



Filed by:

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

January 25, 2021

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

RE: Notice of Exempt Modification
1428 Monroe Turnpike, Monroe, CT
Latitude: 41.376463
Longitude: -73.186541
T-Mobile #: CT11838A_Anchor

Dear Ms. Bachman:

T-Mobile currently maintains twelve (12) antennas at the 142.5-foot level of the existing 159-foot Monopole Tower at 1428 Monroe Turnpike, Monroe, CT. The 159-foot tower is owned by SBA Infrastructure, LLC. The property is owned by Jill Kimball / Stone Castle Investments LLC. T-Mobile now intends to remove (3) L700 MHz antennas and replace with three (3) new 2500 MHz antennas.

The new antennas would support 5G services and would be installed at the 142.5-foot level of the tower.

Please note: Per the Connecticut Siting Council Website: CSC COVID 19 Guidelines.
In order to prevent the spread of Coronavirus and protect the health and safety of our members and staff, as of March 18, 2020, the Connecticut Siting Council shall convert to full remote operations until March 30, 2020. Please be advised that during this time period, all hard copy filing requirements will be waived in lieu of an electronic filing. Please also be advised that the March 26, 2020 regular meeting shall be held via teleconference. The Council's website is not equipped with an on-line filing fee receipt service. Therefore, filing fees and/or direct cost charges associated with matters received electronically during the above-mentioned time period will be directly invoiced at a later date.

Planned Modifications:

TOWER

Remove:

- N/A

Remove and Replace:

- (3) RFS-ATM4P4DBP-1A20 – TMA (remove) – (3) Ericsson Radio 4415 B66A (replace)

- (3) EMS-FR90-16-XXDP 700MHz antenna (remove) – (3) Ericsson AIR6449 B41 2500MHz antenna (replace)

Install New:

- (3) Ericsson 4424 B25 RRU
- (3) Ericsson 4449 B71+B85 RRU
- (3) 1-5/8" Fiber
- (12) Metrosite Support Rail Center Pipe Kit (MS-HRCP-2375)
- (1) Metrosite Support Rail End Connection Kit (MS-HR2875-33ECP)
- (3) PST2375-8 Mount Pipes
- (3) PST2375-15 Support Rail Pipe
- (12) Metrosite Crossover Channel Bracket (MS-CHB350-2875)

Existing Equipment to Remain:

- (3) RFS-APX16DWV-16DWVS-E-A20 1900MHz antenna
- (3) RFS-APXVAA24_43-U-A20 700MHz antenna
- (10) 1-1/4" coax
- LP Platform w/Handrails w/(3) VSR-MS-B

Entitlements:

- (3) Andrew ATSBT-TOP-MF – Bias T
- (14) 1-1/4" Coax

GROUND

Install New:

- (1) Ericsson B160 Battery Cabinet on existing concrete pad
- (1) Ericsson 6160 Equipment cabinet on existing concrete pad
- Equipment within existing RBS6201 Equip. Cabinet

Existing Equipment to Remain:

- (1) ½" Coax for GPS antenna

This facility was originally approved by the CT Siting Council on October 23, 2002 under Docket 210. Approval was given for a monopole, no taller than necessary to provide telecommunications services, sufficient to accommodate the antennas of the carrier and other entities, both public and private, but not to exceed a height of 160 feet above ground level (AGL). Appurtenances extending from the top of the tower were not to exceed 15 feet in height. A recalculated radio frequency power density report was to be provided when circumstances in operation caused a change in power density. Upon the establishment of any new state or federal radio frequency standards applicable to frequencies of the facility, the facility was to be brought into compliance with such standards. The Certificate Holder was to permit public or private entities to share space on the proposed tower for fair consideration, or to provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. And any obsolete antenna was to be removed within 60 days. There were no further post construction stipulations set. 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 Monroe's First Selectman, Ken Kellog, and Zoning enforcement Officer, Joe Chapman, 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,

G. Scott Shepherd
Site Development Specialist II
SBA COMMUNICATIONS CORPORATION
134 Flanders Rd., Suite 125
Westborough, MA 01581

508.251.0720 x3807 + T
508.366.2610 + F
gshepherd@sbsite.com

Attachments

cc: Ken Kellog, First Selectman / with attachments
Town of Monroe, 7 Fan Hill Road, Monroe, Connecticut 06468
Joe Chapman, Zoning Enforcement Officer / with attachments
Town of Monroe, 7 Fan Hill Road, Monroe, Connecticut 06468
Jill M. Kimball / Stone Castle Investments, LLC / with attachments
1428 Monroe Turnpike, Monroe, CT 06468

EXHIBIT LIST

Exhibit 1	Check Copy	To be invoiced at a later date per Covid 19 guidelines
Exhibit 2	Notification Receipts	x
Exhibit 3	Property Card	x
Exhibit 4	Property Map	x
Exhibit 5	Original Zoning Approval	CSC 10/23/2002
Exhibit 6	Construction Drawings	Chappell Engineering 12/22/20
Exhibit 7	Modification Drawings	TES 12/28/20
Exhibit 8	Structural Analysis	TES 12/11/20
Exhibit 9	Post-Mod Mount Analysis	TES 12/16/20
Exhibit 10	EME Report	EBI Consulting 12/31/20

EXHIBIT 1

Normally, Exhibit 1 would contain a copy of the check for the filing fee.

EXHIBIT 2

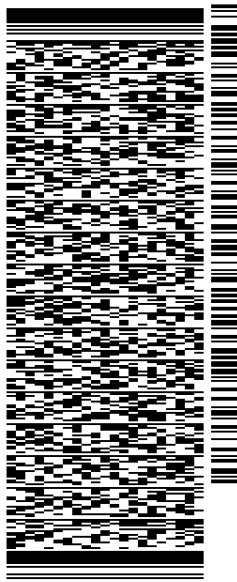
ORIGIN ID:BFBA (508) 614-0389
RICK WOODS
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 25 JAN 21
ACTWGT: 1.00 LB
CAD: 105843304/NET4340
BILL SENDER

TO MELANIE A. BACHMAN EXEC. DIR
CONNECTICUT SITING COUNCIL
TEN FRANKLIN SQUARE

NEW BRITAIN CT 06051

(508) 251-0720 X 3807 REF: 105692009-6089
INV. PO. DEPT:

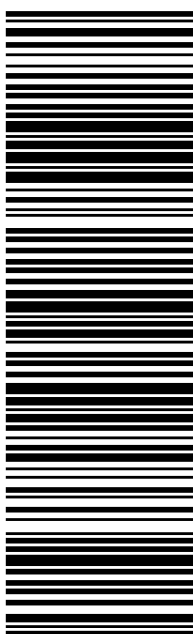


56DJ1/1136/FE4A

TRK# 7727 2137 6189
0201
TUE - 26 JAN 10:30A
PRIORITY OVERNIGHT

EB BDLA

06051
BDL
CT-US



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

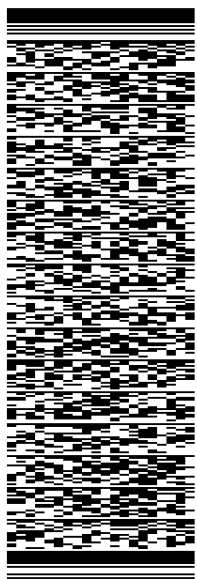
ORIGIN ID:BBFA (508) 614-0389
RICK WOODS
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 25 JAN 21
ACTWGT: 1.00 LB
CAD: 105843304/NET14340
BILL SENDER

TO KEN KELLOG
TOWN OF MONROE
FIRST SELECTMAN
7 FAN HILL RD.
MONROE CT 06468

(508) 251-0720 X 3807
REF: 105692009-6089
PO: DEPT:

56DJ11/1136/FE4A



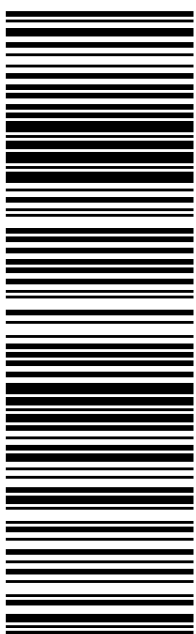
J211121011901uv

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06468
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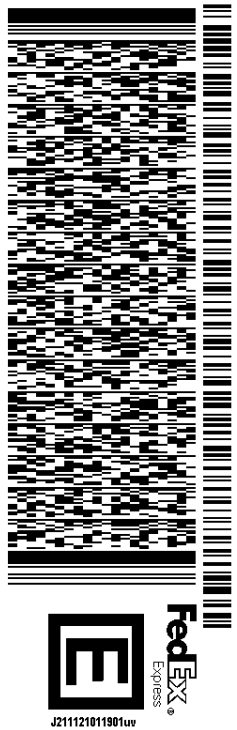
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RICK WOODS
SBA COMMUNICATIONS CORPORATION
134 FLANDERS RD
SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 25 JAN 21
ACTWGT: 1.00 LB
CAD: 105843304/NET14340
BILL SENDER

TO
JOE CHAPMAN
TOWN OF MONROE
ZONING ENFORCEMENT OFFICER
7 FAN HILL RD.
MONROE CT 06468
(508) 251-0720 X 3807
REF: 105692009-6089
PO: DEPT:

56DJ11/1136/FE4A



TRK# 7727 2147 0551
TUE - 26 JAN 10:30A
PRIORITY OVERNIGHT

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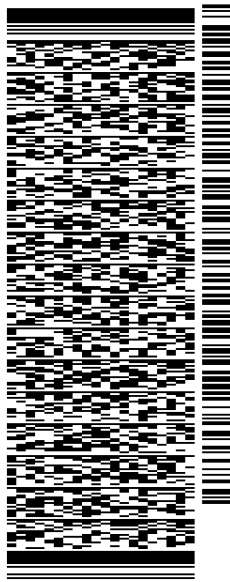
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SUITE 125
WESTBOROUGH, MA 01581
UNITED STATES US

SHIP DATE: 25 JAN 21
ACTWGT: 1.00 LB
CAD: 105843304/NET14340
BILL SENDER

TO JILL M. KIMBALL
STONE CASTLE INVESTMENTS, LLC
1428 MONTOE TURNPIKE

MONROE CT 06468
(508) 251-0720 X 3807 REF: 1056920096089
INV. PO. DEPT:

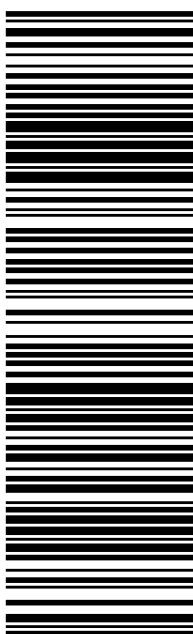
56DJ11/1136/FE4A



TRK# 7727 2152 5345
0201
TUE - 26 JAN 10:30A
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EXHIBIT 3

1428 MONROE TPKE**Location** 1428 MONROE TPKE**Map/Lot** 145/ 024/ 01/ /**Acct#** 14502401**Owner** KIMBALL JILL M**Assessment** \$569,310**Appraisal** \$813,242**PID** 16577**Building Count** 1**Survey** 3171**Affordable****Current Value**

Appraisal			
Valuation Year	Improvements	Land	Total
2014	\$640,442	\$172,800	\$813,242
Assessment			
Valuation Year	Improvements	Land	Total
2014	\$448,310	\$121,000	\$569,310

Owner of Record

Owner KIMBALL JILL M
Co-Owner
Address 1428 MONROE TPKE
 MONROE, CT 06468

Sale Price \$0
Certificate
Book & Page 1904/0251
Sale Date 12/29/2015
Instrument

Ownership History

Ownership History					
Owner	Sale Price	Certificate	Book & Page	Instrument	Sale Date
KIMBALL JILL M	\$0		1904/0251		12/29/2015
STONE CASTLE INVESTMENTS LLC	\$0	1	1789/ 323		07/13/2012
SISTERS OF THE HOLY FAMILY OF NAZARETH U	\$0	2	1603/ 14		07/10/2009

Building Information**Building 1 : Section 1**

Year Built: 1936
Living Area: 5,782

Building Attributes

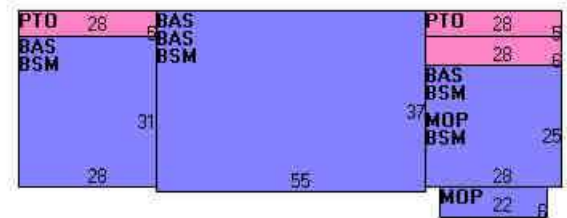
Field	Description
Style	Colonial
Model	Residential
Stories:	2
Occupancy	1
Exterior Wall 1	Stone
Heat Fuel	Gas
Heat Type:	Hot Air
AC Type:	Central AC
Total Bedrooms:	6
Total Bthrms:	4
Total Half Baths:	2
Total Rooms:	14
Fireplaces	6
Basement Gar.	0
Basement	Full
In Law Apt	0

Building Photo



(<http://images.vgsi.com/photos/MonroeCTPhotos//\00\00\66\11>).

Building Layout



FBM[2035]

(<http://images.vgsi.com/photos/MonroeCTPhotos//Sketches/165>).

Building Sub-Areas (sq ft)			Legend
Code	Description	Gross Area	Living Area
BAS	First Floor	3,747	3,747
FUS	Finished Upper Story	2,035	2,035
BSM	Basement	4,055	0
FBM	Finished Basement	2,035	0
MOP	Masonry Open Porch	168	0
PTO	Patio	280	0
		12,320	5,782

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code 101
Description Single Family
Zone RF2
Neighborhood
Alt Land Approved No
Category

Land Line Valuation

Size (Acres) 7.21
Appraised Value \$172,800

Outbuildings

Outbuildings	<u>Legend</u>
No Data for Outbuildings	

Valuation History

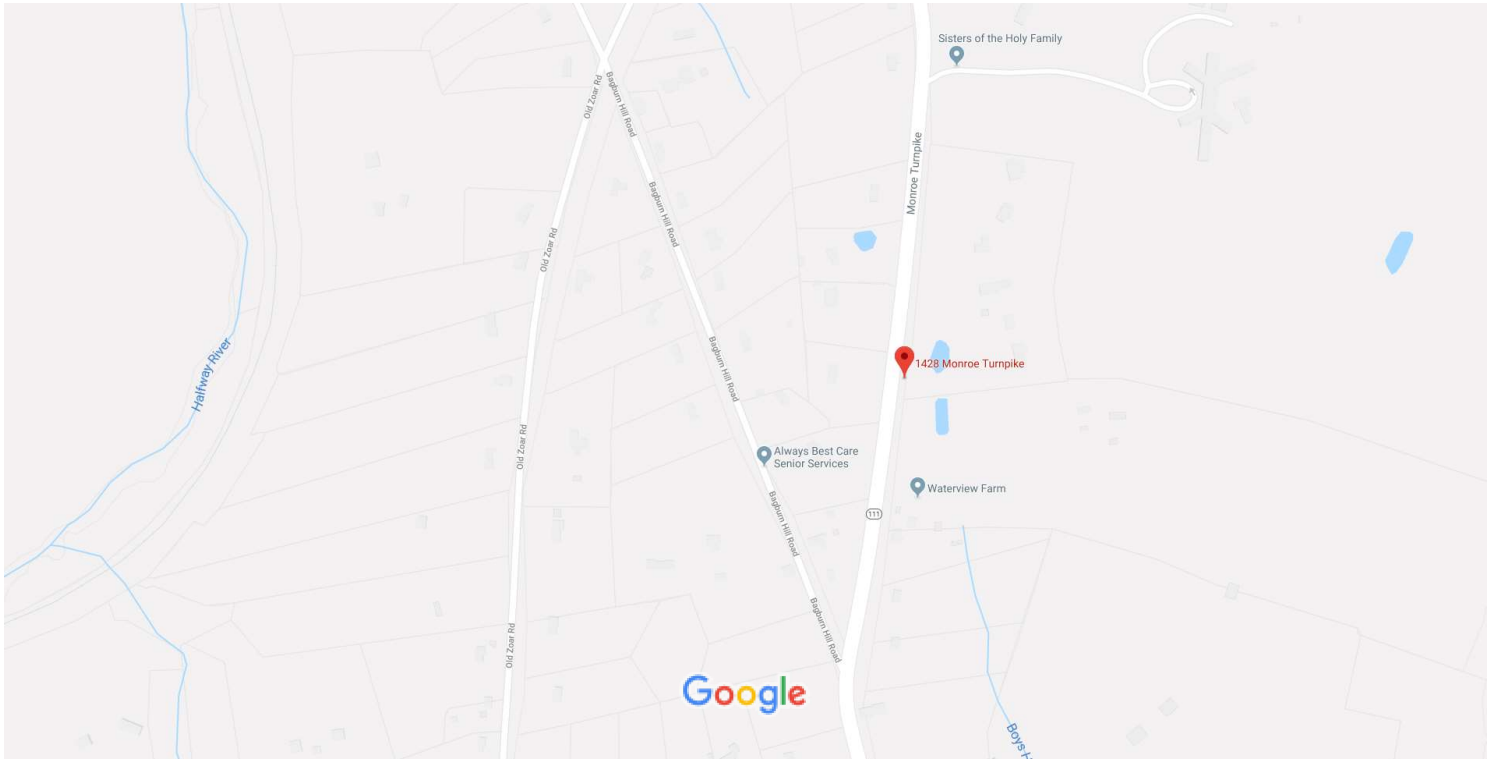
Appraisal			
Valuation Year	Improvements	Land	Total
2018	\$640,400	\$172,800	\$813,200
2017	\$435,300	\$172,800	\$608,100

Assessment			
Valuation Year	Improvements	Land	Total
2018	\$448,300	\$121,000	\$569,300
2017	\$304,700	\$121,000	\$425,700

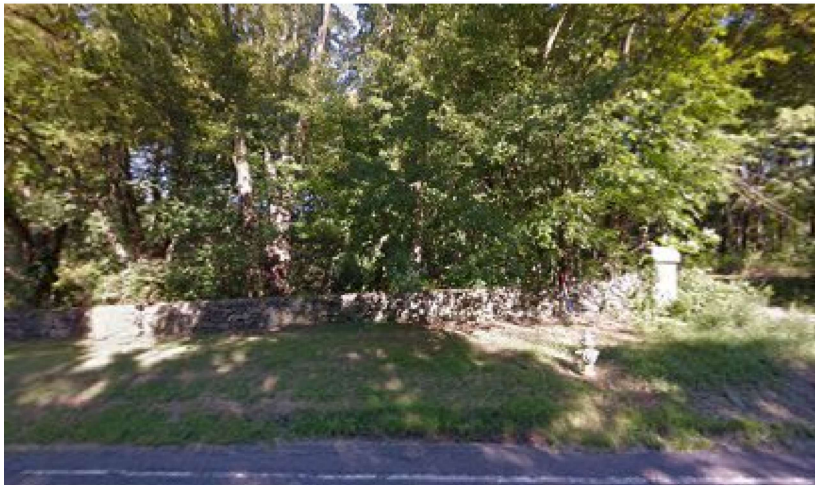
(c) 2016 Vision Government Solutions, Inc. All rights reserved.

EXHIBIT 4

Google Maps 1428 Monroe Turnpike



Map data ©2019 Google 200 ft



1428 Monroe Turnpike

Monroe, CT 06468



Directions



Save



Nearby



Send to your phone

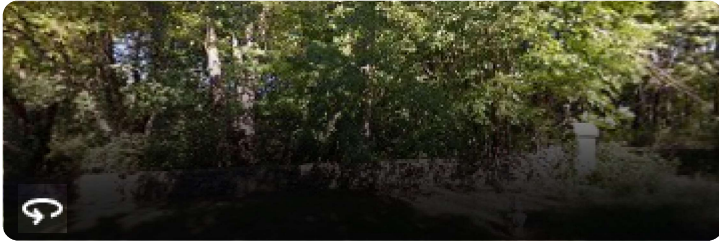


Share



9RF5+35 Monroe, Newtown, CT

Photos



At this location

Sisters of the Holy Family

5.0 ★★★★★ (5)

Religious organization · 1428 Monroe Turnpike



EXHIBIT 5

Connecticut Siting Council

Decisions

DOCKET NO. 210 - James E. Dwyer Co., Inc. application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telecommunications facility at 1428 Monroe Turnpike, Monroe, Connecticut.	} Connecticut
	} Siting
	} Council

October 23, 2002

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility at the proposed site in Monroe, Connecticut, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to James E. Dwyer Co., Inc., now known as Connecticut Architectural Towers, LLC (CAT)*, for the construction, maintenance and operation of a cellular telecommunications facility at the revised proposed site located at 1428 Monroe Turnpike, Monroe, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The tower shall be constructed as a monopole facility, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of AT&T and other entities, both public and private, but such tower shall not exceed a height of 160 feet above ground level (AGL). Appurtenances extending from the top of the tower should not exceed 15 feet in height.
2. The Certificate Holder shall prepare a D&M Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include: a final site plan(s) for site development to include the location and specifications for the tower foundation, placement of carrier antennas, tower height, equipment buildings, security fence, access road, and utility line; construction plans for site clearing, tree trimming, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended; landscaping and provisions to protect the existing vegetative buffer that would extend around the facility compound; a tower finish that may include painting; and provisions for the prevention and containment of spills and/or other discharge into surface water and groundwater bodies. The Certificate Holder must have a commitment from at least one carrier prior to commencement of construction of the facility.
3. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent

with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall provide a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

4. Upon the establishment of any new state or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.
4. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
5. If the facility does not initially provide, or permanently ceases to provide wireless services following completion of construction, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
6. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antenna becomes obsolete and ceases to function.
7. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed and the site in operation as a telecommunications facility within one year of the effective date of this Decision and Order or within one year after all appeals to this Decision and Order have been resolved.

Pursuant to General Statutes § 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in The Hartford Courant and The Advocate.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

Connecticut Architectural Towers, LLC (CAT)/
James E. Dwyer Co., Inc. (Dwyer)

Dennis Morrissey, P.E.
Attorney at Law
106 Sherman Street
Fairfield, CT 06430

AT&T Wireless Corporation, Inc.

Christopher B. Fisher, Esq.
Cuddy & Feder & Worby
90 Maple Avenue
White Plains, NY 10601

Town of Monroe

John Radshaw, III
Howd & Ludorf
65 Wethersfield Avenue
Hartford, CT 06114

Content Last Modified on 10/25/2002 12:44:33 PM



STATE OF CONNECTICUT

CMAA

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@po.state.ct.uswww.ct.gov/csc

November 18, 2004

Jennifer Young Gaudet
345 Taylor Street
Talcottville, CT 06066

RE: **DOCKET NO. 210** - Connecticut Architectural Towers LLC Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of a cellular telecommunications facility at 1428 Monroe Turnpike, Monroe, Connecticut.

Dear Attorney Gaudet:

At a public meeting of the Connecticut Siting Council (Council) held on November 17, 2004, the Council approved the transfer of the Certificate of Environmental Compatibility and Public Need (Certificate) from Connecticut Architectural Towers, LLC to Optasite, Inc. This approval of transfer is consistent with State law and conditioned on the consent of Optasite, Inc. to comply with all the terms, limitations, and conditions contained in said Certificate issued on October 23, 2002.

Thank you for your attention and cooperation. Please call me directly if you have any questions regarding the Council's approval of this proposed transfer of Certificate.

Very truly yours,


Pamela B. Katz, P.E.
Chairman

PBK/laf

EXHIBIT 6

CT838/MARION HEIGHTS CAT

1428 MONROE TURNPIKE
MONROE, CT 06468
FAIRFIELD COUNTY

SITE NO.: CT11838A

RF DESIGN GUIDELINE: 67D5A998C ODE+6160

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.

APPROVALS

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

T-MOBILE TECHNICIAN SITE SAFETY NOTES

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

GENERAL NOTES

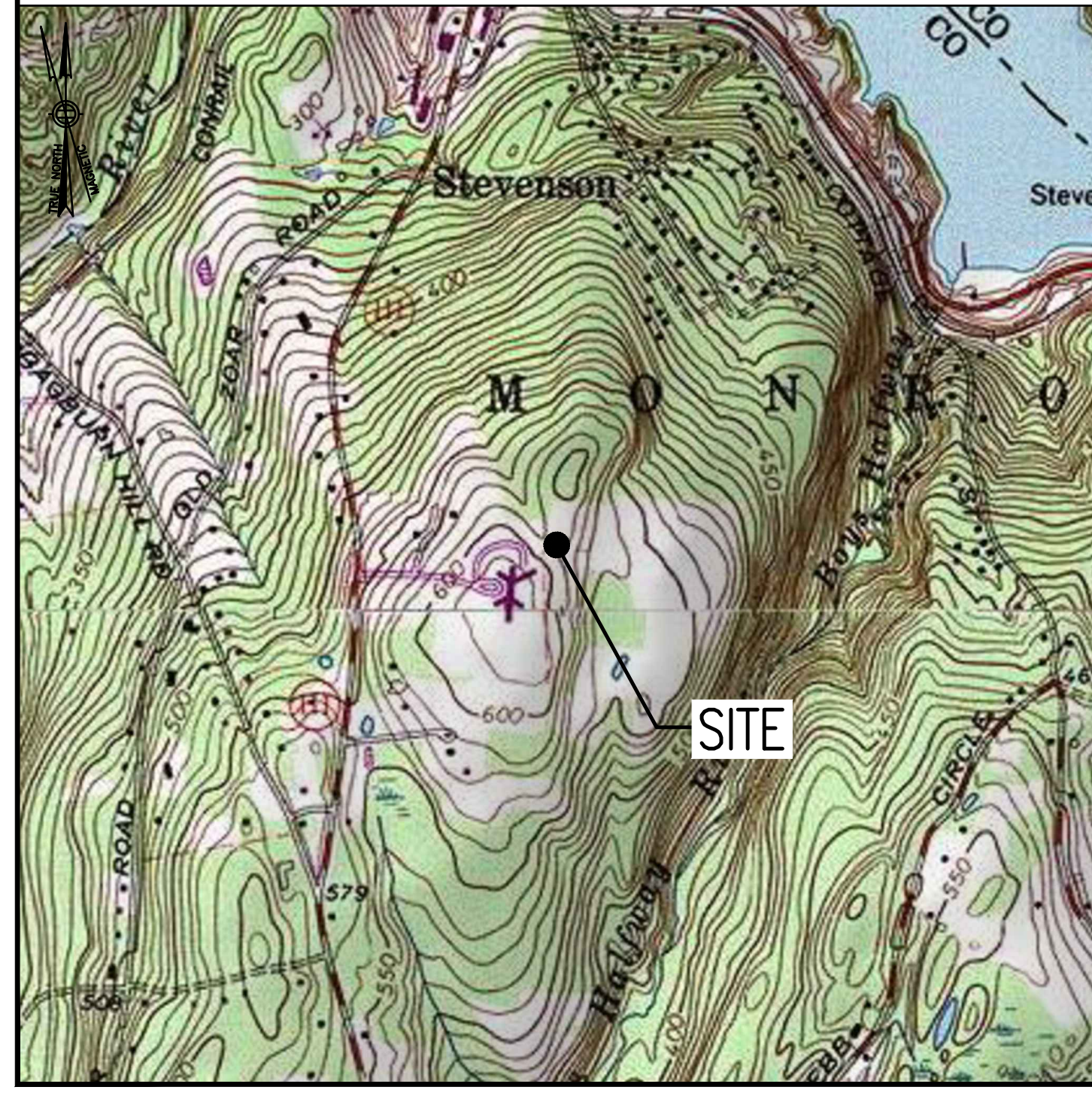
- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT 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 ON-SITE 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

SCALE: 1" = 1000'-0"



DIRECTIONS

TURN LEFT ONTO S WASHINGTON ST. TURN RIGHT ONTO MA-123 E. TURN LEFT TO MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. MERGE ONTO I-495 NORTH. TAKE EXIT 22 TO MERGE ONTO I-90 WEST TOWARD ALBANY. TAKE EXIT 9 FOR I-84 TOWARD HARTFORD CT/NEW YORK CITY. CONTINUE ONTO I-84. TAKE EXIT 11 TOWARD CT-34/DERBY/NEW HAVEN. TURN RIGHT ONTO WASSERMAN WAY. TURN RIGHT ONTO CT34 EAST. TURN RIGHT ONTO CT-111. SITE WILL BE ON THE LEFT.

SHEET INDEX

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E-1	ELECTRIC & GROUNDING DETAILS	1

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:	CT11838A
SBA SITE NUMBER:	CT13055-A
SBA SITE NAME:	MONROE TURNPIKE
SITE ADDRESS:	1428 MONROE TURNPIKE MONROE, CT 06468
PROPERTY OWNER:	STONE CASTLE INVESTMENTS, LLC 1428 MONROE TURNPIKE MONROE, CT 06468
TOWER OWNER:	SBA INFRASTRUCTURE, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-226-9523
COUNTY:	FAIRFIELD COUNTY
ZONING DISTRICT:	RF-2 (RESIDENTIAL AND FARMING DISTRICT 2)
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	159'
APPLICANT:	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
SBA RSM:	STEPHEN ROTH PHONE: 860-539-4920 EMAIL: SRoth@sbsite.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: N.41.376463° 41'-22"-35.27" LONGITUDE: W.73.186541° 73'-11"-11.55"

SPECIAL ZONING NOTE:

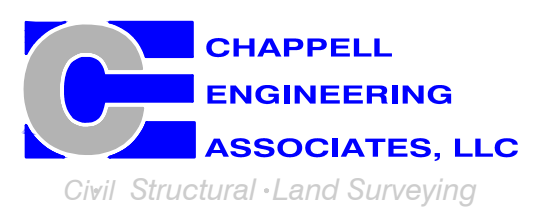
BASED ON INFORMATION PROVIDED BY T-MOBILE REGULATORY COMPLIANCE PROFESSIONALS AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409(A), AND IS SUBJECT TO AN ELIGIBLE 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
(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
1	12/22/20	ISSUED FOR CONSTRUCTION	CMC
0	11/02/20	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CT11838A

SITE ADDRESS:
1428 MONROE TURNPIKE
MONROE, CT 06468

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.
- SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE 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, UNDO.
- 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 MANUFACTURER’S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER’S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.
- CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
(A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
(B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED. FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
- 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”Ø) 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 (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- 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, ANSI/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, ANSI/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**

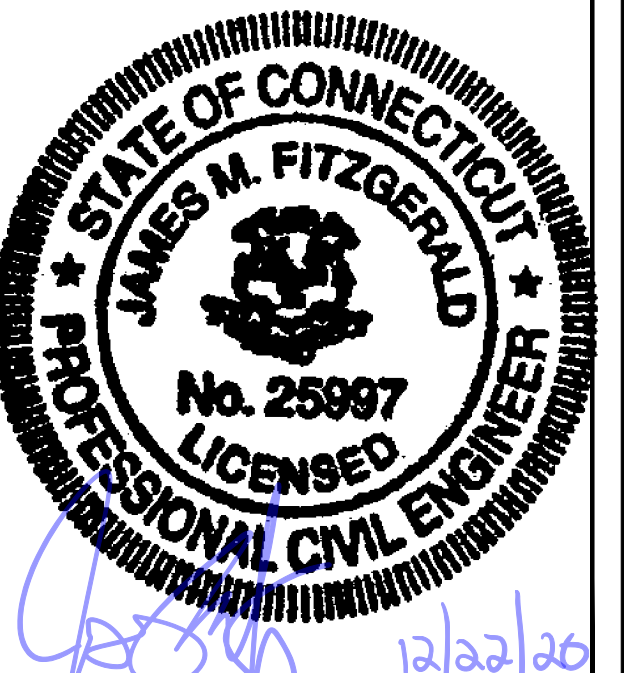
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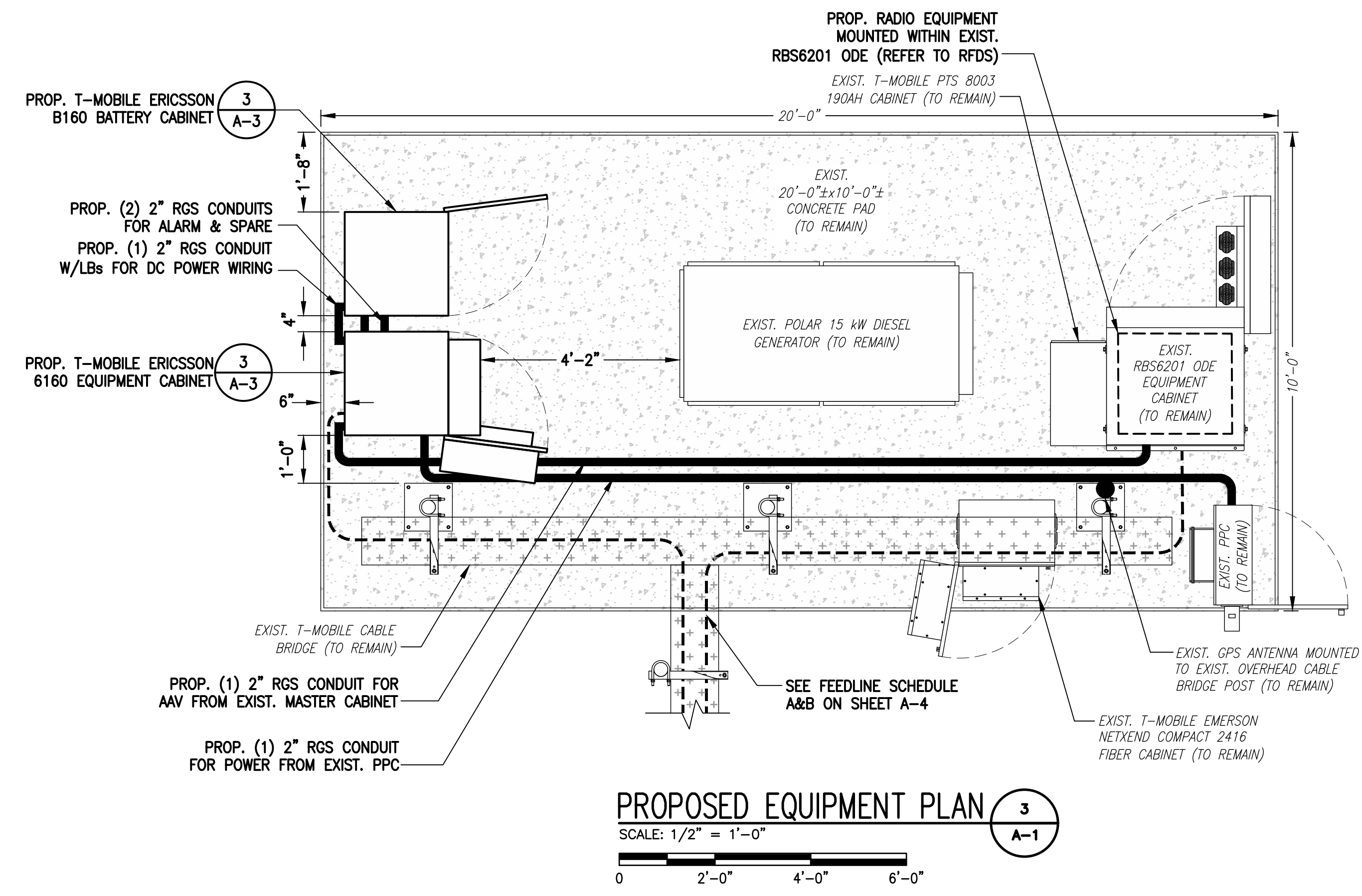
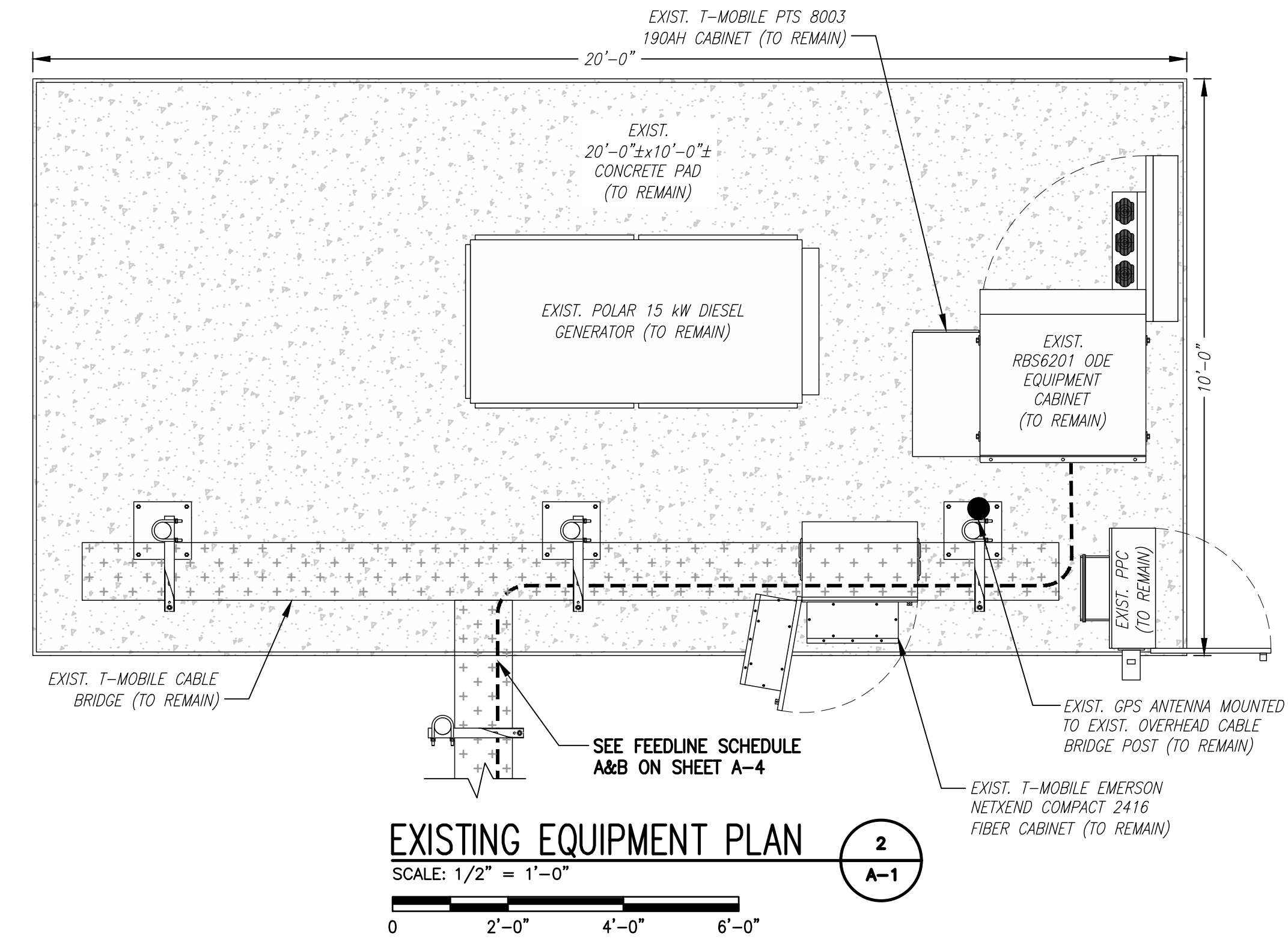
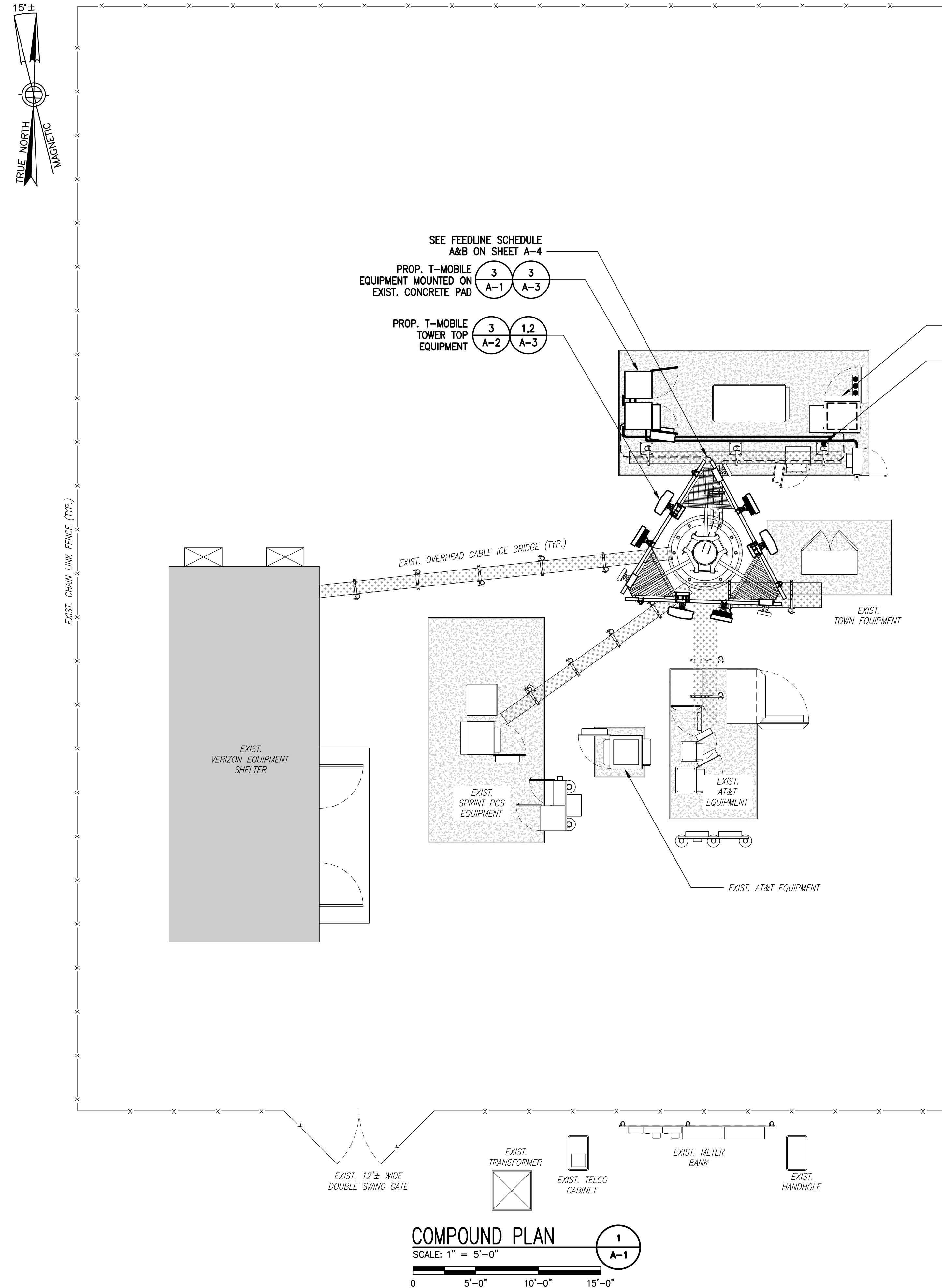
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CT11838A

SITE ADDRESS:
1428 MONROE TURNPIKE
MONROE, CT 06468

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.

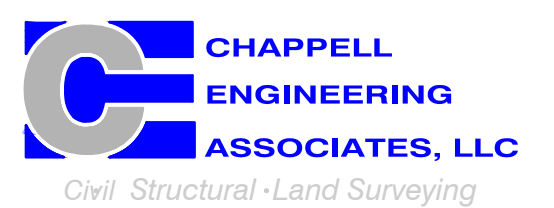


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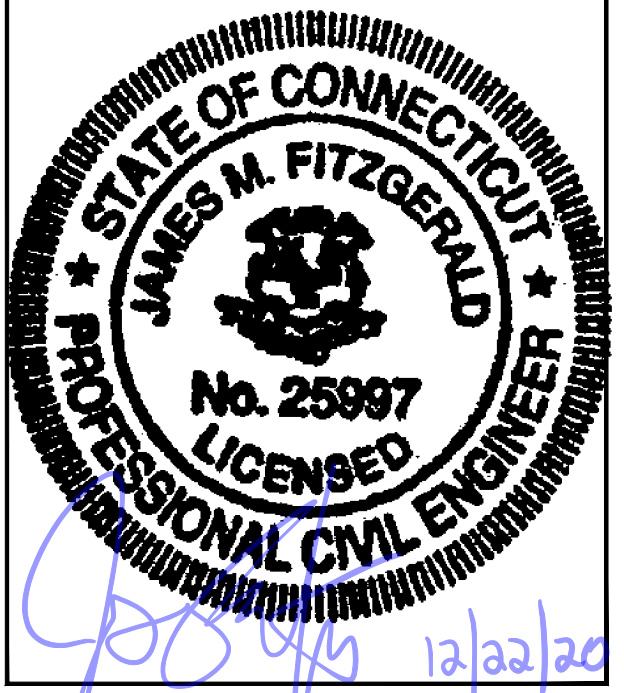
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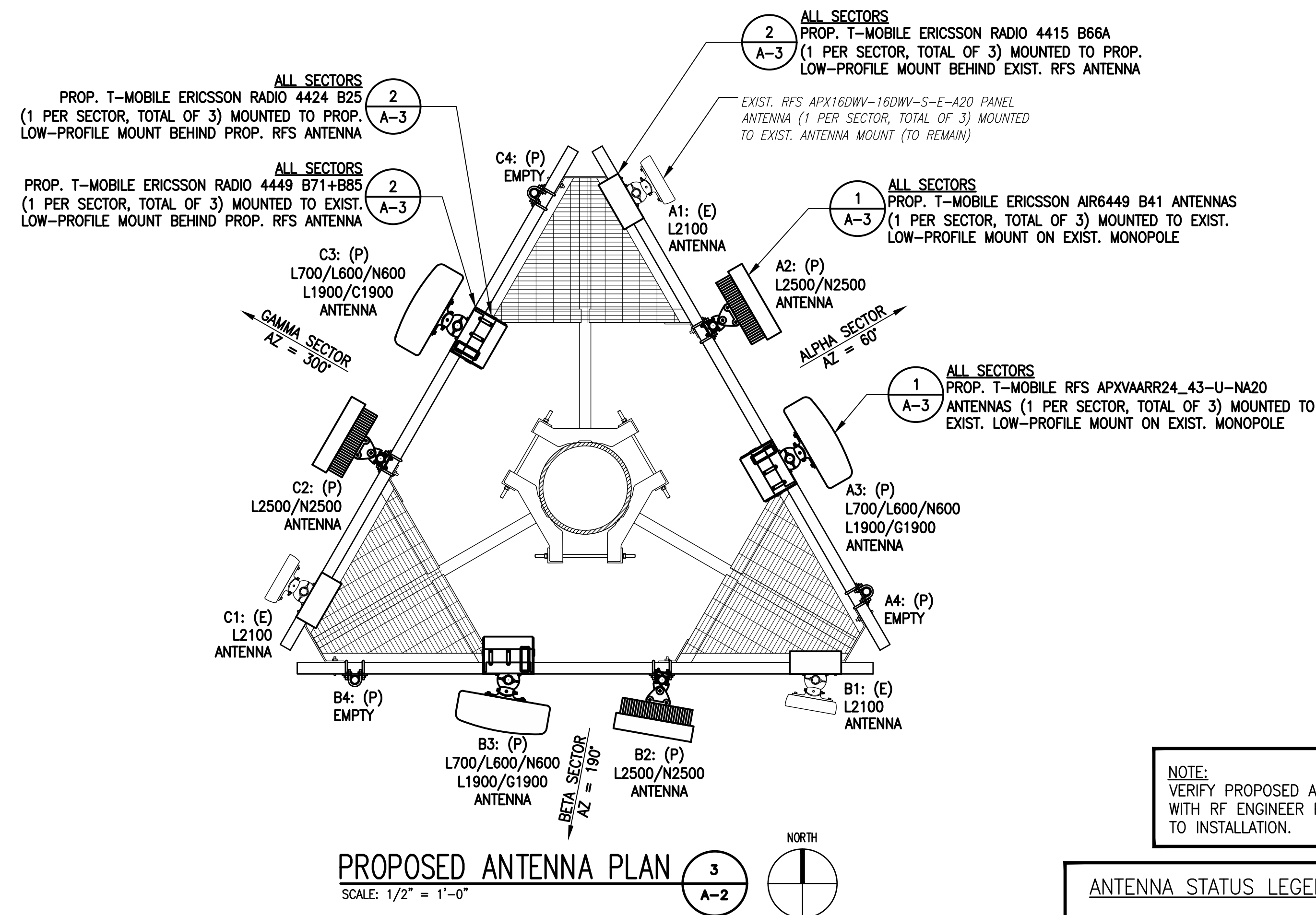
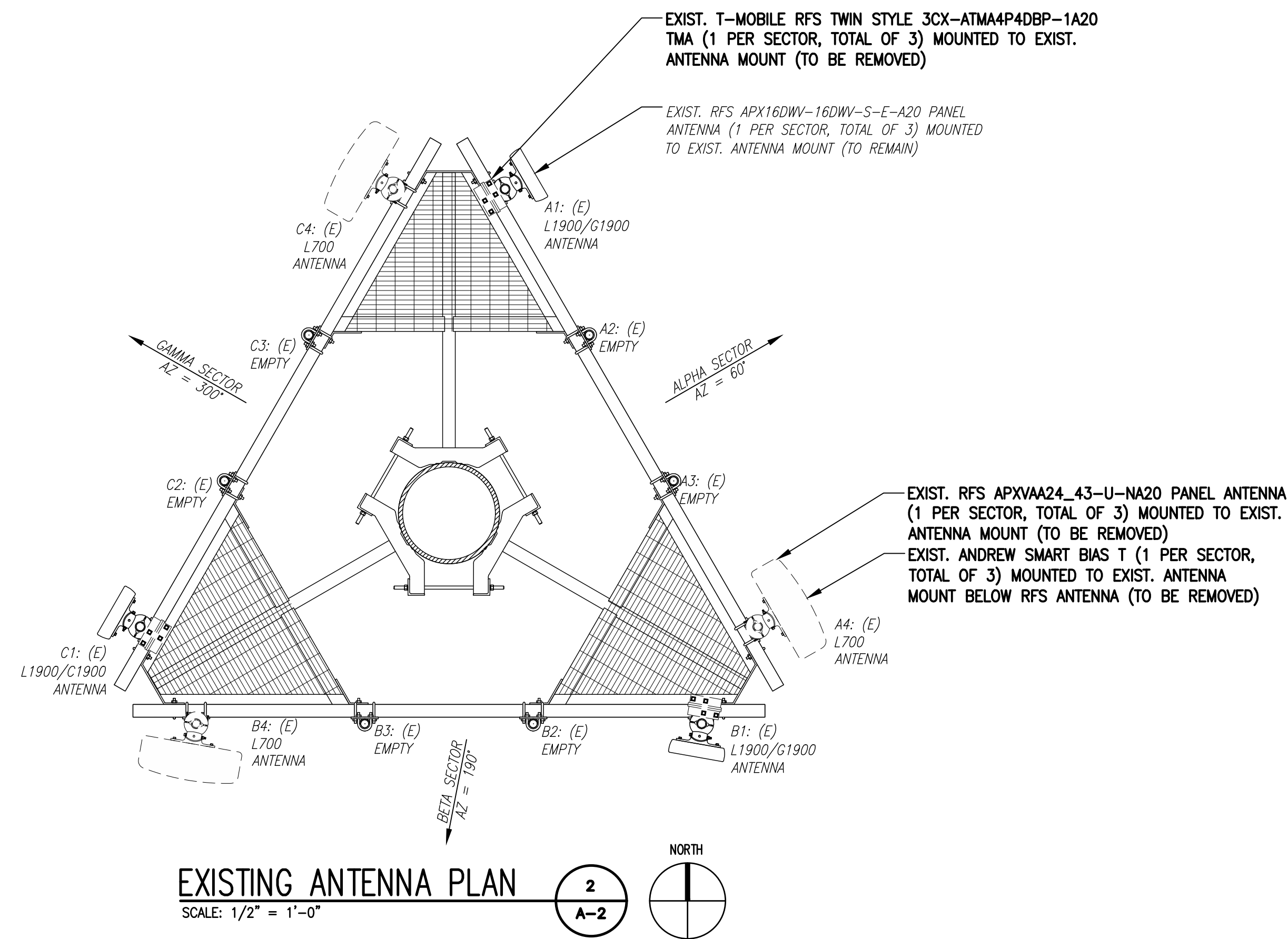
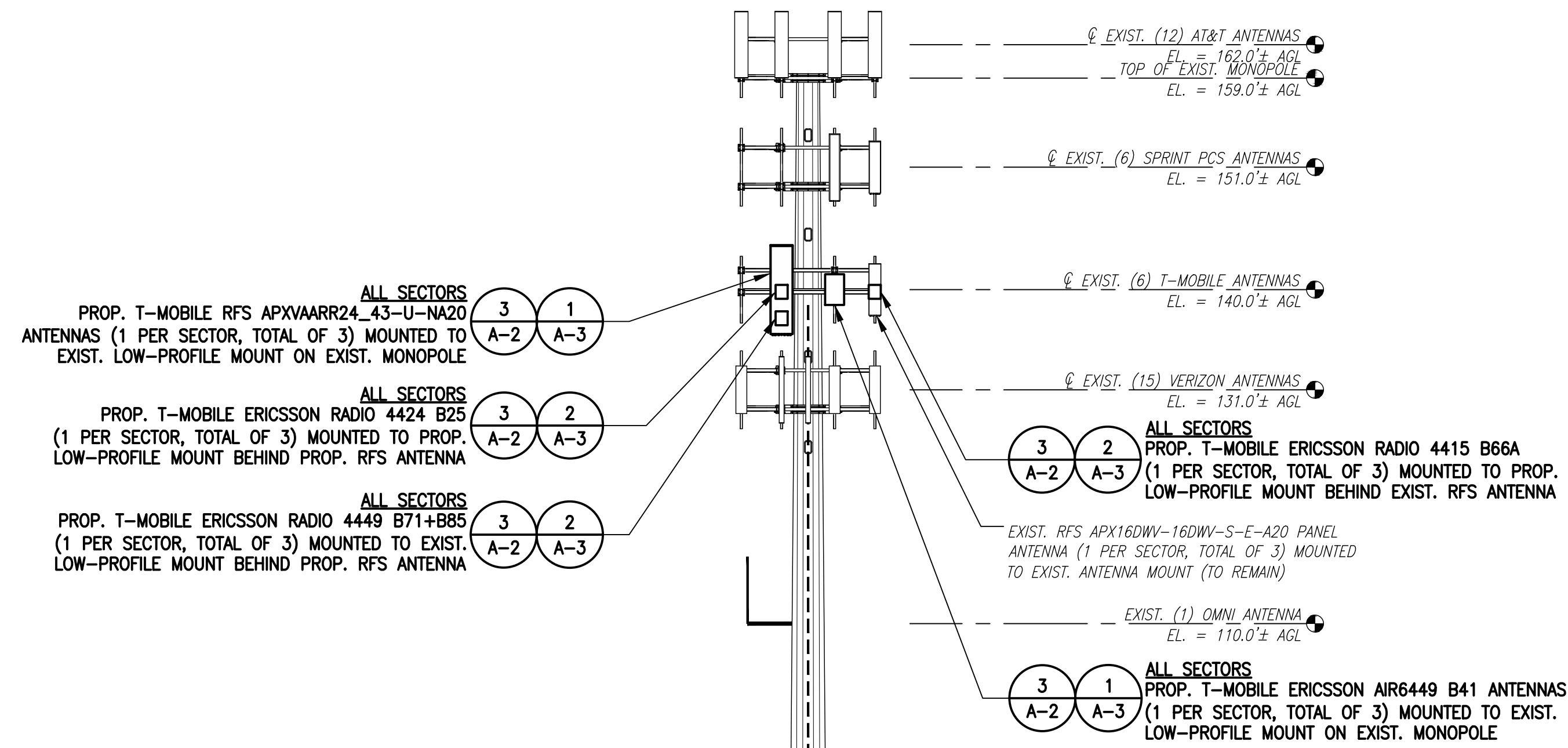
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SHEET TITLE
**COMPOUND &
 EQUIPMENT PLAN**

SHEET NUMBER
A-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.

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



NOTE:
 GROUND EQUIPMENT NOT SHOWN, FOR CLARITY.

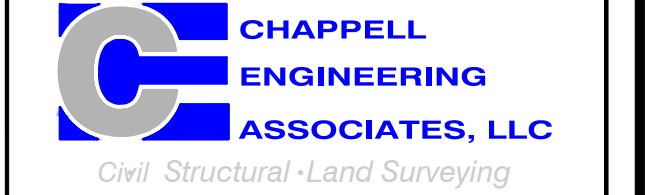
NOTE:
 VERIFY PROPOSED AZIMUTHS WITH RF ENGINEER PRIOR TO INSTALLATION.

ANTENNA STATUS LEGEND:
 EMPTY - EMPTY PIPE
 (E) - EXISTING
 (P) - INSTALL
 (F) - FUTURE

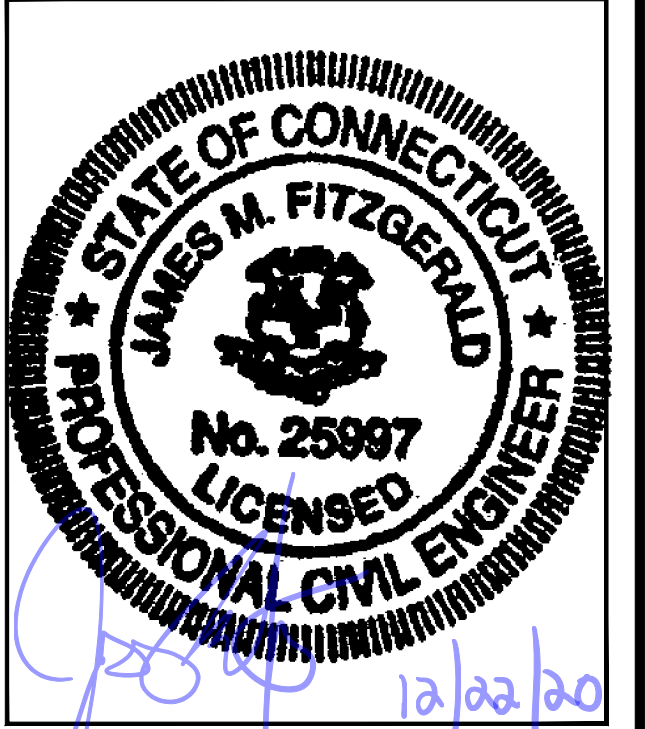
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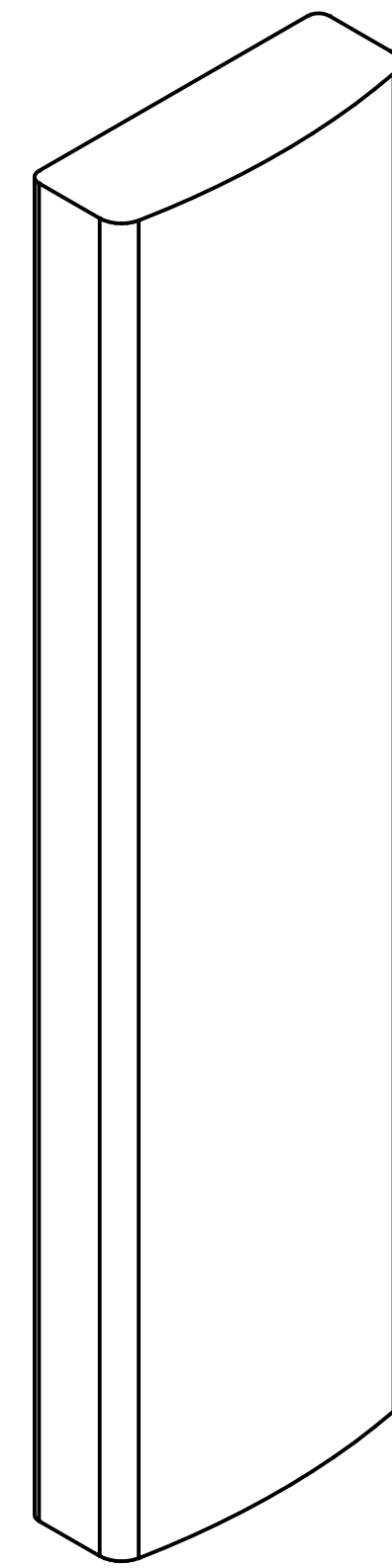
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SHEET TITLE
 TOWER ELEVATIONS &
 ANTENNA PLAN

SHEET NUMBER
A-2



RFS APXVAARR24_43-U-NA20 ANTENNA

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



ERICSSON M-MIMO AIR6449 B41 ANTENNA

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



ERICSSON RADIO 4415 B66A

DIMENSIONS: 16.5"H x 13.4"W x 5.9"D
 WEIGHT: 46.0 lbs
 QUANTITY: 1 PER SECTOR, TOTAL OF 3



ERICSSON RADIO 4449 B71+B85

DIMENSIONS: 14.9"H x 13.2"W x 9.3"D
 WEIGHT: 74.0 lbs
 QUANTITY: 1 PER SECTOR, TOTAL OF 3



ERICSSON RADIO 4424 B25

DIMENSIONS: 16.5"H x 13.5"W x 9.6"D
 WEIGHT: 88.0 lbs
 QUANTITY: 1 PER SECTOR, TOTAL OF 3

ANTENNA DETAILS

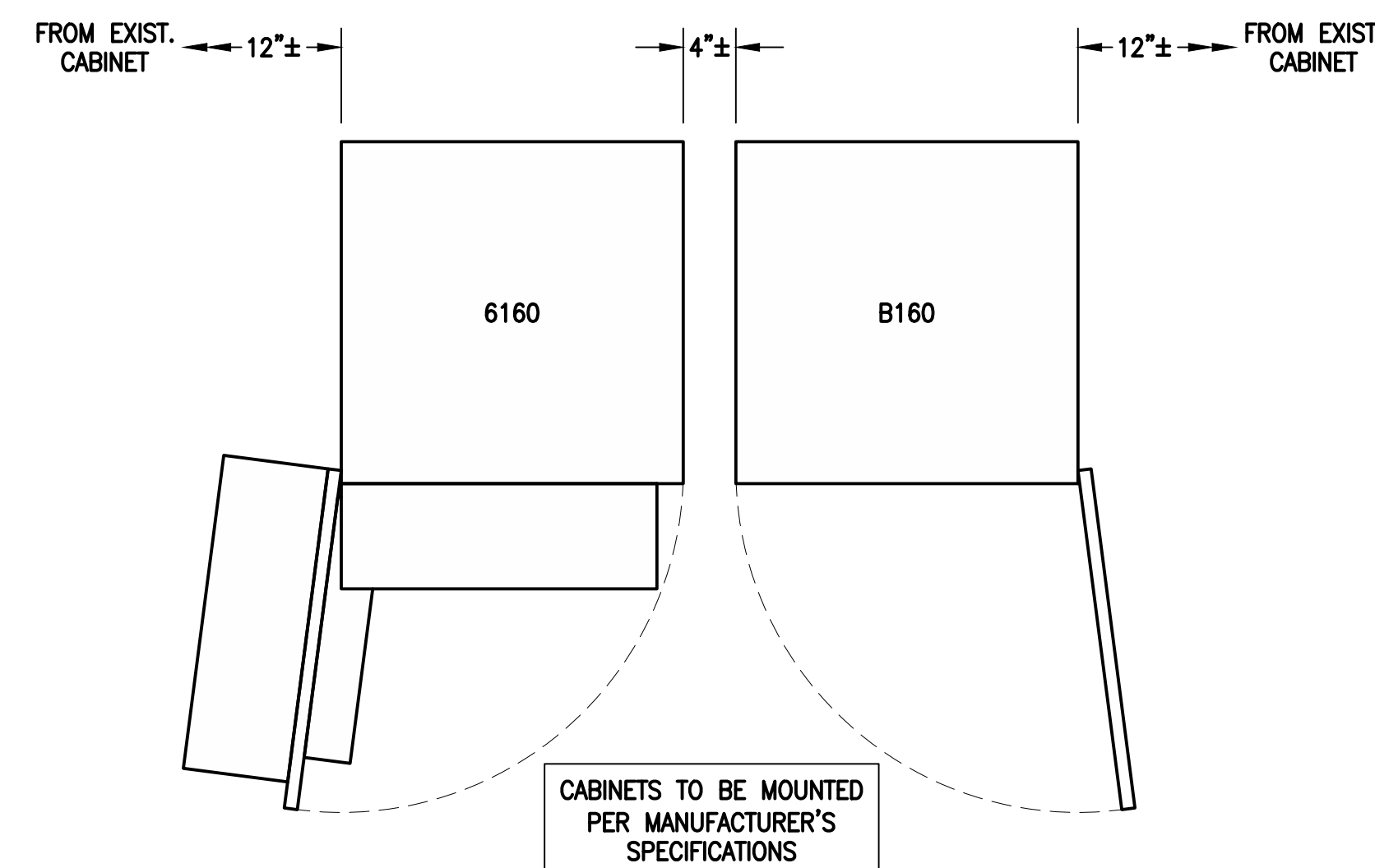
SCALE: N.T.S.

1
A-3

RADIO DETAILS

SCALE: N.T.S.

2
A-3



ERICSSON 6160 SITE SUPPORT CABINET

DIMENSIONS: 63.25"H x 26.0"W x 34.0"D
 WEIGHT: 680.0 lbs
 QUANTITY: TOTAL OF 1

ERICSSON B160 BATTERY CABINET

DIMENSIONS: 63.25"H x 26.0"W x 26.0"D
 WEIGHT: 1771.0 lbs
 QUANTITY: TOTAL OF 1

EQUIPMENT DETAIL

SCALE: N.T.S.

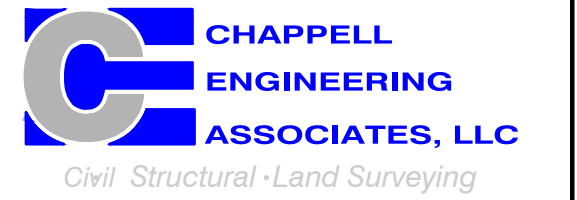
3
A-3

**T-MOBILE
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 MONROE, CT 06468

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 <small>RFS APX16DWV-16DWV-S-E-A20</small>	140'± AGL	60°	0°	2'	L2100	RADIO 4415 B66A	(3) 1-5/8" (6x12) HCS FIBER CABLES
	A2 ERICSSON M-MIMO AIR6449 B41	140'± AGL	60°	0°	2'	L2500/N2500	-	
	A3 <small>RFS APXVAARR24_43-U-NA20</small>	140'± AGL	60°	0°	2'	L700/L600/N600	RADIO 4449 B71+B85	
BETA	B1 <small>RFS APX16DWV-16DWV-S-E-A20</small>	140'± AGL	190°	0°	2'	L2100	RADIO 4415 B66A	
	B2 ERICSSON M-MIMO AIR6449 B41	140'± AGL	190°	0°	2'	L2500/N2500	-	
	B3 <small>RFS APXVAARR24_43-U-NA20</small>	140'± AGL	190°	0°	2'	L700/L600/N600	RADIO 4449 B71+B85	
GAMMA	C1 <small>RFS APX16DWV-16DWV-S-E-A20</small>	140'± AGL	300°	0°	2'	L2100	RADIO 4415 B66A	
	C2 ERICSSON M-MIMO AIR6449 B41	140'± AGL	300°	0°	2'	L2500/N2500	-	
	C3 <small>RFS APXVAARR24_43-U-NA20</small>	140'± AGL	300°	0°	2'	L700/L600/N600	RADIO 4449 B71+B85	
CABLE NOTE: (E)(12) 1-1/4" COAX CABLES TO BE REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.								

NOTE: RFDS REV3 - 09/25/20

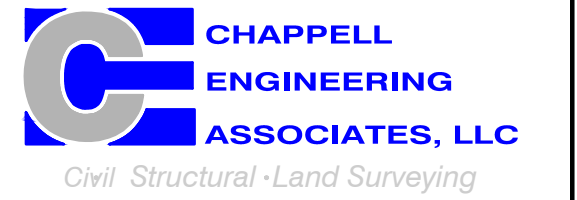
FEEDLINE SCHEDULE		
SCHEDULE	FEEDLINES	LOCATION
A	<small>EXISTING TO REMAIN: 1/2" COAX FOR GPS ANTENNA</small> <small>EXISTING TO BE REMOVED: (12) 1-1/4" COAX CABLES</small>	ROUTED PER STRUCTURAL ANALYSIS
B	PROPOSED: (3) 1-5/8" (6x12) HCS FIBER CABLES	
<small>NOTE: EXISTING T-MOBILE EQUIPMENT FEEDLINE INVENTORY BASED ON OBSERVED FIELD CONDITIONS. RFDS AND FEEDLINE LEASING ENTITLEMENTS MAY DIFFER.</small>		

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SHEET TITLE
**ANTENNA &
FEEDLINE CHARTS**

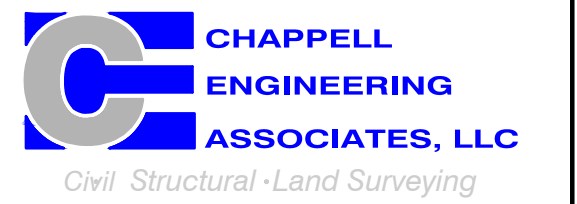
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A-4

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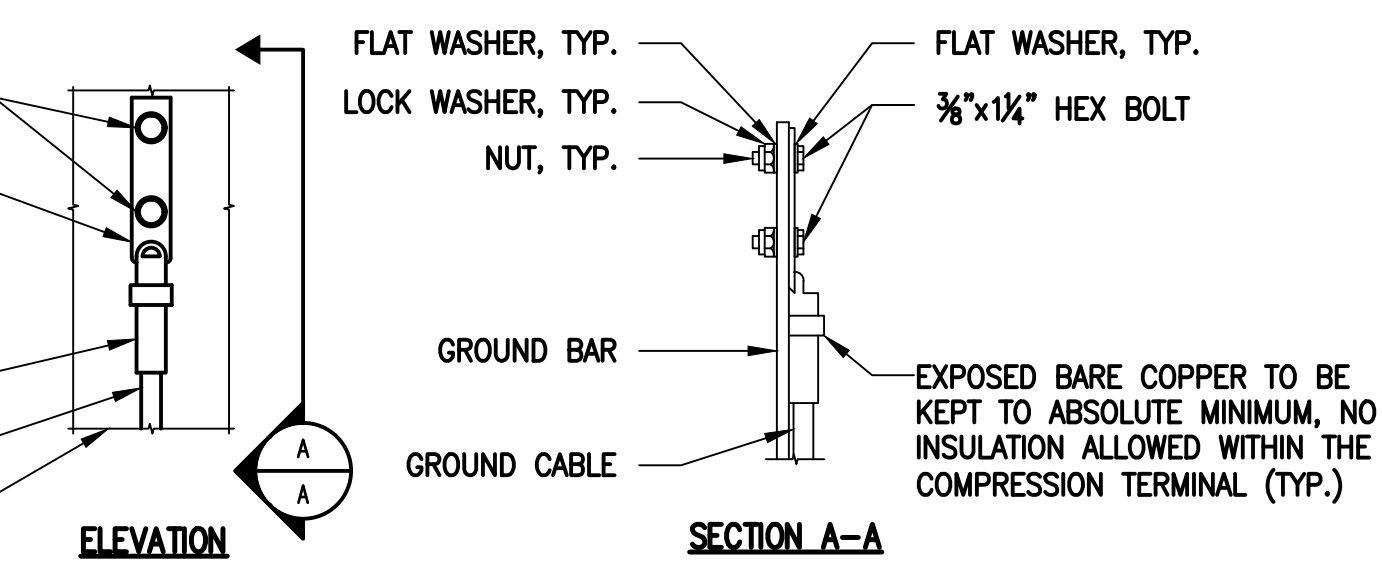
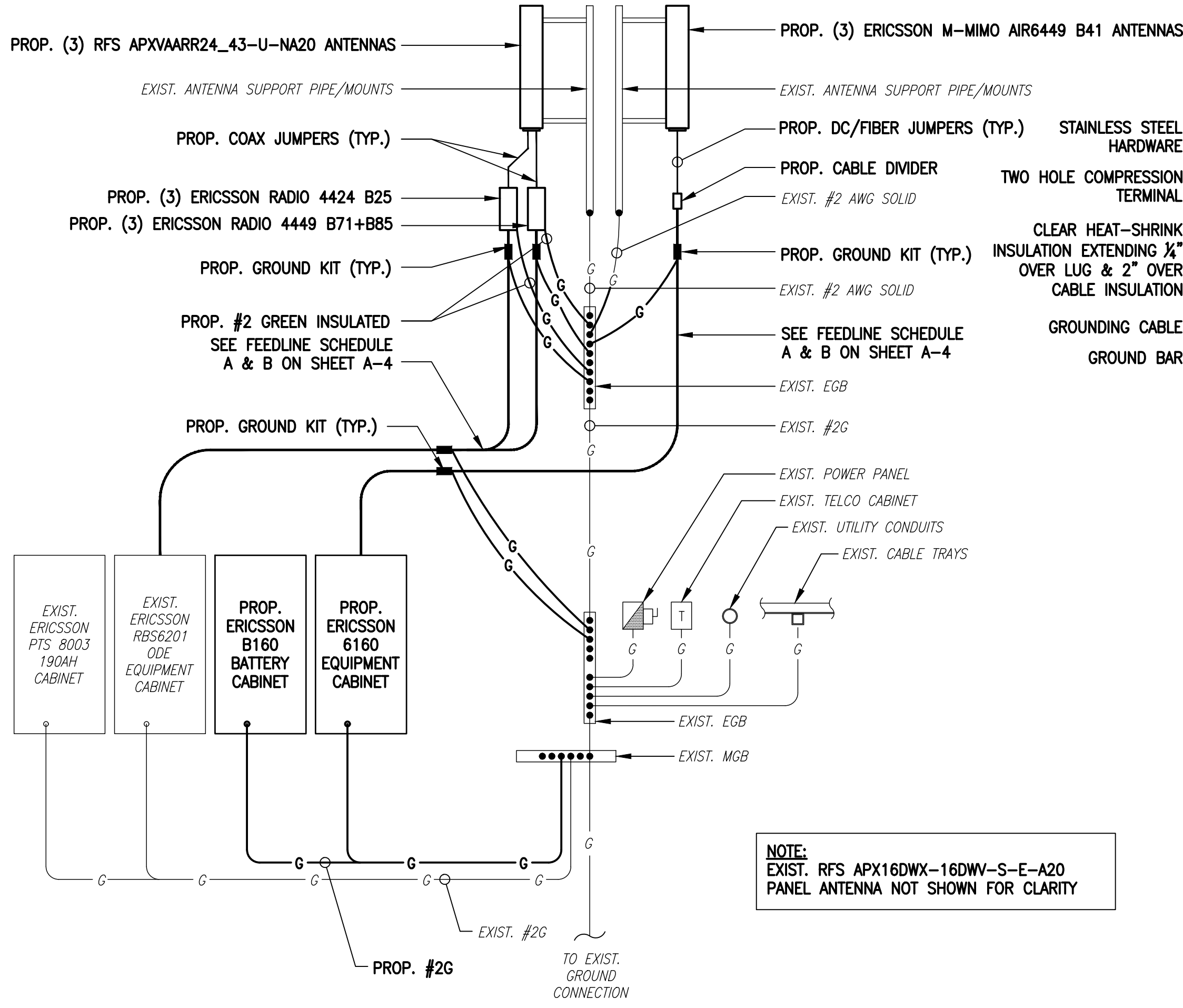
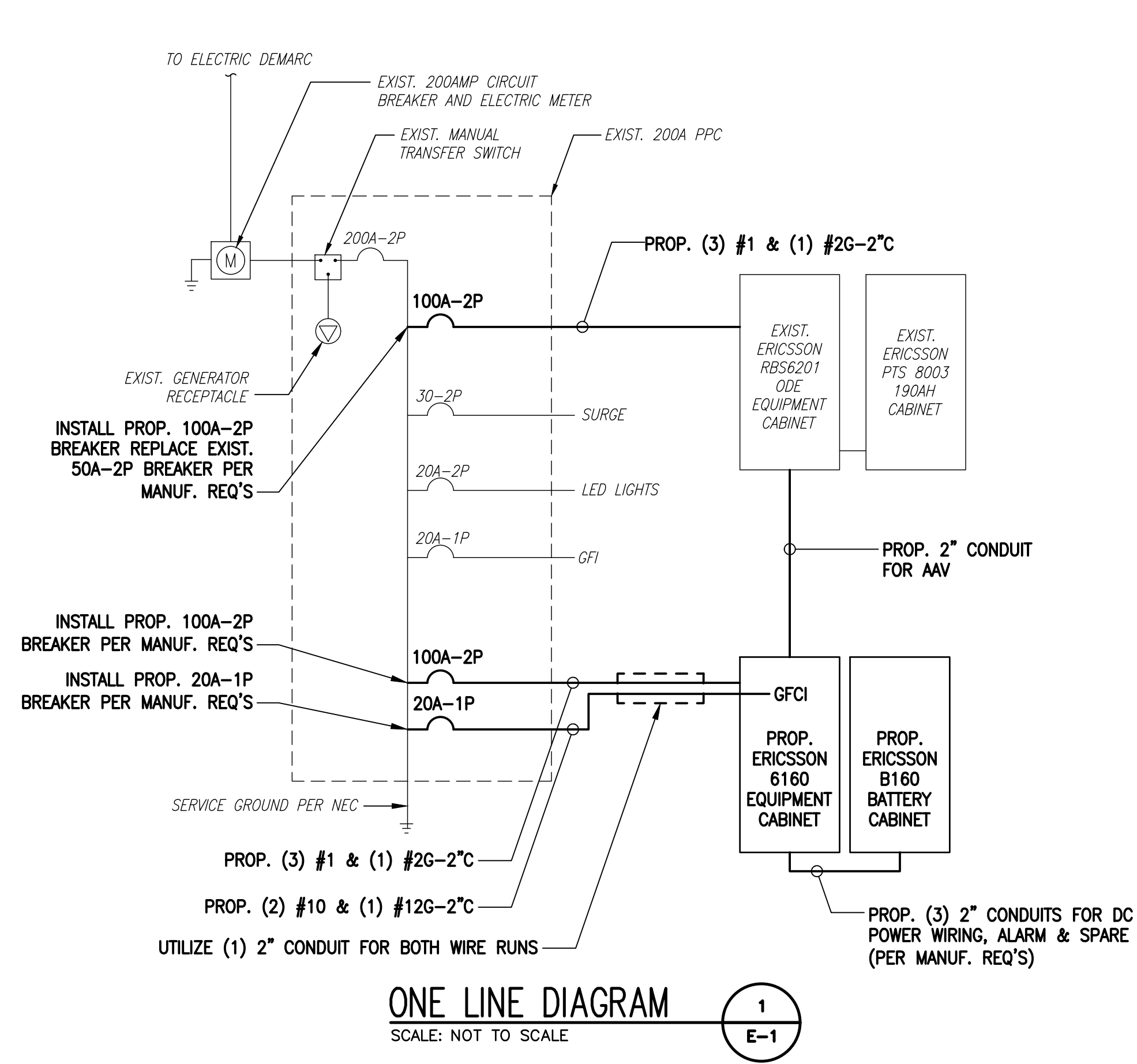
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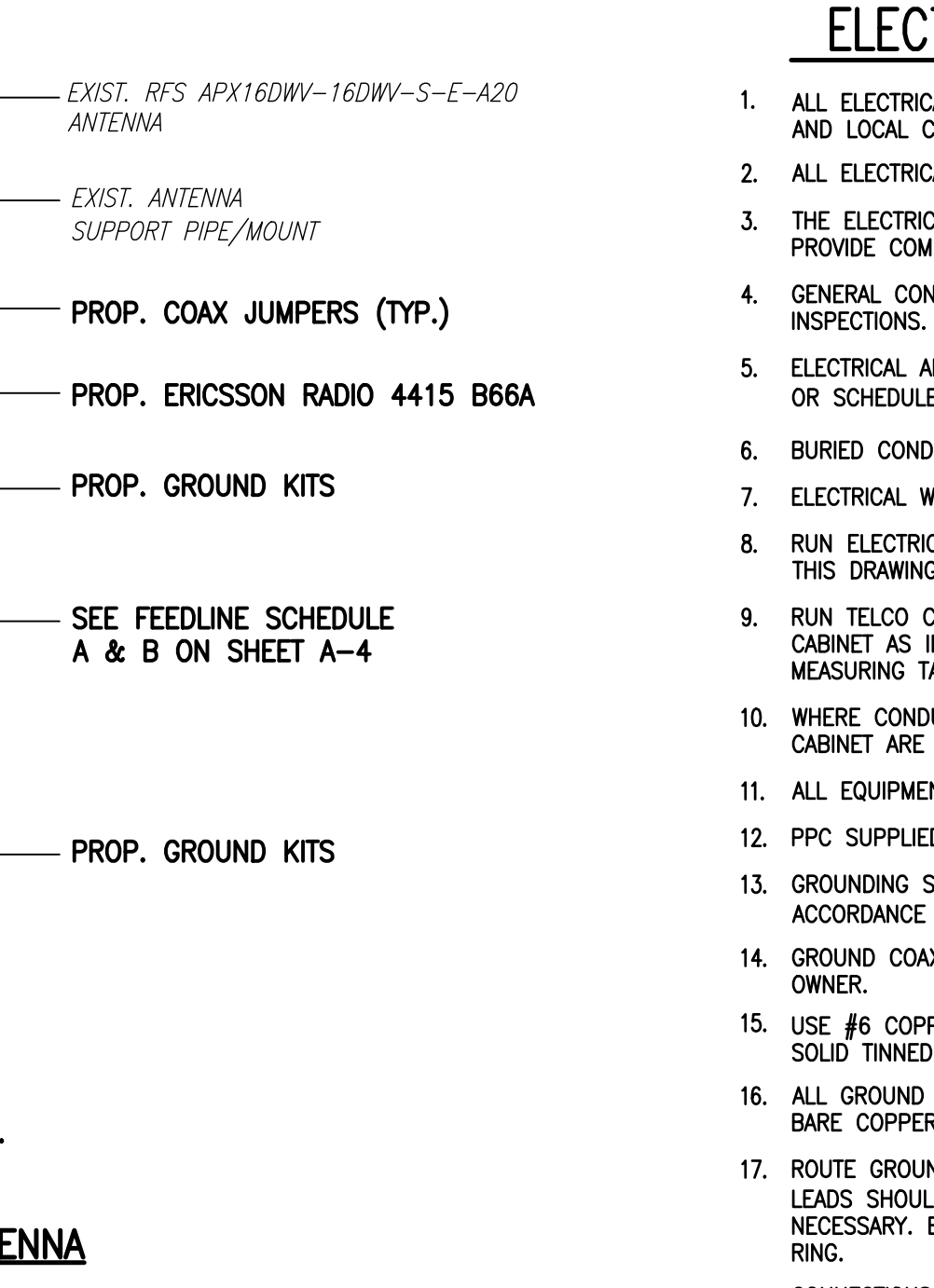
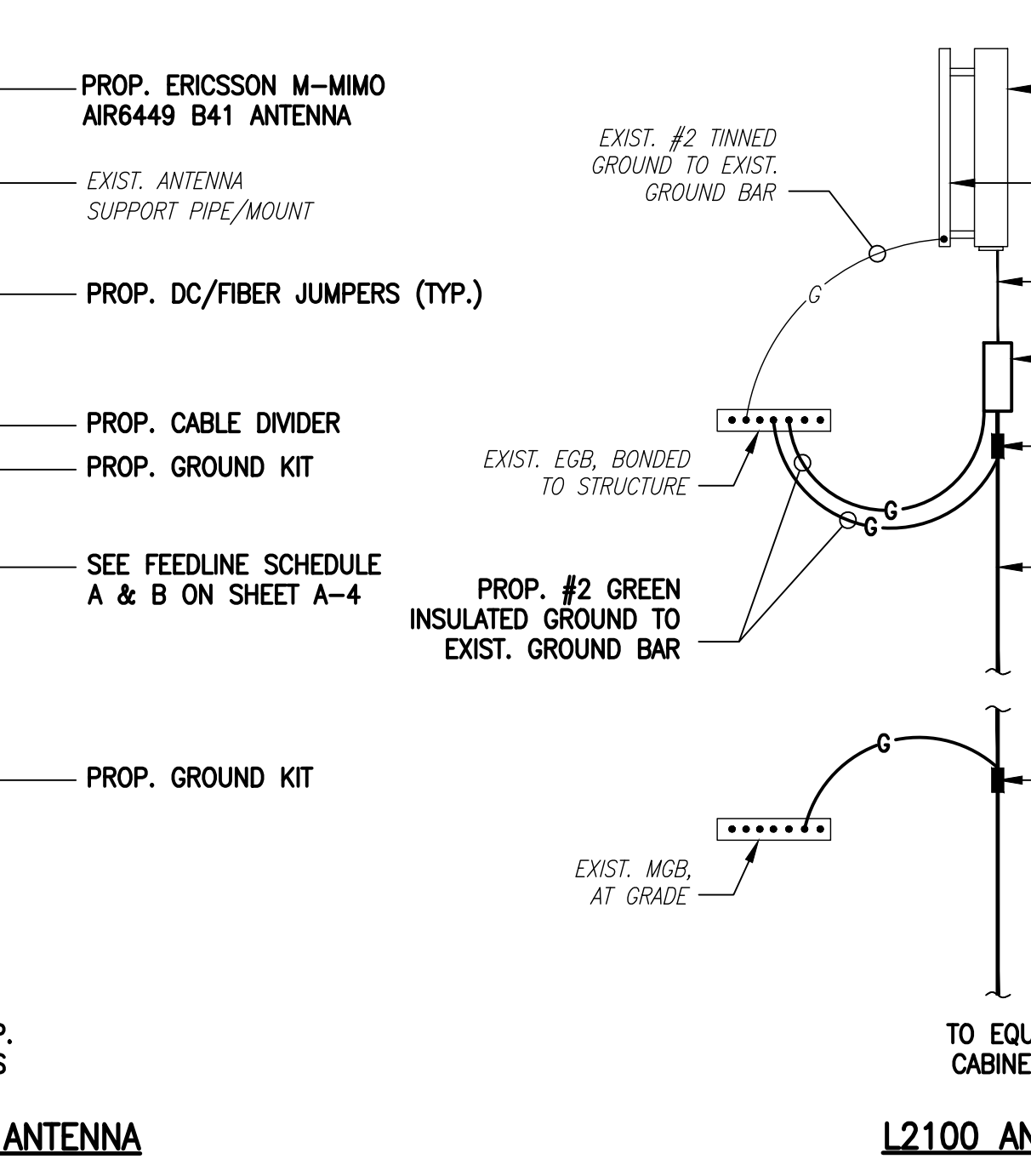
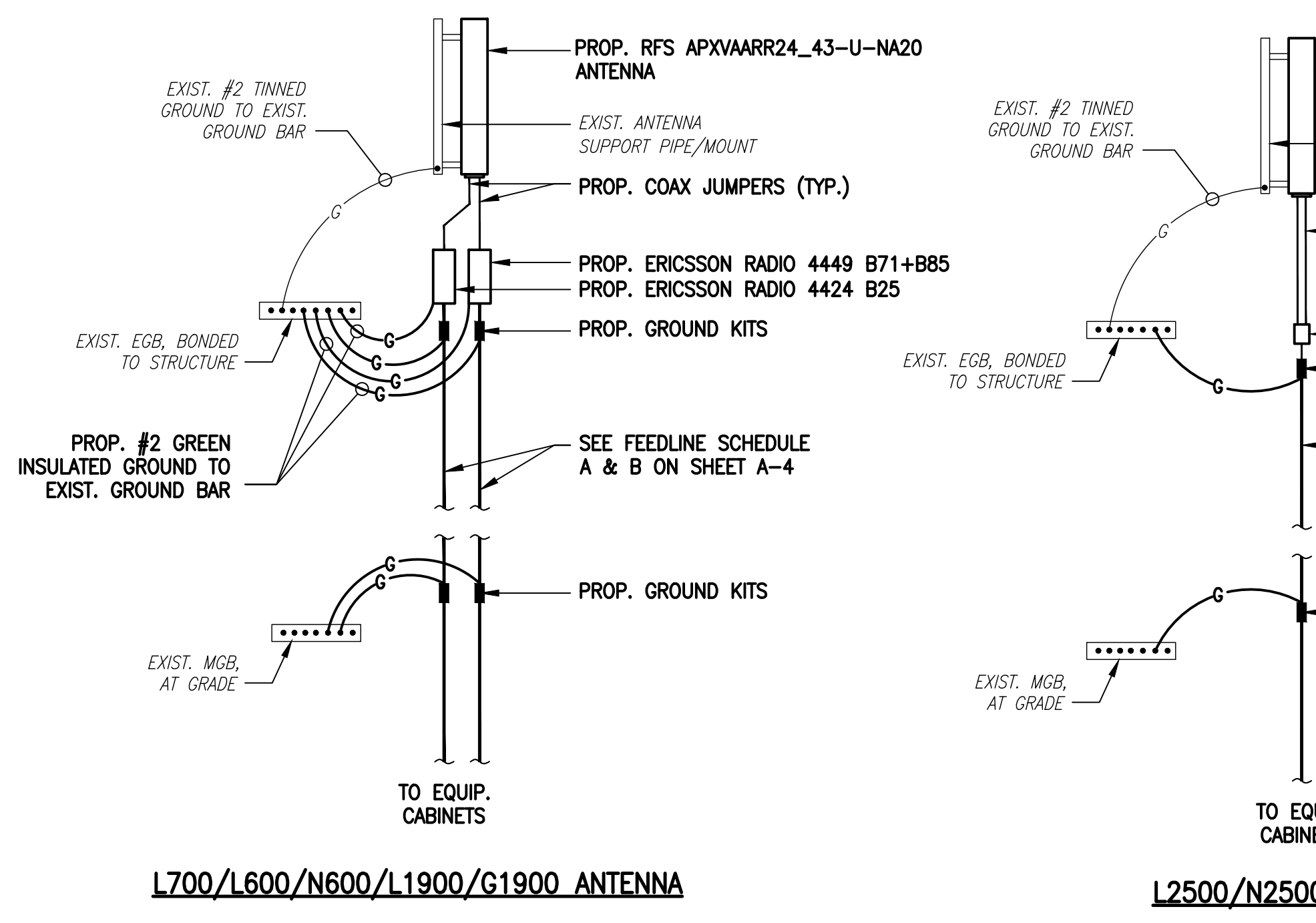
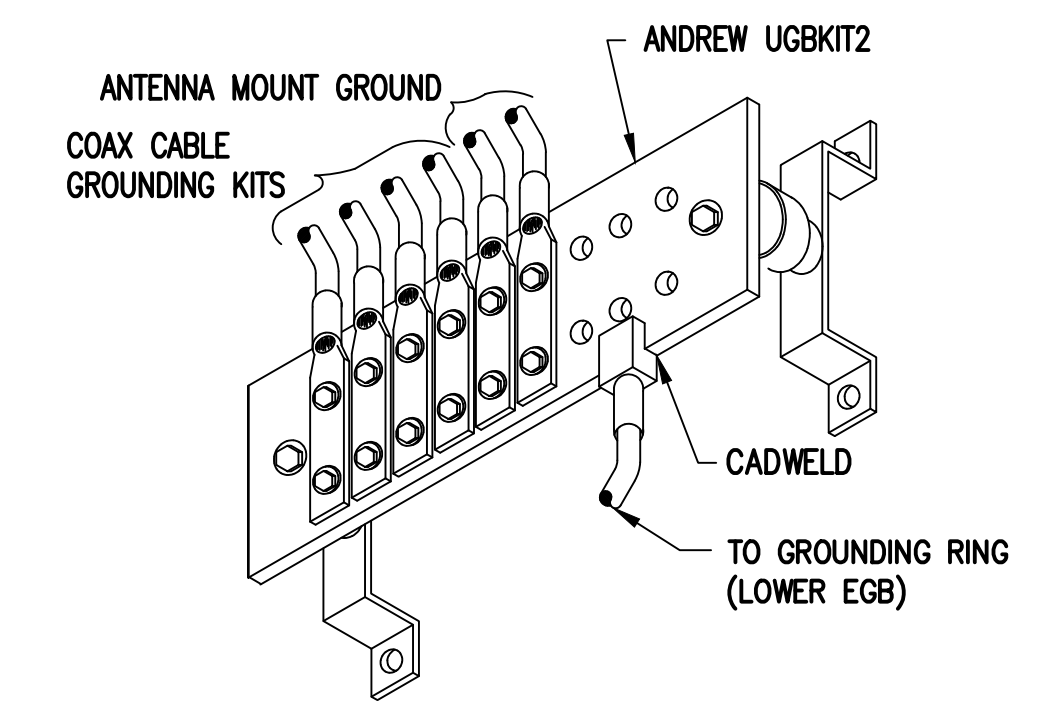
SITE ADDRESS:
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MONROE, CT 06468

SHEET TITLE
**ELECTRIC & GROUNDING
DETAILS**

SHEET NUMBER
E-1



- 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.



- 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 THININSULATION.
 - 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 BITS 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 BITS AND PROJECT OWNER CELL SITE PPC AND BETWEEN BITS 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 BITS 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.

EXHIBIT 7

MODIFICATION AND DESIGN DRAWINGS FOR EXISTING ANTENNA MOUNTS EXISTING MONOPOLE TOWER

PROPOSED CARRIER: T-MOBILE

TOWER OWNER: SBA / TOWER OWNER SITE #: CT13055-A

CARRIER SITE #/NAME: CT11838A / MARION HEIGHTS

COORDINATES (LATITUDE: 41.376463°, LONGITUDE: -73.186541°)

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	1
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
SAF-1	SAFETY CABLE GUIDE DETAILS	0
MS-CHB350-2875	METROSITE CROSSOVER CHANNEL BRACKET KIT	
MS-HRCP-2375	METROSITE SUPPORT RAIL CENTER PIPE KIT	
MS-HR2875-33ECP	METROSITE SUPPORT RAIL END CONNECTION KIT	

NOTE:

- THE MODIFICATION DRAWINGS ARE BASED ON THE TES PROJECT NO. 99610, DATED 11/25/2020.



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TES JOB NO:
100313

CUSTOMER SITE NO:
CT13055-A-SBA
CUSTOMER SITE NAME:
MONROE TURNPIKE
1428 MONROE TURNPIKE
MONROE, CT 06468



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REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	RA	12/16/20
2	REVISED	RA	12/28/20

SHEET TITLE:

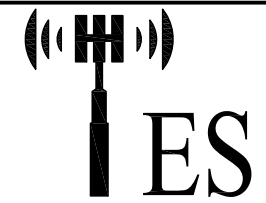
TITLE SHEET

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SHEET NUMBER: REV #:
T-1 1

BILL OF MATERIALS

QUANTITY COUNTED	QUANTITY PROVIDED	PART NUMBER	DESCRIPTIONS	SHEET LIST	PIECE WEIGHT (LBS)	WEIGHT (LB)	NOTES
MATERIAL & HARDWARE							
12	12	MS-HRCP-2375	METROSITE SUPPORT RAIL CENTER PIPE KIT	A-1, MS-HRCP-2375	10.7	128.4	Galvanized
1	1	MS-HR2875-33ECP	METROSITE SUPPORT RAIL END CONNECTION KIT	A-1, MS-HR2875-33ECP	82.0	82.0	Galvanized
FOLLOWING ITEMS ARE "CUSTOM" PARTS							
3	3	PST2375-8	2" PST (2.375" O.D. X 0.154" THK) X 8'-0" A53 GR-B 35KSI	A-1	30.14	94.9	GALVANIZED
12	12	MS-CHB350-2875	METROSITE CROSSOVER CHANNEL BRACKET KIT	A-1	14.00	168.0	GALVANIZED
3	3	PST2375-16	2" PST (2.375" O.D. X 0.154" THK) X 16'-0" A53 GR-B 35KSI	A-1	60.28	180.8	GALVANIZED (FINAL CUT LENGTH TO BE DETERMINED IN FIELD)
12	13	MS02-500-250-400	RU-BOLT 1/2" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.) (IF NEEDED)	A-1	0.70	9.1	(2) HHN & LKW-EA GALVANIZED
12	13	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.) (IF NEEDED)	A-1	1.17	15.2	(2) HHN & LKW-EA GALVANIZED
1	1	TMP-2	PL 1/4" X 2" X 7" A36	SAF-1	1.01	1.0	GALVANIZED
1	1	PN 115-203	SAFETY CABLE GUIDE (TUF-TUG OR EQUIV.)	SAF-1	0.00	0.0	GALVANIZED
2	3	---	BOLT 3/8" X 1 1/2" FULL THREAD SAE GR 5	SAF-1	0.00	0.0	(1) HHN & LKW-EA GALVANIZED
1	2	---	BOLT 5/8" X 2" A325	SAF-1	0.38	0.8	(1) HHN & LKW-EA GALVANIZED
<p align="center">ALL METROSITE PARTS ARE AVAILABLE FROM METROSITE, LLC.</p> <p align="center">180 IND PARK BLVD COMMERCE, GA 30529</p> <p align="center">OFFICE: (706) 335-7045</p> <p align="center">FAX: (706) 335-7056</p>							
NOTE: ALL MATERIALS, WHICH WEREN'T LISTED IN THIS SHEET, ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.							
TOTAL WEIGHT (LBS) =					680.3		



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GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-H, ANSI/ASSP A10.48, 2018 CONNECTICUT STATE BUILDING CODE, 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-2018 SECTION 1705.2 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.



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GENERAL NOTES

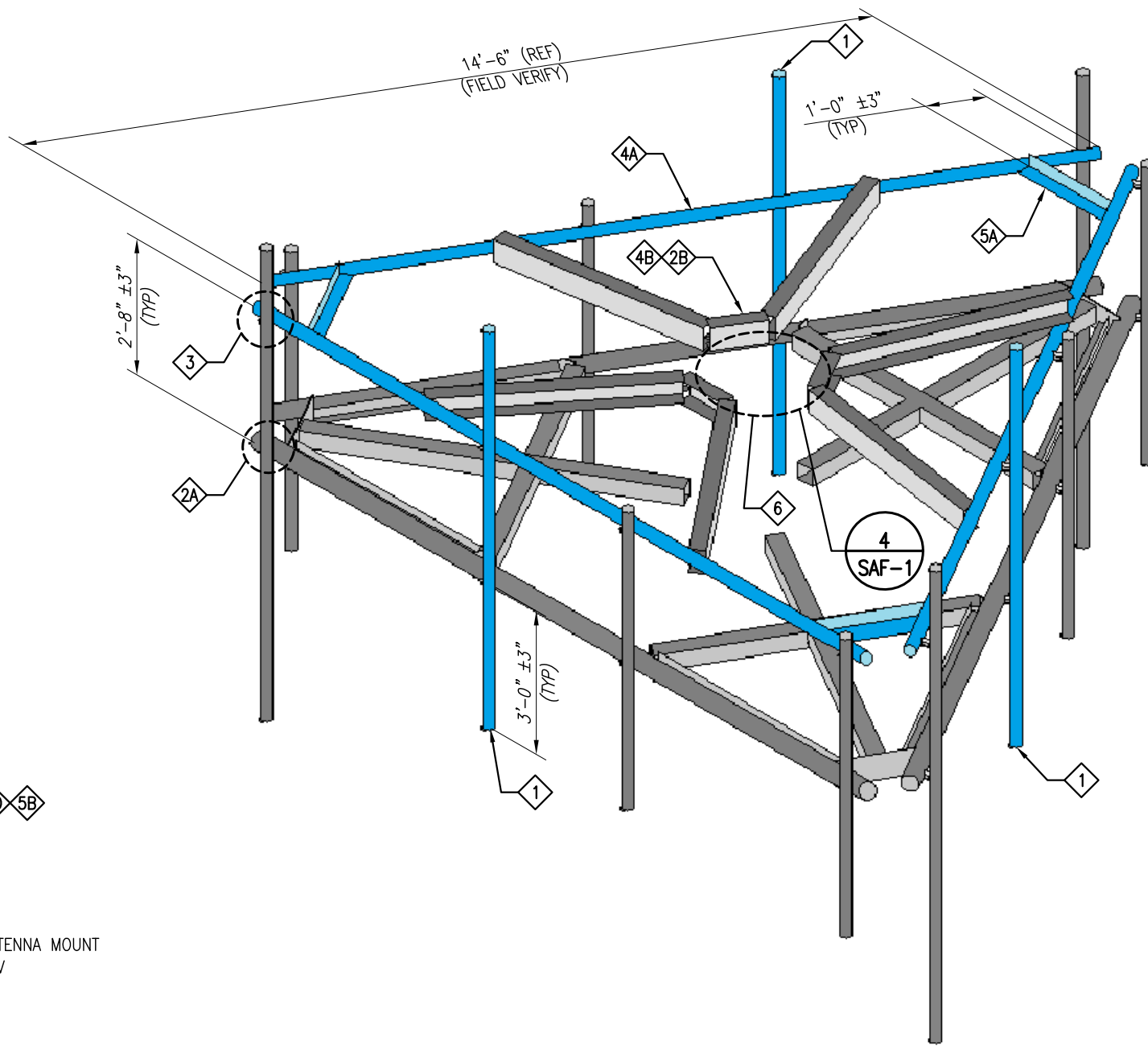
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GN-1 | 0

SCOPE OF WORK

- 1 REPLACE EXISTING ANTENNA MOUNT PIPE WITH NEW 2" PST ANTENNA MOUNT PIPE (8'-0" LONG), (1) PER SECTOR.
- 2 A. REPLACE EXISTING CROSSOVER CHANNEL BRACKETS WITH NEW CROSSOVER CHANNEL BRACKET KITS. SEE SHEET MS-CHB350-2875 FOR DETAILS.
B. TEMPORARILY DETACH EXISTING V-BRACING FROM EXISTING SUPPORT RAIL TO ACCOMMODATE THE INSTALLATION OF NEW SUPPORT RAIL PIPE. DETACH (1) SECTOR AT A TIME. TEMPORARY BRACING MAY BE REQUIRED.
C. REMOVE EXISTING END CONNECTIONS TO ACCOMMODATE LOWERING OF EXISTING TOP SUPPORT RAIL.
D. LOWER EXISTING SUPPORT RAIL TO ACCOMMODATE INSTALLATION OF NEW SUPPORT RAIL PIPE.
- 3 INSTALL NEW SUPPORT RAIL CENTER PIPE KITS, (4) PER SECTOR. SEE SHEET MS-HRCP-2375 FOR DETAILS.
- 4 A. INSTALL NEW 2" PST SUPPORT RAIL PIPE. (1) PER SECTOR.
B. REINSTALL EXISTING V-BRACING TO NEW SUPPORT RAIL. (TYP)
NOTE:
REUSE EXISTING HARDWARE. USE PROVIDED 1/2" OR 5/8" U-BOLTS AS NEEDED, IF EXISTING U-BOLTS ARE UNUSABLE.
- 5 A. INSTALL NEW SUPPORT RAIL END CONNECTION KIT. SEE SHEET MS-HR2875-33ECP FOR DETAILS.
B. REMOVE EXISTING TOP SUPPORT RAIL AFTER INSTALLATION OF NEW SUPPORT RAIL AND END CONNECTION IS COMPLETE.
- 6 REROUTE EXISTING SAFETY CLIMB FROM A TRAPPED CONDITION AND INSTALL NEW SAFETY CLIMB GUIDE TO PREVENT EXISTING SAFETY CLIMB GUIDE FROM RUBBING AGAINST EXISTING COLLAR MOUNT. SEE SHEET SAF-1 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.



ISOMETRIC VIEW
EXISTING ANTENNA MOUNT @ 140' ELEV.



PHOTO 1

NOTES:

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

CONTRACTOR NOTE:

- 1. 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.
- 2. PLEASE NOTIFY TES IMMEDIATELY IF ANY INSTALLATION ISSUES OCCUR RELATED TO THIS DRAWING @ 972-483-0607 OR EMAIL-TESORDERS@TESTOWER.US

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	3	PST2375-8	2" PST (2.375" O.D. X 0.154" THK) X 8'-0" A53 GR-B 35
2	12	MS-CHB350-2875	METROSITE CROSSOVER CHANNEL BRACKET KIT
3	12	MS-HRCP-2375	METROSITE SUPPORT RAIL CENTER PIPE KIT
4	3	PST2375-16	2" PST (2.375" O.D. X 0.154" THK) X 16'-0" A53 GR-B 35K5
5	1	MS-HR2875-33ECP	METROSITE SUPPORT RAIL END CONNECTION KIT
6	12	MS02-500-250-400	RU-BOLT 1/2" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.) (IF N
7	12	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.) (IF N



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CUSTOMER SITE NO:
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CUSTOMER SITE NAME:
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REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	RA	12/16/20

SHEET TITLE:
**ANTENNA MOUNT
MODIFICATION DETAILS**

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REMOVE EXISTING END CONNECTION TO ACCOMMODATE LOWERING OF EXISTING SUPPORT RAIL.

- A. LOWER EXISTING HAND RAIL TO ACCOMMODATE THE INSTALLATION OF NEW SUPPORT RAIL PIPE AND END CONNECTIONS.
- B. REMOVE EXISTING SUPPORT RAIL AFTER THE INSTALLATION OF NEW SUPPORT RAIL PIPE AND END CONNECTION IS COMPLETE.

PHOTO 1

TEMPORARILY DETACH EXISTING V-BRACING FROM EXISTING SUPPORT RAIL TO ACCOMMODATE THE INSTALLATION OF NEW SUPPORT RAIL PIPE.(1) SECTOR AT A TIME. TEMPORARY BRACING MAY BE REQUIRED.



PHOTO 2

REROUTE EXISTING SAFETY CABLE FROM A TRAPPED POSITION AND INSTALL NEW SAFETY CLIMB GUIDE TO PREVENT EXISTING SAFETY CLIMB FROM RUBBING AGAINST EXISTING COLLAR MOUNT. SEE SHEET SAF-1 FOR DETAILS.

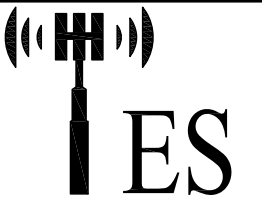


PHOTO 3



PHOTO 4

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



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ANTENNA MOUNT
PHOTOS

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A-2 | 0



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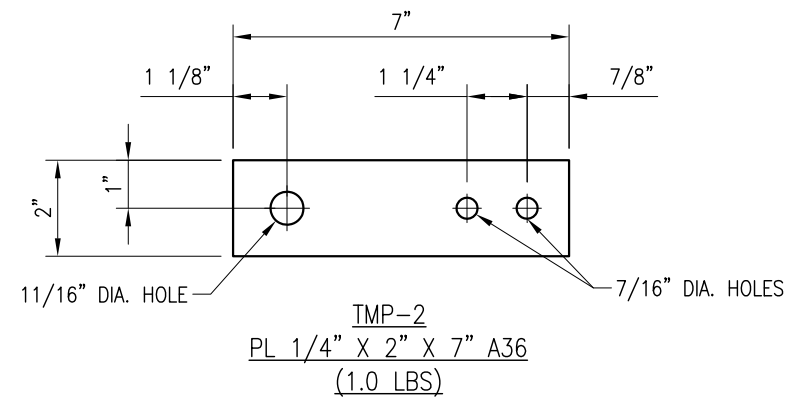
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D-1 | 0

NOTES:

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



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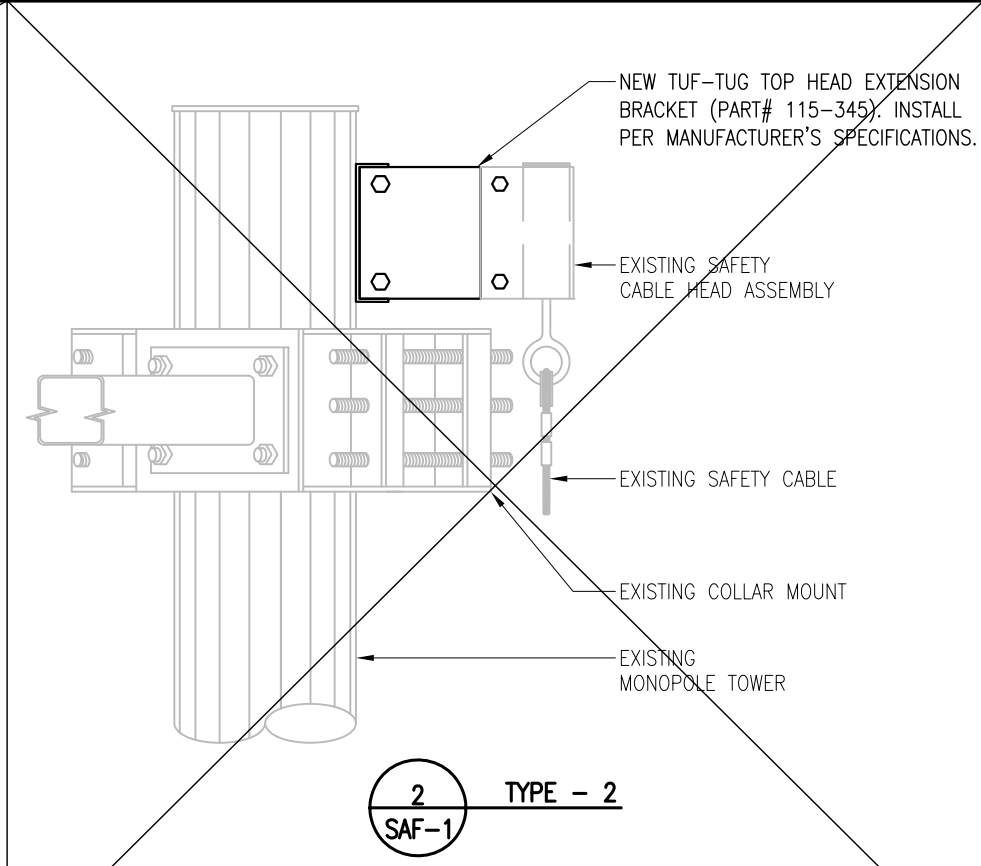
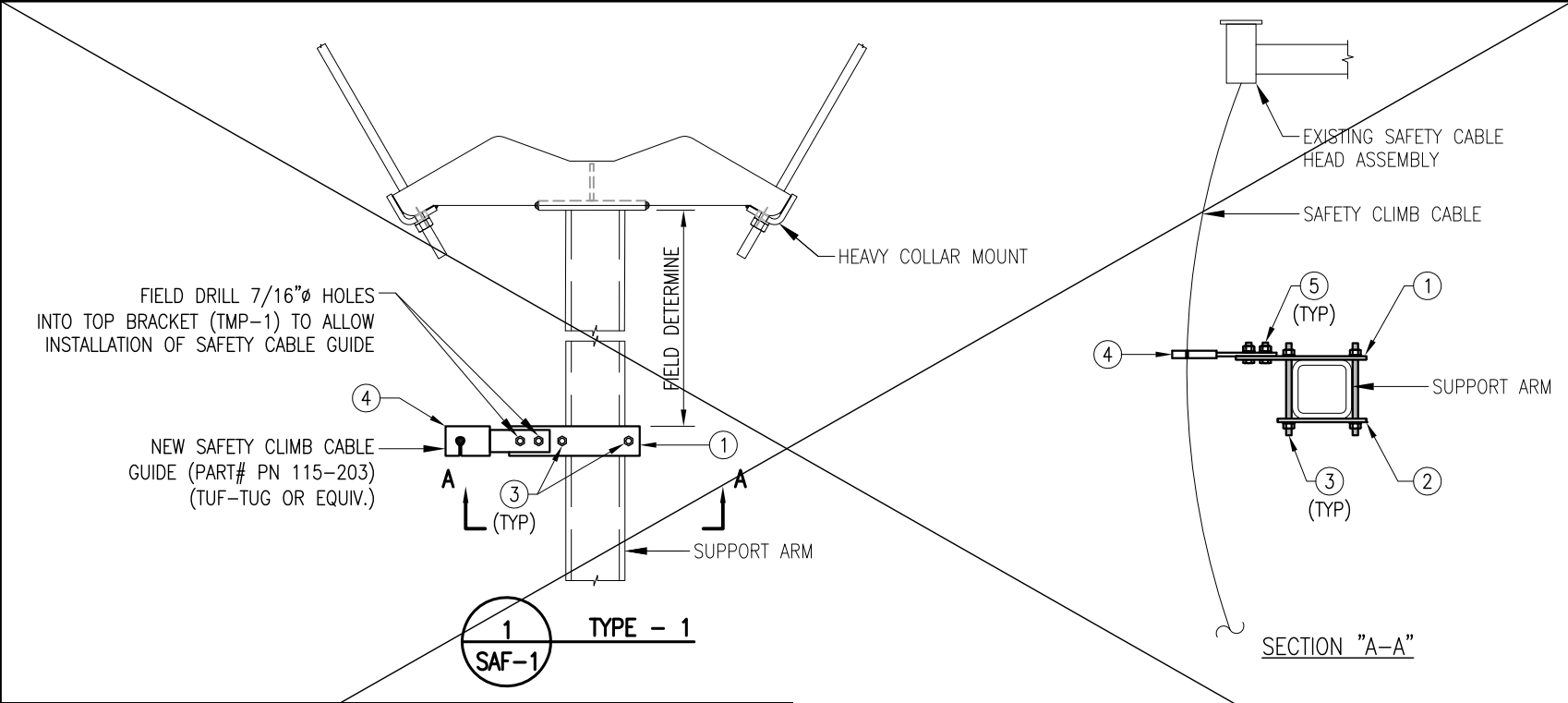
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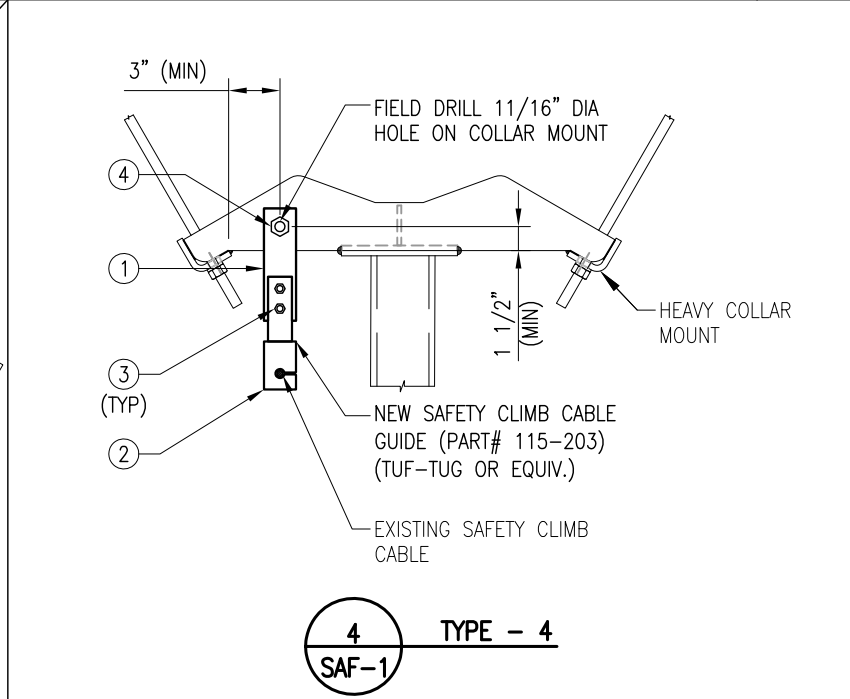
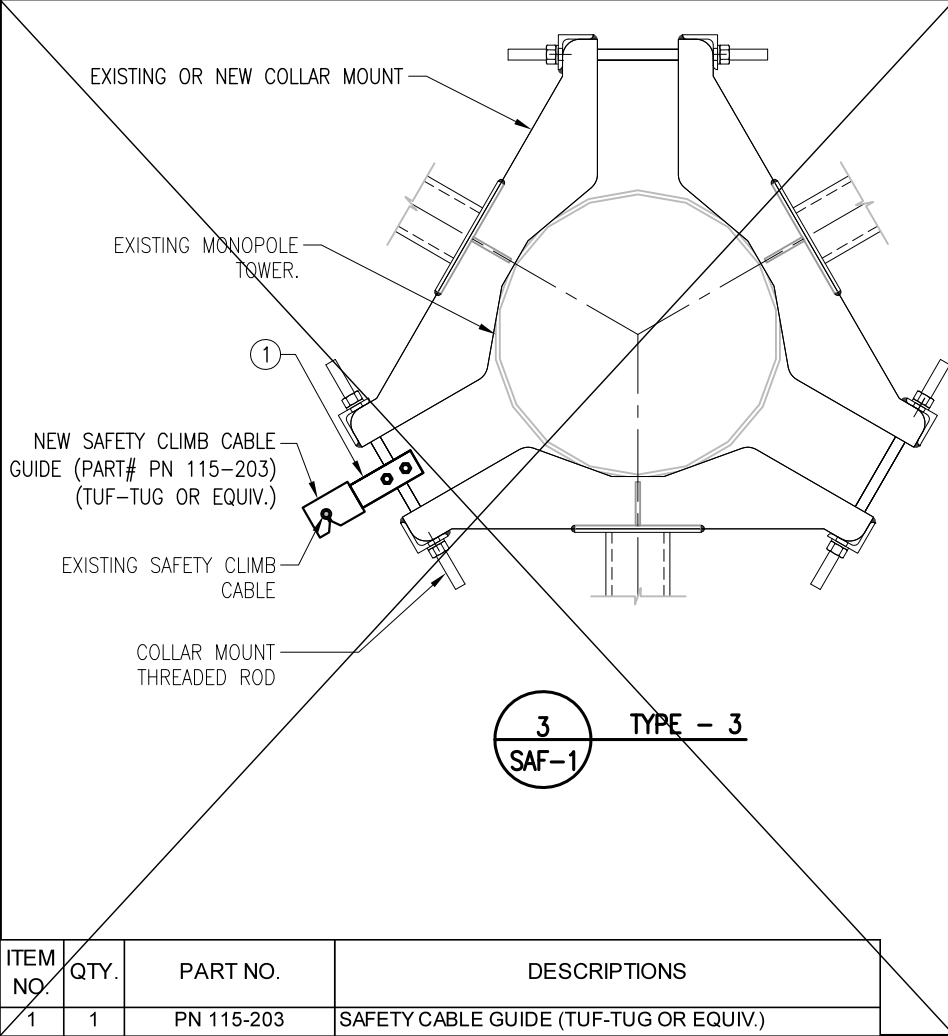
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ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	1	TMP-1	PL 1/4" X 2" X 9 1/2" A36
2	1	BMP-1	PL 1/4" X 2" X 6 1/2" A36
3	2	---	THREADED ROD 3/8" X 8" A36
4	1	PN 115-203	SAFETY CABLE GUIDE (TUF-TUG OR EQUIV.)
5	2	---	BOLT 3/8" X 1 1/2" FULL THREAD SAE GR 5

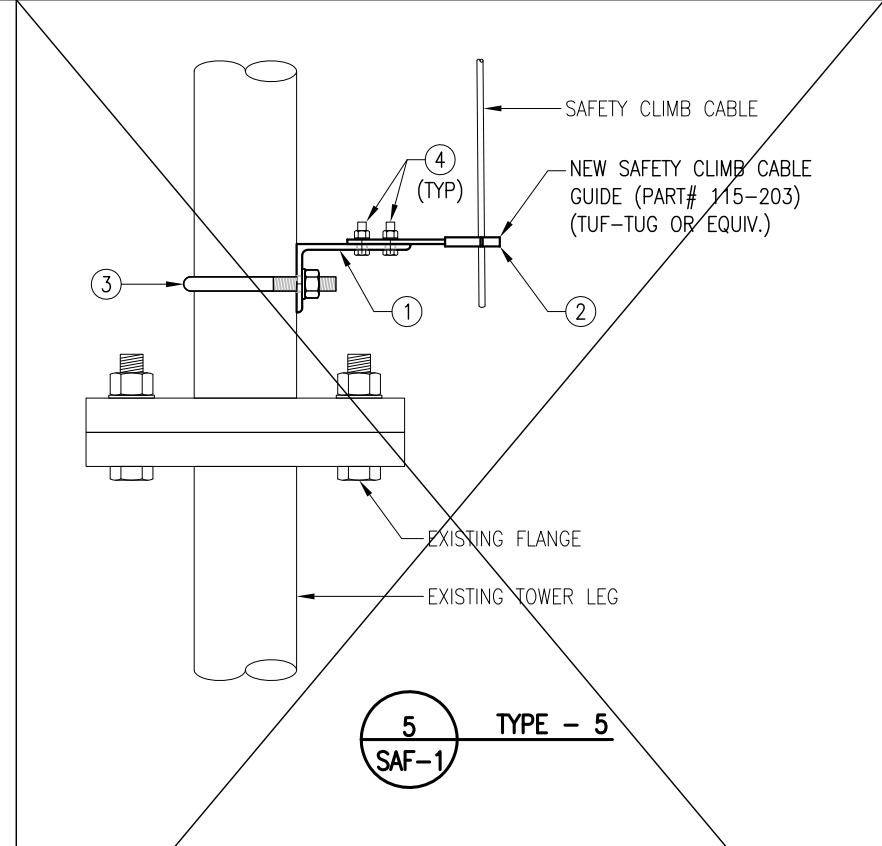
NOTE:
SAFETY CLIMB GUIDE MAY BE INSTALLED ON EITHER LEFT OR RIGHT SIDE OF THE SUPPORT ARM, DEPENDING ON WHERE THE EXISTING SAFETY CLIMB IS LOCATED.

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	1	115-345	TUF-TUG MONOPOLE HEAD EXTENSION ASSEMBLY



NOTE:
SAFETY CLIMB GUIDE MAY BE INSTALLED ON EITHER LEFT OR RIGHT SIDE OF THE COLLAR MOUNT, DEPENDING ON WHERE THE EXISTING SAFETY CLIMB IS LOCATED.

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	1	TMP-2	PL 1/4" X 2" X 7" A36
2	1	PN 115-203	SAFETY CABLE GUIDE (TUF-TUG OR EQUIV.)
3	2	---	BOLT 3/8" X 1 1/2" FULL THREAD SAE GR 5
4	1	---	BOLT 5/8" X 2" A325



ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	1	SCGB-4	L 5" X 3" X 1/4" X 7 1/2" A36
2	1	PN 115-203	SAFETY CABLE GUIDE (TUF-TUG OR EQUIV.)
3	1	MS02-625-4625-700	RU-BOLT 5/8" X 4 5/8" I.W. X 7" I.L. A36 (OR EQUIV.)
4	2	---	BOLT 3/8" X 1 1/2" FULL THREAD SAE GR 5

DRAWN BY: RA CHECKED BY: ID/SK

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	RA	12/16/20

SHEET TITLE:

SAFETY CABLE GUIDE DETAILS

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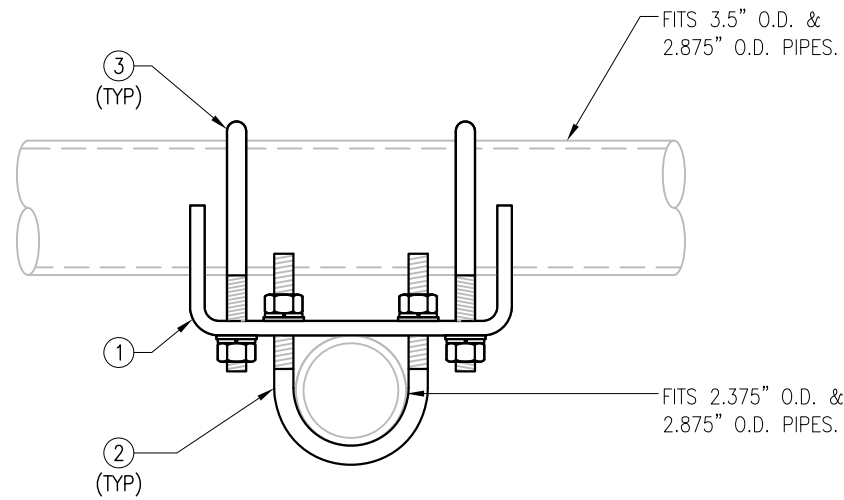
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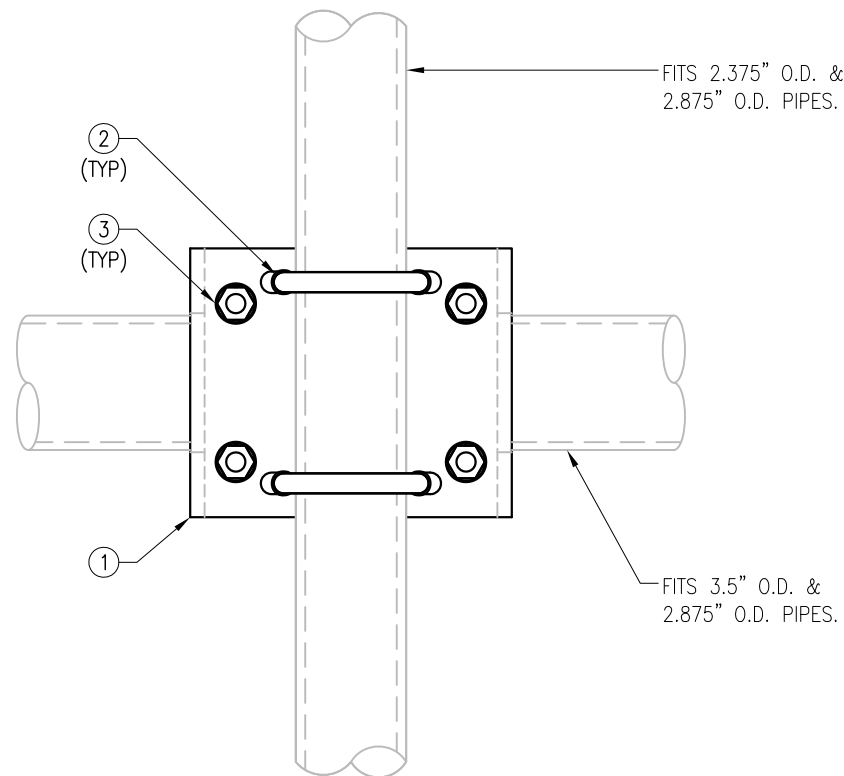
THE FOLLOWING DRAWINGS ARE INCLUDED FOR REFERENCE ONLY
PLEASE REFER TO THE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION DETAILS

MS-CHB350-2875

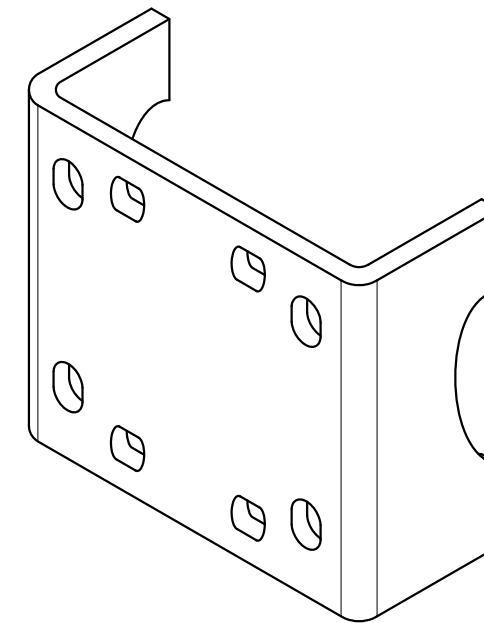
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	1	CHB-714	PL 3/8" X 7" X 1'-2"	A36	CHB-1	10.6
2	2	MS02-500-300-500	RU-BOLT 1/2" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	A36	RBC-1	1.7
3	2	MS02-500-3625-600	RU-BOLT 1/2" X 3 5/8" I.W. X 6" I.L. A36 (OR EQUIV.)	A36	RBC-1	1.9
GALVANIZED WT						14



PLAN VIEW



FRONT VIEW



ISOMETRIC VIEW

NOTES:

1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. FITS UP TO 3.5" O.D HORIZONTAL PIPE AND 2.875" O.D. VERTICAL PIPE

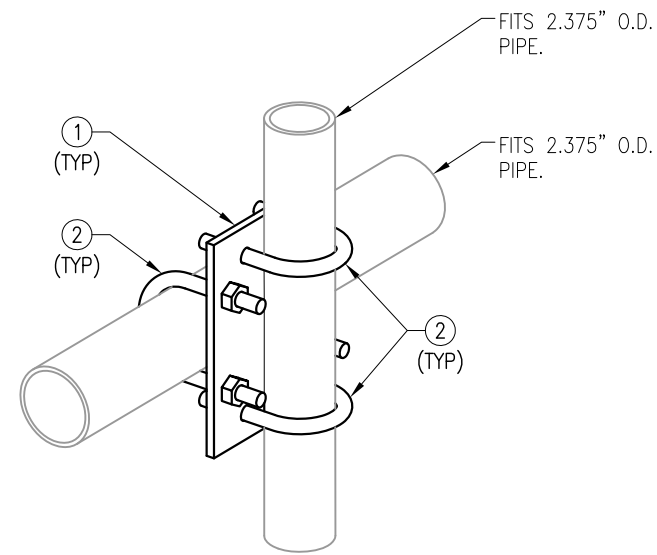
THIRD ANGLE PROJECTION				METROSITE FABRICATORS LLC 180 INDUSTRIAL PARK BLVD. COMMERCE GA 30529	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH				CONFIDENTIAL ALL INFORMATION ON THIS DOCUMENT IS PROPERTY OF METROSITE FABRICATORS LLC	
STANDARD SHEET TOLERANCES		APPROVAL / SIGNATURES		DATE	
DECIMALS	ANGLES	DRAWN BY XXX	REVIEWED XXX	05/15/20	
.X ± 0.1	± 1°			-	
.XX ± 0.02	FRACTIONS			-	
.XXX ± 0.005	± 1/32	APPROVED XXX		-	
		SCALE		-	
			SHEET 1 OF 1		REV 0

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

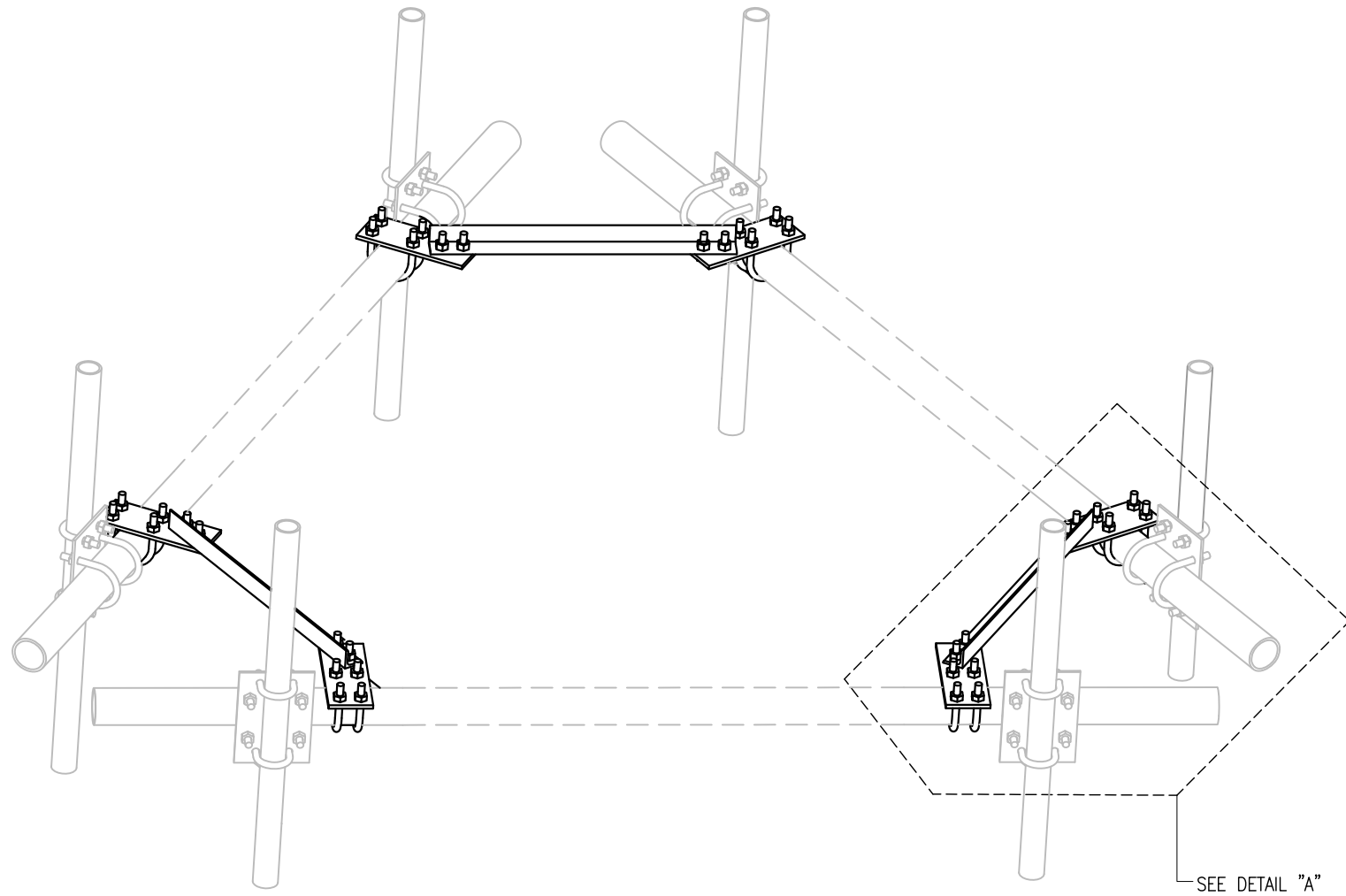


MS-HRCP-2375

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		TITLE MS-HRCP-2375 SUPPORT RAIL CENTER PIPE KIT		
DECIMALS	ANGLES	DRAWN BY XXX REVIEWED XXX APPROVED XXX		05/12/17 - -			SIZE DWG NO	
.X ± 0.1	± 1°						B	MS-HRCP-2375
.XX ± 0.02	FRACTIONS					0		
.XXX ± 0.005	± 1/32	SCALE		SHEET 1 OF 1				

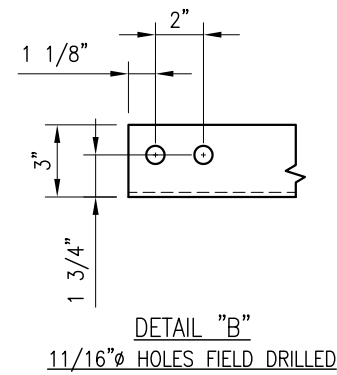
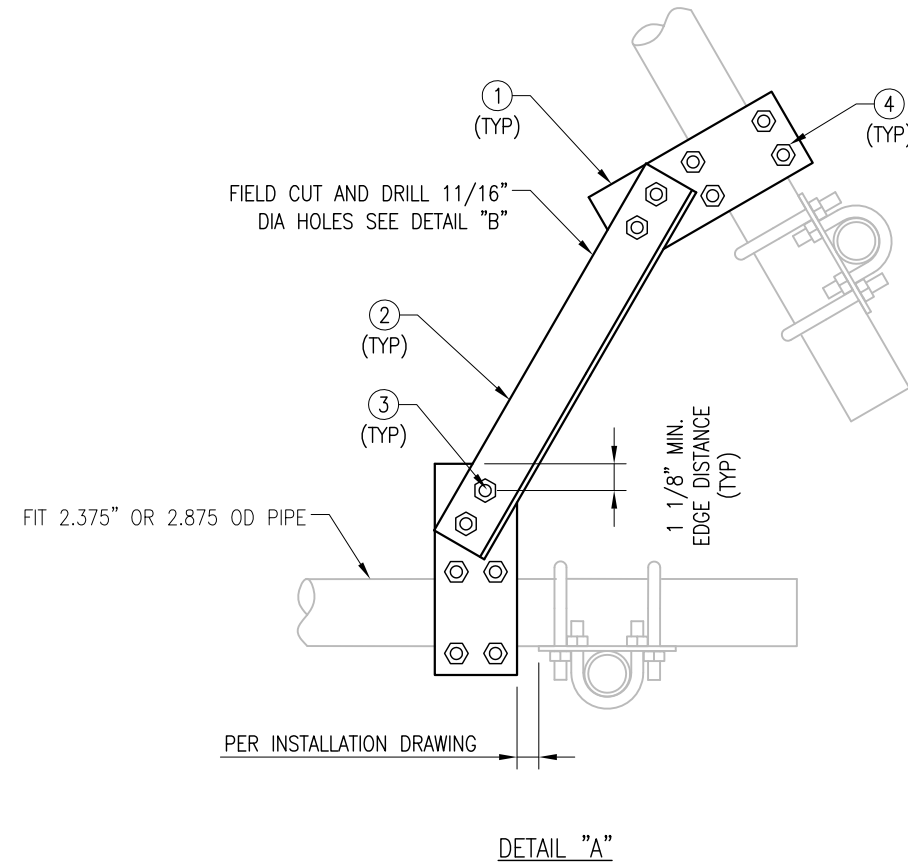
NOTE:

- 1) FITS 2 3/8" DIA. TO 2 7/8" DIA. PIPE.
- 2) ALL HOLES ARE 11/16" DIA. U.N.O
- 3) HOT-DIPPED GALVANIZED PER ASTM A123



ELEVATION VIEW

MS-HR2875-33ECP						
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	6	PL375-425105	PL 3/8" X 4 1/4" X 0'-10 1/2"	A36	BK-1	28.2
2	3	AL-33C	L 3" X 3" X 1/4" X 3'-6"	A36	ECP-1	54.0
3	12	--	BOLT 5/8" X 2" A325 W/ HHN & LKW	A325	--	--
4	12	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	A36	RBC-1	--
GALVANIZED WT						82



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	
DECIMALS	ANGLES	DRAWN BY: XXX	REVIEWED: XXX	05/12/17	
.X ± 0.1	± 1°			-	
.XX ± 0.02	FRACTIONS			-	
.XXX ± 0.005	± 1/32	APPROVED: XXX		-	
		SCALE		SHEET 1 OF 1	

EXHIBIT 8



Tower Engineering Solutions

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

Structural Analysis Report

Existing 159 ft SABRE Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT13055-A

Customer Site Name: Monroe Turnpike

Carrier Name: T-Mobile (App#: 117032, V2)

Carrier Site ID / Name: CT11838A / Marion Heights

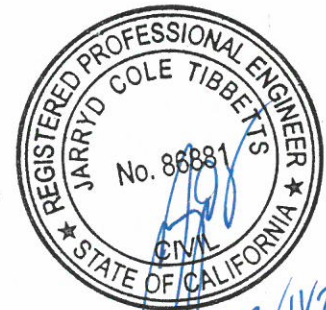
Site Location: 1428 Monroe Turnpike

Monroe, Connecticut

Fairfield County

Latitude: 41.376463

Longitude: -73.186541



Analysis Result:

Max Structural Usage: 96.6% [Pass]

Max Foundation Usage: 90.0% [Pass]

Additional Usage Caused by Mount Modification: +0.6%

Report Prepared By : Dipika Dhungana

Introduction

The purpose of this report is to summarize the analysis results on the 159 ft SABRE 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	Sabre Communications Corporation; Job #04-05018; 5/23/2003
Foundation Drawing	Sabre Communications Corporation; Job #04-05018; 5/23/2003
Geotechnical Report	Dr. Clarence Welti, P.E., P.C.; 4/25/2003
Modification Drawings	N/A
Mount Analysis	MA by TES, Project# 99610, dated 11/25/2020

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:	120.0 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 / 2018 Connecticut State Building Code
Exposure Category:	C
Risk Category:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_5 = 0.204$, $S_1 = 0.054$

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 ¹	Owner
1	162.0	3	Powerwave 7770	Platform w/ Handrails (Site Pro 1 - RMQP-496-HK w/ HRK14) w/ new SitePro1 HRK12- HD and (6) Mast pipes	(12) 1 5/8" (3) 2" {(6) 3/4" DC and (2) 1/2" Fiber}	AT&T
2		3	Quintel QS66512-2			
3		3	Cci DMP65R-BU6DA			
4		3	Cci OPA65R-BU6DA			
5		6	Powerwave Technologies LGP21401			
6		3	Kaelus DBC0061F1V51-2			
7		3	Ericsson RRUS 32 B30			
8		3	Ericsson RRUS 32 B2			
9		3	Ericsson 4449 B5/B12			
10		3	Ericsson RRUS 4478 B14			
11		3	Raycap DC6-48-60-18-8F			
12		1	Decibel DB404-B - Omni			(1) 1/2" Fiber
13	151.0	3	RFS - APXVSP18-C-A20 - Panel	Low Profile Platform with SitePro HRK-12 Handrail Kit	(4) 1-1/4" Hybrid	Sprint Nextel
14		3	RFS - APXVTM14-C-I20 - Panel			
15		4	RFS - ACU-A20-N - RET			
16		3	Alcatel Lucent - 1900 MHz RRH			
17		3	Alcatel Lucent - 800 MHz RRH			
18		3	Alcatel Lucent - TD-RRH8x20-25 - RRH			
19	3	Alcatel Lucent - 800 MHz Filters				
-	142.5	6	EMS - FR90-16-XXDP - Panel	LP Platform w/ Handrails w/ (3) VSR-MS-B	(24) 1 1/4"	T-Mobile
-		3	RFS - APX16DWV-16DWVS-E-A20			
-		3	RFS - APXVAA24_43-U-A20 - Panel			
-		3	RFS - ATMA4P4DBP-1A20 - TMA			
-		3	Andrew - ATSBT-TOP-FM - Bias T			
29	131.0	3	Kathrein 742 213_2110_P45_02.0	Low Profile Platform	(12) 1 5/8" (1) 1 5/8" Hybriflex	Verizon
30		3	Antel BXA-70063/6CF - Panel			
31		3	Antel BXA-171063-12BF - Panel			
32		6	Antel LPA-80063/6CF - Panel			
33		3	Alcatel Lucent RRH2x60-AWS - RRU			
34		6	RFS FD9R6004/2C-3L - Diplexer			
35		1	RFS DB-T1-6Z-8AB-OZ - Distribution Box			
36	110.0	1	Sinclair SCL329-HL - Omni	(1) 4 ft. Standoff	(1) 7/8" ²	Town
37	80.0	1	Sinclair SCL329-HL - Omni	(1) 4 ft. Standoff	(1) 7/8" ²	
38	50.0	1	Decibel 26DB - GPS	(1) 4 ft. Standoff	(1) 1/2" ³	Sprint Nextel

1. Transmission lines installed inside the pole shafts unless otherwise noted.

2. Town has (2) 7/8" coax installed outside the pole shafts in a single row to 110 ft. and 80 ft.

3. Sprint Nextel has (1) 1/2" coax installed outside the pole shafts to 50 ft.

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
20	140.0	3	EMS FR90-16-XXDP	(1)LP Platform w/ Handrails Sitepro VSR- MS-B w/ replaced support rail and mount pipe	(2) 1 1/4" (3) 1 5/8" Fiber	T-Mobile
21		3	RFS APX16DWV-16DWVS-E-A20			
22		3	RFS APXVAARR24_43-U-A20			
23		3	Ericsson AIR6449 B41			
24		3	RFS ATMA4P4DBP-1A20			
25		3	Ericsson 4449 B71 + B85			
26		3	Ericsson 4424 B25			
27		3	Ericsson 4415 B66A			
28		3	Andrew ATSBT-TOP-MF			

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

Analysis Results

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

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	88.5%	96.6%	43.9%
Pass/Fail	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)
Analysis Reactions	4563.9	37.4

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.

Service Load 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 2.3559 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 88.53% at 0.0ft

Structure: CT13055-A-SBA
Site Name: Monroe Turnpike
Height: 159.00 (ft)
Base Elev: 1.000 (ft)

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

12/11/2020



Page: 1

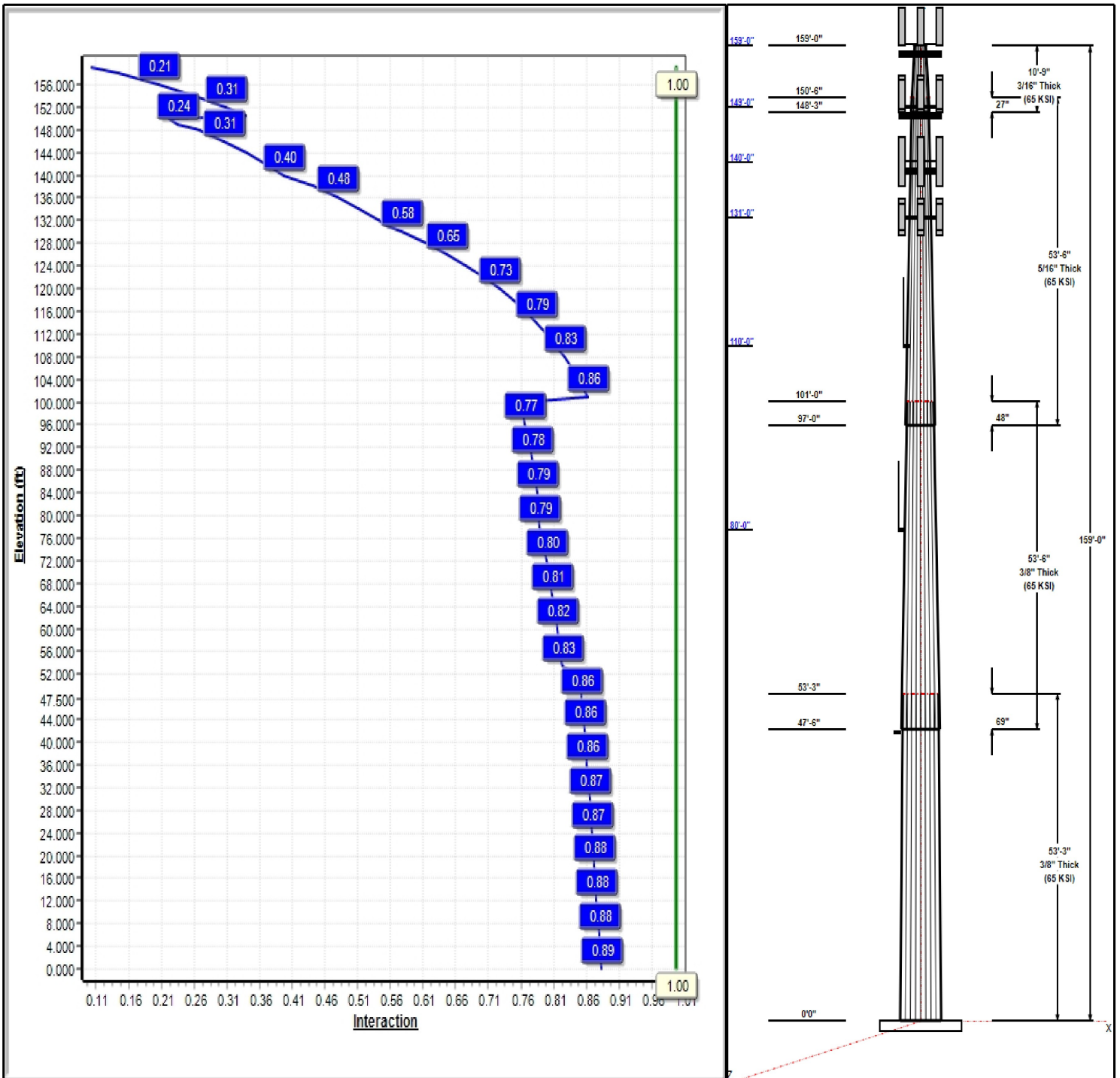
Dead Load Factor: 1.20
Wind Load Factor: 1.00

Load Case : 1.2D + 1.0W 120 mph Wind



Iterations: 30

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Structure: CT13055-A-SBA

Type: Tapered
Site Name: Monroe Turnpike
Height: 159.00 (ft)
Base Elev: 1.00 (ft)

Base Shape: 18 Sided
Taper: 0.28277

12/11/2020

Page: 2

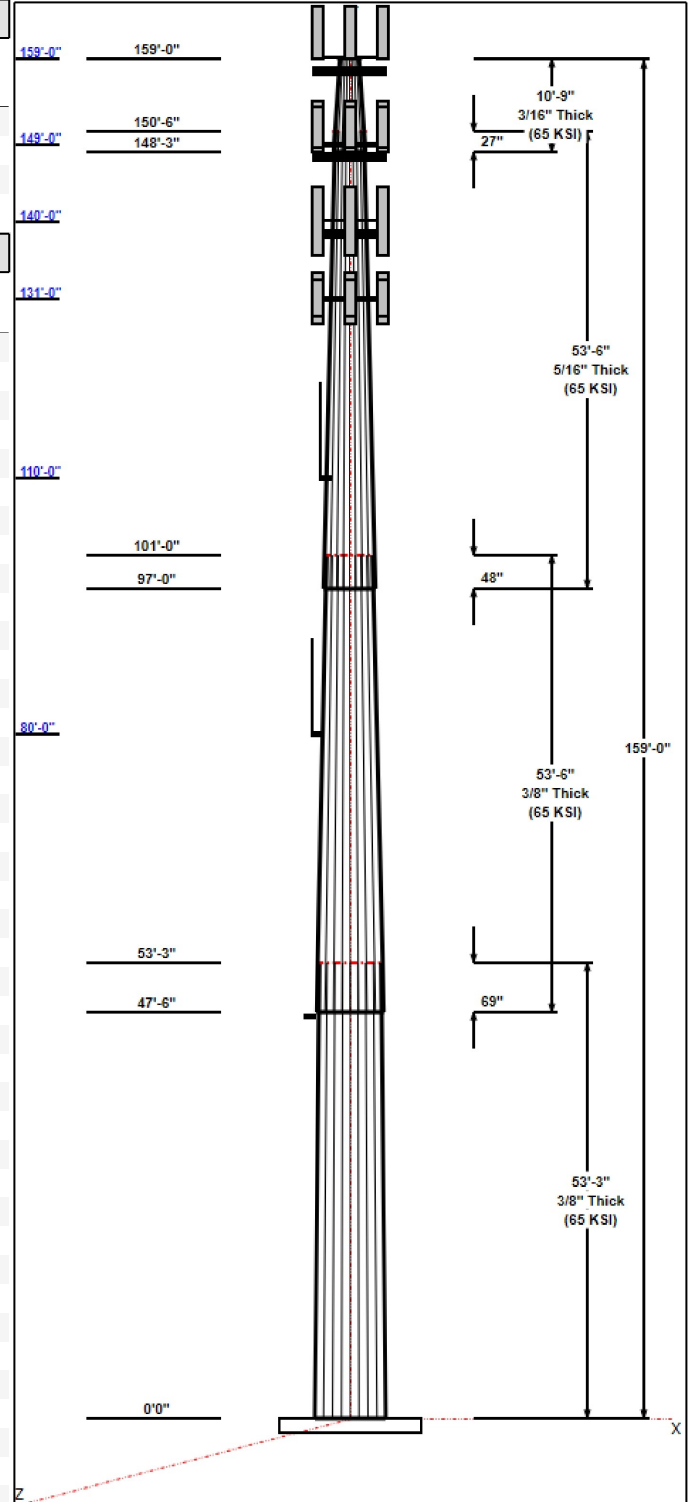


Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	53.25	43.15	58.21	0.375		0.28277	65
2	53.50	30.40	45.53	0.375	Slip	0.28277	65
3	53.50	17.03	32.16	0.313	Slip	0.28277	65
4	10.75	15.00	18.04	0.188	Slip	0.28277	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
159.00	162.00	3	Powerwave 7770	AT&T
159.00	162.00	3	DMP65R-BU6DA	AT&T
159.00	162.00	6	Powerwave Technologies	AT&T
159.00	162.00	3	4449 B5/B12	AT&T
159.00	162.00	3	Raycap DC6-48-60-18-8F	AT&T
159.00	162.00	1	Site Pro 1 - RMQP-496-HK	AT&T
159.00	162.00	1	Decibel DB404-B - Omni	Town
159.00	162.00	3	Quintel QS66512-2	AT&T
159.00	162.00	3	Kaelus DBC0061F1V51-2	AT&T
159.00	162.00	3	Ericsson RRUS 32 B30	AT&T
159.00	162.00	3	Ericsson RRUS 32 B2	AT&T
159.00	162.00	1	Site Pro 1 - HRK14	AT&T
159.00	162.00	3	OPA65R-BU6DA	AT&T
159.00	162.00	3	RRUS 4478 B14	AT&T
149.00	151.00	3	RFS - APXVTM14-C-I20 -	Sprint Nextel
149.00	151.00	3	Alcatel Lucent -	Sprint Nextel
149.00	151.00	3	RFS - APXVSPP18-C-A20	Sprint Nextel
149.00	151.00	3	Alcatel Lucent - 1900 MHz	Sprint Nextel
149.00	151.00	3	Alcatel Lucent - 800 MHz	Sprint Nextel
149.00	151.00	3	Alcatel Lucent - 800 MHz	Sprint Nextel
149.00	151.00	4	RFS - ACU-A20-N - RET	Sprint Nextel
149.00	149.00	1	Low Profile Platform	Sprint Nextel
149.00	149.00	1	SitePro HRK-12 Handrail	Sprint Nextel
140.00	140.00	1	LP Platform w/ Handrails	T-Mobile
140.00	140.00	3	AIR6449 B41	T-Mobile
140.00	140.00	3	4449 B71 + B85	T-Mobile
140.00	140.00	3	4424 B25	T-Mobile
140.00	140.00	3	4415 B66A	T-Mobile
140.00	140.00	3	EMS - FR90-16-XXDP -	T-Mobile
140.00	140.00	3	RFS -	T-Mobile
140.00	140.00	3	RFS -	T-Mobile
140.00	140.00	3	RFS -	T-Mobile
140.00	140.00	3	Andrew - ATSBT-TOP-FM	T-Mobile
131.00	131.00	3	Kathrein 742	Verizon
131.00	131.00	3	Antel BXA-70063/6CF -	Verizon
131.00	131.00	3	Antel BXA-171063-12BF -	Verizon
131.00	131.00	6	Antel LPA-80063/6CF -	Verizon
131.00	131.00	3	Alcatel Lucent	Verizon
131.00	131.00	6	RFS FD9R6004/2C-3L -	Verizon
131.00	131.00	1	RFS DB-T1-6Z-8AB-0Z -	Verizon
131.00	131.00	1	Low Profile Platform	Verizon
110.00	115.55	1	Sinclair SCL329-HL - Omni	Town
110.00	110.00	1	4 ft. Standoff	Town
80.00	80.00	1	4 ft Standoff	Town
80.00	85.55	1	Sinclair SCL329-HL - Omni	Town



Structure: CT13055-A-SBA

Type: Tapered **Base Shape:** 18 Sided 12/11/2020
Site Name: Monroe Turnpike **Taper:** 0.28277
Height: 159.00 (ft)
Base Elev: 1.00 (ft)



Page: 3

47.00	50.00	1	Decibel 26DB - GPS	Sprint Nextel
47.00	47.00	1	4 ft Standoff	Sprint Nextel

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	159.00	Outside	1 5/8"	AT&T
0.00	159.00	Inside	1/2" Fiber	AT&T
0.00	159.00	Outside	1/2" Fiber	Town
0.00	159.00	Outside	2" Conduit	AT&T
0.00	159.00	Inside	3/4" DC Power	AT&T
0.00	151.00	Inside	1-1/4" Hybrid	Sprint Nextel
0.00	140.00	Inside	1 1/4"	T-Mobile
0.00	140.00	Inside	1 5/8" Coax	T-Mobile
0.00	131.00	Inside	1 5/8"	Verizon
0.00	131.00	Inside	1 5/8" Hybriflex	Verizon
0.00	110.00	Outside	7/8"	Town
0.00	80.00	Outside	7/8"	Town
0.00	50.00	Outside	1/2"	Sprint Nextel

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
14	2.25" 18J	75.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.2500	71.0	60.0	Round

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 120 mph Wind	4563.9	37.4	52.6
0.9D + 1.0W 120 mph Wind	4489.1	37.4	39.5
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1180.2	9.7	75.7
1.2D + 1.0Ev + 1.0Eh	105.3	0.7	54.7
0.9D + 1.0Ev + 1.0Eh	103.7	0.7	41.4
1.0D + 1.0W 60 mph Wind	1013.3	8.4	43.9

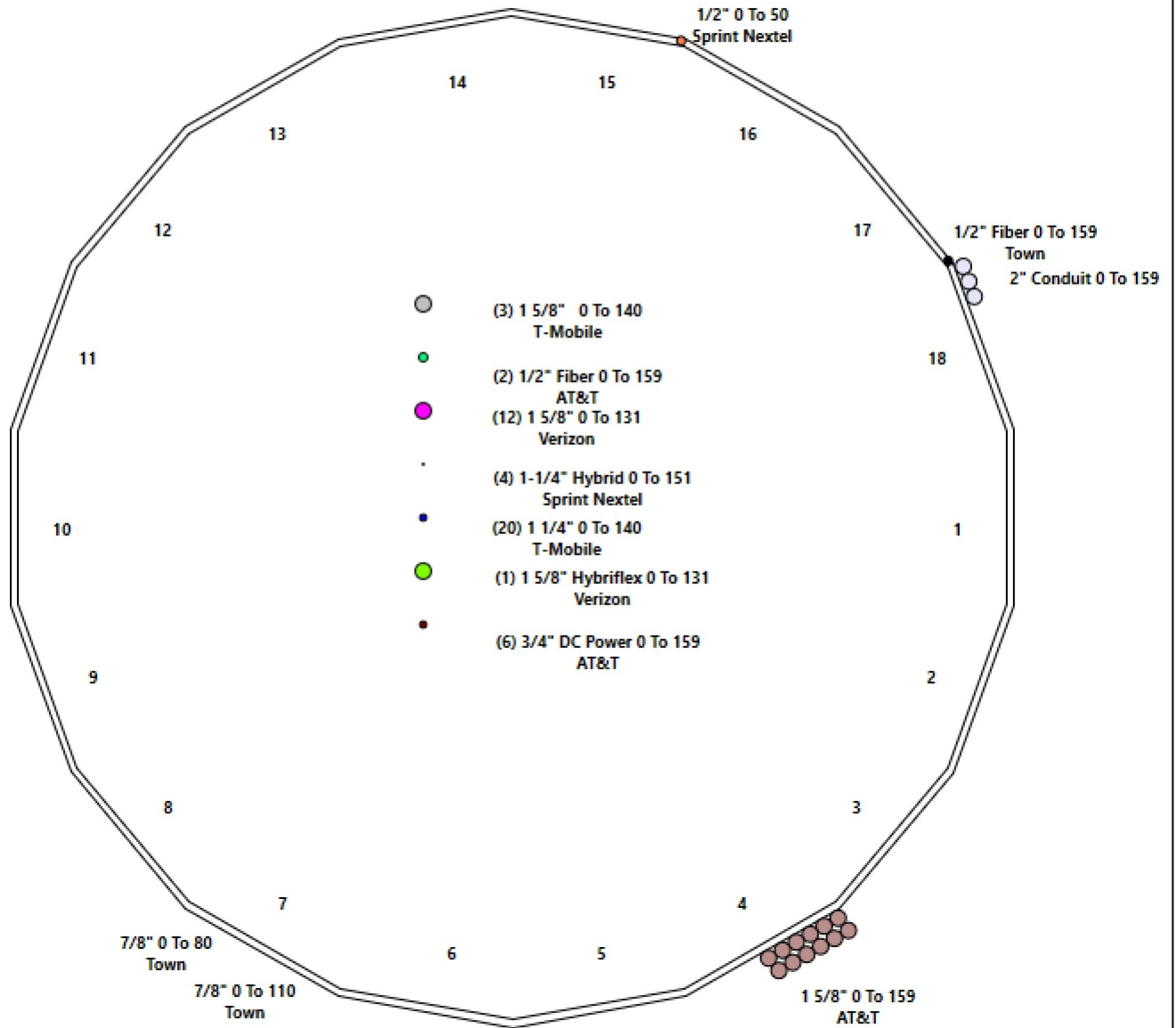
Structure: CT13055-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Monroe Turnpike
Height: 159.00 (ft)

12/11/2020



Page: 4



Shaft Properties

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	18	53.250	0.3750	65		0.00	10,849
2	18	53.500	0.3750	65	Slip	69.00	8,145
3	18	53.500	0.3125	65	Slip	48.00	4,384
4	18	10.750	0.1875	65	Slip	27.00	356
Total Shaft Weight:							23,734

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	58.21	0.00	68.84	29090.28	25.96	155.23	43.15	53.25	50.91	11771.3	18.88	115.0	0.282767
2	45.53	47.50	53.74	13843.68	20.00	121.41	30.40	101.00	35.74	4070.49	12.88	81.07	0.282767
3	32.16	97.00	31.58	4046.51	16.73	102.90	17.03	150.50	16.58	585.32	8.20	54.49	0.282767
4	18.04	148.2	10.62	427.78	15.55	96.21	15.00	159.00	8.81	244.36	12.70	80.00	0.282767

Load Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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	159.00	Powerwave 7770	3	35.00	5.79	0.73	112.58	6.777	0.73	0.00	3.00
2	159.00	DMP65R-BU6DA	3	79.40	12.71	0.72	277.03	13.692	0.72	0.00	3.00
3	159.00	Powerwave Technologies LGP21401	6	14.10	1.29	0.50	30.88	1.851	0.50	0.00	3.00
4	159.00	4449 B5/B12	3	71.00	1.97	0.50	106.82	2.337	0.50	0.00	3.00
5	159.00	Raycap DC6-48-60-18-8F	3	32.80	0.92	0.50	75.59	1.214	0.50	0.00	3.00
6	159.00	Site Pro 1 - RMQP-496-HK	1	2645.00	48.00	1.00	4503.39	71.832	1.00	0.00	3.00
7	159.00	Decibel DB404-B - Omni	1	14.00	0.00	1.00	14.01	0.000	1.00	0.00	3.00
8	159.00	Quintel QS66512-2	3	111.00	8.13	0.92	254.84	8.982	0.92	0.00	3.00
9	159.00	Kaelus DBC0061F1V51-2	3	18.30	0.43	0.50	25.33	0.621	0.50	0.00	3.00
10	159.00	Ericsson RRUS 32 B30	3	60.00	2.74	0.50	114.51	3.217	0.50	0.00	3.00
11	159.00	Ericsson RRUS 32 B2	3	53.00	2.74	0.50	107.51	3.217	0.50	0.00	3.00
12	159.00	Site Pro 1 - HRK14	1	302.36	6.00	1.00	543.13	9.935	1.00	0.00	3.00
13	159.00	OPA65R-BU6DA	3	63.30	12.71	0.50	246.99	13.693	0.50	0.00	3.00
14	159.00	RRUS 4478 B14	3	59.40	1.65	0.50	87.22	1.998	0.50	0.00	3.00
15	149.00	RFS - APXVTM14-C-I20 - Panel	3	56.00	6.34	0.79	140.47	7.081	0.79	0.00	2.00
16	149.00	Alcatel Lucent - TD-RRH8x20-25 -	3	70.00	4.05	0.50	135.15	4.992	0.50	0.00	2.00
17	149.00	RFS - APXVSPP18-C-A20 - Panel	3	106.00	8.42	0.83	284.28	9.666	0.83	0.00	2.00
18	149.00	Alcatel Lucent - 1900 MHz RRH	3	44.00	3.80	0.50	116.78	4.727	0.50	0.00	2.00
19	149.00	Alcatel Lucent - 800 MHz RRH	3	53.00	2.49	0.50	102.31	3.252	0.50	0.00	2.00
20	149.00	Alcatel Lucent - 800 MHz Filters	3	8.80	0.78	0.50	20.56	1.211	0.50	0.00	2.00
21	149.00	RFS - ACU-A20-N - RET	4	1.00	0.14	0.50	3.86	0.338	0.50	0.00	2.00
22	149.00	Low Profile Platform	1	1200.00	35.00	1.00	1898.09	54.546	1.00	0.00	0.00
23	149.00	SitePro HRK-12 Handrail Kit	1	261.72	6.75	1.00	468.78	11.148	1.00	0.00	0.00
24	140.00	LP Platform w/ Handrails	1	1600.00	34.00	1.00	2991.26	53.657	1.00	0.00	0.00
25	140.00	AIR6449 B41	3	103.00	5.65	0.71	193.85	6.280	0.71	0.00	0.00
26	140.00	4449 B71 + B85	3	73.20	1.97	0.50	111.46	2.347	0.50	0.00	0.00
27	140.00	4424 B25	3	79.00	2.22	0.50	118.83	2.631	0.50	0.00	0.00
28	140.00	4415 B66A	3	44.10	1.86	0.50	75.53	2.239	0.50	0.00	0.00
29	140.00	EMS - FR90-16-XXDP - Panel	3	18.00	4.36	0.68	76.98	4.990	0.68	0.00	0.00
30	140.00	RFS - APX16DWV-16DWVS-E-A20 -	3	40.70	6.61	0.62	118.26	8.053	0.62	0.00	0.00
31	140.00	RFS - APXVAA24_43-U-A20 - Panel	3	101.40	20.24	0.73	373.19	21.508	0.73	0.00	0.00
32	140.00	RFS - ATMA4P4DBP-1A20 - TMA	3	15.85	1.17	0.50	37.32	1.688	0.50	0.00	0.00
33	140.00	Andrew - ATSBT-TOP-FM - Bias T	3	1.80	0.20	0.50	5.67	0.430	0.50	0.00	0.00
34	131.00	Kathrein 742 213_2110_P45_02.0	3	16.50	3.15	0.72	62.01	3.732	0.72	0.00	0.00
35	131.00	Antel BXA-70063/6CF - Panel	3	17.00	7.57	0.70	110.27	9.389	0.70	0.00	0.00
36	131.00	Antel BXA-171063-12BF - Panel	3	15.00	4.74	0.84	77.48	6.286	0.84	0.00	0.00
37	131.00	Antel LPA-80063/6CF - Panel	6	27.00	9.60	0.94	207.29	10.470	0.94	0.00	0.00
38	131.00	Alcatel Lucent RRH2x60-AWS - RRU	3	55.00	3.50	0.50	107.67	4.019	0.50	0.00	0.00
39	131.00	RFS FD9R6004/2C-3L - Diplexer	6	3.10	0.36	0.50	8.38	0.652	0.50	0.00	0.00
40	131.00	RFS DB-T1-6Z-8AB-OZ - Distribution	1	18.90	4.80	1.00	107.84	5.362	1.00	0.00	0.00
41	131.00	Low Profile Platform	1	1200.00	22.00	1.00	1889.22	34.130	1.00	0.00	0.00
42	110.00	Sinclair SCL329-HL - Omni	1	10.40	2.22	1.00	49.19	4.782	1.00	0.00	5.55
43	110.00	4 ft Standoff	1	53.32	3.50	1.00	122.59	8.671	1.00	0.00	0.00
44	80.00	4 ft Standoff	1	53.32	3.50	1.00	120.44	8.510	1.00	0.00	0.00
45	80.00	Sinclair SCL329-HL - Omni	1	10.40	2.22	1.00	47.99	4.703	1.00	0.00	5.55
46	47.00	Decibel 26DB - GPS	1	10.00	0.16	1.00	13.30	0.388	1.00	0.00	3.00
47	47.00	4 ft Standoff	1	53.32	3.50	1.00	117.02	8.255	1.00	0.00	0.00
Totals:			123	12,206.59				25,410.43			

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		

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	159.00	(12) 1 5/8"	2.00	Outside
0.00	159.00	(2) 1/2" Fiber	1.00	Inside
0.00	159.00	(1) 1/2" Fiber	0.00	Outside
0.00	159.00	(3) 2" Conduit	0.00	Outside
0.00	159.00	(6) 3/4" DC Power	1.50	Inside
0.00	151.00	(4) 1-1/4" Hybrid	0.00	Inside
0.00	140.00	(20) 1 1/4"	0.00	Inside
0.00	140.00	(3) 1 5/8" Coax	0.00	Inside
0.00	131.00	(12) 1 5/8"	0.00	Inside
0.00	131.00	(1) 1 5/8" Hybriflex	0.00	Inside
0.00	110.00	(1) 7/8"	1.11	Outside
0.00	80.00	(1) 7/8"	0.00	Outside
0.00	50.00	(1) 1/2"	0.65	Outside

Shaft Section Properties

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in ²)	Ix (in ⁴)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in ³)	Weight (lb)
0.00		0.3750	58.210	68.836	29090.3	25.96	155.23	70.9	984.3	0.0
2.00		0.3750	57.644	68.163	28245.2	25.69	153.72	71.2	965.1	466.2
4.00		0.3750	57.079	67.489	27416.7	25.43	152.21	71.5	946.1	461.6
6.00		0.3750	56.513	66.816	26604.5	25.16	150.70	71.8	927.2	457.0
8.00		0.3750	55.948	66.143	25808.6	24.90	149.19	72.1	908.6	452.4
10.00		0.3750	55.382	65.470	25028.6	24.63	147.69	72.4	890.1	447.9
12.00		0.3750	54.817	64.797	24264.6	24.36	146.18	72.7	871.8	443.3
14.00		0.3750	54.251	64.124	23516.2	24.10	144.67	73.1	853.8	438.7
16.00		0.3750	53.686	63.451	22783.4	23.83	143.16	73.4	835.9	434.1
18.00		0.3750	53.120	62.778	22066.0	23.57	141.65	73.7	818.2	429.5
20.00		0.3750	52.555	62.105	21363.8	23.30	140.15	74.0	800.7	424.9
22.00		0.3750	51.989	61.431	20676.7	23.03	138.64	74.3	783.3	420.4
24.00		0.3750	51.424	60.758	20004.5	22.77	137.13	74.6	766.2	415.8
26.00		0.3750	50.858	60.085	19346.9	22.50	135.62	74.9	749.3	411.2
28.00		0.3750	50.293	59.412	18704.0	22.24	134.11	75.2	732.5	406.6
30.00		0.3750	49.727	58.739	18075.5	21.97	132.61	75.6	715.9	402.0
32.00		0.3750	49.161	58.066	17461.2	21.71	131.10	75.9	699.6	397.5
34.00		0.3750	48.596	57.393	16860.9	21.44	129.59	76.2	683.4	392.9
36.00		0.3750	48.030	56.720	16274.6	21.17	128.08	76.5	667.4	388.3
38.00		0.3750	47.465	56.047	15702.1	20.91	126.57	76.8	651.6	383.7
40.00		0.3750	46.899	55.374	15143.1	20.64	125.06	77.1	636.0	379.1
42.00		0.3750	46.334	54.700	14597.6	20.38	123.56	77.4	620.5	374.6
44.00		0.3750	45.768	54.027	14065.3	20.11	122.05	77.7	605.3	370.0
46.00		0.3750	45.203	53.354	13546.1	19.84	120.54	78.1	590.2	365.4
47.00		0.3750	44.920	53.018	13291.4	19.71	119.79	78.2	582.8	181.0
47.50	Bot - Section 2	0.3750	44.779	52.849	13165.2	19.64	119.41	78.3	579.1	90.1
48.00		0.3750	44.637	52.681	13039.9	19.58	119.03	78.4	575.4	181.1
50.00		0.3750	44.072	52.008	12546.4	19.31	117.52	78.7	560.7	718.5
52.00		0.3750	43.506	51.335	12065.6	19.05	116.02	79.0	546.2	709.4
53.25	Top - Section 1	0.3750	43.903	51.807	12401.4	19.23	117.07	0.0	0.0	438.7
54.00		0.3750	43.691	51.554	12221.0	19.13	116.51	78.9	550.9	131.9
56.00		0.3750	43.125	50.881	11748.6	18.87	115.00	79.2	536.6	348.6
58.00		0.3750	42.559	50.208	11288.4	18.60	113.49	79.5	522.4	344.0
60.00		0.3750	41.994	49.535	10840.5	18.34	111.98	79.8	508.4	339.4
62.00		0.3750	41.428	48.862	10404.6	18.07	110.48	80.1	494.7	334.8
64.00		0.3750	40.863	48.189	9980.5	17.80	108.97	80.5	481.1	330.2
66.00		0.3750	40.297	47.516	9568.1	17.54	107.46	80.8	467.7	325.7
68.00		0.3750	39.732	46.843	9167.2	17.27	105.95	81.1	454.4	321.1
70.00		0.3750	39.166	46.170	8777.7	17.01	104.44	81.4	441.4	316.5
72.00		0.3750	38.601	45.497	8399.3	16.74	102.94	81.7	428.6	311.9
74.00		0.3750	38.035	44.823	8032.0	16.47	101.43	82.0	415.9	307.3
76.00		0.3750	37.470	44.150	7675.6	16.21	99.92	82.3	403.5	302.8
78.00		0.3750	36.904	43.477	7329.8	15.94	98.41	82.5	391.2	298.2
80.00		0.3750	36.339	42.804	6994.6	15.68	96.90	82.5	379.1	293.6
82.00		0.3750	35.773	42.131	6669.8	15.41	95.39	82.5	367.2	289.0
84.00		0.3750	35.208	41.458	6355.2	15.14	93.89	82.5	355.5	284.4
86.00		0.3750	34.642	40.785	6050.7	14.88	92.38	82.5	344.0	279.9
88.00		0.3750	34.076	40.112	5756.0	14.61	90.87	82.5	332.7	275.3
90.00		0.3750	33.511	39.439	5471.1	14.35	89.36	82.5	321.6	270.7
92.00		0.3750	32.945	38.766	5195.7	14.08	87.85	82.5	310.6	266.1

Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
94.00		0.3750	32.380	38.092	4929.7	13.81	86.35	82.5	299.9	261.5
96.00		0.3750	31.814	37.419	4673.0	13.55	84.84	82.5	289.3	256.9
97.00	Bot - Section 3	0.3750	31.532	37.083	4548.0	13.42	84.08	82.5	284.1	126.8
98.00		0.3750	31.249	36.746	4425.3	13.28	83.33	82.5	278.9	232.6
100.00		0.3750	30.683	36.073	4186.6	13.02	81.82	82.5	268.7	458.9
101.00	Top - Section 2	0.3125	31.026	30.462	3630.5	16.10	99.28	0.0	0.0	226.3
102.00		0.3125	30.743	30.182	3531.1	15.94	98.38	82.5	226.2	103.2
104.00		0.3125	30.177	29.621	3337.9	15.62	96.57	82.5	217.9	203.5
106.00		0.3125	29.612	29.060	3151.8	15.30	94.76	82.5	209.6	199.7
108.00		0.3125	29.046	28.499	2972.8	14.98	92.95	82.5	201.6	195.9
110.00		0.3125	28.481	27.938	2800.7	14.66	91.14	82.5	193.7	192.0
112.00		0.3125	27.915	27.377	2635.4	14.34	89.33	82.5	185.9	188.2
114.00		0.3125	27.350	26.816	2476.7	14.02	87.52	82.5	178.4	184.4
116.00		0.3125	26.784	26.255	2324.5	13.70	85.71	82.5	170.9	180.6
118.00		0.3125	26.218	25.695	2178.7	13.38	83.90	82.5	163.7	176.8
120.00		0.3125	25.653	25.134	2039.1	13.06	82.09	82.5	156.6	173.0
122.00		0.3125	25.087	24.573	1905.6	12.74	80.28	82.5	149.6	169.1
124.00		0.3125	24.522	24.012	1778.1	12.43	78.47	82.5	142.8	165.3
126.00		0.3125	23.956	23.451	1656.3	12.11	76.66	82.5	136.2	161.5
128.00		0.3125	23.391	22.890	1540.3	11.79	74.85	82.5	129.7	157.7
130.00		0.3125	22.825	22.329	1429.8	11.47	73.04	82.5	123.4	153.9
131.00		0.3125	22.542	22.049	1376.6	11.31	72.14	82.5	120.3	75.5
132.00		0.3125	22.260	21.768	1324.7	11.15	71.23	82.5	117.2	74.5
134.00		0.3125	21.694	21.207	1225.0	10.83	69.42	82.5	111.2	146.2
136.00		0.3125	21.129	20.646	1130.3	10.51	67.61	82.5	105.4	142.4
138.00		0.3125	20.563	20.085	1040.7	10.19	65.80	82.5	99.7	138.6
140.00		0.3125	19.998	19.524	955.9	9.87	63.99	82.5	94.1	134.8
142.00		0.3125	19.432	18.964	875.8	9.55	62.18	82.5	88.8	131.0
144.00		0.3125	18.867	18.403	800.4	9.23	60.37	82.5	83.6	127.1
146.00		0.3125	18.301	17.842	729.4	8.92	58.56	82.5	78.5	123.3
148.00		0.3125	17.735	17.281	662.8	8.60	56.75	82.5	73.6	119.5
148.25	Bot - Section 4	0.3125	17.665	17.211	654.7	8.56	56.53	82.5	73.0	14.7
149.00		0.3125	17.453	17.000	631.0	8.44	55.85	82.5	71.2	70.6
150.00		0.3125	17.170	16.720	600.3	8.28	54.94	82.5	68.9	92.8
150.50	Top - Section 3	0.1875	17.404	10.245	383.7	14.96	92.82	0.0	0.0	45.8
152.00		0.1875	16.979	9.993	356.0	14.56	90.56	82.5	41.3	51.6
154.00		0.1875	16.414	9.656	321.2	14.03	87.54	82.5	38.5	66.9
156.00		0.1875	15.848	9.320	288.8	13.49	84.52	82.5	35.9	64.6
158.00		0.1875	15.283	8.983	258.6	12.96	81.51	82.5	33.3	62.3
159.00		0.1875	15.000	8.815	244.4	12.70	80.00	82.5	32.1	30.3
										23733.6

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020	
Site Name: Monroe Turnpike	Exposure: C		
Height: 159.00 (ft)	Crest Height: 0.00		
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 10

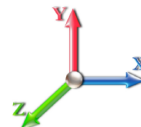


Load Case: 1.2D + 1.0W 120 mph Wind

Iterations 30

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		1.00	0.85	29.139	32.05	539.17	0.730	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	29.139	32.05	533.93	0.730	0.000	2.00	9.803	7.16	229.4	0.0	559.4
4.00		1.00	0.85	29.139	32.05	528.69	0.730	0.000	2.00	9.708	7.09	227.2	0.0	553.9
6.00		1.00	0.85	29.139	32.05	523.45	0.730	0.000	2.00	9.612	7.02	224.9	0.0	548.4
8.00		1.00	0.85	29.139	32.05	518.21	0.730	0.000	2.00	9.516	6.95	222.7	0.0	542.9
10.00		1.00	0.85	29.139	32.05	512.98	0.730	0.000	2.00	9.421	6.88	220.4	0.0	537.4
12.00		1.00	0.85	29.139	32.05	507.74	0.730	0.000	2.00	9.325	6.81	218.2	0.0	531.9
14.00		1.00	0.85	29.139	32.05	502.50	0.730	0.000	2.00	9.229	6.74	216.0	0.0	526.4
16.00		1.00	0.87	29.878	32.87	503.52	0.730	0.000	2.00	9.134	6.67	219.1	0.0	520.9
18.00		1.00	0.89	30.586	33.64	504.09	0.730	0.000	2.00	9.038	6.60	222.0	0.0	515.4
20.00		1.00	0.91	31.237	34.36	504.00	0.730	0.000	2.00	8.942	6.53	224.3	0.0	509.9
22.00		1.00	0.93	31.841	35.03	503.38	0.730	0.000	2.00	8.846	6.46	226.2	0.0	504.4
24.00		1.00	0.95	32.405	35.65	502.29	0.730	0.000	2.00	8.751	6.39	227.7	0.0	498.9
26.00		1.00	0.96	32.934	36.23	500.81	0.730	0.000	2.00	8.655	6.32	228.9	0.0	493.4
28.00		1.00	0.98	33.434	36.78	498.98	0.730	0.000	2.00	8.559	6.25	229.8	0.0	487.9
30.00		1.00	0.99	33.906	37.30	496.84	0.730	0.000	2.00	8.464	6.18	230.4	0.0	482.5
32.00		1.00	1.00	34.356	37.79	494.44	0.730	0.000	2.00	8.368	6.11	230.8	0.0	477.0
34.00		1.00	1.01	34.784	38.26	491.78	0.730	0.000	2.00	8.272	6.04	231.1	0.0	471.5
36.00		1.00	1.03	35.193	38.71	488.91	0.730	0.000	2.00	8.176	5.97	231.1	0.0	466.0
38.00		1.00	1.04	35.585	39.14	485.84	0.730	0.000	2.00	8.081	5.90	230.9	0.0	460.5
40.00		1.00	1.05	35.962	39.56	482.59	0.730	0.000	2.00	7.985	5.83	230.6	0.0	455.0
42.00		1.00	1.06	36.324	39.96	479.16	0.730	0.000	2.00	7.889	5.76	230.1	0.0	449.5
44.00		1.00	1.07	36.674	40.34	475.58	0.730	0.000	2.00	7.794	5.69	229.5	0.0	444.0
46.00		1.00	1.08	37.011	40.71	471.86	0.730	0.000	2.00	7.698	5.62	228.8	0.0	438.5
47.00	Appurtenance(s)	1.00	1.08	37.175	40.89	469.95	0.730	0.000	1.00	3.813	2.78	113.8	0.0	217.2
47.50	Bot - Section 2	1.00	1.09	37.257	40.98	468.98	0.730	0.000	0.50	1.898	1.39	56.8	0.0	108.1
48.00		1.00	1.09	37.337	41.07	468.01	0.730	0.000	0.50	1.923	1.40	57.7	0.0	217.3
50.00		1.00	1.10	37.653	41.42	464.03	0.730	0.000	2.00	7.633	5.57	230.8	0.0	862.3
52.00		1.00	1.11	37.959	41.76	459.93	0.730	0.000	2.00	7.538	5.50	229.8	0.0	851.3
53.25	Top - Section 1	1.00	1.11	38.146	41.96	457.32	0.730	0.000	1.25	4.662	3.40	142.8	0.0	526.5
54.00		1.00	1.12	38.256	42.08	463.69	0.730	0.000	0.75	2.780	2.03	85.4	0.0	158.3
56.00		1.00	1.12	38.545	42.40	459.41	0.730	0.000	2.00	7.346	5.36	227.4	0.0	418.3
58.00		1.00	1.13	38.826	42.71	455.03	0.730	0.000	2.00	7.251	5.29	226.1	0.0	412.8
60.00		1.00	1.14	39.099	43.01	450.56	0.730	0.000	2.00	7.155	5.22	224.6	0.0	407.3
62.00		1.00	1.15	39.366	43.30	446.01	0.730	0.000	2.00	7.059	5.15	223.1	0.0	401.8
64.00		1.00	1.16	39.626	43.59	441.37	0.730	0.000	2.00	6.963	5.08	221.6	0.0	396.3
66.00		1.00	1.16	39.879	43.87	436.65	0.730	0.000	2.00	6.868	5.01	219.9	0.0	390.8
68.00		1.00	1.17	40.127	44.14	431.86	0.730	0.000	2.00	6.772	4.94	218.2	0.0	385.3
70.00		1.00	1.18	40.369	44.41	427.00	0.730	0.000	2.00	6.676	4.87	216.4	0.0	379.8
72.00		1.00	1.18	40.606	44.67	422.06	0.730	0.000	2.00	6.581	4.80	214.6	0.0	374.3
74.00		1.00	1.19	40.838	44.92	417.06	0.730	0.000	2.00	6.485	4.73	212.7	0.0	368.8
76.00		1.00	1.20	41.065	45.17	412.00	0.730	0.000	2.00	6.389	4.66	210.7	0.0	363.3
78.00		1.00	1.20	41.287	45.42	406.88	0.730	0.000	2.00	6.293	4.59	208.6	0.0	357.8
80.00	Appurtenance(s)	1.00	1.21	41.505	45.66	401.70	0.730	0.000	2.00	6.198	4.52	206.6	0.0	352.3
82.00		1.00	1.22	41.718	45.89	396.47	0.730	0.000	2.00	6.102	4.45	204.4	0.0	346.8
84.00		1.00	1.22	41.928	46.12	391.18	0.730	0.000	2.00	6.006	4.38	202.2	0.0	341.3
86.00		1.00	1.23	42.134	46.35	385.84	0.730	0.000	2.00	5.911	4.31	200.0	0.0	335.8

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00	1.00	1.23	42.336	46.57	380.45	0.730	0.000	2.00	5.815	4.24	197.7	0.0	330.3
90.00	1.00	1.24	42.534	46.79	375.01	0.730	0.000	2.00	5.719	4.17	195.3	0.0	324.8
92.00	1.00	1.25	42.730	47.00	369.53	0.730	0.000	2.00	5.623	4.11	193.0	0.0	319.3
94.00	1.00	1.25	42.921	47.21	364.00	0.730	0.000	2.00	5.528	4.04	190.5	0.0	313.8
96.00	1.00	1.26	43.110	47.42	358.42	0.730	0.000	2.00	5.432	3.97	188.0	0.0	308.3
97.00 Bot - Section 3	1.00	1.26	43.203	47.52	355.62	0.730	0.000	1.00	2.680	1.96	93.0	0.0	152.1
98.00	1.00	1.26	43.296	47.63	352.81	0.730	0.000	1.00	2.709	1.98	94.2	0.0	279.1
100.00	1.00	1.27	43.478	47.83	347.16	0.730	0.000	2.00	5.346	3.90	186.7	0.0	550.7
101.00 Top - Section 2	1.00	1.27	43.569	47.93	344.31	0.731 *	0.000	1.00	2.637	1.93	92.3	0.0	271.6
102.00	1.00	1.27	43.658	48.02	348.55	0.730	0.000	1.00	2.613	1.91	91.6	0.0	123.8
104.00	1.00	1.28	43.835	48.22	342.83	0.731 *	0.000	2.00	5.155	3.77	181.8	0.0	244.2
106.00	1.00	1.28	44.010	48.41	337.07	0.735 *	0.000	2.00	5.059	3.72	180.1	0.0	239.6
108.00	1.00	1.29	44.182	48.60	331.28	0.740 *	0.000	2.00	4.964	3.67	178.4	0.0	235.0
110.00 Appurtenance(s)	1.00	1.29	44.351	48.79	325.45	0.744 *	0.000	2.00	4.868	3.62	176.7	0.0	230.5
112.00	1.00	1.30	44.518	48.97	319.59	0.730	0.000	2.00	4.772	3.48	170.6	0.0	225.9
114.00	1.00	1.30	44.683	49.15	313.69	0.730	0.000	2.00	4.676	3.41	167.8	0.0	221.3
116.00	1.00	1.31	44.845	49.33	307.77	0.730	0.000	2.00	4.581	3.34	165.0	0.0	216.7
118.00	1.00	1.31	45.006	49.51	301.81	0.730	0.000	2.00	4.485	3.27	162.1	0.0	212.1
120.00	1.00	1.32	45.164	49.68	295.81	0.730	0.000	2.00	4.389	3.20	159.2	0.0	207.5
122.00	1.00	1.32	45.320	49.85	289.79	0.730	0.000	2.00	4.294	3.13	156.3	0.0	203.0
124.00	1.00	1.33	45.474	50.02	283.74	0.730	0.000	2.00	4.198	3.06	153.3	0.0	198.4
126.00	1.00	1.33	45.627	50.19	277.66	0.730	0.000	2.00	4.102	2.99	150.3	0.0	193.8
128.00	1.00	1.34	45.777	50.35	271.55	0.730	0.000	2.00	4.006	2.92	147.3	0.0	189.2
130.00	1.00	1.34	45.925	50.52	265.42	0.730	0.000	2.00	3.911	2.85	144.2	0.0	184.6
131.00 Appurtenance(s)	1.00	1.34	45.999	50.60	262.34	0.730	0.000	1.00	1.919	1.40	70.9	0.0	90.6
132.00	1.00	1.34	46.072	50.68	259.25	0.730	0.000	1.00	1.896	1.38	70.1	0.0	89.5
134.00	1.00	1.35	46.217	50.84	253.06	0.730	0.000	2.00	3.719	2.72	138.0	0.0	175.5
136.00	1.00	1.35	46.360	51.00	246.85	0.730	0.000	2.00	3.624	2.65	134.9	0.0	170.9
138.00	1.00	1.36	46.502	51.15	240.61	0.730	0.000	2.00	3.528	2.58	131.7	0.0	166.3
140.00 Appurtenance(s)	1.00	1.36	46.642	51.31	234.34	0.730	0.000	2.00	3.432	2.51	128.5	0.0	161.7
142.00	1.00	1.36	46.781	51.46	228.05	0.730	0.000	2.00	3.336	2.44	125.3	0.0	157.2
144.00	1.00	1.37	46.918	51.61	221.74	0.736 *	0.000	2.00	3.241	2.39	123.1	0.0	152.6
146.00	1.00	1.37	47.053	51.76	215.40	0.743 *	0.000	2.00	3.145	2.34	121.0	0.0	148.0
148.00	1.00	1.38	47.187	51.91	209.04	0.750 *	0.000	2.00	3.049	2.29	118.8	0.0	143.4
148.25 Bot - Section 4	1.00	1.38	47.204	51.92	208.25	0.755 *	0.000	0.25	0.374	0.28	14.7	0.0	17.6
149.00 Appurtenance(s)	1.00	1.38	47.254	51.98	205.86	0.757 *	0.000	0.75	1.138	0.86	44.8	0.0	84.7
150.00	1.00	1.38	47.320	52.05	202.66	0.760 *	0.000	1.00	1.497	1.14	59.2	0.0	111.4
150.50 Top - Section 3	1.00	1.38	47.353	52.09	201.06	0.763 *	0.000	0.50	0.739	0.56	29.4	0.0	55.0
152.00	1.00	1.38	47.451	52.20	200.69	0.762 *	0.000	1.50	2.182	1.66	86.8	0.0	62.0
154.00	1.00	1.39	47.581	52.34	194.27	0.769 *	0.000	2.00	2.826	2.17	113.8	0.0	80.2
156.00	1.00	1.39	47.710	52.48	187.83	0.778 *	0.000	2.00	2.730	2.13	111.5	0.0	77.5
158.00	1.00	1.40	47.837	52.62	181.37	0.788 *	0.000	2.00	2.634	2.08	109.2	0.0	74.7
159.00 Appurtenance(s)	1.00	1.40	47.900	52.69	178.13	0.796 *	0.000	1.00	1.281	1.02	53.7	0.0	36.3

* Cf Adjusted by Linear Load Ra Effect

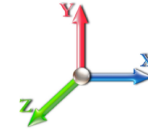
Totals:	159.00	15,164.9		28,480.3
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Discrete Appurtenance Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0W 120 mph Wind	Iterations 30
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	159.00	Decibel DB404-B - Omni	1	48.088	52.897	1.00	1.00	0.00	16.80	0.000	3.000	0.00	0.00	0.00
2	159.00	Powerwave 7770	3	48.088	52.897	0.55	0.75	9.51	126.00	0.000	3.000	503.05	0.00	1509.15
3	159.00	DMP65R-BU6DA	3	48.088	52.897	0.54	0.75	20.59	285.84	0.000	3.000	1089.15	0.00	3267.45
4	159.00	Powerwave Technologies	6	48.088	52.897	0.38	0.75	2.90	101.52	0.000	3.000	153.53	0.00	460.60
5	159.00	4449 B5/B12	3	48.088	52.897	0.38	0.75	2.22	255.60	0.000	3.000	117.23	0.00	351.70
6	159.00	Raycap DC6-48-60-18-8F	3	48.088	52.897	0.38	0.75	1.04	118.08	0.000	3.000	54.75	0.00	164.24
7	159.00	Site Pro 1 -	1	48.088	52.897	1.00	1.00	48.00	3174.00	0.000	3.000	2539.04	0.00	7617.11
8	159.00	RRUS 4478 B14	3	48.088	52.897	0.38	0.75	1.86	213.84	0.000	3.000	98.19	0.00	294.57
9	159.00	Kaelus DBC0061F1V51-2	3	48.088	52.897	0.38	0.75	0.48	65.88	0.000	3.000	25.59	0.00	76.77
10	159.00	Ericsson RRUS 32 B30	3	48.088	52.897	0.38	0.75	3.08	216.00	0.000	3.000	163.05	0.00	489.16
11	159.00	Ericsson RRUS 32 B2	3	48.088	52.897	0.38	0.75	3.08	190.80	0.000	3.000	163.05	0.00	489.16
12	159.00	Site Pro 1 - HRK14	1	48.088	52.897	1.00	1.00	6.00	362.83	0.000	3.000	317.38	0.00	952.14
13	159.00	OPA65R-BU6DA	3	48.088	52.897	0.38	0.75	14.30	227.88	0.000	3.000	756.36	0.00	2269.07
14	159.00	Quintel QS66512-2	3	48.088	52.897	0.69	0.75	16.83	399.60	0.000	3.000	890.20	0.00	2670.61
15	149.00	Alcatel Lucent - 1900 MHz	3	47.386	52.124	0.38	0.75	4.27	158.40	0.000	2.000	222.83	0.00	445.66
16	149.00	RFS - APXVTM14-C-I20 -	3	47.386	52.124	0.59	0.75	11.27	201.60	0.000	2.000	587.41	0.00	1174.81
17	149.00	Alcatel Lucent -	3	47.386	52.124	0.38	0.75	4.56	252.00	0.000	2.000	237.49	0.00	474.98
18	149.00	RFS - APXVSP18-C-A20	3	47.386	52.124	0.62	0.75	15.72	381.60	0.000	2.000	819.62	0.00	1639.24
19	149.00	Low Profile Platform	1	47.254	51.979	1.00	1.00	35.00	1440.00	0.000	0.000	1819.27	0.00	0.00
20	149.00	Alcatel Lucent - 800 MHz	3	47.386	52.124	0.38	0.75	2.80	190.80	0.000	2.000	146.01	0.00	292.03
21	149.00	Alcatel Lucent - 800 MHz	3	47.386	52.124	0.38	0.75	0.88	31.68	0.000	2.000	45.74	0.00	91.48
22	149.00	RFS - ACU-A20-N - RET	4	47.386	52.124	0.38	0.75	0.21	4.80	0.000	2.000	10.95	0.00	21.89
23	149.00	SitePro HRK-12 Handrail	1	47.254	51.979	1.00	1.00	6.75	314.06	0.000	0.000	350.86	0.00	0.00
24	140.00	4415 B66A	3	46.642	51.306	0.38	0.75	2.09	158.76	0.000	0.000	107.36	0.00	0.00
25	140.00	4424 B25	3	46.642	51.306	0.38	0.75	2.50	284.40	0.000	0.000	128.14	0.00	0.00
26	140.00	4449 B71 + B85	3	46.642	51.306	0.38	0.75	2.22	263.52	0.000	0.000	113.71	0.00	0.00
27	140.00	AIR6449 B41	3	46.642	51.306	0.53	0.75	9.03	370.80	0.000	0.000	463.08	0.00	0.00
28	140.00	Andrew - ATSB-TOP-FM	3	46.642	51.306	0.38	0.75	0.23	6.48	0.000	0.000	11.54	0.00	0.00
29	140.00	RFS -	3	46.642	51.306	0.38	0.75	1.32	57.06	0.000	0.000	67.53	0.00	0.00
30	140.00	RFS -	3	46.642	51.306	0.55	0.75	33.24	365.04	0.000	0.000	1705.64	0.00	0.00
31	140.00	RFS -	3	46.642	51.306	0.46	0.75	9.22	146.52	0.000	0.000	473.09	0.00	0.00
32	140.00	EMS - FR90-16-XXDP -	3	46.642	51.306	0.51	0.75	6.67	64.80	0.000	0.000	342.25	0.00	0.00
33	140.00	LP Platform w/ Handrails	1	46.642	51.306	1.00	1.00	34.00	1920.00	0.000	0.000	1744.42	0.00	0.00
34	131.00	Antel BXA-171063-12BF -	3	45.999	50.599	0.67	0.80	9.56	54.00	0.000	0.000	483.51	0.00	0.00
35	131.00	Antel LPA-80063/6CF -	6	45.999	50.599	0.75	0.80	43.32	194.40	0.000	0.000	2191.70	0.00	0.00
36	131.00	Antel BXA-70063/6CF -	3	45.999	50.599	0.56	0.80	12.72	61.20	0.000	0.000	643.50	0.00	0.00
37	131.00	Kathrein 742	3	45.999	50.599	0.58	0.80	5.44	59.40	0.000	0.000	275.42	0.00	0.00
38	131.00	RFS FD9R6004/2C-3L -	6	45.999	50.599	0.40	0.80	0.86	22.32	0.000	0.000	43.72	0.00	0.00
39	131.00	Alcatel Lucent	3	45.999	50.599	0.40	0.80	4.20	198.00	0.000	0.000	212.52	0.00	0.00
40	131.00	RFS DB-T1-6Z-8AB-OZ -	1	45.999	50.599	1.00	1.00	4.80	22.68	0.000	0.000	242.87	0.00	0.00
41	131.00	Low Profile Platform	1	45.999	50.599	1.00	1.00	22.00	1440.00	0.000	0.000	1113.17	0.00	0.00
42	110.00	4 ft. Standoff	1	44.351	48.786	1.00	1.00	3.50	63.98	0.000	0.000	170.75	0.00	0.00
43	110.00	Sinclair SCL329-HL -	1	44.809	49.290	1.00	1.00	2.22	12.48	0.000	5.550	109.42	0.00	607.30
44	80.00	Sinclair SCL329-HL -	1	42.088	46.297	1.00	1.00	2.22	12.48	0.000	5.550	102.78	0.00	570.42
45	80.00	4 ft Standoff	1	41.505	45.655	1.00	1.00	3.50	63.98	0.000	0.000	159.79	0.00	0.00
46	47.00	4 ft Standoff	1	37.175	40.893	1.00	1.00	3.50	63.98	0.000	0.000	143.13	0.00	0.00
47	47.00	Decibel 26DB - GPS	1	37.653	41.418	1.00	1.00	0.16	12.00	0.000	3.000	6.63	0.00	19.88

Discrete Appurtenance Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Totals: 14,647.91

22,166.42

Total Applied Force Summary

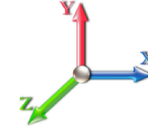
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		229.39	691.66	0.00	0.00
4.00		227.15	686.17	0.00	0.00
6.00		224.91	680.67	0.00	0.00
8.00		222.67	675.17	0.00	0.00
10.00		220.43	669.68	0.00	0.00
12.00		218.19	664.18	0.00	0.00
14.00		215.95	658.68	0.00	0.00
16.00		219.13	653.18	0.00	0.00
18.00		221.97	647.69	0.00	0.00
20.00		224.30	642.19	0.00	0.00
22.00		226.19	636.69	0.00	0.00
24.00		227.70	631.20	0.00	0.00
26.00		228.89	625.70	0.00	0.00
28.00		229.79	620.20	0.00	0.00
30.00		230.44	614.71	0.00	0.00
32.00		230.85	609.21	0.00	0.00
34.00		231.05	603.71	0.00	0.00
36.00		231.07	598.21	0.00	0.00
38.00		230.91	592.72	0.00	0.00
40.00		230.59	587.22	0.00	0.00
42.00		230.12	581.72	0.00	0.00
44.00		229.51	576.23	0.00	0.00
46.00		228.78	570.73	0.00	0.00
47.00	(2) attachments	263.58	359.29	0.00	19.88
47.50		56.77	141.14	0.00	0.00
48.00		57.66	250.34	0.00	0.00
50.00		230.80	994.51	0.00	0.00
52.00		229.76	983.13	0.00	0.00
53.25		142.82	608.87	0.00	0.00
54.00		85.39	207.72	0.00	0.00
56.00		227.38	550.15	0.00	0.00
58.00		226.05	544.65	0.00	0.00
60.00		224.64	539.16	0.00	0.00
62.00		223.14	533.66	0.00	0.00
64.00		221.57	528.16	0.00	0.00
66.00		219.92	522.67	0.00	0.00
68.00		218.21	517.17	0.00	0.00
70.00		216.42	511.67	0.00	0.00
72.00		214.57	506.17	0.00	0.00
74.00		212.66	500.68	0.00	0.00
76.00		210.68	495.18	0.00	0.00
78.00		208.65	489.68	0.00	0.00
80.00	(2) attachments	469.13	560.65	0.00	570.42
82.00		204.42	477.44	0.00	0.00
84.00		202.22	471.94	0.00	0.00
86.00		199.98	466.45	0.00	0.00

Total Applied Force Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00		197.68	460.95	0.00	0.00
90.00		195.34	455.45	0.00	0.00
92.00		192.95	449.96	0.00	0.00
94.00		190.52	444.46	0.00	0.00
96.00		188.04	438.96	0.00	0.00
97.00		92.98	217.42	0.00	0.00
98.00		94.19	344.44	0.00	0.00
100.00		186.66	681.32	0.00	0.00
101.00		92.35	336.88	0.00	0.00
102.00		91.62	189.13	0.00	0.00
104.00		181.75	374.82	0.00	0.00
106.00		180.11	370.24	0.00	0.00
108.00		178.44	365.66	0.00	0.00
110.00	(2) attachments	456.91	437.54	0.00	607.30
112.00		170.60	355.25	0.00	0.00
114.00		167.79	350.67	0.00	0.00
116.00		164.96	346.08	0.00	0.00
118.00		162.09	341.50	0.00	0.00
120.00		159.19	336.92	0.00	0.00
122.00		156.25	332.34	0.00	0.00
124.00		153.29	327.76	0.00	0.00
126.00		150.30	323.18	0.00	0.00
128.00		147.27	318.60	0.00	0.00
130.00		144.22	314.02	0.00	0.00
131.00	(26) attachments	5277.31	2207.29	0.00	0.00
132.00		70.13	137.85	0.00	0.00
134.00		138.03	272.26	0.00	0.00
136.00		134.90	267.68	0.00	0.00
138.00		131.74	263.10	0.00	0.00
140.00	(28) attachments	5285.31	3895.90	0.00	0.00
142.00		125.33	214.77	0.00	0.00
144.00		123.14	210.19	0.00	0.00
146.00		120.97	205.61	0.00	0.00
148.00		118.77	201.03	0.00	0.00
148.25		14.67	24.81	0.00	0.00
149.00	(24) attachments	4284.93	3081.28	0.00	4140.09
150.00		59.22	140.17	0.00	0.00
150.50		29.39	69.40	0.00	0.00
152.00		86.78	100.61	0.00	0.00
154.00		113.78	128.69	0.00	0.00
156.00		111.52	125.94	0.00	0.00
158.00		109.25	123.19	0.00	0.00
159.00	(39) attachments	6924.30	5815.24	0.00	20611.72
	Totals:	37,331.36	52,676.59	0.00	25,949.41

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.064	0.000	29.139	0.00	29.95
2.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	29.139	0.00	0.38
2.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	29.139	0.00	11.59
2.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.064	0.000	29.139	0.00	1.25
2.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	29.139	0.00	1.25
2.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.064	0.000	29.139	0.00	0.38
4.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.065	0.000	29.139	0.00	29.95
4.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	0.38
4.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	11.59
4.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.065	0.000	29.139	0.00	1.25
4.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	1.25
4.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.065	0.000	29.139	0.00	0.38
6.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.065	0.000	29.139	0.00	29.95
6.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	0.38
6.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	11.59
6.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.065	0.000	29.139	0.00	1.25
6.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	1.25
6.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.065	0.000	29.139	0.00	0.38
8.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.066	0.000	29.139	0.00	29.95
8.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	29.139	0.00	0.38
8.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	29.139	0.00	11.59
8.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.066	0.000	29.139	0.00	1.25
8.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	29.139	0.00	1.25
8.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.066	0.000	29.139	0.00	0.38
10.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	29.139	0.00	29.95
10.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	0.38
10.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	11.59
10.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.067	0.000	29.139	0.00	1.25
10.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	1.25
10.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.067	0.000	29.139	0.00	0.38
12.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	29.139	0.00	29.95
12.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	0.38
12.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	11.59
12.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.067	0.000	29.139	0.00	1.25
12.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	1.25
12.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.067	0.000	29.139	0.00	0.38
14.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.068	0.000	29.139	0.00	29.95
14.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	29.139	0.00	0.38
14.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	29.139	0.00	11.59
14.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.068	0.000	29.139	0.00	1.25
14.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	29.139	0.00	1.25
14.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.068	0.000	29.139	0.00	0.38
16.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.069	0.000	29.878	0.00	29.95
16.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	29.878	0.00	0.38
16.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	29.878	0.00	11.59
16.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.069	0.000	29.878	0.00	1.25
16.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	29.878	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



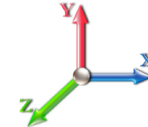
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Load Case: 1.2D + 1.0W 120 mph Wind

Iterations 30

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)
16.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.069	0.000	29.878	0.00	0.38
18.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.069	0.000	30.586	0.00	29.95
18.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	30.586	0.00	0.38
18.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	30.586	0.00	11.59
18.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.069	0.000	30.586	0.00	1.25
18.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	30.586	0.00	1.25
18.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.069	0.000	30.586	0.00	0.38
20.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	31.237	0.00	29.95
20.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	31.237	0.00	0.38
20.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	31.237	0.00	11.59
20.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.070	0.000	31.237	0.00	1.25
20.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	31.237	0.00	1.25
20.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.070	0.000	31.237	0.00	0.38
22.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	31.841	0.00	29.95
22.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.841	0.00	0.38
22.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.841	0.00	11.59
22.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.071	0.000	31.841	0.00	1.25
22.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.841	0.00	1.25
22.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.071	0.000	31.841	0.00	0.38
24.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	32.405	0.00	29.95
24.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.405	0.00	0.38
24.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.405	0.00	11.59
24.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.072	0.000	32.405	0.00	1.25
24.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.405	0.00	1.25
24.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.072	0.000	32.405	0.00	0.38
26.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	32.934	0.00	29.95
26.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.934	0.00	0.38
26.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.934	0.00	11.59
26.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.072	0.000	32.934	0.00	1.25
26.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.934	0.00	1.25
26.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.072	0.000	32.934	0.00	0.38
28.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	33.434	0.00	29.95
28.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	33.434	0.00	0.38
28.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	33.434	0.00	11.59
28.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.073	0.000	33.434	0.00	1.25
28.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	33.434	0.00	1.25
28.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.073	0.000	33.434	0.00	0.38
30.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.074	0.000	33.906	0.00	29.95
30.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	33.906	0.00	0.38
30.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	33.906	0.00	11.59
30.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.074	0.000	33.906	0.00	1.25
30.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	33.906	0.00	1.25
30.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.074	0.000	33.906	0.00	0.38
32.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	34.356	0.00	29.95
32.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	34.356	0.00	0.38
32.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	34.356	0.00	11.59
32.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.075	0.000	34.356	0.00	1.25

Linear Appurtenance Segment Forces (Factored)

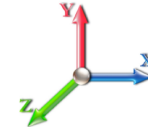
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	34.356	0.00	1.25
32.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.075	0.000	34.356	0.00	0.38
34.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	34.784	0.00	29.95
34.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	34.784	0.00	0.38
34.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	34.784	0.00	11.59
34.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.076	0.000	34.784	0.00	1.25
34.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	34.784	0.00	1.25
34.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.076	0.000	34.784	0.00	0.38
36.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	35.193	0.00	29.95
36.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	35.193	0.00	0.38
36.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	35.193	0.00	11.59
36.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.077	0.000	35.193	0.00	1.25
36.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	35.193	0.00	1.25
36.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.077	0.000	35.193	0.00	0.38
38.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	35.585	0.00	29.95
38.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.585	0.00	0.38
38.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.585	0.00	11.59
38.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.078	0.000	35.585	0.00	1.25
38.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.585	0.00	1.25
38.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.078	0.000	35.585	0.00	0.38
40.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	35.962	0.00	29.95
40.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.962	0.00	0.38
40.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.962	0.00	11.59
40.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.078	0.000	35.962	0.00	1.25
40.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.962	0.00	1.25
40.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.078	0.000	35.962	0.00	0.38
42.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	36.324	0.00	29.95
42.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	36.324	0.00	0.38
42.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	36.324	0.00	11.59
42.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.079	0.000	36.324	0.00	1.25
42.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	36.324	0.00	1.25
42.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.079	0.000	36.324	0.00	0.38
44.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.080	0.000	36.674	0.00	29.95
44.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	36.674	0.00	0.38
44.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	36.674	0.00	11.59
44.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.080	0.000	36.674	0.00	1.25
44.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	36.674	0.00	1.25
44.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.080	0.000	36.674	0.00	0.38
46.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	37.011	0.00	29.95
46.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	37.011	0.00	0.38
46.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	37.011	0.00	11.59
46.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.081	0.000	37.011	0.00	1.25
46.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	37.011	0.00	1.25
46.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.081	0.000	37.011	0.00	0.38
47.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.082	0.000	37.175	0.00	14.98
47.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	37.175	0.00	0.19
47.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	37.175	0.00	5.80

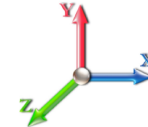
Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
47.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.082	0.000	37.175	0.00	0.62
47.00	7/8"	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	37.175	0.00	0.62
47.00	1/2"	Yes	1.00	0.000	0.65	0.05	0.00	0.082	0.000	37.175	0.00	0.19
47.50	1 5/8"	Yes	0.50	0.000	2.00	0.08	0.00	0.083	0.000	37.257	0.00	7.49
47.50	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.257	0.00	0.10
47.50	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.257	0.00	2.90
47.50	7/8"	Yes	0.50	0.000	1.11	0.05	0.00	0.083	0.000	37.257	0.00	0.31
47.50	7/8"	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.257	0.00	0.31
47.50	1/2"	Yes	0.50	0.000	0.65	0.03	0.00	0.083	0.000	37.257	0.00	0.10
48.00	1 5/8"	Yes	0.50	0.000	2.00	0.08	0.00	0.083	0.000	37.337	0.00	7.49
48.00	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.337	0.00	0.10
48.00	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.337	0.00	2.90
48.00	7/8"	Yes	0.50	0.000	1.11	0.05	0.00	0.083	0.000	37.337	0.00	0.31
48.00	7/8"	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.337	0.00	0.31
48.00	1/2"	Yes	0.50	0.000	0.65	0.03	0.00	0.083	0.000	37.337	0.00	0.10
50.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	37.653	0.00	29.95
50.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	37.653	0.00	0.38
50.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	37.653	0.00	11.59
50.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.083	0.000	37.653	0.00	1.25
50.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	37.653	0.00	1.25
50.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.083	0.000	37.653	0.00	0.38
52.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	37.959	0.00	29.95
52.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	37.959	0.00	0.38
52.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	37.959	0.00	11.59
52.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.070	0.000	37.959	0.00	1.25
52.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	37.959	0.00	1.25
53.25	1 5/8"	Yes	1.25	0.000	2.00	0.21	0.00	0.071	0.000	38.146	0.00	18.72
53.25	1/2" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	38.146	0.00	0.24
53.25	2" Conduit	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	38.146	0.00	7.25
53.25	7/8"	Yes	1.25	0.000	1.11	0.12	0.00	0.071	0.000	38.146	0.00	0.78
53.25	7/8"	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	38.146	0.00	0.78
54.00	1 5/8"	Yes	0.75	0.000	2.00	0.13	0.00	0.070	0.000	38.256	0.00	11.23
54.00	1/2" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	38.256	0.00	0.14
54.00	2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	38.256	0.00	4.35
54.00	7/8"	Yes	0.75	0.000	1.11	0.07	0.00	0.070	0.000	38.256	0.00	0.47
54.00	7/8"	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	38.256	0.00	0.47
56.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	38.545	0.00	29.95
56.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.545	0.00	0.38
56.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.545	0.00	11.59
56.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.071	0.000	38.545	0.00	1.25
56.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.545	0.00	1.25
58.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	38.826	0.00	29.95
58.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.826	0.00	0.38
58.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.826	0.00	11.59
58.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.071	0.000	38.826	0.00	1.25
58.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.826	0.00	1.25
60.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	39.099	0.00	29.95

Linear Appurtenance Segment Forces (Factored)

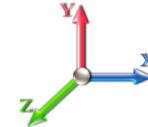
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
60.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	39.099	0.00	0.38
60.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	39.099	0.00	11.59
60.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.072	0.000	39.099	0.00	1.25
60.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	39.099	0.00	1.25
62.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	39.366	0.00	29.95
62.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	39.366	0.00	0.38
62.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	39.366	0.00	11.59
62.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.073	0.000	39.366	0.00	1.25
62.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	39.366	0.00	1.25
64.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.074	0.000	39.626	0.00	29.95
64.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	39.626	0.00	0.38
64.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	39.626	0.00	11.59
64.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.074	0.000	39.626	0.00	1.25
64.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	39.626	0.00	1.25
66.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	39.879	0.00	29.95
66.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	39.879	0.00	0.38
66.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	39.879	0.00	11.59
66.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.075	0.000	39.879	0.00	1.25
66.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	39.879	0.00	1.25
68.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	40.127	0.00	29.95
68.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.127	0.00	0.38
68.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.127	0.00	11.59
68.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.077	0.000	40.127	0.00	1.25
68.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.127	0.00	1.25
70.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	40.369	0.00	29.95
70.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.369	0.00	0.38
70.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.369	0.00	11.59
70.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.078	0.000	40.369	0.00	1.25
70.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.369	0.00	1.25
72.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	40.606	0.00	29.95
72.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	40.606	0.00	0.38
72.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	40.606	0.00	11.59
72.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.079	0.000	40.606	0.00	1.25
72.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	40.606	0.00	1.25
74.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.080	0.000	40.838	0.00	29.95
74.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	40.838	0.00	0.38
74.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	40.838	0.00	11.59
74.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.080	0.000	40.838	0.00	1.25
74.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	40.838	0.00	1.25
76.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	41.065	0.00	29.95
76.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	41.065	0.00	0.38
76.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	41.065	0.00	11.59
76.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.081	0.000	41.065	0.00	1.25
76.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	41.065	0.00	1.25
78.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.082	0.000	41.287	0.00	29.95
78.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	41.287	0.00	0.38
78.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	41.287	0.00	11.59

Linear Appurtenance Segment Forces (Factored)

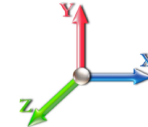
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
78.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.082	0.000	41.287	0.00	1.25
78.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	41.287	0.00	1.25
80.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.084	0.000	41.505	0.00	29.95
80.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	41.505	0.00	0.38
80.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	41.505	0.00	11.59
80.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.084	0.000	41.505	0.00	1.25
80.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	41.505	0.00	1.25
82.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	41.718	0.00	29.95
82.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	41.718	0.00	0.38
82.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	41.718	0.00	11.59
82.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.085	0.000	41.718	0.00	1.25
84.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.086	0.000	41.928	0.00	29.95
84.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	41.928	0.00	0.38
84.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	41.928	0.00	11.59
84.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.086	0.000	41.928	0.00	1.25
86.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.088	0.000	42.134	0.00	29.95
86.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	42.134	0.00	0.38
86.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	42.134	0.00	11.59
86.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.088	0.000	42.134	0.00	1.25
88.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.089	0.000	42.336	0.00	29.95
88.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	42.336	0.00	0.38
88.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	42.336	0.00	11.59
88.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.089	0.000	42.336	0.00	1.25
90.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.091	0.000	42.534	0.00	29.95
90.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	42.534	0.00	0.38
90.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	42.534	0.00	11.59
90.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.091	0.000	42.534	0.00	1.25
92.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.092	0.000	42.730	0.00	29.95
92.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	42.730	0.00	0.38
92.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	42.730	0.00	11.59
92.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.092	0.000	42.730	0.00	1.25
94.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.094	0.000	42.921	0.00	29.95
94.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	42.921	0.00	0.38
94.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	42.921	0.00	11.59
94.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.094	0.000	42.921	0.00	1.25
96.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.095	0.000	43.110	0.00	29.95
96.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	43.110	0.00	0.38
96.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	43.110	0.00	11.59
96.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.095	0.000	43.110	0.00	1.25
97.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.097	0.000	43.203	0.00	14.98
97.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	43.203	0.00	0.19
97.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	43.203	0.00	5.80
97.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.097	0.000	43.203	0.00	0.62
98.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.098	0.000	43.296	0.00	14.98
98.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	43.296	0.00	0.19
98.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	43.296	0.00	5.80
98.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.098	0.000	43.296	0.00	0.62

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
100.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.099	0.000	43.478	0.00	29.95
100.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	43.478	0.00	0.38
100.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	43.478	0.00	11.59
100.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.099	0.000	43.478	0.00	1.25
101.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.100	1.001	43.569	0.00	14.98
101.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	43.569	0.00	0.19
101.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	43.569	0.00	5.80
101.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.100	1.001	43.569	0.00	0.62
102.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.099	0.000	43.658	0.00	14.98
102.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.099	0.000	43.658	0.00	0.19
102.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.099	0.000	43.658	0.00	5.80
102.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.099	0.000	43.658	0.00	0.62
104.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.101	1.002	43.835	0.00	29.95
104.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	43.835	0.00	0.38
104.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	43.835	0.00	11.59
104.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.101	1.002	43.835	0.00	1.25
106.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.102	1.007	44.010	0.00	29.95
106.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.007	44.010	0.00	0.38
106.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.007	44.010	0.00	11.59
106.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.102	1.007	44.010	0.00	1.25
108.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.104	1.013	44.182	0.00	29.95
108.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.013	44.182	0.00	0.38
108.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.013	44.182	0.00	11.59
108.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.104	1.013	44.182	0.00	1.25
110.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.106	1.019	44.351	0.00	29.95
110.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	44.351	0.00	0.38
110.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	44.351	0.00	11.59
110.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.106	1.019	44.351	0.00	1.25
112.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	44.518	0.00	29.95
112.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	44.518	0.00	0.38
112.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	44.518	0.00	11.59
114.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	44.683	0.00	29.95
114.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	44.683	0.00	0.38
114.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	44.683	0.00	11.59
116.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	44.845	0.00	29.95
116.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	44.845	0.00	0.38
116.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	44.845	0.00	11.59
118.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.074	0.000	45.006	0.00	29.95
118.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	45.006	0.00	0.38
118.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	45.006	0.00	11.59
120.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	45.164	0.00	29.95
120.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	45.164	0.00	0.38
120.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	45.164	0.00	11.59
122.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	45.320	0.00	29.95
122.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	45.320	0.00	0.38
122.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	45.320	0.00	11.59
124.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	45.474	0.00	29.95

Linear Appurtenance Segment Forces (Factored)

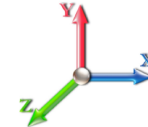
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
124.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	45.474	0.00	0.38
124.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	45.474	0.00	11.59
126.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	45.627	0.00	29.95
126.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	45.627	0.00	0.38
126.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	45.627	0.00	11.59
128.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	45.777	0.00	29.95
128.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	45.777	0.00	0.38
128.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	45.777	0.00	11.59
130.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	45.925	0.00	29.95
130.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	45.925	0.00	0.38
130.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	45.925	0.00	11.59
131.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.087	0.000	45.999	0.00	14.98
131.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.087	0.000	45.999	0.00	0.19
131.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.087	0.000	45.999	0.00	5.80
132.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.088	0.000	46.072	0.00	14.98
132.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.088	0.000	46.072	0.00	0.19
132.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.088	0.000	46.072	0.00	5.80
134.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.090	0.000	46.217	0.00	29.95
134.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	46.217	0.00	0.38
134.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	46.217	0.00	11.59
136.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.092	0.000	46.360	0.00	29.95
136.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	46.360	0.00	0.38
136.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	46.360	0.00	11.59
138.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.094	0.000	46.502	0.00	29.95
138.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	46.502	0.00	0.38
138.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	46.502	0.00	11.59
140.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.097	0.000	46.642	0.00	29.95
140.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	46.642	0.00	0.38
140.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	46.642	0.00	11.59
142.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.100	0.000	46.781	0.00	29.95
142.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	46.781	0.00	0.38
142.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	46.781	0.00	11.59
144.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.103	1.009	46.918	0.00	29.95
144.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	46.918	0.00	0.38
144.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	46.918	0.00	11.59
146.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.106	1.018	47.053	0.00	29.95
146.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	47.053	0.00	0.38
146.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	47.053	0.00	11.59
148.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.028	47.187	0.00	29.95
148.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	47.187	0.00	0.38
148.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	47.187	0.00	11.59
148.25	1 5/8"	Yes	0.25	0.000	2.00	0.04	0.00	0.111	1.034	47.204	0.00	3.74
148.25	1/2" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.111	1.034	47.204	0.00	0.05
148.25	2" Conduit	Yes	0.25	0.000	0.00	0.00	0.00	0.111	1.034	47.204	0.00	1.45
149.00	1 5/8"	Yes	0.75	0.000	2.00	0.13	0.00	0.112	1.037	47.254	0.00	11.23
149.00	1/2" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.112	1.037	47.254	0.00	0.14
149.00	2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	0.112	1.037	47.254	0.00	4.35

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0W 120 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
150.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.041	47.320	0.00	14.98
150.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	47.320	0.00	0.19
150.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	47.320	0.00	5.80
150.50	1 5/8"	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.046	47.353	0.00	7.49
150.50	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.046	47.353	0.00	0.10
150.50	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.046	47.353	0.00	2.90
152.00	1 5/8"	Yes	1.50	0.000	2.00	0.25	0.00	0.115	1.044	47.451	0.00	22.46
152.00	1/2" Fiber	Yes	1.50	0.000	0.00	0.00	0.00	0.115	1.044	47.451	0.00	0.29
152.00	2" Conduit	Yes	1.50	0.000	0.00	0.00	0.00	0.115	1.044	47.451	0.00	8.69
154.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.054	47.581	0.00	29.95
154.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	47.581	0.00	0.38
154.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	47.581	0.00	11.59
156.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	47.710	0.00	29.95
156.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	47.710	0.00	0.38
156.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	47.710	0.00	11.59
158.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	47.837	0.00	29.95
158.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	47.837	0.00	0.38
158.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	47.837	0.00	11.59
159.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.130	1.090	47.900	0.00	14.98
159.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.130	1.090	47.900	0.00	0.19
159.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.130	1.090	47.900	0.00	5.80
Totals:											0.0	3,461.4

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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90.00	-22.81	-29.25	0.00	-1534.0	0.00	1534.03	2930.09	692.15	1902.89	1990.89	45.82	-5.352	0.000	0.780
92.00	-22.31	-29.08	0.00	-1475.5	0.00	1475.52	2880.09	680.34	1838.49	1923.14	48.10	-5.509	0.000	0.777
94.00	-21.80	-28.91	0.00	-1417.3	0.00	1417.36	2830.08	668.52	1775.20	1856.56	50.43	-5.667	0.000	0.773
96.00	-21.32	-28.72	0.00	-1359.5	0.00	1359.55	2780.07	656.71	1713.01	1791.15	52.84	-5.827	0.000	0.769
97.00	-21.07	-28.64	0.00	-1330.8	0.00	1330.83	2755.06	650.80	1682.34	1758.89	54.07	-5.909	0.000	0.766
98.00	-20.68	-28.55	0.00	-1302.1	0.00	1302.19	2730.06	644.90	1651.94	1726.92	55.31	-5.992	0.000	0.764
100.00	-19.96	-28.34	0.00	-1245.0	0.00	1245.09	2680.05	633.08	1591.98	1663.86	57.85	-6.155	0.000	0.758
101.00	-19.60	-28.24	0.00	-1216.7	0.00	1216.75	2260.99	534.61	1362.32	1425.54	59.15	-6.239	0.000	0.865
102.00	-19.35	-28.17	0.00	-1188.5	0.00	1188.51	2242.36	529.69	1337.35	1400.64	60.46	-6.323	0.000	0.860
104.00	-18.91	-28.01	0.00	-1132.1	0.00	1132.17	2200.69	519.85	1288.10	1348.81	63.15	-6.510	0.000	0.851
106.00	-18.47	-27.85	0.00	-1076.1	0.00	1076.14	2159.02	510.00	1239.78	1297.95	65.91	-6.698	0.000	0.841
108.00	-18.03	-27.69	0.00	-1020.4	0.00	1020.44	2117.34	500.16	1192.38	1248.07	68.75	-6.888	0.000	0.829
110.00	-17.57	-27.24	0.00	-964.45	0.00	964.45	2075.67	490.32	1145.90	1199.16	71.67	-7.078	0.000	0.816
112.00	-17.14	-27.09	0.00	-909.97	0.00	909.97	2034.00	480.47	1100.35	1151.23	74.67	-7.268	0.000	0.802
114.00	-16.73	-26.93	0.00	-855.80	0.00	855.80	1992.32	470.63	1055.73	1104.29	77.74	-7.459	0.000	0.787
116.00	-16.32	-26.78	0.00	-801.94	0.00	801.94	1950.65	460.78	1012.02	1058.31	80.90	-7.649	0.000	0.769
118.00	-15.91	-26.62	0.00	-748.39	0.00	748.39	1908.98	450.94	969.24	1013.32	84.14	-7.839	0.000	0.750
120.00	-15.52	-26.47	0.00	-695.14	0.00	695.14	1867.30	441.10	927.39	969.30	87.45	-8.027	0.000	0.729
122.00	-15.12	-26.32	0.00	-642.20	0.00	642.20	1825.63	431.25	886.45	926.26	90.84	-8.214	0.000	0.705
124.00	-14.74	-26.16	0.00	-589.57	0.00	589.57	1783.96	421.41	846.45	884.20	94.31	-8.398	0.000	0.679
126.00	-14.36	-26.01	0.00	-537.24	0.00	537.24	1742.28	411.56	807.36	843.12	97.86	-8.578	0.000	0.649
128.00	-13.99	-25.86	0.00	-485.22	0.00	485.22	1700.61	401.72	769.20	803.01	101.48	-8.754	0.000	0.617
130.00	-13.64	-25.70	0.00	-433.50	0.00	433.50	1658.94	391.87	731.96	763.88	105.17	-8.923	0.000	0.580
131.00	-12.26	-20.16	0.00	-407.80	0.00	407.80	1638.10	386.95	713.69	744.68	107.04	-9.007	0.000	0.558
132.00	-12.09	-20.10	0.00	-387.64	0.00	387.64	1617.26	382.03	695.65	725.73	108.92	-9.089	0.000	0.544
134.00	-11.79	-19.95	0.00	-347.44	0.00	347.44	1575.59	372.19	660.26	688.55	112.75	-9.247	0.000	0.515
136.00	-11.50	-19.80	0.00	-307.55	0.00	307.55	1533.91	362.34	625.80	652.35	116.64	-9.399	0.000	0.482
138.00	-11.21	-19.66	0.00	-267.95	0.00	267.95	1492.24	352.50	592.26	617.13	120.59	-9.544	0.000	0.445
140.00	-8.22	-13.81	0.00	-228.63	0.00	228.63	1450.57	342.65	559.64	582.89	124.60	-9.680	0.000	0.400
142.00	-8.00	-13.67	0.00	-201.01	0.00	201.01	1408.89	332.81	527.94	549.63	128.67	-9.808	0.000	0.373
144.00	-7.79	-13.53	0.00	-173.67	0.00	173.67	1367.22	322.97	497.17	517.34	132.78	-9.929	0.000	0.343
146.00	-7.58	-13.39	0.00	-146.61	0.00	146.61	1325.55	313.12	467.33	486.03	136.94	-10.043	0.000	0.309
148.00	-7.39	-13.24	0.00	-119.83	0.00	119.83	1283.87	303.28	438.41	455.70	141.15	-10.147	0.000	0.271
148.25	-7.36	-13.23	0.00	-116.52	0.00	116.52	1278.66	302.05	434.86	451.97	141.68	-10.160	0.000	0.265
149.00	-5.08	-8.47	0.00	-102.46	0.00	102.46	1263.04	298.36	424.29	440.90	143.27	-10.196	0.000	0.237
150.00	-4.95	-8.39	0.00	-93.99	0.00	93.99	1242.20	293.43	410.41	426.34	145.40	-10.241	0.000	0.225
150.50	-4.88	-8.35	0.00	-89.79	0.00	89.79	761.18	179.81	256.83	268.82	146.47	-10.262	0.000	0.343
152.00	-4.78	-8.26	0.00	-77.27	0.00	77.27	742.42	175.38	244.33	255.67	149.69	-10.323	0.000	0.311
154.00	-4.66	-8.13	0.00	-60.75	0.00	60.75	717.42	169.47	228.15	238.65	154.01	-10.434	0.000	0.263
156.00	-4.55	-8.00	0.00	-44.50	0.00	44.50	692.41	163.56	212.53	222.21	158.38	-10.527	0.000	0.209
158.00	-4.44	-7.88	0.00	-28.49	0.00	28.49	667.41	157.66	197.45	206.36	162.78	-10.599	0.000	0.147
159.00	0.00	-6.92	0.00	-20.61	0.00	20.61	654.91	154.70	190.13	198.65	164.99	-10.626	0.000	0.106

Wind Loading - Shaft

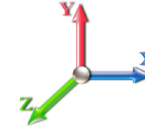
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	29.139	32.05	539.17	0.730	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	29.139	32.05	533.93	0.730	0.000	2.00	9.803	7.16	229.4	0.0	419.6
4.00		1.00	0.85	29.139	32.05	528.69	0.730	0.000	2.00	9.708	7.09	227.2	0.0	415.4
6.00		1.00	0.85	29.139	32.05	523.45	0.730	0.000	2.00	9.612	7.02	224.9	0.0	411.3
8.00		1.00	0.85	29.139	32.05	518.21	0.730	0.000	2.00	9.516	6.95	222.7	0.0	407.2
10.00		1.00	0.85	29.139	32.05	512.98	0.730	0.000	2.00	9.421	6.88	220.4	0.0	403.1
12.00		1.00	0.85	29.139	32.05	507.74	0.730	0.000	2.00	9.325	6.81	218.2	0.0	398.9
14.00		1.00	0.85	29.139	32.05	502.50	0.730	0.000	2.00	9.229	6.74	216.0	0.0	394.8
16.00		1.00	0.87	29.878	32.87	503.52	0.730	0.000	2.00	9.134	6.67	219.1	0.0	390.7
18.00		1.00	0.89	30.586	33.64	504.09	0.730	0.000	2.00	9.038	6.60	222.0	0.0	386.6
20.00		1.00	0.91	31.237	34.36	504.00	0.730	0.000	2.00	8.942	6.53	224.3	0.0	382.5
22.00		1.00	0.93	31.841	35.03	503.38	0.730	0.000	2.00	8.846	6.46	226.2	0.0	378.3
24.00		1.00	0.95	32.405	35.65	502.29	0.730	0.000	2.00	8.751	6.39	227.7	0.0	374.2
26.00		1.00	0.96	32.934	36.23	500.81	0.730	0.000	2.00	8.655	6.32	228.9	0.0	370.1
28.00		1.00	0.98	33.434	36.78	498.98	0.730	0.000	2.00	8.559	6.25	229.8	0.0	366.0
30.00		1.00	0.99	33.906	37.30	496.84	0.730	0.000	2.00	8.464	6.18	230.4	0.0	361.8
32.00		1.00	1.00	34.356	37.79	494.44	0.730	0.000	2.00	8.368	6.11	230.8	0.0	357.7
34.00		1.00	1.01	34.784	38.26	491.78	0.730	0.000	2.00	8.272	6.04	231.1	0.0	353.6
36.00		1.00	1.03	35.193	38.71	488.91	0.730	0.000	2.00	8.176	5.97	231.1	0.0	349.5
38.00		1.00	1.04	35.585	39.14	485.84	0.730	0.000	2.00	8.081	5.90	230.9	0.0	345.3
40.00		1.00	1.05	35.962	39.56	482.59	0.730	0.000	2.00	7.985	5.83	230.6	0.0	341.2
42.00		1.00	1.06	36.324	39.96	479.16	0.730	0.000	2.00	7.889	5.76	230.1	0.0	337.1
44.00		1.00	1.07	36.674	40.34	475.58	0.730	0.000	2.00	7.794	5.69	229.5	0.0	333.0
46.00		1.00	1.08	37.011	40.71	471.86	0.730	0.000	2.00	7.698	5.62	228.8	0.0	328.9
47.00	Appurtenance(s)	1.00	1.08	37.175	40.89	469.95	0.730	0.000	1.00	3.813	2.78	113.8	0.0	162.9
47.50	Bot - Section 2	1.00	1.09	37.257	40.98	468.98	0.730	0.000	0.50	1.898	1.39	56.8	0.0	81.1
48.00		1.00	1.09	37.337	41.07	468.01	0.730	0.000	0.50	1.923	1.40	57.7	0.0	163.0
50.00		1.00	1.10	37.653	41.42	464.03	0.730	0.000	2.00	7.633	5.57	230.8	0.0	646.7
52.00		1.00	1.11	37.959	41.76	459.93	0.730	0.000	2.00	7.538	5.50	229.8	0.0	638.4
53.25	Top - Section 1	1.00	1.11	38.146	41.96	457.32	0.730	0.000	1.25	4.662	3.40	142.8	0.0	394.8
54.00		1.00	1.12	38.256	42.08	463.69	0.730	0.000	0.75	2.780	2.03	85.4	0.0	118.7
56.00		1.00	1.12	38.545	42.40	459.41	0.730	0.000	2.00	7.346	5.36	227.4	0.0	313.7
58.00		1.00	1.13	38.826	42.71	455.03	0.730	0.000	2.00	7.251	5.29	226.1	0.0	309.6
60.00		1.00	1.14	39.099	43.01	450.56	0.730	0.000	2.00	7.155	5.22	224.6	0.0	305.5
62.00		1.00	1.15	39.366	43.30	446.01	0.730	0.000	2.00	7.059	5.15	223.1	0.0	301.3
64.00		1.00	1.16	39.626	43.59	441.37	0.730	0.000	2.00	6.963	5.08	221.6	0.0	297.2
66.00		1.00	1.16	39.879	43.87	436.65	0.730	0.000	2.00	6.868	5.01	219.9	0.0	293.1
68.00		1.00	1.17	40.127	44.14	431.86	0.730	0.000	2.00	6.772	4.94	218.2	0.0	289.0
70.00		1.00	1.18	40.369	44.41	427.00	0.730	0.000	2.00	6.676	4.87	216.4	0.0	284.9
72.00		1.00	1.18	40.606	44.67	422.06	0.730	0.000	2.00	6.581	4.80	214.6	0.0	280.7
74.00		1.00	1.19	40.838	44.92	417.06	0.730	0.000	2.00	6.485	4.73	212.7	0.0	276.6
76.00		1.00	1.20	41.065	45.17	412.00	0.730	0.000	2.00	6.389	4.66	210.7	0.0	272.5
78.00		1.00	1.20	41.287	45.42	406.88	0.730	0.000	2.00	6.293	4.59	208.6	0.0	268.4
80.00	Appurtenance(s)	1.00	1.21	41.505	45.66	401.70	0.730	0.000	2.00	6.198	4.52	206.6	0.0	264.2
82.00		1.00	1.22	41.718	45.89	396.47	0.730	0.000	2.00	6.102	4.45	204.4	0.0	260.1
84.00		1.00	1.22	41.928	46.12	391.18	0.730	0.000	2.00	6.006	4.38	202.2	0.0	256.0
86.00		1.00	1.23	42.134	46.35	385.84	0.730	0.000	2.00	5.911	4.31	200.0	0.0	251.9

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00	1.00	1.23	42.336	46.57	380.45	0.730	0.000	2.00	5.815	4.24	197.7	0.0	247.7
90.00	1.00	1.24	42.534	46.79	375.01	0.730	0.000	2.00	5.719	4.17	195.3	0.0	243.6
92.00	1.00	1.25	42.730	47.00	369.53	0.730	0.000	2.00	5.623	4.11	193.0	0.0	239.5
94.00	1.00	1.25	42.921	47.21	364.00	0.730	0.000	2.00	5.528	4.04	190.5	0.0	235.4
96.00	1.00	1.26	43.110	47.42	358.42	0.730	0.000	2.00	5.432	3.97	188.0	0.0	231.3
97.00 Bot - Section 3	1.00	1.26	43.203	47.52	355.62	0.730	0.000	1.00	2.680	1.96	93.0	0.0	114.1
98.00	1.00	1.26	43.296	47.63	352.81	0.730	0.000	1.00	2.709	1.98	94.2	0.0	209.3
100.00	1.00	1.27	43.478	47.83	347.16	0.730	0.000	2.00	5.346	3.90	186.7	0.0	413.0
101.00 Top - Section 2	1.00	1.27	43.569	47.93	344.31	0.731 *	0.000	1.00	2.637	1.93	92.3	0.0	203.7
102.00	1.00	1.27	43.658	48.02	348.55	0.730	0.000	1.00	2.613	1.91	91.6	0.0	92.9
104.00	1.00	1.28	43.835	48.22	342.83	0.731 *	0.000	2.00	5.155	3.77	181.8	0.0	183.1
106.00	1.00	1.28	44.010	48.41	337.07	0.735 *	0.000	2.00	5.059	3.72	180.1	0.0	179.7
108.00	1.00	1.29	44.182	48.60	331.28	0.740 *	0.000	2.00	4.964	3.67	178.4	0.0	176.3
110.00 Appurtenance(s)	1.00	1.29	44.351	48.79	325.45	0.744 *	0.000	2.00	4.868	3.62	176.7	0.0	172.8
112.00	1.00	1.30	44.518	48.97	319.59	0.730	0.000	2.00	4.772	3.48	170.6	0.0	169.4
114.00	1.00	1.30	44.683	49.15	313.69	0.730	0.000	2.00	4.676	3.41	167.8	0.0	166.0
116.00	1.00	1.31	44.845	49.33	307.77	0.730	0.000	2.00	4.581	3.34	165.0	0.0	162.5
118.00	1.00	1.31	45.006	49.51	301.81	0.730	0.000	2.00	4.485	3.27	162.1	0.0	159.1
120.00	1.00	1.32	45.164	49.68	295.81	0.730	0.000	2.00	4.389	3.20	159.2	0.0	155.7
122.00	1.00	1.32	45.320	49.85	289.79	0.730	0.000	2.00	4.294	3.13	156.3	0.0	152.2
124.00	1.00	1.33	45.474	50.02	283.74	0.730	0.000	2.00	4.198	3.06	153.3	0.0	148.8
126.00	1.00	1.33	45.627	50.19	277.66	0.730	0.000	2.00	4.102	2.99	150.3	0.0	145.4
128.00	1.00	1.34	45.777	50.35	271.55	0.730	0.000	2.00	4.006	2.92	147.3	0.0	141.9
130.00	1.00	1.34	45.925	50.52	265.42	0.730	0.000	2.00	3.911	2.85	144.2	0.0	138.5
131.00 Appurtenance(s)	1.00	1.34	45.999	50.60	262.34	0.730	0.000	1.00	1.919	1.40	70.9	0.0	68.0
132.00	1.00	1.34	46.072	50.68	259.25	0.730	0.000	1.00	1.896	1.38	70.1	0.0	67.1
134.00	1.00	1.35	46.217	50.84	253.06	0.730	0.000	2.00	3.719	2.72	138.0	0.0	131.6
136.00	1.00	1.35	46.360	51.00	246.85	0.730	0.000	2.00	3.624	2.65	134.9	0.0	128.2
138.00	1.00	1.36	46.502	51.15	240.61	0.730	0.000	2.00	3.528	2.58	131.7	0.0	124.7
140.00 Appurtenance(s)	1.00	1.36	46.642	51.31	234.34	0.730	0.000	2.00	3.432	2.51	128.5	0.0	121.3
142.00	1.00	1.36	46.781	51.46	228.05	0.730	0.000	2.00	3.336	2.44	125.3	0.0	117.9
144.00	1.00	1.37	46.918	51.61	221.74	0.736 *	0.000	2.00	3.241	2.39	123.1	0.0	114.4
146.00	1.00	1.37	47.053	51.76	215.40	0.743 *	0.000	2.00	3.145	2.34	121.0	0.0	111.0
148.00	1.00	1.38	47.187	51.91	209.04	0.750 *	0.000	2.00	3.049	2.29	118.8	0.0	107.6
148.25 Bot - Section 4	1.00	1.38	47.204	51.92	208.25	0.755 *	0.000	0.25	0.374	0.28	14.7	0.0	13.2
149.00 Appurtenance(s)	1.00	1.38	47.254	51.98	205.86	0.757 *	0.000	0.75	1.138	0.86	44.8	0.0	63.5
150.00	1.00	1.38	47.320	52.05	202.66	0.760 *	0.000	1.00	1.497	1.14	59.2	0.0	83.5
150.50 Top - Section 3	1.00	1.38	47.353	52.09	201.06	0.763 *	0.000	0.50	0.739	0.56	29.4	0.0	41.2
152.00	1.00	1.38	47.451	52.20	200.69	0.762 *	0.000	1.50	2.182	1.66	86.8	0.0	46.5
154.00	1.00	1.39	47.581	52.34	194.27	0.769 *	0.000	2.00	2.826	2.17	113.8	0.0	60.2
156.00	1.00	1.39	47.710	52.48	187.83	0.778 *	0.000	2.00	2.730	2.13	111.5	0.0	58.1
158.00	1.00	1.40	47.837	52.62	181.37	0.788 *	0.000	2.00	2.634	2.08	109.2	0.0	56.1
159.00 Appurtenance(s)	1.00	1.40	47.900	52.69	178.13	0.796 *	0.000	1.00	1.281	1.02	53.7	0.0	27.3

* Cf Adjusted by Linear Load Ra Effect

Totals:	159.00	15,164.9		21,360.2
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Discrete Appurtenance Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Totals: 10,985.93

22,166.42

Total Applied Force Summary

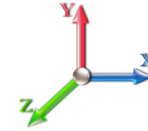
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		229.39	518.75	0.00	0.00
4.00		227.15	514.62	0.00	0.00
6.00		224.91	510.50	0.00	0.00
8.00		222.67	506.38	0.00	0.00
10.00		220.43	502.26	0.00	0.00
12.00		218.19	498.13	0.00	0.00
14.00		215.95	494.01	0.00	0.00
16.00		219.13	489.89	0.00	0.00
18.00		221.97	485.77	0.00	0.00
20.00		224.30	481.64	0.00	0.00
22.00		226.19	477.52	0.00	0.00
24.00		227.70	473.40	0.00	0.00
26.00		228.89	469.27	0.00	0.00
28.00		229.79	465.15	0.00	0.00
30.00		230.44	461.03	0.00	0.00
32.00		230.85	456.91	0.00	0.00
34.00		231.05	452.78	0.00	0.00
36.00		231.07	448.66	0.00	0.00
38.00		230.91	444.54	0.00	0.00
40.00		230.59	440.42	0.00	0.00
42.00		230.12	436.29	0.00	0.00
44.00		229.51	432.17	0.00	0.00
46.00		228.78	428.05	0.00	0.00
47.00	(2) attachments	263.58	269.47	0.00	19.88
47.50		56.77	105.85	0.00	0.00
48.00		57.66	187.76	0.00	0.00
50.00		230.80	745.88	0.00	0.00
52.00		229.76	737.35	0.00	0.00
53.25		142.82	456.65	0.00	0.00
54.00		85.39	155.79	0.00	0.00
56.00		227.38	412.61	0.00	0.00
58.00		226.05	408.49	0.00	0.00
60.00		224.64	404.37	0.00	0.00
62.00		223.14	400.24	0.00	0.00
64.00		221.57	396.12	0.00	0.00
66.00		219.92	392.00	0.00	0.00
68.00		218.21	387.88	0.00	0.00
70.00		216.42	383.75	0.00	0.00
72.00		214.57	379.63	0.00	0.00
74.00		212.66	375.51	0.00	0.00
76.00		210.68	371.39	0.00	0.00
78.00		208.65	367.26	0.00	0.00
80.00	(2) attachments	469.13	420.49	0.00	570.42
82.00		204.42	358.08	0.00	0.00
84.00		202.22	353.96	0.00	0.00
86.00		199.98	349.84	0.00	0.00

Total Applied Force Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00		197.68	345.71	0.00	0.00
90.00		195.34	341.59	0.00	0.00
92.00		192.95	337.47	0.00	0.00
94.00		190.52	333.34	0.00	0.00
96.00		188.04	329.22	0.00	0.00
97.00		92.98	163.06	0.00	0.00
98.00		94.19	258.33	0.00	0.00
100.00		186.66	510.99	0.00	0.00
101.00		92.35	252.66	0.00	0.00
102.00		91.62	141.84	0.00	0.00
104.00		181.75	281.11	0.00	0.00
106.00		180.11	277.68	0.00	0.00
108.00		178.44	274.24	0.00	0.00
110.00	(2) attachments	456.91	328.15	0.00	607.30
112.00		170.60	266.43	0.00	0.00
114.00		167.79	263.00	0.00	0.00
116.00		164.96	259.56	0.00	0.00
118.00		162.09	256.13	0.00	0.00
120.00		159.19	252.69	0.00	0.00
122.00		156.25	249.26	0.00	0.00
124.00		153.29	245.82	0.00	0.00
126.00		150.30	242.39	0.00	0.00
128.00		147.27	238.95	0.00	0.00
130.00		144.22	235.51	0.00	0.00
131.00	(26) attachments	5277.31	1655.47	0.00	0.00
132.00		70.13	103.39	0.00	0.00
134.00		138.03	204.20	0.00	0.00
136.00		134.90	200.76	0.00	0.00
138.00		131.74	197.33	0.00	0.00
140.00	(28) attachments	5285.31	2921.93	0.00	0.00
142.00		125.33	161.08	0.00	0.00
144.00		123.14	157.64	0.00	0.00
146.00		120.97	154.21	0.00	0.00
148.00		118.77	150.77	0.00	0.00
148.25		14.67	18.61	0.00	0.00
149.00	(24) attachments	4284.93	2310.96	0.00	4140.09
150.00		59.22	105.13	0.00	0.00
150.50		29.39	52.05	0.00	0.00
152.00		86.78	75.46	0.00	0.00
154.00		113.78	96.52	0.00	0.00
156.00		111.52	94.46	0.00	0.00
158.00		109.25	92.40	0.00	0.00
159.00	(39) attachments	6924.30	4361.43	0.00	20611.72
	Totals:	37,331.36	39,507.44	0.00	25,949.41

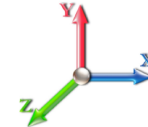
Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.064	0.000	29.139	0.00	22.46
2.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	29.139	0.00	0.29
2.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	29.139	0.00	8.69
2.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.064	0.000	29.139	0.00	0.94
2.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	29.139	0.00	0.94
2.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.064	0.000	29.139	0.00	0.29
4.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.065	0.000	29.139	0.00	22.46
4.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	0.29
4.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	8.69
4.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.065	0.000	29.139	0.00	0.94
4.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	0.94
4.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.065	0.000	29.139	0.00	0.29
6.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.065	0.000	29.139	0.00	22.46
6.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	0.29
6.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	8.69
6.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.065	0.000	29.139	0.00	0.94
6.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	29.139	0.00	0.94
6.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.065	0.000	29.139	0.00	0.29
8.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.066	0.000	29.139	0.00	22.46
8.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	29.139	0.00	0.29
8.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	29.139	0.00	8.69
8.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.066	0.000	29.139	0.00	0.94
8.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	29.139	0.00	0.94
8.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.066	0.000	29.139	0.00	0.29
10.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	29.139	0.00	22.46
10.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	0.29
10.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	8.69
10.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.067	0.000	29.139	0.00	0.94
10.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	0.94
10.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.067	0.000	29.139	0.00	0.29
12.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	29.139	0.00	22.46
12.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	0.29
12.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	8.69
12.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.067	0.000	29.139	0.00	0.94
12.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	29.139	0.00	0.94
12.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.067	0.000	29.139	0.00	0.29
14.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.068	0.000	29.139	0.00	22.46
14.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	29.139	0.00	0.29
14.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	29.139	0.00	8.69
14.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.068	0.000	29.139	0.00	0.94
14.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	29.139	0.00	0.94
14.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.068	0.000	29.139	0.00	0.29
16.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.069	0.000	29.878	0.00	22.46
16.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	29.878	0.00	0.29
16.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	29.878	0.00	8.69
16.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.069	0.000	29.878	0.00	0.94
16.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	29.878	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

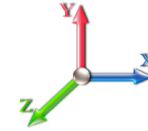
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
16.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.069	0.000	29.878	0.00	0.29
18.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.069	0.000	30.586	0.00	22.46
18.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	30.586	0.00	0.29
18.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	30.586	0.00	8.69
18.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.069	0.000	30.586	0.00	0.94
18.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	30.586	0.00	0.94
18.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.069	0.000	30.586	0.00	0.29
20.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	31.237	0.00	22.46
20.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	31.237	0.00	0.29
20.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	31.237	0.00	8.69
20.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.070	0.000	31.237	0.00	0.94
20.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	31.237	0.00	0.94
20.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.070	0.000	31.237	0.00	0.29
22.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	31.841	0.00	22.46
22.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.841	0.00	0.29
22.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.841	0.00	8.69
22.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.071	0.000	31.841	0.00	0.94
22.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.841	0.00	0.94
22.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.071	0.000	31.841	0.00	0.29
24.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	32.405	0.00	22.46
24.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.405	0.00	0.29
24.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.405	0.00	8.69
24.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.072	0.000	32.405	0.00	0.94
24.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.405	0.00	0.94
24.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.072	0.000	32.405	0.00	0.29
26.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	32.934	0.00	22.46
26.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.934	0.00	0.29
26.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.934	0.00	8.69
26.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.072	0.000	32.934	0.00	0.94
26.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	32.934	0.00	0.94
26.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.072	0.000	32.934	0.00	0.29
28.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	33.434	0.00	22.46
28.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	33.434	0.00	0.29
28.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	33.434	0.00	8.69
28.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.073	0.000	33.434	0.00	0.94
28.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	33.434	0.00	0.94
28.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.073	0.000	33.434	0.00	0.29
30.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.074	0.000	33.906	0.00	22.46
30.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	33.906	0.00	0.29
30.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	33.906	0.00	8.69
30.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.074	0.000	33.906	0.00	0.94
30.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	33.906	0.00	0.94
30.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.074	0.000	33.906	0.00	0.29
32.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	34.356	0.00	22.46
32.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	34.356	0.00	0.29
32.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	34.356	0.00	8.69
32.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.075	0.000	34.356	0.00	0.94

Linear Appurtenance Segment Forces (Factored)

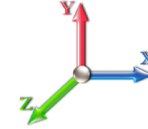
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	34.356	0.00	0.94
32.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.075	0.000	34.356	0.00	0.29
34.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	34.784	0.00	22.46
34.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	34.784	0.00	0.29
34.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	34.784	0.00	8.69
34.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.076	0.000	34.784	0.00	0.94
34.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	34.784	0.00	0.94
34.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.076	0.000	34.784	0.00	0.29
36.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	35.193	0.00	22.46
36.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	35.193	0.00	0.29
36.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	35.193	0.00	8.69
36.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.077	0.000	35.193	0.00	0.94
36.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	35.193	0.00	0.94
36.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.077	0.000	35.193	0.00	0.29
38.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	35.585	0.00	22.46
38.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.585	0.00	0.29
38.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.585	0.00	8.69
38.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.078	0.000	35.585	0.00	0.94
38.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.585	0.00	0.94
38.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.078	0.000	35.585	0.00	0.29
40.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	35.962	0.00	22.46
40.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.962	0.00	0.29
40.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.962	0.00	8.69
40.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.078	0.000	35.962	0.00	0.94
40.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	35.962	0.00	0.94
40.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.078	0.000	35.962	0.00	0.29
42.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	36.324	0.00	22.46
42.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	36.324	0.00	0.29
42.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	36.324	0.00	8.69
42.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.079	0.000	36.324	0.00	0.94
42.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	36.324	0.00	0.94
42.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.079	0.000	36.324	0.00	0.29
44.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.080	0.000	36.674	0.00	22.46
44.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	36.674	0.00	0.29
44.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	36.674	0.00	8.69
44.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.080	0.000	36.674	0.00	0.94
44.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	36.674	0.00	0.94
44.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.080	0.000	36.674	0.00	0.29
46.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	37.011	0.00	22.46
46.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	37.011	0.00	0.29
46.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	37.011	0.00	8.69
46.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.081	0.000	37.011	0.00	0.94
46.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	37.011	0.00	0.94
46.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.081	0.000	37.011	0.00	0.29
47.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.082	0.000	37.175	0.00	11.23
47.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	37.175	0.00	0.14
47.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	37.175	0.00	4.35

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
47.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.082	0.000	37.175	0.00	0.47
47.00	7/8"	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	37.175	0.00	0.47
47.00	1/2"	Yes	1.00	0.000	0.65	0.05	0.00	0.082	0.000	37.175	0.00	0.14
47.50	1 5/8"	Yes	0.50	0.000	2.00	0.08	0.00	0.083	0.000	37.257	0.00	5.62
47.50	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.257	0.00	0.07
47.50	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.257	0.00	2.17
47.50	7/8"	Yes	0.50	0.000	1.11	0.05	0.00	0.083	0.000	37.257	0.00	0.23
47.50	7/8"	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.257	0.00	0.23
47.50	1/2"	Yes	0.50	0.000	0.65	0.03	0.00	0.083	0.000	37.257	0.00	0.07
48.00	1 5/8"	Yes	0.50	0.000	2.00	0.08	0.00	0.083	0.000	37.337	0.00	5.62
48.00	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.337	0.00	0.07
48.00	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.337	0.00	2.17
48.00	7/8"	Yes	0.50	0.000	1.11	0.05	0.00	0.083	0.000	37.337	0.00	0.23
48.00	7/8"	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	37.337	0.00	0.23
48.00	1/2"	Yes	0.50	0.000	0.65	0.03	0.00	0.083	0.000	37.337	0.00	0.07
50.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	37.653	0.00	22.46
50.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	37.653	0.00	0.29
50.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	37.653	0.00	8.69
50.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.083	0.000	37.653	0.00	0.94
50.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	37.653	0.00	0.94
50.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.083	0.000	37.653	0.00	0.29
52.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	37.959	0.00	22.46
52.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	37.959	0.00	0.29
52.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	37.959	0.00	8.69
52.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.070	0.000	37.959	0.00	0.94
52.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	37.959	0.00	0.94
53.25	1 5/8"	Yes	1.25	0.000	2.00	0.21	0.00	0.071	0.000	38.146	0.00	14.04
53.25	1/2" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	38.146	0.00	0.18
53.25	2" Conduit	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	38.146	0.00	5.43
53.25	7/8"	Yes	1.25	0.000	1.11	0.12	0.00	0.071	0.000	38.146	0.00	0.59
53.25	7/8"	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	38.146	0.00	0.59
54.00	1 5/8"	Yes	0.75	0.000	2.00	0.13	0.00	0.070	0.000	38.256	0.00	8.42
54.00	1/2" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	38.256	0.00	0.11
54.00	2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	38.256	0.00	3.26
54.00	7/8"	Yes	0.75	0.000	1.11	0.07	0.00	0.070	0.000	38.256	0.00	0.35
54.00	7/8"	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	38.256	0.00	0.35
56.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	38.545	0.00	22.46
56.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.545	0.00	0.29
56.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.545	0.00	8.69
56.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.071	0.000	38.545	0.00	0.94
56.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.545	0.00	0.94
58.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	38.826	0.00	22.46
58.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.826	0.00	0.29
58.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.826	0.00	8.69
58.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.071	0.000	38.826	0.00	0.94
58.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	38.826	0.00	0.94
60.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	39.099	0.00	22.46

Linear Appurtenance Segment Forces (Factored)

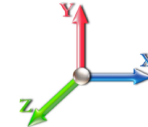
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
60.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	39.099	0.00	0.29
60.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	39.099	0.00	8.69
60.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.072	0.000	39.099	0.00	0.94
60.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	39.099	0.00	0.94
62.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	39.366	0.00	22.46
62.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	39.366	0.00	0.29
62.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	39.366	0.00	8.69
62.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.073	0.000	39.366	0.00	0.94
62.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	39.366	0.00	0.94
64.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.074	0.000	39.626	0.00	22.46
64.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	39.626	0.00	0.29
64.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	39.626	0.00	8.69
64.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.074	0.000	39.626	0.00	0.94
64.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	39.626	0.00	0.94
66.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	39.879	0.00	22.46
66.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	39.879	0.00	0.29
66.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	39.879	0.00	8.69
66.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.075	0.000	39.879	0.00	0.94
66.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	39.879	0.00	0.94
68.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	40.127	0.00	22.46
68.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.127	0.00	0.29
68.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.127	0.00	8.69
68.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.077	0.000	40.127	0.00	0.94
68.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	40.127	0.00	0.94
70.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	40.369	0.00	22.46
70.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.369	0.00	0.29
70.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.369	0.00	8.69
70.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.078	0.000	40.369	0.00	0.94
70.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	40.369	0.00	0.94
72.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	40.606	0.00	22.46
72.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	40.606	0.00	0.29
72.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	40.606	0.00	8.69
72.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.079	0.000	40.606	0.00	0.94
72.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	40.606	0.00	0.94
74.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.080	0.000	40.838	0.00	22.46
74.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	40.838	0.00	0.29
74.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	40.838	0.00	8.69
74.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.080	0.000	40.838	0.00	0.94
74.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	40.838	0.00	0.94
76.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	41.065	0.00	22.46
76.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	41.065	0.00	0.29
76.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	41.065	0.00	8.69
76.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.081	0.000	41.065	0.00	0.94
76.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	41.065	0.00	0.94
78.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.082	0.000	41.287	0.00	22.46
78.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	41.287	0.00	0.29
78.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	41.287	0.00	8.69

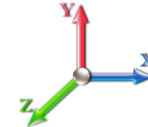
Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
78.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.082	0.000	41.287	0.00	0.94
78.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	41.287	0.00	0.94
80.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.084	0.000	41.505	0.00	22.46
80.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	41.505	0.00	0.29
80.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	41.505	0.00	8.69
80.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.084	0.000	41.505	0.00	0.94
80.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	41.505	0.00	0.94
82.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	41.718	0.00	22.46
82.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	41.718	0.00	0.29
82.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	41.718	0.00	8.69
82.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.085	0.000	41.718	0.00	0.94
84.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.086	0.000	41.928	0.00	22.46
84.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	41.928	0.00	0.29
84.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	41.928	0.00	8.69
84.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.086	0.000	41.928	0.00	0.94
86.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.088	0.000	42.134	0.00	22.46
86.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	42.134	0.00	0.29
86.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	42.134	0.00	8.69
86.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.088	0.000	42.134	0.00	0.94
88.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.089	0.000	42.336	0.00	22.46
88.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	42.336	0.00	0.29
88.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	42.336	0.00	8.69
88.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.089	0.000	42.336	0.00	0.94
90.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.091	0.000	42.534	0.00	22.46
90.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	42.534	0.00	0.29
90.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	42.534	0.00	8.69
90.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.091	0.000	42.534	0.00	0.94
92.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.092	0.000	42.730	0.00	22.46
92.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	42.730	0.00	0.29
92.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	42.730	0.00	8.69
92.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.092	0.000	42.730	0.00	0.94
94.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.094	0.000	42.921	0.00	22.46
94.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	42.921	0.00	0.29
94.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	42.921	0.00	8.69
94.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.094	0.000	42.921	0.00	0.94
96.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.095	0.000	43.110	0.00	22.46
96.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	43.110	0.00	0.29
96.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	43.110	0.00	8.69
96.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.095	0.000	43.110	0.00	0.94
97.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.097	0.000	43.203	0.00	11.23
97.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	43.203	0.00	0.14
97.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	43.203	0.00	4.35
97.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.097	0.000	43.203	0.00	0.47
98.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.098	0.000	43.296	0.00	11.23
98.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	43.296	0.00	0.14
98.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	43.296	0.00	4.35
98.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.098	0.000	43.296	0.00	0.47

Linear Appurtenance Segment Forces (Factored)

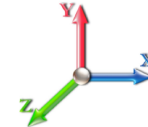
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
100.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.099	0.000	43.478	0.00	22.46
100.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	43.478	0.00	0.29
100.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	43.478	0.00	8.69
100.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.099	0.000	43.478	0.00	0.94
101.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.100	1.001	43.569	0.00	11.23
101.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	43.569	0.00	0.14
101.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	43.569	0.00	4.35
101.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.100	1.001	43.569	0.00	0.47
102.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.099	0.000	43.658	0.00	11.23
102.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.099	0.000	43.658	0.00	0.14
102.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.099	0.000	43.658	0.00	4.35
102.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.099	0.000	43.658	0.00	0.47
104.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.101	1.002	43.835	0.00	22.46
104.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	43.835	0.00	0.29
104.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	43.835	0.00	8.69
104.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.101	1.002	43.835	0.00	0.94
106.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.102	1.007	44.010	0.00	22.46
106.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.007	44.010	0.00	0.29
106.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.007	44.010	0.00	8.69
106.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.102	1.007	44.010	0.00	0.94
108.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.104	1.013	44.182	0.00	22.46
108.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.013	44.182	0.00	0.29
108.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.013	44.182	0.00	8.69
108.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.104	1.013	44.182	0.00	0.94
110.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.106	1.019	44.351	0.00	22.46
110.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	44.351	0.00	0.29
110.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	44.351	0.00	8.69
110.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.106	1.019	44.351	0.00	0.94
112.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	44.518	0.00	22.46
112.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	44.518	0.00	0.29
112.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	44.518	0.00	8.69
114.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	44.683	0.00	22.46
114.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	44.683	0.00	0.29
114.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	44.683	0.00	8.69
116.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	44.845	0.00	22.46
116.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	44.845	0.00	0.29
116.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	44.845	0.00	8.69
118.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.074	0.000	45.006	0.00	22.46
118.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	45.006	0.00	0.29
118.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	45.006	0.00	8.69
120.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	45.164	0.00	22.46
120.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	45.164	0.00	0.29
120.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	45.164	0.00	8.69
122.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	45.320	0.00	22.46
122.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	45.320	0.00	0.29
122.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	45.320	0.00	8.69
124.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	45.474	0.00	22.46

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
124.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	45.474	0.00	0.29
124.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	45.474	0.00	8.69
126.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	45.627	0.00	22.46
126.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	45.627	0.00	0.29
126.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	45.627	0.00	8.69
128.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	45.777	0.00	22.46
128.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	45.777	0.00	0.29
128.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	45.777	0.00	8.69
130.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	45.925	0.00	22.46
130.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	45.925	0.00	0.29
130.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	45.925	0.00	8.69
131.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.087	0.000	45.999	0.00	11.23
131.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.087	0.000	45.999	0.00	0.14
131.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.087	0.000	45.999	0.00	4.35
132.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.088	0.000	46.072	0.00	11.23
132.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.088	0.000	46.072	0.00	0.14
132.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.088	0.000	46.072	0.00	4.35
134.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.090	0.000	46.217	0.00	22.46
134.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	46.217	0.00	0.29
134.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	46.217	0.00	8.69
136.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.092	0.000	46.360	0.00	22.46
136.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	46.360	0.00	0.29
136.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	46.360	0.00	8.69
138.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.094	0.000	46.502	0.00	22.46
138.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	46.502	0.00	0.29
138.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	46.502	0.00	8.69
140.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.097	0.000	46.642	0.00	22.46
140.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	46.642	0.00	0.29
140.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	46.642	0.00	8.69
142.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.100	0.000	46.781	0.00	22.46
142.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	46.781	0.00	0.29
142.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	46.781	0.00	8.69
144.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.103	1.009	46.918	0.00	22.46
144.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	46.918	0.00	0.29
144.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	46.918	0.00	8.69
146.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.106	1.018	47.053	0.00	22.46
146.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	47.053	0.00	0.29
146.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	47.053	0.00	8.69
148.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.028	47.187	0.00	22.46
148.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	47.187	0.00	0.29
148.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	47.187	0.00	8.69
148.25	1 5/8"	Yes	0.25	0.000	2.00	0.04	0.00	0.111	1.034	47.204	0.00	2.81
148.25	1/2" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.111	1.034	47.204	0.00	0.04
148.25	2" Conduit	Yes	0.25	0.000	0.00	0.00	0.00	0.111	1.034	47.204	0.00	1.09
149.00	1 5/8"	Yes	0.75	0.000	2.00	0.13	0.00	0.112	1.037	47.254	0.00	8.42
149.00	1/2" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.112	1.037	47.254	0.00	0.11
149.00	2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	0.112	1.037	47.254	0.00	3.26

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0W 120 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
150.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.041	47.320	0.00	11.23
150.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	47.320	0.00	0.14
150.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	47.320	0.00	4.35
150.50	1 5/8"	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.046	47.353	0.00	5.62
150.50	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.046	47.353	0.00	0.07
150.50	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.046	47.353	0.00	2.17
152.00	1 5/8"	Yes	1.50	0.000	2.00	0.25	0.00	0.115	1.044	47.451	0.00	16.85
152.00	1/2" Fiber	Yes	1.50	0.000	0.00	0.00	0.00	0.115	1.044	47.451	0.00	0.22
152.00	2" Conduit	Yes	1.50	0.000	0.00	0.00	0.00	0.115	1.044	47.451	0.00	6.52
154.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.054	47.581	0.00	22.46
154.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	47.581	0.00	0.29
154.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	47.581	0.00	8.69
156.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	47.710	0.00	22.46
156.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	47.710	0.00	0.29
156.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	47.710	0.00	8.69
158.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	47.837	0.00	22.46
158.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	47.837	0.00	0.29
158.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	47.837	0.00	8.69
159.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.130	1.090	47.900	0.00	11.23
159.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.130	1.090	47.900	0.00	0.14
159.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.130	1.090	47.900	0.00	4.35
Totals:											0.0	2,596.1

Calculated Forces

Structure: CT13055-A-SBA
Site Name: Monroe Turnpike
Height: 159.00 (ft)
Base Elev: 1.000 (ft)
Gh: 1.1

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

12/11/2020
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Load Case: 0.9D + 1.0W 120 mph Wind

Iterations 29

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	-39.48	-37.36	0.00	-4489.1	0.00	4489.14	4390.37	1208.07	5796.90	5231.64	0.00	0.000	0.000	0.868
2.00	-38.90	-37.19	0.00	-4414.4	0.00	4414.42	4366.62	1196.25	5684.08	5152.14	0.02	-0.087	0.000	0.867
4.00	-38.33	-37.02	0.00	-4340.0	0.00	4340.04	4342.50	1184.44	5572.38	5072.75	0.08	-0.175	0.000	0.865
6.00	-37.76	-36.85	0.00	-4266.0	0.00	4266.00	4318.00	1172.63	5461.78	4993.49	0.17	-0.265	0.000	0.864
8.00	-37.20	-36.69	0.00	-4192.2	0.00	4192.29	4293.12	1160.81	5352.29	4914.37	0.30	-0.355	0.000	0.863
10.00	-36.64	-36.52	0.00	-4118.9	0.00	4118.92	4267.86	1149.00	5243.91	4835.41	0.47	-0.447	0.000	0.861
12.00	-36.08	-36.36	0.00	-4045.8	0.00	4045.87	4242.22	1137.19	5136.64	4756.61	0.68	-0.539	0.000	0.860
14.00	-35.53	-36.20	0.00	-3973.1	0.00	3973.15	4216.20	1125.37	5030.48	4677.99	0.92	-0.633	0.000	0.859
16.00	-34.99	-36.03	0.00	-3900.7	0.00	3900.76	4189.80	1113.56	4925.42	4599.57	1.21	-0.729	0.000	0.857
18.00	-34.44	-35.86	0.00	-3828.7	0.00	3828.70	4163.03	1101.75	4821.48	4521.36	1.53	-0.825	0.000	0.856
20.00	-33.90	-35.69	0.00	-3756.9	0.00	3756.98	4135.87	1089.94	4718.64	4443.36	1.90	-0.923	0.000	0.855
22.00	-33.37	-35.51	0.00	-3685.6	0.00	3685.61	4108.34	1078.12	4616.91	4365.60	2.31	-1.022	0.000	0.853
24.00	-32.84	-35.33	0.00	-3614.5	0.00	3614.59	4080.43	1066.31	4516.29	4288.09	2.76	-1.123	0.000	0.852
26.00	-32.31	-35.15	0.00	-3543.9	0.00	3543.92	4052.14	1054.50	4416.78	4210.84	3.25	-1.224	0.000	0.851
28.00	-31.79	-34.97	0.00	-3473.6	0.00	3473.62	4023.46	1042.68	4318.37	4133.86	3.79	-1.328	0.000	0.849
30.00	-31.27	-34.79	0.00	-3403.6	0.00	3403.68	3994.42	1030.87	4221.08	4057.17	4.37	-1.432	0.000	0.848
32.00	-30.75	-34.60	0.00	-3334.1	0.00	3334.11	3964.99	1019.06	4124.89	3980.79	4.99	-1.538	0.000	0.846
34.00	-30.24	-34.41	0.00	-3264.9	0.00	3264.91	3935.18	1007.24	4029.81	3904.71	5.66	-1.646	0.000	0.845
36.00	-29.73	-34.23	0.00	-3196.0	0.00	3196.09	3904.99	995.43	3935.85	3828.97	6.37	-1.755	0.000	0.844
38.00	-29.23	-34.04	0.00	-3127.6	0.00	3127.63	3874.43	983.62	3842.99	3753.56	7.13	-1.865	0.000	0.842
40.00	-28.73	-33.85	0.00	-3059.5	0.00	3059.56	3843.48	971.81	3751.23	3678.51	7.94	-1.977	0.000	0.840
42.00	-28.24	-33.66	0.00	-2991.8	0.00	2991.86	3812.16	959.99	3660.59	3603.83	8.79	-2.091	0.000	0.839
44.00	-27.74	-33.47	0.00	-2924.5	0.00	2924.54	3780.46	948.18	3571.06	3529.52	9.69	-2.206	0.000	0.837
46.00	-27.27	-33.27	0.00	-2857.5	0.00	2857.59	3748.38	936.37	3482.63	3455.62	10.64	-2.323	0.000	0.835
47.00	-26.99	-33.02	0.00	-2824.3	0.00	2824.31	3732.20	930.46	3438.83	3418.81	11.13	-2.383	0.000	0.835
47.50	-26.87	-32.97	0.00	-2807.8	0.00	2807.80	3724.07	927.51	3417.04	3400.45	11.38	-2.413	0.000	0.834
48.00	-26.64	-32.94	0.00	-2791.3	0.00	2791.31	3715.92	924.55	3395.31	3382.11	11.64	-2.443	0.000	0.834
50.00	-25.84	-32.73	0.00	-2725.4	0.00	2725.44	3683.08	912.74	3309.10	3309.03	12.69	-2.564	0.000	0.832
52.00	-25.05	-32.51	0.00	-2659.9	0.00	2659.98	3649.86	900.93	3224.00	3236.39	13.79	-2.686	0.000	0.830
53.25	-24.57	-32.37	0.00	-2619.3	0.00	2619.35	3673.19	909.21	3283.56	3287.28	14.50	-2.764	0.000	0.805
54.00	-24.37	-32.31	0.00	-2595.0	0.00	2595.07	3660.74	904.78	3251.64	3260.04	14.94	-2.811	0.000	0.804
56.00	-23.90	-32.12	0.00	-2530.4	0.00	2530.44	3627.27	892.97	3167.28	3187.69	16.14	-2.930	0.000	0.802
58.00	-23.44	-31.92	0.00	-2466.2	0.00	2466.20	3593.41	881.16	3084.04	3115.80	17.40	-3.051	0.000	0.799
60.00	-22.98	-31.72	0.00	-2402.3	0.00	2402.36	3559.18	869.34	3001.90	3044.38	18.70	-3.174	0.000	0.797
62.00	-22.52	-31.53	0.00	-2338.9	0.00	2338.92	3524.57	857.53	2920.88	2973.45	20.06	-3.298	0.000	0.794
64.00	-22.07	-31.33	0.00	-2275.8	0.00	2275.86	3489.59	845.72	2840.96	2903.01	21.47	-3.425	0.000	0.792
66.00	-21.62	-31.14	0.00	-2213.2	0.00	2213.20	3454.22	833.90	2762.15	2833.08	22.93	-3.553	0.000	0.789
68.00	-21.18	-30.94	0.00	-2150.9	0.00	2150.93	3418.47	822.09	2684.44	2763.67	24.44	-3.682	0.000	0.786
70.00	-20.74	-30.75	0.00	-2089.0	0.00	2089.04	3382.35	810.28	2607.85	2694.80	26.01	-3.814	0.000	0.783
72.00	-20.30	-30.56	0.00	-2027.5	0.00	2027.54	3345.84	798.46	2532.37	2626.49	27.64	-3.947	0.000	0.779
74.00	-19.87	-30.37	0.00	-1966.4	0.00	1966.42	3308.96	786.65	2457.99	2558.73	29.32	-4.083	0.000	0.776
76.00	-19.44	-30.18	0.00	-1905.6	0.00	1905.69	3271.70	774.84	2384.72	2491.55	31.06	-4.220	0.000	0.772
78.00	-19.02	-29.99	0.00	-1845.3	0.00	1845.34	3230.14	763.03	2312.56	2422.03	32.86	-4.359	0.000	0.769
80.00	-18.56	-29.53	0.00	-1784.7	0.00	1784.79	3180.13	751.21	2241.51	2347.24	34.71	-4.500	0.000	0.768
82.00	-18.15	-29.35	0.00	-1725.7	0.00	1725.72	3130.13	739.40	2171.57	2273.62	36.62	-4.643	0.000	0.766
84.00	-17.74	-29.16	0.00	-1667.0	0.00	1667.03	3080.12	727.59	2102.74	2201.18	38.60	-4.787	0.000	0.765
86.00	-17.33	-28.98	0.00	-1608.7	0.00	1608.70	3030.11	715.77	2035.01	2129.91	40.63	-4.934	0.000	0.763
88.00	-16.93	-28.80	0.00	-1550.7	0.00	1550.75	2980.10	703.96	1968.39	2059.81	42.73	-5.083	0.000	0.760

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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90.00	-16.53	-28.61	0.00	-1493.1	0.00	1493.16	2930.09	692.15	1902.89	1990.89	44.89	-5.233	0.000	0.757
92.00	-16.14	-28.43	0.00	-1435.9	0.00	1435.93	2880.09	680.34	1838.49	1923.14	47.11	-5.385	0.000	0.754
94.00	-15.75	-28.26	0.00	-1379.0	0.00	1379.06	2830.08	668.52	1775.20	1856.56	49.40	-5.539	0.000	0.750
96.00	-15.38	-28.07	0.00	-1322.5	0.00	1322.56	2780.07	656.71	1713.01	1791.15	51.75	-5.695	0.000	0.746
97.00	-15.19	-27.98	0.00	-1294.4	0.00	1294.49	2755.06	650.80	1682.34	1758.89	52.95	-5.775	0.000	0.743
98.00	-14.88	-27.89	0.00	-1266.5	0.00	1266.51	2730.06	644.90	1651.94	1726.92	54.16	-5.855	0.000	0.741
100.00	-14.34	-27.68	0.00	-1210.7	0.00	1210.73	2680.05	633.08	1591.98	1663.86	56.65	-6.014	0.000	0.735
101.00	-14.06	-27.58	0.00	-1183.0	0.00	1183.04	2260.99	534.61	1362.32	1425.54	57.91	-6.096	0.000	0.839
102.00	-13.86	-27.51	0.00	-1155.4	0.00	1155.46	2242.36	529.69	1337.35	1400.64	59.20	-6.177	0.000	0.834
104.00	-13.52	-27.34	0.00	-1100.4	0.00	1100.44	2200.69	519.85	1288.10	1348.81	61.82	-6.359	0.000	0.825
106.00	-13.17	-27.17	0.00	-1045.7	0.00	1045.76	2159.02	510.00	1239.78	1297.95	64.52	-6.542	0.000	0.815
108.00	-12.83	-27.01	0.00	-991.41	0.00	991.41	2117.34	500.16	1192.38	1248.07	67.29	-6.726	0.000	0.803
110.00	-12.48	-26.55	0.00	-936.79	0.00	936.79	2075.67	490.32	1145.90	1199.16	70.14	-6.911	0.000	0.790
112.00	-12.15	-26.39	0.00	-883.68	0.00	883.68	2034.00	480.47	1100.35	1151.23	73.07	-7.096	0.000	0.777
114.00	-11.82	-26.23	0.00	-830.90	0.00	830.90	1992.32	470.63	1055.73	1104.29	76.08	-7.281	0.000	0.761
116.00	-11.50	-26.07	0.00	-778.44	0.00	778.44	1950.65	460.78	1012.02	1058.31	79.16	-7.466	0.000	0.745
118.00	-11.19	-25.91	0.00	-726.30	0.00	726.30	1908.98	450.94	969.24	1013.32	82.32	-7.650	0.000	0.726
120.00	-10.88	-25.76	0.00	-674.47	0.00	674.47	1867.30	441.10	927.39	969.30	85.55	-7.833	0.000	0.705
122.00	-10.57	-25.60	0.00	-622.96	0.00	622.96	1825.63	431.25	886.45	926.26	88.86	-8.014	0.000	0.682
124.00	-10.27	-25.45	0.00	-571.76	0.00	571.76	1783.96	421.41	846.45	884.20	92.25	-8.192	0.000	0.656
126.00	-9.98	-25.29	0.00	-520.87	0.00	520.87	1742.28	411.56	807.36	843.12	95.70	-8.367	0.000	0.627
128.00	-9.69	-25.14	0.00	-470.28	0.00	470.28	1700.61	401.72	769.20	803.01	99.23	-8.537	0.000	0.595
130.00	-9.42	-24.98	0.00	-420.01	0.00	420.01	1658.94	391.87	731.96	763.88	102.83	-8.702	0.000	0.560
131.00	-8.56	-19.53	0.00	-395.02	0.00	395.02	1638.10	386.95	713.69	744.68	104.66	-8.783	0.000	0.538
132.00	-8.43	-19.46	0.00	-375.50	0.00	375.50	1617.26	382.03	695.65	725.73	106.50	-8.862	0.000	0.525
134.00	-8.20	-19.31	0.00	-336.58	0.00	336.58	1575.59	372.19	660.26	688.55	110.23	-9.015	0.000	0.497
136.00	-7.98	-19.17	0.00	-297.96	0.00	297.96	1533.91	362.34	625.80	652.35	114.02	-9.163	0.000	0.465
138.00	-7.76	-19.02	0.00	-259.62	0.00	259.62	1492.24	352.50	592.26	617.13	117.88	-9.303	0.000	0.429
140.00	-5.71	-13.35	0.00	-221.58	0.00	221.58	1450.57	342.65	559.64	582.89	121.79	-9.434	0.000	0.386
142.00	-5.54	-13.21	0.00	-194.88	0.00	194.88	1408.89	332.81	527.94	549.63	125.75	-9.558	0.000	0.360
144.00	-5.38	-13.07	0.00	-168.47	0.00	168.47	1367.22	322.97	497.17	517.34	129.76	-9.676	0.000	0.331
146.00	-5.22	-12.94	0.00	-142.33	0.00	142.33	1325.55	313.12	467.33	486.03	133.82	-9.787	0.000	0.298
148.00	-5.08	-12.80	0.00	-116.46	0.00	116.46	1283.87	303.28	438.41	455.70	137.92	-9.888	0.000	0.261
148.25	-5.06	-12.78	0.00	-113.26	0.00	113.26	1278.66	302.05	434.86	451.97	138.43	-9.900	0.000	0.256
149.00	-3.52	-8.17	0.00	-99.53	0.00	99.53	1263.04	298.36	424.29	440.90	139.99	-9.935	0.000	0.229
150.00	-3.42	-8.09	0.00	-91.37	0.00	91.37	1242.20	293.43	410.41	426.34	142.06	-9.979	0.000	0.218
150.50	-3.37	-8.06	0.00	-87.32	0.00	87.32	761.18	179.81	256.83	268.82	143.10	-10.000	0.000	0.331
152.00	-3.30	-7.96	0.00	-75.24	0.00	75.24	742.42	175.38	244.33	255.67	146.24	-10.059	0.000	0.301
154.00	-3.21	-7.84	0.00	-59.32	0.00	59.32	717.42	169.47	228.15	238.65	150.45	-10.166	0.000	0.255
156.00	-3.12	-7.72	0.00	-43.64	0.00	43.64	692.41	163.56	212.53	222.21	154.71	-10.258	0.000	0.203
158.00	-3.05	-7.59	0.00	-28.21	0.00	28.21	667.41	157.66	197.45	206.36	159.00	-10.328	0.000	0.144
159.00	0.00	-6.92	0.00	-20.61	0.00	20.61	654.91	154.70	190.13	198.65	161.16	-10.355	0.000	0.106

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Iterations 29

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		1.00	0.85	5.059	5.56	0.00	1.200	0.705	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	5.059	5.56	0.00	1.200	0.787	2.00	10.066	12.08	67.2	115.2	674.6
4.00		1.00	0.85	5.059	5.56	0.00	1.200	0.828	2.00	9.984	11.98	66.7	120.2	674.1
6.00		1.00	0.85	5.059	5.56	0.00	1.200	0.856	2.00	9.898	11.88	66.1	123.1	671.5
8.00		1.00	0.85	5.059	5.56	0.00	1.200	0.878	2.00	9.809	11.77	65.5	125.1	668.0
10.00		1.00	0.85	5.059	5.56	0.00	1.200	0.896	2.00	9.719	11.66	64.9	126.4	663.8
12.00		1.00	0.85	5.059	5.56	0.00	1.200	0.911	2.00	9.629	11.55	64.3	127.2	659.2
14.00		1.00	0.85	5.059	5.56	0.00	1.200	0.924	2.00	9.537	11.44	63.7	127.8	654.2
16.00		1.00	0.87	5.187	5.71	0.00	1.200	0.936	2.00	9.445	11.33	64.7	128.1	649.0
18.00		1.00	0.89	5.310	5.84	0.00	1.200	0.946	2.00	9.353	11.22	65.6	128.2	643.6
20.00		1.00	0.91	5.423	5.97	0.00	1.200	0.956	2.00	9.261	11.11	66.3	128.2	638.1
22.00		1.00	0.93	5.528	6.08	0.00	1.200	0.965	2.00	9.168	11.00	66.9	128.0	632.4
24.00		1.00	0.95	5.626	6.19	0.00	1.200	0.973	2.00	9.075	10.89	67.4	127.7	626.6
26.00		1.00	0.96	5.718	6.29	0.00	1.200	0.980	2.00	8.982	10.78	67.8	127.3	620.8
28.00		1.00	0.98	5.804	6.38	0.00	1.200	0.987	2.00	8.888	10.67	68.1	126.9	614.8
30.00		1.00	0.99	5.887	6.48	0.00	1.200	0.994	2.00	8.795	10.55	68.3	126.3	608.8
32.00		1.00	1.00	5.965	6.56	0.00	1.200	1.000	2.00	8.701	10.44	68.5	125.7	602.7
34.00		1.00	1.01	6.039	6.64	0.00	1.200	1.006	2.00	8.607	10.33	68.6	125.0	596.5
36.00		1.00	1.03	6.110	6.72	0.00	1.200	1.012	2.00	8.514	10.22	68.7	124.3	590.3
38.00		1.00	1.04	6.178	6.80	0.00	1.200	1.017	2.00	8.420	10.10	68.7	123.5	584.0
40.00		1.00	1.05	6.243	6.87	0.00	1.200	1.022	2.00	8.326	9.99	68.6	122.7	577.7
42.00		1.00	1.06	6.306	6.94	0.00	1.200	1.027	2.00	8.232	9.88	68.5	121.9	571.3
44.00		1.00	1.07	6.367	7.00	0.00	1.200	1.032	2.00	8.137	9.76	68.4	121.0	564.9
46.00		1.00	1.08	6.426	7.07	0.00	1.200	1.036	2.00	8.043	9.65	68.2	120.0	558.5
47.00	Appurtenance(s)	1.00	1.08	6.454	7.10	0.00	1.200	1.038	1.00	3.986	4.78	34.0	59.8	277.0
47.50	Bot - Section 2	1.00	1.09	6.468	7.11	0.00	1.200	1.039	0.50	1.984	2.38	16.9	29.8	137.9
48.00		1.00	1.09	6.482	7.13	0.00	1.200	1.040	0.50	2.010	2.41	17.2	30.3	247.5
50.00		1.00	1.10	6.537	7.19	0.00	1.200	1.044	2.00	7.982	9.58	68.9	120.0	982.3
52.00		1.00	1.11	6.590	7.25	0.00	1.200	1.049	2.00	7.887	9.46	68.6	119.0	970.3
53.25	Top - Section 1	1.00	1.11	6.623	7.28	0.00	1.200	1.051	1.25	4.881	5.86	42.7	74.0	600.4
54.00		1.00	1.12	6.642	7.31	0.00	1.200	1.052	0.75	2.911	3.49	25.5	44.2	202.5
56.00		1.00	1.12	6.692	7.36	0.00	1.200	1.056	2.00	7.698	9.24	68.0	116.9	535.2
58.00		1.00	1.13	6.741	7.41	0.00	1.200	1.060	2.00	7.604	9.12	67.7	115.8	528.6
60.00		1.00	1.14	6.788	7.47	0.00	1.200	1.063	2.00	7.509	9.01	67.3	114.7	522.0
62.00		1.00	1.15	6.834	7.52	0.00	1.200	1.067	2.00	7.415	8.90	66.9	113.6	515.4
64.00		1.00	1.16	6.879	7.57	0.00	1.200	1.070	2.00	7.320	8.78	66.5	112.4	508.7
66.00		1.00	1.16	6.923	7.62	0.00	1.200	1.073	2.00	7.225	8.67	66.0	111.3	502.1
68.00		1.00	1.17	6.967	7.66	0.00	1.200	1.077	2.00	7.131	8.56	65.6	110.1	495.4
70.00		1.00	1.18	7.009	7.71	0.00	1.200	1.080	2.00	7.036	8.44	65.1	108.9	488.7
72.00		1.00	1.18	7.050	7.75	0.00	1.200	1.083	2.00	6.941	8.33	64.6	107.6	482.0
74.00		1.00	1.19	7.090	7.80	0.00	1.200	1.086	2.00	6.847	8.22	64.1	106.4	475.2
76.00		1.00	1.20	7.129	7.84	0.00	1.200	1.088	2.00	6.752	8.10	63.5	105.2	468.5
78.00		1.00	1.20	7.168	7.88	0.00	1.200	1.091	2.00	6.657	7.99	63.0	103.9	461.7
80.00	Appurtenance(s)	1.00	1.21	7.206	7.93	0.00	1.200	1.094	2.00	6.562	7.87	62.4	102.6	454.9
82.00		1.00	1.22	7.243	7.97	0.00	1.200	1.097	2.00	6.468	7.76	61.8	101.3	448.1
84.00		1.00	1.22	7.279	8.01	0.00	1.200	1.099	2.00	6.373	7.65	61.2	100.0	441.3
86.00		1.00	1.23	7.315	8.05	0.00	1.200	1.102	2.00	6.278	7.53	60.6	98.7	434.5

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00	1.00	1.23	7.350	8.08	0.00	1.200	1.104	2.00	6.183	7.42	60.0	97.3	427.7
90.00	1.00	1.24	7.384	8.12	0.00	1.200	1.107	2.00	6.088	7.31	59.3	96.0	420.8
92.00	1.00	1.25	7.418	8.16	0.00	1.200	1.109	2.00	5.993	7.19	58.7	94.6	414.0
94.00	1.00	1.25	7.452	8.20	0.00	1.200	1.112	2.00	5.898	7.08	58.0	93.3	407.1
96.00	1.00	1.26	7.484	8.23	0.00	1.200	1.114	2.00	5.803	6.96	57.3	91.9	400.2
97.00 Bot - Section 3	1.00	1.26	7.501	8.25	0.00	1.200	1.115	1.00	2.866	3.44	28.4	45.6	197.7
98.00	1.00	1.26	7.517	8.27	0.00	1.200	1.116	1.00	2.895	3.47	28.7	46.1	325.3
100.00	1.00	1.27	7.548	8.30	0.00	1.200	1.118	2.00	5.719	6.86	57.0	90.9	641.6
101.00 Top - Section 2	1.00	1.27	7.564	8.32	0.00	1.201 *	1.119	1.00	2.824	3.39	28.2	45.1	316.6
102.00	1.00	1.27	7.580	8.34	0.00	1.200	1.121	1.00	2.800	3.36	28.0	44.7	168.5
104.00	1.00	1.28	7.610	8.37	0.00	1.202 *	1.123	2.00	5.529	6.65	55.6	88.0	332.2
106.00	1.00	1.28	7.641	8.40	0.00	1.209 *	1.125	2.00	5.434	6.57	55.2	86.6	326.2
108.00	1.00	1.29	7.670	8.44	0.00	1.216 *	1.127	2.00	5.339	6.49	54.8	85.2	320.2
110.00 Appurtenance(s)	1.00	1.29	7.700	8.47	0.00	1.223 *	1.129	2.00	5.244	6.42	54.3	83.7	314.2
112.00	1.00	1.30	7.729	8.50	0.00	1.200	1.131	2.00	5.149	6.18	52.5	82.3	308.2
114.00	1.00	1.30	7.757	8.53	0.00	1.200	1.133	2.00	5.054	6.06	51.8	80.8	302.1
116.00	1.00	1.31	7.786	8.56	0.00	1.200	1.135	2.00	4.959	5.95	51.0	79.4	296.1
118.00	1.00	1.31	7.814	8.59	0.00	1.200	1.137	2.00	4.864	5.84	50.2	77.9	290.0
120.00	1.00	1.32	7.841	8.63	0.00	1.200	1.139	2.00	4.769	5.72	49.4	76.4	284.0
122.00	1.00	1.32	7.868	8.65	0.00	1.200	1.141	2.00	4.674	5.61	48.5	74.9	277.9
124.00	1.00	1.33	7.895	8.68	0.00	1.200	1.142	2.00	4.579	5.49	47.7	73.4	271.8
126.00	1.00	1.33	7.921	8.71	0.00	1.200	1.144	2.00	4.484	5.38	46.9	71.9	265.8
128.00	1.00	1.34	7.947	8.74	0.00	1.200	1.146	2.00	4.388	5.27	46.0	70.4	259.7
130.00	1.00	1.34	7.973	8.77	0.00	1.200	1.148	2.00	4.293	5.15	45.2	68.9	253.6
131.00 Appurtenance(s)	1.00	1.34	7.986	8.78	0.00	1.200	1.149	1.00	2.111	2.53	22.3	34.1	124.7
132.00	1.00	1.34	7.999	8.80	0.00	1.200	1.150	1.00	2.087	2.50	22.0	33.7	123.2
134.00	1.00	1.35	8.024	8.83	0.00	1.200	1.151	2.00	4.103	4.92	43.5	65.9	241.4
136.00	1.00	1.35	8.049	8.85	0.00	1.200	1.153	2.00	4.008	4.81	42.6	64.3	235.2
138.00	1.00	1.36	8.073	8.88	0.00	1.200	1.155	2.00	3.913	4.70	41.7	62.8	229.1
140.00 Appurtenance(s)	1.00	1.36	8.098	8.91	0.00	1.200	1.156	2.00	3.818	4.58	40.8	61.3	223.0
142.00	1.00	1.36	8.122	8.93	0.00	1.200	1.158	2.00	3.722	4.47	39.9	59.7	216.9
144.00	1.00	1.37	8.145	8.96	0.00	1.210 *	1.160	2.00	3.627	4.39	39.3	58.2	210.7
146.00	1.00	1.37	8.169	8.99	0.00	1.222 *	1.161	2.00	3.532	4.31	38.8	56.6	204.6
148.00	1.00	1.38	8.192	9.01	0.00	1.234 *	1.163	2.00	3.437	4.24	38.2	55.0	198.4
148.25 Bot - Section 4	1.00	1.38	8.195	9.01	0.00	1.241 *	1.163	0.25	0.423	0.52	4.7	6.9	24.5
149.00 Appurtenance(s)	1.00	1.38	8.204	9.02	0.00	1.244 *	1.163	0.75	1.284	1.60	14.4	20.8	105.5
150.00	1.00	1.38	8.215	9.04	0.00	1.250 *	1.164	1.00	1.691	2.11	19.1	27.3	138.6
150.50 Top - Section 3	1.00	1.38	8.221	9.04	0.00	1.255 *	1.165	0.50	0.836	1.05	9.5	13.5	68.5
152.00	1.00	1.38	8.238	9.06	0.00	1.252 *	1.166	1.50	2.474	3.10	28.1	39.7	101.7
154.00	1.00	1.39	8.261	9.09	0.00	1.265 *	1.167	2.00	3.215	4.07	36.9	51.4	131.6
156.00	1.00	1.39	8.283	9.11	0.00	1.280 *	1.169	2.00	3.120	3.99	36.4	49.8	127.3
158.00	1.00	1.40	8.305	9.14	0.00	1.296 *	1.170	2.00	3.024	3.92	35.8	48.2	123.0
159.00 Appurtenance(s)	1.00	1.40	8.316	9.15	0.00	1.308 *	1.171	1.00	1.476	1.93	17.7	23.7	60.0

* Cf Adjusted by Linear Load Ra Effect

Totals:	159.00	4,594.1	36,235.1
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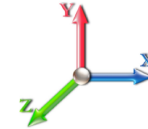
Discrete Appurtenance Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (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 29

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x	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	159.00	Decibel DB404-B - Omni	1	8.349	9.183	1.00	1.00	0.00	30.81	0.000	3.000	0.00	0.00	0.00
2	159.00	Powerwave 7770	3	8.349	9.183	0.55	0.75	11.13	-534.80	0.000	3.000	102.23	0.00	306.68
3	159.00	DMP65R-BU6DA	3	8.349	9.183	0.54	0.75	22.18	676.84	0.000	3.000	203.70	0.00	611.11
4	159.00	Powerwave Technologies	6	8.349	9.183	0.38	0.75	4.16	159.57	0.000	3.000	38.24	0.00	114.72
5	159.00	4449 B5/B12	3	8.349	9.183	0.38	0.75	2.63	322.25	0.000	3.000	24.15	0.00	72.44
6	159.00	Raycap DC6-48-60-18-8F	3	8.349	9.183	0.38	0.75	1.37	196.34	0.000	3.000	12.54	0.00	37.62
7	159.00	Site Pro 1 -	1	8.349	9.183	1.00	1.00	71.83	4277.39	0.000	3.000	659.67	0.00	1979.00
8	159.00	RRUS 4478 B14	3	8.349	9.183	0.38	0.75	2.25	269.11	0.000	3.000	20.64	0.00	61.92
9	159.00	Kaelus DBC0061F1V51-2	3	8.349	9.183	0.38	0.75	0.70	55.17	0.000	3.000	6.42	0.00	19.26
10	159.00	Ericsson RRUS 32 B30	3	8.349	9.183	0.38	0.75	3.62	379.52	0.000	3.000	33.23	0.00	99.70
11	159.00	Ericsson RRUS 32 B2	3	8.349	9.183	0.38	0.75	3.62	354.32	0.000	3.000	33.23	0.00	99.70
12	159.00	Site Pro 1 - HRK14	1	8.349	9.183	1.00	1.00	9.93	905.96	0.000	3.000	91.23	0.00	273.70
13	159.00	OPA65R-BU6DA	3	8.349	9.183	0.38	0.75	15.40	778.96	0.000	3.000	141.47	0.00	424.41
14	159.00	Quintel QS66512-2	3	8.349	9.183	0.69	0.75	18.59	831.11	0.000	3.000	170.75	0.00	512.25
15	149.00	Alcatel Lucent - 1900 MHz	3	8.227	9.049	0.38	0.75	5.32	283.13	0.000	2.000	48.12	0.00	96.24
16	149.00	RFS - APXVTM14-C-I20 -	3	8.227	9.049	0.59	0.75	12.59	347.30	0.000	2.000	113.89	0.00	227.79
17	149.00	Alcatel Lucent -	3	8.227	9.049	0.38	0.75	5.62	381.46	0.000	2.000	50.83	0.00	101.65
18	149.00	RFS - APXVSP18-C-A20	3	8.227	9.049	0.62	0.75	18.05	914.95	0.000	2.000	163.35	0.00	326.71
19	149.00	Low Profile Platform	1	8.204	9.024	1.00	1.00	54.55	1838.09	0.000	0.000	492.23	0.00	0.00
20	149.00	Alcatel Lucent - 800 MHz	3	8.227	9.049	0.38	0.75	3.66	275.42	0.000	2.000	33.11	0.00	66.22
21	149.00	Alcatel Lucent - 800 MHz	3	8.227	9.049	0.38	0.75	1.36	51.97	0.000	2.000	12.33	0.00	24.66
22	149.00	RFS - ACU-A20-N - RET	4	8.227	9.049	0.38	0.75	0.51	11.06	0.000	2.000	4.59	0.00	9.17
23	149.00	SitePro HRK-12 Handrail	1	8.204	9.024	1.00	1.00	11.15	782.85	0.000	0.000	100.60	0.00	0.00
24	140.00	4415 B66A	3	8.098	8.907	0.38	0.75	2.52	222.46	0.000	0.000	22.44	0.00	0.00
25	140.00	4424 B25	3	8.098	8.907	0.38	0.75	2.96	360.38	0.000	0.000	26.36	0.00	0.00
26	140.00	4449 B71 + B85	3	8.098	8.907	0.38	0.75	2.64	203.09	0.000	0.000	23.52	0.00	0.00
27	140.00	AIR6449 B41	3	8.098	8.907	0.53	0.75	10.03	548.25	0.000	0.000	89.36	0.00	0.00
28	140.00	Andrew - ATSBT-TOP-FM	3	8.098	8.907	0.38	0.75	0.48	12.99	0.000	0.000	4.31	0.00	0.00
29	140.00	RFS -	3	8.098	8.907	0.38	0.75	1.90	107.23	0.000	0.000	16.92	0.00	0.00
30	140.00	RFS -	3	8.098	8.907	0.55	0.75	35.33	1180.41	0.000	0.000	314.67	0.00	0.00
31	140.00	RFS -	3	8.098	8.907	0.46	0.75	11.23	278.69	0.000	0.000	100.06	0.00	0.00
32	140.00	EMS - FR90-16-XXDP -	3	8.098	8.907	0.51	0.75	7.63	241.75	0.000	0.000	68.00	0.00	0.00
33	140.00	LP Platform w/ Handrails	1	8.098	8.907	1.00	1.00	53.66	2711.26	0.000	0.000	477.94	0.00	0.00
34	131.00	Antel BXA-171063-12BF -	3	7.986	8.785	0.67	0.80	12.67	159.85	0.000	0.000	111.33	0.00	0.00
35	131.00	Antel LPA-80063/6CF -	6	7.986	8.785	0.75	0.80	47.24	1276.13	0.000	0.000	414.99	0.00	0.00
36	131.00	Antel BXA-70063/6CF -	3	7.986	8.785	0.56	0.80	15.77	219.22	0.000	0.000	138.56	0.00	0.00
37	131.00	Kathrein 742	3	7.986	8.785	0.58	0.80	6.45	195.93	0.000	0.000	56.64	0.00	0.00
38	131.00	RFS FD9R6004/2C-3L -	6	7.986	8.785	0.40	0.80	1.56	40.22	0.000	0.000	13.74	0.00	0.00
39	131.00	Alcatel Lucent	3	7.986	8.785	0.40	0.80	4.82	295.70	0.000	0.000	42.37	0.00	0.00
40	131.00	RFS DB-T1-6Z-8AB-OZ -	1	7.986	8.785	1.00	1.00	5.36	111.62	0.000	0.000	47.10	0.00	0.00
41	131.00	Low Profile Platform	1	7.986	8.785	1.00	1.00	34.13	1829.22	0.000	0.000	299.82	0.00	0.00
42	110.00	4 ft. Standoff	1	7.700	8.470	1.00	1.00	8.67	102.58	0.000	0.000	73.44	0.00	0.00
43	110.00	Sinclair SCL329-HL -	1	7.779	8.557	1.00	1.00	4.78	34.17	0.000	5.550	40.92	0.00	227.13
44	80.00	Sinclair SCL329-HL -	1	7.307	8.038	1.00	1.00	4.70	32.97	0.000	5.550	37.80	0.00	209.79
45	80.00	4 ft Standoff	1	7.206	7.926	1.00	1.00	8.51	100.43	0.000	0.000	67.45	0.00	0.00
46	47.00	4 ft Standoff	1	6.454	7.099	1.00	1.00	8.25	97.01	0.000	0.000	58.61	0.00	0.00
47	47.00	Decibel 26DB - GPS	1	6.537	7.191	1.00	1.00	0.39	13.80	0.000	3.000	2.79	0.00	8.38

Discrete Appurtenance Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Totals: 23,964.10

5,105.72

Total Applied Force Summary

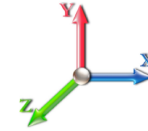
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		67.22	867.09	0.00	0.00
4.00		66.67	869.66	0.00	0.00
6.00		66.09	869.28	0.00	0.00
8.00		65.50	867.41	0.00	0.00
10.00		64.90	864.60	0.00	0.00
12.00		64.30	861.15	0.00	0.00
14.00		63.69	857.24	0.00	0.00
16.00		64.67	852.98	0.00	0.00
18.00		65.56	848.42	0.00	0.00
20.00		66.29	843.64	0.00	0.00
22.00		66.90	838.67	0.00	0.00
24.00		67.39	833.53	0.00	0.00
26.00		67.79	828.25	0.00	0.00
28.00		68.10	822.85	0.00	0.00
30.00		68.34	817.35	0.00	0.00
32.00		68.51	811.75	0.00	0.00
34.00		68.61	806.06	0.00	0.00
36.00		68.66	800.29	0.00	0.00
38.00		68.66	794.46	0.00	0.00
40.00		68.61	788.56	0.00	0.00
42.00		68.52	782.61	0.00	0.00
44.00		68.39	776.60	0.00	0.00
46.00		68.22	770.54	0.00	0.00
47.00	(2) attachments	95.36	493.86	0.00	8.38
47.50		16.94	190.98	0.00	0.00
48.00		17.20	300.63	0.00	0.00
50.00		68.87	1195.03	0.00	0.00
52.00		68.61	1179.15	0.00	0.00
53.25		42.67	731.10	0.00	0.00
54.00		25.52	280.95	0.00	0.00
56.00		68.00	744.65	0.00	0.00
58.00		67.66	738.34	0.00	0.00
60.00		67.29	732.01	0.00	0.00
62.00		66.89	725.64	0.00	0.00
64.00		66.47	719.25	0.00	0.00
66.00		66.03	712.83	0.00	0.00
68.00		65.57	706.39	0.00	0.00
70.00		65.09	699.92	0.00	0.00
72.00		64.59	693.43	0.00	0.00
74.00		64.08	686.92	0.00	0.00
76.00		63.54	680.39	0.00	0.00
78.00		62.99	673.84	0.00	0.00
80.00	(2) attachments	167.67	800.67	0.00	209.79
82.00		61.83	654.40	0.00	0.00
84.00		61.23	647.78	0.00	0.00
86.00		60.62	641.14	0.00	0.00

Total Applied Force Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00		59.99	634.48	0.00	0.00
90.00		59.34	627.81	0.00	0.00
92.00		58.69	621.13	0.00	0.00
94.00		58.02	614.43	0.00	0.00
96.00		57.33	607.72	0.00	0.00
97.00		28.38	301.49	0.00	0.00
98.00		28.73	429.08	0.00	0.00
100.00		56.98	849.37	0.00	0.00
101.00		28.22	420.59	0.00	0.00
102.00		28.02	272.53	0.00	0.00
104.00		55.64	540.35	0.00	0.00
106.00		55.21	534.50	0.00	0.00
108.00		54.78	528.64	0.00	0.00
110.00	(2) attachments	168.70	659.51	0.00	227.13
112.00		52.53	510.35	0.00	0.00
114.00		51.75	504.44	0.00	0.00
116.00		50.96	498.52	0.00	0.00
118.00		50.17	492.59	0.00	0.00
120.00		49.36	486.65	0.00	0.00
122.00		48.54	480.70	0.00	0.00
124.00		47.72	474.74	0.00	0.00
126.00		46.88	468.78	0.00	0.00
128.00		46.04	462.81	0.00	0.00
130.00		45.19	456.82	0.00	0.00
131.00	(26) attachments	1146.81	4354.22	0.00	0.00
132.00		22.04	208.55	0.00	0.00
134.00		43.46	412.25	0.00	0.00
136.00		42.58	406.24	0.00	0.00
138.00		41.70	400.23	0.00	0.00
140.00	(28) attachments	1184.39	6260.72	0.00	0.00
142.00		39.91	349.02	0.00	0.00
144.00		39.33	342.98	0.00	0.00
146.00		38.77	336.94	0.00	0.00
148.00		38.20	330.89	0.00	0.00
148.25		4.73	41.02	0.00	0.00
149.00	(24) attachments	1033.46	5041.39	0.00	852.44
150.00		19.09	204.92	0.00	0.00
150.50		9.49	101.68	0.00	0.00
152.00		28.07	196.62	0.00	0.00
154.00		36.94	255.21	0.00	0.00
156.00		36.37	250.98	0.00	0.00
158.00		35.79	246.73	0.00	0.00
159.00	(39) attachments	1555.18	8824.50	0.00	4612.52
	Totals:	9,699.80	75,745.41	0.00	5,910.26

Linear Appurtenance Segment Forces (Factored)

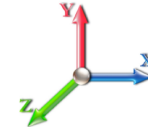
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1 5/8"	Yes	2.00	0.000	2.00	0.60	0.00	0.064	0.000	5.059	0.00	68.40
2.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	5.059	0.00	2.76
2.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	5.059	0.00	22.45
2.00	7/8"	Yes	2.00	0.000	1.11	0.45	0.00	0.064	0.000	5.059	0.00	4.32
2.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	5.059	0.00	4.32
2.00	1/2"	Yes	2.00	0.000	0.65	0.37	0.00	0.064	0.000	5.059	0.00	2.76
4.00	1 5/8"	Yes	2.00	0.000	2.00	0.61	0.00	0.065	0.000	5.059	0.00	70.08
4.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	5.059	0.00	2.97
4.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	5.059	0.00	23.00
4.00	7/8"	Yes	2.00	0.000	1.11	0.46	0.00	0.065	0.000	5.059	0.00	4.56
4.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	5.059	0.00	4.56
4.00	1/2"	Yes	2.00	0.000	0.65	0.38	0.00	0.065	0.000	5.059	0.00	2.97
6.00	1 5/8"	Yes	2.00	0.000	2.00	0.62	0.00	0.065	0.000	5.059	0.00	71.25
6.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	5.059	0.00	3.11
6.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	5.059	0.00	23.38
6.00	7/8"	Yes	2.00	0.000	1.11	0.47	0.00	0.065	0.000	5.059	0.00	4.72
6.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	5.059	0.00	4.72
6.00	1/2"	Yes	2.00	0.000	0.65	0.39	0.00	0.065	0.000	5.059	0.00	3.11
8.00	1 5/8"	Yes	2.00	0.000	2.00	0.63	0.00	0.066	0.000	5.059	0.00	72.15
8.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	5.059	0.00	3.23
8.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	5.059	0.00	23.68
8.00	7/8"	Yes	2.00	0.000	1.11	0.48	0.00	0.066	0.000	5.059	0.00	4.85
8.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	5.059	0.00	4.85
8.00	1/2"	Yes	2.00	0.000	0.65	0.40	0.00	0.066	0.000	5.059	0.00	3.23
10.00	1 5/8"	Yes	2.00	0.000	2.00	0.63	0.00	0.067	0.000	5.059	0.00	72.88
10.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	5.059	0.00	3.32
10.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	5.059	0.00	23.92
10.00	7/8"	Yes	2.00	0.000	1.11	0.48	0.00	0.067	0.000	5.059	0.00	4.96
10.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	5.059	0.00	4.96
10.00	1/2"	Yes	2.00	0.000	0.65	0.41	0.00	0.067	0.000	5.059	0.00	3.32
12.00	1 5/8"	Yes	2.00	0.000	2.00	0.64	0.00	0.067	0.000	5.059	0.00	73.50
12.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	5.059	0.00	3.40
12.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	5.059	0.00	24.13
12.00	7/8"	Yes	2.00	0.000	1.11	0.49	0.00	0.067	0.000	5.059	0.00	5.05
12.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	5.059	0.00	5.05
12.00	1/2"	Yes	2.00	0.000	0.65	0.41	0.00	0.067	0.000	5.059	0.00	3.40
14.00	1 5/8"	Yes	2.00	0.000	2.00	0.64	0.00	0.068	0.000	5.059	0.00	74.05
14.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	5.059	0.00	3.48
14.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	5.059	0.00	24.31
14.00	7/8"	Yes	2.00	0.000	1.11	0.49	0.00	0.068	0.000	5.059	0.00	5.14
14.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	5.059	0.00	5.14
14.00	1/2"	Yes	2.00	0.000	0.65	0.42	0.00	0.068	0.000	5.059	0.00	3.48
16.00	1 5/8"	Yes	2.00	0.000	2.00	0.65	0.00	0.069	0.000	5.187	0.00	74.53
16.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	5.187	0.00	3.54
16.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	5.187	0.00	24.47
16.00	7/8"	Yes	2.00	0.000	1.11	0.50	0.00	0.069	0.000	5.187	0.00	5.21
16.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	5.187	0.00	5.21

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

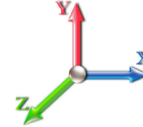


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 29

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)
16.00	1/2"	Yes	2.00	0.000	0.65	0.42	0.00	0.069	0.000	5.187	0.00	3.54
18.00	1 5/8"	Yes	2.00	0.000	2.00	0.65	0.00	0.069	0.000	5.310	0.00	74.97
18.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	5.310	0.00	3.60
18.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	5.310	0.00	24.62
18.00	7/8"	Yes	2.00	0.000	1.11	0.50	0.00	0.069	0.000	5.310	0.00	5.28
18.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	5.310	0.00	5.28
18.00	1/2"	Yes	2.00	0.000	0.65	0.42	0.00	0.069	0.000	5.310	0.00	3.60
20.00	1 5/8"	Yes	2.00	0.000	2.00	0.65	0.00	0.070	0.000	5.423	0.00	75.36
20.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	5.423	0.00	3.65
20.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	5.423	0.00	24.75
20.00	7/8"	Yes	2.00	0.000	1.11	0.50	0.00	0.070	0.000	5.423	0.00	5.34
20.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	5.423	0.00	5.34
20.00	1/2"	Yes	2.00	0.000	0.65	0.43	0.00	0.070	0.000	5.423	0.00	3.65
22.00	1 5/8"	Yes	2.00	0.000	2.00	0.65	0.00	0.071	0.000	5.528	0.00	75.73
22.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.528	0.00	3.70
22.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.528	0.00	24.87
22.00	7/8"	Yes	2.00	0.000	1.11	0.51	0.00	0.071	0.000	5.528	0.00	5.39
22.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	5.528	0.00	5.39
22.00	1/2"	Yes	2.00	0.000	0.65	0.43	0.00	0.071	0.000	5.528	0.00	3.70
24.00	1 5/8"	Yes	2.00	0.000	2.00	0.66	0.00	0.072	0.000	5.626	0.00	76.06
24.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.626	0.00	3.75
24.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.626	0.00	24.98
24.00	7/8"	Yes	2.00	0.000	1.11	0.51	0.00	0.072	0.000	5.626	0.00	5.44
24.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.626	0.00	5.44
24.00	1/2"	Yes	2.00	0.000	0.65	0.43	0.00	0.072	0.000	5.626	0.00	3.75
26.00	1 5/8"	Yes	2.00	0.000	2.00	0.66	0.00	0.072	0.000	5.718	0.00	76.38
26.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.718	0.00	3.79
26.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.718	0.00	25.09
26.00	7/8"	Yes	2.00	0.000	1.11	0.51	0.00	0.072	0.000	5.718	0.00	5.49
26.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	5.718	0.00	5.49
26.00	1/2"	Yes	2.00	0.000	0.65	0.44	0.00	0.072	0.000	5.718	0.00	3.79
28.00	1 5/8"	Yes	2.00	0.000	2.00	0.66	0.00	0.073	0.000	5.804	0.00	76.67
28.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.804	0.00	3.83
28.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.804	0.00	25.19
28.00	7/8"	Yes	2.00	0.000	1.11	0.51	0.00	0.073	0.000	5.804	0.00	5.54
28.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	5.804	0.00	5.54
28.00	1/2"	Yes	2.00	0.000	0.65	0.44	0.00	0.073	0.000	5.804	0.00	3.83
30.00	1 5/8"	Yes	2.00	0.000	2.00	0.66	0.00	0.074	0.000	5.887	0.00	76.95
30.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	5.887	0.00	3.87
30.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	5.887	0.00	25.28
30.00	7/8"	Yes	2.00	0.000	1.11	0.52	0.00	0.074	0.000	5.887	0.00	5.58
30.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	5.887	0.00	5.58
30.00	1/2"	Yes	2.00	0.000	0.65	0.44	0.00	0.074	0.000	5.887	0.00	3.87
32.00	1 5/8"	Yes	2.00	0.000	2.00	0.67	0.00	0.075	0.000	5.965	0.00	77.21
32.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	5.965	0.00	3.91
32.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	5.965	0.00	25.37
32.00	7/8"	Yes	2.00	0.000	1.11	0.52	0.00	0.075	0.000	5.965	0.00	5.62

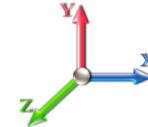
Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (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 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	5.965	0.00	5.62
32.00	1/2"	Yes	2.00	0.000	0.65	0.44	0.00	0.075	0.000	5.965	0.00	3.91
34.00	1 5/8"	Yes	2.00	0.000	2.00	0.67	0.00	0.076	0.000	6.039	0.00	77.45
34.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.039	0.00	3.94
34.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.039	0.00	25.46
34.00	7/8"	Yes	2.00	0.000	1.11	0.52	0.00	0.076	0.000	6.039	0.00	5.66
34.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	6.039	0.00	5.66
34.00	1/2"	Yes	2.00	0.000	0.65	0.44	0.00	0.076	0.000	6.039	0.00	3.94
36.00	1 5/8"	Yes	2.00	0.000	2.00	0.67	0.00	0.077	0.000	6.110	0.00	77.69
36.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.110	0.00	3.98
36.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.110	0.00	25.54
36.00	7/8"	Yes	2.00	0.000	1.11	0.52	0.00	0.077	0.000	6.110	0.00	5.70
36.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.110	0.00	5.70
36.00	1/2"	Yes	2.00	0.000	0.65	0.45	0.00	0.077	0.000	6.110	0.00	3.98
38.00	1 5/8"	Yes	2.00	0.000	2.00	0.67	0.00	0.078	0.000	6.178	0.00	77.91
38.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.178	0.00	4.01
38.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.178	0.00	25.61
38.00	7/8"	Yes	2.00	0.000	1.11	0.52	0.00	0.078	0.000	6.178	0.00	5.74
38.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.178	0.00	5.74
38.00	1/2"	Yes	2.00	0.000	0.65	0.45	0.00	0.078	0.000	6.178	0.00	4.01
40.00	1 5/8"	Yes	2.00	0.000	2.00	0.67	0.00	0.078	0.000	6.243	0.00	78.13
40.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.243	0.00	4.04
40.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.243	0.00	25.68
40.00	7/8"	Yes	2.00	0.000	1.11	0.53	0.00	0.078	0.000	6.243	0.00	5.77
40.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	6.243	0.00	5.77
40.00	1/2"	Yes	2.00	0.000	0.65	0.45	0.00	0.078	0.000	6.243	0.00	4.04
42.00	1 5/8"	Yes	2.00	0.000	2.00	0.68	0.00	0.079	0.000	6.306	0.00	78.33
42.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	6.306	0.00	4.07
42.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	6.306	0.00	25.75
42.00	7/8"	Yes	2.00	0.000	1.11	0.53	0.00	0.079	0.000	6.306	0.00	5.80
42.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	6.306	0.00	5.80
42.00	1/2"	Yes	2.00	0.000	0.65	0.45	0.00	0.079	0.000	6.306	0.00	4.07
44.00	1 5/8"	Yes	2.00	0.000	2.00	0.68	0.00	0.080	0.000	6.367	0.00	78.53
44.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	6.367	0.00	4.10
44.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	6.367	0.00	25.82
44.00	7/8"	Yes	2.00	0.000	1.11	0.53	0.00	0.080	0.000	6.367	0.00	5.83
44.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	6.367	0.00	5.83
44.00	1/2"	Yes	2.00	0.000	0.65	0.45	0.00	0.080	0.000	6.367	0.00	4.10
46.00	1 5/8"	Yes	2.00	0.000	2.00	0.68	0.00	0.081	0.000	6.426	0.00	78.72
46.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	6.426	0.00	4.12
46.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	6.426	0.00	25.89
46.00	7/8"	Yes	2.00	0.000	1.11	0.53	0.00	0.081	0.000	6.426	0.00	5.87
46.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	6.426	0.00	5.87
46.00	1/2"	Yes	2.00	0.000	0.65	0.45	0.00	0.081	0.000	6.426	0.00	4.12
47.00	1 5/8"	Yes	1.00	0.000	2.00	0.34	0.00	0.082	0.000	6.454	0.00	39.40
47.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	6.454	0.00	2.07
47.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	6.454	0.00	12.96

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

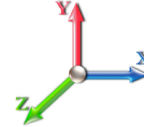


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 29

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)
47.00	7/8"	Yes	1.00	0.000	1.11	0.27	0.00	0.082	0.000	6.454	0.00	2.94
47.00	7/8"	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	6.454	0.00	2.94
47.00	1/2"	Yes	1.00	0.000	0.65	0.23	0.00	0.082	0.000	6.454	0.00	2.07
47.50	1 5/8"	Yes	0.50	0.000	2.00	0.17	0.00	0.083	0.000	6.468	0.00	19.71
47.50	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	6.468	0.00	1.04
47.50	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	6.468	0.00	6.48
47.50	7/8"	Yes	0.50	0.000	1.11	0.13	0.00	0.083	0.000	6.468	0.00	1.47
47.50	7/8"	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	6.468	0.00	1.47
47.50	1/2"	Yes	0.50	0.000	0.65	0.11	0.00	0.083	0.000	6.468	0.00	1.04
48.00	1 5/8"	Yes	0.50	0.000	2.00	0.17	0.00	0.083	0.000	6.482	0.00	19.72
48.00	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	6.482	0.00	1.04
48.00	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	6.482	0.00	6.49
48.00	7/8"	Yes	0.50	0.000	1.11	0.13	0.00	0.083	0.000	6.482	0.00	1.47
48.00	7/8"	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	6.482	0.00	1.47
48.00	1/2"	Yes	0.50	0.000	0.65	0.11	0.00	0.083	0.000	6.482	0.00	1.04
50.00	1 5/8"	Yes	2.00	0.000	2.00	0.68	0.00	0.083	0.000	6.537	0.00	79.07
50.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.537	0.00	4.18
50.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.537	0.00	26.01
50.00	7/8"	Yes	2.00	0.000	1.11	0.53	0.00	0.083	0.000	6.537	0.00	5.92
50.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	6.537	0.00	5.92
50.00	1/2"	Yes	2.00	0.000	0.65	0.46	0.00	0.083	0.000	6.537	0.00	4.18
52.00	1 5/8"	Yes	2.00	0.000	2.00	0.68	0.00	0.070	0.000	6.590	0.00	79.24
52.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.590	0.00	4.20
52.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.590	0.00	26.07
52.00	7/8"	Yes	2.00	0.000	1.11	0.53	0.00	0.070	0.000	6.590	0.00	5.95
52.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.590	0.00	5.95
53.25	1 5/8"	Yes	1.25	0.000	2.00	0.43	0.00	0.071	0.000	6.623	0.00	49.59
53.25	1/2" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	6.623	0.00	2.64
53.25	2" Conduit	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	6.623	0.00	16.31
53.25	7/8"	Yes	1.25	0.000	1.11	0.33	0.00	0.071	0.000	6.623	0.00	3.73
53.25	7/8"	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	6.623	0.00	3.73
54.00	1 5/8"	Yes	0.75	0.000	2.00	0.26	0.00	0.070	0.000	6.642	0.00	29.78
54.00	1/2" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	6.642	0.00	1.58
54.00	2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	6.642	0.00	9.80
54.00	7/8"	Yes	0.75	0.000	1.11	0.20	0.00	0.070	0.000	6.642	0.00	2.24
54.00	7/8"	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	6.642	0.00	2.24
56.00	1 5/8"	Yes	2.00	0.000	2.00	0.69	0.00	0.071	0.000	6.692	0.00	79.57
56.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	6.692	0.00	4.25
56.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	6.692	0.00	26.18
56.00	7/8"	Yes	2.00	0.000	1.11	0.54	0.00	0.071	0.000	6.692	0.00	6.00
56.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	6.692	0.00	6.00
58.00	1 5/8"	Yes	2.00	0.000	2.00	0.69	0.00	0.071	0.000	6.741	0.00	79.72
58.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	6.741	0.00	4.27
58.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	6.741	0.00	26.23
58.00	7/8"	Yes	2.00	0.000	1.11	0.54	0.00	0.071	0.000	6.741	0.00	6.03
58.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	6.741	0.00	6.03
60.00	1 5/8"	Yes	2.00	0.000	2.00	0.69	0.00	0.072	0.000	6.788	0.00	79.87

Linear Appurtenance Segment Forces (Factored)

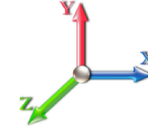
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
60.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	6.788	0.00	4.29
60.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	6.788	0.00	26.28
60.00	7/8"	Yes	2.00	0.000	1.11	0.54	0.00	0.072	0.000	6.788	0.00	6.05
60.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	6.788	0.00	6.05
62.00	1 5/8"	Yes	2.00	0.000	2.00	0.69	0.00	0.073	0.000	6.834	0.00	80.01
62.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	6.834	0.00	4.31
62.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	6.834	0.00	26.33
62.00	7/8"	Yes	2.00	0.000	1.11	0.54	0.00	0.073	0.000	6.834	0.00	6.08
62.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	6.834	0.00	6.08
64.00	1 5/8"	Yes	2.00	0.000	2.00	0.69	0.00	0.074	0.000	6.879	0.00	80.15
64.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	6.879	0.00	4.33
64.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	6.879	0.00	26.38
64.00	7/8"	Yes	2.00	0.000	1.11	0.54	0.00	0.074	0.000	6.879	0.00	6.10
64.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	6.879	0.00	6.10
66.00	1 5/8"	Yes	2.00	0.000	2.00	0.69	0.00	0.075	0.000	6.923	0.00	80.29
66.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.923	0.00	4.36
66.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.923	0.00	26.43
66.00	7/8"	Yes	2.00	0.000	1.11	0.54	0.00	0.075	0.000	6.923	0.00	6.12
66.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	6.923	0.00	6.12
68.00	1 5/8"	Yes	2.00	0.000	2.00	0.69	0.00	0.077	0.000	6.967	0.00	80.43
68.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.967	0.00	4.37
68.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.967	0.00	26.47
68.00	7/8"	Yes	2.00	0.000	1.11	0.54	0.00	0.077	0.000	6.967	0.00	6.14
68.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	6.967	0.00	6.14
70.00	1 5/8"	Yes	2.00	0.000	2.00	0.69	0.00	0.078	0.000	7.009	0.00	80.56
70.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	7.009	0.00	4.39
70.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	7.009	0.00	26.52
70.00	7/8"	Yes	2.00	0.000	1.11	0.54	0.00	0.078	0.000	7.009	0.00	6.17
70.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	7.009	0.00	6.17
72.00	1 5/8"	Yes	2.00	0.000	2.00	0.69	0.00	0.079	0.000	7.050	0.00	80.68
72.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	7.050	0.00	4.41
72.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	7.050	0.00	26.56
72.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.079	0.000	7.050	0.00	6.19
72.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	7.050	0.00	6.19
74.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.080	0.000	7.090	0.00	80.81
74.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	7.090	0.00	4.43
74.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	7.090	0.00	26.61
74.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.080	0.000	7.090	0.00	6.21
74.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	7.090	0.00	6.21
76.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.081	0.000	7.129	0.00	80.93
76.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	7.129	0.00	4.45
76.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	7.129	0.00	26.65
76.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.081	0.000	7.129	0.00	6.23
76.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	7.129	0.00	6.23
78.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.082	0.000	7.168	0.00	81.05
78.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	7.168	0.00	4.47
78.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	7.168	0.00	26.69

Linear Appurtenance Segment Forces (Factored)

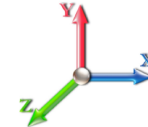
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
78.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.082	0.000	7.168	0.00	6.25
78.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	7.168	0.00	6.25
80.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.084	0.000	7.206	0.00	81.16
80.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	7.206	0.00	4.48
80.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	7.206	0.00	26.73
80.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.084	0.000	7.206	0.00	6.27
80.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	7.206	0.00	6.27
82.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.085	0.000	7.243	0.00	81.27
82.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	7.243	0.00	4.50
82.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	7.243	0.00	26.77
82.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.085	0.000	7.243	0.00	6.29
84.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.086	0.000	7.279	0.00	81.38
84.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	7.279	0.00	4.52
84.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	7.279	0.00	26.81
84.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.086	0.000	7.279	0.00	6.30
86.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.088	0.000	7.315	0.00	81.49
86.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	7.315	0.00	4.53
86.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	7.315	0.00	26.84
86.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.088	0.000	7.315	0.00	6.32
88.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.089	0.000	7.350	0.00	81.60
88.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	7.350	0.00	4.55
88.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	7.350	0.00	26.88
88.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.089	0.000	7.350	0.00	6.34
90.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.091	0.000	7.384	0.00	81.70
90.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	7.384	0.00	4.57
90.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	7.384	0.00	26.92
90.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.091	0.000	7.384	0.00	6.36
92.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.092	0.000	7.418	0.00	81.81
92.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	7.418	0.00	4.58
92.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	7.418	0.00	26.95
92.00	7/8"	Yes	2.00	0.000	1.11	0.55	0.00	0.092	0.000	7.418	0.00	6.37
94.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.094	0.000	7.452	0.00	81.91
94.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	7.452	0.00	4.60
94.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	7.452	0.00	26.99
94.00	7/8"	Yes	2.00	0.000	1.11	0.56	0.00	0.094	0.000	7.452	0.00	6.39
96.00	1 5/8"	Yes	2.00	0.000	2.00	0.70	0.00	0.095	0.000	7.484	0.00	82.00
96.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	7.484	0.00	4.61
96.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	7.484	0.00	27.02
96.00	7/8"	Yes	2.00	0.000	1.11	0.56	0.00	0.095	0.000	7.484	0.00	6.41
97.00	1 5/8"	Yes	1.00	0.000	2.00	0.35	0.00	0.097	0.000	7.501	0.00	41.03
97.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	7.501	0.00	2.31
97.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	7.501	0.00	13.52
97.00	7/8"	Yes	1.00	0.000	1.11	0.28	0.00	0.097	0.000	7.501	0.00	3.21
98.00	1 5/8"	Yes	1.00	0.000	2.00	0.35	0.00	0.098	0.000	7.517	0.00	41.05
98.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	7.517	0.00	2.31
98.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	7.517	0.00	13.53
98.00	7/8"	Yes	1.00	0.000	1.11	0.28	0.00	0.098	0.000	7.517	0.00	3.21

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

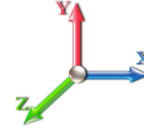


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 29

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)
100.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.099	0.000	7.548	0.00	82.19
100.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	7.548	0.00	4.64
100.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	7.548	0.00	27.09
100.00	7/8"	Yes	2.00	0.000	1.11	0.56	0.00	0.099	0.000	7.548	0.00	6.44
101.00	1 5/8"	Yes	1.00	0.000	2.00	0.35	0.00	0.100	1.001	7.564	0.00	41.12
101.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	7.564	0.00	2.32
101.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	7.564	0.00	13.55
101.00	7/8"	Yes	1.00	0.000	1.11	0.28	0.00	0.100	1.001	7.564	0.00	3.22
102.00	1 5/8"	Yes	1.00	0.000	2.00	0.35	0.00	0.099	0.000	7.580	0.00	41.14
102.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.099	0.000	7.580	0.00	2.33
102.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.099	0.000	7.580	0.00	13.56
102.00	7/8"	Yes	1.00	0.000	1.11	0.28	0.00	0.099	0.000	7.580	0.00	3.23
104.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.101	1.002	7.610	0.00	82.38
104.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	7.610	0.00	4.67
104.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	7.610	0.00	27.15
104.00	7/8"	Yes	2.00	0.000	1.11	0.56	0.00	0.101	1.002	7.610	0.00	6.47
106.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.102	1.007	7.641	0.00	82.47
106.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.007	7.641	0.00	4.68
106.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.007	7.641	0.00	27.18
106.00	7/8"	Yes	2.00	0.000	1.11	0.56	0.00	0.102	1.007	7.641	0.00	6.49
108.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.104	1.013	7.670	0.00	82.56
108.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.013	7.670	0.00	4.70
108.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.013	7.670	0.00	27.22
108.00	7/8"	Yes	2.00	0.000	1.11	0.56	0.00	0.104	1.013	7.670	0.00	6.50
110.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.106	1.019	7.700	0.00	82.65
110.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	7.700	0.00	4.71
110.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	7.700	0.00	27.25
110.00	7/8"	Yes	2.00	0.000	1.11	0.56	0.00	0.106	1.019	7.700	0.00	6.52
112.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.070	0.000	7.729	0.00	82.73
112.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	7.729	0.00	4.72
112.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	7.729	0.00	27.28
114.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.071	0.000	7.757	0.00	82.82
114.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	7.757	0.00	4.74
114.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	7.757	0.00	27.31
116.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.073	0.000	7.786	0.00	82.90
116.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	7.786	0.00	4.75
116.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	7.786	0.00	27.33
118.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.074	0.000	7.814	0.00	82.98
118.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	7.814	0.00	4.76
118.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	7.814	0.00	27.36
120.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.076	0.000	7.841	0.00	83.06
120.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	7.841	0.00	4.77
120.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	7.841	0.00	27.39
122.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.078	0.000	7.868	0.00	83.14
122.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	7.868	0.00	4.79
122.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	7.868	0.00	27.42
124.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.079	0.000	7.895	0.00	83.22

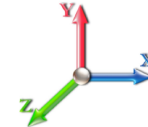
Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (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 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
124.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	7.895	0.00	4.80
124.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	7.895	0.00	27.45
126.00	1 5/8"	Yes	2.00	0.000	2.00	0.71	0.00	0.081	0.000	7.921	0.00	83.30
126.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	7.921	0.00	4.81
126.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	7.921	0.00	27.47
128.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.083	0.000	7.947	0.00	83.37
128.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	7.947	0.00	4.82
128.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	7.947	0.00	27.50
130.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.085	0.000	7.973	0.00	83.45
130.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	7.973	0.00	4.83
130.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	7.973	0.00	27.53
131.00	1 5/8"	Yes	1.00	0.000	2.00	0.36	0.00	0.087	0.000	7.986	0.00	41.74
131.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.087	0.000	7.986	0.00	2.42
131.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.087	0.000	7.986	0.00	13.77
132.00	1 5/8"	Yes	1.00	0.000	2.00	0.36	0.00	0.088	0.000	7.999	0.00	41.76
132.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.088	0.000	7.999	0.00	2.42
132.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.088	0.000	7.999	0.00	13.78
134.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.090	0.000	8.024	0.00	83.59
134.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	8.024	0.00	4.86
134.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	8.024	0.00	27.58
136.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.092	0.000	8.049	0.00	83.67
136.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	8.049	0.00	4.87
136.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	8.049	0.00	27.60
138.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.094	0.000	8.073	0.00	83.74
138.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	8.073	0.00	4.88
138.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	8.073	0.00	27.63
140.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.097	0.000	8.098	0.00	83.81
140.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	8.098	0.00	4.89
140.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	8.098	0.00	27.65
142.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.100	0.000	8.122	0.00	83.88
142.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	8.122	0.00	4.90
142.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	8.122	0.00	27.68
144.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.103	1.009	8.145	0.00	83.95
144.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	8.145	0.00	4.91
144.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	8.145	0.00	27.70
146.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.106	1.018	8.169	0.00	84.01
146.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	8.169	0.00	4.92
146.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	8.169	0.00	27.73
148.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.109	1.028	8.192	0.00	84.08
148.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	8.192	0.00	4.93
148.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	8.192	0.00	27.75
148.25	1 5/8"	Yes	0.25	0.000	2.00	0.09	0.00	0.111	1.034	8.195	0.00	10.51
148.25	1/2" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.111	1.034	8.195	0.00	0.62
148.25	2" Conduit	Yes	0.25	0.000	0.00	0.00	0.00	0.111	1.034	8.195	0.00	3.47
149.00	1 5/8"	Yes	0.75	0.000	2.00	0.27	0.00	0.112	1.037	8.204	0.00	31.54
149.00	1/2" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.112	1.037	8.204	0.00	1.85
149.00	2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	0.112	1.037	8.204	0.00	10.41

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

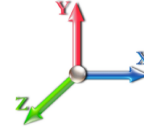


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 29

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)
150.00	1 5/8"	Yes	1.00	0.000	2.00	0.36	0.00	0.114	1.041	8.215	0.00	42.07
150.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	8.215	0.00	2.47
150.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	8.215	0.00	13.89
150.50	1 5/8"	Yes	0.50	0.000	2.00	0.18	0.00	0.115	1.046	8.221	0.00	21.04
150.50	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.046	8.221	0.00	1.24
150.50	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.046	8.221	0.00	6.94
152.00	1 5/8"	Yes	1.50	0.000	2.00	0.54	0.00	0.115	1.044	8.238	0.00	63.16
152.00	1/2" Fiber	Yes	1.50	0.000	0.00	0.00	0.00	0.115	1.044	8.238	0.00	3.72
152.00	2" Conduit	Yes	1.50	0.000	0.00	0.00	0.00	0.115	1.044	8.238	0.00	20.85
154.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.118	1.054	8.261	0.00	84.28
154.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	8.261	0.00	4.96
154.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	8.261	0.00	27.82
156.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.122	1.066	8.283	0.00	84.34
156.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	8.283	0.00	4.97
156.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	8.283	0.00	27.84
158.00	1 5/8"	Yes	2.00	0.000	2.00	0.72	0.00	0.127	1.080	8.305	0.00	84.40
158.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	8.305	0.00	4.98
158.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	8.305	0.00	27.86
159.00	1 5/8"	Yes	1.00	0.000	2.00	0.36	0.00	0.130	1.090	8.316	0.00	42.22
159.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.130	1.090	8.316	0.00	2.49
159.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.130	1.090	8.316	0.00	13.94
Totals:											0.0	9,459.3

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
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90.00	-39.61	-7.53	0.00	-393.19	0.00	393.19	2930.09	692.15	1902.89	1990.89	11.83	-1.378	0.000	0.211
92.00	-38.98	-7.49	0.00	-378.12	0.00	378.12	2880.09	680.34	1838.49	1923.14	12.41	-1.418	0.000	0.210
94.00	-38.37	-7.44	0.00	-363.15	0.00	363.15	2830.08	668.52	1775.20	1856.56	13.02	-1.459	0.000	0.209
96.00	-37.76	-7.39	0.00	-348.27	0.00	348.27	2780.07	656.71	1713.01	1791.15	13.64	-1.500	0.000	0.208
97.00	-37.45	-7.37	0.00	-340.88	0.00	340.88	2755.06	650.80	1682.34	1758.89	13.95	-1.521	0.000	0.208
98.00	-37.02	-7.35	0.00	-333.52	0.00	333.52	2730.06	644.90	1651.94	1726.92	14.27	-1.542	0.000	0.207
100.00	-36.17	-7.29	0.00	-318.83	0.00	318.83	2680.05	633.08	1591.98	1663.86	14.93	-1.584	0.000	0.205
101.00	-35.75	-7.26	0.00	-311.54	0.00	311.54	2260.99	534.61	1362.32	1425.54	15.26	-1.605	0.000	0.235
102.00	-35.47	-7.24	0.00	-304.28	0.00	304.28	2242.36	529.69	1337.35	1400.64	15.60	-1.627	0.000	0.233
104.00	-34.93	-7.20	0.00	-289.79	0.00	289.79	2200.69	519.85	1288.10	1348.81	16.29	-1.675	0.000	0.231
106.00	-34.39	-7.16	0.00	-275.39	0.00	275.39	2159.02	510.00	1239.78	1297.95	17.00	-1.723	0.000	0.228
108.00	-33.85	-7.12	0.00	-261.07	0.00	261.07	2117.34	500.16	1192.38	1248.07	17.74	-1.771	0.000	0.225
110.00	-33.19	-6.96	0.00	-246.60	0.00	246.60	2075.67	490.32	1145.90	1199.16	18.49	-1.820	0.000	0.222
112.00	-32.68	-6.92	0.00	-232.69	0.00	232.69	2034.00	480.47	1100.35	1151.23	19.26	-1.869	0.000	0.218
114.00	-32.17	-6.88	0.00	-218.86	0.00	218.86	1992.32	470.63	1055.73	1104.29	20.06	-1.917	0.000	0.215
116.00	-31.67	-6.83	0.00	-205.11	0.00	205.11	1950.65	460.78	1012.02	1058.31	20.87	-1.966	0.000	0.210
118.00	-31.17	-6.79	0.00	-191.44	0.00	191.44	1908.98	450.94	969.24	1013.32	21.70	-2.015	0.000	0.205
120.00	-30.68	-6.75	0.00	-177.85	0.00	177.85	1867.30	441.10	927.39	969.30	22.56	-2.063	0.000	0.200
122.00	-30.20	-6.71	0.00	-164.35	0.00	164.35	1825.63	431.25	886.45	926.26	23.43	-2.111	0.000	0.194
124.00	-29.72	-6.67	0.00	-150.92	0.00	150.92	1783.96	421.41	846.45	884.20	24.33	-2.158	0.000	0.188
126.00	-29.25	-6.63	0.00	-137.58	0.00	137.58	1742.28	411.56	807.36	843.12	25.24	-2.204	0.000	0.180
128.00	-28.78	-6.59	0.00	-124.33	0.00	124.33	1700.61	401.72	769.20	803.01	26.17	-2.249	0.000	0.172
130.00	-28.33	-6.54	0.00	-111.15	0.00	111.15	1658.94	391.87	731.96	763.88	27.12	-2.292	0.000	0.163
131.00	-24.02	-5.23	0.00	-104.61	0.00	104.61	1638.10	386.95	713.69	744.68	27.61	-2.314	0.000	0.155
132.00	-23.81	-5.21	0.00	-99.38	0.00	99.38	1617.26	382.03	695.65	725.73	28.09	-2.335	0.000	0.152
134.00	-23.39	-5.17	0.00	-88.96	0.00	88.96	1575.59	372.19	660.26	688.55	29.08	-2.375	0.000	0.144
136.00	-22.99	-5.12	0.00	-78.63	0.00	78.63	1533.91	362.34	625.80	652.35	30.08	-2.414	0.000	0.136
138.00	-22.59	-5.08	0.00	-68.39	0.00	68.39	1492.24	352.50	592.26	617.13	31.10	-2.451	0.000	0.126
140.00	-16.38	-3.63	0.00	-58.23	0.00	58.23	1450.57	342.65	559.64	582.89	32.14	-2.486	0.000	0.111
142.00	-16.03	-3.59	0.00	-50.97	0.00	50.97	1408.89	332.81	527.94	549.63	33.19	-2.518	0.000	0.104
144.00	-15.69	-3.54	0.00	-43.79	0.00	43.79	1367.22	322.97	497.17	517.34	34.25	-2.549	0.000	0.096
146.00	-15.35	-3.49	0.00	-36.71	0.00	36.71	1325.55	313.12	467.33	486.03	35.32	-2.578	0.000	0.087
148.00	-15.02	-3.45	0.00	-29.72	0.00	29.72	1283.87	303.28	438.41	455.70	36.41	-2.604	0.000	0.077
148.25	-14.98	-3.44	0.00	-28.86	0.00	28.86	1278.66	302.05	434.86	451.97	36.54	-2.607	0.000	0.076
149.00	-9.99	-2.18	0.00	-25.43	0.00	25.43	1263.04	298.36	424.29	440.90	36.95	-2.616	0.000	0.066
150.00	-9.79	-2.15	0.00	-23.25	0.00	23.25	1242.20	293.43	410.41	426.34	37.50	-2.627	0.000	0.062
150.50	-9.69	-2.14	0.00	-22.17	0.00	22.17	761.18	179.81	256.83	268.82	37.78	-2.632	0.000	0.095
152.00	-9.49	-2.11	0.00	-18.96	0.00	18.96	742.42	175.38	244.33	255.67	38.61	-2.647	0.000	0.087
154.00	-9.24	-2.06	0.00	-14.74	0.00	14.74	717.42	169.47	228.15	238.65	39.72	-2.674	0.000	0.075
156.00	-8.99	-2.02	0.00	-10.62	0.00	10.62	692.41	163.56	212.53	222.21	40.85	-2.697	0.000	0.061
158.00	-8.74	-1.97	0.00	-6.58	0.00	6.58	667.41	157.66	197.45	206.36	41.98	-2.713	0.000	0.045
159.00	0.00	-1.56	0.00	-4.61	0.00	4.61	654.91	154.70	190.13	198.65	42.55	-2.720	0.000	0.023

Seismic Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0Ev + 1.0Eh							Iterations 25
Gust Response Factor	1.10			Sds	0.22	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)	0.32	SA	0.03	Seismic Importance Factor	1.00

Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	
2.00		598.43	1.00	26.04	0.00	
4.00		593.85	3.00	25.84	0.00	
6.00		589.27	5.00	25.64	0.01	
8.00		584.69	7.00	25.45	0.01	
10.00		580.11	9.00	25.25	0.02	
12.00		575.52	11.00	25.05	0.02	
14.00		570.94	13.00	24.85	0.03	
16.00		566.36	15.00	24.65	0.04	
18.00		561.78	17.00	24.45	0.06	
20.00		557.20	19.00	24.25	0.07	
22.00		552.62	21.00	24.05	0.08	
24.00		548.04	23.00	23.85	0.10	
26.00		543.46	25.00	23.65	0.11	
28.00		538.88	27.00	23.45	0.13	
30.00		534.30	29.00	23.25	0.15	
32.00		529.72	31.00	23.05	0.17	
34.00		525.14	33.00	22.85	0.19	
36.00		520.55	35.00	22.65	0.21	
38.00		515.97	37.00	22.46	0.23	
40.00		511.39	39.00	22.26	0.25	
42.00		506.81	41.00	22.06	0.27	
44.00		502.23	43.00	21.86	0.29	
46.00		497.65	45.00	21.66	0.31	
47.00	Appurtenance(s)	310.43	46.50	13.51	0.13	
47.50	Bot - Section 2	123.12	47.25	5.36	0.02	
48.00		214.13	47.75	9.32	0.06	
50.00		850.80	49.00	37.03	1.08	
52.00		841.25	51.00	36.61	1.14	
53.25	Top - Section 1	521.13	52.63	22.68	0.47	
54.00		181.34	53.63	7.89	0.06	
56.00		480.44	55.00	20.91	0.43	
58.00		475.86	57.00	20.71	0.46	
60.00		471.28	59.00	20.51	0.48	
62.00		466.69	61.00	20.31	0.50	
64.00		462.11	63.00	20.11	0.53	
66.00		457.53	65.00	19.91	0.55	
68.00		452.95	67.00	19.71	0.57	
70.00		448.37	69.00	19.51	0.59	
72.00		443.79	71.00	19.31	0.62	
74.00		439.21	73.00	19.11	0.64	
76.00		434.63	75.00	18.92	0.66	
78.00		430.05	77.00	18.72	0.68	
80.00	Appurtenance(s)	489.19	79.00	21.29	0.93	
82.00		419.64	81.00	18.26	0.72	
84.00		415.06	83.00	18.06	0.74	

Seismic Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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86.00		410.48	85.00	17.86	0.75
88.00		405.90	87.00	17.66	0.77
90.00		401.31	89.00	17.47	0.79
92.00		396.73	91.00	17.27	0.81
94.00		392.15	93.00	17.07	0.82
96.00		387.57	95.00	16.87	0.84
97.00	Bot - Section 3	192.07	96.50	8.36	0.21
98.00		297.92	97.50	12.97	0.52
100.00		589.54	99.00	25.66	2.11
101.00	Top - Section 2	291.62	100.50	12.69	0.53
102.00		168.49	101.50	7.33	0.18
104.00		334.12	103.00	14.54	0.73
106.00		330.30	105.00	14.37	0.75
108.00		326.48	107.00	14.21	0.76
110.00	Appurtenance(s)	386.39	109.00	16.82	1.10
112.00		317.60	111.00	13.82	0.77
114.00		313.78	113.00	13.66	0.78
116.00		309.97	115.00	13.49	0.79
118.00		306.15	117.00	13.32	0.79
120.00		302.33	119.00	13.16	0.80
122.00		298.51	121.00	12.99	0.81
124.00		294.70	123.00	12.83	0.81
126.00		290.88	125.00	12.66	0.82
128.00		287.06	127.00	12.49	0.82
130.00		283.24	129.00	12.33	0.83
131.00	Appurtenance(s)	1850.1	130.50	80.52	36.12
132.00		122.94	131.50	5.35	0.16
134.00		243.02	133.00	10.58	0.65
136.00		239.20	135.00	10.41	0.65
138.00		235.38	137.00	10.24	0.64
140.00	Appurtenance(s)	3262.7	139.00	141.99	127.42
142.00		188.58	141.00	8.21	0.44
144.00		184.76	143.00	8.04	0.43
146.00		180.95	145.00	7.87	0.43
148.00		177.13	147.00	7.71	0.42
148.25	Bot - Section 4	21.87	148.13	0.95	0.01
149.00	Appurtenance(s)	2571.3	148.63	111.90	90.48
150.00		121.61	149.50	5.29	0.20
150.50	Top - Section 3	60.23	150.25	2.62	0.05
152.00		90.28	151.25	3.93	0.12
154.00		115.32	153.00	5.02	0.19
156.00		113.03	155.00	4.92	0.19
158.00		110.74	157.00	4.82	0.19
159.00	Appurtenance(s)	4850.0	158.50	211.08	366.10
Totals:		45,488.6		1,979.7	659.4

Total Wind: 37,331.4

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

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00	-26.90	-0.70	0.00	-44.74	0.00	44.74	2980.10	703.96	1968.39	2059.81	1.08	-0.13	0.031
90.00	-26.43	-0.70	0.00	-43.33	0.00	43.33	2930.09	692.15	1902.89	1990.89	1.13	-0.14	0.031
92.00	-25.96	-0.70	0.00	-41.92	0.00	41.92	2880.09	680.34	1838.49	1923.14	1.19	-0.14	0.031
94.00	-25.50	-0.70	0.00	-40.51	0.00	40.51	2830.08	668.52	1775.20	1856.56	1.25	-0.15	0.031
96.00	-25.05	-0.70	0.00	-39.11	0.00	39.11	2780.07	656.71	1713.01	1791.15	1.31	-0.15	0.031
97.00	-24.82	-0.70	0.00	-38.40	0.00	38.40	2755.06	650.80	1682.34	1758.89	1.35	-0.15	0.031
98.00	-24.46	-0.70	0.00	-37.70	0.00	37.70	2730.06	644.90	1651.94	1726.92	1.38	-0.16	0.031
100.00	-23.76	-0.70	0.00	-36.29	0.00	36.29	2680.05	633.08	1591.98	1663.86	1.45	-0.16	0.031
101.00	-23.41	-0.70	0.00	-35.59	0.00	35.59	2260.99	534.61	1362.32	1425.54	1.48	-0.16	0.035
102.00	-23.21	-0.70	0.00	-34.88	0.00	34.88	2242.36	529.69	1337.35	1400.64	1.51	-0.17	0.035
104.00	-22.82	-0.70	0.00	-33.48	0.00	33.48	2200.69	519.85	1288.10	1348.81	1.58	-0.17	0.035
106.00	-22.44	-0.70	0.00	-32.07	0.00	32.07	2159.02	510.00	1239.78	1297.95	1.66	-0.18	0.035
108.00	-22.06	-0.70	0.00	-30.67	0.00	30.67	2117.34	500.16	1192.38	1248.07	1.73	-0.18	0.035
110.00	-21.60	-0.70	0.00	-29.26	0.00	29.26	2075.67	490.32	1145.90	1199.16	1.81	-0.19	0.035
112.00	-21.23	-0.70	0.00	-27.86	0.00	27.86	2034.00	480.47	1100.35	1151.23	1.89	-0.19	0.035
114.00	-20.87	-0.70	0.00	-26.45	0.00	26.45	1992.32	470.63	1055.73	1104.29	1.97	-0.20	0.034
116.00	-20.51	-0.70	0.00	-25.04	0.00	25.04	1950.65	460.78	1012.02	1058.31	2.06	-0.21	0.034
118.00	-20.15	-0.70	0.00	-23.64	0.00	23.64	1908.98	450.94	969.24	1013.32	2.14	-0.21	0.034
120.00	-19.80	-0.70	0.00	-22.23	0.00	22.23	1867.30	441.10	927.39	969.30	2.23	-0.22	0.034
122.00	-19.46	-0.70	0.00	-20.82	0.00	20.82	1825.63	431.25	886.45	926.26	2.33	-0.22	0.033
124.00	-19.12	-0.70	0.00	-19.42	0.00	19.42	1783.96	421.41	846.45	884.20	2.42	-0.23	0.033
126.00	-18.78	-0.70	0.00	-18.01	0.00	18.01	1742.28	411.56	807.36	843.12	2.52	-0.24	0.032
128.00	-18.45	-0.70	0.00	-16.60	0.00	16.60	1700.61	401.72	769.20	803.01	2.62	-0.24	0.032
130.00	-18.12	-0.70	0.00	-15.20	0.00	15.20	1658.94	391.87	731.96	763.88	2.72	-0.25	0.031
131.00	-15.84	-0.66	0.00	-14.49	0.00	14.49	1638.10	386.95	713.69	744.68	2.77	-0.25	0.029
132.00	-15.69	-0.66	0.00	-13.84	0.00	13.84	1617.26	382.03	695.65	725.73	2.82	-0.25	0.029
134.00	-15.41	-0.66	0.00	-12.52	0.00	12.52	1575.59	372.19	660.26	688.55	2.93	-0.26	0.028
136.00	-15.13	-0.66	0.00	-11.21	0.00	11.21	1533.91	362.34	625.80	652.35	3.04	-0.26	0.027
138.00	-14.86	-0.66	0.00	-9.89	0.00	9.89	1492.24	352.50	592.26	617.13	3.15	-0.27	0.026
140.00	-10.82	-0.51	0.00	-8.58	0.00	8.58	1450.57	342.65	559.64	582.89	3.27	-0.27	0.022
142.00	-10.60	-0.51	0.00	-7.56	0.00	7.56	1408.89	332.81	527.94	549.63	3.38	-0.28	0.021
144.00	-10.38	-0.51	0.00	-6.54	0.00	6.54	1367.22	322.97	497.17	517.34	3.50	-0.28	0.020
146.00	-10.17	-0.51	0.00	-5.52	0.00	5.52	1325.55	313.12	467.33	486.03	3.62	-0.29	0.019
148.00	-9.96	-0.51	0.00	-4.50	0.00	4.50	1283.87	303.28	438.41	455.70	3.74	-0.29	0.018
148.25	-9.93	-0.51	0.00	-4.38	0.00	4.38	1278.66	302.05	434.86	451.97	3.76	-0.29	0.017
149.00	-6.74	-0.40	0.00	-4.00	0.00	4.00	1263.04	298.36	424.29	440.90	3.80	-0.29	0.014
150.00	-6.59	-0.40	0.00	-3.60	0.00	3.60	1242.20	293.43	410.41	426.34	3.87	-0.30	0.014
150.50	-6.52	-0.40	0.00	-3.40	0.00	3.40	761.18	179.81	256.83	268.82	3.90	-0.30	0.021
152.00	-6.42	-0.40	0.00	-2.80	0.00	2.80	742.42	175.38	244.33	255.67	3.99	-0.30	0.020
154.00	-6.28	-0.40	0.00	-2.00	0.00	2.00	717.42	169.47	228.15	238.65	4.12	-0.30	0.017
156.00	-6.15	-0.40	0.00	-1.20	0.00	1.20	692.41	163.56	212.53	222.21	4.24	-0.31	0.014
158.00	-6.02	-0.40	0.00	-0.40	0.00	0.40	667.41	157.66	197.45	206.36	4.37	-0.31	0.011
159.00	0.00	-0.37	0.00	0.00	0.00	0.00	654.91	154.70	190.13	198.65	4.44	-0.31	0.000

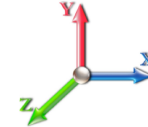
Seismic Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0Ev + 1.0Eh						Iterations 25
Gust Response Factor	1.10			Sds	0.22	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)	0.32	SA	0.03	Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	
2.00		565.37	1.00	24.60	0.00	
4.00		560.78	3.00	24.41	0.00	
6.00		556.20	5.00	24.21	0.00	
8.00		551.62	7.00	24.01	0.01	
10.00		547.04	9.00	23.81	0.02	
12.00		542.46	11.00	23.61	0.02	
14.00		537.88	13.00	23.41	0.03	
16.00		533.30	15.00	23.21	0.04	
18.00		528.72	17.00	23.01	0.05	
20.00		524.14	19.00	22.81	0.06	
22.00		519.56	21.00	22.61	0.07	
24.00		514.98	23.00	22.41	0.09	
26.00		510.39	25.00	22.21	0.10	
28.00		505.81	27.00	22.01	0.12	
30.00		501.23	29.00	21.81	0.13	
32.00		496.65	31.00	21.61	0.15	
34.00		492.07	33.00	21.41	0.17	
36.00		487.49	35.00	21.22	0.18	
38.00		482.91	37.00	21.02	0.20	
40.00		478.33	39.00	20.82	0.22	
42.00		473.75	41.00	20.62	0.24	
44.00		469.17	43.00	20.42	0.26	
46.00		464.59	45.00	20.22	0.27	
47.00	Appurtenance(s)	293.90	46.50	12.79	0.12	
47.50	Bot - Section 2	114.86	47.25	5.00	0.02	
48.00		205.87	47.75	8.96	0.06	
50.00		817.73	49.00	35.59	1.01	
52.00		808.28	51.00	35.18	1.07	
53.25	Top - Section 1	500.53	52.63	21.78	0.44	
54.00		168.98	53.63	7.35	0.05	
56.00		447.47	55.00	19.47	0.38	
58.00		442.89	57.00	19.27	0.40	
60.00		438.31	59.00	19.08	0.42	
62.00		433.73	61.00	18.88	0.44	
64.00		429.15	63.00	18.68	0.46	
66.00		424.57	65.00	18.48	0.48	
68.00		419.98	67.00	18.28	0.50	
70.00		415.40	69.00	18.08	0.52	
72.00		410.82	71.00	17.88	0.54	
74.00		406.24	73.00	17.68	0.55	
76.00		401.66	75.00	17.48	0.57	
78.00		397.08	77.00	17.28	0.59	
80.00	Appurtenance(s)	456.22	79.00	19.85	0.82	
82.00		386.98	81.00	16.84	0.62	
84.00		382.40	83.00	16.64	0.63	

Seismic Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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86.00		377.82	85.00	16.44	0.65
88.00		373.24	87.00	16.24	0.66
90.00		368.66	89.00	16.04	0.68
92.00		364.08	91.00	15.84	0.69
94.00		359.50	93.00	15.65	0.70
96.00		354.92	95.00	15.45	0.71
97.00	Bot - Section 3	175.74	96.50	7.65	0.18
98.00		281.59	97.50	12.25	0.47
100.00		556.89	99.00	24.24	1.91
101.00	Top - Section 2	275.29	100.50	11.98	0.48
102.00		152.16	101.50	6.62	0.15
104.00		301.46	103.00	13.12	0.61
106.00		297.65	105.00	12.95	0.61
108.00		293.83	107.00	12.79	0.62
110.00	Appurtenance(s)	353.73	109.00	15.39	0.93
112.00		285.26	111.00	12.41	0.63
114.00		281.44	113.00	12.25	0.64
116.00		277.62	115.00	12.08	0.64
118.00		273.81	117.00	11.92	0.65
120.00		269.99	119.00	11.75	0.65
122.00		266.17	121.00	11.58	0.65
124.00		262.35	123.00	11.42	0.65
126.00		258.54	125.00	11.25	0.66
128.00		254.72	127.00	11.09	0.66
130.00		250.90	129.00	10.92	0.66
131.00	Appurtenance(s)	1834.0	130.50	79.82	36.03
132.00		110.84	131.50	4.82	0.13
134.00		218.82	133.00	9.52	0.53
136.00		215.00	135.00	9.36	0.53
138.00		211.19	137.00	9.19	0.53
140.00	Appurtenance(s)	3238.5	139.00	140.94	127.45
142.00		174.18	141.00	7.58	0.38
144.00		170.36	143.00	7.41	0.37
146.00		166.54	145.00	7.25	0.37
148.00		162.72	147.00	7.08	0.36
148.25	Bot - Section 4	20.07	148.13	0.87	0.01
149.00	Appurtenance(s)	2565.9	148.63	111.67	91.47
150.00		114.41	149.50	4.98	0.18
150.50	Top - Section 3	56.63	150.25	2.46	0.05
152.00		80.62	151.25	3.51	0.09
154.00		103.20	153.00	4.49	0.16
156.00		100.91	155.00	4.39	0.15
158.00		98.62	157.00	4.29	0.15
159.00	Appurtenance(s)	4844.0	158.50	210.81	370.74
Totals:		43,101.5		1,875.8	659.4

Total Wind: 37,331.4

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

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.0Ev + 1.0Eh						Iterations 25
Gust Response Factor 1.10		Seismic Load Factor 1.00		Sds 0.22	Ss 0.20	
Dead Load Factor 0.90		Structure Frequency (f1) 0.32		Sd1 0.09	S1 0.05	
Wind Load Factor 0.00		Seismic Importance Factor 1.00		SA 0.03		



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	-41.38	-0.66	0.00	-103.67	0.00	103.67	4390.37	1208.07	5796.90	5231.64	0.00	0.00	0.00	0.029
2.00	-40.84	-0.66	0.00	-102.35	0.00	102.35	4366.62	1196.25	5684.08	5152.14	0.00	0.00	0.00	0.029
4.00	-40.30	-0.66	0.00	-101.04	0.00	101.04	4342.50	1184.44	5572.38	5072.75	0.00	0.00	0.00	0.029
6.00	-39.77	-0.66	0.00	-99.71	0.00	99.71	4318.00	1172.63	5461.78	4993.49	0.00	-0.01	0.00	0.029
8.00	-39.24	-0.66	0.00	-98.39	0.00	98.39	4293.12	1160.81	5352.29	4914.37	0.01	-0.01	0.00	0.029
10.00	-38.71	-0.66	0.00	-97.06	0.00	97.06	4267.86	1149.00	5243.91	4835.41	0.01	-0.01	0.00	0.029
12.00	-38.19	-0.67	0.00	-95.73	0.00	95.73	4242.22	1137.19	5136.64	4756.61	0.02	-0.01	0.00	0.029
14.00	-37.67	-0.67	0.00	-94.40	0.00	94.40	4216.20	1125.37	5030.48	4677.99	0.02	-0.01	0.00	0.029
16.00	-37.16	-0.67	0.00	-93.07	0.00	93.07	4189.80	1113.56	4925.42	4599.57	0.03	-0.02	0.00	0.029
18.00	-36.65	-0.67	0.00	-91.73	0.00	91.73	4163.03	1101.75	4821.48	4521.36	0.04	-0.02	0.00	0.029
20.00	-36.14	-0.67	0.00	-90.39	0.00	90.39	4135.87	1089.94	4718.64	4443.36	0.04	-0.02	0.00	0.029
22.00	-35.64	-0.67	0.00	-89.05	0.00	89.05	4108.34	1078.12	4616.91	4365.60	0.05	-0.02	0.00	0.029
24.00	-35.15	-0.67	0.00	-87.70	0.00	87.70	4080.43	1066.31	4516.29	4288.09	0.06	-0.03	0.00	0.029
26.00	-34.66	-0.67	0.00	-86.35	0.00	86.35	4052.14	1054.50	4416.78	4210.84	0.08	-0.03	0.00	0.029
28.00	-34.17	-0.68	0.00	-85.01	0.00	85.01	4023.46	1042.68	4318.37	4133.86	0.09	-0.03	0.00	0.029
30.00	-33.69	-0.68	0.00	-83.65	0.00	83.65	3994.42	1030.87	4221.08	4057.17	0.10	-0.03	0.00	0.029
32.00	-33.21	-0.68	0.00	-82.30	0.00	82.30	3964.99	1019.06	4124.89	3980.79	0.12	-0.04	0.00	0.029
34.00	-32.73	-0.68	0.00	-80.94	0.00	80.94	3935.18	1007.24	4029.81	3904.71	0.13	-0.04	0.00	0.029
36.00	-32.26	-0.68	0.00	-79.58	0.00	79.58	3904.99	995.43	3935.85	3828.97	0.15	-0.04	0.00	0.029
38.00	-31.80	-0.68	0.00	-78.22	0.00	78.22	3874.43	983.62	3842.99	3753.56	0.17	-0.04	0.00	0.029
40.00	-31.34	-0.68	0.00	-76.86	0.00	76.86	3843.48	971.81	3751.23	3678.51	0.19	-0.05	0.00	0.029
42.00	-30.88	-0.68	0.00	-75.50	0.00	75.50	3812.16	959.99	3660.59	3603.83	0.21	-0.05	0.00	0.029
44.00	-30.43	-0.68	0.00	-74.13	0.00	74.13	3780.46	948.18	3571.06	3529.52	0.23	-0.05	0.00	0.029
46.00	-29.98	-0.68	0.00	-72.76	0.00	72.76	3748.38	936.37	3482.63	3455.62	0.25	-0.06	0.00	0.029
47.00	-29.70	-0.68	0.00	-72.08	0.00	72.08	3732.20	930.46	3438.83	3418.81	0.27	-0.06	0.00	0.029
47.50	-29.59	-0.69	0.00	-71.74	0.00	71.74	3724.07	927.51	3417.04	3400.45	0.27	-0.06	0.00	0.029
48.00	-29.39	-0.69	0.00	-71.39	0.00	71.39	3715.92	924.55	3395.31	3382.11	0.28	-0.06	0.00	0.029
50.00	-28.61	-0.69	0.00	-70.02	0.00	70.02	3683.08	912.74	3309.10	3309.03	0.30	-0.06	0.00	0.029
52.00	-27.84	-0.68	0.00	-68.65	0.00	68.65	3649.86	900.93	3224.00	3236.39	0.33	-0.07	0.00	0.029
53.25	-27.36	-0.68	0.00	-67.79	0.00	67.79	3673.19	909.21	3283.56	3287.28	0.35	-0.07	0.00	0.028
54.00	-27.19	-0.69	0.00	-67.28	0.00	67.28	3660.74	904.78	3251.64	3260.04	0.36	-0.07	0.00	0.028
56.00	-26.76	-0.69	0.00	-65.91	0.00	65.91	3627.27	892.97	3167.28	3187.69	0.39	-0.07	0.00	0.028
58.00	-26.33	-0.69	0.00	-64.54	0.00	64.54	3593.41	881.16	3084.04	3115.80	0.42	-0.08	0.00	0.028
60.00	-25.91	-0.69	0.00	-63.17	0.00	63.17	3559.18	869.34	3001.90	3044.38	0.45	-0.08	0.00	0.028
62.00	-25.49	-0.69	0.00	-61.79	0.00	61.79	3524.57	857.53	2920.88	2973.45	0.49	-0.08	0.00	0.028
64.00	-25.08	-0.69	0.00	-60.42	0.00	60.42	3489.59	845.72	2840.96	2903.01	0.52	-0.09	0.00	0.028
66.00	-24.67	-0.69	0.00	-59.04	0.00	59.04	3454.22	833.90	2762.15	2833.08	0.56	-0.09	0.00	0.028
68.00	-24.26	-0.69	0.00	-57.67	0.00	57.67	3418.47	822.09	2684.44	2763.67	0.59	-0.09	0.00	0.028
70.00	-23.86	-0.69	0.00	-56.29	0.00	56.29	3382.35	810.28	2607.85	2694.80	0.63	-0.10	0.00	0.028
72.00	-23.46	-0.69	0.00	-54.91	0.00	54.91	3345.84	798.46	2532.37	2626.49	0.67	-0.10	0.00	0.028
74.00	-23.07	-0.69	0.00	-53.53	0.00	53.53	3308.96	786.65	2457.99	2558.73	0.72	-0.10	0.00	0.028
76.00	-22.68	-0.69	0.00	-52.15	0.00	52.15	3271.70	774.84	2384.72	2491.55	0.76	-0.11	0.00	0.028
78.00	-22.29	-0.69	0.00	-50.77	0.00	50.77	3230.14	763.03	2312.56	2422.03	0.81	-0.11	0.00	0.028
80.00	-21.85	-0.69	0.00	-49.39	0.00	49.39	3180.13	751.21	2241.51	2347.24	0.85	-0.11	0.00	0.028
82.00	-21.48	-0.69	0.00	-48.01	0.00	48.01	3130.13	739.40	2171.57	2273.62	0.90	-0.12	0.00	0.028
84.00	-21.11	-0.69	0.00	-46.64	0.00	46.64	3080.12	727.59	2102.74	2201.18	0.95	-0.12	0.00	0.028
86.00	-20.74	-0.69	0.00	-45.26	0.00	45.26	3030.11	715.77	2035.01	2129.91	1.00	-0.13	0.00	0.028

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00	-20.38	-0.69	0.00	-43.88	0.00	43.88	2980.10	703.96	1968.39	2059.81	1.06	-0.13	0.028
90.00	-20.02	-0.69	0.00	-42.50	0.00	42.50	2930.09	692.15	1902.89	1990.89	1.11	-0.13	0.028
92.00	-19.67	-0.69	0.00	-41.12	0.00	41.12	2880.09	680.34	1838.49	1923.14	1.17	-0.14	0.028
94.00	-19.32	-0.69	0.00	-39.73	0.00	39.73	2830.08	668.52	1775.20	1856.56	1.23	-0.14	0.028
96.00	-18.97	-0.69	0.00	-38.35	0.00	38.35	2780.07	656.71	1713.01	1791.15	1.29	-0.15	0.028
97.00	-18.80	-0.69	0.00	-37.67	0.00	37.67	2755.06	650.80	1682.34	1758.89	1.32	-0.15	0.028
98.00	-18.53	-0.69	0.00	-36.98	0.00	36.98	2730.06	644.90	1651.94	1726.92	1.35	-0.15	0.028
100.00	-18.00	-0.69	0.00	-35.60	0.00	35.60	2680.05	633.08	1591.98	1663.86	1.42	-0.16	0.028
101.00	-17.73	-0.69	0.00	-34.91	0.00	34.91	2260.99	534.61	1362.32	1425.54	1.45	-0.16	0.032
102.00	-17.58	-0.69	0.00	-34.22	0.00	34.22	2242.36	529.69	1337.35	1400.64	1.49	-0.16	0.032
104.00	-17.29	-0.69	0.00	-32.85	0.00	32.85	2200.69	519.85	1288.10	1348.81	1.56	-0.17	0.032
106.00	-17.00	-0.69	0.00	-31.47	0.00	31.47	2159.02	510.00	1239.78	1297.95	1.63	-0.17	0.032
108.00	-16.71	-0.69	0.00	-30.09	0.00	30.09	2117.34	500.16	1192.38	1248.07	1.70	-0.18	0.032
110.00	-16.37	-0.69	0.00	-28.72	0.00	28.72	2075.67	490.32	1145.90	1199.16	1.78	-0.18	0.032
112.00	-16.09	-0.69	0.00	-27.34	0.00	27.34	2034.00	480.47	1100.35	1151.23	1.86	-0.19	0.032
114.00	-15.81	-0.69	0.00	-25.96	0.00	25.96	1992.32	470.63	1055.73	1104.29	1.94	-0.20	0.031
116.00	-15.54	-0.69	0.00	-24.59	0.00	24.59	1950.65	460.78	1012.02	1058.31	2.02	-0.20	0.031
118.00	-15.27	-0.69	0.00	-23.21	0.00	23.21	1908.98	450.94	969.24	1013.32	2.10	-0.21	0.031
120.00	-15.01	-0.69	0.00	-21.84	0.00	21.84	1867.30	441.10	927.39	969.30	2.19	-0.21	0.031
122.00	-14.75	-0.69	0.00	-20.46	0.00	20.46	1825.63	431.25	886.45	926.26	2.28	-0.22	0.030
124.00	-14.49	-0.69	0.00	-19.08	0.00	19.08	1783.96	421.41	846.45	884.20	2.38	-0.23	0.030
126.00	-14.24	-0.69	0.00	-17.71	0.00	17.71	1742.28	411.56	807.36	843.12	2.47	-0.23	0.029
128.00	-13.99	-0.69	0.00	-16.33	0.00	16.33	1700.61	401.72	769.20	803.01	2.57	-0.24	0.029
130.00	-13.74	-0.69	0.00	-14.96	0.00	14.96	1658.94	391.87	731.96	763.88	2.67	-0.24	0.028
131.00	-12.01	-0.64	0.00	-14.27	0.00	14.27	1638.10	386.95	713.69	744.68	2.72	-0.25	0.026
132.00	-11.90	-0.64	0.00	-13.63	0.00	13.63	1617.26	382.03	695.65	725.73	2.77	-0.25	0.026
134.00	-11.68	-0.64	0.00	-12.34	0.00	12.34	1575.59	372.19	660.26	688.55	2.88	-0.25	0.025
136.00	-11.47	-0.64	0.00	-11.05	0.00	11.05	1533.91	362.34	625.80	652.35	2.99	-0.26	0.024
138.00	-11.27	-0.64	0.00	-9.76	0.00	9.76	1492.24	352.50	592.26	617.13	3.10	-0.26	0.023
140.00	-8.21	-0.50	0.00	-8.47	0.00	8.47	1450.57	342.65	559.64	582.89	3.21	-0.27	0.020
142.00	-8.04	-0.50	0.00	-7.47	0.00	7.47	1408.89	332.81	527.94	549.63	3.32	-0.27	0.019
144.00	-7.87	-0.50	0.00	-6.46	0.00	6.46	1367.22	322.97	497.17	517.34	3.44	-0.28	0.018
146.00	-7.71	-0.50	0.00	-5.46	0.00	5.46	1325.55	313.12	467.33	486.03	3.56	-0.28	0.017
148.00	-7.55	-0.50	0.00	-4.46	0.00	4.46	1283.87	303.28	438.41	455.70	3.68	-0.29	0.016
148.25	-7.53	-0.50	0.00	-4.33	0.00	4.33	1278.66	302.05	434.86	451.97	3.69	-0.29	0.015
149.00	-5.11	-0.40	0.00	-3.96	0.00	3.96	1263.04	298.36	424.29	440.90	3.74	-0.29	0.013
150.00	-5.00	-0.40	0.00	-3.56	0.00	3.56	1242.20	293.43	410.41	426.34	3.80	-0.29	0.012
150.50	-4.95	-0.40	0.00	-3.36	0.00	3.36	761.18	179.81	256.83	268.82	3.83	-0.29	0.019
152.00	-4.87	-0.40	0.00	-2.77	0.00	2.77	742.42	175.38	244.33	255.67	3.92	-0.29	0.017
154.00	-4.77	-0.40	0.00	-1.98	0.00	1.98	717.42	169.47	228.15	238.65	4.04	-0.30	0.015
156.00	-4.67	-0.40	0.00	-1.19	0.00	1.19	692.41	163.56	212.53	222.21	4.17	-0.30	0.012
158.00	-4.57	-0.39	0.00	-0.39	0.00	0.39	667.41	157.66	197.45	206.36	4.29	-0.30	0.009
159.00	0.00	-0.37	0.00	0.00	0.00	0.00	654.91	154.70	190.13	198.65	4.36	-0.30	0.000

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

Dead Load Factor 1.00
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		1.00	0.85	6.518	7.17	269.58	0.730	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	6.518	7.17	266.96	0.730	0.000	2.00	9.803	7.16	51.3	0.0	466.2
4.00		1.00	0.85	6.518	7.17	264.35	0.730	0.000	2.00	9.708	7.09	50.8	0.0	461.6
6.00		1.00	0.85	6.518	7.17	261.73	0.730	0.000	2.00	9.612	7.02	50.3	0.0	457.0
8.00		1.00	0.85	6.518	7.17	259.11	0.730	0.000	2.00	9.516	6.95	49.8	0.0	452.4
10.00		1.00	0.85	6.518	7.17	256.49	0.730	0.000	2.00	9.421	6.88	49.3	0.0	447.9
12.00		1.00	0.85	6.518	7.17	253.87	0.730	0.000	2.00	9.325	6.81	48.8	0.0	443.3
14.00		1.00	0.85	6.518	7.17	251.25	0.730	0.000	2.00	9.229	6.74	48.3	0.0	438.7
16.00		1.00	0.87	6.683	7.35	251.76	0.730	0.000	2.00	9.134	6.67	49.0	0.0	434.1
18.00		1.00	0.89	6.842	7.53	252.04	0.730	0.000	2.00	9.038	6.60	49.7	0.0	429.5
20.00		1.00	0.91	6.987	7.69	252.00	0.730	0.000	2.00	8.942	6.53	50.2	0.0	424.9
22.00		1.00	0.93	7.122	7.83	251.69	0.730	0.000	2.00	8.846	6.46	50.6	0.0	420.4
24.00		1.00	0.95	7.249	7.97	251.15	0.730	0.000	2.00	8.751	6.39	50.9	0.0	415.8
26.00		1.00	0.96	7.367	8.10	250.40	0.730	0.000	2.00	8.655	6.32	51.2	0.0	411.2
28.00		1.00	0.98	7.479	8.23	249.49	0.730	0.000	2.00	8.559	6.25	51.4	0.0	406.6
30.00		1.00	0.99	7.584	8.34	248.42	0.730	0.000	2.00	8.464	6.18	51.5	0.0	402.0
32.00		1.00	1.00	7.685	8.45	247.22	0.730	0.000	2.00	8.368	6.11	51.6	0.0	397.5
34.00		1.00	1.01	7.781	8.56	245.89	0.730	0.000	2.00	8.272	6.04	51.7	0.0	392.9
36.00		1.00	1.03	7.872	8.66	244.46	0.730	0.000	2.00	8.176	5.97	51.7	0.0	388.3
38.00		1.00	1.04	7.960	8.76	242.92	0.730	0.000	2.00	8.081	5.90	51.7	0.0	383.7
40.00		1.00	1.05	8.044	8.85	241.29	0.730	0.000	2.00	7.985	5.83	51.6	0.0	379.1
42.00		1.00	1.06	8.125	8.94	239.58	0.730	0.000	2.00	7.889	5.76	51.5	0.0	374.6
44.00		1.00	1.07	8.203	9.02	237.79	0.730	0.000	2.00	7.794	5.69	51.3	0.0	370.0
46.00		1.00	1.08	8.279	9.11	235.93	0.730	0.000	2.00	7.698	5.62	51.2	0.0	365.4
47.00	Appurtenance(s)	1.00	1.08	8.316	9.15	234.98	0.730	0.000	1.00	3.813	2.78	25.5	0.0	181.0
47.50	Bot - Section 2	1.00	1.09	8.334	9.17	234.49	0.730	0.000	0.50	1.898	1.39	12.7	0.0	90.1
48.00		1.00	1.09	8.352	9.19	234.00	0.730	0.000	0.50	1.923	1.40	12.9	0.0	181.1
50.00		1.00	1.10	8.422	9.26	232.01	0.730	0.000	2.00	7.633	5.57	51.6	0.0	718.5
52.00		1.00	1.11	8.491	9.34	229.97	0.730	0.000	2.00	7.538	5.50	51.4	0.0	709.4
53.25	Top - Section 1	1.00	1.11	8.533	9.39	228.66	0.730	0.000	1.25	4.662	3.40	31.9	0.0	438.7
54.00		1.00	1.12	8.557	9.41	231.84	0.730	0.000	0.75	2.780	2.03	19.1	0.0	131.9
56.00		1.00	1.12	8.622	9.48	229.70	0.730	0.000	2.00	7.346	5.36	50.9	0.0	348.6
58.00		1.00	1.13	8.685	9.55	227.52	0.730	0.000	2.00	7.251	5.29	50.6	0.0	344.0
60.00		1.00	1.14	8.746	9.62	225.28	0.730	0.000	2.00	7.155	5.22	50.2	0.0	339.4
62.00		1.00	1.15	8.806	9.69	223.00	0.730	0.000	2.00	7.059	5.15	49.9	0.0	334.8
64.00		1.00	1.16	8.864	9.75	220.69	0.730	0.000	2.00	6.963	5.08	49.6	0.0	330.2
66.00		1.00	1.16	8.920	9.81	218.33	0.730	0.000	2.00	6.868	5.01	49.2	0.0	325.7
68.00		1.00	1.17	8.976	9.87	215.93	0.730	0.000	2.00	6.772	4.94	48.8	0.0	321.1
70.00		1.00	1.18	9.030	9.93	213.50	0.730	0.000	2.00	6.676	4.87	48.4	0.0	316.5
72.00		1.00	1.18	9.083	9.99	211.03	0.730	0.000	2.00	6.581	4.80	48.0	0.0	311.9
74.00		1.00	1.19	9.135	10.05	208.53	0.730	0.000	2.00	6.485	4.73	47.6	0.0	307.3
76.00		1.00	1.20	9.185	10.10	206.00	0.730	0.000	2.00	6.389	4.66	47.1	0.0	302.8
78.00		1.00	1.20	9.235	10.16	203.44	0.730	0.000	2.00	6.293	4.59	46.7	0.0	298.2
80.00	Appurtenance(s)	1.00	1.21	9.284	10.21	200.85	0.730	0.000	2.00	6.198	4.52	46.2	0.0	293.6
82.00		1.00	1.22	9.332	10.26	198.23	0.730	0.000	2.00	6.102	4.45	45.7	0.0	289.0
84.00		1.00	1.22	9.379	10.32	195.59	0.730	0.000	2.00	6.006	4.38	45.2	0.0	284.4
86.00		1.00	1.23	9.425	10.37	192.92	0.730	0.000	2.00	5.911	4.31	44.7	0.0	279.9

Wind Loading - Shaft

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00	1.00	1.23	9.470	10.42	190.22	0.730	0.000	2.00	5.815	4.24	44.2	0.0	275.3
90.00	1.00	1.24	9.514	10.47	187.50	0.730	0.000	2.00	5.719	4.17	43.7	0.0	270.7
92.00	1.00	1.25	9.558	10.51	184.76	0.730	0.000	2.00	5.623	4.11	43.2	0.0	266.1
94.00	1.00	1.25	9.601	10.56	182.00	0.730	0.000	2.00	5.528	4.04	42.6	0.0	261.5
96.00	1.00	1.26	9.643	10.61	179.21	0.730	0.000	2.00	5.432	3.97	42.1	0.0	256.9
97.00 Bot - Section 3	1.00	1.26	9.664	10.63	177.81	0.730	0.000	1.00	2.680	1.96	20.8	0.0	126.8
98.00	1.00	1.26	9.685	10.65	176.41	0.730	0.000	1.00	2.709	1.98	21.1	0.0	232.6
100.00	1.00	1.27	9.725	10.70	173.58	0.730	0.000	2.00	5.346	3.90	41.8	0.0	458.9
101.00 Top - Section 2	1.00	1.27	9.746	10.72	172.16	0.731 *	0.000	1.00	2.637	1.93	20.7	0.0	226.3
102.00	1.00	1.27	9.766	10.74	174.27	0.730	0.000	1.00	2.613	1.91	20.5	0.0	103.2
104.00	1.00	1.28	9.805	10.79	171.41	0.731 *	0.000	2.00	5.155	3.77	40.7	0.0	203.5
106.00	1.00	1.28	9.844	10.83	168.54	0.735 *	0.000	2.00	5.059	3.72	40.3	0.0	199.7
108.00	1.00	1.29	9.883	10.87	165.64	0.740 *	0.000	2.00	4.964	3.67	39.9	0.0	195.9
110.00 Appurtenance(s)	1.00	1.29	9.921	10.91	162.73	0.744 *	0.000	2.00	4.868	3.62	39.5	0.0	192.0
112.00	1.00	1.30	9.958	10.95	159.80	0.730	0.000	2.00	4.772	3.48	38.2	0.0	188.2
114.00	1.00	1.30	9.995	10.99	156.85	0.730	0.000	2.00	4.676	3.41	37.5	0.0	184.4
116.00	1.00	1.31	10.031	11.03	153.88	0.730	0.000	2.00	4.581	3.34	36.9	0.0	180.6
118.00	1.00	1.31	10.067	11.07	150.90	0.730	0.000	2.00	4.485	3.27	36.3	0.0	176.8
120.00	1.00	1.32	10.102	11.11	147.91	0.730	0.000	2.00	4.389	3.20	35.6	0.0	173.0
122.00	1.00	1.32	10.137	11.15	144.90	0.730	0.000	2.00	4.294	3.13	35.0	0.0	169.1
124.00	1.00	1.33	10.172	11.19	141.87	0.730	0.000	2.00	4.198	3.06	34.3	0.0	165.3
126.00	1.00	1.33	10.206	11.23	138.83	0.730	0.000	2.00	4.102	2.99	33.6	0.0	161.5
128.00	1.00	1.34	10.240	11.26	135.78	0.730	0.000	2.00	4.006	2.92	32.9	0.0	157.7
130.00	1.00	1.34	10.273	11.30	132.71	0.730	0.000	2.00	3.911	2.85	32.3	0.0	153.9
131.00 Appurtenance(s)	1.00	1.34	10.289	11.32	131.17	0.730	0.000	1.00	1.919	1.40	15.9	0.0	75.5
132.00	1.00	1.34	10.306	11.34	129.63	0.730	0.000	1.00	1.896	1.38	15.7	0.0	74.5
134.00	1.00	1.35	10.338	11.37	126.53	0.730	0.000	2.00	3.719	2.72	30.9	0.0	146.2
136.00	1.00	1.35	10.370	11.41	123.42	0.730	0.000	2.00	3.624	2.65	30.2	0.0	142.4
138.00	1.00	1.36	10.402	11.44	120.30	0.730	0.000	2.00	3.528	2.58	29.5	0.0	138.6
140.00 Appurtenance(s)	1.00	1.36	10.433	11.48	117.17	0.730	0.000	2.00	3.432	2.51	28.8	0.0	134.8
142.00	1.00	1.36	10.464	11.51	114.03	0.730	0.000	2.00	3.336	2.44	28.0	0.0	131.0
144.00	1.00	1.37	10.495	11.54	110.87	0.736 *	0.000	2.00	3.241	2.39	27.5	0.0	127.1
146.00	1.00	1.37	10.525	11.58	107.70	0.743 *	0.000	2.00	3.145	2.34	27.1	0.0	123.3
148.00	1.00	1.38	10.555	11.61	104.52	0.750 *	0.000	2.00	3.049	2.29	26.6	0.0	119.5
148.25 Bot - Section 4	1.00	1.38	10.559	11.61	104.12	0.755 *	0.000	0.25	0.374	0.28	3.3	0.0	14.7
149.00 Appurtenance(s)	1.00	1.38	10.570	11.63	102.93	0.757 *	0.000	0.75	1.138	0.86	10.0	0.0	70.6
150.00	1.00	1.38	10.585	11.64	101.33	0.760 *	0.000	1.00	1.497	1.14	13.2	0.0	92.8
150.50 Top - Section 3	1.00	1.38	10.592	11.65	100.53	0.763 *	0.000	0.50	0.739	0.56	6.6	0.0	45.8
152.00	1.00	1.38	10.614	11.68	100.35	0.762 *	0.000	1.50	2.182	1.66	19.4	0.0	51.6
154.00	1.00	1.39	10.643	11.71	97.14	0.769 *	0.000	2.00	2.826	2.17	25.5	0.0	66.9
156.00	1.00	1.39	10.672	11.74	93.92	0.778 *	0.000	2.00	2.730	2.13	24.9	0.0	64.6
158.00	1.00	1.40	10.700	11.77	90.69	0.788 *	0.000	2.00	2.634	2.08	24.4	0.0	62.3
159.00 Appurtenance(s)	1.00	1.40	10.714	11.79	89.07	0.796 *	0.000	1.00	1.281	1.02	12.0	0.0	30.3

* Cf Adjusted by Linear Load Ra Effect

Totals:	159.00	3,392.2	23,733.6
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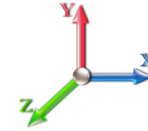
Discrete Appurtenance Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (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 28

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	159.00	Decibel DB404-B - Omni	1	10.756	11.832	1.00	1.00	0.00	14.00	0.000	3.000	0.00	0.00	0.00
2	159.00	Powerwave 7770	3	10.756	11.832	0.55	0.75	9.51	105.00	0.000	3.000	112.52	0.00	337.57
3	159.00	DMP65R-BU6DA	3	10.756	11.832	0.54	0.75	20.59	238.20	0.000	3.000	243.63	0.00	730.88
4	159.00	Powerwave Technologies	6	10.756	11.832	0.38	0.75	2.90	84.60	0.000	3.000	34.34	0.00	103.03
5	159.00	4449 B5/B12	3	10.756	11.832	0.38	0.75	2.22	213.00	0.000	3.000	26.22	0.00	78.67
6	159.00	Raycap DC6-48-60-18-8F	3	10.756	11.832	0.38	0.75	1.04	98.40	0.000	3.000	12.25	0.00	36.74
7	159.00	Site Pro 1 -	1	10.756	11.832	1.00	1.00	48.00	2645.00	0.000	3.000	567.94	0.00	1703.83
8	159.00	RRUS 4478 B14	3	10.756	11.832	0.38	0.75	1.86	178.20	0.000	3.000	21.96	0.00	65.89
9	159.00	Kaelus DBC0061F1V51-2	3	10.756	11.832	0.38	0.75	0.48	54.90	0.000	3.000	5.72	0.00	17.17
10	159.00	Ericsson RRUS 32 B30	3	10.756	11.832	0.38	0.75	3.08	180.00	0.000	3.000	36.47	0.00	109.42
11	159.00	Ericsson RRUS 32 B2	3	10.756	11.832	0.38	0.75	3.08	159.00	0.000	3.000	36.47	0.00	109.42
12	159.00	Site Pro 1 - HRK14	1	10.756	11.832	1.00	1.00	6.00	302.36	0.000	3.000	70.99	0.00	212.98
13	159.00	OPA65R-BU6DA	3	10.756	11.832	0.38	0.75	14.30	189.90	0.000	3.000	169.18	0.00	507.55
14	159.00	Quintel QS66512-2	3	10.756	11.832	0.69	0.75	16.83	333.00	0.000	3.000	199.12	0.00	597.37
15	149.00	Alcatel Lucent - 1900 MHz	3	10.599	11.659	0.38	0.75	4.27	132.00	0.000	2.000	49.84	0.00	99.69
16	149.00	RFS - APXVTM14-C-I20 -	3	10.599	11.659	0.59	0.75	11.27	168.00	0.000	2.000	131.39	0.00	262.79
17	149.00	Alcatel Lucent -	3	10.599	11.659	0.38	0.75	4.56	210.00	0.000	2.000	53.12	0.00	106.25
18	149.00	RFS - APXVSP18-C-A20	3	10.599	11.659	0.62	0.75	15.72	318.00	0.000	2.000	183.34	0.00	366.67
19	149.00	Low Profile Platform	1	10.570	11.627	1.00	1.00	35.00	1200.00	0.000	0.000	406.94	0.00	0.00
20	149.00	Alcatel Lucent - 800 MHz	3	10.599	11.659	0.38	0.75	2.80	159.00	0.000	2.000	32.66	0.00	65.32
21	149.00	Alcatel Lucent - 800 MHz	3	10.599	11.659	0.38	0.75	0.88	26.40	0.000	2.000	10.23	0.00	20.46
22	149.00	RFS - ACU-A20-N - RET	4	10.599	11.659	0.38	0.75	0.21	4.00	0.000	2.000	2.45	0.00	4.90
23	149.00	SitePro HRK-12 Handrail	1	10.570	11.627	1.00	1.00	6.75	261.72	0.000	0.000	78.48	0.00	0.00
24	140.00	4415 B66A	3	10.433	11.476	0.38	0.75	2.09	132.30	0.000	0.000	24.01	0.00	0.00
25	140.00	4424 B25	3	10.433	11.476	0.38	0.75	2.50	237.00	0.000	0.000	28.66	0.00	0.00
26	140.00	4449 B71 + B85	3	10.433	11.476	0.38	0.75	2.22	219.60	0.000	0.000	25.43	0.00	0.00
27	140.00	AIR6449 B41	3	10.433	11.476	0.53	0.75	9.03	309.00	0.000	0.000	103.58	0.00	0.00
28	140.00	Andrew - ATSBT-TOP-FM	3	10.433	11.476	0.38	0.75	0.23	5.40	0.000	0.000	2.58	0.00	0.00
29	140.00	RFS -	3	10.433	11.476	0.38	0.75	1.32	47.55	0.000	0.000	15.11	0.00	0.00
30	140.00	RFS -	3	10.433	11.476	0.55	0.75	33.24	304.20	0.000	0.000	381.52	0.00	0.00
31	140.00	RFS -	3	10.433	11.476	0.46	0.75	9.22	122.10	0.000	0.000	105.82	0.00	0.00
32	140.00	EMS - FR90-16-XXDP -	3	10.433	11.476	0.51	0.75	6.67	54.00	0.000	0.000	76.56	0.00	0.00
33	140.00	LP Platform w/ Handrails	1	10.433	11.476	1.00	1.00	34.00	1600.00	0.000	0.000	390.20	0.00	0.00
34	131.00	Antel BXA-171063-12BF -	3	10.289	11.318	0.67	0.80	9.56	45.00	0.000	0.000	108.15	0.00	0.00
35	131.00	Antel LPA-80063/6CF -	6	10.289	11.318	0.75	0.80	43.32	162.00	0.000	0.000	490.25	0.00	0.00
36	131.00	Antel BXA-70063/6CF -	3	10.289	11.318	0.56	0.80	12.72	51.00	0.000	0.000	143.94	0.00	0.00
37	131.00	Kathrein 742	3	10.289	11.318	0.58	0.80	5.44	49.50	0.000	0.000	61.61	0.00	0.00
38	131.00	RFS FD9R6004/2C-3L -	6	10.289	11.318	0.40	0.80	0.86	18.60	0.000	0.000	9.78	0.00	0.00
39	131.00	Alcatel Lucent	3	10.289	11.318	0.40	0.80	4.20	165.00	0.000	0.000	47.54	0.00	0.00
40	131.00	RFS DB-T1-6Z-8AB-OZ -	1	10.289	11.318	1.00	1.00	4.80	18.90	0.000	0.000	54.33	0.00	0.00
41	131.00	Low Profile Platform	1	10.289	11.318	1.00	1.00	22.00	1200.00	0.000	0.000	249.00	0.00	0.00
42	110.00	4 ft. Standoff	1	9.921	10.913	1.00	1.00	3.50	53.32	0.000	0.000	38.19	0.00	0.00
43	110.00	Sinclair SCL329-HL -	1	10.023	11.025	1.00	1.00	2.22	10.40	0.000	5.550	24.48	0.00	135.84
44	80.00	Sinclair SCL329-HL -	1	9.414	10.356	1.00	1.00	2.22	10.40	0.000	5.550	22.99	0.00	127.59
45	80.00	4 ft Standoff	1	9.284	10.212	1.00	1.00	3.50	53.32	0.000	0.000	35.74	0.00	0.00
46	47.00	4 ft Standoff	1	8.316	9.147	1.00	1.00	3.50	53.32	0.000	0.000	32.01	0.00	0.00
47	47.00	Decibel 26DB - GPS	1	8.422	9.265	1.00	1.00	0.16	10.00	0.000	3.000	1.48	0.00	4.45

Discrete Appurtenance Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 72



Totals:	12,206.59	4,958.28
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Total Applied Force Summary

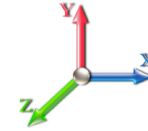
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		51.31	576.39	0.00	0.00
4.00		50.81	571.81	0.00	0.00
6.00		50.31	567.22	0.00	0.00
8.00		49.81	562.64	0.00	0.00
10.00		49.31	558.06	0.00	0.00
12.00		48.81	553.48	0.00	0.00
14.00		48.31	548.90	0.00	0.00
16.00		49.02	544.32	0.00	0.00
18.00		49.65	539.74	0.00	0.00
20.00		50.17	535.16	0.00	0.00
22.00		50.59	530.58	0.00	0.00
24.00		50.93	526.00	0.00	0.00
26.00		51.20	521.42	0.00	0.00
28.00		51.40	516.84	0.00	0.00
30.00		51.54	512.25	0.00	0.00
32.00		51.64	507.67	0.00	0.00
34.00		51.68	503.09	0.00	0.00
36.00		51.69	498.51	0.00	0.00
38.00		51.65	493.93	0.00	0.00
40.00		51.58	489.35	0.00	0.00
42.00		51.47	484.77	0.00	0.00
44.00		51.34	480.19	0.00	0.00
46.00		51.17	475.61	0.00	0.00
47.00	(2) attachments	58.96	299.41	0.00	4.45
47.50		12.70	117.61	0.00	0.00
48.00		12.90	208.62	0.00	0.00
50.00		51.63	828.76	0.00	0.00
52.00		51.39	819.27	0.00	0.00
53.25		31.95	507.39	0.00	0.00
54.00		19.10	173.10	0.00	0.00
56.00		50.86	458.46	0.00	0.00
58.00		50.56	453.88	0.00	0.00
60.00		50.25	449.30	0.00	0.00
62.00		49.91	444.72	0.00	0.00
64.00		49.56	440.14	0.00	0.00
66.00		49.19	435.55	0.00	0.00
68.00		48.81	430.97	0.00	0.00
70.00		48.41	426.39	0.00	0.00
72.00		48.00	421.81	0.00	0.00
74.00		47.57	417.23	0.00	0.00
76.00		47.13	412.65	0.00	0.00
78.00		46.67	408.07	0.00	0.00
80.00	(2) attachments	104.94	467.21	0.00	127.59
82.00		45.72	397.87	0.00	0.00
84.00		45.23	393.29	0.00	0.00
86.00		44.73	388.71	0.00	0.00

Total Applied Force Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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88.00		44.22	384.13	0.00	0.00
90.00		43.69	379.54	0.00	0.00
92.00		43.16	374.96	0.00	0.00
94.00		42.62	370.38	0.00	0.00
96.00		42.06	365.80	0.00	0.00
97.00		20.80	181.18	0.00	0.00
98.00		21.07	287.03	0.00	0.00
100.00		41.75	567.77	0.00	0.00
101.00		20.66	280.74	0.00	0.00
102.00		20.49	157.61	0.00	0.00
104.00		40.66	312.35	0.00	0.00
106.00		40.29	308.53	0.00	0.00
108.00		39.91	304.71	0.00	0.00
110.00	(2) attachments	102.20	364.62	0.00	135.84
112.00		38.16	296.04	0.00	0.00
114.00		37.53	292.22	0.00	0.00
116.00		36.90	288.40	0.00	0.00
118.00		36.26	284.59	0.00	0.00
120.00		35.61	280.77	0.00	0.00
122.00		34.95	276.95	0.00	0.00
124.00		34.29	273.13	0.00	0.00
126.00		33.62	269.32	0.00	0.00
128.00		32.94	265.50	0.00	0.00
130.00		32.26	261.68	0.00	0.00
131.00	(26) attachments	1180.45	1839.41	0.00	0.00
132.00		15.69	114.88	0.00	0.00
134.00		30.88	226.89	0.00	0.00
136.00		30.17	223.07	0.00	0.00
138.00		29.47	219.25	0.00	0.00
140.00	(28) attachments	1182.24	3246.59	0.00	0.00
142.00		28.04	178.98	0.00	0.00
144.00		27.54	175.16	0.00	0.00
146.00		27.06	171.34	0.00	0.00
148.00		26.57	167.53	0.00	0.00
148.25		3.28	20.67	0.00	0.00
149.00	(24) attachments	958.47	2567.73	0.00	926.07
150.00		13.25	116.81	0.00	0.00
150.50		6.57	57.83	0.00	0.00
152.00		19.41	83.84	0.00	0.00
154.00		25.45	107.24	0.00	0.00
156.00		24.95	104.95	0.00	0.00
158.00		24.44	102.66	0.00	0.00
159.00	(39) attachments	1548.86	4846.03	0.00	4610.52
Totals:		8,350.44	43,897.16	0.00	5,804.47

Linear Appurtenance Segment Forces (Factored)

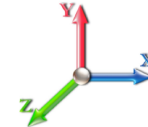
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.064	0.000	6.518	0.00	24.96
2.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	6.518	0.00	0.32
2.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	6.518	0.00	9.66
2.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.064	0.000	6.518	0.00	1.04
2.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	6.518	0.00	1.04
2.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.064	0.000	6.518	0.00	0.32
4.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.065	0.000	6.518	0.00	24.96
4.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.518	0.00	0.32
4.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.518	0.00	9.66
4.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.065	0.000	6.518	0.00	1.04
4.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.518	0.00	1.04
4.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.065	0.000	6.518	0.00	0.32
6.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.065	0.000	6.518	0.00	24.96
6.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.518	0.00	0.32
6.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.518	0.00	9.66
6.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.065	0.000	6.518	0.00	1.04
6.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	6.518	0.00	1.04
6.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.065	0.000	6.518	0.00	0.32
8.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.066	0.000	6.518	0.00	24.96
8.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	6.518	0.00	0.32
8.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	6.518	0.00	9.66
8.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.066	0.000	6.518	0.00	1.04
8.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	6.518	0.00	1.04
8.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.066	0.000	6.518	0.00	0.32
10.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	6.518	0.00	24.96
10.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.518	0.00	0.32
10.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.518	0.00	9.66
10.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.067	0.000	6.518	0.00	1.04
10.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.518	0.00	1.04
10.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.067	0.000	6.518	0.00	0.32
12.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.067	0.000	6.518	0.00	24.96
12.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.518	0.00	0.32
12.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.518	0.00	9.66
12.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.067	0.000	6.518	0.00	1.04
12.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	6.518	0.00	1.04
12.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.067	0.000	6.518	0.00	0.32
14.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.068	0.000	6.518	0.00	24.96
14.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	6.518	0.00	0.32
14.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	6.518	0.00	9.66
14.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.068	0.000	6.518	0.00	1.04
14.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	6.518	0.00	1.04
14.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.068	0.000	6.518	0.00	0.32
16.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.069	0.000	6.683	0.00	24.96
16.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.683	0.00	0.32
16.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.683	0.00	9.66
16.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.069	0.000	6.683	0.00	1.04
16.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.683	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

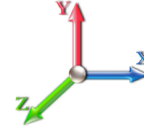


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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

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)
16.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.069	0.000	6.683	0.00	0.32
18.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.069	0.000	6.842	0.00	24.96
18.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.842	0.00	0.32
18.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.842	0.00	9.66
18.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.069	0.000	6.842	0.00	1.04
18.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	6.842	0.00	1.04
18.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.069	0.000	6.842	0.00	0.32
20.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	6.987	0.00	24.96
20.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.987	0.00	0.32
20.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.987	0.00	9.66
20.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.070	0.000	6.987	0.00	1.04
20.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	6.987	0.00	1.04
20.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.070	0.000	6.987	0.00	0.32
22.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	7.122	0.00	24.96
22.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	7.122	0.00	0.32
22.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	7.122	0.00	9.66
22.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.071	0.000	7.122	0.00	1.04
22.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	7.122	0.00	1.04
22.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.071	0.000	7.122	0.00	0.32
24.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	7.249	0.00	24.96
24.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	7.249	0.00	0.32
24.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	7.249	0.00	9.66
24.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.072	0.000	7.249	0.00	1.04
24.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	7.249	0.00	1.04
24.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.072	0.000	7.249	0.00	0.32
26.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	7.367	0.00	24.96
26.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	7.367	0.00	0.32
26.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	7.367	0.00	9.66
26.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.072	0.000	7.367	0.00	1.04
26.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	7.367	0.00	1.04
26.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.072	0.000	7.367	0.00	0.32
28.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	7.479	0.00	24.96
28.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	7.479	0.00	0.32
28.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	7.479	0.00	9.66
28.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.073	0.000	7.479	0.00	1.04
28.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	7.479	0.00	1.04
28.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.073	0.000	7.479	0.00	0.32
30.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.074	0.000	7.584	0.00	24.96
30.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	7.584	0.00	0.32
30.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	7.584	0.00	9.66
30.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.074	0.000	7.584	0.00	1.04
30.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	7.584	0.00	1.04
30.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.074	0.000	7.584	0.00	0.32
32.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	7.685	0.00	24.96
32.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	7.685	0.00	0.32
32.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	7.685	0.00	9.66
32.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.075	0.000	7.685	0.00	1.04

Linear Appurtenance Segment Forces (Factored)

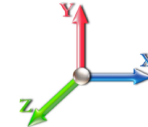
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	7.685	0.00	1.04
32.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.075	0.000	7.685	0.00	0.32
34.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	7.781	0.00	24.96
34.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	7.781	0.00	0.32
34.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	7.781	0.00	9.66
34.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.076	0.000	7.781	0.00	1.04
34.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	7.781	0.00	1.04
34.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.076	0.000	7.781	0.00	0.32
36.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	7.872	0.00	24.96
36.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	7.872	0.00	0.32
36.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	7.872	0.00	9.66
36.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.077	0.000	7.872	0.00	1.04
36.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	7.872	0.00	1.04
36.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.077	0.000	7.872	0.00	0.32
38.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	7.960	0.00	24.96
38.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	7.960	0.00	0.32
38.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	7.960	0.00	9.66
38.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.078	0.000	7.960	0.00	1.04
38.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	7.960	0.00	1.04
38.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.078	0.000	7.960	0.00	0.32
40.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	8.044	0.00	24.96
40.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	8.044	0.00	0.32
40.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	8.044	0.00	9.66
40.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.078	0.000	8.044	0.00	1.04
40.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	8.044	0.00	1.04
40.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.078	0.000	8.044	0.00	0.32
42.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	8.125	0.00	24.96
42.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	8.125	0.00	0.32
42.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	8.125	0.00	9.66
42.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.079	0.000	8.125	0.00	1.04
42.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	8.125	0.00	1.04
42.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.079	0.000	8.125	0.00	0.32
44.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.080	0.000	8.203	0.00	24.96
44.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	8.203	0.00	0.32
44.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	8.203	0.00	9.66
44.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.080	0.000	8.203	0.00	1.04
44.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	8.203	0.00	1.04
44.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.080	0.000	8.203	0.00	0.32
46.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	8.279	0.00	24.96
46.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	8.279	0.00	0.32
46.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	8.279	0.00	9.66
46.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.081	0.000	8.279	0.00	1.04
46.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	8.279	0.00	1.04
46.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.081	0.000	8.279	0.00	0.32
47.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.082	0.000	8.316	0.00	12.48
47.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	8.316	0.00	0.16
47.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	8.316	0.00	4.83

Linear Appurtenance Segment Forces (Factored)

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

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)
47.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.082	0.000	8.316	0.00	0.52
47.00	7/8"	Yes	1.00	0.000	0.00	0.00	0.00	0.082	0.000	8.316	0.00	0.52
47.00	1/2"	Yes	1.00	0.000	0.65	0.05	0.00	0.082	0.000	8.316	0.00	0.16
47.50	1 5/8"	Yes	0.50	0.000	2.00	0.08	0.00	0.083	0.000	8.334	0.00	6.24
47.50	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	8.334	0.00	0.08
47.50	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	8.334	0.00	2.42
47.50	7/8"	Yes	0.50	0.000	1.11	0.05	0.00	0.083	0.000	8.334	0.00	0.26
47.50	7/8"	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	8.334	0.00	0.26
47.50	1/2"	Yes	0.50	0.000	0.65	0.03	0.00	0.083	0.000	8.334	0.00	0.08
48.00	1 5/8"	Yes	0.50	0.000	2.00	0.08	0.00	0.083	0.000	8.352	0.00	6.24
48.00	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	8.352	0.00	0.08
48.00	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	8.352	0.00	2.42
48.00	7/8"	Yes	0.50	0.000	1.11	0.05	0.00	0.083	0.000	8.352	0.00	0.26
48.00	7/8"	Yes	0.50	0.000	0.00	0.00	0.00	0.083	0.000	8.352	0.00	0.26
48.00	1/2"	Yes	0.50	0.000	0.65	0.03	0.00	0.083	0.000	8.352	0.00	0.08
50.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	8.422	0.00	24.96
50.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	8.422	0.00	0.32
50.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	8.422	0.00	9.66
50.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.083	0.000	8.422	0.00	1.04
50.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	8.422	0.00	1.04
50.00	1/2"	Yes	2.00	0.000	0.65	0.11	0.00	0.083	0.000	8.422	0.00	0.32
52.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	8.491	0.00	24.96
52.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	8.491	0.00	0.32
52.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	8.491	0.00	9.66
52.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.070	0.000	8.491	0.00	1.04
52.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	8.491	0.00	1.04
53.25	1 5/8"	Yes	1.25	0.000	2.00	0.21	0.00	0.071	0.000	8.533	0.00	15.60
53.25	1/2" Fiber	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	8.533	0.00	0.20
53.25	2" Conduit	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	8.533	0.00	6.04
53.25	7/8"	Yes	1.25	0.000	1.11	0.12	0.00	0.071	0.000	8.533	0.00	0.65
53.25	7/8"	Yes	1.25	0.000	0.00	0.00	0.00	0.071	0.000	8.533	0.00	0.65
54.00	1 5/8"	Yes	0.75	0.000	2.00	0.13	0.00	0.070	0.000	8.557	0.00	9.36
54.00	1/2" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	8.557	0.00	0.12
54.00	2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	8.557	0.00	3.62
54.00	7/8"	Yes	0.75	0.000	1.11	0.07	0.00	0.070	0.000	8.557	0.00	0.39
54.00	7/8"	Yes	0.75	0.000	0.00	0.00	0.00	0.070	0.000	8.557	0.00	0.39
56.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	8.622	0.00	24.96
56.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	8.622	0.00	0.32
56.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	8.622	0.00	9.66
56.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.071	0.000	8.622	0.00	1.04
56.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	8.622	0.00	1.04
58.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	8.685	0.00	24.96
58.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	8.685	0.00	0.32
58.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	8.685	0.00	9.66
58.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.071	0.000	8.685	0.00	1.04
58.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	8.685	0.00	1.04
60.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.072	0.000	8.746	0.00	24.96

Linear Appurtenance Segment Forces (Factored)

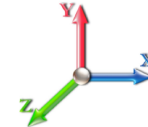
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
60.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	8.746	0.00	0.32
60.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	8.746	0.00	9.66
60.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.072	0.000	8.746	0.00	1.04
60.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	8.746	0.00	1.04
62.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	8.806	0.00	24.96
62.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	8.806	0.00	0.32
62.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	8.806	0.00	9.66
62.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.073	0.000	8.806	0.00	1.04
62.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	8.806	0.00	1.04
64.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.074	0.000	8.864	0.00	24.96
64.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	8.864	0.00	0.32
64.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	8.864	0.00	9.66
64.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.074	0.000	8.864	0.00	1.04
64.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	8.864	0.00	1.04
66.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.075	0.000	8.920	0.00	24.96
66.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	8.920	0.00	0.32
66.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	8.920	0.00	9.66
66.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.075	0.000	8.920	0.00	1.04
66.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	8.920	0.00	1.04
68.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.077	0.000	8.976	0.00	24.96
68.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	8.976	0.00	0.32
68.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	8.976	0.00	9.66
68.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.077	0.000	8.976	0.00	1.04
68.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	8.976	0.00	1.04
70.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	9.030	0.00	24.96
70.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	9.030	0.00	0.32
70.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	9.030	0.00	9.66
70.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.078	0.000	9.030	0.00	1.04
70.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	9.030	0.00	1.04
72.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	9.083	0.00	24.96
72.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	9.083	0.00	0.32
72.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	9.083	0.00	9.66
72.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.079	0.000	9.083	0.00	1.04
72.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	9.083	0.00	1.04
74.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.080	0.000	9.135	0.00	24.96
74.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	9.135	0.00	0.32
74.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	9.135	0.00	9.66
74.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.080	0.000	9.135	0.00	1.04
74.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.080	0.000	9.135	0.00	1.04
76.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	9.185	0.00	24.96
76.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	9.185	0.00	0.32
76.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	9.185	0.00	9.66
76.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.081	0.000	9.185	0.00	1.04
76.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	9.185	0.00	1.04
78.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.082	0.000	9.235	0.00	24.96
78.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	9.235	0.00	0.32
78.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	9.235	0.00	9.66

Linear Appurtenance Segment Forces (Factored)

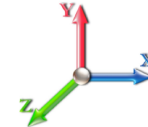
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
78.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.082	0.000	9.235	0.00	1.04
78.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.082	0.000	9.235	0.00	1.04
80.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.084	0.000	9.284	0.00	24.96
80.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	9.284	0.00	0.32
80.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	9.284	0.00	9.66
80.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.084	0.000	9.284	0.00	1.04
80.00	7/8"	Yes	2.00	0.000	0.00	0.00	0.00	0.084	0.000	9.284	0.00	1.04
82.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	9.332	0.00	24.96
82.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	9.332	0.00	0.32
82.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	9.332	0.00	9.66
82.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.085	0.000	9.332	0.00	1.04
84.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.086	0.000	9.379	0.00	24.96
84.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	9.379	0.00	0.32
84.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.086	0.000	9.379	0.00	9.66
84.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.086	0.000	9.379	0.00	1.04
86.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.088	0.000	9.425	0.00	24.96
86.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	9.425	0.00	0.32
86.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.088	0.000	9.425	0.00	9.66
86.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.088	0.000	9.425	0.00	1.04
88.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.089	0.000	9.470	0.00	24.96
88.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	9.470	0.00	0.32
88.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.089	0.000	9.470	0.00	9.66
88.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.089	0.000	9.470	0.00	1.04
90.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.091	0.000	9.514	0.00	24.96
90.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	9.514	0.00	0.32
90.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.091	0.000	9.514	0.00	9.66
90.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.091	0.000	9.514	0.00	1.04
92.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.092	0.000	9.558	0.00	24.96
92.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	9.558	0.00	0.32
92.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	9.558	0.00	9.66
92.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.092	0.000	9.558	0.00	1.04
94.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.094	0.000	9.601	0.00	24.96
94.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	9.601	0.00	0.32
94.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	9.601	0.00	9.66
94.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.094	0.000	9.601	0.00	1.04
96.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.095	0.000	9.643	0.00	24.96
96.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	9.643	0.00	0.32
96.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.095	0.000	9.643	0.00	9.66
96.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.095	0.000	9.643	0.00	1.04
97.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.097	0.000	9.664	0.00	12.48
97.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	9.664	0.00	0.16
97.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	9.664	0.00	4.83
97.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.097	0.000	9.664	0.00	0.52
98.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.098	0.000	9.685	0.00	12.48
98.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	9.685	0.00	0.16
98.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	9.685	0.00	4.83
98.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.098	0.000	9.685	0.00	0.52

Linear Appurtenance Segment Forces (Factored)

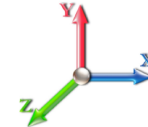
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
100.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.099	0.000	9.725	0.00	24.96
100.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	9.725	0.00	0.32
100.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.099	0.000	9.725	0.00	9.66
100.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.099	0.000	9.725	0.00	1.04
101.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.100	1.001	9.746	0.00	12.48
101.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	9.746	0.00	0.16
101.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.100	1.001	9.746	0.00	4.83
101.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.100	1.001	9.746	0.00	0.52
102.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.099	0.000	9.766	0.00	12.48
102.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.099	0.000	9.766	0.00	0.16
102.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.099	0.000	9.766	0.00	4.83
102.00	7/8"	Yes	1.00	0.000	1.11	0.09	0.00	0.099	0.000	9.766	0.00	0.52
104.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.101	1.002	9.805	0.00	24.96
104.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	9.805	0.00	0.32
104.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.101	1.002	9.805	0.00	9.66
104.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.101	1.002	9.805	0.00	1.04
106.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.102	1.007	9.844	0.00	24.96
106.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.007	9.844	0.00	0.32
106.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.102	1.007	9.844	0.00	9.66
106.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.102	1.007	9.844	0.00	1.04
108.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.104	1.013	9.883	0.00	24.96
108.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.013	9.883	0.00	0.32
108.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.104	1.013	9.883	0.00	9.66
108.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.104	1.013	9.883	0.00	1.04
110.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.106	1.019	9.921	0.00	24.96
110.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	9.921	0.00	0.32
110.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.019	9.921	0.00	9.66
110.00	7/8"	Yes	2.00	0.000	1.11	0.19	0.00	0.106	1.019	9.921	0.00	1.04
112.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.070	0.000	9.958	0.00	24.96
112.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	9.958	0.00	0.32
112.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	9.958	0.00	9.66
114.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.071	0.000	9.995	0.00	24.96
114.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	9.995	0.00	0.32
114.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	9.995	0.00	9.66
116.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.073	0.000	10.031	0.00	24.96
116.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	10.031	0.00	0.32
116.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	10.031	0.00	9.66
118.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.074	0.000	10.067	0.00	24.96
118.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	10.067	0.00	0.32
118.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	10.067	0.00	9.66
120.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.076	0.000	10.102	0.00	24.96
120.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	10.102	0.00	0.32
120.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	10.102	0.00	9.66
122.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.078	0.000	10.137	0.00	24.96
122.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	10.137	0.00	0.32
122.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	10.137	0.00	9.66
124.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.079	0.000	10.172	0.00	24.96

Linear Appurtenance Segment Forces (Factored)

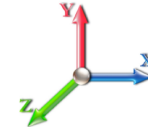
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
124.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	10.172	0.00	0.32
124.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.079	0.000	10.172	0.00	9.66
126.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.081	0.000	10.206	0.00	24.96
126.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	10.206	0.00	0.32
126.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.081	0.000	10.206	0.00	9.66
128.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.083	0.000	10.240	0.00	24.96
128.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	10.240	0.00	0.32
128.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.083	0.000	10.240	0.00	9.66
130.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.085	0.000	10.273	0.00	24.96
130.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	10.273	0.00	0.32
130.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.085	0.000	10.273	0.00	9.66
131.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.087	0.000	10.289	0.00	12.48
131.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.087	0.000	10.289	0.00	0.16
131.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.087	0.000	10.289	0.00	4.83
132.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.088	0.000	10.306	0.00	12.48
132.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.088	0.000	10.306	0.00	0.16
132.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.088	0.000	10.306	0.00	4.83
134.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.090	0.000	10.338	0.00	24.96
134.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	10.338	0.00	0.32
134.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.090	0.000	10.338	0.00	9.66
136.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.092	0.000	10.370	0.00	24.96
136.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	10.370	0.00	0.32
136.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.092	0.000	10.370	0.00	9.66
138.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.094	0.000	10.402	0.00	24.96
138.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	10.402	0.00	0.32
138.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.094	0.000	10.402	0.00	9.66
140.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.097	0.000	10.433	0.00	24.96
140.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	10.433	0.00	0.32
140.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.097	0.000	10.433	0.00	9.66
142.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.100	0.000	10.464	0.00	24.96
142.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	10.464	0.00	0.32
142.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.100	0.000	10.464	0.00	9.66
144.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.103	1.009	10.495	0.00	24.96
144.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	10.495	0.00	0.32
144.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.103	1.009	10.495	0.00	9.66
146.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.106	1.018	10.525	0.00	24.96
146.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	10.525	0.00	0.32
146.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.106	1.018	10.525	0.00	9.66
148.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.109	1.028	10.555	0.00	24.96
148.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	10.555	0.00	0.32
148.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.109	1.028	10.555	0.00	9.66
148.25	1 5/8"	Yes	0.25	0.000	2.00	0.04	0.00	0.111	1.034	10.559	0.00	3.12
148.25	1/2" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.111	1.034	10.559	0.00	0.04
148.25	2" Conduit	Yes	0.25	0.000	0.00	0.00	0.00	0.111	1.034	10.559	0.00	1.21
149.00	1 5/8"	Yes	0.75	0.000	2.00	0.13	0.00	0.112	1.037	10.570	0.00	9.36
149.00	1/2" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.112	1.037	10.570	0.00	0.12
149.00	2" Conduit	Yes	0.75	0.000	0.00	0.00	0.00	0.112	1.037	10.570	0.00	3.62

Linear Appurtenance Segment Forces (Factored)

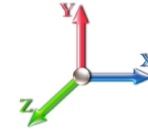
Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
150.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.041	10.585	0.00	12.48
150.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	10.585	0.00	0.16
150.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	10.585	0.00	4.83
150.50	1 5/8"	Yes	0.50	0.000	2.00	0.08	0.00	0.115	1.046	10.592	0.00	6.24
150.50	1/2" Fiber	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.046	10.592	0.00	0.08
150.50	2" Conduit	Yes	0.50	0.000	0.00	0.00	0.00	0.115	1.046	10.592	0.00	2.42
152.00	1 5/8"	Yes	1.50	0.000	2.00	0.25	0.00	0.115	1.044	10.614	0.00	18.72
152.00	1/2" Fiber	Yes	1.50	0.000	0.00	0.00	0.00	0.115	1.044	10.614	0.00	0.24
152.00	2" Conduit	Yes	1.50	0.000	0.00	0.00	0.00	0.115	1.044	10.614	0.00	7.25
154.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.118	1.054	10.643	0.00	24.96
154.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	10.643	0.00	0.32
154.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.118	1.054	10.643	0.00	9.66
156.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.122	1.066	10.672	0.00	24.96
156.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	10.672	0.00	0.32
156.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.122	1.066	10.672	0.00	9.66
158.00	1 5/8"	Yes	2.00	0.000	2.00	0.33	0.00	0.127	1.080	10.700	0.00	24.96
158.00	1/2" Fiber	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	10.700	0.00	0.32
158.00	2" Conduit	Yes	2.00	0.000	0.00	0.00	0.00	0.127	1.080	10.700	0.00	9.66
159.00	1 5/8"	Yes	1.00	0.000	2.00	0.17	0.00	0.130	1.090	10.714	0.00	12.48
159.00	1/2" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.130	1.090	10.714	0.00	0.16
159.00	2" Conduit	Yes	1.00	0.000	0.00	0.00	0.00	0.130	1.090	10.714	0.00	4.83
Totals:											0.0	2,884.5

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 28

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	-43.90	-8.36	0.00	-1013.3	0.00	1013.31	4390.37	1208.07	5796.90	5231.64	0.00	0.000	0.000	0.204
2.00	-43.32	-8.32	0.00	-996.59	0.00	996.59	4366.62	1196.25	5684.08	5152.14	0.00	-0.020	0.000	0.203
4.00	-42.74	-8.28	0.00	-979.95	0.00	979.95	4342.50	1184.44	5572.38	5072.75	0.02	-0.040	0.000	0.203
6.00	-42.17	-8.25	0.00	-963.39	0.00	963.39	4318.00	1172.63	5461.78	4993.49	0.04	-0.060	0.000	0.203
8.00	-41.61	-8.21	0.00	-946.89	0.00	946.89	4293.12	1160.81	5352.29	4914.37	0.07	-0.080	0.000	0.202
10.00	-41.05	-8.18	0.00	-930.46	0.00	930.46	4267.86	1149.00	5243.91	4835.41	0.11	-0.101	0.000	0.202
12.00	-40.49	-8.14	0.00	-914.11	0.00	914.11	4242.22	1137.19	5136.64	4756.61	0.15	-0.122	0.000	0.202
14.00	-39.94	-8.11	0.00	-897.82	0.00	897.82	4216.20	1125.37	5030.48	4677.99	0.21	-0.143	0.000	0.201
16.00	-39.39	-8.07	0.00	-881.61	0.00	881.61	4189.80	1113.56	4925.42	4599.57	0.27	-0.165	0.000	0.201
18.00	-38.85	-8.04	0.00	-865.46	0.00	865.46	4163.03	1101.75	4821.48	4521.36	0.35	-0.186	0.000	0.201
20.00	-38.31	-8.00	0.00	-849.39	0.00	849.39	4135.87	1089.94	4718.64	4443.36	0.43	-0.209	0.000	0.200
22.00	-37.78	-7.96	0.00	-833.39	0.00	833.39	4108.34	1078.12	4616.91	4365.60	0.52	-0.231	0.000	0.200
24.00	-37.25	-7.92	0.00	-817.47	0.00	817.47	4080.43	1066.31	4516.29	4288.09	0.62	-0.254	0.000	0.200
26.00	-36.72	-7.88	0.00	-801.63	0.00	801.63	4052.14	1054.50	4416.78	4210.84	0.73	-0.277	0.000	0.199
28.00	-36.20	-7.85	0.00	-785.86	0.00	785.86	4023.46	1042.68	4318.37	4133.86	0.86	-0.300	0.000	0.199
30.00	-35.69	-7.81	0.00	-770.17	0.00	770.17	3994.42	1030.87	4221.08	4057.17	0.99	-0.324	0.000	0.199
32.00	-35.18	-7.77	0.00	-754.56	0.00	754.56	3964.99	1019.06	4124.89	3980.79	1.13	-0.348	0.000	0.198
34.00	-34.67	-7.73	0.00	-739.03	0.00	739.03	3935.18	1007.24	4029.81	3904.71	1.28	-0.372	0.000	0.198
36.00	-34.17	-7.69	0.00	-723.57	0.00	723.57	3904.99	995.43	3935.85	3828.97	1.44	-0.397	0.000	0.198
38.00	-33.67	-7.65	0.00	-708.20	0.00	708.20	3874.43	983.62	3842.99	3753.56	1.61	-0.422	0.000	0.197
40.00	-33.18	-7.60	0.00	-692.91	0.00	692.91	3843.48	971.81	3751.23	3678.51	1.79	-0.447	0.000	0.197
42.00	-32.69	-7.56	0.00	-677.70	0.00	677.70	3812.16	959.99	3660.59	3603.83	1.99	-0.473	0.000	0.197
44.00	-32.21	-7.52	0.00	-662.58	0.00	662.58	3780.46	948.18	3571.06	3529.52	2.19	-0.499	0.000	0.196
46.00	-31.73	-7.48	0.00	-647.53	0.00	647.53	3748.38	936.37	3482.63	3455.62	2.41	-0.525	0.000	0.196
47.00	-31.43	-7.42	0.00	-640.05	0.00	640.05	3732.20	930.46	3438.83	3418.81	2.52	-0.539	0.000	0.196
47.50	-31.31	-7.41	0.00	-636.34	0.00	636.34	3724.07	927.51	3417.04	3400.45	2.57	-0.546	0.000	0.196
48.00	-31.10	-7.41	0.00	-632.63	0.00	632.63	3715.92	924.55	3395.31	3382.11	2.63	-0.553	0.000	0.195
50.00	-30.27	-7.36	0.00	-617.81	0.00	617.81	3683.08	912.74	3309.10	3309.03	2.87	-0.580	0.000	0.195
52.00	-29.45	-7.31	0.00	-603.09	0.00	603.09	3649.86	900.93	3224.00	3236.39	3.12	-0.608	0.000	0.194
53.25	-28.94	-7.28	0.00	-593.95	0.00	593.95	3673.19	909.21	3283.56	3287.28	3.28	-0.625	0.000	0.189
54.00	-28.76	-7.27	0.00	-588.49	0.00	588.49	3660.74	904.78	3251.64	3260.04	3.38	-0.636	0.000	0.188
56.00	-28.30	-7.23	0.00	-573.94	0.00	573.94	3627.27	892.97	3167.28	3187.69	3.65	-0.663	0.000	0.188
58.00	-27.85	-7.19	0.00	-559.48	0.00	559.48	3593.41	881.16	3084.04	3115.80	3.93	-0.691	0.000	0.187
60.00	-27.39	-7.14	0.00	-545.11	0.00	545.11	3559.18	869.34	3001.90	3044.38	4.23	-0.718	0.000	0.187
62.00	-26.95	-7.10	0.00	-530.82	0.00	530.82	3524.57	857.53	2920.88	2973.45	4.54	-0.747	0.000	0.186
64.00	-26.50	-7.06	0.00	-516.62	0.00	516.62	3489.59	845.72	2840.96	2903.01	4.86	-0.775	0.000	0.186
66.00	-26.07	-7.02	0.00	-502.50	0.00	502.50	3454.22	833.90	2762.15	2833.08	5.19	-0.804	0.000	0.185
68.00	-25.63	-6.98	0.00	-488.46	0.00	488.46	3418.47	822.09	2684.44	2763.67	5.53	-0.834	0.000	0.184
70.00	-25.20	-6.94	0.00	-474.51	0.00	474.51	3382.35	810.28	2607.85	2694.80	5.89	-0.864	0.000	0.184
72.00	-24.78	-6.89	0.00	-460.64	0.00	460.64	3345.84	798.46	2532.37	2626.49	6.25	-0.894	0.000	0.183
74.00	-24.36	-6.85	0.00	-446.85	0.00	446.85	3308.96	786.65	2457.99	2558.73	6.64	-0.925	0.000	0.182
76.00	-23.94	-6.81	0.00	-433.14	0.00	433.14	3271.70	774.84	2384.72	2491.55	7.03	-0.956	0.000	0.181
78.00	-23.53	-6.77	0.00	-419.52	0.00	419.52	3230.14	763.03	2312.56	2422.03	7.44	-0.987	0.000	0.181
80.00	-23.06	-6.67	0.00	-405.85	0.00	405.85	3180.13	751.21	2241.51	2347.24	7.86	-1.020	0.000	0.180
82.00	-22.66	-6.63	0.00	-392.50	0.00	392.50	3130.13	739.40	2171.57	2273.62	8.29	-1.052	0.000	0.180
84.00	-22.26	-6.59	0.00	-379.24	0.00	379.24	3080.12	727.59	2102.74	2201.18	8.74	-1.085	0.000	0.180
86.00	-21.87	-6.55	0.00	-366.06	0.00	366.06	3030.11	715.77	2035.01	2129.91	9.20	-1.118	0.000	0.179
88.00	-21.49	-6.51	0.00	-352.95	0.00	352.95	2980.10	703.96	1968.39	2059.81	9.68	-1.152	0.000	0.179

Calculated Forces

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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90.00	-21.10	-6.47	0.00	-339.93	0.00	339.93	2930.09	692.15	1902.89	1990.89	10.17	-1.186	0.000	0.178
92.00	-20.73	-6.44	0.00	-326.98	0.00	326.98	2880.09	680.34	1838.49	1923.14	10.67	-1.221	0.000	0.177
94.00	-20.35	-6.40	0.00	-314.10	0.00	314.10	2830.08	668.52	1775.20	1856.56	11.19	-1.256	0.000	0.176
96.00	-19.98	-6.36	0.00	-301.31	0.00	301.31	2780.07	656.71	1713.01	1791.15	11.72	-1.292	0.000	0.176
97.00	-19.80	-6.34	0.00	-294.95	0.00	294.95	2755.06	650.80	1682.34	1758.89	12.00	-1.310	0.000	0.175
98.00	-19.51	-6.32	0.00	-288.61	0.00	288.61	2730.06	644.90	1651.94	1726.92	12.27	-1.328	0.000	0.174
100.00	-18.94	-6.27	0.00	-275.97	0.00	275.97	2680.05	633.08	1591.98	1663.86	12.84	-1.364	0.000	0.173
101.00	-18.66	-6.25	0.00	-269.69	0.00	269.69	2260.99	534.61	1362.32	1425.54	13.13	-1.383	0.000	0.198
102.00	-18.50	-6.24	0.00	-263.44	0.00	263.44	2242.36	529.69	1337.35	1400.64	13.42	-1.401	0.000	0.196
104.00	-18.18	-6.20	0.00	-250.96	0.00	250.96	2200.69	519.85	1288.10	1348.81	14.01	-1.443	0.000	0.194
106.00	-17.87	-6.17	0.00	-238.56	0.00	238.56	2159.02	510.00	1239.78	1297.95	14.63	-1.485	0.000	0.192
108.00	-17.56	-6.13	0.00	-226.22	0.00	226.22	2117.34	500.16	1192.38	1248.07	15.26	-1.527	0.000	0.190
110.00	-17.20	-6.03	0.00	-213.82	0.00	213.82	2075.67	490.32	1145.90	1199.16	15.91	-1.569	0.000	0.187
112.00	-16.90	-6.00	0.00	-201.75	0.00	201.75	2034.00	480.47	1100.35	1151.23	16.57	-1.611	0.000	0.184
114.00	-16.60	-5.97	0.00	-189.75	0.00	189.75	1992.32	470.63	1055.73	1104.29	17.26	-1.653	0.000	0.180
116.00	-16.31	-5.93	0.00	-177.82	0.00	177.82	1950.65	460.78	1012.02	1058.31	17.96	-1.695	0.000	0.177
118.00	-16.02	-5.90	0.00	-165.95	0.00	165.95	1908.98	450.94	969.24	1013.32	18.68	-1.738	0.000	0.172
120.00	-15.74	-5.87	0.00	-154.15	0.00	154.15	1867.30	441.10	927.39	969.30	19.41	-1.779	0.000	0.168
122.00	-15.46	-5.84	0.00	-142.41	0.00	142.41	1825.63	431.25	886.45	926.26	20.17	-1.821	0.000	0.162
124.00	-15.18	-5.80	0.00	-130.74	0.00	130.74	1783.96	421.41	846.45	884.20	20.94	-1.861	0.000	0.157
126.00	-14.91	-5.77	0.00	-119.14	0.00	119.14	1742.28	411.56	807.36	843.12	21.73	-1.901	0.000	0.150
128.00	-14.64	-5.74	0.00	-107.60	0.00	107.60	1700.61	401.72	769.20	803.01	22.53	-1.940	0.000	0.143
130.00	-14.38	-5.70	0.00	-96.12	0.00	96.12	1658.94	391.87	731.96	763.88	23.35	-1.978	0.000	0.135
131.00	-12.58	-4.47	0.00	-90.42	0.00	90.42	1638.10	386.95	713.69	744.68	23.77	-1.997	0.000	0.129
132.00	-12.47	-4.45	0.00	-85.95	0.00	85.95	1617.26	382.03	695.65	725.73	24.19	-2.015	0.000	0.126
134.00	-12.24	-4.42	0.00	-77.05	0.00	77.05	1575.59	372.19	660.26	688.55	25.04	-2.050	0.000	0.120
136.00	-12.01	-4.39	0.00	-68.21	0.00	68.21	1533.91	362.34	625.80	652.35	25.91	-2.084	0.000	0.113
138.00	-11.79	-4.36	0.00	-59.43	0.00	59.43	1492.24	352.50	592.26	617.13	26.79	-2.116	0.000	0.104
140.00	-8.59	-3.06	0.00	-50.72	0.00	50.72	1450.57	342.65	559.64	582.89	27.68	-2.146	0.000	0.093
142.00	-8.41	-3.03	0.00	-44.60	0.00	44.60	1408.89	332.81	527.94	549.63	28.59	-2.174	0.000	0.087
144.00	-8.24	-3.00	0.00	-38.54	0.00	38.54	1367.22	322.97	497.17	517.34	29.50	-2.201	0.000	0.081
146.00	-8.07	-2.97	0.00	-32.55	0.00	32.55	1325.55	313.12	467.33	486.03	30.43	-2.226	0.000	0.073
148.00	-7.90	-2.94	0.00	-26.61	0.00	26.61	1283.87	303.28	438.41	455.70	31.37	-2.250	0.000	0.065
148.25	-7.88	-2.93	0.00	-25.87	0.00	25.87	1278.66	302.05	434.86	451.97	31.49	-2.252	0.000	0.064
149.00	-5.35	-1.88	0.00	-22.75	0.00	22.75	1263.04	298.36	424.29	440.90	31.84	-2.260	0.000	0.056
150.00	-5.23	-1.86	0.00	-20.87	0.00	20.87	1242.20	293.43	410.41	426.34	32.31	-2.270	0.000	0.053
150.50	-5.18	-1.85	0.00	-19.94	0.00	19.94	761.18	179.81	256.83	268.82	32.55	-2.275	0.000	0.081
152.00	-5.09	-1.83	0.00	-17.17	0.00	17.17	742.42	175.38	244.33	255.67	33.27	-2.289	0.000	0.074
154.00	-4.98	-1.80	0.00	-13.51	0.00	13.51	717.42	169.47	228.15	238.65	34.23	-2.313	0.000	0.064
156.00	-4.88	-1.77	0.00	-9.91	0.00	9.91	692.41	163.56	212.53	222.21	35.21	-2.334	0.000	0.052
158.00	-4.78	-1.75	0.00	-6.36	0.00	6.36	667.41	157.66	197.45	206.36	36.19	-2.350	0.000	0.038
159.00	0.00	-1.55	0.00	-4.61	0.00	4.61	654.91	154.70	190.13	198.65	36.68	-2.356	0.000	0.023

Final Analysis Summary

Structure: CT13055-A-SBA	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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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 120 mph Wind	37.4	0.00	52.65	0.00	0.00	4563.88
0.9D + 1.0W 120 mph Wind	37.4	0.00	39.48	0.00	0.00	4489.14
1.2D + 1.0Di + 1.0Wi 50 mph Wind	9.7	0.00	75.74	0.00	0.00	1180.18
1.2D + 1.0Ev + 1.0Eh	0.7	0.00	54.66	0.00	0.00	105.28
0.9D + 1.0Ev + 1.0Eh	0.7	0.00	41.38	0.00	0.00	103.67
1.0D + 1.0W 60 mph Wind	8.4	0.00	43.90	0.00	0.00	1013.31

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 120 mph Wind	-52.65	-37.37	0.00	-4563.8	0.00	-4563.8	4390.37	1208.0	5796.90	5231.64	0.00	0.885
0.9D + 1.0W 120 mph Wind	-39.48	-37.36	0.00	-4489.1	0.00	-4489.1	4390.37	1208.0	5796.90	5231.64	0.00	0.868
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-75.74	-9.71	0.00	-1180.1	0.00	-1180.1	4390.37	1208.0	5796.90	5231.64	0.00	0.243
1.2D + 1.0Ev + 1.0Eh	-23.41	-0.70	0.00	-35.59	0.00	-35.59	2260.99	534.61	1362.32	1425.54	101.00	0.035
0.9D + 1.0Ev + 1.0Eh	-17.73	-0.69	0.00	-34.91	0.00	-34.91	2260.99	534.61	1362.32	1425.54	101.00	0.032
1.0D + 1.0W 60 mph Wind	-43.90	-8.36	0.00	-1013.3	0.00	-1013.3	4390.37	1208.0	5796.90	5231.64	0.00	0.204

Base Plate Summary

Structure: CT13055-A-SB	Code: EIA/TIA-222-H	12/11/2020
Site Name: Monroe Turnpike	Exposure: C	
Height: 159.00 (ft)	Crest Height: 0.00	
Base Elev: 1.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Reactions	Base Plate	Anchor Bolts
Original Design	Yield (ksi): 60.00	Bolt Circle: 65.00
Moment (kip-ft): 3665.00	Width (in): 71.00	Number Bolts: 14.00
Axial (kip): 41.45	Style: Round	Bolt Type: 2.25" 18J
Shear (kip): 31.29	Polygon Sides: 0.00	Bolt Diameter (in): 2.25
Analysis (1.2D + 1.0W)	Clip Length (in): 0.00	Yield (ksi): 75.00
Moment (kip-ft): 4563.88	Effective Len (in): 27.84	Ultimate (ksi): 100.00
Axial (kip): 52.65	Moment (kip-in): 835.65	Arrangement: Radial
Shear (kip): 37.37	Allow Stress (ksi): 81.00	Cluster Dist (in): 0.00
	Applied Stress (ksi): 35.64	Start Angle (deg): 0.00
	Stress Ratio: 0.44	Compression
		Force (kip): 246.14
		Allowable (kip): 268.39
		Ratio: 0.92
		Tension
		Force (kip): 235.32
		Allowable (kip): 243.75
		Ratio: 0.97



Monopole Mat Foundation Design

Date
12/11/2020

Customer Name:	T-Mobile	EIA/TIA Standard:	EIA-222-H
Site Name:		Structure Height (Ft.):	159
Site Number:	CT13055-A-SBA	Engineer Name:	J. Chen
Engr. Number:	99611	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations
Monopole
Analysis

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):	52.6	Shear Force (Kips):	37.4
Uplift Force (Kips):	0.0	Moment (Kips-ft):	4563.9

Allowable overstress %: 5.0%

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	7.0	Depth of Base BG (ft.):	5.5
Pier Height A. G. (ft.):	1.00	Thickness of Pad (ft):	2.00
Length of Pad (ft.):	25.5	Width of Pad (ft.):	25.5
Final Length of pad (ft)	25.5	Final width of pad (ft):	25.5

Material Properties and Rebar Info:

Concrete Strength (psi):	4000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	9	Tie / Stirrup Size #:	4	
Qty. of Vertical Rebars:	32	Tie Spacing (in):	12.0	
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):	50	Qty. of Rebar in Pad (W):	50
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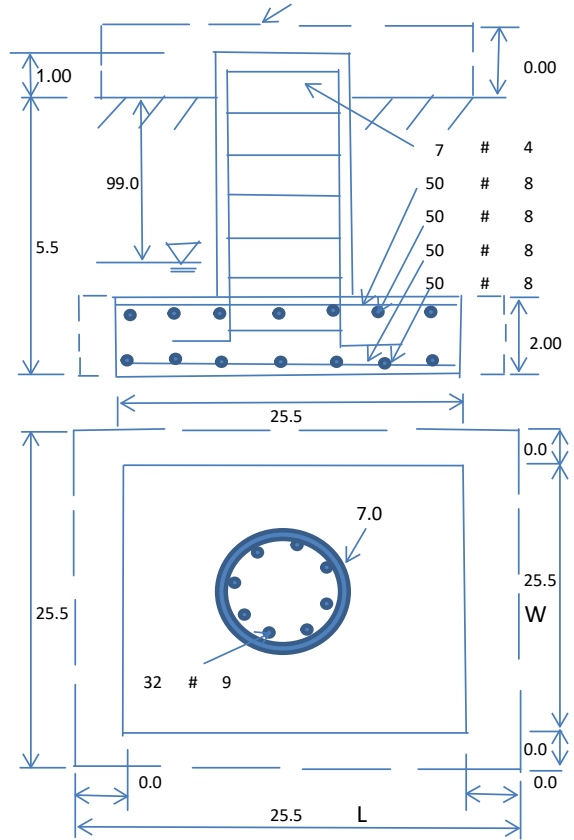
Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	50	Qty. of Rebar in Pad (W):	50
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Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

Soil Unit Weight (pcf):	120.0	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):	12000	Ultimate Skin Friction:	400	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	Yes	Consider Friction for bearing (Y/N):	Yes		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	Yes	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.):	2141.18	Total Dry Soil Weight (Kips):	256.94
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	256.94	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	1473.68	Total Dry Concrete Weight (Kips):	221.05
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	221.05	Total Vertical Load on Base (Kips):	530.59

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	2937	< Allowable Factored Soil Bearing (psf):	9000	0.33	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	6545.8	> Design Factored Momont (kips-ft):	4715	0.72	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.39				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):	1.00	Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	5377.0	> Design Factored Moment (Mu, Kips-F	4732.2	0.88	OK!
Calculated Shear Capacity (Kips):	660.1	> Design Factored Shear (Kips):	37.4	0.06	OK!
Calculated Tension Capacity (Tn, Kips):	1728.0	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	9741.3	> Design Factored Axial Load (Pu Kips):	52.6	0.01	OK!
Moment & Axial Strength Combination:	0.88	OK! Check Tie Spacing (Design/Required):	1		OK!
Pier Reinforcement Ratio:	0.006	Reinforcement Ratio is satisfied per ACI			

(2).Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	595.1	> One-Way Factored Shear (L-D. Kips):	275.9	0.46	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	595.1	> One-Way Factored Shear (W-D., Kips)	275.9	0.46	OK!
One-Way Design Shear Capacity (Corner-Corner, Kips):	598.5	> One-Way Factored Shear (C-C, Kips):	290.0	0.48	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0063	OK! Lower Steel Pad Reinf. Ratio (W-Direc	0.0063		
Lower Steel Pad Moment Capacity (L-Direction, Kips-ft):	3441.4	> Moment at Bottom (L-Dir. K-Ft):	1375.5	0.40	OK!
Lower Steel Pad Moment Capacity (W-Direction, Kips-ft):	3441.4	> Moment at Bottom (W-Dir. K-Ft):	1375.5	0.40	OK!
Lower Steel Pad Moment Capacity (Corner-Corner, K-ft):	4797.9	> Moment at Bottom (C-C Dir. K-Ft):	1945.2	0.41	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0063	OK! Upper Steel Reinf. Ratio (W-Dir.):	0.0063		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	3441.4	> Moment at the top (L-Dir K-Ft):	638.4	0.19	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	3441.4	> Moment at the top (W-Dir K-Ft):	638.4	0.19	OK!
Upper Steel Pad Moment Capacity (Corner-Corner, K-ft):	4797.9	> Moment at the top (C-C Dir. K-Ft):	636.5	0.13	OK!

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

Moment transferred by punching shear:	1825.6	k-ft.	Max. factored shear stress $v_{u,CD}$:	5.9	Psi
Max. factored shear stress $v_{u,AB}$:	19.0	Psi	Factored shear Strength ϕv_n :	189.7	Psi
Max. factored shear stress v_u :	19.0	Psi	Check Usage of Punching Shear Capacity:	0.10	OK!

EXHIBIT 9



Tower Engineering Solutions

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

Post-Mod Antenna Mount Analysis Report

Existing 159-Ft Monopole Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT13055-A-SBA / Monroe Turnpike

Customer Site Name: Monroe Turnpike

Carrier Name: T-Mobile (App#: 117032, V2)

Carrier Site ID / Name: CT11838A / Marion Heights

Site Location: 1428 Monroe Turnpike

Monroe, Connecticut

Fairfield County

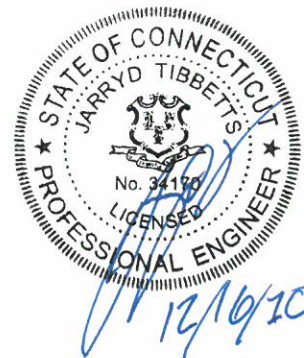
Latitude: 41.376463

Longitude: -73.186541

Analysis Result:

Max Structural Usage: 41.8% [Pass]

Report Prepared By: Ishwor Dhakal



Introduction

The purpose of this report is to summarize the analysis results on the (1) Platform w/ Support Rail at 140.00' elevation including the proposed modifications to support the proposed antenna configuration. Any existing modification listed under Sources of Information was assumed completed and was included in this analysis.

The proposed modification by **TES** listed under Sources of Information was considered completed and was included in this analysis.

Sources of Information

Mount Drawings	Mount Mapping by Full Metal Tower Services, dated 04/25/2019.
Antenna Loading	SBA, Application #: 117032, v2.
Existing Modification	N/A.
Proposed Modification	TES Project No. 100313

Analysis Criteria

Wind Speed Used in the Analysis: 117 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: 2018 IBC ANSI/TIA 222-H/ 2015 IBC / 2018 CSBC
Exposure Category: C
Risk Category: II
Topographic Category: 1
Crest Height (Ft):
Ground Elevation Factor: 0.979

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

Mount Information

(1) Platform w/ Support Rail at 140.00' elevation.

Proposed Modifications

(12) Metrosite Support Rail Center Pipe Kit (MS-HRCP-2375)
(1) Metrosite Support Rail End Connection Kit (MS-HR2875-33ECP)
(3) PST2375-8 Mount Pipes
(3) PST2375-15 Support Rail Pipe
(12) Metrosite Crossover Channel Bracket (MS-CHB350-2875)

Final Antenna Configuration

- 3 EMS FR90-16-XXDP
- 3 RFS APX16DWV-16DWVS-E-A20
- 3 RFS APXVAARR24_43-U-A20
- 3 Ericsson AIR6449 B41
- 3 RFS ATMA4P4DBP-1A20
- 3 Ericsson 4449 B71 + B85
- 3 Ericsson 4424 B25
- 3 Ericsson 4415 B66A
- 3 Andrew ATSBT-TOP-MF

* Equipment to be flush mounted directly to the Monopole. They are not mounted on the Platform w/ Handrails mounts and are not included in this mount analysis.

Analysis Results

Our calculations have determined that under design wind load the existing mounts will be structurally adequate to support the proposed antenna configuration after the proposed modification is successfully completed. The maximum structural usage is 41.8%, which occurs in the mount pipe. 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.

Attachments

1. Mount Photos Before Modification
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.



Structure: CT13055-A-SBA - Monroe Turnpike

Sector: **A**

12/11/2020

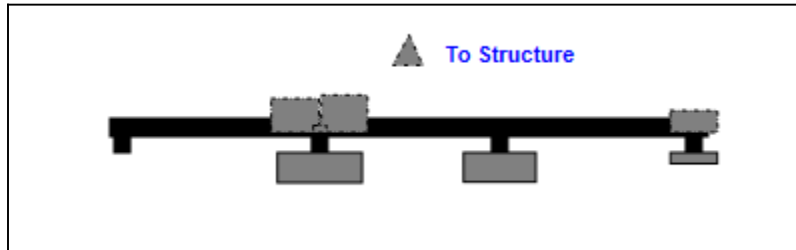
Structure Type: Monopole

Mount Elev: 140.00

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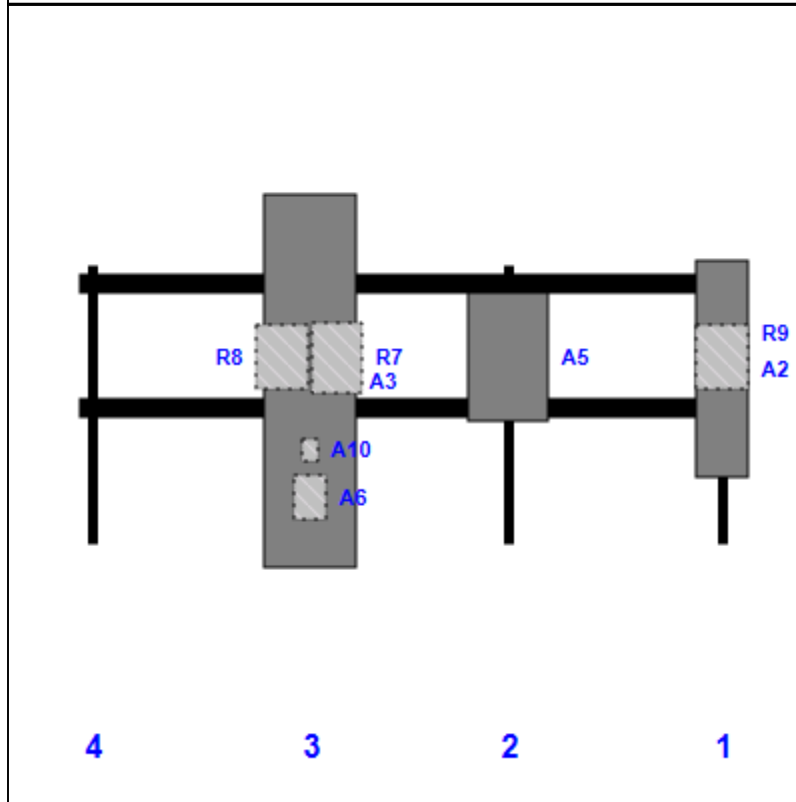


Plan View



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
A2	APX16DWV-16DWVS-E-A20	55.90	13.30	166.00	1	a	Front	27.00			
R9	4415 B66A	16.50	13.40	166.00	1	a	Behind	24.00			
A5	AIR6449 B41	33.10	20.50	111.00	2	a	Front	24.00			
A3	APXVAARR24_43-U-A20	95.90	24.00	60.00	3	a	Front	30.00			
A6	ATMA4P4DBP-1A20	11.20	8.00	60.00	3	a	Behind	60.00			
R7	4449 B71 + B85	17.90	13.10	60.00	3	a	Behind	24.00	7.00		
R8	4424 B25	16.50	13.50	60.00	3	a	Behind	24.00	-7.00		
A10	ATSBT-TOP-MF	5.60	3.70	60.00	3	a	Behind	48.00			

Structure: CT13055-A-SBA - Monroe Turnpike

Sector: **B**

12/11/2020

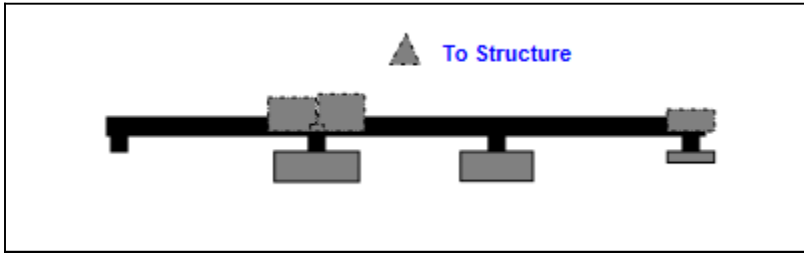
Structure Type: Monopole

Mount Elev: 140.00

Page: 2

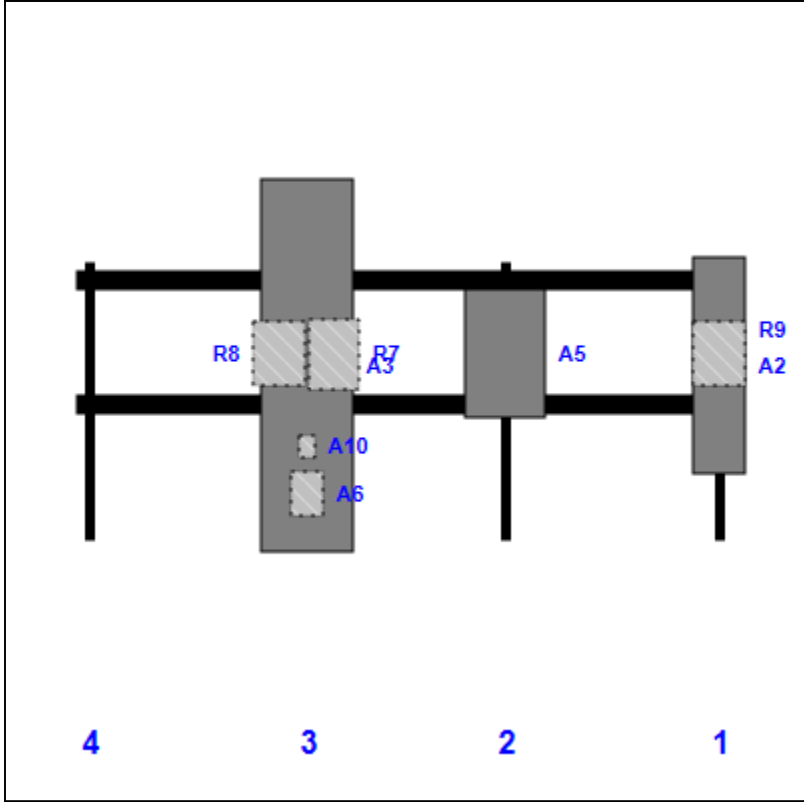


Plan View



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
A2	APX16DWV-16DWVS-E-A20	55.90	13.30	166.00	1	a	Front	27.00			
R9	4415 B66A	16.50	13.40	166.00	1	a	Behind	24.00			
A5	AIR6449 B41	33.10	20.50	111.00	2	a	Front	24.00			
A3	APXVAARR24_43-U-A20	95.90	24.00	60.00	3	a	Front	27.00			
A6	ATMA4P4DBP-1A20	11.20	8.00	60.00	3	a	Behind	60.00			
R7	4449 B71 + B85	17.90	13.10	60.00	3	a	Behind	24.00	7.00		
R8	4424 B25	16.50	13.50	60.00	3	a	Behind	24.00	-7.00		
A10	ATSBT-TOP-MF	5.60	3.70	60.00	3	a	Behind	48.00			

Structure: CT13055-A-SBA - Monroe Turnpike

Sector: C

12/11/2020

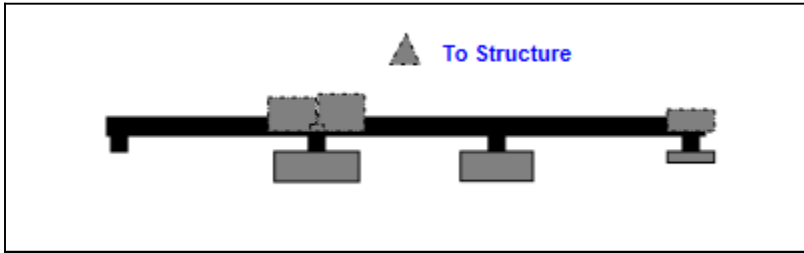


Structure Type: Monopole

Page: 3

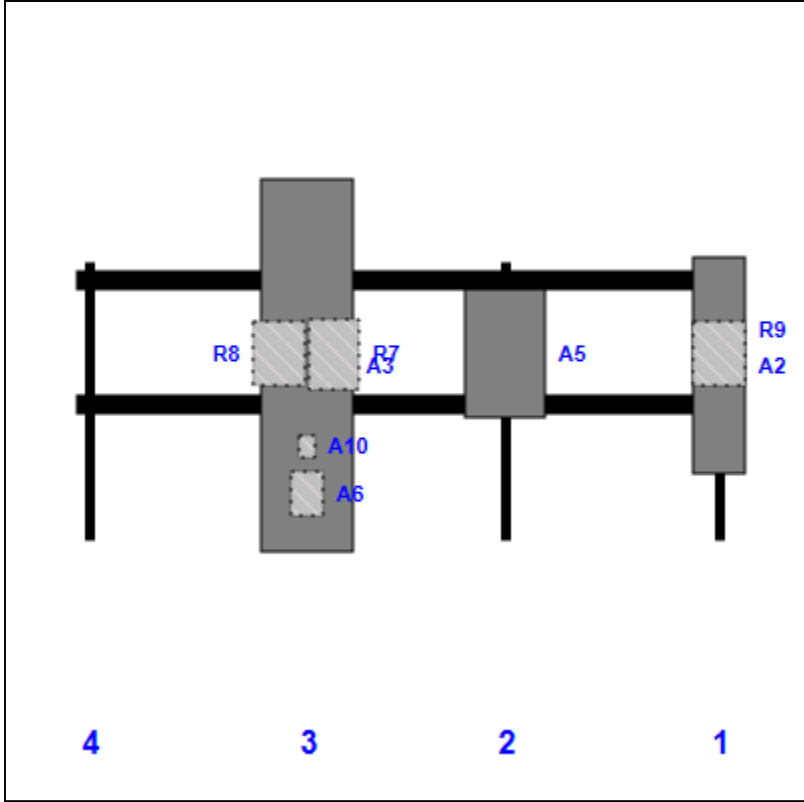
Mount Elev: 140.00

Plan View




Front View

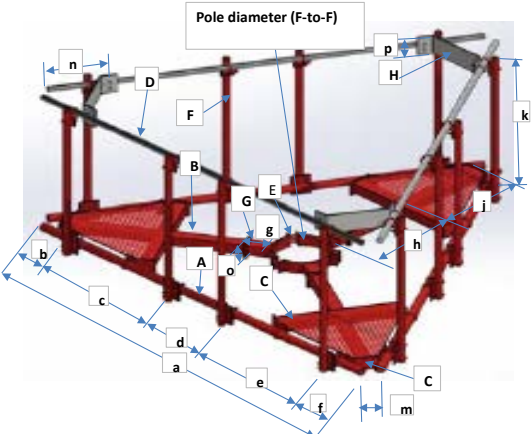
Looking Toward Structure



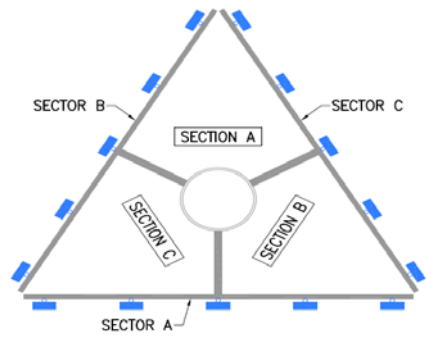
Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A2	APX16DWV-16DWVS-E-A20	55.90	13.30	166.00	1	a	Front	27.00			
R9	4415 B66A	16.50	13.40	166.00	1	a	Behind	24.00			
A5	AIR6449 B41	33.10	20.50	111.00	2	a	Front	24.00			
A3	APXVAARR24_43-U-A20	95.90	24.00	60.00	3	a	Front	27.00			
A6	ATMA4P4DBP-1A20	11.20	8.00	60.00	3	a	Behind	60.00			
R7	4449 B71 + B85	17.90	13.10	60.00	3	a	Behind	24.00	7.00		
R8	4424 B25	16.50	13.50	60.00	3	a	Behind	24.00	-7.00		
A10	ATSBT-TOP-MF	5.60	3.70	60.00	3	a	Behind	48.00			

	Antenna Mount Type "MT-X" Mapping Form (PATENT PENDING)			FCC #
				Not Packed
	Tower Owner:	SBA Communications	Mapping Date:	4/25/19
	Site Name:	Monroe Turnpike	Structure Type:	Monopole
Site Number or ID:	CT13055-A-SBA	Structure Height (Ft.):	161	
Mapping Contractor:	Full Metal Tower Services	Mount Height (Ft.):	141	

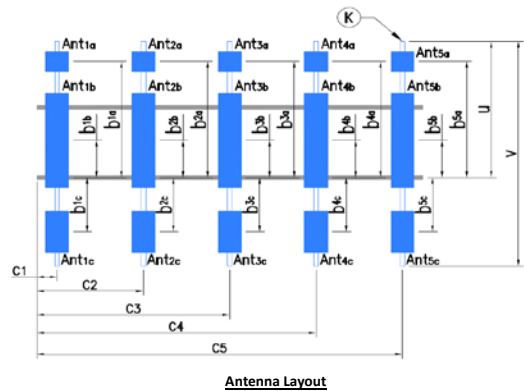
This antenna mapping form is the property of TES and under **PATENT PENDING**. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.



Geometries (Unit: inches)									
a	170	e	45	j	47	o	10	s	N/A
b	10	f	10	k	32	p	6.5	t	16
c	45	g	6	m	15	q	N/A	u*	37
d	60	h	32	n	5	r	N/A	v*	72
Members/Bolts (Unit: inches) * - See Ant. Layout for "u", "v" and member "K" (pipe)									
Items	Member	Lx (O.D.)	Ly (I.D.)	T	Items	Member	Lx (O.D.)	Ly (I.D.)	T
A	3.5 OD x 0.216 Pipe	3.5	3.068	0.216	F	2.375 OD x 0.154 Pipe	2.375	2.067	0.154
B	Tubing 4x4x1/4	4	4	0.25	G	1/2" Thick. Plate	0	0	0.5
C	Tubing 4x4x1/4	4	4	0.25	H				
D	2.375 OD x 0.154 Pipe	2.375	2.067	0.154	J				
E	3/4" Bolt			24	K* (pipe)	2.375 OD x 0.154 Pipe	2.375	2.067	0.154
Distance from top of main platform member to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.)									
Distance from top of main platform member to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.)									
Please enter the information below if members can't be found from the drop down lists									
Member H: 6.5"x5"x0.25" Corner Angle Bracket									
*mount has existing reinforcement mod installed that attaches to handrails (Members D)									



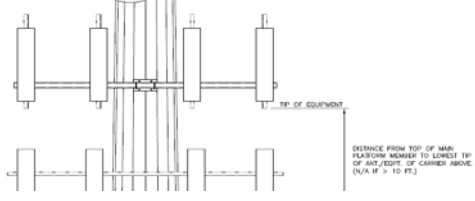
Climbing ladder is Located at Section A, at 0° Degree Azimuth

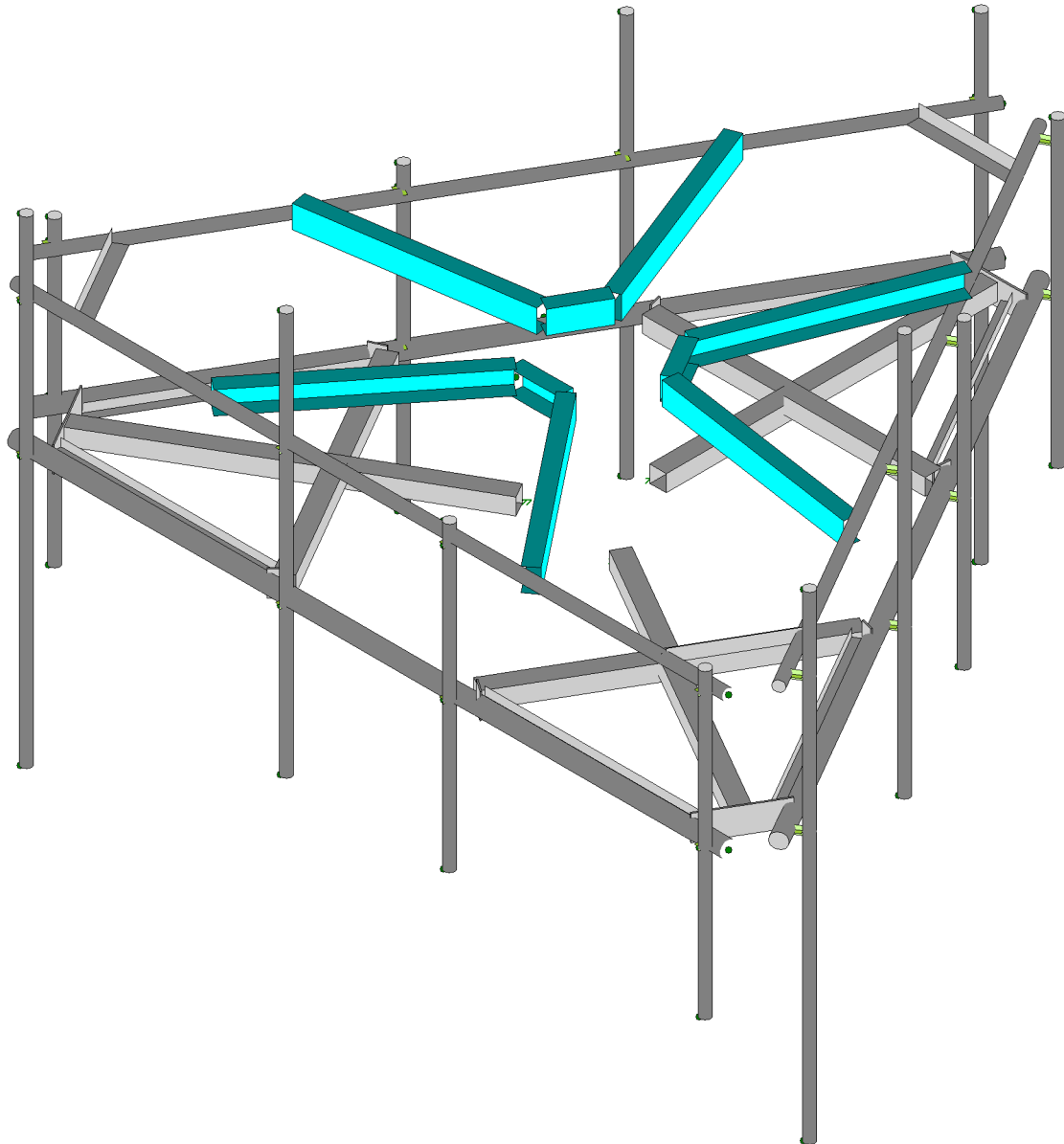
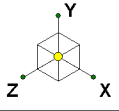


Ants. Items	Enter antenna model. If not labeled, enter "Unknown". If no antenna at specified location, enter "N/A". If antennas and the locations are the same on all three sectors, only enter one sector.					Mounting Locations (Unit: inches)			Photos of antennas
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Vertical Distances "b _{1a} , b _{2a} , b _{3a} , b _{1b} ..." (in.)	Horiz. offset (Use "-" if Ant. is inside)	Horiz. offset "C ₁ , C ₂ , C ₃ , C ₄ , C ₅ " (in.)	
Sector A									
Ant _{1a}									
Ant _{1b}	Antenna A	13	3.5	56	1/2" (2)	+14"	6	4	
Ant _{1c}	TMA A	8	4.5	12	1/2" (2)	+13"	N/A	4	
Ant _{2a}									
Ant _{2b}	Empty Mast	N/A	N/A	N/A	N/A	N/A	N/A	60	
Ant _{2c}									
Ant _{3a}									
Ant _{3b}	Empty Mast	N/A	N/A	N/A	N/A	N/A	N/A	111	
Ant _{3c}									
Ant _{4a}									
Ant _{4b}	Antenna B	24	9	96	1/2" (2)	+5"	7.5	166	
Ant _{4c}									
Ant _{5a}									
Ant _{5b}									
Ant _{5c}									
Are Ant same as sector A?		Yes		Antennas on Sector B are the same as Sector A					

Azimuth (Degree) of Each Sector and Climbing Information		
Sector A:	330°	Deg
Sector B:	90°	Deg
Sector C:	210°	Deg
Climbing	0°	Deg Located at Section A
Climbing Facility	Corrosion Type:	No corrosion observed
	Access:	Climbing path was unobstructed.
	Condition:	N/A

Are Ant same as sector A/B? Same As A Antennas on Sector C are the same as Sector A





Tower Engineering Solutio...

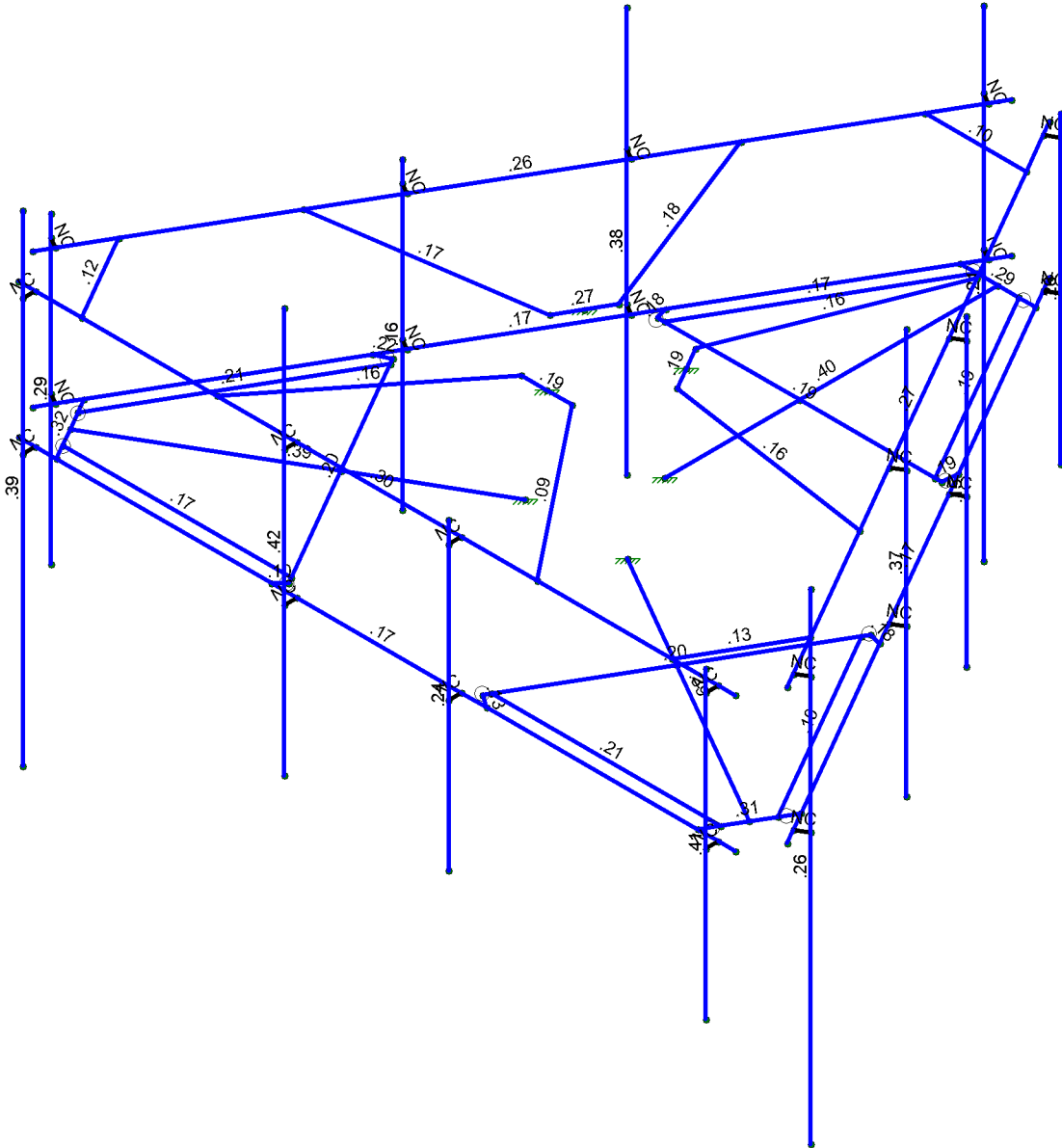
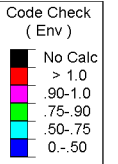
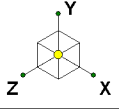
CT13055-A-SBA_MT_LO_Loads Only_H

SK - 1

Dec 11, 2020 at 10:40 AM

TES Project No. 100313

CT13055-A-SBA_100313_H_RISA_...



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0W (0 Deg)

Tower Engineering Solutio...

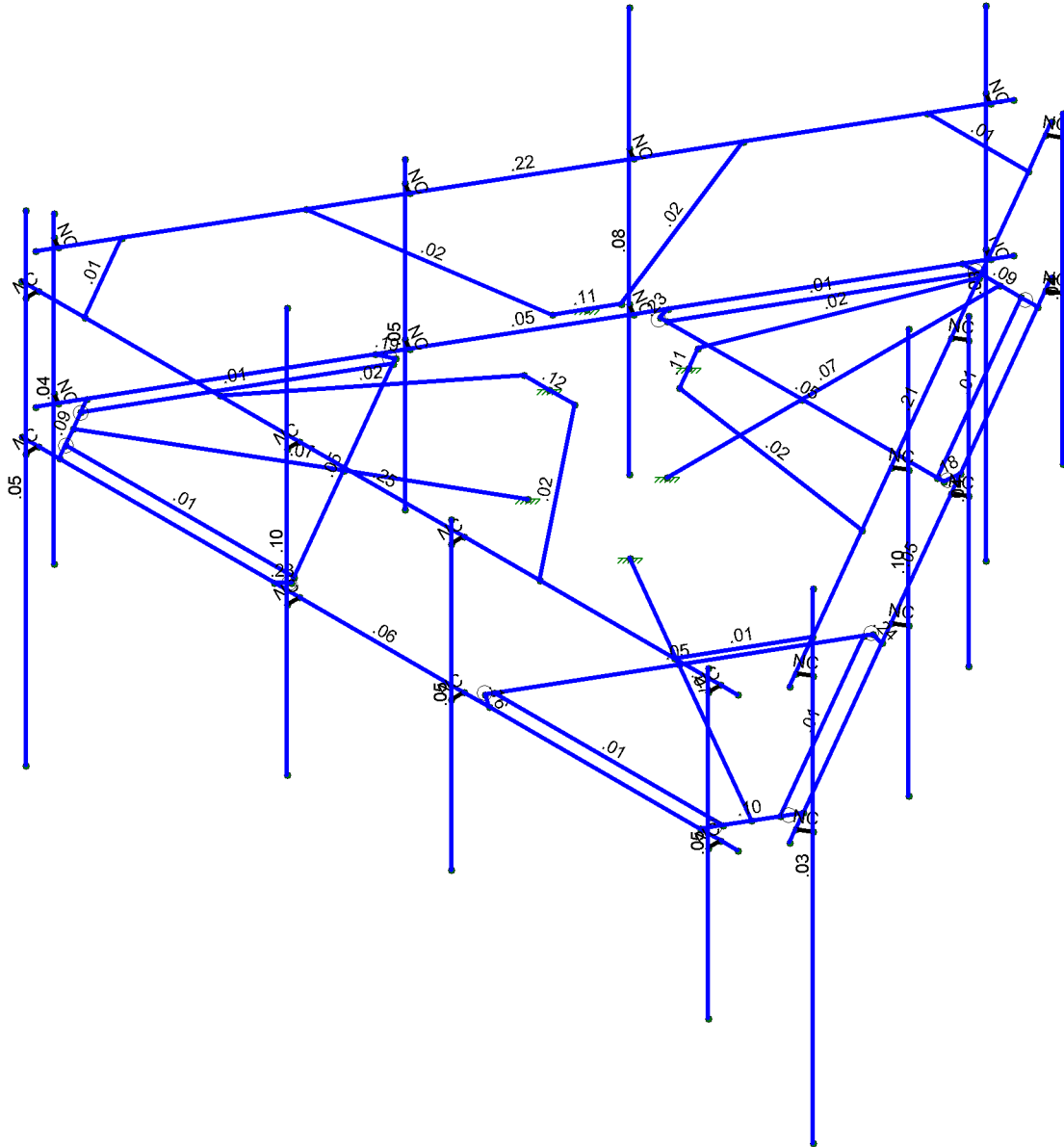
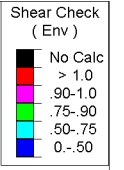
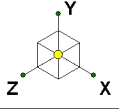
CT13055-A-SBA_MT_LO_Loads Only_H

SK - 2

Dec 11, 2020 at 10:40 AM

TES Project No. 100313

CT13055-A-SBA_100313_H_RISA_...



Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0W (0 Deg)

Tower Engineering Solutio...		SK - 3
	CT13055-A-SBA_MT_LO_Loads Only_H	Dec 11, 2020 at 10:40 AM
TES Project No. 100313		CT13055-A-SBA_100313_H_RISA_...

>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Šã^]	ÝÁãá	ÝÁãá	ZÁãá	V^] Áãá	Ôã&áÁÓ[] ÁÓã] ÉÉ
Fí	ÞGF	ÉÉÉÉÉÉ	€	ÉÉÉÉ	€	
Fí	ÞG	ÉÉÉÉÉÉ	€	HÉGG I GH	€	
FJ	ÞG	ÉÉÉÉÉÉ	GÉÉÉÉÉ	IÉÉGGÉ	€	
GÉ	ÞG	ÉÉÉÉÉÉ	GÉÉÉÉÉ	IÉÉGGÉ	€	
GF	ÞÚF	ÉÉÉÉÉÉ	HÉÉHHH	IÉÉGGÉ	€	
GG	ÞÚG	ÉÉÉÉÉÉ	ÉÉÉÉÉÉ	IÉÉGGÉ	€	
GH	ÞÚH	FÉÉÉÉÉ	HÉÉHHH	IÉÉGGÉ	€	
G	ÞÚ	FÉÉÉÉÉ	ÉÉÉÉÉÉ	IÉÉGGÉ	€	
Ĝ	ÞÚ	ÉÉÉÉHHH	ÉÉÉÉHHH	IÉÉGGÉ	€	
Ĝ	ÞÚ	ÉÉÉÉHHH	ÉÉÉÉHHH	IÉÉGGÉ	€	
Ĝ	ÞÚ	ÉÉÉÉ	IÉÉÉÉÉ	IÉÉGGÉ	€	
Ĝ	ÞÚ	ÉÉÉÉ	ÉÉÉÉHHH	IÉÉGGÉ	€	
GJ	ÞÍF	ÉÉÉÉHHH	GÉÉÉÉÉ	IÉÉGGÉ	€	
HÉ	ÞÍG	ÉÉÉÉHHH	GÉÉÉÉÉ	IÉÉGGÉ	€	
HF	ÞÍH	ÉÉÉÉÉÉ	GÉÉÉÉÉ	HÉÉHGEG	€	
HG	ÞÍ	ÉÉÉÉÉÉ	GÉÉÉÉÉ	ÉÉÉÉÉÉ	€	
HH	ÞÍ	ÉÉÉÉHHH	GÉÉÉÉÉ	GÉÉÉÉÉ	€	
H	ÞÍ	FÉ	GÉÉÉÉÉ	ÉÉÉÉFH	€	
H	ÞÍ	ÉÉÉÉÉÉ	GÉÉÉÉÉ	ÉÉÉÉÉÉ	€	
H	ÞÍ	ÉÉÉÉÉÉ	GÉÉÉÉÉ	HÉÉHGEG	€	
H	ÞÍ	ÉÉÉÉ	GÉÉÉÉÉ	ÉÉÉÉFH	€	
H	ÞÍ	ÉÉÉÉHHH	GÉÉÉÉÉ	GÉÉÉÉÉ	€	
HJ	ÞÍF	ÉÉÉÉ	€	IÉÉGGÉ	€	
I€	ÞÍG	GÉÉÉÉÉ	€	IÉÉGGÉ	€	
IF	ÞÍH	ÉÉÉÉHHH	€	IÉÉGGÉ	€	
IG	ÞÍ	ÉÉÉÉ	€	IÉÉGGÉ	€	
IH	ÞÍ	GÉÉÉHHH	€	ÉÉÉÉÉÉ	€	
II	ÞÍ	IÉÉÉHHH	€	ÉÉÉÉÉÉ	€	
IÍ	ÞÍ	É	€	ÉÉÉÉÉÉ	€	
IÍ	ÞÍF	ÉÉÉÉ	€	ÉÉÉÉÉÉ	€	
IÍ	ÞÍH	ÉÉÉÉÉÉ	€	FÉÉÉÉÉ	€	
IÍ	ÞÍ	HÉÉÉÉÉ	€	FÉÉÉÉÉ	€	
IJ	ÞÍ	ÉÉÉÉFH	€	ÉÉÉÉHHH	€	
Í€	ÞÍG	GÉÉÉÉÉ	€	ÉÉÉÉHHH	€	
ÍF	ÞÍH	ÉÉÉÉÉÉ	€	ÉÉÉÉ	€	
ÍG	ÞÍ	ÉÉÉÉÉÉ	€	ÉÉÉÉHHH	€	
ÍH	ÞÍ	ÉÉÉÉÉÉ	€	ÉÉÉÉ	€	
ÍÍ	ÞÍ	ÉÉÉÉÉÉ	€	ÉÉÉÉÉÉ	€	
ÍÍ	ÞÍ	ÉÉÉÉÉÉ	€	HÉÉÉÉÉ	€	
ÍÍ	ÞÍ	ÉÉÉÉÉÉ	€	IÉÉÉÉÉ	€	
ÍÍ	ÞÍ	ÉÉÉÉÉÉ	€	IÉÉÉÉÉ	€	
ÍJ	ÞÍF	ÉÉÉÉÉÉ	€	IÉÉÉÉÉ	€	
Í€	ÞÍG	IÉÉÉÉÉ	€	ÉÉÉÉÉÉ	€	
ÍF	ÞÍH	IÉÉÉÉÉ	€	HÉÉÉÉÉ	€	
ÍG	ÞÍ	F^ÉÉ	GÉÉÉÉÉ	FÉÉÉÉÉ	€	
ÍH	ÞÍ	HÉÉÉÉÉ	GÉÉÉÉÉ	IÉÉGGÉ	€	
ÍÍ	ÞÍ	ÉÉÉÉÉÉ	GÉÉÉÉÉ	IÉÉGGÉ	€	
ÍÍ	ÞÍ	GÉÉÉHHH	GÉÉÉÉÉ	ÉÉÉÉFH	€	
ÍÍ	ÞÍ	IÉÉ	GÉÉÉÉÉ	ÉÉÉÉFH	€	
ÍÍ	ÞÍ	ÉÉÉ	GÉÉÉÉÉ	ÉÉÉÉFH	€	
ÍÍ	ÞÍ	ÉÉÉHHH	GÉÉÉÉÉ	ÉÉÉÉÉÉ	€	

>c]bh7ccfX]bUhg'UbX'HYa dYUhi fYg'f7 cb]bi YXL

	Š...^]	Ý...á	Ý...á	Z...á	V...]...á	Ö...&@...] { ...á...} ...
Í J	pFEH	í ě í	ǦĚĪĪĪĪ	Ī Ě Ğ Ī Ī	€	
Í €	pFEI	Ě Ě Í	ǦĚĪĪĪĪ	Ī Ě Ğ Ī Ī	€	
Í F	pFEJ	FĚĪĪĪĪ	€	Ī Ě Ğ Ī Ī	€	
Í G	pFE€	ĚĚĪHHH	€	Ī Ě Ğ Ī Ī	€	
Í H	pFFF	FĚĪĪĪĪ	ǦĚĪĪĪĪ	Ī Ě Ğ Ī Ī	€	
Í Ī	pFFG	ĚĚĪHHH	ǦĚĪĪĪĪ	Ī Ě Ğ Ī Ī	€	
Í Ī	pFFH	ǦĚĪĪĪ	€	ĚĚHHHH	€	
Í Ī	pFFI	ǦĚĪĪĪ	€	ĚĚHHHH	€	
Í Ī	pFFĪ	Ě Ě Ğ Ğ Ī	€	ĚĚĪĪĪĪ	€	
Í Ī	pFFĪ	ĚĚĪĪĪĪ	€	Ī Ě Ī Ī Ī Ī	€	
Í J	pFFĪ	FĚĪĪĪĪ	€	Ī Ě Ī Ī Ī Ī	€	
Í €	pFFĪ	Ī Ě Ğ Ğ Ī	€	ĚĚĪĪĪĪ	€	
Í F	pĪHOĚ	í ě í	€	Ī Ě Ī Ī Ī	€	
Í G	pĪIOĚ	Ě Ě Í	€	Ī Ě Ī Ī Ī	€	
Í H	pĪIOĚ	í ě í	ǦĚĪĪĪĪ	Ī Ě Ī Ī Ī	€	
Í Ī	pĪIOĚ	Ě Ě Í	ǦĚĪĪĪĪ	Ī Ě Ī Ī Ī	€	
Í Ī	pĪIOĚ	FĚĪĪĪĪ	€	Ī Ě Ī Ī Ī	€	
Í Ī	pĪIOĚ	ĚĚĪHHH	€	Ī Ě Ī Ī Ī	€	
Í Ī	pĪIOĚ	FĚĪĪĪĪ	ǦĚĪĪĪĪ	Ī Ě Ī Ī Ī	€	
Í Ī	pĪIOĚ	ĚĚĪHHH	ǦĚĪĪĪĪ	Ī Ě Ī Ī Ī	€	
Í J	pJFOĚ	ĚĚĪĪĪĪ	€	Ě Ě Ī Ī Ī	€	
J€	pJGOĚ	Ī Ě Ī Ī Ī	€	HĚĪĪĪĪ	€	
JF	pJHOĚ	ĚĚĪĪĪĪ	ǦĚĪĪĪĪ	Ě Ě Ī Ī Ī	€	
JG	pJI	Ī Ě Ī Ī Ī	ǦĚĪĪĪĪ	HĚĪĪĪĪ	€	
JH	pJÍ Ó	HĚĪHHH	€	ĚĚĪĪĪĪ	€	
JĪ	pJÍ OĚ	Ī Ě Ī HH	€	ĚĚĪĪĪĪ	€	
JĪ	pJÍ OĚ	HĚĪHHH	ǦĚĪĪĪĪ	ĚĚĪĪĪĪ	€	
JĪ	pJÍ OĚ	Ī Ě Ī HH	ǦĚĪĪĪĪ	ĚĚĪĪĪĪ	€	
JĪ	pJJOĚ	ĚĚĪĪĪĪ	€	Ě Ě Ī Ī Ī	€	
JĪ	pFE€OĚ	Ī Ě Ī Ī Ī	€	HĚĪĪĪĪ	€	
JJ	pFEFOĚ	ĚĚĪĪĪĪ	ǦĚĪĪĪĪ	Ě Ě Ī Ī Ī	€	
F€€	pFEGOĚ	Ī Ě Ī Ī Ī	ǦĚĪĪĪĪ	HĚĪĪĪĪ	€	
F€F	pFEHOĚ	HĚĪĪĪ	€	ĚĚĪĪĪĪ	€	
F€G	pFĪ OĚ	Ī Ě Ī Ī	€	ĚĚĪĪĪĪ	€	
F€H	pFĪ	HĚĪĪĪ	ǦĚĪĪĪĪ	ĚĚĪĪĪĪ	€	
F€Ī	pFĪ	Ī Ě Ī Ī	ǦĚĪĪĪĪ	ĚĚĪĪĪĪ	€	
F€Ī	pFĪ	Ě Ě Ī Ī Ī	€	HĚĪĪĪĪ	€	
F€Ī	pFĪ	ĚĚĪĪĪĪ	€	Ě Ě Ī Ī Ī	€	
F€Ī	pFEJOĚ	Ě Ě Ī Ī Ī	ǦĚĪĪĪĪ	HĚĪĪĪĪ	€	
F€Ī	pFF€OĚ	ĚĚĪĪĪĪ	ǦĚĪĪĪĪ	Ě Ě Ī Ī Ī	€	
F€Ī	pFFFOĚ	Ě Ě Í	€	ĚĚĪĪĪĪ	€	
FF€	pFFGOĚ	ĚĚĪĪĪ	€	ĚĚĪĪĪĪ	€	
FFF	pFFHOĚ	Ě Ě Í	ǦĚĪĪĪĪ	ĚĚĪĪĪĪ	€	
FFG	pFFIOĚ	ĚĚĪĪĪ	ǦĚĪĪĪĪ	ĚĚĪĪĪĪ	€	
FFH	pFFIOĚ	Ě Ě Ī Ī Ī	€	HĚĪĪĪĪ	€	
FFĪ	pFFIOĚ	ĚĚĪĪĪĪ	€	Ě Ě Ī Ī Ī	€	
FFĪ	pFFIOĚ	Ě Ě Ī Ī Ī	ǦĚĪĪĪĪ	HĚĪĪĪĪ	€	
FFĪ	pFFIOĚ	ĚĚĪĪĪĪ	ǦĚĪĪĪĪ	Ě Ě Ī Ī Ī	€	
FFĪ	pFFJ	Ě Ě Ī Ī Ī	€	ĚĚĪĪĪĪ	€	
FFĪ	pFGE	ĚĚĪĪĪĪ	€	ĚĚĪĪĪĪ	€	
FFJ	pFGF	Ě Ě Ī Ī Ī	ǦĚĪĪĪĪ	ĚĚĪĪĪĪ	€	
FGE	pFGG	ĚĚĪĪĪĪ	ǦĚĪĪĪĪ	ĚĚĪĪĪĪ	€	

A Ya Vy' Df]a Ufm8 UU'f7 cb]bi YXL

	Šäa^	ÖR äc	RÄ äc	SÄ äc	Ü[ää G^* D Ü^&ä] ÈÈÜÖæ^	V] ^	Ö•ä) Ääc	Tæ:äæ	Ö•ä) ÄU] ^•
G	TH	BJF	BJE		Ö[ää *	Öæ	Üä * ^/Äæ * ^	ÖH Ä:È	V] äæ
G	TH	BJH	BJG		Ö[ää *	Öæ	Üä * ^/Äæ * ^	ÖH Ä:È	V] äæ
GJ	TH	BJ	BF E		XÄ:äæ^	Öæ	ÖW	ÖH Ä:ÈH	V] äæ
HE	TH	BFHJ	BJ ÖE		XÄ:äæ^	Öæ	ÖW	ÖH Ä:ÈH	V] äæ
HF	TIH	B IH	BF I		Üä Ä:äæ^/Ä) ÈÈ	Öæ	ÜÖÖV	ÖH Ä:È	V] äæ
HG	TIH	B IG	BF I		Üä Ä:äæ^/Ä) ÈÈ	Öæ	ÜÖÖV	ÖH Ä:È	V] äæ
HH	TI	B I	BF I		Üä Ä:äæ^/Ä) ÈÈ	Öæ	ÜÖÖV	ÖH Ä:È	V] äæ
HI	TI	B I	BFH		Üä Ä:äæ^/Ä) ÈÈ	Öæ	ÜÖÖV	ÖH Ä:È	V] äæ
HI	TI	B I F	BF I		Üä Ä:äæ^/Ä) ÈÈ	Öæ	ÜÖÖV	ÖH Ä:È	V] äæ
HI	TI	B I E	BF I		Üä Ä:äæ^/Ä) ÈÈ	Öæ	ÜÖÖV	ÖH Ä:È	V] äæ
HI	TI FÖE	BF E	B I ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
HI	TI GÖE	B I	B I ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
HJ	TI HÖE	BF FG	B J ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I E	TI ÖE	BF E	B I ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
IF	TI ÖE	BF F	B J ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
IG	TI ÖE	BF E J	B I ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I H	TI ÖE	BF E H	B I ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
II	TI ÖE	B I F	B I HÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
II	TI J	B J	BF E GÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
II	TI E	B J GÖE	BF E ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
II	TI F	B J ÖE	BF E		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
II	TI G	B J ÖE	BF E ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I J	TI H	B J ÖE	BF E		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I E	TI	B J Ö	BF E HÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I F	TI	B J HÖE	BF E FÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I G	TI	B J FÖE	B J J ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I H	TI	BF E ÖE	BF I ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I I	TI	BF E	BF I ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I I	TI J	BF I ÖE	BF G		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I I	TI E	BF F GÖE	BF G		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I I	TI F	BF F HÖE	BF G		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I I	TI G	BF F FÖE	BF J		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I J	TI H	BF E J ÖE	BF I ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I E	TI	BF E	BF I ÖE		ÜÖÖ	Öæ	P] ^	ÜÖÖ	ÖUF
I F	T UF Ö	BF GH	BF G		ÜÖÖ G E	Öæ	Üä ^	ÖH Ä:Ö	ÖUF
I G	T U G Ö	BF G	BF G		ÜÖÖ G E	Öæ	Üä ^	ÖH Ä:Ö	ÖUF
I H	T U H Ö	BF G	BF G		ÜÖÖ G E	Öæ	Üä ^	ÖH Ä:Ö	ÖUF
I I	T U I Ö	BF G J	BF H E		ÜÖÖ G E	Öæ	Üä ^	ÖH Ä:Ö	ÖUF
I I	T UF Ö	BF HF	BF HG		ÜÖÖ G E	Öæ	Üä ^	ÖH Ä:Ö	ÖUF
I I	T U G Ö	BF HH	BF H I		ÜÖÖ G E	Öæ	Üä ^	ÖH Ä:Ö	ÖUF
I I	T U H Ö	BF HI	BF HI		ÜÖÖ G E	Öæ	Üä ^	ÖH Ä:Ö	ÖUF
I I	T U I Ö	BF HI	BF HI		ÜÖÖ G E	Öæ	Üä ^	ÖH Ä:Ö	ÖUF
I J	TI JÖE	BF HJ	BF E	F E	XÄ:äæ^	Öæ	ÖW	ÖH Ä:ÈH	V] äæ
I E	TI ÖE	B J J	BF I G		XÄ:äæ^	Öæ	ÖW	ÖH Ä:ÈH	V] äæ
I F	TI FÖE	BF I F	B J		XÄ:äæ^	Öæ	ÖW	ÖH Ä:ÈH	V] äæ
I G	TI GÖE	BF I F	BF I G	F E	XÄ:äæ^	Öæ	ÖW	ÖH Ä:ÈH	V] äæ
I H	TI H	BF E G	BF I		XÄ:äæ^	Öæ	ÖW	ÖH Ä:ÈH	V] äæ
I I	TI	BF I	BF E F		XÄ:äæ^	Öæ	ÖW	ÖH Ä:ÈH	V] äæ
I I	TI	BF I	BF I	F E	XÄ:äæ^	Öæ	ÖW	ÖH Ä:ÈH	V] äæ



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A Ya Vyf'Dc]bh@UXg'f6 @ '%. '5 bhYbbU'8 L'ff c]h]bi YXL

	T ^{ à ^! Á ã } ^	Öá^&çà}	T æ) æ à ^ Ža È Ê á	Š { ã } Ža È á
F€	T ÚHÓ	Ÿ	È È	Í È Í
FF	T ÚHÔ	Ÿ	È È	È Í
FG	T ÚHÔ	Ÿ	È È	Í È Í
FH	T ÚGÖ	Ÿ	È FÈ	È
FI	T ÚGÖ	Ÿ	È FÈ	HÈ
FÍ	T ÚGÓ	Ÿ	È FÈ	È
FÎ	T ÚGÓ	Ÿ	È FÈ	HÈ
FÏ	T ÚGÓ	Ÿ	È FÈ	È
FÌ	T ÚGÓ	Ÿ	È FÈ	HÈ
FJ	T ÚHÖ	Ÿ	È Í È Í	Í
GE	T ÚHÓ	Ÿ	È Í È Í	Í
GF	T ÚHÔ	Ÿ	È Í È Í	Í
GG	T ÚHÖ	Ÿ	È Í	G
GH	T ÚHÓ	Ÿ	È Í	G
G	T ÚHÔ	Ÿ	È Í	G
G	T ÚHÖ	Ÿ	È Í	G
G	T ÚHÓ	Ÿ	È Í	G
G	T ÚHÔ	Ÿ	È Í	G
G	T ÚFÖ	Ÿ	È Í	G
GJ	T ÚFÓ	Ÿ	È Í	G
HE	T ÚFÔ	Ÿ	È Í	G
HF	T ÚHÖ	Ÿ	È È	I
HG	T ÚHÓ	Ÿ	È È	I
HH	T ÚHÔ	Ÿ	È È	I

A Ya Vyf'Dc]bh@UXg'f6 @ '&.' '5 bhYbbU'8 JL

	T ^{ à ^! Á ã } ^	Öá^&çà}	T æ) æ à ^ Ža È Ê á	Š { ã } Ža È á
F	T ÚFÖ	Ÿ	È È G	€
G	T ÚFÖ	Ÿ	È È G	I È
H	T ÚFÓ	Ÿ	È È G	€
I	T ÚFÓ	Ÿ	È È G	I È
Í	T ÚFÔ	Ÿ	È È G	€
Î	T ÚFÔ	Ÿ	È È G	I È
Ï	T ÚHÖ	Ÿ	È H È Í	È Í
Ì	T ÚHÖ	Ÿ	È H È Í	Í È Í
J	T ÚHÓ	Ÿ	È H È Í	È Í
F€	T ÚHÓ	Ÿ	È H È Í	Í È Í
FF	T ÚHÔ	Ÿ	È H È Í	È Í
FG	T ÚHÔ	Ÿ	È H È Í	Í È Í
FH	T ÚGÖ	Ÿ	È Í È G	È
FI	T ÚGÖ	Ÿ	È Í È G	HÈ
FÍ	T ÚGÓ	Ÿ	È Í È G	È
FÎ	T ÚGÓ	Ÿ	È Í È G	HÈ
FÏ	T ÚGÓ	Ÿ	È Í È G	È
FÌ	T ÚGÓ	Ÿ	È Í È G	HÈ
FJ	T ÚHÖ	Ÿ	È Í È G	Í
GE	T ÚHÓ	Ÿ	È Í È G	Í
GF	T ÚHÔ	Ÿ	È Í È G	Í
GG	T ÚHÖ	Ÿ	È J È Í F	G
GH	T ÚHÓ	Ÿ	È J È Í F	G
G	T ÚHÔ	Ÿ	È J È Í F	G

A Ya Vyf'Dc]bhi@UXg'f6 @ '(: '5 bhYbbUK]: fcbHf'f' cb]bi YXL

	T^ { à^!Áæ^ }	Öá^&ç }	T æ } æ à^ } àÉ Ééá	Š } &ç } ŽÉÁ á
I	T ÚFÓ	Z	ÉI ÉHG	I É
Í	T ÚFÔ	Z	ÉI ÉHG	€
Î	T ÚFÔ	Z	ÉI ÉHG	I É
İ	T ÚHœ	Z	ÉI ÉHG	ÉÍ
Ï	T ÚHœ	Z	ÉI ÉHG	Í ÉÍ
J	T ÚHÓ	Z	ÉÍ ÉJÍ	ÉÍ
F€	T ÚHÓ	Z	ÉÍ ÉJÍ	Í ÉÍ
FF	T ÚHÓ	Z	ÉÍ ÉJÍ	ÉÍ
FG	T ÚHÓ	Z	ÉÍ ÉJÍ	Í ÉÍ
FH	T ÚGœ	Z	ÉGÉÍ J	É
FI	T ÚGœ	Z	ÉGÉÍ J	HÉ
FÍ	T ÚGÓ	Z	ÉHÉHG	É
FÎ	T ÚGÓ	Z	ÉHÉHG	HÉ
Fİ	T ÚGœ	Z	ÉHÉHG	É
FÏ	T ÚGœ	Z	ÉHÉHG	HÉ
FJ	T ÚHœ	Z	ÉHÉJÍ	Í
G€	T ÚHÓ	Z	ÉGÉFF	Í
GF	T ÚHÓ	Z	ÉGÉFF	Í
GG	T ÚHœ	Z	ÉGÉÉ	G
GH	T ÚHÓ	Z	ÉFÉÍ	G
G	T ÚHÓ	Z	ÉFÉÍ	G
GÍ	T ÚHœ	Z	ÉGÉFG	G
GÎ	T ÚHÓ	Z	ÉÉH	G
Gİ	T ÚHœ	Z	ÉÉH	G
GÏ	T ÚFœ	Z	ÉGÉF	G
GJ	T ÚFÓ	Z	ÉÉÍ	G
H€	T ÚFÔ	Z	ÉÉÍ	G
HF	T ÚHœ	Z	ÉÉÉ	I
HG	T ÚHÓ	Z	ÉÉH	I
HH	T ÚHÓ	Z	ÉÉH	I

A Ya Vyf'Dc]bhi@UXg'f6 @ '(: '5 bhYbbUK 'G]XYL

	T^ { à^!Áæ^ }	Öá^&ç }	T æ } æ à^ } àÉ Ééá	Š } &ç } ŽÉÁ á
F	T ÚFœ	Y	I GÉ G	€
G	T ÚFœ	Y	I GÉ G	I É
H	T ÚFÓ	Y	FÉÉÍ G	€
I	T ÚFÓ	Y	FÉÉÍ G	I É
Í	T ÚFÔ	Y	FÉÉÍ G	€
Î	T ÚFÔ	Y	FÉÉÍ G	I É
İ	T ÚHœ	Y	FÍHÉÍ	ÉÍ
Ï	T ÚHœ	Y	FÍHÉÍ	Í ÉÍ
J	T ÚHÓ	Y	HÍÉG	ÉÍ
F€	T ÚHÓ	Y	HÍÉG	Í ÉÍ
FF	T ÚHÓ	Y	HÍÉG	ÉÍ
FG	T ÚHÓ	Y	HÍÉG	Í ÉÍ
FH	T ÚGœ	Y	I ÉFG	É
FI	T ÚGœ	Y	I ÉFG	HÉ
FÍ	T ÚGÓ	Y	JÍÉÍ	É
FÎ	T ÚGÓ	Y	JÍÉÍ	HÉ
Fİ	T ÚGœ	Y	JÍÉÍ	É
FÏ	T ÚGœ	Y	JÍÉÍ	HÉ

A Ya Vyf'Dc]bhi@UXg'f6 @') : '5 bhYbbUK 'GJXYL'ff c bh]bi YXL

	T\{ a\A\Öa\}	Öa^&a\}	T a\} a^ a^ žaB Eeá	Š\ a\} žaA á
FJ	T ÚHÖE	Ý	FI EGH	I
GE	T ÚHÓ	Ý	HJĚ G	I
GF	T ÚHÖ	Ý	HJĚ G	I
GG	T ÚHÖE	Ý	Ī HĚEG	G
GH	T ÚHÓ	Ý	Ī FĪ H	G
G	T ÚHÖ	Ý	Ī FĪ H	G
GĪ	T ÚHÖE	Ý	Ī GĪ JĪ	G
GĪ	T ÚHÓ	Ý	Ī Ī H	G
GĪ	T ÚHÖ	Ý	Ī Ī H	G
GĪ	T ÚFÖE	Ý	H Ī F	G
GJ	T ÚFÓ	Ý	Ī Ī GĪ	G
HĚ	T ÚFÖ	Ý	Ī Ī GĪ	G
HF	T ÚHÖE	Ý	HĚ Ī	I
HG	T ÚHÓ	Ý	Ī Ī FĪ	I
HH	T ÚHÖ	Ý	Ī Ī FĪ	I

A Ya Vyf'Dc]bhi@UXg'f6 @ '* : '5 bhYbbUK]GJXYL

	T\{ a\A\Öa\}	Öa^&a\}	T a\} a^ a^ žaB Eeá	Š\ a\} žaA á
F	T ÚFÖE	Ý	JĚ Ī F	€
G	T ÚFÖE	Ý	JĚ Ī F	Ī Ī
H	T ÚFÓ	Ý	GĪ FĪ	€
I	T ÚFÓ	Ý	GĪ FĪ	Ī Ī
Ī	T ÚFÓ	Ý	GĪ FĪ	€
Ī	T ÚFÓ	Ý	GĪ FĪ	Ī Ī
Ī	T ÚHÖE	Ý	H Ī HU	Ī Ī
Ī	T ÚHÖE	Ý	H Ī HU	Ī Ī Ī
J	T ÚHÓ	Ý	Ī Ī Ī	Ī Ī
FĚ	T ÚHÓ	Ý	Ī Ī Ī	Ī Ī Ī
FF	T ÚHÖ	Ý	Ī Ī Ī	Ī Ī
FG	T ÚHÖ	Ý	Ī Ī Ī	Ī Ī Ī
FH	T ÚGÖE	Ý	FĪ GG	Ī
FI	T ÚGÖE	Ý	FĪ GG	HĚ
FĪ	T ÚGÓ	Ý	FJĚ Ī	Ī
FĪ	T ÚGÓ	Ý	FJĚ Ī	HĚ
FĪ	T ÚGÓ	Ý	FJĚ Ī	Ī
FĪ	T ÚGÓ	Ý	FJĚ Ī	HĚ
FJ	T ÚHÖE	Ý	Ī Ī H	I
GE	T ÚHÓ	Ý	Ī Ī G	I
GF	T ÚHÖ	Ý	Ī Ī G	I
GG	T ÚHÖE	Ý	FI EGĪ	G
GH	T ÚHÓ	Ý	FĪ GFH	G
G	T ÚHÖ	Ý	FĪ GFH	G
GĪ	T ÚHÖE	Ý	FFĪ GĪ	G
GĪ	T ÚHÓ	Ý	FĪ Ī Ī	G
GĪ	T ÚHÖ	Ý	FĪ Ī Ī	G
GĪ	T ÚFÖE	Ý	Ī Ī Ī	G
GJ	T ÚFÓ	Ý	FI Ī JH	G
HĚ	T ÚFÖ	Ý	FI Ī JH	G
HF	T ÚHÖE	Ý	FĪ Ī J	I
HG	T ÚHÓ	Ý	GĪ GĪ	I
HH	T ÚHÖ	Ý	GĪ GĪ	I

A Ya Vyf'Dc]bhi@UXg'f6 @ '+: 'Gyfj JW' @ %L

	T ^{ à^!Áæ ^ }	Öá^&ç }	T æ } æ à^ ŽaÉ Ééá	Š } &ç } ŽéÁ á
F	T ÚFCE	Ý	Ě €	Á Ě

A Ya Vyf'Dc]bhi@UXg'f6 @ ; : 'Gyfj JW' @ &L

	T ^{ à^!Áæ ^ }	Öá^&ç }	T æ } æ à^ ŽaÉ Ééá	Š } &ç } ŽéÁ á
F	T ÚI CE	Ý	Ě €	Á Ě

A Ya Vyf'Dc]bhi@UXg'f6 @ '% : '5 bhYbUK a : fcbL

	T ^{ à^!Áæ ^ }	Öá^&ç }	T æ } æ à^ ŽaÉ Ééá	Š } &ç } ŽéÁ á
F	T ÚFCE	Z	Ě Ě HG	€
G	T ÚFCE	Z	Ě Ě HG	I Ě
H	T ÚFÓ	Z	Ě Ě Ě	€
I	T ÚFÓ	Z	Ě Ě Ě	I Ě
Í	T ÚFÓ	Z	Ě Ě Ě	€
Î	T ÚFÓ	Z	Ě Ě Ě	I Ě
Ï	T ÚHCE	Z	Ě Ě Ě I	Ě I
Ì	T ÚHCE	Z	Ě Ě Ě I	Ě I
J	T ÚHÓ	Z	Ě Ě G	Ě I
ƒ	T ÚHÓ	Z	Ě Ě G	Ě I
FF	T ÚHÓ	Z	Ě Ě G	Ě I
FG	T ÚHÓ	Z	Ě Ě G	Ě I
FH	T ÚGCE	Z	Ě Ě Ě H	Ě
FI	T ÚGCE	Z	Ě Ě Ě H	Ě
FÍ	T ÚGÓ	Z	Ě Ě Ě H	Ě
FÌ	T ÚGÓ	Z	Ě Ě Ě H	Ě
FĪ	T ÚGÓ	Z	Ě Ě Ě H	Ě
FĬ	T ÚGÓ	Z	Ě Ě Ě H	Ě
FJ	T ÚHCE	Z	Ě Ě H	I
ƒ	T ÚHÓ	Z	Ě Ě H	I
GF	T ÚHÓ	Z	Ě Ě H	I
GG	T ÚHCE	Z	Ě Ě Ě I	G
GH	T ÚHÓ	Z	Ě Ě Ě I	G
G	T ÚHÓ	Z	Ě Ě Ě I	G
G	T ÚHCE	Z	Ě Ě Ě I	G
G	T ÚHÓ	Z	Ě Ě Ě I	G
G	T ÚHÓ	Z	Ě Ě Ě I	G
G	T ÚFCE	Z	Ě Ě Ě I	G
GJ	T ÚFÓ	Z	Ě Ě Ě	G
H€	T ÚFÓ	Z	Ě Ě Ě	G
HF	T ÚHCE	Z	Ě Ě I	I
HG	T ÚHÓ	Z	Ě Ě H	I
HH	T ÚHÓ	Z	Ě Ě H	I

A Ya Vyf'Dc]bhi@UXg'f6 @ '% : '5 bhYbUK a 'GJXL

	T ^{ à^!Áæ ^ }	Öá^&ç }	T æ } æ à^ ŽaÉ Ééá	Š } &ç } ŽéÁ á
F	T ÚFCE	Ý	FFĚ Ě I	€
G	T ÚFCE	Ý	FFĚ Ě I	I Ě
H	T ÚFÓ	Ý	G Ě Ě F	€
I	T ÚFÓ	Ý	G Ě Ě F	I Ě
Í	T ÚFÓ	Ý	G Ě Ě F	€
Î	T ÚFÓ	Ý	G Ě Ě F	I Ě

9bj YcdY>c]bh8]gd'UWã Ybly f'Y cbh]bi YXL

	Rãc	YÁá	SÔ	YÁá	SÔ	ZÁá	SÔ	YÁU[]ç) / ÆSSÔ	YÁU[]ç) / ÆSSÔ	ZÁU[]ç) / ÆSSÔ			
GJ	PFI	{ æ	ÆGF	G	ÆG	ÆI	Î	HÆG^ÆH	G	IÆH^ÆH	F	FÆI^ÆH	H
HÆ		{ á	ÆGF	I	ÆHJ	G	ÆH	FG JÆI^ÆH	J	ÆI^ÆH	I	ÆHJ^ÆH	J
HF	PGE	{ æ	ÆI	I	ÆI	G	ÆG	I ÆHJ^ÆH	G	FÆI^ÆH	FÆ	FÆI^ÆH	H
HG		{ á	ÆI	FÆ	ÆH	FI	ÆG	F ÆHJ^ÆH	GÆ	ÆI^ÆH	I	ÆI^ÆH	J
HH	PGF	{ æ	ÆI	I	ÆI	G	ÆG	I ÆHJ^ÆH	FÆ	FÆI^ÆH	FF	FÆI^ÆH	I
HI		{ á	ÆI	FÆ	ÆH	FI	ÆG	F ÆHJ^ÆH	FI	ÆHJ^ÆH	I	ÆI^ÆH	FÆ
HÍ	PG	{ æ	ÆGF	I	ÆI	G	ÆHJ	J HÆI^ÆH	G	HÆI^ÆH	Î	GÆI^ÆH	G
HÏ		{ á	ÆG	FF	ÆEG	G	ÆHJ	H HÆI^ÆH	I	ÆI^ÆH	FG	ÆHJ^ÆH	FF
HÏ	PG	{ æ	ÆFI	G	ÆH	Î	ÆI	J FÆJ^ÆH	G	IÆJ^ÆH	J	FÆHJ^ÆH	G
HÏ		{ á	ÆFI	G	ÆI	G	ÆH	H ÆI^ÆH	H	ÆHJ^ÆH	H	ÆHJ^ÆH	G
HJ	PÛ	{ æ	ÆFI	G	ÆH	F	ÆI	Î FÆHJ^ÆH	G	FÆI^ÆH	FG	IÆGJ^ÆH	G
I€		{ á	ÆFI	G	ÆH	G	ÆH	FG ÆHJ^ÆH	FF	ÆHJ^ÆH	Î	ÆHJ^ÆH	G
IF	PÚF	{ æ	ÆG	G	ÆI	G	ÆI	Î FÆI^ÆH	G	FÆI^ÆH	FG	IÆG^ÆH	G
IG		{ á	ÆFI	G	ÆH	G	ÆH	FG ÆHJ^ÆH	FG	ÆHJ^ÆH	Î	ÆHJ^ÆH	G
IH	PUG	{ æ	ÆFG	G	ÆI	G	ÆG	I HÆG^ÆH	F	FÆI^ÆH	FG	ÆHJ^ÆH	I
II		{ á	ÆI	G	ÆI	F	ÆH	F ÆHJ^ÆH	I	ÆHJ^ÆH	Î	ÆHJ^ÆH	G
IÍ	PUH	{ æ	ÆGJ	G	ÆH	H	ÆHG	I FÆHJ^ÆH	I	FÆHJ^ÆH	I	IÆG^ÆH	G
IÏ		{ á	ÆGF	G	ÆGH	GG	ÆFI	G ÆHJ^ÆH	F	ÆHJ^ÆH	F	ÆHJ^ÆH	G
IÏ	PUI	{ æ	ÆHJ	G	ÆHJ	G	ÆI	I ÆHJ^ÆH	F	FÆHJ^ÆH	I	IÆG^ÆH	G
IÏ		{ á	ÆI	G	ÆG	GF	ÆFG	F ÆHJ^ÆH	I	ÆHJ^ÆH	F	ÆGJ^ÆH	G
IJ	PÚI	{ æ	ÆI	I	ÆHJ	Î	ÆJ	I JÆHJ^ÆH	I	FÆHJ^ÆH	G	HÆHJ^ÆH	FÆ
I€		{ á	ÆH	FÆ	ÆGH	FH	ÆGJ	F ÆHJ^ÆH	F	ÆI^ÆH	I	ÆHJ^ÆH	I
IF	PÚI	{ æ	ÆHJ	G	ÆHJ	G	ÆG	I IÆG^ÆH	F	GÆI^ÆH	G	GÆI^ÆH	I
IG		{ á	ÆH	FÆ	ÆG	GÆ	ÆGJ	F ÆHJ^ÆH	I	ÆHJ^ÆH	I	ÆHJ^ÆH	FÆ
IH	PÚI	{ æ	ÆG	G	ÆH	G	ÆI	J FÆI^ÆH	G	IÆHJ^ÆH	J	FÆHJ^ÆH	G
IÏ		{ á	ÆH	F	ÆI	G	ÆH	H ÆHJ^ÆH	H	ÆHJ^ÆH	H	ÆHJ^ÆH	G
IÏ	PÚI	{ æ	ÆI	G	ÆH	Î	ÆG	I HÆI^ÆH	F	IÆHJ^ÆH	J	IÆHJ^ÆH	G
IÏ		{ á	ÆFI	J	ÆH	G	ÆG	F ÆHJ^ÆH	I	ÆHJ^ÆH	H	ÆHJ^ÆH	FÆ
IÏ	PÍF	{ æ	ÆFI	G	ÆH	Î	ÆH	J GÆHJ^ÆH	G	FÆHJ^ÆH	J	HÆHJ^ÆH	G
IÏ		{ á	ÆFI	G	ÆH	G	ÆH	H HÆHJ^ÆH	I	ÆHJ^ÆH	H	ÆHJ^ÆH	G
IJ	PÍG	{ æ	ÆFI	G	ÆH	H	ÆI	I GÆHJ^ÆH	G	FÆG^ÆH	FG	ÆGJ^ÆH	G
I€		{ á	ÆFI	G	ÆHJ	G	ÆH	FF GÆHJ^ÆH	I	ÆHJ^ÆH	Î	ÆHJ^ÆH	G
IF	PÍH	{ æ	ÆFI	G	ÆH	G	ÆI	I FÆHJ^ÆH	G	GÆHJ^ÆH	I	IÆG^ÆH	G
IG		{ á	ÆFI	G	ÆH	G	ÆH	FF ÆHJ^ÆH	I	ÆHJ^ÆH	G	ÆHJ^ÆH	G
IH	PÍI	{ æ	ÆH	I	ÆH	G	ÆH	I FÆI^ÆH	I	FÆG^ÆH	J	IÆHJ^ÆH	G
IÏ		{ á	ÆH	FÆ	ÆI	FI	ÆH	G ÆHJ^ÆH	G	ÆHJ^ÆH	H	ÆHJ^ÆH	G
IÏ	PÍI	{ æ	ÆFF	G	ÆH	G	ÆH	I GÆHJ^ÆH	G	IÆHJ^ÆH	Î	ÆHJ^ÆH	G
IÏ		{ á	ÆFI	G	ÆHJ	G	ÆH	FF GÆHJ^ÆH	I	ÆHJ^ÆH	FG	ÆHJ^ÆH	G
IÏ	PÍI	{ æ	ÆI	I	ÆH	G	ÆH	I ÆHJ^ÆH	G	FÆG^ÆH	J	IÆHJ^ÆH	G
IÏ		{ á	ÆI	FÆ	ÆH	FI	ÆH	F ÆHJ^ÆH	G	ÆHJ^ÆH	H	ÆHJ^ÆH	G
IJ	PÍI	{ æ	ÆH	Î	ÆH	J	ÆHG	I HÆHJ^ÆH	G	IÆHJ^ÆH	FG	IÆHJ^ÆH	G
I€		{ á	ÆH	FF	ÆH	FI	ÆHG	G ÆHJ^ÆH	FF	ÆHJ^ÆH	Î	ÆHJ^ÆH	G
IF	PÍI	{ æ	ÆHJ	I	ÆH	G	ÆI	J FÆHJ^ÆH	G	IÆHJ^ÆH	Î	JÆHJ^ÆH	G
IG		{ á	ÆGF	FÆ	ÆHG	G	ÆH	H ÆHJ^ÆH	H	ÆHJ^ÆH	FF	ÆHJ^ÆH	G
IH	PÍJ	{ æ	ÆI	I	ÆH	G	ÆG	I ÆHJ^ÆH	H	JÆHJ^ÆH	FG	IÆHJ^ÆH	G
IÏ		{ á	ÆI	FÆ	ÆH	FI	ÆG	G ÆHJ^ÆH	GF	ÆHJ^ÆH	Î	ÆHJ^ÆH	G
IÏ	PÍ€	{ æ	ÆFI	G	ÆH	G	ÆH	J HÆI^ÆH	G	IÆHJ^ÆH	I	GÆI^ÆH	FI
IÏ		{ á	ÆFF	FÆ	ÆH	G	ÆH	H GÆI^ÆH	I	ÆHJ^ÆH	FÆ	IÆHJ^ÆH	G
IÏ	PÍF	{ æ	ÆF	G	ÆH	F	ÆI	Î GÆHJ^ÆH	G	FÆHJ^ÆH	FG	ÆHJ^ÆH	G
IÏ		{ á	ÆH	G	ÆH	G	ÆH	FG ÆHJ^ÆH	I	ÆHJ^ÆH	Î	ÆHJ^ÆH	G
IJ	PÍG	{ æ	ÆFF	G	ÆH	J	ÆFG	I GÆHJ^ÆH	F	FÆHJ^ÆH	FÆ	HÆHJ^ÆH	G
I€		{ á	ÆH	G	ÆGH	GÆ	ÆFI	F ÆHJ^ÆH	I	ÆHJ^ÆH	I	ÆHJ^ÆH	G

9bj YcdY>c]bh8]gd'UWw Ybtg f' cb]bi YXL

	Rãc	Yãá	SÔ	Yãá	SÔ	Zãá	SÔ	YÁU cæã) ÆÆSÔ	YÁU cæã) ÆÆSÔ	ZÁU cæã) ÆÆSÔ				
FHH	pFef	{ æ̃	ÆEJ	J	ÆE	G	ÆE	J	I ÆE I ^ÆH	G	FEG I ^ÆH	FÆ	I ÆE J ^ÆH	FH
FH		{ ã	ÆEJ	H	ÆE I	FI	ÆE J	H	I ÆE G ^ÆH	J	ÆE J ^ÆH	I	FÆ J ^ÆH	G
FH	pFEG	{ æ̃	ÆE I	H	ÆE E	J	ÆEG	J	ÆE E ^ÆH	FÆ	I ÆE J ^ÆH	J	FEG G ^ÆH	FF
FH		{ ã	ÆE J	J	ÆE G	FI	ÆEG	H	ÆE E ^ÆH	FI	ÆE G ^ÆH	H	ÆE I G ^ÆH	I
FH	pFeh	{ æ̃	ÆE I	G	ÆE I	G	ÆE F	I	FÆ E ^ÆH	G	FÆ I G ^ÆH	FG	I ÆE G ^ÆH	G
FH		{ ã	ÆE I	G	ÆE I	G	ÆE	FG	ÆE J G ^ÆH	FF	ÆE J F ^ÆH	I	ÆE G ^ÆH	G
FHU	pFEl	{ æ̃	ÆE I	G	ÆE I G	I	ÆE I	J	FÆ J G ^ÆH	G	I ÆE J ^ÆH	J	FÆ F ^ÆH	G
FI€		{ ã	ÆE I	G	ÆE I	G	ÆE H	H	ÆE I ^ÆH	H	ÆE G ^ÆH	H	ÆE H ^ÆH	G
FI F	pFEl	{ æ̃	ÆE F	G	ÆE I	G	ÆE G	I	ÆE J F ^ÆH	F	FÆ G ^ÆH	I	I ÆE H ^ÆH	G
FI G		{ ã	ÆE E	G	ÆE J	GE	ÆE I	F	ÆE I ^ÆH	I	ÆE H ^ÆH	F	ÆE I ^ÆH	G
FI H	pFfE	{ æ̃	ÆE F	G	ÆE J G	F	ÆE I	I	HÆ J G ^ÆH	F	GÆ I ^ÆH	G	GÆ I ^ÆH	G
FI I		{ ã	ÆE E	G	ÆE I	FJ	ÆE I	F	ÆE G G ^ÆH	I	ÆE J G ^ÆH	I	ÆE G ^ÆH	G
FI Í	pFFF	{ æ̃	ÆE I	G	ÆE J	I	ÆE G	I	FÆ G ^ÆH	I	FÆ F ^ÆH	I	I ÆE G ^ÆH	G
FI Î		{ ã	ÆE I	G	ÆE F	G	ÆE F H	G	ÆE F ^ÆH	F	ÆE G ^ÆH	F	ÆE E ^ÆH	G
FI Î	pFFG	{ æ̃	ÆE I	G	ÆE I	I	ÆE J	I	I ÆE I ^ÆH	I	FÆ G ^ÆH	G	GÆ H ^ÆH	G
FI Ì		{ ã	ÆE I	G	ÆE G G	FH	ÆE H	F	ÆE G ^ÆH	F	ÆE I ^ÆH	I	ÆE I G ^ÆH	I
FI J	pFFH	{ æ̃	ÆE H	I	ÆE	G	ÆE J	I	ÆE I ^ÆH	G	JÆ G ^ÆH	FG	ÆE I F ^ÆH	G
FI €		{ ã	ÆE H	FÆ	ÆE I	FI	ÆE J	FF	ÆE J ^ÆH	FI	ÆE J ^ÆH	I	ÆE I ^ÆH	FI
FI F	pFFI	{ æ̃	ÆE H	I	ÆE F	G	ÆE G	J	ÆE I ^ÆH	G	I ÆE F ^ÆH	I	HÆ I ^ÆH	GG
FI G		{ ã	ÆE H	FÆ	ÆE J	GG	ÆE G	H	ÆE I ^ÆH	GH	ÆE G ^ÆH	G	FÆ H ^ÆH	G
FI H	pFFÍ	{ æ̃	ÆE G	I	ÆE H	G	ÆE G	J	FÆ J ^ÆH	G	FÆ F ^ÆH	FÆ	I ÆE I ^ÆH	FH
FI I		{ ã	ÆE G	FÆ	ÆE I	G	ÆE G	H	FÆ I ^ÆH	FG	ÆE J ^ÆH	I	GÆ J ^ÆH	G
FI Í	pFFÍ	{ æ̃	ÆE E	G	ÆE I	F	ÆE I	I	I ÆE H ^ÆH	FJ	I ÆE I ^ÆH	F	I ÆE I ^ÆH	G
FI Î		{ ã	ÆE E	G	ÆE G G	FJ	ÆE I	F	GÆ H ^ÆH	F	ÆE J ^ÆH	I	FÆ G ^ÆH	G
FI Î	pFFÌ	{ æ̃	ÆE J	G	ÆE I	G	ÆE I	I	I ÆE I ^ÆH	GF	HÆ E ^ÆH	I	ÆE H ^ÆH	G
FI Ì		{ ã	ÆE J	I	ÆE J	GE	ÆE I	F	GÆ I ^ÆH	G	ÆE J G ^ÆH	G	ÆE I ^ÆH	G
FI J	pFFÌ	{ æ̃	ÆE G	I	ÆE F	G	ÆE J	I	FÆ I ^ÆH	G	FÆ H ^ÆH	FF	ÆE J ^ÆH	G
FI €		{ ã	ÆE J	FÆ	ÆE F	FI	ÆE H	FG	ÆE G ^ÆH	G	ÆE H ^ÆH	I	ÆE F G ^ÆH	FI
FI F	pìHOE	{ æ̃	ÆE F	G	ÆE I	G	ÆE I	I	GÆ H ^ÆH	G	FÆ I ^ÆH	FG	ÆE F J ^ÆH	G
FI G		{ ã	ÆE F	I	ÆE I F	G	ÆE I	FG	ÆE ^ÆH	I	ÆE I F ^ÆH	I	ÆE I ^ÆH	G
FI H	pìOCE	{ æ̃	ÆE F	G	ÆE I	I	ÆE H	I	GÆ I ^ÆH	FG	I ÆE I ^ÆH	J	I ÆE I F ^ÆH	G
FI I		{ ã	ÆE E	G	ÆE J	G	ÆE H	G	ÆE J ^ÆH	I	ÆE G ^ÆH	H	I ÆE I ^ÆH	G
FI Í	pìOCE	{ æ̃	ÆE I	G	ÆE I	G	ÆE F	I	FÆ E ^ÆH	G	FÆ I G ^ÆH	FG	I ÆE G ^ÆH	G
FI Î		{ ã	ÆE I	G	ÆE H	G	ÆE	FG	ÆE J G ^ÆH	FF	ÆE J F ^ÆH	I	ÆE G ^ÆH	G
FI Î	pìOCE	{ æ̃	ÆE I	G	ÆE I G	I	ÆE I	J	FÆ J G ^ÆH	G	I ÆE J ^ÆH	J	FÆ F ^ÆH	G
FI Ì		{ ã	ÆE I	G	ÆE I	G	ÆE H	H	ÆE I ^ÆH	H	ÆE G ^ÆH	H	ÆE H ^ÆH	G
FI J	pìOCE	{ æ̃	ÆE F	G	ÆE J G	G	ÆE G	I	GÆ J F ^ÆH	F	FÆ G ^ÆH	I	I ÆE H ^ÆH	G
FI €		{ ã	ÆE E	G	ÆE G G	GF	ÆE I	F	ÆE I ^ÆH	I	ÆE H ^ÆH	F	ÆE I ^ÆH	G
FI F	pìOCE	{ æ̃	ÆE F	G	ÆE F	G	ÆE I	I	HÆ J G ^ÆH	F	GÆ I ^ÆH	G	GÆ I ^ÆH	G
FI G		{ ã	ÆE E	G	ÆE J	GG	ÆE I	F	ÆE G G ^ÆH	I	ÆE J G ^ÆH	I	ÆE G ^ÆH	G
FI H	pìJOCE	{ æ̃	ÆE J	G	ÆE J	H	ÆE G	I	FÆ G ^ÆH	I	FÆ F ^ÆH	I	I ÆE G ^ÆH	G
FI I		{ ã	ÆE I	G	ÆE H	GG	ÆE F H	G	ÆE F ^ÆH	F	ÆE G ^ÆH	F	ÆE E ^ÆH	G
FI Í	pJ€CE	{ æ̃	ÆE I	G	ÆE F	I	ÆE J	I	I ÆE I ^ÆH	I	FÆ G ^ÆH	G	GÆ H ^ÆH	G
FI Î		{ ã	ÆE J	G	ÆE G F	G	ÆE H	F	ÆE G ^ÆH	F	ÆE I ^ÆH	I	ÆE I G ^ÆH	I
FI Î	pJFOE	{ æ̃	ÆE F	I	ÆE H	G	ÆE G	I	ÆE I ^ÆH	G	FÆ E ^ÆH	FÆ	FÆ F ^ÆH	I
FI Ì		{ ã	ÆE F	FÆ	ÆE I	FI	ÆE G	F	ÆE I J ^ÆH	GE	ÆE I ^ÆH	I	ÆE I ^ÆH	FÆ
FI J	pJGCE	{ æ̃	ÆE H	G	ÆE I	G	ÆE J	I	HÆ I ^ÆH	G	I ÆE F ^ÆH	F	FÆ G ^ÆH	H
FI €		{ ã	ÆE H	I	ÆE I	G	ÆE F	FG	HÆ I ^ÆH	J	ÆE I F ^ÆH	I	ÆE I J ^ÆH	J
FI F	pJHOE	{ æ̃	ÆE J	I	ÆE G	G	ÆE H	I	FÆ I ^ÆH	I	FÆ G ^ÆH	J	I ÆE J ^ÆH	G
FI G		{ ã	ÆE I	FÆ	ÆE H	FI	ÆE H	F	ÆE F ^ÆH	G	ÆE H ^ÆH	H	ÆE I ^ÆH	G
FI H	pJI	{ æ̃	ÆE I	G	ÆE J	G	ÆE I	I	FÆ I G ^ÆH	G	GÆ G ^ÆH	I	I ÆE G ^ÆH	G
FI I		{ ã	ÆE I	G	ÆE G F	G	ÆE I	FF	ÆE F ^ÆH	I	ÆE I F ^ÆH	G	ÆE I ^ÆH	G

9bj YcdY>c]bh8]gd'UWw Yblg f'Y cb]bi YXL

	Rãc	YÁá	SÔ	YÁá	SÔ	ZÁá	SÔ	YÁU[çæ]) ÆSÔ	YÁU[çæ]) ÆSÔ	ZÁU[çæ]) ÆSÔ					
FÍ	ÞJÍ Ó	{ æ	ÆH	Í	ÆÍ	Ǧ	ÆF	Í	ÍÆFʌÆ	H	FÆJÍʌÆ	FG	FÆGʌÆ	H	
FÎ		{ á	ÆH	FF	ÆJÍ	FÍ	ÆH	FF	ÆHʌÆ	J	ÆJʌÆ	Í	ÆFJʌÆ	J	
FÏ	ÞJÍ OE	{ æ	ÆG	Í	ÆÍ	Ǧ	ÆH	Í	FÆÍGʌÆ	G	ÍÆFʌÆ	FF	GÆFʌÆ	H	
FÏ		{ á	ÆGJ	FÆ	ÆFÍ	FÍ	ÆH	FF	ÆHʌÆ	J	ÆFʌÆ	Í	ÆHʌÆ	J	
FÏJ	ÞJÍ OE	{ æ	ÆH	Í	ÆÍ	Ǧ	ÆG	Í	ÍÆJʌÆ	FÆ	FÆHʌÆ	G	ÍÆFʌÆ	FÆ	
FJ€		{ á	ÆH	FF	ÆJÍ	FÍ	ÆG	FG	ÆHʌÆ	Í	ÆGʌÆ	Í	ÆHʌÆ	Í	
FJF	ÞJÍ OE	{ æ	ÆF	Í	ÆÍ	Ǧ	Æ	Í	GÆGʌÆ	Í	FÆÍʌÆ	FÆ	GÍÍʌÆ	FÆ	
FJG		{ á	ÆHF	FÆ	ÆFÍ	GF	Æ	Í	ÆGʌÆ	G	ÆHʌÆ	Í	ÆGʌÆ	Í	
FJH	ÞJJ OE	{ æ	ÆH	Í	ÆÍ	F	ÆG	Í	ÆHʌÆ	G	FÆJʌÆ	FÆ	FÆFʌÆ	Í	
FJI		{ á	ÆH	FÆ	ÆÍ	FÍ	ÆG	F	ÆHʌÆ	G	ÆHʌÆ	Í	ÆGʌÆ	FÆ	
FJÍ	ÞFÆOE	{ æ	ÆGG	G	ÆÍ	Ǧ	ÆF	Í	HÆÍʌÆ	G	ÍÆFʌÆ	F	FÆGʌÆ	H	
FJÎ		{ á	ÆGG	Í	ÆFJ	Ǧ	ÆG	FG	HÆÍʌÆ	J	ÆHʌÆ	Í	ÆHʌÆ	J	
FJÏ	ÞFÆOE	{ æ	Æ	Í	ÆÍ	Ǧ	ÆHG	Í	FÆÍʌÆ	Í	FÆGʌÆ	J	ÍÆJʌÆ	Ǧ	
FJÏ		{ á	Æ	FÆ	ÆÍ	FÍ	ÆHG	F	ÆHʌÆ	G	ÆHʌÆ	H	ÆHʌÆ	Ǧ	
FJJ	ÞFÆOE	{ æ	ÆFÍ	G	ÆÍ	Ǧ	ÆÍ	Í	FÆÍGʌÆ	G	GÆGʌÆ	Í	ÍÆGʌÆ	Ǧ	
G€€		{ á	ÆFÍ	G	ÆGF	Ǧ	ÆÍ	FF	ÆFʌÆ	Í	ÆHʌÆ	G	ÆHʌÆ	Ǧ	
G€F	ÞFÆOE	{ æ	ÆH	Í	ÆÍ	Ǧ	ÆF	Í	ÍÆFʌÆ	H	FÆJÍʌÆ	FG	FÆGʌÆ	H	
G€G		{ á	ÆH	FF	ÆJÍ	FÍ	ÆF	FF	ÆHʌÆ	J	ÆJʌÆ	Í	ÆFJʌÆ	J	
G€H	ÞFÆ OE	{ æ	ÆG	Í	ÆÍ	Ǧ	ÆH	Í	FÆÍGʌÆ	G	ÍÆFʌÆ	FF	GÆFʌÆ	H	
G€		{ á	ÆH	FÆ	ÆFÍ	FJ	ÆH	FF	ÆHʌÆ	J	ÆFʌÆ	Í	ÆHʌÆ	J	
G€Í	ÞFÆÍ	{ æ	ÆG	Í	ÆJ	Ǧ	ÆG	Í	ÍÆJʌÆ	FÆ	FÆHʌÆ	G	ÍÆFʌÆ	FÆ	
G€Í		{ á	ÆH	FF	ÆJÍ	FÍ	ÆF	FG	ÆHʌÆ	Í	ÆGʌÆ	Í	ÆHʌÆ	Í	
G€Í	ÞFÆÍ	{ æ	ÆÍ	Í	ÆÍ	Ǧ	ÆÍ	Í	GÆGʌÆ	Í	FÆÍʌÆ	FÆ	GÍÍʌÆ	FÆ	
G€Í		{ á	ÆH	FÆ	ÆFÍ	FÍ	ÆÍ	FG	ÆHʌÆ	G	ÆHʌÆ	Í	ÆGʌÆ	Í	
G€J	ÞFÆÍ	{ æ	ÆGH	Í	ÆÍ	Ǧ	ÆHU	J	HÆHʌÆ	G	ÍÆJʌÆ	Í	GÆFJʌÆ	Ǧ	
G€€		{ á	ÆGG	FF	ÆGH	Ǧ	ÆHU	H	GÆÍʌÆ	Í	ÆHʌÆ	FG	ÆHʌÆ	FF	
G€F	ÞFÆÍ	{ æ	ÆJ	Í	ÆÍ	F	ÆGF	Í	JÆGʌÆ	FÆ	FÆJʌÆ	FF	FÆGʌÆ	Í	
G€G		{ á	Æ	FÆ	ÆÍ	H	FÍ	ÆGF	F	ÆHʌÆ	FÍ	ÆHʌÆ	Í	ÆHʌÆ	FÆ
G€H	ÞFÆJ OE	{ æ	ÆFÍ	Í	ÆÍ	Ǧ	ÆÍ	J	FÆÍJʌÆ	G	ÍÆFʌÆ	Í	JÆJʌÆ	Ǧ	
G€Í		{ á	ÆFÍ	FÆ	ÆG	Ǧ	ÆÍ	Í	ÆHʌÆ	H	ÆHʌÆ	FF	ÆHʌÆ	Ǧ	
G€Í	ÞFF€OE	{ æ	ÆF	Í	ÆÍ	Ǧ	ÆF	Í	HÆHʌÆ	G	ÍÆGʌÆ	FG	ÍÆÍʌÆ	Ǧ	
G€Í		{ á	ÆF	FÆ	ÆÍ	G	FÍ	ÆF	G	ÆHʌÆ	FF	ÆHʌÆ	Í	ÆHʌÆ	Ǧ
G€Í	ÞFFF OE	{ æ	ÆG	Í	ÆG	Ǧ	ÆH	J	FÆJJʌÆ	G	HÆJʌÆ	FÆ	GÆFʌÆ	Í	
G€Í		{ á	ÆGG	FÆ	ÆJÍ	G	ÆH	H	ÆGʌÆ	Í	ÆHʌÆ	Í	ÆHʌÆ	FF	
G€J	ÞFF€OE	{ æ	ÆHH	Í	ÆÍ	Ǧ	ÆH	J	ÍÆFʌÆ	FF	HÆJʌÆ	J	GÆÍʌÆ	Í	
G€€		{ á	ÆHG	FÆ	ÆFH	GH	ÆGJ	H	ÆHʌÆ	Í	ÆHʌÆ	H	ÆHʌÆ	FF	
G€F	ÞFFH OE	{ æ	ÆFÍ	Í	ÆH	Ǧ	ÆÍ	J	FÆÍʌÆ	G	GÆJʌÆ	FÆ	FÆÍʌÆ	FG	
G€G		{ á	ÆG	FF	ÆJÍ	FÍ	ÆH	H	ÆHʌÆ	FÆ	ÆHʌÆ	Í	ÆHʌÆ	Í	
G€H	ÞFFÍ OE	{ æ	ÆF	Í	ÆÍ	Ǧ	ÆGF	Í	FÆÍGʌÆ	Í	JÆÍʌÆ	Í	ÍÆHʌÆ	FÆ	
G€		{ á	ÆF	FÆ	ÆFÍ	FÍ	ÆG	G	ÆGʌÆ	FG	ÆHʌÆ	F	ÆHʌÆ	Í	
G€Í	ÞFFÍ OE	{ æ	ÆGG	Í	ÆÍ	G	ÆHU	J	HÆHʌÆ	G	ÍÆJʌÆ	Í	GÆFJʌÆ	Ǧ	
G€Í		{ á	ÆGG	FF	ÆG	Ǧ	ÆHU	H	GÆÍʌÆ	Í	ÆHʌÆ	FG	ÆHʌÆ	FF	
G€Í	ÞFFÍ OE	{ æ	ÆF	Í	ÆÍ	Ǧ	ÆG	Í	JÆGʌÆ	FÆ	FÆJʌÆ	FF	FÆGʌÆ	Í	
G€Í		{ á	ÆG	FÆ	ÆÍ	FÍ	ÆG	F	ÆHʌÆ	FÍ	ÆHʌÆ	Í	ÆHʌÆ	FÆ	
G€J	ÞFFÍ OE	{ æ	ÆFÍ	Í	ÆÍ	Ǧ	ÆÍ	J	FÆÍJʌÆ	G	ÍÆFʌÆ	Í	JÆJʌÆ	Ǧ	
G€€		{ á	ÆFÍ	FÆ	ÆG	Ǧ	ÆÍ	H	ÆHʌÆ	H	ÆHʌÆ	FF	ÆHʌÆ	Ǧ	
G€F	ÞFFÍ OE	{ æ	ÆF	Í	ÆÍ	J	ÆH	Í	HÆHʌÆ	G	ÍÆGʌÆ	FG	ÍÆÍʌÆ	Ǧ	
G€G		{ á	ÆG	FÆ	ÆÍ	H	FÍ	ÆF	G	ÆHʌÆ	FF	ÆHʌÆ	Í	ÆHʌÆ	Ǧ
G€H	ÞFFJ	{ æ	ÆG	Í	ÆG	Ǧ	ÆH	J	FÆJJʌÆ	G	HÆJʌÆ	FÆ	GÆFʌÆ	Í	
G€		{ á	ÆGH	FÆ	ÆJJ	FÍ	ÆH	H	ÆGʌÆ	Í	ÆHʌÆ	Í	ÆHʌÆ	FF	
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	Rãc	YÁá	SÔ	YÁá	SÔ	ZÁá	SÔ	YÁU[çæá] /ÆSSÔ	YÁU[çæá] /ÆSSÔ	ZÁU[çæá] /ÆSSÔ				
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GÍ	ÞFGÍ	{ æ	ÆÍ	I	Æ	G	ÆJ	I	IÆFÍ^ÆH	H	FÆJÍ^ÆH	FG	FÆFG^ÆH	H
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GÍ	ÞFGÍ	{ æ	ÆG	I	Æ	G	ÆJ	I	IÆJF^ÆH	F	IÆGF^ÆH	FF	IÆÍG^ÆH	I
GÍ		{ á	ÆG	FÆ	ÆFÍ	FJ	ÆFÍ	H	ÆÆJG^ÆH	I	ÆÆG^ÆH	I	ÆÆÍF^ÆH	FÆ
GÍ	ÞFGÍ	{ æ	ÆG	G	ÆFÍ	G	ÆH	I	FÆH^ÆH	G	GÆH	I	IÆG^ÆH	G
GÍ		{ á	ÆEG	G	ÆGF	G	Æ	FG	FÆÍÍ^ÆH	I	ÆÍF^ÆH	G	ÆÆÍÍ^ÆH	G
GÍ	ÞFHE	{ æ	ÆJJ	H	ÆFÍ	G	ÆHH	I	HÆÍG^ÆH	F	IÆFH^ÆH	F	HÆÍÍ^ÆH	H
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GÍ	ÞFHU	{ æ	€	I	€	I	€	I	IÆÍÍ^ÆH	G	FÆG^ÆH	G	ÆÆÍÍ^ÆH	I
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GÍ		{ á	€	I	€	GF	€	F	ÆÆÍF^ÆH	G	ÆÆÍÍ^ÆH	I	ÆÆÍÍ^ÆH	G
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GÍ	ÞFÍH	{ æ	€	GJ	€	GJ	€	GJ	€	GJ	€	GJ	€	GJ
GÍ		{ á	€	F	€	F	€	F	€	F	€	F	€	F
GÍ	ÞFÍI	{ æ	€	GJ	€	GJ	€	GJ	€	GJ	€	GJ	€	GJ
GÍ		{ á	€	F	€	F	€	F	€	F	€	F	€	F

EXHIBIT 10

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

T-Mobile Existing Facility

Site ID: CT11838A

CT838/Marion Heights CAT
1428 Monroe Turnpike
Monroe, Connecticut 06468

December 31, 2020

EBI Project Number: 6220006446

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	26.01%

December 31, 2020

T-Mobile

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

Emissions Analysis for Site: CT11838A - CT838/Marion Heights CAT

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **1428 Monroe Turnpike** in **Monroe, 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 1428 Monroe Turnpike in Monroe, 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) 2 LTE channels (600 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 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) 2 LTE channels (700 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 4) 4 GSM channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 5) 2 LTE channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 6) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

- 7) 1 LTE channel (BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 120 Watts.
- 8) 1 NR channel (BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 120 Watts.
- 9) 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.
- 10) 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.
- 11) The antennas used in this modeling are the RFS APX16DWV-I6DWV-S-E-A20 for the 2100 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz channel(s) in Sector A, the RFS APX16DWV-I6DWV-S-E-A20 for the 2100 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz channel(s) in Sector B, the RFS APX16DWV-I6DWV-S-E-A20 for the 2100 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz channel(s) in Sector C. 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.
- 12) The antenna mounting height centerline of the proposed antennas is 140 feet above ground level (AGL).

- 13) 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.
- 14) 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
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	RFS APX16DWV-16DWV-S-E-A20	Make / Model:	RFS APX16DWV-16DWV-S-E-A20	Make / Model:	RFS APX16DWV-16DWV-S-E-A20
Frequency Bands:	2100 MHz	Frequency Bands:	2100 MHz	Frequency Bands:	2100 MHz
Gain:	15.9 dBd	Gain:	15.9 dBd	Gain:	15.9 dBd
Height (AGL):	140 feet	Height (AGL):	140 feet	Height (AGL):	140 feet
Channel Count:	2	Channel Count:	2	Channel Count:	2
Total TX Power (W):	120 Watts	Total TX Power (W):	120 Watts	Total TX Power (W):	120 Watts
ERP (W):	4,668.54	ERP (W):	4,668.54	ERP (W):	4,668.54
Antenna AI MPE %:	0.86%	Antenna BI MPE %:	0.86%	Antenna CI MPE %:	0.86%
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Ericsson AIR 6449	Make / Model:	Ericsson AIR 6449	Make / Model:	Ericsson AIR 6449
Frequency Bands:	2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz
Gain:	22.05 dBd / 22.05 dBd	Gain:	22.05 dBd / 22.05 dBd	Gain:	22.05 dBd / 22.05 dBd
Height (AGL):	140 feet	Height (AGL):	140 feet	Height (AGL):	140 feet
Channel Count:	2	Channel Count:	2	Channel Count:	2
Total TX Power (W):	240 Watts	Total TX Power (W):	240 Watts	Total TX Power (W):	240 Watts
ERP (W):	38,477.89	ERP (W):	38,477.89	ERP (W):	38,477.89
Antenna A2 MPE %:	7.06%	Antenna B2 MPE %:	7.06%	Antenna C2 MPE %:	7.06%
Antenna #:	3	Antenna #:	3	Antenna #:	3
Make / Model:	RFS APXVAARR24_43-U-NA20	Make / Model:	RFS APXVAARR24_43-U-NA20	Make / Model:	RFS APXVAARR24_43-U-NA20
Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz
Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd / 15.65 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd / 15.65 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd / 15.65 dBd
Height (AGL):	140 feet	Height (AGL):	140 feet	Height (AGL):	140 feet
Channel Count:	11	Channel Count:	11	Channel Count:	11
Total TX Power (W):	440 Watts	Total TX Power (W):	440 Watts	Total TX Power (W):	440 Watts
ERP (W):	12,873.80	ERP (W):	12,873.80	ERP (W):	12,873.80
Antenna A3 MPE %:	3.39%	Antenna B3 MPE %:	3.39%	Antenna C3 MPE %:	3.39%

Site Composite MPE %	
Carrier	MPE %
T-Mobile (Max at Sector A):	11.31%
AT&T	8.02%
Sprint	2.53%
Verizon	3.77%
Town of Monroe	0.38%
Site Total MPE % :	26.01%

T-Mobile MPE % Per Sector	
T-Mobile Sector A Total:	11.31%
T-Mobile Sector B Total:	11.31%
T-Mobile Sector C Total:	11.31%
Site Total MPE % :	26.01%

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 2100 MHz LTE	2	2334.27	140.0	8.56	2100 MHz LTE	1000	0.86%
T-Mobile 2500 MHz LTE	1	19238.94	140.0	35.29	2500 MHz LTE	1000	3.53%
T-Mobile 2500 MHz NR	1	19238.94	140.0	35.29	2500 MHz NR	1000	3.53%
T-Mobile 600 MHz LTE	2	591.73	140.0	2.17	600 MHz LTE	400	0.54%
T-Mobile 600 MHz NR	1	1577.94	140.0	2.89	600 MHz NR	400	0.72%
T-Mobile 700 MHz LTE	2	648.82	140.0	2.38	700 MHz LTE	467	0.51%
T-Mobile 1900 MHz GSM	4	1101.85	140.0	8.08	1900 MHz GSM	1000	0.81%
T-Mobile 1900 MHz LTE	2	2203.69	140.0	8.08	1900 MHz LTE	1000	0.81%
						Total:	11.31%

• 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:	11.31%
Sector B:	11.31%
Sector C:	11.31%
T-Mobile Maximum MPE % (Sector A):	11.31%
Site Total:	26.01%
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **26.01%** 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.

EXHIBIT 11

EXHIBIT 12

