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

July 27, 2021

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

Application for Tower Share
220 Winthrop Rd., Deep River, CT
Latitude: 41.365872
Longitude: -72.474849
Dish Wireless #: BOBDL00135A

Dear Ms. Bachman:

Please accept this letter as notification pursuant to the Connecticut General Statutes § 16-50aa and R.C.S.A § 16-50j-88 of Dish Wireless, LLC's Application for Tower Sharing at the existing 180-foot Monopole Tower at **220 Winthrop Rd., Deep River, CT.**

- **The new antennas would support 5G services and would be installed at the 140-foot level of the tower.**

Per the requirements under R.C.S.A §16-50j-89 please find the following statements in support of Dish Wireless' Application:

1. Facility and Proposed Modifications

   A. Existing Facility and Appurtenances

   - This facility was initially approved by the Town of Deep River under Permit# 98-5-143 on August 24, 1998 for the erection of a communications tower, which permit includes electrical work. The Town of Deep River later approved a Certificate of Occupancy and Zoning Compliance under Building Permit # 00-1-238, on April 28, 2011.
   - Latitude / Longitude: 41.365872 / -72.474849
   - Height of Tower: 180'
   - Owned/operated by: SBA 2012 TC Assets, LLC
   - Property Owner: The Town of Deep River
   - Size/Components of existing equipment compound:

- 40’5” x 49’10” fenced compound with 12’ wide chain link swing gate containing:
    - Monopole [center of compound]
    - Verizon 12’x20’ Equipment Shelter [northwest of monopole w/in compound]
    - Verizon generator on 3’x3’ pad [northeast corner of monopole w/in compound]
    - Verizon vertical propane tank [southeast corner of monopole w/in compound]
    - AT&T 6’x11’ Equipment Shelter [east of monopole w/in compound]
    - T-Mobile 5’x8’ Equipment Shelter [southeast of monopole w/in compound]
    - Sprint 10’x18’ Equipment Shelter [southwest of monopole w/in compound]
    - Existing 5’x8’ concrete pad [south of monopole w/in compound]

- Components of existing tower:
    - Verizon:
        - 178’
            - (6) JMA MX06FR0660-03 - Panel Antennas
            - (3) Samsung B5/B13 RRH BR04C
            - (3) Samsung B2/B66A RRH BR049
            - (1) Raycap RRFDS-6624-PF48
            - (3) Platform w/Handrails 91900314
            - (2) 1-5/8” Hybrid
    - Sprint Nextel:
        - 166’
            - (3) RFS APXVTM14-C-I20 – Panel Antennas
            - (3) Commscope NNVV-65B-R4 – Panel Antennas
            - (3) ALU 1900 MHz
            - (6) ALU 800 MHz
            - (3) ALU TD-RRH8X20-5
            - Platform w/Handrails + SitePro PRK-1245L + Handrail kit + SitePro PRK-SFS-H-L
    - T-Mobile:
        - 160’
            - (3) EMS-RR90-17-02VDPL2/-R – Panel Antennas
            - (3) RFS-APXVAARR24_43-U-NA20 – Panel Antennas
            - (3) Ericsson KRY 112 489/2 – TMA
            - (3) Ericsson KRY 112/144/2 – TMA
            - (3) Ericsson Radio 4449 B71 + B12 – RRU
            - (3) T-Arms w/Reinforcements
            - (12) 1-1/4” coax
            - (1) 1-5/8” Fiber
    - AT&T:
        - 150’
            - (3) Powerwave 7770
            - (1) Commscope SBNHH-1D65A
            - (2) Cci HPA-65R-BUU-H6
            - (1) Cci DMP65R-BU4DA
            - (2) Cci DMP65R-BU6DA

- (6) Pwerwave LGP21401
- (3) Ericsson RRUS 8843 B2 B66A
- (3) Ericsson RRUS 4449 B5/B12
- (1) Raycap DC-6-48-60-18-8F
- Low Profile platform w/Handrail Kit HRK-12
- (12) 1-1/4" coax
- (2) 1" DC
- (1) 0.39" Fiber

B. Nature and Extent of Proposed Modifications

Dish Wireless proposes to install (3) panel antennas at the 140' level of the existing 180'-foot Monopole Tower and occupy a ground lease area of 5'x7' within the existing 40'5" x 49'10" fenced compound. Dish Wireless' full proposed scope of work is as follows:

Remove:

- N/A

Remove and Replace:

- N/A

Install:
Tower:
At 140':

(3) (3) JMA Wirelss MX08FR0665-21 – 2100 MHz - Panel Antennas
(3) Fujitsu TA08025-B605 RRU
(3) Fujitsu TA08025-B604 RRU
(1) Raycap RDIDC-9181-PF-48 OVP
(1) Platform w/HRK SitePro1 SNP8HR-3XX
(1) 1.75" Hybrid

Ground (within existing compound):

- Generator plug (no generator being proposed)
- GPS unit
- Power protective equipment
- H-Frame
- Safety switch space (if required)
- 200AMP meter socket
- Telco Fiber enclosure
- Fiber ND
- Equipment platform
- Equipment cabinet
- 5'x7' pad
- 15'1" L x 12" W Ice bridge
- 2' 7" Ice bridge

Existing Equipment to Remain: N/A

C. This Proposal is technically, legally, environmentally, and economically feasible and meets public safety concerns per Connecticut General Statute Section 16-50aa.

This facility was initially approved by the Town of Deep River under Permit# 98-5-143 on August 24, 1998 for the erection of a communications tower, which permit includes electrical work. The Town of Deep River later approved a Certificate of Occupancy and Zoning Compliance under Building Permit # 00-1-238, on April 28, 2011. There were no stipulations set forth in either approval. Four carriers currently share space on the tower. If approved, Dish Wireless would become the fifth carrier on the tower.

The proposed collocation meets with all legal and technical requirements. This Application contains all required information and statements per R.C.S.A §16-50j-89 and the proposed installation has been drafted per current code, and studied with regard to structural feasibility and RF emissions output. Drawings and Reports are attached. Dish Wireless' proposed collocation presents no known material changes to environmental conditions from those as documented in the Council's original Findings of Fact and presents no known public safety concerns.

2. Engineering Drawings per the requirements under R.C.S.A. §16-50j-89 are enclosed herewith.

3. Engineering and Structural Analysis per the requirements under R.C.S.A. §16-50j-89 is enclosed herewith.

4. Engineering and Mount Analysis per the requirements under R.C.S.A. §16-50j-89 is enclosed herewith.

5. A Letter from SBA, as Owner of the Facility, agreeing to the proposed shared use of the facility, is enclosed herewith.

6. With regard to any potential environmental impact:

   A. Dish Wireless' collocation will not have any significant adverse visual impact on the surrounding areas. The antennas should result in only marginal additional equipment visibility from areas that already have views of the existing tower. The proposed work would not require any Federal Aviation Administration obstruction marking or lighting.

   B. The proposed collocation does not affect or alter the existing site with regard to wetlands, water resources or air quality. National Wetlands Inventory Maps indicated that the site was not within the 100 year floor zone.

The proposed work is not thought to have any substantial adverse environmental impact. Public Need for the additional coverage outweighs any minor environmental effects that would result from the construction, operation, and maintenance of the proposed collocation.

7. The operation of Dish Wireless' new antennas will not increase the total radio frequency electromagnetic power density at the site to a level at or above the applicable standards. The anticipated Maximum Composite contributions from the Dish Wireless facility are only 1.32% of the allowable FCC established general public limit. The anticipated composite MPE value for this site assuming all carriers present is 16.29% of the allowable FCC established general public limit sampled at the ground level. FCC guidelines state that if a site is to be out of compliance (over allowable thresholds), the carriers over 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold per the federal government. A Power Density / RF Report per the requirements under R.C.S.A. §16-50j-89 is enclosed herewith.

8. Per the Connecticut Siting Council's COVID 19 Guidelines, one original hard copy of this Tower Share Application is being submitted, along with check in the amount of $625 for the filing fee per Conn. Gen. Stat. §4-189j; Regs., Conn. State Agencies §16-50v-1a.

    A. A copy of this Application and all attachments is being sent to:
        i. The Town of Deep River's First Selectman, Angus L. McDonald, Jr
        ii. The Town of Deep River's Planning & Zoning Chair, Anthony R. Bolduc
        iii. Separate notice is not being sent to tower owner, as it belongs to SBA, or the Property Owner as it is owned by the Town of Deep River.

Please note, additionally: the planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. §16.50j-72(b)(2).

1. The proposed modifications will not result in an increase in the height of the existing structure.
2. The proposed modification will not require the extension of the site boundary.
3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.
5. The proposed modification will not cause a significant change or alteration in the physical or environmental characteristics of the site.
6. The existing structure and its foundation can support the proposed loading.

Dish Wireless respectfully submits for the Council's review and approval this Application for Tower Share.

Sincerely,

G. Scott Shepherd
Site Development Specialist II
SBA COMMUNICATIONS CORPORATION
134 Flanders Rd., Suite 125
Westborough, MA 01581
508.251.0720 x3804 + T
508.366.2610 + F
508.868.6000 + C
GShepherd@sbasite.com

Attachments

cc: Angus L. McDonald, Jr., First Selectman / with attachments
Deep River Town Hall, 174 Main St., Deep River, CT 06417
Anthony R. Bolduc, Planning & Zoning Chair / with attachments
Deep River Town Hall, 174 Main St., Deep River, CT 06417

EXHIBIT LIST

Exhibit 1	Copy of Check	x
Exhibit 2	Letter of Intent to Allow Shared Use of the Existing SBA Telecommunications Site	X
Exhibit 3	Notification Receipts	x
Exhibit 4	Property Card	x
Exhibit 5	Property Map	x
Exhibit 6	Original Zoning Approval	Building Permit# 98-5-143 8/24/98
Exhibit 7	EME Report	EBI Consulting 7/19/21
Exhibit 8	Structural Analysis	TES 5/6/21
Exhibit 9	Mount Analysis	B+T GRP 5/13/21
Exhibit 10	Construction Drawings	B+T GRP 6/21/21
Exhibit 11	Site Sketch (ground)	SBA 4/7/21

EXHIBIT 1

Copy of Check

EXHIBIT 2
Letter of Intent

July 27, 2021

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

RE: **Notice of Intent to Allow Shared Use of the Existing SBA Telecommunications Site**
Location: **220 Winthrop Rd., Deep River, CT**
Dish Wireless Site No: BOBDL00135A
SBA Site No: CT46130-A

Dear Ms. Bachman:

Please let the following serve as Evidence of Intent to allow T-Mobile's shared use of the existing SBA telecommunications site at **220 Winthrop Rd., Deep River, CT**.

SBA 2012 TC Assets, LLC ("Owner") and Dish Wireless ("Tenant") are entering into a Site Lease Agreement. Tenant will be provided ground space within the existing site compound for its base station equipment and space at the height of 140' for antennas and associated equipment.

Thank you,

Rick Woods
Site Development Manager
SBA COMMUNICATIONS CORPORATION
134 Flanders Road, Suite 125
Westboro, MA 01581

508.251.0720 x3800 + T
508.366.2610 + F
508.614.0389 + C
rwoods@sbasite.com

EXHIBIT 3

Fedex Labels

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

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

FedEx

TRACK ANOTHER SHIPMENT

774391835607

ADD NICKNAME

Delivered
Monday, August 2, 2021 at 10:12 am

DELIVERED
Signature release on file

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM
SBA COMMUNICATIONS CORPORATION
Rick Woods

134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
Melanie A. Bachman Exec. Dir
Connecticut Siting Council

Ten Franklin Square
NEW BRITAIN, CT US 06051
508-251-0720

Travel History

TIME ZONE
Local Scan Time

Monday, August 2, 2021

10:12 AM	NEW BRITAIN, CT	Delivered Package delivered to recipient address - release authorized
7:16 AM	WINDSOR LOCKS, CT	On FedEx vehicle for delivery
7:03 AM	WINDSOR LOCKS, CT	At local FedEx facility

Saturday, July 31, 2021

10:14 PM	EAST GRANBY, CT	At destination sort facility
7:03 PM	NEWARK, NJ	Departed FedEx hub
12:43 PM	NEWARK, NJ	In transit
12:17 PM	NEWARK, NJ	Arrived at FedEx hub

Friday, July 30, 2021

8:51 PM	FRAMINGHAM, MA	Left FedEx origin facility

12:24 PM	FRAMINGHAM, MA	Picked up

Thursday, July 29, 2021

9:33 AM		Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER
774391835607

SERVICE
FedEx Priority Overnight

WEIGHT
5 lbs / 2.27 kgs

DIMENSIONS
18x13x3 in.

DELIVERY ATTEMPTS
1

TOTAL PIECES
1

TOTAL SHIPMENT WEIGHT
5 lbs / 2.27 kgs

TERMS
Shipper

SHIPPER REFERENCE
10-56-92009-6089

PACKAGING
FedEx Box

SPECIAL HANDLING SECTION
Deliver Weekday

SHIP DATE
7/30/21

STANDARD TRANSIT
8/2/21 before 10:30 am

ACTUAL DELIVERY
8/2/21 at 10:12 am

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FedEx

TRACK ANOTHER SHIPMENT

774391856671

ADD NICKNAME

Delivered
Monday, August 2, 2021 at 10:12 am

DELIVERED
Signature release on file

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OBTAIN PROOF OF DELIVERY

FROM
SBA COMMUNICATIONS CORPORATION
Rick Woods

134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO
Melanie A. Bachman Exec. Dir
Connecticut Siting Council

Ten Franklin Square
NEW BRITAIN, CT US 06051
508-251-0720

Travel History

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Local Scan Time

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12:17 PM	NEWARK, NJ	Arrived at FedEx hub

Friday, July 30, 2021

8:51 PM	FRAMINGHAM, MA	Left FedEx origin facility

12:24 PM	FRAMINGHAM, MA	Picked up

Thursday, July 29, 2021

9:35 AM		Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER
774391856671

SERVICE
FedEx Priority Overnight

WEIGHT
5 lbs / 2.27 kgs

DIMENSIONS
18x13x3 in.

DELIVERY ATTEMPTS
1

TOTAL PIECES
1

TOTAL SHIPMENT WEIGHT
5 lbs / 2.27 kgs

TERMS
Shipper

SHIPPER REFERENCE
10-56-92009-6089

PACKAGING
FedEx Box

SPECIAL HANDLING SECTION
Deliver Weekday

SHIP DATE
7/30/21

STANDARD TRANSIT
8/2/21 before 10:30 am

ACTUAL DELIVERY
8/2/21 at 10:12 am

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FedEx

TRACK ANOTHER SHIPMENT

774367907400

ADD NICKNAME

Delivered
Monday, August 2, 2021 at 11:23 am

DELIVERED

Signed for by: D.NOTADIS

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

SBA COMMUNICATIONS CORPORATION
Rick Woods

134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO

Angus L. McDonald, Jr.
Town of Deep River Town Hall

First Selectman
174 Main St
DEEP RIVER, CT US 06417
508-251-0720

Travel History

TIME ZONE
Local Scan Time

Monday, August 2, 2021

11:23 AM	DEEP RIVER, CT	Delivered
8:42 AM	NORTH HAVEN, CT	On FedEx vehicle for delivery
7:24 AM	NORTH HAVEN, CT	At local FedEx facility

Sunday, August 1, 2021

7:44 PM	EAST GRANBY, CT	At destination sort facility
4:36 PM	MEMPHIS, TN	Departed FedEx hub

Saturday, July 31, 2021

11:09 AM	MEMPHIS, TN	Arrived at FedEx hub

Friday, July 30, 2021

8:35 PM	FRAMINGHAM, MA	Left FedEx origin facility
12:24 PM	FRAMINGHAM, MA	Picked up

Tuesday, July 27, 2021

11:31 AM		Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER
774367907400

SERVICE
FedEx Priority Overnight

WEIGHT
2 lbs / 0.91 kgs

DELIVERY ATTEMPTS
1

DELIVERED TO
Receptionist/Front Desk

TOTAL PIECES
1

TOTAL SHIPMENT WEIGHT
2 lbs / 0.91 kgs

TERMS
Shipper

SHIPPER REFERENCE
10-56-92009-6089

PACKAGING
FedEx Pak

SPECIAL HANDLING SECTION
Deliver Weekday

SHIP DATE
7/30/21

STANDARD TRANSIT
8/2/21 before 12:00 pm

ACTUAL DELIVERY
8/2/21 at 11:23 am

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FedEx

TRACK ANOTHER SHIPMENT

774367926140

ADD NICKNAME

Delivered
Monday, August 2, 2021 at 11:23 am

DELIVERED

Signed for by: D.NOTADIS

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OBTAIN PROOF OF DELIVERY

FROM

SBA COMMUNICATIONS CORPORATION
Rick Woods

134 Flanders Rd
Suite 125
WESTBOROUGH, MA US 01581
508-614-0389

TO

Anthony R. Bolduc
Town of Deep River Town Hall

Planning & Zoning Chair
174 Main St
DEEP RIVER, CT US 06417
508-251-0720

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Friday, July 30, 2021

8:35 PM	FRAMINGHAM, MA	Left FedEx origin facility
12:24 PM	FRAMINGHAM, MA	Picked up

Tuesday, July 27, 2021

11:32 AM		Shipment information sent to FedEx

Shipment Facts

TRACKING NUMBER
774367926140

SERVICE
FedEx Priority Overnight

WEIGHT
2 lbs / 0.91 kgs

DELIVERY ATTEMPTS
1

DELIVERED TO
Receptionist/Front Desk

TOTAL PIECES
1

TOTAL SHIPMENT WEIGHT
2 lbs / 0.91 kgs

TERMS
Shipper

SHIPPER REFERENCE
10-56-92009-6089

PACKAGING
FedEx Pak

SPECIAL HANDLING SECTION
Deliver Weekday

SHIP DATE
7/30/21

STANDARD TRANSIT
8/2/21 before 12:00 pm

ACTUAL DELIVERY
8/2/21 at 11:23 am

EXHIBIT 4

Property Card

220 WINTHROP RD

Location	220 WINTHROP RD	**Mblu**	33/ / 1A/ /
Acct#	00047000	**Owner**	TOWN OF DEEP RIVER
Assessment	$229,250	**Appraisal**	$327,500
PID	546	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$180,300	$147,200	$327,500
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2020	$126,210	$103,040	$229,250

Parcel Addreses

Additional Addresses
No Additional Addresses available for this parcel

Owner of Record

Owner	TOWN OF DEEP RIVER	**Sale Price**	$0
Co-Owner		**Certificate**	
Address	174 MAIN ST DEEP RIVER, CT 06417	**Book & Page**	0093/0797
		Sale Date	12/27/1977

Ownership History

Ownership History				
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Sale Date**
TOWN OF DEEP RIVER	$0		0093/0797	12/27/1977

Building Information

Building 1 : Section 1

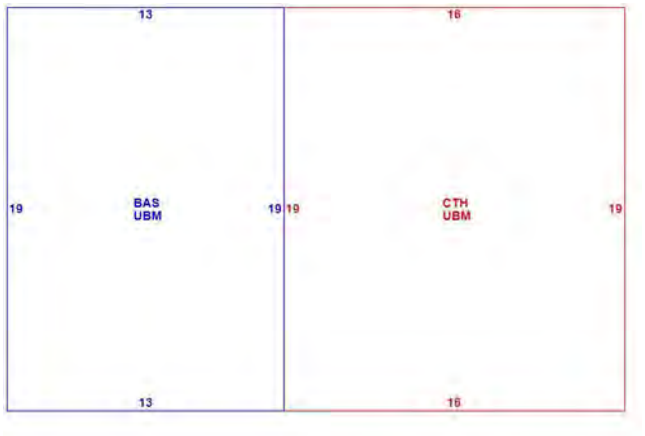
Year Built: 1979
Living Area: 247

Building Attributes	
Field	**Description**
Style:	Commercial
Model	Commercial
Grade	Average
Stories:	1
Occupancy	1.00
Exterior Wall 1	Aluminum Sidng
Exterior Wall 2	
Roof Structure	Gambrel
Roof Cover	Asph/F Gls/Cmp
Interior Wall 1	Drywall/Sheet
Interior Wall 2	
Interior Floor 1	Inlaid Sht Gds
Interior Floor 2	
Heating Fuel	Electric
Heating Type	Electr Basebrd
AC Type	None
Struct Class	
Bldg Use	MUNICIPAL MDL-94
Total Rooms	
Total Bedrms	00
Total Baths	0
1st Floor Use:	903I
Heat/AC	NONE
Frame Type	WOOD FRAME
Baths/Plumbing	AVERAGE
Ceiling/Wall	CEIL & WALLS
Rooms/Prtns	LIGHT
Wall Height	9.00
% Comn Wall	0.00

Building Photo

(http://images.vgsi.com/photos/DeepRiverCTPhotos///0009/100_0050_962

Building Layout



(ParcelSketch.ashx?pid=546&bid=546)

Building Sub-Areas (sq ft)			
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	247	247
CTH	Cath Ceiling	304	0
UBM	Basement, Unfinished	551	0
		1,102	247

Land

Land Use

Use Code 9030
Description MUNICIPAL MDL-94
Zone PRD
Neighborhood 0002

Land Line Valuation

Size (Acres) 9.94
Assessed Value $103,040
Appraised Value $147,200

Outbuildings

Outbuildings		
Code	**Description**	**Size**
PAV1	PAVING-ASPHALT	30000.00 S.F.
PAV2	PAVING-CONC	1400.00 S.F.
SHD1	SHED FRAME	45.00 S.F.
SHD1	SHED FRAME	100.00 S.F.
FN3	FENCE-6' CHAIN	200.00 L.F.
MSC11	COMPACTOR	1.00 UNIT

EXHIBIT 5

Property Map

Google Maps 220 Winthrop Rd

Imagery ©2021 Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2021 100 ft

220 Winthrop Rd

Deep River, CT 06417

Directions Save Nearby Send to your phone Share

9G8F+4P Deep River, Connecticut

At this location

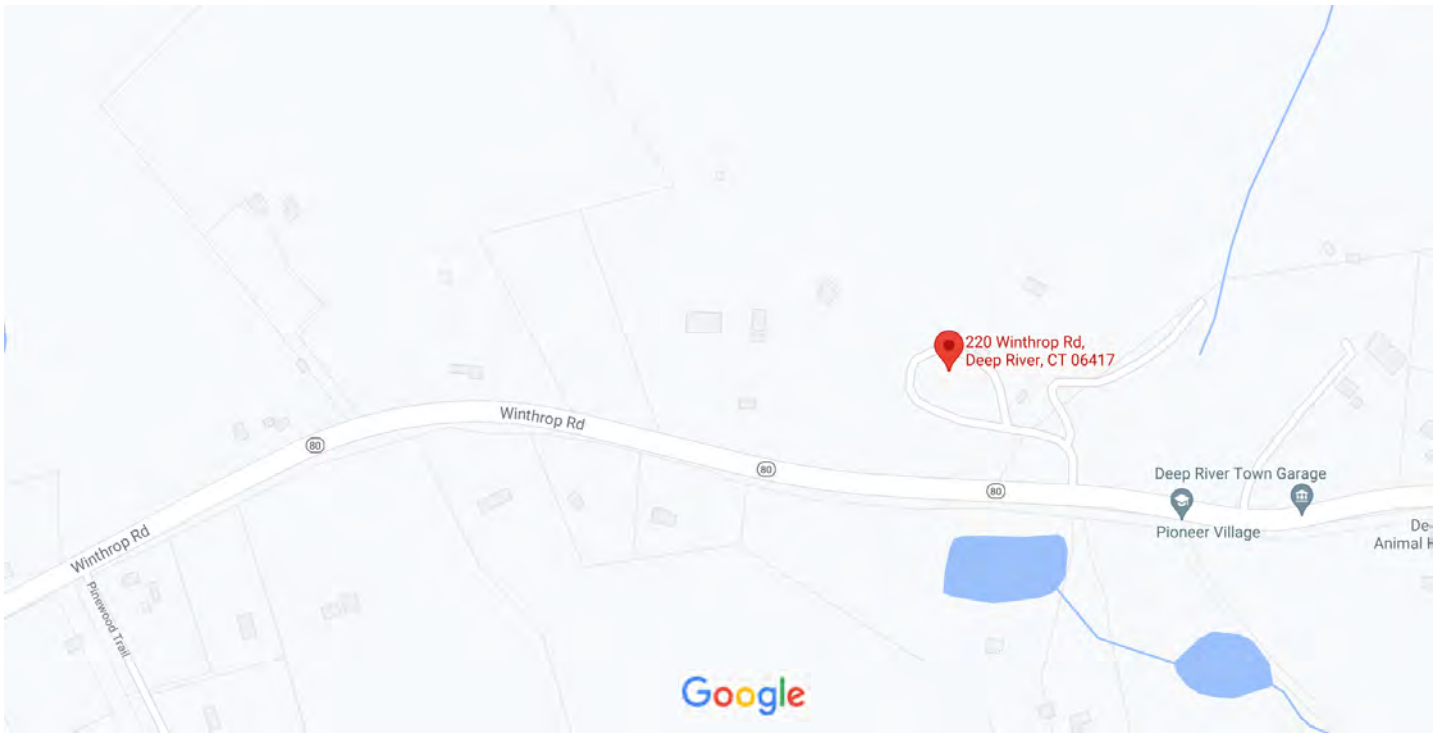
Deep River Transfer Station

5.0 ★★★★★ (5)

City government office · 220 Winthrop Rd

Open until 4:00 PM

Google Maps 220 Winthrop Rd



Map data ©2021 200 ft

220 Winthrop Rd

Directions Save Nearby Send to your phone Share

220 Winthrop Rd, Deep River, CT 06417

9G8F+4P Deep River, Connecticut

At this place

Deep River Transfer Station

5.0 ★★★★★ (5)

City government office

Open until 4:00 PM

Directions

EXHIBIT 6

Zoning Approval

BUILDING PERMIT

AMOUNT PAID

VALIDATION

DATE 8/24/98 19 PERMIT NO. 98-5-143

APPLICANT Tim Bonanno ADDRESS PO BOX 83, QUAKER HILL (NO.) (STREET) 59502 (CONTR'S LICENSE)

PERMIT TO ERECT COMMUNICATIONS (TYPE OF IMPROVEMENT) TOWER NO. STORY (PROPOSED USE) NUMBER OF DWELLING UNITS 0

AT (LOCATION) 220 WINTHROP ROAD (TOWN TRANSFER STATION PROPRTY) (NO.) (STREET) ZONING DISTRICT

BETWEEN (CROSS STREET) AND (CROSS STREET)

SUBDIVISION LOT BLOCK LOT SIZE

BUILDING IS TO BE FT. WIDE BY FT. LONG BY FT. IN HEIGHT AND SHALL CONFORM IN CONSTRUCTION

TO TYPE USE GROUP BASEMENT WALLS OR FOUNDATION (TYPE)

REMARKS: PERMIT ISSUED FOR THE ERECTION OF COMMUNICATIONS TOWER. PRMIT INCLUDES ELECTRICAL WORK.

AREA OR VOLUME (CUBIC/SQUARE FEET) ESTIMATED COST $ 30,000.00 FEE $ 310.00

OWNER TOWN OF DEEP RIVER

ADDRESS 220 WINTHROP ROAD, DEEP RIVER

BUILDING OFFICIAL BY

(Affidavit on reverse side of application to be completed by authorized agent of owner)

FORM NO. BOCA - BP 1994

Town of Deep River
174 Main Street
Deep River, CT. 06417

Certificate of Occupancy and Zoning Compliance

MAP....43.....LOT.....1A.....ZONE.....R-40..... BUILDING PERMIT #..00-1-238

OWNER(s): Town of Deep River - Tri-State Telecom

This is to certify that the communications tower and/or land at conforms substantially to the requirements of the Connecticut State Building Code, Connecticut Fire Code (if applicable), Connecticut Health Codes and the Zoning Regulations of the Town of Deep River and is hereby **APPROVED FOR OCCUPANCY OR USE** as indicated and limited as follows:

BOCA Building Code Edition:.....'96.....Use group:..S-1...Construction type..... Special

Automatic Sprinkler Hazard Classification: .....N/A..... Aisle width (not applicable)

Automatic sprinkler demand at base of rise.....not applicable.....

Approved for Occupancy or Use:

BUILDING DEPARTMENT: Communication Tower - Compliance with 1609.0 and 1510.0 Required

ZONING:

FIRE MARSHAL'S OFFICE: N/A

3/12/01
Building Official Date

n/a
Fire Marshal Date

EXEMPT
Zoning Enforcement Agent Date

n/a
Sanitarian Date

cc: ZEO
Fire Marshal
Assessor
Property File

EXHIBIT 7

EME Report

EBI Consulting

environmental | engineering | due diligence

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

Dish Wireless Existing Facility

Site ID: BOBDL00135A

220 Winthrop Road
Deep River, Connecticut 06417

July 19, 2021

EBI Project Number: 6221003254

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**16.29%**

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

July 19, 2021

Dish Wireless

Emissions Analysis for Site: BOBDL00135A

EBI Consulting was directed to analyze the proposed Dish Wireless facility located at **220 Winthrop Road** in **Deep River, Connecticut** for the purpose of determining whether the emissions from the Proposed Dish Wireless Antenna Installation located on this property are within specified federal limits.

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

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

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

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

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed Dish Wireless Wireless antenna facility located at 220 Winthrop Road in Deep River, Connecticut using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since Dish Wireless is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 20 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was focused at the base of the tower. For this report, the sample point is the top of a 6-foot person standing at the base of the tower.

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

1) 4 n71 channels (600 MHz Band) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

2) 4 n70 channels (PCS Band - 1900 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.

3) 4 n66 channels (AWS Band - 2190 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 40 Watts per Channel.

4) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

5) For the following calculations, the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 20 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used in this direction. This value is a very conservative

estimate as gain reductions for these particular antennas are typically much higher in this direction.

6) 0 This is based on feedback from the carrier with regard to anticipated antenna selection. All Antenna gain values and associated transmit power levels are shown in the Site Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufacturer's supplied specifications, minus 20 dB for directional panel antennas and 20 dB for highly focused parabolic microwave dishes, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

7) The antenna mounting height centerline of the proposed antennas is 140 feet above ground level (AGL).

8) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

9) All calculations were done with respect to uncontrolled / general population threshold limits.

Dish Wireless Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	JMA MX08FRO665-21	Make / Model:	JMA MX08FRO665-21	Make / Model:	JMA MX08FRO665-21
Frequency Bands:	600 MHz / 1900 MHz / 2190 MHz	Frequency Bands:	600 MHz / 1900 MHz / 2190 MHz	Frequency Bands:	600 MHz / 1900 MHz / 2190 MHz
Gain:	17.45 dBd / 22.65 dBd / 22.65 dBd	Gain:	17.45 dBd / 22.65 dBd / 22.65 dBd	Gain:	17.45 dBd / 22.65 dBd / 22.65 dBd
Height (AGL):	140 feet	Height (AGL):	140 feet	Height (AGL):	140 feet
Channel Count:	12	Channel Count:	12	Channel Count:	12
Total TX Power (W):	440 Watts	Total TX Power (W):	440 Watts	Total TX Power (W):	440 Watts
ERP (W):	5,236.31	ERP (W):	5,236.31	ERP (W):	5,236.31
Antenna A1 MPE %:	**1.32%**	Antenna B1 MPE %:	**1.32%**	Antenna C1 MPE %:	**1.32%**

Site Composite MPE %	
Carrier	**MPE %**
Dish Wireless (Max at Sector A):	1.32%
T-Mobile	1.99%
AT&T	1.85%
Verizon	9.19%
Sprint	1.77%
VoiceStream	0.17%
Site Total MPE % :	16.29%

Dish Wireless MPE % Per Sector	
Dish Wireless Sector A Total:	1.32%
Dish Wireless Sector B Total:	1.32%
Dish Wireless Sector C Total:	1.32%
Site Total MPE % :	16.29%

Dish Wireless Maximum MPE Power Values (Sector A)

Dish Wireless Frequency Band / Technology (Sector A)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density (μW/cm²)	Frequency (MHz)	Allowable MPE (μW/cm²)	Calculated % MPE
Dish Wireless 600 MHz n71	4	1667.71	140.0	13.36	600 MHz n71	400	3.34%
Dish Wireless 1900 MHz n70	4	7363.09	140.0	58.97	1900 MHz n70	1000	5.90%
Dish Wireless 2190 MHz n66	4	7363.09	140.0	58.97	2190 MHz n66	1000	5.90%
						Total:	**1.32%**

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

Summary

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

The anticipated maximum composite contributions from the Dish Wireless facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

Dish Wireless Sector	Power Density Value (%)
Sector A:	1.32%
Sector B:	1.32%
Sector C:	1.32%
Dish Wireless Maximum MPE % (Sector A):	1.32%
Site Total:	16.29%
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **16.29%** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

EXHIBIT 8

Structural Analysis

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

Structural Analysis Report

Existing 180 ft Valmont Monopole
Customer Name: SBA Communications Corp
Customer Site Number: CT46130-A
Customer Site Name: Deep River-winthrop Rd
Carrier Name: Dish Wireless (App#: 153557, V1)
Carrier Site ID / Name: BOBDL00135A / 0
Site Location: 220 Winthrop Rd
Deep River, Connecticut
Middlesex County
Latitude: 41.365872
Longitude: -72.474849

Analysis Result:

Max Structural Usage: 99.6% [Pass]
Max Foundation Usage: 88.0% [Pass]
Additional Usage Caused by New Mount/Mount Modification: N/A

Report Prepared By: Younus Alkarawi

Introduction

The purpose of this report is to summarize the analysis results on the 180 ft Valmont Monopole to support the proposed antennas and transmission lines in addition to those currently installed. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

Sources of Information

Tower Drawings	Original structural design report & permit drawings prepared by Valmont. Dated 10-27-2000. Order No 17593-98. CT750 Deep River Site. Project No F082. Previous structural report prepared by FDH Engineering, Inc. Dated 11-04-2013. Project No 13SFRX1400.
Foundation Drawing	Original foundation drawings prepared by Valmont Industries, Inc. Dated 08-11-1998. Project No 2633. Order No 17593-98. Drawing No 2633-F.
Geotechnical Report	Geotechnical report prepared by TECTONIC Engineering Consultants, P.C. Dated 07-13-1998. Work Order No 1170.C750.
Modification Drawings	N/A
Mount Analysis	N/A

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:	123.0 mph (3-Sec. Gust) (Ultimate wind speed)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 1" radial ice concurrent
Service Load Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-H / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	C
Risk Category:	II
Topographic Category:	1
Crest Height:	0 ft
Seismic Parameters:	S_S = 0.21, S_1 = 0.054

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

Existing Antennas, Mounts and Transmission Lines

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

Items	Elevation (ft.)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	178.0	6	JMA MX06FRO660-03 - Panel	Platform w/ Handrails (3) 91900314	(2) 1 5/8" Hybrid	Verizon
2		3	Samsung B5/B13 RRH BR04C			
3		3	Samsung B2/B66A RRH BR049			
4		1	Raycap RRFDS-6627-PF48			
5	166.0	3	RFS APXVTM14-C-I20 - Panel	Platform w/Handrails + Sitepro PRK-1245L + handrail kit + Sitepro PRK-SFS-H-L]	(4) 1-1/4" Hybrid	Sprint Nextel
6		3	Commscope NNVV-65B-R4 - Panel			
7		3	ALU 1900 Mhz			
8		6	ALU 800 Mhz			
9		3	ALU TD-RRH8x20-25			
10	160.0	3	EMS - RR90-17-02VDPL2/-R - Panel	(3) T-Arms w/ Reinforcements	(12) 1 5/8" Coax (1) 1 5/8" Fiber	T-Mobile
11		3	RFS - APXVAARR24_43-U-NA20 - Panel			
12		3	Ericsson - KRY 112 489/2 - TMA			
13		3	Ericsson - KRY 112 144/2 - TMA			
14		3	Ericsson - Radio 4449 B71+B12 - RRU			
15	150.0	3	Powerwave 7770	Low Profile Platform w/ Handrail kit HRK-12	(12) 1 1/4" (2) 1" DC (1) 0.39" Fiber	AT&T
16		1	Commscope SBNHH-1D65A			
17		2	Cci HPA-65R-BUU-H6			
18		1	Cci DMP65R-BU4DA			
19		2	Cci DMP65R-BU6DA			
20		6	Powerwave LGP21401			
21		3	Ericsson RRUS 8843 B2 B66A			
22		3	Ericsson RRUS 4449 B5/B12			
23		1	Raycap DC-6-48-60-18-8F			

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
24	140.0	3	JMA Wireless MX08FRO665-21 - Panel	platform w/HRK Sitepro1 SNP8HR-3XX	(1) 1.75" Hybrid	Dish Wireless
25		3	Fujitsu TA08025-B605 RRU			
26		3	Fujitsu TA08025-B604 RRU			
27		1	Raycap RDIDC-9181-PF-48 OVP			

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

Analysis Results

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

	Pole shafts	Anchor Bolts	Base Plate
Max. Usage:	**99.6%**	**86.3%**	**65.9%**
Pass/Fail	**Pass**	**Pass**	**Pass**

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions	6320.3	50.9	63.2

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

Service Load Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.7617 degrees under the operational wind speed as specified in the Analysis Criteria.

Conclusions

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

Standard Conditions

1. This analysis was performed based on the information supplied to **(TES) Tower Engineering Solutions, LLC.** Verification of the information provided was not included in the Scope of Work for **TES**. The accuracy of the analysis is dependent on the accuracy of the information provided.

2. The structural analysis was performance based upon the evidence available at the time of this report. All information provided by the client is considered to be accurate.

3. The analyses will be performed based on the codes as specified by the client or based on the best knowledge of the engineering staff of **TES**. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/TIA-222. If wind speed and/or ice loads are different from the minimum values recommended by the ANSI/TIA-222 standard or other codes, **TES** should be notified in writing and the applicable minimum values provided by the client.

4. The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. **TES** has not visited the tower site to verify the adequacy of the information provided. If there is any discrepancy found in the report regarding the existing conditions, **TES** should be notified immediately to evaluate the effect of the discrepancy on the analysis results.

5. The client will assume responsibility for rework associated with the differences in initially provided information, including tower and foundation information, existing and/or proposed equipment and transmission lines.

6. If a feasibility analysis was performed, final acceptance of changed conditions shall be based upon a rigorous structural analysis.

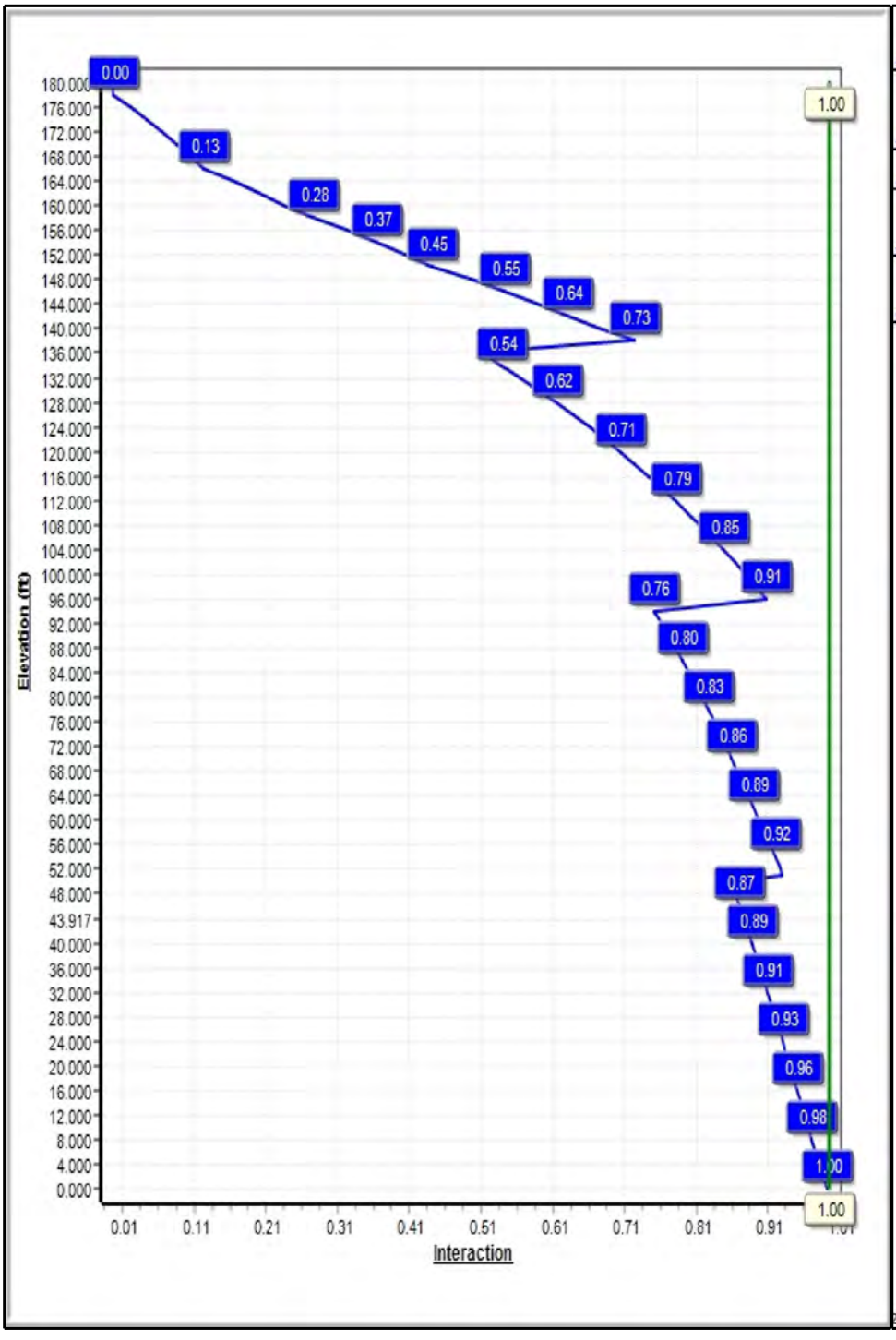
Usage Diagram - Max Ratio 99.56% at 0.0ft

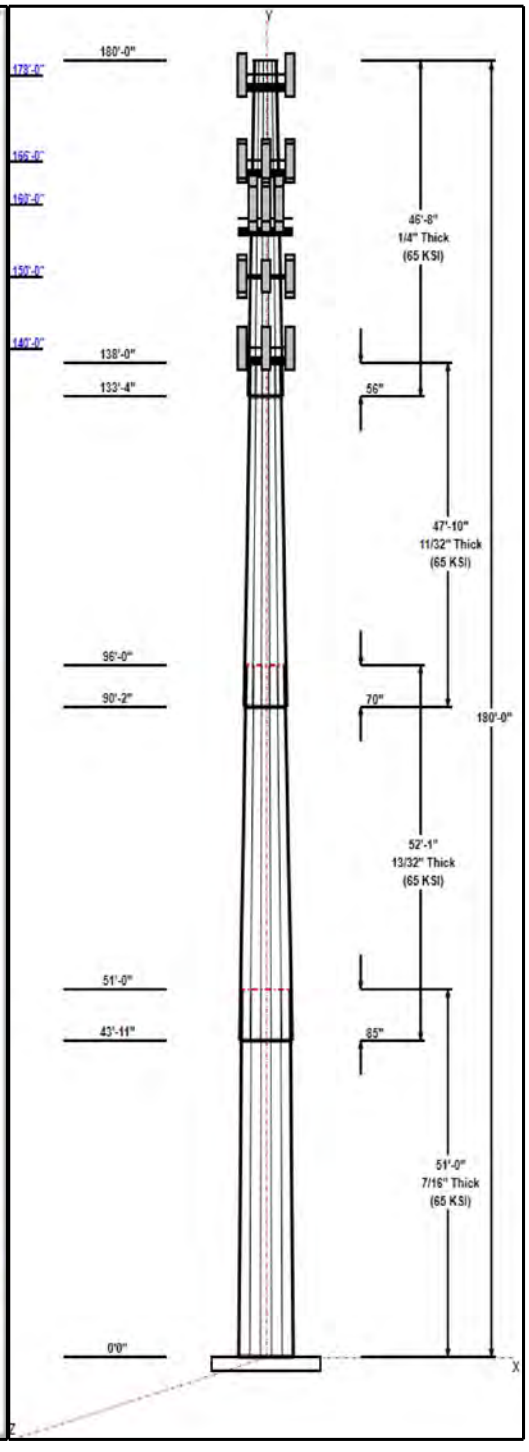
Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd	**Exposure:**	C	
Height:	180.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

Tower Engineering Solutions

Dead Load Factor:	1.20	**Iterations:**	29
Wind Load Factor:	1.00		

Load Case : 1.2D + 1.0W 123 mph Wind





Structure: CT46130-A-SBA

Type: Tapered
Site Name: Deep River-winthrop Rd
Height: 180.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 12 Sided
Taper: 0.24800

5/6/2021

Tower Engineering Solutions

Shaft Properties

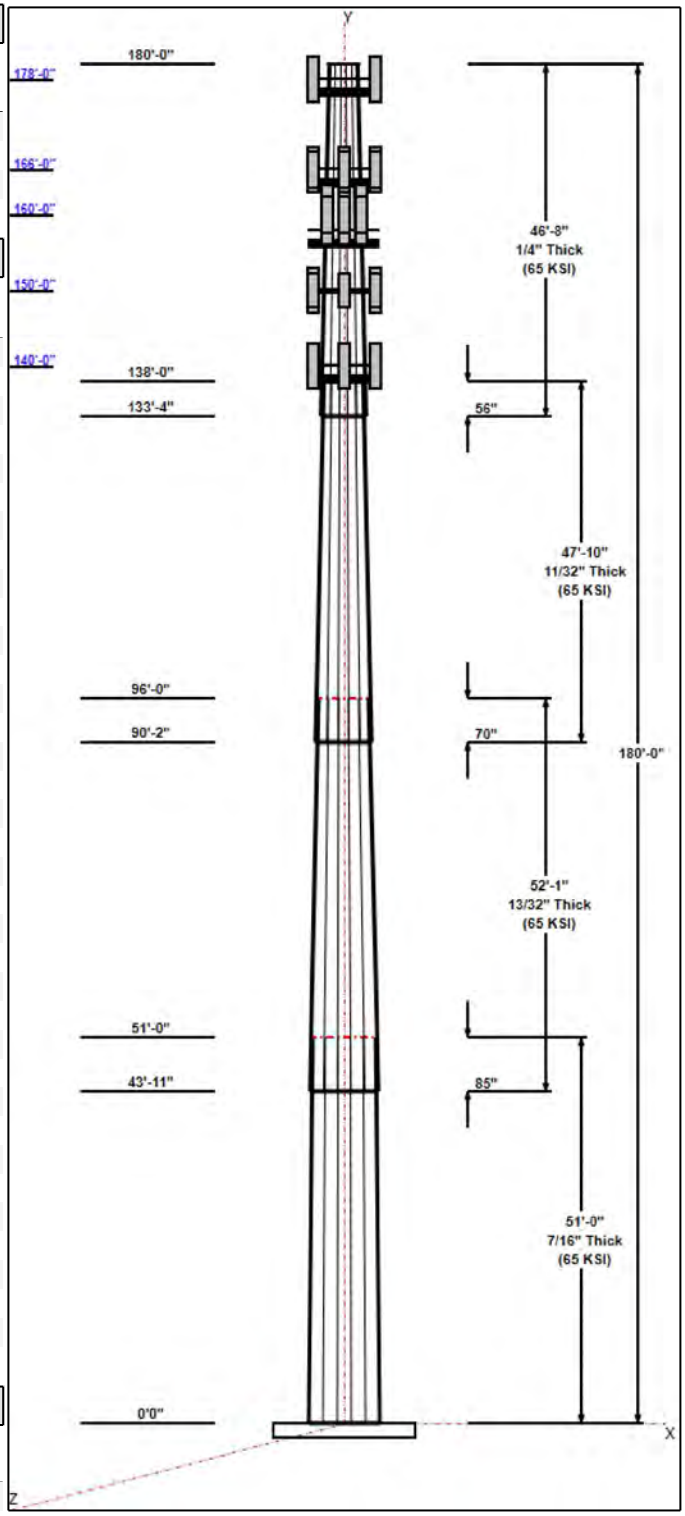
Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	51.00	49.35	62.00	0.438		0.24800	65
2	52.08	39.00	51.92	0.406	Slip	0.24800	65
3	47.83	29.28	41.14	0.344	Slip	0.24800	65
4	46.67	19.36	30.93	0.250	Slip	0.24800	65

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
178.00	178.00	6	JMA MX06FRO660-03	Verizon
178.00	178.00	3	Samsung B2/B66A RRH	Verizon
178.00	178.00	3	Samsung B5/B13 RRH	Verizon
178.00	178.00	1	Raycap	Verizon
178.00	178.00	1	Platform w/ Handrails w/	Verizon
166.00	166.00	3	ALU TD-RRH8x20-25	Sprint Nextel
166.00	166.00	1	Sitepro	Sprint Nextel
166.00	166.00	1	Sitepro	Sprint Nextel
166.00	166.00	3	RFS APXVTM14-C-I20	Sprint Nextel
166.00	166.00	3	Commscope	Sprint Nextel
166.00	166.00	3	ALU 1900 Mhz	Sprint Nextel
166.00	166.00	6	ALU 800 Mhz	Sprint Nextel
166.00	166.00	1	Platform w/ Hand Rails	Sprint Nextel
160.00	160.00	3	APXVAARR24_43-U-NA20	T-Mobile
160.00	160.00	3	KRY 112 489/2	T-Mobile
160.00	160.00	3	KRY 112 144/2	T-Mobile
160.00	160.00	3	4449 B71+B12	T-Mobile
160.00	160.00	3	RR90-17-00VDPL2/-R	T-Mobile
158.00	158.00	3	T-Arms	T-Mobile
158.00	158.00	1	T-Arm Kit	T-Mobile
158.00	158.00	1	V-Brace	T-Mobile
150.00	150.00	2	DMP65R-BU6DA	AT&T
150.00	150.00	3	Powerwave 7770	AT&T
150.00	150.00	1	DMP65R-BU4DA	AT&T
150.00	150.00	6	Powerwave LGP21401	AT&T
150.00	150.00	3	B2 B66A 8843	AT&T
150.00	150.00	1	Raycap DC6-48-60-18-8F	AT&T
150.00	150.00	1	Platform w/ Hand Rail	AT&T
150.00	150.00	2	Cci HPA-65R-BUU-H6	AT&T
150.00	150.00	1	SBNHH-1D65A	AT&T
150.00	150.00	3	4449 B5/B12	AT&T
140.00	140.00	3	JMA Wireless	Dish Wireless
140.00	140.00	1	Sitepro1 SNP8HR-3XX	Dish Wireless
140.00	140.00	3	Fujitsu TA08025-B605	Dish Wireless
140.00	140.00	3	Fujitsu TA08025-B604	Dish Wireless
140.00	140.00	1	Raycap	Dish Wireless

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	180.00	Outside	Safety Cable	
0.00	180.00	Outside	Step bolts (ladder)	
3.00	178.00	Inside	1 5/8" Hybrid	Verizon
3.00	166.00	Inside	1-1/4" Hybrid	Sprint Nextel
3.00	160.00	Inside	1 5/8" Coax	T-Mobile
3.00	160.00	Inside	1 5/8" Fiber	T-Mobile



3.00	150.00	Inside	0.39" Fiber	AT&T
3.00	150.00	Inside	1 1/4" Coax	AT&T
3.00	150.00	Inside	1" DC	AT&T
3.00	140.00	Inside	1.75" Hybrid	Dish Wireless

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
20	2.25" 18J	75.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
2.7500	76.7	60.0	Polygon

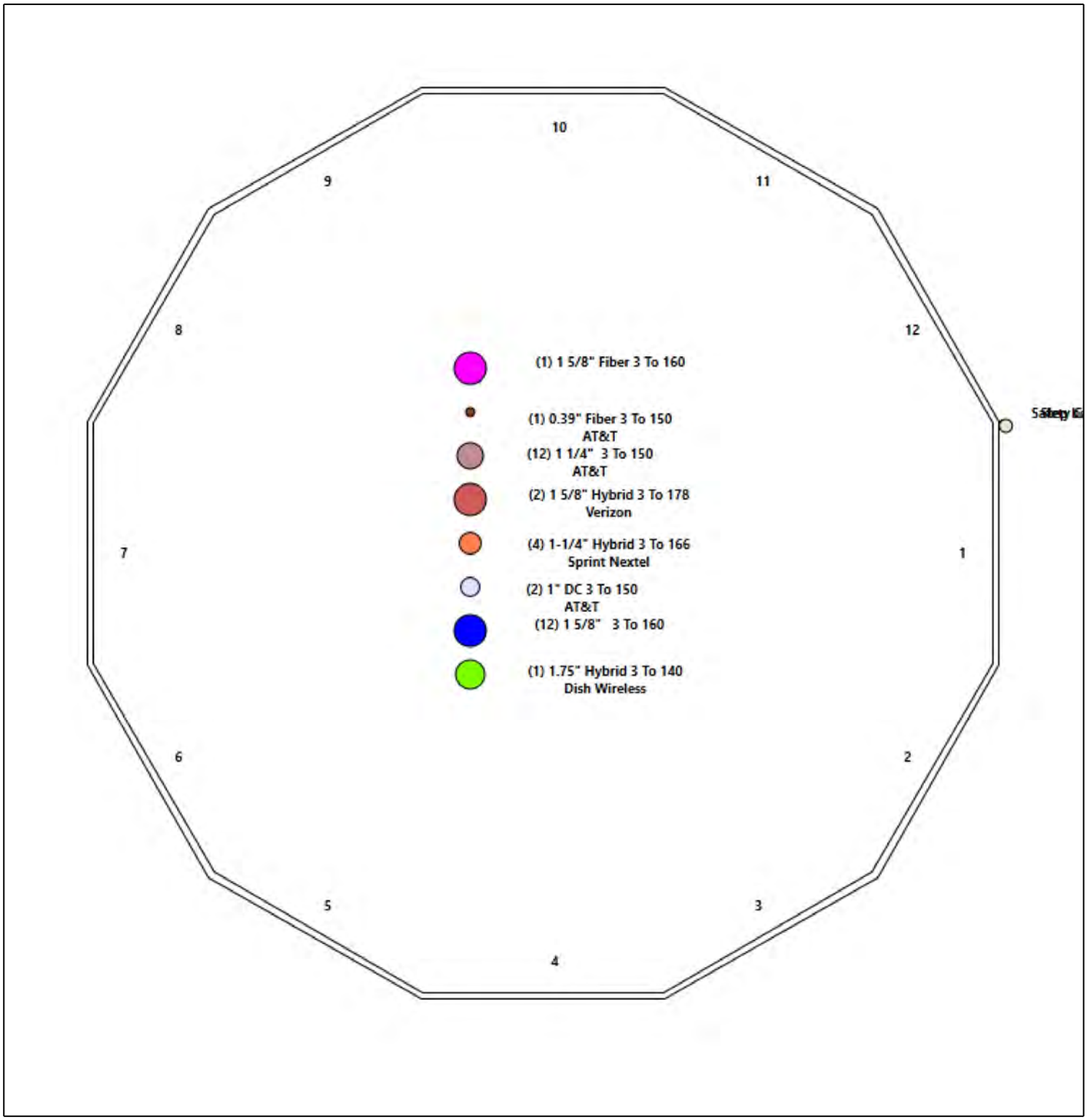
Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.0W 123 mph Wind	6320.3	50.9	63.2
0.9D + 1.0W 123 mph Wind	6230.7	50.9	47.4
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1434.2	11.2	85.0
1.2D + 1.0Ev + 1.0Eh	132.0	0.8	65.7
0.9D + 1.0Ev + 1.0Eh	130.1	0.8	49.8
1.0D + 1.0W 60 mph Wind	1336.6	10.8	52.7

Structure: CT46130-A-SBA - Coax Line Placement

Type: Monopole
Site Name: Deep River-winthrop Rd
Height: 180.00 (ft)

5/6/2021



Shaft Properties

Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 5

Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	12	51.000	0.4375	65		0.00	13,505
2	12	52.083	0.4063	65	Slip	85.00	10,446
3	12	47.833	0.3438	65	Slip	70.00	6,281
4	12	46.667	0.2500	65	Slip	56.00	3,183
					Total Shaft Weight:		**33,414**

	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	62.00	0.00	86.73	41953.54	35.83	141.71	49.35	51.00	68.91	21044.2	28.08	112.8	0.248000
2	51.92	43.92	67.39	22826.23	32.10	127.81	39.00	96.00	50.49	9601.48	23.58	96.01	0.248000
3	41.14	90.17	45.15	9591.86	29.92	119.68	29.28	138.00	32.02	3421.62	20.68	85.17	0.248000
4	30.93	133.3	24.70	2968.17	31.01	123.73	19.36	180.00	15.38	717.07	18.61	77.44	0.248000

Load Summary

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 6	

Discrete Appurtenances

				No Ice			Ice				
No.	Elev (ft)	Description	Qty	Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
1	178.00	JMA MX06FRO660-03	6	60.00	9.87	0.82	232.86	10.736	0.82	0.00	0.00
2	178.00	Samsung B2/B66A RRH BR049	3	84.40	1.88	0.50	168.63	2.475	0.50	0.00	0.00
3	178.00	Samsung B5/B13 RRH BR04C	3	70.30	2.22	0.50	109.57	2.640	0.50	0.00	0.00
4	178.00	Raycap RRFDS-6627-PF48	1	32.00	2.61	1.00	82.34	3.046	1.00	0.00	0.00
5	178.00	Platform w/ Handrails w/ 91900314	1	2202.20	40.00	1.00	3766.06	54.203	1.00	0.00	0.00
6	166.00	ALU TD-RRH8x20-25	3	70.00	4.05	0.50	139.42	4.583	0.50	0.00	0.00
7	166.00	Sitepro	1	230.00	6.70	1.00	446.26	11.425	1.00	0.00	0.00
8	166.00	Sitepro	1	406.61	7.00	1.00	731.58	11.607	1.00	0.00	0.00
9	166.00	RFS APXVTM14-C-I20	3	56.20	6.34	0.77	157.19	7.074	0.77	0.00	0.00
10	166.00	Commscope NNVV-65B-R4	3	77.40	12.27	0.74	269.71	13.251	0.74	0.00	0.00
11	166.00	ALU 1900 Mhz	3	44.00	3.80	0.50	117.52	4.736	0.50	0.00	0.00
12	166.00	ALU 800 Mhz	6	53.00	2.49	0.50	102.81	3.260	0.50	0.00	0.00
13	166.00	Platform w/ Hand Rails	1	2000.00	40.00	1.00	3410.39	54.104	1.00	0.00	0.00
14	160.00	APXVAARR24_43-U-NA20	3	128.00	20.24	0.70	396.79	21.499	0.70	0.00	0.00
15	160.00	KRY 112 489/2	3	15.40	0.65	0.50	27.22	1.061	0.50	0.00	0.00
16	160.00	KRY 112 144/2	3	15.40	0.65	0.50	27.22	1.061	0.50	0.00	0.00
17	160.00	4449 B71+B12	3	70.00	1.65	0.50	112.02	1.998	0.50	0.00	0.00
18	160.00	RR90-17-00VDPL2/-R	3	13.50	4.36	0.68	73.39	4.998	0.68	0.00	0.00
19	158.00	T-Arms	3	350.00	8.00	0.75	513.74	12.678	0.75	0.00	0.00
20	158.00	T-Arm Kit	1	500.00	16.50	1.00	897.64	27.306	1.00	0.00	0.00
21	158.00	V-Brace	1	197.00	6.30	1.00	381.32	10.721	1.00	0.00	0.00
22	150.00	DMP65R-BU6DA	2	79.40	12.71	0.72	275.76	13.686	0.72	0.00	0.00
23	150.00	Powerwave 7770	3	35.00	5.51	0.73	118.38	6.195	0.73	0.00	0.00
24	150.00	DMP65R-BU4DA	1	79.40	12.71	0.72	275.76	13.686	0.72	0.00	0.00
25	150.00	Powerwave LGP21401 TMA's	6	14.10	1.22	0.50	30.77	1.747	0.50	0.00	0.00
26	150.00	B2 B66A 8843	3	70.00	1.64	0.50	100.66	1.984	0.50	0.00	0.00
27	150.00	Raycap DC6-48-60-18-8F	1	31.80	1.81	0.67	73.02	2.385	0.67	0.00	0.00
28	150.00	Platform w/ Hand Rail	1	1600.00	35.00	1.00	2999.90	55.361	1.00	0.00	0.00
29	150.00	Cci HPA-65R-BUU-H6	2	51.00	9.66	0.85	207.49	10.552	0.85	0.00	0.00
30	150.00	SBNHH-1D65A	1	33.50	5.88	1.00	132.07	6.584	1.00	0.00	0.00
31	150.00	4449 B5/B12	3	71.00	1.97	0.50	106.59	2.335	0.50	0.00	0.00
32	140.00	JMA Wireless MX08FRO665-21	3	64.50	12.49	0.74	257.08	13.460	0.74	0.00	0.00
33	140.00	Sitepro1 SNP8HR-3XX	1	1876.00	37.59	1.00	3089.90	68.863	1.00	0.00	0.00
34	140.00	Fujitsu TA08025-B605 RRU	3	75.00	1.96	0.50	109.63	2.331	0.50	0.00	0.00
35	140.00	Fujitsu TA08025-B604 RRU	3	63.90	1.96	0.50	97.42	2.331	0.50	0.00	0.00
36	140.00	Raycap RDIDC-9181-PF-48 OVP	1	21.90	2.01	1.00	57.15	2.386	1.00	0.00	0.00
		Totals:	**89**	**14,355.81**			**28,215.03**				

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	180.00	(1) Safety Cable	0.00	Outside
0.00	180.00	(1) Step bolts (ladder)	0.00	Outside
3.00	178.00	(2) 1 5/8" Hybrid	0.00	Inside
3.00	166.00	(4) 1-1/4" Hybrid	0.00	Inside
3.00	160.00	(12) 1 5/8" Coax	0.00	Inside

Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
3.00	160.00	(1) 1 5/8" Fiber			0.00	Inside					
3.00	150.00	(1) 0.39" Fiber			0.00	Inside					
3.00	150.00	(12) 1 1/4" Coax			0.00	Inside					
3.00	150.00	(2) 1" DC			0.00	Inside					
3.00	140.00	(1) 1.75" Hybrid			0.00	Inside					

Shaft Section Properties

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 8	

Increment Length: **2 (ft)**

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
0.00		0.4375	62.000	86.726	41953.5	35.83	141.71	65.6	1307.	0.0
2.00		0.4375	61.504	86.027	40947.6	35.52	140.58	66.0	1286.	587.8
4.00		0.4375	61.008	85.329	39958.0	35.22	139.45	66.3	1265.	583.1
6.00		0.4375	60.512	84.630	38984.4	34.92	138.31	66.6	1244.	578.3
8.00		0.4375	60.016	83.931	38026.7	34.61	137.18	67.0	1224.	573.6
10.00		0.4375	59.520	83.232	37084.8	34.31	136.05	67.3	1203.	568.8
12.00		0.4375	59.024	82.534	36158.7	34.01	134.91	67.6	1183.	564.1
14.00		0.4375	58.528	81.835	35248.1	33.70	133.78	68.0	1163.	559.3
16.00		0.4375	58.032	81.136	34352.9	33.40	132.64	68.3	1143.	554.6
18.00		0.4375	57.536	80.438	33472.9	33.09	131.51	68.6	1123.	549.8
20.00		0.4375	57.040	79.739	32608.2	32.79	130.38	69.0	1104.	545.0
22.00		0.4375	56.544	79.040	31758.5	32.49	129.24	69.3	1085.	540.3
24.00		0.4375	56.048	78.341	30923.6	32.18	128.11	69.6	1065.	535.5
26.00		0.4375	55.552	77.643	30103.5	31.88	126.98	69.9	1046.	530.8
28.00		0.4375	55.056	76.944	29298.1	31.58	125.84	70.3	1028.	526.0
30.00		0.4375	54.560	76.245	28507.1	31.27	124.71	70.6	1009.	521.3
32.00		0.4375	54.064	75.546	27730.5	30.97	123.57	70.9	990.9	516.5
34.00		0.4375	53.568	74.848	26968.2	30.66	122.44	71.3	972.6	511.8
36.00		0.4375	53.072	74.149	26219.9	30.36	121.31	71.6	954.4	507.0
38.00		0.4375	52.576	73.450	25485.6	30.06	120.17	71.9	936.4	502.2
40.00		0.4375	52.080	72.751	24765.2	29.75	119.04	72.3	918.6	497.5
42.00		0.4375	51.584	72.053	24058.4	29.45	117.91	72.6	901.0	492.7
43.92	Bot - Section 2	0.4375	51.109	71.383	23393.9	29.16	116.82	72.9	884.3	467.7
44.00		0.4375	51.088	71.354	23365.3	29.15	116.77	72.9	883.5	39.3
46.00		0.4375	50.592	70.655	22685.6	28.84	115.64	73.3	866.2	939.4
48.00		0.4375	50.096	69.956	22019.2	28.54	114.51	73.6	849.1	930.3
50.00		0.4375	49.600	69.258	21365.9	28.23	113.37	73.9	832.2	921.1
51.00	Top - Section 1	0.4063	50.165	65.090	20569.8	30.94	123.48	0.0	0.0	457.1
52.00		0.4063	49.917	64.766	20263.8	30.78	122.87	71.1	784.2	220.9
54.00		0.4063	49.421	64.117	19660.8	30.45	121.65	71.5	768.5	438.6
56.00		0.4063	48.925	63.468	19070.0	30.13	120.43	71.9	753.0	434.1
58.00		0.4063	48.429	62.819	18491.1	29.80	119.21	72.2	737.6	429.7
60.00		0.4063	47.933	62.170	17924.0	29.47	117.99	72.6	722.4	425.3
62.00		0.4063	47.437	61.521	17368.7	29.14	116.77	72.9	707.3	420.9
64.00		0.4063	46.941	60.873	16824.9	28.82	115.55	73.3	692.4	416.5
66.00		0.4063	46.445	60.224	16292.6	28.49	114.32	73.6	677.7	412.1
68.00		0.4063	45.949	59.575	15771.7	28.16	113.10	74.0	663.1	407.6
70.00		0.4063	45.453	58.926	15262.0	27.84	111.88	74.4	648.7	403.2
72.00		0.4063	44.957	58.277	14763.4	27.51	110.66	74.7	634.4	398.8
74.00		0.4063	44.461	57.628	14275.7	27.18	109.44	75.1	620.3	394.4
76.00		0.4063	43.965	56.980	13799.0	26.85	108.22	75.4	606.3	390.0
78.00		0.4063	43.469	56.331	13332.9	26.53	107.00	75.8	592.5	385.6
80.00		0.4063	42.973	55.682	12877.5	26.20	105.78	76.1	578.9	381.2
82.00		0.4063	42.477	55.033	12432.6	25.87	104.56	76.5	565.4	376.7
84.00		0.4063	41.981	54.384	11998.0	25.55	103.34	76.9	552.1	372.3
86.00		0.4063	41.485	53.735	11573.7	25.22	102.12	77.2	539.0	367.9
88.00		0.4063	40.989	53.087	11159.5	24.89	100.89	77.6	526.0	363.5
90.00		0.4063	40.493	52.438	10755.3	24.56	99.67	77.9	513.1	359.1
90.17	Bot - Section 3	0.4063	40.451	52.384	10722.0	24.54	99.57	78.0	512.1	29.7
92.00		0.4063	39.997	51.789	10361.0	24.24	98.45	78.3	500.4	605.1

Increment Length: **2 (ft)**

Elev (ft)	Description	Thick (in)	Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fpy (ksi)	S (in^3)	Weight (lb)
94.00		0.4063	39.501	51.140	9976.4	23.91	97.23	78.6	487.9	652.3
96.00	Top - Section 2	0.3438	39.692	43.554	8607.2	28.80	115.47	0.0	0.0	644.1
98.00		0.3438	39.196	43.005	8285.8	28.41	114.02	73.7	408.4	294.5
100.00		0.3438	38.700	42.456	7972.5	28.02	112.58	74.2	398.0	290.8
102.00		0.3438	38.204	41.907	7667.2	27.64	111.14	74.6	387.7	287.1
104.00		0.3438	37.708	41.358	7369.8	27.25	109.70	75.0	377.6	283.3
106.00		0.3438	37.212	40.809	7080.1	26.86	108.25	75.4	367.6	279.6
108.00		0.3438	36.716	40.260	6798.2	26.48	106.81	75.8	357.7	275.9
110.00		0.3438	36.220	39.711	6523.9	26.09	105.37	76.3	348.0	272.1
112.00		0.3438	35.724	39.162	6257.0	25.70	103.92	76.7	338.4	268.4
114.00		0.3438	35.228	38.613	5997.5	25.32	102.48	77.1	328.9	264.6
116.00		0.3438	34.732	38.063	5745.3	24.93	101.04	77.5	319.6	260.9
118.00		0.3438	34.236	37.514	5500.3	24.54	99.60	77.9	310.4	257.2
120.00		0.3438	33.740	36.965	5262.3	24.16	98.15	78.4	301.3	253.4
122.00		0.3438	33.244	36.416	5031.3	23.77	96.71	78.8	292.4	249.7
124.00		0.3438	32.748	35.867	4807.2	23.38	95.27	79.2	283.6	246.0
126.00		0.3438	32.252	35.318	4589.8	23.00	93.82	79.6	274.9	242.2
128.00		0.3438	31.756	34.769	4379.1	22.61	92.38	80.1	266.4	238.5
130.00		0.3438	31.260	34.220	4174.9	22.22	90.94	80.5	258.0	234.8
132.00		0.3438	30.764	33.671	3977.2	21.84	89.50	80.9	249.7	231.0
133.33	Bot - Section 4	0.3438	30.433	33.305	3848.9	21.58	88.53	81.2	244.3	151.9
134.00		0.3438	30.268	33.122	3785.8	21.45	88.05	81.3	241.6	131.2
136.00		0.3438	29.772	32.573	3600.6	21.06	86.61	81.7	233.6	389.4
138.00	Top - Section 3	0.2500	29.776	23.768	2644.8	29.77	119.10	0.0	0.0	382.9
140.00		0.2500	29.280	23.369	2513.8	29.24	117.12	72.8	165.9	160.4
142.00		0.2500	28.784	22.970	2387.1	28.71	115.14	73.4	160.2	157.7
144.00		0.2500	28.288	22.571	2264.8	28.18	113.15	74.0	154.7	155.0
146.00		0.2500	27.792	22.171	2146.7	27.64	111.17	74.6	149.2	152.2
148.00		0.2500	27.296	21.772	2032.8	27.11	109.18	75.1	143.9	149.5
150.00		0.2500	26.800	21.373	1923.0	26.58	107.20	75.7	138.6	146.8
152.00		0.2500	26.304	20.973	1817.2	26.05	105.22	76.3	133.5	144.1
154.00		0.2500	25.808	20.574	1715.4	25.52	103.23	76.9	128.4	141.4
156.00		0.2500	25.312	20.175	1617.4	24.99	101.25	77.5	123.4	138.7
158.00		0.2500	24.816	19.776	1523.3	24.45	99.26	78.0	118.6	135.9
160.00		0.2500	24.320	19.376	1432.9	23.92	97.28	78.6	113.8	133.2
162.00		0.2500	23.824	18.977	1346.1	23.39	95.30	79.2	109.2	130.5
164.00		0.2500	23.328	18.578	1262.9	22.86	93.31	79.8	104.6	127.8
166.00		0.2500	22.832	18.179	1183.2	22.33	91.33	80.4	100.1	125.1
168.00		0.2500	22.336	17.779	1107.0	21.80	89.34	80.9	95.7	122.4
170.00		0.2500	21.840	17.380	1034.0	21.26	87.36	81.5	91.5	119.6
172.00		0.2500	21.344	16.981	964.4	20.73	85.38	81.9	87.3	116.9
174.00		0.2500	20.848	16.581	898.0	20.20	83.39	81.9	83.2	114.2
176.00		0.2500	20.352	16.182	834.6	19.67	81.41	81.9	79.2	111.5
178.00		0.2500	19.856	15.783	774.4	19.14	79.42	81.9	75.3	108.8
180.00		0.2500	19.360	15.384	717.1	18.61	77.44	81.9	71.6	106.1
										33413.9

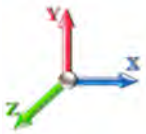
Wind Loading - Shaft

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 10	

Load Case: 1.2D + 1.0W 123 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	31.009	34.11	603.99	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	31.009	34.11	599.16	0.950	0.000	2.00	10.655	10.12	345.3	0.0	705.4
4.00		1.00	0.85	31.009	34.11	594.33	0.950	0.000	2.00	10.569	10.04	342.5	0.0	699.7
6.00		1.00	0.85	31.009	34.11	589.49	0.950	0.000	2.00	10.484	9.96	339.7	0.0	694.0
8.00		1.00	0.85	31.009	34.11	584.66	0.950	0.000	2.00	10.398	9.88	337.0	0.0	688.3
10.00		1.00	0.85	31.009	34.11	579.83	0.950	0.000	2.00	10.313	9.80	334.2	0.0	682.6
12.00		1.00	0.85	31.009	34.11	575.00	0.950	0.000	2.00	10.227	9.72	331.4	0.0	676.9
14.00		1.00	0.85	31.009	34.11	570.17	0.950	0.000	2.00	10.142	9.63	328.6	0.0	671.2
16.00		1.00	0.86	31.392	34.53	568.81	0.950	0.000	2.00	10.056	9.55	329.9	0.0	665.5
18.00		1.00	0.88	32.180	35.40	570.99	0.950	0.000	2.00	9.970	9.47	335.3	0.0	659.8
20.00		1.00	0.90	32.902	36.19	572.38	0.950	0.000	2.00	9.885	9.39	339.9	0.0	654.1
22.00		1.00	0.92	33.569	36.93	573.12	0.950	0.000	2.00	9.799	9.31	343.8	0.0	648.3
24.00		1.00	0.94	34.189	37.61	573.32	0.950	0.000	2.00	9.714	9.23	347.0	0.0	642.6
26.00		1.00	0.95	34.770	38.25	573.06	0.950	0.000	2.00	9.628	9.15	349.8	0.0	636.9
28.00		1.00	0.97	35.317	38.85	572.39	0.950	0.000	2.00	9.542	9.07	352.2	0.0	631.2
30.00		1.00	0.98	35.834	39.42	571.37	0.950	0.000	2.00	9.457	8.98	354.1	0.0	625.5
32.00		1.00	1.00	36.324	39.96	570.03	0.950	0.000	2.00	9.371	8.90	355.7	0.0	619.8
34.00		1.00	1.01	36.791	40.47	568.42	0.950	0.000	2.00	9.286	8.82	357.0	0.0	614.1
36.00		1.00	1.02	37.236	40.96	566.55	0.950	0.000	2.00	9.200	8.74	358.0	0.0	608.4
38.00		1.00	1.03	37.662	41.43	564.46	0.950	0.000	2.00	9.115	8.66	358.7	0.0	602.7
40.00		1.00	1.04	38.071	41.88	562.16	0.950	0.000	2.00	9.029	8.58	359.2	0.0	597.0
42.00		1.00	1.05	38.464	42.31	559.68	0.950	0.000	2.00	8.943	8.50	359.5	0.0	591.3
43.92	Bot - Section 2	1.00	1.06	38.827	42.71	557.13	0.950	0.000	1.92	8.490	8.07	344.5	0.0	561.3
44.00		1.00	1.06	38.843	42.73	557.02	0.950	0.000	0.08	0.373	0.35	15.1	0.0	47.2
46.00		1.00	1.07	39.208	43.13	554.19	0.950	0.000	2.00	8.912	8.47	365.2	0.0	1127.3
48.00		1.00	1.08	39.561	43.52	551.23	0.950	0.000	2.00	8.827	8.39	364.9	0.0	1116.3
50.00		1.00	1.09	39.902	43.89	548.12	0.950	0.000	2.00	8.741	8.30	364.5	0.0	1105.3
51.00	Top - Section 1	1.00	1.10	40.069	44.08	546.52	0.950	0.000	1.00	4.339	4.12	181.7	0.0	548.5
52.00		1.00	1.10	40.233	44.26	553.90	0.950	0.000	1.00	4.317	4.10	181.5	0.0	265.1
54.00		1.00	1.11	40.554	44.61	550.58	0.950	0.000	2.00	8.570	8.14	363.2	0.0	526.3
56.00		1.00	1.12	40.866	44.95	547.14	0.950	0.000	2.00	8.485	8.06	362.3	0.0	521.0
58.00		1.00	1.13	41.169	45.29	543.60	0.950	0.000	2.00	8.399	7.98	361.3	0.0	515.7
60.00		1.00	1.14	41.464	45.61	539.95	0.950	0.000	2.00	8.313	7.90	360.2	0.0	510.4
62.00		1.00	1.14	41.751	45.93	536.21	0.950	0.000	2.00	8.228	7.82	359.0	0.0	505.1
64.00		1.00	1.15	42.031	46.23	532.38	0.950	0.000	2.00	8.142	7.74	357.6	0.0	499.8
66.00		1.00	1.16	42.304	46.53	528.47	0.950	0.000	2.00	8.057	7.65	356.2	0.0	494.5
68.00		1.00	1.17	42.571	46.83	524.47	0.950	0.000	2.00	7.971	7.57	354.6	0.0	489.2
70.00		1.00	1.17	42.831	47.11	520.39	0.950	0.000	2.00	7.885	7.49	352.9	0.0	483.9
72.00		1.00	1.18	43.086	47.39	516.24	0.950	0.000	2.00	7.800	7.41	351.2	0.0	478.6
74.00		1.00	1.19	43.335	47.67	512.02	0.950	0.000	2.00	7.714	7.33	349.3	0.0	473.3
76.00		1.00	1.19	43.579	47.94	507.73	0.950	0.000	2.00	7.629	7.25	347.4	0.0	468.0
78.00		1.00	1.20	43.818	48.20	503.38	0.950	0.000	2.00	7.543	7.17	345.4	0.0	462.7
80.00		1.00	1.21	44.053	48.46	498.96	0.950	0.000	2.00	7.458	7.08	343.3	0.0	457.4
82.00		1.00	1.21	44.282	48.71	494.49	0.950	0.000	2.00	7.372	7.00	341.1	0.0	452.1
84.00		1.00	1.22	44.507	48.96	489.96	0.950	0.000	2.00	7.286	6.92	338.9	0.0	446.8
86.00		1.00	1.23	44.728	49.20	485.37	0.950	0.000	2.00	7.201	6.84	336.6	0.0	441.5
88.00		1.00	1.23	44.945	49.44	480.73	0.950	0.000	2.00	7.115	6.76	334.2	0.0	436.2

Wind Loading - Shaft

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 11	

90.00	1.00	1.24	45.159	49.67	476.03	0.950	0.000	2.00	7.030	6.68	331.7	0.0	430.9
90.17 Bot - Section 3	1.00	1.24	45.176	49.69	475.64	0.950	0.000	0.17	0.582	0.55	27.5	0.0	35.7
92.00	1.00	1.24	45.368	49.90	471.29	0.950	0.000	1.83	6.471	6.15	306.8	0.0	726.1
94.00	1.00	1.25	45.574	50.13	466.50	0.950	0.000	2.00	6.977	6.63	332.3	0.0	782.7
96.00 Top - Section 2	1.00	1.25	45.776	50.35	461.67	0.950	0.000	2.00	6.891	6.55	329.7	0.0	772.9
98.00	1.00	1.26	45.975	50.57	464.94	0.950	0.000	2.00	6.806	6.47	327.0	0.0	353.4
100.00	1.00	1.27	46.171	50.79	460.03	0.950	0.000	2.00	6.720	6.38	324.2	0.0	349.0
102.00	1.00	1.27	46.364	51.00	455.09	0.950	0.000	2.00	6.635	6.30	321.5	0.0	344.5
104.00	1.00	1.28	46.554	51.21	450.10	0.950	0.000	2.00	6.549	6.22	318.6	0.0	340.0
106.00	1.00	1.28	46.741	51.42	445.07	0.950	0.000	2.00	6.464	6.14	315.7	0.0	335.5
108.00	1.00	1.29	46.926	51.62	440.00	0.950	0.000	2.00	6.378	6.06	312.8	0.0	331.0
110.00	1.00	1.29	47.107	51.82	434.90	0.950	0.000	2.00	6.292	5.98	309.8	0.0	326.5
112.00	1.00	1.30	47.286	52.01	429.75	0.950	0.000	2.00	6.207	5.90	306.7	0.0	322.1
114.00	1.00	1.30	47.463	52.21	424.58	0.950	0.000	2.00	6.121	5.82	303.6	0.0	317.6
116.00	1.00	1.31	47.637	52.40	419.37	0.950	0.000	2.00	6.036	5.73	300.5	0.0	313.1
118.00	1.00	1.31	47.809	52.59	414.12	0.950	0.000	2.00	5.950	5.65	297.3	0.0	308.6
120.00	1.00	1.32	47.978	52.78	408.85	0.950	0.000	2.00	5.864	5.57	294.0	0.0	304.1
122.00	1.00	1.32	48.145	52.96	403.54	0.950	0.000	2.00	5.779	5.49	290.7	0.0	299.6
124.00	1.00	1.32	48.310	53.14	398.20	0.950	0.000	2.00	5.693	5.41	287.4	0.0	295.2
126.00	1.00	1.33	48.473	53.32	392.83	0.950	0.000	2.00	5.608	5.33	284.1	0.0	290.7
128.00	1.00	1.33	48.634	53.50	387.43	0.950	0.000	2.00	5.522	5.25	280.7	0.0	286.2
130.00	1.00	1.34	48.793	53.67	382.00	0.950	0.000	2.00	5.437	5.16	277.2	0.0	281.7
132.00	1.00	1.34	48.950	53.85	376.54	0.950	0.000	2.00	5.351	5.08	273.7	0.0	277.2
133.33 Bot - Section 4	1.00	1.34	49.054	53.96	372.89	0.950	0.000	1.33	3.520	3.34	180.4	0.0	182.3
134.00	1.00	1.35	49.106	54.02	371.06	0.950	0.000	0.67	1.774	1.69	91.1	0.0	157.5
136.00	1.00	1.35	49.259	54.19	365.55	0.950	0.000	2.00	5.266	5.00	271.1	0.0	467.3
138.00 Top - Section 3	1.00	1.35	49.411	54.35	360.01	0.950	0.000	2.00	5.181	4.92	267.5	0.0	459.5
140.00 Appurtenance(s)	1.00	1.36	49.561	54.52	360.61	0.950	0.000	2.00	5.095	4.84	263.9	0.0	192.5
142.00	1.00	1.36	49.709	54.68	355.03	0.950	0.000	2.00	5.009	4.76	260.2	0.0	189.2
144.00	1.00	1.37	49.855	54.84	349.42	0.950	0.000	2.00	4.924	4.68	256.5	0.0	186.0
146.00	1.00	1.37	50.000	55.00	343.80	0.950	0.000	2.00	4.838	4.60	252.8	0.0	182.7
148.00	1.00	1.37	50.144	55.16	338.14	0.950	0.000	2.00	4.753	4.51	249.0	0.0	179.4
150.00 Appurtenance(s)	1.00	1.38	50.286	55.31	332.47	0.950	0.000	2.00	4.667	4.43	245.2	0.0	176.2
152.00	1.00	1.38	50.426	55.47	326.77	0.950	0.000	2.00	4.581	4.35	241.4	0.0	172.9
154.00	1.00	1.39	50.565	55.62	321.05	0.950	0.000	2.00	4.496	4.27	237.6	0.0	169.7
156.00	1.00	1.39	50.703	55.77	315.31	0.950	0.000	2.00	4.410	4.19	233.7	0.0	166.4
158.00 Appurtenance(s)	1.00	1.39	50.839	55.92	309.54	0.950	0.000	2.00	4.325	4.11	229.8	0.0	163.1
160.00 Appurtenance(s)	1.00	1.40	50.974	56.07	303.76	0.950	0.000	2.00	4.239	4.03	225.8	0.0	159.9
162.00	1.00	1.40	51.107	56.22	297.95	0.950	0.000	2.00	4.154	3.95	221.8	0.0	156.6
164.00	1.00	1.40	51.239	56.36	292.13	0.950	0.000	2.00	4.068	3.86	217.8	0.0	153.3
166.00 Appurtenance(s)	1.00	1.41	51.370	56.51	286.28	0.950	0.000	2.00	3.982	3.78	213.8	0.0	150.1
168.00	1.00	1.41	51.500	56.65	280.42	0.950	0.000	2.00	3.897	3.70	209.7	0.0	146.8
170.00	1.00	1.42	51.628	56.79	274.53	0.950	0.000	2.00	3.811	3.62	205.6	0.0	143.6
172.00	1.00	1.42	51.756	56.93	268.63	0.950	0.000	2.00	3.726	3.54	201.5	0.0	140.3
174.00	1.00	1.42	51.882	57.07	262.70	0.950	0.000	2.00	3.640	3.46	197.3	0.0	137.0
176.00	1.00	1.43	52.007	57.21	256.76	0.950	0.000	2.00	3.554	3.38	193.2	0.0	133.8
178.00 Appurtenance(s)	1.00	1.43	52.131	57.34	250.80	0.950	0.000	2.00	3.469	3.30	189.0	0.0	130.5
180.00	1.00	1.43	52.253	57.48	244.83	0.950	0.000	2.00	3.383	3.21	184.7	0.0	127.3
							Totals:	**180.00**			**27,684.8**		**40,096.7**

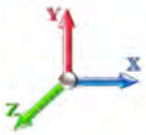
Discrete Appurtenance Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 12	

Load Case: 1.2D + 1.0W 123 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	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	178.00	JMA MX06FRO660-03	6	52.131	57.344	0.61	0.75	36.42	432.00	0.000	0.000	2088.48	0.00	0.00
2	178.00	Raycap	1	52.131	57.344	0.75	0.75	1.96	38.40	0.000	0.000	112.25	0.00	0.00
3	178.00	Samsung B5/B13 RRH	3	52.131	57.344	0.38	0.75	2.50	253.08	0.000	0.000	143.22	0.00	0.00
4	178.00	Platform w/ Handrails w/	1	52.131	57.344	1.00	1.00	40.00	2642.64	0.000	0.000	2293.75	0.00	0.00
5	178.00	Samsung B2/B66A RRH	3	52.131	57.344	0.38	0.75	2.11	303.84	0.000	0.000	121.28	0.00	0.00
6	166.00	RFS APXVTM14-C-I20	3	51.370	56.507	0.58	0.75	10.98	202.32	0.000	0.000	620.68	0.00	0.00
7	166.00	ALU TD-RRH8x20-25	3	51.370	56.507	0.38	0.75	4.56	252.00	0.000	0.000	257.46	0.00	0.00
8	166.00	Sitepro	1	51.370	56.507	1.00	1.00	6.70	276.00	0.000	0.000	378.60	0.00	0.00
9	166.00	Sitepro	1	51.370	56.507	1.00	1.00	7.00	487.93	0.000	0.000	395.55	0.00	0.00
10	166.00	Commscope	3	51.370	56.507	0.55	0.75	20.43	278.64	0.000	0.000	1154.42	0.00	0.00
11	166.00	ALU 1900 Mhz	3	51.370	56.507	0.38	0.75	4.27	158.40	0.000	0.000	241.57	0.00	0.00
12	166.00	ALU 800 Mhz	6	51.370	56.507	0.38	0.75	5.60	381.60	0.000	0.000	316.58	0.00	0.00
13	166.00	Platform w/ Hand Rails	1	51.370	56.507	1.00	1.00	40.00	2400.00	0.000	0.000	2260.29	0.00	0.00
14	160.00	4449 B71+B12	3	50.974	56.071	0.40	0.80	1.98	252.00	0.000	0.000	111.02	0.00	0.00
15	160.00	KRY 112 144/2	3	50.974	56.071	0.40	0.80	0.78	55.44	0.000	0.000	43.74	0.00	0.00
16	160.00	KRY 112 489/2	3	50.974	56.071	0.40	0.80	0.78	55.44	0.000	0.000	43.74	0.00	0.00
17	160.00	APXVAARR24_43-U-NA2	3	50.974	56.071	0.56	0.80	34.00	460.80	0.000	0.000	1906.59	0.00	0.00
18	160.00	RR90-17-00VDPL2/-R	3	50.974	56.071	0.54	0.80	7.12	48.60	0.000	0.000	398.97	0.00	0.00
19	158.00	T-Arms	3	50.839	55.923	0.56	0.75	13.50	1260.00	0.000	0.000	754.96	0.00	0.00
20	158.00	T-Arm Kit	1	50.839	55.923	0.75	0.75	12.38	600.00	0.000	0.000	692.04	0.00	0.00
21	158.00	V-Brace	1	50.839	55.923	0.75	0.75	4.72	236.40	0.000	0.000	264.23	0.00	0.00
22	150.00	Powerwave 7770	3	50.286	55.314	0.55	0.75	9.05	126.00	0.000	0.000	500.60	0.00	0.00
23	150.00	Cci HPA-65R-BUU-H6	2	50.286	55.314	0.64	0.75	12.32	122.40	0.000	0.000	681.28	0.00	0.00
24	150.00	SBNHH-1D65A	1	50.286	55.314	1.00	1.00	5.88	40.20	0.000	0.000	325.25	0.00	0.00
25	150.00	4449 B5/B12	3	50.286	55.314	0.38	0.75	2.22	255.60	0.000	0.000	122.59	0.00	0.00
26	150.00	DMP65R-BU6DA	2	50.286	55.314	0.54	0.75	13.73	190.56	0.000	0.000	759.29	0.00	0.00
27	150.00	DMP65R-BU4DA	1	50.286	55.314	0.54	0.75	6.86	95.28	0.000	0.000	379.64	0.00	0.00
28	150.00	Powerwave LGP21401	6	50.286	55.314	0.38	0.75	2.75	101.52	0.000	0.000	151.84	0.00	0.00
29	150.00	B2 B66A 8843	3	50.286	55.314	0.38	0.75	1.84	252.00	0.000	0.000	102.05	0.00	0.00
30	150.00	Raycap DC6-48-60-18-8F	1	50.286	55.314	0.67	1.00	1.21	38.16	0.000	0.000	67.08	0.00	0.00
31	150.00	Platform w/ Hand Rail	1	50.286	55.314	1.00	1.00	35.00	1920.00	0.000	0.000	1936.00	0.00	0.00
32	140.00	Raycap	1	49.561	54.517	0.75	0.75	1.51	26.28	0.000	0.000	82.18	0.00	0.00
33	140.00	Fujitsu TA08025-B604	3	49.561	54.517	0.38	0.75	2.21	230.04	0.000	0.000	120.21	0.00	0.00
34	140.00	Fujitsu TA08025-B605	3	49.561	54.517	0.38	0.75	2.21	270.00	0.000	0.000	120.21	0.00	0.00
35	140.00	Sitepro1 SNP8HR-3XX	1	49.561	54.517	1.00	1.00	37.59	2251.20	0.000	0.000	2049.28	0.00	0.00
36	140.00	JMA Wireless	3	49.561	54.517	0.55	0.75	20.80	232.20	0.000	0.000	1133.72	0.00	0.00
							Totals:		**17,226.97**			**23,130.65**		

Total Applied Force Summary

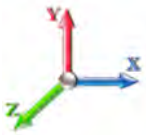
Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 13

Tower Engineering Solutions

Load Case: 1.2D + 1.0W 123 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		345.27	708.56	0.00	0.00
4.00		342.50	739.32	0.00	0.00
6.00		339.73	770.08	0.00	0.00
8.00		336.95	764.37	0.00	0.00
10.00		334.18	758.66	0.00	0.00
12.00		331.41	752.96	0.00	0.00
14.00		328.63	747.25	0.00	0.00
16.00		329.88	741.54	0.00	0.00
18.00		335.29	735.84	0.00	0.00
20.00		339.86	730.13	0.00	0.00
22.00		343.75	724.42	0.00	0.00
24.00		347.05	718.72	0.00	0.00
26.00		349.84	713.01	0.00	0.00
28.00		352.18	707.31	0.00	0.00
30.00		354.13	701.60	0.00	0.00
32.00		355.72	695.89	0.00	0.00
34.00		357.00	690.19	0.00	0.00
36.00		357.99	684.48	0.00	0.00
38.00		358.72	678.77	0.00	0.00
40.00		359.21	673.07	0.00	0.00
42.00		359.48	667.36	0.00	0.00
43.92		344.50	634.20	0.00	0.00
44.00		15.15	50.38	0.00	0.00
46.00		365.16	1203.41	0.00	0.00
48.00		364.91	1192.41	0.00	0.00
50.00		364.49	1181.40	0.00	0.00
51.00		181.66	586.57	0.00	0.00
52.00		181.51	303.16	0.00	0.00
54.00		363.19	602.35	0.00	0.00
56.00		362.33	597.05	0.00	0.00
58.00		361.33	591.75	0.00	0.00
60.00		360.21	586.45	0.00	0.00
62.00		358.98	581.15	0.00	0.00
64.00		357.62	575.85	0.00	0.00
66.00		356.16	570.55	0.00	0.00
68.00		354.60	565.26	0.00	0.00
70.00		352.94	559.96	0.00	0.00
72.00		351.19	554.66	0.00	0.00
74.00		349.34	549.36	0.00	0.00
76.00		347.41	544.06	0.00	0.00
78.00		345.40	538.76	0.00	0.00
80.00		343.31	533.46	0.00	0.00
82.00		341.14	528.16	0.00	0.00
84.00		338.89	522.87	0.00	0.00
86.00		336.57	517.57	0.00	0.00
88.00		334.19	512.27	0.00	0.00

Total Applied Force Summary

Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (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		331.73	506.97	0.00	0.00
90.17		27.47	42.01	0.00	0.00
92.00		306.78	795.81	0.00	0.00
94.00		332.28	858.78	0.00	0.00
96.00		329.66	849.00	0.00	0.00
98.00		326.99	429.52	0.00	0.00
100.00		324.25	425.04	0.00	0.00
102.00		321.46	420.56	0.00	0.00
104.00		318.61	416.07	0.00	0.00
106.00		315.71	411.59	0.00	0.00
108.00		312.76	407.11	0.00	0.00
110.00		309.76	402.62	0.00	0.00
112.00		306.70	398.14	0.00	0.00
114.00		303.61	393.65	0.00	0.00
116.00		300.46	389.17	0.00	0.00
118.00		297.27	384.69	0.00	0.00
120.00		294.03	380.20	0.00	0.00
122.00		290.75	375.72	0.00	0.00
124.00		287.42	371.24	0.00	0.00
126.00		284.06	366.75	0.00	0.00
128.00		280.65	362.27	0.00	0.00
130.00		277.21	357.79	0.00	0.00
132.00		273.72	353.30	0.00	0.00
133.33		180.43	233.04	0.00	0.00
134.00		91.05	182.83	0.00	0.00
136.00		271.08	543.34	0.00	0.00
138.00		267.49	535.59	0.00	0.00
140.00	(11) attachments	3769.48	3278.28	0.00	0.00
142.00		260.21	262.90	0.00	0.00
144.00		256.52	259.63	0.00	0.00
146.00		252.80	256.37	0.00	0.00
148.00		249.04	253.11	0.00	0.00
150.00	(23) attachments	5270.87	3391.57	0.00	0.00
152.00		241.42	222.66	0.00	0.00
154.00		237.56	219.40	0.00	0.00
156.00		233.68	216.14	0.00	0.00
158.00	(5) attachments	1940.99	2309.28	0.00	0.00
160.00	(15) attachments	2729.87	1081.90	0.00	0.00
162.00		221.83	173.91	0.00	0.00
164.00		217.82	170.65	0.00	0.00
166.00	(21) attachments	5838.93	4604.28	0.00	0.00
168.00		209.71	154.97	0.00	0.00
170.00		205.62	151.71	0.00	0.00
172.00		201.50	148.45	0.00	0.00
174.00		197.35	145.19	0.00	0.00
176.00		193.17	141.93	0.00	0.00
178.00	(14) attachments	4947.94	3808.63	0.00	0.00
180.00		184.74	130.41	0.00	0.00
	Totals:	**50,815.43**	**63,260.80**	**0.00**	**0.00**

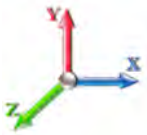
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 15	

Load Case: 1.2D + 1.0W 123 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.66
2.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	2.50
4.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.66
4.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	2.50
6.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.66
6.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	2.50
8.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.66
8.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	2.50
10.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.66
10.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	2.50
12.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.66
12.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	2.50
14.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.66
14.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	2.50
16.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.392	0.00	0.66
16.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.392	0.00	2.50
18.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	32.180	0.00	0.66
18.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	32.180	0.00	2.50
20.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	32.902	0.00	0.66
20.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	32.902	0.00	2.50
22.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	33.569	0.00	0.66
22.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	33.569	0.00	2.50
24.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	34.189	0.00	0.66
24.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	34.189	0.00	2.50
26.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	34.770	0.00	0.66
26.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	34.770	0.00	2.50
28.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	35.317	0.00	0.66
28.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	35.317	0.00	2.50
30.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	35.834	0.00	0.66
30.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	35.834	0.00	2.50
32.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	36.324	0.00	0.66
32.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	36.324	0.00	2.50
34.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	36.791	0.00	0.66
34.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	36.791	0.00	2.50
36.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	37.236	0.00	0.66
36.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	37.236	0.00	2.50
38.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	37.662	0.00	0.66
38.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	37.662	0.00	2.50
40.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	38.071	0.00	0.66
40.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	38.071	0.00	2.50
42.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	38.464	0.00	0.66
42.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	38.464	0.00	2.50
43.92	Safety Cable	Yes	1.92	0.000	0.00	0.00	0.00	0.000	0.000	38.827	0.00	0.63
43.92	Step bolts (ladder)	Yes	1.92	0.000	0.00	0.00	0.00	0.000	0.000	38.827	0.00	2.39
44.00	Safety Cable	Yes	0.08	0.000	0.00	0.00	0.00	0.000	0.000	38.843	0.00	0.03
44.00	Step bolts (ladder)	Yes	0.08	0.000	0.00	0.00	0.00	0.000	0.000	38.843	0.00	0.10
46.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.208	0.00	0.66

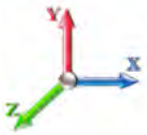
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 16	

Load Case: 1.2D + 1.0W 123 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.208	0.00	2.50
48.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.561	0.00	0.66
48.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.561	0.00	2.50
50.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.902	0.00	0.66
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.902	0.00	2.50
51.00	Safety Cable	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	40.069	0.00	0.33
51.00	Step bolts (ladder)	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	40.069	0.00	1.25
52.00	Safety Cable	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	40.233	0.00	0.33
52.00	Step bolts (ladder)	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	40.233	0.00	1.25
54.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	40.554	0.00	0.66
54.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	40.554	0.00	2.50
56.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	40.866	0.00	0.66
56.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	40.866	0.00	2.50
58.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.169	0.00	0.66
58.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.169	0.00	2.50
60.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.464	0.00	0.66
60.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.464	0.00	2.50
62.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.751	0.00	0.66
62.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.751	0.00	2.50
64.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.031	0.00	0.66
64.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.031	0.00	2.50
66.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.304	0.00	0.66
66.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.304	0.00	2.50
68.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.571	0.00	0.66
68.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.571	0.00	2.50
70.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.831	0.00	0.66
70.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.831	0.00	2.50
72.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.086	0.00	0.66
72.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.086	0.00	2.50
74.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.335	0.00	0.66
74.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.335	0.00	2.50
76.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.579	0.00	0.66
76.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.579	0.00	2.50
78.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.818	0.00	0.66
78.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.818	0.00	2.50
80.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.053	0.00	0.66
80.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.053	0.00	2.50
82.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.282	0.00	0.66
82.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.282	0.00	2.50
84.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.507	0.00	0.66
84.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.507	0.00	2.50
86.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.728	0.00	0.66
86.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.728	0.00	2.50
88.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.945	0.00	0.66
88.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.945	0.00	2.50
90.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.159	0.00	0.66
90.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.159	0.00	2.50

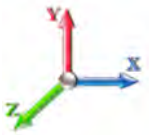
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 17	

Load Case: 1.2D + 1.0W 123 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.17	Safety Cable	Yes	0.17	0.000	0.00	0.00	0.00	0.000	0.000	45.176	0.00	0.05
90.17	Step bolts (ladder)	Yes	0.17	0.000	0.00	0.00	0.00	0.000	0.000	45.176	0.00	0.21
92.00	Safety Cable	Yes	1.83	0.000	0.00	0.00	0.00	0.000	0.000	45.368	0.00	0.60
92.00	Step bolts (ladder)	Yes	1.83	0.000	0.00	0.00	0.00	0.000	0.000	45.368	0.00	2.29
94.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.574	0.00	0.66
94.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.574	0.00	2.50
96.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.776	0.00	0.66
96.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.776	0.00	2.50
98.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.975	0.00	0.66
98.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.975	0.00	2.50
100.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.171	0.00	0.66
100.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.171	0.00	2.50
102.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.364	0.00	0.66
102.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.364	0.00	2.50
104.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.554	0.00	0.66
104.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.554	0.00	2.50
106.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.741	0.00	0.66
106.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.741	0.00	2.50
108.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.926	0.00	0.66
108.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.926	0.00	2.50
110.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.107	0.00	0.66
110.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.107	0.00	2.50
112.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.286	0.00	0.66
112.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.286	0.00	2.50
114.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.463	0.00	0.66
114.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.463	0.00	2.50
116.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.637	0.00	0.66
116.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.637	0.00	2.50
118.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.809	0.00	0.66
118.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.809	0.00	2.50
120.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.978	0.00	0.66
120.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.978	0.00	2.50
122.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.145	0.00	0.66
122.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.145	0.00	2.50
124.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.310	0.00	0.66
124.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.310	0.00	2.50
126.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.473	0.00	0.66
126.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.473	0.00	2.50
128.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.634	0.00	0.66
128.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.634	0.00	2.50
130.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.793	0.00	0.66
130.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.793	0.00	2.50
132.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.950	0.00	0.66
132.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.950	0.00	2.50
133.33	Safety Cable	Yes	1.33	0.000	0.00	0.00	0.00	0.000	0.000	49.054	0.00	0.44
133.33	Step bolts (ladder)	Yes	1.33	0.000	0.00	0.00	0.00	0.000	0.000	49.054	0.00	1.66
134.00	Safety Cable	Yes	0.67	0.000	0.00	0.00	0.00	0.000	0.000	49.106	0.00	0.22

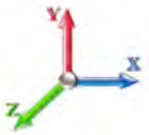
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 18	

Load Case: 1.2D + 1.0W 123 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
134.00	Step bolts (ladder)	Yes	0.67	0.000	0.00	0.00	0.00	0.000	0.000	49.106	0.00	0.83
136.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.259	0.00	0.66
136.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.259	0.00	2.50
138.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.411	0.00	0.66
138.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.411	0.00	2.50
140.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.561	0.00	0.66
140.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.561	0.00	2.50
142.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.709	0.00	0.66
142.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.709	0.00	2.50
144.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.855	0.00	0.66
144.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.855	0.00	2.50
146.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.000	0.00	0.66
146.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.000	0.00	2.50
148.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.144	0.00	0.66
148.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.144	0.00	2.50
150.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.286	0.00	0.66
150.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.286	0.00	2.50
152.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.426	0.00	0.66
152.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.426	0.00	2.50
154.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.565	0.00	0.66
154.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.565	0.00	2.50
156.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.703	0.00	0.66
156.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.703	0.00	2.50
158.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.839	0.00	0.66
158.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.839	0.00	2.50
160.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.974	0.00	0.66
160.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.974	0.00	2.50
162.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.107	0.00	0.66
162.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.107	0.00	2.50
164.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.239	0.00	0.66
164.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.239	0.00	2.50
166.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.370	0.00	0.66
166.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.370	0.00	2.50
168.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.500	0.00	0.66
168.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.500	0.00	2.50
170.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.628	0.00	0.66
170.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.628	0.00	2.50
172.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.756	0.00	0.66
172.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.756	0.00	2.50
174.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.882	0.00	0.66
174.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.882	0.00	2.50
176.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.007	0.00	0.66
176.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.007	0.00	2.50
178.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.131	0.00	0.66
178.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.131	0.00	2.50
180.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.253	0.00	0.66
180.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.253	0.00	2.50

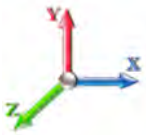
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 19	

Load Case: 1.2D + 1.0W 123 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
										Totals:	**0.0**	**283.6**

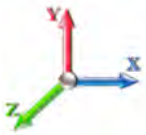
Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 20	

Load Case: 1.2D + 1.0W 123 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 29

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	-63.22	-50.86	0.00	-6320.3	0.00	6320.34	5123.29	1522.04	7808.40	6435.29	0.00	0.000	0.000	0.996
2.00	-62.44	-50.61	0.00	-6218.6	0.00	6218.62	5107.67	1509.78	7683.09	6363.61	0.02	-0.085	0.000	0.991
4.00	-61.62	-50.36	0.00	-6117.4	0.00	6117.40	5091.62	1497.52	7558.79	6291.73	0.07	-0.171	0.000	0.986
6.00	-60.78	-50.11	0.00	-6016.6	0.00	6016.68	5075.16	1485.26	7435.50	6219.67	0.16	-0.257	0.000	0.980
8.00	-59.94	-49.86	0.00	-5916.4	0.00	5916.47	5058.29	1472.99	7313.22	6147.44	0.29	-0.344	0.000	0.975
10.00	-59.11	-49.61	0.00	-5816.7	0.00	5816.75	5041.00	1460.73	7191.96	6075.05	0.45	-0.432	0.000	0.970
12.00	-58.28	-49.36	0.00	-5717.5	0.00	5717.53	5023.29	1448.47	7071.72	6002.51	0.66	-0.520	0.000	0.965
14.00	-57.46	-49.12	0.00	-5618.8	0.00	5618.81	5005.16	1436.20	6952.48	5929.84	0.89	-0.610	0.000	0.960
16.00	-56.65	-48.87	0.00	-5520.5	0.00	5520.57	4986.62	1423.94	6834.27	5857.05	1.17	-0.700	0.000	0.955
18.00	-55.84	-48.61	0.00	-5422.8	0.00	5422.84	4967.66	1411.68	6717.06	5784.16	1.48	-0.790	0.000	0.950
20.00	-55.03	-48.35	0.00	-5325.6	0.00	5325.62	4948.29	1399.42	6600.87	5711.17	1.83	-0.882	0.000	0.945
22.00	-54.24	-48.08	0.00	-5228.9	0.00	5228.92	4928.49	1387.15	6485.69	5638.10	2.22	-0.974	0.000	0.940
24.00	-53.45	-47.81	0.00	-5132.7	0.00	5132.76	4908.28	1374.89	6371.53	5564.95	2.65	-1.067	0.000	0.934
26.00	-52.66	-47.53	0.00	-5037.1	0.00	5037.14	4887.66	1362.63	6258.37	5491.76	3.12	-1.160	0.000	0.929
28.00	-51.89	-47.25	0.00	-4942.0	0.00	4942.08	4866.62	1350.36	6146.24	5418.52	3.62	-1.254	0.000	0.924
30.00	-51.11	-46.97	0.00	-4847.5	0.00	4847.58	4845.16	1338.10	6035.11	5345.24	4.17	-1.349	0.000	0.919
32.00	-50.35	-46.68	0.00	-4753.6	0.00	4753.65	4823.28	1325.84	5925.00	5271.95	4.76	-1.445	0.000	0.913
34.00	-49.59	-46.39	0.00	-4660.3	0.00	4660.30	4800.99	1313.58	5815.91	5198.66	5.38	-1.542	0.000	0.908
36.00	-48.84	-46.09	0.00	-4567.5	0.00	4567.52	4778.28	1301.31	5707.83	5125.37	6.05	-1.639	0.000	0.903
38.00	-48.09	-45.80	0.00	-4475.3	0.00	4475.34	4755.15	1289.05	5600.76	5052.10	6.76	-1.737	0.000	0.897
40.00	-47.35	-45.50	0.00	-4383.7	0.00	4383.75	4731.61	1276.79	5494.70	4978.87	7.51	-1.836	0.000	0.892
42.00	-46.62	-45.20	0.00	-4292.7	0.00	4292.75	4707.65	1264.52	5389.66	4905.68	8.30	-1.936	0.000	0.886
43.92	-45.96	-44.87	0.00	-4206.1	0.00	4206.12	4684.30	1252.77	5289.95	4835.60	9.10	-2.032	0.000	0.881
44.00	-45.87	-44.90	0.00	-4202.3	0.00	4202.38	4683.27	1252.26	5285.64	4832.55	9.13	-2.036	0.000	0.881
46.00	-44.60	-44.57	0.00	-4112.5	0.00	4112.59	4658.48	1240.00	5182.62	4759.49	10.01	-2.138	0.000	0.875
48.00	-43.34	-44.24	0.00	-4023.4	0.00	4023.45	4633.27	1227.74	5080.62	4686.52	10.93	-2.240	0.000	0.869
50.00	-42.12	-43.88	0.00	-3934.9	0.00	3934.98	4607.64	1215.47	4979.64	4613.64	11.89	-2.343	0.000	0.863
51.00	-41.50	-43.71	0.00	-3891.1	0.00	3891.10	4157.28	1142.33	4736.69	4216.21	12.38	-2.395	0.000	0.934
52.00	-41.14	-43.58	0.00	-3847.3	0.00	3847.39	4146.96	1136.64	4689.60	4184.61	12.89	-2.447	0.000	0.931
54.00	-40.47	-43.26	0.00	-3760.2	0.00	3760.24	4126.01	1125.25	4596.10	4121.41	13.94	-2.554	0.000	0.924
56.00	-39.81	-42.95	0.00	-3673.7	0.00	3673.71	4104.64	1113.86	4503.55	4058.23	15.03	-2.661	0.000	0.916
58.00	-39.16	-42.63	0.00	-3587.8	0.00	3587.82	4082.85	1102.48	4411.95	3995.08	16.17	-2.770	0.000	0.909
60.00	-38.51	-42.32	0.00	-3502.5	0.00	3502.55	4060.64	1091.09	4321.28	3931.97	17.35	-2.879	0.000	0.902
62.00	-37.87	-42.00	0.00	-3417.9	0.00	3417.92	4038.02	1079.70	4231.55	3868.91	18.58	-2.989	0.000	0.894
64.00	-37.23	-41.69	0.00	-3333.9	0.00	3333.91	4014.98	1068.31	4142.77	3805.92	19.86	-3.099	0.000	0.887
66.00	-36.60	-41.37	0.00	-3250.5	0.00	3250.53	3991.52	1056.93	4054.92	3743.01	21.18	-3.211	0.000	0.879
68.00	-35.98	-41.06	0.00	-3167.7	0.00	3167.79	3967.65	1045.54	3968.02	3680.19	22.55	-3.323	0.000	0.871
70.00	-35.36	-40.74	0.00	-3085.6	0.00	3085.68	3943.36	1034.15	3882.06	3617.47	23.96	-3.435	0.000	0.864
72.00	-34.74	-40.43	0.00	-3004.2	0.00	3004.20	3918.66	1022.77	3797.04	3554.87	25.43	-3.549	0.000	0.856
74.00	-34.14	-40.11	0.00	-2923.3	0.00	2923.34	3893.54	1011.38	3712.96	3492.40	26.94	-3.663	0.000	0.847
76.00	-33.54	-39.80	0.00	-2843.1	0.00	2843.12	3868.00	999.99	3629.83	3430.07	28.50	-3.778	0.000	0.839
78.00	-32.94	-39.48	0.00	-2763.5	0.00	2763.53	3842.04	988.61	3547.63	3367.90	30.10	-3.894	0.000	0.831
80.00	-32.36	-39.17	0.00	-2684.5	0.00	2684.56	3815.67	977.22	3466.38	3305.90	31.76	-4.010	0.000	0.822
82.00	-31.77	-38.86	0.00	-2606.2	0.00	2606.23	3788.88	965.83	3386.07	3244.07	33.46	-4.127	0.000	0.813
84.00	-31.20	-38.55	0.00	-2528.5	0.00	2528.51	3761.67	954.44	3306.69	3182.44	35.22	-4.244	0.000	0.804
86.00	-30.63	-38.23	0.00	-2451.4	0.00	2451.42	3734.05	943.06	3228.26	3121.02	37.02	-4.362	0.000	0.795
88.00	-30.06	-37.92	0.00	-2374.9	0.00	2374.96	3706.01	931.67	3150.77	3059.82	38.87	-4.481	0.000	0.786
90.00	-29.54	-37.59	0.00	-2299.1	0.00	2299.11	3677.55	920.28	3074.23	2998.84	40.77	-4.600	0.000	0.776

Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (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	

90.17	-29.46	-37.59	0.00	-2292.8	0.00	2292.84	3675.16	919.33	3067.89	2993.77	40.93	-4.610	0.000	0.776
92.00	-28.62	-37.27	0.00	-2223.9	0.00	2223.94	3648.68	908.90	2998.62	2938.12	42.72	-4.720	0.000	0.766
94.00	-27.72	-36.93	0.00	-2149.3	0.00	2149.39	3619.39	897.51	2923.96	2877.64	44.72	-4.840	0.000	0.756
96.00	-26.82	-36.58	0.00	-2075.5	0.00	2075.53	2873.56	764.37	2506.37	2303.28	46.78	-4.961	0.000	0.913
98.00	-26.34	-36.28	0.00	-2002.3	0.00	2002.37	2853.66	754.73	2443.58	2258.25	48.88	-5.082	0.000	0.898
100.00	-25.86	-35.98	0.00	-1929.8	0.00	1929.81	2833.34	745.10	2381.59	2213.29	51.03	-5.217	0.000	0.883
102.00	-25.39	-35.68	0.00	-1857.8	0.00	1857.85	2812.61	735.46	2320.39	2168.43	53.24	-5.352	0.000	0.868
104.00	-24.92	-35.38	0.00	-1786.4	0.00	1786.48	2791.46	725.83	2259.99	2123.68	55.51	-5.487	0.000	0.853
106.00	-24.46	-35.09	0.00	-1715.7	0.00	1715.72	2769.89	716.19	2200.39	2079.04	57.84	-5.622	0.000	0.836
108.00	-24.00	-34.79	0.00	-1645.5	0.00	1645.54	2747.90	706.55	2141.58	2034.53	60.22	-5.757	0.000	0.820
110.00	-23.55	-34.50	0.00	-1575.9	0.00	1575.96	2725.50	696.92	2083.57	1990.17	62.66	-5.892	0.000	0.803
112.00	-23.11	-34.21	0.00	-1506.9	0.00	1506.96	2702.68	687.28	2026.36	1945.97	65.15	-6.027	0.000	0.785
114.00	-22.67	-33.92	0.00	-1438.5	0.00	1438.55	2679.45	677.65	1969.94	1901.93	67.70	-6.161	0.000	0.767
116.00	-22.24	-33.63	0.00	-1370.7	0.00	1370.72	2655.79	668.01	1914.32	1858.08	70.30	-6.294	0.000	0.749
118.00	-21.81	-33.34	0.00	-1303.4	0.00	1303.46	2631.73	658.38	1859.50	1814.42	72.96	-6.426	0.000	0.729
120.00	-21.39	-33.05	0.00	-1236.7	0.00	1236.79	2607.24	648.74	1805.47	1770.96	75.68	-6.558	0.000	0.709
122.00	-20.98	-32.77	0.00	-1170.6	0.00	1170.68	2582.34	639.11	1752.24	1727.73	78.45	-6.688	0.000	0.688
124.00	-20.57	-32.49	0.00	-1105.1	0.00	1105.14	2557.02	629.47	1699.80	1684.74	81.27	-6.816	0.000	0.667
126.00	-20.17	-32.20	0.00	-1040.1	0.00	1040.17	2531.28	619.84	1648.16	1641.98	84.15	-6.943	0.000	0.644
128.00	-19.78	-31.92	0.00	-975.77	0.00	975.77	2505.13	610.20	1597.32	1599.49	87.08	-7.068	0.000	0.621
130.00	-19.39	-31.65	0.00	-911.92	0.00	911.92	2478.56	600.57	1547.28	1557.27	90.06	-7.191	0.000	0.596
132.00	-19.02	-31.36	0.00	-848.63	0.00	848.63	2451.58	590.93	1498.03	1515.33	93.09	-7.311	0.000	0.571
133.33	-18.78	-31.17	0.00	-806.81	0.00	806.81	2433.35	584.51	1465.64	1487.53	95.14	-7.390	0.000	0.553
134.00	-18.57	-31.08	0.00	-786.03	0.00	786.03	2424.17	581.30	1449.58	1473.69	96.17	-7.429	0.000	0.544
136.00	-18.00	-30.78	0.00	-723.86	0.00	723.86	2396.35	571.66	1401.92	1432.35	99.30	-7.543	0.000	0.516
138.00	-17.45	-30.48	0.00	-662.31	0.00	662.31	1545.45	417.14	1026.36	929.77	102.47	-7.652	0.000	0.729
140.00	-14.65	-26.33	0.00	-601.35	0.00	601.35	1531.69	410.13	992.17	905.88	105.69	-7.757	0.000	0.678
142.00	-14.37	-26.07	0.00	-548.69	0.00	548.69	1517.50	403.12	958.56	882.03	108.96	-7.887	0.000	0.636
144.00	-14.09	-25.81	0.00	-496.55	0.00	496.55	1502.90	396.11	925.52	858.22	112.28	-8.012	0.000	0.592
146.00	-13.82	-25.55	0.00	-444.93	0.00	444.93	1487.88	389.11	893.06	834.49	115.65	-8.130	0.000	0.547
148.00	-13.56	-25.29	0.00	-393.83	0.00	393.83	1472.45	382.10	861.19	810.82	119.07	-8.241	0.000	0.499
150.00	-10.93	-19.61	0.00	-343.24	0.00	343.24	1456.60	375.09	829.89	787.25	122.54	-8.345	0.000	0.446
152.00	-10.72	-19.35	0.00	-304.02	0.00	304.02	1440.33	368.08	799.17	763.78	126.04	-8.440	0.000	0.408
154.00	-10.51	-19.10	0.00	-265.32	0.00	265.32	1423.65	361.08	769.03	740.42	129.59	-8.529	0.000	0.369
156.00	-10.30	-18.85	0.00	-227.11	0.00	227.11	1406.55	354.07	739.47	717.20	133.16	-8.611	0.000	0.327
158.00	-8.29	-16.60	0.00	-189.41	0.00	189.41	1389.03	347.06	710.49	694.11	136.77	-8.684	0.000	0.281
160.00	-7.62	-13.74	0.00	-156.21	0.00	156.21	1371.10	340.05	682.09	671.17	140.41	-8.749	0.000	0.240
162.00	-7.47	-13.50	0.00	-128.73	0.00	128.73	1352.75	333.05	654.27	648.41	144.08	-8.806	0.000	0.206
164.00	-7.33	-13.27	0.00	-101.72	0.00	101.72	1333.98	326.04	627.03	625.81	147.76	-8.854	0.000	0.170
166.00	-3.67	-6.79	0.00	-75.18	0.00	75.18	1314.79	319.03	600.37	603.42	151.47	-8.894	0.000	0.128
168.00	-3.55	-6.56	0.00	-61.60	0.00	61.60	1295.19	312.03	574.28	581.22	155.18	-8.927	0.000	0.109
170.00	-3.43	-6.34	0.00	-48.48	0.00	48.48	1275.17	305.02	548.78	559.24	158.92	-8.955	0.000	0.090
172.00	-3.31	-6.12	0.00	-35.81	0.00	35.81	1251.65	298.01	523.85	536.17	162.66	-8.978	0.000	0.070
174.00	-3.20	-5.90	0.00	-23.58	0.00	23.58	1222.21	291.00	499.51	511.11	166.41	-8.996	0.000	0.049
176.00	-3.09	-5.69	0.00	-11.78	0.00	11.78	1192.78	284.00	475.74	486.64	170.16	-9.007	0.000	0.027
178.00	-0.10	-0.20	0.00	-0.41	0.00	0.41	1163.35	276.99	452.55	462.78	173.92	-9.011	0.000	0.001
180.00	0.00	-0.18	0.00	0.00	0.00	0.00	1133.92	269.98	429.95	439.52	177.68	-9.012	0.000	0.000

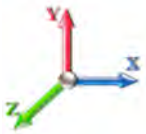
Wind Loading - Shaft

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 22	

Load Case: 0.9D + 1.0W 123 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	31.009	34.11	603.99	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	31.009	34.11	599.16	0.950	0.000	2.00	10.655	10.12	345.3	0.0	529.1
4.00		1.00	0.85	31.009	34.11	594.33	0.950	0.000	2.00	10.569	10.04	342.5	0.0	524.8
6.00		1.00	0.85	31.009	34.11	589.49	0.950	0.000	2.00	10.484	9.96	339.7	0.0	520.5
8.00		1.00	0.85	31.009	34.11	584.66	0.950	0.000	2.00	10.398	9.88	337.0	0.0	516.2
10.00		1.00	0.85	31.009	34.11	579.83	0.950	0.000	2.00	10.313	9.80	334.2	0.0	511.9
12.00		1.00	0.85	31.009	34.11	575.00	0.950	0.000	2.00	10.227	9.72	331.4	0.0	507.7
14.00		1.00	0.85	31.009	34.11	570.17	0.950	0.000	2.00	10.142	9.63	328.6	0.0	503.4
16.00		1.00	0.86	31.392	34.53	568.81	0.950	0.000	2.00	10.056	9.55	329.9	0.0	499.1
18.00		1.00	0.88	32.180	35.40	570.99	0.950	0.000	2.00	9.970	9.47	335.3	0.0	494.8
20.00		1.00	0.90	32.902	36.19	572.38	0.950	0.000	2.00	9.885	9.39	339.9	0.0	490.5
22.00		1.00	0.92	33.569	36.93	573.12	0.950	0.000	2.00	9.799	9.31	343.8	0.0	486.3
24.00		1.00	0.94	34.189	37.61	573.32	0.950	0.000	2.00	9.714	9.23	347.0	0.0	482.0
26.00		1.00	0.95	34.770	38.25	573.06	0.950	0.000	2.00	9.628	9.15	349.8	0.0	477.7
28.00		1.00	0.97	35.317	38.85	572.39	0.950	0.000	2.00	9.542	9.07	352.2	0.0	473.4
30.00		1.00	0.98	35.834	39.42	571.37	0.950	0.000	2.00	9.457	8.98	354.1	0.0	469.1
32.00		1.00	1.00	36.324	39.96	570.03	0.950	0.000	2.00	9.371	8.90	355.7	0.0	464.9
34.00		1.00	1.01	36.791	40.47	568.42	0.950	0.000	2.00	9.286	8.82	357.0	0.0	460.6
36.00		1.00	1.02	37.236	40.96	566.55	0.950	0.000	2.00	9.200	8.74	358.0	0.0	456.3
38.00		1.00	1.03	37.662	41.43	564.46	0.950	0.000	2.00	9.115	8.66	358.7	0.0	452.0
40.00		1.00	1.04	38.071	41.88	562.16	0.950	0.000	2.00	9.029	8.58	359.2	0.0	447.7
42.00		1.00	1.05	38.464	42.31	559.68	0.950	0.000	2.00	8.943	8.50	359.5	0.0	443.5
43.92	Bot - Section 2	1.00	1.06	38.827	42.71	557.13	0.950	0.000	1.92	8.490	8.07	344.5	0.0	421.0
44.00		1.00	1.06	38.843	42.73	557.02	0.950	0.000	0.08	0.373	0.35	15.1	0.0	35.4
46.00		1.00	1.07	39.208	43.13	554.19	0.950	0.000	2.00	8.912	8.47	365.2	0.0	845.5
48.00		1.00	1.08	39.561	43.52	551.23	0.950	0.000	2.00	8.827	8.39	364.9	0.0	837.2
50.00		1.00	1.09	39.902	43.89	548.12	0.950	0.000	2.00	8.741	8.30	364.5	0.0	829.0
51.00	Top - Section 1	1.00	1.10	40.069	44.08	546.52	0.950	0.000	1.00	4.339	4.12	181.7	0.0	411.4
52.00		1.00	1.10	40.233	44.26	553.90	0.950	0.000	1.00	4.317	4.10	181.5	0.0	198.8
54.00		1.00	1.11	40.554	44.61	550.58	0.950	0.000	2.00	8.570	8.14	363.2	0.0	394.7
56.00		1.00	1.12	40.866	44.95	547.14	0.950	0.000	2.00	8.485	8.06	362.3	0.0	390.7
58.00		1.00	1.13	41.169	45.29	543.60	0.950	0.000	2.00	8.399	7.98	361.3	0.0	386.8
60.00		1.00	1.14	41.464	45.61	539.95	0.950	0.000	2.00	8.313	7.90	360.2	0.0	382.8
62.00		1.00	1.14	41.751	45.93	536.21	0.950	0.000	2.00	8.228	7.82	359.0	0.0	378.8
64.00		1.00	1.15	42.031	46.23	532.38	0.950	0.000	2.00	8.142	7.74	357.6	0.0	374.8
66.00		1.00	1.16	42.304	46.53	528.47	0.950	0.000	2.00	8.057	7.65	356.2	0.0	370.9
68.00		1.00	1.17	42.571	46.83	524.47	0.950	0.000	2.00	7.971	7.57	354.6	0.0	366.9
70.00		1.00	1.17	42.831	47.11	520.39	0.950	0.000	2.00	7.885	7.49	352.9	0.0	362.9
72.00		1.00	1.18	43.086	47.39	516.24	0.950	0.000	2.00	7.800	7.41	351.2	0.0	358.9
74.00		1.00	1.19	43.335	47.67	512.02	0.950	0.000	2.00	7.714	7.33	349.3	0.0	355.0
76.00		1.00	1.19	43.579	47.94	507.73	0.950	0.000	2.00	7.629	7.25	347.4	0.0	351.0
78.00		1.00	1.20	43.818	48.20	503.38	0.950	0.000	2.00	7.543	7.17	345.4	0.0	347.0
80.00		1.00	1.21	44.053	48.46	498.96	0.950	0.000	2.00	7.458	7.08	343.3	0.0	343.0
82.00		1.00	1.21	44.282	48.71	494.49	0.950	0.000	2.00	7.372	7.00	341.1	0.0	339.1
84.00		1.00	1.22	44.507	48.96	489.96	0.950	0.000	2.00	7.286	6.92	338.9	0.0	335.1
86.00		1.00	1.23	44.728	49.20	485.37	0.950	0.000	2.00	7.201	6.84	336.6	0.0	331.1
88.00		1.00	1.23	44.945	49.44	480.73	0.950	0.000	2.00	7.115	6.76	334.2	0.0	327.1

Wind Loading - Shaft

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (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	

90.00	1.00	1.24	45.159	49.67	476.03	0.950	0.000	2.00	7.030	6.68	331.7	0.0	323.2
90.17 Bot - Section 3	1.00	1.24	45.176	49.69	475.64	0.950	0.000	0.17	0.582	0.55	27.5	0.0	26.8
92.00	1.00	1.24	45.368	49.90	471.29	0.950	0.000	1.83	6.471	6.15	306.8	0.0	544.6
94.00	1.00	1.25	45.574	50.13	466.50	0.950	0.000	2.00	6.977	6.63	332.3	0.0	587.0
96.00 Top - Section 2	1.00	1.25	45.776	50.35	461.67	0.950	0.000	2.00	6.891	6.55	329.7	0.0	579.7
98.00	1.00	1.26	45.975	50.57	464.94	0.950	0.000	2.00	6.806	6.47	327.0	0.0	265.1
100.00	1.00	1.27	46.171	50.79	460.03	0.950	0.000	2.00	6.720	6.38	324.2	0.0	261.7
102.00	1.00	1.27	46.364	51.00	455.09	0.950	0.000	2.00	6.635	6.30	321.5	0.0	258.4
104.00	1.00	1.28	46.554	51.21	450.10	0.950	0.000	2.00	6.549	6.22	318.6	0.0	255.0
106.00	1.00	1.28	46.741	51.42	445.07	0.950	0.000	2.00	6.464	6.14	315.7	0.0	251.6
108.00	1.00	1.29	46.926	51.62	440.00	0.950	0.000	2.00	6.378	6.06	312.8	0.0	248.3
110.00	1.00	1.29	47.107	51.82	434.90	0.950	0.000	2.00	6.292	5.98	309.8	0.0	244.9
112.00	1.00	1.30	47.286	52.01	429.75	0.950	0.000	2.00	6.207	5.90	306.7	0.0	241.5
114.00	1.00	1.30	47.463	52.21	424.58	0.950	0.000	2.00	6.121	5.82	303.6	0.0	238.2
116.00	1.00	1.31	47.637	52.40	419.37	0.950	0.000	2.00	6.036	5.73	300.5	0.0	234.8
118.00	1.00	1.31	47.809	52.59	414.12	0.950	0.000	2.00	5.950	5.65	297.3	0.0	231.5
120.00	1.00	1.32	47.978	52.78	408.85	0.950	0.000	2.00	5.864	5.57	294.0	0.0	228.1
122.00	1.00	1.32	48.145	52.96	403.54	0.950	0.000	2.00	5.779	5.49	290.7	0.0	224.7
124.00	1.00	1.32	48.310	53.14	398.20	0.950	0.000	2.00	5.693	5.41	287.4	0.0	221.4
126.00	1.00	1.33	48.473	53.32	392.83	0.950	0.000	2.00	5.608	5.33	284.1	0.0	218.0
128.00	1.00	1.33	48.634	53.50	387.43	0.950	0.000	2.00	5.522	5.25	280.7	0.0	214.6
130.00	1.00	1.34	48.793	53.67	382.00	0.950	0.000	2.00	5.437	5.16	277.2	0.0	211.3
132.00	1.00	1.34	48.950	53.85	376.54	0.950	0.000	2.00	5.351	5.08	273.7	0.0	207.9
133.33 Bot - Section 4	1.00	1.34	49.054	53.96	372.89	0.950	0.000	1.33	3.520	3.34	180.4	0.0	136.7
134.00	1.00	1.35	49.106	54.02	371.06	0.950	0.000	0.67	1.774	1.69	91.1	0.0	118.1
136.00	1.00	1.35	49.259	54.19	365.55	0.950	0.000	2.00	5.266	5.00	271.1	0.0	350.4
138.00 Top - Section 3	1.00	1.35	49.411	54.35	360.01	0.950	0.000	2.00	5.181	4.92	267.5	0.0	344.6
140.00 Appurtenance(s)	1.00	1.36	49.561	54.52	360.61	0.950	0.000	2.00	5.095	4.84	263.9	0.0	144.4
142.00	1.00	1.36	49.709	54.68	355.03	0.950	0.000	2.00	5.009	4.76	260.2	0.0	141.9
144.00	1.00	1.37	49.855	54.84	349.42	0.950	0.000	2.00	4.924	4.68	256.5	0.0	139.5
146.00	1.00	1.37	50.000	55.00	343.80	0.950	0.000	2.00	4.838	4.60	252.8	0.0	137.0
148.00	1.00	1.37	50.144	55.16	338.14	0.950	0.000	2.00	4.753	4.51	249.0	0.0	134.6
150.00 Appurtenance(s)	1.00	1.38	50.286	55.31	332.47	0.950	0.000	2.00	4.667	4.43	245.2	0.0	132.1
152.00	1.00	1.38	50.426	55.47	326.77	0.950	0.000	2.00	4.581	4.35	241.4	0.0	129.7
154.00	1.00	1.39	50.565	55.62	321.05	0.950	0.000	2.00	4.496	4.27	237.6	0.0	127.2
156.00	1.00	1.39	50.703	55.77	315.31	0.950	0.000	2.00	4.410	4.19	233.7	0.0	124.8
158.00 Appurtenance(s)	1.00	1.39	50.839	55.92	309.54	0.950	0.000	2.00	4.325	4.11	229.8	0.0	122.3
160.00 Appurtenance(s)	1.00	1.40	50.974	56.07	303.76	0.950	0.000	2.00	4.239	4.03	225.8	0.0	119.9
162.00	1.00	1.40	51.107	56.22	297.95	0.950	0.000	2.00	4.154	3.95	221.8	0.0	117.5
164.00	1.00	1.40	51.239	56.36	292.13	0.950	0.000	2.00	4.068	3.86	217.8	0.0	115.0
166.00 Appurtenance(s)	1.00	1.41	51.370	56.51	286.28	0.950	0.000	2.00	3.982	3.78	213.8	0.0	112.6
168.00	1.00	1.41	51.500	56.65	280.42	0.950	0.000	2.00	3.897	3.70	209.7	0.0	110.1
170.00	1.00	1.42	51.628	56.79	274.53	0.950	0.000	2.00	3.811	3.62	205.6	0.0	107.7
172.00	1.00	1.42	51.756	56.93	268.63	0.950	0.000	2.00	3.726	3.54	201.5	0.0	105.2
174.00	1.00	1.42	51.882	57.07	262.70	0.950	0.000	2.00	3.640	3.46	197.3	0.0	102.8
176.00	1.00	1.43	52.007	57.21	256.76	0.950	0.000	2.00	3.554	3.38	193.2	0.0	100.3
178.00 Appurtenance(s)	1.00	1.43	52.131	57.34	250.80	0.950	0.000	2.00	3.469	3.30	189.0	0.0	97.9
180.00	1.00	1.43	52.253	57.48	244.83	0.950	0.000	2.00	3.383	3.21	184.7	0.0	95.4
							Totals:	**180.00**			**27,684.8**		**30,072.5**

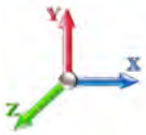
Discrete Appurtenance Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 24	

Load Case: 0.9D + 1.0W 123 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 29

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	178.00	JMA MX06FRO660-03	6	52.131	57.344	0.61	0.75	36.42	324.00	0.000	0.000	2088.48	0.00	0.00
2	178.00	Raycap	1	52.131	57.344	0.75	0.75	1.96	28.80	0.000	0.000	112.25	0.00	0.00
3	178.00	Samsung B5/B13 RRH	3	52.131	57.344	0.38	0.75	2.50	189.81	0.000	0.000	143.22	0.00	0.00
4	178.00	Platform w/ Handrails w/	1	52.131	57.344	1.00	1.00	40.00	1981.98	0.000	0.000	2293.75	0.00	0.00
5	178.00	Samsung B2/B66A RRH	3	52.131	57.344	0.38	0.75	2.11	227.88	0.000	0.000	121.28	0.00	0.00
6	166.00	RFS APXVTM14-C-I20	3	51.370	56.507	0.58	0.75	10.98	151.74	0.000	0.000	620.68	0.00	0.00
7	166.00	ALU TD-RRH8x20-25	3	51.370	56.507	0.38	0.75	4.56	189.00	0.000	0.000	257.46	0.00	0.00
8	166.00	Sitepro	1	51.370	56.507	1.00	1.00	6.70	207.00	0.000	0.000	378.60	0.00	0.00
9	166.00	Sitepro	1	51.370	56.507	1.00	1.00	7.00	365.95	0.000	0.000	395.55	0.00	0.00
10	166.00	Commscope	3	51.370	56.507	0.55	0.75	20.43	208.98	0.000	0.000	1154.42	0.00	0.00
11	166.00	ALU 1900 Mhz	3	51.370	56.507	0.38	0.75	4.27	118.80	0.000	0.000	241.57	0.00	0.00
12	166.00	ALU 800 Mhz	6	51.370	56.507	0.38	0.75	5.60	286.20	0.000	0.000	316.58	0.00	0.00
13	166.00	Platform w/ Hand Rails	1	51.370	56.507	1.00	1.00	40.00	1800.00	0.000	0.000	2260.29	0.00	0.00
14	160.00	4449 B71+B12	3	50.974	56.071	0.40	0.80	1.98	189.00	0.000	0.000	111.02	0.00	0.00
15	160.00	KRY 112 144/2	3	50.974	56.071	0.40	0.80	0.78	41.58	0.000	0.000	43.74	0.00	0.00
16	160.00	KRY 112 489/2	3	50.974	56.071	0.40	0.80	0.78	41.58	0.000	0.000	43.74	0.00	0.00
17	160.00	APXVAARR24_43-U-NA2	3	50.974	56.071	0.56	0.80	34.00	345.60	0.000	0.000	1906.59	0.00	0.00
18	160.00	RR90-17-00VDPL2/-R	3	50.974	56.071	0.54	0.80	7.12	36.45	0.000	0.000	398.97	0.00	0.00
19	158.00	T-Arms	3	50.839	55.923	0.56	0.75	13.50	945.00	0.000	0.000	754.96	0.00	0.00
20	158.00	T-Arm Kit	1	50.839	55.923	0.75	0.75	12.38	450.00	0.000	0.000	692.04	0.00	0.00
21	158.00	V-Brace	1	50.839	55.923	0.75	0.75	4.72	177.30	0.000	0.000	264.23	0.00	0.00
22	150.00	Powerwave 7770	3	50.286	55.314	0.55	0.75	9.05	94.50	0.000	0.000	500.60	0.00	0.00
23	150.00	Cci HPA-65R-BUU-H6	2	50.286	55.314	0.64	0.75	12.32	91.80	0.000	0.000	681.28	0.00	0.00
24	150.00	SBNHH-1D65A	1	50.286	55.314	1.00	1.00	5.88	30.15	0.000	0.000	325.25	0.00	0.00
25	150.00	4449 B5/B12	3	50.286	55.314	0.38	0.75	2.22	191.70	0.000	0.000	122.59	0.00	0.00
26	150.00	DMP65R-BU6DA	2	50.286	55.314	0.54	0.75	13.73	142.92	0.000	0.000	759.29	0.00	0.00
27	150.00	DMP65R-BU4DA	1	50.286	55.314	0.54	0.75	6.86	71.46	0.000	0.000	379.64	0.00	0.00
28	150.00	Powerwave LGP21401	6	50.286	55.314	0.38	0.75	2.75	76.14	0.000	0.000	151.84	0.00	0.00
29	150.00	B2 B66A 8843	3	50.286	55.314	0.38	0.75	1.84	189.00	0.000	0.000	102.05	0.00	0.00
30	150.00	Raycap DC6-48-60-18-8F	1	50.286	55.314	0.67	1.00	1.21	28.62	0.000	0.000	67.08	0.00	0.00
31	150.00	Platform w/ Hand Rail	1	50.286	55.314	1.00	1.00	35.00	1440.00	0.000	0.000	1936.00	0.00	0.00
32	140.00	Raycap	1	49.561	54.517	0.75	0.75	1.51	19.71	0.000	0.000	82.18	0.00	0.00
33	140.00	Fujitsu TA08025-B604	3	49.561	54.517	0.38	0.75	2.21	172.53	0.000	0.000	120.21	0.00	0.00
34	140.00	Fujitsu TA08025-B605	3	49.561	54.517	0.38	0.75	2.21	202.50	0.000	0.000	120.21	0.00	0.00
35	140.00	Sitepro1 SNP8HR-3XX	1	49.561	54.517	1.00	1.00	37.59	1688.40	0.000	0.000	2049.28	0.00	0.00
36	140.00	JMA Wireless	3	49.561	54.517	0.55	0.75	20.80	174.15	0.000	0.000	1133.72	0.00	0.00
							Totals:		**12,920.23**			**23,130.65**		

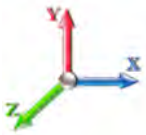
Total Applied Force Summary

Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 25

Load Case: 0.9D + 1.0W 123 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 29

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		345.27	531.42	0.00	0.00
4.00		342.50	554.49	0.00	0.00
6.00		339.73	577.56	0.00	0.00
8.00		336.95	573.28	0.00	0.00
10.00		334.18	569.00	0.00	0.00
12.00		331.41	564.72	0.00	0.00
14.00		328.63	560.44	0.00	0.00
16.00		329.88	556.16	0.00	0.00
18.00		335.29	551.88	0.00	0.00
20.00		339.86	547.60	0.00	0.00
22.00		343.75	543.32	0.00	0.00
24.00		347.05	539.04	0.00	0.00
26.00		349.84	534.76	0.00	0.00
28.00		352.18	530.48	0.00	0.00
30.00		354.13	526.20	0.00	0.00
32.00		355.72	521.92	0.00	0.00
34.00		357.00	517.64	0.00	0.00
36.00		357.99	513.36	0.00	0.00
38.00		358.72	509.08	0.00	0.00
40.00		359.21	504.80	0.00	0.00
42.00		359.48	500.52	0.00	0.00
43.92		344.50	475.65	0.00	0.00
44.00		15.15	37.79	0.00	0.00
46.00		365.16	902.56	0.00	0.00
48.00		364.91	894.31	0.00	0.00
50.00		364.49	886.05	0.00	0.00
51.00		181.66	439.93	0.00	0.00
52.00		181.51	227.37	0.00	0.00
54.00		363.19	451.76	0.00	0.00
56.00		362.33	447.79	0.00	0.00
58.00		361.33	443.81	0.00	0.00
60.00		360.21	439.84	0.00	0.00
62.00		358.98	435.86	0.00	0.00
64.00		357.62	431.89	0.00	0.00
66.00		356.16	427.92	0.00	0.00
68.00		354.60	423.94	0.00	0.00
70.00		352.94	419.97	0.00	0.00
72.00		351.19	415.99	0.00	0.00
74.00		349.34	412.02	0.00	0.00
76.00		347.41	408.05	0.00	0.00
78.00		345.40	404.07	0.00	0.00
80.00		343.31	400.10	0.00	0.00
82.00		341.14	396.12	0.00	0.00
84.00		338.89	392.15	0.00	0.00
86.00		336.57	388.18	0.00	0.00
88.00		334.19	384.20	0.00	0.00

Total Applied Force Summary

Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 26

90.00		331.73	380.23	0.00	0.00
90.17		27.47	31.51	0.00	0.00
92.00		306.78	596.86	0.00	0.00
94.00		332.28	644.09	0.00	0.00
96.00		329.66	636.75	0.00	0.00
98.00		326.99	322.14	0.00	0.00
100.00		324.25	318.78	0.00	0.00
102.00		321.46	315.42	0.00	0.00
104.00		318.61	312.05	0.00	0.00
106.00		315.71	308.69	0.00	0.00
108.00		312.76	305.33	0.00	0.00
110.00		309.76	301.97	0.00	0.00
112.00		306.70	298.60	0.00	0.00
114.00		303.61	295.24	0.00	0.00
116.00		300.46	291.88	0.00	0.00
118.00		297.27	288.52	0.00	0.00
120.00		294.03	285.15	0.00	0.00
122.00		290.75	281.79	0.00	0.00
124.00		287.42	278.43	0.00	0.00
126.00		284.06	275.07	0.00	0.00
128.00		280.65	271.70	0.00	0.00
130.00		277.21	268.34	0.00	0.00
132.00		273.72	264.98	0.00	0.00
133.33		180.43	174.78	0.00	0.00
134.00		91.05	137.12	0.00	0.00
136.00		271.08	407.50	0.00	0.00
138.00		267.49	401.69	0.00	0.00
140.00	(11) attachments	3769.48	2458.71	0.00	0.00
142.00		260.21	197.17	0.00	0.00
144.00		256.52	194.73	0.00	0.00
146.00		252.80	192.28	0.00	0.00
148.00		249.04	189.83	0.00	0.00
150.00	(23) attachments	5270.87	2543.68	0.00	0.00
152.00		241.42	167.00	0.00	0.00
154.00		237.56	164.55	0.00	0.00
156.00		233.68	162.11	0.00	0.00
158.00	(5) attachments	1940.99	1731.96	0.00	0.00
160.00	(15) attachments	2729.87	811.43	0.00	0.00
162.00		221.83	130.43	0.00	0.00
164.00		217.82	127.99	0.00	0.00
166.00	(21) attachments	5838.93	3453.21	0.00	0.00
168.00		209.71	116.23	0.00	0.00
170.00		205.62	113.78	0.00	0.00
172.00		201.50	111.34	0.00	0.00
174.00		197.35	108.89	0.00	0.00
176.00		193.17	106.45	0.00	0.00
178.00	(14) attachments	4947.94	2856.47	0.00	0.00
180.00		184.74	97.81	0.00	0.00
	Totals:	**50,815.43**	**47,445.60**	**0.00**	**0.00**

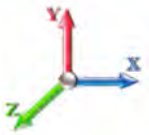
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 27	

Load Case: 0.9D + 1.0W 123 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.49
2.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	1.87
4.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.49
4.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	1.87
6.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.49
6.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	1.87
8.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.49
8.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	1.87
10.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.49
10.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	1.87
12.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.49
12.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	1.87
14.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	0.49
14.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.009	0.00	1.87
16.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.392	0.00	0.49
16.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	31.392	0.00	1.87
18.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	32.180	0.00	0.49
18.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	32.180	0.00	1.87
20.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	32.902	0.00	0.49
20.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	32.902	0.00	1.87
22.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	33.569	0.00	0.49
22.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	33.569	0.00	1.87
24.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	34.189	0.00	0.49
24.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	34.189	0.00	1.87
26.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	34.770	0.00	0.49
26.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	34.770	0.00	1.87
28.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	35.317	0.00	0.49
28.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	35.317	0.00	1.87
30.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	35.834	0.00	0.49
30.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	35.834	0.00	1.87
32.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	36.324	0.00	0.49
32.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	36.324	0.00	1.87
34.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	36.791	0.00	0.49
34.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	36.791	0.00	1.87
36.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	37.236	0.00	0.49
36.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	37.236	0.00	1.87
38.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	37.662	0.00	0.49
38.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	37.662	0.00	1.87
40.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	38.071	0.00	0.49
40.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	38.071	0.00	1.87
42.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	38.464	0.00	0.49
42.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	38.464	0.00	1.87
43.92	Safety Cable	Yes	1.92	0.000	0.00	0.00	0.00	0.000	0.000	38.827	0.00	0.47
43.92	Step bolts (ladder)	Yes	1.92	0.000	0.00	0.00	0.00	0.000	0.000	38.827	0.00	1.79
44.00	Safety Cable	Yes	0.08	0.000	0.00	0.00	0.00	0.000	0.000	38.843	0.00	0.02
44.00	Step bolts (ladder)	Yes	0.08	0.000	0.00	0.00	0.00	0.000	0.000	38.843	0.00	0.08
46.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.208	0.00	0.49

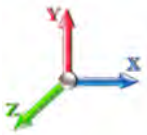
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 28	

Load Case: 0.9D + 1.0W 123 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.208	0.00	1.87
48.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.561	0.00	0.49
48.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.561	0.00	1.87
50.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.902	0.00	0.49
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	39.902	0.00	1.87
51.00	Safety Cable	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	40.069	0.00	0.25
51.00	Step bolts (ladder)	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	40.069	0.00	0.94
52.00	Safety Cable	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	40.233	0.00	0.25
52.00	Step bolts (ladder)	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	40.233	0.00	0.94
54.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	40.554	0.00	0.49
54.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	40.554	0.00	1.87
56.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	40.866	0.00	0.49
56.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	40.866	0.00	1.87
58.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.169	0.00	0.49
58.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.169	0.00	1.87
60.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.464	0.00	0.49
60.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.464	0.00	1.87
62.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.751	0.00	0.49
62.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	41.751	0.00	1.87
64.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.031	0.00	0.49
64.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.031	0.00	1.87
66.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.304	0.00	0.49
66.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.304	0.00	1.87
68.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.571	0.00	0.49
68.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.571	0.00	1.87
70.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.831	0.00	0.49
70.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	42.831	0.00	1.87
72.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.086	0.00	0.49
72.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.086	0.00	1.87
74.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.335	0.00	0.49
74.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.335	0.00	1.87
76.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.579	0.00	0.49
76.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.579	0.00	1.87
78.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.818	0.00	0.49
78.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	43.818	0.00	1.87
80.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.053	0.00	0.49
80.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.053	0.00	1.87
82.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.282	0.00	0.49
82.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.282	0.00	1.87
84.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.507	0.00	0.49
84.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.507	0.00	1.87
86.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.728	0.00	0.49
86.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.728	0.00	1.87
88.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.945	0.00	0.49
88.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	44.945	0.00	1.87
90.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.159	0.00	0.49
90.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.159	0.00	1.87

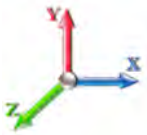
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 29	

Load Case: 0.9D + 1.0W 123 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.17	Safety Cable	Yes	0.17	0.000	0.00	0.00	0.00	0.000	0.000	45.176	0.00	0.04
90.17	Step bolts (ladder)	Yes	0.17	0.000	0.00	0.00	0.00	0.000	0.000	45.176	0.00	0.16
92.00	Safety Cable	Yes	1.83	0.000	0.00	0.00	0.00	0.000	0.000	45.368	0.00	0.45
92.00	Step bolts (ladder)	Yes	1.83	0.000	0.00	0.00	0.00	0.000	0.000	45.368	0.00	1.72
94.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.574	0.00	0.49
94.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.574	0.00	1.87
96.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.776	0.00	0.49
96.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.776	0.00	1.87
98.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.975	0.00	0.49
98.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	45.975	0.00	1.87
100.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.171	0.00	0.49
100.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.171	0.00	1.87
102.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.364	0.00	0.49
102.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.364	0.00	1.87
104.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.554	0.00	0.49
104.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.554	0.00	1.87
106.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.741	0.00	0.49
106.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.741	0.00	1.87
108.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.926	0.00	0.49
108.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	46.926	0.00	1.87
110.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.107	0.00	0.49
110.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.107	0.00	1.87
112.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.286	0.00	0.49
112.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.286	0.00	1.87
114.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.463	0.00	0.49
114.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.463	0.00	1.87
116.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.637	0.00	0.49
116.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.637	0.00	1.87
118.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.809	0.00	0.49
118.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.809	0.00	1.87
120.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.978	0.00	0.49
120.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	47.978	0.00	1.87
122.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.145	0.00	0.49
122.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.145	0.00	1.87
124.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.310	0.00	0.49
124.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.310	0.00	1.87
126.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.473	0.00	0.49
126.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.473	0.00	1.87
128.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.634	0.00	0.49
128.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.634	0.00	1.87
130.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.793	0.00	0.49
130.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.793	0.00	1.87
132.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.950	0.00	0.49
132.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	48.950	0.00	1.87
133.33	Safety Cable	Yes	1.33	0.000	0.00	0.00	0.00	0.000	0.000	49.054	0.00	0.33
133.33	Step bolts (ladder)	Yes	1.33	0.000	0.00	0.00	0.00	0.000	0.000	49.054	0.00	1.25
134.00	Safety Cable	Yes	0.67	0.000	0.00	0.00	0.00	0.000	0.000	49.106	0.00	0.16

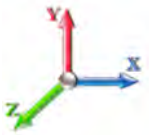
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 30	

Load Case: 0.9D + 1.0W 123 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
134.00	Step bolts (ladder)	Yes	0.67	0.000	0.00	0.00	0.00	0.000	0.000	49.106	0.00	0.62
136.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.259	0.00	0.49
136.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.259	0.00	1.87
138.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.411	0.00	0.49
138.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.411	0.00	1.87
140.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.561	0.00	0.49
140.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.561	0.00	1.87
142.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.709	0.00	0.49
142.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.709	0.00	1.87
144.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.855	0.00	0.49
144.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	49.855	0.00	1.87
146.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.000	0.00	0.49
146.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.000	0.00	1.87
148.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.144	0.00	0.49
148.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.144	0.00	1.87
150.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.286	0.00	0.49
150.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.286	0.00	1.87
152.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.426	0.00	0.49
152.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.426	0.00	1.87
154.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.565	0.00	0.49
154.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.565	0.00	1.87
156.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.703	0.00	0.49
156.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.703	0.00	1.87
158.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.839	0.00	0.49
158.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.839	0.00	1.87
160.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.974	0.00	0.49
160.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	50.974	0.00	1.87
162.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.107	0.00	0.49
162.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.107	0.00	1.87
164.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.239	0.00	0.49
164.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.239	0.00	1.87
166.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.370	0.00	0.49
166.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.370	0.00	1.87
168.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.500	0.00	0.49
168.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.500	0.00	1.87
170.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.628	0.00	0.49
170.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.628	0.00	1.87
172.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.756	0.00	0.49
172.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.756	0.00	1.87
174.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.882	0.00	0.49
174.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	51.882	0.00	1.87
176.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.007	0.00	0.49
176.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.007	0.00	1.87
178.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.131	0.00	0.49
178.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.131	0.00	1.87
180.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.253	0.00	0.49
180.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	52.253	0.00	1.87

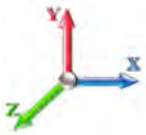
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (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: 0.9D + 1.0W 123 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 29

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
										Totals:	**0.0**	**212.7**

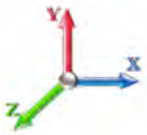
Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 32	

Load Case: 0.9D + 1.0W 123 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.00



Iterations 29

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	-47.41	-50.85	0.00	-6230.6	0.00	6230.69	5123.29	1522.04	7808.40	6435.29	0.00	0.000	0.000	0.979
2.00	-46.80	-50.57	0.00	-6128.9	0.00	6128.99	5107.67	1509.78	7683.09	6363.61	0.02	-0.084	0.000	0.973
4.00	-46.17	-50.30	0.00	-6027.8	0.00	6027.84	5091.62	1497.52	7558.79	6291.73	0.07	-0.168	0.000	0.968
6.00	-45.52	-50.02	0.00	-5927.2	0.00	5927.24	5075.16	1485.26	7435.50	6219.67	0.16	-0.253	0.000	0.963
8.00	-44.88	-49.75	0.00	-5827.2	0.00	5827.20	5058.29	1472.99	7313.22	6147.44	0.29	-0.339	0.000	0.958
10.00	-44.23	-49.48	0.00	-5727.6	0.00	5727.69	5041.00	1460.73	7191.96	6075.05	0.45	-0.426	0.000	0.953
12.00	-43.60	-49.21	0.00	-5628.7	0.00	5628.73	5023.29	1448.47	7071.72	6002.51	0.65	-0.513	0.000	0.948
14.00	-42.96	-48.94	0.00	-5530.3	0.00	5530.31	5005.16	1436.20	6952.48	5929.84	0.88	-0.601	0.000	0.942
16.00	-42.34	-48.67	0.00	-5432.4	0.00	5432.43	4986.62	1423.94	6834.27	5857.05	1.15	-0.689	0.000	0.937
18.00	-41.71	-48.40	0.00	-5335.0	0.00	5335.08	4967.66	1411.68	6717.06	5784.16	1.46	-0.778	0.000	0.932
20.00	-41.10	-48.11	0.00	-5238.2	0.00	5238.29	4948.29	1399.42	6600.87	5711.17	1.81	-0.868	0.000	0.927
22.00	-40.48	-47.83	0.00	-5142.0	0.00	5142.06	4928.49	1387.15	6485.69	5638.10	2.19	-0.959	0.000	0.921
24.00	-39.87	-47.53	0.00	-5046.4	0.00	5046.41	4908.28	1374.89	6371.53	5564.95	2.61	-1.050	0.000	0.916
26.00	-39.27	-47.24	0.00	-4951.3	0.00	4951.35	4887.66	1362.63	6258.37	5491.76	3.07	-1.142	0.000	0.911
28.00	-38.67	-46.94	0.00	-4856.8	0.00	4856.88	4866.62	1350.36	6146.24	5418.52	3.57	-1.235	0.000	0.906
30.00	-38.08	-46.63	0.00	-4763.0	0.00	4763.01	4845.16	1338.10	6035.11	5345.24	4.11	-1.328	0.000	0.900
32.00	-37.49	-46.33	0.00	-4669.7	0.00	4669.75	4823.28	1325.84	5925.00	5271.95	4.68	-1.422	0.000	0.895
34.00	-36.90	-46.02	0.00	-4577.1	0.00	4577.10	4800.99	1313.58	5815.91	5198.66	5.30	-1.517	0.000	0.889
36.00	-36.32	-45.71	0.00	-4485.0	0.00	4485.06	4778.28	1301.31	5707.83	5125.37	5.96	-1.613	0.000	0.884
38.00	-35.75	-45.39	0.00	-4393.6	0.00	4393.65	4755.15	1289.05	5600.76	5052.10	6.65	-1.709	0.000	0.878
40.00	-35.18	-45.08	0.00	-4302.8	0.00	4302.87	4731.61	1276.79	5494.70	4978.87	7.39	-1.806	0.000	0.873
42.00	-34.61	-44.76	0.00	-4212.7	0.00	4212.71	4707.65	1264.52	5389.66	4905.68	8.17	-1.904	0.000	0.867
43.92	-34.11	-44.43	0.00	-4126.9	0.00	4126.92	4684.30	1252.77	5289.95	4835.60	8.95	-1.998	0.000	0.862
44.00	-34.03	-44.44	0.00	-4123.2	0.00	4123.22	4683.27	1252.26	5285.64	4832.55	8.99	-2.003	0.000	0.862
46.00	-33.07	-44.10	0.00	-4034.3	0.00	4034.33	4658.48	1240.00	5182.62	4759.49	9.85	-2.102	0.000	0.856
48.00	-32.11	-43.76	0.00	-3946.1	0.00	3946.12	4633.27	1227.74	5080.62	4686.52	10.75	-2.202	0.000	0.850
50.00	-31.18	-43.41	0.00	-3858.6	0.00	3858.60	4607.64	1215.47	4979.64	4613.64	11.70	-2.303	0.000	0.844
51.00	-30.71	-43.23	0.00	-3815.1	0.00	3815.19	4157.28	1142.33	4736.69	4216.21	12.18	-2.354	0.000	0.914
52.00	-30.43	-43.08	0.00	-3771.9	0.00	3771.96	4146.96	1136.64	4689.60	4184.61	12.68	-2.405	0.000	0.910
54.00	-29.92	-42.76	0.00	-3685.7	0.00	3685.79	4126.01	1125.25	4596.10	4121.41	13.71	-2.510	0.000	0.903
56.00	-29.41	-42.43	0.00	-3600.2	0.00	3600.28	4104.64	1113.86	4503.55	4058.23	14.79	-2.615	0.000	0.896
58.00	-28.90	-42.10	0.00	-3515.4	0.00	3515.42	4082.85	1102.48	4411.95	3995.08	15.90	-2.722	0.000	0.888
60.00	-28.40	-41.77	0.00	-3431.2	0.00	3431.22	4060.64	1091.09	4321.28	3931.97	17.07	-2.828	0.000	0.881
62.00	-27.91	-41.45	0.00	-3347.6	0.00	3347.68	4038.02	1079.70	4231.55	3868.91	18.28	-2.936	0.000	0.874
64.00	-27.42	-41.12	0.00	-3264.7	0.00	3264.79	4014.98	1068.31	4142.77	3805.92	19.53	-3.044	0.000	0.866
66.00	-26.93	-40.79	0.00	-3182.5	0.00	3182.55	3991.52	1056.93	4054.92	3743.01	20.83	-3.153	0.000	0.859
68.00	-26.45	-40.46	0.00	-3100.9	0.00	3100.97	3967.65	1045.54	3968.02	3680.19	22.17	-3.263	0.000	0.851
70.00	-25.98	-40.14	0.00	-3020.0	0.00	3020.04	3943.36	1034.15	3882.06	3617.47	23.56	-3.373	0.000	0.843
72.00	-25.50	-39.81	0.00	-2939.7	0.00	2939.77	3918.66	1022.77	3797.04	3554.87	25.00	-3.485	0.000	0.835
74.00	-25.04	-39.49	0.00	-2860.1	0.00	2860.15	3893.54	1011.38	3712.96	3492.40	26.48	-3.596	0.000	0.827
76.00	-24.57	-39.16	0.00	-2781.1	0.00	2781.17	3868.00	999.99	3629.83	3430.07	28.01	-3.709	0.000	0.819
78.00	-24.12	-38.84	0.00	-2702.8	0.00	2702.85	3842.04	988.61	3547.63	3367.90	29.59	-3.822	0.000	0.810
80.00	-23.66	-38.52	0.00	-2625.1	0.00	2625.17	3815.67	977.22	3466.38	3305.90	31.21	-3.936	0.000	0.802
82.00	-23.22	-38.20	0.00	-2548.1	0.00	2548.14	3788.88	965.83	3386.07	3244.07	32.89	-4.050	0.000	0.793
84.00	-22.77	-37.88	0.00	-2471.7	0.00	2471.75	3761.67	954.44	3306.69	3182.44	34.61	-4.165	0.000	0.784
86.00	-22.34	-37.56	0.00	-2396.0	0.00	2396.00	3734.05	943.06	3228.26	3121.02	36.38	-4.280	0.000	0.775
88.00	-21.90	-37.24	0.00	-2320.8	0.00	2320.89	3706.01	931.67	3150.77	3059.82	38.19	-4.396	0.000	0.766
90.00	-21.51	-36.90	0.00	-2246.4	0.00	2246.42	3677.55	920.28	3074.23	2998.84	40.06	-4.512	0.000	0.757

Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 33	

90.17	-21.44	-36.89	0.00	-2240.2	0.00	2240.27	3675.16	919.33	3067.89	2993.77	40.21	-4.522	0.000	0.756
92.00	-20.80	-36.58	0.00	-2172.6	0.00	2172.63	3648.68	908.90	2998.62	2938.12	41.97	-4.630	0.000	0.747
94.00	-20.11	-36.24	0.00	-2099.4	0.00	2099.47	3619.39	897.51	2923.96	2877.64	43.93	-4.747	0.000	0.737
96.00	-19.43	-35.90	0.00	-2026.9	0.00	2026.99	2873.56	764.37	2506.37	2303.28	45.95	-4.865	0.000	0.889
98.00	-19.06	-35.59	0.00	-1955.2	0.00	1955.20	2853.66	754.73	2443.58	2258.25	48.01	-4.983	0.000	0.875
100.00	-18.69	-35.28	0.00	-1884.0	0.00	1884.03	2833.34	745.10	2381.59	2213.29	50.12	-5.115	0.000	0.860
102.00	-18.32	-34.97	0.00	-1813.4	0.00	1813.48	2812.61	735.46	2320.39	2168.43	52.29	-5.246	0.000	0.845
104.00	-17.96	-34.67	0.00	-1743.5	0.00	1743.53	2791.46	725.83	2259.99	2123.68	54.51	-5.378	0.000	0.830
106.00	-17.61	-34.36	0.00	-1674.2	0.00	1674.20	2769.89	716.19	2200.39	2079.04	56.79	-5.510	0.000	0.814
108.00	-17.25	-34.06	0.00	-1605.4	0.00	1605.48	2747.90	706.55	2141.58	2034.53	59.13	-5.642	0.000	0.798
110.00	-16.91	-33.76	0.00	-1537.3	0.00	1537.35	2725.50	696.92	2083.57	1990.17	61.51	-5.774	0.000	0.781
112.00	-16.57	-33.47	0.00	-1469.8	0.00	1469.83	2702.68	687.28	2026.36	1945.97	63.96	-5.905	0.000	0.764
114.00	-16.23	-33.17	0.00	-1402.9	0.00	1402.90	2679.45	677.65	1969.94	1901.93	66.46	-6.035	0.000	0.746
116.00	-15.90	-32.88	0.00	-1336.5	0.00	1336.56	2655.79	668.01	1914.32	1858.08	69.01	-6.165	0.000	0.728
118.00	-15.57	-32.58	0.00	-1270.8	0.00	1270.81	2631.73	658.38	1859.50	1814.42	71.61	-6.295	0.000	0.709
120.00	-15.24	-32.29	0.00	-1205.6	0.00	1205.65	2607.24	648.74	1805.47	1770.96	74.27	-6.423	0.000	0.689
122.00	-14.93	-32.01	0.00	-1141.0	0.00	1141.06	2582.34	639.11	1752.24	1727.73	76.99	-6.550	0.000	0.669
124.00	-14.61	-31.72	0.00	-1077.0	0.00	1077.05	2557.02	629.47	1699.80	1684.74	79.75	-6.675	0.000	0.648
126.00	-14.31	-31.44	0.00	-1013.6	0.00	1013.61	2531.28	619.84	1648.16	1641.98	82.57	-6.799	0.000	0.626
128.00	-14.01	-31.16	0.00	-950.73	0.00	950.73	2505.13	610.20	1597.32	1599.49	85.44	-6.920	0.000	0.603
130.00	-13.71	-30.88	0.00	-888.42	0.00	888.42	2478.56	600.57	1547.28	1557.27	88.35	-7.040	0.000	0.579
132.00	-13.43	-30.59	0.00	-826.67	0.00	826.67	2451.58	590.93	1498.03	1515.33	91.32	-7.157	0.000	0.554
133.33	-13.25	-30.41	0.00	-785.88	0.00	785.88	2433.35	584.51	1465.64	1487.53	93.33	-7.234	0.000	0.536
134.00	-13.08	-30.32	0.00	-765.61	0.00	765.61	2424.17	581.30	1449.58	1473.69	94.34	-7.272	0.000	0.528
136.00	-12.66	-30.02	0.00	-704.98	0.00	704.98	2396.35	571.66	1401.92	1432.35	97.40	-7.382	0.000	0.500
138.00	-12.24	-29.72	0.00	-644.94	0.00	644.94	1545.45	417.14	1026.36	929.77	100.51	-7.489	0.000	0.707
140.00	-10.25	-25.69	0.00	-585.49	0.00	585.49	1531.69	410.13	992.17	905.88	103.66	-7.591	0.000	0.657
142.00	-10.03	-25.42	0.00	-534.12	0.00	534.12	1517.50	403.12	958.56	882.03	106.86	-7.718	0.000	0.616
144.00	-9.82	-25.16	0.00	-483.27	0.00	483.27	1502.90	396.11	925.52	858.22	110.11	-7.839	0.000	0.574
146.00	-9.61	-24.91	0.00	-432.95	0.00	432.95	1487.88	389.11	893.06	834.49	113.41	-7.954	0.000	0.529
148.00	-9.42	-24.65	0.00	-383.14	0.00	383.14	1472.45	382.10	861.19	810.82	116.75	-8.063	0.000	0.483
150.00	-7.61	-19.08	0.00	-333.84	0.00	333.84	1456.60	375.09	829.89	787.25	120.14	-8.163	0.000	0.432
152.00	-7.45	-18.83	0.00	-295.67	0.00	295.67	1440.33	368.08	799.17	763.78	123.57	-8.256	0.000	0.395
154.00	-7.30	-18.59	0.00	-258.00	0.00	258.00	1423.65	361.08	769.03	740.42	127.04	-8.343	0.000	0.356
156.00	-7.14	-18.34	0.00	-220.83	0.00	220.83	1406.55	354.07	739.47	717.20	130.54	-8.422	0.000	0.316
158.00	-5.70	-16.17	0.00	-184.15	0.00	184.15	1389.03	347.06	710.49	694.11	134.07	-8.493	0.000	0.272
160.00	-5.29	-13.36	0.00	-151.81	0.00	151.81	1371.10	340.05	682.09	671.17	137.63	-8.556	0.000	0.232
162.00	-5.18	-13.12	0.00	-125.09	0.00	125.09	1352.75	333.05	654.27	648.41	141.21	-8.611	0.000	0.198
164.00	-5.08	-12.89	0.00	-98.85	0.00	98.85	1333.98	326.04	627.03	625.81	144.82	-8.659	0.000	0.163
166.00	-2.54	-6.60	0.00	-73.06	0.00	73.06	1314.79	319.03	600.37	603.42	148.44	-8.697	0.000	0.123
168.00	-2.45	-6.38	0.00	-59.86	0.00	59.86	1295.19	312.03	574.28	581.22	152.08	-8.729	0.000	0.105
170.00	-2.37	-6.16	0.00	-47.11	0.00	47.11	1275.17	305.02	548.78	559.24	155.73	-8.757	0.000	0.087
172.00	-2.29	-5.94	0.00	-34.79	0.00	34.79	1251.65	298.01	523.85	536.17	159.39	-8.779	0.000	0.067
174.00	-2.21	-5.73	0.00	-22.91	0.00	22.91	1222.21	291.00	499.51	511.11	163.05	-8.796	0.000	0.047
176.00	-2.13	-5.52	0.00	-11.44	0.00	11.44	1192.78	284.00	475.74	486.64	166.73	-8.807	0.000	0.026
178.00	-0.07	-0.20	0.00	-0.39	0.00	0.39	1163.35	276.99	452.55	462.78	170.40	-8.811	0.000	0.001
180.00	0.00	-0.18	0.00	0.00	0.00	0.00	1133.92	269.98	429.95	439.52	174.08	-8.811	0.000	0.000

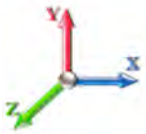
Wind Loading - Shaft

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 34	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00		1.00	0.85	5.124	5.64	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	5.124	5.64	0.00	1.200	0.756	2.00	10.907	13.09	73.8	121.9	827.3
4.00		1.00	0.85	5.124	5.64	0.00	1.200	0.810	2.00	10.839	13.01	73.3	129.7	829.4
6.00		1.00	0.85	5.124	5.64	0.00	1.200	0.843	2.00	10.765	12.92	72.8	134.1	828.1
8.00		1.00	0.85	5.124	5.64	0.00	1.200	0.868	2.00	10.688	12.83	72.3	136.9	825.2
10.00		1.00	0.85	5.124	5.64	0.00	1.200	0.887	2.00	10.609	12.73	71.8	138.9	821.5
12.00		1.00	0.85	5.124	5.64	0.00	1.200	0.904	2.00	10.528	12.63	71.2	140.4	817.2
14.00		1.00	0.85	5.124	5.64	0.00	1.200	0.918	2.00	10.448	12.54	70.7	141.4	812.6
16.00		1.00	0.86	5.187	5.71	0.00	1.200	0.930	2.00	10.366	12.44	71.0	142.1	807.6
18.00		1.00	0.88	5.318	5.85	0.00	1.200	0.941	2.00	10.284	12.34	72.2	142.6	802.4
20.00		1.00	0.90	5.437	5.98	0.00	1.200	0.951	2.00	10.202	12.24	73.2	142.9	797.0
22.00		1.00	0.92	5.547	6.10	0.00	1.200	0.960	2.00	10.119	12.14	74.1	143.1	791.4
24.00		1.00	0.94	5.650	6.21	0.00	1.200	0.969	2.00	10.037	12.04	74.8	143.1	785.8
26.00		1.00	0.95	5.746	6.32	0.00	1.200	0.976	2.00	9.954	11.94	75.5	143.0	780.0
28.00		1.00	0.97	5.836	6.42	0.00	1.200	0.984	2.00	9.870	11.84	76.0	142.8	774.1
30.00		1.00	0.98	5.921	6.51	0.00	1.200	0.991	2.00	9.787	11.74	76.5	142.6	768.1
32.00		1.00	1.00	6.002	6.60	0.00	1.200	0.997	2.00	9.704	11.64	76.9	142.2	762.0
34.00		1.00	1.01	6.079	6.69	0.00	1.200	1.003	2.00	9.620	11.54	77.2	141.8	755.9
36.00		1.00	1.02	6.153	6.77	0.00	1.200	1.009	2.00	9.536	11.44	77.5	141.4	749.8
38.00		1.00	1.03	6.224	6.85	0.00	1.200	1.014	2.00	9.453	11.34	77.7	140.8	743.5
40.00		1.00	1.04	6.291	6.92	0.00	1.200	1.019	2.00	9.369	11.24	77.8	140.3	737.2
42.00		1.00	1.05	6.356	6.99	0.00	1.200	1.024	2.00	9.285	11.14	77.9	139.6	730.9
43.92	Bot - Section 2	1.00	1.06	6.416	7.06	0.00	1.200	1.029	1.92	8.819	10.58	74.7	133.2	694.5
44.00		1.00	1.06	6.419	7.06	0.00	1.200	1.029	0.08	0.388	0.47	3.3	5.9	53.1
46.00		1.00	1.07	6.479	7.13	0.00	1.200	1.034	2.00	9.257	11.11	79.2	140.5	1267.8
48.00		1.00	1.08	6.537	7.19	0.00	1.200	1.038	2.00	9.173	11.01	79.2	139.7	1256.1
50.00		1.00	1.09	6.594	7.25	0.00	1.200	1.042	2.00	9.089	10.91	79.1	139.0	1244.3
51.00	Top - Section 1	1.00	1.10	6.621	7.28	0.00	1.200	1.044	1.00	4.513	5.42	39.4	69.3	617.8
52.00		1.00	1.10	6.648	7.31	0.00	1.200	1.047	1.00	4.492	5.39	39.4	69.1	334.2
54.00		1.00	1.11	6.701	7.37	0.00	1.200	1.050	2.00	8.920	10.70	78.9	137.4	663.6
56.00		1.00	1.12	6.753	7.43	0.00	1.200	1.054	2.00	8.836	10.60	78.8	136.5	657.5
58.00		1.00	1.13	6.803	7.48	0.00	1.200	1.058	2.00	8.752	10.50	78.6	135.7	651.3
60.00		1.00	1.14	6.852	7.54	0.00	1.200	1.062	2.00	8.667	10.40	78.4	134.8	645.1
62.00		1.00	1.14	6.899	7.59	0.00	1.200	1.065	2.00	8.583	10.30	78.2	133.8	638.9
64.00		1.00	1.15	6.945	7.64	0.00	1.200	1.068	2.00	8.498	10.20	77.9	132.9	632.7
66.00		1.00	1.16	6.991	7.69	0.00	1.200	1.072	2.00	8.414	10.10	77.6	131.9	626.4
68.00		1.00	1.17	7.035	7.74	0.00	1.200	1.075	2.00	8.329	10.00	77.3	131.0	620.1
70.00		1.00	1.17	7.078	7.79	0.00	1.200	1.078	2.00	8.245	9.89	77.0	130.0	613.8
72.00		1.00	1.18	7.120	7.83	0.00	1.200	1.081	2.00	8.160	9.79	76.7	128.9	607.5
74.00		1.00	1.19	7.161	7.88	0.00	1.200	1.084	2.00	8.076	9.69	76.3	127.9	601.2
76.00		1.00	1.19	7.201	7.92	0.00	1.200	1.087	2.00	7.991	9.59	76.0	126.9	594.9
78.00		1.00	1.20	7.241	7.96	0.00	1.200	1.090	2.00	7.906	9.49	75.6	125.8	588.5
80.00		1.00	1.21	7.279	8.01	0.00	1.200	1.093	2.00	7.822	9.39	75.2	124.7	582.1
82.00		1.00	1.21	7.317	8.05	0.00	1.200	1.095	2.00	7.737	9.28	74.7	123.6	575.7
84.00		1.00	1.22	7.355	8.09	0.00	1.200	1.098	2.00	7.652	9.18	74.3	122.5	569.3
86.00		1.00	1.23	7.391	8.13	0.00	1.200	1.101	2.00	7.568	9.08	73.8	121.4	562.9
88.00		1.00	1.23	7.427	8.17	0.00	1.200	1.103	2.00	7.483	8.98	73.4	120.3	556.5

Wind Loading - Shaft

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (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	

90.00	1.00	1.24	7.462	8.21	0.00	1.200	1.106	2.00	7.398	8.88	72.9	119.1	550.0
90.17 Bot - Section 3	1.00	1.24	7.465	8.21	0.00	1.200	1.106	0.17	0.613	0.74	6.0	9.9	45.6
92.00	1.00	1.24	7.497	8.25	0.00	1.200	1.108	1.83	6.809	8.17	67.4	110.0	836.0
94.00	1.00	1.25	7.531	8.28	0.00	1.200	1.110	2.00	7.347	8.82	73.0	118.8	901.5
96.00 Top - Section 2	1.00	1.25	7.564	8.32	0.00	1.200	1.113	2.00	7.262	8.71	72.5	117.6	890.5
98.00	1.00	1.26	7.597	8.36	0.00	1.200	1.115	2.00	7.178	8.61	72.0	116.4	469.9
100.00	1.00	1.27	7.630	8.39	0.00	1.200	1.117	2.00	7.093	8.51	71.4	115.2	464.2
102.00	1.00	1.27	7.661	8.43	0.00	1.200	1.119	2.00	7.008	8.41	70.9	114.0	458.5
104.00	1.00	1.28	7.693	8.46	0.00	1.200	1.122	2.00	6.923	8.31	70.3	112.8	452.8
106.00	1.00	1.28	7.724	8.50	0.00	1.200	1.124	2.00	6.838	8.21	69.7	111.6	447.1
108.00	1.00	1.29	7.754	8.53	0.00	1.200	1.126	2.00	6.753	8.10	69.1	110.4	441.4
110.00	1.00	1.29	7.784	8.56	0.00	1.200	1.128	2.00	6.668	8.00	68.5	109.1	435.7
112.00	1.00	1.30	7.814	8.60	0.00	1.200	1.130	2.00	6.583	7.90	67.9	107.9	429.9
114.00	1.00	1.30	7.843	8.63	0.00	1.200	1.132	2.00	6.499	7.80	67.3	106.6	424.2
116.00	1.00	1.31	7.872	8.66	0.00	1.200	1.134	2.00	6.414	7.70	66.6	105.3	418.4
118.00	1.00	1.31	7.900	8.69	0.00	1.200	1.136	2.00	6.329	7.59	66.0	104.1	412.7
120.00	1.00	1.32	7.928	8.72	0.00	1.200	1.138	2.00	6.244	7.49	65.3	102.8	406.9
122.00	1.00	1.32	7.956	8.75	0.00	1.200	1.140	2.00	6.159	7.39	64.7	101.5	401.1
124.00	1.00	1.32	7.983	8.78	0.00	1.200	1.142	2.00	6.074	7.29	64.0	100.2	395.3
126.00	1.00	1.33	8.010	8.81	0.00	1.200	1.143	2.00	5.989	7.19	63.3	98.9	389.6
128.00	1.00	1.33	8.037	8.84	0.00	1.200	1.145	2.00	5.904	7.08	62.6	97.6	383.8
130.00	1.00	1.34	8.063	8.87	0.00	1.200	1.147	2.00	5.819	6.98	61.9	96.3	378.0
132.00	1.00	1.34	8.089	8.90	0.00	1.200	1.149	2.00	5.734	6.88	61.2	94.9	372.2
133.33 Bot - Section 4	1.00	1.34	8.106	8.92	0.00	1.200	1.150	1.33	3.775	4.53	40.4	62.7	245.0
134.00	1.00	1.35	8.115	8.93	0.00	1.200	1.150	0.67	1.902	2.28	20.4	31.7	189.2
136.00	1.00	1.35	8.140	8.95	0.00	1.200	1.152	2.00	5.650	6.78	60.7	93.8	561.0
138.00 Top - Section 3	1.00	1.35	8.165	8.98	0.00	1.200	1.154	2.00	5.565	6.68	60.0	92.4	551.9
140.00 Appurtenance(s)	1.00	1.36	8.190	9.01	0.00	1.200	1.155	2.00	5.480	6.58	59.2	91.1	283.5
142.00	1.00	1.36	8.214	9.04	0.00	1.200	1.157	2.00	5.395	6.47	58.5	89.7	278.9
144.00	1.00	1.37	8.238	9.06	0.00	1.200	1.159	2.00	5.310	6.37	57.7	88.4	274.3
146.00	1.00	1.37	8.262	9.09	0.00	1.200	1.160	2.00	5.225	6.27	57.0	87.0	269.7
148.00	1.00	1.37	8.286	9.11	0.00	1.200	1.162	2.00	5.140	6.17	56.2	85.6	265.0
150.00 Appurtenance(s)	1.00	1.38	8.309	9.14	0.00	1.200	1.163	2.00	5.055	6.07	55.4	84.2	260.4
152.00	1.00	1.38	8.333	9.17	0.00	1.200	1.165	2.00	4.970	5.96	54.7	82.9	255.8
154.00	1.00	1.39	8.356	9.19	0.00	1.200	1.167	2.00	4.885	5.86	53.9	81.5	251.1
156.00	1.00	1.39	8.378	9.22	0.00	1.200	1.168	2.00	4.800	5.76	53.1	80.1	246.5
158.00 Appurtenance(s)	1.00	1.39	8.401	9.24	0.00	1.200	1.170	2.00	4.715	5.66	52.3	78.7	241.8
160.00 Appurtenance(s)	1.00	1.40	8.423	9.27	0.00	1.200	1.171	2.00	4.629	5.56	51.5	77.3	237.1
162.00	1.00	1.40	8.445	9.29	0.00	1.200	1.172	2.00	4.544	5.45	50.7	75.9	232.5
164.00	1.00	1.40	8.467	9.31	0.00	1.200	1.174	2.00	4.459	5.35	49.8	74.5	227.8
166.00 Appurtenance(s)	1.00	1.41	8.489	9.34	0.00	1.200	1.175	2.00	4.374	5.25	49.0	73.0	223.1
168.00	1.00	1.41	8.510	9.36	0.00	1.200	1.177	2.00	4.289	5.15	48.2	71.6	218.4
170.00	1.00	1.42	8.531	9.38	0.00	1.200	1.178	2.00	4.204	5.04	47.3	70.2	213.8
172.00	1.00	1.42	8.552	9.41	0.00	1.200	1.180	2.00	4.119	4.94	46.5	68.8	209.1
174.00	1.00	1.42	8.573	9.43	0.00	1.200	1.181	2.00	4.034	4.84	45.6	67.3	204.4
176.00	1.00	1.43	8.594	9.45	0.00	1.200	1.182	2.00	3.949	4.74	44.8	65.9	199.7
178.00 Appurtenance(s)	1.00	1.43	8.614	9.48	0.00	1.200	1.184	2.00	3.863	4.64	43.9	64.4	195.0
180.00	1.00	1.43	8.635	9.50	0.00	1.200	1.185	2.00	3.778	4.53	43.1	63.0	190.3
							Totals:	**180.00**			**6,091.7**		**50,333.6**

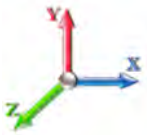
Discrete Appurtenance Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 36	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	178.00	JMA MX06FRO660-03	6	8.614	9.476	0.61	0.75	39.62	1469.15	0.000	0.000	375.38	0.00	0.00
2	178.00	Raycap	1	8.614	9.476	0.75	0.75	2.28	70.34	0.000	0.000	21.65	0.00	0.00
3	178.00	Samsung B5/B13 RRH	3	8.614	9.476	0.38	0.75	2.97	319.30	0.000	0.000	28.15	0.00	0.00
4	178.00	Platform w/ Handrails w/	1	8.614	9.476	1.00	1.00	54.20	3808.70	0.000	0.000	513.61	0.00	0.00
5	178.00	Samsung B2/B66A RRH	3	8.614	9.476	0.38	0.75	2.78	596.43	0.000	0.000	26.39	0.00	0.00
6	166.00	RFS APXVTM14-C-I20	3	8.489	9.338	0.58	0.75	12.26	505.30	0.000	0.000	114.44	0.00	0.00
7	166.00	ALU TD-RRH8x20-25	3	8.489	9.338	0.38	0.75	5.16	460.26	0.000	0.000	48.14	0.00	0.00
8	166.00	Sitepro	1	8.489	9.338	1.00	1.00	11.42	391.26	0.000	0.000	106.68	0.00	0.00
9	166.00	Sitepro	1	8.489	9.338	1.00	1.00	11.61	1219.51	0.000	0.000	108.38	0.00	0.00
10	166.00	Commscope	3	8.489	9.338	0.55	0.75	22.06	658.17	0.000	0.000	206.01	0.00	0.00
11	166.00	ALU 1900 Mhz	3	8.489	9.338	0.38	0.75	5.33	285.35	0.000	0.000	49.75	0.00	0.00
12	166.00	ALU 800 Mhz	6	8.489	9.338	0.38	0.75	7.34	553.85	0.000	0.000	68.50	0.00	0.00
13	166.00	Platform w/ Hand Rails	1	8.489	9.338	1.00	1.00	54.10	3210.39	0.000	0.000	505.20	0.00	0.00
14	160.00	4449 B71+B12	3	8.423	9.265	0.40	0.80	2.40	378.05	0.000	0.000	22.21	0.00	0.00
15	160.00	KRY 112 144/2	3	8.423	9.265	0.40	0.80	1.27	75.91	0.000	0.000	11.79	0.00	0.00
16	160.00	KRY 112 489/2	3	8.423	9.265	0.40	0.80	1.27	75.91	0.000	0.000	11.79	0.00	0.00
17	160.00	APXVAARR24_43-U-NA2	3	8.423	9.265	0.56	0.80	36.12	1267.16	0.000	0.000	334.66	0.00	0.00
18	160.00	RR90-17-00VDPL2/-R	3	8.423	9.265	0.54	0.80	8.16	228.28	0.000	0.000	75.58	0.00	0.00
19	158.00	T-Arms	3	8.401	9.241	0.56	0.75	21.39	1541.21	0.000	0.000	197.71	0.00	0.00
20	158.00	T-Arm Kit	1	8.401	9.241	0.75	0.75	20.48	847.64	0.000	0.000	189.25	0.00	0.00
21	158.00	V-Brace	1	8.401	9.241	0.75	0.75	8.04	333.72	0.000	0.000	74.30	0.00	0.00
22	150.00	Powerwave 7770	3	8.309	9.140	0.55	0.75	10.18	376.13	0.000	0.000	93.01	0.00	0.00
23	150.00	Cci HPA-65R-BUU-H6	2	8.309	9.140	0.64	0.75	13.45	435.37	0.000	0.000	122.98	0.00	0.00
24	150.00	SBNHH-1D65A	1	8.309	9.140	1.00	1.00	6.58	138.77	0.000	0.000	60.18	0.00	0.00
25	150.00	4449 B5/B12	3	8.309	9.140	0.38	0.75	2.63	321.56	0.000	0.000	24.01	0.00	0.00
26	150.00	DMP65R-BU6DA	2	8.309	9.140	0.54	0.75	14.78	448.69	0.000	0.000	135.10	0.00	0.00
27	150.00	DMP65R-BU4DA	1	8.309	9.140	0.54	0.75	7.39	224.34	0.000	0.000	67.55	0.00	0.00
28	150.00	Powerwave LGP21401	6	8.309	9.140	0.38	0.75	3.93	158.93	0.000	0.000	35.93	0.00	0.00
29	150.00	B2 B66A 8843	3	8.309	9.140	0.38	0.75	2.23	310.07	0.000	0.000	20.40	0.00	0.00
30	150.00	Raycap DC6-48-60-18-8F	1	8.309	9.140	0.67	1.00	1.60	61.68	0.000	0.000	14.60	0.00	0.00
31	150.00	Platform w/ Hand Rail	1	8.309	9.140	1.00	1.00	55.36	2719.90	0.000	0.000	506.02	0.00	0.00
32	140.00	Raycap	1	8.190	9.009	0.75	0.75	1.79	48.83	0.000	0.000	16.12	0.00	0.00
33	140.00	Fujitsu TA08025-B604	3	8.190	9.009	0.38	0.75	2.62	294.30	0.000	0.000	23.63	0.00	0.00
34	140.00	Fujitsu TA08025-B605	3	8.190	9.009	0.38	0.75	2.62	336.09	0.000	0.000	23.63	0.00	0.00
35	140.00	Sitepro1 SNP8HR-3XX	1	8.190	9.009	1.00	1.00	68.86	3241.10	0.000	0.000	620.36	0.00	0.00
36	140.00	JMA Wireless	3	8.190	9.009	0.55	0.75	22.41	608.34	0.000	0.000	201.89	0.00	0.00
							Totals:		**28,020.00**			**5,055.01**		

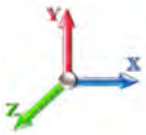
Total Applied Force Summary

Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (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: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		73.77	834.53	0.00	0.00
4.00		73.32	873.60	0.00	0.00
6.00		72.81	909.04	0.00	0.00
8.00		72.29	906.42	0.00	0.00
10.00		71.75	902.91	0.00	0.00
12.00		71.21	898.80	0.00	0.00
14.00		70.67	894.27	0.00	0.00
16.00		70.98	889.43	0.00	0.00
18.00		72.19	884.34	0.00	0.00
20.00		73.22	879.06	0.00	0.00
22.00		74.10	873.60	0.00	0.00
24.00		74.85	868.01	0.00	0.00
26.00		75.49	862.31	0.00	0.00
28.00		76.04	856.50	0.00	0.00
30.00		76.50	850.60	0.00	0.00
32.00		76.88	844.62	0.00	0.00
34.00		77.20	838.58	0.00	0.00
36.00		77.46	832.47	0.00	0.00
38.00		77.65	826.30	0.00	0.00
40.00		77.80	820.08	0.00	0.00
42.00		77.90	813.81	0.00	0.00
43.92		74.69	773.99	0.00	0.00
44.00		3.28	56.55	0.00	0.00
46.00		79.17	1350.79	0.00	0.00
48.00		79.15	1339.11	0.00	0.00
50.00		79.11	1327.40	0.00	0.00
51.00		39.44	659.39	0.00	0.00
52.00		39.42	375.79	0.00	0.00
54.00		78.91	746.83	0.00	0.00
56.00		78.76	740.73	0.00	0.00
58.00		78.59	734.61	0.00	0.00
60.00		78.39	728.46	0.00	0.00
62.00		78.16	722.28	0.00	0.00
64.00		77.91	716.08	0.00	0.00
66.00		77.64	709.86	0.00	0.00
68.00		77.34	703.63	0.00	0.00
70.00		77.03	697.37	0.00	0.00
72.00		76.69	691.09	0.00	0.00
74.00		76.34	684.79	0.00	0.00
76.00		75.96	678.48	0.00	0.00
78.00		75.57	672.15	0.00	0.00
80.00		75.16	665.81	0.00	0.00
82.00		74.73	659.45	0.00	0.00
84.00		74.29	653.08	0.00	0.00
86.00		73.83	646.69	0.00	0.00
88.00		73.36	640.29	0.00	0.00

Total Applied Force Summary

Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (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

90.00		72.87	633.88	0.00	0.00
90.17		6.04	52.58	0.00	0.00
92.00		67.38	912.93	0.00	0.00
94.00		73.04	985.41	0.00	0.00
96.00		72.51	974.48	0.00	0.00
98.00		71.98	553.85	0.00	0.00
100.00		71.43	548.20	0.00	0.00
102.00		70.87	542.54	0.00	0.00
104.00		70.30	536.87	0.00	0.00
106.00		69.72	531.19	0.00	0.00
108.00		69.12	525.49	0.00	0.00
110.00		68.52	519.80	0.00	0.00
112.00		67.90	514.09	0.00	0.00
114.00		67.28	508.37	0.00	0.00
116.00		66.64	502.64	0.00	0.00
118.00		66.00	496.91	0.00	0.00
120.00		65.34	491.17	0.00	0.00
122.00		64.68	485.42	0.00	0.00
124.00		64.00	479.66	0.00	0.00
126.00		63.32	473.89	0.00	0.00
128.00		62.63	468.12	0.00	0.00
130.00		61.93	462.34	0.00	0.00
132.00		61.22	456.56	0.00	0.00
133.33		40.40	301.30	0.00	0.00
134.00		20.37	217.31	0.00	0.00
136.00		60.71	645.46	0.00	0.00
138.00		59.98	636.39	0.00	0.00
140.00	(11) attachments	944.87	4896.70	0.00	0.00
142.00		58.50	361.04	0.00	0.00
144.00		57.74	356.44	0.00	0.00
146.00		56.99	351.83	0.00	0.00
148.00		56.22	347.22	0.00	0.00
150.00	(23) attachments	1135.23	5538.03	0.00	0.00
152.00		54.66	314.05	0.00	0.00
154.00		53.88	309.42	0.00	0.00
156.00		53.08	304.79	0.00	0.00
158.00	(5) attachments	513.54	3022.72	0.00	0.00
160.00	(15) attachments	507.51	2320.81	0.00	0.00
162.00		50.66	258.41	0.00	0.00
164.00		49.84	253.75	0.00	0.00
166.00	(21) attachments	1256.12	7533.21	0.00	0.00
168.00		48.18	235.27	0.00	0.00
170.00		47.34	230.60	0.00	0.00
172.00		46.50	225.93	0.00	0.00
174.00		45.65	221.25	0.00	0.00
176.00		44.79	216.57	0.00	0.00
178.00	(14) attachments	1009.11	6475.80	0.00	0.00
180.00		43.06	202.20	0.00	0.00
	Totals:	**11,146.66**	**84,966.88**	**0.00**	**0.00**

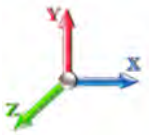
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 39	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	2.51
2.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	4.69
4.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	2.75
4.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	4.95
6.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	2.91
6.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	5.12
8.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	3.03
8.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	5.25
10.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	3.12
10.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	5.35
12.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	3.20
12.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	5.44
14.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	3.27
14.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.124	0.00	5.51
16.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.187	0.00	3.34
16.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.187	0.00	5.58
18.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.318	0.00	3.39
18.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.318	0.00	5.64
20.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.437	0.00	3.44
20.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.437	0.00	5.70
22.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.547	0.00	3.49
22.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.547	0.00	5.75
24.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.650	0.00	3.54
24.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.650	0.00	5.80
26.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.746	0.00	3.58
26.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.746	0.00	5.84
28.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.836	0.00	3.62
28.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.836	0.00	5.88
30.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.921	0.00	3.65
30.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	5.921	0.00	5.92
32.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.002	0.00	3.69
32.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.002	0.00	5.96
34.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.079	0.00	3.72
34.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.079	0.00	5.99
36.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.153	0.00	3.75
36.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.153	0.00	6.03
38.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.224	0.00	3.78
38.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.224	0.00	6.06
40.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.291	0.00	3.81
40.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.291	0.00	6.09
42.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.356	0.00	3.84
42.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.356	0.00	6.12
43.92	Safety Cable	Yes	1.92	0.000	0.00	0.00	0.00	0.000	0.000	6.416	0.00	3.71
43.92	Step bolts (ladder)	Yes	1.92	0.000	0.00	0.00	0.00	0.000	0.000	6.416	0.00	5.89
44.00	Safety Cable	Yes	0.08	0.000	0.00	0.00	0.00	0.000	0.000	6.419	0.00	0.16
44.00	Step bolts (ladder)	Yes	0.08	0.000	0.00	0.00	0.00	0.000	0.000	6.419	0.00	0.26
46.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.479	0.00	3.89

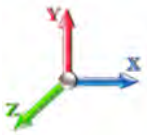
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 40	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.479	0.00	6.18
48.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.537	0.00	3.92
48.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.537	0.00	6.20
50.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.594	0.00	3.94
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.594	0.00	6.23
51.00	Safety Cable	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	6.621	0.00	1.98
51.00	Step bolts (ladder)	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	6.621	0.00	3.12
52.00	Safety Cable	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	6.648	0.00	1.98
52.00	Step bolts (ladder)	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	6.648	0.00	3.13
54.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.701	0.00	3.99
54.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.701	0.00	6.28
56.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.753	0.00	4.01
56.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.753	0.00	6.30
58.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.803	0.00	4.03
58.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.803	0.00	6.33
60.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.852	0.00	4.05
60.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.852	0.00	6.35
62.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.899	0.00	4.07
62.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.899	0.00	6.37
64.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.945	0.00	4.09
64.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.945	0.00	6.39
66.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.991	0.00	4.11
66.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.991	0.00	6.41
68.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.035	0.00	4.13
68.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.035	0.00	6.43
70.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.078	0.00	4.15
70.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.078	0.00	6.45
72.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.120	0.00	4.17
72.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.120	0.00	6.47
74.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.161	0.00	4.18
74.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.161	0.00	6.49
76.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.201	0.00	4.20
76.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.201	0.00	6.51
78.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.241	0.00	4.22
78.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.241	0.00	6.52
80.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.279	0.00	4.23
80.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.279	0.00	6.54
82.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.317	0.00	4.25
82.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.317	0.00	6.56
84.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.355	0.00	4.26
84.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.355	0.00	6.57
86.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.391	0.00	4.28
86.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.391	0.00	6.59
88.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.427	0.00	4.30
88.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.427	0.00	6.61
90.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.462	0.00	4.31
90.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.462	0.00	6.62

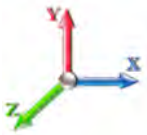
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 41	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.17	Safety Cable	Yes	0.17	0.000	0.00	0.00	0.00	0.000	0.000	7.465	0.00	0.36
90.17	Step bolts (ladder)	Yes	0.17	0.000	0.00	0.00	0.00	0.000	0.000	7.465	0.00	0.55
92.00	Safety Cable	Yes	1.83	0.000	0.00	0.00	0.00	0.000	0.000	7.497	0.00	3.96
92.00	Step bolts (ladder)	Yes	1.83	0.000	0.00	0.00	0.00	0.000	0.000	7.497	0.00	6.08
94.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.531	0.00	4.34
94.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.531	0.00	6.65
96.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.564	0.00	4.35
96.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.564	0.00	6.67
98.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.597	0.00	4.37
98.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.597	0.00	6.68
100.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.630	0.00	4.38
100.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.630	0.00	6.70
102.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.661	0.00	4.39
102.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.661	0.00	6.71
104.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.693	0.00	4.41
104.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.693	0.00	6.73
106.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.724	0.00	4.42
106.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.724	0.00	6.74
108.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.754	0.00	4.43
108.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.754	0.00	6.75
110.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.784	0.00	4.45
110.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.784	0.00	6.77
112.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.814	0.00	4.46
112.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.814	0.00	6.78
114.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.843	0.00	4.47
114.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.843	0.00	6.79
116.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.872	0.00	4.48
116.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.872	0.00	6.81
118.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.900	0.00	4.49
118.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.900	0.00	6.82
120.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.928	0.00	4.51
120.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.928	0.00	6.83
122.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.956	0.00	4.52
122.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.956	0.00	6.84
124.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.983	0.00	4.53
124.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.983	0.00	6.86
126.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.010	0.00	4.54
126.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.010	0.00	6.87
128.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.037	0.00	4.55
128.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.037	0.00	6.88
130.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.063	0.00	4.56
130.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.063	0.00	6.89
132.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.089	0.00	4.57
132.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.089	0.00	6.90
133.33	Safety Cable	Yes	1.33	0.000	0.00	0.00	0.00	0.000	0.000	8.106	0.00	3.05
133.33	Step bolts (ladder)	Yes	1.33	0.000	0.00	0.00	0.00	0.000	0.000	8.106	0.00	4.61
134.00	Safety Cable	Yes	0.67	0.000	0.00	0.00	0.00	0.000	0.000	8.115	0.00	1.53

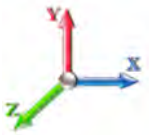
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (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: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
134.00	Step bolts (ladder)	Yes	0.67	0.000	0.00	0.00	0.00	0.000	0.000	8.115	0.00	2.30
136.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.140	0.00	4.59
136.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.140	0.00	6.92
138.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.165	0.00	4.60
138.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.165	0.00	6.94
140.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.190	0.00	4.62
140.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.190	0.00	6.95
142.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.214	0.00	4.63
142.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.214	0.00	6.96
144.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.238	0.00	4.64
144.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.238	0.00	6.97
146.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.262	0.00	4.65
146.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.262	0.00	6.98
148.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.286	0.00	4.66
148.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.286	0.00	6.99
150.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.309	0.00	4.67
150.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.309	0.00	7.00
152.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.333	0.00	4.67
152.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.333	0.00	7.01
154.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.356	0.00	4.68
154.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.356	0.00	7.02
156.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.378	0.00	4.69
156.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.378	0.00	7.03
158.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.401	0.00	4.70
158.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.401	0.00	7.04
160.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.423	0.00	4.71
160.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.423	0.00	7.05
162.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.445	0.00	4.72
162.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.445	0.00	7.06
164.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.467	0.00	4.73
164.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.467	0.00	7.07
166.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.489	0.00	4.74
166.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.489	0.00	7.08
168.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.510	0.00	4.75
168.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.510	0.00	7.09
170.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.531	0.00	4.76
170.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.531	0.00	7.10
172.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.552	0.00	4.77
172.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.552	0.00	7.11
174.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.573	0.00	4.77
174.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.573	0.00	7.12
176.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.594	0.00	4.78
176.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.594	0.00	7.13
178.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.614	0.00	4.79
178.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.614	0.00	7.13
180.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.635	0.00	4.80
180.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.635	0.00	7.14

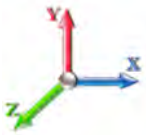
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (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	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
										Totals:	**0.0**	**959.8**

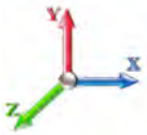
Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 44	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 28

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-84.96	-11.16	0.00	-1434.2	0.00	1434.21	5123.29	1522.04	7808.40	6435.29	0.00	0.000	0.000	0.240
2.00	-84.13	-11.12	0.00	-1411.8	0.00	1411.89	5107.67	1509.78	7683.09	6363.61	0.00	-0.019	0.000	0.238
4.00	-83.25	-11.07	0.00	-1389.6	0.00	1389.66	5091.62	1497.52	7558.79	6291.73	0.02	-0.039	0.000	0.237
6.00	-82.34	-11.02	0.00	-1367.5	0.00	1367.52	5075.16	1485.26	7435.50	6219.67	0.04	-0.058	0.000	0.236
8.00	-81.43	-10.98	0.00	-1345.4	0.00	1345.47	5058.29	1472.99	7313.22	6147.44	0.07	-0.078	0.000	0.235
10.00	-80.52	-10.93	0.00	-1323.5	0.00	1323.51	5041.00	1460.73	7191.96	6075.05	0.10	-0.098	0.000	0.234
12.00	-79.62	-10.89	0.00	-1301.6	0.00	1301.65	5023.29	1448.47	7071.72	6002.51	0.15	-0.118	0.000	0.233
14.00	-78.72	-10.84	0.00	-1279.8	0.00	1279.87	5005.16	1436.20	6952.48	5929.84	0.20	-0.139	0.000	0.232
16.00	-77.83	-10.80	0.00	-1258.1	0.00	1258.18	4986.62	1423.94	6834.27	5857.05	0.27	-0.159	0.000	0.230
18.00	-76.94	-10.75	0.00	-1236.5	0.00	1236.58	4967.66	1411.68	6717.06	5784.16	0.34	-0.180	0.000	0.229
20.00	-76.06	-10.70	0.00	-1215.0	0.00	1215.08	4948.29	1399.42	6600.87	5711.17	0.42	-0.201	0.000	0.228
22.00	-75.18	-10.65	0.00	-1193.6	0.00	1193.67	4928.49	1387.15	6485.69	5638.10	0.51	-0.222	0.000	0.227
24.00	-74.31	-10.60	0.00	-1172.3	0.00	1172.36	4908.28	1374.89	6371.53	5564.95	0.60	-0.243	0.000	0.226
26.00	-73.44	-10.55	0.00	-1151.1	0.00	1151.15	4887.66	1362.63	6258.37	5491.76	0.71	-0.264	0.000	0.225
28.00	-72.58	-10.50	0.00	-1130.0	0.00	1130.05	4866.62	1350.36	6146.24	5418.52	0.82	-0.286	0.000	0.224
30.00	-71.73	-10.45	0.00	-1109.0	0.00	1109.05	4845.16	1338.10	6035.11	5345.24	0.95	-0.307	0.000	0.222
32.00	-70.88	-10.39	0.00	-1088.1	0.00	1088.16	4823.28	1325.84	5925.00	5271.95	1.08	-0.329	0.000	0.221
34.00	-70.04	-10.34	0.00	-1067.3	0.00	1067.38	4800.99	1313.58	5815.91	5198.66	1.23	-0.352	0.000	0.220
36.00	-69.20	-10.28	0.00	-1046.7	0.00	1046.70	4778.28	1301.31	5707.83	5125.37	1.38	-0.374	0.000	0.219
38.00	-68.37	-10.22	0.00	-1026.1	0.00	1026.14	4755.15	1289.05	5600.76	5052.10	1.54	-0.396	0.000	0.218
40.00	-67.55	-10.17	0.00	-1005.7	0.00	1005.70	4731.61	1276.79	5494.70	4978.87	1.71	-0.419	0.000	0.216
42.00	-66.73	-10.11	0.00	-985.36	0.00	985.36	4707.65	1264.52	5389.66	4905.68	1.89	-0.442	0.000	0.215
43.92	-65.95	-10.04	0.00	-965.98	0.00	965.98	4684.30	1252.77	5289.95	4835.60	2.07	-0.464	0.000	0.214
44.00	-65.90	-10.05	0.00	-965.15	0.00	965.15	4683.27	1252.26	5285.64	4832.55	2.08	-0.465	0.000	0.214
46.00	-64.54	-9.99	0.00	-945.04	0.00	945.04	4658.48	1240.00	5182.62	4759.49	2.28	-0.488	0.000	0.212
48.00	-63.20	-9.92	0.00	-925.07	0.00	925.07	4633.27	1227.74	5080.62	4686.52	2.49	-0.512	0.000	0.211
50.00	-61.87	-9.85	0.00	-905.22	0.00	905.22	4607.64	1215.47	4979.64	4613.64	2.71	-0.535	0.000	0.210
51.00	-61.21	-9.82	0.00	-895.37	0.00	895.37	4157.28	1142.33	4736.69	4216.21	2.82	-0.547	0.000	0.227
52.00	-60.83	-9.80	0.00	-885.55	0.00	885.55	4146.96	1136.64	4689.60	4184.61	2.94	-0.559	0.000	0.226
54.00	-60.08	-9.73	0.00	-865.96	0.00	865.96	4126.01	1125.25	4596.10	4121.41	3.18	-0.584	0.000	0.225
56.00	-59.34	-9.67	0.00	-846.49	0.00	846.49	4104.64	1113.86	4503.55	4058.23	3.43	-0.609	0.000	0.223
58.00	-58.60	-9.61	0.00	-827.14	0.00	827.14	4082.85	1102.48	4411.95	3995.08	3.69	-0.634	0.000	0.221
60.00	-57.87	-9.55	0.00	-807.92	0.00	807.92	4060.64	1091.09	4321.28	3931.97	3.96	-0.659	0.000	0.220
62.00	-57.14	-9.49	0.00	-788.82	0.00	788.82	4038.02	1079.70	4231.55	3868.91	4.24	-0.684	0.000	0.218
64.00	-56.42	-9.43	0.00	-769.83	0.00	769.83	4014.98	1068.31	4142.77	3805.92	4.53	-0.710	0.000	0.216
66.00	-55.71	-9.37	0.00	-750.98	0.00	750.98	3991.52	1056.93	4054.92	3743.01	4.84	-0.735	0.000	0.215
68.00	-55.00	-9.31	0.00	-732.24	0.00	732.24	3967.65	1045.54	3968.02	3680.19	5.15	-0.761	0.000	0.213
70.00	-54.30	-9.24	0.00	-713.63	0.00	713.63	3943.36	1034.15	3882.06	3617.47	5.48	-0.787	0.000	0.211
72.00	-53.61	-9.18	0.00	-695.14	0.00	695.14	3918.66	1022.77	3797.04	3554.87	5.81	-0.814	0.000	0.209
74.00	-52.92	-9.12	0.00	-676.78	0.00	676.78	3893.54	1011.38	3712.96	3492.40	6.16	-0.840	0.000	0.207
76.00	-52.24	-9.06	0.00	-658.53	0.00	658.53	3868.00	999.99	3629.83	3430.07	6.52	-0.867	0.000	0.206
78.00	-51.56	-9.00	0.00	-640.41	0.00	640.41	3842.04	988.61	3547.63	3367.90	6.88	-0.894	0.000	0.204
80.00	-50.89	-8.94	0.00	-622.42	0.00	622.42	3815.67	977.22	3466.38	3305.90	7.26	-0.920	0.000	0.202
82.00	-50.23	-8.87	0.00	-604.55	0.00	604.55	3788.88	965.83	3386.07	3244.07	7.66	-0.948	0.000	0.200
84.00	-49.58	-8.81	0.00	-586.80	0.00	586.80	3761.67	954.44	3306.69	3182.44	8.06	-0.975	0.000	0.198
86.00	-48.93	-8.75	0.00	-569.17	0.00	569.17	3734.05	943.06	3228.26	3121.02	8.47	-1.002	0.000	0.196
88.00	-48.28	-8.69	0.00	-551.67	0.00	551.67	3706.01	931.67	3150.77	3059.82	8.90	-1.030	0.000	0.193
90.00	-47.65	-8.62	0.00	-534.29	0.00	534.29	3677.55	920.28	3074.23	2998.84	9.34	-1.057	0.000	0.191

Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 45	

90.17	-47.59	-8.62	0.00	-532.86	0.00	532.86	3675.16	919.33	3067.89	2993.77	9.37	-1.060	0.000	0.191
92.00	-46.68	-8.56	0.00	-517.05	0.00	517.05	3648.68	908.90	2998.62	2938.12	9.79	-1.085	0.000	0.189
94.00	-45.69	-8.49	0.00	-499.93	0.00	499.93	3619.39	897.51	2923.96	2877.64	10.25	-1.113	0.000	0.186
96.00	-44.71	-8.42	0.00	-482.95	0.00	482.95	2873.56	764.37	2506.37	2303.28	10.72	-1.141	0.000	0.225
98.00	-44.16	-8.36	0.00	-466.11	0.00	466.11	2853.66	754.73	2443.58	2258.25	11.20	-1.169	0.000	0.222
100.00	-43.60	-8.30	0.00	-449.39	0.00	449.39	2833.34	745.10	2381.59	2213.29	11.70	-1.201	0.000	0.219
102.00	-43.06	-8.24	0.00	-432.78	0.00	432.78	2812.61	735.46	2320.39	2168.43	12.21	-1.232	0.000	0.215
104.00	-42.52	-8.18	0.00	-416.30	0.00	416.30	2791.46	725.83	2259.99	2123.68	12.73	-1.264	0.000	0.211
106.00	-41.99	-8.13	0.00	-399.93	0.00	399.93	2769.89	716.19	2200.39	2079.04	13.27	-1.295	0.000	0.208
108.00	-41.46	-8.07	0.00	-383.68	0.00	383.68	2747.90	706.55	2141.58	2034.53	13.82	-1.327	0.000	0.204
110.00	-40.94	-8.01	0.00	-367.54	0.00	367.54	2725.50	696.92	2083.57	1990.17	14.38	-1.358	0.000	0.200
112.00	-40.42	-7.95	0.00	-351.53	0.00	351.53	2702.68	687.28	2026.36	1945.97	14.96	-1.390	0.000	0.196
114.00	-39.91	-7.89	0.00	-335.62	0.00	335.62	2679.45	677.65	1969.94	1901.93	15.55	-1.421	0.000	0.191
116.00	-39.40	-7.84	0.00	-319.84	0.00	319.84	2655.79	668.01	1914.32	1858.08	16.15	-1.452	0.000	0.187
118.00	-38.90	-7.78	0.00	-304.17	0.00	304.17	2631.73	658.38	1859.50	1814.42	16.76	-1.483	0.000	0.183
120.00	-38.41	-7.72	0.00	-288.61	0.00	288.61	2607.24	648.74	1805.47	1770.96	17.39	-1.514	0.000	0.178
122.00	-37.92	-7.66	0.00	-273.17	0.00	273.17	2582.34	639.11	1752.24	1727.73	18.03	-1.544	0.000	0.173
124.00	-37.44	-7.60	0.00	-257.85	0.00	257.85	2557.02	629.47	1699.80	1684.74	18.69	-1.574	0.000	0.168
126.00	-36.97	-7.55	0.00	-242.64	0.00	242.64	2531.28	619.84	1648.16	1641.98	19.35	-1.604	0.000	0.163
128.00	-36.50	-7.49	0.00	-227.54	0.00	227.54	2505.13	610.20	1597.32	1599.49	20.03	-1.633	0.000	0.157
130.00	-36.03	-7.43	0.00	-212.57	0.00	212.57	2478.56	600.57	1547.28	1557.27	20.72	-1.661	0.000	0.151
132.00	-35.57	-7.37	0.00	-197.70	0.00	197.70	2451.58	590.93	1498.03	1515.33	21.42	-1.689	0.000	0.145
133.33	-35.27	-7.33	0.00	-187.87	0.00	187.87	2433.35	584.51	1465.64	1487.53	21.90	-1.708	0.000	0.141
134.00	-35.05	-7.32	0.00	-182.98	0.00	182.98	2424.17	581.30	1449.58	1473.69	22.14	-1.717	0.000	0.139
136.00	-34.41	-7.25	0.00	-168.35	0.00	168.35	2396.35	571.66	1401.92	1432.35	22.86	-1.743	0.000	0.132
138.00	-33.77	-7.19	0.00	-153.85	0.00	153.85	1545.45	417.14	1026.36	929.77	23.60	-1.769	0.000	0.188
140.00	-28.90	-6.10	0.00	-139.48	0.00	139.48	1531.69	410.13	992.17	905.88	24.34	-1.793	0.000	0.173
142.00	-28.54	-6.05	0.00	-127.27	0.00	127.27	1517.50	403.12	958.56	882.03	25.10	-1.823	0.000	0.163
144.00	-28.18	-5.99	0.00	-115.18	0.00	115.18	1502.90	396.11	925.52	858.22	25.87	-1.852	0.000	0.153
146.00	-27.83	-5.94	0.00	-103.19	0.00	103.19	1487.88	389.11	893.06	834.49	26.65	-1.880	0.000	0.143
148.00	-27.48	-5.88	0.00	-91.32	0.00	91.32	1472.45	382.10	861.19	810.82	27.45	-1.905	0.000	0.132
150.00	-21.98	-4.57	0.00	-79.55	0.00	79.55	1456.60	375.09	829.89	787.25	28.25	-1.929	0.000	0.116
152.00	-21.67	-4.51	0.00	-70.41	0.00	70.41	1440.33	368.08	799.17	763.78	29.06	-1.951	0.000	0.107
154.00	-21.36	-4.46	0.00	-61.38	0.00	61.38	1423.65	361.08	769.03	740.42	29.88	-1.972	0.000	0.098
156.00	-21.06	-4.40	0.00	-52.47	0.00	52.47	1406.55	354.07	739.47	717.20	30.71	-1.991	0.000	0.088
158.00	-18.05	-3.79	0.00	-43.67	0.00	43.67	1389.03	347.06	710.49	694.11	31.55	-2.008	0.000	0.076
160.00	-15.75	-3.20	0.00	-36.10	0.00	36.10	1371.10	340.05	682.09	671.17	32.40	-2.023	0.000	0.065
162.00	-15.49	-3.14	0.00	-29.70	0.00	29.70	1352.75	333.05	654.27	648.41	33.25	-2.036	0.000	0.057
164.00	-15.24	-3.09	0.00	-23.41	0.00	23.41	1333.98	326.04	627.03	625.81	34.10	-2.047	0.000	0.049
166.00	-7.76	-1.56	0.00	-17.23	0.00	17.23	1314.79	319.03	600.37	603.42	34.96	-2.056	0.000	0.034
168.00	-7.52	-1.51	0.00	-14.11	0.00	14.11	1295.19	312.03	574.28	581.22	35.82	-2.064	0.000	0.030
170.00	-7.29	-1.45	0.00	-11.09	0.00	11.09	1275.17	305.02	548.78	559.24	36.69	-2.070	0.000	0.026
172.00	-7.07	-1.40	0.00	-8.18	0.00	8.18	1251.65	298.01	523.85	536.17	37.56	-2.076	0.000	0.021
174.00	-6.85	-1.35	0.00	-5.38	0.00	5.38	1222.21	291.00	499.51	511.11	38.43	-2.080	0.000	0.016
176.00	-6.64	-1.29	0.00	-2.69	0.00	2.69	1192.78	284.00	475.74	486.64	39.30	-2.082	0.000	0.011
178.00	-0.20	-0.05	0.00	-0.10	0.00	0.10	1163.35	276.99	452.55	462.78	40.17	-2.083	0.000	0.000
180.00	0.00	-0.04	0.00	0.00	0.00	0.00	1133.92	269.98	429.95	439.52	41.05	-2.083	0.000	0.000

Seismic Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 46	

Load Case: 1.2D + 1.0Ev + 1.0Eh

Gust Response Factor	1.10			**Sds**	0.22	**Iterations**	25
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.09	**Ss**	0.21
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.28	**SA**	0.02	**S1**	0.05
						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		590.99	1.00	26.48	0.00	
4.00		622.70	3.00	27.90	0.00	
6.00		654.41	5.00	29.32	0.01	
8.00		649.65	7.00	29.10	0.01	
10.00		644.90	9.00	28.89	0.02	
12.00		640.14	11.00	28.68	0.03	
14.00		635.39	13.00	28.47	0.04	
16.00		630.63	15.00	28.25	0.06	
18.00		625.88	17.00	28.04	0.07	
20.00		621.12	19.00	27.83	0.09	
22.00		616.37	21.00	27.61	0.11	
24.00		611.61	23.00	27.40	0.12	
26.00		606.86	25.00	27.19	0.14	
28.00		602.10	27.00	26.97	0.17	
30.00		597.35	29.00	26.76	0.19	
32.00		592.59	31.00	26.55	0.21	
34.00		587.83	33.00	26.33	0.24	
36.00		583.08	35.00	26.12	0.26	
38.00		578.32	37.00	25.91	0.29	
40.00		573.57	39.00	25.70	0.31	
42.00		568.81	41.00	25.48	0.34	
43.92	Bot - Section 2	540.65	42.96	24.22	0.34	
44.00		42.51	43.96	1.90	0.00	
46.00		1015.5	45.00	45.50	1.31	
48.00		1006.3	47.00	45.08	1.40	
50.00		997.18	49.00	44.67	1.50	
51.00	Top - Section 1	495.15	50.50	22.18	0.39	
52.00		258.97	51.50	11.60	0.11	
54.00		514.64	53.00	23.06	0.47	
56.00		510.22	55.00	22.86	0.49	
58.00		505.80	57.00	22.66	0.52	
60.00		501.39	59.00	22.46	0.55	
62.00		496.97	61.00	22.26	0.58	
64.00		492.56	63.00	22.07	0.60	
66.00		488.14	65.00	21.87	0.63	
68.00		483.73	67.00	21.67	0.66	
70.00		479.31	69.00	21.47	0.69	
72.00		474.89	71.00	21.28	0.71	
74.00		470.48	73.00	21.08	0.74	
76.00		466.06	75.00	20.88	0.77	
78.00		461.65	77.00	20.68	0.79	
80.00		457.23	79.00	20.48	0.82	
82.00		452.82	81.00	20.29	0.84	
84.00		448.40	83.00	20.09	0.87	
86.00		443.99	85.00	19.89	0.89	

Seismic Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 47	

88.00		439.57	87.00	19.69	0.92			
90.00		435.15	89.00	19.49	0.94			
90.17	Bot - Section 3	36.06	90.08	1.62	0.01			
92.00		674.80	91.08	30.23	2.37			
94.00		728.33	93.00	32.63	2.88			
96.00	Top - Section 2	720.18	95.00	32.26	2.94			
98.00		370.62	97.00	16.60	0.81			
100.00		366.88	99.00	16.44	0.83			
102.00		363.14	101.00	16.27	0.84			
104.00		359.41	103.00	16.10	0.86			
106.00		355.67	105.00	15.93	0.88			
108.00		351.93	107.00	15.77	0.89			
110.00		348.20	109.00	15.60	0.90			
112.00		344.46	111.00	15.43	0.92			
114.00		340.73	113.00	15.26	0.93			
116.00		336.99	115.00	15.10	0.94			
118.00		333.25	117.00	14.93	0.95			
120.00		329.52	119.00	14.76	0.96			
122.00		325.78	121.00	14.59	0.98			
124.00		322.04	123.00	14.43	0.98			
126.00		318.31	125.00	14.26	0.99			
128.00		314.57	127.00	14.09	1.00			
130.00		310.83	129.00	13.93	1.01			
132.00		307.10	131.00	13.76	1.02			
133.33	Bot - Section 4	202.66	132.67	9.08	0.45			
134.00		156.59	133.67	7.02	0.27			
136.00		465.46	135.00	20.85	2.48			
138.00	Top - Section 3	459.01	137.00	20.56	2.48			
140.00	Appurtenance(s)	2744.5	139.00	122.96	91.32			
142.00		231.36	141.00	10.36	0.67			
144.00		228.64	143.00	10.24	0.67			
146.00		225.92	145.00	10.12	0.67			
148.00		223.21	147.00	10.00	0.68			
150.00	Appurtenance(s)	2838.5	149.00	127.17	112.25			
152.00		193.84	151.00	8.68	0.54			
154.00		191.13	153.00	8.56	0.54			
156.00		188.41	155.00	8.44	0.54			
158.00	Appurtenance(s)	1932.6	157.00	86.58	57.77			
160.00	Appurtenance(s)	909.88	159.00	40.76	13.13			
162.00		147.81	161.00	6.62	0.36			
164.00		145.09	163.00	6.50	0.35			
166.00	Appurtenance(s)	3839.7	165.00	172.02	251.87			
168.00		130.50	167.00	5.85	0.30			
170.00		127.78	169.00	5.72	0.29			
172.00		125.06	171.00	5.60	0.29			
174.00		122.35	173.00	5.48	0.28			
176.00		119.63	175.00	5.36	0.28			
178.00	Appurtenance(s)	3175.2	177.00	142.25	198.19			
180.00		109.20	179.00	4.89	0.24			
	Totals:	**53,706.8**		**2,406.1**	**783.0**	**Total Wind:**	**50,815.4**	

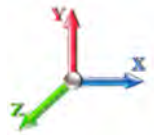
Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 48	

Tower Engineering Solutions

Load Case: 1.2D + 1.0Ev + 1.0Eh



Gust Response Factor	1.10			**Sds**	0.22			**Iterations**	25
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.09			**Ss**	0.21
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.28	**SA**	0.02			**S1**	0.05
								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	-65.67	-0.78	0.00	-131.95	0.00	131.95	5123.29	1522.04	7808.40	6435.29		0.00	0.00	0.033
2.00	-64.93	-0.78	0.00	-130.39	0.00	130.39	5107.67	1509.78	7683.09	6363.61		0.00	0.00	0.033
4.00	-64.16	-0.79	0.00	-128.82	0.00	128.82	5091.62	1497.52	7558.79	6291.73		0.00	0.00	0.033
6.00	-63.37	-0.79	0.00	-127.25	0.00	127.25	5075.16	1485.26	7435.50	6219.67		0.00	-0.01	0.033
8.00	-62.57	-0.79	0.00	-125.67	0.00	125.67	5058.29	1472.99	7313.22	6147.44		0.01	-0.01	0.033
10.00	-61.78	-0.79	0.00	-124.09	0.00	124.09	5041.00	1460.73	7191.96	6075.05		0.01	-0.01	0.033
12.00	-61.00	-0.79	0.00	-122.51	0.00	122.51	5023.29	1448.47	7071.72	6002.51		0.01	-0.01	0.033
14.00	-60.23	-0.80	0.00	-120.92	0.00	120.92	5005.16	1436.20	6952.48	5929.84		0.02	-0.01	0.032
16.00	-59.46	-0.80	0.00	-119.33	0.00	119.33	4986.62	1423.94	6834.27	5857.05		0.02	-0.01	0.032
18.00	-58.69	-0.80	0.00	-117.73	0.00	117.73	4967.66	1411.68	6717.06	5784.16		0.03	-0.02	0.032
20.00	-57.93	-0.80	0.00	-116.13	0.00	116.13	4948.29	1399.42	6600.87	5711.17		0.04	-0.02	0.032
22.00	-57.18	-0.80	0.00	-114.53	0.00	114.53	4928.49	1387.15	6485.69	5638.10		0.05	-0.02	0.032
24.00	-56.44	-0.80	0.00	-112.93	0.00	112.93	4908.28	1374.89	6371.53	5564.95		0.06	-0.02	0.032
26.00	-55.70	-0.81	0.00	-111.32	0.00	111.32	4887.66	1362.63	6258.37	5491.76		0.07	-0.02	0.032
28.00	-54.96	-0.81	0.00	-109.71	0.00	109.71	4866.62	1350.36	6146.24	5418.52		0.08	-0.03	0.032
30.00	-54.23	-0.81	0.00	-108.09	0.00	108.09	4845.16	1338.10	6035.11	5345.24		0.09	-0.03	0.031
32.00	-53.51	-0.81	0.00	-106.48	0.00	106.48	4823.28	1325.84	5925.00	5271.95		0.10	-0.03	0.031
34.00	-52.79	-0.81	0.00	-104.85	0.00	104.85	4800.99	1313.58	5815.91	5198.66		0.12	-0.03	0.031
36.00	-52.08	-0.81	0.00	-103.23	0.00	103.23	4778.28	1301.31	5707.83	5125.37		0.13	-0.04	0.031
38.00	-51.38	-0.81	0.00	-101.61	0.00	101.61	4755.15	1289.05	5600.76	5052.10		0.15	-0.04	0.031
40.00	-50.68	-0.82	0.00	-99.98	0.00	99.98	4731.61	1276.79	5494.70	4978.87		0.16	-0.04	0.031
42.00	-49.99	-0.82	0.00	-98.35	0.00	98.35	4707.65	1264.52	5389.66	4905.68		0.18	-0.04	0.031
43.92	-49.33	-0.82	0.00	-96.78	0.00	96.78	4684.30	1252.77	5289.95	4835.60		0.20	-0.04	0.031
44.00	-49.28	-0.82	0.00	-96.71	0.00	96.71	4683.27	1252.26	5285.64	4832.55		0.20	-0.04	0.031
46.00	-48.03	-0.82	0.00	-95.08	0.00	95.08	4658.48	1240.00	5182.62	4759.49		0.22	-0.05	0.030
48.00	-46.79	-0.82	0.00	-93.44	0.00	93.44	4633.27	1227.74	5080.62	4686.52		0.24	-0.05	0.030
50.00	-45.56	-0.82	0.00	-91.81	0.00	91.81	4607.64	1215.47	4979.64	4613.64		0.26	-0.05	0.030
51.00	-44.96	-0.82	0.00	-90.99	0.00	90.99	4157.28	1142.33	4736.69	4216.21		0.27	-0.05	0.032
52.00	-44.64	-0.82	0.00	-90.18	0.00	90.18	4146.96	1136.64	4689.60	4184.61		0.28	-0.05	0.032
54.00	-44.02	-0.82	0.00	-88.54	0.00	88.54	4126.01	1125.25	4596.10	4121.41		0.30	-0.06	0.032
56.00	-43.40	-0.82	0.00	-86.91	0.00	86.91	4104.64	1113.86	4503.55	4058.23		0.33	-0.06	0.032
58.00	-42.78	-0.82	0.00	-85.27	0.00	85.27	4082.85	1102.48	4411.95	3995.08		0.35	-0.06	0.032
60.00	-42.17	-0.82	0.00	-83.63	0.00	83.63	4060.64	1091.09	4321.28	3931.97		0.38	-0.06	0.032
62.00	-41.57	-0.82	0.00	-81.99	0.00	81.99	4038.02	1079.70	4231.55	3868.91		0.41	-0.07	0.031
64.00	-40.97	-0.82	0.00	-80.35	0.00	80.35	4014.98	1068.31	4142.77	3805.92		0.44	-0.07	0.031
66.00	-40.38	-0.82	0.00	-78.71	0.00	78.71	3991.52	1056.93	4054.92	3743.01		0.47	-0.07	0.031
68.00	-39.79	-0.82	0.00	-77.07	0.00	77.07	3967.65	1045.54	3968.02	3680.19		0.50	-0.08	0.031
70.00	-39.21	-0.82	0.00	-75.42	0.00	75.42	3943.36	1034.15	3882.06	3617.47		0.53	-0.08	0.031
72.00	-38.63	-0.82	0.00	-73.78	0.00	73.78	3918.66	1022.77	3797.04	3554.87		0.56	-0.08	0.031
74.00	-38.06	-0.82	0.00	-72.13	0.00	72.13	3893.54	1011.38	3712.96	3492.40		0.60	-0.08	0.030
76.00	-37.50	-0.82	0.00	-70.48	0.00	70.48	3868.00	999.99	3629.83	3430.07		0.63	-0.09	0.030
78.00	-36.94	-0.82	0.00	-68.84	0.00	68.84	3842.04	988.61	3547.63	3367.90		0.67	-0.09	0.030
80.00	-36.38	-0.82	0.00	-67.19	0.00	67.19	3815.67	977.22	3466.38	3305.90		0.71	-0.09	0.030
82.00	-35.84	-0.82	0.00	-65.54	0.00	65.54	3788.88	965.83	3386.07	3244.07		0.75	-0.10	0.030
84.00	-35.29	-0.82	0.00	-63.89	0.00	63.89	3761.67	954.44	3306.69	3182.44		0.79	-0.10	0.029
86.00	-34.76	-0.82	0.00	-62.24	0.00	62.24	3734.05	943.06	3228.26	3121.02		0.83	-0.10	0.029
88.00	-34.22	-0.82	0.00	-60.60	0.00	60.60	3706.01	931.67	3150.77	3059.82		0.87	-0.10	0.029

Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 49	

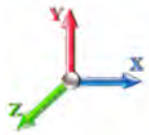
90.00	-33.70	-0.82	0.00	-58.95	0.00	58.95	3677.55	920.28	3074.23	2998.84	0.92	-0.11	0.029
90.17	-33.65	-0.82	0.00	-58.81	0.00	58.81	3675.16	919.33	3067.89	2993.77	0.92	-0.11	0.029
92.00	-32.83	-0.82	0.00	-57.30	0.00	57.30	3648.68	908.90	2998.62	2938.12	0.96	-0.11	0.029
94.00	-31.94	-0.82	0.00	-55.66	0.00	55.66	3619.39	897.51	2923.96	2877.64	1.01	-0.11	0.028
96.00	-31.05	-0.82	0.00	-54.02	0.00	54.02	2873.56	764.37	2506.37	2303.28	1.06	-0.12	0.034
98.00	-30.61	-0.82	0.00	-52.39	0.00	52.39	2853.66	754.73	2443.58	2258.25	1.10	-0.12	0.034
100.00	-30.17	-0.82	0.00	-50.75	0.00	50.75	2833.34	745.10	2381.59	2213.29	1.16	-0.12	0.034
102.00	-29.73	-0.82	0.00	-49.12	0.00	49.12	2812.61	735.46	2320.39	2168.43	1.21	-0.13	0.033
104.00	-29.30	-0.82	0.00	-47.49	0.00	47.49	2791.46	725.83	2259.99	2123.68	1.26	-0.13	0.033
106.00	-28.87	-0.82	0.00	-45.86	0.00	45.86	2769.89	716.19	2200.39	2079.04	1.32	-0.13	0.032
108.00	-28.45	-0.82	0.00	-44.22	0.00	44.22	2747.90	706.55	2141.58	2034.53	1.37	-0.14	0.032
110.00	-28.03	-0.82	0.00	-42.59	0.00	42.59	2725.50	696.92	2083.57	1990.17	1.43	-0.14	0.032
112.00	-27.62	-0.82	0.00	-40.96	0.00	40.96	2702.68	687.28	2026.36	1945.97	1.49	-0.14	0.031
114.00	-27.21	-0.82	0.00	-39.33	0.00	39.33	2679.45	677.65	1969.94	1901.93	1.55	-0.15	0.031
116.00	-26.80	-0.82	0.00	-37.70	0.00	37.70	2655.79	668.01	1914.32	1858.08	1.62	-0.15	0.030
118.00	-26.40	-0.82	0.00	-36.06	0.00	36.06	2631.73	658.38	1859.50	1814.42	1.68	-0.16	0.030
120.00	-26.01	-0.81	0.00	-34.43	0.00	34.43	2607.24	648.74	1805.47	1770.96	1.75	-0.16	0.029
122.00	-25.62	-0.81	0.00	-32.80	0.00	32.80	2582.34	639.11	1752.24	1727.73	1.81	-0.16	0.029
124.00	-25.23	-0.81	0.00	-31.18	0.00	31.18	2557.02	629.47	1699.80	1684.74	1.88	-0.17	0.028
126.00	-24.85	-0.81	0.00	-29.55	0.00	29.55	2531.28	619.84	1648.16	1641.98	1.95	-0.17	0.028
128.00	-24.47	-0.81	0.00	-27.92	0.00	27.92	2505.13	610.20	1597.32	1599.49	2.03	-0.17	0.027
130.00	-24.10	-0.81	0.00	-26.30	0.00	26.30	2478.56	600.57	1547.28	1557.27	2.10	-0.18	0.027
132.00	-23.74	-0.81	0.00	-24.67	0.00	24.67	2451.58	590.93	1498.03	1515.33	2.18	-0.18	0.026
133.33	-23.49	-0.81	0.00	-23.59	0.00	23.59	2433.35	584.51	1465.64	1487.53	2.23	-0.18	0.026
134.00	-23.30	-0.81	0.00	-23.05	0.00	23.05	2424.17	581.30	1449.58	1473.69	2.25	-0.18	0.025
136.00	-22.74	-0.81	0.00	-21.43	0.00	21.43	2396.35	571.66	1401.92	1432.35	2.33	-0.19	0.024
138.00	-22.18	-0.80	0.00	-19.81	0.00	19.81	1545.45	417.14	1026.36	929.77	2.41	-0.19	0.036
140.00	-18.78	-0.70	0.00	-18.20	0.00	18.20	1531.69	410.13	992.17	905.88	2.49	-0.19	0.032
142.00	-18.51	-0.70	0.00	-16.80	0.00	16.80	1517.50	403.12	958.56	882.03	2.57	-0.20	0.031
144.00	-18.24	-0.70	0.00	-15.39	0.00	15.39	1502.90	396.11	925.52	858.22	2.66	-0.20	0.030
146.00	-17.97	-0.70	0.00	-13.99	0.00	13.99	1487.88	389.11	893.06	834.49	2.74	-0.21	0.029
148.00	-17.71	-0.70	0.00	-12.58	0.00	12.58	1472.45	382.10	861.19	810.82	2.83	-0.21	0.028
150.00	-14.19	-0.58	0.00	-11.18	0.00	11.18	1456.60	375.09	829.89	787.25	2.92	-0.21	0.024
152.00	-13.96	-0.58	0.00	-10.02	0.00	10.02	1440.33	368.08	799.17	763.78	3.01	-0.22	0.023
154.00	-13.73	-0.58	0.00	-8.87	0.00	8.87	1423.65	361.08	769.03	740.42	3.10	-0.22	0.022
156.00	-13.51	-0.58	0.00	-7.72	0.00	7.72	1406.55	354.07	739.47	717.20	3.19	-0.22	0.020
158.00	-11.11	-0.51	0.00	-6.57	0.00	6.57	1389.03	347.06	710.49	694.11	3.28	-0.22	0.017
160.00	-9.99	-0.49	0.00	-5.55	0.00	5.55	1371.10	340.05	682.09	671.17	3.38	-0.23	0.016
162.00	-9.81	-0.49	0.00	-4.57	0.00	4.57	1352.75	333.05	654.27	648.41	3.47	-0.23	0.014
164.00	-9.63	-0.49	0.00	-3.59	0.00	3.59	1333.98	326.04	627.03	625.81	3.57	-0.23	0.013
166.00	-4.86	-0.22	0.00	-2.61	0.00	2.61	1314.79	319.03	600.37	603.42	3.66	-0.23	0.008
168.00	-4.69	-0.22	0.00	-2.17	0.00	2.17	1295.19	312.03	574.28	581.22	3.76	-0.23	0.007
170.00	-4.54	-0.22	0.00	-1.73	0.00	1.73	1275.17	305.02	548.78	559.24	3.86	-0.23	0.007
172.00	-4.38	-0.22	0.00	-1.30	0.00	1.30	1251.65	298.01	523.85	536.17	3.96	-0.23	0.006
174.00	-4.23	-0.22	0.00	-0.86	0.00	0.86	1222.21	291.00	499.51	511.11	4.05	-0.23	0.005
176.00	-4.09	-0.22	0.00	-0.43	0.00	0.43	1192.78	284.00	475.74	486.64	4.15	-0.24	0.004
178.00	-0.14	0.00	0.00	0.00	0.00	0.00	1163.35	276.99	452.55	462.78	4.25	-0.24	0.000
180.00	0.00	0.00	0.00	0.00	0.00	0.00	1133.92	269.98	429.95	439.52	4.35	-0.24	0.000

Seismic Segment Forces (Factored)

Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 50

Tower Engineering Solutions

Load Case: 0.9D + 1.0Ev + 1.0Eh



Gust Response Factor	1.10			**Sds**	0.22	**Iterations**	25
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.09	**Ss**	0.21
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.28	**SA**	0.02	**S1**	0.05
						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		590.21	1.00	26.44	0.00	
4.00		612.80	3.00	27.45	0.00	
6.00		635.39	5.00	28.47	0.01	
8.00		630.63	7.00	28.25	0.01	
10.00		625.88	9.00	28.04	0.02	
12.00		621.12	11.00	27.83	0.03	
14.00		616.37	13.00	27.61	0.04	
16.00		611.61	15.00	27.40	0.05	
18.00		606.86	17.00	27.19	0.07	
20.00		602.10	19.00	26.97	0.08	
22.00		597.35	21.00	26.76	0.10	
24.00		592.59	23.00	26.55	0.12	
26.00		587.84	25.00	26.34	0.14	
28.00		583.08	27.00	26.12	0.16	
30.00		578.33	29.00	25.91	0.18	
32.00		573.57	31.00	25.70	0.20	
34.00		568.82	33.00	25.48	0.22	
36.00		564.06	35.00	25.27	0.25	
38.00		559.30	37.00	25.06	0.27	
40.00		554.55	39.00	24.84	0.30	
42.00		549.79	41.00	24.63	0.32	
43.92	Bot - Section 2	522.42	42.96	23.40	0.32	
44.00		41.72	43.96	1.87	0.00	
46.00		996.50	45.00	44.64	1.28	
48.00		987.33	47.00	44.23	1.37	
50.00		978.16	49.00	43.82	1.46	
51.00	Top - Section 1	485.64	50.50	21.76	0.38	
52.00		249.46	51.50	11.18	0.10	
54.00		495.62	53.00	22.20	0.44	
56.00		491.20	55.00	22.01	0.46	
58.00		486.78	57.00	21.81	0.49	
60.00		482.37	59.00	21.61	0.51	
62.00		477.95	61.00	21.41	0.54	
64.00		473.54	63.00	21.21	0.57	
66.00		469.12	65.00	21.02	0.59	
68.00		464.71	67.00	20.82	0.62	
70.00		460.29	69.00	20.62	0.64	
72.00		455.88	71.00	20.42	0.67	
74.00		451.46	73.00	20.23	0.69	
76.00		447.04	75.00	20.03	0.71	
78.00		442.63	77.00	19.83	0.74	
80.00		438.21	79.00	19.63	0.76	
82.00		433.80	81.00	19.43	0.78	
84.00		429.38	83.00	19.24	0.81	
86.00		424.97	85.00	19.04	0.83	

Seismic Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 51	

88.00		420.55	87.00	18.84	0.85			
90.00		416.13	89.00	18.64	0.87			
90.17	Bot - Section 3	34.48	90.08	1.54	0.01			
92.00		657.37	91.08	29.45	2.28			
94.00		709.31	93.00	31.78	2.76			
96.00	Top - Section 2	701.16	95.00	31.41	2.82			
98.00		351.60	97.00	15.75	0.74			
100.00		347.86	99.00	15.58	0.75			
102.00		344.12	101.00	15.42	0.77			
104.00		340.39	103.00	15.25	0.78			
106.00		336.65	105.00	15.08	0.79			
108.00		332.91	107.00	14.91	0.81			
110.00		329.18	109.00	14.75	0.82			
112.00		325.44	111.00	14.58	0.83			
114.00		321.71	113.00	14.41	0.84			
116.00		317.97	115.00	14.25	0.85			
118.00		314.23	117.00	14.08	0.86			
120.00		310.50	119.00	13.91	0.87			
122.00		306.76	121.00	13.74	0.88			
124.00		303.02	123.00	13.58	0.88			
126.00		299.29	125.00	13.41	0.89			
128.00		295.55	127.00	13.24	0.89			
130.00		291.82	129.00	13.07	0.90			
132.00		288.08	131.00	12.91	0.90			
133.33	Bot - Section 4	189.98	132.67	8.51	0.40			
134.00		150.25	133.67	6.73	0.26			
136.00		446.44	135.00	20.00	2.31			
138.00	Top - Section 3	439.99	137.00	19.71	2.31			
140.00	Appurtenance(s)	2725.5	139.00	122.10	91.17			
142.00		212.94	141.00	9.54	0.57			
144.00		210.22	143.00	9.42	0.57			
146.00		207.50	145.00	9.30	0.58			
148.00		204.79	147.00	9.17	0.58			
150.00	Appurtenance(s)	2820.1	149.00	126.34	112.16			
152.00		181.41	151.00	8.13	0.48			
154.00		178.69	153.00	8.01	0.47			
156.00		175.97	155.00	7.88	0.47			
158.00	Appurtenance(s)	1920.2	157.00	86.03	57.73			
160.00	Appurtenance(s)	897.44	159.00	40.21	12.93			
162.00		143.48	161.00	6.43	0.34			
164.00		140.77	163.00	6.31	0.33			
166.00	Appurtenance(s)	3835.4	165.00	171.83	254.40			
168.00		128.46	167.00	5.76	0.29			
170.00		125.75	169.00	5.63	0.29			
172.00		123.03	171.00	5.51	0.28			
174.00		120.31	173.00	5.39	0.28			
176.00		117.59	175.00	5.27	0.27			
178.00	Appurtenance(s)	3173.1	177.00	142.16	200.37			
180.00		108.42	179.00	4.86	0.24			
	Totals:	**52,222.6**		**2,339.6**	**783.0**	**Total Wind:**	**50,815.4**	

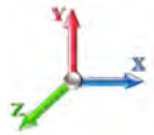
Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 52	

Tower Engineering Solutions

Load Case: 0.9D + 1.0Ev + 1.0Eh



Gust Response Factor	1.10			**Sds**	0.22			**Iterations**	25
Dead Load Factor	0.90	**Seismic Load Factor**	1.00	**Sd1**	0.09			**Ss**	0.21
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.28	**SA**	0.02			**S1**	0.05
								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	-49.79	-0.78	0.00	-130.12	0.00	130.12	5123.29	1522.04	7808.40	6435.29		0.00	0.00	0.030
2.00	-49.23	-0.78	0.00	-128.56	0.00	128.56	5107.67	1509.78	7683.09	6363.61		0.00	0.00	0.030
4.00	-48.65	-0.79	0.00	-126.99	0.00	126.99	5091.62	1497.52	7558.79	6291.73		0.00	0.00	0.030
6.00	-48.04	-0.79	0.00	-125.42	0.00	125.42	5075.16	1485.26	7435.50	6219.67		0.00	-0.01	0.030
8.00	-47.44	-0.79	0.00	-123.85	0.00	123.85	5058.29	1472.99	7313.22	6147.44		0.01	-0.01	0.030
10.00	-46.84	-0.79	0.00	-122.27	0.00	122.27	5041.00	1460.73	7191.96	6075.05		0.01	-0.01	0.029
12.00	-46.25	-0.79	0.00	-120.69	0.00	120.69	5023.29	1448.47	7071.72	6002.51		0.01	-0.01	0.029
14.00	-45.66	-0.79	0.00	-119.11	0.00	119.11	5005.16	1436.20	6952.48	5929.84		0.02	-0.01	0.029
16.00	-45.08	-0.79	0.00	-117.53	0.00	117.53	4986.62	1423.94	6834.27	5857.05		0.02	-0.01	0.029
18.00	-44.50	-0.79	0.00	-115.94	0.00	115.94	4967.66	1411.68	6717.06	5784.16		0.03	-0.02	0.029
20.00	-43.92	-0.80	0.00	-114.35	0.00	114.35	4948.29	1399.42	6600.87	5711.17		0.04	-0.02	0.029
22.00	-43.35	-0.80	0.00	-112.76	0.00	112.76	4928.49	1387.15	6485.69	5638.10		0.05	-0.02	0.029
24.00	-42.79	-0.80	0.00	-111.16	0.00	111.16	4908.28	1374.89	6371.53	5564.95		0.06	-0.02	0.029
26.00	-42.23	-0.80	0.00	-109.56	0.00	109.56	4887.66	1362.63	6258.37	5491.76		0.07	-0.02	0.029
28.00	-41.67	-0.80	0.00	-107.97	0.00	107.97	4866.62	1350.36	6146.24	5418.52		0.08	-0.03	0.028
30.00	-41.12	-0.80	0.00	-106.36	0.00	106.36	4845.16	1338.10	6035.11	5345.24		0.09	-0.03	0.028
32.00	-40.57	-0.80	0.00	-104.76	0.00	104.76	4823.28	1325.84	5925.00	5271.95		0.10	-0.03	0.028
34.00	-40.03	-0.80	0.00	-103.15	0.00	103.15	4800.99	1313.58	5815.91	5198.66		0.11	-0.03	0.028
36.00	-39.49	-0.80	0.00	-101.55	0.00	101.55	4778.28	1301.31	5707.83	5125.37		0.13	-0.04	0.028
38.00	-38.95	-0.81	0.00	-99.94	0.00	99.94	4755.15	1289.05	5600.76	5052.10		0.14	-0.04	0.028
40.00	-38.42	-0.81	0.00	-98.33	0.00	98.33	4731.61	1276.79	5494.70	4978.87		0.16	-0.04	0.028
42.00	-37.90	-0.81	0.00	-96.71	0.00	96.71	4707.65	1264.52	5389.66	4905.68		0.18	-0.04	0.028
43.92	-37.40	-0.81	0.00	-95.17	0.00	95.17	4684.30	1252.77	5289.95	4835.60		0.19	-0.04	0.028
44.00	-37.36	-0.81	0.00	-95.10	0.00	95.10	4683.27	1252.26	5285.64	4832.55		0.19	-0.04	0.028
46.00	-36.41	-0.81	0.00	-93.48	0.00	93.48	4658.48	1240.00	5182.62	4759.49		0.21	-0.05	0.027
48.00	-35.47	-0.81	0.00	-91.87	0.00	91.87	4633.27	1227.74	5080.62	4686.52		0.23	-0.05	0.027
50.00	-34.54	-0.81	0.00	-90.25	0.00	90.25	4607.64	1215.47	4979.64	4613.64		0.25	-0.05	0.027
51.00	-34.08	-0.81	0.00	-89.45	0.00	89.45	4157.28	1142.33	4736.69	4216.21		0.26	-0.05	0.029
52.00	-33.84	-0.81	0.00	-88.64	0.00	88.64	4146.96	1136.64	4689.60	4184.61		0.28	-0.05	0.029
54.00	-33.37	-0.81	0.00	-87.03	0.00	87.03	4126.01	1125.25	4596.10	4121.41		0.30	-0.06	0.029
56.00	-32.90	-0.81	0.00	-85.42	0.00	85.42	4104.64	1113.86	4503.55	4058.23		0.32	-0.06	0.029
58.00	-32.43	-0.81	0.00	-83.80	0.00	83.80	4082.85	1102.48	4411.95	3995.08		0.35	-0.06	0.029
60.00	-31.97	-0.81	0.00	-82.19	0.00	82.19	4060.64	1091.09	4321.28	3931.97		0.37	-0.06	0.029
62.00	-31.52	-0.81	0.00	-80.57	0.00	80.57	4038.02	1079.70	4231.55	3868.91		0.40	-0.07	0.029
64.00	-31.06	-0.81	0.00	-78.95	0.00	78.95	4014.98	1068.31	4142.77	3805.92		0.43	-0.07	0.028
66.00	-30.61	-0.81	0.00	-77.34	0.00	77.34	3991.52	1056.93	4054.92	3743.01		0.46	-0.07	0.028
68.00	-30.17	-0.81	0.00	-75.72	0.00	75.72	3967.65	1045.54	3968.02	3680.19		0.49	-0.07	0.028
70.00	-29.73	-0.81	0.00	-74.10	0.00	74.10	3943.36	1034.15	3882.06	3617.47		0.52	-0.08	0.028
72.00	-29.29	-0.81	0.00	-72.48	0.00	72.48	3918.66	1022.77	3797.04	3554.87		0.55	-0.08	0.028
74.00	-28.86	-0.81	0.00	-70.86	0.00	70.86	3893.54	1011.38	3712.96	3492.40		0.59	-0.08	0.028
76.00	-28.43	-0.81	0.00	-69.24	0.00	69.24	3868.00	999.99	3629.83	3430.07		0.62	-0.08	0.028
78.00	-28.01	-0.81	0.00	-67.62	0.00	67.62	3842.04	988.61	3547.63	3367.90		0.66	-0.09	0.027
80.00	-27.59	-0.81	0.00	-66.00	0.00	66.00	3815.67	977.22	3466.38	3305.90		0.70	-0.09	0.027
82.00	-27.17	-0.81	0.00	-64.38	0.00	64.38	3788.88	965.83	3386.07	3244.07		0.73	-0.09	0.027
84.00	-26.76	-0.81	0.00	-62.76	0.00	62.76	3761.67	954.44	3306.69	3182.44		0.77	-0.10	0.027
86.00	-26.35	-0.81	0.00	-61.14	0.00	61.14	3734.05	943.06	3228.26	3121.02		0.81	-0.10	0.027
88.00	-25.95	-0.81	0.00	-59.52	0.00	59.52	3706.01	931.67	3150.77	3059.82		0.86	-0.10	0.026

Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 53	

90.00	-25.55	-0.81	0.00	-57.90	0.00	57.90	3677.55	920.28	3074.23	2998.84	0.90	-0.11	0.026
90.17	-25.52	-0.81	0.00	-57.77	0.00	57.77	3675.16	919.33	3067.89	2993.77	0.90	-0.11	0.026
92.00	-24.89	-0.81	0.00	-56.28	0.00	56.28	3648.68	908.90	2998.62	2938.12	0.95	-0.11	0.026
94.00	-24.22	-0.80	0.00	-54.67	0.00	54.67	3619.39	897.51	2923.96	2877.64	0.99	-0.11	0.026
96.00	-23.55	-0.80	0.00	-53.06	0.00	53.06	2873.56	764.37	2506.37	2303.28	1.04	-0.11	0.031
98.00	-23.21	-0.80	0.00	-51.46	0.00	51.46	2853.66	754.73	2443.58	2258.25	1.09	-0.12	0.031
100.00	-22.88	-0.80	0.00	-49.86	0.00	49.86	2833.34	745.10	2381.59	2213.29	1.14	-0.12	0.031
102.00	-22.54	-0.80	0.00	-48.25	0.00	48.25	2812.61	735.46	2320.39	2168.43	1.19	-0.12	0.030
104.00	-22.22	-0.80	0.00	-46.65	0.00	46.65	2791.46	725.83	2259.99	2123.68	1.24	-0.13	0.030
106.00	-21.89	-0.80	0.00	-45.05	0.00	45.05	2769.89	716.19	2200.39	2079.04	1.30	-0.13	0.030
108.00	-21.57	-0.80	0.00	-43.45	0.00	43.45	2747.90	706.55	2141.58	2034.53	1.35	-0.14	0.029
110.00	-21.26	-0.80	0.00	-41.85	0.00	41.85	2725.50	696.92	2083.57	1990.17	1.41	-0.14	0.029
112.00	-20.94	-0.80	0.00	-40.24	0.00	40.24	2702.68	687.28	2026.36	1945.97	1.47	-0.14	0.028
114.00	-20.63	-0.80	0.00	-38.64	0.00	38.64	2679.45	677.65	1969.94	1901.93	1.53	-0.15	0.028
116.00	-20.33	-0.80	0.00	-37.04	0.00	37.04	2655.79	668.01	1914.32	1858.08	1.59	-0.15	0.028
118.00	-20.02	-0.80	0.00	-35.44	0.00	35.44	2631.73	658.38	1859.50	1814.42	1.65	-0.15	0.027
120.00	-19.73	-0.80	0.00	-33.85	0.00	33.85	2607.24	648.74	1805.47	1770.96	1.72	-0.16	0.027
122.00	-19.43	-0.80	0.00	-32.25	0.00	32.25	2582.34	639.11	1752.24	1727.73	1.79	-0.16	0.026
124.00	-19.14	-0.80	0.00	-30.65	0.00	30.65	2557.02	629.47	1699.80	1684.74	1.85	-0.16	0.026
126.00	-18.85	-0.80	0.00	-29.06	0.00	29.06	2531.28	619.84	1648.16	1641.98	1.92	-0.17	0.025
128.00	-18.56	-0.80	0.00	-27.46	0.00	27.46	2505.13	610.20	1597.32	1599.49	1.99	-0.17	0.025
130.00	-18.28	-0.80	0.00	-25.87	0.00	25.87	2478.56	600.57	1547.28	1557.27	2.07	-0.17	0.024
132.00	-18.00	-0.80	0.00	-24.28	0.00	24.28	2451.58	590.93	1498.03	1515.33	2.14	-0.18	0.023
133.33	-17.82	-0.79	0.00	-23.22	0.00	23.22	2433.35	584.51	1465.64	1487.53	2.19	-0.18	0.023
134.00	-17.68	-0.79	0.00	-22.69	0.00	22.69	2424.17	581.30	1449.58	1473.69	2.21	-0.18	0.023
136.00	-17.25	-0.79	0.00	-21.10	0.00	21.10	2396.35	571.66	1401.92	1432.35	2.29	-0.18	0.022
138.00	-16.83	-0.79	0.00	-19.51	0.00	19.51	1545.45	417.14	1026.36	929.77	2.37	-0.19	0.032
140.00	-14.25	-0.69	0.00	-17.93	0.00	17.93	1531.69	410.13	992.17	905.88	2.45	-0.19	0.029
142.00	-14.04	-0.69	0.00	-16.55	0.00	16.55	1517.50	403.12	958.56	882.03	2.53	-0.19	0.028
144.00	-13.84	-0.69	0.00	-15.17	0.00	15.17	1502.90	396.11	925.52	858.22	2.61	-0.20	0.027
146.00	-13.64	-0.69	0.00	-13.79	0.00	13.79	1487.88	389.11	893.06	834.49	2.70	-0.20	0.026
148.00	-13.44	-0.69	0.00	-12.41	0.00	12.41	1472.45	382.10	861.19	810.82	2.78	-0.21	0.024
150.00	-10.77	-0.57	0.00	-11.03	0.00	11.03	1456.60	375.09	829.89	787.25	2.87	-0.21	0.021
152.00	-10.59	-0.57	0.00	-9.90	0.00	9.90	1440.33	368.08	799.17	763.78	2.96	-0.21	0.020
154.00	-10.42	-0.57	0.00	-8.76	0.00	8.76	1423.65	361.08	769.03	740.42	3.04	-0.21	0.019
156.00	-10.25	-0.57	0.00	-7.63	0.00	7.63	1406.55	354.07	739.47	717.20	3.14	-0.22	0.018
158.00	-8.43	-0.50	0.00	-6.49	0.00	6.49	1389.03	347.06	710.49	694.11	3.23	-0.22	0.015
160.00	-7.58	-0.49	0.00	-5.49	0.00	5.49	1371.10	340.05	682.09	671.17	3.32	-0.22	0.014
162.00	-7.44	-0.49	0.00	-4.52	0.00	4.52	1352.75	333.05	654.27	648.41	3.41	-0.22	0.012
164.00	-7.31	-0.48	0.00	-3.55	0.00	3.55	1333.98	326.04	627.03	625.81	3.51	-0.23	0.011
166.00	-3.68	-0.22	0.00	-2.58	0.00	2.58	1314.79	319.03	600.37	603.42	3.60	-0.23	0.007
168.00	-3.56	-0.22	0.00	-2.14	0.00	2.14	1295.19	312.03	574.28	581.22	3.70	-0.23	0.006
170.00	-3.44	-0.22	0.00	-1.71	0.00	1.71	1275.17	305.02	548.78	559.24	3.79	-0.23	0.006
172.00	-3.33	-0.21	0.00	-1.28	0.00	1.28	1251.65	298.01	523.85	536.17	3.89	-0.23	0.005
174.00	-3.21	-0.21	0.00	-0.85	0.00	0.85	1222.21	291.00	499.51	511.11	3.99	-0.23	0.004
176.00	-3.10	-0.21	0.00	-0.43	0.00	0.43	1192.78	284.00	475.74	486.64	4.08	-0.23	0.003
178.00	-0.10	0.00	0.00	0.00	0.00	0.00	1163.35	276.99	452.55	462.78	4.18	-0.23	0.000
180.00	0.00	0.00	0.00	0.00	0.00	0.00	1133.92	269.98	429.95	439.52	4.28	-0.23	0.000

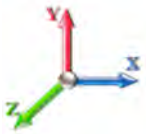
Wind Loading - Shaft

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 54	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 27

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	6.602	7.26	294.63	0.950	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		1.00	0.85	6.602	7.26	292.27	0.950	0.000	2.00	10.655	10.12	73.5	0.0	587.8
4.00		1.00	0.85	6.602	7.26	289.91	0.950	0.000	2.00	10.569	10.04	72.9	0.0	583.1
6.00		1.00	0.85	6.602	7.26	287.56	0.950	0.000	2.00	10.484	9.96	72.3	0.0	578.3
8.00		1.00	0.85	6.602	7.26	285.20	0.950	0.000	2.00	10.398	9.88	71.7	0.0	573.6
10.00		1.00	0.85	6.602	7.26	282.84	0.950	0.000	2.00	10.313	9.80	71.1	0.0	568.8
12.00		1.00	0.85	6.602	7.26	280.49	0.950	0.000	2.00	10.227	9.72	70.6	0.0	564.1
14.00		1.00	0.85	6.602	7.26	278.13	0.950	0.000	2.00	10.142	9.63	70.0	0.0	559.3
16.00		1.00	0.86	6.684	7.35	277.47	0.950	0.000	2.00	10.056	9.55	70.2	0.0	554.6
18.00		1.00	0.88	6.851	7.54	278.53	0.950	0.000	2.00	9.970	9.47	71.4	0.0	549.8
20.00		1.00	0.90	7.005	7.71	279.21	0.950	0.000	2.00	9.885	9.39	72.4	0.0	545.0
22.00		1.00	0.92	7.147	7.86	279.57	0.950	0.000	2.00	9.799	9.31	73.2	0.0	540.3
24.00		1.00	0.94	7.279	8.01	279.67	0.950	0.000	2.00	9.714	9.23	73.9	0.0	535.5
26.00		1.00	0.95	7.403	8.14	279.54	0.950	0.000	2.00	9.628	9.15	74.5	0.0	530.8
28.00		1.00	0.97	7.519	8.27	279.21	0.950	0.000	2.00	9.542	9.07	75.0	0.0	526.0
30.00		1.00	0.98	7.629	8.39	278.72	0.950	0.000	2.00	9.457	8.98	75.4	0.0	521.3
32.00		1.00	1.00	7.734	8.51	278.06	0.950	0.000	2.00	9.371	8.90	75.7	0.0	516.5
34.00		1.00	1.01	7.833	8.62	277.28	0.950	0.000	2.00	9.286	8.82	76.0	0.0	511.8
36.00		1.00	1.02	7.928	8.72	276.37	0.950	0.000	2.00	9.200	8.74	76.2	0.0	507.0
38.00		1.00	1.03	8.019	8.82	275.35	0.950	0.000	2.00	9.115	8.66	76.4	0.0	502.2
40.00		1.00	1.04	8.106	8.92	274.23	0.950	0.000	2.00	9.029	8.58	76.5	0.0	497.5
42.00		1.00	1.05	8.189	9.01	273.01	0.950	0.000	2.00	8.943	8.50	76.5	0.0	492.7
43.92	Bot - Section 2	1.00	1.06	8.267	9.09	271.77	0.950	0.000	1.92	8.490	8.07	73.3	0.0	467.7
44.00		1.00	1.06	8.270	9.10	271.71	0.950	0.000	0.08	0.373	0.35	3.2	0.0	39.3
46.00		1.00	1.07	8.348	9.18	270.34	0.950	0.000	2.00	8.912	8.47	77.7	0.0	939.4
48.00		1.00	1.08	8.423	9.27	268.89	0.950	0.000	2.00	8.827	8.39	77.7	0.0	930.3
50.00		1.00	1.09	8.495	9.34	267.37	0.950	0.000	2.00	8.741	8.30	77.6	0.0	921.1
51.00	Top - Section 1	1.00	1.10	8.531	9.38	266.59	0.950	0.000	1.00	4.339	4.12	38.7	0.0	457.1
52.00		1.00	1.10	8.566	9.42	270.19	0.950	0.000	1.00	4.317	4.10	38.6	0.0	220.9
54.00		1.00	1.11	8.634	9.50	268.57	0.950	0.000	2.00	8.570	8.14	77.3	0.0	438.6
56.00		1.00	1.12	8.701	9.57	266.90	0.950	0.000	2.00	8.485	8.06	77.1	0.0	434.1
58.00		1.00	1.13	8.765	9.64	265.17	0.950	0.000	2.00	8.399	7.98	76.9	0.0	429.7
60.00		1.00	1.14	8.828	9.71	263.39	0.950	0.000	2.00	8.313	7.90	76.7	0.0	425.3
62.00		1.00	1.14	8.889	9.78	261.57	0.950	0.000	2.00	8.228	7.82	76.4	0.0	420.9
64.00		1.00	1.15	8.949	9.84	259.70	0.950	0.000	2.00	8.142	7.74	76.1	0.0	416.5
66.00		1.00	1.16	9.007	9.91	257.79	0.950	0.000	2.00	8.057	7.65	75.8	0.0	412.1
68.00		1.00	1.17	9.064	9.97	255.84	0.950	0.000	2.00	7.971	7.57	75.5	0.0	407.6
70.00		1.00	1.17	9.119	10.03	253.85	0.950	0.000	2.00	7.885	7.49	75.1	0.0	403.2
72.00		1.00	1.18	9.173	10.09	251.83	0.950	0.000	2.00	7.800	7.41	74.8	0.0	398.8
74.00		1.00	1.19	9.226	10.15	249.77	0.950	0.000	2.00	7.714	7.33	74.4	0.0	394.4
76.00		1.00	1.19	9.278	10.21	247.67	0.950	0.000	2.00	7.629	7.25	74.0	0.0	390.0
78.00		1.00	1.20	9.329	10.26	245.55	0.950	0.000	2.00	7.543	7.17	73.5	0.0	385.6
80.00		1.00	1.21	9.379	10.32	243.40	0.950	0.000	2.00	7.458	7.08	73.1	0.0	381.2
82.00		1.00	1.21	9.428	10.37	241.21	0.950	0.000	2.00	7.372	7.00	72.6	0.0	376.7
84.00		1.00	1.22	9.476	10.42	239.00	0.950	0.000	2.00	7.286	6.92	72.2	0.0	372.3
86.00		1.00	1.23	9.523	10.48	236.76	0.950	0.000	2.00	7.201	6.84	71.7	0.0	367.9
88.00		1.00	1.23	9.569	10.53	234.50	0.950	0.000	2.00	7.115	6.76	71.2	0.0	363.5

Wind Loading - Shaft

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 55	

90.00	1.00	1.24	9.615	10.58	232.21	0.950	0.000	2.00	7.030	6.68	70.6	0.0	359.1
90.17 Bot - Section 3	1.00	1.24	9.618	10.58	232.02	0.950	0.000	0.17	0.582	0.55	5.8	0.0	29.7
92.00	1.00	1.24	9.659	10.63	229.90	0.950	0.000	1.83	6.471	6.15	65.3	0.0	605.1
94.00	1.00	1.25	9.703	10.67	227.56	0.950	0.000	2.00	6.977	6.63	70.7	0.0	652.3
96.00 Top - Section 2	1.00	1.25	9.746	10.72	225.20	0.950	0.000	2.00	6.891	6.55	70.2	0.0	644.1
98.00	1.00	1.26	9.788	10.77	226.80	0.950	0.000	2.00	6.806	6.47	69.6	0.0	294.5
100.00	1.00	1.27	9.830	10.81	224.41	0.950	0.000	2.00	6.720	6.38	69.0	0.0	290.8
102.00	1.00	1.27	9.871	10.86	221.99	0.950	0.000	2.00	6.635	6.30	68.4	0.0	287.1
104.00	1.00	1.28	9.912	10.90	219.56	0.950	0.000	2.00	6.549	6.22	67.8	0.0	283.3
106.00	1.00	1.28	9.951	10.95	217.11	0.950	0.000	2.00	6.464	6.14	67.2	0.0	279.6
108.00	1.00	1.29	9.991	10.99	214.63	0.950	0.000	2.00	6.378	6.06	66.6	0.0	275.9
110.00	1.00	1.29	10.029	11.03	212.14	0.950	0.000	2.00	6.292	5.98	65.9	0.0	272.1
112.00	1.00	1.30	10.068	11.07	209.64	0.950	0.000	2.00	6.207	5.90	65.3	0.0	268.4
114.00	1.00	1.30	10.105	11.12	207.11	0.950	0.000	2.00	6.121	5.82	64.6	0.0	264.6
116.00	1.00	1.31	10.142	11.16	204.57	0.950	0.000	2.00	6.036	5.73	64.0	0.0	260.9
118.00	1.00	1.31	10.179	11.20	202.01	0.950	0.000	2.00	5.950	5.65	63.3	0.0	257.2
120.00	1.00	1.32	10.215	11.24	199.44	0.950	0.000	2.00	5.864	5.57	62.6	0.0	253.4
122.00	1.00	1.32	10.250	11.28	196.85	0.950	0.000	2.00	5.779	5.49	61.9	0.0	249.7
124.00	1.00	1.32	10.286	11.31	194.24	0.950	0.000	2.00	5.693	5.41	61.2	0.0	246.0
126.00	1.00	1.33	10.320	11.35	191.62	0.950	0.000	2.00	5.608	5.33	60.5	0.0	242.2
128.00	1.00	1.33	10.355	11.39	188.99	0.950	0.000	2.00	5.522	5.25	59.8	0.0	238.5
130.00	1.00	1.34	10.388	11.43	186.34	0.950	0.000	2.00	5.437	5.16	59.0	0.0	234.8
132.00	1.00	1.34	10.422	11.46	183.68	0.950	0.000	2.00	5.351	5.08	58.3	0.0	231.0
133.33 Bot - Section 4	1.00	1.34	10.444	11.49	181.90	0.950	0.000	1.33	3.520	3.34	38.4	0.0	151.9
134.00	1.00	1.35	10.455	11.50	181.00	0.950	0.000	0.67	1.774	1.69	19.4	0.0	131.2
136.00	1.00	1.35	10.488	11.54	178.32	0.950	0.000	2.00	5.266	5.00	57.7	0.0	389.4
138.00 Top - Section 3	1.00	1.35	10.520	11.57	175.62	0.950	0.000	2.00	5.181	4.92	57.0	0.0	382.9
140.00 Appurtenance(s)	1.00	1.36	10.552	11.61	175.91	0.950	0.000	2.00	5.095	4.84	56.2	0.0	160.4
142.00	1.00	1.36	10.583	11.64	173.18	0.950	0.000	2.00	5.009	4.76	55.4	0.0	157.7
144.00	1.00	1.37	10.615	11.68	170.45	0.950	0.000	2.00	4.924	4.68	54.6	0.0	155.0
146.00	1.00	1.37	10.645	11.71	167.70	0.950	0.000	2.00	4.838	4.60	53.8	0.0	152.2
148.00	1.00	1.37	10.676	11.74	164.95	0.950	0.000	2.00	4.753	4.51	53.0	0.0	149.5
150.00 Appurtenance(s)	1.00	1.38	10.706	11.78	162.18	0.950	0.000	2.00	4.667	4.43	52.2	0.0	146.8
152.00	1.00	1.38	10.736	11.81	159.40	0.950	0.000	2.00	4.581	4.35	51.4	0.0	144.1
154.00	1.00	1.39	10.766	11.84	156.61	0.950	0.000	2.00	4.496	4.27	50.6	0.0	141.4
156.00	1.00	1.39	10.795	11.87	153.81	0.950	0.000	2.00	4.410	4.19	49.8	0.0	138.7
158.00 Appurtenance(s)	1.00	1.39	10.824	11.91	151.00	0.950	0.000	2.00	4.325	4.11	48.9	0.0	135.9
160.00 Appurtenance(s)	1.00	1.40	10.853	11.94	148.18	0.950	0.000	2.00	4.239	4.03	48.1	0.0	133.2
162.00	1.00	1.40	10.881	11.97	145.34	0.950	0.000	2.00	4.154	3.95	47.2	0.0	130.5
164.00	1.00	1.40	10.909	12.00	142.50	0.950	0.000	2.00	4.068	3.86	46.4	0.0	127.8
166.00 Appurtenance(s)	1.00	1.41	10.937	12.03	139.65	0.950	0.000	2.00	3.982	3.78	45.5	0.0	125.1
168.00	1.00	1.41	10.965	12.06	136.79	0.950	0.000	2.00	3.897	3.70	44.6	0.0	122.4
170.00	1.00	1.42	10.992	12.09	133.92	0.950	0.000	2.00	3.811	3.62	43.8	0.0	119.6
172.00	1.00	1.42	11.019	12.12	131.04	0.950	0.000	2.00	3.726	3.54	42.9	0.0	116.9
174.00	1.00	1.42	11.046	12.15	128.15	0.950	0.000	2.00	3.640	3.46	42.0	0.0	114.2
176.00	1.00	1.43	11.073	12.18	125.25	0.950	0.000	2.00	3.554	3.38	41.1	0.0	111.5
178.00 Appurtenance(s)	1.00	1.43	11.099	12.21	122.34	0.950	0.000	2.00	3.469	3.30	40.2	0.0	108.8
180.00	1.00	1.43	11.125	12.24	119.43	0.950	0.000	2.00	3.383	3.21	39.3	0.0	106.1
							Totals:	**180.00**			**5,894.3**		**33,413.9**

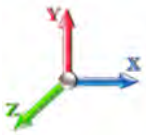
Discrete Appurtenance Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 56	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 27

No.	Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	Orient Factor x Ka	Ka	Total CaAa (sf)	Dead Load (lb)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)
1	178.00	JMA MX06FRO660-03	6	11.099	12.209	0.61	0.75	36.42	360.00	0.000	0.000	444.65	0.00	0.00
2	178.00	Raycap	1	11.099	12.209	0.75	0.75	1.96	32.00	0.000	0.000	23.90	0.00	0.00
3	178.00	Samsung B5/B13 RRH	3	11.099	12.209	0.38	0.75	2.50	210.90	0.000	0.000	30.49	0.00	0.00
4	178.00	Platform w/ Handrails w/	1	11.099	12.209	1.00	1.00	40.00	2202.20	0.000	0.000	488.35	0.00	0.00
5	178.00	Samsung B2/B66A RRH	3	11.099	12.209	0.38	0.75	2.11	253.20	0.000	0.000	25.82	0.00	0.00
6	166.00	RFS APXVTM14-C-I20	3	10.937	12.031	0.58	0.75	10.98	168.60	0.000	0.000	132.15	0.00	0.00
7	166.00	ALU TD-RRH8x20-25	3	10.937	12.031	0.38	0.75	4.56	210.00	0.000	0.000	54.82	0.00	0.00
8	166.00	Sitepro	1	10.937	12.031	1.00	1.00	6.70	230.00	0.000	0.000	80.61	0.00	0.00
9	166.00	Sitepro	1	10.937	12.031	1.00	1.00	7.00	406.61	0.000	0.000	84.22	0.00	0.00
10	166.00	Commscope	3	10.937	12.031	0.55	0.75	20.43	232.20	0.000	0.000	245.78	0.00	0.00
11	166.00	ALU 1900 Mhz	3	10.937	12.031	0.38	0.75	4.27	132.00	0.000	0.000	51.43	0.00	0.00
12	166.00	ALU 800 Mhz	6	10.937	12.031	0.38	0.75	5.60	318.00	0.000	0.000	67.40	0.00	0.00
13	166.00	Platform w/ Hand Rails	1	10.937	12.031	1.00	1.00	40.00	2000.00	0.000	0.000	481.23	0.00	0.00
14	160.00	4449 B71+B12	3	10.853	11.938	0.40	0.80	1.98	210.00	0.000	0.000	23.64	0.00	0.00
15	160.00	KRY 112 144/2	3	10.853	11.938	0.40	0.80	0.78	46.20	0.000	0.000	9.31	0.00	0.00
16	160.00	KRY 112 489/2	3	10.853	11.938	0.40	0.80	0.78	46.20	0.000	0.000	9.31	0.00	0.00
17	160.00	APXVAARR24_43-U-NA2	3	10.853	11.938	0.56	0.80	34.00	384.00	0.000	0.000	405.93	0.00	0.00
18	160.00	RR90-17-00VDPL2/-R	3	10.853	11.938	0.54	0.80	7.12	40.50	0.000	0.000	84.94	0.00	0.00
19	158.00	T-Arms	3	10.824	11.906	0.56	0.75	13.50	1050.00	0.000	0.000	160.73	0.00	0.00
20	158.00	T-Arm Kit	1	10.824	11.906	0.75	0.75	12.38	500.00	0.000	0.000	147.34	0.00	0.00
21	158.00	V-Brace	1	10.824	11.906	0.75	0.75	4.72	197.00	0.000	0.000	56.26	0.00	0.00
22	150.00	Powerwave 7770	3	10.706	11.777	0.55	0.75	9.05	105.00	0.000	0.000	106.58	0.00	0.00
23	150.00	Cci HPA-65R-BUU-H6	2	10.706	11.777	0.64	0.75	12.32	102.00	0.000	0.000	145.05	0.00	0.00
24	150.00	SBNHH-1D65A	1	10.706	11.777	1.00	1.00	5.88	33.50	0.000	0.000	69.25	0.00	0.00
25	150.00	4449 B5/B12	3	10.706	11.777	0.38	0.75	2.22	213.00	0.000	0.000	26.10	0.00	0.00
26	150.00	DMP65R-BU6DA	2	10.706	11.777	0.54	0.75	13.73	158.80	0.000	0.000	161.66	0.00	0.00
27	150.00	DMP65R-BU4DA	1	10.706	11.777	0.54	0.75	6.86	79.40	0.000	0.000	80.83	0.00	0.00
28	150.00	Powerwave LGP21401	6	10.706	11.777	0.38	0.75	2.75	84.60	0.000	0.000	32.33	0.00	0.00
29	150.00	B2 B66A 8843	3	10.706	11.777	0.38	0.75	1.84	210.00	0.000	0.000	21.73	0.00	0.00
30	150.00	Raycap DC6-48-60-18-8F	1	10.706	11.777	0.67	1.00	1.21	31.80	0.000	0.000	14.28	0.00	0.00
31	150.00	Platform w/ Hand Rail	1	10.706	11.777	1.00	1.00	35.00	1600.00	0.000	0.000	412.19	0.00	0.00
32	140.00	Raycap	1	10.552	11.607	0.75	0.75	1.51	21.90	0.000	0.000	17.50	0.00	0.00
33	140.00	Fujitsu TA08025-B604	3	10.552	11.607	0.38	0.75	2.21	191.70	0.000	0.000	25.59	0.00	0.00
34	140.00	Fujitsu TA08025-B605	3	10.552	11.607	0.38	0.75	2.21	225.00	0.000	0.000	25.59	0.00	0.00
35	140.00	Sitepro1 SNP8HR-3XX	1	10.552	11.607	1.00	1.00	37.59	1876.00	0.000	0.000	436.30	0.00	0.00
36	140.00	JMA Wireless	3	10.552	11.607	0.55	0.75	20.80	193.50	0.000	0.000	241.38	0.00	0.00
							Totals:		**14,355.81**			**4,924.65**		

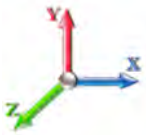
Total Applied Force Summary

Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 57

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 27

Elev (ft)	Description	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00		0.00	0.00	0.00	0.00
2.00		73.51	590.47	0.00	0.00
4.00		72.92	616.10	0.00	0.00
6.00		72.33	641.73	0.00	0.00
8.00		71.74	636.97	0.00	0.00
10.00		71.15	632.22	0.00	0.00
12.00		70.56	627.46	0.00	0.00
14.00		69.97	622.71	0.00	0.00
16.00		70.23	617.95	0.00	0.00
18.00		71.38	613.20	0.00	0.00
20.00		72.36	608.44	0.00	0.00
22.00		73.19	603.69	0.00	0.00
24.00		73.89	598.93	0.00	0.00
26.00		74.48	594.18	0.00	0.00
28.00		74.98	589.42	0.00	0.00
30.00		75.40	584.67	0.00	0.00
32.00		75.74	579.91	0.00	0.00
34.00		76.01	575.16	0.00	0.00
36.00		76.22	570.40	0.00	0.00
38.00		76.37	565.64	0.00	0.00
40.00		76.48	560.89	0.00	0.00
42.00		76.54	556.13	0.00	0.00
43.92		73.35	528.50	0.00	0.00
44.00		3.23	41.98	0.00	0.00
46.00		77.75	1002.84	0.00	0.00
48.00		77.69	993.67	0.00	0.00
50.00		77.60	984.50	0.00	0.00
51.00		38.68	488.81	0.00	0.00
52.00		38.64	252.63	0.00	0.00
54.00		77.33	501.96	0.00	0.00
56.00		77.14	497.54	0.00	0.00
58.00		76.93	493.12	0.00	0.00
60.00		76.69	488.71	0.00	0.00
62.00		76.43	484.29	0.00	0.00
64.00		76.14	479.88	0.00	0.00
66.00		75.83	475.46	0.00	0.00
68.00		75.50	471.05	0.00	0.00
70.00		75.14	466.63	0.00	0.00
72.00		74.77	462.22	0.00	0.00
74.00		74.38	457.80	0.00	0.00
76.00		73.97	453.38	0.00	0.00
78.00		73.54	448.97	0.00	0.00
80.00		73.09	444.55	0.00	0.00
82.00		72.63	440.14	0.00	0.00
84.00		72.15	435.72	0.00	0.00
86.00		71.66	431.31	0.00	0.00
88.00		71.15	426.89	0.00	0.00

Total Applied Force Summary

Structure:	CT46130-A-SBA		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 58

90.00		70.63	422.47	0.00	0.00
90.17		5.85	35.01	0.00	0.00
92.00		65.32	663.18	0.00	0.00
94.00		70.74	715.65	0.00	0.00
96.00		70.19	707.50	0.00	0.00
98.00		69.62	357.94	0.00	0.00
100.00		69.03	354.20	0.00	0.00
102.00		68.44	350.46	0.00	0.00
104.00		67.83	346.73	0.00	0.00
106.00		67.22	342.99	0.00	0.00
108.00		66.59	339.25	0.00	0.00
110.00		65.95	335.52	0.00	0.00
112.00		65.30	331.78	0.00	0.00
114.00		64.64	328.05	0.00	0.00
116.00		63.97	324.31	0.00	0.00
118.00		63.29	320.57	0.00	0.00
120.00		62.60	316.84	0.00	0.00
122.00		61.90	313.10	0.00	0.00
124.00		61.19	309.36	0.00	0.00
126.00		60.48	305.63	0.00	0.00
128.00		59.75	301.89	0.00	0.00
130.00		59.02	298.16	0.00	0.00
132.00		58.28	294.42	0.00	0.00
133.33		38.41	194.20	0.00	0.00
134.00		19.39	152.36	0.00	0.00
136.00		57.71	452.78	0.00	0.00
138.00		56.95	446.33	0.00	0.00
140.00	(11) attachments	802.54	2731.90	0.00	0.00
142.00		55.40	219.08	0.00	0.00
144.00		54.62	216.36	0.00	0.00
146.00		53.82	213.64	0.00	0.00
148.00		53.02	210.93	0.00	0.00
150.00	(23) attachments	1122.20	2826.31	0.00	0.00
152.00		51.40	185.55	0.00	0.00
154.00		50.58	182.84	0.00	0.00
156.00		49.75	180.12	0.00	0.00
158.00	(5) attachments	413.25	1924.40	0.00	0.00
160.00	(15) attachments	581.20	901.58	0.00	0.00
162.00		47.23	144.93	0.00	0.00
164.00		46.37	142.21	0.00	0.00
166.00	(21) attachments	1243.14	3836.90	0.00	0.00
168.00		44.65	129.14	0.00	0.00
170.00		43.78	126.42	0.00	0.00
172.00		42.90	123.71	0.00	0.00
174.00		42.02	120.99	0.00	0.00
176.00		41.13	118.27	0.00	0.00
178.00	(14) attachments	1053.45	3173.86	0.00	0.00
180.00		39.33	108.68	0.00	0.00
	Totals:	**10,818.90**	**52,717.33**	**0.00**	**0.00**

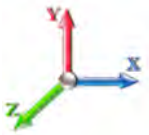
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 59	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	0.55
2.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	2.08
4.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	0.55
4.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	2.08
6.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	0.55
6.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	2.08
8.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	0.55
8.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	2.08
10.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	0.55
10.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	2.08
12.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	0.55
12.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	2.08
14.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	0.55
14.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.602	0.00	2.08
16.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.684	0.00	0.55
16.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.684	0.00	2.08
18.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.851	0.00	0.55
18.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	6.851	0.00	2.08
20.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.005	0.00	0.55
20.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.005	0.00	2.08
22.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.147	0.00	0.55
22.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.147	0.00	2.08
24.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.279	0.00	0.55
24.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.279	0.00	2.08
26.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.403	0.00	0.55
26.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.403	0.00	2.08
28.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.519	0.00	0.55
28.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.519	0.00	2.08
30.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.629	0.00	0.55
30.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.629	0.00	2.08
32.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.734	0.00	0.55
32.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.734	0.00	2.08
34.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.833	0.00	0.55
34.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.833	0.00	2.08
36.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.928	0.00	0.55
36.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	7.928	0.00	2.08
38.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.019	0.00	0.55
38.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.019	0.00	2.08
40.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.106	0.00	0.55
40.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.106	0.00	2.08
42.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.189	0.00	0.55
42.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.189	0.00	2.08
43.92	Safety Cable	Yes	1.92	0.000	0.00	0.00	0.00	0.000	0.000	8.267	0.00	0.52
43.92	Step bolts (ladder)	Yes	1.92	0.000	0.00	0.00	0.00	0.000	0.000	8.267	0.00	1.99
44.00	Safety Cable	Yes	0.08	0.000	0.00	0.00	0.00	0.000	0.000	8.270	0.00	0.02
44.00	Step bolts (ladder)	Yes	0.08	0.000	0.00	0.00	0.00	0.000	0.000	8.270	0.00	0.09
46.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.348	0.00	0.55

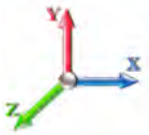
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 60	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
46.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.348	0.00	2.08
48.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.423	0.00	0.55
48.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.423	0.00	2.08
50.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.495	0.00	0.55
50.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.495	0.00	2.08
51.00	Safety Cable	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	8.531	0.00	0.27
51.00	Step bolts (ladder)	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	8.531	0.00	1.04
52.00	Safety Cable	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	8.566	0.00	0.27
52.00	Step bolts (ladder)	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	8.566	0.00	1.04
54.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.634	0.00	0.55
54.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.634	0.00	2.08
56.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.701	0.00	0.55
56.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.701	0.00	2.08
58.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.765	0.00	0.55
58.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.765	0.00	2.08
60.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.828	0.00	0.55
60.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.828	0.00	2.08
62.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.889	0.00	0.55
62.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.889	0.00	2.08
64.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.949	0.00	0.55
64.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	8.949	0.00	2.08
66.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.007	0.00	0.55
66.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.007	0.00	2.08
68.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.064	0.00	0.55
68.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.064	0.00	2.08
70.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.119	0.00	0.55
70.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.119	0.00	2.08
72.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.173	0.00	0.55
72.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.173	0.00	2.08
74.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.226	0.00	0.55
74.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.226	0.00	2.08
76.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.278	0.00	0.55
76.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.278	0.00	2.08
78.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.329	0.00	0.55
78.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.329	0.00	2.08
80.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.379	0.00	0.55
80.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.379	0.00	2.08
82.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.428	0.00	0.55
82.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.428	0.00	2.08
84.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.476	0.00	0.55
84.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.476	0.00	2.08
86.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.523	0.00	0.55
86.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.523	0.00	2.08
88.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.569	0.00	0.55
88.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.569	0.00	2.08
90.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.615	0.00	0.55
90.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.615	0.00	2.08

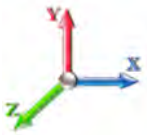
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 61	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
90.17	Safety Cable	Yes	0.17	0.000	0.00	0.00	0.00	0.000	0.000	9.618	0.00	0.05
90.17	Step bolts (ladder)	Yes	0.17	0.000	0.00	0.00	0.00	0.000	0.000	9.618	0.00	0.17
92.00	Safety Cable	Yes	1.83	0.000	0.00	0.00	0.00	0.000	0.000	9.659	0.00	0.50
92.00	Step bolts (ladder)	Yes	1.83	0.000	0.00	0.00	0.00	0.000	0.000	9.659	0.00	1.91
94.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.703	0.00	0.55
94.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.703	0.00	2.08
96.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.746	0.00	0.55
96.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.746	0.00	2.08
98.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.788	0.00	0.55
98.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.788	0.00	2.08
100.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.830	0.00	0.55
100.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.830	0.00	2.08
102.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.871	0.00	0.55
102.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.871	0.00	2.08
104.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.912	0.00	0.55
104.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.912	0.00	2.08
106.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.951	0.00	0.55
106.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.951	0.00	2.08
108.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.991	0.00	0.55
108.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	9.991	0.00	2.08
110.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.029	0.00	0.55
110.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.029	0.00	2.08
112.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.068	0.00	0.55
112.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.068	0.00	2.08
114.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.105	0.00	0.55
114.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.105	0.00	2.08
116.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.142	0.00	0.55
116.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.142	0.00	2.08
118.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.179	0.00	0.55
118.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.179	0.00	2.08
120.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.215	0.00	0.55
120.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.215	0.00	2.08
122.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.250	0.00	0.55
122.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.250	0.00	2.08
124.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.286	0.00	0.55
124.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.286	0.00	2.08
126.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.320	0.00	0.55
126.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.320	0.00	2.08
128.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.355	0.00	0.55
128.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.355	0.00	2.08
130.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.388	0.00	0.55
130.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.388	0.00	2.08
132.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.422	0.00	0.55
132.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.422	0.00	2.08
133.33	Safety Cable	Yes	1.33	0.000	0.00	0.00	0.00	0.000	0.000	10.444	0.00	0.36
133.33	Step bolts (ladder)	Yes	1.33	0.000	0.00	0.00	0.00	0.000	0.000	10.444	0.00	1.39
134.00	Safety Cable	Yes	0.67	0.000	0.00	0.00	0.00	0.000	0.000	10.455	0.00	0.18

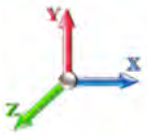
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 62	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
134.00	Step bolts (ladder)	Yes	0.67	0.000	0.00	0.00	0.00	0.000	0.000	10.455	0.00	0.69
136.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.488	0.00	0.55
136.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.488	0.00	2.08
138.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.520	0.00	0.55
138.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.520	0.00	2.08
140.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.552	0.00	0.55
140.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.552	0.00	2.08
142.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.583	0.00	0.55
142.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.583	0.00	2.08
144.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.615	0.00	0.55
144.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.615	0.00	2.08
146.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.645	0.00	0.55
146.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.645	0.00	2.08
148.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.676	0.00	0.55
148.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.676	0.00	2.08
150.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.706	0.00	0.55
150.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.706	0.00	2.08
152.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.736	0.00	0.55
152.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.736	0.00	2.08
154.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.766	0.00	0.55
154.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.766	0.00	2.08
156.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.795	0.00	0.55
156.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.795	0.00	2.08
158.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.824	0.00	0.55
158.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.824	0.00	2.08
160.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.853	0.00	0.55
160.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.853	0.00	2.08
162.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.881	0.00	0.55
162.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.881	0.00	2.08
164.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.909	0.00	0.55
164.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.909	0.00	2.08
166.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.937	0.00	0.55
166.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.937	0.00	2.08
168.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.965	0.00	0.55
168.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.965	0.00	2.08
170.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.992	0.00	0.55
170.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	10.992	0.00	2.08
172.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.019	0.00	0.55
172.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.019	0.00	2.08
174.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.046	0.00	0.55
174.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.046	0.00	2.08
176.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.073	0.00	0.55
176.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.073	0.00	2.08
178.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.099	0.00	0.55
178.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.099	0.00	2.08
180.00	Safety Cable	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.125	0.00	0.55
180.00	Step bolts (ladder)	Yes	2.00	0.000	0.00	0.00	0.00	0.000	0.000	11.125	0.00	2.08

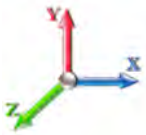
Linear Appurtenance Segment Forces (Factored)

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 63	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 27

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
										Totals:	**0.0**	**236.3**

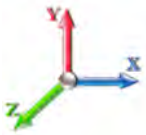
Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 64	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 27

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-52.72	-10.83	0.00	-1336.6	0.00	1336.61	5123.29	1522.04	7808.40	6435.29	0.00	0.000	0.000	0.218
2.00	-52.12	-10.77	0.00	-1314.9	0.00	1314.96	5107.67	1509.78	7683.09	6363.61	0.00	-0.018	0.000	0.217
4.00	-51.50	-10.71	0.00	-1293.4	0.00	1293.43	5091.62	1497.52	7558.79	6291.73	0.02	-0.036	0.000	0.216
6.00	-50.86	-10.65	0.00	-1272.0	0.00	1272.01	5075.16	1485.26	7435.50	6219.67	0.03	-0.054	0.000	0.215
8.00	-50.22	-10.60	0.00	-1250.7	0.00	1250.70	5058.29	1472.99	7313.22	6147.44	0.06	-0.073	0.000	0.213
10.00	-49.58	-10.54	0.00	-1229.5	0.00	1229.50	5041.00	1460.73	7191.96	6075.05	0.10	-0.091	0.000	0.212
12.00	-48.95	-10.49	0.00	-1208.4	0.00	1208.42	5023.29	1448.47	7071.72	6002.51	0.14	-0.110	0.000	0.211
14.00	-48.32	-10.43	0.00	-1187.4	0.00	1187.44	5005.16	1436.20	6952.48	5929.84	0.19	-0.129	0.000	0.210
16.00	-47.70	-10.38	0.00	-1166.5	0.00	1166.58	4986.62	1423.94	6834.27	5857.05	0.25	-0.148	0.000	0.209
18.00	-47.09	-10.32	0.00	-1145.8	0.00	1145.83	4967.66	1411.68	6717.06	5784.16	0.31	-0.167	0.000	0.208
20.00	-46.48	-10.26	0.00	-1125.1	0.00	1125.19	4948.29	1399.42	6600.87	5711.17	0.39	-0.186	0.000	0.206
22.00	-45.87	-10.20	0.00	-1104.6	0.00	1104.67	4928.49	1387.15	6485.69	5638.10	0.47	-0.206	0.000	0.205
24.00	-45.27	-10.14	0.00	-1084.2	0.00	1084.27	4908.28	1374.89	6371.53	5564.95	0.56	-0.225	0.000	0.204
26.00	-44.67	-10.08	0.00	-1063.9	0.00	1063.99	4887.66	1362.63	6258.37	5491.76	0.66	-0.245	0.000	0.203
28.00	-44.08	-10.02	0.00	-1043.8	0.00	1043.84	4866.62	1350.36	6146.24	5418.52	0.77	-0.265	0.000	0.202
30.00	-43.49	-9.95	0.00	-1023.8	0.00	1023.80	4845.16	1338.10	6035.11	5345.24	0.88	-0.285	0.000	0.201
32.00	-42.91	-9.89	0.00	-1003.9	0.00	1003.90	4823.28	1325.84	5925.00	5271.95	1.01	-0.305	0.000	0.199
34.00	-42.33	-9.83	0.00	-984.12	0.00	984.12	4800.99	1313.58	5815.91	5198.66	1.14	-0.326	0.000	0.198
36.00	-41.75	-9.76	0.00	-964.47	0.00	964.47	4778.28	1301.31	5707.83	5125.37	1.28	-0.346	0.000	0.197
38.00	-41.18	-9.70	0.00	-944.95	0.00	944.95	4755.15	1289.05	5600.76	5052.10	1.43	-0.367	0.000	0.196
40.00	-40.62	-9.63	0.00	-925.55	0.00	925.55	4731.61	1276.79	5494.70	4978.87	1.59	-0.388	0.000	0.195
42.00	-40.06	-9.57	0.00	-906.29	0.00	906.29	4707.65	1264.52	5389.66	4905.68	1.75	-0.409	0.000	0.193
43.92	-39.53	-9.50	0.00	-887.96	0.00	887.96	4684.30	1252.77	5289.95	4835.60	1.92	-0.429	0.000	0.192
44.00	-39.49	-9.50	0.00	-887.17	0.00	887.17	4683.27	1252.26	5285.64	4832.55	1.93	-0.430	0.000	0.192
46.00	-38.48	-9.43	0.00	-868.17	0.00	868.17	4658.48	1240.00	5182.62	4759.49	2.12	-0.452	0.000	0.191
48.00	-37.49	-9.36	0.00	-849.31	0.00	849.31	4633.27	1227.74	5080.62	4686.52	2.31	-0.473	0.000	0.189
50.00	-36.50	-9.28	0.00	-830.60	0.00	830.60	4607.64	1215.47	4979.64	4613.64	2.51	-0.495	0.000	0.188
51.00	-36.01	-9.25	0.00	-821.32	0.00	821.32	4157.28	1142.33	4736.69	4216.21	2.62	-0.506	0.000	0.204
52.00	-35.75	-9.21	0.00	-812.08	0.00	812.08	4146.96	1136.64	4689.60	4184.61	2.72	-0.517	0.000	0.203
54.00	-35.25	-9.15	0.00	-793.65	0.00	793.65	4126.01	1125.25	4596.10	4121.41	2.95	-0.539	0.000	0.201
56.00	-34.75	-9.08	0.00	-775.35	0.00	775.35	4104.64	1113.86	4503.55	4058.23	3.18	-0.562	0.000	0.200
58.00	-34.25	-9.01	0.00	-757.20	0.00	757.20	4082.85	1102.48	4411.95	3995.08	3.42	-0.585	0.000	0.198
60.00	-33.76	-8.94	0.00	-739.18	0.00	739.18	4060.64	1091.09	4321.28	3931.97	3.67	-0.608	0.000	0.196
62.00	-33.27	-8.87	0.00	-721.29	0.00	721.29	4038.02	1079.70	4231.55	3868.91	3.93	-0.631	0.000	0.195
64.00	-32.79	-8.81	0.00	-703.54	0.00	703.54	4014.98	1068.31	4142.77	3805.92	4.20	-0.655	0.000	0.193
66.00	-32.31	-8.74	0.00	-685.93	0.00	685.93	3991.52	1056.93	4054.92	3743.01	4.48	-0.678	0.000	0.191
68.00	-31.84	-8.67	0.00	-668.46	0.00	668.46	3967.65	1045.54	3968.02	3680.19	4.77	-0.702	0.000	0.190
70.00	-31.37	-8.60	0.00	-651.12	0.00	651.12	3943.36	1034.15	3882.06	3617.47	5.06	-0.726	0.000	0.188
72.00	-30.91	-8.53	0.00	-633.91	0.00	633.91	3918.66	1022.77	3797.04	3554.87	5.37	-0.749	0.000	0.186
74.00	-30.45	-8.47	0.00	-616.85	0.00	616.85	3893.54	1011.38	3712.96	3492.40	5.69	-0.774	0.000	0.185
76.00	-29.99	-8.40	0.00	-599.91	0.00	599.91	3868.00	999.99	3629.83	3430.07	6.02	-0.798	0.000	0.183
78.00	-29.54	-8.33	0.00	-583.11	0.00	583.11	3842.04	988.61	3547.63	3367.90	6.36	-0.822	0.000	0.181
80.00	-29.09	-8.27	0.00	-566.45	0.00	566.45	3815.67	977.22	3466.38	3305.90	6.71	-0.847	0.000	0.179
82.00	-28.65	-8.20	0.00	-549.92	0.00	549.92	3788.88	965.83	3386.07	3244.07	7.07	-0.871	0.000	0.177
84.00	-28.21	-8.13	0.00	-533.52	0.00	533.52	3761.67	954.44	3306.69	3182.44	7.44	-0.896	0.000	0.175
86.00	-27.78	-8.07	0.00	-517.26	0.00	517.26	3734.05	943.06	3228.26	3121.02	7.82	-0.921	0.000	0.173
88.00	-27.35	-8.00	0.00	-501.13	0.00	501.13	3706.01	931.67	3150.77	3059.82	8.21	-0.946	0.000	0.171
90.00	-26.93	-7.93	0.00	-485.13	0.00	485.13	3677.55	920.28	3074.23	2998.84	8.62	-0.971	0.000	0.169

Calculated Forces

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 65

90.17	-26.89	-7.93	0.00	-483.81	0.00	483.81	3675.16	919.33	3067.89	2993.77	8.65	-0.973	0.000	0.169
92.00	-26.22	-7.86	0.00	-469.28	0.00	469.28	3648.68	908.90	2998.62	2938.12	9.03	-0.997	0.000	0.167
94.00	-25.51	-7.79	0.00	-453.56	0.00	453.56	3619.39	897.51	2923.96	2877.64	9.45	-1.022	0.000	0.165
96.00	-24.80	-7.72	0.00	-437.98	0.00	437.98	2873.56	764.37	2506.37	2303.28	9.88	-1.047	0.000	0.199
98.00	-24.44	-7.65	0.00	-422.54	0.00	422.54	2853.66	754.73	2443.58	2258.25	10.33	-1.073	0.000	0.196
100.00	-24.08	-7.59	0.00	-407.24	0.00	407.24	2833.34	745.10	2381.59	2213.29	10.78	-1.101	0.000	0.193
102.00	-23.73	-7.53	0.00	-392.06	0.00	392.06	2812.61	735.46	2320.39	2168.43	11.25	-1.130	0.000	0.189
104.00	-23.38	-7.46	0.00	-377.01	0.00	377.01	2791.46	725.83	2259.99	2123.68	11.73	-1.158	0.000	0.186
106.00	-23.03	-7.40	0.00	-362.08	0.00	362.08	2769.89	716.19	2200.39	2079.04	12.22	-1.187	0.000	0.183
108.00	-22.69	-7.34	0.00	-347.28	0.00	347.28	2747.90	706.55	2141.58	2034.53	12.73	-1.215	0.000	0.179
110.00	-22.35	-7.28	0.00	-332.60	0.00	332.60	2725.50	696.92	2083.57	1990.17	13.24	-1.244	0.000	0.175
112.00	-22.02	-7.21	0.00	-318.05	0.00	318.05	2702.68	687.28	2026.36	1945.97	13.77	-1.272	0.000	0.172
114.00	-21.69	-7.15	0.00	-303.63	0.00	303.63	2679.45	677.65	1969.94	1901.93	14.31	-1.301	0.000	0.168
116.00	-21.36	-7.09	0.00	-289.32	0.00	289.32	2655.79	668.01	1914.32	1858.08	14.86	-1.329	0.000	0.164
118.00	-21.04	-7.03	0.00	-275.14	0.00	275.14	2631.73	658.38	1859.50	1814.42	15.42	-1.357	0.000	0.160
120.00	-20.72	-6.97	0.00	-261.07	0.00	261.07	2607.24	648.74	1805.47	1770.96	16.00	-1.384	0.000	0.155
122.00	-20.41	-6.91	0.00	-247.13	0.00	247.13	2582.34	639.11	1752.24	1727.73	16.58	-1.412	0.000	0.151
124.00	-20.10	-6.85	0.00	-233.31	0.00	233.31	2557.02	629.47	1699.80	1684.74	17.18	-1.439	0.000	0.146
126.00	-19.79	-6.79	0.00	-219.61	0.00	219.61	2531.28	619.84	1648.16	1641.98	17.79	-1.466	0.000	0.142
128.00	-19.49	-6.73	0.00	-206.02	0.00	206.02	2505.13	610.20	1597.32	1599.49	18.41	-1.492	0.000	0.137
130.00	-19.19	-6.68	0.00	-192.55	0.00	192.55	2478.56	600.57	1547.28	1557.27	19.04	-1.518	0.000	0.132
132.00	-18.89	-6.62	0.00	-179.20	0.00	179.20	2451.58	590.93	1498.03	1515.33	19.68	-1.543	0.000	0.126
133.33	-18.70	-6.58	0.00	-170.38	0.00	170.38	2433.35	584.51	1465.64	1487.53	20.11	-1.560	0.000	0.122
134.00	-18.54	-6.56	0.00	-165.99	0.00	165.99	2424.17	581.30	1449.58	1473.69	20.33	-1.568	0.000	0.120
136.00	-18.09	-6.50	0.00	-152.87	0.00	152.87	2396.35	571.66	1401.92	1432.35	21.00	-1.592	0.000	0.114
138.00	-17.64	-6.43	0.00	-139.88	0.00	139.88	1545.45	417.14	1026.36	929.77	21.67	-1.615	0.000	0.162
140.00	-14.93	-5.56	0.00	-127.01	0.00	127.01	1531.69	410.13	992.17	905.88	22.35	-1.638	0.000	0.150
142.00	-14.71	-5.51	0.00	-115.89	0.00	115.89	1517.50	403.12	958.56	882.03	23.04	-1.665	0.000	0.141
144.00	-14.49	-5.45	0.00	-104.88	0.00	104.88	1502.90	396.11	925.52	858.22	23.74	-1.691	0.000	0.132
146.00	-14.28	-5.40	0.00	-93.97	0.00	93.97	1487.88	389.11	893.06	834.49	24.46	-1.716	0.000	0.122
148.00	-14.07	-5.34	0.00	-83.18	0.00	83.18	1472.45	382.10	861.19	810.82	25.18	-1.740	0.000	0.112
150.00	-11.28	-4.14	0.00	-72.49	0.00	72.49	1456.60	375.09	829.89	787.25	25.92	-1.762	0.000	0.100
152.00	-11.09	-4.09	0.00	-64.21	0.00	64.21	1440.33	368.08	799.17	763.78	26.66	-1.782	0.000	0.092
154.00	-10.91	-4.03	0.00	-56.04	0.00	56.04	1423.65	361.08	769.03	740.42	27.41	-1.801	0.000	0.083
156.00	-10.73	-3.98	0.00	-47.97	0.00	47.97	1406.55	354.07	739.47	717.20	28.17	-1.818	0.000	0.075
158.00	-8.82	-3.51	0.00	-40.01	0.00	40.01	1389.03	347.06	710.49	694.11	28.93	-1.833	0.000	0.064
160.00	-7.94	-2.90	0.00	-32.99	0.00	32.99	1371.10	340.05	682.09	671.17	29.70	-1.847	0.000	0.055
162.00	-7.79	-2.85	0.00	-27.18	0.00	27.18	1352.75	333.05	654.27	648.41	30.48	-1.859	0.000	0.048
164.00	-7.65	-2.80	0.00	-21.48	0.00	21.48	1333.98	326.04	627.03	625.81	31.26	-1.869	0.000	0.040
166.00	-3.86	-1.43	0.00	-15.88	0.00	15.88	1314.79	319.03	600.37	603.42	32.05	-1.878	0.000	0.029
168.00	-3.73	-1.39	0.00	-13.01	0.00	13.01	1295.19	312.03	574.28	581.22	32.83	-1.885	0.000	0.025
170.00	-3.60	-1.34	0.00	-10.24	0.00	10.24	1275.17	305.02	548.78	559.24	33.63	-1.891	0.000	0.021
172.00	-3.48	-1.29	0.00	-7.56	0.00	7.56	1251.65	298.01	523.85	536.17	34.42	-1.896	0.000	0.017
174.00	-3.36	-1.25	0.00	-4.98	0.00	4.98	1222.21	291.00	499.51	511.11	35.21	-1.899	0.000	0.013
176.00	-3.24	-1.20	0.00	-2.49	0.00	2.49	1192.78	284.00	475.74	486.64	36.01	-1.902	0.000	0.008
178.00	-0.11	-0.04	0.00	-0.09	0.00	0.09	1163.35	276.99	452.55	462.78	36.81	-1.903	0.000	0.000
180.00	0.00	-0.04	0.00	0.00	0.00	0.00	1133.92	269.98	429.95	439.52	37.60	-1.903	0.000	0.000

Final Analysis Summary

Structure:	CT46130-A-SBA	**Code:**	EIA/TIA-222-H	5/6/2021	
Site Name:	Deep River-winthrop Rd	**Exposure:**	C		
Height:	180.00 (ft)	**Crest Height:**	0.00		
Base Elev:	0.000 (ft)	**Site Class:**	D - Stiff Soil		
Gh:	1.1 **Topography:** 1	**Struct Class:**	II	Page: 66	

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 123 mph Wind	50.9	0.00	63.22	0.00	0.00	6320.34
0.9D + 1.0W 123 mph Wind	50.9	0.00	47.41	0.00	0.00	6230.69
1.2D + 1.0Di + 1.0Wi 50 mph Wind	11.2	0.00	84.96	0.00	0.00	1434.21
1.2D + 1.0Ev + 1.0Eh	0.8	0.00	65.67	0.00	0.00	131.95
0.9D + 1.0Ev + 1.0Eh	0.8	0.00	49.79	0.00	0.00	130.12
1.0D + 1.0W 60 mph Wind	10.8	0.00	52.72	0.00	0.00	1336.61

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 123 mph Wind	-63.22	-50.86	0.00	-6320.3	0.00	-6320.3	5123.29	1522.0	7808.40	6435.29	0.00	0.996
0.9D + 1.0W 123 mph Wind	-47.41	-50.85	0.00	-6230.6	0.00	-6230.6	5123.29	1522.0	7808.40	6435.29	0.00	0.979
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-84.96	-11.16	0.00	-1434.2	0.00	-1434.2	5123.29	1522.0	7808.40	6435.29	0.00	0.240
1.2D + 1.0Ev + 1.0Eh	-22.18	-0.80	0.00	-19.81	0.00	-19.81	1545.45	417.14	1026.36	929.77	138.00	0.036
0.9D + 1.0Ev + 1.0Eh	-16.83	-0.79	0.00	-19.51	0.00	-19.51	1545.45	417.14	1026.36	929.77	138.00	0.032
1.0D + 1.0W 60 mph Wind	-52.72	-10.83	0.00	-1336.6	0.00	-1336.6	5123.29	1522.0	7808.40	6435.29	0.00	0.218

Base Plate Summary

Structure:	CT46130-A-SB		**Code:**	EIA/TIA-222-H	5/6/2021
Site Name:	Deep River-winthrop Rd		**Exposure:**	C	
Height:	180.00 (ft)		**Crest Height:**	0.00	
Base Elev:	0.000 (ft)		**Site Class:**	D - Stiff Soil	
Gh:	1.1	**Topography:** 1	**Struct Class:**	II	Page: 67

Reactions	
Original Design	
Moment (kip-ft):	5076.00
Axial (kip):	59.10
Shear (kip):	41.70
Analysis (1.2D + 1.0W)	
Moment (kip-ft):	6320.34
Axial (kip):	63.22
Shear (kip):	50.86

Base Plate	
Yield (ksi):	60.00
Width (in):	76.69
Style:	Polygon
Polygon Sides:	12.00
Clip Length (in):	0.00
Effective Len (in):	14.14
Moment (kip-in):	950.82
Allow Stress (ksi):	81.00
Applied Stress (ksi):	53.46
Stress Ratio:	0.66

Anchor Bolts	
Bolt Circle:	70.69
Number Bolts:	20.00
Bolt Type:	2.25" 18J
Bolt Diameter (in):	2.25
Yield (ksi):	75.00
Ultimate (ksi):	100.00
Arrangement:	Radial
Cluster Dist (in):	0.00
Start Angle (deg):	0.00
Compression	
Force (kip):	218.83
Allowable (kip):	268.39
Ratio:	0.82
Tension	
Force (kip):	210.33
Allowable (kip):	243.75
Ratio:	0.86

Monopole Mat Foundation Design

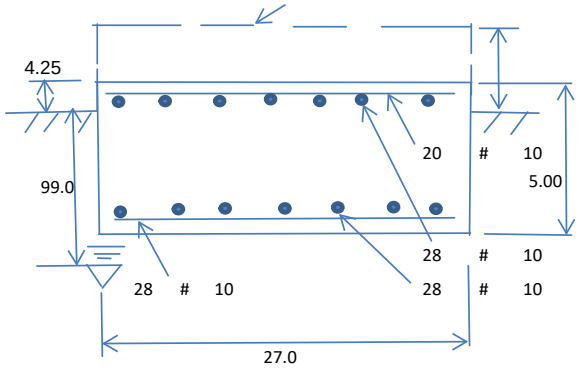
				Date
				5/6/2021
	Customer Name:	SBA Communcations Corp	**EIA/TIA Standard:**	EIA-222-H
	Site Name:	Deep River-winthrop Rd	**Structure Height (Ft.):**	180
	Site Number:	CT46130-A-SBA	**Engineer Name:**	T. Alajaj
	Engr. Number:	106850	**Manager Login Req'd:**	

Tower Engineering Solutions

Foundation Info Obtained from: Drawings/Calculations

Structure Type: Monopole

Analysis or Design? Analysis

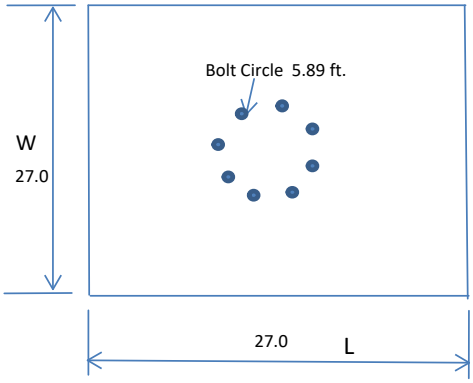


Base Reactions (Factored):

Axial Load (Kips):	63.2	Shear Force (Kips):	50.9
Uplift Force (Kips):	0.0	Moment (Kips-ft):	6320.3
Allowable overstress %:	5.0%		

Foundation Geometries:

		Mods required -Yes/No ?:	No
Anchor Bolt Circle (ft.):	5.89	Depth of Base BG (ft.):	0.75
Thickness of Pad (ft):	5.00		
Length of Pad (ft.):	27	Width of Pad (ft.):	27
Final Length of pad (ft)	27.0	Final width of pad (ft):	27.0



Material Properties and Reabr Info:

Concrete Strength (psi):	4000	Steel Elastic Modulus:	29000	ksi
Pad Rebar Yield (Ksi):	60	Tie Spacing (in):	12.0	
Pad Steel Rebar Size (#):	10			
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):	20	Qty. of Rebar in Pad (W):	20	
Rebar at the top of the concrete pad:				
Qty. of Rebar in Pad (L):	28	Qty. of Rebar in Pad (W):	28	
Apply 1.35 factor for e/w Per G:	1.35			

Soil Design Parameters:

Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	120000	Ultimate Skin Friction:	0	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	No		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	No	Reduction factor on the maximum soil bearing pressure:	1.00			

Foundation Analysis and Design:

Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75
Total Dry Soil Volume (cu. Ft.):	0.00	Total Dry Soil Weight (Kips):	0.00
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	0.00	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	3645.00	Total Dry Concrete Weight (Kips):	546.75
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	546.75	Total Vertical Load on Base (Kips):	609.95

Check Soil Capacities:

				Load/ Capacity Ratio	
Calculated Maxium Net Soil Pressure under the base (psf):	4596	<	Allowable Factored Soil Bearing (psf): 90000	0.05	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	7496.2	>	Design Factored Momont (kips-ft): 6577	0.88	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	1.14	OK!			

Check the capacities of Reinforceing Concrete:

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

Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	1732.8	>	One-Way Factored Shear (L-D. Kips):	392.1	0.23	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1732.8	>	One-Way Factored Shear (W-D., Kips)	392.1	0.23	OK!
One-Way Design Shear Capacity (Corner-Corner. Kips):	2040.5	>	One-Way Factored Shear (C-C, Kips):	875.5	0.43	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0014	OK!	Lower Steel Pad Reinf. Ratio (W-Direc	0.0014		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):	6364.6	>	Moment at Bottom (L-Direct. K-Ft):	1099.3	0.17	OK!
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):	6364.6	>	Moment at Bottom (W-Direct. K-Ft):	1099.3	0.17	OK!
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):	8978.4	>	Moment at Bottom (C-C Dir. K-Ft):	1554.7	0.17	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0019	OK!	Upper Steel Reinf. Ratio (W-Direct.):	0.0019		
Upper Steel Pad Moment Capacity (L-Direction. Kips-ft):	8866.2	>	Moment at the top (L-Dir Kips-Ft):	54.9	0.01	OK!
Upper Steel Pad Moment Capacity (W-Direction. Kips-ft):	8866.2	>	Moment at the top (W-Dir Kips-Ft):	54.9	0.01	OK!
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):	12494.6	>	Moment at the top (C-C Direc. K-Ft):	881.5	0.07	OK!

EXHIBIT 9

Antenna Mount Analysis

May 13, 2021

Sherri Knapik
SBA Network Services, LLC
134 Flanders Road, Suite 125
Westborough, MA 01581
(508) 251-0720

B+T Group
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630
towersupport@btgrp.com

Subject:	**Appurtenance Mount Analysis Report**	
Carrier Designation:	***Dish Wireless* Co-Locate**	
	Site Number:	BOBDL00135A
	Site Name:	N/A
***SBA Network Services Designation*:**	**Site Number:**	CT46130-A-06
	Site Name:	Deep River-winthrop Rd
	Application Number:	153557, v1
Engineering Firm Designation:	**B+T Group Project Number:**	149485.003.01
Site Data:	**220 Winthrop Rd, Deep River, CT, 06417, Middlesex County**	
	Latitude *41.36587*°, Longitude *-72.47484*°	
	Monopole	
	8' Platform Mount	

Dear Ms. Knapik,

B+T Group is pleased to submit this **"Appurtenance Mount Analysis Report"** to determine the structural integrity of the antenna mount on the above-mentioned structure.

The purpose of the analysis is to determine acceptability of the mount's stress level. Based on our analysis we have determined the stress level for the mount under the following load case to be:

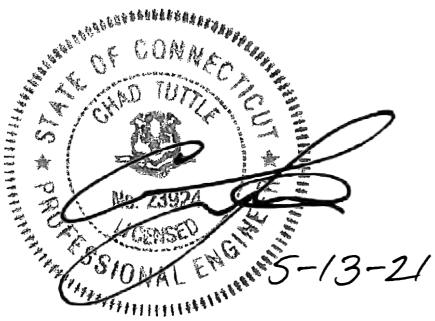
Proposed Equipment Note: See Table 1 for the final loading configuration	**Sufficient Capacity** **(Passing at 53.2%)**

The jurisdiction has adopted the 2015 International Building Code. This analysis has been performed in accordance with the ANSI/TIA-222-H Standard.

We at *B+T Group* appreciate the opportunity of providing our continuing professional services to you and *SBA Network Services, LLC.* If you have any questions or need further assistance on this or any other projects, please give us a call.

Mount structural analysis prepared by: Anne Delice

Respectfully submitted by: B&T Engineering, Inc.
COA: PEC.0001564 Expires: 02/10/2022



Chad E. Tuttle, P.E.

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4) ANALYSIS RESULTS
Table 3 – Mount Component Stresses vs. Capacity

5) RECOMMENDATIONS

6) APPENDIX A
RISA-3D Output

7) APPENDIX B
Additional Calculations

1) INTRODUCTION

The mount consists of SitePro1 platform mount, Part# SNP8HR-396 at 140 ft., attached to monopole at 220 Winthrop Rd, Deep River, CT, 06417, Middlesex County. The proposed antenna loading information was obtained from SBA Network Services, LLC. All information provided to B+T Group was assumed accurate and complete.

2) ANALYSIS CRITERIA

The structural analysis was performed for this mount in accordance with the ANSI/TIA-222-H-2017 Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures using a 3-second gust wind speed of 123 mph with no ice and 50 mph with 1 inch escalated ice thickness. Exposure Category C, Topographic Category 1 and Risk Category II were used in this analysis. In addition, the platform mount has been analyzed for various live loading conditions consisting of a 250-lb man live load applied individually at the midpoint and cantilevered ends of horizontal members as well as a 500-pound man live load applied individually at mount pipe locations using a 3-second gust of 30 mph. The mount was analyzed under 30º increments in the wind direction. The analyzed loading is detailed in Table 1.

Table 1 – Proposed and Existing Equipment Information

Loading	RAD Center Elev. (ft.)	Position	Qty.	Description	Note
Proposed	140	1	3	JMA MX08FRO665-21	1
		1	3	Fujitsu TA08025-B605	2
			3	Fujitsu TA08025-B604	
		--	1	Raycap RDIDC-9181-PF-48	3

Note:
(1) Proposed Antenna to be installed on the proposed Mount Pipe.
(2) Proposed Equipment to be installed directly behind the Antenna.
(3) Proposed Equipment to be installed on the proposed Mount.

Table 2 - Documents Provided

Documents	Remarks	Reference	Source
BOBDL00135A-Collo App	Proposed Loading	Date: 05/06/2021	SBA Network Services, LLC
RFDS		Date: 03/28/2021	

3) ANALYSIS PROCEDURE

3.1) Analysis Method

RISA-3D (Version 19.0.1), a commercially available analysis software package, was used to create a three-dimensional model of the mount and calculate member stresses and deflections for various loading cases. Selected output from the analysis is included in Appendix A.

Manufacturers drawing were used to create the model.

3.2) Assumptions

1. The mount was built in accordance with the manufacturer's specifications.
2. The mount has been maintained in accordance with the manufacturer's specifications and is free of damage.
3. The configuration of antennas and other appurtenances are as specified in Table 1.
4. All mount components have been assumed to be in sufficient condition to carry their full design capacity for the analysis.
5. Mount areas and weights are determined from field measurements, standard material properties, and/or manufacturer product data.

The following assumptions have been included in the analysis of the mount

Component	Section	Length	Note
Proposed Mount Pipes	2" Std. Pipe	8'-0''	All Positions, All Sectors

6. Serviceability with respect to antenna twist, tilt, roll or lateral translation is not checked and is left to the carrier or tower owner to ensure conformance.
7. All prior structural modifications, if any are assumed to be correctly installed and fully effective.
8. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
9. The following material grades were assumed (Unless Noted Otherwise):
   a) Connection Bolts : ASTM A325
   b) Steel Pipe : ASTM A53 (GR. 35)
   c) HSS (Round) : ASTM 500 (GR. B-42)
   d) HSS (Rectangular) : ASTM 500 (GR. B-46)
   e) Channel : ASTM A36 (GR. 36)
   f) Steel Solid Rod : ASTM A36 (GR. 36)
   g) Steel Plate : ASTM A36 (GR. 36)
   h) Steel Angle : ASTM A36 (GR. 36)
   i) UNISTRUT : ASTM A570 (GR. 33)

This analysis may be affected if any assumptions are not valid or have been made in error. B+T Group should be notified to determine the effect on the structural integrity of the antenna mounting system.

4) ANALYSIS RESULTS

Table 3 – Mount Component Stresses vs. Capacity

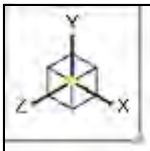
Notes	Component	Elevation (ft.)	% Capacity	Pass / Fail
-	Main Face Horizontals	140	12.5	Pass
-	Support Tubes	140	40.1	Pass
-	Support Angles	140	40.2	Pass
-	Connection Plates	140	52.8	Pass
-	Support Rails	140	25.7	Pass
-	Mount Pipes	140	53.2	Pass
-	Connection Angles	140	27.4	Pass
-	Connection Bolts	140	38.8	Pass

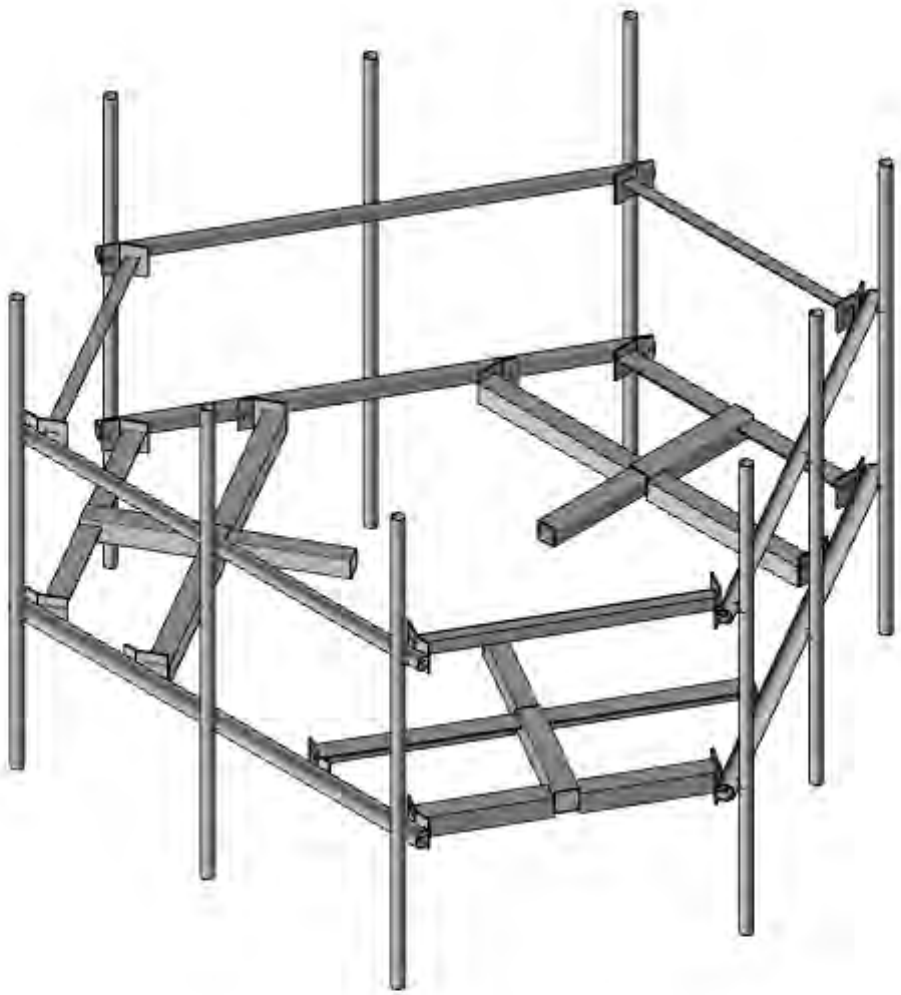
5) RECOMMENDATIONS

The SitePro1 platform mount, Part# SNP8HR-396 has sufficient capacity to carry the proposed loads and is in compliance with the ANSI/TIA-222-H standard for the proposed loading. (Refer to the RISA output for the specific members).

APPENDIX A

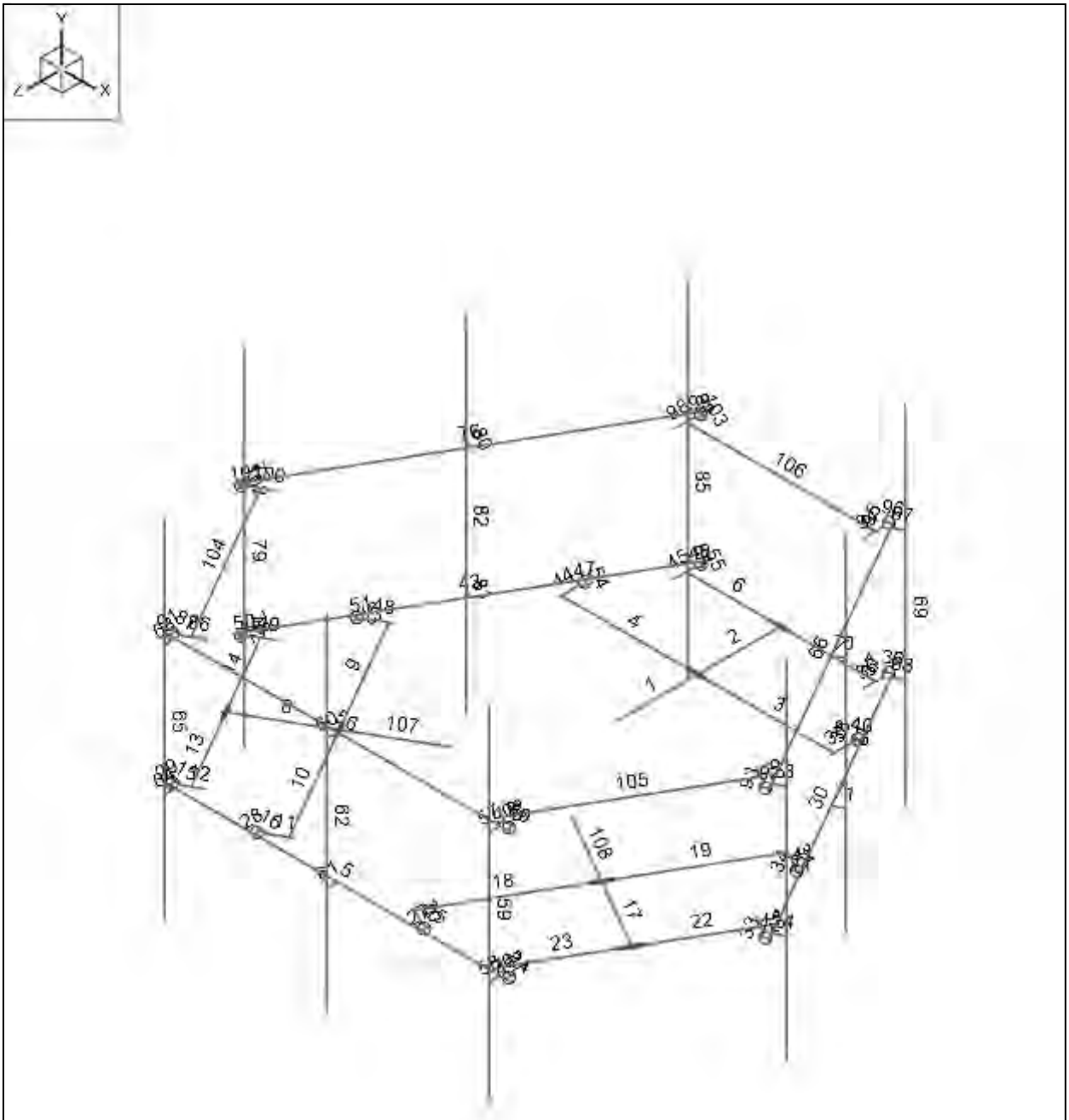
(RISA-3D Output)





Envelope Only Solution

B+T Group	CT46130-A-06 - Deep River-winthrop Rd	VP1
VP		May 12, 2021
149485.003.01		149485_003_01_Deep River-…



Envelope Only Solution

B+T Group	CT46130-A-06 - Deep River-winthrop Rd	VP2
VP		May 12, 2021
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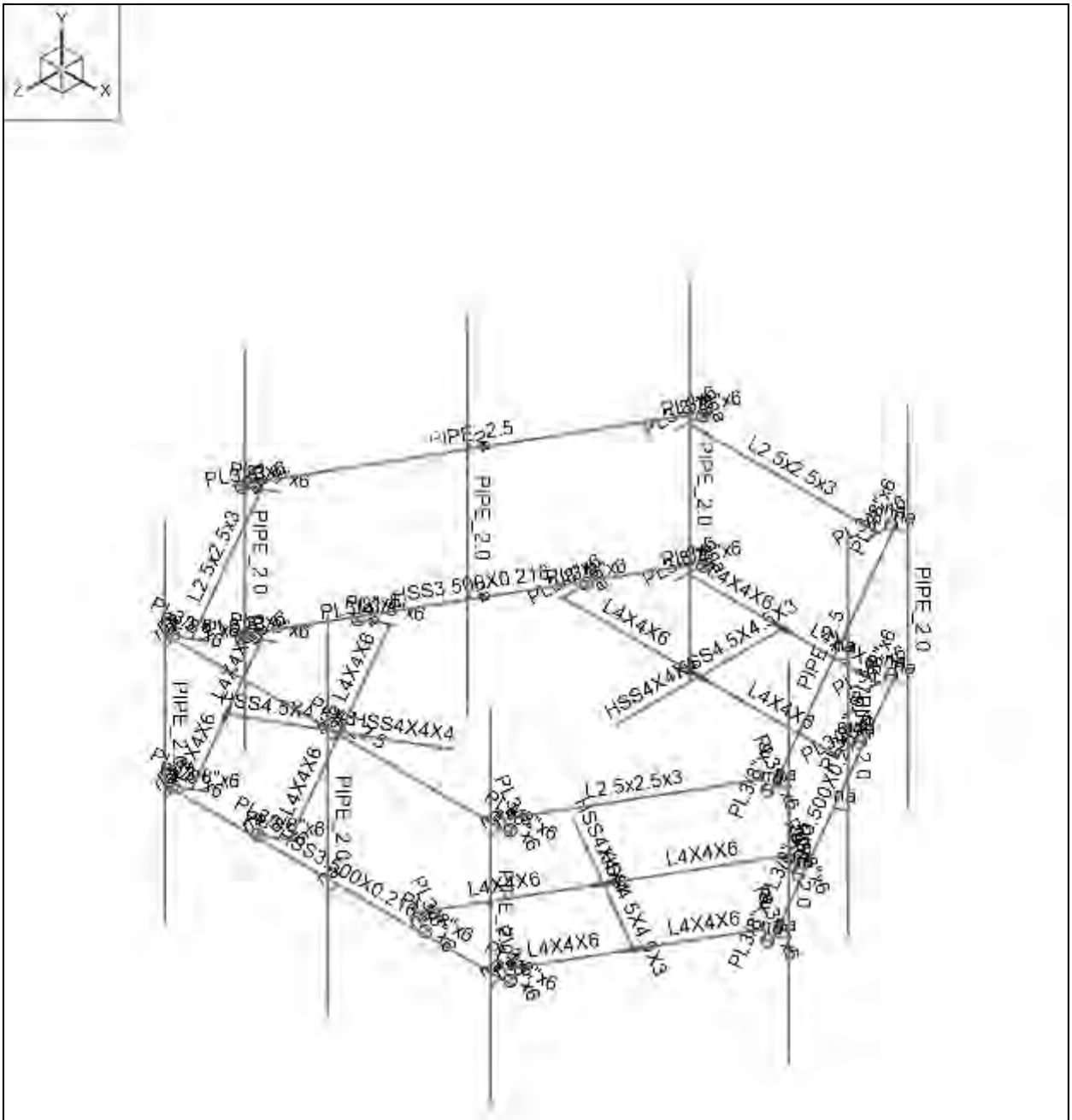

Envelope Only Solution

B+T Group	CT46130-A-06 - Deep River-winthrop Rd	VP3
VP		May 12, 2021
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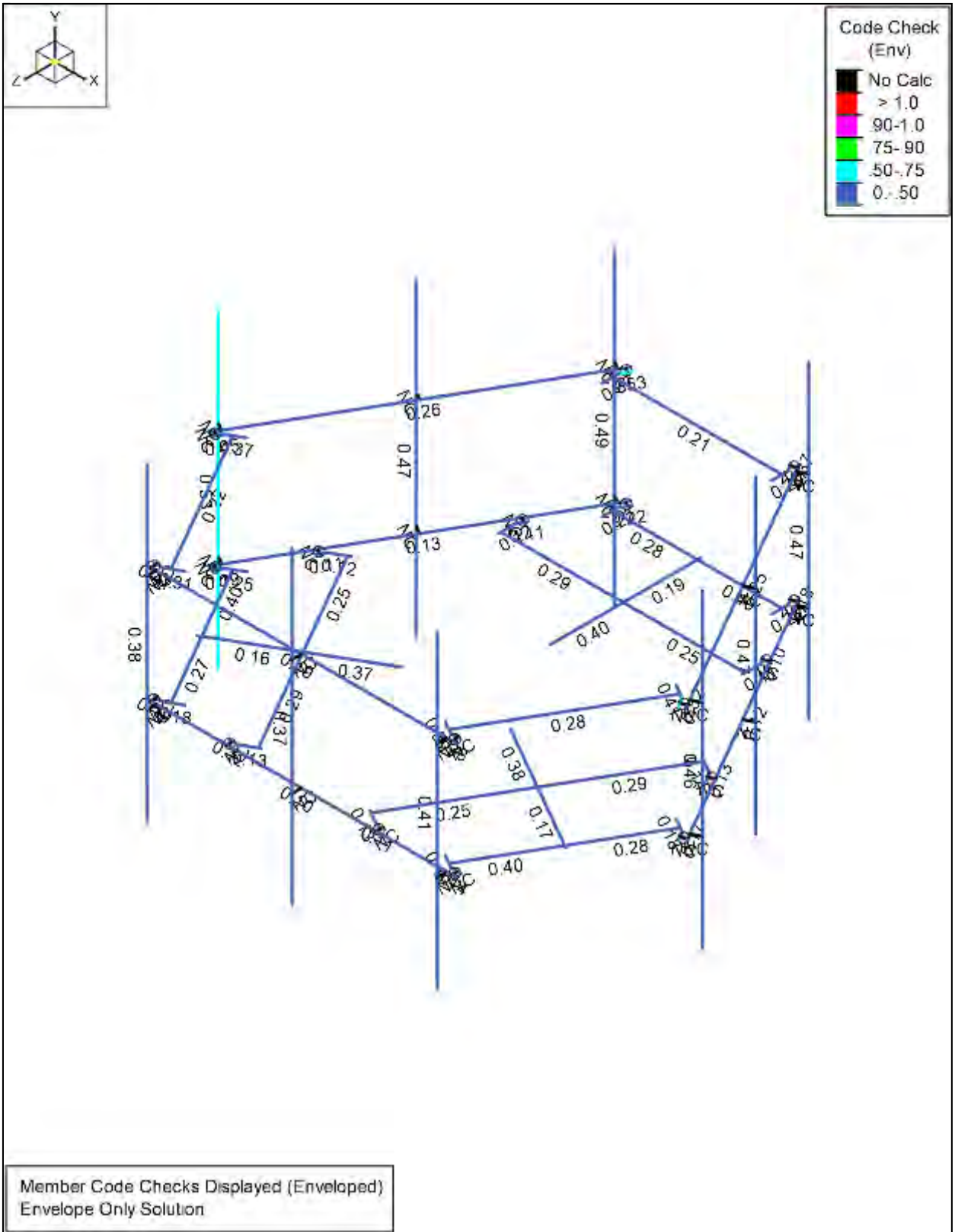

B+T Group	CT46130-A-06 - Deep River-winthrop Rd	VP4
VP		May 12, 2021
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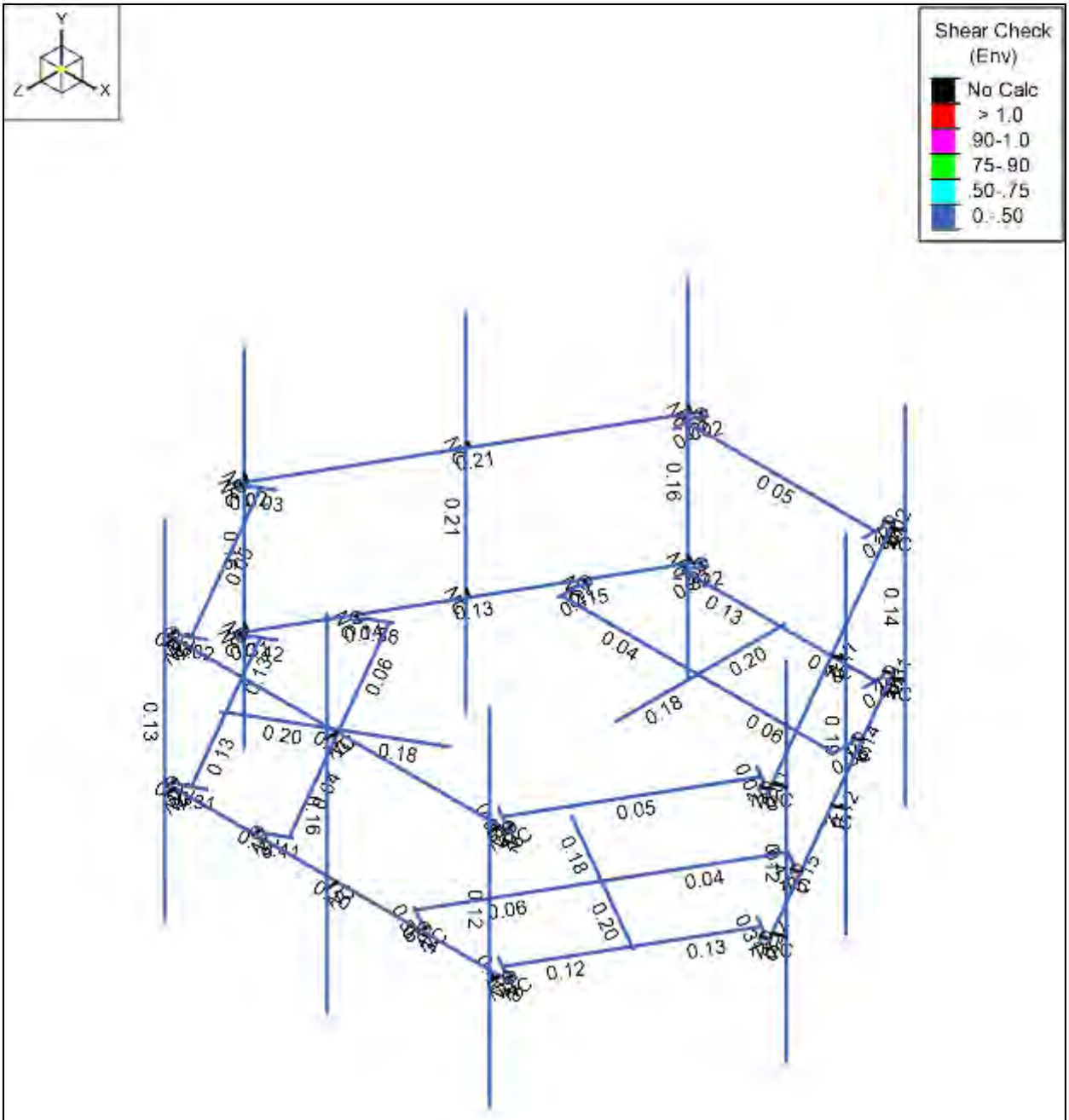


Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

B+T Group	CT46130-A-06 - Deep River-winthrop Rd	VP5
VP		May 12, 2021
149485.003.01		149485_003_01_Deep River-…

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	MF-H1	HSS3.500X0.216	Beam	HSS Pipe	A500 Gr.B RND	Typical	2.08	2.84	2.84	5.69
2	SF-H1	HSS4X4X4	Beam	Tube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
3	SF-H2	HSS4.5X4.5X3	Beam	Tube	A500 Gr.B Rect	Typical	2.93	9.02	9.02	14.4
4	SF-H3	L4X4X6	Beam	Single Angle	A36 Gr.36	Typical	2.86	4.32	4.32	0.141
5	MF-CP1	PL3/8"x6	Beam	RECT	A36 Gr.36	Typical	2.25	0.026	6.75	0.101
6	MF-H2	PIPE_2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
7	MF-P1	PIPE_2.0	Column	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
8	MF-CA1	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical	0.901	0.535	0.535	0.011

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	1	188	1		SF-H1	Beam	Tube	A500 Gr.B Rect	Typical
2	2	2	1		SF-H2	Beam	Tube	A500 Gr.B Rect	Typical
3	3	5	3	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
4	4	3	4	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
5	5	6	7		MF-H1	Beam	HSS Pipe	A500 Gr.B RND	Typical
6	6	9	8	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
7	7	8	10	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
8	8	12	11		SF-H2	Beam	Tube	A500 Gr.B Rect	Typical
9	9	15	13	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
10	10	13	14	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
11	11	17	19		MF-CP1	Beam	RECT	A36 Gr.36	Typical
12	12	16	18		MF-CP1	Beam	RECT	A36 Gr.36	Typical
13	13	21	20	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
14	14	20	22	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
15	15	18	23		MF-CP1	Beam	RECT	A36 Gr.36	Typical
16	16	19	24		MF-CP1	Beam	RECT	A36 Gr.36	Typical
17	17	28	27		SF-H2	Beam	Tube	A500 Gr.B Rect	Typical
18	18	31	29	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
19	19	29	30	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
20	20	33	35		MF-CP1	Beam	RECT	A36 Gr.36	Typical
21	21	32	34		MF-CP1	Beam	RECT	A36 Gr.36	Typical
22	22	37	36	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
23	23	36	38	90	SF-H3	Beam	Single Angle	A36 Gr.36	Typical
24	24	34	39		MF-CP1	Beam	RECT	A36 Gr.36	Typical
25	25	35	40		MF-CP1	Beam	RECT	A36 Gr.36	Typical
26	26	41	45		RIGID	None	None	RIGID	Typical
27	27	42	46		RIGID	None	None	RIGID	Typical
28	28	26	44		RIGID	None	None	RIGID	Typical
29	29	25	43		RIGID	None	None	RIGID	Typical
30	30	47	48		MF-H1	Beam	HSS Pipe	A500 Gr.B RND	Typical
31	31	50	52		MF-CP1	Beam	RECT	A36 Gr.36	Typical
32	32	49	51		MF-CP1	Beam	RECT	A36 Gr.36	Typical
33	33	51	53		MF-CP1	Beam	RECT	A36 Gr.36	Typical
34	34	52	54		MF-CP1	Beam	RECT	A36 Gr.36	Typical
35	35	58	60		MF-CP1	Beam	RECT	A36 Gr.36	Typical
36	36	57	59		MF-CP1	Beam	RECT	A36 Gr.36	Typical
37	37	59	61		MF-CP1	Beam	RECT	A36 Gr.36	Typical
38	38	60	62		MF-CP1	Beam	RECT	A36 Gr.36	Typical
39	39	63	67		RIGID	None	None	RIGID	Typical
40	40	64	68		RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
41	41	56	66		RIGID	None	None	RIGID	Typical
42	42	55	65		RIGID	None	None	RIGID	Typical
43	43	69	70		MF-H1	Beam	HSS Pipe	A500 Gr.B RND	Typical
44	44	72	74		MF-CP1	Beam	RECT	A36 Gr.36	Typical
45	45	71	73		MF-CP1	Beam	RECT	A36 Gr.36	Typical
46	46	73	75		MF-CP1	Beam	RECT	A36 Gr.36	Typical
47	47	74	76		MF-CP1	Beam	RECT	A36 Gr.36	Typical
48	48	80	82		MF-CP1	Beam	RECT	A36 Gr.36	Typical
49	49	79	81		MF-CP1	Beam	RECT	A36 Gr.36	Typical
50	50	81	83		MF-CP1	Beam	RECT	A36 Gr.36	Typical
51	51	82	84		MF-CP1	Beam	RECT	A36 Gr.36	Typical
52	52	85	89		RIGID	None	None	RIGID	Typical
53	53	86	90		RIGID	None	None	RIGID	Typical
54	54	78	88		RIGID	None	None	RIGID	Typical
55	55	77	87		RIGID	None	None	RIGID	Typical
56	56	92	93		MF-H2	Beam	Pipe	A53 Gr.B	Typical
57	57	96	97		RIGID	None	None	RIGID	Typical
58	58	94	95		RIGID	None	None	RIGID	Typical
59	59	98	99		MF-P1	Column	Pipe	A53 Gr.B	Typical
60	60	102	103		RIGID	None	None	RIGID	Typical
61	61	100	101		RIGID	None	None	RIGID	Typical
62	62	104	105		MF-P1	Column	Pipe	A53 Gr.B	Typical
63	63	108	109		RIGID	None	None	RIGID	Typical
64	64	106	107		RIGID	None	None	RIGID	Typical
65	65	110	111		MF-P1	Column	Pipe	A53 Gr.B	Typical
66	66	112	113		MF-H2	Beam	Pipe	A53 Gr.B	Typical
67	67	116	117		RIGID	None	None	RIGID	Typical
68	68	114	115		RIGID	None	None	RIGID	Typical
69	69	118	119		MF-P1	Column	Pipe	A53 Gr.B	Typical
70	70	122	123		RIGID	None	None	RIGID	Typical
71	71	120	121		RIGID	None	None	RIGID	Typical
72	72	124	125		MF-P1	Column	Pipe	A53 Gr.B	Typical
73	73	128	129		RIGID	None	None	RIGID	Typical
74	74	126	127		RIGID	None	None	RIGID	Typical
75	75	130	131		MF-P1	Column	Pipe	A53 Gr.B	Typical
76	76	132	133		MF-H2	Beam	Pipe	A53 Gr.B	Typical
77	77	136	137		RIGID	None	None	RIGID	Typical
78	78	134	135		RIGID	None	None	RIGID	Typical
79	79	138	139		MF-P1	Column	Pipe	A53 Gr.B	Typical
80	80	142	143		RIGID	None	None	RIGID	Typical
81	81	140	141		RIGID	None	None	RIGID	Typical
82	82	144	145		MF-P1	Column	Pipe	A53 Gr.B	Typical
83	83	148	149		RIGID	None	None	RIGID	Typical
84	84	146	147		RIGID	None	None	RIGID	Typical
85	85	150	151		MF-P1	Column	Pipe	A53 Gr.B	Typical
86	86	152	153		MF-CP1	Beam	RECT	A36 Gr.36	Typical
87	87	153	155		MF-CP1	Beam	RECT	A36 Gr.36	Typical
88	88	157	158		MF-CP1	Beam	RECT	A36 Gr.36	Typical
89	89	158	160		MF-CP1	Beam	RECT	A36 Gr.36	Typical
90	90	161	163		RIGID	None	None	RIGID	Typical
91	91	156	162		RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
92	92	164	165		MF-CP1	Beam	RECT	A36 Gr.36	Typical
93	93	165	167		MF-CP1	Beam	RECT	A36 Gr.36	Typical
94	94	169	170		MF-CP1	Beam	RECT	A36 Gr.36	Typical
95	95	170	172		MF-CP1	Beam	RECT	A36 Gr.36	Typical
96	96	173	175		RIGID	None	None	RIGID	Typical
97	97	168	174		RIGID	None	None	RIGID	Typical
98	98	176	177		MF-CP1	Beam	RECT	A36 Gr.36	Typical
99	99	177	179		MF-CP1	Beam	RECT	A36 Gr.36	Typical
100	100	181	182		MF-CP1	Beam	RECT	A36 Gr.36	Typical
101	101	182	184		MF-CP1	Beam	RECT	A36 Gr.36	Typical
102	102	185	187		RIGID	None	None	RIGID	Typical
103	103	180	186		RIGID	None	None	RIGID	Typical
104	104	183	154	180	MF-CA1	Beam	Single Angle	A36 Gr.36	Typical
105	105	159	166	180	MF-CA1	Beam	Single Angle	A36 Gr.36	Typical
106	106	171	178	180	MF-CA1	Beam	Single Angle	A36 Gr.36	Typical
107	107	191	11		SF-H1	Beam	Tube	A500 Gr.B Rect	Typical
108	108	192	27		SF-H1	Beam	Tube	A500 Gr.B Rect	Typical

Basic Load Cases

	BLC Description	Category	Y Gravity	Nodal	Point	Distributed	Area(Member)
1	Dead	DL	-1		20		3
2	0 Wind - No Ice	WLZ			20	72	
3	90 Wind - No Ice	WLX			20	72	
4	0 Wind - Ice	WLZ			20	72	
5	90 Wind - Ice	WLX			20	72	
6	0 Wind - Service	WLZ			20	72	
7	90 Wind - Service	WLX			20	72	
8	Ice	OL1			20	72	3
9	0 Seismic	ELZ			20	72	
10	90 Seismic	ELX			20	72	
11	Live Load a	LL		3			
12	Live Load b	LL		3			
13	Live Load c	LL		3			
14	Live Load d	LL					
15	Maint LL 1	LL			1		
16	Maint LL 2	LL			1		
17	Maint LL 3	LL			1		
18	Maint LL 4	LL			1		
19	Maint LL 5	LL			1		
20	Maint LL 6	LL			1		
21	Maint LL 7	LL			1		
22	Maint LL 8	LL			1		
23	Maint LL 9	LL			1		
24	Maint LL 10	LL			1		
25	Maint LL 11	LL			1		
26	Maint LL 12	LL			1		
27	Maint LL 13	LL			1		
28	Maint LL 14	LL			1		
29	Maint LL 15	LL			1		
30	BLC 1 Transient Area Loads	None				117	
31	BLC 8 Transient Area Loads	None				117	

Load Combinations

	Description	Solve	PDelta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4 Dead	Yes	Y	1	1.4						
2	1.2 D + 1.0 - 0 W	Yes	Y	1	1.2	2	1				
3	1.2 D + 1.0 - 30 W	Yes	Y	1	1.2	2	0.866	3	0.5		
4	1.2 D + 1.0 - 60 W	Yes	Y	1	1.2	3	0.866	2	0.5		
5	1.2 D + 1.0 - 90 W	Yes	Y	1	1.2	3	1				
6	1.2 D + 1.0 - 120 W	Yes	Y	1	1.2	3	0.866	2	-0.5		
7	1.2 D + 1.0 - 150 W	Yes	Y	1	1.2	2	-0.866	3	0.5		
8	1.2 D + 1.0 - 180 W	Yes	Y	1	1.2	2	-1				
9	1.2 D + 1.0 - 210 W	Yes	Y	1	1.2	2	-0.866	3	-0.5		
10	1.2 D + 1.0 - 240 W	Yes	Y	1	1.2	3	-0.866	2	-0.5		
11	1.2 D + 1.0 - 270 W	Yes	Y	1	1.2	3	-1				
12	1.2 D + 1.0 - 300 W	Yes	Y	1	1.2	3	-0.866	2	0.5		
13	1.2 D + 1.0 - 330 W	Yes	Y	1	1.2	2	0.866	3	-0.5		
14	1.2 D + 1.0 - 0 W/Ice	Yes	Y	1	1.2	4	1			8	1
15	1.2 D + 1.0 - 30 W/Ice	Yes	Y	1	1.2	4	0.866	5	0.5	8	1
16	1.2 D + 1.0 - 60 W/Ice	Yes	Y	1	1.2	5	0.866	4	0.5	8	1
17	1.2 D + 1.0 - 90 W/Ice	Yes	Y	1	1.2	5	1			8	1
18	1.2 D + 1.0 - 120 W/Ice	Yes	Y	1	1.2	5	0.866	4	-0.5	8	1
19	1.2 D + 1.0 - 150 W/Ice	Yes	Y	1	1.2	4	-0.866	5	0.5	8	1
20	1.2 D + 1.0 - 180 W/Ice	Yes	Y	1	1.2	4	-1			8	1
21	1.2 D + 1.0 - 210 W/Ice	Yes	Y	1	1.2	4	-0.866	5	-0.5	8	1
22	1.2 D + 1.0 - 240 W/Ice	Yes	Y	1	1.2	5	-0.866	4	-0.5	8	1
23	1.2 D + 1.0 - 270 W/Ice	Yes	Y	1	1.2	5	-1			8	1
24	1.2 D + 1.0 - 300 W/Ice	Yes	Y	1	1.2	5	-0.866	4	0.5	8	1
25	1.2 D + 1.0 - 330 W/Ice	Yes	Y	1	1.2	4	0.866	5	-0.5	8	1
26	1.2 D + 1.0 E - 0	Yes	Y	1	1.2	9	1				
27	1.2 D + 1.0 E - 30	Yes	Y	1	1.2	9	0.866	10	0.5		
28	1.2 D + 1.0 E - 60	Yes	Y	1	1.2	10	0.866	9	0.5		
29	1.2 D + 1.0 E - 90	Yes	Y	1	1.2	10	1				
30	1.2 D + 1.0 E - 120	Yes	Y	1	1.2	10	0.866	9	-0.5		
31	1.2 D + 1.0 E - 150	Yes	Y	1	1.2	9	-0.866	10	0.5		
32	1.2 D + 1.0 E - 180	Yes	Y	1	1.2	9	-1				
33	1.2 D + 1.0 E - 210	Yes	Y	1	1.2	9	-0.866	10	-0.5		
34	1.2 D + 1.0 E - 240	Yes	Y	1	1.2	10	-0.866	9	-0.5		
35	1.2 D + 1.0 E - 270	Yes	Y	1	1.2	10	-1				
36	1.2 D + 1.0 E - 300	Yes	Y	1	1.2	10	-0.866	9	0.5		
37	1.2 D + 1.0 E - 330	Yes	Y	1	1.2	9	0.866	10	-0.5		
38	1.2 D + 1.5 LL a + Service - 0 W	Yes	Y	1	1.2	6	1			11	1.5
39	1.2 D + 1.5 LL a + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	11	1.5
40	1.2 D + 1.5 LL a + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	11	1.5
41	1.2 D + 1.5 LL a + Service - 90 W	Yes	Y	1	1.2	7	1			11	1.5
42	1.2 D + 1.5 LL a + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	11	1.5
43	1.2 D + 1.5 LL a + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	11	1.5
44	1.2 D + 1.5 LL a + Service - 180 W	Yes	Y	1	1.2	6	-1			11	1.5
45	1.2 D + 1.5 LL a + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	11	1.5
46	1.2 D + 1.5 LL a + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	11	1.5
47	1.2 D + 1.5 LL a + Service - 270 W	Yes	Y	1	1.2	7	-1			11	1.5
48	1.2 D + 1.5 LL a + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	11	1.5
49	1.2 D + 1.5 LL a + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	11	1.5
50	1.2 D + 1.5 LL b + Service - 0 W	Yes	Y	1	1.2	6	1			12	1.5
51	1.2 D + 1.5 LL b + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	12	1.5

Load Combinations (Continued)

	Description	Solve	PDelta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
52	1.2 D + 1.5 LL b + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	12	1.5
53	1.2 D + 1.5 LL b + Service - 90 W	Yes	Y	1	1.2	7	1			12	1.5
54	1.2 D + 1.5 LL b + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	12	1.5
55	1.2 D + 1.5 LL b + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	12	1.5
56	1.2 D + 1.5 LL b + Service - 180 W	Yes	Y	1	1.2	6	-1			12	1.5
57	1.2 D + 1.5 LL b + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	12	1.5
58	1.2 D + 1.5 LL b + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	12	1.5
59	1.2 D + 1.5 LL b + Service - 270 W	Yes	Y	1	1.2	7	-1			12	1.5
60	1.2 D + 1.5 LL b + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	12	1.5
61	1.2 D + 1.5 LL b + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	12	1.5
62	1.2 D + 1.5 LL c + Service - 0 W	Yes	Y	1	1.2	6	1			13	1.5
63	1.2 D + 1.5 LL c + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	13	1.5
64	1.2 D + 1.5 LL c + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	13	1.5
65	1.2 D + 1.5 LL c + Service - 90 W	Yes	Y	1	1.2	7	1			13	1.5
66	1.2 D + 1.5 LL c + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	13	1.5
67	1.2 D + 1.5 LL c + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	13	1.5
68	1.2 D + 1.5 LL c + Service - 180 W	Yes	Y	1	1.2	6	-1			13	1.5
69	1.2 D + 1.5 LL c + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	13	1.5
70	1.2 D + 1.5 LL c + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	13	1.5
71	1.2 D + 1.5 LL c + Service - 270 W	Yes	Y	1	1.2	7	-1			13	1.5
72	1.2 D + 1.5 LL c + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	13	1.5
73	1.2 D + 1.5 LL c + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	13	1.5
74	1.2 D + 1.5 LL d + Service - 0 W	Yes	Y	1	1.2	6	1			14	1.5
75	1.2 D + 1.5 LL d + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	14	1.5
76	1.2 D + 1.5 LL d + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	14	1.5
77	1.2 D + 1.5 LL d + Service - 90 W	Yes	Y	1	1.2	7	1			14	1.5
78	1.2 D + 1.5 LL d + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	14	1.5
79	1.2 D + 1.5 LL d + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	14	1.5
80	1.2 D + 1.5 LL d + Service - 180 W	Yes	Y	1	1.2	6	-1			14	1.5
81	1.2 D + 1.5 LL d + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	14	1.5
82	1.2 D + 1.5 LL d + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	14	1.5
83	1.2 D + 1.5 LL d + Service - 270 W	Yes	Y	1	1.2	7	-1			14	1.5
84	1.2 D + 1.5 LL d + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	14	1.5
85	1.2 D + 1.5 LL d + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	14	1.5
86	1.2 D + 1.5 LL Maint (1)	Yes	Y	1	1.2					15	1.5
87	1.2 D + 1.5 LL Maint (2)	Yes	Y	1	1.2					16	1.5
88	1.2 D + 1.5 LL Maint (3)	Yes	Y	1	1.2					17	1.5
89	1.2 D + 1.5 LL Maint (4)	Yes	Y	1	1.2					18	1.5
90	1.2 D + 1.5 LL Maint (5)	Yes	Y	1	1.2					19	1.5
91	1.2 D + 1.5 LL Maint (6)	Yes	Y	1	1.2					20	1.5
92	1.2 D + 1.5 LL Maint (7)	Yes	Y	1	1.2					21	1.5
93	1.2 D + 1.5 LL Maint (8)	Yes	Y	1	1.2					22	1.5
94	1.2 D + 1.5 LL Maint (9)	Yes	Y	1	1.2					23	1.5
95	1.2 D + 1.5 LL Maint (10)	Yes	Y	1	1.2					24	1.5
96	1.2 D + 1.5 LL Maint (11)	Yes	Y	1	1.2					25	1.5
97	1.2 D + 1.5 LL Maint (12)	Yes	Y	1	1.2					26	1.5
98	1.2 D + 1.5 LL Maint (13)	Yes	Y	1	1.2					27	1.5
99	1.2 D + 1.5 LL Maint (14)	Yes	Y	1	1.2					28	1.5
100	1.2 D + 1.5 LL Maint (15)	Yes	Y	1	1.2					29	1.5

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	Y	-0.032	%15
2	59	Y	-0.032	%85
3	59	Y	-0.075	%50
4	59	Y	-0.064	%20
5	59	Y	0	0
6	79	Y	-0.032	%15
7	79	Y	-0.032	%85
8	79	Y	-0.075	%50
9	79	Y	-0.064	%20
10	79	Y	0	0
11	69	Y	-0.032	%15
12	69	Y	-0.032	%85
13	69	Y	-0.075	%50
14	69	Y	-0.064	%20
15	69	Y	0	0
16	107	Y	-0.022	%50
17	107	Y	0	0
18	107	Y	0	0
19	107	Y	0	0
20	107	Y	0	0

Member Point Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	Z	-0.199	%15
2	59	Z	-0.199	%85
3	59	Z	-0.088	%50
4	59	Z	-0.088	%20
5	59	Z	0	0
6	79	Z	-0.199	%15
7	79	Z	-0.199	%85
8	79	Z	-0.088	%50
9	79	Z	-0.088	%20
10	79	Z	0	0
11	69	Z	-0.199	%15
12	69	Z	-0.199	%85
13	69	Z	-0.088	%50
14	69	Z	-0.088	%20
15	69	Z	0	0
16	107	Z	-0.09	%50
17	107	Z	0	0
18	107	Z	0	0
19	107	Z	0	0
20	107	Z	0	0

Member Point Loads (BLC 3 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	X	-0.08	%15
2	59	X	-0.08	%85
3	59	X	-0.053	%50
4	59	X	-0.046	%20

Member Point Loads (BLC 3 : 90 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
5	59	X	0	0
6	79	X	-0.08	%15
7	79	X	-0.08	%85
8	79	X	-0.053	%50
9	79	X	-0.046	%20
10	79	X	0	0
11	69	X	-0.08	%15
12	69	X	-0.08	%85
13	69	X	-0.053	%50
14	69	X	-0.046	%20
15	69	X	0	0
16	107	X	-0.05	%50
17	107	X	0	0
18	107	X	0	0
19	107	X	0	0
20	107	X	0	0

Member Point Loads (BLC 4 : 0 Wind - Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	Z	-0.037	%15
2	59	Z	-0.037	%85
3	59	Z	-0.015	%50
4	59	Z	-0.015	%20
5	59	Z	0	0
6	79	Z	-0.037	%15
7	79	Z	-0.037	%85
8	79	Z	-0.015	%50
9	79	Z	-0.015	%20
10	79	Z	0	0
11	69	Z	-0.037	%15
12	69	Z	-0.037	%85
13	69	Z	-0.015	%50
14	69	Z	-0.015	%20
15	69	Z	0	0
16	107	Z	-0.015	%50
17	107	Z	0	0
18	107	Z	0	0
19	107	Z	0	0
20	107	Z	0	0

Member Point Loads (BLC 5 : 90 Wind - Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	X	-0.017	%15
2	59	X	-0.017	%85
3	59	X	-0.009	%50
4	59	X	-0.008	%20
5	59	X	0	0
6	79	X	-0.017	%15
7	79	X	-0.017	%85
8	79	X	-0.009	%50

Member Point Loads (BLC 5 : 90 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
9	79	X	-0.008	%20
10	79	X	0	0
11	69	X	-0.017	%15
12	69	X	-0.017	%85
13	69	X	-0.009	%50
14	69	X	-0.008	%20
15	69	X	0	0
16	107	X	-0.008	%50
17	107	X	0	0
18	107	X	0	0
19	107	X	0	0
20	107	X	0	0

Member Point Loads (BLC 6 : 0 Wind - Service)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	Z	-0.012	%15
2	59	Z	-0.012	%85
3	59	Z	-0.005	%50
4	59	Z	-0.005	%20
5	59	Z	0	0
6	79	Z	-0.012	%15
7	79	Z	-0.012	%85
8	79	Z	-0.005	%50
9	79	Z	-0.005	%20
10	79	Z	0	0
11	69	Z	-0.012	%15
12	69	Z	-0.012	%85
13	69	Z	-0.005	%50
14	69	Z	-0.005	%20
15	69	Z	0	0
16	107	Z	-0.005	%50
17	107	Z	0	0
18	107	Z	0	0
19	107	Z	0	0
20	107	Z	0	0

Member Point Loads (BLC 7 : 90 Wind - Service)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	X	-0.005	%15
2	59	X	-0.005	%85
3	59	X	-0.003	%50
4	59	X	-0.003	%20
5	59	X	0	0
6	79	X	-0.005	%15
7	79	X	-0.005	%85
8	79	X	-0.003	%50
9	79	X	-0.003	%20
10	79	X	0	0
11	69	X	-0.005	%15
12	69	X	-0.005	%85

Member Point Loads (BLC 7 : 90 Wind - Service) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
13	69	X	-0.003	%50
14	69	X	-0.003	%20
15	69	X	0	0
16	107	X	-0.003	%50
17	107	X	0	0
18	107	X	0	0
19	107	X	0	0
20	107	X	0	0

Member Point Loads (BLC 8 : Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	Y	-0.118	%15
2	59	Y	-0.118	%85
3	59	Y	-0.035	%50
4	59	Y	-0.034	%20
5	59	Y	0	0
6	79	Y	-0.118	%15
7	79	Y	-0.118	%85
8	79	Y	-0.035	%50
9	79	Y	-0.034	%20
10	79	Y	0	0
11	69	Y	-0.118	%15
12	69	Y	-0.118	%85
13	69	Y	-0.035	%50
14	69	Y	-0.034	%20
15	69	Y	0	0
16	107	Y	-0.035	%50
17	107	Y	0	0
18	107	Y	0	0
19	107	Y	0	0
20	107	Y	0	0

Member Point Loads (BLC 9 : 0 Seismic)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	Z	-0.015	%15
2	59	Z	-0.015	%85
3	59	Z	-0.018	%50
4	59	Z	-0.015	%20
5	59	Z	0	0
6	79	Z	-0.015	%15
7	79	Z	-0.015	%85
8	79	Z	-0.018	%50
9	79	Z	-0.015	%20
10	79	Z	0	0
11	69	Z	-0.015	%15
12	69	Z	-0.015	%85
13	69	Z	-0.018	%50
14	69	Z	-0.015	%20
15	69	Z	0	0
16	107	Z	-0.005	%50

Member Point Loads (BLC 9 : 0 Seismic) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
17	107	Z	0	0
18	107	Z	0	0
19	107	Z	0	0
20	107	Z	0	0

Member Point Loads (BLC 10 : 90 Seismic)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	59	X	-0.015	%15
2	59	X	-0.015	%85
3	59	X	-0.018	%50
4	59	X	-0.015	%20
5	59	X	0	0
6	79	X	-0.015	%15
7	79	X	-0.015	%85
8	79	X	-0.018	%50
9	79	X	-0.015	%20
10	79	X	0	0
11	69	X	-0.015	%15
12	69	X	-0.015	%85
13	69	X	-0.018	%50
14	69	X	-0.015	%20
15	69	X	0	0
16	107	X	-0.005	%50
17	107	X	0	0
18	107	X	0	0
19	107	X	0	0
20	107	X	0	0

Member Point Loads (BLC 15 : Maint LL 1)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	56	Y	-0.25	%5

Member Point Loads (BLC 16 : Maint LL 2)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	5	Y	-0.25	%5

Member Point Loads (BLC 17 : Maint LL 3)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	66	Y	-0.25	%5

Member Point Loads (BLC 18 : Maint LL 4)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	30	Y	-0.25	%5

Member Point Loads (BLC 19 : Maint LL 5)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	76	Y	-0.25	%5

Member Point Loads (BLC 20 : Maint LL 6)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	43	Y	-0.25	%5

Member Point Loads (BLC 21 : Maint LL 7)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	56	Y	-0.25	%95

Member Point Loads (BLC 22 : Maint LL 8)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	5	Y	-0.25	%95

Member Point Loads (BLC 23 : Maint LL 9)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	66	Y	-0.25	%95

Member Point Loads (BLC 24 : Maint LL 10)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	30	Y	-0.25	%95

Member Point Loads (BLC 25 : Maint LL 11)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	76	Y	-0.25	%95

Member Point Loads (BLC 26 : Maint LL 12)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	43	Y	-0.25	%95

Member Point Loads (BLC 27 : Maint LL 13)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	8	Y	-0.25	%5

Member Point Loads (BLC 28 : Maint LL 14)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	17	Y	-0.25	%5

Member Point Loads (BLC 29 : Maint LL 15)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	2	Y	-0.25	%5

Member Distributed Loads (BLC 2 : 0 Wind - No Ice)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.019	-0.019	0	%100
2	2	Z	-0.022	-0.022	0	%100
3	3	Z	-0.022	-0.022	0	%100
4	4	Z	-0.022	-0.022	0	%100
5	5	Z	-0.015	-0.015	0	%100
6	6	Z	-0.02	-0.02	0	%100
7	7	Z	-0.02	-0.02	0	%100

Member Distributed Loads (BLC 2 : 0 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
7	7	Z	-0.02	-0.02	0	%100
8	8	Z	-0.022	-0.022	0	%100
9	9	Z	-0.022	-0.022	0	%100
10	10	Z	-0.022	-0.022	0	%100
11	11	Z	-0.027	-0.027	0	%100
12	12	Z	-0.027	-0.027	0	%100
13	13	Z	-0.02	-0.02	0	%100
14	14	Z	-0.02	-0.02	0	%100
15	15	Z	-0.027	-0.027	0	%100
16	16	Z	-0.027	-0.027	0	%100
17	17	Z	-0.022	-0.022	0	%100
18	18	Z	-0.022	-0.022	0	%100
19	19	Z	-0.022	-0.022	0	%100
20	20	Z	-0.027	-0.027	0	%100
21	21	Z	-0.027	-0.027	0	%100
22	22	Z	-0.02	-0.02	0	%100
23	23	Z	-0.02	-0.02	0	%100
24	24	Z	-0.027	-0.027	0	%100
25	25	Z	-0.027	-0.027	0	%100
26	30	Z	-0.015	-0.015	0	%100
27	31	Z	-0.027	-0.027	0	%100
28	32	Z	-0.027	-0.027	0	%100
29	33	Z	-0.027	-0.027	0	%100
30	34	Z	-0.027	-0.027	0	%100
31	35	Z	-0.027	-0.027	0	%100
32	36	Z	-0.027	-0.027	0	%100
33	37	Z	-0.027	-0.027	0	%100
34	38	Z	-0.027	-0.027	0	%100
35	43	Z	-0.015	-0.015	0	%100
36	44	Z	-0.027	-0.027	0	%100
37	45	Z	-0.027	-0.027	0	%100
38	46	Z	-0.027	-0.027	0	%100
39	47	Z	-0.027	-0.027	0	%100
40	48	Z	-0.027	-0.027	0	%100
41	49	Z	-0.027	-0.027	0	%100
42	50	Z	-0.027	-0.027	0	%100
43	51	Z	-0.027	-0.027	0	%100
44	56	Z	-0.013	-0.013	0	%100
45	59	Z	-0.011	-0.011	0	%100
46	62	Z	-0.011	-0.011	0	%100
47	65	Z	-0.011	-0.011	0	%100
48	66	Z	-0.013	-0.013	0	%100
49	69	Z	-0.011	-0.011	0	%100
50	72	Z	-0.011	-0.011	0	%100
51	75	Z	-0.011	-0.011	0	%100
52	76	Z	-0.013	-0.013	0	%100
53	79	Z	-0.011	-0.011	0	%100
54	82	Z	-0.011	-0.011	0	%100
55	85	Z	-0.011	-0.011	0	%100
56	86	Z	-0.027	-0.027	0	%100
57	87	Z	-0.027	-0.027	0	%100
58	88	Z	-0.027	-0.027	0	%100

Member Distributed Loads (BLC 2 : 0 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
58	88	Z	-0.027	-0.027	0	%100
59	89	Z	-0.027	-0.027	0	%100
60	92	Z	-0.027	-0.027	0	%100
61	93	Z	-0.027	-0.027	0	%100
62	94	Z	-0.027	-0.027	0	%100
63	95	Z	-0.027	-0.027	0	%100
64	98	Z	-0.027	-0.027	0	%100
65	99	Z	-0.027	-0.027	0	%100
66	100	Z	-0.027	-0.027	0	%100
67	101	Z	-0.027	-0.027	0	%100
68	104	Z	-0.017	-0.017	0	%100
69	105	Z	-0.017	-0.017	0	%100
70	106	Z	-0.017	-0.017	0	%100
71	107	Z	-0.019	-0.019	0	%100
72	108	Z	-0.019	-0.019	0	%100

Member Distributed Loads (BLC 3 : 90 Wind - No Ice)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.019	-0.019	0	%100
2	2	X	-0.022	-0.022	0	%100
3	3	X	-0.022	-0.022	0	%100
4	4	X	-0.022	-0.022	0	%100
5	5	X	-0.015	-0.015	0	%100
6	6	X	-0.02	-0.02	0	%100
7	7	X	-0.02	-0.02	0	%100
8	8	X	-0.022	-0.022	0	%100
9	9	X	-0.022	-0.022	0	%100
10	10	X	-0.022	-0.022	0	%100
11	11	X	-0.027	-0.027	0	%100
12	12	X	-0.027	-0.027	0	%100
13	13	X	-0.02	-0.02	0	%100
14	14	X	-0.02	-0.02	0	%100
15	15	X	-0.027	-0.027	0	%100
16	16	X	-0.027	-0.027	0	%100
17	17	X	-0.022	-0.022	0	%100
18	18	X	-0.022	-0.022	0	%100
19	19	X	-0.022	-0.022	0	%100
20	20	X	-0.027	-0.027	0	%100
21	21	X	-0.027	-0.027	0	%100
22	22	X	-0.02	-0.02	0	%100
23	23	X	-0.02	-0.02	0	%100
24	24	X	-0.027	-0.027	0	%100
25	25	X	-0.027	-0.027	0	%100
26	30	X	-0.015	-0.015	0	%100
27	31	X	-0.027	-0.027	0	%100
28	32	X	-0.027	-0.027	0	%100
29	33	X	-0.027	-0.027	0	%100
30	34	X	-0.027	-0.027	0	%100
31	35	X	-0.027	-0.027	0	%100
32	36	X	-0.027	-0.027	0	%100
33	37	X	-0.027	-0.027	0	%100

Member Distributed Loads (BLC 3 : 90 Wind - No Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
34	38	X	-0.027	-0.027	0	%100
35	43	X	-0.015	-0.015	0	%100
36	44	X	-0.027	-0.027	0	%100
37	45	X	-0.027	-0.027	0	%100
38	46	X	-0.027	-0.027	0	%100
39	47	X	-0.027	-0.027	0	%100
40	48	X	-0.027	-0.027	0	%100
41	49	X	-0.027	-0.027	0	%100
42	50	X	-0.027	-0.027	0	%100
43	51	X	-0.027	-0.027	0	%100
44	56	X	-0.013	-0.013	0	%100
45	59	X	-0.011	-0.011	0	%100
46	62	X	-0.011	-0.011	0	%100
47	65	X	-0.011	-0.011	0	%100
48	66	X	-0.013	-0.013	0	%100
49	69	X	-0.011	-0.011	0	%100
50	72	X	-0.011	-0.011	0	%100
51	75	X	-0.011	-0.011	0	%100
52	76	X	-0.013	-0.013	0	%100
53	79	X	-0.011	-0.011	0	%100
54	82	X	-0.011	-0.011	0	%100
55	85	X	-0.011	-0.011	0	%100
56	86	X	-0.027	-0.027	0	%100
57	87	X	-0.027	-0.027	0	%100
58	88	X	-0.027	-0.027	0	%100
59	89	X	-0.027	-0.027	0	%100
60	92	X	-0.027	-0.027	0	%100
61	93	X	-0.027	-0.027	0	%100
62	94	X	-0.027	-0.027	0	%100
63	95	X	-0.027	-0.027	0	%100
64	98	X	-0.027	-0.027	0	%100
65	99	X	-0.027	-0.027	0	%100
66	100	X	-0.027	-0.027	0	%100
67	101	X	-0.027	-0.027	0	%100
68	104	X	-0.017	-0.017	0	%100
69	105	X	-0.017	-0.017	0	%100
70	106	X	-0.017	-0.017	0	%100
71	107	X	-0.019	-0.019	0	%100
72	108	X	-0.019	-0.019	0	%100

Member Distributed Loads (BLC 4 : 0 Wind - Ice)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.006	-0.006	0	%100
2	2	Z	-0.006	-0.006	0	%100
3	3	Z	-0.006	-0.006	0	%100
4	4	Z	-0.006	-0.006	0	%100
5	5	Z	-0.002	-0.002	0	%100
6	6	Z	-0.006	-0.006	0	%100
7	7	Z	-0.006	-0.006	0	%100
8	8	Z	-0.006	-0.006	0	%100
9	9	Z	-0.006	-0.006	0	%100

Member Distributed Loads (BLC 4 : 0 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
10	10	Z	-0.006	-0.006	0	%100
11	11	Z	-0.009	-0.009	0	%100
12	12	Z	-0.009	-0.009	0	%100
13	13	Z	-0.006	-0.006	0	%100
14	14	Z	-0.006	-0.006	0	%100
15	15	Z	-0.011	-0.011	0	%100
16	16	Z	-0.012	-0.012	0	%100
17	17	Z	-0.006	-0.006	0	%100
18	18	Z	-0.006	-0.006	0	%100
19	19	Z	-0.006	-0.006	0	%100
20	20	Z	-0.009	-0.009	0	%100
21	21	Z	-0.009	-0.009	0	%100
22	22	Z	-0.006	-0.006	0	%100
23	23	Z	-0.006	-0.006	0	%100
24	24	Z	-0.011	-0.011	0	%100
25	25	Z	-0.012	-0.012	0	%100
26	30	Z	-0.002	-0.002	0	%100
27	31	Z	-0.009	-0.009	0	%100
28	32	Z	-0.009	-0.009	0	%100
29	33	Z	-0.011	-0.011	0	%100
30	34	Z	-0.012	-0.012	0	%100
31	35	Z	-0.009	-0.009	0	%100
32	36	Z	-0.009	-0.009	0	%100
33	37	Z	-0.011	-0.011	0	%100
34	38	Z	-0.012	-0.012	0	%100
35	43	Z	-0.002	-0.002	0	%100
36	44	Z	-0.009	-0.009	0	%100
37	45	Z	-0.009	-0.009	0	%100
38	46	Z	-0.011	-0.011	0	%100
39	47	Z	-0.012	-0.012	0	%100
40	48	Z	-0.009	-0.009	0	%100
41	49	Z	-0.009	-0.009	0	%100
42	50	Z	-0.011	-0.011	0	%100
43	51	Z	-0.012	-0.012	0	%100
44	56	Z	-0.002	-0.002	0	%100
45	59	Z	-0.002	-0.002	0	%100
46	62	Z	-0.002	-0.002	0	%100
47	65	Z	-0.002	-0.002	0	%100
48	66	Z	-0.002	-0.002	0	%100
49	69	Z	-0.002	-0.002	0	%100
50	72	Z	-0.002	-0.002	0	%100
51	75	Z	-0.002	-0.002	0	%100
52	76	Z	-0.002	-0.002	0	%100
53	79	Z	-0.002	-0.002	0	%100
54	82	Z	-0.002	-0.002	0	%100
55	85	Z	-0.002	-0.002	0	%100
56	86	Z	-0.009	-0.009	0	%100
57	87	Z	-0.011	-0.011	0	%100
58	88	Z	-0.009	-0.009	0	%100
59	89	Z	-0.011	-0.011	0	%100
60	92	Z	-0.009	-0.009	0	%100
61	93	Z	-0.011	-0.011	0	%100

Member Distributed Loads (BLC 4 : 0 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
61	93	Z	-0.011	-0.011	0	%100
62	94	Z	-0.009	-0.009	0	%100
63	95	Z	-0.011	-0.011	0	%100
64	98	Z	-0.009	-0.009	0	%100
65	99	Z	-0.011	-0.011	0	%100
66	100	Z	-0.009	-0.009	0	%100
67	101	Z	-0.011	-0.011	0	%100
68	104	Z	-0.006	-0.006	0	%100
69	105	Z	-0.006	-0.006	0	%100
70	106	Z	-0.006	-0.006	0	%100
71	107	Z	-0.006	-0.006	0	%100
72	108	Z	-0.006	-0.006	0	%100

Member Distributed Loads (BLC 5 : 90 Wind - Ice)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.006	-0.006	0	%100
2	2	X	-0.006	-0.006	0	%100
3	3	X	-0.006	-0.006	0	%100
4	4	X	-0.006	-0.006	0	%100
5	5	X	-0.002	-0.002	0	%100
6	6	X	-0.006	-0.006	0	%100
7	7	X	-0.006	-0.006	0	%100
8	8	X	-0.006	-0.006	0	%100
9	9	X	-0.006	-0.006	0	%100
10	10	X	-0.006	-0.006	0	%100
11	11	X	-0.009	-0.009	0	%100
12	12	X	-0.009	-0.009	0	%100
13	13	X	-0.006	-0.006	0	%100
14	14	X	-0.006	-0.006	0	%100
15	15	X	-0.011	-0.011	0	%100
16	16	X	-0.012	-0.012	0	%100
17	17	X	-0.006	-0.006	0	%100
18	18	X	-0.006	-0.006	0	%100
19	19	X	-0.006	-0.006	0	%100
20	20	X	-0.009	-0.009	0	%100
21	21	X	-0.009	-0.009	0	%100
22	22	X	-0.006	-0.006	0	%100
23	23	X	-0.006	-0.006	0	%100
24	24	X	-0.011	-0.011	0	%100
25	25	X	-0.012	-0.012	0	%100
26	30	X	-0.002	-0.002	0	%100
27	31	X	-0.009	-0.009	0	%100
28	32	X	-0.009	-0.009	0	%100
29	33	X	-0.011	-0.011	0	%100
30	34	X	-0.012	-0.012	0	%100
31	35	X	-0.009	-0.009	0	%100
32	36	X	-0.009	-0.009	0	%100
33	37	X	-0.011	-0.011	0	%100
34	38	X	-0.012	-0.012	0	%100
35	43	X	-0.002	-0.002	0	%100
36	44	X	-0.009	-0.009	0	%100

Member Distributed Loads (BLC 5 : 90 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
37	45	X	-0.009	-0.009	0	%100
38	46	X	-0.011	-0.011	0	%100
39	47	X	-0.012	-0.012	0	%100
40	48	X	-0.009	-0.009	0	%100
41	49	X	-0.009	-0.009	0	%100
42	50	X	-0.011	-0.011	0	%100
43	51	X	-0.012	-0.012	0	%100
44	56	X	-0.002	-0.002	0	%100
45	59	X	-0.002	-0.002	0	%100
46	62	X	-0.002	-0.002	0	%100
47	65	X	-0.002	-0.002	0	%100
48	66	X	-0.002	-0.002	0	%100
49	69	X	-0.002	-0.002	0	%100
50	72	X	-0.002	-0.002	0	%100
51	75	X	-0.002	-0.002	0	%100
52	76	X	-0.002	-0.002	0	%100
53	79	X	-0.002	-0.002	0	%100
54	82	X	-0.002	-0.002	0	%100
55	85	X	-0.002	-0.002	0	%100
56	86	X	-0.009	-0.009	0	%100
57	87	X	-0.011	-0.011	0	%100
58	88	X	-0.009	-0.009	0	%100
59	89	X	-0.011	-0.011	0	%100
60	92	X	-0.009	-0.009	0	%100
61	93	X	-0.011	-0.011	0	%100
62	94	X	-0.009	-0.009	0	%100
63	95	X	-0.011	-0.011	0	%100
64	98	X	-0.009	-0.009	0	%100
65	99	X	-0.011	-0.011	0	%100
66	100	X	-0.009	-0.009	0	%100
67	101	X	-0.011	-0.011	0	%100
68	104	X	-0.006	-0.006	0	%100
69	105	X	-0.006	-0.006	0	%100
70	106	X	-0.006	-0.006	0	%100
71	107	X	-0.006	-0.006	0	%100
72	108	X	-0.006	-0.006	0	%100

Member Distributed Loads (BLC 6 : 0 Wind - Service)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.001	-0.001	0	%100
2	2	Z	-0.001	-0.001	0	%100
3	3	Z	-0.001	-0.001	0	%100
4	4	Z	-0.001	-0.001	0	%100
5	5	Z	-0.0005	-0.0005	0	%100
6	6	Z	-0.001	-0.001	0	%100
7	7	Z	-0.001	-0.001	0	%100
8	8	Z	-0.001	-0.001	0	%100
9	9	Z	-0.001	-0.001	0	%100
10	10	Z	-0.001	-0.001	0	%100
11	11	Z	-0.002	-0.002	0	%100
12	12	Z	-0.002	-0.002	0	%100

Member Distributed Loads (BLC 6 : 0 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
13	13	Z	-0.001	-0.001	0	%100
14	14	Z	-0.001	-0.001	0	%100
15	15	Z	-0.002	-0.002	0	%100
16	16	Z	-0.002	-0.002	0	%100
17	17	Z	-0.001	-0.001	0	%100
18	18	Z	-0.001	-0.001	0	%100
19	19	Z	-0.001	-0.001	0	%100
20	20	Z	-0.002	-0.002	0	%100
21	21	Z	-0.002	-0.002	0	%100
22	22	Z	-0.001	-0.001	0	%100
23	23	Z	-0.001	-0.001	0	%100
24	24	Z	-0.002	-0.002	0	%100
25	25	Z	-0.002	-0.002	0	%100
26	30	Z	-0.0005	-0.0005	0	%100
27	31	Z	-0.002	-0.002	0	%100
28	32	Z	-0.002	-0.002	0	%100
29	33	Z	-0.002	-0.002	0	%100
30	34	Z	-0.002	-0.002	0	%100
31	35	Z	-0.002	-0.002	0	%100
32	36	Z	-0.002	-0.002	0	%100
33	37	Z	-0.002	-0.002	0	%100
34	38	Z	-0.002	-0.002	0	%100
35	43	Z	-0.0005	-0.0005	0	%100
36	44	Z	-0.002	-0.002	0	%100
37	45	Z	-0.002	-0.002	0	%100
38	46	Z	-0.002	-0.002	0	%100
39	47	Z	-0.002	-0.002	0	%100
40	48	Z	-0.002	-0.002	0	%100
41	49	Z	-0.002	-0.002	0	%100
42	50	Z	-0.002	-0.002	0	%100
43	51	Z	-0.002	-0.002	0	%100
44	56	Z	-0.0004	-0.0004	0	%100
45	59	Z	-0.0003	-0.0003	0	%100
46	62	Z	-0.0003	-0.0003	0	%100
47	65	Z	-0.0003	-0.0003	0	%100
48	66	Z	-0.0004	-0.0004	0	%100
49	69	Z	-0.0003	-0.0003	0	%100
50	72	Z	-0.0003	-0.0003	0	%100
51	75	Z	-0.0003	-0.0003	0	%100
52	76	Z	-0.0004	-0.0004	0	%100
53	79	Z	-0.0003	-0.0003	0	%100
54	82	Z	-0.0003	-0.0003	0	%100
55	85	Z	-0.0003	-0.0003	0	%100
56	86	Z	-0.002	-0.002	0	%100
57	87	Z	-0.002	-0.002	0	%100
58	88	Z	-0.002	-0.002	0	%100
59	89	Z	-0.002	-0.002	0	%100
60	92	Z	-0.002	-0.002	0	%100
61	93	Z	-0.002	-0.002	0	%100
62	94	Z	-0.002	-0.002	0	%100
63	95	Z	-0.002	-0.002	0	%100
64	98	Z	-0.002	-0.002	0	%100

Member Distributed Loads (BLC 6 : 0 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
64	98	Z	-0.002	-0.002	0	%100
65	99	Z	-0.002	-0.002	0	%100
66	100	Z	-0.002	-0.002	0	%100
67	101	Z	-0.002	-0.002	0	%100
68	104	Z	-0.001	-0.001	0	%100
69	105	Z	-0.001	-0.001	0	%100
70	106	Z	-0.001	-0.001	0	%100
71	107	Z	-0.001	-0.001	0	%100
72	108	Z	-0.001	-0.001	0	%100

Member Distributed Loads (BLC 7 : 90 Wind - Service)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.001	-0.001	0	%100
2	2	X	-0.001	-0.001	0	%100
3	3	X	-0.001	-0.001	0	%100
4	4	X	-0.001	-0.001	0	%100
5	5	X	-0.0005	-0.0005	0	%100
6	6	X	-0.001	-0.001	0	%100
7	7	X	-0.001	-0.001	0	%100
8	8	X	-0.001	-0.001	0	%100
9	9	X	-0.001	-0.001	0	%100
10	10	X	-0.001	-0.001	0	%100
11	11	X	-0.002	-0.002	0	%100
12	12	X	-0.002	-0.002	0	%100
13	13	X	-0.001	-0.001	0	%100
14	14	X	-0.001	-0.001	0	%100
15	15	X	-0.002	-0.002	0	%100
16	16	X	-0.002	-0.002	0	%100
17	17	X	-0.001	-0.001	0	%100
18	18	X	-0.001	-0.001	0	%100
19	19	X	-0.001	-0.001	0	%100
20	20	X	-0.002	-0.002	0	%100
21	21	X	-0.002	-0.002	0	%100
22	22	X	-0.001	-0.001	0	%100
23	23	X	-0.001	-0.001	0	%100
24	24	X	-0.002	-0.002	0	%100
25	25	X	-0.002	-0.002	0	%100
26	30	X	-0.0005	-0.0005	0	%100
27	31	X	-0.002	-0.002	0	%100
28	32	X	-0.002	-0.002	0	%100
29	33	X	-0.002	-0.002	0	%100
30	34	X	-0.002	-0.002	0	%100
31	35	X	-0.002	-0.002	0	%100
32	36	X	-0.002	-0.002	0	%100
33	37	X	-0.002	-0.002	0	%100
34	38	X	-0.002	-0.002	0	%100
35	43	X	-0.0005	-0.0005	0	%100
36	44	X	-0.002	-0.002	0	%100
37	45	X	-0.002	-0.002	0	%100
38	46	X	-0.002	-0.002	0	%100
39	47	X	-0.002	-0.002	0	%100

Member Distributed Loads (BLC 7 : 90 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
40	48	X	-0.002	-0.002	0	%100
41	49	X	-0.002	-0.002	0	%100
42	50	X	-0.002	-0.002	0	%100
43	51	X	-0.002	-0.002	0	%100
44	56	X	-0.0004	-0.0004	0	%100
45	59	X	-0.0003	-0.0003	0	%100
46	62	X	-0.0003	-0.0003	0	%100
47	65	X	-0.0003	-0.0003	0	%100
48	66	X	-0.0004	-0.0004	0	%100
49	69	X	-0.0003	-0.0003	0	%100
50	72	X	-0.0003	-0.0003	0	%100
51	75	X	-0.0003	-0.0003	0	%100
52	76	X	-0.0004	-0.0004	0	%100
53	79	X	-0.0003	-0.0003	0	%100
54	82	X	-0.0003	-0.0003	0	%100
55	85	X	-0.0003	-0.0003	0	%100
56	86	X	-0.002	-0.002	0	%100
57	87	X	-0.002	-0.002	0	%100
58	88	X	-0.002	-0.002	0	%100
59	89	X	-0.002	-0.002	0	%100
60	92	X	-0.002	-0.002	0	%100
61	93	X	-0.002	-0.002	0	%100
62	94	X	-0.002	-0.002	0	%100
63	95	X	-0.002	-0.002	0	%100
64	98	X	-0.002	-0.002	0	%100
65	99	X	-0.002	-0.002	0	%100
66	100	X	-0.002	-0.002	0	%100
67	101	X	-0.002	-0.002	0	%100
68	104	X	-0.001	-0.001	0	%100
69	105	X	-0.001	-0.001	0	%100
70	106	X	-0.001	-0.001	0	%100
71	107	X	-0.001	-0.001	0	%100
72	108	X	-0.001	-0.001	0	%100

Member Distributed Loads (BLC 8 : Ice)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Y	-0.01	-0.01	0	%100
2	2	Y	-0.011	-0.011	0	%100
3	3	Y	-0.01	-0.01	0	%100
4	4	Y	-0.01	-0.01	0	%100
5	5	Y	-0.007	-0.007	0	%100
6	6	Y	-0.01	-0.01	0	%100
7	7	Y	-0.01	-0.01	0	%100
8	8	Y	-0.011	-0.011	0	%100
9	9	Y	-0.01	-0.01	0	%100
10	10	Y	-0.01	-0.01	0	%100
11	11	Y	-0.01	-0.01	0	%100
12	12	Y	-0.01	-0.01	0	%100
13	13	Y	-0.01	-0.01	0	%100
14	14	Y	-0.01	-0.01	0	%100
15	15	Y	-0.01	-0.01	0	%100

Member Distributed Loads (BLC 8 : Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
16	16	Y	-0.01	-0.01	0	%100
17	17	Y	-0.011	-0.011	0	%100
18	18	Y	-0.01	-0.01	0	%100
19	19	Y	-0.01	-0.01	0	%100
20	20	Y	-0.01	-0.01	0	%100
21	21	Y	-0.01	-0.01	0	%100
22	22	Y	-0.01	-0.01	0	%100
23	23	Y	-0.01	-0.01	0	%100
24	24	Y	-0.01	-0.01	0	%100
25	25	Y	-0.01	-0.01	0	%100
26	30	Y	-0.007	-0.007	0	%100
27	31	Y	-0.01	-0.01	0	%100
28	32	Y	-0.01	-0.01	0	%100
29	33	Y	-0.01	-0.01	0	%100
30	34	Y	-0.01	-0.01	0	%100
31	35	Y	-0.01	-0.01	0	%100
32	36	Y	-0.01	-0.01	0	%100
33	37	Y	-0.01	-0.01	0	%100
34	38	Y	-0.01	-0.01	0	%100
35	43	Y	-0.007	-0.007	0	%100
36	44	Y	-0.01	-0.01	0	%100
37	45	Y	-0.01	-0.01	0	%100
38	46	Y	-0.01	-0.01	0	%100
39	47	Y	-0.01	-0.01	0	%100
40	48	Y	-0.01	-0.01	0	%100
41	49	Y	-0.01	-0.01	0	%100
42	50	Y	-0.01	-0.01	0	%100
43	51	Y	-0.01	-0.01	0	%100
44	56	Y	-0.006	-0.006	0	%100
45	59	Y	-0.005	-0.005	0	%100
46	62	Y	-0.005	-0.005	0	%100
47	65	Y	-0.005	-0.005	0	%100
48	66	Y	-0.006	-0.006	0	%100
49	69	Y	-0.005	-0.005	0	%100
50	72	Y	-0.005	-0.005	0	%100
51	75	Y	-0.005	-0.005	0	%100
52	76	Y	-0.006	-0.006	0	%100
53	79	Y	-0.005	-0.005	0	%100
54	82	Y	-0.005	-0.005	0	%100
55	85	Y	-0.005	-0.005	0	%100
56	86	Y	-0.01	-0.01	0	%100
57	87	Y	-0.01	-0.01	0	%100
58	88	Y	-0.01	-0.01	0	%100
59	89	Y	-0.01	-0.01	0	%100
60	92	Y	-0.01	-0.01	0	%100
61	93	Y	-0.01	-0.01	0	%100
62	94	Y	-0.01	-0.01	0	%100
63	95	Y	-0.01	-0.01	0	%100
64	98	Y	-0.01	-0.01	0	%100
65	99	Y	-0.01	-0.01	0	%100
66	100	Y	-0.01	-0.01	0	%100
67	101	Y	-0.01	-0.01	0	%100

Member Distributed Loads (BLC 8 : Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
67	101	Y	-0.01	-0.01	0	%100
68	104	Y	-0.007	-0.007	0	%100
69	105	Y	-0.007	-0.007	0	%100
70	106	Y	-0.007	-0.007	0	%100
71	107	Y	-0.01	-0.01	0	%100
72	108	Y	-0.01	-0.01	0	%100

Member Distributed Loads (BLC 9 : 0 Seismic)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.003	-0.003	0	%100
2	2	Z	-0.003	-0.003	0	%100
3	3	Z	-0.003	-0.003	0	%100
4	4	Z	-0.003	-0.003	0	%100
5	5	Z	-0.002	-0.002	0	%100
6	6	Z	-0.003	-0.003	0	%100
7	7	Z	-0.003	-0.003	0	%100
8	8	Z	-0.003	-0.003	0	%100
9	9	Z	-0.003	-0.003	0	%100
10	10	Z	-0.003	-0.003	0	%100
11	11	Z	-0.002	-0.002	0	%100
12	12	Z	-0.002	-0.002	0	%100
13	13	Z	-0.003	-0.003	0	%100
14	14	Z	-0.003	-0.003	0	%100
15	15	Z	-0.002	-0.002	0	%100
16	16	Z	-0.002	-0.002	0	%100
17	17	Z	-0.003	-0.003	0	%100
18	18	Z	-0.003	-0.003	0	%100
19	19	Z	-0.003	-0.003	0	%100
20	20	Z	-0.002	-0.002	0	%100
21	21	Z	-0.002	-0.002	0	%100
22	22	Z	-0.003	-0.003	0	%100
23	23	Z	-0.003	-0.003	0	%100
24	24	Z	-0.002	-0.002	0	%100
25	25	Z	-0.002	-0.002	0	%100
26	30	Z	-0.002	-0.002	0	%100
27	31	Z	-0.002	-0.002	0	%100
28	32	Z	-0.002	-0.002	0	%100
29	33	Z	-0.002	-0.002	0	%100
30	34	Z	-0.002	-0.002	0	%100
31	35	Z	-0.002	-0.002	0	%100
32	36	Z	-0.002	-0.002	0	%100
33	37	Z	-0.002	-0.002	0	%100
34	38	Z	-0.002	-0.002	0	%100
35	43	Z	-0.002	-0.002	0	%100
36	44	Z	-0.002	-0.002	0	%100
37	45	Z	-0.002	-0.002	0	%100
38	46	Z	-0.002	-0.002	0	%100
39	47	Z	-0.002	-0.002	0	%100
40	48	Z	-0.002	-0.002	0	%100
41	49	Z	-0.002	-0.002	0	%100
42	50	Z	-0.002	-0.002	0	%100

Member Distributed Loads (BLC 9 : 0 Seismic) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
43	51	Z	-0.002	-0.002	0	%100
44	56	Z	-0.001	-0.001	0	%100
45	59	Z	-0.0009	-0.0009	0	%100
46	62	Z	-0.0009	-0.0009	0	%100
47	65	Z	-0.0009	-0.0009	0	%100
48	66	Z	-0.001	-0.001	0	%100
49	69	Z	-0.0009	-0.0009	0	%100
50	72	Z	-0.0009	-0.0009	0	%100
51	75	Z	-0.0009	-0.0009	0	%100
52	76	Z	-0.001	-0.001	0	%100
53	79	Z	-0.0009	-0.0009	0	%100
54	82	Z	-0.0009	-0.0009	0	%100
55	85	Z	-0.0009	-0.0009	0	%100
56	86	Z	-0.002	-0.002	0	%100
57	87	Z	-0.002	-0.002	0	%100
58	88	Z	-0.002	-0.002	0	%100
59	89	Z	-0.002	-0.002	0	%100
60	92	Z	-0.002	-0.002	0	%100
61	93	Z	-0.002	-0.002	0	%100
62	94	Z	-0.002	-0.002	0	%100
63	95	Z	-0.002	-0.002	0	%100
64	98	Z	-0.002	-0.002	0	%100
65	99	Z	-0.002	-0.002	0	%100
66	100	Z	-0.002	-0.002	0	%100
67	101	Z	-0.002	-0.002	0	%100
68	104	Z	-0.0007	-0.0007	0	%100
69	105	Z	-0.0007	-0.0007	0	%100
70	106	Z	-0.0007	-0.0007	0	%100
71	107	Z	-0.003	-0.003	0	%100
72	108	Z	-0.003	-0.003	0	%100

Member Distributed Loads (BLC 10 : 90 Seismic)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.003	-0.003	0	%100
2	2	X	-0.003	-0.003	0	%100
3	3	X	-0.003	-0.003	0	%100
4	4	X	-0.003	-0.003	0	%100
5	5	X	-0.002	-0.002	0	%100
6	6	X	-0.003	-0.003	0	%100
7	7	X	-0.003	-0.003	0	%100
8	8	X	-0.003	-0.003	0	%100
9	9	X	-0.003	-0.003	0	%100
10	10	X	-0.003	-0.003	0	%100
11	11	X	-0.002	-0.002	0	%100
12	12	X	-0.002	-0.002	0	%100
13	13	X	-0.003	-0.003	0	%100
14	14	X	-0.003	-0.003	0	%100
15	15	X	-0.002	-0.002	0	%100
16	16	X	-0.002	-0.002	0	%100
17	17	X	-0.003	-0.003	0	%100
18	18	X	-0.003	-0.003	0	%100

Member Distributed Loads (BLC 10 : 90 Seismic) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
19	19	X	-0.003	-0.003	0	%100
20	20	X	-0.002	-0.002	0	%100
21	21	X	-0.002	-0.002	0	%100
22	22	X	-0.003	-0.003	0	%100
23	23	X	-0.003	-0.003	0	%100
24	24	X	-0.002	-0.002	0	%100
25	25	X	-0.002	-0.002	0	%100
26	30	X	-0.002	-0.002	0	%100
27	31	X	-0.002	-0.002	0	%100
28	32	X	-0.002	-0.002	0	%100
29	33	X	-0.002	-0.002	0	%100
30	34	X	-0.002	-0.002	0	%100
31	35	X	-0.002	-0.002	0	%100
32	36	X	-0.002	-0.002	0	%100
33	37	X	-0.002	-0.002	0	%100
34	38	X	-0.002	-0.002	0	%100
35	43	X	-0.002	-0.002	0	%100
36	44	X	-0.002	-0.002	0	%100
37	45	X	-0.002	-0.002	0	%100
38	46	X	-0.002	-0.002	0	%100
39	47	X	-0.002	-0.002	0	%100
40	48	X	-0.002	-0.002	0	%100
41	49	X	-0.002	-0.002	0	%100
42	50	X	-0.002	-0.002	0	%100
43	51	X	-0.002	-0.002	0	%100
44	56	X	-0.001	-0.001	0	%100
45	59	X	-0.0009	-0.0009	0	%100
46	62	X	-0.0009	-0.0009	0	%100
47	65	X	-0.0009	-0.0009	0	%100
48	66	X	-0.001	-0.001	0	%100
49	69	X	-0.0009	-0.0009	0	%100
50	72	X	-0.0009	-0.0009	0	%100
51	75	X	-0.0009	-0.0009	0	%100
52	76	X	-0.001	-0.001	0	%100
53	79	X	-0.0009	-0.0009	0	%100
54	82	X	-0.0009	-0.0009	0	%100
55	85	X	-0.0009	-0.0009	0	%100
56	86	X	-0.002	-0.002	0	%100
57	87	X	-0.002	-0.002	0	%100
58	88	X	-0.002	-0.002	0	%100
59	89	X	-0.002	-0.002	0	%100
60	92	X	-0.002	-0.002	0	%100
61	93	X	-0.002	-0.002	0	%100
62	94	X	-0.002	-0.002	0	%100
63	95	X	-0.002	-0.002	0	%100
64	98	X	-0.002	-0.002	0	%100
65	99	X	-0.002	-0.002	0	%100
66	100	X	-0.002	-0.002	0	%100
67	101	X	-0.002	-0.002	0	%100
68	104	X	-0.0007	-0.0007	0	%100
69	105	X	-0.0007	-0.0007	0	%100
70	106	X	-0.0007	-0.0007	0	%100

Member Distributed Loads (BLC 10 : 90 Seismic) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
70	106	X	-0.0007	-0.0007	0	%100
71	107	X	-0.003	-0.003	0	%100
72	108	X	-0.003	-0.003	0	%100

Member Distributed Loads (BLC 30 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	5	Y	0	-0.001	0	0.8
2	5	Y	-0.001	-0.001	0.8	1.6
3	5	Y	-0.001	0	1.6	2.4
4	8	Y	-0.002	-0.014	0	0.694
5	8	Y	-0.014	-0.015	0.694	1.389
6	8	Y	-0.015	-0.003	1.389	2.083
7	9	Y	-0.001	-0.006	0	0.593
8	9	Y	-0.006	-0.009	0.593	1.185
9	9	Y	-0.009	-0.009	1.185	1.778
10	9	Y	-0.009	-0.006	1.778	2.371
11	9	Y	-0.006	-0.000536	2.371	2.964
12	10	Y	-0.0005405	-0.007	0.188	0.78
13	10	Y	-0.007	-0.009	0.78	1.373
14	10	Y	-0.009	-0.008	1.373	1.966
15	10	Y	-0.008	-0.007	1.966	2.558
16	10	Y	-0.007	-0.0009811	2.558	3.151
17	12	Y	-0.073	-0.023	0	0.104
18	12	Y	-0.023	0.002	0.104	0.208
19	12	Y	0.002	0.003	0.208	0.313
20	12	Y	0.003	0.003	0.313	0.417
21	13	Y	-0.0007206	-0.004	0	0.4
22	13	Y	-0.004	-0.009	0.4	0.8
23	13	Y	-0.009	-0.01	0.8	1.2
24	13	Y	-0.01	-0.006	1.2	1.6
25	13	Y	-0.006	-0.003	1.6	2
26	14	Y	-0.003	-0.006	0.188	0.588
27	14	Y	-0.006	-0.01	0.588	0.988
28	14	Y	-0.01	-0.009	0.988	1.388
29	14	Y	-0.009	-0.004	1.388	1.788
30	14	Y	-0.004	-0.000745	1.788	2.188
31	16	Y	-0.009	-0.009	0	0.216
32	43	Y	0	-0.001	5.6	6.4
33	43	Y	-0.001	-0.001	6.4	7.2
34	43	Y	-0.001	0	7.2	8
35	49	Y	-0.072	-0.023	0	0.104
36	49	Y	-0.023	0.002	0.104	0.208
37	49	Y	0.002	0.003	0.208	0.313
38	49	Y	0.003	0.003	0.313	0.417
39	51	Y	-0.009	-0.009	0	0.216
40	5	Y	0	-0.001	5.6	6.4
41	5	Y	-0.001	-0.001	6.4	7.2
42	5	Y	-0.001	0	7.2	8
43	17	Y	-0.002	-0.014	0	0.694
44	17	Y	-0.014	-0.015	0.694	1.389
45	17	Y	-0.015	-0.003	1.389	2.083

Member Distributed Loads (BLC 30 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
46	18	Y	-0.001	-0.006	0	0.593
47	18	Y	-0.006	-0.009	0.593	1.185
48	18	Y	-0.009	-0.009	1.185	1.778
49	18	Y	-0.009	-0.006	1.778	2.371
50	18	Y	-0.006	-0.0005361	2.371	2.964
51	19	Y	-0.0005405	-0.007	0.188	0.78
52	19	Y	-0.007	-0.009	0.78	1.373
53	19	Y	-0.009	-0.008	1.373	1.966
54	19	Y	-0.008	-0.007	1.966	2.558
55	19	Y	-0.007	-0.0009812	2.558	3.151
56	21	Y	-0.072	-0.023	0	0.104
57	21	Y	-0.023	0.002	0.104	0.208
58	21	Y	0.002	0.003	0.208	0.313
59	21	Y	0.003	0.003	0.313	0.417
60	22	Y	-0.0007239	-0.004	0	0.4
61	22	Y	-0.004	-0.009	0.4	0.8
62	22	Y	-0.009	-0.01	0.8	1.2
63	22	Y	-0.01	-0.006	1.2	1.6
64	22	Y	-0.006	-0.003	1.6	2
65	23	Y	-0.003	-0.006	0.188	0.587
66	23	Y	-0.006	-0.01	0.587	0.987
67	23	Y	-0.01	-0.009	0.987	1.387
68	23	Y	-0.009	-0.004	1.387	1.787
69	23	Y	-0.004	-0.0007447	1.787	2.187
70	25	Y	-0.009	-0.009	0	0.216
71	30	Y	0	-0.001	0	0.8
72	30	Y	-0.001	-0.001	0.8	1.6
73	30	Y	-0.001	0	1.6	2.4
74	32	Y	-0.073	-0.023	0	0.104
75	32	Y	-0.023	0.002	0.104	0.208
76	32	Y	0.002	0.003	0.208	0.313
77	32	Y	0.003	0.003	0.313	0.417
78	34	Y	-0.009	-0.009	0	0.216
79	2	Y	-0.002	-0.014	0	0.694
80	2	Y	-0.014	-0.015	0.694	1.389
81	2	Y	-0.015	-0.003	1.389	2.083
82	3	Y	-0.001	-0.006	0	0.593
83	3	Y	-0.006	-0.009	0.593	1.185
84	3	Y	-0.009	-0.009	1.185	1.778
85	3	Y	-0.009	-0.006	1.778	2.371
86	3	Y	-0.006	-0.0005361	2.371	2.964
87	4	Y	-0.0005405	-0.007	0.188	0.78
88	4	Y	-0.007	-0.009	0.78	1.373
89	4	Y	-0.009	-0.008	1.373	1.966
90	4	Y	-0.008	-0.007	1.966	2.558
91	4	Y	-0.007	-0.0009812	2.558	3.151
92	6	Y	-0.0007255	-0.004	0	0.4
93	6	Y	-0.004	-0.009	0.4	0.8
94	6	Y	-0.009	-0.01	0.8	1.2
95	6	Y	-0.01	-0.006	1.2	1.6
96	6	Y	-0.006	-0.003	1.6	2
97	7	Y	-0.003	-0.006	0.188	0.588

Member Distributed Loads (BLC 30 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
97	7	Y	-0.003	-0.006	0.188	0.588
98	7	Y	-0.006	-0.01	0.588	0.988
99	7	Y	-0.01	-0.009	0.988	1.388
100	7	Y	-0.009	-0.004	1.388	1.788
101	7	Y	-0.004	-0.0007447	1.788	2.188
102	30	Y	0	-0.001	5.6	6.4
103	30	Y	-0.001	-0.001	6.4	7.2
104	30	Y	-0.001	0	7.2	8
105	36	Y	-0.072	-0.023	0	0.104
106	36	Y	-0.023	0.002	0.104	0.208
107	36	Y	0.002	0.003	0.208	0.313
108	36	Y	0.003	0.003	0.313	0.417
109	38	Y	-0.009	-0.009	0	0.216
110	43	Y	0	-0.001	0	0.8
111	43	Y	-0.001	-0.001	0.8	1.6
112	43	Y	-0.001	0	1.6	2.4
113	45	Y	-0.073	-0.023	0	0.104
114	45	Y	-0.023	0.002	0.104	0.208
115	45	Y	0.002	0.003	0.208	0.313
116	45	Y	0.003	0.003	0.313	0.417
117	47	Y	-0.009	-0.009	0	0.216

Member Distributed Loads (BLC 31 : BLC 8 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	5	Y	0	-0.0007103	0	0.8
2	5	Y	-0.0007103	-0.0007103	0.8	1.6
3	5	Y	-0.0007103	0	1.6	2.4
4	8	Y	-0.0009966	-0.008	0	0.694
5	8	Y	-0.008	-0.008	0.694	1.389
6	8	Y	-0.008	-0.001	1.389	2.083
7	9	Y	-0.0005613	-0.004	0	0.593
8	9	Y	-0.004	-0.005	0.593	1.185
9	9	Y	-0.005	-0.005	1.185	1.778
10	9	Y	-0.005	-0.004	1.778	2.371
11	9	Y	-0.004	-0.000299	2.371	2.964
12	10	Y	-0.0003014	-0.004	0.188	0.78
13	10	Y	-0.004	-0.005	0.78	1.373
14	10	Y	-0.005	-0.004	1.373	1.966
15	10	Y	-0.004	-0.004	1.966	2.558
16	10	Y	-0.004	-0.0005471	2.558	3.151
17	12	Y	-0.041	-0.013	0	0.104
18	12	Y	-0.013	0.001	0.104	0.208
19	12	Y	0.001	0.002	0.208	0.313
20	12	Y	0.002	0.002	0.313	0.417
21	13	Y	-0.0004019	-0.002	0	0.4
22	13	Y	-0.002	-0.005	0.4	0.8
23	13	Y	-0.005	-0.005	0.8	1.2
24	13	Y	-0.005	-0.003	1.2	1.6
25	13	Y	-0.003	-0.002	1.6	2
26	14	Y	-0.002	-0.003	0.188	0.588
27	14	Y	-0.003	-0.005	0.588	0.988

Member Distributed Loads (BLC 31 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
28	14	Y	-0.005	-0.005	0.988	1.388
29	14	Y	-0.005	-0.002	1.388	1.788
30	14	Y	-0.002	-0.0004155	1.788	2.188
31	16	Y	-0.005	-0.005	0	0.216
32	43	Y	0	-0.0007033	5.6	6.4
33	43	Y	-0.0007033	-0.0007033	6.4	7.2
34	43	Y	-0.0007033	0	7.2	8
35	49	Y	-0.04	-0.013	0	0.104
36	49	Y	-0.013	0.001	0.104	0.208
37	49	Y	0.001	0.002	0.208	0.313
38	49	Y	0.002	0.002	0.313	0.417
39	51	Y	-0.005	-0.005	0	0.216
40	5	Y	0	-0.0007032	5.6	6.4
41	5	Y	-0.0007032	-0.0007032	6.4	7.2
42	5	Y	-0.0007032	0	7.2	8
43	17	Y	-0.0009977	-0.008	0	0.694
44	17	Y	-0.008	-0.008	0.694	1.389
45	17	Y	-0.008	-0.001	1.389	2.083
46	18	Y	-0.0005614	-0.004	0	0.593
47	18	Y	-0.004	-0.005	0.593	1.185
48	18	Y	-0.005	-0.005	1.185	1.778
49	18	Y	-0.005	-0.004	1.778	2.371
50	18	Y	-0.004	-0.000299	2.371	2.964
51	19	Y	-0.0003015	-0.004	0.188	0.78
52	19	Y	-0.004	-0.005	0.78	1.373
53	19	Y	-0.005	-0.004	1.373	1.966
54	19	Y	-0.004	-0.004	1.966	2.558
55	19	Y	-0.004	-0.0005472	2.558	3.151
56	21	Y	-0.04	-0.013	0	0.104
57	21	Y	-0.013	0.001	0.104	0.208
58	21	Y	0.001	0.002	0.208	0.313
59	21	Y	0.002	0.002	0.313	0.417
60	22	Y	-0.0004037	-0.002	0	0.4
61	22	Y	-0.002	-0.005	0.4	0.8
62	22	Y	-0.005	-0.005	0.8	1.2
63	22	Y	-0.005	-0.003	1.2	1.6
64	22	Y	-0.003	-0.002	1.6	2
65	23	Y	-0.002	-0.003	0.188	0.587
66	23	Y	-0.003	-0.005	0.587	0.987
67	23	Y	-0.005	-0.005	0.987	1.387
68	23	Y	-0.005	-0.002	1.387	1.787
69	23	Y	-0.002	-0.0004153	1.787	2.187
70	25	Y	-0.005	-0.005	0	0.216
71	30	Y	0	-0.0007102	0	0.8
72	30	Y	-0.0007102	-0.0007102	0.8	1.6
73	30	Y	-0.0007102	0	1.6	2.4
74	32	Y	-0.041	-0.013	0	0.104
75	32	Y	-0.013	0.001	0.104	0.208
76	32	Y	0.001	0.002	0.208	0.313
77	32	Y	0.002	0.002	0.313	0.417
78	34	Y	-0.005	-0.005	0	0.216
79	2	Y	-0.0009977	-0.008	0	0.694

Member Distributed Loads (BLC 31 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
79	2	Y	-0.0009977	-0.008	0	0.694
80	2	Y	-0.008	-0.008	0.694	1.389
81	2	Y	-0.008	-0.001	1.389	2.083
82	3	Y	-0.0005614	-0.004	0	0.593
83	3	Y	-0.004	-0.005	0.593	1.185
84	3	Y	-0.005	-0.005	1.185	1.778
85	3	Y	-0.005	-0.004	1.778	2.371
86	3	Y	-0.004	-0.000299	2.371	2.964
87	4	Y	-0.0003015	-0.004	0.188	0.78
88	4	Y	-0.004	-0.005	0.78	1.373
89	4	Y	-0.005	-0.004	1.373	1.966
90	4	Y	-0.004	-0.004	1.966	2.558
91	4	Y	-0.004	-0.0005472	2.558	3.151
92	6	Y	-0.0004046	-0.002	0	0.4
93	6	Y	-0.002	-0.005	0.4	0.8
94	6	Y	-0.005	-0.005	0.8	1.2
95	6	Y	-0.005	-0.003	1.2	1.6
96	6	Y	-0.003	-0.002	1.6	2
97	7	Y	-0.002	-0.003	0.188	0.588
98	7	Y	-0.003	-0.005	0.588	0.988
99	7	Y	-0.005	-0.005	0.988	1.388
100	7	Y	-0.005	-0.002	1.388	1.788
101	7	Y	-0.002	-0.0004153	1.788	2.188
102	30	Y	0	-0.0007032	5.6	6.4
103	30	Y	-0.0007032	-0.0007032	6.4	7.2
104	30	Y	-0.0007032	0	7.2	8
105	36	Y	-0.04	-0.013	0	0.104
106	36	Y	-0.013	0.001	0.104	0.208
107	36	Y	0.001	0.002	0.208	0.313
108	36	Y	0.002	0.002	0.313	0.417
109	38	Y	-0.005	-0.005	0	0.216
110	43	Y	0	-0.0007102	0	0.8
111	43	Y	-0.0007102	-0.0007102	0.8	1.6
112	43	Y	-0.0007102	0	1.6	2.4
113	45	Y	-0.041	-0.013	0	0.104
114	45	Y	-0.013	0.001	0.104	0.208
115	45	Y	0.001	0.002	0.208	0.313
116	45	Y	0.002	0.002	0.313	0.417
117	47	Y	-0.005	-0.005	0	0.216

Member Area Loads (BLC 1 : Dead)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	21	22	15	14	Y	Two Way	-0.01
2	31	30	37	38	Y	Two Way	-0.01
3	4	9	10	5	Y	Two Way	-0.01

Member Area Loads (BLC 8 : Ice)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	21	22	15	14	Y	Two Way	-0.006
2	31	30	37	38	Y	Two Way	-0.006
3	4	9	10	5	Y	Two Way	-0.006

Member Area Loads (BLC 8 : Ice) (Continued)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
3	4	9	10	5	Y	Two Way	-0.006

Node Loads and Enforced Displacements (BLC 11 : Live Load a)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	106	L	Y	-0.5
2	126	L	Y	-0.5
3	146	L	Y	-0.5

Node Loads and Enforced Displacements (BLC 12 : Live Load b)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	100	L	Y	-0.5
2	120	L	Y	-0.5
3	140	L	Y	-0.5

Node Loads and Enforced Displacements (BLC 13 : Live Load c)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	94	L	Y	-0.5
2	114	L	Y	-0.5
3	134	L	Y	-0.5

Envelope Node Reactions

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	188	max	0.907	5	1.808	14	1.834	2	6.095	2	1.282	11	1.841	65
2		min	-0.914	11	-0.162	8	-1.988	8	-1.841	8	-1.284	5	-0.96	47
3	191	max	1.406	5	1.835	18	1.293	2	0.972	11	1.551	3	0.865	13
4		min	-1.535	11	0.064	12	-1.207	8	-3.047	41	-1.543	9	-5.026	7
5	192	max	1.391	4	1.774	22	1.515	2	0.212	5	1.591	7	4.583	9
6		min	-1.256	10	0.044	4	-1.447	8	-3.798	71	-1.587	13	-1.317	3
7	Totals:	max	3.659	5	4.897	14	4.641	2						
8		min	-3.659	11	2.472	8	-4.641	8						

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
1	1	HSS4X4X4	0.402	0	13	0.176	0	y	64	137.609	139.518	16.181	16.181	1.274	H1-1b
2	2	HSS4.5X4.5X3	0.192	2.083	2	0.202	1.996	y	64	119.657	121.302	16.25	16.25	1.73	H1-1b
3	3	L4X4X6	0.253	2.964	48	0.061	2.964	z	65	83.036	92.664	4.398	9.886	1.5	H2-1
4	4	L4X4X6	0.287	0	65	0.044	0	z	48	83.036	92.664	4.398	9.886	1.5	H2-1
5	5	HSS3.500X0.216	0.096	0.25	12	0.102	0.25		6	51.941	78.624	6.899	6.899	2.139	H1-1b
6	6	L4X4X6	0.276	2	49	0.133	0	z	66	88.147	92.664	4.398	9.886	1.5	H2-1
7	7	L4X4X6	0.4	0	63	0.125	0	z	64	88.147	92.664	4.398	9.886	1.5	H2-1
8	8	HSS4.5X4.5X3	0.159	2.083	6	0.204	1.996	y	68	119.657	121.302	16.25	16.25	1.736	H1-1b
9	9	L4X4X6	0.253	2.964	39	0.061	2.964	z	69	83.036	92.664	4.398	9.886	1.5	H2-1
10	10	L4X4X6	0.288	0	69	0.044	0	z	39	83.036	92.664	4.398	9.886	1.5	H2-1
11	11	PL3/8"x6	0.131	0.067	9	0.41	0.067	y	71	63.715	72.9	0.57	9.113	1.572	H1-1b
12	12	PL3/8"x6	0.178	0.273	12	0.311	0.273	y	42	65.156	72.9	0.57	9.113	2.914	H1-1b
13	13	L4X4X6	0.273	2	40	0.133	2	y	69	88.147	92.664	4.398	9.886	1.5	H2-1
14	14	L4X4X6	0.402	0	68	0.126	0	z	68	88.147	92.664	4.398	9.886	1.5	H2-1
15	15	PL3/8"x6	0.182	0.167	6	0.213	0	y	41	70.011	72.9	0.57	9.113	1.478	H1-1b
16	16	PL3/8"x6	0.118	0.13	9	0.151	0	y	60	70.739	72.9	0.57	9.113	1.373	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
17	17	HSS4.5X4.5X3	0.167	2.083	9	0.203	1.996	y	73	119.657	121.302	16.25	16.25	1.737	H1-1b
18	18	L4X4X6	0.254	2.964	44	0.061	2.964	z	73	83.036	92.664	4.398	9.886	1.5	H2-1
19	19	L4X4X6	0.288	0	73	0.044	0	z	44	83.036	92.664	4.398	9.886	1.5	H2-1
20	20	PL3/8"x6	0.125	0.067	8	0.357	0.067	y	40	63.715	72.9	0.57	9.113	1.746	H1-1b
21	21	PL3/8"x6	0.192	0.273	12	0.412	0.273	y	70	65.156	72.9	0.57	9.113	2.887	H1-1b
22	22	L4X4X6	0.277	2	44	0.134	0	z	62	88.147	92.664	4.398	9.886	1.5	H2-1
23	23	L4X4X6	0.399	0	72	0.125	0	z	72	88.147	92.664	4.398	9.886	1.5	H2-1
24	24	PL3/8"x6	0.14	0.167	11	0.304	0	y	71	70.011	72.9	0.57	9.113	1.541	H1-1b
25	25	PL3/8"x6	0.111	0.13	7	0.138	0	y	51	70.739	72.9	0.57	9.113	1.378	H1-1b
26	30	HSS3.500X0.216	0.117	0.25	3	0.124	7.75		3	51.941	78.624	6.899	6.899	2.069	H1-1b
27	31	PL3/8"x6	0.138	0.067	13	0.41	0.067	y	63	63.715	72.9	0.57	9.113	1.564	H1-1b
28	32	PL3/8"x6	0.178	0.273	3	0.315	0.273	y	45	65.156	72.9	0.57	9.113	2.745	H1-1b
29	33	PL3/8"x6	0.167	0.167	10	0.215	0	y	45	70.011	72.9	0.57	9.113	1.493	H1-1b
30	34	PL3/8"x6	0.128	0.13	13	0.151	0	y	52	70.739	72.9	0.57	9.113	1.372	H1-1b
31	35	PL3/8"x6	0.113	0.067	12	0.358	0.067	y	44	63.715	72.9	0.57	9.113	1.918	H1-1b
32	36	PL3/8"x6	0.218	0.273	3	0.427	0.273	y	2	65.156	72.9	0.57	9.113	3	H1-1b
33	37	PL3/8"x6	0.178	0.167	2	0.307	0	y	63	70.011	72.9	0.57	9.113	1.522	H1-1b
34	38	PL3/8"x6	0.105	0.13	11	0.138	0	y	56	70.739	72.9	0.57	9.113	1.382	H1-1b
35	43	HSS3.500X0.216	0.125	0.25	8	0.132	0.25		2	51.941	78.624	6.899	6.899	2.129	H1-1b
36	44	PL3/8"x6	0.116	0.067	5	0.41	0.067	y	68	63.715	72.9	0.57	9.113	1.602	H1-1b
37	45	PL3/8"x6	0.225	0.273	8	0.321	0.273	y	2	65.156	72.9	0.57	9.113	2.993	H1-1b
38	46	PL3/8"x6	0.218	0.167	2	0.215	0	y	49	70.011	72.9	0.57	9.113	1.492	H1-1b
39	47	PL3/8"x6	0.106	0.13	6	0.151	0	y	56	70.739	72.9	0.57	9.113	1.375	H1-1b
40	48	PL3/8"x6	0.117	0.067	3	0.357	0.067	y	48	63.715	72.9	0.57	9.113	1.687	H1-1b
41	49	PL3/8"x6	0.254	0.273	7	0.416	0.273	y	67	65.156	72.9	0.57	9.113	3	H1-1b
42	50	PL3/8"x6	0.188	0.167	7	0.307	0	y	67	70.011	72.9	0.57	9.113	1.545	H1-1b
43	51	PL3/8"x6	0.113	0.13	3	0.137	0	y	59	70.739	72.9	0.57	9.113	1.378	H1-1b
44	56	PIPE_2.5	0.192	7.75	5	0.167	0.25		12	30.038	50.715	3.596	3.596	1.897	H1-1b
45	59	PIPE_2.0	0.406	5.5	12	0.116	5.5		11	14.916	32.13	1.872	1.872	3	H1-1b
46	62	PIPE_2.0	0.37	5.5	5	0.162	5.5		6	14.916	32.13	1.872	1.872	3	H1-1b
47	65	PIPE_2.0	0.378	5.5	11	0.13	5.5		12	14.916	32.13	1.872	1.872	3	H1-1b
48	66	PIPE_2.5	0.252	7.75	9	0.172	7.75		3	30.038	50.715	3.596	3.596	1.951	H1-1b
49	69	PIPE_2.0	0.47	5.5	3	0.144	5.5		3	14.916	32.13	1.872	1.872	3	H1-1b
50	72	PIPE_2.0	0.471	5.5	9	0.191	5.5		9	14.916	32.13	1.872	1.872	3	H1-1b
51	75	PIPE_2.0	0.462	5.5	3	0.122	5.5		4	14.916	32.13	1.872	1.872	2.568	H1-1b
52	76	PIPE_2.5	0.257	7.75	13	0.21	0.25		8	30.038	50.715	3.596	3.596	1.951	H1-1b
53	79	PIPE_2.0	0.532	5.5	8	0.161	5.5		7	14.916	32.13	1.872	1.872	3	H1-1b
54	82	PIPE_2.0	0.472	5.5	13	0.214	5.5		13	14.916	32.13	1.872	1.872	3	H1-1b
55	85	PIPE_2.0	0.491	5.5	7	0.159	5.5		8	14.916	32.13	1.872	1.872	3	H1-1b
56	86	PL3/8"x6	0.31	0.417	4	0.019	0.417	y	15	65.156	72.9	0.57	9.113	2.632	H1-1b
57	87	PL3/8"x6	0.406	0.167	5	0.015	0	z	6	70.011	72.9	0.57	9.113	1.481	H1-1b
58	88	PL3/8"x6	0.39	0.273	8	0.026	0.417	y	14	65.156	72.9	0.57	9.113	2.479	H1-1b
59	89	PL3/8"x6	0.379	0.167	6	0.016	0	z	10	70.011	72.9	0.57	9.113	1.55	H1-1b
60	92	PL3/8"x6	0.411	0.417	8	0.02	0.417	z	9	65.156	72.9	0.57	9.113	2.542	H1-1b
61	93	PL3/8"x6	0.521	0.167	9	0.015	0	z	10	70.011	72.9	0.57	9.113	1.441	H1-1b
62	94	PL3/8"x6	0.294	0.273	12	0.026	0.417	y	17	65.156	72.9	0.57	9.113	3	H1-1b
63	95	PL3/8"x6	0.37	0.167	9	0.019	0	z	2	70.011	72.9	0.57	9.113	1.461	H1-1b
64	98	PL3/8"x6	0.367	0.417	13	0.022	0.417	z	2	65.156	72.9	0.57	9.113	3	H1-1b
65	99	PL3/8"x6	0.528	0.167	13	0.018	0	z	2	70.011	72.9	0.57	9.113	1.469	H1-1b
66	100	PL3/8"x6	0.369	0.417	2	0.026	0.417	y	21	65.156	72.9	0.57	9.113	2.326	H1-1b
67	101	PL3/8"x6	0.454	0.167	2	0.015	0	z	6	70.011	72.9	0.57	9.113	1.587	H1-1b

Envelope AISC 15TH (360-16): LRFD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
68	104	L2.5x2.5x3	0.225	0	3	0.05	4.375	z	68	15.632	29.192	0.873	1.786	1.5	H2-1
69	105	L2.5x2.5x3	0.279	0	8	0.05	4.375	z	72	15.632	29.192	0.873	1.786	1.5	H2-1
70	106	L2.5x2.5x3	0.213	0	12	0.05	4.375	z	64	15.632	29.192	0.873	1.786	1.5	H2-1
71	107	HSS4X4X4	0.371	0	7	0.178	0	y	68	137.609	139.518	16.181	16.181	1.284	H1-1b
72	108	HSS4X4X4	0.384	0	9	0.177	0	y	73	137.609	139.518	16.181	16.181	1.278	H1-1b

APPENDIX B

(Additional Calculations)

PROJECT	**149485.003.01 - Deep River-winthrop**				**AD**
SUBJECT	**Platform Mount Analysis**				
DATE	**05/13/21**	PAGE	1	OF	1

B+T Group
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630

[REF: AISC 360-05]

Reactions at Bolted Connection

Tension	:	1.922	k
Vertical Shear	:	1.869	k
Horizontal Shear	:	0.957	k
Torsion	:	1.842	k.ft
Moment from Horizontal Forces	:	1.321	k.ft
Moment from Vertical Forces	:	6.118	k.ft

Bolt Parameters

Bolt Grade	:	A325	
Bolt Diameter	:	0.625	in
Nominal Bolt Area	:	0.307	in^2
Bolt spacing, Horizontal	:	6	in
Bolt spacing, Vertical	:	6	in
Bolt edge distance, plate height	:	1	in
Bolt edge distance, plate width	:	1	in
Total Number of Bolts	:	4	bolts

Summary of Forces

Shear Resultant Force	:	2.10	k
Force from Horz. Moment	:	2.39	k
Force from Vert. Moment	:	11.08	k
Shear Load / Bolt	:	0.52	k
Tension Load / Bolt	:	0.48	k
Resultant from Moments / Bolt	:	5.67	k

Bolt Checks

Nominal Tensile Stress, F_{nt}	:	90.00	ksi	[AISC Table J3.2]
Available Tensile Stress, ΦR_{nt}	:	20.72	k/bolt	[Eq. J3-1]
Unity Check, Bolt Tension	:	**29.67%**		**OKAY**
Nominal Shear Stress, F_{nv}	:	48.00	ksi	[AISC Table J3.2]
Available Shear Stress, ΦR_{nv}	:	11.05	k/bolt	[Eq. J3-1]
Unity Check, Bolt Shear	:	**9.10%**		**OKAY**
Unity Check, Combined	:	**38.77%**		**OKAY**
Available Bearing Strength, ΦR_n	:	18.35	k/bolt	
Unity Check, Bolt Bearing	:	**2.86%**		**OKAY**

PROJECT	**149485.003.01 - Deep River-winthrop**				**AD**
SUBJECT	**Platform Mount Analysis**				
DATE	**05/13/21**	PAGE	1	OF	1

B+T Group
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630

[REF: AISC 360-05]

Connecting Member Parameters

Plate Yield Strength, F_y	:	36.00	ksi	[AISC Table 2-5]
Plate Tensile Strength, F_u	:	58.00	ksi	[AISC Table 2-5]
Plate Height	:	8.00	in	
Plate Width	:	8.00	in	
Plate Thickness	:	0.50	in	
Edge Distance	:	0.56	in	
Gross Tension Area, A_{gt}	:	4.00	in^2	
Gross Shear Area, A_{gv}	:	0.5	in^2	
Net Area for tension, A_{nv}	:	3.66	in^2	
Net Area for shear, A_{nt}	:	2.50	in^2	

Plate Check

Available Tensile Yield	:	129.60	k	[Eq. J4-1]
Available Tensile Rupture	:	159.05	k	[Eq. J4-2]
Unity Check, Plate Tension	:	**4.74%**		**OKAY**
Available Shear Yield	:	10.80	k	[Eq. J4-3]
Available Shear Rupture	:	87.00	k	[Eq. J4-4]
Unity Check, Plate Shear	:	**19.44%**		**OKAY**
Available Block Shear, ΦRn	:	62.48	k	[Eq. J4-5]
Unity Check, Block Shear	:	**3.36%**		**OKAY**

EXHIBIT 10

Construction Drawings

DISH WIRELESS L.L.C. SITE ID:

BOBDL00135A

DISH WIRELESS L.L.C. SITE ADDRESS:

220 WINTHROP RD
DEEP RIVER, CT 06417

CONNECTICUT CODE COMPLIANCE

ALL WORK SHALL BE PERFORMED AND MATERIALS INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:

CODE TYPE	CODE
BUILDING	2018 CT STATE BUILDING CODE/2015 IBC W/ CT AMENDMENTS
MECHANICAL	2018 CT STATE BUILDING CODE/2015 IMC W/ CT AMENDMENTS
ELECTRICAL	2018 CT STATE BUILDING CODE/2017 NEC W/ CT AMENDMENTS

SHEET INDEX

SHEET NO.	SHEET TITLE
T-1	TITLE SHEET
LS-1	SITE SURVEY
A-1	OVERALL AND ENLARGED SITE PLAN
A-2	ELEVATION, ANTENNA LAYOUT AND SCHEDULE
A-3	EQUIPMENT PLATFORM AND H-FRAME DETAILS
A-4	EQUIPMENT DETAILS
A-5	EQUIPMENT DETAILS
A-6	EQUIPMENT DETAILS
E-1	ELECTRICAL/FIBER ROUTE PLAN AND NOTES
E-2	ELECTRICAL DETAILS
E-3	ELECTRICAL ONE-LINE, FAULT CALCS & PANEL SCHEDULE
G-1	GROUNDING PLANS AND NOTES
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS
RF-1	RF CABLE COLOR CODE
RF-2	RF PLUMBING DIAGRAM
GN-1	LEGEND AND ABBREVIATIONS
GN-2	GENERAL NOTES
GN-3	GENERAL NOTES
GN-4	GENERAL NOTES

SCOPE OF WORK

THIS IS NOT AN ALL INCLUSIVE LIST. CONTRACTOR SHALL UTILIZE SPECIFIED EQUIPMENT PART OR ENGINEER APPROVED EQUIVALENT. CONTRACTOR SHALL VERIFY ALL NEEDED EQUIPMENT TO PROVIDE A FUNCTIONAL SITE. THE PROJECT GENERALLY CONSISTS OF THE FOLLOWING:

TOWER SCOPE OF WORK:
- INSTALL (3) PROPOSED PANEL ANTENNAS (1 PER SECTOR)
- INSTALL (1) PROPOSED TOWER PLATFORM MOUNT
- INSTALL PROPOSED JUMPERS
- INSTALL (6) PROPOSED RRUs (2 PER SECTOR)
- INSTALL (1) PROPOSED OVER VOLTAGE PROTECTION DEVICE (OVP)
- INSTALL (1) PROPOSED HYBRID CABLE

GROUND SCOPE OF WORK:
- INSTALL (1) PROPOSED METAL PLATFORM
- INSTALL (1) PROPOSED ICE BRIDGE
- INSTALL (1) PROPOSED PPC CABINET
- INSTALL (1) PROPOSED EQUIPMENT CABINET
- INSTALL (1) PROPOSED POWER CONDUIT
- INSTALL (1) PROPOSED TELCO CONDUIT
- INSTALL (1) PROPOSED TELCO-FIBER BOX
- INSTALL (1) PROPOSED GPS UNIT
- INSTALL (1) PROPOSED SAFETY SWITCH (IF REQUIRED)
- INSTALL (1) PROPOSED ZAYO CABINET (IF REQUIRED)
- INSTALL (1) PROPOSED METER SOCKET

SITE PHOTO

UNDERGROUND SERVICE ALERT CBYD 811
UTILITY NOTIFICATION CENTER OF CONNECTICUT
(800) 922-4455
WWW.CBYD.COM
CALL 2 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

811

GENERAL NOTES

THE FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION. A TECHNICIAN WILL VISIT THE SITE AS REQUIRED FOR ROUTINE MAINTENANCE. THE PROJECT WILL NOT RESULT IN ANY SIGNIFICANT DISTURBANCE OR EFFECT ON DRAINAGE. NO SANITARY SEWER SERVICE, POTABLE WATER, OR TRASH DISPOSAL IS REQUIRED AND NO COMMERCIAL SIGNAGE IS PROPOSED.

11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON THE JOB SITE, AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.

SITE INFORMATION

PROPERTY OWNER:	THE TOWN OF DEEP RIVER
ADDRESS:	174 MAIN ST DEEP RIVER, CT 06417
TOWER TYPE:	MONOPOLE
TOWER CO SITE ID:	CT46130-A
TOWER APP NUMBER:	153557
COUNTY:	MIDDLESEX
LATITUDE (NAD 83):	41° 21' 57.1" N 41.365872 N
LONGITUDE (NAD 83):	72° 28' 29.5" W 72.474849 W
ZONING JURISDICTION:	TOWN OF DEEP RIVER
ZONING DISTRICT:	PRD
PARCEL NUMBER:	000961271
OCCUPANCY GROUP:	U
CONSTRUCTION TYPE:	V-B
POWER COMPANY:	CT LIGHT & POWER CO
TELEPHONE COMPANY:	XFINITY

PROJECT DIRECTORY

APPLICANT:	DISH WIRELESS L.L.C. 5701 SOUTH SANTA FE DRIVE LITTLETON, CO 80120
TOWER OWNER:	SBA COMMUNICATAIONS CORP. 8051 CONGRESS AVENUE BOCA RATON, FL 33487 (800) 487-7483
SITE DESIGNER:	B+T GROUP 1717 S. BOULDER AVE, SUITE 300 TULSA, OK 74119 (918) 587-4630
SITE ACQUISITION:	RYAN LYNCH RYAN.LYNCH@DISH.COM
CONSTRUCTION MANAGER:	JAVIER SOTO JAVIER.SOTO@DISH.COM
RF ENGINEER:	BOSSENER CHARLES BOSSENER.CHARLES@DISH.COM

DIRECTIONS

DIRECTIONS FROM BRADLEY INTERNATIONAL AIRPORT:
DEPART BRADLEY INTERNATIONAL AIRPORT ON TERMINAL RD. ROAD NAME CHANGES TO BRADLEY FIELD CONNECTOR. ROAD NAME CHANGES TO CT-20 [BRADLEY FIELD CONNECTOR]. TAKE RAMP (RIGHT) ONTO I-91 [RICHARD P HORAN MEMORIAL HWY]. AT EXIT 22S, TAKE RAMP (LEFT) ONTO CT-9. KEEP STRAIGHT ONTO CT-17 [CT-9]. AT EXIT 13, ROAD NAME CHANGES TO CT-9. AT EXIT 5, KEEP RIGHT ONTO RAMP. TURN RIGHT ONTO CT-80 [W ELM ST]. TURN RIGHT ONTO CT-80 [WINTHROP RD]. ARRIVE AT 220 WINTHROP RD, DEEP RIVER, CT 06417.

VICINITY MAP

NO SCALE

dish wireless.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

SBA
8051 CONGRESS AVENUE
BOCA RATON, FL 33487

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

06/21/21

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22

DRAWN BY:	CHECKED BY:	APPROVED BY:
BLJ	BLJ	JW

RFDS REV #: 1

PRELIMINARY DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
A	5/20/21	ISSUED FOR REVIEW
0	6/21/21	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER
149485.001.01

DISH WIRELESS L.L.C.
PROJECT INFORMATION
BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

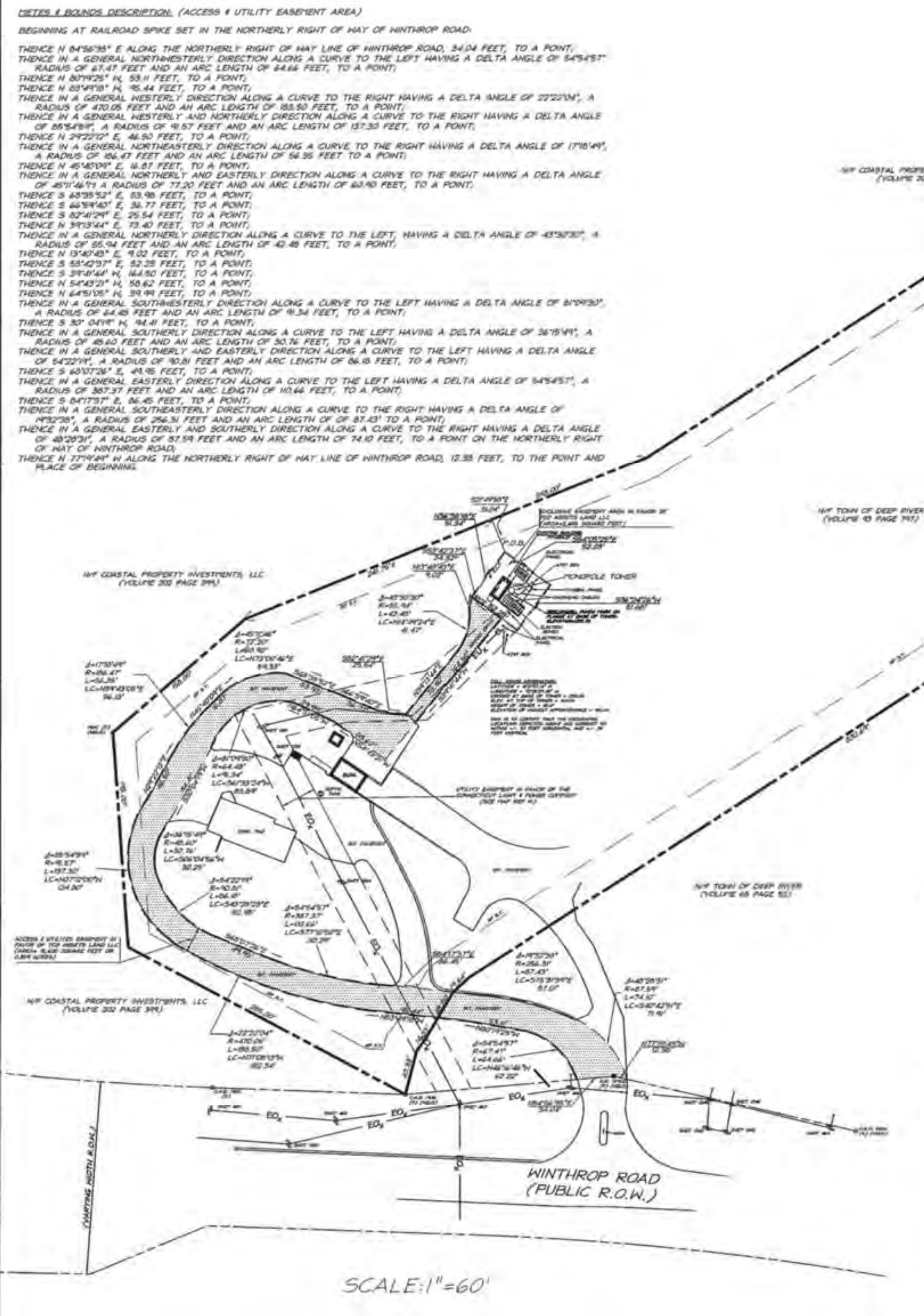
SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

METES & BOUNDS DESCRIPTION: (ACCESS & UTILITY EASEMENT AREA)

BEGINNING AT RAILROAD SPIKE SET IN THE NORTHERLY RIGHT OF WAY OF WINTHROP ROAD:

THENCE N 84°56'35" E ALONG THE NORTHERLY RIGHT OF WAY LINE OF WINTHROP ROAD, 34.04 FEET, TO A POINT;
THENCE IN A GENERAL NORTHWESTERLY DIRECTION ALONG A CURVE TO THE LEFT HAVING A DELTA ANGLE OF 54°54'57" RADIUS OF 67.47 FEET AND AN ARC LENGTH OF 64.66 FEET, TO A POINT;
THENCE N 80°19'25" W, 53.11 FEET, TO A POINT;
THENCE N 85°49'18" W, 95.44 FEET, TO A POINT;
THENCE IN A GENERAL WESTERLY DIRECTION ALONG A CURVE TO THE RIGHT HAVING A DELTA ANGLE OF 22°22'14", A RADIUS OF 470.05 FEET AND AN ARC LENGTH OF 183.50 FEET, TO A POINT;
THENCE IN A GENERAL WESTERLY AND NORTHERLY DIRECTION ALONG A CURVE TO THE RIGHT HAVING A DELTA ANGLE OF 85°54'59", A RADIUS OF 91.57 FEET AND AN ARC LENGTH OF 137.33 FEET, TO A POINT;
THENCE N 29°22'12" E, 46.50 FEET, TO A POINT;
THENCE IN A GENERAL NORTHEASTERLY DIRECTION ALONG A CURVE TO THE RIGHT HAVING A DELTA ANGLE OF 17°18'49", A RADIUS OF 186.47 FEET AND AN ARC LENGTH OF 56.35 FEET TO A POINT;
THENCE N 45°40'09" E, 16.87 FEET, TO A POINT;
THENCE IN A GENERAL NORTHERLY AND EASTERLY DIRECTION ALONG A CURVE TO THE RIGHT HAVING A DELTA ANGLE OF 45°11'46"" A RADIUS OF 77.20 FEET AND AN ARC LENGTH OF 60.90 FEET, TO A POINT;
THENCE S 65°35'52" E, 53.98 FEET, TO A POINT;
THENCE S 66°59'40" E, 36.77 FEET, TO A POINT;
THENCE S 82°41'29" E, 25.54 FEET, TO A POINT;
THENCE N 39°13'44" E, 73.40 FEET, TO A POINT;
THENCE IN A GENERAL NORTHERLY DIRECTION ALONG A CURVE TO THE LEFT, HAVING A DELTA ANGLE OF 43°30'30", A RADIUS OF 55.94 FEET AND AN ARC LENGTH OF 42.48 FEET, TO A POINT;
THENCE N 13°40'43" E, 9.02 FEET, TO A POINT;
THENCE S 53°42'37" E, 52.23 FEET, TO A POINT;
THENCE S 39°41'44" W, 164.50 FEET, TO A POINT;
THENCE N 54°43'21" W, 58.62 FEET, TO A POINT;
THENCE N 64°51'05" W, 39.99 FEET, TO A POINT;
THENCE IN A GENERAL SOUTHWESTERLY DIRECTION ALONG A CURVE TO THE LEFT HAVING A DELTA ANGLE OF 81°09'30", A RADIUS OF 64.48 FEET AND AN ARC LENGTH OF 91.34 FEET, TO A POINT;
THENCE S 30° 04'19" W, 94.41 FEET, TO A POINT;
THENCE IN A GENERAL SOUTHERLY DIRECTION ALONG A CURVE TO THE LEFT HAVING A DELTA ANGLE OF 36°15'49", A RADIUS OF 48.60 FEET AND AN ARC LENGTH OF 30.76 FEET, TO A POINT;
THENCE IN A GENERAL SOUTHERLY AND EASTERLY DIRECTION ALONG A CURVE TO THE LEFT HAVING A DELTA ANGLE OF 54°22'19", A RADIUS OF 90.81 FEET AND AN ARC LENGTH OF 86.18 FEET, TO A POINT;
THENCE S 60°07'26" E, 49.95 FEET, TO A POINT;
THENCE IN A GENERAL EASTERLY DIRECTION ALONG A CURVE TO THE LEFT HAVING A DELTA ANGLE OF 54°54'57", A RADIUS OF 387.37 FEET AND AN ARC LENGTH OF 110.66 FEET, TO A POINT;
THENCE S 84°17'37" E, 86.45 FEET, TO A POINT;
THENCE IN A GENERAL SOUTHEASTERLY DIRECTION ALONG A CURVE TO THE RIGHT HAVING A DELTA ANGLE OF 19°32'38", A RADIUS OF 256.31 FEET AND AN ARC LENGTH OF OF 87.43' TO A POINT;
THENCE IN A GENERAL EASTERLY AND SOUTHERLY DIRECTION ALONG A CURVE TO THE RIGHT HAVING A DELTA ANGLE OF 48°28'31", A RADIUS OF 87.59 FEET AND AN ARC LENGTH OF 74.10 FEET, TO A POINT ON THE NORTHERLY RIGHT OF WAY OF WINTHROP ROAD;
THENCE N 77°19'49" W ALONG THE NORTHERLY RIGHT OF WAY LINE OF WINTHROP ROAD, 12.38 FEET, TO THE POINT AND PLACE OF BEGINNING.



METES & BOUNDS DESCRIPTION: (EXCLUSIVE EASEMENT AREA)

COMMENCING AT A POINT ON THE SOUTHERLY PROPERTY LINE OF LAND NOW OR FORMERLY THE COASTAL PROPERTY INVESTMENTS, LLC.

THENCE S21°49'58" E, 31.04' TO THE POINT OF BEGINNING.

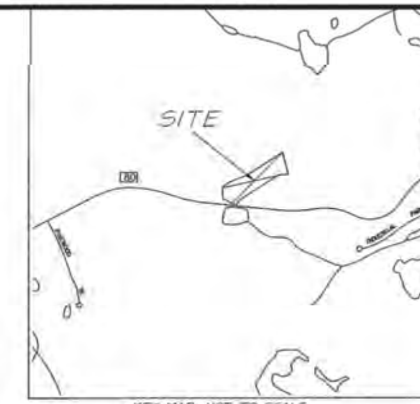
BEGINNING AT THE NORTHERLY CORNER OF THE HEREIN DESCRIBED EASEMENT:

THENCE S 54° 05' 25" E, 52.03 FEET TO A POINT;

THENCE S 36°24'26" W, 51.68 FEET TO A POINT;

THENCE N 53°42'37"W, 52.23 FEET TO A POINT;

THENCE N 36°38'18" E, 51.34 FEET TO THE POINT AND PLACE OF BEGINNING.



KEY MAP: NOT TO SCALE

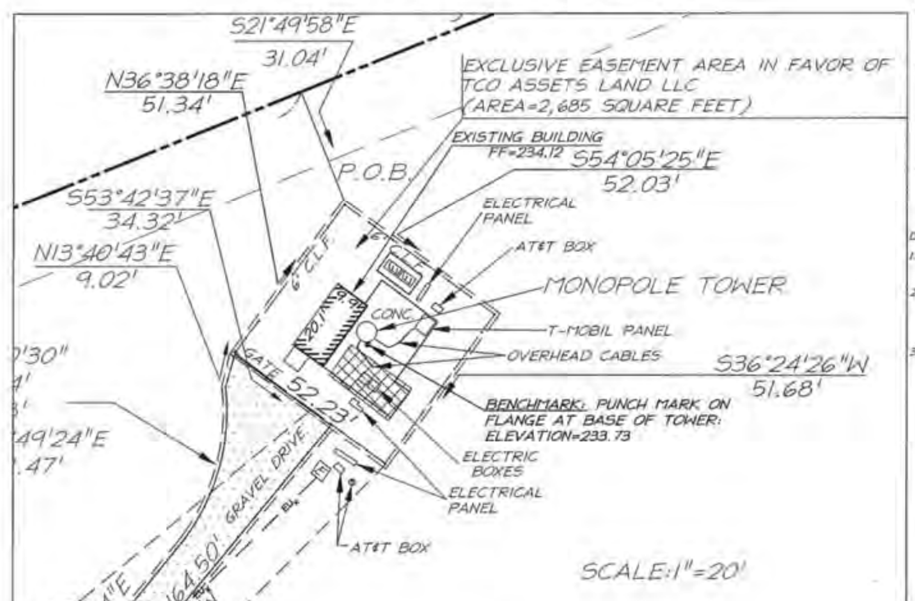
METES & BOUNDS DESCRIPTION:
(MAIN PARCEL) – DESCRIPTION BASED ON VOLUME 93 PAGE 797.

BEGINNING AT A POINT WHERE THE NORTHEASTERLY LINE OF LAND FORMERLY OF THE GRANTORS AND THE NORTHWESTERLY LINE OF OTHER LAND OF THE GRANTEE MEET AT THE NORTHERLY LINE OF ROUTE #80, SOMETIMES KNOWN AS WINTHROP ROAD, WHICH POINT IS MARKED BY A CONNECTICUT HIGHWAY DEPARTMENT MONUMENT; THENCE RUNNING THE FOLLOWING COURSES AND DISTANCES ALONG LAND FORMERLY OF THE GRANTORS NORTH 49 DEGREES 47 MINUTES 49 SECONDS WEST, A DISTANCE OF 285.00 FEET TO A POINT MARKED BY A CONCRETE BOUND; NORTH 8 DEGREES 12 MINUTES 17 SECONDS EAST, A DISTANCE OF 195.00 FEET TO A POINT MARKED BY A CONCRETE BOUND; NORTH 61 DEGREES 50 MINUTES 53 SECONDS EAST, A DISTANCE OF 158.00 FEET TO A POINT MARKED BY A CONCRETE BOUND; NORTH 80 DEGREES 35 MINUTES 53 SECONDS EAST, A DISTANCE OF 393.00 FEET, TO A POINT MARKED BY A CONCRETE BOUND; NORTH 69 DEGREES 44 MINUTES 00 SECONDS EAST, A DISTANCE OF 754.04 FEET, TO A POINT MARKED BY A CONCRETE BOUND; SOUTH 2 DEGREES 15 MINUTES 46 SECONDS EAST A DISTANCE OF 417.66 FEET TO A POINT MARKED BY A CONCRETE BOUND; THENCE RUNNING THE FOLLOWING COURSES AND DISTANCES ALONG OTHER LAND OF THE GRANTEE: NORTH 82 DEGREES 13 MINUTES 59 SECONDS WEST A DISTANCE OF 107.32 FEET, TO A POINT MARKED BY AN IRON PIPE; NORTH 81 DEGREES 41 MINUTES 08 SECONDS WEST A DISTANCE OF 75.01 FEET TO A POINT MARKED BY AN IRON PIPE; SOUTH 73 DEGREES 38 MINUTES 30 SECONDS WEST, A DISTANCE OF 22.80 FEET TO A POINT MARKED BY A RAILROAD SPIKE; SOUTH 69 DEGREES 44 MINUTES 00 SECONDS WEST, A DISTANCE OF 830.69 FEET, TO A POINT MARKED BY AN IRON PIPE; SOUTH 60 DEGREES 29 MINUTES 03 SECONDS WEST, A DISTANCE OF 19.64 FEET, TO A POINT MARKED BY AN IRON PIPE; SOUTH 43 DEGREES 56 MINUTES 40 SECONDS WEST, A DISTANCE OF 48.80 FEET, TO A POINT MARKED BY AN IRON PIPE; SOUTH 48 DEGREES 11 MINUTES 20 SECONDS WEST, A DISTANCE OF 14.33 FEET, TO A POINT MARKED BY AN IRON PIPE; SOUTH 26 DEGREES 15 MINUTES 01 SECONDS WEST, A DISTANCE OF 40.33 FEET TO THE POINT OR PLACE OF BEGINNING.

NOTES:
1. PROPERTY IS IN THE R-60 ZONE.
2. MAIN PARCEL CONTAINS 436,600± SQUARE FEET OF 10.132± ACRES.
3. PROPERTY DOES NOT FALL WITHIN THE LIMITS OF A FLOOD HAZARD ZONE AS DEPICTED ON "FIRM FLOOD INSURANCE RATE MAP MIDDLESEX COUNTY, CONNECTICUT (ALL JURISDICTIONS) PANEL 326 OF 450 MAP NUMBER 09007C0326G EFFECTIVE DATE AUGUST 28, 2008 FEDERAL EMERGENCY MANAGEMENT AGENCY.
4. UNDERGROUND UTILITY, STRUCTURE AND FACILITY LOCATIONS DEPICTED AND NOTED HEREON HAVE BEEN COMPILED, IN PART, FROM RECORD MAPPING SUPPLIED BY THE RESPECTIVE UTILITY COMPANIES OR GOVERNMENTAL AGENCIES, FROM PAROL TESTIMONY AND FROM OTHER SOURCES. THESE LOCATIONS MUST BE CONSIDERED AS APPROXIMATE IN NATURE. ADDITIONALLY, OTHER SUCH FEATURES MAY EXIST ON THE SITE, THE EXISTENCE OF WHICH ARE UNKNOWN TO DESIGN PROFESSIONALS, INC. THE SIZE, LOCATION AND EXISTENCE OF ALL SUCH FEATURES MUST BE FIELD DETERMINED AND VERIFIED BY THE APPROPRIATE AUTHORITIES PRIOR TO CONSTRUCTION.
5. CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" FOR UNDERGROUND UTILITY MARKING AT LEAST TWO FULL WORKING DAYS PRIOR TO START OF CONSTRUCTION: 1-800-922-4455 OR WWW.CBYD.COM

MAP REFERENCES:

1. LAND TO BE CONVEYED TO THE TOWN OF DEEP RIVER FROM CRAIG W. & MARY N. TRISCHMAN DEEP RIVER, CONN. SCALE 1"=40' DATE 9/20/77 RADCLIFFE ENGINEERING, P.C.
2. EASEMENT MAP SHOWING EASEMENT AREA TO BE GRANTED TO THE CONNECTICUT LIGHT & POWER COMPANY ACROSS LAND OF THE TOWN OF DEEP RIVER WINTHROP ROAD – CONN. ROUTE #80, DEEP RIVER, CONNECTICUT CL&P FILE NO. 8207 SCALE: 1"=40 FT THOMAS E. METCALF, P.E., L.S.
3. CONNECTICUT STATE HIGHWAY DEPARTMENT RIGHT OF WAY MAP TOWN OF SAYBROOK WINTHROP ROAD FROM THE WESTBROOK ROAD EASTERLY TO THE IVORYTON ROAD ROUTE NO. 175 SCALE 1"=40'00" JOHN A. MACDONALD, STATE HIGHWAY COMMISSIONER.



SCALE:1"=20'

CELL TOWER INFORMATION:
LATITUDE = 41°21'57.14" N
LONGITUDE = 72°28'29.45" W
GROUND AT BASE OF TOWER = 233.03
ELEV. AT TOP OF TOWER = 414.0±
HEIGHT OF TOWER = 181.0'
ELEVATION OF HIGHEST APPURTENANCE = 415.4±

THIS IS TO CERTIFY THAT THE GEOGRAPHIC LOCATIONS DEPICTED ABOVE ARE CORRECT TO WITHIN +/- 50 FEET HORIZONTAL AND +/- 20 FEET VERTICAL

CERTIFICATION:

I HEREBY CERTIFY TO: TCO ASSETS LAND LLC A DELAWARE LIMITED LIABILITY COMPANY AND STEWART TITLE GUARANTEE COMPANY THAT THIS PLAN AND FIELD SURVEY HAS BEEN PREPARED BASED ON STEWART TITLE GUARANTEE COMPANY COMMITMENT FOR TITLE INSURANCE FILE NUMBER: 11000140408. EFFECTIVE DATE: JUNE 06, 2011 AT 8:00 A.M. AND TO THE "STANDARDS AND ACCURACIES" DESCRIBED BELOW.

SURVEY NOTES:

1. THIS SURVEY AND MAP HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THRU 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. ON SEPTEMBER 26, 1996.
   - TYPE OF SURVEY IS AN EASEMENT SURVEY AND IS INTENDED TO DEPICT THE LOCATION OF IMPROVEMENTS RELATIVE TO PROPERTY LINES AND PROPOSED EASEMENT LINES.
   - THIS IS A DEPENDENT RESURVEY BASED ON MAP REFERENCE #1.
   - HORIZONTAL ACCURACY MEETS CLASS A-2 STANDARDS AND VERTICAL ACCURACY MEETS CLASS T-2 STANDARDS.

TO MY KNOWLEDGE AND BELIEF, THIS MAP IS SUBSTANTIALLY CORRECT AS NOTED HEREON.

LAWRENCE R. GEISSLER, JR., L.S. — 12327 LIC. NO.

SPECIAL EXCEPTIONS TO STEWART TITLE GUARANTEE COMPANY COMMITMENT FILE NO. 11000140408 SCHEDULE B – SECTION 2 SPECIAL EXCEPTIONS, EFFECTIVE DATE: JUNE 06, 2011:

1. AGREEMENT BY CARL PEDERSEN TO C.W. BLAKESLEE & SONS, INC. A CONNECTICUT CORPORATION AND EXISTING UNDER THE LAWS OF THE STATE OF CONNECTICUT TO THE TOWN OF DEEP RIVER DATED AUGUST 6, 1971 AND RECORDED JULY 16, 1979 IN VOLUME 95 AT PAGE 991 OF THE DEEP RIVER LAND RECORDS.
2. EASEMENT BY THE WHELEN ENGINEERING, INC. A CORPORATION ORGANIZED UNDER THE LAWS OF THE STATE OF CONNECTICUT TO THE TOWN OF DEEP RIVER DATED NOVEMBER 21, 1986 AND RECORDED NOVEMBER 21, 1986 IN VOLUME 110 AT PAGE 951 OF SAID LAND RECORDS.
3. EASEMENT GRANTED TO NEXTEL COMMUNICATIONS OF THE MID-ATLANTIC, INC. A DELAWARE CORPORATION D/B/A NEXTEL COMMUNICATIONS BY INSTRUMENT DATED JUNE 4, 1999 AND RECORDED JUNE 23, 1999 IN VOLUME 153 AT PAGE 950 OF SAID LAND RECORDS (AFFECTS ACCESS AND UTILITIES EASEMENT AREA).
4. EASEMENT GRANTED TO NEXTEL COMMUNICATIONS OF THE MID-ATLANTIC, INC. A DELAWARE CORPORATION, D/B/A NEXTEL COMMUNICATIONS BY INSTRUMENT DATED JUNE 4, 1999 AND RECORDED JUNE 23, 1999 IN VOLUME 153 AT PAGE 955 OF SAID LAND RECORDS.

TCO ASSETS LAND LLC
SITE: CT2006
220 WINTHROP ROAD DEEP RIVER, CONNECTICUT

EASEMENT PLAN — SHEET V-01

dish wireless.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

SBA
8051 CONGRESS AVENUE
BOCA RATON, FL 33487

B+T GRP
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
www.btgrp.com

06/21/21

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

DRAWN BY:	CHECKED BY:	APPROVED BY:
BLJ	BLJ	JW

RFDS REV #: 1

PRELIMINARY DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
A	5/20/21	ISSUED FOR REVIEW
0	6/21/21	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER
149485.001.01

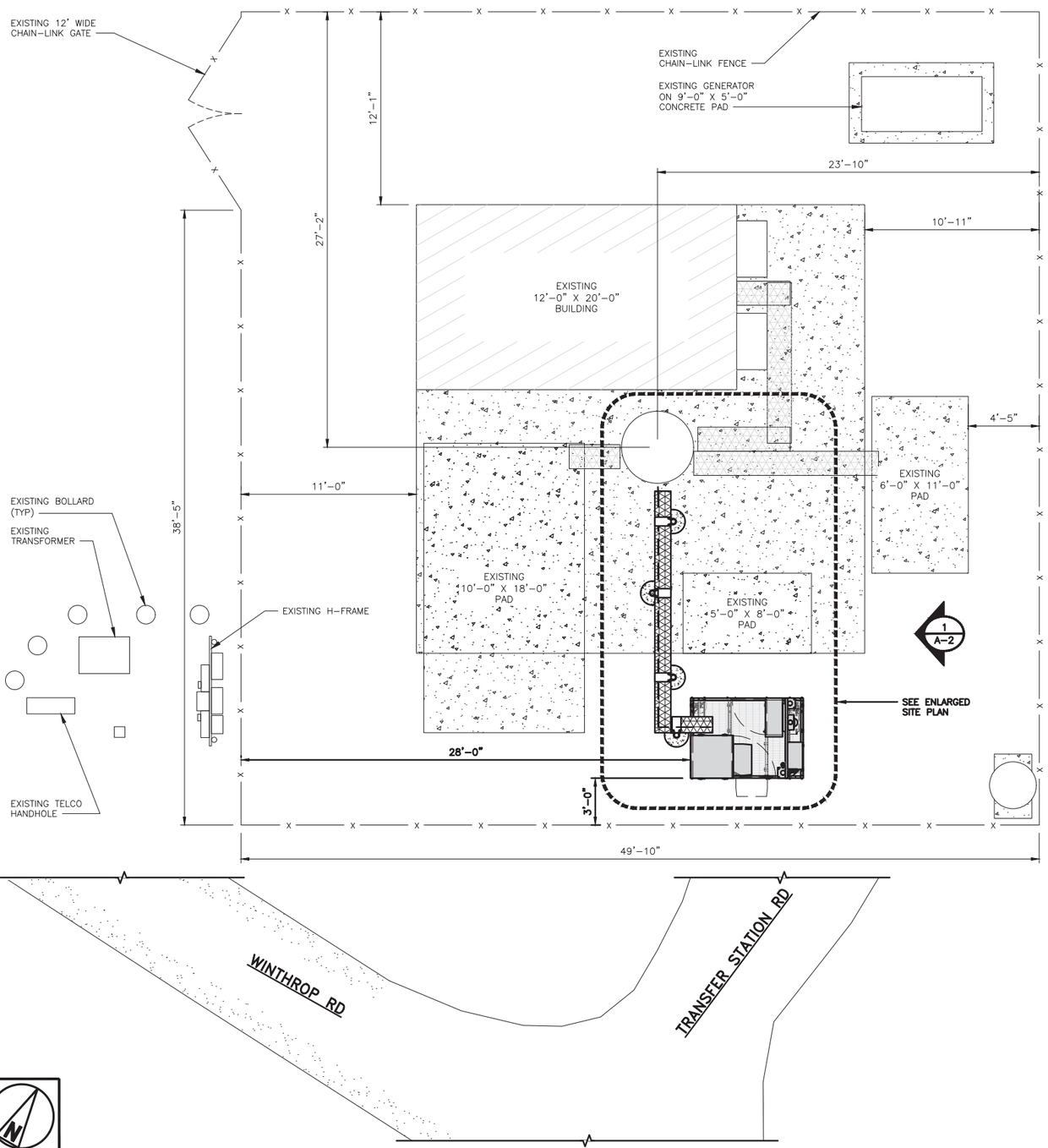
DISH WIRELESS L.L.C. PROJECT INFORMATION
BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE
SITE SURVEY

SHEET NUMBER
LS-1

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.



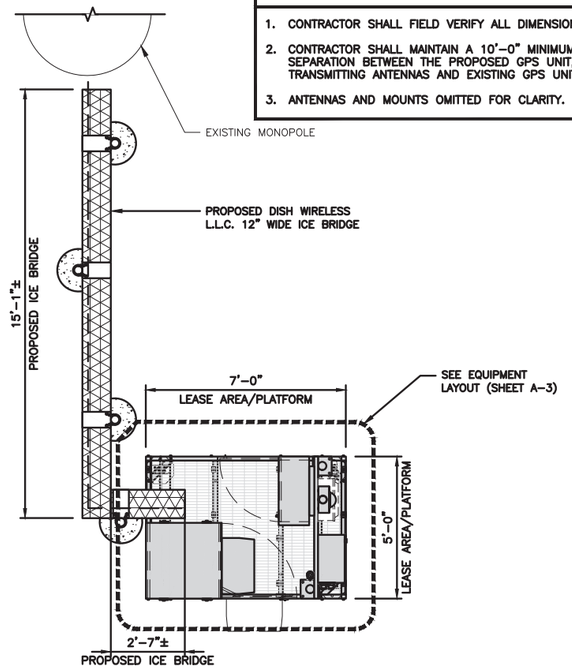
OVERALL SITE PLAN

4' 2' 0 4' 8'
1/4"=1'-0"

1

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. CONTRACTOR SHALL MAINTAIN A 10'-0" MINIMUM SEPARATION BETWEEN THE PROPOSED GPS UNIT, TRANSMITTING ANTENNAS AND EXISTING GPS UNITS.
3. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.



ENLARGED SITE PLAN

12" 6" 0 1' 2' 3' 4' 5' 6' 7'
3/8"=1'-0"

2

NOT USED

3

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BLJ	BLJ	JW

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DISH WIRELESS L.L.C.
PROJECT INFORMATION

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220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE

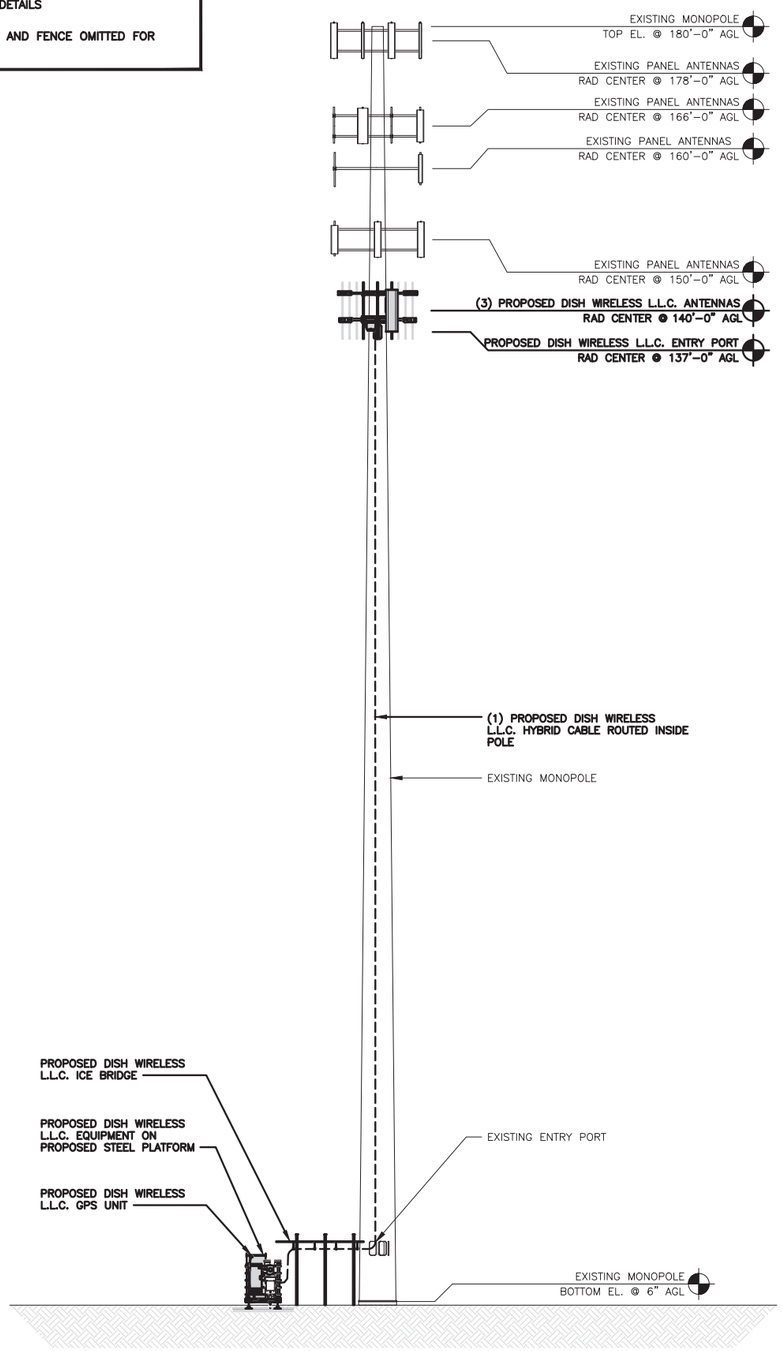
OVERALL AND ENLARGED SITE PLAN

SHEET NUMBER

A-1

NOTES

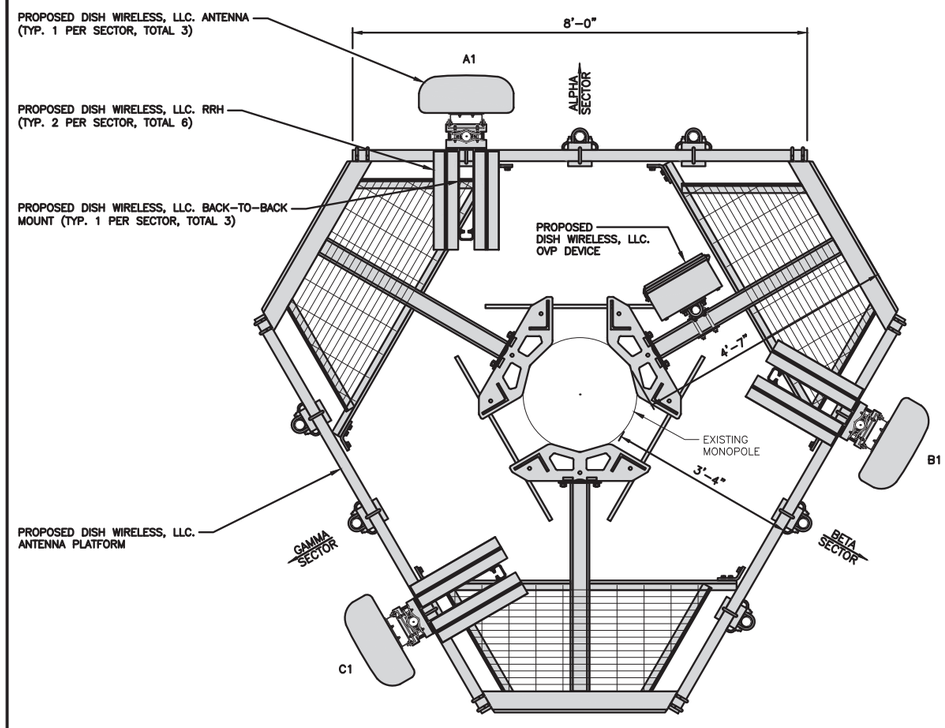
1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS.
2. ANTENNA AND MW DISH SPECIFICATIONS REFER TO ANTENNA SCHEDULE AND TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS
3. EXISTING EQUIPMENT AND FENCE OMITTED FOR CLARITY.



PROPOSED NORTHEAST ELEVATION

8' 4' 0 8' 16'
1/8"=1'-0"

1



ANTENNA LAYOUT

12" 6" 0 1' 2' 3'
3/4"=1'-0"

2

SECTOR	POSITION	ANTENNA						TRANSMISSION CABLE
		EXISTING OR PROPOSED	MANUFACTURER – MODEL NUMBER	TECHNOLOGY	SIZE (HxW)	AZIMUTH	RAD CENTER	FEED LINE TYPE AND LENGTH
ALPHA	A1	PROPOSED	JMA WIRELESS – MX08FRO665-21	5G	72.0" x 20.0"	0°	140'-0"	(1) HIGH-CAPACITY HYBRID CABLE (185'-0" LONG)
BETA	B1	PROPOSED	JMA WIRELESS – MX08FRO665-21	5G	72.0" x 20.0"	120°	140'-0"	
GAMMA	C1	PROPOSED	JMA WIRELESS – MX08FRO665-21	5G	72.0" x 20.0"	240°	140'-0"	

SECTOR	POSITION	RRH	
		MANUFACTURER – MODEL NUMBER	TECHNOLOGY
ALPHA	A1	FUJITSU – TA08025-B604	--
	A1	FUJITSU – TA08025-B605	--
BETA	B1	FUJITSU – TA08025-B604	--
	B1	FUJITSU – TA08025-B605	--
GAMMA	C1	FUJITSU – TA08025-B604	--
	C1	FUJITSU – TA08025-B605	--

NOTES

1. CONTRACTOR TO REFER TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS.
2. ANTENNA AND RRH MODELS MAY CHANGE DUE TO EQUIPMENT AVAILABILITY. ALL EQUIPMENT CHANGES MUST BE APPROVED AND REMAIN IN COMPLIANCE WITH THE PROPOSED DESIGN AND STRUCTURAL ANALYSES.

ANTENNA SCHEDULE

NO SCALE

3

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DISH WIRELESS L.L.C.
PROJECT INFORMATION

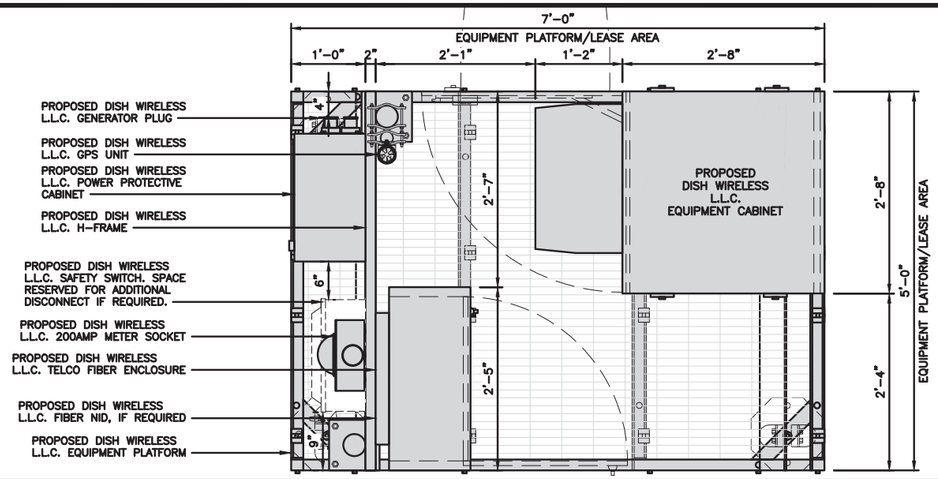
BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE

ELEVATION, ANTENNA LAYOUT AND SCHEDULE

SHEET NUMBER

A-2



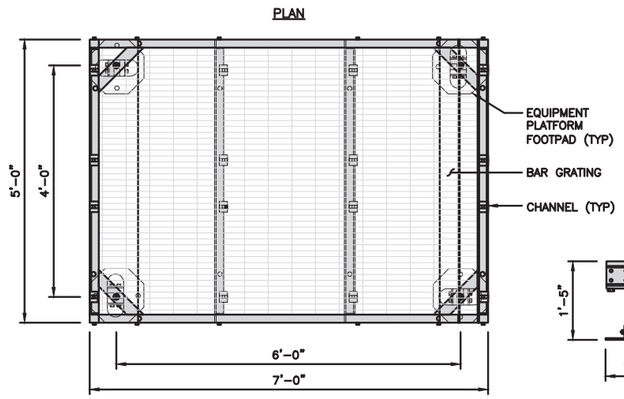
PLATFORM EQUIPMENT PLAN

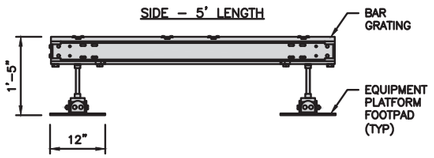
12" 9" 6" 3" 0 1' 2'
1"=1'-0"

1

COMMSCOPE MTC4045LP 5X7 PLATFORM	
DIMENSIONS (HxWxD)	16"x84"x60"
TOTAL WEIGHT	423 LBS

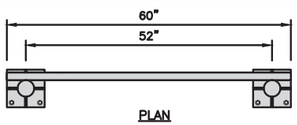
NOTE:
GC TO PROVIDE EXTENDED THREAD FOR PLATFORM IF REQUIRED HEIGHT EXCEEDS 17"

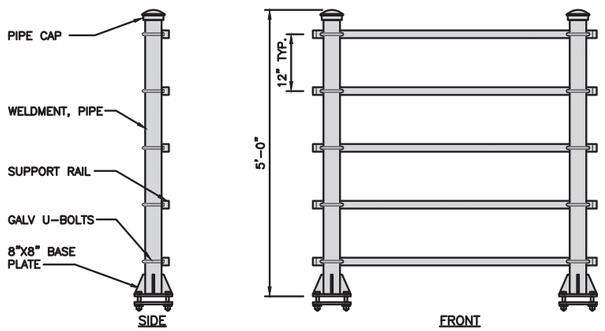




PLATFORM DETAIL | NO SCALE | 2

KENWOOD T1701KT5-5S H-FRAME	
UNISTRUT/SUPPORT RAIL	5
WEIGHT/ VOLUME	173.6 LBS



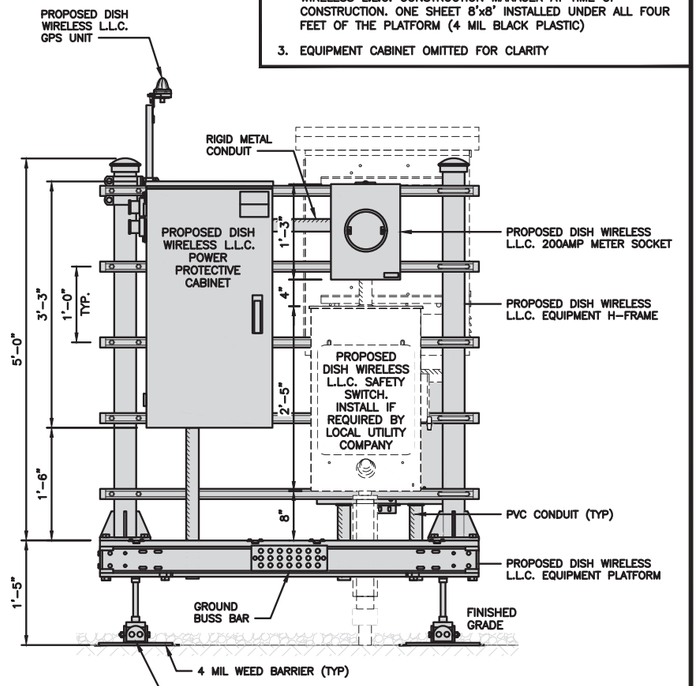


H-FRAME DETAIL | NO SCALE | 3

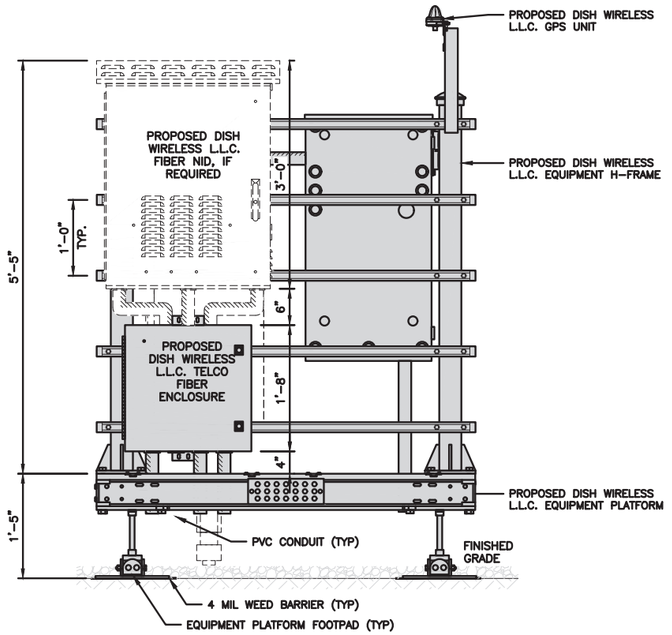
NOT USED | NO SCALE | 4

NOTES

1. CONTRACTOR TO BURY PLATFORM FEET WITH A MINIMUM OF 2" OF FILL PER EXISTING SITE SURFACE
2. WEED BARRIER FABRIC TO BE ADDED AT DISCRETION OF DISH WIRELESS L.L.C. CONSTRUCTION MANAGER AT TIME OF CONSTRUCTION. ONE SHEET 8'x8' INSTALLED UNDER ALL FOUR FEET OF THE PLATFORM (4 MIL BLACK PLASTIC)
3. EQUIPMENT CABINET OMITTED FOR CLARITY



FRONT ELEVATION



BACK ELEVATION

H-FRAME EQUIPMENT ELEVATION | 12" 9" 6" 3" 0 1' 2' 1"=1'-0" | 5

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BLJ	BLJ	JW

RFDS REV #: 1

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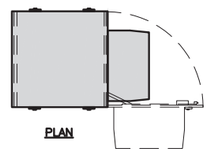
PROJECT INFORMATION
BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

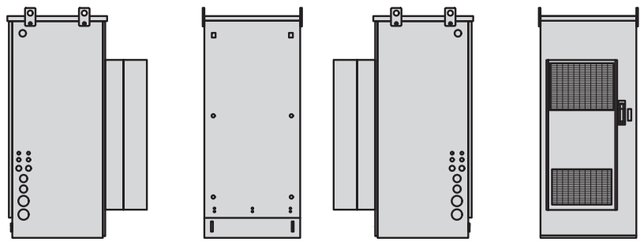
SHEET TITLE
EQUIPMENT PLATFORM AND H-FRAME DETAILS

SHEET NUMBER
A-3

CHARLES INDUSTRY HEX CUBE–PM639155N4

DIMENSIONS (HxWxD):	74"x32"x32"
POWER PLANT:	–48VDC ABB/600W
TOTAL WEIGHT (EMPTY)	408 LBS

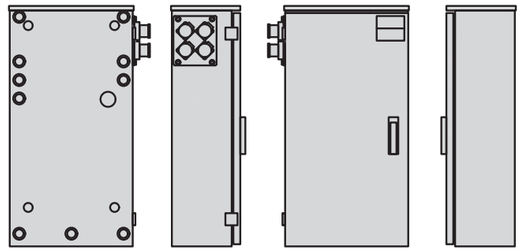




CABINET DETAIL | NO SCALE | 1

RAYCAP PPC RDIAC–2465–P–240–MTS

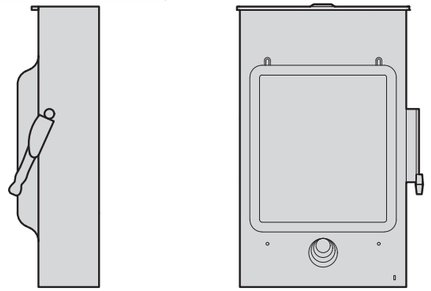
ENCLOSURE DIMENSIONS (HxWxD):	39"x22.855"x12.593
WEIGHT:	80 lbs
OPERATING AC VOLTAGE	240/120 1 PHASE 3W+G



POWER PROTECTION CABINET (PPC) DETAIL | NO SCALE | 2

SQUARE D SAFETY SWITCHES D224NRB

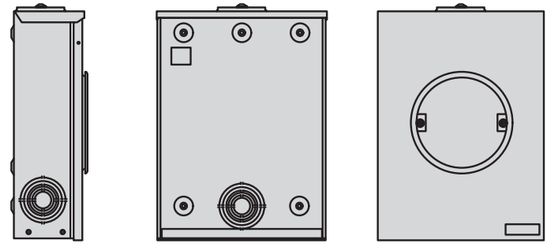
ENCLOSURE DIM (HxWxD)	29.25"x19.00"x8.50"
ENCLOSURE TYPE	NEMA 3R RAINPROOF
UL LISTED	FILE E–2875



SAFETY SWITCH DETAIL | NO SCALE | 3

EATON METER SOCKET UNRRS213BEUSE

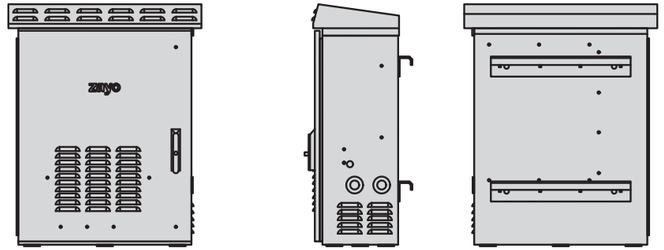
METER SOCKET TYPE	RING
ENCLOSURE DIM (HxWxD)	16"x12"x6"
MAIN AMPERE RATING	200A
WEIGHT	18 LBS



METER SOCKET DETAIL | NO SCALE | 4

ZAYO 5RU CABINET LEFT SWING DOOR ("LIT" SITES)

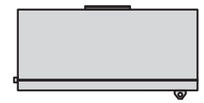
DIMENSIONS (HxWxD)	36.115"x29"x12.9"
WEIGHT	85 LBS
POWER INPUT	20A, –48VDC

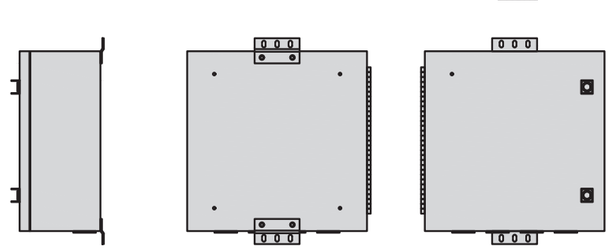


NETWORK INTERFACE UNIT DETAIL | NO SCALE | 5

CHARLES CFIT–PF2020DSH1 FIBER TELCO ENCLOSURE

ENCLOSURE DIMS (HxWxD)	20"x20"x9"
ENCLOSURE WEIGHT	20 lbs
MOUNTING	WALL
COMPLIANCE	TYPE 4



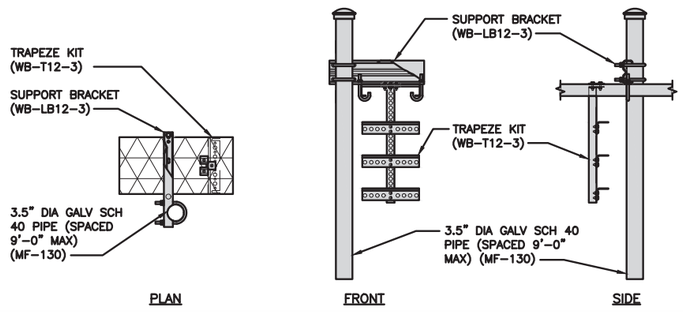


FIBER TELCO ENCLOSURE DETAIL | NO SCALE | 6

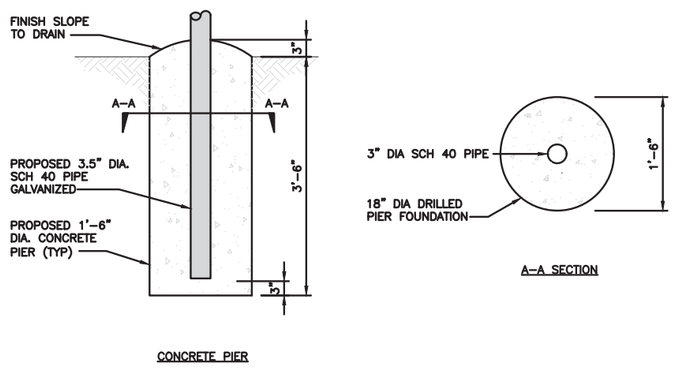
COMMSCOPE WB–K110–B WAVEGUIDE BRIDGE KIT

DIMENSIONS (HxL)	160"x10'
WEIGHT/ VOLUME	325.0 LBS
CABLE RUN (QTY)	12

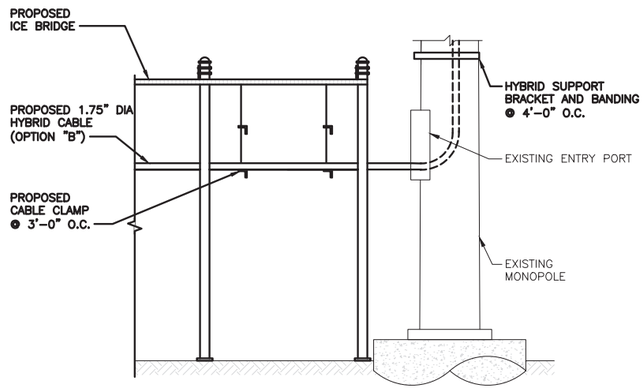
INCLUDED PRODUCTS:
- WB–T12–3 TRAPEZE KIT, 3 RUNGS
- WB–LB12–3 SUPPORT BRACKET
- MF–130 DIRECT BURIAL PIPE COLUMN, 13'–4"



ICE BRIDGE DETAIL | NO SCALE | 7



TYPICAL ICE BRIDGE CONCRETE PIER DETAIL | NO SCALE | 8



HYBRID CABLE RUN | NO SCALE | 9

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BLJ	BLJ	JW

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PRELIMINARY DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
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0	6/21/21	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER

149485.001.01

DISH WIRELESS L.L.C.
PROJECT INFORMATION

BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

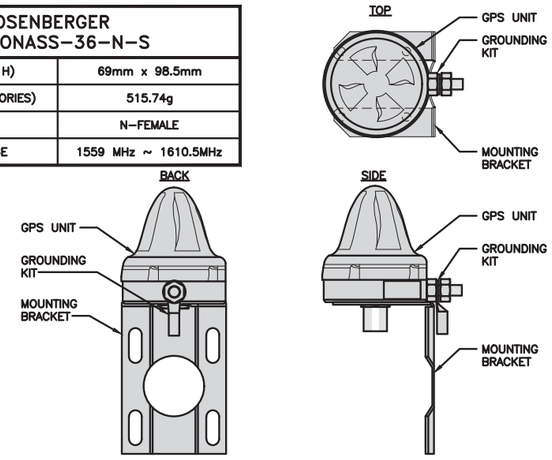
SHEET TITLE

EQUIPMENT DETAILS

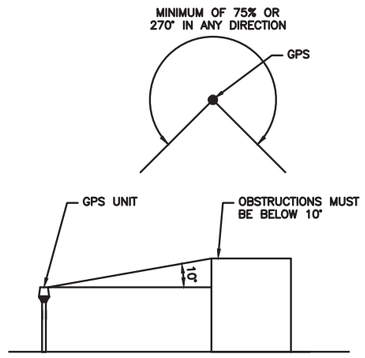
SHEET NUMBER

A-4

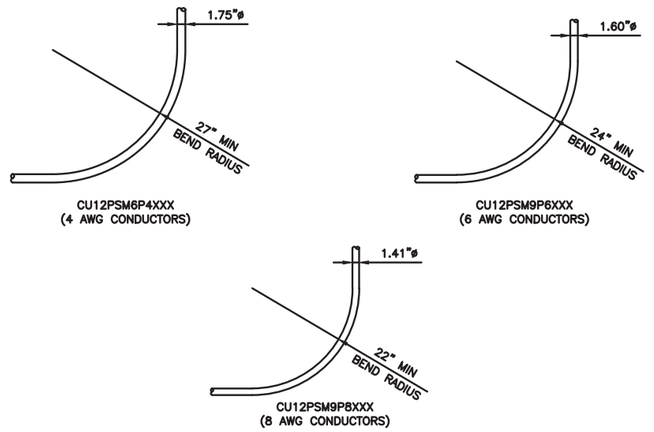
ROSENBERGER GPSGLONASS-36-N-S	
DIMENSION (DIA x H)	69mm x 98.5mm
WEIGHT (WITH ACCESSORIES)	515.74g
CONNECTOR	N-FEMALE
FREQUENCY RANGE	1559 MHz ~ 1610.5MHz



GPS ANTENNA DETAIL | NO SCALE | 1



GPS MINIMUM SKY VIEW REQUIREMENTS | NO SCALE | 2



CABLES UNLIMITED HYBRID CABLE MINIMUM BEND RADIUSES | NO SCALE | 3

NOT USED | NO SCALE | 4

NOT USED | NO SCALE | 5

NOT USED | NO SCALE | 6

NOT USED | NO SCALE | 7

NOT USED | NO SCALE | 8

NOT USED | NO SCALE | 9

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220 WINTHROP RD
DEEP RIVER, CT 06417

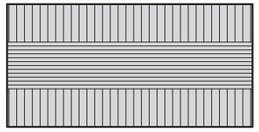
SHEET TITLE

EQUIPMENT DETAILS

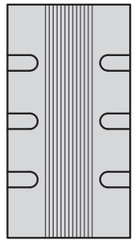
SHEET NUMBER

A-5

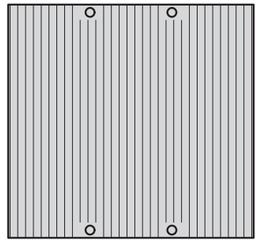
FUJITSU TA08025-B604 RRH	
DIMENSIONS (HxWxD) (KG/IN)	380x400x200/14.9"x15.7"x7.8"
WEIGHT(KG,LB)/ VOLUME	29kg,63.9lb/ 30L
POWER SUPPLY	DC-58~-36V



PLAN



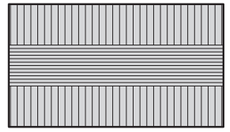
SIDE



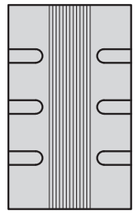
FRONT

REMOTE RADIO HEAD DETAIL | NO SCALE | 1

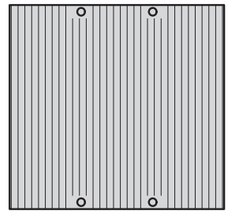
FUJITSU TA08025-B605 RRH	
DIMENSIONS (HxWxD) (KG/IN)	380x400x230/14.9"x15.7"x9.0"
WEIGHT(KG,LB)/ VOLUME	34kg,74.9lb/ 35L
POWER SUPPLY	DC-58~-36V



PLAN



SIDE

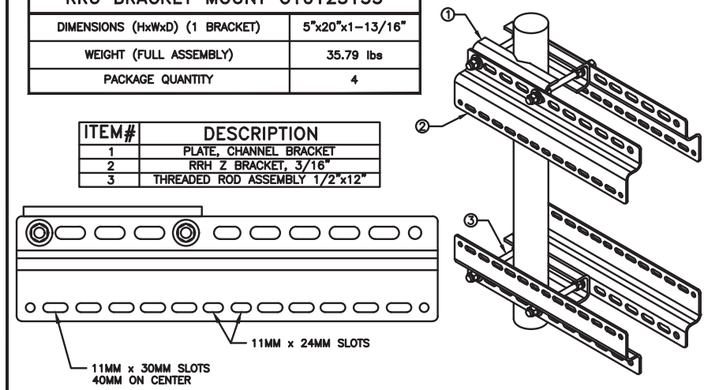


FRONT

REMOTE RADIO HEAD DETAIL | NO SCALE | 2

SABRE INDUSTRIES RRU BRACKET MOUNT C10123155	
DIMENSIONS (HxWxD) (1 BRACKET)	5"x20"x1-13/16"
WEIGHT (FULL ASSEMBLY)	35.79 lbs
PACKAGE QUANTITY	4

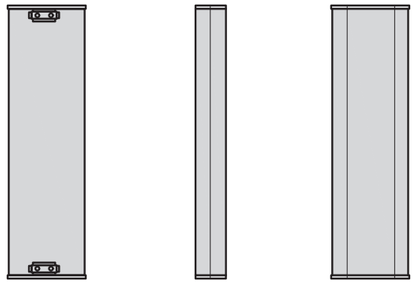
ITEM#	DESCRIPTION
1	PLATE, CHANNEL BRACKET
2	RRH Z BRACKET, 3/16"
3	THREADED ROD ASSEMBLY 1/2"x12"



REMOTE RADIO MOUNT DETAIL | NO SCALE | 3

JMA WIRELESS MX08FRO665-21 ANTENNA	
DIMENSIONS (HxWxD)	72.0"x20.0"x8.0"
TOTAL WEIGHT	64.5 LB
RF PORTS, CONNECTOR TYPE	8 x 4.3-10 FEMALE

PLAN



BACK

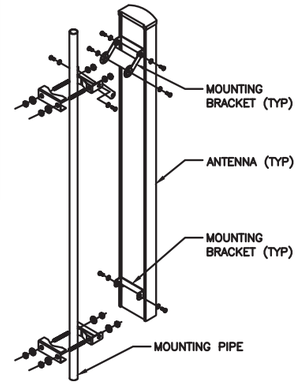
SIDE

FRONT

ANTENNA DETAIL | NO SCALE | 4

NOT USED | NO SCALE | 5

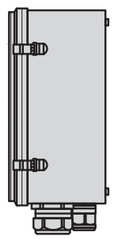
M04 MOUNTING BRACKET HPA-33R-BUU-H4-K	
WIDTH	5" (135mm)
DEPTH	2" (51mm)
HEIGHT	8" (213mm)
TOTAL WEIGHT (WITH BRACKETS)	1.5 LBS (15.50 Kg)
HOUSING MATERIAL	ASA/ABS/ALUMINUM
RADOME COLOR	LIGHT GRAY
CONNECTOR	1X8-PIN DAISY CHAIN



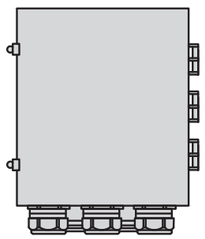
ANTENNA MOUNTING DETAIL | NO SCALE | 6

RAYCAP RDIDC-9181-PF-48 DC SURGE PROTECTION (OVP)	
DIMENSIONS (HxWxD)	18.98"x14.39"x8.15"
WEIGHT	21.82 LBS

PLAN



SIDE



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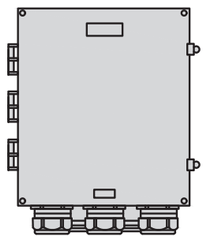
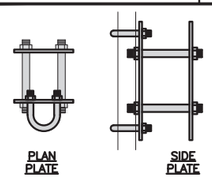


FRONT

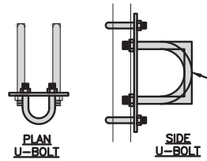
SURGE SUPPRESSION DETAIL (OVP) | NO SCALE | 7

COMMSCOPE XP-2040 CROSSOVER PLATE	
DIMENSIONS (HxW)	10"x12"
WEIGHT	11.023 LBS



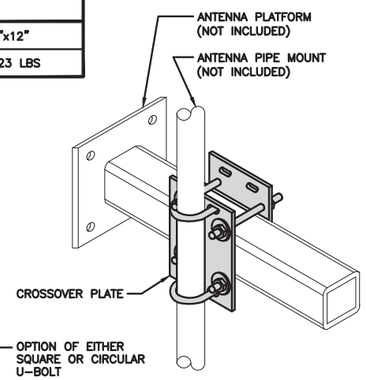
PLAN PLATE

SIDE PLATE



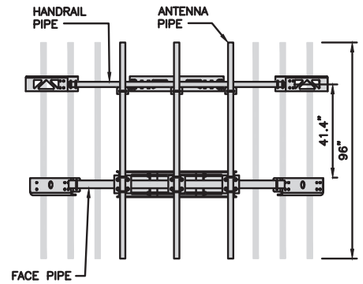
PLAN U-BOLT

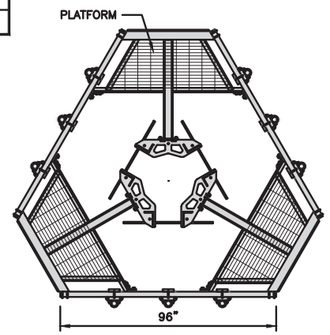
SIDE U-BOLT



RRH/OVP MOUNT DETAIL | NO SCALE | 8

COMMSCOPE MC-PK8-DSH	
FACE WIDTH	96"
WEIGHT	1373.08 lbs
NOTE: 15" TO 38" O.D.	





ANTENNA PLATFORM DETAIL | NO SCALE | 9

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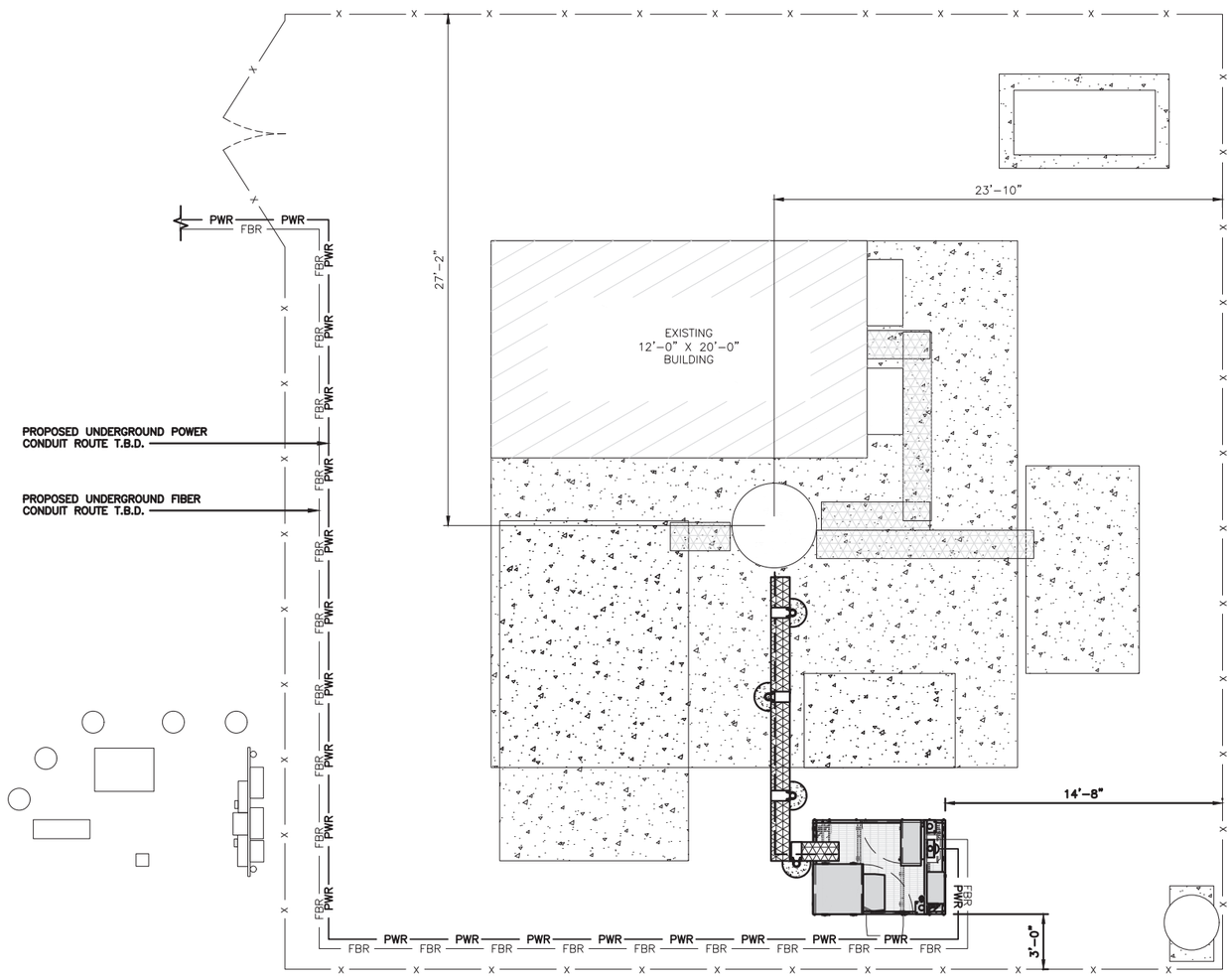
PROJECT INFORMATION
BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
A-6

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED UNDERGROUND UTILITY CONDUIT ROUTE.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.



DC POWER WIRING SHALL BE COLOR CODED AT EACH END FOR IDENTIFYING +24V AND -48V CONDUCTORS. RED MARKINGS SHALL IDENTIFY +24V AND BLUE MARKINGS SHALL IDENTIFY -48V.

1. CONTRACTOR SHALL INSPECT THE EXISTING CONDITIONS PRIOR TO SUBMITTING A BID. ANY QUESTIONS ARISING DURING THE BID PERIOD IN REGARDS TO THE CONTRACTOR'S FUNCTIONS, THE SCOPE OF WORK, OR ANY OTHER ISSUE RELATED TO THIS PROJECT SHALL BE BROUGHT UP DURING THE BID PERIOD WITH THE PROJECT MANAGER FOR CLARIFICATION, NOT AFTER THE CONTRACT HAS BEEN AWARDED.
2. ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH CURRENT NATIONAL ELECTRICAL CODES AND ALL STATE AND LOCAL CODES, LAWS, AND ORDINANCES. PROVIDE ALL COMPONENTS AND WIRING SIZES AS REQUIRED TO MEET NEC STANDARDS.
3. LOCATION OF EQUIPMENT, CONDUIT AND DEVICES SHOWN ON THE DRAWINGS ARE APPROXIMATE AND SHALL BE COORDINATED WITH FIELD CONDITIONS PRIOR TO CONSTRUCTION.
4. CONDUIT ROUGH-IN SHALL BE COORDINATED WITH THE MECHANICAL EQUIPMENT TO AVOID LOCATION CONFLICTS. VERIFY WITH THE MECHANICAL EQUIPMENT CONTRACTOR AND COMPLY AS REQUIRED.
5. CONTRACTOR SHALL PROVIDE ALL BREAKERS, CONDUITS AND CIRCUITS AS REQUIRED FOR A COMPLETE SYSTEM.
6. CONTRACTOR SHALL PROVIDE PULL BOXES AND JUNCTION BOXES AS REQUIRED BY THE NEC ARTICLE 314.
7. CONTRACTOR SHALL PROVIDE ALL STRAIN RELIEF AND CABLE SUPPORTS FOR ALL CABLE ASSEMBLIES. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
8. ALL DISCONNECTS AND CONTROLLING DEVICES SHALL BE PROVIDED WITH ENGRAVED PHENOLIC NAMEPLATES INDICATING EQUIPMENT CONTROLLED, BRANCH CIRCUITS INSTALLED ON, AND PANEL FIELD LOCATIONS FED FROM.
9. INSTALL AN EQUIPMENT GROUNDING CONDUCTOR IN ALL CONDUITS PER THE SPECIFICATIONS AND NEC 250. THE EQUIPMENT GROUNDING CONDUCTORS SHALL BE BONDED AT ALL JUNCTION BOXES, PULL BOXES, AND ALL DISCONNECT SWITCHES, AND EQUIPMENT CABINETS.
10. ALL NEW MATERIAL SHALL HAVE A U.L. LABEL.
11. PANEL SCHEDULE LOADING AND CIRCUIT ARRANGEMENTS REFLECT POST-CONSTRUCTION EQUIPMENT.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR AS-BUILT PANEL SCHEDULE AND SITE DRAWINGS.
13. ALL TRENCHES IN COMPOUND ARE TO BE HAND DUG.

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DEEP RIVER, CT 06417

SHEET TITLE

ELECTRICAL/FIBER ROUTE PLAN AND NOTES

SHEET NUMBER

E-1

UTILITY ROUTE PLAN

4' 2' 0 4' 8'
1/4"=1'-0"

1

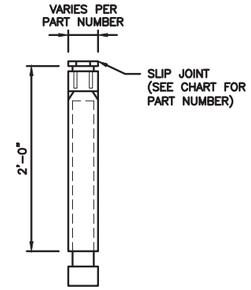
ELECTRICAL NOTES

NO SCALE

2

CARLON EXPANSION FITTINGS

COUPLING END PART#	MALE TERMINAL ADAPTER END PART#	SIZE	STD CTN QTY.	TRAVEL LENGTH
E945D	E945DX	1/2"	20	4"
E945E	E945EX	3/4"	15	4"
E945F	E945FX	1"	10	4"
E945G	E945GX	1 1/4"	5	4"
E945H	E945HX	1 1/2"	5	4"
E945J	E945JX	2"	15	8"
E945K	E945KX	2 1/2"	10	8"
E945L	E945LX	3"	10	8"
E945M	E945MX	3 1/2"	5	8"
E945N	E945NX	4"	5	8"
E945P	E945PX	5"	1	8"
E945R	E945RX	6"	1	8"

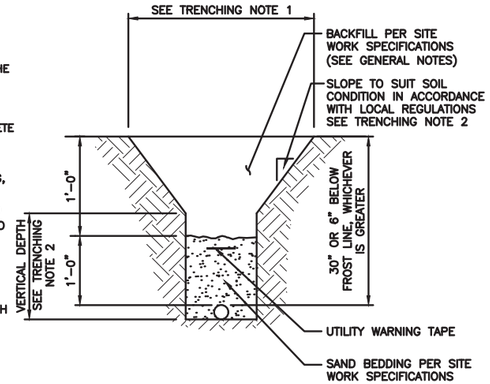


NOTE:
CONTRACTOR TO INSTALL EXPANSION FITTING SLIP JOINT AT METER CENTER CONDUIT TERMINATION, AS PER LOCAL UTILITY POLICY, ORDINANCE AND/OR SPECIFIED REQUIREMENT.

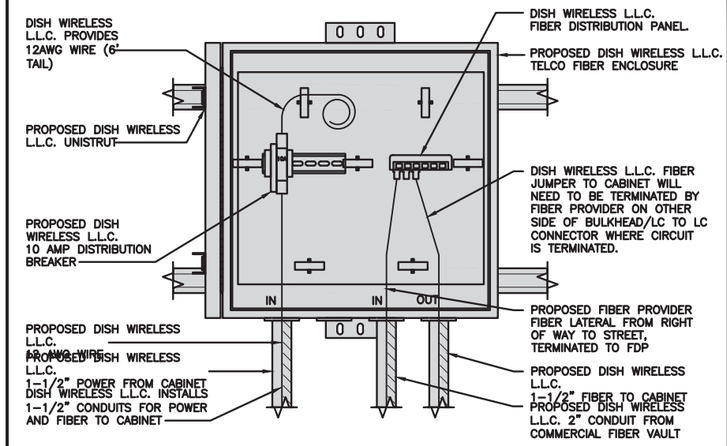
EXPANSION JOINT DETAIL | NO SCALE | 1

TRENCHING NOTES

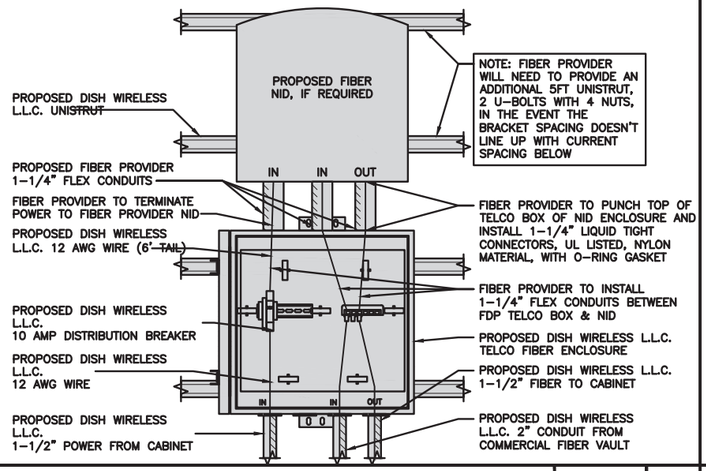
1. CONTRACTOR SHALL RESTORE THE TRENCH TO ITS ORIGINAL CONDITIONS BY EITHER SEEDING OR SODDING GRASS AREAS, OR REPLACING ASPHALT OR CONCRETE AREAS TO ITS ORIGINAL CROSS SECTION.
2. TRENCHING SAFETY; INCLUDING, BUT NOT LIMITED TO SOIL CLASSIFICATION, SLOPING, AND SHORING, SHALL BE GOVERNED BY THE CURRENT OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS.
3. ALL CONDUITS SHALL BE INSTALLED IN COMPLIANCE WITH THE CURRENT NATIONAL ELECTRIC CODE (NEC) OR AS REQUIRED BY THE LOCAL JURISDICTION, WHICHEVER IS THE MOST STRINGENT.



TYPICAL UNDERGROUND TRENCH DETAIL | NO SCALE | 2



DARK TELCO BOX – INTERIOR WIRING LAYOUT | NO SCALE | 3



LIT TELCO BOX – INTERIOR WIRING LAYOUT (OPTIONAL) | NO SCALE | 4

NOT USED | NO SCALE | 5

NOT USED | NO SCALE | 6

NOT USED | NO SCALE | 7

NOT USED | NO SCALE | 8

NOT USED | NO SCALE | 9

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SUBMITTALS

REV	DATE	DESCRIPTION
A	5/20/21	ISSUED FOR REVIEW
0	6/21/21	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER

149485.001.01

DISH WIRELESS L.L.C.
PROJECT INFORMATION

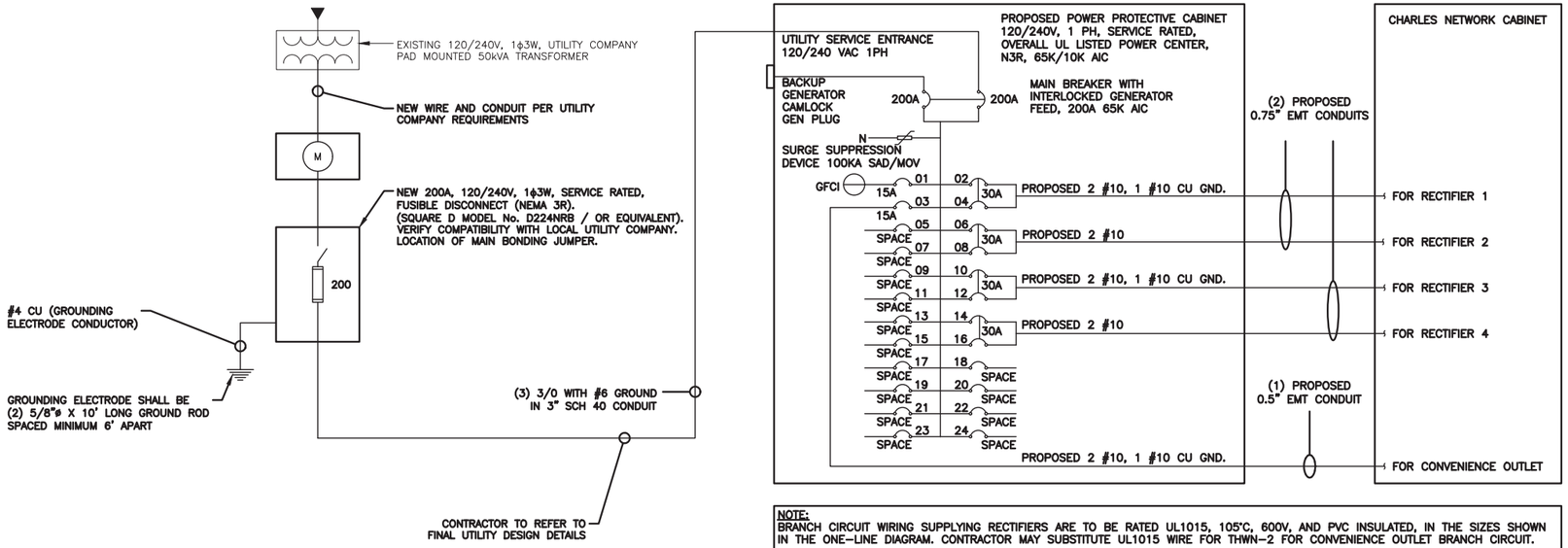
BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE

ELECTRICAL DETAILS

SHEET NUMBER

E-2



NOTE:
BRANCH CIRCUIT WIRING SUPPLYING RECTIFIERS ARE TO BE RATED UL1015, 105°C, 600V, AND PVC INSULATED, IN THE SIZES SHOWN IN THE ONE-LINE DIAGRAM. CONTRACTOR MAY SUBSTITUTE UL1015 WIRE FOR THWN-2 FOR CONVENIENCE OUTLET BRANCH CIRCUIT.

BREAKERS REQUIRED:
(4) 30A, 2P BREAKER - SQUARE D P/N:QO230
(1) 15A, 1P BREAKER - SQUARE D P/N:QO115

PPC ONE-LINE DIAGRAM

NO SCALE | 1

NOTES

THE (2) CONDUITS WITH (4) CURRENT CARRYING CONDUCTORS EACH, SHALL APPLY THE ADJUSTMENT FACTOR OF 80% PER 2014/17 NEC TABLE 310.15(B)(3)(a) OR 2020 NEC TABLE 310.15(C)(1) FOR UL1015 WIRE.

#12 FOR 15A-20A/1P BREAKER: 0.8 x 30A = 24.0A
#10 FOR 25A-30A/2P BREAKER: 0.8 x 40A = 32.0A
#8 FOR 35A-40A/2P BREAKER: 0.8 x 55A = 44.0A
#6 FOR 45A-60A/2P BREAKER: 0.8 x 75A = 60.0A

CONDUIT SIZING: AT 40% FILL PER NEC CHAPTER 9, TABLE 4, ARTICLE 358.
0.5" CONDUIT - 0.122 SQ. IN AREA
0.75" CONDUIT - 0.213 SQ. IN AREA
2.0" CONDUIT - 1.316 SQ. IN AREA
3.0" CONDUIT - 2.907 SQ. IN AREA

CABINET CONVENIENCE OUTLET CONDUCTORS (1 CONDUIT): USING THWN-2, CU.

#10 - 0.0211 SQ. IN X 2 = 0.0422 SQ. IN
#10 - 0.0211 SQ. IN X 1 = 0.0211 SQ. IN <GROUND
TOTAL = 0.0633 SQ. IN

0.5" EMT CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (3) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.

RECTIFIER CONDUCTORS (2 CONDUITS): USING UL1015, CU.

#10 - 0.0266 SQ. IN X 4 = 0.1064 SQ. IN
#10 - 0.0082 SQ. IN X 1 = 0.0082 SQ. IN <BARE GROUND
TOTAL = 0.1146 SQ. IN

0.75" EMT CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (5) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.

PPC FEED CONDUCTORS (1 CONDUIT): USING THWN, CU.

3/0 - 0.2679 SQ. IN X 3 = 0.8037 SQ. IN
#6 - 0.0507 SQ. IN X 1 = 0.0507 SQ. IN <GROUND
TOTAL = 0.8544 SQ. IN

3.0" SCH 40 PVC CONDUIT IS ADEQUATE TO HANDLE THE TOTAL OF (4) WIRES, INCLUDING GROUND WIRE, AS INDICATED ABOVE.

PROPOSED CHARLES PANEL SCHEDULE

LOAD SERVED	VOLT AMPS (WATTS) L1	VOLT AMPS (WATTS) L2	TRIP	CKT #	PHASE	CKT #	TRIP	VOLT AMPS (WATTS) L1	VOLT AMPS (WATTS) L2	LOAD SERVED
PPC GFCI OUTLET	180		15A	1	A	2	30A	2880		ABB/GE INFINITY RECTIFIER 1
CHARLES GFCI OUTLET		180	15A	3	B	4			2880	
-SPACE-				5	A	6	30A	2880		ABB/GE INFINITY RECTIFIER 2
-SPACE-				7	B	8			2880	
-SPACE-				9	A	10	30A	2880		ABB/GE INFINITY RECTIFIER 3
-SPACE-				11	B	12			2880	
-SPACE-				13	A	14	30A	2880		ABB/GE INFINITY RECTIFIER 4
-SPACE-				15	B	16			2880	
-SPACE-				17	A	18				-SPACE-
-SPACE-				19	B	20				-SPACE-
-SPACE-				21	A	22				-SPACE-
-SPACE-				23	B	24				-SPACE-
VOLTAGE AMPS	180	180						11520	11520	
200A MCB, 1ϕ, 24 SPACE, 120/240V			L1		L2					
MB RATING: 65,000 AIC			11700		11700		VOLTAGE AMPS			
			98		98		AMPS			
			98				MAX AMPS			
			123				MAX 125%			

PANEL SCHEDULE

NO SCALE | 2

NOT USED

NO SCALE | 3

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STATE OF CONNECTICUT No. 27024 PROFESSIONAL ENGINEER
06/21/21

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/22

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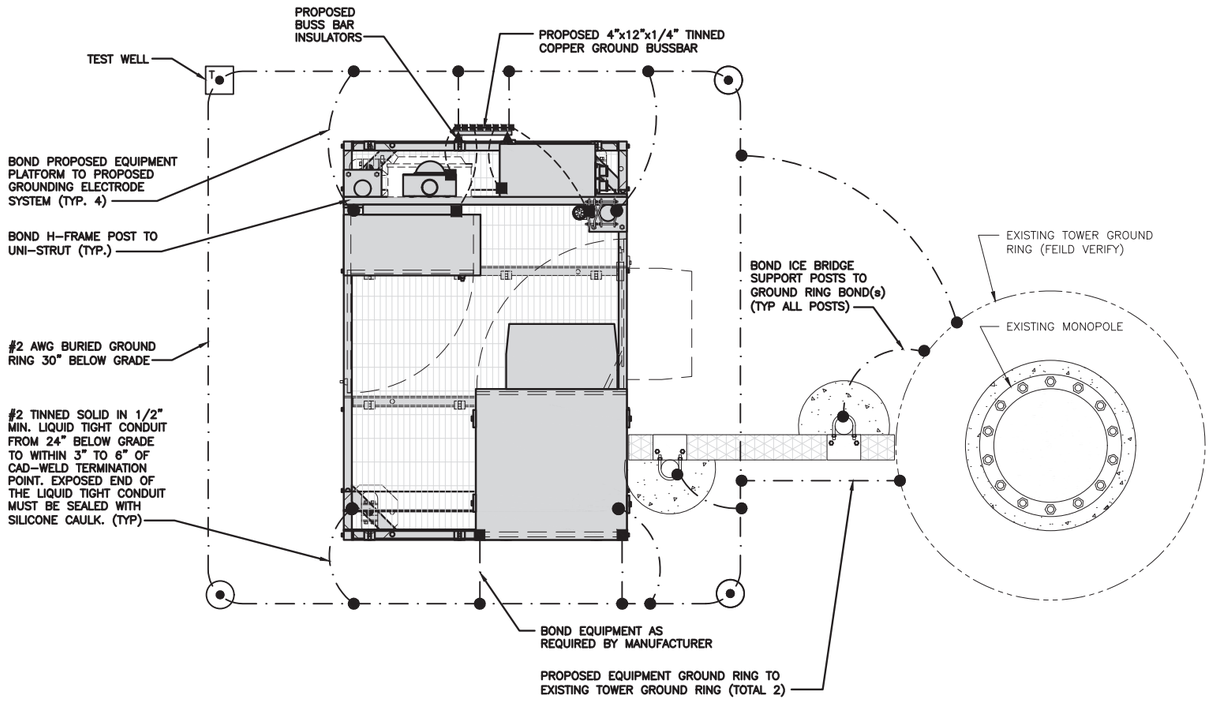
220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE
ELECTRICAL ONE-LINE, FAULT CALCS & PANEL SCHEDULE

SHEET NUMBER
E-3

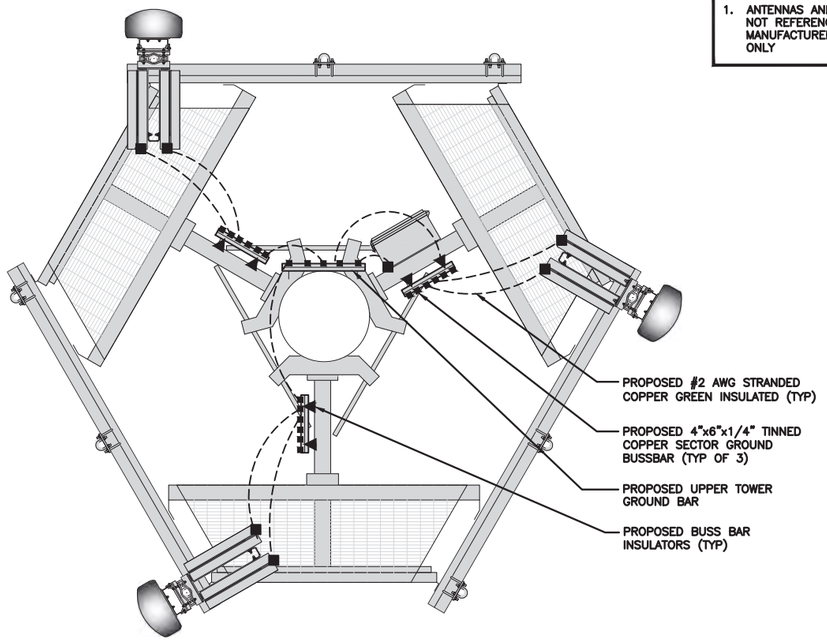


TYPICAL EQUIPMENT GROUNDING PLAN

NO SCALE | 1

NOTES

1. ANTENNAS AND OVP SHOWN ARE GENERIC AND NOT REFERENCING TO A SPECIFIC MANUFACTURER. THIS LAYOUT IS FOR REFERENCE ONLY



TYPICAL ANTENNA GROUNDING PLAN

NO SCALE | 2

EXOTHERMIC CONNECTION
MECHANICAL CONNECTION
GROUND BUS BAR
GROUND ROD
TEST GROUND ROD WITH INSPECTION SLEEVE
#6 AWG STRANDED & INSULATED
#2 AWG SOLID COPPER TINNED
BUSS BAR INSULATOR

GROUNDING LEGEND

1. GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
2. CONTRACTOR SHALL GROUND ALL EQUIPMENT AS A COMPLETE SYSTEM. GROUNDING SHALL BE IN COMPLIANCE WITH NEC SECTION 250 AND DISH WIRELESS L.L.C. GROUNDING AND BONDING REQUIREMENTS AND MANUFACTURER'S SPECIFICATIONS.
3. ALL GROUND CONDUCTORS SHALL BE COPPER; NO ALUMINUM CONDUCTORS SHALL BE USED.

GROUNDING KEY NOTES

(A) EXTERIOR GROUND RING: #2 AWG SOLID COPPER, BURIED AT A DEPTH OF AT LEAST 30 INCHES BELOW GRADE, OR 6 INCHES BELOW THE FROST LINE AND APPROXIMATELY 24 INCHES FROM THE EXTERIOR WALL OR FOOTING.

(B) TOWER GROUND RING: THE GROUND RING SYSTEM SHALL BE INSTALLED AROUND AN ANTENNA TOWER'S LEGS, AND/OR GUY ANCHORS. WHERE SEPARATE SYSTEMS HAVE BEEN PROVIDED FOR THE TOWER AND THE BUILDING, AT LEAST TWO BONDS SHALL BE MADE BETWEEN THE TOWER RING GROUND SYSTEM AND THE BUILDING RING GROUND SYSTEM USING MINIMUM #2 AWG SOLID COPPER CONDUCTORS.

(C) INTERIOR GROUND RING: #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTOR EXTENDED AROUND THE PERIMETER OF THE EQUIPMENT AREA. ALL NON-TELECOMMUNICATIONS RELATED METALLIC OBJECTS FOUND WITHIN A SITE SHALL BE GROUNDED TO THE INTERIOR GROUND RING WITH #6 AWG STRANDED GREEN INSULATED CONDUCTOR.

(D) BOND TO INTERIOR GROUND RING: #2 AWG SOLID TINNED COPPER WIRE PRIMARY BONDS SHALL BE PROVIDED AT LEAST AT FOUR POINTS ON THE INTERIOR GROUND RING, LOCATED AT THE CORNERS OF THE BUILDING.

(E) GROUND ROD: UL LISTED COPPER CLAD STEEL. MINIMUM 1/2" DIAMETER BY EIGHT FEET LONG. GROUND RODS SHALL BE INSTALLED WITH INSPECTION SLEEVES. GROUND RODS SHALL BE DRIVEN TO THE DEPTH OF GROUND RING CONDUCTOR.

(F) CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 AWG UNLESS NOTED OTHERWISE STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUCTORS.

(G) HATCH PLATE GROUND BAR: BOND TO THE INTERIOR GROUND RING WITH TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS. WHEN A HATCH-PLATE AND A CELL REFERENCE GROUND BAR ARE BOTH PRESENT, THE CRGB MUST BE CONNECTED TO THE HATCH-PLATE AND TO THE INTERIOR GROUND RING USING (2) TWO #2 AWG STRANDED GREEN INSULATED COPPER CONDUCTORS EACH.

(H) EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE.

(I) TELCO GROUND BAR: BOND TO BOTH CELL REFERENCE GROUND BAR OR EXTERIOR GROUND RING.

(J) FRAME BONDING: THE BONDING POINT FOR TELECOM EQUIPMENT FRAMES SHALL BE THE GROUND BUS THAT IS NOT ISOLATED FROM THE EQUIPMENTS METAL FRAMEWORK.

(K) INTERIOR UNIT BONDS: METAL FRAMES, CABINETS AND INDIVIDUAL METALLIC UNITS LOCATED WITH THE AREA OF THE INTERIOR GROUND RING REQUIRE A #6 AWG STRANDED GREEN INSULATED COPPER BOND TO THE INTERIOR GROUND RING.

(L) FENCE AND GATE GROUNDING: METAL FENCES WITHIN 7 FEET OF THE EXTERIOR GROUND RING OR OBJECTS BONDED TO THE EXTERIOR GROUND RING SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG SOLID TINNED COPPER CONDUCTOR AT AN INTERVAL NOT EXCEEDING 25 FEET. BONDS SHALL BE MADE AT EACH GATE POST AND ACROSS GATE OPENINGS.

(M) EXTERIOR UNIT BONDS: METALLIC OBJECTS, EXTERNAL TO OR MOUNTED TO THE BUILDING, SHALL BE BONDED TO THE EXTERIOR GROUND RING. USING #2 TINNED SOLID COPPER WIRE

(N) ICE BRIDGE SUPPORTS: EACH ICE BRIDGE LEG SHALL BE BONDED TO THE GROUND RING WITH #2 AWG BARE TINNED COPPER CONDUCTOR. PROVIDE EXOTHERMIC WELDS AT BOTH THE ICE BRIDGE LEG AND BURIED GROUND RING.

(O) DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICE CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH A MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR

(P) TOWER TOP COLLECTOR BUSS BAR IS TO BE MECHANICALLY BONDED TO PROPOSED ANTENNA MOUNT COLLAR.

REFER TO DISH WIRELESS L.L.C. GROUNDING NOTES.

GROUNDING KEY NOTES

NO SCALE | 3

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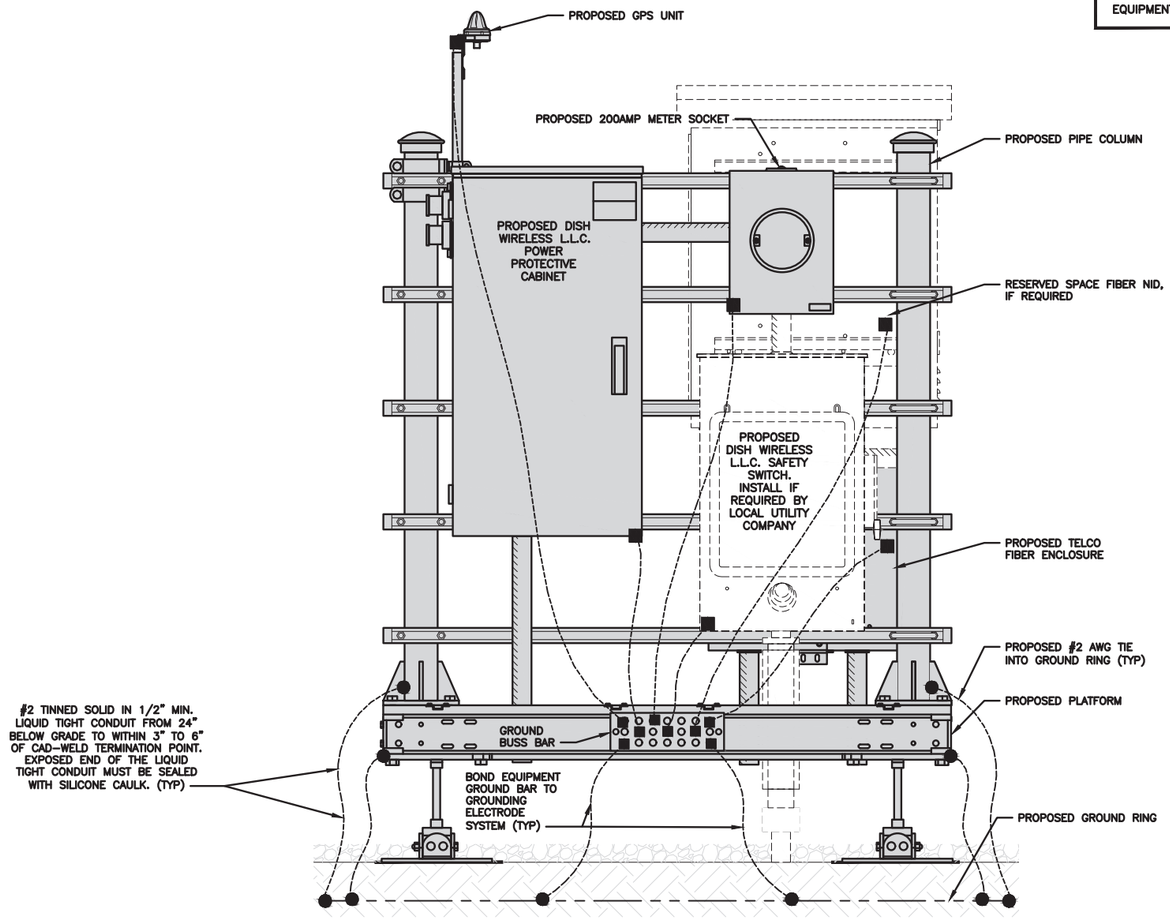
220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE
GROUNDING PLANS AND NOTES

SHEET NUMBER
G-1

NOTES

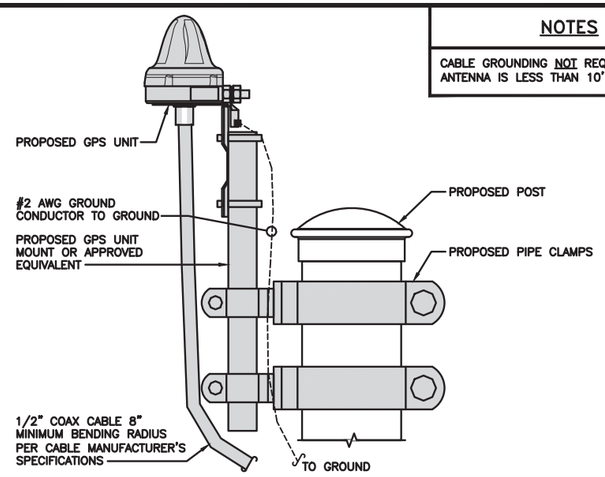
EQUIPMENT CABINET OMITTED FOR CLARITY



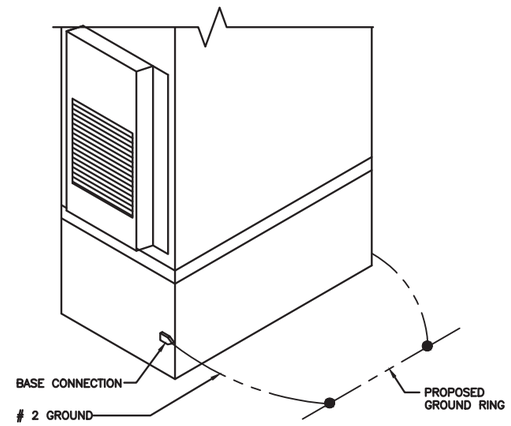
H-FRAME GROUNDING DETAIL | NO SCALE | 1

NOTES

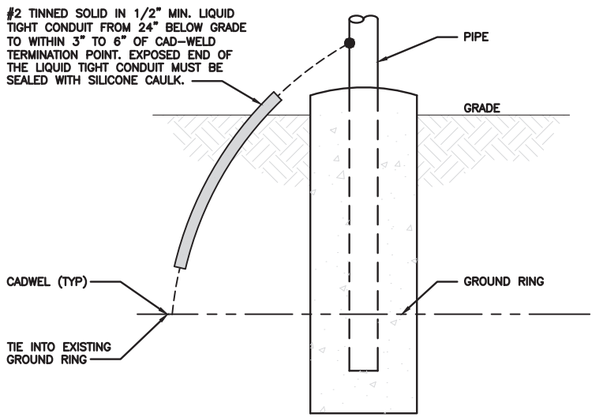
CABLE GROUNDING NOT REQUIRED WHEN ANTENNA IS LESS THAN 10' FROM CABINET



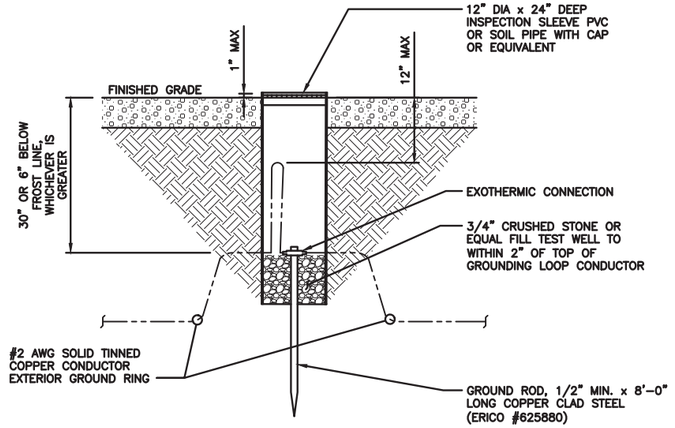
TYPICAL GPS UNIT GROUNDING | NO SCALE | 2



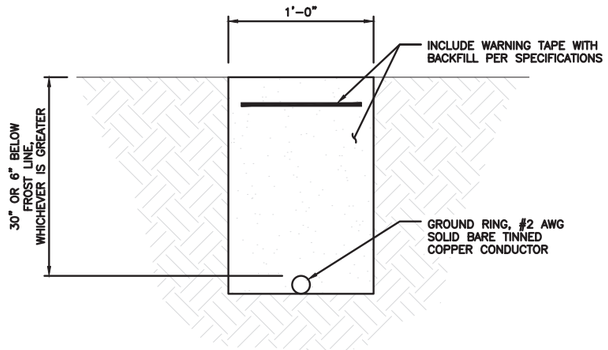
OUTDOOR CABINET GROUNDING | NO SCALE | 3



TRANSITIONING GROUND DETAIL | NO SCALE | 4



TYPICAL TEST GROUND ROD WITH INSPECTION SLEEVE | NO SCALE | 5



TYPICAL GROUND RING TRENCH | NO SCALE | 6

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SHEET TITLE

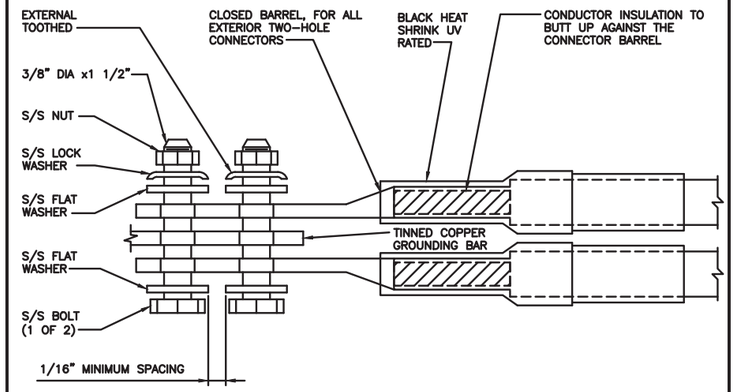
GROUNDING DETAILS

SHEET NUMBER

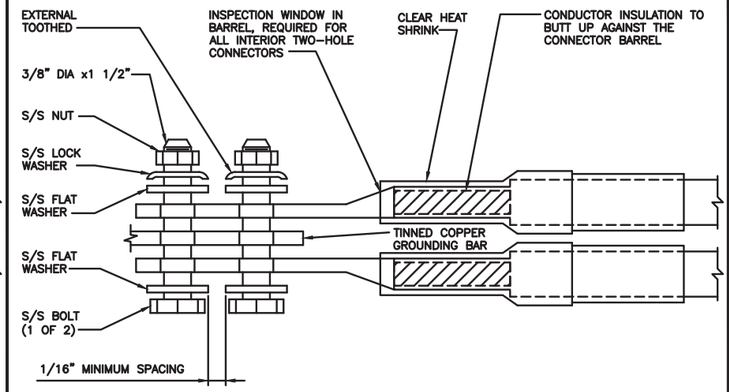
G-2

1. EXOTHERMIC WELD (2) TWO, #2 AWG BARE TINNED SOLID COPPER CONDUCTORS TO GROUND BAR, ROUTE CONDUCTORS TO BURIED GROUND RING AND PROVIDE PARALLEL EXOTHERMIC WELD.
2. ALL EXTERIOR GROUNDING HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
3. FOR GROUND BOND TO STEEL ONLY: COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING.
4. DO NOT INSTALL CABLE GROUNDING KIT AT A BEND AND ALWAYS DIRECT GROUND CONDUCTOR DOWN TO GROUNDING BUS.
5. NUT & WASHER SHALL BE PLACED ON THE FRONT SIDE OF THE GROUND BAR AND BOLTED ON THE BACK SIDE.
6. ALL GROUNDING PARTS AND EQUIPMENT TO BE SUPPLIED AND INSTALLED BY CONTRACTOR.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ADDITIONAL GROUND BAR AS REQUIRED.
8. ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).

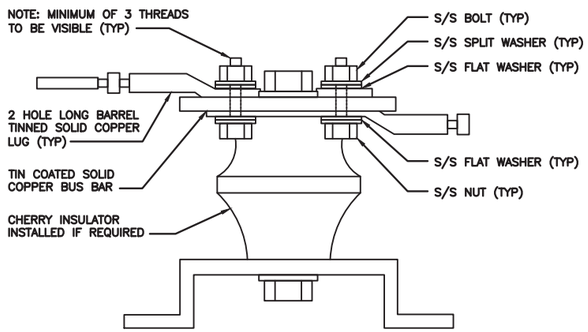
TYPICAL GROUNDING NOTES | NO SCALE | 1



TYPICAL EXTERIOR TWO HOLE LUG | NO SCALE | 2



TYPICAL INTERIOR TWO HOLE LUG | NO SCALE | 3



LUG DETAIL | NO SCALE | 4

NOT USED | NO SCALE | 5

NOT USED | NO SCALE | 6

NOT USED | NO SCALE | 7

NOT USED | NO SCALE | 8

NOT USED | NO SCALE | 9

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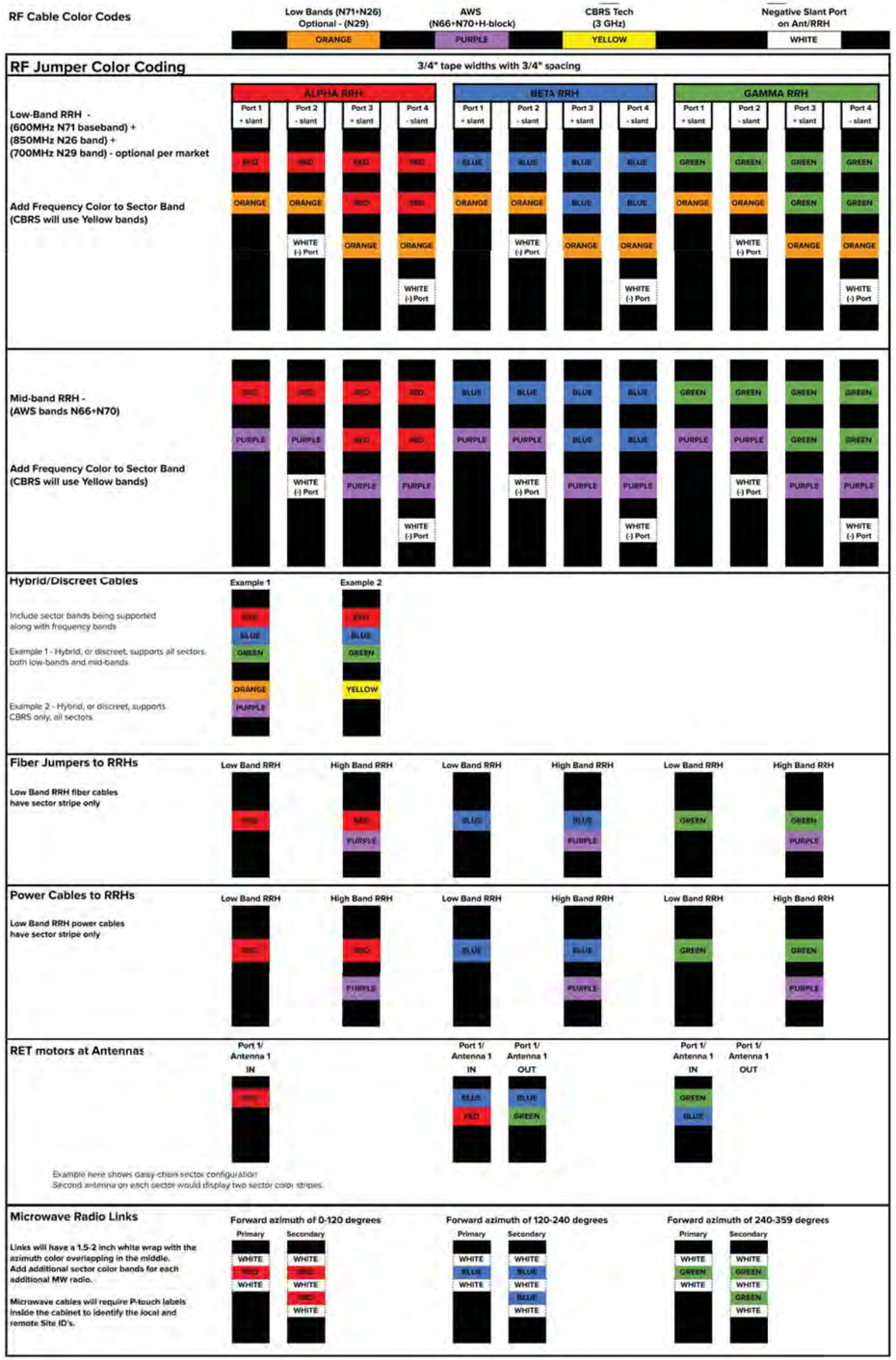
SHEET TITLE

GROUNDING DETAILS

SHEET NUMBER

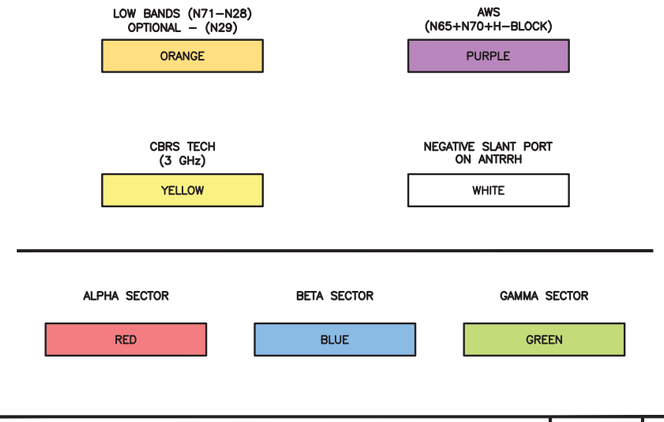
G-3



RF CABLE COLOR CODES | NO SCALE | 1

NOTES

1. CONTRACTOR TO REFER TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS. FINAL RFDS IS IN NEXYSONE.



COLOR IDENTIFIER | NO SCALE | 2

NOT USED | NO SCALE | 3

NOT USED | NO SCALE | 4

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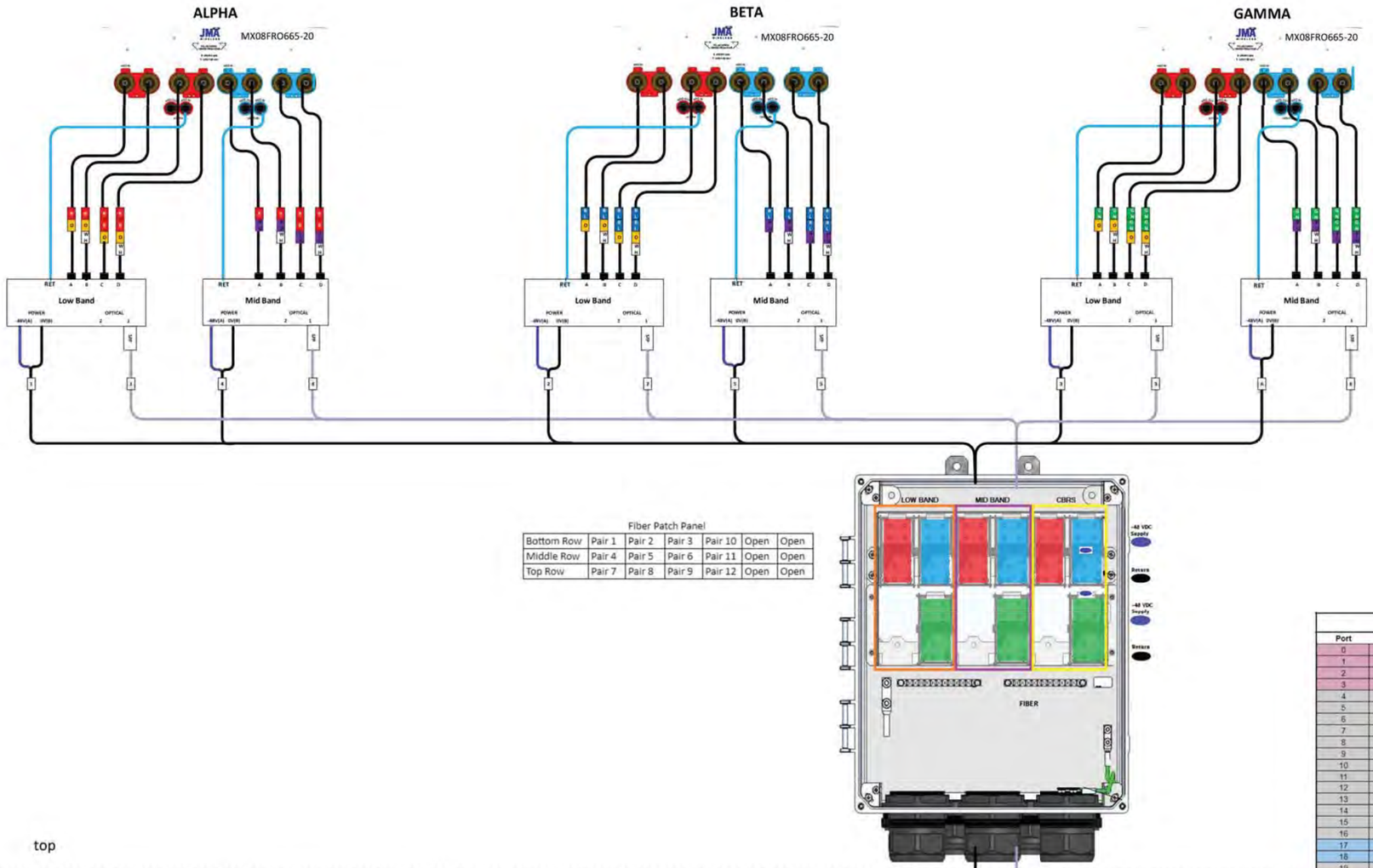
SHEET TITLE
RF
CABLE COLOR CODES

SHEET NUMBER
RF-1



Fiber Patch Panel

Bottom Row	Pair 1	Pair 2	Pair 3	Pair 10	Open	Open
Middle Row	Pair 4	Pair 5	Pair 6	Pair 11	Open	Open
Top Row	Pair 7	Pair 8	Pair 9	Pair 12	Open	Open

CSR NCS540		
Port	Interface	Description
0	Gi0/0/0/0	SiteBoss
1	Gi0/0/0/1	CBRS - Alpha
2	Gi0/0/0/2	CBRS - Beta
3	Gi0/0/0/3	CBRS - Gamma
4	Te0/0/0/4	Fujitsu Low-Band RU - Alpha
5	Te0/0/0/5	Fujitsu Mid-Band RU - Alpha
6	Te0/0/0/6	Fujitsu Low-Band RU - Beta
7	Te0/0/0/7	Fujitsu Mid-Band RU - Beta
8	Te0/0/0/8	Fujitsu Low-Band RU - Gamma
9	Te0/0/0/9	Fujitsu Mid-Band RU - Gamma
10	Te0/0/0/10	Fixed Wifi
11	Te0/0/0/11	Fixed Wifi
12	Te0/0/0/12	Fixed Wifi
13	Te0/0/0/13	Fixed Wifi
14	Te0/0/0/14	CBRS1
15	Te0/0/0/15	CBRS2
16	Te0/0/0/16	CBRS3
17	Gi0/0/0/17	SM1 - BMC
18	Gi0/0/0/18	SM2 - BMC
19	Te0/0/0/19	SM1 - Data 1
20	Te0/0/0/20	SM1 - Data 2
21	Te0/0/0/21	SM2 - Data 1
22	Te0/0/0/22	SM2 - Data 2
23	Te0/0/0/23	Reserved Uplink (EDC, LDC)
24	Te0/0/0/24	Blank/Future
25	Te0/0/0/25	Blank/Future
26	Te0/0/0/26	Fiber NIU
27	Te0/0/0/27	Fiber NIU
28	Te0/0/0/28	Blank/Future
29	Te0/0/0/29	Blank/Future

top

bottom

Bottom OVP Layout

Circuit 1	Alpha Low Band
Circuit 2	Beta Low Band
Circuit 3	Gamma Low Band
Circuit 4	Alpha Mid Band
Circuit 5	Beta Mid Band
Circuit 6	Gamma Mid Band
Circuit 7	Alpha CBRS
Circuit 8	Beta CBRS
Circuit 9	Gamma CBRS
Circuit 10	Open
Circuit 11	Open
Circuit 12	Open

Bottom OVP
Specific OVP model number detailed in RFDS

	5G plumbing diagram JMA MX08FRO665-20 2-2-2(LB+MB)		
Quan Liu	SIZE	ITEM NO	DWG NO
5- Jan- 2021	SCALE None		SHEET

NOTES

1. CONTRACTOR TO REFER TO FINAL CONSTRUCTION RFDS FOR ALL RF DETAILS. FINAL RFDS IS IN NEXYSONE.

PLUMBING DIAGRAM | NO SCALE | 1

dish wireless.

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DISH WIRELESS L.L.C.
PROJECT INFORMATION

BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE

RF
PLUMBING DIAGRAM

SHEET NUMBER

RF-2

EXOTHERMIC CONNECTION

MECHANICAL CONNECTION

BUSS BAR INSULATOR

CHEMICAL ELECTROLYTIC GROUNDING SYSTEM

TEST CHEMICAL ELECTROLYTIC GROUNDING SYSTEM

EXOTHERMIC WITH INSPECTION SLEEVE

GROUNDING BAR

GROUND ROD

TEST GROUND ROD WITH INSPECTION SLEEVE

SINGLE POLE SWITCH

DUPLEX RECEPTACLE

DUPLEX GFCI RECEPTACLE

FLUORESCENT LIGHTING FIXTURE
(2) TWO LAMPS 48–T8

SMOKE DETECTION (DC)

EMERGENCY LIGHTING (DC)

SECURITY LIGHT W/PHOTOCELL LITHONIA ALXW
LED–1–25A400/51K–SR4–120–PE–DDBTXD

CHAIN LINK FENCE

WOOD/WROUGHT IRON FENCE

WALL STRUCTURE

LEASE AREA

PROPERTY LINE (PL)

SETBACKS

ICE BRIDGE

CABLE TRAY

WATER LINE

UNDERGROUND POWER

UNDERGROUND TELCO

OVERHEAD POWER

OVERHEAD TELCO

UNDERGROUND TELCO/POWER

ABOVE GROUND POWER

ABOVE GROUND TELCO

ABOVE GROUND TELCO/POWER

WORKPOINT

SECTION REFERENCE

DETAIL REFERENCE

LEGEND

AB	ANCHOR BOLT
ABV	ABOVE
AC	ALTERNATING CURRENT
ADDL	ADDITIONAL
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AGL	ABOVE GROUND LEVEL
AIC	AMPERAGE INTERRUPTION CAPACITY
ALUM	ALUMINUM
ALT	ALTERNATE
ANT	ANTENNA
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BATT	BATTERY
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BTC	BARE TINNED COPPER CONDUCTOR
BOF	BOTTOM OF FOOTING
CAB	CABINET
CANT	CANTILEVERED
CHG	CHARGING
CLG	CEILING
CLR	CLEAR
COL	COLUMN
COMM	COMMON
CONC	CONCRETE
CONSTR	CONSTRUCTION
DBL	DOUBLE
DC	DIRECT CURRENT
DEPT	DEPARTMENT
DF	DOUGLAS FIR
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DWG	DRAWING
DWL	DOWEL
EA	EACH
EC	ELECTRICAL CONDUCTOR
EL.	ELEVATION
ELEC	ELECTRICAL
EMT	ELECTRICAL METALLIC TUBING
ENG	ENGINEER
EQ	EQUAL
EXP	EXPANSION
EXT	EXTERIOR
EW	EACH WAY
FAB	FABRICATION
FF	FINISH FLOOR
FG	FINISH GRADE
FIF	FACILITY INTERFACE FRAME
FIN	FINISH(ED)
FLR	FLOOR
FDN	FOUNDATION
FOC	FACE OF CONCRETE
FOM	FACE OF MASONRY
FOS	FACE OF STUD
FOW	FACE OF WALL
FS	FINISH SURFACE
FT	FOOT
FTG	FOOTING
GA	GAUGE
GEN	GENERATOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GLB	GLUE LAMINATED BEAM
GLV	GALVANIZED
GPS	GLOBAL POSITIONING SYSTEM
GND	GROUND
GSM	GLOBAL SYSTEM FOR MOBILE
HDG	HOT DIPPED GALVANIZED
HDR	HEADER
HGR	HANGER
HVAC	HEAT/VENTILATION/AIR CONDITIONING
HT	HEIGHT
IGR	INTERIOR GROUND RING
IN	INCH
INT	INTERIOR
LB(S)	POUND(S)
LF	LINEAR FEET
LTE	LONG TERM EVOLUTION
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MECH	MECHANICAL
MFR	MANUFACTURER
MGB	MASTER GROUND BAR
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
MTS	MANUAL TRANSFER SWITCH
MW	MICROWAVE
NEC	NATIONAL ELECTRIC CODE
NM	NEWTON METERS
NO.	NUMBER
#	NUMBER
NTS	NOT TO SCALE
OC	ON–CENTER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
OPNG	OPENING
P/C	PRECAST CONCRETE
PCS	PERSONAL COMMUNICATION SERVICES
PCU	PRIMARY CONTROL UNIT
PRC	PRIMARY RADIO CABINET
PP	POLARIZING PRESERVING
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PWR	POWER CABINET
QTY	QUANTITY
RAD	RADIUS
RECT	RECTIFIER
REF	REFERENCE
REINF	REINFORCEMENT
REQ'D	REQUIRED
RET	REMOTE ELECTRIC TILT
RF	RADIO FREQUENCY
RMC	RIGID METALLIC CONDUIT
RRH	REMOTE RADIO HEAD
RRU	REMOTE RADIO UNIT
RWY	RACEWAY
SCH	SCHEDULE
SHT	SHEET
SIAD	SMART INTEGRATED ACCESS DEVICE
SIM	SIMILAR
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
TEMP	TEMPORARY
THK	THICKNESS
TMA	TOWER MOUNTED AMPLIFIER
TN	TOE NAIL
TOA	TOP OF ANTENNA
TOC	TOP OF CURB
TOF	TOP OF FOUNDATION
TOP	TOP OF PLATE (PARAPET)
TOS	TOP OF STEEL
TOW	TOP OF WALL
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
TYP	TYPICAL
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
UPS	UNITERRUPTIBLE POWER SYSTEM (DC POWER PLANT)
VIF	VERIFIED IN FIELD
W	WIDE
W/	WITH
WD	WOOD
WP	WEATHERPROOF
WT	WEIGHT

ABBREVIATIONS

dish wireless.

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PROJECT INFORMATION

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220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE

LEGEND AND ABBREVIATIONS

SHEET NUMBER

GN-1

SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED – NO WORK SHALL COMMENCE PRIOR TO CONTRACTOR RECEIVING A WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE DISH WIRELESS L.L.C. AND TOWER OWNER NOC & THE DISH WIRELESS L.L.C. AND TOWER OWNER CONSTRUCTION MANAGER.

2. "LOOK UP" – DISH WIRELESS L.L.C. AND TOWER OWNER SAFETY CLIMB REQUIREMENT:

THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR DISH WIRELESS L.L.C. AND DISH WIRELESS L.L.C. AND TOWER OWNER POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.

3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.

4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND DISH WIRELESS L.L.C. AND TOWER OWNER STANDARDS, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA–322 (LATEST EDITION).

5. ALL SITE WORK TO COMPLY WITH DISH WIRELESS L.L.C. AND TOWER OWNER INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON DISH WIRELESS L.L.C. AND TOWER OWNER TOWER SITE AND LATEST VERSION OF ANSI/TIA–1019–A–2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."

6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY DISH WIRELESS L.L.C. AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.

7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR 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.

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

9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES INCLUDING PRIVATE LOCATES SERVICES PRIOR TO THE START OF CONSTRUCTION.

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

11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND DISH PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.

12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.

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

14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.

15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.

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

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

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

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

20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS AND RADIOS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

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

GENERAL NOTES:

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

CONTRACTOR:GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION

CARRIER:DISH WIRELESS L.L.C.

TOWER OWNER:TOWER OWNER

2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.

3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.

4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.

5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.

6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR 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 CARRIER POC AND TOWER OWNER.

7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR 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.

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

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

10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND TOWER OWNER PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.

11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION, BEFORE SUBMITTING BIDS, TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.

12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF DISH WIRELESS L.L.C. AND TOWER OWNER

13. CONTRACTOR 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.

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dish wireless.

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DISH WIRELESS L.L.C.
PROJECT INFORMATION

BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-2

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

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

2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.

3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°f AT TIME OF PLACEMENT.

4. CONCRETE EXPOSED TO FREEZE-THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER-TO-CEMENT RATIO (W/C) OF 0.45.

5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:

#4 BARS AND SMALLER 40 ksi

#5 BARS AND LARGER 60 ksi

6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3"
- CONCRETE EXPOSED TO EARTH OR WEATHER:
- #6 BARS AND LARGER 2"
- #5 BARS AND SMALLER 1-1/2"
- CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
- SLAB AND WALLS 3/4"
- BEAMS AND COLUMNS 1-1/2"

7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.

2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.

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

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

4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.

4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.

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

6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).

7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.

8. TIE WRAPS ARE NOT ALLOWED.

9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.

12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.

13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).

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

15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.

16. ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.

17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.

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

19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.

20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.

21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).

22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).

23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.

24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3 (OR BETTER) FOR EXTERIOR LOCATIONS.

25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.

26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.

27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR DISH WIRELESS L.L.C. AND TOWER OWNER BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

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

29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "DISH WIRELESS L.L.C.".

30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

dish wireless.

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BLJ	BLJ	JW

RFDS REV #: 1

PRELIMINARY DOCUMENTS

SUBMITTALS

REV	DATE	DESCRIPTION
A	5/20/21	ISSUED FOR REVIEW
0	6/21/21	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER

149485.001.01

DISH WIRELESS L.L.C.
PROJECT INFORMATION

BOBDL00135A
220 WINTHROP RD
DEEP RIVER, CT 06417

SHEET TITLE

GENERAL NOTES

SHEET NUMBER

GN-3

GROUNDING NOTES:

1. 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.

2. THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.

3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.

4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

5. 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.

6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.

7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.

8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.

9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.

11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.

13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.

14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.

15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.

17. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.

18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.

19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON-METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD-WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).

21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY). DO NOT ATTACH GROUNDING TO FIRE SPRINKLER SYSTEM PIPES.

dish wireless.

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SHEET TITLE

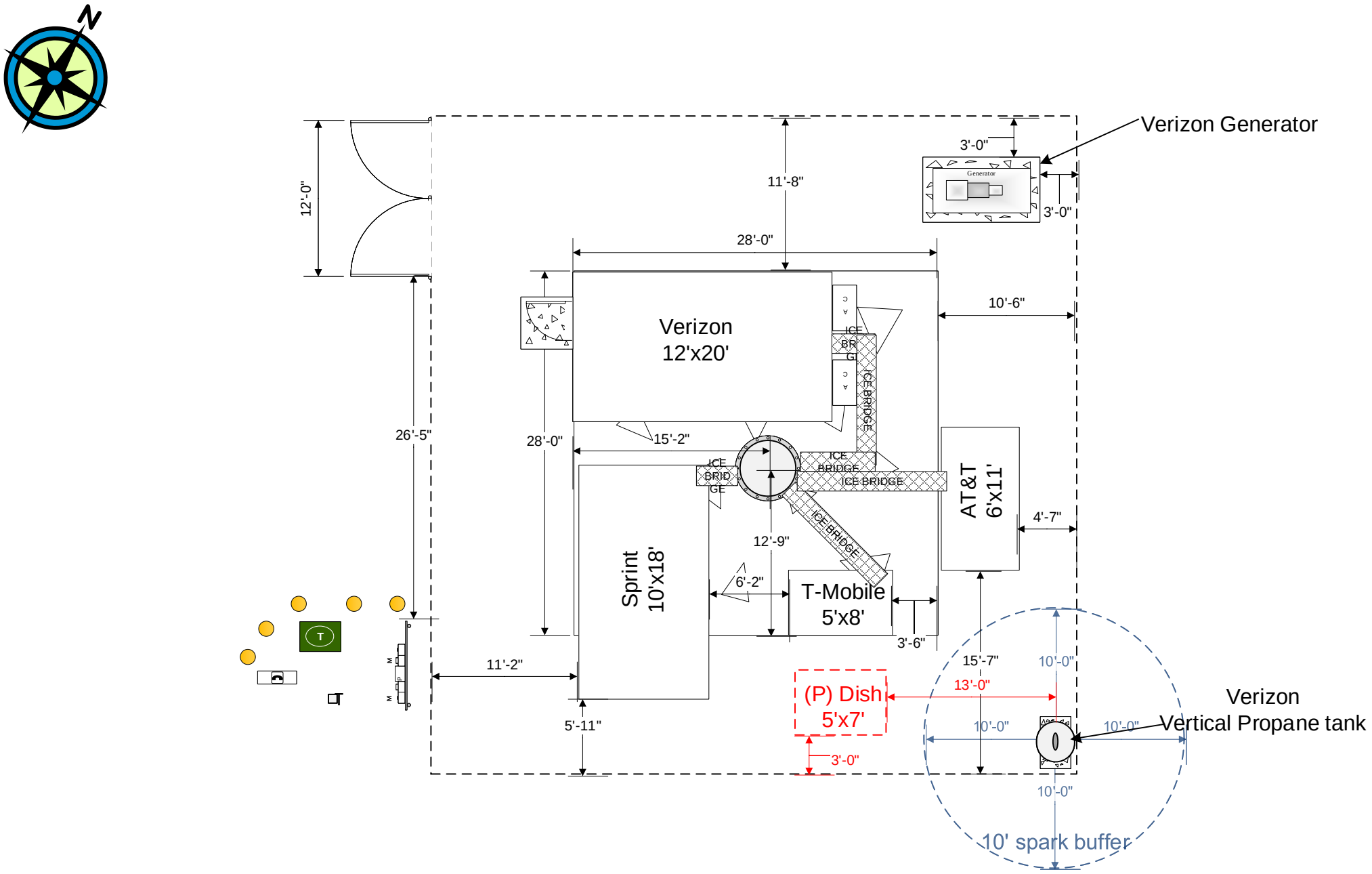
GENERAL NOTES

SHEET NUMBER

GN-4

EXHIBIT 11

Site Sketch (Ground)



SBA Communications	Deep River Winthrop Rd	
	COMPOUND DRAWING	
By: Stephen Roth sroth@sbasite.com	DATE: 4/7/2021	SITE NUMBER: CT46130-A STATE: CT