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

March 31, 2021

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

Notice of Exempt Modification
188 Moody Rd., Enfield, CT 06082
Latitude: 42.002000
Longitude: -72.521694
T-Mobile #: CTHA170C_Anchor

Dear Ms. Bachman:

T-Mobile currently maintains six (6) antennas at the 187-foot level of the existing 188-foot Monopole Tower at 188 Moody Rd., Enfield, CT. The tower is owned by SBA 2012 TC Assets, LLC. The property is owned by Troiano Realty Corp. T-Mobile plans install (3) three new 2500MHz antennas for a total of nine (9) antennas.

The new antennas would support 5G services and would be installed at the 187-foot level of the tower.

T-Mobile is also proposing tower modifications by installing flat bar reinforcements from the base of the tower to 108-feet, as well as, install new link plate reinforcements at the tower's footings as shown on the Tower Modification Drawings in Exibit 10.

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:

- N/A

Install New:

- (3) Ericsson AIR6449 B41 2500MHz antennas
- (3) Ericsson 4415 B25 RRUs
- (1) 1-1/4" Hybrid
- Platform MODS: Kicker Kit with collar mount

Existing Equipment to Remain:

- (3) Ericsson AIR32 KRD901146-1_B66A_B2A 1900/2100MHz antennas
- (3) RFS APXVAARR24_43-U-NA20 600/700/1900MHz antennas
- (1) Platform w/Handrails
- (12) Ericsson KRY 112 144-1 Double TMAs
- (3) Ericsson 4449 B71 + B85 RRUs
- (3) Kathrein 782 11054 Bias Ts
- (15) 1-1/4" coax
- (2) 1-1/4" Hybrid

Entitlements:

- (3) Commscope LNX-6515DS-A1M antennas
- (1) 1-1/4" coax
- (16) 1-5/8" Coax

TOWER MODIFICATIONS

Install New:

- (1) LP6X125-B-20B Flat Bar Reinforcements
- (1) LPX125-B-20T Flat Bar Reinforcements
- (1) LPX100-G-20TC Flat Bar Reinforcements
- (1) LPX100-G-10CT Flat Bar Reinforcements
- (1) LPX100-G-20TT Flat Bar Reinforcements
- (3) LPX100-G-10TT Flat Bar Reinforcements
- (1) Link Plate Cover
- Apply Foundation coating

GROUND

Install New:

- Equipment on existing concrete pad
- (5) 2" TGS conduits
- Ericsson B160 Battery cabinet
- Ericsson 6160 Equipment cabinet

Existing Equipment to Remain:

- (1) GPS antenna
- (1) T-Mobile Emerson cabinet
- (1) T-Mobile generator
- 15' x 15' concrete pad

Remove:

- RBS 6201 Equipment cabinet
- Booster cabinet

At the December 7, 1999 Meeting of the Enfield Conservation Commission the following action was taken: IW# 317 – Application of Nextel Communications of the Mid-Atlantic, Inc. for regulated activities associated with the construction of a wireless telecommunications monopole, equipment shed and yard to be located in the rear of the Troiano Industrial Park on Moody Rd. – Approved with conditions: 1. The Permittee shall notify the Planning Department at 253-6358 immediately upon the commencement of work and upon its completion. 2. If the authorized activity has not been initiated before December 7, 2000 this permit shall be null and void. 3. All work and all regulated activities conducted pursuant to this authorization shall be consistent with these terms and conditions of this permit. 4. The authorization is not transferable without the written consent of the Enfield Conservation Commission. 5. If any information subsequently proved to be false, deceptive, incomplete and/or inaccurate this permit shall be modified, suspended or revoked. 6. This permittee shall employ best management practices consistent with the terms and conditions of this permit. 7. No equipment or material shall be deposited, placed or stored in any wetland or watercourse, on or off site. 8. This permit is subject to and does not derogate any present or future property rights or other rights or powers of the Town of Enfield. 9. Timely implementation and maintenance of sediment and erosion control measures area condition of this permit. 10. A pre-construction meeting shall be held prior to commencement of construction. 11. This facility was further approved by the Town of Enfields' Planning & Zoning Commission February 3, 2000 under PH# 2157. To allow the construction of a personal wireless telecommunications facility with a 180-foot high monopole tower to be located at 188 Moody Rd. (Assessors Map 100, Lot# 12) on property zoned I-1, Troiano Realty Corp., Owner. General Conditions: The wireless facility shall not interfere with existing or proposed public safety communications, commercial television and radio signals or other forms of communication transmissions; the wireless facility shall comply with the standards promulgated by the federal communications commission (FCC); generators installed in conjunction with the wireless communications facility shall comply with all state and local noise regulations. On or before August 31 every year, the applicant or wireless provider shall submit information to the P&Z file for annual review in support of the following: Certified inspection to ensure the structural integrity of the Tower and accessory structures; An affidavit of continuing use of the Wireless Communications Facility; A system wide plan showing a regional perspective of Wireless Facilities; Copies of all reports filed with the FCC or Connecticut Siting Council (CSC) on EMF emissions. If the wireless facility is not in use for 12 consecutive months, it shall be removed within 90-days; the Special Permit shall be valid for a period of ten years, The applicant and successors and assigns shall maintain the antennae and related facilities in a manner to minimize any visual intrusion into the surrounding properties, arrangements shall be made with the Fire Dept. regarding emergency access. Please see attached.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16.50j-72(b)(2).

In accordance with R.C.S.A. § 16.50j-73, a copy of this letter is being sent to the Town of Beacon Falls' Town Manager, Christopher W. Bromson and Raymond Steadward, Chief Building Official, 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
508.868.6000 + C
GShepherd@sbasite.com

Attachments
cc: Town Manager, Christopher W. Bromson / with attachments
Town of Enfield, 820 Enfield St. Enfield, CT 06082
Raymond Steadward, Chief Building Official / with attachments
Town of Enfield, 820 Enfield St. Enfield, CT 06082
Troiano Realty Corp. / with attachments
777 Enfield St. Enfield, CT 06082-2904

Exhibit List

Exhibit 1	Check Copy	To be invoiced at a later date per Covid guidelines.
Exhibit 2	Notification Receipts	X
Exhibit 3	Property Card	X
Exhibit 4	Property Map	X
Exhibit 5	Original Zoning Approval	Town of Enfield P&Z file# 2157 2/3/00, Town of Enfield Wetlands Permit IW# 317 12/7/99
Exhibit 6	Construction Drawings	Chappell Engineering 3/24/21
Exhibit 7	Post-Mod Structural Analysis	TES 12/30/20
Exhibit 8	Post-Mod Mount Analysis	TES 11/18/20
Exhibit 9	Antenna Mount Mod Drawings	TES 11/19/20 (Job# 99815)
Exhibit 10	Tower Mod Drawings	TES 12/30/20 (Job# 99869)
Exhibit 11	EME Report	EBI Consulting 3/5/21

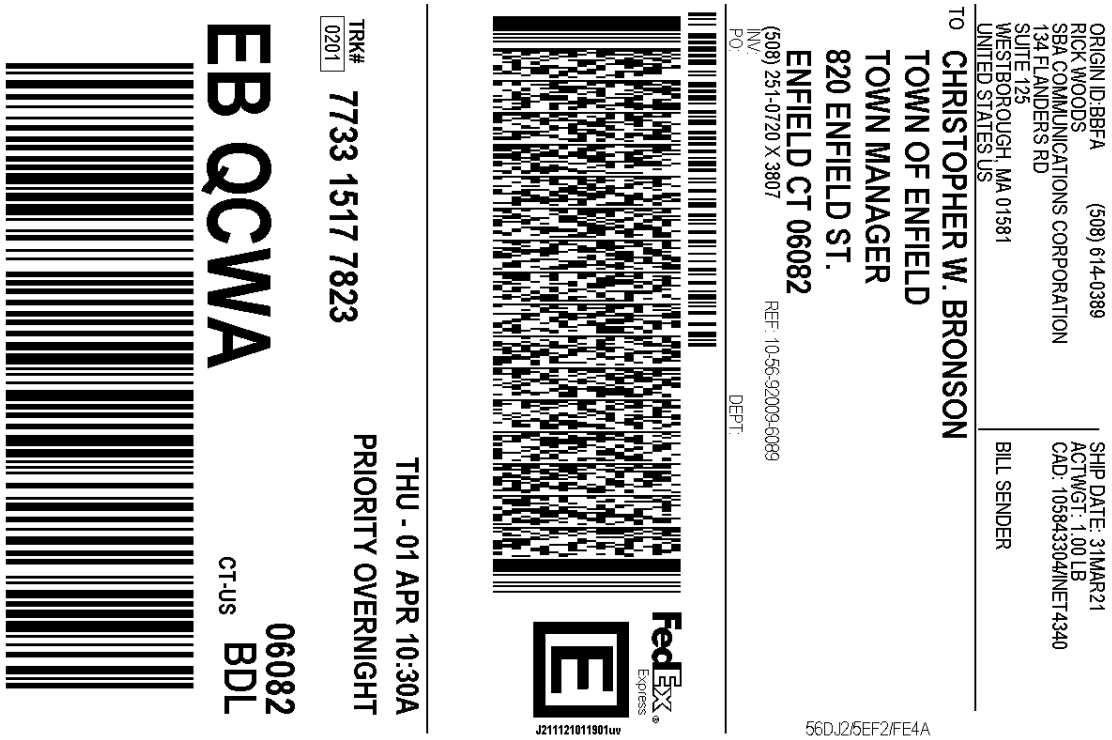
EXHIBIT 1

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

EXHIBIT 2

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

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



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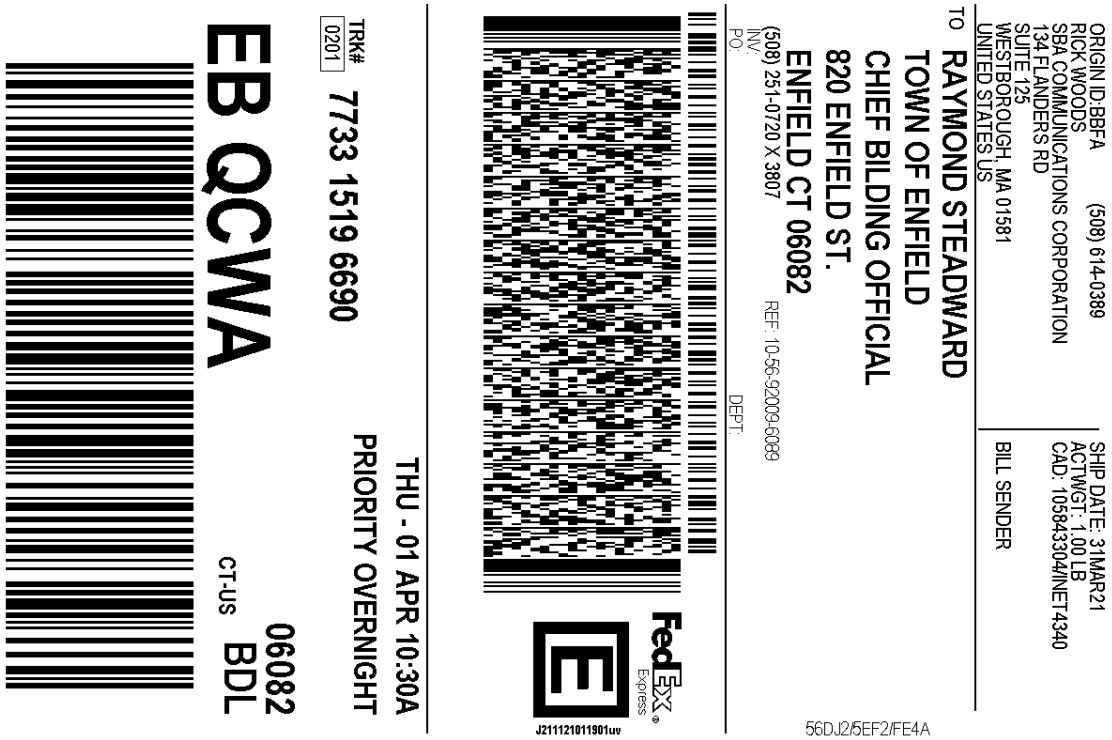

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EXHIBIT 3

188 MOODY RD

Location	188 MOODY RD	**Mblu**	100/ / 0012/ /
Acct#	001600020130	**Owner**	TROIANO REALTY CORP
Assessment	$1,062,940	**Appraisal**	$1,518,470
PID	2238	**Building Count**	1
Fire District	3		

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$812,550	$705,920	$1,518,470
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$568,790	$494,150	$1,062,940

Owner of Record

Owner	TROIANO REALTY CORP	**Sale Price**	$0
Co-Owner		**Certificate**	1
Address	0777 ENFIELD ST ENFIELD, CT 06082	**Book & Page**	0305/0468
		Sale Date	

Ownership History

Ownership History				
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Sale Date**
TROIANO REALTY CORP	$0	1	0305/0468	

Building Information

Building 1 : Section 1

Year Built:	1965
Living Area:	10,980
Replacement Cost:	$490,290
Building Percent Good:	37

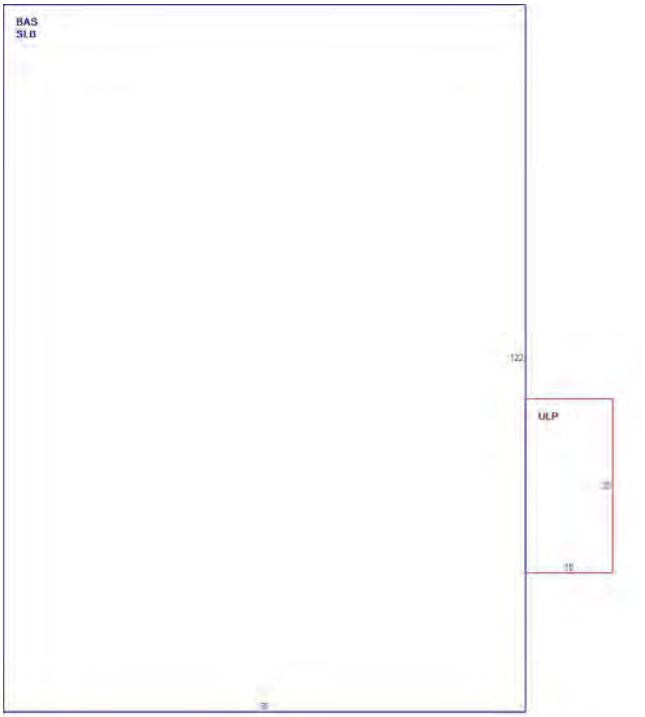
Replacement Cost
Less Depreciation: $181,410

Building Attributes	
Field	**Description**
Style:	Industrial Flex Bldg
Model	Ind/Comm
Grade	Average
Stories:	1
Occupancy	3.00
Exterior Wall 1	Pre-finsh Metl
Exterior Wall 2	
Roof Structure	Gable
Roof Cover	Metal/Tin
Interior Wall 1	Minim/Masonry
Interior Wall 2	
Interior Floor 1	Vinyl/Asphalt
Interior Floor 2	
Heating Fuel	Gas
Heating Type	Forced Air-Duc
AC Type	None
Struct Class	2.51
Bldg Use	Industrial
Total Rooms	
Total Bedrms	
Total Baths	
Total H Bths	
Extra Fixtures	
1st Floor Use:	
Heat/AC	None
Frame Type	Steel
Baths/Plumbing	Average
Ceiling/Wall	None
Rooms/Prtns	Average
Wall Height	15.00
% Comn Wall	

Building Photo

(http://images.vgsi.com/photos2/EnfieldCTPhotos//\00\01\95\47.JPG)

Building Layout



(ParcelSketch.ashx?pid=2238&bid=2238)

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	10,980	10,980
SLB	Slab	10,980	0
ULP	Uncvrd Loading Platform	450	0
		22,410	10,980

Extra Features

Extra Features	Legend
No Data for Extra Features	

Land

Land Use

Use Code	301
Description	Industrial
Zone	I-1
Neighborhood	C500
Alt Land Appr	No
Category	

Land Line Valuation

Size (Acres)	15.10
Frontage	
Depth	
Assessed Value	$494,150
Appraised Value	$705,920

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
PAV1	Paving	AS	Asphalt	32200.00 S.F.	$5,540	1
TNK2	Tank - Oil			500000.00 GALS	$240,000	1
FN2	FENCE-6' CHAIN			900.00 L.F.	$1,220	1
TWR3	Cell Twr3 Carriers			1.00 UNITS	$384,380	1

Valuation History

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$812,550	$705,920	$1,518,470
2019	$1,168,800	$705,920	$1,874,720
2018	$1,168,800	$705,920	$1,874,720

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$568,790	$494,150	$1,062,940
2019	$818,160	$494,150	$1,312,310
2018	$818,160	$494,150	$1,312,310

EXHIBIT 4

Google Maps 188 Moody Rd

Imagery ©2021 CNES / Airbus, MassGIS, Commonwealth of Massachusetts EOEA, Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2021 500 ft

188 Moody Rd

Directions Save Nearby Send to your phone Share

188 Moody Rd, Enfield, CT 06082

2F3H+6R Enfield, Connecticut

Photos

Photos

EXHIBIT 5

CT-0054
TAB 11

ZONING CERTIFICATE

- SPECIAL USE PERMIT -

Planning and Zoning File PH 2157

OWNERS OF RECORD (Grantors): - Troiano Realty Corp.

PREMISES: 188 Moody Road (Assessors Map 100, Lot #12), Enfield, CT

More particularly described on a Site Plan entitled: *

"CT-0054 Enfield Indust. Park Moody Road, Enfield, CT, Zoning Documents, Title Sheet & Index" Sheet T-1, Scale: "As noted" by Diversified Technology Consultants, dated 12/2/99.

"CT-0054 Enfield Indust. Park Moody Road, Enfield, CT, Zoning Documents, Plot Plan" Sheet A-1, Scale: "As noted" by Diversified Technology Consultants, dated 12/2/99.

"CT-0054 Enfield Indust. Park Moody Road, Enfield, CT, Zoning Documents, Proposed Site Plan & Elevations" Sheet Z-1, Scale: "As noted" by Diversified Technology Consultants, dated 11/2/99.

"CT-0054 Enfield Indust. Park Moody Road, Enfield, CT, Zoning Documents, Erosion & Sediment Control Plan" Sheet Z-2, Scale: "As noted" by Diversified Technology Consultants, dated 11/2/99 and revised to 1-20-00.

"CT-0054 Enfield Indust. Park Moody Road, Enfield, CT, Zoning Documents, Detailed Sections" Sheet Z-3, Scale: "As noted" by Diversified Technology Consultants, dated 12/2/99.

"CT-0054 Enfield Indust. Park Moody Road, Enfield, CT, Zoning Documents, Equipment Shelter Elevations & Notes" Sheet Z-4, Scale: "As noted" by Diversified Technology Consultants, dated 12/2/99.

*Revision dates subject to change with final mylar approval.

I, Elizabeth A. Ballard, Secretary, hereby certify that on February 3, 2000, the Planning and Zoning Commission of the Town of Enfield did approve PH # 2157 – Application of Nextel Communications of the Mid-Atlantic, Inc. for a Special Permit under Section 14 and Section 16 to allow the construction of a personal wireless telecommunications facility with a 180 foot high monopole tower to be located at 188 Moody Road (Assessors Map 100, Lot #12) on property zoned I-1, Troiano Realty Corp., owner. This approval is subject to conformance with the referenced plans, as may be required to be modified by this motion, and the following conditions:

Conditions to be Met Prior to Signing of Mylars:

1. All plans submitted for signature shall require the seal and live signature of the appropriate professional(s) responsible for the preparation of the plans.

2. The conditions of this approval shall be binding on the applicant, land owners, and their successors and assigns. A copy of this approval motion shall be filed on the land records prior to the signing of the plans.

Conditions to be met prior to the issuance of permits:

3. Two sets of final plans, with any required revisions incorporated on the sheets, shall be submitted to signature to the Commission.
4. An engineering bond for removal of the wireless telecommunications facility including the tower and base components in an amount to be determined by the Town Engineer shall be submitted to the Town. Any need to use the bond by the Town of Enfield shall be binding in the site regardless of the name of the bond obligee.
5. The applicant shall post a bond for any required Site improvements in an amount to be determined by the Town Engineer and with surety acceptable to the Town.
6. A Separate Erosion and Sediment Control passbook shall be submitted in an amount to be determined by the Town Engineer.
7. A landscaping bond, in an amount to be determined by the Planning Department shall be submitted to the Town.
8. A pre-construction meeting between the applicant, site contractors, project engineer and Town Staff shall be held.

Conditions which must be met prior to the Issuance of a Zoning Certificate of Compliance:

9. Complete as-built plans certified to Class A-2 accuracy shall be submitted prior to the issuance of any certificates of zoning compliance.

General Conditions:

10. This approval is for the specific use and structures identified in the application. Any changes or additions to the site and the structures will require new approvals from the Enfield Planning and Zoning Commission in addition to any other required State approvals.
11. The wireless communication facility shall not interfere with existing or proposed public safety communications, commercial television and radio signals or other forms of communication transmissions. Any such interference shall void the approval of the facility.
12. The wireless communication facility shall comply with the standards promulgated by the federal communication commission (FCC).
13. All generators installed in conjunction with the wireless communications facility shall comply with all state and local noise regulations.
14. On or before August 31 every year, the applicant or Wireless Telecommunications Service Provider shall submit information to the Planning and Zoning Commission file for annual review in support of the following:

A. Maintenance of facilities - A certified inspection report shall be filed to ensure the continuing structural integrity of the Tower and accessory structures. If the report recommends that repairs or maintenance are required, then a letter shall be submitted to the Town to verify that such repairs and/or maintenance have been completed. The Town of Enfield may require repair or removal of the Tower based on the inspection report. The Town shall have no responsibility regarding such repairs and/or maintenance. Existing non-conforming Towers shall be subject to current approval requirements if replacement is required.

B. Continued use - An affidavit of continuing use of the Wireless Communication Facility to establish renewal and continuation of the Special Use Permit.

C. Propagation Plan - A system wide plan showing a regional perspective of Wireless Communications Facilities, both existing and proposed accompanied by a narrative explanation of the service provider's strategic plan for the ensuing year.

D. Copies of all reports filed with the FCC or the Connecticut Siting Council on EMF emissions shall be filed with the Planning and Zoning Commission. Automatic revocation of any approval given under this Chapter shall result for any Wireless Communication Facility that reports EMF emissions exceeding FCC standards.

15. If the wireless communications facility is not in use for 12 consecutive months, it shall be removed within 90 days from the end of such 12 month period, including base components by the last service provider using the site or owner, whichever has a contractual obligation to perform the removal. The site shall be restored to an appearance that is compatible with the surrounding neighborhood and where appropriate, re-vegetated to blend with the surrounding area.
16. The special use permit for a commercial wireless telecommunication service shall be valid for a maximum period of 10 years (February 3, 2010) with a right of reapplication under regulations in effect at that time.
17. The applicant, and his successors and assigns shall maintain the antennae and related facilities in a manner to blend in with the tower so as to minimize any visual intrusion into the surrounding properties.
18. Arrangements shall be made with the Fire Department regarding emergency access to the compound.
19. The approval of an application for special use permit shall be void and of no effect unless construction of the project commences within one year from the date of the approval granted by the commission, (February 3, 2001) in accordance with section 14-10.2 of the zoning ordinance.
20. By acceptance of this permit and conditions, the applicant and owner acknowledge the right of Town staff to periodically enter upon the subject property for the purpose of determining compliance with the terms of this approval.

The reasons for approval of the use and the decision about the Site Plan, including any conditions relating to either, are part of the record of the February 3, 2000 meeting of the Planning and Zoning Commission.

In accordance with Section 8-3c and Section 8-3d of Connecticut General Statues as amended, the **effective date** of this approval shall the date of recording of this Certificate on the land records of the Enfield Town Clerk.

Dated at Enfield, Connecticut this 2 day of March, 2000.

ENFIELD PLANNING AND ZONING COMMISSION

Elizabeth A Ballard
Elizabeth A. Ballard, Secretary

RECORDED IN
ENFIELD LAND RECORDS
2000 MAR -7 PM 3:12
SUZANNE F. OLECHNICKI
TOWN CLERK

I HEREBY CERTIFY A TRUE COPY OF A(N) 4 PAGE Zoning Certificate
AS RECORDED IN THE ENFIELD LAND RECORDS.
DATED AT ENFIELD, CT March 7, 2000
ATTEST: Kirsten G. Montemayor
KIRSTEN G. MONTEMAYOR, ASST TOWN CLERK

TOWN OF ENFIELD

WETLANDS PERMIT

CERTIFIED MAIL Z 022 035 532

December 9, 1999

John W. Knuff, Esq.
Hurwitz & Sagarin LLC
147 North Broad Street
Milford CT 06460

Dear Mr. Knuff:

At the December 7, 1999 Meeting of the Enfield Conservation Commission (Inland Wetland and Watercourses Agency), the following action was taken:

IW# 317 – Application of Nextel Communications of The Mid-Atlantic, Inc., for regulated activities associated with the construction of a wireless telecommunication monopole, equipment shed and yard to be located in the rear of the Troiano Industrial Park on Moody Road - **Approved with conditions:**

The permit is issued subject to the following conditions and/or modifications:

1. The permittee shall notify the Planning Department at 253-6358 immediately upon the commencement of work and upon its completion.

2. If the authorized activity has not been initiated before December 7, 2000 this permit shall be null and void if not previously revoked or specifically extended. The duration of the permit once initiated shall be 5 years from the date of approval.

3. All work and all regulated activities conducted pursuant to his authorization shall be consistent with these terms and conditions of this permit. Any structures, excavation, fill, obstruction, encroachments or regulated activities not specifically identified and authorized herein shall constitute a violation of this permit and may result in its modification, suspension, or revocation. Upon initiation of the activities authorized herein, the permittee thereby accepts and agrees to comply with the terms and conditions of this permit.

4. The authorization is not transferable without the written consent of the Enfield Conservation Commission.

5. In evaluating this application, the Commission has relied on information provided by the applicant and, if such information subsequently proves to be false, deceptive, incomplete and/or inaccurate this permit shall be modified, suspended or revoked.

6. This permittee shall employ best management practices, consistent with the terms and conditions of the permit, to control stormwater discharges and to prevent erosion and sedimentation and to otherwise prevent pollution of wetlands or watercourses. For information and technical assistance, contact the Town Planner. The permittee shall immediately inform the Planning Department of any problems involving wetlands or watercourses which have developed in the course of, or which are caused by, the authorized work.

7. No equipment or material including without limitation, fill, construction materials, or debris, shall be deposited, placed, or stored in any wetland or watercourse on or off site unless specifically authorized by this permit.

8. This permit is subject to and does not derogate any present or future property rights or other rights or powers of the Town of Enfield, and conveys no property rights or in real estate of material nor any exclusive privileges, and is further subject to any and all public and private rights and to any activity affected hereby.

9. Timely implementation and maintenance of sediment and erosion control measures are a condition of this permit. (All sediment and erosion control measures must be maintained until all disturbed areas are stabilized.)

10. A pre-construction meeting shall be held prior to the commencement of any construction activities on the site with the applicant, contractor, and Town staff.

11. A second sentence shall be added to note 9 of the Erosion and Sediment Control Narrative to read: "If weather, or other conditions, prevent seeding; hay will be spread over all exposed areas to a minimum of one inch in thickness".

12. A phrase shall be added to the end of note 13, of the Excavation and Grading Notes stating, "and shall not at any time in the future".

13. With the exception of the addition of the items stated in these conditions, this application is approved in accordance with the plans titled, "NEXTEL Communication of the Mid-Atlantic, Inc., 100 Corporate Place, Rocky Hill, CT 06067, Diversified Technology Consultants, 556 Washington Avenue, North Haven, CT 06473, Enfield, Troiano Industrial Park, Moody Road, Enfield, CT., Wetlands Documents, Erosion & Sedimentation Control Plan ... Sheet: W2". Any changes, such as enlargement or alteration to the building footprint, from the plans shall require the permittee to come before the Enfield Conservation Commission for a Determination of Permit Need (Jurisdictional Ruling).

This authorization constitutes the permit required by Section 22a-39 of the Connecticut General Statutes.

If you have any questions concerning this permit, please contact the Planning department at 253-6358.

Very truly yours,

Jay D. Northrup

Jay O Northrup
Assistant Town Planner

JOP/vch

cc: Applicant File
ECC Correspondence

EXHIBIT 6

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

ENFIELD–MOODY RD

188 MOODY ROAD
ENFIELD, CT 06082
HARTFORD COUNTY

SITE NO.: CTHA170C

RF DESIGN GUIDELINE: 67D5A997DB (GSM ONLY)

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

SITE NOTES

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

GENERAL NOTES

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

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

VICINITY MAP

SCALE: 1" = 1000'–0"

DIRECTIONS

MERGE ONTO I–90 W VIA THE RAMP ON THE LEFT TOWARD ALBANY/SPRINGFIELD (PORTIONS TOLL). MERGE ONTO I–84 W VIA EXIT 9 TOWARD NEW YORK CITY/HARTFORD/US–20 (PORTIONS TOLL) (CROSSING INTO CONNECTICUT). TAKE THE CT–190 EXIT, EXIT 73, TOWARD STAFFORD SPRINGS. TURN RIGHT ONTO BUCKLEY HWY/CT–190. CONTINUE TO FOLLOW CT–190. TURN LEFT ONTO RIVER RD/CT–190. TAKE THE 1ST RIGHT ONTO CT–32/CT–190. PASS THROUGH 1 ROUNDABOUT. STAY STRAIGHT TO GO ONTO MAIN ST/CT–190/CT–32. CONTINUE TO FOLLOW CT–190. TURN RIGHT ONTO SHAKER RD. SHAKER RD BECOMES SOMERS RD. TURN LEFT ONTO MOODY RD. SITE WILL BE ON THE LEFT.

SHEET INDEX

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:	CTHA170C
SBA SITE NUMBER:	CT46124
SBA SITE NAME:	ENFIELD–MOODY RD
SITE ADDRESS:	188 MOODY ROAD ENFIELD, CT 06082
PROPERTY OWNER:	TROIANO REALTY GROUP 777 ENFIELD STREET ENFIELD, CT 06082
TOWER OWNER:	SBA MONARCH TOWERS III, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561–226–9523
COUNTY:	HARTFORD
ZONING DISTRICT:	INDUSTRIAL 1 (I–1)
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	188'±
APPLICANT:	T–MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
SBA RSM:	STEPHEN ROTH PHONE: 860–539–4920 EMAIL: SRoth@sbasite.com
ARCHITECT:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
STRUCTURAL ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
SITE CONTROL POINT:	LATITUDE: N.42.001982° N42°0'07.13" LONGITUDE W.72.521808° W72°31'18.51"

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

CHAPPELL ENGINEERING ASSOCIATES, LLC
Civil ·Structural ·Land Surveying
R.K. EXECUTIVE CENTRE
201 BOSTON POST ROAD WEST, SUITE 101
MARLBOROUGH, MA 01752
(508) 481–7400
www.chappellengineering.com

STATE OF CONNECTICUT
JAMES M. FITZGERALD
No. 25997
LICENSED
PROFESSIONAL CIVIL ENGINEER
5/24/2021

CHECKED BY: CMC

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
2	03/23/21	ISSUED FOR CONSTRUCTION	TRB
1	12/11/20	ISSUED FOR CONSTRUCTION	TRB
0	11/18/20	ISSUED FOR REVIEW	TRB

SITE NUMBER:
CTHA170C

SITE ADDRESS:
188 MOODY ROAD
ENFIELD, CT 06082

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

1815.168

GENERAL NOTES:

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

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.

4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

5. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

6. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.

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

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

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

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

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

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

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

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

17. THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

18. IF THE EXISTING CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.

2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS. EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION.

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

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

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

6. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

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

8. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING, OWNER AND/OR LOCAL UTILITIES.

9. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT SPECIFICATIONS.

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

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

CONCRETE AND REINFORCING STEEL NOTES:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST–IN–PLACE CONCRETE.

2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS

3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.

4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF .....1½ IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER
   OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....¾ IN.
   BEAMS AND COLUMNS .....1½ IN.

5. A CHAMFER ¾" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

6. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.

7. CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
   (A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
   (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.

8. AS AN ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.

9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

1. ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND T–MOBILE SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM–A–36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".

2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.

3. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (¾"ø) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.

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

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

6. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE AS REQUIRED.

2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.

3. AS AN ALTERNATE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPACTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD C.

4. COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING #1 SIEVE.

5. AS AN ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND–OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL–GRADED GRANULAR FILL AND COMPACTED AS STATED ABOVE.

COMPACTION EQUIPMENT:

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

CONSTRUCTION NOTES:

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

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

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

ELECTRICAL INSTALLATION NOTES:

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

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

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

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

5. EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.

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

7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).

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

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

10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.

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

13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.

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

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

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

17. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

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

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

20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.

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

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

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

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

25. WIREWAYS SHALL BE EPOXY–COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.

27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED, OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.

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

30. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.

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

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

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3/24/2021

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SITE NUMBER:
CTHA170C

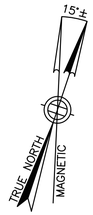
SITE ADDRESS:
188 MOODY ROAD
ENFIELD, CT 06082

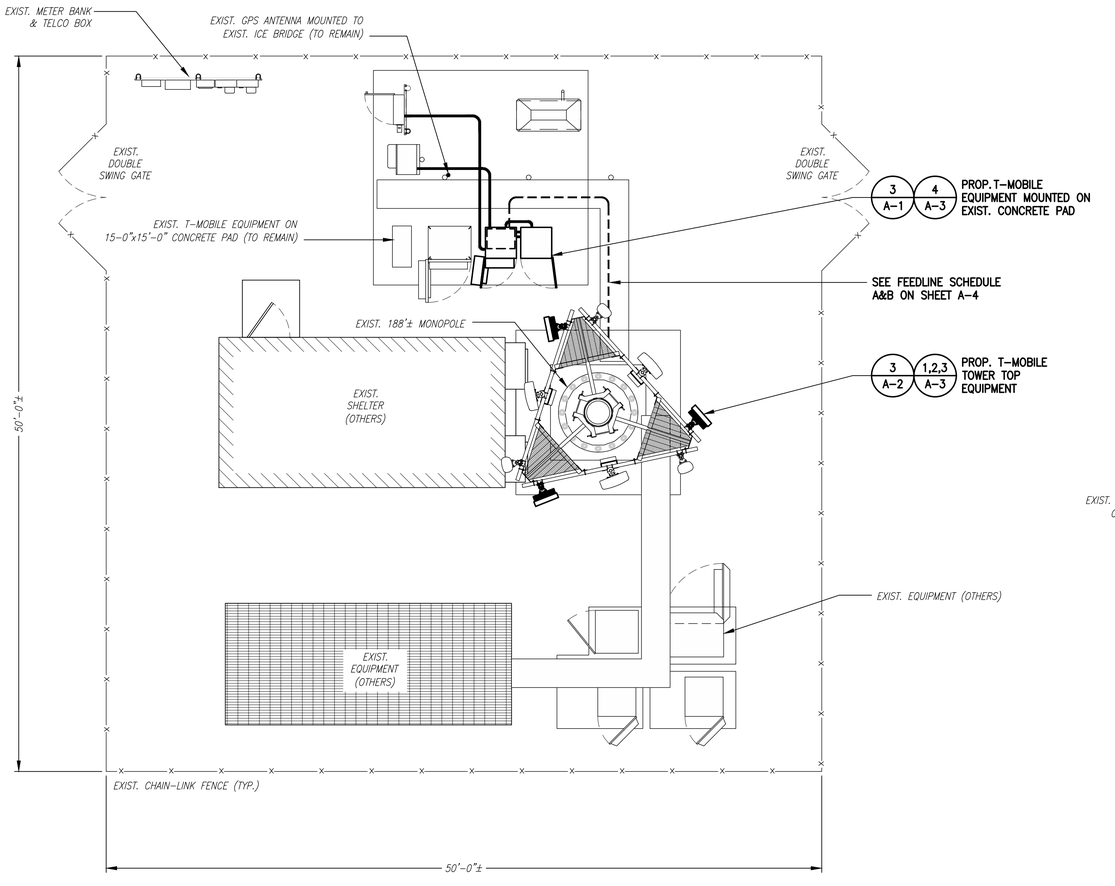
SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-1

1815.168

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



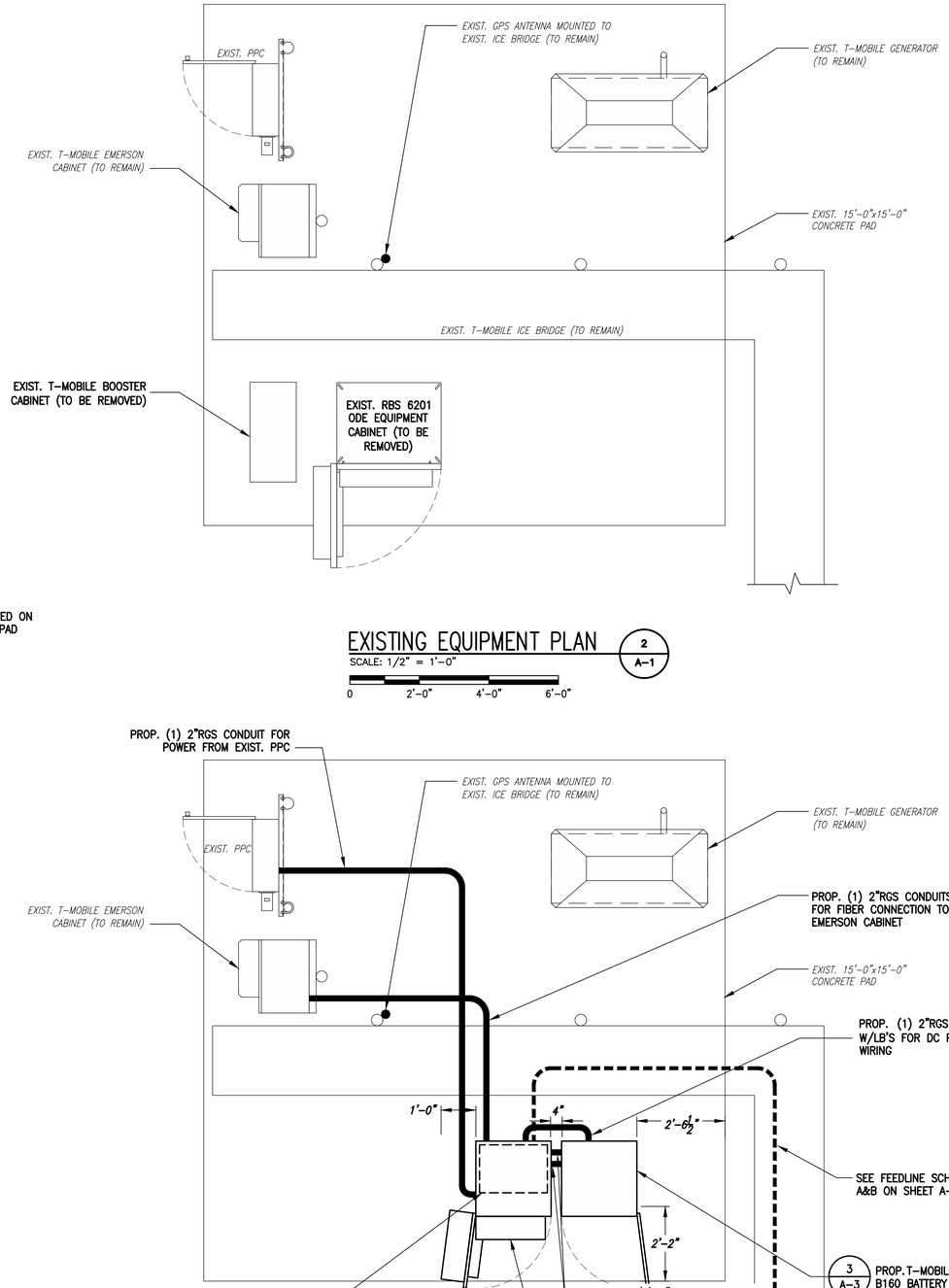


COMPOUND PLAN

1 / A-1

SCALE: 1" = 5'-0"

0 2'-6" 5'-0" 10'-0" 15'-0"



EXISTING EQUIPMENT PLAN

2 / A-1

SCALE: 1/2" = 1'-0"

0 2'-0" 4'-0" 6'-0"

PROPOSED EQUIPMENT PLAN

3 / A-1

SCALE: 1/2" = 1'-0"

0 2'-0" 4'-0" 6'-0"

MOUNT NOTE:
REFER TO MOUNT ANALYSIS DONE BY TOWER ENGINEERING SOLUTIONS DATED 11/11/2020 FOR ADDITIONAL MOUNTING DETAILS

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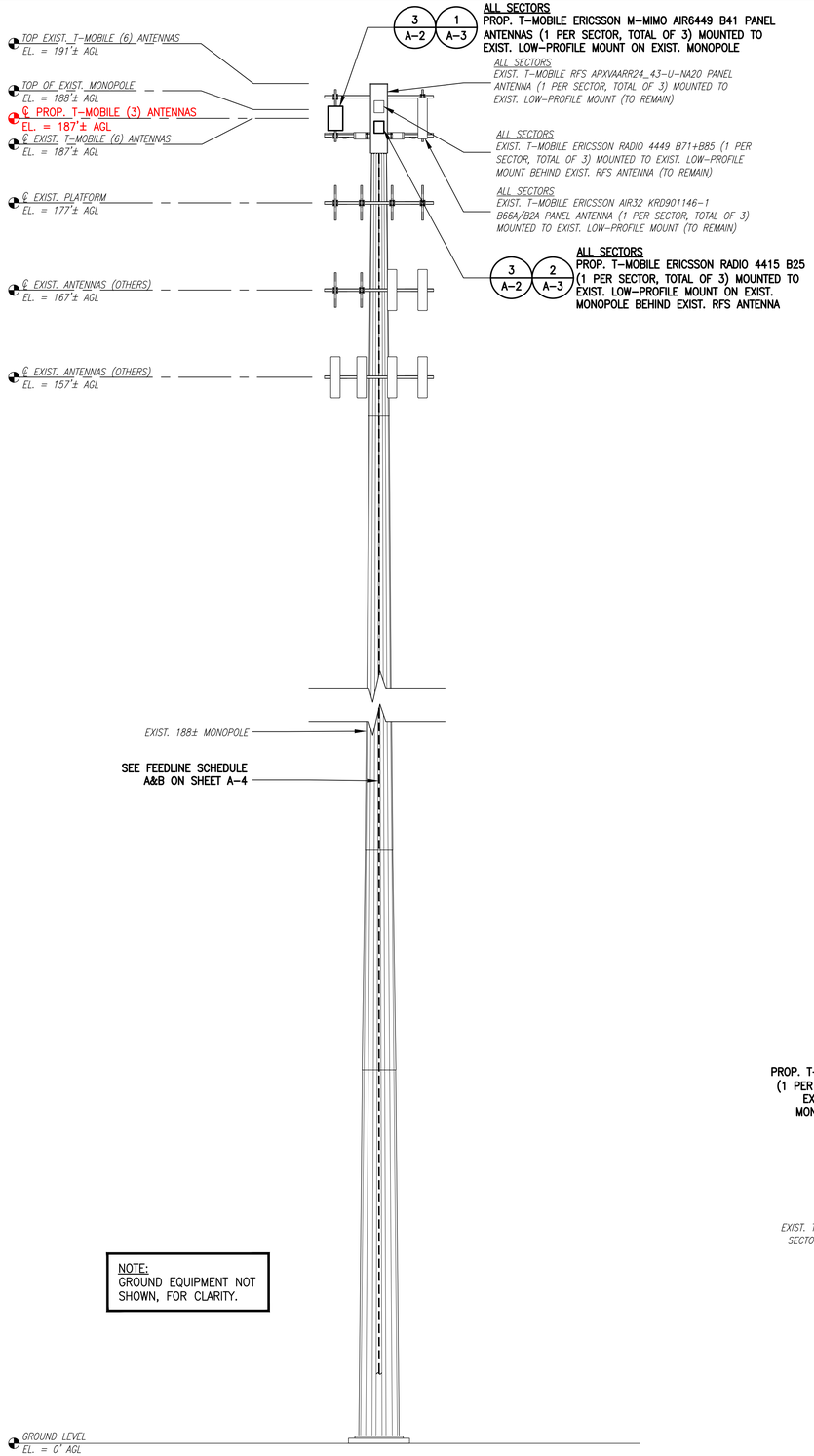
ENFIELD, CT 06082

SHEET TITLE
COMPOUND & EQUIPMENT PLAN

SHEET NUMBER
A-1

1815.168



3/A-2 1/A-3 **ALL SECTORS**
PROP. T-MOBILE ERICSSON M-MIMO AIR6449 B41 PANEL ANTENNAS (1 PER SECTOR, TOTAL OF 3) MOUNTED TO EXIST. LOW-PROFILE MOUNT ON EXIST. MONOPOLE

ALL SECTORS
EXIST. T-MOBILE RFS APXVAARR24_43-U-NA20 PANEL ANTENNA (1 PER SECTOR, TOTAL OF 3) MOUNTED TO EXIST. LOW-PROFILE MOUNT (TO REMAIN)

ALL SECTORS
EXIST. T-MOBILE ERICSSON RADIO 4449 B71+B85 (1 PER SECTOR, TOTAL OF 3) MOUNTED TO EXIST. LOW-PROFILE MOUNT BEHIND EXIST. RFS ANTENNA (TO REMAIN)

ALL SECTORS
EXIST. T-MOBILE ERICSSON AIR32 KRD901146-1 B66A/B2A PANEL ANTENNA (1 PER SECTOR, TOTAL OF 3) MOUNTED TO EXIST. LOW-PROFILE MOUNT (TO REMAIN)

3/A-2 2/A-3 **ALL SECTORS**
PROP. T-MOBILE ERICSSON RADIO 4415 B25 (1 PER SECTOR, TOTAL OF 3) MOUNTED TO EXIST. LOW-PROFILE MOUNT ON EXIST. MONOPOLE BEHIND EXIST. RFS ANTENNA

NOTE:
GROUND EQUIPMENT NOT SHOWN, FOR CLARITY.

TOWER ELEVATION 1/A-2
SCALE: 1" = 10'
0 5' 10' 20' 30'

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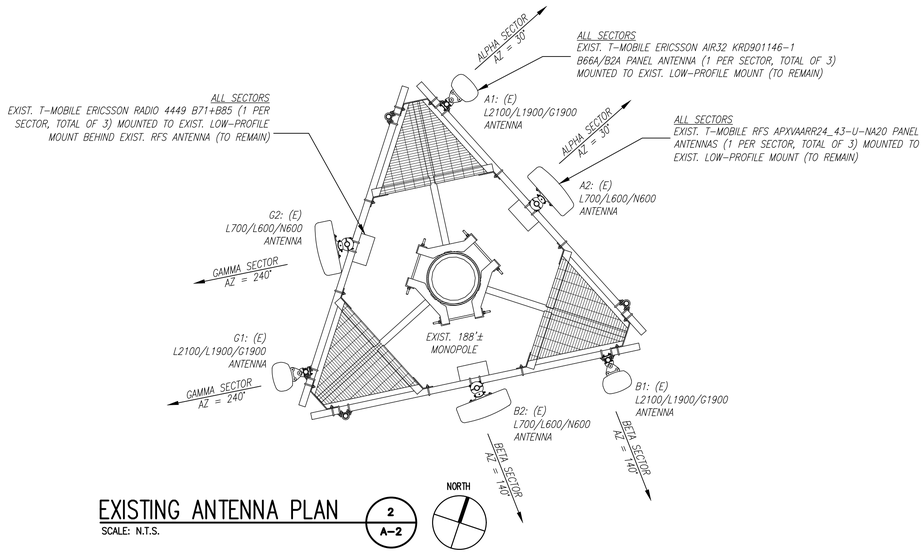
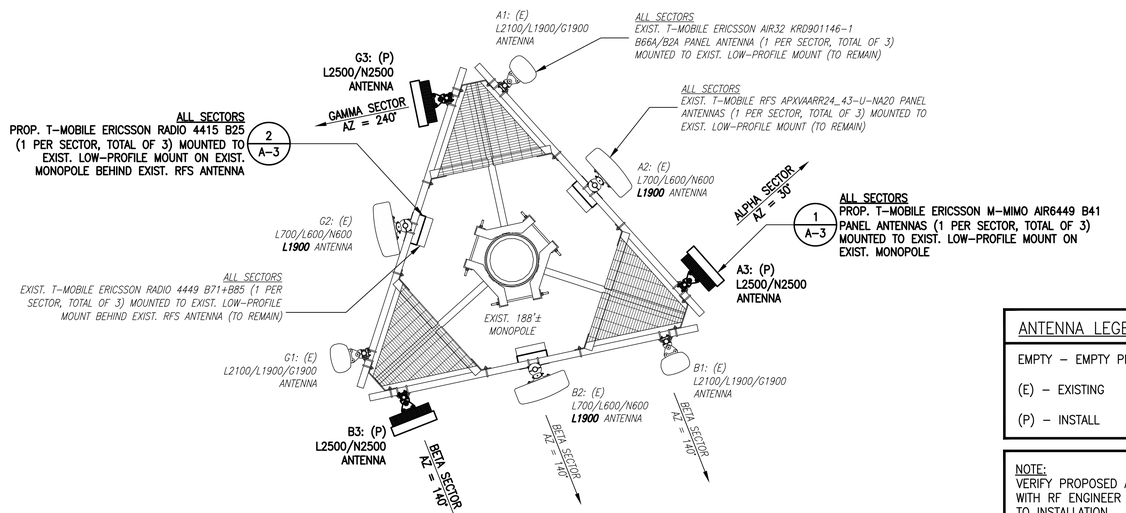
SPECIAL TOWER TOP EQUIPMENT INSTALLATION WORK NOTE (SAFETY-CLIMB ALIGNMENT REQUIREMENTS):
GENERAL CONTRACTOR SHALL ORIENT PROPOSED PLATFORM REINFORCEMENT KIT RING-MOUNTS SO THAT EXISTING SAFETY CLIMB CABLE IS NOT OBSTRUCTED/RE-ROUTED FROM VERTICAL ALIGNMENT AND IS NOT IN PHYSICAL CONTACT WITH EXISTING OR PROPOOSED RING-MOUNT HARDWARE. GENERAL CONTRACTOR SHALL INSTALL NEW OR ADDITIONAL SAFETY-CLIMB CABLE GUIDES IF ADDITIONAL CLEARANCE IS REQUIRED. ADDITIONAL CABLE GUIDES SHALL BE ATTACHED SECURELY TO THE POLE USING MECHANICAL FASTENERS OR FIELD WELDED BY A CERTIFIED WELDING TECHNICIAN.

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

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



EXISTING ANTENNA PLAN 2/A-2
SCALE: N.T.S.



PROPOSED ANTENNA PLAN 3/A-2
SCALE: N.T.S.

ANTENNA LEGEND:
EMPTY – EMPTY PIPE
(E) – EXISTING
(P) – INSTALL

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

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SHEET TITLE
TOWER ELEVATIONS & ANTENNA PLAN

SHEET NUMBER
A-2

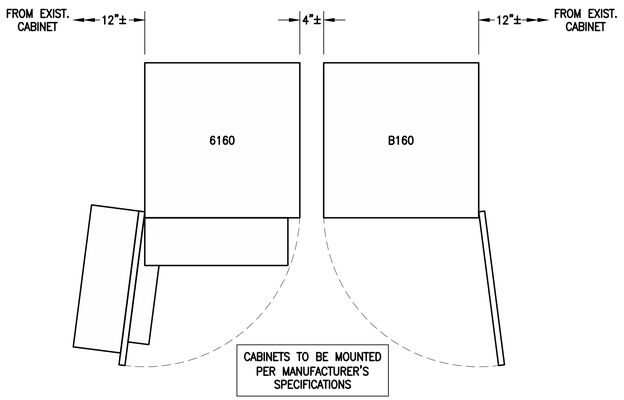
1815.168

ERICSSON M-MIMO AIR6449
B41 ANTENNA
DIMENSIONS: 33.1"H x 20.5"W x 8.3"D
WEIGHT: 103.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

ANTENNA DETAIL (1 / A-3)
SCALE: N.T.S.

ERICSSON RADIO 4415 B25
DIMENSIONS: 16.5"H x 13.4"W x 5.9"D
WEIGHT: 46.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

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



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 (3 / A-3)
SCALE: N.T.S.

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SHEET TITLE
SITE DETAILS

SHEET NUMBER
A-3

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FINAL ANTENNA CONFIGURATION

SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	TMA/RADIOS	CABLES
ALPHA	A1 *ERICSSON AIR32 KRD901146-1 B66A/B2A*	*187'-0"± AGL*	*30°*	*0°*	*2*	*L2100* / *L1900/G1900*	–	*(2) 1-¼" (6X12) HCS FIBER CABLES*
	A2 *RFS APXVAARR24_43-U-NA20*	*187'-0"± AGL*	*30°*	*0°*	*2*	*L700/L600/N600*	*ERICSSON RADIO 4449 B71+B85*	
					–	**L1900**	**ERICSSON RADIO 4415 B25**	
	A3 **ERICSSON M-MIMO AIR6449 B41**	**187'-0"± AGL**	**30°**	**0°**	–	**L2500/N2500**	–	**(1) 7/8" (6X12) HCS FIBER CABLE**
BETA	B1 *ERICSSON AIR32 KRD901146-1 B66A/B2A*	*187'-0"± AGL*	*140°*	*0°*	*2*	*L2100* / *L1900/G1900*	–	
	B2 *RFS APXVAARR24_43-U-NA20*	*187'-0"± AGL*	*140°*	*0°*	*2*	*L700/L600/N600*	*ERICSSON RADIO 4449 B71+B85*	
					–	**L1900**	**ERICSSON RADIO 4415 B25**	
	B3 **ERICSSON M-MIMO AIR6449 B41**	**187'-0"± AGL**	**140°**	**0°**	–	**L2500/N2500**	–	
GAMMA	C1 *ERICSSON AIR32 KRD901146-1 B66A/B2A*	*187'-0"± AGL*	*240°*	*0°*	*2*	*L2100* / *L1900/G1900*	–	
	C2 *RFS APXVAARR24_43-U-NA20*	*187'-0"± AGL*	*240°*	*0°*	*2*	*L700/L600/N600*	*ERICSSON RADIO 4449 B71+B85*	
					–	**L1900**	**ERICSSON RADIO 4415 B25**	
	C3 **ERICSSON M-MIMO AIR6449 B41**	**187'-0"± AGL**	**240°**	**0°**	–	**L2500/N2500**	–	

CABLE NOTE: (E) (16) 1-5/8" COAX CABLES TO BE REMOVED. SEE FEEDLINE SCHEDULE A & B BELOW.

NOTE: RFDS REV5 – 03/12/21

FEEDLINE SCHEDULE

SCHEDULE	FEEDLINES	LOCATION
A	*EXISTING TO REMAIN:* *(1) ½" COAX CABLE FOR GPS ANTENNA* *(2) 1-¼" (6X12) HCS FIBER CABLES*	**ROUTED PER STRUCTURAL ANALYSIS**
	EXISTING TO BE REMOVED: *(16) 1-5/8" COAX CABLES*	
B	**PROPOSED:** **(1) 1-5/8" (6X12) HCS FIBER CABLES**	

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

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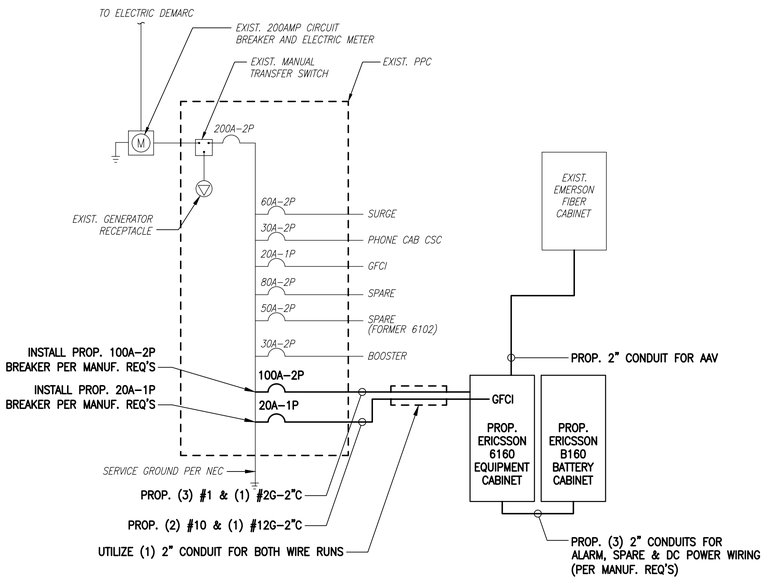
SHEET TITLE
ANTENNA & FEEDLINE CHARTS

SHEET NUMBER
A-4

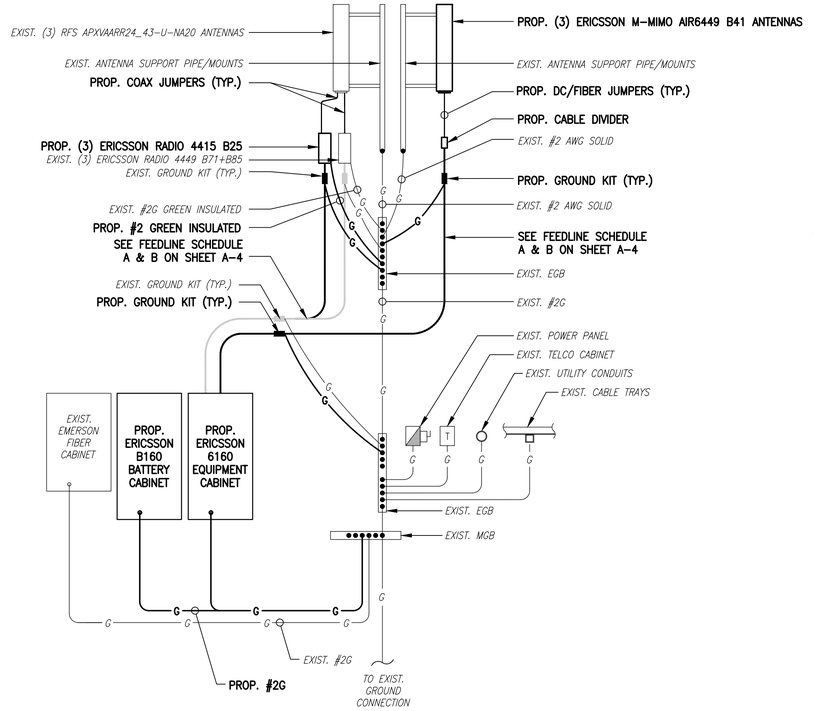
1815.168



ONE LINE DIAGRAM

SCALE: NOT TO SCALE

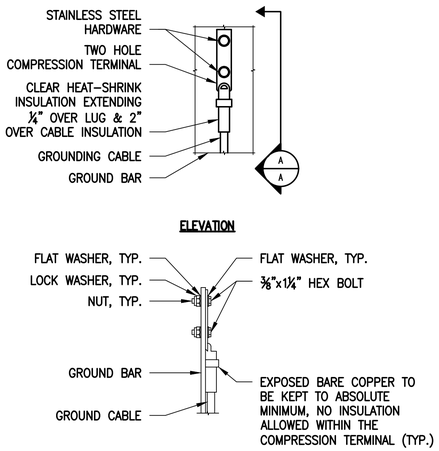
1 / E-1



GROUNDING RISER DIAGRAM

SCALE: NOT TO SCALE

2 / E-1



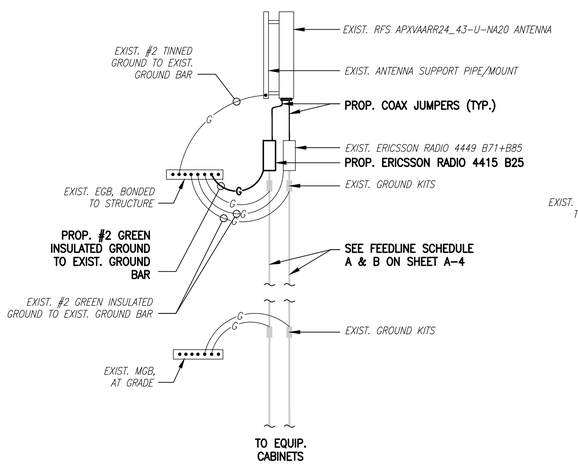
NOTES:

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

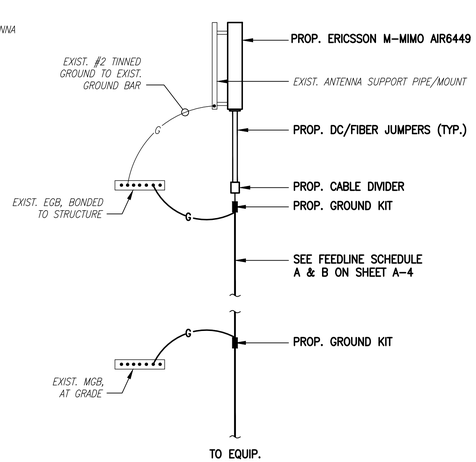
TYPICAL GROUND BAR CONNECTIONS DETAIL

SCALE: NOT TO SCALE

3 / E-1



L700/L600/N600/L1900/U2100 ANTENNA

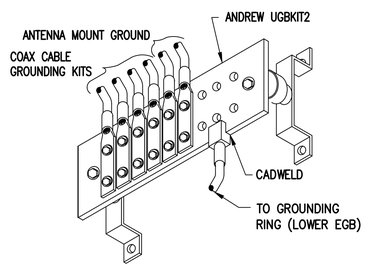


L2500/N2500 ANTENNA & L2100/L1900/G1900 ANTENNA

COAX CABLE CONNECTION AND GROUNDING DETAIL

SCALE: NOT TO SCALE

4 / E-1



GROUND BAR (EGB)

SCALE: NOT TO SCALE

5 / E-1

ELECTRICAL AND GROUNDING NOTES

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

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SBA COMMUNICATIONS CORP.
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STATE OF CONNECTICUT ★ JAMES M. FITZGERALD ★ No. 25997 LICENSED PROFESSIONAL CIVIL ENGINEER

3/24/2021

CHECKED BY: CMC

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
2	03/23/21	ISSUED FOR CONSTRUCTION	TRB
1	12/11/20	ISSUED FOR CONSTRUCTION	TRB
0	11/18/20	ISSUED FOR REVIEW	TRB

SITE NUMBER:
CTHA170C

SITE ADDRESS:
188 MOODY ROAD
ENFIELD, CT 06082

SHEET TITLE
ELECTRIC & GROUNDING DETAILS

SHEET NUMBER
E-1

1815.168

EXHIBIT 7

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

Post-Mod Structural Analysis Report

Existing 188 ft SUMMIT Monopole
Customer Name: SBA Communications Corp
Customer Site Number: CT46124-A
Customer Site Name: Enfield-Moody Rd.
Carrier Name: T-Mobile (App#: 141462, V1)
Carrier Site ID / Name: CTHA170C / Moody Rd
Site Location: 188 Moody Rd
Enfield, Connecticut
Hartford County
Latitude: 42.002000
Longitude: -72.521694

Analysis Result:

Max Structural Usage: 99.9% [Pass]
Max Foundation Usage: 95.0% [Pass]

Report Prepared By: Nasib Pandey

Introduction

The purpose of this report is to summarize the analysis results on the 188 ft SUMMIT Monopole to support the proposed antennas and transmission lines in addition to those currently installed. 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

Tower Drawings	Summit, Job # 29200-155, dated 2/12/00
Foundation Drawing	Summit, Job # 29200-155, dated 2/12/00
Geotechnical Report	Tectonic, Project # 1170.C054, dated 9/17/98
Mount Analysis	Post Mod Mount Analysis by TES, Project # 99815, dated 11/18/2020
Existing Modification	FDH Engineering, Project #1335291400 dated February 20, 2015 Tower Engineering Solutions, Job #19423 dated June 1, 2016
Proposed Modification	TES Job # 99869

Analysis Criteria

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

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed V_{ult} = 125.0 mph (3-Sec. Gust)/ Nominal Design Wind Speed V_{asd} = 97.0 mph (3-Sec. Gust)
Basic Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-G-2 / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	C
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	SS = 0.175, S1 = 0.064

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

Existing Antennas, Mounts and Transmission Lines

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

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
-	187.0	3	Ericsson KRD901146-1_B66A_B2A (Octa)	Low Profile Platform w/Handrails	(16) 1 1/4" (2) 1-1/4" Hybrid	T-Mobile
-		3	RFS APXVAARR24_43-U-NA20 (Octa)			
-		3	Commscope LNX-6515DS-A1M - Panel			
-		12	Ericsson KRY 112 114-1 Double TMA			
-		3	Ericsson Radio 4449 B71 + B12			
-		3	Kathrein 782 11054-Smart Bias T			
-	178.5	-	-	Low Profile Platform*	-	Abandoned
9	168.0	1	RFS APXV9ERR18-C-A20 - Panel	Low Profile Platform	(3) 1-1/4" Fiber (1) 0.7" Fiber	Sprint
10		2	RFS APXVSPP18-C-A20 - Panel			
11		3	RFS APXVTM14-C-120 - Panel			
12		4	ACU-A20-N - RET			
13		3	Alcatel-Lucent 1900MHz RRU			
14		3	Alcatel-Lucent 800 MHz RRH			
15		3	Alcatel-Lucent TD-RRH8x20-25 - RRU			
16		3	Alcatel-Lucent 800 MHz Filter			
17	158.0	3	Kathrein 800 10121 - Panel	(1) Platform Mount [SitePro RMQP-12-H5]	(12) 1 5/8" (2) 3/8" Fiber (6) 5/8" DC	AT&T
18		3	CCI HPA-65R-BUU-H8 - Panel			
19		6	Kathrein 800 10966 - Panel			
20		6	Powerwave LGP21401 TMA			
21		6	Kathrein 860-10025 RET			
22		3	Ericsson RRUS 4415 B25 RRU			
23		3	Ericsson 8843 B2 B66A RRU			
24		3	Ericsson 4449 B5 B12 RRU			
25		3	Ericsson RRUS-A2 RRU			
26		2	Raycap DC6-48-60-18-8F COVP			
27		1	Raycap DC6-48-60-0-8C COVP			

* Low Profile platform at an elevation of 178.5 Ft is considered to be removed and not included in the analysis.

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
1	187.0	3	Ericsson Air 32 KRD901146-1_B66A_B2A - Panel	Low Profile Platform w/Handrails with MODs [Kicker kit with collar mount]	(15) 1 1/4" Coax (3) 1-1/4" Hybrid	T-Mobile
2		3	RFS APXVAARR24_43-U-NA20 (Octa) - Panel			
4		3	Ericsson AIR6449 B41 - Panel			
5		12	Ericsson KRY 112 114-1 Double TMA			
6		3	Ericsson 4415 B25			
7		3	Ericsson 4449 B71 + B85			
8		3	Kathrein 782 11054 Smart Bias T			

All transmission lines are considered running inside of the pole shafts.

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	Reinforcing Plates
Max. Usage:	**87.0%**	**97.7%**	**84.0%**	**99.9%**
Pass/Fail	**Fail**	**Pass**	**Pass**	**Pass**

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	4844.9	35.2	52.0

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

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 2.2480 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the structure and its foundation will be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the TIA-222-G-2 Standard after the following proposed modification is successfully completed.

- Proposed modification design drawing by **TES** Job # 99869

Pre-Mod Installation Determination

We have also checked this tower to determine if the proposed T-Mobile equipment loading can be installed prior to the completion of the required modifications. We ran a reduced wind loading case as required by TIA-322 considering a construction period of no more than 6 months.

The tower and foundations passed, so the Carrier can proceed and install their proposed loading prior to the mods completion. Please be aware that this approval is being provided and is based on the method outlined in TIA-322.

This approval is not a blanket approval and there is still a risk that the tower will experience a wind event that cannot be predicted by TIA-322 or our Engineers. In the event of an unforeseen wind event, Tower Engineering Solutions will not be liable nor responsible for damage to the tower or the Carriers equipment. Additionally, the tower cannot go beyond the 6 month construction period without the modifications being completed. If the modifications cannot be completed within 6 months from the completed installation of the Carrier's proposed equipment, TES must be notified immediately for further review.

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 EIA/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 85.32% at 35.0ft

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020
Site Name:	Enfield-Moody Rd.	**Exposure:**	C	
Height:	188.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

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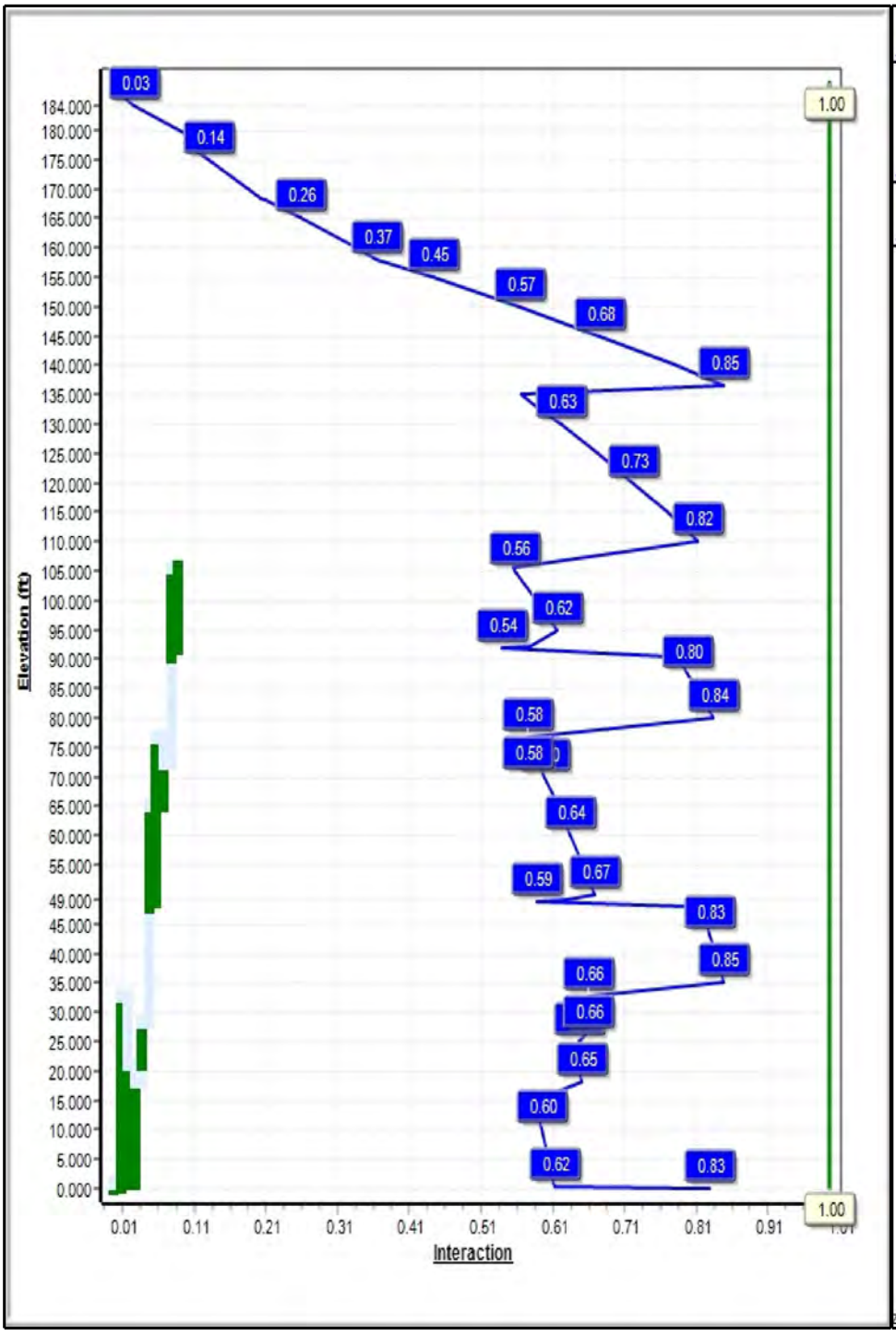
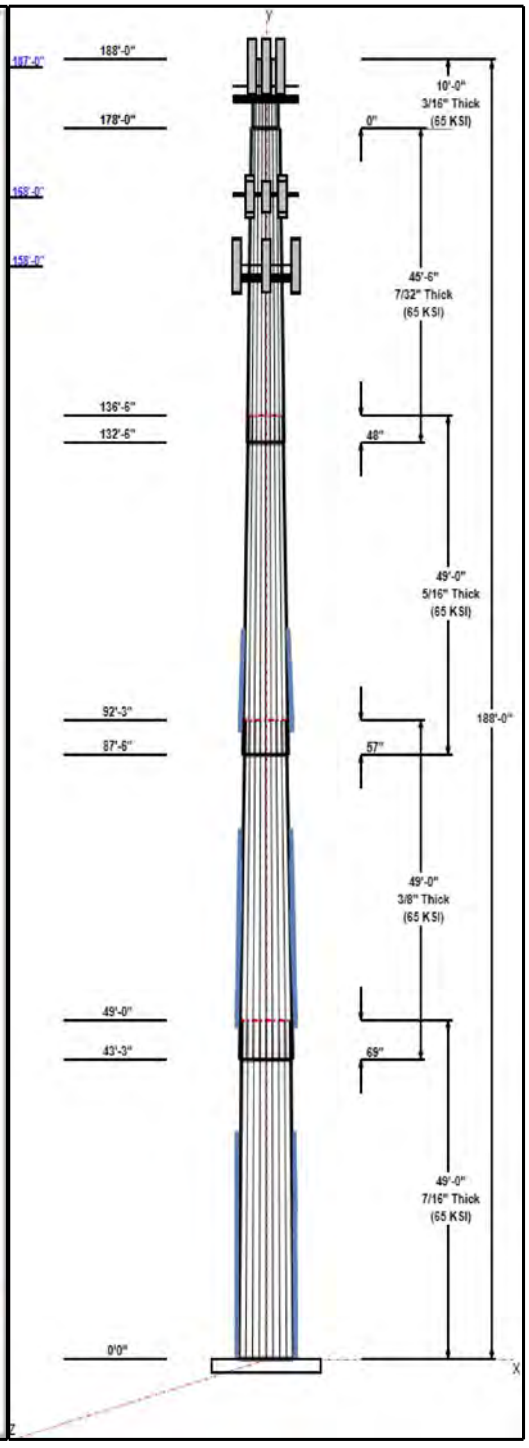
Dead Load Factor:	1.20	**Iterations:**	30
Wind Load Factor:	1.60		

Load Case : 1.2D + 1.6W 97 mph Wind





Structure: CT46124-A-SBA

Type: Custom
Site Name: Enfield-Moody Rd.
Height: 188.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.16603

12/30/2020

Tower Engineering Solutions

Shaft Properties

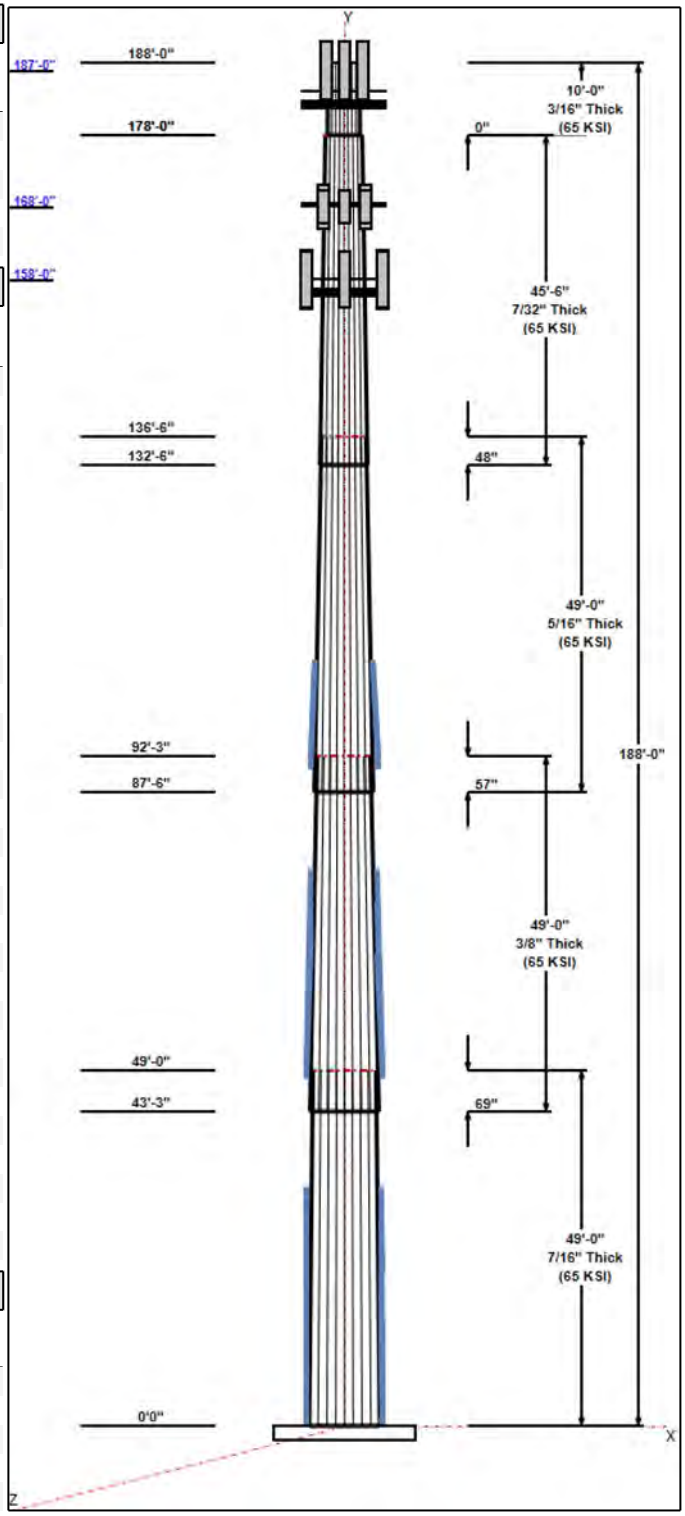
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	49.00	43.60	51.74	0.438		0.16603	65
2	49.00	37.17	45.31	0.375	Slip	0.16603	65
3	49.00	30.45	38.59	0.313	Slip	0.16603	65
4	45.50	24.00	31.55	0.219	Slip	0.16603	65
5	10.00	22.34	24.00	0.188	Butt	0.00000	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
187.00	187.00	3	AIR6449 B41	T-Mobile
187.00	187.00	3	RRUS 4415 B25	T-Mobile
187.00	187.00	1	PRK-1245 (kicker kit)	T-Mobile
187.00	187.00	1	Collar Mount (3-Sided)	T-Mobile
187.00	187.00	12	Ericsson KRY 112 114-1	T-Mobile
187.00	187.00	3	Kathrein 782 11054-Smart	T-Mobile
187.00	187.00	3	Ericsson	T-Mobile
187.00	187.00	3	RFS	T-Mobile
187.00	187.00	3	Ericsson Radio 4449 B71	T-Mobile
184.00	184.00	1	Platform w/ Hand Rail	T-Mobile
168.50	168.50	1	Low Profile Platform	Sprint
168.00	168.00	2	APXVSPP18-C-A20	Sprint
168.00	168.00	3	800 MHz Filters	Sprint
168.00	168.00	3	APXVTM14-C-120	Sprint
168.00	168.00	3	1900 MHz RRH	Sprint
168.00	168.00	3	800 MHz RRH	Sprint
168.00	168.00	3	TD-RRH8x20-25	Sprint
168.00	168.00	4	ACU-A20-N	Sprint
168.00	168.00	1	APXV9ERR18-C-A20	Sprint
158.00	158.00	6	Powerwave LGP21401	AT&T
158.00	158.00	2	Raycap DC6-48-60-18-8F	AT&T
158.00	158.00	3	800 10121	AT&T
158.00	158.00	3	HPA-65R-BUU-H8	AT&T
158.00	158.00	6	Kathrein 860-10025 RET	AT&T
158.00	158.00	3	Ericsson RRUS-A2 RRU	AT&T
158.00	158.00	6	800 10966	AT&T
158.00	158.00	3	Ericsson RRUS 4415 B25	AT&T
158.00	158.00	3	Ericsson 8843 B2 B66A	AT&T
158.00	158.00	3	Ericsson 4449 B5 B12	AT&T
158.00	158.00	1	Raycap DC6-48-60-0-8C	AT&T
158.00	158.00	1	Plateform Mount	AT&T

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	187.00	Inside	1 1/4" Coax	T-Mobile
0.00	187.00	Inside	1-1/4" Hybrid	T-Mobile
0.00	168.00	Inside	0.7" Fiber	Sprint
0.00	168.00	Inside	1-1/4" Fiber	Sprint
0.00	158.00	Inside	1 5/8" Coax	AT&T
0.00	158.00	Inside	3/8" Fiber	AT&T
0.00	158.00	Inside	5/8" DC	AT&T
90.25	107.25	Outside	1.25" Reinforcing plate	
46.50	79.25	Outside	1.25" Reinforcing plate	
0.00	35.50	Outside	1.25" Reinforcing plate	



Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
16	2.25" 18J	75.0	Cluster

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
3.2500	57.0	50.0	Clipped

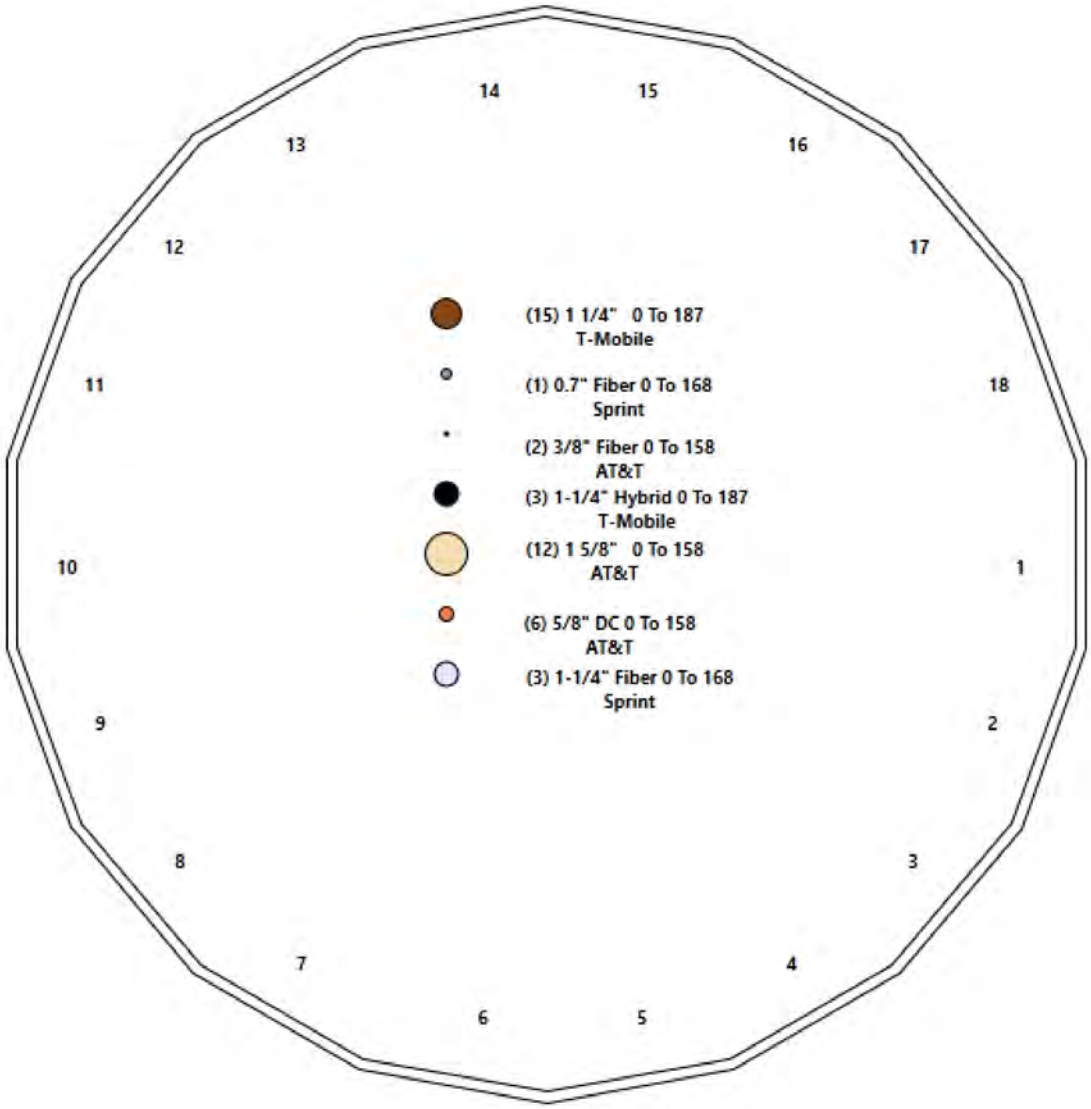
Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 97 mph Wind	4844.9	35.2	52.0
0.9D + 1.6W 97 mph Wind	4766.4	35.2	39.0
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1637.1	11.2	91.5
1.2D + 1.0E	307.3	2.1	52.0
0.9D + 1.0E	301.8	2.1	39.0
1.0D + 1.0W 60 mph Wind	1149.7	8.4	43.3

Structure: CT46124-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Enfield-Moody Rd.
Height: 188.00 (ft)

12/30/2020



Shaft Properties

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 5	

Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	18	49.000	0.4375	65		0.00	10,936
2	18	49.000	0.3750	65	Slip	69.00	8,110
3	18	49.000	0.3125	65	Slip	57.00	5,657
4	18	45.500	0.2188	65	Slip	48.00	2,963
5	18	10.000	0.1875	65	Flange	0.00	482
					Total Shaft Weight:		**28,148**

	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	51.74	0.00	71.24	23688.52	19.44	118.26	43.60	49.00	59.94	14111.8	16.16	99.67	0.166026
2	45.31	43.25	53.48	13643.07	19.89	120.83	37.17	92.25	43.80	7493.55	16.07	99.13	0.166026
3	38.59	87.50	37.96	7026.65	20.36	123.48	30.45	136.50	29.89	3431.02	15.77	97.45	0.166026
4	31.55	132.5	21.76	2699.58	24.02	144.21	24.00	178.00	16.51	1180.03	17.93	109.6	0.166026
5	24.00	178.0	14.17	1015.22	21.16	128.00	22.34	188.00	14.17	1015.22	21.16	119.1	0.000000

Additional Steel

							Intermediate Connectors		Termination Connectors			
Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Fu (ksi)	Offset (in)	Description	Spacing (in)	Description	Spacing (in)	Lower Qty	Upper Qty
0.00	1.00	3	SOL 2 1/4" William R71	128	150	0.00	5/8" Hollo Bolt	12.00	5/8" Hollo Bolt	3.00		
0.25	32.83	3	PLT 6"X1-1/4"(1.25" Hole	65	80	0.00	AJM20&sleeve	21.00	AJM20&sleeve	3.00	11	11
1.00	21.00	1	LNP LP6X125-B-20B	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		
1.00	18.25	1	LNP LP6X125-B-20T	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		11
21.00	28.25	1	LNP LP6X125-G-20BT	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		11
47.75	65.00	1	LNP LP6X100-G-20TC	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00	11	
48.92	76.83	3	PLT 5.5"x1 1/4"(1.25"hol	65	80	0.00	AJM20&sleeve	21.00	AJM20&sleeve	3.00	10	10
65.00	72.25	1	LNP LP6X100-G-10CT	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00		11
90.50	105.5	1	LNP LP6X100-G-20TT	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00	10	10
91.92	105.5	3	PLT 4.5"x 1-1/4"(1.25"ho	65	80	0.00	AJM20&sleeve	24.00	AJM20&sleeve	3.00	7	7

Load Summary

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 6	

Discrete Appurtenances

				No Ice			Ice				
No.	Elev (ft)	Description	Qty	Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
1	187.00	AIR6449 B41	3	103.00	5.65	0.71	289.90	6.946	0.71	0.00	0.00
2	187.00	RRUS 4415 B25	3	46.00	1.64	0.50	102.03	2.342	0.50	0.00	0.00
3	187.00	PRK-1245 (kicker kit)	1	464.91	9.50	1.00	907.29	23.059	1.00	0.00	0.00
4	187.00	Collar Mount (3-Sided)	1	220.00	2.50	1.00	638.67	6.068	1.00	0.00	0.00
5	187.00	Ericsson KRY 112 114-1 Double	12	11.00	0.41	0.50	25.70	1.058	0.50	0.00	0.00
6	187.00	Kathrein 782 11054-Smart Bias T	3	1.80	0.22	0.50	5.18	0.893	0.50	0.00	0.00
7	187.00	Ericsson KRD901146-1_B66A_B2A	3	132.20	6.51	0.86	398.86	8.075	0.86	0.00	0.00
8	187.00	RFS APXVAARR24_43-U-NA20	3	128.00	18.24	0.70	724.23	22.865	0.70	0.00	0.00
9	187.00	Ericsson Radio 4449 B71 + B85	3	74.00	2.50	0.50	175.96	2.412	0.50	0.00	0.00
10	184.00	Platform w/ Hand Rail	1	1600.00	32.00	1.00	4457.58	70.000	1.00	0.00	0.00
11	168.50	Low Profile Platform	1	1400.00	22.00	1.00	3047.92	45.824	1.00	0.00	0.00
12	168.00	APXVSPP18-C-A20	2	57.00	8.02	0.81	290.10	11.787	0.81	0.00	0.00
13	168.00	800 MHz Filters	3	54.00	2.50	0.50	155.87	3.893	0.50	0.00	0.00
14	168.00	APXVTM14-C-120	3	56.00	6.34	0.78	287.79	7.875	0.78	0.00	0.00
15	168.00	1900 MHz RRH	3	44.00	2.50	0.50	134.92	3.893	0.50	0.00	0.00
16	168.00	800 MHz RRH	3	54.00	2.50	0.50	155.87	3.893	0.50	0.00	0.00
17	168.00	TD-RRH8x20-25	3	70.00	3.05	0.50	230.02	5.176	0.50	0.00	0.00
18	168.00	ACU-A20-N	4	1.00	0.14	0.50	6.79	0.540	0.67	0.00	0.00
19	168.00	APXV9ERR18-C-A20	1	62.00	8.02	0.81	306.73	11.787	0.81	0.00	0.00
20	158.00	Powerwave LGP21401 TMA	6	17.50	1.26	0.50	48.20	2.369	0.50	0.00	0.00
21	158.00	Raycap DC6-48-60-18-8F COVP	2	31.80	1.47	0.50	114.66	2.408	0.50	0.00	0.00
22	158.00	800 10121	3	44.10	5.15	0.78	190.74	7.974	0.78	0.00	0.00
23	158.00	HPA-65R-BUU-H8	3	68.00	12.98	0.78	480.19	15.189	0.78	0.00	0.00
24	158.00	Kathrein 860-10025 RET	6	1.16	0.16	0.50	8.75	0.626	0.50	0.00	0.00
25	158.00	Ericsson RRUS-A2 RRU	3	21.10	1.86	0.50	69.27	3.165	0.50	0.00	0.00
26	158.00	800 10966	6	114.60	14.31	0.71	617.51	19.818	0.71	0.00	0.00
27	158.00	Ericsson RRUS 4415 B25 RRU	3	46.00	1.64	0.50	101.09	2.330	0.50	0.00	0.00
28	158.00	Ericsson 8843 B2 B66A RRU	3	72.00	1.64	0.50	134.78	2.306	0.50	0.00	0.00
29	158.00	Ericsson 4449 B5 B12 RRU	3	73.00	1.65	0.50	178.33	2.398	0.50	0.00	0.00
30	158.00	Raycap DC6-48-60-0-8C COVP	1	26.20	4.78	1.00	297.76	5.965	1.00	0.00	0.00
31	158.00	Plateform Mount [RMQP-12-H5]	1	2136.59	44.30	1.00	4935.27	18.907	1.00	0.00	0.00
		Totals:	**96**	**10,284.46**			**31,228.14**				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	187.00	(15) 1 1/4" Coax	0.00	Inside
0.00	187.00	(3) 1-1/4" Hybrid	0.00	Inside
0.00	168.00	(1) 0.7" Fiber	0.00	Inside
0.00	168.00	(3) 1-1/4" Fiber	0.00	Inside
0.00	158.00	(12) 1 5/8" Coax	0.00	Inside
0.00	158.00	(2) 3/8" Fiber	0.00	Inside
0.00	158.00	(6) 5/8" DC	0.00	Inside
90.25	107.25	(3) 1.25" Reinforcing plate	2.50	Outside
46.50	79.25	(3) 1.25" Reinforcing plate	2.50	Outside
0.00	35.50	(3) 1.25" Reinforcing plate	2.50	Outside

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)

Shaft Section Properties

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 8	

Increment Length: **5 (ft)**

											Additional Reinforcing			
Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
0.00	RB1	0.4375	51.740	71.237	23688.5	19.44	118.26	65	79	0.0	12.24	6312.6	2488.6	
0.25	RB2	0.4375	51.698	71.180	23631.1	19.43	118.17	65	79	60.6	34.74	13029.3	11721.5	29.7
1.00	RT1 RB3 RB4	0.4375	51.574	71.007	23459.3	19.38	117.88	65	79	181.4	37.50	14046.1	11242.2	95.7
5.00		0.4375	50.910	70.085	22557.1	19.11	116.37	65	79	960.2	37.50	13696.6	10956.3	510.4
10.00		0.4375	50.080	68.932	21462.3	18.77	114.47	65	79	1182.6	37.50	13266.0	10604.2	638.0
15.00		0.4375	49.250	67.779	20403.5	18.44	112.57	65	80	1163.0	37.50	12842.2	10258.0	638.0
18.25	RT4	0.4375	48.710	67.030	19734.3	18.22	111.34	65	80	745.4	30.00	11129.0	7073.3	331.8
20.00		0.4375	48.419	66.627	19380.1	18.10	110.67	65	80	398.0	30.00	10998.4	6991.9	178.6
21.00	RT3 RB5	0.4375	48.253	66.396	19179.7	18.04	110.29	65	80	226.3	30.00	11774.1	6442.0	102.1
25.00		0.4375	47.589	65.474	18391.6	17.77	108.78	65	81	897.4	30.00	11459.5	6271.7	408.3
28.25	RT5	0.4375	47.050	64.725	17767.4	17.55	107.54	65	81	719.9	22.50	8052.6	5061.2	248.8
30.00		0.4375	46.759	64.321	17437.2	17.43	106.88	65	81	384.2	22.50	7956.2	5000.8	134.0
32.83	RT2	0.4375	46.289	63.669	16911.9	17.25	105.80	65	81	616.3	22.50	7801.7	4903.8	216.7
35.00		0.4375	45.929	63.168	16516.4	17.10	104.98	65	81	468.3				
40.00		0.4375	45.099	62.016	15628.6	16.77	103.08	65	82	1064.9				
43.25	Bot - Section 2	0.4375	44.559	61.267	15069.0	16.55	101.85	65	82	681.7				
45.00		0.4375	44.269	60.863	14773.3	16.43	101.19	65	82	681.1				
47.75	RB6	0.4375	43.812	60.229	14316.4	16.25	100.14	65	82	1061.2	6.00	2575.7	18.0	56.1
48.92	RB7	0.4375	43.618	59.959	14124.9	16.17	99.70	65	82	448.2	26.63	8118.2	5410.4	106.0
49.00	Top - Section 1	0.3750	44.355	52.345	12791.9	19.45	118.28	65	79	30.6	26.63	8113.4	5407.3	7.2
50.00		0.3750	44.189	52.147	12647.5	19.37	117.84	65	79	177.8	26.63	8026.1	5368.3	90.6
55.00		0.3750	43.359	51.159	11942.2	18.98	115.62	65	79	878.8	26.63	7732.2	5175.6	453.0
60.00		0.3750	42.528	50.171	11263.5	18.59	113.41	65	80	862.0	26.63	7443.9	4986.5	453.0
65.00	RT6 RB8	0.3750	41.698	49.183	10611.1	18.20	111.20	65	80	845.2	26.63	7161.2	4800.8	453.0
70.00		0.3750	40.868	48.195	9984.4	17.81	108.98	65	80	828.4	26.63	6884.0	4618.8	453.0
72.25	RT8	0.3750	40.495	47.751	9710.6	17.63	107.99	65	81	367.3	20.63	4520.0	4520.0	157.9
75.00		0.3750	40.038	47.207	9382.8	17.42	106.77	65	81	444.3	20.63	4422.3	4422.3	193.0
76.83	RT7	0.3750	39.734	46.846	9168.9	17.27	105.96	65	81	292.8	20.63	4357.8	4357.8	128.4
80.00		0.3750	39.208	46.219	8805.9	17.03	104.55	65	81	501.9				
85.00		0.3750	38.378	45.231	8253.2	16.63	102.34	65	82	778.0				
87.50	Bot - Section 3	0.3750	37.963	44.737	7985.7	16.44	101.23	65	82	382.7				
90.00		0.3750	37.548	44.243	7724.1	16.24	100.13	65	82	699.7				
90.50	RB9	0.3750	37.465	44.144	7672.5	16.21	99.91	65	82	139.0	6.00	1776.8	18.0	10.2
91.92	RB10	0.3750	37.229	43.864	7527.1	16.09	99.28	65	82	393.1	22.88	5168.4	3258.8	110.5
92.25	Top - Section 2	0.3125	37.799	37.181	6601.2	19.92	120.96	65	78	91.0	22.88	5153.6	3249.8	25.7
95.00		0.3125	37.343	36.728	6362.9	19.66	119.50	65	78	345.8	22.88	5003.9	3175.0	214.1
100.00		0.3125	36.512	35.904	5944.5	19.19	116.84	65	79	617.9	22.88	4787.5	3041.3	389.2
105.00		0.3125	35.682	35.081	5544.9	18.72	114.18	65	79	603.9	22.88	4576.0	2910.5	389.2
105.50	RT9	0.3125	35.599	34.999	5505.9	18.68	113.92	65	79	59.6	16.88	2879.6	2879.6	28.7
105.58	RT10	0.3125	35.586	34.986	5499.7	18.67	113.88	65	79	9.5	16.88	2877.5	2877.5	4.6
110.00		0.3125	34.852	34.258	5163.6	18.25	111.53	65	80	520.7				
115.00		0.3125	34.022	33.434	4800.1	17.79	108.87	65	80	575.9				
120.00		0.3125	33.192	32.611	4454.2	17.32	106.21	65	81	561.8				
125.00		0.3125	32.362	31.788	4125.2	16.85	103.56	65	82	547.8				
130.00		0.3125	31.532	30.964	3812.9	16.38	100.90	65	82	533.8				
132.50	Bot - Section 4	0.3125	31.117	30.553	3662.8	16.15	99.57	65	82	261.7				
135.00		0.3125	30.702	30.141	3516.8	15.91	98.24	65	83	442.1				
136.50	Top - Section 3	0.2188	30.890	21.300	2531.6	23.48	141.18	65	74	262.4				
140.00		0.2188	30.309	20.896	2390.4	23.01	138.52	65	74	251.3				
145.00		0.2188	29.479	20.320	2197.9	22.35	134.73	65	75	350.6				

Increment Length: **5 (ft)**

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing Area (in^2)	Additional Reinforcing Ixp (in^4)	Additional Reinforcing Iyp (in^4)	Additional Reinforcing Weight (lb)
150.00		0.2188	28.649	19.743	2016.1	21.68	130.94	65	76	340.8				
155.00		0.2188	27.819	19.167	1844.6	21.01	127.14	65	77	331.0				
158.00		0.2188	27.321	18.821	1746.6	20.61	124.87	65	77	193.9				
160.00		0.2188	26.988	18.590	1683.1	20.34	123.35	65	77	127.3				
165.00		0.2188	26.158	18.014	1531.4	19.67	119.55	65	78	311.4				
168.00		0.2188	25.660	17.668	1444.8	19.27	117.28	65	79	182.1				
168.50		0.2188	25.577	17.610	1430.7	19.20	116.90	65	79	30.0				
170.00		0.2188	25.328	17.437	1389.0	19.00	115.76	65	79	89.4				
175.00		0.2188	24.498	16.861	1255.7	18.33	111.97	65	80	291.8				
178.00	Top - Section 4	0.2188	24.000	16.515	1180.0	17.93	109.69	65	80	170.4				
178.00	Bot - Section 5	0.1875	24.000	14.171	1015.2	20.92	128.00	65	77					
180.00		0.1875	24.000	14.171	1015.2	21.16	128.00	65	77	96.4				
184.00		0.1875	24.000	14.171	1015.2	21.16	128.00	65	77	192.9				
185.00		0.1875	24.000	14.171	1015.2	21.16	128.00	65	77	48.2				
187.00		0.1875	24.000	14.171	1015.2	21.16	128.00	65	77	96.4				
188.00		0.1875	24.000	14.171	1015.2	21.16	128.00	65	77	48.2				
									Total Weight	**28148.4**				**7255.6**

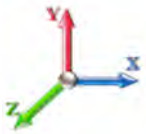
Wind Loading - Shaft

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 10	

Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1	1.00	0.85	19.450	21.40	391.54	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
0.25	RB2	1.00	0.85	19.450	21.40	391.22	0.650	0.000	0.25	1.094	0.71	24.3	0.0	72.7
1.00	RT1 RB3 RB4	1.00	0.85	19.450	21.40	390.28	0.650	0.000	0.75	3.277	2.13	72.9	0.0	217.7
5.00		1.00	0.85	19.450	21.40	385.26	0.650	0.000	4.00	17.344	11.27	385.9	0.0	1152.2
10.00		1.00	0.85	19.450	21.40	378.98	0.650	0.000	5.00	21.364	13.89	475.4	0.0	1419.1
15.00		1.00	0.85	19.450	21.40	372.69	0.650	0.000	5.00	21.013	13.66	467.6	0.0	1395.6
18.25	RT4	1.00	0.88	20.244	22.27	376.05	0.650	0.000	3.25	13.470	8.76	311.9	0.0	894.5
20.00		1.00	0.90	20.638	22.70	377.43	0.650	0.000	1.75	7.192	4.67	169.8	0.0	477.5
21.00	RT3 RB5	1.00	0.91	20.851	22.94	378.07	0.650	0.000	1.00	4.090	2.66	97.6	0.0	271.6
25.00		1.00	0.95	21.630	23.79	379.77	0.650	0.000	4.00	16.220	10.54	401.4	0.0	1076.9
28.25	RT5	1.00	0.97	22.194	24.41	380.33	0.650	0.000	3.25	13.013	8.46	330.4	0.0	863.9
30.00		1.00	0.98	22.477	24.72	380.38	0.650	0.000	1.75	6.946	4.51	178.6	0.0	461.1
32.83	RT2	1.00	1.00	22.907	25.20	380.15	0.650	0.000	2.83	11.141	7.24	292.0	0.0	739.5
35.00		1.00	1.01	23.218	25.54	379.74	0.650	0.000	2.17	8.467	5.50	224.9	0.0	561.9
40.00		1.00	1.04	23.880	26.27	378.15	0.650	0.000	5.00	19.257	12.52	526.1	0.0	1277.9
43.25	Bot - Section 2	1.00	1.06	24.276	26.70	376.71	0.650	0.000	3.25	12.329	8.01	342.4	0.0	818.0
45.00		1.00	1.07	24.479	26.93	375.82	0.650	0.000	1.75	6.688	4.35	187.3	0.0	817.3
47.75	RB6	1.00	1.08	24.787	27.27	374.28	0.650	0.000	2.75	10.423	6.77	295.6	0.0	1273.5
48.92	RB7	1.00	1.09	24.914	27.41	373.57	0.650	0.000	1.17	4.402	2.86	125.5	0.0	537.8
49.00	Top - Section 1	1.00	1.09	24.922	27.41	373.52	0.650	0.000	0.08	0.300	0.20	8.6	0.0	36.7
50.00		1.00	1.09	25.029	27.53	379.33	0.650	0.000	1.00	3.746	2.44	107.3	0.0	213.3
55.00		1.00	1.12	25.536	28.09	375.95	0.650	0.000	5.00	18.520	12.04	541.0	0.0	1054.6
60.00		1.00	1.14	26.008	28.61	372.15	0.650	0.000	5.00	18.169	11.81	540.6	0.0	1034.4
65.00	RT6 RB8	1.00	1.16	26.450	29.09	367.97	0.650	0.000	5.00	17.818	11.58	539.1	0.0	1014.2
70.00		1.00	1.17	26.866	29.55	363.47	0.650	0.000	5.00	17.467	11.35	536.8	0.0	994.1
72.25	RT8	1.00	1.18	27.045	29.75	361.35	0.650	0.000	2.25	7.745	5.03	239.6	0.0	440.8
75.00		1.00	1.19	27.259	29.98	358.68	0.650	0.000	2.75	9.370	6.09	292.2	0.0	533.1
76.83	RT7	1.00	1.20	27.398	30.14	356.87	0.650	0.000	1.83	6.176	4.01	193.6	0.0	351.4
80.00		1.00	1.21	27.632	30.39	353.64	0.650	0.000	3.17	10.588	6.88	334.7	0.0	602.3
85.00		1.00	1.22	27.987	30.79	348.37	0.650	0.000	5.00	16.413	10.67	525.5	0.0	933.6
87.50	Bot - Section 3	1.00	1.23	28.158	30.97	345.66	0.650	0.000	2.50	8.075	5.25	260.1	0.0	459.2
90.00		1.00	1.24	28.325	31.16	342.89	0.650	0.000	2.50	8.119	5.28	263.1	0.0	839.6
90.50	RB9	1.00	1.24	28.359	31.19	342.33	0.650	0.000	0.50	1.613	1.05	52.3	0.0	166.8
91.92	RB10	1.00	1.24	28.452	31.30	340.74	0.650	0.000	1.42	4.563	2.97	148.5	0.0	471.7
92.25	Top - Section 2	1.00	1.24	28.473	31.32	340.36	0.650	0.000	0.33	1.056	0.69	34.4	0.0	109.2
95.00		1.00	1.25	28.650	31.51	342.96	0.650	0.000	2.75	8.743	5.68	286.5	0.0	415.0
100.00		1.00	1.27	28.961	31.86	337.16	0.650	0.000	5.00	15.624	10.16	517.6	0.0	741.5
105.00		1.00	1.28	29.260	32.19	331.19	0.650	0.000	5.00	15.273	9.93	511.2	0.0	724.6
105.50	RT9	1.00	1.28	29.289	32.22	330.58	0.650	0.000	0.50	1.508	0.98	50.5	0.0	71.5
105.58	RT10	1.00	1.28	29.294	32.22	330.49	0.650	0.000	0.08	0.241	0.16	8.1	0.0	11.4
110.00		1.00	1.29	29.548	32.50	325.07	0.650	0.000	4.42	13.172	8.56	445.3	0.0	624.9
115.00		1.00	1.30	29.826	32.81	318.82	0.650	0.000	5.00	14.570	9.47	497.1	0.0	691.0
120.00		1.00	1.32	30.094	33.10	312.43	0.650	0.000	5.00	14.219	9.24	489.5	0.0	674.2
125.00		1.00	1.33	30.354	33.39	305.93	0.650	0.000	5.00	13.868	9.01	481.6	0.0	657.4
130.00		1.00	1.34	30.605	33.67	299.32	0.650	0.000	5.00	13.516	8.79	473.2	0.0	640.6
132.50	Bot - Section 4	1.00	1.34	30.728	33.80	295.97	0.650	0.000	2.50	6.627	4.31	232.9	0.0	314.0
135.00		1.00	1.35	30.850	33.93	292.60	0.650	0.000	2.50	6.631	4.31	234.0	0.0	530.5

Wind Loading - Shaft

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 11	

136.50 Top - Section 3	1.00	1.35	30.921	34.01	290.56	0.650	0.000	1.50	3.937	2.56	139.3	0.0	314.8
140.00	1.00	1.36	31.087	34.20	289.96	0.650	0.000	3.50	9.063	5.89	322.3	0.0	301.5
145.00	1.00	1.37	31.317	34.45	283.07	0.650	0.000	5.00	12.648	8.22	453.1	0.0	420.7
150.00	1.00	1.38	31.541	34.70	276.08	0.650	0.000	5.00	12.297	7.99	443.7	0.0	409.0
155.00	1.00	1.39	31.760	34.94	269.01	0.650	0.000	5.00	11.946	7.76	434.0	0.0	397.2
158.00 Appurtenance(s)	1.00	1.39	31.888	35.08	264.72	0.650	0.000	3.00	6.999	4.55	255.3	0.0	232.7
160.00	1.00	1.40	31.973	35.17	261.85	0.650	0.000	2.00	4.596	2.99	168.1	0.0	152.8
165.00	1.00	1.41	32.181	35.40	254.62	0.650	0.000	5.00	11.243	7.31	413.9	0.0	373.7
168.00 Appurtenance(s)	1.00	1.41	32.303	35.53	250.25	0.650	0.000	3.00	6.577	4.28	243.1	0.0	218.5
168.50 Appurtenance(s)	1.00	1.41	32.323	35.56	249.52	0.650	0.000	0.50	1.084	0.70	40.1	0.0	36.0
170.00	1.00	1.42	32.384	35.62	247.32	0.650	0.000	1.50	3.231	2.10	119.7	0.0	107.3
175.00	1.00	1.42	32.582	35.84	239.94	0.650	0.000	5.00	10.541	6.85	392.9	0.0	350.1
178.00 Top - Section 4	1.00	1.43	32.699	35.97	235.48	0.650	0.000	3.00	6.156	4.00	230.3	0.0	204.4
180.00	1.00	1.43	32.776	36.05	235.76	0.650	0.000	2.00	4.062	2.64	152.3	0.0	115.7
184.00 Appurtenance(s)	1.00	1.44	32.928	36.22	236.31	0.650	0.000	4.00	8.123	5.28	306.0	0.0	231.5
185.00	1.00	1.44	32.965	36.26	236.44	0.650	0.000	1.00	2.031	1.32	76.6	0.0	57.9
187.00 Appurtenance(s)	1.00	1.44	33.040	36.34	236.71	0.650	0.000	2.00	4.062	2.64	153.5	0.0	115.7
188.00	1.00	1.45	33.077	36.38	236.84	0.650	0.000	1.00	2.031	1.32	76.8	0.0	57.9
							Totals:	**188.00**			**18,175.6**		**33,778.1**

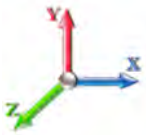
Discrete Appurtenance Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 12	

Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	187.00	Collar Mount (3-Sided)	1	33.040	36.344	1.00	1.00	2.50	264.00	0.000	0.000	145.38	0.00	0.00
2	187.00	AIR6449 B41	3	33.040	36.344	0.53	0.75	9.03	370.80	0.000	0.000	524.86	0.00	0.00
3	187.00	RRUS 4415 B25	3	33.040	36.344	0.38	0.75	1.84	165.60	0.000	0.000	107.29	0.00	0.00
4	187.00	PRK-1245 (kicker kit)	1	33.040	36.344	0.75	0.75	7.13	557.89	0.000	0.000	414.32	0.00	0.00
5	187.00	Ericsson Radio 4449 B71	3	33.040	36.344	0.38	0.75	2.81	266.40	0.000	0.000	163.55	0.00	0.00
6	187.00	Ericsson KRY 112 114-1	12	33.040	36.344	0.38	0.75	1.84	158.40	0.000	0.000	107.29	0.00	0.00
7	187.00	Kathrein 782 11054-Smart	3	33.040	36.344	0.38	0.75	0.25	6.48	0.000	0.000	14.39	0.00	0.00
8	187.00	Ericsson	3	33.040	36.344	0.65	0.75	12.60	475.92	0.000	0.000	732.51	0.00	0.00
9	187.00	RFS	3	33.040	36.344	0.52	0.75	28.73	460.80	0.000	0.000	1670.54	0.00	0.00
10	184.00	Platform w/ Hand Rail	1	32.928	36.220	1.00	1.00	32.00	1920.00	0.000	0.000	1854.49	0.00	0.00
11	168.50	Low Profile Platform	1	32.323	35.556	1.00	1.00	22.00	1680.00	0.000	0.000	1251.56	0.00	0.00
12	168.00	APXV9ERR18-C-A20	1	32.303	35.533	0.65	0.80	5.20	74.40	0.000	0.000	295.46	0.00	0.00
13	168.00	ACU-A20-N	4	32.303	35.533	0.40	0.80	0.22	4.80	0.000	0.000	12.74	0.00	0.00
14	168.00	TD-RRH8x20-25	3	32.303	35.533	0.40	0.80	3.66	252.00	0.000	0.000	208.08	0.00	0.00
15	168.00	800 MHz RRH	3	32.303	35.533	0.40	0.80	3.00	194.40	0.000	0.000	170.56	0.00	0.00
16	168.00	1900 MHz RRH	3	32.303	35.533	0.40	0.80	3.00	158.40	0.000	0.000	170.56	0.00	0.00
17	168.00	800 MHz Filters	3	32.303	35.533	0.40	0.80	3.00	194.40	0.000	0.000	170.56	0.00	0.00
18	168.00	APXVSPP18-C-A20	2	32.303	35.533	0.65	0.80	10.39	136.80	0.000	0.000	590.93	0.00	0.00
19	168.00	APXVTM14-C-120	3	32.303	35.533	0.62	0.80	11.87	201.60	0.000	0.000	674.76	0.00	0.00
20	158.00	Ericsson RRUS-A2 RRU	3	31.888	35.077	0.38	0.75	2.09	75.96	0.000	0.000	117.44	0.00	0.00
21	158.00	Powerwave LGP21401	6	31.888	35.077	0.38	0.75	2.83	126.00	0.000	0.000	159.11	0.00	0.00
22	158.00	Raycap DC6-48-60-18-8F	2	31.888	35.077	0.38	0.75	1.10	76.32	0.000	0.000	61.88	0.00	0.00
23	158.00	800 10121	3	31.888	35.077	0.58	0.75	9.04	158.76	0.000	0.000	507.26	0.00	0.00
24	158.00	HPA-65R-BUU-H8	3	31.888	35.077	0.58	0.75	22.78	244.80	0.000	0.000	1278.49	0.00	0.00
25	158.00	Kathrein 860-10025 RET	6	31.888	35.077	0.38	0.75	0.36	8.35	0.000	0.000	20.20	0.00	0.00
26	158.00	Ericsson RRUS 4415 B25	3	31.888	35.077	0.38	0.75	1.84	165.60	0.000	0.000	103.55	0.00	0.00
27	158.00	800 10966	6	31.888	35.077	0.53	0.75	45.72	825.12	0.000	0.000	2565.99	0.00	0.00
28	158.00	Ericsson 8843 B2 B66A	3	31.888	35.077	0.38	0.75	1.84	259.20	0.000	0.000	103.55	0.00	0.00
29	158.00	Ericsson 4449 B5 B12	3	31.888	35.077	0.38	0.75	1.86	262.80	0.000	0.000	104.18	0.00	0.00
30	158.00	Raycap DC6-48-60-0-8C	1	31.888	35.077	1.00	1.00	4.78	31.44	0.000	0.000	268.27	0.00	0.00
31	158.00	Plateform Mount	1	31.888	35.077	1.00	1.00	44.30	2563.91	0.000	0.000	2486.27	0.00	0.00
							Totals:		**12,341.35**			**17,056.01**		

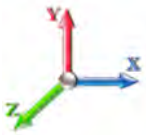
Total Applied Force Summary

Structure:	CT46124-A-SBA		**Code:**	EIA/TIA-222-G	12/30/2020
Site Name:	Enfield-Moody Rd.		**Exposure:**	C	
Height:	188.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 13

Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
0.25		24.35	81.25	0.00	0.00
1.00		72.92	243.39	0.00	0.00
5.00		385.93	1289.15	0.00	0.00
10.00		475.37	1590.26	0.00	0.00
15.00		467.56	1566.73	0.00	0.00
18.25		311.95	1005.75	0.00	0.00
20.00		169.79	537.44	0.00	0.00
21.00		97.56	305.81	0.00	0.00
25.00		401.37	1213.84	0.00	0.00
28.25		330.41	975.16	0.00	0.00
30.00		178.60	520.97	0.00	0.00
32.83		291.97	836.38	0.00	0.00
35.00		224.89	636.21	0.00	0.00
40.00		526.07	1449.05	0.00	0.00
43.25		342.38	929.27	0.00	0.00
45.00		187.30	877.19	0.00	0.00
47.75		295.55	1367.62	0.00	0.00
48.92		125.47	577.85	0.00	0.00
49.00		8.56	39.42	0.00	0.00
50.00		107.26	247.57	0.00	0.00
55.00		541.04	1225.72	0.00	0.00
60.00		540.59	1205.55	0.00	0.00
65.00		539.15	1185.38	0.00	0.00
70.00		536.83	1165.21	0.00	0.00
72.25		239.64	517.76	0.00	0.00
75.00		292.20	627.27	0.00	0.00
76.83		193.59	414.04	0.00	0.00
80.00		334.69	710.82	0.00	0.00
85.00		525.49	1104.69	0.00	0.00
87.50		260.11	544.78	0.00	0.00
90.00		263.10	925.17	0.00	0.00
90.50		52.34	183.93	0.00	0.00
91.92		148.51	520.33	0.00	0.00
92.25		34.41	120.49	0.00	0.00
95.00		286.55	509.09	0.00	0.00
100.00		517.63	912.59	0.00	0.00
105.00		511.22	895.78	0.00	0.00
105.50		50.53	88.65	0.00	0.00
105.58		8.07	14.17	0.00	0.00
110.00		445.26	776.14	0.00	0.00
115.00		497.14	862.16	0.00	0.00
120.00		489.52	845.35	0.00	0.00
125.00		481.55	828.54	0.00	0.00
130.00		473.25	811.73	0.00	0.00
132.50		232.94	399.56	0.00	0.00
135.00		234.03	616.03	0.00	0.00

Total Applied Force Summary

Structure:	CT46124-A-SBA		**Code:**	EIA/TIA-222-G	12/30/2020
Site Name:	Enfield-Moody Rd.		**Exposure:**	C	
Height:	188.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 14

136.50		139.25	366.19	0.00	0.00
140.00		322.29	421.31	0.00	0.00
145.00		453.14	591.87	0.00	0.00
150.00		443.71	580.10	0.00	0.00
155.00		434.02	568.33	0.00	0.00
158.00	(40) attachments	8031.51	5133.61	0.00	0.00
160.00		168.09	188.72	0.00	0.00
165.00		413.91	463.55	0.00	0.00
168.00	(22) attachments	2536.72	1489.28	0.00	0.00
168.50	(1) attachments	1291.64	1723.67	0.00	0.00
170.00		119.69	130.30	0.00	0.00
175.00		392.89	426.70	0.00	0.00
178.00		230.27	250.37	0.00	0.00
180.00		152.30	146.36	0.00	0.00
184.00	(1) attachments	2160.49	2212.72	0.00	0.00
185.00		76.59	73.18	0.00	0.00
187.00	(32) attachments	4033.65	2872.65	0.00	0.00
188.00		76.85	57.86	0.00	0.00
	Totals:	**35,231.60**	**51,998.01**	**0.00**	**0.00**

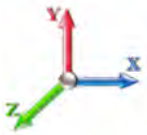
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 15	

Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
0.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.048	0.000	19.450	0.00	0.00
1.00	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.16	0.00	0.048	0.000	19.450	0.00	0.00
5.00	1.25" Reinforcing	Yes	4.00	0.000	2.50	0.83	0.00	0.048	0.000	19.450	0.00	0.00
10.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.049	0.000	19.450	0.00	0.00
15.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.050	0.000	19.450	0.00	0.00
18.25	1.25" Reinforcing	Yes	3.25	0.000	2.50	0.68	0.00	0.050	0.000	20.244	0.00	0.00
20.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.051	0.000	20.638	0.00	0.00
21.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.051	0.000	20.851	0.00	0.00
25.00	1.25" Reinforcing	Yes	4.00	0.000	2.50	0.83	0.00	0.051	0.000	21.630	0.00	0.00
28.25	1.25" Reinforcing	Yes	3.25	0.000	2.50	0.68	0.00	0.052	0.000	22.194	0.00	0.00
30.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.052	0.000	22.477	0.00	0.00
32.83	1.25" Reinforcing	Yes	2.83	0.000	2.50	0.59	0.00	0.053	0.000	22.907	0.00	0.00
35.00	1.25" Reinforcing	Yes	2.17	0.000	2.50	0.45	0.00	0.053	0.000	23.218	0.00	0.00
40.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.005	0.000	23.880	0.00	0.00
47.75	1.25" Reinforcing	Yes	1.25	0.000	2.50	0.26	0.00	0.025	0.000	24.787	0.00	0.00
48.92	1.25" Reinforcing	Yes	1.17	0.000	2.50	0.24	0.00	0.056	0.000	24.914	0.00	0.00
49.00	1.25" Reinforcing	Yes	0.08	0.000	2.50	0.02	0.00	0.056	0.000	24.922	0.00	0.00
50.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.056	0.000	25.029	0.00	0.00
55.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.056	0.000	25.536	0.00	0.00
60.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.057	0.000	26.008	0.00	0.00
65.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.058	0.000	26.450	0.00	0.00
70.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.060	0.000	26.866	0.00	0.00
72.25	1.25" Reinforcing	Yes	2.25	0.000	2.50	0.47	0.00	0.061	0.000	27.045	0.00	0.00
75.00	1.25" Reinforcing	Yes	2.75	0.000	2.50	0.57	0.00	0.061	0.000	27.259	0.00	0.00
76.83	1.25" Reinforcing	Yes	1.83	0.000	2.50	0.38	0.00	0.062	0.000	27.398	0.00	0.00
80.00	1.25" Reinforcing	Yes	2.42	0.000	2.50	0.50	0.00	0.048	0.000	27.632	0.00	0.00
90.50	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.033	0.000	28.359	0.00	0.00
91.92	1.25" Reinforcing	Yes	1.42	0.000	2.50	0.30	0.00	0.066	0.000	28.452	0.00	0.00
92.25	1.25" Reinforcing	Yes	0.33	0.000	2.50	0.07	0.00	0.066	0.000	28.473	0.00	0.00
95.00	1.25" Reinforcing	Yes	2.75	0.000	2.50	0.57	0.00	0.066	0.000	28.650	0.00	0.00
100.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.067	0.000	28.961	0.00	0.00
105.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.068	0.000	29.260	0.00	0.00
105.50	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.069	0.000	29.289	0.00	0.00
105.58	1.25" Reinforcing	Yes	0.08	0.000	2.50	0.02	0.00	0.069	0.000	29.294	0.00	0.00
110.00	1.25" Reinforcing	Yes	1.67	0.000	2.50	0.35	0.00	0.026	0.000	29.548	0.00	0.00
									Totals:		**0.0**	**0.0**

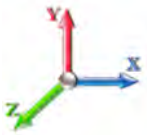
Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 16	

Load Case: 1.2D + 1.6W 97 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 30

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-51.99	-35.24	0.00	-4844.9	0.00	4844.94	5035.03	2517.52	10606.9	5311.37	0.00	0.000	0.000	0.834
0.25	-51.90	-35.23	0.00	-4836.1	0.00	4836.13	5032.22	2516.11	10592.3	5304.07	0.00	-0.013	0.000	0.617
1.00	-51.60	-35.24	0.00	-4809.7	0.00	4809.71	5023.77	2511.88	10548.7	5282.19	0.00	-0.042	0.000	0.616
5.00	-50.21	-35.01	0.00	-4668.7	0.00	4668.74	4978.38	2489.19	10316.4	5165.91	0.11	-0.196	0.000	0.608
10.00	-48.50	-34.69	0.00	-4493.7	0.00	4493.71	4920.91	2460.46	10028.2	5021.57	0.41	-0.388	0.000	0.599
15.00	-46.84	-34.34	0.00	-4320.2	0.00	4320.29	4862.63	2431.31	9742.31	4878.39	0.92	-0.581	0.000	0.589
18.25	-45.78	-34.09	0.00	-4208.7	0.00	4208.70	4824.31	2412.15	9557.73	4785.97	1.36	-0.709	0.000	0.654
20.00	-45.21	-33.97	0.00	-4149.0	0.00	4149.03	4803.53	2401.76	9458.77	4736.42	1.64	-0.786	0.000	0.650
21.00	-44.84	-33.95	0.00	-4115.0	0.00	4115.07	4791.61	2395.81	9402.36	4708.17	1.81	-0.831	0.000	0.661
25.00	-43.53	-33.66	0.00	-3979.2	0.00	3979.26	4743.61	2371.81	9177.73	4595.68	2.58	-1.010	0.000	0.652
28.25	-42.50	-33.39	0.00	-3869.8	0.00	3869.88	4704.23	2352.11	8996.42	4504.89	3.32	-1.158	0.000	0.675
30.00	-41.92	-33.28	0.00	-3811.4	0.00	3811.45	4682.88	2341.44	8899.25	4456.24	3.76	-1.241	0.000	0.671
32.83	-41.02	-33.06	0.00	-3717.2	0.00	3717.26	4648.14	2324.07	8742.80	4377.90	4.54	-1.376	0.000	0.664
32.83	-41.02	-33.06	0.00	-3717.2	0.00	3717.26	4648.14	2324.07	8742.80	4377.90	4.54	-1.376	0.000	0.664
35.00	-40.27	-32.96	0.00	-3645.5	0.00	3645.53	4621.33	2310.66	8623.42	4318.12	5.19	-1.480	0.000	0.853
40.00	-38.69	-32.57	0.00	-3480.7	0.00	3480.72	4558.96	2279.48	8350.33	4181.37	6.90	-1.787	0.000	0.841
43.25	-37.69	-32.30	0.00	-3374.8	0.00	3374.88	4517.98	2258.99	8174.32	4093.24	8.19	-1.990	0.000	0.833
45.00	-36.74	-32.17	0.00	-3318.3	0.00	3318.36	4495.78	2247.89	8080.06	4046.03	8.94	-2.101	0.000	0.829
47.75	-35.31	-31.90	0.00	-3229.9	0.00	3229.90	4460.68	2230.34	7932.64	3972.22	10.20	-2.274	0.000	0.820
48.92	-34.72	-31.77	0.00	-3192.5	0.00	3192.58	4445.67	2222.84	7870.19	3940.94	10.76	-2.349	0.000	0.591
49.00	-34.67	-31.78	0.00	-3190.0	0.00	3190.03	3699.57	1849.78	6681.20	3345.56	10.80	-2.352	0.000	0.631
50.00	-34.34	-31.75	0.00	-3158.2	0.00	3158.26	3689.91	1844.95	6638.39	3324.13	11.30	-2.398	0.000	0.673
55.00	-33.01	-31.29	0.00	-2999.5	0.00	2999.52	3641.14	1820.57	6425.47	3217.51	13.94	-2.642	0.000	0.657
60.00	-31.70	-30.83	0.00	-2843.0	0.00	2843.05	3591.55	1795.77	6214.50	3111.87	16.84	-2.884	0.000	0.639
65.00	-30.42	-30.36	0.00	-2688.9	0.00	2688.90	3541.14	1770.57	6005.55	3007.24	19.99	-3.126	0.000	0.621
70.00	-29.20	-29.85	0.00	-2537.1	0.00	2537.11	3489.91	1744.96	5798.71	2903.67	23.39	-3.368	0.000	0.603
72.25	-28.63	-29.64	0.00	-2469.9	0.00	2469.96	3466.60	1733.30	5706.35	2857.41	25.00	-3.477	0.000	0.596
75.00	-27.96	-29.36	0.00	-2388.4	0.00	2388.46	3437.87	1718.94	5594.07	2801.19	27.04	-3.611	0.000	0.585
76.83	-27.50	-29.20	0.00	-2334.7	0.00	2334.73	3418.62	1709.31	5519.73	2763.97	28.44	-3.700	0.000	0.578
76.83	-27.50	-29.20	0.00	-2334.7	0.00	2334.73	3418.62	1709.31	5519.73	2763.97	28.44	-3.700	0.000	0.578
80.00	-26.69	-28.94	0.00	-2242.1	0.00	2242.17	3385.02	1692.51	5391.70	2699.86	30.95	-3.853	0.000	0.839
85.00	-25.49	-28.45	0.00	-2097.4	0.00	2097.49	3331.35	1665.67	5191.69	2599.71	35.17	-4.203	0.000	0.815
87.50	-24.88	-28.23	0.00	-2026.3	0.00	2026.37	3304.20	1652.10	5092.60	2550.09	37.41	-4.381	0.000	0.802
90.00	-23.93	-27.94	0.00	-1955.8	0.00	1955.80	3276.86	1638.43	4994.13	2500.78	39.75	-4.558	0.000	0.790
90.50	-23.72	-27.90	0.00	-1941.8	0.00	1941.83	3271.36	1635.68	4974.52	2490.96	40.23	-4.594	0.000	0.784
91.92	-23.18	-27.73	0.00	-1902.2	0.00	1902.21	3255.72	1627.86	4918.94	2463.13	41.61	-4.695	0.000	0.544
92.25	-23.03	-27.72	0.00	-1893.0	0.00	1893.06	2609.22	1304.61	4017.17	2011.57	41.94	-4.712	0.000	0.584
95.00	-22.45	-27.47	0.00	-1816.8	0.00	1816.83	2587.46	1293.73	3934.74	1970.29	44.69	-4.847	0.000	0.621
100.00	-21.46	-26.97	0.00	-1679.4	0.00	1679.48	2547.26	1273.63	3786.04	1895.83	49.90	-5.107	0.000	0.592
105.00	-20.55	-26.43	0.00	-1544.6	0.00	1544.62	2506.24	1253.12	3638.92	1822.16	55.38	-5.363	0.000	0.561
105.50	-20.46	-26.38	0.00	-1531.4	0.00	1531.40	2502.09	1251.04	3624.30	1814.84	55.94	-5.388	0.000	0.560
105.58	-20.40	-26.41	0.00	-1529.2	0.00	1529.29	2501.42	1250.71	3621.96	1813.67	56.03	-5.393	0.000	0.560
105.58	-20.40	-26.41	0.00	-1529.2	0.00	1529.29	2501.42	1250.71	3621.96	1813.67	56.03	-5.393	0.000	0.560
110.00	-19.53	-25.99	0.00	-1412.5	0.00	1412.57	2464.40	1232.20	3493.46	1749.33	61.12	-5.613	0.000	0.816
115.00	-18.56	-25.53	0.00	-1282.6	0.00	1282.60	2421.75	1210.87	3349.75	1677.36	67.19	-5.985	0.000	0.773
120.00	-17.62	-25.06	0.00	-1154.9	0.00	1154.95	2378.28	1189.14	3207.87	1606.32	73.64	-6.346	0.000	0.727
125.00	-16.70	-24.59	0.00	-1029.6	0.00	1029.63	2333.99	1167.00	3067.90	1536.23	80.46	-6.695	0.000	0.678
130.00	-15.85	-24.09	0.00	-906.68	0.00	906.68	2288.89	1144.45	2929.94	1467.15	87.63	-7.028	0.000	0.625

Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 17

132.50	-15.42	-23.85	0.00	-846.45	0.00	846.45	2266.03	1133.02	2861.73	1432.99	91.35	-7.192	0.000	0.598
135.00	-14.78	-23.58	0.00	-786.81	0.00	786.81	2239.33	1119.66	2789.52	1396.83	95.15	-7.351	0.000	0.570
136.50	-14.38	-23.43	0.00	-751.45	0.00	751.45	1414.34	707.17	1783.76	893.21	97.46	-7.444	0.000	0.853
140.00	-13.88	-23.13	0.00	-669.45	0.00	669.45	1397.90	698.95	1729.39	865.98	102.98	-7.650	0.000	0.784
145.00	-13.22	-22.68	0.00	-553.82	0.00	553.82	1373.73	686.86	1652.26	827.36	111.17	-8.014	0.000	0.680
150.00	-12.60	-22.22	0.00	-440.44	0.00	440.44	1348.73	674.37	1575.83	789.09	119.71	-8.336	0.000	0.569
155.00	-12.02	-21.75	0.00	-329.35	0.00	329.35	1322.92	661.46	1500.20	751.22	128.56	-8.607	0.000	0.449
158.00	-8.14	-13.05	0.00	-264.10	0.00	264.10	1307.05	653.52	1455.24	728.70	134.00	-8.745	0.000	0.369
160.00	-7.95	-12.87	0.00	-238.00	0.00	238.00	1296.30	648.15	1425.45	713.78	137.67	-8.826	0.000	0.340
165.00	-7.53	-12.41	0.00	-173.64	0.00	173.64	1268.86	634.43	1351.65	676.83	146.97	-9.000	0.000	0.263
168.00	-6.45	-9.67	0.00	-136.42	0.00	136.42	1252.00	626.00	1307.87	654.91	152.63	-9.087	0.000	0.214
168.50	-4.94	-8.13	0.00	-131.58	0.00	131.58	1249.16	624.58	1300.61	651.27	153.58	-9.100	0.000	0.206
170.00	-4.82	-8.00	0.00	-119.39	0.00	119.39	1240.60	620.30	1278.90	640.40	156.43	-9.137	0.000	0.190
175.00	-4.46	-7.55	0.00	-79.40	0.00	79.40	1211.52	605.76	1207.28	604.54	166.02	-9.239	0.000	0.135
178.00	-4.24	-7.28	0.00	-56.77	0.00	56.77	1193.69	596.84	1164.89	583.31	171.81	-9.286	0.000	0.101
178.00	-4.24	-7.28	0.00	-56.77	0.00	56.77	975.84	487.92	954.81	478.11	171.81	-9.286	0.000	0.123
180.00	-4.12	-7.11	0.00	-42.20	0.00	42.20	975.84	487.92	954.81	478.11	175.69	-9.309	0.000	0.093
184.00	-2.28	-4.62	0.00	-13.77	0.00	13.77	975.84	487.92	954.81	478.11	183.47	-9.341	0.000	0.031
185.00	-2.22	-4.53	0.00	-9.15	0.00	9.15	975.84	487.92	954.81	478.11	185.42	-9.344	0.000	0.022
187.00	-0.04	-0.09	0.00	-0.09	0.00	0.09	975.84	487.92	954.81	478.11	189.32	-9.347	0.000	0.000
188.00	0.00	-0.08	0.00	0.00	0.00	0.00	975.84	487.92	954.81	478.11	191.27	-9.347	0.000	0.000

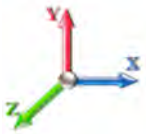
Wind Loading - Shaft

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 18	

Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1	1.00	0.85	19.450	21.40	391.54	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
0.25	RB2	1.00	0.85	19.450	21.40	391.22	0.650	0.000	0.25	1.094	0.71	24.3	0.0	54.5
1.00	RT1 RB3 RB4	1.00	0.85	19.450	21.40	390.28	0.650	0.000	0.75	3.277	2.13	72.9	0.0	163.3
5.00		1.00	0.85	19.450	21.40	385.26	0.650	0.000	4.00	17.344	11.27	385.9	0.0	864.2
10.00		1.00	0.85	19.450	21.40	378.98	0.650	0.000	5.00	21.364	13.89	475.4	0.0	1064.3
15.00		1.00	0.85	19.450	21.40	372.69	0.650	0.000	5.00	21.013	13.66	467.6	0.0	1046.7
18.25	RT4	1.00	0.88	20.244	22.27	376.05	0.650	0.000	3.25	13.470	8.76	311.9	0.0	670.9
20.00		1.00	0.90	20.638	22.70	377.43	0.650	0.000	1.75	7.192	4.67	169.8	0.0	358.2
21.00	RT3 RB5	1.00	0.91	20.851	22.94	378.07	0.650	0.000	1.00	4.090	2.66	97.6	0.0	203.7
25.00		1.00	0.95	21.630	23.79	379.77	0.650	0.000	4.00	16.220	10.54	401.4	0.0	807.7
28.25	RT5	1.00	0.97	22.194	24.41	380.33	0.650	0.000	3.25	13.013	8.46	330.4	0.0	647.9
30.00		1.00	0.98	22.477	24.72	380.38	0.650	0.000	1.75	6.946	4.51	178.6	0.0	345.8
32.83	RT2	1.00	1.00	22.907	25.20	380.15	0.650	0.000	2.83	11.141	7.24	292.0	0.0	554.6
35.00		1.00	1.01	23.218	25.54	379.74	0.650	0.000	2.17	8.467	5.50	224.9	0.0	421.5
40.00		1.00	1.04	23.880	26.27	378.15	0.650	0.000	5.00	19.257	12.52	526.1	0.0	958.4
43.25	Bot - Section 2	1.00	1.06	24.276	26.70	376.71	0.650	0.000	3.25	12.329	8.01	342.4	0.0	613.5
45.00		1.00	1.07	24.479	26.93	375.82	0.650	0.000	1.75	6.688	4.35	187.3	0.0	613.0
47.75	RB6	1.00	1.08	24.787	27.27	374.28	0.650	0.000	2.75	10.423	6.77	295.6	0.0	955.1
48.92	RB7	1.00	1.09	24.914	27.41	373.57	0.650	0.000	1.17	4.402	2.86	125.5	0.0	403.4
49.00	Top - Section 1	1.00	1.09	24.922	27.41	373.52	0.650	0.000	0.08	0.300	0.20	8.6	0.0	27.5
50.00		1.00	1.09	25.029	27.53	379.33	0.650	0.000	1.00	3.746	2.44	107.3	0.0	160.0
55.00		1.00	1.12	25.536	28.09	375.95	0.650	0.000	5.00	18.520	12.04	541.0	0.0	790.9
60.00		1.00	1.14	26.008	28.61	372.15	0.650	0.000	5.00	18.169	11.81	540.6	0.0	775.8
65.00	RT6 RB8	1.00	1.16	26.450	29.09	367.97	0.650	0.000	5.00	17.818	11.58	539.1	0.0	760.7
70.00		1.00	1.17	26.866	29.55	363.47	0.650	0.000	5.00	17.467	11.35	536.8	0.0	745.6
72.25	RT8	1.00	1.18	27.045	29.75	361.35	0.650	0.000	2.25	7.745	5.03	239.6	0.0	330.6
75.00		1.00	1.19	27.259	29.98	358.68	0.650	0.000	2.75	9.370	6.09	292.2	0.0	399.9
76.83	RT7	1.00	1.20	27.398	30.14	356.87	0.650	0.000	1.83	6.176	4.01	193.6	0.0	263.6
80.00		1.00	1.21	27.632	30.39	353.64	0.650	0.000	3.17	10.588	6.88	334.7	0.0	451.7
85.00		1.00	1.22	27.987	30.79	348.37	0.650	0.000	5.00	16.413	10.67	525.5	0.0	700.2
87.50	Bot - Section 3	1.00	1.23	28.158	30.97	345.66	0.650	0.000	2.50	8.075	5.25	260.1	0.0	344.4
90.00		1.00	1.24	28.325	31.16	342.89	0.650	0.000	2.50	8.119	5.28	263.1	0.0	629.7
90.50	RB9	1.00	1.24	28.359	31.19	342.33	0.650	0.000	0.50	1.613	1.05	52.3	0.0	125.1
91.92	RB10	1.00	1.24	28.452	31.30	340.74	0.650	0.000	1.42	4.563	2.97	148.5	0.0	353.8
92.25	Top - Section 2	1.00	1.24	28.473	31.32	340.36	0.650	0.000	0.33	1.056	0.69	34.4	0.0	81.9
95.00		1.00	1.25	28.650	31.51	342.96	0.650	0.000	2.75	8.743	5.68	286.5	0.0	311.2
100.00		1.00	1.27	28.961	31.86	337.16	0.650	0.000	5.00	15.624	10.16	517.6	0.0	556.1
105.00		1.00	1.28	29.260	32.19	331.19	0.650	0.000	5.00	15.273	9.93	511.2	0.0	543.5
105.50	RT9	1.00	1.28	29.289	32.22	330.58	0.650	0.000	0.50	1.508	0.98	50.5	0.0	53.7
105.58	RT10	1.00	1.28	29.294	32.22	330.49	0.650	0.000	0.08	0.241	0.16	8.1	0.0	8.6
110.00		1.00	1.29	29.548	32.50	325.07	0.650	0.000	4.42	13.172	8.56	445.3	0.0	468.6
115.00		1.00	1.30	29.826	32.81	318.82	0.650	0.000	5.00	14.570	9.47	497.1	0.0	518.3
120.00		1.00	1.32	30.094	33.10	312.43	0.650	0.000	5.00	14.219	9.24	489.5	0.0	505.7
125.00		1.00	1.33	30.354	33.39	305.93	0.650	0.000	5.00	13.868	9.01	481.6	0.0	493.1
130.00		1.00	1.34	30.605	33.67	299.32	0.650	0.000	5.00	13.516	8.79	473.2	0.0	480.4
132.50	Bot - Section 4	1.00	1.34	30.728	33.80	295.97	0.650	0.000	2.50	6.627	4.31	232.9	0.0	235.5
135.00		1.00	1.35	30.850	33.93	292.60	0.650	0.000	2.50	6.631	4.31	234.0	0.0	397.8

Wind Loading - Shaft

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 19	

136.50 Top - Section 3	1.00	1.35	30.921	34.01	290.56	0.650	0.000	1.50	3.937	2.56	139.3	0.0	236.1
140.00	1.00	1.36	31.087	34.20	289.96	0.650	0.000	3.50	9.063	5.89	322.3	0.0	226.1
145.00	1.00	1.37	31.317	34.45	283.07	0.650	0.000	5.00	12.648	8.22	453.1	0.0	315.6
150.00	1.00	1.38	31.541	34.70	276.08	0.650	0.000	5.00	12.297	7.99	443.7	0.0	306.7
155.00	1.00	1.39	31.760	34.94	269.01	0.650	0.000	5.00	11.946	7.76	434.0	0.0	297.9
158.00 Appurtenance(s)	1.00	1.39	31.888	35.08	264.72	0.650	0.000	3.00	6.999	4.55	255.3	0.0	174.5
160.00	1.00	1.40	31.973	35.17	261.85	0.650	0.000	2.00	4.596	2.99	168.1	0.0	114.6
165.00	1.00	1.41	32.181	35.40	254.62	0.650	0.000	5.00	11.243	7.31	413.9	0.0	280.2
168.00 Appurtenance(s)	1.00	1.41	32.303	35.53	250.25	0.650	0.000	3.00	6.577	4.28	243.1	0.0	163.9
168.50 Appurtenance(s)	1.00	1.41	32.323	35.56	249.52	0.650	0.000	0.50	1.084	0.70	40.1	0.0	27.0
170.00	1.00	1.42	32.384	35.62	247.32	0.650	0.000	1.50	3.231	2.10	119.7	0.0	80.5
175.00	1.00	1.42	32.582	35.84	239.94	0.650	0.000	5.00	10.541	6.85	392.9	0.0	262.6
178.00 Top - Section 4	1.00	1.43	32.699	35.97	235.48	0.650	0.000	3.00	6.156	4.00	230.3	0.0	153.3
180.00	1.00	1.43	32.776	36.05	235.76	0.650	0.000	2.00	4.062	2.64	152.3	0.0	86.8
184.00 Appurtenance(s)	1.00	1.44	32.928	36.22	236.31	0.650	0.000	4.00	8.123	5.28	306.0	0.0	173.6
185.00	1.00	1.44	32.965	36.26	236.44	0.650	0.000	1.00	2.031	1.32	76.6	0.0	43.4
187.00 Appurtenance(s)	1.00	1.44	33.040	36.34	236.71	0.650	0.000	2.00	4.062	2.64	153.5	0.0	86.8
188.00	1.00	1.45	33.077	36.38	236.84	0.650	0.000	1.00	2.031	1.32	76.8	0.0	43.4
							Totals:	**188.00**			**18,175.6**		**25,333.6**

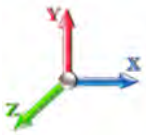
Discrete Appurtenance Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 20	

Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	187.00	Collar Mount (3-Sided)	1	33.040	36.344	1.00	1.00	2.50	198.00	0.000	0.000	145.38	0.00	0.00
2	187.00	AIR6449 B41	3	33.040	36.344	0.53	0.75	9.03	278.10	0.000	0.000	524.86	0.00	0.00
3	187.00	RRUS 4415 B25	3	33.040	36.344	0.38	0.75	1.84	124.20	0.000	0.000	107.29	0.00	0.00
4	187.00	PRK-1245 (kicker kit)	1	33.040	36.344	0.75	0.75	7.13	418.42	0.000	0.000	414.32	0.00	0.00
5	187.00	Ericsson Radio 4449 B71	3	33.040	36.344	0.38	0.75	2.81	199.80	0.000	0.000	163.55	0.00	0.00
6	187.00	Ericsson KRY 112 114-1	12	33.040	36.344	0.38	0.75	1.84	118.80	0.000	0.000	107.29	0.00	0.00
7	187.00	Kathrein 782 11054-Smart	3	33.040	36.344	0.38	0.75	0.25	4.86	0.000	0.000	14.39	0.00	0.00
8	187.00	Ericsson	3	33.040	36.344	0.65	0.75	12.60	356.94	0.000	0.000	732.51	0.00	0.00
9	187.00	RFS	3	33.040	36.344	0.52	0.75	28.73	345.60	0.000	0.000	1670.54	0.00	0.00
10	184.00	Platform w/ Hand Rail	1	32.928	36.220	1.00	1.00	32.00	1440.00	0.000	0.000	1854.49	0.00	0.00
11	168.50	Low Profile Platform	1	32.323	35.556	1.00	1.00	22.00	1260.00	0.000	0.000	1251.56	0.00	0.00
12	168.00	APXV9ERR18-C-A20	1	32.303	35.533	0.65	0.80	5.20	55.80	0.000	0.000	295.46	0.00	0.00
13	168.00	ACU-A20-N	4	32.303	35.533	0.40	0.80	0.22	3.60	0.000	0.000	12.74	0.00	0.00
14	168.00	TD-RRH8x20-25	3	32.303	35.533	0.40	0.80	3.66	189.00	0.000	0.000	208.08	0.00	0.00
15	168.00	800 MHz RRH	3	32.303	35.533	0.40	0.80	3.00	145.80	0.000	0.000	170.56	0.00	0.00
16	168.00	1900 MHz RRH	3	32.303	35.533	0.40	0.80	3.00	118.80	0.000	0.000	170.56	0.00	0.00
17	168.00	800 MHz Filters	3	32.303	35.533	0.40	0.80	3.00	145.80	0.000	0.000	170.56	0.00	0.00
18	168.00	APXVSPP18-C-A20	2	32.303	35.533	0.65	0.80	10.39	102.60	0.000	0.000	590.93	0.00	0.00
19	168.00	APXVTM14-C-120	3	32.303	35.533	0.62	0.80	11.87	151.20	0.000	0.000	674.76	0.00	0.00
20	158.00	Ericsson RRUS-A2 RRU	3	31.888	35.077	0.38	0.75	2.09	56.97	0.000	0.000	117.44	0.00	0.00
21	158.00	Powerwave LGP21401	6	31.888	35.077	0.38	0.75	2.83	94.50	0.000	0.000	159.11	0.00	0.00
22	158.00	Raycap DC6-48-60-18-8F	2	31.888	35.077	0.38	0.75	1.10	57.24	0.000	0.000	61.88	0.00	0.00
23	158.00	800 10121	3	31.888	35.077	0.58	0.75	9.04	119.07	0.000	0.000	507.26	0.00	0.00
24	158.00	HPA-65R-BUU-H8	3	31.888	35.077	0.58	0.75	22.78	183.60	0.000	0.000	1278.49	0.00	0.00
25	158.00	Kathrein 860-10025 RET	6	31.888	35.077	0.38	0.75	0.36	6.26	0.000	0.000	20.20	0.00	0.00
26	158.00	Ericsson RRUS 4415 B25	3	31.888	35.077	0.38	0.75	1.84	124.20	0.000	0.000	103.55	0.00	0.00
27	158.00	800 10966	6	31.888	35.077	0.53	0.75	45.72	618.84	0.000	0.000	2565.99	0.00	0.00
28	158.00	Ericsson 8843 B2 B66A	3	31.888	35.077	0.38	0.75	1.84	194.40	0.000	0.000	103.55	0.00	0.00
29	158.00	Ericsson 4449 B5 B12	3	31.888	35.077	0.38	0.75	1.86	197.10	0.000	0.000	104.18	0.00	0.00
30	158.00	Raycap DC6-48-60-0-8C	1	31.888	35.077	1.00	1.00	4.78	23.58	0.000	0.000	268.27	0.00	0.00
31	158.00	Plateform Mount	1	31.888	35.077	1.00	1.00	44.30	1922.93	0.000	0.000	2486.27	0.00	0.00
							Totals:		**9,256.01**			**17,056.01**		

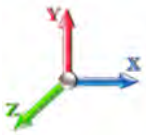
Total Applied Force Summary

Structure:	CT46124-A-SBA		**Code:**	EIA/TIA-222-G	12/30/2020
Site Name:	Enfield-Moody Rd.		**Exposure:**	C	
Height:	188.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 21

Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
0.25		24.35	60.94	0.00	0.00
1.00		72.92	182.54	0.00	0.00
5.00		385.93	966.86	0.00	0.00
10.00		475.37	1192.70	0.00	0.00
15.00		467.56	1175.04	0.00	0.00
18.25		311.95	754.31	0.00	0.00
20.00		169.79	403.08	0.00	0.00
21.00		97.56	229.36	0.00	0.00
25.00		401.37	910.38	0.00	0.00
28.25		330.41	731.37	0.00	0.00
30.00		178.60	390.72	0.00	0.00
32.83		291.97	627.28	0.00	0.00
35.00		224.89	477.16	0.00	0.00
40.00		526.07	1086.79	0.00	0.00
43.25		342.38	696.95	0.00	0.00
45.00		187.30	657.89	0.00	0.00
47.75		295.55	1025.72	0.00	0.00
48.92		125.47	433.39	0.00	0.00
49.00		8.56	29.57	0.00	0.00
50.00		107.26	185.67	0.00	0.00
55.00		541.04	919.29	0.00	0.00
60.00		540.59	904.16	0.00	0.00
65.00		539.15	889.03	0.00	0.00
70.00		536.83	873.90	0.00	0.00
72.25		239.64	388.32	0.00	0.00
75.00		292.20	470.45	0.00	0.00
76.83		193.59	310.53	0.00	0.00
80.00		334.69	533.12	0.00	0.00
85.00		525.49	828.52	0.00	0.00
87.50		260.11	408.58	0.00	0.00
90.00		263.10	693.88	0.00	0.00
90.50		52.34	137.94	0.00	0.00
91.92		148.51	390.25	0.00	0.00
92.25		34.41	90.37	0.00	0.00
95.00		286.55	381.82	0.00	0.00
100.00		517.63	684.44	0.00	0.00
105.00		511.22	671.83	0.00	0.00
105.50		50.53	66.49	0.00	0.00
105.58		8.07	10.63	0.00	0.00
110.00		445.26	582.11	0.00	0.00
115.00		497.14	646.62	0.00	0.00
120.00		489.52	634.01	0.00	0.00
125.00		481.55	621.40	0.00	0.00
130.00		473.25	608.79	0.00	0.00
132.50		232.94	299.67	0.00	0.00
135.00		234.03	462.02	0.00	0.00

Total Applied Force Summary

Structure:	CT46124-A-SBA		**Code:**	EIA/TIA-222-G	12/30/2020
Site Name:	Enfield-Moody Rd.		**Exposure:**	C	
Height:	188.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 22

136.50		139.25	274.64	0.00	0.00
140.00		322.29	315.99	0.00	0.00
145.00		453.14	443.91	0.00	0.00
150.00		443.71	435.08	0.00	0.00
155.00		434.02	426.25	0.00	0.00
158.00	(40) attachments	8031.51	3850.21	0.00	0.00
160.00		168.09	141.54	0.00	0.00
165.00		413.91	347.67	0.00	0.00
168.00	(22) attachments	2536.72	1116.96	0.00	0.00
168.50	(1) attachments	1291.64	1292.75	0.00	0.00
170.00		119.69	97.73	0.00	0.00
175.00		392.89	320.02	0.00	0.00
178.00		230.27	187.78	0.00	0.00
180.00		152.30	109.77	0.00	0.00
184.00	(1) attachments	2160.49	1659.54	0.00	0.00
185.00		76.59	54.88	0.00	0.00
187.00	(32) attachments	4033.65	2154.49	0.00	0.00
188.00		76.85	43.40	0.00	0.00
	Totals:	**35,231.60**	**38,998.50**	**0.00**	**0.00**

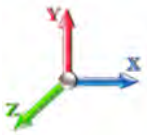
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 23	

Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
0.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.048	0.000	19.450	0.00	0.00
1.00	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.16	0.00	0.048	0.000	19.450	0.00	0.00
5.00	1.25" Reinforcing	Yes	4.00	0.000	2.50	0.83	0.00	0.048	0.000	19.450	0.00	0.00
10.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.049	0.000	19.450	0.00	0.00
15.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.050	0.000	19.450	0.00	0.00
18.25	1.25" Reinforcing	Yes	3.25	0.000	2.50	0.68	0.00	0.050	0.000	20.244	0.00	0.00
20.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.051	0.000	20.638	0.00	0.00
21.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.051	0.000	20.851	0.00	0.00
25.00	1.25" Reinforcing	Yes	4.00	0.000	2.50	0.83	0.00	0.051	0.000	21.630	0.00	0.00
28.25	1.25" Reinforcing	Yes	3.25	0.000	2.50	0.68	0.00	0.052	0.000	22.194	0.00	0.00
30.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.052	0.000	22.477	0.00	0.00
32.83	1.25" Reinforcing	Yes	2.83	0.000	2.50	0.59	0.00	0.053	0.000	22.907	0.00	0.00
35.00	1.25" Reinforcing	Yes	2.17	0.000	2.50	0.45	0.00	0.053	0.000	23.218	0.00	0.00
40.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.005	0.000	23.880	0.00	0.00
47.75	1.25" Reinforcing	Yes	1.25	0.000	2.50	0.26	0.00	0.025	0.000	24.787	0.00	0.00
48.92	1.25" Reinforcing	Yes	1.17	0.000	2.50	0.24	0.00	0.056	0.000	24.914	0.00	0.00
49.00	1.25" Reinforcing	Yes	0.08	0.000	2.50	0.02	0.00	0.056	0.000	24.922	0.00	0.00
50.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.056	0.000	25.029	0.00	0.00
55.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.056	0.000	25.536	0.00	0.00
60.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.057	0.000	26.008	0.00	0.00
65.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.058	0.000	26.450	0.00	0.00
70.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.060	0.000	26.866	0.00	0.00
72.25	1.25" Reinforcing	Yes	2.25	0.000	2.50	0.47	0.00	0.061	0.000	27.045	0.00	0.00
75.00	1.25" Reinforcing	Yes	2.75	0.000	2.50	0.57	0.00	0.061	0.000	27.259	0.00	0.00
76.83	1.25" Reinforcing	Yes	1.83	0.000	2.50	0.38	0.00	0.062	0.000	27.398	0.00	0.00
80.00	1.25" Reinforcing	Yes	2.42	0.000	2.50	0.50	0.00	0.048	0.000	27.632	0.00	0.00
90.50	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.033	0.000	28.359	0.00	0.00
91.92	1.25" Reinforcing	Yes	1.42	0.000	2.50	0.30	0.00	0.066	0.000	28.452	0.00	0.00
92.25	1.25" Reinforcing	Yes	0.33	0.000	2.50	0.07	0.00	0.066	0.000	28.473	0.00	0.00
95.00	1.25" Reinforcing	Yes	2.75	0.000	2.50	0.57	0.00	0.066	0.000	28.650	0.00	0.00
100.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.067	0.000	28.961	0.00	0.00
105.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.068	0.000	29.260	0.00	0.00
105.50	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.069	0.000	29.289	0.00	0.00
105.58	1.25" Reinforcing	Yes	0.08	0.000	2.50	0.02	0.00	0.069	0.000	29.294	0.00	0.00
110.00	1.25" Reinforcing	Yes	1.67	0.000	2.50	0.35	0.00	0.026	0.000	29.548	0.00	0.00
									Totals:		**0.0**	**0.0**

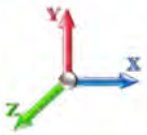
Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 24	

Load Case: 0.9D + 1.6W 97 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 30

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-38.99	-35.24	0.00	-4766.4	0.00	4766.45	5035.03	2517.52	10606.9	5311.37	0.00	0.000	0.000	0.818
0.25	-38.92	-35.23	0.00	-4757.6	0.00	4757.64	5032.22	2516.11	10592.3	5304.07	0.00	-0.013	0.000	0.605
1.00	-38.68	-35.21	0.00	-4731.2	0.00	4731.22	5023.77	2511.88	10548.7	5282.19	0.00	-0.042	0.000	0.604
5.00	-37.61	-34.94	0.00	-4590.3	0.00	4590.37	4978.38	2489.19	10316.4	5165.91	0.10	-0.193	0.000	0.596
10.00	-36.31	-34.58	0.00	-4415.6	0.00	4415.68	4920.91	2460.46	10028.2	5021.57	0.41	-0.382	0.000	0.587
15.00	-35.04	-34.20	0.00	-4242.7	0.00	4242.79	4862.63	2431.31	9742.31	4878.39	0.91	-0.572	0.000	0.577
18.25	-34.23	-33.94	0.00	-4131.6	0.00	4131.66	4824.31	2412.15	9557.73	4785.97	1.34	-0.696	0.000	0.641
20.00	-33.80	-33.80	0.00	-4072.2	0.00	4072.27	4803.53	2401.76	9458.77	4736.42	1.61	-0.773	0.000	0.637
21.00	-33.50	-33.76	0.00	-4038.4	0.00	4038.48	4791.61	2395.81	9402.36	4708.17	1.78	-0.816	0.000	0.647
25.00	-32.51	-33.44	0.00	-3903.4	0.00	3903.44	4743.61	2371.81	9177.73	4595.68	2.54	-0.993	0.000	0.638
28.25	-31.72	-33.15	0.00	-3794.7	0.00	3794.77	4704.23	2352.11	8996.42	4504.89	3.26	-1.137	0.000	0.660
30.00	-31.27	-33.03	0.00	-3736.7	0.00	3736.76	4682.88	2341.44	8899.25	4456.24	3.69	-1.219	0.000	0.656
32.83	-30.58	-32.78	0.00	-3643.2	0.00	3643.29	4648.14	2324.07	8742.80	4377.90	4.46	-1.351	0.000	0.650
32.83	-30.58	-32.78	0.00	-3643.2	0.00	3643.29	4648.14	2324.07	8742.80	4377.90	4.46	-1.351	0.000	0.650
35.00	-29.99	-32.65	0.00	-3572.1	0.00	3572.16	4621.33	2310.66	8623.42	4318.12	5.10	-1.453	0.000	0.834
40.00	-28.78	-32.22	0.00	-3408.9	0.00	3408.90	4558.96	2279.48	8350.33	4181.37	6.78	-1.754	0.000	0.822
43.25	-28.01	-31.93	0.00	-3304.1	0.00	3304.18	4517.98	2258.99	8174.32	4093.24	8.04	-1.952	0.000	0.814
45.00	-27.28	-31.79	0.00	-3248.3	0.00	3248.30	4495.78	2247.89	8080.06	4046.03	8.78	-2.061	0.000	0.809
47.75	-26.20	-31.51	0.00	-3160.8	0.00	3160.89	4460.68	2230.34	7932.64	3972.22	10.01	-2.230	0.000	0.800
48.92	-25.75	-31.38	0.00	-3124.0	0.00	3124.02	4445.67	2222.84	7870.19	3940.94	10.57	-2.303	0.000	0.577
49.00	-25.71	-31.38	0.00	-3121.5	0.00	3121.51	3699.57	1849.78	6681.20	3345.56	10.61	-2.307	0.000	0.616
50.00	-25.45	-31.33	0.00	-3090.1	0.00	3090.12	3689.91	1844.95	6638.39	3324.13	11.10	-2.352	0.000	0.657
55.00	-24.43	-30.86	0.00	-2933.4	0.00	2933.46	3641.14	1820.57	6425.47	3217.51	13.69	-2.590	0.000	0.641
60.00	-23.43	-30.37	0.00	-2779.1	0.00	2779.18	3591.55	1795.77	6214.50	3111.87	16.52	-2.827	0.000	0.624
65.00	-22.44	-29.88	0.00	-2627.3	0.00	2627.34	3541.14	1770.57	6005.55	3007.24	19.61	-3.064	0.000	0.606
70.00	-21.51	-29.36	0.00	-2477.9	0.00	2477.95	3489.91	1744.96	5798.71	2903.67	22.94	-3.300	0.000	0.588
72.25	-21.08	-29.14	0.00	-2411.9	0.00	2411.90	3466.60	1733.30	5706.35	2857.41	24.52	-3.407	0.000	0.581
75.00	-20.57	-28.86	0.00	-2331.7	0.00	2331.76	3437.87	1718.94	5594.07	2801.19	26.52	-3.537	0.000	0.570
76.83	-20.22	-28.69	0.00	-2278.9	0.00	2278.95	3418.62	1709.31	5519.73	2763.97	27.90	-3.624	0.000	0.563
76.83	-20.22	-28.69	0.00	-2278.9	0.00	2278.95	3418.62	1709.31	5519.73	2763.97	27.90	-3.624	0.000	0.563
80.00	-19.58	-28.40	0.00	-2188.0	0.00	2188.01	3385.02	1692.51	5391.70	2699.86	30.35	-3.773	0.000	0.816
85.00	-18.67	-27.91	0.00	-2045.9	0.00	2045.99	3331.35	1665.67	5191.69	2599.71	34.48	-4.115	0.000	0.793
87.50	-18.20	-27.67	0.00	-1976.2	0.00	1976.23	3304.20	1652.10	5092.60	2550.09	36.68	-4.288	0.000	0.781
90.00	-17.47	-27.39	0.00	-1907.0	0.00	1907.05	3276.86	1638.43	4994.13	2500.78	38.97	-4.461	0.000	0.768
90.50	-17.31	-27.35	0.00	-1893.3	0.00	1893.36	3271.36	1635.68	4974.52	2490.96	39.44	-4.496	0.000	0.763
91.92	-16.91	-27.18	0.00	-1854.5	0.00	1854.52	3255.72	1627.86	4918.94	2463.13	40.79	-4.595	0.000	0.529
92.25	-16.78	-27.16	0.00	-1845.5	0.00	1845.55	2609.22	1304.61	4017.17	2011.57	41.11	-4.611	0.000	0.568
95.00	-16.33	-26.90	0.00	-1770.8	0.00	1770.85	2587.46	1293.73	3934.74	1970.29	43.80	-4.743	0.000	0.604
100.00	-15.58	-26.40	0.00	-1636.3	0.00	1636.34	2547.26	1273.63	3786.04	1895.83	48.90	-4.997	0.000	0.575
105.00	-14.90	-25.86	0.00	-1504.3	0.00	1504.36	2506.24	1253.12	3638.92	1822.16	54.26	-5.245	0.000	0.545
105.50	-14.83	-25.81	0.00	-1491.4	0.00	1491.43	2502.09	1251.04	3624.30	1814.84	54.81	-5.270	0.000	0.544
105.58	-14.77	-25.83	0.00	-1489.3	0.00	1489.36	2501.42	1250.71	3621.96	1813.67	54.90	-5.274	0.000	0.544
105.58	-14.77	-25.83	0.00	-1489.3	0.00	1489.36	2501.42	1250.71	3621.96	1813.67	54.90	-5.274	0.000	0.544
110.00	-14.10	-25.40	0.00	-1375.1	0.00	1375.19	2464.40	1232.20	3493.46	1749.33	59.87	-5.489	0.000	0.792
115.00	-13.35	-24.93	0.00	-1248.1	0.00	1248.17	2421.75	1210.87	3349.75	1677.36	65.81	-5.851	0.000	0.750
120.00	-12.63	-24.45	0.00	-1123.5	0.00	1123.53	2378.28	1189.14	3207.87	1606.32	72.11	-6.202	0.000	0.705
125.00	-11.92	-23.97	0.00	-1001.2	0.00	1001.27	2333.99	1167.00	3067.90	1536.23	78.78	-6.542	0.000	0.657
130.00	-11.28	-23.48	0.00	-881.40	0.00	881.40	2288.89	1144.45	2929.94	1467.15	85.79	-6.866	0.000	0.606

Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 25

132.50	-10.94	-23.24	0.00	-822.70	0.00	822.70	2266.03	1133.02	2861.73	1432.99	89.42	-7.025	0.000	0.579
135.00	-10.47	-22.98	0.00	-764.59	0.00	764.59	2239.33	1119.66	2789.52	1396.83	93.13	-7.179	0.000	0.552
136.50	-10.15	-22.83	0.00	-730.13	0.00	730.13	1414.34	707.17	1783.76	893.21	95.39	-7.270	0.000	0.826
140.00	-9.77	-22.52	0.00	-650.22	0.00	650.22	1397.90	698.95	1729.39	865.98	100.79	-7.470	0.000	0.759
145.00	-9.26	-22.06	0.00	-537.64	0.00	537.64	1373.73	686.86	1652.26	827.36	108.78	-7.824	0.000	0.658
150.00	-8.78	-21.61	0.00	-427.32	0.00	427.32	1348.73	674.37	1575.83	789.09	117.12	-8.136	0.000	0.549
155.00	-8.35	-21.15	0.00	-319.28	0.00	319.28	1322.92	661.46	1500.20	751.22	125.76	-8.399	0.000	0.432
158.00	-5.70	-12.64	0.00	-255.85	0.00	255.85	1307.05	653.52	1455.24	728.70	131.06	-8.532	0.000	0.356
160.00	-5.56	-12.47	0.00	-230.56	0.00	230.56	1296.30	648.15	1425.45	713.78	134.64	-8.612	0.000	0.328
165.00	-5.26	-12.02	0.00	-168.21	0.00	168.21	1268.86	634.43	1351.65	676.83	143.72	-8.780	0.000	0.253
168.00	-4.53	-9.35	0.00	-132.15	0.00	132.15	1252.00	626.00	1307.87	654.91	149.24	-8.864	0.000	0.206
168.50	-3.45	-7.87	0.00	-127.48	0.00	127.48	1249.16	624.58	1300.61	651.27	150.17	-8.877	0.000	0.199
170.00	-3.36	-7.74	0.00	-115.67	0.00	115.67	1240.60	620.30	1278.90	640.40	152.95	-8.913	0.000	0.183
175.00	-3.10	-7.31	0.00	-76.96	0.00	76.96	1211.52	605.76	1207.28	604.54	162.31	-9.012	0.000	0.130
178.00	-2.95	-7.05	0.00	-55.04	0.00	55.04	1193.69	596.84	1164.89	583.31	167.96	-9.056	0.000	0.097
178.00	-2.95	-7.05	0.00	-55.04	0.00	55.04	975.84	487.92	954.81	478.11	167.96	-9.056	0.000	0.118
180.00	-2.86	-6.89	0.00	-40.93	0.00	40.93	975.84	487.92	954.81	478.11	171.74	-9.079	0.000	0.089
184.00	-1.56	-4.49	0.00	-13.39	0.00	13.39	975.84	487.92	954.81	478.11	179.33	-9.110	0.000	0.030
185.00	-1.52	-4.41	0.00	-8.90	0.00	8.90	975.84	487.92	954.81	478.11	181.23	-9.113	0.000	0.020
187.00	-0.03	-0.08	0.00	-0.08	0.00	0.08	975.84	487.92	954.81	478.11	185.04	-9.116	0.000	0.000
188.00	0.00	-0.08	0.00	0.00	0.00	0.00	975.84	487.92	954.81	478.11	186.94	-9.116	0.000	0.000

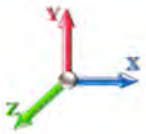
Wind Loading - Shaft

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 26	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 30

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1	1.00	0.85	5.168	5.68	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
0.25	RB2	1.00	0.85	5.168	5.68	0.00	1.200	1.227	0.25	1.145	1.37	7.8	20.3	93.0
1.00	RT1 RB3 RB4	1.00	0.85	5.168	5.68	0.00	1.200	1.410	0.75	3.453	4.14	23.6	70.2	287.9
5.00		1.00	0.85	5.168	5.68	0.00	1.200	1.656	4.00	18.448	22.14	125.8	436.2	1588.5
10.00		1.00	0.85	5.168	5.68	0.00	1.200	1.775	5.00	22.843	27.41	155.8	576.5	1995.6
15.00		1.00	0.85	5.168	5.68	0.00	1.200	1.848	5.00	22.553	27.06	153.9	591.5	1987.1
18.25	RT4	1.00	0.88	5.379	5.92	0.00	1.200	1.885	3.25	14.491	17.39	102.9	388.3	1282.8
20.00		1.00	0.90	5.483	6.03	0.00	1.200	1.902	1.75	7.746	9.30	56.1	209.8	687.4
21.00	RT3 RB5	1.00	0.91	5.540	6.09	0.00	1.200	1.912	1.00	4.409	5.29	32.2	120.1	391.7
25.00		1.00	0.95	5.747	6.32	0.00	1.200	1.945	4.00	17.517	21.02	132.9	482.8	1559.7
28.25	RT5	1.00	0.97	5.897	6.49	0.00	1.200	1.969	3.25	14.080	16.90	109.6	392.9	1256.9
30.00		1.00	0.98	5.972	6.57	0.00	1.200	1.981	1.75	7.524	9.03	59.3	211.6	672.7
32.83	RT2	1.00	1.00	6.087	6.70	0.00	1.200	1.999	2.83	12.084	14.50	97.1	342.2	1081.7
35.00		1.00	1.01	6.169	6.79	0.00	1.200	2.012	2.17	9.194	11.03	74.9	262.1	824.1
40.00		1.00	1.04	6.345	6.98	0.00	1.200	2.039	5.00	20.956	25.15	175.5	601.9	1879.8
43.25	Bot - Section 2	1.00	1.06	6.450	7.10	0.00	1.200	2.055	3.25	13.442	16.13	114.4	389.9	1207.9
45.00		1.00	1.07	6.504	7.15	0.00	1.200	2.063	1.75	7.290	8.75	62.6	212.9	1030.2
47.75	RB6	1.00	1.08	6.586	7.24	0.00	1.200	2.075	2.75	11.374	13.65	98.9	333.4	1606.9
48.92	RB7	1.00	1.09	6.620	7.28	0.00	1.200	2.080	1.17	4.808	5.77	42.0	141.6	679.4
49.00	Top - Section 1	1.00	1.09	6.622	7.28	0.00	1.200	2.081	0.08	0.328	0.39	2.9	9.7	46.4
50.00		1.00	1.09	6.650	7.32	0.00	1.200	2.085	1.00	4.094	4.91	35.9	120.8	334.2
55.00		1.00	1.12	6.785	7.46	0.00	1.200	2.105	5.00	20.274	24.33	181.6	599.2	1653.8
60.00		1.00	1.14	6.910	7.60	0.00	1.200	2.123	5.00	19.939	23.93	181.9	593.7	1628.1
65.00	RT6 RB8	1.00	1.16	7.028	7.73	0.00	1.200	2.140	5.00	19.602	23.52	181.8	587.5	1601.8
70.00		1.00	1.17	7.138	7.85	0.00	1.200	2.156	5.00	19.264	23.12	181.5	580.9	1575.0
72.25	RT8	1.00	1.18	7.186	7.90	0.00	1.200	2.163	2.25	8.557	10.27	81.2	260.0	700.8
75.00		1.00	1.19	7.243	7.97	0.00	1.200	2.171	2.75	10.365	12.44	99.1	315.6	848.8
76.83	RT7	1.00	1.20	7.280	8.01	0.00	1.200	2.176	1.83	6.840	8.21	65.7	209.0	560.4
80.00		1.00	1.21	7.342	8.08	0.00	1.200	2.185	3.17	11.742	14.09	113.8	359.1	961.4
85.00		1.00	1.22	7.436	8.18	0.00	1.200	2.198	5.00	18.245	21.89	179.1	558.6	1492.1
87.50	Bot - Section 3	1.00	1.23	7.482	8.23	0.00	1.200	2.205	2.50	8.994	10.79	88.8	277.3	736.5
90.00		1.00	1.24	7.526	8.28	0.00	1.200	2.211	2.50	9.041	10.85	89.8	279.5	1119.2
90.50	RB9	1.00	1.24	7.535	8.29	0.00	1.200	2.212	0.50	1.798	2.16	17.9	55.8	222.6
91.92	RB10	1.00	1.24	7.560	8.32	0.00	1.200	2.216	1.42	5.087	6.10	50.8	157.9	629.6
92.25	Top - Section 2	1.00	1.24	7.565	8.32	0.00	1.200	2.217	0.33	1.178	1.41	11.8	36.7	145.9
95.00		1.00	1.25	7.612	8.37	0.00	1.200	2.223	2.75	9.762	11.71	98.1	302.9	717.9
100.00		1.00	1.27	7.695	8.46	0.00	1.200	2.234	5.00	17.486	20.98	177.6	542.1	1283.5
105.00		1.00	1.28	7.774	8.55	0.00	1.200	2.245	5.00	17.144	20.57	175.9	533.2	1257.9
105.50	RT9	1.00	1.28	7.782	8.56	0.00	1.200	2.246	0.50	1.695	2.03	17.4	53.2	124.8
105.58	RT10	1.00	1.28	7.783	8.56	0.00	1.200	2.247	0.08	0.271	0.33	2.8	8.5	19.9
110.00		1.00	1.29	7.851	8.64	0.00	1.200	2.256	4.42	14.834	17.80	153.7	463.3	1088.2
115.00		1.00	1.30	7.925	8.72	0.00	1.200	2.266	5.00	16.458	19.75	172.2	514.8	1205.8
120.00		1.00	1.32	7.996	8.80	0.00	1.200	2.276	5.00	16.115	19.34	170.1	505.3	1179.5
125.00		1.00	1.33	8.065	8.87	0.00	1.200	2.285	5.00	15.772	18.93	167.9	495.6	1153.0
130.00		1.00	1.34	8.132	8.95	0.00	1.200	2.294	5.00	15.428	18.51	165.6	485.7	1126.3
132.50	Bot - Section 4	1.00	1.34	8.165	8.98	0.00	1.200	2.298	2.50	7.584	9.10	81.7	240.4	554.4
135.00		1.00	1.35	8.197	9.02	0.00	1.200	2.303	2.50	7.591	9.11	82.1	241.0	771.5

Wind Loading - Shaft

Structure: CT46124-A-SBA
Site Name: Enfield-Moody Rd.
Height: 188.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1
Topography: 1
Code: EIA/TIA-222-G
Exposure: C
Crest Height: 0.00
Site Class: D - Stiff Soil
Struct Class: II

12/30/2020

Tower Engineering Solutions

136.50	Top - Section 3	1.00	1.35	8.216	9.04	0.00	1.200	2.305	1.50	4.513	5.42	48.9	143.7	458.5
140.00		1.00	1.36	8.260	9.09	0.00	1.200	2.311	3.50	10.411	12.49	113.5	330.3	631.8
145.00		1.00	1.37	8.321	9.15	0.00	1.200	2.319	5.00	14.581	17.50	160.1	461.6	882.3
150.00		1.00	1.38	8.381	9.22	0.00	1.200	2.327	5.00	14.236	17.08	157.5	451.2	860.2
155.00		1.00	1.39	8.439	9.28	0.00	1.200	2.335	5.00	13.891	16.67	154.7	440.6	837.8
158.00	Appurtenance(s)	1.00	1.39	8.473	9.32	0.00	1.200	2.339	3.00	8.168	9.80	91.4	260.5	493.2
160.00		1.00	1.40	8.495	9.34	0.00	1.200	2.342	2.00	5.376	6.45	60.3	172.0	324.7
165.00		1.00	1.41	8.551	9.41	0.00	1.200	2.349	5.00	13.201	15.84	149.0	419.2	792.8
168.00	Appurtenance(s)	1.00	1.41	8.583	9.44	0.00	1.200	2.353	3.00	7.754	9.30	87.8	247.6	466.1
168.50	Appurtenance(s)	1.00	1.41	8.588	9.45	0.00	1.200	2.354	0.50	1.280	1.54	14.5	41.2	77.2
170.00		1.00	1.42	8.604	9.46	0.00	1.200	2.356	1.50	3.820	4.58	43.4	122.5	229.8
175.00		1.00	1.42	8.657	9.52	0.00	1.200	2.363	5.00	12.510	15.01	143.0	397.2	747.4
178.00	Top - Section 4	1.00	1.43	8.688	9.56	0.00	1.200	2.367	3.00	7.339	8.81	84.2	234.4	438.8
180.00		1.00	1.43	8.709	9.58	0.00	1.200	2.370	2.00	4.852	5.82	55.8	156.4	272.2
184.00	Appurtenance(s)	1.00	1.44	8.749	9.62	0.00	1.200	2.375	4.00	9.707	11.65	112.1	313.6	545.1
185.00		1.00	1.44	8.759	9.63	0.00	1.200	2.376	1.00	2.427	2.91	28.1	78.4	136.3
187.00	Appurtenance(s)	1.00	1.44	8.779	9.66	0.00	1.200	2.379	2.00	4.855	5.83	56.3	157.1	272.8
188.00		1.00	1.45	8.789	9.67	0.00	1.200	2.380	1.00	2.428	2.91	28.2	78.6	136.4
								Totals:	**188.00**			**6,242.7**		**53,455.9**

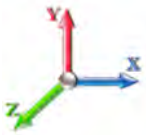
Discrete Appurtenance Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 28	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 30

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	187.00	Collar Mount (3-Sided)	1	8.779	9.657	1.00	1.00	6.07	585.67	0.000	0.000	58.60	0.00	0.00
2	187.00	AIR6449 B41	3	8.779	9.657	0.53	0.75	11.10	836.40	0.000	0.000	107.15	0.00	0.00
3	187.00	RRUS 4415 B25	3	8.779	9.657	0.38	0.75	2.64	305.48	0.000	0.000	25.45	0.00	0.00
4	187.00	PRK-1245 (kicker kit)	1	8.779	9.657	0.75	0.75	17.29	905.18	0.000	0.000	167.01	0.00	0.00
5	187.00	Ericsson Radio 4449 B71	3	8.779	9.657	0.38	0.75	2.71	572.29	0.000	0.000	26.21	0.00	0.00
6	187.00	Ericsson KRY 112 114-1	12	8.779	9.657	0.38	0.75	4.76	297.55	0.000	0.000	45.96	0.00	0.00
7	187.00	Kathrein 782 11054-Smart	3	8.779	9.657	0.38	0.75	1.01	10.02	0.000	0.000	9.71	0.00	0.00
8	187.00	Ericsson	3	8.779	9.657	0.65	0.75	15.62	1275.89	0.000	0.000	150.88	0.00	0.00
9	187.00	RFS	3	8.779	9.657	0.52	0.75	36.01	2249.48	0.000	0.000	347.76	0.00	0.00
10	184.00	Platform w/ Hand Rail	1	8.749	9.624	1.00	1.00	70.00	4177.58	0.000	0.000	673.67	0.00	0.00
11	168.50	Low Profile Platform	1	8.588	9.447	1.00	1.00	45.82	2927.92	0.000	0.000	432.91	0.00	0.00
12	168.00	APXV9ERR18-C-A20	1	8.583	9.441	0.65	0.80	7.64	267.23	0.000	0.000	72.12	0.00	0.00
13	168.00	ACU-A20-N	4	8.583	9.441	0.54	0.80	1.16	22.77	0.000	0.000	10.93	0.00	0.00
14	168.00	TD-RRH8x20-25	3	8.583	9.441	0.40	0.80	6.21	732.06	0.000	0.000	58.64	0.00	0.00
15	168.00	800 MHz RRH	3	8.583	9.441	0.40	0.80	4.67	435.22	0.000	0.000	44.11	0.00	0.00
16	168.00	1900 MHz RRH	3	8.583	9.441	0.40	0.80	4.67	373.26	0.000	0.000	44.11	0.00	0.00
17	168.00	800 MHz Filters	3	8.583	9.441	0.40	0.80	4.67	435.22	0.000	0.000	44.11	0.00	0.00
18	168.00	APXVSPP18-C-A20	2	8.583	9.441	0.65	0.80	15.28	503.99	0.000	0.000	144.23	0.00	0.00
19	168.00	APXVTM14-C-120	3	8.583	9.441	0.62	0.80	14.74	896.98	0.000	0.000	139.18	0.00	0.00
20	158.00	Ericsson RRUS-A2 RRU	3	8.473	9.320	0.38	0.75	3.56	189.57	0.000	0.000	33.19	0.00	0.00
21	158.00	Powerwave LGP21401	6	8.473	9.320	0.38	0.75	5.33	258.60	0.000	0.000	49.69	0.00	0.00
22	158.00	Raycap DC6-48-60-18-8F	2	8.473	9.320	0.38	0.75	1.81	206.64	0.000	0.000	16.83	0.00	0.00
23	158.00	800 10121	3	8.473	9.320	0.58	0.75	13.99	493.39	0.000	0.000	130.42	0.00	0.00
24	158.00	HPA-65R-BUU-H8	3	8.473	9.320	0.58	0.75	26.66	1481.37	0.000	0.000	248.45	0.00	0.00
25	158.00	Kathrein 860-10025 RET	6	8.473	9.320	0.38	0.75	1.41	45.24	0.000	0.000	13.12	0.00	0.00
26	158.00	Ericsson RRUS 4415 B25	3	8.473	9.320	0.38	0.75	2.62	302.67	0.000	0.000	24.44	0.00	0.00
27	158.00	800 10966	6	8.473	9.320	0.53	0.75	63.32	3842.61	0.000	0.000	590.14	0.00	0.00
28	158.00	Ericsson 8843 B2 B66A	3	8.473	9.320	0.38	0.75	2.59	411.55	0.000	0.000	24.18	0.00	0.00
29	158.00	Ericsson 4449 B5 B12	3	8.473	9.320	0.38	0.75	2.70	578.78	0.000	0.000	25.14	0.00	0.00
30	158.00	Raycap DC6-48-60-0-8C	1	8.473	9.320	1.00	1.00	5.97	283.40	0.000	0.000	55.60	0.00	0.00
31	158.00	Plateform Mount	1	8.473	9.320	1.00	1.00	118.91	5241.18	0.000	0.000	1108.23	0.00	0.00
							Totals:		**31,145.19**			**4,922.14**		

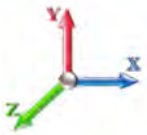
Total Applied Force Summary

Structure:	CT46124-A-SBA		**Code:**	EIA/TIA-222-G	12/30/2020
Site Name:	Enfield-Moody Rd.		**Exposure:**	C	
Height:	188.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 29

Load Case: 1.2D + 1.0Di + 1.0Wi 50 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
0.25		7.81	103.05	0.00	0.00
1.00		23.56	318.78	0.00	0.00
5.00		125.85	1759.65	0.00	0.00
10.00		155.83	2213.81	0.00	0.00
15.00		153.85	2208.05	0.00	0.00
18.25		102.89	1427.25	0.00	0.00
20.00		56.07	765.41	0.00	0.00
21.00		32.24	436.37	0.00	0.00
25.00		132.89	1739.37	0.00	0.00
28.25		109.60	1403.43	0.00	0.00
30.00		59.31	751.80	0.00	0.00
32.83		97.09	1209.96	0.00	0.00
35.00		74.87	922.67	0.00	0.00
40.00		175.51	2056.63	0.00	0.00
43.25		114.44	1319.17	0.00	0.00
45.00		62.59	1090.08	0.00	0.00
47.75		98.88	1715.61	0.00	0.00
48.92		42.01	733.19	0.00	0.00
49.00		2.87	50.04	0.00	0.00
50.00		35.94	380.18	0.00	0.00
55.00		181.58	1884.68	0.00	0.00
60.00		181.87	1859.69	0.00	0.00
65.00		181.84	1834.07	0.00	0.00
70.00		181.51	1807.91	0.00	0.00
72.25		81.16	805.70	0.00	0.00
75.00		99.10	977.21	0.00	0.00
76.83		65.73	646.00	0.00	0.00
80.00		113.80	1100.39	0.00	0.00
85.00		179.09	1663.25	0.00	0.00
87.50		88.82	822.05	0.00	0.00
90.00		89.81	1204.72	0.00	0.00
90.50		17.88	242.96	0.00	0.00
91.92		50.76	696.46	0.00	0.00
92.25		11.77	161.39	0.00	0.00
95.00		98.09	847.50	0.00	0.00
100.00		177.61	1519.72	0.00	0.00
105.00		175.93	1494.49	0.00	0.00
105.50		17.41	148.44	0.00	0.00
105.58		2.78	23.73	0.00	0.00
110.00		153.73	1261.48	0.00	0.00
115.00		172.17	1376.95	0.00	0.00
120.00		170.09	1350.63	0.00	0.00
125.00		167.90	1324.14	0.00	0.00
130.00		165.61	1297.47	0.00	0.00
132.50		81.74	639.94	0.00	0.00
135.00		82.13	857.05	0.00	0.00

Total Applied Force Summary

Structure:	CT46124-A-SBA		**Code:**	EIA/TIA-222-G	12/30/2020
Site Name:	Enfield-Moody Rd.		**Exposure:**	C	
Height:	188.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 30

136.50		48.94	509.89	0.00	0.00
140.00		113.51	751.64	0.00	0.00
145.00		160.15	1053.48	0.00	0.00
150.00		157.48	1031.28	0.00	0.00
155.00		154.73	1008.96	0.00	0.00
158.00	(40) attachments	2410.77	13930.89	0.00	0.00
160.00		60.29	360.70	0.00	0.00
165.00		148.99	882.71	0.00	0.00
168.00	(22) attachments	645.28	4186.80	0.00	0.00
168.50	(1) attachments	447.42	3012.75	0.00	0.00
170.00		43.38	252.78	0.00	0.00
175.00		142.95	823.94	0.00	0.00
178.00		84.17	484.72	0.00	0.00
180.00		55.77	302.79	0.00	0.00
184.00	(1) attachments	785.77	4783.90	0.00	0.00
185.00		28.06	151.63	0.00	0.00
187.00	(32) attachments	994.97	7341.39	0.00	0.00
188.00		28.16	136.45	0.00	0.00
	Totals:	**11,164.81**	**91,459.22**	**0.00**	**0.00**

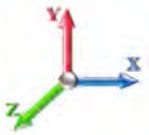
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 31	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 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)
0.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.10	0.00	0.048	0.000	5.168	0.00	1.45
1.00	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.33	0.00	0.048	0.000	5.168	0.00	5.20
5.00	1.25" Reinforcing	Yes	4.00	0.000	2.50	1.94	0.00	0.048	0.000	5.168	0.00	34.29
10.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	2.52	0.00	0.049	0.000	5.168	0.00	47.08
15.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	2.58	0.00	0.050	0.000	5.168	0.00	49.78
18.25	1.25" Reinforcing	Yes	3.25	0.000	2.50	1.70	0.00	0.050	0.000	5.379	0.00	33.25
20.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.92	0.00	0.051	0.000	5.483	0.00	18.13
21.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.53	0.00	0.051	0.000	5.540	0.00	10.43
25.00	1.25" Reinforcing	Yes	4.00	0.000	2.50	2.13	0.00	0.051	0.000	5.747	0.00	42.75
28.25	1.25" Reinforcing	Yes	3.25	0.000	2.50	1.74	0.00	0.052	0.000	5.897	0.00	35.33
30.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.94	0.00	0.052	0.000	5.972	0.00	19.19
32.83	1.25" Reinforcing	Yes	2.83	0.000	2.50	1.53	0.00	0.053	0.000	6.087	0.00	31.42
35.00	1.25" Reinforcing	Yes	2.17	0.000	2.50	1.18	0.00	0.053	0.000	6.169	0.00	24.31
40.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.27	0.00	0.005	0.000	6.345	0.00	5.71
47.75	1.25" Reinforcing	Yes	1.25	0.000	2.50	0.69	0.00	0.025	0.000	6.586	0.00	14.63
48.92	1.25" Reinforcing	Yes	1.17	0.000	2.50	0.65	0.00	0.056	0.000	6.620	0.00	13.74
49.00	1.25" Reinforcing	Yes	0.08	0.000	2.50	0.04	0.00	0.056	0.000	6.622	0.00	0.94
50.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.56	0.00	0.056	0.000	6.650	0.00	11.78
55.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	2.80	0.00	0.056	0.000	6.785	0.00	59.71
60.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	2.81	0.00	0.057	0.000	6.910	0.00	60.46
65.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	2.83	0.00	0.058	0.000	7.028	0.00	61.15
70.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	2.84	0.00	0.060	0.000	7.138	0.00	61.80
72.25	1.25" Reinforcing	Yes	2.25	0.000	2.50	1.28	0.00	0.061	0.000	7.186	0.00	27.94
75.00	1.25" Reinforcing	Yes	2.75	0.000	2.50	1.57	0.00	0.061	0.000	7.243	0.00	34.33
76.83	1.25" Reinforcing	Yes	1.83	0.000	2.50	1.05	0.00	0.062	0.000	7.280	0.00	22.92
80.00	1.25" Reinforcing	Yes	2.42	0.000	2.50	1.39	0.00	0.048	0.000	7.342	0.00	30.49
90.50	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.14	0.00	0.033	0.000	7.535	0.00	3.21
91.92	1.25" Reinforcing	Yes	1.42	0.000	2.50	0.82	0.00	0.066	0.000	7.560	0.00	18.25
92.25	1.25" Reinforcing	Yes	0.33	0.000	2.50	0.19	0.00	0.066	0.000	7.565	0.00	4.24
95.00	1.25" Reinforcing	Yes	2.75	0.000	2.50	1.59	0.00	0.066	0.000	7.612	0.00	35.51
100.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	2.90	0.00	0.067	0.000	7.695	0.00	65.04
105.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	2.91	0.00	0.068	0.000	7.774	0.00	65.50
105.50	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.29	0.00	0.069	0.000	7.782	0.00	6.55
105.58	1.25" Reinforcing	Yes	0.08	0.000	2.50	0.05	0.00	0.069	0.000	7.783	0.00	1.05
110.00	1.25" Reinforcing	Yes	1.67	0.000	2.50	0.98	0.00	0.026	0.000	7.851	0.00	22.02
									Totals:		**0.0**	**979.6**

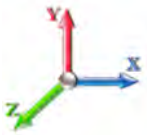
Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 32	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 30

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-91.46	-11.17	0.00	-1637.0	0.00	1637.07	5035.03	2517.52	10606.9	5311.37	0.00	0.000	0.000	0.294
0.25	-91.35	-11.17	0.00	-1634.2	0.00	1634.28	5032.22	2516.11	10592.3	5304.07	0.00	-0.004	0.000	0.218
1.00	-91.03	-11.20	0.00	-1625.9	0.00	1625.90	5023.77	2511.88	10548.7	5282.19	0.00	-0.014	0.000	0.218
5.00	-89.26	-11.16	0.00	-1581.1	0.00	1581.11	4978.38	2489.19	10316.4	5165.91	0.04	-0.066	0.000	0.215
10.00	-87.03	-11.10	0.00	-1525.3	0.00	1525.30	4920.91	2460.46	10028.2	5021.57	0.14	-0.131	0.000	0.212
15.00	-84.81	-11.02	0.00	-1469.7	0.00	1469.79	4862.63	2431.31	9742.31	4878.39	0.31	-0.197	0.000	0.209
18.25	-83.38	-10.96	0.00	-1433.9	0.00	1433.97	4824.31	2412.15	9557.73	4785.97	0.46	-0.240	0.000	0.233
20.00	-82.61	-10.94	0.00	-1414.7	0.00	1414.78	4803.53	2401.76	9458.77	4736.42	0.56	-0.267	0.000	0.231
21.00	-82.17	-10.96	0.00	-1403.8	0.00	1403.85	4791.61	2395.81	9402.36	4708.17	0.61	-0.282	0.000	0.235
25.00	-80.42	-10.89	0.00	-1360.0	0.00	1360.03	4743.61	2371.81	9177.73	4595.68	0.88	-0.343	0.000	0.232
28.25	-79.01	-10.83	0.00	-1324.6	0.00	1324.63	4704.23	2352.11	8996.42	4504.89	1.13	-0.394	0.000	0.241
30.00	-78.25	-10.81	0.00	-1305.6	0.00	1305.68	4682.88	2341.44	8899.25	4456.24	1.28	-0.422	0.000	0.240
32.83	-77.03	-10.76	0.00	-1275.0	0.00	1275.08	4648.14	2324.07	8742.80	4377.90	1.54	-0.469	0.000	0.238
32.83	-77.03	-10.76	0.00	-1275.0	0.00	1275.08	4648.14	2324.07	8742.80	4377.90	1.54	-0.469	0.000	0.238
35.00	-76.10	-10.77	0.00	-1251.7	0.00	1251.72	4621.33	2310.66	8623.42	4318.12	1.76	-0.504	0.000	0.306
40.00	-74.03	-10.69	0.00	-1197.8	0.00	1197.85	4558.96	2279.48	8350.33	4181.37	2.35	-0.610	0.000	0.303
43.25	-72.70	-10.63	0.00	-1163.1	0.00	1163.11	4517.98	2258.99	8174.32	4093.24	2.79	-0.680	0.000	0.300
45.00	-71.60	-10.62	0.00	-1144.5	0.00	1144.50	4495.78	2247.89	8080.06	4046.03	3.04	-0.718	0.000	0.299
47.75	-69.88	-10.55	0.00	-1115.3	0.00	1115.31	4460.68	2230.34	7932.64	3972.22	3.47	-0.778	0.000	0.295
48.92	-69.14	-10.51	0.00	-1102.9	0.00	1102.97	4445.67	2222.84	7870.19	3940.94	3.67	-0.803	0.000	0.213
49.00	-69.09	-10.52	0.00	-1102.1	0.00	1102.13	3699.57	1849.78	6681.20	3345.56	3.68	-0.805	0.000	0.227
50.00	-68.70	-10.54	0.00	-1091.6	0.00	1091.61	3689.91	1844.95	6638.39	3324.13	3.85	-0.821	0.000	0.243
55.00	-66.81	-10.43	0.00	-1038.9	0.00	1038.93	3641.14	1820.57	6425.47	3217.51	4.76	-0.905	0.000	0.237
60.00	-64.94	-10.31	0.00	-986.80	0.00	986.80	3591.55	1795.77	6214.50	3111.87	5.75	-0.989	0.000	0.232
65.00	-63.09	-10.19	0.00	-935.26	0.00	935.26	3541.14	1770.57	6005.55	3007.24	6.83	-1.073	0.000	0.226
70.00	-61.28	-10.03	0.00	-884.34	0.00	884.34	3489.91	1744.96	5798.71	2903.67	8.00	-1.157	0.000	0.220
72.25	-60.46	-9.98	0.00	-861.76	0.00	861.76	3466.60	1733.30	5706.35	2857.41	8.55	-1.195	0.000	0.218
75.00	-59.48	-9.90	0.00	-834.31	0.00	834.31	3437.87	1718.94	5594.07	2801.19	9.25	-1.242	0.000	0.215
76.83	-58.83	-9.87	0.00	-816.19	0.00	816.19	3418.62	1709.31	5519.73	2763.97	9.74	-1.273	0.000	0.212
76.83	-58.83	-9.87	0.00	-816.19	0.00	816.19	3418.62	1709.31	5519.73	2763.97	9.74	-1.273	0.000	0.212
80.00	-57.72	-9.82	0.00	-784.92	0.00	784.92	3385.02	1692.51	5391.70	2699.86	10.60	-1.326	0.000	0.308
85.00	-56.04	-9.69	0.00	-735.84	0.00	735.84	3331.35	1665.67	5191.69	2599.71	12.05	-1.449	0.000	0.300
87.50	-55.21	-9.64	0.00	-711.63	0.00	711.63	3304.20	1652.10	5092.60	2550.09	12.83	-1.512	0.000	0.296
90.00	-54.01	-9.55	0.00	-687.53	0.00	687.53	3276.86	1638.43	4994.13	2500.78	13.64	-1.574	0.000	0.291
90.50	-53.76	-9.55	0.00	-682.76	0.00	682.76	3271.36	1635.68	4974.52	2490.96	13.80	-1.587	0.000	0.288
91.92	-53.06	-9.50	0.00	-669.20	0.00	669.20	3255.72	1627.86	4918.94	2463.13	14.28	-1.622	0.000	0.200
92.25	-52.90	-9.50	0.00	-666.07	0.00	666.07	2609.22	1304.61	4017.17	2011.57	14.39	-1.628	0.000	0.215
95.00	-52.04	-9.45	0.00	-639.93	0.00	639.93	2587.46	1293.73	3934.74	1970.29	15.34	-1.675	0.000	0.229
100.00	-50.51	-9.30	0.00	-592.70	0.00	592.70	2547.26	1273.63	3786.04	1895.83	17.15	-1.767	0.000	0.219
105.00	-49.02	-9.12	0.00	-546.19	0.00	546.19	2506.24	1253.12	3638.92	1822.16	19.05	-1.858	0.000	0.208
105.50	-48.87	-9.10	0.00	-541.62	0.00	541.62	2502.09	1251.04	3624.30	1814.84	19.24	-1.867	0.000	0.209
105.58	-48.84	-9.14	0.00	-540.90	0.00	540.90	2501.42	1250.71	3621.96	1813.67	19.27	-1.868	0.000	0.209
105.58	-48.84	-9.14	0.00	-540.90	0.00	540.90	2501.42	1250.71	3621.96	1813.67	19.27	-1.868	0.000	0.209
110.00	-47.56	-9.03	0.00	-500.52	0.00	500.52	2464.40	1232.20	3493.46	1749.33	21.04	-1.946	0.000	0.305
115.00	-46.17	-8.91	0.00	-455.38	0.00	455.38	2421.75	1210.87	3349.75	1677.36	23.15	-2.078	0.000	0.291
120.00	-44.81	-8.79	0.00	-410.83	0.00	410.83	2378.28	1189.14	3207.87	1606.32	25.39	-2.206	0.000	0.275
125.00	-43.48	-8.66	0.00	-366.88	0.00	366.88	2333.99	1167.00	3067.90	1536.23	27.77	-2.331	0.000	0.257
130.00	-42.18	-8.51	0.00	-323.57	0.00	323.57	2288.89	1144.45	2929.94	1467.15	30.27	-2.450	0.000	0.239

Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 33

132.50	-41.53	-8.44	0.00	-302.30	0.00	302.30	2266.03	1133.02	2861.73	1432.99	31.57	-2.508	0.000	0.229
135.00	-40.67	-8.35	0.00	-281.20	0.00	281.20	2239.33	1119.66	2789.52	1396.83	32.90	-2.565	0.000	0.220
136.50	-40.16	-8.32	0.00	-268.67	0.00	268.67	1414.34	707.17	1783.76	893.21	33.71	-2.598	0.000	0.329
140.00	-39.40	-8.24	0.00	-239.56	0.00	239.56	1397.90	698.95	1729.39	865.98	35.64	-2.672	0.000	0.305
145.00	-38.33	-8.11	0.00	-198.36	0.00	198.36	1373.73	686.86	1652.26	827.36	38.51	-2.802	0.000	0.268
150.00	-37.30	-7.97	0.00	-157.80	0.00	157.80	1348.73	674.37	1575.83	789.09	41.51	-2.917	0.000	0.228
155.00	-36.29	-7.81	0.00	-117.93	0.00	117.93	1322.92	661.46	1500.20	751.22	44.62	-3.015	0.000	0.185
158.00	-22.50	-4.68	0.00	-94.50	0.00	94.50	1307.05	653.52	1455.24	728.70	46.53	-3.064	0.000	0.147
160.00	-22.14	-4.62	0.00	-85.14	0.00	85.14	1296.30	648.15	1425.45	713.78	47.82	-3.093	0.000	0.136
165.00	-21.26	-4.44	0.00	-62.04	0.00	62.04	1268.86	634.43	1351.65	676.83	51.09	-3.155	0.000	0.108
168.00	-17.12	-3.57	0.00	-48.72	0.00	48.72	1252.00	626.00	1307.87	654.91	53.08	-3.186	0.000	0.088
168.50	-14.13	-2.96	0.00	-46.94	0.00	46.94	1249.16	624.58	1300.61	651.27	53.42	-3.191	0.000	0.083
170.00	-13.88	-2.91	0.00	-42.50	0.00	42.50	1240.60	620.30	1278.90	640.40	54.42	-3.204	0.000	0.078
175.00	-13.07	-2.72	0.00	-27.98	0.00	27.98	1211.52	605.76	1207.28	604.54	57.79	-3.240	0.000	0.057
178.00	-12.59	-2.61	0.00	-19.81	0.00	19.81	1193.69	596.84	1164.89	583.31	59.84	-3.256	0.000	0.045
178.00	-12.59	-2.61	0.00	-19.81	0.00	19.81	975.84	487.92	954.81	478.11	59.84	-3.256	0.000	0.054
180.00	-12.29	-2.54	0.00	-14.59	0.00	14.59	975.84	487.92	954.81	478.11	61.20	-3.265	0.000	0.043
184.00	-7.56	-1.49	0.00	-4.42	0.00	4.42	975.84	487.92	954.81	478.11	63.94	-3.275	0.000	0.017
185.00	-7.41	-1.45	0.00	-2.93	0.00	2.93	975.84	487.92	954.81	478.11	64.63	-3.276	0.000	0.014
187.00	-0.13	-0.04	0.00	-0.04	0.00	0.04	975.84	487.92	954.81	478.11	66.00	-3.277	0.000	0.000
188.00	0.00	-0.03	0.00	0.00	0.00	0.00	975.84	487.92	954.81	478.11	66.68	-3.277	0.000	0.000

Seismic Segment Forces (Factored)

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 34	

Load Case:	1.2D + 1.0E							**Iterations**	26
Gust Response Factor	1.10				**Sds**	0.19		**Ss**	0.17
Dead Load Factor	1.20	**Seismic Load Factor**	1.00		**Sd1**	0.10		**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.23		**SA**	0.02	**Seismic Importance Factor**		1.00

Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00	RB1	0.00	0.00	0.00	0.00	0.00	
0.25	RB2	60.58	0.00	0.00	0.00	0.09	
1.00	RT1 RB3 RB4	181.44	0.00	0.01	0.00	1.01	
5.00		960.21	0.00	0.03	0.01	18.45	
10.00		1182.6	0.01	0.05	0.03	32.80	
15.00		1163.0	0.01	0.06	0.03	37.48	
18.25	RT4	745.43	0.02	0.06	0.04	25.35	
20.00		397.95	0.02	0.06	0.04	13.82	
21.00	RT3 RB5	226.32	0.02	0.07	0.04	7.94	
25.00		897.45	0.03	0.07	0.04	32.46	
28.25	RT5	719.93	0.04	0.07	0.04	26.50	
30.00		384.22	0.05	0.07	0.04	14.26	
32.83	RT2	616.26	0.06	0.07	0.04	23.14	
35.00		468.28	0.07	0.07	0.04	17.73	
40.00		1064.9	0.09	0.07	0.04	41.10	
43.25	Bot - Section 2	681.69	0.10	0.07	0.04	26.66	
45.00		681.08	0.11	0.07	0.04	26.83	
47.75	RB6	1061.2	0.12	0.07	0.03	42.28	
48.92	RB7	448.17	0.13	0.07	0.03	17.94	
49.00	Top - Section 1	30.57	0.13	0.07	0.03	1.22	
50.00		177.78	0.13	0.07	0.03	7.15	
55.00		878.82	0.16	0.07	0.03	35.98	
60.00		862.01	0.19	0.06	0.02	35.67	
65.00	RT6 RB8	845.20	0.23	0.06	0.02	34.81	
70.00		828.39	0.26	0.05	0.02	33.05	
72.25	RT8	367.29	0.28	0.05	0.01	14.26	
75.00		444.29	0.30	0.05	0.01	16.41	
76.83	RT7	292.84	0.32	0.04	0.01	10.34	
80.00		501.94	0.34	0.03	0.01	15.87	
85.00		777.96	0.39	0.02	0.01	18.17	
87.50	Bot - Section 3	382.68	0.41	0.02	0.01	6.90	
90.00		699.67	0.43	0.01	0.01	8.39	
90.50	RB9	139.01	0.44	0.01	0.01	1.49	
91.92	RB10	393.11	0.45	0.00	0.01	2.73	
92.25	Top - Section 2	91.00	0.46	0.00	0.01	0.55	
95.00		345.80	0.48	-0.01	0.01	-0.58	
100.00		617.88	0.53	-0.03	0.01	-9.84	
105.00		603.87	0.59	-0.05	0.01	-17.30	
105.50	RT9	59.62	0.60	-0.05	0.01	-1.77	
105.58	RT10	9.53	0.60	-0.05	0.01	-0.29	
110.00		520.72	0.65	-0.07	0.02	-19.95	
115.00		575.85	0.71	-0.09	0.03	-25.53	
120.00		561.85	0.77	-0.11	0.05	-26.22	
125.00		547.84	0.84	-0.12	0.06	-24.94	
130.00		533.83	0.90	-0.12	0.09	-21.96	
132.50	Bot - Section 4	261.66	0.94	-0.12	0.10	-9.89	

Seismic Segment Forces (Factored)

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 35	

135.00		442.05	0.97	-0.12	0.12	-14.89			
136.50	Top - Section 3	262.37	1.00	-0.11	0.13	-8.10			
140.00		251.27	1.05	-0.09	0.16	-5.84			
145.00		350.62	1.12	-0.06	0.20	-3.46			
150.00		340.81	1.20	0.01	0.26	2.21			
155.00		331.00	1.28	0.10	0.32	8.54			
158.00	Appurtenance(s)	4192.4	1.33	0.17	0.37	162.86			
160.00		127.30	1.37	0.23	0.40	6.13			
165.00		311.39	1.46	0.40	0.49	22.93			
168.00	Appurtenance(s)	1196.1	1.51	0.52	0.55	108.15			
168.50	Appurtenance(s)	1430.0	1.52	0.55	0.56	133.46			
170.00		89.44	1.55	0.62	0.60	9.15			
175.00		291.77	1.64	0.90	0.72	39.14			
178.00	Top - Section 4	170.35	1.69	1.10	0.81	26.38			
180.00		96.44	1.73	1.25	0.87	16.33			
184.00	Appurtenance(s)	1792.8	1.81	1.59	1.00	358.41			
185.00		48.22	1.83	1.68	1.03	10.02			
187.00	Appurtenance(s)	2368.3	1.87	1.88	1.10	531.19			
188.00		48.22	1.89	1.98	1.14	11.22			
	Totals:	**38,432.9**				**1,904.4**	**Total Wind:**	**35,231.6**	

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

Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 36	

Load Case:	1.2D + 1.0E							**Iterations**	26
Gust Response Factor	1.10			**Sds**	0.19			**Ss**	0.17
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.10			**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.23	**SA**	0.02	**Seismic Importance Factor**			1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-52.00	-2.09	0.00	-307.30	0.00	307.30	5035.03	2517.52	10606.9	5311.37		0.00	0.00	0.061
0.25	-51.92	-2.09	0.00	-306.78	0.00	306.78	5032.22	2516.11	10592.3	5304.07		0.00	0.00	0.046
1.00	-51.67	-2.10	0.00	-305.21	0.00	305.21	5023.77	2511.88	10548.7	5282.19		0.00	0.00	0.045
5.00	-50.38	-2.09	0.00	-296.81	0.00	296.81	4978.38	2489.19	10316.4	5165.91		0.01	-0.01	0.045
10.00	-48.79	-2.07	0.00	-286.36	0.00	286.36	4920.91	2460.46	10028.2	5021.57		0.03	-0.02	0.044
15.00	-47.23	-2.04	0.00	-276.03	0.00	276.03	4862.63	2431.31	9742.31	4878.39		0.06	-0.04	0.043
18.25	-46.22	-2.02	0.00	-269.41	0.00	269.41	4824.31	2412.15	9557.73	4785.97		0.09	-0.05	0.048
20.00	-45.68	-2.01	0.00	-265.88	0.00	265.88	4803.53	2401.76	9458.77	4736.42		0.10	-0.05	0.048
21.00	-45.38	-2.00	0.00	-263.87	0.00	263.87	4791.61	2395.81	9402.36	4708.17		0.12	-0.05	0.048
25.00	-44.16	-1.98	0.00	-255.86	0.00	255.86	4743.61	2371.81	9177.73	4595.68		0.16	-0.06	0.048
28.25	-43.19	-1.95	0.00	-249.44	0.00	249.44	4704.23	2352.11	8996.42	4504.89		0.21	-0.07	0.050
30.00	-42.67	-1.95	0.00	-246.02	0.00	246.02	4682.88	2341.44	8899.25	4456.24		0.24	-0.08	0.050
32.83	-41.83	-1.93	0.00	-240.51	0.00	240.51	4648.14	2324.07	8742.80	4377.90		0.29	-0.09	0.049
32.83	-41.83	-1.93	0.00	-240.51	0.00	240.51	4648.14	2324.07	8742.80	4377.90		0.29	-0.09	0.049
35.00	-41.19	-1.92	0.00	-236.33	0.00	236.33	4621.33	2310.66	8623.42	4318.12		0.33	-0.09	0.064
40.00	-39.74	-1.89	0.00	-226.75	0.00	226.75	4558.96	2279.48	8350.33	4181.37		0.44	-0.11	0.063
43.25	-38.81	-1.86	0.00	-220.62	0.00	220.62	4517.98	2258.99	8174.32	4093.24		0.52	-0.13	0.062
45.00	-37.94	-1.84	0.00	-217.36	0.00	217.36	4495.78	2247.89	8080.06	4046.03		0.57	-0.14	0.062
47.75	-36.57	-1.80	0.00	-212.30	0.00	212.30	4460.68	2230.34	7932.64	3972.22		0.65	-0.15	0.061
48.92	-35.99	-1.78	0.00	-210.19	0.00	210.19	4445.67	2222.84	7870.19	3940.94		0.69	-0.15	0.044
49.00	-35.95	-1.78	0.00	-210.05	0.00	210.05	3699.57	1849.78	6681.20	3345.56		0.69	-0.15	0.047
50.00	-35.70	-1.78	0.00	-208.27	0.00	208.27	3689.91	1844.95	6638.39	3324.13		0.72	-0.15	0.050
55.00	-34.48	-1.75	0.00	-199.37	0.00	199.37	3641.14	1820.57	6425.47	3217.51		0.90	-0.17	0.049
60.00	-33.27	-1.72	0.00	-190.61	0.00	190.61	3591.55	1795.77	6214.50	3111.87		1.08	-0.19	0.049
65.00	-32.08	-1.69	0.00	-182.01	0.00	182.01	3541.14	1770.57	6005.55	3007.24		1.29	-0.20	0.048
70.00	-30.92	-1.66	0.00	-173.56	0.00	173.56	3489.91	1744.96	5798.71	2903.67		1.51	-0.22	0.047
72.25	-30.40	-1.65	0.00	-169.82	0.00	169.82	3466.60	1733.30	5706.35	2857.41		1.61	-0.23	0.047
75.00	-29.77	-1.63	0.00	-165.29	0.00	165.29	3437.87	1718.94	5594.07	2801.19		1.75	-0.24	0.046
76.83	-29.36	-1.63	0.00	-162.30	0.00	162.30	3418.62	1709.31	5519.73	2763.97		1.84	-0.24	0.046
76.83	-29.36	-1.63	0.00	-162.30	0.00	162.30	3418.62	1709.31	5519.73	2763.97		1.84	-0.24	0.046
80.00	-28.65	-1.62	0.00	-157.15	0.00	157.15	3385.02	1692.51	5391.70	2699.86		2.00	-0.25	0.067
85.00	-27.54	-1.60	0.00	-149.07	0.00	149.07	3331.35	1665.67	5191.69	2599.71		2.28	-0.28	0.066
87.50	-27.00	-1.60	0.00	-145.07	0.00	145.07	3304.20	1652.10	5092.60	2550.09		2.43	-0.29	0.065
90.00	-26.07	-1.59	0.00	-141.07	0.00	141.07	3276.86	1638.43	4994.13	2500.78		2.59	-0.30	0.064
90.50	-25.89	-1.59	0.00	-140.28	0.00	140.28	3271.36	1635.68	4974.52	2490.96		2.62	-0.31	0.063
91.92	-25.37	-1.58	0.00	-138.02	0.00	138.02	3255.72	1627.86	4918.94	2463.13		2.71	-0.31	0.044
92.25	-25.25	-1.59	0.00	-137.50	0.00	137.50	2609.22	1304.61	4017.17	2011.57		2.73	-0.31	0.047
95.00	-24.74	-1.59	0.00	-133.14	0.00	133.14	2587.46	1293.73	3934.74	1970.29		2.92	-0.32	0.051
100.00	-23.83	-1.59	0.00	-125.20	0.00	125.20	2547.26	1273.63	3786.04	1895.83		3.27	-0.34	0.049
105.00	-22.93	-1.59	0.00	-117.24	0.00	117.24	2506.24	1253.12	3638.92	1822.16		3.64	-0.36	0.048
105.50	-22.84	-1.59	0.00	-116.45	0.00	116.45	2502.09	1251.04	3624.30	1814.84		3.68	-0.36	0.048
105.58	-22.83	-1.59	0.00	-116.32	0.00	116.32	2501.42	1250.71	3621.96	1813.67		3.68	-0.37	0.048
105.58	-22.83	-1.59	0.00	-116.32	0.00	116.32	2501.42	1250.71	3621.96	1813.67		3.68	-0.37	0.048
110.00	-22.05	-1.60	0.00	-109.28	0.00	109.28	2464.40	1232.20	3493.46	1749.33		4.03	-0.38	0.071
115.00	-21.19	-1.60	0.00	-101.29	0.00	101.29	2421.75	1210.87	3349.75	1677.36		4.44	-0.41	0.069
120.00	-20.34	-1.61	0.00	-93.28	0.00	93.28	2378.28	1189.14	3207.87	1606.32		4.89	-0.44	0.067
125.00	-19.51	-1.61	0.00	-85.25	0.00	85.25	2333.99	1167.00	3067.90	1536.23		5.37	-0.47	0.064

Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 37

130.00	-18.70	-1.61	0.00	-77.21	0.00	77.21	2288.89	1144.45	2929.94	1467.15	5.87	-0.50	0.061
132.50	-18.30	-1.61	0.00	-73.18	0.00	73.18	2266.03	1133.02	2861.73	1432.99	6.14	-0.51	0.059
135.00	-17.68	-1.61	0.00	-69.16	0.00	69.16	2239.33	1119.66	2789.52	1396.83	6.41	-0.52	0.057
136.50	-17.32	-1.61	0.00	-66.75	0.00	66.75	1414.34	707.17	1783.76	893.21	6.57	-0.53	0.087
140.00	-16.89	-1.61	0.00	-61.12	0.00	61.12	1397.90	698.95	1729.39	865.98	6.97	-0.55	0.083
145.00	-16.30	-1.62	0.00	-53.05	0.00	53.05	1373.73	686.86	1652.26	827.36	7.57	-0.59	0.076
150.00	-15.72	-1.62	0.00	-44.97	0.00	44.97	1348.73	674.37	1575.83	789.09	8.20	-0.62	0.069
155.00	-15.15	-1.61	0.00	-36.89	0.00	36.89	1322.92	661.46	1500.20	751.22	8.86	-0.65	0.061
158.00	-10.02	-1.39	0.00	-32.07	0.00	32.07	1307.05	653.52	1455.24	728.70	9.27	-0.66	0.052
160.00	-9.83	-1.38	0.00	-29.29	0.00	29.29	1296.30	648.15	1425.45	713.78	9.55	-0.67	0.049
165.00	-9.37	-1.36	0.00	-22.38	0.00	22.38	1268.86	634.43	1351.65	676.83	10.26	-0.69	0.040
168.00	-7.88	-1.23	0.00	-18.31	0.00	18.31	1252.00	626.00	1307.87	654.91	10.70	-0.70	0.034
168.50	-6.16	-1.08	0.00	-17.69	0.00	17.69	1249.16	624.58	1300.61	651.27	10.78	-0.71	0.032
170.00	-6.03	-1.07	0.00	-16.08	0.00	16.08	1240.60	620.30	1278.90	640.40	11.00	-0.71	0.030
175.00	-5.60	-1.02	0.00	-10.74	0.00	10.74	1211.52	605.76	1207.28	604.54	11.75	-0.73	0.022
178.00	-5.35	-1.00	0.00	-7.66	0.00	7.66	1193.69	596.84	1164.89	583.31	12.21	-0.73	0.018
178.00	-5.35	-1.00	0.00	-7.66	0.00	7.66	975.84	487.92	954.81	478.11	12.21	-0.73	0.022
180.00	-5.20	-0.98	0.00	-5.67	0.00	5.67	975.84	487.92	954.81	478.11	12.52	-0.73	0.017
184.00	-3.00	-0.59	0.00	-1.76	0.00	1.76	975.84	487.92	954.81	478.11	13.14	-0.74	0.007
185.00	-2.92	-0.58	0.00	-1.17	0.00	1.17	975.84	487.92	954.81	478.11	13.29	-0.74	0.005
187.00	-0.06	-0.01	0.00	-0.01	0.00	0.01	975.84	487.92	954.81	478.11	13.60	-0.74	0.000
188.00	0.00	-0.01	0.00	0.00	0.00	0.00	975.84	487.92	954.81	478.11	13.76	-0.74	0.000

Seismic Segment Forces (Factored)

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 38	

Load Case:	0.9D + 1.0E							**Iterations**	26
Gust Response Factor	1.10				**Sds**	0.19		**Ss**	0.17
Dead Load Factor	0.90	**Seismic Load Factor**	1.00		**Sd1**	0.10		**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.23		**SA**	0.02	**Seismic Importance Factor**		1.00

Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00	RB1	0.00	0.00	0.00	0.00	0.00	
0.25	RB2	60.58	0.00	0.00	0.00	0.09	
1.00	RT1 RB3 RB4	181.44	0.00	0.01	0.00	1.01	
5.00		960.21	0.00	0.03	0.01	18.45	
10.00		1182.6	0.01	0.05	0.03	32.80	
15.00		1163.0	0.01	0.06	0.03	37.48	
18.25	RT4	745.43	0.02	0.06	0.04	25.35	
20.00		397.95	0.02	0.06	0.04	13.82	
21.00	RT3 RB5	226.32	0.02	0.07	0.04	7.94	
25.00		897.45	0.03	0.07	0.04	32.46	
28.25	RT5	719.93	0.04	0.07	0.04	26.50	
30.00		384.22	0.05	0.07	0.04	14.26	
32.83	RT2	616.26	0.06	0.07	0.04	23.14	
35.00		468.28	0.07	0.07	0.04	17.73	
40.00		1064.9	0.09	0.07	0.04	41.10	
43.25	Bot - Section 2	681.69	0.10	0.07	0.04	26.66	
45.00		681.08	0.11	0.07	0.04	26.83	
47.75	RB6	1061.2	0.12	0.07	0.03	42.28	
48.92	RB7	448.17	0.13	0.07	0.03	17.94	
49.00	Top - Section 1	30.57	0.13	0.07	0.03	1.22	
50.00		177.78	0.13	0.07	0.03	7.15	
55.00		878.82	0.16	0.07	0.03	35.98	
60.00		862.01	0.19	0.06	0.02	35.67	
65.00	RT6 RB8	845.20	0.23	0.06	0.02	34.81	
70.00		828.39	0.26	0.05	0.02	33.05	
72.25	RT8	367.29	0.28	0.05	0.01	14.26	
75.00		444.29	0.30	0.05	0.01	16.41	
76.83	RT7	292.84	0.32	0.04	0.01	10.34	
80.00		501.94	0.34	0.03	0.01	15.87	
85.00		777.96	0.39	0.02	0.01	18.17	
87.50	Bot - Section 3	382.68	0.41	0.02	0.01	6.90	
90.00		699.67	0.43	0.01	0.01	8.39	
90.50	RB9	139.01	0.44	0.01	0.01	1.49	
91.92	RB10	393.11	0.45	0.00	0.01	2.73	
92.25	Top - Section 2	91.00	0.46	0.00	0.01	0.55	
95.00		345.80	0.48	-0.01	0.01	-0.58	
100.00		617.88	0.53	-0.03	0.01	-9.84	
105.00		603.87	0.59	-0.05	0.01	-17.30	
105.50	RT9	59.62	0.60	-0.05	0.01	-1.77	
105.58	RT10	9.53	0.60	-0.05	0.01	-0.29	
110.00		520.72	0.65	-0.07	0.02	-19.95	
115.00		575.85	0.71	-0.09	0.03	-25.53	
120.00		561.85	0.77	-0.11	0.05	-26.22	
125.00		547.84	0.84	-0.12	0.06	-24.94	
130.00		533.83	0.90	-0.12	0.09	-21.96	
132.50	Bot - Section 4	261.66	0.94	-0.12	0.10	-9.89	

Seismic Segment Forces (Factored)

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 39	

135.00		442.05	0.97	-0.12	0.12	-14.89			
136.50	Top - Section 3	262.37	1.00	-0.11	0.13	-8.10			
140.00		251.27	1.05	-0.09	0.16	-5.84			
145.00		350.62	1.12	-0.06	0.20	-3.46			
150.00		340.81	1.20	0.01	0.26	2.21			
155.00		331.00	1.28	0.10	0.32	8.54			
158.00	Appurtenance(s)	4192.4	1.33	0.17	0.37	162.86			
160.00		127.30	1.37	0.23	0.40	6.13			
165.00		311.39	1.46	0.40	0.49	22.93			
168.00	Appurtenance(s)	1196.1	1.51	0.52	0.55	108.15			
168.50	Appurtenance(s)	1430.0	1.52	0.55	0.56	133.46			
170.00		89.44	1.55	0.62	0.60	9.15			
175.00		291.77	1.64	0.90	0.72	39.14			
178.00	Top - Section 4	170.35	1.69	1.10	0.81	26.38			
180.00		96.44	1.73	1.25	0.87	16.33			
184.00	Appurtenance(s)	1792.8	1.81	1.59	1.00	358.41			
185.00		48.22	1.83	1.68	1.03	10.02			
187.00	Appurtenance(s)	2368.3	1.87	1.88	1.10	531.19			
188.00		48.22	1.89	1.98	1.14	11.22			
	Totals:	**38,432.9**				**1,904.4**	**Total Wind:**	**35,231.6**	

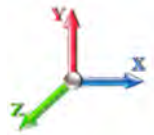
Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 40	

Tower Engineering Solutions

Load Case: 0.9D + 1.0E



Gust Response Factor	1.10			**Sds**	0.19			**Iterations**	26
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.10			**Ss**	0.17
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.23	**SA**	0.02			**S1**	0.06
								Seismic Importance Factor	1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-39.00	-2.09	0.00	-301.84	0.00	301.84	5035.03	2517.52	10606.9	5311.37		0.00	0.00	0.058
0.25	-38.94	-2.09	0.00	-301.32	0.00	301.32	5032.22	2516.11	10592.3	5304.07		0.00	0.00	0.043
1.00	-38.75	-2.10	0.00	-299.75	0.00	299.75	5023.77	2511.88	10548.7	5282.19		0.00	0.00	0.043
5.00	-37.79	-2.09	0.00	-291.36	0.00	291.36	4978.38	2489.19	10316.4	5165.91		0.01	-0.01	0.042
10.00	-36.59	-2.06	0.00	-280.93	0.00	280.93	4920.91	2460.46	10028.2	5021.57		0.03	-0.02	0.042
15.00	-35.42	-2.03	0.00	-270.63	0.00	270.63	4862.63	2431.31	9742.31	4878.39		0.06	-0.04	0.041
18.25	-34.66	-2.01	0.00	-264.04	0.00	264.04	4824.31	2412.15	9557.73	4785.97		0.09	-0.04	0.046
20.00	-34.26	-1.99	0.00	-260.53	0.00	260.53	4803.53	2401.76	9458.77	4736.42		0.10	-0.05	0.045
21.00	-34.03	-1.99	0.00	-258.53	0.00	258.53	4791.61	2395.81	9402.36	4708.17		0.11	-0.05	0.046
25.00	-33.12	-1.96	0.00	-250.57	0.00	250.57	4743.61	2371.81	9177.73	4595.68		0.16	-0.06	0.045
28.25	-32.39	-1.94	0.00	-244.19	0.00	244.19	4704.23	2352.11	8996.42	4504.89		0.21	-0.07	0.047
30.00	-32.00	-1.93	0.00	-240.80	0.00	240.80	4682.88	2341.44	8899.25	4456.24		0.24	-0.08	0.047
32.83	-31.37	-1.91	0.00	-235.34	0.00	235.34	4648.14	2324.07	8742.80	4377.90		0.28	-0.09	0.047
32.83	-31.37	-1.91	0.00	-235.34	0.00	235.34	4648.14	2324.07	8742.80	4377.90		0.28	-0.09	0.047
35.00	-30.89	-1.90	0.00	-231.20	0.00	231.20	4621.33	2310.66	8623.42	4318.12		0.32	-0.09	0.060
40.00	-29.81	-1.86	0.00	-221.71	0.00	221.71	4558.96	2279.48	8350.33	4181.37		0.43	-0.11	0.060
43.25	-29.11	-1.84	0.00	-215.65	0.00	215.65	4517.98	2258.99	8174.32	4093.24		0.51	-0.13	0.059
45.00	-28.45	-1.82	0.00	-212.43	0.00	212.43	4495.78	2247.89	8080.06	4046.03		0.56	-0.13	0.059
47.75	-27.42	-1.78	0.00	-207.44	0.00	207.44	4460.68	2230.34	7932.64	3972.22		0.64	-0.14	0.058
48.92	-26.99	-1.76	0.00	-205.36	0.00	205.36	4445.67	2222.84	7870.19	3940.94		0.68	-0.15	0.042
49.00	-26.96	-1.76	0.00	-205.22	0.00	205.22	3699.57	1849.78	6681.20	3345.56		0.68	-0.15	0.045
50.00	-26.78	-1.75	0.00	-203.47	0.00	203.47	3689.91	1844.95	6638.39	3324.13		0.71	-0.15	0.048
55.00	-25.86	-1.72	0.00	-194.70	0.00	194.70	3641.14	1820.57	6425.47	3217.51		0.88	-0.17	0.047
60.00	-24.95	-1.69	0.00	-186.09	0.00	186.09	3591.55	1795.77	6214.50	3111.87		1.06	-0.18	0.046
65.00	-24.06	-1.66	0.00	-177.63	0.00	177.63	3541.14	1770.57	6005.55	3007.24		1.26	-0.20	0.045
70.00	-23.19	-1.63	0.00	-169.34	0.00	169.34	3489.91	1744.96	5798.71	2903.67		1.48	-0.22	0.044
72.25	-22.80	-1.62	0.00	-165.67	0.00	165.67	3466.60	1733.30	5706.35	2857.41		1.58	-0.22	0.044
75.00	-22.33	-1.60	0.00	-161.23	0.00	161.23	3437.87	1718.94	5594.07	2801.19		1.71	-0.23	0.044
76.83	-22.02	-1.59	0.00	-158.30	0.00	158.30	3418.62	1709.31	5519.73	2763.97		1.80	-0.24	0.043
76.83	-22.02	-1.59	0.00	-158.30	0.00	158.30	3418.62	1709.31	5519.73	2763.97		1.80	-0.24	0.043
80.00	-21.48	-1.58	0.00	-153.26	0.00	153.26	3385.02	1692.51	5391.70	2699.86		1.96	-0.25	0.063
85.00	-20.66	-1.56	0.00	-145.36	0.00	145.36	3331.35	1665.67	5191.69	2599.71		2.24	-0.27	0.062
87.50	-20.25	-1.56	0.00	-141.44	0.00	141.44	3304.20	1652.10	5092.60	2550.09		2.38	-0.28	0.062
90.00	-19.55	-1.55	0.00	-137.54	0.00	137.54	3276.86	1638.43	4994.13	2500.78		2.53	-0.30	0.061
90.50	-19.42	-1.55	0.00	-136.77	0.00	136.77	3271.36	1635.68	4974.52	2490.96		2.56	-0.30	0.060
91.92	-19.02	-1.55	0.00	-134.57	0.00	134.57	3255.72	1627.86	4918.94	2463.13		2.65	-0.31	0.042
92.25	-18.93	-1.55	0.00	-134.06	0.00	134.06	2609.22	1304.61	4017.17	2011.57		2.68	-0.31	0.045
95.00	-18.55	-1.55	0.00	-129.80	0.00	129.80	2587.46	1293.73	3934.74	1970.29		2.86	-0.32	0.048
100.00	-17.87	-1.55	0.00	-122.05	0.00	122.05	2547.26	1273.63	3786.04	1895.83		3.20	-0.34	0.047
105.00	-17.19	-1.55	0.00	-114.29	0.00	114.29	2506.24	1253.12	3638.92	1822.16		3.56	-0.35	0.045
105.50	-17.13	-1.55	0.00	-113.51	0.00	113.51	2502.09	1251.04	3624.30	1814.84		3.60	-0.36	0.046
105.58	-17.12	-1.55	0.00	-113.39	0.00	113.39	2501.42	1250.71	3621.96	1813.67		3.60	-0.36	0.046
105.58	-17.12	-1.55	0.00	-113.39	0.00	113.39	2501.42	1250.71	3621.96	1813.67		3.60	-0.36	0.046
110.00	-16.53	-1.56	0.00	-106.52	0.00	106.52	2464.40	1232.20	3493.46	1749.33		3.94	-0.37	0.068
115.00	-15.89	-1.56	0.00	-98.73	0.00	98.73	2421.75	1210.87	3349.75	1677.36		4.35	-0.40	0.065
120.00	-15.25	-1.56	0.00	-90.93	0.00	90.93	2378.28	1189.14	3207.87	1606.32		4.78	-0.43	0.063
125.00	-14.63	-1.57	0.00	-83.12	0.00	83.12	2333.99	1167.00	3067.90	1536.23		5.25	-0.46	0.060

Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 41

130.00	-14.02	-1.57	0.00	-75.29	0.00	75.29	2288.89	1144.45	2929.94	1467.15	5.74	-0.48	0.057
132.50	-13.72	-1.57	0.00	-71.38	0.00	71.38	2266.03	1133.02	2861.73	1432.99	6.00	-0.50	0.056
135.00	-13.26	-1.56	0.00	-67.47	0.00	67.47	2239.33	1119.66	2789.52	1396.83	6.26	-0.51	0.054
136.50	-12.98	-1.57	0.00	-65.12	0.00	65.12	1414.34	707.17	1783.76	893.21	6.43	-0.52	0.082
140.00	-12.67	-1.57	0.00	-59.64	0.00	59.64	1397.90	698.95	1729.39	865.98	6.81	-0.54	0.078
145.00	-12.22	-1.57	0.00	-51.80	0.00	51.80	1373.73	686.86	1652.26	827.36	7.40	-0.57	0.072
150.00	-11.79	-1.57	0.00	-43.95	0.00	43.95	1348.73	674.37	1575.83	789.09	8.01	-0.60	0.064
155.00	-11.36	-1.56	0.00	-36.10	0.00	36.10	1322.92	661.46	1500.20	751.22	8.66	-0.63	0.057
158.00	-7.51	-1.36	0.00	-31.42	0.00	31.42	1307.05	653.52	1455.24	728.70	9.06	-0.65	0.049
160.00	-7.37	-1.35	0.00	-28.70	0.00	28.70	1296.30	648.15	1425.45	713.78	9.33	-0.66	0.046
165.00	-7.02	-1.33	0.00	-21.95	0.00	21.95	1268.86	634.43	1351.65	676.83	10.03	-0.68	0.038
168.00	-5.91	-1.21	0.00	-17.97	0.00	17.97	1252.00	626.00	1307.87	654.91	10.46	-0.69	0.032
168.50	-4.62	-1.06	0.00	-17.36	0.00	17.36	1249.16	624.58	1300.61	651.27	10.53	-0.69	0.030
170.00	-4.52	-1.05	0.00	-15.78	0.00	15.78	1240.60	620.30	1278.90	640.40	10.75	-0.70	0.028
175.00	-4.20	-1.01	0.00	-10.54	0.00	10.54	1211.52	605.76	1207.28	604.54	11.49	-0.71	0.021
178.00	-4.01	-0.98	0.00	-7.52	0.00	7.52	1193.69	596.84	1164.89	583.31	11.93	-0.71	0.016
178.00	-4.01	-0.98	0.00	-7.52	0.00	7.52	975.84	487.92	954.81	478.11	11.93	-0.71	0.020
180.00	-3.90	-0.96	0.00	-5.57	0.00	5.57	975.84	487.92	954.81	478.11	12.23	-0.72	0.016
184.00	-2.25	-0.58	0.00	-1.73	0.00	1.73	975.84	487.92	954.81	478.11	12.84	-0.72	0.006
185.00	-2.19	-0.57	0.00	-1.15	0.00	1.15	975.84	487.92	954.81	478.11	12.99	-0.72	0.005
187.00	-0.04	-0.01	0.00	-0.01	0.00	0.01	975.84	487.92	954.81	478.11	13.29	-0.72	0.000
188.00	0.00	-0.01	0.00	0.00	0.00	0.00	975.84	487.92	954.81	478.11	13.44	-0.72	0.000

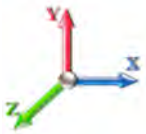
Wind Loading - Shaft

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 42	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 28

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1	1.00	0.85	7.442	8.19	242.19	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
0.25	RB2	1.00	0.85	7.442	8.19	241.99	0.650	0.000	0.25	1.094	0.71	5.8	0.0	60.6
1.00	RT1 RB3 RB4	1.00	0.85	7.442	8.19	241.41	0.650	0.000	0.75	3.277	2.13	17.4	0.0	181.4
5.00		1.00	0.85	7.442	8.19	238.30	0.650	0.000	4.00	17.344	11.27	92.3	0.0	960.2
10.00		1.00	0.85	7.442	8.19	234.42	0.650	0.000	5.00	21.364	13.89	113.7	0.0	1182.6
15.00		1.00	0.85	7.442	8.19	230.53	0.650	0.000	5.00	21.013	13.66	111.8	0.0	1163.0
18.25	RT4	1.00	0.88	7.745	8.52	232.61	0.650	0.000	3.25	13.470	8.76	74.6	0.0	745.4
20.00		1.00	0.90	7.896	8.69	233.46	0.650	0.000	1.75	7.192	4.67	40.6	0.0	398.0
21.00	RT3 RB5	1.00	0.91	7.978	8.78	233.86	0.650	0.000	1.00	4.090	2.66	23.3	0.0	226.3
25.00		1.00	0.95	8.276	9.10	234.91	0.650	0.000	4.00	16.220	10.54	96.0	0.0	897.4
28.25	RT5	1.00	0.97	8.492	9.34	235.26	0.650	0.000	3.25	13.013	8.46	79.0	0.0	719.9
30.00		1.00	0.98	8.600	9.46	235.29	0.650	0.000	1.75	6.946	4.51	42.7	0.0	384.2
32.83	RT2	1.00	1.00	8.765	9.64	235.14	0.650	0.000	2.83	11.141	7.24	69.8	0.0	616.3
35.00		1.00	1.01	8.883	9.77	234.89	0.650	0.000	2.17	8.467	5.50	53.8	0.0	468.3
40.00		1.00	1.04	9.137	10.05	233.91	0.650	0.000	5.00	19.257	12.52	125.8	0.0	1064.9
43.25	Bot - Section 2	1.00	1.06	9.288	10.22	233.02	0.650	0.000	3.25	12.329	8.01	81.9	0.0	681.7
45.00		1.00	1.07	9.366	10.30	232.47	0.650	0.000	1.75	6.688	4.35	44.8	0.0	681.1
47.75	RB6	1.00	1.08	9.484	10.43	231.51	0.650	0.000	2.75	10.423	6.77	70.7	0.0	1061.2
48.92	RB7	1.00	1.09	9.532	10.49	231.07	0.650	0.000	1.17	4.402	2.86	30.0	0.0	448.2
49.00	Top - Section 1	1.00	1.09	9.536	10.49	231.04	0.650	0.000	0.08	0.300	0.20	2.0	0.0	30.6
50.00		1.00	1.09	9.576	10.53	234.64	0.650	0.000	1.00	3.746	2.44	25.7	0.0	177.8
55.00		1.00	1.12	9.770	10.75	232.55	0.650	0.000	5.00	18.520	12.04	129.4	0.0	878.8
60.00		1.00	1.14	9.951	10.95	230.20	0.650	0.000	5.00	18.169	11.81	129.3	0.0	862.0
65.00	RT6 RB8	1.00	1.16	10.120	11.13	227.61	0.650	0.000	5.00	17.818	11.58	128.9	0.0	845.2
70.00		1.00	1.17	10.279	11.31	224.83	0.650	0.000	5.00	17.467	11.35	128.4	0.0	828.4
72.25	RT8	1.00	1.18	10.348	11.38	223.52	0.650	0.000	2.25	7.745	5.03	57.3	0.0	367.3
75.00		1.00	1.19	10.430	11.47	221.87	0.650	0.000	2.75	9.370	6.09	69.9	0.0	444.3
76.83	RT7	1.00	1.20	10.483	11.53	220.74	0.650	0.000	1.83	6.176	4.01	46.3	0.0	292.8
80.00		1.00	1.21	10.572	11.63	218.75	0.650	0.000	3.17	10.588	6.88	80.0	0.0	501.9
85.00		1.00	1.22	10.708	11.78	215.49	0.650	0.000	5.00	16.413	10.67	125.7	0.0	778.0
87.50	Bot - Section 3	1.00	1.23	10.774	11.85	213.81	0.650	0.000	2.50	8.075	5.25	62.2	0.0	382.7
90.00		1.00	1.24	10.838	11.92	212.10	0.650	0.000	2.50	8.119	5.28	62.9	0.0	699.7
90.50	RB9	1.00	1.24	10.850	11.94	211.75	0.650	0.000	0.50	1.613	1.05	12.5	0.0	139.0
91.92	RB10	1.00	1.24	10.886	11.97	210.77	0.650	0.000	1.42	4.563	2.97	35.5	0.0	393.1
92.25	Top - Section 2	1.00	1.24	10.894	11.98	210.53	0.650	0.000	0.33	1.056	0.69	8.2	0.0	91.0
95.00		1.00	1.25	10.962	12.06	212.14	0.650	0.000	2.75	8.743	5.68	68.5	0.0	345.8
100.00		1.00	1.27	11.081	12.19	208.55	0.650	0.000	5.00	15.624	10.16	123.8	0.0	617.9
105.00		1.00	1.28	11.195	12.31	204.86	0.650	0.000	5.00	15.273	9.93	122.2	0.0	603.9
105.50	RT9	1.00	1.28	11.206	12.33	204.48	0.650	0.000	0.50	1.508	0.98	12.1	0.0	59.6
105.58	RT10	1.00	1.28	11.208	12.33	204.42	0.650	0.000	0.08	0.241	0.16	1.9	0.0	9.5
110.00		1.00	1.29	11.305	12.44	201.07	0.650	0.000	4.42	13.172	8.56	106.5	0.0	520.7
115.00		1.00	1.30	11.412	12.55	197.21	0.650	0.000	5.00	14.570	9.47	118.9	0.0	575.9
120.00		1.00	1.32	11.514	12.67	193.26	0.650	0.000	5.00	14.219	9.24	117.1	0.0	561.8
125.00		1.00	1.33	11.614	12.78	189.24	0.650	0.000	5.00	13.868	9.01	115.2	0.0	547.8
130.00		1.00	1.34	11.710	12.88	185.14	0.650	0.000	5.00	13.516	8.79	113.2	0.0	533.8
132.50	Bot - Section 4	1.00	1.34	11.757	12.93	183.07	0.650	0.000	2.50	6.627	4.31	55.7	0.0	261.7
135.00		1.00	1.35	11.803	12.98	180.99	0.650	0.000	2.50	6.631	4.31	56.0	0.0	442.1

Wind Loading - Shaft

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 43	

136.50 Top - Section 3	1.00	1.35	11.831	13.01	179.73	0.650	0.000	1.50	3.937	2.56	33.3	0.0	262.4
140.00	1.00	1.36	11.894	13.08	179.36	0.650	0.000	3.50	9.063	5.89	77.1	0.0	251.3
145.00	1.00	1.37	11.982	13.18	175.09	0.650	0.000	5.00	12.648	8.22	108.4	0.0	350.6
150.00	1.00	1.38	12.068	13.27	170.77	0.650	0.000	5.00	12.297	7.99	106.1	0.0	340.8
155.00	1.00	1.39	12.152	13.37	166.39	0.650	0.000	5.00	11.946	7.76	103.8	0.0	331.0
158.00 Appurtenance(s)	1.00	1.39	12.201	13.42	163.75	0.650	0.000	3.00	6.999	4.55	61.1	0.0	193.9
160.00	1.00	1.40	12.233	13.46	161.97	0.650	0.000	2.00	4.596	2.99	40.2	0.0	127.3
165.00	1.00	1.41	12.313	13.54	157.50	0.650	0.000	5.00	11.243	7.31	99.0	0.0	311.4
168.00 Appurtenance(s)	1.00	1.41	12.360	13.60	154.79	0.650	0.000	3.00	6.577	4.28	58.1	0.0	182.1
168.50 Appurtenance(s)	1.00	1.41	12.367	13.60	154.34	0.650	0.000	0.50	1.084	0.70	9.6	0.0	30.0
170.00	1.00	1.42	12.390	13.63	152.98	0.650	0.000	1.50	3.231	2.10	28.6	0.0	89.4
175.00	1.00	1.42	12.466	13.71	148.42	0.650	0.000	5.00	10.541	6.85	94.0	0.0	291.8
178.00 Top - Section 4	1.00	1.43	12.511	13.76	145.66	0.650	0.000	3.00	6.156	4.00	55.1	0.0	170.4
180.00	1.00	1.43	12.540	13.79	145.83	0.650	0.000	2.00	4.062	2.64	36.4	0.0	96.4
184.00 Appurtenance(s)	1.00	1.44	12.599	13.86	146.17	0.650	0.000	4.00	8.123	5.28	73.2	0.0	192.9
185.00	1.00	1.44	12.613	13.87	146.25	0.650	0.000	1.00	2.031	1.32	18.3	0.0	48.2
187.00 Appurtenance(s)	1.00	1.44	12.642	13.91	146.42	0.650	0.000	2.00	4.062	2.64	36.7	0.0	96.4
188.00	1.00	1.45	12.656	13.92	146.50	0.650	0.000	1.00	2.031	1.32	18.4	0.0	48.2
							Totals:	**188.00**			**4,346.4**		**28,148.4**

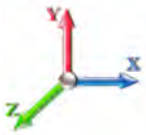
Discrete Appurtenance Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 44	

Load Case: 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	187.00	Collar Mount (3-Sided)	1	12.642	13.906	1.00	1.00	2.50	220.00	0.000	0.000	34.76	0.00	0.00
2	187.00	AIR6449 B41	3	12.642	13.906	0.53	0.75	9.03	309.00	0.000	0.000	125.51	0.00	0.00
3	187.00	RRUS 4415 B25	3	12.642	13.906	0.38	0.75	1.84	138.00	0.000	0.000	25.66	0.00	0.00
4	187.00	PRK-1245 (kicker kit)	1	12.642	13.906	0.75	0.75	7.13	464.91	0.000	0.000	99.08	0.00	0.00
5	187.00	Ericsson Radio 4449 B71	3	12.642	13.906	0.38	0.75	2.81	222.00	0.000	0.000	39.11	0.00	0.00
6	187.00	Ericsson KRY 112 114-1	12	12.642	13.906	0.38	0.75	1.84	132.00	0.000	0.000	25.66	0.00	0.00
7	187.00	Kathrein 782 11054-Smart	3	12.642	13.906	0.38	0.75	0.25	5.40	0.000	0.000	3.44	0.00	0.00
8	187.00	Ericsson	3	12.642	13.906	0.65	0.75	12.60	396.60	0.000	0.000	175.17	0.00	0.00
9	187.00	RFS	3	12.642	13.906	0.52	0.75	28.73	384.00	0.000	0.000	399.48	0.00	0.00
10	184.00	Platform w/ Hand Rail	1	12.599	13.858	1.00	1.00	32.00	1600.00	0.000	0.000	443.47	0.00	0.00
11	168.50	Low Profile Platform	1	12.367	13.604	1.00	1.00	22.00	1400.00	0.000	0.000	299.29	0.00	0.00
12	168.00	APXV9ERR18-C-A20	1	12.360	13.596	0.65	0.80	5.20	62.00	0.000	0.000	70.66	0.00	0.00
13	168.00	ACU-A20-N	4	12.360	13.596	0.40	0.80	0.22	4.00	0.000	0.000	3.05	0.00	0.00
14	168.00	TD-RRH8x20-25	3	12.360	13.596	0.40	0.80	3.66	210.00	0.000	0.000	49.76	0.00	0.00
15	168.00	800 MHz RRH	3	12.360	13.596	0.40	0.80	3.00	162.00	0.000	0.000	40.79	0.00	0.00
16	168.00	1900 MHz RRH	3	12.360	13.596	0.40	0.80	3.00	132.00	0.000	0.000	40.79	0.00	0.00
17	168.00	800 MHz Filters	3	12.360	13.596	0.40	0.80	3.00	162.00	0.000	0.000	40.79	0.00	0.00
18	168.00	APXVSPP18-C-A20	2	12.360	13.596	0.65	0.80	10.39	114.00	0.000	0.000	141.31	0.00	0.00
19	168.00	APXVTM14-C-120	3	12.360	13.596	0.62	0.80	11.87	168.00	0.000	0.000	161.36	0.00	0.00
20	158.00	Ericsson RRUS-A2 RRU	3	12.201	13.421	0.38	0.75	2.09	63.30	0.000	0.000	28.08	0.00	0.00
21	158.00	Powerwave LGP21401	6	12.201	13.421	0.38	0.75	2.83	105.00	0.000	0.000	38.05	0.00	0.00
22	158.00	Raycap DC6-48-60-18-8F	2	12.201	13.421	0.38	0.75	1.10	63.60	0.000	0.000	14.80	0.00	0.00
23	158.00	800 10121	3	12.201	13.421	0.58	0.75	9.04	132.30	0.000	0.000	121.30	0.00	0.00
24	158.00	HPA-65R-BUU-H8	3	12.201	13.421	0.58	0.75	22.78	204.00	0.000	0.000	305.73	0.00	0.00
25	158.00	Kathrein 860-10025 RET	6	12.201	13.421	0.38	0.75	0.36	6.96	0.000	0.000	4.83	0.00	0.00
26	158.00	Ericsson RRUS 4415 B25	3	12.201	13.421	0.38	0.75	1.84	138.00	0.000	0.000	24.76	0.00	0.00
27	158.00	800 10966	6	12.201	13.421	0.53	0.75	45.72	687.60	0.000	0.000	613.61	0.00	0.00
28	158.00	Ericsson 8843 B2 B66A	3	12.201	13.421	0.38	0.75	1.84	216.00	0.000	0.000	24.76	0.00	0.00
29	158.00	Ericsson 4449 B5 B12	3	12.201	13.421	0.38	0.75	1.86	219.00	0.000	0.000	24.91	0.00	0.00
30	158.00	Raycap DC6-48-60-0-8C	1	12.201	13.421	1.00	1.00	4.78	26.20	0.000	0.000	64.15	0.00	0.00
31	158.00	Plateform Mount	1	12.201	13.421	1.00	1.00	44.30	2136.59	0.000	0.000	594.55	0.00	0.00
							Totals:		**10,284.46**			**4,078.65**		

Total Applied Force Summary

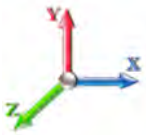
Structure:	CT46124-A-SBA		**Code:**	EIA/TIA-222-G	12/30/2020
Site Name:	Enfield-Moody Rd.		**Exposure:**	C	
Height:	188.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 45

Tower Engineering Solutions

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
0.25		5.82	67.71	0.00	0.00
1.00		17.44	202.83	0.00	0.00
5.00		92.29	1074.29	0.00	0.00
10.00		113.68	1325.22	0.00	0.00
15.00		111.81	1305.61	0.00	0.00
18.25		74.60	838.13	0.00	0.00
20.00		40.60	447.87	0.00	0.00
21.00		23.33	254.85	0.00	0.00
25.00		95.98	1011.54	0.00	0.00
28.25		79.01	812.63	0.00	0.00
30.00		42.71	434.14	0.00	0.00
32.83		69.82	696.98	0.00	0.00
35.00		53.78	530.18	0.00	0.00
40.00		125.80	1207.55	0.00	0.00
43.25		81.88	774.39	0.00	0.00
45.00		44.79	730.99	0.00	0.00
47.75		70.68	1139.68	0.00	0.00
48.92		30.00	481.54	0.00	0.00
49.00		2.05	32.85	0.00	0.00
50.00		25.65	206.30	0.00	0.00
55.00		129.38	1021.43	0.00	0.00
60.00		129.27	1004.62	0.00	0.00
65.00		128.93	987.81	0.00	0.00
70.00		128.37	971.00	0.00	0.00
72.25		57.31	431.47	0.00	0.00
75.00		69.87	522.73	0.00	0.00
76.83		46.29	345.03	0.00	0.00
80.00		80.03	592.35	0.00	0.00
85.00		125.66	920.57	0.00	0.00
87.50		62.20	453.98	0.00	0.00
90.00		62.92	770.98	0.00	0.00
90.50		12.52	153.27	0.00	0.00
91.92		35.51	433.61	0.00	0.00
92.25		8.23	100.41	0.00	0.00
95.00		68.52	424.24	0.00	0.00
100.00		123.78	760.49	0.00	0.00
105.00		122.25	746.48	0.00	0.00
105.50		12.08	73.88	0.00	0.00
105.58		1.93	11.81	0.00	0.00
110.00		106.48	646.79	0.00	0.00
115.00		118.88	718.46	0.00	0.00
120.00		117.06	704.46	0.00	0.00
125.00		115.15	690.45	0.00	0.00
130.00		113.17	676.44	0.00	0.00
132.50		55.70	332.97	0.00	0.00
135.00		55.96	513.36	0.00	0.00

Total Applied Force Summary

Structure:	CT46124-A-SBA		**Code:**	EIA/TIA-222-G	12/30/2020
Site Name:	Enfield-Moody Rd.		**Exposure:**	C	
Height:	188.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 46

136.50		33.30	305.16	0.00	0.00
140.00		77.07	351.10	0.00	0.00
145.00		108.36	493.23	0.00	0.00
150.00		106.11	483.42	0.00	0.00
155.00		103.79	473.61	0.00	0.00
158.00	(40) attachments	1920.60	4278.01	0.00	0.00
160.00		40.20	157.26	0.00	0.00
165.00		98.98	386.30	0.00	0.00
168.00	(22) attachments	606.61	1241.07	0.00	0.00
168.50	(1) attachments	308.87	1436.39	0.00	0.00
170.00		28.62	108.59	0.00	0.00
175.00		93.95	355.58	0.00	0.00
178.00		55.07	208.64	0.00	0.00
180.00		36.42	121.96	0.00	0.00
184.00	(1) attachments	516.64	1843.93	0.00	0.00
185.00		18.31	60.98	0.00	0.00
187.00	(32) attachments	964.58	2393.87	0.00	0.00
188.00		18.38	48.22	0.00	0.00
	Totals:	**8,425.03**	**43,331.67**	**0.00**	**0.00**

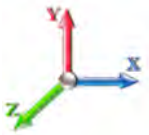
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 47	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 28

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)
0.25	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.048	0.000	7.442	0.00	0.00
1.00	1.25" Reinforcing	Yes	0.75	0.000	2.50	0.16	0.00	0.048	0.000	7.442	0.00	0.00
5.00	1.25" Reinforcing	Yes	4.00	0.000	2.50	0.83	0.00	0.048	0.000	7.442	0.00	0.00
10.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.049	0.000	7.442	0.00	0.00
15.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.050	0.000	7.442	0.00	0.00
18.25	1.25" Reinforcing	Yes	3.25	0.000	2.50	0.68	0.00	0.050	0.000	7.745	0.00	0.00
20.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.051	0.000	7.896	0.00	0.00
21.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.051	0.000	7.978	0.00	0.00
25.00	1.25" Reinforcing	Yes	4.00	0.000	2.50	0.83	0.00	0.051	0.000	8.276	0.00	0.00
28.25	1.25" Reinforcing	Yes	3.25	0.000	2.50	0.68	0.00	0.052	0.000	8.492	0.00	0.00
30.00	1.25" Reinforcing	Yes	1.75	0.000	2.50	0.36	0.00	0.052	0.000	8.600	0.00	0.00
32.83	1.25" Reinforcing	Yes	2.83	0.000	2.50	0.59	0.00	0.053	0.000	8.765	0.00	0.00
35.00	1.25" Reinforcing	Yes	2.17	0.000	2.50	0.45	0.00	0.053	0.000	8.883	0.00	0.00
40.00	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.005	0.000	9.137	0.00	0.00
47.75	1.25" Reinforcing	Yes	1.25	0.000	2.50	0.26	0.00	0.025	0.000	9.484	0.00	0.00
48.92	1.25" Reinforcing	Yes	1.17	0.000	2.50	0.24	0.00	0.056	0.000	9.532	0.00	0.00
49.00	1.25" Reinforcing	Yes	0.08	0.000	2.50	0.02	0.00	0.056	0.000	9.536	0.00	0.00
50.00	1.25" Reinforcing	Yes	1.00	0.000	2.50	0.21	0.00	0.056	0.000	9.576	0.00	0.00
55.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.056	0.000	9.770	0.00	0.00
60.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.057	0.000	9.951	0.00	0.00
65.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.058	0.000	10.120	0.00	0.00
70.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.060	0.000	10.279	0.00	0.00
72.25	1.25" Reinforcing	Yes	2.25	0.000	2.50	0.47	0.00	0.061	0.000	10.348	0.00	0.00
75.00	1.25" Reinforcing	Yes	2.75	0.000	2.50	0.57	0.00	0.061	0.000	10.430	0.00	0.00
76.83	1.25" Reinforcing	Yes	1.83	0.000	2.50	0.38	0.00	0.062	0.000	10.483	0.00	0.00
80.00	1.25" Reinforcing	Yes	2.42	0.000	2.50	0.50	0.00	0.048	0.000	10.572	0.00	0.00
90.50	1.25" Reinforcing	Yes	0.25	0.000	2.50	0.05	0.00	0.033	0.000	10.850	0.00	0.00
91.92	1.25" Reinforcing	Yes	1.42	0.000	2.50	0.30	0.00	0.066	0.000	10.886	0.00	0.00
92.25	1.25" Reinforcing	Yes	0.33	0.000	2.50	0.07	0.00	0.066	0.000	10.894	0.00	0.00
95.00	1.25" Reinforcing	Yes	2.75	0.000	2.50	0.57	0.00	0.066	0.000	10.962	0.00	0.00
100.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.067	0.000	11.081	0.00	0.00
105.00	1.25" Reinforcing	Yes	5.00	0.000	2.50	1.04	0.00	0.068	0.000	11.195	0.00	0.00
105.50	1.25" Reinforcing	Yes	0.50	0.000	2.50	0.10	0.00	0.069	0.000	11.206	0.00	0.00
105.58	1.25" Reinforcing	Yes	0.08	0.000	2.50	0.02	0.00	0.069	0.000	11.208	0.00	0.00
110.00	1.25" Reinforcing	Yes	1.67	0.000	2.50	0.35	0.00	0.026	0.000	11.305	0.00	0.00
									Totals:		**0.0**	**0.0**

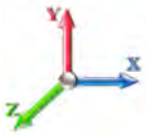
Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 48	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 28

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	-43.33	-8.43	0.00	-1149.7	0.00	1149.72	5035.03	2517.52	10606.9	5311.37	0.00	0.000	0.000	0.203
0.25	-43.26	-8.42	0.00	-1147.6	0.00	1147.61	5032.22	2516.11	10592.3	5304.07	0.00	-0.003	0.000	0.150
1.00	-43.06	-8.42	0.00	-1141.3	0.00	1141.30	5023.77	2511.88	10548.7	5282.19	0.00	-0.010	0.000	0.150
5.00	-41.98	-8.36	0.00	-1107.6	0.00	1107.61	4978.38	2489.19	10316.4	5165.91	0.03	-0.046	0.000	0.148
10.00	-40.65	-8.28	0.00	-1065.8	0.00	1065.81	4920.91	2460.46	10028.2	5021.57	0.10	-0.092	0.000	0.146
15.00	-39.33	-8.19	0.00	-1024.4	0.00	1024.43	4862.63	2431.31	9742.31	4878.39	0.22	-0.138	0.000	0.143
18.25	-38.49	-8.13	0.00	-997.81	0.00	997.81	4824.31	2412.15	9557.73	4785.97	0.32	-0.168	0.000	0.159
20.00	-38.04	-8.10	0.00	-983.59	0.00	983.59	4803.53	2401.76	9458.77	4736.42	0.39	-0.186	0.000	0.158
21.00	-37.78	-8.09	0.00	-975.49	0.00	975.49	4791.61	2395.81	9402.36	4708.17	0.43	-0.197	0.000	0.160
25.00	-36.77	-8.01	0.00	-943.14	0.00	943.14	4743.61	2371.81	9177.73	4595.68	0.61	-0.240	0.000	0.158
28.25	-35.95	-7.95	0.00	-917.10	0.00	917.10	4704.23	2352.11	8996.42	4504.89	0.79	-0.274	0.000	0.164
30.00	-35.51	-7.92	0.00	-903.19	0.00	903.19	4682.88	2341.44	8899.25	4456.24	0.89	-0.294	0.000	0.163
32.83	-34.81	-7.86	0.00	-880.77	0.00	880.77	4648.14	2324.07	8742.80	4377.90	1.08	-0.326	0.000	0.161
32.83	-34.81	-7.86	0.00	-880.77	0.00	880.77	4648.14	2324.07	8742.80	4377.90	1.08	-0.326	0.000	0.161
35.00	-34.28	-7.84	0.00	-863.71	0.00	863.71	4621.33	2310.66	8623.42	4318.12	1.23	-0.351	0.000	0.207
40.00	-33.06	-7.74	0.00	-824.53	0.00	824.53	4558.96	2279.48	8350.33	4181.37	1.64	-0.424	0.000	0.204
43.25	-32.28	-7.67	0.00	-799.39	0.00	799.39	4517.98	2258.99	8174.32	4093.24	1.94	-0.472	0.000	0.202
45.00	-31.55	-7.64	0.00	-785.97	0.00	785.97	4495.78	2247.89	8080.06	4046.03	2.12	-0.498	0.000	0.201
47.75	-30.41	-7.57	0.00	-764.97	0.00	764.97	4460.68	2230.34	7932.64	3972.22	2.42	-0.539	0.000	0.199
48.92	-29.92	-7.54	0.00	-756.11	0.00	756.11	4445.67	2222.84	7870.19	3940.94	2.55	-0.557	0.000	0.143
49.00	-29.89	-7.54	0.00	-755.51	0.00	755.51	3699.57	1849.78	6681.20	3345.56	2.56	-0.558	0.000	0.153
50.00	-29.68	-7.53	0.00	-747.97	0.00	747.97	3689.91	1844.95	6638.39	3324.13	2.68	-0.568	0.000	0.163
55.00	-28.65	-7.42	0.00	-710.30	0.00	710.30	3641.14	1820.57	6425.47	3217.51	3.31	-0.626	0.000	0.159
60.00	-27.64	-7.31	0.00	-673.20	0.00	673.20	3591.55	1795.77	6214.50	3111.87	3.99	-0.684	0.000	0.155
65.00	-26.65	-7.19	0.00	-636.66	0.00	636.66	3541.14	1770.57	6005.55	3007.24	4.74	-0.741	0.000	0.151
70.00	-25.67	-7.07	0.00	-600.69	0.00	600.69	3489.91	1744.96	5798.71	2903.67	5.55	-0.798	0.000	0.146
72.25	-25.24	-7.02	0.00	-584.78	0.00	584.78	3466.60	1733.30	5706.35	2857.41	5.93	-0.824	0.000	0.145
75.00	-24.71	-6.95	0.00	-565.48	0.00	565.48	3437.87	1718.94	5594.07	2801.19	6.41	-0.856	0.000	0.142
76.83	-24.37	-6.91	0.00	-552.75	0.00	552.75	3418.62	1709.31	5519.73	2763.97	6.74	-0.877	0.000	0.141
76.83	-24.37	-6.91	0.00	-552.75	0.00	552.75	3418.62	1709.31	5519.73	2763.97	6.74	-0.877	0.000	0.141
80.00	-23.77	-6.85	0.00	-530.83	0.00	530.83	3385.02	1692.51	5391.70	2699.86	7.34	-0.913	0.000	0.204
85.00	-22.84	-6.73	0.00	-496.58	0.00	496.58	3331.35	1665.67	5191.69	2599.71	8.34	-0.996	0.000	0.198
87.50	-22.39	-6.68	0.00	-479.75	0.00	479.75	3304.20	1652.10	5092.60	2550.09	8.87	-1.038	0.000	0.195
90.00	-21.61	-6.61	0.00	-463.05	0.00	463.05	3276.86	1638.43	4994.13	2500.78	9.43	-1.080	0.000	0.192
90.50	-21.46	-6.60	0.00	-459.74	0.00	459.74	3271.36	1635.68	4974.52	2490.96	9.54	-1.088	0.000	0.190
91.92	-21.02	-6.56	0.00	-450.36	0.00	450.36	3255.72	1627.86	4918.94	2463.13	9.87	-1.112	0.000	0.132
92.25	-20.92	-6.56	0.00	-448.20	0.00	448.20	2609.22	1304.61	4017.17	2011.57	9.94	-1.116	0.000	0.141
95.00	-20.49	-6.50	0.00	-430.15	0.00	430.15	2587.46	1293.73	3934.74	1970.29	10.60	-1.148	0.000	0.151
100.00	-19.73	-6.38	0.00	-397.65	0.00	397.65	2547.26	1273.63	3786.04	1895.83	11.83	-1.210	0.000	0.144
105.00	-18.98	-6.26	0.00	-365.74	0.00	365.74	2506.24	1253.12	3638.92	1822.16	13.13	-1.270	0.000	0.136
105.50	-18.91	-6.24	0.00	-362.61	0.00	362.61	2502.09	1251.04	3624.30	1814.84	13.26	-1.276	0.000	0.136
105.58	-18.89	-6.25	0.00	-362.11	0.00	362.11	2501.42	1250.71	3621.96	1813.67	13.29	-1.277	0.000	0.136
105.58	-18.89	-6.25	0.00	-362.11	0.00	362.11	2501.42	1250.71	3621.96	1813.67	13.29	-1.277	0.000	0.136
110.00	-18.24	-6.15	0.00	-334.49	0.00	334.49	2464.40	1232.20	3493.46	1749.33	14.49	-1.330	0.000	0.199
115.00	-17.52	-6.04	0.00	-303.74	0.00	303.74	2421.75	1210.87	3349.75	1677.36	15.93	-1.418	0.000	0.188
120.00	-16.81	-5.93	0.00	-273.53	0.00	273.53	2378.28	1189.14	3207.87	1606.32	17.46	-1.503	0.000	0.177
125.00	-16.11	-5.82	0.00	-243.88	0.00	243.88	2333.99	1167.00	3067.90	1536.23	19.08	-1.586	0.000	0.166
130.00	-15.43	-5.70	0.00	-214.78	0.00	214.78	2288.89	1144.45	2929.94	1467.15	20.79	-1.665	0.000	0.153

Calculated Forces

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 49

132.50	-15.10	-5.65	0.00	-200.53	0.00	200.53	2266.03	1133.02	2861.73	1432.99	21.67	-1.704	0.000	0.147
135.00	-14.58	-5.58	0.00	-186.41	0.00	186.41	2239.33	1119.66	2789.52	1396.83	22.57	-1.741	0.000	0.140
136.50	-14.28	-5.55	0.00	-178.03	0.00	178.03	1414.34	707.17	1783.76	893.21	23.12	-1.763	0.000	0.209
140.00	-13.92	-5.48	0.00	-158.61	0.00	158.61	1397.90	698.95	1729.39	865.98	24.43	-1.812	0.000	0.193
145.00	-13.42	-5.37	0.00	-131.21	0.00	131.21	1373.73	686.86	1652.26	827.36	26.38	-1.898	0.000	0.168
150.00	-12.94	-5.27	0.00	-104.34	0.00	104.34	1348.73	674.37	1575.83	789.09	28.41	-1.975	0.000	0.142
155.00	-12.46	-5.16	0.00	-78.01	0.00	78.01	1322.92	661.46	1500.20	751.22	30.51	-2.039	0.000	0.113
158.00	-8.26	-3.09	0.00	-62.53	0.00	62.53	1307.05	653.52	1455.24	728.70	31.80	-2.071	0.000	0.092
160.00	-8.10	-3.05	0.00	-56.36	0.00	56.36	1296.30	648.15	1425.45	713.78	32.67	-2.091	0.000	0.085
165.00	-7.71	-2.94	0.00	-41.13	0.00	41.13	1268.86	634.43	1351.65	676.83	34.89	-2.132	0.000	0.067
168.00	-6.50	-2.29	0.00	-32.31	0.00	32.31	1252.00	626.00	1307.87	654.91	36.23	-2.152	0.000	0.055
168.50	-5.07	-1.92	0.00	-31.17	0.00	31.17	1249.16	624.58	1300.61	651.27	36.46	-2.156	0.000	0.052
170.00	-4.96	-1.89	0.00	-28.28	0.00	28.28	1240.60	620.30	1278.90	640.40	37.14	-2.164	0.000	0.048
175.00	-4.61	-1.79	0.00	-18.82	0.00	18.82	1211.52	605.76	1207.28	604.54	39.42	-2.189	0.000	0.035
178.00	-4.41	-1.72	0.00	-13.46	0.00	13.46	1193.69	596.84	1164.89	583.31	40.79	-2.199	0.000	0.027
178.00	-4.41	-1.72	0.00	-13.46	0.00	13.46	975.84	487.92	954.81	478.11	40.79	-2.199	0.000	0.033
180.00	-4.29	-1.68	0.00	-10.01	0.00	10.01	975.84	487.92	954.81	478.11	41.72	-2.205	0.000	0.025
184.00	-2.46	-1.10	0.00	-3.27	0.00	3.27	975.84	487.92	954.81	478.11	43.57	-2.213	0.000	0.009
185.00	-2.40	-1.08	0.00	-2.17	0.00	2.17	975.84	487.92	954.81	478.11	44.03	-2.213	0.000	0.007
187.00	-0.05	-0.02	0.00	-0.02	0.00	0.02	975.84	487.92	954.81	478.11	44.96	-2.214	0.000	0.000
188.00	0.00	-0.02	0.00	0.00	0.00	0.00	975.84	487.92	954.81	478.11	45.42	-2.214	0.000	0.000

Final Analysis Summary

Structure:	CT46124-A-SBA	**Code:**	EIA/TIA-222-G	12/30/2020	
Site Name:	Enfield-Moody Rd.	**Exposure:**	C		
Height:	188.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 50	

Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.6W 97 mph Wind	35.2	0.00	51.99	0.00	0.00	4844.94
0.9D + 1.6W 97 mph Wind	35.2	0.00	38.99	0.00	0.00	4766.45
1.2D + 1.0Di + 1.0Wi 50 mph Wind	11.2	0.00	91.46	0.00	0.00	1637.07
1.2D + 1.0E	2.1	0.00	52.00	0.00	0.00	307.30
0.9D + 1.0E	2.1	0.00	39.00	0.00	0.00	301.84
1.0D + 1.0W 60 mph Wind	8.4	0.00	43.33	0.00	0.00	1149.72

Max Stresses

Load Case	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Elev (ft)	Stress Ratio
1.2D + 1.6W 97 mph Wind	-40.27	-32.96	0.00	-3645.5	0.00	-3645.5	4621.33	2310.6	8623.42	4318.12	35.00	0.853
0.9D + 1.6W 97 mph Wind	-29.99	-32.65	0.00	-3572.1	0.00	-3572.1	4621.33	2310.6	8623.42	4318.12	35.00	0.834
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-40.16	-8.32	0.00	-268.67	0.00	-268.67	1414.34	707.17	1783.76	893.21	136.50	0.329
1.2D + 1.0E	-17.32	-1.61	0.00	-66.75	0.00	-66.75	1414.34	707.17	1783.76	893.21	136.50	0.087
0.9D + 1.0E	-12.98	-1.57	0.00	-65.12	0.00	-65.12	1414.34	707.17	1783.76	893.21	136.50	0.082
1.0D + 1.0W 60 mph Wind	-14.28	-5.55	0.00	-178.03	0.00	-178.03	1414.34	707.17	1783.76	893.21	136.50	0.209

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors VQ/I (lb/in)	Vu (kips)	phi Vn (kips)	Lower Termination MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Upper Termination MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Max Member Pu (kips)	phi Pn (kips)	phi Tn (kips)	Ratio
0.0	1.0	(3) SOL-2 1/4" William R71	137.9	1.66	25.3	227.3	25.3	9	0	180.1	25.3	7	0	227.25	459.1	468.91	0.495
0.3	32.8	(3) PLT-6"X1-1/4"(1.25" Hole	-257.5	-5.41	37.1	325.7	37.1	9	11	347.4	37.1	9	11	355.90	404.8	356.25	0.999
1.0	21.0	(1) LNP-LP6X125-B-20B	197.1	4.73	25.3	295.5	25.3	12	0	286.7	25.3	11	0	295.52	395.0	360.94	0.819
1.0	18.3	(1) LNP-LP6X125-B-20T	191.2	4.59	25.3	295.1	25.3	12	0	283.3	25.3	11	11	295.14	395.0	360.94	0.818
21.0	28.3	(1) LNP-LP6X125-G-20BT	201.6	4.84	25.3	286.2	25.3	11	0	280.4	25.3	11	11	286.21	395.0	360.94	0.793
47.8	65.0	(1) LNP-LP6X100-G-20TC	-232.2	-5.57	25.3	280.9	25.3	11	11	212.5	25.3			280.95	297.8	288.75	0.973
48.9	76.8	(3) PLT-5.5"x1 1/4"(1.25"hol	304.1	6.39	37.1	290.3	37.1	8	10	291.8	37.1	8	10	309.05	371.1	318.75	0.970
65.0	72.3	(1) LNP-LP6X100-G-10CT	-204.2	-4.90	25.3	212.5	25.3			204.3	25.3	8	11	212.48	297.8	288.75	0.736
90.5	105.5	(1) LNP-LP6X100-G-20TT	-298.7	-7.17	25.3	248.2	25.3	10	10	177.5	25.3	7	10	248.24	297.8	288.75	0.860
91.9	105.6	(3) PLT-4.5"x 1-1/4"(1.25"ho	326.6	7.84	37.1	217.0	37.1	6	7	227.0	37.1	6	7	230.08	296.2	243.75	0.944

EXHIBIT 8

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 188-Ft Monopole Tower
Customer Name: SBA Communications Corp
Customer Site Number: CT46124-A
Customer Site Name: Enfield-Moody Rd.
Carrier Name: T-Mobile (App#: 141462, V1)
Carrier Site ID / Name: CTHA170C / Moody Rd
Site Location: 188 Moody Rd
Enfield, Connecticut
Hartford County
Latitude: 42.002000
Longitude: -72.521694

Analysis Result:

Max Structural Usage: 69.9% [Pass]

Report Prepared By: Manoj Kandel

Introduction

The purpose of this report is to summarize the analysis results on the (1) Platform w/ Hand Rail at 187.00' 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 provided by TES, dated 06/26/2018
Antenna Loading	SBA, Application #: 141462, v1, dated 11/11/2020
Existing Modification	N/A
Proposed Modification	TES Project No. 99815

Analysis Criteria

Basic Wind Speed Used in the Analysis: V_{ULT} = 125.0 mph (3-Sec. Gust) / Equivalent to
V_{ASD} = 97.0 mph (3-Sec. Gust)
Basic Wind Speed with Ice: 50 mph (3-Sec. Gust) with 1" radial ice concurrent
Operational Wind Speed: 60 mph +0" Radial ice
Standard/Codes: ANSI/TIA/EIA 222-G /2015 IBC / 2018 Connecticut State Building Code
Exposure Category: C
Structure Class: II
Topographic Category: 1
Crest Height (Ft): 0

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

Mount Information

(1) Platform w/ Hand Rail at 187.00' elevation

Proposed Modifications

- Kicker kit with collar mount
- Replacing existing mount pipes

Final Antenna Configuration

3	Ericsson Air 32 KRD901146-1_B66A_B2A
3	RFS APXVAARR24_43-U-NA20 (Octa)
3	Ericsson AIR6449 B41
12	Ericsson KRY 112 114-1 Double TMA
3	Ericsson 4449 B71 + B85
3	Ericsson 4415 B25
3	Kathrein 782 11054

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

Analysis Results

Our calculations have determined that under design wind load the existing mounts will be structurally adequate to support the proposed antenna configuration after the proposed modification is successfully completed. The maximum structural usage is 69.9%, which occurs in the support rail 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.


2018/06/26 12:00

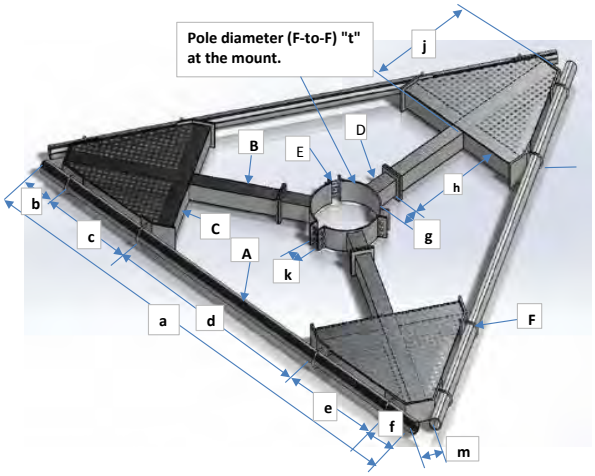

2018/06/26 11:42

Updated on 5-18-17

Antenna Mount Type "MT-C" Mapping Form (PATENT PENDING)

FCC # 1270231

Tower Owner:	SBA	**Mapping Date:**	6/26/18
Site Name:	Enfield Moody rd	**Structure Type:**	Monopole
Site Number or ID:	CT46124-A	**Structure Height (Ft.):**	188
Mapping Contractor:	TES	**Mount Height (Ft.):**	183

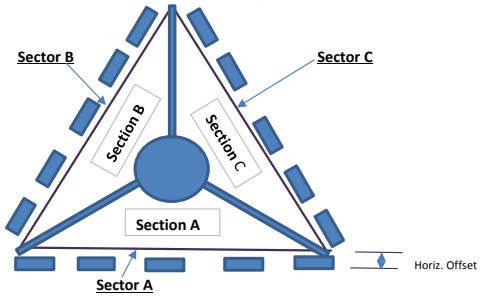


Geometries (Unit: inches)									
a	150	**e**	45	j	45	**o**		**s**	
b	10	**f**	10	k	10	**p**		**t**	24
c	45	**g**	5	m	6	**q**		**u ***	58
d	40	**h**	17	n		**r**		**v ***	72

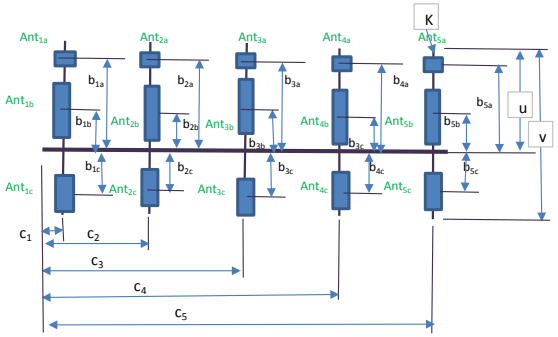
Members/Bolts (Unit: inches)					* - See Antenna Layout for "u", "v" and member "K" (pipe)				
Items	**Member**	Lx (O.D.)	Ly (I.D.)	T	**Items**	**Member**	Lx (O.D.)	Ly (I.D.)	T
A	3.5 OD x 0.216 Pipe	3.5	3.068	0.216	**F**	1/2" U-Bolt			
B	Tubing 4x4x5/16	4	4	0.3125	**G**				
C	Tubing 4x4x5/16	4	4	0.3125	**H**				
D					**J**				
E	3/4" Bolt				K* (pipe)	2.375 OD x 0.154 Pipe	2.375	2.067	0.154

Please enter the infomation below if members can't be found from the drop down lists

F-F= 4"
K1= 2.4" x 1/8", V1=72" U1= 58"
K2= 2.9" x 3/16",V2=114" U2= 66"
D= N/A



Climbing ladder is , at 80 Degree Azimuth



Antenna Layout

Antennas (Please enter the antenna model if it can be found on the antenas. If not labled, enter "Unknown". If no antenna at the specified location, please enter "N/A". If antennas and the locations are the same on all three sections, only enter one sector.)						Mounting Locations (Unit: inches)			Photos of the antennas
Ants. Items	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Vertical Distances from bottom horizontal "b_{1a}, b_{2a}, b_{3a}, b_{1b}...." (In.)	Horiz. offset (Use "-" if antenna is inside the	Horiz. offset "C_1, C_2, C_3, C_4, C_5" from the center	Please enter Photo Numbers
Sector A									
Ant_{1a}		8	3	10.5		31	2	20	
Ant_{1b}		7	3.25	53	1 5/8	32	3		
Ant_{1c}									
Ant_{2a}								75	
Ant_{2b}	LNX-6515DS-A1M				1 5/8"	10	3		
Ant_{2c}									
Ant_{3a}								130	
Ant_{3b}	N/A								
Ant_{3c}									
Ant_{4a}									
Ant_{4b}									
Ant_{4c}									
Ant_{5a}									
Ant_{5b}									
An_{5c}									

Is antenna info same as sector A? Yes — **Antennas on Sector B are the same as Sector A**

Is antenna info same as sector A/B? Same As A — **Antennas on Sector C are the same as Sector A**

Azimuth (Degree) of Each Sector and Climbing Information

Sector A:	30	Deg	
Sector B:	150	Deg	
Sector C:	270	Deg	
Climbing	80	Deg	
Ladders:	Corrosion Type:	n/a	
	Configuration:	n/a	
Step Bolts:	Corrosion Type:	N/A	
	Configuration:	Step bolt was found bent.	
Safety Cable:	Corrosion Type:	Severe corrosion on climb safety cable observed	
	Configuration:	N/A	

Structure: CT46124-A-SBA - Enfield-Moody Rd.

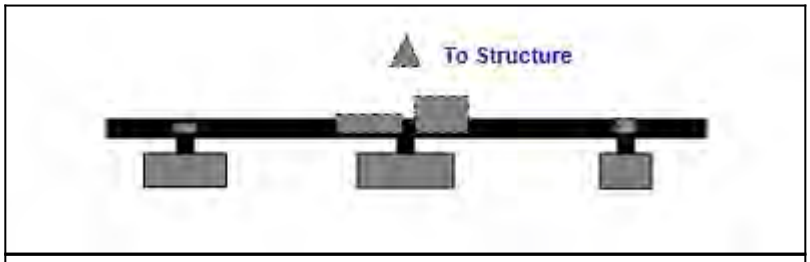
Sector: A

Structure Type: Monopole

Mount Elev: 187.00

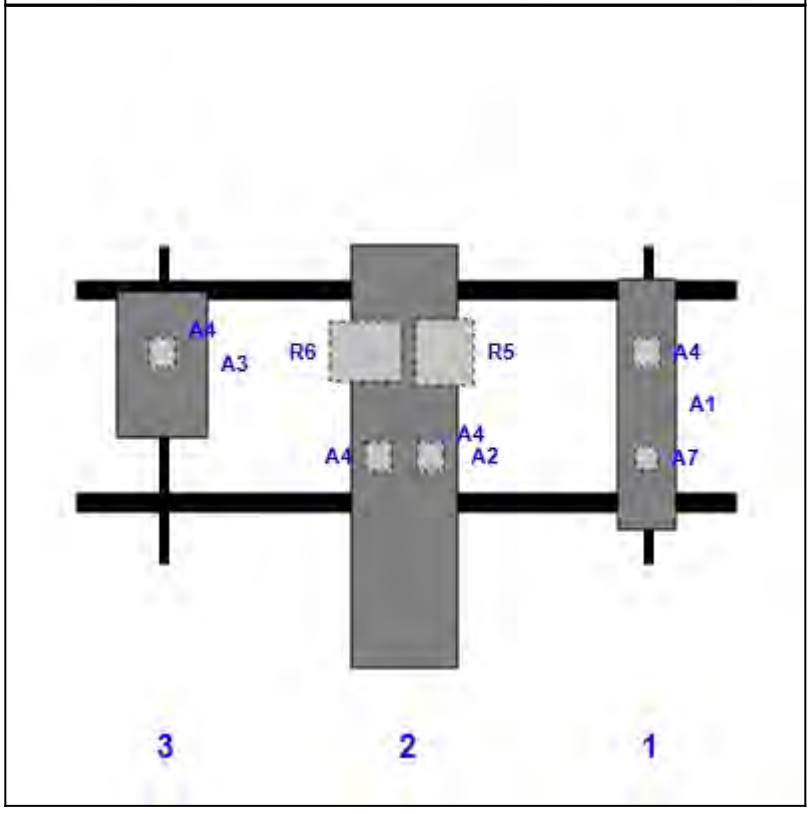
11/18/2020

Plan View



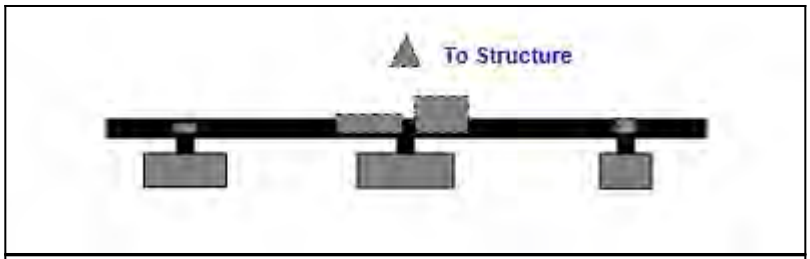
Front View

Looking Toward Structure



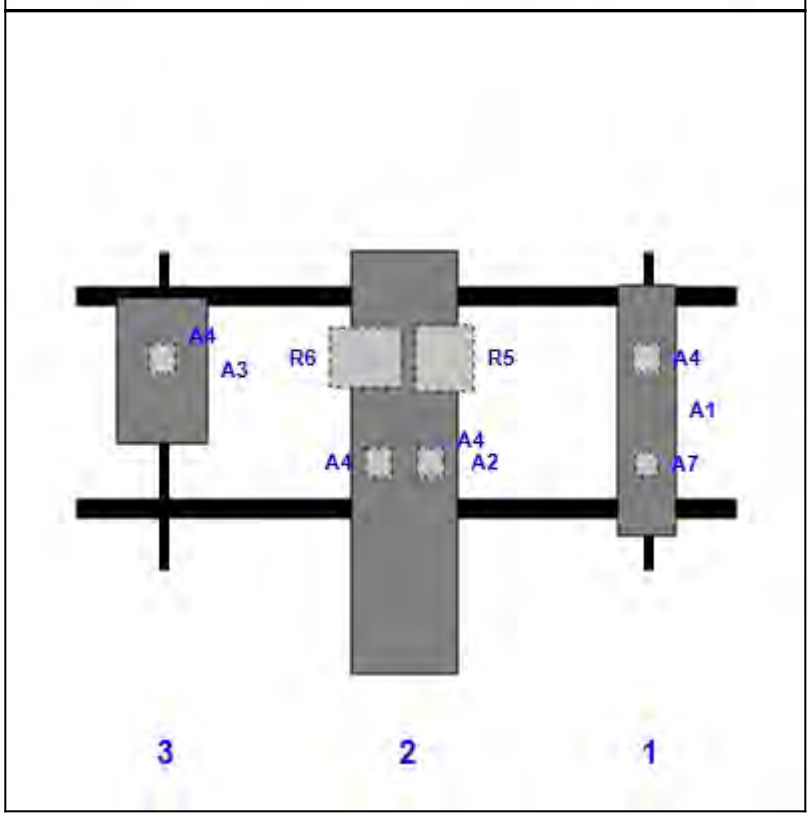
Ref #	Model	Height (in)	Width (in)	H Dist Left	Pipe #	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	Air 32 KRD901146-1_B66A_B2A	57.00	12.90	130.00	1	a	Front	36.00			
A4	KRY 112 114-1 Double TMA	6.90	6.10	130.00	1	a	Behind	24.00			
A7	782 11054	5.70	5.00	130.00	1	a	Behind	48.00			
A2	APXVAARR24_43-U-NA20 (Octa)	95.90	24.00	75.00	2	a	Front	48.00			
A4	KRY 112 114-1 Double TMA	6.90	6.10	75.00	2	a	Behind	48.00	6.00		
R5	4449 B71 + B85	15.00	13.20	75.00	2	a	Behind	24.00	9.00		
R6	4415 B25	13.50	16.50	75.00	2	a	Behind	24.00	-9.00		
A4	KRY 112 114-1 Double TMA	6.90	6.10	75.00	2	b	Behind	48.00	-6.00		
A3	AIR6449 B41	33.10	20.50	20.00	3	a	Front	27.00			
A4	KRY 112 114-1 Double TMA	6.90	6.10	20.00	3	a	Behind	24.00			

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
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R6	4415 B25	13.50	16.50	75.00	2	a	Behind	24.00	-9.00		
A4	KRY 112 114-1 Double TMA	6.90	6.10	75.00	2	b	Behind	48.00	-6.00		
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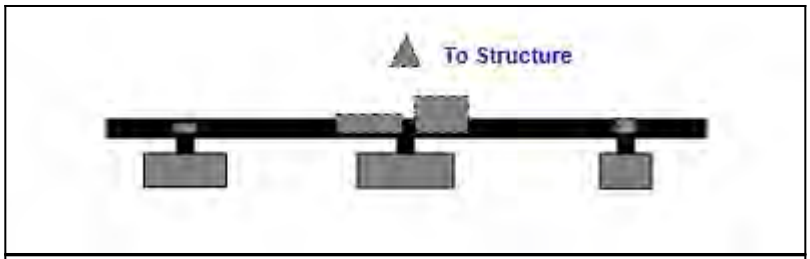
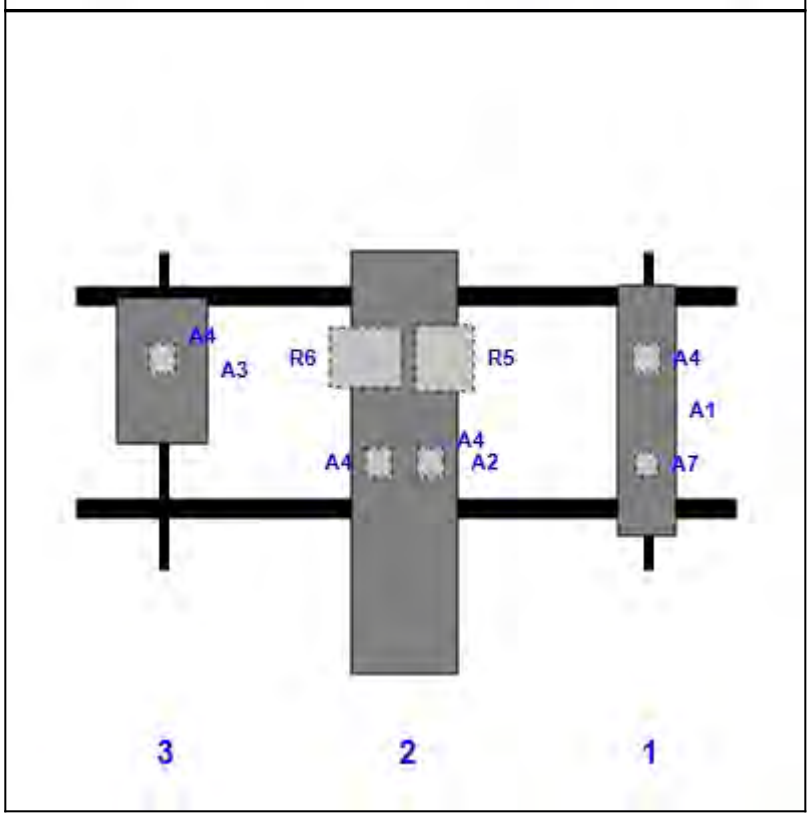
A4	KRY 112 114-1 Double TMA	6.90	6.10	20.00	3	a	Behind	24.00			

Plan View



Front View

Looking Toward Structure



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A4	KRY 112 114-1 Double TMA	6.90	6.10	130.00	1	a	Behind	24.00			
A7	782 11054	5.70	5.00	130.00	1	a	Behind	48.00			
A2	APXVAARR24_43-U-NA20 (Octa)	95.90	24.00	75.00	2	a	Front	48.00			
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A4	KRY 112 114-1 Double TMA	6.90	6.10	75.00	2	b	Behind	48.00	-6.00		
A3	AIR6449 B41	33.10	20.50	20.00	3	a	Front	27.00			
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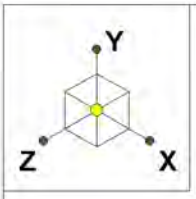

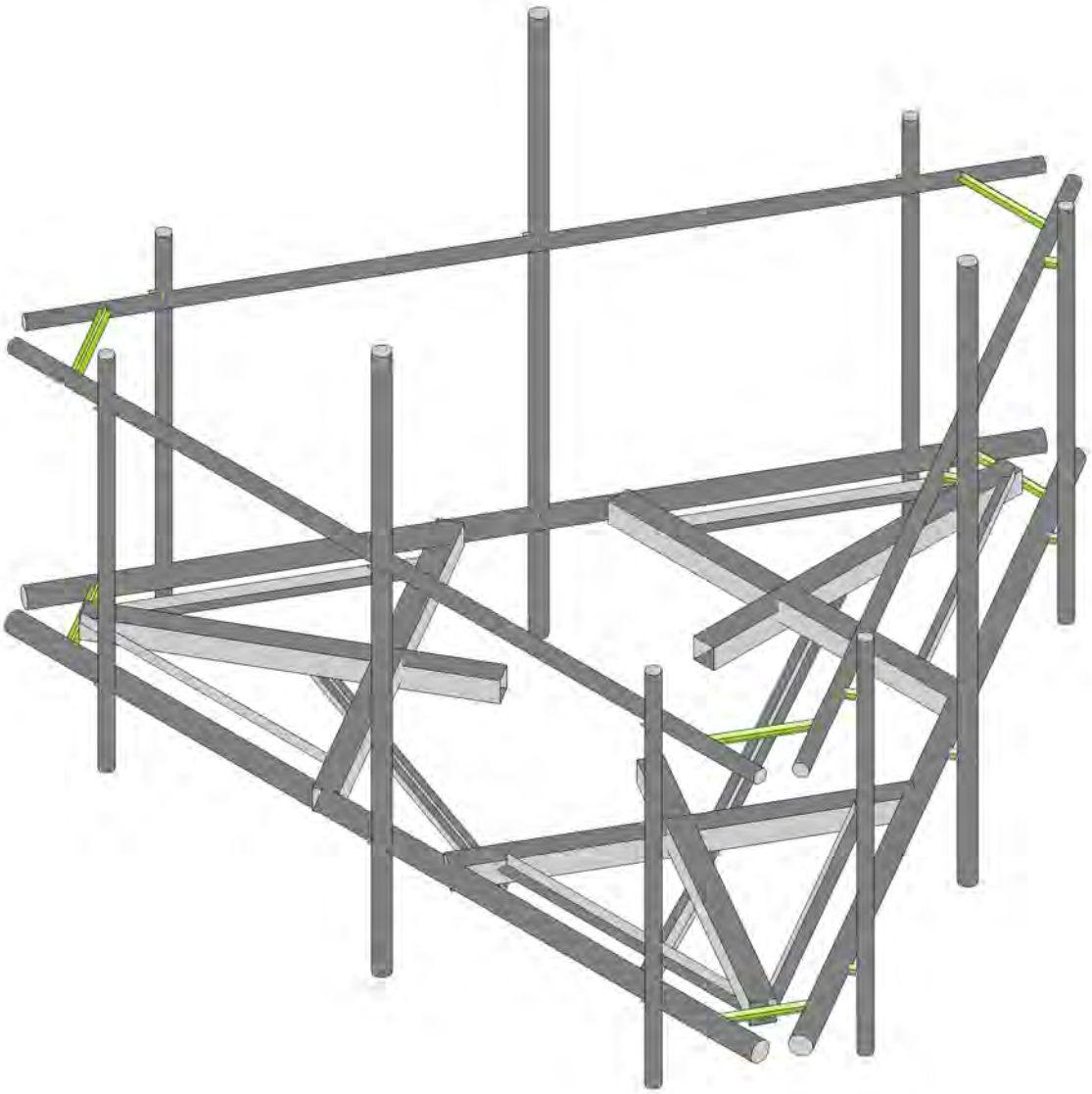

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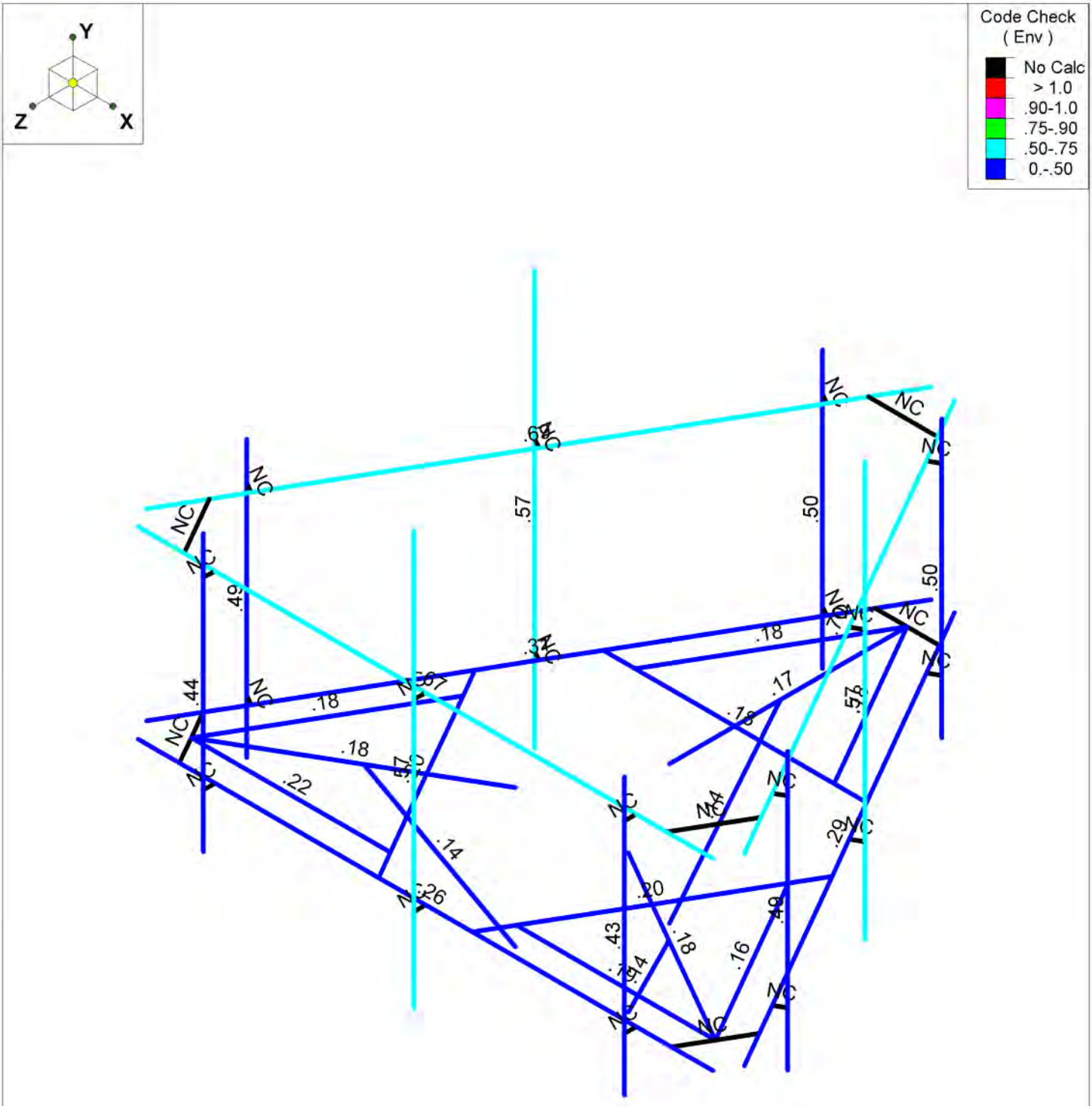
		Nov 18, 2020 at 9:35 AM
TES Project No. 99815		CT46124-A-SBA_99815_G_RISA_L...



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

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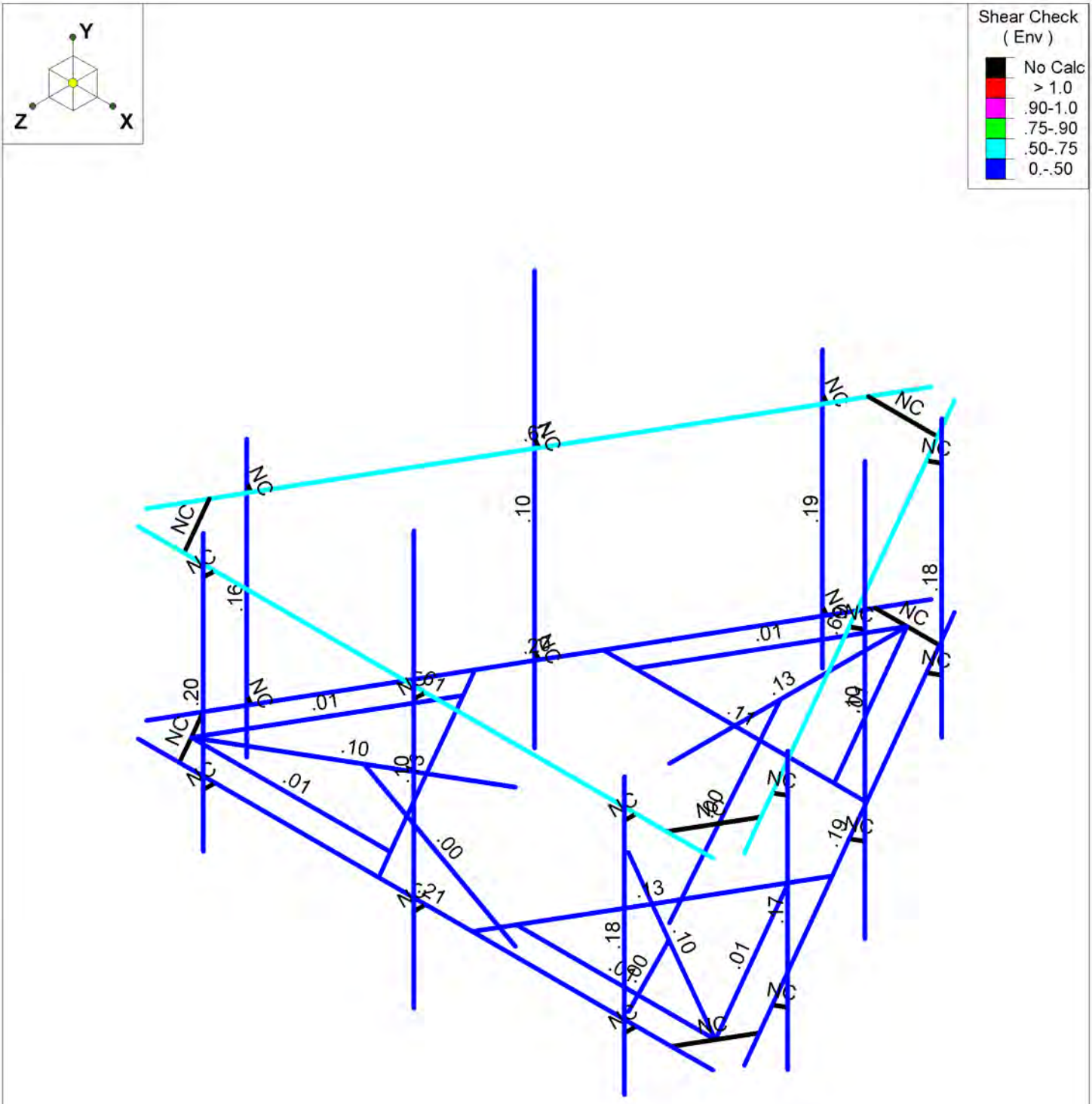

Member Shear Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.6W (Front)

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		Nov 18, 2020 at 9:36 AM
TES Project No. 99815		CT46124-A-SBA_99815_G_RISA_L...

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					39			
2	Antenna Di	None					39			
3	Antenna W Front	None					39			
4	Antenna Wi Front	None					39			
5	Antenna W Side	None					39			
6	Antenna Wi Side	None					39			
7	Service Lm1	None					1			
8	Service Lm2	None					1			
9	Structure D	None		-1					3	
10	Structure Di	None						30	3	
11	Structure W Front	None						30		
12	Structure Wi Front	None						30		
13	Structure W Side	None						30		
14	Structure Wi Side	None						30		
15	BLC 9 Transient Area...	None						93		
16	BLC 10 Transient Are...	None						93		

Load Combinations

	Description	So..	P...	S...	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..	BLC	Fac..
1	1.2D+1.6W (Front)	Yes	Y		1	1.2	9	1.2	3	1.6	11	1.6												
2	1.2D+1.6W (Back)	Yes	Y		1	1.2	9	1.2	3	-1.6	11	-1.6												
3	1.2D+1.6W (Left)	Yes	Y		1	1.2	9	1.2	5	1.6	13	1.6												
4	1.2D+1.6W (Right)	Yes	Y		1	1.2	9	1.2	5	-1.6	13	-1.6												
5	1.2D+1.0Di+1.0Wi (Front)	Yes	Y		1	1.2	9	1.2	2	1	10	1	4	1	12	1								
6	1.2D+1.0Di+1.0Wi (Back)	Yes	Y		1	1.2	9	1.2	2	1	10	1	4	-1	12	-1								
7	1.2D+1.0Di+1.0Wi (Left)	Yes	Y		1	1.2	9	1.2	2	1	10	1	6	1	14	1								
8	1.2D+1.0Di+1.0Wi (Right)	Yes	Y		1	1.2	9	1.2	2	1	10	1	6	-1	14	-1								
9	1.2D+1.5L1+.16W (Mai...	Yes	Y		1	1.2	9	1.2	7	1.5	3	.16	11	.16										
10	1.2D+1.5L2+.16W (Mai...	Yes	Y		1	1.2	9	1.2	8	1.5	3	.16	11	.16										
11	1.4D	Yes	Y		1	1.4	9	1.4																

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-1.226869	0	0.708333	0	
2	N2	1.226869	0	0.708333	0	
3	N3	0	0	-1.416667	0	
4	N4	-6.25	0	3.897114	0	
5	N5	6.25	0	3.897114	0	
6	N6	6.5	0	3.464102	0	
7	N7	.25	0	-7.361216	0	
8	N8	-.25	0	-7.361216	0	
9	N9	-6.5	0	3.464102	0	
10	N10	-5.701778	0	3.290898	0	
11	N11	5.701779	0	3.290897	0	
12	N12	0	0	-6.583333	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
13	N13	-5.351779	0	3.897114	0	
14	N14	-1.021652	0	3.897114	0	
15	N15	1.021652	0	3.897114	0	
16	N16	5.351779	0	3.897114	0	
17	N17	6.050889	0	2.686219	0	
18	N18	3.885826	0	-1.063781	0	
19	N19	2.864174	0	-2.833333	0	
20	N20	0.699111	0	-6.583333	0	
21	N21	-0.699111	0	-6.583333	0	
22	N22	-2.864174	0	-2.833333	0	
23	N23	-3.885826	0	-1.063781	0	
24	N24	-6.050889	0	2.686219	0	
25	NP1	-4.583333	4.833333	4.147114	0	
26	NP2	-4.583333	-1.166667	4.147114	0	
27	NP3	0	7.166633	4.147114	0	
28	NP4	0	-1.833367	4.147114	0	
29	NP5	4.583333	4.833333	4.147114	0	
30	NP6	4.583333	-1.166667	4.147114	0	
31	NP12	-1.083333	-1.166667	-5.91784	0	
32	NP13	-3.375	7.666633	-1.948557	0	
33	NP21	5.666667	4.833333	2.020726	0	
34	N43	-4.583333	0	3.897114	0	
35	N44	0	0	3.897114	0	
36	N45	4.583333	0	3.897114	0	
37	N46	5.666667	0	2.020726	0	
38	N47	3.375	0	-1.948557	0	
39	N48	1.083333	0	-5.91784	0	
40	N50	-3.375	0	-1.948557	0	
41	N51	-5.666667	0	2.020726	0	
42	N52	-2.453739	0	1.416667	0	
43	N53	2.453739	0	1.416667	0	
44	N54	0	0	-2.833333	0	
45	N55	-3.535826	0	-0.457563	0	
46	N56	1.371652	0	3.290897	0	
47	N57	2.164174	0	-2.833333	0	
48	N58	-1.371651	0	3.290898	0	
49	N59	3.535827	0	-0.457565	0	
50	N60	-2.164176	0	-2.833333	0	
51	N61	-6.25	4	3.897114	0	
52	N62	6.25	4	3.897114	0	
53	N63	6.5	4	3.464102	0	
54	N64	.25	4	-7.361216	0	
55	N65	-.25	4	-7.361216	0	
56	N66	-6.5	4	3.464102	0	
57	N67	-5.25	4	3.897114	0	
58	N68	5.25	4	3.897114	0	
59	N69	6	4	2.598076	0	
60	N70	.75	4	-6.495191	0	
61	N71	-.75	4	-6.495191	0	
62	N72	-6	4	2.598076	0	
63	N73	-4.583333	4	3.897114	0	
64	N74	0	4	3.897114	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
65	N75	4.583333	4	3.897114	0	
66	N76	-1.083333	4	-5.91784	0	
67	N77	-3.375	4	-1.948557	0	
68	N78	-5.666667	4	2.020726	0	
69	N79	5.666667	4	2.020726	0	
70	N80	3.375	4	-1.948557	0	
71	N81	1.083333	4	-5.91784	0	
72	N82	-4.583333	0	4.147114	0	
73	N83	0	0	4.147114	0	
74	N84	4.583333	0	4.147114	0	
75	N85	-4.583333	4	4.147114	0	
76	N86	0	4	4.147114	0	
77	N87	4.583333	4	4.147114	0	
78	N78A	5.883173	4.833333	1.895726	0	
79	N79A	5.883173	-1.166667	1.895726	0	
80	N80A	3.591506	7.166633	-2.073557	0	
81	N81A	3.591506	-1.833367	-2.073557	0	
82	N82A	1.29984	4.833333	-6.04284	0	
83	N83A	1.29984	-1.166667	-6.04284	0	
84	N90	5.883173	0	1.895726	0	
85	N91	3.591506	0	-2.073557	0	
86	N92	1.29984	0	-6.04284	0	
87	N93	5.883173	4	1.895726	0	
88	N94	3.591506	4	-2.073557	0	
89	N95	1.29984	4	-6.04284	0	
90	N96	-1.29984	4.833333	-6.04284	0	
91	N97	-1.29984	-1.166667	-6.04284	0	
92	N98	-3.591506	7.166633	-2.073557	0	
93	N99	-3.591506	-1.833367	-2.073557	0	
94	N100	-5.883173	4.833333	1.895726	0	
95	N101	-5.883173	-1.166667	1.895726	0	
96	N102	-1.083333	0	-5.91784	0	
97	N108	-1.29984	0	-6.04284	0	
98	N109	-3.591506	0	-2.073557	0	
99	N110	-5.883173	0	1.895726	0	
100	N111	-1.29984	4	-6.04284	0	
101	N112	-3.591506	4	-2.073557	0	
102	N113	-5.883173	4	1.895726	0	
103	N103	0	0	-3.833333	0	
104	N104	-3.319764	0	1.916667	0	
105	N105	3.319764	0	1.916667	0	
106	N106	-1.226869	-3	0.708333	0	
107	N107	1.226869	-3	0.708333	0	
108	N108A	0	-3	-1.416667	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	xxxxx	HSS16x0.438	Beam	None	A572 Gr.50	Typical	19.9	606	606	1210

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Ru...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	CF	4CU5.25X0375	Beam	CU	A570 Gr.33	Typical	4.854	13.238	12.817	.228

Aluminum Section Sets

	Label	Shape	Type	Design List	Material	Design Rules	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	AL1A	AACS14X13.9	Beam	AA Channel	3003-H14	Typical	11.8	44.7	401	1.19

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E..	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

Cold Formed Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E5 F)	Density[k/ft^3]	Yield[ksi]	Fu[ksi]
1	A570 Gr.33	29500	11346	.3	.65	.49	33	52
2	A607 C1 Gr.55	29500	11346	.3	.65	.49	55	70

Aluminum Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (...	Density[...	Table B.4	kt	Ftu[ksi]	Fty[ksi]	Fcy[ksi]	Fsu[ksi]	Ct
1	3003-H14	10100	3787.5	.33	1.3	.173	Table B...	1	19	16	13	12	141
2	6061-T6	10100	3787.5	.33	1.3	.173	Table B...	1	38	35	35	24	141
3	6063-T5	10100	3787.5	.33	1.3	.173	Table B...	1	22	16	16	13	141
4	6063-T6	10100	3787.5	.33	1.3	.173	Table B...	1	30	25	25	19	141
5	5052-H34	10200	3787.5	.33	1.3	.173	Table B...	1	34	26	24	20	141
6	6061-T6 W	10100	3787.5	.33	1.3	.173	Table B...	1	24	15	15	15	141

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N4	N5			PIPE_3.0	Beam	Pipe	A53 Gr.B	DR1
2	M2	N6	N7			PIPE_3.0	Beam	Pipe	A53 Gr.B	DR1
3	M3	N8	N9			PIPE_3.0	Beam	Pipe	A53 Gr.B	DR1
4	M4	N1	N10			HSS4X4X5	Beam	None	A500 Gr.B...	DR1
5	M5	N2	N11			HSS4X4X5	Beam	None	A500 Gr.B...	DR1
6	M6	N3	N12			HSS4X4X5	Beam	None	A500 Gr.B...	DR1
7	M7	N23	N14			HSS4X4X5	Beam	None	A500 Gr.B...	DR1
8	M8	N15	N18			HSS4X4X5	Beam	None	A500 Gr.B...	DR1
9	M9	N19	N22			HSS4X4X5	Beam	None	A500 Gr.B...	DR1
10	M10	N24	N13			RIGID	Beam	None	RIGID	DR1
11	M11	N16	N17			RIGID	Beam	None	RIGID	DR1

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
12	M12	N20	N21			RIGID	Beam	None	RIGID	DR1
13	MP3A	NP1	NP2			PIPE_2.0	Beam	Pipe	A53 Gr.B	DR1
14	MP2A	NP3	NP4			PIPE_2.5	Beam	Pipe	A53 Gr.B	DR1
15	MP1A	NP5	NP6			PIPE_2.0	Beam	Pipe	A53 Gr.B	DR1
16	M22	N10	N55			L2x2x3	Beam	Single Angle	A36 Gr.36	Typical
17	M23	N58	N10			L2x2x3	Beam	Single Angle	A36 Gr.36	Typical
18	M24	N60	N12			L2x2x3	Beam	Single Angle	A36 Gr.36	Typical
19	M25	N12	N57			L2x2x3	Beam	Single Angle	A36 Gr.36	Typical
20	M26	N56	N11			L2x2x3	Beam	Single Angle	A36 Gr.36	Typical
21	M27	N11	N59			L2x2x3	Beam	Single Angle	A36 Gr.36	Typical
22	M28	N61	N62			PIPE_2.0	Beam	Pipe	A53 Gr.B	DR1
23	M29	N63	N64			PIPE_2.0	Beam	Pipe	A53 Gr.B	DR1
24	M30	N65	N66			PIPE_2.0	Beam	Pipe	A53 Gr.B	DR1
25	M31	N72	N67			RIGID	Beam	None	RIGID	DR1
26	M32	N71	N70			RIGID	Beam	None	RIGID	DR1
27	M33	N68	N69			RIGID	Beam	None	RIGID	DR1
28	M34	N85	N73			RIGID	Beam	None	RIGID	DR1
29	M35	N82	N43			RIGID	Beam	None	RIGID	DR1
30	M36	N86	N74			RIGID	Beam	None	RIGID	DR1
31	M37	N83	N44			RIGID	Beam	None	RIGID	DR1
32	M38	N87	N75			RIGID	Beam	None	RIGID	DR1
33	M39	N84	N45			RIGID	Beam	None	RIGID	DR1
34	MP3C	N78A	N79A			PIPE_2.0	Beam	Pipe	A53 Gr.B	DR1
35	MP2C	N80A	N81A			PIPE_2.5	Beam	Pipe	A53 Gr.B	DR1
36	MP1C	N82A	N83A			PIPE_2.0	Beam	Pipe	A53 Gr.B	DR1
37	M37A	N93	N79			RIGID	Beam	None	RIGID	DR1
38	M38A	N90	N46			RIGID	Beam	None	RIGID	DR1
39	M39A	N94	N80			RIGID	Beam	None	RIGID	DR1
40	M40	N91	N47			RIGID	Beam	None	RIGID	DR1
41	M41	N95	N81			RIGID	Beam	None	RIGID	DR1
42	M42	N92	N48			RIGID	Beam	None	RIGID	DR1
43	MP3B	N96	N97			PIPE_2.0	Beam	Pipe	A53 Gr.B	DR1
44	MP2B	N98	N99			PIPE_2.5	Beam	Pipe	A53 Gr.B	DR1
45	MP1B	N100	N101			PIPE_2.0	Beam	Pipe	A53 Gr.B	DR1
46	M46	N111	N76			RIGID	Beam	None	RIGID	DR1
47	M47	N108	N102			RIGID	Beam	None	RIGID	DR1
48	M48	N112	N77			RIGID	Beam	None	RIGID	DR1
49	M49	N109	N50			RIGID	Beam	None	RIGID	DR1
50	M50	N113	N78			RIGID	Beam	None	RIGID	DR1
51	M51	N110	N51			RIGID	Beam	None	RIGID	DR1
52	M52	N104	N106			LL2x2x4x0	Beam	Double Angle (...	A36 Gr.36	Typical
53	M53	N108A	N103			LL2x2x4x0	Beam	Double Angle (...	A36 Gr.36	Typical
54	M54	N107	N105			LL2x2x4x0	Beam	Double Angle (...	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes				None
4	M4						Yes				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
5	M5						Yes				None
6	M6						Yes				None
7	M7	BenPIN	BenPIN				Yes				None
8	M8	BenPIN	BenPIN				Yes				None
9	M9	BenPIN	BenPIN				Yes				None
10	M10	BenPIN	BenPIN				Yes				None
11	M11	BenPIN	BenPIN				Yes				None
12	M12	BenPIN	BenPIN				Yes				None
13	MP3A						Yes		-z		None
14	MP2A						Yes		-z		None
15	MP1A						Yes		-z		None
16	M22						Yes				None
17	M23						Yes				None
18	M24						Yes				None
19	M25						Yes				None
20	M26						Yes				None
21	M27						Yes				None
22	M28						Yes				None
23	M29						Yes				None
24	M30						Yes				None
25	M31						Yes				None
26	M32						Yes				None
27	M33						Yes				None
28	M34						Yes				None
29	M35						Yes				None
30	M36						Yes				None
31	M37						Yes				None
32	M38						Yes				None
33	M39						Yes				None
34	MP3C						Yes		-z		None
35	MP2C						Yes		-z		None
36	MP1C						Yes		-z		None
37	M37A						Yes				None
38	M38A						Yes				None
39	M39A						Yes				None
40	M40						Yes				None
41	M41						Yes				None
42	M42						Yes				None
43	MP3B						Yes		-z		None
44	MP2B						Yes		-z		None
45	MP1B						Yes		-z		None
46	M46						Yes				None
47	M47						Yes				None
48	M48						Yes				None
49	M49						Yes				None
50	M50						Yes				None
51	M51						Yes				None
52	M52	BenPIN	BenPIN				Yes				None
53	M53	BenPIN	BenPIN				Yes				None
54	M54	BenPIN	BenPIN				Yes				None

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
1	M1	PIPE_3.0	12.5			Lbyy						Gravity
2	M2	PIPE_3.0	12.5			Lbyy						Gravity
3	M3	PIPE_3.0	12.5			Lbyy						Gravity
4	M4	HSS4X4X5	5.167			Lbyy						Gravity
5	M5	HSS4X4X5	5.167			Lbyy						Gravity
6	M6	HSS4X4X5	5.167			Lbyy						Gravity
7	M7	HSS4X4X5	5.728			Lbyy						Gravity
8	M8	HSS4X4X5	5.728			Lbyy						Gravity
9	M9	HSS4X4X5	5.728			Lbyy						Gravity
10	MP3A	PIPE_2.0	6			Lbyy						Lateral
11	MP2A	PIPE_2.5	9			Lbyy						Lateral
12	MP1A	PIPE_2.0	6			Lbyy						Lateral
13	M22	L2x2x3	4.329			Lbyy						Lateral
14	M23	L2x2x3	4.33			Lbyy						Lateral
15	M24	L2x2x3	4.33			Lbyy						Lateral
16	M25	L2x2x3	4.33			Lbyy						Lateral
17	M26	L2x2x3	4.33			Lbyy						Lateral
18	M27	L2x2x3	4.329			Lbyy						Lateral
19	M28	PIPE_2.0	12.5			Lbyy						Gravity
20	M29	PIPE_2.0	12.5			Lbyy						Gravity
21	M30	PIPE_2.0	12.5			Lbyy						Gravity
22	MP3C	PIPE_2.0	6			Lbyy						Lateral
23	MP2C	PIPE_2.5	9			Lbyy						Lateral
24	MP1C	PIPE_2.0	6			Lbyy						Lateral
25	MP3B	PIPE_2.0	6			Lbyy						Lateral
26	MP2B	PIPE_2.5	9			Lbyy						Lateral
27	MP1B	PIPE_2.0	6			Lbyy						Lateral
28	M52	LL2x2x4x0	3.852			Lbyy						Lateral
29	M53	LL2x2x4x0	3.852			Lbyy						Lateral
30	M54	LL2x2x4x0	3.852			Lbyy						Lateral

Cold Formed Steel Design Parameters

Label	Shape	Lengt...	Lbyy[ft]	Lbzz[ft]	Lcomp t...	Lcomp ...	L-torque...	Kyy	Kzz	Cm-...	Cm-...	Cb	R	a[ft]	y sw...	z sw...
No Data to Print ...																

Aluminum Design Parameters

Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torqu...	Kyy	Kzz	Cb	Function
No Data to Print ...											

Joint Loads and Enforced Displacements

Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2...
No Data to Print ...			

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-66.1	.5
2	MP1A	Y	-66.1	5.5
3	MP1B	Y	-66.1	.5
4	MP1B	Y	-66.1	5.5
5	MP1C	Y	-66.1	.5
6	MP1C	Y	-66.1	5.5
7	MP2A	Y	-49.5	.5
8	MP2A	Y	-49.5	7.5
9	MP2B	Y	-49.5	.5
10	MP2B	Y	-49.5	7.5
11	MP2C	Y	-49.5	.5
12	MP2C	Y	-49.5	7.5
13	MP3A	Y	-51.5	.5
14	MP3A	Y	-51.5	4
15	MP3B	Y	-51.5	.5
16	MP3B	Y	-51.5	4
17	MP3C	Y	-51.5	.5
18	MP3C	Y	-51.5	4
19	MP1A	Y	-11	2
20	MP1B	Y	-11	2
21	MP1C	Y	-11	2
22	MP2A	Y	-11	4
23	MP2B	Y	-11	4
24	MP2C	Y	-11	4
25	MP2A	Y	-11	4
26	MP2B	Y	-11	4
27	MP2C	Y	-11	4
28	MP3A	Y	-11	2
29	MP3B	Y	-11	2
30	MP3C	Y	-11	2
31	MP2A	Y	-70	2
32	MP2B	Y	-70	2
33	MP2C	Y	-70	2
34	MP2A	Y	-44.1	2
35	MP2B	Y	-44.1	2
36	MP2C	Y	-44.1	2
37	MP1A	Y	-5.3	4
38	MP1B	Y	-5.3	4
39	MP1C	Y	-5.3	4

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-134.141	.5
2	MP1A	Y	-134.141	5.5
3	MP1B	Y	-134.141	.5
4	MP1B	Y	-134.141	5.5
5	MP1C	Y	-134.141	.5
6	MP1C	Y	-134.141	5.5
7	MP2A	Y	-304.841	.5
8	MP2A	Y	-304.841	7.5

Member Point Loads (BLC 2 : Antenna Di) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP2B	Y	-304.841	.5
10	MP2B	Y	-304.841	7.5
11	MP2C	Y	-304.841	.5
12	MP2C	Y	-304.841	7.5
13	MP3A	Y	-111.055	.5
14	MP3A	Y	-111.055	4
15	MP3B	Y	-111.055	.5
16	MP3B	Y	-111.055	4
17	MP3C	Y	-111.055	.5
18	MP3C	Y	-111.055	4
19	MP1A	Y	-26.908	2
20	MP1B	Y	-26.908	2
21	MP1C	Y	-26.908	2
22	MP2A	Y	-26.908	4
23	MP2B	Y	-26.908	4
24	MP2C	Y	-26.908	4
25	MP2A	Y	-26.908	4
26	MP2B	Y	-26.908	4
27	MP2C	Y	-26.908	4
28	MP3A	Y	-26.908	2
29	MP3B	Y	-26.908	2
30	MP3C	Y	-26.908	2
31	MP2A	Y	-101.962	2
32	MP2B	Y	-101.962	2
33	MP2C	Y	-101.962	2
34	MP2A	Y	-85.564	2
35	MP2B	Y	-85.564	2
36	MP2C	Y	-85.564	2
37	MP1A	Y	-24.551	4
38	MP1B	Y	-24.551	4
39	MP1C	Y	-24.551	4

Member Point Loads (BLC 3 : Antenna W Front)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Z	-118.3	.5
2	MP1A	Z	-118.3	5.5
3	MP1B	Z	-94.349	.5
4	MP1B	Z	-94.349	5.5
5	MP1C	Z	-94.349	.5
6	MP1C	Z	-94.349	5.5
7	MP2A	Z	-367.801	.5
8	MP2A	Z	-367.801	7.5
9	MP2B	Z	-210.974	.5
10	MP2B	Z	-210.974	7.5
11	MP2C	Z	-210.974	.5
12	MP2C	Z	-210.974	7.5
13	MP3A	Z	-102.672	.5
14	MP3A	Z	-102.672	4
15	MP3B	Z	-58.59	.5
16	MP3B	Z	-58.59	4
17	MP3C	Z	-58.59	.5

Member Point Loads (BLC 3 : Antenna W Front) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
18	MP3C	Z	-58.59	4
19	MP1A	Z	-11.176	2
20	MP1B	Z	-5.974	2
21	MP1C	Z	-5.974	2
22	MP2A	Z	-11.176	4
23	MP2B	Z	-5.974	4
24	MP2C	Z	-5.974	4
25	MP2A	Z	-11.176	4
26	MP2B	Z	-5.974	4
27	MP2C	Z	-5.974	4
28	MP3A	Z	-11.176	2
29	MP3B	Z	-5.974	2
30	MP3C	Z	-5.974	2
31	MP2A	Z	-44.976	2
32	MP2B	Z	-35.009	2
33	MP2C	Z	-35.009	2
34	MP2A	Z	-50.7	2
35	MP2B	Z	-23.842	2
36	MP2C	Z	-23.842	2
37	MP1A	Z	-7.632	4
38	MP1B	Z	-5.501	4
39	MP1C	Z	-5.501	4

Member Point Loads (BLC 4 : Antenna Wi Front)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Z	-39.28	.5
2	MP1A	Z	-39.28	5.5
3	MP1B	Z	-32.235	.5
4	MP1B	Z	-32.235	5.5
5	MP1C	Z	-32.235	.5
6	MP1C	Z	-32.235	5.5
7	MP2A	Z	-110.401	.5
8	MP2A	Z	-110.401	7.5
9	MP2B	Z	-67.324	.5
10	MP2B	Z	-67.324	7.5
11	MP2C	Z	-67.324	.5
12	MP2C	Z	-67.324	7.5
13	MP3A	Z	-33.819	.5
14	MP3A	Z	-33.819	4
15	MP3B	Z	-20.783	.5
16	MP3B	Z	-20.783	4
17	MP3C	Z	-20.783	.5
18	MP3C	Z	-20.783	4
19	MP1A	Z	-5.515	2
20	MP1B	Z	-4.026	2
21	MP1C	Z	-4.026	2
22	MP2A	Z	-5.515	4
23	MP2B	Z	-4.026	4
24	MP2C	Z	-4.026	4
25	MP2A	Z	-5.515	4
26	MP2B	Z	-4.026	4

Member Point Loads (BLC 4 : Antenna Wi Front) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
27	MP2C	Z	-4.026	4
28	MP3A	Z	-5.515	2
29	MP3B	Z	-4.026	2
30	MP3C	Z	-4.026	2
31	MP2A	Z	-17.471	2
32	MP2B	Z	-14.333	2
33	MP2C	Z	-14.333	2
34	MP2A	Z	-19.266	2
35	MP2B	Z	-10.646	2
36	MP2C	Z	-10.646	2
37	MP1A	Z	-4.309	4
38	MP1B	Z	-3.811	4
39	MP1C	Z	-3.811	4

Member Point Loads (BLC 5 : Antenna W Side)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	86.365	.5
2	MP1A	X	86.365	5.5
3	MP1B	X	110.316	.5
4	MP1B	X	110.316	5.5
5	MP1C	X	110.316	.5
6	MP1C	X	110.316	5.5
7	MP2A	X	158.698	.5
8	MP2A	X	158.698	7.5
9	MP2B	X	315.525	.5
10	MP2B	X	315.525	7.5
11	MP2C	X	315.525	.5
12	MP2C	X	315.525	7.5
13	MP3A	X	43.896	.5
14	MP3A	X	43.896	4
15	MP3B	X	87.978	.5
16	MP3B	X	87.978	4
17	MP3C	X	87.978	.5
18	MP3C	X	87.978	4
19	MP1A	X	5.654	2
20	MP1B	X	12.589	2
21	MP1C	X	12.589	2
22	MP2A	X	5.654	4
23	MP2B	X	12.589	4
24	MP2C	X	12.589	4
25	MP2A	X	2.827	4
26	MP2B	X	6.295	4
27	MP2C	X	6.295	4
28	MP3A	X	5.654	2
29	MP3B	X	12.589	2
30	MP3C	X	12.589	2
31	MP2A	X	42.25	2
32	MP2B	X	55.538	2
33	MP2C	X	55.538	2
34	MP2A	X	19.853	2
35	MP2B	X	55.663	2

Member Point Loads (BLC 5 : Antenna W Side) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
36	MP2C	X	55.663	2
37	MP1A	X	6.387	4
38	MP1B	X	9.229	4
39	MP1C	X	9.229	4

Member Point Loads (BLC 6 : Antenna Wi Side)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	29.887	.5
2	MP1A	X	29.887	5.5
3	MP1B	X	36.931	.5
4	MP1B	X	36.931	5.5
5	MP1C	X	36.931	.5
6	MP1C	X	36.931	5.5
7	MP2A	X	52.965	.5
8	MP2A	X	52.965	7.5
9	MP2B	X	96.042	.5
10	MP2B	X	96.042	7.5
11	MP2C	X	96.042	.5
12	MP2C	X	96.042	7.5
13	MP3A	X	16.437	.5
14	MP3A	X	16.437	4
15	MP3B	X	29.474	.5
16	MP3B	X	29.474	4
17	MP3C	X	29.474	.5
18	MP3C	X	29.474	4
19	MP1A	X	4.706	2
20	MP1B	X	6.691	2
21	MP1C	X	6.691	2
22	MP2A	X	4.706	4
23	MP2B	X	6.691	4
24	MP2C	X	6.691	4
25	MP2A	X	2.353	4
26	MP2B	X	3.346	4
27	MP2C	X	3.346	4
28	MP3A	X	4.706	2
29	MP3B	X	6.691	2
30	MP3C	X	6.691	2
31	MP2A	X	17.716	2
32	MP2B	X	21.9	2
33	MP2C	X	21.9	2
34	MP2A	X	10.364	2
35	MP2B	X	21.857	2
36	MP2C	X	21.857	2
37	MP1A	X	4.859	4
38	MP1B	X	5.524	4
39	MP1C	X	5.524	4

Member Point Loads (BLC 7 : Service Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	0

Member Point Loads (BLC 8 : Service Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%50

Member Distributed Loads (BLC 10 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-17.086	-17.086	0	%100
2	M2	Y	-17.086	-17.086	0	%100
3	M3	Y	-17.086	-17.086	0	%100
4	M4	Y	-23.604	-23.604	0	%100
5	M5	Y	-23.604	-23.604	0	%100
6	M6	Y	-23.604	-23.604	0	%100
7	M7	Y	-23.604	-23.604	0	%100
8	M8	Y	-23.604	-23.604	0	%100
9	M9	Y	-23.604	-23.604	0	%100
10	MP3A	Y	-13.816	-13.816	0	%100
11	MP2A	Y	-15.269	-15.269	0	%100
12	MP1A	Y	-13.816	-13.816	0	%100
13	M22	Y	-11.802	-11.802	0	%100
14	M23	Y	-11.802	-11.802	0	%100
15	M24	Y	-11.802	-11.802	0	%100
16	M25	Y	-11.802	-11.802	0	%100
17	M26	Y	-11.802	-11.802	0	%100
18	M27	Y	-11.802	-11.802	0	%100
19	M28	Y	-13.816	-13.816	0	%100
20	M29	Y	-13.816	-13.816	0	%100
21	M30	Y	-13.816	-13.816	0	%100
22	MP3C	Y	-13.816	-13.816	0	%100
23	MP2C	Y	-15.269	-15.269	0	%100
24	MP1C	Y	-13.816	-13.816	0	%100
25	MP3B	Y	-13.816	-13.816	0	%100
26	MP2B	Y	-15.269	-15.269	0	%100
27	MP1B	Y	-13.816	-13.816	0	%100
28	M52	Y	-18.054	-18.054	0	%100
29	M53	Y	-18.054	-18.054	0	%100
30	M54	Y	-18.054	-18.054	0	%100

Member Distributed Loads (BLC 11 : Structure W Front)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	PZ	-12.72	-12.72	0	%100
2	M2	PZ	-12.72	-12.72	0	%100
3	M3	PZ	-12.72	-12.72	0	%100
4	M4	PZ	-24.229	-24.229	0	%100
5	M5	PZ	-24.229	-24.229	0	%100
6	M6	PZ	-24.229	-24.229	0	%100
7	M7	PZ	-24.229	-24.229	0	%100
8	M8	PZ	-24.229	-24.229	0	%100
9	M9	PZ	-24.229	-24.229	0	%100
10	MP3A	PZ	-8.632	-8.632	0	%100
11	MP2A	PZ	-10.449	-10.449	0	%100
12	MP1A	PZ	-8.632	-8.632	0	%100
13	M22	PZ	-12.115	-12.115	0	%100

Member Distributed Loads (BLC 11 : Structure W Front) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
14	M23	PZ	-12.115	-12.115	0	%100
15	M24	PZ	-12.115	-12.115	0	%100
16	M25	PZ	-12.115	-12.115	0	%100
17	M26	PZ	-12.115	-12.115	0	%100
18	M27	PZ	-12.115	-12.115	0	%100
19	M28	PZ	-8.632	-8.632	0	%100
20	M29	PZ	-8.632	-8.632	0	%100
21	M30	PZ	-8.632	-8.632	0	%100
22	MP3C	PZ	-8.632	-8.632	0	%100
23	MP2C	PZ	-10.449	-10.449	0	%100
24	MP1C	PZ	-8.632	-8.632	0	%100
25	MP3B	PZ	-8.632	-8.632	0	%100
26	MP2B	PZ	-10.449	-10.449	0	%100
27	MP1B	PZ	-8.632	-8.632	0	%100
28	M52	PZ	-12.115	-12.115	0	%100
29	M53	PZ	-12.115	-12.115	0	%100
30	M54	PZ	-12.115	-12.115	0	%100

Member Distributed Loads (BLC 12 : Structure Wi Front)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	PZ	-7.974	-7.974	0	%100
2	M2	PZ	-7.974	-7.974	0	%100
3	M3	PZ	-7.974	-7.974	0	%100
4	M4	PZ	-11.032	-11.032	0	%100
5	M5	PZ	-11.032	-11.032	0	%100
6	M6	PZ	-11.032	-11.032	0	%100
7	M7	PZ	-11.032	-11.032	0	%100
8	M8	PZ	-11.032	-11.032	0	%100
9	M9	PZ	-11.032	-11.032	0	%100
10	MP3A	PZ	-6.888	-6.888	0	%100
11	MP2A	PZ	-7.371	-7.371	0	%100
12	MP1A	PZ	-6.888	-6.888	0	%100
13	M22	PZ	-7.813	-7.813	0	%100
14	M23	PZ	-7.813	-7.813	0	%100
15	M24	PZ	-7.813	-7.813	0	%100
16	M25	PZ	-7.813	-7.813	0	%100
17	M26	PZ	-7.813	-7.813	0	%100
18	M27	PZ	-7.813	-7.813	0	%100
19	M28	PZ	-6.888	-6.888	0	%100
20	M29	PZ	-6.888	-6.888	0	%100
21	M30	PZ	-6.888	-6.888	0	%100
22	MP3C	PZ	-6.888	-6.888	0	%100
23	MP2C	PZ	-7.371	-7.371	0	%100
24	MP1C	PZ	-6.888	-6.888	0	%100
25	MP3B	PZ	-6.888	-6.888	0	%100
26	MP2B	PZ	-7.371	-7.371	0	%100
27	MP1B	PZ	-6.888	-6.888	0	%100
28	M52	PZ	-7.813	-7.813	0	%100
29	M53	PZ	-7.813	-7.813	0	%100
30	M54	PZ	-7.813	-7.813	0	%100

Member Distributed Loads (BLC 13 : Structure W Side)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	PX	12.72	12.72	0	%100
2	M2	PX	12.72	12.72	0	%100
3	M3	PX	12.72	12.72	0	%100
4	M4	PX	24.229	24.229	0	%100
5	M5	PX	24.229	24.229	0	%100
6	M6	PX	24.229	24.229	0	%100
7	M7	PX	24.229	24.229	0	%100
8	M8	PX	24.229	24.229	0	%100
9	M9	PX	24.229	24.229	0	%100
10	MP3A	PX	8.632	8.632	0	%100
11	MP2A	PX	10.449	10.449	0	%100
12	MP1A	PX	8.632	8.632	0	%100
13	M22	PX	12.115	12.115	0	%100
14	M23	PX	12.115	12.115	0	%100
15	M24	PX	12.115	12.115	0	%100
16	M25	PX	12.115	12.115	0	%100
17	M26	PX	12.115	12.115	0	%100
18	M27	PX	12.115	12.115	0	%100
19	M28	PX	8.632	8.632	0	%100
20	M29	PX	8.632	8.632	0	%100
21	M30	PX	8.632	8.632	0	%100
22	MP3C	PX	8.632	8.632	0	%100
23	MP2C	PX	10.449	10.449	0	%100
24	MP1C	PX	8.632	8.632	0	%100
25	MP3B	PX	8.632	8.632	0	%100
26	MP2B	PX	10.449	10.449	0	%100
27	MP1B	PX	8.632	8.632	0	%100
28	M52	PX	12.115	12.115	0	%100
29	M53	PX	12.115	12.115	0	%100
30	M54	PX	12.115	12.115	0	%100

Member Distributed Loads (BLC 14 : Structure Wi Side)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	PX	7.974	7.974	0	%100
2	M2	PX	7.974	7.974	0	%100
3	M3	PX	7.974	7.974	0	%100
4	M4	PX	11.032	11.032	0	%100
5	M5	PX	11.032	11.032	0	%100
6	M6	PX	11.032	11.032	0	%100
7	M7	PX	11.032	11.032	0	%100
8	M8	PX	11.032	11.032	0	%100
9	M9	PX	11.032	11.032	0	%100
10	MP3A	PX	6.888	6.888	0	%100
11	MP2A	PX	7.371	7.371	0	%100
12	MP1A	PX	6.888	6.888	0	%100
13	M22	PX	7.813	7.813	0	%100
14	M23	PX	7.813	7.813	0	%100
15	M24	PX	7.813	7.813	0	%100
16	M25	PX	7.813	7.813	0	%100
17	M26	PX	7.813	7.813	0	%100
18	M27	PX	7.813	7.813	0	%100

Member Distributed Loads (BLC 14 : Structure Wi Side) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	M28	PX	6.888	6.888	0	%100
20	M29	PX	6.888	6.888	0	%100
21	M30	PX	6.888	6.888	0	%100
22	MP3C	PX	6.888	6.888	0	%100
23	MP2C	PX	7.371	7.371	0	%100
24	MP1C	PX	6.888	6.888	0	%100
25	MP3B	PX	6.888	6.888	0	%100
26	MP2B	PX	7.371	7.371	0	%100
27	MP1B	PX	6.888	6.888	0	%100
28	M52	PX	7.813	7.813	0	%100
29	M53	PX	7.813	7.813	0	%100
30	M54	PX	7.813	7.813	0	%100

Member Distributed Loads (BLC 15 : BLC 9 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M2	Y	-.036	-.812	6.25	7.5
2	M2	Y	-.812	-1.588	7.5	8.75
3	M2	Y	-1.588	-1.614	8.75	10
4	M2	Y	-1.614	-1.019	10	11.25
5	M2	Y	-1.019	-.036	11.25	12.5
6	M3	Y	-.036	-1.02	0	1.25
7	M3	Y	-1.02	-1.614	1.25	2.5
8	M3	Y	-1.614	-1.588	2.5	3.75
9	M3	Y	-1.588	-.812	3.75	5
10	M3	Y	-.812	-.036	5	6.25
11	M6	Y	-2.323	-5.4	1.55	2.756
12	M6	Y	-5.4	-4.655	2.756	3.961
13	M6	Y	-4.655	-.559	3.961	5.167
14	M9	Y	-.369	-1.77	0	1.146
15	M9	Y	-1.77	-3.091	1.146	2.291
16	M9	Y	-3.091	-3.089	2.291	3.437
17	M9	Y	-3.089	-1.768	3.437	4.583
18	M9	Y	-1.768	-.37	4.583	5.728
19	M12	Y	-.392	-1.77	0	1.398
20	M24	Y	-1.699	-4.368	0	.866
21	M24	Y	-4.368	-5.063	.866	1.732
22	M24	Y	-5.063	-3.819	1.732	2.598
23	M24	Y	-3.819	-2.649	2.598	3.464
24	M24	Y	-2.649	-1.519	3.464	4.33
25	M25	Y	-.776	-2.419	0	.866
26	M25	Y	-2.419	-3.845	.866	1.732
27	M25	Y	-3.845	-5.088	1.732	2.598
28	M25	Y	-5.088	-4.394	2.598	3.464
29	M25	Y	-4.394	-1.73	3.464	4.33
30	M1	Y	-.036	-.811	6.25	7.5
31	M1	Y	-.811	-1.587	7.5	8.75
32	M1	Y	-1.587	-1.616	8.75	10
33	M1	Y	-1.616	-1.021	10	11.25
34	M1	Y	-1.021	-.036	11.25	12.5
35	M2	Y	-.04	-1.014	0	1.25
36	M2	Y	-1.014	-1.591	1.25	2.5

Member Distributed Loads (BLC 15 : BLC 9 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
37	M2	Y	-1.591	-1.592	2.5	3.75
38	M2	Y	-1.592	-.816	3.75	5
39	M2	Y	-.816	-.04	5	6.25
40	M5	Y	-.188	-5.747	1.55	2.273
41	M5	Y	-5.747	-7.368	2.273	2.997
42	M5	Y	-7.368	-4.306	2.997	3.72
43	M5	Y	-4.306	-2.22	3.72	4.443
44	M5	Y	-2.22	-.188	4.443	5.167
45	M8	Y	-.384	-1.787	0	1.146
46	M8	Y	-1.787	-3.065	1.146	2.291
47	M8	Y	-3.065	-3.179	2.291	3.437
48	M8	Y	-3.179	-1.897	3.437	4.583
49	M8	Y	-1.897	-.255	4.583	5.728
50	M11	Y	-1.554	-1.22	0	.699
51	M11	Y	-1.22	-.886	.699	1.398
52	M26	Y	-1.732	-4.399	0	.866
53	M26	Y	-4.399	-5.092	.866	1.732
54	M26	Y	-5.092	-3.846	1.732	2.598
55	M26	Y	-3.846	-2.413	2.598	3.464
56	M26	Y	-2.413	-.759	3.464	4.33
57	M27	Y	-.829	-2.697	0	.866
58	M27	Y	-2.697	-3.859	.866	1.732
59	M27	Y	-3.859	-4.485	1.732	2.598
60	M27	Y	-4.485	-3.988	2.598	3.463
61	M27	Y	-3.988	-2.2	3.463	4.329
62	M1	Y	-.036	-1.024	0	1.25
63	M1	Y	-1.024	-1.621	1.25	2.5
64	M1	Y	-1.621	-1.406	2.5	3.75
65	M1	Y	-1.406	-.627	3.75	5
66	M1	Y	-.627	-.036	5	6.25
67	M3	Y	-.039	-.816	6.25	7.5
68	M3	Y	-.816	-1.591	7.5	8.75
69	M3	Y	-1.591	-1.589	8.75	10
70	M3	Y	-1.589	-1.011	10	11.25
71	M3	Y	-1.011	-.039	11.25	12.5
72	M4	Y	-.188	-5.77	1.55	2.273
73	M4	Y	-5.77	-7.392	2.273	2.997
74	M4	Y	-7.392	-4.314	2.997	3.72
75	M4	Y	-4.314	-2.227	3.72	4.443
76	M4	Y	-2.227	-.188	4.443	5.167
77	M7	Y	-.361	-1.762	0	1.146
78	M7	Y	-1.762	-3.026	1.146	2.291
79	M7	Y	-3.026	-3.141	2.291	3.437
80	M7	Y	-3.141	-2.068	3.437	4.583
81	M7	Y	-2.068	-.819	4.583	5.728
82	M10	Y	-.901	-1.226	0	.699
83	M10	Y	-1.226	-1.551	.699	1.398
84	M22	Y	-1.077	-2.552	0	.866
85	M22	Y	-2.552	-3.862	.866	1.732
86	M22	Y	-3.862	-5.076	1.732	2.598
87	M22	Y	-5.076	-4.385	2.598	3.463
88	M22	Y	-4.385	-1.721	3.463	4.329

Member Distributed Loads (BLC 15 : BLC 9 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
89	M23	Y	-2.187	-3.983	0	.866
90	M23	Y	-3.983	-4.645	.866	1.732
91	M23	Y	-4.645	-3.827	1.732	2.598
92	M23	Y	-3.827	-2.389	2.598	3.464
93	M23	Y	-2.389	-.676	3.464	4.33

Member Distributed Loads (BLC 16 : BLC 10 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M2	Y	-.11	-2.463	6.25	7.5
2	M2	Y	-2.463	-4.815	7.5	8.75
3	M2	Y	-4.815	-4.895	8.75	10
4	M2	Y	-4.895	-3.091	10	11.25
5	M2	Y	-3.091	-.11	11.25	12.5
6	M3	Y	-.11	-3.092	0	1.25
7	M3	Y	-3.092	-4.895	1.25	2.5
8	M3	Y	-4.895	-4.814	2.5	3.75
9	M3	Y	-4.814	-2.462	3.75	5
10	M3	Y	-2.462	-.11	5	6.25
11	M6	Y	-7.043	-16.373	1.55	2.756
12	M6	Y	-16.373	-14.115	2.756	3.961
13	M6	Y	-14.115	-1.694	3.961	5.167
14	M9	Y	-1.118	-5.368	0	1.146
15	M9	Y	-5.368	-9.374	1.146	2.291
16	M9	Y	-9.374	-9.368	2.291	3.437
17	M9	Y	-9.368	-5.361	3.437	4.583
18	M9	Y	-5.361	-1.121	4.583	5.728
19	M12	Y	-1.188	-5.368	0	1.398
20	M24	Y	-5.152	-13.246	0	.866
21	M24	Y	-13.246	-15.354	.866	1.732
22	M24	Y	-15.354	-11.581	1.732	2.598
23	M24	Y	-11.581	-8.033	2.598	3.464
24	M24	Y	-8.033	-4.607	3.464	4.33
25	M25	Y	-2.352	-7.335	0	.866
26	M25	Y	-7.335	-11.66	.866	1.732
27	M25	Y	-11.66	-15.429	1.732	2.598
28	M25	Y	-15.429	-13.325	2.598	3.464
29	M25	Y	-13.325	-5.245	3.464	4.33
30	M1	Y	-.11	-2.458	6.25	7.5
31	M1	Y	-2.458	-4.812	7.5	8.75
32	M1	Y	-4.812	-4.901	8.75	10
33	M1	Y	-4.901	-3.095	10	11.25
34	M1	Y	-3.095	-.11	11.25	12.5
35	M2	Y	-.121	-3.074	0	1.25
36	M2	Y	-3.074	-4.824	1.25	2.5
37	M2	Y	-4.824	-4.826	2.5	3.75
38	M2	Y	-4.826	-2.474	3.75	5
39	M2	Y	-2.474	-.121	5	6.25
40	M5	Y	-.57	-17.427	1.55	2.273
41	M5	Y	-17.427	-22.342	2.273	2.997
42	M5	Y	-22.342	-13.057	2.997	3.72
43	M5	Y	-13.057	-6.732	3.72	4.443

Member Distributed Loads (BLC 16 : BLC 10 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
44	M5	Y	-6.732	-.57	4.443	5.167
45	M8	Y	-1.165	-5.418	0	1.146
46	M8	Y	-5.418	-9.293	1.146	2.291
47	M8	Y	-9.293	-9.641	2.291	3.437
48	M8	Y	-9.641	-5.752	3.437	4.583
49	M8	Y	-5.752	-.774	4.583	5.728
50	M11	Y	-4.711	-3.698	0	.699
51	M11	Y	-3.698	-2.685	.699	1.398
52	M26	Y	-5.25	-13.338	0	.866
53	M26	Y	-13.338	-15.441	.866	1.732
54	M26	Y	-15.441	-11.663	1.732	2.598
55	M26	Y	-11.663	-7.318	2.598	3.464
56	M26	Y	-7.318	-2.302	3.464	4.33
57	M27	Y	-2.515	-8.178	0	.866
58	M27	Y	-8.178	-11.702	.866	1.732
59	M27	Y	-11.702	-13.599	1.732	2.598
60	M27	Y	-13.599	-12.093	2.598	3.463
61	M27	Y	-12.093	-6.67	3.463	4.329
62	M1	Y	-.11	-3.104	0	1.25
63	M1	Y	-3.104	-4.917	1.25	2.5
64	M1	Y	-4.917	-4.263	2.5	3.75
65	M1	Y	-4.263	-1.901	3.75	5
66	M1	Y	-1.901	-.11	5	6.25
67	M3	Y	-.119	-2.473	6.25	7.5
68	M3	Y	-2.473	-4.824	7.5	8.75
69	M3	Y	-4.824	-4.82	8.75	10
70	M3	Y	-4.82	-3.066	10	11.25
71	M3	Y	-3.066	-.119	11.25	12.5
72	M4	Y	-.571	-17.498	1.55	2.273
73	M4	Y	-17.498	-22.415	2.273	2.997
74	M4	Y	-22.415	-13.08	2.997	3.72
75	M4	Y	-13.08	-6.754	3.72	4.443
76	M4	Y	-6.754	-.571	4.443	5.167
77	M7	Y	-1.095	-5.344	0	1.146
78	M7	Y	-5.344	-9.175	1.146	2.291
79	M7	Y	-9.175	-9.523	2.291	3.437
80	M7	Y	-9.523	-6.271	3.437	4.583
81	M7	Y	-6.271	-2.484	4.583	5.728
82	M10	Y	-2.731	-3.717	0	.699
83	M10	Y	-3.717	-4.702	.699	1.398
84	M22	Y	-3.266	-7.739	0	.866
85	M22	Y	-7.739	-11.712	.866	1.732
86	M22	Y	-11.712	-15.392	1.732	2.598
87	M22	Y	-15.392	-13.296	2.598	3.463
88	M22	Y	-13.296	-5.218	3.463	4.329
89	M23	Y	-6.632	-12.076	0	.866
90	M23	Y	-12.076	-14.084	.866	1.732
91	M23	Y	-14.084	-11.605	1.732	2.598
92	M23	Y	-11.605	-7.244	2.598	3.464
93	M23	Y	-7.244	-2.049	3.464	4.33

Member Area Loads (BLC 9 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N19	N20	N21	N22	Y	Two Way	-.005
2	N15	N16	N17	N18	Y	Two Way	-.005
3	N13	N14	N23	N24	Y	Two Way	-.005

Member Area Loads (BLC 10 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N19	N20	N21	N22	Y	Two Way	-.016
2	N15	N16	N17	N18	Y	Two Way	-.016
3	N13	N14	N23	N24	Y	Two Way	-.016

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	N1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N2	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N3	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N106	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N107	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N108A	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N1	max	5331.338	4	815.706	3	2532.72	1	.793	1	1.531	1	.512	2
2		min	-3921.928	3	-1058.931	9	-3347.102	2	-.841	2	-1.525	2	-.615	1
3	N2	max	3860.597	4	820.166	4	2532.632	1	.796	1	1.482	2	.636	1
4		min	-5269.35	3	-1024.021	3	-3347.842	2	-.869	2	-1.486	1	-.547	2
5	N3	max	2484.518	4	961.421	2	6459.984	1	.336	6	2.553	3	1.209	3
6		min	-2484.305	3	-1095.417	1	-4958.65	2	-.149	1	-2.553	4	-1.194	4
7	N106	max	1027.11	3	5020.556	8	2002.876	8	0	4	0	3	0	3
8		min	-3456.198	8	-1502.431	3	-610.916	3	0	3	0	4	0	4
9	N107	max	3455.2	7	5019.129	7	2002.303	7	0	3	0	3	0	3
10		min	-1027.921	4	-1503.594	4	-611.386	4	0	4	0	4	0	4
11	N108A	max	36.717	4	4865.158	5	1533.754	2	0	11	0	4	0	3
12		min	-36.697	3	-1925.512	2	-3868.567	5	0	1	0	3	0	4
13	Totals:	max	7844.778	4	11843.03	5	7861.793	1						
14		min	-7844.778	3	3596.397	2	-7861.794	2						

Envelope Member Section Forces

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
1	M1	1	max	0	11	0	11	0	11	0	11	0	11	0	11
2			min	0	1	-750	9	0	1	0	1	0	1	0	1
3		2	max	830.351	2	552.554	1	204.092	2	.062	6	.184	1	.514	4
4			min	-1029.852	1	-655.103	2	-217.701	1	-.027	9	-.171	2	-.468	3
5		3	max	848.054	2	1020.396	4	485.05	1	.924	2	.267	3	.436	1
6			min	-1066.615	1	-1006.846	3	-467.143	2	-.872	1	-.264	4	-.99	4
7		4	max	826.811	2	622.336	2	229.279	1	.023	2	.212	1	.475	3
8			min	-1039.804	1	-506.254	1	-214.802	2	-.08	1	-.198	2	-.449	4

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
9		5	max	0	11	0	11	0	11	0	11	0	11	0	11
10			min	0	1	0	1	0	1	0	1	0	1	0	1
11	M2	1	max	0	11	.018	2	.005	4	0	11	0	11	0	11
12			min	0	1	-.005	4	-.002	2	0	1	0	1	0	1
13		2	max	967.78	3	512.259	2	110.724	3	.1	1	.24	4	.612	2
14			min	-1172.297	4	-573.83	1	-122.817	4	-.045	2	-.228	3	-.548	1
15		3	max	1089.003	3	988.635	6	670.539	3	.75	4	.253	2	.885	2
16			min	-1295.425	4	-872.096	1	-682.476	4	-.749	3	-.247	1	-1.084	3
17		4	max	924.043	1	743.939	3	262.016	4	.005	4	.106	4	.547	4
18			min	-1124.148	2	-641.613	4	-247.015	3	-.097	7	-.091	3	-.527	3
19		5	max	0	11	0	6	0	4	0	11	0	11	0	11
20			min	0	1	-.018	4	-.001	2	0	1	0	1	0	1
21	M3	1	max	0	11	.02	3	0	2	0	11	0	11	0	11
22			min	0	1	0	6	0	3	0	1	0	1	0	1
23		2	max	971.018	1	690.167	3	231.448	4	.125	4	.089	3	.609	3
24			min	-1167.532	2	-779.17	4	-245.609	3	-.073	3	-.075	4	-.57	4
25		3	max	1069.39	4	893.398	1	665.603	3	.795	4	.264	2	.891	2
26			min	-1281.398	3	-960.891	6	-652.362	4	-.795	3	-.26	1	-1.088	1
27		4	max	949.808	4	551.046	1	139.892	3	.072	4	.258	3	.564	2
28			min	-1147.93	3	-477.954	2	-127.106	4	-.137	3	-.246	4	-.517	1
29		5	max	0	11	.005	3	.002	2	0	11	0	11	0	11
30			min	0	1	-.017	2	-.005	3	0	1	0	1	0	1
31	M4	1	max	4235.297	3	815.642	3	1729.519	2	.984	2	1.531	1	.296	7
32			min	-5862.747	4	-1058.865	9	-1734.792	1	-.994	1	-1.525	2	-.466	9
33		2	max	4213.619	3	792.385	3	1691.957	2	.984	2	.685	2	1.2	4
34			min	-5841.068	4	-1082.123	9	-1697.229	1	-.994	1	-.686	1	-.79	3
35		3	max	2763.82	3	1556.067	8	117.75	2	.494	9	.184	2	3.049	8
36			min	-2292.259	4	-179.604	3	-120.833	1	-.17	2	-.185	1	-1.176	3
37		4	max	2742.141	3	1469.6	8	80.187	2	.494	9	.312	2	1.403	4
38			min	-2270.58	4	-212.139	3	-83.271	1	-.17	2	-.316	1	-.923	3
39		5	max	2720.463	3	1404.826	8	49.057	3	.494	9	.391	2	.144	2
40			min	-2248.902	4	-238.523	3	-48.919	4	-.17	2	-.4	1	-.969	7
41	M5	1	max	4196.683	4	820.096	4	1692.708	1	1.008	1	1.482	2	.296	8
42			min	-5823.733	3	-1024.546	3	-1688.279	2	-1.026	2	-1.486	1	-.13	3
43		2	max	4175.005	4	796.838	4	1655.146	1	1.008	1	.676	1	1.208	3
44			min	-5802.055	3	-1047.803	3	-1650.716	2	-1.026	2	-.675	2	-.799	4
45		3	max	2749.826	4	1546.643	7	158.753	1	.137	2	.198	1	3.048	7
46			min	-2265.436	3	-147.764	4	-156.392	2	-.14	1	-.198	2	-1.182	4
47		4	max	2728.148	4	1460.272	7	121.191	1	.137	2	.379	1	1.452	3
48			min	-2243.758	3	-180.272	4	-118.829	2	-.14	1	-.375	2	-.969	4
49		5	max	2706.47	4	1395.527	7	83.628	1	.137	2	.511	1	.193	3
50			min	-2222.079	3	-206.648	4	-81.266	2	-.14	1	-.505	2	-.982	8
51	M6	1	max	4958.65	2	961.32	2	2484.058	4	1.194	4	2.553	3	.336	6
52			min	-6459.984	1	-1096.016	1	-2483.788	3	-1.209	3	-2.553	4	-.149	1
53		2	max	4958.65	2	938.062	2	2433.984	4	1.194	4	.623	4	1.282	1
54			min	-6459.984	1	-1119.273	1	-2433.714	3	-1.209	3	-.623	3	-.941	2
55		3	max	3147.558	2	1544.895	5	140.442	4	.147	3	.195	4	2.956	5
56			min	-2674.682	1	-275.246	2	-140.349	3	-.181	4	-.195	3	-1.488	2
57		4	max	3147.558	2	1463.429	5	90.368	4	.147	3	.344	4	1.515	1
58			min	-2674.682	1	-306.363	2	-90.275	3	-.181	4	-.344	3	-1.112	2
59		5	max	3147.558	2	1394.677	5	40.294	4	.147	3	.429	4	.119	1
60			min	-2674.682	1	-333.875	2	-40.201	3	-.181	4	-.428	3	-1.062	6

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
61	M7	1	max	395.964	2	504.172	3	318.761	1	1.446	4	0	11	0	11
62			min	-374.054	1	-1169.402	8	-340.351	2	-1.317	3	0	1	0	1
63		2	max	586.145	2	426.311	3	143.91	4	1.408	4	.241	1	1.735	8
64			min	-549.946	1	-1296.75	8	-142.537	3	-1.243	3	-.245	2	-.708	3
65		3	max	933.44	1	1356.149	6	185.548	4	1.539	1	.53	2	3.646	8
66			min	-895.929	2	-1373.026	8	-184.175	3	-1.763	2	-.536	1	-1.297	3
67		4	max	909.4	1	1279.056	6	160.259	1	1.539	1	.286	2	1.729	6
68			min	-871.889	2	-259.479	1	-163.745	2	-1.763	2	-.297	1	-.495	1
69		5	max	650.459	1	1161.187	6	406.823	1	1.644	1	0	11	0	11
70			min	-629.636	2	-348.684	1	-378.513	2	-1.839	2	0	1	0	1
71	M8	1	max	651.279	1	324.236	1	386.719	2	1.802	2	0	11	0	11
72			min	-627.657	2	-1146.486	6	-407.181	1	-1.584	1	0	1	0	1
73		2	max	887.677	1	247.525	4	116.808	2	1.746	2	.36	2	1.706	6
74			min	-846.225	2	-1268.126	6	-108.28	1	-1.498	1	-.373	1	-.457	1
75		3	max	911.717	1	1386.45	7	143.287	4	1.746	2	.537	2	3.683	7
76			min	-870.264	2	-1344.617	6	-152.968	3	-1.498	1	-.538	1	-1.309	4
77		4	max	531.967	2	1309.41	7	101.648	4	1.273	4	.297	1	1.754	7
78			min	-491.607	1	-434.575	4	-111.33	3	-1.417	3	-.308	2	-.709	4
79		5	max	342.827	2	1183.557	7	345.978	2	1.335	4	0	11	0	11
80			min	-314.329	1	-505.68	4	-334.337	1	-1.444	3	0	1	0	1
81	M9	1	max	904.297	4	485.983	2	393.288	3	1.608	3	0	11	0	11
82			min	-887.215	3	-1118.086	5	-418.943	4	-1.486	4	0	1	0	1
83		2	max	1138.679	4	424.421	2	134.741	3	1.536	3	.285	3	1.659	5
84			min	-1104.995	3	-1249.725	5	-133.436	4	-1.378	4	-.292	4	-.67	2
85		3	max	1138.679	4	1332.799	5	134.741	3	1.536	3	.177	1	3.523	5
86			min	-1104.995	3	-1184.629	7	-135.5	4	-1.564	4	-.483	4	-1.256	2
87		4	max	1100.915	3	1256.286	5	134.076	3	1.428	3	.282	4	1.67	5
88			min	-1067.394	4	-411.673	2	-135.5	4	-1.564	4	-.289	3	-.65	2
89		5	max	866.703	3	1125.993	5	417.439	3	1.54	3	0	11	0	11
90			min	-848.793	4	-471.835	2	-392.399	4	-1.64	4	0	1	0	1
91	M10	1	max	508.363	2	83.047	3	1292.499	4	.957	1	0	11	0	11
92			min	-573.416	1	-710.957	6	-1506.178	3	-1.243	2	0	1	0	1
93		2	max	508.363	2	82.635	3	1292.499	4	.957	1	.452	4	.249	6
94			min	-573.416	1	-712.41	6	-1506.178	3	-1.243	2	-.526	3	-.029	3
95		3	max	705.325	4	918.146	9	1086.512	1	1.659	1	.613	2	.641	9
96			min	-775.149	3	-151.62	3	-877.207	2	-1.479	2	-.76	1	-.106	3
97		4	max	705.325	4	917.598	9	1086.512	1	1.659	1	.307	2	.321	9
98			min	-775.149	3	-152.168	3	-877.207	2	-1.479	2	-.38	1	-.053	3
99		5	max	705.325	4	916.982	9	1086.512	1	1.659	1	0	10	0	2
100			min	-775.149	3	-152.785	3	-877.207	2	-1.479	2	0	4	0	3
101	M11	1	max	724.818	3	109.199	4	902.028	2	1.325	2	0	11	0	11
102			min	-797.389	4	-630.524	7	-1124.004	1	-1.504	1	0	1	0	1
103		2	max	724.818	3	108.582	4	902.028	2	1.325	2	.315	2	.221	7
104			min	-797.389	4	-632.699	7	-1124.004	1	-1.504	1	-.393	1	-.038	4
105		3	max	724.818	3	108.036	4	902.028	2	1.325	2	.631	2	.442	7
106			min	-797.389	4	-634.627	7	-1124.004	1	-1.504	1	-.786	1	-.076	4
107		4	max	506.053	3	643.316	6	1471.699	4	1.239	2	.438	3	.225	6
108			min	-576.705	4	-101.244	1	-1253.604	3	-.956	1	-.514	4	-.035	1
109		5	max	506.053	3	641.882	6	1471.699	4	1.239	2	0	1	0	3
110			min	-576.705	4	-101.65	1	-1253.604	3	-.956	1	0	8	0	6
111	M12	1	max	703.898	1	146.496	2	1277.64	1	1.341	3	0	11	0	11
112			min	-780.02	2	-665.984	5	-1489.793	2	-1.606	4	0	1	0	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
113		2	max	703.898	1	146.259	2	1277.64	1	1.341	3	.447	1	.233	5
114			min	-780.02	2	-666.819	5	-1489.793	2	-1.606	4	-.521	2	-.051	2
115		3	max	717.073	1	562.466	7	1277.64	1	1.687	3	.893	1	.466	5
116			min	-794.314	2	-668.163	5	-1489.793	2	-1.606	4	-1.042	2	-.125	2
117		4	max	717.073	1	598.399	5	1459.297	2	1.687	3	.437	1	.209	5
118			min	-794.314	2	-178.898	2	-1250.872	1	-1.428	4	-.51	2	-.063	2
119		5	max	717.073	1	596.035	5	1459.297	2	1.687	3	0	11	0	5
120			min	-794.314	2	-179.569	2	-1250.872	1	-1.428	4	0	1	0	10
121	MP3A	1	max	0	2	.136	4	.346	1	0	3	0	11	0	11
122			min	0	1	-.137	3	-.336	2	0	4	0	1	0	1
123		2	max	654.93	2	293.885	4	230.26	1	.256	2	.324	2	.397	4
124			min	-501.64	1	-304.553	3	-179.225	2	-.245	1	-.332	1	-.4	3
125		3	max	674.377	2	323.647	4	268.857	1	.256	2	.125	8	.115	1
126			min	-482.192	1	-334.315	3	-217.822	2	-.245	1	.006	3	-.103	2
127		4	max	742.425	2	414.597	4	453.848	1	.256	2	.548	1	.634	3
128			min	-414.145	1	-425.265	3	-402.813	2	-.245	1	-.403	2	-.605	4
129		5	max	0	2	.006	3	.066	6	0	8	0	11	0	11
130			min	0	1	-.013	8	-.023	1	0	3	0	1	0	1
131	MP2A	1	max	0	1	1.193	4	4.586	1	0	3	0	2	0	11
132			min	0	2	-1.193	3	-4.585	2	0	4	0	1	0	1
133		2	max	737.835	5	392.09	4	783.764	1	0	3	1.121	1	.514	3
134			min	211.112	2	-392.091	3	-783.763	2	0	4	-1.121	2	-.514	4
135		3	max	1011.761	6	695.116	4	301.58	1	.149	4	1.17	1	.088	4
136			min	239.218	1	-689.817	3	-270.716	2	-.148	3	-1.081	2	-.086	3
137		4	max	1060.909	6	732.732	4	339.196	1	.149	4	1.891	1	1.509	3
138			min	254.01	1	-727.433	3	-308.332	2	-.148	3	-1.732	2	-1.518	4
139		5	max	0	2	.057	7	1.311	6	0	8	0	11	0	11
140			min	0	1	-.041	8	-.393	1	0	7	0	1	0	1
141	MP1A	1	max	0	2	.18	4	.442	1	0	3	0	11	0	11
142			min	0	1	-.177	3	-.435	2	0	4	0	1	0	1
143		2	max	670.524	2	313.575	4	262.671	1	.246	1	.325	2	.401	4
144			min	-499.36	1	-304.029	3	-206.834	2	-.257	2	-.34	1	-.399	3
145		3	max	689.972	2	343.337	4	301.268	1	.246	1	.126	7	.099	2
146			min	-479.912	1	-333.792	3	-245.432	2	-.257	2	-.019	2	-.112	1
147		4	max	702.579	2	374.273	4	334.196	1	.246	1	.561	1	.603	3
148			min	-467.305	1	-364.728	3	-278.359	2	-.257	2	-.408	2	-.63	4
149		5	max	0	2	.13	7	.725	6	0	4	0	11	0	11
150			min	0	1	-.086	4	-.343	1	0	7	0	1	0	1
151	M22	1	max	252.034	4	66.798	8	8.76	4	0	1	.023	3	.092	4
152			min	-284.006	3	-19.483	3	-7.708	3	0	2	-.05	8	-.064	3
153		2	max	242.946	4	41.695	8	12.532	2	0	1	.007	3	.059	4
154			min	-274.918	3	-25.264	3	-11.503	1	0	2	-.01	9	-.047	3
155		3	max	238.49	1	32.583	4	23.747	3	0	1	.014	5	.029	9
156			min	-265.83	3	-33.246	3	-22.695	4	0	2	-.008	2	-.02	1
157		4	max	247.578	1	23.159	4	39.475	3	0	1	.011	1	.063	2
158			min	-274.342	2	-47.166	7	-38.423	4	0	2	-.013	2	-.048	1
159		5	max	256.666	1	15.635	4	55.202	3	0	1	-.001	1	.113	3
160			min	-283.43	2	-78.413	7	-54.15	4	0	2	-.047	8	-.075	4
161	M23	1	max	307.236	2	73.322	5	74.604	2	0	9	-.003	3	.16	1
162			min	-342.878	1	-31.2	2	-73.263	1	0	2	-.041	6	-.132	2
163		2	max	307.236	2	53.246	1	53.621	2	0	9	.015	2	.069	1
164			min	-342.878	1	-38.653	2	-52.28	1	0	2	-.016	1	-.056	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
165		3	max	307.236	2	44.32	1	32.638	2	0	9	.015	6	.034	4
166			min	-342.878	1	-47.579	2	-31.296	1	0	2	-.01	1	-.025	3
167		4	max	307.236	2	36.471	1	11.655	2	0	9	.007	3	.066	2
168			min	-342.878	1	-55.428	2	-10.313	1	0	2	-.011	4	-.048	1
169		5	max	307.236	2	31.02	1	10.928	5	0	9	.03	1	.112	2
170			min	-342.878	1	-74.91	6	-9.329	2	0	2	-.056	6	-.073	1
171	M24	1	max	332.001	4	78.765	7	60.924	4	0	3	-.002	4	.162	3
172			min	-362.251	3	-25.368	4	-61.212	3	0	4	-.044	5	-.127	4
173		2	max	322.917	4	51.067	3	45.185	4	0	3	.016	4	.079	3
174			min	-353.168	3	-32.868	4	-45.473	3	0	4	-.018	3	-.064	4
175		3	max	313.834	4	41.664	3	29.446	4	0	3	.016	4	.028	1
176			min	-344.085	3	-42.272	4	-29.734	3	0	4	-.011	3	-.02	2
177		4	max	304.751	4	33.692	3	13.707	4	0	3	.009	2	.049	1
178			min	-335.002	3	-50.243	4	-13.995	3	0	4	-.011	1	-.035	2
179		5	max	295.668	4	27.609	3	4.397	7	0	3	.019	3	.09	4
180			min	-325.918	3	-71.833	8	-4.823	8	0	4	-.05	8	-.059	3
181	M25	1	max	296.693	3	68.027	7	5.908	7	0	3	.019	4	.083	3
182			min	-327.852	4	-26.576	4	-3.81	8	0	4	-.048	7	-.056	4
183		2	max	305.776	3	47.612	3	13.073	4	0	3	.009	2	.049	1
184			min	-336.935	4	-32.102	4	-12.168	3	0	4	-.011	1	-.037	2
185		3	max	314.86	3	39.681	3	28.812	4	0	3	.016	7	.027	1
186			min	-346.018	4	-40.032	4	-27.907	3	0	4	-.011	4	-.021	2
187		4	max	323.943	3	30.245	3	44.552	4	0	3	.016	3	.077	4
188			min	-355.101	4	-49.468	4	-43.646	3	0	4	-.017	4	-.062	3
189		5	max	333.026	3	22.708	3	60.291	4	0	3	-.004	3	.158	4
190			min	-364.184	4	-79.846	8	-59.385	3	0	4	-.044	5	-.122	3
191	M26	1	max	343.168	2	73.054	5	27.593	1	0	2	.043	2	.077	1
192			min	-376.911	1	-19.175	2	-26.501	2	0	1	-.064	1	-.048	2
193		2	max	343.168	2	42.868	1	6.879	5	0	2	.013	2	.054	1
194			min	-376.911	1	-26.717	2	-5.518	2	0	1	-.015	1	-.043	2
195		3	max	343.168	2	33.427	1	15.465	2	0	2	.015	5	.037	3
196			min	-376.911	1	-36.158	2	-14.374	1	0	1	-.007	2	-.03	4
197		4	max	343.168	2	25.496	1	36.448	2	0	2	.015	1	.046	3
198			min	-376.911	1	-47.575	6	-35.357	1	0	1	-.018	2	-.03	4
199		5	max	343.168	2	19.982	1	57.431	2	0	2	-.003	1	.108	2
200			min	-376.911	1	-71.732	6	-56.34	1	0	1	-.043	7	-.072	1
201	M27	1	max	260.098	1	65.84	7	43.765	4	0	2	0	4	.101	3
202			min	-284.412	2	-13.387	4	-43.597	3	0	1	-.041	5	-.069	4
203		2	max	269.186	1	40.811	7	28.037	4	0	2	.014	4	.044	3
204			min	-293.5	2	-19.148	4	-27.869	3	0	1	-.017	3	-.029	4
205		3	max	278.274	1	27.29	3	12.31	4	0	2	.014	8	.037	2
206			min	-302.588	2	-27.092	4	-12.141	3	0	1	-.008	3	-.028	1
207		4	max	287.362	1	18.501	3	3.586	3	0	2	.013	1	.054	2
208			min	-311.676	2	-42.274	8	-3.418	4	0	1	-.016	2	-.038	1
209		5	max	296.45	1	11.043	3	19.314	3	0	2	.026	3	.078	6
210			min	-320.763	2	-73.287	8	-19.146	4	0	1	-.054	8	-.039	1
211	M28	1	max	0	11	0	11	0	11	0	11	0	11	0	11
212			min	0	1	0	1	0	1	0	1	0	1	0	1
213		2	max	66.621	3	358.461	4	319.97	1	.518	1	.321	4	.197	4
214			min	-126.522	4	-369.276	3	-337.449	2	-.523	2	-.315	3	-.217	3
215		3	max	24.314	10	387.472	4	295.392	2	.518	1	.985	1	.966	4
216			min	-178.775	3	-382.291	3	-279.734	1	-.523	2	-1.033	2	-.109	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
217		4	max	124.121	4	374.456	4	338.551	2	.519	2	.312	3	.199	3
218			min	-178.775	3	-359.021	3	-322.893	1	-.516	1	-.309	4	-.224	4
219		5	max	0	11	0	11	0	11	0	11	0	11	0	11
220			min	0	1	0	1	0	1	0	1	0	1	0	1
221	M29	1	max	0	11	.014	2	.021	4	0	11	0	11	0	11
222			min	0	1	0	11	-.028	2	0	1	0	1	0	1
223		2	max	97.035	1	337.465	2	300.487	4	.44	4	.31	2	.17	2
224			min	-165.548	2	-345.912	1	-318.008	3	-.446	3	-.296	1	-.186	1
225		3	max	115.724	1	383.776	2	268.118	4	.44	4	.843	4	.935	2
226			min	-184.236	2	-340.854	1	-285.639	3	-.446	3	-.886	3	-.662	4
227		4	max	-6.538	3	370.76	2	186.691	3	.398	3	.177	4	.218	1
228			min	-91.3	8	-353.87	1	-174.527	4	-.397	4	-.175	3	-.244	2
229		5	max	0	11	0	11	.029	3	0	11	0	11	0	11
230			min	0	1	-.016	2	0	1	0	1	0	1	0	1
231	M30	1	max	0	11	.016	2	0	11	0	11	0	11	0	11
232			min	0	1	0	11	-.029	3	0	1	0	1	0	1
233		2	max	12.287	1	355.087	1	175.413	3	.402	3	.176	1	.216	1
234			min	-97.104	7	-367.323	2	-188.971	4	-.406	4	-.172	2	-.237	2
235		3	max	157.152	1	342.071	1	281.792	4	.441	4	.843	3	.934	1
236			min	-220.448	2	-380.339	2	-265.985	3	-.437	3	-.884	4	-.666	3
237		4	max	138.464	1	355.238	1	314.161	4	.441	4	.313	2	.175	2
238			min	-201.76	2	-342.243	2	-298.353	3	-.437	3	-.302	1	-.196	1
239		5	max	0	11	0	9	.028	2	0	11	0	11	0	11
240			min	0	1	-.014	1	-.022	3	0	1	0	1	0	1
241	M31	1	max	338.297	3	605.657	1	139.62	1	.73	1	.659	2	.451	4
242			min	-424.99	4	-609.658	2	-142.908	2	-.733	2	-.576	1	-.505	3
243		2	max	338.297	3	605.657	1	139.62	1	.73	1	.605	2	.322	4
244			min	-424.99	4	-609.658	2	-142.908	2	-.733	2	-.525	3	-.376	3
245		3	max	338.297	3	605.657	1	139.62	1	.73	1	.651	4	.194	4
246			min	-424.99	4	-609.658	2	-142.908	2	-.733	2	-.573	3	-.248	3
247		4	max	338.297	3	605.657	1	139.62	1	.73	1	.7	4	.294	2
248			min	-424.99	4	-609.658	2	-142.908	2	-.733	2	-.622	3	-.345	1
249		5	max	338.297	3	605.657	1	139.62	1	.73	1	.749	4	.522	2
250			min	-424.99	4	-609.658	2	-142.908	2	-.733	2	-.671	3	-.573	1
251	M32	1	max	249.936	2	794.289	4	120.565	3	.931	3	.472	2	.554	4
252			min	-324.035	1	-788.194	3	-118.436	4	-.93	4	-.54	1	-.599	3
253		2	max	249.936	2	794.289	4	120.565	3	.931	3	.469	2	.256	4
254			min	-324.035	1	-788.194	3	-118.436	4	-.93	4	-.536	1	-.304	3
255		3	max	249.936	2	794.289	4	120.565	3	.931	3	.467	2	.183	1
256			min	-324.035	1	-788.194	3	-118.436	4	-.93	4	-.533	1	-.234	2
257		4	max	249.936	2	794.289	4	120.565	3	.931	3	.464	2	.287	3
258			min	-324.035	1	-788.194	3	-118.436	4	-.93	4	-.53	1	-.339	4
259		5	max	249.936	2	794.289	4	120.565	3	.931	3	.462	2	.583	3
260			min	-324.035	1	-788.194	3	-118.436	4	-.93	4	-.526	1	-.637	4
261	M33	1	max	337.086	4	603.802	2	137.289	2	.739	2	.753	3	.547	2
262			min	-424.454	3	-612.43	1	-128.987	1	-.734	1	-.679	4	-.606	1
263		2	max	337.086	4	603.802	2	137.289	2	.739	2	.706	3	.32	2
264			min	-424.454	3	-612.43	1	-128.987	1	-.734	1	-.63	4	-.377	1
265		3	max	337.086	4	603.802	2	137.289	2	.739	2	.659	3	.177	3
266			min	-424.454	3	-612.43	1	-128.987	1	-.734	1	-.582	4	-.231	4
267		4	max	337.086	4	603.802	2	137.289	2	.739	2	.612	3	.306	3
268			min	-424.454	3	-612.43	1	-128.987	1	-.734	1	-.533	4	-.355	4

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
269		5	max	337.086	4	603.802	2	137.289	2	.739	2	.649	2	.435	3
270			min	-424.454	3	-612.43	1	-128.987	1	-.734	1	-.563	1	-.48	4
271	M34	1	max	98.652	3	587.037	2	201.247	4	.628	3	.259	2	.442	2
272			min	-151.573	4	-570.226	1	-213.245	3	-.618	4	-.249	1	-.486	1
273		2	max	98.652	3	587.037	2	201.247	4	.628	3	.26	2	.405	2
274			min	-151.573	4	-570.226	1	-213.245	3	-.618	4	-.251	1	-.45	1
275		3	max	98.652	3	587.037	2	201.247	4	.628	3	.262	2	.369	2
276			min	-151.573	4	-570.226	1	-213.245	3	-.618	4	-.254	1	-.414	1
277		4	max	98.652	3	587.037	2	201.247	4	.628	3	.264	2	.332	2
278			min	-151.573	4	-570.226	1	-213.245	3	-.618	4	-.256	1	-.379	1
279		5	max	98.652	3	587.037	2	201.247	4	.628	3	.265	2	.295	2
280			min	-151.573	4	-570.226	1	-213.245	3	-.618	4	-.258	1	-.343	1
281	M35	1	max	480.836	1	412.39	1	445.266	3	.767	3	.249	1	.602	2
282			min	-413.821	2	-743.933	2	-434.115	4	-.735	4	-.259	2	-.731	1
283		2	max	480.836	1	412.39	1	445.266	3	.767	3	.251	1	.649	2
284			min	-413.821	2	-743.933	2	-434.115	4	-.735	4	-.26	2	-.757	1
285		3	max	480.836	1	412.39	1	445.266	3	.767	3	.253	1	.695	2
286			min	-413.821	2	-743.933	2	-434.115	4	-.735	4	-.262	2	-.783	1
287		4	max	480.836	1	412.39	1	445.266	3	.767	3	.256	1	.742	2
288			min	-413.821	2	-743.933	2	-434.115	4	-.735	4	-.264	2	-.808	1
289		5	max	480.836	1	412.39	1	445.266	3	.767	3	.258	1	.788	2
290			min	-413.821	2	-743.933	2	-434.115	4	-.735	4	-.265	2	-.834	1
291	M36	1	max	556.763	1	146.044	6	250.708	4	1.86	3	.179	4	1.071	2
292			min	-590.393	2	-10.141	10	-245.441	3	-1.869	4	-.178	3	-1.032	1
293		2	max	556.763	1	146.044	6	250.708	4	1.86	3	.195	4	1.064	2
294			min	-590.393	2	-10.141	10	-245.441	3	-1.869	4	-.193	3	-1.033	1
295		3	max	556.763	1	146.044	6	250.708	4	1.86	3	.211	4	1.057	2
296			min	-590.393	2	-10.141	10	-245.441	3	-1.869	4	-.208	3	-1.033	1
297		4	max	556.763	1	146.044	6	250.708	4	1.86	3	.226	4	1.05	2
298			min	-590.393	2	-10.141	10	-245.441	3	-1.869	4	-.224	3	-1.033	1
299		5	max	556.763	1	146.044	6	250.708	4	1.86	3	.242	4	1.043	2
300			min	-590.393	2	-10.141	10	-245.441	3	-1.869	4	-.239	3	-1.034	1
301	M37	1	max	959.558	1	-317.448	1	1016.635	3	1.7	3	.27	3	1.689	2
302			min	-925.845	2	-1473.256	6	-1021.885	4	-1.712	4	-.272	4	-1.769	1
303		2	max	959.558	1	-317.448	1	1016.635	3	1.7	3	.334	3	1.715	2
304			min	-925.845	2	-1473.256	6	-1021.885	4	-1.712	4	-.336	4	-1.749	1
305		3	max	959.558	1	-317.448	1	1016.635	3	1.7	3	.397	3	1.742	2
306			min	-925.845	2	-1473.256	6	-1021.885	4	-1.712	4	-.4	4	-1.73	1
307		4	max	959.558	1	-317.448	1	1016.635	3	1.7	3	.461	3	1.768	2
308			min	-925.845	2	-1473.256	6	-1021.885	4	-1.712	4	-.463	4	-1.71	1
309		5	max	959.558	1	-317.448	1	1016.635	3	1.7	3	.524	3	1.794	2
310			min	-925.845	2	-1473.256	6	-1021.885	4	-1.712	4	-.527	4	-1.69	1
311	M38	1	max	99.117	4	585.085	2	154.501	4	.65	3	.249	1	.47	2
312			min	-156.857	3	-585.551	1	-143.536	3	-.658	4	-.259	2	-.522	1
313		2	max	99.117	4	585.085	2	154.501	4	.65	3	.251	1	.434	2
314			min	-156.857	3	-585.551	1	-143.536	3	-.658	4	-.261	2	-.486	1
315		3	max	99.117	4	585.085	2	154.501	4	.65	3	.254	1	.397	2
316			min	-156.857	3	-585.551	1	-143.536	3	-.658	4	-.262	2	-.449	1
317		4	max	99.117	4	585.085	2	154.501	4	.65	3	.256	1	.36	2
318			min	-156.857	3	-585.551	1	-143.536	3	-.658	4	-.264	2	-.412	1
319		5	max	99.117	4	585.085	2	154.501	4	.65	3	.258	1	.324	2
320			min	-156.857	3	-585.551	1	-143.536	3	-.658	4	-.266	2	-.376	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
321	M39	1	max	550.73	1	386.439	1	522.52	3	.623	3	.259	2	.444	2
322			min	-478.894	2	-784.065	6	-532.66	4	-.653	4	-.249	1	-.575	1
323		2	max	550.73	1	386.439	1	522.52	3	.623	3	.261	2	.493	2
324			min	-478.894	2	-784.065	6	-532.66	4	-.653	4	-.251	1	-.599	1
325		3	max	550.73	1	386.439	1	522.52	3	.623	3	.262	2	.542	2
326			min	-478.894	2	-784.065	6	-532.66	4	-.653	4	-.254	1	-.623	1
327		4	max	550.73	1	386.439	1	522.52	3	.623	3	.264	2	.591	2
328			min	-478.894	2	-784.065	6	-532.66	4	-.653	4	-.256	1	-.648	1
329		5	max	550.73	1	386.439	1	522.52	3	.623	3	.266	2	.64	2
330			min	-478.894	2	-784.065	6	-532.66	4	-.653	4	-.258	1	-.672	1
331	MP3C	1	max	0	3	.299	4	.177	1	0	3	0	11	0	11
332			min	0	4	-.285	3	-.191	6	0	4	0	1	0	1
333		2	max	665.332	3	223.13	4	349.314	1	.202	3	.506	2	.283	4
334			min	-501.488	4	-174.445	3	-362.922	2	-.196	4	-.507	1	-.272	3
335		3	max	684.779	3	263.989	4	379.589	1	.202	3	.09	4	.026	3
336			min	-482.04	4	-215.304	3	-393.197	2	-.196	4	-.111	3	-.117	8
337		4	max	752.827	3	425.47	4	494.049	1	.202	3	.674	1	.435	3
338			min	-413.993	4	-376.784	3	-507.656	2	-.196	4	-.716	2	-.57	4
339		5	max	0	3	.049	7	.012	2	0	4	0	11	0	11
340			min	0	4	-.015	4	-.023	5	0	7	0	1	0	1
341	MP2C	1	max	0	4	3.728	4	1.881	1	0	3	0	11	0	11
342			min	0	3	-3.706	3	-1.9	2	0	4	0	1	0	1
343		2	max	737.835	8	724.106	4	471.217	1	0	3	.661	1	.979	3
344			min	211.112	3	-724.084	3	-471.237	2	0	4	-.661	2	-.979	4
345		3	max	1007.411	6	432.778	4	596.033	1	.161	2	.424	3	.762	3
346			min	270.434	1	-413.563	3	-622.085	2	-.157	1	-.451	4	-.824	4
347		4	max	1056.558	6	470.394	4	633.649	1	.161	2	1.512	1	1.735	3
348			min	285.226	1	-451.179	3	-659.701	2	-.157	1	-1.596	2	-1.84	4
349		5	max	0	3	.873	7	.158	4	0	4	0	11	0	11
350			min	0	4	-.303	4	-.446	7	0	7	0	2	0	1
351	MP1C	1	max	0	1	.392	4	.255	1	0	3	0	11	0	11
352			min	0	2	-.382	3	-.266	2	0	4	0	1	0	1
353		2	max	632.233	3	399.853	4	262.415	1	.219	4	.347	2	.553	4
354			min	-457.28	4	-364.527	3	-301.253	2	-.226	3	-.331	1	-.545	3
355		3	max	651.68	3	440.712	4	292.69	1	.219	4	.087	1	.042	2
356			min	-437.832	4	-405.386	3	-331.528	2	-.226	3	-.13	2	-.096	5
357		4	max	664.288	3	476.194	4	322.207	1	.219	4	.546	1	.669	3
358			min	-425.225	4	-440.869	3	-361.046	2	-.226	3	-.647	2	-.766	4
359		5	max	0	1	.536	7	.11	2	0	4	0	11	0	11
360			min	0	2	-.34	4	-.316	5	0	7	0	1	0	1
361	M37A	1	max	163.938	1	597.918	3	160.92	2	.621	1	.201	3	.525	1
362			min	-218.772	2	-569.353	4	-172.858	1	-.603	2	-.19	4	-.568	2
363		2	max	163.938	1	597.918	3	160.92	2	.621	1	.21	3	.508	1
364			min	-218.772	2	-569.353	4	-172.858	1	-.603	2	-.201	4	-.552	2
365		3	max	163.938	1	597.918	3	160.92	2	.621	1	.22	3	.49	1
366			min	-218.772	2	-569.353	4	-172.858	1	-.603	2	-.212	4	-.536	2
367		4	max	163.938	1	597.918	3	160.92	2	.621	1	.229	3	.473	1
368			min	-218.772	2	-569.353	4	-172.858	1	-.603	2	-.222	4	-.521	2
369		5	max	163.938	1	597.918	3	160.92	2	.621	1	.238	3	.455	1
370			min	-218.772	2	-569.353	4	-172.858	1	-.603	2	-.233	4	-.505	2
371	M38A	1	max	358.729	2	410.013	4	414.258	1	.717	4	.152	4	.468	1
372			min	-303.883	1	-756.815	3	-404.649	2	-.709	3	-.163	3	-.642	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
373		2	max	358.729	2	410.013	4	414.258	1	.717	4	.175	4	.496	1
374			min	-303.883	1	-756.815	3	-404.649	2	-.709	3	-.184	3	-.648	2
375		3	max	358.729	2	410.013	4	414.258	1	.717	4	.198	4	.523	1
376			min	-303.883	1	-756.815	3	-404.649	2	-.709	3	-.205	3	-.653	2
377		4	max	358.729	2	410.013	4	414.258	1	.717	4	.22	4	.551	1
378			min	-303.883	1	-756.815	3	-404.649	2	-.709	3	-.227	3	-.659	2
379		5	max	358.729	2	410.013	4	414.258	1	.717	4	.243	4	.578	1
380			min	-303.883	1	-756.815	3	-404.649	2	-.709	3	-.248	3	-.665	2
381	M39A	1	max	411.505	4	140.089	6	161.174	2	1.783	1	.178	3	.858	3
382			min	-439.847	3	19.834	1	-149.987	1	-1.799	2	-.173	4	-.824	4
383		2	max	411.505	4	140.089	6	161.174	2	1.783	1	.178	3	.854	3
384			min	-439.847	3	19.834	1	-149.987	1	-1.799	2	-.173	4	-.827	4
385		3	max	411.505	4	140.089	6	161.174	2	1.783	1	.178	3	.851	3
386			min	-439.847	3	19.834	1	-149.987	1	-1.799	2	-.172	4	-.83	4
387		4	max	411.505	4	140.089	6	161.174	2	1.783	1	.178	3	.848	3
388			min	-439.847	3	19.834	1	-149.987	1	-1.799	2	-.171	4	-.833	4
389		5	max	411.505	4	140.089	6	161.174	2	1.783	1	.182	2	.844	3
390			min	-439.847	3	19.834	1	-149.987	1	-1.799	2	-.173	1	-.836	4
391	M40	1	max	773.55	4	-357.342	1	962.551	1	1.464	1	.136	1	1.394	3
392			min	-745.274	3	-1470.051	6	-974.638	2	-1.568	2	-.142	2	-1.581	4
393		2	max	773.55	4	-357.342	1	962.551	1	1.464	1	.196	1	1.417	3
394			min	-745.274	3	-1470.051	6	-974.638	2	-1.568	2	-.203	2	-1.558	4
395		3	max	773.55	4	-357.342	1	962.551	1	1.464	1	.256	1	1.441	3
396			min	-745.274	3	-1470.051	6	-974.638	2	-1.568	2	-.264	2	-1.535	4
397		4	max	773.55	4	-357.342	1	962.551	1	1.464	1	.316	1	1.464	3
398			min	-745.274	3	-1470.051	6	-974.638	2	-1.568	2	-.325	2	-1.512	4
399		5	max	773.55	4	-357.342	1	962.551	1	1.464	1	.376	1	1.487	3
400			min	-745.274	3	-1470.051	6	-974.638	2	-1.568	2	-.386	2	-1.488	4
401	M41	1	max	119.937	3	545.454	3	179.287	2	.651	1	.239	4	.708	3
402			min	-185.37	4	-544.777	4	-157.944	1	-.672	2	-.243	3	-.756	4
403		2	max	119.937	3	545.454	3	179.287	2	.651	1	.233	4	.674	3
404			min	-185.37	4	-544.777	4	-157.944	1	-.672	2	-.236	3	-.722	4
405		3	max	119.937	3	545.454	3	179.287	2	.651	1	.227	4	.64	3
406			min	-185.37	4	-544.777	4	-157.944	1	-.672	2	-.229	3	-.688	4
407		4	max	119.937	3	545.454	3	179.287	2	.651	1	.221	4	.606	3
408			min	-185.37	4	-544.777	4	-157.944	1	-.672	2	-.222	3	-.654	4
409		5	max	119.937	3	545.454	3	179.287	2	.651	1	.215	4	.572	3
410			min	-185.37	4	-544.777	4	-157.944	1	-.672	2	-.216	3	-.62	4
411	M42	1	max	593.075	4	344.42	4	506.818	1	.617	1	.289	3	.551	3
412			min	-527.653	3	-778.616	7	-528.553	2	-.696	2	-.286	4	-.722	4
413		2	max	593.075	4	344.42	4	506.818	1	.617	1	.268	3	.597	3
414			min	-527.653	3	-778.616	7	-528.553	2	-.696	2	-.265	4	-.743	4
415		3	max	593.075	4	344.42	4	506.818	1	.617	1	.247	3	.644	3
416			min	-527.653	3	-778.616	7	-528.553	2	-.696	2	-.244	4	-.765	4
417		4	max	593.075	4	344.42	4	506.818	1	.617	1	.225	3	.69	3
418			min	-527.653	3	-778.616	7	-528.553	2	-.696	2	-.223	4	-.786	4
419		5	max	593.075	4	344.42	4	506.818	1	.617	1	.204	3	.737	3
420			min	-527.653	3	-778.616	7	-528.553	2	-.696	2	-.203	4	-.808	4
421	MP3B	1	max	0	1	.291	4	.194	1	0	3	0	11	0	11
422			min	0	2	-.303	3	-.21	6	0	4	0	1	0	1
423		2	max	623.875	4	335.464	4	250.629	1	.228	4	.345	2	.541	4
424			min	-467.15	3	-367.052	3	-288.664	2	-.221	3	-.33	1	-.543	3

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
425		3	max	643.323	4	376.323	4	280.904	1	.228	4	.071	1	.097	5
426			min	-447.703	3	-407.911	3	-318.939	2	-.221	3	-.113	2	-.046	2
427		4	max	711.37	4	537.803	4	395.364	1	.228	4	.555	1	.741	3
428			min	-379.655	3	-569.391	3	-433.399	2	-.221	3	-.654	2	-.649	4
429		5	max	0	1	.022	3	.007	2	0	8	0	11	0	11
430			min	0	2	-.049	8	-.029	5	0	3	0	1	0	1
431	MP2B	1	max	0	3	3.713	4	1.88	1	0	3	0	11	0	11
432			min	0	4	-3.734	3	-1.9	2	0	4	0	1	0	1
433		2	max	737.835	7	724.091	4	471.216	1	0	3	.661	1	.979	3
434			min	211.112	4	-724.113	3	-471.237	2	0	4	-.661	2	-.979	4
435		3	max	1005.542	6	413.827	4	607.195	1	.171	1	.424	4	.822	3
436			min	278.527	1	-438.27	3	-624.08	2	-.172	2	-.455	3	-.762	4
437		4	max	1054.689	6	451.443	4	644.811	1	.171	1	1.534	1	1.85	3
438			min	293.319	1	-475.886	3	-661.696	2	-.172	2	-1.601	2	-1.736	4
439		5	max	0	4	.304	3	.161	3	0	8	0	11	0	11
440			min	0	3	-.882	8	-.434	8	0	3	0	2	0	1
441	MP1B	1	max	0	4	.373	4	.237	1	0	3	0	11	0	11
442			min	0	3	-.388	3	-.249	2	0	4	0	1	0	1
443		2	max	682.955	4	198.995	4	372.865	1	.198	3	.519	2	.277	4
444			min	-501.239	3	-250.313	3	-388.637	2	-.204	4	-.515	1	-.293	3
445		3	max	702.403	4	239.854	4	403.14	1	.198	3	.081	3	.122	7
446			min	-481.792	3	-291.172	3	-418.912	2	-.204	4	-.101	4	-.057	4
447		4	max	715.01	4	275.336	4	432.658	1	.198	3	.694	1	.578	3
448			min	-469.184	3	-326.654	3	-448.43	2	-.204	4	-.738	2	-.439	4
449		5	max	0	4	.235	3	.184	2	0	8	0	11	0	11
450			min	0	3	-.539	8	-.243	5	0	3	0	1	0	1
451	M46	1	max	124.255	4	554.607	4	201.039	1	.654	2	.245	4	.678	4
452			min	-186.115	3	-537.107	3	-223.402	2	-.632	1	-.241	3	-.717	3
453		2	max	124.255	4	554.607	4	201.039	1	.654	2	.238	4	.643	4
454			min	-186.115	3	-537.107	3	-223.402	2	-.632	1	-.235	3	-.683	3
455		3	max	124.255	4	554.607	4	201.039	1	.654	2	.231	4	.609	4
456			min	-186.115	3	-537.107	3	-223.402	2	-.632	1	-.229	3	-.65	3
457		4	max	124.255	4	554.607	4	201.039	1	.654	2	.224	4	.574	4
458			min	-186.115	3	-537.107	3	-223.402	2	-.632	1	-.222	3	-.616	3
459		5	max	124.255	4	554.607	4	201.039	1	.654	2	.217	4	.539	4
460			min	-186.115	3	-537.107	3	-223.402	2	-.632	1	-.216	3	-.583	3
461	M47	1	max	519.144	3	377.948	3	465.902	2	.821	2	.279	3	.66	4
462			min	-457.304	4	-712.876	4	-443.25	1	-.747	1	-.283	4	-.822	3
463		2	max	519.144	3	377.948	3	465.902	2	.821	2	.261	3	.705	4
464			min	-457.304	4	-712.876	4	-443.25	1	-.747	1	-.264	4	-.846	3
465		3	max	519.144	3	377.948	3	465.902	2	.821	2	.243	3	.75	4
466			min	-457.304	4	-712.876	4	-443.25	1	-.747	1	-.245	4	-.87	3
467		4	max	519.144	3	377.948	3	465.902	2	.821	2	.224	3	.794	4
468			min	-457.304	4	-712.876	4	-443.25	1	-.747	1	-.226	4	-.893	3
469		5	max	519.144	3	377.948	3	465.902	2	.821	2	.206	3	.839	4
470			min	-457.304	4	-712.876	4	-443.25	1	-.747	1	-.207	4	-.917	3
471	M48	1	max	409.979	3	138.222	6	163.999	1	1.806	2	.17	3	.859	4
472			min	-438.177	4	27.937	1	-164.773	2	-1.807	1	-.173	4	-.826	3
473		2	max	409.979	3	138.222	6	163.999	1	1.806	2	.17	3	.856	4
474			min	-438.177	4	27.937	1	-164.773	2	-1.807	1	-.173	4	-.829	3
475		3	max	409.979	3	138.222	6	163.999	1	1.806	2	.17	3	.853	4
476			min	-438.177	4	27.937	1	-164.773	2	-1.807	1	-.173	2	-.832	3

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
477		4	max	409.979	3	138.222	6	163.999	1	1.806	2	.179	1	.85	4
478			min	-438.177	4	27.937	1	-164.773	2	-1.807	1	-.183	2	-.836	3
479		5	max	409.979	3	138.222	6	163.999	1	1.806	2	.189	1	.847	4
480			min	-438.177	4	27.937	1	-164.773	2	-1.807	1	-.194	2	-.839	3
481	M49	1	max	774.904	3	-365.495	1	978.266	2	1.576	2	.153	2	1.398	4
482			min	-746.753	4	-1468.185	6	-976.543	1	-1.496	1	-.148	1	-1.586	3
483		2	max	774.904	3	-365.495	1	978.266	2	1.576	2	.214	2	1.421	4
484			min	-746.753	4	-1468.185	6	-976.543	1	-1.496	1	-.209	1	-1.562	3
485		3	max	774.904	3	-365.495	1	978.266	2	1.576	2	.275	2	1.444	4
486			min	-746.753	4	-1468.185	6	-976.543	1	-1.496	1	-.27	1	-1.539	3
487		4	max	774.904	3	-365.495	1	978.266	2	1.576	2	.336	2	1.467	4
488			min	-746.753	4	-1468.185	6	-976.543	1	-1.496	1	-.331	1	-1.515	3
489		5	max	774.904	3	-365.495	1	978.266	2	1.576	2	.397	2	1.49	4
490			min	-746.753	4	-1468.185	6	-976.543	1	-1.496	1	-.392	1	-1.492	3
491	M50	1	max	153.249	1	598.113	4	160.716	3	.641	2	.193	3	.549	1
492			min	-211.457	2	-586.587	3	-142	4	-.656	1	-.203	4	-.601	2
493		2	max	153.249	1	598.113	4	160.716	3	.641	2	.203	3	.532	1
494			min	-211.457	2	-586.587	3	-142	4	-.656	1	-.212	4	-.585	2
495		3	max	153.249	1	598.113	4	160.716	3	.641	2	.213	3	.516	1
496			min	-211.457	2	-586.587	3	-142	4	-.656	1	-.221	4	-.569	2
497		4	max	153.249	1	598.113	4	160.716	3	.641	2	.223	3	.499	1
498			min	-211.457	2	-586.587	3	-142	4	-.656	1	-.23	4	-.553	2
499		5	max	153.249	1	598.113	4	160.716	3	.641	2	.233	3	.483	1
500			min	-211.457	2	-586.587	3	-142	4	-.656	1	-.239	4	-.537	2
501	M51	1	max	413.026	2	386.225	3	479.378	2	.623	4	.157	4	.437	1
502			min	-354.808	1	-801.349	8	-488.534	1	-.625	3	-.146	3	-.62	2
503		2	max	413.026	2	386.225	3	479.378	2	.623	4	.18	4	.466	1
504			min	-354.808	1	-801.349	8	-488.534	1	-.625	3	-.171	3	-.623	2
505		3	max	413.026	2	386.225	3	479.378	2	.623	4	.204	4	.495	1
506			min	-354.808	1	-801.349	8	-488.534	1	-.625	3	-.196	3	-.626	2
507		4	max	413.026	2	386.225	3	479.378	2	.623	4	.227	4	.524	1
508			min	-354.808	1	-801.349	8	-488.534	1	-.625	3	-.221	3	-.629	2
509		5	max	413.026	2	386.225	3	479.378	2	.623	4	.251	4	.553	1
510			min	-354.808	1	-801.349	8	-488.534	1	-.625	3	-.245	3	-.632	2
511	M52	1	max	6352.119	8	39.661	8	30.702	1	0	3	0	11	0	11
512			min	-1976.869	3	-11.814	3	-30.702	2	0	4	0	1	0	1
513		2	max	6368.015	8	19.831	8	15.351	1	0	3	.022	1	.009	3
514			min	-1962.567	3	-5.907	3	-15.351	2	0	4	-.022	2	-.029	8
515		3	max	6383.912	8	0	11	0	11	0	3	.03	1	.011	3
516			min	-1948.264	3	0	1	0	1	0	4	-.03	2	-.038	8
517		4	max	6399.808	8	5.907	3	15.351	2	0	3	.022	1	.009	3
518			min	-1933.961	3	-19.831	8	-15.351	1	0	4	-.022	2	-.029	8
519		5	max	6415.704	8	11.814	3	30.702	2	0	3	0	11	0	11
520			min	-1919.658	3	-39.661	8	-30.702	1	0	4	0	1	0	1
521	M53	1	max	6215.627	5	40.267	5	37.336	4	0	4	0	11	0	11
522			min	-2461.669	2	-13.317	2	-37.336	3	0	3	0	1	0	1
523		2	max	6199.975	5	20.133	5	18.668	4	0	4	.027	4	.01	2
524			min	-2476.577	2	-6.659	2	-18.668	3	0	3	-.027	3	-.029	5
525		3	max	6184.323	5	0	11	0	11	0	4	.036	4	.013	2
526			min	-2491.485	2	0	1	0	1	0	3	-.036	3	-.039	5
527		4	max	6168.67	5	6.659	2	18.668	3	0	4	.027	4	.01	2
528			min	-2506.393	2	-20.133	5	-18.668	4	0	3	-.027	3	-.029	5

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-ft]	LC	y-y Momen...	LC	z-z Momen...	LC
529		5	max	6153.018	5	13.317	2	37.336	3	0	4	0	11	0	11
530			min	-2521.301	2	-40.267	5	-37.336	4	0	3	0	1	0	1
531	M54	1	max	6413.87	7	39.661	7	30.702	1	0	3	0	11	0	11
532			min	-1921.152	4	-11.814	4	-30.702	2	0	4	0	1	0	1
533		2	max	6397.974	7	19.831	7	15.351	1	0	3	.022	1	.009	4
534			min	-1935.455	4	-5.907	4	-15.351	2	0	4	-.022	2	-.029	7
535		3	max	6382.078	7	0	11	0	11	0	3	.03	1	.011	4
536			min	-1949.758	4	0	1	0	1	0	4	-.03	2	-.038	7
537		4	max	6366.182	7	5.907	4	15.351	2	0	3	.022	1	.009	4
538			min	-1964.061	4	-19.831	7	-15.351	1	0	4	-.022	2	-.029	7
539		5	max	6350.285	7	11.814	4	30.702	2	0	3	0	11	0	11
540			min	-1978.363	4	-39.661	7	-30.702	1	0	4	0	1	0	1

Envelope AISC 14th(360-10): LRFD Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shear C...	Loc[ft]	Dir	LC	phi*Pnc...	phi*Pnt ...	phi*Mn ...	phi*Mn ...	Cb	Eqn
1	M29	PIPE_2.0	.699	6.25	3	.693	11.4...		4	6295.422	32130	1.872	1.872	1...	H3-6
2	M30	PIPE_2.0	.694	6.25	4	.673	1.042		3	6295.422	32130	1.872	1.872	1...	H3-6
3	M28	PIPE_2.0	.668	6.25	2	.606	11.4...		1	6295.422	32130	1.872	1.872	2...	H3-6
4	MP2B	PIPE_2.5	.571	7.125	3	.100	7.125		2	26137....	50715	3.596	3.596	1...	H1-1b
5	MP2C	PIPE_2.5	.567	7.125	4	.096	7.125		2	26137....	50715	3.596	3.596	1...	H1-1b
6	MP2A	PIPE_2.5	.566	7.125	1	.096	7.125		4	26137....	50715	3.596	3.596	2...	H1-1b
7	MP3B	PIPE_2.0	.499	4.813	3	.193	4.813		4	20866....	32130	1.872	1.872	1...	H1-1b
8	MP1C	PIPE_2.0	.499	4.813	4	.182	4.813		3	20866....	32130	1.872	1.872	1...	H1-1b
9	MP1B	PIPE_2.0	.493	4.813	2	.157	4.813		3	20866....	32130	1.872	1.872	1...	H1-1b
10	MP3C	PIPE_2.0	.486	4.813	2	.166	4.813		4	20866....	32130	1.872	1.872	1...	H1-1b
11	MP3A	PIPE_2.0	.437	4.813	4	.197	4.813		2	20866....	32130	1.872	1.872	1...	H1-1b
12	MP1A	PIPE_2.0	.431	4.813	3	.184	4.813		2	20866....	32130	1.872	1.872	1...	H1-1b
13	M3	PIPE_3.0	.307	1.693	4	.203	6.25		3	28250....	65205	5.749	5.749	1...	H1-1b
14	M2	PIPE_3.0	.293	10.807	3	.194	6.25		4	28250....	65205	5.749	5.749	1...	H1-1b
15	M1	PIPE_3.0	.258	.911	1	.207	7.161		2	28250....	65205	5.749	5.749	2...	H1-1b
16	M23	L2x2x3	.217	4.33	2	.015	0	z	2	9144.026	23392.8	.558	1.23	2...	H2-1
17	M8	HSS4X4X5	.198	2.864	7	.128	.656	y	2	147184...	169740	19.285	19.285	1...	H1-1b
18	M7	HSS4X4X5	.196	2.864	8	.131	5.072	y	2	147184...	169740	19.285	19.285	1...	H1-1b
19	M26	L2x2x3	.194	0	1	.013	4.33	y	6	9144.026	23392.8	.558	1.202	1...	H2-1
20	M9	HSS4X4X5	.185	2.864	5	.111	5.072	y	4	147184...	169740	19.285	19.285	1...	H1-1b
21	M24	L2x2x3	.181	0	3	.013	4.33	y	8	9145.787	23392.8	.558	1.239	2...	H2-1
22	M22	L2x2x3	.179	0	4	.011	4.329	y	7	9147.55	23392.8	.558	1.214	2...	H2-1
23	M4	HSS4X4X5	.176	2.368	8	.098	0	z	1	151150...	169740	19.285	19.285	1...	H1-1b
24	M5	HSS4X4X5	.176	2.368	7	.099	0	z	2	151150...	169740	19.285	19.285	1...	H1-1b
25	M25	L2x2x3	.175	4.33	4	.012	4.33	z	3	9145.79	23392.8	.558	1.239	2...	H2-1
26	M6	HSS4X4X5	.173	2.368	1	.128	0	z	3	151150...	169740	19.285	19.285	1...	H1-1b
27	M27	L2x2x3	.161	4.329	6	.011	0	y	7	9147.55	23392.8	.558	1.216	2...	H2-1
28	M52	LL2x2x4x0	.142	3.852	8	.003	0	y	4	45036....	61236	2.894	2.114	1...	H1-1b*
29	M54	LL2x2x4x0	.142	0	7	.003	0	y	3	45036....	61236	2.894	2.114	1...	H1-1b*
30	M53	LL2x2x4x0	.138	0	5	.003	0	z	3	45036....	61236	2.894	2.114	1	H1-1b*

Envelope AISI S100-10: LRFD Cold Formed Steel Code Checks

Member	Shape	Code Check	Loc[ft]	LC	Shea...	Loc[ft]	Dir	LC	phi*Pn...	phi*Tn[...	phi*Mn...	phi*Mn...	Cb	Cmyy	Cmzz	Eqn
No Data to Print ...																

Envelope AA ADM1-10: ASD - Building Aluminum Code Checks

Member	Shape	Code C...	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	Pnc/O...	Pnt/Om...	Mny/O...	Mnz/O...	Vny/O...	Vnz/O...	Cb	Eqn
No Data to Print ...																

EXHIBIT 9

MODIFICATION AND DESIGN
DRAWINGS FOR EXISTING ANTENNA MOUNTS
EXISTING MONOPOLE TOWER

PROPOSED CARRIER: T-MOBILE

TOWER OWNER: SBA / TOWER OWNER SITE #: CT46124-A

CARRIER SITE #/NAME: CTHA170C / MOODY RD

COORDINATES (LATITUDE: 42.002000°, LONGITUDE: -72.521694°)

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

SHEET	SHEET TITLE	REV
T-1	TITLE SHEET	0
BOM	BILL OF MATERIALS	0
GN-1	GENERAL NOTES	0
A-1	ANTENNA MOUNT MODIFICATION DETAILS	0
A-2	ANTENNA MOUNT PHOTOS	0
D-1	STANDARD DETAILS	0
SAF-1	SAFETY CABLE GUIDE DETAILS	
MS-CHB350-2875	METROSITE CROSSOVER CHANNEL BRACKET KIT	
MS-H1436	METROSITE HEAVY COLLAR MOUNT PLATE ASSEMBLY	
MPHW-1	METROSITE HEAVY COLLAR MOUNT PLATE WELDMENT	
MS-HK22-5	METROSITE HEAVY KICKER SUPPORT KIT	

NOTE:

1. THE MODIFICATION DRAWINGS ARE BASED ON THE TES PROJECT NO. 99614, DATED 11/11/2020.

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

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

TES JOB NO:
99815

CUSTOMER SITE NO:
CT46124-A-SBA

CUSTOMER SITE NAME:
ENFIELD MOODY RD

188 MOODY RD
ENFIELD, CT 06082

STATE OF CONNECTICUT
JARRYD TIBBETTS
No. 34178
LICENSED PROFESSIONAL ENGINEER
11/19/20

DRAWN BY: RM | CHECKED BY: MK/CHLE

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	RM	11/18/20

SHEET TITLE:

TITLE SHEET

SHEET NUMBER: T-1

REV #: 0

BILL OF MATERIALS

QUANTITY COUNTED	QUANTITY PROVIDED	PART NUMBER	DESCRIPTIONS	SHEET LIST	PIECE WEIGHT (LBS)	WEIGHT (LB)	NOTES
			MATERIAL & HARDWARE				
1	1	MS-H1436	METROSITE HEAVY COLLAR MOUNT PLATE ASSEMBLY	A-1, MS-H1436	136.7	136.7	Galvanized
1	1	MS-HKI22-5	METROSITE HEAVY KICKER SUPPORT KIT	A-1, MS-HKI22-5	153.0	153.0	Galvanized
			FOLLOWING ITEMS ARE "CUSTOM" PARTS				
3	3	PST2875-9	2 1/2" PST (2.875" O.D. X 0.203" THK) X 9'-0" A53 GR-B 35KSI	A-1	65.25	195.8	GALVANIZED
3	3	MS-CHB350-2875	METROSITE CROSSOVER CHANNEL BRACKET KIT	A-1	14.00	44.1	GALVANIZED
3	3	PL2375-2875	PL 3/8" X 7 1/8" X 10" A36	D-1	7.70	23.1	GALVANIZED
6	7	MS02-625-250-400	RU-BOLT 5/8" X 2 1/2" I.W. X 4" I.L. A36 (OR EQUIV.)	D-1	1.17	8.2	(2) HHN & LKW-EA GALVANIZED
6	7	MS02-625-300-500	RU-BOLT 5/8" X 3" I.W. X 5" I.L. A36 (OR EQUIV.)	D-1	1.37	9.6	(2) HHN & LKW-EA GALVANIZED
1	1	TMP-1	PL 1/4" X 2" X 9 1/2" A36	SAF-1	0.00	0.0	GALVANIZED
1	1	BMP-1	PL 1/4" X 2" X 6 1/2" A36	SAF-1	0.00	0.0	GALVANIZED
2	3	---	THREADED ROD 3/8" X 8" A36	SAF-1	0.00	0.0	(2) HHN & LKW-EA 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
			ALL METROSITE PARTS ARE AVAILABLE FROM METROSITE, LLC. **180 IND PARK BLVD COMMERCE, GA 30529** **OFFICE: (706) 335-7045** **FAX: (706) 335-7056**				
			NOTE: ALL MATERIALS, WHICH WEREN'T LISTED IN THIS SHEET, ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.				
				TOTAL WEIGHT (LBS) =		**570.4**	

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

SBA

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

TES JOB NO:
99815

CUSTOMER SITE NO:
CT46124-A-SBA
CUSTOMER SITE NAME:
ENFIELD MOODY RD
188 MOODY RD
ENFIELD, CT 06082

DRAWN BY: RM | CHECKED BY: MK/CHLE

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	RM	11/18/20

SHEET TITLE:
BILL OF MATERIALS

SHEET NUMBER: BOM
REV #: 0

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-G, ANSI/ASSP A10.48, 2018 CONNECTICUT 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 RCSC.
2. FLANGE BOLTS SHALL BE TIGHTENED BY THE AISC "TURN-OF-THE-NUT" METHOD. THE FOLLOWING TABLE SHOULD BE USED FOR THE "TURN-OF-THE-NUT" TIGHTENING.
3. SPLICE BOLTS AND ALL OTHER BOLTS IN BEARING TYPE CONNECTIONS SHALL BE TIGHTENED TO A SNUG-TIGHT CONDITION.
4. THE SNUG-TIGHT CONDITION IS DEFINED AS THE TIGHTNESS ATTAINED BY EITHER A FEW IMPACTS OF AN IMPACT WRENCH OR THE FULL EFFORT OF AN IRONWORKER WITH AN ORDINARY SPUD WRENCH TO BRING THE CONNECTED PLIES INTO FIRM CONTACT.
5. HB HOLLO-BOLT SHALL BE INSTALLED PER ICC ESR-3330 INSTRUCTIONS.

VERIFICATION AND INSPECTION

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

TABLE 8.2 NUT ROTATION FROM SNUG-TIGHT CONDITION FOR TURN-OF-NUT PRETENSIONING [a,b]

BOLT LENGTH [c]	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.

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

SBA
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(800)-487-SITE

TES JOB NO:
99815

CUSTOMER SITE NO:
CT46124-A-SBA
CUSTOMER SITE NAME:
ENFIELD MOODY RD
188 MOODY RD
ENFIELD, CT 06082

DRAWN BY: RM | CHECKED BY: MK/CHLE

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	RM	11/18/20

SHEET TITLE:
GENERAL NOTES

SHEET NUMBER: GN-1
REV #: 0

SCOPE OF WORK

1. REPLACE EXISTING MIDDLE ANTENNA MOUNT PIPE WITH NEW 2 1/2" PST ANTENNA MOUNT PIPE (9'-0" LONG), THEN RELOCATE EXISTING ANTENNA/ EQUIPMENT TO NEW MOUNT PIPE, (1) PER SECTOR AS SHOWN. EXISTING ANTENNA RAD CENTER TO BE MAINTAINED.

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

2. A. INSTALL NEW CROSSOVER CHANNEL BRACKET KIT ON EXISTING BOTTOM SUPPORT RAIL PIPE, (1) PER SECTOR AS SHOWN. SEE SHEET MS-CHB350-2875 FOR DETAILS.

   B. INSTALL NEW CROSSOVER PLATE CONNECTION ON EXISTING TOP SUPPORT RAIL PIPE, (1) PER SECTOR AS SHOWN. SEE SHEET D-1 FOR DETAILS.

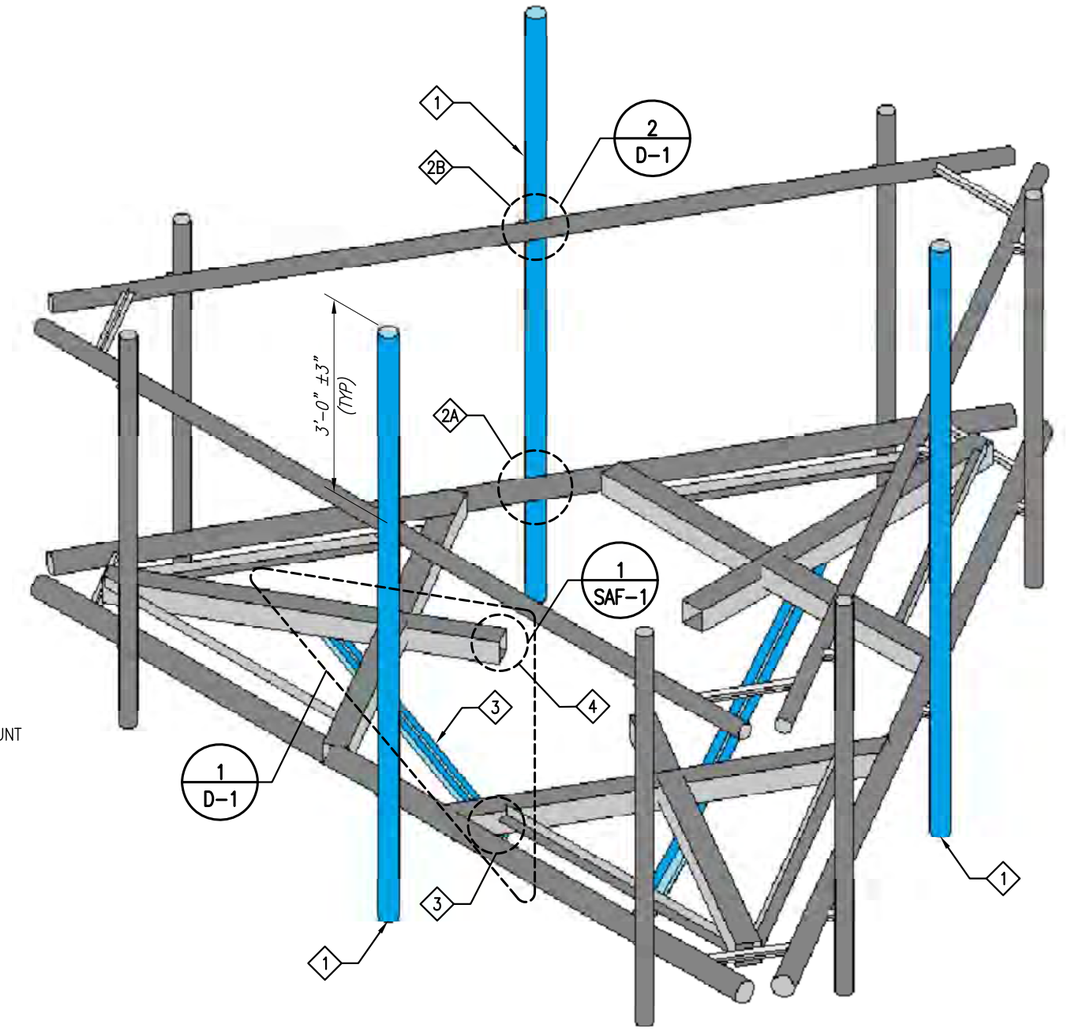
3. INSTALL NEW HEAVY COLLAR MOUNT (NOT SHOWN FOR CLARITY) & KICKER KIT. SEE SHEETS MS-H1436, MS-HKI22-5, AND D-1 FOR DETAILS.

4. INSTALL NEW SAFETY CLIMB CABLE GUIDE TO PREVENT EXISTING SAFETY CLIMB FROM RUBBING AGAINST EXISTING COLLAR MOUNT. SEE SHEET SAF-1 FOR DETAILS.

5. CONTRACTOR TO COORDINATE WITH TOWER OWNER AND CARRIER REGARDING THE PRESENCE OF BIRD'S NEST ON EXISTING PLATFORM.

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

PHOTO 1



ISOMETRIC VIEW
EXISTING ANTENNA MOUNT @ 187' ELEV.

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**

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.**

ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	3	PST2875-9	2 1/2" PST (2.875" O.D. X 0.203" THK) X 9'-0" A53 GR-B 35
2	3	MS-CHB350-2875	METROSITE CROSSOVER CHANNEL BRACKET KIT
3	1	MS-H1436	METROSITE HEAVY COLLAR MOUNT PLATE ASSEMBLY
4	1	MS-HKI22-5	METROSITE HEAVY KICKER SUPPORT KIT

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(800)-487-SITE

TES JOB NO:
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188 MOODY RD
ENFIELD, CT 06082

DRAWN BY: RM | CHECKED BY: MK/CHLE

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	RM	11/18/20

SHEET TITLE:
ANTENNA MOUNT MODIFICATION DETAILS

SHEET NUMBER: A-1
REV #: 0

PHOTO 1

PHOTO 2

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

PHOTO 3

REPLACE EXISTING MIDDLE ANTENNA MOUNT PIPE WITH NEW 2 1/2" PST ANTENNA MOUNT PIPE (9'-0" LONG), THEN RELOCATE EXISTING ANTENNA/ EQUIPMENT TO NEW MOUNT PIPE, (1) PER SECTOR. EXISTING ANTENNA RAD CENTER TO BE MAINTAINED.

PHOTO 4

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

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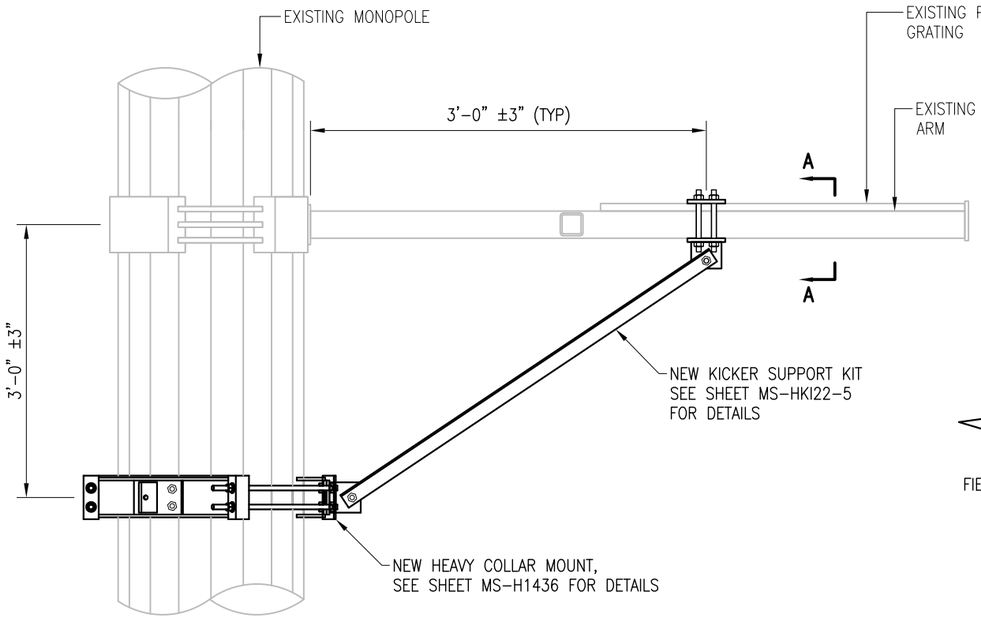
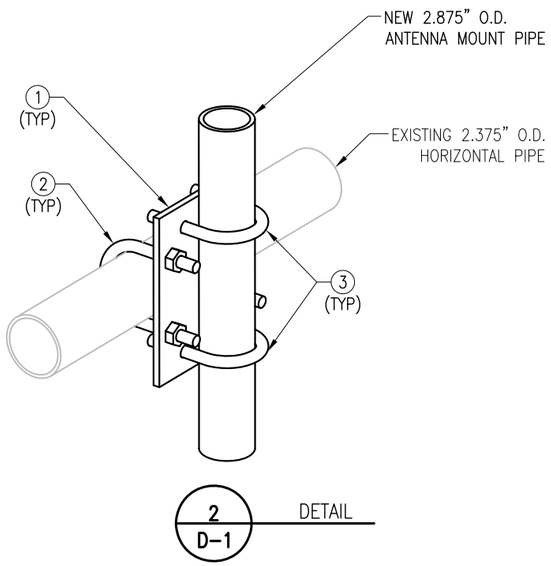
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	RM	11/18/20

SHEET TITLE:
ANTENNA MOUNT PHOTOS

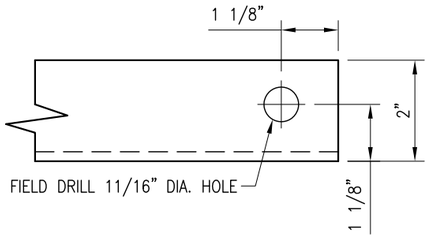
SHEET NUMBER: A-2
REV #: 0



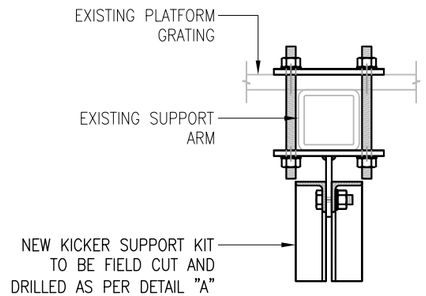
1 D-1 DETAIL



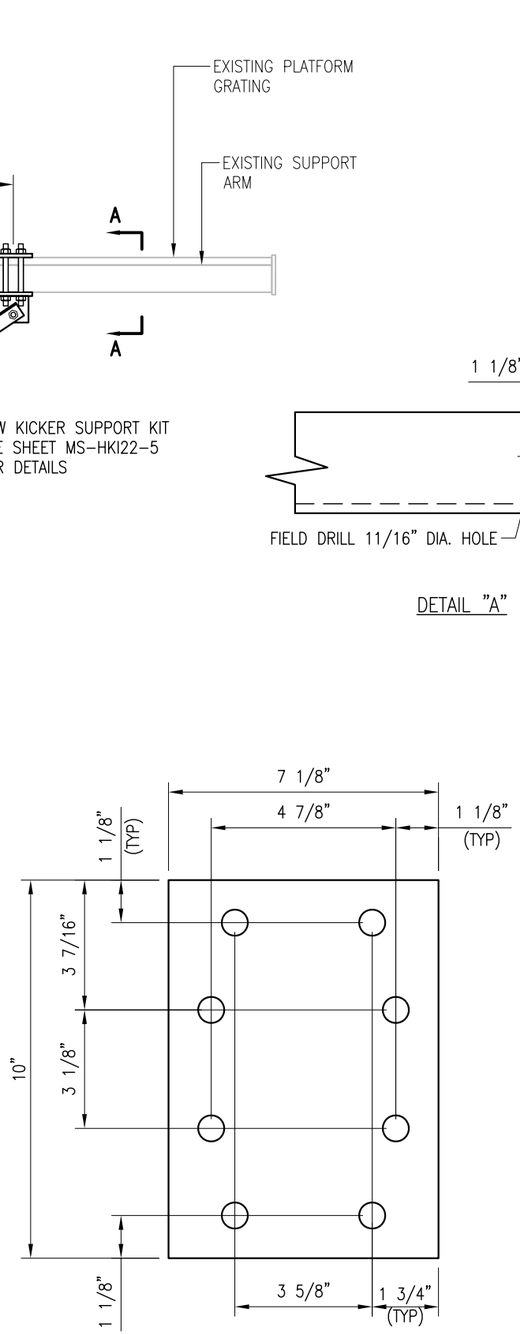
2 D-1 DETAIL



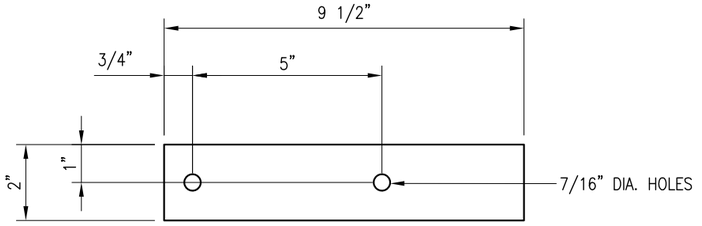
DETAIL "A"



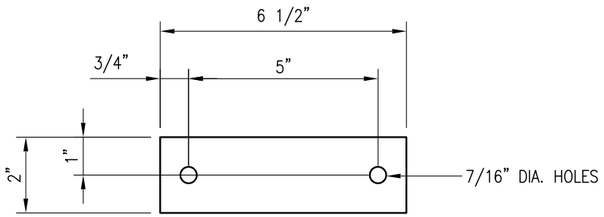
SECTION A-A



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



TMP-1
PL 1/4" X 2" X 9 1/2" A36
(1.4 LBS)



BMP-1
PL 1/4" X 2" X 6 1/2" A36
(1.0 LBS)

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

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

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TES JOB NO:
99815

CUSTOMER SITE NO:
CT46124-A-SBA
CUSTOMER SITE NAME:
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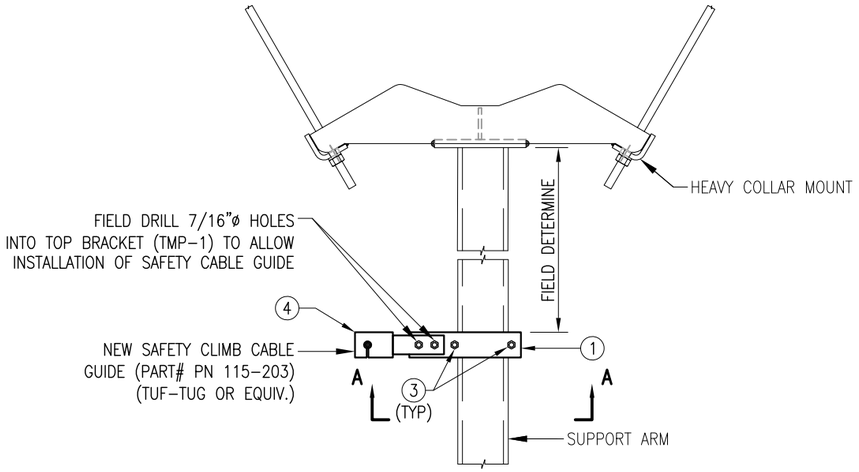
188 MOODY RD
ENFIELD, CT 06082

DRAWN BY: RM | CHECKED BY: MK/CHLE

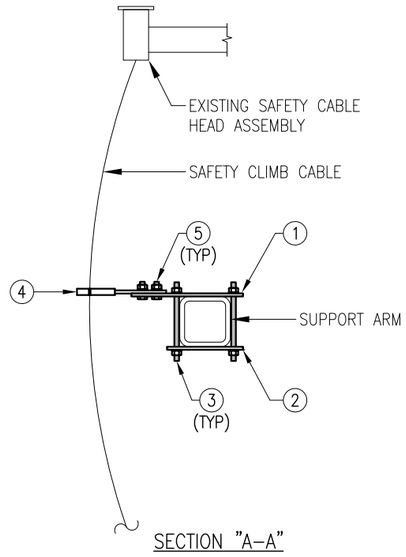
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	RM	11/18/20

SHEET TITLE:
STANDARD DETAILS

SHEET NUMBER: D-1
REV #: 0



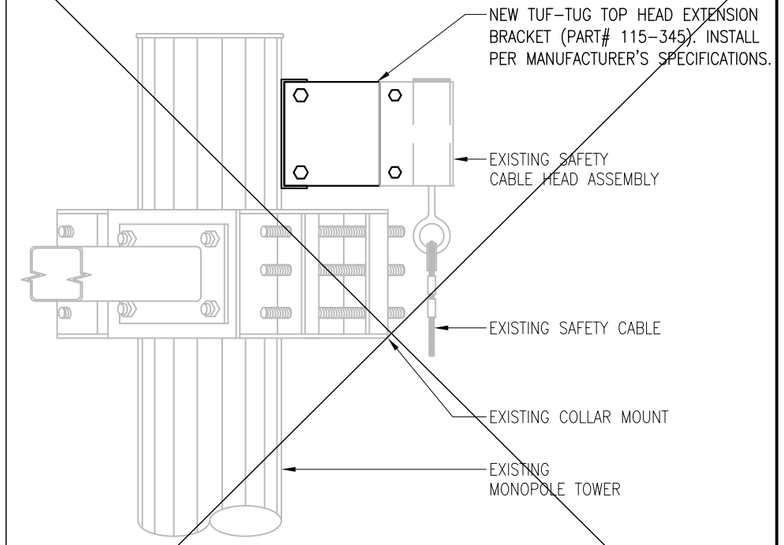
1 SAF-1 TYPE – 1



SECTION "A-A"

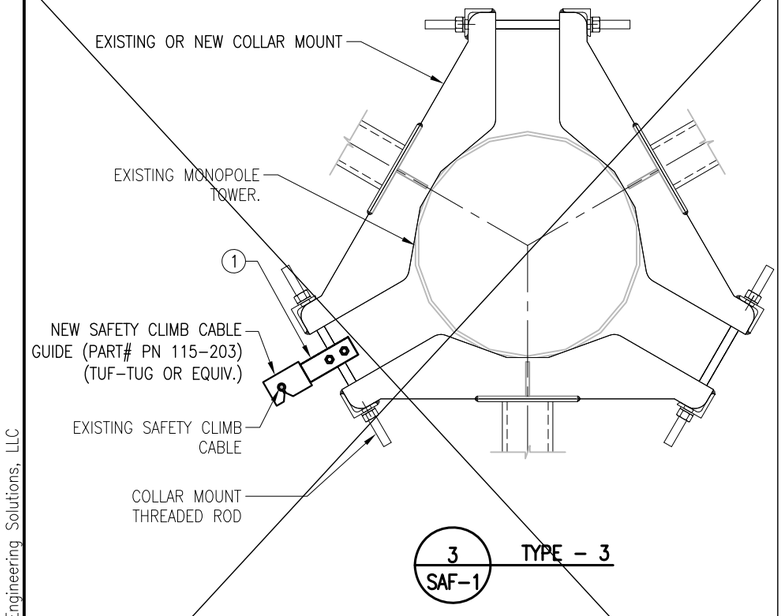
ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	1	TMP-1	PL 1/4" X 2" X 9 1/2" A36
2	1	BMP-1	PL 1/4" X 2" X 6 1/2" A36
3	2	---	THREADED ROD 3/8" X 8" A36
4	1	PN 115-203	SAFETY CABLE GUIDE (TUF-TUG OR EQUIV.)
5	2	---	BOLT 3/8" X 1 1/2" FULL THREAD SAE GR 5

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.



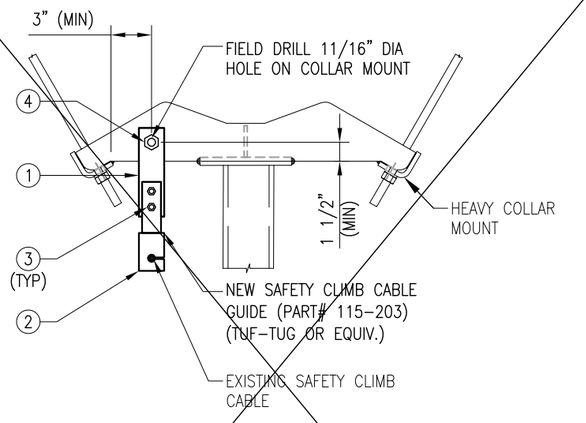
2 SAF-1 TYPE – 2

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



3 SAF-1 TYPE – 3

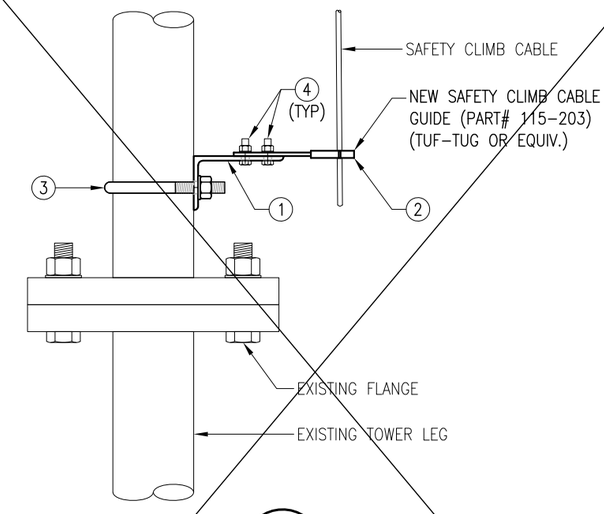
ITEM NO.	QTY.	PART NO.	DESCRIPTIONS
1	1	PN 115-203	SAFETY CABLE GUIDE (TUF-TUG OR EQUIV.)



4 SAF-1 TYPE – 4

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



5 SAF-1 TYPE – 5

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

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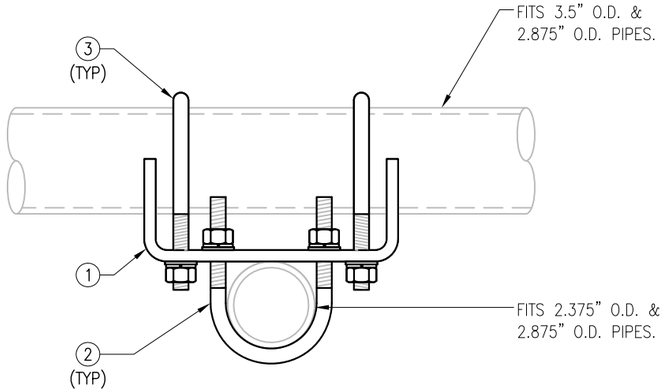
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	RM	11/18/20

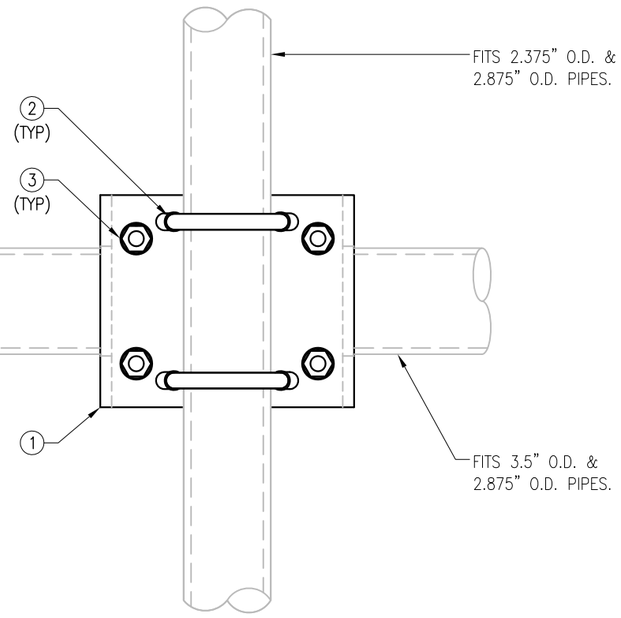
SHEET TITLE:
SAFETY CABLE GUIDE DETAILS

SHEET NUMBER: SAF-1
REV #: 0

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



PLAN VIEW

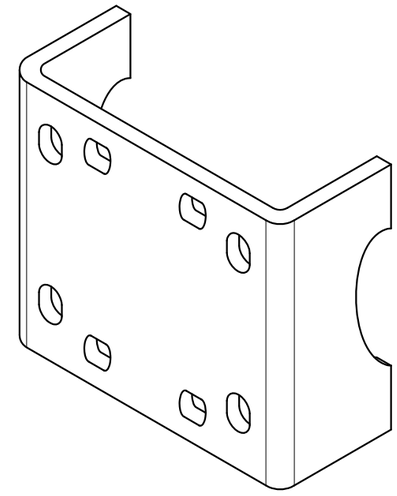


FRONT VIEW

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

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



ISOMETRIC VIEW

THIRD ANGLE PROJECTION

METROSITE FABRICATORS LLC
180 INDUSTRIAL PARK BLVD.
COMMERCE GA 30529

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH
STANDARD SHEET TOLERANCES
DECIMALS: .X ± 0.1, .XX ± 0.02, .XXX ± 0.005
ANGLES: ± 1°
FRACTIONS: ± 1/32

APPROVAL / SIGNATURES		DATE
DRAWN BY	XXX	05/15/20
REVIEWED	XXX	-
APPROVED	XXX	-

TITLE
MS-CHB350-2875
CROSSOVER CHANNEL BRACKET KIT

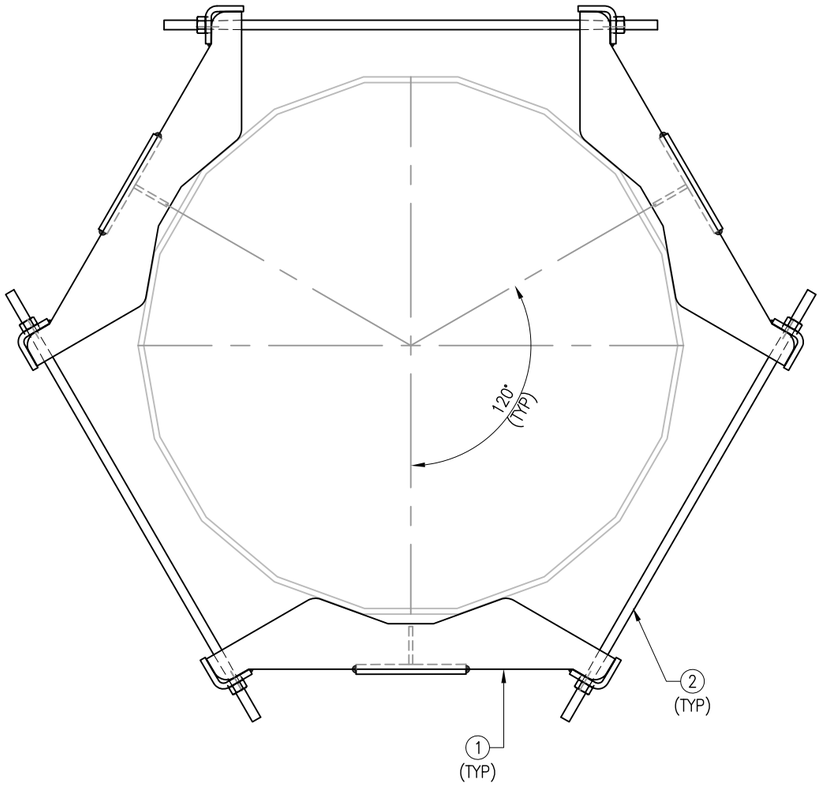
SIZE	DWG NO	REV
B	MS-CHB350-2875	0

SCALE: -
SHEET 1 OF 1

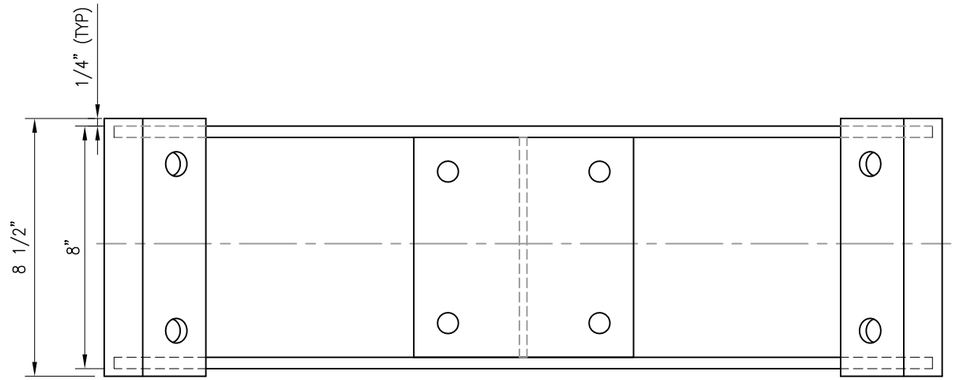
NOTE:
1) FITS 12" DIA TO 32" DIA.

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	3	MPHW-1	MOUNT PLATE WELDMENT A36
2	6	---	THREADED ROD 3/4" X 2'-4 3/4" W/ 2 HHN & LW EA A36

GALVANIZED WEIGHT: 136.7 LBS



TOP VIEW



FRONT VIEW

THIRD ANGLE PROJECTION

METROSITE FABRICATORS LLC
180 INDUSTRIAL PARK BLVD.
COMMERCE GA 30529

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH

STANDARD SHEET TOLERANCES

DECIMALS	ANGLES
.X ± 0.1	± 1°
.XX ± 0.02	FRACTIONS
.XXX ± 0.005	± 1/32

APPROVAL / SIGNATURES		DATE
DRAWN BY	XXX	05/12/17
REVIEWED	XXX	-
APPROVED	XXX	-

TITLE
HEAVY COLLAR MOUNT PLATE
ASSEMBLY DETAIL MS-H1436

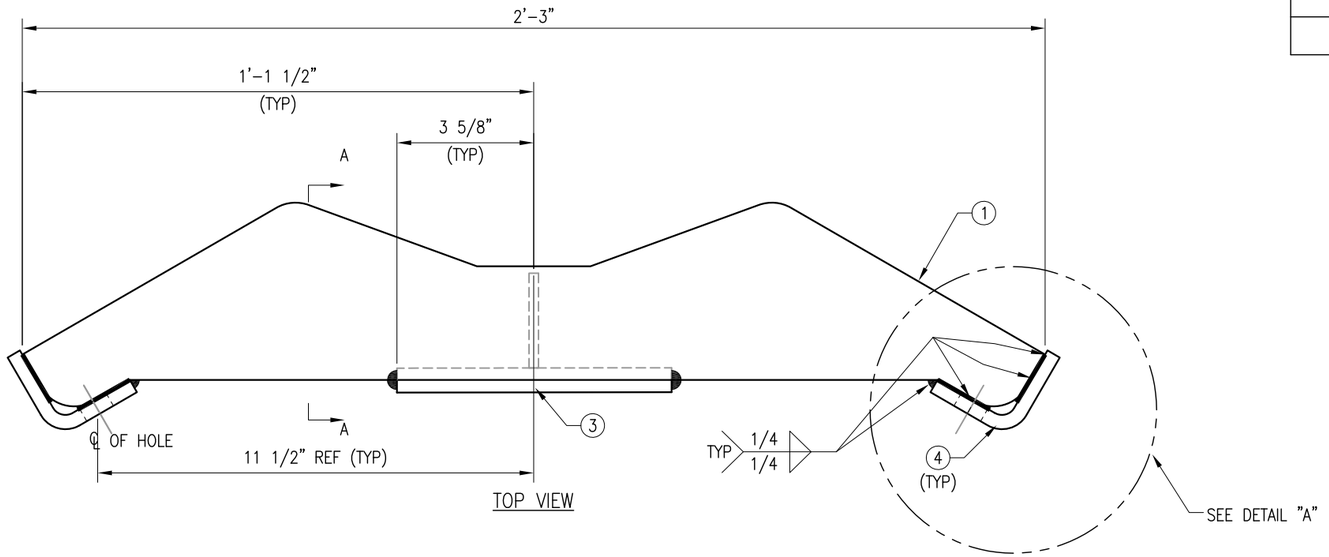
SIZE	DWG NO	REV
B	MS-H1436	1

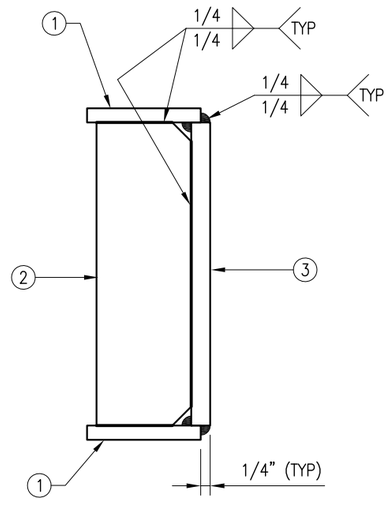
SCALE -

SHEET 1 OF 1

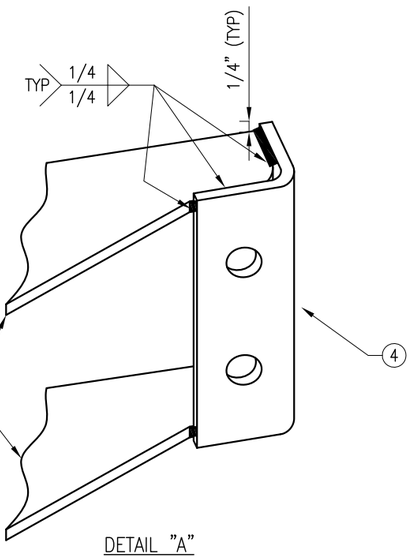
NOTES:
1. HOT-DIPPED GALVANIZED PER ASTM A123.
2. WELD TYPE: E70XX.

MPHW-1 WELDMENT						
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	2	PL-4	PL 3/8" X 5 3/8" X 2'-3"	A36	F-2	18.8
2	1	PL-5	PL 3/8" X 2 1/2" X 0'-7 1/4"	A36	F-2	1.9
3	1	PL-6	PL 1/2" X 7 1/4" X 0'-7 1/4"	A36	F-2	7.5
4	2	PL-7	PL 3/8" x 4 3/8" x 8 1/2"	A36	F-2	7.8
					BLACK WT	36
					GALVANIZED WT	38

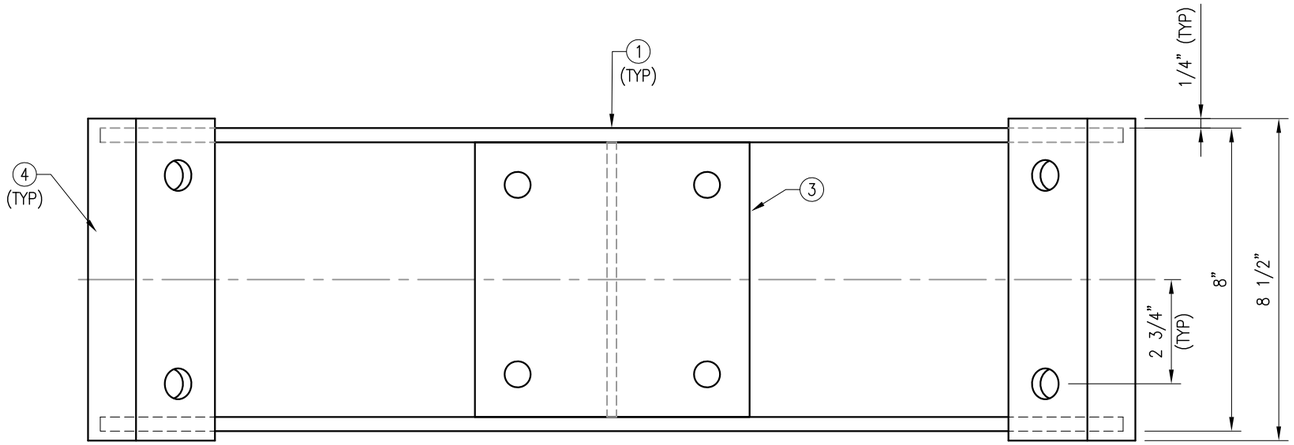




SECTION "A-A"



DETAIL "A"



FRONT VIEW

MPW-1 WELDMENT

THIRD ANGLE PROJECTION

METROSITE FABRICATORS LLC
180 INDUSTRIAL PARK BLVD.
COMMERCE GA 30529

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH

STANDARD SHEET TOLERANCES

DECIMALS	ANGLES
.X ± 0.1	± 1°
.XX ± 0.02	FRACTIONS
.XXX ± 0.005	± 1/32

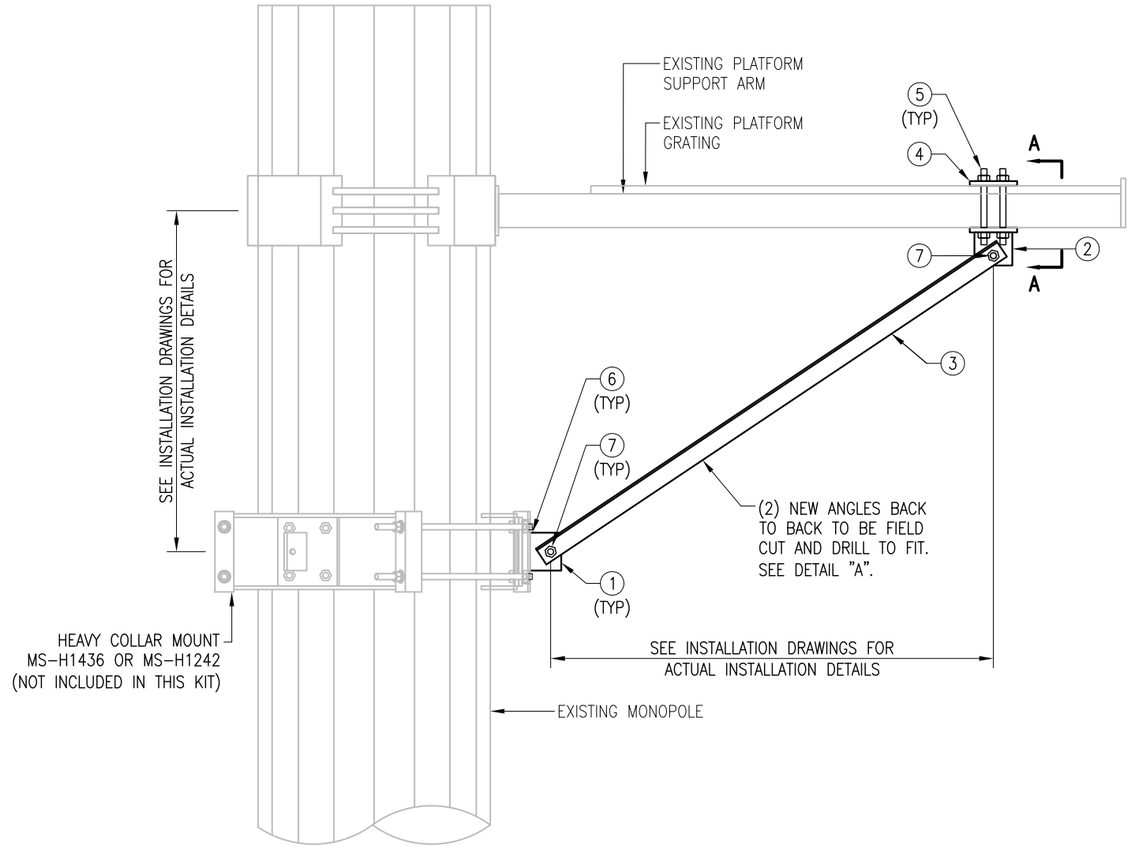
APPROVAL / SIGNATURES		DATE
DRAWN BY	XXX	05/12/17
REVIEWED	XXX	-
APPROVED	XXX	-

TITLE
HEAVY COLLAR MOUNT PLATE WELDMENT DETAIL

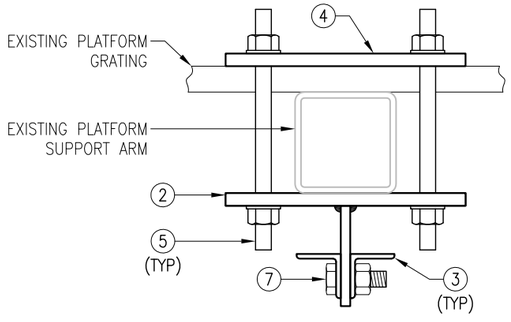
SIZE	DWG NO	REV
B	MPHW-1	0

SCALE - SHEET 1 OF 1

NOTE:
THE LOCATION OF KICKER AND EXISTING ANTENNA MOUNT SHOWN ON THE DRAWING IS FOR REPRESENTATION PURPOSE ONLY. SEE INSTALLATION DRAWINGS FOR ACTUAL INSTALLATION OF DETAILS.



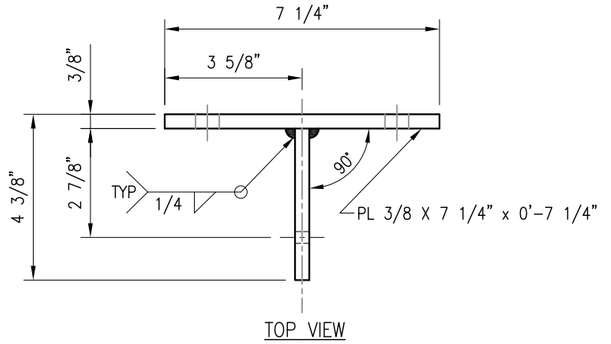
ELEVATION



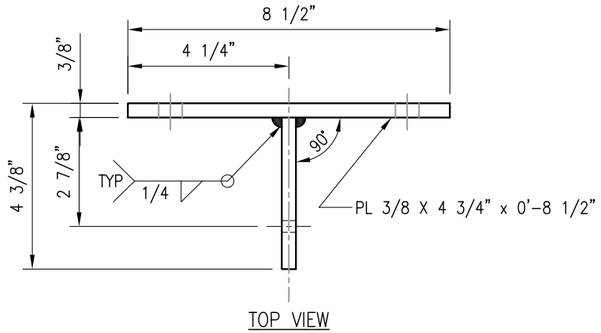
SECTION "A-A"

NOTES:
1. ALL HOLES ARE 11/16" DIA. U.N.O
2. HOT-DIPPED GALVANIZED PER ASTM A123.
3. FIT UP TO 5" X 5" SQ. TUBING OR 4 1/2" O.D. PIPE

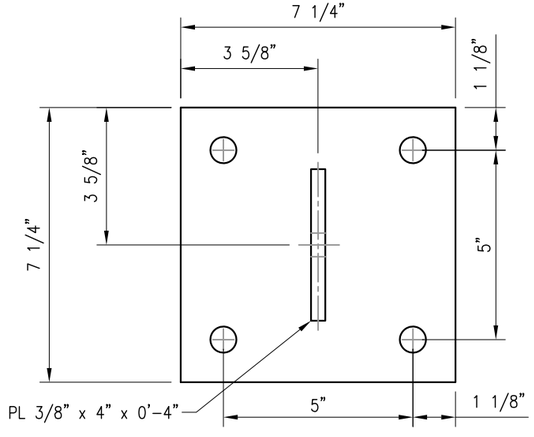
MS-HKI22-5						
ITEM NO.	QTY.	PART NO.	DESCRIPTION	GRADE	SHEET #	WT
1	3	BRKW-HK	BRACKET WELDMENT	---	BRKW-HK	23.4
2	3	BRKW-5S	BRACKET WELDMENT	---	BRKW-5S	18.9
3	6	L2225-5	L 2" X 2" X 1/4" X 5'-0"	A36	HKF-8	97.8
4	3	PL5S-375	PL 3/8" X 4 3/4" X 8 1/2"	A36	HKF-8	12.9
5	12	---	ALL THREADED ROD 5/8" DIA. X 1'-0" HDG W/ (2) HHN & LKW EA.	A36	---	--
6	12	---	BOLT 5/8" X 2" W/ HHN & LKW	A325	--	--
7	9	---	BOLT 5/8" X 2 1/4" W/ HHN & LKW	A325	--	--
				GALVANIZED WT		153



TOP VIEW

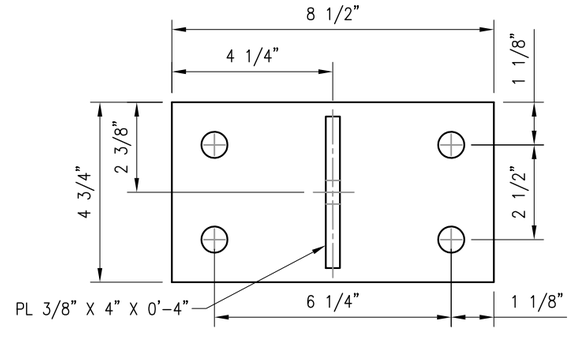


TOP VIEW



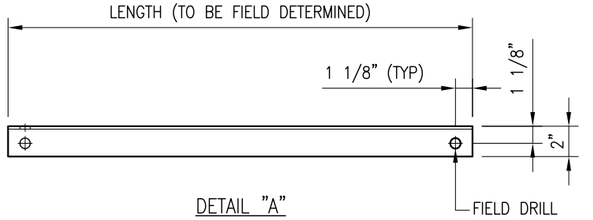
FRONT VIEW

BRKW-HK WELDMENT



FRONT VIEW

BRKW-5S WELDMENT



DETAIL "A"

THIRD ANGLE PROJECTION

METROSITE FABRICATORS LLC
180 INDUSTRIAL PARK BLVD.
COMMERCE GA 30529

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND INCLUDE FINISH
STANDARD SHEET TOLERANCES
DECIMALS .X ± 0.1, .XX ± 0.02, .XXX ± 0.005
ANGLES ± 1°
FRACTIONS ± 1/32

APPROVAL / SIGNATURES		DATE
DRAWN BY	XXX	06/21/18
REVIEWED	XXX	-
APPROVED	XXX	-

TITLE
HEAVY KICKER SUPPORT KIT

SIZE B | DWG NO MS-HKI22-5 | REV 0
SCALE - | SHEET 1 OF 1

EXHIBIT 10

PER THE INTERNATIONAL BUILDING CODE THIS STRUCTURE IS CLASSIFIED AS:

1. CONSTRUCTION TYPE II-B (TABLE 601)
2. GROUP U OCCUPANCY (SECTION 312.1 UNOCCUPIED TOWER SITE)

MODIFICATION AND DESIGN DRAWINGS FOR AN EXISTING 188' SUMMIT MONOPOLE TOWER

PROPOSED CARRIER: T-MOBILE

SITE: CT46124-A-SBA / ENFIELD-MOODY RD.

COORDINATES (LATITUDE: 42.002000°, LONGITUDE: -72.521694°)

CONSTRUCTION CLASS

THE RIGGING PLAN FOR THIS SITE WOULD BE A MINIMUM OF A CLASS IV AND THE CONTRACTOR SHALL MAKE FINAL DETERMINATION

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

SHEET	SHEET TITLE	REV
T-1	TITLE SHEET	0
BOM	BILL OF MATERIALS	0
GN-1	GENERAL NOTES	0
A-1	TOWER PROFILE	0
A-2	INSTALLATION DETAILS	0
A-3	REINFORCEMENT ASSEMBLY	0
A-4	REINFORCEMENT ASSEMBLY	0
A-5	REINFORCEMENT ASSEMBLY	0
A-6	REINFORCEMENT ASSEMBLY	0
A-7	REINFORCEMENT ASSEMBLY	0
A-LP-BB	SPLICE CONNECTION PLATE INSTALLATION DETAILS (TYPE BB)	0
A-LP-CC	SPLICE CONNECTION PLATE INSTALLATION DETAILS (TYPE CC)	0
SPEC-1	NEXGEN2 BLIND BOLT ASSEMBLY INSTALLATION GUIDE	0
SPEC-2	NEXGEN2 BLIND BOLT ASSEMBLY INSTALLATION GUIDE	0
LP-AT-PH	INSTALLATION AT HANDHOLE LOCATION DETAILS	0

NOTE:

1. THE MODIFICATION DRAWINGS ARE BASED ON THE **TES** PROJECT NO. 99615, DATED 11/17/2020.

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

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

TES JOB NO: 99869

CUSTOMER SITE NO: CT46124-A-SBA

CUSTOMER SITE NAME: ENFIELD-MOODY RD.

188 MOODY RD
ENFIELD, CT 06082

STATE OF CONNECTICUT
JARRYD TIBBETTS
No. 34170
LICENSED
PROFESSIONAL ENGINEER
12/30/20

DRAWN BY: MN | CHECKED BY: NP/AD

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	MN	12/30/20

SHEET TITLE: TITLE SHEET

SHEET NUMBER: T-1 | REV #: 0

BILL OF MATERIALS

QUANTITY COUNTED	QUANTITY PROVIDED	PART NUMBER	DESCRIPTIONS	LENGTH	SHEET LIST (INSTALLATION)	SHEET LIST (FABRICATE)	PIECE WEIGHT (LBS)	WEIGHT (LB)	NOTES
			MATERIAL & HARDWARE						
1	1	LP6X125-B-20B	6" x 1.25" Flat Bar, 20 ft. Long, Base Section with 6.75" offset,, Connection Type B	20'-0"	A-3	LP6X125-B-20B	668.6	668.6	Galvanized
1	1	LP6X125-B-20T	6" x 1.25" Flat Bar, 20 ft. Long, Base section with 6.75" offset, termination at the top	20'-0"	A-3	LP6X125-B-20T	668.6	668.6	Galvanized
1	1	LP6X100-G-20TC	6" x 1.00" Flat Bar, 20 ft. Long, Standard, Connection Type C with Termination at the bottom	20'-0"	A-5	LP6X100-G-20TC	412.0	412.0	Galvanized
1	1	LP6X100-G-10CT	6" x 1.00" Flat Bar, 10 ft. Long, Standard, Connection Type C with Termination at top	10'-0"	A-6	LP6X100-G-10CT	299.1	299.1	Galvanized
1	1	LP6X100-G-20TT	6" x 1.00" Flat Bar, 20 ft. Long, Standard, Termination at both ends	20'-0"	A-7	LP6X100-G-20TT	408.3	408.3	Galvanized
1	1	CPL-C	Link Plate Cover, PL 3/8" x 3 1/4 "x 1'- 6 13/16", A572, Grade 50	---	A-6	F-C	6.6	6.6	Galvanized
122	129	HB16-2	Lindapter 5/8" Type HB Hollo-Bolt (HCF, M16x100)	---	A-3 TO A-7	---	---	---	Galvanized
4	6	HB20-3	Lindapter 3/4" Type HB Hollo-Bolt (HCF, M20x150)	---	A-4, A-6	---	---	---	Galvanized
			Following Items are Non-standard Parts						
1	1	LP6X125-G-10BT	6" x 1.25" Flat Bar, 10 ft. Long, Standard, Connection Type B at the bottom and Termination at top	10'-0"	A-4	F-2	396.2	396.2	Galvanized
1	1	CPL-B	Link Plate Cover, PL 3/8" x 3 3/4" x 1'- 8 1/2", A572, Grade 50	---	A-4	F-C	8.3	8.3	Galvanized
1	1	SCBRK-1	L 3 1/2" X 3" X 3/8" A36	---	A-1	F-1	2.1	2.1	Galvanized
4	4	P73-18	Williams 2 1/4" Dia. R73 Hex Nuts		A-2	---			Galvanized
4	4	PLW-1	PL 1 1/4" X 4 1/2" FLAT WASHER, A572 Grade 65		A-2	F-4	3.7	14.8	Galvanized
6	6	---	LANCO /HENRY 287 WHITE ACRYLIC ELASTOMERIC COATING AND SEALER OR EQUIV (GALLON)	---	A-1	---	---	---	PROVIDED BY CONTRACTOR

ALL APLXXXX, LPXXXX AND RLPXXXX ARE PATENTED PRODUCTS AND CANNOT BE FABRICATED BY THIRD PARTIES. THESE PARTS ARE AVAILABLE FROM:

METROSITE, LLC.
180 IND PARK BLVD COMMERCE, GA 30529
OFFICE: (706) 335-7045
FAX: (706) 335-7056

NOTE: ALL MATERIALS, WHICH WEREN'T LISTED IN THIS SHEET, ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

TOTAL WEIGHT (LBS) = 2884.6

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

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

TES JOB NO:
99869

CUSTOMER SITE NO:
CT46124-A-SBA
CUSTOMER SITE NAME:
ENFIELD-MOODY RD.
188 MOODY RD
ENFIELD, CT 06082

DRAWN BY: MN | CHECKED BY: NP/AD

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	MN	12/30/20

SHEET TITLE:
BILL OF MATERIALS

SHEET NUMBER: BOM
REV #: 0

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-G, 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.

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

VERIFICATION AND INSPECTION

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

POST INSTALLED EPOXY INJECTED ANCHOR BOLTS:

1. CONCRETE MUST BE A MINIMUM OF 28 DAYS OLD.
2. FOLLOW MANUFACTURER'S REQUIREMENTS FOR CURE TIME VS. AMBIENT TEMPERATURE.
3. DRILL HOLE TO REQUIRED DIAMETER AND DEPTH. ALL WATER, DIRT, OIL, DEBRIS, GREASE OR DUST MUST BE REMOVED FROM EACH CORE HOLE. FOLLOW MANUFACTURER'S RECOMMENDATION FOR CORRECT TYPE OF CORE BIT. AVOID DAMAGING EXISTING REINFORCING STEEL OR OTHER EMBEDDED ITEMS. NOTIFY TES ENGINEERING IF VOIDS IN THE CONCRETE, REINFORCING STEEL OR OTHER EMBEDDED ITEMS ARE ENCOUNTERED. STOP CORING IMMEDIATELY IF THIS OCCURS.
4. A HOLE ROUGHENING DEVICE FROM EITHER HILTI OR ALLFASTENERS SHALL BE USED WITH ALL HOLES. FOLLOW ALL MANUFACTURER'S RECOMMENDED CORING AND INSTALLATION INSTRUCTIONS.
5. AFTER CORING AND ROUGHENING, FLUSH EACH HOLE WITH RUNNING WATER TO REMOVE ANY SLURRY OR DEBRIS. REMOVE ALL WATER FROM THE HOLE BY MECHANICAL PUMPING.
6. BRUSH EACH HOLE WITH AN APPROPRIATE SIZED NYLON BRUSH AND FLUSH WITH RUNNING WATER A SECOND TIME. REMOVE ALL WATER FROM THE HOLE.
7. AFTER THE SECOND WATER FLUSH BRUSH THE HOLE AGAIN WITH THE APPROPRIATE SIZED NYLON BRUSH.
8. BLOW EACH HOLE WITH COMPRESSED AIR TWO TIMES MINIMUM.
9. CONFIRM THAT EACH HOLE IS PROPERLY ROUGHED AND DRY.
10. NO EPOXY INJECTION SHALL TAKE PLACE IN RAINY CONDITIONS.
11. EPOXY SHOULD BE VISIBLE AT THE TOP OF THE CORE HOLE AFTER INSTALLATION.
12. CONTRACTOR TO SUPPLY ONE PHOTO OF EACH ROUGHED AND CLEANED HOLE IN CLOSEOUT PHOTO PACKAGE.

TABLE 8.2 NUT ROTATION FROM SNUG-TIGHT CONDITION FOR TURN-OF-NUT PRETENSIONING [a,b]

BOLT LENGTH [c]	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.

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

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

TES JOB NO:
99869

CUSTOMER SITE NO:
CT46124-A-SBA

CUSTOMER SITE NAME:
ENFIELD-MOODY RD.

188 MOODY RD
ENFIELD, CT 06082

DRAWN BY: MN | CHECKED BY: NP/AD

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	MN	12/30/20

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER: GN-1

REV #: 0

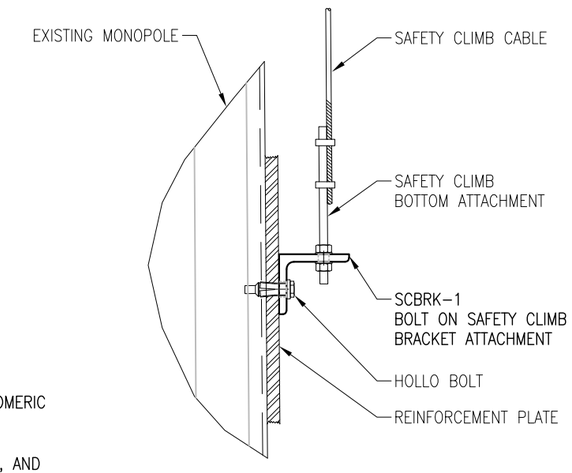
NOTES:
1. TEMPORARILY RELOCATE ANY EXISTING COAX ATTACHED TO THE MONOPOLE AND ANY OTHER MEMBERS WHERE OBSTRUCTION WITH THE PROPOSED MODIFICATION MAY OCCUR.
2. TEMPORARY RELOCATION OF EXISTING EQUIPMENT AROUND THE FOUNDATION MAY BE REQUIRED DURING CONSTRUCTION.

SCOPE OF WORK

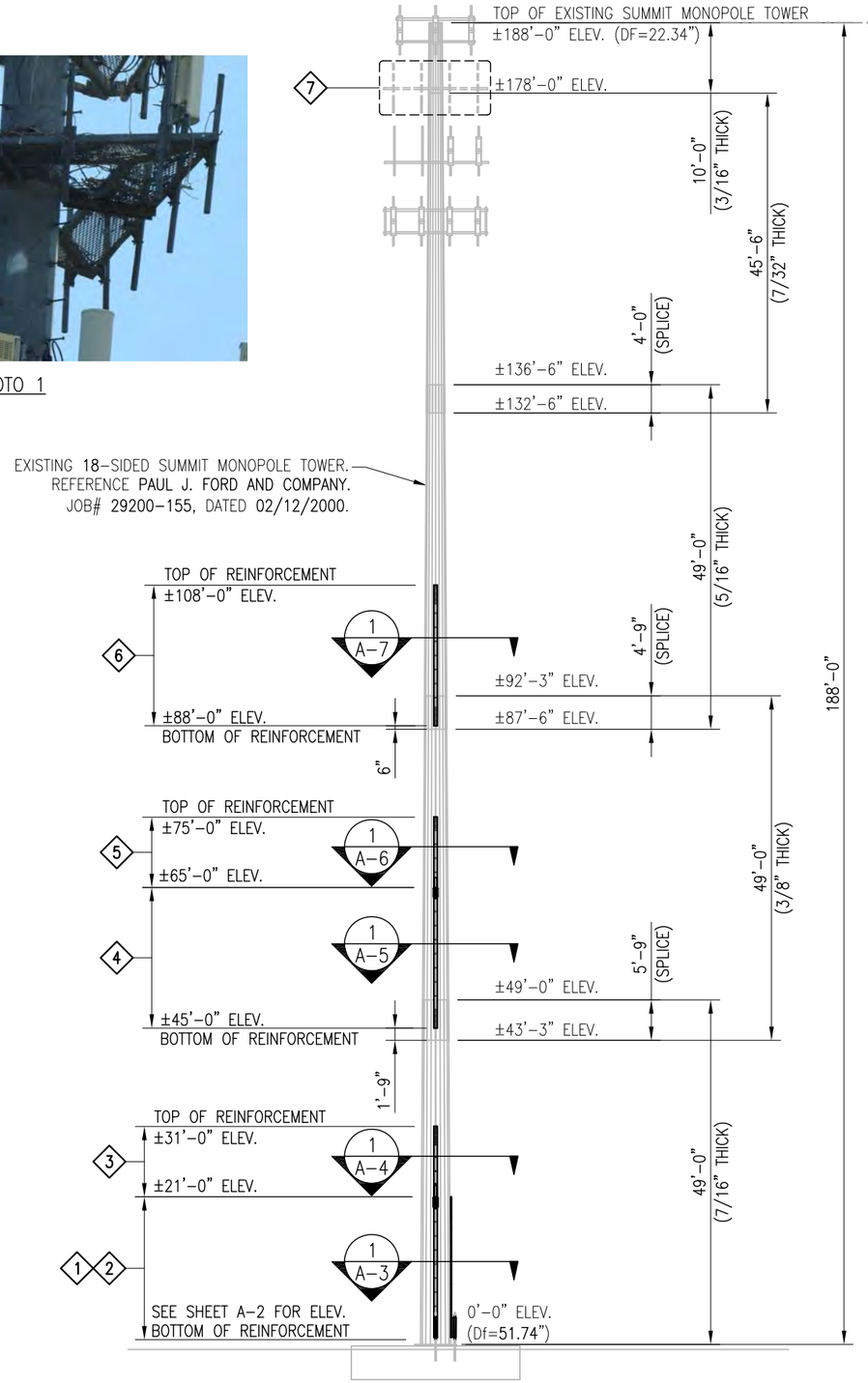
1. REMOVE (2) EXISTING ANCHOR REINFORCEMENT WELDMENT BRACKETS AND INSTALL NEW LINK PLATE REINFORCEMENTS. SEE SHEET A-2 FOR DETAILS.
2. INSTALL NEW (1) LP6X125-B-20B AND (1) LP6X125-B-20T FLAT BAR REINFORCEMENTS TO EXISTING ANCHOR ROD LOCATIONS FROM ±1'-0" TO ±21'-0" ELEV. SEE SHEETS A-2 AND A-3 FOR DETAILS.
3. INSTALL NEW (1) LP6X125-G-10BT FLAT BAR REINFORCEMENTS FROM ±21'-0" TO ±31'-0" ELEV. SEE SHEET A-4 FOR DETAILS.
4. INSTALL NEW (1) LP6X100-G-20TC FLAT BAR REINFORCEMENTS FROM ±45'-0" TO ±65'-0" ELEV. SEE SHEET A-5 FOR DETAILS.
5. INSTALL NEW (1) LP6X100-G-10CT FLAT BAR REINFORCEMENTS FROM ±65'-0" TO ±75'-0" ELEV. SEE SHEET A-6 FOR DETAILS.
6. INSTALL NEW (1) LP6X100-G-20TT FLAT BAR REINFORCEMENTS FROM ±88'-0" TO ±108'-0" ELEV. SEE SHEET A-7 FOR DETAILS.
7. REMOVE EXISTING EMPTY PLATFORM WITH HANDRAILS AT ±178.5' ELEV. SEE PHOTO 1 FOR DETAILS.
8. APPLY FOUNDATION COATING.
9. 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.

TOWER BASE/FOUNDATION PHOTO

PHOTO 1



BOLT ON SAFETY CLIMB BRACKET INSTALLATION



FOUNDATION COATING NOTES:

1. THE COATING MATERIALS SHALL BE LANCO WHITE ACRYLIC ELASTOMERIC COATING AND SEALER, OR HYDRO ARMOR COATING.
2. THE COATING CAN BE PLACED AT LEAST (2) DAYS AFTER THE PLACEMENT OF THE CONCRETE FOR FOUNDATION REINFORCEMENT, AND MINIMUM (4) DAYS FOR NEW FOUNDATION CONSTRUCTION.
3. THE CONCRETE SURFACE SHALL BE CLEAN AND DRY PRIOR TO THE APPLICATION OF THE COATING.
4. THE COATING SHALL BE APPLIED TO ALL THE SURFACES OF THE CONCRETE ABOVE THE GROUND AND 6" BELOW THE GRADE SURFACE IF APPLICABLE.
5. MINIMUM 30 MILS COATING IS REQUIRED.
6. APPLY COLD GALVANIZE AT LEAST 2'-3' ABOVE FOUNDATION.

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TES JOB NO:
99869

CUSTOMER SITE NO:
CT46124-A-SBA

CUSTOMER SITE NAME:
ENFIELD-MOODY RD.

188 MOODY RD
ENFIELD, CT 06082

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SHEET TITLE:

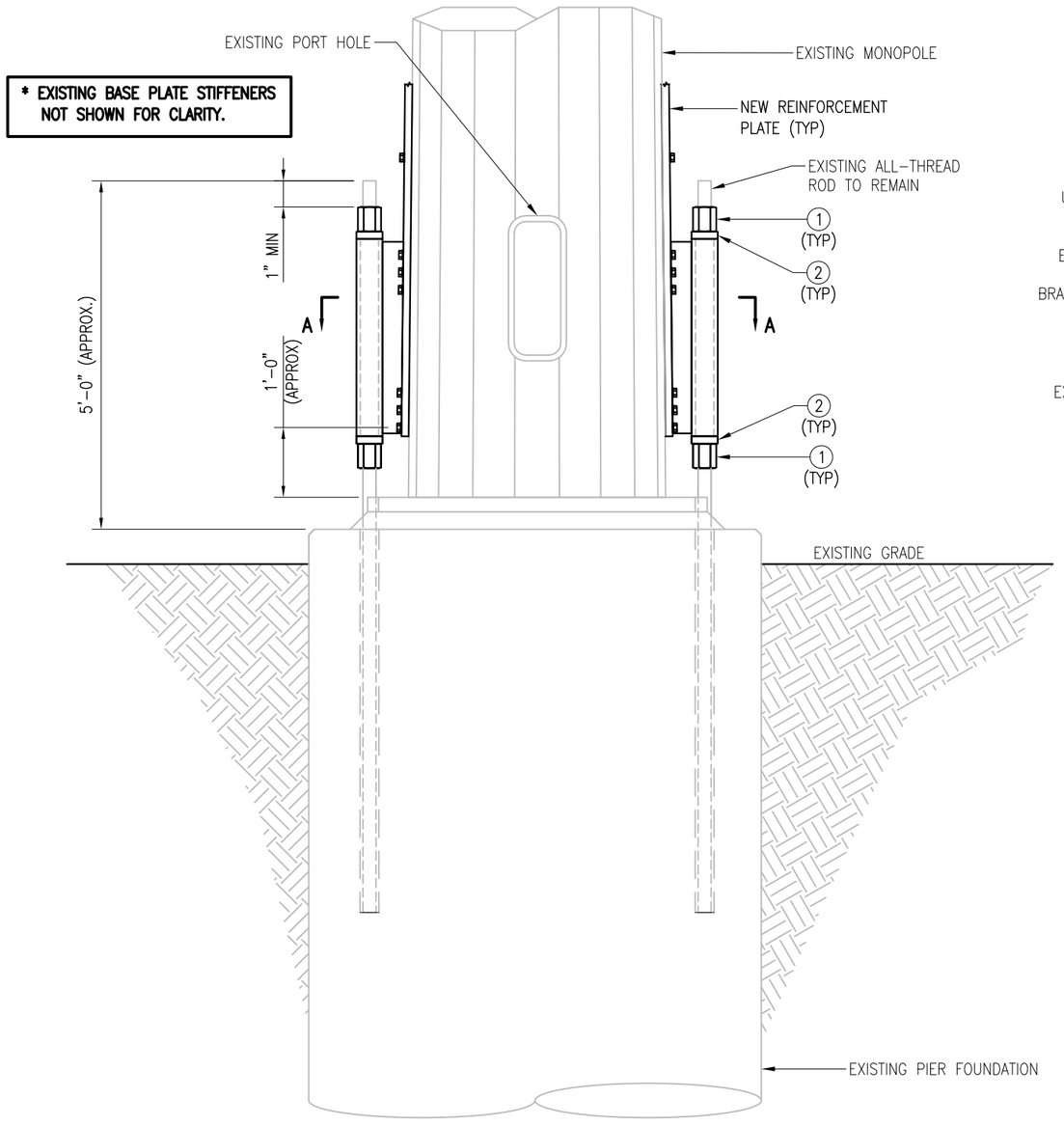
TOWER PROFILE

SHEET NUMBER: A-1

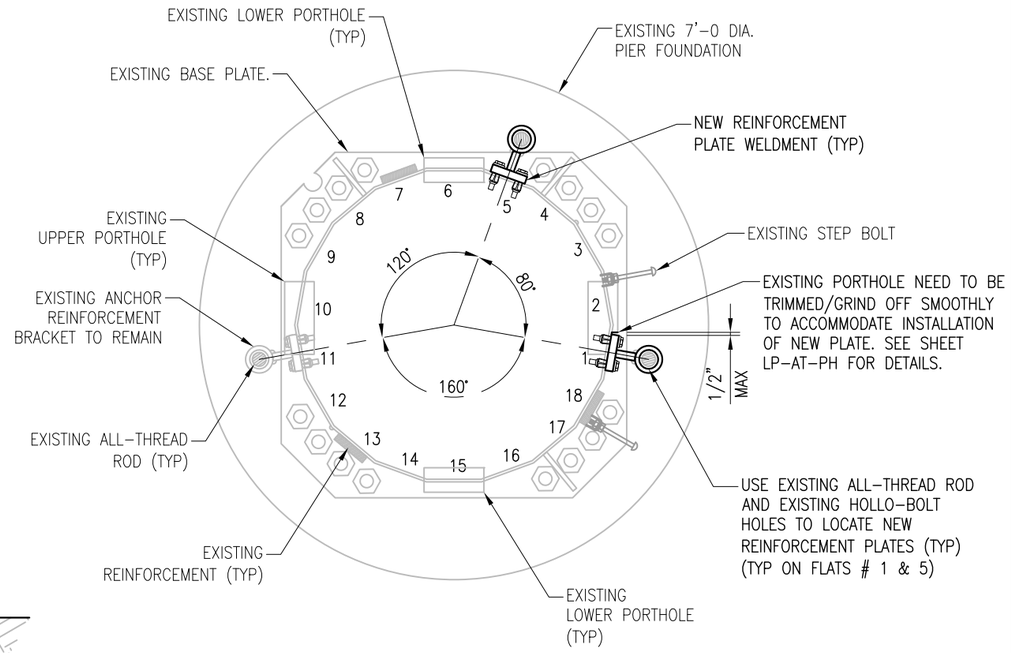
REV #: 0

US PATENT 9,714,520 B1

*** EXISTING BASE PLATE STIFFENERS NOT SHOWN FOR CLARITY.**



ELEVATION



SECTION A-A

NOTE:
SEE NOTES ON SHEET GN-1 FOR POST-INSTALLED EPOXY INJECTED ANCHOR BOLTS

INSTALLATION NOTES **(FOR EXISTING ANCHOR RODS)**:

1. REMOVE EXISTING ANCHOR REINFORCEMENT WELDMENT **(ONLY REMOVE ONE REINFORCEMENT PLATE AT A TIME)**
2. USE THE EXISTING ALL-THREAD ROD TO POSITION NEW REINFORCEMENT PLATE.
3. INSTALL REINFORCEMENT BRACKET AND CONFIRM FIT WITH MONOPOLE REINFORCEMENT PLATES.
4. TIGHTEN NUTS ON THE ALL-THREAD ROD LOCKING IT INTO POSITION.
5. APPLY (2) COATS OF ZINGA COLD GALVANIZING COMPOUND PER MANUFACTURER'S SPECIFICATIONS TO ALL FIELD CUT AND EXPOSED AREAS.

EXISTING ANCHOR ROD REINFORCEMENT BRACKET TO BE REMOVED PRIOR TO INSTALLATION OF NEW REINFORCEMENT PLATE. EXISTING ANCHOR RODS WILL REMAIN (TYPICAL OF 2).

ITEM NO.	QTY.	PART NO.	DESCRIPTION
1	4	R73-18	2 1/4" NUT (WILLIAMS R73-18) (TYP)
2	4	PLW-1	PL 1 1/4" X 4 1/2" FLAT WASHER, A572-65

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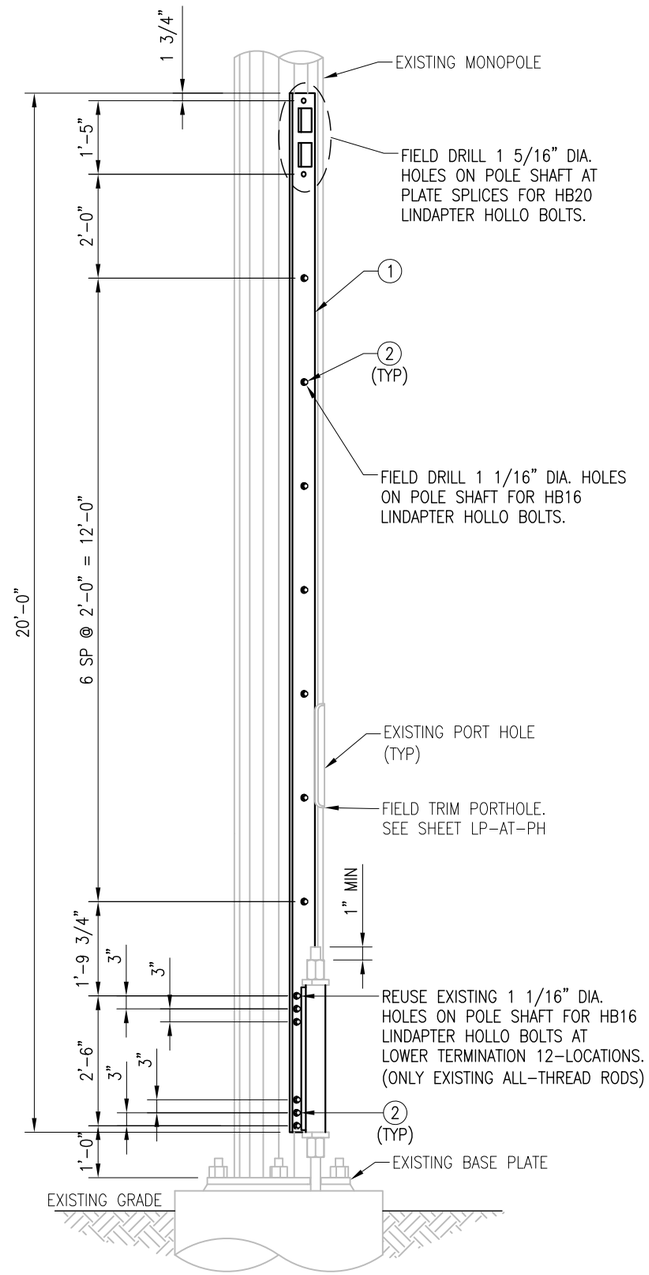
SHEET TITLE:

INSTALLATION DETAILS

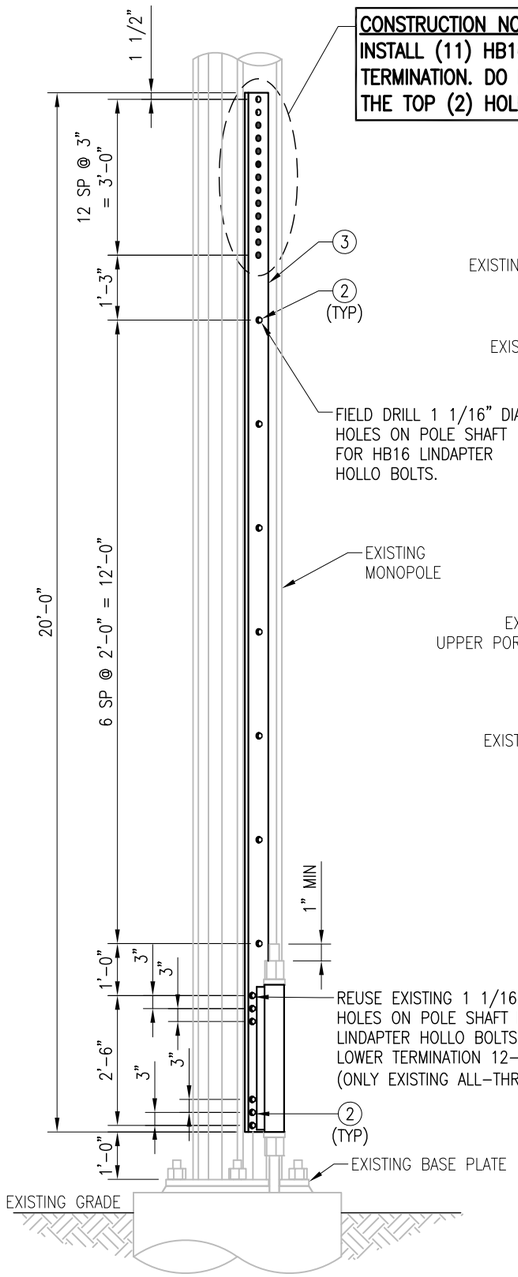
SHEET NUMBER: A-2

REV #: 0

US PATENT 9,546,497 B2

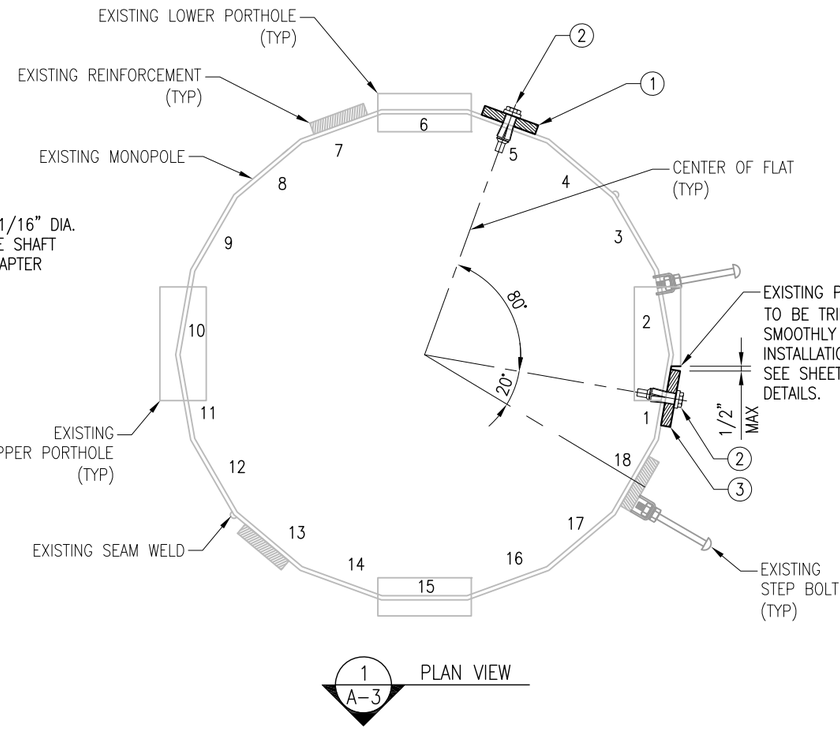


ELEVATION VIEW
REFER TO PLAN VIEW
(±1'-0" TO ±20'-0" ELEV.)



ELEVATION VIEW
REFER TO PLAN VIEW
(±1'-0" TO ±20'-0" ELEV.)

CONSTRUCTION NOTE:
INSTALL (11) HB16 BOLTS FROM THE BOTTOM TERMINATION. DO NOT FIELD DRILL/INSTALL THE TOP (2) HOLES.



1 / A-3 PLAN VIEW

NOTES:
1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1
3. APPLY (2) COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS TO ALL FIELD DRILLED AND EXPOSED AREAS.

ITEM NO.	QTY.	PART NO.	DESCRIPTION (BASE SECTION)
1	1	LP6X125-B-20B	PL 1 1/4" X 6" X 20'-0" A572-65 WELDMENT
2	49	HB16-2	LINDAPTER 5/8" TYPE HB HOLLO-BOLT (HCF)
3	1	LP6X125-B-20T	PL 1 1/4" X 6" X 20'-0" A572-65 WELDMENT

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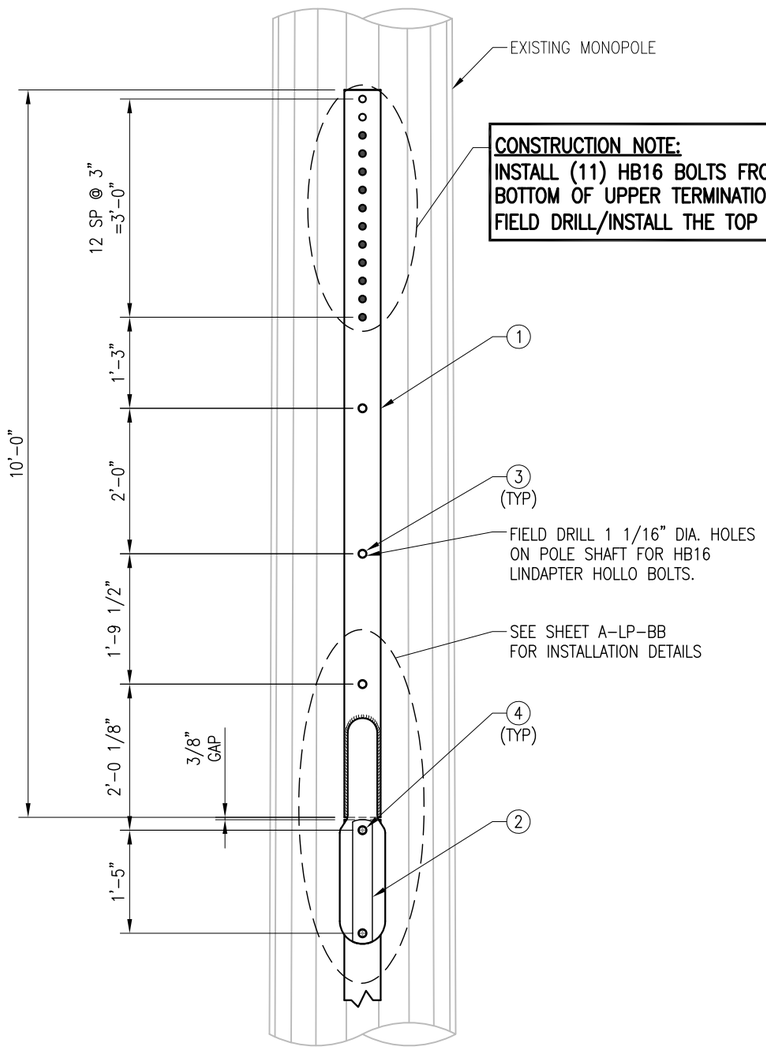
SHEET TITLE:
REINFORCEMENT ASSEMBLY

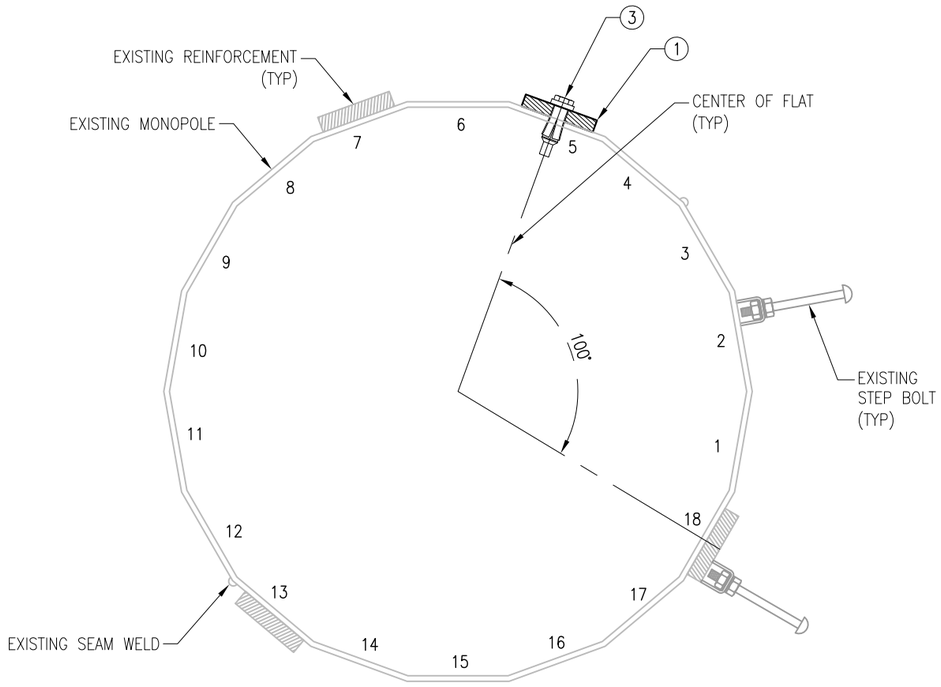
SHEET NUMBER: A-3

REV #: 0

US PATENT 9,546,497 B2



ELEVATION VIEW
REFER TO PLAN VIEW
(±21'-0" TO ±31'-0" ELEV.)



1 A-4 PLAN VIEW

NOTES:
1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1
3. APPLY (2) COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS TO ALL FIELD DRILLED AND EXPOSED AREAS.

ITEM NO.	QTY.	PART NO.	DESCRIPTION (PER SECTION)
1	1	LP6X125-G-10BT	PL 1 1/4" X 6" X 10'-0" A572-65 WELDMENT
2	1	CPL-B	SPLICE CONNECTION COVER PLATE
3	14	HB16-2	LINDAPTER 5/8" TYPE HB HOLLO-BOLT (HCF)
4	2	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)

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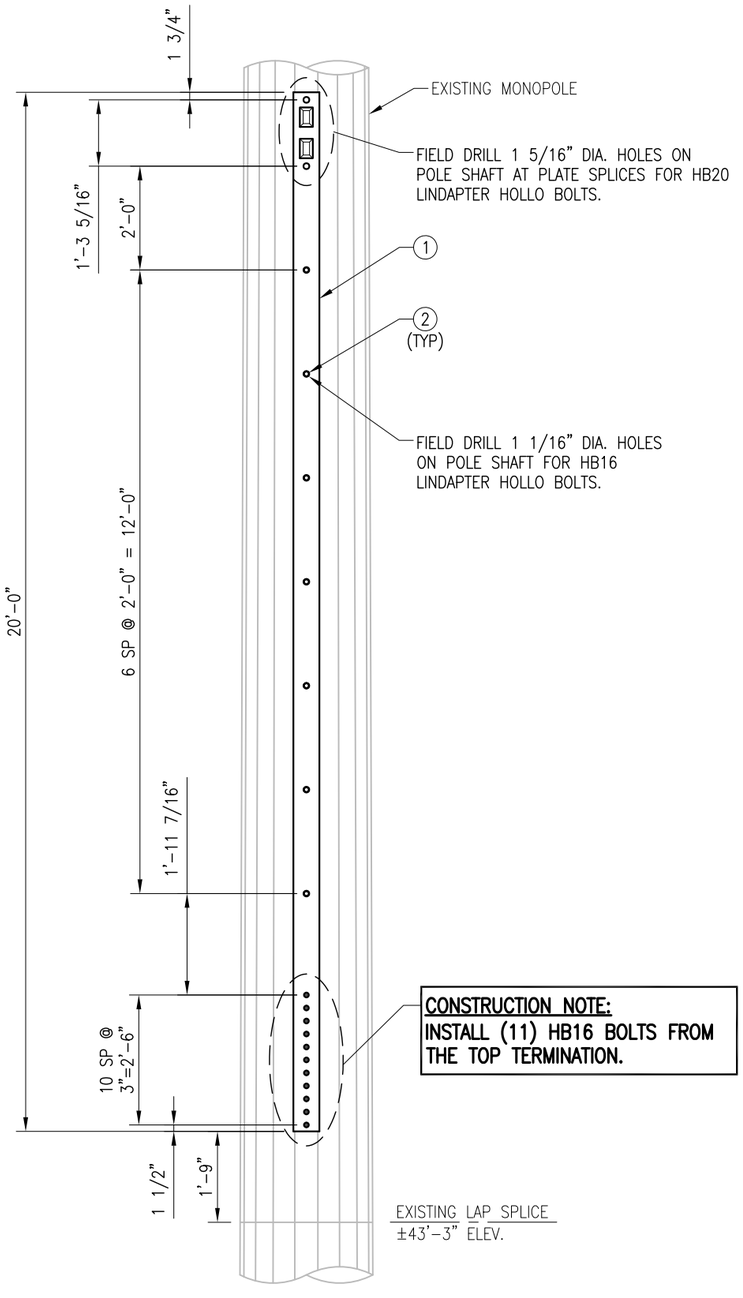
SHEET TITLE: REINFORCEMENT ASSEMBLY

SHEET NUMBER: A-4

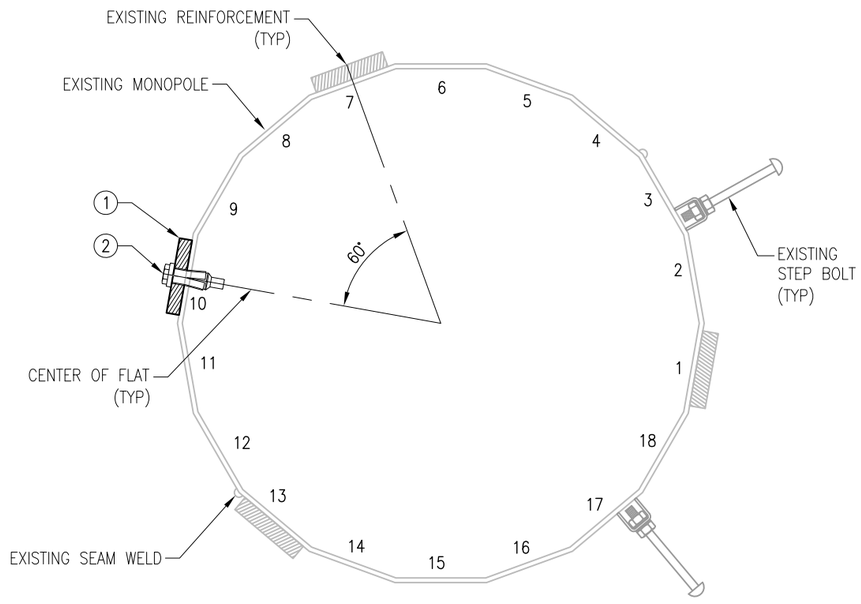
REV #: 0

US PATENT 9,546,497 B2



CONSTRUCTION NOTE:
INSTALL (11) HB16 BOLTS FROM THE TOP TERMINATION.

ELEVATION VIEW
REFER TO PLAN VIEW
(±45'-0" TO ±65'-0" ELEV.)



1 / A-5 PLAN VIEW

NOTES:
1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1
3. APPLY (2) COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS TO ALL FIELD DRILLED AND EXPOSED AREAS.

ITEM NO.	QTY.	PART NO.	DESCRIPTION (PER SECTION)
1	1	LP6X100-G-20TC	PL 1" X 6" X 20'-0" A572-65 WELDMENT
2	18	HB16-2	LINDAPTER TYPE HB HOLLO-BOLT (HDG)

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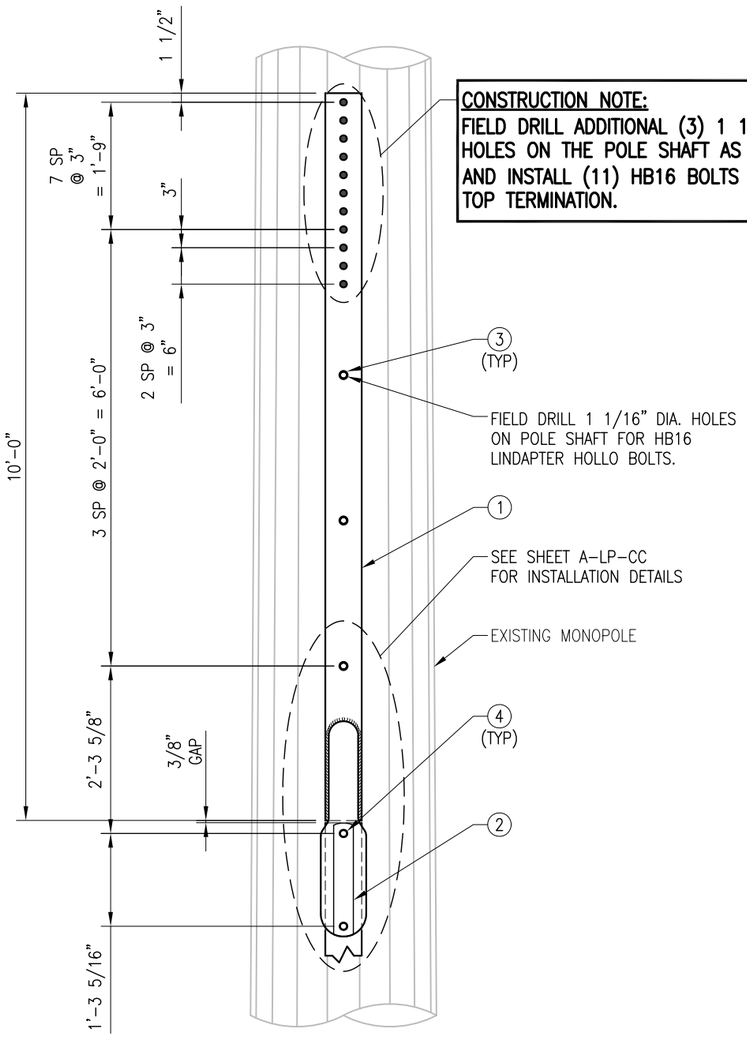
SHEET TITLE:
REINFORCEMENT ASSEMBLY

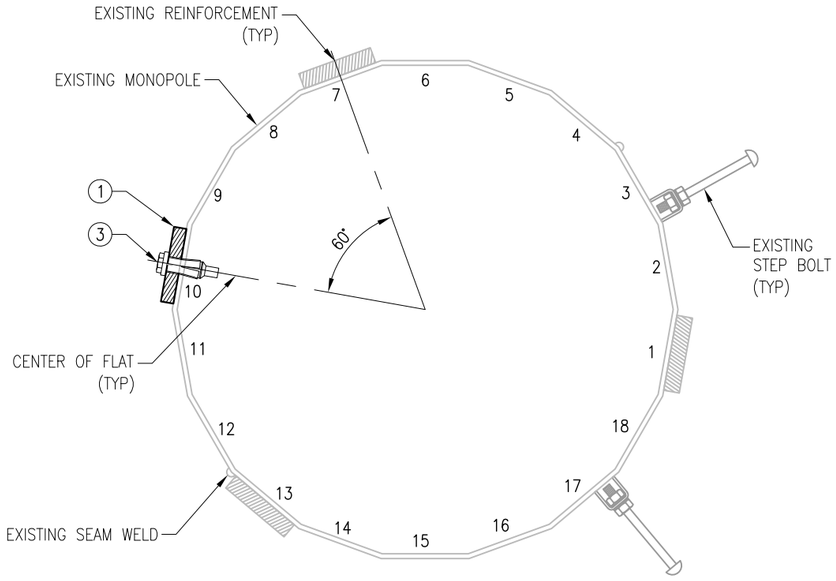
SHEET NUMBER: A-5

REV #: 0

US PATENT 9,546,497 B2



ELEVATION VIEW
REFER TO PLAN VIEW
(±65'-0" TO ±75'-0" ELEV.)



1 / A-6 PLAN VIEW

NOTES:
1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1
3. APPLY (2) COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS TO ALL FIELD DRILLED AND EXPOSED AREAS.

ITEM NO.	QTY.	PART NO.	DESCRIPTION (PER SECTION)
1	1	LP6X100-G-10CT	PL 1" X 6" X 10'-0" A572-65 WELDMENT
2	1	CPL-C	SPLICE CONNECTION COVER PLATE
3	14	HB16-2	LINDAPTER 5/8" TYPE HB HOLLO-BOLT (HCF)
4	2	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)

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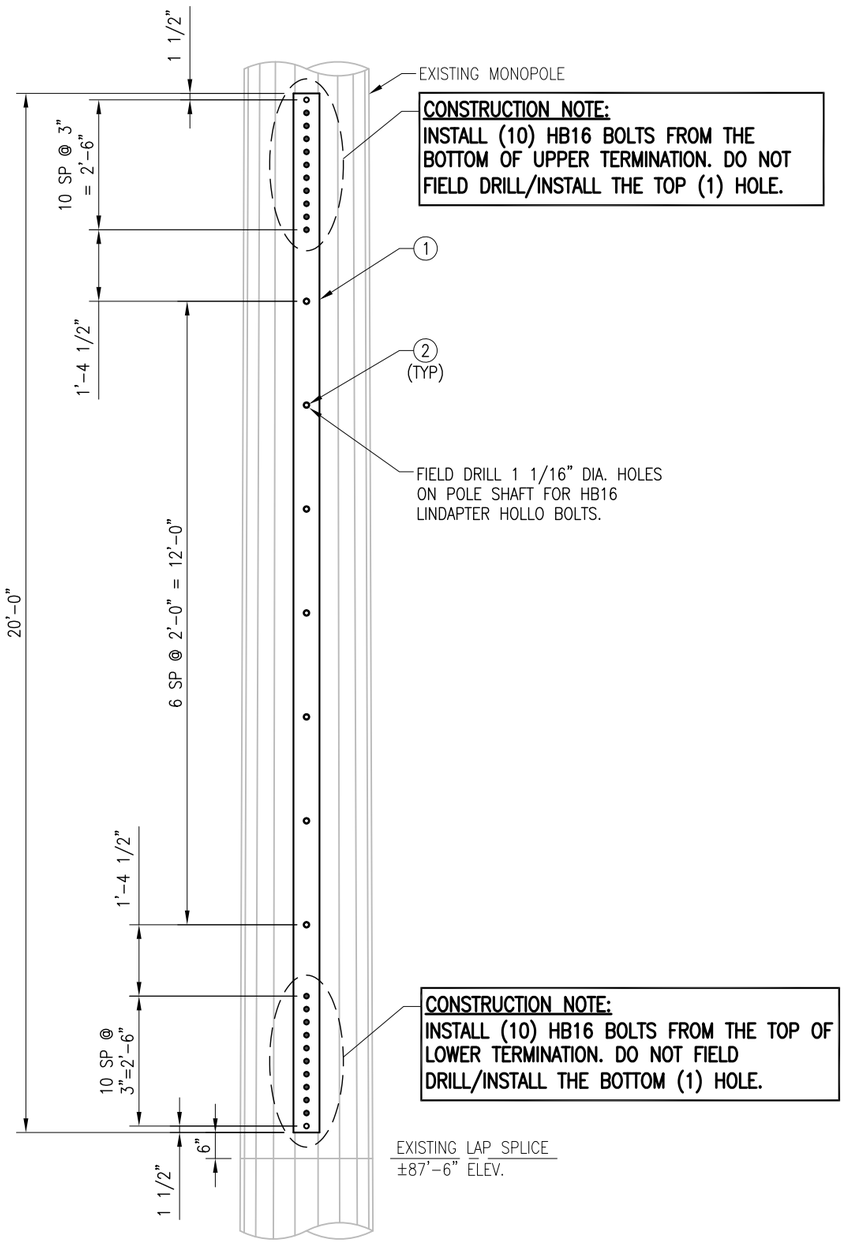
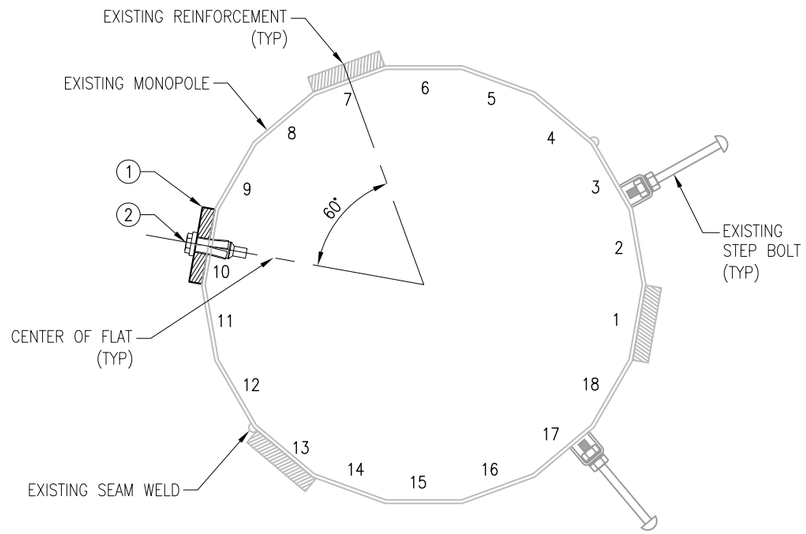
SHEET TITLE:
REINFORCEMENT ASSEMBLY

SHEET NUMBER: A-6
REV #: 0



ELEVATION VIEW
REFER TO PLAN VIEW
(±88'-0" TO ±108'-0" ELEV.)



1 A-7 PLAN VIEW

NOTES:
1. REFER TO SHEET A-2 FOR FLAT BAR ORIENTATION.
2. INSTALLATION TORQUE FOR HOLLO/AJAX-BOLTS: SEE SHEET GN-1
3. APPLY (2) COATS OF ZINGA COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS TO ALL FIELD DRILLED AND EXPOSED AREAS.

ITEM NO.	QTY.	PART NO.	DESCRIPTION (PER SECTION)
1	1	LP6X100-G-20TT	PL 1" X 6" X 20'-0" A572-65
2	27	HB16-2	LINDAPTER TYPE HB HOLLO-BOLT (HCF)

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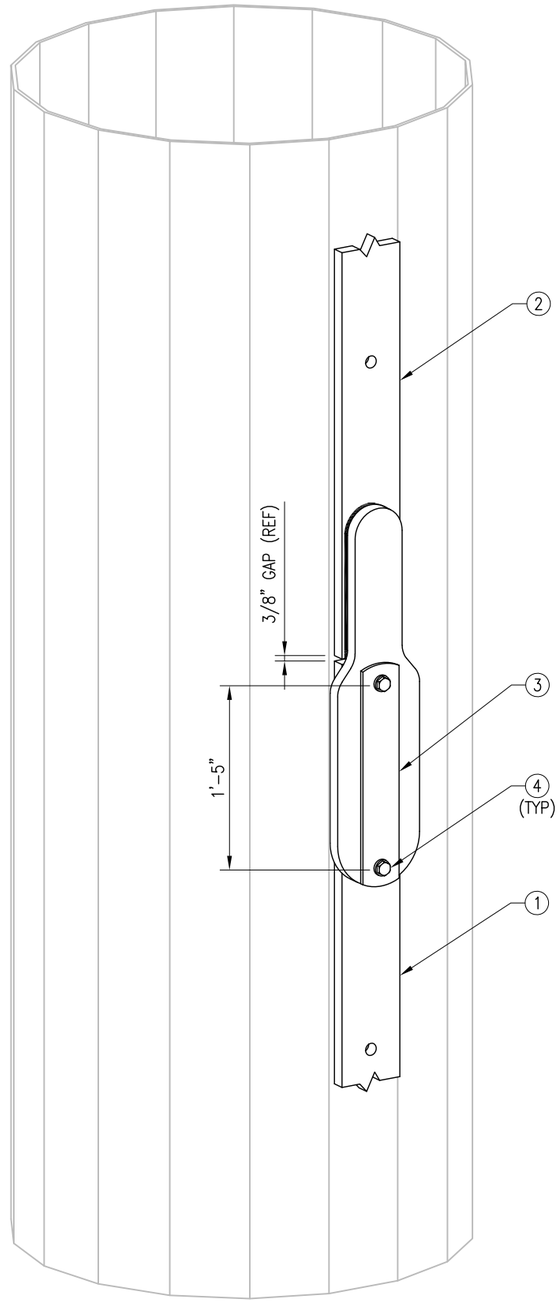
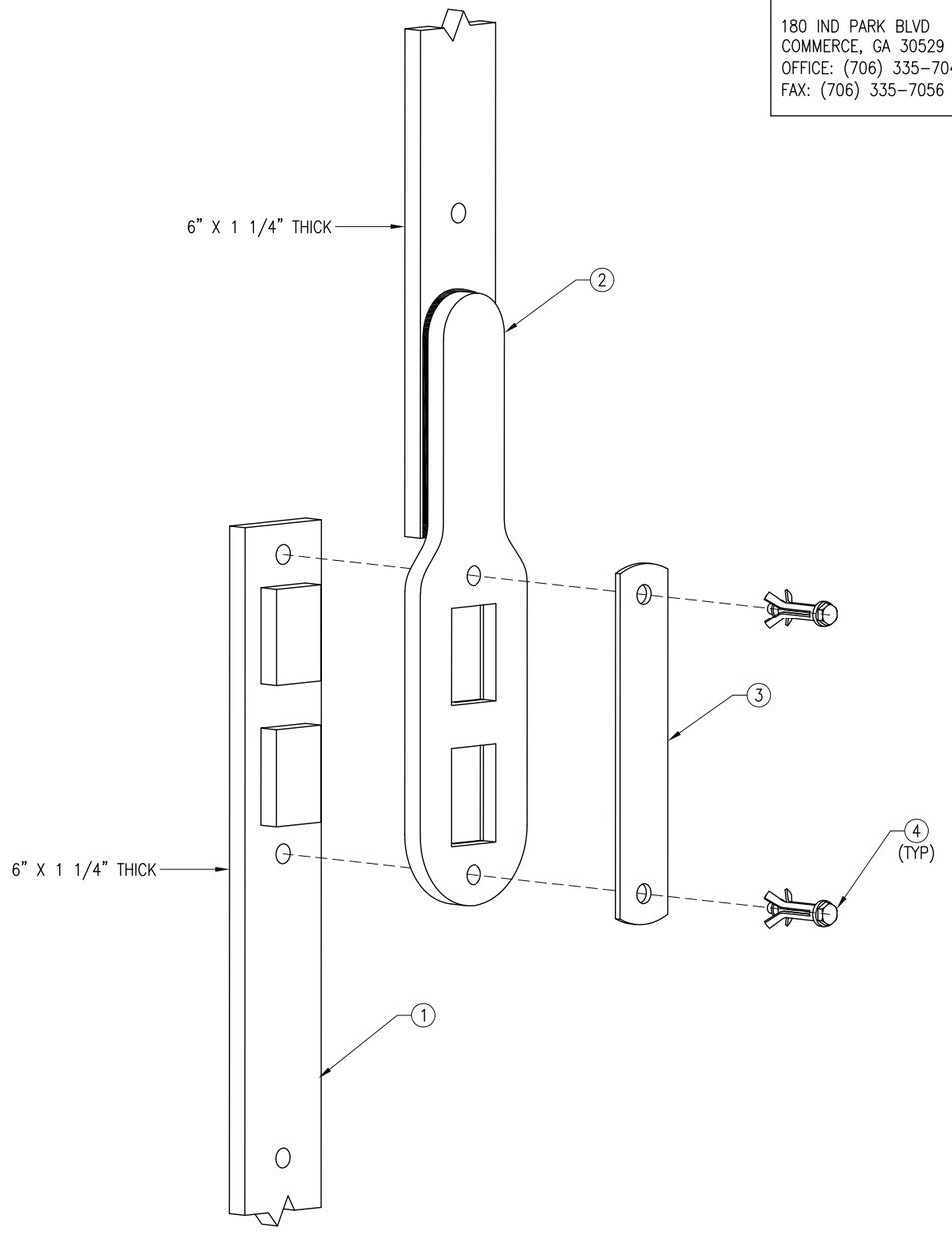
SHEET TITLE:
REINFORCEMENT ASSEMBLY

SHEET NUMBER: A-7
REV #: 0

US PATENT 9,546,497 B2





ALL LPXXXX PARTS ARE PATENTED AND ARE AVAILABLE FROM METROSITE, LLC

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FAX: (706) 335-7056

FIELD NOTE:
INSTALLATION TORQUE FOR THE (2) HB20-3 BOLTS AT SPLICE: 221 FT-LBS.

ITEM NO.	QTY.	MATERIAL PART NO.	DESCRIPTION
1	–	LP6X125-X-XXX	PL 1 1/4" X 6" PLATE WELDMENT
2	–	LP6X125-X-XXX	PL 1 1/4" X 6" PLATE WELDMENT
3	1	CPL-B	KEY PLATE COVER PLATE
4	2	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)

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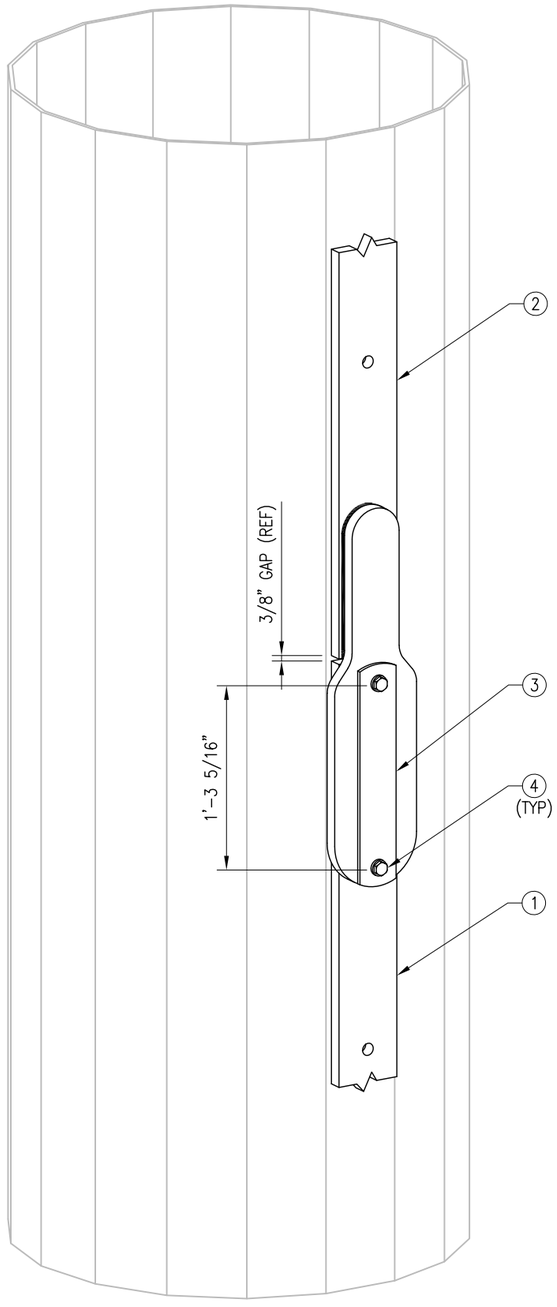
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	MN	12/30/20

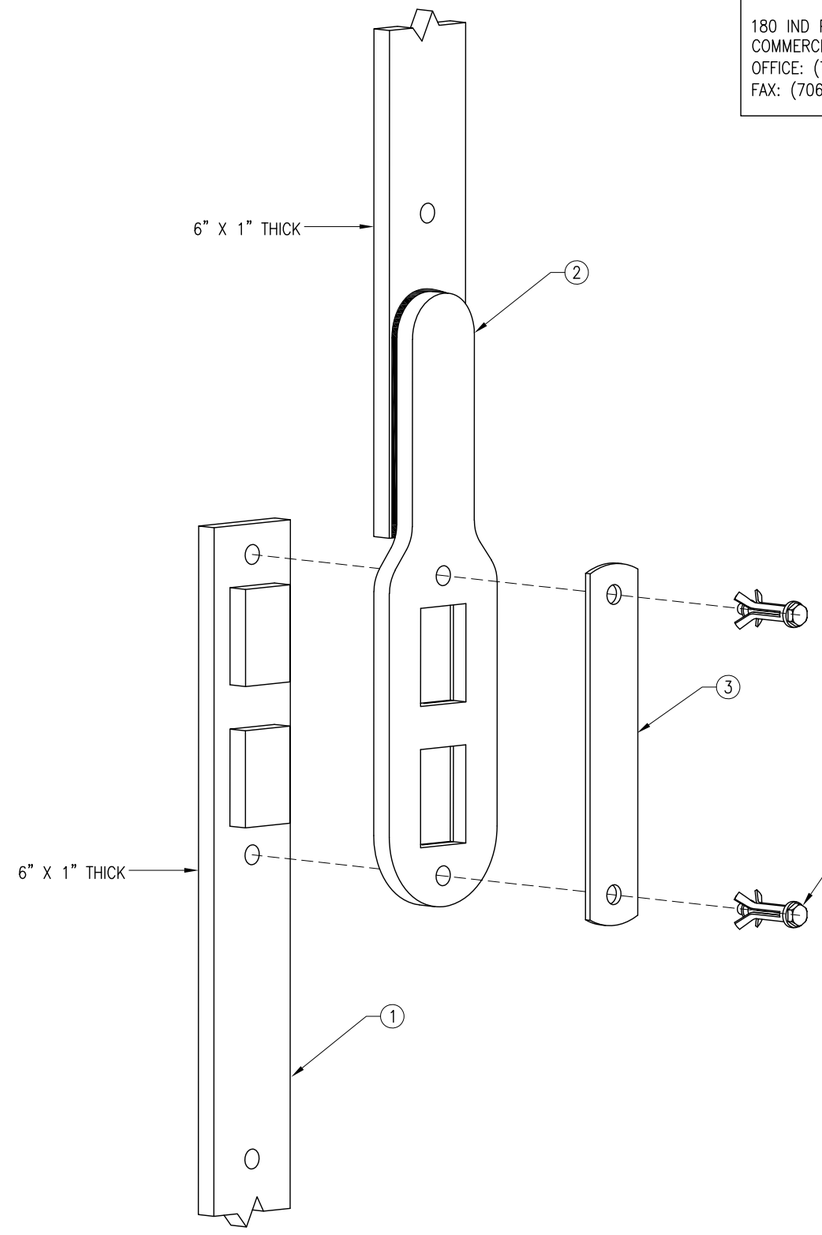
SHEET TITLE:
SPLICE CONNECTION PLATE INSTALLATION DETAILS (TYPE BB)

SHEET NUMBER: A-LP-BB

REV #: 0

US PATENT 9,546,497 B2





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FIELD NOTE:
INSTALLATION TORQUE FOR THE (2) HB20-3 BOLTS AT SPLICE: 221 FT-LBS.

ITEM NO.	QTY.	MATERIAL PART NO.	DESCRIPTION
1	–	LP6X100-X-XXX	PL 1" X 6" PLATE WELDMENT
2	–	LP6X100-X-XXX	PL 1" X 6" PLATE WELDMENT
3	1	CPL-C	KEY PLATE COVER PLATE
4	2	HB20-3	LINDAPTER 3/4" TYPE HB HOLLO-BOLT (HCF)

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REV.	DESCRIPTION	BY	DATE
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SHEET TITLE:
SPLICE CONNECTION PLATE INSTALLATION DETAILS (TYPE CC)

SHEET NUMBER: A-LP-CC
REV #: 0

NEXGEN2 BLIND BOLT ASSEMBLY

INSTALLATION GUIDE

PRE-INSTALL BOLT ON INSTALL TOOL:

1 Thread the installation tool tip into the splined end of the bolt.

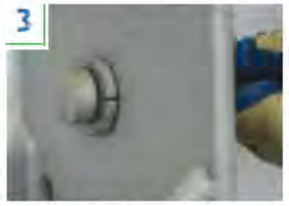
2 Remove the nut, the face washer and the spring shear sleeve and slide along the handle of the tool.

3 Move the collapsible washer to the correct location on the tool and fold in place.

INSTALLATION:

1 Install the bolt into the hole followed by the collapsible washer.

2 Rotate the tool 180°.



3 Pulling back, rock the tool side-to-side to engage the collapsible washer.

4 Engage the spring shear sleeve into the shear plane.

5 Slide the face washer forward and move the nut up to fasten to the bolt. Tighten the nut snug tight at this point.

6 Remove the tool by unscrewing it from bolt (counterclockwise).

7 Using the shear wrench engage the outer socket with the splined end of the bolt. Press the trigger until correct tension has been achieved (the bolt spline separates from the bolt).

8 Press the small trigger on the shear wrench to eject the bolt spline. The application is now complete.

THIS INSTALLATION GUIDE WAS CREATED BY ALLFASTENERS. IT WAS ATTACHED FOR REFERENCE ONLY.

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(800)-487-SITE

TES JOB NO: 99869

CUSTOMER SITE NO: CT46124-A-SBA

CUSTOMER SITE NAME: ENFIELD-MOODY RD.

188 MOODY RD
ENFIELD, CT 06082

DRAWN BY: MN | CHECKED BY: NP/AD

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	MN	12/30/20

SHEET TITLE: NEXGEN2 BLIND BOLT ASSEMBLY INSTALLATION GUIDE

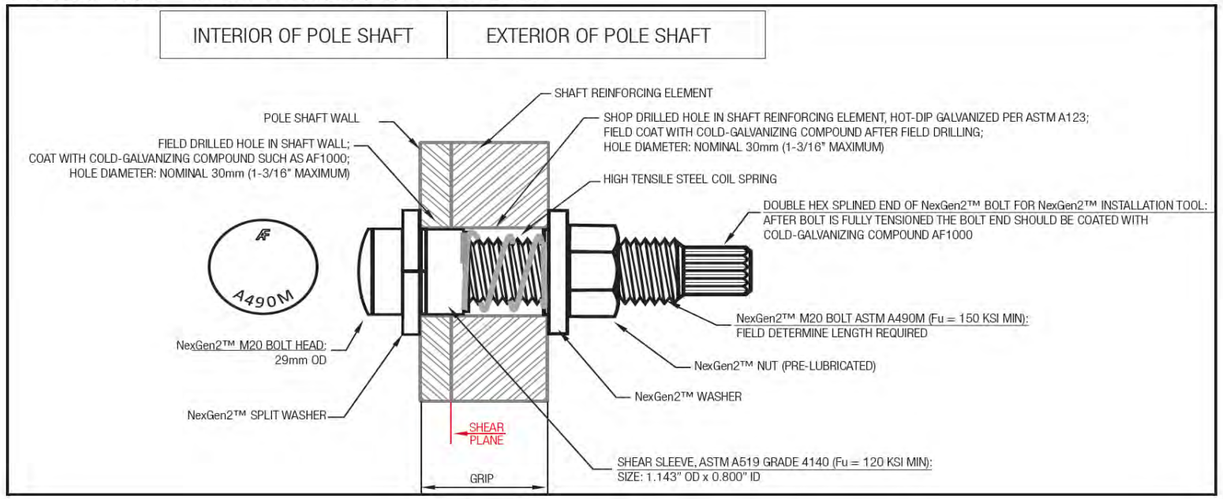
SHEET NUMBER: SPEC-1

REV #: 0

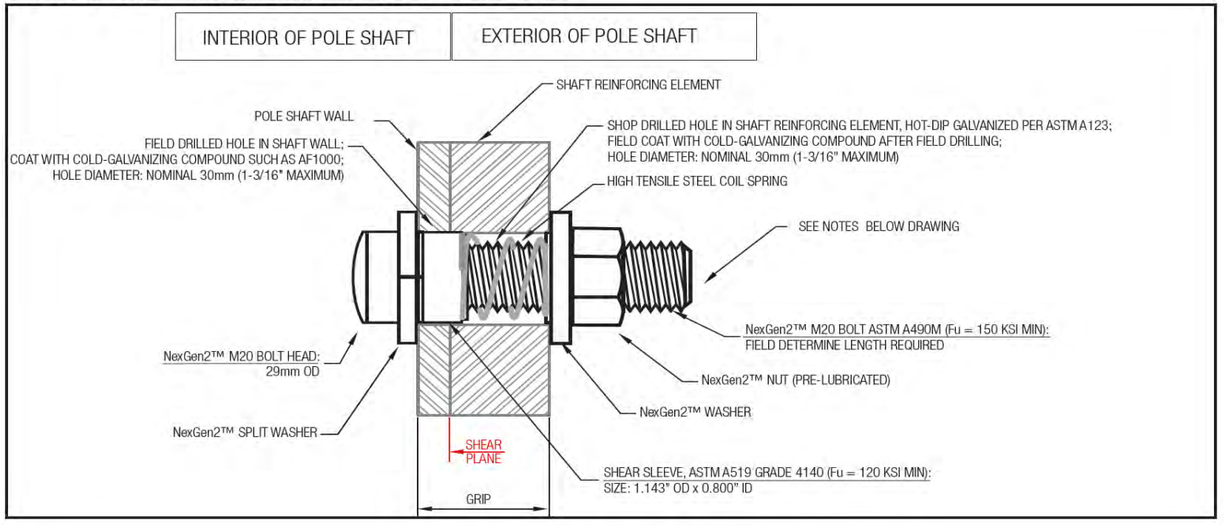
Pre-Tension

Post-Tension

TYPICAL NG2™ BOLT DETAIL: ***PRE-TENSION***



TYPICAL NG2™ BOLT DETAIL: ***POST-TENSION***



THIS INSTALLATION GUIDE WAS CREATED BY ALLFASTENERS.
IT WAS ATTACHED FOR REFERENCE ONLY.

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

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

TES JOB NO:
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CUSTOMER SITE NO:
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ENFIELD, CT 06082

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REV.	DESCRIPTION	BY	DATE
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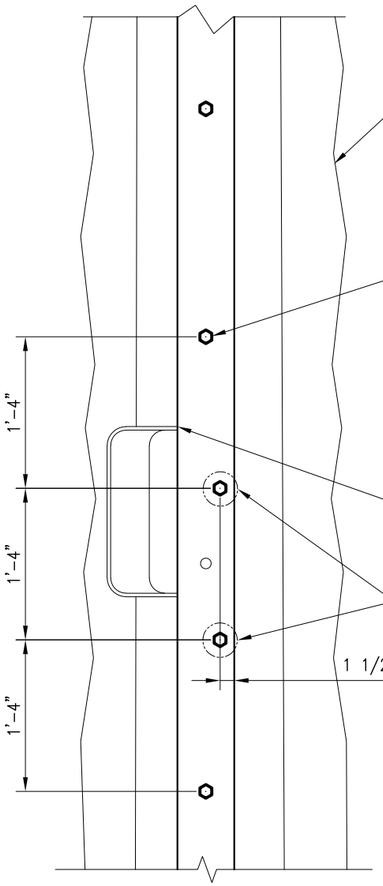
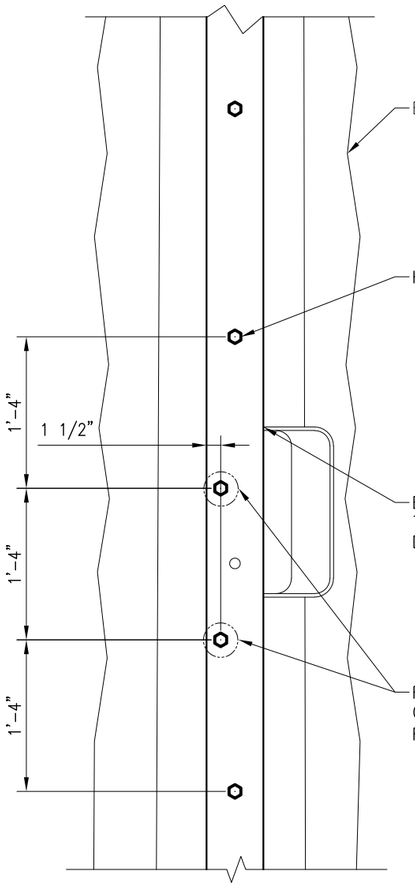
SHEET TITLE:
NEXGEN2 BLIND BOLT ASSEMBLY INSTALLATION GUIDE

SHEET NUMBER: SPEC-2

REV #: 0



CONDITION A



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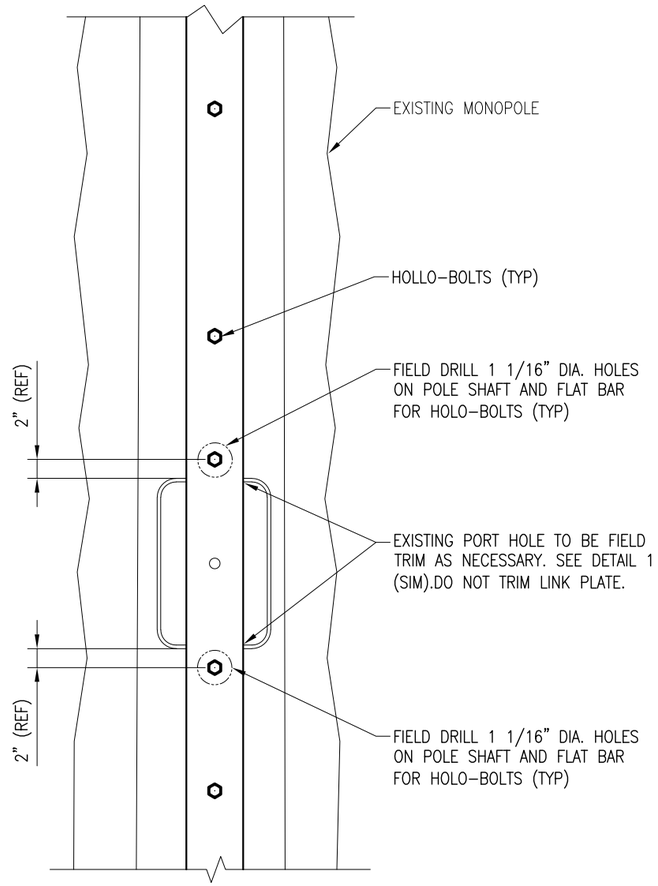
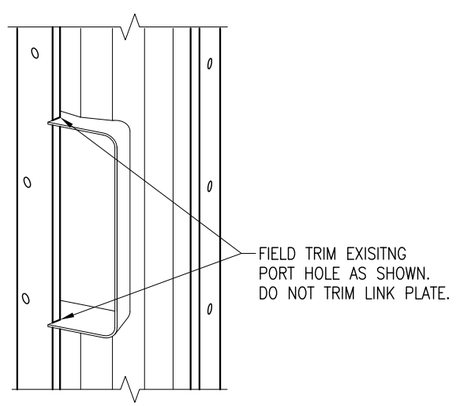


CONDITION C



DETAIL 1

NOTES:
1. REFER TO SHEET A-3 FOR FLAT BAR LOCATION.
2. DO NOT TRIM LINK PLATE.

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REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	MN	12/30/20

SHEET TITLE:
INSTALLATION AT HANDHOLE LOCATION DETAILS

SHEET NUMBER: LP-AT-PH
REV #: 0

EXHIBIT 11

EBI Consulting

environmental | engineering | due diligence

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

T-Mobile Existing Facility

Site ID: CTHA170C

Moody Rd
188 Moody Road
Enfield, Connecticut 06082

March 5, 2021

EBI Project Number: 6221000873

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**15.33%**

21 B Street, Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

March 5, 2021

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

Emissions Analysis for Site: CTHA170C - Moody Rd

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **188 Moody Road** in **Enfield, 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 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu W/cm^2$). The number of $\mu W/cm^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits; therefore, it is necessary to report results and limits in terms of percent MPE rather than power density.

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

General population/uncontrolled exposure limits apply to situations in which the general 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 ($\mu W/cm^2$). The general population exposure limits for the 600 MHz and 700 MHz frequency bands are approximately 400 $\mu W/cm^2$ and 467 $\mu W/cm^2$, respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 11 GHz frequency bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at 188 Moody Road in Enfield, 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 power density calculations, the broadcast footprint of the AIR6449 antenna has been considered. Due to the beamforming nature of this antenna, the actual beam locations vary depending on demand and are narrow in nature. Using the broadcast footprint accounts for the potential location of beams at any given time.

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) 4 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 Ericsson AIR 32 for the 1900 MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s) in Sector A, the Ericsson AIR 32 for the 1900 MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 MHz channel(s) in Sector B, the Ericsson AIR 32 for the 1900 MHz / 1900 MHz / 2100 MHz channel(s), the RFS APXVAARR24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz channel(s), the Ericsson AIR 6449 for the 2500 MHz / 2500 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 187 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:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32	Make / Model:	Ericsson AIR 32
Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	1900 MHz / 1900 MHz / 2100 MHz
Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd	Gain:	15.35 dBd / 15.35 dBd / 15.85 dBd
Height (AGL):	187 feet	Height (AGL):	187 feet	Height (AGL):	187 feet
Channel Count:	8	Channel Count:	8	Channel Count:	8
Total TX Power (W):	360 Watts	Total TX Power (W):	360 Watts	Total TX Power (W):	360 Watts
ERP (W):	12,841.53	ERP (W):	12,841.53	ERP (W):	12,841.53
Antenna A1 MPE %:	**1.41%**	Antenna B1 MPE %:	**1.41%**	Antenna C1 MPE %:	**1.41%**
Antenna #:	**2**	Antenna #:	**2**	Antenna #:	**2**
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	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz
Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.35 dBd / 15.65 dBd
Height (AGL):	187 feet	Height (AGL):	187 feet	Height (AGL):	187 feet
Channel Count:	7	Channel Count:	7	Channel Count:	7
Total TX Power (W):	320 Watts	Total TX Power (W):	320 Watts	Total TX Power (W):	320 Watts
ERP (W):	8,466.41	ERP (W):	8,466.41	ERP (W):	8,466.41
Antenna A2 MPE %:	**1.55%**	Antenna B2 MPE %:	**1.55%**	Antenna C2 MPE %:	**1.55%**
Antenna #:	**3**	Antenna #:	**3**	Antenna #:	**3**
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:	17.3 dBd / 17.3 dBd	Gain:	17.3 dBd / 17.3 dBd	Gain:	17.3 dBd / 17.3 dBd
Height (AGL):	187 feet	Height (AGL):	187 feet	Height (AGL):	187 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):	12,888.76	ERP (W):	12,888.76	ERP (W):	12,888.76
Antenna A3 MPE %:	**1.41%**	Antenna B3 MPE %:	**1.41%**	Antenna C3 MPE %:	**1.41%**

Site Composite MPE %	
Carrier	MPE %
T-Mobile (Max at Sector A):	4.37%
AT&T	8.35%
Metro PCS	0.34%
Nextel	0.19%
Sprint	2.02%
Clearwire	0.06%
Site Total MPE % :	15.33%

T-Mobile MPE % Per Sector	
T-Mobile Sector A Total:	4.37%
T-Mobile Sector B Total:	4.37%
T-Mobile Sector C Total:	4.37%
Site Total MPE % :	15.33%

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 (μW/cm²)	Frequency (MHz)	Allowable MPE (μW/cm²)	Calculated % MPE
T-Mobile 1900 MHz GSM	4	1028.30	187.0	4.51	1900 MHz GSM	1000	0.45%
T-Mobile 1900 MHz LTE	2	2056.61	187.0	4.51	1900 MHz LTE	1000	0.45%
T-Mobile 2100 MHz LTE	2	2307.55	187.0	5.06	2100 MHz LTE	1000	0.51%
T-Mobile 600 MHz LTE	2	591.73	187.0	1.30	600 MHz LTE	400	0.32%
T-Mobile 600 MHz NR	1	1577.94	187.0	1.73	600 MHz NR	400	0.43%
T-Mobile 700 MHz LTE	2	648.82	187.0	1.42	700 MHz LTE	467	0.30%
T-Mobile 1900 MHz LTE	2	2203.69	187.0	4.84	1900 MHz LTE	1000	0.48%
T-Mobile 2500 MHz LTE	1	6444.38	187.0	7.07	2500 MHz LTE	1000	0.71%
T-Mobile 2500 MHz NR	1	6444.38	187.0	7.07	2500 MHz NR	1000	0.71%
						Total:	**4.37%**

• 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:	4.37%
Sector B:	4.37%
Sector C:	4.37%
T-Mobile Maximum MPE % (Sector A):	4.37%
Site Total:	15.33%
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **15.33%** 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.