



September 3, 2020

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

Re: Notice of Exempt Modification New Cingular Wireless PCS, LLC ("AT&T") Site CT2224
811 Stonington Road, Stonington, CT 06378 (the "Property")
Latitude: 41.353411 N Longitude: 71.886800 W

Dear Ms. Bachman:

AT&T currently maintains (3) antennas at the 125-foot level on the existing 150-foot flagpole tower ("Tower") at 811 Stonington Road, Stonington, CT. The tower is owned by SBA Towers, Inc ("SBA") and the property is owned by Phillip C. McClellan. AT&T intends to modify its facility by replacing (3) antennas with (3) OPA65R-BU4BA antennas and replace (3) TMA's with (6) TMABPD7823VG12A TMA's. The height of AT&T's proposed antennas & TMA's is 128'. AT&T also intends on replacing the 32" canister with a 40" canister.

The facility received approval by the Town of Stonington Planning & Zoning Commission on September 2, 1999. There were no conditions that could be feasibility be violated by this modification, including total facility height and mounting restrictions. The AT&T modification complies with the above-mentioned approval. AT&T received CT Siting Council Approval under EM-CING-137-040609.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies ("R.C.S.A") §16-50j-73 for construction that constitutes an exempt modification pursuant to R.C.S.A §16-50j-72(b)(2). In accordance with to R.C.S.A §16-50j-73, a copy of this letter is being mailed to the Honorable Danielle Chesebrough, First Selectman, Town of Stonington, Mr. Keith Brynes, AICP, CZET, Town Planner, Town of Stonington, and Mr. Phillip C. McClellan as property owner. SBA, the tower owner received a copy by email.

The planned modification of the facility falls squarely within those activities explicitly provided for in R.C.S.A §16-50j-72(b)(2). Specifically:

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modifications will not require an extension of the site boundary.
3. The proposed modification 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 modified facility 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 foundation can support the proposed loading.

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

Sincerely,

Hollis M. Redding

Hollis M. Redding
SAI Communications, LLC
12 Industrial Way
Salem, NH 03079
Mobile: 860-834-6964
hredding@saigrp.com

Enclosures

Cc: Honorable Danielle Chesebrough, First Selectman, Town of Stonington
Mr. Keith Brynes, AICP, CZET, Town Planner, Town of Stonington
Mr. Phillip C. McClellan as property owner
SBA Towers, Inc. as tower owner

Power Density

Existing Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm ²)	Freq. Band (MHz ^{**})	Limit S (mW/cm ²)	%MPE
Other Carriers*							3.62%
AT&T GSM	1	500	125	0.0127	880	0.5867	0.22%
AT&T UMTS	1	500	125	0.0127	1900	1.0000	0.13%
AT&T UMTS	6	296	125	0.0451	880	0.5867	0.77%
AT&T LTE	6	427	125	0.0651	1930	1.0000	0.65%
AT&T LTE	1	500	125	0.0127	740	0.4993	0.26%
Site Total							5.64%

*Per CSC Records (available upon request, includes calculation formulas)

** If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

Proposed Loading on Tower

Carrier	# of Channels	ERP/Ch (W)	Antenna Centerline Height (ft)	Power Density (mW/cm ²)	Freq. Band (MHz ^{**})	Limit S (mW/cm ²)	%MPE
Other Carriers*							3.62%
AT&T UMTS	1	352	128	0.0085	850	0.5667	0.15%
AT&T LTE	1	1476	128	0.0357	725	0.4833	0.74%
AT&T LTE	2	3664	128	0.1771	1930	1.0000	1.77%
AT&T LTE	1	1000	128	0.0242	850	0.5667	0.43%
AT&T 5G	1	1000	128	0.0242	850	0.5667	0.43%
AT&T LTE AWS	1	1285	128	0.0310	2355	1.0000	0.31%
Site Total							7.44%

*Per CSC Records (available upon request, includes calculation formulas)

** If a range of frequencies are used, such as 880-894, enter the lowest value, i.e. 880

SCOPE OF WORK:

ITEMS TO BE MOUNTED ON THE EXISTING FLAGPOLE:

- NEW AT&T ANTENNAS: OPA65R-BU4BA (TYP. OF 1 PER SECTOR, TOTAL OF 3).
- NEW AT&T STACKED TMA's: TMABPD7823VG12A (TYP. OF 2 PER SECTOR, TOTAL OF 6).
- PROPOSED 40"Ø FLAGPOLE SHROUD (BY OTHERS).

ITEMS TO BE MOUNTED AT EQUIPMENT LOCATION:

- ADD (1) RBS 6630 FOR 5G.
- ADD IDLe.
- NEW AT&T RRUS: B5/B12 4449 (850/700) (TYP. OF 1 PER SECTOR, TOTAL OF 3).
- NEW AT&T RRUS: 8843 B2/B66A (PCS/AWS) (TYP. OF 1 PER SECTOR, TOTAL OF 3)
- NEW AT&T SURGE ARRESTOR:TSXD-4310FM (TYP. OF 12 PER SECTOR, TOTAL OF 36).
- NEW AT&T COMBINER: DBC0111F2V62-1 (TYP. OF 1 PER SECTOR, TOTAL OF 3).
- NEW AT&T DIPLEXER: CBC61923T-DS-43 (TYP. OF 2 PER SECTOR, TOTAL OF 6).
- INSTALL NEW NETSURE 7100 WITH BATT, & 18 UP CONVERTERS (TO REPLACE EXISTING DC POWER PLANT)

ITEMS TO BE REMOVED:

- EXISTING AT&T ANTENNAS: AM-X-CD-14-65-00T-RET (TYP. OF 1 PER SECTOR, TOTAL OF 3).
- EXISTING AT&T RRUS: RRUS-11 B12 (700) (TYP. OF 1 PER SECTOR, TOTAL OF 3).
- EXISTING AT&T RRUS: RRUS-12 B2 (PCS) (TYP. OF 1 PER SECTOR, TOTAL OF 3).
- EXISTING AT&T SURGE ARRESTOR: 1000860 (TYP. OF 1 PER SECTOR, TOTAL OF 3).
- + APTDC-BDFDM-DB (TYP. OF 4 PER SECTOR, TOTAL OF 12).
- EXISTING AT&T TMA's: DTMA BP7819VG12A (TYP. OF 1 PER SECTOR, TOTAL OF 3).
- EXISTING AT&T TRIPLEXER: TPX-070821 (TYP. OF 2 PER SECTOR, TOTAL OF 6).

ITEMS TO REMAIN:

- (12) COAX CABLES.

SITE ADDRESS:	811 STONINGTON ROAD STONINGTON, CT 06378
LATITUDE:	41.353411° N, 41° 21' 12.27" N
LONGITUDE:	71.886800° W, 71° 53' 12.48" W
TYPE OF SITE:	FLAGPOLE / INDOOR
STRUCTURE HEIGHT:	150'-0"±
RAD CENTER:	128'-0"±
CURRENT USE:	TELECOMMUNICATIONS FACILITY
PROPOSED USE:	TELECOMMUNICATIONS FACILITY
ENGINEER:	HUDSON DESIGN GROUP, LLC. HERNAN CEPEDA hernan.cepeda@hudsondesigngroupllc.com

SHEET NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	1
GN-1	GENERAL NOTES	1
A-1	COMPOUND & EQUIPMENT PLANS	1
A-2	ANTENNA LAYOUTS & ELEVATION	1
A-3	DETAILS	1
G-1	GROUNDING DETAILS	1
RF-1	RF PLUMBING DIAGRAM	1



SITE NUMBER: CT2224

SITE NAME: STONINGTON-STONINGTON RD

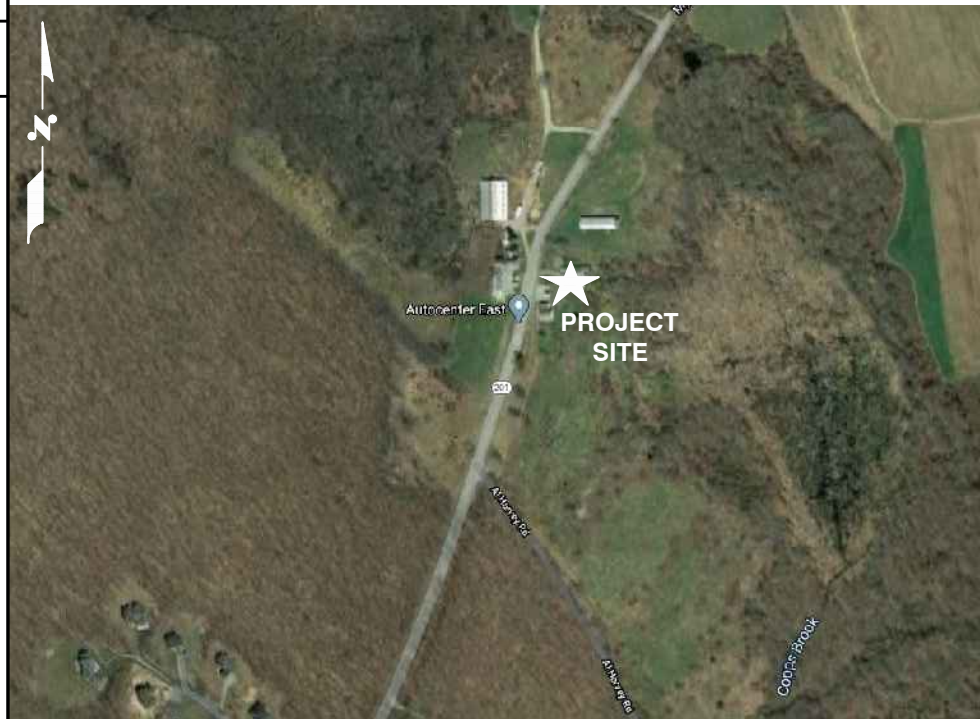
FA CODE: 10050916

PACE ID: MRCTB047145, MRCTB047137

PROJECT: LTE 3C-5G NR 2021 UPGRADE

DIRECTIONS TO SITE:

START OUT GOING NORTHEAST ON ENTERPRISE DR TOWARD CAPITOL BLVD. TURN LEFT ONTO CAPITOL BLVD. TURN LEFT ONTO WEST ST. MERGE ONTO I-91 S VIA THE RAMP ON THE LEFT TOWARD NEW HAVEN. MERGE ONTO CT-9 S VIA EXIT 22S ON THE LEFT TOWARD MIDDLETOWN / OLD SAYBROOK. MERGE ONTO I-95 N VIA THE EXIT ON THE LEFT TOWARD NEW LONDON / PROVIDENCE. TAKE THE CT-234 EXIT, EXIT 91, TOWARD NO. MAIN ST / STONINGTON BOROUGH. TURN RIGHT ONTO CT-234 / PEQUOT TRL. TURN LEFT ONTO N MAIN ST. TURN LEFT ONTO STONINGTON WESTERLY RD / US-1. END AT STONINGTON WESTERLY RD; US-1.



1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
4. CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN.

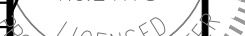
WWW.DIGSAFE.COM
72 HOURS PRIOR



SITE NUMBER: CT2224
SITE NAME: STONINGTON-STONINGTON RD

811 STONINGTON ROAD
STONINGTON, CT 06378
NEW LONDON COUNTY



								AT&T	
1	07/27/20	ISSUED FOR CONSTRUCTION	GA	HC	DPH	TITLE SHEET			
A	05/26/20	ISSUED FOR REVIEW	GA	HC	DPH	LTE 3C-5G NR 2021 UPGRADE			
NO.	DATE	REVISIONS	BY	CHK	APP'D	SITE NUMBER	DRAWING NUMBER		REV
SCALE: AS SHOWN		DESIGNED BY: HC	DRAWN BY: GA			CT2224	T-1		

GROUNDING NOTES

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81 STANDARDS) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS AND #2 AWG STRANDED COPPER FOR OUTDOOR BTS.
6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO GROUND BAR.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR – SAI
SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
OWNER – AT&T MOBILITY
2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
6. "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR. ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
9. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, 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.
10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
13. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCH UP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
16. CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T SITES."
17. 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.
18. THE EXISTING CELL SITE IS 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.
19. SINCE THE 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 ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
20. APPLICABLE BUILDING CODES:

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE: IBC 2015 WITH 2018 CT STATE BUILDING CODE AMENDMENTS
ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE (NFPA 70-2017)

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-H, STRUCTURAL STANDARDS FOR STEEL

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

ABBREVIATIONS

AGL	ABOVE GRADE LEVEL	EQ	EQUAL	REQ	REQUIRED
AWG	AMERICAN WIRE GAUGE	GC	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
BBU	BATTERY BACKUP UNIT	GRC	GALVANIZED RIGID CONDUIT	TBD	TO BE DETERMINED
BTCW	BARE TINNED SOLID COPPER WIRE	MGB	MASTER GROUND BAR	TBR	TO BE REMOVED
BGR	BURIED GROUND RING	MIN	MINIMUM	TBRR	TO BE REMOVED AND REPLACED
BTS	BASE TRANSCEIVER STATION	P	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE (ANTENNA)	VIF	VERIFY IN FIELD
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		



45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586



12 INDUSTRIAL WAY
SALEM, NH 03079

SITE NUMBER: CT2224
SITE NAME: STONINGTON-STONINGTON RD

811 STONINGTON ROAD
STONINGTON, CT 06378
NEW LONDON COUNTY



500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

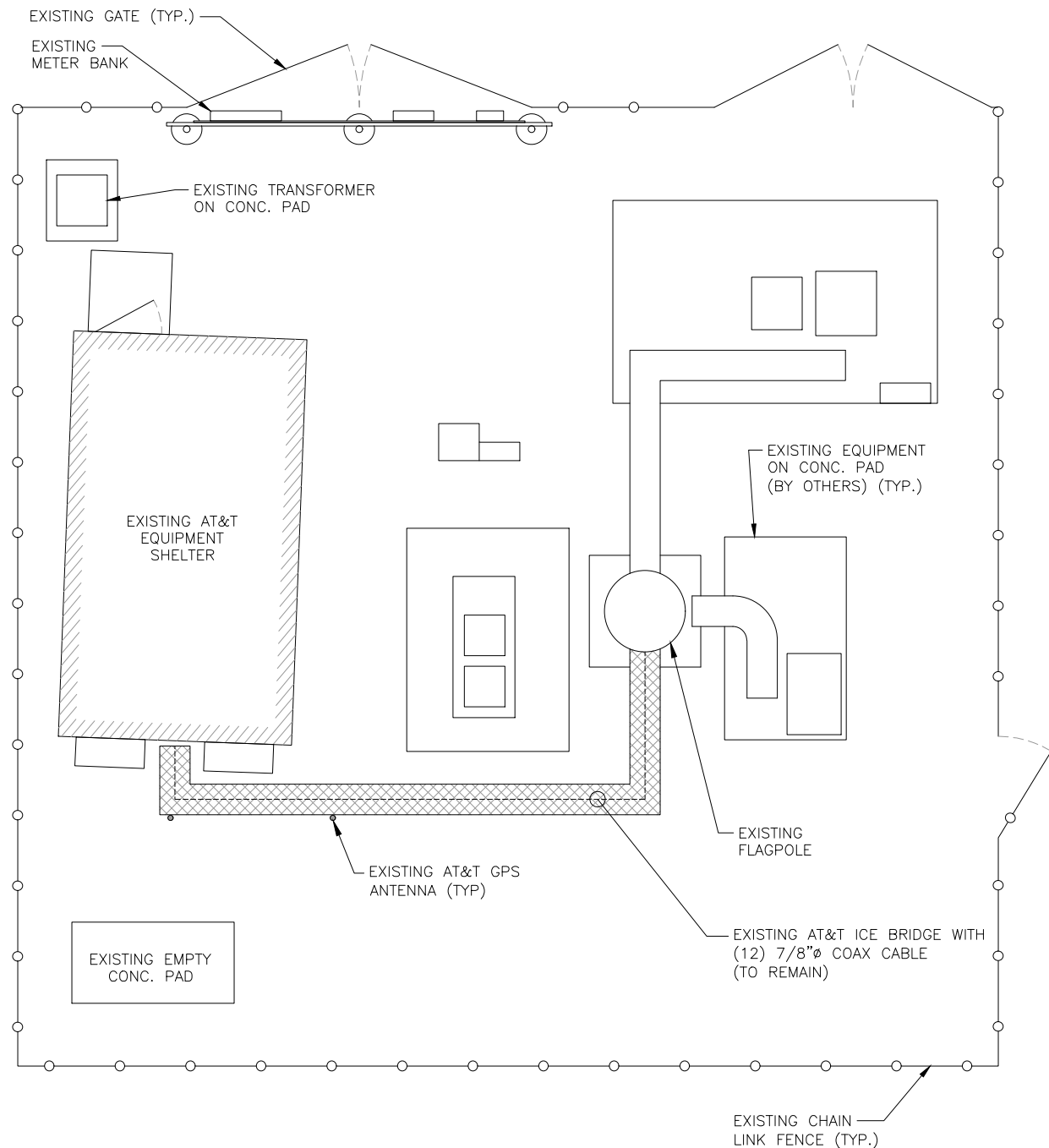
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SCALE:		AS SHOWN	DESIGNED BY: HC	DRAWN BY: GA	
SITE NUMBER		DRAWING NUMBER		REV	
CT2224		GN-1		1	

NOTE:

REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:

REFER TO **STRUCTURAL ANALYSIS** BY: TOWER ENGINEERING SOLUTIONS DATED: JUNE 3, 2020 FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT.

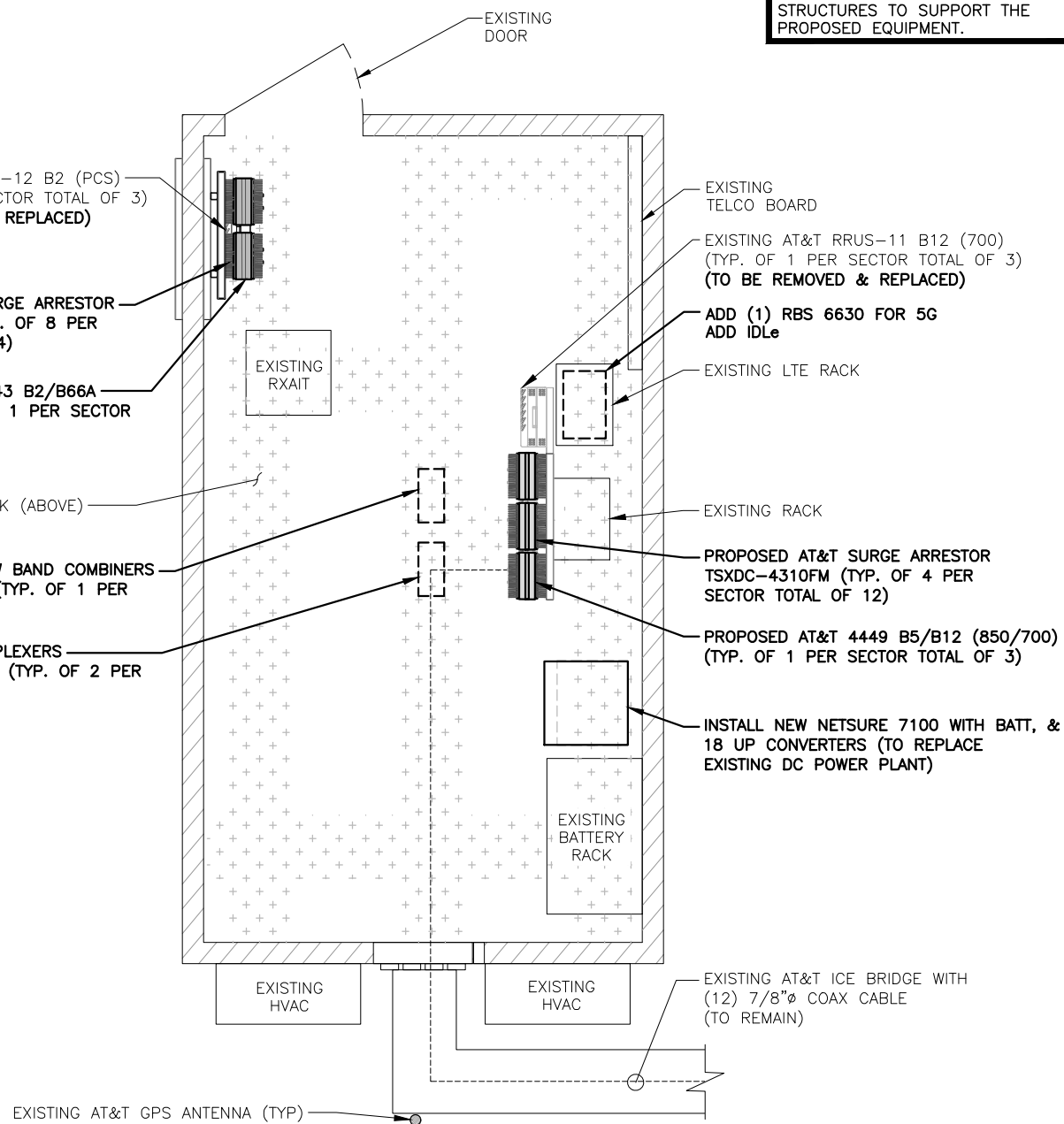


COMPOUND PLAN

22x34 SCALE: 1/4"=1'-0"
11x17 SCALE: 1/8"=1'-0"

1
A-1

0 2'-0" 4'-0" 8'-0" 12'-0"



EQUIPMENT PLAN

22x34 SCALE: 1/2"=1'-0"
11x17 SCALE: 1/4"=1'-0"

2
A-1

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

HDG HUDSON
Design Group LLC

45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

SAI

12 INDUSTRIAL WAY
SALEM, NH 03079

SITE NUMBER: CT2224
SITE NAME: STONINGTON-STONINGTON RD

811 STONINGTON ROAD
STONINGTON, CT 06378
NEW LONDON COUNTY

at&t

500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

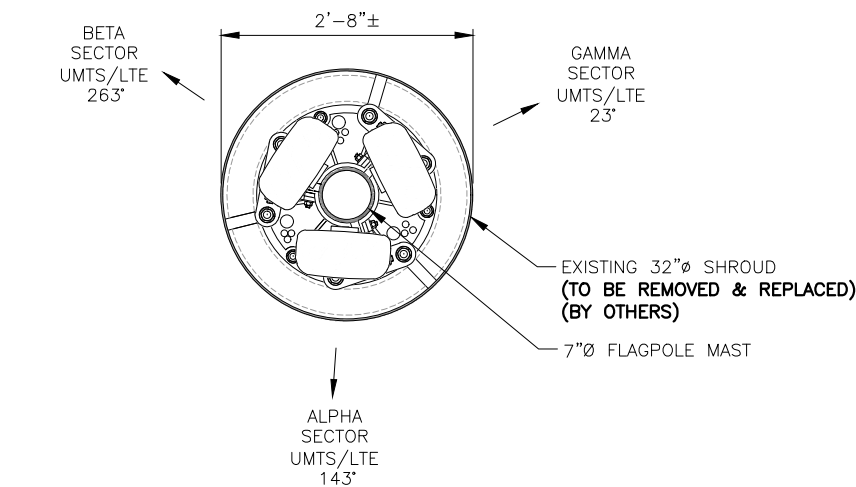
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NOTE:

REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

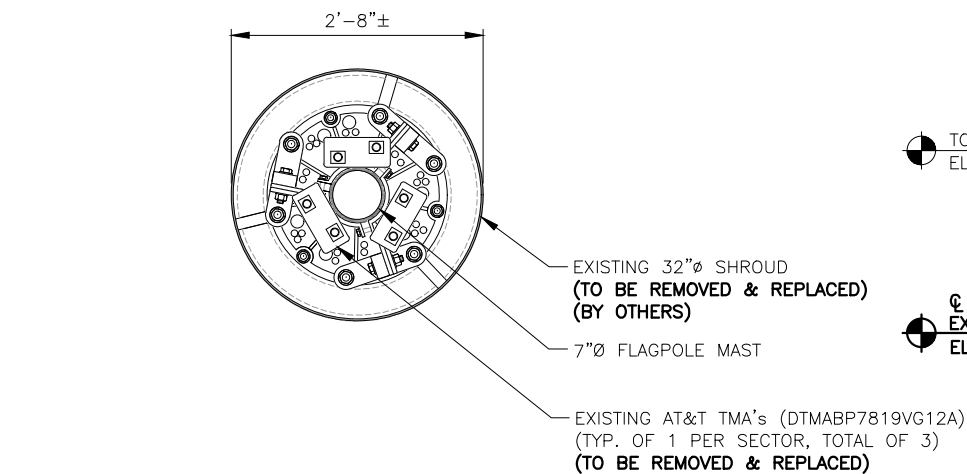
NOTE:

REFER TO **STRUCTURAL ANALYSIS** BY: TOWER ENGINEERING SOLUTIONS DATED: JUNE 3, 2020 FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT.



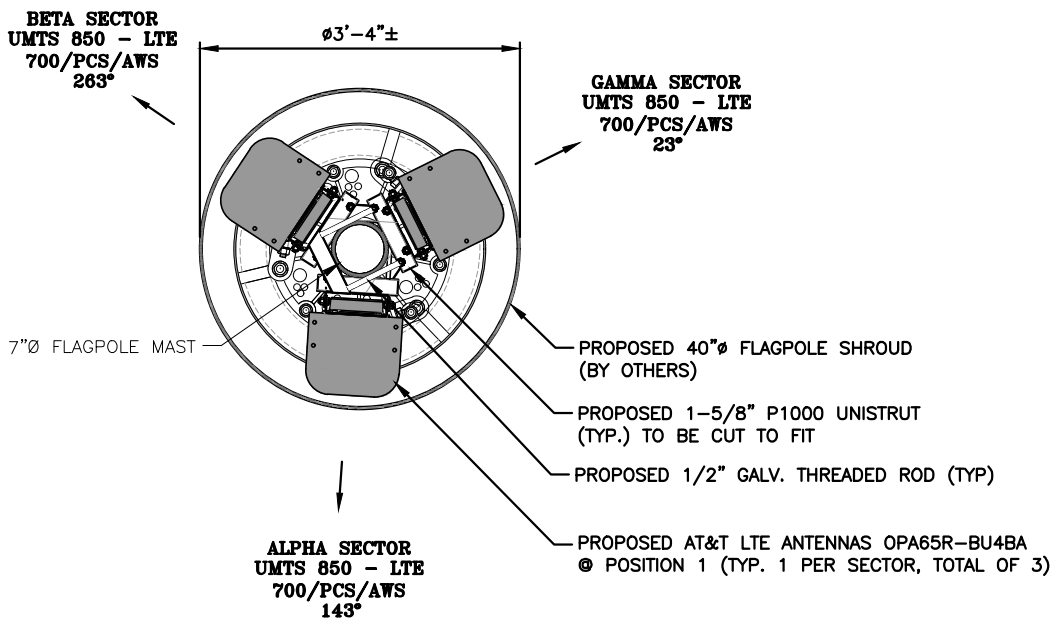
EXISTING ANTENNA LAYOUT
SCALE: N.T.S.

1
A-2



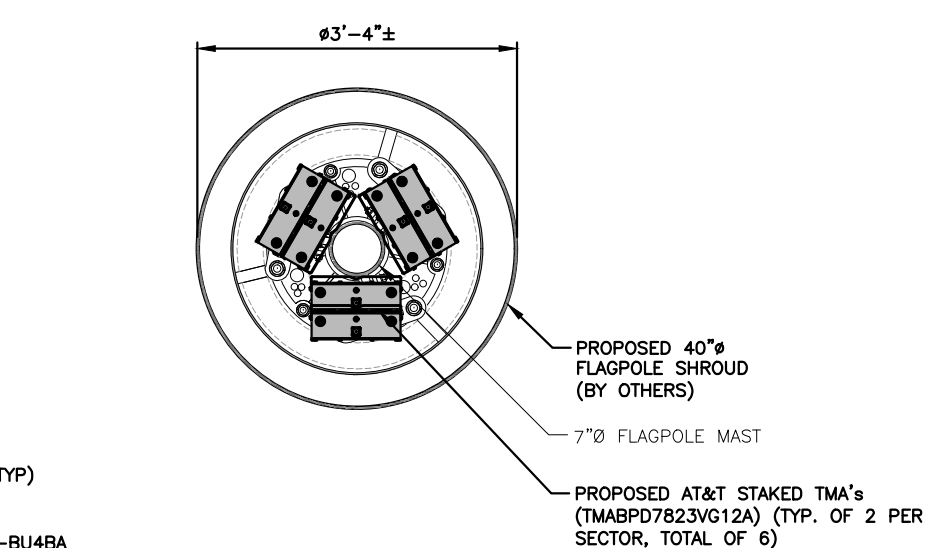
EXISTING TMA's LAYOUT
SCALE: N.T.S.

2
A-2



PROPOSED ANTENNA LAYOUT
SCALE: N.T.S.

3
A-2

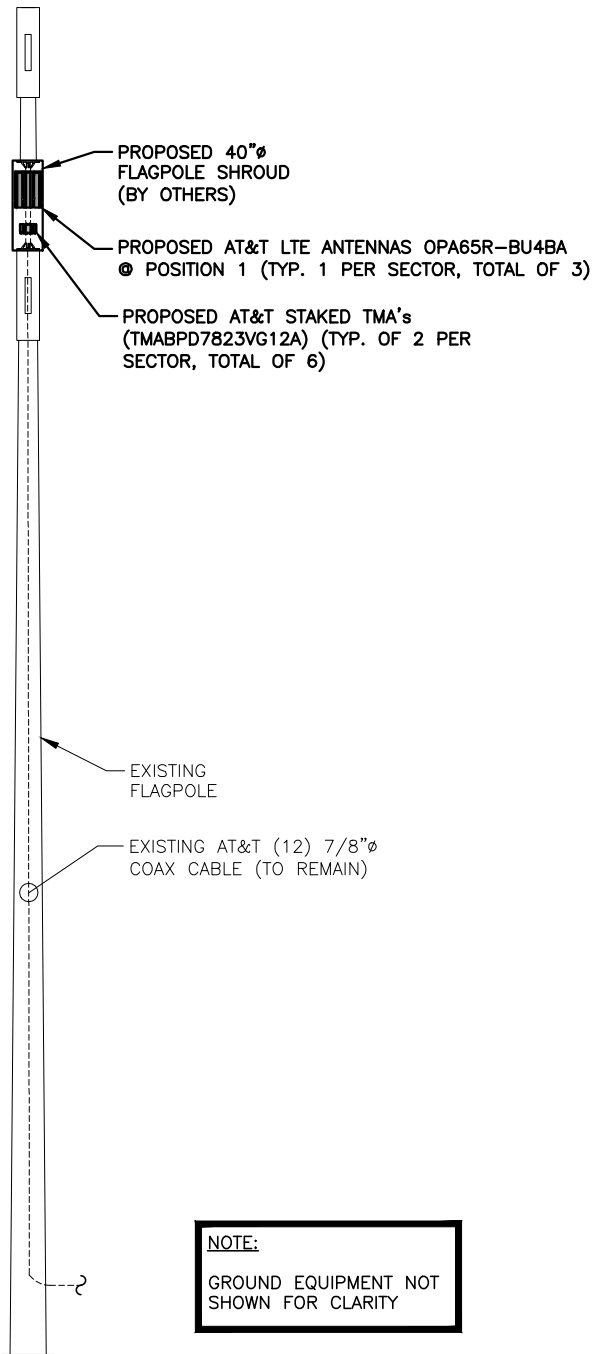


PROPOSED TMA's LAYOUT
SCALE: N.T.S.

4
A-2

TOP OF FLAGPOLE
ELEV. 150'-0"± (AGL)

CL OF PROPOSED & EXISTING AT&T ANTENNAS
ELEV. 128'-0"± (AGL)



NOTE:

GROUND EQUIPMENT NOT SHOWN FOR CLARITY

ELEVATION

22x34 SCALE: 3/32"=1'-0"
11x17 SCALE: 3/64"=1'-0"

0 5'-4" 10'-8" 21'-4" 32'-0"

HDG HUDSON Design Group LLC

45 BEECHWOOD DRIVE
NORTH ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

SAI

12 INDUSTRIAL WAY
SALEM, NH 03079

SITE NUMBER: CT2224
SITE NAME: STONINGTON-STONINGTON RD

811 STONINGTON ROAD
STONINGTON, CT 06378
NEW LONDON COUNTY

at&t

500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

				AT&T			
				ANTENNA LAYOUTS & ELEVATION LTE 3C-5G NR 2021 UPGRADE			
NO.	DATE	REVISIONS	BY	CHK	APP'D	SITE NUMBER	DRAWING NUMBER
1	07/27/20	ISSUED FOR CONSTRUCTION	GA	HC	DPH	CT2224	A-2
A	05/26/20	ISSUED FOR REVIEW	GA	HC	DPH		
SCALE: AS SHOWN				DESIGNED BY: HC		DRAWN BY: GA	
				REVISIONS		REV	
						1	

ANTENNA SCHEDULE											
SECTOR	EXISTING/ PROPOSED	BAND	ANTENNA	SIZE (INCHES) (L x W x D)	ANTENNA CL HEIGHT	AZIMUTH	TMA/ TRIPLEXER/ COMBINERS	RRU	SIZE (INCHES) (L x W x D)	FEEDER	RAYCAP
A1	PROPOSED	UMTS 850 - LTE 700/PCS/AWS	OPA65R-BU4BA	48X11.7X10.1	128'-0"±	143°	(2)(P) TMABPD7823VG12A (2)(P)(G) CBC61923T-DS-43 (1)(P)(G) DBC0111F2V62-1	(1)(P)(G) 4449 B5/B12 (850/700) (1)(P)(G) 8843 B2/B66A (PCS/AWS)	17.9x13.2x10.4 14.9x13.2x10.9	(4)7/8 COAX	I
A2	-	-	-	-	-	-	-	-	-	-	
A3	-	-	-	-	-	-	-	-	-	-	
A4	-	-	-	-	-	-	-	-	-	-	
B1	PROPOSED	UMTS 850 - LTE 700/PCS/AWS	OPA65R-BU4BA	48X11.7X10.1	128'-0"±	263°	(2)(P) TMABPD7823VG12A (2)(P)(G) CBC61923T-DS-43 (1)(P)(G) DBC0111F2V62-1	(1)(P)(G) 4449 B5/B12 (850/700) (1)(P)(G) 8843 B2/B66A (PCS/AWS)	17.9X13.2X10.4 14.9X13.2X10.9	(4)7/8 COAX	I
B2	-	-	-	-	-	-	-	-	-	-	
B3	-	-	-	-	-	-	-	-	-	-	
B4	-	-	-	-	-	-	-	-	-	-	
C1	PROPOSED	UMTS 850 - LTE 700/PCS/AWS	OPA65R-BU4BA	48x11.7x10.1	128'-0"±	23°	(2)(P) TMABPD7823VG12A (2)(P)(G) CBC61923T-DS-43 (1)(P)(G) DBC0111F2V62-1	(1)(P)(G) 4449 B5/B12 (850/700) (1)(P)(G) 8843 B2/B66A (PCS/AWS)	17.9X13.2X10.4 14.9X13.2X10.9	(4)7/8 COAX	I
C2	-	-	-	-	-	-	-	-	-	-	
C3	-	-	-	-	-	-	-	-	-	-	
C4	-	-	-	-	-	-	-	-	-	-	

NOTE:

REFER TO THE FINAL RF DATA SHEET
FOR FINAL ANTENNA SETTINGS.

NOTE:

REFER TO **STRUCTURAL ANALYSIS**
BY: TOWER ENGINEERING SOLUTIONS
DATED: JUNE 3, 2020 FOR THE
CAPACITY OF THE EXISTING
STRUCTURES TO SUPPORT THE
PROPOSED EQUIPMENT.

FINAL ANTENNA SCHEDULE

SCALE: N.T.S

1
A-3

RRU CHART		
QUANTITY	MODEL	SIZE (L x W x D)
3(P)(G)	4449 (850/700)	17.9"x13.2"x10.4"
3(P)(G)	8843 (PCS/AWS)	14.9"x13.2"x10.9"

NOTE:
MOUNT PER MANUFACTURER'S SPECIFICATIONS

NOTE:

SEE RFDS FOR RRH
FREQUENCY AND
MODEL NUMBER

PROPOSED RRU REFER TO THE
FINAL RFDS AND CHART FOR
QUANTITY, MODEL AND DIMENSIONS

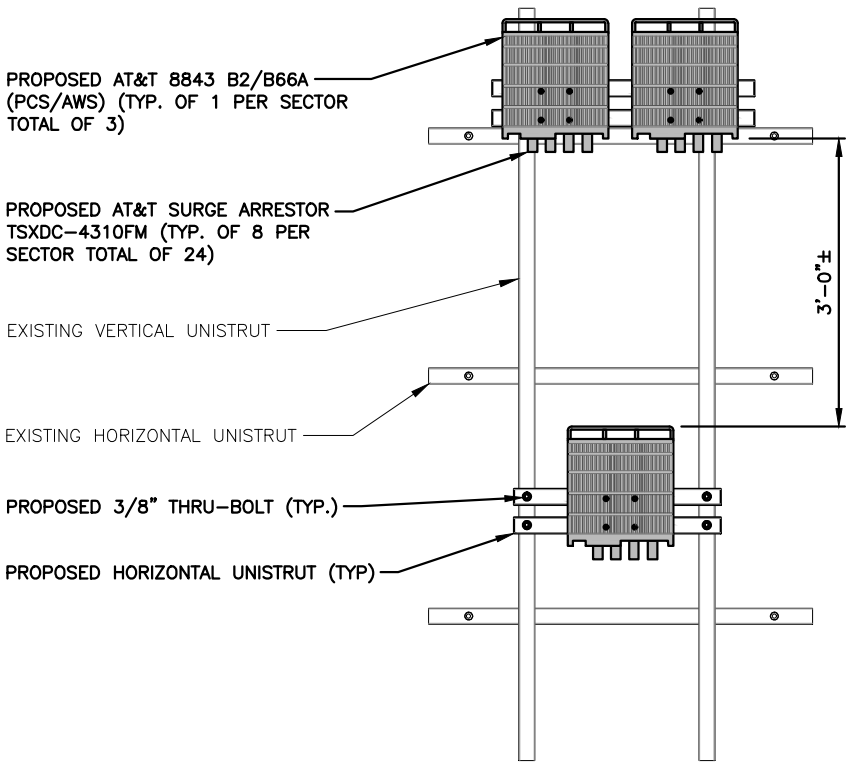
NOTE:

MOUNT PER MANUFACTURER'S
SPECIFICATIONS.

PROPOSED RRUS DETAIL

SCALE: N.T.S

2
A-3



PROPOSED RRUS
MOUNTING DETAIL

22x34 SCALE: 1"=1'-0"
11x17 SCALE: 1/2"=1'-0"

3
A-3

0 0'-6" 1'-0" 2'-0" 3'-0"



INSTALL NEW NETSURE 7100
WITH BATT. & 18 UP
CONVERTERS (TO REPLACE
EXISTING DC POWER PLANT)

PROPOSED NETSURE 7100
POWER PLANT DETAIL

SCALE: N.T.S

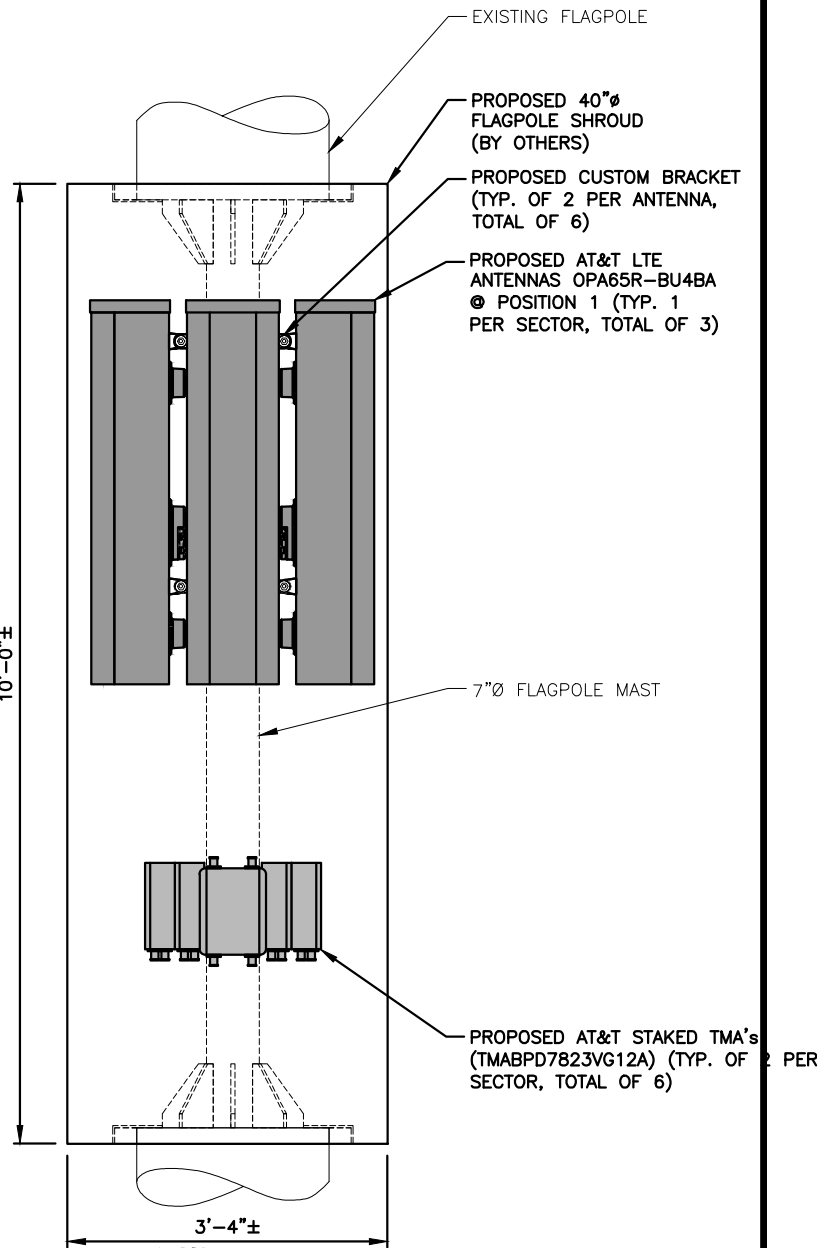
4
A-3

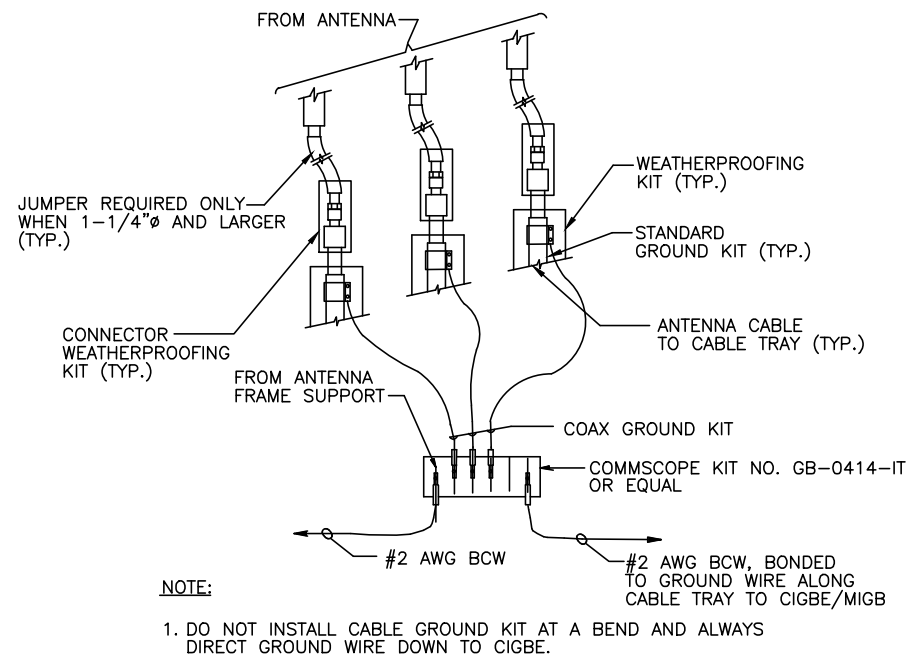
PROPOSED LTE ANTENNA
MOUNTING DETAIL

22x34 SCALE: 1"=1'-0"
11x17 SCALE: 1/2"=1'-0"

5
A-3

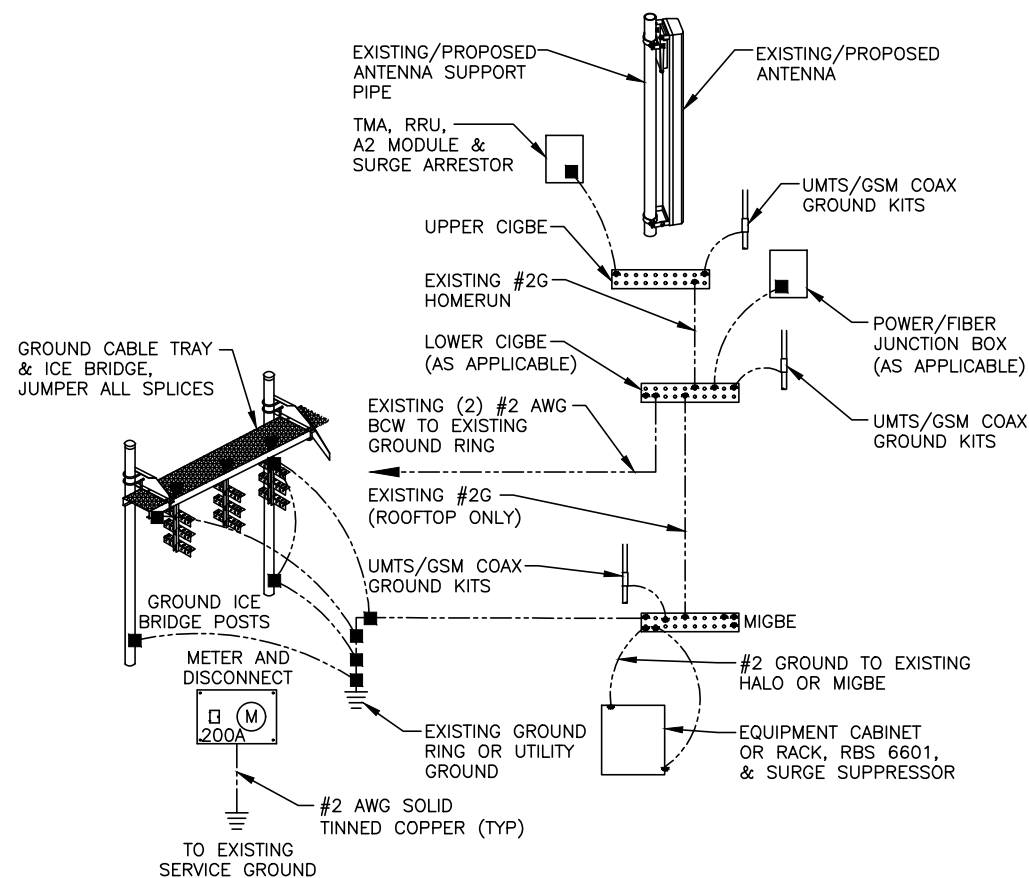
0 0'-6" 1'-0" 2'-0" 3'-0"





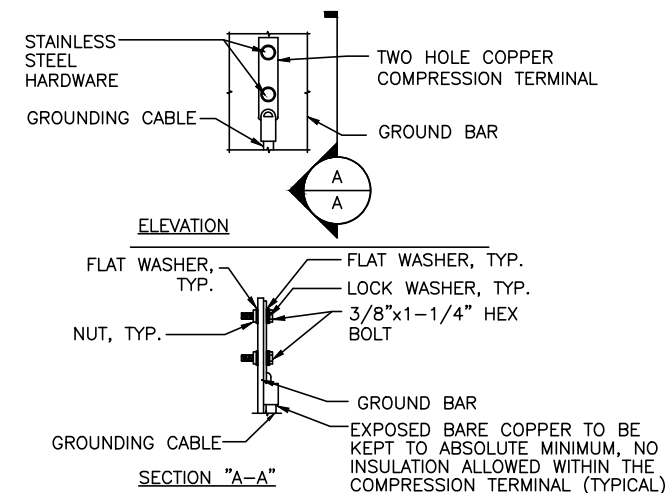
GROUND WIRE TO GROUND BAR CONNECTION DETAIL
SCALE: N.T.S

1
G-1



GROUNDING RISER DIAGRAM
SCALE: N.T.S

2
G-1



- NOTES:**
1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATION.
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB

TYPICAL GROUND BAR CONNECTION DETAIL
SCALE: N.T.S

3
G-1

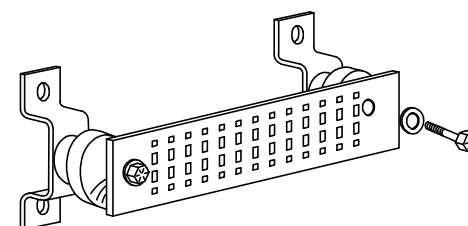
EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION.

SECTION "P" - SURGE PRODUCERS

CABLE ENTRY PORTS (HATCH PLATES) (#2 AWG)
GENERATOR FRAMEWORK (IF AVAILABLE) (#2 AWG)
TELCO GROUND BAR
COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2 AWG)
+24V POWER SUPPLY RETURN BAR (#2 AWG)
-48V POWER SUPPLY RETURN BAR (#2 AWG)
RECTIFIER FRAMES.

SECTION "A" - SURGE ABSORBERS

INTERIOR GROUND RING (#2 AWG)
EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2 AWG)
METALLIC COLD WATER PIPE (IF AVAILABLE) (#2 AWG)
BUILDING STEEL (IF AVAILABLE) (#2 AWG)



GROUND BAR - DETAIL (AS REQUIRED)
SCALE: N.T.S

4
G-1



Tower Engineering Solutions

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

Post-Mod Structural Analysis Report

Existing 150 ft PIROD Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT01493-S

Customer Site Name: North Stonington 2 CT

Carrier Name: AT&T (App#: 134479, V1)

Carrier Site ID / Name: CT2224 / STONINGTON-STONINGTON RD

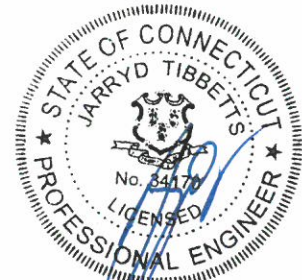
Site Location: 811 Stonington Road

Stonington, Connecticut

New London County

Latitude: 41.353417

Longitude: -71.887000



Analysis Result:

Max Structural Usage: 97.2% [Pass]

Max Foundation Usage: 98% [Pass]

Report Prepared By: Stacey Hesselbein



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Max Foundation Usage: 98% [Pass]

Report Prepared By: Stacey Hesselbein

Introduction

The purpose of this report is to summarize the analysis results on the 150 ft PIROD Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any existing modification listed under Sources of Information was assumed completed and was included in this analysis.

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

Sources of Information

Tower Drawings	Tower Drawing prepared by PiROD, drawing #20550-B dated 10/20/99
Foundation Drawing	Foundation Drawing prepared by PiROD, drawing #20550-B dated 10/20/99
Geotechnical Report	Geotechnical Report prepared by FDH, Project #1207125EG1 dated 8/10/12
Mount Analysis	N/A
Existing Modification	Modification Drawing prepared by FDH, Project #11-04387E S2 dated 8/19/11 TES, Project # 57603R1 Dated 03/01/2019
Proposed Modification	TES Job # 94195

Analysis Criteria

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

Wind Speed Used in the Analysis:	129.0 mph (3-Sec. Gust) (Ultimate wind speed)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 3/4" radial ice concurrent
Service Load Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-H / 2018 IBC / 2018 Connecticut State Building Code
Exposure Category:	C
Risk Category:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	$S_s = 0.183$, $S_1 = 0.052$

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	147.0	3	Commscope - DHHTT65B-3XR - Panel	Concealed inside 40" * Canister from 140ft. to 150ft.	(12) 7/8" (3) 3/8" RET	Sprint Nextel
2		3	RFS - KIT-FD9R6004/1C-DL - Diplexers			
3		3	CCI - DPO-7126Y-0-T1 - Diplexer			
4	135.0	3	RFS - APXV18-206516L - Panel	Concealed inside 40" * Canister from 130ft. to 140ft.	(6) 1 5/8"	T-Mobile
-	125.0	3	KMW - AMXCD1465 - Panel	Concealed inside 40" * Canister from 120ft. to 130ft.	(12) 7/8"	AT&T
-		3	Andrew - ETW190VS12UB - TMA			
-		6	Powerwave CM1007-DBPXCBC-xxx Diplexer			

*All Canisters considered replaced with 40" canisters

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
5	128.0	3	Cci OPA65R-BU4BA Panel	Concealed inside 40" Canister from 120ft. to 130ft.	(12) 7/8"	AT&T
6		6	Cci TMABPD7823VG12A TMA			
7		6	Powerwave CM1007-DBPXCBC-xxx Diplexer			

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

Analysis Results

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

	Pole shafts	Anchor Bolts	Base Plate	Flanges
Max. Usage:	88.6%	62.7%	82.6%	97.2%
Pass/Fail	Pass	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	999.8	11.6	27.5

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

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by ANSI/TIA/EIA 222-H for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.7197 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

Based on the analysis results, the structure and its foundation will be adequate to safely support the existing and proposed equipment and meet the minimum requirements per the design ANSI/TIA/EIA 222-H standards under a basic wind speed of 129 mph no ice and 50 mph with 3/4" radial ice after the following proposed modification is successfully completed.

- Proposed modification design drawing by TES Job # 94195

Pre-Mod Installation Determination

We have also checked this tower to determine if the proposed AT&T equipment loading can be installed prior to the completion of the required modifications.

Since the proposed equipment will interfere the installation of the mods, the Carrier cannot install their proposed loading prior to the mods completion.

Standard Conditions

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

Usage Diagram - Max Ratio 88.57% at 122.0ft

Structure: CT01493-S-SBA
Site Name: North Stonington 2 CT
Height: 150.00 (ft)
Base Elev: 0.000 (ft)

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

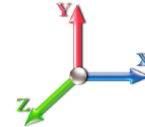
8/12/2020

Page: 1



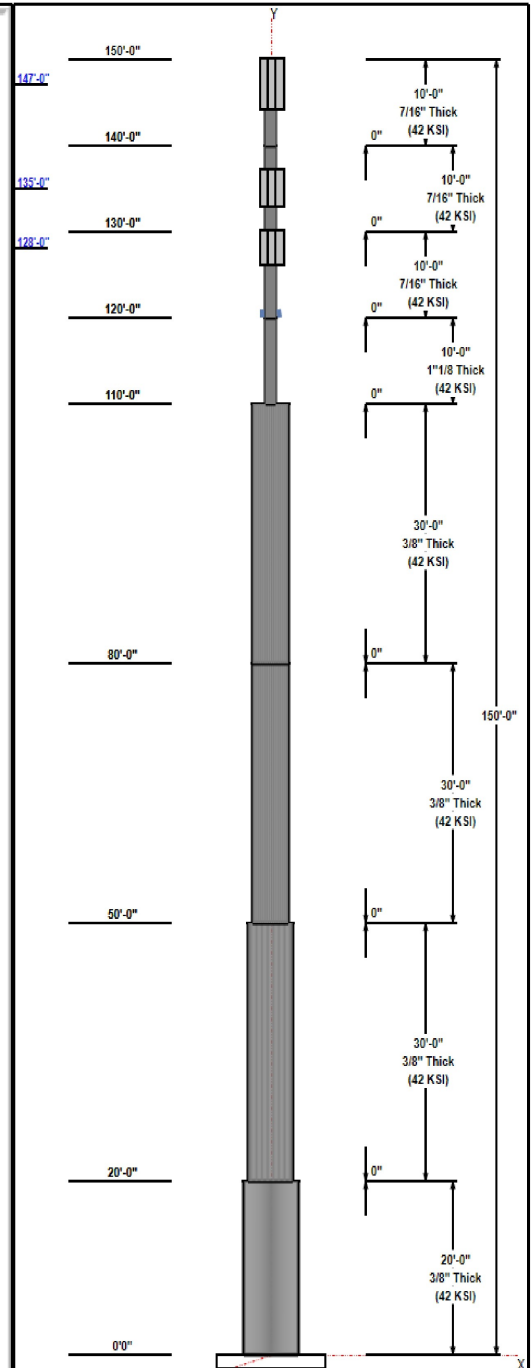
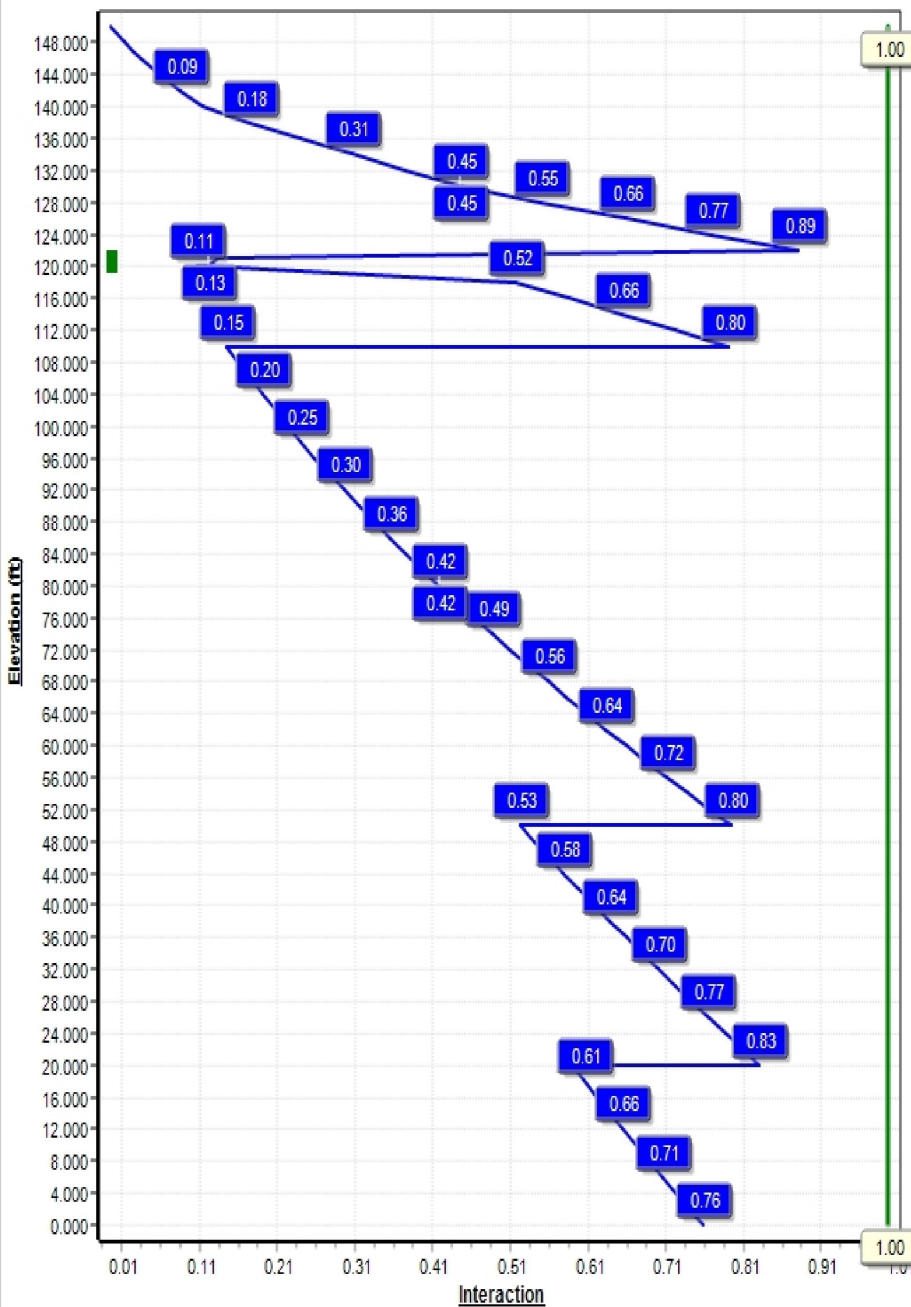
Dead Load Factor: 1.20
Wind Load Factor: 1.00

Load Case : 1.2D + 1.0W 129 mph Wind



Iterations: 38

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Structure: CT01493-S-SBA

Type: Stepped
Site Name: North Stonington 2 CT
Height: 150.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: Round
Taper: 0.00000

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Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	20.00	36.00	36.00	0.375		0.00000	42
2	30.00	30.00	30.00	0.375		0.00000	42
3	30.00	24.00	24.00	0.375		0.00000	42
4	30.00	24.00	24.00	0.375		0.00000	42
5	10.00	6.75	6.75	1.140		0.00000	42
6	10.00	6.63	6.63	0.432		0.00000	42
7	10.00	6.63	6.63	0.432		0.00000	42
8	10.00	6.63	6.63	0.432		0.00000	42

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
150.00	150.00	1	40" Canister Weight	
147.00	147.00	3	DHHTT65B-3XR	Sprint Nextel
147.00	147.00	3	KIT-FD9R6004/1C-DL	Sprint Nextel
147.00	147.00	3	DPO-7126Y-0-T1	Sprint Nextel
140.00	140.00	1	40" Canister Weight	
135.00	135.00	3	APXV18-206516L	T-Mobile
130.00	130.00	1	40" Canister Weight	
128.00	128.00	3	OPA65R-BU4BA	AT&T
128.00	128.00	6	TMABPD7823VG12A	AT&T
128.00	128.00	6	CM1007-DBPXC-xxx	AT&T
120.00	120.00	1	40" Canister Weight	
110.00	110.00	1	40" Canister Weight	

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	147.00	Inside	3/8" RET	Sprint Nextel
0.00	147.00	Inside	7/8" Coax	Sprint Nextel
0.00	134.00	Inside	1 5/8" Coax	T-Mobile
110.00	130.00	Inside	Grout	
0.00	128.00	Inside	7/8" Coax	AT&T

Anchor Bolts

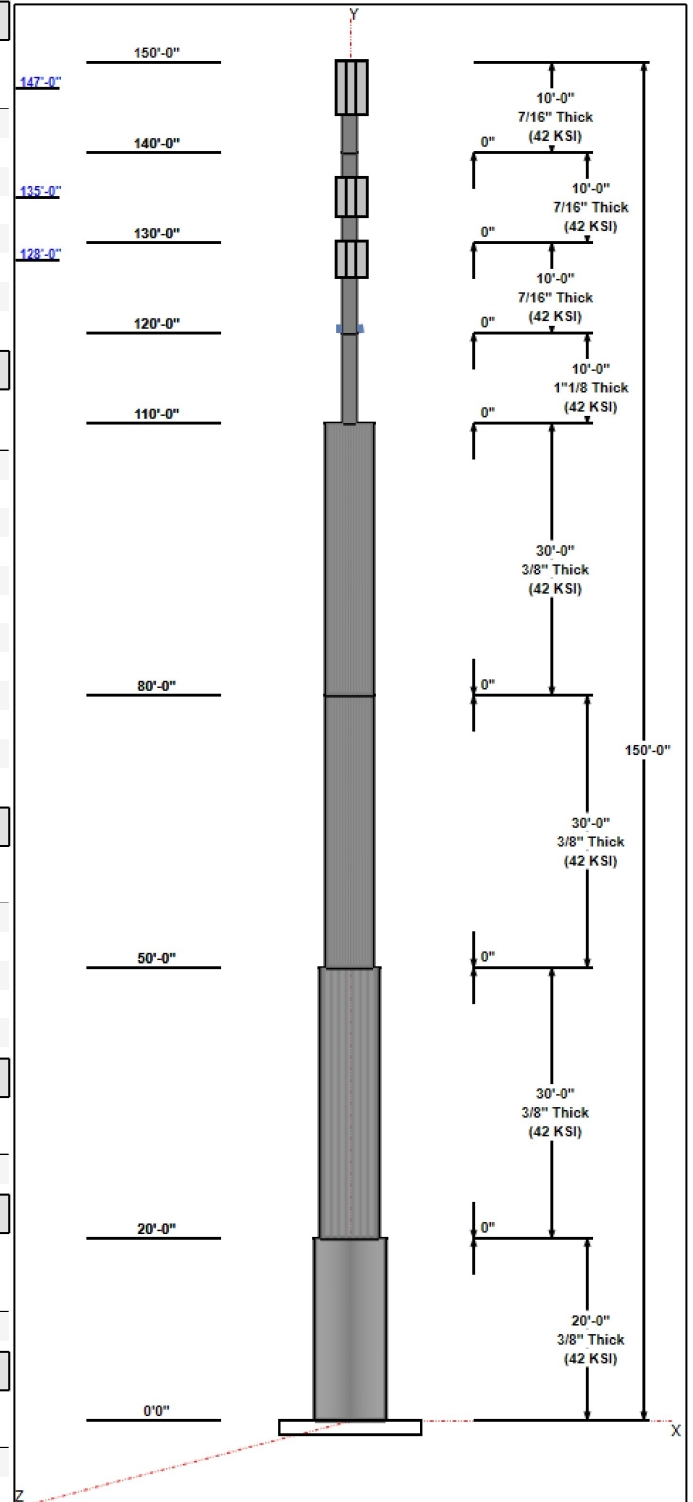
Qty	Specifications	Grade (ksi)	Arrangement
0	2.25" 18J	75.0	0

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
0.0000		60.0	0

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 129 mph Wind	999.8	11.6	22.8
0.9D + 1.0W 129 mph Wind	984.4	11.6	17.1
1.2D + 1.0Di + 1.0Wi 50 mph Wind	301.0	3.5	27.5
1.2D + 1.0Ev + 1.0Eh	31.1	0.3	23.6
0.9D + 1.0Ev + 1.0Eh	30.6	0.3	17.8
1.0D + 1.0W 60 mph Wind	203.5	2.3	19.0



Structure: CT01493-S-SBA - Coax Line Placement

Type: Monopole
Site Name: North Stonington 2 CT
Height: 150.00 (ft)

8/12/2020

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Shaft Properties

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	R	20.000	0.3750	42		0.00	2,856
2	R	30.000	0.3750	42		0.00	3,563
3	R	30.000	0.3750	42		0.00	2,841
4	R	30.000	0.3750	42		0.00	2,841
5	R	10.000	1.1400	42		0.00	684
6	R	10.000	0.4320	42		0.00	286
7	R	10.000	0.4320	42		0.00	286
8	R	10.000	0.4320	42		0.00	286
Total Shaft Weight:							13,643

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	36.00	0.00	41.97	6663.29	0.00	96.00	36.00	20.00	41.97	6663.29	0.00	96.00	0.000000
2	30.00	20.00	34.90	3831.77	0.00	80.00	30.00	50.00	34.90	3831.77	0.00	80.00	0.000000
3	24.00	50.00	27.83	1943.30	0.00	64.00	24.00	80.00	27.83	1943.30	0.00	64.00	0.000000
4	24.00	80.00	27.83	1943.30	0.00	64.00	24.00	110.00	27.83	1943.30	0.00	64.00	0.000000
5	6.75	110.0	20.09	79.10	0.00	5.92	6.75	120.00	20.09	79.10	0.00	5.92	0.000000
6	6.63	120.0	8.40	40.33	0.00	15.34	6.63	130.00	8.40	40.33	0.00	15.34	0.000000
7	6.63	130.0	8.40	40.33	0.00	15.34	6.63	140.00	8.40	40.33	0.00	15.34	0.000000
8	6.63	140.0	8.40	40.33	0.00	15.34	6.63	150.00	8.40	40.33	0.00	15.34	0.000000

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Fu (ksi)	Offset (in)	Intermediate Connectors Description	Spacing (in)	Termination Connectors Description	Spacing (in)	Lower Qty	Upper Qty
120.0	121.0	3	PLT 5/8"x6"STFNR	36	48	0.00	5/8" Holo Bolt	3.00	5/8" Holo Bolt	3.00	2	2

Load Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	150.00	40" Canister Weight	1	107.49	6.26	1.00	111.24	6.479	1.00	0.00	0.00
2	147.00	DHHTT65B-3XR	3	45.40	0.00	0.00	136.62	8.714	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	3.10	0.00	0.00	7.11	0.000	0.00	0.00	0.00
4	147.00	DPO-7126Y-0-T1	3	12.60	0.00	0.00	21.62	0.000	0.00	0.00	0.00
5	140.00	40" Canister Weight	1	214.97	12.52	1.00	222.42	12.954	1.00	0.00	0.00
6	135.00	APXV18-206516L	3	18.70	0.00	0.00	53.27	0.000	0.00	0.00	0.00
7	130.00	40" Canister Weight	1	214.97	12.52	1.00	222.37	12.951	1.00	0.00	0.00
8	128.00	OPA65R-BU4BA	3	43.00	0.00	0.00	112.90	0.000	0.00	0.00	0.00
9	128.00	TMABPD7823VG12A	6	26.00	0.00	0.00	49.71	0.000	0.00	0.00	0.00
10	128.00	CM1007-DBPXBC-xxx	6	6.50	0.00	0.00	12.49	0.000	0.00	0.00	0.00
11	120.00	40" Canister Weight	1	214.97	12.49	1.00	222.31	12.916	1.00	0.00	0.00
12	110.00	40" Canister Weight	1	107.49	6.23	1.00	111.13	6.441	1.00	0.00	0.00
Totals:			32	1,423.29			2,257.21				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	147.00	(3) 3/8" RET	0.00	Inside
0.00	147.00	(12) 7/8" Coax	0.00	Inside
0.00	134.00	(12) 1 5/8" Coax	0.00	Inside
110.0	130.00	(1) Grout	0.00	Inside
0.00	128.00	(12) 7/8" Coax	0.00	Inside

Shaft Section Properties

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	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		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	0.0				
2.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
4.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
6.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
8.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
10.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
12.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
14.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
16.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
18.00		0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
20.00	Top - Section 1	0.3750	36.000	41.970	6663.3	0.00	96.00	42	39	285.6				
20.00	Bot - Section 2	0.3750	30.000	34.901	3831.8	0.00	96.00	42	42					
22.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
24.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
26.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
28.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
30.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
32.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
34.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
36.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
38.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
40.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
42.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
44.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
46.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
48.00		0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
50.00	Top - Section 2	0.3750	30.000	34.901	3831.8	0.00	80.00	42	42	237.5				
50.00	Bot - Section 3	0.3750	24.000	27.833	1943.3	0.00	80.00	42	42					
52.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
54.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
56.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
58.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
60.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
62.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
64.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
66.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
68.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
70.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
72.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
74.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
76.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
78.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
80.00	Top - Section 3	0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
80.00	Bot - Section 4	0.3750	24.000	27.833	1943.3	0.00	64.00	42	42					
82.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
84.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
86.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
88.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
90.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
92.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				

Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
94.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
96.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
98.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
100.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
102.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
104.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
106.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
108.00		0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
110.00	Top - Section 4	0.3750	24.000	27.833	1943.3	0.00	64.00	42	42	189.4				
110.00	Bot - Section 5	1.1400	6.750	20.092	79.1	0.00	21.05	42	42					
112.00		1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7				
114.00		1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7				
116.00		1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7				
118.00		1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7				
120.00	Top - Section 5 RB1	1.1400	6.750	20.092	79.1	0.00	5.92	42	42	136.7	11.25	245.7	245.7	76.6
120.00	Bot - Section 6	0.4320	6.625	8.405	40.3	0.00	15.63	42	42					
121.00	RT1	0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6	11.25	241.2	241.2	38.3
122.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6				
124.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
126.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
128.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
130.00	Top - Section 6	0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
130.00	Bot - Section 7	0.4320	6.625	8.405	40.3	0.00	15.34	42	42					
132.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
134.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
135.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6				
136.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6				
138.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
140.00	Top - Section 7	0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
140.00	Bot - Section 8	0.4320	6.625	8.405	40.3	0.00	15.34	42	42					
142.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
144.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
146.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
147.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6				
148.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	28.6				
150.00		0.4320	6.625	8.405	40.3	0.00	15.34	42	42	57.2				
Total Weight										13643.3	114.8			

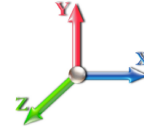
Wind Loading - Shaft

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020	
Site Name: North Stonington 2 CT	Exposure: C		
Height: 150.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 8



Load Case: 1.2D + 1.0W 129 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 38

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	342.8
4.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	342.8
6.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	342.8
8.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	342.8
10.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	342.8
12.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	342.8
14.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	342.8
16.00		1.00	0.86	36.603	40.26	358.72	0.600	0.000	2.00	6.000	3.60	144.9	0.0	342.8
18.00		1.00	0.88	37.522	41.27	363.20	0.600	0.000	2.00	6.000	3.60	148.6	0.0	342.8
20.00	Top - Section 1	1.00	0.90	38.364	42.20	367.25	0.600	0.000	2.00	6.000	3.60	151.9	0.0	342.8
22.00		1.00	0.92	39.141	43.06	309.13	0.600	0.000	2.00	5.000	3.00	129.2	0.0	285.0
24.00		1.00	0.94	39.865	43.85	311.97	0.600	0.000	2.00	5.000	3.00	131.6	0.0	285.0
26.00		1.00	0.95	40.542	44.60	314.61	0.600	0.000	2.00	5.000	3.00	133.8	0.0	285.0
28.00		1.00	0.97	41.180	45.30	317.08	0.600	0.000	2.00	5.000	3.00	135.9	0.0	285.0
30.00		1.00	0.98	41.782	45.96	319.39	0.600	0.000	2.00	5.000	3.00	137.9	0.0	285.0
32.00		1.00	1.00	42.354	46.59	321.56	0.600	0.000	2.00	5.000	3.00	139.8	0.0	285.0
34.00		1.00	1.01	42.898	47.19	323.62	0.600	0.000	2.00	5.000	3.00	141.6	0.0	285.0
36.00		1.00	1.02	43.417	47.76	325.57	0.600	0.000	2.00	5.000	3.00	143.3	0.0	285.0
38.00		1.00	1.03	43.914	48.31	327.43	0.600	0.000	2.00	5.000	3.00	144.9	0.0	285.0
40.00		1.00	1.04	44.391	48.83	329.21	0.600	0.000	2.00	5.000	3.00	146.5	0.0	285.0
42.00		1.00	1.05	44.849	49.33	330.90	0.600	0.000	2.00	5.000	3.00	148.0	0.0	285.0
44.00		1.00	1.06	45.291	49.82	332.53	0.600	0.000	2.00	5.000	3.00	149.5	0.0	285.0
46.00		1.00	1.07	45.717	50.29	334.08	0.600	0.000	2.00	5.000	3.00	150.9	0.0	285.0
48.00		1.00	1.08	46.128	50.74	335.58	0.600	0.000	2.00	5.000	3.00	152.2	0.0	285.0
50.00	Top - Section 2	1.00	1.09	46.526	51.18	337.03	0.600	0.000	2.00	5.000	3.00	153.5	0.0	285.0
52.00		1.00	1.10	46.912	51.60	270.74	0.600	0.000	2.00	4.000	2.40	123.8	0.0	227.3
54.00		1.00	1.11	47.286	52.01	271.82	0.600	0.000	2.00	4.000	2.40	124.8	0.0	227.3
56.00		1.00	1.12	47.650	52.41	272.86	0.600	0.000	2.00	4.000	2.40	125.8	0.0	227.3
58.00		1.00	1.13	48.003	52.80	273.87	0.600	0.000	2.00	4.000	2.40	126.7	0.0	227.3
60.00		1.00	1.14	48.347	53.18	274.85	0.600	0.000	2.00	4.000	2.40	127.6	0.0	227.3
62.00		1.00	1.14	48.682	53.55	275.80	0.600	0.000	2.00	4.000	2.40	128.5	0.0	227.3
64.00		1.00	1.15	49.008	53.91	276.72	0.600	0.000	2.00	4.000	2.40	129.4	0.0	227.3
66.00		1.00	1.16	49.327	54.26	277.62	0.600	0.000	2.00	4.000	2.40	130.2	0.0	227.3
68.00		1.00	1.17	49.638	54.60	278.49	0.600	0.000	2.00	4.000	2.40	131.0	0.0	227.3
70.00		1.00	1.17	49.941	54.94	279.34	0.600	0.000	2.00	4.000	2.40	131.8	0.0	227.3
72.00		1.00	1.18	50.238	55.26	280.17	0.600	0.000	2.00	4.000	2.40	132.6	0.0	227.3
74.00		1.00	1.19	50.529	55.58	280.98	0.600	0.000	2.00	4.000	2.40	133.4	0.0	227.3
76.00		1.00	1.19	50.814	55.89	281.77	0.600	0.000	2.00	4.000	2.40	134.1	0.0	227.3
78.00		1.00	1.20	51.092	56.20	282.54	0.600	0.000	2.00	4.000	2.40	134.9	0.0	227.3
80.00	Top - Section 3	1.00	1.21	51.365	56.50	283.30	0.600	0.000	2.00	4.000	2.40	135.6	0.0	227.3
82.00		1.00	1.21	51.633	56.80	284.04	0.600	0.000	2.00	4.000	2.40	136.3	0.0	227.3
84.00		1.00	1.22	51.896	57.09	284.76	0.600	0.000	2.00	4.000	2.40	137.0	0.0	227.3
86.00		1.00	1.23	52.153	57.37	285.46	0.600	0.000	2.00	4.000	2.40	137.7	0.0	227.3
88.00		1.00	1.23	52.406	57.65	286.16	0.600	0.000	2.00	4.000	2.40	138.4	0.0	227.3
90.00		1.00	1.24	52.655	57.92	286.83	0.600	0.000	2.00	4.000	2.40	139.0	0.0	227.3
92.00		1.00	1.24	52.899	58.19	287.50	0.600	0.000	2.00	4.000	2.40	139.7	0.0	227.3

Wind Loading - Shaft

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II **Page:** 9



94.00	1.00	1.25	53.139	58.45	288.15	0.600	0.000	2.00	4.000	2.40	140.3	0.0	227.3
96.00	1.00	1.25	53.375	58.71	288.79	0.600	0.000	2.00	4.000	2.40	140.9	0.0	227.3
98.00	1.00	1.26	53.607	58.97	289.42	0.600	0.000	2.00	4.000	2.40	141.5	0.0	227.3
100.00	1.00	1.27	53.836	59.22	290.03	0.600	0.000	2.00	4.000	2.40	142.1	0.0	227.3
102.00	1.00	1.27	54.061	59.47	290.64	0.600	0.000	2.00	4.000	2.40	142.7	0.0	227.3
104.00	1.00	1.28	54.282	59.71	291.23	0.600	0.000	2.00	4.000	2.40	143.3	0.0	227.3
106.00	1.00	1.28	54.500	59.95	291.82	0.600	0.000	2.00	4.000	2.40	143.9	0.0	227.3
108.00	1.00	1.29	54.715	60.19	292.39	0.600	0.000	2.00	4.000	2.40	144.4	0.0	227.3
110.00 Top - Section 4	1.00	1.29	54.927	60.42	292.96	0.600	0.000	2.00	4.000	2.40	145.0	0.0	227.3
112.00	1.00	1.30	55.136	60.65	82.55	0.600	0.000	2.00	1.125	0.67	40.9	0.0	164.1
114.00	1.00	1.30	55.342	60.88	82.70	0.600	0.000	2.00	1.125	0.67	41.1	0.0	164.1
116.00	1.00	1.31	55.545	61.10	82.86	0.600	0.000	2.00	1.125	0.67	41.2	0.0	164.1
118.00	1.00	1.31	55.745	61.32	83.01	0.600	0.000	2.00	1.125	0.67	41.4	0.0	164.1
120.00 Top - Section 5 RB1	1.00	1.32	55.942	61.54	83.15	0.600	0.000	2.00	1.125	0.67	41.5	0.0	164.1
121.00 RT1	1.00	1.32	56.040	61.64	81.68	0.600	0.000	1.00	0.552	0.33	20.4	0.0	34.3
122.00	1.00	1.32	56.137	61.75	81.75	0.600	0.000	1.00	0.552	0.33	20.5	0.0	34.3
124.00	1.00	1.32	56.330	61.96	81.89	0.600	0.000	2.00	1.104	0.66	41.1	0.0	68.6
126.00	1.00	1.33	56.520	62.17	82.03	0.600	0.000	2.00	1.104	0.66	41.2	0.0	68.6
128.00 Appurtenance(s)	1.00	1.33	56.708	62.38	82.17	0.600	0.000	2.00	1.104	0.66	41.3	0.0	68.6
130.00 Top - Section 6	1.00	1.34	56.893	62.58	82.30	0.600	0.000	2.00	1.104	0.66	41.5	0.0	68.6
132.00	1.00	1.34	57.076	62.78	82.44	0.600	0.000	2.00	1.104	0.66	41.6	0.0	68.6
134.00	1.00	1.35	57.257	62.98	82.57	0.600	0.000	2.00	1.104	0.66	41.7	0.0	68.6
135.00 Appurtenance(s)	1.00	1.35	57.347	63.08	82.63	0.600	0.000	1.00	0.552	0.33	20.9	0.0	34.3
136.00	1.00	1.35	57.436	63.18	82.69	0.600	0.000	1.00	0.552	0.33	20.9	0.0	34.3
138.00	1.00	1.35	57.613	63.37	82.82	0.600	0.000	2.00	1.104	0.66	42.0	0.0	68.6
140.00 Top - Section 7	1.00	1.36	57.788	63.57	82.95	0.600	0.000	2.00	1.104	0.66	42.1	0.0	68.6
142.00	1.00	1.36	57.961	63.76	83.07	0.600	0.000	2.00	1.104	0.66	42.2	0.0	68.6
144.00	1.00	1.37	58.131	63.94	83.19	0.600	0.000	2.00	1.104	0.66	42.4	0.0	68.6
146.00	1.00	1.37	58.301	64.13	83.31	0.600	0.000	2.00	1.104	0.66	42.5	0.0	68.6
147.00 Appurtenance(s)	1.00	1.37	58.384	64.22	83.37	0.600	0.000	1.00	0.552	0.33	21.3	0.0	34.3
148.00	1.00	1.37	58.468	64.31	83.43	0.600	0.000	1.00	0.552	0.33	21.3	0.0	34.3
150.00 Appurtenance(s)	1.00	1.38	58.633	64.50	83.55	0.600	0.000	2.00	1.104	0.66	42.7	0.0	68.6
Totals:								150.00			8,482.6		16,371.9

Discrete Appurtenance Forces

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

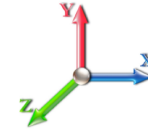


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Load Case: 1.2D + 1.0W 129 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 38

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	150.00	40" Canister Weight	1	58.633	64.497	1.00	1.00	6.26	128.99	0.000	0.000	403.75	0.00	0.00
2	147.00	DPO-7126Y-0-T1	3	58.384	64.223	0.00	1.00	0.00	45.36	0.000	0.000	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	58.384	64.223	0.00	1.00	0.00	11.16	0.000	0.000	0.00	0.00	0.00
4	147.00	DHHTT65B-3XR	3	58.384	64.223	0.00	1.00	0.00	163.44	0.000	0.000	0.00	0.00	0.00
5	140.00	40" Canister Weight	1	57.788	63.566	1.00	1.00	12.52	257.96	0.000	0.000	795.85	0.00	0.00
6	135.00	APXV18-206516L	3	57.347	63.082	0.00	1.00	0.00	67.32	0.000	0.000	0.00	0.00	0.00
7	130.00	40" Canister Weight	1	56.893	62.582	1.00	1.00	12.52	257.96	0.000	0.000	783.53	0.00	0.00
8	128.00	CM1007-DBPXC-xxx	6	56.708	62.379	0.00	1.00	0.00	46.80	0.000	0.000	0.00	0.00	0.00
9	128.00	TMABPD7823VG12A	6	56.708	62.379	0.00	1.00	0.00	187.20	0.000	0.000	0.00	0.00	0.00
10	128.00	OPA65R-BU4BA	3	56.708	62.379	0.00	1.00	0.00	154.80	0.000	0.000	0.00	0.00	0.00
11	120.00	40" Canister Weight	1	55.942	61.537	1.00	1.00	12.49	257.96	0.000	0.000	768.59	0.00	0.00
12	110.00	40" Canister Weight	1	54.927	60.420	1.00	1.00	6.23	128.99	0.000	0.000	376.41	0.00	0.00
Totals:									1,707.95			3,128.14		

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

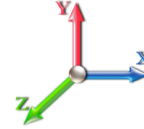


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Load Case: 1.2D + 1.0W 129 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 38

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		143.18	403.09	0.00	0.00
4.00		143.18	403.09	0.00	0.00
6.00		143.18	403.09	0.00	0.00
8.00		143.18	403.09	0.00	0.00
10.00		143.18	403.09	0.00	0.00
12.00		143.18	403.09	0.00	0.00
14.00		143.18	403.09	0.00	0.00
16.00		144.95	403.09	0.00	0.00
18.00		148.59	403.09	0.00	0.00
20.00		151.92	403.09	0.00	0.00
22.00		129.17	345.36	0.00	0.00
24.00		131.55	345.36	0.00	0.00
26.00		133.79	345.36	0.00	0.00
28.00		135.89	345.36	0.00	0.00
30.00		137.88	345.36	0.00	0.00
32.00		139.77	345.36	0.00	0.00
34.00		141.56	345.36	0.00	0.00
36.00		143.28	345.36	0.00	0.00
38.00		144.92	345.36	0.00	0.00
40.00		146.49	345.36	0.00	0.00
42.00		148.00	345.36	0.00	0.00
44.00		149.46	345.36	0.00	0.00
46.00		150.86	345.36	0.00	0.00
48.00		152.22	345.36	0.00	0.00
50.00		153.54	345.36	0.00	0.00
52.00		123.85	287.64	0.00	0.00
54.00		124.84	287.64	0.00	0.00
56.00		125.79	287.64	0.00	0.00
58.00		126.73	287.64	0.00	0.00
60.00		127.64	287.64	0.00	0.00
62.00		128.52	287.64	0.00	0.00
64.00		129.38	287.64	0.00	0.00
66.00		130.22	287.64	0.00	0.00
68.00		131.04	287.64	0.00	0.00
70.00		131.85	287.64	0.00	0.00
72.00		132.63	287.64	0.00	0.00
74.00		133.40	287.64	0.00	0.00
76.00		134.15	287.64	0.00	0.00
78.00		134.88	287.64	0.00	0.00
80.00		135.60	287.64	0.00	0.00
82.00		136.31	287.64	0.00	0.00
84.00		137.00	287.64	0.00	0.00
86.00		137.68	287.64	0.00	0.00
88.00		138.35	287.64	0.00	0.00
90.00		139.01	287.64	0.00	0.00
92.00		139.65	287.64	0.00	0.00

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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94.00		140.29	287.64	0.00	0.00
96.00		140.91	287.64	0.00	0.00
98.00		141.52	287.64	0.00	0.00
100.00		142.13	287.64	0.00	0.00
102.00		142.72	287.64	0.00	0.00
104.00		143.31	287.64	0.00	0.00
106.00		143.88	287.64	0.00	0.00
108.00		144.45	287.64	0.00	0.00
110.00	(1) attachments	521.42	416.62	0.00	0.00
112.00		40.94	289.58	0.00	0.00
114.00		41.09	289.58	0.00	0.00
116.00		41.24	289.58	0.00	0.00
118.00		41.39	289.58	0.00	0.00
120.00	(1) attachments	810.13	547.54	0.00	0.00
121.00		20.42	97.07	0.00	0.00
122.00		20.46	97.07	0.00	0.00
124.00		41.05	194.14	0.00	0.00
126.00		41.19	194.14	0.00	0.00
128.00	(15) attachments	41.33	582.94	0.00	0.00
130.00	(1) attachments	824.99	437.12	0.00	0.00
132.00		41.59	114.00	0.00	0.00
134.00		41.73	114.00	0.00	0.00
135.00	(3) attachments	20.90	109.34	0.00	0.00
136.00		20.93	42.02	0.00	0.00
138.00		41.99	84.05	0.00	0.00
140.00	(1) attachments	837.97	342.01	0.00	0.00
142.00		42.24	84.05	0.00	0.00
144.00		42.36	84.05	0.00	0.00
146.00		42.49	84.05	0.00	0.00
147.00	(9) attachments	21.27	261.98	0.00	0.00
148.00		21.30	34.32	0.00	0.00
150.00	(1) attachments	446.48	197.63	0.00	0.00
Totals:		11,610.72	22,829.19	0.00	0.00

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II Page: 13

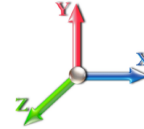


Load Case: 1.2D + 1.0W 129 mph Wind

Iterations 38

Dead Load Factor 1.20

Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-22.82	-11.63	0.00	-999.82	0.00	999.82	1490.10	475.94	99948.2	1339.68	0.00	0.000	0.000	0.762
2.00	-22.40	-11.52	0.00	-976.57	0.00	976.57	1490.10	475.94	99948.2	1339.68	0.02	-0.084	0.000	0.745
4.00	-21.98	-11.40	0.00	-953.53	0.00	953.53	1490.10	475.94	99948.2	1339.68	0.07	-0.167	0.000	0.727
6.00	-21.56	-11.29	0.00	-930.73	0.00	930.73	1490.10	475.94	99948.2	1339.68	0.16	-0.247	0.000	0.710
8.00	-21.15	-11.17	0.00	-908.15	0.00	908.15	1490.10	475.94	99948.2	1339.68	0.28	-0.326	0.000	0.693
10.00	-20.73	-11.05	0.00	-885.81	0.00	885.81	1490.10	475.94	99948.2	1339.68	0.43	-0.402	0.000	0.676
12.00	-20.31	-10.93	0.00	-863.70	0.00	863.70	1490.10	475.94	99948.2	1339.68	0.62	-0.477	0.000	0.659
14.00	-19.90	-10.81	0.00	-841.83	0.00	841.83	1490.10	475.94	99948.2	1339.68	0.83	-0.550	0.000	0.642
16.00	-19.48	-10.69	0.00	-820.21	0.00	820.21	1490.10	475.94	99948.2	1339.68	1.08	-0.621	0.000	0.626
18.00	-19.07	-10.56	0.00	-798.83	0.00	798.83	1490.10	475.94	99948.2	1339.68	1.35	-0.690	0.000	0.610
20.00	-18.66	-10.42	0.00	-777.72	0.00	777.72	1490.10	475.94	99948.2	1339.68	1.66	-0.757	0.000	0.594
20.00	-18.66	-10.42	0.00	-777.72	0.00	777.72	1311.06	395.78	69116.5	948.43	1.66	-0.757	0.000	0.835
22.00	-18.30	-10.32	0.00	-756.88	0.00	756.88	1311.06	395.78	69116.5	948.43	1.99	-0.823	0.000	0.813
24.00	-17.93	-10.21	0.00	-736.25	0.00	736.25	1311.06	395.78	69116.5	948.43	2.36	-0.934	0.000	0.791
26.00	-17.57	-10.11	0.00	-715.82	0.00	715.82	1311.06	395.78	69116.5	948.43	2.77	-1.041	0.000	0.769
28.00	-17.21	-9.99	0.00	-695.61	0.00	695.61	1311.06	395.78	69116.5	948.43	3.23	-1.146	0.000	0.747
30.00	-16.85	-9.88	0.00	-675.63	0.00	675.63	1311.06	395.78	69116.5	948.43	3.73	-1.248	0.000	0.726
32.00	-16.49	-9.76	0.00	-655.87	0.00	655.87	1311.06	395.78	69116.5	948.43	4.28	-1.347	0.000	0.705
34.00	-16.14	-9.64	0.00	-636.35	0.00	636.35	1311.06	395.78	69116.5	948.43	4.86	-1.443	0.000	0.684
36.00	-15.78	-9.51	0.00	-617.08	0.00	617.08	1311.06	395.78	69116.5	948.43	5.48	-1.536	0.000	0.663
38.00	-15.42	-9.38	0.00	-598.06	0.00	598.06	1311.06	395.78	69116.5	948.43	6.15	-1.626	0.000	0.643
40.00	-15.07	-9.24	0.00	-579.31	0.00	579.31	1311.06	395.78	69116.5	948.43	6.85	-1.714	0.000	0.623
42.00	-14.71	-9.11	0.00	-560.82	0.00	560.82	1311.06	395.78	69116.5	948.43	7.58	-1.798	0.000	0.603
44.00	-14.36	-8.97	0.00	-542.60	0.00	542.60	1311.06	395.78	69116.5	948.43	8.35	-1.880	0.000	0.584
46.00	-14.01	-8.82	0.00	-524.67	0.00	524.67	1311.06	395.78	69116.5	948.43	9.16	-1.959	0.000	0.564
48.00	-13.66	-8.68	0.00	-507.02	0.00	507.02	1311.06	395.78	69116.5	948.43	10.00	-2.036	0.000	0.545
50.00	-13.31	-8.53	0.00	-489.67	0.00	489.67	1311.06	395.78	69116.5	948.43	10.86	-2.110	0.000	0.527
50.00	-13.31	-8.53	0.00	-489.67	0.00	489.67	1052.07	315.62	43955.0	624.04	10.86	-2.110	0.000	0.798
52.00	-13.01	-8.42	0.00	-472.61	0.00	472.61	1052.07	315.62	43955.0	624.04	11.76	-2.181	0.000	0.770
54.00	-12.71	-8.31	0.00	-455.77	0.00	455.77	1052.07	315.62	43955.0	624.04	12.71	-2.317	0.000	0.743
56.00	-12.41	-8.20	0.00	-439.15	0.00	439.15	1052.07	315.62	43955.0	624.04	13.70	-2.448	0.000	0.716
58.00	-12.11	-8.09	0.00	-422.75	0.00	422.75	1052.07	315.62	43955.0	624.04	14.76	-2.575	0.000	0.690
60.00	-11.81	-7.97	0.00	-406.57	0.00	406.57	1052.07	315.62	43955.0	624.04	15.86	-2.696	0.000	0.663
62.00	-11.51	-7.85	0.00	-390.63	0.00	390.63	1052.07	315.62	43955.0	624.04	17.01	-2.813	0.000	0.638
64.00	-11.22	-7.73	0.00	-374.92	0.00	374.92	1052.07	315.62	43955.0	624.04	18.22	-2.925	0.000	0.612
66.00	-10.92	-7.61	0.00	-359.46	0.00	359.46	1052.07	315.62	43955.0	624.04	19.46	-3.032	0.000	0.587
68.00	-10.63	-7.48	0.00	-344.25	0.00	344.25	1052.07	315.62	43955.0	624.04	20.76	-3.135	0.000	0.562
70.00	-10.34	-7.35	0.00	-329.29	0.00	329.29	1052.07	315.62	43955.0	624.04	22.09	-3.234	0.000	0.538
72.00	-10.05	-7.22	0.00	-314.60	0.00	314.60	1052.07	315.62	43955.0	624.04	23.46	-3.328	0.000	0.514
74.00	-9.76	-7.08	0.00	-300.17	0.00	300.17	1052.07	315.62	43955.0	624.04	24.88	-3.418	0.000	0.491
76.00	-9.47	-6.94	0.00	-286.01	0.00	286.01	1052.07	315.62	43955.0	624.04	26.33	-3.504	0.000	0.468
78.00	-9.18	-6.80	0.00	-272.12	0.00	272.12	1052.07	315.62	43955.0	624.04	27.81	-3.586	0.000	0.445
80.00	-8.89	-6.66	0.00	-258.51	0.00	258.51	1052.07	315.62	43955.0	624.04	29.33	-3.663	0.000	0.423
80.00	-8.89	-6.66	0.00	-258.51	0.00	258.51	1052.07	315.62	43955.0	624.04	29.33	-3.663	0.000	0.423
82.00	-8.61	-6.52	0.00	-245.19	0.00	245.19	1052.07	315.62	43955.0	624.04	30.88	-3.737	0.000	0.402
84.00	-8.32	-6.37	0.00	-232.16	0.00	232.16	1052.07	315.62	43955.0	624.04	32.46	-3.807	0.000	0.380
86.00	-8.04	-6.22	0.00	-219.41	0.00	219.41	1052.07	315.62	43955.0	624.04	34.07	-3.873	0.000	0.360
88.00	-7.75	-6.07	0.00	-206.96	0.00	206.96	1052.07	315.62	43955.0	624.04	35.70	-3.936	0.000	0.339

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II **Page:** 14



90.00	-7.47	-5.92	0.00	-194.81	0.00	194.81	1052.07	315.62	43955.0	624.04	37.36	-3.994	0.000	0.320
92.00	-7.19	-5.77	0.00	-182.97	0.00	182.97	1052.07	315.62	43955.0	624.04	39.04	-4.050	0.000	0.300
94.00	-6.90	-5.62	0.00	-171.42	0.00	171.42	1052.07	315.62	43955.0	624.04	40.75	-4.102	0.000	0.282
96.00	-6.62	-5.46	0.00	-160.19	0.00	160.19	1052.07	315.62	43955.0	624.04	42.48	-4.150	0.000	0.263
98.00	-6.34	-5.30	0.00	-149.27	0.00	149.27	1052.07	315.62	43955.0	624.04	44.22	-4.195	0.000	0.246
100.00	-6.06	-5.15	0.00	-138.66	0.00	138.66	1052.07	315.62	43955.0	624.04	45.99	-4.238	0.000	0.228
102.00	-5.78	-4.99	0.00	-128.37	0.00	128.37	1052.07	315.62	43955.0	624.04	47.77	-4.277	0.000	0.211
104.00	-5.50	-4.82	0.00	-118.40	0.00	118.40	1052.07	315.62	43955.0	624.04	49.57	-4.313	0.000	0.195
106.00	-5.22	-4.66	0.00	-108.75	0.00	108.75	1052.07	315.62	43955.0	624.04	51.38	-4.346	0.000	0.179
108.00	-4.95	-4.50	0.00	-99.43	0.00	99.43	1052.07	315.62	43955.0	624.04	53.21	-4.377	0.000	0.164
110.00	-4.57	-3.95	0.00	-90.43	0.00	90.43	1052.07	315.62	43955.0	624.04	55.04	-4.404	0.000	0.149
110.00	-4.57	-3.95	0.00	-90.43	0.00	90.43	759.47	227.84	14937.6	114.57	55.04	-4.404	0.000	0.796
112.00	-4.26	-3.91	0.00	-82.54	0.00	82.54	759.47	227.84	14937.6	114.57	56.89	-4.430	0.000	0.726
114.00	-3.94	-3.88	0.00	-74.72	0.00	74.72	759.47	227.84	14937.6	114.57	58.87	-4.995	0.000	0.658
116.00	-3.63	-3.84	0.00	-66.96	0.00	66.96	759.47	227.84	14937.6	114.57	61.07	-5.505	0.000	0.589
118.00	-3.31	-3.80	0.00	-59.27	0.00	59.27	759.47	227.84	14937.6	114.57	63.46	-5.959	0.000	0.522
120.00	-2.84	-2.94	0.00	-51.68	0.00	51.68	759.47	227.84	14937.6	114.57	66.04	-6.358	0.000	0.112
120.00	-2.84	-2.94	0.00	-51.68	0.00	51.68	317.71	95.31	3734.62	52.28	66.04	-6.358	0.000	0.126
121.00	-2.75	-2.92	0.00	-48.73	0.00	48.73	317.71	95.31	3734.62	52.28	67.37	-6.402	0.000	0.138
121.00	-2.75	-2.92	0.00	-48.73	0.00	48.73	317.71	95.31	3734.62	52.28	67.37	-6.402	0.000	0.138
122.00	-2.64	-2.90	0.00	-45.82	0.00	45.82	317.71	95.31	3734.62	52.28	68.72	-6.450	0.000	0.886
124.00	-2.42	-2.86	0.00	-40.02	0.00	40.02	317.71	95.31	3734.62	52.28	71.54	-7.055	0.000	0.774
126.00	-2.21	-2.81	0.00	-34.30	0.00	34.30	317.71	95.31	3734.62	52.28	74.60	-7.580	0.000	0.664
128.00	-1.62	-2.70	0.00	-28.67	0.00	28.67	317.71	95.31	3734.62	52.28	77.86	-8.024	0.000	0.554
130.00	-1.29	-1.83	0.00	-23.26	0.00	23.26	317.71	95.31	3734.62	52.28	81.29	-8.390	0.000	0.449
130.00	-1.29	-1.83	0.00	-23.26	0.00	23.26	317.71	95.31	3734.62	52.28	81.29	-8.390	0.000	0.449
132.00	-1.18	-1.78	0.00	-19.59	0.00	19.59	317.71	95.31	3734.62	52.28	84.86	-8.692	0.000	0.379
134.00	-1.07	-1.73	0.00	-16.03	0.00	16.03	317.71	95.31	3734.62	52.28	88.54	-8.944	0.000	0.310
135.00	-0.96	-1.69	0.00	-14.30	0.00	14.30	317.71	95.31	3734.62	52.28	90.42	-9.051	0.000	0.277
136.00	-0.92	-1.66	0.00	-12.61	0.00	12.61	317.71	95.31	3734.62	52.28	92.32	-9.146	0.000	0.244
138.00	-0.84	-1.61	0.00	-9.28	0.00	9.28	317.71	95.31	3734.62	52.28	96.16	-9.300	0.000	0.181
140.00	-0.63	-0.73	0.00	-6.06	0.00	6.06	317.71	95.31	3734.62	52.28	100.07	-9.408	0.000	0.118
140.00	-0.63	-0.73	0.00	-6.06	0.00	6.06	317.71	95.31	3734.62	52.28	100.07	-9.408	0.000	0.118
142.00	-0.56	-0.68	0.00	-4.60	0.00	4.60	317.71	95.31	3734.62	52.28	104.01	-9.484	0.000	0.090
144.00	-0.48	-0.62	0.00	-3.25	0.00	3.25	317.71	95.31	3734.62	52.28	107.97	-9.539	0.000	0.064
146.00	-0.41	-0.56	0.00	-2.01	0.00	2.01	317.71	95.31	3734.62	52.28	111.96	-9.576	0.000	0.040
147.00	-0.15	-0.50	0.00	-1.45	0.00	1.45	317.71	95.31	3734.62	52.28	113.96	-9.588	0.000	0.028
148.00	-0.12	-0.47	0.00	-0.95	0.00	0.95	317.71	95.31	3734.62	52.28	115.96	-9.597	0.000	0.019
150.00	0.00	-0.45	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	119.96	-9.603	0.000	0.000

Wind Loading - Shaft

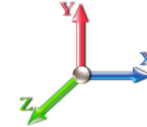
Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



Page: 15

Load Case: 0.9D + 1.0W 129 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.00



Iterations 38

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	257.1
4.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	257.1
6.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	257.1
8.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	257.1
10.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	257.1
12.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	257.1
14.00		1.00	0.85	36.157	39.77	356.53	0.600	0.000	2.00	6.000	3.60	143.2	0.0	257.1
16.00		1.00	0.86	36.603	40.26	358.72	0.600	0.000	2.00	6.000	3.60	144.9	0.0	257.1
18.00		1.00	0.88	37.522	41.27	363.20	0.600	0.000	2.00	6.000	3.60	148.6	0.0	257.1
20.00	Top - Section 1	1.00	0.90	38.364	42.20	367.25	0.600	0.000	2.00	6.000	3.60	151.9	0.0	257.1
22.00		1.00	0.92	39.141	43.06	309.13	0.600	0.000	2.00	5.000	3.00	129.2	0.0	213.8
24.00		1.00	0.94	39.865	43.85	311.97	0.600	0.000	2.00	5.000	3.00	131.6	0.0	213.8
26.00		1.00	0.95	40.542	44.60	314.61	0.600	0.000	2.00	5.000	3.00	133.8	0.0	213.8
28.00		1.00	0.97	41.180	45.30	317.08	0.600	0.000	2.00	5.000	3.00	135.9	0.0	213.8
30.00		1.00	0.98	41.782	45.96	319.39	0.600	0.000	2.00	5.000	3.00	137.9	0.0	213.8
32.00		1.00	1.00	42.354	46.59	321.56	0.600	0.000	2.00	5.000	3.00	139.8	0.0	213.8
34.00		1.00	1.01	42.898	47.19	323.62	0.600	0.000	2.00	5.000	3.00	141.6	0.0	213.8
36.00		1.00	1.02	43.417	47.76	325.57	0.600	0.000	2.00	5.000	3.00	143.3	0.0	213.8
38.00		1.00	1.03	43.914	48.31	327.43	0.600	0.000	2.00	5.000	3.00	144.9	0.0	213.8
40.00		1.00	1.04	44.391	48.83	329.21	0.600	0.000	2.00	5.000	3.00	146.5	0.0	213.8
42.00		1.00	1.05	44.849	49.33	330.90	0.600	0.000	2.00	5.000	3.00	148.0	0.0	213.8
44.00		1.00	1.06	45.291	49.82	332.53	0.600	0.000	2.00	5.000	3.00	149.5	0.0	213.8
46.00		1.00	1.07	45.717	50.29	334.08	0.600	0.000	2.00	5.000	3.00	150.9	0.0	213.8
48.00		1.00	1.08	46.128	50.74	335.58	0.600	0.000	2.00	5.000	3.00	152.2	0.0	213.8
50.00	Top - Section 2	1.00	1.09	46.526	51.18	337.03	0.600	0.000	2.00	5.000	3.00	153.5	0.0	213.8
52.00		1.00	1.10	46.912	51.60	270.74	0.600	0.000	2.00	4.000	2.40	123.8	0.0	170.5
54.00		1.00	1.11	47.286	52.01	271.82	0.600	0.000	2.00	4.000	2.40	124.8	0.0	170.5
56.00		1.00	1.12	47.650	52.41	272.86	0.600	0.000	2.00	4.000	2.40	125.8	0.0	170.5
58.00		1.00	1.13	48.003	52.80	273.87	0.600	0.000	2.00	4.000	2.40	126.7	0.0	170.5
60.00		1.00	1.14	48.347	53.18	274.85	0.600	0.000	2.00	4.000	2.40	127.6	0.0	170.5
62.00		1.00	1.14	48.682	53.55	275.80	0.600	0.000	2.00	4.000	2.40	128.5	0.0	170.5
64.00		1.00	1.15	49.008	53.91	276.72	0.600	0.000	2.00	4.000	2.40	129.4	0.0	170.5
66.00		1.00	1.16	49.327	54.26	277.62	0.600	0.000	2.00	4.000	2.40	130.2	0.0	170.5
68.00		1.00	1.17	49.638	54.60	278.49	0.600	0.000	2.00	4.000	2.40	131.0	0.0	170.5
70.00		1.00	1.17	49.941	54.94	279.34	0.600	0.000	2.00	4.000	2.40	131.8	0.0	170.5
72.00		1.00	1.18	50.238	55.26	280.17	0.600	0.000	2.00	4.000	2.40	132.6	0.0	170.5
74.00		1.00	1.19	50.529	55.58	280.98	0.600	0.000	2.00	4.000	2.40	133.4	0.0	170.5
76.00		1.00	1.19	50.814	55.89	281.77	0.600	0.000	2.00	4.000	2.40	134.1	0.0	170.5
78.00		1.00	1.20	51.092	56.20	282.54	0.600	0.000	2.00	4.000	2.40	134.9	0.0	170.5
80.00	Top - Section 3	1.00	1.21	51.365	56.50	283.30	0.600	0.000	2.00	4.000	2.40	135.6	0.0	170.5
82.00		1.00	1.21	51.633	56.80	284.04	0.600	0.000	2.00	4.000	2.40	136.3	0.0	170.5
84.00		1.00	1.22	51.896	57.09	284.76	0.600	0.000	2.00	4.000	2.40	137.0	0.0	170.5
86.00		1.00	1.23	52.153	57.37	285.46	0.600	0.000	2.00	4.000	2.40	137.7	0.0	170.5
88.00		1.00	1.23	52.406	57.65	286.16	0.600	0.000	2.00	4.000	2.40	138.4	0.0	170.5
90.00		1.00	1.24	52.655	57.92	286.83	0.600	0.000	2.00	4.000	2.40	139.0	0.0	170.5
92.00		1.00	1.24	52.899	58.19	287.50	0.600	0.000	2.00	4.000	2.40	139.7	0.0	170.5

Wind Loading - Shaft

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II **Page:** 16



94.00	1.00	1.25	53.139	58.45	288.15	0.600	0.000	2.00	4.000	2.40	140.3	0.0	170.5
96.00	1.00	1.25	53.375	58.71	288.79	0.600	0.000	2.00	4.000	2.40	140.9	0.0	170.5
98.00	1.00	1.26	53.607	58.97	289.42	0.600	0.000	2.00	4.000	2.40	141.5	0.0	170.5
100.00	1.00	1.27	53.836	59.22	290.03	0.600	0.000	2.00	4.000	2.40	142.1	0.0	170.5
102.00	1.00	1.27	54.061	59.47	290.64	0.600	0.000	2.00	4.000	2.40	142.7	0.0	170.5
104.00	1.00	1.28	54.282	59.71	291.23	0.600	0.000	2.00	4.000	2.40	143.3	0.0	170.5
106.00	1.00	1.28	54.500	59.95	291.82	0.600	0.000	2.00	4.000	2.40	143.9	0.0	170.5
108.00	1.00	1.29	54.715	60.19	292.39	0.600	0.000	2.00	4.000	2.40	144.4	0.0	170.5
110.00 Top - Section 4	1.00	1.29	54.927	60.42	292.96	0.600	0.000	2.00	4.000	2.40	145.0	0.0	170.5
112.00	1.00	1.30	55.136	60.65	82.55	0.600	0.000	2.00	1.125	0.67	40.9	0.0	123.1
114.00	1.00	1.30	55.342	60.88	82.70	0.600	0.000	2.00	1.125	0.67	41.1	0.0	123.1
116.00	1.00	1.31	55.545	61.10	82.86	0.600	0.000	2.00	1.125	0.67	41.2	0.0	123.1
118.00	1.00	1.31	55.745	61.32	83.01	0.600	0.000	2.00	1.125	0.67	41.4	0.0	123.1
120.00 Top - Section 5 RB1	1.00	1.32	55.942	61.54	83.15	0.600	0.000	2.00	1.125	0.67	41.5	0.0	123.1
121.00 RT1	1.00	1.32	56.040	61.64	81.68	0.600	0.000	1.00	0.552	0.33	20.4	0.0	25.7
122.00	1.00	1.32	56.137	61.75	81.75	0.600	0.000	1.00	0.552	0.33	20.5	0.0	25.7
124.00	1.00	1.32	56.330	61.96	81.89	0.600	0.000	2.00	1.104	0.66	41.1	0.0	51.5
126.00	1.00	1.33	56.520	62.17	82.03	0.600	0.000	2.00	1.104	0.66	41.2	0.0	51.5
128.00 Appurtenance(s)	1.00	1.33	56.708	62.38	82.17	0.600	0.000	2.00	1.104	0.66	41.3	0.0	51.5
130.00 Top - Section 6	1.00	1.34	56.893	62.58	82.30	0.600	0.000	2.00	1.104	0.66	41.5	0.0	51.5
132.00	1.00	1.34	57.076	62.78	82.44	0.600	0.000	2.00	1.104	0.66	41.6	0.0	51.5
134.00	1.00	1.35	57.257	62.98	82.57	0.600	0.000	2.00	1.104	0.66	41.7	0.0	51.5
135.00 Appurtenance(s)	1.00	1.35	57.347	63.08	82.63	0.600	0.000	1.00	0.552	0.33	20.9	0.0	25.7
136.00	1.00	1.35	57.436	63.18	82.69	0.600	0.000	1.00	0.552	0.33	20.9	0.0	25.7
138.00	1.00	1.35	57.613	63.37	82.82	0.600	0.000	2.00	1.104	0.66	42.0	0.0	51.5
140.00 Top - Section 7	1.00	1.36	57.788	63.57	82.95	0.600	0.000	2.00	1.104	0.66	42.1	0.0	51.5
142.00	1.00	1.36	57.961	63.76	83.07	0.600	0.000	2.00	1.104	0.66	42.2	0.0	51.5
144.00	1.00	1.37	58.131	63.94	83.19	0.600	0.000	2.00	1.104	0.66	42.4	0.0	51.5
146.00	1.00	1.37	58.301	64.13	83.31	0.600	0.000	2.00	1.104	0.66	42.5	0.0	51.5
147.00 Appurtenance(s)	1.00	1.37	58.384	64.22	83.37	0.600	0.000	1.00	0.552	0.33	21.3	0.0	25.7
148.00	1.00	1.37	58.468	64.31	83.43	0.600	0.000	1.00	0.552	0.33	21.3	0.0	25.7
150.00 Appurtenance(s)	1.00	1.38	58.633	64.50	83.55	0.600	0.000	2.00	1.104	0.66	42.7	0.0	51.5
Totals:								150.00			8,482.6		12,278.9

Discrete Appurtenance Forces

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

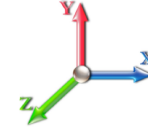


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Load Case: 0.9D + 1.0W 129 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 38

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	150.00	40" Canister Weight	1	58.633	64.497	1.00	1.00	6.26	96.74	0.000	0.000	403.75	0.00	0.00
2	147.00	DPO-7126Y-0-T1	3	58.384	64.223	0.00	1.00	0.00	34.02	0.000	0.000	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	58.384	64.223	0.00	1.00	0.00	8.37	0.000	0.000	0.00	0.00	0.00
4	147.00	DHHTT65B-3XR	3	58.384	64.223	0.00	1.00	0.00	122.58	0.000	0.000	0.00	0.00	0.00
5	140.00	40" Canister Weight	1	57.788	63.566	1.00	1.00	12.52	193.47	0.000	0.000	795.85	0.00	0.00
6	135.00	APXV18-206516L	3	57.347	63.082	0.00	1.00	0.00	50.49	0.000	0.000	0.00	0.00	0.00
7	130.00	40" Canister Weight	1	56.893	62.582	1.00	1.00	12.52	193.47	0.000	0.000	783.53	0.00	0.00
8	128.00	CM1007-DBPXC-xxx	6	56.708	62.379	0.00	1.00	0.00	35.10	0.000	0.000	0.00	0.00	0.00
9	128.00	TMABPD7823VG12A	6	56.708	62.379	0.00	1.00	0.00	140.40	0.000	0.000	0.00	0.00	0.00
10	128.00	OPA65R-BU4BA	3	56.708	62.379	0.00	1.00	0.00	116.10	0.000	0.000	0.00	0.00	0.00
11	120.00	40" Canister Weight	1	55.942	61.537	1.00	1.00	12.49	193.47	0.000	0.000	768.59	0.00	0.00
12	110.00	40" Canister Weight	1	54.927	60.420	1.00	1.00	6.23	96.74	0.000	0.000	376.41	0.00	0.00
Totals:									1,280.96			3,128.14		

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

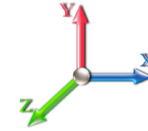


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Load Case: 0.9D + 1.0W 129 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 38

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		143.18	302.32	0.00	0.00
4.00		143.18	302.32	0.00	0.00
6.00		143.18	302.32	0.00	0.00
8.00		143.18	302.32	0.00	0.00
10.00		143.18	302.32	0.00	0.00
12.00		143.18	302.32	0.00	0.00
14.00		143.18	302.32	0.00	0.00
16.00		144.95	302.32	0.00	0.00
18.00		148.59	302.32	0.00	0.00
20.00		151.92	302.32	0.00	0.00
22.00		129.17	259.02	0.00	0.00
24.00		131.55	259.02	0.00	0.00
26.00		133.79	259.02	0.00	0.00
28.00		135.89	259.02	0.00	0.00
30.00		137.88	259.02	0.00	0.00
32.00		139.77	259.02	0.00	0.00
34.00		141.56	259.02	0.00	0.00
36.00		143.28	259.02	0.00	0.00
38.00		144.92	259.02	0.00	0.00
40.00		146.49	259.02	0.00	0.00
42.00		148.00	259.02	0.00	0.00
44.00		149.46	259.02	0.00	0.00
46.00		150.86	259.02	0.00	0.00
48.00		152.22	259.02	0.00	0.00
50.00		153.54	259.02	0.00	0.00
52.00		123.85	215.73	0.00	0.00
54.00		124.84	215.73	0.00	0.00
56.00		125.79	215.73	0.00	0.00
58.00		126.73	215.73	0.00	0.00
60.00		127.64	215.73	0.00	0.00
62.00		128.52	215.73	0.00	0.00
64.00		129.38	215.73	0.00	0.00
66.00		130.22	215.73	0.00	0.00
68.00		131.04	215.73	0.00	0.00
70.00		131.85	215.73	0.00	0.00
72.00		132.63	215.73	0.00	0.00
74.00		133.40	215.73	0.00	0.00
76.00		134.15	215.73	0.00	0.00
78.00		134.88	215.73	0.00	0.00
80.00		135.60	215.73	0.00	0.00
82.00		136.31	215.73	0.00	0.00
84.00		137.00	215.73	0.00	0.00
86.00		137.68	215.73	0.00	0.00
88.00		138.35	215.73	0.00	0.00
90.00		139.01	215.73	0.00	0.00
92.00		139.65	215.73	0.00	0.00

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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94.00		140.29	215.73	0.00	0.00
96.00		140.91	215.73	0.00	0.00
98.00		141.52	215.73	0.00	0.00
100.00		142.13	215.73	0.00	0.00
102.00		142.72	215.73	0.00	0.00
104.00		143.31	215.73	0.00	0.00
106.00		143.88	215.73	0.00	0.00
108.00		144.45	215.73	0.00	0.00
110.00	(1) attachments	521.42	312.47	0.00	0.00
112.00		40.94	217.18	0.00	0.00
114.00		41.09	217.18	0.00	0.00
116.00		41.24	217.18	0.00	0.00
118.00		41.39	217.18	0.00	0.00
120.00	(1) attachments	810.13	410.66	0.00	0.00
121.00		20.42	72.80	0.00	0.00
122.00		20.46	72.80	0.00	0.00
124.00		41.05	145.60	0.00	0.00
126.00		41.19	145.60	0.00	0.00
128.00	(15) attachments	41.33	437.20	0.00	0.00
130.00	(1) attachments	824.99	327.84	0.00	0.00
132.00		41.59	85.50	0.00	0.00
134.00		41.73	85.50	0.00	0.00
135.00	(3) attachments	20.90	82.01	0.00	0.00
136.00		20.93	31.52	0.00	0.00
138.00		41.99	63.04	0.00	0.00
140.00	(1) attachments	837.97	256.51	0.00	0.00
142.00		42.24	63.04	0.00	0.00
144.00		42.36	63.04	0.00	0.00
146.00		42.49	63.04	0.00	0.00
147.00	(9) attachments	21.27	196.49	0.00	0.00
148.00		21.30	25.74	0.00	0.00
150.00	(1) attachments	446.48	148.22	0.00	0.00
Totals:		11,610.72	17,121.89	0.00	0.00

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II Page: 20

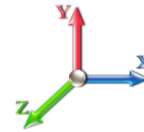


Load Case: 0.9D + 1.0W 129 mph Wind

Iterations 38

Dead Load Factor 0.90

Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-17.11	-11.62	0.00	-984.41	0.00	984.41	1490.10	475.94	99948.2	1339.68	0.00	0.000	0.000	0.747
2.00	-16.79	-11.50	0.00	-961.17	0.00	961.17	1490.10	475.94	99948.2	1339.68	0.02	-0.083	0.000	0.729
4.00	-16.48	-11.38	0.00	-938.16	0.00	938.16	1490.10	475.94	99948.2	1339.68	0.07	-0.164	0.000	0.712
6.00	-16.16	-11.26	0.00	-915.39	0.00	915.39	1490.10	475.94	99948.2	1339.68	0.16	-0.243	0.000	0.695
8.00	-15.84	-11.14	0.00	-892.87	0.00	892.87	1490.10	475.94	99948.2	1339.68	0.27	-0.321	0.000	0.678
10.00	-15.53	-11.01	0.00	-870.60	0.00	870.60	1490.10	475.94	99948.2	1339.68	0.43	-0.396	0.000	0.661
12.00	-15.21	-10.89	0.00	-848.58	0.00	848.58	1490.10	475.94	99948.2	1339.68	0.61	-0.469	0.000	0.644
14.00	-14.90	-10.76	0.00	-826.80	0.00	826.80	1490.10	475.94	99948.2	1339.68	0.82	-0.541	0.000	0.628
16.00	-14.58	-10.63	0.00	-805.29	0.00	805.29	1490.10	475.94	99948.2	1339.68	1.06	-0.610	0.000	0.611
18.00	-14.27	-10.49	0.00	-784.03	0.00	784.03	1490.10	475.94	99948.2	1339.68	1.33	-0.678	0.000	0.595
20.00	-13.96	-10.35	0.00	-763.05	0.00	763.05	1490.10	475.94	99948.2	1339.68	1.63	-0.744	0.000	0.579
20.00	-13.96	-10.35	0.00	-763.05	0.00	763.05	1311.06	395.78	69116.5	948.43	1.63	-0.744	0.000	0.816
22.00	-13.69	-10.24	0.00	-742.34	0.00	742.34	1311.06	395.78	69116.5	948.43	1.95	-0.809	0.000	0.794
24.00	-13.41	-10.13	0.00	-721.86	0.00	721.86	1311.06	395.78	69116.5	948.43	2.32	-0.917	0.000	0.772
26.00	-13.14	-10.02	0.00	-701.60	0.00	701.60	1311.06	395.78	69116.5	948.43	2.72	-1.023	0.000	0.750
28.00	-12.86	-9.90	0.00	-681.57	0.00	681.57	1311.06	395.78	69116.5	948.43	3.17	-1.126	0.000	0.729
30.00	-12.59	-9.78	0.00	-661.77	0.00	661.77	1311.06	395.78	69116.5	948.43	3.67	-1.225	0.000	0.708
32.00	-12.32	-9.65	0.00	-642.22	0.00	642.22	1311.06	395.78	69116.5	948.43	4.20	-1.322	0.000	0.687
34.00	-12.05	-9.52	0.00	-622.91	0.00	622.91	1311.06	395.78	69116.5	948.43	4.78	-1.416	0.000	0.667
36.00	-11.78	-9.39	0.00	-603.87	0.00	603.87	1311.06	395.78	69116.5	948.43	5.39	-1.507	0.000	0.646
38.00	-11.51	-9.26	0.00	-585.08	0.00	585.08	1311.06	395.78	69116.5	948.43	6.04	-1.596	0.000	0.626
40.00	-11.24	-9.12	0.00	-566.57	0.00	566.57	1311.06	395.78	69116.5	948.43	6.73	-1.681	0.000	0.606
42.00	-10.97	-8.98	0.00	-548.33	0.00	548.33	1311.06	395.78	69116.5	948.43	7.45	-1.764	0.000	0.587
44.00	-10.71	-8.84	0.00	-530.37	0.00	530.37	1311.06	395.78	69116.5	948.43	8.20	-1.844	0.000	0.568
46.00	-10.44	-8.69	0.00	-512.69	0.00	512.69	1311.06	395.78	69116.5	948.43	8.99	-1.921	0.000	0.549
48.00	-10.18	-8.54	0.00	-495.31	0.00	495.31	1311.06	395.78	69116.5	948.43	9.81	-1.996	0.000	0.530
50.00	-9.91	-8.39	0.00	-478.22	0.00	478.22	1311.06	395.78	69116.5	948.43	10.66	-2.069	0.000	0.512
50.00	-9.91	-8.39	0.00	-478.22	0.00	478.22	1052.07	315.62	43955.0	624.04	10.66	-2.069	0.000	0.776
52.00	-9.69	-8.28	0.00	-461.43	0.00	461.43	1052.07	315.62	43955.0	624.04	11.55	-2.138	0.000	0.749
54.00	-9.46	-8.17	0.00	-444.87	0.00	444.87	1052.07	315.62	43955.0	624.04	12.47	-2.271	0.000	0.723
56.00	-9.23	-8.05	0.00	-428.54	0.00	428.54	1052.07	315.62	43955.0	624.04	13.45	-2.399	0.000	0.696
58.00	-9.00	-7.94	0.00	-412.43	0.00	412.43	1052.07	315.62	43955.0	624.04	14.48	-2.522	0.000	0.670
60.00	-8.78	-7.82	0.00	-396.56	0.00	396.56	1052.07	315.62	43955.0	624.04	15.56	-2.640	0.000	0.644
62.00	-8.55	-7.70	0.00	-380.92	0.00	380.92	1052.07	315.62	43955.0	624.04	16.69	-2.754	0.000	0.619
64.00	-8.33	-7.57	0.00	-365.53	0.00	365.53	1052.07	315.62	43955.0	624.04	17.87	-2.864	0.000	0.594
66.00	-8.11	-7.44	0.00	-350.39	0.00	350.39	1052.07	315.62	43955.0	624.04	19.09	-2.968	0.000	0.570
68.00	-7.89	-7.32	0.00	-335.50	0.00	335.50	1052.07	315.62	43955.0	624.04	20.35	-3.069	0.000	0.546
70.00	-7.67	-7.19	0.00	-320.87	0.00	320.87	1052.07	315.62	43955.0	624.04	21.66	-3.165	0.000	0.522
72.00	-7.45	-7.05	0.00	-306.50	0.00	306.50	1052.07	315.62	43955.0	624.04	23.00	-3.257	0.000	0.499
74.00	-7.23	-6.92	0.00	-292.40	0.00	292.40	1052.07	315.62	43955.0	624.04	24.39	-3.344	0.000	0.476
76.00	-7.01	-6.78	0.00	-278.56	0.00	278.56	1052.07	315.62	43955.0	624.04	25.80	-3.428	0.000	0.454
78.00	-6.80	-6.64	0.00	-265.00	0.00	265.00	1052.07	315.62	43955.0	624.04	27.26	-3.508	0.000	0.432
80.00	-6.58	-6.50	0.00	-251.72	0.00	251.72	1052.07	315.62	43955.0	624.04	28.74	-3.583	0.000	0.410
80.00	-6.58	-6.50	0.00	-251.72	0.00	251.72	1052.07	315.62	43955.0	624.04	28.74	-3.583	0.000	0.410
82.00	-6.37	-6.36	0.00	-238.71	0.00	238.71	1052.07	315.62	43955.0	624.04	30.26	-3.655	0.000	0.389
84.00	-6.15	-6.22	0.00	-225.99	0.00	225.99	1052.07	315.62	43955.0	624.04	31.80	-3.723	0.000	0.368
86.00	-5.94	-6.07	0.00	-213.56	0.00	213.56	1052.07	315.62	43955.0	624.04	33.37	-3.787	0.000	0.348
88.00	-5.73	-5.93	0.00	-201.41	0.00	201.41	1052.07	315.62	43955.0	624.04	34.97	-3.848	0.000	0.329

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II **Page:** 21



90.00	-5.52	-5.78	0.00	-189.56	0.00	189.56	1052.07	315.62	43955.0	624.04	36.60	-3.905	0.000	0.309
92.00	-5.30	-5.63	0.00	-178.01	0.00	178.01	1052.07	315.62	43955.0	624.04	38.24	-3.959	0.000	0.291
94.00	-5.09	-5.48	0.00	-166.75	0.00	166.75	1052.07	315.62	43955.0	624.04	39.91	-4.010	0.000	0.272
96.00	-4.89	-5.33	0.00	-155.80	0.00	155.80	1052.07	315.62	43955.0	624.04	41.60	-4.057	0.000	0.255
98.00	-4.68	-5.17	0.00	-145.15	0.00	145.15	1052.07	315.62	43955.0	624.04	43.31	-4.101	0.000	0.237
100.00	-4.47	-5.02	0.00	-134.80	0.00	134.80	1052.07	315.62	43955.0	624.04	45.03	-4.142	0.000	0.221
102.00	-4.26	-4.86	0.00	-124.77	0.00	124.77	1052.07	315.62	43955.0	624.04	46.77	-4.180	0.000	0.204
104.00	-4.05	-4.71	0.00	-115.04	0.00	115.04	1052.07	315.62	43955.0	624.04	48.53	-4.215	0.000	0.188
106.00	-3.85	-4.55	0.00	-105.63	0.00	105.63	1052.07	315.62	43955.0	624.04	50.30	-4.247	0.000	0.173
108.00	-3.64	-4.39	0.00	-96.53	0.00	96.53	1052.07	315.62	43955.0	624.04	52.08	-4.277	0.000	0.158
110.00	-3.36	-3.85	0.00	-87.75	0.00	87.75	1052.07	315.62	43955.0	624.04	53.88	-4.304	0.000	0.144
110.00	-3.36	-3.85	0.00	-87.75	0.00	87.75	759.47	227.84	14937.6	114.57	53.88	-4.304	0.000	0.771
112.00	-3.13	-3.81	0.00	-80.05	0.00	80.05	759.47	227.84	14937.6	114.57	55.69	-4.328	0.000	0.703
114.00	-2.88	-3.78	0.00	-72.43	0.00	72.43	759.47	227.84	14937.6	114.57	57.62	-4.877	0.000	0.636
116.00	-2.64	-3.74	0.00	-64.88	0.00	64.88	759.47	227.84	14937.6	114.57	59.76	-5.371	0.000	0.570
118.00	-2.40	-3.69	0.00	-57.40	0.00	57.40	759.47	227.84	14937.6	114.57	62.10	-5.811	0.000	0.504
120.00	-2.07	-2.85	0.00	-50.02	0.00	50.02	759.47	227.84	14937.6	114.57	64.61	-6.197	0.000	0.108
120.00	-2.07	-2.85	0.00	-50.02	0.00	50.02	317.71	95.31	3734.62	52.28	64.61	-6.197	0.000	0.121
121.00	-2.00	-2.82	0.00	-47.17	0.00	47.17	317.71	95.31	3734.62	52.28	65.91	-6.239	0.000	0.133
121.00	-2.00	-2.82	0.00	-47.17	0.00	47.17	317.71	95.31	3734.62	52.28	65.91	-6.239	0.000	0.133
122.00	-1.91	-2.81	0.00	-44.34	0.00	44.34	317.71	95.31	3734.62	52.28	67.22	-6.286	0.000	0.855
124.00	-1.74	-2.77	0.00	-38.73	0.00	38.73	317.71	95.31	3734.62	52.28	69.98	-6.872	0.000	0.747
126.00	-1.58	-2.72	0.00	-33.20	0.00	33.20	317.71	95.31	3734.62	52.28	72.96	-7.379	0.000	0.641
128.00	-1.14	-2.63	0.00	-27.76	0.00	27.76	317.71	95.31	3734.62	52.28	76.13	-7.809	0.000	0.535
130.00	-0.92	-1.77	0.00	-22.50	0.00	22.50	317.71	95.31	3734.62	52.28	79.47	-8.164	0.000	0.434
130.00	-0.92	-1.77	0.00	-22.50	0.00	22.50	317.71	95.31	3734.62	52.28	79.47	-8.164	0.000	0.434
132.00	-0.83	-1.72	0.00	-18.95	0.00	18.95	317.71	95.31	3734.62	52.28	82.94	-8.456	0.000	0.365
134.00	-0.75	-1.67	0.00	-15.51	0.00	15.51	317.71	95.31	3734.62	52.28	86.52	-8.699	0.000	0.299
135.00	-0.67	-1.64	0.00	-13.84	0.00	13.84	317.71	95.31	3734.62	52.28	88.35	-8.803	0.000	0.267
136.00	-0.63	-1.61	0.00	-12.20	0.00	12.20	317.71	95.31	3734.62	52.28	90.19	-8.895	0.000	0.236
138.00	-0.58	-1.56	0.00	-8.97	0.00	8.97	317.71	95.31	3734.62	52.28	93.94	-9.044	0.000	0.174
140.00	-0.45	-0.70	0.00	-5.84	0.00	5.84	317.71	95.31	3734.62	52.28	97.73	-9.148	0.000	0.113
140.00	-0.45	-0.70	0.00	-5.84	0.00	5.84	317.71	95.31	3734.62	52.28	97.73	-9.148	0.000	0.113
142.00	-0.40	-0.65	0.00	-4.44	0.00	4.44	317.71	95.31	3734.62	52.28	101.56	-9.221	0.000	0.086
144.00	-0.34	-0.59	0.00	-3.15	0.00	3.15	317.71	95.31	3734.62	52.28	105.42	-9.275	0.000	0.061
146.00	-0.29	-0.54	0.00	-1.96	0.00	1.96	317.71	95.31	3734.62	52.28	109.30	-9.311	0.000	0.038
147.00	-0.10	-0.49	0.00	-1.42	0.00	1.42	317.71	95.31	3734.62	52.28	111.24	-9.323	0.000	0.027
148.00	-0.07	-0.46	0.00	-0.93	0.00	0.93	317.71	95.31	3734.62	52.28	113.19	-9.331	0.000	0.018
150.00	0.00	-0.45	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	117.08	-9.337	0.000	0.000

Wind Loading - Shaft

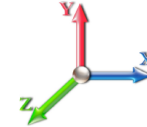
Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 37

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	5.432	5.98	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	5.432	5.98	0.00	1.200	0.567	2.00	6.189	7.43	44.4	50.6	393.4
4.00		1.00	0.85	5.432	5.98	0.00	1.200	0.607	2.00	6.202	7.44	44.5	54.3	397.1
6.00		1.00	0.85	5.432	5.98	0.00	1.200	0.632	2.00	6.211	7.45	44.5	56.6	399.4
8.00		1.00	0.85	5.432	5.98	0.00	1.200	0.651	2.00	6.217	7.46	44.6	58.3	401.0
10.00		1.00	0.85	5.432	5.98	0.00	1.200	0.666	2.00	6.222	7.47	44.6	59.6	402.4
12.00		1.00	0.85	5.432	5.98	0.00	1.200	0.678	2.00	6.226	7.47	44.6	60.7	403.5
14.00		1.00	0.85	5.432	5.98	0.00	1.200	0.688	2.00	6.229	7.48	44.7	61.7	404.5
16.00		1.00	0.86	5.499	6.05	0.00	1.200	0.698	2.00	6.233	7.48	45.2	62.6	405.3
18.00		1.00	0.88	5.637	6.20	0.00	1.200	0.706	2.00	6.235	7.48	46.4	63.3	406.1
20.00	Top - Section 1	1.00	0.90	5.763	6.34	0.00	1.200	0.713	2.00	6.238	7.49	47.5	64.0	406.7
22.00		1.00	0.92	5.880	6.47	0.00	1.200	0.720	2.00	5.240	6.29	40.7	54.1	339.1
24.00		1.00	0.94	5.989	6.59	0.00	1.200	0.726	2.00	5.242	6.29	41.4	54.5	339.6
26.00		1.00	0.95	6.091	6.70	0.00	1.200	0.732	2.00	5.244	6.29	42.2	55.0	340.0
28.00		1.00	0.97	6.186	6.81	0.00	1.200	0.738	2.00	5.246	6.30	42.8	55.4	340.4
30.00		1.00	0.98	6.277	6.90	0.00	1.200	0.743	2.00	5.248	6.30	43.5	55.8	340.8
32.00		1.00	1.00	6.363	7.00	0.00	1.200	0.748	2.00	5.249	6.30	44.1	56.2	341.2
34.00		1.00	1.01	6.445	7.09	0.00	1.200	0.752	2.00	5.251	6.30	44.7	56.5	341.6
36.00		1.00	1.02	6.523	7.17	0.00	1.200	0.757	2.00	5.252	6.30	45.2	56.9	341.9
38.00		1.00	1.03	6.597	7.26	0.00	1.200	0.761	2.00	5.254	6.30	45.8	57.2	342.2
40.00		1.00	1.04	6.669	7.34	0.00	1.200	0.765	2.00	5.255	6.31	46.3	57.5	342.5
42.00		1.00	1.05	6.738	7.41	0.00	1.200	0.768	2.00	5.256	6.31	46.7	57.8	342.8
44.00		1.00	1.06	6.804	7.48	0.00	1.200	0.772	2.00	5.257	6.31	47.2	58.0	343.1
46.00		1.00	1.07	6.868	7.55	0.00	1.200	0.775	2.00	5.258	6.31	47.7	58.3	343.3
48.00		1.00	1.08	6.930	7.62	0.00	1.200	0.779	2.00	5.260	6.31	48.1	58.6	343.6
50.00	Top - Section 2	1.00	1.09	6.990	7.69	0.00	1.200	0.782	2.00	5.261	6.31	48.5	58.8	343.8
52.00		1.00	1.10	7.048	7.75	0.00	1.200	0.785	2.00	4.262	5.11	39.6	47.5	274.8
54.00		1.00	1.11	7.104	7.81	0.00	1.200	0.788	2.00	4.263	5.12	40.0	47.7	275.0
56.00		1.00	1.12	7.158	7.87	0.00	1.200	0.791	2.00	4.264	5.12	40.3	47.9	275.2
58.00		1.00	1.13	7.212	7.93	0.00	1.200	0.794	2.00	4.265	5.12	40.6	48.1	275.4
60.00		1.00	1.14	7.263	7.99	0.00	1.200	0.796	2.00	4.265	5.12	40.9	48.2	275.5
62.00		1.00	1.14	7.314	8.04	0.00	1.200	0.799	2.00	4.266	5.12	41.2	48.4	275.7
64.00		1.00	1.15	7.363	8.10	0.00	1.200	0.801	2.00	4.267	5.12	41.5	48.6	275.9
66.00		1.00	1.16	7.410	8.15	0.00	1.200	0.804	2.00	4.268	5.12	41.7	48.7	276.0
68.00		1.00	1.17	7.457	8.20	0.00	1.200	0.806	2.00	4.269	5.12	42.0	48.9	276.2
70.00		1.00	1.17	7.503	8.25	0.00	1.200	0.809	2.00	4.270	5.12	42.3	49.0	276.3
72.00		1.00	1.18	7.547	8.30	0.00	1.200	0.811	2.00	4.270	5.12	42.5	49.2	276.5
74.00		1.00	1.19	7.591	8.35	0.00	1.200	0.813	2.00	4.271	5.13	42.8	49.3	276.6
76.00		1.00	1.19	7.634	8.40	0.00	1.200	0.815	2.00	4.272	5.13	43.0	49.4	276.7
78.00		1.00	1.20	7.676	8.44	0.00	1.200	0.817	2.00	4.272	5.13	43.3	49.6	276.9
80.00	Top - Section 3	1.00	1.21	7.717	8.49	0.00	1.200	0.819	2.00	4.273	5.13	43.5	49.7	277.0
82.00		1.00	1.21	7.757	8.53	0.00	1.200	0.821	2.00	4.274	5.13	43.8	49.8	277.1
84.00		1.00	1.22	7.796	8.58	0.00	1.200	0.823	2.00	4.274	5.13	44.0	49.9	277.2
86.00		1.00	1.23	7.835	8.62	0.00	1.200	0.825	2.00	4.275	5.13	44.2	50.1	277.4
88.00		1.00	1.23	7.873	8.66	0.00	1.200	0.827	2.00	4.276	5.13	44.4	50.2	277.5
90.00		1.00	1.24	7.910	8.70	0.00	1.200	0.829	2.00	4.276	5.13	44.7	50.3	277.6
92.00		1.00	1.24	7.947	8.74	0.00	1.200	0.831	2.00	4.277	5.13	44.9	50.4	277.7

Wind Loading - Shaft

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II **Page:** 23



94.00	1.00	1.25	7.983	8.78	0.00	1.200	0.833	2.00	4.278	5.13	45.1	50.5	277.8
96.00	1.00	1.25	8.019	8.82	0.00	1.200	0.835	2.00	4.278	5.13	45.3	50.6	277.9
98.00	1.00	1.26	8.054	8.86	0.00	1.200	0.836	2.00	4.279	5.13	45.5	50.7	278.0
100.00	1.00	1.27	8.088	8.90	0.00	1.200	0.838	2.00	4.279	5.14	45.7	50.9	278.2
102.00	1.00	1.27	8.122	8.93	0.00	1.200	0.840	2.00	4.280	5.14	45.9	51.0	278.3
104.00	1.00	1.28	8.155	8.97	0.00	1.200	0.841	2.00	4.280	5.14	46.1	51.1	278.4
106.00	1.00	1.28	8.188	9.01	0.00	1.200	0.843	2.00	4.281	5.14	46.3	51.2	278.5
108.00	1.00	1.29	8.220	9.04	0.00	1.200	0.844	2.00	4.281	5.14	46.5	51.3	278.6
110.00 Top - Section 4	1.00	1.29	8.252	9.08	0.00	1.200	0.846	2.00	4.282	5.14	46.6	51.4	278.7
112.00	1.00	1.30	8.283	9.11	32.00	1.200	0.847	2.00	1.407	1.69	15.4	15.7	179.8
114.00	1.00	1.30	8.314	9.15	32.06	1.200	0.849	2.00	1.408	1.69	15.5	15.8	179.8
116.00	1.00	1.31	8.345	9.18	32.11	1.200	0.850	2.00	1.408	1.69	15.5	15.8	179.9
118.00	1.00	1.31	8.375	9.21	32.17	1.200	0.852	2.00	1.409	1.69	15.6	15.8	179.9
120.00 Top - Section 5 RB1	1.00	1.32	8.404	9.24	32.23	1.200	0.853	2.00	1.409	1.69	15.6	15.9	179.9
121.00 RT1	1.00	1.32	8.419	9.26	31.66	1.200	0.854	1.00	0.694	0.83	7.7	7.8	42.1
122.00	1.00	1.32	8.434	9.28	31.69	1.200	0.855	1.00	0.695	0.83	7.7	7.8	42.1
124.00	1.00	1.32	8.463	9.31	31.74	1.200	0.856	2.00	1.390	1.67	15.5	15.7	84.3
126.00	1.00	1.33	8.491	9.34	31.80	1.200	0.858	2.00	1.390	1.67	15.6	15.7	84.3
128.00 Appurtenance(s)	1.00	1.33	8.519	9.37	31.85	1.200	0.859	2.00	1.390	1.67	15.6	15.7	84.3
130.00 Top - Section 6	1.00	1.34	8.547	9.40	31.90	1.200	0.860	2.00	1.391	1.67	15.7	15.7	84.4
132.00	1.00	1.34	8.575	9.43	31.95	1.200	0.862	2.00	1.391	1.67	15.7	15.8	84.4
134.00	1.00	1.35	8.602	9.46	32.00	1.200	0.863	2.00	1.392	1.67	15.8	15.8	84.4
135.00 Appurtenance(s)	1.00	1.35	8.615	9.48	32.03	1.200	0.863	1.00	0.696	0.84	7.9	7.9	42.2
136.00	1.00	1.35	8.629	9.49	32.05	1.200	0.864	1.00	0.696	0.84	7.9	7.9	42.2
138.00	1.00	1.35	8.655	9.52	32.10	1.200	0.865	2.00	1.393	1.67	15.9	15.8	84.5
140.00 Top - Section 7	1.00	1.36	8.682	9.55	32.15	1.200	0.867	2.00	1.393	1.67	16.0	15.9	84.5
142.00	1.00	1.36	8.707	9.58	32.20	1.200	0.868	2.00	1.393	1.67	16.0	15.9	84.5
144.00	1.00	1.37	8.733	9.61	32.25	1.200	0.869	2.00	1.394	1.67	16.1	15.9	84.6
146.00	1.00	1.37	8.759	9.63	32.29	1.200	0.870	2.00	1.394	1.67	16.1	15.9	84.6
147.00 Appurtenance(s)	1.00	1.37	8.771	9.65	32.32	1.200	0.871	1.00	0.697	0.84	8.1	8.0	42.3
148.00	1.00	1.37	8.784	9.66	32.34	1.200	0.871	1.00	0.697	0.84	8.1	8.0	42.3
150.00 Appurtenance(s)	1.00	1.38	8.809	9.69	32.38	1.200	0.873	2.00	1.395	1.67	16.2	16.0	84.6
Totals:								150.00			2,745.2		19,619.8

Discrete Appurtenance Forces

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

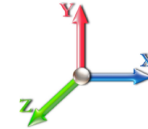


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 37

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	150.00	40" Canister Weight	1	8.809	9.689	1.00	1.00	6.48	186.85	0.000	0.000	62.77	0.00	0.00
2	147.00	DPO-7126Y-0-T1	3	8.771	9.648	0.00	1.00	0.00	57.12	0.000	0.000	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	8.771	9.648	0.00	1.00	0.00	16.28	0.000	0.000	0.00	0.00	0.00
4	147.00	DHHTT65B-3XR	3	8.771	9.648	0.00	1.00	26.14	437.09	0.000	0.000	252.24	0.00	0.00
5	140.00	40" Canister Weight	1	8.682	9.550	1.00	1.00	12.95	427.00	0.000	0.000	123.71	0.00	0.00
6	135.00	APXV18-206516L	3	8.615	9.477	0.00	1.00	0.00	110.74	0.000	0.000	0.00	0.00	0.00
7	130.00	40" Canister Weight	1	8.547	9.402	1.00	1.00	12.95	426.95	0.000	0.000	121.76	0.00	0.00
8	128.00	CM1007-DBPXC-xxx	6	8.519	9.371	0.00	1.00	0.00	62.35	0.000	0.000	0.00	0.00	0.00
9	128.00	TMABPD7823VG12A	6	8.519	9.371	0.00	1.00	0.00	363.64	0.000	0.000	0.00	0.00	0.00
10	128.00	OPA65R-BU4BA	3	8.519	9.371	0.00	1.00	0.00	358.21	0.000	0.000	0.00	0.00	0.00
11	120.00	40" Canister Weight	1	8.404	9.245	1.00	1.00	12.92	426.89	0.000	0.000	119.41	0.00	0.00
12	110.00	40" Canister Weight	1	8.252	9.077	1.00	1.00	6.44	240.12	0.000	0.000	58.46	0.00	0.00
Totals:									3,113.23			738.35		

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

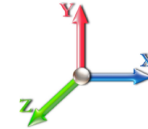


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 37

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		44.37	453.72	0.00	0.00
4.00		44.47	457.41	0.00	0.00
6.00		44.53	459.70	0.00	0.00
8.00		44.58	461.38	0.00	0.00
10.00		44.61	462.72	0.00	0.00
12.00		44.64	463.84	0.00	0.00
14.00		44.67	464.80	0.00	0.00
16.00		45.24	465.64	0.00	0.00
18.00		46.40	466.40	0.00	0.00
20.00		47.46	467.08	0.00	0.00
22.00		40.67	399.42	0.00	0.00
24.00		41.44	399.91	0.00	0.00
26.00		42.16	400.35	0.00	0.00
28.00		42.84	400.77	0.00	0.00
30.00		43.48	401.17	0.00	0.00
32.00		44.09	401.54	0.00	0.00
34.00		44.67	401.89	0.00	0.00
36.00		45.22	402.22	0.00	0.00
38.00		45.75	402.53	0.00	0.00
40.00		46.26	402.84	0.00	0.00
42.00		46.75	403.12	0.00	0.00
44.00		47.22	403.40	0.00	0.00
46.00		47.67	403.67	0.00	0.00
48.00		48.11	403.92	0.00	0.00
50.00		48.54	404.17	0.00	0.00
52.00		39.65	335.17	0.00	0.00
54.00		39.97	335.35	0.00	0.00
56.00		40.29	335.53	0.00	0.00
58.00		40.59	335.71	0.00	0.00
60.00		40.89	335.88	0.00	0.00
62.00		41.19	336.04	0.00	0.00
64.00		41.47	336.20	0.00	0.00
66.00		41.75	336.35	0.00	0.00
68.00		42.02	336.50	0.00	0.00
70.00		42.28	336.65	0.00	0.00
72.00		42.54	336.79	0.00	0.00
74.00		42.80	336.93	0.00	0.00
76.00		43.04	337.07	0.00	0.00
78.00		43.29	337.20	0.00	0.00
80.00		43.53	337.33	0.00	0.00
82.00		43.76	337.46	0.00	0.00
84.00		43.99	337.58	0.00	0.00
86.00		44.21	337.70	0.00	0.00
88.00		44.44	337.82	0.00	0.00
90.00		44.65	337.94	0.00	0.00
92.00		44.87	338.05	0.00	0.00

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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94.00		45.08	338.17	0.00	0.00
96.00		45.28	338.28	0.00	0.00
98.00		45.49	338.38	0.00	0.00
100.00		45.69	338.49	0.00	0.00
102.00		45.88	338.59	0.00	0.00
104.00		46.08	338.70	0.00	0.00
106.00		46.27	338.80	0.00	0.00
108.00		46.46	338.90	0.00	0.00
110.00	(1) attachments	105.10	579.11	0.00	0.00
112.00		15.39	305.31	0.00	0.00
114.00		15.45	305.34	0.00	0.00
116.00		15.51	305.37	0.00	0.00
118.00		15.58	305.40	0.00	0.00
120.00	(1) attachments	135.04	732.32	0.00	0.00
121.00		7.72	104.87	0.00	0.00
122.00		7.73	104.88	0.00	0.00
124.00		15.52	209.79	0.00	0.00
126.00		15.58	209.81	0.00	0.00
128.00	(15) attachments	15.64	994.04	0.00	0.00
130.00	(1) attachments	137.45	621.84	0.00	0.00
132.00		15.75	129.76	0.00	0.00
134.00		15.80	129.79	0.00	0.00
135.00	(3) attachments	7.91	160.66	0.00	0.00
136.00		7.93	49.93	0.00	0.00
138.00		15.91	99.89	0.00	0.00
140.00	(1) attachments	139.67	526.91	0.00	0.00
142.00		16.02	99.94	0.00	0.00
144.00		16.07	99.96	0.00	0.00
146.00		16.12	99.99	0.00	0.00
147.00	(9) attachments	260.31	560.49	0.00	0.00
148.00		8.09	42.30	0.00	0.00
150.00	(1) attachments	78.99	271.47	0.00	0.00
Totals:		3,483.54	27,482.35	0.00	0.00

Calculated Forces

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
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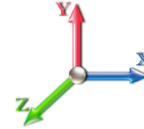


Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 37

Dead Load Factor 1.20

Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-27.48	-3.49	0.00	-301.04	0.00	301.04	1490.10	475.94	99948.2	1339.68	0.00	0.000	0.000	0.243
2.00	-27.03	-3.46	0.00	-294.06	0.00	294.06	1490.10	475.94	99948.2	1339.68	0.01	-0.025	0.000	0.238
4.00	-26.57	-3.42	0.00	-287.15	0.00	287.15	1490.10	475.94	99948.2	1339.68	0.02	-0.050	0.000	0.232
6.00	-26.11	-3.39	0.00	-280.30	0.00	280.30	1490.10	475.94	99948.2	1339.68	0.05	-0.074	0.000	0.227
8.00	-25.64	-3.35	0.00	-273.52	0.00	273.52	1490.10	475.94	99948.2	1339.68	0.08	-0.098	0.000	0.221
10.00	-25.18	-3.32	0.00	-266.81	0.00	266.81	1490.10	475.94	99948.2	1339.68	0.13	-0.121	0.000	0.216
12.00	-24.71	-3.28	0.00	-260.17	0.00	260.17	1490.10	475.94	99948.2	1339.68	0.19	-0.144	0.000	0.211
14.00	-24.25	-3.25	0.00	-253.61	0.00	253.61	1490.10	475.94	99948.2	1339.68	0.25	-0.166	0.000	0.206
16.00	-23.78	-3.21	0.00	-247.12	0.00	247.12	1490.10	475.94	99948.2	1339.68	0.32	-0.187	0.000	0.200
18.00	-23.31	-3.17	0.00	-240.70	0.00	240.70	1490.10	475.94	99948.2	1339.68	0.41	-0.208	0.000	0.195
20.00	-22.85	-3.13	0.00	-234.36	0.00	234.36	1490.10	475.94	99948.2	1339.68	0.50	-0.228	0.000	0.190
20.00	-22.85	-3.13	0.00	-234.36	0.00	234.36	1311.06	395.78	69116.5	948.43	0.50	-0.228	0.000	0.265
22.00	-22.45	-3.10	0.00	-228.11	0.00	228.11	1311.06	395.78	69116.5	948.43	0.60	-0.248	0.000	0.258
24.00	-22.04	-3.06	0.00	-221.92	0.00	221.92	1311.06	395.78	69116.5	948.43	0.71	-0.281	0.000	0.251
26.00	-21.64	-3.03	0.00	-215.79	0.00	215.79	1311.06	395.78	69116.5	948.43	0.83	-0.314	0.000	0.244
28.00	-21.24	-3.00	0.00	-209.73	0.00	209.73	1311.06	395.78	69116.5	948.43	0.97	-0.345	0.000	0.237
30.00	-20.84	-2.96	0.00	-203.73	0.00	203.73	1311.06	395.78	69116.5	948.43	1.12	-0.376	0.000	0.231
32.00	-20.44	-2.93	0.00	-197.80	0.00	197.80	1311.06	395.78	69116.5	948.43	1.29	-0.406	0.000	0.224
34.00	-20.03	-2.89	0.00	-191.94	0.00	191.94	1311.06	395.78	69116.5	948.43	1.46	-0.435	0.000	0.218
36.00	-19.63	-2.85	0.00	-186.16	0.00	186.16	1311.06	395.78	69116.5	948.43	1.65	-0.463	0.000	0.211
38.00	-19.23	-2.81	0.00	-180.46	0.00	180.46	1311.06	395.78	69116.5	948.43	1.85	-0.490	0.000	0.205
40.00	-18.82	-2.77	0.00	-174.84	0.00	174.84	1311.06	395.78	69116.5	948.43	2.06	-0.516	0.000	0.199
42.00	-18.42	-2.73	0.00	-169.30	0.00	169.30	1311.06	395.78	69116.5	948.43	2.28	-0.542	0.000	0.193
44.00	-18.01	-2.68	0.00	-163.85	0.00	163.85	1311.06	395.78	69116.5	948.43	2.52	-0.567	0.000	0.187
46.00	-17.61	-2.64	0.00	-158.48	0.00	158.48	1311.06	395.78	69116.5	948.43	2.76	-0.591	0.000	0.181
48.00	-17.21	-2.59	0.00	-153.20	0.00	153.20	1311.06	395.78	69116.5	948.43	3.01	-0.614	0.000	0.175
50.00	-16.80	-2.55	0.00	-148.01	0.00	148.01	1311.06	395.78	69116.5	948.43	3.27	-0.636	0.000	0.169
50.00	-16.80	-2.55	0.00	-148.01	0.00	148.01	1052.07	315.62	43955.0	624.04	3.27	-0.636	0.000	0.253
52.00	-16.46	-2.51	0.00	-142.92	0.00	142.92	1052.07	315.62	43955.0	624.04	3.55	-0.658	0.000	0.245
54.00	-16.13	-2.48	0.00	-137.89	0.00	137.89	1052.07	315.62	43955.0	624.04	3.83	-0.699	0.000	0.236
56.00	-15.79	-2.45	0.00	-132.93	0.00	132.93	1052.07	315.62	43955.0	624.04	4.13	-0.739	0.000	0.228
58.00	-15.45	-2.41	0.00	-128.04	0.00	128.04	1052.07	315.62	43955.0	624.04	4.45	-0.777	0.000	0.220
60.00	-15.12	-2.38	0.00	-123.22	0.00	123.22	1052.07	315.62	43955.0	624.04	4.78	-0.814	0.000	0.212
62.00	-14.78	-2.34	0.00	-118.47	0.00	118.47	1052.07	315.62	43955.0	624.04	5.13	-0.849	0.000	0.204
64.00	-14.44	-2.30	0.00	-113.79	0.00	113.79	1052.07	315.62	43955.0	624.04	5.49	-0.883	0.000	0.196
66.00	-14.11	-2.26	0.00	-109.19	0.00	109.19	1052.07	315.62	43955.0	624.04	5.87	-0.916	0.000	0.188
68.00	-13.77	-2.22	0.00	-104.67	0.00	104.67	1052.07	315.62	43955.0	624.04	6.26	-0.947	0.000	0.181
70.00	-13.43	-2.18	0.00	-100.22	0.00	100.22	1052.07	315.62	43955.0	624.04	6.66	-0.977	0.000	0.173
72.00	-13.10	-2.14	0.00	-95.86	0.00	95.86	1052.07	315.62	43955.0	624.04	7.08	-1.006	0.000	0.166
74.00	-12.76	-2.10	0.00	-91.59	0.00	91.59	1052.07	315.62	43955.0	624.04	7.51	-1.033	0.000	0.159
76.00	-12.42	-2.05	0.00	-87.40	0.00	87.40	1052.07	315.62	43955.0	624.04	7.94	-1.059	0.000	0.152
78.00	-12.09	-2.01	0.00	-83.29	0.00	83.29	1052.07	315.62	43955.0	624.04	8.39	-1.084	0.000	0.145
80.00	-11.75	-1.96	0.00	-79.28	0.00	79.28	1052.07	315.62	43955.0	624.04	8.85	-1.108	0.000	0.138
80.00	-11.75	-1.96	0.00	-79.28	0.00	79.28	1052.07	315.62	43955.0	624.04	8.85	-1.108	0.000	0.138
82.00	-11.41	-1.92	0.00	-75.36	0.00	75.36	1052.07	315.62	43955.0	624.04	9.32	-1.131	0.000	0.132
84.00	-11.07	-1.87	0.00	-71.52	0.00	71.52	1052.07	315.62	43955.0	624.04	9.80	-1.152	0.000	0.125
86.00	-10.74	-1.82	0.00	-67.78	0.00	67.78	1052.07	315.62	43955.0	624.04	10.29	-1.173	0.000	0.119
88.00	-10.40	-1.77	0.00	-64.14	0.00	64.14	1052.07	315.62	43955.0	624.04	10.78	-1.192	0.000	0.113

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II Page: 28



90.00	-10.06	-1.73	0.00	-60.59	0.00	60.59	1052.07	315.62	43955.0	624.04	11.29	-1.210	0.000	0.107
92.00	-9.72	-1.68	0.00	-57.14	0.00	57.14	1052.07	315.62	43955.0	624.04	11.80	-1.227	0.000	0.101
94.00	-9.39	-1.63	0.00	-53.79	0.00	53.79	1052.07	315.62	43955.0	624.04	12.31	-1.244	0.000	0.095
96.00	-9.05	-1.58	0.00	-50.54	0.00	50.54	1052.07	315.62	43955.0	624.04	12.84	-1.259	0.000	0.090
98.00	-8.71	-1.53	0.00	-47.38	0.00	47.38	1052.07	315.62	43955.0	624.04	13.37	-1.273	0.000	0.084
100.00	-8.37	-1.47	0.00	-44.33	0.00	44.33	1052.07	315.62	43955.0	624.04	13.90	-1.287	0.000	0.079
102.00	-8.04	-1.42	0.00	-41.39	0.00	41.39	1052.07	315.62	43955.0	624.04	14.45	-1.299	0.000	0.074
104.00	-7.70	-1.37	0.00	-38.54	0.00	38.54	1052.07	315.62	43955.0	624.04	14.99	-1.311	0.000	0.069
106.00	-7.36	-1.32	0.00	-35.80	0.00	35.80	1052.07	315.62	43955.0	624.04	15.54	-1.322	0.000	0.064
108.00	-7.02	-1.26	0.00	-33.17	0.00	33.17	1052.07	315.62	43955.0	624.04	16.10	-1.332	0.000	0.060
110.00	-6.44	-1.15	0.00	-30.64	0.00	30.64	1052.07	315.62	43955.0	624.04	16.66	-1.341	0.000	0.055
110.00	-6.44	-1.15	0.00	-30.64	0.00	30.64	759.47	227.84	14937.6	114.57	16.66	-1.341	0.000	0.276
112.00	-6.14	-1.14	0.00	-28.35	0.00	28.35	759.47	227.84	14937.6	114.57	17.22	-1.350	0.000	0.256
114.00	-5.83	-1.13	0.00	-26.08	0.00	26.08	759.47	227.84	14937.6	114.57	17.83	-1.546	0.000	0.235
116.00	-5.52	-1.12	0.00	-23.81	0.00	23.81	759.47	227.84	14937.6	114.57	18.52	-1.725	0.000	0.215
118.00	-5.21	-1.11	0.00	-21.57	0.00	21.57	759.47	227.84	14937.6	114.57	19.27	-1.888	0.000	0.195
120.00	-4.48	-0.96	0.00	-19.34	0.00	19.34	759.47	227.84	14937.6	114.57	20.10	-2.035	0.000	0.045
120.00	-4.48	-0.96	0.00	-19.34	0.00	19.34	317.71	95.31	3734.62	52.28	20.10	-2.035	0.000	0.050
121.00	-4.38	-0.95	0.00	-18.38	0.00	18.38	317.71	95.31	3734.62	52.28	20.52	-2.052	0.000	0.056
121.00	-4.38	-0.95	0.00	-18.38	0.00	18.38	317.71	95.31	3734.62	52.28	20.52	-2.052	0.000	0.056
122.00	-4.27	-0.95	0.00	-17.43	0.00	17.43	317.71	95.31	3734.62	52.28	20.96	-2.070	0.000	0.347
124.00	-4.06	-0.94	0.00	-15.54	0.00	15.54	317.71	95.31	3734.62	52.28	21.87	-2.303	0.000	0.310
126.00	-3.85	-0.93	0.00	-13.67	0.00	13.67	317.71	95.31	3734.62	52.28	22.88	-2.509	0.000	0.274
128.00	-2.85	-0.87	0.00	-11.81	0.00	11.81	317.71	95.31	3734.62	52.28	23.97	-2.688	0.000	0.235
130.00	-2.24	-0.71	0.00	-10.06	0.00	10.06	317.71	95.31	3734.62	52.28	25.13	-2.843	0.000	0.200
130.00	-2.24	-0.71	0.00	-10.06	0.00	10.06	317.71	95.31	3734.62	52.28	25.13	-2.843	0.000	0.200
132.00	-2.11	-0.70	0.00	-8.64	0.00	8.64	317.71	95.31	3734.62	52.28	26.35	-2.975	0.000	0.172
134.00	-1.98	-0.68	0.00	-7.25	0.00	7.25	317.71	95.31	3734.62	52.28	27.62	-3.087	0.000	0.145
135.00	-1.82	-0.66	0.00	-6.57	0.00	6.57	317.71	95.31	3734.62	52.28	28.27	-3.135	0.000	0.131
136.00	-1.77	-0.65	0.00	-5.91	0.00	5.91	317.71	95.31	3734.62	52.28	28.93	-3.180	0.000	0.119
138.00	-1.67	-0.63	0.00	-4.61	0.00	4.61	317.71	95.31	3734.62	52.28	30.28	-3.254	0.000	0.093
140.00	-1.15	-0.46	0.00	-3.34	0.00	3.34	317.71	95.31	3734.62	52.28	31.65	-3.310	0.000	0.068
140.00	-1.15	-0.46	0.00	-3.34	0.00	3.34	317.71	95.31	3734.62	52.28	31.65	-3.310	0.000	0.068
142.00	-1.05	-0.44	0.00	-2.42	0.00	2.42	317.71	95.31	3734.62	52.28	33.05	-3.350	0.000	0.050
144.00	-0.95	-0.42	0.00	-1.53	0.00	1.53	317.71	95.31	3734.62	52.28	34.46	-3.378	0.000	0.032
146.00	-0.85	-0.40	0.00	-0.69	0.00	0.69	317.71	95.31	3734.62	52.28	35.87	-3.394	0.000	0.016
147.00	-0.31	-0.11	0.00	-0.30	0.00	0.30	317.71	95.31	3734.62	52.28	36.58	-3.398	0.000	0.007
148.00	-0.27	-0.09	0.00	-0.19	0.00	0.19	317.71	95.31	3734.62	52.28	37.30	-3.399	0.000	0.004
150.00	0.00	-0.08	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	38.72	-3.401	0.000	0.000

Seismic Segment Forces (Factored)

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.2D + 1.0Ev + 1.0Eh

Iterations 32

Gust Response Factor 1.10

Sds 0.20

Ss 0.18

Dead Load Factor 1.20 **Seismic Load Factor** 1.00

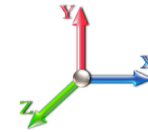
Sd1 0.08

S1 0.05

Wind Load Factor 0.00 **Structure Frequency (f1)** 0.32

SA 0.03

Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	
2.00		345.96	1.00	13.51	0.00	
4.00		345.96	3.00	13.51	0.01	
6.00		345.96	5.00	13.51	0.02	
8.00		345.96	7.00	13.51	0.05	
10.00		345.96	9.00	13.51	0.08	
12.00		345.96	11.00	13.51	0.12	
14.00		345.96	13.00	13.51	0.16	
16.00		345.96	15.00	13.51	0.21	
18.00		345.96	17.00	13.51	0.28	
20.00	Top - Section 1	345.96	19.00	13.51	0.34	
22.00		297.86	21.00	11.63	0.31	
24.00		297.86	23.00	11.63	0.37	
26.00		297.86	25.00	11.63	0.44	
28.00		297.86	27.00	11.63	0.51	
30.00		297.86	29.00	11.63	0.59	
32.00		297.86	31.00	11.63	0.68	
34.00		297.86	33.00	11.63	0.77	
36.00		297.86	35.00	11.63	0.87	
38.00		297.86	37.00	11.63	0.97	
40.00		297.86	39.00	11.63	1.07	
42.00		297.86	41.00	11.63	1.19	
44.00		297.86	43.00	11.63	1.31	
46.00		297.86	45.00	11.63	1.43	
48.00		297.86	47.00	11.63	1.56	
50.00	Top - Section 2	297.86	49.00	11.63	1.70	
52.00		249.75	51.00	9.75	1.29	
54.00		249.75	53.00	9.75	1.39	
56.00		249.75	55.00	9.75	1.50	
58.00		249.75	57.00	9.75	1.61	
60.00		249.75	59.00	9.75	1.73	
62.00		249.75	61.00	9.75	1.85	
64.00		249.75	63.00	9.75	1.97	
66.00		249.75	65.00	9.75	2.10	
68.00		249.75	67.00	9.75	2.23	
70.00		249.75	69.00	9.75	2.36	
72.00		249.75	71.00	9.75	2.50	
74.00		249.75	73.00	9.75	2.65	
76.00		249.75	75.00	9.75	2.79	
78.00		249.75	77.00	9.75	2.94	
80.00	Top - Section 3	249.75	79.00	9.75	3.10	
82.00		249.75	81.00	9.75	3.26	
84.00		249.75	83.00	9.75	3.42	
86.00		249.75	85.00	9.75	3.59	
88.00		249.75	87.00	9.75	3.76	
90.00		249.75	89.00	9.75	3.93	

Seismic Segment Forces (Factored)

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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92.00		249.75	91.00	9.75	4.11
94.00		249.75	93.00	9.75	4.29
96.00		249.75	95.00	9.75	4.48
98.00		249.75	97.00	9.75	4.67
100.00		249.75	99.00	9.75	4.87
102.00		249.75	101.00	9.75	5.06
104.00		249.75	103.00	9.75	5.27
106.00		249.75	105.00	9.75	5.47
108.00		249.75	107.00	9.75	5.68
110.00	Top - Section 4	357.24	109.00	13.95	12.07
112.00		262.23	111.00	10.24	6.74
114.00		262.23	113.00	10.24	6.99
116.00		262.23	115.00	10.24	7.24
118.00		262.23	117.00	10.24	7.49
120.00	Top - Section 5 RB1	477.20	119.00	18.63	25.67
121.00	RT1	91.35	120.50	3.57	0.96
122.00		91.35	121.50	3.57	0.98
124.00		182.70	123.00	7.13	4.02
126.00		182.70	125.00	7.13	4.15
128.00	Appurtenance(s)	506.70	127.00	19.78	32.96
130.00	Top - Section 6	382.69	129.00	14.94	19.40
132.00		102.56	131.00	4.00	1.44
134.00		102.56	133.00	4.00	1.48
135.00	Appurtenance(s)	92.40	134.50	3.61	1.23
136.00		36.30	135.50	1.42	0.19
138.00		72.61	137.00	2.83	0.79
140.00	Top - Section 7	287.58	139.00	11.23	12.72
142.00		72.61	141.00	2.83	0.83
144.00		72.61	143.00	2.83	0.86
146.00		72.61	145.00	2.83	0.88
147.00	Appurtenance(s)	219.60	146.50	8.57	8.24
148.00		28.60	147.50	1.12	0.14
150.00	Appurtenance(s)	164.69	149.00	6.43	4.79
Totals:		19,815.9		773.6	271.2

Total Wind: 11,610.7

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

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II Page: 31



Load Case: 1.2D + 1.0Ev + 1.0Eh

Iterations 32

Gust Response Factor 1.10

Sds 0.20

Ss 0.18

Dead Load Factor 1.20 **Seismic Load Factor** 1.00

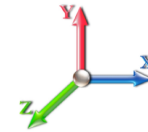
Sd1 0.08

S1 0.05

Wind Load Factor 0.00 **Structure Frequency (f1)** 0.32

SA 0.03

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	-23.60	-0.27	0.00	-31.07	0.00	31.07	1490.10	475.94	99948.2	1339.68		0.00	0.00	0.039
2.00	-23.19	-0.27	0.00	-30.53	0.00	30.53	1490.10	475.94	99948.2	1339.68		0.00	0.00	0.038
4.00	-22.77	-0.27	0.00	-29.98	0.00	29.98	1490.10	475.94	99948.2	1339.68		0.00	-0.01	0.038
6.00	-22.35	-0.27	0.00	-29.44	0.00	29.44	1490.10	475.94	99948.2	1339.68		0.00	-0.01	0.037
8.00	-21.94	-0.27	0.00	-28.89	0.00	28.89	1490.10	475.94	99948.2	1339.68		0.01	-0.01	0.036
10.00	-21.52	-0.28	0.00	-28.34	0.00	28.34	1490.10	475.94	99948.2	1339.68		0.01	-0.01	0.036
12.00	-21.10	-0.28	0.00	-27.79	0.00	27.79	1490.10	475.94	99948.2	1339.68		0.02	-0.02	0.035
14.00	-20.69	-0.28	0.00	-27.24	0.00	27.24	1490.10	475.94	99948.2	1339.68		0.03	-0.02	0.034
16.00	-20.27	-0.28	0.00	-26.69	0.00	26.69	1490.10	475.94	99948.2	1339.68		0.03	-0.02	0.034
18.00	-19.85	-0.28	0.00	-26.14	0.00	26.14	1490.10	475.94	99948.2	1339.68		0.04	-0.02	0.033
20.00	-19.44	-0.28	0.00	-25.58	0.00	25.58	1490.10	475.94	99948.2	1339.68		0.05	-0.02	0.032
20.00	-19.44	-0.28	0.00	-25.58	0.00	25.58	1311.06	395.78	69116.5	948.43		0.05	-0.02	0.042
22.00	-19.08	-0.28	0.00	-25.03	0.00	25.03	1311.06	395.78	69116.5	948.43		0.06	-0.03	0.041
24.00	-18.72	-0.28	0.00	-24.47	0.00	24.47	1311.06	395.78	69116.5	948.43		0.07	-0.03	0.040
26.00	-18.37	-0.28	0.00	-23.91	0.00	23.91	1311.06	395.78	69116.5	948.43		0.09	-0.03	0.039
28.00	-18.01	-0.28	0.00	-23.36	0.00	23.36	1311.06	395.78	69116.5	948.43		0.10	-0.04	0.038
30.00	-17.65	-0.28	0.00	-22.80	0.00	22.80	1311.06	395.78	69116.5	948.43		0.12	-0.04	0.038
32.00	-17.29	-0.28	0.00	-22.24	0.00	22.24	1311.06	395.78	69116.5	948.43		0.14	-0.04	0.037
34.00	-16.94	-0.28	0.00	-21.68	0.00	21.68	1311.06	395.78	69116.5	948.43		0.16	-0.05	0.036
36.00	-16.58	-0.28	0.00	-21.12	0.00	21.12	1311.06	395.78	69116.5	948.43		0.18	-0.05	0.035
38.00	-16.22	-0.28	0.00	-20.56	0.00	20.56	1311.06	395.78	69116.5	948.43		0.20	-0.05	0.034
40.00	-15.87	-0.28	0.00	-20.00	0.00	20.00	1311.06	395.78	69116.5	948.43		0.22	-0.06	0.033
42.00	-15.51	-0.28	0.00	-19.45	0.00	19.45	1311.06	395.78	69116.5	948.43		0.25	-0.06	0.032
44.00	-15.15	-0.28	0.00	-18.89	0.00	18.89	1311.06	395.78	69116.5	948.43		0.27	-0.06	0.031
46.00	-14.80	-0.28	0.00	-18.34	0.00	18.34	1311.06	395.78	69116.5	948.43		0.30	-0.06	0.031
48.00	-14.44	-0.27	0.00	-17.79	0.00	17.79	1311.06	395.78	69116.5	948.43		0.33	-0.07	0.030
50.00	-14.08	-0.27	0.00	-17.24	0.00	17.24	1311.06	395.78	69116.5	948.43		0.35	-0.07	0.029
50.00	-14.08	-0.27	0.00	-17.24	0.00	17.24	1052.07	315.62	43955.0	624.04		0.35	-0.07	0.041
52.00	-13.78	-0.27	0.00	-16.70	0.00	16.70	1052.07	315.62	43955.0	624.04		0.38	-0.07	0.040
54.00	-13.49	-0.27	0.00	-16.15	0.00	16.15	1052.07	315.62	43955.0	624.04		0.42	-0.08	0.039
56.00	-13.19	-0.27	0.00	-15.61	0.00	15.61	1052.07	315.62	43955.0	624.04		0.45	-0.08	0.038
58.00	-12.89	-0.27	0.00	-15.07	0.00	15.07	1052.07	315.62	43955.0	624.04		0.48	-0.09	0.036
60.00	-12.59	-0.27	0.00	-14.53	0.00	14.53	1052.07	315.62	43955.0	624.04		0.52	-0.09	0.035
62.00	-12.30	-0.27	0.00	-14.00	0.00	14.00	1052.07	315.62	43955.0	624.04		0.56	-0.10	0.034
64.00	-12.00	-0.26	0.00	-13.46	0.00	13.46	1052.07	315.62	43955.0	624.04		0.60	-0.10	0.033
66.00	-11.70	-0.26	0.00	-12.93	0.00	12.93	1052.07	315.62	43955.0	624.04		0.64	-0.10	0.032
68.00	-11.41	-0.26	0.00	-12.41	0.00	12.41	1052.07	315.62	43955.0	624.04		0.69	-0.11	0.031
70.00	-11.11	-0.26	0.00	-11.88	0.00	11.88	1052.07	315.62	43955.0	624.04		0.73	-0.11	0.030
72.00	-10.81	-0.26	0.00	-11.37	0.00	11.37	1052.07	315.62	43955.0	624.04		0.78	-0.11	0.028
74.00	-10.51	-0.25	0.00	-10.85	0.00	10.85	1052.07	315.62	43955.0	624.04		0.83	-0.12	0.027
76.00	-10.22	-0.25	0.00	-10.35	0.00	10.35	1052.07	315.62	43955.0	624.04		0.88	-0.12	0.026
78.00	-9.92	-0.25	0.00	-9.84	0.00	9.84	1052.07	315.62	43955.0	624.04		0.93	-0.12	0.025
80.00	-9.62	-0.24	0.00	-9.35	0.00	9.35	1052.07	315.62	43955.0	624.04		0.98	-0.13	0.024
80.00	-9.62	-0.24	0.00	-9.35	0.00	9.35	1052.07	315.62	43955.0	624.04		0.98	-0.13	0.024
82.00	-9.32	-0.24	0.00	-8.86	0.00	8.86	1052.07	315.62	43955.0	624.04		1.04	-0.13	0.023
84.00	-9.03	-0.24	0.00	-8.38	0.00	8.38	1052.07	315.62	43955.0	624.04		1.09	-0.13	0.022
86.00	-8.73	-0.23	0.00	-7.90	0.00	7.90	1052.07	315.62	43955.0	624.04		1.15	-0.13	0.021

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II Page: 32



88.00	-8.43	-0.23	0.00	-7.44	0.00	7.44	1052.07	315.62	43955.0	624.04	1.20	-0.14	0.020
90.00	-8.13	-0.22	0.00	-6.98	0.00	6.98	1052.07	315.62	43955.0	624.04	1.26	-0.14	0.019
92.00	-7.84	-0.22	0.00	-6.53	0.00	6.53	1052.07	315.62	43955.0	624.04	1.32	-0.14	0.018
94.00	-7.54	-0.22	0.00	-6.09	0.00	6.09	1052.07	315.62	43955.0	624.04	1.38	-0.14	0.017
96.00	-7.24	-0.21	0.00	-5.66	0.00	5.66	1052.07	315.62	43955.0	624.04	1.44	-0.14	0.016
98.00	-6.94	-0.21	0.00	-5.24	0.00	5.24	1052.07	315.62	43955.0	624.04	1.50	-0.15	0.015
100.00	-6.65	-0.20	0.00	-4.83	0.00	4.83	1052.07	315.62	43955.0	624.04	1.56	-0.15	0.014
102.00	-6.35	-0.19	0.00	-4.43	0.00	4.43	1052.07	315.62	43955.0	624.04	1.62	-0.15	0.013
104.00	-6.05	-0.19	0.00	-4.04	0.00	4.04	1052.07	315.62	43955.0	624.04	1.68	-0.15	0.012
106.00	-5.75	-0.18	0.00	-3.66	0.00	3.66	1052.07	315.62	43955.0	624.04	1.74	-0.15	0.011
108.00	-5.46	-0.18	0.00	-3.30	0.00	3.30	1052.07	315.62	43955.0	624.04	1.81	-0.15	0.010
110.00	-5.03	-0.16	0.00	-2.94	0.00	2.94	1052.07	315.62	43955.0	624.04	1.87	-0.15	0.009
110.00	-5.03	-0.16	0.00	-2.94	0.00	2.94	759.47	227.84	14937.6	114.57	1.87	-0.15	0.032
112.00	-4.73	-0.16	0.00	-2.62	0.00	2.62	759.47	227.84	14937.6	114.57	1.93	-0.15	0.029
114.00	-4.43	-0.15	0.00	-2.31	0.00	2.31	759.47	227.84	14937.6	114.57	2.00	-0.17	0.026
116.00	-4.13	-0.14	0.00	-2.01	0.00	2.01	759.47	227.84	14937.6	114.57	2.08	-0.19	0.023
118.00	-3.83	-0.13	0.00	-1.72	0.00	1.72	759.47	227.84	14937.6	114.57	2.16	-0.20	0.020
120.00	-3.26	-0.11	0.00	-1.45	0.00	1.45	759.47	227.84	14937.6	114.57	2.24	-0.21	0.006
120.00	-3.26	-0.11	0.00	-1.45	0.00	1.45	317.71	95.31	3734.62	52.28	2.24	-0.21	0.006
121.00	-3.16	-0.11	0.00	-1.35	0.00	1.35	317.71	95.31	3734.62	52.28	2.29	-0.21	0.008
121.00	-3.16	-0.11	0.00	-1.35	0.00	1.35	317.71	95.31	3734.62	52.28	2.29	-0.21	0.008
122.00	-3.06	-0.11	0.00	-1.24	0.00	1.24	317.71	95.31	3734.62	52.28	2.33	-0.21	0.033
124.00	-2.86	-0.10	0.00	-1.03	0.00	1.03	317.71	95.31	3734.62	52.28	2.43	-0.23	0.029
126.00	-2.66	-0.10	0.00	-0.83	0.00	0.83	317.71	95.31	3734.62	52.28	2.53	-0.24	0.024
128.00	-2.05	-0.06	0.00	-0.63	0.00	0.63	317.71	95.31	3734.62	52.28	2.63	-0.25	0.019
130.00	-1.60	-0.04	0.00	-0.51	0.00	0.51	317.71	95.31	3734.62	52.28	2.74	-0.26	0.015
130.00	-1.60	-0.04	0.00	-0.51	0.00	0.51	317.71	95.31	3734.62	52.28	2.74	-0.26	0.015
132.00	-1.48	-0.04	0.00	-0.43	0.00	0.43	317.71	95.31	3734.62	52.28	2.85	-0.27	0.013
134.00	-1.37	-0.04	0.00	-0.35	0.00	0.35	317.71	95.31	3734.62	52.28	2.96	-0.27	0.011
135.00	-1.25	-0.04	0.00	-0.31	0.00	0.31	317.71	95.31	3734.62	52.28	3.02	-0.28	0.010
136.00	-1.21	-0.03	0.00	-0.28	0.00	0.28	317.71	95.31	3734.62	52.28	3.08	-0.28	0.009
138.00	-1.12	-0.03	0.00	-0.21	0.00	0.21	317.71	95.31	3734.62	52.28	3.19	-0.28	0.008
140.00	-0.77	-0.02	0.00	-0.14	0.00	0.14	317.71	95.31	3734.62	52.28	3.31	-0.28	0.005
140.00	-0.77	-0.02	0.00	-0.14	0.00	0.14	317.71	95.31	3734.62	52.28	3.31	-0.28	0.005
142.00	-0.68	-0.02	0.00	-0.10	0.00	0.10	317.71	95.31	3734.62	52.28	3.43	-0.29	0.004
144.00	-0.60	-0.02	0.00	-0.07	0.00	0.07	317.71	95.31	3734.62	52.28	3.55	-0.29	0.003
146.00	-0.51	-0.02	0.00	-0.03	0.00	0.03	317.71	95.31	3734.62	52.28	3.67	-0.29	0.002
147.00	-0.24	-0.01	0.00	-0.02	0.00	0.02	317.71	95.31	3734.62	52.28	3.73	-0.29	0.001
148.00	-0.20	-0.01	0.00	-0.01	0.00	0.01	317.71	95.31	3734.62	52.28	3.79	-0.29	0.001
150.00	0.00	0.00	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	3.91	-0.29	0.000

Seismic Segment Forces (Factored)

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 0.9D + 1.0Ev + 1.0Eh

Iterations 32

Gust Response Factor 1.10

Sds 0.20

Ss 0.18

Dead Load Factor 0.90 **Seismic Load Factor** 1.00

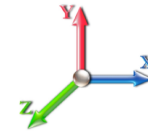
Sd1 0.08

S1 0.05

Wind Load Factor 0.00 **Structure Frequency (f1)** 0.32

SA 0.03

Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	Hz (lb)	Vertical Ev (lb)	Lateral Fs (lb)	R: 1.50
0.00		0.00	0.00	0.00	0.00	
2.00		330.88	1.00	12.92	0.00	
4.00		330.88	3.00	12.92	0.01	
6.00		330.88	5.00	12.92	0.02	
8.00		330.88	7.00	12.92	0.05	
10.00		330.88	9.00	12.92	0.08	
12.00		330.88	11.00	12.92	0.12	
14.00		330.88	13.00	12.92	0.17	
16.00		330.88	15.00	12.92	0.22	
18.00		330.88	17.00	12.92	0.29	
20.00	Top - Section 1	330.88	19.00	12.92	0.36	
22.00		282.77	21.00	11.04	0.32	
24.00		282.77	23.00	11.04	0.39	
26.00		282.77	25.00	11.04	0.46	
28.00		282.77	27.00	11.04	0.53	
30.00		282.77	29.00	11.04	0.61	
32.00		282.77	31.00	11.04	0.70	
34.00		282.77	33.00	11.04	0.79	
36.00		282.77	35.00	11.04	0.89	
38.00		282.77	37.00	11.04	1.00	
40.00		282.77	39.00	11.04	1.11	
42.00		282.77	41.00	11.04	1.23	
44.00		282.77	43.00	11.04	1.35	
46.00		282.77	45.00	11.04	1.48	
48.00		282.77	47.00	11.04	1.61	
50.00	Top - Section 2	282.77	49.00	11.04	1.75	
52.00		234.67	51.00	9.16	1.31	
54.00		234.67	53.00	9.16	1.41	
56.00		234.67	55.00	9.16	1.52	
58.00		234.67	57.00	9.16	1.63	
60.00		234.67	59.00	9.16	1.75	
62.00		234.67	61.00	9.16	1.87	
64.00		234.67	63.00	9.16	1.99	
66.00		234.67	65.00	9.16	2.12	
68.00		234.67	67.00	9.16	2.25	
70.00		234.67	69.00	9.16	2.39	
72.00		234.67	71.00	9.16	2.53	
74.00		234.67	73.00	9.16	2.68	
76.00		234.67	75.00	9.16	2.82	
78.00		234.67	77.00	9.16	2.98	
80.00	Top - Section 3	234.67	79.00	9.16	3.13	
82.00		234.67	81.00	9.16	3.29	
84.00		234.67	83.00	9.16	3.46	
86.00		234.67	85.00	9.16	3.63	
88.00		234.67	87.00	9.16	3.80	
90.00		234.67	89.00	9.16	3.98	

Seismic Segment Forces (Factored)

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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92.00		234.67	91.00	9.16	4.16
94.00		234.67	93.00	9.16	4.34
96.00		234.67	95.00	9.16	4.53
98.00		234.67	97.00	9.16	4.72
100.00		234.67	99.00	9.16	4.92
102.00		234.67	101.00	9.16	5.12
104.00		234.67	103.00	9.16	5.33
106.00		234.67	105.00	9.16	5.54
108.00		234.67	107.00	9.16	5.75
110.00	Top - Section 4	342.16	109.00	13.36	12.68
112.00		230.86	111.00	9.01	5.99
114.00		230.86	113.00	9.01	6.21
116.00		230.86	115.00	9.01	6.43
118.00		230.86	117.00	9.01	6.65
120.00	Top - Section 5 RB1	445.83	119.00	17.41	25.67
121.00	RT1	75.66	120.50	2.95	0.76
122.00		75.66	121.50	2.95	0.77
124.00		151.32	123.00	5.91	3.16
126.00		151.32	125.00	5.91	3.26
128.00	Appurtenance(s)	475.32	127.00	18.56	33.23
130.00	Top - Section 6	355.06	129.00	13.86	19.13
132.00		91.22	131.00	3.56	1.30
134.00		91.22	133.00	3.56	1.34
135.00	Appurtenance(s)	90.48	134.50	3.53	1.35
136.00		34.38	135.50	1.34	0.20
138.00		68.76	137.00	2.68	0.81
140.00	Top - Section 7	283.73	139.00	11.08	14.18
142.00		68.76	141.00	2.68	0.86
144.00		68.76	143.00	2.68	0.88
146.00		68.76	145.00	2.68	0.91
147.00	Appurtenance(s)	217.68	146.50	8.50	9.27
148.00		28.60	147.50	1.12	0.16
150.00	Appurtenance(s)	164.69	149.00	6.43	5.49
Totals:		18,628.5	727.3	271.2	

Total Wind: 11,610.7

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

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II Page: 35



Load Case: 0.9D + 1.0Ev + 1.0Eh

Iterations 32

Gust Response Factor 1.10

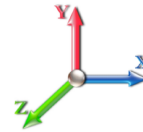
Sds 0.20

Ss 0.18

Dead Load Factor 0.90 **Seismic Load Factor** 1.00 **Sd1** 0.08

S1 0.05

Wind Load Factor 0.00 **Structure Frequency (f1)** 0.32 **SA** 0.03 **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	-17.85	-0.27	0.00	-30.57	0.00	30.57	1490.10	475.94	99948.2	1339.68		0.00	0.00	0.035
2.00	-17.53	-0.27	0.00	-30.02	0.00	30.02	1490.10	475.94	99948.2	1339.68		0.00	0.00	0.034
4.00	-17.22	-0.27	0.00	-29.48	0.00	29.48	1490.10	475.94	99948.2	1339.68		0.00	-0.01	0.034
6.00	-16.90	-0.27	0.00	-28.94	0.00	28.94	1490.10	475.94	99948.2	1339.68		0.00	-0.01	0.033
8.00	-16.59	-0.27	0.00	-28.39	0.00	28.39	1490.10	475.94	99948.2	1339.68		0.01	-0.01	0.032
10.00	-16.27	-0.27	0.00	-27.85	0.00	27.85	1490.10	475.94	99948.2	1339.68		0.01	-0.01	0.032
12.00	-15.96	-0.27	0.00	-27.30	0.00	27.30	1490.10	475.94	99948.2	1339.68		0.02	-0.01	0.031
14.00	-15.64	-0.27	0.00	-26.75	0.00	26.75	1490.10	475.94	99948.2	1339.68		0.03	-0.02	0.030
16.00	-15.33	-0.27	0.00	-26.20	0.00	26.20	1490.10	475.94	99948.2	1339.68		0.03	-0.02	0.030
18.00	-15.01	-0.28	0.00	-25.65	0.00	25.65	1490.10	475.94	99948.2	1339.68		0.04	-0.02	0.029
20.00	-14.70	-0.28	0.00	-25.10	0.00	25.10	1490.10	475.94	99948.2	1339.68		0.05	-0.02	0.029
20.00	-14.70	-0.28	0.00	-25.10	0.00	25.10	1311.06	395.78	69116.5	948.43		0.05	-0.02	0.038
22.00	-14.43	-0.28	0.00	-24.55	0.00	24.55	1311.06	395.78	69116.5	948.43		0.06	-0.03	0.037
24.00	-14.16	-0.28	0.00	-24.00	0.00	24.00	1311.06	395.78	69116.5	948.43		0.07	-0.03	0.036
26.00	-13.89	-0.28	0.00	-23.45	0.00	23.45	1311.06	395.78	69116.5	948.43		0.09	-0.03	0.035
28.00	-13.62	-0.28	0.00	-22.89	0.00	22.89	1311.06	395.78	69116.5	948.43		0.10	-0.04	0.035
30.00	-13.35	-0.28	0.00	-22.34	0.00	22.34	1311.06	395.78	69116.5	948.43		0.12	-0.04	0.034
32.00	-13.08	-0.28	0.00	-21.79	0.00	21.79	1311.06	395.78	69116.5	948.43		0.13	-0.04	0.033
34.00	-12.81	-0.28	0.00	-21.24	0.00	21.24	1311.06	395.78	69116.5	948.43		0.15	-0.05	0.032
36.00	-12.54	-0.28	0.00	-20.69	0.00	20.69	1311.06	395.78	69116.5	948.43		0.17	-0.05	0.031
38.00	-12.27	-0.27	0.00	-20.14	0.00	20.14	1311.06	395.78	69116.5	948.43		0.19	-0.05	0.031
40.00	-12.00	-0.27	0.00	-19.59	0.00	19.59	1311.06	395.78	69116.5	948.43		0.22	-0.06	0.030
42.00	-11.73	-0.27	0.00	-19.04	0.00	19.04	1311.06	395.78	69116.5	948.43		0.24	-0.06	0.029
44.00	-11.46	-0.27	0.00	-18.49	0.00	18.49	1311.06	395.78	69116.5	948.43		0.27	-0.06	0.028
46.00	-11.19	-0.27	0.00	-17.95	0.00	17.95	1311.06	395.78	69116.5	948.43		0.29	-0.06	0.027
48.00	-10.92	-0.27	0.00	-17.41	0.00	17.41	1311.06	395.78	69116.5	948.43		0.32	-0.07	0.027
50.00	-10.65	-0.27	0.00	-16.87	0.00	16.87	1311.06	395.78	69116.5	948.43		0.35	-0.07	0.026
50.00	-10.65	-0.27	0.00	-16.87	0.00	16.87	1052.07	315.62	43955.0	624.04		0.35	-0.07	0.037
52.00	-10.42	-0.27	0.00	-16.33	0.00	16.33	1052.07	315.62	43955.0	624.04		0.38	-0.07	0.036
54.00	-10.20	-0.27	0.00	-15.80	0.00	15.80	1052.07	315.62	43955.0	624.04		0.41	-0.08	0.035
56.00	-9.97	-0.26	0.00	-15.27	0.00	15.27	1052.07	315.62	43955.0	624.04		0.44	-0.08	0.034
58.00	-9.75	-0.26	0.00	-14.74	0.00	14.74	1052.07	315.62	43955.0	624.04		0.48	-0.09	0.033
60.00	-9.52	-0.26	0.00	-14.21	0.00	14.21	1052.07	315.62	43955.0	624.04		0.51	-0.09	0.032
62.00	-9.30	-0.26	0.00	-13.69	0.00	13.69	1052.07	315.62	43955.0	624.04		0.55	-0.09	0.031
64.00	-9.07	-0.26	0.00	-13.17	0.00	13.17	1052.07	315.62	43955.0	624.04		0.59	-0.10	0.030
66.00	-8.85	-0.26	0.00	-12.65	0.00	12.65	1052.07	315.62	43955.0	624.04		0.63	-0.10	0.029
68.00	-8.62	-0.25	0.00	-12.13	0.00	12.13	1052.07	315.62	43955.0	624.04		0.68	-0.10	0.028
70.00	-8.40	-0.25	0.00	-11.62	0.00	11.62	1052.07	315.62	43955.0	624.04		0.72	-0.11	0.027
72.00	-8.17	-0.25	0.00	-11.12	0.00	11.12	1052.07	315.62	43955.0	624.04		0.77	-0.11	0.026
74.00	-7.95	-0.25	0.00	-10.62	0.00	10.62	1052.07	315.62	43955.0	624.04		0.81	-0.11	0.025
76.00	-7.72	-0.24	0.00	-10.12	0.00	10.12	1052.07	315.62	43955.0	624.04		0.86	-0.12	0.024
78.00	-7.50	-0.24	0.00	-9.64	0.00	9.64	1052.07	315.62	43955.0	624.04		0.91	-0.12	0.023
80.00	-7.27	-0.24	0.00	-9.15	0.00	9.15	1052.07	315.62	43955.0	624.04		0.96	-0.12	0.022
80.00	-7.27	-0.24	0.00	-9.15	0.00	9.15	1052.07	315.62	43955.0	624.04		0.96	-0.12	0.022
82.00	-7.05	-0.23	0.00	-8.68	0.00	8.68	1052.07	315.62	43955.0	624.04		1.02	-0.13	0.021
84.00	-6.82	-0.23	0.00	-8.21	0.00	8.21	1052.07	315.62	43955.0	624.04		1.07	-0.13	0.020
86.00	-6.60	-0.23	0.00	-7.74	0.00	7.74	1052.07	315.62	43955.0	624.04		1.12	-0.13	0.019

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II Page: 36



88.00	-6.37	-0.22	0.00	-7.29	0.00	7.29	1052.07	315.62	43955.0	624.04	1.18	-0.13	0.018
90.00	-6.15	-0.22	0.00	-6.84	0.00	6.84	1052.07	315.62	43955.0	624.04	1.23	-0.14	0.017
92.00	-5.92	-0.21	0.00	-6.41	0.00	6.41	1052.07	315.62	43955.0	624.04	1.29	-0.14	0.016
94.00	-5.70	-0.21	0.00	-5.98	0.00	5.98	1052.07	315.62	43955.0	624.04	1.35	-0.14	0.015
96.00	-5.47	-0.20	0.00	-5.56	0.00	5.56	1052.07	315.62	43955.0	624.04	1.41	-0.14	0.014
98.00	-5.25	-0.20	0.00	-5.15	0.00	5.15	1052.07	315.62	43955.0	624.04	1.47	-0.14	0.013
100.00	-5.02	-0.19	0.00	-4.75	0.00	4.75	1052.07	315.62	43955.0	624.04	1.53	-0.14	0.012
102.00	-4.80	-0.19	0.00	-4.36	0.00	4.36	1052.07	315.62	43955.0	624.04	1.59	-0.14	0.012
104.00	-4.57	-0.18	0.00	-3.98	0.00	3.98	1052.07	315.62	43955.0	624.04	1.65	-0.15	0.011
106.00	-4.35	-0.18	0.00	-3.62	0.00	3.62	1052.07	315.62	43955.0	624.04	1.71	-0.15	0.010
108.00	-4.12	-0.17	0.00	-3.26	0.00	3.26	1052.07	315.62	43955.0	624.04	1.77	-0.15	0.009
110.00	-3.80	-0.16	0.00	-2.92	0.00	2.92	1052.07	315.62	43955.0	624.04	1.83	-0.15	0.008
110.00	-3.80	-0.16	0.00	-2.92	0.00	2.92	759.47	227.84	14937.6	114.57	1.83	-0.15	0.031
112.00	-3.57	-0.15	0.00	-2.61	0.00	2.61	759.47	227.84	14937.6	114.57	1.90	-0.15	0.027
114.00	-3.35	-0.15	0.00	-2.31	0.00	2.31	759.47	227.84	14937.6	114.57	1.96	-0.17	0.025
116.00	-3.12	-0.14	0.00	-2.02	0.00	2.02	759.47	227.84	14937.6	114.57	2.04	-0.18	0.022
118.00	-2.89	-0.13	0.00	-1.74	0.00	1.74	759.47	227.84	14937.6	114.57	2.12	-0.20	0.019
120.00	-2.46	-0.11	0.00	-1.47	0.00	1.47	759.47	227.84	14937.6	114.57	2.20	-0.21	0.005
120.00	-2.46	-0.11	0.00	-1.47	0.00	1.47	317.71	95.31	3734.62	52.28	2.20	-0.21	0.006
121.00	-2.39	-0.10	0.00	-1.37	0.00	1.37	317.71	95.31	3734.62	52.28	2.24	-0.21	0.007
121.00	-2.39	-0.10	0.00	-1.37	0.00	1.37	317.71	95.31	3734.62	52.28	2.24	-0.21	0.007
122.00	-2.31	-0.10	0.00	-1.26	0.00	1.26	317.71	95.31	3734.62	52.28	2.29	-0.21	0.031
124.00	-2.16	-0.10	0.00	-1.06	0.00	1.06	317.71	95.31	3734.62	52.28	2.38	-0.23	0.027
126.00	-2.01	-0.10	0.00	-0.85	0.00	0.85	317.71	95.31	3734.62	52.28	2.48	-0.24	0.023
128.00	-1.55	-0.06	0.00	-0.66	0.00	0.66	317.71	95.31	3734.62	52.28	2.58	-0.25	0.018
130.00	-1.21	-0.04	0.00	-0.53	0.00	0.53	317.71	95.31	3734.62	52.28	2.69	-0.26	0.014
130.00	-1.21	-0.04	0.00	-0.53	0.00	0.53	317.71	95.31	3734.62	52.28	2.69	-0.26	0.014
132.00	-1.12	-0.04	0.00	-0.45	0.00	0.45	317.71	95.31	3734.62	52.28	2.80	-0.27	0.012
134.00	-1.04	-0.04	0.00	-0.37	0.00	0.37	317.71	95.31	3734.62	52.28	2.91	-0.27	0.010
135.00	-0.95	-0.04	0.00	-0.33	0.00	0.33	317.71	95.31	3734.62	52.28	2.97	-0.27	0.009
136.00	-0.92	-0.04	0.00	-0.29	0.00	0.29	317.71	95.31	3734.62	52.28	3.03	-0.28	0.009
138.00	-0.85	-0.04	0.00	-0.22	0.00	0.22	317.71	95.31	3734.62	52.28	3.14	-0.28	0.007
140.00	-0.58	-0.02	0.00	-0.15	0.00	0.15	317.71	95.31	3734.62	52.28	3.26	-0.28	0.005
140.00	-0.58	-0.02	0.00	-0.15	0.00	0.15	317.71	95.31	3734.62	52.28	3.26	-0.28	0.005
142.00	-0.52	-0.02	0.00	-0.11	0.00	0.11	317.71	95.31	3734.62	52.28	3.38	-0.29	0.004
144.00	-0.45	-0.02	0.00	-0.07	0.00	0.07	317.71	95.31	3734.62	52.28	3.50	-0.29	0.003
146.00	-0.39	-0.02	0.00	-0.04	0.00	0.04	317.71	95.31	3734.62	52.28	3.62	-0.29	0.002
147.00	-0.18	-0.01	0.00	-0.02	0.00	0.02	317.71	95.31	3734.62	52.28	3.68	-0.29	0.001
148.00	-0.15	-0.01	0.00	-0.01	0.00	0.01	317.71	95.31	3734.62	52.28	3.74	-0.29	0.001
150.00	0.00	-0.01	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	3.86	-0.29	0.000

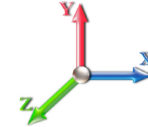
Wind Loading - Shaft

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020	
Site Name: North Stonington 2 CT	Exposure: C		
Height: 150.00 (ft)	Crest Height: 0.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 1	Struct Class: II	Page: 37



Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 36

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	6.649	7.31	165.83	0.600	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	6.649	7.31	165.83	0.600	0.000	2.00	6.000	3.60	26.3	0.0	285.6
4.00		1.00	0.85	6.649	7.31	165.83	0.600	0.000	2.00	6.000	3.60	26.3	0.0	285.6
6.00		1.00	0.85	6.649	7.31	165.83	0.600	0.000	2.00	6.000	3.60	26.3	0.0	285.6
8.00		1.00	0.85	6.649	7.31	165.83	0.600	0.000	2.00	6.000	3.60	26.3	0.0	285.6
10.00		1.00	0.85	6.649	7.31	165.83	0.600	0.000	2.00	6.000	3.60	26.3	0.0	285.6
12.00		1.00	0.85	6.649	7.31	165.83	0.600	0.000	2.00	6.000	3.60	26.3	0.0	285.6
14.00		1.00	0.85	6.649	7.31	165.83	0.600	0.000	2.00	6.000	3.60	26.3	0.0	285.6
16.00		1.00	0.86	6.731	7.40	166.85	0.600	0.000	2.00	6.000	3.60	26.7	0.0	285.6
18.00		1.00	0.88	6.900	7.59	168.93	0.600	0.000	2.00	6.000	3.60	27.3	0.0	285.6
20.00	Top - Section 1	1.00	0.90	7.054	7.76	170.81	0.600	0.000	2.00	6.000	3.60	27.9	0.0	285.6
22.00		1.00	0.92	7.197	7.92	143.78	0.600	0.000	2.00	5.000	3.00	23.8	0.0	237.5
24.00		1.00	0.94	7.330	8.06	145.10	0.600	0.000	2.00	5.000	3.00	24.2	0.0	237.5
26.00		1.00	0.95	7.455	8.20	146.33	0.600	0.000	2.00	5.000	3.00	24.6	0.0	237.5
28.00		1.00	0.97	7.572	8.33	147.48	0.600	0.000	2.00	5.000	3.00	25.0	0.0	237.5
30.00		1.00	0.98	7.683	8.45	148.55	0.600	0.000	2.00	5.000	3.00	25.4	0.0	237.5
32.00		1.00	1.00	7.788	8.57	149.56	0.600	0.000	2.00	5.000	3.00	25.7	0.0	237.5
34.00		1.00	1.01	7.888	8.68	150.52	0.600	0.000	2.00	5.000	3.00	26.0	0.0	237.5
36.00		1.00	1.02	7.984	8.78	151.43	0.600	0.000	2.00	5.000	3.00	26.3	0.0	237.5
38.00		1.00	1.03	8.075	8.88	152.29	0.600	0.000	2.00	5.000	3.00	26.6	0.0	237.5
40.00		1.00	1.04	8.163	8.98	153.12	0.600	0.000	2.00	5.000	3.00	26.9	0.0	237.5
42.00		1.00	1.05	8.247	9.07	153.91	0.600	0.000	2.00	5.000	3.00	27.2	0.0	237.5
44.00		1.00	1.06	8.328	9.16	154.66	0.600	0.000	2.00	5.000	3.00	27.5	0.0	237.5
46.00		1.00	1.07	8.407	9.25	155.39	0.600	0.000	2.00	5.000	3.00	27.7	0.0	237.5
48.00		1.00	1.08	8.482	9.33	156.09	0.600	0.000	2.00	5.000	3.00	28.0	0.0	237.5
50.00	Top - Section 2	1.00	1.09	8.555	9.41	156.76	0.600	0.000	2.00	5.000	3.00	28.2	0.0	237.5
52.00		1.00	1.10	8.626	9.49	125.93	0.600	0.000	2.00	4.000	2.40	22.8	0.0	189.4
54.00		1.00	1.11	8.695	9.56	126.43	0.600	0.000	2.00	4.000	2.40	23.0	0.0	189.4
56.00		1.00	1.12	8.762	9.64	126.91	0.600	0.000	2.00	4.000	2.40	23.1	0.0	189.4
58.00		1.00	1.13	8.827	9.71	127.38	0.600	0.000	2.00	4.000	2.40	23.3	0.0	189.4
60.00		1.00	1.14	8.890	9.78	127.84	0.600	0.000	2.00	4.000	2.40	23.5	0.0	189.4
62.00		1.00	1.14	8.952	9.85	128.28	0.600	0.000	2.00	4.000	2.40	23.6	0.0	189.4
64.00		1.00	1.15	9.012	9.91	128.71	0.600	0.000	2.00	4.000	2.40	23.8	0.0	189.4
66.00		1.00	1.16	9.070	9.98	129.13	0.600	0.000	2.00	4.000	2.40	23.9	0.0	189.4
68.00		1.00	1.17	9.128	10.04	129.53	0.600	0.000	2.00	4.000	2.40	24.1	0.0	189.4
70.00		1.00	1.17	9.183	10.10	129.93	0.600	0.000	2.00	4.000	2.40	24.2	0.0	189.4
72.00		1.00	1.18	9.238	10.16	130.31	0.600	0.000	2.00	4.000	2.40	24.4	0.0	189.4
74.00		1.00	1.19	9.291	10.22	130.69	0.600	0.000	2.00	4.000	2.40	24.5	0.0	189.4
76.00		1.00	1.19	9.344	10.28	131.06	0.600	0.000	2.00	4.000	2.40	24.7	0.0	189.4
78.00		1.00	1.20	9.395	10.33	131.42	0.600	0.000	2.00	4.000	2.40	24.8	0.0	189.4
80.00	Top - Section 3	1.00	1.21	9.445	10.39	131.77	0.600	0.000	2.00	4.000	2.40	24.9	0.0	189.4
82.00		1.00	1.21	9.494	10.44	132.11	0.600	0.000	2.00	4.000	2.40	25.1	0.0	189.4
84.00		1.00	1.22	9.543	10.50	132.45	0.600	0.000	2.00	4.000	2.40	25.2	0.0	189.4
86.00		1.00	1.23	9.590	10.55	132.77	0.600	0.000	2.00	4.000	2.40	25.3	0.0	189.4
88.00		1.00	1.23	9.637	10.60	133.10	0.600	0.000	2.00	4.000	2.40	25.4	0.0	189.4
90.00		1.00	1.24	9.682	10.65	133.41	0.600	0.000	2.00	4.000	2.40	25.6	0.0	189.4
92.00		1.00	1.24	9.727	10.70	133.72	0.600	0.000	2.00	4.000	2.40	25.7	0.0	189.4

Wind Loading - Shaft

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II
		Page: 38



94.00	1.00	1.25	9.771	10.75	134.02	0.600	0.000	2.00	4.000	2.40	25.8	0.0	189.4
96.00	1.00	1.25	9.815	10.80	134.32	0.600	0.000	2.00	4.000	2.40	25.9	0.0	189.4
98.00	1.00	1.26	9.857	10.84	134.61	0.600	0.000	2.00	4.000	2.40	26.0	0.0	189.4
100.00	1.00	1.27	9.900	10.89	134.90	0.600	0.000	2.00	4.000	2.40	26.1	0.0	189.4
102.00	1.00	1.27	9.941	10.93	135.18	0.600	0.000	2.00	4.000	2.40	26.2	0.0	189.4
104.00	1.00	1.28	9.982	10.98	135.46	0.600	0.000	2.00	4.000	2.40	26.4	0.0	189.4
106.00	1.00	1.28	10.022	11.02	135.73	0.600	0.000	2.00	4.000	2.40	26.5	0.0	189.4
108.00	1.00	1.29	10.061	11.07	136.00	0.600	0.000	2.00	4.000	2.40	26.6	0.0	189.4
110.00 Top - Section 4	1.00	1.29	10.100	11.11	136.26	0.600	0.000	2.00	4.000	2.40	26.7	0.0	189.4
112.00	1.00	1.30	10.139	11.15	38.40	1.200	0.000	2.00	1.125	1.35	15.1	0.0	136.7
114.00	1.00	1.30	10.176	11.19	38.47	1.200	0.000	2.00	1.125	1.35	15.1	0.0	136.7
116.00	1.00	1.31	10.214	11.24	38.54	1.200	0.000	2.00	1.125	1.35	15.2	0.0	136.7
118.00	1.00	1.31	10.251	11.28	38.61	1.200	0.000	2.00	1.125	1.35	15.2	0.0	136.7
120.00 Top - Section 5 RB1	1.00	1.32	10.287	11.32	38.68	1.200	0.000	2.00	1.125	1.35	15.3	0.0	136.7
121.00 RT1	1.00	1.32	10.305	11.34	37.99	1.200	0.000	1.00	0.552	0.66	7.5	0.0	28.6
122.00	1.00	1.32	10.323	11.36	38.03	1.200	0.000	1.00	0.552	0.66	7.5	0.0	28.6
124.00	1.00	1.32	10.358	11.39	38.09	1.200	0.000	2.00	1.104	1.32	15.1	0.0	57.2
126.00	1.00	1.33	10.393	11.43	38.15	1.200	0.000	2.00	1.104	1.32	15.1	0.0	57.2
128.00 Appurtenance(s)	1.00	1.33	10.428	11.47	38.22	1.200	0.000	2.00	1.104	1.32	15.2	0.0	57.2
130.00 Top - Section 6	1.00	1.34	10.462	11.51	38.28	1.200	0.000	2.00	1.104	1.32	15.2	0.0	57.2
132.00	1.00	1.34	10.495	11.54	38.34	1.200	0.000	2.00	1.104	1.32	15.3	0.0	57.2
134.00	1.00	1.35	10.529	11.58	38.40	1.200	0.000	2.00	1.104	1.32	15.3	0.0	57.2
135.00 Appurtenance(s)	1.00	1.35	10.545	11.60	38.43	1.200	0.000	1.00	0.552	0.66	7.7	0.0	28.6
136.00	1.00	1.35	10.562	11.62	38.46	1.200	0.000	1.00	0.552	0.66	7.7	0.0	28.6
138.00	1.00	1.35	10.594	11.65	38.52	1.200	0.000	2.00	1.104	1.32	15.4	0.0	57.2
140.00 Top - Section 7	1.00	1.36	10.626	11.69	38.58	1.200	0.000	2.00	1.104	1.32	15.5	0.0	57.2
142.00	1.00	1.36	10.658	11.72	38.64	1.200	0.000	2.00	1.104	1.32	15.5	0.0	57.2
144.00	1.00	1.37	10.689	11.76	38.69	1.200	0.000	2.00	1.104	1.32	15.6	0.0	57.2
146.00	1.00	1.37	10.720	11.79	38.75	1.200	0.000	2.00	1.104	1.32	15.6	0.0	57.2
147.00 Appurtenance(s)	1.00	1.37	10.736	11.81	38.78	1.200	0.000	1.00	0.552	0.66	7.8	0.0	28.6
148.00	1.00	1.37	10.751	11.83	38.81	1.200	0.000	1.00	0.552	0.66	7.8	0.0	28.6
150.00 Appurtenance(s)	1.00	1.38	10.782	11.86	38.86	1.200	0.000	2.00	1.104	1.32	15.7	0.0	57.2
Totals:								150.00			1,713.1		13,643.3

Discrete Appurtenance Forces

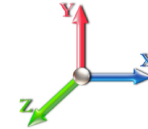
Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 36

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	150.00	40" Canister Weight	1	10.782	11.860	1.00	1.00	6.26	107.49	0.000	0.000	74.24	0.00	0.00
2	147.00	DPO-7126Y-0-T1	3	10.736	11.809	0.00	1.00	0.00	37.80	0.000	0.000	0.00	0.00	0.00
3	147.00	KIT-FD9R6004/1C-DL	3	10.736	11.809	0.00	1.00	0.00	9.30	0.000	0.000	0.00	0.00	0.00
4	147.00	DHHTT65B-3XR	3	10.736	11.809	0.00	1.00	0.00	136.20	0.000	0.000	0.00	0.00	0.00
5	140.00	40" Canister Weight	1	10.626	11.689	1.00	1.00	12.52	214.97	0.000	0.000	146.34	0.00	0.00
6	135.00	APXV18-206516L	3	10.545	11.600	0.00	1.00	0.00	56.10	0.000	0.000	0.00	0.00	0.00
7	130.00	40" Canister Weight	1	10.462	11.508	1.00	1.00	12.52	214.97	0.000	0.000	144.08	0.00	0.00
8	128.00	CM1007-DBPXC-xxx	6	10.428	11.470	0.00	1.00	0.00	39.00	0.000	0.000	0.00	0.00	0.00
9	128.00	TMABPD7823VG12A	6	10.428	11.470	0.00	1.00	0.00	156.00	0.000	0.000	0.00	0.00	0.00
10	128.00	OPA65R-BU4BA	3	10.428	11.470	0.00	1.00	0.00	129.00	0.000	0.000	0.00	0.00	0.00
11	120.00	40" Canister Weight	1	10.287	11.316	1.00	1.00	12.49	214.97	0.000	0.000	141.33	0.00	0.00
12	110.00	40" Canister Weight	1	10.100	11.110	1.00	1.00	6.23	107.49	0.000	0.000	69.22	0.00	0.00
Totals:									1,423.29			575.21		

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II

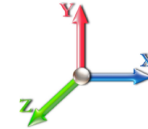


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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 36

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		26.33	335.91	0.00	0.00
4.00		26.33	335.91	0.00	0.00
6.00		26.33	335.91	0.00	0.00
8.00		26.33	335.91	0.00	0.00
10.00		26.33	335.91	0.00	0.00
12.00		26.33	335.91	0.00	0.00
14.00		26.33	335.91	0.00	0.00
16.00		26.65	335.91	0.00	0.00
18.00		27.32	335.91	0.00	0.00
20.00		27.94	335.91	0.00	0.00
22.00		23.75	287.80	0.00	0.00
24.00		24.19	287.80	0.00	0.00
26.00		24.60	287.80	0.00	0.00
28.00		24.99	287.80	0.00	0.00
30.00		25.35	287.80	0.00	0.00
32.00		25.70	287.80	0.00	0.00
34.00		26.03	287.80	0.00	0.00
36.00		26.35	287.80	0.00	0.00
38.00		26.65	287.80	0.00	0.00
40.00		26.94	287.80	0.00	0.00
42.00		27.22	287.80	0.00	0.00
44.00		27.48	287.80	0.00	0.00
46.00		27.74	287.80	0.00	0.00
48.00		27.99	287.80	0.00	0.00
50.00		28.23	287.80	0.00	0.00
52.00		22.77	239.70	0.00	0.00
54.00		22.96	239.70	0.00	0.00
56.00		23.13	239.70	0.00	0.00
58.00		23.30	239.70	0.00	0.00
60.00		23.47	239.70	0.00	0.00
62.00		23.63	239.70	0.00	0.00
64.00		23.79	239.70	0.00	0.00
66.00		23.95	239.70	0.00	0.00
68.00		24.10	239.70	0.00	0.00
70.00		24.24	239.70	0.00	0.00
72.00		24.39	239.70	0.00	0.00
74.00		24.53	239.70	0.00	0.00
76.00		24.67	239.70	0.00	0.00
78.00		24.80	239.70	0.00	0.00
80.00		24.94	239.70	0.00	0.00
82.00		25.07	239.70	0.00	0.00
84.00		25.19	239.70	0.00	0.00
86.00		25.32	239.70	0.00	0.00
88.00		25.44	239.70	0.00	0.00
90.00		25.56	239.70	0.00	0.00
92.00		25.68	239.70	0.00	0.00

Total Applied Force Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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94.00		25.80	239.70	0.00	0.00
96.00		25.91	239.70	0.00	0.00
98.00		26.02	239.70	0.00	0.00
100.00		26.13	239.70	0.00	0.00
102.00		26.24	239.70	0.00	0.00
104.00		26.35	239.70	0.00	0.00
106.00		26.46	239.70	0.00	0.00
108.00		26.56	239.70	0.00	0.00
110.00	(1) attachments	95.88	347.19	0.00	0.00
112.00		15.06	241.32	0.00	0.00
114.00		15.11	241.32	0.00	0.00
116.00		15.17	241.32	0.00	0.00
118.00		15.22	241.32	0.00	0.00
120.00	(1) attachments	156.61	456.29	0.00	0.00
121.00		7.51	80.89	0.00	0.00
122.00		7.52	80.89	0.00	0.00
124.00		15.10	161.78	0.00	0.00
126.00		15.15	161.78	0.00	0.00
128.00	(15) attachments	15.20	485.78	0.00	0.00
130.00	(1) attachments	159.33	364.27	0.00	0.00
132.00		15.30	95.00	0.00	0.00
134.00		15.35	95.00	0.00	0.00
135.00	(3) attachments	7.68	91.12	0.00	0.00
136.00		7.70	35.02	0.00	0.00
138.00		15.44	70.04	0.00	0.00
140.00	(1) attachments	161.83	285.01	0.00	0.00
142.00		15.53	70.04	0.00	0.00
144.00		15.58	70.04	0.00	0.00
146.00		15.63	70.04	0.00	0.00
147.00	(9) attachments	7.82	218.32	0.00	0.00
148.00		7.83	28.60	0.00	0.00
150.00	(1) attachments	89.96	164.69	0.00	0.00
Totals:		2,288.33	19,024.33	0.00	0.00

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II Page: 42

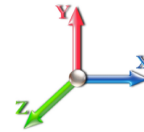


Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 36

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	-19.02	-2.29	0.00	-203.54	0.00	203.54	1490.10	475.94	99948.2	1339.68	0.00	0.000	0.000	0.165
2.00	-18.69	-2.27	0.00	-198.96	0.00	198.96	1490.10	475.94	99948.2	1339.68	0.00	-0.017	0.000	0.161
4.00	-18.35	-2.25	0.00	-194.42	0.00	194.42	1490.10	475.94	99948.2	1339.68	0.01	-0.034	0.000	0.157
6.00	-18.01	-2.23	0.00	-189.93	0.00	189.93	1490.10	475.94	99948.2	1339.68	0.03	-0.050	0.000	0.154
8.00	-17.68	-2.21	0.00	-185.47	0.00	185.47	1490.10	475.94	99948.2	1339.68	0.06	-0.066	0.000	0.150
10.00	-17.34	-2.18	0.00	-181.06	0.00	181.06	1490.10	475.94	99948.2	1339.68	0.09	-0.082	0.000	0.147
12.00	-17.01	-2.16	0.00	-176.69	0.00	176.69	1490.10	475.94	99948.2	1339.68	0.13	-0.097	0.000	0.143
14.00	-16.67	-2.14	0.00	-172.37	0.00	172.37	1490.10	475.94	99948.2	1339.68	0.17	-0.112	0.000	0.140
16.00	-16.33	-2.12	0.00	-168.09	0.00	168.09	1490.10	475.94	99948.2	1339.68	0.22	-0.127	0.000	0.136
18.00	-16.00	-2.09	0.00	-163.86	0.00	163.86	1490.10	475.94	99948.2	1339.68	0.28	-0.141	0.000	0.133
20.00	-15.66	-2.07	0.00	-159.68	0.00	159.68	1490.10	475.94	99948.2	1339.68	0.34	-0.155	0.000	0.130
20.00	-15.66	-2.07	0.00	-159.68	0.00	159.68	1311.06	395.78	69116.5	948.43	0.34	-0.155	0.000	0.180
22.00	-15.37	-2.05	0.00	-155.55	0.00	155.55	1311.06	395.78	69116.5	948.43	0.41	-0.168	0.000	0.176
24.00	-15.08	-2.03	0.00	-151.46	0.00	151.46	1311.06	395.78	69116.5	948.43	0.48	-0.191	0.000	0.171
26.00	-14.79	-2.01	0.00	-147.40	0.00	147.40	1311.06	395.78	69116.5	948.43	0.57	-0.213	0.000	0.167
28.00	-14.51	-1.99	0.00	-143.39	0.00	143.39	1311.06	395.78	69116.5	948.43	0.66	-0.235	0.000	0.162
30.00	-14.22	-1.96	0.00	-139.42	0.00	139.42	1311.06	395.78	69116.5	948.43	0.76	-0.256	0.000	0.158
32.00	-13.93	-1.94	0.00	-135.49	0.00	135.49	1311.06	395.78	69116.5	948.43	0.87	-0.276	0.000	0.154
34.00	-13.64	-1.92	0.00	-131.60	0.00	131.60	1311.06	395.78	69116.5	948.43	0.99	-0.296	0.000	0.149
36.00	-13.35	-1.90	0.00	-127.76	0.00	127.76	1311.06	395.78	69116.5	948.43	1.12	-0.315	0.000	0.145
38.00	-13.06	-1.87	0.00	-123.97	0.00	123.97	1311.06	395.78	69116.5	948.43	1.26	-0.334	0.000	0.141
40.00	-12.78	-1.85	0.00	-120.23	0.00	120.23	1311.06	395.78	69116.5	948.43	1.40	-0.352	0.000	0.137
42.00	-12.49	-1.82	0.00	-116.53	0.00	116.53	1311.06	395.78	69116.5	948.43	1.55	-0.370	0.000	0.132
44.00	-12.20	-1.80	0.00	-112.89	0.00	112.89	1311.06	395.78	69116.5	948.43	1.71	-0.387	0.000	0.128
46.00	-11.91	-1.77	0.00	-109.29	0.00	109.29	1311.06	395.78	69116.5	948.43	1.88	-0.403	0.000	0.124
48.00	-11.62	-1.74	0.00	-105.75	0.00	105.75	1311.06	395.78	69116.5	948.43	2.05	-0.419	0.000	0.120
50.00	-11.34	-1.72	0.00	-102.26	0.00	102.26	1311.06	395.78	69116.5	948.43	2.23	-0.435	0.000	0.116
50.00	-11.34	-1.72	0.00	-102.26	0.00	102.26	1052.07	315.62	43955.0	624.04	2.23	-0.435	0.000	0.175
52.00	-11.10	-1.70	0.00	-98.83	0.00	98.83	1052.07	315.62	43955.0	624.04	2.41	-0.450	0.000	0.169
54.00	-10.85	-1.68	0.00	-95.44	0.00	95.44	1052.07	315.62	43955.0	624.04	2.61	-0.478	0.000	0.163
56.00	-10.61	-1.66	0.00	-92.09	0.00	92.09	1052.07	315.62	43955.0	624.04	2.81	-0.505	0.000	0.158
58.00	-10.37	-1.64	0.00	-88.78	0.00	88.78	1052.07	315.62	43955.0	624.04	3.03	-0.532	0.000	0.152
60.00	-10.13	-1.61	0.00	-85.51	0.00	85.51	1052.07	315.62	43955.0	624.04	3.26	-0.557	0.000	0.147
62.00	-9.89	-1.59	0.00	-82.28	0.00	82.28	1052.07	315.62	43955.0	624.04	3.50	-0.582	0.000	0.141
64.00	-9.65	-1.57	0.00	-79.10	0.00	79.10	1052.07	315.62	43955.0	624.04	3.75	-0.606	0.000	0.136
66.00	-9.41	-1.55	0.00	-75.96	0.00	75.96	1052.07	315.62	43955.0	624.04	4.01	-0.628	0.000	0.131
68.00	-9.17	-1.52	0.00	-72.86	0.00	72.86	1052.07	315.62	43955.0	624.04	4.27	-0.650	0.000	0.126
70.00	-8.93	-1.50	0.00	-69.82	0.00	69.82	1052.07	315.62	43955.0	624.04	4.55	-0.671	0.000	0.120
72.00	-8.69	-1.48	0.00	-66.82	0.00	66.82	1052.07	315.62	43955.0	624.04	4.84	-0.691	0.000	0.115
74.00	-8.45	-1.45	0.00	-63.87	0.00	63.87	1052.07	315.62	43955.0	624.04	5.13	-0.710	0.000	0.110
76.00	-8.21	-1.43	0.00	-60.97	0.00	60.97	1052.07	315.62	43955.0	624.04	5.43	-0.728	0.000	0.106
78.00	-7.97	-1.40	0.00	-58.12	0.00	58.12	1052.07	315.62	43955.0	624.04	5.74	-0.746	0.000	0.101
80.00	-7.74	-1.37	0.00	-55.32	0.00	55.32	1052.07	315.62	43955.0	624.04	6.06	-0.762	0.000	0.096
80.00	-7.74	-1.37	0.00	-55.32	0.00	55.32	1052.07	315.62	43955.0	624.04	6.06	-0.762	0.000	0.096
82.00	-7.50	-1.35	0.00	-52.57	0.00	52.57	1052.07	315.62	43955.0	624.04	6.38	-0.778	0.000	0.091
84.00	-7.26	-1.32	0.00	-49.87	0.00	49.87	1052.07	315.62	43955.0	624.04	6.71	-0.793	0.000	0.087
86.00	-7.02	-1.29	0.00	-47.23	0.00	47.23	1052.07	315.62	43955.0	624.04	7.04	-0.808	0.000	0.082
88.00	-6.78	-1.27	0.00	-44.64	0.00	44.64	1052.07	315.62	43955.0	624.04	7.39	-0.821	0.000	0.078

Calculated Forces

Structure: CT01493-S-SBA **Code:** EIA/TIA-222-H 8/12/2020
Site Name: North Stonington 2 CT **Exposure:** C
Height: 150.00 (ft) **Crest Height:** 0.00
Base Elev: 0.000 (ft) **Site Class:** D - Stiff Soil
Gh: 1.1 **Topography:** 1 **Struct Class:** II **Page:** 43



90.00	-6.54	-1.24	0.00	-42.11	0.00	42.11	1052.07	315.62	43955.0	624.04	7.73	-0.834	0.000	0.074
92.00	-6.30	-1.21	0.00	-39.63	0.00	39.63	1052.07	315.62	43955.0	624.04	8.08	-0.846	0.000	0.070
94.00	-6.06	-1.18	0.00	-37.21	0.00	37.21	1052.07	315.62	43955.0	624.04	8.44	-0.857	0.000	0.065
96.00	-5.82	-1.15	0.00	-34.84	0.00	34.84	1052.07	315.62	43955.0	624.04	8.80	-0.867	0.000	0.061
98.00	-5.58	-1.13	0.00	-32.53	0.00	32.53	1052.07	315.62	43955.0	624.04	9.17	-0.877	0.000	0.057
100.00	-5.34	-1.10	0.00	-30.28	0.00	30.28	1052.07	315.62	43955.0	624.04	9.54	-0.886	0.000	0.054
102.00	-5.10	-1.07	0.00	-28.09	0.00	28.09	1052.07	315.62	43955.0	624.04	9.91	-0.895	0.000	0.050
104.00	-4.86	-1.04	0.00	-25.95	0.00	25.95	1052.07	315.62	43955.0	624.04	10.29	-0.903	0.000	0.046
106.00	-4.62	-1.01	0.00	-23.88	0.00	23.88	1052.07	315.62	43955.0	624.04	10.67	-0.910	0.000	0.043
108.00	-4.38	-0.98	0.00	-21.86	0.00	21.86	1052.07	315.62	43955.0	624.04	11.05	-0.917	0.000	0.039
110.00	-4.04	-0.88	0.00	-19.90	0.00	19.90	1052.07	315.62	43955.0	624.04	11.43	-0.923	0.000	0.036
110.00	-4.04	-0.88	0.00	-19.90	0.00	19.90	759.47	227.84	14937.6	114.57	11.43	-0.923	0.000	0.179
112.00	-3.79	-0.86	0.00	-18.15	0.00	18.15	759.47	227.84	14937.6	114.57	11.82	-0.929	0.000	0.163
114.00	-3.55	-0.85	0.00	-16.42	0.00	16.42	759.47	227.84	14937.6	114.57	12.24	-1.053	0.000	0.148
116.00	-3.31	-0.84	0.00	-14.72	0.00	14.72	759.47	227.84	14937.6	114.57	12.70	-1.165	0.000	0.133
118.00	-3.07	-0.82	0.00	-13.04	0.00	13.04	759.47	227.84	14937.6	114.57	13.21	-1.265	0.000	0.118
120.00	-2.61	-0.66	0.00	-11.40	0.00	11.40	759.47	227.84	14937.6	114.57	13.76	-1.353	0.000	0.026
120.00	-2.61	-0.66	0.00	-11.40	0.00	11.40	317.71	95.31	3734.62	52.28	13.76	-1.353	0.000	0.029
121.00	-2.53	-0.65	0.00	-10.74	0.00	10.74	317.71	95.31	3734.62	52.28	14.04	-1.362	0.000	0.033
121.00	-2.53	-0.65	0.00	-10.74	0.00	10.74	317.71	95.31	3734.62	52.28	14.04	-1.362	0.000	0.033
122.00	-2.45	-0.64	0.00	-10.09	0.00	10.09	317.71	95.31	3734.62	52.28	14.33	-1.373	0.000	0.201
124.00	-2.29	-0.63	0.00	-8.81	0.00	8.81	317.71	95.31	3734.62	52.28	14.94	-1.506	0.000	0.176
126.00	-2.13	-0.61	0.00	-7.55	0.00	7.55	317.71	95.31	3734.62	52.28	15.59	-1.622	0.000	0.151
128.00	-1.64	-0.59	0.00	-6.33	0.00	6.33	317.71	95.31	3734.62	52.28	16.29	-1.720	0.000	0.126
130.00	-1.28	-0.42	0.00	-5.16	0.00	5.16	317.71	95.31	3734.62	52.28	17.03	-1.801	0.000	0.103
130.00	-1.28	-0.42	0.00	-5.16	0.00	5.16	317.71	95.31	3734.62	52.28	17.03	-1.801	0.000	0.103
132.00	-1.19	-0.40	0.00	-4.32	0.00	4.32	317.71	95.31	3734.62	52.28	17.80	-1.868	0.000	0.086
134.00	-1.09	-0.38	0.00	-3.53	0.00	3.53	317.71	95.31	3734.62	52.28	18.59	-1.923	0.000	0.071
135.00	-1.00	-0.37	0.00	-3.14	0.00	3.14	317.71	95.31	3734.62	52.28	19.00	-1.947	0.000	0.063
136.00	-0.96	-0.36	0.00	-2.77	0.00	2.77	317.71	95.31	3734.62	52.28	19.41	-1.967	0.000	0.056
138.00	-0.90	-0.35	0.00	-2.05	0.00	2.05	317.71	95.31	3734.62	52.28	20.24	-2.001	0.000	0.042
140.00	-0.62	-0.17	0.00	-1.35	0.00	1.35	317.71	95.31	3734.62	52.28	21.08	-2.025	0.000	0.028
140.00	-0.62	-0.17	0.00	-1.35	0.00	1.35	317.71	95.31	3734.62	52.28	21.08	-2.025	0.000	0.028
142.00	-0.55	-0.16	0.00	-1.01	0.00	1.01	317.71	95.31	3734.62	52.28	21.93	-2.042	0.000	0.021
144.00	-0.48	-0.14	0.00	-0.69	0.00	0.69	317.71	95.31	3734.62	52.28	22.79	-2.054	0.000	0.015
146.00	-0.41	-0.12	0.00	-0.42	0.00	0.42	317.71	95.31	3734.62	52.28	23.65	-2.062	0.000	0.009
147.00	-0.19	-0.10	0.00	-0.30	0.00	0.30	317.71	95.31	3734.62	52.28	24.09	-2.064	0.000	0.006
148.00	-0.16	-0.10	0.00	-0.19	0.00	0.19	317.71	95.31	3734.62	52.28	24.52	-2.066	0.000	0.004
150.00	0.00	-0.09	0.00	0.00	0.00	0.00	317.71	95.31	3734.62	52.28	25.38	-2.067	0.000	0.000

Final Analysis Summary

Structure: CT01493-S-SBA	Code: EIA/TIA-222-H	8/12/2020
Site Name: North Stonington 2 CT	Exposure: C	
Height: 150.00 (ft)	Crest Height: 0.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 1	Struct Class: II



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Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.0W 129 mph Wind	11.6	0.00	22.82	0.00	0.00	999.82
0.9D + 1.0W 129 mph Wind	11.6	0.00	17.11	0.00	0.00	984.41
1.2D + 1.0Di + 1.0Wi 50 mph Wind	3.5	0.00	27.48	0.00	0.00	301.04
1.2D + 1.0Ev + 1.0Eh	0.3	0.00	23.60	0.00	0.00	31.07
0.9D + 1.0Ev + 1.0Eh	0.3	0.00	17.85	0.00	0.00	30.57
1.0D + 1.0W 60 mph Wind	2.3	0.00	19.02	0.00	0.00	203.54

Max Stresses

Load Case	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Elev (ft)	Stress Ratio
1.2D + 1.0W 129 mph Wind	-2.64	-2.90	0.00	-45.82	0.00	-45.82	317.71	95.31	3734.62	52.28	122.00	0.886
0.9D + 1.0W 129 mph Wind	-1.91	-2.81	0.00	-44.34	0.00	-44.34	317.71	95.31	3734.62	52.28	122.00	0.855
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-4.27	-0.95	0.00	-17.43	0.00	-17.43	317.71	95.31	3734.62	52.28	122.00	0.347
1.2D + 1.0Ev + 1.0Eh	-19.44	-0.28	0.00	-25.58	0.00	-25.58	1490.10	475.94	99948.2	1339.68	20.00	0.042
0.9D + 1.0Ev + 1.0Eh	-14.70	-0.28	0.00	-25.10	0.00	-25.10	1490.10	475.94	99948.2	1339.68	20.00	0.038
1.0D + 1.0W 60 mph Wind	-2.45	-0.64	0.00	-10.09	0.00	-10.09	317.71	95.31	3734.62	52.28	122.00	0.201

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
120.0	121.0	(3) PLT-5/8"x6"STFNR	245.2	0.74	25.3	45.6	25.3	2	2	49.2	25.3	2	2	49.17	121.1	121.50	0.406

	Monopole Mat Foundation Design		Date
			8/12/2020
	Customer Name:	AT&T	EIA/TIA Standard:
	Site Name:	North Stonington 2 CT	Structure Height (Ft.):
	Site Number:	CT01493-S-SBA	Engineer Name:
Engr. Number:	94195	Engineer Login ID:	

Foundation Info Obtained from:

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):	22.8	Shear Force (Kips):	11.6
Uplift Force (Kips):	0.0	Moment (Kips-ft):	999.8

Allowable overstress %: 5.0%

Foundation Geometries:

		Mods required -Yes/No ?:	No
Diameter of Pier (ft.):	4.5	Depth of Base BG (ft.):	5.0
Pier Height A. G. (ft.):	0.50	Thickness of Pad (ft):	2.50
Length of Pad (ft.):	13.5	Width of Pad (ft.):	13.5

Final Length of pad (ft)	13.5	Final width of pad (ft):	13.5
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Material Properties and Rebar Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	7	Tie / Stirrup Size #:	5	
Qty. of Vertical Rebars:	24	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):	17	Qty. of Rebar in Pad (W):	17
---------------------------	----	---------------------------	----

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	17	Qty. of Rebar in Pad (W):	17
---------------------------	----	---------------------------	----

Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

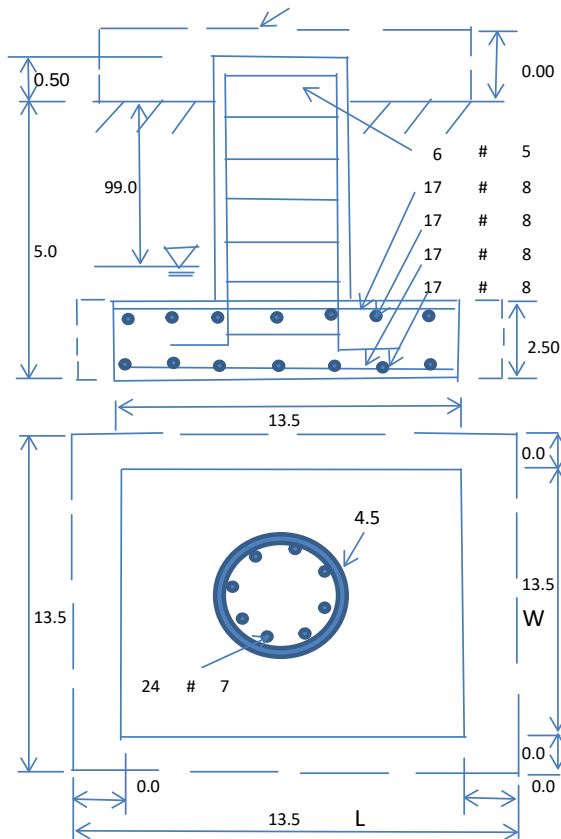
Soil Unit Weight (pcf):	135.0	Soil Buoyant Weight:	50.0	Pcf	
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:
Ultimate Bearing Pressure (psf):	30000	Ultimate Skin Friction:	225	Psf	Angle from Botm of Pad:
Consider Friction for O.T.M. (Y/N):	Yes	Consider Friction for bearing (Y/N):	No		Angle from Botm of Pad:
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.):	415.86	Total Dry Soil Weight (Kips):	56.14
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	56.14	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	503.34	Total Dry Concrete Weight (Kips):	75.50
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	75.50	Total Vertical Load on Base (Kips):	154.44

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	6189	< Allowable Factored Soil Bearing (psf):	22500	0.28	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	1030.5	> Design Factored Momont (kips-ft):	1009	0.98	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.02	OK! Please notice max. e > 0.45 W			



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):

0.60

Tie / Stirrup Area (sq. in./each):

0.31

Calculated Moment Capacity (Mn,Kips-Ft):

1475.8

>

Design Factored Moment (Mu, Kips-F

1034.6

0.70

OK!

Calculated Shear Capacity (Kips):

322.1

>

Design Factored Shear (Kips):

11.6

0.04

OK!

Calculated Tension Capacity (Tn, Kips):

777.6

>

Design Factored Tension (Tu Kips):

0.0

0.00

OK!

Calculated Compression Capacity (Pn, Kips):

3017.7

>

Design Factored Axial Load (Pu Kips):

22.8

0.01

OK!

Moment & Axial Strength Combination:

0.70

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):

352.7

>

One-Way Factored Shear (L-D. Kips):

92.0

0.26

OK!

One-Way Design Shear Capacity (W-Direction, Kips):

352.7

>

One-Way Factored Shear (W-D., Kips)

92.0

0.26

OK!

One-Way Design Shear Capacity (Corner-Corner. Kips):

265.8

>

One-Way Factored Shear (C-C, Kips):

89.8

0.34

OK!

Lower Steel Pad Reinforcement Ratio (L-Direct.):

0.0031

OK!

Lower Steel Pad Reinf. Ratio (W-Direc

0.0031

Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):

1542.6

>

Moment at Bottom (L-Dir. K-Ft):

291.7

0.19

OK!

Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):

1542.6

>

Moment at Bottom (W-Dir. K-Ft):

291.7

0.19

OK!

Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):

2155.8

>

Moment at Bottom (C-C Dir. K-Ft):

412.5

0.19

OK!

Upper Steel Pad Reinforcement Ratio (L-Direct.):

0.0031

OK!

Upper Steel Reinf. Ratio (W-Dir.):

0.0031

Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):

1542.6

>

Moment at the top (L-Dir K-Ft):

105.8

0.07

OK!

Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):

1542.6

>

Moment at the top (W-Dir K-Ft):

105.8

0.07

OK!

Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):

2155.8

>

Moment at the top (C-C Dir. K-Ft):

108.3

0.05

OK!

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

Moment transferred by punching shear:

399.9

k-ft.

Max. factored shear stress v_{u_CD} :

3.2

Psi

Max. factored shear stress v_{u_AB} :

8.4

Psi

Factored shear Strength ϕv_n :

164.3

Psi

Max. factored shear stress v_u :

8.4

Psi

Check Usage of Punching Shear Capacity:

0.05

OK!

MODIFICATION AND DESIGN
DRAWINGS FOR AN EXISTING
150' PIROD MONOPOLE TOWER

PROPOSED CARRIER: AT&T

SITE: CT01493-S-SBA / NORTH STONINGTON 2 CT
COORDINATES (LATITUDE: 41.353417°, LONGITUDE: -71.887000°)

CONSTRUCTION CLASS

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

NOTE:

1. THE MODIFICATION DRAWINGS ARE BASED ON THE
TES PROJECT NO. 94174, DATED 06/03/20.

SHEET	SHEET TITLE	REV
T-1	TITLE SHEET	0
BOM	BILL OF MATERIALS	0
GN-1	GENERAL NOTES	0
A-1	TOWER PROFILE	0

- PER THE INTERNATIONAL BUILDING CODE THIS STRUCTURE IS CLASSIFIED AS:
- CONSTRUCTION TYPE II-B (TABLE 601)
 - GROUP U OCCUPANCY (SECTION 312.1 UNOCCUPIED TOWER SITE)



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



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

TES JOB NO:
94195

CUSTOMER SITE NO:
CT01493-S-SBA
CUSTOMER SITE NAME:
NORTH STONINGTON 2 CT
811 STONINGTON ROAD
STONINGTON, CT 06378



DRAWN BY: CH	CHECKED BY: SH/AD		
REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	CH	08/19/20
△			
△			
△			

SHEET TITLE:

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T-1	0

[illegible]

Tower Engineering Solutions

1320 GREENWAY DRIVE, SUITE 600
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PHONE: (972) 483-0607



5900 BROKEN SOUND PARKWAY, NW
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TES JOB NO:

94195

CUSTOMER SITE NO:

CT01493-S-SBA

CUSTOMER SITE NAME:

NORTH STONINGTON 2 CT

811 STONINGTON ROAD
STONINGTON, CT 06378

DRAWN BY: CH		CHECKED BY: SH/AD	
REV.	DESCRIPTION	BY	DATE
①	FIRST ISSUE	CH	08/19/20
△			
△			
△			
△			

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SHEET NUMBER:

BOM

RFV #:

0

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH THE ANSI/TIA-222-H, ANSI/ASSP A10.48, 2018 CONNECTICUT STATE BUILDING CODE AND ANY OTHER GOVERNING BUILDING CODES AND OSHA SAFETY REGULATIONS.
2. ALL WORK INDICATED ON THE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TELECOMMUNICATIONS TOWER, POLE AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN AND FABRICATION OF ALL MISCELLANEOUS PARTS (SUCH AS SHIMS), TEMPORARY SUPPORTS, AND GUYINGS, ETC., PER ANSI/ASSP A10.48, TO COMPLETE THE ASSEMBLY AS SHOWN IN THE DRAWINGS.
4. CONTRACTOR SHALL PROCEED WITH THE INSTALLATION WORK CAREFULLY SO THE WORK WILL NOT DAMAGE ANY EXISTING CABLE, EQUIPMENT OR THE STRUCTURE.
5. THE USE OF GAS TORCH OR WELDER, ARE NOT ALLOWED ON ANY TOWER STRUCTURE WITHOUT THE CONSENT OF THE TOWER OWNER.
6. GENERALLY THE CONTRACTOR IS RESPONSIBLE TO CONDUCT AN ONSITE VISIT SURVEY OF THE JOB SITE AFTER AWARD, AND REPORT ANY ISSUES WITH THE SITE TO **TES** BEFORE PROCEEDING CONSTRUCTION.

FABRICATION

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

WELDING

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

BOLTED ASSEMBLIES AND TIGHTENING OF CONNECTIONS

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

VERIFICATION AND INSPECTION

1. IF APPLICABLE, VERIFICATION INSPECTION TO BE PERFORMED SHALL BE IN ACCORDANCE TO IBC-2018 SECTION 1705.2 FOR STEEL CONSTRUCTION & TABLE 1705.3 FOR CONCRETE CONSTRUCTION.

POST INSTALLED EPOXY INJECTED ANCHOR BOLTS:

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

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

BOLT LENGTH ^f	DISPOSITION OF OUTER FACE OF BOLTED PARTS		
	BOTH FACES NORMAL TO BOLT AXIS	ONE FACE NORMAL TO BOLT AXIS, OTHER SLOPED NOT MORE THAN 1:20 ^d	BOTH FACES SLOPED NOT MORE THAN 1:20 FROM NORMAL TO BOLT AXIS ^d
NOT MORE THAN 4d _b	1/3 TURN	1/2 TURN	2/3 TURN
MORE THAN 4d _b BUT NOT MORE THAN 8d _b	1/2 TURN	2/3 TURN	5/6 TURN
MORE THAN 8d _b BUT NOT MORE THAN 12d _b	2/3 TURN	5/6 TURN	1 TURN
^a NUT ROTATION IS RELATIVE TO BOLT REGARDLESS OF THE ELEMENT (NUT OR BOLT) BEING TURNED. FOR REQUIRED NUT ROTATIONS OF 1/2 TURN AND LESS, THE TOLERANCE IS PLUS OR MINUS 30 DEGREES; FOR REQUIRED NUT ROTATIONS OF 2/3 TURN AND MORE, THE TOLERANCE IS PLUS OR MINUS 45 DEGREES. ^b APPLICABLE ONLY TO JOINTS IN WHICH ALL MATERIAL WITHIN THE GRIP IS STEEL. ^c WHEN THE BOLT LENGTH EXCEEDS 12d_b, THE REQUIRED NUT ROTATION SHALL BE DETERMINED BY ACTUAL TESTING IN A SUITABLE TENSION CALIBRATOR THAT SIMULATES THE CONDITIONS OF SOLIDLY FITTING STEEL. ^d BEVELED WASHER NOT USED.			

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

INSTALLATION TORQUE REQUIRED FOR HOLLO BOLTS AND AJAX BOLTS:

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

FIELD HOT WORK PLAN NOTES:

FOLLOWING GUIDELINES SHALL BE COMPLIED WITH:

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



Tower Engineering Solutions

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



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

TES JOB NO:
94195

CUSTOMER SITE NO:
CT01493-S-SBA

CUSTOMER SITE NAME:
NORTH STONINGTON 2 CT

811 STONINGTON ROAD
STONINGTON, CT 06378

DRAWN BY: CH		CHECKED BY: SH/AD	
REV.	DESCRIPTION	BY	DATE
△	FIRST ISSUE	CH	08/19/20
△			
△			
△			
△			

SHEET TITLE:

GENERAL NOTES

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SHEET NUMBER:	REV #:
GN-1	0

NOTES:

1. TEMPORARILY RELOCATE ANY EXISTING COAX ATTACHED TO THE MONOPOLE AND ANY OTHER MEMBERS WHERE OBSTRUCTION WITH THE PROPOSED MODIFICATION MAY OCCUR.

SCOPE OF WORK

- 1 REPLACE (2) EXISTING 24" DIA. X $\pm 10'$, (1) EXISTING 30" DIA. X $\pm 10'$ AND (1) EXISTING 34" DIA. X $\pm 10'$ CANISTER SHROUDS FROM $\pm 110'$ TO $\pm 150'$ ELEV. WITH NEW (4) 40" DIA. X $\pm 10'$ SMOOTH ROUND, MULTI PART CANISTER W/ EXPANSION KITS AND TOP CAP. (TO BE DESIGNED AND PROVIDED BY OTHERS).
NOTE: NEW CANISTER SHROUD COLOR SHOULD MATCH EXISTING TOWER COLOR.
- 2 INSTALL NEW TRANSITION CONE, PROVIDED BY OTHERS.
- 3 REMOVE EXISTING FLAG TRUCK & BALL
- 4 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEAN-UP, REMOVAL AND DISPOSAL OF EXCESS MATERIALS USED AND REMOVED FROM THE STRUCTURE AT THE COMPLETION OF THE PROJECT.

INSTALLATION NOTE:

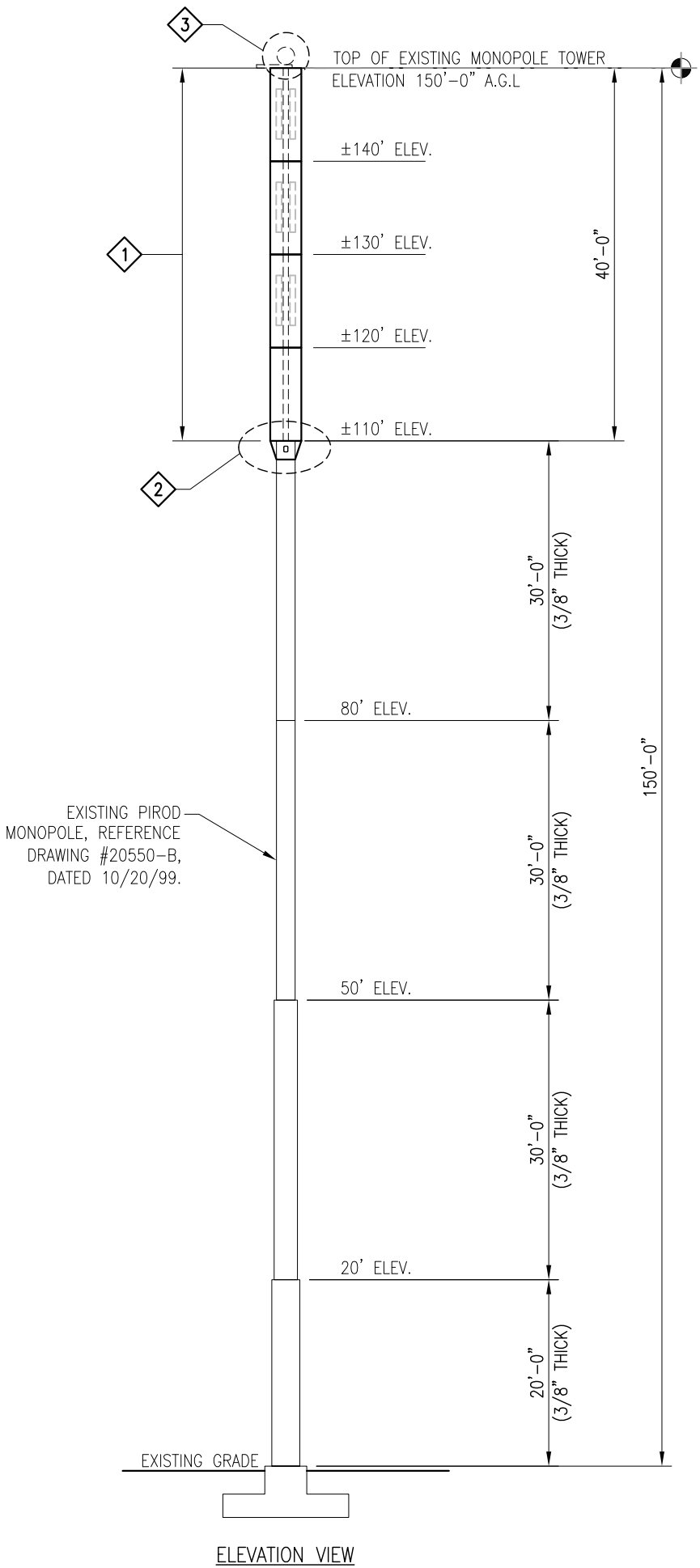
CONTRACTOR TO MAINTAIN THE VERTICAL PLUMB OF THE POLE WHILE INSTALLING THE NEW CANISTER SHROUDS.



PHOTO 1
FOUNDATION



PHOTO 2
TOWER PROFILE



Tower Engineering Solutions

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



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

TES JOB NO:
94195

CUSTOMER SITE NO:
CT01493-S-SBA
CUSTOMER SITE NAME:
NORTH STONINGTON 2 CT
811 STONINGTON ROAD
STONINGTON, CT 06378

DRAWN BY: CH CHECKED BY: SH/AD

REV.	DESCRIPTION	BY	DATE
1	FIRST ISSUE	CH	08/19/20

SHEET TITLE:

TOWER PROFILE

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SHEET NUMBER:

A-1

REV #:

0



Town of Stonington, CT

Property Listing Report

Map Block Lot

75-1-2A

Building #

1

Section #

1

Account

00490300

Property Information

Property Location	811 STONINGTON RD
Owner	MCCLELLAN PHILLIP C
Co-Owner	
Mailing Address	C/O SBA TOWERS INC BOCA RATON FL 33487-1307
Land Use	430V TEL X STA M-00
Land Class	I
Zoning Code	RR-80
Census Tract	7052

Street Index	0035
Acreage	3.3
Utilities	
Lot Setting/Desc	
Survey Map #	NA
School District	
Fire District	Wequetequock
Trash Day	W
Polling Place (District)	1

Primary Construction Details

Year Built	0
Stories	
Building Style	UNKNOWN
Building Use	Vacant
Building Condition	
Occupancy	
Extra Fixtures	
Bath Style	NA
Kitchen Style	NA
AC Type	
Heating Type	
Heating Fuel	

Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Total Rooms	0
Roof Style	
Roof Cover	
Interior Floors 1	
Interior Floors 2	
Exterior Walls	
Exterior Walls 2	NA
Interior Walls	
Interior Walls 2	NA

(*Industrial / Commercial Details)

Building Desc.	TEL X STA M-00
Building Grade	
Heat / AC	
Frame Type	
Baths / Plumbing	
Ceiling / Wall	
Rooms / Prtns	
Wall Height	
First Floor Use	

Photo



Sketch





Town of Stonington, CT

Property Listing Report

Map Block Lot

75-1-2A

Building # 1

Section # 1

Account

00490300

Valuation Summary (Assessed value = 70% of Appraised Value)

Item	Appraised	Assessed	Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Buildings	0	0			
Extras	0	0			
Improvements					
Outbuildings	193000	135100			
Land	109500	76700			
Total	302500	211800			

Outbuilding and Extra Features

Type	Description
CELL TOWER	1.00 UNIT
SHELTER	1.00 UNIT
FENCE-6' CHAIN	192.00 L.F.
LIGHTS-IN W/PL	1.00 UNITS

Total Area	0	0

Sales History

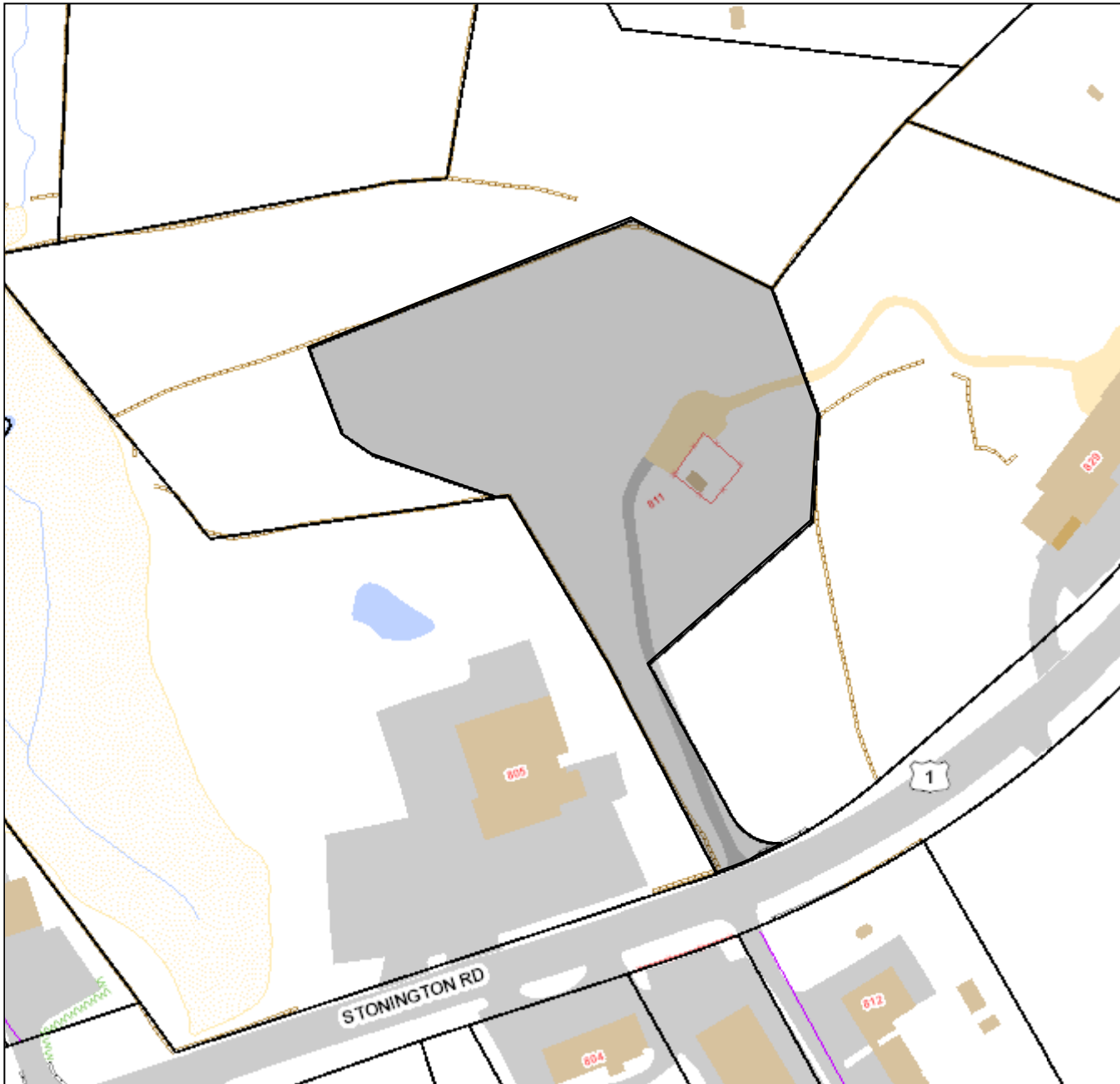
Owner of Record	Book/ Page	Sale Date	Sale Price
MCCLELLAN PHILLIP C	0589/1129	10/24/2005	365500
MCCLELLAN PHILLIP C	0589/1125	10/24/2005	0
MCCLELLAN PHILLIP C	0449/0686	4/27/2000	0
MCCLELLAN PHILLIP C	0406/0135	7/8/1997	30000
LOPRESTO PHILIP JR & GARDNER	0406/0129	7/8/1997	0
LOPRESTO PHILIP EST OF	0384/0781	10/10/1995	0
LOPRESTO PHILIP EST OF	0355/1003	6/1/1993	0
LOPRESTO PHILIP	0221/0662	12/28/1978	0

Town of Stonington

Geographic Information System (GIS)

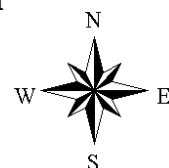


Date Printed: 5/15/2020

**MAP DISCLAIMER - NOTICE OF LIABILITY**

This map is for assessment purposes only. It is not for legal description or conveyances. All information is subject to verification by any user. The Town of Stonington and its mapping contractors assume no legal responsibility for the information contained herein.

Approximate Scale: 1 inch = 150 feet



ZONING PERMIT

TOWN OF STONINGTON PLANNING & ZONING COMMISSION

Date Issued: October 20, 1999

Permit No.: #99-334 ZON

NAME OF PROPERTY OWNER: PHIL McCLELLAN, OWNER; SBA INC., APPLICANT

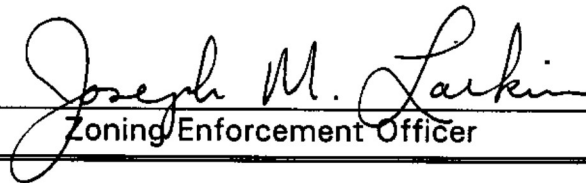
LOCATION OF PROPERTY: 811 STONINGTON ROAD, STONINGTON

MAP: 75 BLOCK: 1 LOT: 2A ZONE: GC-60

PERMITTED ACTIVITY: INSTALLATION OF A 150' FLAGPOLE ANTENNA TOWER AND
50' X 50' EQUIPMENT SPACE.

STIPULATIONS OR SPECIAL CONDITIONS: AS PER PLANNING AND ZONING
COMMISSION APPROVAL.

BY: _____


Zoning Enforcement Officer

**CONSTRUCTION MAY NOT PROCEED UNTIL
A BUILDING PERMIT HAS BEEN OBTAINED**

**THIS PERMIT MUST BE PROMINENTLY POSTED
ON THE PREMISES**

TOWN OF STONINGTON
The Planning and Zoning Commission
152 Elm Street, P.O. Box 352
Stonington, Connecticut 06378
(860) 535-5095

September 7, 1999

Sprint Spectrum LP
9 Barnes Industrial Rd.
Wallingford, CT 06492

Dear Sir:

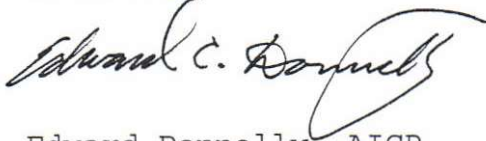
The Planning and Zoning Commission at their meeting of September 2, 1999 voted to APPROVE your application - #PZ9937SPA **SPRINT SPECTRUM LP** - Application for the construction of a 150 ft. monopole telecommunications tower. Property located at 49 Stonington Rd. Assessor's Map 75 Block 1 Lot 2A Zone GC-60. Your application was approved with the following stipulations:

- 1) General cleanup of debris and removal of any fuel tanks of any type from the site prior to any construction beginning on the property.
- 2) The corrections shall be made on the final site plan as noted in the Planning Director's memo dated 9/1/99
- 3) The illegal storage of vehicles and heavy equipment shall cease until site plan approval for the property is obtained from the Commission.

Please schedule an appointment with the Planning Office to review the final plans which have incorporated all the above stipulations and/or changes and have been listed on the site plan. Please bring to the Planning and Zoning Office for the Chairman's signature one (1) set of blueprints. If you require a signed copy of the site plan for your files, please provide the Planning office with the additional copy.

If you have any questions, please feel free to contact the Planning Office.

Sincerely,



Edward Donnelly, AICP
Planning Director



SBA Communications Corporation
8051 Congress Avenue
Boca Raton, FL 33487-1307

T + 561.995.7670
F + 561.995.7626

sbasite.com

LETTER OF AUTHORIZATION

SBA Site ID: CT01493-S, North Stonington 2 CT

Property Located at: 811 Stonington Road, Stonington, CT, 06378-2519

THE CITY/COUNTY OF: Stonington / New London

APPLICATION FOR ZONING/USE/BUILDING PERMIT

This letter authorizes AT&T and its authorized agents to file for all necessary zoning, planning and building permits (local, state and federal) for the purposes of installing, operating and maintaining a telecommunications facility on the existing tower on the property referenced above on behalf of Phillip McClellan.

All approval conditions that may be granted to AT&T in connection with above referenced facility relating to this specific application are the sole responsibility of AT&T.

SBA Towers, LLC

Jason Silberstein

Executive VP, Site Leasing

Date: 6/16/2020

 UNITED STATES POSTAL SERVICE®		Click-N-Ship®	
P	usps.com \$7.75 US POSTAGE Flat Rate Env	9405 5036 9930 0013 5620 44 0077 5000 0010 6378	
		Mailed from 06450 062S0000000101	
PRIORITY MAIL 1-DAY™			
HOLLIS REDDING SAI COMMUNICATIONS, INC 39 WESTVIEW DR MERIDEN CT 06450-4723		Expected Delivery Date: 09/04/20 0005	
Carrier -- Leave if No Response C001			
SHIP TO: HON DANIELLE CHESBROUGH TOWN OF STONINGTON FIRST SELECTMEN'S 152 ELM ST STONINGTON CT 06378-1139			
USPS TRACKING #			
9405 5036 9930 0013 5620 44			
Electronic Rate Approved #038555749			

Cut on dotted line.

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P	usps.com \$7.75 US POSTAGE Flat Rate Env	9405 5036 9930 0013 5620 51 0077 5000 0010 6378	
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PRIORITY MAIL 1-DAY™			
HOLLIS REDDING SAI COMMUNICATIONS, INC 39 WESTVIEW DR MERIDEN CT 06450-4723		Expected Delivery Date: 09/04/20 0005	
Carrier -- Leave if No Response C001			
SHIP TO: MR. KEITH AICP, CZEI TOWN OF STONINGTON TOWN PLANNING DEPT 152 ELM ST STONINGTON CT 06378-1139			
USPS TRACKING #			
9405 5036 9930 0013 5620 51			
Electronic Rate Approved #038555749			

 UNITED STATES POSTAL SERVICE®		Click-N-Ship®	
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	09/03/2020		
PRIORITY MAIL 1-DAY™		Mailed from 06450 062S0000000309	
HOLLIS REDDING SAI COMMUNICATIONS, INC 39 WESTVIEW DR MERIDEN CT 06450-4723		Expected Delivery Date: 09/04/20 0005	
Carrier -- Leave if No Response R012			
SHIP TO: MR. PHILLIP C MCCLELLAN 811 STONINGTON RD STONINGTON CT 06378			
USPS TRACKING #  9405 5036 9930 0013 5620 68			
Electronic Rate Approved #038555749			

Cut on dotted line.

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	09/03/2020		
PRIORITY MAIL 1-DAY™		Mailed from 06450 062S00000001311	
HOLLIS REDDING SAI COMMUNICATIONS, INC 39 WESTVIEW DR MERIDEN CT 06450-4723		Expected Delivery Date: 09/04/20 0005	
Carrier -- Leave if No Response C006			
SHIP TO: MELANIE BACHMAN EXEC DIRECTOR CT SITING COUNCIL 10 FRANKLIN SQ NEW BRITAIN CT 06051-2655			
USPS TRACKING #  9405 5036 9930 0013 5620 37			
Electronic Rate Approved #038555749			

Hollis Redding

To: Michael McNamara
Subject: AT&T Wireless CSC Exempt Modification Filing 811 Stonington Road, Stonington, CT
SBA Site #CT01493 North Stonington 2 CT

Mike-

Attached please find an Exempt Modification which will be filed with the CT Siting Council on September 3, 2020. Thank you. Hollis

Hollis M. Redding



SAI Communications LLC
Mobile: 860-834-6964
hredding@saigrp.com