



Northeast Site Solutions
Denise Sabo
4 Angela's Way, Burlington CT 06013
203-435-3640
denise@northeastsitesolutions.com

May 26, 2022

Members of the Siting Council
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051

RE: Exempt Modification Application
1291-1293 Bantam Road, Bantam, CT 06750
Latitude: 41.717222
Longitude: -73.260833
Site #: CT12215-A _CTNH546A_SBA/T-Mobile

Dear Ms. Bachman:

T-Mobile is requesting to file an exempt modification for an existing tower located at 1291-1293 Bantam Road, Bantam (Litchfield), CT 06750. T-Mobile currently maintains six (6) antennas at the 115-foot level of the existing 149-foot monopole tower. The property is owned by Robert & Judith Hammer, and the tower is owned by SBA. T-Mobile now intends to replace (3) antennas and install (3) antennas. The new antennas would be installed at the 115-foot level of the tower. This modification includes B2, B5 hardware that is both 4G (LTE), and 5G capable.

T-Mobile Planned Modifications:

Remove:

(2) HCS Fiber Cable 1-5/8"

Remove and Replace:

(3) RFS Antennas (REMOVE) - (3) ERICSSON AIR6449 B41 Antennas (REPLACE)
(3) ERICSSON RRUS11 B2 (REMOVE) - (3) ERICSSON 4460 B25+B66 RRU (REPLACE)

Install New:

(2) HCS Fiber Cable 1.9"

Existing to Remain:

(3) RFS APXVAALL24-43-U-NA20 Antennas
(3) ERICSSON 4449 B71+B85 RRU
(3) ERICSSON RRUS11 Band 4 *
(1) HCS Fiber Cable 1-5/8" *

* Equipment listed for entitlement purposes only



The facility was approved by the Connecticut Siting Council, Docket No. 258 on December 9, 2003. Please see attached.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-72(b)(2), 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 Denise Raap, First Selectwoman and Dennis Tobin, Land Use Administrator for the Town of Litchfield, as well as the property owner and the tower owner.

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

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications 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 modifications 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 telecommunications facility constitute an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Denise Sabo
Mobile: 203-435-3640
Fax: 413-521-0558
Office: 4 Angela's Way, Burlington CT 06013
Email: denise@northeastsitesolutions.com



NSS **NORTHEAST**
SITE SOLUTIONS
Turnkey Wireless Development

Attachments

Cc: Denise Raap, First Selectwoman
Town of Litchfield
74 West Street
PO Box 488
Litchfield, CT 06759

Dennis Tobin, Land Use Administrator
Town of Litchfield
74 West Street
PO Box 488
Litchfield, CT 06759

Robert & Judith Hammer - Property Owner
PO Box 251
Bantam, CT 06750

SBA - Tower Owner

Exhibit A

Original Facility Approval

DOCKET NO. 258 - Sprint Spectrum, L.P. d/b/a Sprint PCS } Connecticut
application for a Certificate of Environmental Compatibility and }
Public Need for the construction, maintenance and operation of a } Siting
wireless telecommunications facility at one of two sites on }
Bantam Road, Litchfield, Connecticut. } Council

December 9, 2003

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate either alone or cumulatively with other effects when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the proposed site B located at 1291-1293 Bantam Road, Litchfield, Connecticut. The Council denies certification of proposed site A owned by Kathleen Higgins on Route 202 in Litchfield, Connecticut.

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

1. The tower shall be constructed as a monopole with low profile antennas, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of Sprint and other entities, both public and private, but such tower shall not exceed a height of 150-feet above ground level.
2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. The D&M Plan shall be submitted to and approved by the Council prior to the commencement of facility construction and shall include:
 - a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment building, access road, utility line, landscaping, and the movement of the tower compound not more than 50 feet to the southeast to increase wetland buffers; and
 - b) construction plans for site clearing, water drainage, and erosion and sedimentation control consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.
3. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of electromagnetic radio frequency power density is submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
4. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.

5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. The Certificate Holder shall provide space on the tower for no compensation for any municipal antennas, provided such antennas are compatible with the structural integrity of the tower.
6. If the facility does not initially provide wireless services within one year of completion of construction or ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.
7. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and cease to function.
8. Unless otherwise approved by the Council, this Decision and Order shall be void if the facility authorized herein is not operational within one year of the effective date of this Decision and Order or within one year after all appeals to this Decision and Order have been resolved.

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

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

The parties and intervenors to this proceeding are:

Applicant

Sprint Spectrum, L.P.
d/b/a Sprint PCS

Its Representative

Thomas J. Regan, Esq.
Brown Rudnick Berlack Israels LLP
CityPlace I, 38th Floor
185 Asylum Street
Hartford, CT 06103-3402

Intervenor

Town of Litchfield

Its Representative

Steven E. Byrne, Esq.
Byrne & Byrne
2-B Farmington Commons
790 Farmington Avenue
Farmington, Connecticut 06032

Exhibit B

Property Card



Town of Litchfield, CT

Property Listing Report

Map Block Lot

061-087-042

Building # 1

Section # 1

Account

008045

Property Information

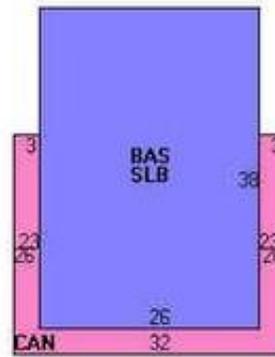
Property Location	1293 BANTAM RD
Owner	HAMMER ROBERT & JUDITH ET AL
Co-Owner	na
Mailing Address	PO BOX 251 BANTAM CT 06750-0251
Land Use	201 Commercial
Land Class	C
Zoning Code	5
Census Tract	3

Street Index	200
Acreage	12.51
Utilities	UNKNOWN
Lot Setting/Desc	UNKNOWN UNKNOWN
Additional Info	

Photo



Sketch



Primary Construction Details

Year Built	1970
Stories	1
Building Style	Restaurant
Building Use	Comm/Ind
Building Condition	A
Interior Floors 1	Ceramic Tile
Interior Floors 2	NA
Total Rooms	0
Basement Garages	
Occupancy	1.00
Building Grade	

Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Bath Style	NA
Kitchen Style	NA
Roof Style	Flat
Roof Cover	Tar & Gravel
AC Type	None
Fireplaces	0

Exterior Walls	Brick
Exterior Walls 2	Concr/Cinder
Interior Walls	Minimum
Interior Walls 2	NA
Heating Type	Forced Hot Air
Heating Fuel	Oil
Sq. Ft. Basement	
Fin BSMT Quality	
Extra Kitchens	

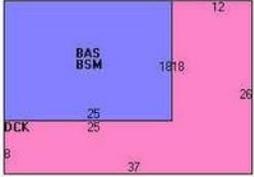


Town of Litchfield, CT

Property Listing Report

Map Block Lot **061-087-042**

Building # **2** Section # **1** Account **008045**

<p>Photo</p> 	<p>Sketch</p> 
---	---

Primary Construction Details

Year Built	1977
Stories	1
Building Style	Office
Building Use	Comm/Ind
Building Condition	G
Interior Floors 1	Hardwood
Interior Floors 2	NA
Total Rooms	0
Basement Garages	0
Occupancy	1.00
Building Grade	

Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Bath Style	NA
Kitchen Style	NA
Roof Style	Gable
Roof Cover	Arch Shingles
AC Type	None
Fireplaces	0

Exterior Walls	Vinyl Siding
Exterior Walls 2	NA
Interior Walls	Drywall
Interior Walls 2	NA
Heating Type	Elec Baseboard
Heating Fuel	Electric
Sq. Ft. Basement	
Fin BSMT Quality	
Extra Kitchens	

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	450	450
Basement	450	0
Deck	512	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	1412	450



Town of Litchfield, CT

Property Listing Report

Map Block Lot

061-087-042

Building #

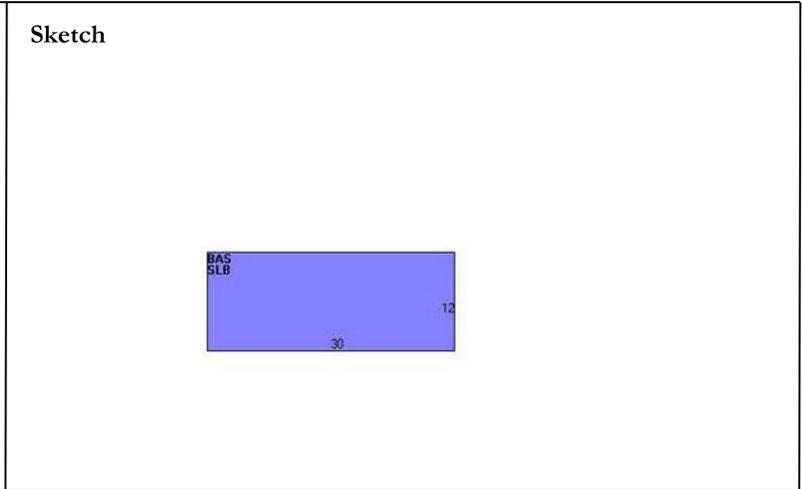
3

Section #

1

Account

008045



Primary Construction Details

Year Built	2005
Stories	1
Building Style	Pre-Eng Warehs
Building Use	Comm/Ind
Building Condition	A
Interior Floors 1	Concrete
Interior Floors 2	NA
Total Rooms	0
Basement Garages	0
Occupancy	1.00
Building Grade	

Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Bath Style	NA
Kitchen Style	NA
Roof Style	Flat
Roof Cover	Rolled
AC Type	None
Fireplaces	0

Exterior Walls	Concr/Cinder
Exterior Walls 2	NA
Interior Walls	Minimum
Interior Walls 2	NA
Heating Type	None
Heating Fuel	None
Sq. Ft. Basement	
Fin BSMT Quality	
Extra Kitchens	

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	360	360
Slab	360	0

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	720	360



Town of Litchfield, CT

Property Listing Report

Map Block Lot

061-087-042

Building #

4

Section #

1

Account

008045

Photo



Sketch



Primary Construction Details

Year Built	2005
Stories	1
Building Style	Pre-Eng Warehs
Building Use	Comm/Ind
Building Condition	A
Interior Floors 1	Average
Interior Floors 2	NA
Total Rooms	0
Basement Garages	0
Occupancy	0.00
Building Grade	

Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Bath Style	NA
Kitchen Style	NA
Roof Style	Flat
Roof Cover	Rolled
AC Type	None
Fireplaces	0

Exterior Walls	Concr/Cinder
Exterior Walls 2	NA
Interior Walls	Minimum
Interior Walls 2	NA
Heating Type	None
Heating Fuel	None
Sq. Ft. Basement	
Fin BSMT Quality	
Extra Kitchens	

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	240	240
Slab	240	0

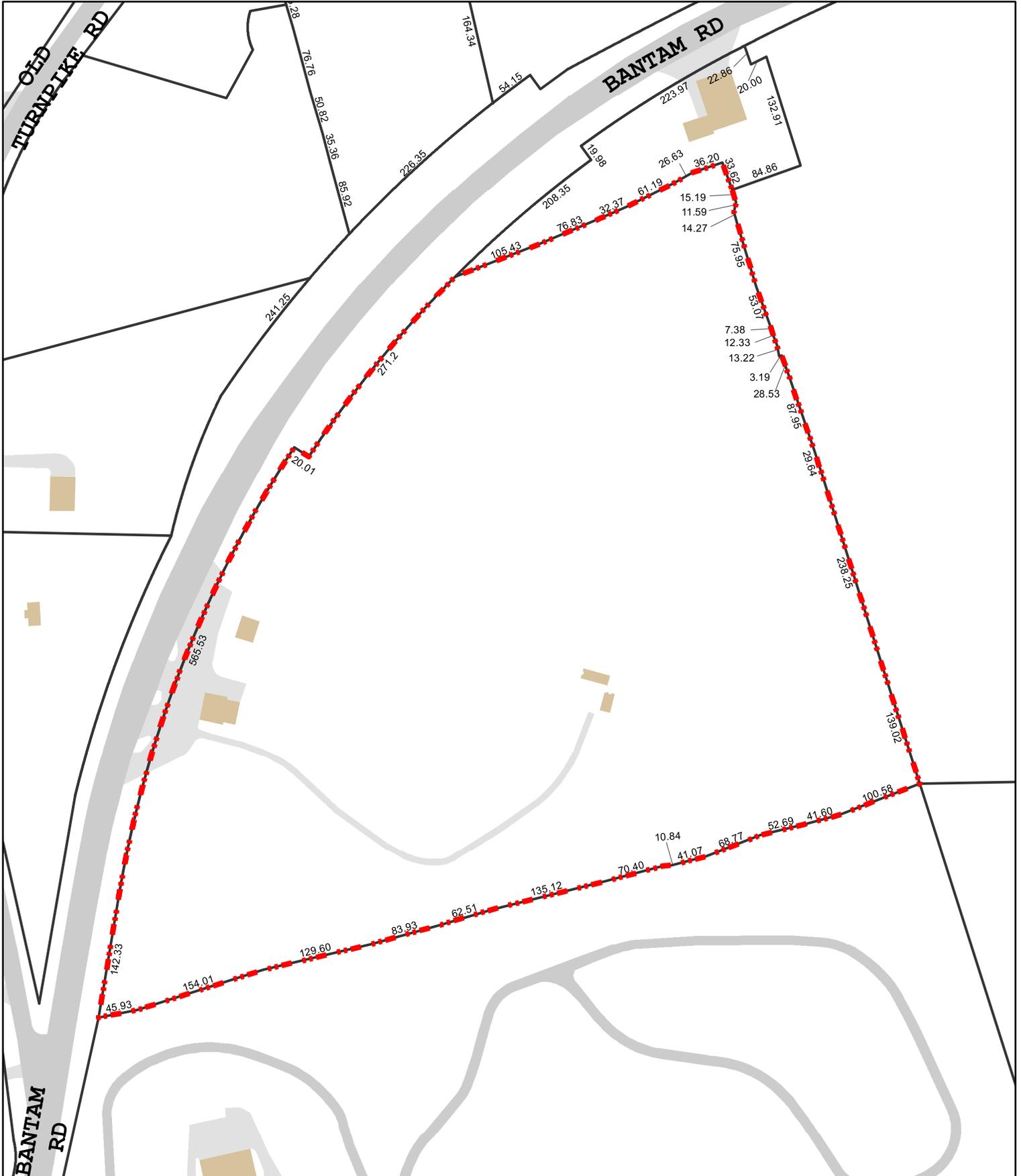
Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	480	240



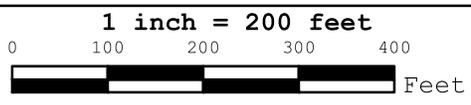
Town of Litchfield, CT: Parcel Map

MBL: 061-087-042

LOCATION: 1293 BANTAM RD



Disclaimer: This map is for informational purposes only. All information is subject to verification by any user. The Town of Litchfield and its mapping contractors assume no legal responsibility for the information contained herein.



Map Produced May 2021

Exhibit C

Construction Drawings

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

CTNH546A

1291 BANTAM ROAD
 BANTAM, CT 06750
 LTCHFIELD COUNTY

SITE NO.: CTNH546A

SITE TYPE: 149'± MONOPOLE

RF DESIGN GUIDELINE: 67D5D998E MUAC

SCOPE OF WORK

REMOVE:

- 3 ANTENNAS
- 6 RRUs
- 2 HYBRID CABLE
- ALL COAX CABLES
- 1 100A-2P BREAKER

INSTALL:

- 3 ANTENNAS
- 3 RRUs
- 1 6160 CABINET
- 1 B160 CABINET
- 1 CONCRETE PAD EXTENSION
- 1 SLACKBOX
- 2 HYBRID CABLES
- 1 150A-2P BREAKER
- 1 125A-2P BREAKER
- 1 25A-1P BREAKER

T-MOBILE NORTHEAST LLC

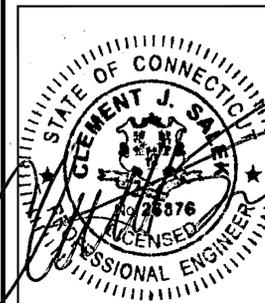
15 COMMERCE WAY, SUITE B
 NORTON, MA 02766
 (508) 286-2700



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



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



APPROVALS

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

T-MOBILE TECHNICIAN SITE SAFETY NOTES

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

GENERAL NOTES

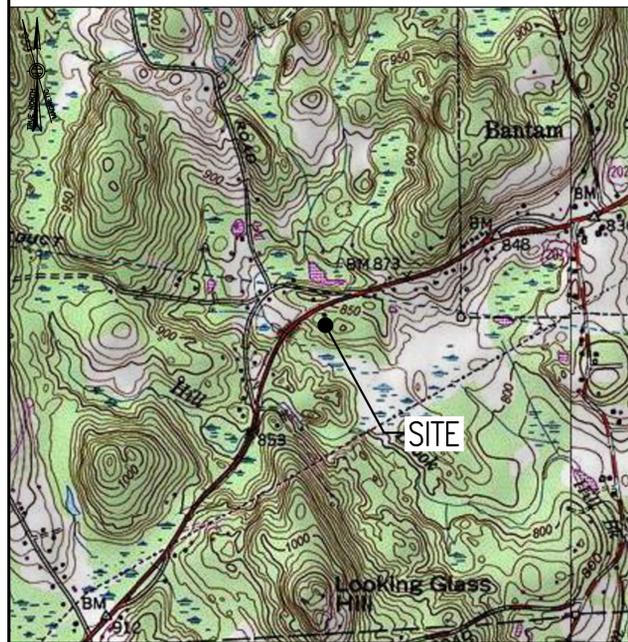
- THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY, MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS, AND LOCAL AND STATE JURISDICTIONAL CODES BEARING ON THE PERFORMANCE OF THE WORK. THE WORK PERFORMED ON THE PROJECT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

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



VICINITY MAP

SCALE: 1" = 1000'-0"



DIRECTIONS

TURN LEFT ONTO S WASHINGTON ST. TURN RIGHT ONTO MA-123 E. TURN LEFT TO MERGE ONTO I-495 NORTH TOWARD MANSFIELD/MARLBORO. MERGE ONTO I-495 NORTH. TAKE EXIT 58 TOWARD I-90 WEST. TAKE EXIT 78 TOWARD I-84. TAKE EXIT 30 TOWARD CT-4 WEST. TURN RIGHT ONTO CT-177 NORTH. SLIGHT LEFT ONTO CT-4 WEST. TURN LEFT ONTO CT-4 WEST. CONTINUE ONTO CT-118 WEST. TURN LEFT ONTO EAST STREET. SLIGHT RIGHT ONTO EAST STREET. CONTINUE ONTO WEST STREET. SITE WILL BE ON THE LEFT.

SHEET INDEX

SHT. NO.	DESCRIPTION	VER.
T-1	TITLE SHEET	0
GN-1	GENERAL NOTES	0
A-1	COMPOUND & EQUIPMENT PLAN	0
A-2	TOWER ELEVATIONS & ANTENNA PLAN	0
A-3	SITE DETAILS	0
E-1	ELECTRIC & GROUNDING DETAILS	0

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:	CTNH546A
SBA SITE NUMBER:	CT12215-A
SBA SITE NAME:	LITCHFIELD 3, CT
SITE ADDRESS:	1291 BANTAM ROAD BANTAM, CT 06750
PROPERTY OWNER:	ROBERT & JUDITH HAMMER 30 REVERE ROAD WASHINGTON, CT 06793
TOWER OWNER:	SBA TOWERS V, LLC 8501 CONGRESS AVENUE BOCA RATON, FL 33487 PHONE: 561-226-9523
COUNTY:	LITCHFIELD COUNTY
ZONING DISTRICT:	R-80 RESIDENTIAL
STRUCTURE TYPE:	MONOPOLE
STRUCTURE HEIGHT:	149'±
APPLICANT:	T-MOBILE NORTHEAST LLC 15 COMMERCE WAY, SUITE B NORTON, MA 02766
ARCHITECT:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
STRUCTURAL ENGINEER:	CHAPPELL ENGINEERING ASSOCIATES, LLC. 201 BOSTON POST ROAD WEST, SUITE 101 MARLBOROUGH, MA 01752
SITE CONTROL POINT:	LATITUDE: N.41.717180° N.41.43'01.85" LONGITUDE W.73.260930° W.73.15'39.35"

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).

CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
0	04/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTNH546A

SITE ADDRESS:
1291 BANTAM ROAD
BANTAM, CT 06750

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

GENERAL NOTES:

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
CONTRACTOR – T–MOBILE
SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
OWNER – T–MOBILE
OEM – ORIGINAL EQUIPMENT MANUFACTURER
- PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL, STATE AND FEDERAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER, T1 CABLES AND GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR AND/OR LANDLORD PRIOR TO CONSTRUCTION.
- THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY.
- SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION AND RETURN DISTURBED AREAS TO ORIGINAL CONDITIONS.
- THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- SUBCONTRACTOR SHALL NOTIFY CHAPPELL ENGINEERING ASSOCIATES, LLC 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS AND POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.
- CONSTRUCTION SHALL COMPLY WITH ALL T–MOBILE STANDARDS AND SPECIFICATIONS.
- SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- THE EXISTING CELL SITES ARE IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- IF THE EXISTING CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

SITE WORK GENERAL NOTES:

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

CONCRETE AND REINFORCING STEEL NOTES:

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (400PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE REQUIREMENTS
- REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
CONCRETE CAST AGAINST EARTH.....3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:
#6 AND LARGER2 IN.
#5 AND SMALLER & WWF1½ IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
SLAB AND WALL¾ IN.
BEAMS AND COLUMNS½ IN.
- A CHAMFER ¾" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO THE MANUFACTURERS RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY SIMPSON OR APPROVED EQUAL.
- CONCRETE CYLINDER TIES ARE NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;
(A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
(B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED.
FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
- AS AN ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.
- EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

STRUCTURAL STEEL NOTES:

- ALL STEEL WORK SHALL BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE DRAWINGS AND T–MOBILE SPECIFICATIONS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASTM–A–36 UNLESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL OF STEEL CONSTRUCTION".
- ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.
- BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS (¾") AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE GALVANIZED OR STAINLESS STEEL.
- NON–STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE ¾" DIA. ASTM A 307 BOLTS (GALV) UNLESS NOTED OTHERWISE.
- CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL.
- ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

SOIL COMPACTION NOTES FOR SLAB ON GRADE:

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

COMPACTION EQUIPMENT:

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

CONSTRUCTION NOTES:

- FIELD VERIFICATION:
SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, T–MOBILE ANTENNA PLATFORM LOCATION AND UTILITY TRENCHWORK.
- COORDINATION OF WORK:
SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR.
- CABLE LADDER RACK:
SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY AND/OR ICE BRIDGE, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

ELECTRICAL INSTALLATION NOTES:

- WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
- SUBCONTRACTOR SHALL MODIFY OR INSTALL CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLEING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO CONTRACTOR FOR APPROVAL.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC AND TELCORDIA.
- CABLES SHALL NOT BE ROUTED THROUGH LADDER–STYLE CABLE TRAY RUNGS.
- EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA, AND MATCH INSTALLATION REQUIREMENTS.
- POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC AND OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #2 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN–2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY HARGER (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO LESS THAN 75°C (90°C IF AVAILABLE).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND NEC.
- NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE.
- RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- CABINETS, BOXES AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANS/IEEE AND NEC.
- CABINETS, BOXES AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE.
- WIREWAYS SHALL BE EPOXY–COATED (GRAY) AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL, SHALL MEET OR EXCEED UL 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS.
- METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED, OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
- THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD AGAINST LIFE AND PROPERTY.
- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE LOCAL CODES.
- CONDUIT ROUTINGS ARE SCHEMATIC. SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

**T-MOBILE
NORTHEAST LLC**

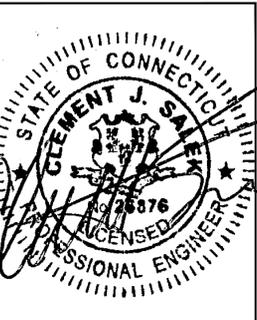
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
(508) 286–2700



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



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



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
0	04/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTNH546A

SITE ADDRESS:
1291 BANTAM ROAD
BANTAM, CT 06750

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-1

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

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

**T-MOBILE
NORTHEAST LLC**

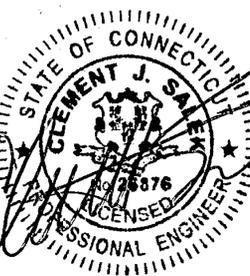
15 COMMERCE WAY, SUITE B
 NORTON, MA 02766
 (508) 286-2700



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



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



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS

REV.	DATE	DESCRIPTION	BY
0	04/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTNH546A

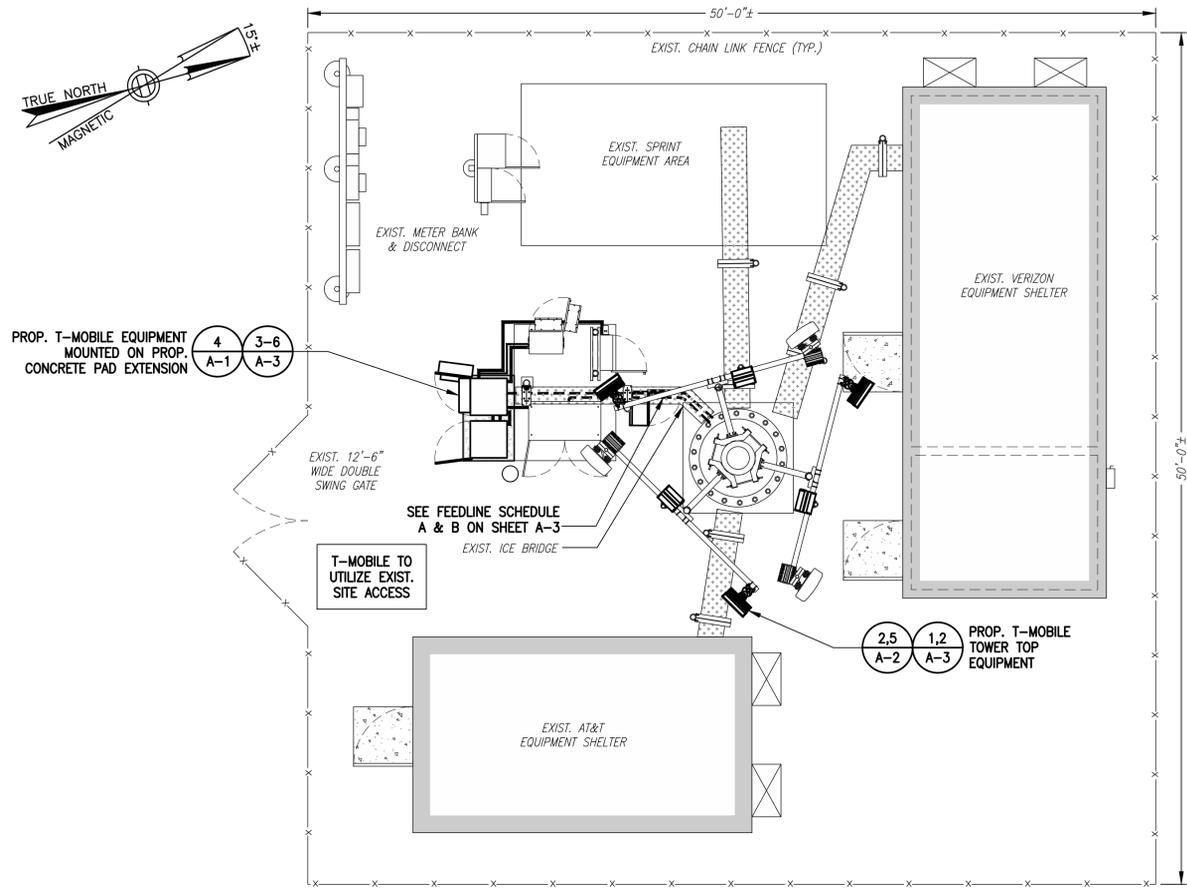
SITE ADDRESS:
 1291 BANTAM ROAD
 BANTAM, CT 06750

SHEET TITLE

COMPOUND &
EQUIPMENT PLANS

SHEET NUMBER

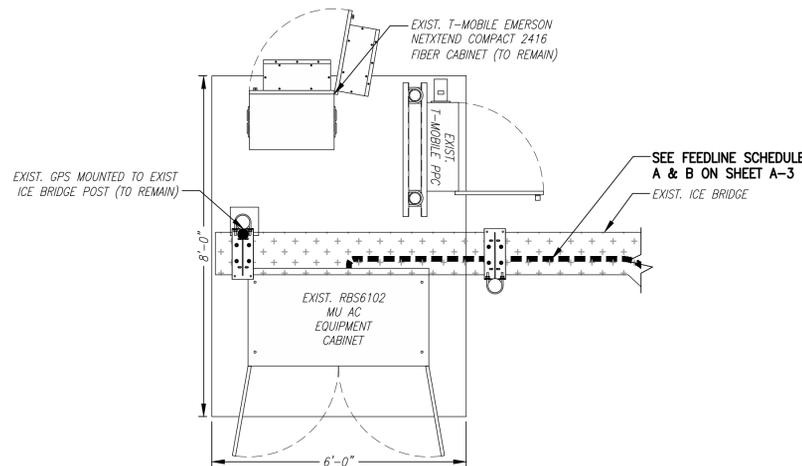
A-1



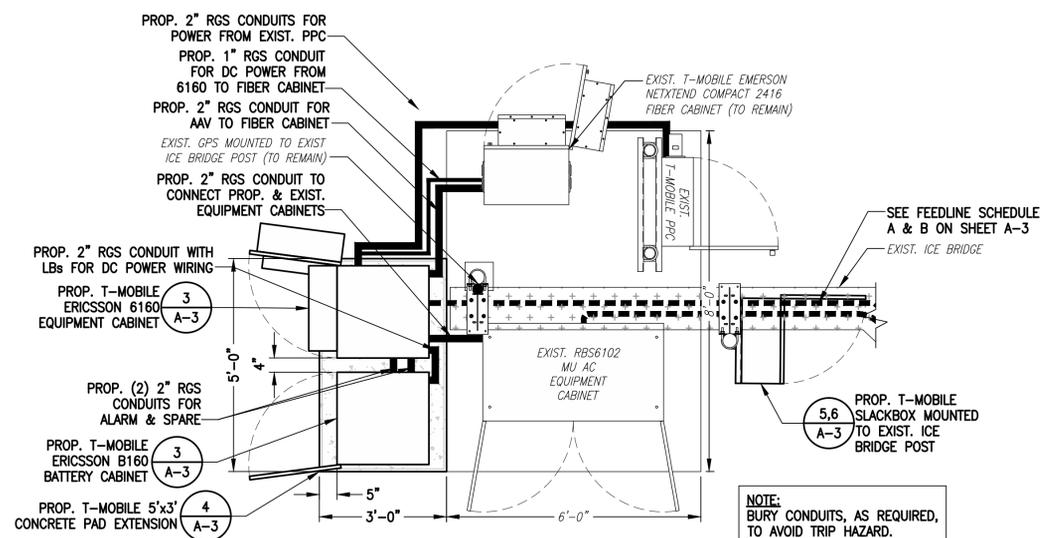
COMPOUND PLAN 1
 SCALE: 1" = 5'-0"
 0 5'-0" 10'-0" 15'-0"



EXISTING EQUIPMENT PHOTO 2
 SCALE: N.T.S.



EXISTING EQUIPMENT PLAN 3
 SCALE: 1/2" = 1'-0"
 0 2'-0" 4'-0" 6'-0"



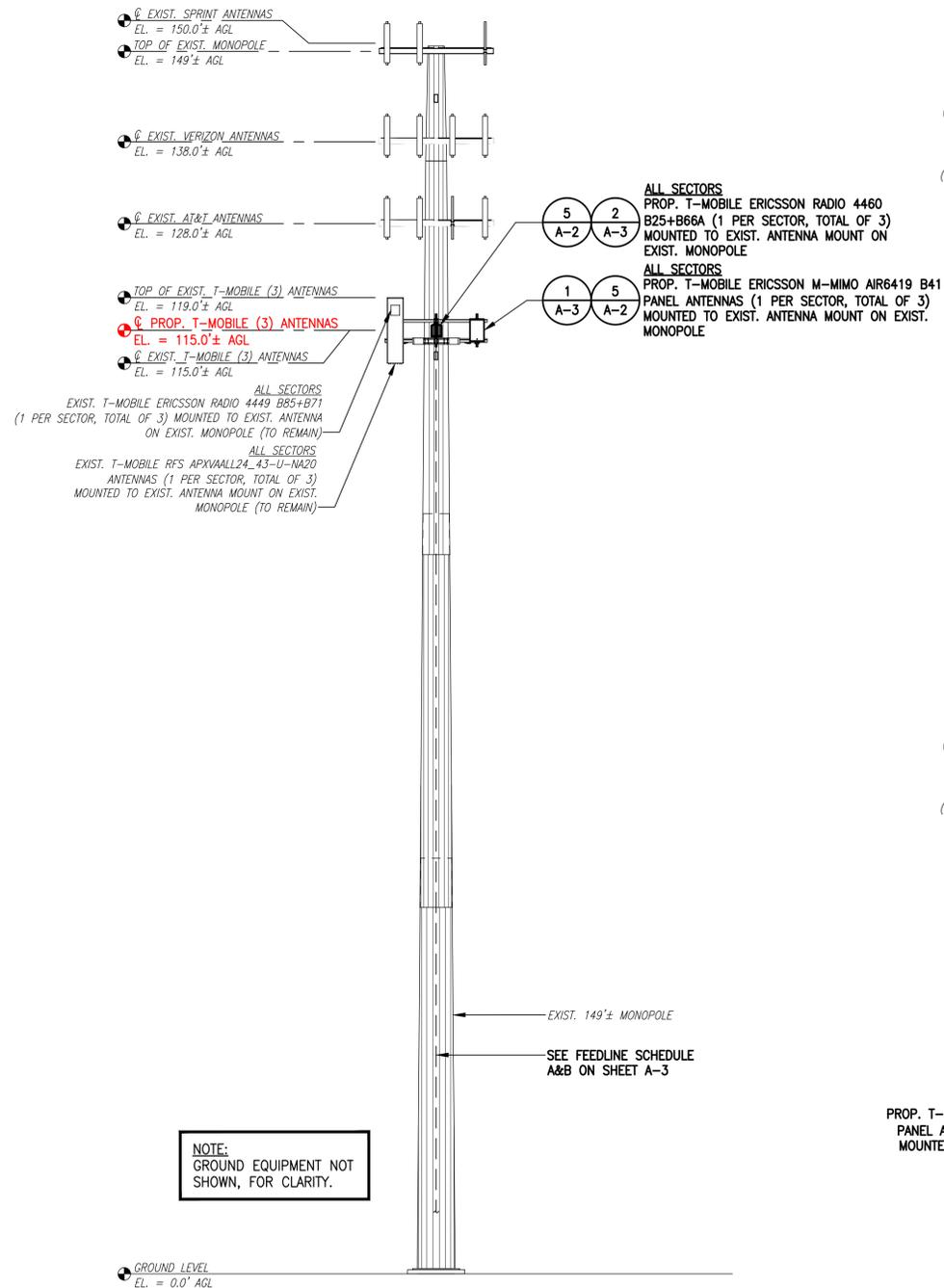
PROPOSED EQUIPMENT PLAN 4
 SCALE: 1/2" = 1'-0"
 0 2'-0" 4'-0" 6'-0"

NOTE:
 BURY CONDUITS, AS REQUIRED,
 TO AVOID TRIP HAZARD.

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

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

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.

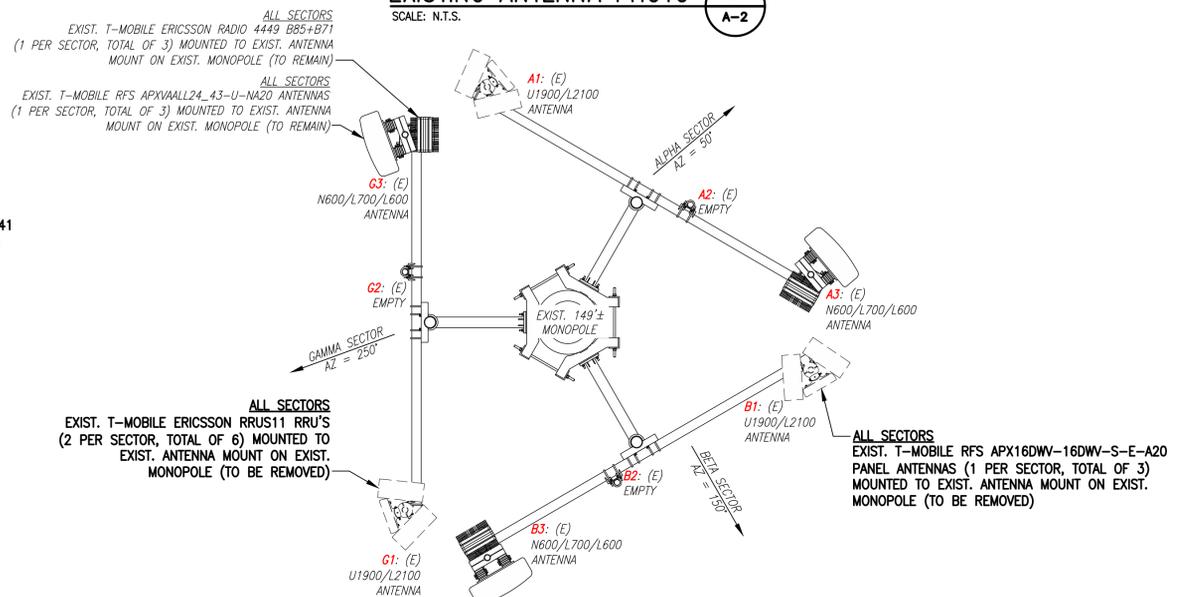


EXISTING TOWER PHOTO
 SCALE: N.T.S.

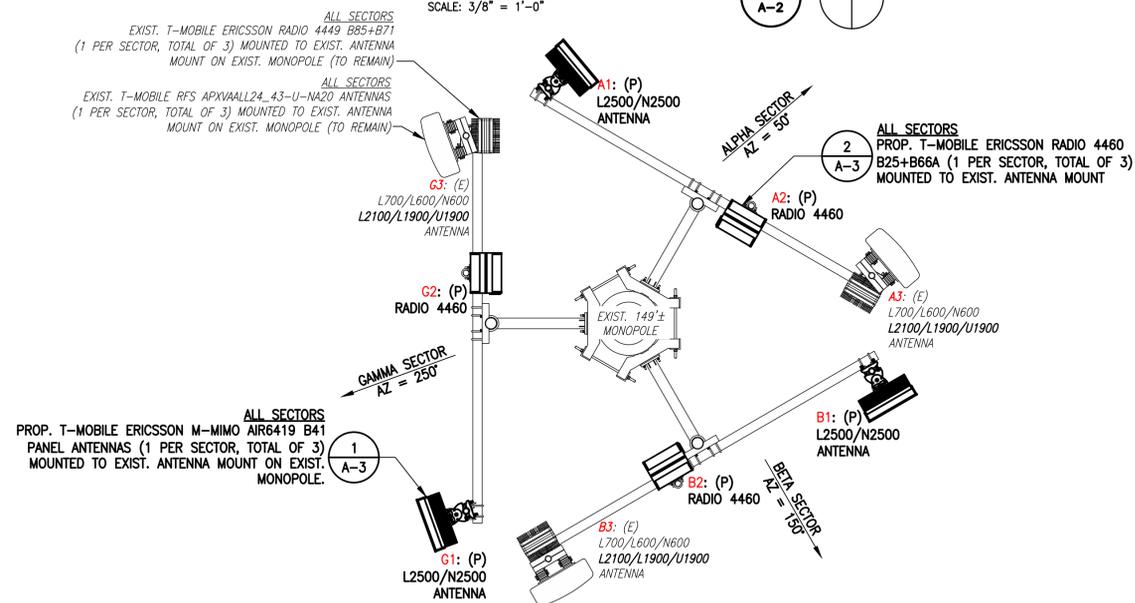
TOWER ELEVATION
 SCALE: 1" = 10'-0"



EXISTING ANTENNA PHOTO
 SCALE: N.T.S.



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



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

ANTENNA STATUS LEGEND:

EMPTY - EMPTY PIPE

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

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

T-MOBILE NORTHEAST LLC

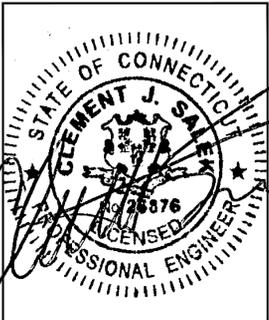
15 COMMERCE WAY, SUITE B
 NORTON, MA 02766
 (508) 286-2700



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



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



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
0	04/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTNH546A

SITE ADDRESS:
 1291 BANTAM ROAD
 BANTAM, CT 06750

SHEET TITLE
TOWER ELEVATIONS & ANTENNA PLANS

SHEET NUMBER
A-2

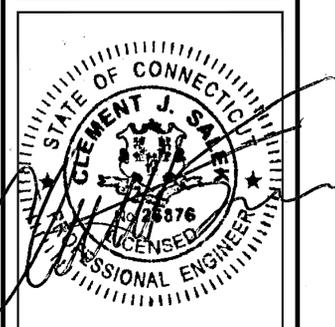
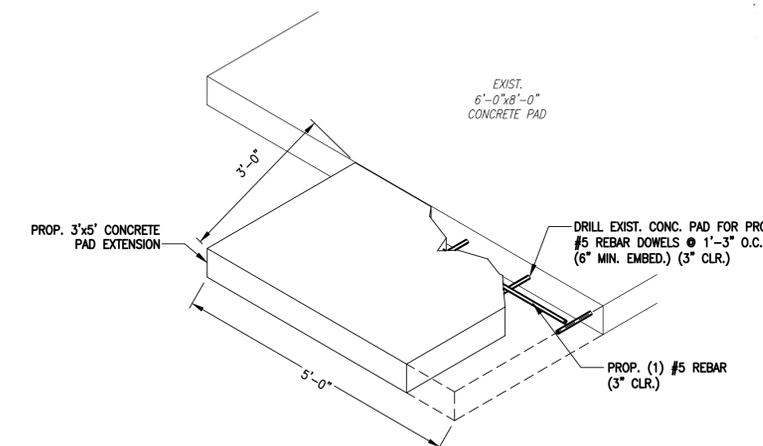
FINAL ANTENNA CONFIGURATION								
SECTOR	ANTENNA	RAD CENTER	AZIMUTH (TRUE NORTH)	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	BAND	TMA/RADIOS	SIGNAL CABLES
ALPHA	A1 ERICSSON M-MIMO AIR6419 B41	115± AGL	50°	0°	2'	L2500/N2500	-	(1) 1-5/8" (6x12) HCS FIBER CABLE (2) 2" (6x24) HCS FIBER CABLES
	A2 ERICSSON RADIO 4460 B25+B66A	-	-	-	-	-	-	
	A3 RFS APXVAALL24_43-U-NA20	115± AGL	50°	0°	2'	L700/L600/N600 L2100/L1900/U1900	RADIO 4449 B71+B85 RADIO 4460 B25+B66	
BETA	B1 ERICSSON M-MIMO AIR6419 B41	115± AGL	150°	0°	2'	L2500/N2500	-	
	B2 ERICSSON RADIO 4460 B25+B66A	-	-	-	-	-	-	
	B3 RFS APXVAALL24_43-U-NA20	115± AGL	150°	0°	2'	L700/L600/N600 L2100/L1900/U1900	RADIO 4449 B71+B85 RADIO 4460 B25+B66	
GAMMA	G1 ERICSSON M-MIMO AIR6419 B41	115± AGL	250°	0°	2'	L2500/N2500	-	
	G2 ERICSSON RADIO 4460 B25+B66A	-	-	-	-	-	-	
	G3 RFS APXVAALL24_43-U-NA20	115± AGL	250°	0°	2'	L700/L600/N600 L2100/L1900/U1900	RADIO 4449 B71+B85 RADIO 4460 B25+B66	

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

NOTE: RFDS REV4 - 03/10/22

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

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



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
0	04/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTNH546A

SITE ADDRESS:
1291 BANTAM ROAD
BANTAM, CT 06750

SHEET TITLE
SITE DETAILS

SHEET NUMBER
A-3



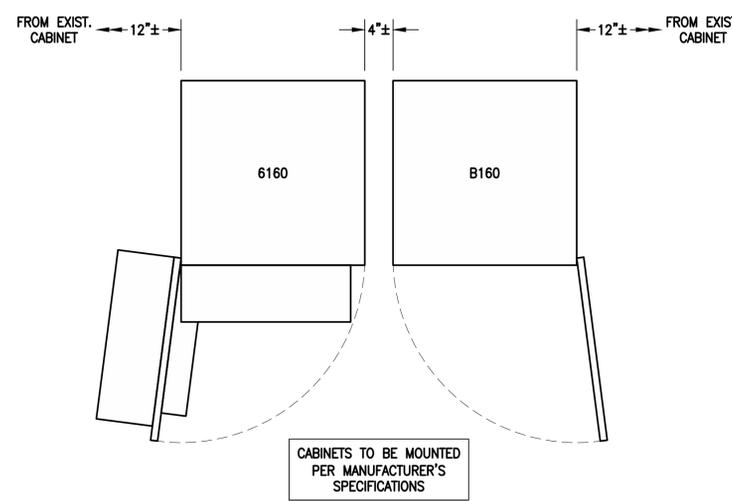
ERICSSON M-MIMO AIR6419 B41 ANTENNA
DIMENSIONS: 36.3"H x 20.9"W x 9.0"D
WEIGHT: 83.3 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

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



ERICSSON RADIO 4460 B25+B66
DIMENSIONS: 17.0"H x 15.1"W x 11.9"D
WEIGHT: 104.0 lbs
QUANTITY: 1 PER SECTOR, TOTAL OF 3

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



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

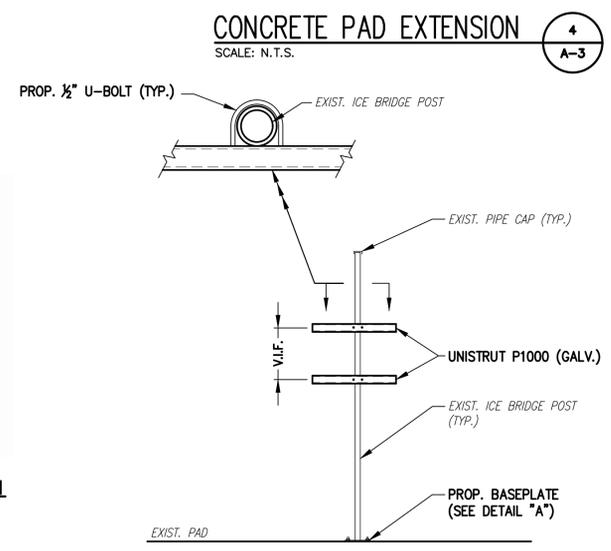
ERICSSON B160 BATTERY CABINET
DIMENSIONS: 63.25"H x 26.0"W x 26.0"D
QUANTITY: TOTAL OF 1

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

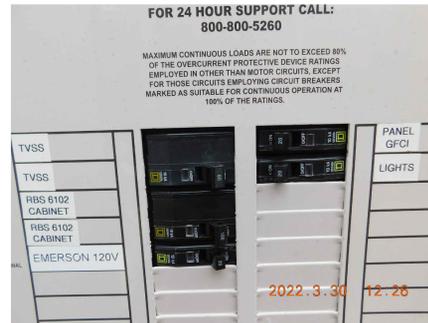


SLACKBOX - HOFFMAN 32FH91 NEMA 3R ENCLOSURE
DIMENSIONS: 24.0"H x 24.0"W x 12.0"D
QUANTITY: TOTAL OF 1

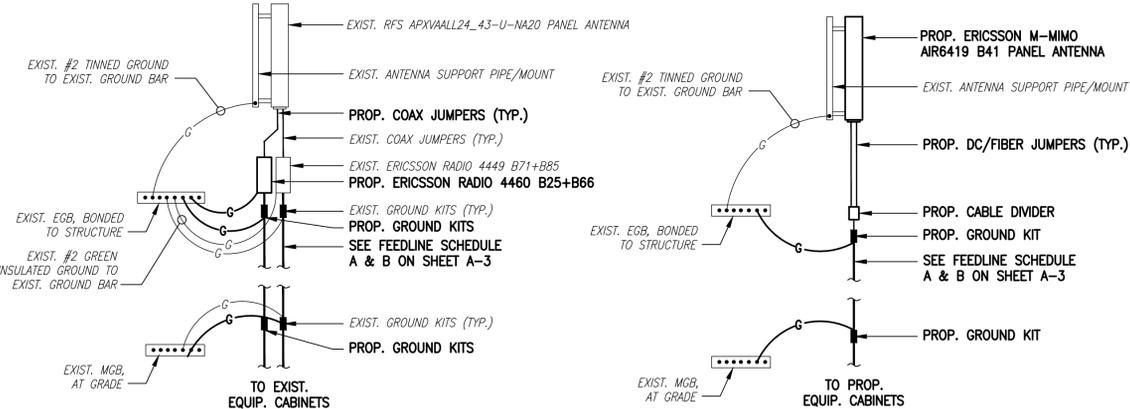
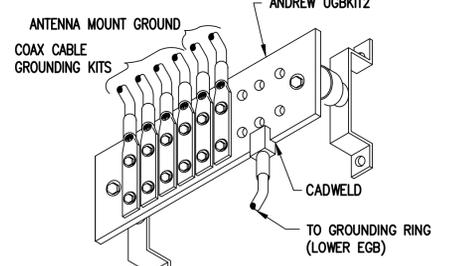
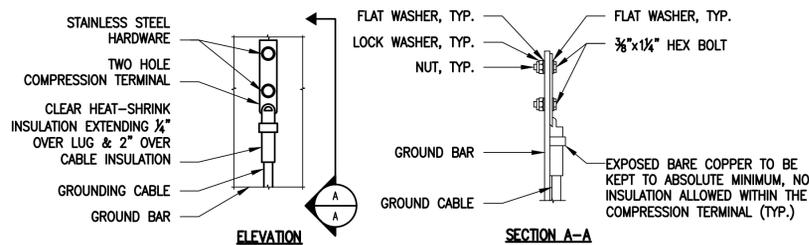
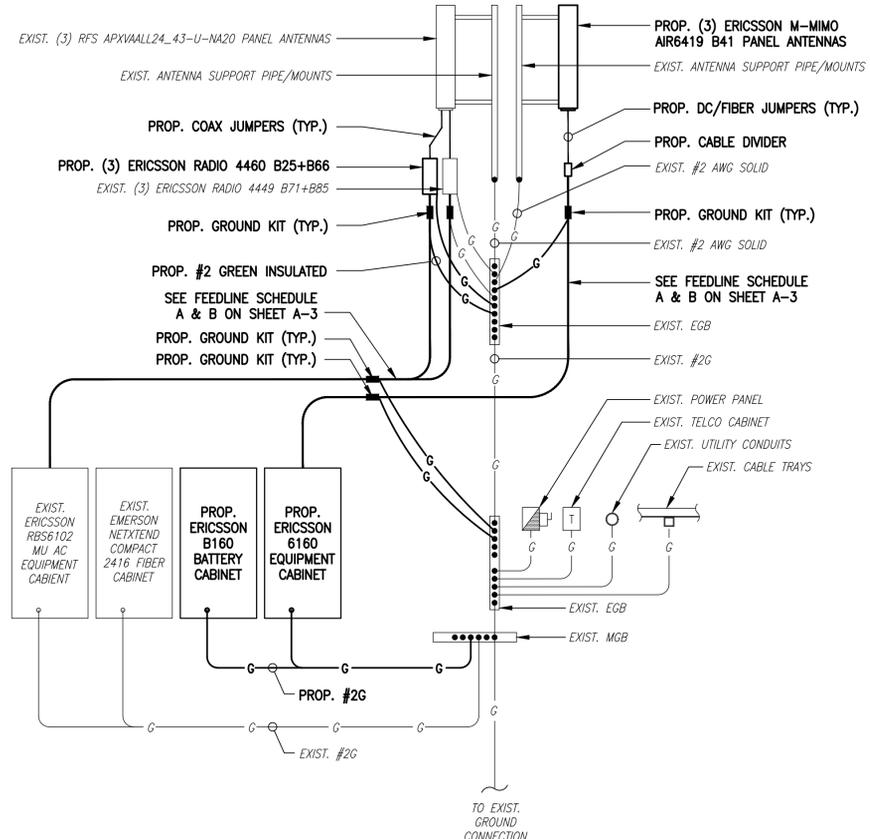
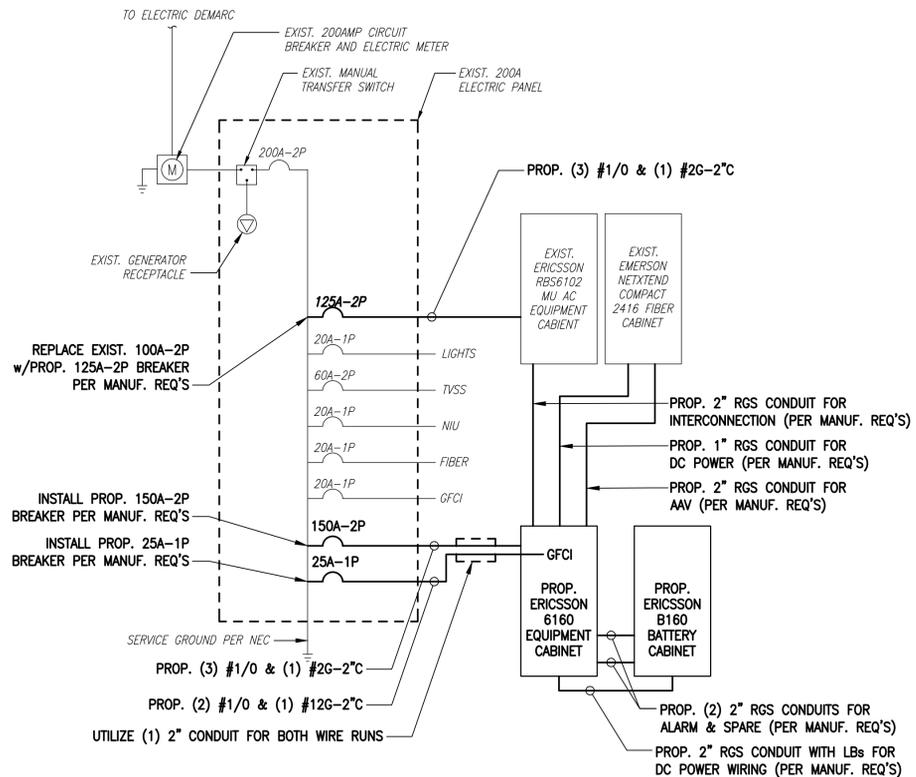
SSC DETAILS 5 A-3
SCALE: N.T.S.



H-FRAME DETAIL 6 A-3
SCALE: N.T.S.



EXISTING POWER PANEL PHOTOS 1
SCALE: NOT TO SCALE E-1



ELECTRICAL AND GROUNDING NOTES

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

T-MOBILE NORTHEAST LLC

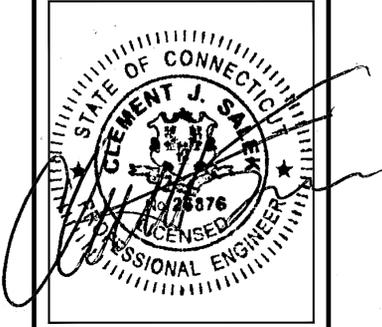
15 COMMERCE WAY, SUITE B
NORTON, MA 02766
(508) 286-2700



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



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



CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
0	04/11/22	ISSUED FOR REVIEW	JRV

SITE NUMBER:
CTNH546A

SITE ADDRESS:
1291 BANTAM ROAD
BANTAM, CT 06750

SHEET TITLE
**ELECTRIC & GROUNDING
DETAILS**

SHEET NUMBER
E-1

Exhibit D

Structural Analysis Report



Tower Engineering Solutions

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

Structural Analysis Report

Existing 149 ft EEI Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT12215-A

Customer Site Name: Litchfield 3, CT

Carrier Name: T-Mobile (App#: 194575, V#1)

Carrier Site ID / Name: CTNH546A / BayCom Litchfield

Site Location: 1291 Bantam Road

Bantam, Connecticut

Litchfield County

Latitude: 41.717183

Longitude: -73.260928



Analysis Result:

Max Structural Usage: 82.1% [Pass]

Max Foundation Usage: 64.0% [Pass]

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

Report Prepared By: Ikram Efaz



Tower Engineering Solutions

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

Structural Analysis Report

Existing 149 ft EEI Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT12215-A

Customer Site Name: Litchfield 3, CT

Carrier Name: T-Mobile (App#: 194575, V#1)

Carrier Site ID / Name: CTNH546A / BayCom Litchfield

Site Location: 1291 Bantam Road

Bantam, Connecticut

Litchfield County

Latitude: 41.717183

Longitude: -73.260928

Analysis Result:

Max Structural Usage: 82.1% [Pass]

Max Foundation Usage: 64.0% [Pass]

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

Report Prepared By: Ikram Efaz

Introduction

The purpose of this report is to summarize the analysis results on the 149 ft EEI Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Engineered Endeavors, Inc. (Job No. 12278) Structure and Foundation Design Calculations dated January 26, 2004
Foundation Drawing	Engineered Endeavors, Inc. (Job No. 12278) Design Calculations for a Spread Footer Foundation dated January 27, 2004
Geotechnical Report	Clarence Welti Associates, Inc. (Project Name: Sprint Site CT33XC204) Geotechnical Study dated January 24, 2004
Modification Drawings	FDH Engineering, Inc. (Project No. 12-06691E S3) Modification Drawings for a 149' Monopole dated February 6, 2013 TES, Project # 75424, dated 05/23/2019
Mount Analysis	TES, Project #128394, dated 04/28/2022

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 $V_{ult} = 120.0$ mph (3-Sec. Gust)/ Nominal Design Wind Speed $V_{asd} = 93.0$ mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 3/4" 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:	B
Structure Class:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_S = 0.187$, $S_1 = 0.065$

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

Existing Antennas, Mounts and Transmission Lines

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

Items	Elevation (ft.)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	150.0	3	RFS APXVSP18-C-A20 - Panel	Low Profile Platform	(4) 1-1/4" Fiber Outside	Sprint Nextel
2		3	RFS APXVTM14-C-I20 - Panel			
3		4	RFS ACU-A20-N RET			
4		3	Alcatel Lucent 1900 MHz RRH			
5		3	Alcatel Lucent 800 MHz RRH			
6		3	Alcatel Lucent TD-RRH8x20-25			
7		3	Alcatel Lucent 800 MHz Filter			
8	138.0	3	Antel LPA-80080/6CF - Panel	Low Profile Platform	(12) 1 5/8" (1) 1/2"	Verizon
9		3	Antel BXA-70063-6CF_2 - Panel			
10		3	Antel BXA-171085-12B_2 - Panel			
11		1	GPS Receiver			
12	128.0	6	RFS FD9R6004/2C-3L Diplexer	Low Profile Platform w/ (2) Commscope VSR-MS-B Reinforcement Kit (24) Commscope XP-2020 Crossover Plate	(12) 1 5/8" * (1) 3" Conduit (2) 2" Conduit (2) 7/16" Fiber (6) 3/4" DC	AT&T
13		3	Powerwave 7770.00 - Panel			
14		6	Kathrein 80010965 - Panel			
15		12	Powerwave LGP 21401 TMA			
16		3	Ericsson RRUS 4478 B14 RRU			
17		3	Ericsson 4449 B5/B12 RRU			
18		3	Ericsson 8843 B2/B6A RRU			
19		1	Raycap DC6-48-60-18-8F			
20		1	Raycap DC6-48-60-18-8C			
21		1	Raycap DC6-48-60-0-8C-EV			
22	1	Commscope ABT-DF-DM-ADBH				
-	115.0	3	RFS APX16DWV-16DWVS-E-A20 - Panel	(3) T-Arm (Site Pro #RMV12-3XX) W/ Rotatable T-Arms	(3) 1 5/8" Fiber	T-Mobile
-		3	RFS APXVAARR24_43-U-NA20 - Panel			
-		3	Ericsson RRUS 11 (Band 4)			
-		3	Ericsson RRUS 11 B2			
-		3	Ericsson Radio 4449 B71+B12			
28	73.0	1	GPS Receiver	-	(1) 1/2"	Sprint Nextel
-	50.0	1	Symmetricom 58532A	-	(1) 1/2"	T-Mobile

*AT&T coax inside the pole. (1) 3" conduit housing (1) 7/16" fiber and (2) 3/4" DC
(1) 2" conduit housing (1) 7/16" fiber and (2) 3/4" DC
(1) 2" conduit housing (2) 3/4" DC

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
23	115.0	3	Ericsson- AIR6419 B41- Panel	(3) Sitepro RMV12-3XX- (T-arms)	(1) 1-5/8" Fiber (2) 1.9" Fiber	T-Mobile
24		3	RFS- APXVAALL24_43-U-NA20- Panel			
25		3	Ericsson- RRUS 11 (Band 4)- RRUs			
26		3	Ericsson- 4460 B25 + B66- RRU's			
27		3	Ericsson- 4449 B71 + B85- RRUs			
29	50.0	1	Symmetricom- 58532A- GPS	-	(1) 1/2"	

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

Analysis Results

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

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	82.1%	67.5%	68.7%
Pass/Fail	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	2409.6	21.1	59.7

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

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.6850 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

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

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC**. Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.
2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.
3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.
4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.
5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.
6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

Usage Diagram - Max Ratio 82.13% at 0.0ft

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)

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

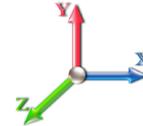
5/3/2022



Page: 1

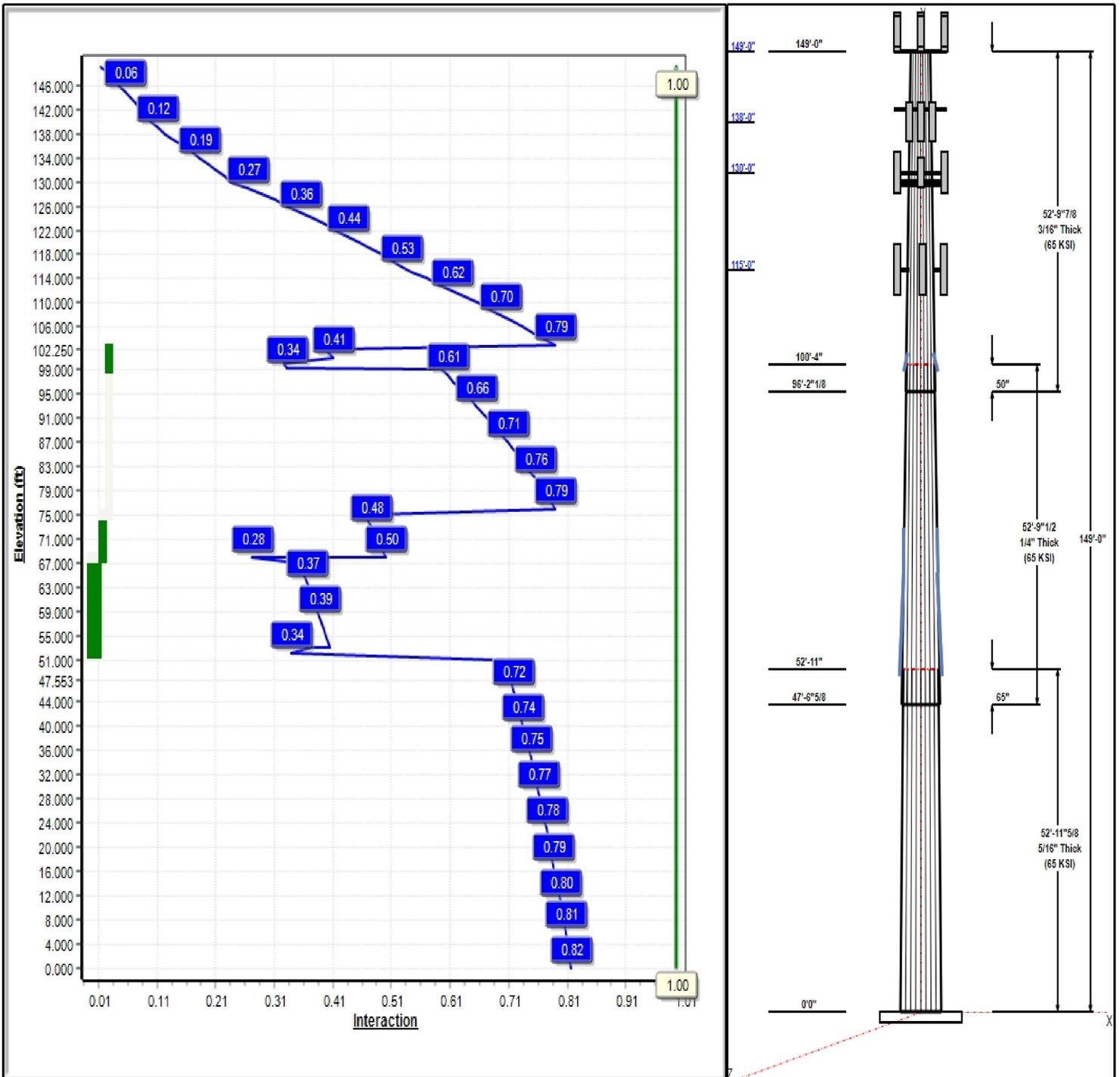
Dead Load Factor: 1.20
 Wind Load Factor: 1.60

Load Case : 1.2D + 1.6W 93 mph Wind



Iterations: 35

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



Structure: CT12215-A-SBA

Type: Tapered
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.20721

5/3/2022

Page: 2



Shaft Properties

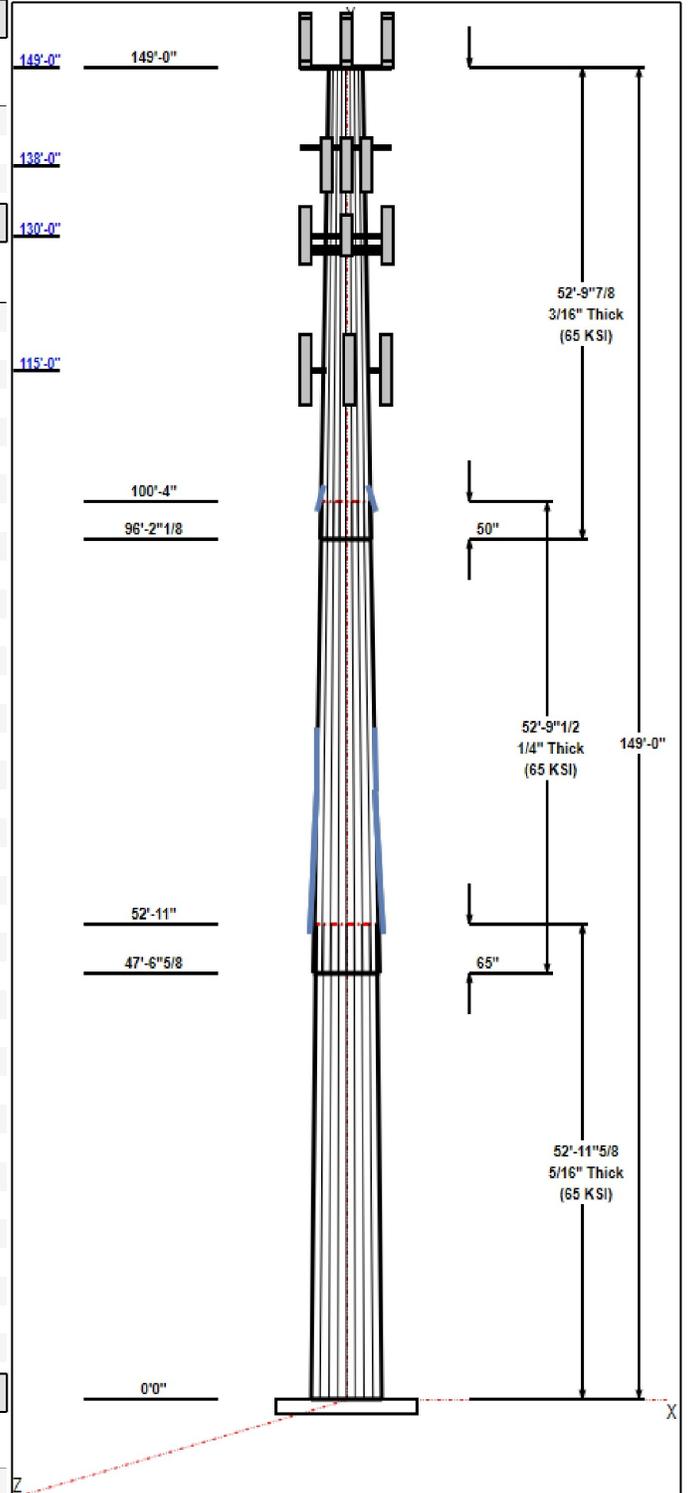
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	52.97	37.02	48.00	0.313		0.20721	65
2	52.79	27.71	38.65	0.250	Slip	0.20721	65
3	52.82	18.00	28.95	0.188	Slip	0.20721	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
149.00	152.00	3	APXVSP18-C-A20	Sprint Nextel
149.00	152.00	3	APXVTM14-C-I20	Sprint Nextel
149.00	152.00	3	1900MHz	Sprint Nextel
149.00	152.00	3	800MHz	Sprint Nextel
149.00	152.00	3	TD-RRH8x20-25	Sprint Nextel
149.00	152.00	3	800MHz Filter	Sprint Nextel
149.00	152.00	4	ACU-A20-N	Sprint Nextel
149.00	149.00	1	Low Profile Platform	Sprint Nextel
140.00	140.00	1	Low Profile	Verizon
138.00	138.00	3	LPA-80080/6CF	Verizon
138.00	138.00	3	BXA-70063-6CF_2	Verizon
138.00	138.00	3	BXA-171085-12B_2	Verizon
138.00	138.00	1	GPS Receiver	Verizon
138.00	138.00	6	FD9R6004/2C-3L	Verizon
130.00	130.00	3	RRUS 4478 B14	AT&T
130.00	130.00	3	4449 B5/B12	AT&T
130.00	130.00	3	8843 B2/B66A	AT&T
130.00	130.00	1	DC6-48-60-18-8C	AT&T
130.00	130.00	1	DC6-48-60-0-8C-EV	AT&T
130.00	130.00	2	VSRDual-TS-B-HD	AT&T
130.00	130.00	24	XP-2020	AT&T
130.00	130.00	1	(3) 12.5' - 2" Horizontal	AT&T
130.00	130.00	3	7770.00	AT&T
130.00	130.00	12	LGP 21401	AT&T
130.00	130.00	1	DC6-48-60-18-8F	AT&T
130.00	130.00	1	ABT-DF-DM-ADBH	AT&T
130.00	130.00	1	Low Profile Platform	AT&T
130.00	130.00	6	80010965	AT&T
115.00	115.00	1	(3) Stabilizer Kit (12' FW)	T-Mobile
115.00	115.00	3	T-Arm	T-Mobile
115.00	115.00	3	AIR6449 B41	T-Mobile
115.00	115.00	3	APXVAALL24_43-U-NA20	T-Mobile
115.00	115.00	3	RRUS 11	T-Mobile
115.00	115.00	3	4460 Radio	T-Mobile
115.00	115.00	3	4449 B71 + B85	T-Mobile
73.00	73.00	1	GPS Receiver	Sprint
50.00	50.00	1	58532A	T-Mobile

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	149.00	Inside	1-1/4" Fiber	Sprint
0.00	140.00	Inside	1 5/8" Coax	Verizon
0.00	140.00	Inside	1 5/8" Hybrid	Verizon
0.00	140.00	Inside	1/2" Coax	Verizon
0.00	130.00	Inside	1 5/8" Coax	AT&T
0.00	130.00	Inside	2" Conduit	AT&T



Structure: CT12215-A-SBA

Type: Tapered
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 18 Sided
Taper: 0.20721

5/3/2022

Page: 3



0.00	130.00	Inside	3" Conduit	AT&T
0.00	130.00	Inside	3/4" DC	AT&T
0.00	130.00	Inside	7/16" Fiber	AT&T
96.00	116.00	Outside	1" Reinforcing plate	
0.00	115.00	Outside	1 5/8" Fiber	T-Mobile
0.00	115.00	Outside	1.9" Fiber	T-Mobile
97.00	105.00	Outside	1.25" Reinforcing plate	
50.00	77.00	Outside	1.25" Reinforcing plate	
0.00	73.00	Inside	1/2" Coax	Sprint
50.00	70.00	Outside	1" Reinforcing plate	
0.00	50.00	Outside	1/2" Coax	T-Mobile

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
12	2.25" 18J	75.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
1.7500	63.0	60.0	Round

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 93 mph Wind	2409.6	21.1	36.1
0.9D + 1.6W 93 mph Wind	2368.1	21.1	27.1
1.2D + 1.0Di + 1.0Wi 50 mph Wind	755.6	6.5	59.7
1.2D + 1.0E	121.0	1.0	36.1
0.9D + 1.0E	118.8	1.0	27.1
1.0D + 1.0W 60 mph Wind	620.6	5.5	30.1

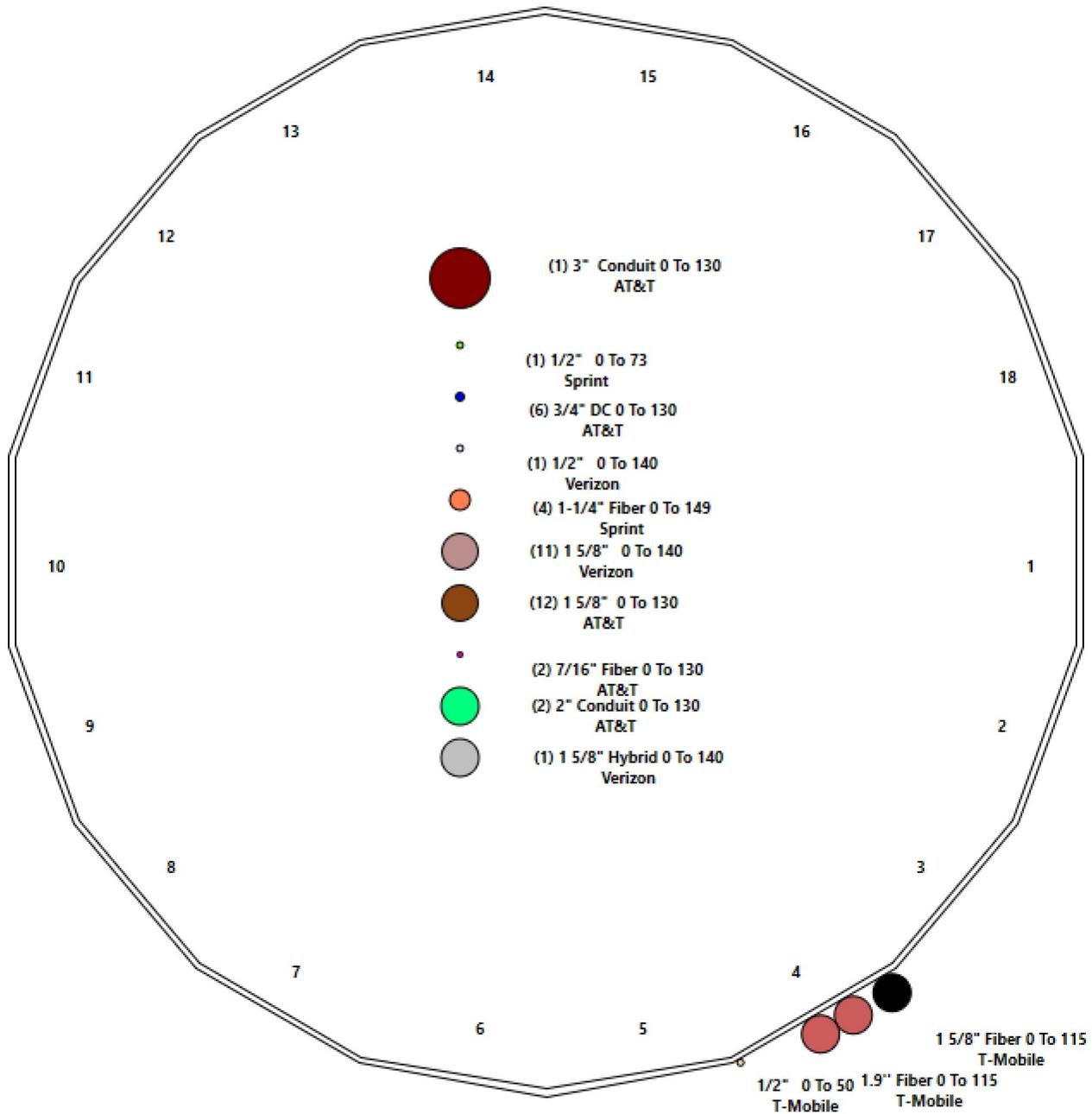
Structure: CT12215-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Litchfield 3, CT
Height: 149.00 (ft)

5/3/2022



Page: 4



Shaft Properties

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
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	52.970	0.3125	65		0.00	7,544
2	18	52.790	0.2500	65	Slip	65.00	4,693
3	18	52.823	0.1875	65	Slip	50.00	2,491
Total Shaft Weight:							14,728

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	48.00	0.00	47.30	13589.64	25.67	153.60	37.02	52.97	36.41	6200.05	19.48	118.4	0.207215
2	38.65	47.55	30.47	5674.80	25.85	154.58	27.71	100.34	21.79	2075.21	18.13	110.8	0.207215
3	28.95	96.18	17.11	1788.27	25.81	154.38	18.00	149.00	10.60	424.93	15.52	96.00	0.207215

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Fu (ksi)	Offset (in)	Intermediate Connectors			Termination Connectors		
							Description	Spacing (in)	Description	Spacing (in)	Lower Qty	Upper Qty
52.00	68.00	3	PLT 4.5"x 1-1/4" (1.25"ho)	65	80	0.00	AJM20&sleeve	24.00	AJM20&sleeve	3.00	8	8
52.00	68.00	3	LNP LP6X100-G-20TT	65	80	0.00	5/8" Hollo Bolt	24.00	5/8" Hollo Bolt	3.00	8	8
67.92	75.00	3	PLT 4.5"x 1-1/4" (1.25"ho)	65	80	0.00	AJM20&sleeve	24.00	AJM20&sleeve	3.00	8	8
99.25	102.2	3	PLT 4x1.25 (1.25 Hole)	65	80	0.00	AJM20&sleeve	22.00	AJM20&sleeve	3.00	9	9

Load Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 6

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	149.00	APXVSP18-C-A20	3	57.00	8.02	0.83	229.74	10.812	0.83	0.00	3.00
2	149.00	APXVTM14-C-I20	3	56.00	6.34	0.79	216.28	7.453	0.79	0.00	3.00
3	149.00	1900MHZ	3	60.00	2.77	0.50	143.38	4.038	0.50	0.00	3.00
4	149.00	800MHZ	3	59.50	2.64	0.50	137.45	3.797	0.50	0.00	3.00
5	149.00	TD-RRH8x20-25	3	70.00	4.05	0.50	180.37	4.863	0.50	0.00	3.00
6	149.00	800MHZ Filter	3	8.80	0.78	0.50	26.43	1.426	0.50	0.00	3.00
7	149.00	ACU-A20-N	4	1.00	0.14	0.50	5.29	0.436	0.50	0.00	3.00
8	149.00	Low Profile Platform	1	1200.00	25.00	1.00	2246.43	45.929	1.00	0.00	0.00
9	140.00	Low Profile Platform-Round	1	1500.00	22.00	1.00	2799.91	39.540	1.00	0.00	0.00
10	138.00	LPA-80080/6CF	3	21.00	4.33	1.70	214.01	5.500	1.70	0.00	0.00
11	138.00	BXA-70063-6CF_2	3	17.00	7.57	0.73	189.43	8.819	0.73	0.00	0.00
12	138.00	BXA-171085-12B_2	3	15.00	4.74	0.84	109.14	7.070	0.84	0.00	0.00
13	138.00	GPS Receiver	1	10.00	1.00	1.00	39.08	1.706	1.00	0.00	0.00
14	138.00	FD9R6004/2C-3L	6	3.10	0.36	0.50	11.06	0.800	0.50	0.00	0.00
15	130.00	RRUS 4478 B14	3	59.40	1.65	0.50	100.28	2.161	0.50	0.00	0.00
16	130.00	4449 B5/B12	3	71.00	1.97	0.50	123.62	2.510	0.50	0.00	0.00
17	130.00	8843 B2/B66A	3	72.00	1.64	0.50	118.18	2.130	0.50	0.00	0.00
18	130.00	DC6-48-60-18-8C	1	20.00	1.26	1.00	72.01	1.910	1.00	0.00	0.00
19	130.00	DC6-48-60-0-8C-EV	1	16.00	4.78	1.00	137.98	5.652	1.00	0.00	0.00
20	130.00	VSRDual-TS-B-HD	2	148.40	4.10	0.75	291.37	9.179	0.75	0.00	0.00
21	130.00	XP-2020	24	10.00	0.69	0.75	18.83	1.189	0.75	0.00	0.00
22	130.00	(3) 12.5' - 2" Horizontal Pipe	1	137.25	5.94	0.75	269.48	13.292	0.75	0.00	0.00
23	130.00	7770.00	3	35.00	5.50	0.73	167.82	6.549	0.73	0.00	0.00
24	130.00	LGP 21401	12	17.50	0.00	0.50	45.16	1.226	0.50	0.00	0.00
25	130.00	DC6-48-60-18-8F	1	31.80	0.92	1.00	92.75	1.352	1.00	0.00	0.00
26	130.00	ABT-DF-DM-ADBH	1	1.10	0.05	1.00	3.30	0.240	1.00	0.00	0.00
27	130.00	Low Profile Platform	1	1200.00	25.00	1.00	2232.25	45.645	1.00	0.00	0.00
28	130.00	80010965	6	108.60	13.81	0.71	401.89	15.367	0.71	0.00	0.00
29	115.00	(3) Stabilizer Kit (12' FW)	1	180.00	6.10	1.00	400.25	12.320	1.00	0.00	0.00
30	115.00	T-Arm	3	350.00	8.00	0.75	587.92	14.798	0.75	0.00	0.00
31	115.00	AIR6449 B41	3	103.00	5.65	0.71	236.52	6.576	0.71	0.00	0.00
32	115.00	APXVAALL24_43-U-NA20	3	122.80	20.24	0.73	537.92	22.088	0.73	0.00	0.00
33	115.00	RRUS 11	3	50.70	2.52	0.50	137.04	3.153	0.50	0.00	0.00
34	115.00	4460 Radio	3	109.00	2.85	0.50	179.02	3.507	0.50	0.00	0.00
35	115.00	4449 B71 + B85	3	73.20	1.97	0.50	129.43	2.524	0.50	0.00	0.00
36	73.00	GPS Receiver	1	10.00	1.00	1.00	37.28	1.663	1.00	0.00	0.00
37	50.00	58532A	1	0.40	0.22	1.00	7.57	0.552	1.00	0.00	0.00
Totals:			123	9,958.75			23,705.79				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	149.00	(4) 1-1/4" Fiber	0.00	Inside
0.00	140.00	(11) 1 5/8" Coax	0.00	Inside
0.00	140.00	(1) 1 5/8" Hybrid	0.00	Inside
0.00	140.00	(1) 1/2" Coax	0.00	Inside

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
0.00	130.00	(12) 1 5/8" Coax		0.00							
0.00	130.00	(2) 2" Conduit		0.00							
0.00	130.00	(1) 3" Conduit		0.00							
0.00	130.00	(6) 3/4" DC		0.00							
0.00	130.00	(2) 7/16" Fiber		0.00							
96.00	116.00	(3) 1" Reinforcing plate		1.00							
0.00	115.00	(1) 1 5/8" Fiber		2.00							
0.00	115.00	(2) 1.9" Fiber		0.00							
97.00	105.00	(3) 1.25" Reinforcing plate		1.25							
50.00	77.00	(3) 1.25" Reinforcing plate		1.25							
0.00	73.00	(1) 1/2" Coax		0.00							
50.00	70.00	(3) 1" Reinforcing plate		1.00							
0.00	50.00	(1) 1/2" Coax		0.65							

Shaft Section Properties

Structure: CT12215-A-SBA

Code: TIA-222-G

5/3/2022

Site Name: Litchfield 3, CT

Exposure: B

Height: 149.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: B - Competent Rock

Gh: 1.1

Topography: 1

Struct Class: II

Page: 8



Increment Length: 1 (ft)

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
0.00		0.3125	48.000	47.298	13589.6	25.67	153.60	65	71	0.0				
1.00		0.3125	47.793	47.093	13413.3	25.56	152.94	65	71	160.6				
2.00		0.3125	47.586	46.887	13238.4	25.44	152.27	65	71	159.9				
3.00		0.3125	47.378	46.682	13065.1	25.32	151.61	65	72	159.2				
4.00		0.3125	47.171	46.476	12893.3	25.21	150.95	65	72	158.5				
5.00		0.3125	46.964	46.271	12723.0	25.09	150.28	65	72	157.8				
6.00		0.3125	46.757	46.065	12554.2	24.97	149.62	65	72	157.1				
7.00		0.3125	46.549	45.860	12386.9	24.85	148.96	65	72	156.4				
8.00		0.3125	46.342	45.654	12221.1	24.74	148.30	65	72	155.7				
9.00		0.3125	46.135	45.449	12056.8	24.62	147.63	65	72	155.0				
10.00		0.3125	45.928	45.243	11894.0	24.50	146.97	65	73	154.3				
11.00		0.3125	45.721	45.038	11732.6	24.39	146.31	65	73	153.6				
12.00		0.3125	45.513	44.832	11572.7	24.27	145.64	65	73	152.9				
13.00		0.3125	45.306	44.627	11414.3	24.15	144.98	65	73	152.2				
14.00		0.3125	45.099	44.421	11257.3	24.04	144.32	65	73	151.5				
15.00		0.3125	44.892	44.215	11101.8	23.92	143.65	65	73	150.8				
16.00		0.3125	44.685	44.010	10947.7	23.80	142.99	65	73	150.1				
17.00		0.3125	44.477	43.804	10795.0	23.69	142.33	65	74	149.4				
18.00		0.3125	44.270	43.599	10643.8	23.57	141.66	65	74	148.7				
19.00		0.3125	44.063	43.393	10494.0	23.45	141.00	65	74	148.0				
20.00		0.3125	43.856	43.188	10345.6	23.33	140.34	65	74	147.3				
21.00		0.3125	43.648	42.982	10198.6	23.22	139.68	65	74	146.6				
22.00		0.3125	43.441	42.777	10053.0	23.10	139.01	65	74	145.9				
23.00		0.3125	43.234	42.571	9908.8	22.98	138.35	65	74	145.2				
24.00		0.3125	43.027	42.366	9766.0	22.87	137.69	65	75	144.5				
25.00		0.3125	42.820	42.160	9624.5	22.75	137.02	65	75	143.8				
26.00		0.3125	42.612	41.955	9484.5	22.63	136.36	65	75	143.1				
27.00		0.3125	42.405	41.749	9345.8	22.52	135.70	65	75	142.4				
28.00		0.3125	42.198	41.544	9208.4	22.40	135.03	65	75	141.7				
29.00		0.3125	41.991	41.338	9072.4	22.28	134.37	65	75	141.0				
30.00		0.3125	41.784	41.133	8937.8	22.17	133.71	65	75	140.3				
31.00		0.3125	41.576	40.927	8804.5	22.05	133.04	65	75	139.6				
32.00		0.3125	41.369	40.722	8672.5	21.93	132.38	65	76	138.9				
33.00		0.3125	41.162	40.516	8541.8	21.81	131.72	65	76	138.2				
34.00		0.3125	40.955	40.311	8412.5	21.70	131.06	65	76	137.5				
35.00		0.3125	40.747	40.105	8284.5	21.58	130.39	65	76	136.8				
36.00		0.3125	40.540	39.899	8157.8	21.46	129.73	65	76	136.1				
37.00		0.3125	40.333	39.694	8032.4	21.35	129.07	65	76	135.4				
38.00		0.3125	40.126	39.488	7908.2	21.23	128.40	65	76	134.7				
39.00		0.3125	39.919	39.283	7785.4	21.11	127.74	65	77	134.0				
40.00		0.3125	39.711	39.077	7663.9	21.00	127.08	65	77	133.3				
41.00		0.3125	39.504	38.872	7543.6	20.88	126.41	65	77	132.6				
42.00		0.3125	39.297	38.666	7424.5	20.76	125.75	65	77	131.9				
43.00		0.3125	39.090	38.461	7306.8	20.65	125.09	65	77	131.2				
44.00		0.3125	38.883	38.255	7190.3	20.53	124.42	65	77	130.5				
45.00		0.3125	38.675	38.050	7075.0	20.41	123.76	65	77	129.8				
46.00		0.3125	38.468	37.844	6961.0	20.29	123.10	65	78	129.1				
47.00		0.3125	38.261	37.639	6848.2	20.18	122.43	65	78	128.4				
47.55	Bot - Section 2	0.3125	38.146	37.525	6786.3	20.11	122.07	65	78	70.8				
48.00		0.3125	38.054	37.433	6736.6	20.06	121.77	65	78	103.2				

Increment Length: 1 (ft)

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
49.00		0.3125	37.846	37.228	6626.3	19.94	121.11	65	78	230.2				
50.00		0.3125	37.639	37.022	6517.1	19.83	120.45	65	78	228.9				
51.00		0.3125	37.432	36.817	6409.2	19.71	119.78	65	78	227.6				
52.00	RB1 RB2	0.3125	37.225	36.611	6302.4	19.59	119.12	65	78	226.4	34.88	6621.4	6621.4	118.7
52.97	Top - Section 1	0.2500	37.524	29.576	5191.5	25.06	150.10	65	72	218.4	34.88	6553.5	6553.5	115.1
53.00		0.2500	37.518	29.571	5188.9	25.05	150.07	65	72	3.0	34.88	6551.4	6551.4	3.6
54.00		0.2500	37.310	29.406	5102.9	24.90	149.24	65	72	100.3	34.88	6481.8	6481.8	118.7
55.00		0.2500	37.103	29.242	5017.8	24.76	148.41	65	72	99.8	34.88	6412.6	6412.6	118.7
56.00		0.2500	36.896	29.078	4933.6	24.61	147.58	65	72	99.2	34.88	6343.7	6343.7	118.7
57.00		0.2500	36.689	28.913	4850.4	24.47	146.76	65	73	98.7	34.88	6275.2	6275.2	118.7
58.00		0.2500	36.482	28.749	4768.1	24.32	145.93	65	73	98.1	34.88	6207.1	6207.1	118.7
59.00		0.2500	36.274	28.584	4686.8	24.17	145.10	65	73	97.5	34.88	6139.3	6139.3	118.7
60.00		0.2500	36.067	28.420	4606.3	24.03	144.27	65	73	97.0	34.88	6072.0	6072.0	118.7
61.00		0.2500	35.860	28.255	4526.9	23.88	143.44	65	73	96.4	34.88	6005.0	6005.0	118.7
62.00		0.2500	35.653	28.091	4448.3	23.74	142.61	65	73	95.9	34.88	5938.3	5938.3	118.7
63.00		0.2500	35.445	27.927	4370.6	23.59	141.78	65	74	95.3	34.88	5872.1	5872.1	118.7
64.00		0.2500	35.238	27.762	4293.9	23.44	140.95	65	74	94.7	34.88	5806.2	5806.2	118.7
65.00		0.2500	35.031	27.598	4218.1	23.30	140.12	65	74	94.2	34.88	5740.7	5740.7	118.7
66.00		0.2500	34.824	27.433	4143.1	23.15	139.30	65	74	93.6	34.88	5675.6	5675.6	118.7
67.00		0.2500	34.617	27.269	4069.1	23.00	138.47	65	74	93.1	34.88	5610.8	5610.8	118.7
67.92	RB3	0.2500	34.426	27.118	4001.7	22.87	137.70	65	75	85.1	51.75	8251.7	8251.7	162.0
68.00	RT1 RT2	0.2500	34.409	27.105	3995.9	22.86	137.64	65	75	7.4	16.88	2697.6	2697.6	4.6
69.00		0.2500	34.202	26.940	3923.6	22.71	136.81	65	75	92.0	16.88	2666.5	2666.5	57.4
70.00		0.2500	33.995	26.776	3852.2	22.57	135.98	65	75	91.4	16.88	2635.6	2635.6	57.4
71.00		0.2500	33.788	26.611	3781.7	22.42	135.15	65	75	90.8	16.88	2604.9	2604.9	57.4
72.00		0.2500	33.581	26.447	3712.0	22.27	134.32	65	75	90.3	16.88	2574.4	2574.4	57.4
73.00		0.2500	33.373	26.282	3643.2	22.13	133.49	65	75	89.7	16.88	2544.0	2544.0	57.4
74.00		0.2500	33.166	26.118	3575.3	21.98	132.66	65	76	89.2	16.88	2513.8	2513.8	57.4
75.00	RT3	0.2500	32.959	25.954	3508.2	21.84	131.84	65	76	88.6	16.88	2483.8	2483.8	57.4
76.00		0.2500	32.752	25.789	3441.9	21.69	131.01	65	76	88.0				
77.00		0.2500	32.544	25.625	3376.5	21.54	130.18	65	76	87.5				
78.00		0.2500	32.337	25.460	3311.9	21.40	129.35	65	76	86.9				
79.00		0.2500	32.130	25.296	3248.2	21.25	128.52	65	76	86.4				
80.00		0.2500	31.923	25.131	3185.3	21.10	127.69	65	77	85.8				
81.00		0.2500	31.716	24.967	3123.1	20.96	126.86	65	77	85.2				
82.00		0.2500	31.508	24.803	3061.9	20.81	126.03	65	77	84.7				
83.00		0.2500	31.301	24.638	3001.4	20.67	125.20	65	77	84.1				
84.00		0.2500	31.094	24.474	2941.7	20.52	124.38	65	77	83.6				
85.00		0.2500	30.887	24.309	2882.8	20.37	123.55	65	77	83.0				
86.00		0.2500	30.680	24.145	2824.7	20.23	122.72	65	78	82.4				
87.00		0.2500	30.472	23.981	2767.4	20.08	121.89	65	78	81.9				
88.00		0.2500	30.265	23.816	2710.8	19.94	121.06	65	78	81.3				
89.00		0.2500	30.058	23.652	2655.1	19.79	120.23	65	78	80.8				
90.00		0.2500	29.851	23.487	2600.1	19.64	119.40	65	78	80.2				
91.00		0.2500	29.643	23.323	2545.9	19.50	118.57	65	78	79.6				
92.00		0.2500	29.436	23.158	2492.4	19.35	117.74	65	79	79.1				
93.00		0.2500	29.229	22.994	2439.7	19.20	116.92	65	79	78.5				
94.00		0.2500	29.022	22.830	2387.7	19.06	116.09	65	79	78.0				
95.00		0.2500	28.815	22.665	2336.5	18.91	115.26	65	79	77.4				
96.00		0.2500	28.607	22.501	2286.0	18.77	114.43	65	79	76.8				
96.18	Bot - Section 3	0.2500	28.571	22.472	2277.2	18.74	114.28	65	79	13.5				
97.00		0.2500	28.400	22.336	2236.3	18.62	113.60	65	79	110.6				
98.00		0.2500	28.193	22.172	2187.3	18.47	112.77	65	80	133.4				
99.00		0.2500	27.986	22.008	2139.0	18.33	111.94	65	80	132.4				
99.25	RB4	0.2500	27.934	21.966	2127.0	18.29	111.74	65	80	33.0	15.00	1649.2	1649.2	12.8
100.00		0.2500	27.779	21.843	2091.4	18.18	111.11	65	80	98.5	15.00	1632.0	1632.0	38.3
100.34	Top - Section 2	0.1875	28.082	16.600	1632.0	25.00	149.77	65	72	44.9	15.00	1624.2	1624.2	17.5
101.00		0.1875	27.946	16.519	1608.2	24.87	149.05	65	72	37.0	15.00	1609.3	1609.3	33.5
102.00		0.1875	27.739	16.396	1572.5	24.68	147.94	65	72	56.0	15.00	1586.7	1586.7	51.0
102.25	RT4	0.1875	27.687	16.365	1563.6	24.63	147.67	65	72	13.9	15.00	1581.0	1581.0	12.8

Increment Length: 1 (ft)

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
103.00		0.1875	27.532	16.273	1537.3	24.48	146.84	65	73	41.6				
104.00		0.1875	27.325	16.149	1502.6	24.29	145.73	65	73	55.2				
105.00		0.1875	27.117	16.026	1468.4	24.09	144.63	65	73	54.7				
106.00		0.1875	26.910	15.903	1434.8	23.90	143.52	65	73	54.3				
107.00		0.1875	26.703	15.779	1401.7	23.70	142.42	65	74	53.9				
108.00		0.1875	26.496	15.656	1369.1	23.51	141.31	65	74	53.5				
109.00		0.1875	26.289	15.533	1337.0	23.31	140.21	65	74	53.1				
110.00		0.1875	26.081	15.410	1305.4	23.12	139.10	65	74	52.6				
111.00		0.1875	25.874	15.286	1274.3	22.92	138.00	65	74	52.2				
112.00		0.1875	25.667	15.163	1243.7	22.73	136.89	65	75	51.8				
113.00		0.1875	25.460	15.040	1213.6	22.53	135.79	65	75	51.4				
114.00		0.1875	25.253	14.916	1184.0	22.34	134.68	65	75	51.0				
115.00		0.1875	25.045	14.793	1154.9	22.14	133.57	65	75	50.5				
116.00		0.1875	24.838	14.670	1126.2	21.95	132.47	65	76	50.1				
117.00		0.1875	24.631	14.546	1098.1	21.75	131.36	65	76	49.7				
118.00		0.1875	24.424	14.423	1070.4	21.56	130.26	65	76	49.3				
119.00		0.1875	24.216	14.300	1043.2	21.36	129.15	65	76	48.9				
120.00		0.1875	24.009	14.176	1016.4	21.17	128.05	65	77	48.4				
121.00		0.1875	23.802	14.053	990.1	20.97	126.94	65	77	48.0				
122.00		0.1875	23.595	13.930	964.3	20.78	125.84	65	77	47.6				
123.00		0.1875	23.388	13.806	938.9	20.58	124.73	65	77	47.2				
124.00		0.1875	23.180	13.683	914.0	20.39	123.63	65	77	46.8				
125.00		0.1875	22.973	13.560	889.5	20.19	122.52	65	78	46.4				
126.00		0.1875	22.766	13.437	865.4	20.00	121.42	65	78	45.9				
127.00		0.1875	22.559	13.313	841.8	19.80	120.31	65	78	45.5				
128.00		0.1875	22.352	13.190	818.6	19.61	119.21	65	78	45.1				
129.00		0.1875	22.144	13.067	795.9	19.41	118.10	65	79	44.7				
130.00		0.1875	21.937	12.943	773.6	19.22	117.00	65	79	44.3				
131.00		0.1875	21.730	12.820	751.7	19.02	115.89	65	79	43.8				
132.00		0.1875	21.523	12.697	730.2	18.83	114.79	65	79	43.4				
133.00		0.1875	21.315	12.573	709.1	18.63	113.68	65	79	43.0				
134.00		0.1875	21.108	12.450	688.5	18.44	112.58	65	80	42.6				
135.00		0.1875	20.901	12.327	668.2	18.24	111.47	65	80	42.2				
136.00		0.1875	20.694	12.203	648.3	18.05	110.37	65	80	41.7				
137.00		0.1875	20.487	12.080	628.9	17.86	109.26	65	80	41.3				
138.00		0.1875	20.279	11.957	609.8	17.66	108.16	65	81	40.9				
139.00		0.1875	20.072	11.833	591.2	17.47	107.05	65	81	40.5				
140.00		0.1875	19.865	11.710	572.9	17.27	105.95	65	81	40.1				
141.00		0.1875	19.658	11.587	555.0	17.08	104.84	65	81	39.6				
142.00		0.1875	19.451	11.463	537.4	16.88	103.74	65	82	39.2				
143.00		0.1875	19.243	11.340	520.3	16.69	102.63	65	82	38.8				
144.00		0.1875	19.036	11.217	503.5	16.49	101.53	65	82	38.4				
145.00		0.1875	18.829	11.094	487.1	16.30	100.42	65	82	38.0				
146.00		0.1875	18.622	10.970	471.0	16.10	99.32	65	82	37.5				
147.00		0.1875	18.414	10.847	455.3	15.91	98.21	65	83	37.1				
148.00		0.1875	18.207	10.724	439.9	15.71	97.11	65	83	36.7				
149.00		0.1875	18.000	10.600	424.9	15.52	96.00	65	83	36.3				
Total Weight										14728.1				
											2633.1			

Wind Loading - Shaft

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 11

Load Case: 1.2D + 1.6W 93 mph Wind	Iterations 35
Dead Load Factor 1.20	
Wind Load Factor 1.60	

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	14.724	16.20	316.04	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00		1.00	0.70	14.724	16.20	314.67	0.650	0.000	1.00	4.053	2.63	68.3	0.0	192.7
2.00		1.00	0.70	14.724	16.20	313.31	0.650	0.000	1.00	4.035	2.62	68.0	0.0	191.9
3.00		1.00	0.70	14.724	16.20	311.95	0.650	0.000	1.00	4.018	2.61	67.7	0.0	191.0
4.00		1.00	0.70	14.724	16.20	310.58	0.650	0.000	1.00	4.000	2.60	67.4	0.0	190.2
5.00		1.00	0.70	14.724	16.20	309.22	0.650	0.000	1.00	3.983	2.59	67.1	0.0	189.4
6.00		1.00	0.70	14.724	16.20	307.85	0.650	0.000	1.00	3.965	2.58	66.8	0.0	188.5
7.00		1.00	0.70	14.724	16.20	306.49	0.650	0.000	1.00	3.948	2.57	66.5	0.0	187.7
8.00		1.00	0.70	14.724	16.20	305.12	0.650	0.000	1.00	3.930	2.55	66.2	0.0	186.8
9.00		1.00	0.70	14.724	16.20	303.76	0.650	0.000	1.00	3.913	2.54	65.9	0.0	186.0
10.00		1.00	0.70	14.724	16.20	302.40	0.650	0.000	1.00	3.895	2.53	65.6	0.0	185.2
11.00		1.00	0.70	14.724	16.20	301.03	0.650	0.000	1.00	3.878	2.52	65.3	0.0	184.3
12.00		1.00	0.70	14.724	16.20	299.67	0.650	0.000	1.00	3.860	2.51	65.0	0.0	183.5
13.00		1.00	0.70	14.724	16.20	298.30	0.650	0.000	1.00	3.843	2.50	64.7	0.0	182.6
14.00		1.00	0.70	14.724	16.20	296.94	0.650	0.000	1.00	3.825	2.49	64.4	0.0	181.8
15.00		1.00	0.70	14.724	16.20	295.57	0.650	0.000	1.00	3.807	2.47	64.1	0.0	181.0
16.00		1.00	0.70	14.724	16.20	294.21	0.650	0.000	1.00	3.790	2.46	63.8	0.0	180.1
17.00		1.00	0.70	14.724	16.20	292.85	0.650	0.000	1.00	3.772	2.45	63.5	0.0	179.3
18.00		1.00	0.70	14.724	16.20	291.48	0.650	0.000	1.00	3.755	2.44	63.2	0.0	178.4
19.00		1.00	0.70	14.724	16.20	290.12	0.650	0.000	1.00	3.737	2.43	63.0	0.0	177.6
20.00		1.00	0.70	14.724	16.20	288.75	0.650	0.000	1.00	3.720	2.42	62.7	0.0	176.8
21.00		1.00	0.70	14.724	16.20	287.39	0.650	0.000	1.00	3.702	2.41	62.4	0.0	175.9
22.00		1.00	0.70	14.724	16.20	286.02	0.650	0.000	1.00	3.685	2.40	62.1	0.0	175.1
23.00		1.00	0.70	14.724	16.20	284.66	0.650	0.000	1.00	3.667	2.38	61.8	0.0	174.3
24.00		1.00	0.70	14.724	16.20	283.29	0.650	0.000	1.00	3.650	2.37	61.5	0.0	173.4
25.00		1.00	0.70	14.724	16.20	281.93	0.650	0.000	1.00	3.632	2.36	61.2	0.0	172.6
26.00		1.00	0.70	14.724	16.20	280.57	0.650	0.000	1.00	3.615	2.35	60.9	0.0	171.7
27.00		1.00	0.70	14.724	16.20	279.20	0.650	0.000	1.00	3.597	2.34	60.6	0.0	170.9
28.00		1.00	0.70	14.724	16.20	277.84	0.650	0.000	1.00	3.580	2.33	60.3	0.0	170.1
29.00		1.00	0.70	14.724	16.20	276.47	0.650	0.000	1.00	3.562	2.32	60.0	0.0	169.2
30.00		1.00	0.70	14.736	16.21	275.23	0.650	0.000	1.00	3.544	2.30	59.8	0.0	168.4
31.00		1.00	0.71	14.875	16.36	275.15	0.650	0.000	1.00	3.527	2.29	60.0	0.0	167.5
32.00		1.00	0.71	15.011	16.51	275.02	0.650	0.000	1.00	3.509	2.28	60.3	0.0	166.7
33.00		1.00	0.72	15.143	16.66	274.85	0.650	0.000	1.00	3.492	2.27	60.5	0.0	165.9
34.00		1.00	0.73	15.273	16.80	274.63	0.650	0.000	1.00	3.474	2.26	60.7	0.0	165.0
35.00		1.00	0.73	15.400	16.94	274.38	0.650	0.000	1.00	3.457	2.25	60.9	0.0	164.2
36.00		1.00	0.74	15.524	17.08	274.08	0.650	0.000	1.00	3.439	2.24	61.1	0.0	163.3
37.00		1.00	0.74	15.646	17.21	273.75	0.650	0.000	1.00	3.422	2.22	61.2	0.0	162.5
38.00		1.00	0.75	15.766	17.34	273.38	0.650	0.000	1.00	3.404	2.21	61.4	0.0	161.7
39.00		1.00	0.76	15.884	17.47	272.98	0.650	0.000	1.00	3.387	2.20	61.5	0.0	160.8
40.00		1.00	0.76	15.999	17.60	272.55	0.650	0.000	1.00	3.369	2.19	61.7	0.0	160.0
41.00		1.00	0.77	16.112	17.72	272.09	0.650	0.000	1.00	3.352	2.18	61.8	0.0	159.1
42.00		1.00	0.77	16.224	17.85	271.59	0.650	0.000	1.00	3.334	2.17	61.9	0.0	158.3
43.00		1.00	0.78	16.333	17.97	271.07	0.650	0.000	1.00	3.316	2.16	62.0	0.0	157.5
44.00		1.00	0.78	16.441	18.08	270.52	0.650	0.000	1.00	3.299	2.14	62.0	0.0	156.6
45.00		1.00	0.79	16.546	18.20	269.94	0.650	0.000	1.00	3.281	2.13	62.1	0.0	155.8
46.00		1.00	0.79	16.651	18.32	269.34	0.650	0.000	1.00	3.264	2.12	62.2	0.0	155.0

Wind Loading - Shaft

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
 Page: 12



47.00	1.00	0.80	16.753	18.43	268.71	0.650	0.000	1.00	3.246	2.11	62.2	0.0	154.1
47.55 Bot - Section 2	1.00	0.80	16.809	18.49	268.36	0.650	0.000	0.55	1.789	1.16	34.4	0.0	84.9
48.00	1.00	0.80	16.854	18.54	268.06	0.650	0.000	0.45	1.459	0.95	28.1	0.0	123.9
49.00	1.00	0.81	16.954	18.65	267.39	0.650	0.000	1.00	3.254	2.11	63.1	0.0	276.2
50.00 Appurtenance(s)	1.00	0.81	17.052	18.76	266.70	0.650	0.000	1.00	3.236	2.10	63.1	0.0	274.7
51.00	1.00	0.82	17.149	18.86	265.98	0.672 *	0.000	1.00	3.219	2.16	65.3	0.0	273.2
52.00 RB1 RB2	1.00	0.82	17.244	18.97	265.24	0.674 *	0.000	1.00	3.201	2.16	65.4	0.0	271.7
52.97 Top - Section 1	1.00	0.82	17.336	19.07	264.51	0.675 *	0.000	0.97	3.088	2.08	63.6	0.0	262.1
53.00	1.00	0.82	17.338	19.07	268.06	0.673 *	0.000	0.03	0.095	0.06	2.0	0.0	3.6
54.00	1.00	0.83	17.431	19.17	267.29	0.673 *	0.000	1.00	3.166	2.13	65.4	0.0	120.4
55.00	1.00	0.83	17.523	19.28	266.50	0.674 *	0.000	1.00	3.148	2.12	65.5	0.0	119.7
56.00	1.00	0.84	17.613	19.37	265.70	0.676 *	0.000	1.00	3.131	2.12	65.6	0.0	119.1
57.00	1.00	0.84	17.703	19.47	264.87	0.677 *	0.000	1.00	3.113	2.11	65.7	0.0	118.4
58.00	1.00	0.85	17.791	19.57	264.03	0.678 *	0.000	1.00	3.096	2.10	65.7	0.0	117.7
59.00	1.00	0.85	17.878	19.67	263.17	0.679 *	0.000	1.00	3.078	2.09	65.8	0.0	117.1
60.00	1.00	0.85	17.964	19.76	262.30	0.681 *	0.000	1.00	3.061	2.08	65.9	0.0	116.4
61.00	1.00	0.86	18.049	19.85	261.41	0.682 *	0.000	1.00	3.043	2.08	65.9	0.0	115.7
62.00	1.00	0.86	18.133	19.95	260.50	0.683 *	0.000	1.00	3.026	2.07	66.0	0.0	115.0
63.00	1.00	0.87	18.216	20.04	259.58	0.685 *	0.000	1.00	3.008	2.06	66.0	0.0	114.4
64.00	1.00	0.87	18.298	20.13	258.65	0.686 *	0.000	1.00	2.991	2.05	66.1	0.0	113.7
65.00	1.00	0.87	18.380	20.22	257.69	0.687 *	0.000	1.00	2.973	2.04	66.1	0.0	113.0
66.00	1.00	0.88	18.460	20.31	256.73	0.689 *	0.000	1.00	2.956	2.04	66.1	0.0	112.4
67.00	1.00	0.88	18.539	20.39	255.75	0.690 *	0.000	1.00	2.938	2.03	66.2	0.0	111.7
67.92 RB3	1.00	0.88	18.612	20.47	254.84	0.691 *	0.000	0.92	2.687	1.86	60.9	0.0	102.2
68.00 RT1 RT2	1.00	0.89	18.618	20.48	254.76	0.692 *	0.000	0.08	0.233	0.16	5.3	0.0	8.9
69.00	1.00	0.89	18.696	20.57	253.75	0.693 *	0.000	1.00	2.903	2.01	66.2	0.0	110.3
70.00	1.00	0.89	18.773	20.65	252.73	0.694 *	0.000	1.00	2.885	2.00	66.2	0.0	109.7
71.00	1.00	0.90	18.849	20.73	251.70	0.650	0.000	1.00	2.868	1.86	61.8	0.0	109.0
72.00	1.00	0.90	18.925	20.82	250.66	0.650	0.000	1.00	2.850	1.85	61.7	0.0	108.3
73.00 Appurtenance(s)	1.00	0.90	18.999	20.90	249.61	0.650	0.000	1.00	2.833	1.84	61.6	0.0	107.7
74.00	1.00	0.91	19.073	20.98	248.54	0.650	0.000	1.00	2.815	1.83	61.4	0.0	107.0
75.00 RT3	1.00	0.91	19.147	21.06	247.46	0.650	0.000	1.00	2.798	1.82	61.3	0.0	106.3
76.00	1.00	0.91	19.219	21.14	246.37	0.650	0.000	1.00	2.780	1.81	61.1	0.0	105.6
77.00	1.00	0.92	19.291	21.22	245.27	0.650	0.000	1.00	2.763	1.80	61.0	0.0	105.0
78.00	1.00	0.92	19.362	21.30	244.16	0.650	0.000	1.00	2.745	1.78	60.8	0.0	104.3
79.00	1.00	0.92	19.433	21.38	243.03	0.650	0.000	1.00	2.728	1.77	60.6	0.0	103.6
80.00	1.00	0.93	19.503	21.45	241.90	0.650	0.000	1.00	2.710	1.76	60.5	0.0	103.0
81.00	1.00	0.93	19.572	21.53	240.76	0.650	0.000	1.00	2.693	1.75	60.3	0.0	102.3
82.00	1.00	0.93	19.641	21.61	239.60	0.650	0.000	1.00	2.675	1.74	60.1	0.0	101.6
83.00	1.00	0.94	19.709	21.68	238.44	0.650	0.000	1.00	2.657	1.73	59.9	0.0	100.9
84.00	1.00	0.94	19.777	21.75	237.27	0.650	0.000	1.00	2.640	1.72	59.7	0.0	100.3
85.00	1.00	0.94	19.844	21.83	236.09	0.650	0.000	1.00	2.622	1.70	59.5	0.0	99.6
86.00	1.00	0.95	19.910	21.90	234.89	0.650	0.000	1.00	2.605	1.69	59.3	0.0	98.9
87.00	1.00	0.95	19.976	21.97	233.69	0.650	0.000	1.00	2.587	1.68	59.1	0.0	98.3
88.00	1.00	0.95	20.041	22.05	232.48	0.650	0.000	1.00	2.570	1.67	58.9	0.0	97.6
89.00	1.00	0.96	20.106	22.12	231.26	0.650	0.000	1.00	2.552	1.66	58.7	0.0	96.9
90.00	1.00	0.96	20.170	22.19	230.04	0.650	0.000	1.00	2.535	1.65	58.5	0.0	96.2
91.00	1.00	0.96	20.234	22.26	228.80	0.650	0.000	1.00	2.517	1.64	58.3	0.0	95.6
92.00	1.00	0.96	20.297	22.33	227.56	0.650	0.000	1.00	2.500	1.62	58.0	0.0	94.9
93.00	1.00	0.97	20.360	22.40	226.30	0.650	0.000	1.00	2.482	1.61	57.8	0.0	94.2
94.00	1.00	0.97	20.423	22.46	225.04	0.650	0.000	1.00	2.465	1.60	57.6	0.0	93.6
95.00	1.00	0.97	20.484	22.53	223.77	0.650	0.000	1.00	2.447	1.59	57.3	0.0	92.9
96.00	1.00	0.98	20.546	22.60	222.50	0.650	0.000	1.00	2.429	1.58	57.1	0.0	92.2
96.18 Bot - Section 3	1.00	0.98	20.557	22.61	222.27	0.657 *	0.000	0.18	0.427	0.28	10.2	0.0	16.2
97.00	1.00	0.98	20.607	22.67	221.21	0.657 *	0.000	0.82	2.011	1.32	47.9	0.0	132.7
98.00	1.00	0.98	20.667	22.73	219.92	0.743 *	0.000	1.00	2.426	1.80	65.6	0.0	160.1
99.00	1.00	0.99	20.727	22.80	218.62	0.746 *	0.000	1.00	2.409	1.80	65.5	0.0	158.9

Wind Loading - Shaft

Structure: CT12215-A-SBA

Code: TIA-222-G

5/3/2022

Site Name: Litchfield 3, CT

Exposure: B



Height: 149.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: B - Competent Rock

Gh: 1.1

Topography: 1

Struct Class: II

Page: 13

Tower Engineering Solutions

99.25 RB4	1.00	0.99	20.742	22.82	218.30	0.747 *	0.000	0.25	0.599	0.45	16.3	0.0	39.5
100.00	1.00	0.99	20.787	22.87	217.31	0.748 *	0.000	0.75	1.792	1.34	49.0	0.0	118.2
100.34 Top - Section 2	1.00	0.99	20.807	22.89	216.86	0.749 *	0.000	0.34	0.817	0.61	22.4	0.0	53.9
101.00	1.00	0.99	20.846	22.93	218.94	0.746 *	0.000	0.66	1.557	1.16	42.6	0.0	44.4
102.00	1.00	0.99	20.905	23.00	217.62	0.748 *	0.000	1.00	2.356	1.76	64.9	0.0	67.2
102.25 RT4	1.00	0.99	20.919	23.01	217.29	0.750 *	0.000	0.25	0.586	0.44	16.2	0.0	16.7
103.00	1.00	1.00	20.963	23.06	216.30	0.751 *	0.000	0.75	1.752	1.32	48.5	0.0	50.0
104.00	1.00	1.00	21.021	23.12	214.96	0.753 *	0.000	1.00	2.321	1.75	64.6	0.0	66.2
105.00	1.00	1.00	21.079	23.19	213.63	0.755 *	0.000	1.00	2.303	1.74	64.5	0.0	65.7
106.00	1.00	1.00	21.136	23.25	212.28	0.668 *	0.000	1.00	2.286	1.53	56.8	0.0	65.2
107.00	1.00	1.01	21.193	23.31	210.93	0.670 *	0.000	1.00	2.268	1.52	56.7	0.0	64.7
108.00	1.00	1.01	21.249	23.37	209.57	0.672 *	0.000	1.00	2.251	1.51	56.5	0.0	64.2
109.00	1.00	1.01	21.305	23.44	208.21	0.673 *	0.000	1.00	2.233	1.50	56.4	0.0	63.7
110.00	1.00	1.02	21.361	23.50	206.83	0.675 *	0.000	1.00	2.216	1.50	56.2	0.0	63.2
111.00	1.00	1.02	21.416	23.56	205.46	0.677 *	0.000	1.00	2.198	1.49	56.1	0.0	62.7
112.00	1.00	1.02	21.471	23.62	204.07	0.679 *	0.000	1.00	2.181	1.48	55.9	0.0	62.2
113.00	1.00	1.02	21.526	23.68	202.68	0.680 *	0.000	1.00	2.163	1.47	55.8	0.0	61.7
114.00	1.00	1.03	21.580	23.74	201.29	0.682 *	0.000	1.00	2.146	1.46	55.6	0.0	61.2
115.00 Appurtenance(s)	1.00	1.03	21.634	23.80	199.88	0.684 *	0.000	1.00	2.128	1.46	55.4	0.0	60.7
116.00	1.00	1.03	21.687	23.86	198.48	0.650	0.000	1.00	2.111	1.37	52.4	0.0	60.2
117.00	1.00	1.03	21.741	23.91	197.06	0.650	0.000	1.00	2.093	1.36	52.1	0.0	59.6
118.00	1.00	1.04	21.793	23.97	195.64	0.650	0.000	1.00	2.075	1.35	51.7	0.0	59.1
119.00	1.00	1.04	21.846	24.03	194.21	0.650	0.000	1.00	2.058	1.34	51.4	0.0	58.6
120.00	1.00	1.04	21.898	24.09	192.78	0.650	0.000	1.00	2.040	1.33	51.1	0.0	58.1
121.00	1.00	1.04	21.950	24.15	191.35	0.650	0.000	1.00	2.023	1.31	50.8	0.0	57.6
122.00	1.00	1.05	22.002	24.20	189.90	0.650	0.000	1.00	2.005	1.30	50.5	0.0	57.1
123.00	1.00	1.05	22.053	24.26	188.46	0.650	0.000	1.00	1.988	1.29	50.2	0.0	56.6
124.00	1.00	1.05	22.104	24.31	187.00	0.650	0.000	1.00	1.970	1.28	49.8	0.0	56.1
125.00	1.00	1.05	22.155	24.37	185.54	0.650	0.000	1.00	1.953	1.27	49.5	0.0	55.6
126.00	1.00	1.06	22.206	24.43	184.08	0.650	0.000	1.00	1.935	1.26	49.2	0.0	55.1
127.00	1.00	1.06	22.256	24.48	182.61	0.650	0.000	1.00	1.918	1.25	48.8	0.0	54.6
128.00	1.00	1.06	22.306	24.54	181.13	0.650	0.000	1.00	1.900	1.24	48.5	0.0	54.1
129.00	1.00	1.06	22.356	24.59	179.66	0.650	0.000	1.00	1.883	1.22	48.1	0.0	53.6
130.00 Appurtenance(s)	1.00	1.07	22.405	24.65	178.17	0.650	0.000	1.00	1.865	1.21	47.8	0.0	53.1
131.00	1.00	1.07	22.454	24.70	176.68	0.650	0.000	1.00	1.848	1.20	47.5	0.0	52.6
132.00	1.00	1.07	22.503	24.75	175.19	0.650	0.000	1.00	1.830	1.19	47.1	0.0	52.1
133.00	1.00	1.07	22.551	24.81	173.69	0.650	0.000	1.00	1.812	1.18	46.8	0.0	51.6
134.00	1.00	1.07	22.600	24.86	172.18	0.650	0.000	1.00	1.795	1.17	46.4	0.0	51.1
135.00	1.00	1.08	22.648	24.91	170.67	0.650	0.000	1.00	1.777	1.16	46.1	0.0	50.6
136.00	1.00	1.08	22.696	24.97	169.16	0.650	0.000	1.00	1.760	1.14	45.7	0.0	50.1
137.00	1.00	1.08	22.743	25.02	167.64	0.650	0.000	1.00	1.742	1.13	45.3	0.0	49.6
138.00 Appurtenance(s)	1.00	1.08	22.790	25.07	166.12	0.650	0.000	1.00	1.725	1.12	45.0	0.0	49.1
139.00	1.00	1.09	22.838	25.12	164.59	0.650	0.000	1.00	1.707	1.11	44.6	0.0	48.6
140.00 Appurtenance(s)	1.00	1.09	22.884	25.17	163.06	0.650	0.000	1.00	1.690	1.10	44.2	0.0	48.1
141.00	1.00	1.09	22.931	25.22	161.52	0.650	0.000	1.00	1.672	1.09	43.9	0.0	47.6
142.00	1.00	1.09	22.977	25.28	159.98	0.650	0.000	1.00	1.655	1.08	43.5	0.0	47.1
143.00	1.00	1.09	23.023	25.33	158.43	0.650	0.000	1.00	1.637	1.06	43.1	0.0	46.6
144.00	1.00	1.10	23.069	25.38	156.88	0.650	0.000	1.00	1.620	1.05	42.7	0.0	46.1
145.00	1.00	1.10	23.115	25.43	155.33	0.650	0.000	1.00	1.602	1.04	42.4	0.0	45.6
146.00	1.00	1.10	23.160	25.48	153.77	0.650	0.000	1.00	1.585	1.03	42.0	0.0	45.0
147.00	1.00	1.10	23.206	25.53	152.21	0.650	0.000	1.00	1.567	1.02	41.6	0.0	44.5
148.00	1.00	1.11	23.251	25.58	150.64	0.650	0.000	1.00	1.549	1.01	41.2	0.0	44.0
149.00 Appurtenance(s)	1.00	1.11	23.295	25.62	149.07	0.650	0.000	1.00	1.532	1.00	40.8	0.0	43.5
* Cf Adjusted by Linear Load Ra Effect													
								Totals:	149.00		8,752.1		17,673.7

Discrete Appurtenance Forces

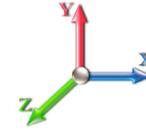
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 14

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 35

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	149.00	Low Profile Platform	1	23.295	25.625	1.00	1.00	25.00	1440.00	0.000	0.000	1025.00	0.00	0.00
2	149.00	ACU-A20-N	4	23.428	25.771	0.40	0.80	0.22	4.80	0.000	3.000	9.24	0.00	27.71
3	149.00	800MHZ Filter	3	23.428	25.771	0.40	0.80	0.94	31.68	0.000	3.000	38.60	0.00	115.79
4	149.00	TD-RRH8x20-25	3	23.428	25.771	0.40	0.80	4.86	252.00	0.000	3.000	200.40	0.00	601.19
5	149.00	800MHZ	3	23.428	25.771	0.40	0.80	3.17	214.20	0.000	3.000	130.63	0.00	391.89
6	149.00	1900MHZ	3	23.428	25.771	0.40	0.80	3.32	216.00	0.000	3.000	137.06	0.00	411.19
7	149.00	APXVTM14-C-I20	3	23.428	25.771	0.63	0.80	12.02	201.60	0.000	3.000	495.66	0.00	1486.98
8	149.00	APXVSPP18-C-A20	3	23.428	25.771	0.66	0.80	15.98	205.20	0.000	3.000	658.75	0.00	1976.25
9	140.00	Low Profile	1	22.884	25.173	1.00	1.00	22.00	1800.00	0.000	0.000	886.08	0.00	0.00
10	138.00	FD9R6004/2C-3L	6	22.790	25.070	0.40	0.80	0.86	22.32	0.000	0.000	34.66	0.00	0.00
11	138.00	GPS Receiver	1	22.790	25.070	0.80	0.80	0.80	12.00	0.000	0.000	32.09	0.00	0.00
12	138.00	BXA-171085-12B_2	3	22.790	25.070	0.67	0.80	9.56	54.00	0.000	0.000	383.30	0.00	0.00
13	138.00	BXA-70063-6CF_2	3	22.790	25.070	0.58	0.80	13.26	61.20	0.000	0.000	531.98	0.00	0.00
14	138.00	LPA-80080/6CF	3	22.790	25.070	1.36	0.80	17.67	75.60	0.000	0.000	708.62	0.00	0.00
15	130.00	RRUS 4478 B14	3	22.405	24.645	0.38	0.75	1.86	213.84	0.000	0.000	73.20	0.00	0.00
16	130.00	(3) 12.5' - 2" Horizontal	1	22.405	24.645	0.75	1.00	4.45	164.70	0.000	0.000	175.60	0.00	0.00
17	130.00	XP-2020	24	22.405	24.645	0.56	0.75	9.31	288.00	0.000	0.000	367.32	0.00	0.00
18	130.00	VSRDual-TS-B-HD	2	22.405	24.645	0.56	0.75	4.61	356.16	0.000	0.000	181.88	0.00	0.00
19	130.00	DC6-48-60-0-8C-EV	1	22.405	24.645	0.75	0.75	3.58	19.20	0.000	0.000	141.37	0.00	0.00
20	130.00	ABT-DF-DM-ADBH	1	22.405	24.645	0.75	0.75	0.04	1.32	0.000	0.000	1.48	0.00	0.00
21	130.00	7770.00	3	22.405	24.645	0.55	0.75	9.03	126.00	0.000	0.000	356.22	0.00	0.00
22	130.00	LGP 21401	12	22.405	24.645	0.38	0.75	0.00	252.00	0.000	0.000	0.00	0.00	0.00
23	130.00	DC6-48-60-18-8F	1	22.405	24.645	0.75	0.75	0.69	38.16	0.000	0.000	27.21	0.00	0.00
24	130.00	DC6-48-60-18-8C	1	22.405	24.645	0.75	0.75	0.95	24.00	0.000	0.000	37.26	0.00	0.00
25	130.00	80010965	6	22.405	24.645	0.53	0.75	44.12	781.92	0.000	0.000	1739.88	0.00	0.00
26	130.00	4449 B5/B12	3	22.405	24.645	0.38	0.75	2.22	255.60	0.000	0.000	87.39	0.00	0.00
27	130.00	8843 B2/B66A	3	22.405	24.645	0.38	0.75	1.84	259.20	0.000	0.000	72.75	0.00	0.00
28	130.00	Low Profile Platform	1	22.405	24.645	1.00	1.00	25.00	1440.00	0.000	0.000	985.82	0.00	0.00
29	115.00	AIR6449 B41	3	21.634	23.797	0.57	0.80	9.63	370.80	0.000	0.000	366.57	0.00	0.00
30	115.00	(3) Stabilizer Kit (12' FW)	1	21.634	23.797	1.00	1.00	6.10	216.00	0.000	0.000	232.26	0.00	0.00
31	115.00	T-Arm	3	21.634	23.797	0.56	0.75	13.50	1260.00	0.000	0.000	514.02	0.00	0.00
32	115.00	RRUS 11	3	21.634	23.797	0.40	0.80	3.02	182.52	0.000	0.000	115.14	0.00	0.00
33	115.00	APXVAALL24_43-U-NA20	3	21.634	23.797	0.58	0.80	35.46	442.08	0.000	0.000	1350.17	0.00	0.00
34	115.00	4460 Radio	3	21.634	23.797	0.40	0.80	3.42	392.40	0.000	0.000	130.22	0.00	0.00
35	115.00	4449 B71 + B85	3	21.634	23.797	0.40	0.80	2.36	263.52	0.000	0.000	90.01	0.00	0.00
36	73.00	GPS Receiver	1	18.999	20.899	1.00	1.00	1.00	12.00	0.000	0.000	33.44	0.00	0.00
37	50.00	58532A	1	17.052	18.757	1.00	1.00	0.22	0.48	0.000	0.000	6.60	0.00	0.00

Totals: 11,950.50

12,357.86

Total Applied Force Summary

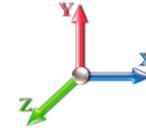
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 15

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 35

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		68.27	241.36	0.00	0.00
2.00		67.97	240.52	0.00	0.00
3.00		67.68	239.68	0.00	0.00
4.00		67.38	238.84	0.00	0.00
5.00		67.09	238.00	0.00	0.00
6.00		66.79	237.16	0.00	0.00
7.00		66.50	236.32	0.00	0.00
8.00		66.20	235.48	0.00	0.00
9.00		65.91	234.64	0.00	0.00
10.00		65.61	233.81	0.00	0.00
11.00		65.32	232.97	0.00	0.00
12.00		65.02	232.13	0.00	0.00
13.00		64.72	231.29	0.00	0.00
14.00		64.43	230.45	0.00	0.00
15.00		64.13	229.61	0.00	0.00
16.00		63.84	228.77	0.00	0.00
17.00		63.54	227.93	0.00	0.00
18.00		63.25	227.09	0.00	0.00
19.00		62.95	226.25	0.00	0.00
20.00		62.66	225.41	0.00	0.00
21.00		62.36	224.57	0.00	0.00
22.00		62.07	223.73	0.00	0.00
23.00		61.77	222.90	0.00	0.00
24.00		61.48	222.06	0.00	0.00
25.00		61.18	221.22	0.00	0.00
26.00		60.89	220.38	0.00	0.00
27.00		60.59	219.54	0.00	0.00
28.00		60.29	218.70	0.00	0.00
29.00		60.00	217.86	0.00	0.00
30.00		59.75	217.02	0.00	0.00
31.00		60.02	216.18	0.00	0.00
32.00		60.26	215.34	0.00	0.00
33.00		60.49	214.50	0.00	0.00
34.00		60.70	213.66	0.00	0.00
35.00		60.90	212.82	0.00	0.00
36.00		61.08	211.99	0.00	0.00
37.00		61.25	211.15	0.00	0.00
38.00		61.40	210.31	0.00	0.00
39.00		61.54	209.47	0.00	0.00
40.00		61.66	208.63	0.00	0.00
41.00		61.78	207.79	0.00	0.00
42.00		61.88	206.95	0.00	0.00
43.00		61.97	206.11	0.00	0.00
44.00		62.05	205.27	0.00	0.00
45.00		62.11	204.43	0.00	0.00
46.00		62.17	203.59	0.00	0.00

Total Applied Force Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 16

47.00	62.22	202.75	0.00	0.00
47.55	34.40	111.83	0.00	0.00
48.00	28.13	145.59	0.00	0.00
49.00	63.10	324.84	0.00	0.00
50.00	(1) attachments 69.73	323.81	0.00	0.00
51.00	65.32	321.63	0.00	0.00
52.00	65.44	320.12	0.00	0.00
52.97	63.59	309.07	0.00	0.00
53.00	1.95	5.08	0.00	0.00
54.00	65.38	168.86	0.00	0.00
55.00	65.48	168.19	0.00	0.00
56.00	65.57	167.52	0.00	0.00
57.00	65.65	166.85	0.00	0.00
58.00	65.73	166.18	0.00	0.00
59.00	65.80	165.51	0.00	0.00
60.00	65.87	164.83	0.00	0.00
61.00	65.92	164.16	0.00	0.00
62.00	65.98	163.49	0.00	0.00
63.00	66.02	162.82	0.00	0.00
64.00	66.06	162.15	0.00	0.00
65.00	66.10	161.48	0.00	0.00
66.00	66.13	160.81	0.00	0.00
67.00	66.15	160.13	0.00	0.00
67.92	60.87	146.73	0.00	0.00
68.00	5.28	12.73	0.00	0.00
69.00	66.19	158.79	0.00	0.00
70.00	66.20	158.12	0.00	0.00
71.00	61.84	157.45	0.00	0.00
72.00	61.71	156.78	0.00	0.00
73.00	(1) attachments 95.01	168.11	0.00	0.00
74.00	61.43	155.24	0.00	0.00
75.00	61.28	154.57	0.00	0.00
76.00	61.13	153.90	0.00	0.00
77.00	60.97	153.23	0.00	0.00
78.00	60.81	152.56	0.00	0.00
79.00	60.64	151.89	0.00	0.00
80.00	60.46	151.22	0.00	0.00
81.00	60.29	150.54	0.00	0.00
82.00	60.10	149.87	0.00	0.00
83.00	59.92	149.20	0.00	0.00
84.00	59.73	148.53	0.00	0.00
85.00	59.53	147.86	0.00	0.00
86.00	59.33	147.19	0.00	0.00
87.00	59.13	146.52	0.00	0.00
88.00	58.92	145.84	0.00	0.00
89.00	58.70	145.17	0.00	0.00
90.00	58.49	144.50	0.00	0.00
91.00	58.27	143.83	0.00	0.00
92.00	58.04	143.16	0.00	0.00
93.00	57.81	142.49	0.00	0.00
94.00	57.58	141.82	0.00	0.00
95.00	57.34	141.14	0.00	0.00
96.00	57.10	140.47	0.00	0.00
96.18	10.15	24.75	0.00	0.00
97.00	47.93	172.42	0.00	0.00
98.00	65.61	208.35	0.00	0.00
99.00	65.51	207.17	0.00	0.00

Total Applied Force Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 17

99.25	16.34	51.61	0.00	0.00
100.00	49.03	154.39	0.00	0.00
100.34	22.41	70.45	0.00	0.00
101.00	42.62	76.09	0.00	0.00
102.00	64.85	115.46	0.00	0.00
102.25	16.18	28.79	0.00	0.00
103.00	48.53	86.17	0.00	0.00
104.00	64.62	114.45	0.00	0.00
105.00	64.50	113.95	0.00	0.00
106.00	56.82	113.45	0.00	0.00
107.00	56.68	112.94	0.00	0.00
108.00	56.53	112.44	0.00	0.00
109.00	56.38	111.94	0.00	0.00
110.00	56.23	111.43	0.00	0.00
111.00	56.07	110.93	0.00	0.00
112.00	55.92	110.43	0.00	0.00
113.00	55.76	109.92	0.00	0.00
114.00	55.59	109.42	0.00	0.00
115.00	(19) attachments 2853.81	3236.24	0.00	0.00
116.00	52.36	104.45	0.00	0.00
117.00	52.06	103.95	0.00	0.00
118.00	51.74	103.44	0.00	0.00
119.00	51.43	102.94	0.00	0.00
120.00	51.12	102.44	0.00	0.00
121.00	50.80	101.93	0.00	0.00
122.00	50.47	101.43	0.00	0.00
123.00	50.15	100.93	0.00	0.00
124.00	49.82	100.42	0.00	0.00
125.00	49.49	99.92	0.00	0.00
126.00	49.16	99.42	0.00	0.00
127.00	48.83	98.91	0.00	0.00
128.00	48.49	98.41	0.00	0.00
129.00	48.15	97.91	0.00	0.00
130.00	(62) attachments 4295.19	4317.50	0.00	0.00
131.00	47.46	72.42	0.00	0.00
132.00	47.11	71.92	0.00	0.00
133.00	46.76	71.41	0.00	0.00
134.00	46.41	70.91	0.00	0.00
135.00	46.05	70.40	0.00	0.00
136.00	45.69	69.90	0.00	0.00
137.00	45.33	69.40	0.00	0.00
138.00	(16) attachments 1735.61	294.01	0.00	0.00
139.00	44.60	68.39	0.00	0.00
140.00	(1) attachments 930.32	1867.89	0.00	0.00
141.00	43.87	52.14	0.00	0.00
142.00	43.49	51.64	0.00	0.00
143.00	43.12	51.14	0.00	0.00
144.00	42.74	50.63	0.00	0.00
145.00	42.36	50.13	0.00	0.00
146.00	41.98	49.63	0.00	0.00
147.00	41.60	49.12	0.00	0.00
148.00	41.21	48.62	0.00	0.00
149.00	(23) attachments 2736.15	2613.60	0.00	5010.99
Totals:	21,109.95	36,101.56	0.00	5,010.99

Linear Appurtenance Segment Forces (Factored)

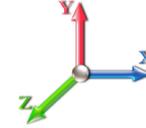
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 18

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 35

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.054	0.000	14.724	0.00	1.32
1.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.054	0.000	14.724	0.00	2.64
1.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.054	0.000	14.724	0.00	0.19
2.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	14.724	0.00	1.32
2.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	14.724	0.00	2.64
2.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	14.724	0.00	0.19
3.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	14.724	0.00	1.32
3.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	14.724	0.00	2.64
3.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	14.724	0.00	0.19
4.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	14.724	0.00	1.32
4.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	14.724	0.00	2.64
4.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	14.724	0.00	0.19
5.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	14.724	0.00	1.32
5.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	14.724	0.00	2.64
5.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	14.724	0.00	0.19
6.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	14.724	0.00	1.32
6.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	14.724	0.00	2.64
6.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	14.724	0.00	0.19
7.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	14.724	0.00	1.32
7.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	14.724	0.00	2.64
7.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	14.724	0.00	0.19
8.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	14.724	0.00	1.32
8.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	14.724	0.00	2.64
8.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	14.724	0.00	0.19
9.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	14.724	0.00	1.32
9.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	14.724	0.00	2.64
9.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	14.724	0.00	0.19
10.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	14.724	0.00	1.32
10.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	14.724	0.00	2.64
10.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	14.724	0.00	0.19
11.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	14.724	0.00	1.32
11.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	14.724	0.00	2.64
11.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	14.724	0.00	0.19
12.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	14.724	0.00	1.32
12.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	14.724	0.00	2.64
12.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	14.724	0.00	0.19
13.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	14.724	0.00	1.32
13.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	14.724	0.00	2.64
13.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	14.724	0.00	0.19
14.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.058	0.000	14.724	0.00	1.32
14.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	14.724	0.00	2.64
14.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.058	0.000	14.724	0.00	0.19
15.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.058	0.000	14.724	0.00	1.32
15.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	14.724	0.00	2.64
15.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.058	0.000	14.724	0.00	0.19
16.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.058	0.000	14.724	0.00	1.32
16.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	14.724	0.00	2.64

Linear Appurtenance Segment Forces (Factored)

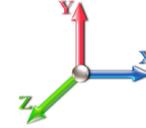
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 19

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 35

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
16.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.058	0.000	14.724	0.00	0.19
17.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	14.724	0.00	1.32
17.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	14.724	0.00	2.64
17.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	14.724	0.00	0.19
18.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	14.724	0.00	1.32
18.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	14.724	0.00	2.64
18.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	14.724	0.00	0.19
19.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	14.724	0.00	1.32
19.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	14.724	0.00	2.64
19.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	14.724	0.00	0.19
20.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	14.724	0.00	1.32
20.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	14.724	0.00	2.64
20.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	14.724	0.00	0.19
21.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.060	0.000	14.724	0.00	1.32
21.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	14.724	0.00	2.64
21.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.060	0.000	14.724	0.00	0.19
22.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.060	0.000	14.724	0.00	1.32
22.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	14.724	0.00	2.64
22.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.060	0.000	14.724	0.00	0.19
23.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.060	0.000	14.724	0.00	1.32
23.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	14.724	0.00	2.64
23.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.060	0.000	14.724	0.00	0.19
24.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	14.724	0.00	1.32
24.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	14.724	0.00	2.64
24.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	14.724	0.00	0.19
25.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	14.724	0.00	1.32
25.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	14.724	0.00	2.64
25.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	14.724	0.00	0.19
26.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	14.724	0.00	1.32
26.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	14.724	0.00	2.64
26.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	14.724	0.00	0.19
27.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	14.724	0.00	1.32
27.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	14.724	0.00	2.64
27.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	14.724	0.00	0.19
28.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	14.724	0.00	1.32
28.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	14.724	0.00	2.64
28.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.062	0.000	14.724	0.00	0.19
29.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	14.724	0.00	1.32
29.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	14.724	0.00	2.64
29.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.062	0.000	14.724	0.00	0.19
30.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	14.736	0.00	1.32
30.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	14.736	0.00	2.64
30.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.062	0.000	14.736	0.00	0.19
31.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	14.875	0.00	1.32
31.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	14.875	0.00	2.64
31.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.063	0.000	14.875	0.00	0.19
32.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	15.011	0.00	1.32

Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 20

Load Case: 1.2D + 1.6W 93 mph Wind

Iterations 35

Dead Load Factor 1.20

Wind Load Factor 1.60



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	15.011	0.00	2.64
32.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.063	0.000	15.011	0.00	0.19
33.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	15.143	0.00	1.32
33.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	15.143	0.00	2.64
33.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.063	0.000	15.143	0.00	0.19
34.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	15.273	0.00	1.32
34.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	15.273	0.00	2.64
34.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.064	0.000	15.273	0.00	0.19
35.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	15.400	0.00	1.32
35.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	15.400	0.00	2.64
35.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.064	0.000	15.400	0.00	0.19
36.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	15.524	0.00	1.32
36.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	15.524	0.00	2.64
36.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.064	0.000	15.524	0.00	0.19
37.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	15.646	0.00	1.32
37.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	15.646	0.00	2.64
37.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.065	0.000	15.646	0.00	0.19
38.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	15.766	0.00	1.32
38.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	15.766	0.00	2.64
38.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.065	0.000	15.766	0.00	0.19
39.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	15.884	0.00	1.32
39.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	15.884	0.00	2.64
39.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.065	0.000	15.884	0.00	0.19
40.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	15.999	0.00	1.32
40.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	15.999	0.00	2.64
40.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.066	0.000	15.999	0.00	0.19
41.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	16.112	0.00	1.32
41.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	16.112	0.00	2.64
41.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.066	0.000	16.112	0.00	0.19
42.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	16.224	0.00	1.32
42.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	16.224	0.00	2.64
42.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.066	0.000	16.224	0.00	0.19
43.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	16.333	0.00	1.32
43.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	16.333	0.00	2.64
43.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.067	0.000	16.333	0.00	0.19
44.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	16.441	0.00	1.32
44.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	16.441	0.00	2.64
44.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.067	0.000	16.441	0.00	0.19
45.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	16.546	0.00	1.32
45.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	16.546	0.00	2.64
45.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.067	0.000	16.546	0.00	0.19
46.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	16.651	0.00	1.32
46.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	16.651	0.00	2.64
46.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.068	0.000	16.651	0.00	0.19
47.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	16.753	0.00	1.32
47.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	16.753	0.00	2.64
47.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.068	0.000	16.753	0.00	0.19

Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II

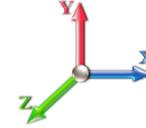


Page: 21

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 35

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
47.55	1 5/8" Fiber	Yes	0.55	0.000	2.00	0.09	0.00	0.068	0.000	16.809	0.00	0.73
47.55	1.9" Fiber	Yes	0.55	0.000	0.00	0.00	0.00	0.068	0.000	16.809	0.00	1.46
47.55	1/2" Coax	Yes	0.55	0.000	0.65	0.03	0.00	0.068	0.000	16.809	0.00	0.11
48.00	1 5/8" Fiber	Yes	0.45	0.000	2.00	0.07	0.00	0.068	0.000	16.854	0.00	0.59
48.00	1.9" Fiber	Yes	0.45	0.000	0.00	0.00	0.00	0.068	0.000	16.854	0.00	1.18
48.00	1/2" Coax	Yes	0.45	0.000	0.65	0.02	0.00	0.068	0.000	16.854	0.00	0.09
49.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.069	0.000	16.954	0.00	1.32
49.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	16.954	0.00	2.64
49.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.069	0.000	16.954	0.00	0.19
50.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.069	0.000	17.052	0.00	1.32
50.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	17.052	0.00	2.64
50.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.069	0.000	17.052	0.00	0.19
51.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.035	17.149	0.00	1.32
51.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.035	17.149	0.00	2.64
51.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.035	17.149	0.00	0.00
51.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.035	17.149	0.00	0.00
52.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.036	17.244	0.00	1.32
52.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	17.244	0.00	2.64
52.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.036	17.244	0.00	0.00
52.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.036	17.244	0.00	0.00
52.97	1 5/8" Fiber	Yes	0.97	0.000	2.00	0.16	0.00	0.113	1.038	17.336	0.00	1.28
52.97	1.9" Fiber	Yes	0.97	0.000	0.00	0.00	0.00	0.113	1.038	17.336	0.00	2.56
52.97	1.25" Reinforcing	Yes	0.97	0.000	1.25	0.10	0.00	0.113	1.038	17.336	0.00	0.00
52.97	1" Reinforcing plate	Yes	0.97	0.000	1.00	0.08	0.00	0.113	1.038	17.336	0.00	0.00
53.00	1 5/8" Fiber	Yes	0.03	0.000	2.00	0.01	0.00	0.112	1.035	17.338	0.00	0.04
53.00	1.9" Fiber	Yes	0.03	0.000	0.00	0.00	0.00	0.112	1.035	17.338	0.00	0.08
53.00	1.25" Reinforcing	Yes	0.03	0.000	1.25	0.00	0.00	0.112	1.035	17.338	0.00	0.00
53.00	1" Reinforcing plate	Yes	0.03	0.000	1.00	0.00	0.00	0.112	1.035	17.338	0.00	0.00
54.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.036	17.431	0.00	1.32
54.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	17.431	0.00	2.64
54.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.036	17.431	0.00	0.00
54.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.036	17.431	0.00	0.00
55.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.037	17.523	0.00	1.32
55.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.037	17.523	0.00	2.64
55.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.037	17.523	0.00	0.00
55.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.037	17.523	0.00	0.00
56.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.113	1.039	17.613	0.00	1.32
56.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.113	1.039	17.613	0.00	2.64
56.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.113	1.039	17.613	0.00	0.00
56.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.113	1.039	17.613	0.00	0.00
57.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.041	17.703	0.00	1.32
57.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	17.703	0.00	2.64
57.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.114	1.041	17.703	0.00	0.00
57.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.114	1.041	17.703	0.00	0.00
58.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.043	17.791	0.00	1.32
58.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.043	17.791	0.00	2.64
58.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.114	1.043	17.791	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

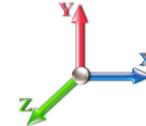
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 22

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 35

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)
58.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.114	1.043	17.791	0.00	0.00
59.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.115	1.045	17.878	0.00	1.32
59.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.115	1.045	17.878	0.00	2.64
59.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.115	1.045	17.878	0.00	0.00
59.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.115	1.045	17.878	0.00	0.00
60.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.116	1.047	17.964	0.00	1.32
60.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.047	17.964	0.00	2.64
60.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.116	1.047	17.964	0.00	0.00
60.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.116	1.047	17.964	0.00	0.00
61.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.116	1.049	18.049	0.00	1.32
61.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.049	18.049	0.00	2.64
61.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.116	1.049	18.049	0.00	0.00
61.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.116	1.049	18.049	0.00	0.00
62.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.117	1.051	18.133	0.00	1.32
62.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.051	18.133	0.00	2.64
62.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.117	1.051	18.133	0.00	0.00
62.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.117	1.051	18.133	0.00	0.00
63.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.118	1.053	18.216	0.00	1.32
63.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.118	1.053	18.216	0.00	2.64
63.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.118	1.053	18.216	0.00	0.00
63.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.118	1.053	18.216	0.00	0.00
64.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.118	1.055	18.298	0.00	1.32
64.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.118	1.055	18.298	0.00	2.64
64.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.118	1.055	18.298	0.00	0.00
64.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.118	1.055	18.298	0.00	0.00
65.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.119	1.057	18.380	0.00	1.32
65.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.119	1.057	18.380	0.00	2.64
65.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.119	1.057	18.380	0.00	0.00
65.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.119	1.057	18.380	0.00	0.00
66.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.120	1.059	18.460	0.00	1.32
66.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.120	1.059	18.460	0.00	2.64
66.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.120	1.059	18.460	0.00	0.00
66.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.120	1.059	18.460	0.00	0.00
67.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.121	1.062	18.539	0.00	1.32
67.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.121	1.062	18.539	0.00	2.64
67.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.121	1.062	18.539	0.00	0.00
67.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.121	1.062	18.539	0.00	0.00
67.92	1 5/8" Fiber	Yes	0.92	0.000	2.00	0.15	0.00	0.121	1.064	18.612	0.00	1.21
67.92	1.9" Fiber	Yes	0.92	0.000	0.00	0.00	0.00	0.121	1.064	18.612	0.00	2.43
67.92	1.25" Reinforcing	Yes	0.92	0.000	1.25	0.10	0.00	0.121	1.064	18.612	0.00	0.00
67.92	1" Reinforcing plate	Yes	0.92	0.000	1.00	0.08	0.00	0.121	1.064	18.612	0.00	0.00
68.00	1 5/8" Fiber	Yes	0.08	0.000	2.00	0.01	0.00	0.122	1.065	18.618	0.00	0.11
68.00	1.9" Fiber	Yes	0.08	0.000	0.00	0.00	0.00	0.122	1.065	18.618	0.00	0.21
68.00	1.25" Reinforcing	Yes	0.08	0.000	1.25	0.01	0.00	0.122	1.065	18.618	0.00	0.00
68.00	1" Reinforcing plate	Yes	0.08	0.000	1.00	0.01	0.00	0.122	1.065	18.618	0.00	0.00
69.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.122	1.066	18.696	0.00	1.32
69.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.122	1.066	18.696	0.00	2.64

Linear Appurtenance Segment Forces (Factored)

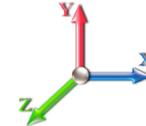
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 23

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 35

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)
69.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.122	1.066	18.696	0.00	0.00
69.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.122	1.066	18.696	0.00	0.00
70.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.123	1.068	18.773	0.00	1.32
70.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.123	1.068	18.773	0.00	2.64
70.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.123	1.068	18.773	0.00	0.00
70.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.123	1.068	18.773	0.00	0.00
71.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.094	0.000	18.849	0.00	1.32
71.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	18.849	0.00	2.64
71.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.094	0.000	18.849	0.00	0.00
72.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.095	0.000	18.925	0.00	1.32
72.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.095	0.000	18.925	0.00	2.64
72.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.095	0.000	18.925	0.00	0.00
73.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.096	0.000	18.999	0.00	1.32
73.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.096	0.000	18.999	0.00	2.64
73.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.096	0.000	18.999	0.00	0.00
74.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.096	0.000	19.073	0.00	1.32
74.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.096	0.000	19.073	0.00	2.64
74.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.096	0.000	19.073	0.00	0.00
75.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.097	0.000	19.147	0.00	1.32
75.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	19.147	0.00	2.64
75.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.097	0.000	19.147	0.00	0.00
76.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.097	0.000	19.219	0.00	1.32
76.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	19.219	0.00	2.64
76.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.097	0.000	19.219	0.00	0.00
77.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.098	0.000	19.291	0.00	1.32
77.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	19.291	0.00	2.64
77.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.098	0.000	19.291	0.00	0.00
78.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	19.362	0.00	1.32
78.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	19.362	0.00	2.64
79.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	19.433	0.00	1.32
79.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	19.433	0.00	2.64
80.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	19.503	0.00	1.32
80.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	19.503	0.00	2.64
81.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	19.572	0.00	1.32
81.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	19.572	0.00	2.64
82.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	19.641	0.00	1.32
82.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	19.641	0.00	2.64
83.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	19.709	0.00	1.32
83.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	19.709	0.00	2.64
84.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	19.777	0.00	1.32
84.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	19.777	0.00	2.64
85.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	19.844	0.00	1.32
85.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	19.844	0.00	2.64
86.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	19.910	0.00	1.32
86.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	19.910	0.00	2.64
87.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	19.976	0.00	1.32
87.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	19.976	0.00	2.64

Linear Appurtenance Segment Forces (Factored)

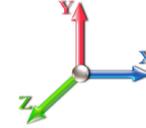
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 24

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 35

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
88.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	20.041	0.00	1.32
88.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	20.041	0.00	2.64
89.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	20.106	0.00	1.32
89.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	20.106	0.00	2.64
90.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	20.170	0.00	1.32
90.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	20.170	0.00	2.64
91.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	20.234	0.00	1.32
91.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	20.234	0.00	2.64
92.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	20.297	0.00	1.32
92.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	20.297	0.00	2.64
93.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	20.360	0.00	1.32
93.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	20.360	0.00	2.64
94.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	20.423	0.00	1.32
94.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	20.423	0.00	2.64
95.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	20.484	0.00	1.32
95.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	20.484	0.00	2.64
96.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.069	0.000	20.546	0.00	1.32
96.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	20.546	0.00	2.64
96.18	1" Reinforcing plate	Yes	0.18	0.000	1.00	0.01	0.00	0.103	1.010	20.557	0.00	0.00
96.18	1 5/8" Fiber	Yes	0.18	0.000	2.00	0.03	0.00	0.103	1.010	20.557	0.00	0.23
96.18	1.9" Fiber	Yes	0.18	0.000	0.00	0.00	0.00	0.103	1.010	20.557	0.00	0.47
97.00	1" Reinforcing plate	Yes	0.82	0.000	1.00	0.07	0.00	0.104	1.011	20.607	0.00	0.00
97.00	1 5/8" Fiber	Yes	0.82	0.000	2.00	0.14	0.00	0.104	1.011	20.607	0.00	1.09
97.00	1.9" Fiber	Yes	0.82	0.000	0.00	0.00	0.00	0.104	1.011	20.607	0.00	2.17
98.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.148	1.144	20.667	0.00	0.00
98.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.148	1.144	20.667	0.00	1.32
98.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.148	1.144	20.667	0.00	2.64
98.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.148	1.144	20.667	0.00	0.00
99.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.149	1.147	20.727	0.00	0.00
99.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.147	20.727	0.00	1.32
99.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	20.727	0.00	2.64
99.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.149	1.147	20.727	0.00	0.00
99.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.150	1.149	20.742	0.00	0.00
99.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.04	0.00	0.150	1.149	20.742	0.00	0.33
99.25	1.9" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.150	1.149	20.742	0.00	0.66
99.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.150	1.149	20.742	0.00	0.00
100.00	1" Reinforcing plate	Yes	0.75	0.000	1.00	0.06	0.00	0.150	1.151	20.787	0.00	0.00
100.00	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.150	1.151	20.787	0.00	0.99
100.00	1.9" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.150	1.151	20.787	0.00	1.98
100.00	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.150	1.151	20.787	0.00	0.00
100.34	1" Reinforcing plate	Yes	0.34	0.000	1.00	0.03	0.00	0.151	1.153	20.807	0.00	0.00
100.34	1 5/8" Fiber	Yes	0.34	0.000	2.00	0.06	0.00	0.151	1.153	20.807	0.00	0.45
100.34	1.9" Fiber	Yes	0.34	0.000	0.00	0.00	0.00	0.151	1.153	20.807	0.00	0.91
100.34	1.25" Reinforcing	Yes	0.34	0.000	1.25	0.04	0.00	0.151	1.153	20.807	0.00	0.00
101.00	1" Reinforcing plate	Yes	0.66	0.000	1.00	0.05	0.00	0.149	1.148	20.846	0.00	0.00
101.00	1 5/8" Fiber	Yes	0.66	0.000	2.00	0.11	0.00	0.149	1.148	20.846	0.00	0.87
101.00	1.9" Fiber	Yes	0.66	0.000	0.00	0.00	0.00	0.149	1.148	20.846	0.00	1.73

Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 25

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 35

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)
101.00	1.25" Reinforcing	Yes	0.66	0.000	1.25	0.07	0.00	0.149	1.148	20.846	0.00	0.00
102.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.150	1.151	20.905	0.00	0.00
102.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.150	1.151	20.905	0.00	1.32
102.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.150	1.151	20.905	0.00	2.64
102.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.150	1.151	20.905	0.00	0.00
102.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.151	1.153	20.919	0.00	0.00
102.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.04	0.00	0.151	1.153	20.919	0.00	0.33
102.25	1.9" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.151	1.153	20.919	0.00	0.66
102.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.151	1.153	20.919	0.00	0.00
103.00	1" Reinforcing plate	Yes	0.75	0.000	1.00	0.06	0.00	0.152	1.155	20.963	0.00	0.00
103.00	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.152	1.155	20.963	0.00	0.99
103.00	1.9" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.152	1.155	20.963	0.00	1.98
103.00	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.152	1.155	20.963	0.00	0.00
104.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.153	1.158	21.021	0.00	0.00
104.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.153	1.158	21.021	0.00	1.32
104.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.153	1.158	21.021	0.00	2.64
104.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.153	1.158	21.021	0.00	0.00
105.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.154	1.161	21.079	0.00	0.00
105.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.154	1.161	21.079	0.00	1.32
105.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.154	1.161	21.079	0.00	2.64
105.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.154	1.161	21.079	0.00	0.00
106.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.109	1.028	21.136	0.00	0.00
106.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.109	1.028	21.136	0.00	1.32
106.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.109	1.028	21.136	0.00	2.64
107.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.110	1.031	21.193	0.00	0.00
107.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.110	1.031	21.193	0.00	1.32
107.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.110	1.031	21.193	0.00	2.64
108.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.111	1.033	21.249	0.00	0.00
108.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.111	1.033	21.249	0.00	1.32
108.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.111	1.033	21.249	0.00	2.64
109.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.036	21.305	0.00	0.00
109.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.036	21.305	0.00	1.32
109.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	21.305	0.00	2.64
110.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.113	1.038	21.361	0.00	0.00
110.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.113	1.038	21.361	0.00	1.32
110.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.113	1.038	21.361	0.00	2.64
111.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.114	1.041	21.416	0.00	0.00
111.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.041	21.416	0.00	1.32
111.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	21.416	0.00	2.64
112.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.115	1.044	21.471	0.00	0.00
112.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.115	1.044	21.471	0.00	1.32
112.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.115	1.044	21.471	0.00	2.64
113.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.116	1.047	21.526	0.00	0.00
113.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.116	1.047	21.526	0.00	1.32
113.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.047	21.526	0.00	2.64
114.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.117	1.050	21.580	0.00	0.00
114.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.117	1.050	21.580	0.00	1.32

Linear Appurtenance Segment Forces (Factored)

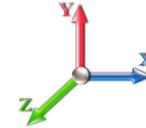
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 26

Load Case: 1.2D + 1.6W 93 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 35

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)
114.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.050	21.580	0.00	2.64
115.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.117	1.052	21.634	0.00	0.00
115.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.117	1.052	21.634	0.00	1.32
115.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.052	21.634	0.00	2.64
116.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.039	0.000	21.687	0.00	0.00
Totals:											0.0	465.0

Calculated Forces

Structure: CT12215-A-SBA

Code: TIA-222-G

5/3/2022

Site Name: Litchfield 3, CT

Exposure: B



Height: 149.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: B - Competent Rock

Gh: 1.1

Topography: 1

Struct Class: II

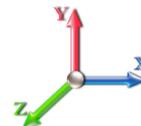
Page: 27

Load Case: 1.2D + 1.6W 93 mph Wind

Iterations 35

Dead Load Factor 1.20

Wind Load Factor 1.60



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	-36.09	-21.13	0.00	-2409.6	0.00	2409.62	3031.07	1515.53	5947.06	2977.95	0.00	0.000	0.000	0.821
1.00	-35.83	-21.09	0.00	-2388.4	0.00	2388.49	3023.73	1511.86	5906.70	2957.74	0.01	-0.050	0.000	0.820
2.00	-35.57	-21.05	0.00	-2367.4	0.00	2367.40	3016.33	1508.17	5866.38	2937.55	0.02	-0.101	0.000	0.818
3.00	-35.31	-21.01	0.00	-2346.3	0.00	2346.35	3008.89	1504.45	5826.08	2917.37	0.05	-0.151	0.000	0.816
4.00	-35.06	-20.98	0.00	-2325.3	0.00	2325.34	3001.40	1500.70	5785.81	2897.21	0.09	-0.202	0.000	0.814
5.00	-34.80	-20.94	0.00	-2304.3	0.00	2304.36	2993.85	1496.92	5745.58	2877.06	0.13	-0.253	0.000	0.813
6.00	-34.55	-20.90	0.00	-2283.4	0.00	2283.42	2986.25	1493.13	5705.37	2856.93	0.19	-0.305	0.000	0.811
7.00	-34.29	-20.87	0.00	-2262.5	0.00	2262.52	2978.60	1489.30	5665.20	2836.81	0.26	-0.356	0.000	0.809
8.00	-34.04	-20.83	0.00	-2241.6	0.00	2241.65	2970.91	1485.45	5625.07	2816.71	0.34	-0.408	0.000	0.807
9.00	-33.78	-20.79	0.00	-2220.8	0.00	2220.82	2963.16	1481.58	5584.97	2796.63	0.43	-0.460	0.000	0.806
10.00	-33.53	-20.76	0.00	-2200.0	0.00	2200.03	2955.36	1477.68	5544.90	2776.57	0.54	-0.512	0.000	0.804
11.00	-33.28	-20.72	0.00	-2179.2	0.00	2179.27	2947.51	1473.75	5504.88	2756.53	0.65	-0.564	0.000	0.802
12.00	-33.03	-20.68	0.00	-2158.5	0.00	2158.55	2939.60	1469.80	5464.90	2736.51	0.77	-0.617	0.000	0.800
13.00	-32.78	-20.65	0.00	-2137.8	0.00	2137.87	2931.65	1465.83	5424.96	2716.51	0.91	-0.670	0.000	0.798
14.00	-32.53	-20.61	0.00	-2117.2	0.00	2117.23	2923.65	1461.82	5385.06	2696.53	1.05	-0.723	0.000	0.796
15.00	-32.28	-20.57	0.00	-2096.6	0.00	2096.62	2915.59	1457.80	5345.20	2676.57	1.21	-0.776	0.000	0.795
16.00	-32.04	-20.53	0.00	-2076.0	0.00	2076.05	2907.49	1453.74	5305.39	2656.64	1.38	-0.829	0.000	0.793
17.00	-31.79	-20.50	0.00	-2055.5	0.00	2055.52	2899.33	1449.67	5265.63	2636.73	1.56	-0.883	0.000	0.791
18.00	-31.54	-20.46	0.00	-2035.0	0.00	2035.02	2891.12	1445.56	5225.92	2616.84	1.75	-0.937	0.000	0.789
19.00	-31.30	-20.42	0.00	-2014.5	0.00	2014.56	2882.86	1441.43	5186.25	2596.98	1.95	-0.991	0.000	0.787
20.00	-31.06	-20.39	0.00	-1994.1	0.00	1994.14	2874.56	1437.28	5146.64	2577.14	2.17	-1.045	0.000	0.785
21.00	-30.81	-20.35	0.00	-1973.7	0.00	1973.75	2866.20	1433.10	5107.08	2557.33	2.39	-1.100	0.000	0.783
22.00	-30.57	-20.31	0.00	-1953.4	0.00	1953.41	2857.79	1428.89	5067.57	2537.55	2.63	-1.155	0.000	0.781
23.00	-30.33	-20.27	0.00	-1933.0	0.00	1933.09	2849.32	1424.66	5028.11	2517.79	2.88	-1.210	0.000	0.779
24.00	-30.09	-20.24	0.00	-1912.8	0.00	1912.82	2840.81	1420.41	4988.71	2498.06	3.14	-1.265	0.000	0.777
25.00	-29.85	-20.20	0.00	-1892.5	0.00	1892.59	2832.25	1416.12	4949.37	2478.36	3.41	-1.320	0.000	0.774
26.00	-29.61	-20.16	0.00	-1872.3	0.00	1872.39	2823.63	1411.82	4910.09	2458.69	3.69	-1.376	0.000	0.772
27.00	-29.38	-20.13	0.00	-1852.2	0.00	1852.22	2814.97	1407.48	4870.87	2439.05	3.98	-1.432	0.000	0.770
28.00	-29.14	-20.09	0.00	-1832.1	0.00	1832.10	2806.25	1403.13	4831.70	2419.44	4.29	-1.488	0.000	0.768
29.00	-28.90	-20.05	0.00	-1812.0	0.00	1812.01	2797.49	1398.74	4792.60	2399.86	4.61	-1.544	0.000	0.766
30.00	-28.67	-20.01	0.00	-1791.9	0.00	1791.96	2788.67	1394.33	4753.57	2380.32	4.94	-1.601	0.000	0.763
31.00	-28.43	-19.98	0.00	-1771.9	0.00	1771.95	2779.80	1389.90	4714.60	2360.80	5.28	-1.658	0.000	0.761
32.00	-28.20	-19.94	0.00	-1751.9	0.00	1751.97	2770.88	1385.44	4675.69	2341.32	5.63	-1.714	0.000	0.759
33.00	-27.97	-19.90	0.00	-1732.0	0.00	1732.04	2761.91	1380.95	4636.86	2321.88	6.00	-1.772	0.000	0.756
34.00	-27.74	-19.86	0.00	-1712.1	0.00	1712.14	2752.89	1376.44	4598.09	2302.46	6.38	-1.829	0.000	0.754
35.00	-27.51	-19.82	0.00	-1692.2	0.00	1692.28	2743.82	1371.91	4559.39	2283.08	6.77	-1.887	0.000	0.751
36.00	-27.28	-19.78	0.00	-1672.4	0.00	1672.47	2734.69	1367.35	4520.77	2263.74	7.17	-1.944	0.000	0.749
37.00	-27.05	-19.74	0.00	-1652.6	0.00	1652.69	2725.52	1362.76	4482.21	2244.44	7.58	-2.002	0.000	0.746
38.00	-26.82	-19.69	0.00	-1632.9	0.00	1632.95	2716.29	1358.15	4443.74	2225.17	8.01	-2.061	0.000	0.744
39.00	-26.59	-19.65	0.00	-1613.2	0.00	1613.26	2707.02	1353.51	4405.33	2205.94	8.44	-2.119	0.000	0.741
40.00	-26.37	-19.61	0.00	-1593.6	0.00	1593.61	2697.69	1348.85	4367.01	2186.75	8.89	-2.177	0.000	0.739
41.00	-26.14	-19.57	0.00	-1574.0	0.00	1574.00	2688.32	1344.16	4328.76	2167.60	9.36	-2.236	0.000	0.736
42.00	-25.92	-19.52	0.00	-1554.4	0.00	1554.43	2678.89	1339.44	4290.59	2148.48	9.83	-2.295	0.000	0.733
43.00	-25.69	-19.48	0.00	-1534.9	0.00	1534.90	2669.41	1334.70	4252.50	2129.41	10.32	-2.354	0.000	0.731
44.00	-25.47	-19.44	0.00	-1515.4	0.00	1515.42	2659.88	1329.94	4214.50	2110.38	10.82	-2.414	0.000	0.728
45.00	-25.25	-19.39	0.00	-1495.9	0.00	1495.99	2650.30	1325.15	4176.57	2091.39	11.33	-2.473	0.000	0.725
46.00	-25.03	-19.35	0.00	-1476.6	0.00	1476.60	2640.67	1320.33	4138.74	2072.44	11.86	-2.533	0.000	0.722
47.00	-24.81	-19.30	0.00	-1457.2	0.00	1457.25	2630.98	1315.49	4100.98	2053.54	12.39	-2.593	0.000	0.719

Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 28



47.55	-24.69	-19.27	0.00	-1446.5	0.00	1446.57	2625.60	1312.80	4080.13	2043.10	12.70	-2.627	0.000	0.718
48.00	-24.53	-19.25	0.00	-1437.9	0.00	1437.97	2621.25	1310.62	4063.32	2034.68	12.94	-2.654	0.000	0.716
49.00	-24.19	-19.20	0.00	-1418.7	0.00	1418.71	2611.47	1305.73	4025.74	2015.86	13.50	-2.714	0.000	0.713
50.00	-23.85	-19.14	0.00	-1399.5	0.00	1399.51	2601.63	1300.82	3988.26	1997.09	14.08	-2.774	0.000	0.710
51.00	-23.51	-19.09	0.00	-1380.3	0.00	1380.37	2591.74	1295.87	3950.86	1978.37	14.67	-2.835	0.000	0.707
52.00	-23.18	-19.02	0.00	-1361.2	0.00	1361.29	2581.81	1290.90	3913.56	1959.69	15.27	-2.896	0.000	0.344
52.97	-22.87	-18.95	0.00	-1342.8	0.00	1342.84	1914.68	957.34	2935.86	1470.11	15.86	-2.925	0.000	0.377
53.00	-22.86	-18.95	0.00	-1342.2	0.00	1342.27	1914.50	957.25	2935.09	1469.72	15.88	-2.926	0.000	0.410
54.00	-22.68	-18.89	0.00	-1323.3	0.00	1323.32	1908.40	954.20	2909.37	1456.85	16.49	-2.958	0.000	0.406
55.00	-22.51	-18.83	0.00	-1304.4	0.00	1304.42	1902.26	951.13	2883.67	1443.98	17.12	-2.990	0.000	0.402
56.00	-22.33	-18.77	0.00	-1285.5	0.00	1285.59	1896.06	948.03	2858.01	1431.13	17.75	-3.022	0.000	0.399
57.00	-22.16	-18.71	0.00	-1266.8	0.00	1266.83	1889.81	944.90	2832.37	1418.29	18.38	-3.055	0.000	0.395
58.00	-21.99	-18.64	0.00	-1248.1	0.00	1248.12	1883.51	941.76	2806.77	1405.47	19.02	-3.087	0.000	0.391
59.00	-21.82	-18.58	0.00	-1229.4	0.00	1229.48	1877.16	938.58	2781.20	1392.67	19.67	-3.119	0.000	0.388
60.00	-21.64	-18.52	0.00	-1210.8	0.00	1210.89	1870.76	935.38	2755.66	1379.88	20.33	-3.151	0.000	0.384
61.00	-21.47	-18.46	0.00	-1192.3	0.00	1192.38	1864.31	932.15	2730.16	1367.11	20.99	-3.183	0.000	0.380
62.00	-21.30	-18.39	0.00	-1173.9	0.00	1173.92	1857.80	928.90	2704.70	1354.36	21.66	-3.215	0.000	0.377
63.00	-21.14	-18.33	0.00	-1155.5	0.00	1155.53	1851.25	925.63	2679.27	1341.63	22.34	-3.247	0.000	0.373
64.00	-20.97	-18.27	0.00	-1137.2	0.00	1137.20	1844.65	922.32	2653.88	1328.91	23.02	-3.279	0.000	0.369
65.00	-20.80	-18.20	0.00	-1118.9	0.00	1118.93	1837.99	919.00	2628.54	1316.22	23.71	-3.310	0.000	0.365
66.00	-20.63	-18.14	0.00	-1100.7	0.00	1100.73	1831.29	915.64	2603.23	1303.55	24.41	-3.342	0.000	0.362
67.00	-20.47	-18.07	0.00	-1082.5	0.00	1082.59	1824.53	912.26	2577.97	1290.90	25.11	-3.374	0.000	0.358
67.92	-20.32	-18.01	0.00	-1065.9	0.00	1065.96	1818.27	909.13	2554.77	1279.28	25.77	-3.403	0.000	0.276
68.00	-20.30	-18.01	0.00	-1064.5	0.00	1064.52	1817.72	908.86	2552.75	1278.27	25.82	-3.405	0.000	0.504
69.00	-20.13	-17.95	0.00	-1046.5	0.00	1046.51	1810.86	905.43	2527.58	1265.67	26.54	-3.450	0.000	0.500
70.00	-19.96	-17.89	0.00	-1028.5	0.00	1028.56	1803.95	901.98	2502.46	1253.09	27.27	-3.495	0.000	0.495
71.00	-19.80	-17.84	0.00	-1010.6	0.00	1010.67	1796.99	898.50	2477.38	1240.53	28.00	-3.539	0.000	0.490
72.00	-19.63	-17.78	0.00	-992.83	0.00	992.83	1789.98	894.99	2452.36	1228.00	28.75	-3.584	0.000	0.484
73.00	-19.45	-17.69	0.00	-975.05	0.00	975.05	1782.92	891.46	2427.38	1215.49	29.51	-3.628	0.000	0.479
74.00	-19.29	-17.63	0.00	-957.36	0.00	957.36	1775.81	887.90	2402.46	1203.02	30.27	-3.673	0.000	0.474
75.00	-19.13	-17.58	0.00	-939.73	0.00	939.73	1768.64	884.32	2377.59	1190.56	31.04	-3.717	0.000	0.469
76.00	-18.96	-17.53	0.00	-922.15	0.00	922.15	1761.43	880.71	2352.78	1178.14	31.83	-3.761	0.000	0.794
77.00	-18.79	-17.48	0.00	-904.62	0.00	904.62	1754.16	877.08	2328.02	1165.74	32.62	-3.837	0.000	0.787
78.00	-18.61	-17.43	0.00	-887.14	0.00	887.14	1746.84	873.42	2303.32	1153.37	33.43	-3.912	0.000	0.780
79.00	-18.44	-17.39	0.00	-869.71	0.00	869.71	1739.48	869.74	2278.68	1141.03	34.26	-3.988	0.000	0.773
80.00	-18.27	-17.34	0.00	-852.32	0.00	852.32	1732.06	866.03	2254.10	1128.72	35.10	-4.063	0.000	0.766
81.00	-18.11	-17.29	0.00	-834.98	0.00	834.98	1724.59	862.29	2229.58	1116.45	35.96	-4.139	0.000	0.759
82.00	-17.94	-17.25	0.00	-817.69	0.00	817.69	1717.07	858.53	2205.12	1104.20	36.84	-4.214	0.000	0.751
83.00	-17.77	-17.20	0.00	-800.44	0.00	800.44	1709.50	854.75	2180.73	1091.99	37.73	-4.289	0.000	0.744
84.00	-17.61	-17.15	0.00	-783.24	0.00	783.24	1701.88	850.94	2156.41	1079.81	38.63	-4.364	0.000	0.736
85.00	-17.44	-17.10	0.00	-766.09	0.00	766.09	1694.20	847.10	2132.15	1067.66	39.55	-4.439	0.000	0.728
86.00	-17.28	-17.06	0.00	-748.99	0.00	748.99	1686.48	843.24	2107.95	1055.54	40.49	-4.514	0.000	0.720
87.00	-17.11	-17.01	0.00	-731.94	0.00	731.94	1678.71	839.35	2083.83	1043.46	41.44	-4.588	0.000	0.712
88.00	-16.95	-16.96	0.00	-714.93	0.00	714.93	1670.88	835.44	2059.78	1031.42	42.41	-4.663	0.000	0.704
89.00	-16.79	-16.91	0.00	-697.97	0.00	697.97	1663.00	831.50	2035.80	1019.41	43.40	-4.737	0.000	0.695
90.00	-16.63	-16.86	0.00	-681.06	0.00	681.06	1655.08	827.54	2011.90	1007.44	44.40	-4.811	0.000	0.686
91.00	-16.47	-16.81	0.00	-664.20	0.00	664.20	1647.10	823.55	1988.06	995.51	45.41	-4.884	0.000	0.678
92.00	-16.31	-16.76	0.00	-647.39	0.00	647.39	1639.07	819.54	1964.31	983.61	46.44	-4.958	0.000	0.669
93.00	-16.15	-16.71	0.00	-630.63	0.00	630.63	1630.99	815.50	1940.63	971.76	47.49	-5.031	0.000	0.659
94.00	-15.99	-16.66	0.00	-613.92	0.00	613.92	1622.86	811.43	1917.03	959.94	48.55	-5.103	0.000	0.650
95.00	-15.84	-16.61	0.00	-597.25	0.00	597.25	1614.68	807.34	1893.51	948.16	49.62	-5.175	0.000	0.640
96.00	-15.69	-16.56	0.00	-580.64	0.00	580.64	1606.45	803.22	1870.07	936.43	50.71	-5.247	0.000	0.630
96.18	-15.66	-16.55	0.00	-577.72	0.00	577.72	1604.99	802.49	1865.94	934.36	50.91	-5.260	0.000	0.628
97.00	-15.47	-16.51	0.00	-564.09	0.00	564.09	1598.16	799.08	1846.72	924.73	51.82	-5.318	0.000	0.620
98.00	-15.25	-16.44	0.00	-547.58	0.00	547.58	1589.83	794.91	1823.44	913.08	52.94	-5.389	0.000	0.610
99.00	-15.04	-16.37	0.00	-531.14	0.00	531.14	1581.44	790.72	1800.26	901.47	54.07	-5.459	0.000	0.599
99.25	-14.98	-16.35	0.00	-527.05	0.00	527.05	1579.34	789.67	1794.47	898.57	54.36	-5.477	0.000	0.336

Calculated Forces

Structure: CT12215-A-SBA

Site Name: Litchfield 3, CT

Height: 149.00 (ft)

Base Elev: 0.000 (ft)

Gh: 1.1

Topography: 1

Code: TIA-222-G

Exposure: B

Crest Height: 0.00

Site Class: B - Competent Rock

Struct Class: II

5/3/2022

Page: 29



100.00	-14.82	-16.29	0.00	-514.79	0.00	514.79	1573.01	786.50	1777.16	889.90	55.22	-5.506	0.000	0.331
100.34	-14.75	-16.27	0.00	-509.19	0.00	509.19	1075.68	537.84	1234.34	618.09	55.62	-5.520	0.000	0.371
101.00	-14.67	-16.23	0.00	-498.51	0.00	498.51	1072.67	536.33	1224.84	613.33	56.38	-5.545	0.000	0.414
102.00	-14.55	-16.16	0.00	-482.28	0.00	482.28	1068.04	534.02	1210.40	606.10	57.54	-5.589	0.000	0.404
102.25	-14.52	-16.15	0.00	-478.24	0.00	478.24	1066.88	533.44	1206.79	604.29	57.83	-5.599	0.000	0.402
102.25	-14.52	-16.15	0.00	-478.24	0.00	478.24	1066.88	533.44	1206.79	604.29	57.83	-5.599	0.000	0.402
103.00	-14.42	-16.11	0.00	-466.13	0.00	466.13	1063.37	531.68	1195.97	598.87	58.71	-5.631	0.000	0.793
104.00	-14.29	-16.05	0.00	-450.03	0.00	450.03	1058.64	529.32	1181.57	591.66	59.90	-5.716	0.000	0.775
105.00	-14.16	-16.00	0.00	-433.98	0.00	433.98	1053.86	526.93	1167.20	584.47	61.11	-5.800	0.000	0.757
106.00	-14.03	-15.95	0.00	-417.98	0.00	417.98	1049.03	524.52	1152.85	577.28	62.33	-5.882	0.000	0.738
107.00	-13.90	-15.90	0.00	-402.03	0.00	402.03	1044.15	522.08	1138.52	570.11	63.57	-5.964	0.000	0.719
108.00	-13.77	-15.85	0.00	-386.14	0.00	386.14	1039.22	519.61	1124.23	562.95	64.82	-6.044	0.000	0.700
109.00	-13.65	-15.80	0.00	-370.29	0.00	370.29	1034.24	517.12	1109.97	555.81	66.10	-6.122	0.000	0.680
110.00	-13.52	-15.75	0.00	-354.49	0.00	354.49	1029.21	514.60	1095.73	548.68	67.38	-6.199	0.000	0.660
111.00	-13.40	-15.70	0.00	-338.73	0.00	338.73	1024.13	512.06	1081.53	541.57	68.69	-6.275	0.000	0.639
112.00	-13.27	-15.65	0.00	-323.03	0.00	323.03	1018.99	509.50	1067.37	534.48	70.01	-6.349	0.000	0.618
113.00	-13.15	-15.60	0.00	-307.38	0.00	307.38	1013.81	506.90	1053.24	527.40	71.34	-6.421	0.000	0.597
114.00	-13.03	-15.55	0.00	-291.79	0.00	291.79	1008.57	504.29	1039.14	520.34	72.69	-6.491	0.000	0.575
115.00	-10.13	-12.36	0.00	-276.24	0.00	276.24	1003.28	501.64	1025.09	513.31	74.06	-6.559	0.000	0.549
116.00	-10.01	-12.30	0.00	-263.89	0.00	263.89	997.95	498.97	1011.07	506.29	75.44	-6.626	0.000	0.532
117.00	-9.90	-12.25	0.00	-251.58	0.00	251.58	992.56	496.28	997.10	499.29	76.83	-6.691	0.000	0.514
118.00	-9.79	-12.20	0.00	-239.33	0.00	239.33	987.12	493.56	983.16	492.31	78.24	-6.755	0.000	0.497
119.00	-9.68	-12.14	0.00	-227.14	0.00	227.14	981.63	490.81	969.27	485.36	79.65	-6.817	0.000	0.478
120.00	-9.57	-12.09	0.00	-214.99	0.00	214.99	976.09	488.04	955.42	478.42	81.09	-6.877	0.000	0.460
121.00	-9.47	-12.04	0.00	-202.90	0.00	202.90	970.50	485.25	941.62	471.51	82.53	-6.935	0.000	0.441
122.00	-9.36	-11.99	0.00	-190.86	0.00	190.86	964.85	482.43	927.87	464.62	83.98	-6.992	0.000	0.421
123.00	-9.26	-11.93	0.00	-178.88	0.00	178.88	959.16	479.58	914.16	457.76	85.45	-7.047	0.000	0.401
124.00	-9.15	-11.88	0.00	-166.95	0.00	166.95	953.42	476.71	900.51	450.92	86.93	-7.099	0.000	0.380
125.00	-9.05	-11.82	0.00	-155.07	0.00	155.07	947.62	473.81	886.90	444.11	88.42	-7.149	0.000	0.359
126.00	-8.95	-11.77	0.00	-143.24	0.00	143.24	941.77	470.89	873.35	437.32	89.92	-7.197	0.000	0.338
127.00	-8.85	-11.72	0.00	-131.47	0.00	131.47	935.88	467.94	859.85	430.56	91.43	-7.242	0.000	0.315
128.00	-8.75	-11.66	0.00	-119.76	0.00	119.76	929.93	464.96	846.40	423.83	92.94	-7.284	0.000	0.293
129.00	-8.65	-11.61	0.00	-108.10	0.00	108.10	923.93	461.97	833.02	417.13	94.47	-7.324	0.000	0.269
130.00	-4.91	-6.80	0.00	-96.49	0.00	96.49	917.88	458.94	819.69	410.45	96.01	-7.361	0.000	0.241
131.00	-4.84	-6.75	0.00	-89.69	0.00	89.69	911.78	455.89	806.41	403.81	97.55	-7.395	0.000	0.228
132.00	-4.77	-6.69	0.00	-82.94	0.00	82.94	905.63	452.81	793.20	397.19	99.10	-7.427	0.000	0.214
133.00	-4.70	-6.64	0.00	-76.25	0.00	76.25	899.43	449.71	780.05	390.61	100.65	-7.458	0.000	0.201
134.00	-4.64	-6.59	0.00	-69.61	0.00	69.61	893.17	446.59	766.97	384.05	102.21	-7.488	0.000	0.187
135.00	-4.57	-6.53	0.00	-63.03	0.00	63.03	886.87	443.43	753.94	377.53	103.78	-7.515	0.000	0.172
136.00	-4.50	-6.48	0.00	-56.50	0.00	56.50	880.51	440.26	740.98	371.04	105.35	-7.541	0.000	0.158
137.00	-4.44	-6.43	0.00	-50.02	0.00	50.02	874.11	437.05	728.09	364.59	106.93	-7.564	0.000	0.142
138.00	-4.37	-6.37	0.00	-43.59	0.00	43.59	867.65	433.83	715.27	358.17	108.51	-7.585	0.000	0.127
139.00	-4.31	-6.32	0.00	-38.92	0.00	38.92	861.15	430.57	702.52	351.78	110.10	-7.604	0.000	0.116
140.00	-2.58	-3.45	0.00	-34.30	0.00	34.30	854.59	427.29	689.83	345.43	111.69	-7.622	0.000	0.102
141.00	-2.53	-3.40	0.00	-30.85	0.00	30.85	847.98	423.99	677.22	339.11	113.28	-7.638	0.000	0.094
142.00	-2.49	-3.35	0.00	-27.45	0.00	27.45	841.32	420.66	664.68	332.84	114.88	-7.653	0.000	0.085
143.00	-2.44	-3.30	0.00	-24.10	0.00	24.10	834.61	417.30	652.22	326.60	116.48	-7.667	0.000	0.077
144.00	-2.40	-3.25	0.00	-20.80	0.00	20.80	827.84	413.92	639.83	320.39	118.08	-7.679	0.000	0.068
145.00	-2.35	-3.20	0.00	-17.54	0.00	17.54	821.03	410.52	627.52	314.23	119.68	-7.690	0.000	0.059
146.00	-2.31	-3.16	0.00	-14.34	0.00	14.34	814.17	407.08	615.29	308.10	121.29	-7.699	0.000	0.049
147.00	-2.27	-3.11	0.00	-11.18	0.00	11.18	805.87	402.94	602.11	301.50	122.90	-7.707	0.000	0.040
148.00	-2.22	-3.06	0.00	-8.07	0.00	8.07	796.71	398.35	588.42	294.65	124.51	-7.713	0.000	0.030
149.00	0.00	-2.74	0.00	-5.01	0.00	5.01	787.55	393.77	574.90	287.88	126.12	-7.717	0.000	0.017

Wind Loading - Shaft

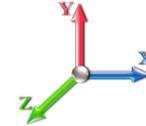
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 30

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	14.724	16.20	316.04	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00		1.00	0.70	14.724	16.20	314.67	0.650	0.000	1.00	4.053	2.63	68.3	0.0	144.5
2.00		1.00	0.70	14.724	16.20	313.31	0.650	0.000	1.00	4.035	2.62	68.0	0.0	143.9
3.00		1.00	0.70	14.724	16.20	311.95	0.650	0.000	1.00	4.018	2.61	67.7	0.0	143.3
4.00		1.00	0.70	14.724	16.20	310.58	0.650	0.000	1.00	4.000	2.60	67.4	0.0	142.6
5.00		1.00	0.70	14.724	16.20	309.22	0.650	0.000	1.00	3.983	2.59	67.1	0.0	142.0
6.00		1.00	0.70	14.724	16.20	307.85	0.650	0.000	1.00	3.965	2.58	66.8	0.0	141.4
7.00		1.00	0.70	14.724	16.20	306.49	0.650	0.000	1.00	3.948	2.57	66.5	0.0	140.8
8.00		1.00	0.70	14.724	16.20	305.12	0.650	0.000	1.00	3.930	2.55	66.2	0.0	140.1
9.00		1.00	0.70	14.724	16.20	303.76	0.650	0.000	1.00	3.913	2.54	65.9	0.0	139.5
10.00		1.00	0.70	14.724	16.20	302.40	0.650	0.000	1.00	3.895	2.53	65.6	0.0	138.9
11.00		1.00	0.70	14.724	16.20	301.03	0.650	0.000	1.00	3.878	2.52	65.3	0.0	138.2
12.00		1.00	0.70	14.724	16.20	299.67	0.650	0.000	1.00	3.860	2.51	65.0	0.0	137.6
13.00		1.00	0.70	14.724	16.20	298.30	0.650	0.000	1.00	3.843	2.50	64.7	0.0	137.0
14.00		1.00	0.70	14.724	16.20	296.94	0.650	0.000	1.00	3.825	2.49	64.4	0.0	136.4
15.00		1.00	0.70	14.724	16.20	295.57	0.650	0.000	1.00	3.807	2.47	64.1	0.0	135.7
16.00		1.00	0.70	14.724	16.20	294.21	0.650	0.000	1.00	3.790	2.46	63.8	0.0	135.1
17.00		1.00	0.70	14.724	16.20	292.85	0.650	0.000	1.00	3.772	2.45	63.5	0.0	134.5
18.00		1.00	0.70	14.724	16.20	291.48	0.650	0.000	1.00	3.755	2.44	63.2	0.0	133.8
19.00		1.00	0.70	14.724	16.20	290.12	0.650	0.000	1.00	3.737	2.43	63.0	0.0	133.2
20.00		1.00	0.70	14.724	16.20	288.75	0.650	0.000	1.00	3.720	2.42	62.7	0.0	132.6
21.00		1.00	0.70	14.724	16.20	287.39	0.650	0.000	1.00	3.702	2.41	62.4	0.0	131.9
22.00		1.00	0.70	14.724	16.20	286.02	0.650	0.000	1.00	3.685	2.40	62.1	0.0	131.3
23.00		1.00	0.70	14.724	16.20	284.66	0.650	0.000	1.00	3.667	2.38	61.8	0.0	130.7
24.00		1.00	0.70	14.724	16.20	283.29	0.650	0.000	1.00	3.650	2.37	61.5	0.0	130.1
25.00		1.00	0.70	14.724	16.20	281.93	0.650	0.000	1.00	3.632	2.36	61.2	0.0	129.4
26.00		1.00	0.70	14.724	16.20	280.57	0.650	0.000	1.00	3.615	2.35	60.9	0.0	128.8
27.00		1.00	0.70	14.724	16.20	279.20	0.650	0.000	1.00	3.597	2.34	60.6	0.0	128.2
28.00		1.00	0.70	14.724	16.20	277.84	0.650	0.000	1.00	3.580	2.33	60.3	0.0	127.5
29.00		1.00	0.70	14.724	16.20	276.47	0.650	0.000	1.00	3.562	2.32	60.0	0.0	126.9
30.00		1.00	0.70	14.736	16.21	275.23	0.650	0.000	1.00	3.544	2.30	59.8	0.0	126.3
31.00		1.00	0.71	14.875	16.36	275.15	0.650	0.000	1.00	3.527	2.29	60.0	0.0	125.7
32.00		1.00	0.71	15.011	16.51	275.02	0.650	0.000	1.00	3.509	2.28	60.3	0.0	125.0
33.00		1.00	0.72	15.143	16.66	274.85	0.650	0.000	1.00	3.492	2.27	60.5	0.0	124.4
34.00		1.00	0.73	15.273	16.80	274.63	0.650	0.000	1.00	3.474	2.26	60.7	0.0	123.8
35.00		1.00	0.73	15.400	16.94	274.38	0.650	0.000	1.00	3.457	2.25	60.9	0.0	123.1
36.00		1.00	0.74	15.524	17.08	274.08	0.650	0.000	1.00	3.439	2.24	61.1	0.0	122.5
37.00		1.00	0.74	15.646	17.21	273.75	0.650	0.000	1.00	3.422	2.22	61.2	0.0	121.9
38.00		1.00	0.75	15.766	17.34	273.38	0.650	0.000	1.00	3.404	2.21	61.4	0.0	121.2
39.00		1.00	0.76	15.884	17.47	272.98	0.650	0.000	1.00	3.387	2.20	61.5	0.0	120.6
40.00		1.00	0.76	15.999	17.60	272.55	0.650	0.000	1.00	3.369	2.19	61.7	0.0	120.0
41.00		1.00	0.77	16.112	17.72	272.09	0.650	0.000	1.00	3.352	2.18	61.8	0.0	119.4
42.00		1.00	0.77	16.224	17.85	271.59	0.650	0.000	1.00	3.334	2.17	61.9	0.0	118.7
43.00		1.00	0.78	16.333	17.97	271.07	0.650	0.000	1.00	3.316	2.16	62.0	0.0	118.1
44.00		1.00	0.78	16.441	18.08	270.52	0.650	0.000	1.00	3.299	2.14	62.0	0.0	117.5
45.00		1.00	0.79	16.546	18.20	269.94	0.650	0.000	1.00	3.281	2.13	62.1	0.0	116.8
46.00		1.00	0.79	16.651	18.32	269.34	0.650	0.000	1.00	3.264	2.12	62.2	0.0	116.2

Wind Loading - Shaft

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
Page: 31



Height	Topography	1	1	18.43	268.71	0.650	0.000	1.00	3.246	2.11	62.2	0.0	115.6
47.00													
47.55 Bot - Section 2													
48.00													
49.00													
50.00 Appurtenance(s)													
51.00													
52.00 RB1 RB2													
52.97 Top - Section 1													
53.00													
54.00													
55.00													
56.00													
57.00													
58.00													
59.00													
60.00													
61.00													
62.00													
63.00													
64.00													
65.00													
66.00													
67.00													
67.92 RB3													
68.00 RT1 RT2													
69.00													
70.00													
71.00													
72.00													
73.00 Appurtenance(s)													
74.00													
75.00 RT3													
76.00													
77.00													
78.00													
79.00													
80.00													
81.00													
82.00													
83.00													
84.00													
85.00													
86.00													
87.00													
88.00													
89.00													
90.00													
91.00													
92.00													
93.00													
94.00													
95.00													
96.00													
96.18 Bot - Section 3													
97.00													
98.00													
99.00													

Wind Loading - Shaft

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
 Page: 32



99.25 RB4	1.00	0.99	20.742	22.82	218.30	0.747 *	0.000	0.25	0.599	0.45	16.3	0.0	29.7
100.00	1.00	0.99	20.787	22.87	217.31	0.748 *	0.000	0.75	1.792	1.34	49.0	0.0	88.6
100.34 Top - Section 2	1.00	0.99	20.807	22.89	216.86	0.749 *	0.000	0.34	0.817	0.61	22.4	0.0	40.4
101.00	1.00	0.99	20.846	22.93	218.94	0.746 *	0.000	0.66	1.557	1.16	42.6	0.0	33.3
102.00	1.00	0.99	20.905	23.00	217.62	0.748 *	0.000	1.00	2.356	1.76	64.9	0.0	50.4
102.25 RT4	1.00	0.99	20.919	23.01	217.29	0.750 *	0.000	0.25	0.586	0.44	16.2	0.0	12.5
103.00	1.00	1.00	20.963	23.06	216.30	0.751 *	0.000	0.75	1.752	1.32	48.5	0.0	37.5
104.00	1.00	1.00	21.021	23.12	214.96	0.753 *	0.000	1.00	2.321	1.75	64.6	0.0	49.6
105.00	1.00	1.00	21.079	23.19	213.63	0.755 *	0.000	1.00	2.303	1.74	64.5	0.0	49.3
106.00	1.00	1.00	21.136	23.25	212.28	0.668 *	0.000	1.00	2.286	1.53	56.8	0.0	48.9
107.00	1.00	1.01	21.193	23.31	210.93	0.670 *	0.000	1.00	2.268	1.52	56.7	0.0	48.5
108.00	1.00	1.01	21.249	23.37	209.57	0.672 *	0.000	1.00	2.251	1.51	56.5	0.0	48.1
109.00	1.00	1.01	21.305	23.44	208.21	0.673 *	0.000	1.00	2.233	1.50	56.4	0.0	47.8
110.00	1.00	1.02	21.361	23.50	206.83	0.675 *	0.000	1.00	2.216	1.50	56.2	0.0	47.4
111.00	1.00	1.02	21.416	23.56	205.46	0.677 *	0.000	1.00	2.198	1.49	56.1	0.0	47.0
112.00	1.00	1.02	21.471	23.62	204.07	0.679 *	0.000	1.00	2.181	1.48	55.9	0.0	46.6
113.00	1.00	1.02	21.526	23.68	202.68	0.680 *	0.000	1.00	2.163	1.47	55.8	0.0	46.2
114.00	1.00	1.03	21.580	23.74	201.29	0.682 *	0.000	1.00	2.146	1.46	55.6	0.0	45.9
115.00 Appurtenance(s)	1.00	1.03	21.634	23.80	199.88	0.684 *	0.000	1.00	2.128	1.46	55.4	0.0	45.5
116.00	1.00	1.03	21.687	23.86	198.48	0.650	0.000	1.00	2.111	1.37	52.4	0.0	45.1
117.00	1.00	1.03	21.741	23.91	197.06	0.650	0.000	1.00	2.093	1.36	52.1	0.0	44.7
118.00	1.00	1.04	21.793	23.97	195.64	0.650	0.000	1.00	2.075	1.35	51.7	0.0	44.4
119.00	1.00	1.04	21.846	24.03	194.21	0.650	0.000	1.00	2.058	1.34	51.4	0.0	44.0
120.00	1.00	1.04	21.898	24.09	192.78	0.650	0.000	1.00	2.040	1.33	51.1	0.0	43.6
121.00	1.00	1.04	21.950	24.15	191.35	0.650	0.000	1.00	2.023	1.31	50.8	0.0	43.2
122.00	1.00	1.05	22.002	24.20	189.90	0.650	0.000	1.00	2.005	1.30	50.5	0.0	42.8
123.00	1.00	1.05	22.053	24.26	188.46	0.650	0.000	1.00	1.988	1.29	50.2	0.0	42.5
124.00	1.00	1.05	22.104	24.31	187.00	0.650	0.000	1.00	1.970	1.28	49.8	0.0	42.1
125.00	1.00	1.05	22.155	24.37	185.54	0.650	0.000	1.00	1.953	1.27	49.5	0.0	41.7
126.00	1.00	1.06	22.206	24.43	184.08	0.650	0.000	1.00	1.935	1.26	49.2	0.0	41.3
127.00	1.00	1.06	22.256	24.48	182.61	0.650	0.000	1.00	1.918	1.25	48.8	0.0	41.0
128.00	1.00	1.06	22.306	24.54	181.13	0.650	0.000	1.00	1.900	1.24	48.5	0.0	40.6
129.00	1.00	1.06	22.356	24.59	179.66	0.650	0.000	1.00	1.883	1.22	48.1	0.0	40.2
130.00 Appurtenance(s)	1.00	1.07	22.405	24.65	178.17	0.650	0.000	1.00	1.865	1.21	47.8	0.0	39.8
131.00	1.00	1.07	22.454	24.70	176.68	0.650	0.000	1.00	1.848	1.20	47.5	0.0	39.4
132.00	1.00	1.07	22.503	24.75	175.19	0.650	0.000	1.00	1.830	1.19	47.1	0.0	39.1
133.00	1.00	1.07	22.551	24.81	173.69	0.650	0.000	1.00	1.812	1.18	46.8	0.0	38.7
134.00	1.00	1.07	22.600	24.86	172.18	0.650	0.000	1.00	1.795	1.17	46.4	0.0	38.3
135.00	1.00	1.08	22.648	24.91	170.67	0.650	0.000	1.00	1.777	1.16	46.1	0.0	37.9
136.00	1.00	1.08	22.696	24.97	169.16	0.650	0.000	1.00	1.760	1.14	45.7	0.0	37.6
137.00	1.00	1.08	22.743	25.02	167.64	0.650	0.000	1.00	1.742	1.13	45.3	0.0	37.2
138.00 Appurtenance(s)	1.00	1.08	22.790	25.07	166.12	0.650	0.000	1.00	1.725	1.12	45.0	0.0	36.8
139.00	1.00	1.09	22.838	25.12	164.59	0.650	0.000	1.00	1.707	1.11	44.6	0.0	36.4
140.00 Appurtenance(s)	1.00	1.09	22.884	25.17	163.06	0.650	0.000	1.00	1.690	1.10	44.2	0.0	36.1
141.00	1.00	1.09	22.931	25.22	161.52	0.650	0.000	1.00	1.672	1.09	43.9	0.0	35.7
142.00	1.00	1.09	22.977	25.28	159.98	0.650	0.000	1.00	1.655	1.08	43.5	0.0	35.3
143.00	1.00	1.09	23.023	25.33	158.43	0.650	0.000	1.00	1.637	1.06	43.1	0.0	34.9
144.00	1.00	1.10	23.069	25.38	156.88	0.650	0.000	1.00	1.620	1.05	42.7	0.0	34.5
145.00	1.00	1.10	23.115	25.43	155.33	0.650	0.000	1.00	1.602	1.04	42.4	0.0	34.2
146.00	1.00	1.10	23.160	25.48	153.77	0.650	0.000	1.00	1.585	1.03	42.0	0.0	33.8
147.00	1.00	1.10	23.206	25.53	152.21	0.650	0.000	1.00	1.567	1.02	41.6	0.0	33.4
148.00	1.00	1.11	23.251	25.58	150.64	0.650	0.000	1.00	1.549	1.01	41.2	0.0	33.0
149.00 Appurtenance(s)	1.00	1.11	23.295	25.62	149.07	0.650	0.000	1.00	1.532	1.00	40.8	0.0	32.7
								Totals:	149.00		8,752.1		13,255.3

* Cf Adjusted by Linear Load Ra Effect

Discrete Appurtenance Forces

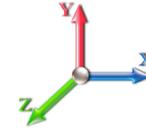
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 33

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

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	149.00	Low Profile Platform	1	23.295	25.625	1.00	1.00	25.00	1080.00	0.000	0.000	1025.00	0.00	0.00
2	149.00	ACU-A20-N	4	23.428	25.771	0.40	0.80	0.22	3.60	0.000	3.000	9.24	0.00	27.71
3	149.00	800MHZ Filter	3	23.428	25.771	0.40	0.80	0.94	23.76	0.000	3.000	38.60	0.00	115.79
4	149.00	TD-RRH8x20-25	3	23.428	25.771	0.40	0.80	4.86	189.00	0.000	3.000	200.40	0.00	601.19
5	149.00	800MHZ	3	23.428	25.771	0.40	0.80	3.17	160.65	0.000	3.000	130.63	0.00	391.89
6	149.00	1900MHZ	3	23.428	25.771	0.40	0.80	3.32	162.00	0.000	3.000	137.06	0.00	411.19
7	149.00	APXVTM14-C-I20	3	23.428	25.771	0.63	0.80	12.02	151.20	0.000	3.000	495.66	0.00	1486.98
8	149.00	APXVSPP18-C-A20	3	23.428	25.771	0.66	0.80	15.98	153.90	0.000	3.000	658.75	0.00	1976.25
9	140.00	Low Profile	1	22.884	25.173	1.00	1.00	22.00	1350.00	0.000	0.000	886.08	0.00	0.00
10	138.00	FD9R6004/2C-3L	6	22.790	25.070	0.40	0.80	0.86	16.74	0.000	0.000	34.66	0.00	0.00
11	138.00	GPS Receiver	1	22.790	25.070	0.80	0.80	0.80	9.00	0.000	0.000	32.09	0.00	0.00
12	138.00	BXA-171085-12B_2	3	22.790	25.070	0.67	0.80	9.56	40.50	0.000	0.000	383.30	0.00	0.00
13	138.00	BXA-70063-6CF_2	3	22.790	25.070	0.58	0.80	13.26	45.90	0.000	0.000	531.98	0.00	0.00
14	138.00	LPA-80080/6CF	3	22.790	25.070	1.36	0.80	17.67	56.70	0.000	0.000	708.62	0.00	0.00
15	130.00	RRUS 4478 B14	3	22.405	24.645	0.38	0.75	1.86	160.38	0.000	0.000	73.20	0.00	0.00
16	130.00	(3) 12.5' - 2" Horizontal	1	22.405	24.645	0.75	1.00	4.45	123.53	0.000	0.000	175.60	0.00	0.00
17	130.00	XP-2020	24	22.405	24.645	0.56	0.75	9.31	216.00	0.000	0.000	367.32	0.00	0.00
18	130.00	VSRDual-TS-B-HD	2	22.405	24.645	0.56	0.75	4.61	267.12	0.000	0.000	181.88	0.00	0.00
19	130.00	DC6-48-60-0-8C-EV	1	22.405	24.645	0.75	0.75	3.58	14.40	0.000	0.000	141.37	0.00	0.00
20	130.00	ABT-DF-DM-ADBH	1	22.405	24.645	0.75	0.75	0.04	0.99	0.000	0.000	1.48	0.00	0.00
21	130.00	7770.00	3	22.405	24.645	0.55	0.75	9.03	94.50	0.000	0.000	356.22	0.00	0.00
22	130.00	LGP 21401	12	22.405	24.645	0.38	0.75	0.00	189.00	0.000	0.000	0.00	0.00	0.00
23	130.00	DC6-48-60-18-8F	1	22.405	24.645	0.75	0.75	0.69	28.62	0.000	0.000	27.21	0.00	0.00
24	130.00	DC6-48-60-18-8C	1	22.405	24.645	0.75	0.75	0.95	18.00	0.000	0.000	37.26	0.00	0.00
25	130.00	80010965	6	22.405	24.645	0.53	0.75	44.12	586.44	0.000	0.000	1739.88	0.00	0.00
26	130.00	4449 B5/B12	3	22.405	24.645	0.38	0.75	2.22	191.70	0.000	0.000	87.39	0.00	0.00
27	130.00	8843 B2/B66A	3	22.405	24.645	0.38	0.75	1.84	194.40	0.000	0.000	72.75	0.00	0.00
28	130.00	Low Profile Platform	1	22.405	24.645	1.00	1.00	25.00	1080.00	0.000	0.000	985.82	0.00	0.00
29	115.00	AIR6449 B41	3	21.634	23.797	0.57	0.80	9.63	278.10	0.000	0.000	366.57	0.00	0.00
30	115.00	(3) Stabilizer Kit (12' FW)	1	21.634	23.797	1.00	1.00	6.10	162.00	0.000	0.000	232.26	0.00	0.00
31	115.00	T-Arm	3	21.634	23.797	0.56	0.75	13.50	945.00	0.000	0.000	514.02	0.00	0.00
32	115.00	RRUS 11	3	21.634	23.797	0.40	0.80	3.02	136.89	0.000	0.000	115.14	0.00	0.00
33	115.00	APXVAALL24_43-U-NA20	3	21.634	23.797	0.58	0.80	35.46	331.56	0.000	0.000	1350.17	0.00	0.00
34	115.00	4460 Radio	3	21.634	23.797	0.40	0.80	3.42	294.30	0.000	0.000	130.22	0.00	0.00
35	115.00	4449 B71 + B85	3	21.634	23.797	0.40	0.80	2.36	197.64	0.000	0.000	90.01	0.00	0.00
36	73.00	GPS Receiver	1	18.999	20.899	1.00	1.00	1.00	9.00	0.000	0.000	33.44	0.00	0.00
37	50.00	58532A	1	17.052	18.757	1.00	1.00	0.22	0.36	0.000	0.000	6.60	0.00	0.00

Totals: 8,962.87 12,357.86

Total Applied Force Summary

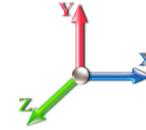
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 34

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		68.27	181.02	0.00	0.00
2.00		67.97	180.39	0.00	0.00
3.00		67.68	179.76	0.00	0.00
4.00		67.38	179.13	0.00	0.00
5.00		67.09	178.50	0.00	0.00
6.00		66.79	177.87	0.00	0.00
7.00		66.50	177.24	0.00	0.00
8.00		66.20	176.61	0.00	0.00
9.00		65.91	175.98	0.00	0.00
10.00		65.61	175.35	0.00	0.00
11.00		65.32	174.72	0.00	0.00
12.00		65.02	174.10	0.00	0.00
13.00		64.72	173.47	0.00	0.00
14.00		64.43	172.84	0.00	0.00
15.00		64.13	172.21	0.00	0.00
16.00		63.84	171.58	0.00	0.00
17.00		63.54	170.95	0.00	0.00
18.00		63.25	170.32	0.00	0.00
19.00		62.95	169.69	0.00	0.00
20.00		62.66	169.06	0.00	0.00
21.00		62.36	168.43	0.00	0.00
22.00		62.07	167.80	0.00	0.00
23.00		61.77	167.17	0.00	0.00
24.00		61.48	166.54	0.00	0.00
25.00		61.18	165.91	0.00	0.00
26.00		60.89	165.28	0.00	0.00
27.00		60.59	164.65	0.00	0.00
28.00		60.29	164.02	0.00	0.00
29.00		60.00	163.40	0.00	0.00
30.00		59.75	162.77	0.00	0.00
31.00		60.02	162.14	0.00	0.00
32.00		60.26	161.51	0.00	0.00
33.00		60.49	160.88	0.00	0.00
34.00		60.70	160.25	0.00	0.00
35.00		60.90	159.62	0.00	0.00
36.00		61.08	158.99	0.00	0.00
37.00		61.25	158.36	0.00	0.00
38.00		61.40	157.73	0.00	0.00
39.00		61.54	157.10	0.00	0.00
40.00		61.66	156.47	0.00	0.00
41.00		61.78	155.84	0.00	0.00
42.00		61.88	155.21	0.00	0.00
43.00		61.97	154.58	0.00	0.00
44.00		62.05	153.95	0.00	0.00
45.00		62.11	153.32	0.00	0.00
46.00		62.17	152.70	0.00	0.00

Total Applied Force Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 35

47.00	62.22	152.07	0.00	0.00
47.55	34.40	83.87	0.00	0.00
48.00	28.13	109.19	0.00	0.00
49.00	63.10	243.63	0.00	0.00
50.00	(1) attachments 69.73	242.86	0.00	0.00
51.00	65.32	241.22	0.00	0.00
52.00	65.44	240.09	0.00	0.00
52.97	63.59	231.81	0.00	0.00
53.00	1.95	3.81	0.00	0.00
54.00	65.38	126.65	0.00	0.00
55.00	65.48	126.14	0.00	0.00
56.00	65.57	125.64	0.00	0.00
57.00	65.65	125.14	0.00	0.00
58.00	65.73	124.63	0.00	0.00
59.00	65.80	124.13	0.00	0.00
60.00	65.87	123.63	0.00	0.00
61.00	65.92	123.12	0.00	0.00
62.00	65.98	122.62	0.00	0.00
63.00	66.02	122.12	0.00	0.00
64.00	66.06	121.61	0.00	0.00
65.00	66.10	121.11	0.00	0.00
66.00	66.13	120.60	0.00	0.00
67.00	66.15	120.10	0.00	0.00
67.92	60.87	110.05	0.00	0.00
68.00	5.28	9.55	0.00	0.00
69.00	66.19	119.09	0.00	0.00
70.00	66.20	118.59	0.00	0.00
71.00	61.84	118.09	0.00	0.00
72.00	61.71	117.58	0.00	0.00
73.00	(1) attachments 95.01	126.08	0.00	0.00
74.00	61.43	116.43	0.00	0.00
75.00	61.28	115.93	0.00	0.00
76.00	61.13	115.43	0.00	0.00
77.00	60.97	114.92	0.00	0.00
78.00	60.81	114.42	0.00	0.00
79.00	60.64	113.91	0.00	0.00
80.00	60.46	113.41	0.00	0.00
81.00	60.29	112.91	0.00	0.00
82.00	60.10	112.40	0.00	0.00
83.00	59.92	111.90	0.00	0.00
84.00	59.73	111.40	0.00	0.00
85.00	59.53	110.89	0.00	0.00
86.00	59.33	110.39	0.00	0.00
87.00	59.13	109.89	0.00	0.00
88.00	58.92	109.38	0.00	0.00
89.00	58.70	108.88	0.00	0.00
90.00	58.49	108.38	0.00	0.00
91.00	58.27	107.87	0.00	0.00
92.00	58.04	107.37	0.00	0.00
93.00	57.81	106.87	0.00	0.00
94.00	57.58	106.36	0.00	0.00
95.00	57.34	105.86	0.00	0.00
96.00	57.10	105.35	0.00	0.00
96.18	10.15	18.56	0.00	0.00
97.00	47.93	129.32	0.00	0.00
98.00	65.61	156.26	0.00	0.00
99.00	65.51	155.38	0.00	0.00

Total Applied Force Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 36

99.25	16.34	38.71	0.00	0.00
100.00	49.03	115.79	0.00	0.00
100.34	22.41	52.84	0.00	0.00
101.00	42.62	57.07	0.00	0.00
102.00	64.85	86.60	0.00	0.00
102.25	16.18	21.59	0.00	0.00
103.00	48.53	64.63	0.00	0.00
104.00	64.62	85.84	0.00	0.00
105.00	64.50	85.46	0.00	0.00
106.00	56.82	85.09	0.00	0.00
107.00	56.68	84.71	0.00	0.00
108.00	56.53	84.33	0.00	0.00
109.00	56.38	83.95	0.00	0.00
110.00	56.23	83.57	0.00	0.00
111.00	56.07	83.20	0.00	0.00
112.00	55.92	82.82	0.00	0.00
113.00	55.76	82.44	0.00	0.00
114.00	55.59	82.06	0.00	0.00
115.00	(19) attachments 2853.81	2427.18	0.00	0.00
116.00	52.36	78.34	0.00	0.00
117.00	52.06	77.96	0.00	0.00
118.00	51.74	77.58	0.00	0.00
119.00	51.43	77.21	0.00	0.00
120.00	51.12	76.83	0.00	0.00
121.00	50.80	76.45	0.00	0.00
122.00	50.47	76.07	0.00	0.00
123.00	50.15	75.70	0.00	0.00
124.00	49.82	75.32	0.00	0.00
125.00	49.49	74.94	0.00	0.00
126.00	49.16	74.56	0.00	0.00
127.00	48.83	74.18	0.00	0.00
128.00	48.49	73.81	0.00	0.00
129.00	48.15	73.43	0.00	0.00
130.00	(62) attachments 4295.19	3238.13	0.00	0.00
131.00	47.46	54.31	0.00	0.00
132.00	47.11	53.94	0.00	0.00
133.00	46.76	53.56	0.00	0.00
134.00	46.41	53.18	0.00	0.00
135.00	46.05	52.80	0.00	0.00
136.00	45.69	52.43	0.00	0.00
137.00	45.33	52.05	0.00	0.00
138.00	(16) attachments 1735.61	220.51	0.00	0.00
139.00	44.60	51.29	0.00	0.00
140.00	(1) attachments 930.32	1400.92	0.00	0.00
141.00	43.87	39.11	0.00	0.00
142.00	43.49	38.73	0.00	0.00
143.00	43.12	38.35	0.00	0.00
144.00	42.74	37.97	0.00	0.00
145.00	42.36	37.60	0.00	0.00
146.00	41.98	37.22	0.00	0.00
147.00	41.60	36.84	0.00	0.00
148.00	41.21	36.46	0.00	0.00
149.00	(23) attachments 2736.15	1960.20	0.00	5010.99
Totals:	21,109.95	27,076.17	0.00	5,010.99

Linear Appurtenance Segment Forces (Factored)

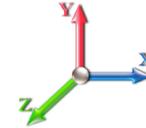
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 37

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.054	0.000	14.724	0.00	0.99
1.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.054	0.000	14.724	0.00	1.98
1.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.054	0.000	14.724	0.00	0.14
2.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	14.724	0.00	0.99
2.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	14.724	0.00	1.98
2.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	14.724	0.00	0.14
3.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	14.724	0.00	0.99
3.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	14.724	0.00	1.98
3.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	14.724	0.00	0.14
4.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	14.724	0.00	0.99
4.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	14.724	0.00	1.98
4.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	14.724	0.00	0.14
5.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	14.724	0.00	0.99
5.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	14.724	0.00	1.98
5.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	14.724	0.00	0.14
6.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	14.724	0.00	0.99
6.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	14.724	0.00	1.98
6.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	14.724	0.00	0.14
7.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	14.724	0.00	0.99
7.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	14.724	0.00	1.98
7.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	14.724	0.00	0.14
8.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	14.724	0.00	0.99
8.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	14.724	0.00	1.98
8.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	14.724	0.00	0.14
9.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	14.724	0.00	0.99
9.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	14.724	0.00	1.98
9.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	14.724	0.00	0.14
10.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	14.724	0.00	0.99
10.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	14.724	0.00	1.98
10.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	14.724	0.00	0.14
11.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	14.724	0.00	0.99
11.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	14.724	0.00	1.98
11.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	14.724	0.00	0.14
12.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	14.724	0.00	0.99
12.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	14.724	0.00	1.98
12.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	14.724	0.00	0.14
13.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	14.724	0.00	0.99
13.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	14.724	0.00	1.98
13.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	14.724	0.00	0.14
14.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.058	0.000	14.724	0.00	0.99
14.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	14.724	0.00	1.98
14.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.058	0.000	14.724	0.00	0.14
15.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.058	0.000	14.724	0.00	0.99
15.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	14.724	0.00	1.98
15.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.058	0.000	14.724	0.00	0.14
16.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.058	0.000	14.724	0.00	0.99
16.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	14.724	0.00	1.98

Linear Appurtenance Segment Forces (Factored)

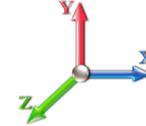
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 38

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
16.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.058	0.000	14.724	0.00	0.14
17.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	14.724	0.00	0.99
17.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	14.724	0.00	1.98
17.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	14.724	0.00	0.14
18.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	14.724	0.00	0.99
18.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	14.724	0.00	1.98
18.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	14.724	0.00	0.14
19.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	14.724	0.00	0.99
19.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	14.724	0.00	1.98
19.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	14.724	0.00	0.14
20.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	14.724	0.00	0.99
20.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	14.724	0.00	1.98
20.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	14.724	0.00	0.14
21.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.060	0.000	14.724	0.00	0.99
21.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	14.724	0.00	1.98
21.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.060	0.000	14.724	0.00	0.14
22.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.060	0.000	14.724	0.00	0.99
22.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	14.724	0.00	1.98
22.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.060	0.000	14.724	0.00	0.14
23.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.060	0.000	14.724	0.00	0.99
23.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	14.724	0.00	1.98
23.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.060	0.000	14.724	0.00	0.14
24.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	14.724	0.00	0.99
24.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	14.724	0.00	1.98
24.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	14.724	0.00	0.14
25.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	14.724	0.00	0.99
25.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	14.724	0.00	1.98
25.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	14.724	0.00	0.14
26.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	14.724	0.00	0.99
26.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	14.724	0.00	1.98
26.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	14.724	0.00	0.14
27.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	14.724	0.00	0.99
27.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	14.724	0.00	1.98
27.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	14.724	0.00	0.14
28.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	14.724	0.00	0.99
28.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	14.724	0.00	1.98
28.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.062	0.000	14.724	0.00	0.14
29.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	14.724	0.00	0.99
29.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	14.724	0.00	1.98
29.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.062	0.000	14.724	0.00	0.14
30.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	14.736	0.00	0.99
30.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	14.736	0.00	1.98
30.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.062	0.000	14.736	0.00	0.14
31.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	14.875	0.00	0.99
31.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	14.875	0.00	1.98
31.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.063	0.000	14.875	0.00	0.14
32.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	15.011	0.00	0.99

Linear Appurtenance Segment Forces (Factored)

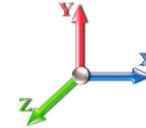
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 39

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	15.011	0.00	1.98
32.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.063	0.000	15.011	0.00	0.14
33.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	15.143	0.00	0.99
33.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	15.143	0.00	1.98
33.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.063	0.000	15.143	0.00	0.14
34.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	15.273	0.00	0.99
34.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	15.273	0.00	1.98
34.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.064	0.000	15.273	0.00	0.14
35.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	15.400	0.00	0.99
35.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	15.400	0.00	1.98
35.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.064	0.000	15.400	0.00	0.14
36.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	15.524	0.00	0.99
36.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	15.524	0.00	1.98
36.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.064	0.000	15.524	0.00	0.14
37.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	15.646	0.00	0.99
37.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	15.646	0.00	1.98
37.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.065	0.000	15.646	0.00	0.14
38.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	15.766	0.00	0.99
38.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	15.766	0.00	1.98
38.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.065	0.000	15.766	0.00	0.14
39.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	15.884	0.00	0.99
39.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	15.884	0.00	1.98
39.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.065	0.000	15.884	0.00	0.14
40.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	15.999	0.00	0.99
40.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	15.999	0.00	1.98
40.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.066	0.000	15.999	0.00	0.14
41.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	16.112	0.00	0.99
41.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	16.112	0.00	1.98
41.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.066	0.000	16.112	0.00	0.14
42.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	16.224	0.00	0.99
42.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	16.224	0.00	1.98
42.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.066	0.000	16.224	0.00	0.14
43.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	16.333	0.00	0.99
43.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	16.333	0.00	1.98
43.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.067	0.000	16.333	0.00	0.14
44.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	16.441	0.00	0.99
44.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	16.441	0.00	1.98
44.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.067	0.000	16.441	0.00	0.14
45.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	16.546	0.00	0.99
45.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	16.546	0.00	1.98
45.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.067	0.000	16.546	0.00	0.14
46.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	16.651	0.00	0.99
46.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	16.651	0.00	1.98
46.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.068	0.000	16.651	0.00	0.14
47.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	16.753	0.00	0.99
47.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	16.753	0.00	1.98
47.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.068	0.000	16.753	0.00	0.14

Linear Appurtenance Segment Forces (Factored)

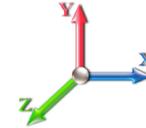
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 40

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
47.55	1 5/8" Fiber	Yes	0.55	0.000	2.00	0.09	0.00	0.068	0.000	16.809	0.00	0.55
47.55	1.9" Fiber	Yes	0.55	0.000	0.00	0.00	0.00	0.068	0.000	16.809	0.00	1.10
47.55	1/2" Coax	Yes	0.55	0.000	0.65	0.03	0.00	0.068	0.000	16.809	0.00	0.08
48.00	1 5/8" Fiber	Yes	0.45	0.000	2.00	0.07	0.00	0.068	0.000	16.854	0.00	0.44
48.00	1.9" Fiber	Yes	0.45	0.000	0.00	0.00	0.00	0.068	0.000	16.854	0.00	0.88
48.00	1/2" Coax	Yes	0.45	0.000	0.65	0.02	0.00	0.068	0.000	16.854	0.00	0.06
49.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.069	0.000	16.954	0.00	0.99
49.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	16.954	0.00	1.98
49.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.069	0.000	16.954	0.00	0.14
50.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.069	0.000	17.052	0.00	0.99
50.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	17.052	0.00	1.98
50.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.069	0.000	17.052	0.00	0.14
51.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.035	17.149	0.00	0.99
51.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.035	17.149	0.00	1.98
51.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.035	17.149	0.00	0.00
51.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.035	17.149	0.00	0.00
52.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.036	17.244	0.00	0.99
52.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	17.244	0.00	1.98
52.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.036	17.244	0.00	0.00
52.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.036	17.244	0.00	0.00
52.97	1 5/8" Fiber	Yes	0.97	0.000	2.00	0.16	0.00	0.113	1.038	17.336	0.00	0.96
52.97	1.9" Fiber	Yes	0.97	0.000	0.00	0.00	0.00	0.113	1.038	17.336	0.00	1.92
52.97	1.25" Reinforcing	Yes	0.97	0.000	1.25	0.10	0.00	0.113	1.038	17.336	0.00	0.00
52.97	1" Reinforcing plate	Yes	0.97	0.000	1.00	0.08	0.00	0.113	1.038	17.336	0.00	0.00
53.00	1 5/8" Fiber	Yes	0.03	0.000	2.00	0.01	0.00	0.112	1.035	17.338	0.00	0.03
53.00	1.9" Fiber	Yes	0.03	0.000	0.00	0.00	0.00	0.112	1.035	17.338	0.00	0.06
53.00	1.25" Reinforcing	Yes	0.03	0.000	1.25	0.00	0.00	0.112	1.035	17.338	0.00	0.00
53.00	1" Reinforcing plate	Yes	0.03	0.000	1.00	0.00	0.00	0.112	1.035	17.338	0.00	0.00
54.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.036	17.431	0.00	0.99
54.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	17.431	0.00	1.98
54.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.036	17.431	0.00	0.00
54.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.036	17.431	0.00	0.00
55.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.037	17.523	0.00	0.99
55.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.037	17.523	0.00	1.98
55.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.037	17.523	0.00	0.00
55.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.037	17.523	0.00	0.00
56.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.113	1.039	17.613	0.00	0.99
56.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.113	1.039	17.613	0.00	1.98
56.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.113	1.039	17.613	0.00	0.00
56.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.113	1.039	17.613	0.00	0.00
57.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.041	17.703	0.00	0.99
57.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	17.703	0.00	1.98
57.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.114	1.041	17.703	0.00	0.00
57.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.114	1.041	17.703	0.00	0.00
58.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.043	17.791	0.00	0.99
58.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.043	17.791	0.00	1.98
58.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.114	1.043	17.791	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

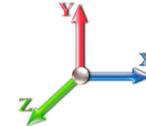
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 41

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

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)
58.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.114	1.043	17.791	0.00	0.00
59.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.115	1.045	17.878	0.00	0.99
59.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.115	1.045	17.878	0.00	1.98
59.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.115	1.045	17.878	0.00	0.00
59.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.115	1.045	17.878	0.00	0.00
60.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.116	1.047	17.964	0.00	0.99
60.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.047	17.964	0.00	1.98
60.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.116	1.047	17.964	0.00	0.00
60.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.116	1.047	17.964	0.00	0.00
61.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.116	1.049	18.049	0.00	0.99
61.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.049	18.049	0.00	1.98
61.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.116	1.049	18.049	0.00	0.00
61.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.116	1.049	18.049	0.00	0.00
62.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.117	1.051	18.133	0.00	0.99
62.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.051	18.133	0.00	1.98
62.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.117	1.051	18.133	0.00	0.00
62.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.117	1.051	18.133	0.00	0.00
63.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.118	1.053	18.216	0.00	0.99
63.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.118	1.053	18.216	0.00	1.98
63.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.118	1.053	18.216	0.00	0.00
63.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.118	1.053	18.216	0.00	0.00
64.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.118	1.055	18.298	0.00	0.99
64.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.118	1.055	18.298	0.00	1.98
64.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.118	1.055	18.298	0.00	0.00
64.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.118	1.055	18.298	0.00	0.00
65.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.119	1.057	18.380	0.00	0.99
65.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.119	1.057	18.380	0.00	1.98
65.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.119	1.057	18.380	0.00	0.00
65.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.119	1.057	18.380	0.00	0.00
66.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.120	1.059	18.460	0.00	0.99
66.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.120	1.059	18.460	0.00	1.98
66.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.120	1.059	18.460	0.00	0.00
66.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.120	1.059	18.460	0.00	0.00
67.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.121	1.062	18.539	0.00	0.99
67.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.121	1.062	18.539	0.00	1.98
67.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.121	1.062	18.539	0.00	0.00
67.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.121	1.062	18.539	0.00	0.00
67.92	1 5/8" Fiber	Yes	0.92	0.000	2.00	0.15	0.00	0.121	1.064	18.612	0.00	0.91
67.92	1.9" Fiber	Yes	0.92	0.000	0.00	0.00	0.00	0.121	1.064	18.612	0.00	1.82
67.92	1.25" Reinforcing	Yes	0.92	0.000	1.25	0.10	0.00	0.121	1.064	18.612	0.00	0.00
67.92	1" Reinforcing plate	Yes	0.92	0.000	1.00	0.08	0.00	0.121	1.064	18.612	0.00	0.00
68.00	1 5/8" Fiber	Yes	0.08	0.000	2.00	0.01	0.00	0.122	1.065	18.618	0.00	0.08
68.00	1.9" Fiber	Yes	0.08	0.000	0.00	0.00	0.00	0.122	1.065	18.618	0.00	0.16
68.00	1.25" Reinforcing	Yes	0.08	0.000	1.25	0.01	0.00	0.122	1.065	18.618	0.00	0.00
68.00	1" Reinforcing plate	Yes	0.08	0.000	1.00	0.01	0.00	0.122	1.065	18.618	0.00	0.00
69.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.122	1.066	18.696	0.00	0.99
69.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.122	1.066	18.696	0.00	1.98

Linear Appurtenance Segment Forces (Factored)

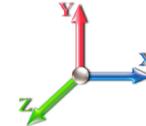
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 42

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

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)
69.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.122	1.066	18.696	0.00	0.00
69.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.122	1.066	18.696	0.00	0.00
70.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.123	1.068	18.773	0.00	0.99
70.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.123	1.068	18.773	0.00	1.98
70.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.123	1.068	18.773	0.00	0.00
70.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.123	1.068	18.773	0.00	0.00
71.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.094	0.000	18.849	0.00	0.99
71.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	18.849	0.00	1.98
71.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.094	0.000	18.849	0.00	0.00
72.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.095	0.000	18.925	0.00	0.99
72.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.095	0.000	18.925	0.00	1.98
72.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.095	0.000	18.925	0.00	0.00
73.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.096	0.000	18.999	0.00	0.99
73.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.096	0.000	18.999	0.00	1.98
73.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.096	0.000	18.999	0.00	0.00
74.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.096	0.000	19.073	0.00	0.99
74.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.096	0.000	19.073	0.00	1.98
74.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.096	0.000	19.073	0.00	0.00
75.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.097	0.000	19.147	0.00	0.99
75.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	19.147	0.00	1.98
75.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.097	0.000	19.147	0.00	0.00
76.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.097	0.000	19.219	0.00	0.99
76.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	19.219	0.00	1.98
76.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.097	0.000	19.219	0.00	0.00
77.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.098	0.000	19.291	0.00	0.99
77.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	19.291	0.00	1.98
77.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.098	0.000	19.291	0.00	0.00
78.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	19.362	0.00	0.99
78.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	19.362	0.00	1.98
79.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	19.433	0.00	0.99
79.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	19.433	0.00	1.98
80.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	19.503	0.00	0.99
80.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	19.503	0.00	1.98
81.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	19.572	0.00	0.99
81.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	19.572	0.00	1.98
82.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	19.641	0.00	0.99
82.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	19.641	0.00	1.98
83.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	19.709	0.00	0.99
83.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	19.709	0.00	1.98
84.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	19.777	0.00	0.99
84.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	19.777	0.00	1.98
85.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	19.844	0.00	0.99
85.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	19.844	0.00	1.98
86.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	19.910	0.00	0.99
86.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	19.910	0.00	1.98
87.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	19.976	0.00	0.99
87.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	19.976	0.00	1.98

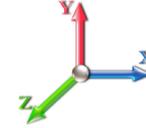
Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
88.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	20.041	0.00	0.99
88.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	20.041	0.00	1.98
89.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	20.106	0.00	0.99
89.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	20.106	0.00	1.98
90.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	20.170	0.00	0.99
90.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	20.170	0.00	1.98
91.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	20.234	0.00	0.99
91.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	20.234	0.00	1.98
92.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	20.297	0.00	0.99
92.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	20.297	0.00	1.98
93.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	20.360	0.00	0.99
93.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	20.360	0.00	1.98
94.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	20.423	0.00	0.99
94.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	20.423	0.00	1.98
95.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	20.484	0.00	0.99
95.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	20.484	0.00	1.98
96.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.069	0.000	20.546	0.00	0.99
96.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	20.546	0.00	1.98
96.18	1" Reinforcing plate	Yes	0.18	0.000	1.00	0.01	0.00	0.103	1.010	20.557	0.00	0.00
96.18	1 5/8" Fiber	Yes	0.18	0.000	2.00	0.03	0.00	0.103	1.010	20.557	0.00	0.17
96.18	1.9" Fiber	Yes	0.18	0.000	0.00	0.00	0.00	0.103	1.010	20.557	0.00	0.35
97.00	1" Reinforcing plate	Yes	0.82	0.000	1.00	0.07	0.00	0.104	1.011	20.607	0.00	0.00
97.00	1 5/8" Fiber	Yes	0.82	0.000	2.00	0.14	0.00	0.104	1.011	20.607	0.00	0.82
97.00	1.9" Fiber	Yes	0.82	0.000	0.00	0.00	0.00	0.104	1.011	20.607	0.00	1.63
98.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.148	1.144	20.667	0.00	0.00
98.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.148	1.144	20.667	0.00	0.99
98.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.148	1.144	20.667	0.00	1.98
98.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.148	1.144	20.667	0.00	0.00
99.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.149	1.147	20.727	0.00	0.00
99.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.147	20.727	0.00	0.99
99.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	20.727	0.00	1.98
99.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.149	1.147	20.727	0.00	0.00
99.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.150	1.149	20.742	0.00	0.00
99.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.04	0.00	0.150	1.149	20.742	0.00	0.25
99.25	1.9" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.150	1.149	20.742	0.00	0.50
99.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.150	1.149	20.742	0.00	0.00
100.00	1" Reinforcing plate	Yes	0.75	0.000	1.00	0.06	0.00	0.150	1.151	20.787	0.00	0.00
100.00	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.150	1.151	20.787	0.00	0.74
100.00	1.9" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.150	1.151	20.787	0.00	1.49
100.00	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.150	1.151	20.787	0.00	0.00
100.34	1" Reinforcing plate	Yes	0.34	0.000	1.00	0.03	0.00	0.151	1.153	20.807	0.00	0.00
100.34	1 5/8" Fiber	Yes	0.34	0.000	2.00	0.06	0.00	0.151	1.153	20.807	0.00	0.34
100.34	1.9" Fiber	Yes	0.34	0.000	0.00	0.00	0.00	0.151	1.153	20.807	0.00	0.68
100.34	1.25" Reinforcing	Yes	0.34	0.000	1.25	0.04	0.00	0.151	1.153	20.807	0.00	0.00
101.00	1" Reinforcing plate	Yes	0.66	0.000	1.00	0.05	0.00	0.149	1.148	20.846	0.00	0.00
101.00	1 5/8" Fiber	Yes	0.66	0.000	2.00	0.11	0.00	0.149	1.148	20.846	0.00	0.65
101.00	1.9" Fiber	Yes	0.66	0.000	0.00	0.00	0.00	0.149	1.148	20.846	0.00	1.30

Linear Appurtenance Segment Forces (Factored)

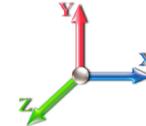
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 44

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

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)
101.00	1.25" Reinforcing	Yes	0.66	0.000	1.25	0.07	0.00	0.149	1.148	20.846	0.00	0.00
102.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.150	1.151	20.905	0.00	0.00
102.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.150	1.151	20.905	0.00	0.99
102.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.150	1.151	20.905	0.00	1.98
102.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.150	1.151	20.905	0.00	0.00
102.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.151	1.153	20.919	0.00	0.00
102.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.04	0.00	0.151	1.153	20.919	0.00	0.25
102.25	1.9" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.151	1.153	20.919	0.00	0.50
102.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.151	1.153	20.919	0.00	0.00
103.00	1" Reinforcing plate	Yes	0.75	0.000	1.00	0.06	0.00	0.152	1.155	20.963	0.00	0.00
103.00	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.152	1.155	20.963	0.00	0.74
103.00	1.9" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.152	1.155	20.963	0.00	1.49
103.00	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.152	1.155	20.963	0.00	0.00
104.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.153	1.158	21.021	0.00	0.00
104.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.153	1.158	21.021	0.00	0.99
104.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.153	1.158	21.021	0.00	1.98
104.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.153	1.158	21.021	0.00	0.00
105.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.154	1.161	21.079	0.00	0.00
105.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.154	1.161	21.079	0.00	0.99
105.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.154	1.161	21.079	0.00	1.98
105.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.154	1.161	21.079	0.00	0.00
106.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.109	1.028	21.136	0.00	0.00
106.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.109	1.028	21.136	0.00	0.99
106.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.109	1.028	21.136	0.00	1.98
107.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.110	1.031	21.193	0.00	0.00
107.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.110	1.031	21.193	0.00	0.99
107.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.110	1.031	21.193	0.00	1.98
108.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.111	1.033	21.249	0.00	0.00
108.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.111	1.033	21.249	0.00	0.99
108.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.111	1.033	21.249	0.00	1.98
109.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.036	21.305	0.00	0.00
109.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.036	21.305	0.00	0.99
109.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	21.305	0.00	1.98
110.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.113	1.038	21.361	0.00	0.00
110.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.113	1.038	21.361	0.00	0.99
110.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.113	1.038	21.361	0.00	1.98
111.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.114	1.041	21.416	0.00	0.00
111.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.041	21.416	0.00	0.99
111.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	21.416	0.00	1.98
112.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.115	1.044	21.471	0.00	0.00
112.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.115	1.044	21.471	0.00	0.99
112.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.115	1.044	21.471	0.00	1.98
113.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.116	1.047	21.526	0.00	0.00
113.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.116	1.047	21.526	0.00	0.99
113.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.047	21.526	0.00	1.98
114.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.117	1.050	21.580	0.00	0.00
114.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.117	1.050	21.580	0.00	0.99

Linear Appurtenance Segment Forces (Factored)

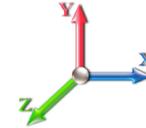
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 45

Load Case: 0.9D + 1.6W 93 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 34

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)
114.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.050	21.580	0.00	1.98
115.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.117	1.052	21.634	0.00	0.00
115.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.117	1.052	21.634	0.00	0.99
115.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.052	21.634	0.00	1.98
116.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.039	0.000	21.687	0.00	0.00
Totals:											0.0	348.8

Calculated Forces

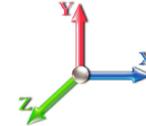
Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
 Page: 46



Load Case: 0.9D + 1.6W 93 mph Wind	Iterations 34
Dead Load Factor 0.90	
Wind Load Factor 1.60	



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	-27.07	-21.12	0.00	-2368.0	0.00	2368.07	3031.07	1515.53	5947.06	2977.95	0.00	0.000	0.000	0.804
1.00	-26.87	-21.07	0.00	-2346.9	0.00	2346.95	3023.73	1511.86	5906.70	2957.74	0.01	-0.049	0.000	0.803
2.00	-26.67	-21.03	0.00	-2325.8	0.00	2325.87	3016.33	1508.17	5866.38	2937.55	0.02	-0.099	0.000	0.801
3.00	-26.47	-20.98	0.00	-2304.8	0.00	2304.84	3008.89	1504.45	5826.08	2917.37	0.05	-0.149	0.000	0.799
4.00	-26.27	-20.94	0.00	-2283.8	0.00	2283.86	3001.40	1500.70	5785.81	2897.21	0.08	-0.199	0.000	0.797
5.00	-26.08	-20.89	0.00	-2262.9	0.00	2262.92	2993.85	1496.92	5745.58	2877.06	0.13	-0.249	0.000	0.795
6.00	-25.88	-20.85	0.00	-2242.0	0.00	2242.02	2986.25	1493.13	5705.37	2856.93	0.19	-0.299	0.000	0.794
7.00	-25.69	-20.81	0.00	-2221.1	0.00	2221.18	2978.60	1489.30	5665.20	2836.81	0.26	-0.350	0.000	0.792
8.00	-25.49	-20.76	0.00	-2200.3	0.00	2200.37	2970.91	1485.45	5625.07	2816.71	0.34	-0.401	0.000	0.790
9.00	-25.30	-20.72	0.00	-2179.6	0.00	2179.61	2963.16	1481.58	5584.97	2796.63	0.43	-0.451	0.000	0.788
10.00	-25.10	-20.67	0.00	-2158.9	0.00	2158.90	2955.36	1477.68	5544.90	2776.57	0.53	-0.503	0.000	0.786
11.00	-24.91	-20.63	0.00	-2138.2	0.00	2138.23	2947.51	1473.75	5504.88	2756.53	0.64	-0.554	0.000	0.784
12.00	-24.72	-20.58	0.00	-2117.6	0.00	2117.60	2939.60	1469.80	5464.90	2736.51	0.76	-0.606	0.000	0.782
13.00	-24.53	-20.54	0.00	-2097.0	0.00	2097.02	2931.65	1465.83	5424.96	2716.51	0.89	-0.657	0.000	0.781
14.00	-24.34	-20.49	0.00	-2076.4	0.00	2076.48	2923.65	1461.82	5385.06	2696.53	1.04	-0.709	0.000	0.779
15.00	-24.15	-20.45	0.00	-2055.9	0.00	2055.99	2915.59	1457.80	5345.20	2676.57	1.19	-0.762	0.000	0.777
16.00	-23.96	-20.40	0.00	-2035.5	0.00	2035.54	2907.49	1453.74	5305.39	2656.64	1.36	-0.814	0.000	0.775
17.00	-23.77	-20.36	0.00	-2015.1	0.00	2015.13	2899.33	1449.67	5265.63	2636.73	1.53	-0.867	0.000	0.773
18.00	-23.58	-20.32	0.00	-1994.7	0.00	1994.77	2891.12	1445.56	5225.92	2616.84	1.72	-0.920	0.000	0.771
19.00	-23.39	-20.27	0.00	-1974.4	0.00	1974.46	2882.86	1441.43	5186.25	2596.98	1.92	-0.973	0.000	0.769
20.00	-23.21	-20.23	0.00	-1954.1	0.00	1954.19	2874.56	1437.28	5146.64	2577.14	2.13	-1.026	0.000	0.767
21.00	-23.02	-20.18	0.00	-1933.9	0.00	1933.96	2866.20	1433.10	5107.08	2557.33	2.35	-1.079	0.000	0.764
22.00	-22.84	-20.14	0.00	-1913.7	0.00	1913.77	2857.79	1428.89	5067.57	2537.55	2.58	-1.133	0.000	0.762
23.00	-22.65	-20.10	0.00	-1893.6	0.00	1893.63	2849.32	1424.66	5028.11	2517.79	2.82	-1.187	0.000	0.760
24.00	-22.47	-20.05	0.00	-1873.5	0.00	1873.54	2840.81	1420.41	4988.71	2498.06	3.08	-1.241	0.000	0.758
25.00	-22.28	-20.01	0.00	-1853.4	0.00	1853.48	2832.25	1416.12	4949.37	2478.36	3.34	-1.295	0.000	0.756
26.00	-22.10	-19.97	0.00	-1833.4	0.00	1833.47	2823.63	1411.82	4910.09	2458.69	3.62	-1.350	0.000	0.754
27.00	-21.92	-19.92	0.00	-1813.5	0.00	1813.51	2814.97	1407.48	4870.87	2439.05	3.91	-1.404	0.000	0.752
28.00	-21.74	-19.88	0.00	-1793.5	0.00	1793.59	2806.25	1403.13	4831.70	2419.44	4.21	-1.459	0.000	0.749
29.00	-21.56	-19.84	0.00	-1773.7	0.00	1773.71	2797.49	1398.74	4792.60	2399.86	4.52	-1.514	0.000	0.747
30.00	-21.38	-19.79	0.00	-1753.8	0.00	1753.87	2788.67	1394.33	4753.57	2380.32	4.85	-1.570	0.000	0.745
31.00	-21.20	-19.75	0.00	-1734.0	0.00	1734.08	2779.80	1389.90	4714.60	2360.80	5.18	-1.625	0.000	0.742
32.00	-21.02	-19.70	0.00	-1714.3	0.00	1714.33	2770.88	1385.44	4675.69	2341.32	5.53	-1.681	0.000	0.740
33.00	-20.84	-19.66	0.00	-1694.6	0.00	1694.63	2761.91	1380.95	4636.86	2321.88	5.89	-1.737	0.000	0.738
34.00	-20.66	-19.61	0.00	-1674.9	0.00	1674.97	2752.89	1376.44	4598.09	2302.46	6.26	-1.793	0.000	0.735
35.00	-20.48	-19.57	0.00	-1655.3	0.00	1655.36	2743.82	1371.91	4559.39	2283.08	6.64	-1.849	0.000	0.733
36.00	-20.31	-19.52	0.00	-1635.7	0.00	1635.79	2734.69	1367.35	4520.77	2263.74	7.03	-1.906	0.000	0.730
37.00	-20.13	-19.47	0.00	-1616.2	0.00	1616.27	2725.52	1362.76	4482.21	2244.44	7.44	-1.963	0.000	0.728
38.00	-19.96	-19.43	0.00	-1596.8	0.00	1596.80	2716.29	1358.15	4443.74	2225.17	7.85	-2.020	0.000	0.725
39.00	-19.78	-19.38	0.00	-1577.3	0.00	1577.37	2707.02	1353.51	4405.33	2205.94	8.28	-2.077	0.000	0.723
40.00	-19.61	-19.33	0.00	-1557.9	0.00	1557.99	2697.69	1348.85	4367.01	2186.75	8.72	-2.134	0.000	0.720
41.00	-19.44	-19.28	0.00	-1538.6	0.00	1538.65	2688.32	1344.16	4328.76	2167.60	9.18	-2.191	0.000	0.717
42.00	-19.27	-19.24	0.00	-1519.3	0.00	1519.37	2678.89	1339.44	4290.59	2148.48	9.64	-2.249	0.000	0.715
43.00	-19.09	-19.19	0.00	-1500.1	0.00	1500.13	2669.41	1334.70	4252.50	2129.41	10.12	-2.307	0.000	0.712
44.00	-18.92	-19.14	0.00	-1480.9	0.00	1480.95	2659.88	1329.94	4214.50	2110.38	10.61	-2.365	0.000	0.709
45.00	-18.75	-19.09	0.00	-1461.8	0.00	1461.81	2650.30	1325.15	4176.57	2091.39	11.11	-2.423	0.000	0.706
46.00	-18.58	-19.04	0.00	-1442.7	0.00	1442.72	2640.67	1320.33	4138.74	2072.44	11.63	-2.482	0.000	0.703
47.00	-18.42	-18.99	0.00	-1423.6	0.00	1423.68	2630.98	1315.49	4100.98	2053.54	12.15	-2.540	0.000	0.700

Calculated Forces

Structure: CT12215-A-SBA

Code: TIA-222-G

5/3/2022

Site Name: Litchfield 3, CT

Exposure: B

Height: 149.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: B - Competent Rock

Gh: 1.1

Topography: 1

Struct Class: II

Page: 47



47.55	-18.33	-18.96	0.00	-1413.1	0.00	1413.18	2625.60	1312.80	4080.13	2043.10	12.45	-2.573	0.000	0.699
48.00	-18.21	-18.94	0.00	-1404.7	0.00	1404.71	2621.25	1310.62	4063.32	2034.68	12.69	-2.599	0.000	0.698
49.00	-17.95	-18.88	0.00	-1385.7	0.00	1385.77	2611.47	1305.73	4025.74	2015.86	13.24	-2.658	0.000	0.695
50.00	-17.69	-18.82	0.00	-1366.8	0.00	1366.89	2601.63	1300.82	3988.26	1997.09	13.80	-2.717	0.000	0.691
51.00	-17.43	-18.76	0.00	-1348.0	0.00	1348.07	2591.74	1295.87	3950.86	1978.37	14.38	-2.776	0.000	0.688
52.00	-17.18	-18.70	0.00	-1329.3	0.00	1329.31	2581.81	1290.90	3913.56	1959.69	14.97	-2.836	0.000	0.334
52.97	-16.95	-18.63	0.00	-1311.1	0.00	1311.18	1914.68	957.34	2935.86	1470.11	15.55	-2.864	0.000	0.367
53.00	-16.94	-18.63	0.00	-1310.6	0.00	1310.62	1914.50	957.25	2935.09	1469.72	15.56	-2.865	0.000	0.399
54.00	-16.80	-18.57	0.00	-1291.9	0.00	1291.99	1908.40	954.20	2909.37	1456.85	16.17	-2.896	0.000	0.395
55.00	-16.67	-18.50	0.00	-1273.4	0.00	1273.43	1902.26	951.13	2883.67	1443.98	16.78	-2.928	0.000	0.392
56.00	-16.54	-18.44	0.00	-1254.9	0.00	1254.92	1896.06	948.03	2858.01	1431.13	17.39	-2.959	0.000	0.388
57.00	-16.41	-18.38	0.00	-1236.4	0.00	1236.48	1889.81	944.90	2832.37	1418.29	18.02	-2.991	0.000	0.384
58.00	-16.28	-18.31	0.00	-1218.1	0.00	1218.11	1883.51	941.76	2806.77	1405.47	18.65	-3.022	0.000	0.381
59.00	-16.15	-18.25	0.00	-1199.7	0.00	1199.79	1877.16	938.58	2781.20	1392.67	19.28	-3.054	0.000	0.377
60.00	-16.02	-18.19	0.00	-1181.5	0.00	1181.54	1870.76	935.38	2755.66	1379.88	19.93	-3.085	0.000	0.374
61.00	-15.89	-18.12	0.00	-1163.3	0.00	1163.36	1864.31	932.15	2730.16	1367.11	20.57	-3.116	0.000	0.370
62.00	-15.76	-18.06	0.00	-1145.2	0.00	1145.24	1857.80	928.90	2704.70	1354.36	21.23	-3.147	0.000	0.366
63.00	-15.63	-17.99	0.00	-1127.1	0.00	1127.18	1851.25	925.63	2679.27	1341.63	21.89	-3.178	0.000	0.363
64.00	-15.50	-17.93	0.00	-1109.1	0.00	1109.18	1844.65	922.32	2653.88	1328.91	22.56	-3.209	0.000	0.359
65.00	-15.38	-17.87	0.00	-1091.2	0.00	1091.25	1837.99	919.00	2628.54	1316.22	23.24	-3.240	0.000	0.355
66.00	-15.25	-17.80	0.00	-1073.3	0.00	1073.39	1831.29	915.64	2603.23	1303.55	23.92	-3.271	0.000	0.352
67.00	-15.12	-17.74	0.00	-1055.5	0.00	1055.59	1824.53	912.26	2577.97	1290.90	24.61	-3.302	0.000	0.348
67.92	-15.01	-17.67	0.00	-1039.2	0.00	1039.27	1818.27	909.13	2554.77	1279.28	25.25	-3.330	0.000	0.269
68.00	-15.00	-17.67	0.00	-1037.8	0.00	1037.86	1817.72	908.86	2552.75	1278.27	25.30	-3.332	0.000	0.490
69.00	-14.87	-17.61	0.00	-1020.1	0.00	1020.18	1810.86	905.43	2527.58	1265.67	26.00	-3.376	0.000	0.485
70.00	-14.74	-17.55	0.00	-1002.5	0.00	1002.57	1803.95	901.98	2502.46	1253.09	26.72	-3.420	0.000	0.480
71.00	-14.61	-17.49	0.00	-985.02	0.00	985.02	1796.99	898.50	2477.38	1240.53	27.44	-3.463	0.000	0.476
72.00	-14.49	-17.43	0.00	-967.53	0.00	967.53	1789.98	894.99	2452.36	1228.00	28.17	-3.507	0.000	0.471
73.00	-14.35	-17.34	0.00	-950.10	0.00	950.10	1782.92	891.46	2427.38	1215.49	28.91	-3.550	0.000	0.466
74.00	-14.23	-17.28	0.00	-932.76	0.00	932.76	1775.81	887.90	2402.46	1203.02	29.65	-3.594	0.000	0.460
75.00	-14.10	-17.23	0.00	-915.47	0.00	915.47	1768.64	884.32	2377.59	1190.56	30.41	-3.637	0.000	0.455
76.00	-13.97	-17.17	0.00	-898.25	0.00	898.25	1761.43	880.71	2352.78	1178.14	31.18	-3.680	0.000	0.771
77.00	-13.84	-17.12	0.00	-881.07	0.00	881.07	1754.16	877.08	2328.02	1165.74	31.95	-3.753	0.000	0.764
78.00	-13.71	-17.07	0.00	-863.95	0.00	863.95	1746.84	873.42	2303.32	1153.37	32.75	-3.827	0.000	0.757
79.00	-13.58	-17.02	0.00	-846.88	0.00	846.88	1739.48	869.74	2278.68	1141.03	33.56	-3.900	0.000	0.750
80.00	-13.45	-16.97	0.00	-829.86	0.00	829.86	1732.06	866.03	2254.10	1128.72	34.38	-3.974	0.000	0.743
81.00	-13.32	-16.92	0.00	-812.89	0.00	812.89	1724.59	862.29	2229.58	1116.45	35.22	-4.047	0.000	0.736
82.00	-13.19	-16.87	0.00	-795.97	0.00	795.97	1717.07	858.53	2205.12	1104.20	36.08	-4.120	0.000	0.729
83.00	-13.06	-16.82	0.00	-779.10	0.00	779.10	1709.50	854.75	2180.73	1091.99	36.95	-4.194	0.000	0.721
84.00	-12.93	-16.77	0.00	-762.29	0.00	762.29	1701.88	850.94	2156.41	1079.81	37.83	-4.267	0.000	0.714
85.00	-12.80	-16.71	0.00	-745.52	0.00	745.52	1694.20	847.10	2132.15	1067.66	38.73	-4.340	0.000	0.706
86.00	-12.68	-16.66	0.00	-728.81	0.00	728.81	1686.48	843.24	2107.95	1055.54	39.65	-4.412	0.000	0.698
87.00	-12.55	-16.61	0.00	-712.15	0.00	712.15	1678.71	839.35	2083.83	1043.46	40.58	-4.485	0.000	0.690
88.00	-12.43	-16.56	0.00	-695.54	0.00	695.54	1670.88	835.44	2059.78	1031.42	41.53	-4.557	0.000	0.682
89.00	-12.30	-16.51	0.00	-678.98	0.00	678.98	1663.00	831.50	2035.80	1019.41	42.49	-4.629	0.000	0.674
90.00	-12.18	-16.46	0.00	-662.47	0.00	662.47	1655.08	827.54	2011.90	1007.44	43.47	-4.701	0.000	0.665
91.00	-12.05	-16.40	0.00	-646.01	0.00	646.01	1647.10	823.55	1988.06	995.51	44.46	-4.773	0.000	0.657
92.00	-11.93	-16.35	0.00	-629.61	0.00	629.61	1639.07	819.54	1964.31	983.61	45.46	-4.844	0.000	0.648
93.00	-11.81	-16.30	0.00	-613.26	0.00	613.26	1630.99	815.50	1940.63	971.76	46.49	-4.915	0.000	0.639
94.00	-11.69	-16.25	0.00	-596.96	0.00	596.96	1622.86	811.43	1917.03	959.94	47.52	-4.986	0.000	0.629
95.00	-11.57	-16.20	0.00	-580.71	0.00	580.71	1614.68	807.34	1893.51	948.16	48.57	-5.056	0.000	0.620
96.00	-11.46	-16.14	0.00	-564.52	0.00	564.52	1606.45	803.22	1870.07	936.43	49.64	-5.125	0.000	0.610
96.18	-11.43	-16.13	0.00	-561.67	0.00	561.67	1604.99	802.49	1865.94	934.36	49.83	-5.138	0.000	0.609
97.00	-11.29	-16.09	0.00	-548.38	0.00	548.38	1598.16	799.08	1846.72	924.73	50.72	-5.195	0.000	0.600
98.00	-11.12	-16.02	0.00	-532.30	0.00	532.30	1589.83	794.91	1823.44	913.08	51.81	-5.264	0.000	0.590
99.00	-10.96	-15.95	0.00	-516.28	0.00	516.28	1581.44	790.72	1800.26	901.47	52.92	-5.332	0.000	0.580
99.25	-10.92	-15.93	0.00	-512.29	0.00	512.29	1579.34	789.67	1794.47	898.57	53.20	-5.349	0.000	0.326

Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



100.00	-10.80	-15.88	0.00	-500.34	0.00	500.34	1573.01	786.50	1777.16	889.90	54.04	-5.378	0.000	0.320
100.34	-10.74	-15.85	0.00	-494.89	0.00	494.89	1075.68	537.84	1234.34	618.09	54.43	-5.391	0.000	0.359
101.00	-10.68	-15.81	0.00	-484.48	0.00	484.48	1072.67	536.33	1224.84	613.33	55.17	-5.415	0.000	0.401
102.00	-10.59	-15.74	0.00	-468.67	0.00	468.67	1068.04	534.02	1210.40	606.10	56.31	-5.458	0.000	0.391
102.25	-10.57	-15.73	0.00	-464.74	0.00	464.74	1066.88	533.44	1206.79	604.29	56.59	-5.468	0.000	0.388
102.25	-10.57	-15.73	0.00	-464.74	0.00	464.74	1066.88	533.44	1206.79	604.29	56.59	-5.468	0.000	0.388
103.00	-10.49	-15.69	0.00	-452.94	0.00	452.94	1063.37	531.68	1195.97	598.87	57.45	-5.499	0.000	0.767
104.00	-10.39	-15.63	0.00	-437.25	0.00	437.25	1058.64	529.32	1181.57	591.66	58.61	-5.582	0.000	0.750
105.00	-10.29	-15.57	0.00	-421.63	0.00	421.63	1053.86	526.93	1167.20	584.47	59.79	-5.663	0.000	0.732
106.00	-10.19	-15.52	0.00	-406.06	0.00	406.06	1049.03	524.52	1152.85	577.28	60.98	-5.743	0.000	0.714
107.00	-10.09	-15.47	0.00	-390.54	0.00	390.54	1044.15	522.08	1138.52	570.11	62.19	-5.822	0.000	0.696
108.00	-9.99	-15.42	0.00	-375.07	0.00	375.07	1039.22	519.61	1124.23	562.95	63.42	-5.900	0.000	0.677
109.00	-9.89	-15.36	0.00	-359.65	0.00	359.65	1034.24	517.12	1109.97	555.81	64.66	-5.976	0.000	0.658
110.00	-9.80	-15.31	0.00	-344.29	0.00	344.29	1029.21	514.60	1095.73	548.68	65.92	-6.051	0.000	0.638
111.00	-9.70	-15.26	0.00	-328.98	0.00	328.98	1024.13	512.06	1081.53	541.57	67.19	-6.124	0.000	0.618
112.00	-9.60	-15.21	0.00	-313.72	0.00	313.72	1018.99	509.50	1067.37	534.48	68.48	-6.196	0.000	0.597
113.00	-9.51	-15.16	0.00	-298.51	0.00	298.51	1013.81	506.90	1053.24	527.40	69.78	-6.266	0.000	0.576
114.00	-9.42	-15.10	0.00	-283.35	0.00	283.35	1008.57	504.29	1039.14	520.34	71.10	-6.334	0.000	0.555
115.00	-7.31	-12.00	0.00	-268.25	0.00	268.25	1003.28	501.64	1025.09	513.31	72.43	-6.401	0.000	0.530
116.00	-7.22	-11.95	0.00	-256.25	0.00	256.25	997.95	498.97	1011.07	506.29	73.78	-6.465	0.000	0.514
117.00	-7.14	-11.90	0.00	-244.30	0.00	244.30	992.56	496.28	997.10	499.29	75.14	-6.528	0.000	0.497
118.00	-7.05	-11.85	0.00	-232.40	0.00	232.40	987.12	493.56	983.16	492.31	76.51	-6.590	0.000	0.480
119.00	-6.97	-11.79	0.00	-220.55	0.00	220.55	981.63	490.81	969.27	485.36	77.89	-6.650	0.000	0.462
120.00	-6.89	-11.74	0.00	-208.76	0.00	208.76	976.09	488.04	955.42	478.42	79.29	-6.709	0.000	0.444
121.00	-6.81	-11.69	0.00	-197.02	0.00	197.02	970.50	485.25	941.62	471.51	80.70	-6.766	0.000	0.425
122.00	-6.73	-11.64	0.00	-185.33	0.00	185.33	964.85	482.43	927.87	464.62	82.12	-6.821	0.000	0.406
123.00	-6.65	-11.58	0.00	-173.69	0.00	173.69	959.16	479.58	914.16	457.76	83.55	-6.874	0.000	0.387
124.00	-6.57	-11.53	0.00	-162.11	0.00	162.11	953.42	476.71	900.51	450.92	84.99	-6.924	0.000	0.367
125.00	-6.49	-11.48	0.00	-150.58	0.00	150.58	947.62	473.81	886.90	444.11	86.44	-6.973	0.000	0.347
126.00	-6.41	-11.42	0.00	-139.10	0.00	139.10	941.77	470.89	873.35	437.32	87.91	-7.019	0.000	0.325
127.00	-6.34	-11.37	0.00	-127.68	0.00	127.68	935.88	467.94	859.85	430.56	89.38	-7.063	0.000	0.304
128.00	-6.26	-11.32	0.00	-116.31	0.00	116.31	929.93	464.96	846.40	423.83	90.86	-7.105	0.000	0.282
129.00	-6.19	-11.27	0.00	-104.99	0.00	104.99	923.93	461.97	833.02	417.13	92.35	-7.143	0.000	0.259
130.00	-3.51	-6.60	0.00	-93.72	0.00	93.72	917.88	458.94	819.69	410.45	93.85	-7.179	0.000	0.232
131.00	-3.46	-6.55	0.00	-87.12	0.00	87.12	911.78	455.89	806.41	403.81	95.35	-7.212	0.000	0.220
132.00	-3.41	-6.50	0.00	-80.57	0.00	80.57	905.63	452.81	793.20	397.19	96.86	-7.244	0.000	0.207
133.00	-3.35	-6.45	0.00	-74.07	0.00	74.07	899.43	449.71	780.05	390.61	98.38	-7.274	0.000	0.194
134.00	-3.30	-6.40	0.00	-67.62	0.00	67.62	893.17	446.59	766.97	384.05	99.90	-7.302	0.000	0.180
135.00	-3.26	-6.35	0.00	-61.23	0.00	61.23	886.87	443.43	753.94	377.53	101.43	-7.329	0.000	0.166
136.00	-3.21	-6.29	0.00	-54.88	0.00	54.88	880.51	440.26	740.98	371.04	102.96	-7.353	0.000	0.152
137.00	-3.16	-6.24	0.00	-48.59	0.00	48.59	874.11	437.05	728.09	364.59	104.50	-7.376	0.000	0.137
138.00	-3.16	-4.50	0.00	-42.34	0.00	42.34	867.65	433.83	715.27	358.17	106.04	-7.397	0.000	0.122
139.00	-3.11	-4.45	0.00	-37.85	0.00	37.85	861.15	430.57	702.52	351.78	107.59	-7.415	0.000	0.111
140.00	-1.84	-3.34	0.00	-33.40	0.00	33.40	854.59	427.29	689.83	345.43	109.14	-7.433	0.000	0.099
141.00	-1.81	-3.30	0.00	-30.06	0.00	30.06	847.98	423.99	677.22	339.11	110.69	-7.448	0.000	0.091
142.00	-1.78	-3.25	0.00	-26.76	0.00	26.76	841.32	420.66	664.68	332.84	112.25	-7.463	0.000	0.083
143.00	-1.74	-3.20	0.00	-23.52	0.00	23.52	834.61	417.30	652.22	326.60	113.81	-7.476	0.000	0.074
144.00	-1.71	-3.15	0.00	-20.32	0.00	20.32	827.84	413.92	639.83	320.39	115.37	-7.488	0.000	0.066
145.00	-1.68	-3.11	0.00	-17.16	0.00	17.16	821.03	410.52	627.52	314.23	116.94	-7.499	0.000	0.057
146.00	-1.65	-3.06	0.00	-14.06	0.00	14.06	814.17	407.08	615.29	308.10	118.51	-7.508	0.000	0.048
147.00	-1.62	-3.01	0.00	-10.99	0.00	10.99	805.87	402.94	602.11	301.50	120.08	-7.515	0.000	0.039
148.00	-1.59	-2.97	0.00	-7.98	0.00	7.98	796.71	398.35	588.42	294.65	121.65	-7.521	0.000	0.029
149.00	0.00	-2.74	0.00	-5.01	0.00	5.01	787.55	393.77	574.90	287.88	123.22	-7.526	0.000	0.017

Wind Loading - Shaft

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Topography: 1

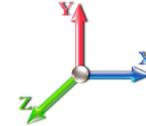
Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
 Page: 49



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	4.256	4.68	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00		1.00	0.70	4.256	4.68	0.00	1.200	1.057	1.00	4.229	5.08	23.8	64.7	257.4
2.00		1.00	0.70	4.256	4.68	0.00	1.200	1.133	1.00	4.224	5.07	23.7	69.2	261.1
3.00		1.00	0.70	4.256	4.68	0.00	1.200	1.180	1.00	4.215	5.06	23.7	71.8	262.8
4.00		1.00	0.70	4.256	4.68	0.00	1.200	1.215	1.00	4.203	5.04	23.6	73.6	263.8
5.00		1.00	0.70	4.256	4.68	0.00	1.200	1.242	1.00	4.190	5.03	23.5	75.0	264.4
6.00		1.00	0.70	4.256	4.68	0.00	1.200	1.265	1.00	4.176	5.01	23.5	76.1	264.6
7.00		1.00	0.70	4.256	4.68	0.00	1.200	1.285	1.00	4.162	4.99	23.4	77.0	264.7
8.00		1.00	0.70	4.256	4.68	0.00	1.200	1.302	1.00	4.147	4.98	23.3	77.7	264.5
9.00		1.00	0.70	4.256	4.68	0.00	1.200	1.317	1.00	4.132	4.96	23.2	78.3	264.3
10.00		1.00	0.70	4.256	4.68	0.00	1.200	1.331	1.00	4.117	4.94	23.1	78.8	264.0
11.00		1.00	0.70	4.256	4.68	0.00	1.200	1.344	1.00	4.102	4.92	23.0	79.2	263.6
12.00		1.00	0.70	4.256	4.68	0.00	1.200	1.356	1.00	4.086	4.90	23.0	79.6	263.1
13.00		1.00	0.70	4.256	4.68	0.00	1.200	1.367	1.00	4.070	4.88	22.9	79.9	262.5
14.00		1.00	0.70	4.256	4.68	0.00	1.200	1.377	1.00	4.054	4.87	22.8	80.2	262.0
15.00		1.00	0.70	4.256	4.68	0.00	1.200	1.386	1.00	4.039	4.85	22.7	80.4	261.3
16.00		1.00	0.70	4.256	4.68	0.00	1.200	1.395	1.00	4.022	4.83	22.6	80.5	260.7
17.00		1.00	0.70	4.256	4.68	0.00	1.200	1.404	1.00	4.006	4.81	22.5	80.7	260.0
18.00		1.00	0.70	4.256	4.68	0.00	1.200	1.412	1.00	3.990	4.79	22.4	80.8	259.2
19.00		1.00	0.70	4.256	4.68	0.00	1.200	1.419	1.00	3.974	4.77	22.3	80.9	258.5
20.00		1.00	0.70	4.256	4.68	0.00	1.200	1.427	1.00	3.958	4.75	22.2	80.9	257.7
21.00		1.00	0.70	4.256	4.68	0.00	1.200	1.434	1.00	3.941	4.73	22.1	81.0	256.9
22.00		1.00	0.70	4.256	4.68	0.00	1.200	1.440	1.00	3.925	4.71	22.0	81.0	256.1
23.00		1.00	0.70	4.256	4.68	0.00	1.200	1.447	1.00	3.908	4.69	22.0	81.0	255.2
24.00		1.00	0.70	4.256	4.68	0.00	1.200	1.453	1.00	3.892	4.67	21.9	81.0	254.4
25.00		1.00	0.70	4.256	4.68	0.00	1.200	1.459	1.00	3.875	4.65	21.8	80.9	253.5
26.00		1.00	0.70	4.256	4.68	0.00	1.200	1.465	1.00	3.859	4.63	21.7	80.9	252.6
27.00		1.00	0.70	4.256	4.68	0.00	1.200	1.470	1.00	3.842	4.61	21.6	80.8	251.7
28.00		1.00	0.70	4.256	4.68	0.00	1.200	1.476	1.00	3.825	4.59	21.5	80.7	250.8
29.00		1.00	0.70	4.256	4.68	0.00	1.200	1.481	1.00	3.809	4.57	21.4	80.6	249.9
30.00		1.00	0.70	4.260	4.69	0.00	1.200	1.486	1.00	3.792	4.55	21.3	80.5	248.9
31.00		1.00	0.71	4.300	4.73	0.00	1.200	1.491	1.00	3.775	4.53	21.4	80.4	248.0
32.00		1.00	0.71	4.339	4.77	0.00	1.200	1.495	1.00	3.759	4.51	21.5	80.3	247.0
33.00		1.00	0.72	4.377	4.81	0.00	1.200	1.500	1.00	3.742	4.49	21.6	80.2	246.0
34.00		1.00	0.73	4.415	4.86	0.00	1.200	1.504	1.00	3.725	4.47	21.7	80.0	245.0
35.00		1.00	0.73	4.451	4.90	0.00	1.200	1.509	1.00	3.708	4.45	21.8	79.9	244.0
36.00		1.00	0.74	4.487	4.94	0.00	1.200	1.513	1.00	3.691	4.43	21.9	79.7	243.0
37.00		1.00	0.74	4.523	4.97	0.00	1.200	1.517	1.00	3.675	4.41	21.9	79.5	242.0
38.00		1.00	0.75	4.557	5.01	0.00	1.200	1.521	1.00	3.658	4.39	22.0	79.4	241.0
39.00		1.00	0.76	4.591	5.05	0.00	1.200	1.525	1.00	3.641	4.37	22.1	79.2	240.0
40.00		1.00	0.76	4.625	5.09	0.00	1.200	1.529	1.00	3.624	4.35	22.1	79.0	239.0
41.00		1.00	0.77	4.657	5.12	0.00	1.200	1.533	1.00	3.607	4.33	22.2	78.8	237.9
42.00		1.00	0.77	4.689	5.16	0.00	1.200	1.537	1.00	3.590	4.31	22.2	78.6	236.9
43.00		1.00	0.78	4.721	5.19	0.00	1.200	1.540	1.00	3.573	4.29	22.3	78.4	235.9
44.00		1.00	0.78	4.752	5.23	0.00	1.200	1.544	1.00	3.556	4.27	22.3	78.2	234.8
45.00		1.00	0.79	4.783	5.26	0.00	1.200	1.547	1.00	3.539	4.25	22.3	78.0	233.7
46.00		1.00	0.79	4.813	5.29	0.00	1.200	1.551	1.00	3.522	4.23	22.4	77.7	232.7

Wind Loading - Shaft

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



47.00	1.00	0.80	4.843	5.33	0.00	1.200	1.554	1.00	3.505	4.21	22.4	77.5	231.6
47.55 Bot - Section 2	1.00	0.80	4.859	5.34	0.00	1.200	1.556	0.55	1.932	2.32	12.4	42.8	127.7
48.00	1.00	0.80	4.872	5.36	0.00	1.200	1.557	0.45	1.575	1.89	10.1	34.9	158.8
49.00	1.00	0.81	4.901	5.39	0.00	1.200	1.560	1.00	3.514	4.22	22.7	78.0	354.2
50.00 Appurtenance(s)	1.00	0.81	4.929	5.42	0.00	1.200	1.564	1.00	3.497	4.20	22.8	77.8	352.5
51.00	1.00	0.82	4.957	5.45	0.00	1.241 *	1.567	1.00	3.480	4.32	23.6	77.5	350.7
52.00 RB1 RB2	1.00	0.82	4.984	5.48	0.00	1.244 *	1.570	1.00	3.463	4.31	23.6	77.3	348.9
52.97 Top - Section 1	1.00	0.82	5.011	5.51	0.00	1.246 *	1.573	0.97	3.342	4.16	23.0	74.7	336.8
53.00	1.00	0.82	5.012	5.51	0.00	1.242 *	1.573	0.03	0.103	0.13	0.7	2.3	5.9
54.00	1.00	0.83	5.039	5.54	0.00	1.243 *	1.576	1.00	3.429	4.26	23.6	76.7	197.2
55.00	1.00	0.83	5.065	5.57	0.00	1.245 *	1.579	1.00	3.411	4.25	23.7	76.5	196.2
56.00	1.00	0.84	5.091	5.60	0.00	1.247 *	1.581	1.00	3.394	4.23	23.7	76.2	195.3
57.00	1.00	0.84	5.117	5.63	0.00	1.250 *	1.584	1.00	3.377	4.22	23.8	75.9	194.3
58.00	1.00	0.85	5.142	5.66	0.00	1.252 *	1.587	1.00	3.360	4.21	23.8	75.7	193.4
59.00	1.00	0.85	5.168	5.68	0.00	1.254 *	1.590	1.00	3.343	4.19	23.8	75.4	192.4
60.00	1.00	0.85	5.193	5.71	0.00	1.257 *	1.592	1.00	3.326	4.18	23.9	75.1	191.5
61.00	1.00	0.86	5.217	5.74	0.00	1.259 *	1.595	1.00	3.309	4.17	23.9	74.8	190.5
62.00	1.00	0.86	5.241	5.77	0.00	1.261 *	1.598	1.00	3.292	4.15	23.9	74.5	189.6
63.00	1.00	0.87	5.265	5.79	0.00	1.264 *	1.600	1.00	3.275	4.14	24.0	74.2	188.6
64.00	1.00	0.87	5.289	5.82	0.00	1.266 *	1.603	1.00	3.258	4.13	24.0	74.0	187.7
65.00	1.00	0.87	5.313	5.84	0.00	1.269 *	1.605	1.00	3.241	4.11	24.0	73.7	186.7
66.00	1.00	0.88	5.336	5.87	0.00	1.271 *	1.608	1.00	3.223	4.10	24.1	73.4	185.7
67.00	1.00	0.88	5.359	5.89	0.00	1.274 *	1.610	1.00	3.206	4.08	24.1	73.1	184.7
67.92 RB3	1.00	0.88	5.380	5.92	0.00	1.276 *	1.612	0.92	2.935	3.75	22.2	67.0	169.1
68.00 RT1 RT2	1.00	0.89	5.382	5.92	0.00	1.278 *	1.612	0.08	0.254	0.33	1.9	5.8	14.7
69.00	1.00	0.89	5.404	5.94	0.00	1.279 *	1.615	1.00	3.172	4.06	24.1	72.4	182.8
70.00	1.00	0.89	5.426	5.97	0.00	1.282 *	1.617	1.00	3.155	4.04	24.1	72.1	181.8
71.00	1.00	0.90	5.448	5.99	0.00	1.200	1.619	1.00	3.138	3.77	22.6	71.8	180.8
72.00	1.00	0.90	5.470	6.02	0.00	1.200	1.622	1.00	3.121	3.74	22.5	71.5	179.8
73.00 Appurtenance(s)	1.00	0.90	5.492	6.04	0.00	1.200	1.624	1.00	3.103	3.72	22.5	71.2	178.8
74.00	1.00	0.91	5.513	6.06	0.00	1.200	1.626	1.00	3.086	3.70	22.5	70.9	177.8
75.00 RT3	1.00	0.91	5.534	6.09	0.00	1.200	1.628	1.00	3.069	3.68	22.4	70.5	176.8
76.00	1.00	0.91	5.555	6.11	0.00	1.200	1.631	1.00	3.052	3.66	22.4	70.2	175.9
77.00	1.00	0.92	5.576	6.13	0.00	1.200	1.633	1.00	3.035	3.64	22.3	69.9	174.9
78.00	1.00	0.92	5.597	6.16	0.00	1.200	1.635	1.00	3.018	3.62	22.3	69.6	173.9
79.00	1.00	0.92	5.617	6.18	0.00	1.200	1.637	1.00	3.000	3.60	22.2	69.2	172.8
80.00	1.00	0.93	5.637	6.20	0.00	1.200	1.639	1.00	2.983	3.58	22.2	68.9	171.8
81.00	1.00	0.93	5.657	6.22	0.00	1.200	1.641	1.00	2.966	3.56	22.1	68.6	170.8
82.00	1.00	0.93	5.677	6.24	0.00	1.200	1.643	1.00	2.949	3.54	22.1	68.2	169.8
83.00	1.00	0.94	5.697	6.27	0.00	1.200	1.645	1.00	2.932	3.52	22.0	67.9	168.8
84.00	1.00	0.94	5.716	6.29	0.00	1.200	1.647	1.00	2.914	3.50	22.0	67.5	167.8
85.00	1.00	0.94	5.736	6.31	0.00	1.200	1.649	1.00	2.897	3.48	21.9	67.2	166.8
86.00	1.00	0.95	5.755	6.33	0.00	1.200	1.651	1.00	2.880	3.46	21.9	66.8	165.8
87.00	1.00	0.95	5.774	6.35	0.00	1.200	1.653	1.00	2.863	3.44	21.8	66.5	164.7
88.00	1.00	0.95	5.793	6.37	0.00	1.200	1.655	1.00	2.846	3.41	21.8	66.1	163.7
89.00	1.00	0.96	5.812	6.39	0.00	1.200	1.656	1.00	2.828	3.39	21.7	65.8	162.7
90.00	1.00	0.96	5.830	6.41	0.00	1.200	1.658	1.00	2.811	3.37	21.6	65.4	161.7
91.00	1.00	0.96	5.849	6.43	0.00	1.200	1.660	1.00	2.794	3.35	21.6	65.1	160.7
92.00	1.00	0.96	5.867	6.45	0.00	1.200	1.662	1.00	2.777	3.33	21.5	64.7	159.6
93.00	1.00	0.97	5.885	6.47	0.00	1.200	1.664	1.00	2.759	3.31	21.4	64.4	158.6
94.00	1.00	0.97	5.903	6.49	0.00	1.200	1.666	1.00	2.742	3.29	21.4	64.0	157.6
95.00	1.00	0.97	5.921	6.51	0.00	1.200	1.667	1.00	2.725	3.27	21.3	63.6	156.5
96.00	1.00	0.98	5.939	6.53	0.00	1.200	1.669	1.00	2.708	3.25	21.2	63.3	155.5
96.18 Bot - Section 3	1.00	0.98	5.942	6.54	0.00	1.212 *	1.669	0.18	0.477	0.58	3.8	11.2	27.4
97.00	1.00	0.98	5.956	6.55	0.00	1.213 *	1.671	0.82	2.240	2.72	17.8	52.4	185.1
98.00	1.00	0.98	5.974	6.57	0.00	1.372 *	1.672	1.00	2.705	3.71	24.4	63.3	223.4
99.00	1.00	0.99	5.991	6.59	0.00	1.376 *	1.674	1.00	2.688	3.70	24.4	63.0	221.9

Wind Loading - Shaft

Structure: CT12215-A-SBA

Code: TIA-222-G

5/3/2022

Site Name: Litchfield 3, CT

Exposure: B



Height: 149.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: B - Competent Rock

Gh: 1.1

Topography: 1

Struct Class: II

Page: 51

99.25 RB4	1.00	0.99	5.996	6.60	0.00	1.379 *	1.675	0.25	0.669	0.92	6.1	15.7	55.3
100.00	1.00	0.99	6.008	6.61	0.00	1.381 *	1.676	0.75	2.001	2.76	18.3	47.0	165.1
100.34 Top - Section 2	1.00	0.99	6.014	6.62	0.00	1.383 *	1.676	0.34	0.913	1.26	8.4	21.4	75.3
101.00	1.00	0.99	6.026	6.63	0.00	1.378 *	1.678	0.66	1.740	2.40	15.9	40.9	85.3
102.00	1.00	0.99	6.043	6.65	0.00	1.381 *	1.679	1.00	2.636	3.64	24.2	61.9	129.1
102.25 RT4	1.00	0.99	6.047	6.65	0.00	1.384 *	1.680	0.25	0.656	0.91	6.0	15.4	32.2
103.00	1.00	1.00	6.059	6.67	0.00	1.386 *	1.681	0.75	1.962	2.72	18.1	46.1	96.1
104.00	1.00	1.00	6.076	6.68	0.00	1.389 *	1.682	1.00	2.601	3.61	24.2	61.1	127.3
105.00	1.00	1.00	6.093	6.70	0.00	1.394 *	1.684	1.00	2.584	3.60	24.1	60.7	126.4
106.00	1.00	1.00	6.109	6.72	0.00	1.234 *	1.686	1.00	2.567	3.17	21.3	60.4	125.5
107.00	1.00	1.01	6.126	6.74	0.00	1.237 *	1.687	1.00	2.550	3.15	21.2	60.0	124.7
108.00	1.00	1.01	6.142	6.76	0.00	1.240 *	1.689	1.00	2.532	3.14	21.2	59.6	123.8
109.00	1.00	1.01	6.158	6.77	0.00	1.243 *	1.690	1.00	2.515	3.13	21.2	59.2	122.9
110.00	1.00	1.02	6.174	6.79	0.00	1.246 *	1.692	1.00	2.498	3.11	21.1	58.8	122.0
111.00	1.00	1.02	6.190	6.81	0.00	1.249 *	1.693	1.00	2.480	3.10	21.1	58.5	121.1
112.00	1.00	1.02	6.206	6.83	0.00	1.253 *	1.695	1.00	2.463	3.09	21.1	58.1	120.2
113.00	1.00	1.02	6.222	6.84	0.00	1.256 *	1.696	1.00	2.446	3.07	21.0	57.7	119.3
114.00	1.00	1.03	6.238	6.86	0.00	1.259 *	1.698	1.00	2.429	3.06	21.0	57.3	118.5
115.00 Appurtenance(s)	1.00	1.03	6.253	6.88	0.00	1.263 *	1.699	1.00	2.411	3.05	20.9	56.9	117.6
116.00	1.00	1.03	6.269	6.90	0.00	1.200	1.701	1.00	2.394	2.87	19.8	56.5	116.7
117.00	1.00	1.03	6.284	6.91	0.00	1.200	1.702	1.00	2.377	2.85	19.7	56.1	115.8
118.00	1.00	1.04	6.299	6.93	0.00	1.200	1.704	1.00	2.359	2.83	19.6	55.7	114.9
119.00	1.00	1.04	6.315	6.95	0.00	1.200	1.705	1.00	2.342	2.81	19.5	55.3	114.0
120.00	1.00	1.04	6.330	6.96	0.00	1.200	1.707	1.00	2.325	2.79	19.4	55.0	113.1
121.00	1.00	1.04	6.345	6.98	0.00	1.200	1.708	1.00	2.308	2.77	19.3	54.6	112.2
122.00	1.00	1.05	6.360	7.00	0.00	1.200	1.710	1.00	2.290	2.75	19.2	54.2	111.3
123.00	1.00	1.05	6.375	7.01	0.00	1.200	1.711	1.00	2.273	2.73	19.1	53.8	110.4
124.00	1.00	1.05	6.389	7.03	0.00	1.200	1.712	1.00	2.256	2.71	19.0	53.4	109.5
125.00	1.00	1.05	6.404	7.04	0.00	1.200	1.714	1.00	2.238	2.69	18.9	53.0	108.6
126.00	1.00	1.06	6.419	7.06	0.00	1.200	1.715	1.00	2.221	2.67	18.8	52.6	107.7
127.00	1.00	1.06	6.433	7.08	0.00	1.200	1.716	1.00	2.204	2.64	18.7	52.2	106.8
128.00	1.00	1.06	6.448	7.09	0.00	1.200	1.718	1.00	2.186	2.62	18.6	51.8	105.9
129.00	1.00	1.06	6.462	7.11	0.00	1.200	1.719	1.00	2.169	2.60	18.5	51.4	105.0
130.00 Appurtenance(s)	1.00	1.07	6.476	7.12	0.00	1.200	1.720	1.00	2.152	2.58	18.4	51.0	104.1
131.00	1.00	1.07	6.490	7.14	0.00	1.200	1.722	1.00	2.134	2.56	18.3	50.5	103.1
132.00	1.00	1.07	6.504	7.15	0.00	1.200	1.723	1.00	2.117	2.54	18.2	50.1	102.2
133.00	1.00	1.07	6.519	7.17	0.00	1.200	1.724	1.00	2.100	2.52	18.1	49.7	101.3
134.00	1.00	1.07	6.532	7.19	0.00	1.200	1.726	1.00	2.083	2.50	18.0	49.3	100.4
135.00	1.00	1.08	6.546	7.20	0.00	1.200	1.727	1.00	2.065	2.48	17.8	48.9	99.5
136.00	1.00	1.08	6.560	7.22	0.00	1.200	1.728	1.00	2.048	2.46	17.7	48.5	98.6
137.00	1.00	1.08	6.574	7.23	0.00	1.200	1.729	1.00	2.031	2.44	17.6	48.1	97.7
138.00 Appurtenance(s)	1.00	1.08	6.588	7.25	0.00	1.200	1.731	1.00	2.013	2.42	17.5	47.7	96.8
139.00	1.00	1.09	6.601	7.26	0.00	1.200	1.732	1.00	1.996	2.40	17.4	47.3	95.8
140.00 Appurtenance(s)	1.00	1.09	6.615	7.28	0.00	1.200	1.733	1.00	1.979	2.37	17.3	46.9	94.9
141.00	1.00	1.09	6.628	7.29	0.00	1.200	1.734	1.00	1.961	2.35	17.2	46.4	94.0
142.00	1.00	1.09	6.642	7.31	0.00	1.200	1.736	1.00	1.944	2.33	17.0	46.0	93.1
143.00	1.00	1.09	6.655	7.32	0.00	1.200	1.737	1.00	1.927	2.31	16.9	45.6	92.2
144.00	1.00	1.10	6.668	7.34	0.00	1.200	1.738	1.00	1.909	2.29	16.8	45.2	91.3
145.00	1.00	1.10	6.681	7.35	0.00	1.200	1.739	1.00	1.892	2.27	16.7	44.8	90.3
146.00	1.00	1.10	6.695	7.36	0.00	1.200	1.741	1.00	1.875	2.25	16.6	44.4	89.4
147.00	1.00	1.10	6.708	7.38	0.00	1.200	1.742	1.00	1.857	2.23	16.4	43.9	88.5
148.00	1.00	1.11	6.721	7.39	0.00	1.200	1.743	1.00	1.840	2.21	16.3	43.5	87.6
149.00 Appurtenance(s)	1.00	1.11	6.734	7.41	0.00	1.200	1.744	1.00	1.823	2.19	16.2	43.1	86.6

* Cf Adjusted by Linear Load Ra Effect

Totals: 149.00 3,210.9 27,705.9

Discrete Appurtenance Forces

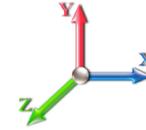
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 52

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

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	149.00	Low Profile Platform	1	6.734	7.407	1.00	1.00	45.93	2186.43	0.000	0.000	340.19	0.00	0.00
2	149.00	ACU-A20-N	4	6.772	7.449	0.40	0.80	0.70	16.77	0.000	3.000	5.20	0.00	15.61
3	149.00	800MHZ Filter	3	6.772	7.449	0.40	0.80	1.71	69.57	0.000	3.000	12.75	0.00	38.25
4	149.00	TD-RRH8x20-25	3	6.772	7.449	0.40	0.80	5.84	583.12	0.000	3.000	43.47	0.00	130.40
5	149.00	800MHZ	3	6.772	7.449	0.40	0.80	4.56	380.86	0.000	3.000	33.94	0.00	101.81
6	149.00	1900MHZ	3	6.772	7.449	0.40	0.80	4.85	394.44	0.000	3.000	36.09	0.00	108.28
7	149.00	APXVTM14-C-I20	3	6.772	7.449	0.63	0.80	14.13	682.45	0.000	3.000	105.26	0.00	315.78
8	149.00	APXVSP18-C-A20	3	6.772	7.449	0.66	0.80	21.54	574.91	0.000	3.000	160.44	0.00	481.31
9	140.00	Low Profile	1	6.615	7.276	1.00	1.00	39.54	2799.91	0.000	0.000	287.70	0.00	0.00
10	138.00	FD9R6004/2C-3L	6	6.588	7.246	0.40	0.80	1.92	56.28	0.000	0.000	13.91	0.00	0.00
11	138.00	GPS Receiver	1	6.588	7.246	0.80	0.80	1.36	33.08	0.000	0.000	9.89	0.00	0.00
12	138.00	BXA-171085-12B_2	3	6.588	7.246	0.67	0.80	14.25	254.83	0.000	0.000	103.28	0.00	0.00
13	138.00	BXA-70063-6CF_2	3	6.588	7.246	0.58	0.80	15.45	578.50	0.000	0.000	111.96	0.00	0.00
14	138.00	LPA-80080/6CF	3	6.588	7.246	1.36	0.80	22.44	654.62	0.000	0.000	162.59	0.00	0.00
15	130.00	RRUS 4478 B14	3	6.476	7.124	0.38	0.75	2.43	308.27	0.000	0.000	17.32	0.00	0.00
16	130.00	(3) 12.5' - 2" Horizontal	1	6.476	7.124	0.75	1.00	9.97	254.18	0.000	0.000	71.02	0.00	0.00
17	130.00	XP-2020	24	6.476	7.124	0.56	0.75	16.05	197.50	0.000	0.000	114.31	0.00	0.00
18	130.00	VSRDual-TS-B-HD	2	6.476	7.124	0.56	0.75	10.33	553.11	0.000	0.000	73.56	0.00	0.00
19	130.00	DC6-48-60-0-8C-EV	1	6.476	7.124	0.75	0.75	4.24	111.38	0.000	0.000	30.20	0.00	0.00
20	130.00	ABT-DF-DM-ADBH	1	6.476	7.124	0.75	0.75	0.18	2.82	0.000	0.000	1.28	0.00	0.00
21	130.00	7770.00	3	6.476	7.124	0.55	0.75	10.76	524.47	0.000	0.000	76.63	0.00	0.00
22	130.00	LGP 21401	12	6.476	7.124	0.38	0.75	5.51	583.97	0.000	0.000	39.28	0.00	0.00
23	130.00	DC6-48-60-18-8F	1	6.476	7.124	0.75	0.75	1.01	81.41	0.000	0.000	7.22	0.00	0.00
24	130.00	DC6-48-60-18-8C	1	6.476	7.124	0.75	0.75	1.43	60.91	0.000	0.000	10.21	0.00	0.00
25	130.00	80010965	6	6.476	7.124	0.53	0.75	49.10	2541.67	0.000	0.000	349.77	0.00	0.00
26	130.00	4449 B5/B12	3	6.476	7.124	0.38	0.75	2.82	372.67	0.000	0.000	20.11	0.00	0.00
27	130.00	8843 B2/B66A	3	6.476	7.124	0.38	0.75	2.40	361.74	0.000	0.000	17.07	0.00	0.00
28	130.00	Low Profile Platform	1	6.476	7.124	1.00	1.00	45.65	2172.25	0.000	0.000	325.16	0.00	0.00
29	115.00	AIR6449 B41	3	6.253	6.879	0.57	0.80	11.20	676.27	0.000	0.000	77.07	0.00	0.00
30	115.00	(3) Stabilizer Kit (12' FW)	1	6.253	6.879	1.00	1.00	12.32	366.25	0.000	0.000	84.74	0.00	0.00
31	115.00	T-Arm	3	6.253	6.879	0.56	0.75	24.97	1763.77	0.000	0.000	171.77	0.00	0.00
32	115.00	RRUS 11	3	6.253	6.879	0.40	0.80	3.78	441.55	0.000	0.000	26.02	0.00	0.00
33	115.00	APXVAALL24_43-U-NA20	3	6.253	6.879	0.58	0.80	38.70	1687.45	0.000	0.000	266.19	0.00	0.00
34	115.00	4460 Radio	3	6.253	6.879	0.40	0.80	4.21	551.46	0.000	0.000	28.95	0.00	0.00
35	115.00	4449 B71 + B85	3	6.253	6.879	0.40	0.80	3.03	257.01	0.000	0.000	20.84	0.00	0.00
36	73.00	GPS Receiver	1	5.492	6.041	1.00	1.00	1.66	31.28	0.000	0.000	10.04	0.00	0.00
37	50.00	58532A	1	4.929	5.422	1.00	1.00	0.55	5.25	0.000	0.000	2.99	0.00	0.00

Totals: 23,172.39

3,268.43

Total Applied Force Summary

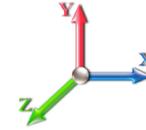
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 53

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		23.76	316.68	0.00	0.00
2.00		23.73	321.30	0.00	0.00
3.00		23.68	323.73	0.00	0.00
4.00		23.61	325.20	0.00	0.00
5.00		23.54	326.13	0.00	0.00
6.00		23.46	326.71	0.00	0.00
7.00		23.38	327.03	0.00	0.00
8.00		23.30	327.17	0.00	0.00
9.00		23.21	327.16	0.00	0.00
10.00		23.13	327.04	0.00	0.00
11.00		23.04	326.82	0.00	0.00
12.00		22.95	326.51	0.00	0.00
13.00		22.87	326.14	0.00	0.00
14.00		22.78	325.71	0.00	0.00
15.00		22.69	325.23	0.00	0.00
16.00		22.60	324.70	0.00	0.00
17.00		22.51	324.13	0.00	0.00
18.00		22.42	323.53	0.00	0.00
19.00		22.33	322.89	0.00	0.00
20.00		22.23	322.22	0.00	0.00
21.00		22.14	321.53	0.00	0.00
22.00		22.05	320.81	0.00	0.00
23.00		21.96	320.07	0.00	0.00
24.00		21.86	319.31	0.00	0.00
25.00		21.77	318.52	0.00	0.00
26.00		21.68	317.72	0.00	0.00
27.00		21.58	316.91	0.00	0.00
28.00		21.49	316.07	0.00	0.00
29.00		21.40	315.23	0.00	0.00
30.00		21.32	314.37	0.00	0.00
31.00		21.43	313.49	0.00	0.00
32.00		21.53	312.60	0.00	0.00
33.00		21.62	311.71	0.00	0.00
34.00		21.71	310.80	0.00	0.00
35.00		21.79	309.88	0.00	0.00
36.00		21.87	308.95	0.00	0.00
37.00		21.94	308.01	0.00	0.00
38.00		22.00	307.06	0.00	0.00
39.00		22.06	306.10	0.00	0.00
40.00		22.12	305.14	0.00	0.00
41.00		22.17	304.17	0.00	0.00
42.00		22.22	303.18	0.00	0.00
43.00		22.27	302.20	0.00	0.00
44.00		22.31	301.20	0.00	0.00
45.00		22.34	300.20	0.00	0.00
46.00		22.38	299.19	0.00	0.00

Total Applied Force Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 54

47.00	22.41	298.18	0.00	0.00	
47.55	12.39	164.58	0.00	0.00	
48.00	10.13	188.56	0.00	0.00	
49.00	22.73	420.88	0.00	0.00	
50.00	(1) attachments	25.74	424.43	0.00	0.00
51.00	23.55	428.32	0.00	0.00	
52.00	23.61	426.64	0.00	0.00	
52.97	22.95	412.23	0.00	0.00	
53.00	0.71	8.27	0.00	0.00	
54.00	23.61	275.01	0.00	0.00	
55.00	23.66	274.15	0.00	0.00	
56.00	23.71	273.29	0.00	0.00	
57.00	23.75	272.42	0.00	0.00	
58.00	23.80	271.54	0.00	0.00	
59.00	23.83	270.66	0.00	0.00	
60.00	23.87	269.77	0.00	0.00	
61.00	23.91	268.89	0.00	0.00	
62.00	23.94	267.99	0.00	0.00	
63.00	23.97	267.09	0.00	0.00	
64.00	24.00	266.19	0.00	0.00	
65.00	24.03	265.29	0.00	0.00	
66.00	24.05	264.38	0.00	0.00	
67.00	24.08	263.47	0.00	0.00	
67.92	22.17	241.59	0.00	0.00	
68.00	1.92	20.98	0.00	0.00	
69.00	24.12	261.63	0.00	0.00	
70.00	24.14	260.71	0.00	0.00	
71.00	22.57	252.55	0.00	0.00	
72.00	22.53	251.61	0.00	0.00	
73.00	(1) attachments	32.54	281.94	0.00	0.00
74.00	22.46	249.52	0.00	0.00	
75.00	22.42	248.57	0.00	0.00	
76.00	22.38	247.61	0.00	0.00	
77.00	22.34	246.66	0.00	0.00	
78.00	22.29	237.27	0.00	0.00	
79.00	22.25	236.29	0.00	0.00	
80.00	22.20	235.31	0.00	0.00	
81.00	22.15	234.33	0.00	0.00	
82.00	22.10	233.35	0.00	0.00	
83.00	22.05	232.36	0.00	0.00	
84.00	21.99	231.37	0.00	0.00	
85.00	21.94	230.38	0.00	0.00	
86.00	21.88	229.39	0.00	0.00	
87.00	21.82	228.39	0.00	0.00	
88.00	21.76	227.40	0.00	0.00	
89.00	21.70	226.40	0.00	0.00	
90.00	21.63	225.40	0.00	0.00	
91.00	21.57	224.39	0.00	0.00	
92.00	21.50	223.39	0.00	0.00	
93.00	21.44	222.38	0.00	0.00	
94.00	21.37	221.37	0.00	0.00	
95.00	21.30	220.36	0.00	0.00	
96.00	21.23	219.35	0.00	0.00	
96.18	3.78	40.01	0.00	0.00	
97.00	17.81	243.95	0.00	0.00	
98.00	24.40	303.58	0.00	0.00	
99.00	24.38	302.08	0.00	0.00	

Total Applied Force Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 55

99.25	6.09	75.32	0.00	0.00
100.00	18.26	225.33	0.00	0.00
100.34	8.35	102.89	0.00	0.00
101.00	15.89	137.99	0.00	0.00
102.00	24.20	209.40	0.00	0.00
102.25	6.04	52.25	0.00	0.00
103.00	18.12	156.37	0.00	0.00
104.00	24.16	207.73	0.00	0.00
105.00	24.13	206.89	0.00	0.00
106.00	21.28	197.27	0.00	0.00
107.00	21.25	196.42	0.00	0.00
108.00	21.21	195.57	0.00	0.00
109.00	21.18	194.72	0.00	0.00
110.00	21.14	193.86	0.00	0.00
111.00	21.10	193.00	0.00	0.00
112.00	21.07	192.14	0.00	0.00
113.00	21.03	191.28	0.00	0.00
114.00	20.99	190.42	0.00	0.00
115.00	(19) attachments	696.53	5933.32	0.00
116.00		19.81	168.73	0.00
117.00		19.72	160.08	0.00
118.00		19.62	159.18	0.00
119.00		19.52	158.29	0.00
120.00		19.42	157.39	0.00
121.00		19.33	156.49	0.00
122.00		19.23	155.59	0.00
123.00		19.13	154.69	0.00
124.00		19.02	153.79	0.00
125.00		18.92	152.89	0.00
126.00		18.82	151.98	0.00
127.00		18.71	151.08	0.00
128.00		18.61	150.17	0.00
129.00		18.50	149.27	0.00
130.00	(62) attachments	1171.53	8274.69	0.00
131.00		18.29	122.97	0.00
132.00		18.18	122.06	0.00
133.00		18.07	121.15	0.00
134.00		17.96	120.24	0.00
135.00		17.85	119.32	0.00
136.00		17.73	118.41	0.00
137.00		17.62	117.50	0.00
138.00	(16) attachments	419.14	1693.89	0.00
139.00		17.39	115.66	0.00
140.00	(1) attachments	304.98	2914.66	0.00
141.00		17.16	98.59	0.00
142.00		17.04	97.67	0.00
143.00		16.92	96.75	0.00
144.00		16.81	95.83	0.00
145.00		16.69	94.91	0.00
146.00		16.57	93.99	0.00
147.00		16.44	93.06	0.00
148.00		16.32	92.14	0.00
149.00	(23) attachments	753.53	4979.76	0.00
	Totals:	6,479.35	59,729.63	0.00
				1,191.44

Linear Appurtenance Segment Forces (Factored)

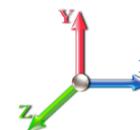
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 56

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.34	0.00	0.054	0.000	4.256	0.00	4.66
1.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.054	0.000	4.256	0.00	7.96
1.00	1/2" Coax	Yes	1.00	0.000	0.65	0.23	0.00	0.054	0.000	4.256	0.00	2.13
2.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.36	0.00	0.055	0.000	4.256	0.00	4.99
2.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	4.256	0.00	8.40
2.00	1/2" Coax	Yes	1.00	0.000	0.65	0.24	0.00	0.055	0.000	4.256	0.00	2.37
3.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.36	0.00	0.055	0.000	4.256	0.00	5.19
3.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	4.256	0.00	8.68
3.00	1/2" Coax	Yes	1.00	0.000	0.65	0.25	0.00	0.055	0.000	4.256	0.00	2.53
4.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.37	0.00	0.055	0.000	4.256	0.00	5.35
4.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	4.256	0.00	8.89
4.00	1/2" Coax	Yes	1.00	0.000	0.65	0.26	0.00	0.055	0.000	4.256	0.00	2.64
5.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.37	0.00	0.055	0.000	4.256	0.00	5.47
5.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	4.256	0.00	9.06
5.00	1/2" Coax	Yes	1.00	0.000	0.65	0.26	0.00	0.055	0.000	4.256	0.00	2.74
6.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.38	0.00	0.056	0.000	4.256	0.00	5.58
6.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	4.256	0.00	9.20
6.00	1/2" Coax	Yes	1.00	0.000	0.65	0.26	0.00	0.056	0.000	4.256	0.00	2.82
7.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.38	0.00	0.056	0.000	4.256	0.00	5.67
7.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	4.256	0.00	9.32
7.00	1/2" Coax	Yes	1.00	0.000	0.65	0.27	0.00	0.056	0.000	4.256	0.00	2.89
8.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.38	0.00	0.056	0.000	4.256	0.00	5.75
8.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	4.256	0.00	9.43
8.00	1/2" Coax	Yes	1.00	0.000	0.65	0.27	0.00	0.056	0.000	4.256	0.00	2.96
9.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.39	0.00	0.056	0.000	4.256	0.00	5.82
9.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	4.256	0.00	9.53
9.00	1/2" Coax	Yes	1.00	0.000	0.65	0.27	0.00	0.056	0.000	4.256	0.00	3.01
10.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.39	0.00	0.057	0.000	4.256	0.00	5.89
10.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	4.256	0.00	9.61
10.00	1/2" Coax	Yes	1.00	0.000	0.65	0.28	0.00	0.057	0.000	4.256	0.00	3.07
11.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.39	0.00	0.057	0.000	4.256	0.00	5.95
11.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	4.256	0.00	9.70
11.00	1/2" Coax	Yes	1.00	0.000	0.65	0.28	0.00	0.057	0.000	4.256	0.00	3.11
12.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.39	0.00	0.057	0.000	4.256	0.00	6.01
12.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	4.256	0.00	9.77
12.00	1/2" Coax	Yes	1.00	0.000	0.65	0.28	0.00	0.057	0.000	4.256	0.00	3.16
13.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.39	0.00	0.057	0.000	4.256	0.00	6.06
13.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	4.256	0.00	9.84
13.00	1/2" Coax	Yes	1.00	0.000	0.65	0.28	0.00	0.057	0.000	4.256	0.00	3.20
14.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.40	0.00	0.058	0.000	4.256	0.00	6.11
14.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	4.256	0.00	9.91
14.00	1/2" Coax	Yes	1.00	0.000	0.65	0.28	0.00	0.058	0.000	4.256	0.00	3.24
15.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.40	0.00	0.058	0.000	4.256	0.00	6.16
15.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	4.256	0.00	9.97
15.00	1/2" Coax	Yes	1.00	0.000	0.65	0.29	0.00	0.058	0.000	4.256	0.00	3.28
16.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.40	0.00	0.058	0.000	4.256	0.00	6.20
16.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	4.256	0.00	10.03

Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA

Code: TIA-222-G

5/3/2022

Site Name: Litchfield 3, CT

Exposure: B



Height: 149.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: B - Competent Rock

Gh: 1.1

Topography: 1

Struct Class: II

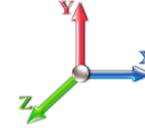
Page: 57

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

Iterations 33

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
16.00	1/2" Coax	Yes	1.00	0.000	0.65	0.29	0.00	0.058	0.000	4.256	0.00	3.31
17.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.40	0.00	0.059	0.000	4.256	0.00	6.24
17.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	4.256	0.00	10.08
17.00	1/2" Coax	Yes	1.00	0.000	0.65	0.29	0.00	0.059	0.000	4.256	0.00	3.34
18.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.40	0.00	0.059	0.000	4.256	0.00	6.28
18.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	4.256	0.00	10.13
18.00	1/2" Coax	Yes	1.00	0.000	0.65	0.29	0.00	0.059	0.000	4.256	0.00	3.38
19.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.40	0.00	0.059	0.000	4.256	0.00	6.32
19.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	4.256	0.00	10.19
19.00	1/2" Coax	Yes	1.00	0.000	0.65	0.29	0.00	0.059	0.000	4.256	0.00	3.41
20.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.40	0.00	0.059	0.000	4.256	0.00	6.36
20.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	4.256	0.00	10.23
20.00	1/2" Coax	Yes	1.00	0.000	0.65	0.29	0.00	0.059	0.000	4.256	0.00	3.44
21.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.060	0.000	4.256	0.00	6.40
21.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	4.256	0.00	10.28
21.00	1/2" Coax	Yes	1.00	0.000	0.65	0.29	0.00	0.060	0.000	4.256	0.00	3.46
22.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.060	0.000	4.256	0.00	6.43
22.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	4.256	0.00	10.32
22.00	1/2" Coax	Yes	1.00	0.000	0.65	0.29	0.00	0.060	0.000	4.256	0.00	3.49
23.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.060	0.000	4.256	0.00	6.46
23.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	4.256	0.00	10.37
23.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.060	0.000	4.256	0.00	3.52
24.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.061	0.000	4.256	0.00	6.49
24.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	4.256	0.00	10.41
24.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.061	0.000	4.256	0.00	3.54
25.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.061	0.000	4.256	0.00	6.52
25.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	4.256	0.00	10.45
25.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.061	0.000	4.256	0.00	3.57
26.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.061	0.000	4.256	0.00	6.55
26.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	4.256	0.00	10.49
26.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.061	0.000	4.256	0.00	3.59
27.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.061	0.000	4.256	0.00	6.58
27.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	4.256	0.00	10.52
27.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.061	0.000	4.256	0.00	3.61
28.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.062	0.000	4.256	0.00	6.61
28.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	4.256	0.00	10.56
28.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.062	0.000	4.256	0.00	3.63
29.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.062	0.000	4.256	0.00	6.64
29.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	4.256	0.00	10.59
29.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.062	0.000	4.256	0.00	3.65
30.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.41	0.00	0.062	0.000	4.260	0.00	6.66
30.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	4.260	0.00	10.63
30.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.062	0.000	4.260	0.00	3.68
31.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.063	0.000	4.300	0.00	6.69
31.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	4.300	0.00	10.66
31.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.063	0.000	4.300	0.00	3.70
32.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.063	0.000	4.339	0.00	6.71

Linear Appurtenance Segment Forces (Factored)

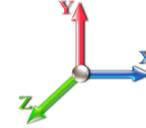
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 58

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	4.339	0.00	10.69
32.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.063	0.000	4.339	0.00	3.72
33.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.063	0.000	4.377	0.00	6.74
33.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	4.377	0.00	10.72
33.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.063	0.000	4.377	0.00	3.73
34.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.064	0.000	4.415	0.00	6.76
34.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	4.415	0.00	10.75
34.00	1/2" Coax	Yes	1.00	0.000	0.65	0.30	0.00	0.064	0.000	4.415	0.00	3.75
35.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.064	0.000	4.451	0.00	6.78
35.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	4.451	0.00	10.78
35.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.064	0.000	4.451	0.00	3.77
36.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.064	0.000	4.487	0.00	6.80
36.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	4.487	0.00	10.81
36.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.064	0.000	4.487	0.00	3.79
37.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.065	0.000	4.523	0.00	6.83
37.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	4.523	0.00	10.84
37.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.065	0.000	4.523	0.00	3.81
38.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.065	0.000	4.557	0.00	6.85
38.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	4.557	0.00	10.87
38.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.065	0.000	4.557	0.00	3.82
39.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.065	0.000	4.591	0.00	6.87
39.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	4.591	0.00	10.90
39.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.065	0.000	4.591	0.00	3.84
40.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.066	0.000	4.625	0.00	6.89
40.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	4.625	0.00	10.92
40.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.066	0.000	4.625	0.00	3.86
41.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.066	0.000	4.657	0.00	6.91
41.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	4.657	0.00	10.95
41.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.066	0.000	4.657	0.00	3.87
42.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.066	0.000	4.689	0.00	6.93
42.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	4.689	0.00	10.97
42.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.066	0.000	4.689	0.00	3.89
43.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.067	0.000	4.721	0.00	6.95
43.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	4.721	0.00	11.00
43.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.067	0.000	4.721	0.00	3.90
44.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.067	0.000	4.752	0.00	6.97
44.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	4.752	0.00	11.02
44.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.067	0.000	4.752	0.00	3.92
45.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.42	0.00	0.067	0.000	4.783	0.00	6.99
45.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	4.783	0.00	11.05
45.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.067	0.000	4.783	0.00	3.93
46.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.068	0.000	4.813	0.00	7.00
46.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	4.813	0.00	11.07
46.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.068	0.000	4.813	0.00	3.95
47.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.068	0.000	4.843	0.00	7.02
47.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	4.843	0.00	11.09
47.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.068	0.000	4.843	0.00	3.96

Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Topography: 1

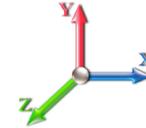
Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
 Page: 59



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
47.55	1 5/8" Fiber	Yes	0.55	0.000	2.00	0.24	0.00	0.068	0.000	4.859	0.00	3.89
47.55	1.9" Fiber	Yes	0.55	0.000	0.00	0.00	0.00	0.068	0.000	4.859	0.00	6.14
47.55	1/2" Coax	Yes	0.55	0.000	0.65	0.17	0.00	0.068	0.000	4.859	0.00	2.20
48.00	1 5/8" Fiber	Yes	0.45	0.000	2.00	0.19	0.00	0.068	0.000	4.872	0.00	3.14
48.00	1.9" Fiber	Yes	0.45	0.000	0.00	0.00	0.00	0.068	0.000	4.872	0.00	4.96
48.00	1/2" Coax	Yes	0.45	0.000	0.65	0.14	0.00	0.068	0.000	4.872	0.00	1.78
49.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.069	0.000	4.901	0.00	7.06
49.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	4.901	0.00	11.14
49.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.069	0.000	4.901	0.00	3.99
50.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.069	0.000	4.929	0.00	7.07
50.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	4.929	0.00	11.16
50.00	1/2" Coax	Yes	1.00	0.000	0.65	0.31	0.00	0.069	0.000	4.929	0.00	4.00
51.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.112	1.035	4.957	0.00	7.09
51.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.035	4.957	0.00	11.18
51.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.112	1.035	4.957	0.00	7.96
51.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.34	0.00	0.112	1.035	4.957	0.00	6.91
52.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.112	1.036	4.984	0.00	7.11
52.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	4.984	0.00	11.20
52.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.112	1.036	4.984	0.00	7.98
52.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.34	0.00	0.112	1.036	4.984	0.00	6.92
52.97	1 5/8" Fiber	Yes	0.97	0.000	2.00	0.42	0.00	0.113	1.038	5.011	0.00	6.91
52.97	1.9" Fiber	Yes	0.97	0.000	0.00	0.00	0.00	0.113	1.038	5.011	0.00	10.89
52.97	1.25" Reinforcing	Yes	0.97	0.000	1.25	0.36	0.00	0.113	1.038	5.011	0.00	7.76
52.97	1" Reinforcing plate	Yes	0.97	0.000	1.00	0.34	0.00	0.113	1.038	5.011	0.00	6.73
53.00	1 5/8" Fiber	Yes	0.03	0.000	2.00	0.01	0.00	0.112	1.035	5.012	0.00	0.21
53.00	1.9" Fiber	Yes	0.03	0.000	0.00	0.00	0.00	0.112	1.035	5.012	0.00	0.34
53.00	1.25" Reinforcing	Yes	0.03	0.000	1.25	0.01	0.00	0.112	1.035	5.012	0.00	0.24
53.00	1" Reinforcing plate	Yes	0.03	0.000	1.00	0.01	0.00	0.112	1.035	5.012	0.00	0.21
54.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.112	1.036	5.039	0.00	7.14
54.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	5.039	0.00	11.24
54.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.112	1.036	5.039	0.00	8.02
54.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.112	1.036	5.039	0.00	6.96
55.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.112	1.037	5.065	0.00	7.15
55.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.037	5.065	0.00	11.26
55.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.112	1.037	5.065	0.00	8.04
55.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.112	1.037	5.065	0.00	6.98
56.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.113	1.039	5.091	0.00	7.17
56.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.113	1.039	5.091	0.00	11.28
56.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.113	1.039	5.091	0.00	8.06
56.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.113	1.039	5.091	0.00	7.00
57.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.114	1.041	5.117	0.00	7.18
57.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	5.117	0.00	11.30
57.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.114	1.041	5.117	0.00	8.08
57.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.114	1.041	5.117	0.00	7.01
58.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.114	1.043	5.142	0.00	7.20
58.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.043	5.142	0.00	11.32
58.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.114	1.043	5.142	0.00	8.10

Linear Appurtenance Segment Forces (Factored)

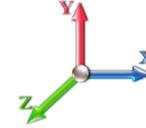
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 60

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

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)
58.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.114	1.043	5.142	0.00	7.03
59.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.115	1.045	5.168	0.00	7.21
59.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.115	1.045	5.168	0.00	11.34
59.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.115	1.045	5.168	0.00	8.12
59.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.115	1.045	5.168	0.00	7.05
60.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.116	1.047	5.193	0.00	7.23
60.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.047	5.193	0.00	11.36
60.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.116	1.047	5.193	0.00	8.13
60.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.116	1.047	5.193	0.00	7.06
61.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.116	1.049	5.217	0.00	7.24
61.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.049	5.217	0.00	11.38
61.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.116	1.049	5.217	0.00	8.15
61.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.116	1.049	5.217	0.00	7.08
62.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.117	1.051	5.241	0.00	7.26
62.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.051	5.241	0.00	11.40
62.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.117	1.051	5.241	0.00	8.17
62.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.117	1.051	5.241	0.00	7.10
63.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.118	1.053	5.265	0.00	7.27
63.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.118	1.053	5.265	0.00	11.41
63.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.118	1.053	5.265	0.00	8.19
63.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.118	1.053	5.265	0.00	7.11
64.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.118	1.055	5.289	0.00	7.29
64.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.118	1.055	5.289	0.00	11.43
64.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.118	1.055	5.289	0.00	8.20
64.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.118	1.055	5.289	0.00	7.13
65.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.119	1.057	5.313	0.00	7.30
65.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.119	1.057	5.313	0.00	11.45
65.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.119	1.057	5.313	0.00	8.22
65.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.119	1.057	5.313	0.00	7.14
66.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.43	0.00	0.120	1.059	5.336	0.00	7.31
66.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.120	1.059	5.336	0.00	11.47
66.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.120	1.059	5.336	0.00	8.24
66.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.120	1.059	5.336	0.00	7.16
67.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.121	1.062	5.359	0.00	7.33
67.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.121	1.062	5.359	0.00	11.48
67.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.121	1.062	5.359	0.00	8.25
67.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.121	1.062	5.359	0.00	7.17
67.92	1 5/8" Fiber	Yes	0.92	0.000	2.00	0.40	0.00	0.121	1.064	5.380	0.00	6.75
67.92	1.9" Fiber	Yes	0.92	0.000	0.00	0.00	0.00	0.121	1.064	5.380	0.00	10.58
67.92	1.25" Reinforcing	Yes	0.92	0.000	1.25	0.34	0.00	0.121	1.064	5.380	0.00	7.61
67.92	1" Reinforcing plate	Yes	0.92	0.000	1.00	0.32	0.00	0.121	1.064	5.380	0.00	6.61
68.00	1 5/8" Fiber	Yes	0.08	0.000	2.00	0.03	0.00	0.122	1.065	5.382	0.00	0.59
68.00	1.9" Fiber	Yes	0.08	0.000	0.00	0.00	0.00	0.122	1.065	5.382	0.00	0.92
68.00	1.25" Reinforcing	Yes	0.08	0.000	1.25	0.03	0.00	0.122	1.065	5.382	0.00	0.66
68.00	1" Reinforcing plate	Yes	0.08	0.000	1.00	0.03	0.00	0.122	1.065	5.382	0.00	0.58
69.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.122	1.066	5.404	0.00	7.35
69.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.122	1.066	5.404	0.00	11.52

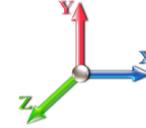
Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

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)
69.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.122	1.066	5.404	0.00	8.29
69.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.122	1.066	5.404	0.00	7.20
70.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.123	1.068	5.426	0.00	7.36
70.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.123	1.068	5.426	0.00	11.53
70.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.123	1.068	5.426	0.00	8.30
70.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.35	0.00	0.123	1.068	5.426	0.00	7.22
71.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.094	0.000	5.448	0.00	7.38
71.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	5.448	0.00	11.55
71.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.094	0.000	5.448	0.00	8.32
72.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.095	0.000	5.470	0.00	7.39
72.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.095	0.000	5.470	0.00	11.57
72.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.095	0.000	5.470	0.00	8.33
73.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.096	0.000	5.492	0.00	7.40
73.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.096	0.000	5.492	0.00	11.58
73.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.37	0.00	0.096	0.000	5.492	0.00	8.35
74.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.096	0.000	5.513	0.00	7.41
74.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.096	0.000	5.513	0.00	11.60
74.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.096	0.000	5.513	0.00	8.36
75.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.097	0.000	5.534	0.00	7.43
75.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	5.534	0.00	11.61
75.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.097	0.000	5.534	0.00	8.38
76.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.097	0.000	5.555	0.00	7.44
76.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	5.555	0.00	11.63
76.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.097	0.000	5.555	0.00	8.39
77.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.098	0.000	5.576	0.00	7.45
77.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	5.576	0.00	11.64
77.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.098	0.000	5.576	0.00	8.41
78.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.061	0.000	5.597	0.00	7.46
78.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	5.597	0.00	11.66
79.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.061	0.000	5.617	0.00	7.47
79.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	5.617	0.00	11.67
80.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.061	0.000	5.637	0.00	7.48
80.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	5.637	0.00	11.69
81.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.062	0.000	5.657	0.00	7.50
81.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	5.657	0.00	11.70
82.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.062	0.000	5.677	0.00	7.51
82.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	5.677	0.00	11.72
83.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.063	0.000	5.697	0.00	7.52
83.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	5.697	0.00	11.73
84.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.063	0.000	5.716	0.00	7.53
84.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	5.716	0.00	11.75
85.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.064	0.000	5.736	0.00	7.54
85.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	5.736	0.00	11.76
86.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.064	0.000	5.755	0.00	7.55
86.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	5.755	0.00	11.77
87.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.064	0.000	5.774	0.00	7.56
87.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	5.774	0.00	11.79

Linear Appurtenance Segment Forces (Factored)

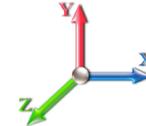
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 62

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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
88.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.065	0.000	5.793	0.00	7.57
88.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	5.793	0.00	11.80
89.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.065	0.000	5.812	0.00	7.58
89.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	5.812	0.00	11.81
90.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.066	0.000	5.830	0.00	7.59
90.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	5.830	0.00	11.83
91.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.066	0.000	5.849	0.00	7.60
91.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	5.849	0.00	11.84
92.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.067	0.000	5.867	0.00	7.61
92.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	5.867	0.00	11.85
93.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.067	0.000	5.885	0.00	7.62
93.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	5.885	0.00	11.87
94.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.068	0.000	5.903	0.00	7.63
94.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	5.903	0.00	11.88
95.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.068	0.000	5.921	0.00	7.64
95.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	5.921	0.00	11.89
96.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.44	0.00	0.069	0.000	5.939	0.00	7.65
96.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	5.939	0.00	11.90
96.18	1" Reinforcing plate	Yes	0.18	0.000	1.00	0.06	0.00	0.103	1.010	5.942	0.00	1.33
96.18	1 5/8" Fiber	Yes	0.18	0.000	2.00	0.08	0.00	0.103	1.010	5.942	0.00	1.35
96.18	1.9" Fiber	Yes	0.18	0.000	0.00	0.00	0.00	0.103	1.010	5.942	0.00	2.10
97.00	1" Reinforcing plate	Yes	0.82	0.000	1.00	0.30	0.00	0.104	1.011	5.956	0.00	6.22
97.00	1 5/8" Fiber	Yes	0.82	0.000	2.00	0.37	0.00	0.104	1.011	5.956	0.00	6.31
97.00	1.9" Fiber	Yes	0.82	0.000	0.00	0.00	0.00	0.104	1.011	5.956	0.00	9.81
98.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.36	0.00	0.148	1.144	5.974	0.00	7.57
98.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.148	1.144	5.974	0.00	7.67
98.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.148	1.144	5.974	0.00	11.93
98.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.148	1.144	5.974	0.00	8.69
99.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.36	0.00	0.149	1.147	5.991	0.00	7.58
99.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.149	1.147	5.991	0.00	7.68
99.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	5.991	0.00	11.94
99.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.149	1.147	5.991	0.00	8.70
99.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.09	0.00	0.150	1.149	5.996	0.00	1.90
99.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.11	0.00	0.150	1.149	5.996	0.00	1.92
99.25	1.9" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.150	1.149	5.996	0.00	2.99
99.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.10	0.00	0.150	1.149	5.996	0.00	2.18
100.00	1" Reinforcing plate	Yes	0.75	0.000	1.00	0.27	0.00	0.150	1.151	6.008	0.00	5.69
100.00	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.33	0.00	0.150	1.151	6.008	0.00	5.77
100.00	1.9" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.150	1.151	6.008	0.00	8.96
100.00	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.29	0.00	0.150	1.151	6.008	0.00	6.53
100.34	1" Reinforcing plate	Yes	0.34	0.000	1.00	0.12	0.00	0.151	1.153	6.014	0.00	2.61
100.34	1 5/8" Fiber	Yes	0.34	0.000	2.00	0.15	0.00	0.151	1.153	6.014	0.00	2.64
100.34	1.9" Fiber	Yes	0.34	0.000	0.00	0.00	0.00	0.151	1.153	6.014	0.00	4.11
100.34	1.25" Reinforcing	Yes	0.34	0.000	1.25	0.13	0.00	0.151	1.153	6.014	0.00	2.99
101.00	1" Reinforcing plate	Yes	0.66	0.000	1.00	0.24	0.00	0.149	1.148	6.026	0.00	4.99
101.00	1 5/8" Fiber	Yes	0.66	0.000	2.00	0.29	0.00	0.149	1.148	6.026	0.00	5.06
101.00	1.9" Fiber	Yes	0.66	0.000	0.00	0.00	0.00	0.149	1.148	6.026	0.00	7.86

Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA

Code: TIA-222-G

5/3/2022

Site Name: Litchfield 3, CT

Exposure: B



Height: 149.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: B - Competent Rock

Gh: 1.1

Topography: 1

Struct Class: II

Page: 63

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

Iterations 33

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
101.00	1.25" Reinforcing	Yes	0.66	0.000	1.25	0.25	0.00	0.149	1.148	6.026	0.00	5.73
102.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.36	0.00	0.150	1.151	6.043	0.00	7.61
102.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.150	1.151	6.043	0.00	7.71
102.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.150	1.151	6.043	0.00	11.98
102.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.150	1.151	6.043	0.00	8.73
102.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.09	0.00	0.151	1.153	6.047	0.00	1.90
102.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.11	0.00	0.151	1.153	6.047	0.00	1.93
102.25	1.9" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.151	1.153	6.047	0.00	2.99
102.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.10	0.00	0.151	1.153	6.047	0.00	2.18
103.00	1" Reinforcing plate	Yes	0.75	0.000	1.00	0.27	0.00	0.152	1.155	6.059	0.00	5.72
103.00	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.34	0.00	0.152	1.155	6.059	0.00	5.79
103.00	1.9" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.152	1.155	6.059	0.00	8.99
103.00	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.29	0.00	0.152	1.155	6.059	0.00	6.56
104.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.36	0.00	0.153	1.158	6.076	0.00	7.63
104.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.153	1.158	6.076	0.00	7.73
104.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.153	1.158	6.076	0.00	12.00
104.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.153	1.158	6.076	0.00	8.76
105.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.36	0.00	0.154	1.161	6.093	0.00	7.64
105.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.154	1.161	6.093	0.00	7.74
105.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.154	1.161	6.093	0.00	12.01
105.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.38	0.00	0.154	1.161	6.093	0.00	8.77
106.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.36	0.00	0.109	1.028	6.109	0.00	7.66
106.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.109	1.028	6.109	0.00	7.75
106.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.109	1.028	6.109	0.00	12.02
107.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.36	0.00	0.110	1.031	6.126	0.00	7.67
107.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.110	1.031	6.126	0.00	7.76
107.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.110	1.031	6.126	0.00	12.03
108.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.36	0.00	0.111	1.033	6.142	0.00	7.68
108.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.111	1.033	6.142	0.00	7.77
108.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.111	1.033	6.142	0.00	12.05
109.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.37	0.00	0.112	1.036	6.158	0.00	7.69
109.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.112	1.036	6.158	0.00	7.77
109.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	6.158	0.00	12.06
110.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.37	0.00	0.113	1.038	6.174	0.00	7.70
110.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.113	1.038	6.174	0.00	7.78
110.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.113	1.038	6.174	0.00	12.07
111.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.37	0.00	0.114	1.041	6.190	0.00	7.71
111.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.114	1.041	6.190	0.00	7.79
111.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	6.190	0.00	12.08
112.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.37	0.00	0.115	1.044	6.206	0.00	7.72
112.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.115	1.044	6.206	0.00	7.80
112.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.115	1.044	6.206	0.00	12.09
113.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.37	0.00	0.116	1.047	6.222	0.00	7.72
113.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.116	1.047	6.222	0.00	7.81
113.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.047	6.222	0.00	12.10
114.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.37	0.00	0.117	1.050	6.238	0.00	7.73
114.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.117	1.050	6.238	0.00	7.82

Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 64

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

Iterations 33

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
114.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.050	6.238	0.00	12.11
115.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.37	0.00	0.117	1.052	6.253	0.00	7.74
115.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.45	0.00	0.117	1.052	6.253	0.00	7.83
115.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.052	6.253	0.00	12.12
116.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.37	0.00	0.039	0.000	6.269	0.00	7.75
Totals:											0.0	2,839.1

Calculated Forces

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Topography: 1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
Page: 65



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 33

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	-59.73	-6.48	0.00	-755.62	0.00	755.62	3031.07	1515.53	5947.06	2977.95	0.00	0.000	0.000	0.273
1.00	-59.41	-6.48	0.00	-749.13	0.00	749.13	3023.73	1511.86	5906.70	2957.74	0.00	-0.016	0.000	0.273
2.00	-59.09	-6.47	0.00	-742.66	0.00	742.66	3016.33	1508.17	5866.38	2937.55	0.01	-0.032	0.000	0.272
3.00	-58.76	-6.46	0.00	-736.19	0.00	736.19	3008.89	1504.45	5826.08	2917.37	0.02	-0.047	0.000	0.272
4.00	-58.43	-6.45	0.00	-729.72	0.00	729.72	3001.40	1500.70	5785.81	2897.21	0.03	-0.063	0.000	0.271
5.00	-58.11	-6.45	0.00	-723.27	0.00	723.27	2993.85	1496.92	5745.58	2877.06	0.04	-0.079	0.000	0.271
6.00	-57.78	-6.44	0.00	-716.82	0.00	716.82	2986.25	1493.13	5705.37	2856.93	0.06	-0.096	0.000	0.270
7.00	-57.45	-6.43	0.00	-710.38	0.00	710.38	2978.60	1489.30	5665.20	2836.81	0.08	-0.112	0.000	0.270
8.00	-57.12	-6.42	0.00	-703.95	0.00	703.95	2970.91	1485.45	5625.07	2816.71	0.11	-0.128	0.000	0.269
9.00	-56.79	-6.42	0.00	-697.53	0.00	697.53	2963.16	1481.58	5584.97	2796.63	0.14	-0.144	0.000	0.269
10.00	-56.46	-6.41	0.00	-691.11	0.00	691.11	2955.36	1477.68	5544.90	2776.57	0.17	-0.161	0.000	0.268
11.00	-56.13	-6.40	0.00	-684.71	0.00	684.71	2947.51	1473.75	5504.88	2756.53	0.20	-0.177	0.000	0.267
12.00	-55.81	-6.39	0.00	-678.31	0.00	678.31	2939.60	1469.80	5464.90	2736.51	0.24	-0.194	0.000	0.267
13.00	-55.48	-6.38	0.00	-671.91	0.00	671.91	2931.65	1465.83	5424.96	2716.51	0.29	-0.210	0.000	0.266
14.00	-55.15	-6.38	0.00	-665.53	0.00	665.53	2923.65	1461.82	5385.06	2696.53	0.33	-0.227	0.000	0.266
15.00	-54.82	-6.37	0.00	-659.15	0.00	659.15	2915.59	1457.80	5345.20	2676.57	0.38	-0.244	0.000	0.265
16.00	-54.50	-6.36	0.00	-652.78	0.00	652.78	2907.49	1453.74	5305.39	2656.64	0.43	-0.260	0.000	0.264
17.00	-54.17	-6.35	0.00	-646.42	0.00	646.42	2899.33	1449.67	5265.63	2636.73	0.49	-0.277	0.000	0.264
18.00	-53.85	-6.34	0.00	-640.07	0.00	640.07	2891.12	1445.56	5225.92	2616.84	0.55	-0.294	0.000	0.263
19.00	-53.52	-6.34	0.00	-633.73	0.00	633.73	2882.86	1441.43	5186.25	2596.98	0.61	-0.311	0.000	0.263
20.00	-53.20	-6.33	0.00	-627.39	0.00	627.39	2874.56	1437.28	5146.64	2577.14	0.68	-0.328	0.000	0.262
21.00	-52.87	-6.32	0.00	-621.06	0.00	621.06	2866.20	1433.10	5107.08	2557.33	0.75	-0.346	0.000	0.261
22.00	-52.55	-6.31	0.00	-614.74	0.00	614.74	2857.79	1428.89	5067.57	2537.55	0.83	-0.363	0.000	0.261
23.00	-52.23	-6.30	0.00	-608.43	0.00	608.43	2849.32	1424.66	5028.11	2517.79	0.90	-0.380	0.000	0.260
24.00	-51.91	-6.30	0.00	-602.13	0.00	602.13	2840.81	1420.41	4988.71	2498.06	0.98	-0.398	0.000	0.259
25.00	-51.59	-6.29	0.00	-595.83	0.00	595.83	2832.25	1416.12	4949.37	2478.36	1.07	-0.415	0.000	0.259
26.00	-51.27	-6.28	0.00	-589.55	0.00	589.55	2823.63	1411.82	4910.09	2458.69	1.16	-0.432	0.000	0.258
27.00	-50.95	-6.27	0.00	-583.27	0.00	583.27	2814.97	1407.48	4870.87	2439.05	1.25	-0.450	0.000	0.257
28.00	-50.63	-6.26	0.00	-577.00	0.00	577.00	2806.25	1403.13	4831.70	2419.44	1.35	-0.468	0.000	0.257
29.00	-50.32	-6.25	0.00	-570.74	0.00	570.74	2797.49	1398.74	4792.60	2399.86	1.45	-0.485	0.000	0.256
30.00	-50.00	-6.25	0.00	-564.48	0.00	564.48	2788.67	1394.33	4753.57	2380.32	1.55	-0.503	0.000	0.255
31.00	-49.68	-6.24	0.00	-558.24	0.00	558.24	2779.80	1389.90	4714.60	2360.80	1.66	-0.521	0.000	0.254
32.00	-49.37	-6.23	0.00	-552.00	0.00	552.00	2770.88	1385.44	4675.69	2341.32	1.77	-0.539	0.000	0.254
33.00	-49.06	-6.22	0.00	-545.77	0.00	545.77	2761.91	1380.95	4636.86	2321.88	1.88	-0.557	0.000	0.253
34.00	-48.74	-6.21	0.00	-539.56	0.00	539.56	2752.89	1376.44	4598.09	2302.46	2.00	-0.575	0.000	0.252
35.00	-48.43	-6.20	0.00	-533.35	0.00	533.35	2743.82	1371.91	4559.39	2283.08	2.13	-0.593	0.000	0.251
36.00	-48.12	-6.19	0.00	-527.15	0.00	527.15	2734.69	1367.35	4520.77	2263.74	2.25	-0.611	0.000	0.250
37.00	-47.81	-6.18	0.00	-520.96	0.00	520.96	2725.52	1362.76	4482.21	2244.44	2.38	-0.630	0.000	0.250
38.00	-47.50	-6.17	0.00	-514.78	0.00	514.78	2716.29	1358.15	4443.74	2225.17	2.52	-0.648	0.000	0.249
39.00	-47.19	-6.16	0.00	-508.61	0.00	508.61	2707.02	1353.51	4405.33	2205.94	2.65	-0.667	0.000	0.248
40.00	-46.89	-6.15	0.00	-502.45	0.00	502.45	2697.69	1348.85	4367.01	2186.75	2.80	-0.685	0.000	0.247
41.00	-46.58	-6.14	0.00	-496.30	0.00	496.30	2688.32	1344.16	4328.76	2167.60	2.94	-0.704	0.000	0.246
42.00	-46.28	-6.13	0.00	-490.16	0.00	490.16	2678.89	1339.44	4290.59	2148.48	3.09	-0.722	0.000	0.245
43.00	-45.97	-6.12	0.00	-484.04	0.00	484.04	2669.41	1334.70	4252.50	2129.41	3.24	-0.741	0.000	0.245
44.00	-45.67	-6.10	0.00	-477.92	0.00	477.92	2659.88	1329.94	4214.50	2110.38	3.40	-0.760	0.000	0.244
45.00	-45.37	-6.09	0.00	-471.82	0.00	471.82	2650.30	1325.15	4176.57	2091.39	3.56	-0.778	0.000	0.243
46.00	-45.07	-6.08	0.00	-465.72	0.00	465.72	2640.67	1320.33	4138.74	2072.44	3.73	-0.797	0.000	0.242
47.00	-44.77	-6.07	0.00	-459.64	0.00	459.64	2630.98	1315.49	4100.98	2053.54	3.90	-0.816	0.000	0.241

Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 66



47.55	-44.60	-6.06	0.00	-456.29	0.00	456.29	2625.60	1312.80	4080.13	2043.10	3.99	-0.827	0.000	0.240
48.00	-44.41	-6.06	0.00	-453.58	0.00	453.58	2621.25	1310.62	4063.32	2034.68	4.07	-0.835	0.000	0.240
49.00	-43.99	-6.04	0.00	-447.52	0.00	447.52	2611.47	1305.73	4025.74	2015.86	4.25	-0.854	0.000	0.239
50.00	-43.56	-6.03	0.00	-441.48	0.00	441.48	2601.63	1300.82	3988.26	1997.09	4.43	-0.873	0.000	0.238
51.00	-43.13	-6.01	0.00	-435.46	0.00	435.46	2591.74	1295.87	3950.86	1978.37	4.61	-0.892	0.000	0.237
52.00	-42.71	-5.99	0.00	-429.45	0.00	429.45	2581.81	1290.90	3913.56	1959.69	4.80	-0.912	0.000	0.115
52.97	-42.29	-5.96	0.00	-423.64	0.00	423.64	1914.68	957.34	2935.86	1470.11	4.99	-0.921	0.000	0.127
53.00	-42.29	-5.97	0.00	-423.46	0.00	423.46	1914.50	957.25	2935.09	1469.72	4.99	-0.921	0.000	0.138
54.00	-42.01	-5.95	0.00	-417.49	0.00	417.49	1908.40	954.20	2909.37	1456.85	5.19	-0.931	0.000	0.136
55.00	-41.74	-5.93	0.00	-411.55	0.00	411.55	1902.26	951.13	2883.67	1443.98	5.38	-0.941	0.000	0.135
56.00	-41.46	-5.90	0.00	-405.62	0.00	405.62	1896.06	948.03	2858.01	1431.13	5.58	-0.952	0.000	0.134
57.00	-41.19	-5.88	0.00	-399.72	0.00	399.72	1889.81	944.90	2832.37	1418.29	5.78	-0.962	0.000	0.133
58.00	-40.92	-5.86	0.00	-393.84	0.00	393.84	1883.51	941.76	2806.77	1405.47	5.99	-0.972	0.000	0.132
59.00	-40.65	-5.84	0.00	-387.97	0.00	387.97	1877.16	938.58	2781.20	1392.67	6.19	-0.982	0.000	0.130
60.00	-40.37	-5.82	0.00	-382.13	0.00	382.13	1870.76	935.38	2755.66	1379.88	6.40	-0.992	0.000	0.129
61.00	-40.11	-5.80	0.00	-376.32	0.00	376.32	1864.31	932.15	2730.16	1367.11	6.61	-1.002	0.000	0.128
62.00	-39.84	-5.78	0.00	-370.52	0.00	370.52	1857.80	928.90	2704.70	1354.36	6.82	-1.012	0.000	0.127
63.00	-39.57	-5.75	0.00	-364.74	0.00	364.74	1851.25	925.63	2679.27	1341.63	7.03	-1.022	0.000	0.126
64.00	-39.30	-5.73	0.00	-358.99	0.00	358.99	1844.65	922.32	2653.88	1328.91	7.24	-1.032	0.000	0.124
65.00	-39.04	-5.71	0.00	-353.25	0.00	353.25	1837.99	919.00	2628.54	1316.22	7.46	-1.042	0.000	0.123
66.00	-38.77	-5.69	0.00	-347.54	0.00	347.54	1831.29	915.64	2603.23	1303.55	7.68	-1.052	0.000	0.122
67.00	-38.51	-5.67	0.00	-341.86	0.00	341.86	1824.53	912.26	2577.97	1290.90	7.90	-1.062	0.000	0.121
67.92	-38.27	-5.64	0.00	-336.64	0.00	336.64	1818.27	909.13	2554.77	1279.28	8.11	-1.072	0.000	0.093
68.00	-38.24	-5.65	0.00	-336.19	0.00	336.19	1817.72	908.86	2552.75	1278.27	8.13	-1.072	0.000	0.170
69.00	-37.98	-5.63	0.00	-330.55	0.00	330.55	1810.86	905.43	2527.58	1265.67	8.35	-1.086	0.000	0.168
70.00	-37.72	-5.61	0.00	-324.92	0.00	324.92	1803.95	901.98	2502.46	1253.09	8.58	-1.101	0.000	0.167
71.00	-37.47	-5.59	0.00	-319.32	0.00	319.32	1796.99	898.50	2477.38	1240.53	8.81	-1.115	0.000	0.165
72.00	-37.21	-5.57	0.00	-313.73	0.00	313.73	1789.98	894.99	2452.36	1228.00	9.05	-1.129	0.000	0.164
73.00	-36.93	-5.54	0.00	-308.16	0.00	308.16	1782.92	891.46	2427.38	1215.49	9.29	-1.143	0.000	0.162
74.00	-36.68	-5.52	0.00	-302.62	0.00	302.62	1775.81	887.90	2402.46	1203.02	9.53	-1.157	0.000	0.160
75.00	-36.43	-5.50	0.00	-297.10	0.00	297.10	1768.64	884.32	2377.59	1190.56	9.77	-1.171	0.000	0.159
76.00	-36.18	-5.49	0.00	-291.59	0.00	291.59	1761.43	880.71	2352.78	1178.14	10.02	-1.185	0.000	0.268
77.00	-35.93	-5.48	0.00	-286.11	0.00	286.11	1754.16	877.08	2328.02	1165.74	10.27	-1.209	0.000	0.266
78.00	-35.70	-5.46	0.00	-280.63	0.00	280.63	1746.84	873.42	2303.32	1153.37	10.53	-1.233	0.000	0.264
79.00	-35.46	-5.45	0.00	-275.17	0.00	275.17	1739.48	869.74	2278.68	1141.03	10.79	-1.256	0.000	0.262
80.00	-35.22	-5.44	0.00	-269.72	0.00	269.72	1732.06	866.03	2254.10	1128.72	11.05	-1.280	0.000	0.259
81.00	-34.98	-5.43	0.00	-264.28	0.00	264.28	1724.59	862.29	2229.58	1116.45	11.32	-1.304	0.000	0.257
82.00	-34.75	-5.41	0.00	-258.86	0.00	258.86	1717.07	858.53	2205.12	1104.20	11.60	-1.328	0.000	0.255
83.00	-34.52	-5.40	0.00	-253.44	0.00	253.44	1709.50	854.75	2180.73	1091.99	11.88	-1.352	0.000	0.252
84.00	-34.28	-5.39	0.00	-248.05	0.00	248.05	1701.88	850.94	2156.41	1079.81	12.16	-1.376	0.000	0.250
85.00	-34.05	-5.37	0.00	-242.66	0.00	242.66	1694.20	847.10	2132.15	1067.66	12.46	-1.399	0.000	0.247
86.00	-33.82	-5.36	0.00	-237.29	0.00	237.29	1686.48	843.24	2107.95	1055.54	12.75	-1.423	0.000	0.245
87.00	-33.59	-5.35	0.00	-231.93	0.00	231.93	1678.71	839.35	2083.83	1043.46	13.05	-1.447	0.000	0.242
88.00	-33.36	-5.33	0.00	-226.59	0.00	226.59	1670.88	835.44	2059.78	1031.42	13.36	-1.470	0.000	0.240
89.00	-33.13	-5.32	0.00	-221.25	0.00	221.25	1663.00	831.50	2035.80	1019.41	13.67	-1.494	0.000	0.237
90.00	-32.91	-5.30	0.00	-215.94	0.00	215.94	1655.08	827.54	2011.90	1007.44	13.98	-1.517	0.000	0.234
91.00	-32.68	-5.29	0.00	-210.63	0.00	210.63	1647.10	823.55	1988.06	995.51	14.30	-1.540	0.000	0.231
92.00	-32.46	-5.27	0.00	-205.35	0.00	205.35	1639.07	819.54	1964.31	983.61	14.63	-1.564	0.000	0.229
93.00	-32.23	-5.26	0.00	-200.07	0.00	200.07	1630.99	815.50	1940.63	971.76	14.96	-1.587	0.000	0.226
94.00	-32.01	-5.25	0.00	-194.81	0.00	194.81	1622.86	811.43	1917.03	959.94	15.29	-1.610	0.000	0.223
95.00	-31.79	-5.23	0.00	-189.57	0.00	189.57	1614.68	807.34	1893.51	948.16	15.63	-1.633	0.000	0.220
96.00	-31.57	-5.21	0.00	-184.34	0.00	184.34	1606.45	803.22	1870.07	936.43	15.98	-1.656	0.000	0.217
96.18	-31.53	-5.21	0.00	-183.42	0.00	183.42	1604.99	802.49	1865.94	934.36	16.04	-1.660	0.000	0.216
97.00	-31.28	-5.20	0.00	-179.13	0.00	179.13	1598.16	799.08	1846.72	924.73	16.33	-1.678	0.000	0.213
98.00	-30.98	-5.18	0.00	-173.93	0.00	173.93	1589.83	794.91	1823.44	913.08	16.68	-1.701	0.000	0.210
99.00	-30.67	-5.15	0.00	-168.75	0.00	168.75	1581.44	790.72	1800.26	901.47	17.04	-1.723	0.000	0.207
99.25	-30.60	-5.15	0.00	-167.46	0.00	167.46	1579.34	789.67	1794.47	898.57	17.13	-1.729	0.000	0.117

Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 67



100.00	-30.37	-5.13	0.00	-163.60	0.00	163.60	1573.01	786.50	1777.16	889.90	17.40	-1.738	0.000	0.115
100.34	-30.27	-5.12	0.00	-161.85	0.00	161.85	1075.68	537.84	1234.34	618.09	17.53	-1.742	0.000	0.128
101.00	-30.13	-5.10	0.00	-158.49	0.00	158.49	1072.67	536.33	1224.84	613.33	17.77	-1.750	0.000	0.144
102.00	-29.92	-5.08	0.00	-153.38	0.00	153.38	1068.04	534.02	1210.40	606.10	18.14	-1.764	0.000	0.141
102.25	-29.87	-5.07	0.00	-152.11	0.00	152.11	1066.88	533.44	1206.79	604.29	18.23	-1.767	0.000	0.140
102.25	-29.87	-5.07	0.00	-152.11	0.00	152.11	1066.88	533.44	1206.79	604.29	18.23	-1.767	0.000	0.140
103.00	-29.71	-5.06	0.00	-148.31	0.00	148.31	1063.37	531.68	1195.97	598.87	18.51	-1.778	0.000	0.276
104.00	-29.50	-5.04	0.00	-143.25	0.00	143.25	1058.64	529.32	1181.57	591.66	18.88	-1.805	0.000	0.270
105.00	-29.29	-5.03	0.00	-138.21	0.00	138.21	1053.86	526.93	1167.20	584.47	19.26	-1.831	0.000	0.264
106.00	-29.10	-5.01	0.00	-133.18	0.00	133.18	1049.03	524.52	1152.85	577.28	19.65	-1.858	0.000	0.259
107.00	-28.90	-5.00	0.00	-128.17	0.00	128.17	1044.15	522.08	1138.52	570.11	20.04	-1.884	0.000	0.253
108.00	-28.70	-4.98	0.00	-123.18	0.00	123.18	1039.22	519.61	1124.23	562.95	20.44	-1.909	0.000	0.247
109.00	-28.50	-4.97	0.00	-118.20	0.00	118.20	1034.24	517.12	1109.97	555.81	20.84	-1.934	0.000	0.240
110.00	-28.31	-4.95	0.00	-113.23	0.00	113.23	1029.21	514.60	1095.73	548.68	21.25	-1.959	0.000	0.234
111.00	-28.12	-4.93	0.00	-108.28	0.00	108.28	1024.13	512.06	1081.53	541.57	21.66	-1.983	0.000	0.227
112.00	-27.92	-4.92	0.00	-103.35	0.00	103.35	1018.99	509.50	1067.37	534.48	22.08	-2.006	0.000	0.221
113.00	-27.73	-4.90	0.00	-98.43	0.00	98.43	1013.81	506.90	1053.24	527.40	22.50	-2.030	0.000	0.214
114.00	-27.54	-4.88	0.00	-93.53	0.00	93.53	1008.57	504.29	1039.14	520.34	22.93	-2.052	0.000	0.207
115.00	-21.63	-3.98	0.00	-88.64	0.00	88.64	1003.28	501.64	1025.09	513.31	23.36	-2.074	0.000	0.194
116.00	-21.46	-3.97	0.00	-84.66	0.00	84.66	997.95	498.97	1011.07	506.29	23.80	-2.095	0.000	0.189
117.00	-21.30	-3.95	0.00	-80.70	0.00	80.70	992.56	496.28	997.10	499.29	24.24	-2.116	0.000	0.183
118.00	-21.14	-3.93	0.00	-76.75	0.00	76.75	987.12	493.56	983.16	492.31	24.69	-2.137	0.000	0.177
119.00	-20.98	-3.91	0.00	-72.82	0.00	72.82	981.63	490.81	969.27	485.36	25.14	-2.156	0.000	0.171
120.00	-20.83	-3.89	0.00	-68.91	0.00	68.91	976.09	488.04	955.42	478.42	25.59	-2.176	0.000	0.165
121.00	-20.67	-3.87	0.00	-65.02	0.00	65.02	970.50	485.25	941.62	471.51	26.05	-2.195	0.000	0.159
122.00	-20.51	-3.86	0.00	-61.14	0.00	61.14	964.85	482.43	927.87	464.62	26.51	-2.213	0.000	0.153
123.00	-20.36	-3.84	0.00	-57.29	0.00	57.29	959.16	479.58	914.16	457.76	26.97	-2.230	0.000	0.146
124.00	-20.20	-3.82	0.00	-53.45	0.00	53.45	953.42	476.71	900.51	450.92	27.44	-2.247	0.000	0.140
125.00	-20.05	-3.80	0.00	-49.64	0.00	49.64	947.62	473.81	886.90	444.11	27.92	-2.263	0.000	0.133
126.00	-19.90	-3.78	0.00	-45.84	0.00	45.84	941.77	470.89	873.35	437.32	28.39	-2.278	0.000	0.126
127.00	-19.75	-3.76	0.00	-42.06	0.00	42.06	935.88	467.94	859.85	430.56	28.87	-2.293	0.000	0.119
128.00	-19.60	-3.74	0.00	-38.30	0.00	38.30	929.93	464.96	846.40	423.83	29.35	-2.306	0.000	0.112
129.00	-19.45	-3.72	0.00	-34.57	0.00	34.57	923.93	461.97	833.02	417.13	29.84	-2.319	0.000	0.104
130.00	-11.23	-2.21	0.00	-30.85	0.00	30.85	917.88	458.94	819.69	410.45	30.32	-2.331	0.000	0.087
131.00	-11.11	-2.19	0.00	-28.64	0.00	28.64	911.78	455.89	806.41	403.81	30.81	-2.342	0.000	0.083
132.00	-10.98	-2.17	0.00	-26.44	0.00	26.44	905.63	452.81	793.20	397.19	31.30	-2.352	0.000	0.079
133.00	-10.86	-2.15	0.00	-24.27	0.00	24.27	899.43	449.71	780.05	390.61	31.80	-2.362	0.000	0.074
134.00	-10.74	-2.13	0.00	-22.12	0.00	22.12	893.17	446.59	766.97	384.05	32.29	-2.371	0.000	0.070
135.00	-10.62	-2.11	0.00	-20.00	0.00	20.00	886.87	443.43	753.94	377.53	32.79	-2.380	0.000	0.065
136.00	-10.51	-2.09	0.00	-17.89	0.00	17.89	880.51	440.26	740.98	371.04	33.29	-2.388	0.000	0.060
137.00	-10.39	-2.07	0.00	-15.80	0.00	15.80	874.11	437.05	728.09	364.59	33.79	-2.395	0.000	0.055
138.00	-8.71	-1.58	0.00	-13.74	0.00	13.74	867.65	433.83	715.27	358.17	34.29	-2.402	0.000	0.048
139.00	-8.60	-1.56	0.00	-12.16	0.00	12.16	861.15	430.57	702.52	351.78	34.80	-2.408	0.000	0.045
140.00	-5.70	-1.13	0.00	-10.61	0.00	10.61	854.59	427.29	689.83	345.43	35.30	-2.414	0.000	0.037
141.00	-5.60	-1.11	0.00	-9.48	0.00	9.48	847.98	423.99	677.22	339.11	35.81	-2.419	0.000	0.035
142.00	-5.51	-1.09	0.00	-8.37	0.00	8.37	841.32	420.66	664.68	332.84	36.32	-2.423	0.000	0.032
143.00	-5.41	-1.07	0.00	-7.28	0.00	7.28	834.61	417.30	652.22	326.60	36.82	-2.427	0.000	0.029
144.00	-5.31	-1.05	0.00	-6.22	0.00	6.22	827.84	413.92	639.83	320.39	37.33	-2.431	0.000	0.026
145.00	-5.22	-1.03	0.00	-5.17	0.00	5.17	821.03	410.52	627.52	314.23	37.84	-2.434	0.000	0.023
146.00	-5.13	-1.01	0.00	-4.15	0.00	4.15	814.17	407.08	615.29	308.10	38.35	-2.437	0.000	0.020
147.00	-5.03	-0.99	0.00	-3.14	0.00	3.14	805.87	402.94	602.11	301.50	38.86	-2.439	0.000	0.017
148.00	-4.94	-0.96	0.00	-2.16	0.00	2.16	796.71	398.35	588.42	294.65	39.37	-2.441	0.000	0.014
149.00	0.00	-0.75	0.00	-1.19	0.00	1.19	787.55	393.77	574.90	287.88	39.88	-2.442	0.000	0.004

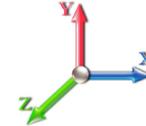
Seismic Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 68

Load Case: 1.2D + 1.0E						Iterations 30
Gust Response Factor	1.10			Sds	0.12	Ss 0.19
Dead Load Factor	1.20	Seismic Load Factor	1.00	Sd1	0.04	S1 0.07
Wind Load Factor	0.00	Structure Frequency (f1)	0.28	SA	0.01	Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
1.00		160.60	0.00	0.01	0.00	0.90	
2.00		159.90	0.00	0.01	0.01	1.51	
3.00		159.20	0.00	0.02	0.01	1.96	
4.00		158.50	0.00	0.03	0.01	2.31	
5.00		157.80	0.00	0.03	0.02	2.60	
6.00		157.10	0.00	0.04	0.02	2.82	
7.00		156.40	0.00	0.04	0.02	3.01	
8.00		155.70	0.01	0.05	0.03	3.16	
9.00		155.00	0.01	0.05	0.03	3.29	
10.00		154.30	0.01	0.05	0.03	3.39	
11.00		153.60	0.01	0.06	0.03	3.48	
12.00		152.90	0.01	0.06	0.03	3.55	
13.00		152.20	0.01	0.06	0.04	3.61	
14.00		151.50	0.02	0.06	0.04	3.65	
15.00		150.81	0.02	0.06	0.04	3.69	
16.00		150.11	0.02	0.07	0.04	3.72	
17.00		149.41	0.02	0.07	0.04	3.74	
18.00		148.71	0.03	0.07	0.04	3.76	
19.00		148.01	0.03	0.07	0.04	3.78	
20.00		147.31	0.03	0.07	0.04	3.78	
21.00		146.61	0.04	0.07	0.04	3.79	
22.00		145.91	0.04	0.07	0.04	3.80	
23.00		145.21	0.05	0.07	0.04	3.80	
24.00		144.51	0.05	0.07	0.04	3.80	
25.00		143.81	0.05	0.07	0.04	3.80	
26.00		143.11	0.06	0.07	0.04	3.80	
27.00		142.41	0.06	0.07	0.04	3.80	
28.00		141.71	0.07	0.07	0.04	3.80	
29.00		141.01	0.07	0.07	0.04	3.80	
30.00		140.31	0.08	0.07	0.04	3.80	
31.00		139.62	0.08	0.07	0.04	3.80	
32.00		138.92	0.09	0.07	0.04	3.80	
33.00		138.22	0.09	0.07	0.04	3.80	
34.00		137.52	0.10	0.07	0.04	3.80	
35.00		136.82	0.10	0.07	0.04	3.81	
36.00		136.12	0.11	0.07	0.04	3.81	
37.00		135.42	0.12	0.07	0.03	3.81	
38.00		134.72	0.12	0.07	0.03	3.82	
39.00		134.02	0.13	0.07	0.03	3.82	
40.00		133.32	0.14	0.07	0.03	3.82	
41.00		132.62	0.14	0.07	0.03	3.82	
42.00		131.92	0.15	0.07	0.03	3.83	
43.00		131.22	0.16	0.07	0.03	3.83	
44.00		130.52	0.16	0.07	0.03	3.83	
45.00		129.82	0.17	0.07	0.03	3.82	

Seismic Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 69

46.00		129.13	0.18	0.07	0.03	3.82
47.00		128.43	0.19	0.06	0.02	3.81
47.55	Bot - Section 2	70.76	0.19	0.06	0.02	2.10
48.00		103.21	0.20	0.06	0.02	3.07
49.00		230.17	0.20	0.06	0.02	6.86
50.00	Appurtenance(s)	229.31	0.21	0.06	0.02	6.84
51.00		227.65	0.22	0.06	0.02	6.79
52.00	RB1 RB2	226.39	0.23	0.06	0.02	6.74
52.97	Top - Section 1	218.40	0.24	0.06	0.02	6.48
53.00		3.02	0.24	0.06	0.02	0.09
54.00		100.34	0.25	0.06	0.02	2.96
55.00		99.78	0.26	0.05	0.02	2.92
56.00		99.22	0.27	0.05	0.02	2.87
57.00		98.66	0.28	0.05	0.01	2.82
58.00		98.11	0.29	0.05	0.01	2.75
59.00		97.55	0.30	0.05	0.01	2.68
60.00		96.99	0.31	0.04	0.01	2.59
61.00		96.43	0.32	0.04	0.01	2.50
62.00		95.87	0.33	0.04	0.01	2.39
63.00		95.31	0.34	0.04	0.01	2.27
64.00		94.75	0.35	0.03	0.01	2.13
65.00		94.19	0.36	0.03	0.01	1.98
66.00		93.63	0.37	0.03	0.01	1.82
67.00		93.07	0.38	0.02	0.01	1.64
67.92	RB3	85.13	0.39	0.02	0.01	1.34
68.00	RT1 RT2	7.38	0.39	0.02	0.01	0.11
69.00		91.95	0.41	0.02	0.01	1.23
70.00		91.39	0.42	0.01	0.01	1.01
71.00		90.83	0.43	0.01	0.01	0.77
72.00		90.27	0.44	0.00	0.01	0.53
73.00	Appurtenance(s)	99.71	0.45	0.00	0.01	0.31
74.00		89.15	0.47	0.00	0.01	0.02
75.00	RT3	88.59	0.48	-0.01	0.01	-0.24
76.00		88.03	0.49	-0.01	0.01	-0.49
77.00		87.48	0.50	-0.02	0.01	-0.74
78.00		86.92	0.52	-0.02	0.01	-0.98
79.00		86.36	0.53	-0.03	0.01	-1.21
80.00		85.80	0.54	-0.03	0.01	-1.43
81.00		85.24	0.56	-0.04	0.01	-1.63
82.00		84.68	0.57	-0.04	0.01	-1.82
83.00		84.12	0.59	-0.05	0.01	-1.99
84.00		83.56	0.60	-0.05	0.01	-2.14
85.00		83.00	0.62	-0.06	0.02	-2.27
86.00		82.44	0.63	-0.06	0.02	-2.38
87.00		81.88	0.64	-0.07	0.02	-2.48
88.00		81.32	0.66	-0.07	0.02	-2.56
89.00		80.76	0.67	-0.08	0.03	-2.62
90.00		80.20	0.69	-0.08	0.03	-2.67
91.00		79.64	0.70	-0.09	0.03	-2.70
92.00		79.08	0.72	-0.09	0.03	-2.72
93.00		78.52	0.74	-0.10	0.04	-2.73
94.00		77.96	0.75	-0.10	0.04	-2.72
95.00		77.40	0.77	-0.11	0.05	-2.70
96.00		76.84	0.78	-0.11	0.05	-2.67
96.18	Bot - Section 3	13.52	0.79	-0.11	0.05	-0.47
97.00		110.57	0.80	-0.11	0.05	-3.82
98.00		133.41	0.82	-0.11	0.06	-4.55

Seismic Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 70

99.00		132.43	0.83	-0.12	0.06	-4.45	
99.25	RB4	32.95	0.84	-0.12	0.07	-1.10	
100.00		98.49	0.85	-0.12	0.07	-3.24	
100.34	Top - Section 2	44.90	0.86	-0.12	0.07	-1.47	
101.00		37.00	0.87	-0.12	0.08	-1.19	
102.00		56.00	0.89	-0.12	0.08	-1.74	
102.25	RT4	13.93	0.89	-0.12	0.08	-0.43	
103.00		41.65	0.90	-0.12	0.09	-1.25	
104.00		55.16	0.92	-0.12	0.10	-1.59	
105.00		54.74	0.94	-0.12	0.10	-1.51	
106.00		54.32	0.96	-0.12	0.11	-1.42	
107.00		53.90	0.97	-0.12	0.12	-1.33	
108.00		53.48	0.99	-0.11	0.13	-1.23	
109.00		53.06	1.01	-0.11	0.14	-1.12	
110.00		52.65	1.03	-0.10	0.15	-1.01	
111.00		52.23	1.05	-0.09	0.16	-0.90	
112.00		51.81	1.07	-0.09	0.17	-0.78	
113.00		51.39	1.09	-0.08	0.18	-0.66	
114.00		50.97	1.11	-0.07	0.19	-0.53	
115.00	Appurtenance(s)	2656.6	1.13	-0.05	0.20	-20.93	
116.00		50.13	1.15	-0.04	0.22	-0.26	
117.00		49.71	1.17	-0.03	0.23	-0.12	
118.00		49.29	1.19	-0.01	0.24	0.02	
119.00		48.87	1.21	0.01	0.26	0.17	
120.00		48.45	1.23	0.03	0.27	0.32	
121.00		48.03	1.25	0.05	0.29	0.47	
122.00		47.61	1.27	0.08	0.31	0.63	
123.00		47.19	1.29	0.10	0.33	0.79	
124.00		46.77	1.31	0.13	0.34	0.95	
125.00		46.35	1.33	0.16	0.36	1.12	
126.00		45.93	1.35	0.20	0.38	1.28	
127.00		45.51	1.37	0.23	0.40	1.46	
128.00		45.09	1.39	0.27	0.43	1.63	
129.00		44.67	1.42	0.32	0.45	1.81	
130.00	Appurtenance(s)	3561.0	1.44	0.36	0.47	159.68	
131.00		43.83	1.46	0.41	0.50	2.16	
132.00		43.41	1.48	0.46	0.52	2.35	
133.00		42.99	1.51	0.52	0.55	2.53	
134.00		42.57	1.53	0.57	0.58	2.72	
135.00		42.15	1.55	0.64	0.61	2.91	
136.00		41.74	1.57	0.70	0.64	3.09	
137.00		41.32	1.60	0.77	0.67	3.28	
138.00	Appurtenance(s)	228.50	1.62	0.85	0.70	19.42	
139.00		40.48	1.64	0.92	0.73	3.67	
140.00	Appurtenance(s)	1540.0	1.67	1.01	0.77	148.48	
141.00		39.64	1.69	1.09	0.80	4.06	
142.00		39.22	1.72	1.19	0.84	4.25	
143.00		38.80	1.74	1.28	0.88	4.45	
144.00		38.38	1.77	1.39	0.92	4.64	
145.00		37.96	1.79	1.49	0.96	4.84	
146.00		37.54	1.81	1.61	1.00	5.03	
147.00		37.12	1.84	1.72	1.05	5.23	
148.00		36.70	1.86	1.85	1.09	5.42	
149.00	Appurtenance(s)	2174.1	1.89	1.98	1.14	336.70	
Totals:		24,686.9				877.7	Total Wind: 21,109.9

Calculated Forces

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022



Page: 71

Load Case: 1.2D + 1.0E								Iterations 30	
Gust Response Factor 1.10		Seismic Load Factor 1.00		Sds 0.12				Ss 0.19	
Dead Load Factor 1.20		Structure Frequency (f1) 0.28		Sd1 0.04				S1 0.07	
Wind Load Factor 0.00		Seismic Importance Factor 1.00		SA 0.01					

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	-36.10	-0.98	0.00	-121.01	0.00	121.01	3031.07	1515.53	5947.06	2977.95	0.00	0.00	0.00	0.053
1.00	-35.86	-0.98	0.00	-120.04	0.00	120.04	3023.73	1511.86	5906.70	2957.74	0.00	0.00	0.00	0.052
2.00	-35.62	-0.98	0.00	-119.06	0.00	119.06	3016.33	1508.17	5866.38	2937.55	0.00	0.00	-0.01	0.052
3.00	-35.38	-0.98	0.00	-118.09	0.00	118.09	3008.89	1504.45	5826.08	2917.37	0.00	0.00	-0.01	0.052
4.00	-35.14	-0.98	0.00	-117.11	0.00	117.11	3001.40	1500.70	5785.81	2897.21	0.00	0.00	-0.01	0.052
5.00	-34.90	-0.97	0.00	-116.13	0.00	116.13	2993.85	1496.92	5745.58	2877.06	0.01	0.00	-0.01	0.052
6.00	-34.67	-0.97	0.00	-115.16	0.00	115.16	2986.25	1493.13	5705.37	2856.93	0.01	0.00	-0.02	0.052
7.00	-34.43	-0.97	0.00	-114.19	0.00	114.19	2978.60	1489.30	5665.20	2836.81	0.01	0.00	-0.02	0.052
8.00	-34.19	-0.97	0.00	-113.21	0.00	113.21	2970.91	1485.45	5625.07	2816.71	0.02	0.00	-0.02	0.052
9.00	-33.96	-0.97	0.00	-112.24	0.00	112.24	2963.16	1481.58	5584.97	2796.63	0.02	0.00	-0.02	0.052
10.00	-33.73	-0.97	0.00	-111.28	0.00	111.28	2955.36	1477.68	5544.90	2776.57	0.03	0.00	-0.03	0.051
11.00	-33.49	-0.96	0.00	-110.31	0.00	110.31	2947.51	1473.75	5504.88	2756.53	0.03	0.00	-0.03	0.051
12.00	-33.26	-0.96	0.00	-109.35	0.00	109.35	2939.60	1469.80	5464.90	2736.51	0.04	0.00	-0.03	0.051
13.00	-33.03	-0.96	0.00	-108.38	0.00	108.38	2931.65	1465.83	5424.96	2716.51	0.05	0.00	-0.03	0.051
14.00	-32.80	-0.96	0.00	-107.42	0.00	107.42	2923.65	1461.82	5385.06	2696.53	0.05	0.00	-0.04	0.051
15.00	-32.57	-0.96	0.00	-106.47	0.00	106.47	2915.59	1457.80	5345.20	2676.57	0.06	0.00	-0.04	0.051
16.00	-32.34	-0.95	0.00	-105.51	0.00	105.51	2907.49	1453.74	5305.39	2656.64	0.07	0.00	-0.04	0.051
17.00	-32.11	-0.95	0.00	-104.56	0.00	104.56	2899.33	1449.67	5265.63	2636.73	0.08	0.00	-0.04	0.051
18.00	-31.88	-0.95	0.00	-103.61	0.00	103.61	2891.12	1445.56	5225.92	2616.84	0.09	0.00	-0.05	0.051
19.00	-31.66	-0.95	0.00	-102.66	0.00	102.66	2882.86	1441.43	5186.25	2596.98	0.10	0.00	-0.05	0.051
20.00	-31.43	-0.94	0.00	-101.72	0.00	101.72	2874.56	1437.28	5146.64	2577.14	0.11	0.00	-0.05	0.050
21.00	-31.21	-0.94	0.00	-100.77	0.00	100.77	2866.20	1433.10	5107.08	2557.33	0.12	0.00	-0.06	0.050
22.00	-30.98	-0.94	0.00	-99.83	0.00	99.83	2857.79	1428.89	5067.57	2537.55	0.13	0.00	-0.06	0.050
23.00	-30.76	-0.94	0.00	-98.89	0.00	98.89	2849.32	1424.66	5028.11	2517.79	0.15	0.00	-0.06	0.050
24.00	-30.54	-0.93	0.00	-97.96	0.00	97.96	2840.81	1420.41	4988.71	2498.06	0.16	0.00	-0.06	0.050
25.00	-30.32	-0.93	0.00	-97.02	0.00	97.02	2832.25	1416.12	4949.37	2478.36	0.17	0.00	-0.07	0.050
26.00	-30.10	-0.93	0.00	-96.09	0.00	96.09	2823.63	1411.82	4910.09	2458.69	0.19	0.00	-0.07	0.050
27.00	-29.88	-0.93	0.00	-95.17	0.00	95.17	2814.97	1407.48	4870.87	2439.05	0.20	0.00	-0.07	0.050
28.00	-29.66	-0.92	0.00	-94.24	0.00	94.24	2806.25	1403.13	4831.70	2419.44	0.22	0.00	-0.08	0.050
29.00	-29.44	-0.92	0.00	-93.32	0.00	93.32	2797.49	1398.74	4792.60	2399.86	0.23	0.00	-0.08	0.049
30.00	-29.22	-0.92	0.00	-92.40	0.00	92.40	2788.67	1394.33	4753.57	2380.32	0.25	0.00	-0.08	0.049
31.00	-29.01	-0.92	0.00	-91.48	0.00	91.48	2779.80	1389.90	4714.60	2360.80	0.27	0.00	-0.08	0.049
32.00	-28.79	-0.91	0.00	-90.56	0.00	90.56	2770.88	1385.44	4675.69	2341.32	0.29	0.00	-0.09	0.049
33.00	-28.58	-0.91	0.00	-89.65	0.00	89.65	2761.91	1380.95	4636.86	2321.88	0.30	0.00	-0.09	0.049
34.00	-28.36	-0.91	0.00	-88.74	0.00	88.74	2752.89	1376.44	4598.09	2302.46	0.32	0.00	-0.09	0.049
35.00	-28.15	-0.90	0.00	-87.83	0.00	87.83	2743.82	1371.91	4559.39	2283.08	0.34	0.00	-0.10	0.049
36.00	-27.94	-0.90	0.00	-86.93	0.00	86.93	2734.69	1367.35	4520.77	2263.74	0.36	0.00	-0.10	0.049
37.00	-27.73	-0.90	0.00	-86.03	0.00	86.03	2725.52	1362.76	4482.21	2244.44	0.38	0.00	-0.10	0.049
38.00	-27.52	-0.90	0.00	-85.13	0.00	85.13	2716.29	1358.15	4443.74	2225.17	0.41	0.00	-0.11	0.048
39.00	-27.31	-0.89	0.00	-84.23	0.00	84.23	2707.02	1353.51	4405.33	2205.94	0.43	0.00	-0.11	0.048
40.00	-27.10	-0.89	0.00	-83.34	0.00	83.34	2697.69	1348.85	4367.01	2186.75	0.45	0.00	-0.11	0.048
41.00	-26.89	-0.89	0.00	-82.45	0.00	82.45	2688.32	1344.16	4328.76	2167.60	0.48	0.00	-0.11	0.048
42.00	-26.69	-0.89	0.00	-81.56	0.00	81.56	2678.89	1339.44	4290.59	2148.48	0.50	0.00	-0.12	0.048
43.00	-26.48	-0.88	0.00	-80.68	0.00	80.68	2669.41	1334.70	4252.50	2129.41	0.52	0.00	-0.12	0.048
44.00	-26.27	-0.88	0.00	-79.79	0.00	79.79	2659.88	1329.94	4214.50	2110.38	0.55	0.00	-0.12	0.048
45.00	-26.07	-0.88	0.00	-78.91	0.00	78.91	2650.30	1325.15	4176.57	2091.39	0.58	0.00	-0.13	0.048
46.00	-25.87	-0.87	0.00	-78.04	0.00	78.04	2640.67	1320.33	4138.74	2072.44	0.60	0.00	-0.13	0.047

Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



47.00	-25.66	-0.87	0.00	-77.16	0.00	77.16	2630.98	1315.49	4100.98	2053.54	0.63	-0.13	0.047
47.55	-25.55	-0.87	0.00	-76.68	0.00	76.68	2625.60	1312.80	4080.13	2043.10	0.65	-0.13	0.047
48.00	-25.41	-0.87	0.00	-76.29	0.00	76.29	2621.25	1310.62	4063.32	2034.68	0.66	-0.14	0.047
49.00	-25.08	-0.86	0.00	-75.43	0.00	75.43	2611.47	1305.73	4025.74	2015.86	0.69	-0.14	0.047
50.00	-24.76	-0.85	0.00	-74.57	0.00	74.57	2601.63	1300.82	3988.26	1997.09	0.72	-0.14	0.047
51.00	-24.44	-0.85	0.00	-73.71	0.00	73.71	2591.74	1295.87	3950.86	1978.37	0.75	-0.15	0.047
52.00	-24.11	-0.84	0.00	-72.86	0.00	72.86	2581.81	1290.90	3913.56	1959.69	0.78	-0.15	0.023
52.97	-23.81	-0.83	0.00	-72.05	0.00	72.05	1914.68	957.34	2935.86	1470.11	0.81	-0.15	0.025
53.00	-23.80	-0.83	0.00	-72.02	0.00	72.02	1914.50	957.25	2935.09	1469.72	0.81	-0.15	0.027
54.00	-23.63	-0.83	0.00	-71.19	0.00	71.19	1908.40	954.20	2909.37	1456.85	0.84	-0.15	0.027
55.00	-23.46	-0.83	0.00	-70.36	0.00	70.36	1902.26	951.13	2883.67	1443.98	0.87	-0.15	0.027
56.00	-23.30	-0.83	0.00	-69.53	0.00	69.53	1896.06	948.03	2858.01	1431.13	0.91	-0.16	0.027
57.00	-23.13	-0.82	0.00	-68.70	0.00	68.70	1889.81	944.90	2832.37	1418.29	0.94	-0.16	0.027
58.00	-22.96	-0.82	0.00	-67.88	0.00	67.88	1883.51	941.76	2806.77	1405.47	0.97	-0.16	0.026
59.00	-22.80	-0.82	0.00	-67.05	0.00	67.05	1877.16	938.58	2781.20	1392.67	1.01	-0.16	0.026
60.00	-22.63	-0.82	0.00	-66.23	0.00	66.23	1870.76	935.38	2755.66	1379.88	1.04	-0.16	0.026
61.00	-22.47	-0.81	0.00	-65.42	0.00	65.42	1864.31	932.15	2730.16	1367.11	1.07	-0.16	0.026
62.00	-22.30	-0.81	0.00	-64.60	0.00	64.60	1857.80	928.90	2704.70	1354.36	1.11	-0.17	0.026
63.00	-22.14	-0.81	0.00	-63.79	0.00	63.79	1851.25	925.63	2679.27	1341.63	1.14	-0.17	0.026
64.00	-21.98	-0.81	0.00	-62.98	0.00	62.98	1844.65	922.32	2653.88	1328.91	1.18	-0.17	0.025
65.00	-21.82	-0.81	0.00	-62.17	0.00	62.17	1837.99	919.00	2628.54	1316.22	1.22	-0.17	0.025
66.00	-21.66	-0.81	0.00	-61.36	0.00	61.36	1831.29	915.64	2603.23	1303.55	1.25	-0.17	0.025
67.00	-21.50	-0.80	0.00	-60.56	0.00	60.56	1824.53	912.26	2577.97	1290.90	1.29	-0.18	0.025
67.92	-21.35	-0.80	0.00	-59.82	0.00	59.82	1818.27	909.13	2554.77	1279.28	1.32	-0.18	0.019
68.00	-21.34	-0.80	0.00	-59.76	0.00	59.76	1817.72	908.86	2552.75	1278.27	1.33	-0.18	0.035
69.00	-21.18	-0.80	0.00	-58.95	0.00	58.95	1810.86	905.43	2527.58	1265.67	1.36	-0.18	0.035
70.00	-21.02	-0.80	0.00	-58.15	0.00	58.15	1803.95	901.98	2502.46	1253.09	1.40	-0.18	0.035
71.00	-20.86	-0.80	0.00	-57.35	0.00	57.35	1796.99	898.50	2477.38	1240.53	1.44	-0.18	0.034
72.00	-20.71	-0.80	0.00	-56.55	0.00	56.55	1789.98	894.99	2452.36	1228.00	1.48	-0.19	0.034
73.00	-20.54	-0.80	0.00	-55.75	0.00	55.75	1782.92	891.46	2427.38	1215.49	1.52	-0.19	0.034
74.00	-20.38	-0.80	0.00	-54.95	0.00	54.95	1775.81	887.90	2402.46	1203.02	1.56	-0.19	0.034
75.00	-20.23	-0.80	0.00	-54.15	0.00	54.15	1768.64	884.32	2377.59	1190.56	1.60	-0.19	0.034
76.00	-20.07	-0.80	0.00	-53.34	0.00	53.34	1761.43	880.71	2352.78	1178.14	1.64	-0.20	0.057
77.00	-19.92	-0.80	0.00	-52.54	0.00	52.54	1754.16	877.08	2328.02	1165.74	1.68	-0.20	0.056
78.00	-19.77	-0.80	0.00	-51.74	0.00	51.74	1746.84	873.42	2303.32	1153.37	1.72	-0.21	0.056
79.00	-19.62	-0.81	0.00	-50.93	0.00	50.93	1739.48	869.74	2278.68	1141.03	1.77	-0.21	0.056
80.00	-19.47	-0.81	0.00	-50.13	0.00	50.13	1732.06	866.03	2254.10	1128.72	1.81	-0.22	0.056
81.00	-19.32	-0.81	0.00	-49.32	0.00	49.32	1724.59	862.29	2229.58	1116.45	1.86	-0.22	0.055
82.00	-19.17	-0.81	0.00	-48.51	0.00	48.51	1717.07	858.53	2205.12	1104.20	1.90	-0.22	0.055
83.00	-19.02	-0.81	0.00	-47.71	0.00	47.71	1709.50	854.75	2180.73	1091.99	1.95	-0.23	0.055
84.00	-18.87	-0.81	0.00	-46.90	0.00	46.90	1701.88	850.94	2156.41	1079.81	2.00	-0.23	0.055
85.00	-18.72	-0.81	0.00	-46.09	0.00	46.09	1694.20	847.10	2132.15	1067.66	2.05	-0.24	0.054
86.00	-18.57	-0.81	0.00	-45.28	0.00	45.28	1686.48	843.24	2107.95	1055.54	2.10	-0.24	0.054
87.00	-18.43	-0.81	0.00	-44.46	0.00	44.46	1678.71	839.35	2083.83	1043.46	2.15	-0.25	0.054
88.00	-18.28	-0.81	0.00	-43.65	0.00	43.65	1670.88	835.44	2059.78	1031.42	2.20	-0.25	0.053
89.00	-18.13	-0.81	0.00	-42.84	0.00	42.84	1663.00	831.50	2035.80	1019.41	2.26	-0.26	0.053
90.00	-17.99	-0.82	0.00	-42.02	0.00	42.02	1655.08	827.54	2011.90	1007.44	2.31	-0.26	0.053
91.00	-17.85	-0.82	0.00	-41.21	0.00	41.21	1647.10	823.55	1988.06	995.51	2.37	-0.26	0.052
92.00	-17.70	-0.82	0.00	-40.39	0.00	40.39	1639.07	819.54	1964.31	983.61	2.42	-0.27	0.052
93.00	-17.56	-0.82	0.00	-39.58	0.00	39.58	1630.99	815.50	1940.63	971.76	2.48	-0.27	0.051
94.00	-17.42	-0.82	0.00	-38.76	0.00	38.76	1622.86	811.43	1917.03	959.94	2.54	-0.28	0.051
95.00	-17.28	-0.82	0.00	-37.94	0.00	37.94	1614.68	807.34	1893.51	948.16	2.59	-0.28	0.051
96.00	-17.14	-0.82	0.00	-37.12	0.00	37.12	1606.45	803.22	1870.07	936.43	2.65	-0.29	0.050
96.18	-17.11	-0.82	0.00	-36.98	0.00	36.98	1604.99	802.49	1865.94	934.36	2.66	-0.29	0.050
97.00	-16.94	-0.82	0.00	-36.30	0.00	36.30	1598.16	799.08	1846.72	924.73	2.71	-0.29	0.050
98.00	-16.73	-0.82	0.00	-35.48	0.00	35.48	1589.83	794.91	1823.44	913.08	2.78	-0.30	0.049
99.00	-16.52	-0.82	0.00	-34.66	0.00	34.66	1581.44	790.72	1800.26	901.47	2.84	-0.30	0.049

Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



99.25	-16.47	-0.82	0.00	-34.46	0.00	34.46	1579.34	789.67	1794.47	898.57	2.86	-0.30	0.028
100.00	-16.32	-0.82	0.00	-33.84	0.00	33.84	1573.01	786.50	1777.16	889.90	2.90	-0.30	0.028
100.34	-16.25	-0.82	0.00	-33.56	0.00	33.56	1075.68	537.84	1234.34	618.09	2.92	-0.31	0.031
101.00	-16.17	-0.82	0.00	-33.02	0.00	33.02	1072.67	536.33	1224.84	613.33	2.97	-0.31	0.035
102.00	-16.06	-0.82	0.00	-32.20	0.00	32.20	1068.04	534.02	1210.40	606.10	3.03	-0.31	0.034
102.25	-16.03	-0.82	0.00	-32.00	0.00	32.00	1066.88	533.44	1206.79	604.29	3.05	-0.31	0.034
102.25	-16.03	-0.82	0.00	-32.00	0.00	32.00	1066.88	533.44	1206.79	604.29	3.05	-0.31	0.034
103.00	-15.94	-0.82	0.00	-31.38	0.00	31.38	1063.37	531.68	1195.97	598.87	3.10	-0.31	0.067
104.00	-15.83	-0.82	0.00	-30.56	0.00	30.56	1058.64	529.32	1181.57	591.66	3.16	-0.32	0.067
105.00	-15.71	-0.82	0.00	-29.74	0.00	29.74	1053.86	526.93	1167.20	584.47	3.23	-0.32	0.066
106.00	-15.60	-0.82	0.00	-28.92	0.00	28.92	1049.03	524.52	1152.85	577.28	3.30	-0.33	0.065
107.00	-15.49	-0.82	0.00	-28.09	0.00	28.09	1044.15	522.08	1138.52	570.11	3.37	-0.34	0.064
108.00	-15.37	-0.83	0.00	-27.27	0.00	27.27	1039.22	519.61	1124.23	562.95	3.44	-0.34	0.063
109.00	-15.26	-0.83	0.00	-26.44	0.00	26.44	1034.24	517.12	1109.97	555.81	3.51	-0.35	0.062
110.00	-15.15	-0.83	0.00	-25.61	0.00	25.61	1029.21	514.60	1095.73	548.68	3.58	-0.35	0.061
111.00	-15.04	-0.83	0.00	-24.79	0.00	24.79	1024.13	512.06	1081.53	541.57	3.66	-0.36	0.060
112.00	-14.93	-0.83	0.00	-23.96	0.00	23.96	1018.99	509.50	1067.37	534.48	3.73	-0.36	0.059
113.00	-14.82	-0.83	0.00	-23.13	0.00	23.13	1013.81	506.90	1053.24	527.40	3.81	-0.37	0.058
114.00	-14.71	-0.83	0.00	-22.30	0.00	22.30	1008.57	504.29	1039.14	520.34	3.89	-0.37	0.057
115.00	-11.47	-0.81	0.00	-21.47	0.00	21.47	1003.28	501.64	1025.09	513.31	3.97	-0.38	0.053
116.00	-11.37	-0.81	0.00	-20.66	0.00	20.66	997.95	498.97	1011.07	506.29	4.05	-0.38	0.052
117.00	-11.26	-0.81	0.00	-19.85	0.00	19.85	992.56	496.28	997.10	499.29	4.13	-0.39	0.051
118.00	-11.16	-0.81	0.00	-19.04	0.00	19.04	987.12	493.56	983.16	492.31	4.21	-0.39	0.050
119.00	-11.06	-0.81	0.00	-18.23	0.00	18.23	981.63	490.81	969.27	485.36	4.29	-0.40	0.049
120.00	-10.95	-0.81	0.00	-17.42	0.00	17.42	976.09	488.04	955.42	478.42	4.38	-0.40	0.048
121.00	-10.85	-0.81	0.00	-16.61	0.00	16.61	970.50	485.25	941.62	471.51	4.46	-0.41	0.046
122.00	-10.75	-0.81	0.00	-15.79	0.00	15.79	964.85	482.43	927.87	464.62	4.55	-0.41	0.045
123.00	-10.65	-0.81	0.00	-14.98	0.00	14.98	959.16	479.58	914.16	457.76	4.64	-0.42	0.044
124.00	-10.55	-0.81	0.00	-14.17	0.00	14.17	953.42	476.71	900.51	450.92	4.72	-0.42	0.043
125.00	-10.45	-0.81	0.00	-13.37	0.00	13.37	947.62	473.81	886.90	444.11	4.81	-0.43	0.041
126.00	-10.35	-0.81	0.00	-12.56	0.00	12.56	941.77	470.89	873.35	437.32	4.90	-0.43	0.040
127.00	-10.25	-0.81	0.00	-11.75	0.00	11.75	935.88	467.94	859.85	430.56	4.99	-0.43	0.038
128.00	-10.15	-0.80	0.00	-10.95	0.00	10.95	929.93	464.96	846.40	423.83	5.09	-0.44	0.037
129.00	-10.05	-0.80	0.00	-10.14	0.00	10.14	923.93	461.97	833.02	417.13	5.18	-0.44	0.035
130.00	-5.74	-0.61	0.00	-9.34	0.00	9.34	917.88	458.94	819.69	410.45	5.27	-0.45	0.029
131.00	-5.67	-0.61	0.00	-8.73	0.00	8.73	911.78	455.89	806.41	403.81	5.36	-0.45	0.028
132.00	-5.59	-0.60	0.00	-8.12	0.00	8.12	905.63	452.81	793.20	397.19	5.46	-0.45	0.027
133.00	-5.52	-0.60	0.00	-7.52	0.00	7.52	899.43	449.71	780.05	390.61	5.55	-0.46	0.025
134.00	-5.45	-0.60	0.00	-6.92	0.00	6.92	893.17	446.59	766.97	384.05	5.65	-0.46	0.024
135.00	-5.38	-0.60	0.00	-6.32	0.00	6.32	886.87	443.43	753.94	377.53	5.75	-0.46	0.023
136.00	-5.31	-0.59	0.00	-5.73	0.00	5.73	880.51	440.26	740.98	371.04	5.84	-0.46	0.021
137.00	-5.24	-0.59	0.00	-5.13	0.00	5.13	874.11	437.05	728.09	364.59	5.94	-0.47	0.020
138.00	-4.95	-0.57	0.00	-4.55	0.00	4.55	867.65	433.83	715.27	358.17	6.04	-0.47	0.018
139.00	-4.88	-0.56	0.00	-3.98	0.00	3.98	861.15	430.57	702.52	351.78	6.14	-0.47	0.017
140.00	-3.01	-0.40	0.00	-3.42	0.00	3.42	854.59	427.29	689.83	345.43	6.24	-0.47	0.013
141.00	-2.96	-0.39	0.00	-3.02	0.00	3.02	847.98	423.99	677.22	339.11	6.33	-0.47	0.012
142.00	-2.91	-0.39	0.00	-2.62	0.00	2.62	841.32	420.66	664.68	332.84	6.43	-0.48	0.011
143.00	-2.86	-0.39	0.00	-2.23	0.00	2.23	834.61	417.30	652.22	326.60	6.53	-0.48	0.010
144.00	-2.81	-0.38	0.00	-1.85	0.00	1.85	827.84	413.92	639.83	320.39	6.63	-0.48	0.009
145.00	-2.76	-0.38	0.00	-1.47	0.00	1.47	821.03	410.52	627.52	314.23	6.73	-0.48	0.008
146.00	-2.71	-0.37	0.00	-1.09	0.00	1.09	814.17	407.08	615.29	308.10	6.83	-0.48	0.007
147.00	-2.66	-0.36	0.00	-0.72	0.00	0.72	805.87	402.94	602.11	301.50	6.93	-0.48	0.006
148.00	-2.61	-0.36	0.00	-0.36	0.00	0.36	796.71	398.35	588.42	294.65	7.03	-0.48	0.004
149.00	0.00	-0.34	0.00	0.00	0.00	0.00	787.55	393.77	574.90	287.88	7.14	-0.48	0.000

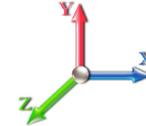
Seismic Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 74

Load Case: 0.9D + 1.0E				Iterations 30
Gust Response Factor	1.10	Sds	0.12	Ss 0.19
Dead Load Factor	0.90	Seismic Load Factor	1.00	S1 0.07
Wind Load Factor	0.00	Structure Frequency (f1)	0.28	SA 0.01
				Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	0.00	
1.00		160.60	0.00	0.01	0.00	0.90	
2.00		159.90	0.00	0.01	0.01	1.51	
3.00		159.20	0.00	0.02	0.01	1.96	
4.00		158.50	0.00	0.03	0.01	2.31	
5.00		157.80	0.00	0.03	0.02	2.60	
6.00		157.10	0.00	0.04	0.02	2.82	
7.00		156.40	0.00	0.04	0.02	3.01	
8.00		155.70	0.01	0.05	0.03	3.16	
9.00		155.00	0.01	0.05	0.03	3.29	
10.00		154.30	0.01	0.05	0.03	3.39	
11.00		153.60	0.01	0.06	0.03	3.48	
12.00		152.90	0.01	0.06	0.03	3.55	
13.00		152.20	0.01	0.06	0.04	3.61	
14.00		151.50	0.02	0.06	0.04	3.65	
15.00		150.81	0.02	0.06	0.04	3.69	
16.00		150.11	0.02	0.07	0.04	3.72	
17.00		149.41	0.02	0.07	0.04	3.74	
18.00		148.71	0.03	0.07	0.04	3.76	
19.00		148.01	0.03	0.07	0.04	3.78	
20.00		147.31	0.03	0.07	0.04	3.78	
21.00		146.61	0.04	0.07	0.04	3.79	
22.00		145.91	0.04	0.07	0.04	3.80	
23.00		145.21	0.05	0.07	0.04	3.80	
24.00		144.51	0.05	0.07	0.04	3.80	
25.00		143.81	0.05	0.07	0.04	3.80	
26.00		143.11	0.06	0.07	0.04	3.80	
27.00		142.41	0.06	0.07	0.04	3.80	
28.00		141.71	0.07	0.07	0.04	3.80	
29.00		141.01	0.07	0.07	0.04	3.80	
30.00		140.31	0.08	0.07	0.04	3.80	
31.00		139.62	0.08	0.07	0.04	3.80	
32.00		138.92	0.09	0.07	0.04	3.80	
33.00		138.22	0.09	0.07	0.04	3.80	
34.00		137.52	0.10	0.07	0.04	3.80	
35.00		136.82	0.10	0.07	0.04	3.81	
36.00		136.12	0.11	0.07	0.04	3.81	
37.00		135.42	0.12	0.07	0.03	3.81	
38.00		134.72	0.12	0.07	0.03	3.82	
39.00		134.02	0.13	0.07	0.03	3.82	
40.00		133.32	0.14	0.07	0.03	3.82	
41.00		132.62	0.14	0.07	0.03	3.82	
42.00		131.92	0.15	0.07	0.03	3.83	
43.00		131.22	0.16	0.07	0.03	3.83	
44.00		130.52	0.16	0.07	0.03	3.83	
45.00		129.82	0.17	0.07	0.03	3.82	

Seismic Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 75

46.00		129.13	0.18	0.07	0.03	3.82
47.00		128.43	0.19	0.06	0.02	3.81
47.55	Bot - Section 2	70.76	0.19	0.06	0.02	2.10
48.00		103.21	0.20	0.06	0.02	3.07
49.00		230.17	0.20	0.06	0.02	6.86
50.00	Appurtenance(s)	229.31	0.21	0.06	0.02	6.84
51.00		227.65	0.22	0.06	0.02	6.79
52.00	RB1 RB2	226.39	0.23	0.06	0.02	6.74
52.97	Top - Section 1	218.40	0.24	0.06	0.02	6.48
53.00		3.02	0.24	0.06	0.02	0.09
54.00		100.34	0.25	0.06	0.02	2.96
55.00		99.78	0.26	0.05	0.02	2.92
56.00		99.22	0.27	0.05	0.02	2.87
57.00		98.66	0.28	0.05	0.01	2.82
58.00		98.11	0.29	0.05	0.01	2.75
59.00		97.55	0.30	0.05	0.01	2.68
60.00		96.99	0.31	0.04	0.01	2.59
61.00		96.43	0.32	0.04	0.01	2.50
62.00		95.87	0.33	0.04	0.01	2.39
63.00		95.31	0.34	0.04	0.01	2.27
64.00		94.75	0.35	0.03	0.01	2.13
65.00		94.19	0.36	0.03	0.01	1.98
66.00		93.63	0.37	0.03	0.01	1.82
67.00		93.07	0.38	0.02	0.01	1.64
67.92	RB3	85.13	0.39	0.02	0.01	1.34
68.00	RT1 RT2	7.38	0.39	0.02	0.01	0.11
69.00		91.95	0.41	0.02	0.01	1.23
70.00		91.39	0.42	0.01	0.01	1.01
71.00		90.83	0.43	0.01	0.01	0.77
72.00		90.27	0.44	0.00	0.01	0.53
73.00	Appurtenance(s)	99.71	0.45	0.00	0.01	0.31
74.00		89.15	0.47	0.00	0.01	0.02
75.00	RT3	88.59	0.48	-0.01	0.01	-0.24
76.00		88.03	0.49	-0.01	0.01	-0.49
77.00		87.48	0.50	-0.02	0.01	-0.74
78.00		86.92	0.52	-0.02	0.01	-0.98
79.00		86.36	0.53	-0.03	0.01	-1.21
80.00		85.80	0.54	-0.03	0.01	-1.43
81.00		85.24	0.56	-0.04	0.01	-1.63
82.00		84.68	0.57	-0.04	0.01	-1.82
83.00		84.12	0.59	-0.05	0.01	-1.99
84.00		83.56	0.60	-0.05	0.01	-2.14
85.00		83.00	0.62	-0.06	0.02	-2.27
86.00		82.44	0.63	-0.06	0.02	-2.38
87.00		81.88	0.64	-0.07	0.02	-2.48
88.00		81.32	0.66	-0.07	0.02	-2.56
89.00		80.76	0.67	-0.08	0.03	-2.62
90.00		80.20	0.69	-0.08	0.03	-2.67
91.00		79.64	0.70	-0.09	0.03	-2.70
92.00		79.08	0.72	-0.09	0.03	-2.72
93.00		78.52	0.74	-0.10	0.04	-2.73
94.00		77.96	0.75	-0.10	0.04	-2.72
95.00		77.40	0.77	-0.11	0.05	-2.70
96.00		76.84	0.78	-0.11	0.05	-2.67
96.18	Bot - Section 3	13.52	0.79	-0.11	0.05	-0.47
97.00		110.57	0.80	-0.11	0.05	-3.82
98.00		133.41	0.82	-0.11	0.06	-4.55

Seismic Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 76

99.00		132.43	0.83	-0.12	0.06	-4.45	
99.25	RB4	32.95	0.84	-0.12	0.07	-1.10	
100.00		98.49	0.85	-0.12	0.07	-3.24	
100.34	Top - Section 2	44.90	0.86	-0.12	0.07	-1.47	
101.00		37.00	0.87	-0.12	0.08	-1.19	
102.00		56.00	0.89	-0.12	0.08	-1.74	
102.25	RT4	13.93	0.89	-0.12	0.08	-0.43	
103.00		41.65	0.90	-0.12	0.09	-1.25	
104.00		55.16	0.92	-0.12	0.10	-1.59	
105.00		54.74	0.94	-0.12	0.10	-1.51	
106.00		54.32	0.96	-0.12	0.11	-1.42	
107.00		53.90	0.97	-0.12	0.12	-1.33	
108.00		53.48	0.99	-0.11	0.13	-1.23	
109.00		53.06	1.01	-0.11	0.14	-1.12	
110.00		52.65	1.03	-0.10	0.15	-1.01	
111.00		52.23	1.05	-0.09	0.16	-0.90	
112.00		51.81	1.07	-0.09	0.17	-0.78	
113.00		51.39	1.09	-0.08	0.18	-0.66	
114.00		50.97	1.11	-0.07	0.19	-0.53	
115.00	Appurtenance(s)	2656.6	1.13	-0.05	0.20	-20.93	
116.00		50.13	1.15	-0.04	0.22	-0.26	
117.00		49.71	1.17	-0.03	0.23	-0.12	
118.00		49.29	1.19	-0.01	0.24	0.02	
119.00		48.87	1.21	0.01	0.26	0.17	
120.00		48.45	1.23	0.03	0.27	0.32	
121.00		48.03	1.25	0.05	0.29	0.47	
122.00		47.61	1.27	0.08	0.31	0.63	
123.00		47.19	1.29	0.10	0.33	0.79	
124.00		46.77	1.31	0.13	0.34	0.95	
125.00		46.35	1.33	0.16	0.36	1.12	
126.00		45.93	1.35	0.20	0.38	1.28	
127.00		45.51	1.37	0.23	0.40	1.46	
128.00		45.09	1.39	0.27	0.43	1.63	
129.00		44.67	1.42	0.32	0.45	1.81	
130.00	Appurtenance(s)	3561.0	1.44	0.36	0.47	159.68	
131.00		43.83	1.46	0.41	0.50	2.16	
132.00		43.41	1.48	0.46	0.52	2.35	
133.00		42.99	1.51	0.52	0.55	2.53	
134.00		42.57	1.53	0.57	0.58	2.72	
135.00		42.15	1.55	0.64	0.61	2.91	
136.00		41.74	1.57	0.70	0.64	3.09	
137.00		41.32	1.60	0.77	0.67	3.28	
138.00	Appurtenance(s)	228.50	1.62	0.85	0.70	19.42	
139.00		40.48	1.64	0.92	0.73	3.67	
140.00	Appurtenance(s)	1540.0	1.67	1.01	0.77	148.48	
141.00		39.64	1.69	1.09	0.80	4.06	
142.00		39.22	1.72	1.19	0.84	4.25	
143.00		38.80	1.74	1.28	0.88	4.45	
144.00		38.38	1.77	1.39	0.92	4.64	
145.00		37.96	1.79	1.49	0.96	4.84	
146.00		37.54	1.81	1.61	1.00	5.03	
147.00		37.12	1.84	1.72	1.05	5.23	
148.00		36.70	1.86	1.85	1.09	5.42	
149.00	Appurtenance(s)	2174.1	1.89	1.98	1.14	336.70	
Totals:		24,686.9				877.7	Total Wind: 21,109.9

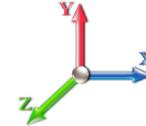
Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 77

Load Case: 0.9D + 1.0E										Iterations	30
Gust Response Factor 1.10					Sds 0.12					Ss	0.19
Dead Load Factor 0.90			Seismic Load Factor 1.00			Sd1 0.04		S1 0.07			
Wind Load Factor 0.00		Structure Frequency (f1) 0.28		SA 0.01		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	-27.08	-0.98	0.00	-118.78	0.00	118.78	3031.07	1515.53	5947.06	2977.95	0.00	0.00	0.00	0.049
1.00	-26.90	-0.98	0.00	-117.81	0.00	117.81	3023.73	1511.86	5906.70	2957.74	0.00	0.00	0.00	0.049
2.00	-26.71	-0.98	0.00	-116.83	0.00	116.83	3016.33	1508.17	5866.38	2937.55	0.00	0.00	0.00	0.049
3.00	-26.53	-0.98	0.00	-115.86	0.00	115.86	3008.89	1504.45	5826.08	2917.37	0.00	-0.01	0.00	0.049
4.00	-26.36	-0.97	0.00	-114.88	0.00	114.88	3001.40	1500.70	5785.81	2897.21	0.00	-0.01	0.00	0.048
5.00	-26.18	-0.97	0.00	-113.91	0.00	113.91	2993.85	1496.92	5745.58	2877.06	0.01	-0.01	0.00	0.048
6.00	-26.00	-0.97	0.00	-112.93	0.00	112.93	2986.25	1493.13	5705.37	2856.93	0.01	-0.02	0.00	0.048
7.00	-25.82	-0.97	0.00	-111.96	0.00	111.96	2978.60	1489.30	5665.20	2836.81	0.01	-0.02	0.00	0.048
8.00	-25.65	-0.97	0.00	-111.00	0.00	111.00	2970.91	1485.45	5625.07	2816.71	0.02	-0.02	0.00	0.048
9.00	-25.47	-0.96	0.00	-110.03	0.00	110.03	2963.16	1481.58	5584.97	2796.63	0.02	-0.02	0.00	0.048
10.00	-25.29	-0.96	0.00	-109.06	0.00	109.06	2955.36	1477.68	5544.90	2776.57	0.03	-0.03	0.00	0.048
11.00	-25.12	-0.96	0.00	-108.10	0.00	108.10	2947.51	1473.75	5504.88	2756.53	0.03	-0.03	0.00	0.048
12.00	-24.94	-0.96	0.00	-107.14	0.00	107.14	2939.60	1469.80	5464.90	2736.51	0.04	-0.03	0.00	0.048
13.00	-24.77	-0.95	0.00	-106.18	0.00	106.18	2931.65	1465.83	5424.96	2716.51	0.04	-0.03	0.00	0.048
14.00	-24.60	-0.95	0.00	-105.23	0.00	105.23	2923.65	1461.82	5385.06	2696.53	0.05	-0.04	0.00	0.047
15.00	-24.43	-0.95	0.00	-104.28	0.00	104.28	2915.59	1457.80	5345.20	2676.57	0.06	-0.04	0.00	0.047
16.00	-24.25	-0.95	0.00	-103.33	0.00	103.33	2907.49	1453.74	5305.39	2656.64	0.07	-0.04	0.00	0.047
17.00	-24.08	-0.94	0.00	-102.38	0.00	102.38	2899.33	1449.67	5265.63	2636.73	0.08	-0.04	0.00	0.047
18.00	-23.91	-0.94	0.00	-101.44	0.00	101.44	2891.12	1445.56	5225.92	2616.84	0.09	-0.05	0.00	0.047
19.00	-23.74	-0.94	0.00	-100.50	0.00	100.50	2882.86	1441.43	5186.25	2596.98	0.10	-0.05	0.00	0.047
20.00	-23.57	-0.94	0.00	-99.56	0.00	99.56	2874.56	1437.28	5146.64	2577.14	0.11	-0.05	0.00	0.047
21.00	-23.41	-0.93	0.00	-98.62	0.00	98.62	2866.20	1433.10	5107.08	2557.33	0.12	-0.05	0.00	0.047
22.00	-23.24	-0.93	0.00	-97.69	0.00	97.69	2857.79	1428.89	5067.57	2537.55	0.13	-0.06	0.00	0.047
23.00	-23.07	-0.93	0.00	-96.76	0.00	96.76	2849.32	1424.66	5028.11	2517.79	0.14	-0.06	0.00	0.047
24.00	-22.90	-0.92	0.00	-95.83	0.00	95.83	2840.81	1420.41	4988.71	2498.06	0.16	-0.06	0.00	0.046
25.00	-22.74	-0.92	0.00	-94.91	0.00	94.91	2832.25	1416.12	4949.37	2478.36	0.17	-0.07	0.00	0.046
26.00	-22.57	-0.92	0.00	-93.99	0.00	93.99	2823.63	1411.82	4910.09	2458.69	0.18	-0.07	0.00	0.046
27.00	-22.41	-0.92	0.00	-93.07	0.00	93.07	2814.97	1407.48	4870.87	2439.05	0.20	-0.07	0.00	0.046
28.00	-22.24	-0.91	0.00	-92.15	0.00	92.15	2806.25	1403.13	4831.70	2419.44	0.21	-0.07	0.00	0.046
29.00	-22.08	-0.91	0.00	-91.24	0.00	91.24	2797.49	1398.74	4792.60	2399.86	0.23	-0.08	0.00	0.046
30.00	-21.92	-0.91	0.00	-90.33	0.00	90.33	2788.67	1394.33	4753.57	2380.32	0.24	-0.08	0.00	0.046
31.00	-21.76	-0.90	0.00	-89.42	0.00	89.42	2779.80	1389.90	4714.60	2360.80	0.26	-0.08	0.00	0.046
32.00	-21.59	-0.90	0.00	-88.52	0.00	88.52	2770.88	1385.44	4675.69	2341.32	0.28	-0.09	0.00	0.046
33.00	-21.43	-0.90	0.00	-87.62	0.00	87.62	2761.91	1380.95	4636.86	2321.88	0.30	-0.09	0.00	0.045
34.00	-21.27	-0.90	0.00	-86.72	0.00	86.72	2752.89	1376.44	4598.09	2302.46	0.32	-0.09	0.00	0.045
35.00	-21.11	-0.89	0.00	-85.82	0.00	85.82	2743.82	1371.91	4559.39	2283.08	0.34	-0.09	0.00	0.045
36.00	-20.95	-0.89	0.00	-84.93	0.00	84.93	2734.69	1367.35	4520.77	2263.74	0.36	-0.10	0.00	0.045
37.00	-20.80	-0.89	0.00	-84.04	0.00	84.04	2725.52	1362.76	4482.21	2244.44	0.38	-0.10	0.00	0.045
38.00	-20.64	-0.88	0.00	-83.16	0.00	83.16	2716.29	1358.15	4443.74	2225.17	0.40	-0.10	0.00	0.045
39.00	-20.48	-0.88	0.00	-82.27	0.00	82.27	2707.02	1353.51	4405.33	2205.94	0.42	-0.11	0.00	0.045
40.00	-20.32	-0.88	0.00	-81.39	0.00	81.39	2697.69	1348.85	4367.01	2186.75	0.44	-0.11	0.00	0.045
41.00	-20.17	-0.87	0.00	-80.52	0.00	80.52	2688.32	1344.16	4328.76	2167.60	0.47	-0.11	0.00	0.045
42.00	-20.01	-0.87	0.00	-79.64	0.00	79.64	2678.89	1339.44	4290.59	2148.48	0.49	-0.11	0.00	0.045
43.00	-19.86	-0.87	0.00	-78.77	0.00	78.77	2669.41	1334.70	4252.50	2129.41	0.51	-0.12	0.00	0.044
44.00	-19.70	-0.86	0.00	-77.91	0.00	77.91	2659.88	1329.94	4214.50	2110.38	0.54	-0.12	0.00	0.044
45.00	-19.55	-0.86	0.00	-77.04	0.00	77.04	2650.30	1325.15	4176.57	2091.39	0.56	-0.12	0.00	0.044
46.00	-19.40	-0.86	0.00	-76.18	0.00	76.18	2640.67	1320.33	4138.74	2072.44	0.59	-0.13	0.00	0.044

Calculated Forces

Structure: CT12215-A-SBA

Code: TIA-222-G

5/3/2022

Site Name: Litchfield 3, CT

Exposure: B



Height: 149.00 (ft)

Crest Height: 0.00

Base Elev: 0.000 (ft)

Site Class: B - Competent Rock

Gh: 1.1

Topography: 1

Struct Class: II

Page: 78

Tower Engineering Solutions

47.00	-19.25	-0.86	0.00	-75.32	0.00	75.32	2630.98	1315.49	4100.98	2053.54	0.62	-0.13	0.044
47.55	-19.16	-0.85	0.00	-74.85	0.00	74.85	2625.60	1312.80	4080.13	2043.10	0.63	-0.13	0.044
48.00	-19.05	-0.85	0.00	-74.47	0.00	74.47	2621.25	1310.62	4063.32	2034.68	0.65	-0.13	0.044
49.00	-18.81	-0.84	0.00	-73.62	0.00	73.62	2611.47	1305.73	4025.74	2015.86	0.67	-0.14	0.044
50.00	-18.57	-0.84	0.00	-72.77	0.00	72.77	2601.63	1300.82	3988.26	1997.09	0.70	-0.14	0.044
51.00	-18.33	-0.83	0.00	-71.93	0.00	71.93	2591.74	1295.87	3950.86	1978.37	0.73	-0.14	0.043
52.00	-18.09	-0.83	0.00	-71.10	0.00	71.10	2581.81	1290.90	3913.56	1959.69	0.76	-0.15	0.021
52.97	-17.85	-0.82	0.00	-70.30	0.00	70.30	1914.68	957.34	2935.86	1470.11	0.79	-0.15	0.023
53.00	-17.85	-0.82	0.00	-70.28	0.00	70.28	1914.50	957.25	2935.09	1469.72	0.79	-0.15	0.025
54.00	-17.72	-0.82	0.00	-69.46	0.00	69.46	1908.40	954.20	2909.37	1456.85	0.82	-0.15	0.025
55.00	-17.60	-0.81	0.00	-68.64	0.00	68.64	1902.26	951.13	2883.67	1443.98	0.86	-0.15	0.025
56.00	-17.47	-0.81	0.00	-67.83	0.00	67.83	1896.06	948.03	2858.01	1431.13	0.89	-0.15	0.025
57.00	-17.35	-0.81	0.00	-67.02	0.00	67.02	1889.81	944.90	2832.37	1418.29	0.92	-0.15	0.025
58.00	-17.22	-0.81	0.00	-66.21	0.00	66.21	1883.51	941.76	2806.77	1405.47	0.95	-0.16	0.025
59.00	-17.10	-0.80	0.00	-65.41	0.00	65.41	1877.16	938.58	2781.20	1392.67	0.99	-0.16	0.024
60.00	-16.97	-0.80	0.00	-64.61	0.00	64.61	1870.76	935.38	2755.66	1379.88	1.02	-0.16	0.024
61.00	-16.85	-0.80	0.00	-63.81	0.00	63.81	1864.31	932.15	2730.16	1367.11	1.05	-0.16	0.024
62.00	-16.73	-0.80	0.00	-63.01	0.00	63.01	1857.80	928.90	2704.70	1354.36	1.09	-0.16	0.024
63.00	-16.61	-0.79	0.00	-62.21	0.00	62.21	1851.25	925.63	2679.27	1341.63	1.12	-0.16	0.024
64.00	-16.48	-0.79	0.00	-61.42	0.00	61.42	1844.65	922.32	2653.88	1328.91	1.16	-0.17	0.024
65.00	-16.36	-0.79	0.00	-60.63	0.00	60.63	1837.99	919.00	2628.54	1316.22	1.19	-0.17	0.023
66.00	-16.24	-0.79	0.00	-59.84	0.00	59.84	1831.29	915.64	2603.23	1303.55	1.23	-0.17	0.023
67.00	-16.12	-0.79	0.00	-59.05	0.00	59.05	1824.53	912.26	2577.97	1290.90	1.26	-0.17	0.023
67.92	-16.01	-0.79	0.00	-58.33	0.00	58.33	1818.27	909.13	2554.77	1279.28	1.29	-0.17	0.018
68.00	-16.00	-0.79	0.00	-58.26	0.00	58.26	1817.72	908.86	2552.75	1278.27	1.30	-0.17	0.033
69.00	-15.88	-0.78	0.00	-57.48	0.00	57.48	1810.86	905.43	2527.58	1265.67	1.33	-0.18	0.032
70.00	-15.77	-0.78	0.00	-56.69	0.00	56.69	1803.95	901.98	2502.46	1253.09	1.37	-0.18	0.032
71.00	-15.65	-0.78	0.00	-55.91	0.00	55.91	1796.99	898.50	2477.38	1240.53	1.41	-0.18	0.032
72.00	-15.53	-0.78	0.00	-55.13	0.00	55.13	1789.98	894.99	2452.36	1228.00	1.45	-0.18	0.032
73.00	-15.40	-0.78	0.00	-54.34	0.00	54.34	1782.92	891.46	2427.38	1215.49	1.49	-0.19	0.032
74.00	-15.29	-0.78	0.00	-53.56	0.00	53.56	1775.81	887.90	2402.46	1203.02	1.52	-0.19	0.031
75.00	-15.17	-0.78	0.00	-52.78	0.00	52.78	1768.64	884.32	2377.59	1190.56	1.56	-0.19	0.031
76.00	-15.06	-0.78	0.00	-51.99	0.00	51.99	1761.43	880.71	2352.78	1178.14	1.60	-0.19	0.053
77.00	-14.94	-0.78	0.00	-51.21	0.00	51.21	1754.16	877.08	2328.02	1165.74	1.65	-0.20	0.052
78.00	-14.83	-0.79	0.00	-50.43	0.00	50.43	1746.84	873.42	2303.32	1153.37	1.69	-0.20	0.052
79.00	-14.71	-0.79	0.00	-49.64	0.00	49.64	1739.48	869.74	2278.68	1141.03	1.73	-0.21	0.052
80.00	-14.60	-0.79	0.00	-48.85	0.00	48.85	1732.06	866.03	2254.10	1128.72	1.77	-0.21	0.052
81.00	-14.49	-0.79	0.00	-48.07	0.00	48.07	1724.59	862.29	2229.58	1116.45	1.82	-0.21	0.051
82.00	-14.37	-0.79	0.00	-47.28	0.00	47.28	1717.07	858.53	2205.12	1104.20	1.86	-0.22	0.051
83.00	-14.26	-0.79	0.00	-46.49	0.00	46.49	1709.50	854.75	2180.73	1091.99	1.91	-0.22	0.051
84.00	-14.15	-0.79	0.00	-45.70	0.00	45.70	1701.88	850.94	2156.41	1079.81	1.96	-0.23	0.051
85.00	-14.04	-0.79	0.00	-44.91	0.00	44.91	1694.20	847.10	2132.15	1067.66	2.00	-0.23	0.050
86.00	-13.93	-0.79	0.00	-44.12	0.00	44.12	1686.48	843.24	2107.95	1055.54	2.05	-0.24	0.050
87.00	-13.82	-0.79	0.00	-43.33	0.00	43.33	1678.71	839.35	2083.83	1043.46	2.10	-0.24	0.050
88.00	-13.71	-0.79	0.00	-42.54	0.00	42.54	1670.88	835.44	2059.78	1031.42	2.15	-0.25	0.049
89.00	-13.60	-0.79	0.00	-41.75	0.00	41.75	1663.00	831.50	2035.80	1019.41	2.21	-0.25	0.049
90.00	-13.49	-0.79	0.00	-40.95	0.00	40.95	1655.08	827.54	2011.90	1007.44	2.26	-0.25	0.049
91.00	-13.38	-0.79	0.00	-40.16	0.00	40.16	1647.10	823.55	1988.06	995.51	2.31	-0.26	0.048
92.00	-13.28	-0.79	0.00	-39.37	0.00	39.37	1639.07	819.54	1964.31	983.61	2.37	-0.26	0.048
93.00	-13.17	-0.80	0.00	-38.57	0.00	38.57	1630.99	815.50	1940.63	971.76	2.42	-0.27	0.048
94.00	-13.06	-0.80	0.00	-37.78	0.00	37.78	1622.86	811.43	1917.03	959.94	2.48	-0.27	0.047
95.00	-12.96	-0.80	0.00	-36.98	0.00	36.98	1614.68	807.34	1893.51	948.16	2.54	-0.28	0.047
96.00	-12.85	-0.80	0.00	-36.19	0.00	36.19	1606.45	803.22	1870.07	936.43	2.60	-0.28	0.047
96.18	-12.83	-0.80	0.00	-36.04	0.00	36.04	1604.99	802.49	1865.94	934.36	2.61	-0.28	0.047
97.00	-12.70	-0.80	0.00	-35.39	0.00	35.39	1598.16	799.08	1846.72	924.73	2.65	-0.29	0.046
98.00	-12.55	-0.80	0.00	-34.59	0.00	34.59	1589.83	794.91	1823.44	913.08	2.71	-0.29	0.046
99.00	-12.39	-0.80	0.00	-33.79	0.00	33.79	1581.44	790.72	1800.26	901.47	2.78	-0.29	0.045

Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



99.25	-12.35	-0.80	0.00	-33.60	0.00	33.60	1579.34	789.67	1794.47	898.57	2.79	-0.30	0.026
100.00	-12.24	-0.80	0.00	-33.00	0.00	33.00	1573.01	786.50	1777.16	889.90	2.84	-0.30	0.025
100.34	-12.18	-0.80	0.00	-32.72	0.00	32.72	1075.68	537.84	1234.34	618.09	2.86	-0.30	0.028
101.00	-12.13	-0.80	0.00	-32.20	0.00	32.20	1072.67	536.33	1224.84	613.33	2.90	-0.30	0.032
102.00	-12.04	-0.80	0.00	-31.40	0.00	31.40	1068.04	534.02	1210.40	606.10	2.96	-0.30	0.032
102.25	-12.02	-0.80	0.00	-31.20	0.00	31.20	1066.88	533.44	1206.79	604.29	2.98	-0.30	0.032
102.25	-12.02	-0.80	0.00	-31.20	0.00	31.20	1066.88	533.44	1206.79	604.29	2.98	-0.30	0.032
103.00	-11.95	-0.80	0.00	-30.61	0.00	30.61	1063.37	531.68	1195.97	598.87	3.03	-0.31	0.062
104.00	-11.87	-0.80	0.00	-29.81	0.00	29.81	1058.64	529.32	1181.57	591.66	3.09	-0.31	0.062
105.00	-11.78	-0.80	0.00	-29.01	0.00	29.01	1053.86	526.93	1167.20	584.47	3.16	-0.32	0.061
106.00	-11.70	-0.80	0.00	-28.21	0.00	28.21	1049.03	524.52	1152.85	577.28	3.22	-0.32	0.060
107.00	-11.61	-0.80	0.00	-27.41	0.00	27.41	1044.15	522.08	1138.52	570.11	3.29	-0.33	0.059
108.00	-11.53	-0.80	0.00	-26.61	0.00	26.61	1039.22	519.61	1124.23	562.95	3.36	-0.33	0.058
109.00	-11.44	-0.80	0.00	-25.81	0.00	25.81	1034.24	517.12	1109.97	555.81	3.43	-0.34	0.058
110.00	-11.36	-0.80	0.00	-25.01	0.00	25.01	1029.21	514.60	1095.73	548.68	3.50	-0.34	0.057
111.00	-11.28	-0.80	0.00	-24.21	0.00	24.21	1024.13	512.06	1081.53	541.57	3.58	-0.35	0.056
112.00	-11.19	-0.80	0.00	-23.40	0.00	23.40	1018.99	509.50	1067.37	534.48	3.65	-0.35	0.055
113.00	-11.11	-0.80	0.00	-22.60	0.00	22.60	1013.81	506.90	1053.24	527.40	3.72	-0.36	0.054
114.00	-11.03	-0.80	0.00	-21.79	0.00	21.79	1008.57	504.29	1039.14	520.34	3.80	-0.36	0.053
115.00	-8.60	-0.79	0.00	-20.99	0.00	20.99	1003.28	501.64	1025.09	513.31	3.88	-0.37	0.049
116.00	-8.52	-0.79	0.00	-20.20	0.00	20.20	997.95	498.97	1011.07	506.29	3.96	-0.38	0.048
117.00	-8.45	-0.79	0.00	-19.41	0.00	19.41	992.56	496.28	997.10	499.29	4.03	-0.38	0.047
118.00	-8.37	-0.79	0.00	-18.62	0.00	18.62	987.12	493.56	983.16	492.31	4.11	-0.39	0.046
119.00	-8.29	-0.79	0.00	-17.83	0.00	17.83	981.63	490.81	969.27	485.36	4.20	-0.39	0.045
120.00	-8.21	-0.79	0.00	-17.04	0.00	17.04	976.09	488.04	955.42	478.42	4.28	-0.39	0.044
121.00	-8.14	-0.79	0.00	-16.25	0.00	16.25	970.50	485.25	941.62	471.51	4.36	-0.40	0.043
122.00	-8.06	-0.79	0.00	-15.46	0.00	15.46	964.85	482.43	927.87	464.62	4.45	-0.40	0.042
123.00	-7.99	-0.79	0.00	-14.67	0.00	14.67	959.16	479.58	914.16	457.76	4.53	-0.41	0.040
124.00	-7.91	-0.79	0.00	-13.88	0.00	13.88	953.42	476.71	900.51	450.92	4.62	-0.41	0.039
125.00	-7.84	-0.79	0.00	-13.09	0.00	13.09	947.62	473.81	886.90	444.11	4.70	-0.42	0.038
126.00	-7.76	-0.79	0.00	-12.30	0.00	12.30	941.77	470.89	873.35	437.32	4.79	-0.42	0.036
127.00	-7.69	-0.78	0.00	-11.52	0.00	11.52	935.88	467.94	859.85	430.56	4.88	-0.42	0.035
128.00	-7.61	-0.78	0.00	-10.73	0.00	10.73	929.93	464.96	846.40	423.83	4.97	-0.43	0.034
129.00	-7.54	-0.78	0.00	-9.95	0.00	9.95	923.93	461.97	833.02	417.13	5.06	-0.43	0.032
130.00	-4.30	-0.60	0.00	-9.17	0.00	9.17	917.88	458.94	819.69	410.45	5.15	-0.44	0.027
131.00	-4.25	-0.59	0.00	-8.57	0.00	8.57	911.78	455.89	806.41	403.81	5.24	-0.44	0.026
132.00	-4.19	-0.59	0.00	-7.98	0.00	7.98	905.63	452.81	793.20	397.19	5.33	-0.44	0.025
133.00	-4.14	-0.59	0.00	-7.39	0.00	7.39	899.43	449.71	780.05	390.61	5.43	-0.44	0.024
134.00	-4.09	-0.59	0.00	-6.80	0.00	6.80	893.17	446.59	766.97	384.05	5.52	-0.45	0.022
135.00	-4.04	-0.58	0.00	-6.21	0.00	6.21	886.87	443.43	753.94	377.53	5.61	-0.45	0.021
136.00	-3.98	-0.58	0.00	-5.63	0.00	5.63	880.51	440.26	740.98	371.04	5.71	-0.45	0.020
137.00	-3.93	-0.58	0.00	-5.05	0.00	5.05	874.11	437.05	728.09	364.59	5.80	-0.46	0.018
138.00	-3.71	-0.56	0.00	-4.47	0.00	4.47	867.65	433.83	715.27	358.17	5.90	-0.46	0.017
139.00	-3.66	-0.55	0.00	-3.91	0.00	3.91	861.15	430.57	702.52	351.78	6.00	-0.46	0.015
140.00	-2.26	-0.39	0.00	-3.36	0.00	3.36	854.59	427.29	689.83	345.43	6.09	-0.46	0.012
141.00	-2.22	-0.39	0.00	-2.97	0.00	2.97	847.98	423.99	677.22	339.11	6.19	-0.46	0.011
142.00	-2.18	-0.38	0.00	-2.58	0.00	2.58	841.32	420.66	664.68	332.84	6.29	-0.46	0.010
143.00	-2.14	-0.38	0.00	-2.20	0.00	2.20	834.61	417.30	652.22	326.60	6.38	-0.47	0.009
144.00	-2.11	-0.37	0.00	-1.82	0.00	1.82	827.84	413.92	639.83	320.39	6.48	-0.47	0.008
145.00	-2.07	-0.37	0.00	-1.44	0.00	1.44	821.03	410.52	627.52	314.23	6.58	-0.47	0.007
146.00	-2.03	-0.36	0.00	-1.07	0.00	1.07	814.17	407.08	615.29	308.10	6.68	-0.47	0.006
147.00	-1.99	-0.36	0.00	-0.71	0.00	0.71	805.87	402.94	602.11	301.50	6.78	-0.47	0.005
148.00	-1.96	-0.35	0.00	-0.35	0.00	0.35	796.71	398.35	588.42	294.65	6.87	-0.47	0.004
149.00	0.00	-0.34	0.00	0.00	0.00	0.00	787.55	393.77	574.90	287.88	6.97	-0.47	0.000

Wind Loading - Shaft

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Topography: 1

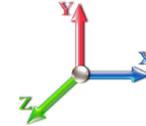
Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
 Page: 80



Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.70	6.129	6.74	203.90	0.650	0.000	0.00	0.000	0.00	0.0	0.0	0.0
1.00		1.00	0.70	6.129	6.74	203.02	0.650	0.000	1.00	4.053	2.63	17.8	0.0	160.6
2.00		1.00	0.70	6.129	6.74	202.14	0.650	0.000	1.00	4.035	2.62	17.7	0.0	159.9
3.00		1.00	0.70	6.129	6.74	201.26	0.650	0.000	1.00	4.018	2.61	17.6	0.0	159.2
4.00		1.00	0.70	6.129	6.74	200.38	0.650	0.000	1.00	4.000	2.60	17.5	0.0	158.5
5.00		1.00	0.70	6.129	6.74	199.49	0.650	0.000	1.00	3.983	2.59	17.5	0.0	157.8
6.00		1.00	0.70	6.129	6.74	198.61	0.650	0.000	1.00	3.965	2.58	17.4	0.0	157.1
7.00		1.00	0.70	6.129	6.74	197.73	0.650	0.000	1.00	3.948	2.57	17.3	0.0	156.4
8.00		1.00	0.70	6.129	6.74	196.85	0.650	0.000	1.00	3.930	2.55	17.2	0.0	155.7
9.00		1.00	0.70	6.129	6.74	195.97	0.650	0.000	1.00	3.913	2.54	17.1	0.0	155.0
10.00		1.00	0.70	6.129	6.74	195.09	0.650	0.000	1.00	3.895	2.53	17.1	0.0	154.3
11.00		1.00	0.70	6.129	6.74	194.21	0.650	0.000	1.00	3.878	2.52	17.0	0.0	153.6
12.00		1.00	0.70	6.129	6.74	193.33	0.650	0.000	1.00	3.860	2.51	16.9	0.0	152.9
13.00		1.00	0.70	6.129	6.74	192.45	0.650	0.000	1.00	3.843	2.50	16.8	0.0	152.2
14.00		1.00	0.70	6.129	6.74	191.57	0.650	0.000	1.00	3.825	2.49	16.8	0.0	151.5
15.00		1.00	0.70	6.129	6.74	190.69	0.650	0.000	1.00	3.807	2.47	16.7	0.0	150.8
16.00		1.00	0.70	6.129	6.74	189.81	0.650	0.000	1.00	3.790	2.46	16.6	0.0	150.1
17.00		1.00	0.70	6.129	6.74	188.93	0.650	0.000	1.00	3.772	2.45	16.5	0.0	149.4
18.00		1.00	0.70	6.129	6.74	188.05	0.650	0.000	1.00	3.755	2.44	16.5	0.0	148.7
19.00		1.00	0.70	6.129	6.74	187.17	0.650	0.000	1.00	3.737	2.43	16.4	0.0	148.0
20.00		1.00	0.70	6.129	6.74	186.29	0.650	0.000	1.00	3.720	2.42	16.3	0.0	147.3
21.00		1.00	0.70	6.129	6.74	185.41	0.650	0.000	1.00	3.702	2.41	16.2	0.0	146.6
22.00		1.00	0.70	6.129	6.74	184.53	0.650	0.000	1.00	3.685	2.40	16.1	0.0	145.9
23.00		1.00	0.70	6.129	6.74	183.65	0.650	0.000	1.00	3.667	2.38	16.1	0.0	145.2
24.00		1.00	0.70	6.129	6.74	182.77	0.650	0.000	1.00	3.650	2.37	16.0	0.0	144.5
25.00		1.00	0.70	6.129	6.74	181.89	0.650	0.000	1.00	3.632	2.36	15.9	0.0	143.8
26.00		1.00	0.70	6.129	6.74	181.01	0.650	0.000	1.00	3.615	2.35	15.8	0.0	143.1
27.00		1.00	0.70	6.129	6.74	180.13	0.650	0.000	1.00	3.597	2.34	15.8	0.0	142.4
28.00		1.00	0.70	6.129	6.74	179.25	0.650	0.000	1.00	3.580	2.33	15.7	0.0	141.7
29.00		1.00	0.70	6.129	6.74	178.37	0.650	0.000	1.00	3.562	2.32	15.6	0.0	141.0
30.00		1.00	0.70	6.134	6.75	177.56	0.650	0.000	1.00	3.544	2.30	15.5	0.0	140.3
31.00		1.00	0.71	6.192	6.81	177.51	0.650	0.000	1.00	3.527	2.29	15.6	0.0	139.6
32.00		1.00	0.71	6.248	6.87	177.43	0.650	0.000	1.00	3.509	2.28	15.7	0.0	138.9
33.00		1.00	0.72	6.303	6.93	177.32	0.650	0.000	1.00	3.492	2.27	15.7	0.0	138.2
34.00		1.00	0.73	6.357	6.99	177.18	0.650	0.000	1.00	3.474	2.26	15.8	0.0	137.5
35.00		1.00	0.73	6.410	7.05	177.02	0.650	0.000	1.00	3.457	2.25	15.8	0.0	136.8
36.00		1.00	0.74	6.462	7.11	176.83	0.650	0.000	1.00	3.439	2.24	15.9	0.0	136.1
37.00		1.00	0.74	6.513	7.16	176.61	0.650	0.000	1.00	3.422	2.22	15.9	0.0	135.4
38.00		1.00	0.75	6.562	7.22	176.38	0.650	0.000	1.00	3.404	2.21	16.0	0.0	134.7
39.00		1.00	0.76	6.611	7.27	176.12	0.650	0.000	1.00	3.387	2.20	16.0	0.0	134.0
40.00		1.00	0.76	6.659	7.33	175.84	0.650	0.000	1.00	3.369	2.19	16.0	0.0	133.3
41.00		1.00	0.77	6.706	7.38	175.54	0.650	0.000	1.00	3.352	2.18	16.1	0.0	132.6
42.00		1.00	0.77	6.753	7.43	175.22	0.650	0.000	1.00	3.334	2.17	16.1	0.0	131.9
43.00		1.00	0.78	6.798	7.48	174.88	0.650	0.000	1.00	3.316	2.16	16.1	0.0	131.2
44.00		1.00	0.78	6.843	7.53	174.53	0.650	0.000	1.00	3.299	2.14	16.1	0.0	130.5
45.00		1.00	0.79	6.887	7.58	174.16	0.650	0.000	1.00	3.281	2.13	16.2	0.0	129.8
46.00		1.00	0.79	6.931	7.62	173.77	0.650	0.000	1.00	3.264	2.12	16.2	0.0	129.1

Wind Loading - Shaft

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 81

47.00	1.00	0.80	6.973	7.67	173.36	0.650	0.000	1.00	3.246	2.11	16.2	0.0	128.4
47.55 Bot - Section 2	1.00	0.80	6.997	7.70	173.13	0.650	0.000	0.55	1.789	1.16	8.9	0.0	70.8
48.00	1.00	0.80	7.015	7.72	172.94	0.650	0.000	0.45	1.459	0.95	7.3	0.0	103.2
49.00	1.00	0.81	7.057	7.76	172.51	0.650	0.000	1.00	3.254	2.11	16.4	0.0	230.2
50.00 Appurtenance(s)	1.00	0.81	7.098	7.81	172.06	0.650	0.000	1.00	3.236	2.10	16.4	0.0	228.9
51.00	1.00	0.82	7.138	7.85	171.60	0.672 *	0.000	1.00	3.219	2.16	17.0	0.0	227.6
52.00 RB1 RB2	1.00	0.82	7.178	7.90	171.12	0.674 *	0.000	1.00	3.201	2.16	17.0	0.0	226.4
52.97 Top - Section 1	1.00	0.82	7.216	7.94	170.65	0.675 *	0.000	0.97	3.088	2.08	16.5	0.0	218.4
53.00	1.00	0.82	7.217	7.94	172.94	0.673 *	0.000	0.03	0.095	0.06	0.5	0.0	3.0
54.00	1.00	0.83	7.255	7.98	172.44	0.673 *	0.000	1.00	3.166	2.13	17.0	0.0	100.3
55.00	1.00	0.83	7.294	8.02	171.94	0.674 *	0.000	1.00	3.148	2.12	17.0	0.0	99.8
56.00	1.00	0.84	7.331	8.06	171.42	0.676 *	0.000	1.00	3.131	2.12	17.1	0.0	99.2
57.00	1.00	0.84	7.368	8.11	170.89	0.677 *	0.000	1.00	3.113	2.11	17.1	0.0	98.7
58.00	1.00	0.85	7.405	8.15	170.34	0.678 *	0.000	1.00	3.096	2.10	17.1	0.0	98.1
59.00	1.00	0.85	7.441	8.19	169.79	0.679 *	0.000	1.00	3.078	2.09	17.1	0.0	97.5
60.00	1.00	0.85	7.477	8.22	169.23	0.681 *	0.000	1.00	3.061	2.08	17.1	0.0	97.0
61.00	1.00	0.86	7.513	8.26	168.65	0.682 *	0.000	1.00	3.043	2.08	17.1	0.0	96.4
62.00	1.00	0.86	7.548	8.30	168.07	0.683 *	0.000	1.00	3.026	2.07	17.2	0.0	95.9
63.00	1.00	0.87	7.582	8.34	167.47	0.685 *	0.000	1.00	3.008	2.06	17.2	0.0	95.3
64.00	1.00	0.87	7.616	8.38	166.87	0.686 *	0.000	1.00	2.991	2.05	17.2	0.0	94.7
65.00	1.00	0.87	7.650	8.42	166.25	0.687 *	0.000	1.00	2.973	2.04	17.2	0.0	94.2
66.00	1.00	0.88	7.684	8.45	165.63	0.689 *	0.000	1.00	2.956	2.04	17.2	0.0	93.6
67.00	1.00	0.88	7.717	8.49	165.00	0.690 *	0.000	1.00	2.938	2.03	17.2	0.0	93.1
67.92 RB3	1.00	0.88	7.747	8.52	164.41	0.691 *	0.000	0.92	2.687	1.86	15.8	0.0	85.1
68.00 RT1 RT2	1.00	0.89	7.749	8.52	164.36	0.692 *	0.000	0.08	0.233	0.16	1.4	0.0	7.4
69.00	1.00	0.89	7.782	8.56	163.71	0.693 *	0.000	1.00	2.903	2.01	17.2	0.0	92.0
70.00	1.00	0.89	7.814	8.60	163.05	0.694 *	0.000	1.00	2.885	2.00	17.2	0.0	91.4
71.00	1.00	0.90	7.846	8.63	162.39	0.650	0.000	1.00	2.868	1.86	16.1	0.0	90.8
72.00	1.00	0.90	7.877	8.66	161.72	0.650	0.000	1.00	2.850	1.85	16.1	0.0	90.3
73.00 Appurtenance(s)	1.00	0.90	7.908	8.70	161.04	0.650	0.000	1.00	2.833	1.84	16.0	0.0	89.7
74.00	1.00	0.91	7.939	8.73	160.35	0.650	0.000	1.00	2.815	1.83	16.0	0.0	89.2
75.00 RT3	1.00	0.91	7.969	8.77	159.65	0.650	0.000	1.00	2.798	1.82	15.9	0.0	88.6
76.00	1.00	0.91	8.000	8.80	158.95	0.650	0.000	1.00	2.780	1.81	15.9	0.0	88.0
77.00	1.00	0.92	8.030	8.83	158.24	0.650	0.000	1.00	2.763	1.80	15.9	0.0	87.5
78.00	1.00	0.92	8.059	8.87	157.52	0.650	0.000	1.00	2.745	1.78	15.8	0.0	86.9
79.00	1.00	0.92	8.089	8.90	156.80	0.650	0.000	1.00	2.728	1.77	15.8	0.0	86.4
80.00	1.00	0.93	8.118	8.93	156.06	0.650	0.000	1.00	2.710	1.76	15.7	0.0	85.8
81.00	1.00	0.93	8.147	8.96	155.33	0.650	0.000	1.00	2.693	1.75	15.7	0.0	85.2
82.00	1.00	0.93	8.175	8.99	154.58	0.650	0.000	1.00	2.675	1.74	15.6	0.0	84.7
83.00	1.00	0.94	8.204	9.02	153.83	0.650	0.000	1.00	2.657	1.73	15.6	0.0	84.1
84.00	1.00	0.94	8.232	9.05	153.08	0.650	0.000	1.00	2.640	1.72	15.5	0.0	83.6
85.00	1.00	0.94	8.260	9.09	152.31	0.650	0.000	1.00	2.622	1.70	15.5	0.0	83.0
86.00	1.00	0.95	8.287	9.12	151.54	0.650	0.000	1.00	2.605	1.69	15.4	0.0	82.4
87.00	1.00	0.95	8.315	9.15	150.77	0.650	0.000	1.00	2.587	1.68	15.4	0.0	81.9
88.00	1.00	0.95	8.342	9.18	149.99	0.650	0.000	1.00	2.570	1.67	15.3	0.0	81.3
89.00	1.00	0.96	8.369	9.21	149.20	0.650	0.000	1.00	2.552	1.66	15.3	0.0	80.8
90.00	1.00	0.96	8.396	9.24	148.41	0.650	0.000	1.00	2.535	1.65	15.2	0.0	80.2
91.00	1.00	0.96	8.422	9.26	147.61	0.650	0.000	1.00	2.517	1.64	15.2	0.0	79.6
92.00	1.00	0.96	8.448	9.29	146.81	0.650	0.000	1.00	2.500	1.62	15.1	0.0	79.1
93.00	1.00	0.97	8.475	9.32	146.00	0.650	0.000	1.00	2.482	1.61	15.0	0.0	78.5
94.00	1.00	0.97	8.501	9.35	145.19	0.650	0.000	1.00	2.465	1.60	15.0	0.0	78.0
95.00	1.00	0.97	8.526	9.38	144.37	0.650	0.000	1.00	2.447	1.59	14.9	0.0	77.4
96.00	1.00	0.98	8.552	9.41	143.55	0.650	0.000	1.00	2.429	1.58	14.9	0.0	76.8
96.18 Bot - Section 3	1.00	0.98	8.556	9.41	143.40	0.657 *	0.000	0.18	0.427	0.28	2.6	0.0	13.5
97.00	1.00	0.98	8.577	9.43	142.72	0.657 *	0.000	0.82	2.011	1.32	12.5	0.0	110.6
98.00	1.00	0.98	8.602	9.46	141.88	0.743 *	0.000	1.00	2.426	1.80	17.1	0.0	133.4
99.00	1.00	0.99	8.627	9.49	141.05	0.746 *	0.000	1.00	2.409	1.80	17.0	0.0	132.4

Wind Loading - Shaft

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
 Page: 82



99.25 RB4	1.00	0.99	8.634	9.50	140.84	0.747 *	0.000	0.25	0.599	0.45	4.3	0.0	33.0	
100.00	1.00	0.99	8.652	9.52	140.20	0.748 *	0.000	0.75	1.792	1.34	12.8	0.0	98.5	
100.34 Top - Section 2	1.00	0.99	8.661	9.53	139.91	0.749 *	0.000	0.34	0.817	0.61	5.8	0.0	44.9	
101.00	1.00	0.99	8.677	9.54	141.25	0.746 *	0.000	0.66	1.557	1.16	11.1	0.0	37.0	
102.00	1.00	0.99	8.701	9.57	140.40	0.748 *	0.000	1.00	2.356	1.76	16.9	0.0	56.0	
102.25 RT4	1.00	0.99	8.707	9.58	140.19	0.750 *	0.000	0.25	0.586	0.44	4.2	0.0	13.9	
103.00	1.00	1.00	8.726	9.60	139.55	0.751 *	0.000	0.75	1.752	1.32	12.6	0.0	41.6	
104.00	1.00	1.00	8.750	9.62	138.69	0.753 *	0.000	1.00	2.321	1.75	16.8	0.0	55.2	
105.00	1.00	1.00	8.774	9.65	137.82	0.755 *	0.000	1.00	2.303	1.74	16.8	0.0	54.7	
106.00	1.00	1.00	8.797	9.68	136.96	0.668 *	0.000	1.00	2.286	1.53	14.8	0.0	54.3	
107.00	1.00	1.01	8.821	9.70	136.08	0.670 *	0.000	1.00	2.268	1.52	14.7	0.0	53.9	
108.00	1.00	1.01	8.845	9.73	135.21	0.672 *	0.000	1.00	2.251	1.51	14.7	0.0	53.5	
109.00	1.00	1.01	8.868	9.75	134.33	0.673 *	0.000	1.00	2.233	1.50	14.7	0.0	53.1	
110.00	1.00	1.02	8.891	9.78	133.44	0.675 *	0.000	1.00	2.216	1.50	14.6	0.0	52.6	
111.00	1.00	1.02	8.914	9.81	132.55	0.677 *	0.000	1.00	2.198	1.49	14.6	0.0	52.2	
112.00	1.00	1.02	8.937	9.83	131.66	0.679 *	0.000	1.00	2.181	1.48	14.5	0.0	51.8	
113.00	1.00	1.02	8.960	9.86	130.76	0.680 *	0.000	1.00	2.163	1.47	14.5	0.0	51.4	
114.00	1.00	1.03	8.982	9.88	129.86	0.682 *	0.000	1.00	2.146	1.46	14.5	0.0	51.0	
115.00 Appurtenance(s)	1.00	1.03	9.005	9.91	128.96	0.684 *	0.000	1.00	2.128	1.46	14.4	0.0	50.5	
116.00	1.00	1.03	9.027	9.93	128.05	0.650	0.000	1.00	2.111	1.37	13.6	0.0	50.1	
117.00	1.00	1.03	9.049	9.95	127.14	0.650	0.000	1.00	2.093	1.36	13.5	0.0	49.7	
118.00	1.00	1.04	9.071	9.98	126.22	0.650	0.000	1.00	2.075	1.35	13.5	0.0	49.3	
119.00	1.00	1.04	9.093	10.00	125.30	0.650	0.000	1.00	2.058	1.34	13.4	0.0	48.9	
120.00	1.00	1.04	9.115	10.03	124.38	0.650	0.000	1.00	2.040	1.33	13.3	0.0	48.4	
121.00	1.00	1.04	9.136	10.05	123.45	0.650	0.000	1.00	2.023	1.31	13.2	0.0	48.0	
122.00	1.00	1.05	9.158	10.07	122.52	0.650	0.000	1.00	2.005	1.30	13.1	0.0	47.6	
123.00	1.00	1.05	9.179	10.10	121.58	0.650	0.000	1.00	1.988	1.29	13.0	0.0	47.2	
124.00	1.00	1.05	9.201	10.12	120.65	0.650	0.000	1.00	1.970	1.28	13.0	0.0	46.8	
125.00	1.00	1.05	9.222	10.14	119.71	0.650	0.000	1.00	1.953	1.27	12.9	0.0	46.4	
126.00	1.00	1.06	9.243	10.17	118.76	0.650	0.000	1.00	1.935	1.26	12.8	0.0	45.9	
127.00	1.00	1.06	9.264	10.19	117.81	0.650	0.000	1.00	1.918	1.25	12.7	0.0	45.5	
128.00	1.00	1.06	9.284	10.21	116.86	0.650	0.000	1.00	1.900	1.24	12.6	0.0	45.1	
129.00	1.00	1.06	9.305	10.24	115.91	0.650	0.000	1.00	1.883	1.22	12.5	0.0	44.7	
130.00 Appurtenance(s)	1.00	1.07	9.326	10.26	114.95	0.650	0.000	1.00	1.865	1.21	12.4	0.0	44.3	
131.00	1.00	1.07	9.346	10.28	113.99	0.650	0.000	1.00	1.848	1.20	12.3	0.0	43.8	
132.00	1.00	1.07	9.366	10.30	113.02	0.650	0.000	1.00	1.830	1.19	12.3	0.0	43.4	
133.00	1.00	1.07	9.387	10.33	112.06	0.650	0.000	1.00	1.812	1.18	12.2	0.0	43.0	
134.00	1.00	1.07	9.407	10.35	111.09	0.650	0.000	1.00	1.795	1.17	12.1	0.0	42.6	
135.00	1.00	1.08	9.427	10.37	110.11	0.650	0.000	1.00	1.777	1.16	12.0	0.0	42.2	
136.00	1.00	1.08	9.447	10.39	109.14	0.650	0.000	1.00	1.760	1.14	11.9	0.0	41.7	
137.00	1.00	1.08	9.466	10.41	108.16	0.650	0.000	1.00	1.742	1.13	11.8	0.0	41.3	
138.00 Appurtenance(s)	1.00	1.08	9.486	10.43	107.17	0.650	0.000	1.00	1.725	1.12	11.7	0.0	40.9	
139.00	1.00	1.09	9.506	10.46	106.19	0.650	0.000	1.00	1.707	1.11	11.6	0.0	40.5	
140.00 Appurtenance(s)	1.00	1.09	9.525	10.48	105.20	0.650	0.000	1.00	1.690	1.10	11.5	0.0	40.1	
141.00	1.00	1.09	9.545	10.50	104.21	0.650	0.000	1.00	1.672	1.09	11.4	0.0	39.6	
142.00	1.00	1.09	9.564	10.52	103.21	0.650	0.000	1.00	1.655	1.08	11.3	0.0	39.2	
143.00	1.00	1.09	9.583	10.54	102.22	0.650	0.000	1.00	1.637	1.06	11.2	0.0	38.8	
144.00	1.00	1.10	9.602	10.56	101.22	0.650	0.000	1.00	1.620	1.05	11.1	0.0	38.4	
145.00	1.00	1.10	9.621	10.58	100.21	0.650	0.000	1.00	1.602	1.04	11.0	0.0	38.0	
146.00	1.00	1.10	9.640	10.60	99.21	0.650	0.000	1.00	1.585	1.03	10.9	0.0	37.5	
147.00	1.00	1.10	9.659	10.62	98.20	0.650	0.000	1.00	1.567	1.02	10.8	0.0	37.1	
148.00	1.00	1.11	9.678	10.65	97.19	0.650	0.000	1.00	1.549	1.01	10.7	0.0	36.7	
149.00 Appurtenance(s)	1.00	1.11	9.696	10.67	96.17	0.650	0.000	1.00	1.532	1.00	10.6	0.0	36.3	
* Cf Adjusted by Linear Load Ra Effect														
								Totals:	149.00			2,276.8		14,728.1

Discrete Appurtenance Forces

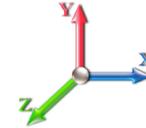
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 83

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

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	149.00	Low Profile Platform	1	9.696	10.666	1.00	1.00	25.00	1200.00	0.000	0.000	266.65	0.00	0.00
2	149.00	ACU-A20-N	4	9.752	10.727	0.40	0.80	0.22	4.00	0.000	3.000	2.40	0.00	7.21
3	149.00	800MHZ Filter	3	9.752	10.727	0.40	0.80	0.94	26.40	0.000	3.000	10.04	0.00	30.12
4	149.00	TD-RRH8x20-25	3	9.752	10.727	0.40	0.80	4.86	210.00	0.000	3.000	52.13	0.00	156.40
5	149.00	800MHZ	3	9.752	10.727	0.40	0.80	3.17	178.50	0.000	3.000	33.98	0.00	101.95
6	149.00	1900MHZ	3	9.752	10.727	0.40	0.80	3.32	180.00	0.000	3.000	35.66	0.00	106.97
7	149.00	APXVTM14-C-I20	3	9.752	10.727	0.63	0.80	12.02	168.00	0.000	3.000	128.94	0.00	386.83
8	149.00	APXVSP18-C-A20	3	9.752	10.727	0.66	0.80	15.98	171.00	0.000	3.000	171.37	0.00	514.11
9	140.00	Low Profile	1	9.525	10.478	1.00	1.00	22.00	1500.00	0.000	0.000	230.51	0.00	0.00
10	138.00	FD9R6004/2C-3L	6	9.486	10.435	0.40	0.80	0.86	18.60	0.000	0.000	9.02	0.00	0.00
11	138.00	GPS Receiver	1	9.486	10.435	0.80	0.80	0.80	10.00	0.000	0.000	8.35	0.00	0.00
12	138.00	BXA-171085-12B_2	3	9.486	10.435	0.67	0.80	9.56	45.00	0.000	0.000	99.71	0.00	0.00
13	138.00	BXA-70063-6CF_2	3	9.486	10.435	0.58	0.80	13.26	51.00	0.000	0.000	138.39	0.00	0.00
14	138.00	LPA-80080/6CF	3	9.486	10.435	1.36	0.80	17.67	63.00	0.000	0.000	184.34	0.00	0.00
15	130.00	RRUS 4478 B14	3	9.326	10.258	0.38	0.75	1.86	178.20	0.000	0.000	19.04	0.00	0.00
16	130.00	(3) 12.5' - 2" Horizontal	1	9.326	10.258	0.75	1.00	4.45	137.25	0.000	0.000	45.68	0.00	0.00
17	130.00	XP-2020	24	9.326	10.258	0.56	0.75	9.31	240.00	0.000	0.000	95.56	0.00	0.00
18	130.00	VSRDual-TS-B-HD	2	9.326	10.258	0.56	0.75	4.61	296.80	0.000	0.000	47.32	0.00	0.00
19	130.00	DC6-48-60-0-8C-EV	1	9.326	10.258	0.75	0.75	3.58	16.00	0.000	0.000	36.78	0.00	0.00
20	130.00	ABT-DF-DM-ADBH	1	9.326	10.258	0.75	0.75	0.04	1.10	0.000	0.000	0.38	0.00	0.00
21	130.00	7770.00	3	9.326	10.258	0.55	0.75	9.03	105.00	0.000	0.000	92.67	0.00	0.00
22	130.00	LGP 21401	12	9.326	10.258	0.38	0.75	0.00	210.00	0.000	0.000	0.00	0.00	0.00
23	130.00	DC6-48-60-18-8F	1	9.326	10.258	0.75	0.75	0.69	31.80	0.000	0.000	7.08	0.00	0.00
24	130.00	DC6-48-60-18-8C	1	9.326	10.258	0.75	0.75	0.95	20.00	0.000	0.000	9.69	0.00	0.00
25	130.00	80010965	6	9.326	10.258	0.53	0.75	44.12	651.60	0.000	0.000	452.62	0.00	0.00
26	130.00	4449 B5/B12	3	9.326	10.258	0.38	0.75	2.22	213.00	0.000	0.000	22.73	0.00	0.00
27	130.00	8843 B2/B66A	3	9.326	10.258	0.38	0.75	1.84	216.00	0.000	0.000	18.93	0.00	0.00
28	130.00	Low Profile Platform	1	9.326	10.258	1.00	1.00	25.00	1200.00	0.000	0.000	256.46	0.00	0.00
29	115.00	AIR6449 B41	3	9.005	9.905	0.57	0.80	9.63	309.00	0.000	0.000	95.36	0.00	0.00
30	115.00	(3) Stabilizer Kit (12' FW)	1	9.005	9.905	1.00	1.00	6.10	180.00	0.000	0.000	60.42	0.00	0.00
31	115.00	T-Arm	3	9.005	9.905	0.56	0.75	13.50	1050.00	0.000	0.000	133.72	0.00	0.00
32	115.00	RRUS 11	3	9.005	9.905	0.40	0.80	3.02	152.10	0.000	0.000	29.95	0.00	0.00
33	115.00	APXVAALL24_43-U-NA20	3	9.005	9.905	0.58	0.80	35.46	368.40	0.000	0.000	351.24	0.00	0.00
34	115.00	4460 Radio	3	9.005	9.905	0.40	0.80	3.42	327.00	0.000	0.000	33.88	0.00	0.00
35	115.00	4449 B71 + B85	3	9.005	9.905	0.40	0.80	2.36	219.60	0.000	0.000	23.42	0.00	0.00
36	73.00	GPS Receiver	1	7.908	8.699	1.00	1.00	1.00	10.00	0.000	0.000	8.70	0.00	0.00
37	50.00	58532A	1	7.098	7.807	1.00	1.00	0.22	0.40	0.000	0.000	1.72	0.00	0.00

Totals: **9,958.75** **3,214.84**

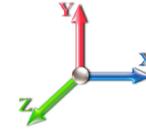
Total Applied Force Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 84



Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
1.00		17.76	201.13	0.00	0.00
2.00		17.68	200.43	0.00	0.00
3.00		17.61	199.73	0.00	0.00
4.00		17.53	199.03	0.00	0.00
5.00		17.45	198.33	0.00	0.00
6.00		17.38	197.64	0.00	0.00
7.00		17.30	196.94	0.00	0.00
8.00		17.22	196.24	0.00	0.00
9.00		17.15	195.54	0.00	0.00
10.00		17.07	194.84	0.00	0.00
11.00		16.99	194.14	0.00	0.00
12.00		16.91	193.44	0.00	0.00
13.00		16.84	192.74	0.00	0.00
14.00		16.76	192.04	0.00	0.00
15.00		16.68	191.34	0.00	0.00
16.00		16.61	190.64	0.00	0.00
17.00		16.53	189.94	0.00	0.00
18.00		16.45	189.24	0.00	0.00
19.00		16.38	188.54	0.00	0.00
20.00		16.30	187.84	0.00	0.00
21.00		16.22	187.15	0.00	0.00
22.00		16.15	186.45	0.00	0.00
23.00		16.07	185.75	0.00	0.00
24.00		15.99	185.05	0.00	0.00
25.00		15.92	184.35	0.00	0.00
26.00		15.84	183.65	0.00	0.00
27.00		15.76	182.95	0.00	0.00
28.00		15.69	182.25	0.00	0.00
29.00		15.61	181.55	0.00	0.00
30.00		15.54	180.85	0.00	0.00
31.00		15.61	180.15	0.00	0.00
32.00		15.68	179.45	0.00	0.00
33.00		15.74	178.75	0.00	0.00
34.00		15.79	178.05	0.00	0.00
35.00		15.84	177.35	0.00	0.00
36.00		15.89	176.65	0.00	0.00
37.00		15.93	175.96	0.00	0.00
38.00		15.97	175.26	0.00	0.00
39.00		16.01	174.56	0.00	0.00
40.00		16.04	173.86	0.00	0.00
41.00		16.07	173.16	0.00	0.00
42.00		16.10	172.46	0.00	0.00
43.00		16.12	171.76	0.00	0.00
44.00		16.14	171.06	0.00	0.00
45.00		16.16	170.36	0.00	0.00
46.00		16.17	169.66	0.00	0.00

Total Applied Force Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 85

47.00	16.19	168.96	0.00	0.00	
47.55	8.95	93.19	0.00	0.00	
48.00	7.32	121.32	0.00	0.00	
49.00	16.42	270.70	0.00	0.00	
50.00	(1) attachments	18.14	269.84	0.00	0.00
51.00	16.99	268.03	0.00	0.00	
52.00	17.03	266.77	0.00	0.00	
52.97	16.54	257.56	0.00	0.00	
53.00	0.51	4.23	0.00	0.00	
54.00	17.01	140.72	0.00	0.00	
55.00	17.03	140.16	0.00	0.00	
56.00	17.06	139.60	0.00	0.00	
57.00	17.08	139.04	0.00	0.00	
58.00	17.10	138.48	0.00	0.00	
59.00	17.12	137.92	0.00	0.00	
60.00	17.13	137.36	0.00	0.00	
61.00	17.15	136.80	0.00	0.00	
62.00	17.16	136.24	0.00	0.00	
63.00	17.18	135.68	0.00	0.00	
64.00	17.19	135.12	0.00	0.00	
65.00	17.20	134.56	0.00	0.00	
66.00	17.20	134.01	0.00	0.00	
67.00	17.21	133.45	0.00	0.00	
67.92	15.83	122.28	0.00	0.00	
68.00	1.37	10.61	0.00	0.00	
69.00	17.22	132.33	0.00	0.00	
70.00	17.22	131.77	0.00	0.00	
71.00	16.09	131.21	0.00	0.00	
72.00	16.05	130.65	0.00	0.00	
73.00	(1) attachments	24.72	140.09	0.00	0.00
74.00	15.98	129.37	0.00	0.00	
75.00	15.94	128.81	0.00	0.00	
76.00	15.90	128.25	0.00	0.00	
77.00	15.86	127.69	0.00	0.00	
78.00	15.82	127.13	0.00	0.00	
79.00	15.77	126.57	0.00	0.00	
80.00	15.73	126.01	0.00	0.00	
81.00	15.68	125.45	0.00	0.00	
82.00	15.64	124.89	0.00	0.00	
83.00	15.59	124.33	0.00	0.00	
84.00	15.54	123.77	0.00	0.00	
85.00	15.49	123.22	0.00	0.00	
86.00	15.43	122.66	0.00	0.00	
87.00	15.38	122.10	0.00	0.00	
88.00	15.33	121.54	0.00	0.00	
89.00	15.27	120.98	0.00	0.00	
90.00	15.22	120.42	0.00	0.00	
91.00	15.16	119.86	0.00	0.00	
92.00	15.10	119.30	0.00	0.00	
93.00	15.04	118.74	0.00	0.00	
94.00	14.98	118.18	0.00	0.00	
95.00	14.92	117.62	0.00	0.00	
96.00	14.86	117.06	0.00	0.00	
96.18	2.64	20.62	0.00	0.00	
97.00	12.47	143.68	0.00	0.00	
98.00	17.07	173.62	0.00	0.00	
99.00	17.04	172.64	0.00	0.00	

Total Applied Force Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 86

99.25		4.25	43.01	0.00	0.00
100.00		12.75	128.66	0.00	0.00
100.34		5.83	58.71	0.00	0.00
101.00		11.09	63.41	0.00	0.00
102.00		16.87	96.22	0.00	0.00
102.25		4.21	23.99	0.00	0.00
103.00		12.62	71.81	0.00	0.00
104.00		16.81	95.38	0.00	0.00
105.00		16.78	94.96	0.00	0.00
106.00		14.78	94.54	0.00	0.00
107.00		14.74	94.12	0.00	0.00
108.00		14.71	93.70	0.00	0.00
109.00		14.67	93.28	0.00	0.00
110.00		14.63	92.86	0.00	0.00
111.00		14.59	92.44	0.00	0.00
112.00		14.55	92.02	0.00	0.00
113.00		14.50	91.60	0.00	0.00
114.00		14.46	91.18	0.00	0.00
115.00	(19) attachments	742.41	2696.86	0.00	0.00
116.00		13.62	87.04	0.00	0.00
117.00		13.54	86.62	0.00	0.00
118.00		13.46	86.20	0.00	0.00
119.00		13.38	85.78	0.00	0.00
120.00		13.30	85.36	0.00	0.00
121.00		13.21	84.95	0.00	0.00
122.00		13.13	84.53	0.00	0.00
123.00		13.05	84.11	0.00	0.00
124.00		12.96	83.69	0.00	0.00
125.00		12.88	83.27	0.00	0.00
126.00		12.79	82.85	0.00	0.00
127.00		12.70	82.43	0.00	0.00
128.00		12.61	82.01	0.00	0.00
129.00		12.53	81.59	0.00	0.00
130.00	(62) attachments	1117.37	3597.92	0.00	0.00
131.00		12.35	60.35	0.00	0.00
132.00		12.26	59.93	0.00	0.00
133.00		12.16	59.51	0.00	0.00
134.00		12.07	59.09	0.00	0.00
135.00		11.98	58.67	0.00	0.00
136.00		11.89	58.25	0.00	0.00
137.00		11.79	57.83	0.00	0.00
138.00	(16) attachments	451.51	245.01	0.00	0.00
139.00		11.60	56.99	0.00	0.00
140.00	(1) attachments	242.02	1556.57	0.00	0.00
141.00		11.41	43.45	0.00	0.00
142.00		11.31	43.03	0.00	0.00
143.00		11.22	42.61	0.00	0.00
144.00		11.12	42.19	0.00	0.00
145.00		11.02	41.77	0.00	0.00
146.00		10.92	41.36	0.00	0.00
147.00		10.82	40.94	0.00	0.00
148.00		10.72	40.52	0.00	0.00
149.00	(23) attachments	711.80	2178.00	0.00	1303.59
Totals:		5,491.66	30,084.63	0.00	1,303.59

Linear Appurtenance Segment Forces (Factored)

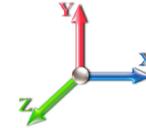
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 87

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
1.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.054	0.000	6.129	0.00	1.10
1.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.054	0.000	6.129	0.00	2.20
1.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.054	0.000	6.129	0.00	0.16
2.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	6.129	0.00	1.10
2.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	6.129	0.00	2.20
2.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	6.129	0.00	0.16
3.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	6.129	0.00	1.10
3.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	6.129	0.00	2.20
3.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	6.129	0.00	0.16
4.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	6.129	0.00	1.10
4.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	6.129	0.00	2.20
4.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	6.129	0.00	0.16
5.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.055	0.000	6.129	0.00	1.10
5.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.055	0.000	6.129	0.00	2.20
5.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.055	0.000	6.129	0.00	0.16
6.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	6.129	0.00	1.10
6.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	6.129	0.00	2.20
6.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	6.129	0.00	0.16
7.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	6.129	0.00	1.10
7.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	6.129	0.00	2.20
7.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	6.129	0.00	0.16
8.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	6.129	0.00	1.10
8.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	6.129	0.00	2.20
8.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	6.129	0.00	0.16
9.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.056	0.000	6.129	0.00	1.10
9.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.056	0.000	6.129	0.00	2.20
9.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.056	0.000	6.129	0.00	0.16
10.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	6.129	0.00	1.10
10.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	6.129	0.00	2.20
10.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	6.129	0.00	0.16
11.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	6.129	0.00	1.10
11.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	6.129	0.00	2.20
11.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	6.129	0.00	0.16
12.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	6.129	0.00	1.10
12.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	6.129	0.00	2.20
12.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	6.129	0.00	0.16
13.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.057	0.000	6.129	0.00	1.10
13.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.057	0.000	6.129	0.00	2.20
13.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.057	0.000	6.129	0.00	0.16
14.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.058	0.000	6.129	0.00	1.10
14.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	6.129	0.00	2.20
14.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.058	0.000	6.129	0.00	0.16
15.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.058	0.000	6.129	0.00	1.10
15.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	6.129	0.00	2.20
15.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.058	0.000	6.129	0.00	0.16
16.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.058	0.000	6.129	0.00	1.10
16.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.058	0.000	6.129	0.00	2.20

Linear Appurtenance Segment Forces (Factored)

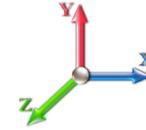
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 88

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
16.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.058	0.000	6.129	0.00	0.16
17.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	6.129	0.00	1.10
17.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	6.129	0.00	2.20
17.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	6.129	0.00	0.16
18.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	6.129	0.00	1.10
18.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	6.129	0.00	2.20
18.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	6.129	0.00	0.16
19.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	6.129	0.00	1.10
19.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	6.129	0.00	2.20
19.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	6.129	0.00	0.16
20.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.059	0.000	6.129	0.00	1.10
20.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.059	0.000	6.129	0.00	2.20
20.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.059	0.000	6.129	0.00	0.16
21.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.060	0.000	6.129	0.00	1.10
21.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	6.129	0.00	2.20
21.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.060	0.000	6.129	0.00	0.16
22.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.060	0.000	6.129	0.00	1.10
22.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	6.129	0.00	2.20
22.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.060	0.000	6.129	0.00	0.16
23.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.060	0.000	6.129	0.00	1.10
23.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.060	0.000	6.129	0.00	2.20
23.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.060	0.000	6.129	0.00	0.16
24.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	6.129	0.00	1.10
24.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	6.129	0.00	2.20
24.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	6.129	0.00	0.16
25.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	6.129	0.00	1.10
25.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	6.129	0.00	2.20
25.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	6.129	0.00	0.16
26.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	6.129	0.00	1.10
26.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	6.129	0.00	2.20
26.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	6.129	0.00	0.16
27.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	6.129	0.00	1.10
27.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	6.129	0.00	2.20
27.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.061	0.000	6.129	0.00	0.16
28.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	6.129	0.00	1.10
28.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	6.129	0.00	2.20
28.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.062	0.000	6.129	0.00	0.16
29.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	6.129	0.00	1.10
29.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	6.129	0.00	2.20
29.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.062	0.000	6.129	0.00	0.16
30.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	6.134	0.00	1.10
30.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	6.134	0.00	2.20
30.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.062	0.000	6.134	0.00	0.16
31.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	6.192	0.00	1.10
31.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	6.192	0.00	2.20
31.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.063	0.000	6.192	0.00	0.16
32.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	6.248	0.00	1.10

Linear Appurtenance Segment Forces (Factored)

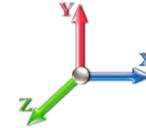
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 89

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
32.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	6.248	0.00	2.20
32.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.063	0.000	6.248	0.00	0.16
33.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	6.303	0.00	1.10
33.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	6.303	0.00	2.20
33.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.063	0.000	6.303	0.00	0.16
34.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	6.357	0.00	1.10
34.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.357	0.00	2.20
34.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.064	0.000	6.357	0.00	0.16
35.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	6.410	0.00	1.10
35.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.410	0.00	2.20
35.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.064	0.000	6.410	0.00	0.16
36.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	6.462	0.00	1.10
36.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	6.462	0.00	2.20
36.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.064	0.000	6.462	0.00	0.16
37.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	6.513	0.00	1.10
37.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	6.513	0.00	2.20
37.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.065	0.000	6.513	0.00	0.16
38.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	6.562	0.00	1.10
38.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	6.562	0.00	2.20
38.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.065	0.000	6.562	0.00	0.16
39.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	6.611	0.00	1.10
39.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	6.611	0.00	2.20
39.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.065	0.000	6.611	0.00	0.16
40.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	6.659	0.00	1.10
40.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	6.659	0.00	2.20
40.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.066	0.000	6.659	0.00	0.16
41.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	6.706	0.00	1.10
41.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	6.706	0.00	2.20
41.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.066	0.000	6.706	0.00	0.16
42.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	6.753	0.00	1.10
42.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	6.753	0.00	2.20
42.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.066	0.000	6.753	0.00	0.16
43.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	6.798	0.00	1.10
43.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	6.798	0.00	2.20
43.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.067	0.000	6.798	0.00	0.16
44.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	6.843	0.00	1.10
44.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	6.843	0.00	2.20
44.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.067	0.000	6.843	0.00	0.16
45.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	6.887	0.00	1.10
45.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	6.887	0.00	2.20
45.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.067	0.000	6.887	0.00	0.16
46.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	6.931	0.00	1.10
46.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	6.931	0.00	2.20
46.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.068	0.000	6.931	0.00	0.16
47.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	6.973	0.00	1.10
47.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	6.973	0.00	2.20
47.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.068	0.000	6.973	0.00	0.16

Linear Appurtenance Segment Forces (Factored)

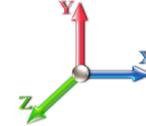
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 90

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
47.55	1 5/8" Fiber	Yes	0.55	0.000	2.00	0.09	0.00	0.068	0.000	6.997	0.00	0.61
47.55	1.9" Fiber	Yes	0.55	0.000	0.00	0.00	0.00	0.068	0.000	6.997	0.00	1.22
47.55	1/2" Coax	Yes	0.55	0.000	0.65	0.03	0.00	0.068	0.000	6.997	0.00	0.09
48.00	1 5/8" Fiber	Yes	0.45	0.000	2.00	0.07	0.00	0.068	0.000	7.015	0.00	0.49
48.00	1.9" Fiber	Yes	0.45	0.000	0.00	0.00	0.00	0.068	0.000	7.015	0.00	0.98
48.00	1/2" Coax	Yes	0.45	0.000	0.65	0.02	0.00	0.068	0.000	7.015	0.00	0.07
49.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.069	0.000	7.057	0.00	1.10
49.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	7.057	0.00	2.20
49.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.069	0.000	7.057	0.00	0.16
50.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.069	0.000	7.098	0.00	1.10
50.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	7.098	0.00	2.20
50.00	1/2" Coax	Yes	1.00	0.000	0.65	0.05	0.00	0.069	0.000	7.098	0.00	0.16
51.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.035	7.138	0.00	1.10
51.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.035	7.138	0.00	2.20
51.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.035	7.138	0.00	0.00
51.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.035	7.138	0.00	0.00
52.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.036	7.178	0.00	1.10
52.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	7.178	0.00	2.20
52.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.036	7.178	0.00	0.00
52.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.036	7.178	0.00	0.00
52.97	1 5/8" Fiber	Yes	0.97	0.000	2.00	0.16	0.00	0.113	1.038	7.216	0.00	1.07
52.97	1.9" Fiber	Yes	0.97	0.000	0.00	0.00	0.00	0.113	1.038	7.216	0.00	2.13
52.97	1.25" Reinforcing	Yes	0.97	0.000	1.25	0.10	0.00	0.113	1.038	7.216	0.00	0.00
52.97	1" Reinforcing plate	Yes	0.97	0.000	1.00	0.08	0.00	0.113	1.038	7.216	0.00	0.00
53.00	1 5/8" Fiber	Yes	0.03	0.000	2.00	0.01	0.00	0.112	1.035	7.217	0.00	0.03
53.00	1.9" Fiber	Yes	0.03	0.000	0.00	0.00	0.00	0.112	1.035	7.217	0.00	0.07
53.00	1.25" Reinforcing	Yes	0.03	0.000	1.25	0.00	0.00	0.112	1.035	7.217	0.00	0.00
53.00	1" Reinforcing plate	Yes	0.03	0.000	1.00	0.00	0.00	0.112	1.035	7.217	0.00	0.00
54.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.036	7.255	0.00	1.10
54.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	7.255	0.00	2.20
54.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.036	7.255	0.00	0.00
54.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.036	7.255	0.00	0.00
55.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.037	7.294	0.00	1.10
55.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.037	7.294	0.00	2.20
55.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.112	1.037	7.294	0.00	0.00
55.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.037	7.294	0.00	0.00
56.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.113	1.039	7.331	0.00	1.10
56.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.113	1.039	7.331	0.00	2.20
56.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.113	1.039	7.331	0.00	0.00
56.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.113	1.039	7.331	0.00	0.00
57.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.041	7.368	0.00	1.10
57.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	7.368	0.00	2.20
57.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.114	1.041	7.368	0.00	0.00
57.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.114	1.041	7.368	0.00	0.00
58.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.043	7.405	0.00	1.10
58.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.043	7.405	0.00	2.20
58.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.114	1.043	7.405	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 91

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 32

Dead Load Factor 1.00

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
58.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.114	1.043	7.405	0.00	0.00
59.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.115	1.045	7.441	0.00	1.10
59.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.115	1.045	7.441	0.00	2.20
59.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.115	1.045	7.441	0.00	0.00
59.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.115	1.045	7.441	0.00	0.00
60.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.116	1.047	7.477	0.00	1.10
60.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.047	7.477	0.00	2.20
60.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.116	1.047	7.477	0.00	0.00
60.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.116	1.047	7.477	0.00	0.00
61.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.116	1.049	7.513	0.00	1.10
61.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.049	7.513	0.00	2.20
61.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.116	1.049	7.513	0.00	0.00
61.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.116	1.049	7.513	0.00	0.00
62.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.117	1.051	7.548	0.00	1.10
62.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.051	7.548	0.00	2.20
62.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.117	1.051	7.548	0.00	0.00
62.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.117	1.051	7.548	0.00	0.00
63.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.118	1.053	7.582	0.00	1.10
63.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.118	1.053	7.582	0.00	2.20
63.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.118	1.053	7.582	0.00	0.00
63.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.118	1.053	7.582	0.00	0.00
64.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.118	1.055	7.616	0.00	1.10
64.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.118	1.055	7.616	0.00	2.20
64.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.118	1.055	7.616	0.00	0.00
64.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.118	1.055	7.616	0.00	0.00
65.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.119	1.057	7.650	0.00	1.10
65.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.119	1.057	7.650	0.00	2.20
65.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.119	1.057	7.650	0.00	0.00
65.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.119	1.057	7.650	0.00	0.00
66.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.120	1.059	7.684	0.00	1.10
66.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.120	1.059	7.684	0.00	2.20
66.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.120	1.059	7.684	0.00	0.00
66.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.120	1.059	7.684	0.00	0.00
67.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.121	1.062	7.717	0.00	1.10
67.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.121	1.062	7.717	0.00	2.20
67.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.121	1.062	7.717	0.00	0.00
67.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.121	1.062	7.717	0.00	0.00
67.92	1 5/8" Fiber	Yes	0.92	0.000	2.00	0.15	0.00	0.121	1.064	7.747	0.00	1.01
67.92	1.9" Fiber	Yes	0.92	0.000	0.00	0.00	0.00	0.121	1.064	7.747	0.00	2.02
67.92	1.25" Reinforcing	Yes	0.92	0.000	1.25	0.10	0.00	0.121	1.064	7.747	0.00	0.00
67.92	1" Reinforcing plate	Yes	0.92	0.000	1.00	0.08	0.00	0.121	1.064	7.747	0.00	0.00
68.00	1 5/8" Fiber	Yes	0.08	0.000	2.00	0.01	0.00	0.122	1.065	7.749	0.00	0.09
68.00	1.9" Fiber	Yes	0.08	0.000	0.00	0.00	0.00	0.122	1.065	7.749	0.00	0.18
68.00	1.25" Reinforcing	Yes	0.08	0.000	1.25	0.01	0.00	0.122	1.065	7.749	0.00	0.00
68.00	1" Reinforcing plate	Yes	0.08	0.000	1.00	0.01	0.00	0.122	1.065	7.749	0.00	0.00
69.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.122	1.066	7.782	0.00	1.10
69.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.122	1.066	7.782	0.00	2.20

Linear Appurtenance Segment Forces (Factored)

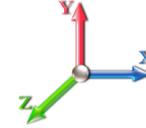
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 92

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

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)
69.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.122	1.066	7.782	0.00	0.00
69.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.122	1.066	7.782	0.00	0.00
70.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.123	1.068	7.814	0.00	1.10
70.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.123	1.068	7.814	0.00	2.20
70.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.123	1.068	7.814	0.00	0.00
70.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.123	1.068	7.814	0.00	0.00
71.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.094	0.000	7.846	0.00	1.10
71.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.094	0.000	7.846	0.00	2.20
71.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.094	0.000	7.846	0.00	0.00
72.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.095	0.000	7.877	0.00	1.10
72.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.095	0.000	7.877	0.00	2.20
72.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.095	0.000	7.877	0.00	0.00
73.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.096	0.000	7.908	0.00	1.10
73.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.096	0.000	7.908	0.00	2.20
73.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.096	0.000	7.908	0.00	0.00
74.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.096	0.000	7.939	0.00	1.10
74.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.096	0.000	7.939	0.00	2.20
74.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.096	0.000	7.939	0.00	0.00
75.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.097	0.000	7.969	0.00	1.10
75.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	7.969	0.00	2.20
75.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.097	0.000	7.969	0.00	0.00
76.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.097	0.000	8.000	0.00	1.10
76.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.097	0.000	8.000	0.00	2.20
76.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.097	0.000	8.000	0.00	0.00
77.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.098	0.000	8.030	0.00	1.10
77.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.098	0.000	8.030	0.00	2.20
77.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.098	0.000	8.030	0.00	0.00
78.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	8.059	0.00	1.10
78.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	8.059	0.00	2.20
79.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	8.089	0.00	1.10
79.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	8.089	0.00	2.20
80.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.061	0.000	8.118	0.00	1.10
80.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.061	0.000	8.118	0.00	2.20
81.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	8.147	0.00	1.10
81.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	8.147	0.00	2.20
82.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.062	0.000	8.175	0.00	1.10
82.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.062	0.000	8.175	0.00	2.20
83.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	8.204	0.00	1.10
83.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	8.204	0.00	2.20
84.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.063	0.000	8.232	0.00	1.10
84.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.063	0.000	8.232	0.00	2.20
85.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	8.260	0.00	1.10
85.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	8.260	0.00	2.20
86.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	8.287	0.00	1.10
86.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	8.287	0.00	2.20
87.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.064	0.000	8.315	0.00	1.10
87.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.064	0.000	8.315	0.00	2.20

Linear Appurtenance Segment Forces (Factored)

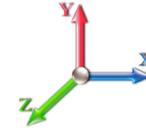
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 93

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
88.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	8.342	0.00	1.10
88.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	8.342	0.00	2.20
89.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.065	0.000	8.369	0.00	1.10
89.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.065	0.000	8.369	0.00	2.20
90.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	8.396	0.00	1.10
90.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	8.396	0.00	2.20
91.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.066	0.000	8.422	0.00	1.10
91.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.066	0.000	8.422	0.00	2.20
92.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	8.448	0.00	1.10
92.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	8.448	0.00	2.20
93.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.067	0.000	8.475	0.00	1.10
93.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.067	0.000	8.475	0.00	2.20
94.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	8.501	0.00	1.10
94.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	8.501	0.00	2.20
95.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.068	0.000	8.526	0.00	1.10
95.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.068	0.000	8.526	0.00	2.20
96.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.069	0.000	8.552	0.00	1.10
96.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	8.552	0.00	2.20
96.18	1" Reinforcing plate	Yes	0.18	0.000	1.00	0.01	0.00	0.103	1.010	8.556	0.00	0.00
96.18	1 5/8" Fiber	Yes	0.18	0.000	2.00	0.03	0.00	0.103	1.010	8.556	0.00	0.19
96.18	1.9" Fiber	Yes	0.18	0.000	0.00	0.00	0.00	0.103	1.010	8.556	0.00	0.39
97.00	1" Reinforcing plate	Yes	0.82	0.000	1.00	0.07	0.00	0.104	1.011	8.577	0.00	0.00
97.00	1 5/8" Fiber	Yes	0.82	0.000	2.00	0.14	0.00	0.104	1.011	8.577	0.00	0.91
97.00	1.9" Fiber	Yes	0.82	0.000	0.00	0.00	0.00	0.104	1.011	8.577	0.00	1.81
98.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.148	1.144	8.602	0.00	0.00
98.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.148	1.144	8.602	0.00	1.10
98.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.148	1.144	8.602	0.00	2.20
98.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.148	1.144	8.602	0.00	0.00
99.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.149	1.147	8.627	0.00	0.00
99.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.149	1.147	8.627	0.00	1.10
99.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.149	1.147	8.627	0.00	2.20
99.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.149	1.147	8.627	0.00	0.00
99.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.150	1.149	8.634	0.00	0.00
99.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.04	0.00	0.150	1.149	8.634	0.00	0.28
99.25	1.9" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.150	1.149	8.634	0.00	0.55
99.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.150	1.149	8.634	0.00	0.00
100.00	1" Reinforcing plate	Yes	0.75	0.000	1.00	0.06	0.00	0.150	1.151	8.652	0.00	0.00
100.00	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.150	1.151	8.652	0.00	0.83
100.00	1.9" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.150	1.151	8.652	0.00	1.65
100.00	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.150	1.151	8.652	0.00	0.00
100.34	1" Reinforcing plate	Yes	0.34	0.000	1.00	0.03	0.00	0.151	1.153	8.661	0.00	0.00
100.34	1 5/8" Fiber	Yes	0.34	0.000	2.00	0.06	0.00	0.151	1.153	8.661	0.00	0.38
100.34	1.9" Fiber	Yes	0.34	0.000	0.00	0.00	0.00	0.151	1.153	8.661	0.00	0.76
100.34	1.25" Reinforcing	Yes	0.34	0.000	1.25	0.04	0.00	0.151	1.153	8.661	0.00	0.00
101.00	1" Reinforcing plate	Yes	0.66	0.000	1.00	0.05	0.00	0.149	1.148	8.677	0.00	0.00
101.00	1 5/8" Fiber	Yes	0.66	0.000	2.00	0.11	0.00	0.149	1.148	8.677	0.00	0.72
101.00	1.9" Fiber	Yes	0.66	0.000	0.00	0.00	0.00	0.149	1.148	8.677	0.00	1.44

Linear Appurtenance Segment Forces (Factored)

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 94

Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 32

Dead Load Factor 1.00

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
101.00	1.25" Reinforcing	Yes	0.66	0.000	1.25	0.07	0.00	0.149	1.148	8.677	0.00	0.00
102.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.150	1.151	8.701	0.00	0.00
102.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.150	1.151	8.701	0.00	1.10
102.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.150	1.151	8.701	0.00	2.20
102.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.150	1.151	8.701	0.00	0.00
102.25	1" Reinforcing plate	Yes	0.25	0.000	1.00	0.02	0.00	0.151	1.153	8.707	0.00	0.00
102.25	1 5/8" Fiber	Yes	0.25	0.000	2.00	0.04	0.00	0.151	1.153	8.707	0.00	0.28
102.25	1.9" Fiber	Yes	0.25	0.000	0.00	0.00	0.00	0.151	1.153	8.707	0.00	0.55
102.25	1.25" Reinforcing	Yes	0.25	0.000	1.25	0.03	0.00	0.151	1.153	8.707	0.00	0.00
103.00	1" Reinforcing plate	Yes	0.75	0.000	1.00	0.06	0.00	0.152	1.155	8.726	0.00	0.00
103.00	1 5/8" Fiber	Yes	0.75	0.000	2.00	0.13	0.00	0.152	1.155	8.726	0.00	0.83
103.00	1.9" Fiber	Yes	0.75	0.000	0.00	0.00	0.00	0.152	1.155	8.726	0.00	1.65
103.00	1.25" Reinforcing	Yes	0.75	0.000	1.25	0.08	0.00	0.152	1.155	8.726	0.00	0.00
104.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.153	1.158	8.750	0.00	0.00
104.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.153	1.158	8.750	0.00	1.10
104.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.153	1.158	8.750	0.00	2.20
104.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.153	1.158	8.750	0.00	0.00
105.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.154	1.161	8.774	0.00	0.00
105.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.154	1.161	8.774	0.00	1.10
105.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.154	1.161	8.774	0.00	2.20
105.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.154	1.161	8.774	0.00	0.00
106.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.109	1.028	8.797	0.00	0.00
106.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.109	1.028	8.797	0.00	1.10
106.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.109	1.028	8.797	0.00	2.20
107.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.110	1.031	8.821	0.00	0.00
107.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.110	1.031	8.821	0.00	1.10
107.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.110	1.031	8.821	0.00	2.20
108.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.111	1.033	8.845	0.00	0.00
108.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.111	1.033	8.845	0.00	1.10
108.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.111	1.033	8.845	0.00	2.20
109.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.112	1.036	8.868	0.00	0.00
109.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.112	1.036	8.868	0.00	1.10
109.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.112	1.036	8.868	0.00	2.20
110.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.113	1.038	8.891	0.00	0.00
110.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.113	1.038	8.891	0.00	1.10
110.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.113	1.038	8.891	0.00	2.20
111.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.114	1.041	8.914	0.00	0.00
111.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.114	1.041	8.914	0.00	1.10
111.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.114	1.041	8.914	0.00	2.20
112.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.115	1.044	8.937	0.00	0.00
112.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.115	1.044	8.937	0.00	1.10
112.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.115	1.044	8.937	0.00	2.20
113.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.116	1.047	8.960	0.00	0.00
113.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.116	1.047	8.960	0.00	1.10
113.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.116	1.047	8.960	0.00	2.20
114.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.117	1.050	8.982	0.00	0.00
114.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.117	1.050	8.982	0.00	1.10

Linear Appurtenance Segment Forces (Factored)

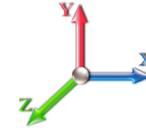
Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 95

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 32

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)
114.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.050	8.982	0.00	2.20
115.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.117	1.052	9.005	0.00	0.00
115.00	1 5/8" Fiber	Yes	1.00	0.000	2.00	0.17	0.00	0.117	1.052	9.005	0.00	1.10
115.00	1.9" Fiber	Yes	1.00	0.000	0.00	0.00	0.00	0.117	1.052	9.005	0.00	2.20
116.00	1" Reinforcing plate	Yes	1.00	0.000	1.00	0.08	0.00	0.039	0.000	9.027	0.00	0.00
Totals:											0.0	387.5

Calculated Forces

Structure: CT12215-A-SBA
Site Name: Litchfield 3, CT
Height: 149.00 (ft)
Base Elev: 0.000 (ft)
Gh: 1.1

Code: TIA-222-G
Exposure: B
Crest Height: 0.00
Site Class: B - Competent Rock
Struct Class: II

5/3/2022
 Page: 96



Load Case: 1.0D + 1.0W 60 mph Wind **Iterations** 32

Dead Load Factor 1.00

Wind Load Factor 1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-30.08	-5.49	0.00	-620.64	0.00	620.64	3031.07	1515.53	5947.06	2977.95	0.00	0.000	0.000	0.218
1.00	-29.88	-5.48	0.00	-615.15	0.00	615.15	3023.73	1511.86	5906.70	2957.74	0.00	-0.013	0.000	0.218
2.00	-29.68	-5.47	0.00	-609.67	0.00	609.67	3016.33	1508.17	5866.38	2937.55	0.01	-0.026	0.000	0.217
3.00	-29.48	-5.46	0.00	-604.20	0.00	604.20	3008.89	1504.45	5826.08	2917.37	0.01	-0.039	0.000	0.217
4.00	-29.28	-5.45	0.00	-598.74	0.00	598.74	3001.40	1500.70	5785.81	2897.21	0.02	-0.052	0.000	0.216
5.00	-29.08	-5.44	0.00	-593.29	0.00	593.29	2993.85	1496.92	5745.58	2877.06	0.03	-0.065	0.000	0.216
6.00	-28.88	-5.43	0.00	-587.86	0.00	587.86	2986.25	1493.13	5705.37	2856.93	0.05	-0.078	0.000	0.215
7.00	-28.68	-5.41	0.00	-582.43	0.00	582.43	2978.60	1489.30	5665.20	2836.81	0.07	-0.092	0.000	0.215
8.00	-28.48	-5.40	0.00	-577.02	0.00	577.02	2970.91	1485.45	5625.07	2816.71	0.09	-0.105	0.000	0.214
9.00	-28.29	-5.39	0.00	-571.61	0.00	571.61	2963.16	1481.58	5584.97	2796.63	0.11	-0.118	0.000	0.214
10.00	-28.09	-5.38	0.00	-566.22	0.00	566.22	2955.36	1477.68	5544.90	2776.57	0.14	-0.132	0.000	0.213
11.00	-27.90	-5.37	0.00	-560.84	0.00	560.84	2947.51	1473.75	5504.88	2756.53	0.17	-0.145	0.000	0.213
12.00	-27.70	-5.36	0.00	-555.47	0.00	555.47	2939.60	1469.80	5464.90	2736.51	0.20	-0.159	0.000	0.212
13.00	-27.51	-5.35	0.00	-550.11	0.00	550.11	2931.65	1465.83	5424.96	2716.51	0.23	-0.172	0.000	0.212
14.00	-27.31	-5.34	0.00	-544.76	0.00	544.76	2923.65	1461.82	5385.06	2696.53	0.27	-0.186	0.000	0.211
15.00	-27.12	-5.33	0.00	-539.42	0.00	539.42	2915.59	1457.80	5345.20	2676.57	0.31	-0.200	0.000	0.211
16.00	-26.93	-5.32	0.00	-534.09	0.00	534.09	2907.49	1453.74	5305.39	2656.64	0.36	-0.213	0.000	0.210
17.00	-26.74	-5.31	0.00	-528.78	0.00	528.78	2899.33	1449.67	5265.63	2636.73	0.40	-0.227	0.000	0.210
18.00	-26.55	-5.30	0.00	-523.47	0.00	523.47	2891.12	1445.56	5225.92	2616.84	0.45	-0.241	0.000	0.209
19.00	-26.36	-5.28	0.00	-518.18	0.00	518.18	2882.86	1441.43	5186.25	2596.98	0.50	-0.255	0.000	0.209
20.00	-26.17	-5.27	0.00	-512.89	0.00	512.89	2874.56	1437.28	5146.64	2577.14	0.56	-0.269	0.000	0.208
21.00	-25.98	-5.26	0.00	-507.62	0.00	507.62	2866.20	1433.10	5107.08	2557.33	0.62	-0.283	0.000	0.208
22.00	-25.79	-5.25	0.00	-502.36	0.00	502.36	2857.79	1428.89	5067.57	2537.55	0.68	-0.297	0.000	0.207
23.00	-25.61	-5.24	0.00	-497.10	0.00	497.10	2849.32	1424.66	5028.11	2517.79	0.74	-0.311	0.000	0.206
24.00	-25.42	-5.23	0.00	-491.86	0.00	491.86	2840.81	1420.41	4988.71	2498.06	0.81	-0.326	0.000	0.206
25.00	-25.23	-5.22	0.00	-486.63	0.00	486.63	2832.25	1416.12	4949.37	2478.36	0.88	-0.340	0.000	0.205
26.00	-25.05	-5.21	0.00	-481.41	0.00	481.41	2823.63	1411.82	4910.09	2458.69	0.95	-0.354	0.000	0.205
27.00	-24.87	-5.20	0.00	-476.20	0.00	476.20	2814.97	1407.48	4870.87	2439.05	1.03	-0.368	0.000	0.204
28.00	-24.68	-5.19	0.00	-471.00	0.00	471.00	2806.25	1403.13	4831.70	2419.44	1.10	-0.383	0.000	0.203
29.00	-24.50	-5.18	0.00	-465.82	0.00	465.82	2797.49	1398.74	4792.60	2399.86	1.19	-0.397	0.000	0.203
30.00	-24.32	-5.17	0.00	-460.64	0.00	460.64	2788.67	1394.33	4753.57	2380.32	1.27	-0.412	0.000	0.202
31.00	-24.14	-5.16	0.00	-455.47	0.00	455.47	2779.80	1389.90	4714.60	2360.80	1.36	-0.426	0.000	0.202
32.00	-23.96	-5.15	0.00	-450.32	0.00	450.32	2770.88	1385.44	4675.69	2341.32	1.45	-0.441	0.000	0.201
33.00	-23.78	-5.13	0.00	-445.17	0.00	445.17	2761.91	1380.95	4636.86	2321.88	1.54	-0.456	0.000	0.200
34.00	-23.60	-5.12	0.00	-440.04	0.00	440.04	2752.89	1376.44	4598.09	2302.46	1.64	-0.471	0.000	0.200
35.00	-23.42	-5.11	0.00	-434.91	0.00	434.91	2743.82	1371.91	4559.39	2283.08	1.74	-0.485	0.000	0.199
36.00	-23.24	-5.10	0.00	-429.80	0.00	429.80	2734.69	1367.35	4520.77	2263.74	1.84	-0.500	0.000	0.198
37.00	-23.06	-5.09	0.00	-424.70	0.00	424.70	2725.52	1362.76	4482.21	2244.44	1.95	-0.515	0.000	0.198
38.00	-22.89	-5.08	0.00	-419.61	0.00	419.61	2716.29	1358.15	4443.74	2225.17	2.06	-0.530	0.000	0.197
39.00	-22.71	-5.07	0.00	-414.54	0.00	414.54	2707.02	1353.51	4405.33	2205.94	2.17	-0.545	0.000	0.196
40.00	-22.54	-5.05	0.00	-409.47	0.00	409.47	2697.69	1348.85	4367.01	2186.75	2.29	-0.560	0.000	0.196
41.00	-22.36	-5.04	0.00	-404.42	0.00	404.42	2688.32	1344.16	4328.76	2167.60	2.41	-0.575	0.000	0.195
42.00	-22.19	-5.03	0.00	-399.38	0.00	399.38	2678.89	1339.44	4290.59	2148.48	2.53	-0.590	0.000	0.194
43.00	-22.01	-5.02	0.00	-394.35	0.00	394.35	2669.41	1334.70	4252.50	2129.41	2.66	-0.606	0.000	0.193
44.00	-21.84	-5.01	0.00	-389.33	0.00	389.33	2659.88	1329.94	4214.50	2110.38	2.78	-0.621	0.000	0.193
45.00	-21.67	-4.99	0.00	-384.32	0.00	384.32	2650.30	1325.15	4176.57	2091.39	2.92	-0.636	0.000	0.192
46.00	-21.50	-4.98	0.00	-379.33	0.00	379.33	2640.67	1320.33	4138.74	2072.44	3.05	-0.651	0.000	0.191
47.00	-21.33	-4.97	0.00	-374.35	0.00	374.35	2630.98	1315.49	4100.98	2053.54	3.19	-0.667	0.000	0.190

Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 97



47.55	-21.24	-4.96	0.00	-371.60	0.00	371.60	2625.60	1312.80	4080.13	2043.10	3.27	-0.675	0.000	0.190
48.00	-21.11	-4.96	0.00	-369.38	0.00	369.38	2621.25	1310.62	4063.32	2034.68	3.33	-0.682	0.000	0.190
49.00	-20.84	-4.94	0.00	-364.43	0.00	364.43	2611.47	1305.73	4025.74	2015.86	3.47	-0.698	0.000	0.189
50.00	-20.57	-4.93	0.00	-359.49	0.00	359.49	2601.63	1300.82	3988.26	1997.09	3.62	-0.713	0.000	0.188
51.00	-20.30	-4.91	0.00	-354.56	0.00	354.56	2591.74	1295.87	3950.86	1978.37	3.77	-0.729	0.000	0.187
52.00	-20.04	-4.89	0.00	-349.65	0.00	349.65	2581.81	1290.90	3913.56	1959.69	3.93	-0.745	0.000	0.091
52.97	-19.78	-4.88	0.00	-344.90	0.00	344.90	1914.68	957.34	2935.86	1470.11	4.08	-0.752	0.000	0.100
53.00	-19.77	-4.88	0.00	-344.76	0.00	344.76	1914.50	957.25	2935.09	1469.72	4.09	-0.752	0.000	0.108
54.00	-19.63	-4.86	0.00	-339.88	0.00	339.88	1908.40	954.20	2909.37	1456.85	4.24	-0.761	0.000	0.107
55.00	-19.49	-4.84	0.00	-335.02	0.00	335.02	1902.26	951.13	2883.67	1443.98	4.40	-0.769	0.000	0.107
56.00	-19.35	-4.83	0.00	-330.17	0.00	330.17	1896.06	948.03	2858.01	1431.13	4.57	-0.777	0.000	0.106
57.00	-19.21	-4.81	0.00	-325.34	0.00	325.34	1889.81	944.90	2832.37	1418.29	4.73	-0.785	0.000	0.105
58.00	-19.07	-4.80	0.00	-320.53	0.00	320.53	1883.51	941.76	2806.77	1405.47	4.89	-0.794	0.000	0.104
59.00	-18.93	-4.78	0.00	-315.74	0.00	315.74	1877.16	938.58	2781.20	1392.67	5.06	-0.802	0.000	0.103
60.00	-18.80	-4.76	0.00	-310.96	0.00	310.96	1870.76	935.38	2755.66	1379.88	5.23	-0.810	0.000	0.102
61.00	-18.66	-4.75	0.00	-306.19	0.00	306.19	1864.31	932.15	2730.16	1367.11	5.40	-0.818	0.000	0.101
62.00	-18.52	-4.73	0.00	-301.45	0.00	301.45	1857.80	928.90	2704.70	1354.36	5.57	-0.827	0.000	0.100
63.00	-18.39	-4.71	0.00	-296.71	0.00	296.71	1851.25	925.63	2679.27	1341.63	5.75	-0.835	0.000	0.099
64.00	-18.25	-4.70	0.00	-292.00	0.00	292.00	1844.65	922.32	2653.88	1328.91	5.92	-0.843	0.000	0.098
65.00	-18.12	-4.68	0.00	-287.30	0.00	287.30	1837.99	919.00	2628.54	1316.22	6.10	-0.851	0.000	0.097
66.00	-17.98	-4.66	0.00	-282.62	0.00	282.62	1831.29	915.64	2603.23	1303.55	6.28	-0.859	0.000	0.096
67.00	-17.85	-4.65	0.00	-277.96	0.00	277.96	1824.53	912.26	2577.97	1290.90	6.46	-0.867	0.000	0.095
67.92	-17.73	-4.63	0.00	-273.68	0.00	273.68	1818.27	909.13	2554.77	1279.28	6.63	-0.875	0.000	0.073
68.00	-17.71	-4.63	0.00	-273.31	0.00	273.31	1817.72	908.86	2552.75	1278.27	6.64	-0.875	0.000	0.134
69.00	-17.58	-4.62	0.00	-268.68	0.00	268.68	1810.86	905.43	2527.58	1265.67	6.83	-0.887	0.000	0.132
70.00	-17.45	-4.60	0.00	-264.06	0.00	264.06	1803.95	901.98	2502.46	1253.09	7.02	-0.898	0.000	0.131
71.00	-17.32	-4.59	0.00	-259.46	0.00	259.46	1796.99	898.50	2477.38	1240.53	7.20	-0.910	0.000	0.130
72.00	-17.19	-4.57	0.00	-254.88	0.00	254.88	1789.98	894.99	2452.36	1228.00	7.40	-0.921	0.000	0.128
73.00	-17.05	-4.55	0.00	-250.31	0.00	250.31	1782.92	891.46	2427.38	1215.49	7.59	-0.933	0.000	0.127
74.00	-16.92	-4.53	0.00	-245.76	0.00	245.76	1775.81	887.90	2402.46	1203.02	7.79	-0.944	0.000	0.126
75.00	-16.79	-4.52	0.00	-241.23	0.00	241.23	1768.64	884.32	2377.59	1190.56	7.99	-0.955	0.000	0.124
76.00	-16.66	-4.50	0.00	-236.71	0.00	236.71	1761.43	880.71	2352.78	1178.14	8.19	-0.967	0.000	0.210
77.00	-16.53	-4.49	0.00	-232.21	0.00	232.21	1754.16	877.08	2328.02	1165.74	8.39	-0.986	0.000	0.209
78.00	-16.40	-4.48	0.00	-227.71	0.00	227.71	1746.84	873.42	2303.32	1153.37	8.60	-1.006	0.000	0.207
79.00	-16.27	-4.47	0.00	-223.24	0.00	223.24	1739.48	869.74	2278.68	1141.03	8.81	-1.025	0.000	0.205
80.00	-16.14	-4.45	0.00	-218.77	0.00	218.77	1732.06	866.03	2254.10	1128.72	9.03	-1.044	0.000	0.203
81.00	-16.02	-4.44	0.00	-214.31	0.00	214.31	1724.59	862.29	2229.58	1116.45	9.25	-1.064	0.000	0.201
82.00	-15.89	-4.43	0.00	-209.87	0.00	209.87	1717.07	858.53	2205.12	1104.20	9.48	-1.083	0.000	0.199
83.00	-15.77	-4.42	0.00	-205.44	0.00	205.44	1709.50	854.75	2180.73	1091.99	9.71	-1.102	0.000	0.197
84.00	-15.64	-4.40	0.00	-201.03	0.00	201.03	1701.88	850.94	2156.41	1079.81	9.94	-1.122	0.000	0.195
85.00	-15.52	-4.39	0.00	-196.62	0.00	196.62	1694.20	847.10	2132.15	1067.66	10.18	-1.141	0.000	0.193
86.00	-15.39	-4.38	0.00	-192.23	0.00	192.23	1686.48	843.24	2107.95	1055.54	10.42	-1.160	0.000	0.191
87.00	-15.27	-4.37	0.00	-187.85	0.00	187.85	1678.71	839.35	2083.83	1043.46	10.66	-1.179	0.000	0.189
88.00	-15.15	-4.35	0.00	-183.49	0.00	183.49	1670.88	835.44	2059.78	1031.42	10.91	-1.198	0.000	0.187
89.00	-15.03	-4.34	0.00	-179.14	0.00	179.14	1663.00	831.50	2035.80	1019.41	11.16	-1.217	0.000	0.185
90.00	-14.90	-4.33	0.00	-174.80	0.00	174.80	1655.08	827.54	2011.90	1007.44	11.42	-1.236	0.000	0.183
91.00	-14.78	-4.31	0.00	-170.47	0.00	170.47	1647.10	823.55	1988.06	995.51	11.68	-1.255	0.000	0.180
92.00	-14.66	-4.30	0.00	-166.15	0.00	166.15	1639.07	819.54	1964.31	983.61	11.95	-1.274	0.000	0.178
93.00	-14.54	-4.29	0.00	-161.85	0.00	161.85	1630.99	815.50	1940.63	971.76	12.22	-1.293	0.000	0.176
94.00	-14.42	-4.28	0.00	-157.56	0.00	157.56	1622.86	811.43	1917.03	959.94	12.49	-1.311	0.000	0.173
95.00	-14.30	-4.26	0.00	-153.29	0.00	153.29	1614.68	807.34	1893.51	948.16	12.77	-1.330	0.000	0.171
96.00	-14.19	-4.25	0.00	-149.03	0.00	149.03	1606.45	803.22	1870.07	936.43	13.05	-1.348	0.000	0.168
96.18	-14.17	-4.25	0.00	-148.28	0.00	148.28	1604.99	802.49	1865.94	934.36	13.10	-1.351	0.000	0.168
97.00	-14.02	-4.24	0.00	-144.78	0.00	144.78	1598.16	799.08	1846.72	924.73	13.33	-1.366	0.000	0.165
98.00	-13.85	-4.22	0.00	-140.54	0.00	140.54	1589.83	794.91	1823.44	913.08	13.62	-1.385	0.000	0.163
99.00	-13.67	-4.20	0.00	-136.33	0.00	136.33	1581.44	790.72	1800.26	901.47	13.91	-1.403	0.000	0.160
99.25	-13.63	-4.20	0.00	-135.28	0.00	135.28	1579.34	789.67	1794.47	898.57	13.98	-1.407	0.000	0.090

Calculated Forces

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 98



100.00	-13.50	-4.18	0.00	-132.13	0.00	132.13	1573.01	786.50	1777.16	889.90	14.21	-1.415	0.000	0.089
100.34	-13.44	-4.18	0.00	-130.69	0.00	130.69	1075.68	537.84	1234.34	618.09	14.31	-1.418	0.000	0.099
101.00	-13.38	-4.16	0.00	-127.95	0.00	127.95	1072.67	536.33	1224.84	613.33	14.50	-1.425	0.000	0.111
102.00	-13.28	-4.15	0.00	-123.79	0.00	123.79	1068.04	534.02	1210.40	606.10	14.80	-1.436	0.000	0.108
102.25	-13.26	-4.14	0.00	-122.75	0.00	122.75	1066.88	533.44	1206.79	604.29	14.88	-1.439	0.000	0.108
102.25	-13.26	-4.14	0.00	-122.75	0.00	122.75	1066.88	533.44	1206.79	604.29	14.88	-1.439	0.000	0.108
103.00	-13.19	-4.13	0.00	-119.64	0.00	119.64	1063.37	531.68	1195.97	598.87	15.10	-1.447	0.000	0.212
104.00	-13.09	-4.12	0.00	-115.51	0.00	115.51	1058.64	529.32	1181.57	591.66	15.41	-1.469	0.000	0.208
105.00	-12.99	-4.10	0.00	-111.39	0.00	111.39	1053.86	526.93	1167.20	584.47	15.72	-1.490	0.000	0.203
106.00	-12.90	-4.09	0.00	-107.29	0.00	107.29	1049.03	524.52	1152.85	577.28	16.03	-1.511	0.000	0.198
107.00	-12.80	-4.08	0.00	-103.20	0.00	103.20	1044.15	522.08	1138.52	570.11	16.35	-1.532	0.000	0.193
108.00	-12.71	-4.07	0.00	-99.12	0.00	99.12	1039.22	519.61	1124.23	562.95	16.68	-1.553	0.000	0.188
109.00	-12.61	-4.05	0.00	-95.05	0.00	95.05	1034.24	517.12	1109.97	555.81	17.00	-1.573	0.000	0.183
110.00	-12.52	-4.04	0.00	-91.00	0.00	91.00	1029.21	514.60	1095.73	548.68	17.34	-1.593	0.000	0.178
111.00	-12.43	-4.03	0.00	-86.96	0.00	86.96	1024.13	512.06	1081.53	541.57	17.67	-1.612	0.000	0.173
112.00	-12.33	-4.01	0.00	-82.93	0.00	82.93	1018.99	509.50	1067.37	534.48	18.01	-1.631	0.000	0.167
113.00	-12.24	-4.00	0.00	-78.91	0.00	78.91	1013.81	506.90	1053.24	527.40	18.36	-1.649	0.000	0.162
114.00	-12.15	-3.99	0.00	-74.91	0.00	74.91	1008.57	504.29	1039.14	520.34	18.70	-1.668	0.000	0.156
115.00	-9.47	-3.17	0.00	-70.92	0.00	70.92	1003.28	501.64	1025.09	513.31	19.05	-1.685	0.000	0.148
116.00	-9.39	-3.16	0.00	-67.75	0.00	67.75	997.95	498.97	1011.07	506.29	19.41	-1.702	0.000	0.143
117.00	-9.30	-3.14	0.00	-64.60	0.00	64.60	992.56	496.28	997.10	499.29	19.77	-1.719	0.000	0.139
118.00	-9.21	-3.13	0.00	-61.45	0.00	61.45	987.12	493.56	983.16	492.31	20.13	-1.735	0.000	0.134
119.00	-9.13	-3.12	0.00	-58.32	0.00	58.32	981.63	490.81	969.27	485.36	20.49	-1.751	0.000	0.130
120.00	-9.04	-3.10	0.00	-55.21	0.00	55.21	976.09	488.04	955.42	478.42	20.86	-1.767	0.000	0.125
121.00	-8.96	-3.09	0.00	-52.11	0.00	52.11	970.50	485.25	941.62	471.51	21.23	-1.782	0.000	0.120
122.00	-8.87	-3.08	0.00	-49.02	0.00	49.02	964.85	482.43	927.87	464.62	21.61	-1.796	0.000	0.115
123.00	-8.79	-3.06	0.00	-45.94	0.00	45.94	959.16	479.58	914.16	457.76	21.99	-1.810	0.000	0.110
124.00	-8.70	-3.05	0.00	-42.88	0.00	42.88	953.42	476.71	900.51	450.92	22.37	-1.824	0.000	0.104
125.00	-8.62	-3.04	0.00	-39.83	0.00	39.83	947.62	473.81	886.90	444.11	22.75	-1.836	0.000	0.099
126.00	-8.54	-3.02	0.00	-36.79	0.00	36.79	941.77	470.89	873.35	437.32	23.14	-1.849	0.000	0.093
127.00	-8.45	-3.01	0.00	-33.77	0.00	33.77	935.88	467.94	859.85	430.56	23.53	-1.860	0.000	0.088
128.00	-8.37	-2.99	0.00	-30.76	0.00	30.76	929.93	464.96	846.40	423.83	23.92	-1.871	0.000	0.082
129.00	-8.29	-2.98	0.00	-27.77	0.00	27.77	923.93	461.97	833.02	417.13	24.31	-1.881	0.000	0.076
130.00	-4.73	-1.75	0.00	-24.79	0.00	24.79	917.88	458.94	819.69	410.45	24.70	-1.891	0.000	0.066
131.00	-4.67	-1.73	0.00	-23.04	0.00	23.04	911.78	455.89	806.41	403.81	25.10	-1.900	0.000	0.062
132.00	-4.61	-1.72	0.00	-21.31	0.00	21.31	905.63	452.81	793.20	397.19	25.50	-1.908	0.000	0.059
133.00	-4.55	-1.71	0.00	-19.59	0.00	19.59	899.43	449.71	780.05	390.61	25.90	-1.916	0.000	0.055
134.00	-4.49	-1.69	0.00	-17.89	0.00	17.89	893.17	446.59	766.97	384.05	26.30	-1.923	0.000	0.052
135.00	-4.43	-1.68	0.00	-16.19	0.00	16.19	886.87	443.43	753.94	377.53	26.71	-1.930	0.000	0.048
136.00	-4.38	-1.67	0.00	-14.51	0.00	14.51	880.51	440.26	740.98	371.04	27.11	-1.937	0.000	0.044
137.00	-4.32	-1.65	0.00	-12.85	0.00	12.85	874.11	437.05	728.09	364.59	27.52	-1.943	0.000	0.040
138.00	-4.09	-1.19	0.00	-11.20	0.00	11.20	867.65	433.83	715.27	358.17	27.93	-1.948	0.000	0.036
139.00	-4.03	-1.18	0.00	-10.00	0.00	10.00	861.15	430.57	702.52	351.78	28.33	-1.953	0.000	0.033
140.00	-2.48	-0.89	0.00	-8.82	0.00	8.82	854.59	427.29	689.83	345.43	28.74	-1.958	0.000	0.028
141.00	-2.44	-0.87	0.00	-7.94	0.00	7.94	847.98	423.99	677.22	339.11	29.15	-1.962	0.000	0.026
142.00	-2.40	-0.86	0.00	-7.07	0.00	7.07	841.32	420.66	664.68	332.84	29.57	-1.966	0.000	0.024
143.00	-2.36	-0.85	0.00	-6.21	0.00	6.21	834.61	417.30	652.22	326.60	29.98	-1.969	0.000	0.022
144.00	-2.32	-0.84	0.00	-5.36	0.00	5.36	827.84	413.92	639.83	320.39	30.39	-1.973	0.000	0.020
145.00	-2.27	-0.82	0.00	-4.52	0.00	4.52	821.03	410.52	627.52	314.23	30.80	-1.975	0.000	0.017
146.00	-2.23	-0.81	0.00	-3.70	0.00	3.70	814.17	407.08	615.29	308.10	31.22	-1.978	0.000	0.015
147.00	-2.19	-0.80	0.00	-2.89	0.00	2.89	805.87	402.94	602.11	301.50	31.63	-1.980	0.000	0.012
148.00	-2.15	-0.79	0.00	-2.09	0.00	2.09	796.71	398.35	588.42	294.65	32.05	-1.981	0.000	0.010
149.00	0.00	-0.71	0.00	-1.30	0.00	1.30	787.55	393.77	574.90	287.88	32.46	-1.982	0.000	0.005

Final Analysis Summary

Structure: CT12215-A-SBA	Code: TIA-222-G	5/3/2022
Site Name: Litchfield 3, CT	Exposure: B	
Height: 149.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: B - Competent Rock	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 99



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 93 mph Wind	21.1	0.00	36.09	0.00	0.00	2409.62
0.9D + 1.6W 93 mph Wind	21.1	0.00	27.07	0.00	0.00	2368.07
1.2D + 1.0Di + 1.0Wi 50 mph Wind	6.5	0.00	59.73	0.00	0.00	755.62
1.2D + 1.0E	1.0	0.00	36.10	0.00	0.00	121.01
0.9D + 1.0E	1.0	0.00	27.08	0.00	0.00	118.78
1.0D + 1.0W 60 mph Wind	5.5	0.00	30.08	0.00	0.00	620.64

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 93 mph Wind	-36.09	-21.13	0.00	-2409.6	0.00	-2409.6	3031.07	1515.5	5947.06	2977.95	0.00	0.821
0.9D + 1.6W 93 mph Wind	-27.07	-21.12	0.00	-2368.0	0.00	-2368.0	3031.07	1515.5	5947.06	2977.95	0.00	0.804
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-29.71	-5.06	0.00	-148.31	0.00	-148.31	1063.37	531.68	1195.97	598.87	103.00	0.276
1.2D + 1.0E	-15.94	-0.82	0.00	-31.38	0.00	-31.38	1063.37	531.68	1195.97	598.87	103.00	0.067
0.9D + 1.0E	-11.95	-0.80	0.00	-30.61	0.00	-30.61	1063.37	531.68	1195.97	598.87	103.00	0.062
1.0D + 1.0W 60 mph Wind	-30.08	-5.49	0.00	-620.64	0.00	-620.64	3031.07	1515.5	5947.06	2977.95	0.00	0.218

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors			Lower Termination				Upper Termination				Max Member			
			VQ/I (lb/in)	Vu (kips)	phi Vn (kips)	MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Pu (kips)	phi Pn (kips)	phi Tn (kips)	Ratio
52.0	68.0	(3) PLT-4.5"x 1-1/4" (1.25"ho)	189.2	4.54	37.1	138.6	37.1	4	8	104.7	37.1	3	8	149.59	296.2	239.06	0.626
52.0	68.0	(3) LNP-LP6X100-G-20TT	200.4	4.81	25.3	146.8	25.3	6	8	110.9	25.3	5	8	158.53	297.8	288.75	0.549
67.9	75.0	(3) PLT-4.5"x 1-1/4" (1.25"ho)	-282.2	-6.77	37.1	104.7	37.1	3	8	181.1	37.1	5	8	191.40	296.2	239.06	0.801
99.3	102.3	(3) PLT-4x1.25 (1.25 Hole)	371.5	8.17	37.1	123.8	37.1	4	9	132.0	37.1	4	9	135.71	267.8	201.56	0.673



Monopole Mat Foundation Design

Date

5/3/2022

Customer Name:	T-Mobile	TIA Standard:	TIA-222-G
Site Name:		Structure Height (Ft.):	149
Site Number:	CT12215-A-SBA	Engineer Name:	I. Hasan Efaz
Engr. Number:	128601	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations
Monopole
Analysis

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):	36.1	Shear Force (Kips):	21.1
Uplift Force (Kips):	0.0	Moment (Kips-ft):	2409.6

Allowable overstress %: 5.0%

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	6.5	Depth of Base BG (ft.):	4.5
Pier Height A. G. (ft.):	1.00	Thickness of Pad (ft):	3.00
Length of Pad (ft.):	23	Width of Pad (ft.):	23

Final Length of pad (ft)	23.0	Final width of pad (ft):	23.0
--------------------------	------	--------------------------	------

Material Properties and Rebar Info:

Concrete Strength (psi):	4000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	8	Tie / Stirrup Size #:	4	
Qty. of Vertical Rebars:	38	Tie Spacing (in):	12.0	
Pad Rebar Yield (Ksi):	60	Pad Steel Rebar Size (#):	8	
Concrete Cover (in.):	3	Unit Weight of Concrete:	150.0	pcf

Rebar at the bottom of the concrete pad:

Qty. of Rebar in Pad (L):	34	Qty. of Rebar in Pad (W):	34
---------------------------	----	---------------------------	----

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	34	Qty. of Rebar in Pad (W):	34
---------------------------	----	---------------------------	----

Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

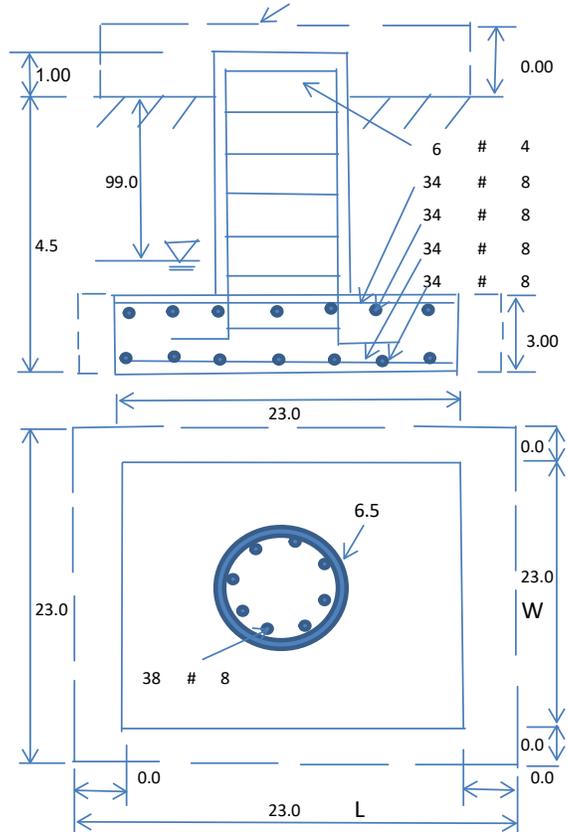
Soil Unit Weight (pcf):	110.0	Soil Buoyant Weight:	50.0	Pcf		
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	12000	Ultimate Skin Friction:	425	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	No		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	Yes	Reduction factor on the maximum soil bearing pressure:	1.00			

Foundation Analysis and Design:

Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75
Total Dry Soil Volume (cu. Ft.):	743.73	Total Dry Soil Weight (Kips):	81.81
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	81.81	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	1669.96	Total Dry Concrete Weight (Kips):	250.49
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	250.49	Total Vertical Load on Base (Kips):	368.40

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	2297	<	Allowable Factored Soil Bearing (psf):	9000	0.26	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	3854.5	>	Design Factored Momont (kips-ft):	2460	0.64	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.57					OK!



Check the capacities of Reinforcing Concrete:

Strength reduction factor (Flexure and axial tension):	0.90	Strength reduction factor (Shear):	0.75		
Strength reduction factor (Axial compression):	0.65	Wind Load Factor on Concrete Design:	1.00		
				Load/ Capacity Ratio	
(1) Concrete Pier:					
Vertical Steel Rebar Area (sq. in./each):	0.79	Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	4704.5	> Design Factored Moment (Mu, Kips-F	2462.4	0.52	OK!
Calculated Shear Capacity (Kips):	578.1	> Design Factored Shear (Kips):	21.1	0.04	OK!
Calculated Tension Capacity (Tn, Kips):	1621.1	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	8395.1	> Design Factored Axial Load (Pu Kips):	36.1	0.00	OK!
Moment & Axial Strength Combination:	0.52	OK! Check Tie Spacing (Design/Required):		1	OK!
Pier Reinforcement Ratio:	0.006	Reinforcement Ratio is satisfied per ACI			
(2).Concrete Pad:					
One-Way Design Shear Capacity (L-Direction, Kips):	851.0	> One-Way Factored Shear (L-D. Kips):	164.2	0.19	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	851.0	> One-Way Factored Shear (W-D., Kips)	164.2	0.19	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	762.6	> One-Way Factored Shear (C-C, Kips):	158.9	0.21	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0030	OK! Lower Steel Pad Reinf. Ratio (W-Direc	0.0030		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	3824.5	> Moment at Bottom (L-Dir. K-Ft):	847.7	0.22	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	3824.5	> Moment at Bottom (W-Dir. K-Ft):	847.7	0.22	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	5372.0	> Moment at Bottom (C-C Dir. K-Ft):	1198.9	0.22	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0030	OK! Upper Steel Reinf. Ratio (W-Dir.):	0.0030		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	3824.5	> Moment at the top (L-Dir K-Ft):	368.6	0.10	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	3824.5	> Moment at the top (W-Dir K-Ft):	368.6	0.10	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	5372.0	> Moment at the top (C-C Dir. K-Ft):	346.0	0.06	OK!
(3).Check Punching Shear Capacity due to Moment in the Pier:					
Moment transferred by punching shear:	963.8	k-ft. Max. factored shear stress $v_{u,CD}$:		2.9	Psi
Max. factored shear stress $v_{u,AB}$:	7.9	Psi Factored shear Strength ϕv_n :		189.7	Psi
Max. factored shear stress v_u :	7.9	Psi Check Usage of Punching Shear Capacity:		0.04	OK!

Exhibit E

Mount Analysis



Tower Engineering Solutions

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

Antenna Mount Analysis Report

Existing Monopole Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT12215-A-SBA

Customer Site Name: Litchfield 3, CT

Carrier Name: T-Mobile (App#: 194575, V1)

Carrier Site ID / Name: CTNH546A / BayCom Litchfield

Site Location: 1291 Bantam Road

Bantam, Connecticut

Litchfield County

Latitude: 41.717183

Longitude: -73.260928



Analysis Result:

Max Structural Usage: 93.2% [Pass]

Report Prepared By: Venkata Annamreddy



Tower Engineering Solutions

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

Antenna Mount Analysis Report

Existing Monopole Tower

Customer Name: SBA Communications Corp

Customer Site Number: CT12215-A-SBA

Customer Site Name: Litchfield 3, CT

Carrier Name: T-Mobile (App#: 194575, V1)

Carrier Site ID / Name: CTNH546A / BayCom Litchfield

Site Location: 1291 Bantam Road

Bantam, Connecticut

Litchfield County

Latitude: 41.717183

Longitude: -73.260928

Analysis Result:

Max Structural Usage: 93.2% [Pass]

Report Prepared By: Venkata Annamreddy

Introduction

The purpose of this report is to summarize the analysis results on the (3) T-Arms (Sitepro RMV12) at 115.00' elevation to support the proposed antenna configuration. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Mount Drawings	Mapping by Full Metal Tower Services; dated:4/27/2019
Antenna Loading	SBA, Application #: 194575, v1; dated: 4/27/2022
Existing Modification Drawings	TES Project no: 81152 dated: 07/23/2019
Recent site picture	Provided by SBA

Analysis Criteria

Basic Wind Speed Used in the Analysis: $V_{ULT} = 120\text{mph}$ (3-Sec. Gust) / Equivalent to
 $V_{ASD} = 93\text{mph}$ (3-Sec. Gust)

Basic Wind Speed with Ice: 40 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

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

(3) T-Arms (Sitepro RMV12) at 115.00' elevation

Final Antenna Configuration

- 3 Ericsson AIR6419 B41
- 3 RFS APXVAALL24_43-U-NA20
- 3 Ericsson RRUS 11 (Band 4)
- 3 Ericsson 4460 B25 + B66
- 3 Ericsson 4449 B71 + B85

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

Analysis Results

Our calculations have determined that under design wind load the existing mounts will be structurally adequate to support the proposed antenna configuration. The maximum structural usage is 93.2%, which occurs in the mount pipe. The proposed equipment must be installed as stipulated in the Final Antenna Configuration section of this report. The analysis results are void if the proposed equipment is not installed in accordance with this report.

Attachments

1. Mount Photos
2. Antenna Placement Diagram
3. Mount Mapping Information
4. Analysis Calculations

Standard Conditions

1. The loading configuration as analyzed in this report is as provided from the customer. Any deviation from this design shall be communicated to TES to verify deviation will not adversely impact the analysis.
2. The analysis is based on the presumption that the antenna mount members and components along with any existing reinforcement items have been correctly and properly designed, manufactured, installed and maintained.
3. All the existing structural members were assumed to be in good condition with no physical damage or deterioration associated with corrosion. The mount analysis is not a condition assessment of the mount.
4. The mount analysis was performed in accordance with the loading provided, and if applicable the modification required to support the additional loading.
5. If the mount is modified, installation must adhere to the configuration communicated in the modification drawings.
6. The modification drawings are not intended to convey means or methods. These are the responsibility of the installing contractor.
7. Rigging plan review is available if the contractor requires for a construction class IV or other if required. Review fee would apply.
8. The mount modification package was created based upon information provided for the mount loading. The underlying tower is assumed to provide support and sufficient rigidity to support the mount loads as a tower analysis was not part of the mount analysis.
9. TES is not responsible for modifications to climbing facilities unless communicated to TES in writing.



Sector: **A**

4/28/2022

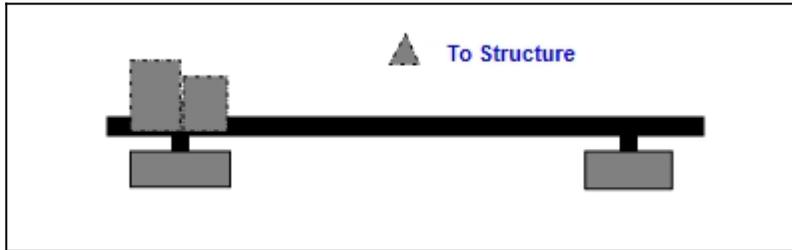
Structure Type: Monopole

Mount Elev: 115.00

Page: 1

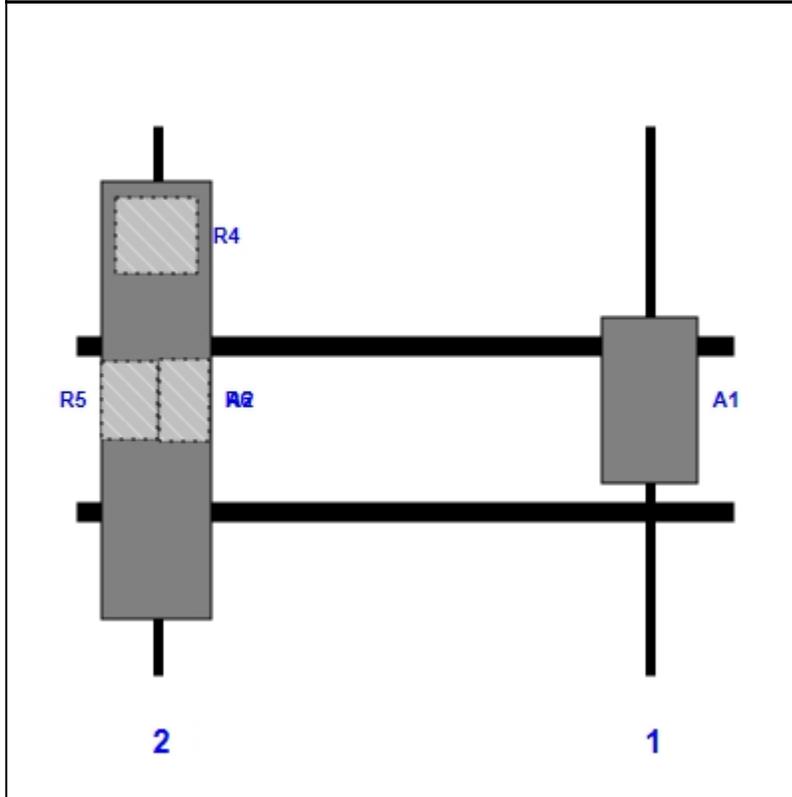


Plan View



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	AIR6419 B41	36.30	20.90	126.00	1	a	Front	60.00			
A2	APXVAALL24_43-U-NA20	95.90	24.00	18.00	2	a	Front	60.00			
R4	RRUS 11 (Band 4)	17.00	17.80	18.00	2	a	Behind	24.00			
R5	4460 B25 + B66	17.00	11.90	18.00	2	a	Behind	60.00	-6.00		
R6	4449 B71 + B85	17.90	10.60	18.00	2	a	Behind	60.00	6.00		

Sector: **B**

4/28/2022

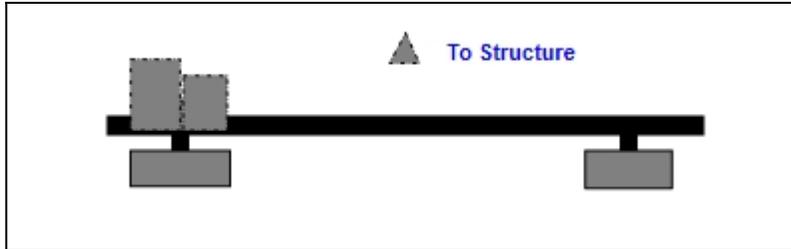
Structure Type: Monopole

Mount Elev: 115.00

Page: 2

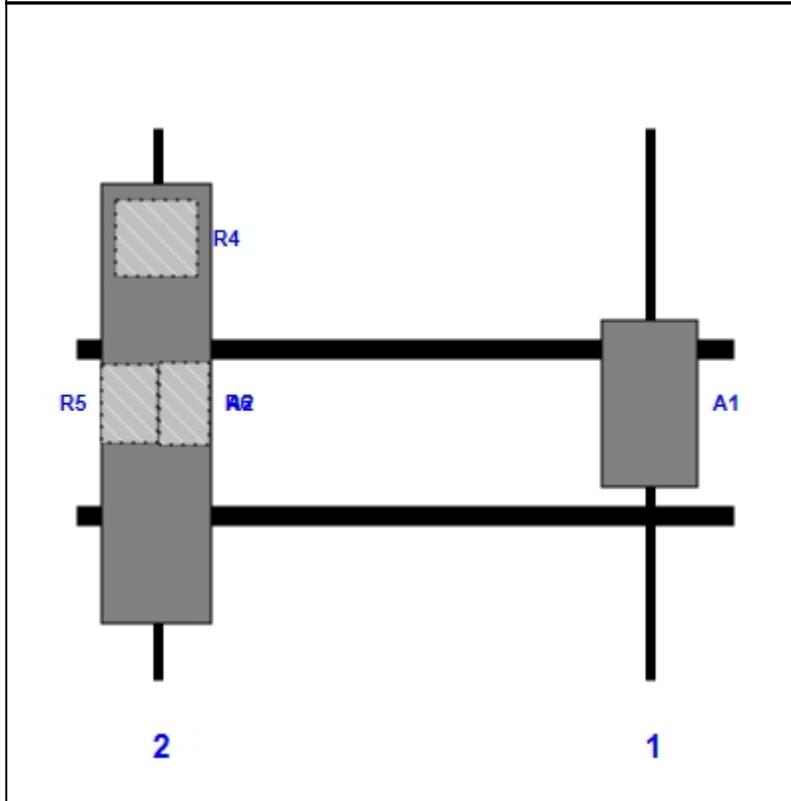


Plan View



Front View

Looking Toward Structure



Ref	Model	Height (in)	Width (in)	H Dist Left	Pipe	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	AIR6419 B41	36.30	20.90	126.00	1	a	Front	60.00			
A2	APXVAALL24_43-U-NA20	95.90	24.00	18.00	2	a	Front	60.00			
R4	RRUS 11 (Band 4)	17.00	17.80	18.00	2	a	Behind	24.00			
R5	4460 B25 + B66	17.00	11.90	18.00	2	a	Behind	60.00	-6.00		
R6	4449 B71 + B85	17.90	10.60	18.00	2	a	Behind	60.00	6.00		

Sector: **C**

4/28/2022

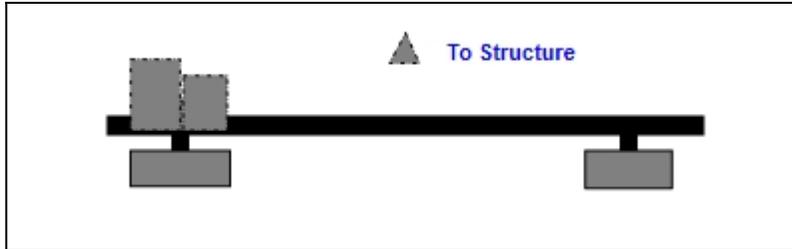
Structure Type: Monopole

Mount Elev: 115.00

Page: 3

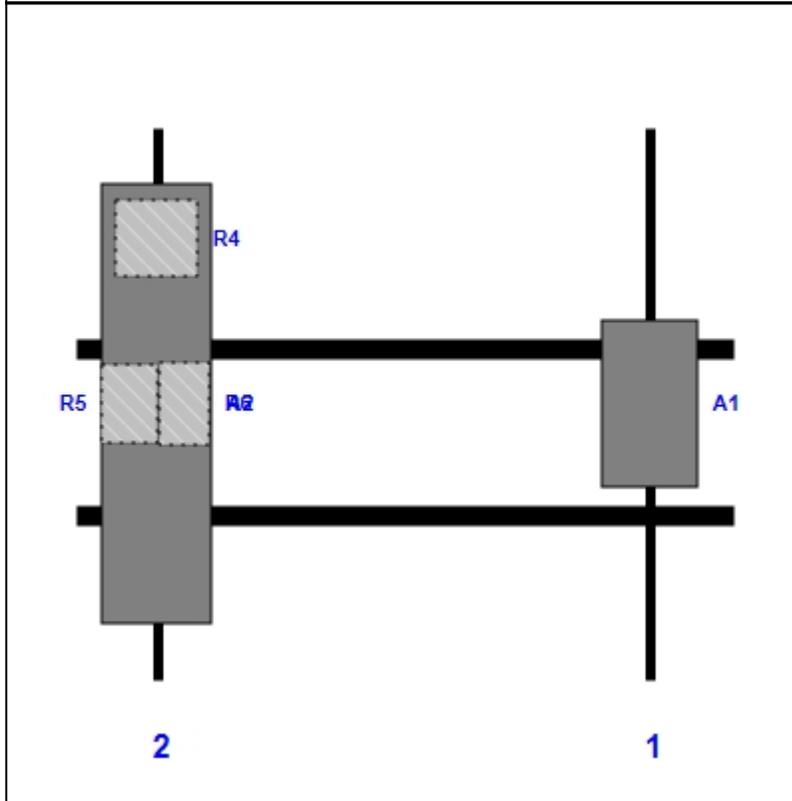


Plan View



Front View

Looking Toward Structure



Ref	Model	Height (in)	Width (in)	H Dist Left	Pipe	Pipe Pos V	Pos	From Top	H Offset	Status	Validation
A1	AIR6419 B41	36.30	20.90	126.00	1	a	Front	60.00			
A2	APXVAALL24_43-U-NA20	95.90	24.00	18.00	2	a	Front	60.00			
R4	RRUS 11 (Band 4)	17.00	17.80	18.00	2	a	Behind	24.00			
R5	4460 B25 + B66	17.00	11.90	18.00	2	a	Behind	60.00	-6.00		
R6	4449 B71 + B85	17.90	10.60	18.00	2	a	Behind	60.00	6.00		

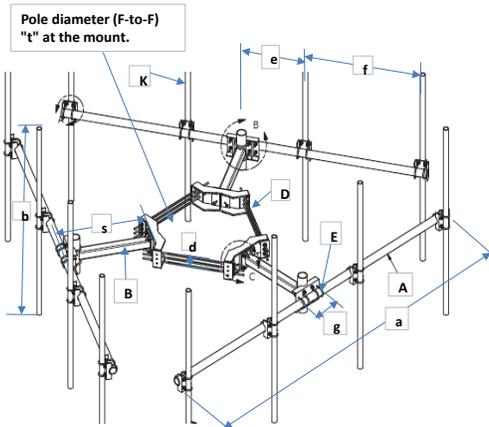


Antenna Mount Type "MT-Z" Mapping Form (PATENT PENDING)

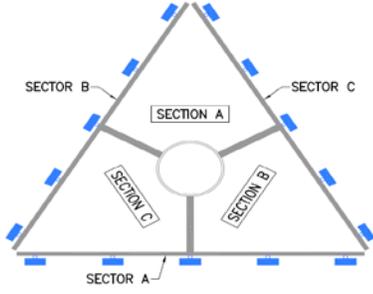
FCC #
Not Posted

Tower Owner:	SBA Communications	Mapping Date:	4/27/19
Site Name:	Litchfield 3, CT	Structure Type:	Monopole
Site Number or ID:	CT12215-A-SBA	Structure Height (Ft.):	150
Mapping Contractor:	Full Metal Tower Services	Mount Height (Ft.):	113.1

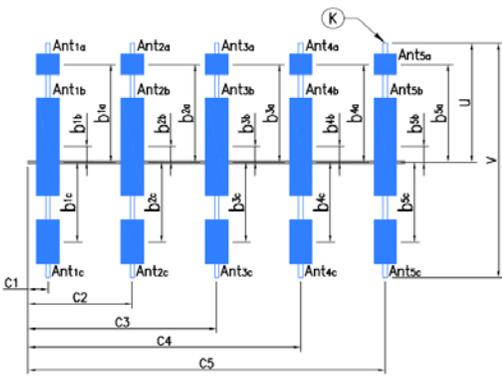
This antenna mapping form is the property of TES and under **PATENT PENDING**. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is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



Geometries (Unit: inches)									
a	144	e	54	j	N/A	o	N/A	s	46
b	120	f	N/A	k	N/A	p	N/A	t	19
c	N/A	g	15	m	N/A	q	N/A	u*	72
d	6	h	N/A	n	N/A	r	N/A	v*	120
Members/Bolts (Unit: inches) *- See Ant. Layout for "u", "v" and member "K" (pipe)									
Items	Member	Lx (O.D.)	Ly (I.D.)	T	Items	Member	Lx (O.D.)	Ly (I.D.)	T
A	3.5 OD x 0.216 Pipe	3.5	3.068	0.216	F				
B	Tubing 4x4x1/4	4	4	0.25	G				
C					H				
D	5/8" Bolt	32			J				
E	5/8" Bolt	U-Bolt			K* (pipe)	2.375 OD x 0.154 Pipe	2.375	2.067	0.154
Distance from top of main platform member to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.)									
Distance from top of main platform member to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.)									
Please enter the information below if members can't be found from the drop down lists									



Ants. Items	Enter antenna model. If not labled, enter "Unknown". If no antenna at specified location, enter "N/A". If antennas and the locations are the same on all three sectors, only enter one sector.					Mounting Locations (Unit: inches)			Photos of antennas
	Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Vertical Distances "b _{1a} ", "b _{2a} ", "b _{3a} ", "b _{1b} ..." (in.)	Horiz. offset (Use "..." if Ant. is inside)	Horiz. offset "C ₁ ", "C ₂ ", "C ₃ ", "C ₄ ", "C ₅ " (in.)	Photo Numbers
Sector A									
Ant _{1a}	RRH A	17	7	20	1/2" (2)	+18"	N/A	18	
Ant _{1b}	Antenna A	13	3.5	53	1/2" (4)	+34"	6	18	
Ant _{1c}	RRH A	17	7	20	1/2" (2)	+18"	N/A	18	
Ant _{2a}									
Ant _{2b}	Antenna B	12	7.5	96.5	1/2" (2)	+38"	7	126	
Ant _{2c}	RRH A	17	7	20	1/2" (2)	+20"	N/A	126	
Ant _{3a}									
Ant _{3b}									
Ant _{3c}									
Ant _{4a}									
Ant _{4b}									
Ant _{4c}									
Ant _{5a}									
Ant _{5b}									
Ant _{5c}									
Are Ant same as sector A?		Yes		Antennas on Sector B are the same as Sector A					

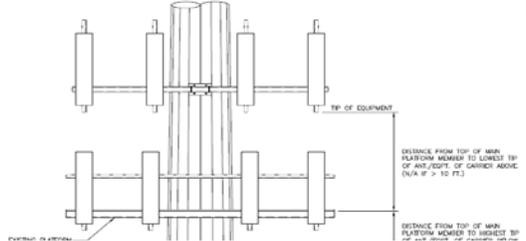


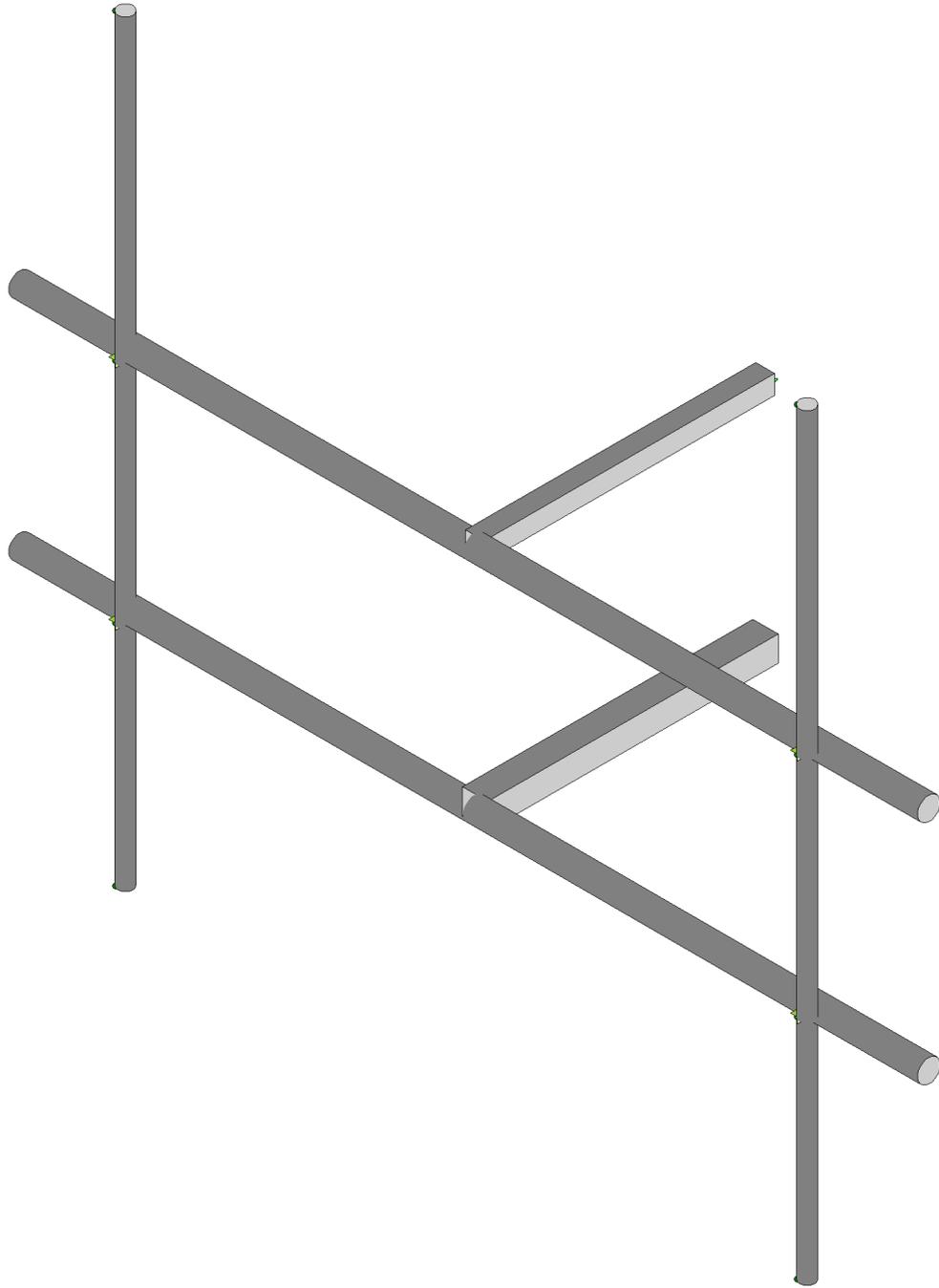
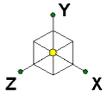
Antenna Layout

Azimuth (Degree) of Each Sector and Climbing Information

Sector A:	60°	Deg	
Sector B:	180°	Deg	
Sector C:	270°	Deg	
Climbing	180°	Deg	Located at Section B
Climbing Facility	Corrosion Type:	No corrosion observed	
	Access:	Climbing path was unobstructed.	
	Condition:	N/A	

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





Tower Engineering Solutio...

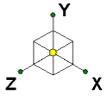
CT12215-A-SBA_MT_LOT_Loads Only_Sector A_G

SK - 1

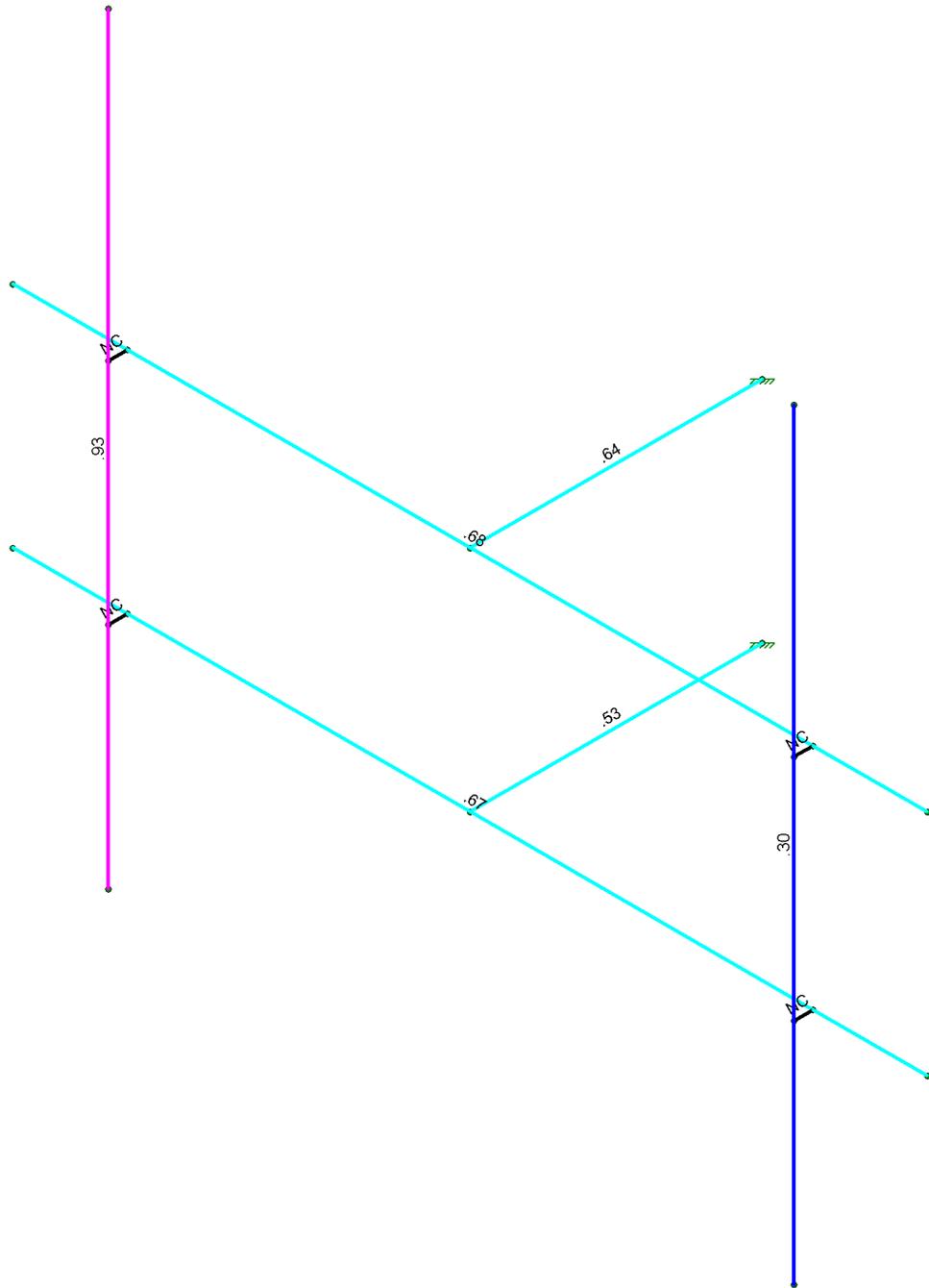
Apr 28, 2022 at 10:17 AM

TES Project No. 128394

CT12215-A-SBA_128394_G_RISA_...



Code Check (Env)	
Black	No Calc
Red	> 1.0
Magenta	.90-1.0
Green	.75-.90
Cyan	.50-.75
Blue	0-.50



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

Tower Engineering Solutio...

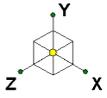
CT12215-A-SBA_MT_LOT_Loads Only_Sector A_G

SK - 3

Apr 28, 2022 at 10:18 AM

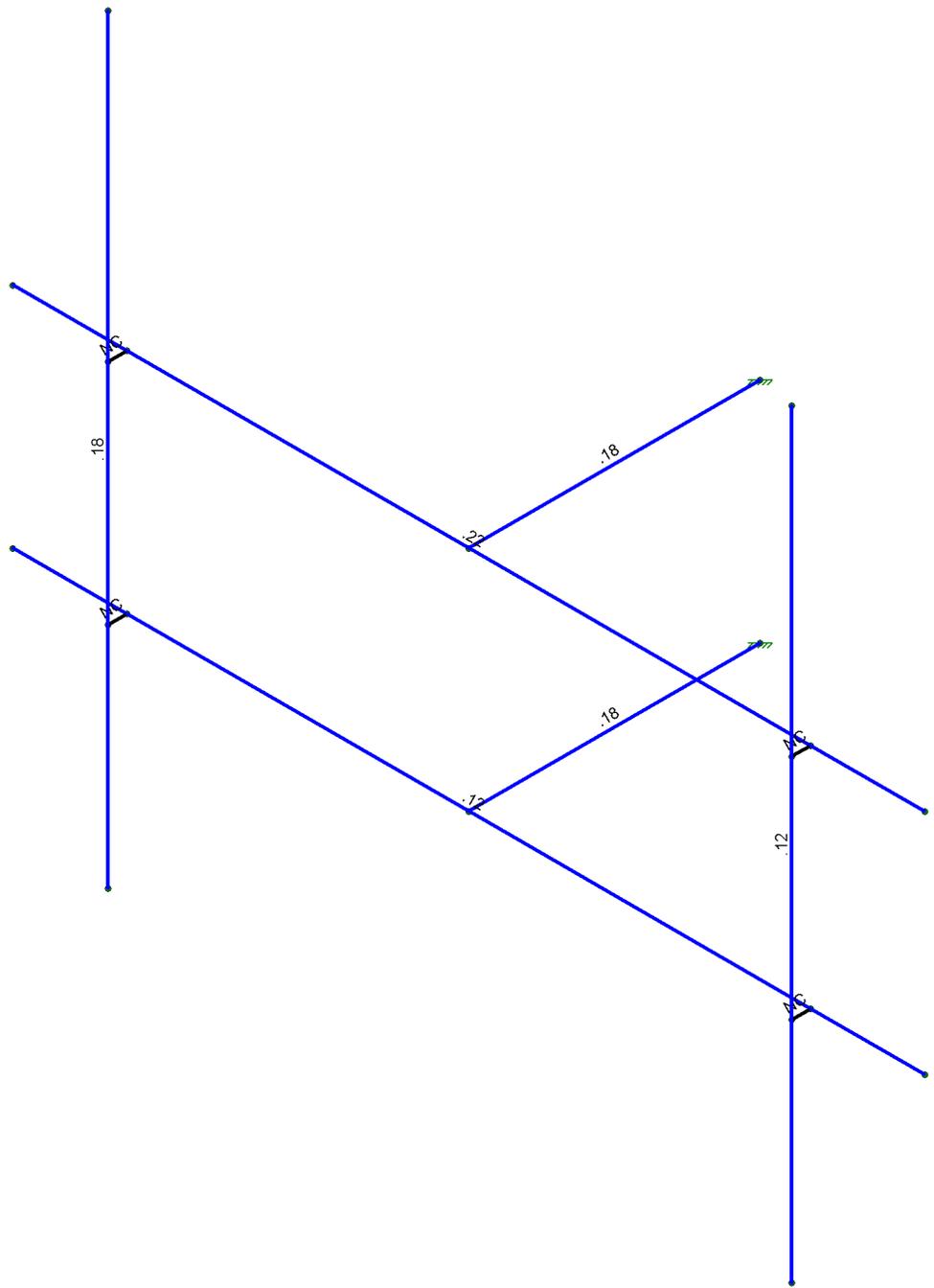
TES Project No. 128394

CT12215-A-SBA_128394_G_RISA_...



Shear Check
(Env)

- No Calc
- > 1.0
- .90-1.0
- .75-.90
- .50-.75
- 0-.50



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

Tower Engineering Solutio...	CT12215-A-SBA_MT_LOT_Loads Only_Sector A_G	SK - 2
TES Project No. 128394		Apr 28, 2022 at 10:18 AM
		CT12215-A-SBA_128394_G_RISA_...

>c]bh7ccfX]bUHyg'UbX'HYa dYfUi fYg'f7 cb]bi YXŁ

	Šæ^]	ÝÁcá	ÝÁcá	ZÁcá	V^]Ácá	Ô•æ&Ó[] ÁÓæ] ÉÉ
FÍ	ÞFÍ	I ÉÉ	G	I ÉÉ HHH	€	
FĪ	ÞFĪ	Ī ÉÉ	G	I ÉÉ HHH	€	
FĪ	ÞFĪ	I ÉÉ	Ē	HÉ HHHH	€	
FĪ	ÞFĪ	Ī ÉÉ	Ē	HÉ HHHH	€	
FJ	ÞFJ	I ÉÉ	G	HÉ HHHH	€	
GE	ÞGE	Ī ÉÉ	G	HÉ HHHH	€	

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

	Šæ^]	Úæ^	V^]	Ô•ã) Ác	Tæ]æ	Ô•ã) ÁU' ÉÉ	Q'Áá	Q:Áá	RÁá	
F	ccc	PÚÚFÍ	Óæ	P] ^	ÓĪ GÓ:É€	V] ææ	FJÉ	Ī É	Ī É	FG€

A Ya Vyf'Df]a Ufm8 UU

	Šæ^]	Q]á c	R]á c	S]á c	Ú[æ Q^*D Ú^&ç] ÉÚæ^	V^]	Ô•ã) Ác	Tæ]æ	Ô•ã) ÁU' ^
F	TF	ÞH	ÞI		ÚÓÓ' HÉ	Óæ	Úá ^	ÓÉ HÓ:ÉÓ	ÓÜF
G	TG	ÞF	ÞG		PÚÚI YI YI	Óæ	P] ^	ÓÉ HÓ:ÉÓ	ÓÜF
H	T ÚFÓÉ	ÞÚF	ÞÚG		ÚÓÓ' GÉ	Óæ	Úá ^	ÓÉ HÓ:ÉÓ	ÓÜF
I	T ÚGÓÉ	ÞÚH	ÞÚI		ÚÓÓ' GÉ	Óæ	Úá ^	ÓÉ HÓ:ÉÓ	ÓÜF
Í	T Í	ÞFF	ÞFG		ÚÓÓ' HÉ	Óæ	Úá ^	ÓÉ HÓ:ÉÓ	ÓÜF
Ī	T Ī	ÞJ	ÞFÉ		PÚÚH YH YI	Óæ	P] ^	ÓÉ HÓ:ÉÓ	ÓÜF
Ī	T Ī	ÞFĪ	ÞGÉ		ÚÓÓ	Óæ	P] ^	ÚÓÓ	ÓÜF
Ī	T Ī	ÞFĪ	ÞFĪ		ÚÓÓ	Óæ	P] ^	ÚÓÓ	ÓÜF
J	TJ	ÞFJ	ÞFÍ		ÚÓÓ	Óæ	P] ^	ÚÓÓ	ÓÜF
FÉ	TFÉ	ÞFH	ÞFĪ		ÚÓÓ	Óæ	P] ^	ÚÓÓ	ÓÜF

A Ya Vyf'5 Xj UbWX'8 UU

	Šæ^]	Q] ^ Áæ ^	R] ^ Áæ ^	Q] ~ ^ çá	R] ~ ^ çá	VÉÁU]]	Ú@•ææ	Ô•ÁUæÉÉ] æ•á ÁÉÉ	Qæçá ^	Úá { æÉÉ
F	TF						Ý•			P] ^
G	TG						Ý•			P] ^
H	T ÚFÓÉ						Ý•	É		P] ^
I	T ÚGÓÉ						Ý•	É		P] ^
Í	T Í						Ý•			P] ^
Ī	T Ī						Ý•			P] ^
Ī	T Ī						Ý•			P] ^
Ī	T Ī						Ý•			P] ^
J	TJ						Ý•			P] ^
FÉ	TFÉ						Ý•			P] ^

<chFc`YX'GhYY'DfcdYf]Yg

	Šæ^]	ÓÆ•ã	ÓÆ•ã	P`	VØ[(ÁPÓÉÉ) •æ Ž ÉÉ	Ýa]áŽ•ã	Ú	Ø Ž•ã	Úc	
F	ØÉJG	GJÉÉÉ	FFFÍ I	ÉÉ	ÉÉ	ÉÉ J	Í €	FÉ	Ī Ī	FÉ
G	ØĪ ÁÓ:ÉĪ	GJÉÉÉ	FFFÍ I	ÉÉ	ÉÉ	ÉÉ J	HÍ	FÉ	Ī Ī	FÉ
H	ØĪ Ī GÓ:É€	GJÉÉÉ	FFFÍ I	ÉÉ	ÉÉ	ÉÉ J	Í €	FÉ	Ī Ī	FÉ
I	ØÉ ÉÓ:ÉÓ Ú ÞÓ	GJÉÉÉ	FFFÍ I	ÉÉ	ÉÉ	ÉÉ Ĝ	I G	FÉ	Ī Ī	FÉ
Í	ØÉ ÉÓ:ÉÓ Ú ^&c	GJÉÉÉ	FFFÍ I	ÉÉ	ÉÉ	ÉÉ Ĝ	Ī Ī	FÉ	Ī Ī	FÉ
Ī	ØÉ HÓ:ÉÓ	GJÉÉÉ	FFFÍ I	ÉÉ	ÉÉ	ÉÉ J	HÍ	FÉ	Ī €	FÉ
Ī	ØÉ Ī	GJÉÉÉ	FFFÍ I	ÉÉ	ÉÉ	ÉÉ J	Í €	FÉ	Ī Ī	FÉ

Exhibit F

Power Density/RF Emissions Report

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

T-Mobile Existing Facility

Site ID: CTNH546A

**1291 Bantam Road
Bantam, Connecticut 06750**

May 22, 2022

EBI Project Number: 6222003372

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	26.81%

May 22, 2022

T-Mobile

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

Emissions Analysis for Site: CTNH546A

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **1291 Bantam Road in Bantam, Connecticut** for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

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

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

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

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

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at 1291 Bantam Road in Bantam, Connecticut using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 10 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was focused at the base of the tower. For this report, the sample point is the top of a 6-foot person standing at the base of the tower.

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

- 1) 2 LTE channels (600 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 2) 1 NR channel (600 MHz Band) was considered for each sector of the proposed installation. This Channel has a transmit power of 80 Watts.
- 3) 2 LTE channels (700 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 4) 2 UMTS channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 5) 2 LTE channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.
- 6) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

- 7) 1 LTE Traffic channel (LTE 1C and 2C BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 60 Watts.
- 8) 1 LTE Broadcast channel (LTE 1C and 2C BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 20 Watts.
- 9) 1 NR Traffic channel (BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 120 Watts.
- 10) 1 NR Broadcast channel (BRS Band - 2500 MHz) was considered for each sector of the proposed installation. This Channel has a transmit power of 40 Watts.
- 11) 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.
- 12) 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.
- 13) The antennas used in this modeling are the Ericsson AIR 6419 for the 2500 MHz / 2500 MHz / 2500 MHz / 2500 MHz channel(s), the RFS APXVAALL24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz channel(s) in Sector A, the Ericsson AIR 6419 for the 2500 MHz / 2500 MHz / 2500 MHz / 2500 MHz channel(s), the RFS APXVAALL24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz channel(s) in Sector B, the Ericsson AIR 6419 for the 2500 MHz / 2500 MHz / 2500 MHz / 2500 MHz channel(s), the RFS APXVAALL24_43-U-NA20 for the 600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 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.

- 14) The antenna mounting height centerline of the proposed antennas is 115 feet above ground level (AGL).
- 15) 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.
- 16) 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 6419	Make / Model:	Ericsson AIR 6419	Make / Model:	Ericsson AIR 6419
Frequency Bands:	2500 MHz / 2500 MHz / 2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz / 2500 MHz	Frequency Bands:	2500 MHz / 2500 MHz / 2500 MHz
Gain:	22.05 dBd / 15.55 dBd / 22.05 dBd / 15.55 dBd	Gain:	22.05 dBd / 15.55 dBd / 22.05 dBd / 15.55 dBd	Gain:	22.05 dBd / 15.55 dBd / 22.05 dBd / 15.55 dBd
Height (AGL):	115 feet	Height (AGL):	115 feet	Height (AGL):	115 feet
Channel Count:	4	Channel Count:	4	Channel Count:	4
Total TX Power (W):	240.00 Watts	Total TX Power (W):	240.00 Watts	Total TX Power (W):	240.00 Watts
ERP (W):	31,011.95	ERP (W):	31,011.95	ERP (W):	31,011.95
Antenna A1 MPE %:	9.38%	Antenna B1 MPE %:	9.38%	Antenna C1 MPE %:	9.38%
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	RFS APXVAALL24_43-U-NA20	Make / Model:	RFS APXVAALL24_43-U-NA20	Make / Model:	RFS APXVAALL24_43-U-NA20
Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz	Frequency Bands:	600 MHz / 600 MHz / 700 MHz / 1900 MHz / 1900 MHz / 2100 MHz
Gain:	12.95 dBd / 12.95 dBd / 13.65 dBd / 15.45 dBd / 15.45 dBd / 16.45 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.65 dBd / 15.45 dBd / 15.45 dBd / 16.45 dBd	Gain:	12.95 dBd / 12.95 dBd / 13.65 dBd / 15.45 dBd / 15.45 dBd / 16.45 dBd
Height (AGL):	115 feet	Height (AGL):	115 feet	Height (AGL):	115 feet
Channel Count:	11	Channel Count:	11	Channel Count:	11
Total TX Power (W):	500.00 Watts	Total TX Power (W):	500.00 Watts	Total TX Power (W):	500.00 Watts
ERP (W):	15,764.21	ERP (W):	15,764.21	ERP (W):	15,764.21
Antenna A2 MPE %:	6.50%	Antenna B2 MPE %:	6.50%	Antenna C2 MPE %:	6.50%

Site Composite MPE %	
Carrier	MPE %
T-Mobile (Max at Sector A):	15.89%
Sprint	2.6%
AT&T	6.67%
Verizon	1.65%
Site Total MPE % :	26.81%

T-Mobile MPE % Per Sector	
T-Mobile Sector A Total:	15.89%
T-Mobile Sector B Total:	15.89%
T-Mobile Sector C Total:	15.89%
Site Total MPE % :	26.81%

T-Mobile Maximum MPE Power Values (Sector A)							
T-Mobile Frequency Band / Technology (Sector A)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
T-Mobile 2500 MHz LTE IC & 2C Traffic	1	9619.47	115.0	29.11	2500 MHz LTE IC & 2C Traffic	1000	2.91%
T-Mobile 2500 MHz LTE IC & 2C Broadcast	1	717.84	115.0	2.17	2500 MHz LTE IC & 2C Broadcast	1000	0.22%
T-Mobile 2500 MHz NR Traffic	1	19238.94	115.0	58.22	2500 MHz NR Traffic	1000	5.82%
T-Mobile 2500 MHz NR Broadcast	1	1435.69	115.0	4.34	2500 MHz NR Broadcast	1000	0.43%
T-Mobile 600 MHz LTE	2	591.73	115.0	3.58	600 MHz LTE	400	0.90%
T-Mobile 600 MHz NR	1	1577.94	115.0	4.77	600 MHz NR	400	1.19%
T-Mobile 700 MHz LTE	2	695.22	115.0	4.21	700 MHz LTE	467	0.90%
T-Mobile 1900 MHz UMTS	2	1052.26	115.0	6.37	1900 MHz UMTS	1000	0.64%
T-Mobile 1900 MHz LTE	2	2104.51	115.0	12.74	1900 MHz LTE	1000	1.27%
T-Mobile 2100 MHz LTE	2	2649.42	115.0	16.03	2100 MHz LTE	1000	1.60%
						Total:	15.89%

• 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:

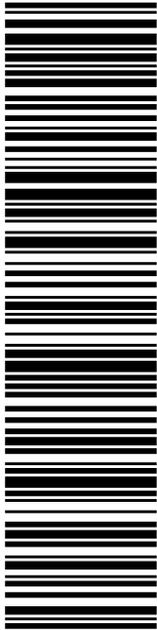
T-Mobile Sector	Power Density Value (%)
Sector A:	15.89%
Sector B:	15.89%
Sector C:	15.89%
T-Mobile Maximum MPE % (Sector A):	15.89%
Site Total:	26.81%
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **26.81%** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

Exhibit G

Recipient Mailings



USPS TRACKING #

9405 5036 9930 0258 9035 58

Electronic Rate Approved #038555749

SHIP TO: SBA COMMUNICATIONS CORPORATION
13 FLANDERS RD
STE 125
WESTBOROUGH MA 01581

SHIP TO: DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

P

05/26/2022

PRIORITY MAIL 1-DAY™

Expected Delivery Date: 05/27/22
Ref#: SBCT-NH546
0006

Mailed from 01566

U.S. POSTAGE PAID
click-n-ship®

usps.com 9405 5036 9930 0258 9035 58 0089 5000 0010 1581
US POSTAGE
Flat Rate Env
\$8.95

UNITED STATES POSTAL SERVICE®

Click-N-Ship®



Cut on dotted line.

Instructions

1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.
2. Place your label so it does not wrap around the edge of the package.
3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0258 9035 58

Trans. #: 564360765	Priority Mail® Postage: \$8.95
Print Date: 05/26/2022	Total: \$8.95
Ship Date: 05/26/2022	
Expected Delivery Date: 05/27/2022	

From: DEBORAH CHASE Ref#: SBCT-NH546
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

To: SBA COMMUNICATIONS CORPORATION
13 FLANDERS RD
STE 125
WESTBOROUGH MA 01581

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.



Thank you for shipping with the United States Postal Service!

Check the status of your shipment on the USPS Tracking® page at usps.com



**UNITED STATES
POSTAL SERVICE®**

Click-N-Ship®

P

USPS.com 9405 5036 9930 0258 9035 65 0089 5000 0010 6759
US POSTAGE
 Flat Rate Env
U.S. POSTAGE PAID
Click-N-Ship®

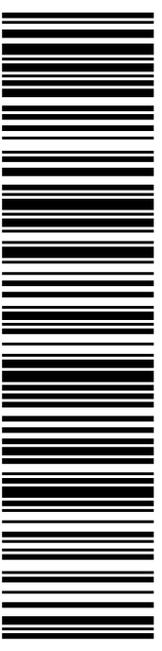
05/26/2022 Mailed from 01566

PRIORITY MAIL 2-DAY™

Expected Delivery Date: 05/28/22
 Ref#: SBCT-NH546
0006

SHIP TO: DENISE RAAP
 FIRST SELECTWOMAN
 PO BOX 488
 LITCHFIELD CT 06759-0488

USPS TRACKING #



9405 5036 9930 0258 9035 65

Electronic Rate Approved #038555749



Cut on dotted line.

Instructions

1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.
2. Place your label so it does not wrap around the edge of the package.
3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0258 9035 65

Trans. #: 564360765	Priority Mail® Postage: \$8.95
Print Date: 05/26/2022	Total: \$8.95
Ship Date: 05/26/2022	
Expected Delivery Date: 05/28/2022	

From: DEBORAH CHASE Ref#: SBCT-NH546
 NORTHEAST SITE SOLUTIONS
 420 MAIN ST
 STE 1
 STURBRIDGE MA 01566-1359

To: DENISE RAAP
 FIRST SELECTWOMAN
 PO BOX 488
 LITCHFIELD CT 06759-0488

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.



Thank you for shipping with the United States Postal Service!
 Check the status of your shipment on the USPS Tracking® page at usps.com



**UNITED STATES
POSTAL SERVICE®**

Click-N-Ship®

P

USPS.com
US POSTAGE
 Flat Rate Env
 9405 5036 9930 0258 9035 96 0089 5000 0010 6759

U.S. POSTAGE PAID
Click-N-Ship®

05/26/2022 Mailed from 01566

PRIORITY MAIL 2-DAY™

Expected Delivery Date: 05/28/22
 Ref#: SBCT-NH546
0006

DEBORAH CHASE
 NORTHEAST SITE SOLUTIONS
 420 MAIN ST
 STE 1
 STURBRIDGE MA 01566-1359

B005

SHIP TO: DENNIS TOBIN
 LAND USE ADMINISTRATOR
 PO BOX 488
 LITCHFIELD CT 06759-0488

USPS TRACKING #



9405 5036 9930 0258 9035 96

Electronic Rate Approved #038555749



Cut on dotted line.

Instructions

1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.
2. Place your label so it does not wrap around the edge of the package.
3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0258 9035 96

Trans. #: 564360765	Priority Mail® Postage: \$8.95
Print Date: 05/26/2022	Total: \$8.95
Ship Date: 05/26/2022	
Expected Delivery Date: 05/28/2022	

From: DEBORAH CHASE
 NORTHEAST SITE SOLUTIONS
 420 MAIN ST
 STE 1
 STURBRIDGE MA 01566-1359

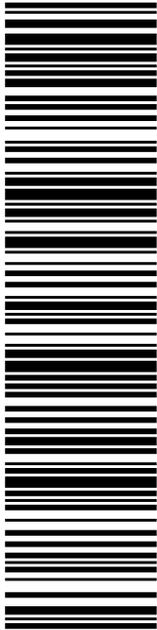
Ref#: SBCT-NH546

To: DENNIS TOBIN
 LAND USE ADMINISTRATOR
 PO BOX 488
 LITCHFIELD CT 06759-0488

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.



Thank you for shipping with the United States Postal Service!
 Check the status of your shipment on the USPS Tracking® page at usps.com



USPS TRACKING #

9405 5036 9930 0258 9036 02

Electronic Rate Approved #038555749

SHIP TO:

ROBERT & JUDITH HAMMER
PO BOX 251
BANTAM CT 06750-0251

P

05/26/2022

USPS.com
US POSTAGE
Flat Rate Env

U.S. POSTAGE PAID
click-n-ship®

Mailed from 01566

PRIORITY MAIL 2-DAY™

DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

Expected Delivery Date: 05/28/22
Ref#: SBCT-NH546
0006

B002



Click-N-Ship®



Cut on dotted line.

Instructions

1. Each Click-N-Ship® label is unique. Labels are to be used as printed and used only once. DO NOT PHOTO COPY OR ALTER LABEL.
2. Place your label so it does not wrap around the edge of the package.
3. Adhere your label to the package. A self-adhesive label is recommended. If tape or glue is used, DO NOT TAPE OVER BARCODE. Be sure all edges are secure.
4. To mail your package with PC Postage®, you may schedule a Package Pickup online, hand to your letter carrier, take to a Post Office™, or drop in a USPS collection box.
5. Mail your package on the "Ship Date" you selected when creating this label.

Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0258 9036 02

Trans. #: 564360765	Priority Mail® Postage: \$8.95
Print Date: 05/26/2022	Total: \$8.95
Ship Date: 05/26/2022	
Expected Delivery Date: 05/28/2022	

From: DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

Ref#: SBCT-NH546

To: ROBERT & JUDITH HAMMER
PO BOX 251
BANTAM CT 06750-0251

* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.



Thank you for shipping with the United States Postal Service!
Check the status of your shipment on the USPS Tracking® page at usps.com

CTNH 546A SBA
LMS



FARMINGTON
210 MAIN ST
FARMINGTON, CT 06032-9998
(800)275-8777

06/01/2022

03:19 PM

Product	Qty	Unit Price	Price
Prepaid Mail Westborough, MA 01581 Weight: 0 lb 1.90 oz Acceptance Date: Wed 06/01/2022 Tracking #: 9405 5036 9930 0258 9035 58	1		\$0.00
Prepaid Mail Litchfield, CT 06759 Weight: 0 lb 6.70 oz Acceptance Date: Wed 06/01/2022 Tracking #: 9405 5036 9930 0258 9035 65	1		\$0.00
Prepaid Mail Litchfield, CT 06759 Weight: 0 lb 6.70 oz Acceptance Date: Wed 06/01/2022 Tracking #: 9405 5036 9930 0258 9035 96	1		\$0.00
Prepaid Mail Bantam, CT 06750 Weight: 0 lb 6.70 oz Acceptance Date: Wed 06/01/2022 Tracking #: 9405 5036 9930 0258 9036 02	1		\$0.00
Grand Total:			\$0.00

 Every household in the U.S. is now
 eligible to receive a third set
 of 8 free test kits.
 Go to www.covidtests.gov

Preview your Mail
 Track your Packages
 Sign up for FREE @
<https://informedelivery.usps.com>

All sales final on stamps and postage.
 Refunds for guaranteed services only.
 Thank you for your business.

Tell us about your experience.
 Go to: <https://postalexperience.com/Pos>
 or scan this code with your mobile device.

