



NSS

NORTHEAST
SITE SOLUTIONS

Turnkey Wireless Development

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

May 25, 2022

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

RE: Tower Share Application
246 East Franklin Street, Danielson, CT 06239
Latitude: 41.795861
Longitude: -71.870166
Site #: CT00302-S_BOBOS00896A_SBA_DISH

Dear Ms. Bachman:

This letter and attachments are submitted on behalf of Dish Wireless LLC. Dish Wireless LLC plans to install antennas and related equipment to the tower site located at 246 East Franklin Street, Danielson (Killingly), Connecticut.

Dish Wireless LLC proposes to install three (3) 600/1900 MHz 5G antennas and six (6) RRUs, at the 117-foot level of the existing 155-foot monopole tower, one (1) Fiber cable will also be installed. Dish Wireless LLC equipment cabinets will be placed within a 7' x 5' lease area within the fenced compound. Included are plans by B+T, dated May 16, 2022, Exhibit C. Also included is a structural analysis prepared by TES, dated January 20, 2022, confirming that the existing tower is structurally capable of supporting the proposed equipment. Attached as Exhibit D. The facility was originally approved by the Killingly Planning & Zoning Commission on July 13, 1998. Please see attached Exhibit A.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies 16-50aa, of Dish Wireless LLC intent to share a telecommunications facility pursuant to R.C.S.A. 16-50j-88. In accordance with R.C.S.A., a copy of this letter is being sent to Jason Anderson, Town Council Chair, and Ann-Marie Aubrey, Director of Planning & Development for the Town of Killingly, as well as the tower owner (SBA) and property owner (Charles Hutchins & Amanda Martell).

The planned modifications of the facility fall squarely within those activities explicitly provided for in R.C.S.A. 16-50j-89.

1. The proposed modification will not result in an increase in the height of the existing structure. The top of the existing tower is 155-feet and the Dish Wireless LLC antennas will be located at a center line height of 117-feet.
2. The proposed modifications will not result in an increase of the site boundary as depicted on the attached site plan.



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3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed local and state criteria. The incremental effect of the proposed changes will be negligent.

4. The operation of the proposed antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard. The combined site operations will result in a total power density of 32.75% as evidenced by Exhibit F.

Connecticut General Statutes 16-50aa indicates that the Council must approve the shared use of a telecommunications facility provided it finds the shared use is technically, legally, environmentally, and economically feasible and meets public safety concerns. As demonstrated in this letter, Dish Wireless LLC respectfully submits that the shared use of this facility satisfies these criteria.

A. Technical Feasibility. The existing monopole has been deemed structurally capable of supporting Dish Wireless LLC proposed loading. The structural analysis is included as Exhibit D.

B. Legal Feasibility. As referenced above, C.G.S. 16-50aa has been authorized to issue orders approving the shared use of an existing tower such as this monopole tower in Killingly. Under the authority granted to the Council, an order of the Council approving the requested shared use would permit Dish Wireless LLC to obtain a building permit for the proposed installation. Further, a Letter of Authorization is included as Exhibit G, authorizing Dish Wireless LLC to file this application for shared use.

C. Environmental Feasibility. The proposed shared use of this facility would have a minimal environmental impact. The installation of Dish Wireless LLC equipment at the 117-foot level of the existing 155-foot tower would have an insignificant visual impact on the area around the tower. Dish Wireless LLC ground equipment would be installed within the existing facility compound. Dish Wireless LLC shared use would therefore not cause any significant alteration in the physical or environmental characteristics of the existing site. Additionally, as evidenced by Exhibit F, the proposed antennas would not increase radio frequency emissions to a level at or above the Federal Communications Commission safety standard.

D. Economic Feasibility. Dish Wireless LLC will be entering into an agreement with the owner of this facility to mutually agreeable terms. As previously mentioned, the Letter of Authorization has been provided by the owner to assist Dish Wireless LLC with this tower sharing application.

E. Public Safety Concerns. As discussed above, the tower is structurally capable of supporting Dish Wireless LLC proposed loading. Dish Wireless LLC is not aware of any public safety concerns relative to the proposed sharing of the existing tower. Dish Wireless LLC intentions of providing new and improved wireless service through the shared use of this facility is expected to enhance the safety and welfare of local residents and individuals traveling through Killingly.

Sincerely,

Denise Sabo

Denise Sabo

Mobile: 203-435-3640

Fax: 413-521-0558

Office: 4 Angela's Way, Burlington CT 06013

Email: denise@northeastsitesolutions.com



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Turnkey Wireless Development

Attachments

Cc: Jason Anderson, Town Council Chair
Killingly Town Hall
172 Main Street
Killingly, CT 06239

Ann-Marie Aubrey, Director of Planning & Development
Killingly Town Hall
172 Main Street
Killingly, CT 06239

Charles R. Lu Hutchins & Amanda Martel Trustee – Property Owner
246 East Franklin Street
Killingly, CT 06239

SBA - Tower Owner

Exhibit A

Original Facility Approval



Town of Killingly

TOWN HALL • 172 MAIN STREET • P.O. BOX 6000 • DANIELSON, CONNECTICUT 06239-6000
TELEPHONE • 860-779-5300 FAX • 860-779-5394

July 15, 1998

CERTIFIED MAIL

SBA, Inc.
Scott Thomae
125 Shaw Street
Suite 116
New London, CT 06320

Dear Mr. Thomae:

At its regular monthly meeting of July 13, 1998, the Killingly Planning & Zoning Commission approved with conditions your Special Permit Application #98-704 for a telecommunications tower and associated equipment; Section 410.1.2j (Public Service Corporation or Municipal Land Use); property located at 246 Franklin Street; Tax Map 3995 Block 22 (Charles Hutchins, owner) – Rural Development Zone.

The following conditions were applied to your approval:

1. Given the unusual heavy rains that have occurred this spring, hay bale checks at intervals along the proposed driveway swales are recommended until all disturbed areas are stabilized with vegetation.
2. Prior to the filing of mylars and issuance of zoning and building permits, signed, binding documentation shall be provided to commission staff to ensure that a licensed telecommunication carrier is committed to use of the tower. This is to ensure that the town's zoning definition of a public service corporation has been met and to demonstrate that the tower is not being built for speculation purposes only.
3. Prior to the filing of mylars and issuance of zoning and building permits, the applicant shall provide evidence of satisfaction of all FAA concerns regarding the proposed tower and Danielson Airport operations.
4. Prior to the filing of mylars and the issuance of zoning and building permits, the applicant shall provide commission staff with evidence of provisions for dismantling the tower if it is not used for a period of one year so that it does not become an attractive nuisance.
5. Prior to the filing of mylars and the issuance of zoning and building permits, the applicant shall submit certification that compliance with FCC radio frequency health standards are met.

SBA Inc. SP #98-704

July 15, 1998

Page 2

6. Prior to the filing of mylars and the issuance of zoning and building permits, the applicant shall submit evidence to commission staff that the affected utility companies have been contacted. The resulting construction sequencing shall be provided to town staff for review and comment.
7. Prior to the filing of mylars and the issuance of zoning and building permits, evidence of the acquisition of all required state and federal permits shall be provided to commission staff.

The legal notice will be published in the Norwich Bulletin on July 16, 1998. The 15 day appeal period commences on that date. The approval does not become official until a recording sheet is filed with the Town Clerk. This sheet can be filed at the completion of the 15 day appeal period (July 31, 1998). If you wish, upon receipt of a \$10.00 check this office will file the recording sheet for you.

A Zoning Permit is necessary prior to the commencement of your operation and will not be issued until the recording sheet has been filed.

If you have any questions regarding this matter, please contact me at 779-5311.

Respectfully,



Linda E. Walden

Director of Planning & Development

LED/mcb

C: Charles Hutchins

Your Registration Application has been received electronically by the FCC at 14:48:00 on 08/28/98 . Your Antenna Registration Number is 1055848.

Although a Registration Number has been assigned, you may not begin construction unless:

- (1) you have met all obligations concerning the National Environmental Policy Act (47 CFR Section 1.1307(a))
- (2) the proposed construction is to be located more than three miles from each FCC Monitoring Station listed in 47 CFR Section 0.121, or alternatively, you have coordinated construction with the FCC.

If you decide to begin construction prior to receiving Form 854-R via mail, you must paint and/or light the structure in accordance with the FAA Determination of No Hazard which is valid for the construction or alteration proposed. In addition, there may be state and/or local regulations, separate from the FCC Rules, which must be satisfied prior to construction.

Antenna Structure Registration is not an authorization to construct radio facilities or transmit radio signals. All radio equipment on this structure must be covered by a valid FCC license or construction permit.

Exhibit B

Property Card

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2018.



Information on the Property Records for the Municipality of Killingly was last updated on 4/7/2022.



Parcel Information

Location:	246 E FRANKLIN ST	Property Use:	Residential	Primary Use:	Residential
Unique ID:	2601	Map Block Lot:	216-12	Acres:	17.00
490 Acres:	0.00	Zone:	RD	Volume / Page:	1355/0728
Developers Map / Lot:		Census:	9041-4017		

Value Information

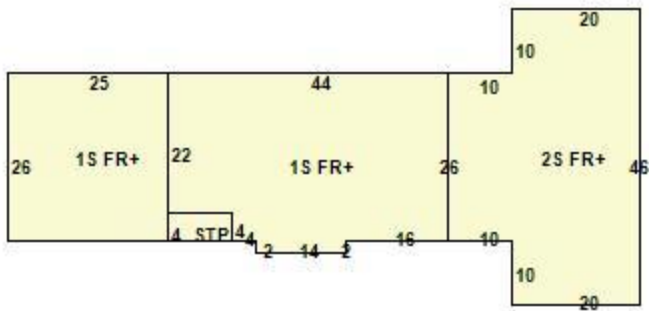
	Appraised Value	Assessed Value
Land	112,130	78,470
Buildings	277,170	172,520
Detached Outbuildings	1,640	1,150
Total	390,940	252,140

Owner's Information

Owner's Data

HUTCHINS CHARLES R LU &
MARTEL AMANDA TRUSTEE
CHARLES R HUTCHINS IRREVOCABLE TRUST
246 E FRANKLIN ST
KILLINGLY CT 06239

Building 1



Building Use:	Single Family	Style:	Ranch	Living Area:	4,142
Stories:	1.00	Construction:	Wood Frame	Year Built:	1960

Total Rooms:	9	Bedrooms:	4	Full Baths:	2
Half Baths:	0	Fireplaces:	1	Heating:	Hot Water
Fuel:	Oil	Cooling Percent:	0	Basement Area:	2,962
Basement Finished Area:	0	Basement Garages:	0	Roof Material:	Asphalt
Siding:	Wood Frame	Units:			

Special Features

Bsmt Gar 3 Car	1
Extra Fixtures	1
Fireplace	1
Fireplace Opening	1
Generator	1
Pellet or Wood Stove	1
Plumbing	2

Attached Components

Type:	Year Built:	Area:
Chain Fence	1960	1
Stoop	1960	40

Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
Frame Coop	2000	11.00	12.00	132
Frame Shed	2008	0.00	0.00	174

Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Sale Price
HUTCHINS CHARLES R LU MARTEL AMANDA TRUS	1355	0728	02/11/2019	Quit Claim	\$0

Building Permits

Permit Number	Permit Type	Date Opened	Reason
22-1095	Electrical	01/20/2022	UPGRADE SVC FROM 100A TO 200A, INSTALL ERICSSON CABINETS & CONCRETE SLAB
21-1141	Generator	10/20/2021	WIRE NEW STANDBY GENERATOR & AUTO TRANSFER SWITCH
21-1043	Commercial	09/20/2021	VERIZON WIRELESS TO MODIFY ANTENNAES & ANCILLARY EQUIP ON TOWER
21-391	Roof	03/18/2021	REPLACE 4 & INSTAL 2 CELL ANTENNAS & ASSOC EQUIP
27800	Commercial	10/01/2020	REPL 6 ANTENNAS, 6 REMOTE RADIO UNITS & ADD 6 RRU'S
27023	Commercial	08/08/2019	TELECOMMUNICATIONS FACILITY UPGRADE + REPLACEMENT OF EXISTING ANTENNA
25925	Commercial	04/06/2018	ADDING 3 ANTENNAS
25284	Commercial	05/11/2017	TELECOM -MODIFY EXISTING AT&T ANTENNAS: REMOVE & REPL 3 ANTENNAS & INSTALL 3 RRV
23794	Commercial	08/03/2015	REPL EXISTING ANTENNAES & ADD 3 REMOTE RADIO HEADS
23346	Commercial	12/11/2014	REPL OLD PANEL/ANTENNAE MODELS WITH NEW ONE ON EXISTING TOWER
23221	Commercial	10/06/2014	NVC MAINT WORK - ADD STEEL PLATES & BASE GUSSET EXTENSIONS TO EXIST STRUCTURE
23133	Commercial	08/28/2014	ADD 3 NEWER CELL ANTENNAS & ASSOC EQUIP
22648	Commercial	10/11/2013	INSTALL 3 NEW ANTENNAS & ASSOC RADIO EQUIP ON EXISTING TOWER
22323	Commercial	05/08/2013	REMOVE 6 CELL ANTENNAS & REPL W/3 NEW TECH ANTENNAS & ASSOC EQUIP
15440	Commercial	08/16/2002	NEW ANTENNA PP
15351	Commercial	07/02/2002	TOWER MODIFICAT
13760	Commercial	07/29/1999	ANTENNA/TOWER
13610	Electrical	05/14/1999	NVC ELEC
13495	Commercial	03/30/1999	TOWER C-5/99

Permit Number	Permit Type	Date Opened	Reason
13462	Commercial	03/03/1999	TOWER C-5/99
13425	Commercial	02/02/1999	TOWER C-5/99
11694	Residential Addition	01/01/1995	ADDN 5/99-50% NO WORK HAS BEEN DONE IN THE LAST 10 YEARS

Information Published With Permission From The Assessor



246 E. FRANKLIN STREET

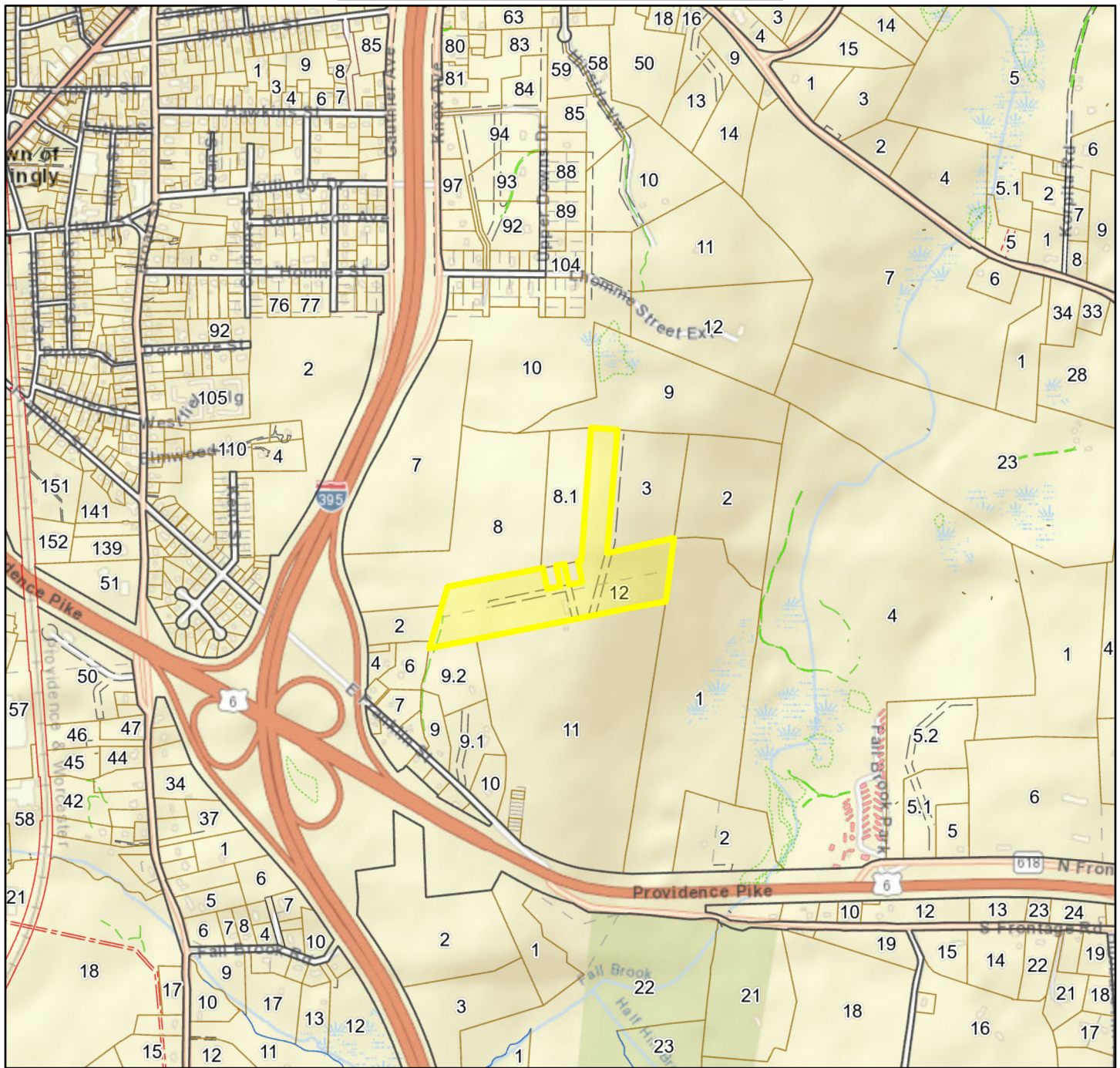
Killingly, CT

1 inch = 1123 Feet



www.cai-tech.com

May 20, 2022



	PROPERTYLINE		RAILROAD
	PVTRD		ROAD
	PWATER		UNDRD

Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

Exhibit C

Construction Drawings



DISH Wireless L.L.C. SITE ID:

BOBOS00896A

DISH Wireless L.L.C. SITE ADDRESS:

**246 EAST FRANKLIN ST
DANIELSON, CT 06239**

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 ANTENNA 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 FIBER NID (IF REQUIRED)

SITE INFORMATION

PROPERTY OWNER: HUTCHINS CHARLES R
ADDRESS: 246 E FRANKLIN ST
KILLINGLY, CT 06239

TOWER TYPE: MONOPOLE

TOWER CO SITE ID: CT00302-S

TOWER APP NUMBER: 178906

COUNTY: WINDHAM

LATITUDE (NAD 83): 41°47'45.0" N
41.79582189

LONGITUDE (NAD 83): 71°52'13.2" W
-71.87033267

ZONING JURISDICTION: WINDHAM COUNTY

ZONING DISTRICT: RD

PARCEL NUMBER: 216-012-000

OCCUPANCY GROUP: U

CONSTRUCTION TYPE: II-B

POWER COMPANY: CONNECTICUT LIGHT & POWER

TELEPHONE COMPANY: AT&T

PROJECT DIRECTORY

APPLICANT: DISH Wireless L.L.C.
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120
(303) 706-5008

TOWER OWNER: SBA COMMUNICATIIONS 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: APRIL PARROTT
april.parrott@dish.com

CONST. MANAGER: CHAD WILCOX
chad.wilcox@dish.com

RF ENGINEER: DIPESH PARIKH
dipesh.parikh@dish.com



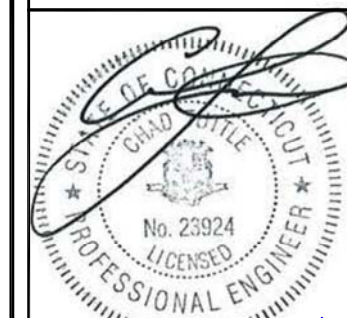
5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



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



B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

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: AP CHECKED BY: RMC APPROVED BY: RMC

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
A	3/10/22	ISSUED FOR REVIEW
0	5/16/22	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER
161924.001.01

DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
TITLE SHEET

SHEET NUMBER
T-1

CONNECTICUT CODE OF 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

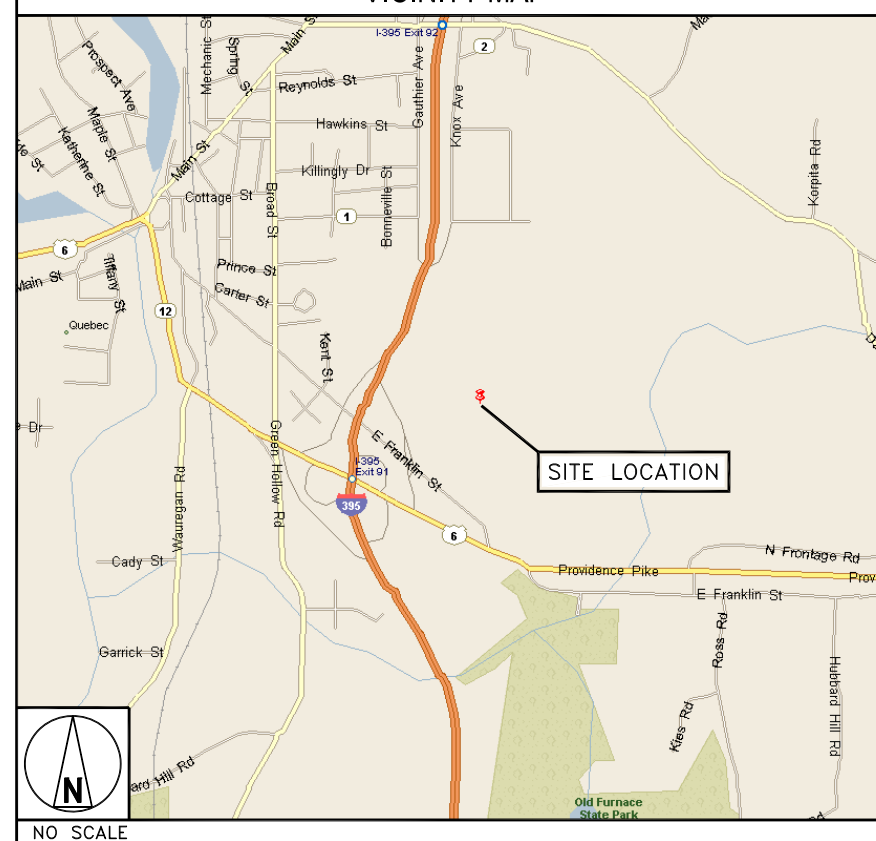
SITE PHOTO



DIRECTIONS

DIRECTIONS FROM DANIELSON AIRPORT:
HEAD NORTH ON AIRPORT RD TOWARD UPPER MAPLE ST, TURN RIGHT ONTO UPPER MAPLE ST, CONTINUE ONTO MAPLE ST, TURN LEFT ONTO US-6 E, SHARP LEFT ONTO E FRANKLIN ST, TURN RIGHT, AND ARRIVE AT BOBOS00896A.

VICINITY MAP



UNDERGROUND SERVICE ALERT CBYD 811
UTILITY NOTIFICATION CENTER OF CONNECTICUT
(800) 922-4455
WWW.CBYD.COM



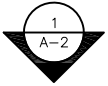
CALL 2 WORKING DAYS UTILITY NOTIFICATION PRIOR TO CONSTRUCTION

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.

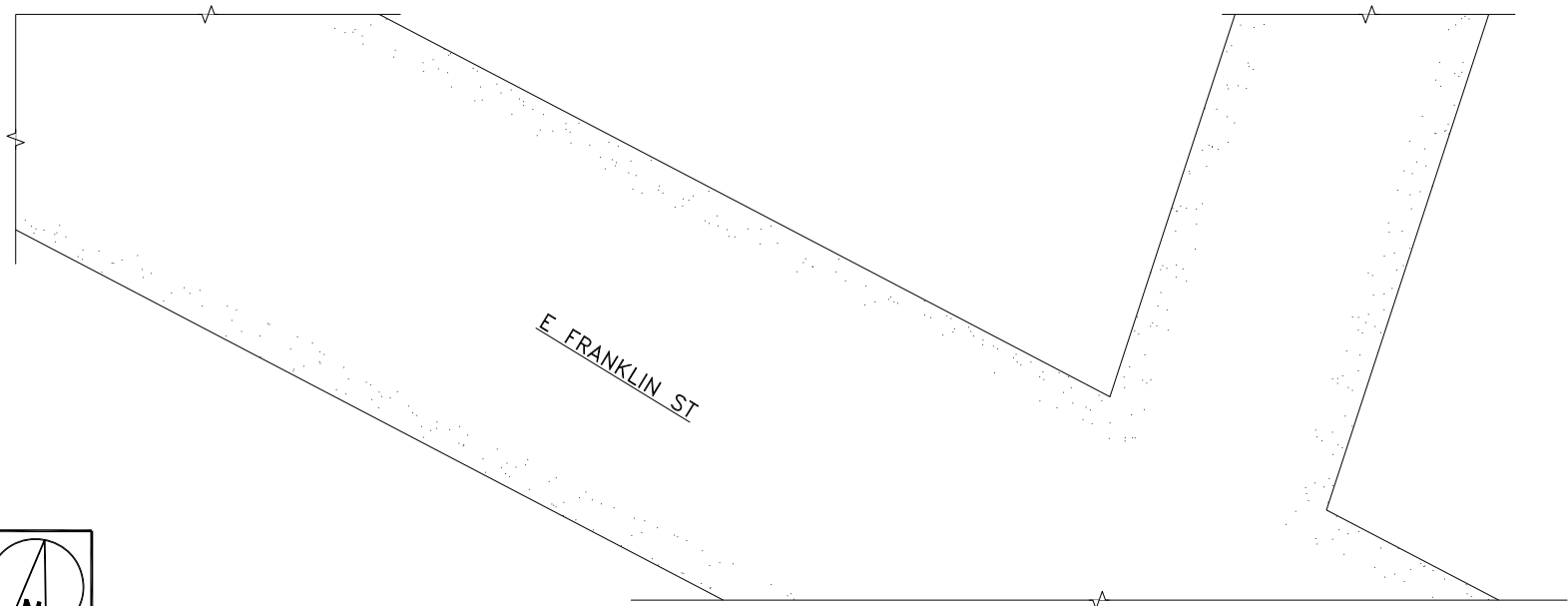
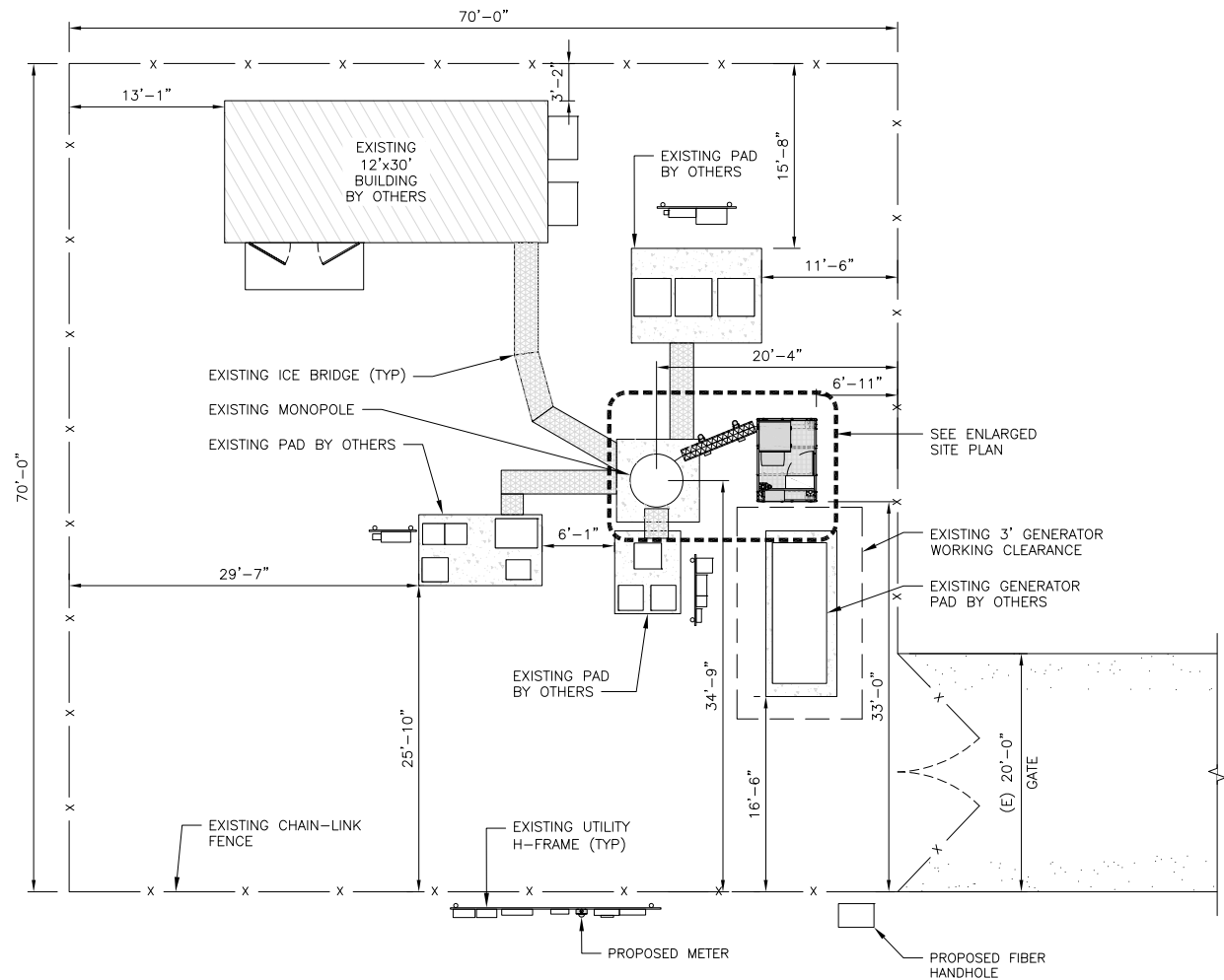
11"x17" PLOT WILL BE HALF SCALE UNLESS OTHERWISE NOTED

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.



NOTES

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



8' 4' 0 8' 16'

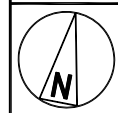
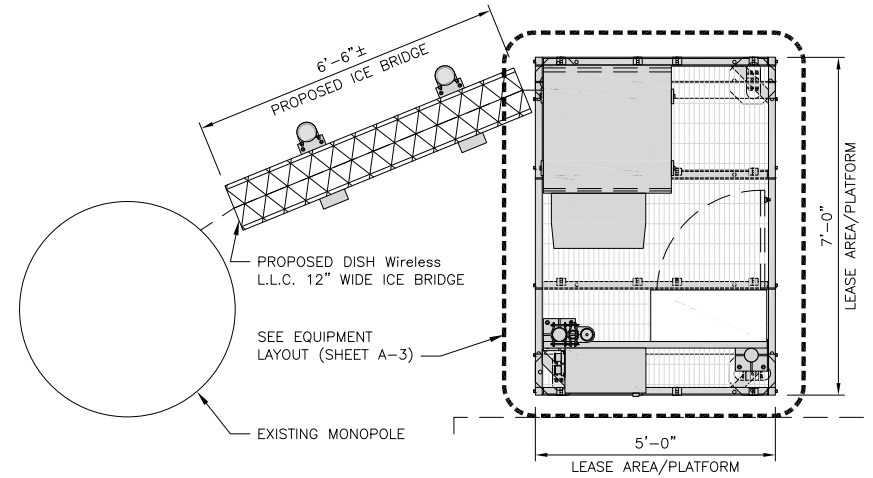
1/8"=1'-0"

OVERALL SITE PLAN

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'

1/2"=1'-0"

2

NOT USED

NO SCALE

3



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

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CONSTRUCTION DOCUMENTS

SUBMITTALS		
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A&E PROJECT NUMBER
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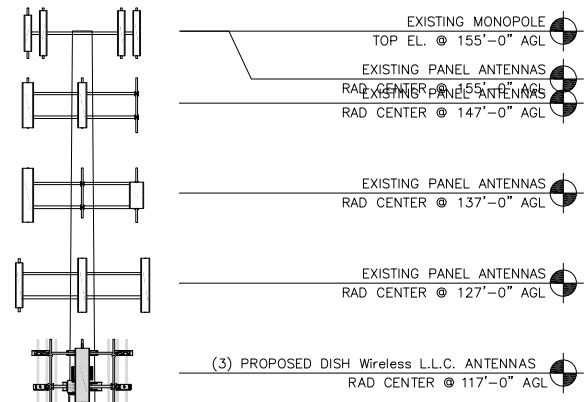
DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
OVERALL AND ENLARGED
SITE PLAN

SHEET NUMBER
A-1

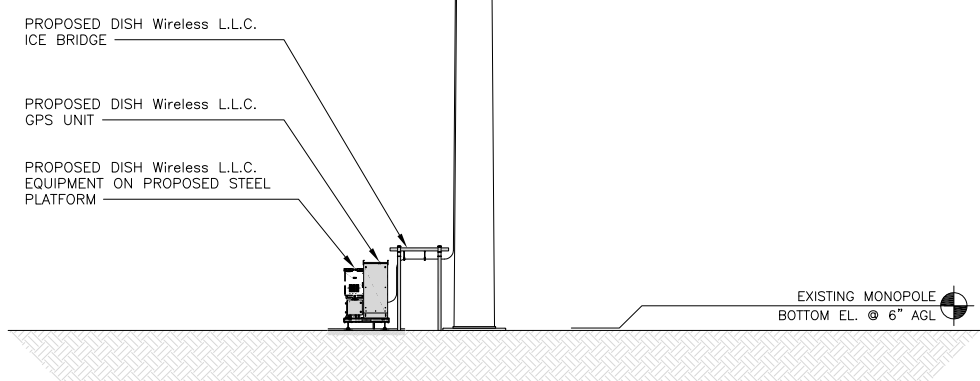
NOTES

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.

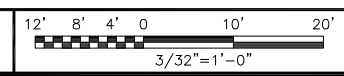


(1) PROPOSED DISH Wireless L.L.C. HYBRID CABLE ROUTED OUTSIDE POLE

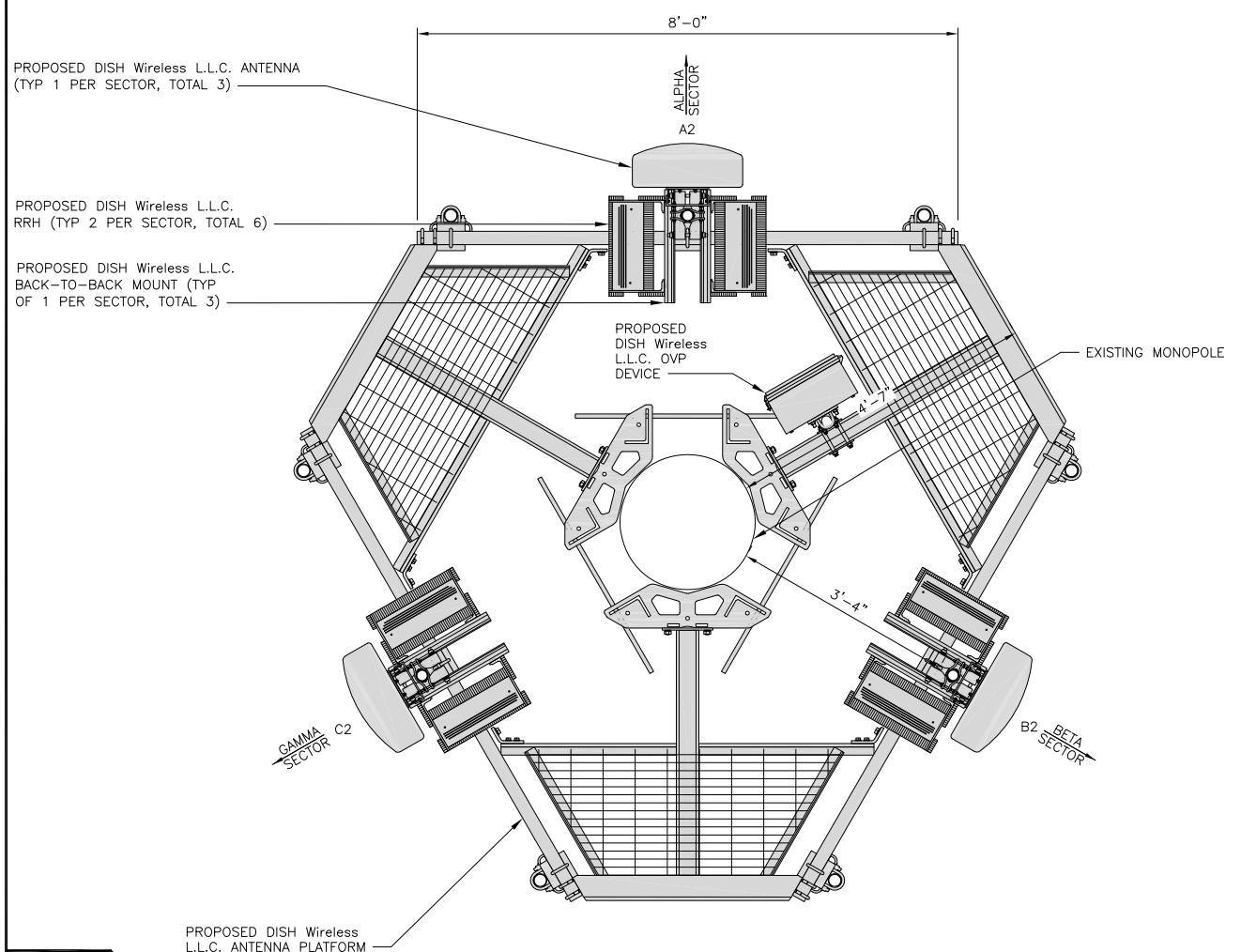
EXISTING MONOPOLE



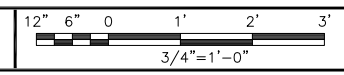
PROPOSED NORTH ELEVATION



1



ANTENNA LAYOUT



2

SECTOR POS.	ANTENNA					TRANSMISSION CABLE	RRH			OVP
	EXISTING OR PROPOSED	MANUFACTURER - MODEL NUMBER	TECH	AZIMUTH	RAD CENTER		FEED LINE TYPE AND LENGTH	MANUFACTURER - MODEL NUMBER	TECH	
A1	--	--	--	--	--	(1) HIGH-CAPACITY HYBRID CABLE (150' LONG)	FUJITSU - TA08025-B605	5G	A2	RAYCAP - RDIDC-9181 -PF-48
A2	PROPOSED	COMMSCOPE - FFV-65B-R2	5G	0°	117'-0"		FUJITSU - TA08025-B604	5G	A2	
A3	--	--	--	--	--		--	--	--	
B1	--	--	--	--	--	SHARED W/ALPHA	FUJITSU - TA08025-B605	5G	B2	SHARED W/ALPHA
B2	PROPOSED	COMMSCOPE - FFV-65B-R2	5G	120°	117'-0"		FUJITSU - TA08025-B604	5G	B2	
B3	--	--	--	--	--		--	--	--	
C1	--	--	--	--	--	SHARED W/ALPHA	FUJITSU - TA08025-B605	5G	C2	SHARED W/ALPHA
C2	PROPOSED	COMMSCOPE - FFV-65B-R2	5G	240°	117'-0"		FUJITSU - TA08025-B604	5G	C2	
C3	--	--	--	--	--		--	--	--	

- 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**



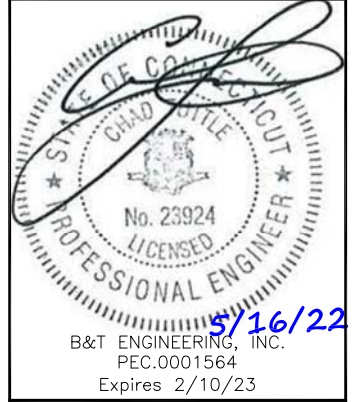
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AP	RMC	RMC

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

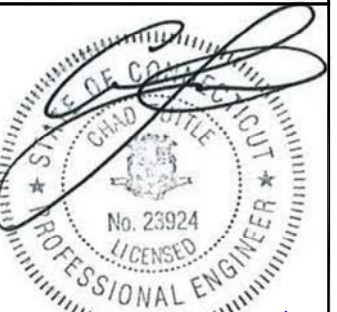
SUBMITTALS		
REV	DATE	DESCRIPTION
A	3/10/22	ISSUED FOR REVIEW
0	5/16/22	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER
161924.001.01

DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
ELEVATION, ANTENNA LAYOUT AND SCHEDULE

SHEET NUMBER
A-2



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RFDS REV #: 1

CONSTRUCTION DOCUMENTS

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DISH Wireless L.L.C.
PROJECT INFORMATION

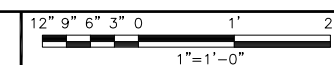
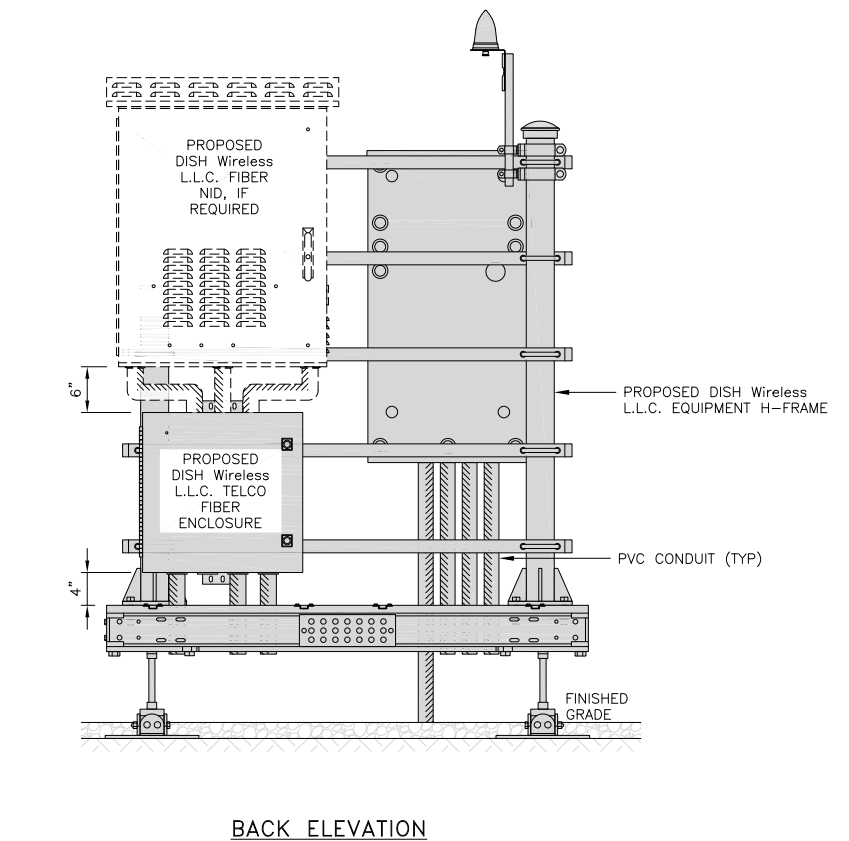
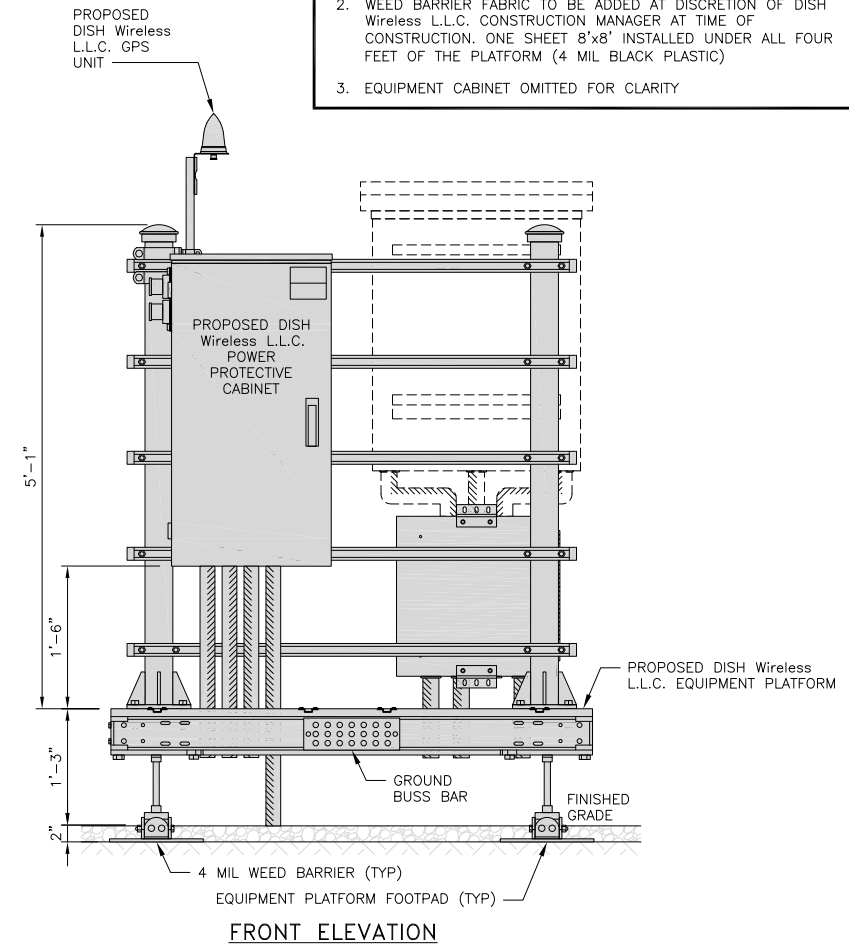
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
EQUIPMENT PLATFORM AND H-FRAME DETAILS

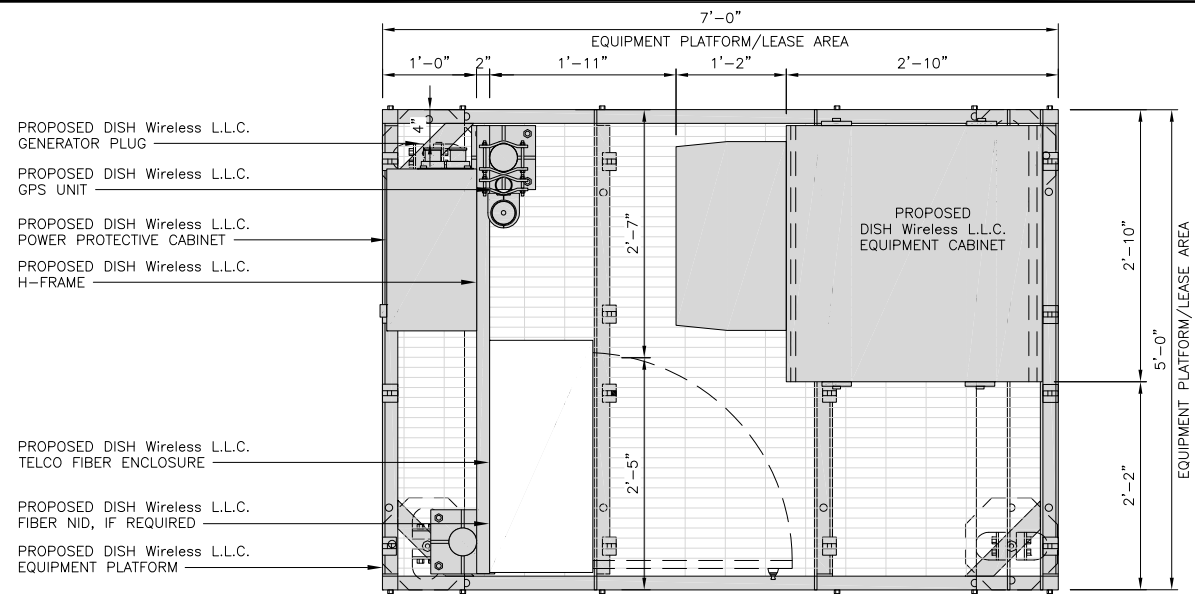
SHEET NUMBER
A-3

NOTES

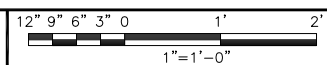
- CONTRACTOR TO BURY PLATFORM FEET WITH A MINIMUM OF 2" OF FILL PER EXISTING SITE SURFACE
- WEED BARRIER FABRIC TO BE ADDED AT DISCRETION OF DISH Wireless L.L.C. CONSTRUCTION MANAGER AT TIME OF CONSTRUCTION. ONE SHEET 8'x8' INSTALLED UNDER ALL FOUR FEET OF THE PLATFORM (4 MIL BLACK PLASTIC)
- EQUIPMENT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



5



PLATFORM EQUIPMENT PLAN

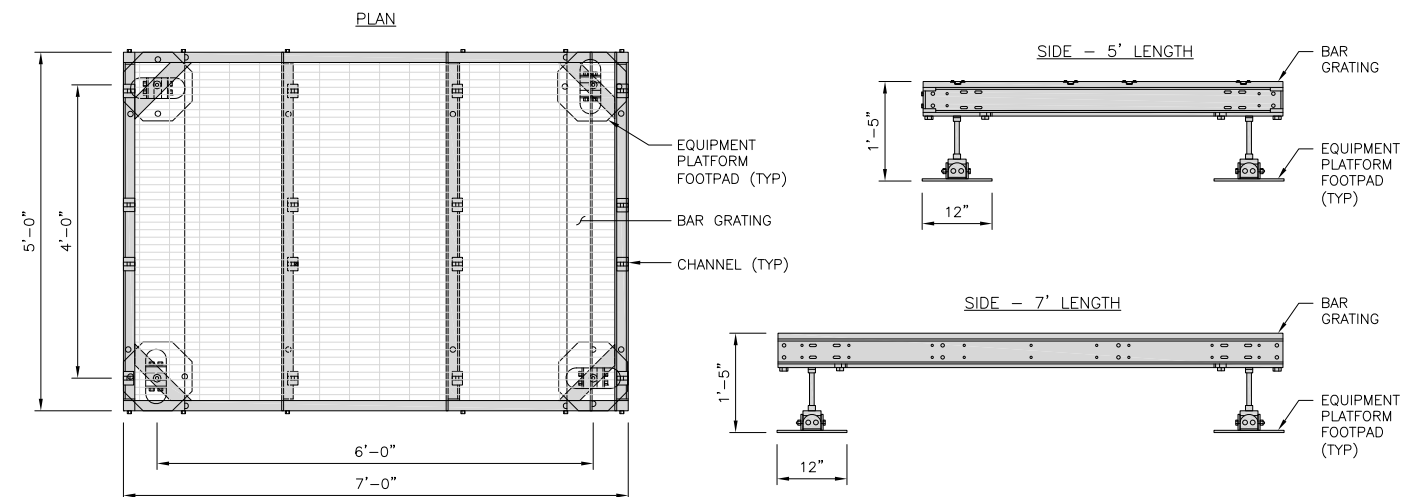


1

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

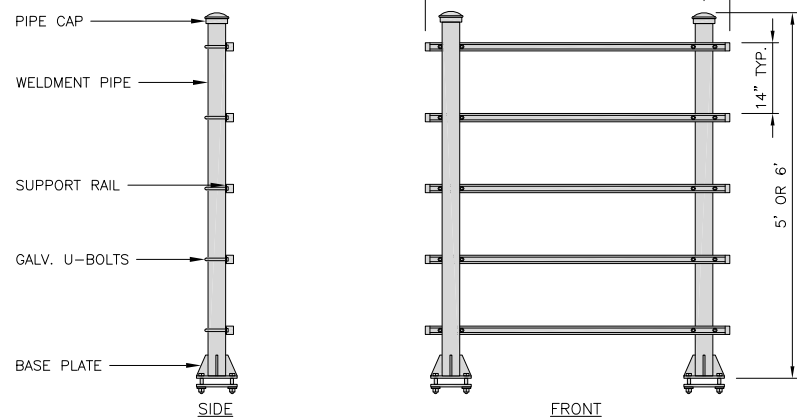
NO SCALE

2

COMMSCOPE MTC4045HFLD H-FRAME

UNISTRUT/SUPPORT RAILS QTY	5
WEIGHT	59.74 lbs

NOTE:
OR DISH Wireless L.L.C. APPROVED EQUIVALENT



H-FRAME DETAIL

NO SCALE

3

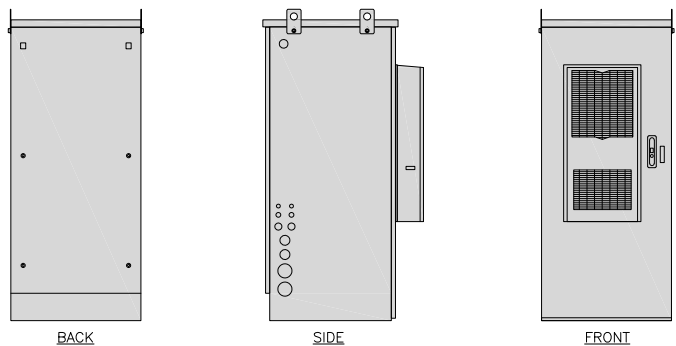
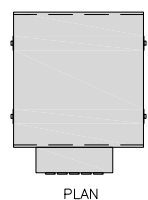
NOT USED

NO SCALE

4

H-FRAME EQUIPMENT ELEVATION

CHARLES INDUSTRY HVAC CUBE-PM63915IN4	
DIMENSIONS (HxWxD)	74"x32"x32"
POWER PLANT	-48VDC ABB/600W
TOTAL WEIGHT (EMPTY)	383 lbs

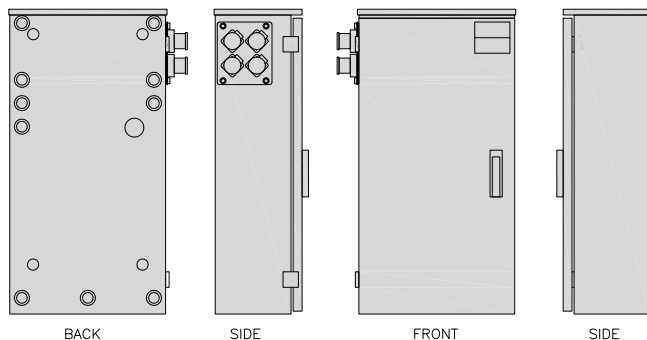
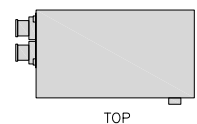


CABINET DETAIL

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

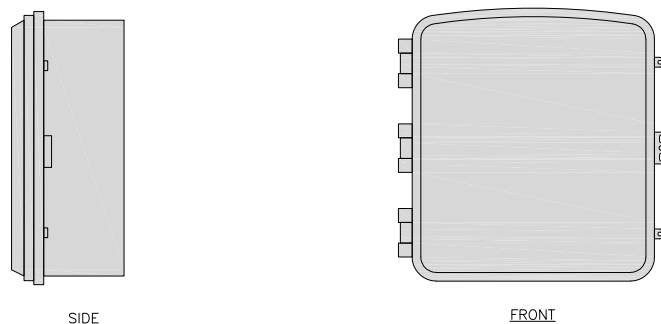
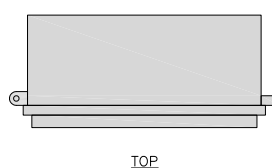


POWER PROTECTION CABINET (PPC) DETAIL

NO SCALE

2

CIENA 3931 FIBER NID ENCLOSURE	
DIMENSIONS (HxWxD)	17"x16.8"x7"
WEIGHT	28.6 lbs

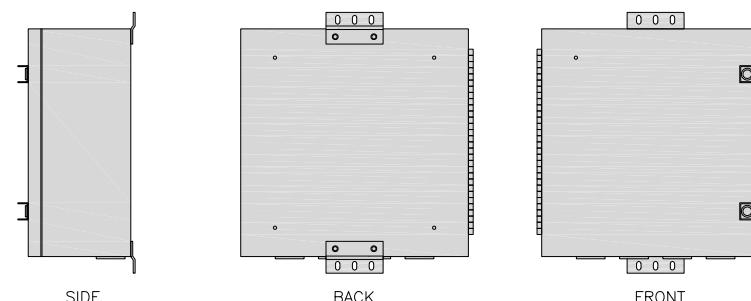
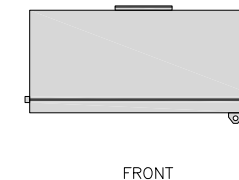


FIBER NID ENCLOSURE DETAIL

NO SCALE

5

CHARLES CFIT-PF2020DSH1 FIBER TELCO ENCLOSURE	
ENCLOSURE DIMS (HxWxD)	20"x20"x9"
ENCLOSURE WEIGHT	20 lbs
MOUNTING	WALL
COMPLIANCE	TYPE 4

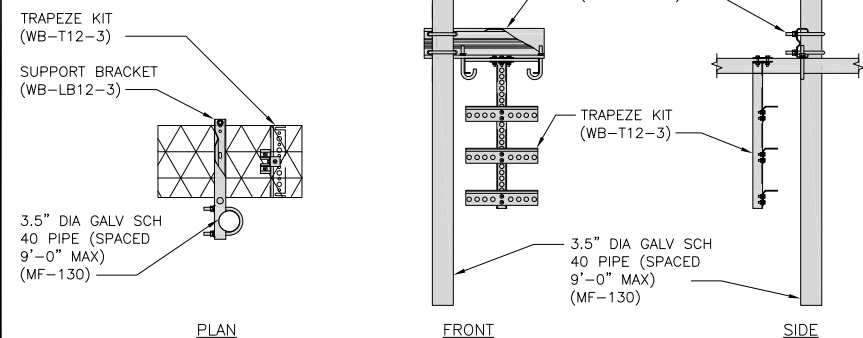


FIBER TELCO ENCLOSURE DETAIL

NO SCALE

6

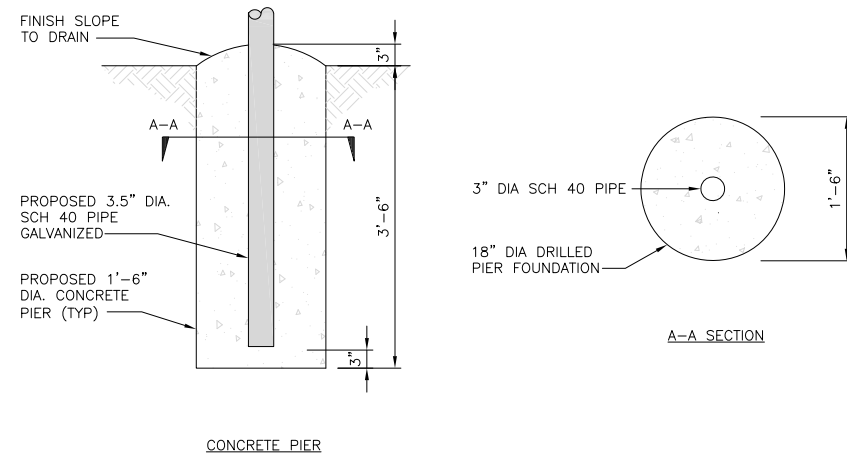
COMMSCOPE WB-K110-B WAVEGUIDE BRIDGE KIT		INCLUDED PRODUCTS: WB-T12-3 TRAPEZE KIT, 3 RUNGS WB-LB12-3 SUPPORT BRACKET MF-130 DIRECT BURIAL PIPE COLUMN, 13'-4"
DIMENSIONS (HxL)	160"x10'	
WEIGHT/ VOLUME	325.0 LBS	
CABLE RUN (QTY)	12	



ICE BRIDGE DETAIL

NO SCALE

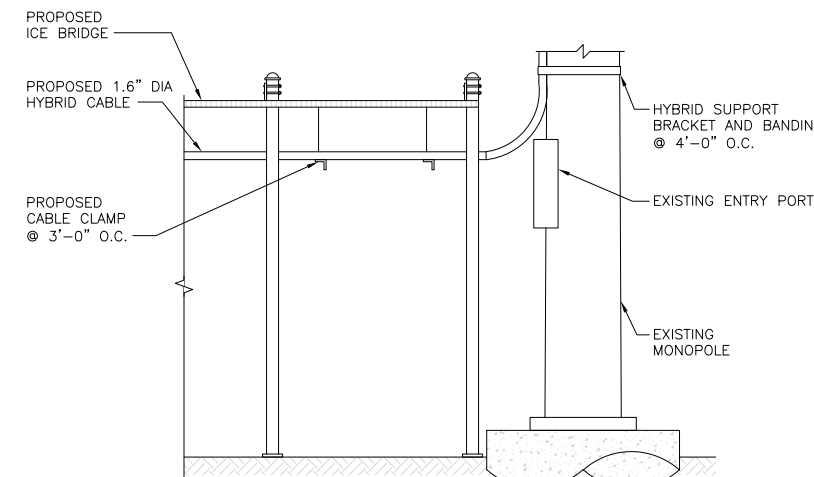
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TYPICAL ICE BRIDGE CONCRETE PIER DETAIL

NO SCALE

8



HYBRID CABLE RUN

NO SCALE

9



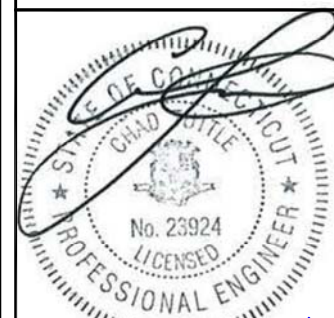
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PEC.0001564
Expires 2/10/23

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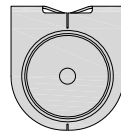
DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
EQUIPMENT DETAILS

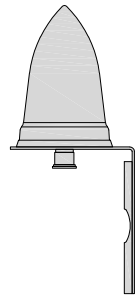
SHEET NUMBER

A-4

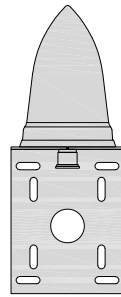
PCTEL GPSGL-TMG-SPI-40NCB	
DIMENSIONS (DIAxH) MM/INCH	81x184mm 3.2"x7.25"
WEIGHT W/ACCESSORIES	075 lbs
CONNECTOR	N-FEMALE
FREQUENCY RANGE	1590 ± 30MHz



TOP



BACK

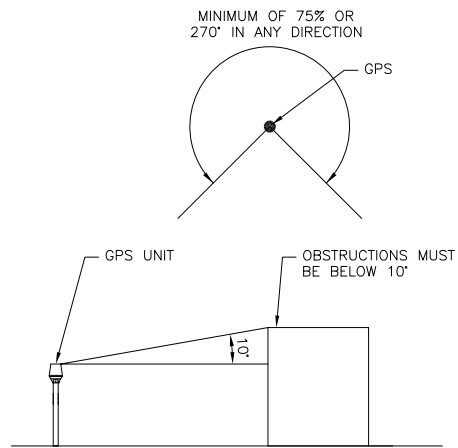


SIDE

GPS DETAIL

NO SCALE

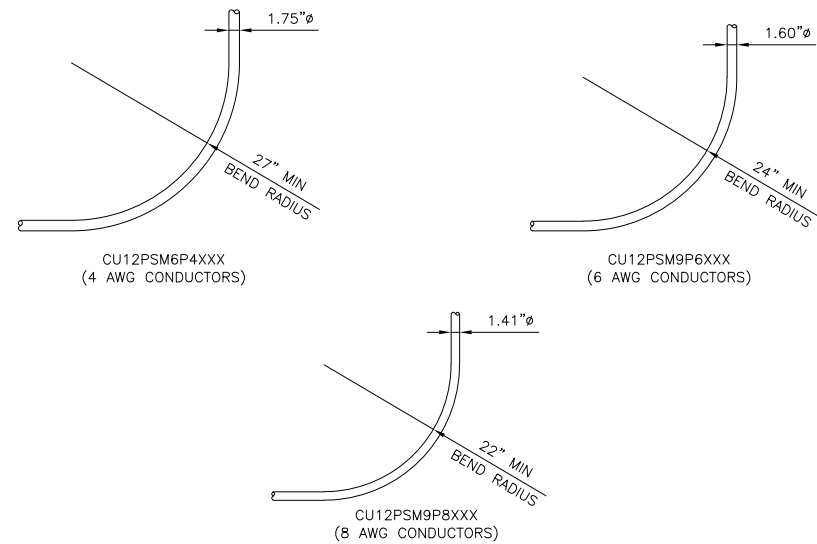
1



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



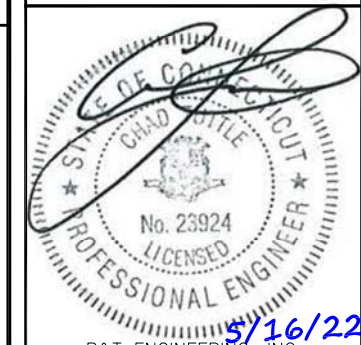
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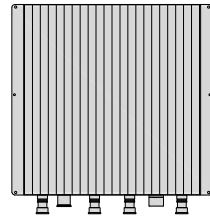
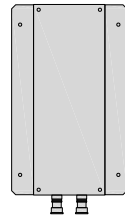
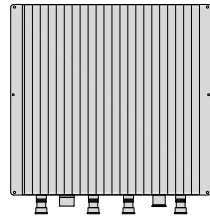
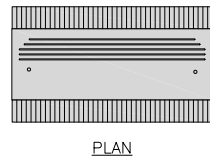
A&E PROJECT NUMBER
161924.001.01

DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
EQUIPMENT DETAILS

SHEET NUMBER
A-5

FUJITSU TRIPLE BAND TA08025-B605	
DIMENSIONS (HxWxD)	14.9"x15.7"x9"
WEIGHT	74.95 lbs
CONNECTOR TYPE	4.3-10 RF CONNECTOR
POWER SUPPLY	DC -58~-36V



BACK

SIDE

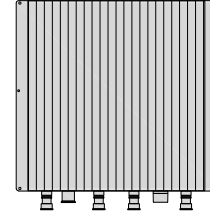
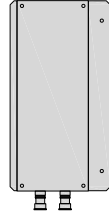
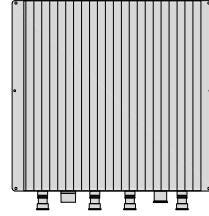
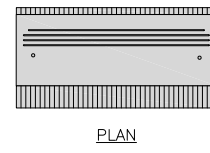
FRONT

RRH DETAIL

NO SCALE

1

FUJITSU DUAL BAND TA08025-B604	
DIMENSIONS (HxWxD)	14.9"x15.7"x7.8"
WEIGHT	63.9 lbs
CONNECTOR TYPE	4.3-10 RF CONNECTOR
POWER SUPPLY	DC -58~-36V



BACK

SIDE

FRONT

RRH DETAIL

NO SCALE

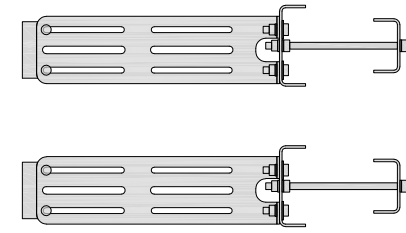
2

COMMSCOPE RR-FA2 LARGE STABILIZER	
DIMENSIONS (HxWxD)	16.4"x8.5"x18"
WEIGHT	39.2 lbs

DESIGN NOTES:
MOUNT WILL FIT LEGS UP TO:
- 5.6" ROUND
- 6.0" 60° ANGLE
- 4.5" 90° ANGLE



PLAN



SIDE

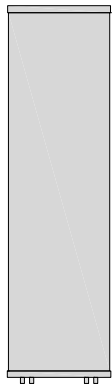
NOTE:
OR DISH Wireless L.L.C.
APPROVED EQUIVALENT

RRH MOUNT DETAIL

NO SCALE

3

COMMSCOPE FFVV-65B-R2	
DIMENSIONS (HxWxD)(MM/IN)	1826x498x197 72"x19.6"x7.8"
RF CONNECTOR INTERFACE	4.3-10 FEMALE
WEIGHT	70.8 lbs
WEIGHT WITH BRACKETS	98.1 lbs



BACK

SIDE

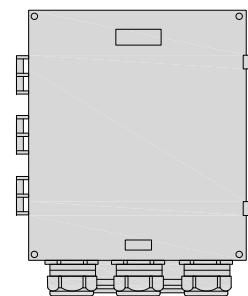
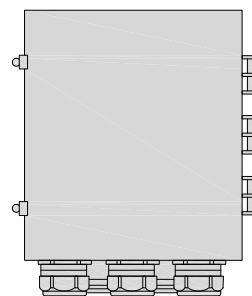
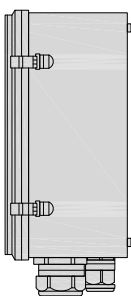
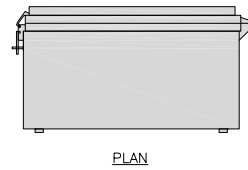
FRONT

ANTENNA DETAIL

NO SCALE

4

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



SIDE

BACK

FRONT

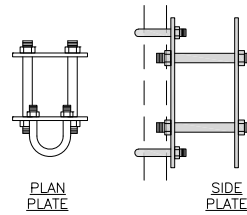
SURGE SUPPRESSION DETAIL (OVP)

NO SCALE

7

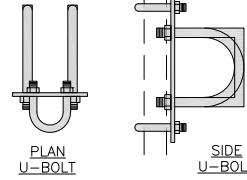
COMMSCOPE XP-2040 CROSSOVER PLATE	
DIMENSIONS (HxW)	10"x12"
WEIGHT	11 lbs

NOTE:
OR DISH Wireless L.L.C.
APPROVED EQUIVALENT



PLAN
U-BOLT

SIDE
U-BOLT



PLAN
U-BOLT

SIDE
U-BOLT

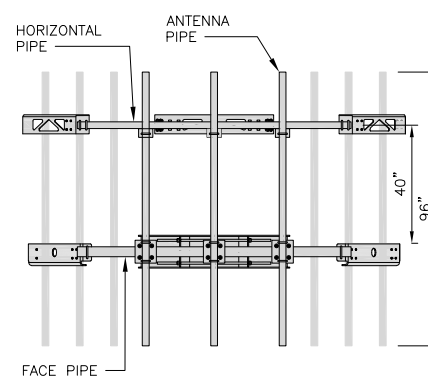
RRH/OVP MOUNT DETAIL

NO SCALE

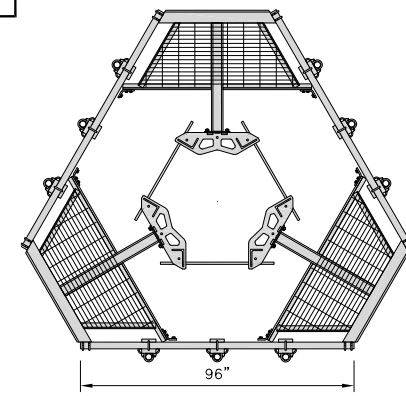
8

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

NOTE:
OR DISH Wireless L.L.C.
APPROVED EQUIVALENT



FACE PIPE



96"

ANTENNA PLATFORM DETAIL

NO SCALE

9

dish
wireless.

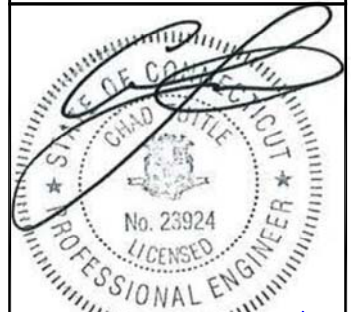
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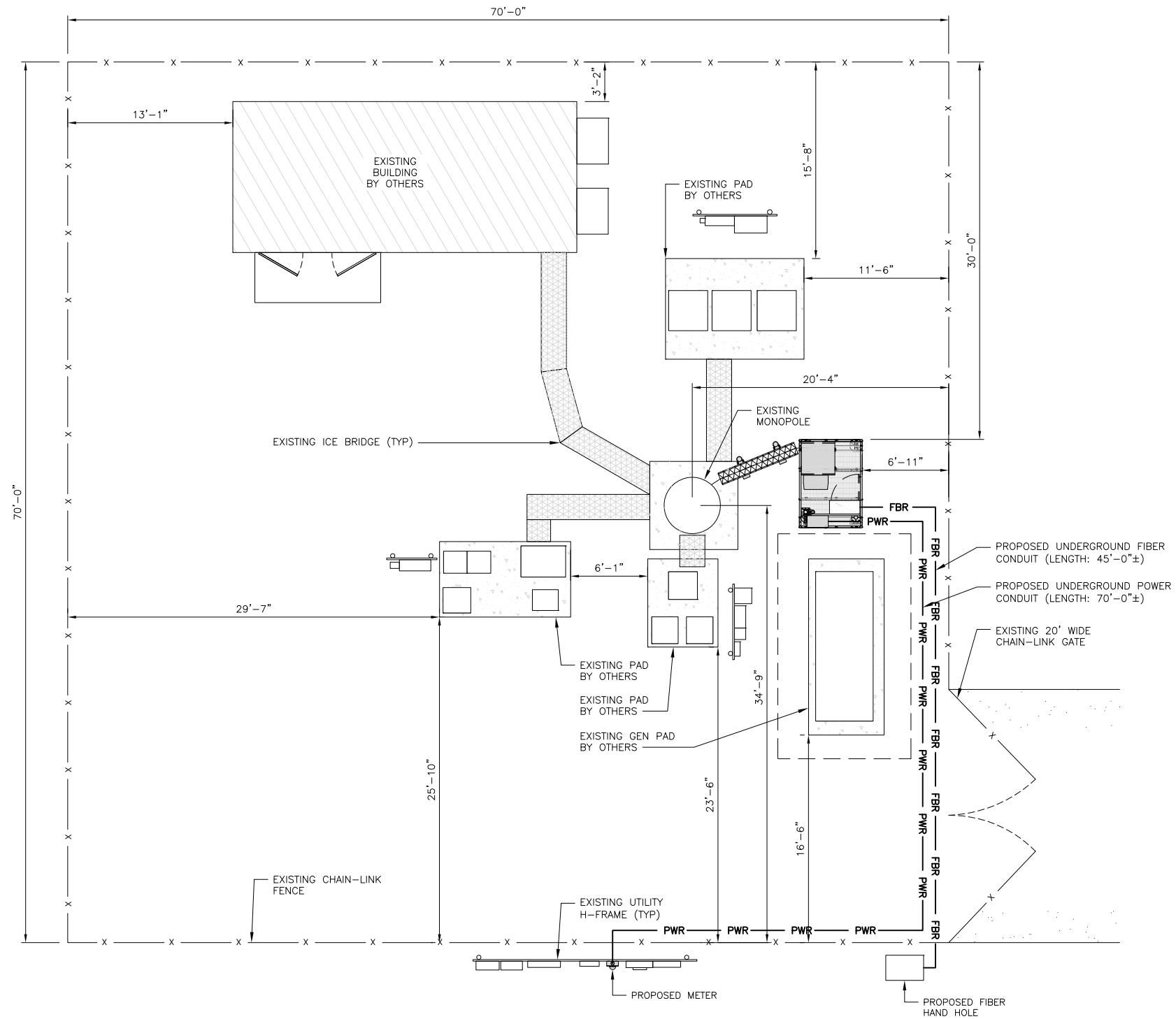
A-6

NOTES

1. CONTRACTOR SHALL FIELD VERIFY ALL PROPOSED UNDERGROUND UTILITY CONDUIT ROUTE.
2. ANTENNAS AND MOUNTS OMITTED FOR CLARITY.
3. THE GROUND LEASE PROVIDES BROAD/BLANKET UTILITY RIGHTS. "PWR" AND "FBR" PATH DEPICTED ON A-1 AND E-1 ARE BASED ON BEST AVAILABLE INFORMATION INCLUDING BUT NOT LIMITED TO FIELD VERIFICATION, PRIOR PROJECT DOCUMENTATION AND OTHER REAL PROPERTY RIGHTS DOCUMENTS. WHEN INSTALLING THE UTILITIES PLEASE LOCATE AND FOLLOW EXISTING PATH. IF EXISTING PATH IS NOT AN OPTION, PLEASE NOTIFY TOWER OWNER AS FURTHER COORDINATION MAY BE NEEDED.

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 TO BE HAND DUG



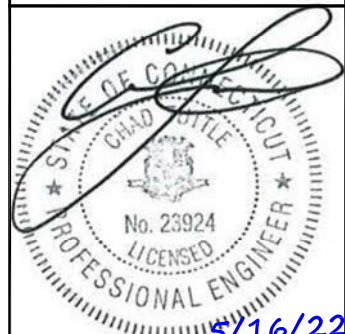
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CONSTRUCTION DOCUMENTS

SUBMITTALS		
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A&E PROJECT NUMBER
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DISH Wireless L.L.C.
PROJECT INFORMATION

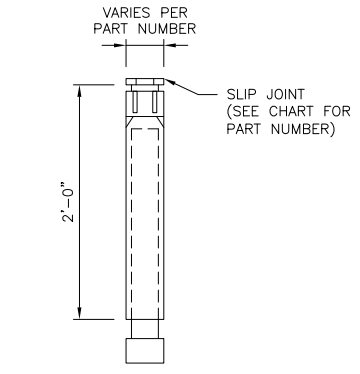
BOBOS00896A
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SHEET TITLE
**ELECTRICAL/FIBER ROUTE
PLAN AND NOTES**

SHEET NUMBER
E-1

CARLON EXPANSION FITTINGS

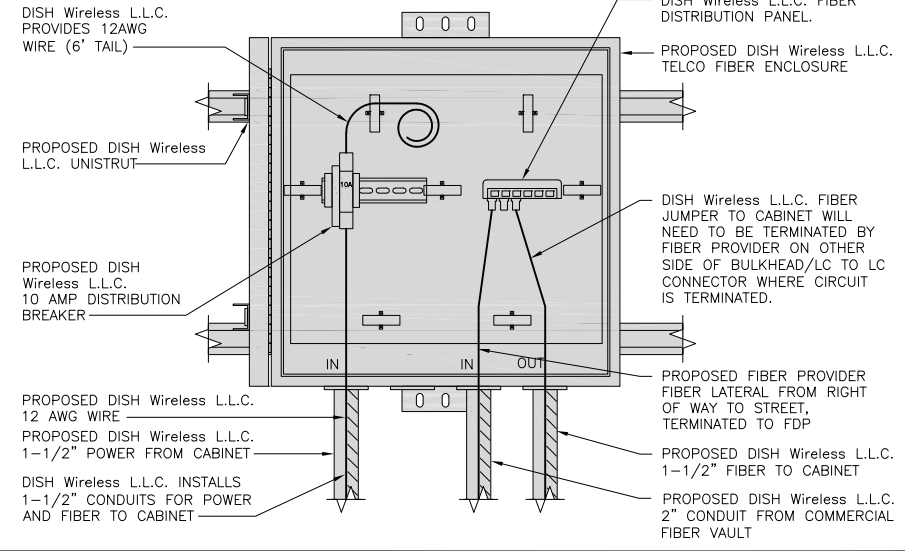
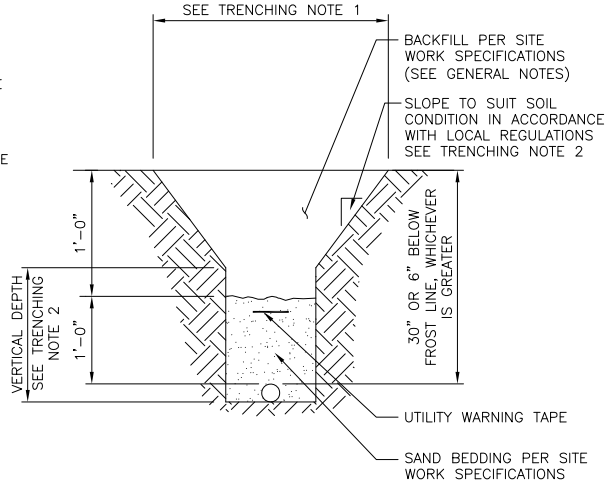
COUPLING END PART#	MALE TERMINAL ADAPTER END PART#	SIZE	STD CTN QTY.	TRAVEL LENGTH
E945D	E945DX	1/2"	20	4"
E945E	E945EX	3/4"	15	4"
E945F	E945FX	1"	10	4"
E945G	E945GX	1 1/4"	5	4"
E945H	E945HX	1 1/2"	5	4"
E945J	E945JX	2"	15	8"
E945K	E945KX	2 1/2"	10	8"
E945L	E945LX	3"	10	8"
E945M	E945MX	3 1/2"	5	8"
E945N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

TRENCHING NOTES

- 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.
- TRENCHING SAFETY; INCLUDING, BUT NOT LIMITED TO SOIL CLASSIFICATION, SLOPING, AND SHORING, SHALL BE GOVERNED BY THE CURRENT OSHA TRENCHING AND EXCAVATION SAFETY STANDARDS.
- 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.



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DISH Wireless L.L.C. PROJECT INFORMATION
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
ELECTRICAL DETAILS

SHEET NUMBER
E-2

EXPANSION JOINT DETAIL

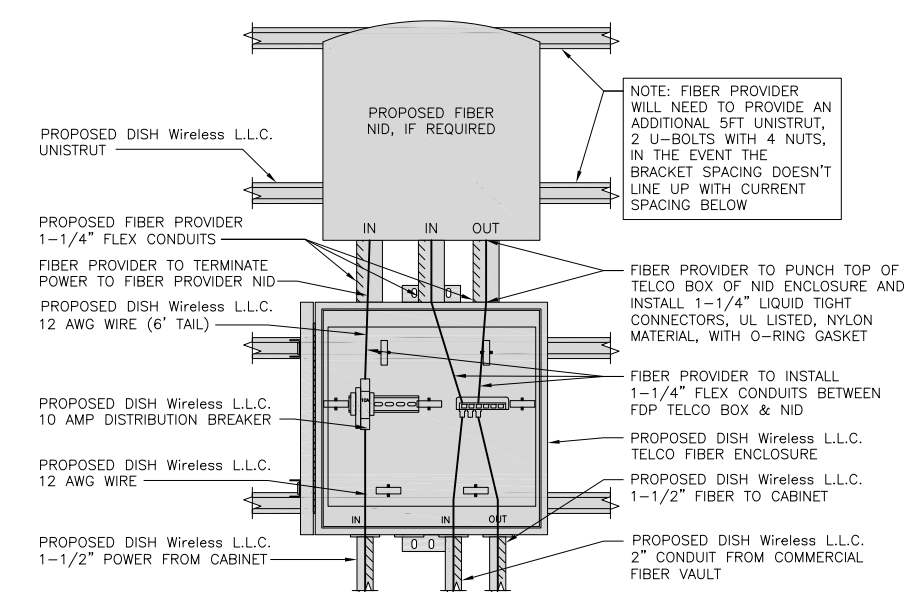
NO SCALE 1

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

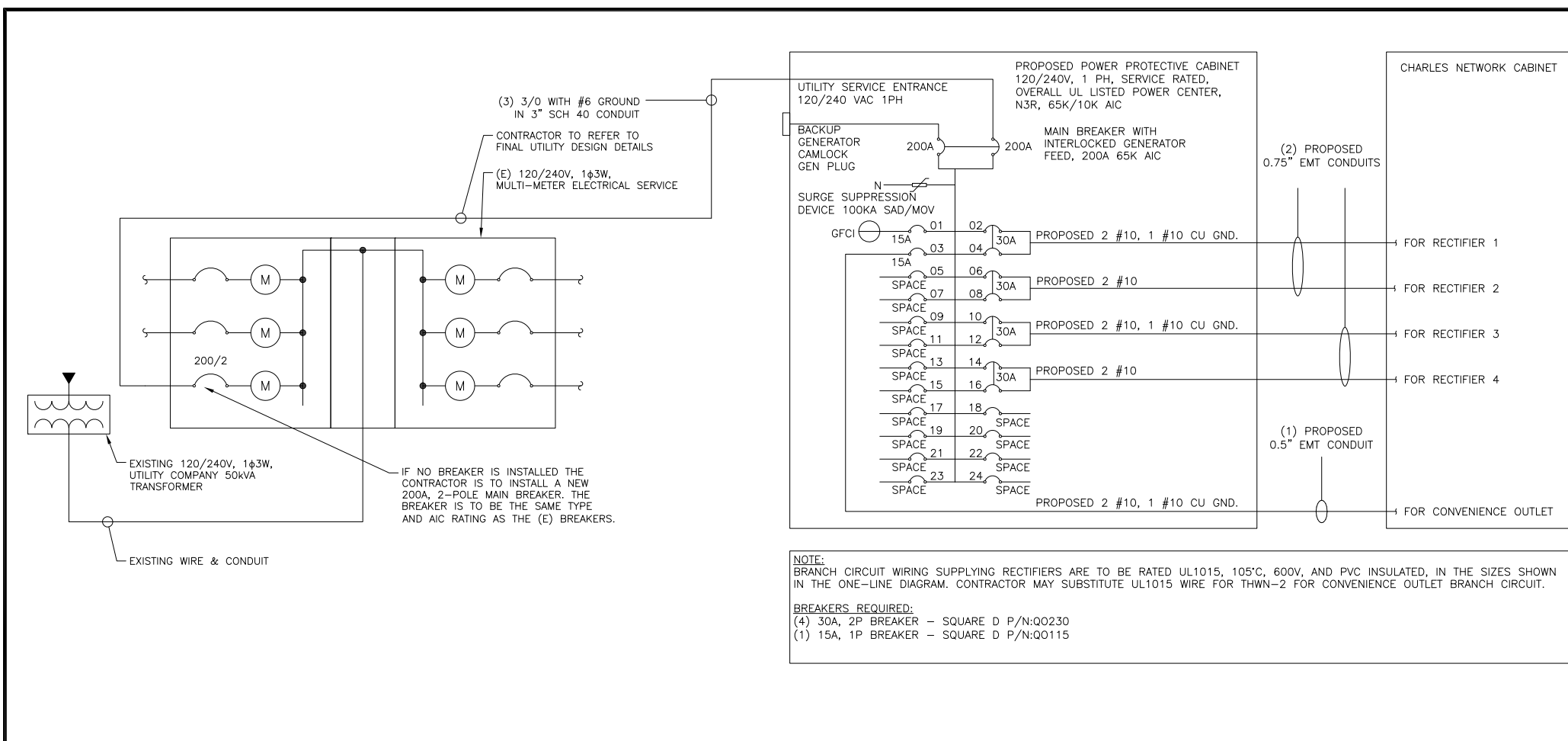
NO SCALE 7

NOT USED

NO SCALE 8

NOT USED

NO SCALE 9



NOTES

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED SHORT CIRCUIT CALCULATIONS AND THE AIC RATINGS FOR EACH DEVICE IS ADEQUATE TO PROTECT THE EQUIPMENT AND THE ELECTRICAL SYSTEM.

THE ENGINEER OF RECORD HAS PERFORMED ALL REQUIRED VOLTAGE DROP CALCULATIONS AND ALL BRANCH CIRCUIT AND FEEDERS COMPLY WITH THE NEC (LISTED ON T-1) ARTICLE 210.19(A)(1) FPN NO. 4.

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)(g) 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.

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:Q0230
(1) 15A, 1P BREAKER - SQUARE D P/N:Q0115

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SUITE 300
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PROFESSIONAL ENGINEER
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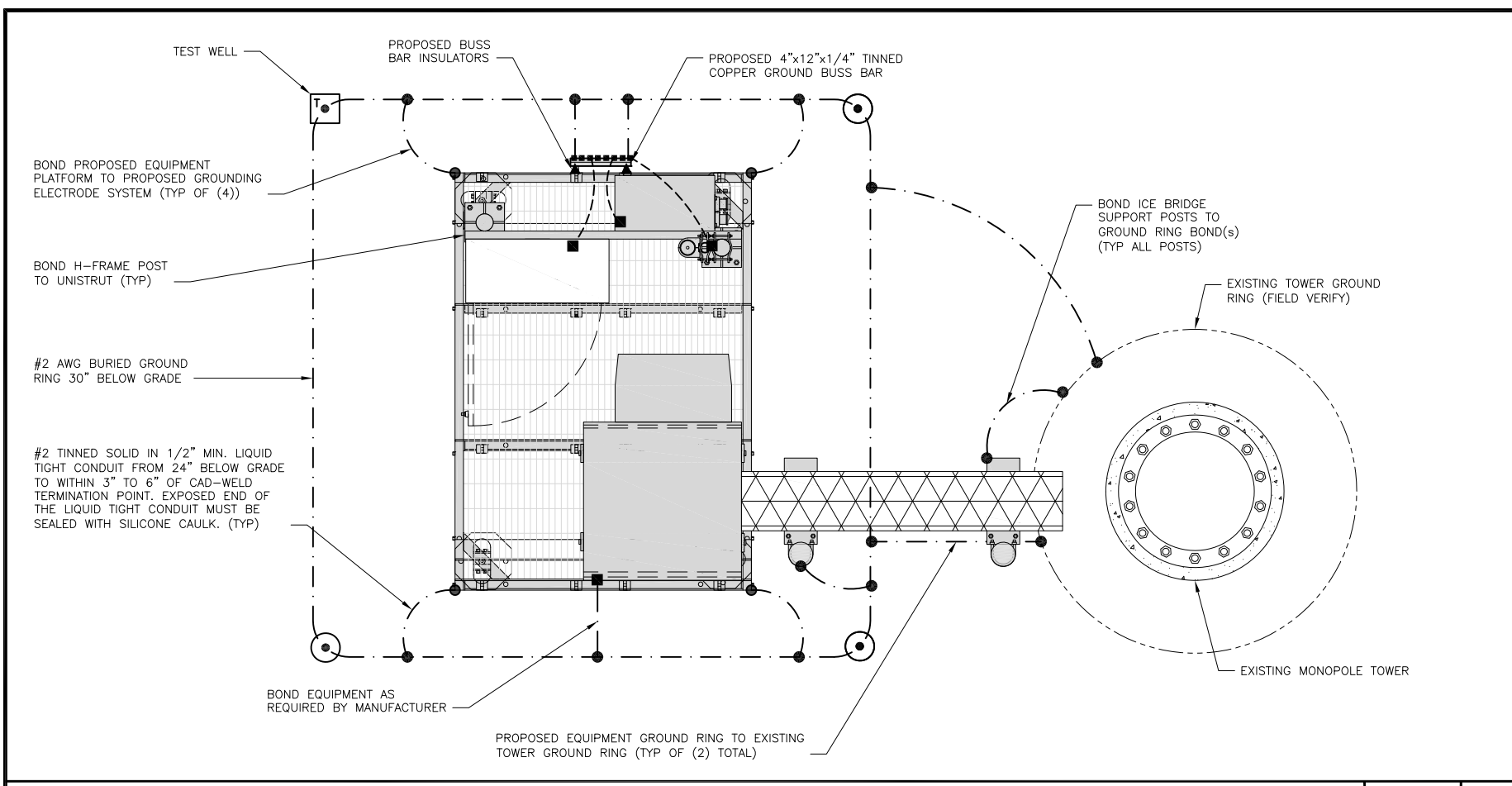
SHEET TITLE
ELECTRICAL ONE-LINE, FAULT CALCS & PANEL SCHEDULE

SHEET NUMBER
E-3

PROPOSED CHARLES PANEL SCHEDULE

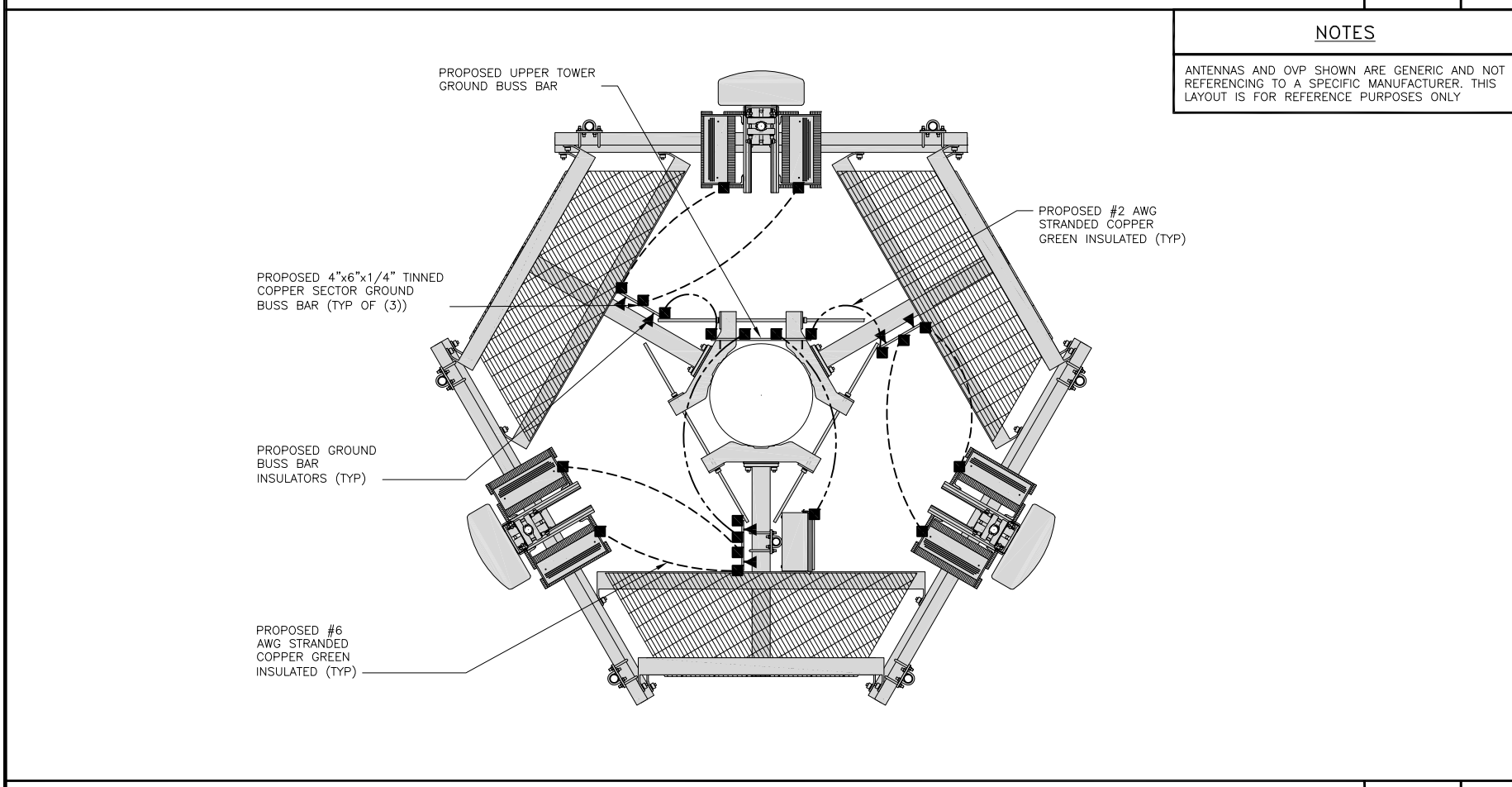
LOAD SERVED	VOLT AMPS (WATTS)		TRIP	CKT #	PHASE	CKT #	TRIP	VOLT AMPS (WATTS)		LOAD SERVED
	L1	L2						L1	L2	
PPC GFCI OUTLET	180	180	15A	1	A	2	30A	2880	2880	ABB/GE INFINITY RECTIFIER 1
CHARLES GFCI OUTLET			15A	3	B	4	30A	2880	2880	ABB/GE INFINITY RECTIFIER 2
--SPACE--				5	A	6	30A	2880	2880	ABB/GE INFINITY RECTIFIER 3
--SPACE--				7	B	8	30A	2880	2880	ABB/GE INFINITY RECTIFIER 4
--SPACE--				9	A	10				--SPACE--
--SPACE--				11	B	12				--SPACE--
--SPACE--				13	A	14				--SPACE--
--SPACE--				15	B	16				--SPACE--
--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					
				98	98					
				98						
				123						

PANEL SCHEDULE		NO SCALE	2	NOT USED		NO SCALE	3
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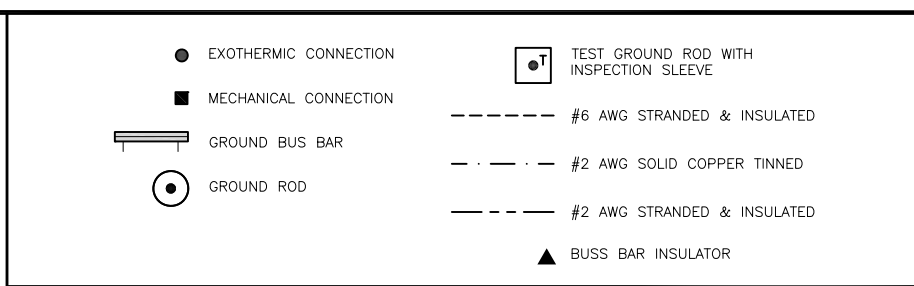
TYPICAL EQUIPMENT GROUNDING PLAN

NO SCALE 1



TYPICAL ANTENNA GROUNDING PLAN

NO SCALE 2



GROUNDING LEGEND

- GROUNDING IS SHOWN DIAGRAMMATICALLY ONLY.
- 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.
- 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



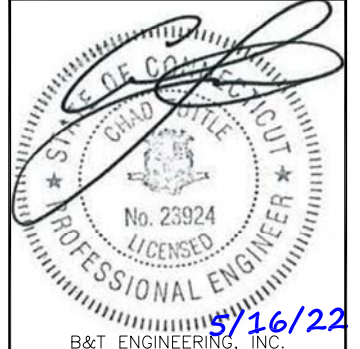
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TULSA, OK 74119
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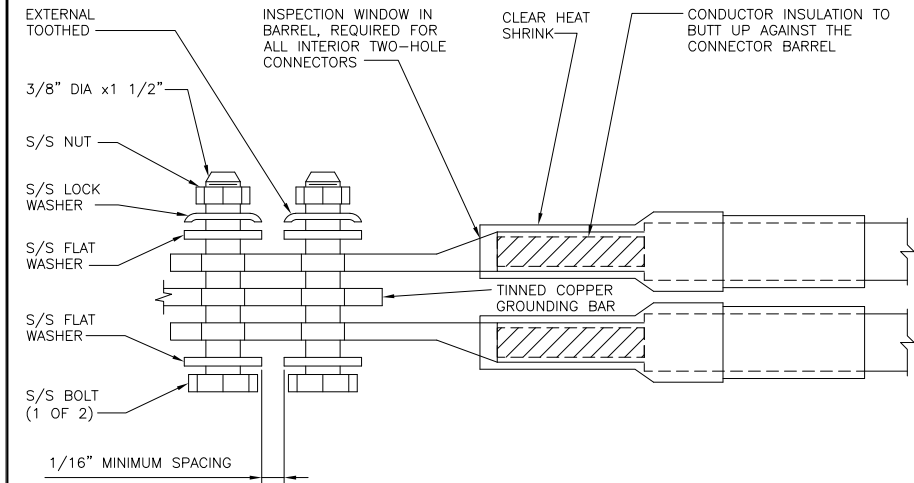
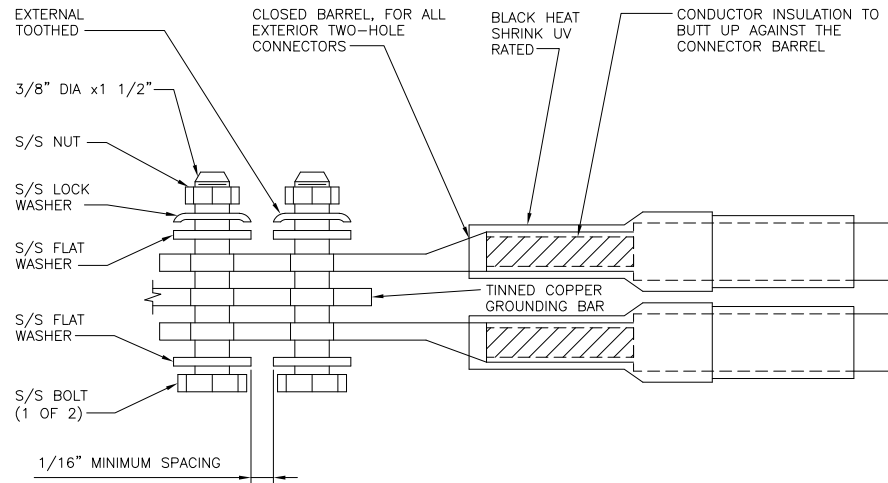
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PROJECT INFORMATION
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DANIELSON, CT 06239

SHEET TITLE
GROUNDING PLANS
AND NOTES

SHEET NUMBER
G-1

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

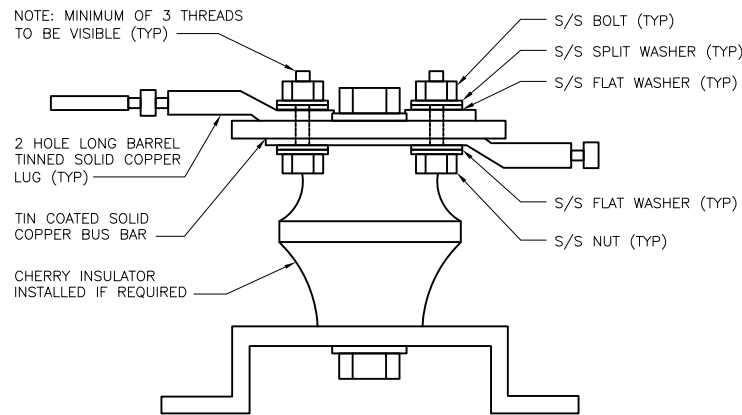
NO SCALE

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

dish
wireless.

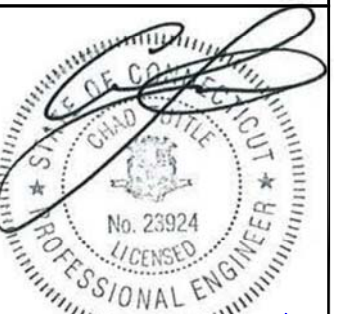
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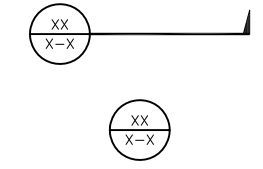
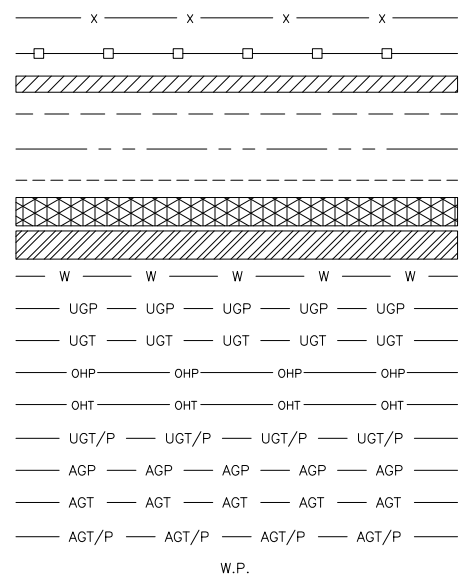
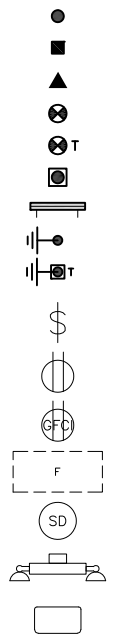
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SHEET TITLE
GROUNDING DETAILS

SHEET NUMBER

G-3

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



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 UNINTERRUPTIBLE POWER SYSTEM (DC POWER PLANT)
 VIF VERIFIED IN FIELD
 W WIDE
 W/ WITH
 WD WOOD
 WP WEATHERPROOF
 WT WEIGHT

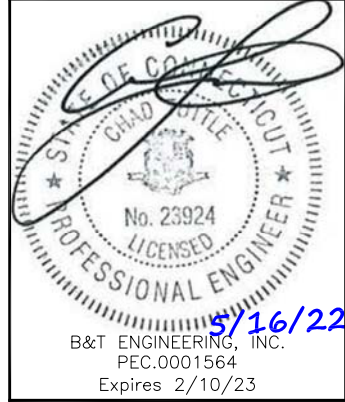
ABBREVIATIONS



5701 SOUTH SANTA FE DRIVE
 LITTLETON, CO 80120



8051 CONGRESS AVENUE
 BOCA RATON, FL 33487



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DRAWN BY:	CHECKED BY:	APPROVED BY:
AP	RMC	RMC

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
A	3/10/22	ISSUED FOR REVIEW
0	5/16/22	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER
161924.001.01

DISH Wireless L.L.C.
 PROJECT INFORMATION
BOBOS00896A
 246 EAST FRANKLIN ST
 DANIELSON, CT 06239

SHEET TITLE
LEGEND AND ABBREVIATIONS

SHEET NUMBER
GN-1

SIGN TYPES		
TYPE	COLOR	COLOR CODE PURPOSE
INFORMATION	GREEN	"INFORMATIONAL SIGN" TO NOTIFY OTHERS OF SITE OWNERSHIP & CONTACT NUMBER AND POTENTIAL RF EXPOSURE.
NOTICE	BLUE	"NOTICE BEYOND THIS POINT" RF FIELDS BEYOND THIS POINT MAY EXCEED THE FCC GENERAL PUBLIC EXPOSURE LIMIT. OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RF ENVIRONMENTS. IN ACCORDANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES ON RADIO FREQUENCY EMISSIONS 47 CFR-1.1307(b)
CAUTION	YELLOW	"CAUTION BEYOND THIS POINT" RF FIELDS BEYOND THIS POINT MAY EXCEED THE FCC GENERAL PUBLIC EXPOSURE LIMIT. OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RF ENVIRONMENTS. IN ACCORDANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES ON RADIO FREQUENCY EMISSIONS 47 CFR-1.1307(b)
WARNING	ORANGE/RED	"WARNING BEYOND THIS POINT" RF FIELDS AT THIS SITE EXCEED FCC RULES FOR HUMAN EXPOSURE. FAILURE TO OBEY ALL POSTED SIGNS AND SITE GUIDELINES FOR WORKING IN RF ENVIRONMENTS COULD RESULT IN SERIOUS INJURY. IN ACCORDANCE WITH FEDERAL COMMUNICATIONS COMMISSION RULES ON RADIO FREQUENCY EMISSIONS 47 CFR-1.1307(b)

SIGN PLACEMENT:

- RF SIGNAGE PLACEMENT SHALL FOLLOW THE RECOMMENDATIONS OF AN EXISTING EME REPORT, CREATED BY A THIRD PARTY PREVIOUSLY AUTHORIZED BY DISH Wireless L.L.C.
- INFORMATION SIGN (GREEN) SHALL BE LOCATED ON EXISTING DISH Wireless L.L.C. EQUIPMENT.
 - A) IF THE INFORMATION SIGN IS A STICKER, IT SHALL BE PLACED ON EXISTING DISH Wireless L.L.C. EQUIPMENT CABINET.
 - B) IF THE INFORMATION SIGN IS A METAL SIGN IT SHALL BE PLACED ON EXISTING DISH Wireless L.L.C. H-FRAME WITH A SECURE ATTACH METHOD.
- IF EME REPORT IS NOT AVAILABLE AT THE TIME OF CREATION OF CONSTRUCTION DOCUMENTS; PLEASE CONTACT DISH Wireless L.L.C. CONSTRUCTION MANAGER FOR FURTHER INSTRUCTION ON HOW TO PROCEED.

NOTES:

1. FOR DISH Wireless L.L.C. LOGO, SEE DISH Wireless L.L.C. DESIGN SPECIFICATIONS (PROVIDED BY DISH Wireless L.L.C.)
2. SITE ID SHALL BE APPLIED TO SIGNS USING "LASER ENGRAVING" OR ANY OTHER WEATHER RESISTANT METHOD (DISH Wireless L.L.C. APPROVAL REQUIRED)
3. TEXT FOR SIGNAGE SHALL INDICATE CORRECT SITE NAME AND NUMBER AS PER DISH Wireless L.L.C. CONSTRUCTION MANAGER RECOMMENDATIONS.
4. CABINET/SHELTER MOUNTING APPLICATION REQUIRES ANOTHER PLATE APPLIED TO THE FACE OF THE CABINET WITH WATER PROOF POLYURETHANE ADHESIVE
5. ALL SIGNS WILL BE SECURED WITH EITHER STAINLESS STEEL ZIP TIES OR STAINLESS STEEL TECH SCREWS
6. ALL SIGNS TO BE 8.5"x11" AND MADE WITH 0.04" OF ALUMINUM MATERIAL

INFORMATION

This is an access point to an area with transmitting antennas.

Obey all signs and barriers beyond this point.
Call the DISH Wireless L.L.C. NOC at 1-866-624-6874

Site ID: _____

THIS SIGN IS FOR REFERENCE PURPOSES ONLY

NOTICE

Transmitting Antenna(s)

Radio frequency fields beyond this point **MAY EXCEED** the FCC Occupational exposure limit.

Obey all posted signs and site guidelines for working in radio frequency environments.

Call the DISH Wireless L.L.C. NOC at 1-866-624-6874 prior to working beyond this point.

Site ID: _____

dish

THIS SIGN IS FOR REFERENCE PURPOSES ONLY

CAUTION

Transmitting Antenna(s)

Radio frequency fields beyond this point **MAY EXCEED** the FCC Occupational exposure limit.

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dish

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Site ID: _____

dish

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5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120

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

5/16/22
B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

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DRAWN BY:	CHECKED BY:	APPROVED BY:
AP	RMC	RMC

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

SUBMITTALS

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0	5/16/22	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER
161924.001.01

DISH Wireless L.L.C.
PROJECT INFORMATION

BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
RF SIGNAGE

SHEET NUMBER
GN-2

SITE ACTIVITY REQUIREMENTS:

- 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.
- "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.
- 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.
- 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).
- 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."
- 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.
- 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.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES INCLUDING PRIVATE LOCATES SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY 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.
- ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND DISH PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
- 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.
- 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.
- 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.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 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.
- 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.
- 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.
- 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.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
- 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:

- 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
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 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.
- 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.
- 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
- 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.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.



5701 SOUTH SANTA FE DRIVE
LITTLETON, CO 80120



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

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161924.001.01

DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-3

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.



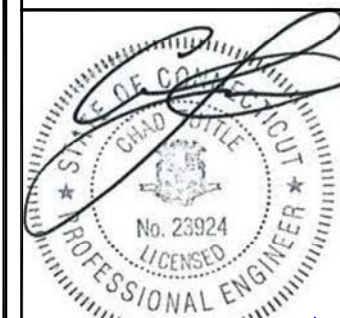
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LITTLETON, CO 80120



8051 CONGRESS AVENUE
BOCA RATON, FL 33487



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



B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/23

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DRAWN BY:	CHECKED BY:	APPROVED BY:
AP	RMC	RMC

RFDS REV #: 1

CONSTRUCTION DOCUMENTS

SUBMITTALS		
REV	DATE	DESCRIPTION
A	3/10/22	ISSUED FOR REVIEW
0	5/16/22	ISSUED FOR CONSTRUCTION

A&E PROJECT NUMBER
161924.001.01

DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-4

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.



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RFDS REV #: 1

CONSTRUCTION DOCUMENTS

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DISH Wireless L.L.C.
PROJECT INFORMATION
BOBOS00896A
246 EAST FRANKLIN ST
DANIELSON, CT 06239

SHEET TITLE
GENERAL NOTES

SHEET NUMBER
GN-5

Exhibit D

Structural Analysis Report



Tower Engineering Solutions

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

Structural Analysis Report

Existing 155 ft Nudd Corporation Monopole

Customer Name: SBA Communications Corp

Customer Site Number: CT00302-S

Customer Site Name: Danielson

Carrier Name: Dish Wireless (App#: 178906-1)

Carrier Site ID / Name: BOBOS00896A / 0

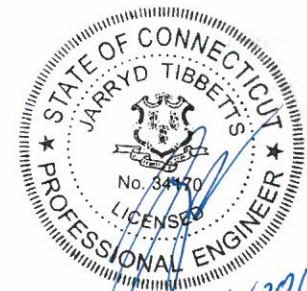
Site Location: 246 East Franklin Street

Danielson, Connecticut

Windham County

Latitude: 41.795822

Longitude: -71.870333



Analysis Result:

Max Structural Usage: 98.9% [Pass]

Max Foundation Usage: 67% [Pass]

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

Report Prepared By: Kevin Azisllari



Tower Engineering Solutions

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Report Prepared By: Kevin Azisllari

Introduction

The purpose of this report is to summarize the analysis results on the 155 ft Nudd Corporation 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	Nudd Corporation, Project #6410 dated October 27, 1998
Foundation Drawing	Nudd Corporation, Project #98-6410-4 dated November 2, 1998
Geotechnical Report	Jaworski Geotech, Inc., Project #C98423G dated October 14, 1998
Modification Drawings	Vertical Solutions, Inc., Job #TA2002007001-T1 dated October 7, 2002 Vertical Solutions, Inc., Job #TA2008007031-T3 dated November 10, 2008 Vertical Solutions, Inc., Job #TA2009007021-T2 dated July 16, 2009 FDH Engineering, Project #12-01571E S4 dated March 13, 2013 FDH Engineering, Project #1466VA1400 dated July 8, 2014

Analysis Criteria

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

Wind Speed Used in the Analysis:	Ultimate Design Wind Speed $V_{ult} = 130.0$ mph (3-Sec. Gust)/ Nominal Design Wind Speed $V_{asd} = 101.0$ mph (3-Sec. Gust)
Wind Speed with Ice:	50 mph (3-Sec. Gust) with 3/4" radial ice concurrent
Operational Wind Speed:	60 mph + 0" Radial ice
Standard/Codes:	TIA-222-G-2 / 2015 IBC / 2018 Connecticut State Building Code
Exposure Category:	B
Structure Class:	II
Topographic Category:	3
Crest Height:	172 ft
Seismic Parameters:	$S_5 = 0.171$, $S_1 = 0.062$

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

Existing Antennas, Mounts and Transmission Lines

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

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	156.5	3	Samsung MT6407-77A – Panel	(3) T-Frame w/ Walkaways (3) Commscope BSAMNT-SBS-2-2	(11) 1 5/8" Coax (2) 1 5/8" Hybrid	Verizon
2	155.0	3	Antel BXA-70080-4BF-EDIN - Panel			
3		6	Andrew JAHH-65B-R3B - Panel			
4		3	Commscope CBC78T-DS-43-2X - Diplexer			
5		3	Samsung B2/B66A - RRU			
6		3	Samsung B5/B13 - RRU			
7		1	Raycap RVZDC-6627-PF-48 - OVP			
8		153.0	3			
9	3		Samsung CBRS RRH - RT 4401-48A - RRU			
10	147.0	3	RFS APXVSP18-C-A20 - Panel	(3) T-Frame w/ Platforms (1) SitePro1 PRK- SFS-L (1) SitePro1 PRK- 1245L	(4) 1-1/4" Hybrid	Sprint Nextel
11		3	RFS APXVTM14-C-120 - Panel			
12		3	ALU TD-RRH8x20-25			
13		3	ALU 1900MHz RRH			
14		3	ALU 800 MHz RRH			
15		3	ALU 800 MHz Filters			
16		4	RFS ACU-A20-N RET			
17	137.0	2	Ericsson Air 32 KRD901146-1_B66A_B2A	(3) T-Frame w/ walking platform w/ mount modifications	(2) 1 1/4" (3) 1 5/8" Fiber	T-Mobile
18		2	RFS APXVAALL24-43-U-NA20			
19		2	Ericsson AIR6449 B41			
20		3	Ericsson KRY 112 144/2			
21		2	Ericsson 4449 B71 + B85			
22		2	Ericsson 4415 B25			
23	127.0	3	Powerwave 7770	Low Profile Platform (12) Pipe Mast (1) Handrail kitSitePro1 HRK12- 3HD	(8) 1 5/8" (1) 3" conduit { housing(2) 3/4" DC and (1) 7/16" fiber line} (2) 2 3/8" conduit {Housing (1) 7/16" fiber & (3) 1" DC}	AT&T
24		3	Cci DMP65R-BU8DA			
25		3	Kathrein 840370799			
26		3	Powerwave DTMABP7819VG12A			
27		6	Powerwave LGP13519 Diplexer			
28		3	Ericsson 4449 B5/B12			
29		3	Ericsson RRUS 4478 B14			
30		3	Ericsson RRUS 8843 B2 B66A			
31		3	Ericsson 4415 B30			
32		1	Raycap DC6-48-60-18-8F			
33		1	Raycap DC9-48-60-24-8C-EV			

Proposed Carrier's Final Configuration of Antennas, Mounts and Transmission Lines

Information pertaining to the proposed carrier's final configuration of antennas and transmission lines was provided by SBA Communications Corp. The proposed antennas and lines are listed below.

Items	Elevation (ft)	Qty.	Antenna Descriptions	Mount Type & Qty.	Transmission Lines	Owner
1	117.0	3	Commscope MC-PK8-DSH - Panel	Platform Commscope MC-PK8-DSH	(1) 1.6" Hybrid (outside)	Dish Wireless
2		3	Fujitsu TA08025-B605			
3		3	Fujitsu TA08025-B604			
4		1	Raycap RDIDC-9181-PF-48			

The proposed transmission lines can be installed inside or outside of the pole shafts. If installed outside, the lines shall be strapped tightly to the face of the pole shafts. Stacking lines is not allowed.

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	Reinforcement Plate
Max. Usage:	87.5%	77.0%	83.9%	98.9%
Pass/Fail	Pass	Pass	Pass	Pass

Foundations

	Moment (Kip-Ft)	Shear (Kips)
Analysis Reactions	5559.9	54.6

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

Operational Condition (Rigidity):

Operational characteristics of the tower are found to be within the limits prescribed by TIA-222 for the installed antennas. The maximum twist/sway at the elevation of the proposed equipment is 1.0470 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 87.54% at 0.0ft

Structure: CT00302-S-SBA
Site Name: Danielson
Height: 155.00 (ft)
Base Elev: 0.000 (ft)

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

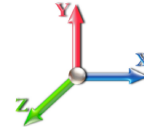
1/20/2022



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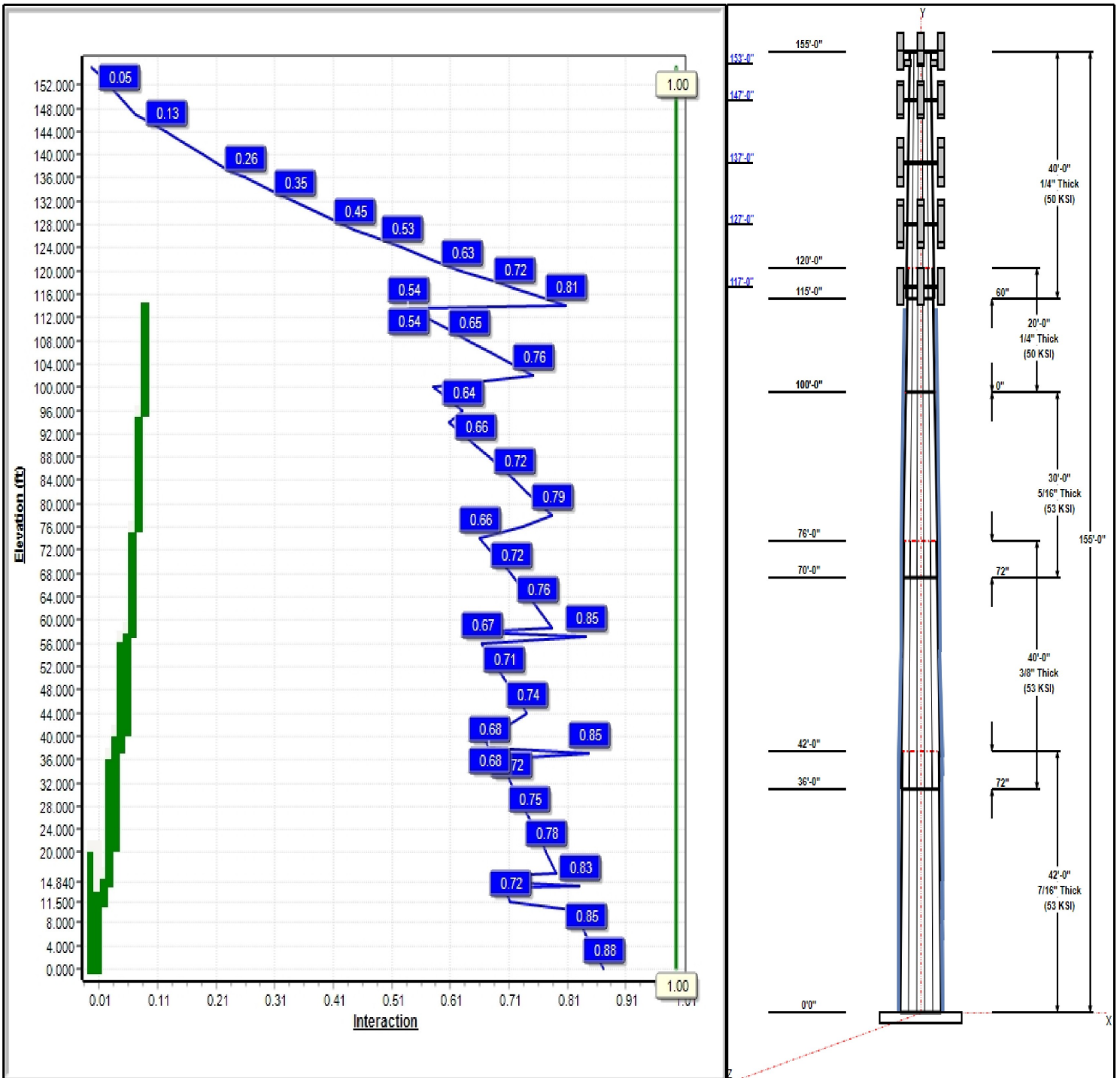
Dead Load Factor: 1.20
Wind Load Factor: 1.60

Load Case : 1.2D + 1.6W 101 mph Wind



Iterations: 26

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Structure: CT00302-S-SBA

Type: Tapered
Site Name: Danielson
Height: 155.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 12 Sided
Taper: 0.19129

1/20/2022

Page: 2

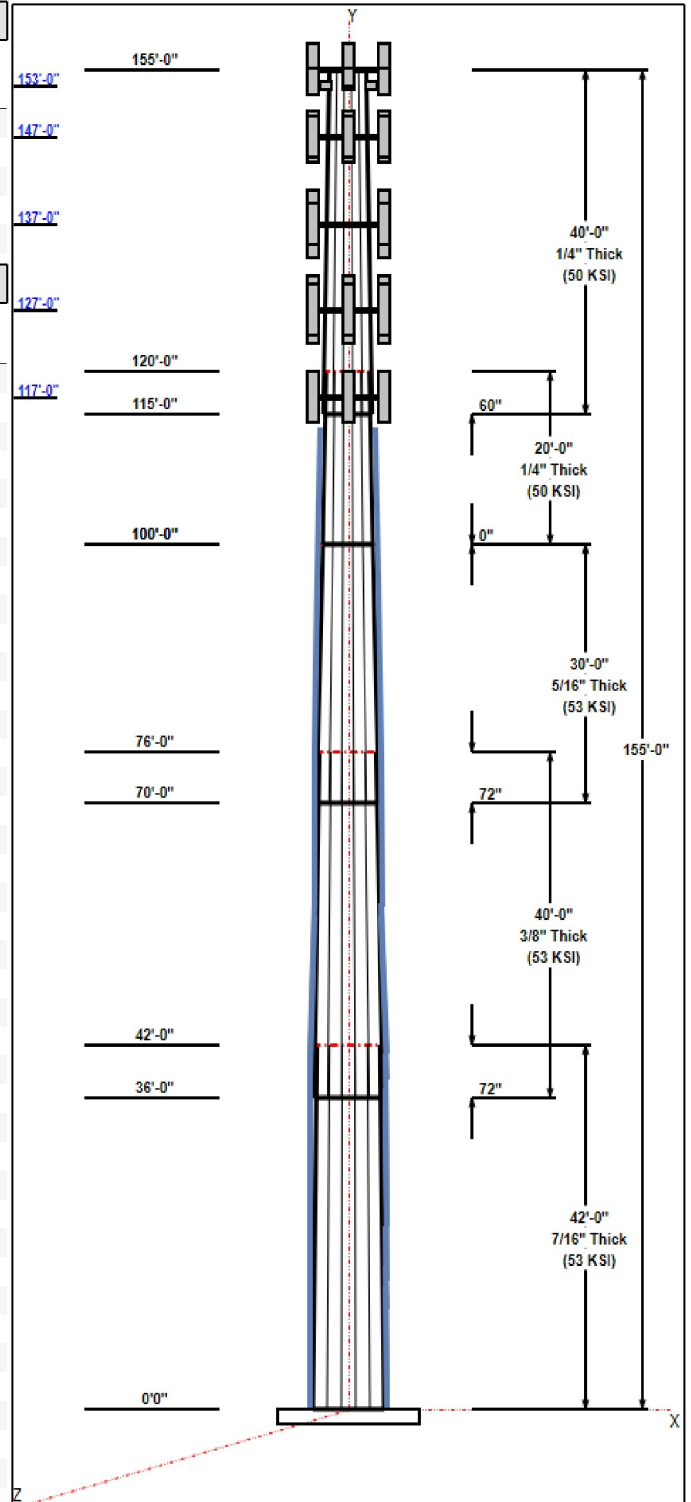


Shaft Properties

Seq	Length (ft)	Top (in)	Bottom (in)	Thick (in)	Joint Type	Taper	Grade (ksi)
1	42.00	45.87	53.90	0.433		0.19129	53
2	40.00	40.11	47.76	0.375	Slip	0.19129	53
3	30.00	36.15	41.88	0.313	Slip	0.19129	53
4	20.00	32.32	36.15	0.250	Butt	0.19129	50
5	40.00	26.13	33.78	0.250	Slip	0.19129	50

Discrete Appurtenances

Attach Elev (ft)	Force Elev (ft)	Qty	Description	Carrier
155.00	155.00	3	BXA-70080-4BF	Verizon
155.00	155.00	3	BSAMNT-SBS-2-2	Verizon
155.00	155.00	3	CBC78T-DS-43-2X	Verizon
155.00	155.00	3	B2/B66A	Verizon
155.00	155.00	1	RVZDC-6627-PF-48	Verizon
155.00	155.00	1	(3) T-Frame w/ Platforms	Verizon
155.00	155.00	6	JAHH-65B-R3B	Verizon
155.00	156.50	3	MT6407-77A	Verizon
155.00	155.00	3	B5/B13	Verizon
153.00	153.00	3	CBRS RRH - RT 4401-48A	Verizon
153.00	153.00	3	XXDWMM-12.5-65-8T-CB	Verizon
147.00	147.00	1	(3) T-Frame w/ Platforms	Sprint Nextel
147.00	147.00	1	PRK-1245 (kicker kit)	Sprint Nextel
147.00	147.00	1	(3) SFS-H (V-Braces)	Sprint Nextel
147.00	147.00	3	APXVSP18-C-A20	Sprint Nextel
147.00	147.00	3	APXVTM14-C-I20	Sprint Nextel
147.00	147.00	3	Alcatel Lucent	Sprint Nextel
147.00	147.00	3	Alcatel Lucent 1900 MHz	Sprint Nextel
147.00	147.00	3	Alcatel Lucent 800 MHz	Sprint Nextel
147.00	147.00	3	Alcatel Lucent 800 MHz	Sprint Nextel
147.00	147.00	4	RFS ACU-A20-N RET	Sprint Nextel
137.00	137.00	2	KRD 9011461-B66A-B2A	T-Mobile
137.00	137.00	2	APXVAALL24_43-U-NA20	T-Mobile
137.00	137.00	1	PRK-1245 (kicker kit)	T-Mobile
137.00	137.00	1	(3) HR w/ V-Brace Kits	T-Mobile
137.00	137.00	2	AIR6449 B41	T-Mobile
137.00	137.00	3	KRY 112 144/2	T-Mobile
137.00	137.00	2	4449 B71 + B85	T-Mobile
137.00	137.00	2	RRUS 4415 B25	T-Mobile
137.00	137.00	1	(3) T-Framew/ walking	T-Mobile
127.00	127.00	1	Low Profile	AT&T
127.00	127.00	3	7770.00	AT&T
127.00	127.00	3	DTMABP7819VG12A	AT&T
127.00	127.00	3	4449 B5/B12	AT&T
127.00	127.00	3	RRUS 4478 B14	AT&T
127.00	127.00	1	DC6-48-60-18-8F	AT&T
127.00	127.00	6	LGP13519	AT&T
127.00	127.00	3	DMP65R-BU6DA	AT&T
127.00	127.00	3	840370799	AT&T
127.00	127.00	3	8843 B2 B66A	AT&T
127.00	127.00	3	4415 B30	AT&T
127.00	127.00	1	DC9-48-60-24-8C-EV	AT&T
127.00	127.00	1	HRK12 (Handrail Kit)	AT&T
117.00	117.00	3	Commscope	Dish Wireless



Structure: CT00302-S-SBA

Type: Tapered
Site Name: Danielson
Height: 155.00 (ft)
Base Elev: 0.00 (ft)

Base Shape: 12 Sided
Taper: 0.19129

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117.00	117.00	3	Fujitsu TA08025-B605	Dish Wireless
117.00	117.00	3	Fujitsu TA08025-B604	Dish Wireless
117.00	117.00	1	Raycap	Dish Wireless
117.00	117.00	1	Commscope MC-PK8-DSH	Dish Wireless

Linear Appurtenances

Elev From (ft)	Elev To (ft)	Placement	Description	Carrier
0.00	155.00	Inside	1 5/8" 6x12 Hybrid	Verizon
0.00	155.00	Inside	1 5/8" Coax	Verizon
0.00	147.00	Inside	1 1/4" Coax	Sprint Nextel
58.00	137.00	Inside	1 1/4" Coax	T-Mobile
58.00	137.00	Inside	1 5/8" Fiber	T-Mobile
0.00	127.00	Inside	1 5/8" Coax	AT&T
0.00	127.00	Inside	1"DC	AT&T
0.00	127.00	Inside	2 3/8" Coax	AT&T
0.00	127.00	Inside	3" Conduit	AT&T
0.00	127.00	Inside	3/4" DC	AT&T
0.00	127.00	Inside	7/16" Fiber	AT&T
0.00	117.00	Outside	1.6" Hybrid	Dish Wireless
58.00	115.00	Outside	1.25" Reinforcing plate	
0.00	58.00	Outside	10"x1/2" Bent plate	

Anchor Bolts

Qty	Specifications	Grade (ksi)	Arrangement
18	2.00" A687	105.0	Radial

Base Plate

Thickness (in)	Specifications (in)	Grade (ksi)	Geometry
1.7500	67.0	36.0	Round

Reactions

Load Case	Moment (FT-Kips)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W 101 mph Wind	5559.9	54.6	55.5
0.9D + 1.6W 101 mph Wind	5509.9	54.6	41.6
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1283.9	11.8	93.2
1.2D + 1.0E	294.0	2.3	55.6
0.9D + 1.0E	291.0	2.3	41.7
1.0D + 1.0W 60 mph Wind	1220.2	12.0	46.3

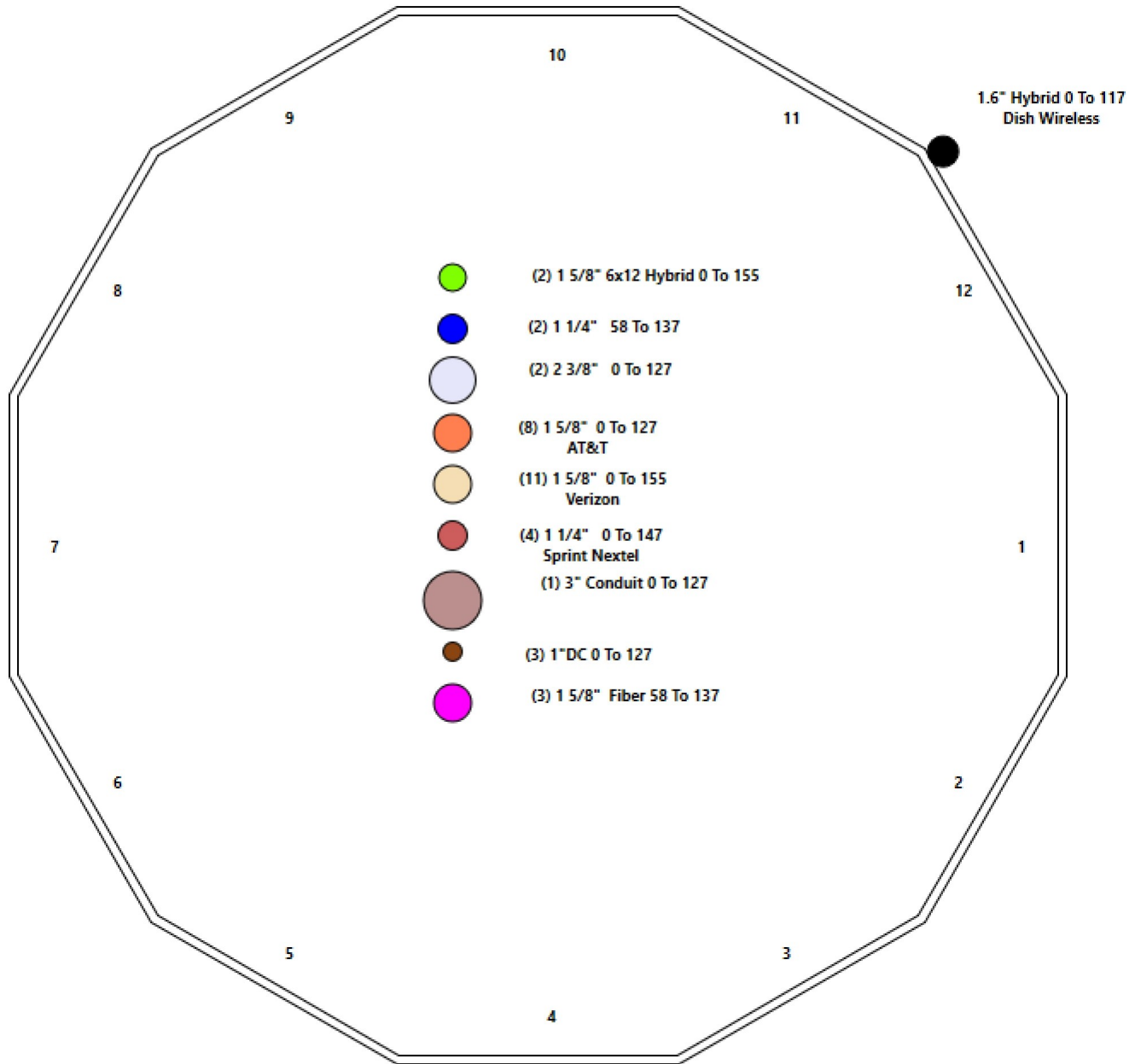
Structure: CT00302-S-SBA - Coax Line Placement

Type: Monopole
Site Name: Danielson
Height: 155.00 (ft)

1/20/2022



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Shaft Properties

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Sec. No.	Shape	Length (ft)	Thick (in)	Fy (ksi)	Joint Type	Overlap (in)	Weight (lb)
1	12	42.000	0.4331	53		0.00	9,856
2	12	40.000	0.3750	53	Slip	72.00	7,160
3	12	30.000	0.3125	53	Slip	72.00	3,976
4	12	20.000	0.2500	50	Flange	0.00	1,862
5	12	40.000	0.2500	50	Slip	60.00	3,254
Total Shaft Weight:							26,107

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	53.90	0.00	74.56	27207.27	31.20	124.45	45.87	42.00	63.36	16693.0	26.23	105.9	0.191290
2	47.76	36.00	57.22	16401.87	31.98	127.37	40.11	76.00	47.98	9670.66	26.52	106.9	0.191290
3	41.88	70.00	41.83	9227.84	33.77	134.03	36.15	100.00	36.06	5909.60	28.85	115.6	0.191290
4	36.15	100.0	28.90	4752.46	36.60	144.58	32.32	120.00	25.82	3389.11	32.50	129.2	0.191290
5	33.78	115.0	26.99	3872.14	34.06	135.11	26.13	155.00	20.83	1780.01	25.86	104.5	0.191290

Additional Steel

Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Fu (ksi)	Offset (in)	Intermediate Connectors		Termination Connectors			
							Description	Spacing (in)	Description	Spacing (in)	Lower Qty	Upper Qty
0.00	21.00	3	PLT 6"x1-1/4"(1.25" Hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00		
0.00	14.16	3	PLT 10"x1/2" (90deg)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	0.00		
11.50	16.50	1	PLT 6"x1-1/4"(1.25" Hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	11	11
14.84	37.06	3	PLT 10"x1/2" (90deg)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	0.00		
21.00	41.00	3	PLT 6"x1-1/4"(1.25" Hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00		
37.96	57.11	3	PLT 10"x1/2" (90deg)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	0.00		
41.00	58.50	3	PLT 6"x1-1/4"(1.25" Hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00		11
58.00	76.00	3	PLT 5"x1-1/4"(1.25"Hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00	8	
76.00	96.00	3	PLT 4.5"x 1-1/4"(1.25"ho	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00		
96.00	113.5	3	PLT 3.5x1.25(1.25 Hole)	65	80	0.00	AJM20&sleeve	18.00	AJM20&sleeve	3.00		6

Load Summary

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Discrete Appurtenances

No.	Elev (ft)	Description	Qty	No Ice			Ice			Hor. Ecc. (ft)	Vert Ecc (ft)
				Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor		
1	155.00	BXA-70080-4BF	3	13.00	4.76	0.76	126.60	6.729	0.76	0.00	0.00
2	155.00	BSAMNT-SBS-2-2	3	25.35	0.00	1.00	44.07	0.000	1.00	0.00	0.00
3	155.00	CBC78T-DS-43-2X	3	10.40	0.37	0.50	32.95	0.673	0.50	0.00	0.00
4	155.00	B2/B66A	3	84.40	1.87	0.50	166.53	2.480	0.50	0.00	0.00
5	155.00	RVZDC-6627-PF-48	1	32.00	4.06	0.50	152.53	4.929	0.50	0.00	0.00
6	155.00	(3) T-Frame w/ Platforms	1	1620.00	25.00	1.00	3115.49	46.232	1.00	0.00	0.00
7	155.00	JAHH-65B-R3B	6	63.30	9.11	0.83	309.56	10.540	0.83	0.00	0.00
8	155.00	MT6407-77A	3	79.40	4.69	0.70	207.41	5.695	0.70	0.00	1.50
9	155.00	B5/B13	3	70.30	1.87	0.50	144.77	2.480	0.50	0.00	0.00
10	153.00	CBRS RRH - RT 4401-48A	3	18.60	0.99	0.50	47.90	1.436	0.50	0.00	0.00
11	153.00	XXDWMM-12.5-65-8T-CBRS	3	2.90	0.89	0.86	28.53	1.347	0.86	0.00	0.00
12	147.00	(3) T-Frame w/ Platforms	1	1620.00	25.00	1.00	3114.98	46.225	1.00	0.00	0.00
13	147.00	PRK-1245 (kicker kit)	1	464.91	9.50	1.00	808.13	20.020	1.00	0.00	0.00
14	147.00	(3) SFS-H (V-Braces)	1	197.00	9.60	1.00	560.59	16.687	1.00	0.00	0.00
15	147.00	APXVSPP18-C-A20	3	57.00	8.02	0.83	239.80	10.975	0.83	0.00	0.00
16	147.00	APXVTM14-C-I20	3	56.00	6.34	0.79	227.62	7.522	0.79	0.00	0.00
17	147.00	Alcatel Lucent TD-RRH8x20-25	3	70.00	4.05	0.50	188.23	4.914	0.50	0.00	0.00
18	147.00	Alcatel Lucent 1900 MHz RRH	3	60.00	2.31	0.50	373.48	3.001	0.50	0.00	0.00
19	147.00	Alcatel Lucent 800 MHz RRH	3	53.00	2.49	0.50	131.22	3.700	0.50	0.00	0.00
20	147.00	Alcatel Lucent 800 MHz Filter	3	8.80	0.78	0.50	27.46	1.464	0.50	0.00	0.00
21	147.00	RFS ACU-A20-N RET	4	1.00	0.14	0.50	5.54	0.454	0.50	0.00	0.00
22	137.00	KRD 9011461-B66A-B2A	2	132.20	6.51	0.87	327.99	7.700	0.87	0.00	0.00
23	137.00	APXVAALL24_43-U-NA20	2	128.00	20.24	0.70	573.12	22.253	0.70	0.00	0.00
24	137.00	PRK-1245 (kicker kit)	1	445.91	8.50	1.00	775.04	17.911	1.00	0.00	0.00
25	137.00	(3) HR w/ V-Brace Kits	1	450.00	8.50	1.00	1047.86	17.911	1.00	0.00	0.00
26	137.00	AIR6449 B41	2	103.00	5.65	0.71	247.98	6.655	0.71	0.00	0.00
27	137.00	KRY 112 144/2	3	11.00	0.41	0.50	22.40	0.912	0.50	0.00	0.00
28	137.00	4449 B71 + B85	2	73.20	1.97	0.50	134.25	2.572	0.50	0.00	0.00
29	137.00	RRUS 4415 B25	2	46.00	1.64	0.50	89.46	2.185	0.50	0.00	0.00
30	137.00	(3) T-Frame w/ walking platform	1	1620.00	25.00	1.00	3114.65	46.220	1.00	0.00	0.00
31	127.00	Low Profile Platform-Round	1	1500.00	25.00	1.00	2883.95	46.221	1.00	0.00	0.00
32	127.00	7770.00	3	35.00	5.50	0.73	179.79	6.630	0.73	0.00	0.00
33	127.00	DTMABP7819VG12A	3	19.20	1.14	0.50	46.18	1.954	0.50	0.00	0.00
34	127.00	4449 B5/B12	3	71.00	1.97	0.50	127.44	2.549	0.50	0.00	0.00
35	127.00	RRUS 4478 B14	3	59.40	1.65	0.50	103.24	2.198	0.50	0.00	0.00
36	127.00	DC6-48-60-18-8F	1	31.80	0.92	0.50	97.17	1.383	0.50	0.00	0.00
37	127.00	LGP13519	6	5.30	0.34	0.50	15.34	0.820	0.50	0.00	0.00
38	127.00	DMP65R-BU6DA	3	79.40	12.71	0.72	390.83	14.258	0.72	0.00	0.00
39	127.00	840370799	3	18.70	15.93	0.69	337.35	19.822	0.69	0.00	0.00
40	127.00	8843 B2 B66A	3	70.00	1.64	0.50	118.62	2.186	0.50	0.00	0.00
41	127.00	4415 B30	3	44.10	1.86	0.50	94.26	2.465	0.50	0.00	0.00
42	127.00	DC9-48-60-24-8C-EV	1	26.20	1.14	0.50	138.27	2.818	0.50	0.00	0.00
43	127.00	HRK12 (Handrail Kit)	1	261.72	6.75	1.00	590.12	13.725	1.00	0.00	0.00
44	117.00	Commscope FFVV-65B-R2	3	70.80	12.27	0.74	372.40	13.810	0.74	0.00	0.00
45	117.00	Fujitsu TA08025-B605	3	75.00	1.96	0.67	130.32	2.553	0.67	0.00	0.00
46	117.00	Fujitsu TA08025-B604	3	63.90	1.96	0.67	117.44	2.553	0.67	0.00	0.00
47	117.00	Raycap RDIDC-9181-PF-48	1	21.90	2.01	1.00	78.21	2.611	1.00	0.00	0.00
48	117.00	Commscope MC-PK8-DSH	1	1727.00	37.59	1.00	3512.00	87.543	1.00	0.00	0.00
Totals:			118	15,078.79			36,786.72				

Discrete Appurtenances

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

Linear Appurtenances

Bottom Elev. (ft)	Top Elev. (ft)	Description	Exposed Width	Exposed
0.00	155.00	(2) 1 5/8" 6x12 Hybrid	0.00	Inside
0.00	155.00	(11) 1 5/8" Coax	0.00	Inside
0.00	147.00	(4) 1 1/4" Coax	0.00	Inside
58.00	137.00	(2) 1 1/4" Coax	0.00	Inside
58.00	137.00	(3) 1 5/8" Fiber	0.00	Inside
0.00	127.00	(8) 1 5/8" Coax	0.00	Inside
0.00	127.00	(3) 1"DC	0.00	Inside
0.00	127.00	(2) 2 3/8" Coax	0.00	Inside
0.00	127.00	(1) 3" Conduit	0.00	Inside
0.00	127.00	(2) 3/4" DC	0.00	Inside
0.00	127.00	(2) 7/16" Fiber	0.00	Inside
0.00	117.00	(1) 1.6" Hybrid	0.00	Outside
58.00	115.00	(3) 1.25" Reinforcing plate	1.25	Outside
0.00	58.00	(3) 10"x1/2" Bent plate	3.56	Outside

Shaft Section Properties

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
0.00	RB1 RB2	0.4331	53.900	74.564	27207.3	31.20	124.45	53	60	0.0	37.50	18070.2	12370.3	
2.00		0.4331	53.517	74.030	26627.4	30.97	123.57	53	61	505.6	37.50	17827.8	12206.8	255.2
4.00		0.4331	53.135	73.497	26055.8	30.73	122.68	53	61	502.0	37.50	17587.1	12044.3	255.2
6.00		0.4331	52.752	72.963	25492.5	30.49	121.80	53	61	498.4	37.50	17348.0	11883.0	255.2
8.00		0.4331	52.370	72.430	24937.3	30.26	120.92	53	61	494.7	37.50	17110.5	11722.8	255.2
10.00		0.4331	51.987	71.896	24390.3	30.02	120.03	53	61	491.1	37.50	16874.7	11563.6	255.2
11.50	RB3	0.4331	51.700	71.496	23985.3	29.84	119.37	53	61	365.9	45.00	16792.5	16499.8	229.7
12.00		0.4331	51.605	71.363	23851.3	29.78	119.15	53	61	121.5	45.00	16733.9	16442.0	76.6
14.00		0.4331	51.222	70.829	23320.3	29.55	118.27	53	62	483.8	45.00	16500.5	16211.8	306.2
14.16	RT2	0.4331	51.191	70.787	23278.2	29.53	118.20	53	62	38.6	30.00	10359.8	10009.7	16.3
14.84	RB4	0.4331	51.061	70.605	23099.7	29.45	117.90	53	62	163.6	45.00	16403.0	16115.7	104.1
16.00		0.4331	50.839	70.296	22797.3	29.31	117.38	53	62	278.1	45.00	16268.8	15983.3	177.6
16.50	RT3	0.4331	50.744	70.162	22667.8	29.25	117.16	53	62	119.5	37.50	16119.7	11054.0	63.8
18.00		0.4331	50.457	69.762	22282.1	29.07	116.50	53	62	357.1	37.50	15948.0	10938.1	191.4
20.00		0.4331	50.074	69.229	21774.8	28.84	115.62	53	62	473.0	37.50	15720.4	10784.4	255.2
21.00	RT1 RB5	0.4331	49.883	68.962	21524.0	28.72	115.18	53	62	235.1	37.50	15607.2	10708.0	127.6
22.00		0.4331	49.692	68.695	21275.2	28.60	114.73	53	62	234.2	37.50	15494.5	10631.8	127.6
24.00		0.4331	49.309	68.161	20783.3	28.36	113.85	53	63	465.7	37.50	15270.2	10480.4	255.2
26.00		0.4331	48.926	67.628	20299.1	28.13	112.97	53	63	462.1	37.50	15047.5	10330.0	255.2
28.00		0.4331	48.544	67.094	19822.4	27.89	112.08	53	63	458.4	37.50	14826.5	10180.7	255.2
30.00		0.4331	48.161	66.561	19353.3	27.65	111.20	53	63	454.8	37.50	14607.2	10032.6	255.2
32.00		0.4331	47.779	66.027	18891.6	27.42	110.32	53	63	451.2	37.50	14389.5	9885.5	255.2
34.00		0.4331	47.396	65.494	18437.3	27.18	109.43	53	64	447.5	37.50	14173.4	9739.5	255.2
36.00	Bot - Section 2	0.4331	47.014	64.960	17990.4	26.94	108.55	53	64	443.9	37.50	13959.0	9594.6	255.2
37.06	RT4	0.4331	46.811	64.677	17756.5	26.82	108.08	53	64	439.8	22.50	8878.8	4413.7	81.2
37.96	RB6	0.4331	46.639	64.437	17559.5	26.71	107.69	53	64	371.9	37.50	14168.7	9736.1	114.8
38.00		0.4331	46.631	64.427	17550.8	26.71	107.67	53	64	16.5	37.50	14164.4	9733.1	5.1
40.00		0.4331	46.248	63.893	17118.3	26.47	106.78	53	64	821.4	37.50	13950.0	9588.3	255.2
41.00	RT5 RB7	0.4331	46.057	63.626	16904.8	26.35	106.34	53	64	408.1	37.50	13843.4	9516.3	127.6
42.00	Top - Section 1	0.3750	46.616	55.836	15238.7	31.16	124.31	53	60	406.4	37.50	13737.3	9444.6	127.6
44.00		0.3750	46.233	55.374	14863.6	30.89	123.29	53	61	378.4	37.50	13522.2	9297.6	255.2
46.00		0.3750	45.851	54.912	14494.7	30.62	122.27	53	61	375.3	37.50	13312.9	9156.1	255.2
48.00		0.3750	45.468	54.450	14132.0	30.34	121.25	53	61	372.1	37.50	13105.2	9015.8	255.2
50.00		0.3750	45.085	53.988	13775.3	30.07	120.23	53	61	369.0	37.50	12899.1	8876.5	255.2
52.00		0.3750	44.703	53.526	13424.7	29.80	119.21	53	61	365.8	37.50	12694.7	8738.3	255.2
54.00		0.3750	44.320	53.064	13080.1	29.52	118.19	53	62	362.7	37.50	12492.0	8601.2	255.2
56.00		0.3750	43.938	52.602	12741.4	29.25	117.17	53	62	359.6	37.50	12290.9	8465.2	255.2
57.11	RT6	0.3750	43.725	52.346	12556.0	29.10	116.60	53	62	198.2	22.50	7533.3	3742.2	85.0
58.00	RB8	0.3750	43.555	52.140	12408.7	28.98	116.15	53	62	158.2	41.25	12224.5	8463.6	124.9
58.50	RT7	0.3750	43.460	52.025	12326.4	28.91	115.89	53	62	88.6	18.75	4705.8	4705.8	31.9
60.00		0.3750	43.173	51.678	12081.8	28.70	115.13	53	62	264.7	18.75	4645.8	4645.8	95.7
62.00		0.3750	42.790	51.216	11760.7	28.43	114.11	53	63	350.1	18.75	4566.5	4566.5	127.6
64.00		0.3750	42.407	50.754	11445.3	28.16	113.09	53	63	347.0	18.75	4487.9	4487.9	127.6
66.00		0.3750	42.025	50.292	11135.6	27.88	112.07	53	63	343.8	18.75	4409.9	4409.9	127.6
68.00		0.3750	41.642	49.830	10831.5	27.61	111.05	53	63	340.7	18.75	4332.7	4332.7	127.6
70.00	Bot - Section 3	0.3750	41.260	49.368	10533.1	27.34	110.03	53	63	337.6	18.75	4256.1	4256.1	127.6
72.00		0.3750	40.877	48.906	10240.1	27.06	109.01	53	64	617.8	18.75	4304.5	4304.5	127.6
74.00		0.3750	40.495	48.444	9952.7	26.79	107.99	53	64	612.0	18.75	4228.2	4228.2	127.6
76.00	Top - Section 2 RT8	0.3125	40.737	40.677	8484.5	32.79	130.36	53	59	606.3	16.88	3734.0	3734.0	114.8
78.00		0.3125	40.354	40.292	8245.8	32.46	129.13	53	59	275.5	16.88	3666.5	3666.5	114.8

Increment Length: 2 (ft)

Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Additional Reinforcing			
											Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
80.00		0.3125	39.972	39.907	8011.7	32.13	127.91	53	60	272.9	16.88	3599.7	3599.7	114.8
82.00		0.3125	39.589	39.522	7782.1	31.80	126.69	53	60	270.3	16.88	3533.4	3533.4	114.8
84.00		0.3125	39.207	39.137	7556.9	31.47	125.46	53	60	267.7	16.88	3467.8	3467.8	114.8
86.00		0.3125	38.824	38.752	7336.1	31.15	124.24	53	60	265.0	16.88	3402.8	3402.8	114.8
88.00		0.3125	38.441	38.367	7119.6	30.82	123.01	53	61	262.4	16.88	3338.5	3338.5	114.8
90.00		0.3125	38.059	37.982	6907.4	30.49	121.79	53	61	259.8	16.88	3274.7	3274.7	114.8
92.00		0.3125	37.676	37.597	6699.5	30.16	120.56	53	61	257.2	16.88	3211.6	3211.6	114.8
94.00		0.3125	37.294	37.212	6495.8	29.83	119.34	53	61	254.6	16.88	3149.1	3149.1	114.8
96.00	RT9 RB10	0.3125	36.911	36.827	6296.3	29.51	118.12	53	62	251.9	13.13	2396.7	2396.7	89.3
98.00		0.3125	36.529	36.442	6100.9	29.18	116.89	53	62	249.3	13.13	2349.1	2349.1	89.3
100.00	Top - Section 3	0.3125	36.146	36.057	5909.6	28.85	115.67	53	62	246.7	13.13	2301.9	2301.9	89.3
100.00	Bot - Section 4	0.2500	36.146	28.896	4752.5	36.06	144.58	50	54					
102.00		0.2500	35.763	28.588	4602.1	36.19	143.05	50	54	195.6	13.13	2255.2	2255.2	89.3
104.00		0.2500	35.381	28.280	4455.0	35.78	141.52	50	54	193.5	13.13	2209.0	2209.0	89.3
106.00		0.2500	34.998	27.972	4311.0	35.37	139.99	50	55	191.4	13.13	2163.2	2163.2	89.3
108.00		0.2500	34.616	27.664	4170.2	34.96	138.46	50	55	189.3	13.13	2118.0	2118.0	89.3
110.00		0.2500	34.233	27.356	4032.5	34.55	136.93	50	55	187.2	13.13	2073.2	2073.2	89.3
112.00		0.2500	33.850	27.048	3897.8	34.14	135.40	50	55	185.1	13.13	2028.9	2028.9	89.3
113.50	RT10	0.2500	33.564	26.817	3798.8	33.83	134.25	50	56	137.5	13.13	1996.0	1996.0	67.0
114.00		0.2500	33.468	26.740	3766.2	33.73	133.87	50	56	45.6				
115.00	Bot - Section 5	0.2500	33.277	26.586	3701.5	33.52	133.11	50	56	90.7				
116.00		0.2500	33.085	26.432	3637.5	33.32	132.34	50	56	181.8				
117.00		0.2500	32.894	26.278	3574.3	33.11	131.58	50	56	180.7				
118.00		0.2500	32.703	26.124	3511.9	32.91	130.81	50	56	179.7				
120.00	Top - Section 4	0.2500	32.820	26.219	3550.1	33.03	131.28	50	56	356.2				
122.00		0.2500	32.438	25.911	3426.5	32.62	129.75	50	57	177.4				
124.00		0.2500	32.055	25.603	3305.7	32.21	128.22	50	57	175.3				
126.00		0.2500	31.672	25.295	3187.9	31.80	126.69	50	57	173.2				
127.00		0.2500	31.481	25.141	3130.0	31.60	125.92	50	57	85.8				
128.00		0.2500	31.290	24.987	3072.8	31.39	125.16	50	57	85.3				
130.00		0.2500	30.907	24.679	2960.6	30.98	123.63	50	58	169.0				
132.00		0.2500	30.525	24.371	2851.2	30.57	122.10	50	58	166.9				
134.00		0.2500	30.142	24.063	2744.4	30.16	120.57	50	58	164.8				
136.00		0.2500	29.760	23.755	2640.4	29.75	119.04	50	59	162.7				
137.00		0.2500	29.568	23.601	2589.4	29.55	118.27	50	59	80.6				
138.00		0.2500	29.377	23.447	2539.0	29.34	117.51	50	59	80.0				
140.00		0.2500	28.994	23.139	2440.3	28.93	115.98	50	59	158.5				
142.00		0.2500	28.612	22.831	2344.1	28.52	114.45	50	60	156.4				
144.00		0.2500	28.229	22.523	2250.5	28.11	112.92	50	60	154.3				
146.00		0.2500	27.847	22.215	2159.5	27.70	111.39	50	60	152.2				
147.00		0.2500	27.655	22.061	2114.9	27.50	110.62	50	60	75.3				
148.00		0.2500	27.464	21.907	2070.9	27.29	109.86	50	60	74.8				
150.00		0.2500	27.081	21.599	1984.8	26.88	108.33	50	61	148.0				
152.00		0.2500	26.699	21.291	1901.1	26.47	106.80	50	61	145.9				
153.00		0.2500	26.508	21.137	1860.1	26.27	106.03	50	61	72.2				
154.00		0.2500	26.316	20.983	1819.8	26.06	105.27	50	61	71.7				
155.00		0.2500	26.125	20.829	1780.0	25.86	104.50	50	62	71.1				
Total Weight										26107.2	10486.2			

Wind Loading - Shaft

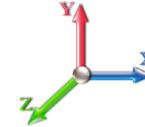
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



Load Case: 1.2D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 1.20
Wind Load Factor 1.60



Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2	2.18	0.70	37.885	41.67	580.38	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		2.15	0.70	37.324	41.06	571.99	1.000	0.000	2.00	9.267	9.27	608.8	0.0	606.8
4.00		2.12	0.70	36.781	40.46	563.75	1.000	0.000	2.00	9.201	9.20	595.6	0.0	602.4
6.00		2.09	0.70	36.254	39.88	555.66	1.000	0.000	2.00	9.135	9.14	582.9	0.0	598.0
8.00		2.06	0.70	35.743	39.32	547.73	1.000	0.000	2.00	9.069	9.07	570.5	0.0	593.7
10.00		2.03	0.70	35.247	38.77	539.94	1.000	0.000	2.00	9.003	9.00	558.5	0.0	589.3
11.50	RB3	2.01	0.70	34.884	38.37	534.19	1.000	0.000	1.50	6.709	6.71	411.9	0.0	439.1
12.00		2.00	0.70	34.765	38.24	532.30	1.000	0.000	0.50	2.228	2.23	136.3	0.0	145.8
14.00		1.97	0.70	34.298	37.73	524.79	1.000	0.000	2.00	8.871	8.87	535.5	0.0	580.6
14.16	RT2	1.97	0.70	34.261	37.69	524.19	1.000	0.000	0.16	0.707	0.71	42.6	0.0	46.3
14.84	RB4	1.96	0.70	34.106	37.52	521.68	1.000	0.000	0.68	2.999	3.00	180.0	0.0	196.3
16.00		1.95	0.70	33.845	37.23	517.42	1.000	0.000	1.16	5.099	5.10	303.7	0.0	333.7
16.50	RT3	1.94	0.70	33.734	37.11	515.59	1.000	0.000	0.50	2.191	2.19	130.1	0.0	143.4
18.00		1.92	0.70	33.405	36.75	510.17	1.000	0.000	1.50	6.548	6.55	385.0	0.0	428.5
20.00		1.90	0.70	32.978	36.28	503.06	1.000	0.000	2.00	8.673	8.67	503.4	0.0	567.5
21.00	RT1 RB5	1.89	0.70	32.769	36.05	499.55	1.000	0.000	1.00	4.312	4.31	248.7	0.0	282.1
22.00		1.88	0.70	32.563	35.82	496.07	1.000	0.000	1.00	4.295	4.30	246.2	0.0	281.0
24.00		1.85	0.70	32.161	35.38	489.20	1.000	0.000	2.00	8.541	8.54	483.5	0.0	558.8
26.00		1.83	0.70	31.770	34.95	482.44	1.000	0.000	2.00	8.475	8.48	473.9	0.0	554.5
28.00		1.81	0.70	31.390	34.53	475.80	1.000	0.000	2.00	8.409	8.41	464.6	0.0	550.1
30.00		1.79	0.70	31.048	34.15	469.47	1.000	0.000	2.00	8.343	8.34	455.9	0.0	545.8
32.00		1.77	0.71	31.261	34.39	467.33	1.000	0.000	2.00	8.277	8.28	455.4	0.0	541.4
34.00		1.75	0.73	31.446	34.59	464.97	1.000	0.000	2.00	8.211	8.21	454.4	0.0	537.0
36.00	Bot - Section 2	1.73	0.74	31.608	34.77	462.40	1.000	0.000	2.00	8.145	8.15	453.1	0.0	532.7
37.06	RT4	1.72	0.74	31.685	34.85	460.96	1.000	0.000	1.06	4.359	4.36	243.1	0.0	527.7
37.96	RB6	1.71	0.75	31.746	34.92	459.71	1.000	0.000	0.90	3.686	3.69	206.0	0.0	446.3
38.00		1.71	0.75	31.748	34.92	459.65	1.000	0.000	0.04	0.164	0.16	9.1	0.0	19.8
40.00		1.69	0.76	31.870	35.06	456.76	1.000	0.000	2.00	8.142	8.14	456.7	0.0	985.6
41.00	RT5 RB7	1.68	0.77	31.925	35.12	455.26	1.000	0.000	1.00	4.046	4.05	227.4	0.0	489.8
42.00	Top - Section 1	1.67	0.77	31.976	35.17	453.73	1.000	0.000	1.00	4.030	4.03	226.8	0.0	487.7
44.00		1.65	0.78	32.068	35.27	458.02	1.000	0.000	2.00	8.010	8.01	452.1	0.0	454.1
46.00		1.64	0.79	32.146	35.36	454.78	1.000	0.000	2.00	7.944	7.94	449.5	0.0	450.3
48.00		1.62	0.80	32.214	35.44	451.46	1.000	0.000	2.00	7.878	7.88	446.7	0.0	446.6
50.00		1.60	0.81	32.271	35.50	448.06	1.000	0.000	2.00	7.812	7.81	443.7	0.0	442.8
52.00		1.59	0.82	32.320	35.55	444.59	1.000	0.000	2.00	7.746	7.75	440.6	0.0	439.0
54.00		1.57	0.83	32.360	35.60	441.07	1.000	0.000	2.00	7.680	7.68	437.4	0.0	435.2
56.00		1.56	0.84	32.394	35.63	437.49	1.000	0.000	2.00	7.614	7.61	434.1	0.0	431.5
57.11	RT6	1.55	0.84	32.410	35.65	435.48	1.000	0.000	1.11	4.197	4.20	239.4	0.0	237.8
58.00	RB8	1.55	0.85	32.422	35.66	433.86	1.000	0.000	0.89	3.351	3.35	191.2	0.0	189.9
58.50	RT7	1.54	0.85	32.427	35.67	432.95	1.000	0.000	0.50	1.877	1.88	107.1	0.0	106.3
60.00		1.53	0.85	32.444	35.69	430.19	1.000	0.000	1.50	5.606	5.61	320.1	0.0	317.6
62.00		1.52	0.86	32.461	35.71	426.50	1.000	0.000	2.00	7.416	7.42	423.7	0.0	420.2
64.00		1.50	0.87	32.474	35.72	422.77	1.000	0.000	2.00	7.350	7.35	420.1	0.0	416.4
66.00		1.49	0.88	32.483	35.73	419.01	1.000	0.000	2.00	7.284	7.28	416.4	0.0	412.6
68.00		1.48	0.89	32.488	35.74	415.23	1.000	0.000	2.00	7.218	7.22	412.7	0.0	408.8
70.00	Bot - Section 3	1.47	0.89	32.491	35.74	411.44	1.000	0.000	2.00	7.152	7.15	409.0	0.0	405.1
72.00		1.46	0.90	32.492	35.74	407.62	1.000	0.000	2.00	7.194	7.19	411.4	0.0	741.3

Wind Loading - Shaft

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



74.00	1.44	0.91	32.490	35.74	403.80	1.000	0.000	2.00	7.128	7.13	407.6	0.0	734.4
76.00 Top - Section 2 RT8	1.43	0.91	32.486	35.73	399.96	1.000	0.000	2.00	7.062	7.06	403.8	0.0	727.5
78.00	1.42	0.92	32.481	35.73	402.34	1.000	0.000	2.00	6.996	7.00	399.9	0.0	330.6
80.00	1.41	0.93	32.474	35.72	398.49	1.000	0.000	2.00	6.930	6.93	396.1	0.0	327.5
82.00	1.40	0.93	32.466	35.71	394.63	1.000	0.000	2.00	6.864	6.86	392.2	0.0	324.3
84.00	1.39	0.94	32.458	35.70	390.76	1.000	0.000	2.00	6.798	6.80	388.3	0.0	321.2
86.00	1.38	0.95	32.448	35.69	386.89	1.000	0.000	2.00	6.732	6.73	384.5	0.0	318.0
88.00	1.37	0.95	32.438	35.68	383.02	1.000	0.000	2.00	6.666	6.67	380.6	0.0	314.9
90.00	1.36	0.96	32.428	35.67	379.15	1.000	0.000	2.00	6.600	6.60	376.7	0.0	311.8
92.00	1.35	0.96	32.417	35.66	375.28	1.000	0.000	2.00	6.534	6.53	372.8	0.0	308.6
94.00	1.35	0.97	32.407	35.65	371.40	1.000	0.000	2.00	6.468	6.47	368.9	0.0	305.5
96.00 RT9 RB10	1.34	0.98	32.396	35.64	367.53	1.000	0.000	2.00	6.402	6.40	365.0	0.0	302.3
98.00	1.33	0.98	32.385	35.62	363.66	1.000	0.000	2.00	6.336	6.34	361.1	0.0	299.2
100.00 Top - Section 3	1.32	0.99	32.375	35.61	359.80	1.000	0.000	2.00	6.270	6.27	357.3	0.0	296.0
102.00	1.31	0.99	32.364	35.60	355.93	1.000	0.000	2.00	6.204	6.20	353.4	0.0	234.7
104.00	1.30	1.00	32.355	35.59	352.07	1.000	0.000	2.00	6.138	6.14	349.5	0.0	232.2
106.00	1.30	1.00	32.345	35.58	348.21	1.000	0.000	2.00	6.072	6.07	345.7	0.0	229.7
108.00	1.29	1.01	32.336	35.57	344.36	1.000	0.000	2.00	6.006	6.01	341.8	0.0	227.2
110.00	1.28	1.02	32.327	35.56	340.51	1.000	0.000	2.00	5.940	5.94	338.0	0.0	224.7
112.00	1.28	1.02	32.319	35.55	336.66	1.000	0.000	2.00	5.874	5.87	334.1	0.0	222.2
113.50 RT10	1.27	1.02	32.314	35.55	333.78	1.000	0.000	1.50	4.362	4.36	248.1	0.0	165.0
114.00	1.27	1.03	32.312	35.54	332.82	1.000	0.000	0.50	1.446	1.45	82.2	0.0	54.7
115.00 Bot - Section 5	1.27	1.03	32.309	35.54	330.90	1.000	0.000	1.00	2.879	2.88	163.7	0.0	108.9
116.00	1.26	1.03	32.305	35.54	328.98	1.000	0.000	1.00	2.906	2.91	165.2	0.0	218.1
117.00 Appurtenance(s)	1.26	1.03	32.302	35.53	327.06	1.000	0.000	1.00	2.889	2.89	164.3	0.0	216.9
118.00	1.26	1.04	32.299	35.53	325.14	1.000	0.000	1.00	2.873	2.87	163.3	0.0	215.6
120.00 Top - Section 4	1.25	1.04	32.294	35.52	321.31	1.000	0.000	2.00	5.696	5.70	323.7	0.0	427.5
122.00	1.24	1.05	32.289	35.52	322.46	1.000	0.000	2.00	5.630	5.63	319.9	0.0	212.9
124.00	1.24	1.05	32.286	35.51	318.63	1.000	0.000	2.00	5.564	5.56	316.2	0.0	210.3
126.00	1.23	1.06	32.282	35.51	314.82	1.000	0.000	2.00	5.498	5.50	312.4	0.0	207.8
127.00 Appurtenance(s)	1.23	1.06	32.281	35.51	312.91	1.000	0.000	1.00	2.724	2.72	154.8	0.0	103.0
128.00	1.23	1.06	32.280	35.51	311.00	1.000	0.000	1.00	2.708	2.71	153.8	0.0	102.3
130.00	1.22	1.07	32.279	35.51	307.19	1.000	0.000	2.00	5.366	5.37	304.8	0.0	202.8
132.00	1.22	1.07	32.278	35.51	303.39	1.000	0.000	2.00	5.300	5.30	301.1	0.0	200.3
134.00	1.21	1.07	32.278	35.51	299.59	1.000	0.000	2.00	5.234	5.23	297.3	0.0	197.8
136.00	1.21	1.08	32.279	35.51	295.79	1.000	0.000	2.00	5.168	5.17	293.6	0.0	195.3
137.00 Appurtenance(s)	1.20	1.08	32.280	35.51	293.89	1.000	0.000	1.00	2.559	2.56	145.4	0.0	96.7
138.00	1.20	1.08	32.281	35.51	291.99	1.000	0.000	1.00	2.543	2.54	144.5	0.0	96.1
140.00	1.20	1.09	32.284	35.51	288.20	1.000	0.000	2.00	5.036	5.04	286.1	0.0	190.2
142.00	1.19	1.09	32.288	35.52	284.42	1.000	0.000	2.00	4.970	4.97	282.4	0.0	187.7
144.00	1.19	1.10	32.292	35.52	280.63	1.000	0.000	2.00	4.904	4.90	278.7	0.0	185.2
146.00	1.18	1.10	32.297	35.53	276.85	1.000	0.000	2.00	4.838	4.84	275.0	0.0	182.7
147.00 Appurtenance(s)	1.18	1.10	32.300	35.53	274.96	1.000	0.000	1.00	2.394	2.39	136.1	0.0	90.4
148.00	1.18	1.11	32.304	35.53	273.08	1.000	0.000	1.00	2.378	2.38	135.2	0.0	89.8
150.00	1.17	1.11	32.311	35.54	269.30	1.000	0.000	2.00	4.706	4.71	267.6	0.0	177.7
152.00	1.17	1.11	32.318	35.55	265.53	1.000	0.000	2.00	4.640	4.64	263.9	0.0	175.1
153.00 Appurtenance(s)	1.17	1.12	32.323	35.55	263.64	1.000	0.000	1.00	2.295	2.30	130.6	0.0	86.6
154.00	1.17	1.12	32.327	35.56	261.76	1.000	0.000	1.00	2.279	2.28	129.6	0.0	86.0
155.00 Appurtenance(s)	1.16	1.12	32.332	35.56	259.87	1.000	0.000	1.00	2.262	2.26	128.7	0.0	85.4
Totals:								155.00			30,890.4		31,328.6

Discrete Appurtenance Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II

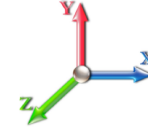


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Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 26

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	155.00	BSAMNT-SBS-2-2	3	32.332	35.565	1.00	1.00	0.00	91.26	91.26	0.000	0.000	0.00	0.00	0.00
2	155.00	BA-70080-4BF	3	32.332	35.565	0.68	0.90	9.77	46.80	46.80	0.000	0.000	555.81	0.00	0.00
3	155.00	JAHH-65B-R3B	6	32.332	35.565	0.66	0.80	36.29	455.76	455.76	0.000	0.000	2065.29	0.00	0.00
4	155.00	MT6407-77A	3	32.339	35.573	0.56	0.80	7.88	285.84	285.84	0.000	1.500	448.46	0.00	672.69
5	155.00	(3) T-Frame w/ Platforms	1	32.332	35.565	1.00	1.00	25.00	1944.00	1944.00	0.000	0.000	1422.60	0.00	0.00
6	155.00	CBC78T-DS-43-2X	3	32.332	35.565	0.40	0.80	0.44	37.44	37.44	0.000	0.000	25.27	0.00	0.00
7	155.00	B2/B66A	3	32.332	35.565	0.40	0.80	2.24	303.84	303.84	0.000	0.000	127.69	0.00	0.00
8	155.00	B5/B13	3	32.332	35.565	0.40	0.80	2.24	253.08	253.08	0.000	0.000	127.69	0.00	0.00
9	155.00	RVZDC-6627-PF-48	1	32.332	35.565	0.40	0.80	1.62	38.40	38.40	0.000	0.000	92.41	0.00	0.00
10	153.00	XXDWMM-12.5-65-8T-CB	3	32.323	35.555	0.69	0.80	1.84	10.44	10.44	0.000	0.000	104.50	0.00	0.00
11	153.00	CBRS RRH - RT	3	32.323	35.555	0.40	0.80	1.19	66.96	66.96	0.000	0.000	67.58	0.00	0.00
12	147.00	APXVTM14-C-I20	3	32.300	35.530	0.63	0.80	12.02	201.60	201.60	0.000	0.000	683.36	0.00	0.00
13	147.00	APXVSP18-C-A20	3	32.300	35.530	0.66	0.80	15.98	205.20	205.20	0.000	0.000	908.21	0.00	0.00
14	147.00	Alcatel Lucent	3	32.300	35.530	0.40	0.80	4.86	252.00	252.00	0.000	0.000	276.28	0.00	0.00
15	147.00	(3) SFS-H (V-Braces)	1	32.300	35.530	0.75	0.75	7.20	236.40	236.40	0.000	0.000	409.31	0.00	0.00
16	147.00	PRK-1245 (kicker kit)	1	32.300	35.530	1.00	1.00	9.50	557.89	557.89	0.000	0.000	540.06	0.00	0.00
17	147.00	(3) T-Frame w/ Platforms	1	32.300	35.530	1.00	1.00	25.00	1944.00	1944.00	0.000	0.000	1421.22	0.00	0.00
18	147.00	Alcatel Lucent 1900 MHz	3	32.300	35.530	0.40	0.80	2.77	216.00	216.00	0.000	0.000	157.58	0.00	0.00
19	147.00	Alcatel Lucent 800 MHz	3	32.300	35.530	0.40	0.80	2.99	190.80	190.80	0.000	0.000	169.86	0.00	0.00
20	147.00	Alcatel Lucent 800 MHz	3	32.300	35.530	0.40	0.80	0.94	31.68	31.68	0.000	0.000	53.21	0.00	0.00
21	147.00	RFS ACU-A20-N RET	4	32.300	35.530	0.40	0.80	0.22	4.80	4.80	0.000	0.000	12.73	0.00	0.00
22	137.00	RRUS 4415 B25	2	32.280	35.508	0.40	0.80	1.31	110.40	110.40	0.000	0.000	74.54	0.00	0.00
23	137.00	4449 B71 + B85	2	32.280	35.508	0.40	0.80	1.58	175.68	175.68	0.000	0.000	89.54	0.00	0.00
24	137.00	KRY 112 144/2	3	32.280	35.508	0.40	0.80	0.49	39.60	39.60	0.000	0.000	27.95	0.00	0.00
25	137.00	AIR6449 B41	2	32.280	35.508	0.57	0.80	6.42	247.20	247.20	0.000	0.000	364.65	0.00	0.00
26	137.00	PRK-1245 (kicker kit)	1	32.280	35.508	1.00	1.00	8.50	535.09	535.09	0.000	0.000	482.91	0.00	0.00
27	137.00	APXVAALL24_43-U-NA20	2	32.280	35.508	0.56	0.80	22.67	307.20	307.20	0.000	0.000	1287.89	0.00	0.00
28	137.00	KRD 9011461-B66A-B2A	2	32.280	35.508	0.70	0.80	9.06	317.28	317.28	0.000	0.000	514.84	0.00	0.00
29	137.00	(3) T-Frame/ walking	1	32.280	35.508	1.00	1.00	25.00	1944.00	1944.00	0.000	0.000	1420.33	0.00	0.00
30	137.00	(3) HR w/ V-Brace Kits	1	32.280	35.508	1.00	1.00	8.50	540.00	540.00	0.000	0.000	482.91	0.00	0.00
31	127.00	4415 B30	3	32.281	35.509	0.38	0.75	2.09	158.76	158.76	0.000	0.000	118.89	0.00	0.00
32	127.00	HRK12 (Handrail Kit)	1	32.281	35.509	1.00	1.00	6.75	314.06	314.06	0.000	0.000	383.50	0.00	0.00
33	127.00	DC9-48-60-24-8C-EV	1	32.281	35.509	0.38	0.75	0.43	31.44	31.44	0.000	0.000	24.29	0.00	0.00
34	127.00	DMP65R-BU6DA	3	32.281	35.509	0.54	0.75	20.59	285.84	285.84	0.000	0.000	1169.83	0.00	0.00
35	127.00	8843 B2 B66A	3	32.281	35.509	0.38	0.75	1.84	252.00	252.00	0.000	0.000	104.82	0.00	0.00
36	127.00	840370799	3	32.281	35.509	0.52	0.75	24.73	67.32	67.32	0.000	0.000	1405.11	0.00	0.00
37	127.00	7770.00	3	32.281	35.509	0.55	0.75	9.03	126.00	126.00	0.000	0.000	513.25	0.00	0.00
38	127.00	DC6-48-60-18-8F	1	32.281	35.509	0.38	0.75	0.35	38.16	38.16	0.000	0.000	19.60	0.00	0.00
39	127.00	Low Profile	1	32.281	35.509	1.00	1.00	25.00	1800.00	1800.00	0.000	0.000	1420.37	0.00	0.00
40	127.00	LGP13519	6	32.281	35.509	0.38	0.75	0.77	38.16	38.16	0.000	0.000	43.46	0.00	0.00
41	127.00	DTMABP7819VG12A	3	32.281	35.509	0.38	0.75	1.28	69.12	69.12	0.000	0.000	72.87	0.00	0.00
42	127.00	RRUS 4478 B14	3	32.281	35.509	0.38	0.75	1.86	213.84	213.84	0.000	0.000	105.46	0.00	0.00
43	127.00	4449 B5/B12	3	32.281	35.509	0.38	0.75	2.22	255.60	255.60	0.000	0.000	125.92	0.00	0.00
44	117.00	Commscope	1	32.302	35.532	1.00	1.00	37.59	2072.40	2072.40	0.000	0.000	2137.06	0.00	0.00
45	117.00	Raycap	1	32.302	35.532	0.75	0.75	1.51	26.28	26.28	0.000	0.000	85.70	0.00	0.00
46	117.00	Fujitsu TA08025-B604	3	32.302	35.532	0.50	0.75	2.95	230.04	230.04	0.000	0.000	167.98	0.00	0.00
47	117.00	Fujitsu TA08025-B605	3	32.302	35.532	0.50	0.75	2.95	270.00	270.00	0.000	0.000	167.98	0.00	0.00

Discrete Appurtenance Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II
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48	117.00 Commscope	3	32.302	35.532	0.55	0.75	20.43	254.88	0.000	0.000	1161.46	0.00	0.00
Totals:											18,094.55	23,642.26	

Total Applied Force Summary

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II

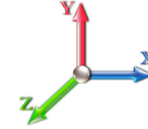


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Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 26

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		608.77	688.49	0.00	0.00
4.00		595.64	684.14	0.00	0.00
6.00		582.89	679.78	0.00	0.00
8.00		570.52	675.42	0.00	0.00
10.00		558.50	671.07	0.00	0.00
11.50		411.91	500.44	0.00	0.00
12.00		136.33	166.27	0.00	0.00
14.00		535.51	662.35	0.00	0.00
14.16		42.62	52.80	0.00	0.00
14.84		180.04	224.09	0.00	0.00
16.00		303.73	381.11	0.00	0.00
16.50		130.08	163.82	0.00	0.00
18.00		384.98	489.82	0.00	0.00
20.00		503.40	649.28	0.00	0.00
21.00		248.68	323.01	0.00	0.00
22.00		246.17	321.92	0.00	0.00
24.00		483.45	640.57	0.00	0.00
26.00		473.89	636.21	0.00	0.00
28.00		464.58	631.85	0.00	0.00
30.00		455.90	627.49	0.00	0.00
32.00		455.40	623.14	0.00	0.00
34.00		454.44	618.78	0.00	0.00
36.00		453.10	614.42	0.00	0.00
37.06		243.06	571.02	0.00	0.00
37.96		205.96	483.04	0.00	0.00
38.00		9.14	21.43	0.00	0.00
40.00		456.72	1067.36	0.00	0.00
41.00		227.36	530.63	0.00	0.00
42.00		226.80	528.60	0.00	0.00
44.00		452.10	535.84	0.00	0.00
46.00		449.47	532.07	0.00	0.00
48.00		446.67	528.29	0.00	0.00
50.00		443.72	524.52	0.00	0.00
52.00		440.63	520.75	0.00	0.00
54.00		437.43	516.98	0.00	0.00
56.00		434.12	513.20	0.00	0.00
57.11		239.43	283.20	0.00	0.00
58.00		191.20	226.23	0.00	0.00
58.50		107.11	129.43	0.00	0.00
60.00		320.08	386.88	0.00	0.00
62.00		423.70	512.54	0.00	0.00
64.00		420.09	508.77	0.00	0.00
66.00		416.43	505.00	0.00	0.00
68.00		412.73	501.22	0.00	0.00
70.00		409.00	497.45	0.00	0.00
72.00		411.39	833.73	0.00	0.00

Total Applied Force Summary

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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74.00		407.59	826.82	0.00	0.00
76.00		403.77	819.90	0.00	0.00
78.00		399.93	423.01	0.00	0.00
80.00		396.08	419.87	0.00	0.00
82.00		392.21	416.73	0.00	0.00
84.00		388.34	413.58	0.00	0.00
86.00		384.46	410.44	0.00	0.00
88.00		380.57	407.29	0.00	0.00
90.00		376.68	404.15	0.00	0.00
92.00		372.79	401.01	0.00	0.00
94.00		368.90	397.86	0.00	0.00
96.00		365.01	394.72	0.00	0.00
98.00		361.13	391.58	0.00	0.00
100.00		357.25	388.43	0.00	0.00
102.00		353.38	327.12	0.00	0.00
104.00		349.51	324.60	0.00	0.00
106.00		345.65	322.09	0.00	0.00
108.00		341.80	319.57	0.00	0.00
110.00		337.95	317.06	0.00	0.00
112.00		334.11	314.54	0.00	0.00
113.50		248.08	234.26	0.00	0.00
114.00		82.22	77.77	0.00	0.00
115.00		163.72	155.07	0.00	0.00
116.00		165.21	264.33	0.00	0.00
117.00	(11) attachments	3884.45	3116.67	0.00	0.00
118.00		163.31	259.63	0.00	0.00
120.00		323.75	515.49	0.00	0.00
122.00		319.95	300.89	0.00	0.00
124.00		316.16	298.37	0.00	0.00
126.00		312.38	295.86	0.00	0.00
127.00	(34) attachments	5662.15	3797.29	0.00	0.00
128.00		153.83	128.47	0.00	0.00
130.00		304.84	255.06	0.00	0.00
132.00		301.09	252.55	0.00	0.00
134.00		297.34	250.03	0.00	0.00
136.00		293.60	247.52	0.00	0.00
137.00	(16) attachments	4890.96	4339.27	0.00	0.00
138.00		144.46	116.86	0.00	0.00
140.00		286.14	231.83	0.00	0.00
142.00		282.42	229.31	0.00	0.00
144.00		278.71	226.80	0.00	0.00
146.00		275.00	224.28	0.00	0.00
147.00	(25) attachments	4767.94	3951.57	0.00	0.00
148.00		135.18	107.40	0.00	0.00
150.00		267.60	212.92	0.00	0.00
152.00		263.91	210.40	0.00	0.00
153.00	(6) attachments	302.65	181.66	0.00	0.00
154.00		129.64	103.63	0.00	0.00
155.00	(26) attachments	4993.94	3559.42	0.00	672.69
	Totals:	54,532.61	55,569.44	0.00	672.69

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



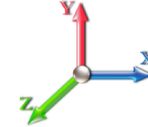
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Load Case: 1.2D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 1.20

Wind Load Factor 1.60



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	37.324	0.00	4.37
2.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.064	0.000	37.324	0.00	0.00
4.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	36.781	0.00	4.37
4.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.064	0.000	36.781	0.00	0.00
6.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	36.254	0.00	4.37
6.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.065	0.000	36.254	0.00	0.00
8.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	35.743	0.00	4.37
8.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.065	0.000	35.743	0.00	0.00
10.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	35.247	0.00	4.37
10.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.066	0.000	35.247	0.00	0.00
11.50	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.066	0.000	34.884	0.00	3.28
11.50	10"x1/2" Bent plate	Yes	1.50	0.000	3.56	0.45	0.00	0.066	0.000	34.884	0.00	0.00
12.00	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.067	0.000	34.765	0.00	1.09
12.00	10"x1/2" Bent plate	Yes	0.50	0.000	3.56	0.15	0.00	0.067	0.000	34.765	0.00	0.00
14.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	34.298	0.00	4.37
14.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.067	0.000	34.298	0.00	0.00
14.16	1.6" Hybrid	Yes	0.16	0.000	0.00	0.00	0.00	0.067	0.000	34.261	0.00	0.35
14.16	10"x1/2" Bent plate	Yes	0.16	0.000	3.56	0.05	0.00	0.067	0.000	34.261	0.00	0.00
14.84	1.6" Hybrid	Yes	0.68	0.000	0.00	0.00	0.00	0.067	0.000	34.106	0.00	1.49
14.84	10"x1/2" Bent plate	Yes	0.68	0.000	3.56	0.20	0.00	0.067	0.000	34.106	0.00	0.00
16.00	1.6" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.067	0.000	33.845	0.00	2.53
16.00	10"x1/2" Bent plate	Yes	1.16	0.000	3.56	0.34	0.00	0.067	0.000	33.845	0.00	0.00
16.50	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.068	0.000	33.734	0.00	1.09
16.50	10"x1/2" Bent plate	Yes	0.50	0.000	3.56	0.15	0.00	0.068	0.000	33.734	0.00	0.00
18.00	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.068	0.000	33.405	0.00	3.28
18.00	10"x1/2" Bent plate	Yes	1.50	0.000	3.56	0.45	0.00	0.068	0.000	33.405	0.00	0.00
20.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	32.978	0.00	4.37
20.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.068	0.000	32.978	0.00	0.00
21.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	32.769	0.00	2.18
21.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.069	0.000	32.769	0.00	0.00
22.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	32.563	0.00	2.18
22.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.069	0.000	32.563	0.00	0.00
24.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	32.161	0.00	4.37
24.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.069	0.000	32.161	0.00	0.00
26.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	31.770	0.00	4.37
26.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.070	0.000	31.770	0.00	0.00
28.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.390	0.00	4.37
28.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.071	0.000	31.390	0.00	0.00
30.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.048	0.00	4.37
30.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.071	0.000	31.048	0.00	0.00
32.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	31.261	0.00	4.37
32.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.072	0.000	31.261	0.00	0.00
34.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	31.446	0.00	4.37
34.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.072	0.000	31.446	0.00	0.00
36.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	31.608	0.00	4.37
36.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.073	0.000	31.608	0.00	0.00
37.06	1.6" Hybrid	Yes	1.06	0.000	0.00	0.00	0.00	0.073	0.000	31.685	0.00	2.32

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 1.2D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 1.20

Wind Load Factor 1.60



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
37.06	10"x1/2" Bent plate	Yes	1.06	0.000	3.56	0.31	0.00	0.073	0.000	31.685	0.00	0.00
37.96	1.6" Hybrid	Yes	0.90	0.000	0.00	0.00	0.00	0.074	0.000	31.746	0.00	1.97
37.96	10"x1/2" Bent plate	Yes	0.90	0.000	3.56	0.27	0.00	0.074	0.000	31.746	0.00	0.00
38.00	1.6" Hybrid	Yes	0.04	0.000	0.00	0.00	0.00	0.074	0.000	31.748	0.00	0.09
38.00	10"x1/2" Bent plate	Yes	0.04	0.000	3.56	0.01	0.00	0.074	0.000	31.748	0.00	0.00
40.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	31.870	0.00	4.37
40.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.074	0.000	31.870	0.00	0.00
41.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.075	0.000	31.925	0.00	2.18
41.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.075	0.000	31.925	0.00	0.00
42.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.075	0.000	31.976	0.00	2.18
42.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.075	0.000	31.976	0.00	0.00
44.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	32.068	0.00	4.37
44.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.074	0.000	32.068	0.00	0.00
46.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	32.146	0.00	4.37
46.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.075	0.000	32.146	0.00	0.00
48.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	32.214	0.00	4.37
48.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.075	0.000	32.214	0.00	0.00
50.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	32.271	0.00	4.37
50.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.076	0.000	32.271	0.00	0.00
52.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	32.320	0.00	4.37
52.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.077	0.000	32.320	0.00	0.00
54.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	32.360	0.00	4.37
54.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.077	0.000	32.360	0.00	0.00
56.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.394	0.00	4.37
56.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.078	0.000	32.394	0.00	0.00
57.11	1.6" Hybrid	Yes	1.11	0.000	0.00	0.00	0.00	0.078	0.000	32.410	0.00	2.42
57.11	10"x1/2" Bent plate	Yes	1.11	0.000	3.56	0.33	0.00	0.078	0.000	32.410	0.00	0.00
58.00	1.6" Hybrid	Yes	0.89	0.000	0.00	0.00	0.00	0.079	0.000	32.422	0.00	1.94
58.00	10"x1/2" Bent plate	Yes	0.89	0.000	3.56	0.26	0.00	0.079	0.000	32.422	0.00	0.00
58.50	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.028	0.000	32.427	0.00	1.09
58.50	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.028	0.000	32.427	0.00	0.00
60.00	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.028	0.000	32.444	0.00	3.28
60.00	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.028	0.000	32.444	0.00	0.00
62.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	32.461	0.00	4.37
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	32.461	0.00	0.00
64.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	32.474	0.00	4.37
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	32.474	0.00	0.00
66.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	32.483	0.00	4.37
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.483	0.00	0.00
68.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	32.488	0.00	4.37
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.488	0.00	0.00
70.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	32.491	0.00	4.37
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.491	0.00	0.00
72.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	32.492	0.00	4.37
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.492	0.00	0.00
74.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.490	0.00	4.37
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.490	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

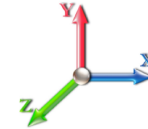
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20
Wind Load Factor 1.60



Iterations 26

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)
76.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.486	0.00	4.37
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.486	0.00	0.00
78.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.481	0.00	4.37
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.481	0.00	0.00
80.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.474	0.00	4.37
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.474	0.00	0.00
82.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.466	0.00	4.37
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.466	0.00	0.00
84.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	32.458	0.00	4.37
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.458	0.00	0.00
86.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	32.448	0.00	4.37
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.448	0.00	0.00
88.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	32.438	0.00	4.37
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.438	0.00	0.00
90.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	32.428	0.00	4.37
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.428	0.00	0.00
92.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	32.417	0.00	4.37
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.417	0.00	0.00
94.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	32.407	0.00	4.37
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.407	0.00	0.00
96.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	32.396	0.00	4.37
96.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.396	0.00	0.00
98.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	32.385	0.00	4.37
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.385	0.00	0.00
100.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	32.375	0.00	4.37
100.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.375	0.00	0.00
102.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	32.364	0.00	4.37
102.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.364	0.00	0.00
104.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	32.355	0.00	4.37
104.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.355	0.00	0.00
106.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	32.345	0.00	4.37
106.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.345	0.00	0.00
108.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	32.336	0.00	4.37
108.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.336	0.00	0.00
110.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	32.327	0.00	4.37
110.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.327	0.00	0.00
112.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	32.319	0.00	4.37
112.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.319	0.00	0.00
113.50	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.036	0.000	32.314	0.00	3.28
113.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.036	0.000	32.314	0.00	0.00
114.00	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.036	0.000	32.312	0.00	1.09
114.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.036	0.000	32.312	0.00	0.00
115.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.036	0.000	32.309	0.00	2.18
115.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.036	0.000	32.309	0.00	0.00
116.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	32.305	0.00	2.18
117.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	32.302	0.00	2.18

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II

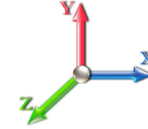


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Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 26

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	255.5

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 1.2D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 1.20

Wind Load Factor 1.60



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-55.53	-54.57	0.00	-5559.9	0.00	5559.93	4048.32	2024.16	8933.65	4411.99	0.00	0.000	0.000	0.875
2.00	-54.77	-54.04	0.00	-5450.7	0.00	5450.79	4032.02	2016.01	8833.50	4362.53	0.02	-0.079	0.000	0.866
4.00	-54.01	-53.52	0.00	-5342.7	0.00	5342.72	4015.53	2007.77	8733.46	4313.13	0.07	-0.158	0.000	0.856
6.00	-53.26	-53.00	0.00	-5235.6	0.00	5235.69	3998.87	1999.43	8633.56	4263.79	0.15	-0.237	0.000	0.846
8.00	-52.52	-52.50	0.00	-5129.6	0.00	5129.68	3982.01	1991.01	8533.79	4214.52	0.27	-0.316	0.000	0.837
10.00	-51.79	-52.00	0.00	-5024.6	0.00	5024.68	3964.98	1982.49	8434.18	4165.32	0.42	-0.395	0.000	0.827
11.50	-51.25	-51.62	0.00	-4946.6	0.00	4946.68	3952.09	1976.04	8359.57	4128.48	0.55	-0.454	0.000	0.717
12.00	-51.05	-51.52	0.00	-4920.8	0.00	4920.87	3947.76	1973.88	8334.72	4116.20	0.60	-0.471	0.000	0.714
14.00	-50.36	-51.01	0.00	-4817.8	0.00	4817.83	3930.37	1965.18	8235.42	4067.17	0.81	-0.540	0.000	0.705
14.16	-50.29	-50.98	0.00	-4809.6	0.00	4809.67	3928.97	1964.48	8227.49	4063.25	0.83	-0.545	0.000	0.834
14.84	-50.04	-50.83	0.00	-4775.0	0.00	4775.00	3923.00	1961.50	8193.77	4046.60	0.91	-0.573	0.000	0.702
16.00	-49.64	-50.55	0.00	-4716.0	0.00	4716.04	3912.78	1956.39	8136.31	4018.22	1.06	-0.613	0.000	0.696
16.50	-49.44	-50.45	0.00	-4690.7	0.00	4690.76	3908.36	1954.18	8111.55	4005.99	1.12	-0.630	0.000	0.795
18.00	-48.90	-50.12	0.00	-4615.0	0.00	4615.09	3895.02	1947.51	8037.37	3969.35	1.33	-0.689	0.000	0.788
20.00	-48.20	-49.65	0.00	-4514.8	0.00	4514.86	3877.07	1938.54	7938.63	3920.59	1.63	-0.767	0.000	0.778
21.00	-47.85	-49.43	0.00	-4465.2	0.00	4465.20	3868.03	1934.02	7889.33	3896.24	1.80	-0.806	0.000	0.773
22.00	-47.48	-49.23	0.00	-4415.7	0.00	4415.77	3858.94	1929.47	7840.08	3871.92	1.97	-0.845	0.000	0.768
24.00	-46.78	-48.80	0.00	-4317.3	0.00	4317.31	3840.63	1920.32	7741.75	3823.36	2.34	-0.923	0.000	0.758
26.00	-46.09	-48.38	0.00	-4219.7	0.00	4219.71	3822.14	1911.07	7643.63	3774.90	2.75	-1.001	0.000	0.749
28.00	-45.40	-47.97	0.00	-4122.9	0.00	4122.95	3803.46	1901.73	7545.74	3726.56	3.18	-1.078	0.000	0.739
30.00	-44.72	-47.56	0.00	-4027.0	0.00	4027.02	3784.60	1892.30	7448.09	3678.33	3.65	-1.155	0.000	0.729
32.00	-44.04	-47.15	0.00	-3931.9	0.00	3931.90	3765.56	1882.78	7350.68	3630.22	4.15	-1.232	0.000	0.718
34.00	-43.37	-46.74	0.00	-3837.6	0.00	3837.61	3746.34	1873.17	7253.52	3582.24	4.69	-1.309	0.000	0.708
36.00	-42.72	-46.31	0.00	-3744.1	0.00	3744.13	3726.93	1863.47	7156.62	3534.39	5.25	-1.385	0.000	0.698
37.06	-42.12	-46.09	0.00	-3695.0	0.00	3695.04	3716.57	1858.29	7105.38	3509.08	5.56	-1.426	0.000	0.851
37.96	-41.62	-45.89	0.00	-3653.5	0.00	3653.56	3707.74	1853.87	7061.93	3487.62	5.84	-1.468	0.000	0.681
38.00	-41.57	-45.90	0.00	-3651.7	0.00	3651.73	3707.34	1853.67	7060.00	3486.67	5.85	-1.470	0.000	0.681
40.00	-40.47	-45.46	0.00	-3559.9	0.00	3559.92	3687.57	1843.78	6963.65	3439.09	6.48	-1.545	0.000	0.670
41.00	-39.92	-45.24	0.00	-3514.4	0.00	3514.46	3677.62	1838.81	6915.58	3415.35	6.81	-1.583	0.000	0.665
42.00	-39.35	-45.04	0.00	-3469.2	0.00	3469.22	3033.05	1516.53	5788.55	2858.75	7.14	-1.620	0.000	0.715
44.00	-38.77	-44.62	0.00	-3379.1	0.00	3379.14	3018.90	1509.45	5713.49	2821.68	7.84	-1.695	0.000	0.744
46.00	-38.19	-44.21	0.00	-3289.8	0.00	3289.89	3004.56	1502.28	5638.53	2784.66	8.57	-1.773	0.000	0.732
48.00	-37.62	-43.80	0.00	-3201.4	0.00	3201.47	2990.04	1495.02	5563.69	2747.70	9.33	-1.851	0.000	0.719
50.00	-37.05	-43.39	0.00	-3113.8	0.00	3113.87	2975.34	1487.67	5488.97	2710.80	10.12	-1.929	0.000	0.706
52.00	-36.49	-42.98	0.00	-3027.1	0.00	3027.10	2960.46	1480.23	5414.39	2673.96	10.94	-2.006	0.000	0.693
54.00	-35.93	-42.57	0.00	-2941.1	0.00	2941.14	2945.39	1472.69	5339.95	2637.20	11.80	-2.082	0.000	0.680
56.00	-35.39	-42.16	0.00	-2856.0	0.00	2856.00	2930.14	1465.07	5265.67	2600.52	12.69	-2.158	0.000	0.667
57.11	-35.09	-41.93	0.00	-2809.2	0.00	2809.20	2921.60	1460.80	5224.51	2580.19	13.20	-2.200	0.000	0.846
58.00	-34.84	-41.75	0.00	-2771.8	0.00	2771.89	2914.71	1457.35	5191.54	2563.91	13.61	-2.244	0.000	0.650
58.50	-34.69	-41.67	0.00	-2751.0	0.00	2751.01	2910.82	1455.41	5173.04	2554.77	13.85	-2.262	0.000	0.789
60.00	-34.26	-41.38	0.00	-2688.5	0.00	2688.51	2899.09	1449.55	5117.58	2527.38	14.57	-2.331	0.000	0.778
62.00	-33.70	-40.99	0.00	-2605.7	0.00	2605.76	2883.30	1441.65	5043.81	2490.95	15.56	-2.421	0.000	0.763
64.00	-33.14	-40.60	0.00	-2523.7	0.00	2523.79	2867.32	1433.66	4970.21	2454.60	16.60	-2.510	0.000	0.748
66.00	-32.60	-40.21	0.00	-2442.6	0.00	2442.60	2851.15	1425.58	4896.82	2418.35	17.67	-2.599	0.000	0.733
68.00	-32.05	-39.82	0.00	-2362.1	0.00	2362.19	2834.81	1417.40	4823.62	2382.21	18.78	-2.687	0.000	0.717
70.00	-31.52	-39.44	0.00	-2282.5	0.00	2282.55	2818.28	1409.14	4750.64	2346.16	19.92	-2.774	0.000	0.702
72.00	-30.65	-39.03	0.00	-2203.6	0.00	2203.68	2801.57	1400.79	4677.88	2310.23	21.10	-2.860	0.000	0.680
74.00	-29.78	-38.62	0.00	-2125.6	0.00	2125.62	2784.68	1392.34	4605.35	2274.41	22.32	-2.945	0.000	0.664

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II
		Page: 21



76.00	-28.93	-38.22	0.00	-2048.3	0.00	2048.37	2161.97	1080.98	3608.45	1782.08	23.57	-3.028	0.000	0.737
78.00	-28.47	-37.84	0.00	-1971.9	0.00	1971.93	2151.06	1075.53	3556.01	1756.18	24.85	-3.114	0.000	0.788
80.00	-28.01	-37.47	0.00	-1896.2	0.00	1896.24	2139.97	1069.98	3503.61	1730.30	26.18	-3.206	0.000	0.767
82.00	-27.56	-37.10	0.00	-1821.3	0.00	1821.30	2128.69	1064.35	3451.27	1704.45	27.54	-3.297	0.000	0.745
84.00	-27.11	-36.73	0.00	-1747.1	0.00	1747.11	2117.24	1058.62	3398.99	1678.63	28.94	-3.387	0.000	0.724
86.00	-26.67	-36.36	0.00	-1673.6	0.00	1673.65	2105.60	1052.80	3346.79	1652.86	30.38	-3.475	0.000	0.702
88.00	-26.23	-36.00	0.00	-1600.9	0.00	1600.93	2093.78	1046.89	3294.68	1627.12	31.85	-3.562	0.000	0.680
90.00	-25.80	-35.63	0.00	-1528.9	0.00	1528.94	2081.77	1040.89	3242.65	1601.42	33.36	-3.647	0.000	0.657
92.00	-25.38	-35.27	0.00	-1457.6	0.00	1457.67	2069.59	1034.79	3190.73	1575.78	34.91	-3.731	0.000	0.635
94.00	-24.95	-34.91	0.00	-1387.1	0.00	1387.13	2057.22	1028.61	3138.91	1550.19	36.49	-3.812	0.000	0.612
96.00	-24.53	-34.56	0.00	-1317.3	0.00	1317.31	2044.67	1022.33	3087.22	1524.66	38.10	-3.892	0.000	0.636
98.00	-24.12	-34.20	0.00	-1248.2	0.00	1248.20	2031.93	1015.97	3035.65	1499.19	39.75	-3.976	0.000	0.611
100.00	-23.71	-33.85	0.00	-1179.7	0.00	1179.79	2019.02	1009.51	2984.22	1473.79	41.43	-4.058	0.000	0.586
100.00	-23.71	-33.85	0.00	-1179.7	0.00	1179.79	1394.49	697.25	2068.33	1021.47	41.43	-4.058	0.000	0.681
102.00	-23.36	-33.51	0.00	-1112.0	0.00	1112.08	1387.39	693.70	2035.72	1005.36	43.15	-4.137	0.000	0.756
104.00	-23.01	-33.18	0.00	-1045.0	0.00	1045.06	1380.13	690.06	2003.09	989.25	44.90	-4.227	0.000	0.720
106.00	-22.67	-32.84	0.00	-978.71	0.00	978.71	1372.69	686.35	1970.45	973.13	46.69	-4.313	0.000	0.683
108.00	-22.33	-32.51	0.00	-913.03	0.00	913.03	1365.09	682.55	1937.81	957.01	48.51	-4.396	0.000	0.646
110.00	-21.99	-32.18	0.00	-848.01	0.00	848.01	1357.32	678.66	1905.17	940.89	50.37	-4.476	0.000	0.608
112.00	-21.67	-31.84	0.00	-783.66	0.00	783.66	1349.39	674.69	1872.56	924.79	52.26	-4.552	0.000	0.570
113.50	-21.44	-31.59	0.00	-735.90	0.00	735.90	1343.33	671.66	1848.11	912.71	53.70	-4.607	0.000	0.541
113.50	-21.44	-31.59	0.00	-735.90	0.00	735.90	1343.33	671.66	1848.11	912.71	53.70	-4.607	0.000	0.541
114.00	-21.34	-31.52	0.00	-720.10	0.00	720.10	1341.28	670.64	1839.96	908.69	54.18	-4.624	0.000	0.811
115.00	-21.17	-31.36	0.00	-688.59	0.00	688.59	1337.17	668.58	1823.68	900.65	55.16	-4.678	0.000	0.783
116.00	-20.90	-31.19	0.00	-657.23	0.00	657.23	1333.01	666.51	1807.40	892.61	56.14	-4.729	0.000	0.754
117.00	-18.09	-27.08	0.00	-626.04	0.00	626.04	1328.82	664.41	1791.13	884.57	57.14	-4.780	0.000	0.723
118.00	-17.81	-26.92	0.00	-598.96	0.00	598.96	1324.58	662.29	1774.88	876.54	58.14	-4.828	0.000	0.698
120.00	-17.28	-26.58	0.00	-545.13	0.00	545.13	1327.18	663.59	1784.85	881.47	60.18	-4.921	0.000	0.633
122.00	-16.97	-26.26	0.00	-491.98	0.00	491.98	1318.63	659.32	1752.36	865.43	62.26	-5.008	0.000	0.583
124.00	-16.67	-25.94	0.00	-439.47	0.00	439.47	1309.91	654.95	1719.92	849.40	64.38	-5.085	0.000	0.532
126.00	-16.38	-25.61	0.00	-387.59	0.00	387.59	1301.02	650.51	1687.54	833.41	66.52	-5.157	0.000	0.479
127.00	-13.10	-19.64	0.00	-361.98	0.00	361.98	1296.51	648.26	1671.38	825.43	67.60	-5.190	0.000	0.450
128.00	-12.97	-19.48	0.00	-342.34	0.00	342.34	1291.97	645.98	1655.23	817.46	68.69	-5.222	0.000	0.430
130.00	-12.73	-19.17	0.00	-303.37	0.00	303.37	1282.74	641.37	1623.00	801.54	70.89	-5.282	0.000	0.389
132.00	-12.48	-18.86	0.00	-265.03	0.00	265.03	1273.35	636.68	1590.85	785.66	73.11	-5.336	0.000	0.348
134.00	-12.25	-18.55	0.00	-227.32	0.00	227.32	1263.80	631.90	1558.80	769.83	75.36	-5.386	0.000	0.306
136.00	-12.02	-18.24	0.00	-190.22	0.00	190.22	1254.07	627.04	1526.84	754.05	77.62	-5.429	0.000	0.263
137.00	-8.16	-12.96	0.00	-171.98	0.00	171.98	1249.15	624.57	1510.90	746.18	78.76	-5.448	0.000	0.237
138.00	-8.05	-12.81	0.00	-159.02	0.00	159.02	1244.18	622.09	1494.99	738.32	79.90	-5.467	0.000	0.222
140.00	-7.84	-12.51	0.00	-133.39	0.00	133.39	1234.12	617.06	1463.26	722.65	82.19	-5.499	0.000	0.191
142.00	-7.63	-12.21	0.00	-108.38	0.00	108.38	1223.90	611.95	1431.66	707.04	84.50	-5.527	0.000	0.160
144.00	-7.43	-11.91	0.00	-83.96	0.00	83.96	1213.50	606.75	1400.19	691.50	86.82	-5.551	0.000	0.128
146.00	-7.23	-11.62	0.00	-60.14	0.00	60.14	1202.94	601.47	1368.85	676.02	89.14	-5.569	0.000	0.095
147.00	-3.76	-6.49	0.00	-48.52	0.00	48.52	1197.60	598.80	1353.24	668.32	90.31	-5.576	0.000	0.076
148.00	-3.67	-6.34	0.00	-42.03	0.00	42.03	1192.22	596.11	1337.67	660.62	91.48	-5.582	0.000	0.067
150.00	-3.48	-6.06	0.00	-29.34	0.00	29.34	1181.32	590.66	1306.64	645.30	93.81	-5.592	0.000	0.049
152.00	-3.30	-5.78	0.00	-17.22	0.00	17.22	1170.26	585.13	1275.78	630.06	96.15	-5.599	0.000	0.030
153.00	-3.15	-5.46	0.00	-11.45	0.00	11.45	1164.66	582.33	1260.41	622.47	97.33	-5.601	0.000	0.021
154.00	-3.05	-5.32	0.00	-5.99	0.00	5.99	1159.03	579.51	1245.09	614.90	98.50	-5.602	0.000	0.012
155.00	0.00	-4.99	0.00	-0.67	0.00	0.67	1153.35	576.68	1229.81	607.36	99.67	-5.603	0.000	0.001

Wind Loading - Shaft

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II

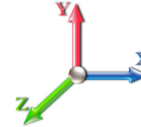


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Load Case: 0.9D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 0.90
Wind Load Factor 1.60



Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2	2.18	0.70	37.885	41.67	580.38	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		2.15	0.70	37.324	41.06	571.99	1.000	0.000	2.00	9.267	9.27	608.8	0.0	455.1
4.00		2.12	0.70	36.781	40.46	563.75	1.000	0.000	2.00	9.201	9.20	595.6	0.0	451.8
6.00		2.09	0.70	36.254	39.88	555.66	1.000	0.000	2.00	9.135	9.14	582.9	0.0	448.5
8.00		2.06	0.70	35.743	39.32	547.73	1.000	0.000	2.00	9.069	9.07	570.5	0.0	445.3
10.00		2.03	0.70	35.247	38.77	539.94	1.000	0.000	2.00	9.003	9.00	558.5	0.0	442.0
11.50	RB3	2.01	0.70	34.884	38.37	534.19	1.000	0.000	1.50	6.709	6.71	411.9	0.0	329.4
12.00		2.00	0.70	34.765	38.24	532.30	1.000	0.000	0.50	2.228	2.23	136.3	0.0	109.4
14.00		1.97	0.70	34.298	37.73	524.79	1.000	0.000	2.00	8.871	8.87	535.5	0.0	435.5
14.16	RT2	1.97	0.70	34.261	37.69	524.19	1.000	0.000	0.16	0.707	0.71	42.6	0.0	34.7
14.84	RB4	1.96	0.70	34.106	37.52	521.68	1.000	0.000	0.68	2.999	3.00	180.0	0.0	147.2
16.00		1.95	0.70	33.845	37.23	517.42	1.000	0.000	1.16	5.099	5.10	303.7	0.0	250.3
16.50	RT3	1.94	0.70	33.734	37.11	515.59	1.000	0.000	0.50	2.191	2.19	130.1	0.0	107.5
18.00		1.92	0.70	33.405	36.75	510.17	1.000	0.000	1.50	6.548	6.55	385.0	0.0	321.4
20.00		1.90	0.70	32.978	36.28	503.06	1.000	0.000	2.00	8.673	8.67	503.4	0.0	425.7
21.00	RT1 RB5	1.89	0.70	32.769	36.05	499.55	1.000	0.000	1.00	4.312	4.31	248.7	0.0	211.6
22.00		1.88	0.70	32.563	35.82	496.07	1.000	0.000	1.00	4.295	4.30	246.2	0.0	210.8
24.00		1.85	0.70	32.161	35.38	489.20	1.000	0.000	2.00	8.541	8.54	483.5	0.0	419.1
26.00		1.83	0.70	31.770	34.95	482.44	1.000	0.000	2.00	8.475	8.48	473.9	0.0	415.9
28.00		1.81	0.70	31.390	34.53	475.80	1.000	0.000	2.00	8.409	8.41	464.6	0.0	412.6
30.00		1.79	0.70	31.048	34.15	469.47	1.000	0.000	2.00	8.343	8.34	455.9	0.0	409.3
32.00		1.77	0.71	31.261	34.39	467.33	1.000	0.000	2.00	8.277	8.28	455.4	0.0	406.1
34.00		1.75	0.73	31.446	34.59	464.97	1.000	0.000	2.00	8.211	8.21	454.4	0.0	402.8
36.00	Bot - Section 2	1.73	0.74	31.608	34.77	462.40	1.000	0.000	2.00	8.145	8.15	453.1	0.0	399.5
37.06	RT4	1.72	0.74	31.685	34.85	460.96	1.000	0.000	1.06	4.359	4.36	243.1	0.0	395.8
37.96	RB6	1.71	0.75	31.746	34.92	459.71	1.000	0.000	0.90	3.686	3.69	206.0	0.0	334.7
38.00		1.71	0.75	31.748	34.92	459.65	1.000	0.000	0.04	0.164	0.16	9.1	0.0	14.8
40.00		1.69	0.76	31.870	35.06	456.76	1.000	0.000	2.00	8.142	8.14	456.7	0.0	739.2
41.00	RT5 RB7	1.68	0.77	31.925	35.12	455.26	1.000	0.000	1.00	4.046	4.05	227.4	0.0	367.3
42.00	Top - Section 1	1.67	0.77	31.976	35.17	453.73	1.000	0.000	1.00	4.030	4.03	226.8	0.0	365.8
44.00		1.65	0.78	32.068	35.27	458.02	1.000	0.000	2.00	8.010	8.01	452.1	0.0	340.6
46.00		1.64	0.79	32.146	35.36	454.78	1.000	0.000	2.00	7.944	7.94	449.5	0.0	337.7
48.00		1.62	0.80	32.214	35.44	451.46	1.000	0.000	2.00	7.878	7.88	446.7	0.0	334.9
50.00		1.60	0.81	32.271	35.50	448.06	1.000	0.000	2.00	7.812	7.81	443.7	0.0	332.1
52.00		1.59	0.82	32.320	35.55	444.59	1.000	0.000	2.00	7.746	7.75	440.6	0.0	329.3
54.00		1.57	0.83	32.360	35.60	441.07	1.000	0.000	2.00	7.680	7.68	437.4	0.0	326.4
56.00		1.56	0.84	32.394	35.63	437.49	1.000	0.000	2.00	7.614	7.61	434.1	0.0	323.6
57.11	RT6	1.55	0.84	32.410	35.65	435.48	1.000	0.000	1.11	4.197	4.20	239.4	0.0	178.4
58.00	RB8	1.55	0.85	32.422	35.66	433.86	1.000	0.000	0.89	3.351	3.35	191.2	0.0	142.4
58.50	RT7	1.54	0.85	32.427	35.67	432.95	1.000	0.000	0.50	1.877	1.88	107.1	0.0	79.8
60.00		1.53	0.85	32.444	35.69	430.19	1.000	0.000	1.50	5.606	5.61	320.1	0.0	238.2
62.00		1.52	0.86	32.461	35.71	426.50	1.000	0.000	2.00	7.416	7.42	423.7	0.0	315.1
64.00		1.50	0.87	32.474	35.72	422.77	1.000	0.000	2.00	7.350	7.35	420.1	0.0	312.3
66.00		1.49	0.88	32.483	35.73	419.01	1.000	0.000	2.00	7.284	7.28	416.4	0.0	309.5
68.00		1.48	0.89	32.488	35.74	415.23	1.000	0.000	2.00	7.218	7.22	412.7	0.0	306.6
70.00	Bot - Section 3	1.47	0.89	32.491	35.74	411.44	1.000	0.000	2.00	7.152	7.15	409.0	0.0	303.8
72.00		1.46	0.90	32.492	35.74	407.62	1.000	0.000	2.00	7.194	7.19	411.4	0.0	556.0

Wind Loading - Shaft

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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74.00	1.44	0.91	32.490	35.74	403.80	1.000	0.000	2.00	7.128	7.13	407.6	0.0	550.8
76.00 Top - Section 2 RT8	1.43	0.91	32.486	35.73	399.96	1.000	0.000	2.00	7.062	7.06	403.8	0.0	545.6
78.00	1.42	0.92	32.481	35.73	402.34	1.000	0.000	2.00	6.996	7.00	399.9	0.0	248.0
80.00	1.41	0.93	32.474	35.72	398.49	1.000	0.000	2.00	6.930	6.93	396.1	0.0	245.6
82.00	1.40	0.93	32.466	35.71	394.63	1.000	0.000	2.00	6.864	6.86	392.2	0.0	243.3
84.00	1.39	0.94	32.458	35.70	390.76	1.000	0.000	2.00	6.798	6.80	388.3	0.0	240.9
86.00	1.38	0.95	32.448	35.69	386.89	1.000	0.000	2.00	6.732	6.73	384.5	0.0	238.5
88.00	1.37	0.95	32.438	35.68	383.02	1.000	0.000	2.00	6.666	6.67	380.6	0.0	236.2
90.00	1.36	0.96	32.428	35.67	379.15	1.000	0.000	2.00	6.600	6.60	376.7	0.0	233.8
92.00	1.35	0.96	32.417	35.66	375.28	1.000	0.000	2.00	6.534	6.53	372.8	0.0	231.5
94.00	1.35	0.97	32.407	35.65	371.40	1.000	0.000	2.00	6.468	6.47	368.9	0.0	229.1
96.00 RT9 RB10	1.34	0.98	32.396	35.64	367.53	1.000	0.000	2.00	6.402	6.40	365.0	0.0	226.7
98.00	1.33	0.98	32.385	35.62	363.66	1.000	0.000	2.00	6.336	6.34	361.1	0.0	224.4
100.00 Top - Section 3	1.32	0.99	32.375	35.61	359.80	1.000	0.000	2.00	6.270	6.27	357.3	0.0	222.0
102.00	1.31	0.99	32.364	35.60	355.93	1.000	0.000	2.00	6.204	6.20	353.4	0.0	176.0
104.00	1.30	1.00	32.355	35.59	352.07	1.000	0.000	2.00	6.138	6.14	349.5	0.0	174.2
106.00	1.30	1.00	32.345	35.58	348.21	1.000	0.000	2.00	6.072	6.07	345.7	0.0	172.3
108.00	1.29	1.01	32.336	35.57	344.36	1.000	0.000	2.00	6.006	6.01	341.8	0.0	170.4
110.00	1.28	1.02	32.327	35.56	340.51	1.000	0.000	2.00	5.940	5.94	338.0	0.0	168.5
112.00	1.28	1.02	32.319	35.55	336.66	1.000	0.000	2.00	5.874	5.87	334.1	0.0	166.6
113.50 RT10	1.27	1.02	32.314	35.55	333.78	1.000	0.000	1.50	4.362	4.36	248.1	0.0	123.7
114.00	1.27	1.03	32.312	35.54	332.82	1.000	0.000	0.50	1.446	1.45	82.2	0.0	41.0
115.00 Bot - Section 5	1.27	1.03	32.309	35.54	330.90	1.000	0.000	1.00	2.879	2.88	163.7	0.0	81.7
116.00	1.26	1.03	32.305	35.54	328.98	1.000	0.000	1.00	2.906	2.91	165.2	0.0	163.6
117.00 Appurtenance(s)	1.26	1.03	32.302	35.53	327.06	1.000	0.000	1.00	2.889	2.89	164.3	0.0	162.7
118.00	1.26	1.04	32.299	35.53	325.14	1.000	0.000	1.00	2.873	2.87	163.3	0.0	161.7
120.00 Top - Section 4	1.25	1.04	32.294	35.52	321.31	1.000	0.000	2.00	5.696	5.70	323.7	0.0	320.6
122.00	1.24	1.05	32.289	35.52	322.46	1.000	0.000	2.00	5.630	5.63	319.9	0.0	159.6
124.00	1.24	1.05	32.286	35.51	318.63	1.000	0.000	2.00	5.564	5.56	316.2	0.0	157.8
126.00	1.23	1.06	32.282	35.51	314.82	1.000	0.000	2.00	5.498	5.50	312.4	0.0	155.9
127.00 Appurtenance(s)	1.23	1.06	32.281	35.51	312.91	1.000	0.000	1.00	2.724	2.72	154.8	0.0	77.2
128.00	1.23	1.06	32.280	35.51	311.00	1.000	0.000	1.00	2.708	2.71	153.8	0.0	76.8
130.00	1.22	1.07	32.279	35.51	307.19	1.000	0.000	2.00	5.366	5.37	304.8	0.0	152.1
132.00	1.22	1.07	32.278	35.51	303.39	1.000	0.000	2.00	5.300	5.30	301.1	0.0	150.2
134.00	1.21	1.07	32.278	35.51	299.59	1.000	0.000	2.00	5.234	5.23	297.3	0.0	148.3
136.00	1.21	1.08	32.279	35.51	295.79	1.000	0.000	2.00	5.168	5.17	293.6	0.0	146.4
137.00 Appurtenance(s)	1.20	1.08	32.280	35.51	293.89	1.000	0.000	1.00	2.559	2.56	145.4	0.0	72.5
138.00	1.20	1.08	32.281	35.51	291.99	1.000	0.000	1.00	2.543	2.54	144.5	0.0	72.0
140.00	1.20	1.09	32.284	35.51	288.20	1.000	0.000	2.00	5.036	5.04	286.1	0.0	142.7
142.00	1.19	1.09	32.288	35.52	284.42	1.000	0.000	2.00	4.970	4.97	282.4	0.0	140.8
144.00	1.19	1.10	32.292	35.52	280.63	1.000	0.000	2.00	4.904	4.90	278.7	0.0	138.9
146.00	1.18	1.10	32.297	35.53	276.85	1.000	0.000	2.00	4.838	4.84	275.0	0.0	137.0
147.00 Appurtenance(s)	1.18	1.10	32.300	35.53	274.96	1.000	0.000	1.00	2.394	2.39	136.1	0.0	67.8
148.00	1.18	1.11	32.304	35.53	273.08	1.000	0.000	1.00	2.378	2.38	135.2	0.0	67.3
150.00	1.17	1.11	32.311	35.54	269.30	1.000	0.000	2.00	4.706	4.71	267.6	0.0	133.2
152.00	1.17	1.11	32.318	35.55	265.53	1.000	0.000	2.00	4.640	4.64	263.9	0.0	131.4
153.00 Appurtenance(s)	1.17	1.12	32.323	35.55	263.64	1.000	0.000	1.00	2.295	2.30	130.6	0.0	65.0
154.00	1.17	1.12	32.327	35.56	261.76	1.000	0.000	1.00	2.279	2.28	129.6	0.0	64.5
155.00 Appurtenance(s)	1.16	1.12	32.332	35.56	259.87	1.000	0.000	1.00	2.262	2.26	128.7	0.0	64.0
Totals:									155.00		30,890.4		23,496.5

Discrete Appurtenance Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II

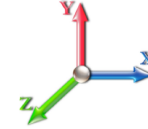


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Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 26

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	155.00	BSAMNT-SBS-2-2	3	32.332	35.565	1.00	1.00	1.00	0.00	68.45	0.000	0.000	0.00	0.00	0.00
2	155.00	BA-70080-4BF	3	32.332	35.565	0.68	0.90	9.77	35.10	0.000	0.000	555.81	0.00	0.00	0.00
3	155.00	JAHH-65B-R3B	6	32.332	35.565	0.66	0.80	36.29	341.82	0.000	0.000	2065.29	0.00	0.00	0.00
4	155.00	MT6407-77A	3	32.339	35.573	0.56	0.80	7.88	214.38	0.000	1.500	448.46	0.00	672.69	0.00
5	155.00	(3) T-Frame w/ Platforms	1	32.332	35.565	1.00	1.00	25.00	1458.00	0.000	0.000	1422.60	0.00	0.00	0.00
6	155.00	CBC78T-DS-43-2X	3	32.332	35.565	0.40	0.80	0.44	28.08	0.000	0.000	25.27	0.00	0.00	0.00
7	155.00	B2/B66A	3	32.332	35.565	0.40	0.80	2.24	227.88	0.000	0.000	127.69	0.00	0.00	0.00
8	155.00	B5/B13	3	32.332	35.565	0.40	0.80	2.24	189.81	0.000	0.000	127.69	0.00	0.00	0.00
9	155.00	RVZDC-6627-PF-48	1	32.332	35.565	0.40	0.80	1.62	28.80	0.000	0.000	92.41	0.00	0.00	0.00
10	153.00	XXDWMM-12.5-65-8T-CB	3	32.323	35.555	0.69	0.80	1.84	7.83	0.000	0.000	104.50	0.00	0.00	0.00
11	153.00	CBRS RRH - RT	3	32.323	35.555	0.40	0.80	1.19	50.22	0.000	0.000	67.58	0.00	0.00	0.00
12	147.00	APXVTM14-C-I20	3	32.300	35.530	0.63	0.80	12.02	151.20	0.000	0.000	683.36	0.00	0.00	0.00
13	147.00	APXVSP18-C-A20	3	32.300	35.530	0.66	0.80	15.98	153.90	0.000	0.000	908.21	0.00	0.00	0.00
14	147.00	Alcatel Lucent	3	32.300	35.530	0.40	0.80	4.86	189.00	0.000	0.000	276.28	0.00	0.00	0.00
15	147.00	(3) SFS-H (V-Braces)	1	32.300	35.530	0.75	0.75	7.20	177.30	0.000	0.000	409.31	0.00	0.00	0.00
16	147.00	PRK-1245 (kicker kit)	1	32.300	35.530	1.00	1.00	9.50	418.42	0.000	0.000	540.06	0.00	0.00	0.00
17	147.00	(3) T-Frame w/ Platforms	1	32.300	35.530	1.00	1.00	25.00	1458.00	0.000	0.000	1421.22	0.00	0.00	0.00
18	147.00	Alcatel Lucent 1900 MHz	3	32.300	35.530	0.40	0.80	2.77	162.00	0.000	0.000	157.58	0.00	0.00	0.00
19	147.00	Alcatel Lucent 800 MHz	3	32.300	35.530	0.40	0.80	2.99	143.10	0.000	0.000	169.86	0.00	0.00	0.00
20	147.00	Alcatel Lucent 800 MHz	3	32.300	35.530	0.40	0.80	0.94	23.76	0.000	0.000	53.21	0.00	0.00	0.00
21	147.00	RFS ACU-A20-N RET	4	32.300	35.530	0.40	0.80	0.22	3.60	0.000	0.000	12.73	0.00	0.00	0.00
22	137.00	RRUS 4415 B25	2	32.280	35.508	0.40	0.80	1.31	82.80	0.000	0.000	74.54	0.00	0.00	0.00
23	137.00	4449 B71 + B85	2	32.280	35.508	0.40	0.80	1.58	131.76	0.000	0.000	89.54	0.00	0.00	0.00
24	137.00	KRY 112 144/2	3	32.280	35.508	0.40	0.80	0.49	29.70	0.000	0.000	27.95	0.00	0.00	0.00
25	137.00	AIR6449 B41	2	32.280	35.508	0.57	0.80	6.42	185.40	0.000	0.000	364.65	0.00	0.00	0.00
26	137.00	PRK-1245 (kicker kit)	1	32.280	35.508	1.00	1.00	8.50	401.32	0.000	0.000	482.91	0.00	0.00	0.00
27	137.00	APXVAALL24_43-U-NA20	2	32.280	35.508	0.56	0.80	22.67	230.40	0.000	0.000	1287.89	0.00	0.00	0.00
28	137.00	KRD 9011461-B66A-B2A	2	32.280	35.508	0.70	0.80	9.06	237.96	0.000	0.000	514.84	0.00	0.00	0.00
29	137.00	(3) T-Frame/ walking	1	32.280	35.508	1.00	1.00	25.00	1458.00	0.000	0.000	1420.33	0.00	0.00	0.00
30	137.00	(3) HR w/ V-Brace Kits	1	32.280	35.508	1.00	1.00	8.50	405.00	0.000	0.000	482.91	0.00	0.00	0.00
31	127.00	4415 B30	3	32.281	35.509	0.38	0.75	2.09	119.07	0.000	0.000	118.89	0.00	0.00	0.00
32	127.00	HRK12 (Handrail Kit)	1	32.281	35.509	1.00	1.00	6.75	235.55	0.000	0.000	383.50	0.00	0.00	0.00
33	127.00	DC9-48-60-24-8C-EV	1	32.281	35.509	0.38	0.75	0.43	23.58	0.000	0.000	24.29	0.00	0.00	0.00
34	127.00	DMP65R-BU6DA	3	32.281	35.509	0.54	0.75	20.59	214.38	0.000	0.000	1169.83	0.00	0.00	0.00
35	127.00	8843 B2 B66A	3	32.281	35.509	0.38	0.75	1.84	189.00	0.000	0.000	104.82	0.00	0.00	0.00
36	127.00	840370799	3	32.281	35.509	0.52	0.75	24.73	50.49	0.000	0.000	1405.11	0.00	0.00	0.00
37	127.00	7770.00	3	32.281	35.509	0.55	0.75	9.03	94.50	0.000	0.000	513.25	0.00	0.00	0.00
38	127.00	DC6-48-60-18-8F	1	32.281	35.509	0.38	0.75	0.35	28.62	0.000	0.000	19.60	0.00	0.00	0.00
39	127.00	Low Profile	1	32.281	35.509	1.00	1.00	25.00	1350.00	0.000	0.000	1420.37	0.00	0.00	0.00
40	127.00	LGP13519	6	32.281	35.509	0.38	0.75	0.77	28.62	0.000	0.000	43.46	0.00	0.00	0.00
41	127.00	DTMABP7819VG12A	3	32.281	35.509	0.38	0.75	1.28	51.84	0.000	0.000	72.87	0.00	0.00	0.00
42	127.00	RRUS 4478 B14	3	32.281	35.509	0.38	0.75	1.86	160.38	0.000	0.000	105.46	0.00	0.00	0.00
43	127.00	4449 B5/B12	3	32.281	35.509	0.38	0.75	2.22	191.70	0.000	0.000	125.92	0.00	0.00	0.00
44	117.00	Commscope	1	32.302	35.532	1.00	1.00	37.59	1554.30	0.000	0.000	2137.06	0.00	0.00	0.00
45	117.00	Raycap	1	32.302	35.532	0.75	0.75	1.51	19.71	0.000	0.000	85.70	0.00	0.00	0.00
46	117.00	Fujitsu TA08025-B604	3	32.302	35.532	0.50	0.75	2.95	172.53	0.000	0.000	167.98	0.00	0.00	0.00
47	117.00	Fujitsu TA08025-B605	3	32.302	35.532	0.50	0.75	2.95	202.50	0.000	0.000	167.98	0.00	0.00	0.00

Discrete Appurtenance Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022	
Site Name: Danielson	Exposure: B		
Height: 155.00 (ft)	Crest Height: 172.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 3	Struct Class: II	Page: 25



48	117.00 Commscope	3	32.302	35.532	0.55	0.75	20.43	191.16	0.000	0.000	1161.46	0.00	0.00
Totals:											13,570.91	23,642.26	

Total Applied Force Summary

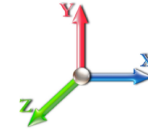
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90
Wind Load Factor 1.60



Iterations 26

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		608.77	516.37	0.00	0.00
4.00		595.64	513.10	0.00	0.00
6.00		582.89	509.84	0.00	0.00
8.00		570.52	506.57	0.00	0.00
10.00		558.50	503.30	0.00	0.00
11.50		411.91	375.33	0.00	0.00
12.00		136.33	124.70	0.00	0.00
14.00		535.51	496.76	0.00	0.00
14.16		42.62	39.60	0.00	0.00
14.84		180.04	168.07	0.00	0.00
16.00		303.73	285.83	0.00	0.00
16.50		130.08	122.86	0.00	0.00
18.00		384.98	367.36	0.00	0.00
20.00		503.40	486.96	0.00	0.00
21.00		248.68	242.25	0.00	0.00
22.00		246.17	241.44	0.00	0.00
24.00		483.45	480.42	0.00	0.00
26.00		473.89	477.16	0.00	0.00
28.00		464.58	473.89	0.00	0.00
30.00		455.90	470.62	0.00	0.00
32.00		455.40	467.35	0.00	0.00
34.00		454.44	464.08	0.00	0.00
36.00		453.10	460.82	0.00	0.00
37.06		243.06	428.27	0.00	0.00
37.96		205.96	362.28	0.00	0.00
38.00		9.14	16.07	0.00	0.00
40.00		456.72	800.52	0.00	0.00
41.00		227.36	397.97	0.00	0.00
42.00		226.80	396.45	0.00	0.00
44.00		452.10	401.88	0.00	0.00
46.00		449.47	399.05	0.00	0.00
48.00		446.67	396.22	0.00	0.00
50.00		443.72	393.39	0.00	0.00
52.00		440.63	390.56	0.00	0.00
54.00		437.43	387.73	0.00	0.00
56.00		434.12	384.90	0.00	0.00
57.11		239.43	212.40	0.00	0.00
58.00		191.20	169.67	0.00	0.00
58.50		107.11	97.07	0.00	0.00
60.00		320.08	290.16	0.00	0.00
62.00		423.70	384.41	0.00	0.00
64.00		420.09	381.58	0.00	0.00
66.00		416.43	378.75	0.00	0.00
68.00		412.73	375.92	0.00	0.00
70.00		409.00	373.09	0.00	0.00
72.00		411.39	625.30	0.00	0.00

Total Applied Force Summary

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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74.00		407.59	620.11	0.00	0.00
76.00		403.77	614.93	0.00	0.00
78.00		399.93	317.26	0.00	0.00
80.00		396.08	314.90	0.00	0.00
82.00		392.21	312.55	0.00	0.00
84.00		388.34	310.19	0.00	0.00
86.00		384.46	307.83	0.00	0.00
88.00		380.57	305.47	0.00	0.00
90.00		376.68	303.11	0.00	0.00
92.00		372.79	300.76	0.00	0.00
94.00		368.90	298.40	0.00	0.00
96.00		365.01	296.04	0.00	0.00
98.00		361.13	293.68	0.00	0.00
100.00		357.25	291.32	0.00	0.00
102.00		353.38	245.34	0.00	0.00
104.00		349.51	243.45	0.00	0.00
106.00		345.65	241.57	0.00	0.00
108.00		341.80	239.68	0.00	0.00
110.00		337.95	237.79	0.00	0.00
112.00		334.11	235.91	0.00	0.00
113.50		248.08	175.69	0.00	0.00
114.00		82.22	58.33	0.00	0.00
115.00		163.72	116.30	0.00	0.00
116.00		165.21	198.25	0.00	0.00
117.00	(11) attachments	3884.45	2337.51	0.00	0.00
118.00		163.31	194.72	0.00	0.00
120.00		323.75	386.62	0.00	0.00
122.00		319.95	225.66	0.00	0.00
124.00		316.16	223.78	0.00	0.00
126.00		312.38	221.89	0.00	0.00
127.00	(34) attachments	5662.15	2847.97	0.00	0.00
128.00		153.83	96.36	0.00	0.00
130.00		304.84	191.30	0.00	0.00
132.00		301.09	189.41	0.00	0.00
134.00		297.34	187.52	0.00	0.00
136.00		293.60	185.64	0.00	0.00
137.00	(16) attachments	4890.96	3254.45	0.00	0.00
138.00		144.46	87.64	0.00	0.00
140.00		286.14	173.87	0.00	0.00
142.00		282.42	171.99	0.00	0.00
144.00		278.71	170.10	0.00	0.00
146.00		275.00	168.21	0.00	0.00
147.00	(25) attachments	4767.94	2963.68	0.00	0.00
148.00		135.18	80.55	0.00	0.00
150.00		267.60	159.69	0.00	0.00
152.00		263.91	157.80	0.00	0.00
153.00	(6) attachments	302.65	136.24	0.00	0.00
154.00		129.64	77.72	0.00	0.00
155.00	(26) attachments	4993.94	2669.57	0.00	672.69
	Totals:	54,532.61	41,677.08	0.00	672.69

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



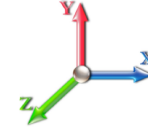
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Load Case: 0.9D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 0.90

Wind Load Factor 1.60



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	37.324	0.00	3.28
2.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.064	0.000	37.324	0.00	0.00
4.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	36.781	0.00	3.28
4.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.064	0.000	36.781	0.00	0.00
6.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	36.254	0.00	3.28
6.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.065	0.000	36.254	0.00	0.00
8.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	35.743	0.00	3.28
8.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.065	0.000	35.743	0.00	0.00
10.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	35.247	0.00	3.28
10.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.066	0.000	35.247	0.00	0.00
11.50	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.066	0.000	34.884	0.00	2.46
11.50	10"x1/2" Bent plate	Yes	1.50	0.000	3.56	0.45	0.00	0.066	0.000	34.884	0.00	0.00
12.00	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.067	0.000	34.765	0.00	0.82
12.00	10"x1/2" Bent plate	Yes	0.50	0.000	3.56	0.15	0.00	0.067	0.000	34.765	0.00	0.00
14.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	34.298	0.00	3.28
14.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.067	0.000	34.298	0.00	0.00
14.16	1.6" Hybrid	Yes	0.16	0.000	0.00	0.00	0.00	0.067	0.000	34.261	0.00	0.26
14.16	10"x1/2" Bent plate	Yes	0.16	0.000	3.56	0.05	0.00	0.067	0.000	34.261	0.00	0.00
14.84	1.6" Hybrid	Yes	0.68	0.000	0.00	0.00	0.00	0.067	0.000	34.106	0.00	1.11
14.84	10"x1/2" Bent plate	Yes	0.68	0.000	3.56	0.20	0.00	0.067	0.000	34.106	0.00	0.00
16.00	1.6" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.067	0.000	33.845	0.00	1.90
16.00	10"x1/2" Bent plate	Yes	1.16	0.000	3.56	0.34	0.00	0.067	0.000	33.845	0.00	0.00
16.50	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.068	0.000	33.734	0.00	0.82
16.50	10"x1/2" Bent plate	Yes	0.50	0.000	3.56	0.15	0.00	0.068	0.000	33.734	0.00	0.00
18.00	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.068	0.000	33.405	0.00	2.46
18.00	10"x1/2" Bent plate	Yes	1.50	0.000	3.56	0.45	0.00	0.068	0.000	33.405	0.00	0.00
20.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	32.978	0.00	3.28
20.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.068	0.000	32.978	0.00	0.00
21.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	32.769	0.00	1.64
21.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.069	0.000	32.769	0.00	0.00
22.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	32.563	0.00	1.64
22.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.069	0.000	32.563	0.00	0.00
24.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	32.161	0.00	3.28
24.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.069	0.000	32.161	0.00	0.00
26.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	31.770	0.00	3.28
26.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.070	0.000	31.770	0.00	0.00
28.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.390	0.00	3.28
28.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.071	0.000	31.390	0.00	0.00
30.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	31.048	0.00	3.28
30.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.071	0.000	31.048	0.00	0.00
32.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	31.261	0.00	3.28
32.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.072	0.000	31.261	0.00	0.00
34.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	31.446	0.00	3.28
34.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.072	0.000	31.446	0.00	0.00
36.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	31.608	0.00	3.28
36.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.073	0.000	31.608	0.00	0.00
37.06	1.6" Hybrid	Yes	1.06	0.000	0.00	0.00	0.00	0.073	0.000	31.685	0.00	1.74

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



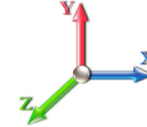
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Load Case: 0.9D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 0.90

Wind Load Factor 1.60



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
37.06	10"x1/2" Bent plate	Yes	1.06	0.000	3.56	0.31	0.00	0.073	0.000	31.685	0.00	0.00
37.96	1.6" Hybrid	Yes	0.90	0.000	0.00	0.00	0.00	0.074	0.000	31.746	0.00	1.47
37.96	10"x1/2" Bent plate	Yes	0.90	0.000	3.56	0.27	0.00	0.074	0.000	31.746	0.00	0.00
38.00	1.6" Hybrid	Yes	0.04	0.000	0.00	0.00	0.00	0.074	0.000	31.748	0.00	0.07
38.00	10"x1/2" Bent plate	Yes	0.04	0.000	3.56	0.01	0.00	0.074	0.000	31.748	0.00	0.00
40.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	31.870	0.00	3.28
40.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.074	0.000	31.870	0.00	0.00
41.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.075	0.000	31.925	0.00	1.64
41.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.075	0.000	31.925	0.00	0.00
42.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.075	0.000	31.976	0.00	1.64
42.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.075	0.000	31.976	0.00	0.00
44.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	32.068	0.00	3.28
44.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.074	0.000	32.068	0.00	0.00
46.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	32.146	0.00	3.28
46.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.075	0.000	32.146	0.00	0.00
48.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	32.214	0.00	3.28
48.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.075	0.000	32.214	0.00	0.00
50.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	32.271	0.00	3.28
50.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.076	0.000	32.271	0.00	0.00
52.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	32.320	0.00	3.28
52.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.077	0.000	32.320	0.00	0.00
54.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	32.360	0.00	3.28
54.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.077	0.000	32.360	0.00	0.00
56.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	32.394	0.00	3.28
56.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.078	0.000	32.394	0.00	0.00
57.11	1.6" Hybrid	Yes	1.11	0.000	0.00	0.00	0.00	0.078	0.000	32.410	0.00	1.82
57.11	10"x1/2" Bent plate	Yes	1.11	0.000	3.56	0.33	0.00	0.078	0.000	32.410	0.00	0.00
58.00	1.6" Hybrid	Yes	0.89	0.000	0.00	0.00	0.00	0.079	0.000	32.422	0.00	1.46
58.00	10"x1/2" Bent plate	Yes	0.89	0.000	3.56	0.26	0.00	0.079	0.000	32.422	0.00	0.00
58.50	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.028	0.000	32.427	0.00	0.82
58.50	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.028	0.000	32.427	0.00	0.00
60.00	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.028	0.000	32.444	0.00	2.46
60.00	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.028	0.000	32.444	0.00	0.00
62.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	32.461	0.00	3.28
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	32.461	0.00	0.00
64.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	32.474	0.00	3.28
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	32.474	0.00	0.00
66.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	32.483	0.00	3.28
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.483	0.00	0.00
68.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	32.488	0.00	3.28
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.488	0.00	0.00
70.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	32.491	0.00	3.28
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.491	0.00	0.00
72.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	32.492	0.00	3.28
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.492	0.00	0.00
74.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.490	0.00	3.28
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.490	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



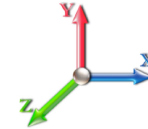
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Load Case: 0.9D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 0.90

Wind Load Factor 1.60



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
76.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.486	0.00	3.28
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.486	0.00	0.00
78.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.481	0.00	3.28
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.481	0.00	0.00
80.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.474	0.00	3.28
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.474	0.00	0.00
82.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	32.466	0.00	3.28
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.466	0.00	0.00
84.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	32.458	0.00	3.28
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.458	0.00	0.00
86.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	32.448	0.00	3.28
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.448	0.00	0.00
88.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	32.438	0.00	3.28
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.438	0.00	0.00
90.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	32.428	0.00	3.28
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.428	0.00	0.00
92.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	32.417	0.00	3.28
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.417	0.00	0.00
94.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	32.407	0.00	3.28
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.407	0.00	0.00
96.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	32.396	0.00	3.28
96.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.396	0.00	0.00
98.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	32.385	0.00	3.28
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.385	0.00	0.00
100.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	32.375	0.00	3.28
100.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.375	0.00	0.00
102.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	32.364	0.00	3.28
102.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.364	0.00	0.00
104.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	32.355	0.00	3.28
104.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.355	0.00	0.00
106.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	32.345	0.00	3.28
106.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.345	0.00	0.00
108.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	32.336	0.00	3.28
108.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.336	0.00	0.00
110.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	32.327	0.00	3.28
110.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.327	0.00	0.00
112.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	32.319	0.00	3.28
112.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.319	0.00	0.00
113.50	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.036	0.000	32.314	0.00	2.46
113.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.036	0.000	32.314	0.00	0.00
114.00	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.036	0.000	32.312	0.00	0.82
114.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.036	0.000	32.312	0.00	0.00
115.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.036	0.000	32.309	0.00	1.64
115.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.036	0.000	32.309	0.00	0.00
116.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	32.305	0.00	1.64
117.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	32.302	0.00	1.64

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II

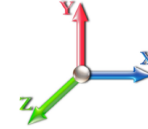


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Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 26

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	191.6

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 0.9D + 1.6W 101 mph Wind

Iterations 26

Dead Load Factor 0.90
Wind Load Factor 1.60



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-41.64	-54.56	0.00	-5509.9	0.00	5509.92	4048.32	2024.16	8933.65	4411.99	0.00	0.000	0.000	0.865
2.00	-41.05	-54.01	0.00	-5400.8	0.00	5400.80	4032.02	2016.01	8833.50	4362.53	0.02	-0.078	0.000	0.856
4.00	-40.46	-53.47	0.00	-5292.7	0.00	5292.78	4015.53	2007.77	8733.46	4313.13	0.07	-0.157	0.000	0.846
6.00	-39.88	-52.94	0.00	-5185.8	0.00	5185.85	3998.87	1999.43	8633.56	4263.79	0.15	-0.235	0.000	0.836
8.00	-39.31	-52.42	0.00	-5079.9	0.00	5079.97	3982.01	1991.01	8533.79	4214.52	0.27	-0.313	0.000	0.826
10.00	-38.75	-51.90	0.00	-4975.1	0.00	4975.14	3964.98	1982.49	8434.18	4165.32	0.41	-0.391	0.000	0.817
11.50	-38.34	-51.51	0.00	-4897.2	0.00	4897.29	3952.09	1976.04	8359.57	4128.48	0.55	-0.449	0.000	0.707
12.00	-38.18	-51.40	0.00	-4871.5	0.00	4871.53	3947.76	1973.88	8334.72	4116.20	0.59	-0.467	0.000	0.705
14.00	-37.65	-50.89	0.00	-4768.7	0.00	4768.73	3930.37	1965.18	8235.42	4067.17	0.81	-0.534	0.000	0.696
14.16	-37.60	-50.86	0.00	-4760.5	0.00	4760.58	3928.97	1964.48	8227.49	4063.25	0.82	-0.540	0.000	0.823
14.84	-37.40	-50.70	0.00	-4726.0	0.00	4726.00	3923.00	1961.50	8193.77	4046.60	0.90	-0.567	0.000	0.693
16.00	-37.10	-50.41	0.00	-4667.2	0.00	4667.20	3912.78	1956.39	8136.31	4018.22	1.05	-0.607	0.000	0.687
16.50	-36.94	-50.30	0.00	-4641.9	0.00	4641.99	3908.36	1954.18	8111.55	4005.99	1.11	-0.624	0.000	0.785
18.00	-36.52	-49.95	0.00	-4566.5	0.00	4566.54	3895.02	1947.51	8037.37	3969.35	1.32	-0.682	0.000	0.778
20.00	-35.99	-49.48	0.00	-4466.6	0.00	4466.63	3877.07	1938.54	7938.63	3920.59	1.62	-0.759	0.000	0.768
21.00	-35.72	-49.25	0.00	-4417.1	0.00	4417.15	3868.03	1934.02	7889.33	3896.24	1.78	-0.798	0.000	0.763
22.00	-35.43	-49.04	0.00	-4367.9	0.00	4367.90	3858.94	1929.47	7840.08	3871.92	1.95	-0.837	0.000	0.758
24.00	-34.89	-48.60	0.00	-4269.8	0.00	4269.82	3840.63	1920.32	7741.75	3823.36	2.32	-0.914	0.000	0.748
26.00	-34.36	-48.16	0.00	-4172.6	0.00	4172.63	3822.14	1911.07	7643.63	3774.90	2.72	-0.990	0.000	0.738
28.00	-33.83	-47.73	0.00	-4076.3	0.00	4076.31	3803.46	1901.73	7545.74	3726.56	3.15	-1.067	0.000	0.728
30.00	-33.30	-47.31	0.00	-3980.8	0.00	3980.85	3784.60	1892.30	7448.09	3678.33	3.62	-1.143	0.000	0.718
32.00	-32.78	-46.89	0.00	-3886.2	0.00	3886.22	3765.56	1882.78	7350.68	3630.22	4.11	-1.219	0.000	0.708
34.00	-32.27	-46.47	0.00	-3792.4	0.00	3792.44	3746.34	1873.17	7253.52	3582.24	4.64	-1.295	0.000	0.698
36.00	-31.77	-46.04	0.00	-3699.5	0.00	3699.51	3726.93	1863.47	7156.62	3534.39	5.20	-1.371	0.000	0.688
37.06	-31.32	-45.81	0.00	-3650.7	0.00	3650.71	3716.57	1858.29	7105.38	3509.08	5.51	-1.411	0.000	0.839
37.96	-30.94	-45.60	0.00	-3609.4	0.00	3609.48	3707.74	1853.87	7061.93	3487.62	5.78	-1.453	0.000	0.671
38.00	-30.90	-45.61	0.00	-3607.6	0.00	3607.66	3707.34	1853.67	7060.00	3486.67	5.79	-1.454	0.000	0.671
40.00	-30.07	-45.17	0.00	-3516.4	0.00	3516.43	3687.57	1843.78	6963.65	3439.09	6.42	-1.529	0.000	0.660
41.00	-29.64	-44.95	0.00	-3471.2	0.00	3471.27	3677.62	1838.81	6915.58	3415.35	6.74	-1.566	0.000	0.655
42.00	-29.21	-44.74	0.00	-3426.3	0.00	3426.32	3033.05	1516.53	5788.55	2858.75	7.07	-1.603	0.000	0.704
44.00	-28.76	-44.31	0.00	-3336.8	0.00	3336.85	3018.90	1509.45	5713.49	2821.68	7.76	-1.676	0.000	0.733
46.00	-28.32	-43.89	0.00	-3248.2	0.00	3248.23	3004.56	1502.28	5638.53	2784.66	8.48	-1.754	0.000	0.721
48.00	-27.88	-43.47	0.00	-3160.4	0.00	3160.45	2990.04	1495.02	5563.69	2747.70	9.23	-1.831	0.000	0.708
50.00	-27.44	-43.05	0.00	-3073.5	0.00	3073.52	2975.34	1487.67	5488.97	2710.80	10.01	-1.907	0.000	0.695
52.00	-27.01	-42.63	0.00	-2987.4	0.00	2987.42	2960.46	1480.23	5414.39	2673.96	10.83	-1.983	0.000	0.682
54.00	-26.58	-42.21	0.00	-2902.1	0.00	2902.16	2945.39	1472.69	5339.95	2637.20	11.68	-2.059	0.000	0.669
56.00	-26.17	-41.79	0.00	-2817.7	0.00	2817.74	2930.14	1465.07	5265.67	2600.52	12.55	-2.134	0.000	0.656
57.11	-25.94	-41.56	0.00	-2771.3	0.00	2771.35	2921.60	1460.80	5224.51	2580.19	13.06	-2.175	0.000	0.833
58.00	-25.76	-41.38	0.00	-2734.3	0.00	2734.36	2914.71	1457.35	5191.54	2563.91	13.47	-2.218	0.000	0.639
58.50	-25.63	-41.29	0.00	-2713.6	0.00	2713.66	2910.82	1455.41	5173.04	2554.77	13.70	-2.237	0.000	0.776
60.00	-25.30	-40.99	0.00	-2651.7	0.00	2651.73	2899.09	1449.55	5117.58	2527.38	14.41	-2.304	0.000	0.765
62.00	-24.87	-40.59	0.00	-2569.7	0.00	2569.75	2883.30	1441.65	5043.81	2490.95	15.40	-2.393	0.000	0.750
64.00	-24.44	-40.19	0.00	-2488.5	0.00	2488.57	2867.32	1433.66	4970.21	2454.60	16.42	-2.481	0.000	0.735
66.00	-24.02	-39.80	0.00	-2408.1	0.00	2408.18	2851.15	1425.58	4896.82	2418.35	17.48	-2.568	0.000	0.720
68.00	-23.61	-39.40	0.00	-2328.5	0.00	2328.59	2834.81	1417.40	4823.62	2382.21	18.57	-2.655	0.000	0.705
70.00	-23.20	-39.01	0.00	-2249.7	0.00	2249.78	2818.28	1409.14	4750.64	2346.16	19.70	-2.741	0.000	0.690
72.00	-22.53	-38.60	0.00	-2171.7	0.00	2171.76	2801.57	1400.79	4677.88	2310.23	20.87	-2.826	0.000	0.668
74.00	-21.88	-38.20	0.00	-2094.5	0.00	2094.55	2784.68	1392.34	4605.35	2274.41	22.07	-2.909	0.000	0.653

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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76.00	-21.23	-37.79	0.00	-2018.1	0.00	2018.16	2161.97	1080.98	3608.45	1782.08	23.31	-2.992	0.000	0.724
78.00	-20.88	-37.41	0.00	-1942.5	0.00	1942.57	2151.06	1075.53	3556.01	1756.18	24.58	-3.076	0.000	0.774
80.00	-20.53	-37.03	0.00	-1867.7	0.00	1867.76	2139.97	1069.98	3503.61	1730.30	25.89	-3.167	0.000	0.753
82.00	-20.18	-36.65	0.00	-1793.7	0.00	1793.70	2128.69	1064.35	3451.27	1704.45	27.23	-3.257	0.000	0.732
84.00	-19.84	-36.28	0.00	-1720.4	0.00	1720.40	2117.24	1058.62	3398.99	1678.63	28.62	-3.345	0.000	0.710
86.00	-19.50	-35.90	0.00	-1647.8	0.00	1647.85	2105.60	1052.80	3346.79	1652.86	30.03	-3.432	0.000	0.689
88.00	-19.16	-35.53	0.00	-1576.0	0.00	1576.04	2093.78	1046.89	3294.68	1627.12	31.49	-3.517	0.000	0.667
90.00	-18.83	-35.17	0.00	-1504.9	0.00	1504.98	2081.77	1040.89	3242.65	1601.42	32.98	-3.601	0.000	0.645
92.00	-18.51	-34.80	0.00	-1434.6	0.00	1434.64	2069.59	1034.79	3190.73	1575.78	34.51	-3.683	0.000	0.623
94.00	-18.19	-34.44	0.00	-1365.0	0.00	1365.04	2057.22	1028.61	3138.91	1550.19	36.07	-3.764	0.000	0.600
96.00	-17.87	-34.08	0.00	-1296.1	0.00	1296.17	2044.67	1022.33	3087.22	1524.66	37.66	-3.842	0.000	0.623
98.00	-17.55	-33.72	0.00	-1228.0	0.00	1228.01	2031.93	1015.97	3035.65	1499.19	39.29	-3.925	0.000	0.599
100.00	-17.24	-33.37	0.00	-1160.5	0.00	1160.56	2019.02	1009.51	2984.22	1473.79	40.95	-4.005	0.000	0.574
100.00	-17.24	-33.37	0.00	-1160.5	0.00	1160.56	1394.49	697.25	2068.33	1021.47	40.95	-4.005	0.000	0.667
102.00	-16.97	-33.03	0.00	-1093.8	0.00	1093.81	1387.39	693.70	2035.72	1005.36	42.64	-4.083	0.000	0.741
104.00	-16.70	-32.69	0.00	-1027.7	0.00	1027.76	1380.13	690.06	2003.09	989.25	44.37	-4.171	0.000	0.705
106.00	-16.44	-32.35	0.00	-962.39	0.00	962.39	1372.69	686.35	1970.45	973.13	46.14	-4.256	0.000	0.669
108.00	-16.18	-32.01	0.00	-897.69	0.00	897.69	1365.09	682.55	1937.81	957.01	47.94	-4.338	0.000	0.632
110.00	-15.93	-31.68	0.00	-833.67	0.00	833.67	1357.32	678.66	1905.17	940.89	49.77	-4.416	0.000	0.595
112.00	-15.69	-31.34	0.00	-770.32	0.00	770.32	1349.39	674.69	1872.56	924.79	51.63	-4.491	0.000	0.558
113.50	-15.51	-31.09	0.00	-723.30	0.00	723.30	1343.33	671.66	1848.11	912.71	53.05	-4.545	0.000	0.529
113.50	-15.51	-31.09	0.00	-723.30	0.00	723.30	1343.33	671.66	1848.11	912.71	53.05	-4.545	0.000	0.529
114.00	-15.44	-31.02	0.00	-707.75	0.00	707.75	1341.28	670.64	1839.96	908.69	53.53	-4.562	0.000	0.793
115.00	-15.31	-30.86	0.00	-676.74	0.00	676.74	1337.17	668.58	1823.68	900.65	54.49	-4.615	0.000	0.765
116.00	-15.10	-30.69	0.00	-645.88	0.00	645.88	1333.01	666.51	1807.40	892.61	55.46	-4.666	0.000	0.737
117.00	-13.06	-26.64	0.00	-615.19	0.00	615.19	1328.82	664.41	1791.13	884.57	56.44	-4.715	0.000	0.707
118.00	-12.85	-26.47	0.00	-588.56	0.00	588.56	1324.58	662.29	1774.88	876.54	57.44	-4.763	0.000	0.683
120.00	-12.45	-26.14	0.00	-535.61	0.00	535.61	1327.18	663.59	1784.85	881.47	59.45	-4.854	0.000	0.619
122.00	-12.22	-25.82	0.00	-483.33	0.00	483.33	1318.63	659.32	1752.36	865.43	61.50	-4.939	0.000	0.569
124.00	-11.99	-25.50	0.00	-431.70	0.00	431.70	1309.91	654.95	1719.92	849.40	63.58	-5.015	0.000	0.519
126.00	-11.78	-25.18	0.00	-380.70	0.00	380.70	1301.02	650.51	1687.54	833.41	65.70	-5.085	0.000	0.467
127.00	-9.43	-19.29	0.00	-355.52	0.00	355.52	1296.51	648.26	1671.38	825.43	66.77	-5.118	0.000	0.439
128.00	-9.34	-19.14	0.00	-336.23	0.00	336.23	1291.97	645.98	1655.23	817.46	67.84	-5.150	0.000	0.419
130.00	-9.15	-18.82	0.00	-297.96	0.00	297.96	1282.74	641.37	1623.00	801.54	70.01	-5.208	0.000	0.380
132.00	-8.98	-18.52	0.00	-260.31	0.00	260.31	1273.35	636.68	1590.85	785.66	72.20	-5.262	0.000	0.339
134.00	-8.80	-18.21	0.00	-223.28	0.00	223.28	1263.80	631.90	1558.80	769.83	74.41	-5.310	0.000	0.298
136.00	-8.64	-17.90	0.00	-186.86	0.00	186.86	1254.07	627.04	1526.84	754.05	76.64	-5.353	0.000	0.256
137.00	-5.85	-12.73	0.00	-168.96	0.00	168.96	1249.15	624.57	1510.90	746.18	77.77	-5.372	0.000	0.232
138.00	-5.77	-12.58	0.00	-156.22	0.00	156.22	1244.18	622.09	1494.99	738.32	78.89	-5.390	0.000	0.217
140.00	-5.62	-12.28	0.00	-131.06	0.00	131.06	1234.12	617.06	1463.26	722.65	81.15	-5.422	0.000	0.186
142.00	-5.47	-11.99	0.00	-106.49	0.00	106.49	1223.90	611.95	1431.66	707.04	83.43	-5.450	0.000	0.155
144.00	-5.32	-11.70	0.00	-82.51	0.00	82.51	1213.50	606.75	1400.19	691.50	85.71	-5.473	0.000	0.124
146.00	-5.18	-11.41	0.00	-59.12	0.00	59.12	1202.94	601.47	1368.85	676.02	88.01	-5.490	0.000	0.092
147.00	-2.68	-6.38	0.00	-47.71	0.00	47.71	1197.60	598.80	1353.24	668.32	89.16	-5.497	0.000	0.074
148.00	-2.61	-6.24	0.00	-41.33	0.00	41.33	1192.22	596.11	1337.67	660.62	90.31	-5.503	0.000	0.065
150.00	-2.48	-5.96	0.00	-28.86	0.00	28.86	1181.32	590.66	1306.64	645.30	92.61	-5.513	0.000	0.047
152.00	-2.35	-5.68	0.00	-16.94	0.00	16.94	1170.26	585.13	1275.78	630.06	94.92	-5.520	0.000	0.029
153.00	-2.24	-5.36	0.00	-11.26	0.00	11.26	1164.66	582.33	1260.41	622.47	96.07	-5.522	0.000	0.020
154.00	-2.18	-5.23	0.00	-5.90	0.00	5.90	1159.03	579.51	1245.09	614.90	97.23	-5.523	0.000	0.012
155.00	0.00	-4.99	0.00	-0.67	0.00	0.67	1153.35	576.68	1229.81	607.36	98.38	-5.524	0.000	0.001

Wind Loading - Shaft

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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

Iterations 25

Dead Load Factor 1.20

Wind Load Factor 1.00



Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2	2.18	0.70	9.285	10.21	0.00	1.200	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		2.15	0.70	9.147	10.06	0.00	1.200	1.481	2.00	9.761	11.71	117.9	211.0	817.8
4.00		2.12	0.70	9.014	9.92	0.00	1.200	1.579	2.00	9.728	11.67	115.7	223.9	826.3
6.00		2.09	0.70	8.885	9.77	0.00	1.200	1.637	2.00	9.681	11.62	113.5	230.5	828.6
8.00		2.06	0.70	8.760	9.64	0.00	1.200	1.676	2.00	9.628	11.55	111.3	234.6	828.3
10.00		2.03	0.70	8.638	9.50	0.00	1.200	1.705	2.00	9.572	11.49	109.1	237.2	826.5
11.50	RB3	2.01	0.70	8.549	9.40	0.00	1.200	1.723	1.50	7.140	8.57	80.6	178.8	618.0
12.00		2.00	0.70	8.520	9.37	0.00	1.200	1.728	0.50	2.372	2.85	26.7	59.7	205.5
14.00		1.97	0.70	8.406	9.25	0.00	1.200	1.747	2.00	9.453	11.34	104.9	239.7	820.3
14.16	RT2	1.97	0.70	8.397	9.24	0.00	1.200	1.748	0.16	0.753	0.90	8.4	19.2	65.4
14.84	RB4	1.96	0.70	8.359	9.19	0.00	1.200	1.754	0.68	3.198	3.84	35.3	81.6	277.9
16.00		1.95	0.70	8.295	9.12	0.00	1.200	1.762	1.16	5.440	6.53	59.6	139.2	472.9
16.50	RT3	1.94	0.70	8.267	9.09	0.00	1.200	1.766	0.50	2.338	2.81	25.5	60.0	203.4
18.00		1.92	0.70	8.187	9.01	0.00	1.200	1.775	1.50	6.992	8.39	75.6	180.1	608.6
20.00		1.90	0.70	8.082	8.89	0.00	1.200	1.786	2.00	9.268	11.12	98.9	239.8	807.4
21.00	RT1 RB5	1.89	0.70	8.031	8.83	0.00	1.200	1.791	1.00	4.610	5.53	48.9	119.8	401.9
22.00		1.88	0.70	7.980	8.78	0.00	1.200	1.795	1.00	4.594	5.51	48.4	119.7	400.7
24.00		1.85	0.70	7.882	8.67	0.00	1.200	1.803	2.00	9.142	10.97	95.1	238.6	797.4
26.00		1.83	0.70	7.786	8.56	0.00	1.200	1.809	2.00	9.078	10.89	93.3	237.7	792.2
28.00		1.81	0.70	7.693	8.46	0.00	1.200	1.815	2.00	9.014	10.82	91.5	236.7	786.8
30.00		1.79	0.70	7.609	8.37	0.00	1.200	1.820	2.00	8.950	10.74	89.9	235.6	781.4
32.00		1.77	0.71	7.661	8.43	0.00	1.200	1.825	2.00	8.885	10.66	89.9	234.4	775.8
34.00		1.75	0.73	7.707	8.48	0.00	1.200	1.828	2.00	8.820	10.58	89.7	233.1	770.1
36.00	Bot - Section 2	1.73	0.74	7.746	8.52	0.00	1.200	1.832	2.00	8.756	10.51	89.5	231.7	764.4
37.06	RT4	1.72	0.74	7.765	8.54	0.00	1.200	1.833	1.06	4.683	5.62	48.0	124.3	652.0
37.96	RB6	1.71	0.75	7.780	8.56	0.00	1.200	1.834	0.90	3.961	4.75	40.7	105.2	551.5
38.00		1.71	0.75	7.781	8.56	0.00	1.200	1.835	0.04	0.176	0.21	1.8	4.7	24.5
40.00		1.69	0.76	7.811	8.59	0.00	1.200	1.837	2.00	8.755	10.51	90.3	232.3	1217.9
41.00	RT5 RB7	1.68	0.77	7.824	8.61	0.00	1.200	1.838	1.00	4.353	5.22	45.0	115.8	605.5
42.00	Top - Section 1	1.67	0.77	7.837	8.62	0.00	1.200	1.839	1.00	4.336	5.20	44.9	115.4	603.1
44.00		1.65	0.78	7.859	8.64	0.00	1.200	1.841	2.00	8.624	10.35	89.5	229.2	683.3
46.00		1.64	0.79	7.878	8.67	0.00	1.200	1.843	2.00	8.559	10.27	89.0	227.5	677.9
48.00		1.62	0.80	7.895	8.68	0.00	1.200	1.844	2.00	8.493	10.19	88.5	225.9	672.5
50.00		1.60	0.81	7.909	8.70	0.00	1.200	1.845	2.00	8.427	10.11	88.0	224.2	667.0
52.00		1.59	0.82	7.921	8.71	0.00	1.200	1.846	2.00	8.362	10.03	87.4	222.5	661.5
54.00		1.57	0.83	7.931	8.72	0.00	1.200	1.847	2.00	8.296	9.96	86.8	220.8	656.0
56.00		1.56	0.84	7.939	8.73	0.00	1.200	1.848	2.00	8.230	9.88	86.2	219.0	650.5
57.11	RT6	1.55	0.84	7.943	8.74	0.00	1.200	1.848	1.11	4.539	5.45	47.6	121.0	358.9
58.00	RB8	1.55	0.85	7.946	8.74	0.00	1.200	1.848	0.89	3.625	4.35	38.0	96.7	286.5
58.50	RT7	1.54	0.85	7.947	8.74	0.00	1.200	1.848	0.50	2.031	2.44	21.3	54.2	160.5
60.00		1.53	0.85	7.951	8.75	0.00	1.200	1.849	1.50	6.068	7.28	63.7	161.6	479.2
62.00		1.52	0.86	7.955	8.75	0.00	1.200	1.849	2.00	8.033	9.64	84.3	213.7	633.8
64.00		1.50	0.87	7.958	8.75	0.00	1.200	1.849	2.00	7.967	9.56	83.7	211.9	628.3
66.00		1.49	0.88	7.961	8.76	0.00	1.200	1.849	2.00	7.901	9.48	83.0	210.1	622.7
68.00		1.48	0.89	7.962	8.76	0.00	1.200	1.849	2.00	7.835	9.40	82.3	208.2	617.1
70.00	Bot - Section 3	1.47	0.89	7.963	8.76	0.00	1.200	1.849	2.00	7.769	9.32	81.7	206.4	611.5
72.00		1.46	0.90	7.963	8.76	0.00	1.200	1.849	2.00	7.811	9.37	82.1	207.6	948.9

Wind Loading - Shaft

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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74.00	1.44	0.91	7.962	8.76	0.00	1.200	1.849	2.00	7.744	9.29	81.4	205.7	940.2
76.00 Top - Section 2 RT8	1.43	0.91	7.962	8.76	0.00	1.200	1.849	2.00	7.678	9.21	80.7	203.9	931.4
78.00	1.42	0.92	7.960	8.76	0.00	1.200	1.849	2.00	7.612	9.13	80.0	202.1	532.7
80.00	1.41	0.93	7.959	8.75	0.00	1.200	1.849	2.00	7.546	9.06	79.3	200.2	527.7
82.00	1.40	0.93	7.957	8.75	0.00	1.200	1.849	2.00	7.480	8.98	78.6	198.4	522.7
84.00	1.39	0.94	7.955	8.75	0.00	1.200	1.849	2.00	7.414	8.90	77.8	196.5	517.7
86.00	1.38	0.95	7.952	8.75	0.00	1.200	1.849	2.00	7.348	8.82	77.1	194.6	512.7
88.00	1.37	0.95	7.950	8.74	0.00	1.200	1.848	2.00	7.282	8.74	76.4	192.8	507.7
90.00	1.36	0.96	7.947	8.74	0.00	1.200	1.848	2.00	7.216	8.66	75.7	190.9	502.7
92.00	1.35	0.96	7.945	8.74	0.00	1.200	1.848	2.00	7.150	8.58	75.0	189.1	497.7
94.00	1.35	0.97	7.942	8.74	0.00	1.200	1.848	2.00	7.084	8.50	74.3	187.2	492.7
96.00 RT9 RB10	1.34	0.98	7.939	8.73	0.00	1.200	1.848	2.00	7.018	8.42	73.5	185.4	487.7
98.00	1.33	0.98	7.937	8.73	0.00	1.200	1.847	2.00	6.952	8.34	72.8	183.5	482.7
100.00 Top - Section 3	1.32	0.99	7.934	8.73	0.00	1.200	1.847	2.00	6.886	8.26	72.1	181.7	477.7
102.00	1.31	0.99	7.932	8.72	0.00	1.200	1.847	2.00	6.819	8.18	71.4	179.8	472.7
104.00	1.30	1.00	7.929	8.72	0.00	1.200	1.847	2.00	6.753	8.10	70.7	178.0	467.7
106.00	1.30	1.00	7.927	8.72	0.00	1.200	1.847	2.00	6.687	8.02	70.0	176.1	462.7
108.00	1.29	1.01	7.925	8.72	0.00	1.200	1.846	2.00	6.621	7.95	69.3	174.3	457.7
110.00	1.28	1.02	7.923	8.71	0.00	1.200	1.846	2.00	6.555	7.87	68.6	172.4	452.7
112.00	1.28	1.02	7.921	8.71	0.00	1.200	1.846	2.00	6.489	7.79	67.8	170.6	447.7
113.50 RT10	1.27	1.02	7.919	8.71	0.00	1.200	1.846	1.50	4.823	5.79	50.4	126.9	291.8
114.00	1.27	1.03	7.919	8.71	0.00	1.200	1.846	0.50	1.600	1.92	16.7	42.2	96.9
115.00 Bot - Section 5	1.27	1.03	7.918	8.71	0.00	1.200	1.846	1.00	3.187	3.82	33.3	83.9	192.8
116.00	1.26	1.03	7.917	8.71	0.00	1.200	1.846	1.00	3.213	3.86	33.6	84.6	302.8
117.00 Appurtenance(s)	1.26	1.03	7.916	8.71	0.00	1.200	1.846	1.00	3.197	3.84	33.4	84.2	301.0
118.00	1.26	1.04	7.916	8.71	0.00	1.200	1.846	1.00	3.180	3.82	33.2	83.7	299.3
120.00 Top - Section 4	1.25	1.04	7.914	8.71	0.00	1.200	1.846	2.00	6.311	7.57	65.9	165.6	593.0
122.00	1.24	1.05	7.913	8.70	0.00	1.200	1.845	2.00	6.245	7.49	65.2	163.7	376.6
124.00	1.24	1.05	7.912	8.70	0.00	1.200	1.845	2.00	6.179	7.41	64.5	161.9	372.2
126.00	1.23	1.06	7.912	8.70	0.00	1.200	1.845	2.00	6.113	7.34	63.8	160.1	367.9
127.00 Appurtenance(s)	1.23	1.06	7.911	8.70	0.00	1.200	1.845	1.00	3.032	3.64	31.7	79.6	182.5
128.00	1.23	1.06	7.911	8.70	0.00	1.200	1.845	1.00	3.015	3.62	31.5	79.1	181.5
130.00	1.22	1.07	7.911	8.70	0.00	1.200	1.845	2.00	5.981	7.18	62.5	156.4	359.2
132.00	1.22	1.07	7.911	8.70	0.00	1.200	1.845	2.00	5.915	7.10	61.8	154.6	354.9
134.00	1.21	1.07	7.911	8.70	0.00	1.200	1.845	2.00	5.849	7.02	61.1	152.7	350.5
136.00	1.21	1.08	7.911	8.70	0.00	1.200	1.845	2.00	5.783	6.94	60.4	150.9	346.2
137.00 Appurtenance(s)	1.20	1.08	7.911	8.70	0.00	1.200	1.845	1.00	2.867	3.44	29.9	75.0	171.7
138.00	1.20	1.08	7.911	8.70	0.00	1.200	1.845	1.00	2.850	3.42	29.8	74.5	170.6
140.00	1.20	1.09	7.912	8.70	0.00	1.200	1.845	2.00	5.651	6.78	59.0	147.3	337.5
142.00	1.19	1.09	7.913	8.70	0.00	1.200	1.845	2.00	5.585	6.70	58.3	145.4	333.1
144.00	1.19	1.10	7.914	8.71	0.00	1.200	1.845	2.00	5.519	6.62	57.7	143.6	328.8
146.00	1.18	1.10	7.915	8.71	0.00	1.200	1.846	2.00	5.453	6.54	57.0	141.8	324.5
147.00 Appurtenance(s)	1.18	1.10	7.916	8.71	0.00	1.200	1.846	1.00	2.702	3.24	28.2	70.4	160.8
148.00	1.18	1.11	7.917	8.71	0.00	1.200	1.846	1.00	2.685	3.22	28.1	70.0	159.8
150.00	1.17	1.11	7.918	8.71	0.00	1.200	1.846	2.00	5.321	6.39	55.6	138.1	315.8
152.00	1.17	1.11	7.920	8.71	0.00	1.200	1.846	2.00	5.255	6.31	54.9	136.3	311.5
153.00 Appurtenance(s)	1.17	1.12	7.921	8.71	0.00	1.200	1.846	1.00	2.603	3.12	27.2	67.7	154.3
154.00	1.17	1.12	7.923	8.71	0.00	1.200	1.846	1.00	2.586	3.10	27.0	67.3	153.2
155.00 Appurtenance(s)	1.16	1.12	7.924	8.72	0.00	1.200	1.846	1.00	2.570	3.08	26.9	66.8	152.2
Totals:									155.00			6,174.1	46,546.6

Discrete Appurtenance Forces

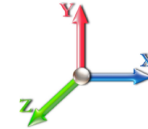
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 25

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	155.00	BSAMNT-SBS-2-2	3	7.924	8.716	1.00	1.00	0.00	143.97	0.000	0.000	0.00	0.00	0.00
2	155.00	BA-70080-4BF	3	7.924	8.716	0.68	0.90	13.81	295.51	0.000	0.000	120.34	0.00	0.00
3	155.00	JAHH-65B-R3B	6	7.924	8.716	0.66	0.80	41.99	1933.32	0.000	0.000	365.99	0.00	0.00
4	155.00	MT6407-77A	3	7.925	8.718	0.56	0.80	9.57	669.87	0.000	1.500	83.40	0.00	125.11
5	155.00	(3) T-Frame w/ Platforms	1	7.924	8.716	1.00	1.00	46.23	3259.49	0.000	0.000	402.96	0.00	0.00
6	155.00	CBC78T-DS-43-2X	3	7.924	8.716	0.40	0.80	0.81	105.10	0.000	0.000	7.04	0.00	0.00
7	155.00	B2/B66A	3	7.924	8.716	0.40	0.80	2.98	550.23	0.000	0.000	25.94	0.00	0.00
8	155.00	B5/B13	3	7.924	8.716	0.40	0.80	2.98	476.49	0.000	0.000	25.94	0.00	0.00
9	155.00	RVZDC-6627-PF-48	1	7.924	8.716	0.40	0.80	1.97	133.73	0.000	0.000	17.19	0.00	0.00
10	153.00	XXDWMM-12.5-65-8T-CB	3	7.921	8.714	0.69	0.80	2.78	-28.16	0.000	0.000	24.23	0.00	0.00
11	153.00	CBRS RRH - RT	3	7.921	8.714	0.40	0.80	1.72	136.25	0.000	0.000	15.01	0.00	0.00
12	147.00	APXVTM14-C-I20	3	7.916	8.708	0.63	0.80	14.26	716.47	0.000	0.000	124.18	0.00	0.00
13	147.00	APXVSP18-C-A20	3	7.916	8.708	0.66	0.80	21.86	605.10	0.000	0.000	190.36	0.00	0.00
14	147.00	Alcatel Lucent	3	7.916	8.708	0.40	0.80	5.90	606.68	0.000	0.000	51.35	0.00	0.00
15	147.00	(3) SFS-H (V-Braces)	1	7.916	8.708	0.75	0.75	12.52	115.20	0.000	0.000	108.98	0.00	0.00
16	147.00	PRK-1245 (kicker kit)	1	7.916	8.708	1.00	1.00	20.02	806.03	0.000	0.000	174.33	0.00	0.00
17	147.00	(3) T-Frame w/ Platforms	1	7.916	8.708	1.00	1.00	46.23	3258.98	0.000	0.000	402.51	0.00	0.00
18	147.00	Alcatel Lucent 1900 MHz	3	7.916	8.708	0.40	0.80	3.60	1110.84	0.000	0.000	31.35	0.00	0.00
19	147.00	Alcatel Lucent 800 MHz	3	7.916	8.708	0.40	0.80	4.44	362.15	0.000	0.000	38.66	0.00	0.00
20	147.00	Alcatel Lucent 800 MHz	3	7.916	8.708	0.40	0.80	1.76	72.66	0.000	0.000	15.30	0.00	0.00
21	147.00	RFS ACU-A20-N RET	4	7.916	8.708	0.40	0.80	0.73	17.77	0.000	0.000	6.32	0.00	0.00
22	137.00	RRUS 4415 B25	2	7.911	8.702	0.40	0.80	1.75	178.52	0.000	0.000	15.21	0.00	0.00
23	137.00	4449 B71 + B85	2	7.911	8.702	0.40	0.80	2.06	180.99	0.000	0.000	17.91	0.00	0.00
24	137.00	KRY 112 144/2	3	7.911	8.702	0.40	0.80	1.09	64.50	0.000	0.000	9.53	0.00	0.00
25	137.00	AIR6449 B41	2	7.911	8.702	0.57	0.80	7.56	473.76	0.000	0.000	65.79	0.00	0.00
26	137.00	PRK-1245 (kicker kit)	1	7.911	8.702	1.00	1.00	17.91	750.13	0.000	0.000	155.86	0.00	0.00
27	137.00	APXVAALL24_43-U-NA20	2	7.911	8.702	0.56	0.80	24.92	1197.43	0.000	0.000	216.89	0.00	0.00
28	137.00	KRD 9011461-B66A-B2A	2	7.911	8.702	0.70	0.80	10.72	708.85	0.000	0.000	93.28	0.00	0.00
29	137.00	(3) T-Frame/ walking	1	7.911	8.702	1.00	1.00	46.22	3258.65	0.000	0.000	402.22	0.00	0.00
30	137.00	(3) HR w/ V-Brace Kits	1	7.911	8.702	1.00	1.00	17.91	787.86	0.000	0.000	155.86	0.00	0.00
31	127.00	4415 B30	3	7.911	8.702	0.38	0.75	2.77	278.64	0.000	0.000	24.14	0.00	0.00
32	127.00	HRK12 (Handrail Kit)	1	7.911	8.702	1.00	1.00	13.73	904.19	0.000	0.000	119.44	0.00	0.00
33	127.00	DC9-48-60-24-8C-EV	1	7.911	8.702	0.38	0.75	1.06	126.41	0.000	0.000	9.20	0.00	0.00
34	127.00	DMP65R-BU6DA	3	7.911	8.702	0.54	0.75	23.10	1018.23	0.000	0.000	201.01	0.00	0.00
35	127.00	8843 B2 B66A	3	7.911	8.702	0.38	0.75	2.46	363.96	0.000	0.000	21.40	0.00	0.00
36	127.00	840370799	3	7.911	8.702	0.52	0.75	30.77	763.46	0.000	0.000	267.80	0.00	0.00
37	127.00	7770.00	3	7.911	8.702	0.55	0.75	10.89	560.38	0.000	0.000	94.77	0.00	0.00
38	127.00	DC6-48-60-18-8F	1	7.911	8.702	0.38	0.75	0.52	85.83	0.000	0.000	4.51	0.00	0.00
39	127.00	Low Profile	1	7.911	8.702	1.00	1.00	46.22	2883.95	0.000	0.000	402.23	0.00	0.00
40	127.00	LGP13519	6	7.911	8.702	0.38	0.75	1.85	82.21	0.000	0.000	16.06	0.00	0.00
41	127.00	DTMABP7819VG12A	3	7.911	8.702	0.38	0.75	2.20	128.17	0.000	0.000	19.13	0.00	0.00
42	127.00	RRUS 4478 B14	3	7.911	8.702	0.38	0.75	2.47	317.17	0.000	0.000	21.52	0.00	0.00
43	127.00	4449 B5/B12	3	7.911	8.702	0.38	0.75	2.87	384.12	0.000	0.000	24.95	0.00	0.00
44	117.00	Commscope	1	7.916	8.708	1.00	1.00	87.54	3484.40	0.000	0.000	762.33	0.00	0.00
45	117.00	Raycap	1	7.916	8.708	0.75	0.75	1.96	69.89	0.000	0.000	17.05	0.00	0.00
46	117.00	Fujitsu TA08025-B604	3	7.916	8.708	0.50	0.75	3.85	354.37	0.000	0.000	33.52	0.00	0.00
47	117.00	Fujitsu TA08025-B605	3	7.916	8.708	0.50	0.75	3.85	398.15	0.000	0.000	33.52	0.00	0.00

Discrete Appurtenance Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022	
Site Name: Danielson	Exposure: B		
Height: 155.00 (ft)	Crest Height: 172.00		
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil		
Gh: 1.1	Topography: 3	Struct Class: II	Page: 37



48	117.00 Commscope	3	7.916	8.708	0.55	0.75	22.99	962.27	0.000	0.000	200.23	0.00	0.00
Totals:										36,114.17	5,636.74		

Total Applied Force Summary

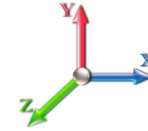
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 25

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		117.86	999.79	0.00	0.00
4.00		115.75	1013.56	0.00	0.00
6.00		113.54	1019.04	0.00	0.00
8.00		111.32	1020.92	0.00	0.00
10.00		109.14	1020.76	0.00	0.00
11.50		80.57	764.41	0.00	0.00
12.00		26.68	254.41	0.00	0.00
14.00		104.89	1016.88	0.00	0.00
14.16		8.35	81.17	0.00	0.00
14.84		35.29	344.84	0.00	0.00
16.00		59.56	587.47	0.00	0.00
16.50		25.52	252.83	0.00	0.00
18.00		75.56	757.23	0.00	0.00
20.00		98.88	1006.17	0.00	0.00
21.00		48.87	501.47	0.00	0.00
22.00		48.40	500.37	0.00	0.00
24.00		95.11	997.20	0.00	0.00
26.00		93.30	992.35	0.00	0.00
28.00		91.54	987.31	0.00	0.00
30.00		89.89	982.11	0.00	0.00
32.00		89.85	976.78	0.00	0.00
34.00		89.73	971.32	0.00	0.00
36.00		89.53	965.77	0.00	0.00
37.06		48.00	758.77	0.00	0.00
37.96		40.68	642.18	0.00	0.00
38.00		1.81	28.50	0.00	0.00
40.00		90.26	1419.64	0.00	0.00
41.00		44.95	706.42	0.00	0.00
42.00		44.86	704.03	0.00	0.00
44.00		89.46	885.21	0.00	0.00
46.00		89.00	879.91	0.00	0.00
48.00		88.51	874.56	0.00	0.00
50.00		87.98	869.16	0.00	0.00
52.00		87.42	863.74	0.00	0.00
54.00		86.85	858.28	0.00	0.00
56.00		86.25	852.80	0.00	0.00
57.11		47.59	471.14	0.00	0.00
58.00		38.02	376.58	0.00	0.00
58.50		21.30	191.96	0.00	0.00
60.00		63.68	573.46	0.00	0.00
62.00		84.35	759.53	0.00	0.00
64.00		83.69	753.96	0.00	0.00
66.00		83.02	748.38	0.00	0.00
68.00		82.34	742.78	0.00	0.00
70.00		81.66	737.19	0.00	0.00
72.00		82.10	1074.63	0.00	0.00

Total Applied Force Summary

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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74.00		81.40	1065.88	0.00	0.00
76.00		80.69	1057.11	0.00	0.00
78.00		79.99	658.38	0.00	0.00
80.00		79.28	653.38	0.00	0.00
82.00		78.56	648.38	0.00	0.00
84.00		77.85	643.38	0.00	0.00
86.00		77.13	638.38	0.00	0.00
88.00		76.42	633.37	0.00	0.00
90.00		75.70	628.37	0.00	0.00
92.00		74.98	623.36	0.00	0.00
94.00		74.26	618.36	0.00	0.00
96.00		73.55	613.35	0.00	0.00
98.00		72.83	608.35	0.00	0.00
100.00		72.11	603.34	0.00	0.00
102.00		71.40	540.17	0.00	0.00
104.00		70.69	535.80	0.00	0.00
106.00		69.97	531.43	0.00	0.00
108.00		69.26	527.06	0.00	0.00
110.00		68.55	522.69	0.00	0.00
112.00		67.85	518.33	0.00	0.00
113.50		50.42	386.05	0.00	0.00
114.00		16.72	128.25	0.00	0.00
115.00		33.31	255.58	0.00	0.00
116.00		33.58	355.64	0.00	0.00
117.00	(11) attachments	1080.06	5623.00	0.00	0.00
118.00		33.23	343.34	0.00	0.00
120.00		65.93	681.07	0.00	0.00
122.00		65.23	464.62	0.00	0.00
124.00		64.54	460.27	0.00	0.00
126.00		63.84	455.92	0.00	0.00
127.00	(34) attachments	1257.82	8123.28	0.00	0.00
128.00		31.49	207.59	0.00	0.00
130.00		62.45	411.46	0.00	0.00
132.00		61.76	407.11	0.00	0.00
134.00		61.07	402.77	0.00	0.00
136.00		60.39	398.42	0.00	0.00
137.00	(16) attachments	1162.48	7798.49	0.00	0.00
138.00		29.76	191.40	0.00	0.00
140.00		59.02	379.08	0.00	0.00
142.00		58.34	374.74	0.00	0.00
144.00		57.65	370.40	0.00	0.00
146.00		56.97	366.07	0.00	0.00
147.00	(25) attachments	1171.57	7853.51	0.00	0.00
148.00		28.06	177.38	0.00	0.00
150.00		55.62	351.06	0.00	0.00
152.00		54.94	346.73	0.00	0.00
153.00	(6) attachments	66.46	280.06	0.00	0.00
154.00		27.05	170.88	0.00	0.00
155.00	(26) attachments	1075.68	7737.52	0.00	125.11
	Totals:	11,810.81	93,157.53	0.00	125.11

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



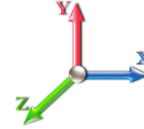
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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 25

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	9.147	0.00	13.84
2.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.09	0.00	0.064	0.000	9.147	0.00	90.78
4.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	9.014	0.00	14.82
4.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.12	0.00	0.064	0.000	9.014	0.00	95.12
6.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	8.885	0.00	15.41
6.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.14	0.00	0.065	0.000	8.885	0.00	97.66
8.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	8.760	0.00	15.83
8.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.15	0.00	0.065	0.000	8.760	0.00	99.43
10.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	8.638	0.00	16.15
10.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.16	0.00	0.066	0.000	8.638	0.00	100.76
11.50	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.066	0.000	8.549	0.00	12.25
11.50	10"x1/2" Bent plate	Yes	1.50	0.000	3.56	0.88	0.00	0.066	0.000	8.549	0.00	76.17
12.00	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.067	0.000	8.520	0.00	4.10
12.00	10"x1/2" Bent plate	Yes	0.50	0.000	3.56	0.29	0.00	0.067	0.000	8.520	0.00	25.45
14.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	8.406	0.00	16.60
14.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.18	0.00	0.067	0.000	8.406	0.00	102.63
14.16	1.6" Hybrid	Yes	0.16	0.000	0.00	0.00	0.00	0.067	0.000	8.397	0.00	1.33
14.16	10"x1/2" Bent plate	Yes	0.16	0.000	3.56	0.09	0.00	0.067	0.000	8.397	0.00	8.22
14.84	1.6" Hybrid	Yes	0.68	0.000	0.00	0.00	0.00	0.067	0.000	8.359	0.00	5.67
14.84	10"x1/2" Bent plate	Yes	0.68	0.000	3.56	0.40	0.00	0.067	0.000	8.359	0.00	35.00
16.00	1.6" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.067	0.000	8.295	0.00	9.73
16.00	10"x1/2" Bent plate	Yes	1.16	0.000	3.56	0.68	0.00	0.067	0.000	8.295	0.00	59.93
16.50	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.068	0.000	8.267	0.00	4.20
16.50	10"x1/2" Bent plate	Yes	0.50	0.000	3.56	0.30	0.00	0.068	0.000	8.267	0.00	25.87
18.00	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.068	0.000	8.187	0.00	12.68
18.00	10"x1/2" Bent plate	Yes	1.50	0.000	3.56	0.89	0.00	0.068	0.000	8.187	0.00	77.93
20.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	8.082	0.00	17.03
20.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.19	0.00	0.068	0.000	8.082	0.00	104.39
21.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	8.031	0.00	8.54
21.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.60	0.00	0.069	0.000	8.031	0.00	52.30
22.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	7.980	0.00	8.57
22.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.60	0.00	0.069	0.000	7.980	0.00	52.40
24.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	7.882	0.00	17.22
24.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.19	0.00	0.069	0.000	7.882	0.00	105.16
26.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	7.786	0.00	17.30
26.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.20	0.00	0.070	0.000	7.786	0.00	105.47
28.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	7.693	0.00	17.36
28.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.20	0.00	0.071	0.000	7.693	0.00	105.73
30.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	7.609	0.00	17.42
30.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.20	0.00	0.071	0.000	7.609	0.00	105.96
32.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	7.661	0.00	17.47
32.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.20	0.00	0.072	0.000	7.661	0.00	106.16
34.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	7.707	0.00	17.51
34.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.20	0.00	0.072	0.000	7.707	0.00	106.33
36.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	7.746	0.00	17.55
36.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.20	0.00	0.073	0.000	7.746	0.00	106.48
37.06	1.6" Hybrid	Yes	1.06	0.000	0.00	0.00	0.00	0.073	0.000	7.765	0.00	9.31

Linear Appurtenance Segment Forces (Factored)

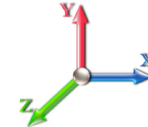
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 25

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)
37.06	10"x1/2" Bent plate	Yes	1.06	0.000	3.56	0.64	0.00	0.073	0.000	7.765	0.00	56.47
37.96	1.6" Hybrid	Yes	0.90	0.000	0.00	0.00	0.00	0.074	0.000	7.780	0.00	7.91
37.96	10"x1/2" Bent plate	Yes	0.90	0.000	3.56	0.54	0.00	0.074	0.000	7.780	0.00	47.98
38.00	1.6" Hybrid	Yes	0.04	0.000	0.00	0.00	0.00	0.074	0.000	7.781	0.00	0.35
38.00	10"x1/2" Bent plate	Yes	0.04	0.000	3.56	0.02	0.00	0.074	0.000	7.781	0.00	2.13
40.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	7.811	0.00	17.61
40.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.21	0.00	0.074	0.000	7.811	0.00	106.73
41.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.075	0.000	7.824	0.00	8.81
41.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.60	0.00	0.075	0.000	7.824	0.00	53.39
42.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.075	0.000	7.837	0.00	8.82
42.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.60	0.00	0.075	0.000	7.837	0.00	53.41
44.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	7.859	0.00	17.66
44.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.21	0.00	0.074	0.000	7.859	0.00	106.91
46.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	7.878	0.00	17.68
46.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.21	0.00	0.075	0.000	7.878	0.00	106.98
48.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	7.895	0.00	17.69
48.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.21	0.00	0.075	0.000	7.895	0.00	107.04
50.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	7.909	0.00	17.71
50.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.21	0.00	0.076	0.000	7.909	0.00	107.10
52.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	7.921	0.00	17.72
52.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.21	0.00	0.077	0.000	7.921	0.00	107.14
54.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	7.931	0.00	17.73
54.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.21	0.00	0.077	0.000	7.931	0.00	107.18
56.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	7.939	0.00	17.73
56.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	1.21	0.00	0.078	0.000	7.939	0.00	107.21
57.11	1.6" Hybrid	Yes	1.11	0.000	0.00	0.00	0.00	0.078	0.000	7.943	0.00	9.84
57.11	10"x1/2" Bent plate	Yes	1.11	0.000	3.56	0.67	0.00	0.078	0.000	7.943	0.00	59.51
58.00	1.6" Hybrid	Yes	0.89	0.000	0.00	0.00	0.00	0.079	0.000	7.946	0.00	7.89
58.00	10"x1/2" Bent plate	Yes	0.89	0.000	3.56	0.54	0.00	0.079	0.000	7.946	0.00	47.72
58.50	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.028	0.000	7.947	0.00	4.44
58.50	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.21	0.00	0.028	0.000	7.947	0.00	4.98
60.00	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.028	0.000	7.951	0.00	13.31
60.00	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.62	0.00	0.028	0.000	7.951	0.00	14.94
62.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	7.955	0.00	17.75
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.028	0.000	7.955	0.00	19.92
64.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	7.958	0.00	17.75
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.028	0.000	7.958	0.00	19.92
66.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	7.961	0.00	17.75
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.029	0.000	7.961	0.00	19.93
68.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	7.962	0.00	17.76
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.029	0.000	7.962	0.00	19.93
70.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	7.963	0.00	17.76
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.029	0.000	7.963	0.00	19.93
72.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	7.963	0.00	17.76
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.029	0.000	7.963	0.00	19.93
74.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	7.962	0.00	17.76
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.030	0.000	7.962	0.00	19.93

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



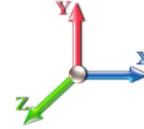
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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 25

Dead Load Factor 1.20

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
76.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	7.962	0.00	17.76
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.030	0.000	7.962	0.00	19.93
78.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	7.960	0.00	17.75
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.030	0.000	7.960	0.00	19.93
80.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	7.959	0.00	17.75
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.030	0.000	7.959	0.00	19.92
82.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	7.957	0.00	17.75
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.030	0.000	7.957	0.00	19.92
84.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	7.955	0.00	17.75
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.031	0.000	7.955	0.00	19.92
86.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	7.952	0.00	17.75
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.031	0.000	7.952	0.00	19.92
88.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	7.950	0.00	17.74
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.031	0.000	7.950	0.00	19.91
90.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	7.947	0.00	17.74
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.032	0.000	7.947	0.00	19.91
92.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	7.945	0.00	17.74
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.032	0.000	7.945	0.00	19.91
94.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	7.942	0.00	17.74
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.032	0.000	7.942	0.00	19.90
96.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	7.939	0.00	17.73
96.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.033	0.000	7.939	0.00	19.90
98.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	7.937	0.00	17.73
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.033	0.000	7.937	0.00	19.90
100.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	7.934	0.00	17.73
100.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.033	0.000	7.934	0.00	19.89
102.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	7.932	0.00	17.73
102.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.034	0.000	7.932	0.00	19.89
104.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	7.929	0.00	17.72
104.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.034	0.000	7.929	0.00	19.89
106.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	7.927	0.00	17.72
106.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.034	0.000	7.927	0.00	19.89
108.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	7.925	0.00	17.72
108.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.035	0.000	7.925	0.00	19.88
110.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	7.923	0.00	17.72
110.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.035	0.000	7.923	0.00	19.88
112.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	7.921	0.00	17.72
112.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.035	0.000	7.921	0.00	19.88
113.50	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.036	0.000	7.919	0.00	13.29
113.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.62	0.00	0.036	0.000	7.919	0.00	14.91
114.00	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.036	0.000	7.919	0.00	4.43
114.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.21	0.00	0.036	0.000	7.919	0.00	4.97
115.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.036	0.000	7.918	0.00	8.86
115.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.41	0.00	0.036	0.000	7.918	0.00	9.94
116.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	7.917	0.00	8.86
117.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	7.916	0.00	8.86

Linear Appurtenance Segment Forces (Factored)

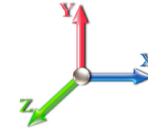
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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

Dead Load Factor 1.20
Wind Load Factor 1.00



Iterations 25

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	4,606.0

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II

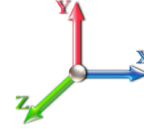


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Load Case: 1.2D + 1.0Di + 1.0Wi 50 mph Wind

Iterations 25

Dead Load Factor 1.20
Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-93.16	-11.83	0.00	-1283.9	0.00	1283.90	4048.32	2024.16	8933.65	4411.99	0.00	0.000	0.000	0.215
2.00	-92.15	-11.74	0.00	-1260.2	0.00	1260.25	4032.02	2016.01	8833.50	4362.53	0.00	-0.018	0.000	0.213
4.00	-91.13	-11.65	0.00	-1236.7	0.00	1236.78	4015.53	2007.77	8733.46	4313.13	0.02	-0.037	0.000	0.211
6.00	-90.11	-11.56	0.00	-1213.4	0.00	1213.48	3998.87	1999.43	8633.56	4263.79	0.04	-0.055	0.000	0.209
8.00	-89.09	-11.48	0.00	-1190.3	0.00	1190.35	3982.01	1991.01	8533.79	4214.52	0.06	-0.073	0.000	0.207
10.00	-88.06	-11.39	0.00	-1167.3	0.00	1167.39	3964.98	1982.49	8434.18	4165.32	0.10	-0.091	0.000	0.205
11.50	-87.30	-11.33	0.00	-1150.3	0.00	1150.30	3952.09	1976.04	8359.57	4128.48	0.13	-0.105	0.000	0.178
12.00	-87.04	-11.31	0.00	-1144.6	0.00	1144.64	3947.76	1973.88	8334.72	4116.20	0.14	-0.109	0.000	0.178
14.00	-86.02	-11.22	0.00	-1122.0	0.00	1122.02	3930.37	1965.18	8235.42	4067.17	0.19	-0.125	0.000	0.176
14.16	-85.94	-11.22	0.00	-1120.2	0.00	1120.22	3928.97	1964.48	8227.49	4063.25	0.19	-0.126	0.000	0.207
14.84	-85.60	-11.19	0.00	-1112.5	0.00	1112.59	3923.00	1961.50	8193.77	4046.60	0.21	-0.133	0.000	0.175
16.00	-85.01	-11.14	0.00	-1099.6	0.00	1099.61	3912.78	1956.39	8136.31	4018.22	0.24	-0.142	0.000	0.174
16.50	-84.75	-11.13	0.00	-1094.0	0.00	1094.04	3908.36	1954.18	8111.55	4005.99	0.26	-0.146	0.000	0.198
18.00	-83.99	-11.07	0.00	-1077.3	0.00	1077.35	3895.02	1947.51	8037.37	3969.35	0.31	-0.160	0.000	0.196
20.00	-82.98	-10.99	0.00	-1055.2	0.00	1055.20	3877.07	1938.54	7938.63	3920.59	0.38	-0.178	0.000	0.194
21.00	-82.48	-10.95	0.00	-1044.2	0.00	1044.21	3868.03	1934.02	7889.33	3896.24	0.42	-0.187	0.000	0.193
22.00	-81.98	-10.92	0.00	-1033.2	0.00	1033.25	3858.94	1929.47	7840.08	3871.92	0.46	-0.196	0.000	0.192
24.00	-80.98	-10.85	0.00	-1011.4	0.00	1011.41	3840.63	1920.32	7741.75	3823.36	0.54	-0.215	0.000	0.189
26.00	-79.98	-10.78	0.00	-989.70	0.00	989.70	3822.14	1911.07	7643.63	3774.90	0.64	-0.233	0.000	0.187
28.00	-78.99	-10.71	0.00	-968.14	0.00	968.14	3803.46	1901.73	7545.74	3726.56	0.74	-0.251	0.000	0.185
30.00	-78.01	-10.64	0.00	-946.73	0.00	946.73	3784.60	1892.30	7448.09	3678.33	0.85	-0.269	0.000	0.183
32.00	-77.03	-10.57	0.00	-925.45	0.00	925.45	3765.56	1882.78	7350.68	3630.22	0.96	-0.287	0.000	0.180
34.00	-76.05	-10.50	0.00	-904.31	0.00	904.31	3746.34	1873.17	7253.52	3582.24	1.09	-0.305	0.000	0.178
36.00	-75.08	-10.42	0.00	-883.32	0.00	883.32	3726.93	1863.47	7156.62	3534.39	1.22	-0.323	0.000	0.176
37.06	-74.32	-10.38	0.00	-872.27	0.00	872.27	3716.57	1858.29	7105.38	3509.08	1.29	-0.333	0.000	0.214
37.96	-73.68	-10.34	0.00	-862.93	0.00	862.93	3707.74	1853.87	7061.93	3487.62	1.36	-0.343	0.000	0.172
38.00	-73.65	-10.35	0.00	-862.51	0.00	862.51	3707.34	1853.67	7060.00	3486.67	1.36	-0.343	0.000	0.172
40.00	-72.23	-10.27	0.00	-841.81	0.00	841.81	3687.57	1843.78	6963.65	3439.09	1.51	-0.361	0.000	0.169
41.00	-71.52	-10.23	0.00	-831.53	0.00	831.53	3677.62	1838.81	6915.58	3415.35	1.59	-0.370	0.000	0.168
42.00	-70.82	-10.20	0.00	-821.30	0.00	821.30	3033.05	1516.53	5788.55	2858.75	1.66	-0.379	0.000	0.180
44.00	-69.93	-10.13	0.00	-800.90	0.00	800.90	3018.90	1509.45	5713.49	2821.68	1.83	-0.397	0.000	0.188
46.00	-69.05	-10.05	0.00	-780.65	0.00	780.65	3004.56	1502.28	5638.53	2784.66	2.00	-0.415	0.000	0.185
48.00	-68.17	-9.98	0.00	-760.54	0.00	760.54	2990.04	1495.02	5563.69	2747.70	2.17	-0.434	0.000	0.182
50.00	-67.30	-9.91	0.00	-740.58	0.00	740.58	2975.34	1487.67	5488.97	2710.80	2.36	-0.452	0.000	0.179
52.00	-66.43	-9.83	0.00	-720.77	0.00	720.77	2960.46	1480.23	5414.39	2673.96	2.55	-0.470	0.000	0.176
54.00	-65.57	-9.76	0.00	-701.10	0.00	701.10	2945.39	1472.69	5339.95	2637.20	2.75	-0.489	0.000	0.173
56.00	-64.72	-9.68	0.00	-681.58	0.00	681.58	2930.14	1465.07	5265.67	2600.52	2.96	-0.507	0.000	0.170
57.11	-64.24	-9.64	0.00	-670.83	0.00	670.83	2921.60	1460.80	5224.51	2580.19	3.08	-0.517	0.000	0.215
58.00	-63.87	-9.61	0.00	-662.24	0.00	662.24	2914.71	1457.35	5191.54	2563.91	3.18	-0.527	0.000	0.166
58.50	-63.67	-9.60	0.00	-657.44	0.00	657.44	2910.82	1455.41	5173.04	2554.77	3.23	-0.532	0.000	0.202
60.00	-63.10	-9.55	0.00	-643.04	0.00	643.04	2899.09	1449.55	5117.58	2527.38	3.40	-0.548	0.000	0.200
62.00	-62.33	-9.48	0.00	-623.94	0.00	623.94	2883.30	1441.65	5043.81	2490.95	3.64	-0.569	0.000	0.196
64.00	-61.58	-9.41	0.00	-604.98	0.00	604.98	2867.32	1433.66	4970.21	2454.60	3.88	-0.591	0.000	0.193
66.00	-60.83	-9.35	0.00	-586.15	0.00	586.15	2851.15	1425.58	4896.82	2418.35	4.13	-0.612	0.000	0.189
68.00	-60.08	-9.28	0.00	-567.46	0.00	567.46	2834.81	1417.40	4823.62	2382.21	4.40	-0.633	0.000	0.186
70.00	-59.34	-9.21	0.00	-548.91	0.00	548.91	2818.28	1409.14	4750.64	2346.16	4.67	-0.654	0.000	0.182
72.00	-58.27	-9.14	0.00	-530.49	0.00	530.49	2801.57	1400.79	4677.88	2310.23	4.94	-0.675	0.000	0.177
74.00	-57.20	-9.06	0.00	-512.22	0.00	512.22	2784.68	1392.34	4605.35	2274.41	5.23	-0.695	0.000	0.173

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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76.00	-56.14	-8.99	0.00	-494.10	0.00	494.10	2161.97	1080.98	3608.45	1782.08	5.53	-0.716	0.000	0.192
78.00	-55.48	-8.92	0.00	-476.13	0.00	476.13	2151.06	1075.53	3556.01	1756.18	5.83	-0.736	0.000	0.206
80.00	-54.82	-8.85	0.00	-458.29	0.00	458.29	2139.97	1069.98	3503.61	1730.30	6.14	-0.758	0.000	0.201
82.00	-54.17	-8.79	0.00	-440.58	0.00	440.58	2128.69	1064.35	3451.27	1704.45	6.47	-0.780	0.000	0.196
84.00	-53.53	-8.72	0.00	-423.01	0.00	423.01	2117.24	1058.62	3398.99	1678.63	6.80	-0.802	0.000	0.190
86.00	-52.89	-8.65	0.00	-405.57	0.00	405.57	2105.60	1052.80	3346.79	1652.86	7.14	-0.824	0.000	0.185
88.00	-52.25	-8.59	0.00	-388.26	0.00	388.26	2093.78	1046.89	3294.68	1627.12	7.49	-0.845	0.000	0.180
90.00	-51.62	-8.52	0.00	-371.09	0.00	371.09	2081.77	1040.89	3242.65	1601.42	7.85	-0.865	0.000	0.174
92.00	-50.99	-8.45	0.00	-354.05	0.00	354.05	2069.59	1034.79	3190.73	1575.78	8.21	-0.886	0.000	0.169
94.00	-50.37	-8.39	0.00	-337.14	0.00	337.14	2057.22	1028.61	3138.91	1550.19	8.59	-0.905	0.000	0.163
96.00	-49.76	-8.32	0.00	-320.37	0.00	320.37	2044.67	1022.33	3087.22	1524.66	8.97	-0.925	0.000	0.170
98.00	-49.15	-8.26	0.00	-303.73	0.00	303.73	2031.93	1015.97	3035.65	1499.19	9.37	-0.945	0.000	0.164
100.00	-48.54	-8.19	0.00	-287.22	0.00	287.22	2019.02	1009.51	2984.22	1473.79	9.77	-0.965	0.000	0.158
100.00	-48.54	-8.19	0.00	-287.22	0.00	287.22	1394.49	697.25	2068.33	1021.47	9.77	-0.965	0.000	0.183
102.00	-48.00	-8.13	0.00	-270.84	0.00	270.84	1387.39	693.70	2035.72	1005.36	10.17	-0.984	0.000	0.205
104.00	-47.47	-8.06	0.00	-254.58	0.00	254.58	1380.13	690.06	2003.09	989.25	10.59	-1.006	0.000	0.196
106.00	-46.93	-8.00	0.00	-238.46	0.00	238.46	1372.69	686.35	1970.45	973.13	11.02	-1.027	0.000	0.187
108.00	-46.40	-7.94	0.00	-222.45	0.00	222.45	1365.09	682.55	1937.81	957.01	11.45	-1.048	0.000	0.177
110.00	-45.88	-7.88	0.00	-206.57	0.00	206.57	1357.32	678.66	1905.17	940.89	11.90	-1.067	0.000	0.168
112.00	-45.36	-7.81	0.00	-190.82	0.00	190.82	1349.39	674.69	1872.56	924.79	12.35	-1.085	0.000	0.158
113.50	-44.97	-7.76	0.00	-179.11	0.00	179.11	1343.33	671.66	1848.11	912.71	12.69	-1.099	0.000	0.151
113.50	-44.97	-7.76	0.00	-179.11	0.00	179.11	1343.33	671.66	1848.11	912.71	12.69	-1.099	0.000	0.151
114.00	-44.85	-7.75	0.00	-175.23	0.00	175.23	1341.28	670.64	1839.96	908.69	12.81	-1.103	0.000	0.226
115.00	-44.59	-7.72	0.00	-167.48	0.00	167.48	1337.17	668.58	1823.68	900.65	13.04	-1.116	0.000	0.219
116.00	-44.23	-7.69	0.00	-159.76	0.00	159.76	1333.01	666.51	1807.40	892.61	13.27	-1.129	0.000	0.212
117.00	-38.63	-6.51	0.00	-152.07	0.00	152.07	1328.82	664.41	1791.13	884.57	13.51	-1.141	0.000	0.201
118.00	-38.29	-6.48	0.00	-145.56	0.00	145.56	1324.58	662.29	1774.88	876.54	13.75	-1.153	0.000	0.195
120.00	-37.60	-6.41	0.00	-132.61	0.00	132.61	1327.18	663.59	1784.85	881.47	14.24	-1.175	0.000	0.179
122.00	-37.14	-6.35	0.00	-119.79	0.00	119.79	1318.63	659.32	1752.36	865.43	14.74	-1.196	0.000	0.167
124.00	-36.68	-6.29	0.00	-107.09	0.00	107.09	1309.91	654.95	1719.92	849.40	15.24	-1.215	0.000	0.154
126.00	-36.22	-6.22	0.00	-94.51	0.00	94.51	1301.02	650.51	1687.54	833.41	15.76	-1.233	0.000	0.141
127.00	-28.13	-4.79	0.00	-88.29	0.00	88.29	1296.51	648.26	1671.38	825.43	16.01	-1.241	0.000	0.129
128.00	-27.92	-4.76	0.00	-83.50	0.00	83.50	1291.97	645.98	1655.23	817.46	16.28	-1.249	0.000	0.124
130.00	-27.51	-4.70	0.00	-73.97	0.00	73.97	1282.74	641.37	1623.00	801.54	16.80	-1.263	0.000	0.114
132.00	-27.10	-4.63	0.00	-64.58	0.00	64.58	1273.35	636.68	1590.85	785.66	17.33	-1.276	0.000	0.104
134.00	-26.70	-4.57	0.00	-55.31	0.00	55.31	1263.80	631.90	1558.80	769.83	17.87	-1.288	0.000	0.093
136.00	-26.30	-4.50	0.00	-46.18	0.00	46.18	1254.07	627.04	1526.84	754.05	18.41	-1.299	0.000	0.082
137.00	-18.53	-3.16	0.00	-41.68	0.00	41.68	1249.15	624.57	1510.90	746.18	18.69	-1.304	0.000	0.071
138.00	-18.34	-3.13	0.00	-38.51	0.00	38.51	1244.18	622.09	1494.99	738.32	18.96	-1.308	0.000	0.067
140.00	-17.96	-3.07	0.00	-32.25	0.00	32.25	1234.12	617.06	1463.26	722.65	19.51	-1.316	0.000	0.059
142.00	-17.59	-3.00	0.00	-26.12	0.00	26.12	1223.90	611.95	1431.66	707.04	20.06	-1.323	0.000	0.051
144.00	-17.22	-2.94	0.00	-20.11	0.00	20.11	1213.50	606.75	1400.19	691.50	20.62	-1.328	0.000	0.043
146.00	-16.85	-2.87	0.00	-14.24	0.00	14.24	1202.94	601.47	1368.85	676.02	21.18	-1.333	0.000	0.035
147.00	-9.03	-1.52	0.00	-11.37	0.00	11.37	1197.60	598.80	1353.24	668.32	21.46	-1.334	0.000	0.025
148.00	-8.85	-1.49	0.00	-9.85	0.00	9.85	1192.22	596.11	1337.67	660.62	21.74	-1.336	0.000	0.022
150.00	-8.50	-1.42	0.00	-6.88	0.00	6.88	1181.32	590.66	1306.64	645.30	22.30	-1.338	0.000	0.018
152.00	-8.16	-1.36	0.00	-4.03	0.00	4.03	1170.26	585.13	1275.78	630.06	22.86	-1.340	0.000	0.013
153.00	-7.88	-1.29	0.00	-2.67	0.00	2.67	1164.66	582.33	1260.41	622.47	23.14	-1.340	0.000	0.011
154.00	-7.71	-1.26	0.00	-1.38	0.00	1.38	1159.03	579.51	1245.09	614.90	23.42	-1.341	0.000	0.009
155.00	0.00	-1.08	0.00	-0.13	0.00	0.13	1153.35	576.68	1229.81	607.36	23.70	-1.341	0.000	0.000

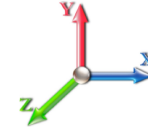
Seismic Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 1.2D + 1.0E				Iterations 23
Gust Response Factor	1.10	Sds	0.18	Ss 0.17
Dead Load Factor	1.20	Seismic Load Factor	1.00	S1 0.06
Wind Load Factor	0.00	Structure Frequency (f1)	0.30	SA 0.03
				Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00	RB1 RB2	0.00	0.00	0.00	0.00	0.00	
2.00		505.63	0.00	0.01	0.01	4.80	
4.00		502.00	0.00	0.03	0.01	8.00	
6.00		498.37	0.00	0.04	0.02	10.24	
8.00		494.74	0.01	0.04	0.03	11.85	
10.00		491.11	0.01	0.05	0.03	13.01	
11.50	RB3	365.95	0.01	0.06	0.03	10.24	
12.00		121.53	0.01	0.06	0.03	3.45	
14.00		483.85	0.02	0.06	0.04	14.45	
14.16	RT2	38.55	0.02	0.06	0.04	1.16	
14.84	RB4	163.58	0.02	0.06	0.04	4.97	
16.00		278.08	0.02	0.06	0.04	8.61	
16.50	RT3	119.49	0.02	0.06	0.04	3.73	
18.00		357.10	0.03	0.07	0.04	11.37	
20.00		472.95	0.03	0.07	0.04	15.37	
21.00	RT1 RB5	235.12	0.03	0.07	0.04	7.71	
22.00		234.21	0.04	0.07	0.04	7.74	
24.00		465.69	0.05	0.07	0.04	15.59	
26.00		462.06	0.05	0.07	0.04	15.65	
28.00		458.43	0.06	0.07	0.04	15.68	
30.00		454.80	0.07	0.07	0.04	15.71	
32.00		451.17	0.08	0.07	0.04	15.73	
34.00		447.54	0.09	0.07	0.04	15.75	
36.00	Bot - Section 2	443.91	0.10	0.07	0.04	15.77	
37.06	RT4	439.75	0.11	0.07	0.04	15.70	
37.96	RB6	371.88	0.11	0.07	0.04	13.33	
38.00		16.50	0.11	0.07	0.04	0.59	
40.00		821.35	0.13	0.07	0.03	29.72	
41.00	RT5 RB7	408.14	0.13	0.07	0.03	14.83	
42.00	Top - Section 1	406.44	0.14	0.07	0.03	14.83	
44.00		378.42	0.15	0.07	0.03	13.91	
46.00		375.28	0.17	0.07	0.03	13.88	
48.00		372.13	0.18	0.06	0.03	13.81	
50.00		368.99	0.20	0.06	0.02	13.70	
52.00		365.85	0.21	0.06	0.02	13.54	
54.00		362.70	0.23	0.06	0.02	13.31	
56.00		359.56	0.25	0.06	0.02	13.01	
57.11	RT6	198.20	0.26	0.05	0.02	7.09	
58.00	RB8	158.22	0.26	0.05	0.02	5.59	
58.50	RT7	88.61	0.27	0.05	0.02	3.11	
60.00		264.66	0.28	0.05	0.01	9.05	
62.00		350.13	0.30	0.04	0.01	11.44	
64.00		346.98	0.32	0.04	0.01	10.65	
66.00		343.84	0.34	0.03	0.01	9.72	
68.00		340.69	0.36	0.03	0.01	8.62	
70.00	Bot - Section 3	337.55	0.39	0.02	0.01	7.35	

Seismic Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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72.00		617.79	0.41	0.02	0.01	10.96
74.00		612.02	0.43	0.01	0.01	8.07
76.00	Top - Section 2 RT8 RB9	606.26	0.45	0.00	0.01	4.97
78.00		275.52	0.48	-0.01	0.01	0.79
80.00		272.90	0.50	-0.02	0.01	-0.73
82.00		270.28	0.53	-0.03	0.01	-2.23
84.00		267.66	0.56	-0.04	0.01	-3.68
86.00		265.04	0.58	-0.05	0.01	-5.03
88.00		262.42	0.61	-0.06	0.02	-6.23
90.00		259.80	0.64	-0.07	0.02	-7.28
92.00		257.18	0.67	-0.08	0.02	-8.14
94.00		254.56	0.70	-0.09	0.03	-8.80
96.00	RT9 RB10	251.94	0.73	-0.09	0.03	-9.26
98.00		249.32	0.76	-0.10	0.04	-9.52
100.00	Top - Section 3	246.70	0.79	-0.11	0.05	-9.58
102.00		195.61	0.82	-0.12	0.06	-7.58
104.00		193.51	0.85	-0.12	0.07	-7.33
106.00		191.42	0.88	-0.12	0.08	-6.95
108.00		189.32	0.92	-0.12	0.09	-6.43
110.00		187.22	0.95	-0.12	0.11	-5.78
112.00		185.13	0.99	-0.11	0.12	-5.02
113.50	RT10	137.47	1.01	-0.11	0.14	-3.27
114.00		45.56	1.02	-0.10	0.14	-1.03
115.00	Bot - Section 5	90.73	1.04	-0.10	0.15	-1.82
116.00		181.78	1.06	-0.09	0.16	-3.16
117.00	Appurtenance(s)	2558.7	1.08	-0.08	0.17	-37.22
118.00		179.69	1.10	-0.07	0.18	-2.07
120.00	Top - Section 4	356.23	1.13	-0.05	0.21	-1.74
122.00		177.39	1.17	-0.02	0.23	0.43
124.00		175.29	1.21	0.01	0.26	1.83
126.00		173.19	1.25	0.06	0.29	3.32
127.00	Appurtenance(s)	3127.7	1.27	0.08	0.31	74.36
128.00		85.29	1.29	0.11	0.33	2.44
130.00		169.00	1.33	0.16	0.36	6.55
132.00		166.91	1.37	0.23	0.40	8.28
134.00		164.81	1.41	0.31	0.44	10.09
136.00		162.72	1.46	0.40	0.49	11.96
137.00	Appurtenance(s)	3594.2	1.48	0.44	0.52	287.44
138.00		80.05	1.50	0.50	0.54	6.93
140.00		158.52	1.54	0.61	0.59	15.92
142.00		156.43	1.59	0.74	0.65	17.99
144.00		154.33	1.63	0.88	0.71	20.11
146.00		152.24	1.68	1.04	0.78	22.29
147.00	Appurtenance(s)	3275.6	1.70	1.12	0.81	506.93
148.00		74.81	1.72	1.21	0.85	12.22
150.00		148.04	1.77	1.41	0.93	26.79
152.00		145.95	1.82	1.62	1.01	29.10
153.00	Appurtenance(s)	136.69	1.84	1.73	1.05	28.56
154.00		71.66	1.87	1.85	1.09	15.67
155.00	Appurtenance(s)	2951.4	1.89	1.98	1.14	674.62
Totals:		41,186.0				2,152.1

Total Wind: 54,532.6

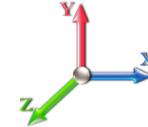
Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



Load Case: 1.2D + 1.0E										Iterations 23
Gust Response Factor 1.10					Sds 0.18					Ss 0.17
Dead Load Factor 1.20			Seismic Load Factor 1.00			Sd1 0.10			S1 0.06	
Wind Load Factor 0.00		Structure Frequency (f1) 0.30		SA 0.03		Seismic Importance Factor 1.00				



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-55.57	-2.31	0.00	-294.03	0.00	294.03	4048.32	2024.16	8933.65	4411.99	0.00	0.00	0.00	0.055
2.00	-54.88	-2.31	0.00	-289.40	0.00	289.40	4032.02	2016.01	8833.50	4362.53	0.00	0.00	0.00	0.054
4.00	-54.20	-2.31	0.00	-284.78	0.00	284.78	4015.53	2007.77	8733.46	4313.13	0.00	-0.01	0.00	0.054
6.00	-53.52	-2.30	0.00	-280.17	0.00	280.17	3998.87	1999.43	8633.56	4263.79	0.01	-0.01	0.00	0.054
8.00	-52.84	-2.29	0.00	-275.56	0.00	275.56	3982.01	1991.01	8533.79	4214.52	0.01	-0.02	0.00	0.053
10.00	-52.17	-2.28	0.00	-270.98	0.00	270.98	3964.98	1982.49	8434.18	4165.32	0.02	-0.02	0.00	0.053
11.50	-51.67	-2.27	0.00	-267.55	0.00	267.55	3952.09	1976.04	8359.57	4128.48	0.03	-0.02	0.00	0.046
12.00	-51.50	-2.27	0.00	-266.42	0.00	266.42	3947.76	1973.88	8334.72	4116.20	0.03	-0.03	0.00	0.046
14.00	-50.84	-2.26	0.00	-261.87	0.00	261.87	3930.37	1965.18	8235.42	4067.17	0.04	-0.03	0.00	0.046
14.16	-50.79	-2.26	0.00	-261.51	0.00	261.51	3928.97	1964.48	8227.49	4063.25	0.04	-0.03	0.00	0.054
14.84	-50.56	-2.26	0.00	-259.97	0.00	259.97	3923.00	1961.50	8193.77	4046.60	0.05	-0.03	0.00	0.046
16.00	-50.18	-2.25	0.00	-257.36	0.00	257.36	3912.78	1956.39	8136.31	4018.22	0.06	-0.03	0.00	0.045
16.50	-50.02	-2.25	0.00	-256.23	0.00	256.23	3908.36	1954.18	8111.55	4005.99	0.06	-0.03	0.00	0.051
18.00	-49.53	-2.24	0.00	-252.86	0.00	252.86	3895.02	1947.51	8037.37	3969.35	0.07	-0.04	0.00	0.051
20.00	-48.88	-2.23	0.00	-248.39	0.00	248.39	3877.07	1938.54	7938.63	3920.59	0.09	-0.04	0.00	0.051
21.00	-48.56	-2.22	0.00	-246.16	0.00	246.16	3868.03	1934.02	7889.33	3896.24	0.10	-0.04	0.00	0.050
22.00	-48.23	-2.21	0.00	-243.94	0.00	243.94	3858.94	1929.47	7840.08	3871.92	0.11	-0.05	0.00	0.050
24.00	-47.59	-2.20	0.00	-239.52	0.00	239.52	3840.63	1920.32	7741.75	3823.36	0.13	-0.05	0.00	0.050
26.00	-46.96	-2.19	0.00	-235.11	0.00	235.11	3822.14	1911.07	7643.63	3774.90	0.15	-0.05	0.00	0.049
28.00	-46.32	-2.18	0.00	-230.74	0.00	230.74	3803.46	1901.73	7545.74	3726.56	0.17	-0.06	0.00	0.049
30.00	-45.70	-2.16	0.00	-226.39	0.00	226.39	3784.60	1892.30	7448.09	3678.33	0.20	-0.06	0.00	0.048
32.00	-45.07	-2.15	0.00	-222.06	0.00	222.06	3765.56	1882.78	7350.68	3630.22	0.22	-0.07	0.00	0.048
34.00	-44.45	-2.14	0.00	-217.76	0.00	217.76	3746.34	1873.17	7253.52	3582.24	0.25	-0.07	0.00	0.047
36.00	-43.84	-2.12	0.00	-213.49	0.00	213.49	3726.93	1863.47	7156.62	3534.39	0.28	-0.08	0.00	0.047
37.06	-43.27	-2.11	0.00	-211.24	0.00	211.24	3716.57	1858.29	7105.38	3509.08	0.30	-0.08	0.00	0.057
37.96	-42.79	-2.09	0.00	-209.34	0.00	209.34	3707.74	1853.87	7061.93	3487.62	0.32	-0.08	0.00	0.046
38.00	-42.76	-2.10	0.00	-209.26	0.00	209.26	3707.34	1853.67	7060.00	3486.67	0.32	-0.08	0.00	0.046
40.00	-41.70	-2.07	0.00	-205.07	0.00	205.07	3687.57	1843.78	6963.65	3439.09	0.35	-0.09	0.00	0.045
41.00	-41.17	-2.05	0.00	-203.00	0.00	203.00	3677.62	1838.81	6915.58	3415.35	0.37	-0.09	0.00	0.045
42.00	-40.64	-2.04	0.00	-200.95	0.00	200.95	3033.05	1516.53	5788.55	2858.75	0.39	-0.09	0.00	0.048
44.00	-40.10	-2.03	0.00	-196.87	0.00	196.87	3018.90	1509.45	5713.49	2821.68	0.43	-0.09	0.00	0.051
46.00	-39.57	-2.02	0.00	-192.81	0.00	192.81	3004.56	1502.28	5638.53	2784.66	0.47	-0.10	0.00	0.050
48.00	-39.04	-2.00	0.00	-188.78	0.00	188.78	2990.04	1495.02	5563.69	2747.70	0.51	-0.10	0.00	0.050
50.00	-38.52	-1.99	0.00	-184.77	0.00	184.77	2975.34	1487.67	5488.97	2710.80	0.55	-0.11	0.00	0.049
52.00	-38.00	-1.98	0.00	-180.78	0.00	180.78	2960.46	1480.23	5414.39	2673.96	0.60	-0.11	0.00	0.048
54.00	-37.48	-1.97	0.00	-176.82	0.00	176.82	2945.39	1472.69	5339.95	2637.20	0.65	-0.12	0.00	0.048
56.00	-36.97	-1.96	0.00	-172.88	0.00	172.88	2930.14	1465.07	5265.67	2600.52	0.70	-0.12	0.00	0.047
57.11	-36.68	-1.95	0.00	-170.71	0.00	170.71	2921.60	1460.80	5224.51	2580.19	0.73	-0.12	0.00	0.060
58.00	-36.46	-1.95	0.00	-168.97	0.00	168.97	2914.71	1457.35	5191.54	2563.91	0.75	-0.13	0.00	0.046
58.50	-36.33	-1.95	0.00	-168.00	0.00	168.00	2910.82	1455.41	5173.04	2554.77	0.76	-0.13	0.00	0.057
60.00	-35.94	-1.94	0.00	-165.08	0.00	165.08	2899.09	1449.55	5117.58	2527.38	0.80	-0.13	0.00	0.056
62.00	-35.43	-1.93	0.00	-161.20	0.00	161.20	2883.30	1441.65	5043.81	2490.95	0.86	-0.14	0.00	0.056
64.00	-34.92	-1.92	0.00	-157.34	0.00	157.34	2867.32	1433.66	4970.21	2454.60	0.92	-0.14	0.00	0.055
66.00	-34.41	-1.91	0.00	-153.50	0.00	153.50	2851.15	1425.58	4896.82	2418.35	0.98	-0.15	0.00	0.054
68.00	-33.91	-1.91	0.00	-149.67	0.00	149.67	2834.81	1417.40	4823.62	2382.21	1.04	-0.15	0.00	0.054
70.00	-33.41	-1.90	0.00	-145.86	0.00	145.86	2818.28	1409.14	4750.64	2346.16	1.11	-0.16	0.00	0.053
72.00	-32.58	-1.89	0.00	-142.05	0.00	142.05	2801.57	1400.79	4677.88	2310.23	1.18	-0.17	0.00	0.052

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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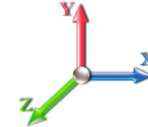
74.00	-31.75	-1.88	0.00	-138.27	0.00	138.27	2784.68	1392.34	4605.35	2274.41	1.25	-0.17	0.051
76.00	-30.93	-1.88	0.00	-134.50	0.00	134.50	2161.97	1080.98	3608.45	1782.08	1.32	-0.18	0.057
78.00	-30.51	-1.88	0.00	-130.74	0.00	130.74	2151.06	1075.53	3556.01	1756.18	1.39	-0.18	0.062
80.00	-30.09	-1.88	0.00	-126.98	0.00	126.98	2139.97	1069.98	3503.61	1730.30	1.47	-0.19	0.061
82.00	-29.67	-1.88	0.00	-123.22	0.00	123.22	2128.69	1064.35	3451.27	1704.45	1.55	-0.19	0.059
84.00	-29.26	-1.89	0.00	-119.45	0.00	119.45	2117.24	1058.62	3398.99	1678.63	1.63	-0.20	0.058
86.00	-28.85	-1.89	0.00	-115.68	0.00	115.68	2105.60	1052.80	3346.79	1652.86	1.72	-0.21	0.057
88.00	-28.44	-1.89	0.00	-111.90	0.00	111.90	2093.78	1046.89	3294.68	1627.12	1.81	-0.21	0.056
90.00	-28.04	-1.89	0.00	-108.12	0.00	108.12	2081.77	1040.89	3242.65	1601.42	1.90	-0.22	0.055
92.00	-27.63	-1.89	0.00	-104.34	0.00	104.34	2069.59	1034.79	3190.73	1575.78	1.99	-0.22	0.054
94.00	-27.24	-1.89	0.00	-100.56	0.00	100.56	2057.22	1028.61	3138.91	1550.19	2.09	-0.23	0.053
96.00	-26.84	-1.89	0.00	-96.77	0.00	96.77	2044.67	1022.33	3087.22	1524.66	2.18	-0.24	0.056
98.00	-26.45	-1.90	0.00	-92.98	0.00	92.98	2031.93	1015.97	3035.65	1499.19	2.28	-0.24	0.054
100.00	-26.06	-1.90	0.00	-89.19	0.00	89.19	2019.02	1009.51	2984.22	1473.79	2.39	-0.25	0.053
100.00	-26.06	-1.90	0.00	-89.19	0.00	89.19	1394.49	697.25	2068.33	1021.47	2.39	-0.25	0.062
102.00	-25.73	-1.90	0.00	-85.40	0.00	85.40	1387.39	693.70	2035.72	1005.36	2.49	-0.25	0.070
104.00	-25.41	-1.90	0.00	-81.60	0.00	81.60	1380.13	690.06	2003.09	989.25	2.60	-0.26	0.068
106.00	-25.09	-1.90	0.00	-77.81	0.00	77.81	1372.69	686.35	1970.45	973.13	2.71	-0.27	0.066
108.00	-24.77	-1.90	0.00	-74.00	0.00	74.00	1365.09	682.55	1937.81	957.01	2.82	-0.27	0.064
110.00	-24.45	-1.90	0.00	-70.20	0.00	70.20	1357.32	678.66	1905.17	940.89	2.94	-0.28	0.061
112.00	-24.14	-1.90	0.00	-66.39	0.00	66.39	1349.39	674.69	1872.56	924.79	3.06	-0.29	0.059
113.50	-23.90	-1.90	0.00	-63.53	0.00	63.53	1343.33	671.66	1848.11	912.71	3.15	-0.29	0.058
113.50	-23.90	-1.90	0.00	-63.53	0.00	63.53	1343.33	671.66	1848.11	912.71	3.15	-0.29	0.058
114.00	-23.82	-1.91	0.00	-62.58	0.00	62.58	1341.28	670.64	1839.96	908.69	3.18	-0.29	0.087
115.00	-23.67	-1.91	0.00	-60.67	0.00	60.67	1337.17	668.58	1823.68	900.65	3.24	-0.30	0.085
116.00	-23.40	-1.91	0.00	-58.77	0.00	58.77	1333.01	666.51	1807.40	892.61	3.31	-0.30	0.083
117.00	-20.29	-1.89	0.00	-56.86	0.00	56.86	1328.82	664.41	1791.13	884.57	3.37	-0.31	0.080
118.00	-20.03	-1.89	0.00	-54.97	0.00	54.97	1324.58	662.29	1774.88	876.54	3.44	-0.31	0.078
120.00	-19.51	-1.89	0.00	-51.18	0.00	51.18	1327.18	663.59	1784.85	881.47	3.57	-0.32	0.073
122.00	-19.21	-1.89	0.00	-47.39	0.00	47.39	1318.63	659.32	1752.36	865.43	3.70	-0.33	0.069
124.00	-18.91	-1.89	0.00	-43.61	0.00	43.61	1309.91	654.95	1719.92	849.40	3.84	-0.34	0.066
126.00	-18.62	-1.89	0.00	-39.82	0.00	39.82	1301.02	650.51	1687.54	833.41	3.99	-0.34	0.062
127.00	-14.82	-1.79	0.00	-37.93	0.00	37.93	1296.51	648.26	1671.38	825.43	4.06	-0.35	0.057
128.00	-14.69	-1.79	0.00	-36.14	0.00	36.14	1291.97	645.98	1655.23	817.46	4.13	-0.35	0.056
130.00	-14.43	-1.78	0.00	-32.56	0.00	32.56	1282.74	641.37	1623.00	801.54	4.28	-0.36	0.052
132.00	-14.18	-1.78	0.00	-28.99	0.00	28.99	1273.35	636.68	1590.85	785.66	4.43	-0.36	0.048
134.00	-13.93	-1.77	0.00	-25.43	0.00	25.43	1263.80	631.90	1558.80	769.83	4.58	-0.37	0.044
136.00	-13.68	-1.75	0.00	-21.90	0.00	21.90	1254.07	627.04	1526.84	754.05	4.74	-0.37	0.040
137.00	-9.35	-1.44	0.00	-20.15	0.00	20.15	1249.15	624.57	1510.90	746.18	4.82	-0.38	0.034
138.00	-9.23	-1.43	0.00	-18.71	0.00	18.71	1244.18	622.09	1494.99	738.32	4.90	-0.38	0.033
140.00	-9.00	-1.41	0.00	-15.85	0.00	15.85	1234.12	617.06	1463.26	722.65	5.06	-0.38	0.029
142.00	-8.77	-1.39	0.00	-13.02	0.00	13.02	1223.90	611.95	1431.66	707.04	5.22	-0.38	0.026
144.00	-8.54	-1.37	0.00	-10.23	0.00	10.23	1213.50	606.75	1400.19	691.50	5.38	-0.39	0.022
146.00	-8.32	-1.35	0.00	-7.48	0.00	7.48	1202.94	601.47	1368.85	676.02	5.54	-0.39	0.018
147.00	-4.37	-0.82	0.00	-6.13	0.00	6.13	1197.60	598.80	1353.24	668.32	5.62	-0.39	0.013
148.00	-4.26	-0.80	0.00	-5.32	0.00	5.32	1192.22	596.11	1337.67	660.62	5.70	-0.39	0.012
150.00	-4.05	-0.78	0.00	-3.71	0.00	3.71	1181.32	590.66	1306.64	645.30	5.87	-0.39	0.009
152.00	-3.84	-0.75	0.00	-2.16	0.00	2.16	1170.26	585.13	1275.78	630.06	6.03	-0.39	0.007
153.00	-3.66	-0.72	0.00	-1.41	0.00	1.41	1164.66	582.33	1260.41	622.47	6.12	-0.39	0.005
154.00	-3.55	-0.70	0.00	-0.70	0.00	0.70	1159.03	579.51	1245.09	614.90	6.20	-0.39	0.004
155.00	0.00	-0.67	0.00	0.00	0.00	0.00	1153.35	576.68	1229.81	607.36	6.28	-0.39	0.000

Seismic Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



Load Case: 0.9D + 1.0E				Iterations 23
Gust Response Factor	1.10	Sds	0.18	Ss 0.17
Dead Load Factor	0.90	Seismic Load Factor	1.00	S1 0.06
Wind Load Factor	0.00	Structure Frequency (f1)	0.30	SA 0.03
				Seismic Importance Factor 1.00



Top Elev (ft)	Description	Wz (lb)	a	b	c	Lateral Fs (lb)	R: 1.50
0.00	RB1 RB2	0.00	0.00	0.00	0.00	0.00	
2.00		505.63	0.00	0.01	0.01	4.80	
4.00		502.00	0.00	0.03	0.01	8.00	
6.00		498.37	0.00	0.04	0.02	10.24	
8.00		494.74	0.01	0.04	0.03	11.85	
10.00		491.11	0.01	0.05	0.03	13.01	
11.50	RB3	365.95	0.01	0.06	0.03	10.24	
12.00		121.53	0.01	0.06	0.03	3.45	
14.00		483.85	0.02	0.06	0.04	14.45	
14.16	RT2	38.55	0.02	0.06	0.04	1.16	
14.84	RB4	163.58	0.02	0.06	0.04	4.97	
16.00		278.08	0.02	0.06	0.04	8.61	
16.50	RT3	119.49	0.02	0.06	0.04	3.73	
18.00		357.10	0.03	0.07	0.04	11.37	
20.00		472.95	0.03	0.07	0.04	15.37	
21.00	RT1 RB5	235.12	0.03	0.07	0.04	7.71	
22.00		234.21	0.04	0.07	0.04	7.74	
24.00		465.69	0.05	0.07	0.04	15.59	
26.00		462.06	0.05	0.07	0.04	15.65	
28.00		458.43	0.06	0.07	0.04	15.68	
30.00		454.80	0.07	0.07	0.04	15.71	
32.00		451.17	0.08	0.07	0.04	15.73	
34.00		447.54	0.09	0.07	0.04	15.75	
36.00	Bot - Section 2	443.91	0.10	0.07	0.04	15.77	
37.06	RT4	439.75	0.11	0.07	0.04	15.70	
37.96	RB6	371.88	0.11	0.07	0.04	13.33	
38.00		16.50	0.11	0.07	0.04	0.59	
40.00		821.35	0.13	0.07	0.03	29.72	
41.00	RT5 RB7	408.14	0.13	0.07	0.03	14.83	
42.00	Top - Section 1	406.44	0.14	0.07	0.03	14.83	
44.00		378.42	0.15	0.07	0.03	13.91	
46.00		375.28	0.17	0.07	0.03	13.88	
48.00		372.13	0.18	0.06	0.03	13.81	
50.00		368.99	0.20	0.06	0.02	13.70	
52.00		365.85	0.21	0.06	0.02	13.54	
54.00		362.70	0.23	0.06	0.02	13.31	
56.00		359.56	0.25	0.06	0.02	13.01	
57.11	RT6	198.20	0.26	0.05	0.02	7.09	
58.00	RB8	158.22	0.26	0.05	0.02	5.59	
58.50	RT7	88.61	0.27	0.05	0.02	3.11	
60.00		264.66	0.28	0.05	0.01	9.05	
62.00		350.13	0.30	0.04	0.01	11.44	
64.00		346.98	0.32	0.04	0.01	10.65	
66.00		343.84	0.34	0.03	0.01	9.72	
68.00		340.69	0.36	0.03	0.01	8.62	
70.00	Bot - Section 3	337.55	0.39	0.02	0.01	7.35	

Seismic Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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72.00		617.79	0.41	0.02	0.01	10.96
74.00		612.02	0.43	0.01	0.01	8.07
76.00	Top - Section 2 RT8 RB9	606.26	0.45	0.00	0.01	4.97
78.00		275.52	0.48	-0.01	0.01	0.79
80.00		272.90	0.50	-0.02	0.01	-0.73
82.00		270.28	0.53	-0.03	0.01	-2.23
84.00		267.66	0.56	-0.04	0.01	-3.68
86.00		265.04	0.58	-0.05	0.01	-5.03
88.00		262.42	0.61	-0.06	0.02	-6.23
90.00		259.80	0.64	-0.07	0.02	-7.28
92.00		257.18	0.67	-0.08	0.02	-8.14
94.00		254.56	0.70	-0.09	0.03	-8.80
96.00	RT9 RB10	251.94	0.73	-0.09	0.03	-9.26
98.00		249.32	0.76	-0.10	0.04	-9.52
100.00	Top - Section 3	246.70	0.79	-0.11	0.05	-9.58
102.00		195.61	0.82	-0.12	0.06	-7.58
104.00		193.51	0.85	-0.12	0.07	-7.33
106.00		191.42	0.88	-0.12	0.08	-6.95
108.00		189.32	0.92	-0.12	0.09	-6.43
110.00		187.22	0.95	-0.12	0.11	-5.78
112.00		185.13	0.99	-0.11	0.12	-5.02
113.50	RT10	137.47	1.01	-0.11	0.14	-3.27
114.00		45.56	1.02	-0.10	0.14	-1.03
115.00	Bot - Section 5	90.73	1.04	-0.10	0.15	-1.82
116.00		181.78	1.06	-0.09	0.16	-3.16
117.00	Appurtenance(s)	2558.7	1.08	-0.08	0.17	-37.22
118.00		179.69	1.10	-0.07	0.18	-2.07
120.00	Top - Section 4	356.23	1.13	-0.05	0.21	-1.74
122.00		177.39	1.17	-0.02	0.23	0.43
124.00		175.29	1.21	0.01	0.26	1.83
126.00		173.19	1.25	0.06	0.29	3.32
127.00	Appurtenance(s)	3127.7	1.27	0.08	0.31	74.36
128.00		85.29	1.29	0.11	0.33	2.44
130.00		169.00	1.33	0.16	0.36	6.55
132.00		166.91	1.37	0.23	0.40	8.28
134.00		164.81	1.41	0.31	0.44	10.09
136.00		162.72	1.46	0.40	0.49	11.96
137.00	Appurtenance(s)	3594.2	1.48	0.44	0.52	287.44
138.00		80.05	1.50	0.50	0.54	6.93
140.00		158.52	1.54	0.61	0.59	15.92
142.00		156.43	1.59	0.74	0.65	17.99
144.00		154.33	1.63	0.88	0.71	20.11
146.00		152.24	1.68	1.04	0.78	22.29
147.00	Appurtenance(s)	3275.6	1.70	1.12	0.81	506.93
148.00		74.81	1.72	1.21	0.85	12.22
150.00		148.04	1.77	1.41	0.93	26.79
152.00		145.95	1.82	1.62	1.01	29.10
153.00	Appurtenance(s)	136.69	1.84	1.73	1.05	28.56
154.00		71.66	1.87	1.85	1.09	15.67
155.00	Appurtenance(s)	2951.4	1.89	1.98	1.14	674.62
Totals:		41,186.0				2,152.1

Total Wind: 54,532.6

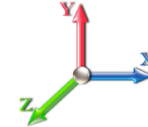
Seismic Base Shear is Less Than 50% of Wind Force - An Analysis is NOT Required

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



Load Case: 0.9D + 1.0E										Iterations 23
Gust Response Factor 1.10					Sds 0.18					Ss 0.17
Dead Load Factor 0.90			Seismic Load Factor 1.00			Sd1 0.10			S1 0.06	
Wind Load Factor 0.00		Structure Frequency (f1) 0.30		SA 0.03		Seismic Importance Factor 1.00				



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-41.68	-2.31	0.00	-291.01	0.00	291.01	4048.32	2024.16	8933.65	4411.99	0.00	0.00	0.00	0.052
2.00	-41.16	-2.31	0.00	-286.39	0.00	286.39	4032.02	2016.01	8833.50	4362.53	0.00	0.00	0.00	0.052
4.00	-40.65	-2.30	0.00	-281.77	0.00	281.77	4015.53	2007.77	8733.46	4313.13	0.00	-0.01	0.00	0.051
6.00	-40.14	-2.30	0.00	-277.16	0.00	277.16	3998.87	1999.43	8633.56	4263.79	0.01	-0.01	0.00	0.051
8.00	-39.63	-2.29	0.00	-272.56	0.00	272.56	3982.01	1991.01	8533.79	4214.52	0.01	-0.02	0.00	0.051
10.00	-39.13	-2.28	0.00	-267.99	0.00	267.99	3964.98	1982.49	8434.18	4165.32	0.02	-0.02	0.00	0.050
11.50	-38.75	-2.27	0.00	-264.57	0.00	264.57	3952.09	1976.04	8359.57	4128.48	0.03	-0.02	0.00	0.044
12.00	-38.63	-2.27	0.00	-263.43	0.00	263.43	3947.76	1973.88	8334.72	4116.20	0.03	-0.02	0.00	0.044
14.00	-38.13	-2.25	0.00	-258.90	0.00	258.90	3930.37	1965.18	8235.42	4067.17	0.04	-0.03	0.00	0.043
14.16	-38.09	-2.25	0.00	-258.54	0.00	258.54	3928.97	1964.48	8227.49	4063.25	0.04	-0.03	0.00	0.051
14.84	-37.92	-2.25	0.00	-257.01	0.00	257.01	3923.00	1961.50	8193.77	4046.60	0.05	-0.03	0.00	0.043
16.00	-37.64	-2.24	0.00	-254.40	0.00	254.40	3912.78	1956.39	8136.31	4018.22	0.06	-0.03	0.00	0.043
16.50	-37.51	-2.24	0.00	-253.28	0.00	253.28	3908.36	1954.18	8111.55	4005.99	0.06	-0.03	0.00	0.049
18.00	-37.15	-2.23	0.00	-249.92	0.00	249.92	3895.02	1947.51	8037.37	3969.35	0.07	-0.04	0.00	0.048
20.00	-36.66	-2.22	0.00	-245.46	0.00	245.46	3877.07	1938.54	7938.63	3920.59	0.09	-0.04	0.00	0.048
21.00	-36.42	-2.21	0.00	-243.25	0.00	243.25	3868.03	1934.02	7889.33	3896.24	0.10	-0.04	0.00	0.048
22.00	-36.17	-2.20	0.00	-241.04	0.00	241.04	3858.94	1929.47	7840.08	3871.92	0.10	-0.05	0.00	0.048
24.00	-35.69	-2.19	0.00	-236.63	0.00	236.63	3840.63	1920.32	7741.75	3823.36	0.12	-0.05	0.00	0.047
26.00	-35.22	-2.18	0.00	-232.25	0.00	232.25	3822.14	1911.07	7643.63	3774.90	0.15	-0.05	0.00	0.047
28.00	-34.74	-2.16	0.00	-227.90	0.00	227.90	3803.46	1901.73	7545.74	3726.56	0.17	-0.06	0.00	0.046
30.00	-34.27	-2.15	0.00	-223.57	0.00	223.57	3784.60	1892.30	7448.09	3678.33	0.19	-0.06	0.00	0.046
32.00	-33.80	-2.14	0.00	-219.27	0.00	219.27	3765.56	1882.78	7350.68	3630.22	0.22	-0.07	0.00	0.045
34.00	-33.34	-2.12	0.00	-215.00	0.00	215.00	3746.34	1873.17	7253.52	3582.24	0.25	-0.07	0.00	0.045
36.00	-32.88	-2.11	0.00	-210.76	0.00	210.76	3726.93	1863.47	7156.62	3534.39	0.28	-0.08	0.00	0.044
37.06	-32.45	-2.09	0.00	-208.53	0.00	208.53	3716.57	1858.29	7105.38	3509.08	0.30	-0.08	0.00	0.054
37.96	-32.09	-2.08	0.00	-206.64	0.00	206.64	3707.74	1853.87	7061.93	3487.62	0.31	-0.08	0.00	0.044
38.00	-32.07	-2.08	0.00	-206.56	0.00	206.56	3707.34	1853.67	7060.00	3486.67	0.31	-0.08	0.00	0.044
40.00	-31.27	-2.05	0.00	-202.40	0.00	202.40	3687.57	1843.78	6963.65	3439.09	0.35	-0.08	0.00	0.043
41.00	-30.87	-2.04	0.00	-200.35	0.00	200.35	3677.62	1838.81	6915.58	3415.35	0.37	-0.09	0.00	0.043
42.00	-30.48	-2.02	0.00	-198.31	0.00	198.31	3033.05	1516.53	5788.55	2858.75	0.38	-0.09	0.00	0.046
44.00	-30.08	-2.01	0.00	-194.27	0.00	194.27	3018.90	1509.45	5713.49	2821.68	0.42	-0.09	0.00	0.048
46.00	-29.68	-2.00	0.00	-190.25	0.00	190.25	3004.56	1502.28	5638.53	2784.66	0.46	-0.10	0.00	0.048
48.00	-29.28	-1.99	0.00	-186.25	0.00	186.25	2990.04	1495.02	5563.69	2747.70	0.50	-0.10	0.00	0.047
50.00	-28.89	-1.97	0.00	-182.28	0.00	182.28	2975.34	1487.67	5488.97	2710.80	0.55	-0.11	0.00	0.047
52.00	-28.50	-1.96	0.00	-178.33	0.00	178.33	2960.46	1480.23	5414.39	2673.96	0.59	-0.11	0.00	0.046
54.00	-28.11	-1.95	0.00	-174.40	0.00	174.40	2945.39	1472.69	5339.95	2637.20	0.64	-0.12	0.00	0.045
56.00	-27.72	-1.94	0.00	-170.50	0.00	170.50	2930.14	1465.07	5265.67	2600.52	0.69	-0.12	0.00	0.045
57.11	-27.51	-1.93	0.00	-168.35	0.00	168.35	2921.60	1460.80	5224.51	2580.19	0.72	-0.12	0.00	0.057
58.00	-27.34	-1.93	0.00	-166.63	0.00	166.63	2914.71	1457.35	5191.54	2563.91	0.74	-0.12	0.00	0.044
58.50	-27.24	-1.92	0.00	-165.67	0.00	165.67	2910.82	1455.41	5173.04	2554.77	0.75	-0.13	0.00	0.054
60.00	-26.95	-1.92	0.00	-162.78	0.00	162.78	2899.09	1449.55	5117.58	2527.38	0.79	-0.13	0.00	0.053
62.00	-26.57	-1.91	0.00	-158.95	0.00	158.95	2883.30	1441.65	5043.81	2490.95	0.85	-0.14	0.00	0.053
64.00	-26.19	-1.90	0.00	-155.13	0.00	155.13	2867.32	1433.66	4970.21	2454.60	0.91	-0.14	0.00	0.052
66.00	-25.81	-1.89	0.00	-151.34	0.00	151.34	2851.15	1425.58	4896.82	2418.35	0.97	-0.15	0.00	0.051
68.00	-25.43	-1.88	0.00	-147.56	0.00	147.56	2834.81	1417.40	4823.62	2382.21	1.03	-0.15	0.00	0.051
70.00	-25.06	-1.88	0.00	-143.79	0.00	143.79	2818.28	1409.14	4750.64	2346.16	1.10	-0.16	0.00	0.050
72.00	-24.43	-1.87	0.00	-140.04	0.00	140.04	2801.57	1400.79	4677.88	2310.23	1.16	-0.16	0.00	0.049

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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74.00	-23.81	-1.86	0.00	-136.30	0.00	136.30	2784.68	1392.34	4605.35	2274.41	1.23	-0.17	0.048
76.00	-23.20	-1.85	0.00	-132.58	0.00	132.58	2161.97	1080.98	3608.45	1782.08	1.30	-0.17	0.054
78.00	-22.88	-1.86	0.00	-128.88	0.00	128.88	2151.06	1075.53	3556.01	1756.18	1.38	-0.18	0.058
80.00	-22.57	-1.86	0.00	-125.17	0.00	125.17	2139.97	1069.98	3503.61	1730.30	1.45	-0.19	0.057
82.00	-22.25	-1.86	0.00	-121.45	0.00	121.45	2128.69	1064.35	3451.27	1704.45	1.53	-0.19	0.056
84.00	-21.94	-1.86	0.00	-117.74	0.00	117.74	2117.24	1058.62	3398.99	1678.63	1.61	-0.20	0.055
86.00	-21.63	-1.86	0.00	-114.02	0.00	114.02	2105.60	1052.80	3346.79	1652.86	1.70	-0.20	0.054
88.00	-21.33	-1.86	0.00	-110.30	0.00	110.30	2093.78	1046.89	3294.68	1627.12	1.79	-0.21	0.053
90.00	-21.03	-1.86	0.00	-106.58	0.00	106.58	2081.77	1040.89	3242.65	1601.42	1.87	-0.22	0.052
92.00	-20.72	-1.86	0.00	-102.85	0.00	102.85	2069.59	1034.79	3190.73	1575.78	1.97	-0.22	0.051
94.00	-20.43	-1.86	0.00	-99.12	0.00	99.12	2057.22	1028.61	3138.91	1550.19	2.06	-0.23	0.050
96.00	-20.13	-1.87	0.00	-95.40	0.00	95.40	2044.67	1022.33	3087.22	1524.66	2.16	-0.23	0.053
98.00	-19.84	-1.87	0.00	-91.67	0.00	91.67	2031.93	1015.97	3035.65	1499.19	2.25	-0.24	0.051
100.00	-19.54	-1.87	0.00	-87.93	0.00	87.93	2019.02	1009.51	2984.22	1473.79	2.36	-0.24	0.050
100.00	-19.54	-1.87	0.00	-87.93	0.00	87.93	1394.49	697.25	2068.33	1021.47	2.36	-0.24	0.058
102.00	-19.30	-1.87	0.00	-84.20	0.00	84.20	1387.39	693.70	2035.72	1005.36	2.46	-0.25	0.066
104.00	-19.06	-1.87	0.00	-80.46	0.00	80.46	1380.13	690.06	2003.09	989.25	2.57	-0.26	0.064
106.00	-18.81	-1.87	0.00	-76.72	0.00	76.72	1372.69	686.35	1970.45	973.13	2.68	-0.26	0.062
108.00	-18.57	-1.87	0.00	-72.98	0.00	72.98	1365.09	682.55	1937.81	957.01	2.79	-0.27	0.060
110.00	-18.34	-1.87	0.00	-69.24	0.00	69.24	1357.32	678.66	1905.17	940.89	2.90	-0.28	0.058
112.00	-18.10	-1.87	0.00	-65.50	0.00	65.50	1349.39	674.69	1872.56	924.79	3.02	-0.28	0.056
113.50	-17.92	-1.87	0.00	-62.69	0.00	62.69	1343.33	671.66	1848.11	912.71	3.11	-0.29	0.054
113.50	-17.92	-1.87	0.00	-62.69	0.00	62.69	1343.33	671.66	1848.11	912.71	3.11	-0.29	0.054
114.00	-17.87	-1.87	0.00	-61.75	0.00	61.75	1341.28	670.64	1839.96	908.69	3.14	-0.29	0.081
115.00	-17.75	-1.87	0.00	-59.88	0.00	59.88	1337.17	668.58	1823.68	900.65	3.20	-0.29	0.080
116.00	-17.55	-1.88	0.00	-58.00	0.00	58.00	1333.01	666.51	1807.40	892.61	3.26	-0.30	0.078
117.00	-15.21	-1.86	0.00	-56.13	0.00	56.13	1328.82	664.41	1791.13	884.57	3.33	-0.30	0.075
118.00	-15.02	-1.86	0.00	-54.26	0.00	54.26	1324.58	662.29	1774.88	876.54	3.39	-0.31	0.073
120.00	-14.63	-1.86	0.00	-50.53	0.00	50.53	1327.18	663.59	1784.85	881.47	3.52	-0.32	0.068
122.00	-14.40	-1.87	0.00	-46.80	0.00	46.80	1318.63	659.32	1752.36	865.43	3.66	-0.32	0.065
124.00	-14.18	-1.86	0.00	-43.07	0.00	43.07	1309.91	654.95	1719.92	849.40	3.79	-0.33	0.062
126.00	-13.96	-1.86	0.00	-39.35	0.00	39.35	1301.02	650.51	1687.54	833.41	3.93	-0.34	0.058
127.00	-11.11	-1.77	0.00	-37.49	0.00	37.49	1296.51	648.26	1671.38	825.43	4.01	-0.34	0.054
128.00	-11.01	-1.77	0.00	-35.72	0.00	35.72	1291.97	645.98	1655.23	817.46	4.08	-0.35	0.052
130.00	-10.82	-1.76	0.00	-32.18	0.00	32.18	1282.74	641.37	1623.00	801.54	4.22	-0.35	0.049
132.00	-10.63	-1.75	0.00	-28.66	0.00	28.66	1273.35	636.68	1590.85	785.66	4.37	-0.36	0.045
134.00	-10.45	-1.74	0.00	-25.15	0.00	25.15	1263.80	631.90	1558.80	769.83	4.52	-0.36	0.041
136.00	-10.26	-1.73	0.00	-21.67	0.00	21.67	1254.07	627.04	1526.84	754.05	4.68	-0.37	0.037
137.00	-7.01	-1.42	0.00	-19.94	0.00	19.94	1249.15	624.57	1510.90	746.18	4.76	-0.37	0.032
138.00	-6.92	-1.41	0.00	-18.52	0.00	18.52	1244.18	622.09	1494.99	738.32	4.83	-0.37	0.031
140.00	-6.75	-1.40	0.00	-15.69	0.00	15.69	1234.12	617.06	1463.26	722.65	4.99	-0.38	0.027
142.00	-6.57	-1.38	0.00	-12.89	0.00	12.89	1223.90	611.95	1431.66	707.04	5.15	-0.38	0.024
144.00	-6.40	-1.36	0.00	-10.13	0.00	10.13	1213.50	606.75	1400.19	691.50	5.31	-0.38	0.020
146.00	-6.24	-1.34	0.00	-7.41	0.00	7.41	1202.94	601.47	1368.85	676.02	5.47	-0.38	0.016
147.00	-3.28	-0.81	0.00	-6.08	0.00	6.08	1197.60	598.80	1353.24	668.32	5.55	-0.39	0.012
148.00	-3.20	-0.80	0.00	-5.27	0.00	5.27	1192.22	596.11	1337.67	660.62	5.63	-0.39	0.011
150.00	-3.04	-0.77	0.00	-3.68	0.00	3.68	1181.32	590.66	1306.64	645.30	5.79	-0.39	0.008
152.00	-2.88	-0.74	0.00	-2.14	0.00	2.14	1170.26	585.13	1275.78	630.06	5.96	-0.39	0.006
153.00	-2.74	-0.71	0.00	-1.40	0.00	1.40	1164.66	582.33	1260.41	622.47	6.04	-0.39	0.005
154.00	-2.66	-0.69	0.00	-0.69	0.00	0.69	1159.03	579.51	1245.09	614.90	6.12	-0.39	0.003
155.00	0.00	-0.67	0.00	0.00	0.00	0.00	1153.35	576.68	1229.81	607.36	6.20	-0.39	0.000

Wind Loading - Shaft

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II

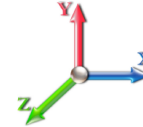


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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 24

Dead Load Factor 1.00
Wind Load Factor 1.00



Elev (ft)	Description	Kzt	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)
0.00	RB1 RB2	2.18	0.70	13.370	14.71	344.78	1.000	0.000	0.00	0.000	0.00	0.0	0.0	0.0
2.00		2.15	0.70	13.172	14.49	339.79	1.000	0.000	2.00	9.267	9.27	134.3	0.0	505.6
4.00		2.12	0.70	12.980	14.28	334.90	1.000	0.000	2.00	9.201	9.20	131.4	0.0	502.0
6.00		2.09	0.70	12.794	14.07	330.10	1.000	0.000	2.00	9.135	9.14	128.6	0.0	498.4
8.00		2.06	0.70	12.614	13.88	325.38	1.000	0.000	2.00	9.069	9.07	125.8	0.0	494.7
10.00		2.03	0.70	12.439	13.68	320.76	1.000	0.000	2.00	9.003	9.00	123.2	0.0	491.1
11.50	RB3	2.01	0.70	12.311	13.54	317.34	1.000	0.000	1.50	6.709	6.71	90.9	0.0	365.9
12.00		2.00	0.70	12.269	13.50	316.22	1.000	0.000	0.50	2.228	2.23	30.1	0.0	121.5
14.00		1.97	0.70	12.104	13.31	311.76	1.000	0.000	2.00	8.871	8.87	118.1	0.0	483.8
14.16	RT2	1.97	0.70	12.091	13.30	311.40	1.000	0.000	0.16	0.707	0.71	9.4	0.0	38.6
14.84	RB4	1.96	0.70	12.036	13.24	309.91	1.000	0.000	0.68	2.999	3.00	39.7	0.0	163.6
16.00		1.95	0.70	11.944	13.14	307.38	1.000	0.000	1.16	5.099	5.10	67.0	0.0	278.1
16.50	RT3	1.94	0.70	11.905	13.10	306.29	1.000	0.000	0.50	2.191	2.19	28.7	0.0	119.5
18.00		1.92	0.70	11.789	12.97	303.07	1.000	0.000	1.50	6.548	6.55	84.9	0.0	357.1
20.00		1.90	0.70	11.638	12.80	298.85	1.000	0.000	2.00	8.673	8.67	111.0	0.0	473.0
21.00	RT1 RB5	1.89	0.70	11.564	12.72	296.76	1.000	0.000	1.00	4.312	4.31	54.8	0.0	235.1
22.00		1.88	0.70	11.492	12.64	294.69	1.000	0.000	1.00	4.295	4.30	54.3	0.0	234.2
24.00		1.85	0.70	11.350	12.48	290.61	1.000	0.000	2.00	8.541	8.54	106.6	0.0	465.7
26.00		1.83	0.70	11.212	12.33	286.60	1.000	0.000	2.00	8.475	8.48	104.5	0.0	462.1
28.00		1.81	0.70	11.078	12.19	282.65	1.000	0.000	2.00	8.409	8.41	102.5	0.0	458.4
30.00		1.79	0.70	10.957	12.05	278.89	1.000	0.000	2.00	8.343	8.34	100.6	0.0	454.8
32.00		1.77	0.71	11.032	12.14	277.62	1.000	0.000	2.00	8.277	8.28	100.4	0.0	451.2
34.00		1.75	0.73	11.098	12.21	276.22	1.000	0.000	2.00	8.211	8.21	100.2	0.0	447.5
36.00	Bot - Section 2	1.73	0.74	11.155	12.27	274.69	1.000	0.000	2.00	8.145	8.15	99.9	0.0	443.9
37.06	RT4	1.72	0.74	11.182	12.30	273.84	1.000	0.000	1.06	4.359	4.36	53.6	0.0	439.8
37.96	RB6	1.71	0.75	11.203	12.32	273.09	1.000	0.000	0.90	3.686	3.69	45.4	0.0	371.9
38.00		1.71	0.75	11.204	12.32	273.06	1.000	0.000	0.04	0.164	0.16	2.0	0.0	16.5
40.00		1.69	0.76	11.247	12.37	271.34	1.000	0.000	2.00	8.142	8.14	100.7	0.0	821.4
41.00	RT5 RB7	1.68	0.77	11.267	12.39	270.45	1.000	0.000	1.00	4.046	4.05	50.1	0.0	408.1
42.00	Top - Section 1	1.67	0.77	11.285	12.41	269.54	1.000	0.000	1.00	4.030	4.03	50.0	0.0	406.4
44.00		1.65	0.78	11.317	12.45	272.09	1.000	0.000	2.00	8.010	8.01	99.7	0.0	378.4
46.00		1.64	0.79	11.345	12.48	270.17	1.000	0.000	2.00	7.944	7.94	99.1	0.0	375.3
48.00		1.62	0.80	11.368	12.51	268.19	1.000	0.000	2.00	7.878	7.88	98.5	0.0	372.1
50.00		1.60	0.81	11.389	12.53	266.17	1.000	0.000	2.00	7.812	7.81	97.9	0.0	369.0
52.00		1.59	0.82	11.406	12.55	264.11	1.000	0.000	2.00	7.746	7.75	97.2	0.0	365.8
54.00		1.57	0.83	11.420	12.56	262.02	1.000	0.000	2.00	7.680	7.68	96.5	0.0	362.7
56.00		1.56	0.84	11.432	12.58	259.89	1.000	0.000	2.00	7.614	7.61	95.8	0.0	359.6
57.11	RT6	1.55	0.84	11.438	12.58	258.70	1.000	0.000	1.11	4.197	4.20	52.8	0.0	198.2
58.00	RB8	1.55	0.85	11.442	12.59	257.74	1.000	0.000	0.89	3.351	3.35	42.2	0.0	158.2
58.50	RT7	1.54	0.85	11.444	12.59	257.20	1.000	0.000	0.50	1.877	1.88	23.6	0.0	88.6
60.00		1.53	0.85	11.450	12.59	255.56	1.000	0.000	1.50	5.606	5.61	70.6	0.0	264.7
62.00		1.52	0.86	11.456	12.60	253.36	1.000	0.000	2.00	7.416	7.42	93.5	0.0	350.1
64.00		1.50	0.87	11.460	12.61	251.15	1.000	0.000	2.00	7.350	7.35	92.7	0.0	347.0
66.00		1.49	0.88	11.463	12.61	248.92	1.000	0.000	2.00	7.284	7.28	91.9	0.0	343.8
68.00		1.48	0.89	11.465	12.61	246.67	1.000	0.000	2.00	7.218	7.22	91.0	0.0	340.7
70.00	Bot - Section 3	1.47	0.89	11.466	12.61	244.42	1.000	0.000	2.00	7.152	7.15	90.2	0.0	337.6
72.00		1.46	0.90	11.467	12.61	242.15	1.000	0.000	2.00	7.194	7.19	90.7	0.0	617.8

Wind Loading - Shaft

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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74.00	1.44	0.91	11.466	12.61	239.88	1.000	0.000	2.00	7.128	7.13	89.9	0.0	612.0
76.00 Top - Section 2 RT8	1.43	0.91	11.465	12.61	237.60	1.000	0.000	2.00	7.062	7.06	89.1	0.0	606.3
78.00	1.42	0.92	11.463	12.61	239.02	1.000	0.000	2.00	6.996	7.00	88.2	0.0	275.5
80.00	1.41	0.93	11.460	12.61	236.73	1.000	0.000	2.00	6.930	6.93	87.4	0.0	272.9
82.00	1.40	0.93	11.458	12.60	234.43	1.000	0.000	2.00	6.864	6.86	86.5	0.0	270.3
84.00	1.39	0.94	11.455	12.60	232.14	1.000	0.000	2.00	6.798	6.80	85.7	0.0	267.7
86.00	1.38	0.95	11.451	12.60	229.84	1.000	0.000	2.00	6.732	6.73	84.8	0.0	265.0
88.00	1.37	0.95	11.448	12.59	227.54	1.000	0.000	2.00	6.666	6.67	83.9	0.0	262.4
90.00	1.36	0.96	11.444	12.59	225.24	1.000	0.000	2.00	6.600	6.60	83.1	0.0	259.8
92.00	1.35	0.96	11.440	12.58	222.94	1.000	0.000	2.00	6.534	6.53	82.2	0.0	257.2
94.00	1.35	0.97	11.437	12.58	220.64	1.000	0.000	2.00	6.468	6.47	81.4	0.0	254.6
96.00 RT9 RB10	1.34	0.98	11.433	12.58	218.34	1.000	0.000	2.00	6.402	6.40	80.5	0.0	251.9
98.00	1.33	0.98	11.429	12.57	216.04	1.000	0.000	2.00	6.336	6.34	79.7	0.0	249.3
100.00 Top - Section 3	1.32	0.99	11.425	12.57	213.74	1.000	0.000	2.00	6.270	6.27	78.8	0.0	246.7
102.00	1.31	0.99	11.422	12.56	211.44	1.000	0.000	2.00	6.204	6.20	77.9	0.0	195.6
104.00	1.30	1.00	11.418	12.56	209.15	1.000	0.000	2.00	6.138	6.14	77.1	0.0	193.5
106.00	1.30	1.00	11.415	12.56	206.86	1.000	0.000	2.00	6.072	6.07	76.2	0.0	191.4
108.00	1.29	1.01	11.412	12.55	204.57	1.000	0.000	2.00	6.006	6.01	75.4	0.0	189.3
110.00	1.28	1.02	11.409	12.55	202.28	1.000	0.000	2.00	5.940	5.94	74.5	0.0	187.2
112.00	1.28	1.02	11.406	12.55	200.00	1.000	0.000	2.00	5.874	5.87	73.7	0.0	185.1
113.50 RT10	1.27	1.02	11.404	12.54	198.28	1.000	0.000	1.50	4.362	4.36	54.7	0.0	137.5
114.00	1.27	1.03	11.403	12.54	197.71	1.000	0.000	0.50	1.446	1.45	18.1	0.0	45.6
115.00 Bot - Section 5	1.27	1.03	11.402	12.54	196.57	1.000	0.000	1.00	2.879	2.88	36.1	0.0	90.7
116.00	1.26	1.03	11.401	12.54	195.43	1.000	0.000	1.00	2.906	2.91	36.4	0.0	181.8
117.00 Appurtenance(s)	1.26	1.03	11.400	12.54	194.29	1.000	0.000	1.00	2.889	2.89	36.2	0.0	180.7
118.00	1.26	1.04	11.399	12.54	193.15	1.000	0.000	1.00	2.873	2.87	36.0	0.0	179.7
120.00 Top - Section 4	1.25	1.04	11.397	12.54	190.88	1.000	0.000	2.00	5.696	5.70	71.4	0.0	356.2
122.00	1.24	1.05	11.395	12.53	191.56	1.000	0.000	2.00	5.630	5.63	70.6	0.0	177.4
124.00	1.24	1.05	11.394	12.53	189.29	1.000	0.000	2.00	5.564	5.56	69.7	0.0	175.3
126.00	1.23	1.06	11.393	12.53	187.02	1.000	0.000	2.00	5.498	5.50	68.9	0.0	173.2
127.00 Appurtenance(s)	1.23	1.06	11.392	12.53	185.89	1.000	0.000	1.00	2.724	2.72	34.1	0.0	85.8
128.00	1.23	1.06	11.392	12.53	184.75	1.000	0.000	1.00	2.708	2.71	33.9	0.0	85.3
130.00	1.22	1.07	11.391	12.53	182.49	1.000	0.000	2.00	5.366	5.37	67.2	0.0	169.0
132.00	1.22	1.07	11.391	12.53	180.23	1.000	0.000	2.00	5.300	5.30	66.4	0.0	166.9
134.00	1.21	1.07	11.391	12.53	177.97	1.000	0.000	2.00	5.234	5.23	65.6	0.0	164.8
136.00	1.21	1.08	11.392	12.53	175.72	1.000	0.000	2.00	5.168	5.17	64.8	0.0	162.7
137.00 Appurtenance(s)	1.20	1.08	11.392	12.53	174.59	1.000	0.000	1.00	2.559	2.56	32.1	0.0	80.6
138.00	1.20	1.08	11.392	12.53	173.46	1.000	0.000	1.00	2.543	2.54	31.9	0.0	80.0
140.00	1.20	1.09	11.393	12.53	171.21	1.000	0.000	2.00	5.036	5.04	63.1	0.0	158.5
142.00	1.19	1.09	11.395	12.53	168.96	1.000	0.000	2.00	4.970	4.97	62.3	0.0	156.4
144.00	1.19	1.10	11.396	12.54	166.71	1.000	0.000	2.00	4.904	4.90	61.5	0.0	154.3
146.00	1.18	1.10	11.398	12.54	164.47	1.000	0.000	2.00	4.838	4.84	60.7	0.0	152.2
147.00 Appurtenance(s)	1.18	1.10	11.399	12.54	163.35	1.000	0.000	1.00	2.394	2.39	30.0	0.0	75.3
148.00	1.18	1.11	11.400	12.54	162.22	1.000	0.000	1.00	2.378	2.38	29.8	0.0	74.8
150.00	1.17	1.11	11.403	12.54	159.98	1.000	0.000	2.00	4.706	4.71	59.0	0.0	148.0
152.00	1.17	1.11	11.405	12.55	157.74	1.000	0.000	2.00	4.640	4.64	58.2	0.0	145.9
153.00 Appurtenance(s)	1.17	1.12	11.407	12.55	156.62	1.000	0.000	1.00	2.295	2.30	28.8	0.0	72.2
154.00	1.17	1.12	11.408	12.55	155.50	1.000	0.000	1.00	2.279	2.28	28.6	0.0	71.7
155.00 Appurtenance(s)	1.16	1.12	11.410	12.55	154.38	1.000	0.000	1.00	2.262	2.26	28.4	0.0	71.1
Totals:								155.00			6,813.4		26,107.2

Discrete Appurtenance Forces

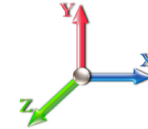
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 24

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	155.00	BSAMNT-SBS-2-2	3	11.410	12.551	1.00	1.00	0.00	76.05	0.000	0.000	0.00	0.00	0.00
2	155.00	BA-70080-4BF	3	11.410	12.551	0.68	0.90	9.77	39.00	0.000	0.000	122.59	0.00	0.00
3	155.00	JAHH-65B-R3B	6	11.410	12.551	0.66	0.80	36.29	379.80	0.000	0.000	455.53	0.00	0.00
4	155.00	MT6407-77A	3	11.413	12.554	0.56	0.80	7.88	238.20	0.000	1.500	98.92	0.00	148.37
5	155.00	(3) T-Frame w/ Platforms	1	11.410	12.551	1.00	1.00	25.00	1620.00	0.000	0.000	313.78	0.00	0.00
6	155.00	CBC78T-DS-43-2X	3	11.410	12.551	0.40	0.80	0.44	31.20	0.000	0.000	5.57	0.00	0.00
7	155.00	B2/B66A	3	11.410	12.551	0.40	0.80	2.24	253.20	0.000	0.000	28.16	0.00	0.00
8	155.00	B5/B13	3	11.410	12.551	0.40	0.80	2.24	210.90	0.000	0.000	28.16	0.00	0.00
9	155.00	RVZDC-6627-PF-48	1	11.410	12.551	0.40	0.80	1.62	32.00	0.000	0.000	20.38	0.00	0.00
10	153.00	XXDWMM-12.5-65-8T-CB	3	11.407	12.548	0.69	0.80	1.84	8.70	0.000	0.000	23.05	0.00	0.00
11	153.00	CBRS RRH - RT	3	11.407	12.548	0.40	0.80	1.19	55.80	0.000	0.000	14.91	0.00	0.00
12	147.00	APXVTM14-C-I20	3	11.399	12.539	0.63	0.80	12.02	168.00	0.000	0.000	150.73	0.00	0.00
13	147.00	APXVSP18-C-A20	3	11.399	12.539	0.66	0.80	15.98	171.00	0.000	0.000	200.32	0.00	0.00
14	147.00	Alcatel Lucent	3	11.399	12.539	0.40	0.80	4.86	210.00	0.000	0.000	60.94	0.00	0.00
15	147.00	(3) SFS-H (V-Braces)	1	11.399	12.539	0.75	0.75	7.20	197.00	0.000	0.000	90.28	0.00	0.00
16	147.00	PRK-1245 (kicker kit)	1	11.399	12.539	1.00	1.00	9.50	464.91	0.000	0.000	119.12	0.00	0.00
17	147.00	(3) T-Frame w/ Platforms	1	11.399	12.539	1.00	1.00	25.00	1620.00	0.000	0.000	313.47	0.00	0.00
18	147.00	Alcatel Lucent 1900 MHz	3	11.399	12.539	0.40	0.80	2.77	180.00	0.000	0.000	34.76	0.00	0.00
19	147.00	Alcatel Lucent 800 MHz	3	11.399	12.539	0.40	0.80	2.99	159.00	0.000	0.000	37.47	0.00	0.00
20	147.00	Alcatel Lucent 800 MHz	3	11.399	12.539	0.40	0.80	0.94	26.40	0.000	0.000	11.74	0.00	0.00
21	147.00	RFS ACU-A20-N RET	4	11.399	12.539	0.40	0.80	0.22	4.00	0.000	0.000	2.81	0.00	0.00
22	137.00	RRUS 4415 B25	2	11.392	12.531	0.40	0.80	1.31	92.00	0.000	0.000	16.44	0.00	0.00
23	137.00	4449 B71 + B85	2	11.392	12.531	0.40	0.80	1.58	146.40	0.000	0.000	19.75	0.00	0.00
24	137.00	KRY 112 144/2	3	11.392	12.531	0.40	0.80	0.49	33.00	0.000	0.000	6.17	0.00	0.00
25	137.00	AIR6449 B41	2	11.392	12.531	0.57	0.80	6.42	206.00	0.000	0.000	80.43	0.00	0.00
26	137.00	PRK-1245 (kicker kit)	1	11.392	12.531	1.00	1.00	8.50	445.91	0.000	0.000	106.51	0.00	0.00
27	137.00	APXVAALL24_43-U-NA20	2	11.392	12.531	0.56	0.80	22.67	256.00	0.000	0.000	284.07	0.00	0.00
28	137.00	KRD 9011461-B66A-B2A	2	11.392	12.531	0.70	0.80	9.06	264.40	0.000	0.000	113.56	0.00	0.00
29	137.00	(3) T-Frame/ walking	1	11.392	12.531	1.00	1.00	25.00	1620.00	0.000	0.000	313.28	0.00	0.00
30	137.00	(3) HR w/ V-Brace Kits	1	11.392	12.531	1.00	1.00	8.50	450.00	0.000	0.000	106.51	0.00	0.00
31	127.00	4415 B30	3	11.392	12.531	0.38	0.75	2.09	132.30	0.000	0.000	26.22	0.00	0.00
32	127.00	HRK12 (Handrail Kit)	1	11.392	12.531	1.00	1.00	6.75	261.72	0.000	0.000	84.59	0.00	0.00
33	127.00	DC9-48-60-24-8C-EV	1	11.392	12.531	0.38	0.75	0.43	26.20	0.000	0.000	5.36	0.00	0.00
34	127.00	DMP65R-BU6DA	3	11.392	12.531	0.54	0.75	20.59	238.20	0.000	0.000	258.03	0.00	0.00
35	127.00	8843 B2 B66A	3	11.392	12.531	0.38	0.75	1.84	210.00	0.000	0.000	23.12	0.00	0.00
36	127.00	840370799	3	11.392	12.531	0.52	0.75	24.73	56.10	0.000	0.000	309.92	0.00	0.00
37	127.00	7770.00	3	11.392	12.531	0.55	0.75	9.03	105.00	0.000	0.000	113.21	0.00	0.00
38	127.00	DC6-48-60-18-8F	1	11.392	12.531	0.38	0.75	0.35	31.80	0.000	0.000	4.32	0.00	0.00
39	127.00	Low Profile	1	11.392	12.531	1.00	1.00	25.00	1500.00	0.000	0.000	313.29	0.00	0.00
40	127.00	LGP13519	6	11.392	12.531	0.38	0.75	0.77	31.80	0.000	0.000	9.59	0.00	0.00
41	127.00	DTMABP7819VG12A	3	11.392	12.531	0.38	0.75	1.28	57.60	0.000	0.000	16.07	0.00	0.00
42	127.00	RRUS 4478 B14	3	11.392	12.531	0.38	0.75	1.86	178.20	0.000	0.000	23.26	0.00	0.00
43	127.00	4449 B5/B12	3	11.392	12.531	0.38	0.75	2.22	213.00	0.000	0.000	27.77	0.00	0.00
44	117.00	Commscope	1	11.400	12.540	1.00	1.00	37.59	1727.00	0.000	0.000	471.36	0.00	0.00
45	117.00	Raycap	1	11.400	12.540	0.75	0.75	1.51	21.90	0.000	0.000	18.90	0.00	0.00
46	117.00	Fujitsu TA08025-B604	3	11.400	12.540	0.50	0.75	2.95	191.70	0.000	0.000	37.05	0.00	0.00
47	117.00	Fujitsu TA08025-B605	3	11.400	12.540	0.50	0.75	2.95	225.00	0.000	0.000	37.05	0.00	0.00

Discrete Appurtenance Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II
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48	117.00	Commscope	3	11.400	12.540	0.55	0.75	20.43	212.40	0.000	0.000	256.18	0.00	0.00
Totals:											15,078.79	5,214.69		

Total Applied Force Summary

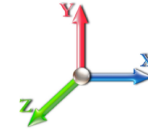
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 24

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		134.28	573.75	0.00	0.00
4.00		131.38	570.11	0.00	0.00
6.00		128.57	566.48	0.00	0.00
8.00		125.84	562.85	0.00	0.00
10.00		123.19	559.22	0.00	0.00
11.50		90.85	417.03	0.00	0.00
12.00		30.07	138.56	0.00	0.00
14.00		118.11	551.96	0.00	0.00
14.16		9.40	44.00	0.00	0.00
14.84		39.71	186.74	0.00	0.00
16.00		66.99	317.59	0.00	0.00
16.50		28.69	136.51	0.00	0.00
18.00		84.91	408.18	0.00	0.00
20.00		111.03	541.07	0.00	0.00
21.00		54.85	269.17	0.00	0.00
22.00		54.30	268.26	0.00	0.00
24.00		106.63	533.80	0.00	0.00
26.00		104.52	530.17	0.00	0.00
28.00		102.47	526.54	0.00	0.00
30.00		100.56	522.91	0.00	0.00
32.00		100.44	519.28	0.00	0.00
34.00		100.23	515.65	0.00	0.00
36.00		99.94	512.02	0.00	0.00
37.06		53.61	475.85	0.00	0.00
37.96		45.43	402.53	0.00	0.00
38.00		2.02	17.86	0.00	0.00
40.00		100.74	889.47	0.00	0.00
41.00		50.15	442.19	0.00	0.00
42.00		50.02	440.50	0.00	0.00
44.00		99.72	446.53	0.00	0.00
46.00		99.14	443.39	0.00	0.00
48.00		98.52	440.25	0.00	0.00
50.00		97.87	437.10	0.00	0.00
52.00		97.19	433.96	0.00	0.00
54.00		96.48	430.81	0.00	0.00
56.00		95.75	427.67	0.00	0.00
57.11		52.81	236.00	0.00	0.00
58.00		42.17	188.53	0.00	0.00
58.50		23.63	107.86	0.00	0.00
60.00		70.60	322.40	0.00	0.00
62.00		93.45	427.12	0.00	0.00
64.00		92.66	423.97	0.00	0.00
66.00		91.85	420.83	0.00	0.00
68.00		91.04	417.69	0.00	0.00
70.00		90.21	414.54	0.00	0.00
72.00		90.74	694.78	0.00	0.00

Total Applied Force Summary

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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74.00		89.90	689.01	0.00	0.00
76.00		89.06	683.25	0.00	0.00
78.00		88.21	352.51	0.00	0.00
80.00		87.36	349.89	0.00	0.00
82.00		86.51	347.27	0.00	0.00
84.00		85.65	344.65	0.00	0.00
86.00		84.80	342.03	0.00	0.00
88.00		83.94	339.41	0.00	0.00
90.00		83.08	336.79	0.00	0.00
92.00		82.23	334.17	0.00	0.00
94.00		81.37	331.55	0.00	0.00
96.00		80.51	328.93	0.00	0.00
98.00		79.65	326.31	0.00	0.00
100.00		78.80	323.69	0.00	0.00
102.00		77.94	272.60	0.00	0.00
104.00		77.09	270.50	0.00	0.00
106.00		76.24	268.41	0.00	0.00
108.00		75.39	266.31	0.00	0.00
110.00		74.54	264.22	0.00	0.00
112.00		73.69	262.12	0.00	0.00
113.50		54.72	195.21	0.00	0.00
114.00		18.13	64.81	0.00	0.00
115.00		36.11	129.23	0.00	0.00
116.00		36.44	220.28	0.00	0.00
117.00	(11) attachments	856.78	2597.23	0.00	0.00
118.00		36.02	216.36	0.00	0.00
120.00		71.41	429.58	0.00	0.00
122.00		70.57	250.74	0.00	0.00
124.00		69.73	248.64	0.00	0.00
126.00		68.90	246.55	0.00	0.00
127.00	(34) attachments	1248.88	3164.41	0.00	0.00
128.00		33.93	107.06	0.00	0.00
130.00		67.24	212.55	0.00	0.00
132.00		66.41	210.45	0.00	0.00
134.00		65.58	208.36	0.00	0.00
136.00		64.76	206.26	0.00	0.00
137.00	(16) attachments	1078.78	3616.06	0.00	0.00
138.00		31.86	97.38	0.00	0.00
140.00		63.11	193.19	0.00	0.00
142.00		62.29	191.10	0.00	0.00
144.00		61.47	189.00	0.00	0.00
146.00		60.66	186.90	0.00	0.00
147.00	(25) attachments	1051.65	3292.98	0.00	0.00
148.00		29.82	89.50	0.00	0.00
150.00		59.02	177.43	0.00	0.00
152.00		58.21	175.34	0.00	0.00
153.00	(6) attachments	66.75	151.38	0.00	0.00
154.00		28.60	86.36	0.00	0.00
155.00	(26) attachments	1101.50	2966.18	0.00	148.37
	Totals:	12,028.07	46,307.86	0.00	148.37

Linear Appurtenance Segment Forces (Factored)

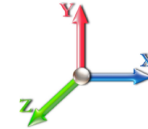
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 24

Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
2.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	13.172	0.00	3.64
2.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.064	0.000	13.172	0.00	0.00
4.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.064	0.000	12.980	0.00	3.64
4.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.064	0.000	12.980	0.00	0.00
6.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	12.794	0.00	3.64
6.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.065	0.000	12.794	0.00	0.00
8.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.065	0.000	12.614	0.00	3.64
8.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.065	0.000	12.614	0.00	0.00
10.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.066	0.000	12.439	0.00	3.64
10.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.066	0.000	12.439	0.00	0.00
11.50	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.066	0.000	12.311	0.00	2.73
11.50	10"x1/2" Bent plate	Yes	1.50	0.000	3.56	0.45	0.00	0.066	0.000	12.311	0.00	0.00
12.00	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.067	0.000	12.269	0.00	0.91
12.00	10"x1/2" Bent plate	Yes	0.50	0.000	3.56	0.15	0.00	0.067	0.000	12.269	0.00	0.00
14.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.067	0.000	12.104	0.00	3.64
14.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.067	0.000	12.104	0.00	0.00
14.16	1.6" Hybrid	Yes	0.16	0.000	0.00	0.00	0.00	0.067	0.000	12.091	0.00	0.29
14.16	10"x1/2" Bent plate	Yes	0.16	0.000	3.56	0.05	0.00	0.067	0.000	12.091	0.00	0.00
14.84	1.6" Hybrid	Yes	0.68	0.000	0.00	0.00	0.00	0.067	0.000	12.036	0.00	1.24
14.84	10"x1/2" Bent plate	Yes	0.68	0.000	3.56	0.20	0.00	0.067	0.000	12.036	0.00	0.00
16.00	1.6" Hybrid	Yes	1.16	0.000	0.00	0.00	0.00	0.067	0.000	11.944	0.00	2.11
16.00	10"x1/2" Bent plate	Yes	1.16	0.000	3.56	0.34	0.00	0.067	0.000	11.944	0.00	0.00
16.50	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.068	0.000	11.905	0.00	0.91
16.50	10"x1/2" Bent plate	Yes	0.50	0.000	3.56	0.15	0.00	0.068	0.000	11.905	0.00	0.00
18.00	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.068	0.000	11.789	0.00	2.73
18.00	10"x1/2" Bent plate	Yes	1.50	0.000	3.56	0.45	0.00	0.068	0.000	11.789	0.00	0.00
20.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.068	0.000	11.638	0.00	3.64
20.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.068	0.000	11.638	0.00	0.00
21.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	11.564	0.00	1.82
21.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.069	0.000	11.564	0.00	0.00
22.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.069	0.000	11.492	0.00	1.82
22.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.069	0.000	11.492	0.00	0.00
24.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.069	0.000	11.350	0.00	3.64
24.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.069	0.000	11.350	0.00	0.00
26.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.070	0.000	11.212	0.00	3.64
26.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.070	0.000	11.212	0.00	0.00
28.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	11.078	0.00	3.64
28.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.071	0.000	11.078	0.00	0.00
30.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.071	0.000	10.957	0.00	3.64
30.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.071	0.000	10.957	0.00	0.00
32.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	11.032	0.00	3.64
32.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.072	0.000	11.032	0.00	0.00
34.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.072	0.000	11.098	0.00	3.64
34.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.072	0.000	11.098	0.00	0.00
36.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.073	0.000	11.155	0.00	3.64
36.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.073	0.000	11.155	0.00	0.00
37.06	1.6" Hybrid	Yes	1.06	0.000	0.00	0.00	0.00	0.073	0.000	11.182	0.00	1.93

Linear Appurtenance Segment Forces (Factored)

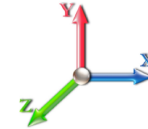
Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00
Wind Load Factor 1.00



Iterations 24

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)
37.06	10"x1/2" Bent plate	Yes	1.06	0.000	3.56	0.31	0.00	0.073	0.000	11.182	0.00	0.00
37.96	1.6" Hybrid	Yes	0.90	0.000	0.00	0.00	0.00	0.074	0.000	11.203	0.00	1.64
37.96	10"x1/2" Bent plate	Yes	0.90	0.000	3.56	0.27	0.00	0.074	0.000	11.203	0.00	0.00
38.00	1.6" Hybrid	Yes	0.04	0.000	0.00	0.00	0.00	0.074	0.000	11.204	0.00	0.07
38.00	10"x1/2" Bent plate	Yes	0.04	0.000	3.56	0.01	0.00	0.074	0.000	11.204	0.00	0.00
40.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	11.247	0.00	3.64
40.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.074	0.000	11.247	0.00	0.00
41.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.075	0.000	11.267	0.00	1.82
41.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.075	0.000	11.267	0.00	0.00
42.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.075	0.000	11.285	0.00	1.82
42.00	10"x1/2" Bent plate	Yes	1.00	0.000	3.56	0.30	0.00	0.075	0.000	11.285	0.00	0.00
44.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.074	0.000	11.317	0.00	3.64
44.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.074	0.000	11.317	0.00	0.00
46.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	11.345	0.00	3.64
46.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.075	0.000	11.345	0.00	0.00
48.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.075	0.000	11.368	0.00	3.64
48.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.075	0.000	11.368	0.00	0.00
50.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.076	0.000	11.389	0.00	3.64
50.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.076	0.000	11.389	0.00	0.00
52.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	11.406	0.00	3.64
52.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.077	0.000	11.406	0.00	0.00
54.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.077	0.000	11.420	0.00	3.64
54.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.077	0.000	11.420	0.00	0.00
56.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.078	0.000	11.432	0.00	3.64
56.00	10"x1/2" Bent plate	Yes	2.00	0.000	3.56	0.59	0.00	0.078	0.000	11.432	0.00	0.00
57.11	1.6" Hybrid	Yes	1.11	0.000	0.00	0.00	0.00	0.078	0.000	11.438	0.00	2.02
57.11	10"x1/2" Bent plate	Yes	1.11	0.000	3.56	0.33	0.00	0.078	0.000	11.438	0.00	0.00
58.00	1.6" Hybrid	Yes	0.89	0.000	0.00	0.00	0.00	0.079	0.000	11.442	0.00	1.62
58.00	10"x1/2" Bent plate	Yes	0.89	0.000	3.56	0.26	0.00	0.079	0.000	11.442	0.00	0.00
58.50	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.028	0.000	11.444	0.00	0.91
58.50	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.028	0.000	11.444	0.00	0.00
60.00	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.028	0.000	11.450	0.00	2.73
60.00	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.028	0.000	11.450	0.00	0.00
62.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	11.456	0.00	3.64
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	11.456	0.00	0.00
64.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.028	0.000	11.460	0.00	3.64
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	11.460	0.00	0.00
66.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	11.463	0.00	3.64
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	11.463	0.00	0.00
68.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	11.465	0.00	3.64
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	11.465	0.00	0.00
70.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	11.466	0.00	3.64
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	11.466	0.00	0.00
72.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.029	0.000	11.467	0.00	3.64
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	11.467	0.00	0.00
74.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	11.466	0.00	3.64
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	11.466	0.00	0.00

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 24

Dead Load Factor 1.00

Wind Load Factor 1.00



Top Elev (ft)	Description	Wind Exposed	Length (ft)	Ca	Exposed Width (in)	Area (sqft)	CaAa (sqft)	Ra	Cf Adjust Factor	qz (psf)	F X (lb)	Dead Load (lb)
76.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	11.465	0.00	3.64
76.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	11.465	0.00	0.00
78.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	11.463	0.00	3.64
78.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	11.463	0.00	0.00
80.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	11.460	0.00	3.64
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	11.460	0.00	0.00
82.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.030	0.000	11.458	0.00	3.64
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	11.458	0.00	0.00
84.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	11.455	0.00	3.64
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	11.455	0.00	0.00
86.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	11.451	0.00	3.64
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	11.451	0.00	0.00
88.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.031	0.000	11.448	0.00	3.64
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	11.448	0.00	0.00
90.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	11.444	0.00	3.64
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	11.444	0.00	0.00
92.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	11.440	0.00	3.64
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	11.440	0.00	0.00
94.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.032	0.000	11.437	0.00	3.64
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	11.437	0.00	0.00
96.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	11.433	0.00	3.64
96.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	11.433	0.00	0.00
98.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	11.429	0.00	3.64
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	11.429	0.00	0.00
100.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.033	0.000	11.425	0.00	3.64
100.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	11.425	0.00	0.00
102.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	11.422	0.00	3.64
102.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	11.422	0.00	0.00
104.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	11.418	0.00	3.64
104.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	11.418	0.00	0.00
106.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.034	0.000	11.415	0.00	3.64
106.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	11.415	0.00	0.00
108.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	11.412	0.00	3.64
108.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	11.412	0.00	0.00
110.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	11.409	0.00	3.64
110.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	11.409	0.00	0.00
112.00	1.6" Hybrid	Yes	2.00	0.000	0.00	0.00	0.00	0.035	0.000	11.406	0.00	3.64
112.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	11.406	0.00	0.00
113.50	1.6" Hybrid	Yes	1.50	0.000	0.00	0.00	0.00	0.036	0.000	11.404	0.00	2.73
113.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.036	0.000	11.404	0.00	0.00
114.00	1.6" Hybrid	Yes	0.50	0.000	0.00	0.00	0.00	0.036	0.000	11.403	0.00	0.91
114.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.036	0.000	11.403	0.00	0.00
115.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.036	0.000	11.402	0.00	1.82
115.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.036	0.000	11.402	0.00	0.00
116.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	11.401	0.00	1.82
117.00	1.6" Hybrid	Yes	1.00	0.000	0.00	0.00	0.00	0.000	0.000	11.400	0.00	1.82

Linear Appurtenance Segment Forces (Factored)

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II

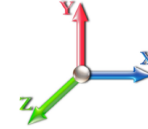


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Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 24

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	212.9

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



Load Case: 1.0D + 1.0W 60 mph Wind

Iterations 24

Dead Load Factor 1.00
Wind Load Factor 1.00



Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-46.31	-12.03	0.00	-1220.2	0.00	1220.22	4048.32	2024.16	8933.65	4411.99	0.00	0.000	0.000	0.198
2.00	-45.73	-11.91	0.00	-1196.1	0.00	1196.16	4032.02	2016.01	8833.50	4362.53	0.00	-0.017	0.000	0.195
4.00	-45.15	-11.79	0.00	-1172.3	0.00	1172.33	4015.53	2007.77	8733.46	4313.13	0.01	-0.035	0.000	0.193
6.00	-44.59	-11.68	0.00	-1148.7	0.00	1148.74	3998.87	1999.43	8633.56	4263.79	0.03	-0.052	0.000	0.191
8.00	-44.02	-11.57	0.00	-1125.3	0.00	1125.39	3982.01	1991.01	8533.79	4214.52	0.06	-0.069	0.000	0.189
10.00	-43.46	-11.45	0.00	-1102.2	0.00	1102.25	3964.98	1982.49	8434.18	4165.32	0.09	-0.087	0.000	0.187
11.50	-43.04	-11.37	0.00	-1085.0	0.00	1085.07	3952.09	1976.04	8359.57	4128.48	0.12	-0.100	0.000	0.162
12.00	-42.90	-11.34	0.00	-1079.3	0.00	1079.39	3947.76	1973.88	8334.72	4116.20	0.13	-0.103	0.000	0.161
14.00	-42.34	-11.23	0.00	-1056.7	0.00	1056.70	3930.37	1965.18	8235.42	4067.17	0.18	-0.118	0.000	0.159
14.16	-42.30	-11.22	0.00	-1054.9	0.00	1054.90	3928.97	1964.48	8227.49	4063.25	0.18	-0.120	0.000	0.188
14.84	-42.11	-11.19	0.00	-1047.2	0.00	1047.27	3923.00	1961.50	8193.77	4046.60	0.20	-0.126	0.000	0.159
16.00	-41.79	-11.13	0.00	-1034.2	0.00	1034.29	3912.78	1956.39	8136.31	4018.22	0.23	-0.134	0.000	0.157
16.50	-41.66	-11.10	0.00	-1028.7	0.00	1028.73	3908.36	1954.18	8111.55	4005.99	0.25	-0.138	0.000	0.179
18.00	-41.24	-11.03	0.00	-1012.0	0.00	1012.07	3895.02	1947.51	8037.37	3969.35	0.29	-0.151	0.000	0.178
20.00	-40.70	-10.93	0.00	-990.01	0.00	990.01	3877.07	1938.54	7938.63	3920.59	0.36	-0.168	0.000	0.176
21.00	-40.43	-10.88	0.00	-979.09	0.00	979.09	3868.03	1934.02	7889.33	3896.24	0.39	-0.177	0.000	0.174
22.00	-40.16	-10.83	0.00	-968.21	0.00	968.21	3858.94	1929.47	7840.08	3871.92	0.43	-0.185	0.000	0.173
24.00	-39.62	-10.73	0.00	-946.55	0.00	946.55	3840.63	1920.32	7741.75	3823.36	0.51	-0.202	0.000	0.171
26.00	-39.09	-10.64	0.00	-925.09	0.00	925.09	3822.14	1911.07	7643.63	3774.90	0.60	-0.219	0.000	0.169
28.00	-38.56	-10.55	0.00	-903.81	0.00	903.81	3803.46	1901.73	7545.74	3726.56	0.70	-0.236	0.000	0.167
30.00	-38.04	-10.45	0.00	-882.72	0.00	882.72	3784.60	1892.30	7448.09	3678.33	0.80	-0.253	0.000	0.164
32.00	-37.51	-10.36	0.00	-861.81	0.00	861.81	3765.56	1882.78	7350.68	3630.22	0.91	-0.270	0.000	0.162
34.00	-37.00	-10.27	0.00	-841.09	0.00	841.09	3746.34	1873.17	7253.52	3582.24	1.03	-0.287	0.000	0.160
36.00	-36.48	-10.18	0.00	-820.55	0.00	820.55	3726.93	1863.47	7156.62	3534.39	1.15	-0.304	0.000	0.157
37.06	-36.00	-10.13	0.00	-809.77	0.00	809.77	3716.57	1858.29	7105.38	3509.08	1.22	-0.313	0.000	0.192
37.96	-35.60	-10.08	0.00	-800.65	0.00	800.65	3707.74	1853.87	7061.93	3487.62	1.28	-0.322	0.000	0.154
38.00	-35.58	-10.08	0.00	-800.25	0.00	800.25	3707.34	1853.67	7060.00	3486.67	1.28	-0.322	0.000	0.154
40.00	-34.69	-9.99	0.00	-780.08	0.00	780.08	3687.57	1843.78	6963.65	3439.09	1.42	-0.339	0.000	0.151
41.00	-34.25	-9.94	0.00	-770.10	0.00	770.10	3677.62	1838.81	6915.58	3415.35	1.49	-0.347	0.000	0.150
42.00	-33.81	-9.89	0.00	-760.16	0.00	760.16	3033.05	1516.53	5788.55	2858.75	1.57	-0.355	0.000	0.161
44.00	-33.36	-9.80	0.00	-740.38	0.00	740.38	3018.90	1509.45	5713.49	2821.68	1.72	-0.372	0.000	0.168
46.00	-32.91	-9.71	0.00	-720.78	0.00	720.78	3004.56	1502.28	5638.53	2784.66	1.88	-0.389	0.000	0.165
48.00	-32.47	-9.61	0.00	-701.37	0.00	701.37	2990.04	1495.02	5563.69	2747.70	2.05	-0.406	0.000	0.162
50.00	-32.03	-9.52	0.00	-682.14	0.00	682.14	2975.34	1487.67	5488.97	2710.80	2.22	-0.423	0.000	0.159
52.00	-31.59	-9.43	0.00	-663.09	0.00	663.09	2960.46	1480.23	5414.39	2673.96	2.40	-0.440	0.000	0.156
54.00	-31.16	-9.34	0.00	-644.23	0.00	644.23	2945.39	1472.69	5339.95	2637.20	2.59	-0.456	0.000	0.153
56.00	-30.73	-9.25	0.00	-625.55	0.00	625.55	2930.14	1465.07	5265.67	2600.52	2.78	-0.473	0.000	0.151
57.11	-30.49	-9.20	0.00	-615.28	0.00	615.28	2921.60	1460.80	5224.51	2580.19	2.89	-0.482	0.000	0.191
58.00	-30.31	-9.16	0.00	-607.09	0.00	607.09	2914.71	1457.35	5191.54	2563.91	2.98	-0.492	0.000	0.146
58.50	-30.20	-9.14	0.00	-602.51	0.00	602.51	2910.82	1455.41	5173.04	2554.77	3.04	-0.496	0.000	0.178
60.00	-29.87	-9.08	0.00	-588.80	0.00	588.80	2899.09	1449.55	5117.58	2527.38	3.20	-0.511	0.000	0.176
62.00	-29.44	-8.99	0.00	-570.65	0.00	570.65	2883.30	1441.65	5043.81	2490.95	3.41	-0.531	0.000	0.173
64.00	-29.02	-8.90	0.00	-552.68	0.00	552.68	2867.32	1433.66	4970.21	2454.60	3.64	-0.550	0.000	0.169
66.00	-28.59	-8.81	0.00	-534.88	0.00	534.88	2851.15	1425.58	4896.82	2418.35	3.87	-0.570	0.000	0.166
68.00	-28.17	-8.73	0.00	-517.25	0.00	517.25	2834.81	1417.40	4823.62	2382.21	4.12	-0.589	0.000	0.162
70.00	-27.76	-8.64	0.00	-499.79	0.00	499.79	2818.28	1409.14	4750.64	2346.16	4.37	-0.608	0.000	0.159
72.00	-27.06	-8.55	0.00	-482.50	0.00	482.50	2801.57	1400.79	4677.88	2310.23	4.63	-0.627	0.000	0.154
74.00	-26.37	-8.47	0.00	-465.39	0.00	465.39	2784.68	1392.34	4605.35	2274.41	4.89	-0.645	0.000	0.150

Calculated Forces

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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76.00	-25.69	-8.38	0.00	-448.46	0.00	448.46	2161.97	1080.98	3608.45	1782.08	5.17	-0.664	0.000	0.167
78.00	-25.33	-8.29	0.00	-431.71	0.00	431.71	2151.06	1075.53	3556.01	1756.18	5.45	-0.682	0.000	0.179
80.00	-24.98	-8.21	0.00	-415.12	0.00	415.12	2139.97	1069.98	3503.61	1730.30	5.74	-0.703	0.000	0.174
82.00	-24.63	-8.13	0.00	-398.70	0.00	398.70	2128.69	1064.35	3451.27	1704.45	6.04	-0.723	0.000	0.169
84.00	-24.28	-8.05	0.00	-382.45	0.00	382.45	2117.24	1058.62	3398.99	1678.63	6.35	-0.742	0.000	0.164
86.00	-23.94	-7.97	0.00	-366.35	0.00	366.35	2105.60	1052.80	3346.79	1652.86	6.66	-0.762	0.000	0.159
88.00	-23.60	-7.88	0.00	-350.43	0.00	350.43	2093.78	1046.89	3294.68	1627.12	6.98	-0.780	0.000	0.155
90.00	-23.26	-7.80	0.00	-334.66	0.00	334.66	2081.77	1040.89	3242.65	1601.42	7.32	-0.799	0.000	0.150
92.00	-22.93	-7.72	0.00	-319.05	0.00	319.05	2069.59	1034.79	3190.73	1575.78	7.65	-0.817	0.000	0.145
94.00	-22.59	-7.65	0.00	-303.60	0.00	303.60	2057.22	1028.61	3138.91	1550.19	8.00	-0.835	0.000	0.140
96.00	-22.26	-7.57	0.00	-288.31	0.00	288.31	2044.67	1022.33	3087.22	1524.66	8.35	-0.853	0.000	0.145
98.00	-21.94	-7.49	0.00	-273.18	0.00	273.18	2031.93	1015.97	3035.65	1499.19	8.72	-0.871	0.000	0.140
100.00	-21.61	-7.41	0.00	-258.20	0.00	258.20	2019.02	1009.51	2984.22	1473.79	9.09	-0.889	0.000	0.134
100.00	-21.61	-7.41	0.00	-258.20	0.00	258.20	1394.49	697.25	2068.33	1021.47	9.09	-0.889	0.000	0.156
102.00	-21.34	-7.34	0.00	-243.38	0.00	243.38	1387.39	693.70	2035.72	1005.36	9.46	-0.906	0.000	0.173
104.00	-21.07	-7.26	0.00	-228.70	0.00	228.70	1380.13	690.06	2003.09	989.25	9.85	-0.926	0.000	0.165
106.00	-20.80	-7.19	0.00	-214.18	0.00	214.18	1372.69	686.35	1970.45	973.13	10.24	-0.945	0.000	0.157
108.00	-20.53	-7.12	0.00	-199.80	0.00	199.80	1365.09	682.55	1937.81	957.01	10.64	-0.963	0.000	0.149
110.00	-20.26	-7.04	0.00	-185.57	0.00	185.57	1357.32	678.66	1905.17	940.89	11.04	-0.980	0.000	0.140
112.00	-20.00	-6.97	0.00	-171.48	0.00	171.48	1349.39	674.69	1872.56	924.79	11.46	-0.997	0.000	0.132
113.50	-19.81	-6.91	0.00	-161.03	0.00	161.03	1343.33	671.66	1848.11	912.71	11.77	-1.009	0.000	0.126
113.50	-19.81	-6.91	0.00	-161.03	0.00	161.03	1343.33	671.66	1848.11	912.71	11.77	-1.009	0.000	0.126
114.00	-19.74	-6.90	0.00	-157.57	0.00	157.57	1341.28	670.64	1839.96	908.69	11.88	-1.013	0.000	0.188
115.00	-19.61	-6.86	0.00	-150.68	0.00	150.68	1337.17	668.58	1823.68	900.65	12.09	-1.025	0.000	0.182
116.00	-19.39	-6.83	0.00	-143.81	0.00	143.81	1333.01	666.51	1807.40	892.61	12.31	-1.036	0.000	0.176
117.00	-16.81	-5.93	0.00	-136.99	0.00	136.99	1328.82	664.41	1791.13	884.57	12.53	-1.047	0.000	0.168
118.00	-16.59	-5.89	0.00	-131.06	0.00	131.06	1324.58	662.29	1774.88	876.54	12.75	-1.058	0.000	0.162
120.00	-16.16	-5.82	0.00	-119.28	0.00	119.28	1327.18	663.59	1784.85	881.47	13.20	-1.078	0.000	0.148
122.00	-15.91	-5.75	0.00	-107.65	0.00	107.65	1318.63	659.32	1752.36	865.43	13.65	-1.097	0.000	0.137
124.00	-15.66	-5.68	0.00	-96.16	0.00	96.16	1309.91	654.95	1719.92	849.40	14.12	-1.114	0.000	0.125
126.00	-15.41	-5.61	0.00	-84.80	0.00	84.80	1301.02	650.51	1687.54	833.41	14.59	-1.129	0.000	0.114
127.00	-12.27	-4.30	0.00	-79.20	0.00	79.20	1296.51	648.26	1671.38	825.43	14.82	-1.137	0.000	0.105
128.00	-12.17	-4.26	0.00	-74.90	0.00	74.90	1291.97	645.98	1655.23	817.46	15.06	-1.144	0.000	0.101
130.00	-11.96	-4.19	0.00	-66.38	0.00	66.38	1282.74	641.37	1623.00	801.54	15.55	-1.157	0.000	0.092
132.00	-11.75	-4.12	0.00	-57.99	0.00	57.99	1273.35	636.68	1590.85	785.66	16.03	-1.169	0.000	0.083
134.00	-11.54	-4.06	0.00	-49.74	0.00	49.74	1263.80	631.90	1558.80	769.83	16.52	-1.180	0.000	0.074
136.00	-11.33	-3.99	0.00	-41.63	0.00	41.63	1254.07	627.04	1526.84	754.05	17.02	-1.189	0.000	0.064
137.00	-7.74	-2.84	0.00	-37.64	0.00	37.64	1249.15	624.57	1510.90	746.18	17.27	-1.193	0.000	0.057
138.00	-7.64	-2.80	0.00	-34.80	0.00	34.80	1244.18	622.09	1494.99	738.32	17.52	-1.197	0.000	0.053
140.00	-7.45	-2.74	0.00	-29.20	0.00	29.20	1234.12	617.06	1463.26	722.65	18.02	-1.204	0.000	0.046
142.00	-7.26	-2.67	0.00	-23.72	0.00	23.72	1223.90	611.95	1431.66	707.04	18.53	-1.211	0.000	0.040
144.00	-7.07	-2.61	0.00	-18.38	0.00	18.38	1213.50	606.75	1400.19	691.50	19.04	-1.216	0.000	0.032
146.00	-6.89	-2.54	0.00	-13.17	0.00	13.17	1202.94	601.47	1368.85	676.02	19.55	-1.220	0.000	0.025
147.00	-3.62	-1.42	0.00	-10.63	0.00	10.63	1197.60	598.80	1353.24	668.32	19.80	-1.221	0.000	0.019
148.00	-3.53	-1.39	0.00	-9.21	0.00	9.21	1192.22	596.11	1337.67	660.62	20.06	-1.223	0.000	0.017
150.00	-3.35	-1.33	0.00	-6.43	0.00	6.43	1181.32	590.66	1306.64	645.30	20.57	-1.225	0.000	0.013
152.00	-3.18	-1.26	0.00	-3.77	0.00	3.77	1170.26	585.13	1275.78	630.06	21.09	-1.226	0.000	0.009
153.00	-3.03	-1.20	0.00	-2.51	0.00	2.51	1164.66	582.33	1260.41	622.47	21.34	-1.227	0.000	0.007
154.00	-2.94	-1.16	0.00	-1.31	0.00	1.31	1159.03	579.51	1245.09	614.90	21.60	-1.227	0.000	0.005
155.00	0.00	-1.10	0.00	-0.15	0.00	0.15	1153.35	576.68	1229.81	607.36	21.86	-1.227	0.000	0.000

Final Analysis Summary

Structure: CT00302-S-SBA	Code: EIA/TIA-222-G	1/20/2022
Site Name: Danielson	Exposure: B	
Height: 155.00 (ft)	Crest Height: 172.00	
Base Elev: 0.000 (ft)	Site Class: D - Stiff Soil	
Gh: 1.1	Topography: 3	Struct Class: II



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Reactions

Load Case	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)
1.2D + 1.6W 101 mph Wind	54.6	0.00	55.53	0.00	0.00	5559.93
0.9D + 1.6W 101 mph Wind	54.6	0.00	41.64	0.00	0.00	5509.92
1.2D + 1.0Di + 1.0Wi 50 mph Wind	11.8	0.00	93.16	0.00	0.00	1283.90
1.2D + 1.0E	2.3	0.00	55.57	0.00	0.00	294.03
0.9D + 1.0E	2.3	0.00	41.68	0.00	0.00	291.01
1.0D + 1.0W 60 mph Wind	12.0	0.00	46.31	0.00	0.00	1220.22

Max Stresses

Load Case	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Elev (ft)	Stress Ratio
1.2D + 1.6W 101 mph Wind	-55.53	-54.57	0.00	-5559.9	0.00	-5559.9	4048.32	2024.1	8933.65	4411.99	0.00	0.875
0.9D + 1.6W 101 mph Wind	-41.64	-54.56	0.00	-5509.9	0.00	-5509.9	4048.32	2024.1	8933.65	4411.99	0.00	0.865
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-44.85	-7.75	0.00	-175.23	0.00	-175.23	1341.28	670.64	1839.96	908.69	114.00	0.226
1.2D + 1.0E	-23.82	-1.91	0.00	-62.58	0.00	-62.58	1341.28	670.64	1839.96	908.69	114.00	0.087
0.9D + 1.0E	-17.87	-1.87	0.00	-61.75	0.00	-61.75	1341.28	670.64	1839.96	908.69	114.00	0.081
1.0D + 1.0W 60 mph Wind	-46.31	-12.03	0.00	-1220.2	0.00	-1220.2	4048.32	2024.1	8933.65	4411.99	0.00	0.198

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors			Lower Termination				Upper Termination				Max Member			
			VQ/I (lb/in)	Vu (kips)	phi Vn (kips)	MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Pu (kips)	phi Pn (kips)	phi Tn (kips)	Ratio
0.0	21.0	(3) PLT-6"X1-1/4"(1.25" Hole)	307.5	5.53	37.1	327.3	37.1	9	0	298.3	37.1			347.60	413.6	351.56	0.989
0.0	14.2	(3) PLT-10"x1/2" (90deg)	-209.7	-3.77	37.1	251.9	37.1	7	0	217.2	37.1	6	0	251.91	290.0	255.00	0.988
11.5	16.5	(1) PLT-6"X1-1/4"(1.25" Hole)	-285.7	-5.14	37.1	278.2	37.1	8	11	271.6	37.1	8	11	323.06	413.6	351.56	0.919
14.8	37.1	(3) PLT-10"x1/2" (90deg)	217.9	3.92	37.1	215.2	37.1	6	0	209.6	37.1	6	0	230.71	290.0	255.00	0.905
21.0	41.0	(3) PLT-6"X1-1/4"(1.25" Hole)	351.3	6.32	37.1	298.3	37.1			268.2	37.1			337.24	413.6	351.56	0.959
38.0	57.1	(3) PLT-10"x1/2" (90deg)	-248.3	-4.47	37.1	213.8	37.1	6	0	199.6	37.1	6	0	218.71	290.0	255.00	0.858
41.0	58.5	(3) PLT-6"X1-1/4"(1.25" Hole)	396.1	7.13	37.1	268.2	37.1			247.3	37.1	7	11	317.67	413.6	351.56	0.904
58.0	76.0	(3) PLT-5"x1-1/4"(1.25"Hole)	-362.8	-6.53	37.1	229.5	37.1	7	8	233.3	37.1			270.80	344.6	276.56	0.979
76.0	96.0	(3) PLT-4.5"x 1-1/4"(1.25"ho	-395.3	-7.11	37.1	216.5	37.1			180.8	37.1			232.44	310.2	239.06	0.972
96.0	113.5	(3) PLT-3.5x1.25(1.25 Hole)	-415.2	-7.47	37.1	151.8	37.1			116.1	37.1	4	6	157.57	241.2	164.06	0.960



Monopole Mat Foundation Design

Date

1/20/2022

Customer Name:	Dish Wireless	TIA Standard:	EIA-222-G
Site Name:		Structure Height (Ft.):	155
Site Number:	CT00302-S-SBA	Engineer Name:	K. Azizllari
Engr. Number:	122186	Engineer Login ID:	

Foundation Info Obtained from:

Drawings/Calculations
Monopole
Analysis

Structure Type:

Analysis or Design?

Base Reactions (Factored):

Axial Load (Kips):	55.5	Shear Force (Kips):	54.7
Uplift Force (Kips):	0.0	Moment (Kips-ft):	5577.4

Allowable overstress %: 5.0%

Foundation Geometries:

Diameter of Pier (ft.):	7.0	Mods required -Yes/No ?:	No
Pier Height A. G. (ft.):	0.00	Depth of Base BG (ft.):	6.0
Length of Pad (ft.):	33	Thickness of Pad (ft.):	3.50
		Width of Pad (ft.):	33
Final Length of pad (ft)	33.0	Final width of pad (ft):	33.0

Material Properties and Rebar Info:

Concrete Strength (psi):	3000	Steel Elastic Modulus:	29000	ksi
Vertical bar yield (ksi)	60	Tie steel yield (ksi):	60	
Vertical Rebar Size #:	14	Tie / Stirrup Size #:	4	
Qty. of Vertical Rebars:	25	Tie Spacing (in):	6.0	
Pad Rebar Yield (Ksi):	60	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):	23	Qty. of Rebar in Pad (W):	23
---------------------------	----	---------------------------	----

Rebar at the top of the concrete pad:

Qty. of Rebar in Pad (L):	23	Qty. of Rebar in Pad (W):	23
---------------------------	----	---------------------------	----

Apply 1.35 factor for e/w Per G: 1.35

Soil Design Parameters:

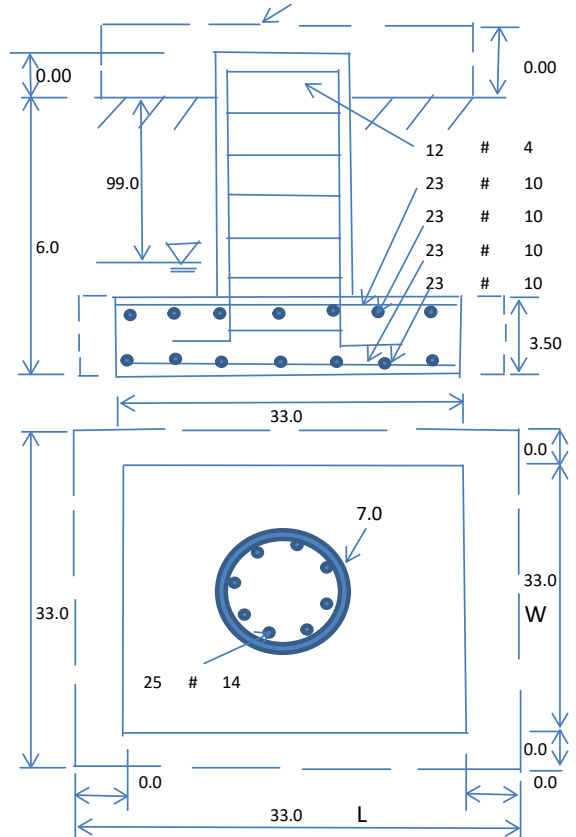
Soil Unit Weight (pcf):	130.0	Soil Buoyant Weight:	50.0	Pcf	Angle from Top of Pad:	30
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Bottm of Pad:	25
Ultimate Bearing Pressure (psf):	32000	Ultimate Skin Friction:	0	Psf	Angle from Bottm of Pad:	25
Consider Friction for O.T.M. (Y/N):	No	Consider Friction for bearing (Y/N):	Yes		Reduction factor on the maximum soil bearing pressure:	1.00
Consider soil hor. resist. for OTM.:	No					

Foundation Analysis and Design:

Uplift Strength Reduction Factor:	0.75	Compression Strength Reduction Factor:	0.75
Total Dry Soil Volume (cu. Ft.):	2626.29	Total Dry Soil Weight (Kips):	341.42
Total Buoyant Soil Volume (cu. Ft.):	0.00	Total Buoyant Soil Weight (Kips):	0.00
Total Effective Soil Weight (Kips):	341.42	Weight from the Concrete Block at Top (K):	0.00
Total Dry Concrete Volume (cu. Ft.):	3907.90	Total Dry Concrete Weight (Kips):	586.19
Total Buoyant Concrete Volume (cu. Ft.):	0.00	Total Buoyant Concrete Weight (Kips):	0.00
Total Effective Concrete Weight (Kips):	586.19	Total Vertical Load on Base (Kips):	983.10

Check Soil Capacities:

Calculated Maxium Net Soil Pressure under the base (psf):	1838	< Allowable Factored Soil Bearing (psf):	24000	0.08	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	14690.7	> Design Factored Momont (kips-ft):	5906	0.40	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	2.49				OK!



Check the capacities of Reinforcing Concrete:

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

Load/
Capacity
Ratio

(1) Concrete Pier:

Vertical Steel Rebar Area (sq. in./each):	2.25	Tie / Stirrup Area (sq. in./each):	0.20		
Calculated Moment Capacity (Mn,Kips-Ft):	8511.1	> Design Factored Moment (Mu, Kips-F	5714.2	0.67	OK!
Calculated Shear Capacity (Kips):	724.1	> Design Factored Shear (Kips):	54.7	0.08	OK!
Calculated Tension Capacity (Tn, Kips):	3037.5	> Design Factored Tension (Tu Kips):	0.0	0.00	OK!
Calculated Compression Capacity (Pn, Kips):	7273.8	> Design Factored Axial Load (Pu Kips):	55.5	0.01	OK!
Moment & Axial Strength Combination:	0.67	OK! Check Tie Spacing (Design/Required):	0.5		OK!
Pier Reinforcement Ratio:	0.010	Reinforcement Ratio is satisfied per ACI			

(2).Concrete Pad:

One-Way Design Shear Capacity (L-Direction, Kips):	1248.5	> One-Way Factored Shear (L-D. Kips):	324.2	0.26	OK!
One-Way Design Shear Capacity (W-Direction, Kips):	1248.5	> One-Way Factored Shear (W-D., Kips)	324.2	0.26	OK!
One-Way Design Shear Capacity (Corner-Corner, Kips):	1258.9	> One-Way Factored Shear (C-C, Kips):	325.5	0.26	OK!
Lower Steel Pad Reinforcement Ratio (L-Direct.):	0.0019	OK! Lower Steel Pad Reinf. Ratio (W-Direc	0.0019		
Lower Steel Pad Moment Capacity (L-Direction, Kips-ft):	4930.1	> Moment at Bottom (L-Dir. K-Ft):	2442.5	0.50	OK!
Lower Steel Pad Moment Capacity (W-Direction, Kips-ft):	4930.1	> Moment at Bottom (W-Dir. K-Ft):	2442.5	0.50	OK!
Lower Steel Pad Moment Capacity (Corner-Corner, K-ft):	6943.8	> Moment at Bottom (C-C Dir. K-Ft):	3454.3	0.50	OK!
Upper Steel Pad Reinforcement Ratio (L-Direct.):	0.0019	OK! Upper Steel Reinf. Ratio (W-Dir.):	0.0019		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):	4930.1	> Moment at the top (L-Dir K-Ft):	1143.4	0.23	OK!
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):	4930.1	> Moment at the top (W-Dir K-Ft):	1143.4	0.23	OK!
Upper Steel Pad Moment Capacity (Corner-Corner, K-ft):	6943.8	> Moment at the top (C-C Dir. K-Ft):	1066.6	0.15	OK!

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

Moment transferred by punching shear:	2231.0	k-ft.	Max. factored shear stress $v_{u,CD}$:	6.4	Psi
Max. factored shear stress $v_{u,AB}$:	12.1	Psi	Factored shear Strength ϕv_n :	164.3	Psi
Max. factored shear stress v_u :	12.1	Psi	Check Usage of Punching Shear Capacity:	0.07	OK!

Exhibit E

Mount Analysis



March 10, 2022

Sherri Knapik
SBA Network Services, LLC.
134 Flanders Road, Suite 125
Westborough, MA 01581
(508) 251-0720 x 3805

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: BOBOS00896A
Site Name: N/A

SBA Network Services Designation: **Site Number:** CT00302-S-07
Site Name: Danielson
Application Number: 178906, v1

Engineering Firm Designation: **B+T Group Project Number:** 161924.002.01

Site Data: 246 East Franklin Street, Danielson, CT, 06239, Windham County
Latitude 41.79582°, Longitude -71.87033°
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 49.6%)

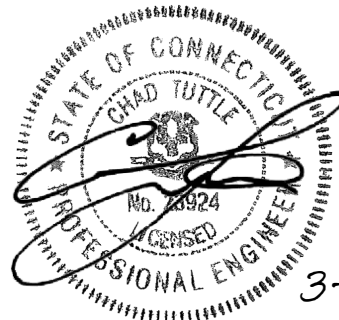
This analysis has been performed in accordance with the ANSI/TIA-222-H Standard.

All the equipment proposed in this report shall be installed in accordance with the drawings for the determined available structural capacity to be effective

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: Rose Denny

Respectfully submitted by: B&T Engineering, Inc.
COA: PEC.0001564 Expires: 02/01/2023



3-11-22

Chad E. Tuttle, P.E.

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Additional Calculations

1) INTRODUCTION

The appurtenance mount consists of Commscope platform mount (Part #MC-PK8-DSH) at 117 ft., attached to monopole at 246 East Franklin Street, Danielson, CT, 06239, Windham 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 122 mph with no ice and 50 mph with 1.0 inch escalated ice thickness. Exposure Category B, 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 30° increments in the wind direction. The analyzed loading is detailed in Table 1.

Table 1 – Proposed Equipment Information

Loading	RAD Center Elev. (ft.)	Position	Qty.	Description	Note
Proposed	117	1	3	Commscope FFVV-65B-R2	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 Mount Pipe.
- (2) Proposed Equipment to be installed directly behind the Antenna.
- (3) Proposed Equipment to be installed on the Mount.

Table 2 - Documents Provided

Documents	Remarks	Reference	Source
Collo App	Proposed Loading	Date: 12/12/2021	SBA Network Services, LLC.

3) ANALYSIS PROCEDURE

3.1) Analysis Method

RISA-3D (Version 19.0.4), 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.

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

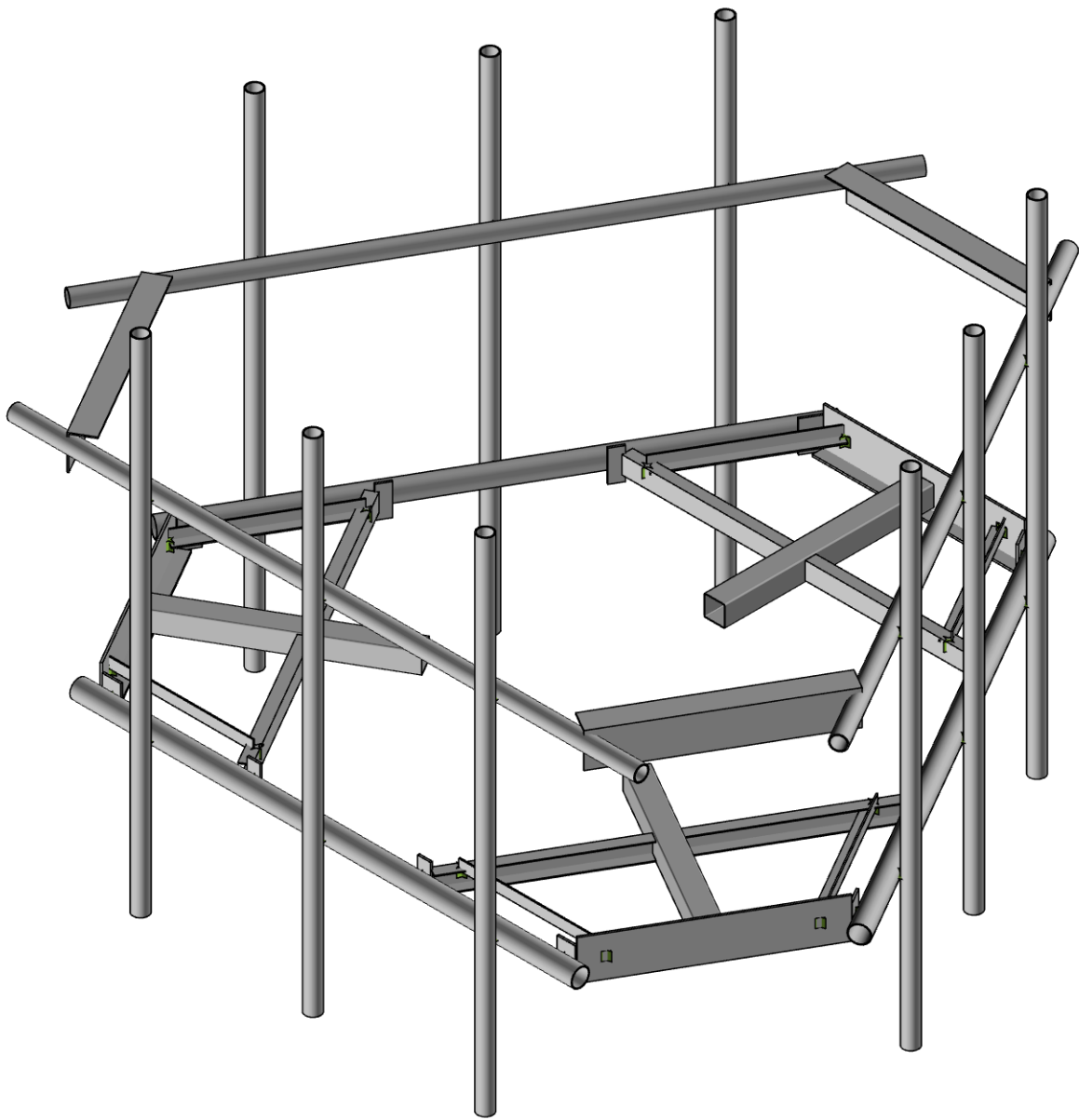
Notes	Component	Elevation (ft.)	% Capacity	Pass / Fail
-	Main Face Horizontals	117	7.3	Pass
-	Support Rails	117	13.2	Pass
-	Support Tubes	117	49.6	Pass
-	Support Channels	117	34.3	Pass
-	Support Angles	117	34.8	Pass
-	Mount Pipes	117	14.7	Pass
-	Connection Plates	117	19.9	Pass
-	Connection Angles	117	22.1	Pass
-	Connection Bolts	117	25.8	Pass

5) RECOMMENDATIONS

The Commscope platform mount (Part #MC-PK8-DSH) 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

GRG

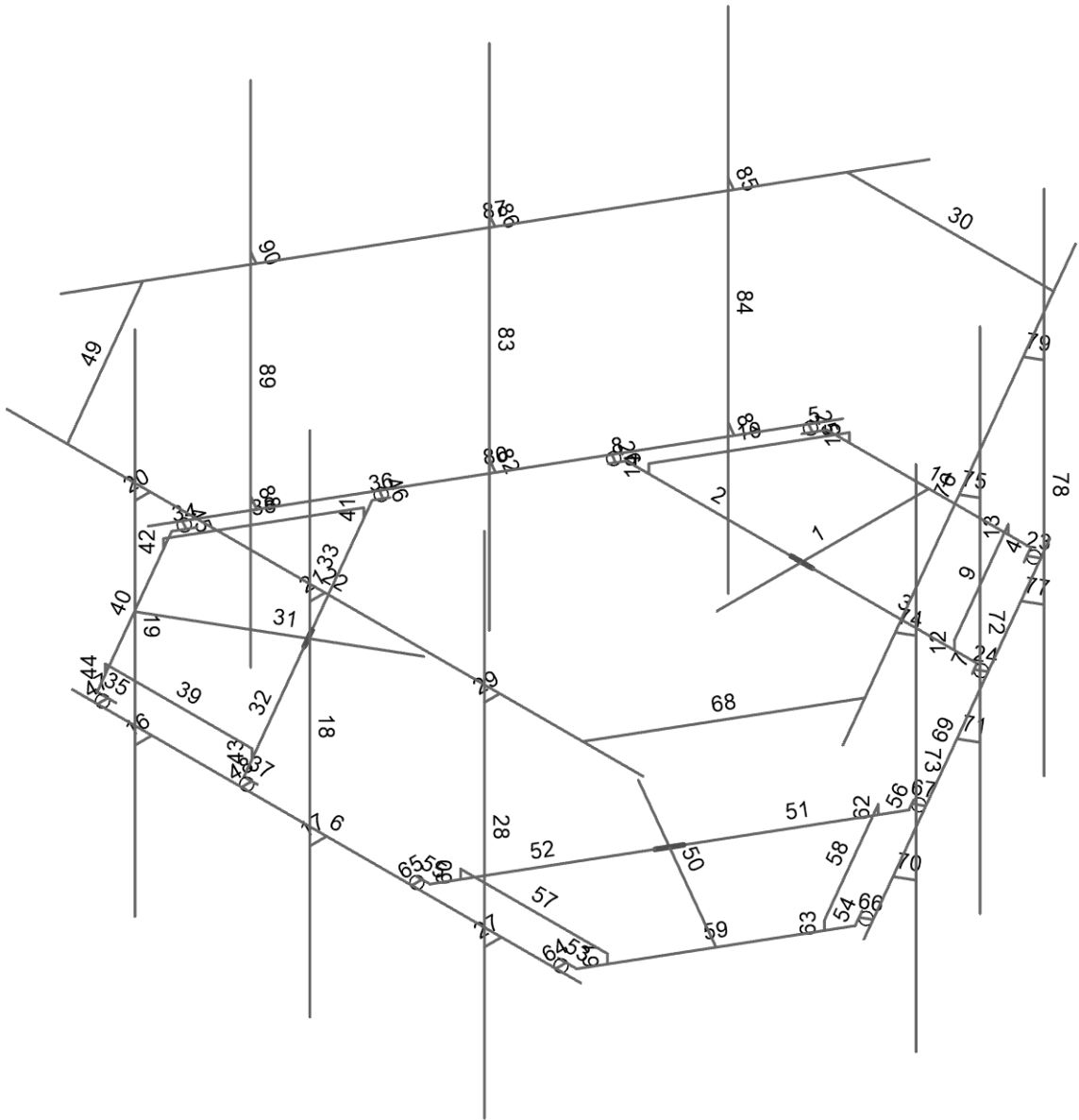
161924.002.01

CT00302-S-07 - Danielson

GRG-1

Mar 10, 2022

161924_002_01_Danielson_CT.R3D



Envelope Only Solution

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GRG

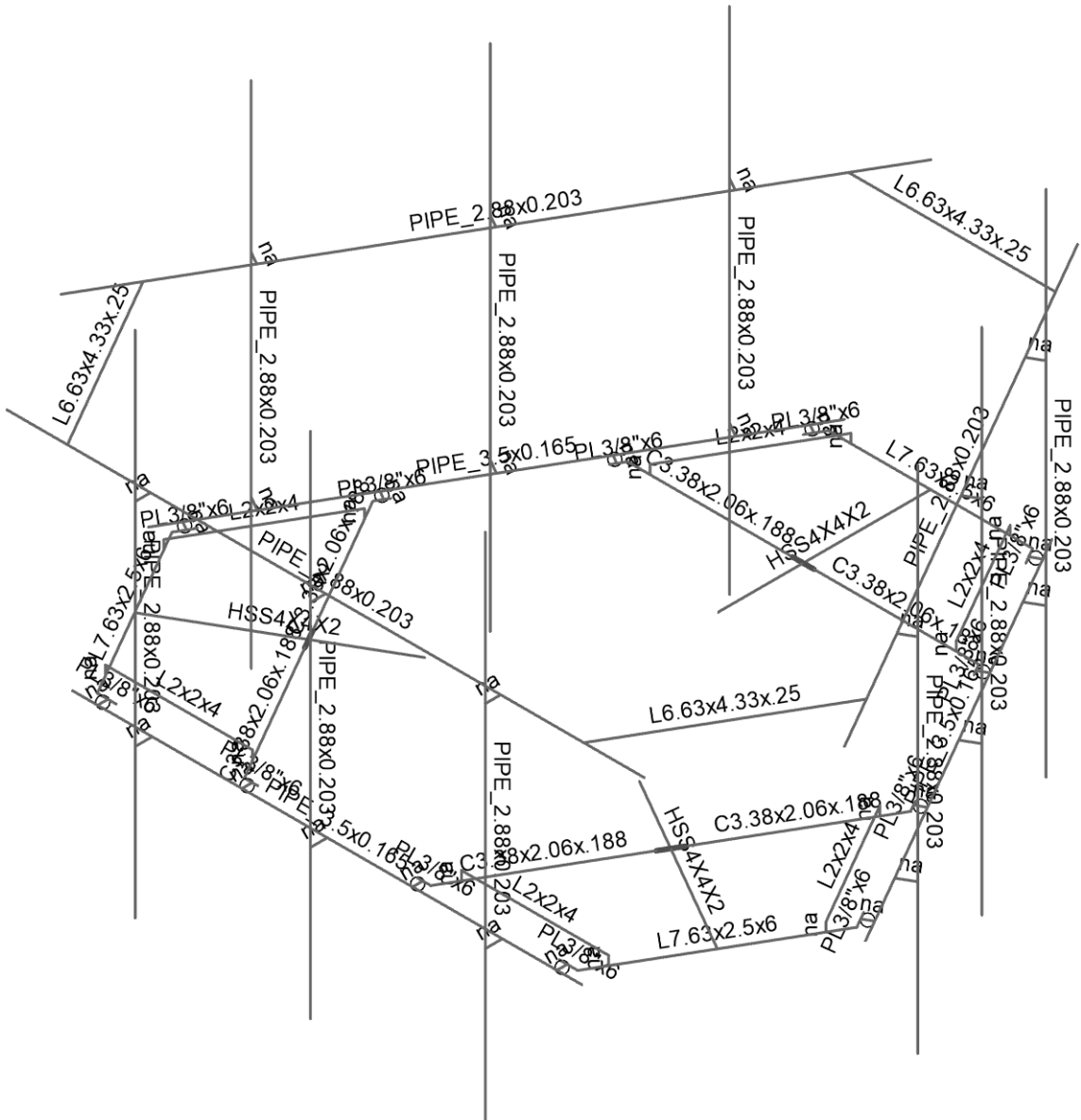
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CT00302-S-07 - Danielson

GRG-2

Mar 10, 2022

161924_002_01_Danielson_CT.R3D

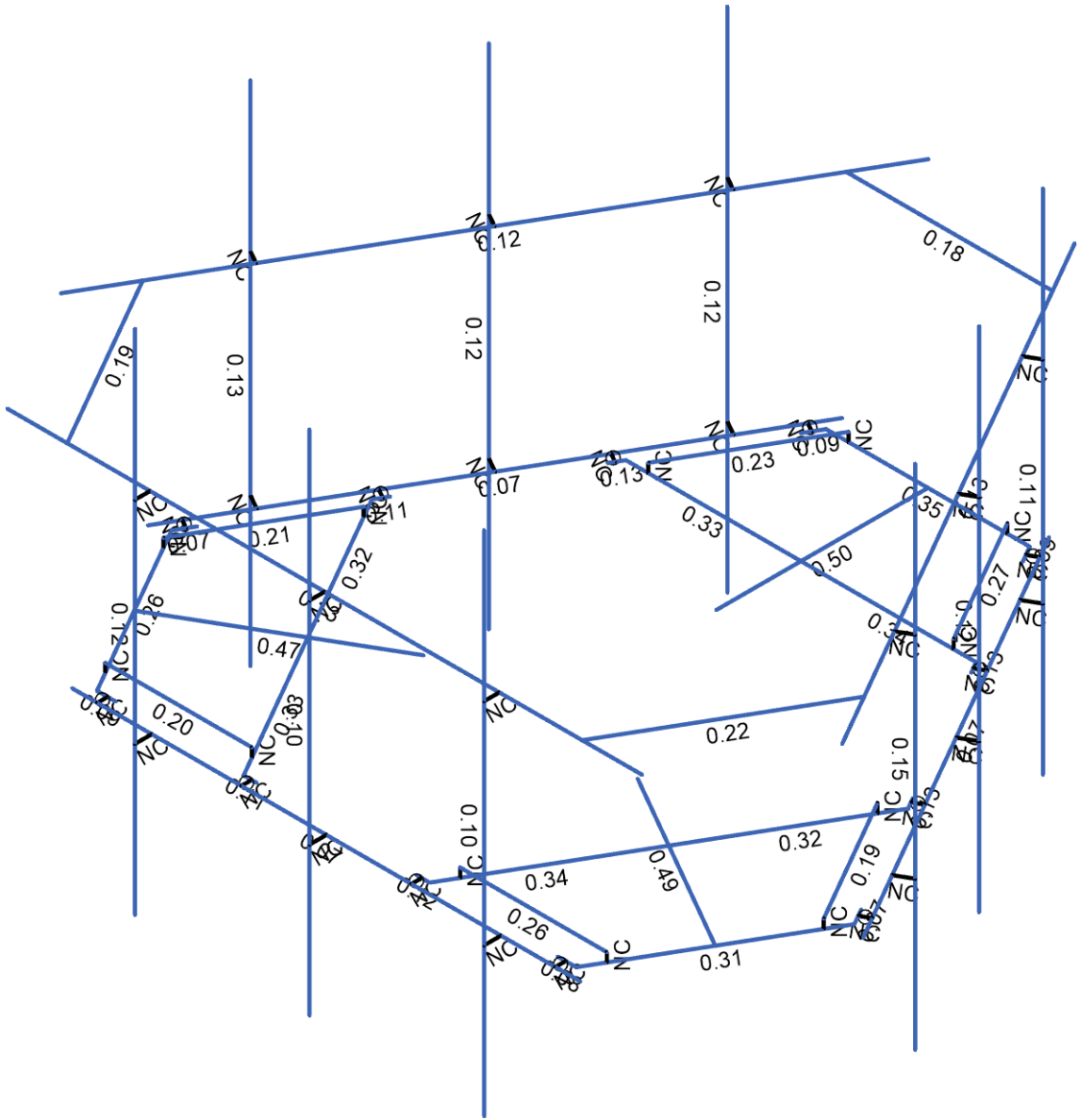
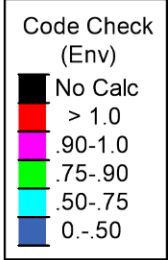


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B+T Group
 GRG
 161924.002.01

CT00302-S-07 - Danielson

GRG-3
 Mar 10, 2022
 161924_002_01_Danielson_CT.R3D



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

B+T Group
GRG
161924.002.01

CT00302-S-07 - Danielson

GRG-4
Mar 10, 2022
161924_002_01_Danielson_CT.R3D



Company : B+T Group
 Designer : GRG
 Job Number : 161924.002.01
 Model Name : CT00302-S-07 - Danielson

3/10/2022
 6:41:02 PM
 Checked By : _____

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	1	0	0	-1.949902	
2	2	0	0	-5.283235	
3	3	0	0	-3.283235	
4	4	2.758333	0	-3.283235	
5	5	-2.758333	0	-3.283235	
6	6	-1.603633	0	-5.283235	
7	7	1.603633	0	-5.283235	
8	8	1.749466	0	-5.030644	
9	9	-1.749466	0	-5.030644	
10	10	1.686966	0	-5.138897	
11	11	1.826823	0	-5.219644	
12	12	-1.686966	0	-5.138897	
13	13	-1.826823	0	-5.219644	
14	14	-3.999998	0	4.191897	
15	15	3.999998	0	4.191897	
16	16	2.8625	0	-3.102813	
17	17	2.820833	0	-3.174983	
18	18	2.960689	0	-3.255729	
19	19	-2.8625	0	-3.102813	
20	20	-2.820833	0	-3.174983	
21	21	-2.960689	0	-3.255729	
22	22	-1.25	0.140833	-5.283235	
23	23	-2.404701	0.140833	-3.283235	
24	24	2.404701	0.140833	-3.283235	
25	25	1.25	0.140833	-5.283235	
26	26	-1.25	0	-5.283235	
27	27	-2.404701	0	-3.283235	
28	28	2.404701	0	-3.283235	
29	29	1.25	0	-5.283235	
30	30	-2.749998	0	4.191897	
31	31	0.000002	0	4.191897	
32	32	-2.749998	0	4.457522	
33	33	0.000002	0	4.457522	
34	34	-2.749998	-2.333667	4.457522	
35	35	0.000002	-2.333667	4.457522	
36	36	-2.749998	5.666335	4.457522	
37	37	0.000002	5.666335	4.457522	
38	38	-2.749998	3.333337	4.457522	
39	39	0.000002	3.333337	4.457522	
40	40	-2.749998	3.333337	4.217938	
41	41	0.000002	3.333337	4.217938	
42	42	-5	3.333337	4.217938	
43	43	5	3.333337	4.217938	
44	44	2.749998	0	4.191897	
45	45	2.749998	0	4.457522	
46	46	2.749998	-2.333667	4.457522	
47	47	2.749998	5.666335	4.457522	
48	48	2.749998	3.333337	4.457522	
49	49	2.749998	3.333337	4.217938	
50	50	0	0	0	
51	51	1.62504	3.333337	-5.621224	
52	52	-1.62504	3.333337	-5.621224	
53	53	-1.688664	0	0.974951	
54	54	-4.575416	0	2.641617	
55	55	-2.843365	0	1.641617	



Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
56	56	-4.222531	0	-0.747169	
57	57	-1.464198	0	4.030404	
58	58	-3.773599	0	4.030404	
59	59	-5.377232	0	1.252831	
60	60	-5.231399	0	1.00024	
61	61	-3.481933	0	4.030404	
62	62	-5.293899	0	1.108493	
63	63	-5.433755	0	1.027747	
64	64	-3.606933	0	4.030404	
65	65	-3.606933	0	4.191897	
66	66	-4.118365	0	-0.927591	
67	67	-4.160032	0	-0.855422	
68	68	-4.299889	0	-0.936168	
69	69	-1.255865	0	4.030404	
70	70	-1.339199	0	4.030404	
71	71	-1.339199	0	4.191897	
72	72	-3.950416	0.140833	3.724149	
73	73	-1.641015	0.140833	3.724149	
74	74	-4.045715	0.140833	-0.440914	
75	75	-5.200416	0.140833	1.559086	
76	76	-3.950416	0	3.724149	
77	77	-1.641015	0	3.724149	
78	78	-4.045715	0	-0.440914	
79	79	-5.200416	0	1.559086	
80	80	-5.680643	3.333337	1.403286	
81	81	-4.055603	3.333337	4.217938	
82	82	1.688664	0	0.974951	
83	83	4.575416	0	2.641617	
84	84	2.843365	0	1.641617	
85	85	1.464198	0	4.030404	
86	86	4.222531	0	-0.747169	
87	87	5.377232	0	1.252831	
88	88	3.773599	0	4.030404	
89	89	3.481933	0	4.030404	
90	90	5.231399	0	1.00024	
91	91	3.606933	0	4.030404	
92	92	3.606933	0	4.191897	
93	93	5.293899	0	1.108493	
94	94	5.433755	0	1.027747	
95	95	1.255865	0	4.030404	
96	96	1.339199	0	4.030404	
97	97	1.339199	0	4.191897	
98	98	4.118365	0	-0.927591	
99	99	4.160032	0	-0.855422	
100	100	4.299889	0	-0.936168	
101	101	5.200416	0.140833	1.559086	
102	102	4.045715	0.140833	-0.440914	
103	103	1.641015	0.140833	3.724149	
104	104	3.950416	0.140833	3.724149	
105	105	5.200416	0	1.559086	
106	106	4.045715	0	-0.440914	
107	107	1.641015	0	3.724149	
108	108	3.950416	0	3.724149	
109	109	4.055603	3.333337	4.217938	
110	110	5.680643	3.333337	1.403286	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
111	111	5.630288	0	1.368152	
112	112	1.63029	0	-5.560048	
113	113	5.005288	0	0.28562	
114	114	3.630288	0	-2.09595	
115	115	5.235326	0	0.152807	
116	116	3.860326	0	-2.228763	
117	117	5.235326	-2.333667	0.152807	
118	118	3.860326	-2.333667	-2.228763	
119	119	5.235326	5.666335	0.152807	
120	120	3.860326	5.666335	-2.228763	
121	121	5.235326	3.333337	0.152807	
122	122	3.860326	3.333337	-2.228763	
123	123	5.027841	3.333337	0.272599	
124	124	3.652841	3.333337	-2.108971	
125	125	6.152842	3.333337	2.221158	
126	126	1.152842	3.333337	-6.439096	
127	127	2.25529	0	-4.477517	
128	128	2.485328	0	-4.610329	
129	129	2.485328	-2.333667	-4.610329	
130	130	2.485328	5.666335	-4.610329	
131	131	2.485328	3.333337	-4.610329	
132	132	2.277843	3.333337	-4.490537	
133	133	-1.63029	0	-5.560048	
134	134	-5.630288	0	1.368152	
135	135	-2.25529	0	-4.477517	
136	136	-3.63029	0	-2.095947	
137	137	-2.485328	0	-4.610329	
138	138	-3.860328	0	-2.228759	
139	139	-2.485328	-2.333667	-4.610329	
140	140	-3.860328	-2.333667	-2.228759	
141	141	-2.485328	5.666335	-4.610329	
142	142	-3.860328	5.666335	-2.228759	
143	143	-2.485328	3.333337	-4.610329	
144	144	-3.860328	3.333337	-2.228759	
145	145	-2.277843	3.333337	-4.490537	
146	146	-3.652843	3.333337	-2.108968	
147	147	-1.152842	3.333337	-6.439096	
148	148	-6.152842	3.333337	2.221158	
149	149	-5.005288	0	0.28562	
150	150	-5.235326	0	0.152807	
151	151	-5.235326	-2.333667	0.152807	
152	152	-5.235326	5.666335	0.152807	
153	153	-5.235326	3.333337	0.152807	
154	154	-5.027841	3.333337	0.272599	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]	Y Rot [k-ft/rad]	Z Rot [k-ft/rad]
		Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
1	1						
2	2						
3	3						
4	4						
5	5						
6	16						
7	17						
8	19						

Node Boundary Conditions (Continued)

Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]	Y Rot [k-ft/rad]	Z Rot [k-ft/rad]
9	20					
10	22					
11	25					
12	26					
13	29					
14	53	Reaction	Reaction	Reaction	Reaction	Reaction
15	54					
16	55					
17	56					
18	57					
19	66					
20	67					
21	69					
22	70					
23	72					
24	75					
25	76					
26	79					
27	82	Reaction	Reaction	Reaction	Reaction	Reaction
28	83					
29	84					
30	85					
31	86					
32	95					
33	96					
34	98					
35	99					
36	101					
37	104					
38	105					
39	108					

Hot Rolled Steel Properties

Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e ⁶ F ⁻¹]	Density [k/ft ³]	Yield [ksi]	Ry	Fu [ksi]	Rt	
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
8	A500 Gr.C	29000	11154	0.3	0.65	0.49	46	1.4	62	1.3

Hot Rolled Steel Section Sets

Label	Shape	Type	Design List	Material	Design Rule Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]			
1	MF-H1	PIPE	3.5x0.165	Beam	None	A500 Gr.C	Typical	1.729	2.409	2.409	4.819
2	MF-H2	PIPE	2.88x0.203	Beam	None	A500 Gr.C	Typical	1.707	1.538	1.538	3.076
3	SF-H1	HSS	4X4X2	Beam	None	A500 Gr.B Rect	Typical	1.77	4.4	4.4	6.91
4	SF-H2	C	3.38x2.06x.188	Beam	Channel	A36 Gr.36	Typical	1.339	0.562	2.4	0.015
5	SF-H3	L	2x2x4	Beam	Single Angle	A36 Gr.36	Typical	0.944	0.346	0.346	0.021
6	SF-H4	L	7.63x2.5x6	Beam	Single Angle	A36 Gr.36	Typical	3.658	1.307	22.092	0.163
7	MF-P1	PIPE	2.88x0.203	Column	None	A500 Gr.C	Typical	1.707	1.538	1.538	3.076
8	MF-CP1	PL	3/8"x6	Beam	None	A36 Gr.36	Typical	2.25	0.026	6.75	0.101



Company : B+T Group
 Designer : GRG
 Job Number : 161924.002.01
 Model Name : CT00302-S-07 - Danielson

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Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design Rule	Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
9	MF-H3	L6.63x4.33x.25	Beam	Single Angle	A36 Gr.36	Typical	2.678	4.383	12.502	0.054

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	1	1	2		SF-H1	Beam	None	A500 Gr.B Rect	Typical
2	2	5	3	180	SF-H2	Beam	Channel	A36 Gr.36	Typical
3	3	3	4	180	SF-H2	Beam	Channel	A36 Gr.36	Typical
4	4	7	8		MF-CP1	Beam	None	A36 Gr.36	Typical
5	5	6	9		MF-CP1	Beam	None	A36 Gr.36	Typical
6	6	14	15		MF-H1	Beam	None	A500 Gr.C	Typical
7	7	16	4		MF-CP1	Beam	None	A36 Gr.36	Typical
8	8	5	19		MF-CP1	Beam	None	A36 Gr.36	Typical
9	9	25	24		SF-H3	Beam	Single Angle	A36 Gr.36	Typical
10	10	23	22		SF-H3	Beam	Single Angle	A36 Gr.36	Typical
11	11	6	7		SF-H4	Beam	Single Angle	A36 Gr.36	Typical
12	12	28	24		RIGID	None	None	RIGID	Typical
13	13	29	25		RIGID	None	None	RIGID	Typical
14	14	27	23		RIGID	None	None	RIGID	Typical
15	15	26	22		RIGID	None	None	RIGID	Typical
16	16	32	30		RIGID	None	None	RIGID	Typical
17	17	33	31		RIGID	None	None	RIGID	Typical
18	18	37	35		MF-P1	Column	None	A500 Gr.C	Typical
19	19	36	34		MF-P1	Column	None	A500 Gr.C	Typical
20	20	38	40		RIGID	None	None	RIGID	Typical
21	21	39	41		RIGID	None	None	RIGID	Typical
22	22	42	43		MF-H2	Beam	None	A500 Gr.C	Typical
23	23	11	10		RIGID	None	None	RIGID	Typical
24	24	18	17		RIGID	None	None	RIGID	Typical
25	25	13	12		RIGID	None	None	RIGID	Typical
26	26	21	20		RIGID	None	None	RIGID	Typical
27	27	45	44		RIGID	None	None	RIGID	Typical
28	28	47	46		MF-P1	Column	None	A500 Gr.C	Typical
29	29	48	49		RIGID	None	None	RIGID	Typical
30	30	51	52	180	MF-H3	Beam	Single Angle	A36 Gr.36	Typical
31	31	53	54		SF-H1	Beam	None	A500 Gr.B Rect	Typical
32	32	57	55	180	SF-H2	Beam	Channel	A36 Gr.36	Typical
33	33	55	56	180	SF-H2	Beam	Channel	A36 Gr.36	Typical
34	34	59	60		MF-CP1	Beam	None	A36 Gr.36	Typical
35	35	58	61		MF-CP1	Beam	None	A36 Gr.36	Typical
36	36	66	56		MF-CP1	Beam	None	A36 Gr.36	Typical
37	37	57	69		MF-CP1	Beam	None	A36 Gr.36	Typical
38	38	75	74		SF-H3	Beam	Single Angle	A36 Gr.36	Typical
39	39	73	72		SF-H3	Beam	Single Angle	A36 Gr.36	Typical
40	40	58	59		SF-H4	Beam	Single Angle	A36 Gr.36	Typical
41	41	78	74		RIGID	None	None	RIGID	Typical
42	42	79	75		RIGID	None	None	RIGID	Typical
43	43	77	73		RIGID	None	None	RIGID	Typical
44	44	76	72		RIGID	None	None	RIGID	Typical
45	45	63	62		RIGID	None	None	RIGID	Typical
46	46	68	67		RIGID	None	None	RIGID	Typical
47	47	65	64		RIGID	None	None	RIGID	Typical
48	48	71	70		RIGID	None	None	RIGID	Typical
49	49	80	81	180	MF-H3	Beam	Single Angle	A36 Gr.36	Typical
50	50	82	83		SF-H1	Beam	None	A500 Gr.B Rect	Typical
51	51	86	84	180	SF-H2	Beam	Channel	A36 Gr.36	Typical



Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
52	52	84	85	180	SF-H2	Beam	Channel	A36 Gr.36	Typical
53	53	88	89		MF-CP1	Beam	None	A36 Gr.36	Typical
54	54	87	90		MF-CP1	Beam	None	A36 Gr.36	Typical
55	55	95	85		MF-CP1	Beam	None	A36 Gr.36	Typical
56	56	86	98		MF-CP1	Beam	None	A36 Gr.36	Typical
57	57	104	103		SF-H3	Beam	Single Angle	A36 Gr.36	Typical
58	58	102	101		SF-H3	Beam	Single Angle	A36 Gr.36	Typical
59	59	87	88		SF-H4	Beam	Single Angle	A36 Gr.36	Typical
60	60	107	103		RIGID	None	None	RIGID	Typical
61	61	108	104		RIGID	None	None	RIGID	Typical
62	62	106	102		RIGID	None	None	RIGID	Typical
63	63	105	101		RIGID	None	None	RIGID	Typical
64	64	92	91		RIGID	None	None	RIGID	Typical
65	65	97	96		RIGID	None	None	RIGID	Typical
66	66	94	93		RIGID	None	None	RIGID	Typical
67	67	100	99		RIGID	None	None	RIGID	Typical
68	68	109	110	180	MF-H3	Beam	Single Angle	A36 Gr.36	Typical
69	69	111	112		MF-H1	Beam	None	A500 Gr.C	Typical
70	70	115	113		RIGID	None	None	RIGID	Typical
71	71	116	114		RIGID	None	None	RIGID	Typical
72	72	120	118		MF-P1	Column	None	A500 Gr.C	Typical
73	73	119	117		MF-P1	Column	None	A500 Gr.C	Typical
74	74	121	123		RIGID	None	None	RIGID	Typical
75	75	122	124		RIGID	None	None	RIGID	Typical
76	76	125	126		MF-H2	Beam	None	A500 Gr.C	Typical
77	77	128	127		RIGID	None	None	RIGID	Typical
78	78	130	129		MF-P1	Column	None	A500 Gr.C	Typical
79	79	131	132		RIGID	None	None	RIGID	Typical
80	80	133	134		MF-H1	Beam	None	A500 Gr.C	Typical
81	81	137	135		RIGID	None	None	RIGID	Typical
82	82	138	136		RIGID	None	None	RIGID	Typical
83	83	142	140		MF-P1	Column	None	A500 Gr.C	Typical
84	84	141	139		MF-P1	Column	None	A500 Gr.C	Typical
85	85	143	145		RIGID	None	None	RIGID	Typical
86	86	144	146		RIGID	None	None	RIGID	Typical
87	87	147	148		MF-H2	Beam	None	A500 Gr.C	Typical
88	88	150	149		RIGID	None	None	RIGID	Typical
89	89	152	151		MF-P1	Column	None	A500 Gr.C	Typical
90	90	153	154		RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	I Offset [in]	J Offset [in]	Physical	Deflection Ratio Options	Seismic DR
1	1				Yes	N/A	None
2	2			2	Yes	N/A	None
3	3		2		Yes	N/A	None
4	4				Yes	N/A	None
5	5				Yes	N/A	None
6	6				Yes	N/A	None
7	7				Yes	N/A	None
8	8				Yes	N/A	None
9	9				Yes	N/A	None
10	10				Yes	N/A	None
11	11				Yes	N/A	None
12	12				Yes	** NA **	None
13	13				Yes	** NA **	None



Member Advanced Data (Continued)

	Label	I Release	I Offset [in]	J Offset [in]	Physical	Deflection Ratio Options	Seismic DR
14	14				Yes	** NA **	None
15	15				Yes	** NA **	None
16	16				Yes	** NA **	None
17	17				Yes	** NA **	None
18	18				Yes	** NA **	None
19	19				Yes	** NA **	None
20	20				Yes	** NA **	None
21	21				Yes	** NA **	None
22	22				Yes	N/A	None
23	23	OOOOOX			Yes	** NA **	None
24	24	OOOOOX			Yes	** NA **	None
25	25	OOOOOX			Yes	** NA **	None
26	26	OOOOOX			Yes	** NA **	None
27	27				Yes	** NA **	None
28	28				Yes	** NA **	None
29	29				Yes	** NA **	None
30	30				Yes	N/A	None
31	31				Yes	N/A	None
32	32			2	Yes	N/A	None
33	33		2		Yes	N/A	None
34	34				Yes	N/A	None
35	35				Yes	N/A	None
36	36				Yes	N/A	None
37	37				Yes	N/A	None
38	38				Yes	N/A	None
39	39				Yes	N/A	None
40	40				Yes	N/A	None
41	41				Yes	** NA **	None
42	42				Yes	** NA **	None
43	43				Yes	** NA **	None
44	44				Yes	** NA **	None
45	45	OOOOOX			Yes	** NA **	None
46	46	OOOOOX			Yes	** NA **	None
47	47	OOOOOX			Yes	** NA **	None
48	48	OOOOOX			Yes	** NA **	None
49	49				Yes	N/A	None
50	50				Yes	N/A	None
51	51			2	Yes	N/A	None
52	52		2		Yes	N/A	None
53	53				Yes	N/A	None
54	54				Yes	N/A	None
55	55				Yes	N/A	None
56	56				Yes	N/A	None
57	57				Yes	N/A	None
58	58				Yes	N/A	None
59	59				Yes	N/A	None
60	60				Yes	** NA **	None
61	61				Yes	** NA **	None
62	62				Yes	** NA **	None
63	63				Yes	** NA **	None
64	64	OOOOOX			Yes	** NA **	None
65	65	OOOOOX			Yes	** NA **	None
66	66	OOOOOX			Yes	** NA **	None
67	67	OOOOOX			Yes	** NA **	None
68	68				Yes	N/A	None

Member Advanced Data (Continued)

	Label	I Release	I Offset [in]	J Offset [in]	Physical	Deflection Ratio Options	Seismic DR
69	69				Yes	N/A	None
70	70				Yes	** NA **	None
71	71				Yes	** NA **	None
72	72				Yes	** NA **	None
73	73				Yes	** NA **	None
74	74				Yes	** NA **	None
75	75				Yes	** NA **	None
76	76				Yes	N/A	None
77	77				Yes	** NA **	None
78	78				Yes	** NA **	None
79	79				Yes	** NA **	None
80	80				Yes	N/A	None
81	81				Yes	** NA **	None
82	82				Yes	** NA **	None
83	83				Yes	** NA **	None
84	84				Yes	** NA **	None
85	85				Yes	** NA **	None
86	86				Yes	** NA **	None
87	87				Yes	N/A	None
88	88				Yes	** NA **	None
89	89				Yes	** NA **	None
90	90				Yes	** NA **	None

Hot Rolled Steel Design Parameters

	Label	Shape	Length [ft]	Lcomp top [ft]	Function
1	1	SF-H1	3.333	Lbyy	Lateral
2	2	SF-H2	2.758	Lbyy	Lateral
3	3	SF-H2	2.758	Lbyy	Lateral
4	4	MF-CP1	0.292	Lbyy	Lateral
5	5	MF-CP1	0.292	Lbyy	Lateral
6	6	MF-H1	8	Lbyy	Lateral
7	7	MF-CP1	0.208	Lbyy	Lateral
8	8	MF-CP1	0.208	Lbyy	Lateral
9	9	SF-H3	2.309	Lbyy	Lateral
10	10	SF-H3	2.309	Lbyy	Lateral
11	11	SF-H4	3.207	Lbyy	Lateral
12	18	MF-P1	8	Lbyy	Lateral
13	19	MF-P1	8	Lbyy	Lateral
14	22	MF-H2	10	Lbyy	Lateral
15	28	MF-P1	8	Lbyy	Lateral
16	30	MF-H3	3.25	Lbyy	Lateral
17	31	SF-H1	3.333	Lbyy	Lateral
18	32	SF-H2	2.758	Lbyy	Lateral
19	33	SF-H2	2.758	Lbyy	Lateral
20	34	MF-CP1	0.292	Lbyy	Lateral
21	35	MF-CP1	0.292	Lbyy	Lateral
22	36	MF-CP1	0.208	Lbyy	Lateral
23	37	MF-CP1	0.208	Lbyy	Lateral
24	38	SF-H3	2.309	Lbyy	Lateral
25	39	SF-H3	2.309	Lbyy	Lateral
26	40	SF-H4	3.207	Lbyy	Lateral
27	49	MF-H3	3.25	Lbyy	Lateral
28	50	SF-H1	3.333	Lbyy	Lateral
29	51	SF-H2	2.758	Lbyy	Lateral
30	52	SF-H2	2.758	Lbyy	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lcomp top [ft]	Function
31	53	MF-CP1	0.292	Lbyy	Lateral
32	54	MF-CP1	0.292	Lbyy	Lateral
33	55	MF-CP1	0.208	Lbyy	Lateral
34	56	MF-CP1	0.208	Lbyy	Lateral
35	57	SF-H3	2.309	Lbyy	Lateral
36	58	SF-H3	2.309	Lbyy	Lateral
37	59	SF-H4	3.207	Lbyy	Lateral
38	68	MF-H3	3.25	Lbyy	Lateral
39	69	MF-H1	8	Lbyy	Lateral
40	72	MF-P1	8	Lbyy	Lateral
41	73	MF-P1	8	Lbyy	Lateral
42	76	MF-H2	10	Lbyy	Lateral
43	78	MF-P1	8	Lbyy	Lateral
44	80	MF-H1	8	Lbyy	Lateral
45	83	MF-P1	8	Lbyy	Lateral
46	84	MF-P1	8	Lbyy	Lateral
47	87	MF-H2	10	Lbyy	Lateral
48	89	MF-P1	8	Lbyy	Lateral

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	Y	-0.035	%15
2	28	Y	-0.035	%85
3	28	Y	-0.075	%20
4	28	Y	-0.064	%50
5	28	Y	0	0
6	89	Y	-0.035	%15
7	89	Y	-0.035	%85
8	89	Y	-0.075	%20
9	89	Y	-0.064	%50
10	89	Y	0	0
11	78	Y	-0.035	%15
12	78	Y	-0.035	%85
13	78	Y	-0.075	%20
14	78	Y	-0.064	%50
15	78	Y	0	0
16	1	Y	-0.022	%20
17	1	Y	0	0
18	1	Y	0	0
19	1	Y	0	0
20	1	Y	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	Z	-0.203	%15
2	28	Z	-0.203	%85
3	28	Z	-0.065	%20
4	28	Z	-0.065	%50
5	28	Z	0	0
6	89	Z	-0.203	%15
7	89	Z	-0.203	%85
8	89	Z	-0.065	%20
9	89	Z	-0.065	%50

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
10	89	Z	0	0
11	78	Z	-0.203	%15
12	78	Z	-0.203	%85
13	78	Z	-0.065	%20
14	78	Z	-0.065	%50
15	78	Z	0	0
16	1	Z	-0.067	%20
17	1	Z	0	0
18	1	Z	0	0
19	1	Z	0	0
20	1	Z	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	X	-0.081	%15
2	28	X	-0.081	%85
3	28	X	-0.039	%20
4	28	X	-0.034	%50
5	28	X	0	0
6	89	X	-0.081	%15
7	89	X	-0.081	%85
8	89	X	-0.039	%20
9	89	X	-0.034	%50
10	89	X	0	0
11	78	X	-0.081	%15
12	78	X	-0.081	%85
13	78	X	-0.039	%20
14	78	X	-0.034	%50
15	78	X	0	0
16	1	X	-0.037	%20
17	1	X	0	0
18	1	X	0	0
19	1	X	0	0
20	1	X	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	Z	-0.034	%15
2	28	Z	-0.034	%85
3	28	Z	-0.011	%20
4	28	Z	-0.011	%50
5	28	Z	0	0
6	89	Z	-0.034	%15
7	89	Z	-0.034	%85
8	89	Z	-0.011	%20
9	89	Z	-0.011	%50
10	89	Z	0	0
11	78	Z	-0.034	%15
12	78	Z	-0.034	%85
13	78	Z	-0.011	%20
14	78	Z	-0.011	%50
15	78	Z	0	0
16	1	Z	-0.011	%20

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
17	1	Z	0	0
18	1	Z	0	0
19	1	Z	0	0
20	1	Z	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	X	-0.014	%15
2	28	X	-0.014	%85
3	28	X	-0.007	%20
4	28	X	-0.006	%50
5	28	X	0	0
6	89	X	-0.014	%15
7	89	X	-0.014	%85
8	89	X	-0.007	%20
9	89	X	-0.006	%50
10	89	X	0	0
11	78	X	-0.014	%15
12	78	X	-0.014	%85
13	78	X	-0.007	%20
14	78	X	-0.006	%50
15	78	X	0	0
16	1	X	-0.006	%20
17	1	X	0	0
18	1	X	0	0
19	1	X	0	0
20	1	X	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	Z	-0.012	%15
2	28	Z	-0.012	%85
3	28	Z	-0.004	%20
4	28	Z	-0.004	%50
5	28	Z	0	0
6	89	Z	-0.012	%15
7	89	Z	-0.012	%85
8	89	Z	-0.004	%20
9	89	Z	-0.004	%50
10	89	Z	0	0
11	78	Z	-0.012	%15
12	78	Z	-0.012	%85
13	78	Z	-0.004	%20
14	78	Z	-0.004	%50
15	78	Z	0	0
16	1	Z	-0.004	%20
17	1	Z	0	0
18	1	Z	0	0
19	1	Z	0	0
20	1	Z	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	X	-0.005	%15
2	28	X	-0.005	%85
3	28	X	-0.002	%20
4	28	X	-0.002	%50
5	28	X	0	0
6	89	X	-0.005	%15
7	89	X	-0.005	%85
8	89	X	-0.002	%20
9	89	X	-0.002	%50
10	89	X	0	0
11	78	X	-0.005	%15
12	78	X	-0.005	%85
13	78	X	-0.002	%20
14	78	X	-0.002	%50
15	78	X	0	0
16	1	X	-0.002	%20
17	1	X	0	0
18	1	X	0	0
19	1	X	0	0
20	1	X	0	0

Member Point Loads (BLC 8 : Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	Y	-0.092	%15
2	28	Y	-0.092	%85
3	28	Y	-0.034	%20
4	28	Y	-0.033	%50
5	28	Y	0	0
6	89	Y	-0.092	%15
7	89	Y	-0.092	%85
8	89	Y	-0.034	%20
9	89	Y	-0.033	%50
10	89	Y	0	0
11	78	Y	-0.092	%15
12	78	Y	-0.092	%85
13	78	Y	-0.034	%20
14	78	Y	-0.033	%50
15	78	Y	0	0
16	1	Y	-0.034	%20
17	1	Y	0	0
18	1	Y	0	0
19	1	Y	0	0
20	1	Y	0	0

Member Point Loads (BLC 9 : 0 Seismic)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	Z	-0.014	%15
2	28	Z	-0.014	%85
3	28	Z	-0.015	%20
4	28	Z	-0.013	%50
5	28	Z	0	0
6	89	Z	-0.014	%15

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
7	89	Z	-0.014	%85
8	89	Z	-0.015	%20
9	89	Z	-0.013	%50
10	89	Z	0	0
11	78	Z	-0.014	%15
12	78	Z	-0.014	%85
13	78	Z	-0.015	%20
14	78	Z	-0.013	%50
15	78	Z	0	0
16	1	Z	-0.004	%20
17	1	Z	0	0
18	1	Z	0	0
19	1	Z	0	0
20	1	Z	0	0

Member Point Loads (BLC 10 : 90 Seismic)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	28	X	-0.014	%15
2	28	X	-0.014	%85
3	28	X	-0.015	%20
4	28	X	-0.013	%50
5	28	X	0	0
6	89	X	-0.014	%15
7	89	X	-0.014	%85
8	89	X	-0.015	%20
9	89	X	-0.013	%50
10	89	X	0	0
11	78	X	-0.014	%15
12	78	X	-0.014	%85
13	78	X	-0.015	%20
14	78	X	-0.013	%50
15	78	X	0	0
16	1	X	-0.004	%20
17	1	X	0	0
18	1	X	0	0
19	1	X	0	0
20	1	X	0	0

Member Point Loads (BLC 15 : Maint LL 1)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	22	Y	-0.25	%5

Member Point Loads (BLC 16 : Maint LL 2)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	6	Y	-0.25	%5

Member Point Loads (BLC 17 : Maint LL 3)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	87	Y	-0.25	%5



Member Point Loads (BLC 18 : Maint LL 4)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	80	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	69	Y	-0.25	%5

Member Point Loads (BLC 21 : Maint LL 7)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	22	Y	-0.25	%95

Member Point Loads (BLC 22 : Maint LL 8)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	6	Y	-0.25	%95

Member Point Loads (BLC 23 : Maint LL 9)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	87	Y	-0.25	%95

Member Point Loads (BLC 24 : Maint LL 10)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	80	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	69	Y	-0.25	%95

Member Point Loads (BLC 27 : Maint LL 13)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	31	Y	-0.25	%95



Member Point Loads (BLC 28 : Maint LL 14)

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

Member Point Loads (BLC 29 : Maint LL 15)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	50	Y	-0.25	%95

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	-0.016	-0.016	0	%100
2	2	Z	-0.014	-0.014	0	%100
3	3	Z	-0.014	-0.014	0	%100
4	4	Z	-0.02	-0.02	0	%100
5	5	Z	-0.02	-0.02	0	%100
6	6	Z	-0.012	-0.012	0	%100
7	7	Z	-0.02	-0.02	0	%100
8	8	Z	-0.02	-0.02	0	%100
9	9	Z	-0.009	-0.009	0	%100
10	10	Z	-0.009	-0.009	0	%100
11	11	Z	-0.027	-0.027	0	%100
12	18	Z	-0.01	-0.01	0	%100
13	19	Z	-0.01	-0.01	0	%100
14	22	Z	-0.01	-0.01	0	%100
15	28	Z	-0.01	-0.01	0	%100
16	30	Z	-0.024	-0.024	0	%100
17	31	Z	-0.016	-0.016	0	%100
18	32	Z	-0.014	-0.014	0	%100
19	33	Z	-0.014	-0.014	0	%100
20	34	Z	-0.02	-0.02	0	%100
21	35	Z	-0.02	-0.02	0	%100
22	36	Z	-0.02	-0.02	0	%100
23	37	Z	-0.02	-0.02	0	%100
24	38	Z	-0.009	-0.009	0	%100
25	39	Z	-0.009	-0.009	0	%100
26	40	Z	-0.027	-0.027	0	%100
27	49	Z	-0.024	-0.024	0	%100
28	50	Z	-0.016	-0.016	0	%100
29	51	Z	-0.014	-0.014	0	%100
30	52	Z	-0.014	-0.014	0	%100
31	53	Z	-0.02	-0.02	0	%100
32	54	Z	-0.02	-0.02	0	%100
33	55	Z	-0.02	-0.02	0	%100
34	56	Z	-0.02	-0.02	0	%100
35	57	Z	-0.009	-0.009	0	%100
36	58	Z	-0.009	-0.009	0	%100
37	59	Z	-0.027	-0.027	0	%100
38	68	Z	-0.024	-0.024	0	%100
39	69	Z	-0.012	-0.012	0	%100
40	72	Z	-0.01	-0.01	0	%100
41	73	Z	-0.01	-0.01	0	%100
42	76	Z	-0.01	-0.01	0	%100
43	78	Z	-0.01	-0.01	0	%100
44	80	Z	-0.012	-0.012	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, %)]
45	83	Z	-0.01	-0.01	0	%100
46	84	Z	-0.01	-0.01	0	%100
47	87	Z	-0.01	-0.01	0	%100
48	89	Z	-0.01	-0.01	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	-0.016	-0.016	0	%100
2	2	X	-0.014	-0.014	0	%100
3	3	X	-0.014	-0.014	0	%100
4	4	X	-0.02	-0.02	0	%100
5	5	X	-0.02	-0.02	0	%100
6	6	X	-0.012	-0.012	0	%100
7	7	X	-0.02	-0.02	0	%100
8	8	X	-0.02	-0.02	0	%100
9	9	X	-0.009	-0.009	0	%100
10	10	X	-0.009	-0.009	0	%100
11	11	X	-0.027	-0.027	0	%100
12	18	X	-0.01	-0.01	0	%100
13	19	X	-0.01	-0.01	0	%100
14	22	X	-0.01	-0.01	0	%100
15	28	X	-0.01	-0.01	0	%100
16	30	X	-0.024	-0.024	0	%100
17	31	X	-0.016	-0.016	0	%100
18	32	X	-0.014	-0.014	0	%100
19	33	X	-0.014	-0.014	0	%100
20	34	X	-0.02	-0.02	0	%100
21	35	X	-0.02	-0.02	0	%100
22	36	X	-0.02	-0.02	0	%100
23	37	X	-0.02	-0.02	0	%100
24	38	X	-0.009	-0.009	0	%100
25	39	X	-0.009	-0.009	0	%100
26	40	X	-0.027	-0.027	0	%100
27	49	X	-0.024	-0.024	0	%100
28	50	X	-0.016	-0.016	0	%100
29	51	X	-0.014	-0.014	0	%100
30	52	X	-0.014	-0.014	0	%100
31	53	X	-0.02	-0.02	0	%100
32	54	X	-0.02	-0.02	0	%100
33	55	X	-0.02	-0.02	0	%100
34	56	X	-0.02	-0.02	0	%100
35	57	X	-0.009	-0.009	0	%100
36	58	X	-0.009	-0.009	0	%100
37	59	X	-0.027	-0.027	0	%100
38	68	X	-0.024	-0.024	0	%100
39	69	X	-0.012	-0.012	0	%100
40	72	X	-0.01	-0.01	0	%100
41	73	X	-0.01	-0.01	0	%100
42	76	X	-0.01	-0.01	0	%100
43	78	X	-0.01	-0.01	0	%100
44	80	X	-0.012	-0.012	0	%100
45	83	X	-0.01	-0.01	0	%100
46	84	X	-0.01	-0.01	0	%100
47	87	X	-0.01	-0.01	0	%100
48	89	X	-0.01	-0.01	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	-0.005	-0.005	0	%100
2	2	Z	-0.004	-0.004	0	%100
3	3	Z	-0.004	-0.004	0	%100
4	4	Z	-0.008	-0.008	0	%100
5	5	Z	-0.008	-0.008	0	%100
6	6	Z	-0.002	-0.002	0	%100
7	7	Z	-0.009	-0.009	0	%100
8	8	Z	-0.009	-0.009	0	%100
9	9	Z	-0.003	-0.003	0	%100
10	10	Z	-0.003	-0.003	0	%100
11	11	Z	-0.006	-0.006	0	%100
12	18	Z	-0.002	-0.002	0	%100
13	19	Z	-0.002	-0.002	0	%100
14	22	Z	-0.002	-0.002	0	%100
15	28	Z	-0.002	-0.002	0	%100
16	30	Z	-0.006	-0.006	0	%100
17	31	Z	-0.005	-0.005	0	%100
18	32	Z	-0.004	-0.004	0	%100
19	33	Z	-0.004	-0.004	0	%100
20	34	Z	-0.008	-0.008	0	%100
21	35	Z	-0.008	-0.008	0	%100
22	36	Z	-0.009	-0.009	0	%100
23	37	Z	-0.009	-0.009	0	%100
24	38	Z	-0.003	-0.003	0	%100
25	39	Z	-0.003	-0.003	0	%100
26	40	Z	-0.006	-0.006	0	%100
27	49	Z	-0.006	-0.006	0	%100
28	50	Z	-0.005	-0.005	0	%100
29	51	Z	-0.004	-0.004	0	%100
30	52	Z	-0.004	-0.004	0	%100
31	53	Z	-0.008	-0.008	0	%100
32	54	Z	-0.008	-0.008	0	%100
33	55	Z	-0.009	-0.009	0	%100
34	56	Z	-0.009	-0.009	0	%100
35	57	Z	-0.003	-0.003	0	%100
36	58	Z	-0.003	-0.003	0	%100
37	59	Z	-0.006	-0.006	0	%100
38	68	Z	-0.006	-0.006	0	%100
39	69	Z	-0.002	-0.002	0	%100
40	72	Z	-0.002	-0.002	0	%100
41	73	Z	-0.002	-0.002	0	%100
42	76	Z	-0.002	-0.002	0	%100
43	78	Z	-0.002	-0.002	0	%100
44	80	Z	-0.002	-0.002	0	%100
45	83	Z	-0.002	-0.002	0	%100
46	84	Z	-0.002	-0.002	0	%100
47	87	Z	-0.002	-0.002	0	%100
48	89	Z	-0.002	-0.002	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	-0.005	-0.005	0	%100
2	2	X	-0.004	-0.004	0	%100
3	3	X	-0.004	-0.004	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, %)]
4	4	X	-0.008	-0.008	0	%100
5	5	X	-0.008	-0.008	0	%100
6	6	X	-0.002	-0.002	0	%100
7	7	X	-0.009	-0.009	0	%100
8	8	X	-0.009	-0.009	0	%100
9	9	X	-0.003	-0.003	0	%100
10	10	X	-0.003	-0.003	0	%100
11	11	X	-0.006	-0.006	0	%100
12	18	X	-0.002	-0.002	0	%100
13	19	X	-0.002	-0.002	0	%100
14	22	X	-0.002	-0.002	0	%100
15	28	X	-0.002	-0.002	0	%100
16	30	X	-0.006	-0.006	0	%100
17	31	X	-0.005	-0.005	0	%100
18	32	X	-0.004	-0.004	0	%100
19	33	X	-0.004	-0.004	0	%100
20	34	X	-0.008	-0.008	0	%100
21	35	X	-0.008	-0.008	0	%100
22	36	X	-0.009	-0.009	0	%100
23	37	X	-0.009	-0.009	0	%100
24	38	X	-0.003	-0.003	0	%100
25	39	X	-0.003	-0.003	0	%100
26	40	X	-0.006	-0.006	0	%100
27	49	X	-0.006	-0.006	0	%100
28	50	X	-0.005	-0.005	0	%100
29	51	X	-0.004	-0.004	0	%100
30	52	X	-0.004	-0.004	0	%100
31	53	X	-0.008	-0.008	0	%100
32	54	X	-0.008	-0.008	0	%100
33	55	X	-0.009	-0.009	0	%100
34	56	X	-0.009	-0.009	0	%100
35	57	X	-0.003	-0.003	0	%100
36	58	X	-0.003	-0.003	0	%100
37	59	X	-0.006	-0.006	0	%100
38	68	X	-0.006	-0.006	0	%100
39	69	X	-0.002	-0.002	0	%100
40	72	X	-0.002	-0.002	0	%100
41	73	X	-0.002	-0.002	0	%100
42	76	X	-0.002	-0.002	0	%100
43	78	X	-0.002	-0.002	0	%100
44	80	X	-0.002	-0.002	0	%100
45	83	X	-0.002	-0.002	0	%100
46	84	X	-0.002	-0.002	0	%100
47	87	X	-0.002	-0.002	0	%100
48	89	X	-0.002	-0.002	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	-0.0008	-0.0008	0	%100
3	3	Z	-0.0008	-0.0008	0	%100
4	4	Z	-0.001	-0.001	0	%100
5	5	Z	-0.001	-0.001	0	%100
6	6	Z	-0.0004	-0.0004	0	%100
7	7	Z	-0.001	-0.001	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, %)]
8	8	Z	-0.001	-0.001	0	%100
9	9	Z	-0.0005	-0.0005	0	%100
10	10	Z	-0.0005	-0.0005	0	%100
11	11	Z	-0.002	-0.002	0	%100
12	18	Z	-0.0003	-0.0003	0	%100
13	19	Z	-0.0003	-0.0003	0	%100
14	22	Z	-0.0003	-0.0003	0	%100
15	28	Z	-0.0003	-0.0003	0	%100
16	30	Z	-0.002	-0.002	0	%100
17	31	Z	-0.001	-0.001	0	%100
18	32	Z	-0.0008	-0.0008	0	%100
19	33	Z	-0.0008	-0.0008	0	%100
20	34	Z	-0.001	-0.001	0	%100
21	35	Z	-0.001	-0.001	0	%100
22	36	Z	-0.001	-0.001	0	%100
23	37	Z	-0.001	-0.001	0	%100
24	38	Z	-0.0005	-0.0005	0	%100
25	39	Z	-0.0005	-0.0005	0	%100
26	40	Z	-0.002	-0.002	0	%100
27	49	Z	-0.002	-0.002	0	%100
28	50	Z	-0.001	-0.001	0	%100
29	51	Z	-0.0008	-0.0008	0	%100
30	52	Z	-0.0008	-0.0008	0	%100
31	53	Z	-0.001	-0.001	0	%100
32	54	Z	-0.001	-0.001	0	%100
33	55	Z	-0.001	-0.001	0	%100
34	56	Z	-0.001	-0.001	0	%100
35	57	Z	-0.0005	-0.0005	0	%100
36	58	Z	-0.0005	-0.0005	0	%100
37	59	Z	-0.002	-0.002	0	%100
38	68	Z	-0.002	-0.002	0	%100
39	69	Z	-0.0004	-0.0004	0	%100
40	72	Z	-0.0003	-0.0003	0	%100
41	73	Z	-0.0003	-0.0003	0	%100
42	76	Z	-0.0003	-0.0003	0	%100
43	78	Z	-0.0003	-0.0003	0	%100
44	80	Z	-0.0004	-0.0004	0	%100
45	83	Z	-0.0003	-0.0003	0	%100
46	84	Z	-0.0003	-0.0003	0	%100
47	87	Z	-0.0003	-0.0003	0	%100
48	89	Z	-0.0003	-0.0003	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	-0.0008	-0.0008	0	%100
3	3	X	-0.0008	-0.0008	0	%100
4	4	X	-0.001	-0.001	0	%100
5	5	X	-0.001	-0.001	0	%100
6	6	X	-0.0004	-0.0004	0	%100
7	7	X	-0.001	-0.001	0	%100
8	8	X	-0.001	-0.001	0	%100
9	9	X	-0.0005	-0.0005	0	%100
10	10	X	-0.0005	-0.0005	0	%100
11	11	X	-0.002	-0.002	0	%100



Company : B+T Group
 Designer : GRG
 Job Number : 161924.002.01
 Model Name : CT00302-S-07 - Danielson

3/10/2022
 6:41:02 PM
 Checked By : _____

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, %)]
12	18	X	-0.0003	-0.0003	0	%100
13	19	X	-0.0003	-0.0003	0	%100
14	22	X	-0.0003	-0.0003	0	%100
15	28	X	-0.0003	-0.0003	0	%100
16	30	X	-0.002	-0.002	0	%100
17	31	X	-0.001	-0.001	0	%100
18	32	X	-0.0008	-0.0008	0	%100
19	33	X	-0.0008	-0.0008	0	%100
20	34	X	-0.001	-0.001	0	%100
21	35	X	-0.001	-0.001	0	%100
22	36	X	-0.001	-0.001	0	%100
23	37	X	-0.001	-0.001	0	%100
24	38	X	-0.0005	-0.0005	0	%100
25	39	X	-0.0005	-0.0005	0	%100
26	40	X	-0.002	-0.002	0	%100
27	49	X	-0.002	-0.002	0	%100
28	50	X	-0.001	-0.001	0	%100
29	51	X	-0.0008	-0.0008	0	%100
30	52	X	-0.0008	-0.0008	0	%100
31	53	X	-0.001	-0.001	0	%100
32	54	X	-0.001	-0.001	0	%100
33	55	X	-0.001	-0.001	0	%100
34	56	X	-0.001	-0.001	0	%100
35	57	X	-0.0005	-0.0005	0	%100
36	58	X	-0.0005	-0.0005	0	%100
37	59	X	-0.002	-0.002	0	%100
38	68	X	-0.002	-0.002	0	%100
39	69	X	-0.0004	-0.0004	0	%100
40	72	X	-0.0003	-0.0003	0	%100
41	73	X	-0.0003	-0.0003	0	%100
42	76	X	-0.0003	-0.0003	0	%100
43	78	X	-0.0003	-0.0003	0	%100
44	80	X	-0.0004	-0.0004	0	%100
45	83	X	-0.0003	-0.0003	0	%100
46	84	X	-0.0003	-0.0003	0	%100
47	87	X	-0.0003	-0.0003	0	%100
48	89	X	-0.0003	-0.0003	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	-0.009	-0.009	0	%100
2	2	Y	-0.007	-0.007	0	%100
3	3	Y	-0.007	-0.007	0	%100
4	4	Y	-0.01	-0.01	0	%100
5	5	Y	-0.01	-0.01	0	%100
6	6	Y	-0.006	-0.006	0	%100
7	7	Y	-0.01	-0.01	0	%100
8	8	Y	-0.01	-0.01	0	%100
9	9	Y	-0.005	-0.005	0	%100
10	10	Y	-0.005	-0.005	0	%100
11	11	Y	-0.013	-0.013	0	%100
12	18	Y	-0.006	-0.006	0	%100
13	19	Y	-0.006	-0.006	0	%100
14	22	Y	-0.006	-0.006	0	%100
15	28	Y	-0.006	-0.006	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	30	Y	-0.013	-0.013	0	%100
17	31	Y	-0.009	-0.009	0	%100
18	32	Y	-0.007	-0.007	0	%100
19	33	Y	-0.007	-0.007	0	%100
20	34	Y	-0.01	-0.01	0	%100
21	35	Y	-0.01	-0.01	0	%100
22	36	Y	-0.01	-0.01	0	%100
23	37	Y	-0.01	-0.01	0	%100
24	38	Y	-0.005	-0.005	0	%100
25	39	Y	-0.005	-0.005	0	%100
26	40	Y	-0.013	-0.013	0	%100
27	49	Y	-0.013	-0.013	0	%100
28	50	Y	-0.009	-0.009	0	%100
29	51	Y	-0.007	-0.007	0	%100
30	52	Y	-0.007	-0.007	0	%100
31	53	Y	-0.01	-0.01	0	%100
32	54	Y	-0.01	-0.01	0	%100
33	55	Y	-0.01	-0.01	0	%100
34	56	Y	-0.01	-0.01	0	%100
35	57	Y	-0.005	-0.005	0	%100
36	58	Y	-0.005	-0.005	0	%100
37	59	Y	-0.013	-0.013	0	%100
38	68	Y	-0.013	-0.013	0	%100
39	69	Y	-0.006	-0.006	0	%100
40	72	Y	-0.006	-0.006	0	%100
41	73	Y	-0.006	-0.006	0	%100
42	76	Y	-0.006	-0.006	0	%100
43	78	Y	-0.006	-0.006	0	%100
44	80	Y	-0.006	-0.006	0	%100
45	83	Y	-0.006	-0.006	0	%100
46	84	Y	-0.006	-0.006	0	%100
47	87	Y	-0.006	-0.006	0	%100
48	89	Y	-0.006	-0.006	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	-0.001	-0.001	0	%100
2	2	Z	-0.0009	-0.0009	0	%100
3	3	Z	-0.0009	-0.0009	0	%100
4	4	Z	-0.001	-0.001	0	%100
5	5	Z	-0.001	-0.001	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	-0.0006	-0.0006	0	%100
10	10	Z	-0.0006	-0.0006	0	%100
11	11	Z	-0.002	-0.002	0	%100
12	18	Z	-0.001	-0.001	0	%100
13	19	Z	-0.001	-0.001	0	%100
14	22	Z	-0.001	-0.001	0	%100
15	28	Z	-0.001	-0.001	0	%100
16	30	Z	-0.002	-0.002	0	%100
17	31	Z	-0.001	-0.001	0	%100
18	32	Z	-0.0009	-0.0009	0	%100
19	33	Z	-0.0009	-0.0009	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, %)]
20	34	Z	-0.001	-0.001	0	%100
21	35	Z	-0.001	-0.001	0	%100
22	36	Z	-0.001	-0.001	0	%100
23	37	Z	-0.001	-0.001	0	%100
24	38	Z	-0.0006	-0.0006	0	%100
25	39	Z	-0.0006	-0.0006	0	%100
26	40	Z	-0.002	-0.002	0	%100
27	49	Z	-0.002	-0.002	0	%100
28	50	Z	-0.001	-0.001	0	%100
29	51	Z	-0.0009	-0.0009	0	%100
30	52	Z	-0.0009	-0.0009	0	%100
31	53	Z	-0.001	-0.001	0	%100
32	54	Z	-0.001	-0.001	0	%100
33	55	Z	-0.001	-0.001	0	%100
34	56	Z	-0.001	-0.001	0	%100
35	57	Z	-0.0006	-0.0006	0	%100
36	58	Z	-0.0006	-0.0006	0	%100
37	59	Z	-0.002	-0.002	0	%100
38	68	Z	-0.002	-0.002	0	%100
39	69	Z	-0.001	-0.001	0	%100
40	72	Z	-0.001	-0.001	0	%100
41	73	Z	-0.001	-0.001	0	%100
42	76	Z	-0.001	-0.001	0	%100
43	78	Z	-0.001	-0.001	0	%100
44	80	Z	-0.001	-0.001	0	%100
45	83	Z	-0.001	-0.001	0	%100
46	84	Z	-0.001	-0.001	0	%100
47	87	Z	-0.001	-0.001	0	%100
48	89	Z	-0.001	-0.001	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	-0.001	-0.001	0	%100
2	2	X	-0.0009	-0.0009	0	%100
3	3	X	-0.0009	-0.0009	0	%100
4	4	X	-0.001	-0.001	0	%100
5	5	X	-0.001	-0.001	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	-0.0006	-0.0006	0	%100
10	10	X	-0.0006	-0.0006	0	%100
11	11	X	-0.002	-0.002	0	%100
12	18	X	-0.001	-0.001	0	%100
13	19	X	-0.001	-0.001	0	%100
14	22	X	-0.001	-0.001	0	%100
15	28	X	-0.001	-0.001	0	%100
16	30	X	-0.002	-0.002	0	%100
17	31	X	-0.001	-0.001	0	%100
18	32	X	-0.0009	-0.0009	0	%100
19	33	X	-0.0009	-0.0009	0	%100
20	34	X	-0.001	-0.001	0	%100
21	35	X	-0.001	-0.001	0	%100
22	36	X	-0.001	-0.001	0	%100
23	37	X	-0.001	-0.001	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, %)]
24	38	X	-0.0006	-0.0006	0	%100
25	39	X	-0.0006	-0.0006	0	%100
26	40	X	-0.002	-0.002	0	%100
27	49	X	-0.002	-0.002	0	%100
28	50	X	-0.001	-0.001	0	%100
29	51	X	-0.0009	-0.0009	0	%100
30	52	X	-0.0009	-0.0009	0	%100
31	53	X	-0.001	-0.001	0	%100
32	54	X	-0.001	-0.001	0	%100
33	55	X	-0.001	-0.001	0	%100
34	56	X	-0.001	-0.001	0	%100
35	57	X	-0.0006	-0.0006	0	%100
36	58	X	-0.0006	-0.0006	0	%100
37	59	X	-0.002	-0.002	0	%100
38	68	X	-0.002	-0.002	0	%100
39	69	X	-0.001	-0.001	0	%100
40	72	X	-0.001	-0.001	0	%100
41	73	X	-0.001	-0.001	0	%100
42	76	X	-0.001	-0.001	0	%100
43	78	X	-0.001	-0.001	0	%100
44	80	X	-0.001	-0.001	0	%100
45	83	X	-0.001	-0.001	0	%100
46	84	X	-0.001	-0.001	0	%100
47	87	X	-0.001	-0.001	0	%100
48	89	X	-0.001	-0.001	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	10	Y	-0.02	-0.026	1.27	2.309
2	38	Y	-0.014	-0.02	0	2.078
3	39	Y	0.0006164	-0.016	0	1.155
4	39	Y	-0.016	-0.035	1.155	2.309
5	57	Y	-0.035	-0.016	0	1.155
6	57	Y	-0.016	0.0006163	1.155	2.309
7	58	Y	-0.018	-0.016	0.231	2.309
8	9	Y	-0.015	-0.015	0	2.078
9	10	Y	-0.014	-0.02	0.231	1.27

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	9	Y	-0.008	-0.008	0	2.078
2	10	Y	-0.008	-0.011	0.231	1.27
3	10	Y	-0.011	-0.014	1.27	2.309
4	38	Y	-0.006	-0.011	0	2.078
5	39	Y	0.0003082	-0.008	0	1.155
6	39	Y	-0.008	-0.017	1.155	2.309
7	57	Y	-0.017	-0.008	0	1.155
8	57	Y	-0.008	0.0003082	1.155	2.309
9	58	Y	-0.009	-0.008	0.231	2.309

Member Area Loads (BLC 1 : Dead)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	23	22	25	24	Y	Two Way	-0.01
2	73	72	75	74	Y	Two Way	-0.01
3	102	101	104	103	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	23	22	25	24	Y	Two Way	-0.005
2	73	72	75	74	Y	Two Way	-0.005
3	102	101	104	103	Y	Two Way	-0.005

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

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s ² /ft, k*s ² *ft)]
1	30	L	Y	-0.5
2	113	L	Y	-0.5
3	135	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*s ² /ft, k*s ² *ft)]
1	31	L	Y	-0.5
2	114	L	Y	-0.5
3	136	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*s ² /ft, k*s ² *ft)]
1	44	L	Y	-0.5
2	127	L	Y	-0.5
3	149	L	Y	-0.5

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	48	
3	90 Wind - No Ice	WLX			20	48	
4	0 Wind - Ice	WLZ			20	48	
5	90 Wind - Ice	WLX			20	48	
6	0 Wind - Service	WLZ			20	48	
7	90 Wind - Service	WLX			20	48	
8	Ice	OL1			20	48	3
9	0 Seismic	ELZ			20	48	
10	90 Seismic	ELX			20	48	
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		

Basic Load Cases (Continued)

	BLC Description	Category	Y Gravity	Nodal	Point	Distributed	Area(Member)
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				9	
31	BLC 8 Transient Area Loads	None				9	

Load Combinations

	Description	Solve	P-Delta	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

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
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
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



Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
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

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	1	max	1.023	5	1.73	14	1.319	2	3.696	2	1.024	11	0.355	97
2		min	-1.025	11	-0.015	8	-1.444	8	-0.555	8	-1.024	5	-0.206	89
3	53	max	1.001	5	1.64	18	1.221	2	0.171	13	1.215	3	0.06	12
4		min	-1.108	11	0.138	12	-1.158	8	-1.729	43	-1.215	9	-2.91	18
5	82	max	1.017	5	1.636	22	1.435	2	0.128	3	1.264	7	2.814	46
6		min	-0.909	11	0.132	4	-1.373	8	-1.876	69	-1.265	13	-0.13	4
7	Totals:	max	3.042	5	4.669	55	3.974	2						
8		min	-3.042	11	2.419	13	-3.974	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	HSS4X4X2	0.496	0	13	0.123	0	y	73	70.173	73.278	8.24	8.24	2.022	H1-1b
2	50	HSS4X4X2	0.489	0	9	0.123	0	y	69	70.173	73.278	8.24	8.24	2.019	H1-1b
3	31	HSS4X4X2	0.466	0	7	0.122	0	y	65	70.173	73.278	8.24	8.24	2.039	H1-1b
4	11	L7.63x2.5x6	0.348	1.604	8	0.078	0	z	62	75.414	118.523	1.798	13.794	1.252	H2-1
5	3	C3.38x2.06x.188	0.343	0	13	0.066	2.241	z	8	35.676	43.394	1.694	4.483	1.598	H1-1b
6	52	C3.38x2.06x.188	0.337	0	9	0.063	2.241	y	39	35.676	43.394	1.694	4.483	1.597	H1-1b
7	2	C3.38x2.06x.188	0.332	2.592	3	0.06	0.351	y	64	35.676	43.394	1.694	4.483	1.603	H1-1b
8	32	C3.38x2.06x.188	0.329	2.592	7	0.06	0.351	y	68	35.676	43.394	1.694	4.483	1.602	H1-1b
9	33	C3.38x2.06x.188	0.325	0	56	0.063	2.241	y	48	35.676	43.394	1.703	4.483	1.621	H1-1b
10	51	C3.38x2.06x.188	0.324	2.592	56	0.06	0.351	y	73	35.676	43.394	1.703	4.483	1.62	H1-1b
11	59	L7.63x2.5x6	0.309	1.604	3	0.079	0	z	70	75.414	118.523	1.798	14.32	1.377	H2-1
12	9	L2x2x4	0.27	0	8	0.031	2.309	y	48	23.349	30.586	0.691	1.577	1.5	H2-1
13	40	L7.63x2.5x6	0.264	1.604	12	0.078	0	z	66	75.414	118.523	1.798	13.917	1.28	H2-1
14	57	L2x2x4	0.261	0	3	0.03	2.309	y	44	23.349	30.586	0.691	1.577	1.5	H2-1
15	10	L2x2x4	0.233	2.309	8	0.035	0	y	64	23.349	30.586	0.691	1.577	1.5	H2-1
16	68	L6.63x4.33x.25	0.221	3.25	2	0.029	3.25	z	8	51.794	86.751	2.311	6.976	1.5	H2-1
17	38	L2x2x4	0.206	0	11	0.031	2.309	y	40	23.349	30.586	0.691	1.577	1.5	H2-1
18	39	L2x2x4	0.197	2.309	13	0.035	0	y	68	23.349	30.586	0.691	1.577	1.5	H2-1
19	58	L2x2x4	0.195	2.309	4	0.035	0	y	72	23.349	30.586	0.691	1.577	1.5	H2-1
20	49	L6.63x4.33x.25	0.192	0	2	0.025	3.25	y	9	51.794	86.751	2.311	6.976	1.5	H2-1
21	30	L6.63x4.33x.25	0.177	3.25	6	0.022	3.25	z	12	51.794	86.751	2.311	6.976	1.5	H2-1
22	73	PIPE_2.88x0.203	0.147	2.333	2	0.042	5.583		13	35.519	70.68	5.029	5.029	3	H1-1b
23	56	PL3/8"x6	0.133	0	9	0.196	0	y	59	70.882	72.9	0.57	9.113	2.95	H1-1b
24	22	PIPE_2.88x0.203	0.132	7.812	13	0.123	8.958		2	24.131	70.68	5.029	5.029	2.462	H1-1b
25	8	PL3/8"x6	0.131	0	13	0.198	0	y	50	70.882	72.9	0.57	9.113	2.929	H1-1b
26	76	PIPE_2.88x0.203	0.129	2.188	13	0.101	2.188		13	24.131	70.68	5.029	5.029	2.29	H1-1b
27	7	PL3/8"x6	0.127	0.208	8	0.194	0.208	y	50	70.882	72.9	0.57	9.113	1.528	H1-1b
28	89	PIPE_2.88x0.203	0.127	5.583	2	0.032	5.583		6	35.519	70.68	5.029	5.029	3	H1-1b
29	72	PIPE_2.88x0.203	0.124	5.583	9	0.044	5.583		9	35.519	70.68	5.029	5.029	3	H1-1b
30	83	PIPE_2.88x0.203	0.123	5.583	13	0.049	5.583		13	35.519	70.68	5.029	5.029	3	H1-1b
31	19	PIPE_2.88x0.203	0.123	2.333	9	0.043	5.583		9	35.519	70.68	5.029	5.029	3	H1-1b
32	87	PIPE_2.88x0.203	0.122	7.813	9	0.11	8.958		9	24.131	70.68	5.029	5.029	2.561	H1-1b
33	55	PL3/8"x6	0.119	0.085	2	0.194	0.208	y	57	70.882	72.9	0.57	9.113	1.775	H1-1b



Company : B+T Group
 Designer : GRG
 Job Number : 161924.002.01
 Model Name : CT00302-S-07 - Danielson

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 Checked By : _____

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*	Pnt [k]	phi*	Mn y-y [k-ft]	phi*	Mn z-z [k-ft]	Cb	Eqn
34	84	PIPE_2.88x0.203	0.117	2.333	6	0.032	5.583	5	35.519	70.68	5.029	5.029	3	H1-1b			
35	78	PIPE_2.88x0.203	0.112	5.583	9	0.039	5.583	2	35.519	70.68	5.029	5.029	3	H1-1b			
36	36	PL3/8"x6	0.111	0.208	13	0.192	0.208	y	54	70.882	72.9	0.57	9.113	2.006	H1-1b		
37	37	PL3/8"x6	0.105	0	5	0.199	0	y	55	70.882	72.9	0.57	9.113	3	H1-1b		
38	28	PIPE_2.88x0.203	0.1	2.333	7	0.039	5.583	8	35.519	70.68	5.029	5.029	3	H1-1b			
39	18	PIPE_2.88x0.203	0.099	5.583	5	0.038	5.583	6	35.519	70.68	5.029	5.029	3	H1-1b			
40	5	PL3/8"x6	0.087	0	3	0.123	0	y	38	68.997	72.9	0.57	9.113	1.877	H1-1b		
41	35	PL3/8"x6	0.086	0	7	0.121	0	y	42	68.997	72.9	0.57	9.113	1.807	H1-1b		
42	4	PL3/8"x6	0.085	0	2	0.154	0	y	2	68.997	72.9	0.57	9.113	2.287	H1-1b		
43	53	PL3/8"x6	0.083	0.164	3	0.148	0	y	70	68.997	72.9	0.57	9.113	1.885	H1-1b		
44	69	PIPE_3.5x0.165	0.073	1.25	2	0.046	4	8	45.872	71.57	6.336	6.336	1.82	H1-1b			
45	34	PL3/8"x6	0.072	0	6	0.15	0	y	66	68.997	72.9	0.57	9.113	2.27	H1-1b		
46	6	PIPE_3.5x0.165	0.071	6.75	7	0.035	4	4	45.872	71.57	6.336	6.336	1.987	H1-1b			
47	54	PL3/8"x6	0.069	0	11	0.123	0	y	45	68.997	72.9	0.57	9.113	1.795	H1-1b		
48	80	PIPE_3.5x0.165	0.069	6.75	63	0.043	2.667	13	45.872	71.57	6.336	6.336	2.33	H1-1b			

APPENDIX B

(Additional Calculations)

PROJECT	161924.002.01 - Danielson, C	KSC
SUBJECT	Platform Mount Analysis	
DATE	03/10/22	PAGE OF



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

Tower Type	:	Monopole	
Ground Elevation	z_s :	473	ft [ASCE7 Hazard Tool]
Tower Height	:	155.00	ft
Mount Elevation	:	117.00	ft
Antenna Elevation	:	117.00	ft
Crest Height	:	0	ft
Risk Category	:	II	[Table 2-1]
Exposure Category	:	B	[Sec. 2.6.5.1.2]
Topography Category	:	1.00	[Sec. 2.6.6.2]
Wind Velocity	V :	122	mph [ASCE7 Hazard Tool]
Ice wind Velocity	V_i :	50	mph [ASCE7 Hazard Tool]
Service Velocity	V_s :	30	mph [ASCE7 Hazard Tool]
Base Ice thickness	t_i :	1.00	in [ASCE7 Hazard Tool]
Seismic Design Cat.	:	B	[ASCE7 Hazard Tool]
	S_S :	0.19	
	S_1 :	0.05	
	S_{DS} :	0.20	
	S_{D1} :	0.09	
Gust Factor	G_h :	1.00	[Sec. 16.6]
Pressure Coefficient	K_z :	1.03	[Sec. 2.6.5.2]
Topography Factor	K_{zt} :	1.00	[Sec. 2.6.6]
Elevation Factor	K_e :	0.98	[Sec. 2.6.8]
Directionality Factor	K_d :	0.95	[Sec. 16.6]
Shielding Factor	K_a :	0.90	[Sec. 16.6]
Design Ice Thickness	t_{iz} :	1.13	in [Sec. 2.6.10]
Importance Factor	I_e :	1	[Table 2-3]
Response Coefficient	C_s :	0.099	[Sec. 2.7.7.1]
Amplification	A_s :	2.019355	[Sec. 16.7]
	q_z :	36.78	psf

PROJECT	161924.002.01 - Danielson, C	KSC
SUBJECT	Platform Mount Analysis	
DATE	03/10/22	PAGE OF



Manufacturer	Model	Qty	Aspect Ratio	C_a	EPA_N (ft ²)	EPA_T (ft ²)	EPA_{N-Ice}	EPA_{T-Ice}	$F_{A \text{ No Ice (N)}}$	$F_{A \text{ No Ice (T)}}$	$F_{A \text{ Ice (N)}}$	$F_{A \text{ Ice (T)}}$
				flat/round		(ft ²)	(ft ²)					
Commscope	FFVV-65B-R2	0.5	3.67	1.25	4.90	1.95	5.64	2.60	0.20	0.08	0.03	0.01
Commscope	FFVV-65B-R2	0.5	3.67	1.25	4.90	1.95	5.64	2.60	0.20	0.08	0.03	0.01
Fujitsu	TA08025-B605	1	1.05	1.20	1.64	0.99	2.16	1.42	0.06	0.04	0.01	0.01
Fujitsu	TA08025-B604	1	1.05	1.20	1.64	0.86	2.16	1.27	0.06	0.03	0.01	0.01
Commscope	FFVV-65B-R2	0.5	3.67	1.25	4.90	1.95	5.64	2.60	0.20	0.08	0.03	0.01
Commscope	FFVV-65B-R2	0.5	3.67	1.25	4.90	1.95	5.64	2.60	0.20	0.08	0.03	0.01
Fujitsu	TA08025-B605	1	1.05	1.20	1.64	0.99	2.16	1.42	0.06	0.04	0.01	0.01
Fujitsu	TA08025-B604	1	1.05	1.20	1.64	0.86	2.16	1.27	0.06	0.03	0.01	0.01
Commscope	FFVV-65B-R2	0.5	3.67	1.25	4.90	1.95	5.64	2.60	0.20	0.08	0.03	0.01
Commscope	FFVV-65B-R2	0.5	3.67	1.25	4.90	1.95	5.64	2.60	0.20	0.08	0.03	0.01
Fujitsu	TA08025-B605	1	1.05	1.20	1.64	0.99	2.16	1.42	0.06	0.04	0.01	0.01
Fujitsu	TA08025-B604	1	1.05	1.20	1.64	0.86	2.16	1.27	0.06	0.03	0.01	0.01
RAYCAP	RDIDC-9181-PF-48	1	1.14	1.20	1.68	0.94	2.20	1.36	0.07	0.04	0.01	0.01

PROJECT	161924.002.01 - Danielson, CT	KSC
SUBJECT	Platform Mount Analysis	
DATE	03/10/22	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	:	1.319	k
Vertical Shear	:	1.73	k
Horizontal Shear	:	1.023	k
Torsion	:	0.355	k.ft
Moment from Horizontal Forces	:	1.024	k.ft
Moment from Vertical Forces	:	3.696	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	:	1.5	in
Bolt edge distance, plate width	:	1.5	in
Total Number of Bolts	:	4	bolts

Summary of Forces

Shear Resultant Force	:	2.01	k
Force from Horz. Moment	:	1.85	k
Force from Vert. Moment	:	6.69	k
Shear Load / Bolt	:	0.50	k
Tension Load / Bolt	:	0.33	k
Resultant from Moments / Bolt	:	3.47	k

Bolt Checks

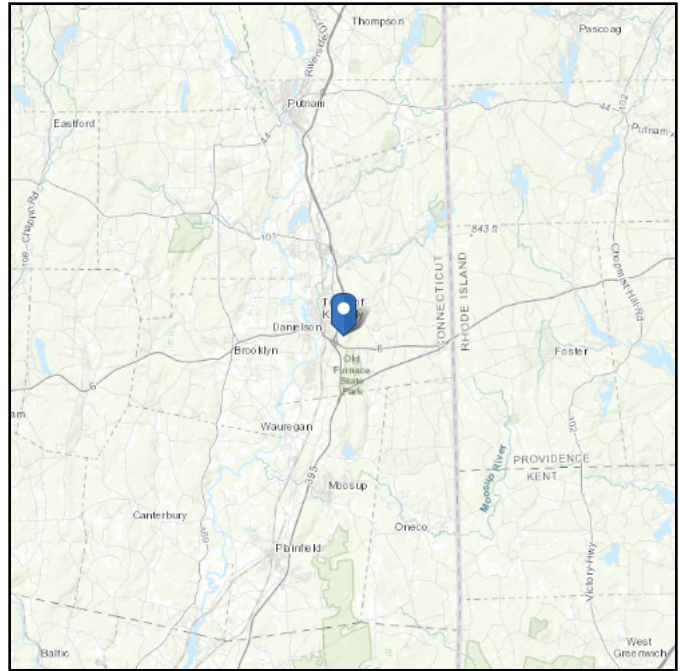
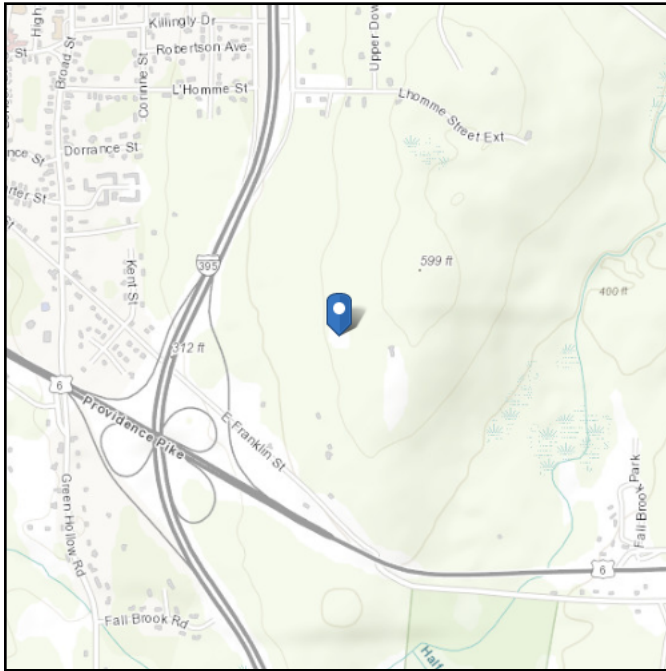
Nominal Tensile Stress, F_{nt}	:	90.00	ksi	[AISC Table J3.2]
Available Tensile Stress, ΦR_{nt}	:	20.72	k/bolt	[Eq. J3-1]
Unity Check, Bolt Tension	:	18.35%		OKAY
Nominal Shear Stress, F_{nv}	:	48.00	ksi	[AISC Table J3.2]
Available Shear Stress, ΦR_{nv}	:	11.05	k/bolt	[Eq. J3-1]
Unity Check, Bolt Shear	:	7.53%		OKAY
Unity Check, Combined	:	25.88%		OKAY
Available Bearing Strength, ΦR_n	:	34.66	k/bolt	
Unity Check, Bolt Bearing	:	1.45%		OKAY

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-16
Risk Category: II
Soil Class: D - Default (see Section 11.4.3)

Elevation: 473.16 ft (NAVD 88)
Latitude: 41.795822
Longitude: -71.870333



Wind

Results:

Wind Speed	122 Vmph
10-year MRI	75 Vmph
25-year MRI	85 Vmph
50-year MRI	95 Vmph
100-year MRI	100 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Wed Mar 09 2022

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-16 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

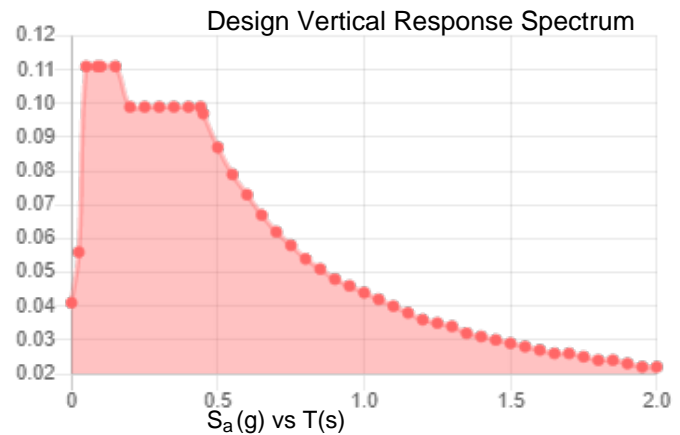
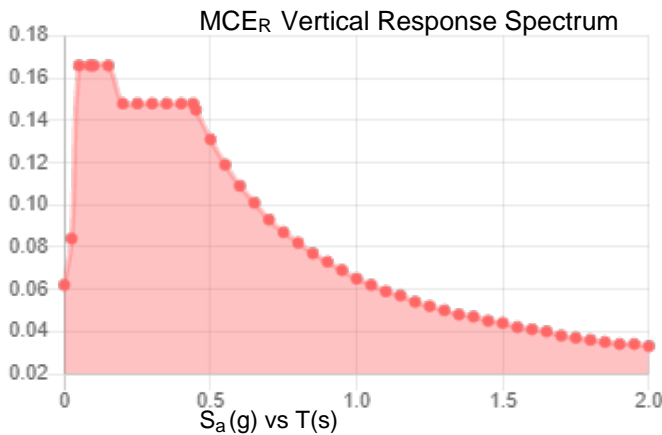
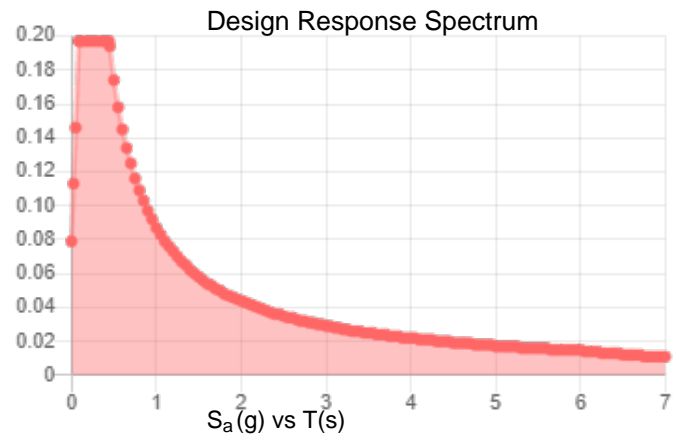
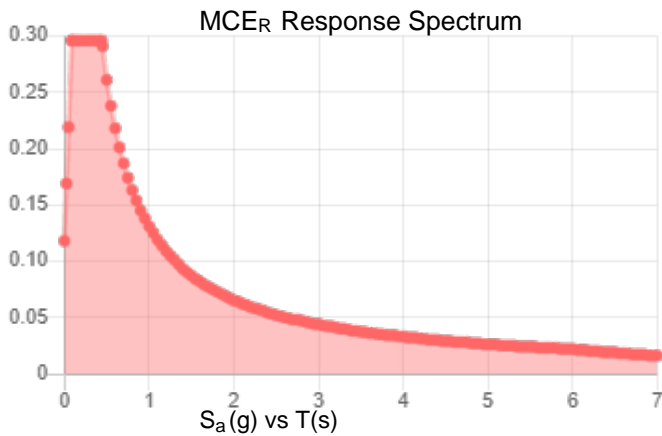
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Site Soil Class: D - Default (see Section 11.4.3)

Results:

S_s :	0.185	S_{D1} :	0.087
S_1 :	0.054	T_L :	6
F_a :	1.6	PGA :	0.1
F_v :	2.4	PGA _M :	0.16
S_{MS} :	0.296	F_{PGA} :	1.6
S_{M1} :	0.131	I_e :	1
S_{DS} :	0.197	C_v :	0.7

Seismic Design Category B



Data Accessed: Wed Mar 09 2022

Date Source:

USGS Seismic Design Maps based on ASCE/SEI 7-16 and ASCE/SEI 7-16 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-16 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness: 1.00 in.
Concurrent Temperature: 15 F
Gust Speed 50 mph

Data Source: Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

Date Accessed: Wed Mar 09 2022

Ice thicknesses on structures in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 500-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

The ASCE 7 Hazard Tool is provided for your convenience, for informational purposes only, and is provided “as is” and without warranties of any kind. The location data included herein has been obtained from information developed, produced, and maintained by third party providers; or has been extrapolated from maps incorporated in the ASCE 7 standard. While ASCE has made every effort to use data obtained from reliable sources or methodologies, ASCE does not make any representations or warranties as to the accuracy, completeness, reliability, currency, or quality of any data provided herein. Any third-party links provided by this Tool should not be construed as an endorsement, affiliation, relationship, or sponsorship of such third-party content by or from ASCE.

ASCE does not intend, nor should anyone interpret, the results provided by this Tool to replace the sound judgment of a competent professional, having knowledge and experience in the appropriate field(s) of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the contents of this Tool or the ASCE 7 standard.

In using this Tool, you expressly assume all risks associated with your use. Under no circumstances shall ASCE or its officers, directors, employees, members, affiliates, or agents be liable to you or any other person for any direct, indirect, special, incidental, or consequential damages arising from or related to your use of, or reliance on, the Tool or any information obtained therein. To the fullest extent permitted by law, you agree to release and hold harmless ASCE from any and all liability of any nature arising out of or resulting from any use of data provided by the ASCE 7 Hazard Tool.

Exhibit F

Power Density/RF Emissions Report



Radio Frequency Emissions Analysis Report



Site ID: BOBOS00896A

SBA - East Franklin Street
246 East Franklin Street
Danielson, CT 06239

May 21, 2022

Fox Hill Telecom Project Number: 221175

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general population allowable limit:	32.75 %

May 21, 2022

Dish Wireless
5701 South Santa Fe Drive
Littleton, CO 80120

Emissions Analysis for Site: **BOBOS00896A – SBA - East Franklin Street**

Fox Hill Telecom, Inc (“Fox Hill”) was directed to analyze the proposed radio installation for Dish Wireless, LLC (Dish) facility located at **246 East Franklin Street, Danielson, CT**, for the purpose of determining whether the emissions from the Proposed Dish radio and antenna installation located on this property are within specified federal limits.

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

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

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

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limits for the 600 MHz & 700 MHz bands are approximately $400 \mu\text{W}/\text{cm}^2$ and $467 \mu\text{W}/\text{cm}^2$ respectively. The general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS / AWS-4) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.



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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were performed for the proposed radio system installation for **Dish** on the subject site located at **246 East Franklin Street, Danielson, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since **Dish** 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 manufactures supplied specifications, minus 10 dB for directional panel antennas, 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.

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. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

All emissions values for additional carriers were taken from the Connecticut Siting Council (CSC) active MPE database. Values in this database are provided by the individual carriers themselves

For each sector the following channel counts, frequency bands and power levels were utilized as shown in *Table 1*:

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
5G	n71 (600 MHz)	4	61.5
5G	n70 (AWS-4 / 1995-2020)	4	40
5G	n66 (AWS-4 / 2180-2200)	4	40

Table 1: Channel Data Table



The following antennas listed in *Table 2* were used in the modeling for transmission in the 600 MHz (n71) frequency band, and the 2100 MHz (AWS 4) frequency bands at 1995-2020 MHz (n70) and 2180-2200 MHz (n66). This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, 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.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Commscope FFVV-65B-R2	117
B	1	Commscope FFVV-65B-R2	117
C	1	Commscope FFVV-65B-R2	117

Table 2: Antenna Data

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



RESULTS

Per the calculations completed for the proposed **Dish** configurations *Table 3* shows resulting emissions power levels and percentages of the FCC’s allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Commscope FFVV-65B-R2	n71 (600 MHz) / n70 (AWS-4 / 1995-2020) / n66 (AWS-4 / 2180-2200)	12.15 / 15.95 / 16.25	12	566	17,079.80	6.75
Sector A Composite MPE%							6.75
Antenna B1	Commscope FFVV-65B-R2	n71 (600 MHz) / n70 (AWS-4 / 1995-2020) / n66 (AWS-4 / 2180-2200)	12.15 / 15.95 / 16.25	12	566	17,079.80	6.75
Sector B Composite MPE%							6.75
Antenna C1	Commscope FFVV-65B-R2	n71 (600 MHz) / n70 (AWS-4 / 1995-2020) / n66 (AWS-4 / 2180-2200)	12.15 / 15.95 / 16.25	12	566	17,079.80	6.75
Sector C Composite MPE%							6.75

Table 3: Dish Emissions Levels



The Following table (*table 4*) shows all additional carriers on site and their MPE% as recorded in the CSC active MPE database for this facility along with the newly calculated maximum **Dish** MPE contributions per this report. FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. For this site, all three sectors have the same configuration yielding the same results on all three sectors. *Table 5* below shows a summary for each **Dish** Sector as well as the composite MPE value for the site.

Site Composite MPE%	
Carrier	MPE%
Dish – Max Per Sector Value	6.75 %
T-Mobile	13.71 %
AT&T	7.10 %
MetroPCS	0.39 %
Verizon Wireless	2.13 %
Sprint	2.67 %
Site Total MPE %:	32.75 %

Table 4: All Carrier MPE Contributions

Dish Sector A Total:	6.75 %
Dish Sector B Total:	6.75 %
Dish Sector C Total:	6.75 %
Site Total:	32.75 %

Table 5: Site MPE Summary



FCC OET 65 specifies that for carriers utilizing directional antennas that the highest recorded sector value be used for composite site MPE values due to their greatly reduced emissions contributions in the directions of the adjacent sectors. *Table 6* below details a breakdown by frequency band and technology for the MPE power values for the maximum calculated **Dish** sector(s). For this site, all three sectors have the same configuration yielding the same results on all three sectors.

Dish _ Frequency Band / Technology Max Power Values (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
Dish n71 (600 MHz) 5G	4	1,008.96	117	11.78	n71 (600 MHz)	400	2.94%
Dish n70 (AWS-4 / 1995-2020) 5G	4	1,574.20	117	18.37	n70 (AWS-4 / 1995-2020)	1000	1.84%
Dish n66 (AWS-4 / 2180-2200) 5G	4	1,686.79	117	19.69	n66 (AWS-4 / 2180-2200)	1000	1.97%
						Total:	6.75%

Table 6: Dish Maximum Sector MPE Power Values



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 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 Sector	Power Density Value (%)
Sector A:	6.75 %
Sector B:	6.75 %
Sector C:	6.75 %
Dish Maximum Total (per sector):	6.75 %
Site Total:	32.75 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **32.75 %** 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.

Scott Heffernan
Principal RF Engineer
Fox Hill Telecom, Inc
Holden, MA 01520
(978)660-3998

Exhibit G

Letter of Authorization

SBA Letter of Authorization

CT - CONNECTICUT SITING COUNCIL

Melanie A. Bachman

Executive Director

Connecticut Siting Council

10 Franklin Square

New Britain, CT 06051

Re: Tower Share Application

SBA COMMUNICATIONS CORPORATION hereby authorizes DISH Wireless LLC, including their Agent, to act as our Agent in the processing of all zoning applications, building permits and approvals through the CONNECTICUT SITING COUNCIL for existing wireless communications towers.

Kri Pelletier

Site Development Manager

SBA COMMUNICATIONS CORPORATION

134 Flanders Road, Suite 125

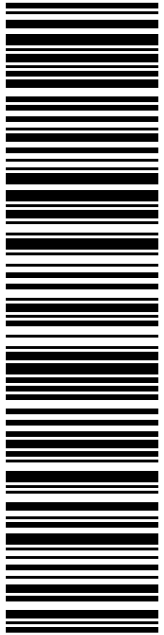
Westboro, MA 01581

SBA

By: _____ Date: _____

Exhibit H

Recipient Mailings



USPS TRACKING #

9405 5036 9930 0257 9725 86

Electronic Rate Approved #038555749

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

R005

P

05/25/2022 Mailed from 01566

USPS TRACKING #
9405 5036 9930 0257 9725 86


US POSTAGE
Flat Rate Env

U.S. POSTAGE PAID
click-n-ship®

PRIORITY MAIL 1-DAY™

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

Expected Delivery Date: 05/26/22
Ref#: SBDS-00896
0006



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Cut on dotted line.

Instructions

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

Click-N-Ship® Label Record

USPS TRACKING # :
9405 5036 9930 0257 9725 86

Trans. #: 564282642	Priority Mail® Postage: \$8.95
Print Date: 05/25/2022	Total: \$8.95
Ship Date: 05/25/2022	
Expected Delivery Date: 05/26/2022	

From: DEBORAH CHASE Ref#: SBDS-00896
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
STURBRIDGE MA 01566-1359

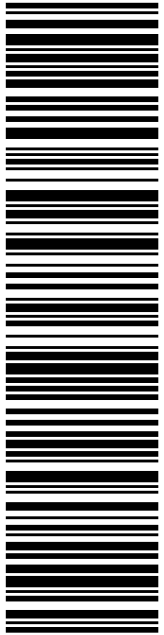
To: SBA COMMUNICATIONS CORPORATION
13 FLANDERS RD
STE 125
WESTBOROUGH MA 01581

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



Thank you for shipping with the United States Postal Service!

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



USPS TRACKING #

9405 5036 9930 0257 9726 16

Electronic Rate Approved #038555749

SHIP

TO: JASON ANDERSON
TOWN COUNCIL CHAIR
172 MAIN ST
KILLINGLY CT 06239-2822

P

PRIORITY MAIL 2-DAY™

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

Expected Delivery Date: 05/27/22
Ref#: SBDS-00896
0006

C005

UNITED STATES POSTAL SERVICE®

Click-N-Ship®

U.S. POSTAGE PAID

Flat Rate Env
USPS.com 9405 5036 9930 0257 9726 16 0089 5000 0010 6239
US POSTAGE \$8.95

Mailed from 01566
05/25/2022



Cut on dotted line.

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

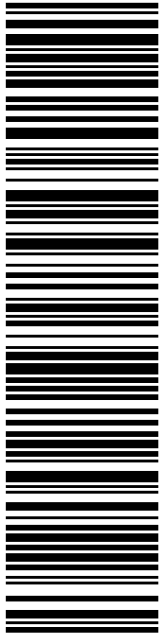
Ref#: SBDS-00896

To: JASON ANDERSON
TOWN COUNCIL CHAIR
172 MAIN ST
KILLINGLY CT 06239-2822

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USPS TRACKING #

9405 5036 9930 0257 9726 23

Electronic Rate Approved #038555749

SHIP TO: ANNE-MARIE AUBREY
DIRECTOR OF PLANNING & DEVELOPMENT
172 MAIN ST
KILLINGLY CT 06239-2822

C005

P

05/25/2022 Mailed from 01566


USPS TRACKING #
9405 5036 9930 0257 9726 23

US POSTAGE
Flat Rate Env
U.S. POSTAGE PAID
click-n-ship®

PRIORITY MAIL 2-DAY™

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

Expected Delivery Date: 05/27/22
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0006



Click-N-Ship®



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Print Date:	05/25/2022
Ship Date:	05/25/2022
Expected Delivery Date:	05/27/2022
Priority Mail® Postage:	\$8.95
Total:	\$8.95
From:	DEBORAH CHASE NORTHEAST SITE SOLUTIONS 420 MAIN ST STE 1 STURBRIDGE MA 01566-1359
To:	ANNE-MARIE AUBREY DIRECTOR OF PLANNING & DEVELOPMENT 172 MAIN ST KILLINGLY CT 06239-2822
	Ref#: SBDS-00896
<p>* Retail Pricing Priority Mail rates apply. There is no fee for USPS Tracking® service on Priority Mail service with use of this electronic rate shipping label. Refunds for unused postage paid labels can be requested online 30 days from the print date.</p>	



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UNITED STATES POSTAL SERVICE®

Click-N-Ship®

P

USPS.com 9405 5036 9930 0257 9726 30 0089 5000 0010 6239
US POSTAGE
 Flat Rate Env
U.S. POSTAGE PAID
Click-N-Ship®

05/25/2022 Mailed from 01566

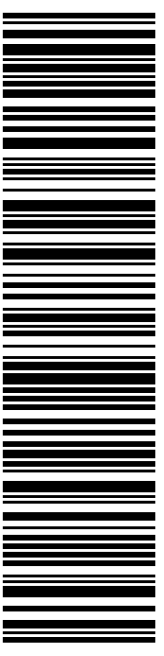
PRIORITY MAIL 2-DAY™

Expected Delivery Date: 05/27/22
 Ref#: SBDS-00896
0006

R002

SHIP TO:
 CHARLES HUTCHINS
 246 E FRANKLIN ST
 KILLINGLY CT 06239-3806

USPS TRACKING #



9405 5036 9930 0257 9726 30

Electronic Rate Approved #038555749



Cut on dotted line.

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

Ref#: SBDS-00896

To: CHARLES HUTCHINS
 246 E FRANKLIN ST
 KILLINGLY CT 06239-3806

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B03B0500896A

DISH



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

05/25/2022 04:40 PM

Product	Qty	Unit Price	Price
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Prepaid Mail	1		\$0.00
Danielson, CT 06239			
Weight: 0 lb 8.50 oz			
Acceptance Date:			
Wed 05/25/2022			
Tracking #:			
9405 5036 9930 0257 9726 16			

Prepaid Mail	1		\$0.00
Danielson, CT 06239			
Weight: 0 lb 8.50 oz			
Acceptance Date:			
Wed 05/25/2022			
Tracking #:			
9405 5036 9930 0257 9726 23			

Prepaid Mail	1		\$0.00
Danielson, CT 06239			
Weight: 0 lb 8.50 oz			
Acceptance Date:			
Wed 05/25/2022			
Tracking #:			
9405 5036 9930 0257 9726 30			

Prepaid Mail	1		\$0.00
Westborough, MA 01581			
Weight: 0 lb 2.00 oz			
Acceptance Date:			
Wed 05/25/2022			
Tracking #:			
9405 5036 9930 0257 9725 86			

Grand Total:			\$0.00
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 Every household in the U.S. is now
 eligible to receive a third set
 of 8 free test kits.
 Go to www.covidtests.gov

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

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

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

