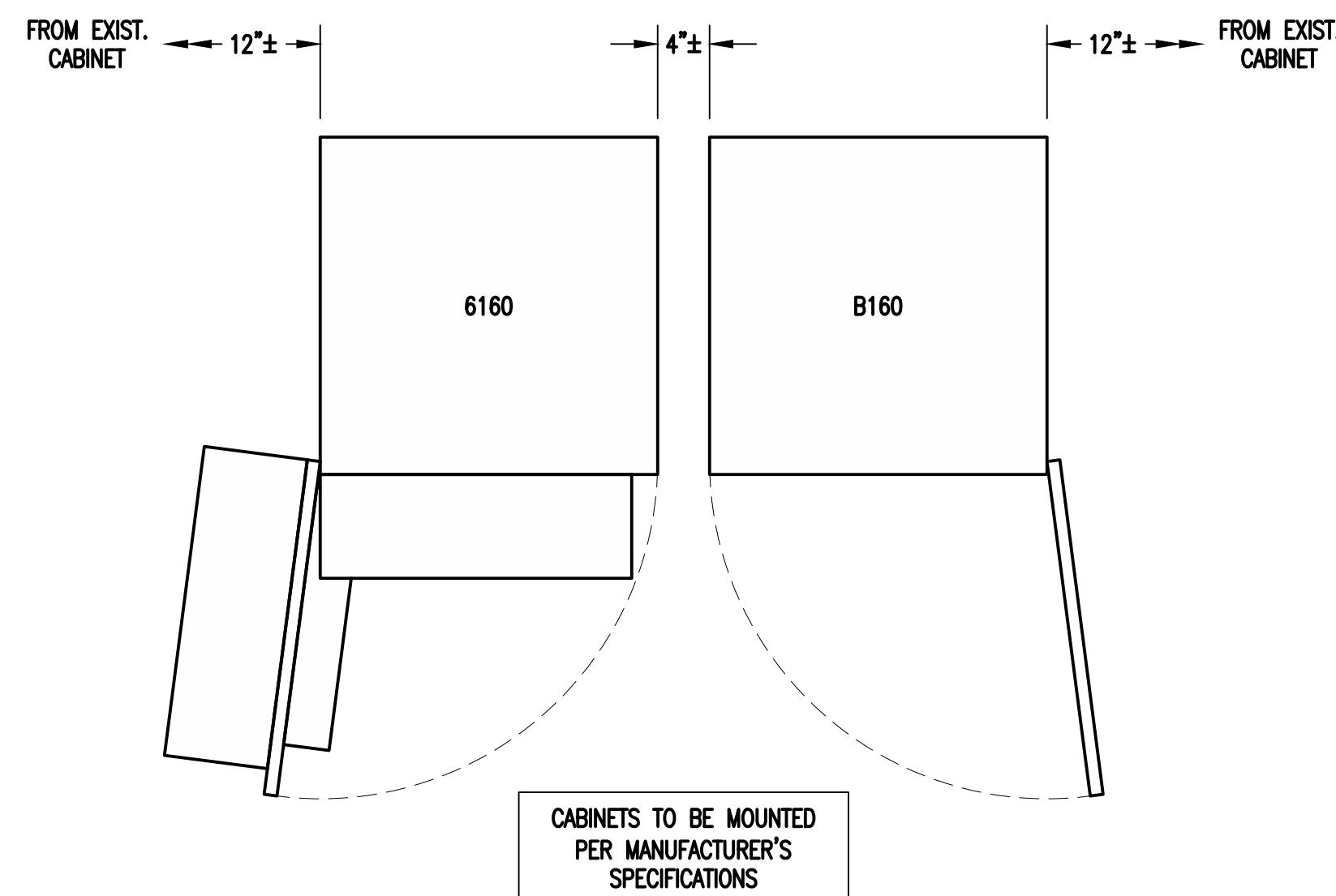
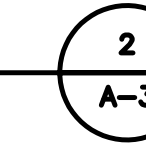
SCALE: N.T.S.



ERICSSON M-MIMO AIR6419 B41 ANTENNA
 DIMENSIONS: 36.3"H x 20.9"W x 9.0"D
 WEIGHT: 83.3 lbs
 QUANTITY: 1 PER SECTOR, TOTAL OF 3

ANTENNA DETAILS

SCALE: N.T.S.



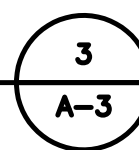
ERICSSON 6160 SITE SUPPORT CABINET
 DIMENSIONS: 63.25"H x 26.0"W x 34.0"D
 QUANTITY: TOTAL OF 1

ERICSSON B160 BATTERY CABINET
 DIMENSIONS: 63.25"H x 26.0"W x 26.0"D
 QUANTITY: TOTAL OF 1

PURCELL SITE SUPPORT CABINET RAC24
 DIMENSIONS: 24.0"H x 15.7"W x 20.0"D
 QUANTITY: TOTAL OF 1

EQUIPMENT DETAIL

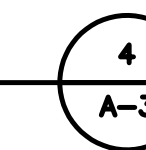
SCALE: N.T.S.



SLACKBOX -- HOFFMAN 32FH91 NEMA 3R ENCLOSURE
 DIMENSIONS: 24.0"H x 24.0"W x 12.0"D
 QUANTITY: TOTAL OF 1

SSC DETAILS

SCALE: N.T.S.

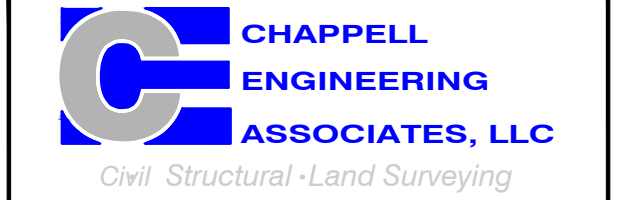


..T..Mobile..

T-MOBILE NORTHEAST LLC
 15 COMMERCE WAY, SUITE B
 NORTON, MA 02766
 OFFICE: (508) 286-2700



SBA COMMUNICATIONS CORP.
 134 FLANDERS ROAD, SUITE 125
 WESTBOROUGH, MA 01581
 (508) 251-0720



R.K. EXECUTIVE CENTRE
 201 BOSTON POST ROAD WEST, SUITE 101
 MARLBOROUGH, MA 01752
 (508) 481-7400
 www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
2	07/12/22	CONSTRUCTION REVISED	BDJ
1	02/09/21	ISSUED FOR CONSTRUCTION	BDJ
0	11/21/20	ISSUED FOR REVIEW	BDJ

SITE NUMBER:
CT11299D
 SITE ADDRESS:
 60 RICE LANE
 BEACON FALLS, CT 06403

SHEET TITLE
SITE DETAILS

SHEET NUMBER
A-3

FINAL ANTENNA CONFIGURATION

SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	TMA/RADIOS	SIGNAL CABLES
ALPHA	A1	EMPTY	-	-	-	-	-	
	A2	ERICSSON M-MIMO AIR6419 B41	142°-0± AGL	90°	0°	2'	L2500/N2500	-
	A3	ERICSSON AIR32 KR0901146-1 B66A/B2A	142°-0± AGL	90°	0°	2'	L1900/G1900 L2100	-
	A4	RFS APXVAARR24_43-U-NA20	142°-0± AGL	90°	0°	2'	L700/L600/N600 ERICSSON RADIO 4449 B71+BB5 L1900/U1900/U2100 ERICSSON RADIO 4460 B25 + B66	
BETA	B1	ERICSSON M-MIMO AIR6419 B41	142°-0± AGL	220°	0°	2'	L2500/N2500	-
	B2	ERICSSON AIR32 KR0901146-1 B66A/B2A	142°-0± AGL	220°	0°	2'	L1900/G1900 L2100	-
	B3	RFS APXVAARR24_43-U-NA20	142°-0± AGL	220°	0°	2'	L700/L600/N600 ERICSSON RADIO 4449 B71+BB5 L1900/U1900/U2100 ERICSSON RADIO 4460 B25 + B66	
	B4	EMPTY	-	-	-	-	-	-
GAMMA	C1	ERICSSON M-MIMO AIR6419 B41	142°-0± AGL	335°	0°	2'	L2500/N2500	-
	C2	ERICSSON AIR32 KR0901146-1 B66A/B2A	142°-0± AGL	335°	0°	2'	L1900/G1900 L2100	-
	C3	RFS APXVAARR24_43-U-NA20	142°-0± AGL	335°	0°	2'	L700/L600/N600 ERICSSON RADIO 4449 B71+BB5 L1900/U1900/U2100 ERICSSON RADIO 4460 B25 + B66	
	C4	EMPTY	-	-	-	-	-	-
DELTA	D1	ERICSSON AIR32 KR0901146-1 B66A/B2A	142°-0± AGL	30°	0°	2'	L1900/G1900 L2100	-
	D2	RFS APXVAARR18_43-U-NA20	142°-0± AGL	30°	0°	2'	L700/L600/N600 ERICSSON RADIO 4449 B71+BB5 L1900/U1900/U2100 ERICSSON RADIO 4460 B25 + B66	
	D3	ERICSSON M-MIMO AIR6419 B41	142°-0± AGL	30°	0°	2'	L2500/N2500	-

(E) (4) 1-5/8" (6x12) HCS FIBER CABLES
(P) (2) 1-3/4" (6x24) HCS FIBER CABLES

CABLE NOTE: EXISTING ALL 1-5/8" COAX CABLES, & (2) 1-3/4" (9x18) HCS FIBER CABLES TO BE CAPPED, WRAPPED & REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.

NOTE: RFDS REV8 - 01/27/22

FEEDLINE SCHEDULE		
SCHEDULE	FEEDLINES	LOCATION
A	EXISTING TO REMAIN: (4) 1-5/8" (6x12) HCS FIBER CABLES (1) 1/2" COAX CABLE FOR GPS ANTENNA EXISTING TO BE REMOVED: ALL 1-5/8" COAX CABLES (2) 1-3/4" (9x18) HCS FIBER CABLES	ROUTED PER STRUCTURAL ANALYSIS
B	PROPOSED: (2) 1-3/4" (6x24) HCS FIBER CABLES	

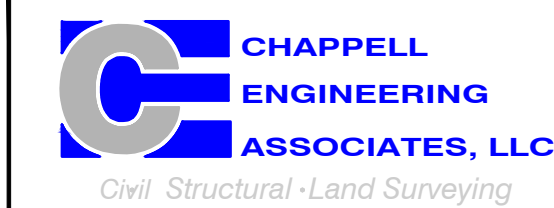
NOTE: EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.



T-MOBILE NORTHEAST LLC
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
OFFICE: (508) 286-2700



SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
(508) 251-0720



R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
2	07/12/22	CONSTRUCTION REVISED	BDJ
1	02/09/21	ISSUED FOR CONSTRUCTION	BDJ
0	11/21/20	ISSUED FOR REVIEW	BDJ

SITE NUMBER:
CT11299D

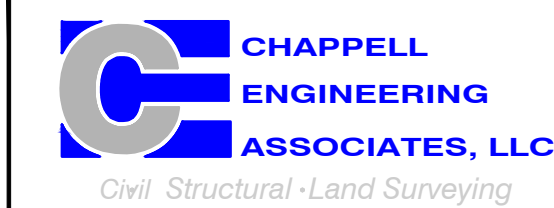
SITE ADDRESS:
60 RICE LANE
BEACON FALLS, CT 06403

SHEET TITLE
ANTENNA & FEEDLINE CHARTS

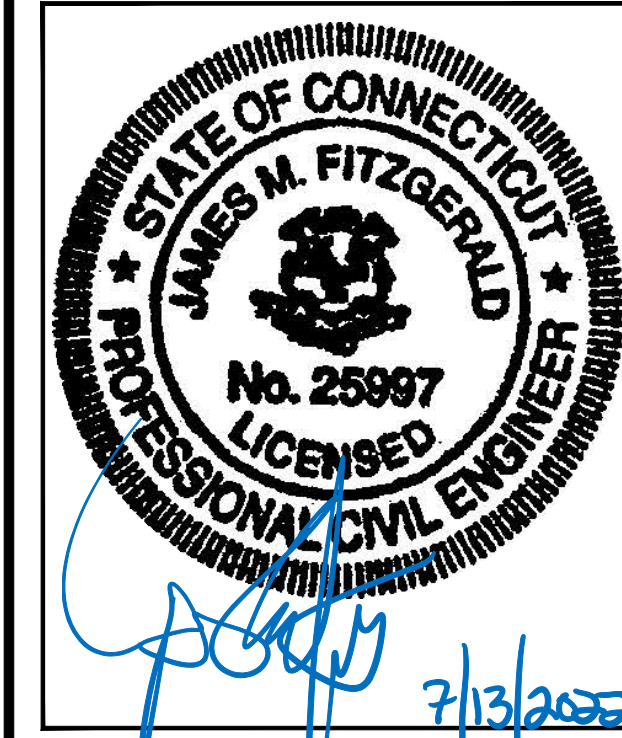
SHEET NUMBER
A-4



SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
(508) 251-0720



R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

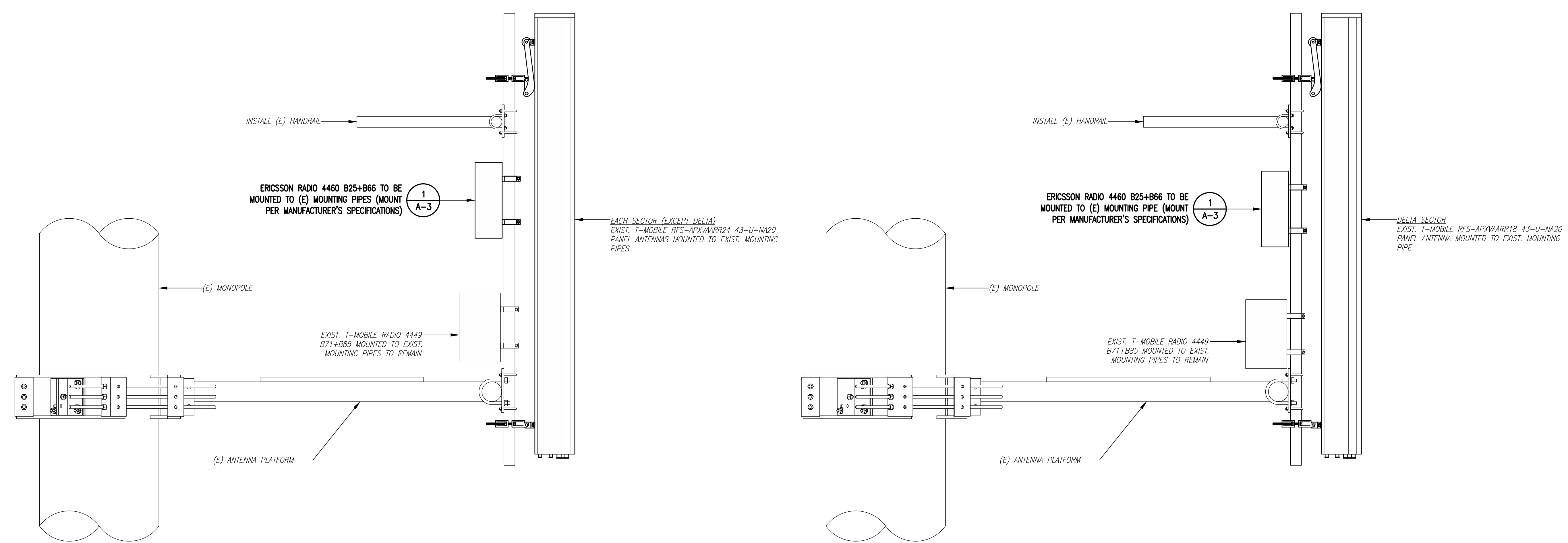
SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
2	07/12/22	CONSTRUCTION REVISED	BDJ
1	02/09/21	ISSUED FOR CONSTRUCTION	BDJ
0	11/21/20	ISSUED FOR REVIEW	BDJ

SITE NUMBER:
CT11299D

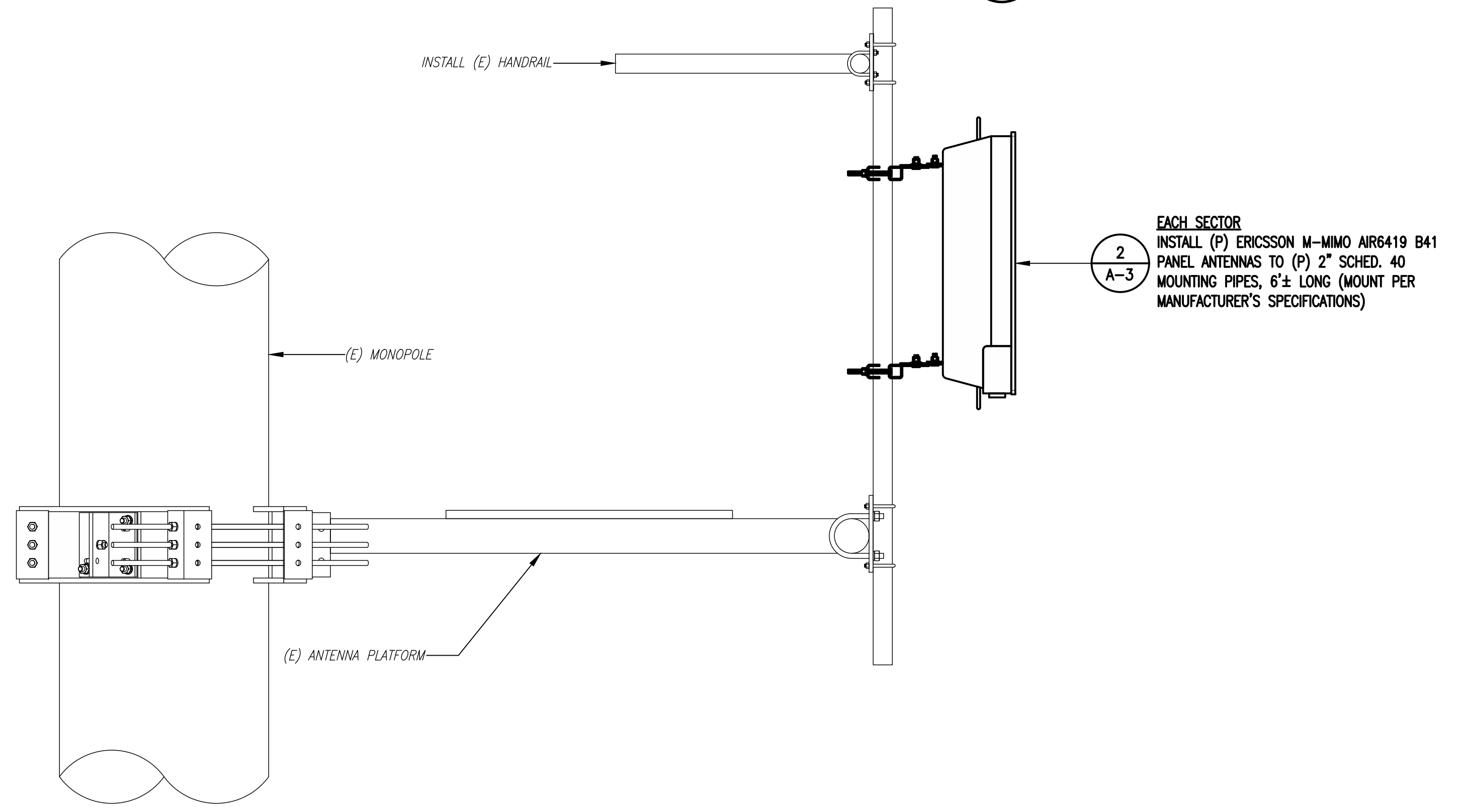
SITE ADDRESS:
60 RICE LANE
BEACON FALLS, CT 06403

SHEET TITLE
**ANTENNA MOUNTING
DETAILS**

SHEET NUMBER
S-1



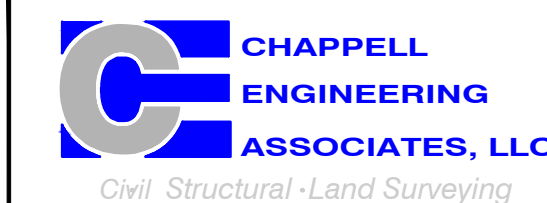
ANTENNA & RADIO MOUNT DETAIL
SCALE: N.T.S.



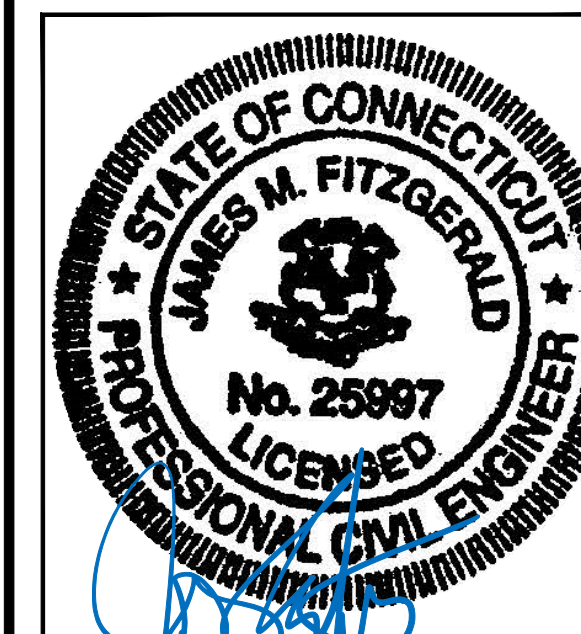
ANTENNA MOUNT DETAIL
SCALE: N.T.S.



SBA COMMUNICATIONS CORP.
134 FLANDERS ROAD, SUITE 125
WESTBOROUGH, MA 01581
(508) 251-0720



R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481-7400
www.chappellengineering.com



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
2	07/12/22	CONSTRUCTION REVISED	BDJ
1	02/09/21	ISSUED FOR CONSTRUCTION	BDJ
0	11/21/20	ISSUED FOR REVIEW	BDJ

SITE NUMBER:

CT11299D

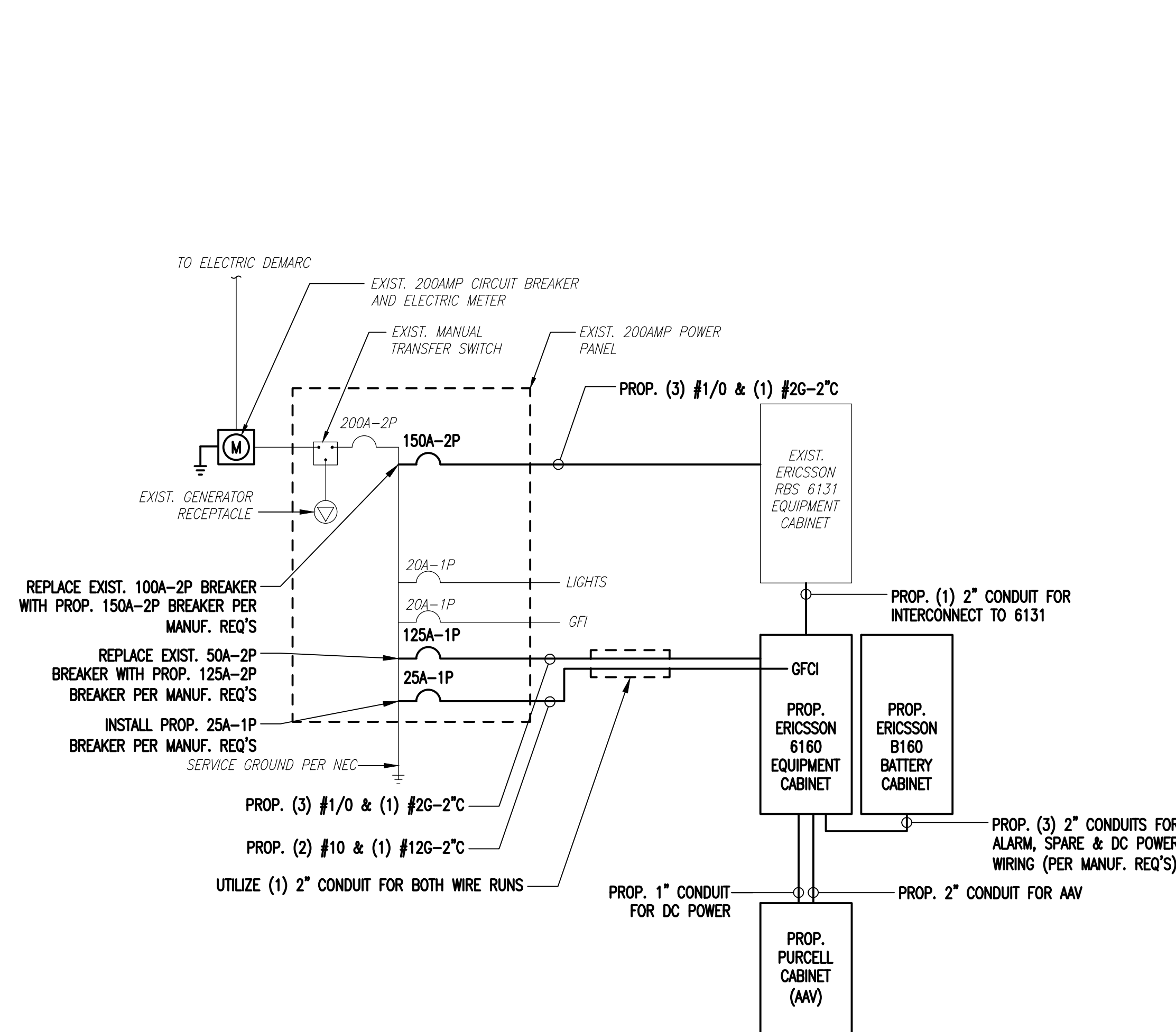
SITE ADDRESS:
60 RICE LANE
BEACON FALLS, CT 06403

SHEET TITLE

ELECTRICAL &
GROUNDING DETAILS

SHEET NUMBER

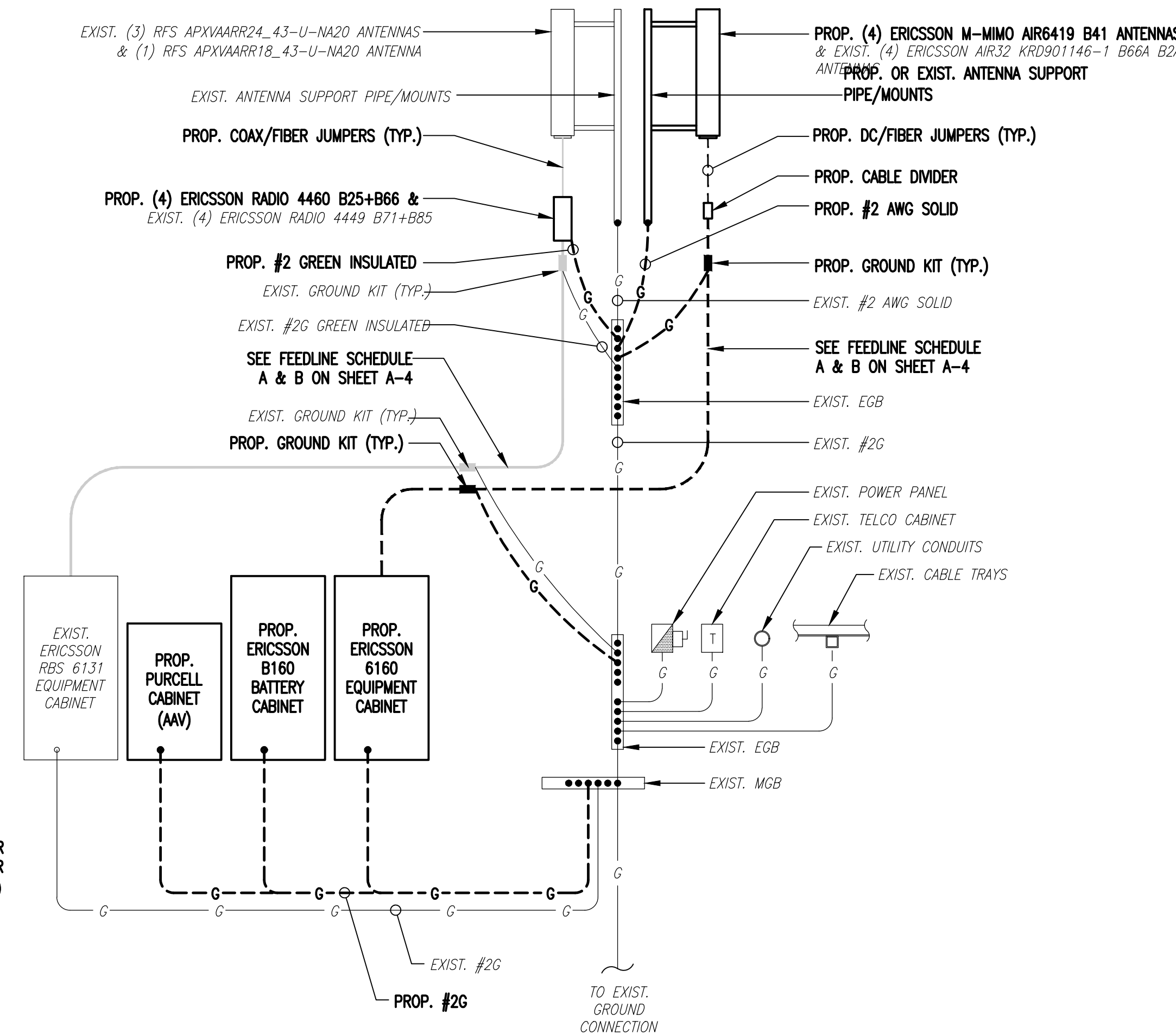
E-1



ONE LINE DIAGRAM

SCALE: NOT TO SCALE

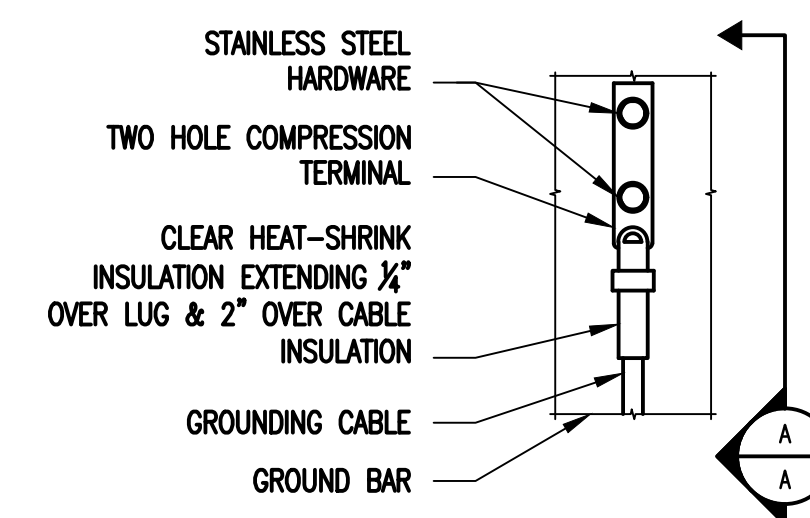
1
E-1



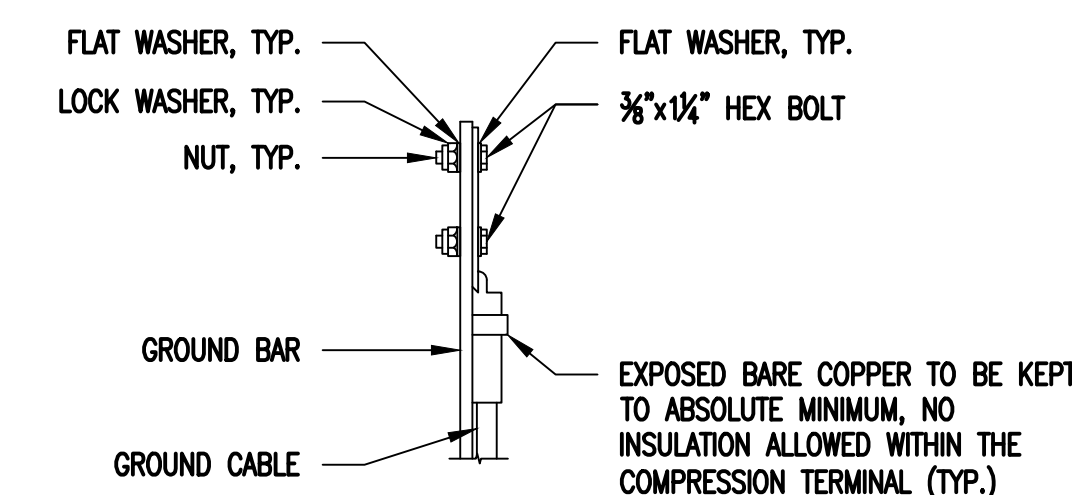
GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

2
E-1



ELEVATION



SECTION A-A

NOTES:

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

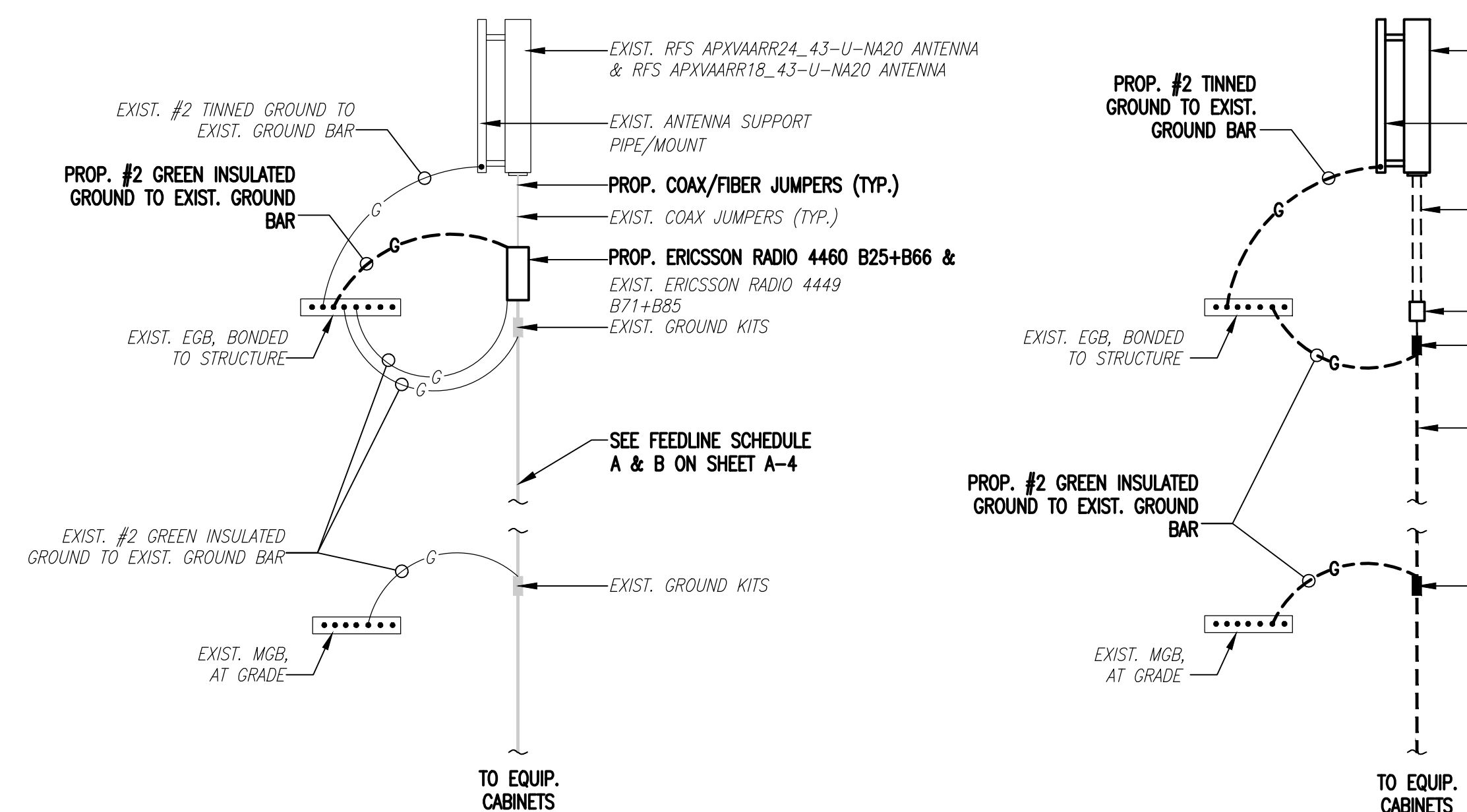
TYPICAL GROUND BAR CONNECTIONS DETAIL

SCALE: NOT TO SCALE

3
E-1

ELECTRICAL AND GROUNDING NOTES

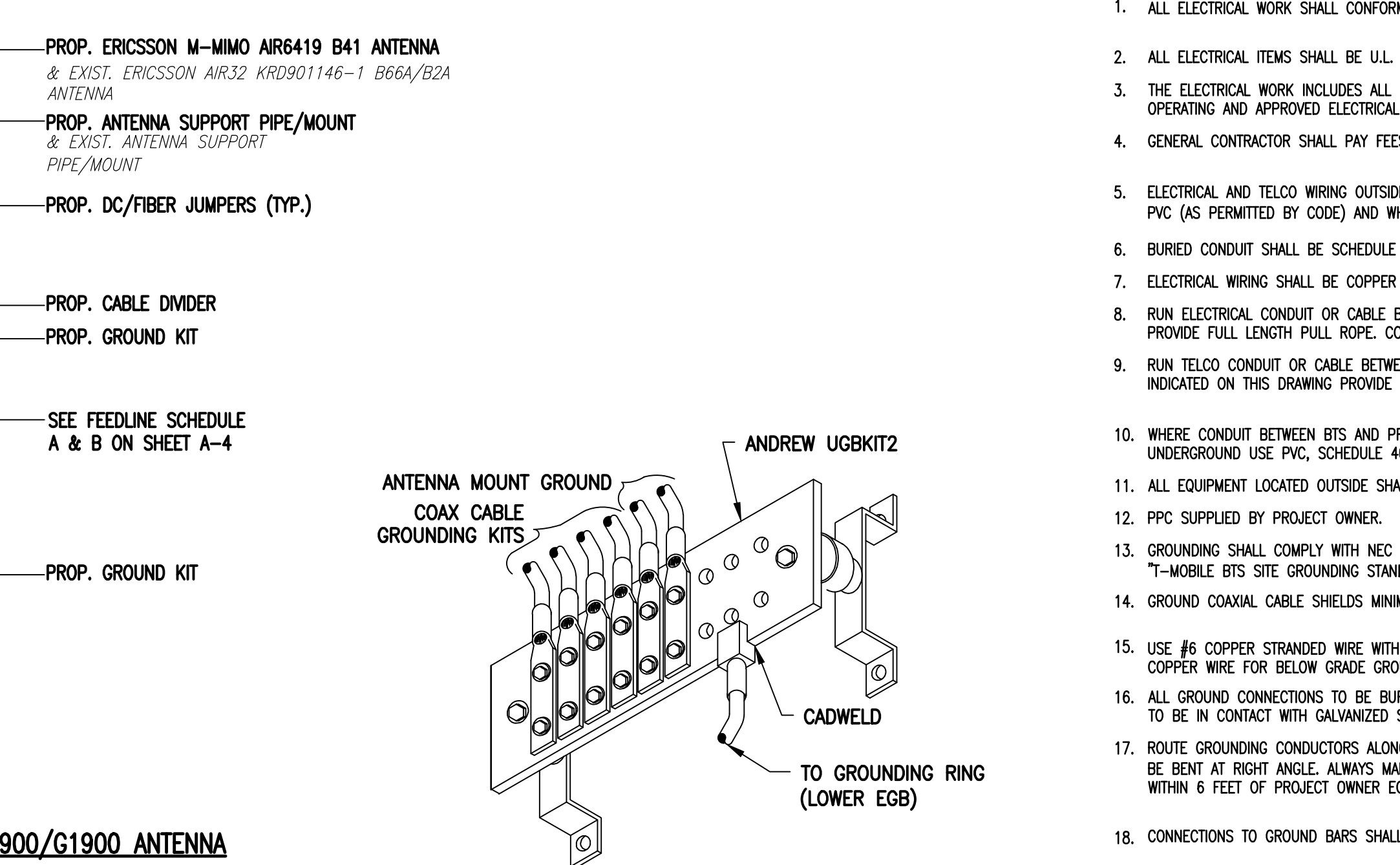
- ALL ELECTRICAL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE (NEC) AS WELL AS APPLICABLE STATE AND LOCAL CODES.
- ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER SPECIFICATION REQUIREMENTS.
- THE ELECTRICAL WORK INCLUDES ALL LABOR AND MATERIAL DESCRIBED BY DRAWINGS AND SPECIFICATION INCLUDING INCIDENTAL WORK TO PROVIDE COMPLETE OPERATING AND APPROVED ELECTRICAL SYSTEM.
- GENERAL CONTRACTOR SHALL PAY FEES FOR PERMITS, AND IS RESPONSIBLE FOR OBTAINING SAID PERMITS AND COORDINATION OF INSPECTIONS.
- 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.
- BURIED CONDUIT SHALL BE SCHEDULE 40 PVC.
- ELECTRICAL WIRING SHALL BE COPPER WITH TYPE XHHW, THWN, OR THHN/INSULATION.
- 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.
- 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.
- 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.
- ALL EQUIPMENT LOCATED OUTSIDE SHALL HAVE NEMA 3R ENCLOSURE.
- PPC SUPPLIED BY PROJECT OWNER.
- 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".
- GROUND COAXIAL CABLE SHIELDS MINIMUM AT BOTH ENDS USING MANUFACTURERS COAX CABLE GROUNDING KITS SUPPLIED BY PROJECT OWNER.
- 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.
- 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.
- 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 6" RADIUS WHEN NECESSARY. BOND ANY METAL OBJECTS WITHIN 6 FEET OF PROJECT OWNER EQUIPMENT OR CABINET TO MASTER GROUND BAR OR GROUNDING RING.
- CONNECTIONS TO GROUND BARS SHALL BE MADE WITH TWO HOLE COMPRESSION TYPE COPPER LUGS. APPLY OXIDE INHIBITING COMPOUND TO ALL LOCATIONS.
- APPLY OXIDE INHIBITING COMPOUND TO ALL COMPRESSION TYPE GROUND CONNECTIONS.
- 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.
- CONTRACTOR SHALL TEST COMPLETED GROUND SYSTEM AND RECORD RESULTS FOR PROJECT CLOSE-OUT DOCUMENTATION. 5 OHMS MINIMUM RESISTANCE REQUIRED.
- CONTRACTOR SHALL CONDUCT ANTENNA, COAX, AND LNA RETURN-LOSS AND DISTANCE- TO-FAULT MEASUREMENTS (SWEEP TESTS) AND RECORD RESULTS FOR PROJECT CLOSE OUT.



COAX CABLE CONNECTION AND GROUNDING DETAIL

SCALE: NOT TO SCALE

4
E-1



GROUND BAR (EGB)

SCALE: NOT TO SCALE

5
E-1

EXHIBIT 7



Tower Engineering Solutions

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

Structural Analysis Report

Existing 160 ft Nudd Corporation Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT02049-S

Customer Site Name: Beacon Falls

Carrier Name: T-Mobile (App#: 200173, V1)

Carrier Site ID / Name: CT11299D / CTBeacon Falls/Rt8

Site Location: 60 Rice Lane

Beacon Falls, Connecticut

New Haven County

Latitude: 41.455689

Longitude: -73.039866



Analysis Result:

Max Structural Usage: 98.6% [Pass]

Max Foundation Usage: 72.0% [Pass]

Additional Usage Caused by New Mount/Mount Modification: N/A

Report Prepared By: Younus Alkarawi



Tower Engineering Solutions

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

Structural Analysis Report

Existing 160 ft Nudd Corporation Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT02049-S

Customer Site Name: Beacon Falls

Carrier Name: T-Mobile (App#: 200173, V1)

Carrier Site ID / Name: CT11299D / CTBeacon Falls/Rt8

Site Location: 60 Rice Lane

Beacon Falls, Connecticut

New Haven County

Latitude: 41.455689

Longitude: -73.039866

Analysis Result:

Max Structural Usage: 98.6% [Pass]

Max Foundation Usage: 72.0% [Pass]

Additional Usage Caused by New Mount/Mount Modification: N/A

Report Prepared By: Younus Alkarawi

Introduction

The purpose of this report is to summarize the analysis results on the 160 ft Nudd Corporation 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	Nudd Project # 7342, dated 01/14/2000
Foundation Drawing	Nudd Project # 7342, dated 01/14/2000
Geotechnical Report	SEA Consultants Ref # 99339.02-A, dated 08/02/1999
Modification Drawings	O2 Wireless Solutions Job # 2230-022, dated 05/23/2002; FDH Project # 09-04232E S2, dated 01/03/2009; FDH Project # 12-04772E S3, dated 10/15/2013; TES Job # 20939 rev.3, dated 09/28/2016; TES Job# 80199, dated 04/30/2020
Mount Analysis	T-Mobile MA by TES # 131523, Dated 07/18/2022

Analysis Criteria

The comprehensive analysis was performed in accordance with the requirements and stipulations of the TIA-222-H. 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:	125.0 mph (3-Sec. Gust) (Ultimate wind speed)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Service Load Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Risk Category:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_5 = 0.198, S_1 = 0.054$

This structural analysis is based upon the tower being classified as a Risk Category 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	165.0	1	Andrew - DB222 - Whip	Low Profile Platform	(1) 7/8"	BFFD
2	162.0	6	Andrew DB846F65ZAXY - Panel		(2) 1 5/8" Hybrid (17) 1 5/8"	Verizon
3		6	Andrew JAHH-65B-R3B - Panel			
4		3	Samsung VZS01 - Panel			
5		1	Commscope CBC78T-DS-43-2X - Diplexer			
6		3	Samsung B2/B66A RRH-BR049 - RRU			
7		3	Samsung Telecommunications B5/B13 RRH-BR04C - RRU			
8		1	Commscope FE-16148-OVP-B12 - OVP			
9	152.0	3	JMA Wireless - MX08FRO665-21 - Panel	Platform w/ Handrail (Commscope MC-PK8-DSH)	(1) 1.75" Hybrid	Dish Wireless
10		3	Fujitsu - TA08025-B605 - RRU			
11		3	Fujitsu - TA08025-B604 - RRU			
12		1	Raycap - RDIDC-9181-PF-48 - OVP			
-	142.0	3	Ericsson KRY 112 144/1 TMA	Platform w/ HR & Bracing	(10) 1 5/8" (2) 1 5/8" Fiber (2) 1-1/4" Fiber	T-Mobile
-		3	Ericsson AIR 21 B2A/B4P - Panel			
-		4	Ericsson Air 32 KR0901146-1 B66A B2A - Panel			
-		3	RFS APXVAARR24_43-U-NA20 - Panel			
-		1	RFS APXVAARR18_43-U-NA20 - Panel			
-		4	Ericsson Radio 4449 B71+B12 RRUs			
-		1	Ericsson Radio 4415 B66A RRUs			
20	134.75	3	Ericsson AIR6419 B77G Panel	T-Frames (3) SitePro 1 P/N RMV12-NP W/ (3) 2-1/2" (2.88" O.D.) Pipe Masts	(6) 1 5/8" Coax (6) 1 1/4" coax (7) 0.92" DC Power (2) 3/8" Fiber (1) 1/2" Fiber	AT&T
21	133.0	3	Kathrein 800-10965 Panel			
22		2	Cci DMP65R-BU6EA-K Panel			
23		1	Cci DMP65R-BU8EA-K Panel			
24		6	Powerwave LGP21401 TMA			
25		3	Ericsson RRUS-32 RRU			
26		3	Ericsson B2/B66A 8843 RRU			
27		3	Ericsson B5/B12 4449 RRU			
28		3	Ericsson RRUS 4478 B14 RRU			
29		2	Raycap DC6-48-60-18-8F OVP			
30		1	Raycap DC9-48-60-24-8C-EV OVP			
31		131.75	3			
32	115.0	1	DB222 - Whip	(1) 3 ft. Standoff	(1) 7/8"	BFFD
33	40.0	1	GPS	Standoff	(1) 1/2"	Sprint

** (4) 3/4" DC inside 3" Conduit.

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
13	142.0	4	Ericsson Air 6419 B41 - Panel	Platform w/ HR & Bracing	(7) 1 5/8" (2) 1-1/4" Fiber (2) 1.9" Fiber (2) 1 5/8" Fiber	T-Mobile
14		4	Ericsson Air 32 KRD901146-1_B66A_B2A- Panel			
15		3	RFS APXVAARR24_43-U-NA20 - Panel			
16		1	RFS APXVAARR18_43-U-NA20 - Panel			
17		3	Ericsson KRY 112 144/1 TMA			
18		4	Ericsson 4460 B25 + B66 RRU			
19		4	Ericsson 4449 B71 + B85 RRU			

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	Flange connection
Max. Usage:	97.2%	69.0%	86.1%	98.6%
Pass/Fail	Pass	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	4380.4	36.5	78.5

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 1.4265 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 84.41% at 96.0ft

Structure: CT02049-S-SBA
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.000 (ft)

Code: EIA/TIA-222-H
Exposure: B
Gh: 1.1

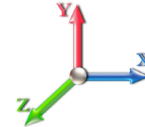
7/28/2022



Page: 1

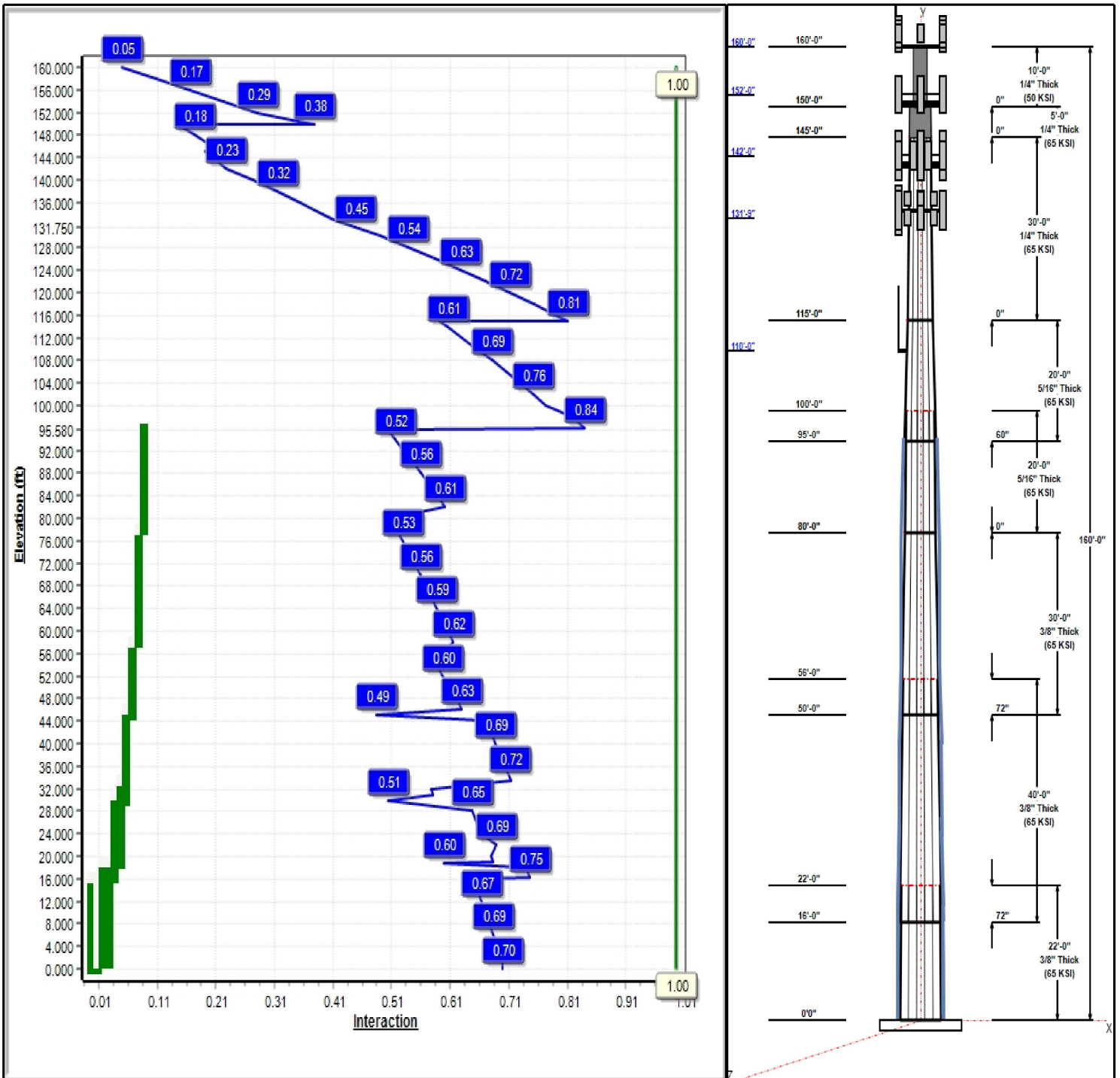
Dead Load Factor: 1.20
 Wind Load Factor: 1.00

Load Case : 1.2D + 1.0W 125 mph Wind



Iterations: 28

Copyright © 2022 by Tower Engineering Solutions, LLC. All rights reserved.



Structure: CT02049-S-SBA

Type: Custom
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 12 Sided
Taper: 0.19400

7/28/2022

Page: 2

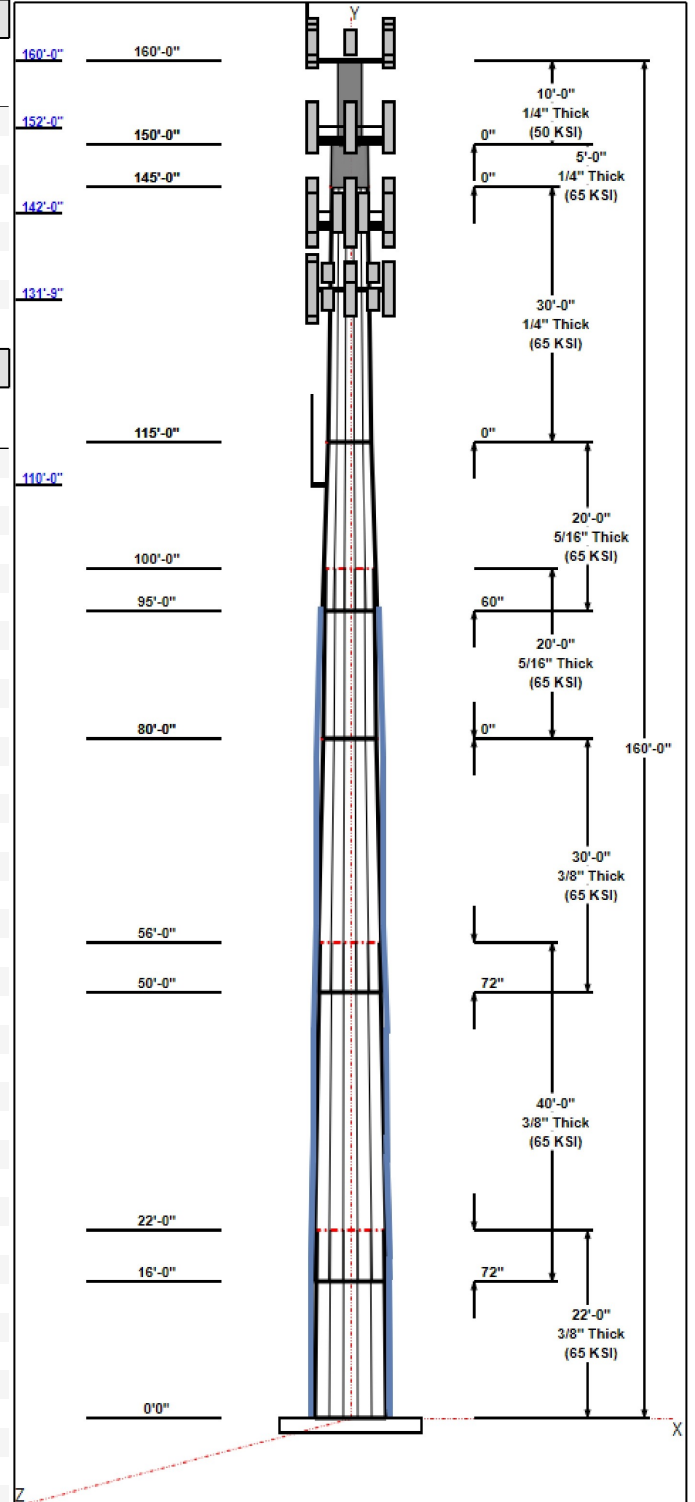


Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	22.00	46.11	50.38	0.375		0.19400	65
2	40.00	40.26	48.02	0.375	Slip	0.19400	65
3	30.00	36.35	42.17	0.375	Slip	0.19400	65
4	20.00	32.48	36.35	0.313	Butt	0.19400	65
5	20.00	30.19	34.07	0.313	Slip	0.19400	65
6	30.00	24.38	30.19	0.250	Butt	0.19400	65
7	5.00	24.38	24.38	0.250	Butt	0.19400	65
8	10.00	16.00	16.00	0.250	Butt	0.00000	50

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
160.00	165.00	1	DB222	BFFD
160.00	162.00	6	DB846F65ZAXY	Verizon
160.00	162.00	1	Low Profile Platform	Verizon
160.00	163.00	1	6' Lightning rod	--
160.00	162.00	6	JAHH-65B-R3B	Verizon
160.00	162.00	3	VZS01	Verizon
160.00	162.00	1	CBC78T-DS-43	Verizon
160.00	162.00	3	B2/B66A RRH-BR049	Verizon
160.00	162.00	3	B5/B13 RRH-BR04C	Verizon
160.00	162.00	1	Commscope	Verizon
152.00	152.00	1	MC-PK8-DSH	Dish Wireless
152.00	152.00	3	MX08FRO665-21	Dish Wireless
152.00	152.00	3	TA08025-B605	Dish Wireless
152.00	152.00	3	TA08025-B604	Dish Wireless
152.00	152.00	1	RDIDC-9181-OF-48	Dish Wireless
142.00	142.00	1	Platform w/ HR & Bracing	T-Mobile
142.00	142.00	4	Ericsson Air 6419 B41	T-Mobile
142.00	142.00	4	Ericsson 4460 B25 + B66	T-Mobile
142.00	142.00	1	Mod	T-Mobile
142.00	142.00	4	KRD 9011461-B66A-B2A	T-Mobile
142.00	142.00	3	APXVAARR24_43-U-NA20	T-Mobile
142.00	142.00	1	APXVA18-43-C-A20	T-Mobile
142.00	142.00	3	KRY 112 144/1	T-Mobile
142.00	142.00	4	4449 B71 + B85	T-Mobile
134.75	134.75	3	AIR 6419 B77G	AT&T
133.00	133.00	2	DMP65R-BU6EA-K	AT&T
133.00	133.00	1	DMP65R-BU8EA-K	AT&T
133.00	133.00	3	4478 B14	AT&T
133.00	133.00	1	DC9-48-60-24-8C-EV	AT&T
133.00	133.00	3	Kathrein 800-10965	AT&T
133.00	133.00	2	(3) SitePro 1 P/N	AT&T
133.00	133.00	6	Powerwave LGP21401	AT&T
133.00	133.00	3	Ericsson RRUS-32 RRU	AT&T
133.00	133.00	3	Ericsson B2/B66A 8843	AT&T
133.00	133.00	3	Ericsson B5/B12 4449	AT&T
133.00	133.00	2	Raycap DC6-48-60-18-8F	AT&T
131.75	131.75	3	AIR 6449 B77D	AT&T
110.00	115.29	1	DB222	BFFD
110.00	110.00	1	3 ft Standoff	BFFD
40.00	40.00	1	GPS	Sprint



Linear Appurtenances

Structure: CT02049-S-SBA

Type: Custom
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 12 Sided
Taper: 0.00000

7/28/2022

Page: 3



Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	160.00	Inside	1 5/8" Coax	Verizon
0.00	160.00	Outside	1 5/8" Hybrid	Verizon
0.00	160.00	Outside	7/8" Coax	BFFD
0.00	152.00	Outside	1.75" Hybrid	Dish Wireless
0.00	142.00	Inside	1 5/8" Coax	T-Mobile
0.00	142.00	Outside	1 5/8" Fiber	T-Mobile
0.00	142.00	Outside	1-1/4" Fiber	T-Mobile
0.00	142.00	Inside	1.9" Fiber	T-Mobile
0.00	133.00	Inside	0.92" DC Power	AT&T
0.00	133.00	Inside	1 1/4" Coax	AT&T
0.00	133.00	Inside	1 5/8" Coax	AT&T
0.00	133.00	Inside	1/2" Fiber	AT&T
0.00	133.00	Inside	3/8" Fiber	AT&T
0.00	110.00	Outside	7/8" Coax	BFFD
28.00	98.00	Outside	1.25" Reinforcing plate	
0.00	40.00	Inside	1/2" Coax	Sprint
0.00	32.00	Outside	1" Reinforcing plate	
0.00	32.00	Outside	C10x15.3	

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
18	2.00" F1554 105	105.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
1.5000	63.0	50.0	Round

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 125 mph Wind	4380.4	36.5	78.5
0.9D + 1.0W 125 mph Wind	4315.9	36.5	58.8
1.2D + 1.0Di + 1.0Wi 50 mph Wind	971.4	7.8	100.6
1.2D + 1.0Ev + 1.0Eh	77.3	0.5	81.5
0.9D + 1.0Ev + 1.0Eh	77.0	0.5	61.5
1.0D + 1.0W 60 mph Wind	895.7	7.5	65.4

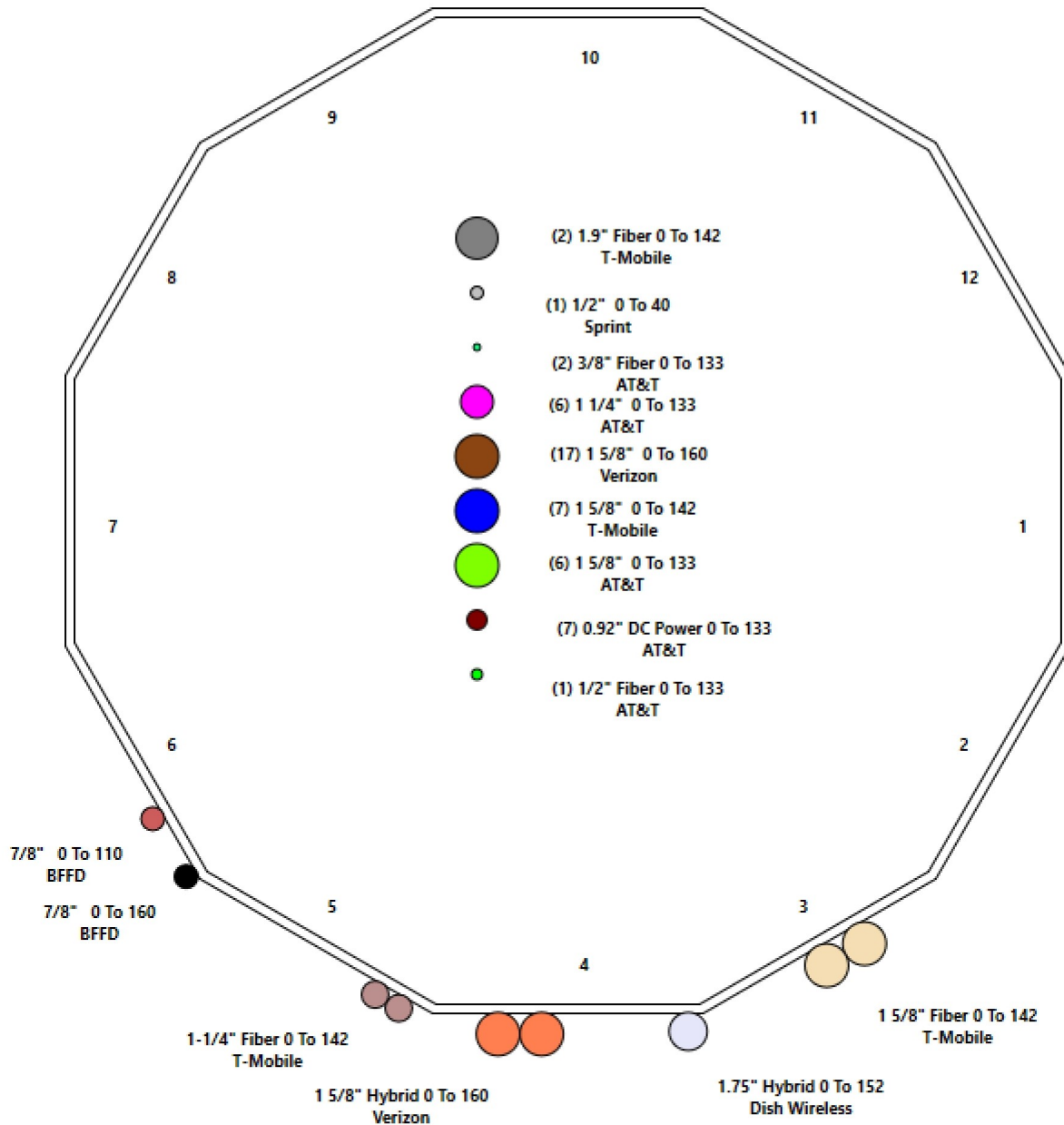
Structure: CT02049-S-SBA - Coax Line Placement

Type: Monopole
Site Name: Beacon Falls
Height: 160.00 (ft)

7/28/2022



Page: 4



Shaft Properties

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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

Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	12	22.000	0.3750	65		0.00	4,327
2	12	40.000	0.3750	65	Slip	72.00	7,193
3	12	30.000	0.3750	65	Slip	72.00	4,794
4	12	20.000	0.3125	65	Flange	0.00	2,335
5	12	20.000	0.3125	65	Slip	60.00	2,179
6	12	30.000	0.2500	65	Flange	0.00	2,221
7	R	5.000	0.2500	65	Flange	0.00	316
8	R	10.000	0.2500	50	Flange	0.00	421
Total Shaft Weight:							23,786

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	50.38	0.00	60.38	19265.63	33.85	134.33	46.11	22.00	55.22	14741.2	30.80	122.9	0.194000
2	48.02	16.00	57.53	16670.65	32.17	128.06	40.26	56.00	48.16	9779.90	26.62	107.3	0.194000
3	42.17	50.00	50.47	11256.46	27.99	112.47	36.35	80.00	43.45	7178.88	23.83	96.95	0.194000
4	36.35	80.00	36.27	6013.63	29.03	116.34	32.48	100.00	32.36	4273.08	25.70	103.9	0.194000
5	34.07	95.00	33.97	4940.86	27.07	109.02	30.19	115.00	30.06	3425.51	23.74	96.61	0.194000
6	30.19	115.0	24.10	2757.64	30.21	120.76	24.38	145.00	19.42	1441.83	23.98	97.50	0.194000
7	24.38	145.0	18.95	1379.54	0.00	97.50	24.38	150.00	18.19	1219.74	0.00	97.50	0.194000
8	16.00	150.0	12.37	383.86	0.00	64.00	16.00	160.00	12.37	383.86	0.00	64.00	0.000000

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Fu (ksi)	Offset (in)	Intermediate Connectors		Termination Connectors			
							Spacing (in)	Description	Spacing (in)	Lower Qty	Upper Qty	
0.00	16.25	3	PLT C10x30(1.5" Hole)	65	80	0.00	AJM20&sleeve	20.00	AJM20&sleeve	3.00		
0.00	1.00	3	SOL 2 1/4" William R71	128	150	5.62	5/8" Hollo Bolt	12.00	5/8" Hollo Bolt	3.00		
1.00	18.88	2	LNP LP6X100-BW-20T	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		9
1.00	18.88	1	LNP LP6x100-B2-20T	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		9
16.25	31.00	3	PLT C10x15.3(1.5" Hole)	65	80	0.00	AJM20&sleeve	20.00	AJM20&sleeve	3.00		4
18.63	33.38	3	LNP LP6X100-G-20TT	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00	10	10
30.00	46.00	3	PLT 6"X1-1/4"(1.25" Hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	8	8
45.16	58.00	3	PLT 7" x 1.25"(1.25"Hole)	65	80	0.00	AJM20&sleeve	12.00	AJM20&sleeve	3.00	13	
58.00	78.00	3	PLT 5.5"x1 1/4"(1.25"hol)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00		
78.00	95.58	3	PLT 5.5"x1 1/4"(1.25"hol)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00		10

Load Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	160.00	DB222	1	16.00	2.25	1.00	62.50	6.317	1.00	0.00	5.00
2	160.00	DB846F65ZAXY	6	21.00	7.05	0.93	145.05	7.851	0.93	0.00	2.00
3	160.00	Low Profile Platform	1	1200.00	22.00	1.00	1902.61	33.851	1.00	0.00	2.00
4	160.00	6' Lightning rod	1	6.50	0.38	1.00	30.86	1.110	1.00	0.00	3.00
5	160.00	JAHH-65B-R3B	6	54.00	9.11	0.83	168.75	7.426	0.83	0.00	2.00
6	160.00	VZS01	3	87.10	4.30	0.69	161.90	5.322	0.69	0.00	2.00
7	160.00	CBC78T-DS-43	1	20.70	0.37	1.00	38.29	0.546	1.00	0.00	2.00
8	160.00	B2/B66A RRH-BR049	3	70.00	1.87	0.67	112.71	2.243	0.67	0.00	2.00
9	160.00	B5/B13 RRH-BR04C (RFV01U-D2A)	3	84.40	1.87	0.67	131.77	2.243	0.67	0.00	2.00
10	160.00	Commscope FE-16148-OVP-B12 -	1	15.00	2.51	1.00	57.39	2.235	1.00	0.00	2.00
11	152.00	MC-PK8-DSH	1	1727.00	37.59	1.00	2853.71	69.121	1.00	0.00	0.00
12	152.00	MX08FRO665-21	3	64.50	12.49	0.74	258.67	13.468	0.74	0.00	0.00
13	152.00	TA08025-B605	3	75.00	1.96	0.67	109.92	2.334	0.67	0.00	0.00
14	152.00	TA08025-B604	3	63.90	1.96	0.67	97.70	2.334	0.67	0.00	0.00
15	152.00	RDIDC-9181-OF-48	1	21.90	2.01	1.00	57.45	2.389	1.00	0.00	0.00
16	142.00	Platform w/ HR & Bracing	1	2246.00	52.00	1.00	4325.11	77.512	1.00	0.00	0.00
17	142.00	Ericsson Air 6419 B41	4	66.10	3.80	0.76	129.89	4.328	0.76	0.00	0.00
18	142.00	Ericsson 4460 B25 + B66 RRU	4	109.00	2.85	0.67	156.68	3.297	0.67	0.00	0.00
19	142.00	Mod	1	300.00	12.00	1.00	577.71	20.331	1.00	0.00	0.00
20	142.00	KRD 9011461-B66A-B2A	4	132.20	6.51	0.87	438.14	8.017	0.89	0.00	0.00
21	142.00	APXVAARR24_43-U-NA20	3	128.00	20.24	0.70	424.22	24.924	0.72	0.00	0.00
22	142.00	APXVA18-43-C-A20	1	45.40	9.65	0.82	202.26	10.525	0.84	0.00	0.00
23	142.00	KRY 112 144/1	3	11.00	0.41	0.50	18.15	0.725	0.50	0.00	0.00
24	142.00	4449 B71 + B85	4	73.20	1.97	0.67	111.48	2.348	0.67	0.00	0.00
25	134.75	AIR 6419 B77G	3	66.10	3.80	0.76	129.56	4.325	0.76	0.00	0.00
26	133.00	DMP65R-BU6EA-K	2	101.00	17.12	0.71	345.80	18.249	0.71	0.00	0.00
27	133.00	DMP65R-BU8EA-K	1	95.70	17.87	0.73	357.31	19.053	0.73	0.00	0.00
28	133.00	4478 B14	3	59.90	1.84	0.67	90.86	2.187	0.67	0.00	0.00
29	133.00	DC9-48-60-24-8C-EV	1	26.20	1.14	1.00	96.02	2.185	1.00	0.00	0.00
30	133.00	Kathrein 800-10965	3	108.60	13.81	0.71	295.10	14.836	0.71	0.00	0.00
31	133.00	(3) SitePro 1 P/N RMV12-NP W/3	2	1357.77	21.34	0.75	2231.84	39.003	0.75	0.00	0.00
32	133.00	Powerwave LGP21401 TMA	6	14.10	1.29	0.67	30.57	1.841	0.67	0.00	0.00
33	133.00	Ericsson RRUS-32 RRU	3	77.00	3.87	0.67	146.63	3.822	0.67	0.00	0.00
34	133.00	Ericsson B2/B66A 8843 RRU	3	72.00	1.64	0.67	102.86	1.967	0.67	0.00	0.00
35	133.00	Ericsson B5/B12 4449 RRU	3	71.00	1.97	0.67	106.16	2.330	0.67	0.00	0.00
36	133.00	Raycap DC6-48-60-18-8F Junction	2	31.80	0.92	0.67	72.52	1.208	0.67	0.00	0.00
37	131.75	AIR 6449 B77D	3	88.00	4.13	0.85	172.88	4.682	0.85	0.00	0.00
38	110.00	DB222	1	16.00	2.65	1.00	60.79	7.264	1.00	0.00	5.29
39	110.00	3 ft Standoff	1	40.00	2.63	1.00	91.89	6.488	1.00	0.00	0.00
40	40.00	GPS	1	10.00	1.00	1.00	27.13	1.416	1.00	0.00	0.00
Totals:			100	14,203.64			28,529.57				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	160.00	(17) 1 5/8" Coax	0.00	Inside

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice		Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)		
0.00	160.00	(2) 1 5/8" Hybrid		2.00						
0.00	160.00	(1) 7/8" Coax		0.00						
0.00	152.00	(1) 1.75" Hybrid		0.00						
0.00	142.00	(7) 1 5/8" Coax		0.00						
0.00	142.00	(2) 1 5/8" Fiber		0.00						
0.00	142.00	(2) 1-1/4" Fiber		0.00						
0.00	142.00	(2) 1.9" Fiber		0.00						
0.00	133.00	(7) 0.92" DC Power		0.00						
0.00	133.00	(6) 1 1/4" Coax		0.00						
0.00	133.00	(6) 1 5/8" Coax		0.00						
0.00	133.00	(1) 1/2" Fiber		0.00						
0.00	133.00	(2) 3/8" Fiber		0.00						
0.00	110.00	(1) 7/8" Coax		0.00						
28.00	98.00	(3) 1.25" Reinforcing plate		1.25						
0.00	40.00	(1) 1/2" Coax		0.00						
0.00	32.00	(3) 1" Reinforcing plate		1.00						
0.00	32.00	(3) C10x15.3		2.60						

Shaft Section Properties

Structure: CT02049-S-SBA

Code: TIA-222-H

7/28/2022

Site Name: Beacon Falls

Exposure: B

Height: 160.00 (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)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
0.00	RB1 RB2	0.3750	50.375	60.375	19265.6	33.85	134.33	65	68	0.0	38.70	17446.6	13285.7	
1.00	RT2 RB3 RB4	0.3750	50.181	60.141	19042.2	33.71	133.82	65	68	205.0	44.46	16928.4	13002.7	151.2
2.00		0.3750	49.987	59.906	18820.6	33.57	133.30	65	68	204.2	44.46	16802.1	12906.2	151.2
4.00		0.3750	49.599	59.438	18382.5	33.30	132.26	65	68	406.1	44.46	16551.1	12714.2	302.5
6.00		0.3750	49.211	58.969	17951.2	33.02	131.23	65	69	402.9	44.46	16301.9	12523.7	302.5
8.00		0.3750	48.823	58.501	17526.7	32.74	130.19	65	69	399.7	44.46	16054.6	12334.6	302.5
10.00		0.3750	48.435	58.032	17109.0	32.46	129.16	65	69	396.5	44.46	15809.2	12147.0	302.5
12.00		0.3750	48.047	57.564	16698.0	32.19	128.13	65	70	393.3	44.46	15565.7	11960.8	302.5
14.00		0.3750	47.659	57.095	16293.5	31.91	127.09	65	70	390.2	44.46	15324.1	11776.1	302.5
16.00	Bot - Section 2	0.3750	47.271	56.627	15895.7	31.63	126.06	65	70	387.0	44.46	15084.3	11592.8	302.5
16.25	RT1 RB5	0.3750	47.222	56.568	15846.5	31.60	125.93	65	70	97.1	31.47	11629.5	8035.3	26.8
18.00		0.3750	46.883	56.158	15504.4	31.36	125.02	65	71	676.7	31.47	11472.0	7927.5	187.5
18.63	RB6	0.3750	46.761	56.011	15382.5	31.27	124.70	65	71	242.4	49.47	16750.0	13223.8	106.1
18.88	RT3 RT4	0.3750	46.712	55.952	15334.3	31.23	124.57	65	71	96.0	31.47	9686.5	9686.5	26.8
20.00		0.3750	46.495	55.690	15119.6	31.08	123.99	65	71	428.9	31.47	9602.0	9602.0	120.0
22.00	Top - Section 1	0.3750	46.857	56.127	15478.5	31.34	124.95	65	71	761.0	31.47	9452.1	9452.1	214.3
24.00		0.3750	46.469	55.659	15094.1	31.06	123.92	65	71	380.4	31.47	9303.4	9303.4	214.3
26.00		0.3750	46.081	55.190	14716.1	30.78	122.88	65	71	377.2	31.47	9155.8	9155.8	214.3
28.00		0.3750	45.693	54.721	14344.5	30.51	121.85	65	71	374.0	31.47	9009.5	9009.5	214.3
30.00	RB7	0.3750	45.305	54.253	13979.2	30.23	120.81	65	72	370.8	53.97	14995.2	14995.2	367.4
31.00	RT5	0.3750	45.111	54.019	13798.9	30.09	120.30	65	72	184.2	40.50	10892.0	10892.0	137.8
32.00		0.3750	44.917	53.784	13620.2	29.95	119.78	65	72	183.4	40.50	10801.3	10801.3	137.8
33.38	RT6	0.3750	44.649	53.461	13376.0	29.76	119.06	65	72	251.8	22.50	5960.4	5960.4	105.7
34.00		0.3750	44.529	53.316	13267.3	29.67	118.74	65	72	112.6	22.50	5929.4	5929.4	47.5
36.00		0.3750	44.141	52.847	12920.6	29.40	117.71	65	73	361.3	22.50	5829.9	5829.9	153.1
38.00		0.3750	43.753	52.379	12580.0	29.12	116.67	65	73	358.1	22.50	5731.3	5731.3	153.1
40.00		0.3750	43.365	51.910	12245.5	28.84	115.64	65	73	354.9	22.50	5633.5	5633.5	153.1
42.00		0.3750	42.977	51.442	11916.9	28.56	114.61	65	74	351.7	22.50	5536.5	5536.5	153.1
44.00		0.3750	42.589	50.973	11594.2	28.29	113.57	65	74	348.5	22.50	5440.4	5440.4	153.1
45.16	RB8	0.3750	42.364	50.702	11409.8	28.13	112.97	65	74	200.7	48.75	11681.9	11681.9	192.4
46.00	RT7	0.3750	42.201	50.505	11277.5	28.01	112.54	65	74	144.6	26.25	6250.3	6250.3	75.0
48.00		0.3750	41.813	50.036	10966.5	27.73	111.50	65	74	342.1	26.25	6140.1	6140.1	178.6
50.00	Bot - Section 3	0.3750	41.425	49.568	10661.4	27.46	110.47	65	75	338.9	26.25	6031.0	6031.0	178.6
52.00		0.3750	41.037	49.099	10361.9	27.18	109.43	65	75	677.6	26.25	6132.8	6132.8	178.6
54.00		0.3750	40.649	48.631	10068.1	26.90	108.40	65	75	671.3	26.25	6023.7	6023.7	178.6
56.00	Top - Section 2	0.3750	41.011	49.068	10342.0	27.16	109.36	65	75	664.9	26.25	5915.6	5915.6	178.6
58.00	RT8 RB9	0.3750	40.623	48.599	10048.6	26.88	108.33	65	75	332.3	20.63	4547.7	4547.7	140.4
60.00		0.3750	40.235	48.131	9760.8	26.61	107.29	65	76	329.2	20.63	4464.3	4464.3	140.4
62.00		0.3750	39.847	47.662	9478.5	26.33	106.26	65	76	326.0	20.63	4381.7	4381.7	140.4
64.00		0.3750	39.459	47.194	9201.7	26.05	105.22	65	76	322.8	20.63	4299.9	4299.9	140.4
66.00		0.3750	39.071	46.725	8930.4	25.77	104.19	65	77	319.6	20.63	4218.8	4218.8	140.4
68.00		0.3750	38.683	46.257	8664.5	25.50	103.15	65	77	316.4	20.63	4138.5	4138.5	140.4
70.00		0.3750	38.295	45.788	8403.8	25.22	102.12	65	77	313.2	20.63	4059.0	4059.0	140.4
72.00		0.3750	37.907	45.320	8148.5	24.94	101.09	65	78	310.0	20.63	3980.3	3980.3	140.4
74.00		0.3750	37.519	44.851	7898.4	24.66	100.05	65	78	306.8	20.63	3902.4	3902.4	140.4
76.00		0.3750	37.131	44.383	7653.5	24.39	99.02	65	78	303.6	20.63	3825.2	3825.2	140.4
78.00	RT9 RB10	0.3750	36.743	43.914	7413.6	24.11	97.98	65	78	300.5	20.63	3748.8	3748.8	140.4
80.00	Top - Section 3	0.3750	36.355	43.446	7178.9	23.83	96.95	65	79	297.3	20.63	3673.2	3673.2	140.4
80.00	Bot - Section 4	0.3125	36.355	36.268	6013.6	28.60	116.34	65	73					
82.00		0.3125	35.967	35.877	5821.5	28.70	115.09	65	73	245.5	20.63	3598.3	3598.3	140.4

Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
84.00		0.3125	35.579	35.487	5633.5	28.36	113.85	65	74	242.8	20.63	3524.2	3524.2	140.4
86.00		0.3125	35.191	35.096	5449.6	28.03	112.61	65	74	240.2	20.63	3451.0	3451.0	140.4
88.00		0.3125	34.803	34.706	5269.8	27.70	111.37	65	75	237.5	20.63	3378.4	3378.4	140.4
90.00		0.3125	34.415	34.316	5093.9	27.37	110.13	65	75	234.9	20.63	3306.7	3306.7	140.4
92.00		0.3125	34.027	33.925	4922.0	27.03	108.89	65	75	232.2	20.63	3235.7	3235.7	140.4
94.00		0.3125	33.639	33.535	4754.0	26.70	107.64	65	76	229.6	20.63	3165.5	3165.5	140.4
95.00	Bot - Section 5	0.3125	33.445	33.340	4671.5	26.53	107.02	65	76	113.8	20.63	3130.7	3130.7	70.2
95.58	RT10	0.3125	33.332	33.226	4624.0	26.44	106.66	65	76	132.6	20.63	3223.1	3223.1	40.7
96.00		0.3125	33.251	33.144	4589.9	26.37	106.40	65	76	95.8				
98.00		0.3125	32.863	32.754	4429.6	26.03	105.16	65	76	452.8				
100.00	Top - Section 4	0.3125	33.100	32.992	4527.1	26.24	105.92	65	76	447.4				
102.00		0.3125	32.712	32.602	4368.2	25.90	104.68	65	76	223.2				
104.00		0.3125	32.324	32.212	4213.2	25.57	103.44	65	77	220.5				
106.00		0.3125	31.936	31.821	4061.8	25.24	102.20	65	77	217.9				
108.00		0.3125	31.548	31.431	3914.1	24.91	100.95	65	78	215.2				
110.00		0.3125	31.160	31.040	3770.1	24.57	99.71	65	78	212.6				
112.00		0.3125	30.772	30.650	3629.6	24.24	98.47	65	78	209.9				
114.00		0.3125	30.384	30.259	3492.7	23.91	97.23	65	79	207.3				
115.00	Top - Section 5	0.3125	30.190	30.064	3425.5	23.74	96.61	65	79	102.6				
115.00	Bot - Section 6	0.2500	30.190	24.102	2757.6	29.68	120.76	65	72					
116.00		0.2500	29.996	23.946	2704.4	30.01	119.98	65	72	81.7				
118.00		0.2500	29.608	23.633	2599.9	29.59	118.43	65	72	161.9				
120.00		0.2500	29.220	23.321	2498.2	29.17	116.88	65	73	159.8				
122.00		0.2500	28.832	23.009	2399.2	28.76	115.33	65	73	157.6				
124.00		0.2500	28.444	22.696	2302.8	28.34	113.78	65	74	155.5				
126.00		0.2500	28.056	22.384	2209.0	27.93	112.22	65	74	153.4				
128.00		0.2500	27.668	22.071	2117.8	27.51	110.67	65	75	151.3				
130.00		0.2500	27.280	21.759	2029.2	27.10	109.12	65	75	149.1				
131.75		0.2500	26.941	21.486	1953.7	26.73	107.76	65	76	128.8				
132.00		0.2500	26.892	21.447	1943.0	26.68	107.57	65	76	18.3				
133.00		0.2500	26.698	21.291	1900.9	26.47	106.79	65	76	72.7				
134.00		0.2500	26.504	21.134	1859.4	26.26	106.02	65	76	72.2				
134.75		0.2500	26.359	21.017	1828.6	26.11	105.43	65	76	53.8				
136.00		0.2500	26.116	20.822	1778.2	25.85	104.46	65	77	89.0				
138.00		0.2500	25.728	20.510	1699.3	25.43	102.91	65	77	140.6				
140.00		0.2500	25.340	20.197	1622.9	25.02	101.36	65	77	138.5				
142.00		0.2500	24.952	19.885	1548.7	24.60	99.81	65	78	136.4				
144.00		0.2500	24.564	19.573	1476.9	24.18	98.26	65	78	134.3				
145.00	Top - Section 6	0.2500	24.370	19.417	1441.8	23.98	97.48	65	79	66.3				
145.00	Bot - Section 7	0.2500	24.375	18.948	1379.5	23.98	97.48	65	55					
146.00		0.2500	24.181	18.795	1346.5	0.00	96.72	65	55	64.2				
148.00		0.2500	23.793	18.491	1282.1	0.00	95.17	65	55	126.9				
150.00	Top - Section 7	0.2500	23.405	18.186	1219.7	0.00	93.62	65	55	124.8				
150.00	Bot - Section 8	0.2500	16.000	12.370	383.9	0.00	93.62	50	50					
152.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
154.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
156.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
158.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
160.00		0.2500	16.000	12.370	383.9	0.00	64.00	50	50	84.2				
Total Weight										23786.1	9244.5			

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

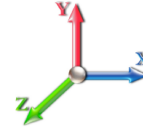


Page: 10

Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20
Wind Load Factor 1.00



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	RB1 RB2	1.00	0.70	26.005	28.61	449.40	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT2 RB3 RB4	1.00	0.70	26.005	28.61	447.67	0.972 *	0.000	1.00	4.338	4.21	120.6	0.0	246.1
2.00		1.00	0.70	26.005	28.61	445.94	0.973 *	0.000	1.00	4.321	4.20	120.2	0.0	245.1
4.00		1.00	0.70	26.005	28.61	442.48	0.975 *	0.000	2.00	8.592	8.37	239.5	0.0	487.3
6.00		1.00	0.70	26.005	28.61	439.02	0.977 *	0.000	2.00	8.525	8.33	238.2	0.0	483.5
8.00		1.00	0.70	26.005	28.61	435.56	0.980 *	0.000	2.00	8.458	8.28	237.0	0.0	479.7
10.00		1.00	0.70	26.005	28.61	432.09	0.982 *	0.000	2.00	8.391	8.24	235.7	0.0	475.8
12.00		1.00	0.70	26.005	28.61	428.63	0.985 *	0.000	2.00	8.324	8.20	234.4	0.0	472.0
14.00		1.00	0.70	26.005	28.61	425.17	0.987 *	0.000	2.00	8.257	8.15	233.2	0.0	468.2
16.00	Bot - Section 2	1.00	0.70	26.005	28.61	421.71	0.990 *	0.000	2.00	8.190	8.11	231.9	0.0	464.4
16.25	RT1 RB5	1.00	0.70	26.005	28.61	421.28	0.991 *	0.000	0.25	1.035	1.03	29.4	0.0	116.5
18.00		1.00	0.70	26.005	28.61	418.25	0.993 *	0.000	1.75	7.217	7.16	204.9	0.0	812.0
18.63	RB6	1.00	0.70	26.005	28.61	417.16	0.994 *	0.000	0.63	2.586	2.57	73.5	0.0	290.9
18.88	RT3 RT4	1.00	0.70	26.005	28.61	416.73	0.995 *	0.000	0.25	1.024	1.02	29.1	0.0	115.2
20.00		1.00	0.70	26.005	28.61	414.79	0.996 *	0.000	1.12	4.576	4.56	130.3	0.0	514.7
22.00	Top - Section 1	1.00	0.70	26.005	28.61	411.33	0.998 *	0.000	2.00	8.118	8.10	231.8	0.0	913.2
24.00		1.00	0.70	26.005	28.61	414.56	0.995 *	0.000	2.00	8.052	8.01	229.2	0.0	456.5
26.00		1.00	0.70	26.005	28.61	411.09	0.998 *	0.000	2.00	7.985	7.97	228.0	0.0	452.6
28.00		1.00	0.70	26.005	28.61	407.63	1.001 *	0.000	2.00	7.918	7.93	226.7	0.0	448.8
30.00	RB7	1.00	0.70	26.027	28.63	404.34	1.079 *	0.000	2.00	7.851	8.47	242.6	0.0	445.0
31.00	RT5	1.00	0.71	26.272	28.90	404.50	1.082 *	0.000	1.00	3.900	4.22	122.0	0.0	221.1
32.00		1.00	0.71	26.511	29.16	404.59	1.084 *	0.000	1.00	3.883	4.21	122.8	0.0	220.1
33.38	RT6	1.00	0.72	26.833	29.52	404.61	0.950	0.000	1.38	5.332	5.07	149.5	0.0	302.2
34.00		1.00	0.73	26.974	29.67	404.59	0.950	0.000	0.62	2.385	2.27	67.2	0.0	135.2
36.00		1.00	0.74	27.418	30.16	404.35	0.950	0.000	2.00	7.650	7.27	219.2	0.0	433.5
38.00		1.00	0.75	27.845	30.63	403.90	0.950	0.000	2.00	7.583	7.20	220.6	0.0	429.7
40.00	Appurtenance(s)	1.00	0.76	28.256	31.08	403.26	0.950	0.000	2.00	7.516	7.14	221.9	0.0	425.8
42.00		1.00	0.77	28.653	31.52	402.45	0.950	0.000	2.00	7.449	7.08	223.0	0.0	422.0
44.00		1.00	0.78	29.036	31.94	401.48	0.950	0.000	2.00	7.382	7.01	224.0	0.0	418.2
45.16	RB8	1.00	0.79	29.253	32.18	400.84	0.950	0.000	1.16	4.251	4.04	129.9	0.0	240.8
46.00	RT7	1.00	0.79	29.407	32.35	400.35	0.950	0.000	0.84	3.064	2.91	94.2	0.0	173.6
48.00		1.00	0.80	29.767	32.74	399.09	0.950	0.000	2.00	7.248	6.89	225.5	0.0	410.5
50.00	Bot - Section 3	1.00	0.81	30.116	33.13	397.70	0.950	0.000	2.00	7.181	6.82	226.0	0.0	406.7
52.00		1.00	0.82	30.456	33.50	396.19	0.950	0.000	2.00	7.244	6.88	230.5	0.0	813.2
54.00		1.00	0.83	30.786	33.86	394.57	0.950	0.000	2.00	7.177	6.82	230.9	0.0	805.5
56.00	Top - Section 2	1.00	0.84	31.108	34.22	392.84	0.950	0.000	2.00	7.110	6.75	231.1	0.0	797.9
58.00	RT8 RB9	1.00	0.85	31.421	34.56	398.36	0.950	0.000	2.00	7.043	6.69	231.3	0.0	398.8
60.00		1.00	0.85	31.727	34.90	396.47	0.950	0.000	2.00	6.976	6.63	231.3	0.0	395.0
62.00		1.00	0.86	32.025	35.23	394.49	0.950	0.000	2.00	6.909	6.56	231.2	0.0	391.2
64.00		1.00	0.87	32.317	35.55	392.43	0.950	0.000	2.00	6.842	6.50	231.1	0.0	387.3
66.00		1.00	0.88	32.603	35.86	390.28	0.950	0.000	2.00	6.775	6.44	230.8	0.0	383.5
68.00		1.00	0.89	32.882	36.17	388.05	0.950	0.000	2.00	6.708	6.37	230.5	0.0	379.7
70.00		1.00	0.89	33.155	36.47	385.76	0.950	0.000	2.00	6.641	6.31	230.1	0.0	375.9
72.00		1.00	0.90	33.423	36.77	383.39	0.950	0.000	2.00	6.574	6.25	229.6	0.0	372.0
74.00		1.00	0.91	33.686	37.05	380.95	0.950	0.000	2.00	6.507	6.18	229.1	0.0	368.2
76.00		1.00	0.91	33.944	37.34	378.45	0.950	0.000	2.00	6.440	6.12	228.4	0.0	364.4
78.00	RT9 RB10	1.00	0.92	34.197	37.62	375.89	0.950	0.000	2.00	6.373	6.05	227.8	0.0	360.5

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



80.00 Top - Section 3	1.00	0.93	34.445	37.89	373.27	0.950	0.000	2.00	6.306	5.99	227.0	0.0	356.7
82.00	1.00	0.93	34.689	38.16	370.59	0.950	0.000	2.00	6.239	5.93	226.2	0.0	294.6
84.00	1.00	0.94	34.928	38.42	367.85	0.950	0.000	2.00	6.172	5.86	225.3	0.0	291.4
86.00	1.00	0.95	35.164	38.68	365.07	0.950	0.000	2.00	6.106	5.80	224.4	0.0	288.2
88.00	1.00	0.95	35.396	38.94	362.23	0.950	0.000	2.00	6.039	5.74	223.4	0.0	285.0
90.00	1.00	0.96	35.624	39.19	359.34	0.950	0.000	2.00	5.972	5.67	222.3	0.0	281.8
92.00	1.00	0.96	35.848	39.43	356.41	0.950	0.000	2.00	5.905	5.61	221.2	0.0	278.7
94.00	1.00	0.97	36.069	39.68	353.43	0.950	0.000	2.00	5.838	5.55	220.0	0.0	275.5
95.00 Bot - Section 5	1.00	0.97	36.178	39.80	351.92	0.950	0.000	1.00	2.894	2.75	109.4	0.0	136.5
95.58 RT10	1.00	0.98	36.241	39.87	351.04	0.950	0.000	0.58	1.702	1.62	64.5	0.0	159.1
96.00	1.00	0.98	36.287	39.92	350.41	0.950	0.000	0.42	1.229	1.17	46.6	0.0	114.9
98.00	1.00	0.98	36.501	40.15	347.34	0.950	0.000	2.00	5.812	5.52	221.7	0.0	543.3
100.00 Top - Section 4	1.00	0.99	36.712	40.38	344.23	0.950	0.000	2.00	5.745	5.46	220.4	0.0	536.9
102.00	1.00	0.99	36.921	40.61	347.72	0.950	0.000	2.00	5.678	5.39	219.1	0.0	267.8
104.00	1.00	1.00	37.126	40.84	344.55	0.950	0.000	2.00	5.611	5.33	217.7	0.0	264.7
106.00	1.00	1.00	37.329	41.06	341.35	0.950	0.000	2.00	5.544	5.27	216.3	0.0	261.5
108.00	1.00	1.01	37.529	41.28	338.10	0.950	0.000	2.00	5.477	5.20	214.8	0.0	258.3
110.00 Appurtenance(s)	1.00	1.02	37.726	41.50	334.82	0.950	0.000	2.00	5.410	5.14	213.3	0.0	255.1
112.00	1.00	1.02	37.921	41.71	331.50	0.950	0.000	2.00	5.343	5.08	211.7	0.0	251.9
114.00	1.00	1.03	38.113	41.92	328.15	0.950	0.000	2.00	5.276	5.01	210.1	0.0	248.7
115.00 Top - Section 5	1.00	1.03	38.208	42.03	326.46	0.950	0.000	1.00	2.613	2.48	104.3	0.0	123.2
116.00	1.00	1.03	38.303	42.13	324.77	0.950	0.000	1.00	2.596	2.47	103.9	0.0	98.1
118.00	1.00	1.04	38.490	42.34	321.35	0.950	0.000	2.00	5.142	4.89	206.8	0.0	194.3
120.00	1.00	1.04	38.675	42.54	317.90	0.950	0.000	2.00	5.075	4.82	205.1	0.0	191.7
122.00	1.00	1.05	38.859	42.74	314.42	0.950	0.000	2.00	5.008	4.76	203.4	0.0	189.2
124.00	1.00	1.05	39.040	42.94	310.91	0.950	0.000	2.00	4.941	4.69	201.6	0.0	186.6
126.00	1.00	1.06	39.218	43.14	307.37	0.950	0.000	2.00	4.874	4.63	199.8	0.0	184.1
128.00	1.00	1.06	39.395	43.33	303.80	0.950	0.000	2.00	4.807	4.57	197.9	0.0	181.5
130.00	1.00	1.07	39.570	43.53	300.21	0.950	0.000	2.00	4.741	4.50	196.0	0.0	179.0
131.75 Appurtenance(s)	1.00	1.07	39.722	43.69	297.04	0.950	0.000	1.75	4.093	3.89	169.9	0.0	154.5
132.00	1.00	1.07	39.743	43.72	296.58	0.950	0.000	0.25	0.581	0.55	24.1	0.0	21.9
133.00 Appurtenance(s)	1.00	1.07	39.829	43.81	294.76	0.950	0.000	1.00	2.312	2.20	96.2	0.0	87.3
134.00	1.00	1.07	39.914	43.91	292.93	0.950	0.000	1.00	2.295	2.18	95.7	0.0	86.6
134.75 Appurtenance(s)	1.00	1.08	39.978	43.98	291.56	0.950	0.000	0.75	1.710	1.62	71.4	0.0	64.5
136.00	1.00	1.08	40.084	44.09	289.26	0.950	0.000	1.25	2.829	2.69	118.5	0.0	106.8
138.00	1.00	1.08	40.251	44.28	285.55	0.950	0.000	2.00	4.473	4.25	188.1	0.0	168.8
140.00	1.00	1.09	40.417	44.46	281.83	0.950	0.000	2.00	4.406	4.19	186.1	0.0	166.2
142.00 Appurtenance(s)	1.00	1.09	40.581	44.64	278.07	0.950	0.000	2.00	4.339	4.12	184.0	0.0	163.7
144.00	1.00	1.10	40.744	44.82	274.30	0.950	0.000	2.00	4.272	4.06	181.9	0.0	161.1
145.00 Top - Section 6	1.00	1.10	40.824	44.91	272.40	0.950	0.000	1.00	2.111	2.01	90.1	0.0	79.6
146.00	1.00	1.10	40.904	44.99	261.33	0.600	0.000	1.00	2.023	1.21	54.6	0.0	77.1
148.00	1.00	1.11	41.064	45.17	257.64	0.600	0.000	2.00	3.998	2.40	108.3	0.0	152.3
150.00 Top - Section 7	1.00	1.11	41.222	45.34	253.93	0.600	0.000	2.00	3.933	2.36	107.0	0.0	149.8
152.00 Appurtenance(s)	1.00	1.11	41.378	45.52	173.92	0.645*	0.000	2.00	2.667	1.72	78.3	0.0	101.0
154.00	1.00	1.12	41.533	45.69	174.24	0.645*	0.000	2.00	2.667	1.72	78.6	0.0	101.0
156.00	1.00	1.12	41.686	45.85	174.56	0.645*	0.000	2.00	2.667	1.72	78.9	0.0	101.0
158.00	1.00	1.13	41.838	46.02	174.88	0.645*	0.000	2.00	2.667	1.72	79.2	0.0	101.0
160.00 Appurtenance(s)	1.00	1.13	41.989	46.19	175.20	0.645*	0.000	2.00	2.667	1.72	79.4	0.0	101.0
Totals:								160.00			16,630.3		28,543.3

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



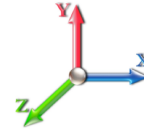
Page: 12

Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



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	160.00	B5/B13 RRH-BR04C	3	42.138	46.352	0.60	0.90	3.38	303.84	0.000	2.000	156.80	0.00	313.60
2	160.00	JAHH-65B-R3B	6	42.138	46.352	0.75	0.90	40.83	388.80	0.000	2.000	1892.59	0.00	3785.18
3	160.00	VZS01	3	42.138	46.352	0.62	0.90	8.01	313.56	0.000	2.000	371.32	0.00	742.64
4	160.00	CBC78T-DS-43	1	42.138	46.352	1.00	1.00	0.37	24.84	0.000	2.000	17.15	0.00	34.30
5	160.00	B2/B66A RRH-BR049	3	42.138	46.352	0.60	0.90	3.38	252.00	0.000	2.000	156.80	0.00	313.60
6	160.00	Low Profile Platform	1	42.138	46.352	1.00	1.00	22.00	1440.00	0.000	2.000	1019.74	0.00	2039.48
7	160.00	Commscope	1	42.138	46.352	1.00	1.00	2.51	18.00	0.000	2.000	116.34	0.00	232.69
8	160.00	6' Lightning rod	1	42.212	46.433	1.00	1.00	0.38	7.80	0.000	3.000	17.64	0.00	52.93
9	160.00	DB222	1	42.359	46.595	1.00	1.00	2.25	19.20	0.000	5.000	104.84	0.00	524.20
10	160.00	DB846F65ZAXY	6	42.138	46.352	0.84	0.90	35.41	151.20	0.000	2.000	1641.09	0.00	3282.18
11	152.00	MC-PK8-DSH	1	41.378	45.516	1.00	1.00	37.59	2072.40	0.000	0.000	1710.93	0.00	0.00
12	152.00	MX08FRO665-21	3	41.378	45.516	0.55	0.75	20.80	232.20	0.000	0.000	946.54	0.00	0.00
13	152.00	TA08025-B605	3	41.378	45.516	0.50	0.75	2.95	270.00	0.000	0.000	134.48	0.00	0.00
14	152.00	TA08025-B604	3	41.378	45.516	0.50	0.75	2.95	230.04	0.000	0.000	134.48	0.00	0.00
15	152.00	RDIDC-9181-OF-48	1	41.378	45.516	0.75	0.75	1.51	26.28	0.000	0.000	68.61	0.00	0.00
16	142.00	4449 B71 + B85	4	40.581	44.639	0.54	0.80	4.22	351.36	0.000	0.000	188.54	0.00	0.00
17	142.00	KRY 112 144/1	3	40.581	44.639	0.38	0.75	0.46	39.60	0.000	0.000	20.59	0.00	0.00
18	142.00	APXVA18-43-C-A20	1	40.581	44.639	0.61	0.75	5.93	54.48	0.000	0.000	264.92	0.00	0.00
19	142.00	APXVAARR24_43-U-NA2	3	40.581	44.639	0.52	0.75	31.88	460.80	0.000	0.000	1423.01	0.00	0.00
20	142.00	KRD 9011461-B66A-B2A	4	40.581	44.639	0.65	0.75	16.99	634.56	0.000	0.000	758.47	0.00	0.00
21	142.00	Mod	1	40.581	44.639	1.00	1.00	12.00	360.00	0.000	0.000	535.67	0.00	0.00
22	142.00	Platform w/ HR & Bracing	1	40.581	44.639	1.00	1.00	52.00	2695.20	0.000	0.000	2321.24	0.00	0.00
23	142.00	Ericsson 4460 B25 + B66	4	40.581	44.639	0.50	0.75	5.73	523.20	0.000	0.000	255.72	0.00	0.00
24	142.00	Ericsson Air 6419 B41	4	40.581	44.639	0.57	0.75	8.66	317.28	0.000	0.000	386.75	0.00	0.00
25	134.75	AIR 6419 B77G	3	39.978	43.976	0.61	0.80	6.93	237.96	0.000	0.000	304.80	0.00	0.00
26	133.00	DMP65R-BU6EA-K	2	39.829	43.812	0.57	0.80	19.45	242.40	0.000	0.000	852.07	0.00	0.00
27	133.00	DMP65R-BU8EA-K	1	39.829	43.812	0.58	0.80	10.44	114.84	0.000	0.000	457.22	0.00	0.00
28	133.00	4478 B14	3	39.829	43.812	0.54	0.80	2.96	215.64	0.000	0.000	129.63	0.00	0.00
29	133.00	DC9-48-60-24-8C-EV	1	39.829	43.812	0.80	0.80	0.91	31.44	0.000	0.000	39.96	0.00	0.00
30	133.00	Kathrein 800-10965	3	39.829	43.812	0.57	0.80	23.53	390.96	0.000	0.000	1030.99	0.00	0.00
31	133.00	(3) SitePro 1 P/N	2	39.829	43.812	0.56	0.75	24.01	3258.65	0.000	0.000	1051.81	0.00	0.00
32	133.00	Powerwave LGP21401	6	39.829	43.812	0.54	0.80	4.15	101.52	0.000	0.000	181.76	0.00	0.00
33	133.00	Ericsson RRUS-32 RRU	3	39.829	43.812	0.54	0.80	6.22	277.20	0.000	0.000	272.64	0.00	0.00
34	133.00	Ericsson B2/B66A 8843	3	39.829	43.812	0.54	0.80	2.64	259.20	0.000	0.000	115.54	0.00	0.00
35	133.00	Ericsson B5/B12 4449	3	39.829	43.812	0.54	0.80	3.17	255.60	0.000	0.000	138.79	0.00	0.00
36	133.00	Raycap DC6-48-60-18-8F	2	39.829	43.812	0.54	0.80	0.99	76.32	0.000	0.000	43.21	0.00	0.00
37	131.75	AIR 6449 B77D	3	39.722	43.694	0.68	0.80	8.43	316.80	0.000	0.000	368.13	0.00	0.00
38	110.00	3 ft Standoff	1	37.726	41.498	1.00	1.00	2.63	48.00	0.000	0.000	109.14	0.00	0.00
39	110.00	DB222	1	38.236	42.059	1.00	1.00	2.65	19.20	0.000	5.292	111.46	0.00	589.80
40	40.00	GPS	1	28.256	31.082	1.00	1.00	1.00	12.00	0.000	0.000	31.08	0.00	0.00

Totals: 17,044.37

19,882.49

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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 + 1.0W 125 mph Wind

Dead Load Factor 1.20
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
1.00		120.56	665.79	0.00	0.00
2.00		120.24	664.83	0.00	0.00
4.00		239.52	1326.79	0.00	0.00
6.00		238.25	1322.97	0.00	0.00
8.00		236.98	1319.14	0.00	0.00
10.00		235.70	1315.31	0.00	0.00
12.00		234.43	1311.49	0.00	0.00
14.00		233.16	1307.66	0.00	0.00
16.00		231.88	1303.84	0.00	0.00
16.25		29.35	221.41	0.00	0.00
18.00		204.93	1546.53	0.00	0.00
18.63		73.54	555.32	0.00	0.00
18.88		29.15	220.15	0.00	0.00
20.00		130.33	984.82	0.00	0.00
22.00		231.76	1752.64	0.00	0.00
24.00		229.25	1295.93	0.00	0.00
26.00		227.98	1292.10	0.00	0.00
28.00		226.70	1288.27	0.00	0.00
30.00		242.62	1644.45	0.00	0.00
31.00		121.97	820.79	0.00	0.00
32.00		122.76	819.83	0.00	0.00
33.38		149.50	633.00	0.00	0.00
34.00		67.23	283.80	0.00	0.00
36.00		219.18	912.97	0.00	0.00
38.00		220.65	909.14	0.00	0.00
40.00	(1) attachments	253.01	917.32	0.00	0.00
42.00		223.04	901.11	0.00	0.00
44.00		223.99	897.28	0.00	0.00
45.16		129.95	518.67	0.00	0.00
46.00		94.16	374.79	0.00	0.00
48.00		225.47	889.63	0.00	0.00
50.00		226.00	885.80	0.00	0.00
52.00		230.54	1292.26	0.00	0.00
54.00		230.88	1284.61	0.00	0.00
56.00		231.12	1276.96	0.00	0.00
58.00		231.25	877.89	0.00	0.00
60.00		231.28	874.07	0.00	0.00
62.00		231.22	870.24	0.00	0.00
64.00		231.06	866.42	0.00	0.00
66.00		230.82	862.59	0.00	0.00
68.00		230.50	858.76	0.00	0.00
70.00		230.10	854.94	0.00	0.00
72.00		229.62	851.11	0.00	0.00
74.00		229.07	847.28	0.00	0.00
76.00		228.44	843.46	0.00	0.00
78.00		227.75	839.63	0.00	0.00

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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

80.00		227.00	835.81	0.00	0.00
82.00		226.18	773.68	0.00	0.00
84.00		225.30	770.49	0.00	0.00
86.00		224.36	767.30	0.00	0.00
88.00		223.36	764.11	0.00	0.00
90.00		222.30	760.92	0.00	0.00
92.00		221.20	757.74	0.00	0.00
94.00		220.04	754.55	0.00	0.00
95.00		109.40	376.08	0.00	0.00
95.58		64.46	298.07	0.00	0.00
96.00		46.60	215.51	0.00	0.00
98.00		221.68	1022.39	0.00	0.00
100.00		220.39	656.01	0.00	0.00
102.00		219.06	386.93	0.00	0.00
104.00		217.68	383.74	0.00	0.00
106.00		216.26	380.55	0.00	0.00
108.00		214.79	377.36	0.00	0.00
110.00	(2) attachments	433.88	441.38	0.00	589.80
112.00		211.73	369.74	0.00	0.00
114.00		210.14	366.55	0.00	0.00
115.00		104.33	182.08	0.00	0.00
116.00		103.92	157.02	0.00	0.00
118.00		206.83	312.12	0.00	0.00
120.00		205.12	309.57	0.00	0.00
122.00		203.37	307.02	0.00	0.00
124.00		201.59	304.47	0.00	0.00
126.00		199.77	301.91	0.00	0.00
128.00		197.91	299.36	0.00	0.00
130.00		196.02	296.81	0.00	0.00
131.75	(3) attachments	538.03	574.42	0.00	0.00
132.00		24.11	36.64	0.00	0.00
133.00	(29) attachments	4409.82	5369.94	0.00	0.00
134.00		95.72	129.55	0.00	0.00
134.75	(3) attachments	376.25	334.71	0.00	0.00
136.00		118.52	160.45	0.00	0.00
138.00		188.13	254.64	0.00	0.00
140.00		186.08	252.09	0.00	0.00
142.00	(25) attachments	6338.90	5686.02	0.00	0.00
144.00		181.88	214.86	0.00	0.00
145.00		90.05	106.47	0.00	0.00
146.00		54.62	103.93	0.00	0.00
148.00		108.35	205.99	0.00	0.00
150.00		107.01	203.50	0.00	0.00
152.00	(11) attachments	3073.34	2985.68	0.00	0.00
154.00		78.58	149.98	0.00	0.00
156.00		78.87	149.98	0.00	0.00
158.00		79.16	149.98	0.00	0.00
160.00	(26) attachments	5573.76	3069.22	0.00	11320.80
Totals:		36,512.75	78,471.14	0.00	11,910.60

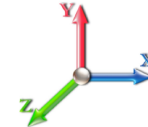
Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20
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)
1.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.108	1.023	26.005	0.00	2.64
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	0.62
1.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	2.39
1.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	2.64
1.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	2.29
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	0.62
1.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.108	1.023	26.005	0.00	144.00
1.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.108	1.023	26.005	0.00	216.00
2.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.108	1.024	26.005	0.00	2.64
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	0.62
2.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	2.39
2.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	2.64
2.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	2.29
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	0.62
2.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.108	1.024	26.005	0.00	144.00
2.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.108	1.024	26.005	0.00	216.00
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.026	26.005	0.00	5.28
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	1.25
4.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	4.78
4.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	5.28
4.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	4.58
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	1.25
4.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.109	1.026	26.005	0.00	288.00
4.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.109	1.026	26.005	0.00	432.00
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.028	26.005	0.00	5.28
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	1.25
6.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	4.78
6.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	5.28
6.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	4.58
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	1.25
6.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.109	1.028	26.005	0.00	288.00
6.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.109	1.028	26.005	0.00	432.00
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.110	1.031	26.005	0.00	5.28
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	1.25
8.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	4.78
8.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	5.28
8.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	4.58
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	1.25
8.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.110	1.031	26.005	0.00	288.00
8.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.110	1.031	26.005	0.00	432.00
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.111	1.034	26.005	0.00	5.28
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	1.25
10.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	4.78
10.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	5.28
10.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	4.58
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	1.25
10.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.111	1.034	26.005	0.00	288.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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 + 1.0W 125 mph Wind

Dead Load Factor 1.20
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)
10.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.111	1.034	26.005	0.00	432.00
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.112	1.036	26.005	0.00	5.28
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	1.25
12.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	4.78
12.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	5.28
12.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	4.58
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	1.25
12.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.112	1.036	26.005	0.00	288.00
12.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.112	1.036	26.005	0.00	432.00
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.039	26.005	0.00	5.28
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	1.25
14.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	4.78
14.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	5.28
14.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	4.58
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	1.25
14.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.113	1.039	26.005	0.00	288.00
14.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.113	1.039	26.005	0.00	432.00
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.114	1.042	26.005	0.00	5.28
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	1.25
16.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	4.78
16.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	5.28
16.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	4.58
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	1.25
16.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.114	1.042	26.005	0.00	288.00
16.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.114	1.042	26.005	0.00	432.00
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.114	1.043	26.005	0.00	0.66
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.16
16.25	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.60
16.25	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.66
16.25	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.57
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.16
16.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.114	1.043	26.005	0.00	36.00
16.25	C10x15.3	Yes	0.25	0.000	2.60	0.05	0.00	0.114	1.043	26.005	0.00	54.00
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.115	1.045	26.005	0.00	4.62
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	1.09
18.00	1.75" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	4.18
18.00	1 5/8" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	4.62
18.00	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	4.01
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	1.09
18.00	1" Reinforcing plate	Yes	1.75	0.000	1.00	0.15	0.00	0.115	1.045	26.005	0.00	252.00
18.00	C10x15.3	Yes	1.75	0.000	2.60	0.38	0.00	0.115	1.045	26.005	0.00	378.00
18.63	1 5/8" Hybrid	Yes	0.63	0.000	2.00	0.10	0.00	0.116	1.047	26.005	0.00	1.66
18.63	7/8" Coax	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.39
18.63	1.75" Hybrid	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	1.51
18.63	1 5/8" Fiber	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	1.66
18.63	1-1/4" Fiber	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	1.44
18.63	7/8" Coax	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.39

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



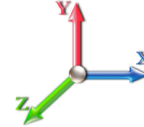
Page: 17

Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
18.63	1" Reinforcing plate	Yes	0.63	0.000	1.00	0.05	0.00	0.116	1.047	26.005	0.00	90.72
18.63	C10x15.3	Yes	0.63	0.000	2.60	0.14	0.00	0.116	1.047	26.005	0.00	136.08
18.88	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.116	1.047	26.005	0.00	0.66
18.88	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.16
18.88	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.60
18.88	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.66
18.88	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.57
18.88	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.16
18.88	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.116	1.047	26.005	0.00	36.00
18.88	C10x15.3	Yes	0.25	0.000	2.60	0.05	0.00	0.116	1.047	26.005	0.00	54.00
20.00	1 5/8" Hybrid	Yes	1.12	0.000	2.00	0.19	0.00	0.116	1.048	26.005	0.00	2.96
20.00	7/8" Coax	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	0.70
20.00	1.75" Hybrid	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	2.68
20.00	1 5/8" Fiber	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	2.96
20.00	1-1/4" Fiber	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	2.56
20.00	7/8" Coax	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	0.70
20.00	1" Reinforcing plate	Yes	1.12	0.000	1.00	0.09	0.00	0.116	1.048	26.005	0.00	161.28
20.00	C10x15.3	Yes	1.12	0.000	2.60	0.24	0.00	0.116	1.048	26.005	0.00	241.92
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.050	26.005	0.00	5.28
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	1.25
22.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	4.78
22.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	5.28
22.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	4.58
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	1.25
22.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.117	1.050	26.005	0.00	288.00
22.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.117	1.050	26.005	0.00	432.00
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.048	26.005	0.00	5.28
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	1.25
24.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	4.78
24.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	5.28
24.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	4.58
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	1.25
24.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.116	1.048	26.005	0.00	288.00
24.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.116	1.048	26.005	0.00	432.00
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.051	26.005	0.00	5.28
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	1.25
26.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	4.78
26.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	5.28
26.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	4.58
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	1.25
26.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.117	1.051	26.005	0.00	288.00
26.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.117	1.051	26.005	0.00	432.00
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.054	26.005	0.00	5.28
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	1.25
28.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	4.78
28.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	5.28
28.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	4.58

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

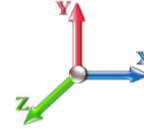


Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	1.25
28.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.118	1.054	26.005	0.00	288.00
28.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.118	1.054	26.005	0.00	432.00
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.136	26.027	0.00	5.28
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	1.25
30.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	4.78
30.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	5.28
30.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	4.58
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	1.25
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.145	1.136	26.027	0.00	360.00
30.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.145	1.136	26.027	0.00	288.00
30.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.145	1.136	26.027	0.00	432.00
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.146	1.139	26.272	0.00	2.64
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	0.62
31.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	2.39
31.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	2.64
31.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	2.29
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	0.62
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.146	1.139	26.272	0.00	180.00
31.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.146	1.139	26.272	0.00	144.00
31.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.146	1.139	26.272	0.00	216.00
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.147	1.141	26.511	0.00	2.64
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	0.62
32.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	2.39
32.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	2.64
32.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	2.29
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	0.62
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.147	1.141	26.511	0.00	180.00
32.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.147	1.141	26.511	0.00	144.00
32.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.147	1.141	26.511	0.00	216.00
33.38	1 5/8" Hybrid	Yes	1.38	0.000	2.00	0.23	0.00	0.070	0.000	26.833	0.00	3.64
33.38	7/8" Coax	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	0.86
33.38	1.75" Hybrid	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	3.30
33.38	1 5/8" Fiber	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	3.64
33.38	1-1/4" Fiber	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	3.16
33.38	7/8" Coax	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	0.86
33.38	1.25" Reinforcing	Yes	1.38	0.000	1.25	0.14	0.00	0.070	0.000	26.833	0.00	248.40
34.00	1 5/8" Hybrid	Yes	0.62	0.000	2.00	0.10	0.00	0.070	0.000	26.974	0.00	1.64
34.00	7/8" Coax	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	0.39
34.00	1.75" Hybrid	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	1.48
34.00	1 5/8" Fiber	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	1.64
34.00	1-1/4" Fiber	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	1.42
34.00	7/8" Coax	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	0.39
34.00	1.25" Reinforcing	Yes	0.62	0.000	1.25	0.06	0.00	0.070	0.000	26.974	0.00	111.60
36.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	27.418	0.00	5.28
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	1.25
36.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	4.78

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

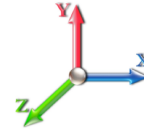


Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
36.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	5.28
36.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	4.58
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	1.25
36.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.071	0.000	27.418	0.00	360.00
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	27.845	0.00	5.28
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	1.25
38.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	4.78
38.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	5.28
38.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	4.58
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	1.25
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.071	0.000	27.845	0.00	360.00
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	28.256	0.00	5.28
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	1.25
40.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	4.78
40.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	5.28
40.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	4.58
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	1.25
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.072	0.000	28.256	0.00	360.00
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	28.653	0.00	5.28
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	1.25
42.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	4.78
42.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	5.28
42.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	4.58
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	1.25
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.073	0.000	28.653	0.00	360.00
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	29.036	0.00	5.28
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	1.25
44.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	4.78
44.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	5.28
44.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	4.58
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	1.25
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.073	0.000	29.036	0.00	360.00
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.19	0.00	0.074	0.000	29.253	0.00	3.06
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	0.72
45.16	1.75" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	2.77
45.16	1 5/8" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	3.06
45.16	1-1/4" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	2.66
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	0.72
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.12	0.00	0.074	0.000	29.253	0.00	208.80
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.14	0.00	0.074	0.000	29.407	0.00	2.22
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	0.52
46.00	1.75" Hybrid	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	2.01
46.00	1 5/8" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	2.22
46.00	1-1/4" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	1.92
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	0.52
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.09	0.00	0.074	0.000	29.407	0.00	151.20
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	29.767	0.00	5.28

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



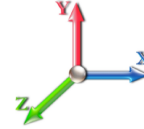
Page: 20

Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	1.25
48.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	4.78
48.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	5.28
48.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	4.58
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	1.25
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.075	0.000	29.767	0.00	360.00
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	30.116	0.00	5.28
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	1.25
50.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	4.78
50.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	5.28
50.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	4.58
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	1.25
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.075	0.000	30.116	0.00	360.00
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	30.456	0.00	5.28
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	1.25
52.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	4.78
52.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	5.28
52.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	4.58
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	1.25
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.076	0.000	30.456	0.00	360.00
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	30.786	0.00	5.28
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	1.25
54.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	4.78
54.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	5.28
54.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	4.58
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	1.25
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.077	0.000	30.786	0.00	360.00
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	31.108	0.00	5.28
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	1.25
56.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	4.78
56.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	5.28
56.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	4.58
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	1.25
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.078	0.000	31.108	0.00	360.00
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	31.421	0.00	5.28
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	1.25
58.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	4.78
58.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	5.28
58.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	4.58
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	1.25
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.077	0.000	31.421	0.00	360.00
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	31.727	0.00	5.28
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	1.25
60.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	4.78
60.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	5.28
60.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	4.58
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



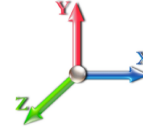
Page: 21

Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.078	0.000	31.727	0.00	360.00
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	32.025	0.00	5.28
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	1.25
62.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	4.78
62.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	5.28
62.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	4.58
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	1.25
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.078	0.000	32.025	0.00	360.00
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	32.317	0.00	5.28
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	1.25
64.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	4.78
64.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	5.28
64.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	4.58
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	1.25
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.079	0.000	32.317	0.00	360.00
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.080	0.000	32.603	0.00	5.28
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	1.25
66.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	4.78
66.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	5.28
66.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	4.58
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	1.25
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.080	0.000	32.603	0.00	360.00
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	32.882	0.00	5.28
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	1.25
68.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	4.78
68.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	5.28
68.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	4.58
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	1.25
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.081	0.000	32.882	0.00	360.00
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.082	0.000	33.155	0.00	5.28
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	1.25
70.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	4.78
70.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	5.28
70.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	4.58
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	1.25
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.082	0.000	33.155	0.00	360.00
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.082	0.000	33.423	0.00	5.28
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	1.25
72.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	4.78
72.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	5.28
72.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	4.58
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	1.25
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.082	0.000	33.423	0.00	360.00
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	33.686	0.00	5.28
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	1.25
74.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	4.78
74.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	5.28

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



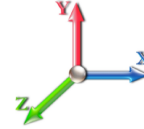
Page: 22

Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
74.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	4.58
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	1.25
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.083	0.000	33.686	0.00	360.00
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.084	0.000	33.944	0.00	5.28
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	1.25
76.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	4.78
76.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	5.28
76.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	4.58
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	1.25
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.084	0.000	33.944	0.00	360.00
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	34.197	0.00	5.28
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	1.25
78.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	4.78
78.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	5.28
78.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	4.58
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	1.25
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.085	0.000	34.197	0.00	360.00
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.086	0.000	34.445	0.00	5.28
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	1.25
80.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	4.78
80.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	5.28
80.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	4.58
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	1.25
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.086	0.000	34.445	0.00	360.00
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.087	0.000	34.689	0.00	5.28
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	1.25
82.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	4.78
82.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	5.28
82.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	4.58
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	1.25
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.087	0.000	34.689	0.00	360.00
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.088	0.000	34.928	0.00	5.28
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	1.25
84.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	4.78
84.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	5.28
84.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	4.58
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	1.25
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.088	0.000	34.928	0.00	360.00
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.089	0.000	35.164	0.00	5.28
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	1.25
86.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	4.78
86.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	5.28
86.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	4.58
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	1.25
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.089	0.000	35.164	0.00	360.00
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.090	0.000	35.396	0.00	5.28
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



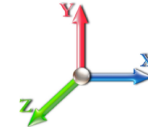
Page: 23

Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
88.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	4.78
88.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	5.28
88.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	4.58
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	1.25
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.090	0.000	35.396	0.00	360.00
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.091	0.000	35.624	0.00	5.28
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	1.25
90.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	4.78
90.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	5.28
90.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	4.58
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	1.25
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.091	0.000	35.624	0.00	360.00
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.092	0.000	35.848	0.00	5.28
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	1.25
92.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	4.78
92.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	5.28
92.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	4.58
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	1.25
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.092	0.000	35.848	0.00	360.00
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.093	0.000	36.069	0.00	5.28
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	1.25
94.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	4.78
94.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	5.28
94.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	4.58
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	1.25
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.093	0.000	36.069	0.00	360.00
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.094	0.000	36.178	0.00	2.64
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	0.62
95.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	2.39
95.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	2.64
95.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	2.29
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	0.62
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.094	0.000	36.178	0.00	180.00
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.10	0.00	0.094	0.000	36.241	0.00	1.53
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	0.36
95.58	1.75" Hybrid	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	1.39
95.58	1 5/8" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	1.53
95.58	1-1/4" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	1.33
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	0.36
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.06	0.00	0.094	0.000	36.241	0.00	104.40
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.07	0.00	0.094	0.000	36.287	0.00	1.11
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	0.26
96.00	1.75" Hybrid	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	1.00
96.00	1 5/8" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	1.11
96.00	1-1/4" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	0.96
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	0.26
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.04	0.00	0.094	0.000	36.287	0.00	75.60

Linear Appurtenance Segment Forces (Factored)

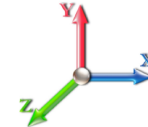
Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 24

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20
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)
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.095	0.000	36.501	0.00	5.28
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	1.25
98.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	4.78
98.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	5.28
98.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	4.58
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	1.25
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.095	0.000	36.501	0.00	360.00
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.059	0.000	36.712	0.00	5.28
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	1.25
100.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	4.78
100.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	5.28
100.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	4.58
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	1.25
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.059	0.000	36.921	0.00	5.28
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	1.25
102.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	4.78
102.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	5.28
102.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	4.58
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	1.25
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.059	0.000	37.126	0.00	5.28
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	1.25
104.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	4.78
104.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	5.28
104.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	4.58
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	1.25
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.060	0.000	37.329	0.00	5.28
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	1.25
106.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	4.78
106.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	5.28
106.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	4.58
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	1.25
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.061	0.000	37.529	0.00	5.28
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	1.25
108.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	4.78
108.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	5.28
108.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	4.58
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	1.25
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.062	0.000	37.726	0.00	5.28
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	1.25
110.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	4.78
110.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	5.28
110.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	4.58
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	1.25
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.062	0.000	37.921	0.00	5.28
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.921	0.00	1.25
112.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.921	0.00	4.78
112.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.921	0.00	5.28

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20
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)
112.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.921	0.00	4.58
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.063	0.000	38.113	0.00	5.28
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	38.113	0.00	1.25
114.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	38.113	0.00	4.78
114.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	38.113	0.00	5.28
114.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	38.113	0.00	4.58
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	38.208	0.00	2.64
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.208	0.00	0.62
115.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.208	0.00	2.39
115.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.208	0.00	2.64
115.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.208	0.00	2.29
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	38.303	0.00	2.64
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.303	0.00	0.62
116.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.303	0.00	2.39
116.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.303	0.00	2.64
116.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.303	0.00	2.29
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.065	0.000	38.490	0.00	5.28
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	38.490	0.00	1.25
118.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	38.490	0.00	4.78
118.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	38.490	0.00	5.28
118.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	38.490	0.00	4.58
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.066	0.000	38.675	0.00	5.28
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	38.675	0.00	1.25
120.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	38.675	0.00	4.78
120.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	38.675	0.00	5.28
120.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	38.675	0.00	4.58
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	38.859	0.00	5.28
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	38.859	0.00	1.25
122.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	38.859	0.00	4.78
122.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	38.859	0.00	5.28
122.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	38.859	0.00	4.58
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	39.040	0.00	5.28
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	39.040	0.00	1.25
124.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	39.040	0.00	4.78
124.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	39.040	0.00	5.28
124.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	39.040	0.00	4.58
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.068	0.000	39.218	0.00	5.28
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	39.218	0.00	1.25
126.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	39.218	0.00	4.78
126.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	39.218	0.00	5.28
126.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	39.218	0.00	4.58
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.069	0.000	39.395	0.00	5.28
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	39.395	0.00	1.25
128.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	39.395	0.00	4.78
128.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	39.395	0.00	5.28
128.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	39.395	0.00	4.58
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	39.570	0.00	5.28

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



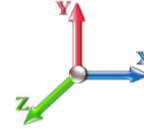
Page: 26

Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	39.570	0.00	1.25
130.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	39.570	0.00	4.78
130.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	39.570	0.00	5.28
130.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	39.570	0.00	4.58
131.75	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.071	0.000	39.722	0.00	4.62
131.75	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	39.722	0.00	1.09
131.75	1.75" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	39.722	0.00	4.18
131.75	1 5/8" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	39.722	0.00	4.62
131.75	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	39.722	0.00	4.01
132.00	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.072	0.000	39.743	0.00	0.66
132.00	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	39.743	0.00	0.16
132.00	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	39.743	0.00	0.60
132.00	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	39.743	0.00	0.66
132.00	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	39.743	0.00	0.57
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.072	0.000	39.829	0.00	2.64
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	39.829	0.00	0.62
133.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	39.829	0.00	2.39
133.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	39.829	0.00	2.64
133.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	39.829	0.00	2.29
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.073	0.000	39.914	0.00	2.64
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	39.914	0.00	0.62
134.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	39.914	0.00	2.39
134.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	39.914	0.00	2.64
134.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	39.914	0.00	2.29
134.75	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.13	0.00	0.073	0.000	39.978	0.00	1.98
134.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	39.978	0.00	0.47
134.75	1.75" Hybrid	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	39.978	0.00	1.79
134.75	1 5/8" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	39.978	0.00	1.98
134.75	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	39.978	0.00	1.72
136.00	1 5/8" Hybrid	Yes	1.25	0.000	2.00	0.21	0.00	0.074	0.000	40.084	0.00	3.30
136.00	7/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	40.084	0.00	0.78
136.00	1.75" Hybrid	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	40.084	0.00	2.99
136.00	1 5/8" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	40.084	0.00	3.30
136.00	1-1/4" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	40.084	0.00	2.86
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	40.251	0.00	5.28
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	40.251	0.00	1.25
138.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	40.251	0.00	4.78
138.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	40.251	0.00	5.28
138.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	40.251	0.00	4.58
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	40.417	0.00	5.28
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	40.417	0.00	1.25
140.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	40.417	0.00	4.78
140.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	40.417	0.00	5.28
140.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	40.417	0.00	4.58
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	40.581	0.00	5.28
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.581	0.00	1.25
142.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.581	0.00	4.78

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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

Load Case: 1.2D + 1.0W 125 mph Wind

Dead Load Factor 1.20
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)
142.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.581	0.00	5.28
142.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.581	0.00	4.58
144.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	40.744	0.00	5.28
144.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.744	0.00	1.25
144.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.744	0.00	4.78
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.079	0.000	40.824	0.00	2.64
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	40.824	0.00	0.62
145.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	40.824	0.00	2.39
146.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.082	0.000	40.904	0.00	2.64
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	40.904	0.00	0.62
146.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	40.904	0.00	2.39
148.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	41.064	0.00	5.28
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	41.064	0.00	1.25
148.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	41.064	0.00	4.78
150.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	41.222	0.00	5.28
150.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	41.222	0.00	1.25
150.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	41.222	0.00	4.78
152.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.378	0.00	5.28
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.378	0.00	1.25
152.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.378	0.00	4.78
154.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.533	0.00	5.28
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.533	0.00	1.25
156.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.686	0.00	5.28
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.686	0.00	1.25
158.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.838	0.00	5.28
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.838	0.00	1.25
160.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.989	0.00	5.28
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.989	0.00	1.25
Totals:											0.0	25,774.0

Calculated Forces

Structure: CT02049-S-SBA
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

7/28/2022

Page: 28



Load Case: 1.2D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 1.20

Wind Load 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	-78.46	-36.54	0.00	-4380.3	0.00	4380.39	3683.82	1059.58	4414.92	3756.66	0.00	0.000	0.000	0.704
1.00	-77.77	-36.47	0.00	-4343.8	0.00	4343.85	3677.71	1055.47	4380.73	3735.77	0.00	-0.038	0.000	0.704
2.00	-77.07	-36.43	0.00	-4307.3	0.00	4307.38	3671.54	1051.36	4346.67	3714.86	0.02	-0.076	0.000	0.701
4.00	-75.69	-36.29	0.00	-4234.5	0.00	4234.53	3659.00	1043.14	4278.95	3673.00	0.07	-0.153	0.000	0.694
6.00	-74.32	-36.14	0.00	-4161.9	0.00	4161.96	3646.20	1034.91	4211.76	3631.09	0.15	-0.230	0.000	0.688
8.00	-72.95	-36.00	0.00	-4089.6	0.00	4089.67	3633.16	1026.69	4145.10	3589.13	0.26	-0.307	0.000	0.681
10.00	-71.59	-35.85	0.00	-4017.6	0.00	4017.68	3619.85	1018.47	4078.97	3547.13	0.40	-0.384	0.000	0.674
12.00	-70.23	-35.70	0.00	-3945.9	0.00	3945.98	3606.29	1010.25	4013.38	3505.10	0.58	-0.461	0.000	0.668
14.00	-68.88	-35.55	0.00	-3874.5	0.00	3874.57	3592.48	1002.02	3948.31	3463.03	0.79	-0.539	0.000	0.661
16.00	-67.55	-35.36	0.00	-3803.4	0.00	3803.47	3578.41	993.80	3883.78	3420.94	1.03	-0.617	0.000	0.654
16.25	-67.30	-35.38	0.00	-3794.6	0.00	3794.63	3576.63	992.77	3875.75	3415.68	1.07	-0.627	0.000	0.750
18.00	-65.73	-35.22	0.00	-3732.7	0.00	3732.72	3564.09	985.58	3819.78	3378.83	1.31	-0.705	0.000	0.743
18.63	-65.16	-35.16	0.00	-3710.5	0.00	3710.54	3559.52	982.99	3799.73	3365.57	1.41	-0.733	0.000	0.604
18.88	-64.92	-35.16	0.00	-3701.7	0.00	3701.75	3557.70	981.96	3791.79	3360.30	1.45	-0.743	0.000	0.688
20.00	-63.90	-35.09	0.00	-3662.3	0.00	3662.37	3549.51	977.36	3756.31	3336.71	1.63	-0.790	0.000	0.684
22.00	-62.10	-34.92	0.00	-3592.2	0.00	3592.20	3563.12	985.03	3815.51	3376.01	1.98	-0.873	0.000	0.693
24.00	-60.76	-34.76	0.00	-3522.3	0.00	3522.36	3548.52	976.81	3752.08	3333.89	2.36	-0.957	0.000	0.666
26.00	-59.42	-34.59	0.00	-3452.8	0.00	3452.85	3533.67	968.58	3689.18	3291.77	2.78	-1.038	0.000	0.659
28.00	-58.09	-34.42	0.00	-3383.6	0.00	3383.67	3518.56	960.36	3626.81	3249.64	3.23	-1.120	0.000	0.651
30.00	-56.42	-34.20	0.00	-3314.8	0.00	3314.83	3503.20	952.14	3564.97	3207.53	3.72	-1.201	0.000	0.508
31.00	-55.58	-34.10	0.00	-3280.6	0.00	3280.62	3495.43	948.03	3534.25	3186.48	3.97	-1.233	0.000	0.586
32.00	-54.73	-34.00	0.00	-3246.5	0.00	3246.53	3487.59	943.92	3503.66	3165.43	4.23	-1.271	0.000	0.582
33.38	-54.08	-33.87	0.00	-3199.6	0.00	3199.61	3476.66	938.24	3461.67	3136.39	4.61	-1.323	0.000	0.718
34.00	-53.76	-33.86	0.00	-3178.6	0.00	3178.61	3471.72	935.70	3442.89	3123.35	4.78	-1.352	0.000	0.716
36.00	-52.80	-33.70	0.00	-3110.8	0.00	3110.89	3455.59	927.47	3382.65	3081.29	5.37	-1.445	0.000	0.708
38.00	-51.84	-33.54	0.00	-3043.4	0.00	3043.49	3439.21	919.25	3322.94	3039.26	6.00	-1.539	0.000	0.700
40.00	-50.88	-33.35	0.00	-2976.4	0.00	2976.40	3422.57	911.03	3263.76	2997.28	6.66	-1.632	0.000	0.692
42.00	-49.93	-33.18	0.00	-2909.7	0.00	2909.71	3405.68	902.81	3205.11	2955.34	7.36	-1.726	0.000	0.684
44.00	-49.00	-32.99	0.00	-2843.3	0.00	2843.35	3388.54	894.58	3146.99	2913.44	8.11	-1.820	0.000	0.676
45.16	-48.46	-32.88	0.00	-2805.0	0.00	2805.08	3378.48	889.81	3113.53	2889.17	8.56	-1.874	0.000	0.488
46.00	-48.05	-32.82	0.00	-2777.4	0.00	2777.46	3371.14	886.36	3089.41	2871.61	8.89	-1.903	0.000	0.633
48.00	-47.12	-32.64	0.00	-2711.8	0.00	2711.82	3353.48	878.14	3032.36	2829.83	9.71	-1.992	0.000	0.625
50.00	-46.19	-32.46	0.00	-2646.5	0.00	2646.53	3335.57	869.92	2975.84	2788.13	10.56	-2.081	0.000	0.617
52.00	-44.86	-32.25	0.00	-2581.6	0.00	2581.62	3317.41	861.69	2919.85	2746.50	11.45	-2.171	0.000	0.601
54.00	-43.54	-32.03	0.00	-2517.1	0.00	2517.13	3298.98	853.47	2864.39	2704.94	12.38	-2.258	0.000	0.592
56.00	-42.22	-31.82	0.00	-2453.0	0.00	2453.06	3316.18	861.14	2916.12	2743.71	13.34	-2.346	0.000	0.599
58.00	-41.31	-31.61	0.00	-2389.4	0.00	2389.43	3297.74	852.92	2860.70	2702.16	14.35	-2.434	0.000	0.619
60.00	-40.39	-31.41	0.00	-2326.2	0.00	2326.21	3279.05	844.70	2805.81	2660.71	15.38	-2.526	0.000	0.610
62.00	-39.48	-31.20	0.00	-2263.3	0.00	2263.39	3260.10	836.48	2751.45	2619.34	16.46	-2.618	0.000	0.601
64.00	-38.58	-30.99	0.00	-2200.9	0.00	2200.99	3240.90	828.25	2697.62	2578.08	17.58	-2.709	0.000	0.592
66.00	-37.68	-30.78	0.00	-2139.0	0.00	2139.00	3221.44	820.03	2644.33	2536.92	18.73	-2.801	0.000	0.582
68.00	-36.78	-30.57	0.00	-2077.4	0.00	2077.44	3201.73	811.81	2591.56	2495.87	19.93	-2.892	0.000	0.573
70.00	-35.89	-30.35	0.00	-2016.3	0.00	2016.31	3181.76	803.59	2539.33	2454.94	21.16	-2.983	0.000	0.563
72.00	-35.01	-30.13	0.00	-1955.6	0.00	1955.61	3161.54	795.36	2487.63	2414.13	22.43	-3.074	0.000	0.553
74.00	-34.13	-29.91	0.00	-1895.3	0.00	1895.35	3141.06	787.14	2436.47	2373.45	23.73	-3.164	0.000	0.543
76.00	-33.25	-29.69	0.00	-1835.5	0.00	1835.53	3120.33	778.92	2385.83	2332.91	25.08	-3.254	0.000	0.533
78.00	-32.38	-29.46	0.00	-1776.1	0.00	1776.16	3099.34	770.70	2335.73	2292.51	26.46	-3.344	0.000	0.523
80.00	-31.52	-29.23	0.00	-1717.2	0.00	1717.24	3078.09	762.47	2286.15	2252.26	27.88	-3.433	0.000	0.513

Calculated Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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



80.00	-31.52	-29.23	0.00	-1717.2	0.00	1717.24	2384.58	636.50	1911.75	1750.88	27.88	-3.433	0.000	0.553
82.00	-30.71	-29.01	0.00	-1658.7	0.00	1658.77	2370.62	629.65	1870.81	1721.73	29.33	-3.521	0.000	0.606
84.00	-29.91	-28.79	0.00	-1600.7	0.00	1600.75	2356.42	622.80	1830.32	1692.63	30.83	-3.620	0.000	0.592
86.00	-29.11	-28.57	0.00	-1543.1	0.00	1543.17	2341.95	615.94	1790.27	1663.57	32.37	-3.717	0.000	0.578
88.00	-28.31	-28.34	0.00	-1486.0	0.00	1486.04	2327.23	609.09	1750.66	1634.56	33.94	-3.814	0.000	0.564
90.00	-27.52	-28.11	0.00	-1429.3	0.00	1429.36	2312.26	602.24	1711.49	1605.61	35.56	-3.910	0.000	0.549
92.00	-26.73	-27.89	0.00	-1373.1	0.00	1373.13	2297.03	595.39	1672.77	1576.72	37.22	-4.005	0.000	0.535
94.00	-25.96	-27.64	0.00	-1317.3	0.00	1317.36	2281.55	588.54	1634.49	1547.90	38.91	-4.099	0.000	0.520
95.00	-25.58	-27.52	0.00	-1289.7	0.00	1289.72	2273.71	585.11	1615.51	1533.52	39.78	-4.146	0.000	0.513
95.58	-25.27	-27.45	0.00	-1273.7	0.00	1273.75	2269.13	583.12	1604.56	1525.19	40.28	-4.173	0.000	0.501
95.58	-25.27	-27.45	0.00	-1273.7	0.00	1273.75	2269.13	583.12	1604.56	1525.19	40.28	-4.173	0.000	0.501
96.00	-25.02	-27.42	0.00	-1262.2	0.00	1262.23	2265.81	581.68	1596.65	1519.16	40.65	-4.192	0.000	0.844
98.00	-23.94	-27.19	0.00	-1207.3	0.00	1207.38	2249.81	574.83	1559.25	1490.50	42.44	-4.345	0.000	0.823
100.00	-23.24	-26.98	0.00	-1153.0	0.00	1153.00	2259.61	579.02	1582.04	1508.00	44.29	-4.497	0.000	0.777
102.00	-22.80	-26.79	0.00	-1099.0	0.00	1099.03	2243.52	572.17	1544.82	1479.37	46.20	-4.647	0.000	0.755
104.00	-22.37	-26.60	0.00	-1045.4	0.00	1045.45	2227.17	565.31	1508.04	1450.84	48.18	-4.786	0.000	0.733
106.00	-21.95	-26.40	0.00	-992.26	0.00	992.26	2210.57	558.46	1471.71	1422.40	50.21	-4.924	0.000	0.710
108.00	-21.53	-26.20	0.00	-939.46	0.00	939.46	2193.71	551.61	1435.82	1394.06	52.30	-5.059	0.000	0.686
110.00	-21.07	-25.78	0.00	-886.46	0.00	886.46	2176.60	544.76	1400.37	1365.84	54.45	-5.192	0.000	0.661
112.00	-20.66	-25.58	0.00	-834.90	0.00	834.90	2159.23	537.91	1365.36	1337.73	56.65	-5.322	0.000	0.636
114.00	-20.28	-25.37	0.00	-783.73	0.00	783.73	2141.61	531.05	1330.80	1309.73	58.90	-5.449	0.000	0.610
115.00	-20.08	-25.27	0.00	-758.36	0.00	758.36	2132.70	527.63	1313.68	1295.79	60.05	-5.511	0.000	0.597
115.00	-20.08	-25.27	0.00	-758.36	0.00	758.36	1556.62	422.98	1055.35	949.74	60.05	-5.511	0.000	0.815
116.00	-19.88	-25.19	0.00	-733.09	0.00	733.09	1551.43	420.24	1041.71	940.38	61.21	-5.573	0.000	0.796
118.00	-19.53	-25.01	0.00	-682.71	0.00	682.71	1540.84	414.76	1014.72	921.68	63.57	-5.722	0.000	0.757
120.00	-19.18	-24.82	0.00	-632.70	0.00	632.70	1529.99	409.28	988.07	902.99	66.00	-5.866	0.000	0.717
122.00	-18.84	-24.63	0.00	-583.06	0.00	583.06	1518.89	403.80	961.78	884.33	68.48	-6.005	0.000	0.675
124.00	-18.50	-24.44	0.00	-533.81	0.00	533.81	1507.54	398.32	935.85	865.70	71.02	-6.137	0.000	0.633
126.00	-18.17	-24.25	0.00	-484.93	0.00	484.93	1495.93	392.84	910.27	847.11	73.62	-6.263	0.000	0.588
128.00	-17.85	-24.05	0.00	-436.44	0.00	436.44	1484.06	387.35	885.04	828.56	76.26	-6.382	0.000	0.543
130.00	-17.53	-23.85	0.00	-388.34	0.00	388.34	1471.95	381.87	860.17	810.06	78.95	-6.493	0.000	0.495
131.75	-17.00	-23.27	0.00	-346.60	0.00	346.60	1461.13	377.08	838.70	793.92	81.35	-6.583	0.000	0.452
132.00	-16.96	-23.25	0.00	-340.78	0.00	340.78	1459.57	376.39	835.65	791.62	81.69	-6.595	0.000	0.446
133.00	-12.12	-18.26	0.00	-317.53	0.00	317.53	1453.29	373.65	823.53	782.42	83.08	-6.643	0.000	0.417
134.00	-11.99	-18.16	0.00	-299.27	0.00	299.27	1446.94	370.91	811.49	773.23	84.47	-6.690	0.000	0.398
134.75	-11.69	-17.75	0.00	-285.65	0.00	285.65	1442.14	368.85	802.52	766.35	85.52	-6.723	0.000	0.383
136.00	-11.52	-17.63	0.00	-263.46	0.00	263.46	1434.06	365.43	787.68	754.91	87.28	-6.777	0.000	0.359
138.00	-11.27	-17.43	0.00	-228.20	0.00	228.20	1420.92	359.95	764.23	736.67	90.13	-6.855	0.000	0.320
140.00	-11.02	-17.23	0.00	-193.34	0.00	193.34	1407.52	354.47	741.13	718.50	93.02	-6.926	0.000	0.279
142.00	-6.13	-10.25	0.00	-158.89	0.00	158.89	1393.87	348.98	718.38	700.42	95.92	-6.988	0.000	0.232
144.00	-5.94	-10.05	0.00	-138.39	0.00	138.39	1379.97	343.50	695.99	682.44	98.86	-7.042	0.000	0.208
145.00	-5.84	-9.95	0.00	-128.34	0.00	128.34	1372.92	340.76	684.93	673.48	100.33	-7.068	0.000	0.196
145.00	-5.84	-9.95	0.00	-128.34	0.00	128.34	931.20	332.53	24157.3	604.09	100.33	-7.068	0.000	0.220
146.00	-5.73	-9.89	0.00	-118.39	0.00	118.39	925.24	329.86	23770.3	594.77	101.81	-7.092	0.000	0.206
148.00	-5.54	-9.76	0.00	-98.62	0.00	98.62	913.32	324.51	23005.8	576.36	104.78	-7.138	0.000	0.178
150.00	-5.34	-9.63	0.00	-79.11	0.00	79.11	901.40	319.16	22253.7	558.24	107.78	-7.177	0.000	0.149
150.00	-5.34	-9.63	0.00	-79.11	0.00	79.11	556.65	167.00	10296.1	213.69	107.78	-7.177	0.000	0.383
152.00	-2.76	-6.21	0.00	-59.85	0.00	59.85	556.65	167.00	10296.1	213.69	110.78	-7.210	0.000	0.286
154.00	-2.61	-6.11	0.00	-47.43	0.00	47.43	556.65	167.00	10296.1	213.69	113.81	-7.289	0.000	0.228
156.00	-2.47	-6.02	0.00	-35.21	0.00	35.21	556.65	167.00	10296.1	213.69	116.87	-7.351	0.000	0.170
158.00	-2.32	-5.92	0.00	-23.17	0.00	23.17	556.65	167.00	10296.1	213.69	119.95	-7.394	0.000	0.114
160.00	0.00	-5.57	0.00	-11.32	0.00	11.32	556.65	167.00	10296.1	213.69	123.05	-7.419	0.000	0.054

Wind Loading - Shaft

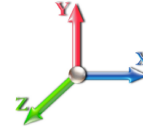
Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90
Wind Load Factor 1.00



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	RB1 RB2	1.00	0.70	26.005	28.61	449.40	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT2 RB3 RB4	1.00	0.70	26.005	28.61	447.67	0.972 *	0.000	1.00	4.338	4.21	120.6	0.0	184.5
2.00		1.00	0.70	26.005	28.61	445.94	0.973 *	0.000	1.00	4.321	4.20	120.2	0.0	183.8
4.00		1.00	0.70	26.005	28.61	442.48	0.975 *	0.000	2.00	8.592	8.37	239.5	0.0	365.5
6.00		1.00	0.70	26.005	28.61	439.02	0.977 *	0.000	2.00	8.525	8.33	238.2	0.0	362.6
8.00		1.00	0.70	26.005	28.61	435.56	0.980 *	0.000	2.00	8.458	8.28	237.0	0.0	359.8
10.00		1.00	0.70	26.005	28.61	432.09	0.982 *	0.000	2.00	8.391	8.24	235.7	0.0	356.9
12.00		1.00	0.70	26.005	28.61	428.63	0.985 *	0.000	2.00	8.324	8.20	234.4	0.0	354.0
14.00		1.00	0.70	26.005	28.61	425.17	0.987 *	0.000	2.00	8.257	8.15	233.2	0.0	351.1
16.00	Bot - Section 2	1.00	0.70	26.005	28.61	421.71	0.990 *	0.000	2.00	8.190	8.11	231.9	0.0	348.3
16.25	RT1 RB5	1.00	0.70	26.005	28.61	421.28	0.991 *	0.000	0.25	1.035	1.03	29.4	0.0	87.4
18.00		1.00	0.70	26.005	28.61	418.25	0.993 *	0.000	1.75	7.217	7.16	204.9	0.0	609.0
18.63	RB6	1.00	0.70	26.005	28.61	417.16	0.994 *	0.000	0.63	2.586	2.57	73.5	0.0	218.2
18.88	RT3 RT4	1.00	0.70	26.005	28.61	416.73	0.995 *	0.000	0.25	1.024	1.02	29.1	0.0	86.4
20.00		1.00	0.70	26.005	28.61	414.79	0.996 *	0.000	1.12	4.576	4.56	130.3	0.0	386.0
22.00	Top - Section 1	1.00	0.70	26.005	28.61	411.33	0.998 *	0.000	2.00	8.118	8.10	231.8	0.0	684.9
24.00		1.00	0.70	26.005	28.61	414.56	0.995 *	0.000	2.00	8.052	8.01	229.2	0.0	342.3
26.00		1.00	0.70	26.005	28.61	411.09	0.998 *	0.000	2.00	7.985	7.97	228.0	0.0	339.5
28.00		1.00	0.70	26.005	28.61	407.63	1.001 *	0.000	2.00	7.918	7.93	226.7	0.0	336.6
30.00	RB7	1.00	0.70	26.027	28.63	404.34	1.079 *	0.000	2.00	7.851	8.47	242.6	0.0	333.7
31.00	RT5	1.00	0.71	26.272	28.90	404.50	1.082 *	0.000	1.00	3.900	4.22	122.0	0.0	165.8
32.00		1.00	0.71	26.511	29.16	404.59	1.084 *	0.000	1.00	3.883	4.21	122.8	0.0	165.1
33.38	RT6	1.00	0.72	26.833	29.52	404.61	0.950	0.000	1.38	5.332	5.07	149.5	0.0	226.6
34.00		1.00	0.73	26.974	29.67	404.59	0.950	0.000	0.62	2.385	2.27	67.2	0.0	101.4
36.00		1.00	0.74	27.418	30.16	404.35	0.950	0.000	2.00	7.650	7.27	219.2	0.0	325.1
38.00		1.00	0.75	27.845	30.63	403.90	0.950	0.000	2.00	7.583	7.20	220.6	0.0	322.3
40.00	Appurtenance(s)	1.00	0.76	28.256	31.08	403.26	0.950	0.000	2.00	7.516	7.14	221.9	0.0	319.4
42.00		1.00	0.77	28.653	31.52	402.45	0.950	0.000	2.00	7.449	7.08	223.0	0.0	316.5
44.00		1.00	0.78	29.036	31.94	401.48	0.950	0.000	2.00	7.382	7.01	224.0	0.0	313.6
45.16	RB8	1.00	0.79	29.253	32.18	400.84	0.950	0.000	1.16	4.251	4.04	129.9	0.0	180.6
46.00	RT7	1.00	0.79	29.407	32.35	400.35	0.950	0.000	0.84	3.064	2.91	94.2	0.0	130.2
48.00		1.00	0.80	29.767	32.74	399.09	0.950	0.000	2.00	7.248	6.89	225.5	0.0	307.9
50.00	Bot - Section 3	1.00	0.81	30.116	33.13	397.70	0.950	0.000	2.00	7.181	6.82	226.0	0.0	305.0
52.00		1.00	0.82	30.456	33.50	396.19	0.950	0.000	2.00	7.244	6.88	230.5	0.0	609.9
54.00		1.00	0.83	30.786	33.86	394.57	0.950	0.000	2.00	7.177	6.82	230.9	0.0	604.1
56.00	Top - Section 2	1.00	0.84	31.108	34.22	392.84	0.950	0.000	2.00	7.110	6.75	231.1	0.0	598.4
58.00	RT8 RB9	1.00	0.85	31.421	34.56	398.36	0.950	0.000	2.00	7.043	6.69	231.3	0.0	299.1
60.00		1.00	0.85	31.727	34.90	396.47	0.950	0.000	2.00	6.976	6.63	231.3	0.0	296.2
62.00		1.00	0.86	32.025	35.23	394.49	0.950	0.000	2.00	6.909	6.56	231.2	0.0	293.4
64.00		1.00	0.87	32.317	35.55	392.43	0.950	0.000	2.00	6.842	6.50	231.1	0.0	290.5
66.00		1.00	0.88	32.603	35.86	390.28	0.950	0.000	2.00	6.775	6.44	230.8	0.0	287.6
68.00		1.00	0.89	32.882	36.17	388.05	0.950	0.000	2.00	6.708	6.37	230.5	0.0	284.8
70.00		1.00	0.89	33.155	36.47	385.76	0.950	0.000	2.00	6.641	6.31	230.1	0.0	281.9
72.00		1.00	0.90	33.423	36.77	383.39	0.950	0.000	2.00	6.574	6.25	229.6	0.0	279.0
74.00		1.00	0.91	33.686	37.05	380.95	0.950	0.000	2.00	6.507	6.18	229.1	0.0	276.1
76.00		1.00	0.91	33.944	37.34	378.45	0.950	0.000	2.00	6.440	6.12	228.4	0.0	273.3
78.00	RT9 RB10	1.00	0.92	34.197	37.62	375.89	0.950	0.000	2.00	6.373	6.05	227.8	0.0	270.4

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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

80.00 Top - Section 3	1.00	0.93	34.445	37.89	373.27	0.950	0.000	2.00	6.306	5.99	227.0	0.0	267.5
82.00	1.00	0.93	34.689	38.16	370.59	0.950	0.000	2.00	6.239	5.93	226.2	0.0	220.9
84.00	1.00	0.94	34.928	38.42	367.85	0.950	0.000	2.00	6.172	5.86	225.3	0.0	218.6
86.00	1.00	0.95	35.164	38.68	365.07	0.950	0.000	2.00	6.106	5.80	224.4	0.0	216.2
88.00	1.00	0.95	35.396	38.94	362.23	0.950	0.000	2.00	6.039	5.74	223.4	0.0	213.8
90.00	1.00	0.96	35.624	39.19	359.34	0.950	0.000	2.00	5.972	5.67	222.3	0.0	211.4
92.00	1.00	0.96	35.848	39.43	356.41	0.950	0.000	2.00	5.905	5.61	221.2	0.0	209.0
94.00	1.00	0.97	36.069	39.68	353.43	0.950	0.000	2.00	5.838	5.55	220.0	0.0	206.6
95.00 Bot - Section 5	1.00	0.97	36.178	39.80	351.92	0.950	0.000	1.00	2.894	2.75	109.4	0.0	102.4
95.58 RT10	1.00	0.98	36.241	39.87	351.04	0.950	0.000	0.58	1.702	1.62	64.5	0.0	119.4
96.00	1.00	0.98	36.287	39.92	350.41	0.950	0.000	0.42	1.229	1.17	46.6	0.0	86.2
98.00	1.00	0.98	36.501	40.15	347.34	0.950	0.000	2.00	5.812	5.52	221.7	0.0	407.5
100.00 Top - Section 4	1.00	0.99	36.712	40.38	344.23	0.950	0.000	2.00	5.745	5.46	220.4	0.0	402.7
102.00	1.00	0.99	36.921	40.61	347.72	0.950	0.000	2.00	5.678	5.39	219.1	0.0	200.9
104.00	1.00	1.00	37.126	40.84	344.55	0.950	0.000	2.00	5.611	5.33	217.7	0.0	198.5
106.00	1.00	1.00	37.329	41.06	341.35	0.950	0.000	2.00	5.544	5.27	216.3	0.0	196.1
108.00	1.00	1.01	37.529	41.28	338.10	0.950	0.000	2.00	5.477	5.20	214.8	0.0	193.7
110.00 Appurtenance(s)	1.00	1.02	37.726	41.50	334.82	0.950	0.000	2.00	5.410	5.14	213.3	0.0	191.3
112.00	1.00	1.02	37.921	41.71	331.50	0.950	0.000	2.00	5.343	5.08	211.7	0.0	188.9
114.00	1.00	1.03	38.113	41.92	328.15	0.950	0.000	2.00	5.276	5.01	210.1	0.0	186.5
115.00 Top - Section 5	1.00	1.03	38.208	42.03	326.46	0.950	0.000	1.00	2.613	2.48	104.3	0.0	92.4
116.00	1.00	1.03	38.303	42.13	324.77	0.950	0.000	1.00	2.596	2.47	103.9	0.0	73.6
118.00	1.00	1.04	38.490	42.34	321.35	0.950	0.000	2.00	5.142	4.89	206.8	0.0	145.7
120.00	1.00	1.04	38.675	42.54	317.90	0.950	0.000	2.00	5.075	4.82	205.1	0.0	143.8
122.00	1.00	1.05	38.859	42.74	314.42	0.950	0.000	2.00	5.008	4.76	203.4	0.0	141.9
124.00	1.00	1.05	39.040	42.94	310.91	0.950	0.000	2.00	4.941	4.69	201.6	0.0	140.0
126.00	1.00	1.06	39.218	43.14	307.37	0.950	0.000	2.00	4.874	4.63	199.8	0.0	138.1
128.00	1.00	1.06	39.395	43.33	303.80	0.950	0.000	2.00	4.807	4.57	197.9	0.0	136.1
130.00	1.00	1.07	39.570	43.53	300.21	0.950	0.000	2.00	4.741	4.50	196.0	0.0	134.2
131.75 Appurtenance(s)	1.00	1.07	39.722	43.69	297.04	0.950	0.000	1.75	4.093	3.89	169.9	0.0	115.9
132.00	1.00	1.07	39.743	43.72	296.58	0.950	0.000	0.25	0.581	0.55	24.1	0.0	16.4
133.00 Appurtenance(s)	1.00	1.07	39.829	43.81	294.76	0.950	0.000	1.00	2.312	2.20	96.2	0.0	65.4
134.00	1.00	1.07	39.914	43.91	292.93	0.950	0.000	1.00	2.295	2.18	95.7	0.0	65.0
134.75 Appurtenance(s)	1.00	1.08	39.978	43.98	291.56	0.950	0.000	0.75	1.710	1.62	71.4	0.0	48.4
136.00	1.00	1.08	40.084	44.09	289.26	0.950	0.000	1.25	2.829	2.69	118.5	0.0	80.1
138.00	1.00	1.08	40.251	44.28	285.55	0.950	0.000	2.00	4.473	4.25	188.1	0.0	126.6
140.00	1.00	1.09	40.417	44.46	281.83	0.950	0.000	2.00	4.406	4.19	186.1	0.0	124.7
142.00 Appurtenance(s)	1.00	1.09	40.581	44.64	278.07	0.950	0.000	2.00	4.339	4.12	184.0	0.0	122.8
144.00	1.00	1.10	40.744	44.82	274.30	0.950	0.000	2.00	4.272	4.06	181.9	0.0	120.8
145.00 Top - Section 6	1.00	1.10	40.824	44.91	272.40	0.950	0.000	1.00	2.111	2.01	90.1	0.0	59.7
146.00	1.00	1.10	40.904	44.99	261.33	0.600	0.000	1.00	2.023	1.21	54.6	0.0	57.8
148.00	1.00	1.11	41.064	45.17	257.64	0.600	0.000	2.00	3.998	2.40	108.3	0.0	114.2
150.00 Top - Section 7	1.00	1.11	41.222	45.34	253.93	0.600	0.000	2.00	3.933	2.36	107.0	0.0	112.3
152.00 Appurtenance(s)	1.00	1.11	41.378	45.52	173.92	0.645*	0.000	2.00	2.667	1.72	78.3	0.0	75.8
154.00	1.00	1.12	41.533	45.69	174.24	0.645*	0.000	2.00	2.667	1.72	78.6	0.0	75.8
156.00	1.00	1.12	41.686	45.85	174.56	0.645*	0.000	2.00	2.667	1.72	78.9	0.0	75.8
158.00	1.00	1.13	41.838	46.02	174.88	0.645*	0.000	2.00	2.667	1.72	79.2	0.0	75.8
160.00 Appurtenance(s)	1.00	1.13	41.989	46.19	175.20	0.645*	0.000	2.00	2.667	1.72	79.4	0.0	75.8
Totals:								160.00			16,630.3		21,407.5

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



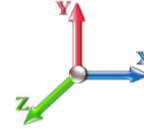
Page: 32

Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90

Wind Load Factor 1.00



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	160.00	B5/B13 RRH-BR04C	3	42.138	46.352	0.60	0.90	3.38	227.88	0.000	2.000	156.80	0.00	313.60	
2	160.00	JAHH-65B-R3B	6	42.138	46.352	0.75	0.90	40.83	291.60	0.000	2.000	1892.59	0.00	3785.18	
3	160.00	VZS01	3	42.138	46.352	0.62	0.90	8.01	235.17	0.000	2.000	371.32	0.00	742.64	
4	160.00	CBC78T-DS-43	1	42.138	46.352	1.00	1.00	0.37	18.63	0.000	2.000	17.15	0.00	34.30	
5	160.00	B2/B66A RRH-BR049	3	42.138	46.352	0.60	0.90	3.38	189.00	0.000	2.000	156.80	0.00	313.60	
6	160.00	Low Profile Platform	1	42.138	46.352	1.00	1.00	22.00	1080.00	0.000	2.000	1019.74	0.00	2039.48	
7	160.00	Commscope	1	42.138	46.352	1.00	1.00	2.51	13.50	0.000	2.000	116.34	0.00	232.69	
8	160.00	6' Lightning rod	1	42.212	46.433	1.00	1.00	0.38	5.85	0.000	3.000	17.64	0.00	52.93	
9	160.00	DB222	1	42.359	46.595	1.00	1.00	2.25	14.40	0.000	5.000	104.84	0.00	524.20	
10	160.00	DB846F65ZAXY	6	42.138	46.352	0.84	0.90	35.41	113.40	0.000	2.000	1641.09	0.00	3282.18	
11	152.00	MC-PK8-DSH	1	41.378	45.516	1.00	1.00	37.59	1554.30	0.000	0.000	1710.93	0.00	0.00	
12	152.00	MX08FRO665-21	3	41.378	45.516	0.55	0.75	20.80	174.15	0.000	0.000	946.54	0.00	0.00	
13	152.00	TA08025-B605	3	41.378	45.516	0.50	0.75	2.95	202.50	0.000	0.000	134.48	0.00	0.00	
14	152.00	TA08025-B604	3	41.378	45.516	0.50	0.75	2.95	172.53	0.000	0.000	134.48	0.00	0.00	
15	152.00	RDIDC-9181-OF-48	1	41.378	45.516	0.75	0.75	1.51	19.71	0.000	0.000	68.61	0.00	0.00	
16	142.00	4449 B71 + B85	4	40.581	44.639	0.54	0.80	4.22	263.52	0.000	0.000	188.54	0.00	0.00	
17	142.00	KRY 112 144/1	3	40.581	44.639	0.38	0.75	0.46	29.70	0.000	0.000	20.59	0.00	0.00	
18	142.00	APXVA18-43-C-A20	1	40.581	44.639	0.61	0.75	5.93	40.86	0.000	0.000	264.92	0.00	0.00	
19	142.00	APXVAARR24_43-U-NA2	3	40.581	44.639	0.52	0.75	31.88	345.60	0.000	0.000	1423.01	0.00	0.00	
20	142.00	KRD 9011461-B66A-B2A	4	40.581	44.639	0.65	0.75	16.99	475.92	0.000	0.000	758.47	0.00	0.00	
21	142.00	Mod	1	40.581	44.639	1.00	1.00	12.00	270.00	0.000	0.000	535.67	0.00	0.00	
22	142.00	Platform w/ HR & Bracing	1	40.581	44.639	1.00	1.00	52.00	2021.40	0.000	0.000	2321.24	0.00	0.00	
23	142.00	Ericsson 4460 B25 + B66	4	40.581	44.639	0.50	0.75	5.73	392.40	0.000	0.000	255.72	0.00	0.00	
24	142.00	Ericsson Air 6419 B41	4	40.581	44.639	0.57	0.75	8.66	237.96	0.000	0.000	386.75	0.00	0.00	
25	134.75	AIR 6419 B77G	3	39.978	43.976	0.61	0.80	6.93	178.47	0.000	0.000	304.80	0.00	0.00	
26	133.00	DMP65R-BU6EA-K	2	39.829	43.812	0.57	0.80	19.45	181.80	0.000	0.000	852.07	0.00	0.00	
27	133.00	DMP65R-BU8EA-K	1	39.829	43.812	0.58	0.80	10.44	86.13	0.000	0.000	457.22	0.00	0.00	
28	133.00	4478 B14	3	39.829	43.812	0.54	0.80	2.96	161.73	0.000	0.000	129.63	0.00	0.00	
29	133.00	DC9-48-60-24-8C-EV	1	39.829	43.812	0.80	0.80	0.91	23.58	0.000	0.000	39.96	0.00	0.00	
30	133.00	Kathrein 800-10965	3	39.829	43.812	0.57	0.80	23.53	293.22	0.000	0.000	1030.99	0.00	0.00	
31	133.00	(3) SitePro 1 P/N	2	39.829	43.812	0.56	0.75	24.01	2443.99	0.000	0.000	1051.81	0.00	0.00	
32	133.00	Powerwave LGP21401	6	39.829	43.812	0.54	0.80	4.15	76.14	0.000	0.000	181.76	0.00	0.00	
33	133.00	Ericsson RRUS-32 RRU	3	39.829	43.812	0.54	0.80	6.22	207.90	0.000	0.000	272.64	0.00	0.00	
34	133.00	Ericsson B2/B66A 8843	3	39.829	43.812	0.54	0.80	2.64	194.40	0.000	0.000	115.54	0.00	0.00	
35	133.00	Ericsson B5/B12 4449	3	39.829	43.812	0.54	0.80	3.17	191.70	0.000	0.000	138.79	0.00	0.00	
36	133.00	Raycap DC6-48-60-18-8F	2	39.829	43.812	0.54	0.80	0.99	57.24	0.000	0.000	43.21	0.00	0.00	
37	131.75	AIR 6449 B77D	3	39.722	43.694	0.68	0.80	8.43	237.60	0.000	0.000	368.13	0.00	0.00	
38	110.00	3 ft Standoff	1	37.726	41.498	1.00	1.00	2.63	36.00	0.000	0.000	109.14	0.00	0.00	
39	110.00	DB222	1	38.236	42.059	1.00	1.00	2.65	14.40	0.000	5.292	111.46	0.00	589.80	
40	40.00	GPS	1	28.256	31.082	1.00	1.00	1.00	9.00	0.000	0.000	31.08	0.00	0.00	

Totals: 12,783.28

19,882.49

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

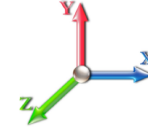


Page: 33

Load Case: 0.9D + 1.0W 125 mph Wind

Dead Load Factor 0.90

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
1.00		120.56	499.34	0.00	0.00
2.00		120.24	498.62	0.00	0.00
4.00		239.52	995.09	0.00	0.00
6.00		238.25	992.23	0.00	0.00
8.00		236.98	989.36	0.00	0.00
10.00		235.70	986.49	0.00	0.00
12.00		234.43	983.62	0.00	0.00
14.00		233.16	980.75	0.00	0.00
16.00		231.88	977.88	0.00	0.00
16.25		29.35	166.06	0.00	0.00
18.00		204.93	1159.90	0.00	0.00
18.63		73.54	416.49	0.00	0.00
18.88		29.15	165.12	0.00	0.00
20.00		130.33	738.62	0.00	0.00
22.00		231.76	1314.48	0.00	0.00
24.00		229.25	971.95	0.00	0.00
26.00		227.98	969.08	0.00	0.00
28.00		226.70	966.21	0.00	0.00
30.00		242.62	1233.34	0.00	0.00
31.00		121.97	615.59	0.00	0.00
32.00		122.76	614.87	0.00	0.00
33.38		149.50	474.75	0.00	0.00
34.00		67.23	212.85	0.00	0.00
36.00		219.18	684.73	0.00	0.00
38.00		220.65	681.86	0.00	0.00
40.00	(1) attachments	253.01	687.99	0.00	0.00
42.00		223.04	675.83	0.00	0.00
44.00		223.99	672.96	0.00	0.00
45.16		129.95	389.00	0.00	0.00
46.00		94.16	281.09	0.00	0.00
48.00		225.47	667.22	0.00	0.00
50.00		226.00	664.35	0.00	0.00
52.00		230.54	969.20	0.00	0.00
54.00		230.88	963.46	0.00	0.00
56.00		231.12	957.72	0.00	0.00
58.00		231.25	658.42	0.00	0.00
60.00		231.28	655.55	0.00	0.00
62.00		231.22	652.68	0.00	0.00
64.00		231.06	649.81	0.00	0.00
66.00		230.82	646.94	0.00	0.00
68.00		230.50	644.07	0.00	0.00
70.00		230.10	641.20	0.00	0.00
72.00		229.62	638.33	0.00	0.00
74.00		229.07	635.46	0.00	0.00
76.00		228.44	632.59	0.00	0.00
78.00		227.75	629.72	0.00	0.00

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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

80.00		227.00	626.85	0.00	0.00
82.00		226.18	580.26	0.00	0.00
84.00		225.30	577.87	0.00	0.00
86.00		224.36	575.48	0.00	0.00
88.00		223.36	573.08	0.00	0.00
90.00		222.30	570.69	0.00	0.00
92.00		221.20	568.30	0.00	0.00
94.00		220.04	565.91	0.00	0.00
95.00		109.40	282.06	0.00	0.00
95.58		64.46	223.56	0.00	0.00
96.00		46.60	161.63	0.00	0.00
98.00		221.68	766.79	0.00	0.00
100.00		220.39	492.01	0.00	0.00
102.00		219.06	290.20	0.00	0.00
104.00		217.68	287.81	0.00	0.00
106.00		216.26	285.41	0.00	0.00
108.00		214.79	283.02	0.00	0.00
110.00	(2) attachments	433.88	331.03	0.00	589.80
112.00		211.73	277.30	0.00	0.00
114.00		210.14	274.91	0.00	0.00
115.00		104.33	136.56	0.00	0.00
116.00		103.92	117.76	0.00	0.00
118.00		206.83	234.09	0.00	0.00
120.00		205.12	232.17	0.00	0.00
122.00		203.37	230.26	0.00	0.00
124.00		201.59	228.35	0.00	0.00
126.00		199.77	226.44	0.00	0.00
128.00		197.91	224.52	0.00	0.00
130.00		196.02	222.61	0.00	0.00
131.75	(3) attachments	538.03	430.81	0.00	0.00
132.00		24.11	27.48	0.00	0.00
133.00	(29) attachments	4409.82	4027.46	0.00	0.00
134.00		95.72	97.16	0.00	0.00
134.75	(3) attachments	376.25	251.03	0.00	0.00
136.00		118.52	120.33	0.00	0.00
138.00		188.13	190.98	0.00	0.00
140.00		186.08	189.07	0.00	0.00
142.00	(25) attachments	6338.90	4264.52	0.00	0.00
144.00		181.88	161.14	0.00	0.00
145.00		90.05	79.85	0.00	0.00
146.00		54.62	77.95	0.00	0.00
148.00		108.35	154.49	0.00	0.00
150.00		107.01	152.63	0.00	0.00
152.00	(11) attachments	3073.34	2239.26	0.00	0.00
154.00		78.58	112.49	0.00	0.00
156.00		78.87	112.49	0.00	0.00
158.00		79.16	112.49	0.00	0.00
160.00	(26) attachments	5573.76	2301.92	0.00	11320.80
Totals:		36,512.75	58,853.35	0.00	11,910.60

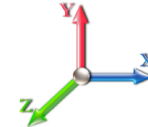
Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 125 mph Wind

Dead Load Factor 0.90
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)
1.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.108	1.023	26.005	0.00	1.98
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	0.47
1.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	1.79
1.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	1.98
1.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	1.72
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	26.005	0.00	0.47
1.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.108	1.023	26.005	0.00	108.00
1.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.108	1.023	26.005	0.00	162.00
2.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.108	1.024	26.005	0.00	1.98
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	0.47
2.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	1.79
2.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	1.98
2.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	1.72
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	26.005	0.00	0.47
2.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.108	1.024	26.005	0.00	108.00
2.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.108	1.024	26.005	0.00	162.00
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.026	26.005	0.00	3.96
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	0.94
4.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	3.58
4.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	3.96
4.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	3.43
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	26.005	0.00	0.94
4.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.109	1.026	26.005	0.00	216.00
4.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.109	1.026	26.005	0.00	324.00
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.028	26.005	0.00	3.96
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	0.94
6.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	3.58
6.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	3.96
6.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	3.43
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	26.005	0.00	0.94
6.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.109	1.028	26.005	0.00	216.00
6.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.109	1.028	26.005	0.00	324.00
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.110	1.031	26.005	0.00	3.96
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	0.94
8.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	3.58
8.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	3.96
8.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	3.43
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	26.005	0.00	0.94
8.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.110	1.031	26.005	0.00	216.00
8.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.110	1.031	26.005	0.00	324.00
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.111	1.034	26.005	0.00	3.96
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	0.94
10.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	3.58
10.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	3.96
10.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	3.43
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	26.005	0.00	0.94
10.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.111	1.034	26.005	0.00	216.00

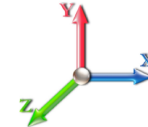
Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 125 mph Wind

Dead Load Factor 0.90
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)
10.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.111	1.034	26.005	0.00	324.00
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.112	1.036	26.005	0.00	3.96
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	0.94
12.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	3.58
12.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	3.96
12.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	3.43
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	26.005	0.00	0.94
12.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.112	1.036	26.005	0.00	216.00
12.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.112	1.036	26.005	0.00	324.00
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.039	26.005	0.00	3.96
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	0.94
14.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	3.58
14.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	3.96
14.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	3.43
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	26.005	0.00	0.94
14.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.113	1.039	26.005	0.00	216.00
14.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.113	1.039	26.005	0.00	324.00
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.114	1.042	26.005	0.00	3.96
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	0.94
16.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	3.58
16.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	3.96
16.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	3.43
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	26.005	0.00	0.94
16.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.114	1.042	26.005	0.00	216.00
16.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.114	1.042	26.005	0.00	324.00
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.114	1.043	26.005	0.00	0.50
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.12
16.25	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.45
16.25	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.50
16.25	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.43
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	26.005	0.00	0.12
16.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.114	1.043	26.005	0.00	27.00
16.25	C10x15.3	Yes	0.25	0.000	2.60	0.05	0.00	0.114	1.043	26.005	0.00	40.50
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.115	1.045	26.005	0.00	3.47
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	0.82
18.00	1.75" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	3.14
18.00	1 5/8" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	3.47
18.00	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	3.01
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	26.005	0.00	0.82
18.00	1" Reinforcing plate	Yes	1.75	0.000	1.00	0.15	0.00	0.115	1.045	26.005	0.00	189.00
18.00	C10x15.3	Yes	1.75	0.000	2.60	0.38	0.00	0.115	1.045	26.005	0.00	283.50
18.63	1 5/8" Hybrid	Yes	0.63	0.000	2.00	0.10	0.00	0.116	1.047	26.005	0.00	1.25
18.63	7/8" Coax	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.29
18.63	1.75" Hybrid	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	1.13
18.63	1 5/8" Fiber	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	1.25
18.63	1-1/4" Fiber	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	1.08
18.63	7/8" Coax	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.29

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



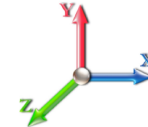
Page: 37

Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90

Wind Load Factor 1.00



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)
18.63	1" Reinforcing plate	Yes	0.63	0.000	1.00	0.05	0.00	0.116	1.047	26.005	0.00	68.04
18.63	C10x15.3	Yes	0.63	0.000	2.60	0.14	0.00	0.116	1.047	26.005	0.00	102.06
18.88	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.116	1.047	26.005	0.00	0.50
18.88	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.12
18.88	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.45
18.88	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.50
18.88	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.43
18.88	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	26.005	0.00	0.12
18.88	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.116	1.047	26.005	0.00	27.00
18.88	C10x15.3	Yes	0.25	0.000	2.60	0.05	0.00	0.116	1.047	26.005	0.00	40.50
20.00	1 5/8" Hybrid	Yes	1.12	0.000	2.00	0.19	0.00	0.116	1.048	26.005	0.00	2.22
20.00	7/8" Coax	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	0.52
20.00	1.75" Hybrid	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	2.01
20.00	1 5/8" Fiber	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	2.22
20.00	1-1/4" Fiber	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	1.92
20.00	7/8" Coax	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	0.52
20.00	1" Reinforcing plate	Yes	1.12	0.000	1.00	0.09	0.00	0.116	1.048	26.005	0.00	120.96
20.00	C10x15.3	Yes	1.12	0.000	2.60	0.24	0.00	0.116	1.048	26.005	0.00	181.44
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.050	26.005	0.00	3.96
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	0.94
22.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	3.58
22.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	3.96
22.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	3.43
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	26.005	0.00	0.94
22.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.117	1.050	26.005	0.00	216.00
22.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.117	1.050	26.005	0.00	324.00
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.048	26.005	0.00	3.96
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	0.94
24.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	3.58
24.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	3.96
24.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	3.43
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	26.005	0.00	0.94
24.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.116	1.048	26.005	0.00	216.00
24.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.116	1.048	26.005	0.00	324.00
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.051	26.005	0.00	3.96
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	0.94
26.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	3.58
26.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	3.96
26.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	3.43
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	26.005	0.00	0.94
26.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.117	1.051	26.005	0.00	216.00
26.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.117	1.051	26.005	0.00	324.00
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.054	26.005	0.00	3.96
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	0.94
28.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	3.58
28.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	3.96
28.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	3.43

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



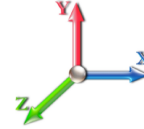
Page: 38

Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90

Wind Load Factor 1.00



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)
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	26.005	0.00	0.94
28.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.118	1.054	26.005	0.00	216.00
28.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.118	1.054	26.005	0.00	324.00
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.136	26.027	0.00	3.96
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	0.94
30.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	3.58
30.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	3.96
30.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	3.43
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	26.027	0.00	0.94
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.145	1.136	26.027	0.00	270.00
30.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.145	1.136	26.027	0.00	216.00
30.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.145	1.136	26.027	0.00	324.00
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.146	1.139	26.272	0.00	1.98
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	0.47
31.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	1.79
31.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	1.98
31.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	1.72
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	26.272	0.00	0.47
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.146	1.139	26.272	0.00	135.00
31.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.146	1.139	26.272	0.00	108.00
31.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.146	1.139	26.272	0.00	162.00
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.147	1.141	26.511	0.00	1.98
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	0.47
32.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	1.79
32.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	1.98
32.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	1.72
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	26.511	0.00	0.47
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.147	1.141	26.511	0.00	135.00
32.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.147	1.141	26.511	0.00	108.00
32.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.147	1.141	26.511	0.00	162.00
33.38	1 5/8" Hybrid	Yes	1.38	0.000	2.00	0.23	0.00	0.070	0.000	26.833	0.00	2.73
33.38	7/8" Coax	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	0.65
33.38	1.75" Hybrid	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	2.47
33.38	1 5/8" Fiber	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	2.73
33.38	1-1/4" Fiber	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	2.37
33.38	7/8" Coax	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	26.833	0.00	0.65
33.38	1.25" Reinforcing	Yes	1.38	0.000	1.25	0.14	0.00	0.070	0.000	26.833	0.00	186.30
34.00	1 5/8" Hybrid	Yes	0.62	0.000	2.00	0.10	0.00	0.070	0.000	26.974	0.00	1.23
34.00	7/8" Coax	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	0.29
34.00	1.75" Hybrid	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	1.11
34.00	1 5/8" Fiber	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	1.23
34.00	1-1/4" Fiber	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	1.06
34.00	7/8" Coax	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	26.974	0.00	0.29
34.00	1.25" Reinforcing	Yes	0.62	0.000	1.25	0.06	0.00	0.070	0.000	26.974	0.00	83.70
36.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	27.418	0.00	3.96
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	0.94
36.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	3.58

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



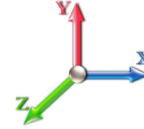
Page: 39

Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90

Wind Load Factor 1.00



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)
36.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	3.96
36.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	3.43
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.418	0.00	0.94
36.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.071	0.000	27.418	0.00	270.00
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	27.845	0.00	3.96
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	0.94
38.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	3.58
38.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	3.96
38.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	3.43
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	27.845	0.00	0.94
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.071	0.000	27.845	0.00	270.00
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	28.256	0.00	3.96
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	0.94
40.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	3.58
40.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	3.96
40.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	3.43
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	28.256	0.00	0.94
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.072	0.000	28.256	0.00	270.00
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	28.653	0.00	3.96
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	0.94
42.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	3.58
42.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	3.96
42.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	3.43
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	28.653	0.00	0.94
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.073	0.000	28.653	0.00	270.00
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	29.036	0.00	3.96
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	0.94
44.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	3.58
44.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	3.96
44.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	3.43
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	29.036	0.00	0.94
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.073	0.000	29.036	0.00	270.00
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.19	0.00	0.074	0.000	29.253	0.00	2.30
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	0.54
45.16	1.75" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	2.08
45.16	1 5/8" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	2.30
45.16	1-1/4" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	1.99
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	29.253	0.00	0.54
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.12	0.00	0.074	0.000	29.253	0.00	156.60
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.14	0.00	0.074	0.000	29.407	0.00	1.66
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	0.39
46.00	1.75" Hybrid	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	1.51
46.00	1 5/8" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	1.66
46.00	1-1/4" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	1.44
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	29.407	0.00	0.39
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.09	0.00	0.074	0.000	29.407	0.00	113.40
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	29.767	0.00	3.96

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



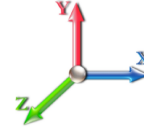
Page: 40

Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90

Wind Load Factor 1.00



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)
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	0.94
48.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	3.58
48.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	3.96
48.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	3.43
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	29.767	0.00	0.94
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.075	0.000	29.767	0.00	270.00
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	30.116	0.00	3.96
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	0.94
50.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	3.58
50.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	3.96
50.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	3.43
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	30.116	0.00	0.94
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.075	0.000	30.116	0.00	270.00
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	30.456	0.00	3.96
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	0.94
52.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	3.58
52.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	3.96
52.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	3.43
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	30.456	0.00	0.94
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.076	0.000	30.456	0.00	270.00
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	30.786	0.00	3.96
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	0.94
54.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	3.58
54.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	3.96
54.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	3.43
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	30.786	0.00	0.94
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.077	0.000	30.786	0.00	270.00
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	31.108	0.00	3.96
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	0.94
56.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	3.58
56.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	3.96
56.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	3.43
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.108	0.00	0.94
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.078	0.000	31.108	0.00	270.00
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	31.421	0.00	3.96
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	0.94
58.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	3.58
58.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	3.96
58.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	3.43
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	31.421	0.00	0.94
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.077	0.000	31.421	0.00	270.00
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	31.727	0.00	3.96
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	0.94
60.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	3.58
60.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	3.96
60.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	3.43
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	31.727	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

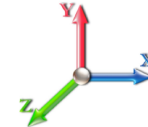
Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 41

Load Case: 0.9D + 1.0W 125 mph Wind

Dead Load Factor 0.90
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)
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.078	0.000	31.727	0.00	270.00
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	32.025	0.00	3.96
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	0.94
62.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	3.58
62.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	3.96
62.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	3.43
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.025	0.00	0.94
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.078	0.000	32.025	0.00	270.00
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	32.317	0.00	3.96
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	0.94
64.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	3.58
64.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	3.96
64.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	3.43
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	32.317	0.00	0.94
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.079	0.000	32.317	0.00	270.00
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.080	0.000	32.603	0.00	3.96
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	0.94
66.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	3.58
66.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	3.96
66.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	3.43
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	32.603	0.00	0.94
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.080	0.000	32.603	0.00	270.00
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	32.882	0.00	3.96
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	0.94
68.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	3.58
68.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	3.96
68.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	3.43
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	32.882	0.00	0.94
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.081	0.000	32.882	0.00	270.00
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.082	0.000	33.155	0.00	3.96
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	0.94
70.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	3.58
70.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	3.96
70.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	3.43
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.155	0.00	0.94
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.082	0.000	33.155	0.00	270.00
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.082	0.000	33.423	0.00	3.96
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	0.94
72.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	3.58
72.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	3.96
72.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	3.43
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	33.423	0.00	0.94
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.082	0.000	33.423	0.00	270.00
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	33.686	0.00	3.96
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	0.94
74.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	3.58
74.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	3.96

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



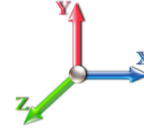
Page: 42

Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90

Wind Load Factor 1.00



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)
74.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	3.43
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	33.686	0.00	0.94
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.083	0.000	33.686	0.00	270.00
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.084	0.000	33.944	0.00	3.96
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	0.94
76.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	3.58
76.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	3.96
76.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	3.43
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	33.944	0.00	0.94
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.084	0.000	33.944	0.00	270.00
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	34.197	0.00	3.96
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	0.94
78.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	3.58
78.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	3.96
78.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	3.43
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	34.197	0.00	0.94
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.085	0.000	34.197	0.00	270.00
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.086	0.000	34.445	0.00	3.96
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	0.94
80.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	3.58
80.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	3.96
80.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	3.43
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	34.445	0.00	0.94
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.086	0.000	34.445	0.00	270.00
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.087	0.000	34.689	0.00	3.96
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	0.94
82.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	3.58
82.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	3.96
82.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	3.43
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	34.689	0.00	0.94
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.087	0.000	34.689	0.00	270.00
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.088	0.000	34.928	0.00	3.96
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	0.94
84.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	3.58
84.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	3.96
84.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	3.43
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	34.928	0.00	0.94
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.088	0.000	34.928	0.00	270.00
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.089	0.000	35.164	0.00	3.96
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	0.94
86.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	3.58
86.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	3.96
86.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	3.43
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	35.164	0.00	0.94
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.089	0.000	35.164	0.00	270.00
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.090	0.000	35.396	0.00	3.96
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

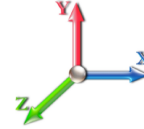


Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90

Wind Load Factor 1.00



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)
88.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	3.58
88.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	3.96
88.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	3.43
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	35.396	0.00	0.94
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.090	0.000	35.396	0.00	270.00
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.091	0.000	35.624	0.00	3.96
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	0.94
90.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	3.58
90.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	3.96
90.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	3.43
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	35.624	0.00	0.94
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.091	0.000	35.624	0.00	270.00
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.092	0.000	35.848	0.00	3.96
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	0.94
92.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	3.58
92.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	3.96
92.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	3.43
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	35.848	0.00	0.94
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.092	0.000	35.848	0.00	270.00
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.093	0.000	36.069	0.00	3.96
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	0.94
94.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	3.58
94.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	3.96
94.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	3.43
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	36.069	0.00	0.94
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.093	0.000	36.069	0.00	270.00
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.094	0.000	36.178	0.00	1.98
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	0.47
95.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	1.79
95.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	1.98
95.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	1.72
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	36.178	0.00	0.47
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.094	0.000	36.178	0.00	135.00
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.10	0.00	0.094	0.000	36.241	0.00	1.15
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	0.27
95.58	1.75" Hybrid	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	1.04
95.58	1 5/8" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	1.15
95.58	1-1/4" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	1.00
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	36.241	0.00	0.27
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.06	0.00	0.094	0.000	36.241	0.00	78.30
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.07	0.00	0.094	0.000	36.287	0.00	0.83
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	0.20
96.00	1.75" Hybrid	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	0.75
96.00	1 5/8" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	0.83
96.00	1-1/4" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	0.72
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	36.287	0.00	0.20
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.04	0.00	0.094	0.000	36.287	0.00	56.70

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



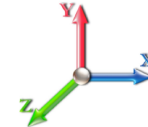
Page: 44

Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90

Wind Load Factor 1.00



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)
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.095	0.000	36.501	0.00	3.96
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	0.94
98.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	3.58
98.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	3.96
98.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	3.43
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	36.501	0.00	0.94
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.095	0.000	36.501	0.00	270.00
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.059	0.000	36.712	0.00	3.96
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	0.94
100.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	3.58
100.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	3.96
100.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	3.43
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.712	0.00	0.94
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.059	0.000	36.921	0.00	3.96
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	0.94
102.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	3.58
102.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	3.96
102.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	3.43
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	36.921	0.00	0.94
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.059	0.000	37.126	0.00	3.96
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	0.94
104.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	3.58
104.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	3.96
104.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	3.43
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	37.126	0.00	0.94
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.060	0.000	37.329	0.00	3.96
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	0.94
106.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	3.58
106.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	3.96
106.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	3.43
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	37.329	0.00	0.94
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.061	0.000	37.529	0.00	3.96
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	0.94
108.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	3.58
108.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	3.96
108.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	3.43
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	37.529	0.00	0.94
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.062	0.000	37.726	0.00	3.96
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	0.94
110.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	3.58
110.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	3.96
110.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	3.43
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.726	0.00	0.94
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.062	0.000	37.921	0.00	3.96
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.921	0.00	0.94
112.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.921	0.00	3.58
112.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.921	0.00	3.96

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

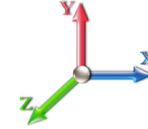


Page: 45

Load Case: 0.9D + 1.0W 125 mph Wind

Dead Load Factor 0.90

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)
112.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	37.921	0.00	3.43
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.063	0.000	38.113	0.00	3.96
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	38.113	0.00	0.94
114.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	38.113	0.00	3.58
114.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	38.113	0.00	3.96
114.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	38.113	0.00	3.43
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	38.208	0.00	1.98
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.208	0.00	0.47
115.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.208	0.00	1.79
115.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.208	0.00	1.98
115.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.208	0.00	1.72
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	38.303	0.00	1.98
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.303	0.00	0.47
116.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.303	0.00	1.79
116.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.303	0.00	1.98
116.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	38.303	0.00	1.72
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.065	0.000	38.490	0.00	3.96
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	38.490	0.00	0.94
118.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	38.490	0.00	3.58
118.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	38.490	0.00	3.96
118.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	38.490	0.00	3.43
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.066	0.000	38.675	0.00	3.96
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	38.675	0.00	0.94
120.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	38.675	0.00	3.58
120.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	38.675	0.00	3.96
120.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	38.675	0.00	3.43
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	38.859	0.00	3.96
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	38.859	0.00	0.94
122.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	38.859	0.00	3.58
122.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	38.859	0.00	3.96
122.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	38.859	0.00	3.43
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	39.040	0.00	3.96
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	39.040	0.00	0.94
124.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	39.040	0.00	3.58
124.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	39.040	0.00	3.96
124.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	39.040	0.00	3.43
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.068	0.000	39.218	0.00	3.96
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	39.218	0.00	0.94
126.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	39.218	0.00	3.58
126.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	39.218	0.00	3.96
126.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	39.218	0.00	3.43
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.069	0.000	39.395	0.00	3.96
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	39.395	0.00	0.94
128.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	39.395	0.00	3.58
128.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	39.395	0.00	3.96
128.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	39.395	0.00	3.43
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	39.570	0.00	3.96

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 125 mph Wind

Dead Load Factor 0.90
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)
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	39.570	0.00	0.94
130.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	39.570	0.00	3.58
130.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	39.570	0.00	3.96
130.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	39.570	0.00	3.43
131.75	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.071	0.000	39.722	0.00	3.47
131.75	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	39.722	0.00	0.82
131.75	1.75" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	39.722	0.00	3.14
131.75	1 5/8" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	39.722	0.00	3.47
131.75	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	39.722	0.00	3.01
132.00	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.072	0.000	39.743	0.00	0.50
132.00	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	39.743	0.00	0.12
132.00	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	39.743	0.00	0.45
132.00	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	39.743	0.00	0.50
132.00	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	39.743	0.00	0.43
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.072	0.000	39.829	0.00	1.98
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	39.829	0.00	0.47
133.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	39.829	0.00	1.79
133.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	39.829	0.00	1.98
133.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	39.829	0.00	1.72
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.073	0.000	39.914	0.00	1.98
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	39.914	0.00	0.47
134.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	39.914	0.00	1.79
134.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	39.914	0.00	1.98
134.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	39.914	0.00	1.72
134.75	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.13	0.00	0.073	0.000	39.978	0.00	1.49
134.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	39.978	0.00	0.35
134.75	1.75" Hybrid	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	39.978	0.00	1.34
134.75	1 5/8" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	39.978	0.00	1.49
134.75	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	39.978	0.00	1.29
136.00	1 5/8" Hybrid	Yes	1.25	0.000	2.00	0.21	0.00	0.074	0.000	40.084	0.00	2.48
136.00	7/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	40.084	0.00	0.59
136.00	1.75" Hybrid	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	40.084	0.00	2.24
136.00	1 5/8" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	40.084	0.00	2.48
136.00	1-1/4" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	40.084	0.00	2.15
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	40.251	0.00	3.96
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	40.251	0.00	0.94
138.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	40.251	0.00	3.58
138.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	40.251	0.00	3.96
138.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	40.251	0.00	3.43
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	40.417	0.00	3.96
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	40.417	0.00	0.94
140.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	40.417	0.00	3.58
140.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	40.417	0.00	3.96
140.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	40.417	0.00	3.43
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	40.581	0.00	3.96
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.581	0.00	0.94
142.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.581	0.00	3.58

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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: 0.9D + 1.0W 125 mph Wind

Dead Load Factor 0.90
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)
142.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.581	0.00	3.96
142.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.581	0.00	3.43
144.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	40.744	0.00	3.96
144.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.744	0.00	0.94
144.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.744	0.00	3.58
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.079	0.000	40.824	0.00	1.98
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	40.824	0.00	0.47
145.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	40.824	0.00	1.79
146.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.082	0.000	40.904	0.00	1.98
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	40.904	0.00	0.47
146.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	40.904	0.00	1.79
148.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	41.064	0.00	3.96
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	41.064	0.00	0.94
148.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	41.064	0.00	3.58
150.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	41.222	0.00	3.96
150.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	41.222	0.00	0.94
150.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	41.222	0.00	3.58
152.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.378	0.00	3.96
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.378	0.00	0.94
152.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.378	0.00	3.58
154.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.533	0.00	3.96
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.533	0.00	0.94
156.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.686	0.00	3.96
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.686	0.00	0.94
158.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.838	0.00	3.96
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.838	0.00	0.94
160.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	41.989	0.00	3.96
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	41.989	0.00	0.94
Totals:											0.0	19,330.5

Calculated Forces

Structure: CT02049-S-SBA
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

7/28/2022

Page: 48



Load Case: 0.9D + 1.0W 125 mph Wind

Iterations 28

Dead Load Factor 0.90

Wind Load 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	-58.84	-36.53	0.00	-4315.8	0.00	4315.87	3683.82	1059.58	4414.92	3756.66	0.00	0.000	0.000	0.691
1.00	-58.32	-36.45	0.00	-4279.3	0.00	4279.34	3677.71	1055.47	4380.73	3735.77	0.00	-0.038	0.000	0.691
2.00	-57.78	-36.39	0.00	-4242.8	0.00	4242.89	3671.54	1051.36	4346.67	3714.86	0.02	-0.075	0.000	0.687
4.00	-56.74	-36.22	0.00	-4170.1	0.00	4170.12	3659.00	1043.14	4278.95	3673.00	0.06	-0.151	0.000	0.681
6.00	-55.70	-36.05	0.00	-4097.6	0.00	4097.68	3646.20	1034.91	4211.76	3631.09	0.14	-0.226	0.000	0.674
8.00	-54.67	-35.88	0.00	-4025.5	0.00	4025.58	3633.16	1026.69	4145.10	3589.13	0.26	-0.302	0.000	0.668
10.00	-53.63	-35.71	0.00	-3953.8	0.00	3953.81	3619.85	1018.47	4078.97	3547.13	0.40	-0.378	0.000	0.661
12.00	-52.60	-35.54	0.00	-3882.3	0.00	3882.39	3606.29	1010.25	4013.38	3505.10	0.57	-0.454	0.000	0.654
14.00	-51.58	-35.37	0.00	-3811.3	0.00	3811.31	3592.48	1002.02	3948.31	3463.03	0.78	-0.531	0.000	0.648
16.00	-50.58	-35.16	0.00	-3740.5	0.00	3740.57	3578.41	993.80	3883.78	3420.94	1.02	-0.607	0.000	0.641
16.25	-50.38	-35.17	0.00	-3731.7	0.00	3731.78	3576.63	992.77	3875.75	3415.68	1.05	-0.617	0.000	0.735
18.00	-49.19	-35.00	0.00	-3670.2	0.00	3670.23	3564.09	985.58	3819.78	3378.83	1.29	-0.694	0.000	0.728
18.63	-48.77	-34.94	0.00	-3648.1	0.00	3648.18	3559.52	982.99	3799.73	3365.57	1.39	-0.722	0.000	0.591
18.88	-48.59	-34.93	0.00	-3639.4	0.00	3639.45	3557.70	981.96	3791.79	3360.30	1.42	-0.731	0.000	0.674
20.00	-47.81	-34.84	0.00	-3600.3	0.00	3600.33	3549.51	977.36	3756.31	3336.71	1.60	-0.777	0.000	0.670
22.00	-46.45	-34.66	0.00	-3530.6	0.00	3530.65	3563.12	985.03	3815.51	3376.01	1.94	-0.859	0.000	0.679
24.00	-45.43	-34.48	0.00	-3461.3	0.00	3461.34	3548.52	976.81	3752.08	3333.89	2.32	-0.941	0.000	0.652
26.00	-44.42	-34.29	0.00	-3392.3	0.00	3392.38	3533.67	968.58	3689.18	3291.77	2.73	-1.021	0.000	0.645
28.00	-43.41	-34.11	0.00	-3323.8	0.00	3323.80	3518.56	960.36	3626.81	3249.64	3.18	-1.101	0.000	0.637
30.00	-42.15	-33.88	0.00	-3255.5	0.00	3255.57	3503.20	952.14	3564.97	3207.53	3.66	-1.181	0.000	0.497
31.00	-41.52	-33.77	0.00	-3221.6	0.00	3221.69	3495.43	948.03	3534.25	3186.48	3.91	-1.213	0.000	0.573
32.00	-40.88	-33.67	0.00	-3187.9	0.00	3187.92	3487.59	943.92	3503.66	3165.43	4.17	-1.250	0.000	0.570
33.38	-40.38	-33.54	0.00	-3141.4	0.00	3141.45	3476.66	938.24	3461.67	3136.39	4.54	-1.301	0.000	0.702
34.00	-40.14	-33.51	0.00	-3120.6	0.00	3120.66	3471.72	935.70	3442.89	3123.35	4.71	-1.330	0.000	0.700
36.00	-39.40	-33.34	0.00	-3053.6	0.00	3053.64	3455.59	927.47	3382.65	3081.29	5.28	-1.421	0.000	0.692
38.00	-38.68	-33.16	0.00	-2986.9	0.00	2986.97	3439.21	919.25	3322.94	3039.26	5.90	-1.513	0.000	0.684
40.00	-37.94	-32.95	0.00	-2920.6	0.00	2920.65	3422.57	911.03	3263.76	2997.28	6.55	-1.605	0.000	0.676
42.00	-37.22	-32.77	0.00	-2854.7	0.00	2854.76	3405.68	902.81	3205.11	2955.34	7.24	-1.696	0.000	0.668
44.00	-36.51	-32.57	0.00	-2789.2	0.00	2789.23	3388.54	894.58	3146.99	2913.44	7.98	-1.788	0.000	0.660
45.16	-36.11	-32.45	0.00	-2751.4	0.00	2751.45	3378.48	889.81	3113.53	2889.17	8.42	-1.842	0.000	0.477
46.00	-35.79	-32.38	0.00	-2724.1	0.00	2724.19	3371.14	886.36	3089.41	2871.61	8.74	-1.870	0.000	0.619
48.00	-35.09	-32.19	0.00	-2659.4	0.00	2659.42	3353.48	878.14	3032.36	2829.83	9.55	-1.958	0.000	0.611
50.00	-34.38	-31.99	0.00	-2595.0	0.00	2595.04	3335.57	869.92	2975.84	2788.13	10.38	-2.045	0.000	0.603
52.00	-33.37	-31.78	0.00	-2531.0	0.00	2531.05	3317.41	861.69	2919.85	2746.50	11.26	-2.133	0.000	0.587
54.00	-32.37	-31.56	0.00	-2467.4	0.00	2467.49	3298.98	853.47	2864.39	2704.94	12.17	-2.219	0.000	0.578
56.00	-31.38	-31.34	0.00	-2404.3	0.00	2404.37	3316.18	861.14	2916.12	2743.71	13.12	-2.305	0.000	0.585
58.00	-30.68	-31.13	0.00	-2341.7	0.00	2341.70	3297.74	852.92	2860.70	2702.16	14.10	-2.391	0.000	0.604
60.00	-29.99	-30.92	0.00	-2279.4	0.00	2279.44	3279.05	844.70	2805.81	2660.71	15.12	-2.481	0.000	0.596
62.00	-29.30	-30.70	0.00	-2217.6	0.00	2217.61	3260.10	836.48	2751.45	2619.34	16.18	-2.571	0.000	0.587
64.00	-28.61	-30.49	0.00	-2156.2	0.00	2156.21	3240.90	828.25	2697.62	2578.08	17.28	-2.661	0.000	0.578
66.00	-27.93	-30.27	0.00	-2095.2	0.00	2095.23	3221.44	820.03	2644.33	2536.92	18.41	-2.750	0.000	0.568
68.00	-27.25	-30.05	0.00	-2034.7	0.00	2034.70	3201.73	811.81	2591.56	2495.87	19.58	-2.840	0.000	0.559
70.00	-26.57	-29.83	0.00	-1974.6	0.00	1974.60	3181.76	803.59	2539.33	2454.94	20.79	-2.929	0.000	0.550
72.00	-25.90	-29.61	0.00	-1914.9	0.00	1914.94	3161.54	795.36	2487.63	2414.13	22.04	-3.018	0.000	0.540
74.00	-25.24	-29.38	0.00	-1855.7	0.00	1855.72	3141.06	787.14	2436.47	2373.45	23.32	-3.106	0.000	0.530
76.00	-24.57	-29.16	0.00	-1796.9	0.00	1796.96	3120.33	778.92	2385.83	2332.91	24.64	-3.194	0.000	0.520
78.00	-23.91	-28.93	0.00	-1738.6	0.00	1738.64	3099.34	770.70	2335.73	2292.51	26.00	-3.282	0.000	0.510
80.00	-23.26	-28.70	0.00	-1680.7	0.00	1680.78	3078.09	762.47	2286.15	2252.26	27.39	-3.369	0.000	0.500

Calculated Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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



80.00	-23.26	-28.70	0.00	-1680.7	0.00	1680.78	2384.58	636.50	1911.75	1750.88	27.39	-3.369	0.000	0.540
82.00	-22.64	-28.48	0.00	-1623.3	0.00	1623.37	2370.62	629.65	1870.81	1721.73	28.82	-3.455	0.000	0.591
84.00	-22.03	-28.26	0.00	-1566.4	0.00	1566.41	2356.42	622.80	1830.32	1692.63	30.29	-3.552	0.000	0.577
86.00	-21.43	-28.03	0.00	-1509.9	0.00	1509.90	2341.95	615.94	1790.27	1663.57	31.79	-3.647	0.000	0.564
88.00	-20.82	-27.81	0.00	-1453.8	0.00	1453.84	2327.23	609.09	1750.66	1634.56	33.34	-3.742	0.000	0.550
90.00	-20.22	-27.58	0.00	-1398.2	0.00	1398.23	2312.26	602.24	1711.49	1605.61	34.93	-3.836	0.000	0.536
92.00	-19.63	-27.35	0.00	-1343.0	0.00	1343.07	2297.03	595.39	1672.77	1576.72	36.56	-3.929	0.000	0.521
94.00	-19.05	-27.12	0.00	-1288.3	0.00	1288.36	2281.55	588.54	1634.49	1547.90	38.22	-4.021	0.000	0.507
95.00	-18.76	-27.00	0.00	-1261.2	0.00	1261.25	2273.71	585.11	1615.51	1533.52	39.07	-4.066	0.000	0.500
95.58	-18.53	-26.93	0.00	-1245.5	0.00	1245.59	2269.13	583.12	1604.56	1525.19	39.56	-4.093	0.000	0.488
95.58	-18.53	-26.93	0.00	-1245.5	0.00	1245.59	2269.13	583.12	1604.56	1525.19	39.56	-4.093	0.000	0.488
96.00	-18.33	-26.90	0.00	-1234.2	0.00	1234.28	2265.81	581.68	1596.65	1519.16	39.92	-4.112	0.000	0.823
98.00	-17.51	-26.66	0.00	-1180.4	0.00	1180.49	2249.81	574.83	1559.25	1490.50	41.68	-4.261	0.000	0.802
100.00	-16.97	-26.45	0.00	-1127.1	0.00	1127.16	2259.61	579.02	1582.04	1508.00	43.49	-4.410	0.000	0.757
102.00	-16.63	-26.25	0.00	-1074.2	0.00	1074.26	2243.52	572.17	1544.82	1479.37	45.37	-4.556	0.000	0.736
104.00	-16.30	-26.05	0.00	-1021.7	0.00	1021.75	2227.17	565.31	1508.04	1450.84	47.31	-4.693	0.000	0.714
106.00	-15.97	-25.85	0.00	-969.66	0.00	969.66	2210.57	558.46	1471.71	1422.40	49.30	-4.827	0.000	0.691
108.00	-15.65	-25.65	0.00	-917.96	0.00	917.96	2193.71	551.61	1435.82	1394.06	51.35	-4.959	0.000	0.668
110.00	-15.30	-25.22	0.00	-866.08	0.00	866.08	2176.60	544.76	1400.37	1365.84	53.45	-5.089	0.000	0.643
112.00	-14.99	-25.02	0.00	-815.64	0.00	815.64	2159.23	537.91	1365.36	1337.73	55.61	-5.216	0.000	0.619
114.00	-14.70	-24.81	0.00	-765.61	0.00	765.61	2141.61	531.05	1330.80	1309.73	57.82	-5.340	0.000	0.594
115.00	-14.55	-24.70	0.00	-740.81	0.00	740.81	2132.70	527.63	1313.68	1295.79	58.94	-5.401	0.000	0.581
115.00	-14.55	-24.70	0.00	-740.81	0.00	740.81	1556.62	422.98	1055.35	949.74	58.94	-5.401	0.000	0.793
116.00	-14.39	-24.62	0.00	-716.10	0.00	716.10	1551.43	420.24	1041.71	940.38	60.08	-5.462	0.000	0.774
118.00	-14.12	-24.42	0.00	-666.87	0.00	666.87	1540.84	414.76	1014.72	921.68	62.39	-5.607	0.000	0.736
120.00	-13.85	-24.23	0.00	-618.03	0.00	618.03	1529.99	409.28	988.07	902.99	64.77	-5.748	0.000	0.697
122.00	-13.59	-24.03	0.00	-569.57	0.00	569.57	1518.89	403.80	961.78	884.33	67.21	-5.883	0.000	0.657
124.00	-13.33	-23.84	0.00	-521.51	0.00	521.51	1507.54	398.32	935.85	865.70	69.69	-6.013	0.000	0.615
126.00	-13.07	-23.64	0.00	-473.83	0.00	473.83	1495.93	392.84	910.27	847.11	72.24	-6.136	0.000	0.572
128.00	-12.83	-23.45	0.00	-426.54	0.00	426.54	1484.06	387.35	885.04	828.56	74.83	-6.252	0.000	0.527
130.00	-12.59	-23.25	0.00	-379.64	0.00	379.64	1471.95	381.87	860.17	810.06	77.47	-6.360	0.000	0.481
131.75	-12.20	-22.68	0.00	-338.95	0.00	338.95	1461.13	377.08	838.70	793.92	79.81	-6.448	0.000	0.439
132.00	-12.16	-22.66	0.00	-333.28	0.00	333.28	1459.57	376.39	835.65	791.62	80.15	-6.460	0.000	0.433
133.00	-8.65	-17.83	0.00	-310.63	0.00	310.63	1453.29	373.65	823.53	782.42	81.50	-6.507	0.000	0.405
134.00	-8.55	-17.73	0.00	-292.80	0.00	292.80	1446.94	370.91	811.49	773.23	82.87	-6.552	0.000	0.387
134.75	-8.33	-17.33	0.00	-279.50	0.00	279.50	1442.14	368.85	802.52	766.35	83.90	-6.585	0.000	0.373
136.00	-8.20	-17.21	0.00	-257.84	0.00	257.84	1434.06	365.43	787.68	754.91	85.63	-6.638	0.000	0.349
138.00	-8.01	-17.01	0.00	-223.42	0.00	223.42	1420.92	359.95	764.23	736.67	88.42	-6.715	0.000	0.311
140.00	-7.83	-16.81	0.00	-189.40	0.00	189.40	1407.52	354.47	741.13	718.50	91.24	-6.784	0.000	0.271
142.00	-4.34	-10.02	0.00	-155.77	0.00	155.77	1393.87	348.98	718.38	700.42	94.09	-6.844	0.000	0.226
144.00	-4.19	-9.82	0.00	-135.74	0.00	135.74	1379.97	343.50	695.99	682.44	96.96	-6.898	0.000	0.203
145.00	-4.12	-9.72	0.00	-125.92	0.00	125.92	1372.92	340.76	684.93	673.48	98.41	-6.923	0.000	0.191
145.00	-4.12	-9.72	0.00	-125.92	0.00	125.92	931.20	332.53	24157.3	604.09	98.41	-6.923	0.000	0.214
146.00	-4.04	-9.66	0.00	-116.20	0.00	116.20	925.24	329.86	23770.3	594.77	99.86	-6.947	0.000	0.201
148.00	-3.90	-9.54	0.00	-96.88	0.00	96.88	913.32	324.51	23005.8	576.36	102.77	-6.992	0.000	0.173
150.00	-3.75	-9.42	0.00	-77.80	0.00	77.80	901.40	319.16	22253.7	558.24	105.70	-7.031	0.000	0.144
150.00	-3.75	-9.42	0.00	-77.80	0.00	77.80	556.65	167.00	10296.1	213.69	105.70	-7.031	0.000	0.374
152.00	-1.90	-6.09	0.00	-58.97	0.00	58.97	556.65	167.00	10296.1	213.69	108.64	-7.063	0.000	0.281
154.00	-1.79	-6.00	0.00	-46.79	0.00	46.79	556.65	167.00	10296.1	213.69	111.61	-7.141	0.000	0.223
156.00	-1.68	-5.91	0.00	-34.78	0.00	34.78	556.65	167.00	10296.1	213.69	114.61	-7.201	0.000	0.167
158.00	-1.58	-5.82	0.00	-22.96	0.00	22.96	556.65	167.00	10296.1	213.69	117.63	-7.244	0.000	0.111
160.00	0.00	-5.57	0.00	-11.32	0.00	11.32	556.65	167.00	10296.1	213.69	120.66	-7.270	0.000	0.054

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

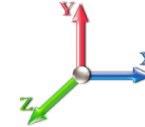


Page: 50

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

Iterations 27

Dead Load Factor 1.20
Wind Load Factor 1.00



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	RB1 RB2	1.00	0.70	4.161	4.58	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT2 RB3 RB4	1.00	0.70	4.161	4.58	0.00	1.227 *	0.705	1.00	4.455	5.47	25.0	45.3	291.4
2.00		1.00	0.70	4.161	4.58	0.00	1.229 *	0.756	1.00	4.447	5.46	25.0	48.5	293.6
4.00		1.00	0.70	4.161	4.58	0.00	1.231 *	0.810	2.00	8.862	10.91	49.9	103.2	590.5
6.00		1.00	0.70	4.161	4.58	0.00	1.234 *	0.843	2.00	8.806	10.87	49.7	106.7	590.2
8.00		1.00	0.70	4.161	4.58	0.00	1.237 *	0.868	2.00	8.747	10.82	49.5	109.0	588.7
10.00		1.00	0.70	4.161	4.58	0.00	1.240 *	0.887	2.00	8.687	10.78	49.3	110.7	586.5
12.00		1.00	0.70	4.161	4.58	0.00	1.244 *	0.904	2.00	8.625	10.73	49.1	111.8	583.9
14.00		1.00	0.70	4.161	4.58	0.00	1.247 *	0.918	2.00	8.563	10.68	48.9	112.7	580.9
16.00	Bot - Section 2	1.00	0.70	4.161	4.58	0.00	1.250 *	0.930	2.00	8.500	10.63	48.6	113.3	577.7
16.25	RT1 RB5	1.00	0.70	4.161	4.58	0.00	1.252 *	0.932	0.25	1.074	1.34	6.2	14.4	130.9
18.00		1.00	0.70	4.161	4.58	0.00	1.254 *	0.941	1.75	7.492	9.39	43.0	101.1	913.1
18.63	RB6	1.00	0.70	4.161	4.58	0.00	1.256 *	0.944	0.63	2.685	3.37	15.4	36.4	327.3
18.88	RT3 RT4	1.00	0.70	4.161	4.58	0.00	1.257 *	0.946	0.25	1.064	1.34	6.1	14.5	129.7
20.00		1.00	0.70	4.161	4.58	0.00	1.258 *	0.951	1.12	4.753	5.98	27.4	64.9	579.6
22.00	Top - Section 1	1.00	0.70	4.161	4.58	0.00	1.261 *	0.960	2.00	8.439	10.64	48.7	116.1	1029.2
24.00		1.00	0.70	4.161	4.58	0.00	1.257 *	0.969	2.00	8.374	10.53	48.2	116.2	572.6
26.00		1.00	0.70	4.161	4.58	0.00	1.261 *	0.976	2.00	8.310	10.48	48.0	116.2	568.8
28.00		1.00	0.70	4.161	4.58	0.00	1.264 *	0.984	2.00	8.246	10.43	47.7	116.1	564.9
30.00	RB7	1.00	0.70	4.164	4.58	0.00	1.364 *	0.991	2.00	8.181	11.15	51.1	115.9	560.9
31.00	RT5	1.00	0.71	4.203	4.62	0.00	1.367 *	0.994	1.00	4.066	5.56	25.7	57.9	279.0
32.00		1.00	0.71	4.242	4.67	0.00	1.369 *	0.997	1.00	4.050	5.54	25.9	57.9	278.0
33.38	RT6	1.00	0.72	4.293	4.72	0.00	1.200	1.001	1.38	5.562	6.67	31.5	79.7	381.9
34.00		1.00	0.73	4.316	4.75	0.00	1.200	1.003	0.62	2.489	2.99	14.2	35.8	170.9
36.00		1.00	0.74	4.387	4.83	0.00	1.200	1.009	2.00	7.986	9.58	46.2	115.1	548.6
38.00		1.00	0.75	4.455	4.90	0.00	1.200	1.014	2.00	7.921	9.51	46.6	114.8	544.4
40.00	Appurtenance(s)	1.00	0.76	4.521	4.97	0.00	1.200	1.019	2.00	7.856	9.43	46.9	114.4	540.2
42.00		1.00	0.77	4.584	5.04	0.00	1.200	1.024	2.00	7.790	9.35	47.1	113.9	536.0
44.00		1.00	0.78	4.646	5.11	0.00	1.200	1.029	2.00	7.725	9.27	47.4	113.5	531.7
45.16	RB8	1.00	0.79	4.680	5.15	0.00	1.200	1.032	1.16	4.450	5.34	27.5	65.6	306.4
46.00	RT7	1.00	0.79	4.705	5.18	0.00	1.200	1.034	0.84	3.209	3.85	19.9	47.4	221.0
48.00		1.00	0.80	4.763	5.24	0.00	1.200	1.038	2.00	7.594	9.11	47.7	112.4	523.0
50.00	Bot - Section 3	1.00	0.81	4.819	5.30	0.00	1.200	1.042	2.00	7.529	9.03	47.9	111.9	518.6
52.00		1.00	0.82	4.873	5.36	0.00	1.200	1.047	2.00	7.592	9.11	48.8	113.3	926.5
54.00		1.00	0.83	4.926	5.42	0.00	1.200	1.050	2.00	7.527	9.03	48.9	112.7	918.2
56.00	Top - Section 2	1.00	0.84	4.977	5.47	0.00	1.200	1.054	2.00	7.461	8.95	49.0	112.1	910.0
58.00	RT8 RB9	1.00	0.85	5.027	5.53	0.00	1.200	1.058	2.00	7.395	8.87	49.1	111.5	510.3
60.00		1.00	0.85	5.076	5.58	0.00	1.200	1.062	2.00	7.330	8.80	49.1	110.8	505.8
62.00		1.00	0.86	5.124	5.64	0.00	1.200	1.065	2.00	7.264	8.72	49.1	110.1	501.3
64.00		1.00	0.87	5.171	5.69	0.00	1.200	1.068	2.00	7.198	8.64	49.1	109.4	496.8
66.00		1.00	0.88	5.216	5.74	0.00	1.200	1.072	2.00	7.132	8.56	49.1	108.7	492.2
68.00		1.00	0.89	5.261	5.79	0.00	1.200	1.075	2.00	7.066	8.48	49.1	108.0	487.7
70.00		1.00	0.89	5.305	5.84	0.00	1.200	1.078	2.00	7.000	8.40	49.0	107.3	483.1
72.00		1.00	0.90	5.348	5.88	0.00	1.200	1.081	2.00	6.935	8.32	49.0	106.5	478.6
74.00		1.00	0.91	5.390	5.93	0.00	1.200	1.084	2.00	6.869	8.24	48.9	105.8	474.0
76.00		1.00	0.91	5.431	5.97	0.00	1.200	1.087	2.00	6.803	8.16	48.8	105.0	469.4
78.00	RT9 RB10	1.00	0.92	5.471	6.02	0.00	1.200	1.090	2.00	6.737	8.08	48.7	104.2	464.7

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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

80.00 Top - Section 3	1.00	0.93	5.511	6.06	0.00	1.200	1.093	2.00	6.671	8.00	48.5	103.4	460.1
82.00	1.00	0.93	5.550	6.11	0.00	1.200	1.095	2.00	6.605	7.93	48.4	102.6	397.2
84.00	1.00	0.94	5.589	6.15	0.00	1.200	1.098	2.00	6.538	7.85	48.2	101.8	393.2
86.00	1.00	0.95	5.626	6.19	0.00	1.200	1.101	2.00	6.472	7.77	48.1	100.9	389.1
88.00	1.00	0.95	5.663	6.23	0.00	1.200	1.103	2.00	6.406	7.69	47.9	100.1	385.1
90.00	1.00	0.96	5.700	6.27	0.00	1.200	1.106	2.00	6.340	7.61	47.7	99.2	381.1
92.00	1.00	0.96	5.736	6.31	0.00	1.200	1.108	2.00	6.274	7.53	47.5	98.4	377.0
94.00	1.00	0.97	5.771	6.35	0.00	1.200	1.110	2.00	6.208	7.45	47.3	97.5	373.0
95.00 Bot - Section 5	1.00	0.97	5.789	6.37	0.00	1.200	1.112	1.00	3.079	3.69	23.5	48.5	185.1
95.58 RT10	1.00	0.98	5.799	6.38	0.00	1.200	1.112	0.58	1.810	2.17	13.9	28.6	187.7
96.00	1.00	0.98	5.806	6.39	0.00	1.200	1.113	0.42	1.307	1.57	10.0	20.7	135.6
98.00	1.00	0.98	5.840	6.42	0.00	1.200	1.115	2.00	6.183	7.42	47.7	97.5	640.8
100.00 Top - Section 4	1.00	0.99	5.874	6.46	0.00	1.200	1.117	2.00	6.117	7.34	47.4	96.6	633.5
102.00	1.00	0.99	5.907	6.50	0.00	1.200	1.119	2.00	6.051	7.26	47.2	95.7	363.5
104.00	1.00	1.00	5.940	6.53	0.00	1.200	1.122	2.00	5.985	7.18	46.9	94.8	359.4
106.00	1.00	1.00	5.973	6.57	0.00	1.200	1.124	2.00	5.918	7.10	46.7	93.9	355.3
108.00	1.00	1.01	6.005	6.61	0.00	1.200	1.126	2.00	5.852	7.02	46.4	92.9	351.2
110.00 Appurtenance(s)	1.00	1.02	6.036	6.64	0.00	1.200	1.128	2.00	5.786	6.94	46.1	92.0	347.1
112.00	1.00	1.02	6.067	6.67	0.00	1.200	1.130	2.00	5.720	6.86	45.8	91.1	343.0
114.00	1.00	1.03	6.098	6.71	0.00	1.200	1.132	2.00	5.653	6.78	45.5	90.1	338.8
115.00 Top - Section 5	1.00	1.03	6.113	6.72	0.00	1.200	1.133	1.00	2.802	3.36	22.6	44.8	168.0
116.00	1.00	1.03	6.128	6.74	0.00	1.200	1.134	1.00	2.785	3.34	22.5	44.6	142.7
118.00	1.00	1.04	6.158	6.77	0.00	1.200	1.136	2.00	5.521	6.63	44.9	88.2	282.5
120.00	1.00	1.04	6.188	6.81	0.00	1.200	1.138	2.00	5.455	6.55	44.6	87.3	279.0
122.00	1.00	1.05	6.217	6.84	0.00	1.200	1.140	2.00	5.388	6.47	44.2	86.3	275.5
124.00	1.00	1.05	6.246	6.87	0.00	1.200	1.142	2.00	5.322	6.39	43.9	85.3	271.9
126.00	1.00	1.06	6.275	6.90	0.00	1.200	1.143	2.00	5.256	6.31	43.5	84.3	268.4
128.00	1.00	1.06	6.303	6.93	0.00	1.200	1.145	2.00	5.189	6.23	43.2	83.4	264.9
130.00	1.00	1.07	6.331	6.96	0.00	1.200	1.147	2.00	5.123	6.15	42.8	82.4	261.3
131.75 Appurtenance(s)	1.00	1.07	6.355	6.99	0.00	1.200	1.148	1.75	4.428	5.31	37.1	71.3	225.8
132.00	1.00	1.07	6.359	6.99	0.00	1.200	1.149	0.25	0.628	0.75	5.3	10.2	32.1
133.00 Appurtenance(s)	1.00	1.07	6.373	7.01	0.00	1.200	1.150	1.00	2.503	3.00	21.1	40.4	127.7
134.00	1.00	1.07	6.386	7.02	0.00	1.200	1.150	1.00	2.487	2.98	21.0	40.2	126.8
134.75 Appurtenance(s)	1.00	1.08	6.396	7.04	0.00	1.200	1.151	0.75	1.854	2.22	15.7	30.0	94.5
136.00	1.00	1.08	6.413	7.05	0.00	1.200	1.152	1.25	3.069	3.68	26.0	49.6	156.4
138.00	1.00	1.08	6.440	7.08	0.00	1.200	1.154	2.00	4.857	5.83	41.3	78.3	247.1
140.00	1.00	1.09	6.467	7.11	0.00	1.200	1.155	2.00	4.791	5.75	40.9	77.3	243.6
142.00 Appurtenance(s)	1.00	1.09	6.493	7.14	0.00	1.200	1.157	2.00	4.725	5.67	40.5	76.3	240.0
144.00	1.00	1.10	6.519	7.17	0.00	1.200	1.159	2.00	4.658	5.59	40.1	75.3	236.4
145.00 Top - Section 6	1.00	1.10	6.532	7.19	0.00	1.200	1.160	1.00	2.304	2.76	19.9	37.4	117.0
146.00	1.00	1.10	6.545	7.20	0.00	1.200	1.160	1.00	2.217	2.66	19.1	35.9	113.0
148.00	1.00	1.11	6.570	7.23	0.00	1.200	1.162	2.00	4.385	5.26	38.0	70.8	223.1
150.00 Top - Section 7	1.00	1.11	6.595	7.25	0.00	1.200	1.163	2.00	4.321	5.19	37.6	69.8	219.6
152.00 Appurtenance(s)	1.00	1.11	6.620	7.28	0.00	1.290 *	1.165	2.00	3.055	3.94	28.7	48.9	149.9
154.00	1.00	1.12	6.645	7.31	0.00	1.290 *	1.167	2.00	3.056	3.94	28.8	48.9	150.0
156.00	1.00	1.12	6.670	7.34	0.00	1.290 *	1.168	2.00	3.056	3.94	28.9	49.0	150.0
158.00	1.00	1.13	6.694	7.36	0.00	1.290 *	1.170	2.00	3.057	3.94	29.0	49.1	150.1
160.00 Appurtenance(s)	1.00	1.13	6.718	7.39	0.00	1.290 *	1.171	2.00	3.057	3.94	29.1	49.1	150.2

* Cf Adjusted by Linear Load Ra Effect

Totals:	160.00	3,648.1	36,322.9
----------------	---------------	----------------	-----------------

Discrete Appurtenance Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 27

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	160.00	B5/B13 RRH-BR04C	3	6.742	7.416	0.60	0.90	4.06	445.96	0.000	2.000	30.10	0.00	60.19
2	160.00	JAHH-65B-R3B	6	6.742	7.416	0.75	0.90	33.28	1077.31	0.000	2.000	246.85	0.00	493.69
3	160.00	VZS01	3	6.742	7.416	0.62	0.90	9.91	537.95	0.000	2.000	73.53	0.00	147.06
4	160.00	CBC78T-DS-43	1	6.742	7.416	1.00	1.00	0.55	42.43	0.000	2.000	4.05	0.00	8.10
5	160.00	B2/B66A RRH-BR049	3	6.742	7.416	0.60	0.90	4.06	380.13	0.000	2.000	30.10	0.00	60.19
6	160.00	Low Profile Platform	1	6.742	7.416	1.00	1.00	33.85	1542.61	0.000	2.000	251.05	0.00	502.09
7	160.00	Commscope	1	6.742	7.416	1.00	1.00	2.23	60.39	0.000	2.000	16.57	0.00	33.15
8	160.00	6' Lightning rod	1	6.754	7.429	1.00	1.00	1.11	26.86	0.000	3.000	8.24	0.00	24.73
9	160.00	DB222	1	6.778	7.455	1.00	1.00	6.32	45.80	0.000	5.000	47.10	0.00	235.48
10	160.00	DB846F65ZAXY	6	6.742	7.416	0.84	0.90	39.43	895.51	0.000	2.000	292.39	0.00	584.79
11	152.00	MC-PK8-DSH	1	6.620	7.282	1.00	1.00	69.12	2826.11	0.000	0.000	503.37	0.00	0.00
12	152.00	MX08FRO665-21	3	6.620	7.282	0.55	0.75	22.42	613.11	0.000	0.000	163.30	0.00	0.00
13	152.00	TA08025-B605	3	6.620	7.282	0.50	0.75	3.52	336.95	0.000	0.000	25.63	0.00	0.00
14	152.00	TA08025-B604	3	6.620	7.282	0.50	0.75	3.52	295.13	0.000	0.000	25.63	0.00	0.00
15	152.00	RDIDC-9181-OF-48	1	6.620	7.282	0.75	0.75	1.79	49.13	0.000	0.000	13.05	0.00	0.00
16	142.00	4449 B71 + B85	4	6.493	7.142	0.54	0.80	5.03	270.90	0.000	0.000	35.95	0.00	0.00
17	142.00	KRY 112 144/1	3	6.493	7.142	0.38	0.75	0.82	51.74	0.000	0.000	5.83	0.00	0.00
18	142.00	APXVA18-43-C-A20	1	6.493	7.142	0.63	0.75	6.63	154.54	0.000	0.000	47.36	0.00	0.00
19	142.00	APXVAARR24_43-U-NA2	3	6.493	7.142	0.54	0.75	40.38	1045.57	0.000	0.000	288.38	0.00	0.00
20	142.00	KRD 9011461-B66A-B2A	4	6.493	7.142	0.67	0.75	21.40	1693.93	0.000	0.000	152.87	0.00	0.00
21	142.00	Mod	1	6.493	7.142	1.00	1.00	20.33	727.71	0.000	0.000	145.21	0.00	0.00
22	142.00	Platform w/ HR & Bracing	1	6.493	7.142	1.00	1.00	77.51	3770.31	0.000	0.000	553.61	0.00	0.00
23	142.00	Ericsson 4460 B25 + B66	4	6.493	7.142	0.50	0.75	6.63	645.90	0.000	0.000	47.33	0.00	0.00
24	142.00	Ericsson Air 6419 B41	4	6.493	7.142	0.57	0.75	9.87	481.64	0.000	0.000	70.47	0.00	0.00
25	134.75	AIR 6419 B77G	3	6.396	7.036	0.61	0.80	7.89	360.23	0.000	0.000	55.51	0.00	0.00
26	133.00	DMP65R-BU6EA-K	2	6.373	7.010	0.57	0.80	20.73	732.00	0.000	0.000	145.32	0.00	0.00
27	133.00	DMP65R-BU8EA-K	1	6.373	7.010	0.58	0.80	11.13	472.15	0.000	0.000	78.00	0.00	0.00
28	133.00	4478 B14	3	6.373	7.010	0.54	0.80	3.52	273.42	0.000	0.000	24.65	0.00	0.00
29	133.00	DC9-48-60-24-8C-EV	1	6.373	7.010	0.80	0.80	1.75	84.15	0.000	0.000	12.25	0.00	0.00
30	133.00	Kathrein 800-10965	3	6.373	7.010	0.57	0.80	25.28	950.47	0.000	0.000	177.22	0.00	0.00
31	133.00	(3) SitePro 1 P/N	2	6.373	7.010	0.56	0.75	43.88	4522.34	0.000	0.000	307.58	0.00	0.00
32	133.00	Powerwave LGP21401	6	6.373	7.010	0.54	0.80	5.92	157.73	0.000	0.000	41.49	0.00	0.00
33	133.00	Ericsson RRUS-32 RRU	3	6.373	7.010	0.54	0.80	6.15	486.09	0.000	0.000	43.09	0.00	0.00
34	133.00	Ericsson B2/B66A 8843	3	6.373	7.010	0.54	0.80	3.16	315.77	0.000	0.000	22.18	0.00	0.00
35	133.00	Ericsson B5/B12 4449	3	6.373	7.010	0.54	0.80	3.75	320.28	0.000	0.000	26.27	0.00	0.00
36	133.00	Raycap DC6-48-60-18-8F	2	6.373	7.010	0.54	0.80	1.30	122.37	0.000	0.000	9.08	0.00	0.00
37	131.75	AIR 6449 B77D	3	6.355	6.991	0.68	0.80	9.55	571.43	0.000	0.000	66.77	0.00	0.00
38	110.00	3 ft Standoff	1	6.036	6.640	1.00	1.00	6.49	76.89	0.000	0.000	43.08	0.00	0.00
39	110.00	DB222	1	6.118	6.729	1.00	1.00	7.26	44.09	0.000	5.292	48.88	0.00	258.67
40	40.00	GPS	1	4.521	4.973	1.00	1.00	1.42	21.13	0.000	0.000	7.04	0.00	0.00

Totals: 27,528.13

4,186.37

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 27

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
1.00		25.03	730.33	0.00	0.00
2.00		25.01	734.04	0.00	0.00
4.00		49.93	1474.94	0.00	0.00
6.00		49.74	1476.81	0.00	0.00
8.00		49.53	1476.94	0.00	0.00
10.00		49.32	1476.06	0.00	0.00
12.00		49.09	1474.53	0.00	0.00
14.00		48.87	1472.54	0.00	0.00
16.00		48.64	1470.19	0.00	0.00
16.25		6.16	242.45	0.00	0.00
18.00		42.99	1694.72	0.00	0.00
18.63		15.43	608.77	0.00	0.00
18.88		6.12	241.38	0.00	0.00
20.00		27.36	1080.23	0.00	0.00
22.00		48.69	1923.84	0.00	0.00
24.00		48.19	1467.80	0.00	0.00
26.00		47.95	1464.52	0.00	0.00
28.00		47.72	1461.13	0.00	0.00
30.00		51.10	1826.59	0.00	0.00
31.00		25.70	911.95	0.00	0.00
32.00		25.87	911.06	0.00	0.00
33.38		31.52	747.50	0.00	0.00
34.00		14.18	335.25	0.00	0.00
36.00		46.25	1078.99	0.00	0.00
38.00		46.58	1075.15	0.00	0.00
40.00	(1) attachments	53.92	1092.38	0.00	0.00
42.00		47.14	1066.92	0.00	0.00
44.00		47.37	1062.93	0.00	0.00
45.16		27.50	614.68	0.00	0.00
46.00		19.93	444.27	0.00	0.00
48.00		47.74	1054.83	0.00	0.00
50.00		47.89	1050.72	0.00	0.00
52.00		48.84	1458.86	0.00	0.00
54.00		48.94	1450.86	0.00	0.00
56.00		49.02	1442.84	0.00	0.00
58.00		49.08	1043.38	0.00	0.00
60.00		49.11	1039.14	0.00	0.00
62.00		49.13	1034.86	0.00	0.00
64.00		49.13	1030.57	0.00	0.00
66.00		49.11	1026.25	0.00	0.00
68.00		49.07	1021.91	0.00	0.00
70.00		49.02	1017.55	0.00	0.00
72.00		48.95	1013.17	0.00	0.00
74.00		48.87	1008.77	0.00	0.00
76.00		48.77	1004.36	0.00	0.00
78.00		48.65	999.93	0.00	0.00

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 54

80.00		48.53	995.49	0.00	0.00
82.00		48.39	932.72	0.00	0.00
84.00		48.23	928.89	0.00	0.00
86.00		48.07	925.03	0.00	0.00
88.00		47.89	921.17	0.00	0.00
90.00		47.70	917.29	0.00	0.00
92.00		47.50	913.40	0.00	0.00
94.00		47.29	909.50	0.00	0.00
95.00		23.53	453.37	0.00	0.00
95.58		13.85	343.36	0.00	0.00
96.00		10.02	248.27	0.00	0.00
98.00		47.67	1177.65	0.00	0.00
100.00		47.43	800.18	0.00	0.00
102.00		47.18	530.31	0.00	0.00
104.00		46.93	526.34	0.00	0.00
106.00		46.66	522.35	0.00	0.00
108.00		46.39	518.35	0.00	0.00
110.00	(2) attachments	138.06	635.33	0.00	258.67
112.00		45.81	503.81	0.00	0.00
114.00		45.51	499.78	0.00	0.00
115.00		22.61	248.48	0.00	0.00
116.00		22.53	223.20	0.00	0.00
118.00		44.88	443.62	0.00	0.00
120.00		44.55	440.20	0.00	0.00
122.00		44.22	436.78	0.00	0.00
124.00		43.88	433.34	0.00	0.00
126.00		43.53	429.90	0.00	0.00
128.00		43.18	426.45	0.00	0.00
130.00		42.81	422.99	0.00	0.00
131.75	(3) attachments	103.92	938.76	0.00	0.00
132.00		5.27	52.30	0.00	0.00
133.00	(29) attachments	908.18	8645.35	0.00	0.00
134.00		20.96	191.73	0.00	0.00
134.75	(3) attachments	71.16	503.47	0.00	0.00
136.00		25.99	237.59	0.00	0.00
138.00		41.29	377.14	0.00	0.00
140.00		40.90	373.66	0.00	0.00
142.00	(25) attachments	1387.51	9212.40	0.00	0.00
144.00		40.08	314.40	0.00	0.00
145.00		19.87	156.00	0.00	0.00
146.00		19.15	152.00	0.00	0.00
148.00		38.03	301.19	0.00	0.00
150.00		37.62	297.74	0.00	0.00
152.00	(11) attachments	759.68	4348.49	0.00	0.00
154.00		28.81	216.38	0.00	0.00
156.00		28.92	216.47	0.00	0.00
158.00		29.03	216.57	0.00	0.00
160.00	(26) attachments	1029.11	5271.60	0.00	2149.46
Totals:		7,834.44	100,567.67	0.00	2,408.14

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (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

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 27

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)
1.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.28	0.00	0.108	1.023	4.161	0.00	6.11
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	4.161	0.00	1.94
1.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	4.161	0.00	4.21
1.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	4.161	0.00	6.11
1.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	4.161	0.00	4.53
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	4.161	0.00	1.94
1.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.20	0.00	0.108	1.023	4.161	0.00	146.50
1.00	C10x15.3	Yes	1.00	0.000	2.60	0.33	0.00	0.108	1.023	4.161	0.00	219.05
2.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.29	0.00	0.108	1.024	4.161	0.00	6.36
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	4.161	0.00	2.08
2.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	4.161	0.00	4.37
2.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	4.161	0.00	6.36
2.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	4.161	0.00	4.72
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	4.161	0.00	2.08
2.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.21	0.00	0.108	1.024	4.161	0.00	146.71
2.00	C10x15.3	Yes	1.00	0.000	2.60	0.34	0.00	0.108	1.024	4.161	0.00	219.29
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.60	0.00	0.109	1.026	4.161	0.00	13.26
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	4.161	0.00	4.45
4.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	4.161	0.00	9.10
4.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	4.161	0.00	13.26
4.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	4.161	0.00	9.85
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	4.161	0.00	4.45
4.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.44	0.00	0.109	1.026	4.161	0.00	293.88
4.00	C10x15.3	Yes	2.00	0.000	2.60	0.70	0.00	0.109	1.026	4.161	0.00	439.11
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.61	0.00	0.109	1.028	4.161	0.00	13.60
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	4.161	0.00	4.65
6.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	4.161	0.00	9.32
6.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	4.161	0.00	13.60
6.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	4.161	0.00	10.12
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	4.161	0.00	4.65
6.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.45	0.00	0.109	1.028	4.161	0.00	294.17
6.00	C10x15.3	Yes	2.00	0.000	2.60	0.71	0.00	0.109	1.028	4.161	0.00	439.44
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.62	0.00	0.110	1.031	4.161	0.00	13.86
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	4.161	0.00	4.79
8.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	4.161	0.00	9.49
8.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	4.161	0.00	13.86
8.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	4.161	0.00	10.32
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	4.161	0.00	4.79
8.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.46	0.00	0.110	1.031	4.161	0.00	294.39
8.00	C10x15.3	Yes	2.00	0.000	2.60	0.72	0.00	0.110	1.031	4.161	0.00	439.69
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.63	0.00	0.111	1.034	4.161	0.00	14.06
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	4.161	0.00	4.91
10.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	4.161	0.00	9.63
10.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	4.161	0.00	14.06
10.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	4.161	0.00	10.48
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	4.161	0.00	4.91
10.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.46	0.00	0.111	1.034	4.161	0.00	294.57

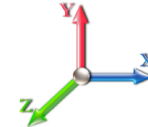
Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 27

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)
10.00	C10x15.3	Yes	2.00	0.000	2.60	0.73	0.00	0.111	1.034	4.161	0.00	439.88
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.63	0.00	0.112	1.036	4.161	0.00	14.23
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	4.161	0.00	5.01
12.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	4.161	0.00	9.75
12.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	4.161	0.00	14.23
12.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	4.161	0.00	10.61
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	4.161	0.00	5.01
12.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.47	0.00	0.112	1.036	4.161	0.00	294.71
12.00	C10x15.3	Yes	2.00	0.000	2.60	0.73	0.00	0.112	1.036	4.161	0.00	440.05
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.64	0.00	0.113	1.039	4.161	0.00	14.38
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	4.161	0.00	5.10
14.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	4.161	0.00	9.85
14.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	4.161	0.00	14.38
14.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	4.161	0.00	10.73
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	4.161	0.00	5.10
14.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.47	0.00	0.113	1.039	4.161	0.00	294.84
14.00	C10x15.3	Yes	2.00	0.000	2.60	0.74	0.00	0.113	1.039	4.161	0.00	440.19
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.64	0.00	0.114	1.042	4.161	0.00	14.52
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	4.161	0.00	5.17
16.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	4.161	0.00	9.94
16.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	4.161	0.00	14.52
16.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	4.161	0.00	10.83
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	4.161	0.00	5.17
16.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.48	0.00	0.114	1.042	4.161	0.00	294.96
16.00	C10x15.3	Yes	2.00	0.000	2.60	0.74	0.00	0.114	1.042	4.161	0.00	440.32
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.08	0.00	0.114	1.043	4.161	0.00	1.82
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	4.161	0.00	0.65
16.25	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	4.161	0.00	1.24
16.25	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	4.161	0.00	1.82
16.25	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	4.161	0.00	1.36
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	4.161	0.00	0.65
16.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.06	0.00	0.114	1.043	4.161	0.00	36.87
16.25	C10x15.3	Yes	0.25	0.000	2.60	0.09	0.00	0.114	1.043	4.161	0.00	55.04
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.57	0.00	0.115	1.045	4.161	0.00	12.81
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	4.161	0.00	4.59
18.00	1.75" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	4.161	0.00	8.76
18.00	1 5/8" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	4.161	0.00	12.81
18.00	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	4.161	0.00	9.56
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	4.161	0.00	4.59
18.00	1" Reinforcing plate	Yes	1.75	0.000	1.00	0.42	0.00	0.115	1.045	4.161	0.00	258.18
18.00	C10x15.3	Yes	1.75	0.000	2.60	0.65	0.00	0.115	1.045	4.161	0.00	385.38
18.63	1 5/8" Hybrid	Yes	0.63	0.000	2.00	0.20	0.00	0.116	1.047	4.161	0.00	4.62
18.63	7/8" Coax	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	1.66
18.63	1.75" Hybrid	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	3.16
18.63	1 5/8" Fiber	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	4.62
18.63	1-1/4" Fiber	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	3.45
18.63	7/8" Coax	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	1.66

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA

Code: TIA-222-H

7/28/2022

Site Name: Beacon Falls

Exposure: B

Height: 160.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: D - Stiff Soil

Gh: 1.1

Topography: 1

Struct Class: II

Page: 57

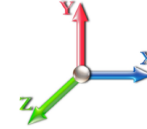


Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 27

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
18.63	1" Reinforcing plate	Yes	0.63	0.000	1.00	0.15	0.00	0.116	1.047	4.161	0.00	92.95
18.63	C10x15.3	Yes	0.63	0.000	2.60	0.24	0.00	0.116	1.047	4.161	0.00	138.75
18.88	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.08	0.00	0.116	1.047	4.161	0.00	1.84
18.88	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	0.66
18.88	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	1.26
18.88	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	1.84
18.88	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	1.37
18.88	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	4.161	0.00	0.66
18.88	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.06	0.00	0.116	1.047	4.161	0.00	36.89
18.88	C10x15.3	Yes	0.25	0.000	2.60	0.09	0.00	0.116	1.047	4.161	0.00	55.06
20.00	1 5/8" Hybrid	Yes	1.12	0.000	2.00	0.36	0.00	0.116	1.048	4.161	0.00	8.26
20.00	7/8" Coax	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	2.97
20.00	1.75" Hybrid	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	5.65
20.00	1 5/8" Fiber	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	8.26
20.00	1-1/4" Fiber	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	6.17
20.00	7/8" Coax	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	2.97
20.00	1" Reinforcing plate	Yes	1.12	0.000	1.00	0.27	0.00	0.116	1.048	4.161	0.00	165.28
20.00	C10x15.3	Yes	1.12	0.000	2.60	0.42	0.00	0.116	1.048	4.161	0.00	246.70
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.65	0.00	0.117	1.050	4.161	0.00	14.84
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	4.161	0.00	5.36
22.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	4.161	0.00	10.16
22.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	4.161	0.00	14.84
22.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	4.161	0.00	11.09
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	4.161	0.00	5.36
22.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.49	0.00	0.117	1.050	4.161	0.00	295.24
22.00	C10x15.3	Yes	2.00	0.000	2.60	0.75	0.00	0.117	1.050	4.161	0.00	440.64
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.66	0.00	0.116	1.048	4.161	0.00	14.94
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	5.42
24.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	10.22
24.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	14.94
24.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	11.16
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	4.161	0.00	5.42
24.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.49	0.00	0.116	1.048	4.161	0.00	295.31
24.00	C10x15.3	Yes	2.00	0.000	2.60	0.76	0.00	0.116	1.048	4.161	0.00	440.73
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.66	0.00	0.117	1.051	4.161	0.00	15.02
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	4.161	0.00	5.47
26.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	4.161	0.00	10.28
26.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	4.161	0.00	15.02
26.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	4.161	0.00	11.23
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	4.161	0.00	5.47
26.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.49	0.00	0.117	1.051	4.161	0.00	295.39
26.00	C10x15.3	Yes	2.00	0.000	2.60	0.76	0.00	0.117	1.051	4.161	0.00	440.81
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.66	0.00	0.118	1.054	4.161	0.00	15.10
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	4.161	0.00	5.52
28.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	4.161	0.00	10.33
28.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	4.161	0.00	15.10
28.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	4.161	0.00	11.29

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



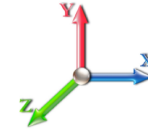
Page: 58

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

Iterations 27

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	4.161	0.00	5.52
28.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.49	0.00	0.118	1.054	4.161	0.00	295.46
28.00	C10x15.3	Yes	2.00	0.000	2.60	0.76	0.00	0.118	1.054	4.161	0.00	440.89
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.66	0.00	0.145	1.136	4.164	0.00	15.18
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	4.164	0.00	5.56
30.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	4.164	0.00	10.38
30.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	4.164	0.00	15.18
30.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	4.164	0.00	11.35
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	4.164	0.00	5.56
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.54	0.00	0.145	1.136	4.164	0.00	368.96
30.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.50	0.00	0.145	1.136	4.164	0.00	295.52
30.00	C10x15.3	Yes	2.00	0.000	2.60	0.76	0.00	0.145	1.136	4.164	0.00	440.96
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.33	0.00	0.146	1.139	4.203	0.00	7.61
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	4.203	0.00	2.79
31.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	4.203	0.00	5.20
31.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	4.203	0.00	7.61
31.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	4.203	0.00	5.69
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	4.203	0.00	2.79
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.27	0.00	0.146	1.139	4.203	0.00	184.50
31.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.25	0.00	0.146	1.139	4.203	0.00	147.78
31.00	C10x15.3	Yes	1.00	0.000	2.60	0.38	0.00	0.146	1.139	4.203	0.00	220.50
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.33	0.00	0.147	1.141	4.242	0.00	7.62
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	4.242	0.00	2.80
32.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	4.242	0.00	5.22
32.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	4.242	0.00	7.62
32.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	4.242	0.00	5.70
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	4.242	0.00	2.80
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.27	0.00	0.147	1.141	4.242	0.00	184.51
32.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.25	0.00	0.147	1.141	4.242	0.00	147.79
32.00	C10x15.3	Yes	1.00	0.000	2.60	0.38	0.00	0.147	1.141	4.242	0.00	220.51
33.38	1 5/8" Hybrid	Yes	1.38	0.000	2.00	0.46	0.00	0.070	0.000	4.293	0.00	10.55
33.38	7/8" Coax	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	4.293	0.00	3.89
33.38	1.75" Hybrid	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	4.293	0.00	7.22
33.38	1 5/8" Fiber	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	4.293	0.00	10.55
33.38	1-1/4" Fiber	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	4.293	0.00	7.90
33.38	7/8" Coax	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	4.293	0.00	3.89
33.38	1.25" Reinforcing	Yes	1.38	0.000	1.25	0.37	0.00	0.070	0.000	4.293	0.00	254.66
34.00	1 5/8" Hybrid	Yes	0.62	0.000	2.00	0.21	0.00	0.070	0.000	4.316	0.00	4.75
34.00	7/8" Coax	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	4.316	0.00	1.75
34.00	1.75" Hybrid	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	4.316	0.00	3.25
34.00	1 5/8" Fiber	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	4.316	0.00	4.75
34.00	1-1/4" Fiber	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	4.316	0.00	3.55
34.00	7/8" Coax	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	4.316	0.00	1.75
34.00	1.25" Reinforcing	Yes	0.62	0.000	1.25	0.17	0.00	0.070	0.000	4.316	0.00	114.42
36.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.67	0.00	0.071	0.000	4.387	0.00	15.38
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.387	0.00	5.68
36.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.387	0.00	10.52

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



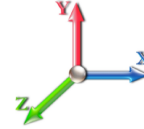
Page: 59

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

Iterations 27

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
36.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.387	0.00	15.38
36.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.387	0.00	11.51
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.387	0.00	5.68
36.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.54	0.00	0.071	0.000	4.387	0.00	369.15
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.67	0.00	0.071	0.000	4.455	0.00	15.44
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.455	0.00	5.72
38.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.455	0.00	10.56
38.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.455	0.00	15.44
38.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.455	0.00	11.56
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	4.455	0.00	5.72
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.071	0.000	4.455	0.00	369.21
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.67	0.00	0.072	0.000	4.521	0.00	15.50
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	4.521	0.00	5.75
40.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	4.521	0.00	10.60
40.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	4.521	0.00	15.50
40.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	4.521	0.00	11.60
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	4.521	0.00	5.75
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.072	0.000	4.521	0.00	369.27
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.67	0.00	0.073	0.000	4.584	0.00	15.55
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.584	0.00	5.79
42.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.584	0.00	10.64
42.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.584	0.00	15.55
42.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.584	0.00	11.65
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.584	0.00	5.79
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.073	0.000	4.584	0.00	369.32
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.073	0.000	4.646	0.00	15.61
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.646	0.00	5.82
44.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.646	0.00	10.68
44.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.646	0.00	15.61
44.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.646	0.00	11.69
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	4.646	0.00	5.82
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.073	0.000	4.646	0.00	369.37
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.39	0.00	0.074	0.000	4.680	0.00	9.07
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	4.680	0.00	3.39
45.16	1.75" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	4.680	0.00	6.21
45.16	1 5/8" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	4.680	0.00	9.07
45.16	1-1/4" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	4.680	0.00	6.79
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	4.680	0.00	3.39
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.32	0.00	0.074	0.000	4.680	0.00	214.25
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.28	0.00	0.074	0.000	4.705	0.00	6.58
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	4.705	0.00	2.46
46.00	1.75" Hybrid	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	4.705	0.00	4.50
46.00	1 5/8" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	4.705	0.00	6.58
46.00	1-1/4" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	4.705	0.00	4.93
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	4.705	0.00	2.46
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.23	0.00	0.074	0.000	4.705	0.00	155.16
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.075	0.000	4.763	0.00	15.71

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

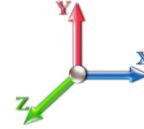


Page: 60

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

Iterations 27

Dead Load Factor 1.20
Wind Load Factor 1.00



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)
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.763	0.00	5.88
48.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.763	0.00	10.75
48.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.763	0.00	15.71
48.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.763	0.00	11.77
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.763	0.00	5.88
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.55	0.00	0.075	0.000	4.763	0.00	369.47
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.075	0.000	4.819	0.00	15.76
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.819	0.00	5.91
50.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.819	0.00	10.78
50.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.819	0.00	15.76
50.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.819	0.00	11.81
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	4.819	0.00	5.91
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.075	0.000	4.819	0.00	369.52
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.076	0.000	4.873	0.00	15.80
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	4.873	0.00	5.94
52.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	4.873	0.00	10.81
52.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	4.873	0.00	15.80
52.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	4.873	0.00	11.85
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	4.873	0.00	5.94
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.076	0.000	4.873	0.00	369.56
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.077	0.000	4.926	0.00	15.85
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	4.926	0.00	5.96
54.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	4.926	0.00	10.85
54.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	4.926	0.00	15.85
54.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	4.926	0.00	11.88
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	4.926	0.00	5.96
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.077	0.000	4.926	0.00	369.61
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.68	0.00	0.078	0.000	4.977	0.00	15.89
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	4.977	0.00	5.99
56.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	4.977	0.00	10.88
56.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	4.977	0.00	15.89
56.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	4.977	0.00	11.92
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	4.977	0.00	5.99
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.078	0.000	4.977	0.00	369.65
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.077	0.000	5.027	0.00	15.93
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	5.027	0.00	6.02
58.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	5.027	0.00	10.90
58.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	5.027	0.00	15.93
58.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	5.027	0.00	11.95
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	5.027	0.00	6.02
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.077	0.000	5.027	0.00	369.69
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.078	0.000	5.076	0.00	15.97
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.076	0.00	6.04
60.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.076	0.00	10.93
60.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.076	0.00	15.97
60.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.076	0.00	11.98
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.076	0.00	6.04

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



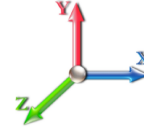
Page: 61

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

Iterations 27

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.078	0.000	5.076	0.00	369.73
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.078	0.000	5.124	0.00	16.01
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.124	0.00	6.06
62.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.124	0.00	10.96
62.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.124	0.00	16.01
62.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.124	0.00	12.01
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	5.124	0.00	6.06
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.078	0.000	5.124	0.00	369.77
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.079	0.000	5.171	0.00	16.05
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	5.171	0.00	6.09
64.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	5.171	0.00	10.99
64.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	5.171	0.00	16.05
64.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	5.171	0.00	12.05
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	5.171	0.00	6.09
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.56	0.00	0.079	0.000	5.171	0.00	369.80
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.080	0.000	5.216	0.00	16.09
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	5.216	0.00	6.11
66.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	5.216	0.00	11.01
66.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	5.216	0.00	16.09
66.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	5.216	0.00	12.08
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	5.216	0.00	6.11
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.080	0.000	5.216	0.00	369.84
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.081	0.000	5.261	0.00	16.13
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	5.261	0.00	6.13
68.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	5.261	0.00	11.04
68.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	5.261	0.00	16.13
68.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	5.261	0.00	12.10
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	5.261	0.00	6.13
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.081	0.000	5.261	0.00	369.88
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.082	0.000	5.305	0.00	16.16
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.305	0.00	6.16
70.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.305	0.00	11.06
70.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.305	0.00	16.16
70.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.305	0.00	12.13
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.305	0.00	6.16
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.082	0.000	5.305	0.00	369.91
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.082	0.000	5.348	0.00	16.20
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.348	0.00	6.18
72.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.348	0.00	11.09
72.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.348	0.00	16.20
72.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.348	0.00	12.16
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	5.348	0.00	6.18
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.082	0.000	5.348	0.00	369.95
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.69	0.00	0.083	0.000	5.390	0.00	16.23
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	5.390	0.00	6.20
74.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	5.390	0.00	11.11
74.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	5.390	0.00	16.23

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



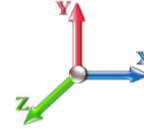
Page: 62

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

Iterations 27

Dead Load Factor 1.20

Wind Load Factor 1.00



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)
74.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	5.390	0.00	12.19
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	5.390	0.00	6.20
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.083	0.000	5.390	0.00	369.98
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.084	0.000	5.431	0.00	16.27
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	5.431	0.00	6.22
76.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	5.431	0.00	11.14
76.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	5.431	0.00	16.27
76.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	5.431	0.00	12.22
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	5.431	0.00	6.22
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.084	0.000	5.431	0.00	370.01
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.085	0.000	5.471	0.00	16.30
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	5.471	0.00	6.24
78.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	5.471	0.00	11.16
78.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	5.471	0.00	16.30
78.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	5.471	0.00	12.24
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	5.471	0.00	6.24
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.085	0.000	5.471	0.00	370.04
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.086	0.000	5.511	0.00	16.33
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	5.511	0.00	6.26
80.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	5.511	0.00	11.18
80.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	5.511	0.00	16.33
80.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	5.511	0.00	12.27
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	5.511	0.00	6.26
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.086	0.000	5.511	0.00	370.07
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.087	0.000	5.550	0.00	16.36
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	5.550	0.00	6.28
82.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	5.550	0.00	11.20
82.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	5.550	0.00	16.36
82.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	5.550	0.00	12.29
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	5.550	0.00	6.28
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.087	0.000	5.550	0.00	370.10
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.088	0.000	5.589	0.00	16.39
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	5.589	0.00	6.29
84.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	5.589	0.00	11.22
84.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	5.589	0.00	16.39
84.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	5.589	0.00	12.32
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	5.589	0.00	6.29
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.57	0.00	0.088	0.000	5.589	0.00	370.13
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.089	0.000	5.626	0.00	16.42
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	5.626	0.00	6.31
86.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	5.626	0.00	11.24
86.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	5.626	0.00	16.42
86.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	5.626	0.00	12.34
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	5.626	0.00	6.31
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.089	0.000	5.626	0.00	370.16
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.090	0.000	5.663	0.00	16.45
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	5.663	0.00	6.33

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

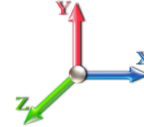


Page: 63

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

Iterations 27

Dead Load Factor 1.20
Wind Load Factor 1.00



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)
88.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	5.663	0.00	11.27
88.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	5.663	0.00	16.45
88.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	5.663	0.00	12.36
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	5.663	0.00	6.33
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.090	0.000	5.663	0.00	370.19
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.091	0.000	5.700	0.00	16.48
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	5.700	0.00	6.35
90.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	5.700	0.00	11.29
90.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	5.700	0.00	16.48
90.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	5.700	0.00	12.39
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	5.700	0.00	6.35
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.091	0.000	5.700	0.00	370.22
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.092	0.000	5.736	0.00	16.51
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	5.736	0.00	6.37
92.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	5.736	0.00	11.31
92.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	5.736	0.00	16.51
92.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	5.736	0.00	12.41
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	5.736	0.00	6.37
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.092	0.000	5.736	0.00	370.25
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.093	0.000	5.771	0.00	16.54
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	5.771	0.00	6.38
94.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	5.771	0.00	11.32
94.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	5.771	0.00	16.54
94.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	5.771	0.00	12.43
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	5.771	0.00	6.38
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.093	0.000	5.771	0.00	370.27
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.35	0.00	0.094	0.000	5.789	0.00	8.28
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	5.789	0.00	3.20
95.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	5.789	0.00	5.67
95.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	5.789	0.00	8.28
95.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	5.789	0.00	6.22
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	5.789	0.00	3.20
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.29	0.00	0.094	0.000	5.789	0.00	185.14
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.20	0.00	0.094	0.000	5.799	0.00	4.80
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	5.799	0.00	1.86
95.58	1.75" Hybrid	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	5.799	0.00	3.29
95.58	1 5/8" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	5.799	0.00	4.80
95.58	1-1/4" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	5.799	0.00	3.61
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	5.799	0.00	1.86
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.17	0.00	0.094	0.000	5.799	0.00	107.38
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.15	0.00	0.094	0.000	5.806	0.00	3.48
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	5.806	0.00	1.34
96.00	1.75" Hybrid	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	5.806	0.00	2.38
96.00	1 5/8" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	5.806	0.00	3.48
96.00	1-1/4" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	5.806	0.00	2.62
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	5.806	0.00	1.34
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.12	0.00	0.094	0.000	5.806	0.00	77.76

Linear Appurtenance Segment Forces (Factored)

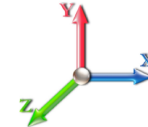
Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 64

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 27

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)
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.70	0.00	0.095	0.000	5.840	0.00	16.59
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	5.840	0.00	6.42
98.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	5.840	0.00	11.36
98.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	5.840	0.00	16.59
98.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	5.840	0.00	12.47
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	5.840	0.00	6.42
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.58	0.00	0.095	0.000	5.840	0.00	370.32
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.059	0.000	5.874	0.00	16.62
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.874	0.00	6.43
100.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.874	0.00	11.38
100.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.874	0.00	16.62
100.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.874	0.00	12.50
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.874	0.00	6.43
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.059	0.000	5.907	0.00	16.64
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.907	0.00	6.45
102.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.907	0.00	11.40
102.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.907	0.00	16.64
102.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.907	0.00	12.52
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.907	0.00	6.45
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.059	0.000	5.940	0.00	16.67
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.940	0.00	6.46
104.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.940	0.00	11.42
104.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.940	0.00	16.67
104.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.940	0.00	12.54
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	5.940	0.00	6.46
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.060	0.000	5.973	0.00	16.69
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	5.973	0.00	6.48
106.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	5.973	0.00	11.43
106.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	5.973	0.00	16.69
106.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	5.973	0.00	12.56
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	5.973	0.00	6.48
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.061	0.000	6.005	0.00	16.72
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	6.005	0.00	6.49
108.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	6.005	0.00	11.45
108.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	6.005	0.00	16.72
108.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	6.005	0.00	12.58
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	6.005	0.00	6.49
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.062	0.000	6.036	0.00	16.74
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	6.036	0.00	6.51
110.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	6.036	0.00	11.47
110.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	6.036	0.00	16.74
110.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	6.036	0.00	12.60
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	6.036	0.00	6.51
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.062	0.000	6.067	0.00	16.77
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	6.067	0.00	6.52
112.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	6.067	0.00	11.49
112.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	6.067	0.00	16.77

Linear Appurtenance Segment Forces (Factored)

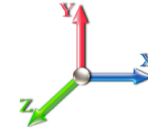
Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 65

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 27

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)
112.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	6.067	0.00	12.62
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.063	0.000	6.098	0.00	16.79
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	6.098	0.00	6.54
114.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	6.098	0.00	11.50
114.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	6.098	0.00	16.79
114.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	6.098	0.00	12.63
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.064	0.000	6.113	0.00	8.40
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.113	0.00	3.27
115.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.113	0.00	5.76
115.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.113	0.00	8.40
115.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.113	0.00	6.32
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.064	0.000	6.128	0.00	8.41
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.128	0.00	3.28
116.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.128	0.00	5.76
116.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.128	0.00	8.41
116.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.128	0.00	6.33
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.065	0.000	6.158	0.00	16.84
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.158	0.00	6.57
118.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.158	0.00	11.53
118.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.158	0.00	16.84
118.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.158	0.00	12.67
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.066	0.000	6.188	0.00	16.86
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	6.188	0.00	6.58
120.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	6.188	0.00	11.55
120.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	6.188	0.00	16.86
120.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	6.188	0.00	12.69
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.067	0.000	6.217	0.00	16.88
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.217	0.00	6.60
122.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.217	0.00	11.57
122.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.217	0.00	16.88
122.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.217	0.00	12.71
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.067	0.000	6.246	0.00	16.90
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.246	0.00	6.61
124.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.246	0.00	11.58
124.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.246	0.00	16.90
124.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.246	0.00	12.72
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.71	0.00	0.068	0.000	6.275	0.00	16.92
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	6.275	0.00	6.62
126.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	6.275	0.00	11.60
126.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	6.275	0.00	16.92
126.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	6.275	0.00	12.74
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.069	0.000	6.303	0.00	16.95
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.303	0.00	6.64
128.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.303	0.00	11.61
128.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.303	0.00	16.95
128.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.303	0.00	12.76
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.070	0.000	6.331	0.00	16.97

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

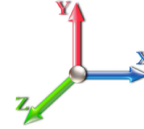


Page: 66

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

Iterations 27

Dead Load Factor 1.20
Wind Load Factor 1.00



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)
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.331	0.00	6.65
130.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.331	0.00	11.63
130.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.331	0.00	16.97
130.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.331	0.00	12.78
131.75	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.63	0.00	0.071	0.000	6.355	0.00	14.86
131.75	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	6.355	0.00	5.83
131.75	1.75" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	6.355	0.00	10.18
131.75	1 5/8" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	6.355	0.00	14.86
131.75	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	6.355	0.00	11.19
132.00	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.09	0.00	0.072	0.000	6.359	0.00	2.12
132.00	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	6.359	0.00	0.83
132.00	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	6.359	0.00	1.46
132.00	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	6.359	0.00	2.12
132.00	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	6.359	0.00	1.60
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.072	0.000	6.373	0.00	8.50
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	6.373	0.00	3.33
133.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	6.373	0.00	5.82
133.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	6.373	0.00	8.50
133.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	6.373	0.00	6.40
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.073	0.000	6.386	0.00	8.50
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	6.386	0.00	3.34
134.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	6.386	0.00	5.83
134.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	6.386	0.00	8.50
134.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	6.386	0.00	6.40
134.75	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.27	0.00	0.073	0.000	6.396	0.00	6.38
134.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	6.396	0.00	2.50
134.75	1.75" Hybrid	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	6.396	0.00	4.37
134.75	1 5/8" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	6.396	0.00	6.38
134.75	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	6.396	0.00	4.81
136.00	1 5/8" Hybrid	Yes	1.25	0.000	2.00	0.45	0.00	0.074	0.000	6.413	0.00	10.64
136.00	7/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	6.413	0.00	4.18
136.00	1.75" Hybrid	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	6.413	0.00	7.29
136.00	1 5/8" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	6.413	0.00	10.64
136.00	1-1/4" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	6.413	0.00	8.02
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.075	0.000	6.440	0.00	17.05
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.440	0.00	6.70
138.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.440	0.00	11.68
138.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.440	0.00	17.05
138.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.440	0.00	12.84
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.076	0.000	6.467	0.00	17.07
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.467	0.00	6.71
140.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.467	0.00	11.70
140.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.467	0.00	17.07
140.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.467	0.00	12.86
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.077	0.000	6.493	0.00	17.09
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.493	0.00	6.72
142.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.493	0.00	11.71

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 67

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 27

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)
142.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.493	0.00	17.09
142.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.493	0.00	12.87
144.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.078	0.000	6.519	0.00	17.11
144.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.519	0.00	6.74
144.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.519	0.00	11.72
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.079	0.000	6.532	0.00	8.56
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	6.532	0.00	3.37
145.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	6.532	0.00	5.87
146.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.36	0.00	0.082	0.000	6.545	0.00	8.56
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	6.545	0.00	3.37
146.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	6.545	0.00	5.87
148.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.083	0.000	6.570	0.00	17.14
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.570	0.00	6.76
148.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.570	0.00	11.75
150.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.085	0.000	6.595	0.00	17.16
150.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	6.595	0.00	6.77
150.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	6.595	0.00	11.76
152.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.620	0.00	17.18
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.620	0.00	6.78
152.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.620	0.00	11.78
154.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.645	0.00	17.20
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.645	0.00	6.79
156.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.670	0.00	17.22
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.670	0.00	6.80
158.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.694	0.00	17.23
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.694	0.00	6.82
160.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.72	0.00	0.125	1.075	6.718	0.00	17.25
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	6.718	0.00	6.83
Totals:											0.0	29,607.2

Calculated Forces

Structure: CT02049-S-SBA
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

7/28/2022

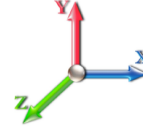
Page: 68



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

Iterations 27

Dead Load Factor 1.20
Wind Load 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	-100.5	-7.84	0.00	-971.44	0.00	971.44	3683.82	1059.58	4414.92	3756.66	0.00	0.000	0.000	0.170
1.00	-99.84	-7.83	0.00	-963.60	0.00	963.60	3677.71	1055.47	4380.73	3735.77	0.00	-0.008	0.000	0.169
2.00	-99.10	-7.83	0.00	-955.77	0.00	955.77	3671.54	1051.36	4346.67	3714.86	0.00	-0.017	0.000	0.168
4.00	-97.62	-7.81	0.00	-940.11	0.00	940.11	3659.00	1043.14	4278.95	3673.00	0.01	-0.034	0.000	0.167
6.00	-96.14	-7.78	0.00	-924.50	0.00	924.50	3646.20	1034.91	4211.76	3631.09	0.03	-0.051	0.000	0.165
8.00	-94.66	-7.76	0.00	-908.93	0.00	908.93	3633.16	1026.69	4145.10	3589.13	0.06	-0.068	0.000	0.163
10.00	-93.19	-7.74	0.00	-893.41	0.00	893.41	3619.85	1018.47	4078.97	3547.13	0.09	-0.085	0.000	0.162
12.00	-91.71	-7.71	0.00	-877.93	0.00	877.93	3606.29	1010.25	4013.38	3505.10	0.13	-0.102	0.000	0.160
14.00	-90.23	-7.69	0.00	-862.50	0.00	862.50	3592.48	1002.02	3948.31	3463.03	0.18	-0.120	0.000	0.159
16.00	-88.76	-7.65	0.00	-847.12	0.00	847.12	3578.41	993.80	3883.78	3420.94	0.23	-0.137	0.000	0.157
16.25	-88.52	-7.66	0.00	-845.21	0.00	845.21	3576.63	992.77	3875.75	3415.68	0.24	-0.139	0.000	0.180
18.00	-86.82	-7.63	0.00	-831.80	0.00	831.80	3564.09	985.58	3819.78	3378.83	0.29	-0.157	0.000	0.178
18.63	-86.21	-7.62	0.00	-827.00	0.00	827.00	3559.52	982.99	3799.73	3365.57	0.31	-0.163	0.000	0.145
18.88	-85.97	-7.62	0.00	-825.09	0.00	825.09	3557.70	981.96	3791.79	3360.30	0.32	-0.165	0.000	0.166
20.00	-84.89	-7.61	0.00	-816.55	0.00	816.55	3549.51	977.36	3756.31	3336.71	0.36	-0.176	0.000	0.165
22.00	-82.96	-7.59	0.00	-801.32	0.00	801.32	3563.12	985.03	3815.51	3376.01	0.44	-0.194	0.000	0.167
24.00	-81.49	-7.56	0.00	-786.15	0.00	786.15	3548.52	976.81	3752.08	3333.89	0.52	-0.213	0.000	0.161
26.00	-80.03	-7.53	0.00	-771.03	0.00	771.03	3533.67	968.58	3689.18	3291.77	0.62	-0.231	0.000	0.159
28.00	-78.56	-7.50	0.00	-755.97	0.00	755.97	3518.56	960.36	3626.81	3249.64	0.72	-0.249	0.000	0.157
30.00	-76.74	-7.46	0.00	-740.96	0.00	740.96	3503.20	952.14	3564.97	3207.53	0.83	-0.267	0.000	0.122
31.00	-75.82	-7.44	0.00	-733.50	0.00	733.50	3495.43	948.03	3534.25	3186.48	0.88	-0.275	0.000	0.141
32.00	-74.91	-7.42	0.00	-726.06	0.00	726.06	3487.59	943.92	3503.66	3165.43	0.94	-0.283	0.000	0.140
33.38	-74.16	-7.40	0.00	-715.82	0.00	715.82	3476.66	938.24	3461.67	3136.39	1.03	-0.295	0.000	0.173
34.00	-73.82	-7.40	0.00	-711.23	0.00	711.23	3471.72	935.70	3442.89	3123.35	1.06	-0.301	0.000	0.172
36.00	-72.74	-7.38	0.00	-696.43	0.00	696.43	3455.59	927.47	3382.65	3081.29	1.19	-0.322	0.000	0.171
38.00	-71.67	-7.35	0.00	-681.68	0.00	681.68	3439.21	919.25	3322.94	3039.26	1.33	-0.343	0.000	0.169
40.00	-70.57	-7.31	0.00	-666.98	0.00	666.98	3422.57	911.03	3263.76	2997.28	1.48	-0.364	0.000	0.167
42.00	-69.50	-7.29	0.00	-652.35	0.00	652.35	3405.68	902.81	3205.11	2955.34	1.64	-0.385	0.000	0.165
44.00	-68.44	-7.25	0.00	-637.78	0.00	637.78	3388.54	894.58	3146.99	2913.44	1.81	-0.406	0.000	0.163
45.16	-67.82	-7.23	0.00	-629.37	0.00	629.37	3378.48	889.81	3113.53	2889.17	1.91	-0.418	0.000	0.118
46.00	-67.38	-7.22	0.00	-623.29	0.00	623.29	3371.14	886.36	3089.41	2871.61	1.98	-0.425	0.000	0.153
48.00	-66.32	-7.19	0.00	-608.85	0.00	608.85	3353.48	878.14	3032.36	2829.83	2.16	-0.445	0.000	0.151
50.00	-65.27	-7.16	0.00	-594.47	0.00	594.47	3335.57	869.92	2975.84	2788.13	2.35	-0.465	0.000	0.149
52.00	-63.81	-7.12	0.00	-580.16	0.00	580.16	3317.41	861.69	2919.85	2746.50	2.55	-0.485	0.000	0.145
54.00	-62.35	-7.08	0.00	-565.92	0.00	565.92	3298.98	853.47	2864.39	2704.94	2.76	-0.505	0.000	0.143
56.00	-60.91	-7.04	0.00	-551.77	0.00	551.77	3316.18	861.14	2916.12	2743.71	2.97	-0.524	0.000	0.145
58.00	-59.86	-7.00	0.00	-537.69	0.00	537.69	3297.74	852.92	2860.70	2702.16	3.20	-0.544	0.000	0.150
60.00	-58.82	-6.96	0.00	-523.70	0.00	523.70	3279.05	844.70	2805.81	2660.71	3.43	-0.565	0.000	0.148
62.00	-57.78	-6.92	0.00	-509.77	0.00	509.77	3260.10	836.48	2751.45	2619.34	3.67	-0.585	0.000	0.146
64.00	-56.75	-6.88	0.00	-495.93	0.00	495.93	3240.90	828.25	2697.62	2578.08	3.92	-0.606	0.000	0.143
66.00	-55.72	-6.84	0.00	-482.16	0.00	482.16	3221.44	820.03	2644.33	2536.92	4.18	-0.627	0.000	0.141
68.00	-54.70	-6.80	0.00	-468.48	0.00	468.48	3201.73	811.81	2591.56	2495.87	4.45	-0.647	0.000	0.139
70.00	-53.68	-6.76	0.00	-454.87	0.00	454.87	3181.76	803.59	2539.33	2454.94	4.72	-0.668	0.000	0.137
72.00	-52.67	-6.72	0.00	-441.35	0.00	441.35	3161.54	795.36	2487.63	2414.13	5.01	-0.688	0.000	0.134
74.00	-51.66	-6.68	0.00	-427.91	0.00	427.91	3141.06	787.14	2436.47	2373.45	5.30	-0.709	0.000	0.132
76.00	-50.65	-6.63	0.00	-414.56	0.00	414.56	3120.33	778.92	2385.83	2332.91	5.60	-0.729	0.000	0.130
78.00	-49.65	-6.59	0.00	-401.30	0.00	401.30	3099.34	770.70	2335.73	2292.51	5.91	-0.749	0.000	0.127
80.00	-48.65	-6.54	0.00	-388.12	0.00	388.12	3078.09	762.47	2286.15	2252.26	6.23	-0.769	0.000	0.125

Calculated Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 69

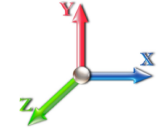
80.00	-48.65	-6.54	0.00	-388.12	0.00	388.12	2384.58	636.50	1911.75	1750.88	6.23	-0.769	0.000	0.134
82.00	-47.72	-6.50	0.00	-375.04	0.00	375.04	2370.62	629.65	1870.81	1721.73	6.56	-0.789	0.000	0.148
84.00	-46.79	-6.46	0.00	-362.04	0.00	362.04	2356.42	622.80	1830.32	1692.63	6.89	-0.811	0.000	0.144
86.00	-45.86	-6.41	0.00	-349.12	0.00	349.12	2341.95	615.94	1790.27	1663.57	7.24	-0.834	0.000	0.141
88.00	-44.94	-6.37	0.00	-336.30	0.00	336.30	2327.23	609.09	1750.66	1634.56	7.59	-0.855	0.000	0.138
90.00	-44.02	-6.32	0.00	-323.56	0.00	323.56	2312.26	602.24	1711.49	1605.61	7.95	-0.877	0.000	0.134
92.00	-43.10	-6.28	0.00	-310.91	0.00	310.91	2297.03	595.39	1672.77	1576.72	8.32	-0.899	0.000	0.131
94.00	-42.19	-6.23	0.00	-298.35	0.00	298.35	2281.55	588.54	1634.49	1547.90	8.71	-0.920	0.000	0.127
95.00	-41.74	-6.20	0.00	-292.12	0.00	292.12	2273.71	585.11	1615.51	1533.52	8.90	-0.931	0.000	0.126
95.58	-41.39	-6.19	0.00	-288.53	0.00	288.53	2269.13	583.12	1604.56	1525.19	9.01	-0.937	0.000	0.123
95.58	-41.39	-6.19	0.00	-288.53	0.00	288.53	2269.13	583.12	1604.56	1525.19	9.01	-0.937	0.000	0.123
96.00	-41.14	-6.19	0.00	-285.93	0.00	285.93	2265.81	581.68	1596.65	1519.16	9.10	-0.941	0.000	0.206
98.00	-39.96	-6.15	0.00	-273.55	0.00	273.55	2249.81	574.83	1559.25	1490.50	9.50	-0.976	0.000	0.201
100.00	-39.16	-6.11	0.00	-261.26	0.00	261.26	2259.61	579.02	1582.04	1508.00	9.91	-1.010	0.000	0.191
102.00	-38.63	-6.07	0.00	-249.05	0.00	249.05	2243.52	572.17	1544.82	1479.37	10.34	-1.044	0.000	0.186
104.00	-38.10	-6.04	0.00	-236.90	0.00	236.90	2227.17	565.31	1508.04	1450.84	10.79	-1.076	0.000	0.181
106.00	-37.58	-6.00	0.00	-224.83	0.00	224.83	2210.57	558.46	1471.71	1422.40	11.25	-1.107	0.000	0.175
108.00	-37.05	-5.96	0.00	-212.83	0.00	212.83	2193.71	551.61	1435.82	1394.06	11.72	-1.138	0.000	0.170
110.00	-36.42	-5.83	0.00	-200.65	0.00	200.65	2176.60	544.76	1400.37	1365.84	12.20	-1.168	0.000	0.164
112.00	-35.91	-5.79	0.00	-188.98	0.00	188.98	2159.23	537.91	1365.36	1337.73	12.69	-1.197	0.000	0.158
114.00	-35.41	-5.75	0.00	-177.40	0.00	177.40	2141.61	531.05	1330.80	1309.73	13.20	-1.226	0.000	0.152
115.00	-35.16	-5.73	0.00	-171.65	0.00	171.65	2132.70	527.63	1313.68	1295.79	13.46	-1.240	0.000	0.149
115.00	-35.16	-5.73	0.00	-171.65	0.00	171.65	1556.62	422.98	1055.35	949.74	13.46	-1.240	0.000	0.204
116.00	-34.94	-5.72	0.00	-165.91	0.00	165.91	1551.43	420.24	1041.71	940.38	13.72	-1.254	0.000	0.199
118.00	-34.49	-5.68	0.00	-154.48	0.00	154.48	1540.84	414.76	1014.72	921.68	14.26	-1.288	0.000	0.190
120.00	-34.05	-5.65	0.00	-143.11	0.00	143.11	1529.99	409.28	988.07	902.99	14.80	-1.320	0.000	0.181
122.00	-33.61	-5.61	0.00	-131.81	0.00	131.81	1518.89	403.80	961.78	884.33	15.36	-1.352	0.000	0.171
124.00	-33.18	-5.57	0.00	-120.59	0.00	120.59	1507.54	398.32	935.85	865.70	15.93	-1.381	0.000	0.161
126.00	-32.75	-5.54	0.00	-109.44	0.00	109.44	1495.93	392.84	910.27	847.11	16.52	-1.410	0.000	0.151
128.00	-32.32	-5.50	0.00	-98.37	0.00	98.37	1484.06	387.35	885.04	828.56	17.12	-1.437	0.000	0.141
130.00	-31.89	-5.46	0.00	-87.37	0.00	87.37	1471.95	381.87	860.17	810.06	17.72	-1.462	0.000	0.130
131.75	-30.96	-5.33	0.00	-77.82	0.00	77.82	1461.13	377.08	838.70	793.92	18.26	-1.482	0.000	0.119
132.00	-30.90	-5.33	0.00	-76.49	0.00	76.49	1459.57	376.39	835.65	791.62	18.34	-1.485	0.000	0.118
133.00	-22.28	-4.20	0.00	-71.16	0.00	71.16	1453.29	373.65	823.53	782.42	18.65	-1.496	0.000	0.106
134.00	-22.09	-4.18	0.00	-66.95	0.00	66.95	1446.94	370.91	811.49	773.23	18.97	-1.506	0.000	0.102
134.75	-21.59	-4.10	0.00	-63.82	0.00	63.82	1442.14	368.85	802.52	766.35	19.20	-1.513	0.000	0.098
136.00	-21.35	-4.07	0.00	-58.69	0.00	58.69	1434.06	365.43	787.68	754.91	19.60	-1.525	0.000	0.093
138.00	-20.98	-4.03	0.00	-50.55	0.00	50.55	1420.92	359.95	764.23	736.67	20.25	-1.543	0.000	0.084
140.00	-20.60	-3.98	0.00	-42.49	0.00	42.49	1407.52	354.47	741.13	718.50	20.90	-1.558	0.000	0.074
142.00	-11.43	-2.35	0.00	-34.53	0.00	34.53	1393.87	348.98	718.38	700.42	21.55	-1.572	0.000	0.058
144.00	-11.12	-2.30	0.00	-29.84	0.00	29.84	1379.97	343.50	695.99	682.44	22.21	-1.584	0.000	0.052
145.00	-10.96	-2.28	0.00	-27.54	0.00	27.54	1372.92	340.76	684.93	673.48	22.54	-1.589	0.000	0.049
145.00	-10.96	-2.28	0.00	-27.54	0.00	27.54	931.20	332.53	24157.3	604.09	22.54	-1.589	0.000	0.057
146.00	-10.81	-2.25	0.00	-25.26	0.00	25.26	925.24	329.86	23770.3	594.77	22.88	-1.594	0.000	0.054
148.00	-10.51	-2.21	0.00	-20.76	0.00	20.76	913.32	324.51	23005.8	576.36	23.55	-1.604	0.000	0.048
150.00	-10.21	-2.16	0.00	-16.34	0.00	16.34	901.40	319.16	22253.7	558.24	24.22	-1.612	0.000	0.041
150.00	-10.21	-2.16	0.00	-16.34	0.00	16.34	556.65	167.00	10296.1	213.69	24.22	-1.612	0.000	0.095
152.00	-5.89	-1.28	0.00	-12.01	0.00	12.01	556.65	167.00	10296.1	213.69	24.90	-1.619	0.000	0.067
154.00	-5.67	-1.25	0.00	-9.44	0.00	9.44	556.65	167.00	10296.1	213.69	25.58	-1.635	0.000	0.054
156.00	-5.46	-1.22	0.00	-6.94	0.00	6.94	556.65	167.00	10296.1	213.69	26.27	-1.647	0.000	0.042
158.00	-5.24	-1.18	0.00	-4.51	0.00	4.51	556.65	167.00	10296.1	213.69	26.96	-1.655	0.000	0.031
160.00	0.00	-1.03	0.00	-2.15	0.00	2.15	556.65	167.00	10296.1	213.69	27.65	-1.660	0.000	0.010

Seismic Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 70

Load Case: 1.2D + 1.0Ev + 1.0Eh							Iterations 23
Gust Response Factor	1.10			Sds	0.21	Ss	0.20
Dead Load Factor	1.20	Seismic Load Factor	1.00	Sd1	0.09	S1	0.05
Wind Load Factor	0.00	Structure Frequency (f1)	0.24	SA	0.02	Seismic Importance Factor	1.00

Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00	RB1 RB2	0.00	0.00	0.00	0.00	
1.00	RT2 RB3 RB4	624.78	0.50	26.39	0.00	
2.00		623.98	1.50	26.36	0.00	
4.00		1245.5	3.00	52.61	0.01	
6.00		1242.3	5.00	52.48	0.02	
8.00		1239.2	7.00	52.34	0.03	
10.00		1236.0	9.00	52.21	0.05	
12.00		1232.8	11.00	52.07	0.08	
14.00		1229.6	13.00	51.94	0.11	
16.00	Bot - Section 2	1226.4	15.00	51.80	0.15	
16.25	RT1 RB5	202.00	16.13	8.53	0.00	
18.00		1411.2	17.13	59.61	0.25	
18.63	RB6	506.84	18.31	21.41	0.04	
18.88	RT3 RT4	200.95	18.75	8.49	0.01	
20.00		899.04	19.44	37.98	0.13	
22.00	Top - Section 1	1600.4	21.00	67.60	0.48	
24.00		1219.8	23.00	51.53	0.34	
26.00		1216.6	25.00	51.39	0.40	
28.00		1213.4	27.00	51.26	0.46	
30.00	RB7	1570.2	29.00	66.33	0.89	
31.00	RT5	783.95	30.50	33.11	0.25	
32.00		783.15	31.50	33.08	0.26	
33.38	RT6	582.64	32.69	24.61	0.16	
34.00		261.27	33.69	11.04	0.03	
36.00		840.72	35.00	35.51	0.37	
38.00		837.53	37.00	35.38	0.41	
40.00	Appurtenance(s)	844.34	39.00	35.67	0.46	
42.00		830.77	41.00	35.09	0.50	
44.00		827.58	43.00	34.96	0.54	
45.16	RB8	478.54	44.58	20.21	0.20	
46.00	RT7	345.86	45.58	14.61	0.11	
48.00		821.21	47.00	34.69	0.64	
50.00	Bot - Section 3	818.02	49.00	34.55	0.69	
52.00		1156.7	51.00	48.86	1.49	
54.00		1150.3	53.00	48.59	1.59	
56.00	Top - Section 2	1143.9	55.00	48.32	1.70	
58.00	RT8 RB9	811.43	57.00	34.27	0.92	
60.00		808.24	59.00	34.14	0.97	
62.00		805.05	61.00	34.01	1.03	
64.00		801.86	63.00	33.87	1.09	
66.00		798.67	65.00	33.74	1.16	
68.00		795.48	67.00	33.60	1.22	
70.00		792.30	69.00	33.47	1.28	
72.00		789.11	71.00	33.33	1.35	
74.00		785.92	73.00	33.20	1.41	
76.00		782.73	75.00	33.06	1.48	

Seismic Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 71

78.00	RT9 RB10	779.54	77.00	32.93	1.54
80.00	Top - Section 3	776.35	79.00	32.79	1.61
82.00		724.58	81.00	30.61	1.48
84.00		721.92	83.00	30.49	1.54
86.00		719.27	85.00	30.38	1.60
88.00		716.61	87.00	30.27	1.67
90.00		713.95	89.00	30.16	1.73
92.00		711.29	91.00	30.05	1.80
94.00		708.64	93.00	29.93	1.86
95.00	Bot - Section 5	353.32	94.50	14.92	0.48
95.58	RT10	271.55	95.29	11.47	0.29
96.00		196.36	95.79	8.29	0.15
98.00		931.84	97.00	39.36	3.50
100.00	Top - Section 4	566.53	99.00	23.93	1.35
102.00		342.29	101.00	14.46	0.51
104.00		339.63	103.00	14.35	0.52
106.00		336.97	105.00	14.23	0.54
108.00		334.32	107.00	14.12	0.55
110.00	Appurtenance(s)	387.66	109.00	16.37	0.77
112.00		327.76	111.00	13.84	0.57
114.00		325.10	113.00	13.73	0.58
115.00	Top - Section 5	161.55	114.50	6.82	0.15
116.00		140.67	115.50	5.94	0.11
118.00		279.74	117.00	11.82	0.46
120.00		277.61	119.00	11.73	0.47
122.00		275.49	121.00	11.64	0.48
124.00		273.36	123.00	11.55	0.48
126.00		271.23	125.00	11.46	0.49
128.00		269.11	127.00	11.37	0.50
130.00		266.98	129.00	11.28	0.51
131.75	Appurtenance(s)	495.87	130.88	20.95	1.81
132.00		32.99	131.88	1.39	0.01
133.00	Appurtenance(s)	4484.7	132.50	189.44	151.36
134.00		115.12	133.50	4.86	0.10
134.75	Appurtenance(s)	284.29	134.38	12.01	0.63
136.00		142.65	135.38	6.03	0.16
138.00		226.51	137.00	9.57	0.41
140.00		224.39	139.00	9.48	0.42
142.00	Appurtenance(s)	4752.6	141.00	200.75	192.49
144.00		188.00	143.00	7.94	0.31
145.00	Top - Section 6	93.21	144.50	3.94	0.08
146.00		91.08	145.50	3.85	0.08
148.00		180.61	147.00	7.63	0.30
150.00	Top - Section 7	178.54	149.00	7.54	0.30
152.00	Appurtenance(s)	2497.0	151.00	105.47	60.94
154.00		133.14	153.00	5.62	0.18
156.00		133.14	155.00	5.62	0.18
158.00		133.14	157.00	5.62	0.19
160.00	Appurtenance(s)	2565.8	159.00	108.38	71.34
Totals:		70,873.2		2,993.7	534.3
					Total Wind: 36,512.8

Calculated Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0Ev + 1.0Eh										Iterations 23
Gust Response Factor 1.10					Sds 0.21					Ss 0.20
Dead Load Factor 1.20			Seismic Load Factor 1.00			Sd1 0.09			S1 0.05	
Wind Load Factor 0.00		Structure Frequency (f1) 0.24		SA 0.02		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	-81.46	-0.53	0.00	-77.34	0.00	77.34	3683.82	1059.58	4414.92	3756.66	0.00	0.00	0.00	0.026
1.00	-80.77	-0.53	0.00	-76.81	0.00	76.81	3677.71	1055.47	4380.73	3735.77	0.00	0.00	0.00	0.025
2.00	-80.08	-0.53	0.00	-76.28	0.00	76.28	3671.54	1051.36	4346.67	3714.86	0.00	0.00	0.00	0.025
4.00	-78.70	-0.54	0.00	-75.21	0.00	75.21	3659.00	1043.14	4278.95	3673.00	0.00	0.00	0.00	0.024
6.00	-77.33	-0.54	0.00	-74.14	0.00	74.14	3646.20	1034.91	4211.76	3631.09	0.00	0.00	0.00	0.024
8.00	-75.95	-0.54	0.00	-73.06	0.00	73.06	3633.16	1026.69	4145.10	3589.13	0.00	0.00	-0.01	0.024
10.00	-74.59	-0.54	0.00	-71.98	0.00	71.98	3619.85	1018.47	4078.97	3547.13	0.01	0.00	-0.01	0.024
12.00	-73.22	-0.54	0.00	-70.90	0.00	70.90	3606.29	1010.25	4013.38	3505.10	0.01	0.00	-0.01	0.023
14.00	-71.86	-0.54	0.00	-69.81	0.00	69.81	3592.48	1002.02	3948.31	3463.03	0.01	0.00	-0.01	0.023
16.00	-70.51	-0.54	0.00	-68.72	0.00	68.72	3578.41	993.80	3883.78	3420.94	0.02	0.00	-0.01	0.023
16.25	-70.28	-0.55	0.00	-68.59	0.00	68.59	3576.63	992.77	3875.75	3415.68	0.02	0.00	-0.01	0.026
18.00	-68.67	-0.55	0.00	-67.63	0.00	67.63	3564.09	985.58	3819.78	3378.83	0.02	0.00	-0.01	0.026
18.63	-68.10	-0.55	0.00	-67.29	0.00	67.29	3559.52	982.99	3799.73	3365.57	0.03	0.00	-0.01	0.021
18.88	-67.87	-0.55	0.00	-67.15	0.00	67.15	3557.70	981.96	3791.79	3360.30	0.03	0.00	-0.01	0.024
20.00	-66.84	-0.55	0.00	-66.54	0.00	66.54	3549.51	977.36	3756.31	3336.71	0.03	0.00	-0.01	0.024
22.00	-65.02	-0.55	0.00	-65.44	0.00	65.44	3563.12	985.03	3815.51	3376.01	0.04	0.00	-0.02	0.024
24.00	-63.68	-0.55	0.00	-64.35	0.00	64.35	3548.52	976.81	3752.08	3333.89	0.04	0.00	-0.02	0.023
26.00	-62.33	-0.55	0.00	-63.25	0.00	63.25	3533.67	968.58	3689.18	3291.77	0.05	0.00	-0.02	0.023
28.00	-60.99	-0.55	0.00	-62.15	0.00	62.15	3518.56	960.36	3626.81	3249.64	0.06	0.00	-0.02	0.023
30.00	-59.28	-0.55	0.00	-61.04	0.00	61.04	3503.20	952.14	3564.97	3207.53	0.07	0.00	-0.02	0.018
31.00	-58.43	-0.55	0.00	-60.49	0.00	60.49	3495.43	948.03	3534.25	3186.48	0.07	0.00	-0.02	0.020
32.00	-57.58	-0.55	0.00	-59.94	0.00	59.94	3487.59	943.92	3503.66	3165.43	0.08	0.00	-0.02	0.020
33.38	-56.92	-0.55	0.00	-59.18	0.00	59.18	3476.66	938.24	3461.67	3136.39	0.08	0.00	-0.02	0.025
34.00	-56.62	-0.55	0.00	-58.84	0.00	58.84	3471.72	935.70	3442.89	3123.35	0.09	0.00	-0.02	0.024
36.00	-55.67	-0.55	0.00	-57.73	0.00	57.73	3455.59	927.47	3382.65	3081.29	0.10	0.00	-0.03	0.024
38.00	-54.73	-0.55	0.00	-56.63	0.00	56.63	3439.21	919.25	3322.94	3039.26	0.11	0.00	-0.03	0.024
40.00	-53.78	-0.55	0.00	-55.52	0.00	55.52	3422.57	911.03	3263.76	2997.28	0.12	0.00	-0.03	0.024
42.00	-52.84	-0.56	0.00	-54.41	0.00	54.41	3405.68	902.81	3205.11	2955.34	0.13	0.00	-0.03	0.023
44.00	-51.91	-0.56	0.00	-53.30	0.00	53.30	3388.54	894.58	3146.99	2913.44	0.15	0.00	-0.03	0.023
45.16	-51.37	-0.56	0.00	-52.65	0.00	52.65	3378.48	889.81	3113.53	2889.17	0.15	0.00	-0.03	0.017
46.00	-50.98	-0.56	0.00	-52.19	0.00	52.19	3371.14	886.36	3089.41	2871.61	0.16	0.00	-0.03	0.022
48.00	-50.06	-0.56	0.00	-51.07	0.00	51.07	3353.48	878.14	3032.36	2829.83	0.18	0.00	-0.04	0.021
50.00	-49.14	-0.56	0.00	-49.96	0.00	49.96	3335.57	869.92	2975.84	2788.13	0.19	0.00	-0.04	0.021
52.00	-47.79	-0.56	0.00	-48.85	0.00	48.85	3317.41	861.69	2919.85	2746.50	0.21	0.00	-0.04	0.021
54.00	-46.46	-0.55	0.00	-47.73	0.00	47.73	3298.98	853.47	2864.39	2704.94	0.22	0.00	-0.04	0.020
56.00	-45.14	-0.55	0.00	-46.62	0.00	46.62	3316.18	861.14	2916.12	2743.71	0.24	0.00	-0.04	0.020
58.00	-44.22	-0.55	0.00	-45.52	0.00	45.52	3297.74	852.92	2860.70	2702.16	0.26	0.00	-0.04	0.021
60.00	-43.32	-0.55	0.00	-44.41	0.00	44.41	3279.05	844.70	2805.81	2660.71	0.28	0.00	-0.05	0.021
62.00	-42.41	-0.55	0.00	-43.31	0.00	43.31	3260.10	836.48	2751.45	2619.34	0.30	0.00	-0.05	0.020
64.00	-41.51	-0.55	0.00	-42.20	0.00	42.20	3240.90	828.25	2697.62	2578.08	0.32	0.00	-0.05	0.020
66.00	-40.61	-0.55	0.00	-41.10	0.00	41.10	3221.44	820.03	2644.33	2536.92	0.34	0.00	-0.05	0.020
68.00	-39.72	-0.55	0.00	-40.00	0.00	40.00	3201.73	811.81	2591.56	2495.87	0.36	0.00	-0.05	0.019
70.00	-38.83	-0.55	0.00	-38.90	0.00	38.90	3181.76	803.59	2539.33	2454.94	0.39	0.00	-0.06	0.019
72.00	-37.95	-0.55	0.00	-37.80	0.00	37.80	3161.54	795.36	2487.63	2414.13	0.41	0.00	-0.06	0.019
74.00	-37.07	-0.55	0.00	-36.70	0.00	36.70	3141.06	787.14	2436.47	2373.45	0.43	0.00	-0.06	0.018
76.00	-36.19	-0.55	0.00	-35.61	0.00	35.61	3120.33	778.92	2385.83	2332.91	0.46	0.00	-0.06	0.018
78.00	-35.32	-0.54	0.00	-34.51	0.00	34.51	3099.34	770.70	2335.73	2292.51	0.49	0.00	-0.06	0.018

Calculated Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 73

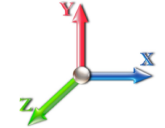
80.00	-34.45	-0.54	0.00	-33.43	0.00	33.43	3078.09	762.47	2286.15	2252.26	0.51	-0.06	0.017
80.00	-34.45	-0.54	0.00	-33.43	0.00	33.43	2384.58	636.50	1911.75	1750.88	0.51	-0.06	0.019
82.00	-33.65	-0.54	0.00	-32.34	0.00	32.34	2370.62	629.65	1870.81	1721.73	0.54	-0.07	0.021
84.00	-32.85	-0.54	0.00	-31.26	0.00	31.26	2356.42	622.80	1830.32	1692.63	0.57	-0.07	0.020
86.00	-32.05	-0.54	0.00	-30.18	0.00	30.18	2341.95	615.94	1790.27	1663.57	0.60	-0.07	0.020
88.00	-31.25	-0.54	0.00	-29.10	0.00	29.10	2327.23	609.09	1750.66	1634.56	0.62	-0.07	0.019
90.00	-30.46	-0.54	0.00	-28.02	0.00	28.02	2312.26	602.24	1711.49	1605.61	0.66	-0.07	0.019
92.00	-29.68	-0.53	0.00	-26.95	0.00	26.95	2297.03	595.39	1672.77	1576.72	0.69	-0.08	0.018
94.00	-28.89	-0.53	0.00	-25.89	0.00	25.89	2281.55	588.54	1634.49	1547.90	0.72	-0.08	0.018
95.00	-28.50	-0.53	0.00	-25.35	0.00	25.35	2273.71	585.11	1615.51	1533.52	0.73	-0.08	0.018
95.58	-28.19	-0.53	0.00	-25.05	0.00	25.05	2269.13	583.12	1604.56	1525.19	0.74	-0.08	0.017
95.58	-28.19	-0.53	0.00	-25.05	0.00	25.05	2269.13	583.12	1604.56	1525.19	0.74	-0.08	0.017
96.00	-27.97	-0.53	0.00	-24.82	0.00	24.82	2265.81	581.68	1596.65	1519.16	0.75	-0.08	0.029
98.00	-26.90	-0.53	0.00	-23.76	0.00	23.76	2249.81	574.83	1559.25	1490.50	0.78	-0.08	0.028
100.00	-26.22	-0.53	0.00	-22.71	0.00	22.71	2259.61	579.02	1582.04	1508.00	0.82	-0.08	0.027
102.00	-25.82	-0.53	0.00	-21.65	0.00	21.65	2243.52	572.17	1544.82	1479.37	0.86	-0.09	0.026
104.00	-25.43	-0.53	0.00	-20.60	0.00	20.60	2227.17	565.31	1508.04	1450.84	0.89	-0.09	0.026
106.00	-25.03	-0.53	0.00	-19.55	0.00	19.55	2210.57	558.46	1471.71	1422.40	0.93	-0.09	0.025
108.00	-24.64	-0.53	0.00	-18.49	0.00	18.49	2193.71	551.61	1435.82	1394.06	0.97	-0.10	0.024
110.00	-24.18	-0.53	0.00	-17.44	0.00	17.44	2176.60	544.76	1400.37	1365.84	1.01	-0.10	0.024
112.00	-23.80	-0.53	0.00	-16.39	0.00	16.39	2159.23	537.91	1365.36	1337.73	1.05	-0.10	0.023
114.00	-23.42	-0.53	0.00	-15.34	0.00	15.34	2141.61	531.05	1330.80	1309.73	1.10	-0.10	0.023
115.00	-23.23	-0.53	0.00	-14.81	0.00	14.81	2132.70	527.63	1313.68	1295.79	1.12	-0.10	0.022
115.00	-23.23	-0.53	0.00	-14.81	0.00	14.81	1556.62	422.98	1055.35	949.74	1.12	-0.10	0.031
116.00	-23.07	-0.53	0.00	-14.28	0.00	14.28	1551.43	420.24	1041.71	940.38	1.14	-0.11	0.030
118.00	-22.74	-0.53	0.00	-13.23	0.00	13.23	1540.84	414.76	1014.72	921.68	1.19	-0.11	0.029
120.00	-22.42	-0.53	0.00	-12.18	0.00	12.18	1529.99	409.28	988.07	902.99	1.23	-0.11	0.028
122.00	-22.10	-0.53	0.00	-11.13	0.00	11.13	1518.89	403.80	961.78	884.33	1.28	-0.11	0.027
124.00	-21.79	-0.53	0.00	-10.07	0.00	10.07	1507.54	398.32	935.85	865.70	1.33	-0.12	0.026
126.00	-21.47	-0.53	0.00	-9.02	0.00	9.02	1495.93	392.84	910.27	847.11	1.38	-0.12	0.025
128.00	-21.16	-0.53	0.00	-7.97	0.00	7.97	1484.06	387.35	885.04	828.56	1.43	-0.12	0.024
130.00	-20.85	-0.53	0.00	-6.92	0.00	6.92	1471.95	381.87	860.17	810.06	1.48	-0.12	0.023
131.75	-20.26	-0.52	0.00	-6.00	0.00	6.00	1461.13	377.08	838.70	793.92	1.53	-0.13	0.021
132.00	-20.22	-0.52	0.00	-5.87	0.00	5.87	1459.57	376.39	835.65	791.62	1.53	-0.13	0.021
133.00	-14.66	-0.36	0.00	-5.35	0.00	5.35	1453.29	373.65	823.53	782.42	1.56	-0.13	0.017
134.00	-14.53	-0.36	0.00	-4.99	0.00	4.99	1446.94	370.91	811.49	773.23	1.58	-0.13	0.016
134.75	-14.18	-0.36	0.00	-4.72	0.00	4.72	1442.14	368.85	802.52	766.35	1.60	-0.13	0.016
136.00	-14.01	-0.36	0.00	-4.27	0.00	4.27	1434.06	365.43	787.68	754.91	1.64	-0.13	0.015
138.00	-13.75	-0.36	0.00	-3.56	0.00	3.56	1420.92	359.95	764.23	736.67	1.69	-0.13	0.015
140.00	-13.49	-0.36	0.00	-2.84	0.00	2.84	1407.52	354.47	741.13	718.50	1.75	-0.13	0.014
142.00	-7.60	-0.15	0.00	-2.13	0.00	2.13	1393.87	348.98	718.38	700.42	1.80	-0.13	0.008
144.00	-7.38	-0.15	0.00	-1.83	0.00	1.83	1379.97	343.50	695.99	682.44	1.86	-0.13	0.008
145.00	-7.27	-0.15	0.00	-1.68	0.00	1.68	1372.92	340.76	684.93	673.48	1.88	-0.13	0.008
145.00	-7.27	-0.15	0.00	-1.68	0.00	1.68	931.20	332.53	24157.3	604.09	1.88	-0.13	0.011
146.00	-7.16	-0.15	0.00	-1.53	0.00	1.53	925.24	329.86	23770.3	594.77	1.91	-0.13	0.010
148.00	-6.95	-0.15	0.00	-1.23	0.00	1.23	913.32	324.51	23005.8	576.36	1.97	-0.13	0.010
150.00	-6.74	-0.15	0.00	-0.93	0.00	0.93	901.40	319.16	22253.7	558.24	2.02	-0.13	0.009
150.00	-6.74	-0.15	0.00	-0.93	0.00	0.93	556.65	167.00	10296.1	213.69	2.02	-0.13	0.016
152.00	-3.64	-0.08	0.00	-0.64	0.00	0.64	556.65	167.00	10296.1	213.69	2.08	-0.13	0.010
154.00	-3.49	-0.08	0.00	-0.48	0.00	0.48	556.65	167.00	10296.1	213.69	2.14	-0.14	0.008
156.00	-3.33	-0.08	0.00	-0.32	0.00	0.32	556.65	167.00	10296.1	213.69	2.19	-0.14	0.007
158.00	-3.18	-0.08	0.00	-0.16	0.00	0.16	556.65	167.00	10296.1	213.69	2.25	-0.14	0.006
160.00	0.00	-0.07	0.00	0.00	0.00	0.00	556.65	167.00	10296.1	213.69	2.31	-0.14	0.000

Seismic Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 74

Load Case: 0.9D + 1.0Ev + 1.0Eh							Iterations 23
Gust Response Factor	1.10			Sds	0.21	Ss	0.20
Dead Load Factor	0.90	Seismic Load Factor	1.00	Sd1	0.09	S1	0.05
Wind Load Factor	0.00	Structure Frequency (f1)	0.24	SA	0.02	Seismic Importance Factor	1.00

Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00	RB1 RB2	0.00	0.00	0.00	0.00	
1.00	RT2 RB3 RB4	519.85	0.50	21.96	0.00	
2.00		519.05	1.50	21.92	0.00	
4.00		1035.7	3.00	43.75	0.00	
6.00		1032.5	5.00	43.61	0.01	
8.00		1029.3	7.00	43.48	0.02	
10.00		1026.1	9.00	43.34	0.04	
12.00		1022.9	11.00	43.21	0.06	
14.00		1019.7	13.00	43.07	0.08	
16.00	Bot - Section 2	1016.5	15.00	42.94	0.10	
16.25	RT1 RB5	175.77	16.13	7.42	0.00	
18.00		1227.5	17.13	51.85	0.20	
18.63	RB6	440.73	18.31	18.62	0.03	
18.88	RT3 RT4	174.72	18.75	7.38	0.00	
20.00		781.51	19.44	33.01	0.10	
22.00	Top - Section 1	1390.5	21.00	58.74	0.38	
24.00		1009.9	23.00	42.66	0.24	
26.00		1006.8	25.00	42.53	0.28	
28.00		1003.6	27.00	42.39	0.33	
30.00	RB7	1270.4	29.00	53.66	0.60	
31.00	RT5	634.01	30.50	26.78	0.17	
32.00		633.22	31.50	26.75	0.18	
33.38	RT6	499.93	32.69	21.12	0.12	
34.00		224.11	33.69	9.47	0.03	
36.00		720.85	35.00	30.45	0.28	
38.00		717.66	37.00	30.31	0.31	
40.00	Appurtenance(s)	724.48	39.00	30.60	0.35	
42.00		711.00	41.00	30.03	0.38	
44.00		707.81	43.00	29.90	0.41	
45.16	RB8	409.07	44.58	17.28	0.15	
46.00	RT7	295.55	45.58	12.48	0.08	
48.00		701.43	47.00	29.63	0.48	
50.00	Bot - Section 3	698.25	49.00	29.49	0.52	
52.00		1036.9	51.00	43.80	1.24	
54.00		1030.5	53.00	43.53	1.32	
56.00	Top - Section 2	1024.2	55.00	43.26	1.41	
58.00	RT8 RB9	691.65	57.00	29.22	0.69	
60.00		688.47	59.00	29.08	0.73	
62.00		685.28	61.00	28.95	0.78	
64.00		682.09	63.00	28.81	0.82	
66.00		678.90	65.00	28.68	0.86	
68.00		675.71	67.00	28.54	0.91	
70.00		672.52	69.00	28.41	0.96	
72.00		669.34	71.00	28.27	1.00	
74.00		666.15	73.00	28.14	1.05	
76.00		662.96	75.00	28.00	1.10	

Seismic Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 75

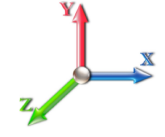
78.00	RT9 RB10	659.77	77.00	27.87	1.15
80.00	Top - Section 3	656.58	79.00	27.73	1.19
82.00		604.81	81.00	25.55	1.07
84.00		602.15	83.00	25.43	1.11
86.00		599.49	85.00	25.32	1.15
88.00		596.84	87.00	25.21	1.20
90.00		594.18	89.00	25.10	1.24
92.00		591.52	91.00	24.99	1.29
94.00		588.87	93.00	24.87	1.33
95.00	Bot - Section 5	293.44	94.50	12.39	0.34
95.58	RT10	236.82	95.29	10.00	0.23
96.00		171.21	95.79	7.23	0.12
98.00		812.07	97.00	34.30	2.75
100.00	Top - Section 4	536.75	99.00	22.67	1.25
102.00		312.52	101.00	13.20	0.44
104.00		309.86	103.00	13.09	0.45
106.00		307.20	105.00	12.98	0.46
108.00		304.55	107.00	12.86	0.47
110.00	Appurtenance(s)	357.89	109.00	15.12	0.68
112.00		298.30	111.00	12.60	0.49
114.00		295.64	113.00	12.49	0.50
115.00	Top - Section 5	146.82	114.50	6.20	0.13
116.00		125.94	115.50	5.32	0.09
118.00		250.28	117.00	10.57	0.38
120.00		248.15	119.00	10.48	0.39
122.00		246.03	121.00	10.39	0.39
124.00		243.90	123.00	10.30	0.40
126.00		241.78	125.00	10.21	0.41
128.00		239.65	127.00	10.12	0.41
130.00		237.52	129.00	10.03	0.42
131.75	Appurtenance(s)	470.09	130.88	19.86	1.68
132.00		29.31	131.88	1.24	0.01
133.00	Appurtenance(s)	4470.0	132.50	188.81	155.74
134.00		104.38	133.50	4.41	0.09
134.75	Appurtenance(s)	276.24	134.38	11.67	0.61
136.00		129.23	135.38	5.46	0.14
138.00		205.05	137.00	8.66	0.35
140.00		202.92	139.00	8.57	0.35
142.00	Appurtenance(s)	4731.1	141.00	199.85	197.57
144.00		174.57	143.00	7.37	0.28
145.00	Top - Section 6	86.49	144.50	3.65	0.07
146.00		84.37	145.50	3.56	0.07
148.00		167.18	147.00	7.06	0.27
150.00	Top - Section 7	165.11	149.00	6.97	0.27
152.00	Appurtenance(s)	2483.5	151.00	104.91	62.44
154.00		120.90	153.00	5.11	0.15
156.00		120.90	155.00	5.11	0.16
158.00		120.90	157.00	5.11	0.16
160.00	Appurtenance(s)	2553.6	159.00	107.86	73.19
Totals:		62,652.3		2,646.4	534.3
					Total Wind: 36,512.8

Calculated Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0Ev + 1.0Eh										Iterations 23
Gust Response Factor 1.10					Sds 0.21					Ss 0.20
Dead Load Factor 0.90			Seismic Load Factor 1.00			Sd1 0.09		S1 0.05		
Wind Load Factor 0.00		Structure Frequency (f1) 0.24		SA 0.02		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	-61.50	-0.53	0.00	-77.04	0.00	77.04	3683.82	1059.58	4414.92	3756.66	0.00	0.00	0.00	0.022
1.00	-60.98	-0.53	0.00	-76.51	0.00	76.51	3677.71	1055.47	4380.73	3735.77	0.00	0.00	0.00	0.022
2.00	-60.46	-0.53	0.00	-75.98	0.00	75.98	3671.54	1051.36	4346.67	3714.86	0.00	0.00	0.00	0.022
4.00	-59.42	-0.54	0.00	-74.91	0.00	74.91	3659.00	1043.14	4278.95	3673.00	0.00	0.00	0.00	0.021
6.00	-58.38	-0.54	0.00	-73.84	0.00	73.84	3646.20	1034.91	4211.76	3631.09	0.00	0.00	0.00	0.021
8.00	-57.35	-0.54	0.00	-72.77	0.00	72.77	3633.16	1026.69	4145.10	3589.13	0.00	0.00	-0.01	0.021
10.00	-56.32	-0.54	0.00	-71.69	0.00	71.69	3619.85	1018.47	4078.97	3547.13	0.01	0.01	-0.01	0.021
12.00	-55.29	-0.54	0.00	-70.61	0.00	70.61	3606.29	1010.25	4013.38	3505.10	0.01	0.01	-0.01	0.020
14.00	-54.27	-0.54	0.00	-69.53	0.00	69.53	3592.48	1002.02	3948.31	3463.03	0.01	0.01	-0.01	0.020
16.00	-53.25	-0.54	0.00	-68.45	0.00	68.45	3578.41	993.80	3883.78	3420.94	0.02	0.02	-0.01	0.020
16.25	-53.08	-0.54	0.00	-68.31	0.00	68.31	3576.63	992.77	3875.75	3415.68	0.02	0.02	-0.01	0.023
18.00	-51.86	-0.54	0.00	-67.36	0.00	67.36	3564.09	985.58	3819.78	3378.83	0.02	0.02	-0.01	0.023
18.63	-51.43	-0.54	0.00	-67.02	0.00	67.02	3559.52	982.99	3799.73	3365.57	0.02	0.02	-0.01	0.018
18.88	-51.26	-0.54	0.00	-66.89	0.00	66.89	3557.70	981.96	3791.79	3360.30	0.03	0.03	-0.01	0.021
20.00	-50.48	-0.54	0.00	-66.28	0.00	66.28	3549.51	977.36	3756.31	3336.71	0.03	0.03	-0.01	0.021
22.00	-49.11	-0.54	0.00	-65.19	0.00	65.19	3563.12	985.03	3815.51	3376.01	0.04	0.04	-0.02	0.021
24.00	-48.10	-0.55	0.00	-64.10	0.00	64.10	3548.52	976.81	3752.08	3333.89	0.04	0.04	-0.02	0.021
26.00	-47.09	-0.55	0.00	-63.01	0.00	63.01	3533.67	968.58	3689.18	3291.77	0.05	0.05	-0.02	0.020
28.00	-46.08	-0.55	0.00	-61.92	0.00	61.92	3518.56	960.36	3626.81	3249.64	0.06	0.06	-0.02	0.020
30.00	-44.79	-0.55	0.00	-60.82	0.00	60.82	3503.20	952.14	3564.97	3207.53	0.07	0.07	-0.02	0.016
31.00	-44.15	-0.55	0.00	-60.28	0.00	60.28	3495.43	948.03	3534.25	3186.48	0.07	0.07	-0.02	0.018
32.00	-43.51	-0.55	0.00	-59.73	0.00	59.73	3487.59	943.92	3503.66	3165.43	0.08	0.08	-0.02	0.018
33.38	-43.01	-0.55	0.00	-58.98	0.00	58.98	3476.66	938.24	3461.67	3136.39	0.08	0.08	-0.02	0.022
34.00	-42.79	-0.55	0.00	-58.64	0.00	58.64	3471.72	935.70	3442.89	3123.35	0.09	0.09	-0.02	0.022
36.00	-42.07	-0.55	0.00	-57.54	0.00	57.54	3455.59	927.47	3382.65	3081.29	0.10	0.10	-0.03	0.021
38.00	-41.36	-0.55	0.00	-56.45	0.00	56.45	3439.21	919.25	3322.94	3039.26	0.11	0.11	-0.03	0.021
40.00	-40.64	-0.55	0.00	-55.35	0.00	55.35	3422.57	911.03	3263.76	2997.28	0.12	0.12	-0.03	0.021
42.00	-39.94	-0.55	0.00	-54.25	0.00	54.25	3405.68	902.81	3205.11	2955.34	0.13	0.13	-0.03	0.021
44.00	-39.23	-0.55	0.00	-53.15	0.00	53.15	3388.54	894.58	3146.99	2913.44	0.15	0.15	-0.03	0.020
45.16	-38.83	-0.55	0.00	-52.51	0.00	52.51	3378.48	889.81	3113.53	2889.17	0.15	0.15	-0.03	0.015
46.00	-38.53	-0.55	0.00	-52.05	0.00	52.05	3371.14	886.36	3089.41	2871.61	0.16	0.16	-0.03	0.019
48.00	-37.84	-0.55	0.00	-50.95	0.00	50.95	3353.48	878.14	3032.36	2829.83	0.17	0.17	-0.04	0.019
50.00	-37.14	-0.55	0.00	-49.85	0.00	49.85	3335.57	869.92	2975.84	2788.13	0.19	0.19	-0.04	0.019
52.00	-36.13	-0.55	0.00	-48.74	0.00	48.74	3317.41	861.69	2919.85	2746.50	0.21	0.21	-0.04	0.018
54.00	-35.12	-0.55	0.00	-47.64	0.00	47.64	3298.98	853.47	2864.39	2704.94	0.22	0.22	-0.04	0.018
56.00	-34.12	-0.55	0.00	-46.55	0.00	46.55	3316.18	861.14	2916.12	2743.71	0.24	0.24	-0.04	0.018
58.00	-33.43	-0.55	0.00	-45.45	0.00	45.45	3297.74	852.92	2860.70	2702.16	0.26	0.26	-0.04	0.019
60.00	-32.75	-0.55	0.00	-44.35	0.00	44.35	3279.05	844.70	2805.81	2660.71	0.28	0.28	-0.05	0.018
62.00	-32.07	-0.55	0.00	-43.26	0.00	43.26	3260.10	836.48	2751.45	2619.34	0.30	0.30	-0.05	0.018
64.00	-31.39	-0.55	0.00	-42.17	0.00	42.17	3240.90	828.25	2697.62	2578.08	0.32	0.32	-0.05	0.018
66.00	-30.71	-0.55	0.00	-41.07	0.00	41.07	3221.44	820.03	2644.33	2536.92	0.34	0.34	-0.05	0.018
68.00	-30.04	-0.55	0.00	-39.98	0.00	39.98	3201.73	811.81	2591.56	2495.87	0.36	0.36	-0.05	0.017
70.00	-29.37	-0.55	0.00	-38.89	0.00	38.89	3181.76	803.59	2539.33	2454.94	0.39	0.39	-0.06	0.017
72.00	-28.70	-0.54	0.00	-37.80	0.00	37.80	3161.54	795.36	2487.63	2414.13	0.41	0.41	-0.06	0.017
74.00	-28.04	-0.54	0.00	-36.71	0.00	36.71	3141.06	787.14	2436.47	2373.45	0.43	0.43	-0.06	0.016
76.00	-27.38	-0.54	0.00	-35.62	0.00	35.62	3120.33	778.92	2385.83	2332.91	0.46	0.46	-0.06	0.016
78.00	-26.72	-0.54	0.00	-34.54	0.00	34.54	3099.34	770.70	2335.73	2292.51	0.48	0.48	-0.06	0.016

Calculated Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 77

80.00	-26.07	-0.54	0.00	-33.46	0.00	33.46	3078.09	762.47	2286.15	2252.26	0.51	-0.06	0.016
80.00	-26.07	-0.54	0.00	-33.46	0.00	33.46	2384.58	636.50	1911.75	1750.88	0.51	-0.06	0.017
82.00	-25.46	-0.54	0.00	-32.37	0.00	32.37	2370.62	629.65	1870.81	1721.73	0.54	-0.07	0.018
84.00	-24.86	-0.54	0.00	-31.30	0.00	31.30	2356.42	622.80	1830.32	1692.63	0.56	-0.07	0.018
86.00	-24.26	-0.54	0.00	-30.22	0.00	30.22	2341.95	615.94	1790.27	1663.57	0.59	-0.07	0.018
88.00	-23.66	-0.54	0.00	-29.14	0.00	29.14	2327.23	609.09	1750.66	1634.56	0.62	-0.07	0.017
90.00	-23.06	-0.54	0.00	-28.07	0.00	28.07	2312.26	602.24	1711.49	1605.61	0.65	-0.07	0.017
92.00	-22.47	-0.53	0.00	-27.00	0.00	27.00	2297.03	595.39	1672.77	1576.72	0.68	-0.08	0.016
94.00	-21.88	-0.53	0.00	-25.93	0.00	25.93	2281.55	588.54	1634.49	1547.90	0.72	-0.08	0.016
95.00	-21.58	-0.53	0.00	-25.40	0.00	25.40	2273.71	585.11	1615.51	1533.52	0.73	-0.08	0.016
95.58	-21.35	-0.53	0.00	-25.09	0.00	25.09	2269.13	583.12	1604.56	1525.19	0.74	-0.08	0.016
95.58	-21.35	-0.53	0.00	-25.09	0.00	25.09	2269.13	583.12	1604.56	1525.19	0.74	-0.08	0.016
96.00	-21.18	-0.53	0.00	-24.87	0.00	24.87	2265.81	581.68	1596.65	1519.16	0.75	-0.08	0.026
98.00	-20.38	-0.53	0.00	-23.81	0.00	23.81	2249.81	574.83	1559.25	1490.50	0.78	-0.08	0.025
100.00	-19.87	-0.53	0.00	-22.75	0.00	22.75	2259.61	579.02	1582.04	1508.00	0.82	-0.08	0.024
102.00	-19.56	-0.53	0.00	-21.69	0.00	21.69	2243.52	572.17	1544.82	1479.37	0.85	-0.09	0.023
104.00	-19.26	-0.53	0.00	-20.64	0.00	20.64	2227.17	565.31	1508.04	1450.84	0.89	-0.09	0.023
106.00	-18.96	-0.53	0.00	-19.58	0.00	19.58	2210.57	558.46	1471.71	1422.40	0.93	-0.09	0.022
108.00	-18.67	-0.53	0.00	-18.52	0.00	18.52	2193.71	551.61	1435.82	1394.06	0.97	-0.10	0.022
110.00	-18.32	-0.53	0.00	-17.47	0.00	17.47	2176.60	544.76	1400.37	1365.84	1.01	-0.10	0.021
112.00	-18.03	-0.53	0.00	-16.41	0.00	16.41	2159.23	537.91	1365.36	1337.73	1.05	-0.10	0.021
114.00	-17.74	-0.53	0.00	-15.36	0.00	15.36	2141.61	531.05	1330.80	1309.73	1.09	-0.10	0.020
115.00	-17.60	-0.53	0.00	-14.83	0.00	14.83	2132.70	527.63	1313.68	1295.79	1.12	-0.10	0.020
115.00	-17.60	-0.53	0.00	-14.83	0.00	14.83	1556.62	422.98	1055.35	949.74	1.12	-0.10	0.027
116.00	-17.48	-0.53	0.00	-14.30	0.00	14.30	1551.43	420.24	1041.71	940.38	1.14	-0.11	0.026
118.00	-17.23	-0.53	0.00	-13.25	0.00	13.25	1540.84	414.76	1014.72	921.68	1.18	-0.11	0.026
120.00	-16.99	-0.53	0.00	-12.19	0.00	12.19	1529.99	409.28	988.07	902.99	1.23	-0.11	0.025
122.00	-16.75	-0.53	0.00	-11.14	0.00	11.14	1518.89	403.80	961.78	884.33	1.28	-0.11	0.024
124.00	-16.51	-0.53	0.00	-10.08	0.00	10.08	1507.54	398.32	935.85	865.70	1.33	-0.12	0.023
126.00	-16.27	-0.53	0.00	-9.03	0.00	9.03	1495.93	392.84	910.27	847.11	1.38	-0.12	0.022
128.00	-16.04	-0.53	0.00	-7.97	0.00	7.97	1484.06	387.35	885.04	828.56	1.43	-0.12	0.020
130.00	-15.81	-0.53	0.00	-6.92	0.00	6.92	1471.95	381.87	860.17	810.06	1.48	-0.12	0.019
131.75	-15.36	-0.52	0.00	-6.00	0.00	6.00	1461.13	377.08	838.70	793.92	1.52	-0.12	0.018
132.00	-15.33	-0.52	0.00	-5.87	0.00	5.87	1459.57	376.39	835.65	791.62	1.53	-0.13	0.018
133.00	-11.11	-0.36	0.00	-5.34	0.00	5.34	1453.29	373.65	823.53	782.42	1.56	-0.13	0.014
134.00	-11.01	-0.36	0.00	-4.98	0.00	4.98	1446.94	370.91	811.49	773.23	1.58	-0.13	0.014
134.75	-10.75	-0.36	0.00	-4.71	0.00	4.71	1442.14	368.85	802.52	766.35	1.60	-0.13	0.014
136.00	-10.62	-0.36	0.00	-4.27	0.00	4.27	1434.06	365.43	787.68	754.91	1.64	-0.13	0.013
138.00	-10.42	-0.36	0.00	-3.55	0.00	3.55	1420.92	359.95	764.23	736.67	1.69	-0.13	0.012
140.00	-10.22	-0.36	0.00	-2.83	0.00	2.83	1407.52	354.47	741.13	718.50	1.74	-0.13	0.011
142.00	-5.76	-0.15	0.00	-2.12	0.00	2.12	1393.87	348.98	718.38	700.42	1.80	-0.13	0.007
144.00	-5.59	-0.15	0.00	-1.82	0.00	1.82	1379.97	343.50	695.99	682.44	1.85	-0.13	0.007
145.00	-5.51	-0.15	0.00	-1.67	0.00	1.67	1372.92	340.76	684.93	673.48	1.88	-0.13	0.006
145.00	-5.51	-0.15	0.00	-1.67	0.00	1.67	931.20	332.53	24157.3	604.09	1.88	-0.13	0.009
146.00	-5.43	-0.15	0.00	-1.52	0.00	1.52	925.24	329.86	23770.3	594.77	1.91	-0.13	0.008
148.00	-5.27	-0.15	0.00	-1.23	0.00	1.23	913.32	324.51	23005.8	576.36	1.96	-0.13	0.008
150.00	-5.11	-0.15	0.00	-0.93	0.00	0.93	901.40	319.16	22253.7	558.24	2.02	-0.13	0.007
150.00	-5.11	-0.15	0.00	-0.93	0.00	0.93	556.65	167.00	10296.1	213.69	2.02	-0.13	0.014
152.00	-2.76	-0.08	0.00	-0.63	0.00	0.63	556.65	167.00	10296.1	213.69	2.08	-0.13	0.008
154.00	-2.64	-0.08	0.00	-0.47	0.00	0.47	556.65	167.00	10296.1	213.69	2.13	-0.14	0.007
156.00	-2.53	-0.08	0.00	-0.32	0.00	0.32	556.65	167.00	10296.1	213.69	2.19	-0.14	0.006
158.00	-2.41	-0.08	0.00	-0.16	0.00	0.16	556.65	167.00	10296.1	213.69	2.25	-0.14	0.005
160.00	0.00	-0.07	0.00	0.00	0.00	0.00	556.65	167.00	10296.1	213.69	2.30	-0.14	0.000

Wind Loading - Shaft

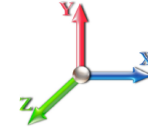
Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 78

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 26

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	RB1 RB2	1.00	0.70	5.361	5.90	215.71	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00	RT2 RB3 RB4	1.00	0.70	5.361	5.90	214.88	0.972 *	0.000	1.00	4.338	4.21	24.9	0.0	205.0
2.00		1.00	0.70	5.361	5.90	214.05	0.973 *	0.000	1.00	4.321	4.20	24.8	0.0	204.2
4.00		1.00	0.70	5.361	5.90	212.39	0.975 *	0.000	2.00	8.592	8.37	49.4	0.0	406.1
6.00		1.00	0.70	5.361	5.90	210.73	0.977 *	0.000	2.00	8.525	8.33	49.1	0.0	402.9
8.00		1.00	0.70	5.361	5.90	209.07	0.980 *	0.000	2.00	8.458	8.28	48.9	0.0	399.7
10.00		1.00	0.70	5.361	5.90	207.41	0.982 *	0.000	2.00	8.391	8.24	48.6	0.0	396.5
12.00		1.00	0.70	5.361	5.90	205.74	0.985 *	0.000	2.00	8.324	8.20	48.3	0.0	393.3
14.00		1.00	0.70	5.361	5.90	204.08	0.987 *	0.000	2.00	8.257	8.15	48.1	0.0	390.2
16.00	Bot - Section 2	1.00	0.70	5.361	5.90	202.42	0.990 *	0.000	2.00	8.190	8.11	47.8	0.0	387.0
16.25	RT1 RB5	1.00	0.70	5.361	5.90	202.21	0.991 *	0.000	0.25	1.035	1.03	6.1	0.0	97.1
18.00		1.00	0.70	5.361	5.90	200.76	0.993 *	0.000	1.75	7.217	7.16	42.2	0.0	676.7
18.63	RB6	1.00	0.70	5.361	5.90	200.24	0.994 *	0.000	0.63	2.586	2.57	15.2	0.0	242.4
18.88	RT3 RT4	1.00	0.70	5.361	5.90	200.03	0.995 *	0.000	0.25	1.024	1.02	6.0	0.0	96.0
20.00		1.00	0.70	5.361	5.90	199.10	0.996 *	0.000	1.12	4.576	4.56	26.9	0.0	428.9
22.00	Top - Section 1	1.00	0.70	5.361	5.90	197.44	0.998 *	0.000	2.00	8.118	8.10	47.8	0.0	761.0
24.00		1.00	0.70	5.361	5.90	198.99	0.995 *	0.000	2.00	8.052	8.01	47.3	0.0	380.4
26.00		1.00	0.70	5.361	5.90	197.33	0.998 *	0.000	2.00	7.985	7.97	47.0	0.0	377.2
28.00		1.00	0.70	5.361	5.90	195.66	1.001 *	0.000	2.00	7.918	7.93	46.7	0.0	374.0
30.00	RB7	1.00	0.70	5.365	5.90	194.08	1.079 *	0.000	2.00	7.851	8.47	50.0	0.0	370.8
31.00	RT5	1.00	0.71	5.416	5.96	194.16	1.082 *	0.000	1.00	3.900	4.22	25.1	0.0	184.2
32.00		1.00	0.71	5.465	6.01	194.20	1.084 *	0.000	1.00	3.883	4.21	25.3	0.0	183.4
33.38	RT6	1.00	0.72	5.532	6.08	194.21	0.950	0.000	1.38	5.332	5.07	30.8	0.0	251.8
34.00		1.00	0.73	5.561	6.12	194.20	0.950	0.000	0.62	2.385	2.27	13.9	0.0	112.6
36.00		1.00	0.74	5.652	6.22	194.09	0.950	0.000	2.00	7.650	7.27	45.2	0.0	361.3
38.00		1.00	0.75	5.740	6.31	193.87	0.950	0.000	2.00	7.583	7.20	45.5	0.0	358.1
40.00	Appurtenance(s)	1.00	0.76	5.825	6.41	193.57	0.950	0.000	2.00	7.516	7.14	45.8	0.0	354.9
42.00		1.00	0.77	5.907	6.50	193.18	0.950	0.000	2.00	7.449	7.08	46.0	0.0	351.7
44.00		1.00	0.78	5.986	6.58	192.71	0.950	0.000	2.00	7.382	7.01	46.2	0.0	348.5
45.16	RB8	1.00	0.79	6.030	6.63	192.40	0.950	0.000	1.16	4.251	4.04	26.8	0.0	200.7
46.00	RT7	1.00	0.79	6.062	6.67	192.17	0.950	0.000	0.84	3.064	2.91	19.4	0.0	144.6
48.00		1.00	0.80	6.136	6.75	191.56	0.950	0.000	2.00	7.248	6.89	46.5	0.0	342.1
50.00	Bot - Section 3	1.00	0.81	6.208	6.83	190.90	0.950	0.000	2.00	7.181	6.82	46.6	0.0	338.9
52.00		1.00	0.82	6.278	6.91	190.17	0.950	0.000	2.00	7.244	6.88	47.5	0.0	677.6
54.00		1.00	0.83	6.346	6.98	189.39	0.950	0.000	2.00	7.177	6.82	47.6	0.0	671.3
56.00	Top - Section 2	1.00	0.84	6.413	7.05	188.56	0.950	0.000	2.00	7.110	6.75	47.6	0.0	664.9
58.00	RT8 RB9	1.00	0.85	6.477	7.13	191.21	0.950	0.000	2.00	7.043	6.69	47.7	0.0	332.3
60.00		1.00	0.85	6.540	7.19	190.31	0.950	0.000	2.00	6.976	6.63	47.7	0.0	329.2
62.00		1.00	0.86	6.602	7.26	189.36	0.950	0.000	2.00	6.909	6.56	47.7	0.0	326.0
64.00		1.00	0.87	6.662	7.33	188.36	0.950	0.000	2.00	6.842	6.50	47.6	0.0	322.8
66.00		1.00	0.88	6.721	7.39	187.33	0.950	0.000	2.00	6.775	6.44	47.6	0.0	319.6
68.00		1.00	0.89	6.779	7.46	186.27	0.950	0.000	2.00	6.708	6.37	47.5	0.0	316.4
70.00		1.00	0.89	6.835	7.52	185.16	0.950	0.000	2.00	6.641	6.31	47.4	0.0	313.2
72.00		1.00	0.90	6.890	7.58	184.03	0.950	0.000	2.00	6.574	6.25	47.3	0.0	310.0
74.00		1.00	0.91	6.944	7.64	182.86	0.950	0.000	2.00	6.507	6.18	47.2	0.0	306.8
76.00		1.00	0.91	6.997	7.70	181.66	0.950	0.000	2.00	6.440	6.12	47.1	0.0	303.6
78.00	RT9 RB10	1.00	0.92	7.050	7.75	180.43	0.950	0.000	2.00	6.373	6.05	47.0	0.0	300.5

Wind Loading - Shaft

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



80.00 Top - Section 3	1.00	0.93	7.101	7.81	179.17	0.950	0.000	2.00	6.306	5.99	46.8	0.0	297.3
82.00	1.00	0.93	7.151	7.87	177.88	0.950	0.000	2.00	6.239	5.93	46.6	0.0	245.5
84.00	1.00	0.94	7.200	7.92	176.57	0.950	0.000	2.00	6.172	5.86	46.4	0.0	242.8
86.00	1.00	0.95	7.249	7.97	175.23	0.950	0.000	2.00	6.106	5.80	46.3	0.0	240.2
88.00	1.00	0.95	7.297	8.03	173.87	0.950	0.000	2.00	6.039	5.74	46.0	0.0	237.5
90.00	1.00	0.96	7.344	8.08	172.49	0.950	0.000	2.00	5.972	5.67	45.8	0.0	234.9
92.00	1.00	0.96	7.390	8.13	171.08	0.950	0.000	2.00	5.905	5.61	45.6	0.0	232.2
94.00	1.00	0.97	7.436	8.18	169.65	0.950	0.000	2.00	5.838	5.55	45.4	0.0	229.6
95.00 Bot - Section 5	1.00	0.97	7.458	8.20	168.92	0.950	0.000	1.00	2.894	2.75	22.6	0.0	113.8
95.58 RT10	1.00	0.98	7.471	8.22	168.50	0.950	0.000	0.58	1.702	1.62	13.3	0.0	132.6
96.00	1.00	0.98	7.480	8.23	168.19	0.950	0.000	0.42	1.229	1.17	9.6	0.0	95.8
98.00	1.00	0.98	7.525	8.28	166.72	0.950	0.000	2.00	5.812	5.52	45.7	0.0	452.8
100.00 Top - Section 4	1.00	0.99	7.568	8.32	165.23	0.950	0.000	2.00	5.745	5.46	45.4	0.0	447.4
102.00	1.00	0.99	7.611	8.37	166.91	0.950	0.000	2.00	5.678	5.39	45.2	0.0	223.2
104.00	1.00	1.00	7.653	8.42	165.39	0.950	0.000	2.00	5.611	5.33	44.9	0.0	220.5
106.00	1.00	1.00	7.695	8.46	163.85	0.950	0.000	2.00	5.544	5.27	44.6	0.0	217.9
108.00	1.00	1.01	7.736	8.51	162.29	0.950	0.000	2.00	5.477	5.20	44.3	0.0	215.2
110.00 Appurtenance(s)	1.00	1.02	7.777	8.55	160.71	0.950	0.000	2.00	5.410	5.14	44.0	0.0	212.6
112.00	1.00	1.02	7.817	8.60	159.12	0.950	0.000	2.00	5.343	5.08	43.6	0.0	209.9
114.00	1.00	1.03	7.857	8.64	157.51	0.950	0.000	2.00	5.276	5.01	43.3	0.0	207.3
115.00 Top - Section 5	1.00	1.03	7.876	8.66	156.70	0.950	0.000	1.00	2.613	2.48	21.5	0.0	102.6
116.00	1.00	1.03	7.896	8.69	155.89	0.950	0.000	1.00	2.596	2.47	21.4	0.0	81.7
118.00	1.00	1.04	7.935	8.73	154.25	0.950	0.000	2.00	5.142	4.89	42.6	0.0	161.9
120.00	1.00	1.04	7.973	8.77	152.59	0.950	0.000	2.00	5.075	4.82	42.3	0.0	159.8
122.00	1.00	1.05	8.011	8.81	150.92	0.950	0.000	2.00	5.008	4.76	41.9	0.0	157.6
124.00	1.00	1.05	8.048	8.85	149.24	0.950	0.000	2.00	4.941	4.69	41.6	0.0	155.5
126.00	1.00	1.06	8.085	8.89	147.54	0.950	0.000	2.00	4.874	4.63	41.2	0.0	153.4
128.00	1.00	1.06	8.121	8.93	145.83	0.950	0.000	2.00	4.807	4.57	40.8	0.0	151.3
130.00	1.00	1.07	8.157	8.97	144.10	0.950	0.000	2.00	4.741	4.50	40.4	0.0	149.1
131.75 Appurtenance(s)	1.00	1.07	8.189	9.01	142.58	0.950	0.000	1.75	4.093	3.89	35.0	0.0	128.8
132.00	1.00	1.07	8.193	9.01	142.36	0.950	0.000	0.25	0.581	0.55	5.0	0.0	18.3
133.00 Appurtenance(s)	1.00	1.07	8.211	9.03	141.49	0.950	0.000	1.00	2.312	2.20	19.8	0.0	72.7
134.00	1.00	1.07	8.228	9.05	140.61	0.950	0.000	1.00	2.295	2.18	19.7	0.0	72.2
134.75 Appurtenance(s)	1.00	1.08	8.241	9.07	139.95	0.950	0.000	0.75	1.710	1.62	14.7	0.0	53.8
136.00	1.00	1.08	8.263	9.09	138.84	0.950	0.000	1.25	2.829	2.69	24.4	0.0	89.0
138.00	1.00	1.08	8.298	9.13	137.07	0.950	0.000	2.00	4.473	4.25	38.8	0.0	140.6
140.00	1.00	1.09	8.332	9.17	135.28	0.950	0.000	2.00	4.406	4.19	38.4	0.0	138.5
142.00 Appurtenance(s)	1.00	1.09	8.366	9.20	133.48	0.950	0.000	2.00	4.339	4.12	37.9	0.0	136.4
144.00	1.00	1.10	8.399	9.24	131.66	0.950	0.000	2.00	4.272	4.06	37.5	0.0	134.3
145.00 Top - Section 6	1.00	1.10	8.416	9.26	130.75	0.950	0.000	1.00	2.111	2.01	18.6	0.0	66.3
146.00	1.00	1.10	8.432	9.28	125.44	0.600	0.000	1.00	2.023	1.21	11.3	0.0	64.2
148.00	1.00	1.11	8.465	9.31	123.67	0.600	0.000	2.00	3.998	2.40	22.3	0.0	126.9
150.00 Top - Section 7	1.00	1.11	8.498	9.35	121.88	0.600	0.000	2.00	3.933	2.36	22.1	0.0	124.8
152.00 Appurtenance(s)	1.00	1.11	8.530	9.38	83.48	0.645*	0.000	2.00	2.667	1.72	16.1	0.0	84.2
154.00	1.00	1.12	8.562	9.42	83.64	0.645*	0.000	2.00	2.667	1.72	16.2	0.0	84.2
156.00	1.00	1.12	8.593	9.45	83.79	0.645*	0.000	2.00	2.667	1.72	16.3	0.0	84.2
158.00	1.00	1.13	8.625	9.49	83.94	0.645*	0.000	2.00	2.667	1.72	16.3	0.0	84.2
160.00 Appurtenance(s)	1.00	1.13	8.656	9.52	84.09	0.645*	0.000	2.00	2.667	1.72	16.4	0.0	84.2

* Cf Adjusted by Linear Load Ra Effect

Totals:	160.00	3,428.3	23,786.1
----------------	---------------	----------------	-----------------

Discrete Appurtenance Forces

Structure: CT02049-S-SBA
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Topography: 1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

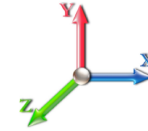
7/28/2022



Page: 80

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 26

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	160.00	B5/B13 RRH-BR04C	3	8.687	9.555	0.60	0.90	3.38	253.20	0.000	2.000	32.32	0.00	64.65
2	160.00	JAHH-65B-R3B	6	8.687	9.555	0.75	0.90	40.83	324.00	0.000	2.000	390.15	0.00	780.31
3	160.00	VZS01	3	8.687	9.555	0.62	0.90	8.01	261.30	0.000	2.000	76.55	0.00	153.09
4	160.00	CBC78T-DS-43	1	8.687	9.555	1.00	1.00	0.37	20.70	0.000	2.000	3.54	0.00	7.07
5	160.00	B2/B66A RRH-BR049	3	8.687	9.555	0.60	0.90	3.38	210.00	0.000	2.000	32.32	0.00	64.65
6	160.00	Low Profile Platform	1	8.687	9.555	1.00	1.00	22.00	1200.00	0.000	2.000	210.22	0.00	420.43
7	160.00	Commscope	1	8.687	9.555	1.00	1.00	2.51	15.00	0.000	2.000	23.98	0.00	47.97
8	160.00	6' Lightning rod	1	8.702	9.572	1.00	1.00	0.38	6.50	0.000	3.000	3.64	0.00	10.91
9	160.00	DB222	1	8.732	9.606	1.00	1.00	2.25	16.00	0.000	5.000	21.61	0.00	108.06
10	160.00	DB846F65ZAXY	6	8.687	9.555	0.84	0.90	35.41	126.00	0.000	2.000	338.31	0.00	676.61
11	152.00	MC-PK8-DSH	1	8.530	9.383	1.00	1.00	37.59	1727.00	0.000	0.000	352.70	0.00	0.00
12	152.00	MX08FRO665-21	3	8.530	9.383	0.55	0.75	20.80	193.50	0.000	0.000	195.13	0.00	0.00
13	152.00	TA08025-B605	3	8.530	9.383	0.50	0.75	2.95	225.00	0.000	0.000	27.72	0.00	0.00
14	152.00	TA08025-B604	3	8.530	9.383	0.50	0.75	2.95	191.70	0.000	0.000	27.72	0.00	0.00
15	152.00	RDIDC-9181-OF-48	1	8.530	9.383	0.75	0.75	1.51	21.90	0.000	0.000	14.14	0.00	0.00
16	142.00	4449 B71 + B85	4	8.366	9.202	0.54	0.80	4.22	292.80	0.000	0.000	38.87	0.00	0.00
17	142.00	KRY 112 144/1	3	8.366	9.202	0.38	0.75	0.46	33.00	0.000	0.000	4.24	0.00	0.00
18	142.00	APXVA18-43-C-A20	1	8.366	9.202	0.61	0.75	5.93	45.40	0.000	0.000	54.61	0.00	0.00
19	142.00	APXVAARR24_43-U-NA2	3	8.366	9.202	0.52	0.75	31.88	384.00	0.000	0.000	293.35	0.00	0.00
20	142.00	KRD 9011461-B66A-B2A	4	8.366	9.202	0.65	0.75	16.99	528.80	0.000	0.000	156.36	0.00	0.00
21	142.00	Mod	1	8.366	9.202	1.00	1.00	12.00	300.00	0.000	0.000	110.43	0.00	0.00
22	142.00	Platform w/ HR & Bracing	1	8.366	9.202	1.00	1.00	52.00	2246.00	0.000	0.000	478.52	0.00	0.00
23	142.00	Ericsson 4460 B25 + B66	4	8.366	9.202	0.50	0.75	5.73	436.00	0.000	0.000	52.72	0.00	0.00
24	142.00	Ericsson Air 6419 B41	4	8.366	9.202	0.57	0.75	8.66	264.40	0.000	0.000	79.73	0.00	0.00
25	134.75	AIR 6419 B77G	3	8.241	9.065	0.61	0.80	6.93	198.30	0.000	0.000	62.83	0.00	0.00
26	133.00	DMP65R-BU6EA-K	2	8.211	9.032	0.57	0.80	19.45	202.00	0.000	0.000	175.65	0.00	0.00
27	133.00	DMP65R-BU8EA-K	1	8.211	9.032	0.58	0.80	10.44	95.70	0.000	0.000	94.26	0.00	0.00
28	133.00	4478 B14	3	8.211	9.032	0.54	0.80	2.96	179.70	0.000	0.000	26.72	0.00	0.00
29	133.00	DC9-48-60-24-8C-EV	1	8.211	9.032	0.80	0.80	0.91	26.20	0.000	0.000	8.24	0.00	0.00
30	133.00	Kathrein 800-10965	3	8.211	9.032	0.57	0.80	23.53	325.80	0.000	0.000	212.54	0.00	0.00
31	133.00	(3) SitePro 1 P/N	2	8.211	9.032	0.56	0.75	24.01	2715.54	0.000	0.000	216.83	0.00	0.00
32	133.00	Powerwave LGP21401	6	8.211	9.032	0.54	0.80	4.15	84.60	0.000	0.000	37.47	0.00	0.00
33	133.00	Ericsson RRUS-32 RRU	3	8.211	9.032	0.54	0.80	6.22	231.00	0.000	0.000	56.20	0.00	0.00
34	133.00	Ericsson B2/B66A 8843	3	8.211	9.032	0.54	0.80	2.64	216.00	0.000	0.000	23.82	0.00	0.00
35	133.00	Ericsson B5/B12 4449	3	8.211	9.032	0.54	0.80	3.17	213.00	0.000	0.000	28.61	0.00	0.00
36	133.00	Raycap DC6-48-60-18-8F	2	8.211	9.032	0.54	0.80	0.99	63.60	0.000	0.000	8.91	0.00	0.00
37	131.75	AIR 6449 B77D	3	8.189	9.007	0.68	0.80	8.43	264.00	0.000	0.000	75.89	0.00	0.00
38	110.00	3 ft Standoff	1	7.777	8.555	1.00	1.00	2.63	40.00	0.000	0.000	22.50	0.00	0.00
39	110.00	DB222	1	7.882	8.670	1.00	1.00	2.65	16.00	0.000	5.292	22.98	0.00	121.59
40	40.00	GPS	1	5.825	6.407	1.00	1.00	1.00	10.00	0.000	0.000	6.41	0.00	0.00

Totals: 14,203.64

4,098.72

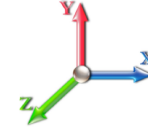
Total Applied Force Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 81



Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 26

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
1.00		24.85	554.82	0.00	0.00
2.00		24.79	554.03	0.00	0.00
4.00		49.38	1105.66	0.00	0.00
6.00		49.11	1102.47	0.00	0.00
8.00		48.85	1099.28	0.00	0.00
10.00		48.59	1096.10	0.00	0.00
12.00		48.33	1092.91	0.00	0.00
14.00		48.06	1089.72	0.00	0.00
16.00		47.80	1086.53	0.00	0.00
16.25		6.05	184.51	0.00	0.00
18.00		42.25	1288.78	0.00	0.00
18.63		15.16	462.77	0.00	0.00
18.88		6.01	183.46	0.00	0.00
20.00		26.87	820.68	0.00	0.00
22.00		47.78	1460.53	0.00	0.00
24.00		47.26	1079.94	0.00	0.00
26.00		47.00	1076.75	0.00	0.00
28.00		46.73	1073.56	0.00	0.00
30.00		50.02	1370.37	0.00	0.00
31.00		25.14	683.99	0.00	0.00
32.00		25.31	683.19	0.00	0.00
33.38		30.82	527.50	0.00	0.00
34.00		13.86	236.50	0.00	0.00
36.00		45.18	760.81	0.00	0.00
38.00		45.49	757.62	0.00	0.00
40.00	(1) attachments	52.16	764.43	0.00	0.00
42.00		45.98	750.92	0.00	0.00
44.00		46.18	747.73	0.00	0.00
45.16		26.79	432.23	0.00	0.00
46.00		19.41	312.32	0.00	0.00
48.00		46.48	741.36	0.00	0.00
50.00		46.59	738.17	0.00	0.00
52.00		47.53	1076.89	0.00	0.00
54.00		47.60	1070.51	0.00	0.00
56.00		47.64	1064.13	0.00	0.00
58.00		47.67	731.58	0.00	0.00
60.00		47.68	728.39	0.00	0.00
62.00		47.67	725.20	0.00	0.00
64.00		47.63	722.01	0.00	0.00
66.00		47.58	718.82	0.00	0.00
68.00		47.52	715.64	0.00	0.00
70.00		47.43	712.45	0.00	0.00
72.00		47.34	709.26	0.00	0.00
74.00		47.22	706.07	0.00	0.00
76.00		47.09	702.88	0.00	0.00
78.00		46.95	699.69	0.00	0.00

Total Applied Force Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 82

80.00		46.79	696.51	0.00	0.00
82.00		46.63	644.73	0.00	0.00
84.00		46.44	642.07	0.00	0.00
86.00		46.25	639.42	0.00	0.00
88.00		46.04	636.76	0.00	0.00
90.00		45.83	634.10	0.00	0.00
92.00		45.60	631.45	0.00	0.00
94.00		45.36	628.79	0.00	0.00
95.00		22.55	313.40	0.00	0.00
95.58		13.29	248.40	0.00	0.00
96.00		9.61	179.59	0.00	0.00
98.00		45.70	851.99	0.00	0.00
100.00		45.43	546.68	0.00	0.00
102.00		45.16	322.44	0.00	0.00
104.00		44.87	319.78	0.00	0.00
106.00		44.58	317.13	0.00	0.00
108.00		44.28	314.47	0.00	0.00
110.00	(2) attachments	89.44	367.81	0.00	121.59
112.00		43.65	308.12	0.00	0.00
114.00		43.32	305.46	0.00	0.00
115.00		21.51	151.73	0.00	0.00
116.00		21.42	130.85	0.00	0.00
118.00		42.64	260.10	0.00	0.00
120.00		42.29	257.97	0.00	0.00
122.00		41.92	255.85	0.00	0.00
124.00		41.56	253.72	0.00	0.00
126.00		41.18	251.60	0.00	0.00
128.00		40.80	249.47	0.00	0.00
130.00		40.41	247.34	0.00	0.00
131.75	(3) attachments	110.91	478.68	0.00	0.00
132.00		4.97	30.54	0.00	0.00
133.00	(29) attachments	909.07	4474.95	0.00	0.00
134.00		19.73	107.96	0.00	0.00
134.75	(3) attachments	77.56	278.92	0.00	0.00
136.00		24.43	133.71	0.00	0.00
138.00		38.78	212.20	0.00	0.00
140.00		38.36	210.08	0.00	0.00
142.00	(25) attachments	1306.75	4738.35	0.00	0.00
144.00		37.50	179.05	0.00	0.00
145.00		18.56	88.73	0.00	0.00
146.00		11.26	86.61	0.00	0.00
148.00		22.34	171.66	0.00	0.00
150.00		22.06	169.58	0.00	0.00
152.00	(11) attachments	633.56	2488.07	0.00	0.00
154.00		16.20	124.98	0.00	0.00
156.00		16.26	124.98	0.00	0.00
158.00		16.32	124.98	0.00	0.00
160.00	(26) attachments	1149.02	2557.68	0.00	2333.75
Totals:		7,527.01	65,392.62	0.00	2,455.34

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



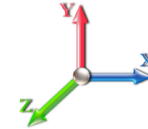
Page: 83

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00

Wind Load Factor 1.00



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)
1.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.108	1.023	5.361	0.00	2.20
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	5.361	0.00	0.52
1.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	5.361	0.00	1.99
1.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	5.361	0.00	2.20
1.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	5.361	0.00	1.91
1.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.023	5.361	0.00	0.52
1.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.108	1.023	5.361	0.00	120.00
1.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.108	1.023	5.361	0.00	180.00
2.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.108	1.024	5.361	0.00	2.20
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	5.361	0.00	0.52
2.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	5.361	0.00	1.99
2.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	5.361	0.00	2.20
2.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	5.361	0.00	1.91
2.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.108	1.024	5.361	0.00	0.52
2.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.108	1.024	5.361	0.00	120.00
2.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.108	1.024	5.361	0.00	180.00
4.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.026	5.361	0.00	4.40
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	5.361	0.00	1.04
4.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	5.361	0.00	3.98
4.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	5.361	0.00	4.40
4.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	5.361	0.00	3.82
4.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.026	5.361	0.00	1.04
4.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.109	1.026	5.361	0.00	240.00
4.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.109	1.026	5.361	0.00	360.00
6.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.028	5.361	0.00	4.40
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	5.361	0.00	1.04
6.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	5.361	0.00	3.98
6.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	5.361	0.00	4.40
6.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	5.361	0.00	3.82
6.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	5.361	0.00	1.04
6.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.109	1.028	5.361	0.00	240.00
6.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.109	1.028	5.361	0.00	360.00
8.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.110	1.031	5.361	0.00	4.40
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	5.361	0.00	1.04
8.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	5.361	0.00	3.98
8.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	5.361	0.00	4.40
8.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	5.361	0.00	3.82
8.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.110	1.031	5.361	0.00	1.04
8.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.110	1.031	5.361	0.00	240.00
8.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.110	1.031	5.361	0.00	360.00
10.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.111	1.034	5.361	0.00	4.40
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	5.361	0.00	1.04
10.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	5.361	0.00	3.98
10.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	5.361	0.00	4.40
10.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	5.361	0.00	3.82
10.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.111	1.034	5.361	0.00	1.04
10.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.111	1.034	5.361	0.00	240.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

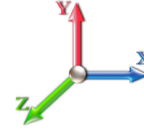


Page: 84

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00
Wind Load Factor 1.00



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)
10.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.111	1.034	5.361	0.00	360.00
12.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.112	1.036	5.361	0.00	4.40
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	5.361	0.00	1.04
12.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	5.361	0.00	3.98
12.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	5.361	0.00	4.40
12.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	5.361	0.00	3.82
12.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.112	1.036	5.361	0.00	1.04
12.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.112	1.036	5.361	0.00	240.00
12.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.112	1.036	5.361	0.00	360.00
14.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.113	1.039	5.361	0.00	4.40
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	5.361	0.00	1.04
14.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	5.361	0.00	3.98
14.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	5.361	0.00	4.40
14.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	5.361	0.00	3.82
14.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.113	1.039	5.361	0.00	1.04
14.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.113	1.039	5.361	0.00	240.00
14.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.113	1.039	5.361	0.00	360.00
16.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.114	1.042	5.361	0.00	4.40
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	5.361	0.00	1.04
16.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	5.361	0.00	3.98
16.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	5.361	0.00	4.40
16.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	5.361	0.00	3.82
16.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.114	1.042	5.361	0.00	1.04
16.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.114	1.042	5.361	0.00	240.00
16.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.114	1.042	5.361	0.00	360.00
16.25	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.114	1.043	5.361	0.00	0.55
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	5.361	0.00	0.13
16.25	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	5.361	0.00	0.50
16.25	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	5.361	0.00	0.55
16.25	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	5.361	0.00	0.48
16.25	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.114	1.043	5.361	0.00	0.13
16.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.114	1.043	5.361	0.00	30.00
16.25	C10x15.3	Yes	0.25	0.000	2.60	0.05	0.00	0.114	1.043	5.361	0.00	45.00
18.00	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.115	1.045	5.361	0.00	3.85
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	5.361	0.00	0.91
18.00	1.75" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	5.361	0.00	3.48
18.00	1 5/8" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	5.361	0.00	3.85
18.00	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	5.361	0.00	3.34
18.00	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.115	1.045	5.361	0.00	0.91
18.00	1" Reinforcing plate	Yes	1.75	0.000	1.00	0.15	0.00	0.115	1.045	5.361	0.00	210.00
18.00	C10x15.3	Yes	1.75	0.000	2.60	0.38	0.00	0.115	1.045	5.361	0.00	315.00
18.63	1 5/8" Hybrid	Yes	0.63	0.000	2.00	0.10	0.00	0.116	1.047	5.361	0.00	1.39
18.63	7/8" Coax	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	0.33
18.63	1.75" Hybrid	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	1.25
18.63	1 5/8" Fiber	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	1.39
18.63	1-1/4" Fiber	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	1.20
18.63	7/8" Coax	Yes	0.63	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	0.33

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



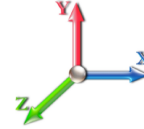
Page: 85

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00

Wind Load Factor 1.00



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)
18.63	1" Reinforcing plate	Yes	0.63	0.000	1.00	0.05	0.00	0.116	1.047	5.361	0.00	75.60
18.63	C10x15.3	Yes	0.63	0.000	2.60	0.14	0.00	0.116	1.047	5.361	0.00	113.40
18.88	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.116	1.047	5.361	0.00	0.55
18.88	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	0.13
18.88	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	0.50
18.88	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	0.55
18.88	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	0.48
18.88	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.116	1.047	5.361	0.00	0.13
18.88	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.116	1.047	5.361	0.00	30.00
18.88	C10x15.3	Yes	0.25	0.000	2.60	0.05	0.00	0.116	1.047	5.361	0.00	45.00
20.00	1 5/8" Hybrid	Yes	1.12	0.000	2.00	0.19	0.00	0.116	1.048	5.361	0.00	2.46
20.00	7/8" Coax	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	0.58
20.00	1.75" Hybrid	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	2.23
20.00	1 5/8" Fiber	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	2.46
20.00	1-1/4" Fiber	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	2.14
20.00	7/8" Coax	Yes	1.12	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	0.58
20.00	1" Reinforcing plate	Yes	1.12	0.000	1.00	0.09	0.00	0.116	1.048	5.361	0.00	134.40
20.00	C10x15.3	Yes	1.12	0.000	2.60	0.24	0.00	0.116	1.048	5.361	0.00	201.60
22.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.050	5.361	0.00	4.40
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	5.361	0.00	1.04
22.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	5.361	0.00	3.98
22.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	5.361	0.00	4.40
22.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	5.361	0.00	3.82
22.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.050	5.361	0.00	1.04
22.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.117	1.050	5.361	0.00	240.00
22.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.117	1.050	5.361	0.00	360.00
24.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.116	1.048	5.361	0.00	4.40
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	1.04
24.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	3.98
24.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	4.40
24.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	3.82
24.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.116	1.048	5.361	0.00	1.04
24.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.116	1.048	5.361	0.00	240.00
24.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.116	1.048	5.361	0.00	360.00
26.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.117	1.051	5.361	0.00	4.40
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	5.361	0.00	1.04
26.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	5.361	0.00	3.98
26.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	5.361	0.00	4.40
26.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	5.361	0.00	3.82
26.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.117	1.051	5.361	0.00	1.04
26.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.117	1.051	5.361	0.00	240.00
26.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.117	1.051	5.361	0.00	360.00
28.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.054	5.361	0.00	4.40
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	5.361	0.00	1.04
28.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	5.361	0.00	3.98
28.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	5.361	0.00	4.40
28.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	5.361	0.00	3.82

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



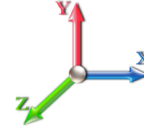
Page: 86

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00

Wind Load Factor 1.00



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)
28.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	5.361	0.00	1.04
28.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.118	1.054	5.361	0.00	240.00
28.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.118	1.054	5.361	0.00	360.00
30.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.145	1.136	5.365	0.00	4.40
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	5.365	0.00	1.04
30.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	5.365	0.00	3.98
30.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	5.365	0.00	4.40
30.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	5.365	0.00	3.82
30.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.145	1.136	5.365	0.00	1.04
30.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.145	1.136	5.365	0.00	300.00
30.00	1" Reinforcing plate	Yes	2.00	0.000	1.00	0.17	0.00	0.145	1.136	5.365	0.00	240.00
30.00	C10x15.3	Yes	2.00	0.000	2.60	0.43	0.00	0.145	1.136	5.365	0.00	360.00
31.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.146	1.139	5.416	0.00	2.20
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	5.416	0.00	0.52
31.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	5.416	0.00	1.99
31.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	5.416	0.00	2.20
31.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	5.416	0.00	1.91
31.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.146	1.139	5.416	0.00	0.52
31.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.146	1.139	5.416	0.00	150.00
31.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.146	1.139	5.416	0.00	120.00
31.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.146	1.139	5.416	0.00	180.00
32.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.147	1.141	5.465	0.00	2.20
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	5.465	0.00	0.52
32.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	5.465	0.00	1.99
32.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	5.465	0.00	2.20
32.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	5.465	0.00	1.91
32.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.147	1.141	5.465	0.00	0.52
32.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.147	1.141	5.465	0.00	150.00
32.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.147	1.141	5.465	0.00	120.00
32.00	C10x15.3	Yes	1.00	0.000	2.60	0.22	0.00	0.147	1.141	5.465	0.00	180.00
33.38	1 5/8" Hybrid	Yes	1.38	0.000	2.00	0.23	0.00	0.070	0.000	5.532	0.00	3.04
33.38	7/8" Coax	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	5.532	0.00	0.72
33.38	1.75" Hybrid	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	5.532	0.00	2.75
33.38	1 5/8" Fiber	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	5.532	0.00	3.04
33.38	1-1/4" Fiber	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	5.532	0.00	2.63
33.38	7/8" Coax	Yes	1.38	0.000	0.00	0.00	0.00	0.070	0.000	5.532	0.00	0.72
33.38	1.25" Reinforcing	Yes	1.38	0.000	1.25	0.14	0.00	0.070	0.000	5.532	0.00	207.00
34.00	1 5/8" Hybrid	Yes	0.62	0.000	2.00	0.10	0.00	0.070	0.000	5.561	0.00	1.36
34.00	7/8" Coax	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	5.561	0.00	0.32
34.00	1.75" Hybrid	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	5.561	0.00	1.23
34.00	1 5/8" Fiber	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	5.561	0.00	1.36
34.00	1-1/4" Fiber	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	5.561	0.00	1.18
34.00	7/8" Coax	Yes	0.62	0.000	0.00	0.00	0.00	0.070	0.000	5.561	0.00	0.32
34.00	1.25" Reinforcing	Yes	0.62	0.000	1.25	0.06	0.00	0.070	0.000	5.561	0.00	93.00
36.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	5.652	0.00	4.40
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.652	0.00	1.04
36.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.652	0.00	3.98

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

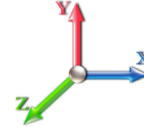


Page: 87

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00
Wind Load Factor 1.00



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)
36.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.652	0.00	4.40
36.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.652	0.00	3.82
36.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.652	0.00	1.04
36.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.071	0.000	5.652	0.00	300.00
38.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	5.740	0.00	4.40
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.740	0.00	1.04
38.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.740	0.00	3.98
38.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.740	0.00	4.40
38.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.740	0.00	3.82
38.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.740	0.00	1.04
38.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.071	0.000	5.740	0.00	300.00
40.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	5.825	0.00	4.40
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.825	0.00	1.04
40.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.825	0.00	3.98
40.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.825	0.00	4.40
40.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.825	0.00	3.82
40.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.825	0.00	1.04
40.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.072	0.000	5.825	0.00	300.00
42.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	5.907	0.00	4.40
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.907	0.00	1.04
42.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.907	0.00	3.98
42.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.907	0.00	4.40
42.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.907	0.00	3.82
42.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.907	0.00	1.04
42.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.073	0.000	5.907	0.00	300.00
44.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	5.986	0.00	4.40
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.986	0.00	1.04
44.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.986	0.00	3.98
44.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.986	0.00	4.40
44.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.986	0.00	3.82
44.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.986	0.00	1.04
44.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.073	0.000	5.986	0.00	300.00
45.16	1 5/8" Hybrid	Yes	1.16	0.000	2.00	0.19	0.00	0.074	0.000	6.030	0.00	2.55
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	6.030	0.00	0.60
45.16	1.75" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	6.030	0.00	2.31
45.16	1 5/8" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	6.030	0.00	2.55
45.16	1-1/4" Fiber	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	6.030	0.00	2.21
45.16	7/8" Coax	Yes	1.16	0.000	0.00	0.00	0.00	0.074	0.000	6.030	0.00	0.60
45.16	1.25" Reinforcing	Yes	1.16	0.000	1.25	0.12	0.00	0.074	0.000	6.030	0.00	174.00
46.00	1 5/8" Hybrid	Yes	0.84	0.000	2.00	0.14	0.00	0.074	0.000	6.062	0.00	1.85
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	6.062	0.00	0.44
46.00	1.75" Hybrid	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	6.062	0.00	1.67
46.00	1 5/8" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	6.062	0.00	1.85
46.00	1-1/4" Fiber	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	6.062	0.00	1.60
46.00	7/8" Coax	Yes	0.84	0.000	0.00	0.00	0.00	0.074	0.000	6.062	0.00	0.44
46.00	1.25" Reinforcing	Yes	0.84	0.000	1.25	0.09	0.00	0.074	0.000	6.062	0.00	126.00
48.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	6.136	0.00	4.40

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

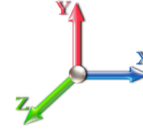


Page: 88

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00
Wind Load Factor 1.00



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)
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.136	0.00	1.04
48.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.136	0.00	3.98
48.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.136	0.00	4.40
48.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.136	0.00	3.82
48.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.136	0.00	1.04
48.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.075	0.000	6.136	0.00	300.00
50.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	6.208	0.00	4.40
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.208	0.00	1.04
50.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.208	0.00	3.98
50.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.208	0.00	4.40
50.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.208	0.00	3.82
50.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.208	0.00	1.04
50.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.075	0.000	6.208	0.00	300.00
52.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	6.278	0.00	4.40
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.278	0.00	1.04
52.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.278	0.00	3.98
52.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.278	0.00	4.40
52.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.278	0.00	3.82
52.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.278	0.00	1.04
52.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.076	0.000	6.278	0.00	300.00
54.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	6.346	0.00	4.40
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.346	0.00	1.04
54.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.346	0.00	3.98
54.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.346	0.00	4.40
54.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.346	0.00	3.82
54.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.346	0.00	1.04
54.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.077	0.000	6.346	0.00	300.00
56.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	6.413	0.00	4.40
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.413	0.00	1.04
56.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.413	0.00	3.98
56.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.413	0.00	4.40
56.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.413	0.00	3.82
56.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.413	0.00	1.04
56.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.078	0.000	6.413	0.00	300.00
58.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	6.477	0.00	4.40
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.477	0.00	1.04
58.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.477	0.00	3.98
58.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.477	0.00	4.40
58.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.477	0.00	3.82
58.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.477	0.00	1.04
58.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.077	0.000	6.477	0.00	300.00
60.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	6.540	0.00	4.40
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.540	0.00	1.04
60.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.540	0.00	3.98
60.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.540	0.00	4.40
60.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.540	0.00	3.82
60.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.540	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

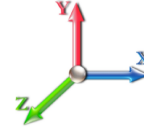
Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00
Wind Load Factor 1.00



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)
60.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.078	0.000	6.540	0.00	300.00
62.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	6.602	0.00	4.40
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.602	0.00	1.04
62.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.602	0.00	3.98
62.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.602	0.00	4.40
62.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.602	0.00	3.82
62.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.602	0.00	1.04
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.078	0.000	6.602	0.00	300.00
64.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	6.662	0.00	4.40
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	6.662	0.00	1.04
64.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	6.662	0.00	3.98
64.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	6.662	0.00	4.40
64.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	6.662	0.00	3.82
64.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	6.662	0.00	1.04
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.079	0.000	6.662	0.00	300.00
66.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.080	0.000	6.721	0.00	4.40
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	6.721	0.00	1.04
66.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	6.721	0.00	3.98
66.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	6.721	0.00	4.40
66.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	6.721	0.00	3.82
66.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	6.721	0.00	1.04
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.080	0.000	6.721	0.00	300.00
68.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	6.779	0.00	4.40
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	6.779	0.00	1.04
68.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	6.779	0.00	3.98
68.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	6.779	0.00	4.40
68.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	6.779	0.00	3.82
68.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	6.779	0.00	1.04
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.081	0.000	6.779	0.00	300.00
70.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.082	0.000	6.835	0.00	4.40
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.835	0.00	1.04
70.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.835	0.00	3.98
70.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.835	0.00	4.40
70.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.835	0.00	3.82
70.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.835	0.00	1.04
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.082	0.000	6.835	0.00	300.00
72.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.082	0.000	6.890	0.00	4.40
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.890	0.00	1.04
72.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.890	0.00	3.98
72.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.890	0.00	4.40
72.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.890	0.00	3.82
72.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	6.890	0.00	1.04
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.082	0.000	6.890	0.00	300.00
74.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	6.944	0.00	4.40
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.944	0.00	1.04
74.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.944	0.00	3.98
74.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.944	0.00	4.40

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

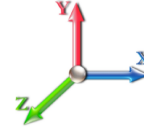


Page: 90

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00
Wind Load Factor 1.00



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)
74.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.944	0.00	3.82
74.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.944	0.00	1.04
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.083	0.000	6.944	0.00	300.00
76.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.084	0.000	6.997	0.00	4.40
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	6.997	0.00	1.04
76.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	6.997	0.00	3.98
76.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	6.997	0.00	4.40
76.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	6.997	0.00	3.82
76.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	6.997	0.00	1.04
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.084	0.000	6.997	0.00	300.00
78.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	7.050	0.00	4.40
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	7.050	0.00	1.04
78.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	7.050	0.00	3.98
78.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	7.050	0.00	4.40
78.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	7.050	0.00	3.82
78.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	7.050	0.00	1.04
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.085	0.000	7.050	0.00	300.00
80.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.086	0.000	7.101	0.00	4.40
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	7.101	0.00	1.04
80.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	7.101	0.00	3.98
80.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	7.101	0.00	4.40
80.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	7.101	0.00	3.82
80.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	7.101	0.00	1.04
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.086	0.000	7.101	0.00	300.00
82.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.087	0.000	7.151	0.00	4.40
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	7.151	0.00	1.04
82.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	7.151	0.00	3.98
82.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	7.151	0.00	4.40
82.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	7.151	0.00	3.82
82.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.087	0.000	7.151	0.00	1.04
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.087	0.000	7.151	0.00	300.00
84.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.088	0.000	7.200	0.00	4.40
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	7.200	0.00	1.04
84.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	7.200	0.00	3.98
84.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	7.200	0.00	4.40
84.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	7.200	0.00	3.82
84.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	7.200	0.00	1.04
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.088	0.000	7.200	0.00	300.00
86.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.089	0.000	7.249	0.00	4.40
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	7.249	0.00	1.04
86.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	7.249	0.00	3.98
86.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	7.249	0.00	4.40
86.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	7.249	0.00	3.82
86.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	7.249	0.00	1.04
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.089	0.000	7.249	0.00	300.00
88.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.090	0.000	7.297	0.00	4.40
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	7.297	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

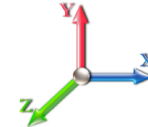
Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 91

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 26

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)
88.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	7.297	0.00	3.98
88.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	7.297	0.00	4.40
88.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	7.297	0.00	3.82
88.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	7.297	0.00	1.04
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.090	0.000	7.297	0.00	300.00
90.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.091	0.000	7.344	0.00	4.40
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	7.344	0.00	1.04
90.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	7.344	0.00	3.98
90.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	7.344	0.00	4.40
90.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	7.344	0.00	3.82
90.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	7.344	0.00	1.04
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.091	0.000	7.344	0.00	300.00
92.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.092	0.000	7.390	0.00	4.40
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	7.390	0.00	1.04
92.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	7.390	0.00	3.98
92.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	7.390	0.00	4.40
92.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	7.390	0.00	3.82
92.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	7.390	0.00	1.04
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.092	0.000	7.390	0.00	300.00
94.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.093	0.000	7.436	0.00	4.40
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	7.436	0.00	1.04
94.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	7.436	0.00	3.98
94.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	7.436	0.00	4.40
94.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	7.436	0.00	3.82
94.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.093	0.000	7.436	0.00	1.04
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.093	0.000	7.436	0.00	300.00
95.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.094	0.000	7.458	0.00	2.20
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	7.458	0.00	0.52
95.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	7.458	0.00	1.99
95.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	7.458	0.00	2.20
95.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	7.458	0.00	1.91
95.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	7.458	0.00	0.52
95.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.094	0.000	7.458	0.00	150.00
95.58	1 5/8" Hybrid	Yes	0.58	0.000	2.00	0.10	0.00	0.094	0.000	7.471	0.00	1.28
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	7.471	0.00	0.30
95.58	1.75" Hybrid	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	7.471	0.00	1.15
95.58	1 5/8" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	7.471	0.00	1.28
95.58	1-1/4" Fiber	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	7.471	0.00	1.11
95.58	7/8" Coax	Yes	0.58	0.000	0.00	0.00	0.00	0.094	0.000	7.471	0.00	0.30
95.58	1.25" Reinforcing	Yes	0.58	0.000	1.25	0.06	0.00	0.094	0.000	7.471	0.00	87.00
96.00	1 5/8" Hybrid	Yes	0.42	0.000	2.00	0.07	0.00	0.094	0.000	7.480	0.00	0.92
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	7.480	0.00	0.22
96.00	1.75" Hybrid	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	7.480	0.00	0.84
96.00	1 5/8" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	7.480	0.00	0.92
96.00	1-1/4" Fiber	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	7.480	0.00	0.80
96.00	7/8" Coax	Yes	0.42	0.000	0.00	0.00	0.00	0.094	0.000	7.480	0.00	0.22
96.00	1.25" Reinforcing	Yes	0.42	0.000	1.25	0.04	0.00	0.094	0.000	7.480	0.00	63.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

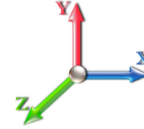


Page: 92

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00
Wind Load Factor 1.00



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)
98.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.095	0.000	7.525	0.00	4.40
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	7.525	0.00	1.04
98.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	7.525	0.00	3.98
98.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	7.525	0.00	4.40
98.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	7.525	0.00	3.82
98.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	7.525	0.00	1.04
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.095	0.000	7.525	0.00	300.00
100.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.059	0.000	7.568	0.00	4.40
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.568	0.00	1.04
100.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.568	0.00	3.98
100.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.568	0.00	4.40
100.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.568	0.00	3.82
100.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.568	0.00	1.04
102.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.059	0.000	7.611	0.00	4.40
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.611	0.00	1.04
102.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.611	0.00	3.98
102.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.611	0.00	4.40
102.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.611	0.00	3.82
102.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.611	0.00	1.04
104.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.059	0.000	7.653	0.00	4.40
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.653	0.00	1.04
104.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.653	0.00	3.98
104.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.653	0.00	4.40
104.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.653	0.00	3.82
104.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.059	0.000	7.653	0.00	1.04
106.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.060	0.000	7.695	0.00	4.40
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	7.695	0.00	1.04
106.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	7.695	0.00	3.98
106.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	7.695	0.00	4.40
106.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	7.695	0.00	3.82
106.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.060	0.000	7.695	0.00	1.04
108.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.061	0.000	7.736	0.00	4.40
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	7.736	0.00	1.04
108.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	7.736	0.00	3.98
108.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	7.736	0.00	4.40
108.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	7.736	0.00	3.82
108.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.061	0.000	7.736	0.00	1.04
110.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.062	0.000	7.777	0.00	4.40
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	7.777	0.00	1.04
110.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	7.777	0.00	3.98
110.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	7.777	0.00	4.40
110.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	7.777	0.00	3.82
110.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	7.777	0.00	1.04
112.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.062	0.000	7.817	0.00	4.40
112.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	7.817	0.00	1.04
112.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	7.817	0.00	3.98
112.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	7.817	0.00	4.40

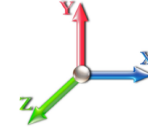
Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 26

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)
112.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.062	0.000	7.817	0.00	3.82
114.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.063	0.000	7.857	0.00	4.40
114.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	7.857	0.00	1.04
114.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	7.857	0.00	3.98
114.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	7.857	0.00	4.40
114.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.063	0.000	7.857	0.00	3.82
115.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	7.876	0.00	2.20
115.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	7.876	0.00	0.52
115.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	7.876	0.00	1.99
115.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	7.876	0.00	2.20
115.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	7.876	0.00	1.91
116.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	7.896	0.00	2.20
116.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	7.896	0.00	0.52
116.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	7.896	0.00	1.99
116.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	7.896	0.00	2.20
116.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	7.896	0.00	1.91
118.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.065	0.000	7.935	0.00	4.40
118.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	7.935	0.00	1.04
118.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	7.935	0.00	3.98
118.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	7.935	0.00	4.40
118.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	7.935	0.00	3.82
120.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.066	0.000	7.973	0.00	4.40
120.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	7.973	0.00	1.04
120.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	7.973	0.00	3.98
120.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	7.973	0.00	4.40
120.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	7.973	0.00	3.82
122.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	8.011	0.00	4.40
122.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	8.011	0.00	1.04
122.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	8.011	0.00	3.98
122.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	8.011	0.00	4.40
122.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	8.011	0.00	3.82
124.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	8.048	0.00	4.40
124.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	8.048	0.00	1.04
124.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	8.048	0.00	3.98
124.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	8.048	0.00	4.40
124.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	8.048	0.00	3.82
126.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.068	0.000	8.085	0.00	4.40
126.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	8.085	0.00	1.04
126.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	8.085	0.00	3.98
126.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	8.085	0.00	4.40
126.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	8.085	0.00	3.82
128.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.069	0.000	8.121	0.00	4.40
128.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	8.121	0.00	1.04
128.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	8.121	0.00	3.98
128.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	8.121	0.00	4.40
128.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	8.121	0.00	3.82
130.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	8.157	0.00	4.40

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



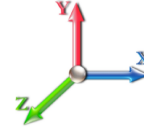
Page: 94

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00

Wind Load Factor 1.00



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)
130.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	8.157	0.00	1.04
130.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	8.157	0.00	3.98
130.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	8.157	0.00	4.40
130.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	8.157	0.00	3.82
131.75	1 5/8" Hybrid	Yes	1.75	0.000	2.00	0.29	0.00	0.071	0.000	8.189	0.00	3.85
131.75	7/8" Coax	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	8.189	0.00	0.91
131.75	1.75" Hybrid	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	8.189	0.00	3.48
131.75	1 5/8" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	8.189	0.00	3.85
131.75	1-1/4" Fiber	Yes	1.75	0.000	0.00	0.00	0.00	0.071	0.000	8.189	0.00	3.34
132.00	1 5/8" Hybrid	Yes	0.25	0.000	2.00	0.04	0.00	0.072	0.000	8.193	0.00	0.55
132.00	7/8" Coax	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	8.193	0.00	0.13
132.00	1.75" Hybrid	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	8.193	0.00	0.50
132.00	1 5/8" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	8.193	0.00	0.55
132.00	1-1/4" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.072	0.000	8.193	0.00	0.48
133.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.072	0.000	8.211	0.00	2.20
133.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	8.211	0.00	0.52
133.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	8.211	0.00	1.99
133.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	8.211	0.00	2.20
133.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.072	0.000	8.211	0.00	1.91
134.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.073	0.000	8.228	0.00	2.20
134.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	8.228	0.00	0.52
134.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	8.228	0.00	1.99
134.00	1 5/8" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	8.228	0.00	2.20
134.00	1-1/4" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.073	0.000	8.228	0.00	1.91
134.75	1 5/8" Hybrid	Yes	0.75	0.000	2.00	0.13	0.00	0.073	0.000	8.241	0.00	1.65
134.75	7/8" Coax	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	8.241	0.00	0.39
134.75	1.75" Hybrid	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	8.241	0.00	1.49
134.75	1 5/8" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	8.241	0.00	1.65
134.75	1-1/4" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.073	0.000	8.241	0.00	1.43
136.00	1 5/8" Hybrid	Yes	1.25	0.000	2.00	0.21	0.00	0.074	0.000	8.263	0.00	2.75
136.00	7/8" Coax	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	8.263	0.00	0.65
136.00	1.75" Hybrid	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	8.263	0.00	2.49
136.00	1 5/8" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	8.263	0.00	2.75
136.00	1-1/4" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.074	0.000	8.263	0.00	2.38
138.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	8.298	0.00	4.40
138.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	8.298	0.00	1.04
138.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	8.298	0.00	3.98
138.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	8.298	0.00	4.40
138.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	8.298	0.00	3.82
140.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	8.332	0.00	4.40
140.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	8.332	0.00	1.04
140.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	8.332	0.00	3.98
140.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	8.332	0.00	4.40
140.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	8.332	0.00	3.82
142.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	8.366	0.00	4.40
142.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	8.366	0.00	1.04
142.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	8.366	0.00	3.98

Linear Appurtenance Segment Forces (Factored)

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

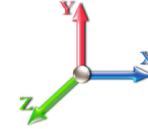


Page: 95

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 26

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)
142.00	1 5/8" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	8.366	0.00	4.40
142.00	1-1/4" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	8.366	0.00	3.82
144.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	8.399	0.00	4.40
144.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	8.399	0.00	1.04
144.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	8.399	0.00	3.98
145.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.079	0.000	8.416	0.00	2.20
145.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	8.416	0.00	0.52
145.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.079	0.000	8.416	0.00	1.99
146.00	1 5/8" Hybrid	Yes	1.00	0.000	2.00	0.17	0.00	0.082	0.000	8.432	0.00	2.20
146.00	7/8" Coax	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	8.432	0.00	0.52
146.00	1.75" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	8.432	0.00	1.99
148.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	8.465	0.00	4.40
148.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	8.465	0.00	1.04
148.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	8.465	0.00	3.98
150.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	8.498	0.00	4.40
150.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	8.498	0.00	1.04
150.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	8.498	0.00	3.98
152.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.530	0.00	4.40
152.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.530	0.00	1.04
152.00	1.75" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.530	0.00	3.98
154.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.562	0.00	4.40
154.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.562	0.00	1.04
156.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.593	0.00	4.40
156.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.593	0.00	1.04
158.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.625	0.00	4.40
158.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.625	0.00	1.04
160.00	1 5/8" Hybrid	Yes	2.00	0.000	2.00	0.33	0.00	0.125	1.075	8.656	0.00	4.40
160.00	7/8" Coax	Yes	2.00	0.000	0.00	0.00	0.00	0.125	1.075	8.656	0.00	1.04
Totals:											0.0	21,478.4

Calculated Forces

Structure: CT02049-S-SBA
Site Name: Beacon Falls
Height: 160.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Code: TIA-222-H
Exposure: B
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

7/28/2022
 Page: 96



Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 26

Dead Load Factor 1.00
Wind Load 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	-65.39	-7.53	0.00	-895.67	0.00	895.67	3683.82	1059.58	4414.92	3756.66	0.00	0.000	0.000	0.152
1.00	-64.84	-7.51	0.00	-888.14	0.00	888.14	3677.71	1055.47	4380.73	3735.77	0.00	-0.008	0.000	0.151
2.00	-64.28	-7.50	0.00	-880.62	0.00	880.62	3671.54	1051.36	4346.67	3714.86	0.00	-0.016	0.000	0.151
4.00	-63.17	-7.47	0.00	-865.62	0.00	865.62	3659.00	1043.14	4278.95	3673.00	0.01	-0.031	0.000	0.149
6.00	-62.07	-7.44	0.00	-850.68	0.00	850.68	3646.20	1034.91	4211.76	3631.09	0.03	-0.047	0.000	0.148
8.00	-60.97	-7.40	0.00	-835.81	0.00	835.81	3633.16	1026.69	4145.10	3589.13	0.05	-0.063	0.000	0.146
10.00	-59.87	-7.37	0.00	-821.00	0.00	821.00	3619.85	1018.47	4078.97	3547.13	0.08	-0.078	0.000	0.145
12.00	-58.77	-7.34	0.00	-806.26	0.00	806.26	3606.29	1010.25	4013.38	3505.10	0.12	-0.094	0.000	0.143
14.00	-57.68	-7.30	0.00	-791.59	0.00	791.59	3592.48	1002.02	3948.31	3463.03	0.16	-0.110	0.000	0.142
16.00	-56.60	-7.26	0.00	-776.98	0.00	776.98	3578.41	993.80	3883.78	3420.94	0.21	-0.126	0.000	0.140
16.25	-56.41	-7.26	0.00	-775.17	0.00	775.17	3576.63	992.77	3875.75	3415.68	0.22	-0.128	0.000	0.161
18.00	-55.12	-7.23	0.00	-762.45	0.00	762.45	3564.09	985.58	3819.78	3378.83	0.27	-0.144	0.000	0.159
18.63	-54.66	-7.22	0.00	-757.90	0.00	757.90	3559.52	982.99	3799.73	3365.57	0.29	-0.150	0.000	0.129
18.88	-54.47	-7.22	0.00	-756.10	0.00	756.10	3557.70	981.96	3791.79	3360.30	0.30	-0.152	0.000	0.148
20.00	-53.65	-7.20	0.00	-748.02	0.00	748.02	3549.51	977.36	3756.31	3336.71	0.33	-0.161	0.000	0.147
22.00	-52.19	-7.16	0.00	-733.62	0.00	733.62	3563.12	985.03	3815.51	3376.01	0.40	-0.178	0.000	0.149
24.00	-51.11	-7.13	0.00	-719.30	0.00	719.30	3548.52	976.81	3752.08	3333.89	0.48	-0.195	0.000	0.143
26.00	-50.03	-7.09	0.00	-705.04	0.00	705.04	3533.67	968.58	3689.18	3291.77	0.57	-0.212	0.000	0.141
28.00	-48.95	-7.05	0.00	-690.86	0.00	690.86	3518.56	960.36	3626.81	3249.64	0.66	-0.229	0.000	0.139
30.00	-47.58	-7.01	0.00	-676.76	0.00	676.76	3503.20	952.14	3564.97	3207.53	0.76	-0.245	0.000	0.109
31.00	-46.89	-6.98	0.00	-669.75	0.00	669.75	3495.43	948.03	3534.25	3186.48	0.81	-0.252	0.000	0.125
32.00	-46.21	-6.96	0.00	-662.77	0.00	662.77	3487.59	943.92	3503.66	3165.43	0.87	-0.260	0.000	0.124
33.38	-45.68	-6.94	0.00	-653.16	0.00	653.16	3476.66	938.24	3461.67	3136.39	0.94	-0.270	0.000	0.153
34.00	-45.44	-6.93	0.00	-648.85	0.00	648.85	3471.72	935.70	3442.89	3123.35	0.98	-0.276	0.000	0.153
36.00	-44.68	-6.90	0.00	-634.99	0.00	634.99	3455.59	927.47	3382.65	3081.29	1.10	-0.295	0.000	0.151
38.00	-43.92	-6.86	0.00	-621.19	0.00	621.19	3439.21	919.25	3322.94	3039.26	1.23	-0.314	0.000	0.149
40.00	-43.16	-6.82	0.00	-607.47	0.00	607.47	3422.57	911.03	3263.76	2997.28	1.36	-0.333	0.000	0.148
42.00	-42.40	-6.78	0.00	-593.83	0.00	593.83	3405.68	902.81	3205.11	2955.34	1.50	-0.352	0.000	0.146
44.00	-41.65	-6.74	0.00	-580.26	0.00	580.26	3388.54	894.58	3146.99	2913.44	1.66	-0.372	0.000	0.144
45.16	-41.22	-6.72	0.00	-572.43	0.00	572.43	3378.48	889.81	3113.53	2889.17	1.75	-0.383	0.000	0.104
46.00	-40.91	-6.71	0.00	-566.79	0.00	566.79	3371.14	886.36	3089.41	2871.61	1.82	-0.389	0.000	0.135
48.00	-40.16	-6.67	0.00	-553.37	0.00	553.37	3353.48	878.14	3032.36	2829.83	1.98	-0.407	0.000	0.133
50.00	-39.42	-6.63	0.00	-540.03	0.00	540.03	3335.57	869.92	2975.84	2788.13	2.16	-0.425	0.000	0.131
52.00	-38.35	-6.59	0.00	-526.77	0.00	526.77	3317.41	861.69	2919.85	2746.50	2.34	-0.443	0.000	0.128
54.00	-37.27	-6.54	0.00	-513.60	0.00	513.60	3298.98	853.47	2864.39	2704.94	2.53	-0.461	0.000	0.126
56.00	-36.21	-6.50	0.00	-500.51	0.00	500.51	3316.18	861.14	2916.12	2743.71	2.73	-0.479	0.000	0.127
58.00	-35.47	-6.45	0.00	-487.52	0.00	487.52	3297.74	852.92	2860.70	2702.16	2.93	-0.497	0.000	0.132
60.00	-34.74	-6.41	0.00	-474.61	0.00	474.61	3279.05	844.70	2805.81	2660.71	3.14	-0.516	0.000	0.130
62.00	-34.02	-6.37	0.00	-461.79	0.00	461.79	3260.10	836.48	2751.45	2619.34	3.36	-0.534	0.000	0.128
64.00	-33.29	-6.33	0.00	-449.05	0.00	449.05	3240.90	828.25	2697.62	2578.08	3.59	-0.553	0.000	0.126
66.00	-32.57	-6.28	0.00	-436.40	0.00	436.40	3221.44	820.03	2644.33	2536.92	3.83	-0.572	0.000	0.124
68.00	-31.86	-6.24	0.00	-423.84	0.00	423.84	3201.73	811.81	2591.56	2495.87	4.07	-0.590	0.000	0.122
70.00	-31.14	-6.19	0.00	-411.37	0.00	411.37	3181.76	803.59	2539.33	2454.94	4.32	-0.609	0.000	0.120
72.00	-30.43	-6.15	0.00	-398.98	0.00	398.98	3161.54	795.36	2487.63	2414.13	4.58	-0.628	0.000	0.118
74.00	-29.72	-6.10	0.00	-386.69	0.00	386.69	3141.06	787.14	2436.47	2373.45	4.85	-0.646	0.000	0.116
76.00	-29.02	-6.06	0.00	-374.49	0.00	374.49	3120.33	778.92	2385.83	2332.91	5.12	-0.664	0.000	0.113
78.00	-28.32	-6.01	0.00	-362.38	0.00	362.38	3099.34	770.70	2335.73	2292.51	5.40	-0.683	0.000	0.111
80.00	-27.62	-5.96	0.00	-350.36	0.00	350.36	3078.09	762.47	2286.15	2252.26	5.69	-0.701	0.000	0.109

Calculated Forces

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 97



80.00	-27.62	-5.96	0.00	-350.36	0.00	350.36	2384.58	636.50	1911.75	1750.88	5.69	-0.701	0.000	0.118
82.00	-26.98	-5.92	0.00	-338.43	0.00	338.43	2370.62	629.65	1870.81	1721.73	5.99	-0.719	0.000	0.129
84.00	-26.33	-5.87	0.00	-326.60	0.00	326.60	2356.42	622.80	1830.32	1692.63	6.30	-0.739	0.000	0.126
86.00	-25.69	-5.83	0.00	-314.86	0.00	314.86	2341.95	615.94	1790.27	1663.57	6.61	-0.759	0.000	0.123
88.00	-25.05	-5.78	0.00	-303.20	0.00	303.20	2327.23	609.09	1750.66	1634.56	6.93	-0.779	0.000	0.120
90.00	-24.42	-5.73	0.00	-291.64	0.00	291.64	2312.26	602.24	1711.49	1605.61	7.26	-0.798	0.000	0.117
92.00	-23.78	-5.69	0.00	-280.18	0.00	280.18	2297.03	595.39	1672.77	1576.72	7.60	-0.817	0.000	0.114
94.00	-23.16	-5.64	0.00	-268.80	0.00	268.80	2281.55	588.54	1634.49	1547.90	7.95	-0.837	0.000	0.111
95.00	-22.84	-5.61	0.00	-263.16	0.00	263.16	2273.71	585.11	1615.51	1533.52	8.13	-0.846	0.000	0.109
95.58	-22.59	-5.60	0.00	-259.91	0.00	259.91	2269.13	583.12	1604.56	1525.19	8.23	-0.852	0.000	0.107
95.58	-22.59	-5.60	0.00	-259.91	0.00	259.91	2269.13	583.12	1604.56	1525.19	8.23	-0.852	0.000	0.107
96.00	-22.41	-5.59	0.00	-257.56	0.00	257.56	2265.81	581.68	1596.65	1519.16	8.30	-0.856	0.000	0.180
98.00	-21.56	-5.55	0.00	-246.37	0.00	246.37	2249.81	574.83	1559.25	1490.50	8.67	-0.887	0.000	0.175
100.00	-21.01	-5.50	0.00	-235.27	0.00	235.27	2259.61	579.02	1582.04	1508.00	9.05	-0.918	0.000	0.165
102.00	-20.68	-5.46	0.00	-224.27	0.00	224.27	2243.52	572.17	1544.82	1479.37	9.44	-0.948	0.000	0.161
104.00	-20.36	-5.42	0.00	-213.34	0.00	213.34	2227.17	565.31	1508.04	1450.84	9.84	-0.977	0.000	0.156
106.00	-20.04	-5.38	0.00	-202.49	0.00	202.49	2210.57	558.46	1471.71	1422.40	10.26	-1.005	0.000	0.152
108.00	-19.73	-5.34	0.00	-191.72	0.00	191.72	2193.71	551.61	1435.82	1394.06	10.68	-1.033	0.000	0.147
110.00	-19.36	-5.26	0.00	-180.91	0.00	180.91	2176.60	544.76	1400.37	1365.84	11.12	-1.060	0.000	0.141
112.00	-19.05	-5.22	0.00	-170.40	0.00	170.40	2159.23	537.91	1365.36	1337.73	11.57	-1.086	0.000	0.136
114.00	-18.74	-5.17	0.00	-159.96	0.00	159.96	2141.61	531.05	1330.80	1309.73	12.03	-1.112	0.000	0.131
115.00	-18.59	-5.15	0.00	-154.79	0.00	154.79	2132.70	527.63	1313.68	1295.79	12.27	-1.125	0.000	0.128
115.00	-18.59	-5.15	0.00	-154.79	0.00	154.79	1556.62	422.98	1055.35	949.74	12.27	-1.125	0.000	0.175
116.00	-18.46	-5.14	0.00	-149.64	0.00	149.64	1551.43	420.24	1041.71	940.38	12.50	-1.138	0.000	0.171
118.00	-18.20	-5.10	0.00	-139.37	0.00	139.37	1540.84	414.76	1014.72	921.68	12.99	-1.168	0.000	0.163
120.00	-17.94	-5.06	0.00	-129.17	0.00	129.17	1529.99	409.28	988.07	902.99	13.48	-1.197	0.000	0.155
122.00	-17.68	-5.02	0.00	-119.05	0.00	119.05	1518.89	403.80	961.78	884.33	13.99	-1.226	0.000	0.146
124.00	-17.42	-4.98	0.00	-109.01	0.00	109.01	1507.54	398.32	935.85	865.70	14.51	-1.253	0.000	0.138
126.00	-17.17	-4.94	0.00	-99.05	0.00	99.05	1495.93	392.84	910.27	847.11	15.04	-1.278	0.000	0.129
128.00	-16.92	-4.90	0.00	-89.17	0.00	89.17	1484.06	387.35	885.04	828.56	15.58	-1.303	0.000	0.119
130.00	-16.67	-4.86	0.00	-79.36	0.00	79.36	1471.95	381.87	860.17	810.06	16.13	-1.325	0.000	0.109
131.75	-16.20	-4.74	0.00	-70.85	0.00	70.85	1461.13	377.08	838.70	793.92	16.62	-1.344	0.000	0.100
132.00	-16.17	-4.74	0.00	-69.67	0.00	69.67	1459.57	376.39	835.65	791.62	16.69	-1.346	0.000	0.099
133.00	-11.71	-3.73	0.00	-64.93	0.00	64.93	1453.29	373.65	823.53	782.42	16.98	-1.356	0.000	0.091
134.00	-11.60	-3.71	0.00	-61.20	0.00	61.20	1446.94	370.91	811.49	773.23	17.26	-1.366	0.000	0.087
134.75	-11.33	-3.62	0.00	-58.42	0.00	58.42	1442.14	368.85	802.52	766.35	17.48	-1.372	0.000	0.084
136.00	-11.19	-3.60	0.00	-53.89	0.00	53.89	1434.06	365.43	787.68	754.91	17.84	-1.383	0.000	0.079
138.00	-10.98	-3.56	0.00	-46.69	0.00	46.69	1420.92	359.95	764.23	736.67	18.42	-1.399	0.000	0.071
140.00	-10.77	-3.52	0.00	-39.57	0.00	39.57	1407.52	354.47	741.13	718.50	19.01	-1.414	0.000	0.063
142.00	-6.07	-2.09	0.00	-32.54	0.00	32.54	1393.87	348.98	718.38	700.42	19.61	-1.427	0.000	0.051
144.00	-5.89	-2.05	0.00	-28.35	0.00	28.35	1379.97	343.50	695.99	682.44	20.21	-1.438	0.000	0.046
145.00	-5.80	-2.03	0.00	-26.30	0.00	26.30	1372.92	340.76	684.93	673.48	20.51	-1.443	0.000	0.043
145.00	-5.80	-2.03	0.00	-26.30	0.00	26.30	931.20	332.53	24157.3	604.09	20.51	-1.443	0.000	0.050
146.00	-5.71	-2.02	0.00	-24.26	0.00	24.26	925.24	329.86	23770.3	594.77	20.81	-1.448	0.000	0.047
148.00	-5.54	-2.00	0.00	-20.22	0.00	20.22	913.32	324.51	23005.8	576.36	21.42	-1.457	0.000	0.041
150.00	-5.37	-1.97	0.00	-16.23	0.00	16.23	901.40	319.16	22253.7	558.24	22.03	-1.465	0.000	0.035
150.00	-5.37	-1.97	0.00	-16.23	0.00	16.23	556.65	167.00	10296.1	213.69	22.03	-1.465	0.000	0.086
152.00	-2.90	-1.27	0.00	-12.29	0.00	12.29	556.65	167.00	10296.1	213.69	22.65	-1.472	0.000	0.063
154.00	-2.78	-1.25	0.00	-9.75	0.00	9.75	556.65	167.00	10296.1	213.69	23.27	-1.488	0.000	0.051
156.00	-2.65	-1.24	0.00	-7.24	0.00	7.24	556.65	167.00	10296.1	213.69	23.89	-1.501	0.000	0.039
158.00	-2.53	-1.22	0.00	-4.77	0.00	4.77	556.65	167.00	10296.1	213.69	24.52	-1.510	0.000	0.027
160.00	0.00	-1.15	0.00	-2.33	0.00	2.33	556.65	167.00	10296.1	213.69	25.16	-1.515	0.000	0.011

Final Analysis Summary

Structure: CT02049-S-SBA	Code: TIA-222-H	7/28/2022
Site Name: Beacon Falls	Exposure: B	
Height: 160.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 98

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 + 1.0W 125 mph Wind	36.5	0.00	78.46	0.00	0.00	4380.39
0.9D + 1.0W 125 mph Wind	36.5	0.00	58.84	0.00	0.00	4315.87
1.2D + 1.0Di + 1.0Wi 50 mph Wind	7.8	0.00	100.57	0.00	0.00	971.44
1.2D + 1.0Ev + 1.0Eh	0.5	0.00	81.46	0.00	0.00	77.34
0.9D + 1.0Ev + 1.0Eh	0.5	0.00	61.50	0.00	0.00	77.04
1.0D + 1.0W 60 mph Wind	7.5	0.00	65.39	0.00	0.00	895.67

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 + 1.0W 125 mph Wind	-25.02	-27.42	0.00	-1262.2	0.00	-1262.2	2265.81	581.68	1596.65	1519.16	96.00	0.844
0.9D + 1.0W 125 mph Wind	-18.33	-26.90	0.00	-1234.2	0.00	-1234.2	2265.81	581.68	1596.65	1519.16	96.00	0.823
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-41.14	-6.19	0.00	-285.93	0.00	-285.93	2265.81	581.68	1596.65	1519.16	96.00	0.206
1.2D + 1.0Ev + 1.0Eh	-23.23	-0.53	0.00	-14.81	0.00	-14.81	2132.70	527.63	1313.68	1295.79	115.00	0.031
0.9D + 1.0Ev + 1.0Eh	-17.60	-0.53	0.00	-14.83	0.00	-14.83	2132.70	527.63	1313.68	1295.79	115.00	0.027
1.0D + 1.0W 60 mph Wind	-22.41	-5.59	0.00	-257.56	0.00	-257.56	2265.81	581.68	1596.65	1519.16	96.00	0.180

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors			Lower Termination				Upper Termination				Max Member			
			VQ/I (lb/in)	Vu (kips)	phi Vn (kips)	MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Pu (kips)	phi Pn (kips)	phi Tn (kips)	Ratio
0.0	16.3	(3) PLT-C10x30(1.5" Hole)	-281.8	-5.64	37.1	373.1	37.1	10	0	362.7	37.1			375.86	505.1	468.64	0.802
0.0	1.0	(3) SOL-2 1/4" William R71	140.1	1.68	25.3	200.6	25.3	8	0	200.2	25.3	8	0	200.61	459.1	468.91	0.437
1.0	18.9	(2) LNP-LP6X100-BW-20T	205.9	4.94	25.3	236.5	25.3	9	0	214.3	22.7	9	9	262.48	297.8	288.75	0.909
1.0	18.9	(1) LNP-LP6x100-B2-20T	-197.4	-4.74	25.3	228.4	25.3	9	0	206.9	22.7	9	9	251.64	297.8	288.75	0.871
16.3	31.0	(3) PLT-C10x15.3(1.5" Hole)	-281.8	-5.64	37.1	220.1	37.1			149.8	37.1	4	4	220.13	257.8	247.80	0.888
18.6	33.4	(3) LNP-LP6X100-G-20TT	208.0	4.99	25.3	231.2	22.7	10	10	218.6	22.7	10	10	258.11	297.8	288.75	0.894
30.0	46.0	(3) PLT-6"X1-1/4"(1.25" Hole)	320.2	5.76	37.1	239.7	33.4	7	8	237.4	33.4	7	8	341.77	413.6	351.56	0.972
45.2	58.0	(3) PLT-7" x 1.25"(1.25"Hole)	-374.8	-4.50	37.1	278.1	33.4	8	13	331.3	37.1			361.48	498.6	426.56	0.847
58.0	78.0	(3) PLT-5.5"x1 1/4"(1.25"hol)	-365.2	-6.57	37.1	282.8	37.1			249.4	37.1			282.76	379.1	314.06	0.900
78.0	95.6	(3) PLT-5.5"x1 1/4"(1.25"hol)	-423.3	-7.62	37.1	249.4	37.1			235.7	33.4	7	10	270.34	379.1	314.06	0.861



Monopole Mat Foundation Design

Date

7/28/2022

Customer Name:	T-Mobile	EIA/TIA Standard:	TIA-222-H
Site Name:		Structure Height (Ft.):	160
Site Number:	CT02049-S-SBA	Engineer Name:	H. You
Engr. Number:	132055	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations
Monopole
Analysis

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):	78.5	Shear Force (Kips):	36.5
Uplift Force (Kips):	0.0	Moment (Kips-ft):	4380.4

Allowable overstress %: 5.0%

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	7.0	Depth of Base BG (ft.):	4.8
Pier Height A. G. (ft.):	0.50	Thickness of Pad (ft):	3.50
Length of Pad (ft.):	28	Width of Pad (ft.):	28

Final Length of pad (ft)	28.0	Final width of pad (ft):	28.0
--------------------------	------	--------------------------	------

Material Properties and Rebar Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	10	Tie / Stirrup Size #:	4	
Qty. of Vertical Rebars:	30	Tie Spacing (in):	6.0	
Pad Rebar Yield (Ksi):	60	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):	26	Qty. of Rebar in Pad (W):	26
---------------------------	----	---------------------------	----

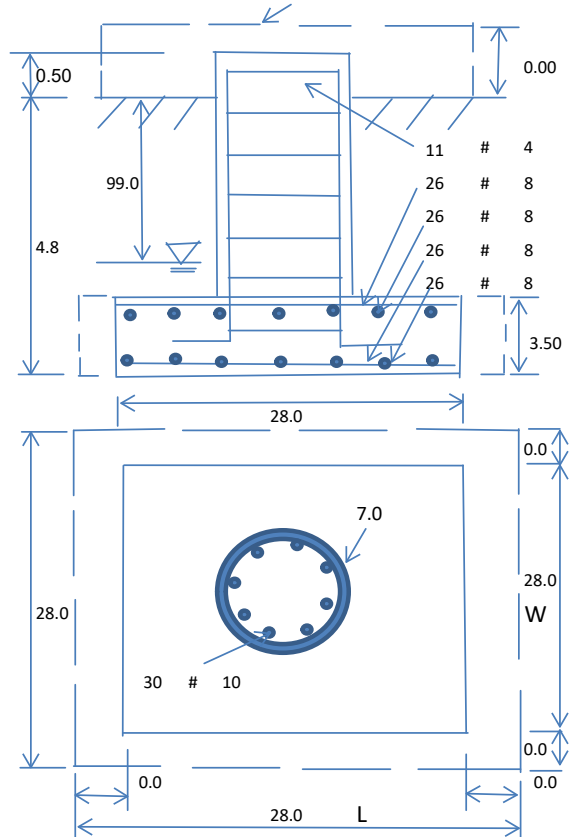
Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	26	Qty. of Rebar in Pad (W):	26
---------------------------	----	---------------------------	----

Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

Soil Unit Weight (pcf):	115.0	Soil Buoyant Weight:	50.0	Pcf		
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	6000	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.):	969.17	Total Dry Soil Weight (Kips):	111.45
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	111.45	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	2813.27	Total Dry Concrete Weight (Kips):	421.99
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	421.99	Total Vertical Load on Base (Kips):	611.95

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	2309	<	Allowable Factored Soil Bearing (psf):	4500	0.51	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	7820.4	>	Design Factored Momont (kips-ft):	4574	0.58	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.71					OK!

Load/
Capacity
Ratio

Check the capacities of Reinforcing Concrete:

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

Load/
Capacity
Ratio

(1) Concrete Pier:

Vertical Steel Rebar Area (sq. in./each):	1.27	Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	6154.8	> Design Factored Moment (Mu, Kips-F	4446.1	0.72	OK!
Calculated Shear Capacity (Kips):	724.1	> Design Factored Shear (Kips):	36.5	0.05	OK!
Calculated Tension Capacity (Tn, Kips):	2057.4	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	7297.9	> Design Factored Axial Load (Pu Kips):	78.5	0.01	OK!
Moment & Axial Strength Combination:	0.72	OK! Check Tie Spacing (Design/Required):		0.5	OK!
Pier Reinforcement Ratio:	0.007	Reinforcement Ratio is satisfied per ACI			

(2).Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	1062.8	> One-Way Factored Shear (L-D. Kips):	267.5	0.25	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1062.8	> One-Way Factored Shear (W-D., Kips)	267.5	0.25	OK!
One-Way Design Shear Capacity (Corner-Corner, Kips):	993.8	> One-Way Factored Shear (C-C, Kips):	257.3	0.26	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0016	OK! Lower Steel Pad Reinf. Ratio (W-Direc	0.0016		
Lower Steel Pad Moment Capacity (L-Direction, Kips-ft):	3492.1	> Moment at Bottom (L-Dir. K-Ft):	1721.0	0.49	OK!
Lower Steel Pad Moment Capacity (W-Direction, Kips-ft):	3492.1	> Moment at Bottom (W-Dir. K-Ft):	1721.0	0.49	OK!
Lower Steel Pad Moment Capacity (Corner-Corner, K-ft):	4918.4	> Moment at Bottom (C-C Dir. K-Ft):	2433.9	0.49	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0016	OK! Upper Steel Reinf. Ratio (W-Dir.):	0.0016		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	3492.1	> Moment at the top (L-Dir K-Ft):	730.7	0.21	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	3492.1	> Moment at the top (W-Dir K-Ft):	730.7	0.21	OK!
Upper Steel Pad Moment Capacity (Corner-Corner, K-ft):	4918.4	> Moment at the top (C-C Dir. K-Ft):	683.2	0.14	OK!

(3).Check Punching Shear Capacity due to Moment in the Pier:

Moment transferred by punching shear:	1752.2	k-ft.	Max. factored shear stress $v_{u,CD}$:	3.2	Psi
Max. factored shear stress $v_{u,AB}$:	11.3	Psi	Factored shear Strength ϕv_n :	164.3	Psi
Max. factored shear stress v_u :	11.3	Psi	Check Usage of Punching Shear Capacity:	0.07	OK!

EXHIBIT 8



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: CT02049-S-SBA

Customer Site Name: Beacon Falls

Carrier Name: T-Mobile (App#: 200173, V1)

Carrier Site ID / Name: CT11299D / CTBeacon Falls/Rt8

Site Location: 60 Rice Lane

Beacon Falls, Connecticut

New Haven County

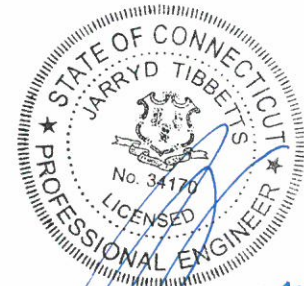
Latitude: 41.455689

Longitude: -73.039866

Analysis Result:

Max Structural Usage: 75.7% [Pass]

Report Prepared By: Venkata Annamreddy



NOTE: The proposed modification by TES, project no.# 100487 was assumed to be installed as per drawing instruction. The analysis results are void if the proposed modification is not installed in accordance with modification drawing listed in the source of information.



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: CT02049-S-SBA

Customer Site Name: Beacon Falls

Carrier Name: T-Mobile (App#: 200173, V1)

Carrier Site ID / Name: CT11299D / CTBeacon Falls/Rt8

Site Location: 60 Rice Lane

Beacon Falls, Connecticut

New Haven County

Latitude: 41.455689

Longitude: -73.039866

Analysis Result:

Max Structural Usage: 75.7% [Pass]

Report Prepared By: Venkata Annamreddy

NOTE: The proposed modification by TES, project no.# 100487 was assumed to be installed as per drawing instruction. The analysis results are void if the proposed modification is not installed in accordance with modification drawing listed in the source of information.

Introduction

The purpose of this report is to summarize the analysis results on the (3) Proposed Modified Sector Mounts at 142.00' 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	Specs from CENTEK Engineering Project# 18127.22 10/05/18
Antenna Loading	SBA, Application #:200173, v1; dated:7/12/2022
Modification Drawings	TES Project No: 100487; dated:1/4/2021
Existing Drawings	N/A

Analysis Criteria

Basic Wind Speed Used in the Analysis: $V_{ULT} = 125$ mph (3-Sec. Gust) / Equivalent to
 $V_{ASD} = 97$ 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 / 2015 IBC

Exposure Category: B

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

(3) Sector Mounts at 142.00' elevation

Final Antenna Configuration

4	Ericsson Air 6419 B41
4	Ericsson Air 32 KRD901146-1_B66A_B2A
3	RFS APXVAARR24_43-U-NA20
1	RFS APXVAARR18_43-U-NA20
3	Ericsson KRY 112 144/1
4	Ericsson 4449 B71 + B85
4	Ericsson 4460 B25 + B66

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 existing mounts will be structurally adequate to support the proposed antenna configuration. The maximum structural usage is 75.7%, which occurs in the footrails. 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 modification by TES, project no.# 100487 was assumed to be installed as per drawing instruction. The analysis results are void if the proposed modification is not installed in accordance with modification drawing listed in the source of information.

Attachments

1. Mount Photos Before Modifications
2. Antenna Placement Diagram
3. Mount Mapping Information
4. 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.



Sector: **A**

7/18/2022

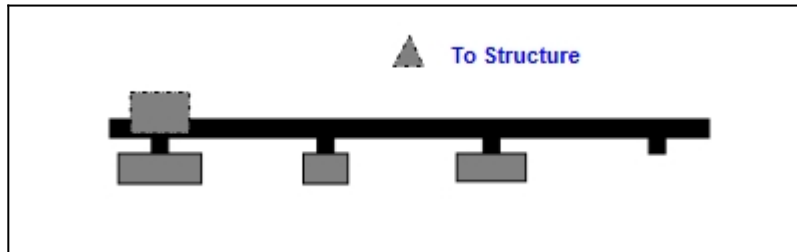


Structure Type: Monopole

Page: 1

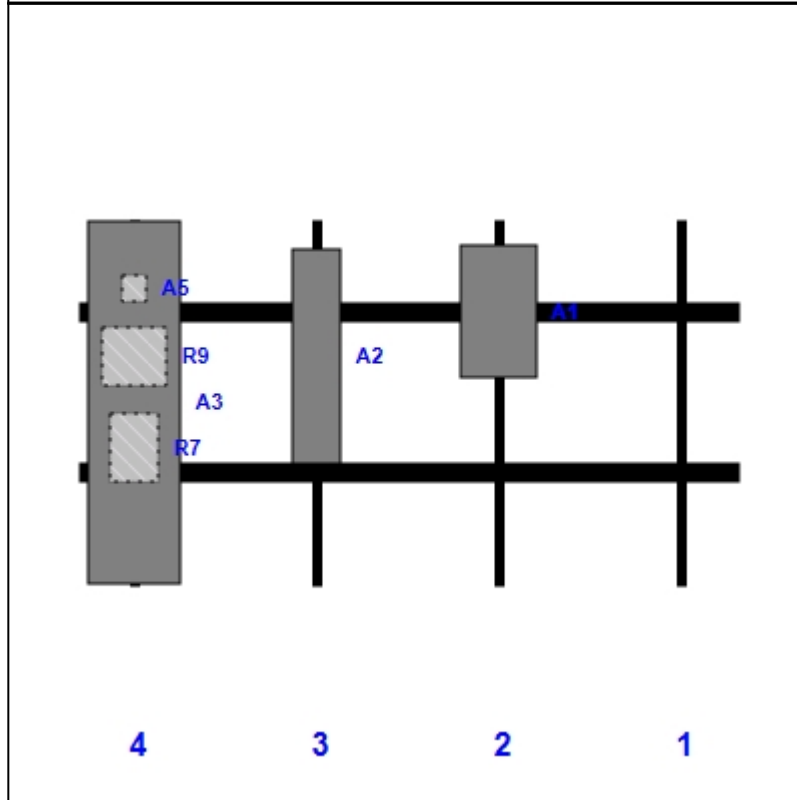
Mount Elev: 142.00

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	4460 B25 + B66	16.50	13.50	159.00	1	a	Behind	30.00		Removed	
A13	SDX1926Q-43	6.90	4.10	159.00	1	a	Behind	12.00		Removed	
A1	Air 6419 B41vvv	34.50	20.00	111.00	2	a	Front	24.00		Leased	
A2	Air 32 KRD901146-1_B66A_B2A	56.60	12.90	63.00	3	a	Front	36.00		Leased	
A3	APXVAARR24_43-U-NA20	95.90	24.00	15.00	4	a	Front	48.00		Leased	
A5	KRY 112 144/1	6.93	6.10	15.00	4	a	Behind	18.00		Leased	
A6	SDX1926Q-43	6.90	4.10	15.00	4	a	Behind	12.00		Removed	
R7	4449 B71 + B85	17.90	13.10	15.00	4	a	Behind	60.00		Leased	
R9	4460 B25 + B66	15.10	17.00	15.00	4	a	Behind	36.00		Added	

Structure: CT02049-S-SBA - Beacon Falls

Sector: **B**

7/18/2022

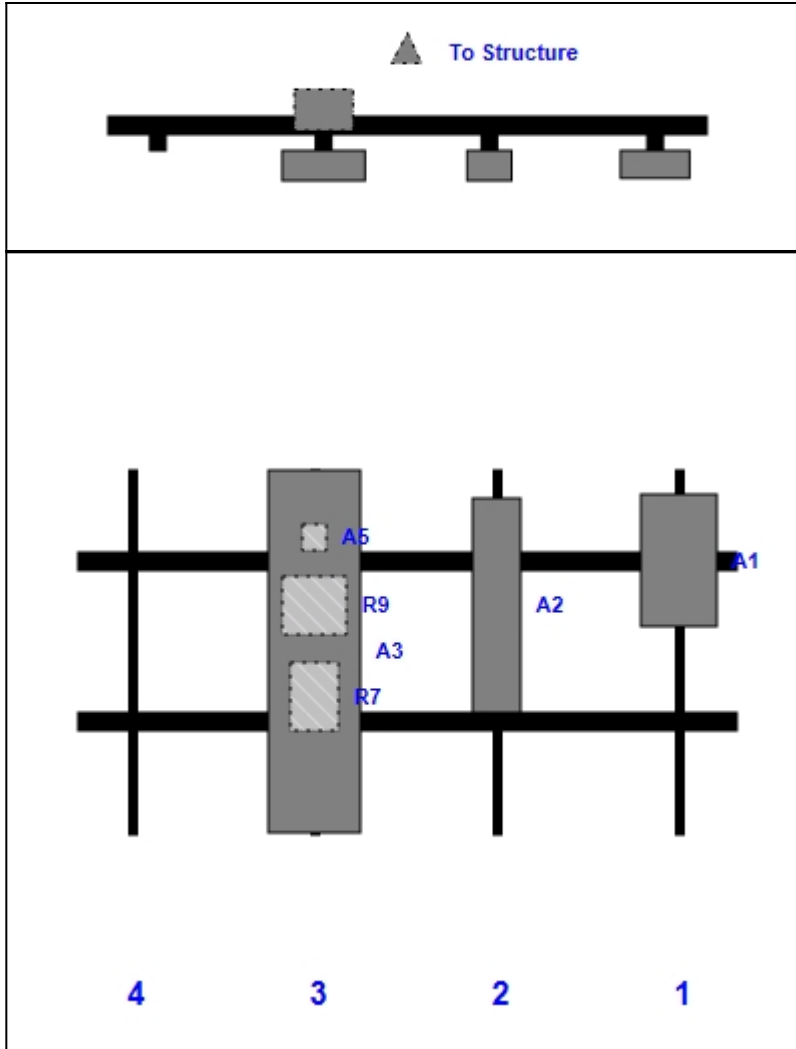
Structure Type: Monopole



Mount Elev: 142.00

Page: 2

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
A1	Air 6419 B41vvv	34.50	20.00	159.00	1	a	Front	24.00		Leased	
A2	Air 32 KRD901146-1_B66A_B2A	56.60	12.90	111.00	2	a	Front	36.00		Leased	
A3	APXVAARR24_43-U-NA20	95.90	24.00	63.00	3	a	Front	48.00		Leased	
A5	KRY 112 144/1	6.93	6.10	63.00	3	a	Behind	18.00		Leased	
A6	SDX1926Q-43	6.90	4.10	63.00	3	a	Behind	12.00		Removed	
R7	4449 B71 + B85	17.90	13.10	63.00	3	a	Behind	60.00		Leased	
R9	4460 B25 + B66	15.10	17.00	63.00	3	a	Behind	36.00		Added	

Structure: CT02049-S-SBA - Beacon Falls

Sector: C

7/18/2022

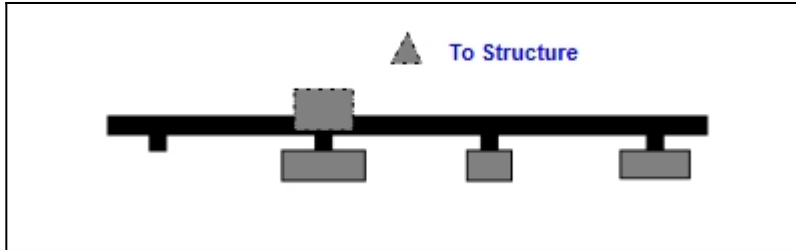
Structure Type: Monopole



Mount Elev: 142.00

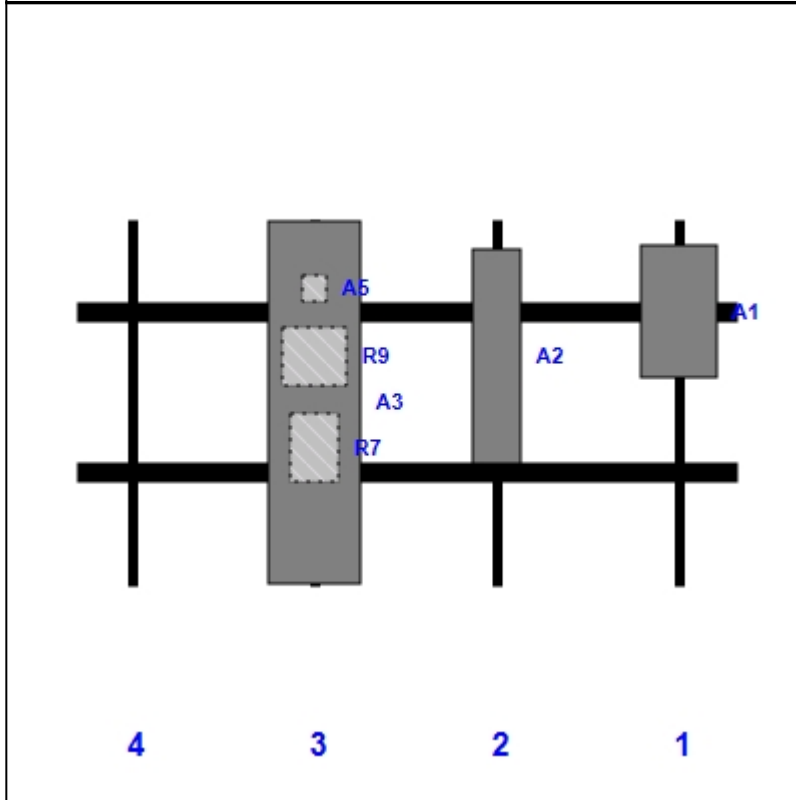
Page: 3

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
A1	Air 6419 B41vvv	34.50	20.00	159.00	1	a	Front	24.00		Leased	
A2	Air 32 KRD901146-1_B66A_B2A	56.60	12.90	111.00	2	a	Front	36.00		Leased	
A3	APXVAARR24_43-U-NA20	95.90	24.00	63.00	3	a	Front	48.00		Leased	
A5	KRY 112 144/1	6.93	6.10	63.00	3	a	Behind	18.00		Leased	
A6	SDX1926Q-43	6.90	4.10	63.00	3	a	Behind	12.00		Removed	
R7	4449 B71 + B85	17.90	13.10	63.00	3	a	Behind	60.00		Leased	
R9	4460 B25 + B66	15.10	17.00	63.00	3	a	Behind	36.00		Added	

Sector: **D**

7/18/2022

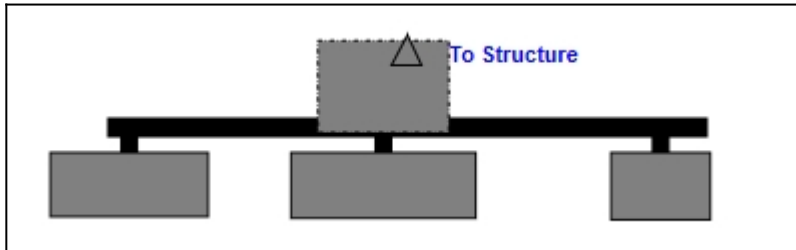


Structure Type: Monopole

Page: 4

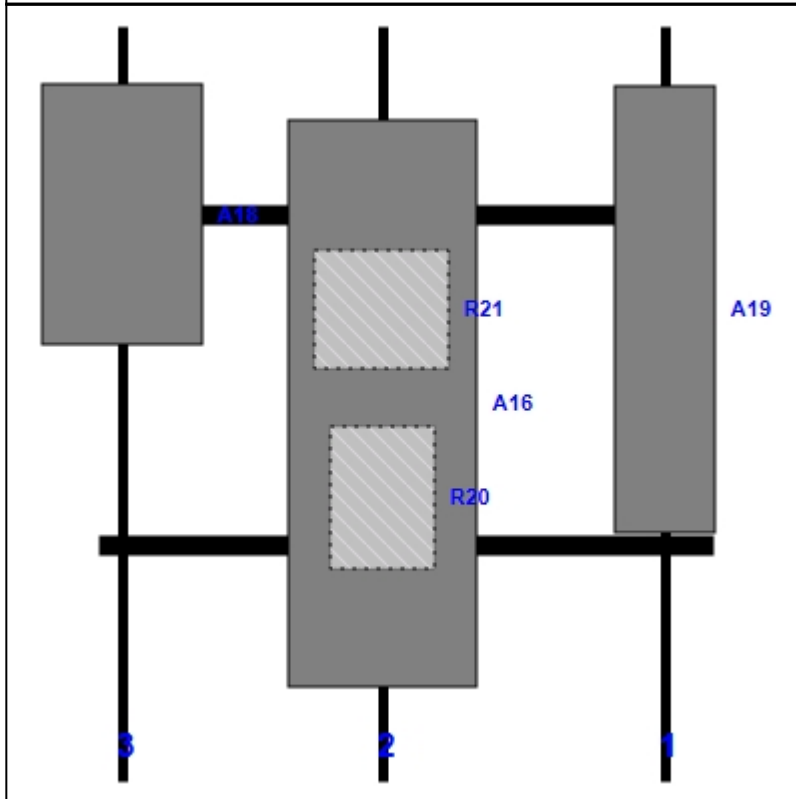
Mount Elev: 142.00

Plan View

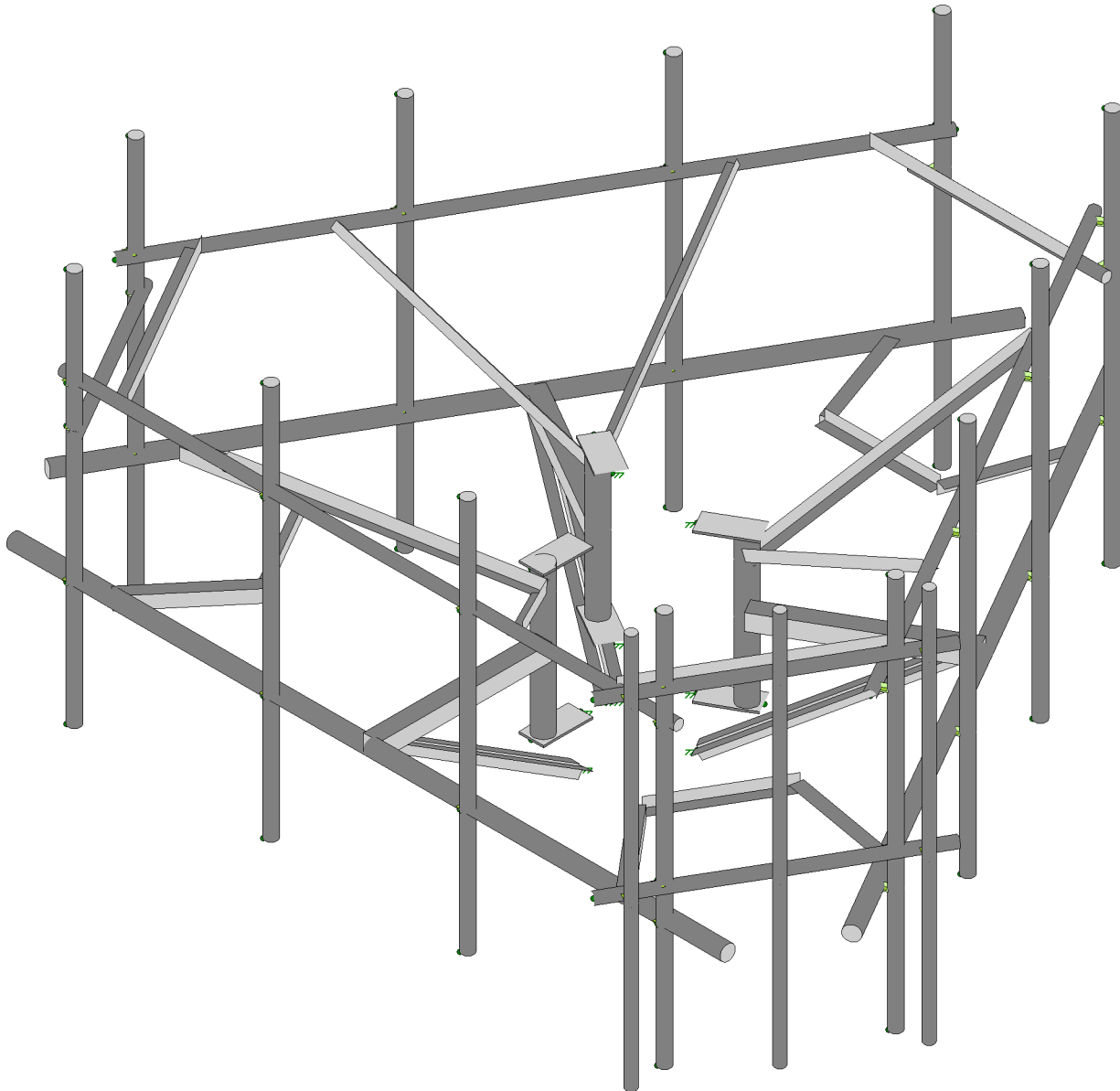
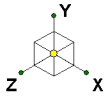


Front View

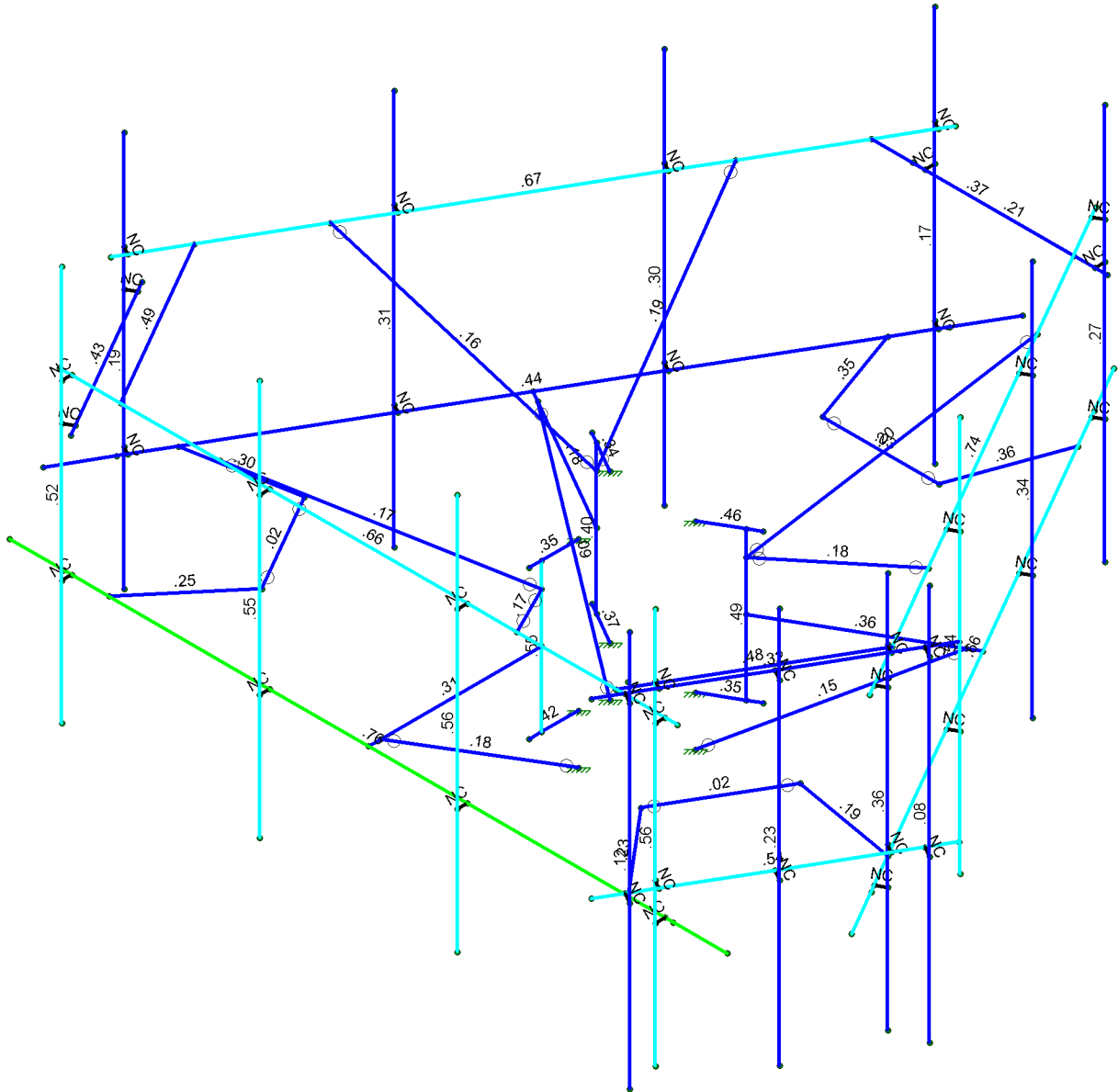
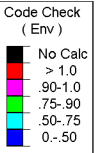
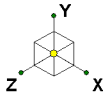
Looking Toward Structure



Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A19	Air 32 KRD901146-1_B66A_B2A	56.60	12.90	72.00	1	a	Front	36.00		Leased	
R8	4460 B25 + B66	16.50	13.50	72.00	1	a	Behind	30.00		Removed	
A13	SDX1926Q-43	6.90	4.10	72.00	1	a	Behind	12.00		Removed	
A16	APXVAARR18_43-U-NA20	72.00	24.00	36.00	2	a	Front	48.00		Leased	
R21	4460 B25 + B66	15.10	17.00	36.00	2	a	Behind	36.00			
R20	4449 B71 + B85	17.90	13.20	36.00	2	b	Behind	60.00			
A18	Air 6419 B41	33.10	20.50	3.00	3	a	Front	24.00		Added	



Tower Engineering Solutio...	CT02049-S-SBA_MT_LO_Loads Only_G	SK - 1
		July 18, 2022 at 1:23 PM
TES Project No. 131523		CT02049-S-SBA_131523_G_RISA_...



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

Tower Engineering Solutio...

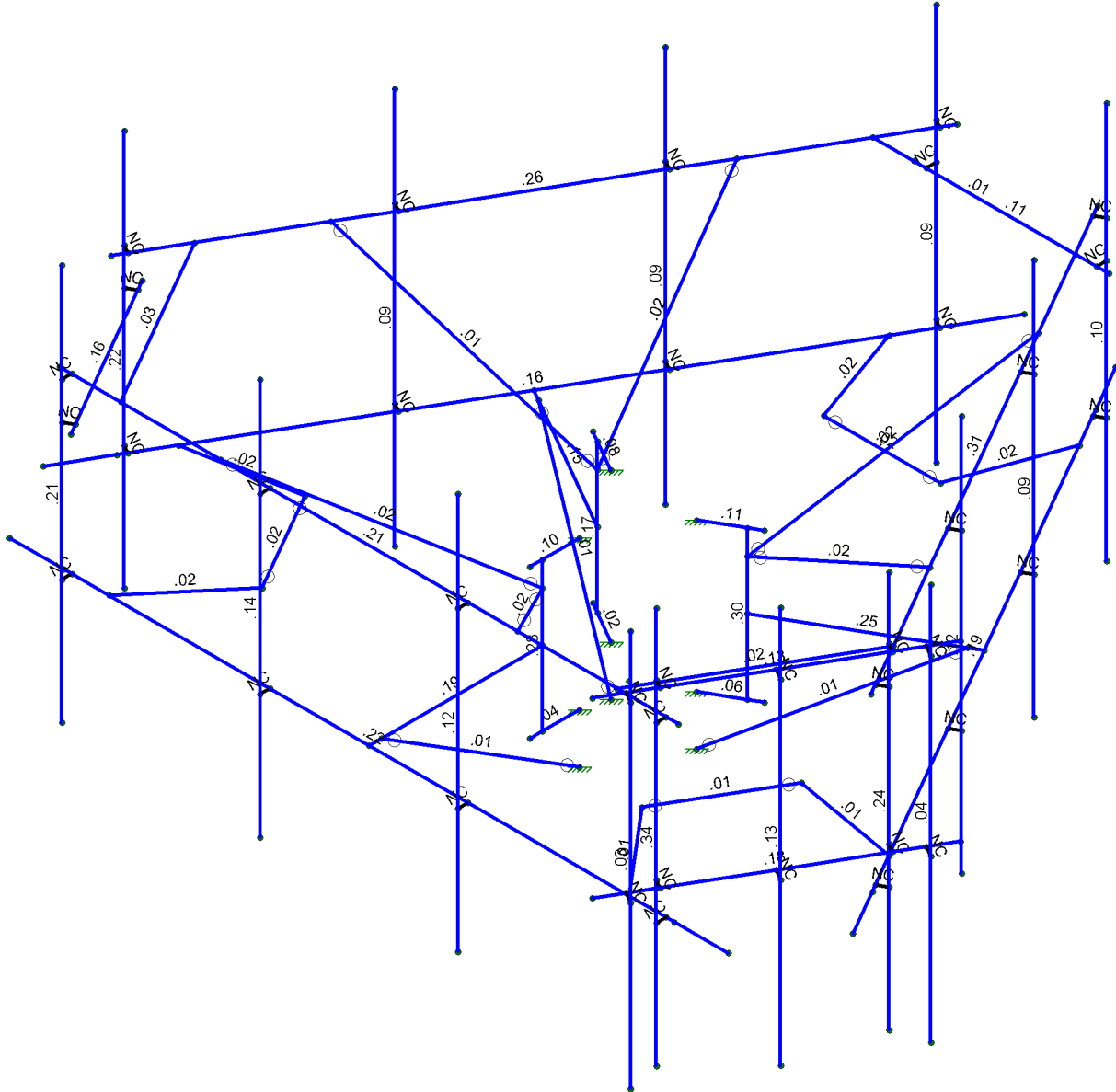
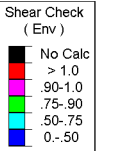
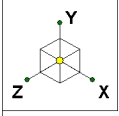
CT02049-S-SBA_MT_LO_Loads Only_G

SK - 2

July 18, 2022 at 1:24 PM

TES Project No. 131523

CT02049-S-SBA_131523_G_RISA_...



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

Tower Engineering Solutio...	CT02049-S-SBA_MT_LO_Loads Only_G	SK - 3
TES Project No. 131523		July 18, 2022 at 1:24 PM
		CT02049-S-SBA_131523_G_RISA...



Ó{ |æ^ K V[, ^\Á) *á^iá *ÁU[|c} •ÉŠÓ
 Ô•á}^ K
 R àÁ~{ à^! K VÓÚÁU| |b&Á| ÉFHÍ GH
 T[á^|Áæ^ K ÓVEGEI JÉUÉÓCE T V' ŠU'Š{æ•ÁU}|r' Ó

R | Ái ÉGEGG
 FGI ÁUT
 Ó@&^ÁÓ'K''''

6 UjW@ UX'7 UjYg

	ÓŠÓ\Ô•&á c}	Ôæ* r'	ÝÁ\ ææ	ÝÁ\ ææ	ZÁ\ ææ	R á c	Ú á c	Öä d á	ÉFHÍ ÁUT	ÉFHÍ ÁUT
F	Ö{ æ^} æÖ	p }^					H			
G	Ö{ æ^} æÖä	p }^					H			
H	Ö{ æ^} æY ÁU } c	p }^					H			
I	Ö{ æ^} æY ÁU } c	p }^					H			
Í	Ö{ æ^} æY ÁUä^	p }^					H			
Î	Ö{ æ^} æY ÁUä^	p }^					H			
Ï	Ú^ cæ^ Á{ F	p }^					F			
Ì	Ú^ cæ^ Á{ G	p }^					F			
J	Úd~&c ^ÁÖ	p }^		É						
F€	Úd~&c ^ÁÖä	p }^						í		
FF	Úd~&c ^ÁY ÁU } c	p }^						í		
FG	Úd~&c ^ÁY ÁU } c	p }^						í		
FH	Úd~&c ^ÁY ÁUä^	p }^						í		
FI	Úd~&c ^ÁY ÁUä^	p }^						í		

@ UX'7 ca V|bUjcbg

	Ô•&á c}	Ú ÉFHÍ ÁUT	ÓŠÓ	Öä d á	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT	ÉFHÍ ÁUT
F	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ H	ÉFHÍ FF	ÉFHÍ									
G	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ H	ÉFHÍ FF	ÉFHÍ									
H	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ Í	ÉFHÍ FH	ÉFHÍ									
I	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ Í	ÉFHÍ FH	ÉFHÍ									
Í	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ G	F	F€	F	I	F	FG	F				
Î	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ G	F	F€	F	I	É	FG	É				
Ï	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ G	F	F€	F	Í	F	FI	F				
Ì	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ G	F	F€	F	Í	É	FI	É				
J	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ Í	ÉFHÍ H	ÉFHÍ	FF	ÉFHÍ							
F€	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ Í	ÉFHÍ H	ÉFHÍ	FF	ÉFHÍ							
FF	ÉFHÍ ÁUT	Y ÁU } d Ý^	Y	F	ÉFHÍ J	ÉFHÍ											

>c|bh7 ccfX|bUjYg'UbX'HYa dYUli fYg

	Šæ^	ÝÁ\ ææ	ÝÁ\ ææ	ZÁ\ ææ	V\ ÁZá	Ôæ&@ ÁU } ÉFHÍ
F	pF	€	€	ÉFHÍ	€	
G	pG	ÉFHÍ	€	ÍFHÍ	€	
H	pH	ÍFHÍ	€	ÍFHÍ	€	
I	pI	€	€	ÍFHÍ	€	
Í	pÍ	ÉFHÍ	ÍFHÍ	ÍFHÍ	€	
Î	pÎ	ÉFHÍ	ÉFHÍ	ÍFHÍ	€	
Ï	pÏ	ÉFHÍ	€	ÍFHÍ	€	
Ì	pÌ	ÉFHÍ	HÉFHÍ	ÍFHÍ	€	
J	pJ	ÉFHÍ	€	ÍFHÍ	€	
F€	pF€	ÉFHÍ	HÉFHÍ	ÍFHÍ	€	
FF	pFF	Í	ÍFHÍ	ÍFHÍ	€	
FG	pFG	Í	ÉFHÍ	ÍFHÍ	€	
FH	pFH	Í	€	ÍFHÍ	€	
FI	pFI	Í	HÉFHÍ	ÍFHÍ	€	

>c]bh7 ccfX]bUHyg'UbX'HYa dYUhi fYg'f' cbi]bi YXL

	Šæ^ \	Y'Æcá	Y'Æcá	Z'Æcá	V^ [] ÁZá	Ô•cæ&á [] ÁÓæ] ÈÈ
F F	β F F	ī Ĩ J Ĩ H	ĒĒ	ī Ē ī ī ī	€	
F G	β F G	Ē Ē Ĩ Ĩ H	HĒ	FĒ F Ĩ FJ	€	
F H	β F H	Ē Ē FF J J J	HĒ	ī Ĩ	€	
F I	β F I	ī Ē FF J J J	HĒ	ī Ĩ	€	
F Í	β F Í	ī Ē Ĩ Ĩ H	HĒ	FĒ F Ĩ FJ	€	
F Î	β F Î	FĒ FJ Ĩ H	GĒ Ĩ	Ē Ē GF FĨ G	€	
F Ï	β F Ï	ĒĒ FJ Ĩ H	GĒ Ĩ	Ē Ē GF FĨ G	€	
F Ì	β F Ì	FĒ FJ Ĩ H	GĒ Ĩ	Ē Ē GF FĨ G	€	
F J	β F J	ĒĒ FJ Ĩ H	GĒ Ĩ	Ē Ē GF FĨ G	€	
F €	β F €	ĒĒ Î Ĩ H	GĒ Ĩ	Ē Ē GF FĨ G	€	
F Æ	β F Æ	FĒ Î Ĩ H	GĒ Ĩ	Ē Ē GF FĨ G	€	
F G	β F G	Ē Ē FJ Ĩ H	GĒ Ĩ	GĒ Ĩ FFĨ G	€	
F H	β F H	Ē	GĒ Ĩ	ī Ē Ĩ	€	
F I	β F I	Ē Ē Ĩ Ĩ H	GĒ Ĩ	GĒ Ĩ FFĨ G	€	
F Í	β F Í	Ē Ē Ĩ Ĩ Ĩ	GĒ Ĩ	ī Ē Ĩ	€	
F Î	β F Î	Ē Ē Ē Ĩ Ĩ	GĒ Ĩ	ī Ē Ĩ Ĩ Ĩ	€	
F Ï	β F Ï	Ē Ē Ĩ Ĩ H	GĒ Ĩ	GĒ Ĩ Ĩ Ĩ Ĩ	€	
F Ì	β F Ì	€	F	FĒ Ĩ	€	
F J	β F J	FĒ F Ĩ Ĩ	F	Ē Ĩ Ĩ	€	
F J€	β F J€	ĒĒ F Ĩ Ĩ	F	Ē Ĩ Ĩ	€	

<chFc`YX'GhYY'GYW]cb'GYlg

F	Šæ^ \	Ú@^	V^ ^	Ô•a) Ác	Tæ^ læp	Ô•a) ÁÚÈÈ	ÓÁ Gá	Q' ÁZá	Q: ÁZá	RÁZá
	cccc	PÚUÍ YÍ YH	Ô•æ	p [] ^	æí çó: èÈ V^] ææ	FJÉJ	í é	í é	FG€	

A Ya Vy' Df]a Ufm8 UU

F	Šæ^ \	ÓR] á c	RÁ] á c	SÁ] á c	Ú[cæ G^* D Ú^&ç]] Ú@^	V^ ^	Ô•a) Ác	Tæ^ læp	Ô•a) ÁÚ^ ^
F	T I	β F	β I		PÚUÍ YÍ YH	Ô•æ	p [] ^	æí çó: èÈ	ÓUF
G	T Í	β GJ	β HJ	F I €	ŠHÝHYI	Ô•æ	Úã * ^ ÁÚ * ^	çĤ Á: ÈÈ	ÓUF
H	T Ì	β H€	β I €	F I €	ŠHÝHYI	Ô•æ	Úã * ^ ÁÚ * ^	çĤ Á: ÈÈ	ÓUF
I	T Ú I ÇE	β Í	β Î		ÚÓÚÓ GĒ	Ô•æ	Úã ^	çĤ HÁ: ÈÓ	ÓUF
Í	T Ĩ ÇE	β Ï	β F€		ÚÓÓ	Ô•æ	p [] ^	ÚÓÓ	ÓUF
Î	T Ĩ ÇE	β Î	β J		ÚÓÓ	Ô•æ	p [] ^	ÚÓÓ	ÓUF
Ï	T Ú F ÇE	β FF	β FG		ÚÓÚÓ GĒ	Ô•æ	Úã ^	çĤ HÁ: ÈÓ	ÓUF
Ì	T Ĩ ÇE	β F	β F		ÚÓÓ	Ô•æ	p [] ^	ÚÓÓ	ÓUF
J	T H ÇE	β FH	β F		ÚÓÓ	Ô•æ	p [] ^	ÚÓÓ	ÓUF
F€	T Ú H ÇE	β F	β F		ÚÓÚÓ GĒ	Ô•æ	Úã ^	çĤ HÁ: ÈÓ	ÓUF
FF	T H ÇE	β ÇE	β GG		ÚÓÓ	Ô•æ	p [] ^	ÚÓÓ	ÓUF
FG	T H ÇE	β FJ	β GF		ÚÓÓ	Ô•æ	p [] ^	ÚÓÓ	ÓUF
FH	T Ú ÇE	β GH	β G		ÚÓÚÓ GĒ	Ô•æ	Úã ^	çĤ HÁ: ÈÓ	ÓUF
F I	T Ĩ	β Ĩ	β Ĩ		ÚÓÓ	Ô•æ	p [] ^	ÚÓÓ	ÓUF
F Í	T Ĩ	β Ĩ	β Ĩ		ÚÓÓ	Ô•æ	p [] ^	ÚÓÓ	ÓUF
F Î	T Ĩ F	β G	β H		ÚÓÚÓ HÈ	Ô•æ	Úã ^	çĤ HÁ: ÈÓ	V^] ææ
F Ï	T Ĩ €	β H	β H	J €	ÚŠFÇÍ	Ô•æ	ÚÓÓV	çĤ Á: ÈÈ	V^] ææ
F Ì	T Ĩ ÇE	β H	β H	J €	ÚŠFÇÍ	Ô•æ	ÚÓÓV	çĤ Á: ÈÈ	V^] ææ
F J	T Ĩ G	β HG	β HH		ÚÓÚÓ Ĩ È	Ô•æ	Úã ^	çĤ HÁ: ÈÓ	V^] ææ
F €	T Ĩ F Ó	β HF	β H		ŠŠĒ çĤ çĤ H	Ô•æ	Úã ^	çĤ Á: ÈÈ	V^] ææ
F G	T Ĩ ÇE	β F	β I		PÚUÍ YÍ YH	Ô•æ	p [] ^	æí çó: èÈ	ÓUF
F G€	T Ĩ GH	β Í J	β Í J	F I €	ŠHÝHYI	Ô•æ	Úã * ^ ÁÚ * ^	çĤ Á: ÈÈ	ÓUF

A Ya Vyf 5 Xj Ub WX 8 UHF7 cbhji YXL

Šæ^\	Ó\^\æ^\	RÁU^\æ^\	Ó\~^\z`á	RÁU~^\z`á	VEÁU}]'	Ú@•æ\	Ó\~\ÁUæ\É\æ\•ã\ÁÉ	Qæç\^\	Úã\ { æÉÉ
İİ	TJI					ÿ^.			b[]^
İJ	TJJ					ÿ^.			b[]^
İ€	TFEE					ÿ^.			b[]^
İF	TFE					ÿ^.			b[]^
İG	TFEG					ÿ^.			b[]^
İH	TFEH					ÿ^.			b[]^
İI	TFE					ÿ^.			b[]^
İÍ	TFE					ÿ^.			b[]^
İÎ	TFE					ÿ^.			b[]^
İÏ	TFE					ÿ^.			b[]^
İì	TFE					ÿ^.			b[]^
İj	TJG					ÿ^.			b[]^
J€	TJH					ÿ^.			b[]^
JF	TJF					ÿ^.			b[]^
JG	TJGE					ÿ^.			b[]^
JH	TJHE					ÿ^.			b[]^
JI	TJI					ÿ^.			b[]^
JÍ	TJÍ					ÿ^.			b[]^
JÎ	TJÍ					ÿ^.			b[]^

<chFc`YX`GhY`DfcdYfHjYg

Šæ^\	ÓÆ•æ	ÓÆ•æ	pˆ	V@; { AÞÓÉÖ^\} •æžĐæÉ Yajæž•æ	Ū	Øž•æ	Ūc			
F	OJGG	GJEEE	FFF I	ÈH	ÈÍ	ÈJ	Í€	FÈ	ÍÍ	FÈ
G	OÈÍ ÁÓ; ÈÍ	GJEEE	FFF I	ÈH	ÈÍ	ÈJ	HÍ	FÈ	ÍÍ	FÈG
H	OÈ Í G Ó; ÈÍ €	GJEEE	FFF I	ÈH	ÈÍ	ÈJ	Í€	FÈ	ÍÍ	FÈ
I	OÈ €€ ÁÓ; ÈÁÚÞÓ	GJEEE	FFF I	ÈH	ÈÍ	ÈG	I G	FÈ	ÍÍ	FÈH
Í	OÈ €€ ÁÓ; ÈÁÚ^&c	GJEEE	FFF I	ÈH	ÈÍ	ÈG	I Í	FÈ	ÍÍ	FÈH
Î	OÈ H Ó; ÈÓ	GJEEE	FFF I	ÈH	ÈÍ	ÈJ	HÍ	FÈ	Í€	FÈG
Ï	OÈ È Í	GJEEE	FFF I	ÈH	ÈÍ	ÈJ	Í€	FÈ	ÍÍ	FÈH
ì	ÓUSÓ	GÍ €€	FFH Í	ÈH	ÈÍ	ÈJ	HH	I G	ÍÍ	FÈG

<chFc`YX`GhY`8 YgH b`DUfUa`Yhfg

Šæ^\	Ú@^\	Š\)* cœžá	Šã^^žá	Šã::žá	Šã{ [] Á žá Šã{ [] Á žá Šã{ [] Á žá Šã{ [] Á žá Šã{ [] Á žá	S::	Òã	Ø } &c\ }
F	TÍ	PUÜIYIYH	HÈ		Šã^^			Šæ^\æþ
G	TÍ	ŠHYHYI	GÈJÍ		Šã^^			Šæ^\æþ
H	TÍ	ŠHYHYI	GÈJÍ		Šã^^			Šæ^\æþ
I	T ÚI OE	ÚQÓ' GÈ	Ì		Šã^^			Šæ^\æþ
Í	T ÚFOE	ÚQÓ' GÈ	Ì		Šã^^			Šæ^\æþ
Î	T ÚHOE	ÚQÓ' GÈ	Ì		Šã^^			Šæ^\æþ
Ï	T ÚGOE	ÚQÓ' GÈ	Ì		Šã^^			Šæ^\æþ
ì	T GF	ÚQÓ' HÈ	FÍ È		Šã^^			Šæ^\æþ
J	T GE	ÚŠFÓ; Í	F		Šã^^			Šæ^\æþ
J€	T GEOE	ÚŠFÓ; Í	F		Šã^^			Šæ^\æþ
FF	T GG	ÚQÓ' I È	H		Šã^^			Šæ^\æþ
FG	T GÓ	ŠSGÈ cœž cHÈ I È FÍ			Šã^^			Šæ^\æþ
FH	T GœE	PUÜIYIYH	HÈ		Šã^^			Šæ^\æþ
FI	T GH	ŠHYHYI	GÈJÍ		Šã^^			Šæ^\æþ
FÍ	T G	ŠHYHYI	GÈJÍ		Šã^^			Šæ^\æþ
FÏ	T ÚI Ó	ÚQÓ' GÈ	Ì		Šã^^			Šæ^\æþ

<chFc`YX'GhY'8 YgJ| b'DU'Ua YhYg f'7 cbh|bi YXL

	Šæ^ \	Úç^ ^	Š^)* ççá	Šã^Zá	Šã::Zá	Š&[] Á] ZcáŠ&[] Á] cçáŠç[] ~ ÈÈ S^^	S::	Ôa	Ø } &ç }
FÍ	T ÚFÓ	ÚQJÓ' GÉ	Ì			Šã^^			Šæ^!æ
FÌ	T ÚHÓ	ÚQJÓ' GÉ	Ì			Šã^^			Šæ^!æ
FJ	T ÚGÓ	ÚQJÓ' GÉ	Ì			Šã^^			Šæ^!æ
GÉ	T HÍ	ÚQJÓ' HÈ	FÍ È			Šã^^			Šæ^!æ
GF	T HJ	ÚSFQçÍ	F			Šã^^			Šæ^!æ
GG	T I €	ÚSFQçÍ	F			Šã^^			Šæ^!æ
GH	T I F	ÚQJÓ' I È	H			Šã^^			Šæ^!æ
GÍ	T I G	ŠŠGÈ çGÈ çHÈ	I È FÍ			Šã^^			Šæ^!æ
GÌ	T I H	PÙÙYÍ YH	HÈ			Šã^^			Šæ^!æ
GÍ	T I I	ŠH'YH'YI	GÈ JÍ			Šã^^			Šæ^!æ
GÌ	T I Í	ŠH'YH'YI	GÈ JÍ			Šã^^			Šæ^!æ
GË	T ÚI Ó	ÚQJÓ' GÉ	Ì			Šã^^			Šæ^!æ
GJ	T ÚFÓ	ÚQJÓ' GÉ	Ì			Šã^^			Šæ^!æ
HÈ	T ÚHÓ	ÚQJÓ' GÉ	Ì			Šã^^			Šæ^!æ
HF	T ÚGÓ	ÚQJÓ' GÉ	Ì			Šã^^			Šæ^!æ
HG	T Í I	ÚQJÓ' HÈ	FÍ È			Šã^^			Šæ^!æ
HH	T Í €	ÚSFQçÍ	F			Šã^^			Šæ^!æ
HI	T Í F	ÚSFQçÍ	F			Šã^^			Šæ^!æ
HÍ	T Í G	ÚQJÓ' I È	H			Šã^^			Šæ^!æ
HÌ	T Í H	ŠŠGÈ çGÈ çHÈ	I È FÍ			Šã^^			Šæ^!æ
HÍ	T Í I	ŠGÈ çGÈ çH	GÈ Í Í			Šã^^			Šæ^!æ
HÌ	T Í Í	ŠGÈ çGÈ çH	GÈ Í Í			Šã^^			Šæ^!æ
HJ	T Í Í	ŠGÈ çGÈ çH	GÈ Í Í			Šã^^			Šæ^!æ
I €	T Í I ÇE	ÚQJÓ' GÈ	FÇÈ			Šã^^			Šæ^!æ
I F	T Í I ÇE	ÚQJÓ' GÈ	FÇÈ			Šã^^			Šæ^!æ
I G	T Í I ÇE	ÚQJÓ' GÈ	FÇÈ			Šã^^			Šæ^!æ
I H	T Í J	ŠH'YH'YI	I È F			Šã^^			Šæ^!æ
II	T Í €	ÚQJÓ' GÈ	Ì			Šã^^			Šæ^!æ
II	T Í F	ÚQJÓ' GÈ	Ì			Šã^^			Šæ^!æ
II	T Í G	ÚQJÓ' GÈ	Ì			Šã^^			Šæ^!æ
II	T Í I	ŠGÈ çGÈ ç	I È I			Šã^^			Šæ^!æ
II	T Í I	ŠGÈ çGÈ ç	I È I			Šã^^			Šæ^!æ
I J	T Í I	ŠGÈ çGÈ ç	I È I			Šã^^			Šæ^!æ
I €	T Í J	ŠGÈ çGÈ ç	I È I			Šã^^			Šæ^!æ
I F	T Í €	ŠGÈ çGÈ ç	I È I			Šã^^			Šæ^!æ
I G	T Í F	ŠGÈ çGÈ ç	I È I			Šã^^			Šæ^!æ
I H	T F €	ÚQJÓ' GÈ	I È I			Šã^^			Šæ^!æ
II	T F €	ÚQJÓ' GÈ	I È I			Šã^^			Šæ^!æ
II	T J G	ŠH'YH'YI	I È F			Šã^^			Šæ^!æ
II	T J H	ŠH'YH'YI	I È F			Šã^^			Šæ^!æ
II	T J HÈ	ÚQJÓ' GÈ	HÈ I			Šã^^			Šæ^!æ
II	T J Í	ÚQJÓ' GÈ	HÈ I			Šã^^			Šæ^!æ

>c|bh6 ci bXU' m7 cbX|hcbg

	Rã çŠæ^ \	YÁç çá	YÁç çá	ZÁç çá	YÁU] çÁ ÈçDæá	YÁU] çÁ ÈçDæá	ZÁU] çÁ ÈçDæá
F	ÞF						
G	ÞHG						
H	ÞHH						
I	ÞH						
Í	ÞH						

>c]bh6ci bXUfmi7 cbX]h]cbg f7 cb]bi YXL

	R á c	Y Á a	Y Á a	Z Á a	Y Á dZ Écáá	Y Á dZ Écáá	Z Á dZ Écáá
I	bH	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá
I	bH	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá
I	bH	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá
J	bIF						
F€	bIG						
FF	bIH						
FG	bII						
FH	bIÍ						
FI	bIÎ	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá
FÍ	bIÏ	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá
FÎ	bIÏ	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá
FÏ	bIF						
FÌ	bFFG						
FJ	bFFH						
G€	bFFI						
GF	bFFÍ						
GG	bFFÎ	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá
GH	bFFI	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá
G	bFFI	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá	Ü^æá
G	bFGH						
G	bFI						
G	bFIJ						
G	bFJ€						

9bj YcdY>c]bhFYUM]cbg

	R á c	Y Á a	ŠÓ	Y Á a	ŠÓ	Z Á a	ŠÓ	T Y Á c á	ŠÓ	T Y Á c á	ŠÓ	T Z Á c á	ŠÓ	
F	bH	{ æ	GG FÉUI	I	I FJÉFI	I	H ÉHÉ F	F	É H	G	GÉ H	I	ÉG	I
G		{ á	ÉG FÉÉ F	H	ÉI ÉÉG	G	ÉI GGEJÍ	G	ÉG Í	F	ÉG Í G	H	ÉG	H
H	bH	{ æ	IÍ GÉI	I	JÉ ÉJÍ	F	JFÉFI I	F	É F	G	FÉ II	I	ÉFJ	H
I		{ á	ÉI ÉÉFH	H	É É ÉI I	G	ÉG I ÉG	I	É G	F	É ÉI	H	ÉÉF	I
I	bH	{ æ	I I ÉI I	I	I F I ÉI I	I	I I I ÉG	I	€	FF	€	F€	€	F€
I		{ á	É I ÉI I	H	F I É F	F	G ÉG	F	€	F	€	I	€	I
I	bII	{ æ	HGGÉG	I	I G ÉI H	I	H I JÉÉ	F	ÉG	I	HÉI	G	ÉFI	I
I		{ á	É I J J É H	H	É I É I	H	É É GÉ F	G	É F	F	É É G I	F	É É I	H
J	bII	{ æ	JHÉJ J	I	I G É I I	I	F I É É F	I	É I J	I	FÉ I I	G	É H	I
F€		{ á	ÉG FÉ I I	H	É I GÉ I G	H	É G É I F	G	É F F	H	É G G	F	É I	H
FF	bII	{ æ	I I I ÉÉ G	I	H I I É H	I	É G É I I	I	€	I	€	I	€	I
FG		{ á	I I É G	I	I I É	I	É I HÉ J I	I	É É G	I	É É F	I	€	I
FH	bFFÍ	{ æ	HUG É H I	I	I I É F J	I	G I I É I	F	É G F	I	FÉ I G	F	É I	I
FI		{ á	É H F I É I	H	É G É I	I	É I HÉ I F	G	É F I	F	É É F I	G	É F I	I
FÍ	bFFÍ	{ æ	F I HÉ G I	I	I HÉ J I	H	J I I É F	F	É I I	H	É I I	F	É I I	I
FÎ		{ á	É É É É H	H	É I É É H I	I	É I I É I	G	É É H	I	É É J I	G	É G I	H
FÏ	bFFI	{ æ	I J I É F I	H	G G I É I I	I	H E J É G	H	€	F	€	G	€	F
FÌ		{ á	É H F É I	I	É I J É F F	H	É I I I É I I	I	É É F	G	€	F	€	G
FJ	V{ çp K	{ æ	FÉ G H É J I	I	FF I I É H	I	FÉ I HÉ I I	F						
G€		{ á	É É G H É J G	H	I I J GÉ I F	G	É É H É I I	G						

9bj YcdYA Ya Vyf GYMjcb : cfWg

	T ^ { } à !	Ù &	Qrãžãã	ŠÔ	^ Á U @ æ žãã	ŠÔ	: Á U @ æ žãã	ŠÔ	V{ } ^ ! Ž Æ ŠÔ	^ È Á { } ^ Æ ŠÔ	ŠÔ	: È Á { } ^ Æ ŠÔ		
F	Tl	F	{ æ FGI ÈIJ	F	ÍIGÈF	G	ÍÍIGJ	H	FÈH	H	GGJ	I	FÈIJ	G
G			{ ä ÈÍÍÈIJ	Í	ÈHÈÍ	F	ÈÈÈÍ	I	ÈGF	I	ÈÈÍ	H	ÈÈH	F
H		G	{ æ FGI ÈIJ	F	ÍIGÈI	G	ÍIGÈH	H	FÈH	H	FÈUJ	I	FÈIG	G
I			{ ä ÈÍÍÈIJ	Í	ÈÍÈÈF	F	ÈÈÈÈÍ	I	ÈGF	I	ÈÈÈU	H	ÈÈÍ	F
Í		H	{ æ FGI ÈIJ	F	ÍIGÈJ	G	ÍJGÈG	H	FÈH	H	ÈHF	I	FÈG	Í
Î			{ ä ÈÍÍÈIJ	Í	ÈÍÈÈFÍ	F	ÈÍÈÈIJ	I	ÈGF	I	ÈÈÈG	H	ÈÈÈH	F
Ï		I	{ æ FGI ÈIJ	F	ÍHGÈÍ	G	ÍÍÈÈFÍ	H	FÈH	H	ÈÈG	F	FÈFG	Í
Ì			{ ä ÈÍÍÈIJ	Í	ÈÍÈÈH	F	ÈÍÈÈH	I	ÈGF	I	ÈÈI	G	ÈÈÍ	F
J		Í	{ æ FGI ÈHF	F	ÍÈÈÈG	Í	ÍÍÈÈH	H	FÈH	H	ÈG	F	ÈÍF	F
F€			{ ä ÈFJÈH	G	ÈJÈÈGF	F	ÈÍJÈJF	I	ÈGF	I	ÈÈÈFÍ	G	ÈÈÍ	G
FF	Tl	F	{ æ FFÈIJ	I	ÈÈÈÍ	I	FÍÈÈU	I	€	G	ÈU	H	ÈUJ	H
FG			{ ä ÈGÈH	H	ÈÈÈÍ	Í	ÈÈÈÈF	H	€	I	ÈÈG	I	ÈÈG	I
FH		G	{ æ FÈÈÍ	I	ÈÈÈH	I	FÍÈJ	I	€	G	ÈG	H	ÈÈU	H
FI			{ ä ÈFÈÈG	H	ÈÈÈH	Í	ÈÈÈÈH	H	€	I	ÈÈÈÍ	I	ÈÈÈÈ	I
FÍ		H	{ æ FÈÈÈH	I	ÈÈÈF	I	FÍÈÈÍ	I	€	G	ÈÈH	H	ÈÈI	H
FÎ			{ ä ÈÈÈÈÍ	H	ÈÈÈÈÍ	Í	ÈÈÈÈÈG	H	€	I	ÈÈÈU	I	ÈÈÈF	I
FÏ		I	{ æ JHÈFF	I	ÈÈÈÍ	I	FÍÈÈÍ	I	€	G	ÈÈÍ	H	ÈÈÍ	H
FÌ			{ ä ÈÈÈÈG	H	ÈÈÈÈH	Í	ÈÈÈÈÈ	H	€	I	ÈÈÈÍ	I	ÈÈÈG	I
FJ		Í	{ æ ÍÍÈÍ	I	ÈÈÈÍ	I	FÍÈÈF	I	€	G	ÈÈF	I	€	G
Q€			{ ä ÈÍÈHU	H	ÈÈÈÍ	Í	ÈÈÈÈH	H	€	I	€	G	ÈÈÈF	I
QF	Tl	F	{ æ ÍÍÈH	G	ÈÈÈÈ	H	FÍÈÈ	F	€	F	ÈJ	G	ÈÈG	G
QG			{ ä ÈÈÈÈ	F	ÈÈÈÈÍ	Í	ÈÈÈÈÍ	G	€	G	ÈÈG	F	ÈÈÈÍ	F
QH		G	{ æ ÍÍÈFG	G	ÈÈÈÈH	H	FÍÈÈG	F	€	F	ÈÈI	G	ÈÈG	G
QI			{ ä ÈÈÈÈÍ	F	ÈÈÈÈÍ	Í	ÈÈÈÈÍ	G	€	G	ÈÈÈÍ	F	ÈÈÈF	F
QÍ		H	{ æ ÍJÈIJ	G	ÈÈÈÈÍ	H	FÍÈÈÍ	F	€	F	ÈÈJ	G	ÈÈJ	G
QÎ			{ ä ÈÈÈÈÍ	F	ÈÈÈÈJ	Í	ÈÈÈÈÈG	G	€	G	ÈÈÈG	F	ÈÈÈH	F
QÏ		I	{ æ ÍÈÈÈÍ	G	ÈÈÈÈJ	H	FÍÈÈÍ	F	€	F	ÈÈH	G	ÈÈU	G
QÌ			{ ä ÈÈÈÈF	F	ÈÈÈÈJG	Í	ÈÈÈÈÈG	G	€	G	ÈÈÈ	F	ÈÈÈÍ	F
QU		Í	{ æ ÍÍÈIH	G	ÈÈÈÈH	H	FÍÈÈF	F	€	F	€	F	€	G
H€			{ ä ÈÈÈÈÈ	F	ÈÈÈÈH	Í	ÈÈÈÈÈF	G	€	G	€	G	€	F
HF	TUICE	F	{ æ €	I	ÈG	I	ÈG	H	€	Í	€	Í	€	FF
HG			{ ä €	H	ÈH	Í	ÈG	Í	€	I	€	H	€	F
HH		G	{ æ HÍÈÈ	I	FÍÈÈÍ	H	ÍFFÈÈH	F	ÈG	I	ÈÈH	F	ÈÈ	H
Hl			{ ä ÈÈÈÈÈJ	H	ÈÈÈÈÈH	Í	ÈÈÈÈÈG	G	ÈÈU	H	ÈÈÈÍ	G	ÈÈÈÈ	Í
HÍ		H	{ æ GÍÈÈ	Í	ÈÈÈÈÍ	I	HÍÈÈÈ	G	ÈÈG	G	ÈÈG	F	ÈÈÈ	Í
HÎ			{ ä ÈÈÈÈH	F	ÈÈÈÈH	Í	ÈÈÈÈÈG	F	ÈÈH	F	ÈÈÈÍ	G	ÈÈÈJ	F
HÏ		I	{ æ ÈJÈIJ	I	GÍÈÈH	H	ÍÍÈÈÍ	G	€	Í	ÈÈÍ	F	ÈÈÍ	H
HÌ			{ ä ÈÈÈÈÈG	Í	ÈÈÈÈÈF	I	ÈÈÈÈÈJ	F	€	H	ÈÈÈÍ	G	ÈÈÈÍ	I
HU		Í	{ æ €	I	ÈÈÈÈ	H	ÈÈÈÈ	Í	€	Í	€	H	€	FF
I€			{ ä €	H	ÈÈÈÈ	Í	ÈÈÈÈ	G	€	H	€	I	€	F
IF	TGCE	F	{ æ GÈÈÈ	I	ÍÍÈÈÈ	Í	ÍÍÈÈÈG	H	FÈÈ	Í	ÈÈG	G	ÈÈÍ	I
IG			{ ä ÈÈÈÈÈF	Í	FÈÈÈÈJ	I	ÈÈÈÈÈH	I	ÈÈH	I	ÈÈÈ	F	ÈÈÈJ	Í
IH		G	{ æ GÈÈÈ	I	ÍÍÈÈÈ	Í	ÍÍÈÈÈG	H	FÈÈ	Í	ÈÈÍ	G	ÈÈH	Í
Il			{ ä ÈÈÈÈÈF	Í	FÈÈÈÈJ	I	ÈÈÈÈÈH	I	ÈÈH	I	ÈÈÈ	F	ÈÈÈÈ	Í
IÍ		H	{ æ GÈÈÈ	I	ÍÍÈÈÈ	Í	ÍÍÈÈÈG	H	FÈÈ	Í	ÈÈÍ	G	ÈÈH	Í
IÎ			{ ä ÈÈÈÈÈF	Í	FÈÈÈÈJ	I	ÈÈÈÈÈH	I	ÈÈH	I	ÈÈÈ	F	ÈÈÈH	Í
IÏ		I	{ æ GÈÈÈ	I	ÍÍÈÈÈ	Í	ÍÍÈÈÈG	H	FÈÈ	Í	ÈÈH	G	ÈÈH	Í
IÌ			{ ä ÈÈÈÈÈF	Í	FÈÈÈÈJ	I	ÈÈÈÈÈH	I	ÈÈH	I	ÈÈÈ	F	ÈÈÈÍ	Í
IJ		Í	{ æ GÈÈÈ	I	ÍÍÈÈÈ	Í	ÍÍÈÈÈG	H	FÈÈ	Í	ÈÈU	G	ÈÈG	I
I€			{ ä ÈÈÈÈÈF	Í	FÈÈÈÈJ	I	ÈÈÈÈÈH	I	ÈÈH	I	ÈÈÈ	F	ÈÈÈÍ	Í
IF	TGCE	F	{ æ HÍÈÈÈH	F	ÍHÈIJ	Í	FÈÈÈÈÍ	Í	FÈÈJ	Í	ÈÈÍ	G	ÈÈÍ	F

9bj YcdYA Ya Vyf'GYWJcb': cfWwg'f'rbhji YXL

	T^ { ʌ! ǎ	Ú&	Orǎǎ	ŠÓ	^ ÁU@ǎǎ	ŠÓ	: ÁU@ǎǎ	ŠÓ	V{ } ʌ! ǎ	ŠÓ	^ Ê Á { } ʌ! ǎ	ŠÓ	: Ê Á { } ʌ! ǎ	ŠÓ	
ÍG			{ ǎ ÊH ÊH	G	FÍ ÊG	F	ÊÍ ÊÍ F	I	ÊÍ	F	ÊF F	F	ÊÍ F	G	
ÍH		G	{ ǎ HÍ HÍ	F	ÍH ÊÍ J	Í	FÊG ÊÍ	Í	FÊJ J	Í	ÊUJ	G	ÊH	F	
ÍI			{ ǎ ÊH ÊH	G	FÍ ÊG	F	ÊÍ ÊÍ F	I	ÊÍ	F	ÊJ J	F	ÊÍ	G	
ÍÍ		H	{ ǎ HÍ HÍ	F	ÍH ÊÍ J	Í	FÊG ÊÍ	Í	FÊJ J	Í	ÊGF	G	ÊG	F	
ÍĪ			{ ǎ ÊH ÊH	G	FÍ ÊG	F	ÊÍ ÊÍ F	I	ÊÍ	F	ÊĪ Ī	F	ÊĪ J	G	
ÍĪ		I	{ ǎ HÍ HÍ	F	ÍH ÊÍ J	Í	FÊG ÊÍ	Í	FÊJ J	Í	ÊIH	G	ÊGF	F	
ÍĲ			{ ǎ ÊH ÊH	G	FÍ ÊG	F	ÊÍ ÊÍ F	I	ÊÍ	F	ÊĲ Ĳ	F	ÊĲ J	G	
ÍJ		Í	{ ǎ HÍ HÍ	F	ÍH ÊÍ J	Í	FÊG ÊÍ	Í	FÊJ J	Í	ÊĪ	G	ÊFH	F	
Í€			{ ǎ ÊH ÊH	G	FÍ ÊG	F	ÊÍ ÊÍ F	I	ÊÍ	F	ÊĪ H	F	ÊFÍ	G	
ÍF	T ÚFOE	F	{ ǎ €	Í	ÊFF	I	Ê€	I	€	Í	€	FF	€	FF	
ÍG			{ ǎ €	I	Ê€	Í	Ê€G	Í	€	I	€	F	€	F	
ÍH		G	{ ǎ ÍÍ ÊÍ	Í	ÍÍ ÊHG	Í	HGÍ ÊJH	H	ÊG J	F	ÊJÍ	H	FÊH	Í	
ÍI			{ ǎ ÊÍ ÊÍ	FÊ	ÊÍ ÊÍ F	H	Ê ÊÊÊG	I	ÊÊÍ	G	ÊÊ F	I	ÊÊ Í	I	
ÍÍ		H	{ ǎ ÍJ ÊH	G	ÍÍ ÊÍ	Í	GÍ ÊÍ F	I	ÊÍ	I	ÊÍ	I	ÊÊ Í	I	
ÍĪ			{ ǎ ÊH ÊH	FÊ	FÍ ÊFH	I	ÊÊ ÊÍ	H	ÊÊHF	H	ÊÊ Í	H	ÊÊ EH	Í	
ÍĪ		I	{ ǎ ÊÊ ÊÍ	H	HÊG	H	HÊÍ	G	€	I	ÊHG	F	ÊHG	H	
ÍĲ			{ ǎ ÊG ÊG	Í	ÊÊ ÊÍ	I	ÊÊ Í F	F	€	Í	ÊHG	G	ÊHG	I	
ÍJ		Í	{ ǎ €	Í	ÊGÍ	Í	ÊJ	Í	€	I	€	I	€	FF	
Í€			{ ǎ €	I	ÊFH	I	Ê€	F	€	Í	€	I	€	F	
ÍF	T GJCE	F	{ ǎ ÍH ÊÍ F	H	ÍÍ ÊG	Í	FÊ ÊÍ	H	ÊÊFJ	H	ÊH	F	ÊÍ	F	
ÍG			{ ǎ ÊÍ ÊÍ	I	FÊ ÊÍ	H	ÊJ ÊÍ	I	ÊÊÍ	Í	ÊÍ F	G	ÊÊ Í	G	
ÍH		G	{ ǎ ÍH ÊÍ F	H	ÍÍ ÊG	Í	FÊ ÊÍ	H	ÊÊFJ	H	ÊÍ	F	ÊÍ	F	
ÍI			{ ǎ ÊÍ ÊÍ	I	FÊ ÊÍ	H	ÊJ ÊÍ	I	ÊÊÍ	Í	ÊÊFÍ	G	ÊÊ Í	G	
ÍÍ		H	{ ǎ ÍH ÊÍ F	H	ÍÍ ÊG	Í	FÊ ÊÍ	H	ÊÊFJ	H	ÊÍ	F	ÊÍ	F	
ÍĪ			{ ǎ ÊÍ ÊÍ	I	FÊ ÊÍ	H	ÊJ ÊÍ	I	ÊÊÍ	Í	ÊÊ Í	G	ÊÊJH	Í	
ÍĪ		I	{ ǎ ÍH ÊÍ F	H	ÍÍ ÊG	Í	FÊ ÊÍ	H	ÊÊFJ	H	ÊÍ F	F	ÊÍ F	F	
ÍĲ			{ ǎ ÊÍ ÊÍ	I	FÊ ÊÍ	H	ÊJ ÊÍ	I	ÊÊÍ	Í	ÊÊG	G	ÊÊG	Í	
ÍJ		Í	{ ǎ ÍH ÊÍ F	H	ÍÍ ÊG	Í	FÊ ÊÍ	H	ÊÊFJ	H	ÊÍ H	F	ÊÍ H	F	
Í€			{ ǎ ÊÍ ÊÍ	I	FÊ ÊÍ	H	ÊJ ÊÍ	I	ÊÊÍ	Í	ÊÊFÍ	G	ÊÊ Í	Í	
ÍF	T HCOE	F	{ ǎ GÊ ÊÍ G	F	ÍÊ ÊÍ	Í	FÍ ÊÍ	F	ÊÊÍ	F	ÊÍ J	F	Ê	H	
ÍG			{ ǎ ÊH ÊÍ	G	ÊJ ÊÍ F	FÊ	ÊH ÊÍ	Í	ÊÊG	Í	ÊÊÍ	G	ÊÊFÍ	I	
ÍH		G	{ ǎ GÊ ÊÍ G	F	ÍÊ ÊÍ	Í	FÍ ÊÍ	F	ÊÊÍ	F	ÊÍ	F	ÊÍ	H	
ÍI			{ ǎ ÊH ÊÍ	G	ÊJ ÊÍ F	FÊ	ÊH ÊÍ	Í	ÊÊG	Í	ÊÊÍ	G	ÊÊG	I	
ÍÍ		H	{ ǎ GÊ ÊÍ G	F	ÍÊ ÊÍ	Í	FÍ ÊÍ	F	ÊÊÍ	F	ÊÍ	F	ÊÍ	H	
ÍĪ			{ ǎ ÊH ÊÍ	G	ÊJ ÊÍ F	FÊ	ÊH ÊÍ	Í	ÊÊG	Í	ÊÊ€	G	ÊÊG	J	Í
ÍĪ		I	{ ǎ GÊ ÊÍ G	F	ÍÊ ÊÍ	Í	FÍ ÊÍ	F	ÊÊÍ	F	ÊÍ	F	ÊÍ	H	
ÍĲ			{ ǎ ÊH ÊÍ	G	ÊJ ÊÍ F	FÊ	ÊH ÊÍ	Í	ÊÊG	Í	ÊÊÍ J	G	ÊÊG	Í	Í
ÍJ		Í	{ ǎ GÊ ÊÍ G	F	ÍÊ ÊÍ	Í	FÍ ÊÍ	F	ÊÊÍ	F	ÊJÍ	F	ÊH	H	
J€			{ ǎ ÊH ÊÍ	G	ÊJ ÊÍ F	FÊ	ÊH ÊÍ	Í	ÊÊG	Í	ÊÊFÍ	G	ÊÊG	Í	Í
JF	T ÚHOE	F	{ ǎ €	I	ÊH	I	€	G	€	Í	€	Í	€	FF	
JG			{ ǎ €	H	ÊG	Í	ÊG	Í	€	I	€	F	€	F	
JH		G	{ ǎ FÊG ÊÍ	G	GÊÍ	H	GÊÊFG	F	ÊGJ	G	ÊG	Í	ÊÍ J	H	
JI			{ ǎ ÊÍ ÊÍ	F	ÊÍ ÊÍ	Í	ÊÍ ÊÍ F	H	ÊÊÍ	F	ÊÊF	G	ÊÊG	Í	
JÍ		H	{ ǎ FÊÍ ÊG	G	FÊÍ J	F	ÍÊÍ	I	ÊGJ	G	ÊÍ H	I	ÊH	Í	
JĪ			{ ǎ ÊÍ ÊÍ	F	ÊÍ ÊÍ	Í	ÊÍ ÊÍ F	H	ÊÊÍ	F	ÊÊÍ H	H	ÊÊÍ	F	
JĪ		I	{ ǎ ÊÊ ÊÍ	I	HÊÍ	H	HÊÍ G	G	€	Í	ÊHG	F	ÊHG	H	
JĲ			{ ǎ ÊG ÊG	Í	ÊÊ ÊG	I	ÊÊ HG	F	€	H	ÊHG	G	ÊHG	I	
JJ		Í	{ ǎ €	I	ÊH	H	ÊEG	Í	€	Í	€	FF	€	FF	
F€			{ ǎ €	H	ÊF	Í	Ê€	G	€	H	€	G	€	F	
F€	T HCOE	F	{ ǎ HÍ ÊÍ	F	ÍÍ ÊG	F	FÍ ÊÍ	H	FÊJ	Í	ÊÍ	F	ÊG	H	
F€			{ ǎ ÊG ÊÍ	G	ÊH ÊÍ	G	ÊH ÊÍ	Í	ÊÊG	F	ÊÊF	G	ÊÊG	I	
F€		G	{ ǎ HÍ ÊÍ	F	ÍÍ ÊG	F	FÍ ÊÍ	H	FÊJ	Í	ÊÍ F	F	ÊG	H	

9bj YcdYA Ya VYf GYW]cb: cfWg f r cb]bi YXL

	T ʌ{ ʌ!	Ú&	Óǎǎǎ	SÓ	ʌU@ǎǎǎ	SÓ	: ʌU@ǎǎǎ	SÓ	V[r' ʌ! ÉGEG	SÓ	ʌ Á [] ʌ ÉGEG	SÓ	: ʌ Á [] ʌ ÉGEG	SÓ	
G€			{ ǎ ÉÍÉHÍ	H	ÍÉÍÍ	I	ÉÉÉÉ	G	ÉÍ	I	ÉÉH	G	ÉGEG	F	
GF	T ÚFÔ	F	{ æ €	F	ÉFG	Í	ÉFJ	F	€	F	€	F	€	FF	
GG			{ ǎ €	G	ÉÉF	F	ÉFJ	Í	€	Í	€	G	€	F	
GH		G	{ æ FÍÉÉG	Í	ÍÍÉÉ	G	ÉÉJ	G	ÉH	H	ÉÉ	Í	ÉÍ	H	
GI			{ ǎ ÉFÍÉG	G	ÉÍÉÉJ	F	ÉHÉG	Í	ÉÉ	I	ÉÉG	G	ÉG	I	
GÍ		H	{ æ GÉJH	Í	ÉÍÉJG	I	ÉHÍÍ	I	ÉÉ	I	ÉÉH	G	ÉÉ	F	
Gİ			{ ǎ ÉGÉÍ	I	ÉÍÉÍ	Í	ÉÍÉÉ	Í	ÉÉ	I	ÉÉ	Í	ÉÉ	G	
Gİ		I	{ æ ÉHÉÍ	F	HFÉÍ	H	HFÉÍ	G	€	I	ÉHG	F	ÉHG	H	
Gì			{ ǎ ÉHÉH	Í	ÉHÉÍ	I	ÉHÉJ	F	€	Í	ÉHG	G	ÉHG	I	
GJ		Í	{ æ €	F	ÉÉ	Í	ÉJG	Í	€	I	€	G	€	FF	
G€			{ ǎ €	G	ÉÉ	I	ÉÍ	F	€	Í	€	F	€	F	
Gf	T GJ	F	{ æ GÍÉHÍ	F	GÍÉFÍ	Í	ÍÍÉÍ	F	ÉÉ	F	I	ÉH	I	ÉH	F
Gg			{ ǎ ÉJÉÉFG	G	ÉÉÉ	F	ÉGÉÉF	G	ÉÉ	Í	ÉÉÍ	H	ÉÉ	G	G
Gh		G	{ æ GÍÉHÍ	F	GÍÉFÍ	Í	ÍÍÉÍ	F	ÉÉ	F	I	ÉH	I	ÉH	F
Gi			{ ǎ ÉJÉÉFG	G	ÉÉÉ	F	ÉGÉÉF	G	ÉÉ	Í	ÉÉÍ	H	ÉÉ	F	G
GÍ		H	{ æ GÍÉHÍ	F	GÍÉFÍ	Í	ÍÍÉÍ	F	ÉÉ	F	I	ÉH	I	ÉG	F
Gİ			{ ǎ ÉJÉÉFG	G	ÉÉÉ	F	ÉGÉÉF	G	ÉÉ	Í	ÉÉÍ	H	ÉÉ	G	G
Gİ		I	{ æ GÍÉHÍ	F	GÍÉFÍ	Í	ÍÍÉÍ	F	ÉÉ	F	I	ÉH	I	ÉG	F
Gì			{ ǎ ÉJÉÉFG	G	ÉÉÉ	F	ÉGÉÉF	G	ÉÉ	Í	ÉÉÍ	H	ÉÉ	J	G
GJ		Í	{ æ GÍÉHÍ	F	GÍÉFÍ	Í	ÍÍÉÍ	F	ÉÉ	F	I	ÉH	I	ÉF	F
G€			{ ǎ ÉJÉÉFG	G	ÉÉÉ	F	ÉGÉÉF	G	ÉÉ	Í	ÉÉÍ	H	ÉÉ	Í	G
Gf	T HÉ	F	{ æ ÍÉJÍG	G	HÍÉÉH	Í	ÉHÉÉ	I	ÉÉ	I	ÉÉ	I	ÉÉ	F	F
Gg			{ ǎ ÉÍÉÉG	F	HÉG	I	ÉÍHÉJ	Í	ÉÉ	Í	ÉÉ	H	ÉÉ	H	G
Gh		G	{ æ ÍÉJÍG	G	HÍÉÉH	Í	ÉHÉÉ	I	ÉÉ	I	ÉÉ	I	ÉÉ	G	F
Gi			{ ǎ ÉÍÉÉG	F	HÉG	I	ÉÍHÉJ	Í	ÉÉ	Í	ÉÉ	H	ÉÉ	Í	G
GÍ		H	{ æ ÍÉJÍG	G	HÍÉÉH	Í	ÉHÉÉ	I	ÉÉ	I	ÉÉ	I	ÉÉ	H	F
Gİ			{ ǎ ÉÍÉÉG	F	HÉG	I	ÉÍHÉJ	Í	ÉÉ	Í	ÉÉ	H	ÉÉ	Í	G
Gİ		I	{ æ ÍÉJÍG	G	HÍÉÉH	Í	ÉHÉÉ	I	ÉÉ	I	ÉÉ	I	ÉÉ	Í	F
Gì			{ ǎ ÉÍÉÉG	F	HÉG	I	ÉÍHÉJ	Í	ÉÉ	Í	ÉÉ	H	ÉÉ	G	G
GJ		Í	{ æ ÍÉJÍG	G	HÍÉÉH	Í	ÉHÉÉ	I	ÉÉ	I	ÉÉ	I	ÉÉ	Í	F
G€			{ ǎ ÉÍÉÉG	F	HÉG	I	ÉÍHÉJ	Í	ÉÉ	Í	ÉÉ	F	H	ÉÉ	G
Gf	T ÚHÔ	F	{ æ €	Í	ÉÉ	I	ÉH	F	€	Í	€	FF	€	FF	
Gg			{ ǎ €	I	ÉÉ	Í	ÉÍG	Í	€	I	€	F	€	F	
Gh		G	{ æ FHFÉÍ	H	ÍGÉH	H	ÍÍÉÉ	Í	ÉH	H	ÉÍ	F	ÉÍ	H	
Gi			{ ǎ ÉÉÉÉ	I	ÉÉ	F	ÉFÍ	I	ÉÉ	Í	ÉÉ	H	ÉÉ	I	
GÍ		H	{ æ FÍJÉFÍ	H	ÍÍÉÉ	F	ÍÍÉÉ	Í	ÉH	H	ÉFÍ	Í	ÉÉ	I	
Gİ			{ ǎ ÉÍJÉÍ	I	ÉGÉÉ	I	ÉGÉJ	I	ÉÉ	Í	ÉÉ	G	ÉÉ	Í	
Gİ		I	{ æ ÉJÉÍ	H	ÍÉÉFG	H	HÉÉ	G	€	F	ÉH	F	ÉÉ	H	
Gì			{ ǎ ÉHGÉG	Í	ÉÉÉ	I	ÉHÉG	Í	€	Í	ÉÉ	G	ÉÉ	I	
GJ		Í	{ æ €	Í	ÉÉG	Í	ÉÉG	Í	€	F	€	I	€	FF	
H€			{ ǎ €	I	ÉÉ	F	ÉÉG	I	€	Í	€	H	€	F	
Hf	T HG	F	{ æ ÍÉJÍ	I	ÉÉÉÉ	I	ÍÍÉÍ	I	ÉÉ	H	ÉÉ	I	ÉÉ	F	
Hg			{ ǎ ÉÍÉÍ	H	ÉÉÉÉ	H	ÉFGÉG	H	ÉÉ	I	ÉÉ	H	ÉÉ	G	
Hh		G	{ æ ÍÉJÍ	I	ÉÉÉÉ	I	ÍÍÉÍ	I	ÉÉ	H	ÉÉ	I	ÉÉ	F	
Hı			{ ǎ ÉÍÉÍ	H	ÉÉÉÉ	H	ÉFGÉG	H	ÉÉ	I	ÉÉ	H	ÉÉ	G	
Hİ		H	{ æ ÍÉJÍ	I	ÉÉÉÉ	I	ÍÍÉÍ	I	ÉÉ	H	ÉÉ	I	ÉÉ	F	
Hì			{ ǎ ÉÍÉÍ	H	ÉÉÉÉ	H	ÉFGÉG	H	ÉÉ	I	ÉÉ	H	ÉÉ	G	
Hİ		I	{ æ ÍÉJÍ	I	ÉÉÉÉ	I	ÍÍÉÍ	I	ÉÉ	H	ÉÉ	I	ÉÉ	F	
Hı			{ ǎ ÉÍÉÍ	H	ÉÉÉÉ	H	ÉFGÉG	H	ÉÉ	I	ÉÉ	H	ÉÉ	G	
HJ		Í	{ æ ÍÉJÍ	I	ÉÉÉÉ	I	ÍÍÉÍ	I	ÉÉ	H	ÉÉ	I	ÉÉ	H	
H€			{ ǎ ÉÍÉÍ	H	ÉÉÉÉ	H	ÉFGÉG	H	ÉÉ	I	ÉÉ	H	ÉÉ	I	
Hf	T HH	F	{ æ ÍÉJÍ	I	ÉÉÉÉ	I	ÍÍÉÍ	I	ÉÉ	Í	ÉÉ	G	ÉÉ	I	

9bj YcdYA Ya Vyf GYV]cb: cfWg fT cb]bi YXL

T^ { à^i	Ù&	Crã]ãá	SÔ	^ÁU@æ]ãá	SÔ	: ÁU@æ]ãá	SÔ	V[]r' ç) ÊSSÔ	^ÊÁ[]r' ç) ÊSSÔ	: ÊÁ[]r' ç) ÊSSÔ					
HÍ		{ a	ÊÍ GÊÍ	H	ÊÍ FÊÍ	G	ÊÍ ÊÍ	H	ÊÍ F	F	ÊÍ Í	I	ÊÍ ÊÍ G	F	
HÍ		H { æ	HÊÍ GÊÍ	I	GÊÍ ÊÍ	F	I FÊÍ FJ	I	ÊÍ H	G	ÊÍ H	F	FÊÍ H	G	
HÍ		{ a	ÊÍ Í ÊÍ J	H	ÊÍ FÊÍ J	G	ÊÍ HÊÍ I	H	ÊÍ F	F	ÊÍ F	I	ÊÍ ÊÍ H	F	
HÍ		I { æ	HÊÍ ÊÍ I	I	GÊÍ ÊÍ I	F	I FÊÍ ÊÍ	I	ÊÍ H	G	ÊÍ H	I	GÊÍ ÊÍ G	G	
HÍ		{ a	ÊÍ Í HÊÍ H	H	ÊÍ FÊÍ I	G	ÊÍ HÊÍ F	H	ÊÍ F	F	ÊÍ I	H	ÊÍ ÊÍ F	F	
HÍ		J { æ	HÊÍ HÊÍ F	I	GÊÍ HÊÍ I	F	I G ÊÍ I	I	ÊÍ H	G	ÊÍ I	I	HÊÍ I	G	
HÍ		€ { a	ÊÍ Í JÊÍ J	H	ÊÍ JÊÍ I	G	ÊÍ ÊÍ FJ	H	ÊÍ F	F	ÊÍ Í	H	ÊÍ ÊÍ J	F	
HÍ		F T I €	F { æ	€	FF	€	I	ÊÍ F	I	€	FF	€	FF	€	FF
HÍ		G { a	€	F	ÊÍ H	F	ÊÍ ÊÍ	H	€	F	€	F	€	F	
HÍ		H G { æ	I Í ÊÍ G	I	I ÊÍ G	F	I GÊÍ F	I	ÊÍ G	F	ÊÍ F	H	FÊÍ G	G	
HÍ		{ a	ÊÍ ÊÍ H	I	ÊÍ FÊÍ H	G	ÊÍ ÊÍ H	H	ÊÍ F	G	ÊÍ G	I	ÊÍ ÊÍ F	F	
HÍ		I H { æ	I Í GÊÍ I	I	I FÊÍ J	F	I G ÊÍ H	I	ÊÍ G	F	ÊÍ F	H	FÊÍ I	G	
HÍ		{ a	ÊÍ HÊÍ I	I	ÊÍ FÊÍ H	G	ÊÍ ÊÍ F	H	ÊÍ F	G	ÊÍ F	I	ÊÍ ÊÍ F	F	
HÍ		I { æ	I Í ÊÍ ÊÍ	I	I G ÊÍ I	F	I G ÊÍ H	I	ÊÍ G	F	ÊÍ F	I	FÊÍ I	G	
HÍ		{ a	ÊÍ Í ÊÍ J	I	ÊÍ FÊÍ J	G	ÊÍ FÊÍ I	H	ÊÍ F	G	ÊÍ I	H	ÊÍ ÊÍ G	F	
HÍ		J { æ	I Í ÊÍ I	I	I HÊÍ I	F	I HÊÍ I	I	ÊÍ G	F	ÊÍ J	I	FÊÍ I	G	
HÍ		€ { a	ÊÍ Í ÊÍ G	I	ÊÍ FÊÍ F	G	ÊÍ ÊÍ I	H	ÊÍ F	G	ÊÍ J	H	ÊÍ ÊÍ J	F	
HÍ		F T I F	F { æ	I	ÊÍ F	H	I Í GÊÍ F	H	HÊÍ H	G	FÊÍ	F	ÊÍ I	I	
HÍ		G { a	ÊÍ ÊÍ G	I	ÊÍ FÊÍ H	I	ÊÍ GÊÍ H	F	ÊÍ G	I	ÊÍ G	H	ÊÍ ÊÍ F	F	
HÍ		H G { æ	F HÊÍ H	I	HÊÍ H	I	I FÊÍ J	G	FÊÍ G	F	FÊÍ J	G	FÊÍ I	I	
HÍ		{ a	ÊÍ GÊÍ G	H	ÊÍ FÊÍ F	I	ÊÍ HÊÍ J	I	ÊÍ G	G	ÊÍ ÊÍ G	F	ÊÍ ÊÍ H	H	
HÍ		H { æ	F HÊÍ H	I	HÊÍ H	I	I FÊÍ J	G	FÊÍ J	G	GÊÍ	G	GÊÍ J	I	
HÍ		I { a	ÊÍ FÊÍ H	H	I FÊÍ F	G	ÊÍ GÊÍ G	I	ÊÍ F	F	ÊÍ ÊÍ F	F	ÊÍ ÊÍ G	H	
HÍ		I { æ	I Í ÊÍ J	I	I Í ÊÍ J	I	I Í ÊÍ I	I	FÊÍ J	G	ÊÍ I	G	ÊÍ I	I	
HÍ		{ a	ÊÍ Í ÊÍ I	H	ÊÍ GÊÍ I	H	ÊÍ JÊÍ G	G	ÊÍ F	F	ÊÍ ÊÍ G	I	ÊÍ ÊÍ I	I	
HÍ		J { æ	I FÊÍ F	I	J ÊÍ F	I	I FÊÍ J	I	FÊÍ J	G	ÊÍ H	H	ÊÍ I	H	
HÍ		€ { a	ÊÍ Í ÊÍ G	H	ÊÍ GÊÍ I	H	ÊÍ ÊÍ I	G	ÊÍ F	F	ÊÍ F	I	ÊÍ I	I	
HÍ		F T I G	F { æ	I Í ÊÍ I	I	I JÊÍ G	I	I GÊÍ	G	€	I	€	FF	€	FF
HÍ		G { a	HÊÍ I	I	ÊÍ F	I	ÊÍ GÊÍ	F	ÊÍ G	I	€	F	€	F	
HÍ		H G { æ	I Í ÊÍ I	I	GÊÍ F	I	GÊÍ I	G	€	I	ÊÍ H	G	ÊÍ G	I	
HÍ		{ a	I GÊÍ J	I	ÊÍ ÊÍ	I	ÊÍ FÊÍ I	F	ÊÍ G	I	ÊÍ H	F	ÊÍ I	I	
HÍ		H { æ	I Í ÊÍ F	I	€	FF	€	FF	€	I	ÊÍ I	G	ÊÍ G	I	
HÍ		{ a	I ÊÍ G	I	€	F	€	F	ÊÍ G	I	ÊÍ H	F	ÊÍ J	I	
HÍ		I { æ	I JÊÍ G	I	FÊÍ	I	GÊÍ I	F	€	I	ÊÍ H	G	ÊÍ G	I	
HÍ		{ a	I Í ÊÍ F	I	ÊÍ ÊÍ F	I	ÊÍ FÊÍ I	G	ÊÍ G	I	ÊÍ H	F	ÊÍ I	I	
HÍ		J { æ	I Í ÊÍ I	I	GÊÍ	I	I GÊÍ	F	€	I	€	FF	€	FF	
HÍ		€ { a	FÊÍ ÊÍ J	I	ÊÍ JÊÍ G	I	ÊÍ GÊÍ	G	ÊÍ G	I	€	F	€	F	
HÍ		F T I H	F { æ	I FÊÍ I	H	I Í ÊÍ H	I	HÍ ÊÍ H	G	FÊÍ F	G	ÊÍ G	H	FÊÍ I	I
HÍ		G { a	ÊÍ FÊÍ ÊÍ	I	ÊÍ JÊÍ I	H	ÊÍ JÊÍ I	F	ÊÍ J	F	ÊÍ F	G	ÊÍ ÊÍ H	H	
HÍ		H G { æ	I FÊÍ H	H	I Í ÊÍ F	I	HÍ HÊÍ G	G	FÊÍ F	G	ÊÍ I	H	FÊÍ H	I	
HÍ		{ a	ÊÍ FÊÍ J	I	ÊÍ ÊÍ I	H	ÊÍ Í ÊÍ H	F	ÊÍ J	F	ÊÍ F	I	ÊÍ ÊÍ H	H	
HÍ		H { æ	I FÊÍ G	H	I HÊÍ H	I	HÊÍ F	G	FÊÍ F	G	ÊÍ I	H	ÊÍ G	I	
HÍ		{ a	ÊÍ FÊÍ G	I	ÊÍ FÊÍ G	H	ÊÍ HÊÍ H	F	ÊÍ J	F	ÊÍ G	I	ÊÍ I	H	
HÍ		I { æ	I Í ÊÍ F	H	I G ÊÍ J	I	HÍ ÊÍ I	G	FÊÍ F	G	ÊÍ ÊÍ	G	ÊÍ H	I	
HÍ		{ a	ÊÍ FÊÍ I	I	ÊÍ GÊÍ J	H	ÊÍ FÊÍ G	F	ÊÍ J	F	ÊÍ I	F	ÊÍ I	F	
HÍ		J { æ	FÊÍ ÊÍ G	H	GÊÍ ÊÍ	I	GÊÍ ÊÍ	G	FÊÍ J	G	ÊÍ G	G	ÊÍ J	H	
HÍ		€ { a	ÊÍ ÊÍ I	I	ÊÍ HÊÍ F	H	ÊÍ ÊÍ ÊÍ G	F	ÊÍ I	F	ÊÍ H	F	ÊÍ I	I	
HÍ		F T I I	F { æ	I FÊÍ F	F	ÊÍ ÊÍ G	G	GÍ ÊÍ J	F	€	G	ÊÍ H	G	ÊÍ I	G
HÍ		G { a	ÊÍ HÊÍ H	G	ÊÍ ÊÍ F	I	ÊÍ ÊÍ I	G	€	F	ÊÍ J	F	ÊÍ F	F	
HÍ		H G { æ	F HÊÍ F	F	ÊÍ FÊÍ J	G	GÍ ÊÍ H	F	€	G	ÊÍ F	G	ÊÍ I	G	
HÍ		{ a	ÊÍ HÊÍ H	G	ÊÍ GÊÍ H	I	ÊÍ JÊÍ I	G	€	F	ÊÍ I	F	ÊÍ F	F	
HÍ		H { æ	F HÊÍ F	F	ÊÍ ÊÍ J	G	GÍ ÊÍ G	F	€	G	ÊÍ I	G	ÊÍ J	G	

9bj YcdYA Ya Vyf GYV]cb: cfWg f7 cb]bi YXL

T ʌ { à!	Ú&	Crã]áá	SÔ	ʌÚ@æ]áá	SÔ	: ÁÚ@æ]áá	SÔ	V{r' ʌZ ÊÊÊ SÔ	ʌ Ê Á { } ʌ ÊÊ SÔ	: Ê Á { } ʌ ÊÊ SÔ				
IF		{ a	ÊGÊÍ H	G	ÊHÊÍ	Í	ÊG FÊ FH	G	€	F	ÊFJ	F	ÊGEJ	F
IF		I { æ	FG ÊÍ F	F	ÊÊÍ G	G	G FÊÍ	F	€	G	ÊEJ	G	ÊEJ	G
IF		{ a	ÊG ÊÍ H	G	ÊG ÊÊÍ	Í	ÊG HÊ Í G	G	€	F	ÊEJ	F	ÊFÊÍ	F
IFJ		Í { æ	FG HÊÍ F	F	ÊGEFÍ	G	G HÊ €J	F	€	G	ÊEF	F	ÊEF	G
IG		{ a	ÊFJ ÊÍ H	G	ÊÍ ÊÍ F	Í	ÊG Í ÊÍ	G	€	F	ÊEEF	G	ÊEEF	F
IG	TII	F { æ	FÊ ÊÍ G	I	ÊÍ ÊÍ J	F	GG ÊHG	H	€	G	ÊHH	I	ÊHF	I
IGG		{ a	ÊFF ÊÍ Í	H	ÊÊÍ Í	Í	ÊG ÊÍ	I	€	I	ÊEH	H	ÊHÍ	H
IGH		G { æ	FÊ HÊÍ J	I	ÊHÊ HG	F	GG ÊÍ F	H	€	G	ÊG	I	ÊG	I
IG		{ a	ÊÊ ÊÍ H	H	Ê FÊHF	Í	ÊG ÊÍ	I	€	I	ÊG J	H	ÊG H	H
IG		H { æ	FÊÊ G	I	ÊÊÊ ÊÍ	F	GG ÊÍ J	H	€	G	ÊÍ H	I	ÊÍ I	I
IG		{ a	ÊÊ ÊG	H	ÊGÊÍ H	Í	ÊG ÊÍ	I	€	I	ÊHÍ	H	ÊHÍ F	H
IG		I { æ	JÍ ÊEH	I	ÊÊÍ J	F	GG ÊFÍ	H	€	G	ÊE	I	ÊE I	I
IG		{ a	ÊÊ ÊGÍ	H	ÊG ÊFÍ	Í	ÊG ÊG	I	€	I	ÊH H	H	ÊEJ	H
IGJ		Í { æ	JÍ ÊG F	I	ÊÊÍ G	F	GG ÊÍ Í	H	€	G	€	G	ÊEF	I
IHE		{ a	ÊÊÊ ÊÍ	H	ÊÍ ÊÍ Í	Í	ÊG ÊÊ Í H	I	€	I	ÊEEF	I	€	G
IHF	TUIÓ	F { æ	€	F	ÊFÍ	F	ÊG	F	€	Í	€	F	€	FF
IHG		{ a	€	G	ÊÊÍ	Í	ÊÊ	Í	€	F	€	G	€	F
IHH		G { æ	Í HÊÍ	F	Í J ÊFÍ	F	G ÊG	F€	ÊEH	G	ÊG	I	ÊE I	F
IH		{ a	ÊÍ ÊÍ	G	ÊÍ ÊEJ	G	ÊH ÊEH	Í	ÊEJ	F	ÊEG	H	ÊFF	G
IH		H { æ	Í FÊ EH	F	H ÊFF	F	FH ÊÊ	H	ÊEH	I	ÊH	G	ÊFH	G
IH		{ a	ÊG ÊÍ F	Í	Ê HÊÍ G	F€	ÊG ÊÍ	I	ÊGÍ	H	ÊE J	F	ÊGG	F
IH		I { æ	ÊHÊÍ	F	HÊÍ	H	HÊÊ G	G	€	Í	ÊHG	F	ÊHG	H
IH		{ a	ÊGÊ EH	Í	ÊFÊ J	I	ÊFÊ JH	F	€	I	ÊHG	G	ÊHG	I
IHU		Í { æ	€	F	ÊE	I	ÊE	Í	€	Í	€	G	€	FF
IIE		{ a	€	G	ÊÊÍ	Í	ÊEJ	F	€	I	€	F	€	F
IIF	TII	F { æ	HÍ ÊGG	F	FÍ ÊFF	G	Í GÊG	G	ÊE	Í	ÊEJ	F	ÊE F	H
IIG		{ a	ÊFÍ ÊFF	G	ÊÍ ÊÍ	F	ÊH ÊÊÍ	F	ÊEG	F€	ÊE G	G	ÊHÍ	Í
IIH		G { æ	HÍ ÊGG	F	FÍ ÊFF	G	Í GÊG	G	ÊE	Í	ÊEJ	F	ÊE	F
III		{ a	ÊFÍ ÊFF	G	ÊÍ ÊÍ	F	ÊH ÊÊÍ	F	ÊEG	F€	ÊE Í	G	ÊHÍ	Í
III		H { æ	HÍ ÊGG	F	FÍ ÊFF	G	Í GÊG	G	ÊE	Í	ÊE H	F	ÊE H	F
III		{ a	ÊFÍ ÊFF	G	ÊÍ ÊÍ	F	ÊH ÊÊÍ	F	ÊEG	F€	ÊEH	G	ÊHÍ G	Í
III		I { æ	HÍ ÊGG	F	FÍ ÊFF	G	Í GÊG	G	ÊE	Í	ÊE I	I	ÊE I	F
III		{ a	ÊFÍ ÊFF	G	ÊÍ ÊÍ	F	ÊH ÊÊÍ	F	ÊEG	F€	ÊEFF	H	ÊHÍ J	Í
IJJ		Í { æ	HÍ ÊGG	F	FÍ ÊFF	G	Í GÊG	G	ÊE	Í	ÊE J	I	ÊE J	F
IIE		{ a	ÊFÍ ÊFF	G	ÊÍ ÊÍ	F	ÊH ÊÊÍ	F	ÊEG	F€	ÊEÊ	H	ÊEJ	Í
IIF	TII	F { æ	Í GÊG	G	Í ÊH	F	G ÊG F	I	ÊH	F	ÊE I	I	ÊE I	F
IIG		{ a	ÊGÊÍ	F	ÊÍ GÊFÍ	G	ÊÍ FGH	H	ÊEG	G	ÊEJH	H	ÊHÊ	G
IIH		G { æ	Í GÊG	G	Í ÊH	F	G ÊG F	I	ÊH	F	ÊE J	I	ÊE F	F
III		{ a	ÊGÊÍ	F	ÊÍ GÊFÍ	G	ÊÍ FGH	H	ÊEG	G	ÊEEF	H	ÊEJ	G
III		H { æ	Í GÊG	G	Í ÊH	F	G ÊG F	I	ÊH	F	ÊEJ	I	ÊH	F
III		{ a	ÊGÊÍ	F	ÊÍ GÊFÍ	G	ÊÍ FGH	H	ÊEG	G	ÊEJ	H	ÊEJ	G
III		I { æ	Í GÊG	G	Í ÊH	F	G ÊG F	I	ÊH	F	ÊEH	I	ÊHG	F
III		{ a	ÊGÊÍ	F	ÊÍ GÊFÍ	G	ÊÍ FGH	H	ÊEG	G	ÊEÍ	H	ÊE G	G
IJJ		Í { æ	Í GÊG	G	Í ÊH	F	G ÊG F	I	ÊH	F	ÊEÍ	I	ÊE G	F
IIE		{ a	ÊGÊÍ	F	ÊÍ GÊFÍ	G	ÊÍ FGH	H	ÊEG	G	ÊEG	H	ÊE H	G
IIF	TUFÓ	F { æ	€	I	ÊH	G	ÊEFG	I	€	F	€	I	€	FF
IIG		{ a	€	H	ÊHÍ	F	ÊEG	Í	€	G	€	F	€	F
IIH		G { æ	FÍ ÊEG	I	Í ÊÍ	G	Í J ÊG	G	ÊE	F	ÊEJ	F	ÊE I	H
III		{ a	Í ÊG	H	Ê J ÊH	Í	ÊE ÊE	F	ÊEJ	G	ÊEG	G	ÊH H	Í
III		H { æ	FFGÊ G	I	FÍ ÊJ	G	HFJÊ I	F	ÊE	G	ÊFH	G	ÊFH	F
III		{ a	ÊÍ ÊÍ F	H	ÊÍ ÊEH	Í	ÊJHÊ Í	G	ÊE	F	ÊG	F	ÊE J	G
III		I { æ	ÊHÊÍ	I	HÊÍ	H	HÊJF	G	€	Í	ÊHG	F	ÊHG	H

9bj YcdYA Ya Vyf GYWJcb: cfWg f7 cbh7bi YXL

	T ʌ{ ʌ! ʌ&	Ôʌ&	Ôʌ&ʌá	ŠÔ	ʌU@æʌá	ŠÔ	ʌU@æʌá	ŠÔ	V{ }ʌZ ʌZ ʌZ ŠÔ	ʌÊ ʌ{ } ʌZ ʌZ ŠÔ	ʌÊ ʌ{ } ʌZ ʌZ ŠÔ	ʌÊ ʌ{ } ʌZ ʌZ ŠÔ	ʌÊ ʌ{ } ʌZ ʌZ ŠÔ	ʌÊ ʌ{ } ʌZ ʌZ ŠÔ		
ÍIG			{ ă	€	F	€	H	ÊÊÊ	I	€	F	€	F	€	F	
ÍIH		G	{ æ	FÊI ÊJ	H	FÊ ÊG	G	I HÊI J	H	ÊFG	G	ÊGH	I	ÊJI	F	
ÍII			{ ă	ÊJU ÊJ	I	ÊG ÊG	F	ÊI ÊJ	I	ÊFI	F	ÊGJ	H	ÊEI	G	
ÍII		H	{ æ	FÊI HÊI	H	FÊ ÊFI	G	I H ÊHG	H	ÊFG	G	ÊJ	I	ÊIG	F	
ÍII			{ ă	ÊJU ÊH	I	ÊG ÊFI	F	ÊI HÊI	I	ÊFI	F	ÊFG	H	ÊHF	G	
ÍII		I	{ æ	FÊI JÊI	H	FÊ ÊEI	G	I ÊEJ	H	ÊFG	G	ÊJ	H	ÊFG	F	
ÍII			{ ă	ÊEÊ ÊJ	I	ÊG ÊEI	F	ÊI ÊEJ	I	ÊFI	F	ÊEJ	I	ÊIF	G	
ÍIJ		Í	{ æ	FÊI ÊFJ	H	FÊ ÊJ	G	I HÊI	H	ÊFG	G	ÊI	H	ÊI	F	
ÍI€			{ ă	ÊEÊ FJ	I	ÊG ÊJ	F	Ê H ÊF	I	ÊFI	F	ÊI	I	ÊJI	G	
ÍIF	TIG	F	{ æ	I GÊH	I	HÊI ÊI	H	G Ê ÊF	G	ÊI	I	ÊHG	I	ÊEG	I	
ÍIG			{ ă	ÊI ÊEI	I	ÊEJ ÊFI	I	ÊEJ ÊJ	F	ÊEJ	H	ÊE	I	ÊEG	I	
ÍIH		G	{ æ	FÊI ÊF	H	I Ê ÊF	H	HÊI ÊI	G	ÊI	I	FÊJ	G	GÊGG	I	
ÍII			{ ă	ÊE ÊH	I	ÊEJ ÊI	I	ÊEJ ÊE	I	ÊEJ	H	ÊEJ	F	ÊEJ	H	
ÍII		H	{ æ	FÊE ÊI	H	ÊEJ ÊEG	G	ÊE ÊG	FÊ	ÊEJ	F	FÊI	G	HÊG	I	
ÍII			{ ă	ÊE HÊI	I	ÊE HÊI	I	ÊE ÊEJ	I	ÊE	G	ÊE H	F	ÊE I	G	
ÍII		I	{ æ	I ÊI ÊI	H	FÊ ÊI	I	JÊ ÊI	F	ÊEJ	F	ÊEG	G	FÊE	I	
ÍII			{ ă	ÊI ÊE I	I	ÊE ÊE I	H	ÊE ÊE	H	ÊE	G	ÊE I	I	ÊE I	G	
ÍIJ		Í	{ æ	I G ÊI	H	FÊ ÊEJ	I	JÊ ÊI	F	ÊEJ	F	ÊE	I	ÊE J	H	
ÍI€			{ ă	ÊI ÊE I	I	ÊE ÊE I	H	ÊE ÊE	H	ÊE	G	ÊE I	H	ÊE I	I	
ÍIF	TIH	F	{ æ	I FÊI ÊI	I	JÊ ÊI	I	I GÊI	F	ÊEG	G	€	FF	€	FF	
ÍJG			{ ă	ÊI ÊE I	G	ÊE	H	Ê ÊE	G	ÊE	F	€	F	€	F	
ÍJH		G	{ æ	I FÊI ÊI	I	G ÊI	F	G ÊI	F	ÊEG	G	ÊE	F	ÊEG	H	
ÍJI			{ ă	ÊE I ÊE I	H	ÊE I	H	ÊE I	G	ÊE	F	ÊE I	G	ÊE I	I	
ÍJÍ		H	{ æ	I FÊI ÊE I	I	€	FF	€	FF	ÊEG	G	ÊE	F	ÊEG	H	
ÍJÍ			{ ă	ÊE GÊI	I	H	€	F	€	ÊE	F	ÊE	G	ÊE J	I	
ÍJÍ		I	{ æ	I FÊI ÊE I	I	FÊI	H	G ÊI	I	ÊEG	G	ÊE	F	ÊEG	H	
ÍJÍ			{ ă	ÊE FÊI	F	H	ÊE ÊI	F	ÊE ÊI	F	ÊE	F	ÊE I	G	ÊE I	I
ÍJJ		Í	{ æ	I FÊI ÊE I	I	GÊI	H	I GÊI	G	ÊEG	G	€	FF	€	FF	
Í€€			{ ă	ÊE JÊI	F	H	ÊE ÊE I	G	ÊE ÊE I	F	ÊE	F	€	F	€	F
Í€F	TII	F	{ æ	GÊE ÊE I	I	FÊI ÊE I	I	GÊE J	H	ÊE	G	€	FF	€	FF	
Í€G			{ ă	ÊE I ÊE I	H	I ÊE H	F	ÊE ÊE J	I	ÊE	I	€	F	€	F	
Í€H		G	{ æ	GÊI ÊE I	I	I ÊE G	I	FÊE	H	ÊE	G	ÊE	H	ÊE	H	
Í€I			{ ă	ÊE H ÊE I	H	GÊI	F	ÊE ÊE	I	ÊE	I	ÊE	I	ÊE	I	
Í€I		H	{ æ	GÊE I H	I	€	FF	€	FF	ÊE	G	ÊE	H	ÊE	H	
Í€I			{ ă	ÊE GÊI	H	H	€	F	€	F	ÊE	I	ÊE	I	ÊE	I
Í€I		I	{ æ	GÊI ÊE I	I	ÊE ÊE I	FÊ	FÊE	I	ÊE	G	ÊE	H	ÊE	H	
Í€I			{ ă	ÊE G ÊE I	G	ÊE ÊE G	I	ÊE ÊE	H	ÊE	I	ÊE	I	ÊE	I	
Í€I		Í	{ æ	GÊE I F	I	ÊE ÊE H	FÊ	GÊE J	I	ÊE	G	€	FF	€	FF	
Í€I			{ ă	ÊE G ÊE I	F	H	ÊE ÊE I	I	ÊE ÊE J	H	ÊE	I	€	F	€	F
ÍFF	TII	F	{ æ	FFF ÊE I	G	FÊI ÊE I	I	GÊE J	I	ÊE	F	€	FF	€	FF	
ÍFG			{ ă	ÊE I ÊE I	F	I ÊE H	F	ÊE ÊE J	H	€	G	€	F	€	F	
ÍFH		G	{ æ	FÊI ÊE H	G	I ÊE G	I	FÊE	I	ÊE	F	ÊE	I	ÊE	I	
ÍFI			{ ă	ÊE I ÊE I	F	GÊI	F	ÊE ÊE	H	€	G	ÊE	H	ÊE	H	
ÍFI		H	{ æ	FÊE ÊE G	G	€	FF	€	FF	ÊE	F	ÊE	I	ÊE	I	
ÍFI			{ ă	ÊE I ÊE I	F	€	F	€	F	€	G	ÊE	H	ÊE	H	
ÍFI		I	{ æ	JÊ ÊE F	G	ÊE ÊE I	FÊ	FÊE	H	ÊE	F	ÊE	I	ÊE	I	
ÍFI			{ ă	ÊE I ÊE I	F	ÊE ÊE G	I	ÊE ÊE	I	€	G	ÊE	H	ÊE	H	
ÍFJ		Í	{ æ	JÊ ÊE I	H	ÊE ÊE H	FÊ	GÊE J	H	ÊE	F	€	FF	€	FF	
ÍG€			{ ă	ÊE I ÊE I	F	ÊE ÊE I	I	ÊE ÊE J	I	€	G	€	F	€	F	
ÍGF	TII	F	{ æ	GÊE ÊE I	F	FÊI ÊE I	I	G ÊE H	F	ÊEG	G	€	FF	€	FF	
ÍGG			{ ă	ÊE ÊE I	G	I ÊE H	F	ÊE ÊE H	G	ÊEG	F	€	F	€	F	
ÍGH		G	{ æ	GÊE ÊE I	F	I ÊE G	I	FÊE I	F	ÊEG	G	ÊE	F	ÊE	F	

9bj YcdY5=G7 %h fl *\$!%Ł'@: 8 'GhY'7cXY7\ YWg'f' cbh}bi YXL

	T^ { }à!	Ù@^	Ô ã^ÁÓ@&	Š &ZÉ ŠÓ	Ù@æÞÉŠ &ZÉa	ŠÓ	@Ú) ÞÉ @Ú) dÞÉ @É } ÞÉ @É } ÞÉa Ò }	
GH	T GGE	PÜÜI YI YH	ÉÍ G	€	F	ÉI H HGI F ^	I	Féfi i ÞÉ Féi FG FGI I GFI I G FÞP FÉa
G	T ÚI Ó	ÚQÓ' GÉ	ÉÍ F	Í É	I	ÉHI Í É	G	Hehi ÞÉ é Fí Hé Jí Hé Jí FÞP FÉa
G	T G	ŠHÝHI	ÉÍ Í	€	F	ÉGE GFI :	F	IFJHGÞÉ ÞÍ ÞÍ FÉ ÞÍ Hé ÞÍ FÞP GÉ
G	T I €	ÚSFÓÍ	ÉÍ G	ÉI	I	ÉÍ F ^	F	ÞÍ ÞÍ FÞÉ Jí GEE FÉFG FGI FÞP FÉa
G	T G€	ÚSFÓÍ	ÉÍ €	F	F	ÉJÍ F ^	H	ÞÍ ÞÍ FÞÉ Jí GEE FÉFG FGI FÞP FÉa
G	T II	ŠHÝHI	ÉÍ Í	€	F	ÉGE GFI :	F	IFJHGÞÉ ÞÍ ÞÍ FÉ ÞÍ Hé ÞÍ FÞP GÉ
GJ	T ÚG Ó	ÚQÓ' GÉ	ÉHU	Í É	F	ÉJÍ G	I	Hehi ÞÉ é Fí Hé Jí Hé Jí GÞP FÉa
H€	T I €	ÚSFÓÍ	ÉHI	F	H	ÉÍ F ^	G	ÞÍ ÞÍ FÞÉ Jí GEE FÉFG FGI FÞP FÉa
HF	T F€	ÚQÓ' GÉ	ÉHG	I ÉG	F	ÉGÍ BÍ H	I	GÍ HÞÉ HGFHE FÉ I G FÉ I G FÞP FÉa
HG	T ÚG Ó	ÚQÓ' GÉ	ÉÉÍ	Í É	I	ÉJF G	I	Hehi ÞÉ é Fí Hé Jí Hé Jí FÞP FÉa
HH	T I	PÜÜI YI YH	ÉÉÍ	€	G	ÉJ I HGI F ^	I	Féfi i ÞÉ Féi FG FGI I GFI I G FÞP FÉa
HI	T ÚH Ó	ÚQÓ' GÉ	ÉEG	G	F	ÉJH G	I	Hehi ÞÉ é Fí Hé Jí Hé Jí GÞP FÉa
HÍ	T II	ŠHÝHI	ÉJÍ	€	H	ÉFÍ € :	H	IFJHGÞÉ ÞÍ ÞÍ FÉ ÞÍ Hé ÞÍ FÞP GÉ
HÍ	T ÚF Ó	ÚQÓ' GÉ	ÉÍ	Í É	I	ÉJ GÉÍ	G	Hehi ÞÉ é Fí Hé Jí Hé Jí GÞP FÉa
HÍ	T Í	ŠHÝHI	ÉI F	€	H	ÉFÍ GFI :	H	IFJHGÞÉ ÞÍ ÞÍ FÉ ÞÍ Hé ÞÍ FÞP GÉ
HÍ	T Í	ŠHÝHI	ÉG	€	F	ÉFÍ € :	F	IFJHGÞÉ ÞÍ ÞÍ FÉ ÞÍ Hé ÞÍ FÞP GÉ
HJ	T I F	ÚQÓ' GÉ	ÉG	I ÉÍ	G	ÉG I ÉÍ	G	FÍ Jí ÞÉ HGFHE FÉ I G FÉ I G GÞP FÉa
I €	T JH€	ÚQÓ' GÉ	ÉF€	HÉ I G	G	ÉFH ÉÍ	H	GÍ I ÞÉ HGFHE FÉ I G FÉ I G FÞP FÉa
IF	T I J	ŠGÉ cGÉ d	ÉJÍ	GÉ I I	G	ÉGF € :	G	FÍ Fí ÞÉ HÍ ÞÍ FÉ Fí GGG FÞP GÉ
IG	T GH	ŠHÝHI	ÉJH	€	I	ÉFF GFI :	F	IFJHGÞÉ ÞÍ ÞÍ FÉ ÞÍ Hé ÞÍ FÞP GÉ
IH	T ÚF Ó	ÚQÓ' GÉ	ÉI J	GÉ I	F	ÉGF G	F	Hehi ÞÉ é Fí Hé Jí Hé Jí GÞP FÉa
II	T I €	ŠGÉ cGÉ d	ÉÍ	GÉ I I	G	ÉGG € :	G	FÍ Fí ÞÉ HÍ ÞÍ FÉ Fí GGG FÞP GÉ
II	T II	ŠGÉ cGÉ d	ÉÍ €	HÉ F I	I	ÉFÍ € :	G	FÍ Fí ÞÉ HÍ ÞÍ FÉ Fí GGG FÞP GÉ
II	T I H	PÜÜI YI YH	ÉÍ J	€	I	ÉÍ HGI F ^	F	Féfi i ÞÉ Féi FG FGI I GFI I G FÞP FÉa
II	T G F Ó	ŠGÉ cGÉ ÞÉ	ÉÍ	I É F I	I	ÉÉ I É F :	H	I HFGÞÉ I HGE Hé I I GÉ I FÞP FÉa
II	T ÚI Ó	ÚQÓ' GÉ	ÉÍ H	GÉ I	G	ÉJH G	G	Hehi ÞÉ é Fí Hé Jí Hé Jí GÞP FÉa
I J	T II	ŠGÉ cGÉ d	ÉÍ H	GÉ F	F	ÉFÍ € :	H	FÍ Fí ÞÉ HÍ ÞÍ FÉ Fí GGG FÞP GÉ
I €	T II	ŠGÉ cGÉ d	ÉÍ €	GÉ F	F	ÉFÍ € :	H	FÍ Fí ÞÉ HÍ ÞÍ FÉ Fí GGG FÞP GÉ
I F	T I F	ŠGÉ cGÉ d	ÉÍ H	GÉ H	H	ÉFÍ € :	F	FÍ Fí ÞÉ HÍ ÞÍ FÉ Fí GGG FÞP GÉ
I G	T I G	ŠGÉ cGÉ ÞÉ	ÉÍ	I É F I	I	ÉFG I É F ^	I	I HFGÞÉ I HGE Hé I I GÉ I FÞP FÉa
I H	T I €	ÚQÓ' GÉ	ÉFÍ	FÉ I	I	ÉHF I ÉÍ	I	FÍ Jí ÞÉ HGFHE FÉ I G FÉ I G GÞP FÉa
II	T I H	ŠGÉ cGÉ ÞÉ	ÉJÍ	I É F I	I	ÉEJ € :	G	I HFGÞÉ I HGE Hé I I GÉ I FÞP FÉa
II	T I G	ÚQÓ' GÉ	ÉI F	I ÉÍ	I	ÉHI I ÉÍ	G	FÍ Jí ÞÉ HGFHE FÉ I G FÉ I G GÞP FÉa
II	T II	ŠGÉ cGÉ dH	ÉHG	FÉ I I	F	ÉFÍ € :	F	G H I ÞÉ G FJGÉ É I H FÉ G FÞP GÉ
II	T II	ŠGÉ cGÉ dH	ÉGH	FÉ I H	H	ÉFÍ € :	I	G H I ÞÉ G FJGÉ É I H FÉ G FÞP GÉ
II	T II	ŠGÉ cGÉ dH	ÉGE	FÉ G	I	ÉFG GHI :	F	G H I ÞÉ G FJGÉ É I H FÉ G FÞP GÉ

EXHIBIT 9

MODIFICATION AND DESIGN DRAWINGS FOR EXISTING ANTENNA MOUNTS EXISTING MONOPOLE TOWER

PROPOSED CARRIER: T-MOBILE

TOWER OWNER: SBA / TOWER OWNER SITE #: CT02049-S
CARRIER SITE #/NAME: CT11299D / CT BEACON FALLS/RT8
COORDINATES (LATITUDE: 41.455689°, LONGITUDE: -73.039866°)

PLEASE NOTE THIS SET OF DRAWINGS ARE FOR INSTALLATION AND ASSEMBLY ONLY. FABRICATION DETAIL DRAWINGS ARE NOT PROVIDED AND MUST BE COMPLETED BY THE STEEL FABRICATOR SELECTED. TES CAN PROVIDE THE FABRICATION DETAIL DRAWINGS FOR AN ADDITIONAL FEE.

SHEET	SHEET TITLE	REV
T-1	TITLE SHEET	0
BOM	BILL OF MATERIALS	0
GN-1	GENERAL NOTES	0
A-1	ANTENNA MOUNT MODIFICATION DETAILS	0
A-2	ANTENNA MOUNT PHOTOS	0
D-1	STANDARD DETAILS	0
D-2	STANDARD DETAILS	0
D-3	STANDARD DETAILS	0
MS-HRCP-2375	METROSITE SUPPORT RAIL CENTER PIPE KIT	
MS-C2B-2875P	METROSITE V-BRACING KIT	
MS-HRCP-35-2875	METROSITE SUPPORT RAIL CENTER PIPE KIT	

NOTE:

- THE MODIFICATION DRAWINGS ARE BASED ON THE TES PROJECT NO. 99849, DATED 12/03/2020.

Copyright 2021 Tower Engineering Solutions, LLC



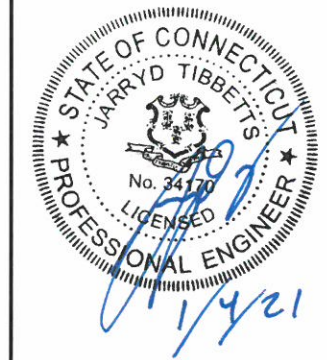
Tower Engineering Solutions
1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403



DRAWN BY: MS CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

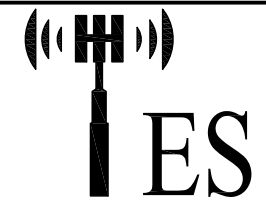
TITLE SHEET

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: REV #:
T-1 0

BILL OF MATERIALS

QUANTITY COUNTED	QUANTITY PROVIDED	PART NUMBER	DESCRIPTIONS	SHEET LIST	PIECE WEIGHT (LBS)	WEIGHT (LB)	NOTES
MATERIAL & HARDWARE							
6	6	MS-HRCP-2375	METROSITE SUPPORT RAIL CENTER PIPE KIT	A-1, MS-HRCP-2375	10.7	64.2	Galvanized
1	1	MS-C2B-2875P	METROSITE V-BRACING KIT	A-1, MS-C2B-2875P	337.0	337.0	Galvanized
2	2	MS-HRCP-35-2875	METROSITE SUPPORT RAIL CENTER PIPE KIT	A-1, MS-HRCP-35-2875	11.0	22.0	Galvanized
FOLLOWING ITEMS ARE "CUSTOM" PARTS							
2	2	PST2875-8	2 1/2" PST (2.875" O.D. X 0.203" THK) X 8'-0" A53 GR-B 35KSI	A-1	47.45	99.6	GALVANIZED
2	2	PST2375-6	2" PST (2.375" O.D. X 0.154" THK) X 6'-0" A53 GR-B 35KSI	A-1	22.61	45.2	GALVANIZED (FINAL CUT LENGTH TO BE DETERMINED IN FIELD)
3	3	PST2375-8	2" PST (2.375" O.D. X 0.154" THK) X 8'-0" A53 GR-B 35KSI	A-1	48.98	151.3	GALVANIZED
3	3	L3325-5	L 3" X 3" X 1/4" X 5'-0" A36	D-1	25.01	75.0	GALVANIZED (FINAL CUT LENGTH TO BE DETERMINED IN FIELD)
6	6	PL375-42510-A	PL 3/8" X 4 1/4" X 10" A36	D-1	4.60	27.6	GALVANIZED
24	26	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)	D-1, D-2	1.17	30.4	(2) HHN & LKW-EA GALVANIZED
12	13	---	BOLT 5/8" X 2" A325	D-1	0.38	4.9	(1) HHN & LKW-EA GALVANIZED
6	6	PL2375-2875	PL 3/8" X 7 1/8" X 10" A36	D-2	7.70	46.2	GALVANIZED
12	13	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	D-2	1.37	17.8	(2) HHN & LKW-EA GALVANIZED
ALL METROSITE PARTS ARE AVAILABLE FROM METROSITE, LLC.							
180 IND PARK BLVD COMMERCE, GA 30529							
OFFICE: (706) 335-7045							
FAX: (706) 335-7056							
NOTE: ALL MATERIALS, WHICH WEREN'T LISTED IN THIS SHEET, ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.							
TOTAL WEIGHT (LBS) =						921.4	



Tower Engineering Solutions
 1320 GREENWAY DRIVE, SUITE 600
 IRVING, TX 75038
 PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
 BOCA RATON, FL 33487
 (800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
 CUSTOMER SITE NAME:
BEACON FALLS
 60 RICE LANE
 BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

BILL OF MATERIALS

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: **BOM** | REV #: **0**

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-G, ANSI/ASSP A10.48, AND ANY OTHER GOVERNING BUILDING CODES AND OSHA SAFETY REGULATIONS.
2. ALL WORK INDICATED ON THE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TELECOMMUNICATIONS TOWER, POLE AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF ALL MISCELLANEOUS PARTS (SUCH AS SHIMS), TEMPORARY SUPPORTS, AND GUYINGS, ETC., PER ANSI/ASSP A10.48, TO COMPLETE THE ASSEMBLY AS SHOWN IN THE DRAWINGS.
4. CONTRACTOR SHALL PROCEED WITH THE INSTALLATION WORK CAREFULLY SO THE WORK WILL NOT DAMAGE ANY EXISTING CABLE, EQUIPMENT OR THE STRUCTURE.
5. THE USE OF GAS TORCH OR WELDER, ARE NOT ALLOWED ON ANY TOWER STRUCTURE WITHOUT THE CONSENT OF THE TOWER OWNER.
6. GENERALLY THE CONTRACTOR IS RESPONSIBLE TO CONDUCT AN ONSITE VISIT SURVEY OF THE JOB SITE AFTER AWARD, AND REPORT ANY ISSUES WITH THE SITE TO **TES** BEFORE PROCEEDING CONSTRUCTION.
7. IT IS THE RESPONSIBILITY OF THE GC TO VERIFY THAT THERE IS NO INTERFERENCES (WITH SAFETY CLIMB BRACKETS, TRANSMISSION LINES, ETC.) PRIOR TO MOBILIZATION AND INSTALLATION OF THESE MODIFICATIONS.
8. PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-TESORDERS@TESTOWER.US

FABRICATION

1. ALL STEEL SHALL MEET OR EXCEED THE MINIMUM STRENGTH AS SPECIFIED IN THE DRAWINGS. IF YIELD STRENGTH WAS NOT NOTED IN THE DRAWINGS, CONTRACTORS SHALL CONTACT TES FOR DIRECTION.
2. ALL FIELD CUT EDGES SHALL BE GROUND SMOOTH. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

WELDING

1. ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNO. (E70XX UNLESS NOTED OTHERWISE).
2. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING APPROX. 0.5" BEYOND THE PROPOSED FIELD WELD SURFACES.
3. ALL WELDS SHALL BE INSPECTED VISUALLY. A MINIMUM OF 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. 100% OF WELDS SHALL BE INSPECTED IF DEFECTS ARE FOUND.
4. WELD INSPECTIONS SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
5. AFTER INSPECTION, ALL FIELD WELDED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

BOLTED ASSEMBLIES AND TIGHTENING OF CONNECTIONS

1. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO THE PROVISIONS OF THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS AS APPROVED BY THE RSCC.
2. FLANGE BOLTS SHALL BE TIGHTENED BY THE AISC "TURN-OF-THE-NUT" METHOD. THE FOLLOWING TABLE SHOULD BE USED FOR THE "TURN-OF-THE-NUT" TIGHTENING.
3. SPLICE BOLTS AND ALL OTHER BOLTS IN BEARING TYPE CONNECTIONS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION.
4. THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY EITHER A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER WITH AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
5. HB HOLLO-BOLT SHALL BE INSTALLED PER ICC ESR-3330 INSTRUCTIONS.

VERIFICATION AND INSPECTION

1. IF APPLICABLE, VERIFICATION INSPECTION TO BE PERFORMED SHALL BE IN ACCORDANCE TO IBC-2015 SECTION 1705 FOR STEEL CONSTRUCTION AND TABLE 1705.3 FOR CONCRETE CONSTRUCTION.

TABLE 8.2 NUT ROTATION FROM SNUG-TIGHT CONDITION FOR TURN-OF-NUT PRETENSIONING^{a,b}

BOLT LENGTH ^f	DISPOSITION OF OUTER FACE OF BOLTED PARTS		
	BOTH FACES NORMAL TO BOLT AXIS	ONE FACE NORMAL TO BOLT AXIS, OTHER SLOPED NOT MORE THAN 1:20 ^d	BOTH FACES SLOPED NOT MORE THAN 1:20 FROM NORMAL TO BOLT AXIS ^d
NOT MORE THAN 4d _b	1/3 TURN	1/2 TURN	2/3 TURN
MORE THAN 4d _b BUT NOT MORE THAN 8d _b	1/2 TURN	2/3 TURN	5/6 TURN
MORE THAN 8d _b BUT NOT MORE THAN 12d _b	2/3 TURN	5/6 TURN	1 TURN

^a NUT ROTATION IS RELATIVE TO BOLT REGARDLESS OF THE ELEMENT (NUT OR BOLT) BEING TURNED. FOR REQUIRED NUT ROTATIONS OF 1/2 TURN AND LESS, THE TOLERANCE IS PLUS OR MINUS 30 DEGREES; FOR REQUIRED NUT ROTATIONS OF 2/3 TURN AND MORE, THE TOLERANCE IS PLUS OR MINUS 45 DEGREES.

^b APPLICABLE ONLY TO JOINTS IN WHICH ALL MATERIAL WITHIN THE GRIP IS STEEL.

^c WHEN THE BOLT LENGTH EXCEEDS 12d_b, THE REQUIRED NUT ROTATION SHALL BE DETERMINED BY ACTUAL TESTING IN A SUITABLE TENSION CALIBRATOR THAT SIMULATES THE CONDITIONS OF SOLIDLY FITTING STEEL.

^d BEVELED WASHER NOT USED.

SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004 RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS

INSTALLATION TORQUE REQUIRED FOR HOLLO BOLTS AND AJAX BOLTS:

1. HB12 HOLLO BOLT: 59 FT-LBS
2. HB16 HOLLO BOLT: 140 FT-LBS
3. HB20 HOLLO BOLT: 221 FT-LBS
4. M20 AJAX BOLT: 280 FT-LBS.

FIELD HOT WORK PLAN NOTES:

FOLLOWING GUIDELINES SHALL BE COMPLIED WITH:

1. CONTRACTOR'S RESPONSIBILITY TO COMPLETE A HOT WORK PLAN IF AWARDED PER CUSTOMER SPECIFICATIONS GUIDELINES FOR WELDING, CUTTING & SPARK PRODUCING WORK.
2. HAVE A FIRE PLAN APPROVED BY THE CUSTOMER AND THEIR SAFETY MANAGEMENT DEPT.
3. CONTRACTOR MUST OBTAIN THE CONTACT INFO OF THE LOCAL FIRE DEPARTMENT AND THE 911 ADDRESS OF THE TOWER SITE BEFORE CONSTRUCTION.
4. CONTRACTOR SHALL MAKE SURE THAT CELL PHONE COVERAGE IS AVAILABLE IN THE TOWER SITE. IF CELL COVERAGE IS NOT AVAILABLE, AN IMMEDIATE AVAILABLE MEANS OF DIRECT COMMUNICATION WITH THE FIRE DEPARTMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION START.
5. ALL CONSTRUCTION SHALL BE PERFORMED UNDER WIND SPEED LESS THAN 10 MPH ON THE GROUND LEVEL. IF WIND SPEED INCREASE, CONTRACTOR MUST DETERMINE IF CONSTRUCTION SHALL BE DISCONTINUED.
6. FIRE SUPPRESSION EQUIPMENT MUST BE MADE AVAILABLE ON SITE AND READY TO USE.
7. CONTRACTOR SHALL ASSIGN A FIRE WATCHER TO PERFORM FIRE-FIGHTING DUTIES.
8. ALL WELDERS SHALL BE AWS OR STATE CERTIFIED. THEY MUST ALSO BE EXPERIENCED IN WELDING ON GALVANIZED MATERIALS.
9. IF IT IS POSSIBLE, ALL EXISTING COAX NEAR WELDING AREA SHALL BE TEMPORARILY MOVED AWAY FROM THE WELDING AREA BEFORE WELDING THE PLATES.
10. PLEASE REPORT ANY FIELD ISSUE TO TES @ 972-483-0607.



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA

CUSTOMER SITE NAME:
BEACON FALLS

60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

GENERAL NOTES

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: **GN-1** | REV #: **0**

SCOPE OF WORK

1. REPLACE EXISTING ANTENNA MOUNT PIPES WITH NEW 2 1/2" PST ANTENNA MOUNT PIPES (8'-0" LONG) THEN RELOCATE EXISTING ANTENNAS TO NEW MOUNT PIPES, (1) FOR ALPHA AND (1) FOR GAMMA SECTOR. EXISTING ANTENNA RAD CENTER TO BE MAINTAINED.

NOTE:
CONTRACTOR TO COORDINATE WITH CARRIER PRIOR TO REPLACING OF EXISTING ANTENNA MOUNT PIPES TO DETERMINE IF EXISTING ANTENNAS NEED TO BE TURNED DOWN.

2. INSTALL NEW SUPPORT RAIL CENTER PIPE KIT ON EXISTING BOTTOM SUPPORT RAIL PIPE. (1) ON ALPHA AND GAMMA SECTOR. SEE SHEET MS-HRCP-35-2875 FOR DETAILS.

3. A. INSTALL NEW END CONNECTION ON EXISTING TOP SUPPORT RAIL. SEE SHEET D-1 FOR DETAILS.
B. INSTALL NEW 2" PST TOP AND BOTTOM SUPPORT RAIL PIPES AS SHOWN. (2) FOR DELTA SECTOR ONLY.
C. REMOVE THE EXISTING PIPE ON THE DELTA SECTOR TO ACCOMMODATE THE INSTALLATION OF NEW END CONNECTION.

4. INSTALL NEW 2" PST ANTENNA MOUNT PIPE (8'-0" LONG). (3) FOR DELTA SECTOR ONLY. SEE SHEET D-2 FOR DETAILS.

5. INSTALL NEW SUPPORT RAIL CENTER PIPE KIT ON NEW TOP AND BOTTOM SUPPORT RAIL PIPES. (6) FOR DELTA SECTOR ONLY. SEE SHEETS MS-HRCP-2375 & D-2 FOR DETAILS.

6. INSTALL NEW V-BRACING KIT ON EXISTING TOP SUPPORT RAIL. SEE SHEET MS-C2B-2875P FOR DETAILS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP, REMOVAL AND DISPOSAL OF EXCESS MATERIALS USED AND REMOVED FROM THE STRUCTURE AT THE COMPLETION OF THE PROJECT.

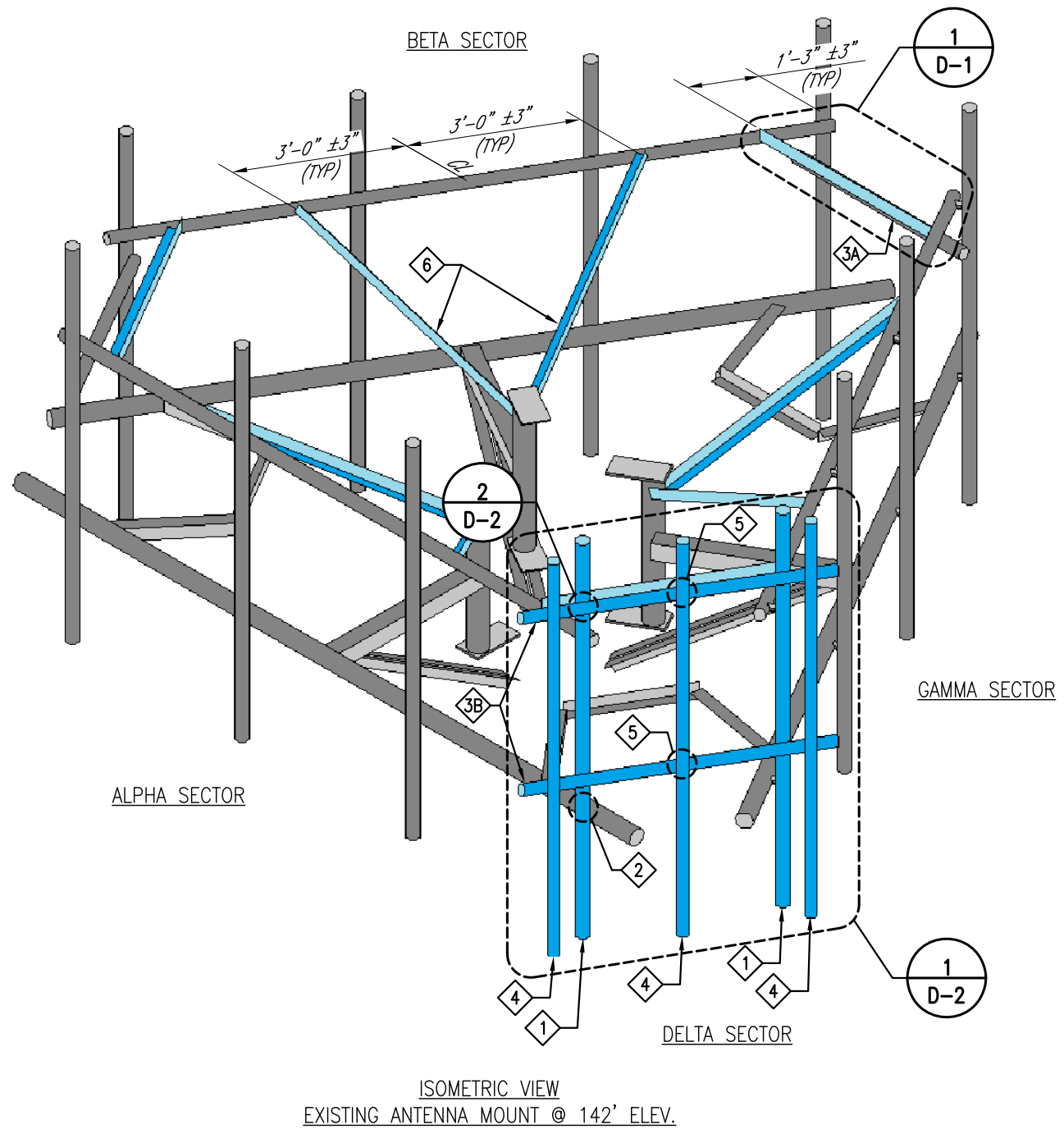
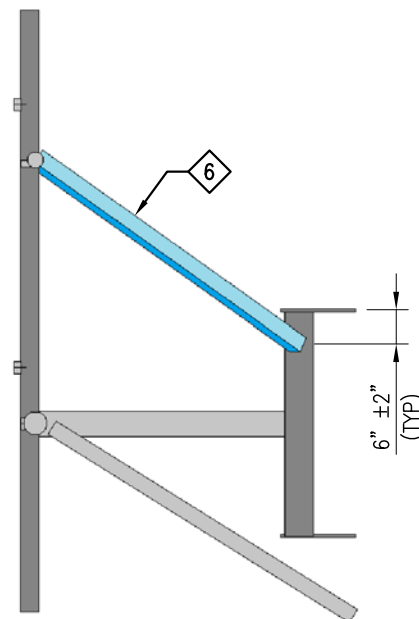


PHOTO 1

EXISTING ANTENNA MOUNT
@ 142' ELEV.



SIDE VIEW

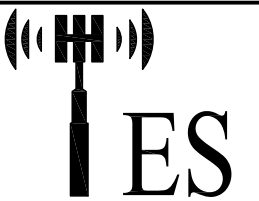
CONTRACTOR NOTE:

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THERE IS NO INTERFERENCES WITH (PORT HOLES, SAFETY CLIMB BRACKETS, TRANSMISSION LINES, ETC.) PRIOR TO MOBILIZATION AND INSTALLATION OF THESE MODIFICATIONS.
- PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-TESORDERS@TESTOWER.US

NOTES:

- TEMPORARILY RELOCATE ANY EXISTING COAX ATTACHED TO THE LEGS AND/OR ANY OTHER MEMBERS WHERE OBSTRUCTION WITH THE PROPOSED MODIFICATION MAY OCCUR.
- WHEN FIELD CUTTING AND DRILLING ANGLES, USE SAME GAGE LINES AND EDGE DISTANCES AS INDICATED ON SHOP CUT AND DRILLED ENDS.
- APPLY (2) COATS OF ZINGA COLD GALVANIZING COMPOUND AS PER THE MANUFACTURER'S SPECIFICATIONS TO ALL FIELD CUT AND DRILLED AREAS.
- MEMBERS IN BLUE COLOR ARE NEW REINFORCEMENTS.

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	2	PST2875-8	2 1/2" PST (2.875" O.D. X 0.203" THK) X 8'-0" A53 GR-B 35
2	2	MS-HRCP-35-2875	METROSITE SUPPORT RAIL CENTER PIPE KIT
3	2	PST2375-6	2" PST (2.375" O.D. X 0.154" THK) X 6'-0" A53 GR-B 35KSI
4	3	PST2375-8	2" PST (2.375" O.D. X 0.154" THK) X 8'-0" A53 GR-B 35KSI
5	6	MS-HRCP-2375	METROSITE SUPPORT RAIL CENTER PIPE KIT
6	1	MS-C2B-2875P	METROSITE V-BRACING KIT



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

ANTENNA MOUNT
MODIFICATION DETAILS

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: | REV #:

A-1 | 0



REMOVE THE EXISTING PIPE ON THE DELTA SECTOR TO ACCOMMODATE THE INSTALLATION OF NEW END CONNECTION.

PHOTO 1



PHOTO 2

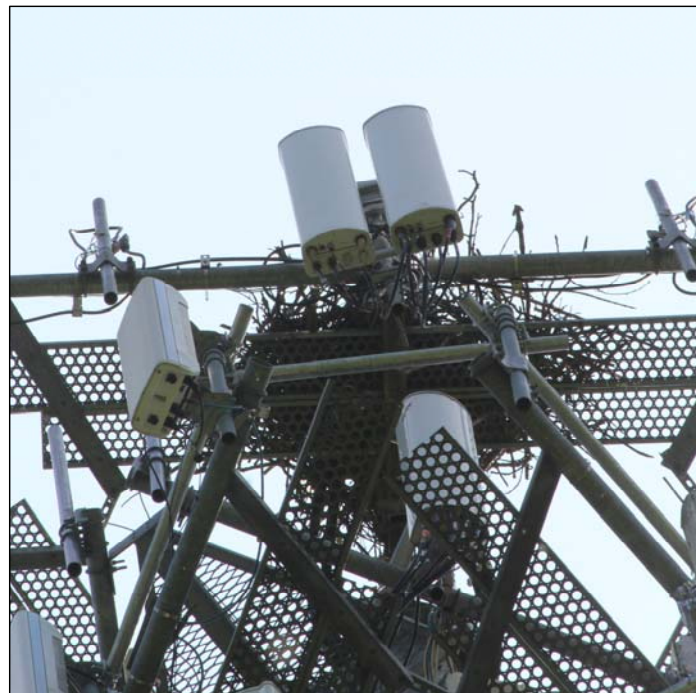


PHOTO 3

NOTE:
EXISTING RRUS/EQUIPMENT MAY BE RELOCATED ALONG THE MEMBER TO ACCOMMODATE THE INSTALLATION OF NEW MOUNT MODIFICATION



Tower Engineering Solutions
1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

ANTENNA MOUNT
PHOTOS

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: A-2 | REV #: 0



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

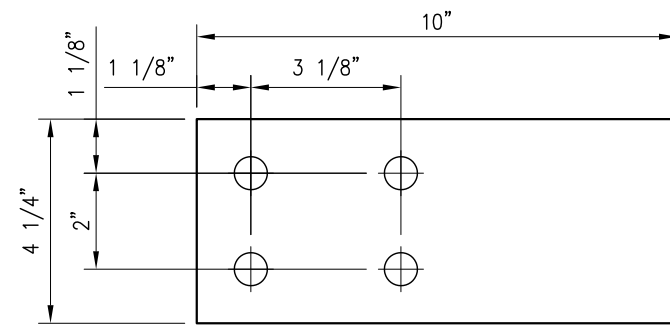
SHEET TITLE:

STANDARD DETAILS

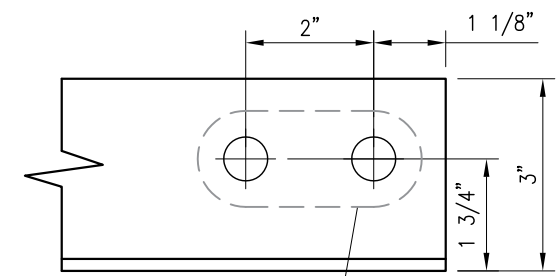
This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: | REV #:

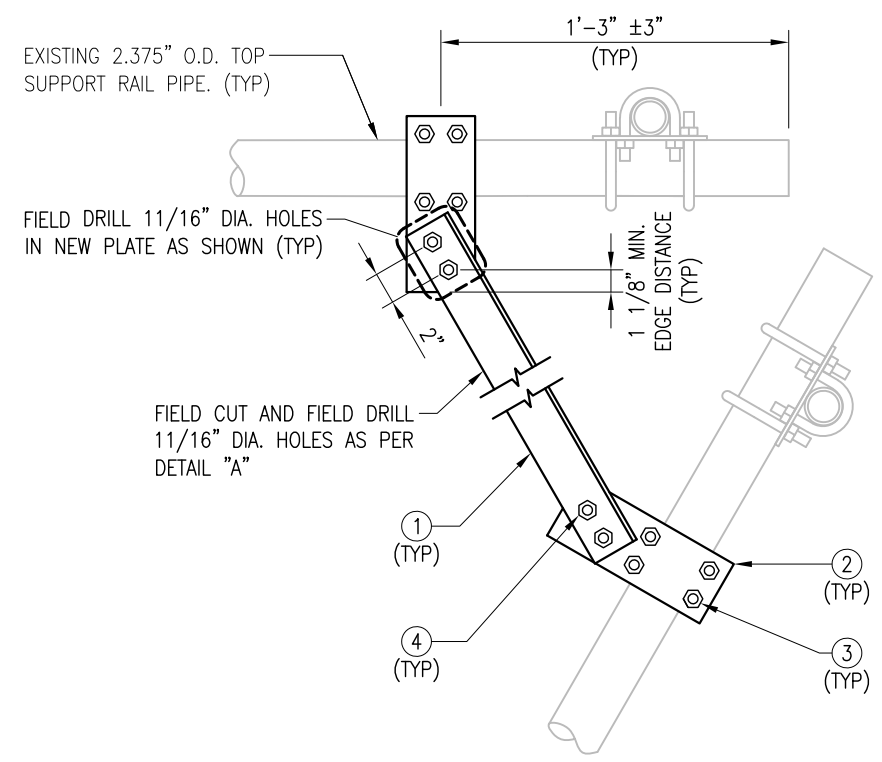
D-1 | 0



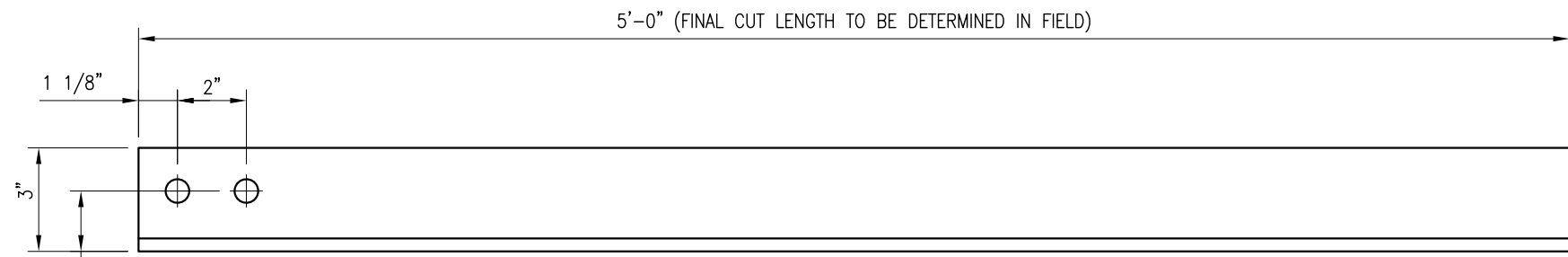
PL375-42510-A
PL 3/8" X 4 1/4" X 10" A36
(4.6 LBS)



FIELD DRILL 11/16" DIA. HOLES
DETAIL "A"



1
D-1 END CONNECTION DETAIL



L3325-5
L 3" X 3" X 1/4" A36
(25.01 LBS)

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	3	L3325-5	L 3" X 3" X 1/4" X 5'-0" A36
2	6	PL375-42510-A	PL 3/8" X 4 1/4" X 10" A36
3	12	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)
4	12	---	BOLT 5/8" X 2" A325

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.
2. ALL HOLES ARE 11/16" DIA. U.N.O

Copyright 2021 Tower Engineering Solutions, LLC



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

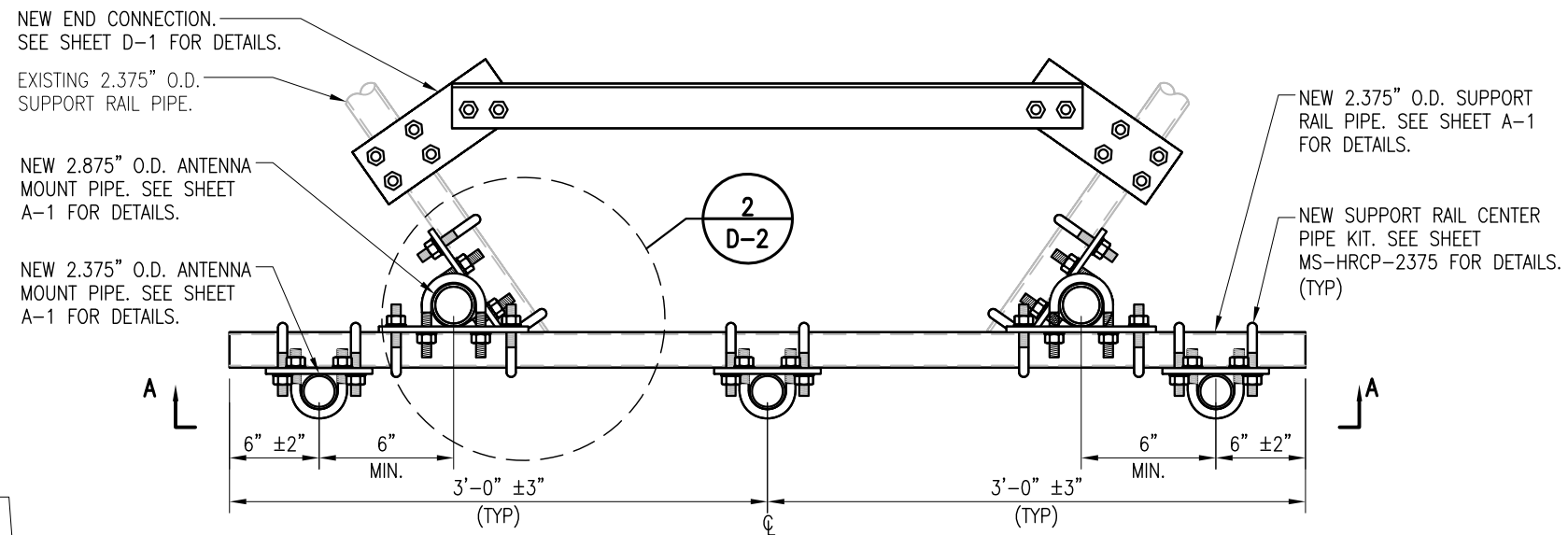
SHEET TITLE:

STANDARD DETAILS

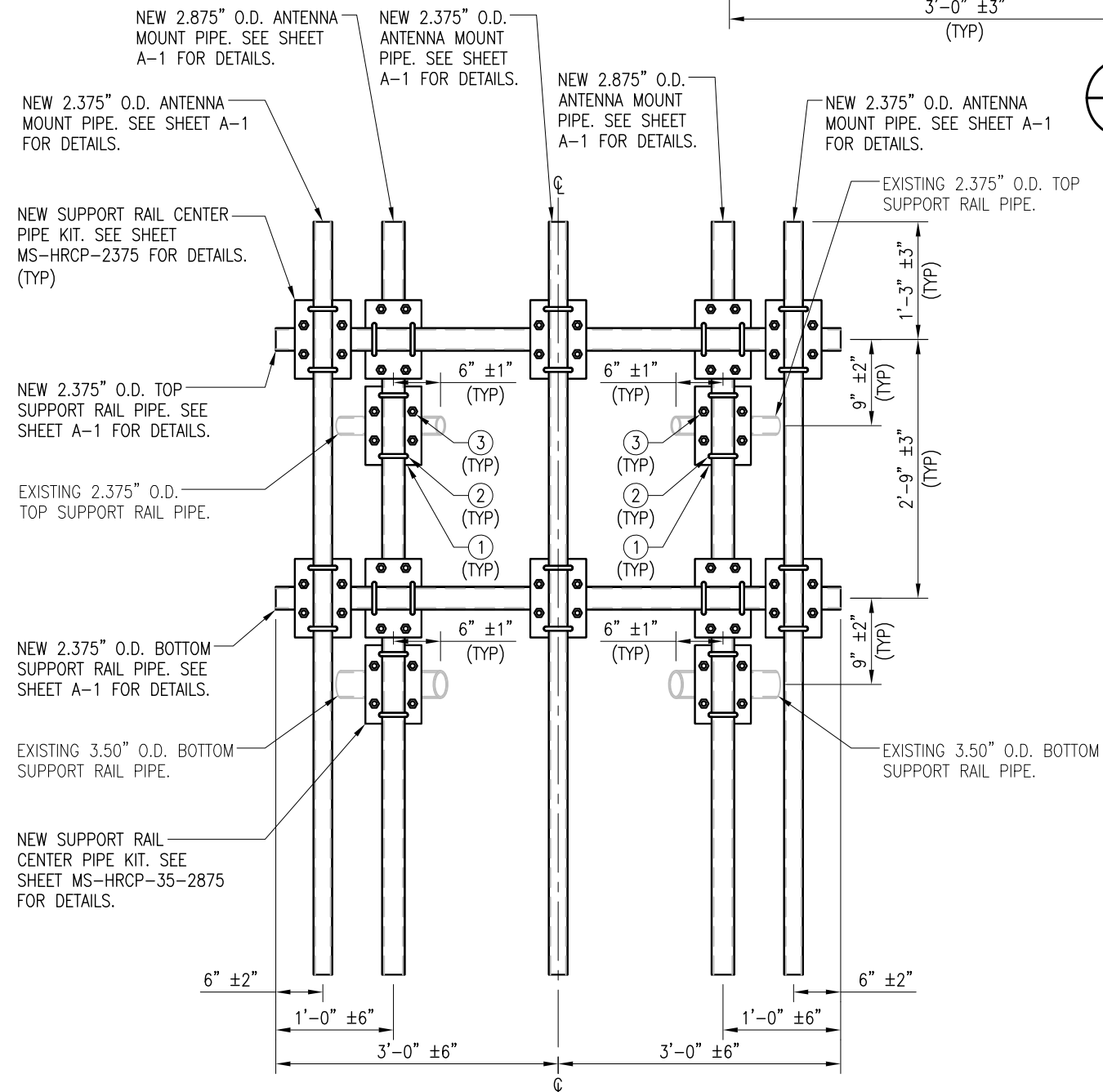
This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: REV #:

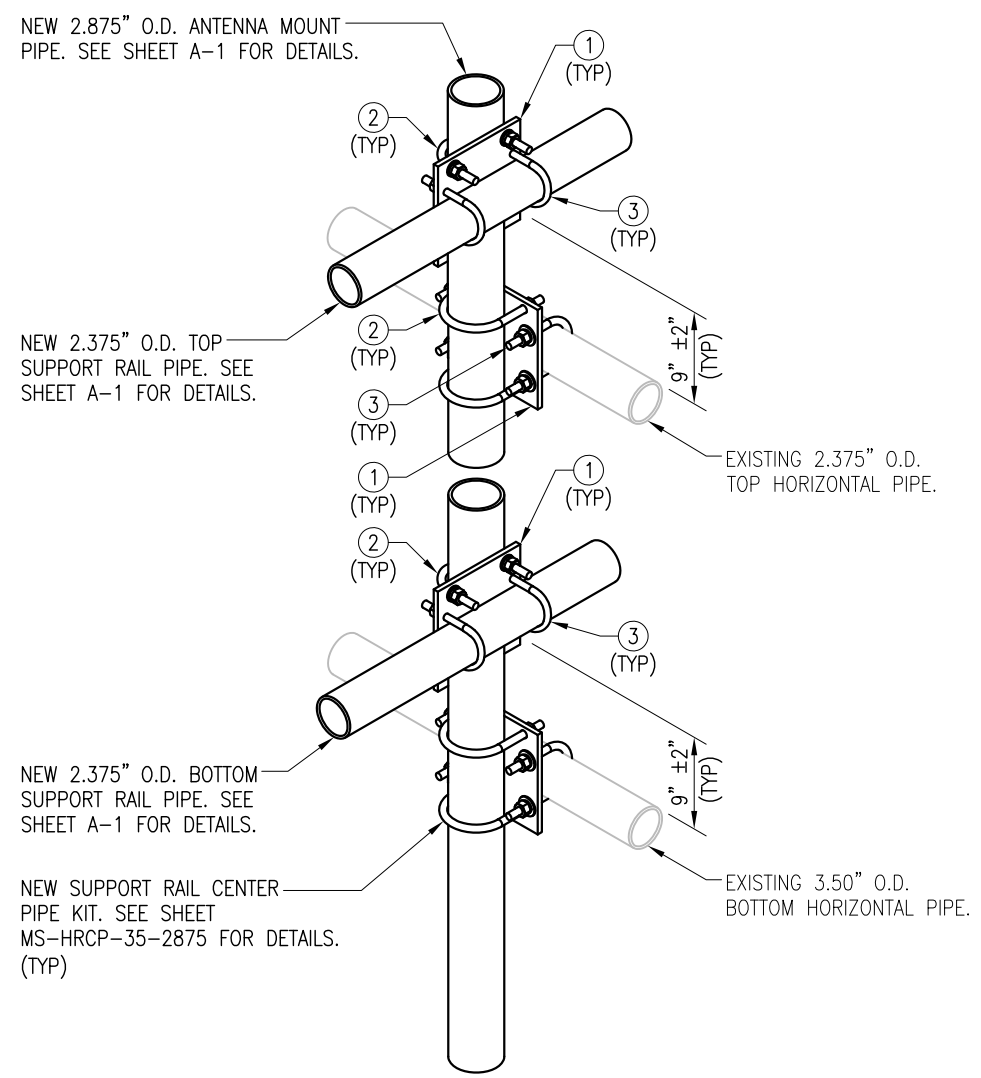
D-2 0



1 PLAN VIEW (DELTA SECTOR) D-2



SECTION "A-A"

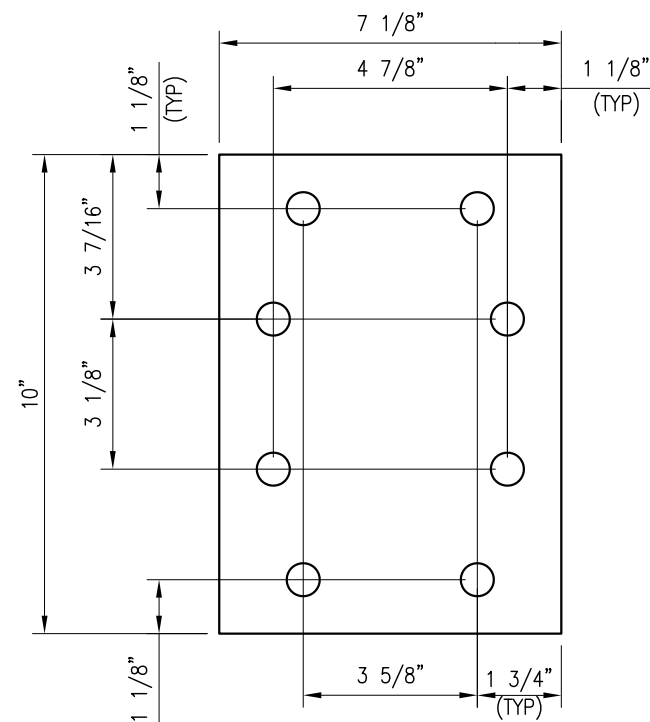


2 DETAIL D-2

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.
2. ALL HOLES ARE 11/16" DIA. U.N.O

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	6	PL2375-2875	PL 3/8" X 7 1/8" X 10" A36
2	12	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)
3	12	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)

Copyright 2021 Tower Engineering Solutions, LLC



PL2375-2875
 PL 3/8" X 7 1/8" X 10" A36
 (7.7 LBS)

- NOTES:
 1. HOT-DIPPED GALVANIZED PER ASTM A123.
 2. ALL HOLES ARE 11/16" DIA. U.N.O



Tower Engineering Solutions
 1320 GREENWAY DRIVE, SUITE 600
 IRVING, TX 75038
 PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
 BOCA RATON, FL 33487
 (800)-487-SITE

TES JOB NO:
 100487

CUSTOMER SITE NO:
 CT02049-S-SBA
 CUSTOMER SITE NAME:
 BEACON FALLS
 60 RICE LANE
 BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

STANDARD DETAILS

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: D-3 | REV #: 0

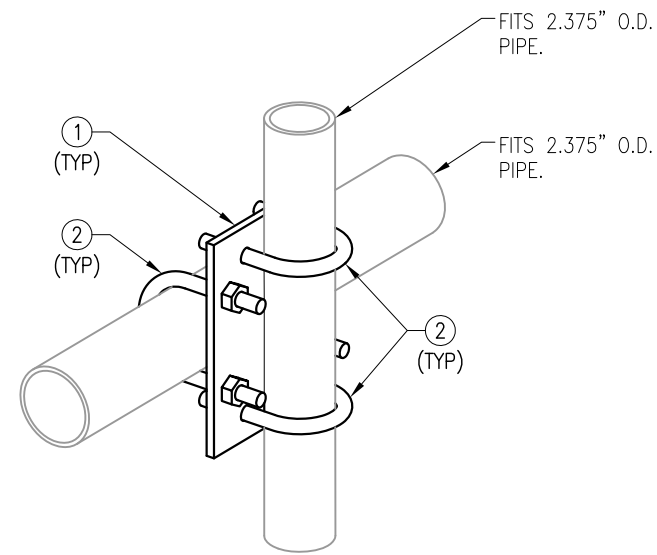
THE FOLLOWING DRAWINGS ARE INCLUDED FOR REFERENCE ONLY
PLEASE REFER TO THE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION DETAILS

NOTES:



1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT-DIPPED GALVANIZED PER ASTM A123.

MS-HRCP-2375

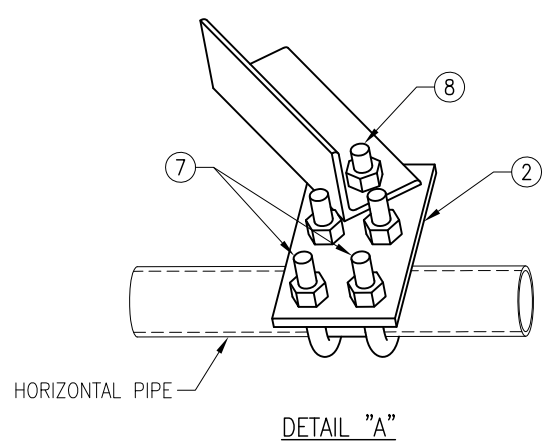
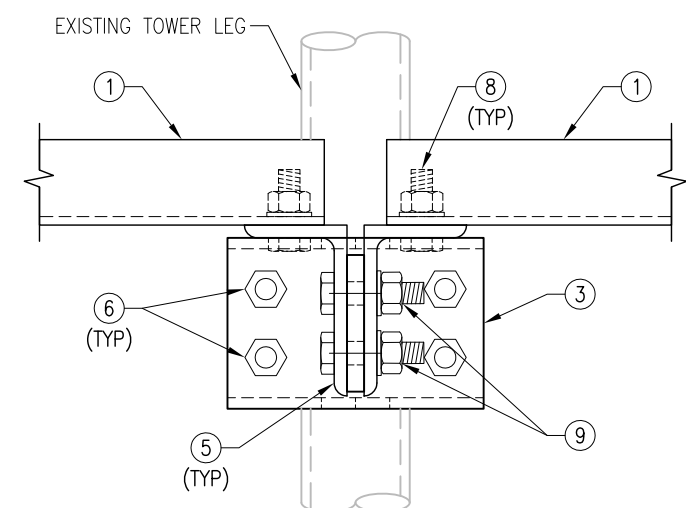
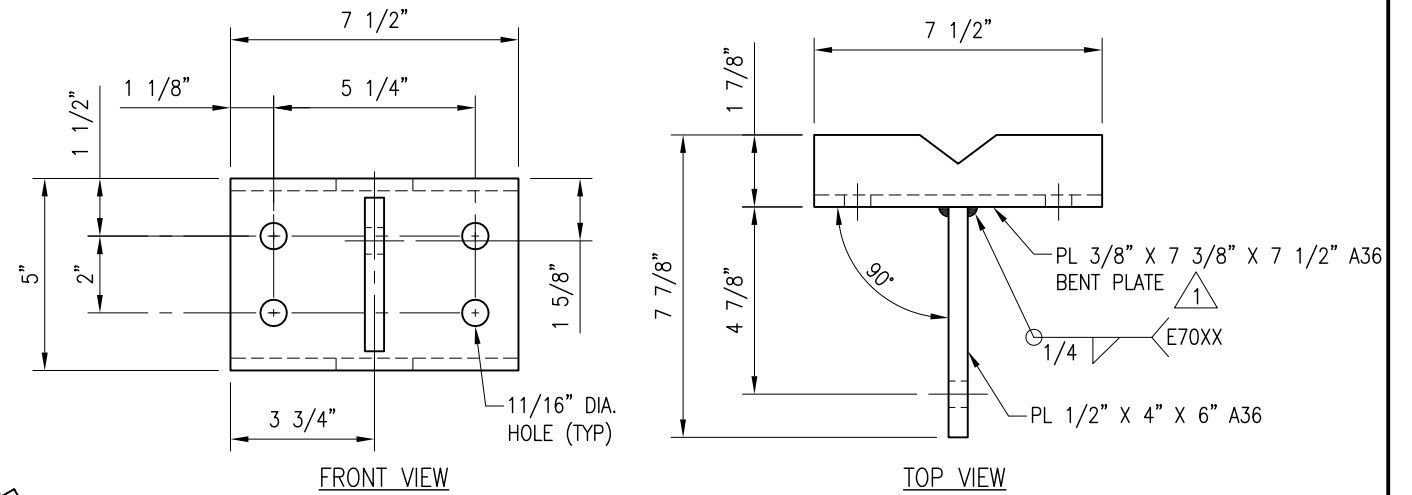
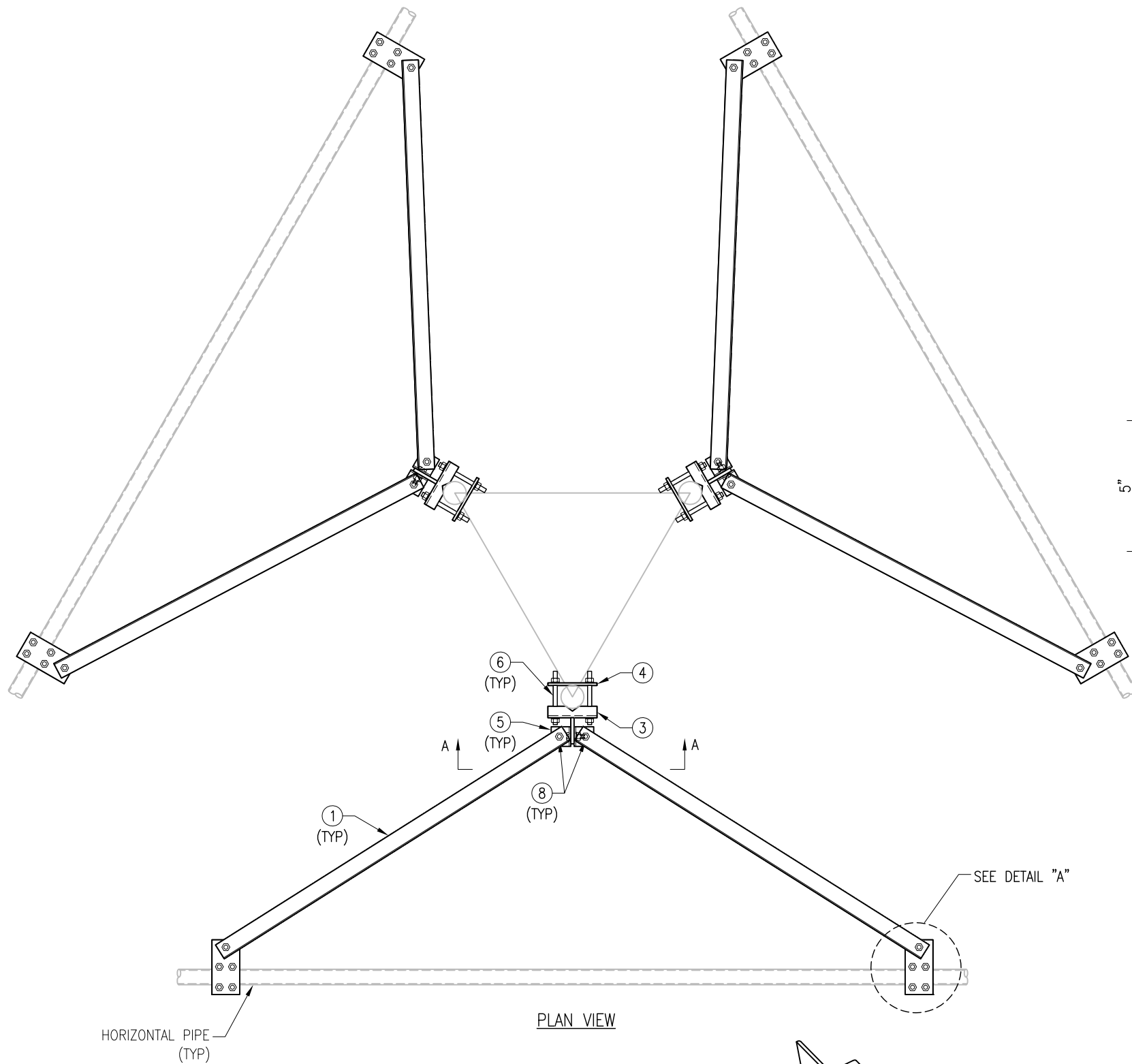
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	1	PL2375-2375	PL 3/8" X 7 1/8" X 10"	A36	TAF-3	7.7
2	4	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)	A36	RBC-1	1.2
GALVANIZED WT						9



MS-HRCP-2375

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH		THIRD ANGLE PROJECTION 			METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529	
		CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC				
STANDARD SHEET TOLERANCES		APPROVAL / SIGNATURES		DATE		
DECIMALS	ANGLES	DRAWN BY: XXX REVIEWED: XXX APPROVED: XXX		05/12/17 - -		
.X ± 0.1	± 1°					
.XX ± 0.02	FRACTIONS					
.XXX ± 0.005	± 1/32	TITLE MS-HRCP-2375 SUPPORT RAIL CENTER PIPE KIT		SIZE/DWG NO B MS-HRCP-2375		
				SCALE: -		
SHEET 1 OF 1						

MS-C2B-2875P						
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	6	VB-25-10	L 2 1/2" X 2 1/2" X 1/4" X 10'-0"	A36	BK-1	258
2	6	PL375-4259	PL 3/8" X 4 1/4" X 9"	A36	BK-2	25.8
3	3	C2BW-275-450	BRACKET WELDMENT	A36	C2BW-275-450	28.5
4	3	PL5-42575	PL 1/2" X 4 1/4" X 7 1/2"	A572-50	BK-2	14.4
5	6	AL-533	L 5" X 3" X 1/4" X 3"	A36	BK-1	10.2
6	12	---	THREADED ROD 5/8" X 10" W/ (2) HHN & LKW EA.	A36	---	---
7	12	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	---	RBC-1	---
8	12	---	BOLT 5/8" X 1 3/4" A325 W/ HHN & LKW EA.	---	---	---
9	6	---	BOLT 5/8" X 2 1/4" A325 W/ HHN & LKW EA.	---	---	---
GALVANIZED WT						337



NOTE:
 1) FITS 2 7/8" DIA. TO 4 1/2" DIA. LEG.
 2) THREADED ROD MAY BE CUT TO LENGTH AS REQUIRED.
 3) FITS 1 1/2" TO 2 7/8" O.D. HORIZONTAL PIPE.

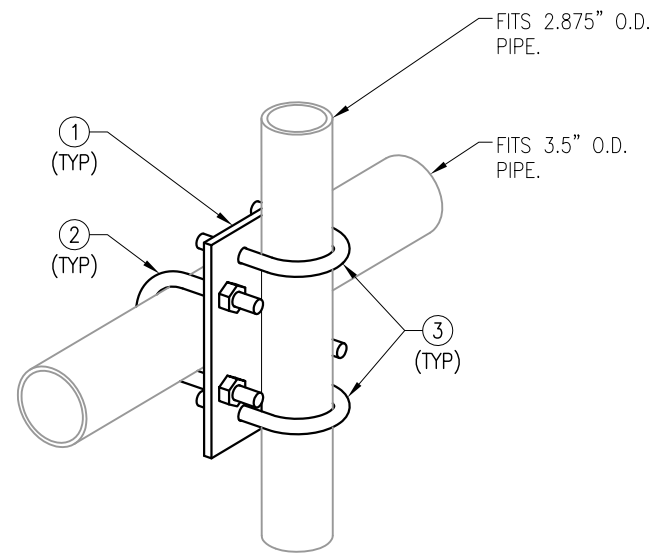
THIRD ANGLE PROJECTION			METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH		CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC		TITLE MS-C2B-2875P V-BRACING KIT
STANDARD SHEET TOLERANCES		APPROVAL / SIGNATURES	DATE	SIZE/DWG NO
DECIMALS .X ± 0.1 .XX ± 0.02 .XXX ± 0.005	ANGLES ± 1° FRACTIONS ± 1/32	DRAWN BY: XXX	05/12/17	B MS-C2B-2875P
		REVIEWED: XXX	-	SCALE
		APPROVED: XXX	-	SHEET 1 OF 1

NOTES:

1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT-DIPPED GALVANIZED PER ASTM A123.

MS-HRCP-35-2875

ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	1	PL350-2875	PL 3/8" X 7 1/8" X 10"	A36	TAF-2	7.7
2	2	MS02-625-3625-600	RU-BOLT 5/8" X 3 5/8" I.W. X 6" I.L. A36 (OR EQUIV.)	A36	RBC-1	1.5
3	2	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	A36	RBC-1	1.4
					GALVANIZED WT	11



MS-HRCP-35-2875

<p>THIRD ANGLE PROJECTION</p>				<p>METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529</p>									
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH</p>		<p>CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC</p>		<p>TITLE MS-HRCP-35-2875 SUPPORT RAIL CENTER PIPE KIT</p>									
<p>STANDARD SHEET TOLERANCES</p> <table border="1"> <tr> <td>DECIMALS</td> <td>ANGLES</td> </tr> <tr> <td>.X ± 0.1</td> <td>± 1°</td> </tr> <tr> <td>.XX ± 0.02</td> <td>FRACTIONS</td> </tr> <tr> <td>.XXX ± 0.005</td> <td>± 1/32</td> </tr> </table>		DECIMALS	ANGLES	.X ± 0.1	± 1°	.XX ± 0.02	FRACTIONS	.XXX ± 0.005	± 1/32	<p>APPROVAL / SIGNATURES</p> <p>DRAWN BY: XXX</p> <p>REVIEWED: XXX</p> <p>APPROVED: XXX</p>	<p>DATE</p> <p>05/12/17</p> <p>-</p> <p>-</p>	<p>SIZE/DWG NO</p> <p>B MS-HRCP-35-2875</p>	<p>REV</p> <p>0</p>
DECIMALS	ANGLES												
.X ± 0.1	± 1°												
.XX ± 0.02	FRACTIONS												
.XXX ± 0.005	± 1/32												
		<p>SCALE</p> <p>-</p>	<p>SHEET 1 OF 1</p>										

MODIFICATION AND DESIGN DRAWINGS FOR EXISTING ANTENNA MOUNTS EXISTING MONOPOLE TOWER

PROPOSED CARRIER: T-MOBILE

TOWER OWNER: SBA / TOWER OWNER SITE #: CT02049-S
CARRIER SITE #/NAME: CT11299D / CT BEACON FALLS/RT8
COORDINATES (LATITUDE: 41.455689°, LONGITUDE: -73.039866°)

PLEASE NOTE THIS SET OF DRAWINGS ARE FOR INSTALLATION AND ASSEMBLY ONLY. FABRICATION DETAIL DRAWINGS ARE NOT PROVIDED AND MUST BE COMPLETED BY THE STEEL FABRICATOR SELECTED. TES CAN PROVIDE THE FABRICATION DETAIL DRAWINGS FOR AN ADDITIONAL FEE.

SHEET	SHEET TITLE	REV
T-1	TITLE SHEET	0
BOM	BILL OF MATERIALS	0
GN-1	GENERAL NOTES	0
A-1	ANTENNA MOUNT MODIFICATION DETAILS	0
A-2	ANTENNA MOUNT PHOTOS	0
D-1	STANDARD DETAILS	0
D-2	STANDARD DETAILS	0
D-3	STANDARD DETAILS	0
MS-HRCP-2375	METROSITE SUPPORT RAIL CENTER PIPE KIT	
MS-C2B-2875P	METROSITE V-BRACING KIT	
MS-HRCP-35-2875	METROSITE SUPPORT RAIL CENTER PIPE KIT	

NOTE:

- THE MODIFICATION DRAWINGS ARE BASED ON THE TES PROJECT NO. 99849, DATED 12/03/2020.

Copyright 2021 Tower Engineering Solutions, LLC



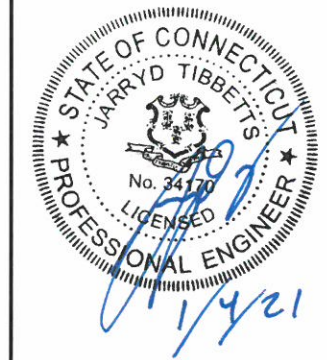
Tower Engineering Solutions
1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403



DRAWN BY: MS CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

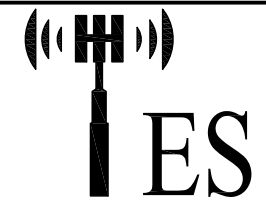
TITLE SHEET

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: REV #:
T-1 0

BILL OF MATERIALS

QUANTITY COUNTED	QUANTITY PROVIDED	PART NUMBER	DESCRIPTIONS	SHEET LIST	PIECE WEIGHT (LBS)	WEIGHT (LB)	NOTES
MATERIAL & HARDWARE							
6	6	MS-HRCP-2375	METROSITE SUPPORT RAIL CENTER PIPE KIT	A-1, MS-HRCP-2375	10.7	64.2	Galvanized
1	1	MS-C2B-2875P	METROSITE V-BRACING KIT	A-1, MS-C2B-2875P	337.0	337.0	Galvanized
2	2	MS-HRCP-35-2875	METROSITE SUPPORT RAIL CENTER PIPE KIT	A-1, MS-HRCP-35-2875	11.0	22.0	Galvanized
FOLLOWING ITEMS ARE "CUSTOM" PARTS							
2	2	PST2875-8	2 1/2" PST (2.875" O.D. X 0.203" THK) X 8'-0" A53 GR-B 35KSI	A-1	47.45	99.6	GALVANIZED
2	2	PST2375-6	2" PST (2.375" O.D. X 0.154" THK) X 6'-0" A53 GR-B 35KSI	A-1	22.61	45.2	GALVANIZED (FINAL CUT LENGTH TO BE DETERMINED IN FIELD)
3	3	PST2375-8	2" PST (2.375" O.D. X 0.154" THK) X 8'-0" A53 GR-B 35KSI	A-1	48.98	151.3	GALVANIZED
3	3	L3325-5	L 3" X 3" X 1/4" X 5'-0" A36	D-1	25.01	75.0	GALVANIZED (FINAL CUT LENGTH TO BE DETERMINED IN FIELD)
6	6	PL375-42510-A	PL 3/8" X 4 1/4" X 10" A36	D-1	4.60	27.6	GALVANIZED
24	26	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)	D-1, D-2	1.17	30.4	(2) HHN & LKW-EA GALVANIZED
12	13	---	BOLT 5/8" X 2" A325	D-1	0.38	4.9	(1) HHN & LKW-EA GALVANIZED
6	6	PL2375-2875	PL 3/8" X 7 1/8" X 10" A36	D-2	7.70	46.2	GALVANIZED
12	13	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	D-2	1.37	17.8	(2) HHN & LKW-EA GALVANIZED
ALL METROSITE PARTS ARE AVAILABLE FROM METROSITE, LLC.							
180 IND PARK BLVD COMMERCE, GA 30529							
OFFICE: (706) 335-7045							
FAX: (706) 335-7056							
NOTE: ALL MATERIALS, WHICH WEREN'T LISTED IN THIS SHEET, ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.							
					TOTAL WEIGHT (LBS) =	921.4	



Tower Engineering Solutions
 1320 GREENWAY DRIVE, SUITE 600
 IRVING, TX 75038
 PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
 BOCA RATON, FL 33487
 (800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
 CUSTOMER SITE NAME:
BEACON FALLS
 60 RICE LANE
 BEACON FALLS, CT 06403

DRAWN BY: MS CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

BILL OF MATERIALS

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: **BOM** REV #: **0**

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-G, ANSI/ASSP A10.48, AND ANY OTHER GOVERNING BUILDING CODES AND OSHA SAFETY REGULATIONS.
2. ALL WORK INDICATED ON THE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TELECOMMUNICATIONS TOWER, POLE AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF ALL MISCELLANEOUS PARTS (SUCH AS SHIMS), TEMPORARY SUPPORTS, AND GUYINGS, ETC., PER ANSI/ASSP A10.48, TO COMPLETE THE ASSEMBLY AS SHOWN IN THE DRAWINGS.
4. CONTRACTOR SHALL PROCEED WITH THE INSTALLATION WORK CAREFULLY SO THE WORK WILL NOT DAMAGE ANY EXISTING CABLE, EQUIPMENT OR THE STRUCTURE.
5. THE USE OF GAS TORCH OR WELDER, ARE NOT ALLOWED ON ANY TOWER STRUCTURE WITHOUT THE CONSENT OF THE TOWER OWNER.
6. GENERALLY THE CONTRACTOR IS RESPONSIBLE TO CONDUCT AN ONSITE VISIT SURVEY OF THE JOB SITE AFTER AWARD, AND REPORT ANY ISSUES WITH THE SITE TO **TES** BEFORE PROCEEDING CONSTRUCTION.
7. IT IS THE RESPONSIBILITY OF THE GC TO VERIFY THAT THERE IS NO INTERFERENCES (WITH SAFETY CLIMB BRACKETS, TRANSMISSION LINES, ETC.) PRIOR TO MOBILIZATION AND INSTALLATION OF THESE MODIFICATIONS.
8. PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-TESORDERS@TESTOWER.US

FABRICATION

1. ALL STEEL SHALL MEET OR EXCEED THE MINIMUM STRENGTH AS SPECIFIED IN THE DRAWINGS. IF YIELD STRENGTH WAS NOT NOTED IN THE DRAWINGS, CONTRACTORS SHALL CONTACT TES FOR DIRECTION.
2. ALL FIELD CUT EDGES SHALL BE GROUND SMOOTH. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

WELDING

1. ALL WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS AND IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, UNO. (E70XX UNLESS NOTED OTHERWISE).
2. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING APPROX. 0.5" BEYOND THE PROPOSED FIELD WELD SURFACES.
3. ALL WELDS SHALL BE INSPECTED VISUALLY. A MINIMUM OF 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRANT OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1. 100% OF WELDS SHALL BE INSPECTED IF DEFECTS ARE FOUND.
4. WELD INSPECTIONS SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
5. AFTER INSPECTION, ALL FIELD WELDED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

BOLTED ASSEMBLIES AND TIGHTENING OF CONNECTIONS

1. ALL HIGH STRENGTH BOLTS SHALL CONFORM TO THE PROVISIONS OF THE SPECIFICATIONS FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS AS APPROVED BY THE RSCC.
2. FLANGE BOLTS SHALL BE TIGHTENED BY THE AISC "TURN-OF-THE-NUT" METHOD. THE FOLLOWING TABLE SHOULD BE USED FOR THE "TURN-OF-THE-NUT" TIGHTENING.
3. SPLICE BOLTS AND ALL OTHER BOLTS IN BEARING TYPE CONNECTIONS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION.
4. THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY EITHER A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER WITH AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
5. HB HOLLO-BOLT SHALL BE INSTALLED PER ICC ESR-3330 INSTRUCTIONS.

VERIFICATION AND INSPECTION

1. IF APPLICABLE, VERIFICATION INSPECTION TO BE PERFORMED SHALL BE IN ACCORDANCE TO IBC-2015 SECTION 1705 FOR STEEL CONSTRUCTION AND TABLE 1705.3 FOR CONCRETE CONSTRUCTION.

TABLE 8.2 NUT ROTATION FROM SNUG-TIGHT CONDITION FOR TURN-OF-NUT PRETENSIONING^{a,b}

BOLT LENGTH ^f	DISPOSITION OF OUTER FACE OF BOLTED PARTS		
	BOTH FACES NORMAL TO BOLT AXIS	ONE FACE NORMAL TO BOLT AXIS, OTHER SLOPED NOT MORE THAN 1:20 ^d	BOTH FACES SLOPED NOT MORE THAN 1:20 FROM NORMAL TO BOLT AXIS ^d
NOT MORE THAN 4d _b	1/3 TURN	1/2 TURN	2/3 TURN
MORE THAN 4d _b BUT NOT MORE THAN 8d _b	1/2 TURN	2/3 TURN	5/6 TURN
MORE THAN 8d _b BUT NOT MORE THAN 12d _b	2/3 TURN	5/6 TURN	1 TURN

^a NUT ROTATION IS RELATIVE TO BOLT REGARDLESS OF THE ELEMENT (NUT OR BOLT) BEING TURNED. FOR REQUIRED NUT ROTATIONS OF 1/2 TURN AND LESS, THE TOLERANCE IS PLUS OR MINUS 30 DEGREES; FOR REQUIRED NUT ROTATIONS OF 2/3 TURN AND MORE, THE TOLERANCE IS PLUS OR MINUS 45 DEGREES.

^b APPLICABLE ONLY TO JOINTS IN WHICH ALL MATERIAL WITHIN THE GRIP IS STEEL.

^c WHEN THE BOLT LENGTH EXCEEDS 12d_b, THE REQUIRED NUT ROTATION SHALL BE DETERMINED BY ACTUAL TESTING IN A SUITABLE TENSION CALIBRATOR THAT SIMULATES THE CONDITIONS OF SOLIDLY FITTING STEEL.

^d BEVELED WASHER NOT USED.

SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS, JUNE 30, 2004 RESEARCH COUNCIL ON STRUCTURAL CONNECTIONS

INSTALLATION TORQUE REQUIRED FOR HOLLO BOLTS AND AJAX BOLTS:

1. HB12 HOLLO BOLT: 59 FT-LBS
2. HB16 HOLLO BOLT: 140 FT-LBS
3. HB20 HOLLO BOLT: 221 FT-LBS
4. M20 AJAX BOLT: 280 FT-LBS.

FIELD HOT WORK PLAN NOTES:

FOLLOWING GUIDELINES SHALL BE COMPLIED WITH:

1. CONTRACTOR'S RESPONSIBILITY TO COMPLETE A HOT WORK PLAN IF AWARDED PER CUSTOMER SPECIFICATIONS GUIDELINES FOR WELDING, CUTTING & SPARK PRODUCING WORK.
2. HAVE A FIRE PLAN APPROVED BY THE CUSTOMER AND THEIR SAFETY MANAGEMENT DEPT.
3. CONTRACTOR MUST OBTAIN THE CONTACT INFO OF THE LOCAL FIRE DEPARTMENT AND THE 911 ADDRESS OF THE TOWER SITE BEFORE CONSTRUCTION.
4. CONTRACTOR SHALL MAKE SURE THAT CELL PHONE COVERAGE IS AVAILABLE IN THE TOWER SITE. IF CELL COVERAGE IS NOT AVAILABLE, AN IMMEDIATE AVAILABLE MEANS OF DIRECT COMMUNICATION WITH THE FIRE DEPARTMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION START.
5. ALL CONSTRUCTION SHALL BE PERFORMED UNDER WIND SPEED LESS THAN 10 MPH ON THE GROUND LEVEL. IF WIND SPEED INCREASE, CONTRACTOR MUST DETERMINE IF CONSTRUCTION SHALL BE DISCONTINUED.
6. FIRE SUPPRESSION EQUIPMENT MUST BE MADE AVAILABLE ON SITE AND READY TO USE.
7. CONTRACTOR SHALL ASSIGN A FIRE WATCHER TO PERFORM FIRE-FIGHTING DUTIES.
8. ALL WELDERS SHALL BE AWS OR STATE CERTIFIED. THEY MUST ALSO BE EXPERIENCED IN WELDING ON GALVANIZED MATERIALS.
9. IF IT IS POSSIBLE, ALL EXISTING COAX NEAR WELDING AREA SHALL BE TEMPORARILY MOVED AWAY FROM THE WELDING AREA BEFORE WELDING THE PLATES.
10. PLEASE REPORT ANY FIELD ISSUE TO TES @ 972-483-0607.



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA

CUSTOMER SITE NAME:
BEACON FALLS

60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

GENERAL NOTES

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: GN-1 | REV #: 0

SCOPE OF WORK

1. REPLACE EXISTING ANTENNA MOUNT PIPES WITH NEW 2 1/2" PST ANTENNA MOUNT PIPES (8'-0" LONG) THEN RELOCATE EXISTING ANTENNAS TO NEW MOUNT PIPES, (1) FOR ALPHA AND (1) FOR GAMMA SECTOR. EXISTING ANTENNA RAD CENTER TO BE MAINTAINED.

NOTE:
CONTRACTOR TO COORDINATE WITH CARRIER PRIOR TO REPLACING OF EXISTING ANTENNA MOUNT PIPES TO DETERMINE IF EXISTING ANTENNAS NEED TO BE TURNED DOWN.

2. INSTALL NEW SUPPORT RAIL CENTER PIPE KIT ON EXISTING BOTTOM SUPPORT RAIL PIPE. (1) ON ALPHA AND GAMMA SECTOR. SEE SHEET MS-HRCP-35-2875 FOR DETAILS.

3. A. INSTALL NEW END CONNECTION ON EXISTING TOP SUPPORT RAIL. SEE SHEET D-1 FOR DETAILS.
B. INSTALL NEW 2" PST TOP AND BOTTOM SUPPORT RAIL PIPES AS SHOWN. (2) FOR DELTA SECTOR ONLY.
C. REMOVE THE EXISTING PIPE ON THE DELTA SECTOR TO ACCOMMODATE THE INSTALLATION OF NEW END CONNECTION.

4. INSTALL NEW 2" PST ANTENNA MOUNT PIPE (8'-0" LONG). (3) FOR DELTA SECTOR ONLY. SEE SHEET D-2 FOR DETAILS.

5. INSTALL NEW SUPPORT RAIL CENTER PIPE KIT ON NEW TOP AND BOTTOM SUPPORT RAIL PIPES. (6) FOR DELTA SECTOR ONLY. SEE SHEETS MS-HRCP-2375 & D-2 FOR DETAILS.

6. INSTALL NEW V-BRACING KIT ON EXISTING TOP SUPPORT RAIL. SEE SHEET MS-C2B-2875P FOR DETAILS.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP, REMOVAL AND DISPOSAL OF EXCESS MATERIALS USED AND REMOVED FROM THE STRUCTURE AT THE COMPLETION OF THE PROJECT.

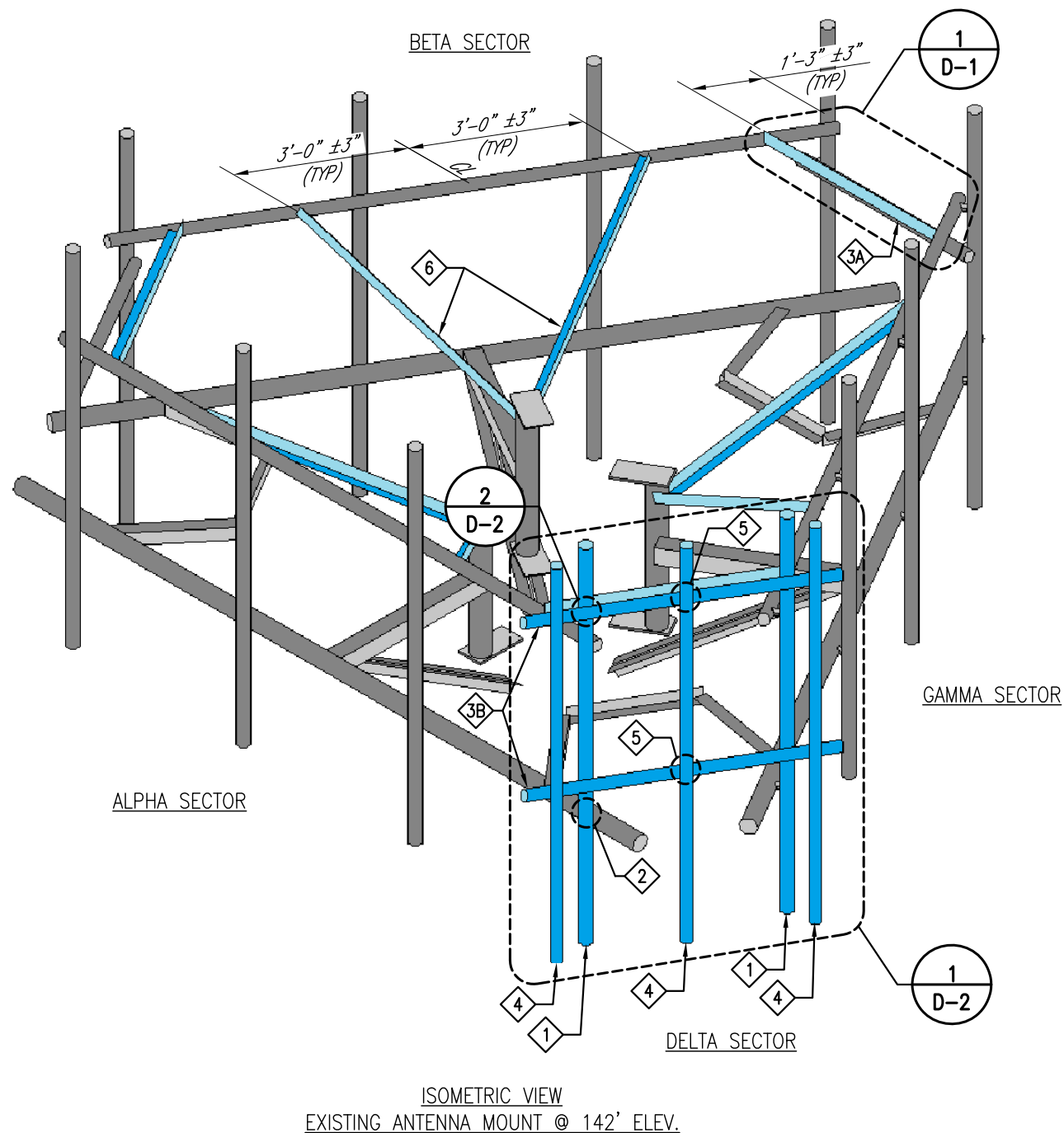
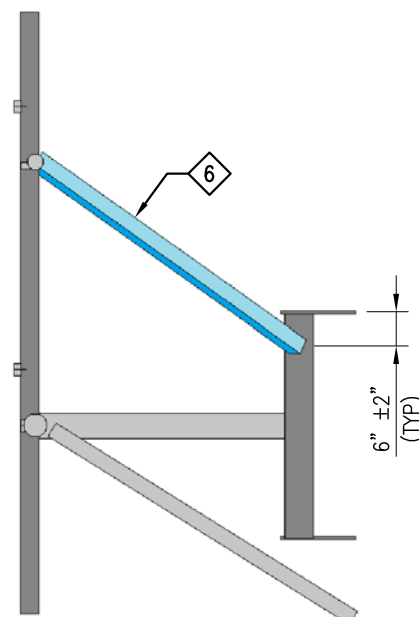


PHOTO 1



SIDE VIEW

CONTRACTOR NOTE:

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THAT THERE IS NO INTERFERENCES WITH (PORT HOLES, SAFETY CLIMB BRACKETS, TRANSMISSION LINES, ETC.) PRIOR TO MOBILIZATION AND INSTALLATION OF THESE MODIFICATIONS.
- PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-TESORDERS@TESTOWER.US

NOTES:

- TEMPORARILY RELOCATE ANY EXISTING COAX ATTACHED TO THE LEGS AND/OR ANY OTHER MEMBERS WHERE OBSTRUCTION WITH THE PROPOSED MODIFICATION MAY OCCUR.
- WHEN FIELD CUTTING AND DRILLING ANGLES, USE SAME GAGE LINES AND EDGE DISTANCES AS INDICATED ON SHOP CUT AND DRILLED ENDS.
- APPLY (2) COATS OF ZINGA COLD GALVANIZING COMPOUND AS PER THE MANUFACTURER'S SPECIFICATIONS TO ALL FIELD CUT AND DRILLED AREAS.
- MEMBERS IN BLUE COLOR ARE NEW REINFORCEMENTS.

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	2	PST2875-8	2 1/2" PST (2.875" O.D. X 0.203" THK) X 8'-0" A53 GR-B 35
2	2	MS-HRCP-35-2875	METROSITE SUPPORT RAIL CENTER PIPE KIT
3	2	PST2375-6	2" PST (2.375" O.D. X 0.154" THK) X 6'-0" A53 GR-B 35KSI
4	3	PST2375-8	2" PST (2.375" O.D. X 0.154" THK) X 8'-0" A53 GR-B 35KSI
5	6	MS-HRCP-2375	METROSITE SUPPORT RAIL CENTER PIPE KIT
6	1	MS-C2B-2875P	METROSITE V-BRACING KIT



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

ANTENNA MOUNT
MODIFICATION DETAILS

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER:

A-1

REV #:

0



REMOVE THE EXISTING PIPE ON THE DELTA SECTOR TO ACCOMMODATE THE INSTALLATION OF NEW END CONNECTION.

PHOTO 1



PHOTO 2

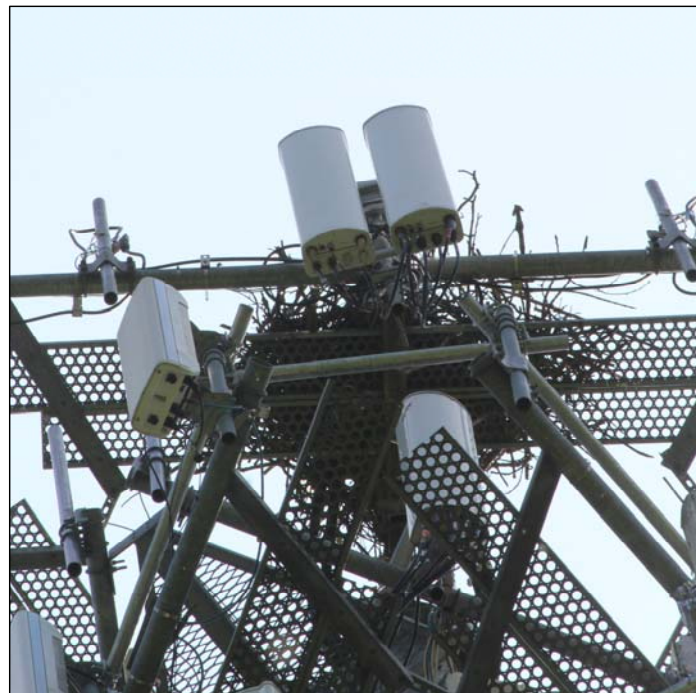


PHOTO 3

NOTE:
EXISTING RRUS/EQUIPMENT MAY BE RELOCATED ALONG THE MEMBER TO ACCOMMODATE THE INSTALLATION OF NEW MOUNT MODIFICATION



Tower Engineering Solutions
1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

ANTENNA MOUNT
PHOTOS

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: A-2 | REV #: 0



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

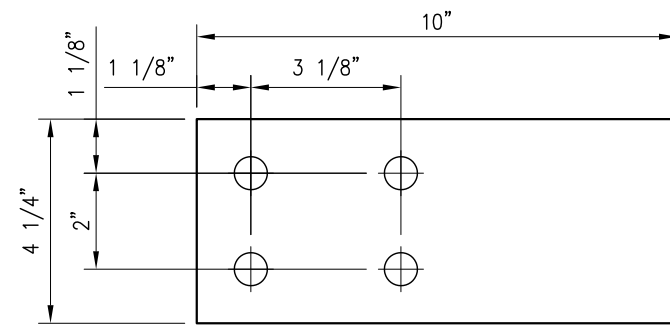
SHEET TITLE:

STANDARD DETAILS

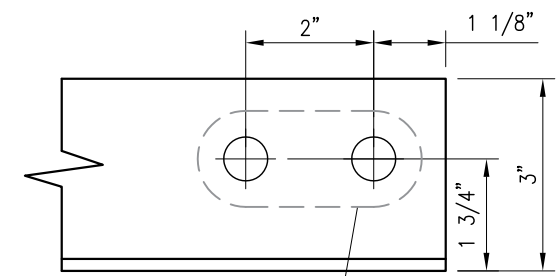
This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: | REV #:

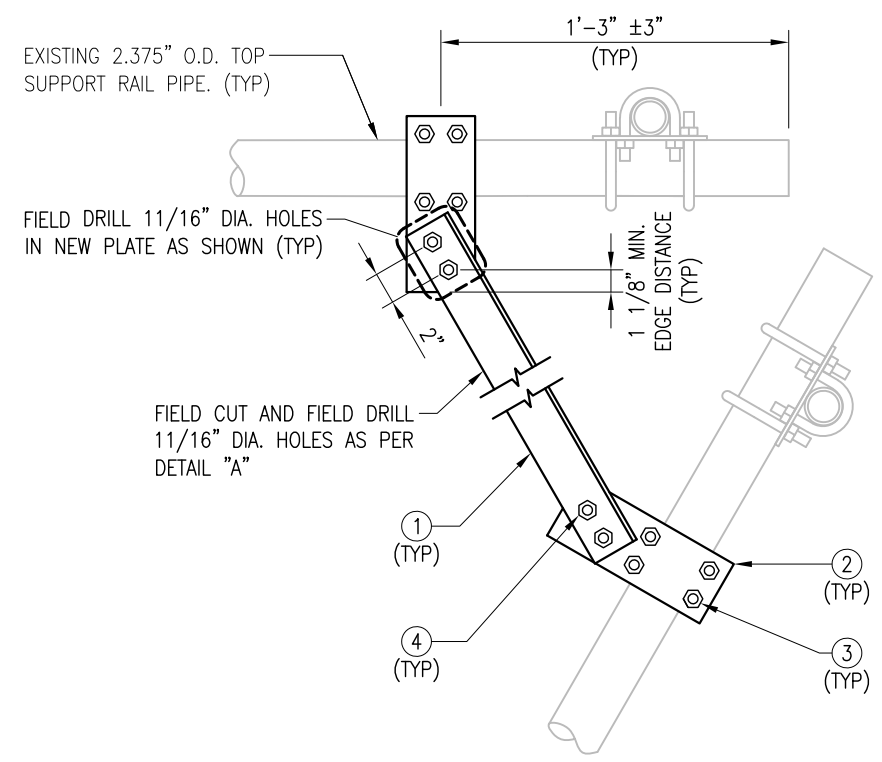
D-1 | 0



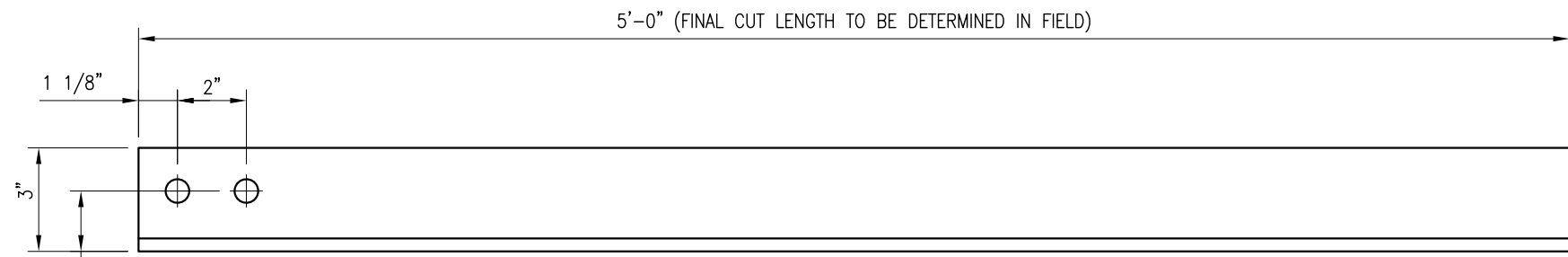
PL375-42510-A
PL 3/8" X 4 1/4" X 10" A36
(4.6 LBS)



FIELD DRILL 11/16" DIA. HOLES
DETAIL "A"



1 END CONNECTION DETAIL
D-1



L3325-5
L 3" X 3" X 1/4" A36
(25.01 LBS)

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	3	L3325-5	L 3" X 3" X 1/4" X 5'-0" A36
2	6	PL375-42510-A	PL 3/8" X 4 1/4" X 10" A36
3	12	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)
4	12	---	BOLT 5/8" X 2" A325

NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.
2. ALL HOLES ARE 11/16" DIA. U.N.O

Copyright 2021 Tower Engineering Solutions, LLC



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
IRVING, TX 75038
PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
BOCA RATON, FL 33487
(800)-487-SITE

TES JOB NO:
100487

CUSTOMER SITE NO:
CT02049-S-SBA
CUSTOMER SITE NAME:
BEACON FALLS
60 RICE LANE
BEACON FALLS, CT 06403

DRAWN BY: MS CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

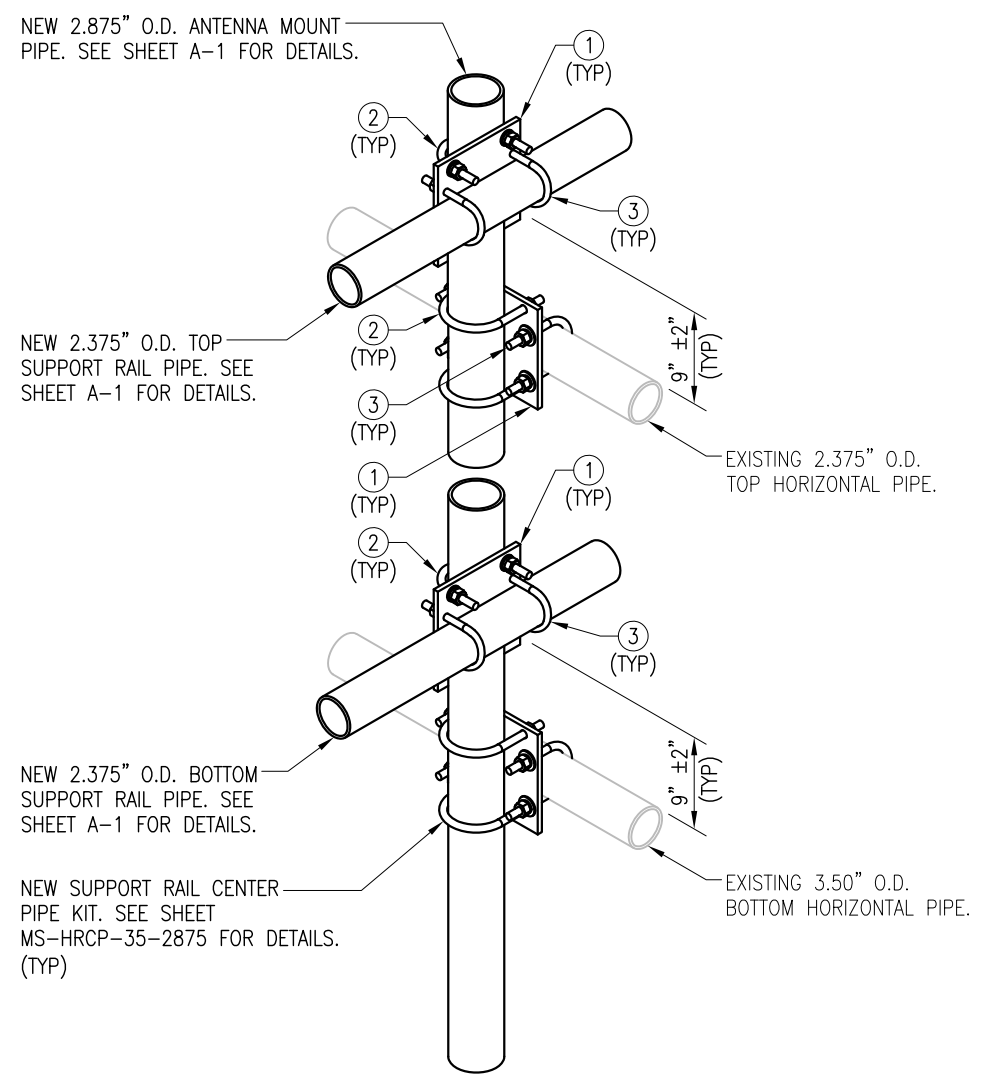
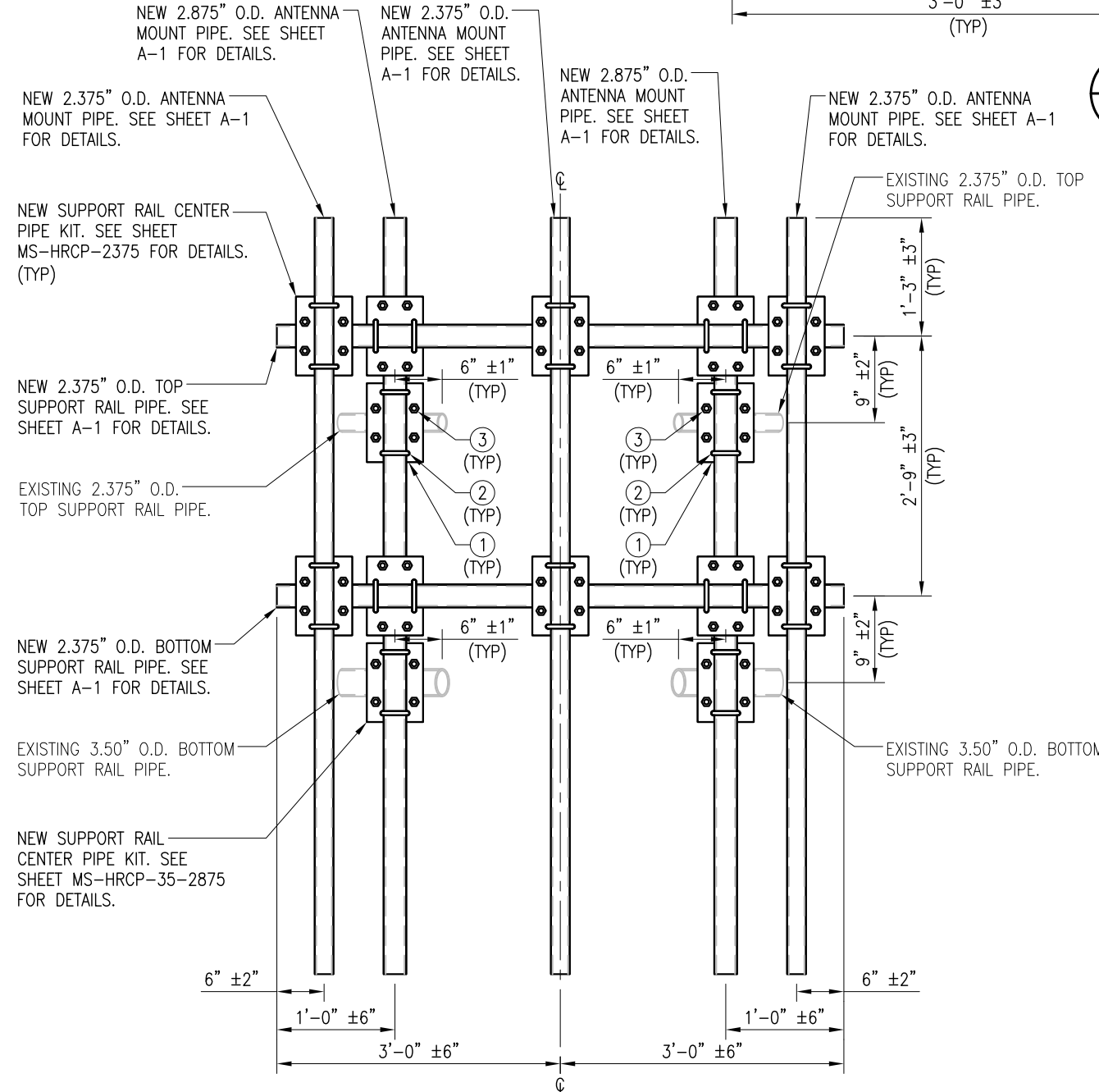
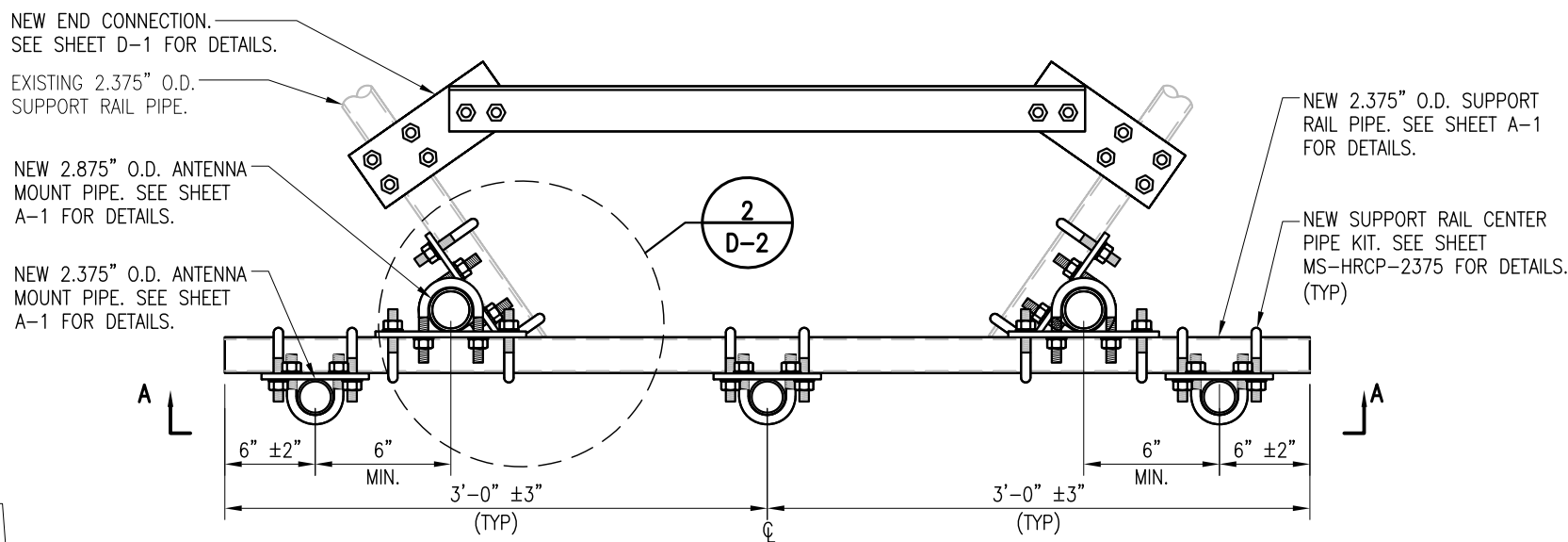
SHEET TITLE:

STANDARD DETAILS

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: REV #:

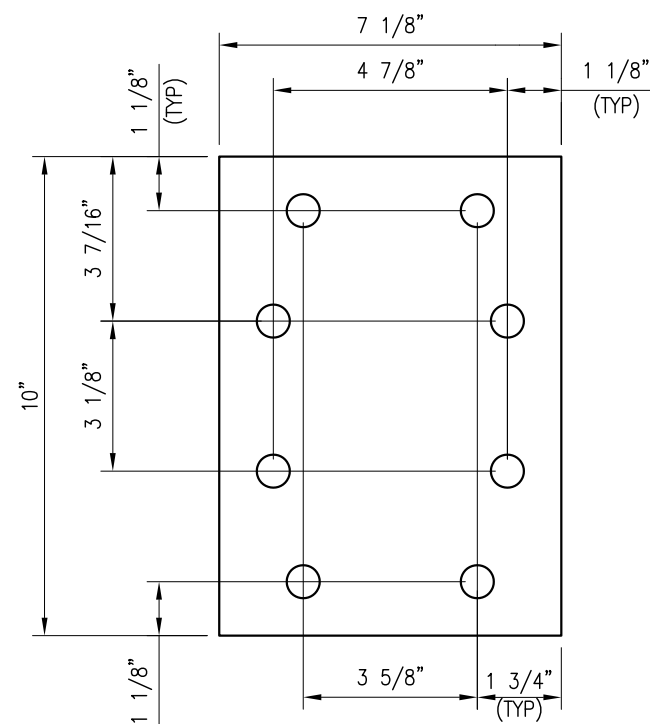
D-2 0



NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.
2. ALL HOLES ARE 11/16" DIA. U.N.O

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	6	PL2375-2875	PL 3/8" X 7 1/8" X 10" A36
2	12	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)
3	12	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)

Copyright 2021 Tower Engineering Solutions, LLC



PL2375-2875
 PL 3/8" X 7 1/8" X 10" A36
 (7.7 LBS)

- NOTES:
 1. HOT-DIPPED GALVANIZED PER ASTM A123.
 2. ALL HOLES ARE 11/16" DIA. U.N.O



Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
 IRVING, TX 75038
 PH: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
 BOCA RATON, FL 33487
 (800)-487-SITE

TES JOB NO:
 100487

CUSTOMER SITE NO:
 CT02049-S-SBA
 CUSTOMER SITE NAME:
 BEACON FALLS
 60 RICE LANE
 BEACON FALLS, CT 06403

DRAWN BY: MS | CHECKED BY: MF/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	MS	01/04/21

SHEET TITLE:

STANDARD DETAILS

This drawing/document is the property of Tower Engineering Solutions, LLC. Information contained herein is considered confidential in nature and is to be used only for the specific site that it was intended for. Reproduction, transmission, publication or disclosure by any method is prohibited except by express written permission from Tower Engineering Solutions, LLC. Without exception, the information on this drawing/document remains the property of Tower Engineering Solutions, LLC.

SHEET NUMBER: D-3 | REV #: 0

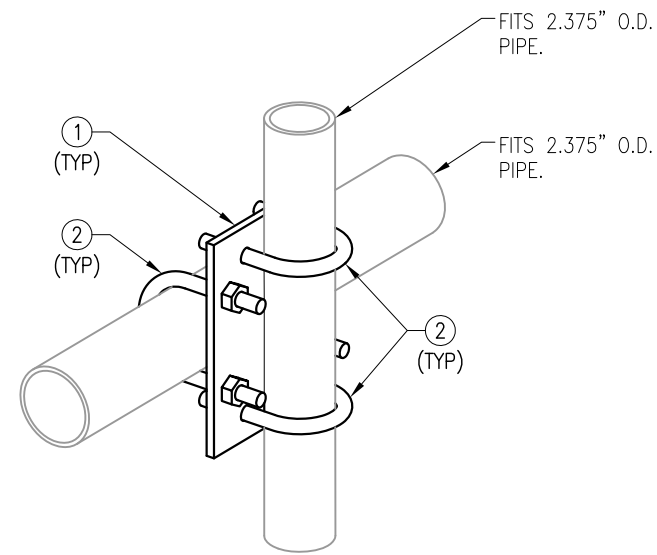
THE FOLLOWING DRAWINGS ARE INCLUDED FOR REFERENCE ONLY
PLEASE REFER TO THE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION DETAILS

NOTES:



1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT-DIPPED GALVANIZED PER ASTM A123.

MS-HRCP-2375

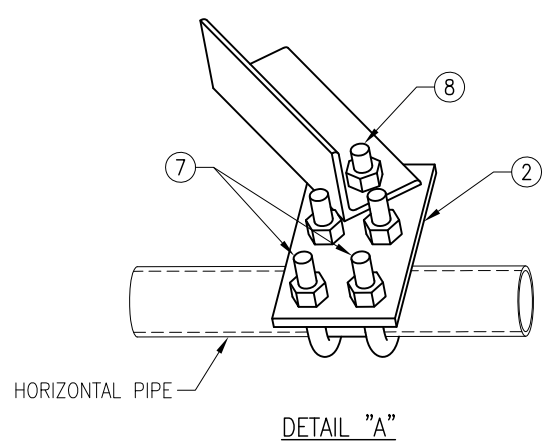
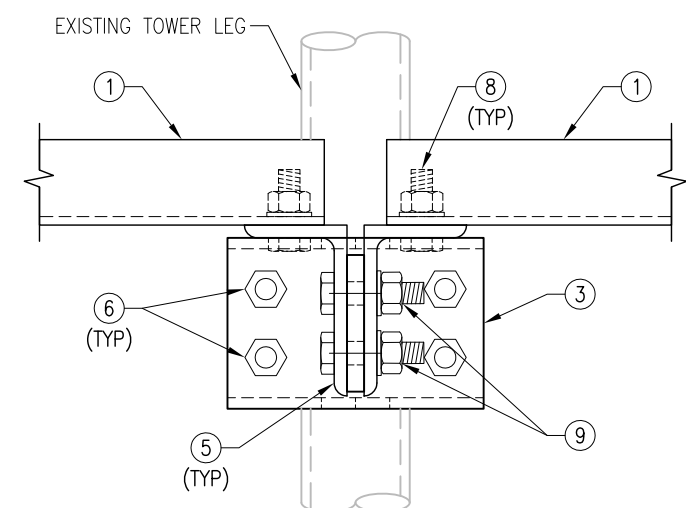
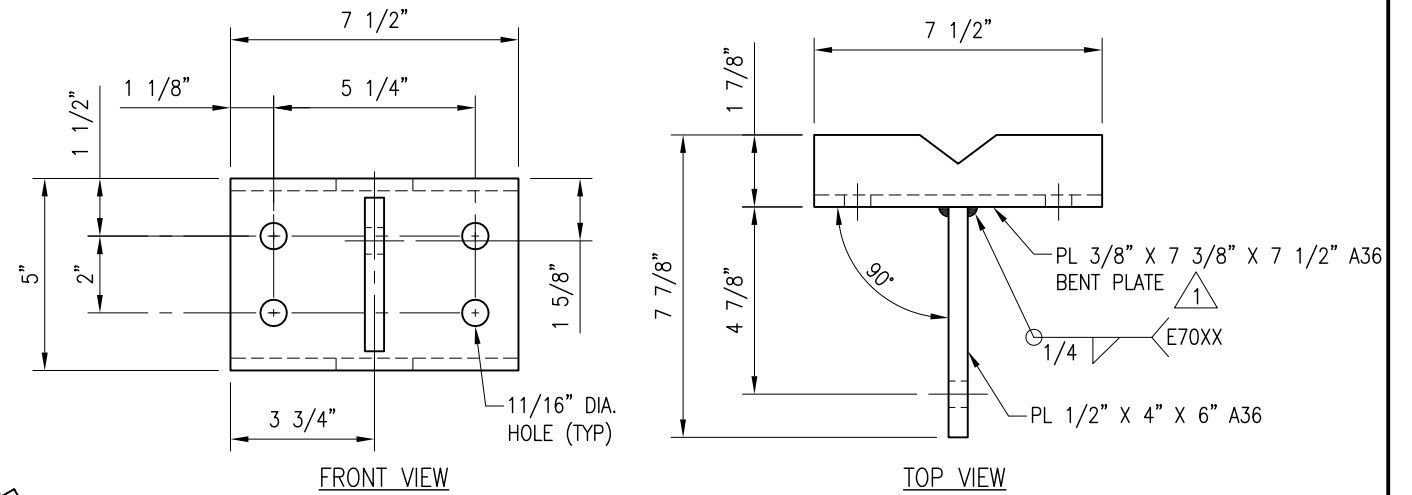
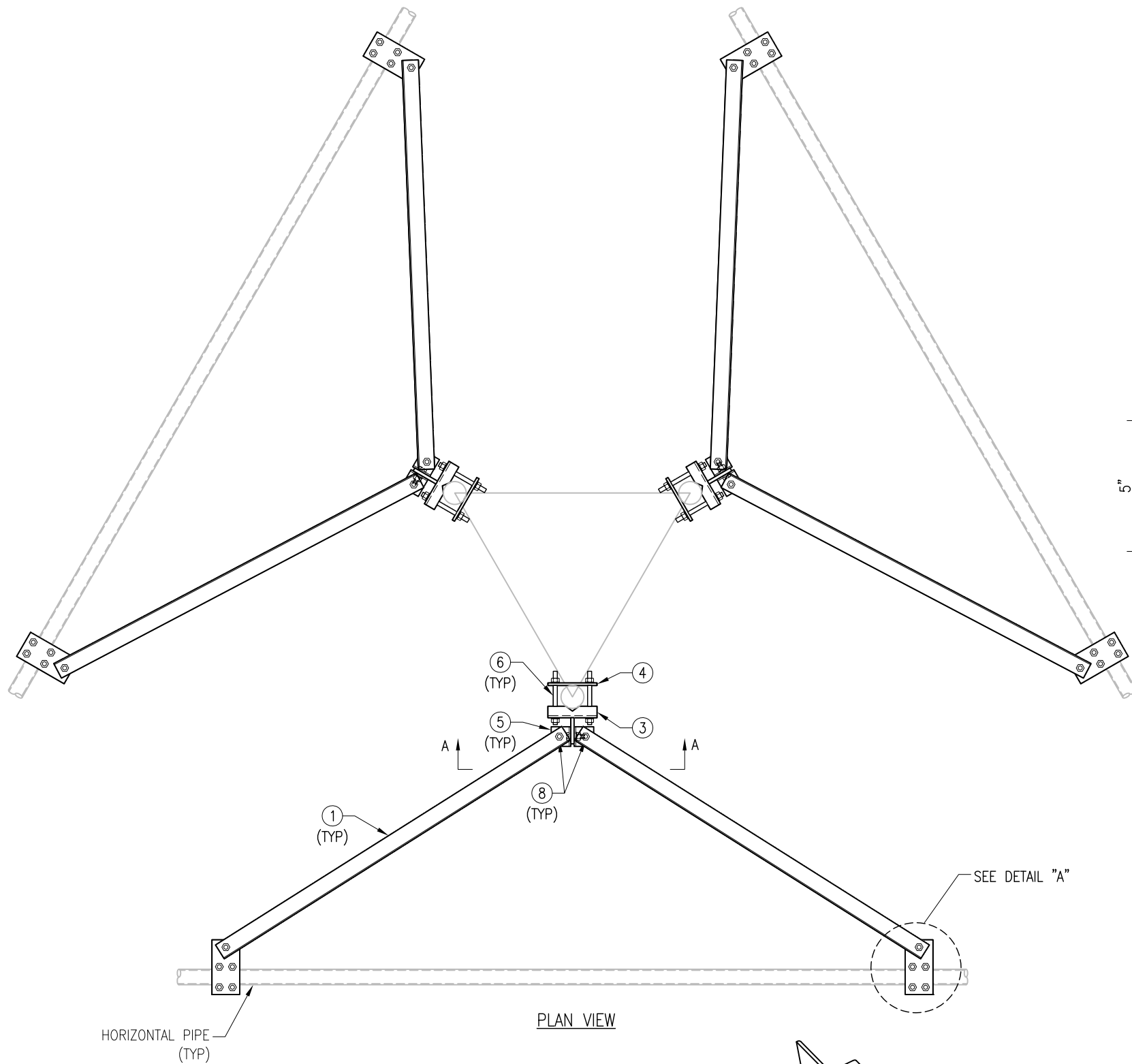
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	1	PL2375-2375	PL 3/8" X 7 1/8" X 10"	A36	TAF-3	7.7
2	4	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)	A36	RBC-1	1.2
GALVANIZED WT						9



MS-HRCP-2375

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH		THIRD ANGLE PROJECTION 			METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529
		CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC			
STANDARD SHEET TOLERANCES		APPROVAL / SIGNATURES	DATE	SIZE/DWG NO B MS-HRCP-2375	
DECIMALS .X ± 0.1 .XX ± 0.02 .XXX ± 0.005	ANGLES ± 1° FRACTIONS ± 1/32	DRAWN BY XXX	05/12/17	REV 0	
		REVIEWED XXX	-	SCALE - SHEET 1 OF 1	
		APPROVED XXX	-		

MS-C2B-2875P						
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	6	VB-25-10	L 2 1/2" X 2 1/2" X 1/4" X 10'-0"	A36	BK-1	258
2	6	PL375-4259	PL 3/8" X 4 1/4" X 9"	A36	BK-2	25.8
3	3	C2BW-275-450	BRACKET WELDMENT	A36	C2BW-275-450	28.5
4	3	PL5-42575	PL 1/2" X 4 1/4" X 7 1/2"	A572-50	BK-2	14.4
5	6	AL-533	L 5" X 3" X 1/4" X 3"	A36	BK-1	10.2
6	12	---	THREADED ROD 5/8" X 10" W/ (2) HHN & LKW EA.	A36	---	---
7	12	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	---	RBC-1	---
8	12	---	BOLT 5/8" X 1 3/4" A325 W/ HHN & LKW EA.	---	---	---
9	6	---	BOLT 5/8" X 2 1/4" A325 W/ HHN & LKW EA.	---	---	---
GALVANIZED WT						337



NOTE:
 1) FITS 2 7/8" DIA. TO 4 1/2" DIA. LEG.
 2) THREADED ROD MAY BE CUT TO LENGTH AS REQUIRED.
 3) FITS 1 1/2" TO 2 7/8" O.D. HORIZONTAL PIPE.

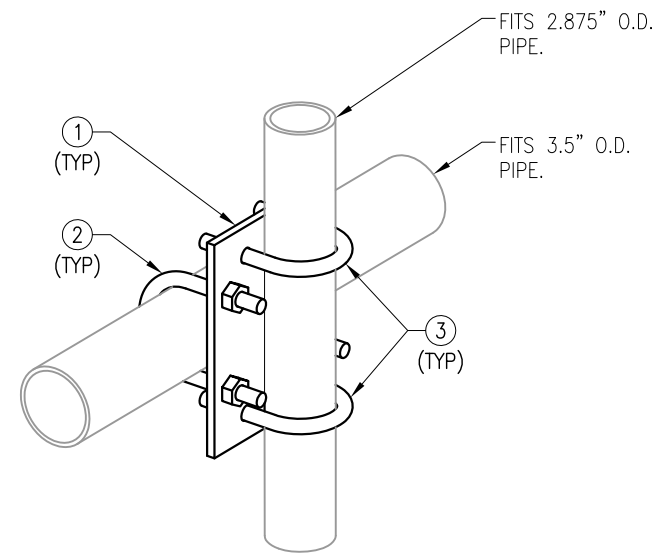
THIRD ANGLE PROJECTION						METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH				CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC			
STANDARD SHEET TOLERANCES		APPROVAL / SIGNATURES		DATE		TITLE	
DECIMALS .X ± 0.1 .XX ± 0.02 .XXX ± 0.005	ANGLES ± 1° FRACTIONS ± 1/32	DRAWN BY: XXX	REVIEWED: XXX	APPROVED: XXX	05/12/17	SIZE: DWG NO B MS-C2B-2875P	REV 1
						MS-C2B-2875P V-BRACING KIT	SHEET 1 OF 1

NOTES:

1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT-DIPPED GALVANIZED PER ASTM A123.

MS-HRCP-35-2875

ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	1	PL350-2875	PL 3/8" X 7 1/8" X 10"	A36	TAF-2	7.7
2	2	MS02-625-3625-600	RU-BOLT 5/8" X 3 5/8" I.W. X 6" I.L. A36 (OR EQUIV.)	A36	RBC-1	1.5
3	2	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	A36	RBC-1	1.4
					GALVANIZED WT	11



MS-HRCP-35-2875

<p>THIRD ANGLE PROJECTION</p>				<p>METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529</p>															
<p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH</p>		<p>CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC</p>		<p>TITLE MS-HRCP-35-2875 SUPPORT RAIL CENTER PIPE KIT</p>															
<p>STANDARD SHEET TOLERANCES</p> <table border="1"> <tr> <th>DECIMALS</th> <th>ANGLES</th> </tr> <tr> <td>.X ± 0.1</td> <td>± 1°</td> </tr> <tr> <td>.XX ± 0.02</td> <td>FRACTIONS</td> </tr> <tr> <td>.XXX ± 0.005</td> <td>± 1/32</td> </tr> </table>		DECIMALS	ANGLES	.X ± 0.1	± 1°	.XX ± 0.02	FRACTIONS	.XXX ± 0.005	± 1/32	<p>APPROVAL / SIGNATURES</p> <table border="1"> <tr> <td>DRAWN BY XXX</td> <td>05/12/17</td> </tr> <tr> <td>REVIEWED XXX</td> <td>-</td> </tr> <tr> <td>APPROVED XXX</td> <td>-</td> </tr> </table>		DRAWN BY XXX	05/12/17	REVIEWED XXX	-	APPROVED XXX	-	<p>DATE</p>	
DECIMALS	ANGLES																		
.X ± 0.1	± 1°																		
.XX ± 0.02	FRACTIONS																		
.XXX ± 0.005	± 1/32																		
DRAWN BY XXX	05/12/17																		
REVIEWED XXX	-																		
APPROVED XXX	-																		
<p>SIZE DWG NO</p> <p>B MS-HRCP-35-2875</p>		<p>SCALE</p> <p>-</p>		<p>REV</p> <p>0</p>															
				<p>SHEET 1 OF 1</p>															

EXHIBIT 10

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

T-Mobile Existing Facility

Site ID: CT11299D

CTBeacon Falls/Rt 8
60 Rice Lane
Beacon Falls, Connecticut 06403

August 11, 2022

EBI Project Number: 6222004965

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	25.54%

August 11, 2022

T-Mobile

Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, Connecticut 06002

Emissions Analysis for Site: CT11299D - CTBeacon Falls/Rt 8

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **60 Rice Lane in Beacon Falls, Connecticut** for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits; therefore, it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general population may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general population would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 600 MHz and 700 MHz frequency bands are approximately $400 \mu\text{W}/\text{cm}^2$ and $467 \mu\text{W}/\text{cm}^2$, respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 11 GHz frequency bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at 60 Rice Lane in Beacon Falls, Connecticut using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was focused at the base of the tower. For this report, the sample point is the top of a 6-foot person standing at the base of the tower.

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

- 1) 1 LTE channel (600 MHz Band) was considered for each sector of the proposed installation. This Channel has a transmit power of 40 Watts.
- 2) 1 NR channel (600 MHz Band) was considered for each sector of the proposed installation. This Channel has a transmit power of 80 Watts.
- 3) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This Channel has a transmit power of 40 Watts per Channel.
- 4) 1 GSM channel (PCS Band - 1900 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 10 Watts per Channel in Sector A, B, and C.
- 5) 1 UMTS channel (PCS Band - 1900 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 10 Watts per Channel.
- 6) 1 LTE channel (PCS Band - 1900 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 120 Watts per Channel.

- 7) 1 LTE channel (PCS Band - 1900 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 160 Watts per Channel.
- 8) 1 UMTS channel (AWS Band - 2100 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 10 Watts per Channel.
- 9) 1 LTE channel (AWS Band – 2100 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 120 Watts per Channel.
- 10) 1 LTE Traffic channel (LTE 1C and 2C BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 45 Watts.
- 11) 1 LTE Broadcast channel (LTE 1C and 2C BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 15 Watts.
- 12) 1 NR Traffic channel (BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 90 Watts.
- 13) 1 NR Broadcast channel (BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 30 Watts.
- 14) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 15) For the following calculations, the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 16) The antennas used in this modeling are the Ericsson AIR 6419 for the 2500 MHz / 2500 MHz / 2500 MHz / 2500 MHz channel(s), the Ericsson AIR 32 for the 1900 MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz channel(s) in Sector A, the Ericsson AIR 6419 for the 2500 MHz / 2500 MHz / 2500 MHz / 2500 MHz channel(s), the Ericsson AIR 32 for the 1900

MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz channel(s) in Sector B, the Ericsson AIR 6419 for the 2500 MHz / 2500 MHz / 2500 MHz / 2500 MHz channel(s), the Ericsson AIR 32 for the 1900 MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz channel(s) in Sector C, the Ericsson AIR 6419 for the 2500 MHz / 2500 MHz / 2500 MHz / 2500 MHz channel(s), the Ericsson AIR 32 for the 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR18_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 2100 MHz channel(s) in Sector D. This is based on feedback from the carrier with regard to anticipated antenna selection. All Antenna gain values and associated transmit power levels are shown in the Site Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

- 17) The antenna mounting height centerline of the proposed antennas is 142 feet above ground level (AGL).
- 18) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.
- 19) All calculations were done with respect to uncontrolled / general population threshold limits.

T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C	Sector:	D
Antenna #:	I	Antenna #:	I	Antenna #:	I	Antenna #:	I
Make / Model:	Ericsson AIR 6419	Make / Model:	Ericsson AIR 6419	Make / Model:	Ericsson AIR 6419	Make / Model:	Ericsson AIR 6419
Frequency Bands:	2500 MHz / 2500 MHz / 2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz / 2500 MHz
Gain:	22.05 dBd / 15.55 dBd / 22.05 dBd / 15.55 dBd	Gain:	22.05 dBd / 15.55 dBd / 22.05 dBd / 15.55 dBd	Gain:	22.05 dBd / 15.55 dBd / 22.05 dBd / 15.55 dBd	Gain:	22.05 dBd / 15.55 dBd / 22.05 dBd / 15.55 dBd
Height (AGL):	142 feet	Height (AGL):	142 feet	Height (AGL):	142 feet	Height (AGL):	142 feet
Channel Count:	4	Channel Count:	4	Channel Count:	4	Channel Count:	4
Total TX Power (W):	180.00 Watts	Total TX Power (W):	180.00 Watts	Total TX Power (W):	180.00 Watts	Total TX Power (W):	180.00 Watts
ERP (W):	23,258.96	ERP (W):	23,258.96	ERP (W):	23,258.96	ERP (W):	23,258.96
Antenna A1 MPE %:	4.52%	Antenna B1 MPE %:	4.52%	Antenna C1 MPE %:	4.52%	Antenna D1 MPE %:	4.52%
Antenna #:	2	Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32
Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 2100 MHz
Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.85 dBd
Height (AGL):	142 feet	Height (AGL):	142 feet	Height (AGL):	142 feet	Height (AGL):	142 feet
Channel Count:	3	Channel Count:	3	Channel Count:	3	Channel Count:	2
Total TX Power (W):	250.00 Watts	Total TX Power (W):	250.00 Watts	Total TX Power (W):	250.00 Watts	Total TX Power (W):	240.00 Watts
ERP (W):	9,071.08	ERP (W):	9,071.08	ERP (W):	9,071.08	ERP (W):	8,728.31
Antenna A2 MPE %:	1.76%	Antenna B2 MPE %:	1.76%	Antenna C2 MPE %:	1.76%	Antenna D2 MPE %:	1.70%
Antenna #:	3	Antenna #:	3	Antenna #:	3	Antenna #:	3
Make / Model:	RFS APXVAARR24_43-UNA20	Make / Model:	RFS APXVAARR24_43-UNA20	Make / Model:	RFS APXVAARR24_43-UNA20	Make / Model:	RFS APXVAARR18_43-UNA20
Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 2100 MHz
Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd / 15.65 dBd / 16.35 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd / 15.65 dBd / 16.35 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd / 15.65 dBd / 16.35 dBd	Gain:	11.95 dBd / 11.95 dBd / 12.35 dBd / 14.85 dBd / 15.55 dBd
Height (AGL):	142 feet	Height (AGL):	142 feet	Height (AGL):	142 feet	Height (AGL):	142 feet
Channel Count:	6	Channel Count:	6	Channel Count:	6	Channel Count:	5
Total TX Power (W):	340.00 Watts	Total TX Power (W):	340.00 Watts	Total TX Power (W):	340.00 Watts	Total TX Power (W):	330.00 Watts
ERP (W):	9,907.31	ERP (W):	9,907.31	ERP (W):	9,907.31	ERP (W):	7,814.06
Antenna A3 MPE %:	2.81%	Antenna B3 MPE %:	2.81%	Antenna C3 MPE %:	2.81%	Antenna D3 MPE %:	2.22%

Site Composite MPE %	
Carrier	MPE %
T-Mobile (Max at Sector A):	9.09%
Dish	3.81%
AT&T	4.9%
Verizon	7.39%
Clearwire	0.08%
Sprint	0.02%
Beacon Hose Co.	0.25%
Site Total MPE % :	25.54%

T-Mobile MPE % Per Sector	
T-Mobile Sector A Total:	9.09%
T-Mobile Sector B Total:	9.09%
T-Mobile Sector C Total:	9.09%
T-Mobile Sector D Total:	8.44%
Site Total MPE % :	25.54%

T-Mobile Maximum MPE Power Values (Sector A)							
T-Mobile Frequency Band / Technology (Sector A)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
T-Mobile 2500 MHz LTE IC & 2C Traffic	1	7214.60	142.0	14.02	2500 MHz LTE IC & 2C Traffic	1000	1.40%
T-Mobile 2500 MHz LTE IC & 2C Broadcast	1	538.38	142.0	1.05	2500 MHz LTE IC & 2C Broadcast	1000	0.10%
T-Mobile 2500 MHz NR Traffic	1	14429.21	142.0	28.05	2500 MHz NR Traffic	1000	2.80%
T-Mobile 2500 MHz NR Broadcast	1	1076.77	142.0	2.09	2500 MHz NR Broadcast	1000	0.21%
T-Mobile 1900 MHz GSM	1	342.77	142.0	0.67	1900 MHz GSM	1000	0.07%
T-Mobile 1900 MHz LTE	1	4113.21	142.0	8.00	1900 MHz LTE	1000	0.80%
T-Mobile 2100 MHz LTE	1	4615.10	142.0	8.97	2100 MHz LTE	1000	0.90%
T-Mobile 600 MHz LTE	1	788.97	142.0	1.53	600 MHz LTE	400	0.38%
T-Mobile 600 MHz NR	1	1577.94	142.0	3.07	600 MHz NR	400	0.77%
T-Mobile 700 MHz LTE	1	865.09	142.0	1.68	700 MHz LTE	467	0.36%
T-Mobile 1900 MHz UMTS	1	367.28	142.0	0.71	1900 MHz UMTS	1000	0.07%
T-Mobile 1900 MHz LTE	1	5876.52	142.0	11.42	1900 MHz LTE	1000	1.14%
T-Mobile 2100 MHz UMTS	1	431.52	142.0	0.84	2100 MHz UMTS	1000	0.08%
						Total:	9.09%

• NOTE: Totals may vary by approximately 0.01% due to summation of remainders in calculations.

Summary

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

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

T-Mobile Sector	Power Density Value (%)
Sector A:	9.09%
Sector B:	9.09%
Sector C:	9.09%
Sector D:	8.44%
T-Mobile Maximum MPE % (Sector A):	9.09%
Site Total:	25.54%
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **25.54%** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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