Robinson+Cole

KENNETH C. BALDWIN

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Also admitted in Massachusetts
and New York

September 21, 2021

Via Electronic Mail

Melanie A. Bachman, Esq.
Executive Director/Staff Attorney
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Facility Modification**
246 East Franklin Street, Danielson (Killingly), Connecticut

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains an existing wireless telecommunications facility at the above-referenced property address (the "Property"). The facility consists of antennas and remote radio heads attached to a tower and related equipment on the ground, near the base of the tower. The tower was approved by the Town of Killingly ("Town") in July 1998. Cellco's use of the tower was approved in July 1999 (TS-BAM-069-990701). A copy of the Town's tower approval and the Council's TS-BAM-069-0701 approval are included in Attachment 1.

Cellco now intends to modify its facility by replacing nine (9) existing antennas with three (3) Samsung MT6407-77A antennas, three (3) CBRS antennas and six (6) JAHH-65B-R3B antennas on its existing mounting platform. Cellco also intends to install nine (9) remote radio heads ("RRHs") behind its antennas. A set of project plans showing Cellco's proposed facility modifications and new antennas and RRH specifications are included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Killingly's Chief Elected Official and Land Use Officer.

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

1. The proposed modifications will not result in an increase in the height of the existing tower.

2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

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

4. The installation of Cellco's new antennas will not increase radio frequency (RF) emissions at the facility to a level at or above the Federal Communications Commission (FCC) safety standard. A cumulative General Power Density table for Cellco's modified facility is included in Attachment 3. The modified facility will be capable of providing Cellco's 5G wireless service.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. According to the attached Structural Analysis ("SA") and Mount Analysis ("MA"), the existing tower, tower foundation and antenna mounting platform can support Cellco's proposed modifications. Copies of the SA and MA are included in Attachment 4.

A copy of the parcel map and Property owner information is included in Attachment 5. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 6.

For the foregoing reasons, Cellco respectfully submits that the proposed modifications to the above-referenced telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:

Mary Calorio, Town Manager for the Town of Killingly
Ann-Marie Aubrey, Killingly Director of Planning & Development
Charles R. Lu Hutchins & Amanda Martell Trustee, Property Owner
Karla Hanna

ATTACHMENT 1

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.

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

Submission Results for Application CTSP 8628--Danielson

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.

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

July 16, 1999

Sandy M. Carter
Manager-Regulatory
Bell Atlantic Mobile
20 Alexander Drive
P.O. Box 5029
Wallingford, CT 06492

RE: TS-BAM-069-990701 - Bell Atlantic Mobile request for an order to approve tower sharing at an existing telecommunications facility located at 246 East Franklin Street in Danielson, Connecticut.

Dear Ms. Carter:

At a public meeting held July 15, 1999, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures.

This facility has been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequency now used on this tower. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated June 30, 1999. Please notify the Council when all work is complete.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/tsg

c: Honorable Marc Skocypec, Town Manager, Town of Danielson

I:\siting\cm\bam\danlson\dc071599.doc

ATTACHMENT 2

verizon

WIRELESS COMMUNICATIONS FACILITY UPGRADE

DANIELSON CT
246 EAST FRANKLIN STREET,
DANIELSON, CT 06239

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE 2015 INTERNATIONAL BUILDING CODE AS MODIFIED BY THE 2018 CONNECTICUT SUPPLEMENT, INCLUDING THE TIA/EIA-222 REVISION "G" STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWERS AND SUPPORTING STRUCTURES, 2017 CONNECTICUT FIRE SAFETY CODE, NATIONAL ELECTRICAL CODE, AND LOCAL CODES.
2. SHOULD ANY FIELD CONDITIONS PRECLUDE COMPLIANCE WITH THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER AND SHALL NOT PROCEED WITH ANY AFFECTED WORK.
3. CONTRACTOR SHALL REVIEW ALL DRAWINGS AND SPECIFICATIONS IN THE CONTRACT DOCUMENT SET. CONTRACTOR SHALL COORDINATE ALL WORK SHOWN IN THE SET OF DRAWINGS. THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF DRAWINGS TO ALL SUBCONTRACTORS AND ALL RELATED PARTIES. THE SUBCONTRACTORS SHALL EXAMINE ALL THE DRAWINGS AND SPECIFICATIONS FOR THE INFORMATION THAT AFFECTS THEIR WORK.
4. CONTRACTOR SHALL PROVIDE A COMPLETE BUILD-OUT WITH ALL FINISHES, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS AND PROVIDE ALL ITEMS AS SHOWN OR INDICATED ON THE DRAWINGS OR IN THE WRITTEN SPECIFICATIONS.
5. CONTRACTOR SHALL FURNISH ALL MATERIAL, LABOR AND EQUIPMENT TO COMPLETE THE WORK AND FURNISH A COMPLETED JOB ALL IN ACCORDANCE WITH LOCAL AND STATE GOVERNING AUTHORITIES AND OTHER AUTHORITIES HAVING LAWFUL JURISDICTION OVER THE WORK.
6. CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS AND ALL INSPECTIONS REQUIRED AND SHALL ALSO PAY FEES REQUIRED FOR THE GENERAL CONSTRUCTION, AND ALL TRADES AS APPLICABLE PERMITS SHALL BE PAID FOR BY THE RESPECTIVE SUBCONTRACTORS.
7. CONTRACTOR SHALL MAINTAIN A CURRENT SET OF DRAWINGS AND SPECIFICATIONS ON SITE AT ALL TIMES AND INSURE DISTRIBUTION OF NEW DRAWINGS TO SUBCONTRACTORS AND OTHER RELEVANT PARTIES AS SOON AS THEY ARE MADE AVAILABLE. ALL OLD DRAWINGS SHALL BE MARKED VOID AND REMOVED FROM THE CONTRACT AREA. THE CONTRACTOR SHALL FURNISH AN "AS-BUILT" SET OF DRAWINGS TO OWNER UPON COMPLETION OF PROJECT.
8. LOCATION OF EQUIPMENT, AND WORK SUPPLIED BY OTHERS THAT IS DIAGRAMMATICALLY INDICATED ON THE DRAWINGS SHALL BE DETERMINED BY THE CONTRACTOR. THE CONTRACTOR SHALL DETERMINE LOCATIONS AND DIMENSIONS SUBJECT TO STRUCTURAL CONDITIONS AND WORK OF THE SUBCONTRACTORS.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING BUILDING'S/PROPERTY'S OPERATIONS, COORDINATE WORK WITH BUILDING/PROPERTY OWNER.
10. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
11. ALL UTILITY WORK SHALL BE IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS AND SPECIFICATIONS.
12. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUBCONTRACTORS FOR ANY CONDITION PER MFR.'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
13. ANY AND ALL ERRORS, DISCREPANCIES, AND "MISSED" ITEMS ARE TO BE BROUGHT TO THE ATTENTION OF THE VERIZON WIRELESS CONSTRUCTION MANAGER DURING THE BIDDING PROCESS BY THE CONTRACTOR. ALL THESE ITEMS ARE TO BE INCLUDED IN THE BID. NO "EXTRA" WILL BE ALLOWED FOR MISSED ITEMS.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ON-SITE SAFETY FROM THE TIME THE JOB IS AWARDED UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE OWNER.
15. CONTRACTOR TO REVIEW ALL SHOP DRAWINGS AND SUBMIT COPY TO ENGINEER FOR APPROVAL. DRAWINGS MUST BEAR THE CHECKER'S INITIALS BEFORE SUBMITTING TO THE CONSTRUCTION MANAGER FOR REVIEW.
16. THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE, PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA.
17. COORDINATION, LAYOUT, FURNISHING AND INSTALLATION OF CONDUIT AND ALL APPURTENANCES REQUIRED FOR PROPER INSTALLATION OF ELECTRICAL AND TELECOMMUNICATION SERVICE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
18. ALL EQUIPMENT AND PRODUCTS PURCHASED ARE TO BE REVIEWED BY CONTRACTOR AND ALL APPLICABLE SUB- CONTRACTORS FOR ANY CONDITION PER THE MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR TO SUPPLY THESE ITEMS AT NO COST TO OWNER OR CONSTRUCTION MANAGER.
19. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
20. THE CONTRACTOR SHALL CONTACT "CALL BEFORE YOU DIG" AT LEAST 48 HOURS PRIOR TO ANY EXCAVATIONS AT 1-800-922-4455. ALL UTILITIES SHALL BE IDENTIFIED AND CLEARLY MARKED PRIOR TO ANY EXCAVATION WORK. CONTRACTOR SHALL MAINTAIN AND PROTECT MARKED UTILITIES THROUGHOUT PROJECT COMPLETION.

SITE DIRECTIONS

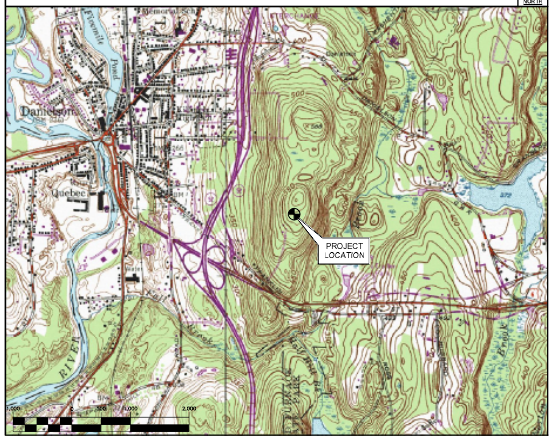
FROM: 20 ALEXANDER DRIVE WALLINGFORD, CONNECTICUT

TO: 246 EAST FRANKLIN ST, DANIELSON, CT 06239

1.	START OUT GOING NORTH ON ALEXANDER DR TOWARD BARNES INDUSTRIAL RD.	0.18 MI
2.	TURN RIGHT ONTO BARNES INDUSTRIAL RD.	0.11 MI
3.	TAKE THE 1ST LEFT ONTO CT-68.	0.35 MI
4.	TURN RIGHT ONTO RAMP.	0.17 MI
5.	TURN RIGHT ONTO N COLONY RD/US-5 N.	0.30 MI
6.	MERGE ONTO CT-15 N TOWARD HARTFORD.	3.58 MI
7.	MERGE ONTO I-91 N VIA EXIT 68N-E TOWARD MIDDLETOWN/HARTFORD/CT-66 E.	16.92 MI
8.	MERGE ONTO CT-15 N VIA THE EXIT ON THE LEFT.	2.53 MI
9.	CT-15 N BECOMES I-84 E/US-6 E.	1.52 MI
10.	MERGE ONTO I-384 E VIA EXIT 59 TOWARD PROVIDENCE.	8.65 MI
11.	I-384 E BECOMES BOSTON TURNPIKE/US-6 E/US-44 E.	0.22 MI
12.	TAKE US-6 E TOWARD PROVIDENCE/WILLIMANTIC.	10.84 MI
13.	TURN SLIGHT LEFT ONTO ROUTE 6/US-6 E. CONTINUE TO FOLLOW US-6 E.	5.34 MI
14.	MERGE ONTO US-6 E TOWARD DANIELSON/WINDHAM AIRPORT/PROVIDENCE.	19.20 MI
15.	TURN LEFT ONTO E FRANKLIN ST.	0.24 MI
16.	246 E FRANKLIN ST, DANIELSON, CT 06239-3806, 246 E FRANKLIN ST AT END OF SERVICE ROAD. SERVICE ROAD LOCATED ON RIGHT IMMEDIATELY AFTER FIRST HOUSE ON THE RIGHT.	

VICINITY MAP

SCALE: 1" = 1000'



PROJECT SUMMARY

1. THE PROPOSED UPGRADE SCOPE OF WORK AT THE EXISTING UNMANNED TELECOMMUNICATIONS FACILITY GENERALLY INCLUDES THE FOLLOWING:

A. AT THE EXISTING MONOPOLE MOUNTED ANTENNA SECTORS:

- REMOVE (6) EXISTING ANDREW HBX-6517DS-A2M ANTENNAS.
- REMOVE (3) EXISTING ANTEL BXA-70063O6CF ANTENNAS.
- REMOVE (6) EXISTING NOKIA RRUS.
- REMOVE (6) EXISTING RFS DIPLEXER.
- REMOVE (1) EXISTING RAYCAP OVP BOX
- REMOVE (1) EXISTING 6x12 HYBRID CABLE.
- REMOVE (1) EXISTING COAX CABLE.
- RETAIN (11) EXISTING COAX CABLES.
- INSTALL (6) NEW ANDREW JAHH-65B-R3B ANTENNAS ON (3) NEW BSAMNT-SBS-2-2 MOUNTS.
- INSTALL (3) NEW SAMSUNG MT6407-77A ALL-IN-ONE ANTENNA/RRUS/
- INSTALL (3) NEW SAMSUNG XXDWMM-12.5-65-8T-CBRS ALL-IN-ONE ANTENNAS/RRU'S.
- INSTALL (3) NEW SAMSUNG B2/B66A RRH-BR049 RADIOS.
- INSTALL (3) NEW SAMSUNG B5/B13 RRH-BR04C RADIOS.
- INSTALL (3) NEW COMMSCOPE CBC78T-DS-43-2X DIPLEXERS.
- INSTALL (2) NEW 6x12 HYBRIFLEX LI CABLES.
- INSTALL (1) NEW RAYCAP OVP-12 OVP BOX.

PROJECT INFORMATION

SITE NAME:	DANIELSON CT
SITE ADDRESS:	246 EAST FRANKLIN ST, DANIELSON, CT 06239
LESSEE/TENANT:	CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS 20 ALEXANDER DRIVE WALLINGFORD, CT 06492
CONTACT PERSON:	WALTER CHARCZNSKI (CONSTRUCTION MANAGER) VERIZON WIRELESS (860) 306-1806
ENGINEER:	CENTEK ENGINEERING, INC. 63-2 NORTH BRANFORD RD. BRANFORD, CT. 06405 (203) 488-0580
PROJECT COORDINATES:	LATITUDE: 41°-47'-44.9304"N LONGITUDE: 71°-52'-13.1916"W COORDINATES REFERENCED FROM VERIZON WIRELESS RFDS DATED 6/11/2021.

SHEET INDEX

SHT. NO.	DESCRIPTION	REV.
T-1	TITLE SHEET	0
N-1	NOTES AND SPECIFICATIONS	0
B-1	RF BILL OF MATERIALS	0
C-1	COMPOUND PLAN AND ELEVATION	0
C-2	ANTENNA SECTOR CONFIGURATION DETAILS	0
C-3	RF DETAILS	0
E-1	ELECTRICAL DETAILS AND SPECIFICATIONS	0

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	09/01/21	ANC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
B	06/29/21	ANC	DMD	CONSTRUCTION DRAWINGS – REVISED PER COMMENTS.
A	06/23/21	ASC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

verizon

CENTEK engineering
Centered on Solutions
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless

DANIELSON CT

246 EAST FRANKLIN STREET,
DANIELSON, CT 06239

DATE: 06/23/21
SCALE: AS NOTED
JOB NO. 21007.26

TITLE SHEET

T-1

Sheet No. 1 of 7

NOTES AND SPECIFICATIONS

DESIGN BASIS:

GOVERNING CODE: 2015 INTERNATIONAL BUILDING (IBC) AS MODIFIED BY THE 2018 CT STATE BUILDING CODE AND AMENDMENTS.

1. DESIGN CRITERIA:

- RISK CATEGORY: I (BASED ON TABLE 1604.5 OF THE 2015 IBC)
- NOMINAL DESIGN SPEED (TOWER): 101 MPH (Vasd) (EXPOSURE B/IMPORTANCE FACTOR 1.0 BASED ON ASCE 7-10) PER 2015 INTERNATIONAL BUILDING CODE (IBC) AS MODIFIED BY THE 2018 CONNECTICUT STATE BUILDING CODE.
- SEISMIC LOAD (DOES NOT CONTROL): PER ASCE 7-10 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE GOVERNING BUILDING CODE.
2. DRAWINGS INDICATE THE MINIMUM STANDARDS, BUT IF ANY WORK SHOULD BE INDICATED TO BE SUBSTANDARD TO ANY ORDINANCES, LAWS, CODES, RULES, OR REGULATIONS BEARING ON THE WORK, THE CONTRACTOR SHALL INCLUDE IN HIS WORK AND SHALL EXECUTE THE WORK CORRECTLY IN ACCORDANCE WITH SUCH ORDINANCES, LAWS, CODES, RULES OR REGULATIONS WITH NO INCREASE IN COSTS.
3. BEFORE BEGINNING THE WORK, THE CONTRACTOR IS RESPONSIBLE FOR MAKING SUCH INVESTIGATIONS CONCERNING PHYSICAL CONDITIONS (SURFACE AND SUBSURFACE) AT OR CONTIGUOUS TO THE SITE WHICH MAY AFFECT PERFORMANCE AND COST OF THE WORK.
4. DIMENSIONS AND DETAILS SHALL BE CHECKED AGAINST EXISTING FIELD CONDITIONS.
5. THE CONTRACTOR SHALL VERIFY AND COORDINATE THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES AND ANCHOR BOLTS AS REQUIRED BY ALL TRADES.
6. ALL DIMENSIONS, ELEVATIONS, AND OTHER REFERENCES TO EXISTING STRUCTURES, SURFACE, AND SUBSURFACE CONDITIONS ARE APPROXIMATE. NO GUARANTEE IS MADE FOR THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL VERIFY AND COORDINATE ALL DIMENSIONS, ELEVATIONS, ANGLES WITH EXISTING CONDITIONS AND WITH ARCHITECTURAL AND SITE DRAWINGS BEFORE PROCEEDING WITH ANY WORK.
7. AS THE WORK PROGRESSES, THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONDITIONS WHICH ARE IN CONFLICT OR OTHERWISE NOT CONSISTENT WITH THE CONSTRUCTION DOCUMENTS AND SHALL NOT PROCEED WITH SUCH WORK UNTIL THE CONFLICT IS SATISFACTORILY RESOLVED.
8. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SAFETY CODES AND REGULATIONS DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROVIDING AND MAINTAINING ADEQUATE SHORING, BRACING, AND BARRICADES AS MAY BE REQUIRED FOR THE PROTECTION OF EXISTING PROPERTY, CONSTRUCTION WORKERS, AND FOR PUBLIC SAFETY.
9. THE CONTRACTOR IS SOLELY RESPONSIBLE TO DETERMINE CONSTRUCTION PROCEDURE AND SEQUENCE, AND TO ENSURE THE SAFETY OF THE EXISTING STRUCTURES AND ITS COMPONENT PARTS DURING CONSTRUCTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, BRACING, UNDERPINNING, ETC. THAT MAY BE NECESSARY. MAINTAIN EXISTING SITE OPERATIONS, COORDINATE WORK WITH NORTHEAST UTILITIES
10. ALL DAMAGE CAUSED TO ANY EXISTING STRUCTURE SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR WILL BE HELD LIABLE FOR ALL REPAIRS REQUIRED FOR EXISTING STRUCTURES IF DAMAGED DURING CONSTRUCTION ACTIVITIES.
11. REFER TO DRAWING T1 FOR ADDITIONAL NOTES AND REQUIREMENTS.

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
0	09/01/21	ANC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CONSTRUCTION
A	06/29/21	ANC	DMD	CONSTRUCTION DRAWINGS – REVISED PER COMMENTS.
	06/23/21	ASC	DMD	CONSTRUCTION DRAWINGS – ISSUED FOR CLIENT REVIEW

PROFESSIONAL ENGINEER SEAL

verizon

CENTEK engineering
Centered on Solutions
(203) 488-0580
(203) 488-8587 Fax
63-2 North Branford Road
Branford, CT 06405
www.CentekEng.com

Cellco Partnership d/b/a Verizon Wireless

DANIELSON CT

246 EAST FRANKLIN STREET,
DANIELSON, CT 06239

DATE: 06/23/21
SCALE: AS NOTED
JOB NO. 21007.26

NOTES AND SPECIFICATIONS

N-1

Sheet No. 2 of 7

PLUMBING DIAGRAM NOTES:

1. PORTS 1 & 2 ARE FOR LOW BAND (698–896 MHz).
2. PORTS 3, 4, 5 & 5 ARE FOR HIGH BAND (1695–2360 MHz).
3. SMART BIAS TEE (SBT) IS THROUGH ANTENNA PORTS 1 & 3 (1 FOR LOW BAND AND 3 FOR HIGH BAND).
4. AISG CABLE IS ONLY NEEDED WHEN DRAWN IN THE DIAGRAMS ABOVE. IF IT IS NOT DRAWN THEN SBT IS ENOUGH TO CONTROL ALL RET MOTORS.
5. NOT ALL SBT PORTS ARE NEEDED TO CONTROL RET. ONLY GREEN PORT CONNECTION TO GREEN PORT WILL CONTROL RET.

RET DC SIGNAL PASS FOR RET (PORT THAT WILL CONTROL RET)

PLUMBING DIAGRAM COMMENTS:

A. DIAGRAMS SHOW ANTENNA PORT CONFIGURATIONS AS VIEWED FROM BELOW ANTENNAS.

B. ANTENNA POSITIONS ARE INDICATED AS VIEWED FROM IN FRONT OF ANTENNAS.

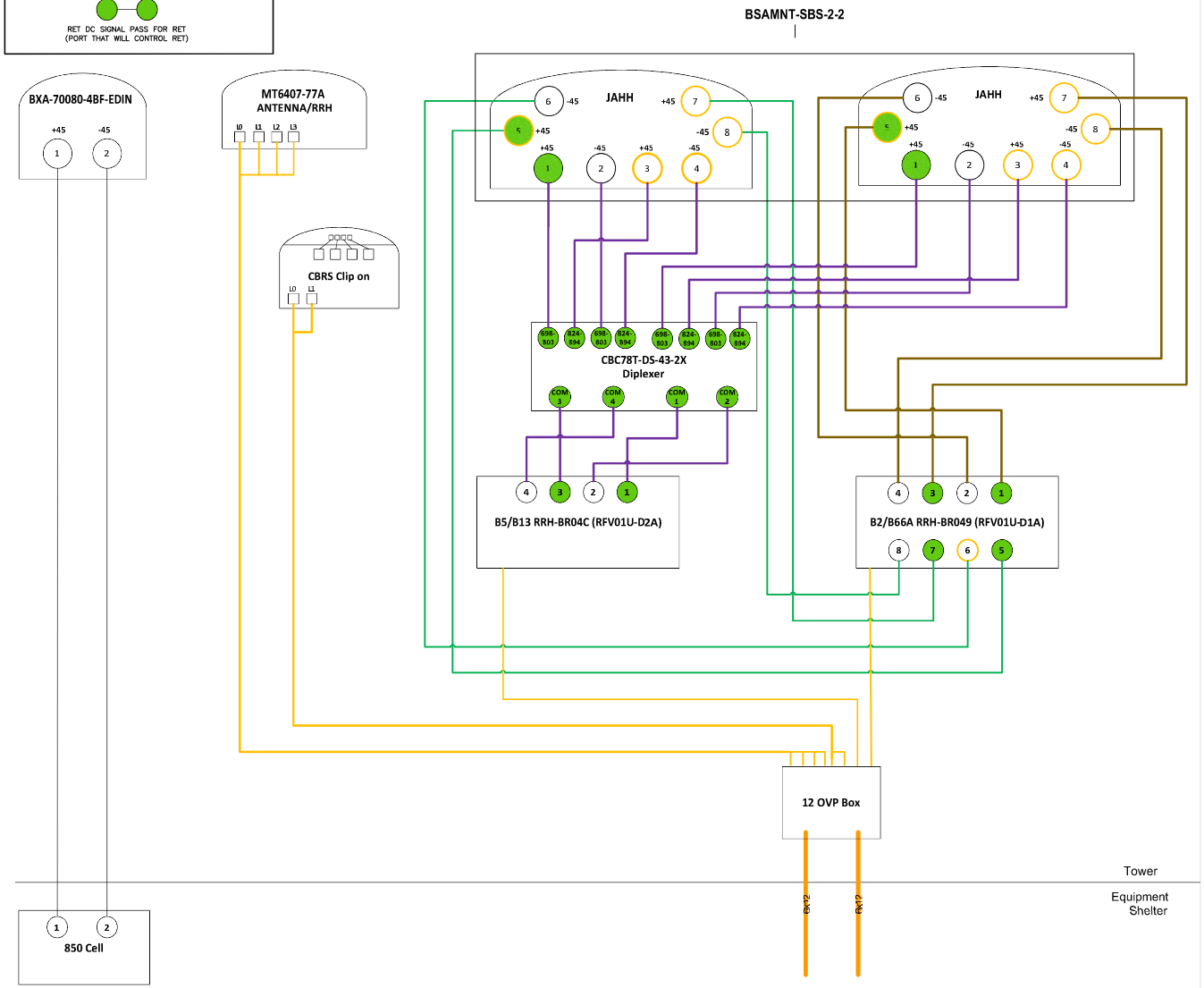
C. CAP AND WEATHERPROOF UNUSED ANTENNA PORTS.

D. ALL PLUMBING DIAGRAM COLORS ARE IRRELEVANT EXCEPT FOR AISG AND HYBRIFLEX CABLE. (FOR THE COAX COLORS, FOLLOW COAX COLORS GUIDE ABOVE)

DC SIGNAL CAPABLE PORT

AISG CABLE

RET DC SIGNAL PASS FOR RET (PORT THAT WILL CONTROL RET)



NOTES:

1. INFORMATION SHOWN HEREIN IS FOR USE BY VERIZON WIRELESS EQUIPMENT OPERATIONS.
2. THIS B.O.M. DRAWING IS BASED ON FACILITY UPGRADE DESIGN DRAWINGS PREPARED BY CENTEK ENGINEERING (REV.0 DATED: 09.01.21), & VERIZON WIRELESS RF ANTENNA EQUIPMENT RECOMMENDATION (DATED 06.11.21).

BILL OF MATERIALS

TECHNOLOGY	QUANTITY	ANTENNA
LTE 700 LTE 850, 5G LTE PCS 1900 LTE AWS 2100	6	ANDREW MODEL: JAHH-65B-R3B
5G	3	SAMSUNG MODEL: MT6407-77A
LTE CBRS	3	SAMSUNG MODEL: XXDWMM-12.5-65-8T-CBRS

CABLES	QUANTITY	LENGTH	COMMENTS
6x12 HYBRIFLEX LI	2	±230' (EA)	–

RADIOS	QUANTITY	COMMENTS
LTE 700 LTE 850, 5G	3	SAMSUNG MODEL: B5/B13 RRH-BR04C
LTE PCS 1900 LTE AWS 2100	3	SAMSUNG MODEL: B2/B66A RRH-BR049
LTE CBRS	3	INTEGRATED INTO XXDWMM-12.5-65-8T-CBRS ANTENNA
5G	3	INTEGRATED INTO MT6407-77A ANTENNA

DIPLEXERS	QUANTITY	COMMENTS
COMMSCOPE DIPLEXER	3	COMMSCOPE MODEL: CBC78T-DS-43-2X

OVP BOXES	QUANTITY	COMMENTS
RAYCAP OVP	1	RAYCAP MODEL: OVP-12

ANTENNA MOUNT	QUANTITY	COMMENTS
COMMSCOPE ANTENNA MOUNT	3	COMMSCOPE MODEL: BSAMNT-SBS-2-2

REV.	DATE	DRAWN BY	CHK'D BY	DESCRIPTION
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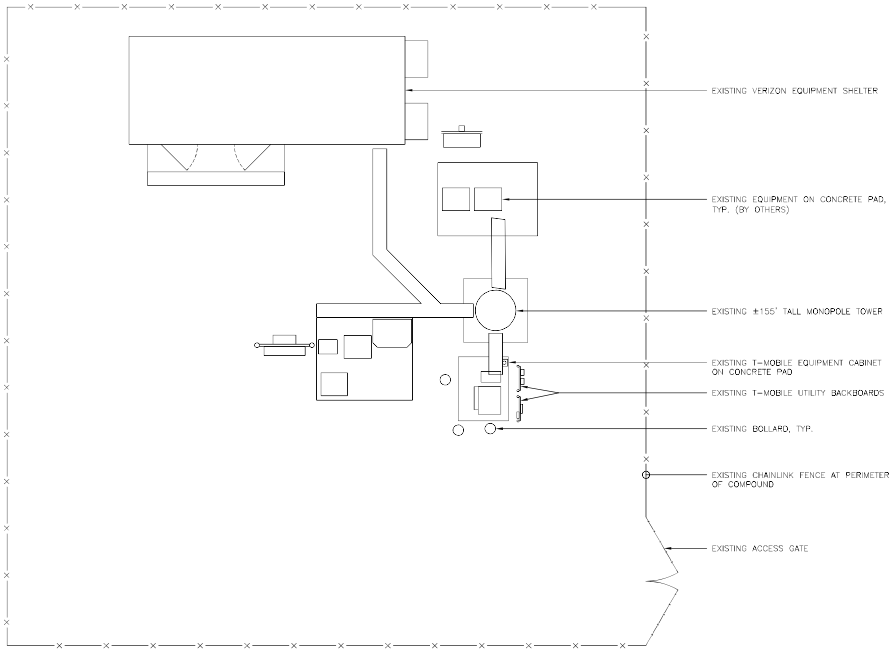
RF BILL OF MATERIALS

B-1

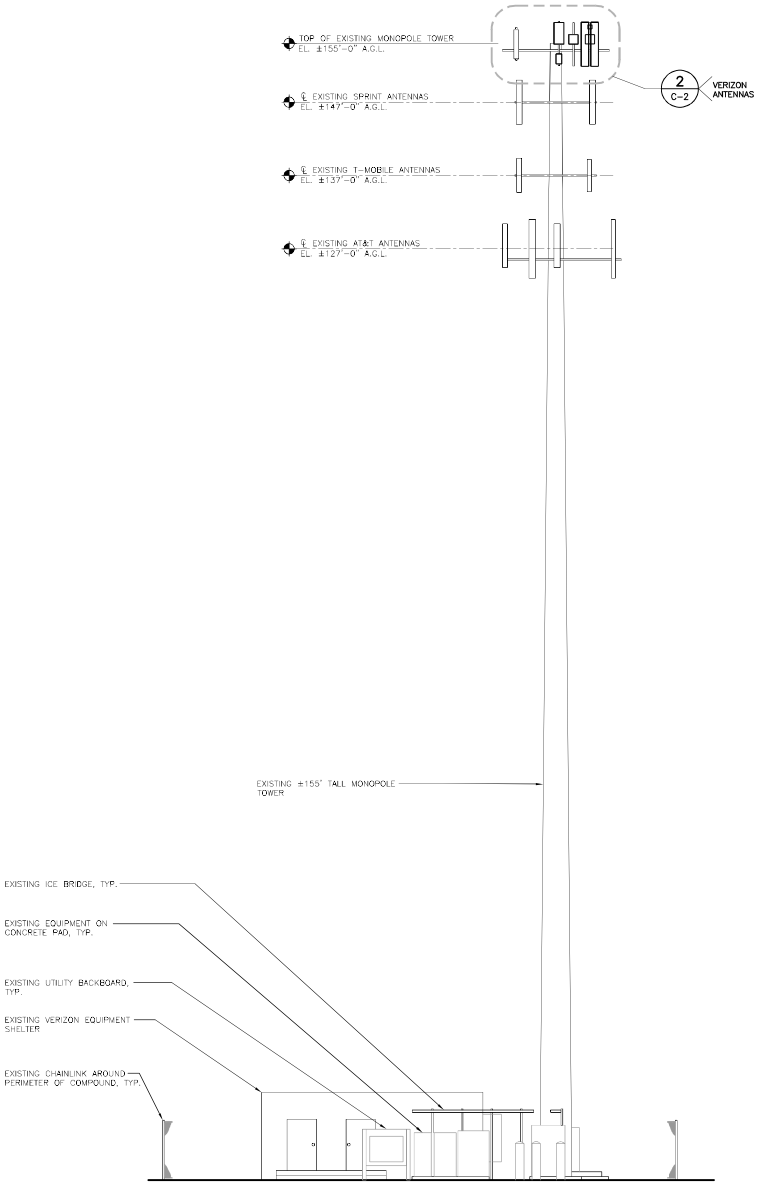
Sheet No. 3 of 7



1 / C-1 **COMPOUND PLAN - PROPOSED**
SCALE: 1" = 10'-0"

APPROX. NORTH

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.



2 / C-1 **TOWER ELEVATION - PROPOSED**
SCALE: 1" = 10'-0"

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

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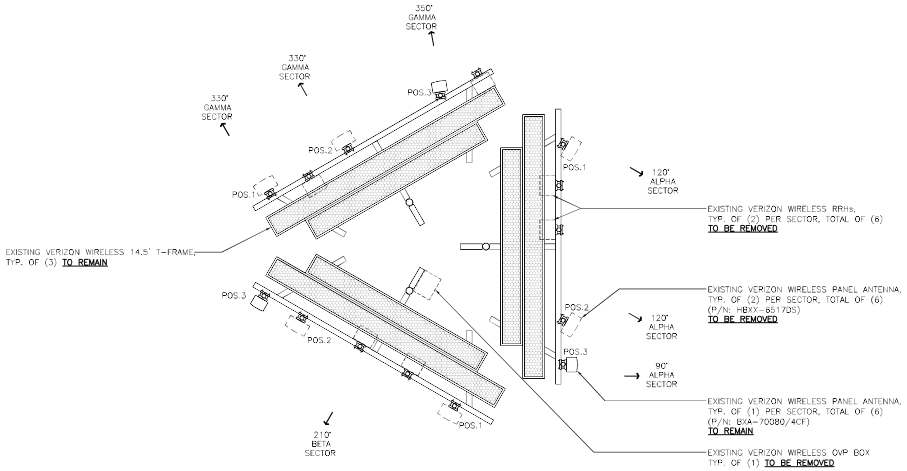
COMPOUND PLAN AND ELEVATION

C-1

Sheet No. 4 of 7

EXISTING ANTENNA CONFIGURATIONS



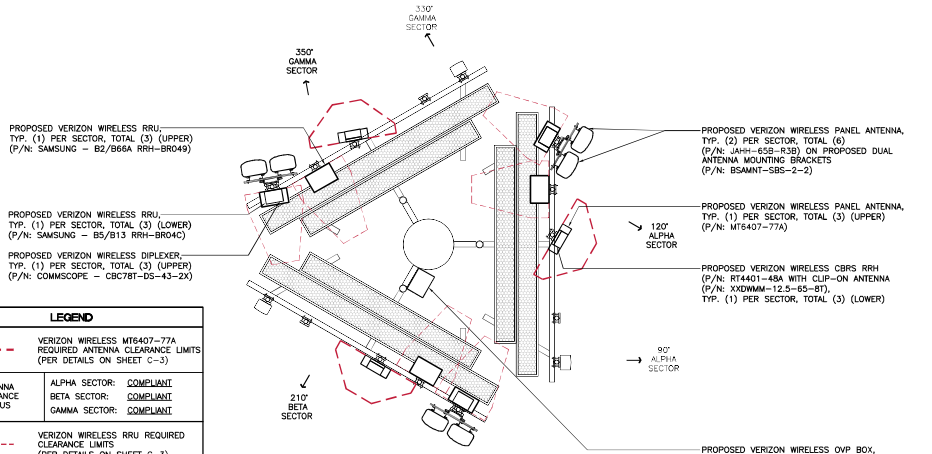
1 C-2 **EXISTING SECTOR CONFIGURATION PLAN**
SCALE: 3/8" = 1'-0"

APPROXIMATE NORTH

PROPOSED ANTENNA CONFIGURATIONS

ANTENNA MOUNT ANALYSIS NOTE:

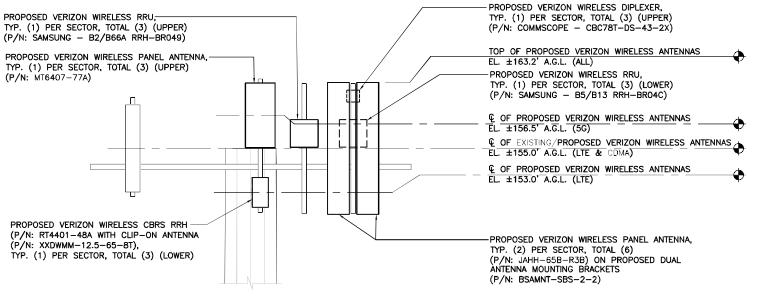
REFER TO PASSING VERIZON WIRELESS MOUNT ANALYSIS REPORT PREPARED BY MASER CONSULTING CONNECTICUT DATED 06/17/202 FOR ADDITIONAL INFORMATION.



LEGEND		
- - - -	VERIZON WIRELESS MT6407-77A REQUIRED ANTENNA CLEARANCE LIMITS (PER DETAILS ON SHEET C-3)	
ANTENNA CLEARANCE STATUS	ALPHA SECTOR:	COMPLIANT
	BETA SECTOR:	COMPLIANT
	GAMMA SECTOR:	COMPLIANT
- - - - - - -	VERIZON WIRELESS RRU REQUIRED CLEARANCE LIMITS (PER DETAILS ON SHEET C-3)	
RRU CLEARANCE STATUS	ALPHA SECTOR:	COMPLIANT
	BETA SECTOR:	COMPLIANT
	GAMMA SECTOR:	COMPLIANT

1A C-2 **PROPOSED SECTOR CONFIGURATION PLAN**
SCALE: 3/8" = 1'-0"

APPROXIMATE NORTH



TYPICAL SECTOR

NOTE:
THE PROPOSED VERIZON WIRELESS OVP BOX, TYP. OF (1), RAYCAP (P/N: RCMDC-6600-PF-48) ON EXISTING OVP MOUNT IS NOT SHOWN FOR CLARITY

2 C-2 **PROPOSED SECTOR CONFIGURATION ELEVATION**
SCALE: 3/8" = 1'-0"

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ANTENNA SECTOR CONFIGURATION DETAILS

C-2

Sheet No. 5 of 7

ANTENNA FRONT

SECTOR ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: TBD MODEL: VZS01	35"h x 20"W x 6"D (NOT TO EXCEED)	97 LBS. (NOT TO EXCEED)
CLEARANCES AND SERVICE AREA		
TOP: 31.5"	HORIZONTAL DISTANCE: (ANT. TO ANT.) 31.5"	
FRONT, SIDES & BOTTOM: 15.7"	VERTICAL DISTANCE: (ANT. TO ANT.) 63.0"	
NOTES: 1. THIS ANTENNA HAS ITS OWN BUILT-IN RRH (VZS01).		

1 / C-3 **SECTOR ANTENNA DETAIL**
NOT TO SCALE

ELEVATION - ISOMETRIC

BOTTOM

8-PORT SECTOR ANTENNA		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: COMMSCOPE MODEL: JAHH-65B-R3B	72.0"L x 13.8"W x 8.2"D	64.4 LBS. (W/OUT MOUNT KIT)

2 / C-3 **SECTOR ANTENNA DETAIL**
NOT TO SCALE

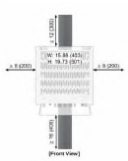
CLIP-ON ANTENNA ONLY

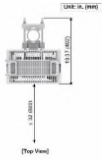
ALL-IN-ONE ANTENNA & RRH

RRH ONLY

CBRS CLIP-ON ANTENNA			CBRS RRU (REMOTE RADIO UNIT)			
EQUIPMENT	DIMENSIONS	WEIGHT	EQUIPMENT	BAND	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: XADWMM-12.5-65-8T	12.3"H x 8.7"W x 1.4"D	2.9 LBS.	MAKE: SAMSUNG MODEL: CBRS RRH-RT4401-48A	CBRS	12.1"H x 8.5"W x 4.1"D	18.6 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.						

3 / C-3 **COMBINED RRH/CLIP-ON ANTENNA DETAIL**
NOT TO SCALE



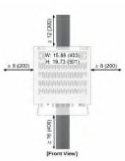


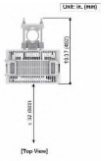
RRH ISOMETRIC

RRH CLEARANCES

DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: B2/B66A RRH-BR049 (RFV01U-D1A)	B2: PCS (1900 MHz) B66: AWS (2100 MHz)	15.0"H x 15.0"W x 10.0"D	84.4 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

4 / C-3 **DUAL-BAND AWS/PCS RADIO UNIT DETAIL**
NOT TO SCALE





RRH ISOMETRIC

RRH CLEARANCES

DUAL BAND RRU (REMOTE RADIO UNIT)			
EQUIPMENT	BANDS	DIMENSIONS	WEIGHT
MAKE: SAMSUNG MODEL: B5/B13 RRH-BR04C (RFV01U-D2A)	B5: 850 MHz B13: 700 MHz	15.0"H x 15.0"W x 8.1"D	70.3 LBS.
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

5 / C-3 **DUAL-BAND 700/850 MHZ RADIO UNIT DETAIL**
NOT TO SCALE

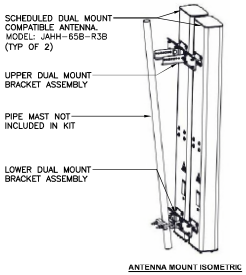
OVP BOX		
EQUIPMENT	DIMENSIONS	WEIGHT
MAKE: RAYCAP MODEL: DB-C1-12C-24AB-0Z	29.5"H x 16.5"W x 12.6"D	32 LBS.
NOTES: 1. CONTRACTOR TO CONFIRM OVP BOX MAKE/MODEL AND QUANTITY WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.		

6 / C-3 **PROPOSED OVER-VOLTAGE PROTECTION BOX**
NOT TO SCALE

ISOMETRIC

DIPLEXER			
EQUIPMENT	DESCRIPTION	DIMENSIONS	WEIGHT
MAKE: COMMSCOPE MODEL: CBC7BT-DS-43-2X	4 PACK DIPLEXER 700MHz/850MHz	6.4"H x 6.9"W x 9.6"D	21.8 LBS. (W/MNTG HDWR)
NOTES: 1. CONTRACTOR TO COORDINATE FINAL EQUIPMENT MODEL SELECTION WITH VERIZON WIRELESS CONSTRUCTION MANAGER PRIOR TO ORDERING.			

7 / C-3 **DIPLEXER DETAIL**
NOT TO SCALE



ANTENNA MOUNT ISOMETRIC

ANTENNA MOUNT PROFILE

DUAL ANTENNA MOUNTING KIT	
EQUIPMENT	DESCRIPTION
MOUNT MAKE: COMMSCOPE MODEL: BSAMNT-SBS-2-2	• SIDE-BY-SIDE MOUNTING KIT, ACCOMMODATES (2) COMPATABLE ANTENNAS • ACCOMMODATES MAST DIAMETERS FROM 2.375" TO 4.5" (O.D.)

8 / C-3 **DUAL ANTENNA MOUNT DETAIL**
NOT TO SCALE

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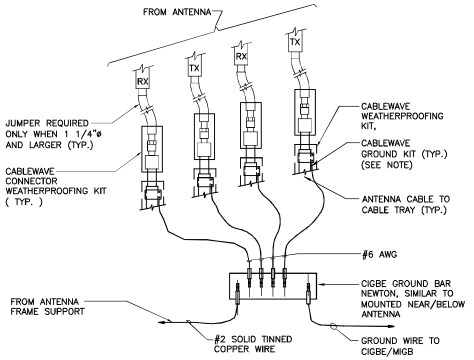
RF DETAILS

C-3

Sheet No. 6 of 7

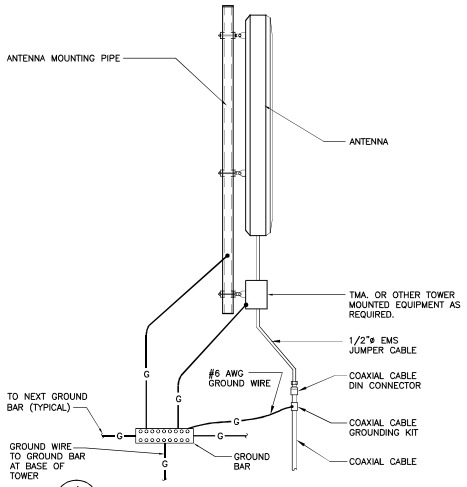


NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE

1 E-1 CONNECTION OF GROUND WIRES TO GROUND BAR

NOT TO SCALE

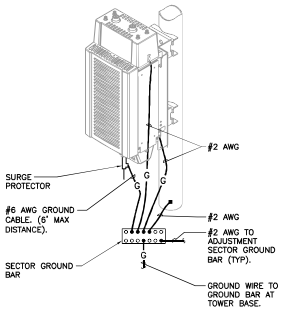


4 E-1 TYPICAL ANTENNA GROUNDING DETAIL

NOT TO SCALE

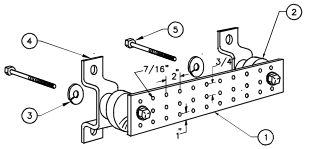
EACH RRH CABINET SHALL BE GROUNDED IN THE FOLLOWING MANNER:

1. AT TOP OF THE CABINET
2. AT RIGHT SIDE OF THE CABINET.



2 E-1 RRH POLE MOUNT GROUNDING

NOT TO SCALE

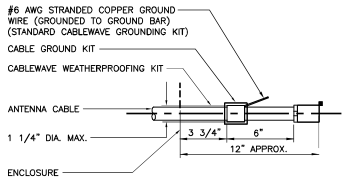


NOTES

1. TINNED COPPER GROUND BAR, 1/4" x 4" x 20", NEWTON INSTRUMENT CO. HOLE CENTERS TO MATCH NEMA DOUBLE LUG CONFIGURATION.
2. INSULATORS, NEWTON INSTRUMENT CAT. NO. 3061-4.
3. 5/8" LOCK WASHERS, NEWTON INSTRUMENT CO. CAT. NO. 3015-8.
4. WALL MOUNTING BRACKET, NEWTON INSTRUMENT CO. CAT NO. A-6056.
5. 5/8-11 x 1" STAINLESS STEEL TRUSS SPANNER MACHINE SCREWS.

5 E-1 GROUND BAR DETAIL

NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.

3 E-1 ANTENNA CABLE GROUNDING DETAIL

NOT TO SCALE

ELECTRICAL SPECIFICATIONS

SECTION 16010

1.01. SCOPE OF WORK

A. WORK SHALL INCLUDE ALL LABOR, EQUIPMENT AND SERVICES REQUIRED TO COMPLETE (MAKE READY FOR OPERATION) ALL THE ELECTRICAL WORK INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:

1. CELLULAR GROUNDING SYSTEMS CONSISTING OF ANTENNA GROUNDING, GROUND BARS, ETC.

1.02. GENERAL REQUIREMENTS

A. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE MADE IN STRICT ACCORDANCE WITH ALL LOCAL, STATE AND NATIONAL CODES AND REGULATIONS WHICH MAY APPLY AND NOTHING IN THE DRAWINGS OR SPECIFICATIONS SHALL BE INTERPRETED AS AN INFRINGEMENT OF SUCH CODES OR REGULATIONS.

B. THE ELECTRICAL CONTRACTOR IS TO BE RESPONSIBLE FOR THE COMPLETE INSTALLATION AND COORDINATION OF THE ENTIRE ELECTRICAL SERVICE. ALL ACTIVITIES TO BE COORDINATED THROUGH OWNERS REPRESENTATIVE, DESIGN ENGINEER AND OTHER AUTHORITIES HAVING JURISDICTION OF TRADES.

C. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND PAY ALL FEES THAT MAY BE REQUIRED FOR THE ELECTRICAL WORK AND FOR SCHEDULING OF ALL INSPECTIONS THAT MAY BE REQUIRED BY THE LOCAL AUTHORITY.

D. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH THE BUILDING OWNER FOR NEW AND/OR DEMOLITION WORK INVOLVED.

E. NO MATERIAL OTHER THAN THAT CONTAINED IN THE "LATEST LIST OF ELECTRICAL FITTINGS" APPROVED BY THE UNDERWRITERS' LABORATORIES, SHALL BE USED IN ANY PART OF THE WORK. ALL MATERIAL FOR WHICH LABEL SERVICE HAS BEEN ESTABLISHED SHALL BEAR THE U.L. LABEL.

F. THE CONTRACTOR SHALL GUARANTEE ALL NEW WORK FOR A PERIOD OF ONE YEAR FROM THE ACCEPTANCE DATE BY THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WARRANTIES FROM ALL EQUIPMENT MANUFACTURERS FOR SUBMISSION TO THE OWNER.

G. DRAWINGS INDICATE GENERAL ARRANGEMENT OF WORK INCLUDED IN CONTRACT. CONTRACTOR SHALL, WITHOUT EXTRA CHARGE, MAKE MODIFICATIONS TO THE LAYOUT OF THE WORK TO PREVENT CONFLICT WITH WORK OF OTHER TRADES AND FOR THE PROPER INSTALLATION OF WORK. CHECK ALL DRAWINGS AND VISIT JOB SITE TO VERIFY SPACE AND TYPE OF EXISTING CONDITIONS IN WHICH WORK WILL BE DONE, PRIOR TO SUBMITTAL OF BID.

H. THE ELECTRICAL CONTRACTOR SHALL SUPPLY THREE (3) COMPLETE SETS OF APPROVED DRAWINGS, ENGINEERING DATA SHEETS, MAINTENANCE AND OPERATING INSTRUCTION MANUALS FOR ALL SYSTEMS AND THEIR RESPECTIVE EQUIPMENT. THESE MANUALS SHALL BE INSERTED IN VINYL COVERED 3-RING BINDERS AND TURNED OVER TO OWNER'S REPRESENTATIVE ONE (1) WEEK PRIOR TO FINAL PUNCH LIST.

I. ALL WORK SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER AND WILL BE SUBJECT TO THE APPROVAL OF THE OWNER'S REPRESENTATIVE.

J. ALL EQUIPMENT AND MATERIALS TO BE INSTALLED SHALL BE NEW, UNLESS OTHERWISE NOTED.

K. BEFORE FINAL PAYMENT, THE CONTRACTOR SHALL PROVIDE A COMPLETE SET OF PRINTS (AS-BUILTS), LEGIBLY MARKED IN RED PENCIL TO SHOW ALL CHANGES FROM THE ORIGINAL PLANS.

L. ENTIRE ELECTRICAL INSTALLATION SHALL BE IN ACCORDANCE WITH OWNER'S SPECIFICATIONS, AND REQUIREMENTS OF ALL LOCAL AUTHORITIES HAVING JURISDICTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH APPROPRIATE INDIVIDUALS TO OBTAIN ALL SUCH SPECIFICATIONS AND REQUIREMENTS. NOTHING CONTAINED IN, OR OMITTED FROM, THESE DOCUMENTS SHALL RELIEVE CONTRACTOR FROM THIS OBLIGATION.

SECTION 16450

1.01. GROUNDING

A. ALL NON-CURRENT CARRYING PARTS OF THE ELECTRICAL AND TELEPHONE CONDUIT SYSTEMS SHALL BE MECHANICALLY AND ELECTRICALLY CONNECTED TO PROVIDE AN INDEPENDENT RETURN PATH TO THE EQUIPMENT GROUNDING SOURCES.

B. GROUNDING SYSTEM WILL BE IN ACCORDANCE WITH THE LATEST ACCEPTABLE EDITION OF THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS PER LOCAL INSPECTOR HAVING JURISDICTION.

C. EQUIPMENT GROUNDING CONDUCTOR:

1. EACH EQUIPMENT GROUND CONDUCTOR SHALL BE SIZED IN ACCORDANCE WITH THE N.E.C. ARTICLE 250-122.

2. THE MINIMUM SIZE OF EQUIPMENT GROUND CONDUCTOR SHALL BE #12 AWG COPPER.

D. CELLULAR GROUNDING SYSTEM:

PROVIDE THE CELLULAR GROUNDING SYSTEM AS SPECIFIED ON DRAWINGS, INCLUDING, BUT NOT LIMITED TO:

1. GROUND BARS
2. ANTENNA GROUND CONNECTIONS AND PLATES.

E. ALL EQUIPMENT SHALL BE BONDED TO GROUND AS REQUIRED BY N.E.C., MFG. SPECIFICATIONS, AND OWNER'S SPECIFICATIONS.

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ELECTRICAL DETAILS AND SPECIFICATIONS

E-1

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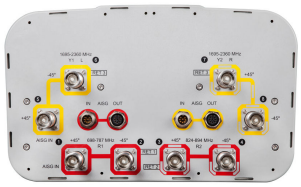
JAHH-65B-R3B



8-port sector antenna, 2x 698–787, 2x 824-894 and 4x 1695–2360 MHz, 65° HPBW, 3x RET and low bands have diplexers. Internal SBT's on first LB(Port 1) and first HB(Port 5).

- Internal SBT on low and high band allow remote RET control from the radio over the RF jumper cable
- One RET for 700MHz, one RET for 850MHz, and one RET for both high bands to ensure same tilt level for 4x Rx or 4x MIMO
- Internal filter on low band and interleaved dipole technology providing for attractive, low wind load mechanical package
- Separate RS-485 RET input/output for low and high band

General Specifications

Antenna Type	Sector
Band	Multiband
Color	Light gray
Effective Projective Area (EPA), frontal	0.28 m^2 | 3.014 ft^2
Effective Projective Area (EPA), lateral	0.24 m^2 | 2.583 ft^2
Grounding Type	RF connector body grounded to reflector and mounting bracket
Performance Note	Outdoor usage | Wind loading figures are validated by wind tunnel measurements described in white paper WP-112534-EN
Radome Material	Fiberglass, UV resistant
Radiator Material	Aluminum | Low loss circuit board
Reflector Material	Aluminum
RF Connector Interface	4.3-10 Female
RF Connector Location	Bottom
RF Connector Quantity, high band	4
RF Connector Quantity, low band	4
RF Connector Quantity, total	8

Remote Electrical Tilt (RET) Information, General

RET Interface	8-pin DIN Female | 8-pin DIN Male
RET Interface, quantity	2 female | 2 male

Dimensions

Width	350 mm | 13.78 in

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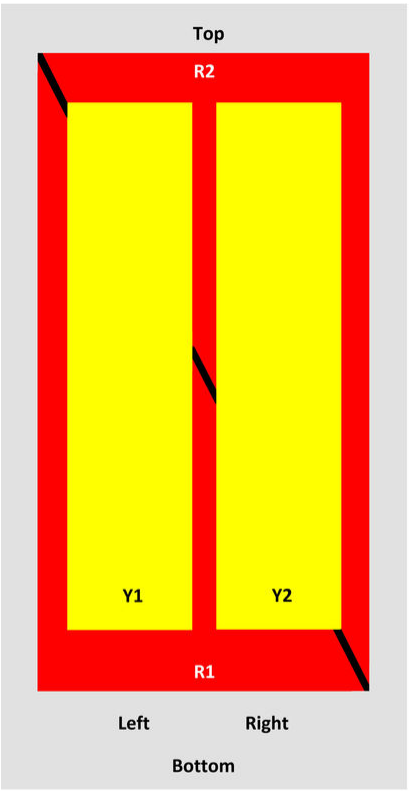
JAHH-65B-R3B

Length	1828 mm | 71.969 in
Depth	208 mm | 8.189 in

Array Layout

JAHH-65A-R3B JAHH-65B-R3B JAHH-65C-R3B



Array	Freq (MHz)	Conns	RET (SRET)	AISG RET UID
R1	698-798	1-2	1	ANxxxxxxxxxxxxxxx1
R2	824-894	3-4	2	ANxxxxxxxxxxxxxxx2
Y1	1695-2360	5-6	3	ANxxxxxxxxxxxxxxx3
Y2	1695-2360	7-8		

View from the front of the antenna

(Sizes of colored boxes are not true depictions of array sizes)

Electrical Specifications

Impedance	50 ohm
Operating Frequency Band	1695 – 2360 MHz | 698 – 787 MHz | 824 – 894 MHz
Polarization	±45°

Remote Electrical Tilt (RET) Information, Electrical

Protocol	3GPP/AISG 2.0 (Single RET)
Power Consumption, idle state, maximum	2 W

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JAHH-65B-R3B

Power Consumption, normal conditions, maximum	13 W
Input Voltage	10–30 Vdc
Internal Bias Tee	Port 1 | Port 5
Internal RET	High band (1) | Low band (2)

Electrical Specifications

Frequency Band, MHz	**698–787**	**824–894**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
Gain, dBi	14.5	15.8	18	18.4	18.5	18.8
Beamwidth, Horizontal, degrees	67	65	63	63	65	68
Beamwidth, Vertical, degrees	12.4	10.5	5.7	5.2	4.9	4.4
Beam Tilt, degrees	2–14	2–14	0–10	0–10	0–10	0–10
USLS (First Lobe), dB	18	18	20	20	21	23
Front-to-Back Ratio at 180°, dB	32	34	31	35	36	38
Isolation, Cross Polarization, dB	25	25	25	25	25	25
Isolation, Inter-band, dB	30	30	30	30	30	30
VSWR | Return loss, dB	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0	1.5 | 14.0
PIM, 3rd Order, 2 x 20 W, dBc	-153	-153	-153	-153	-153	-153
Input Power per Port at 50° C, maximum, watts	200	200	300	300	300	250

Electrical Specifications, BASTA

Frequency Band, MHz	**698–787**	**824–894**	**1695–1880**	**1850–1990**	**1920–2200**	**2300–2360**
Gain by all Beam Tilts, average, dBi	14.3	14.9	17.6	18.1	18.2	18.5
Gain by all Beam Tilts Tolerance, dB	±0.3	±0.5	±0.6	±0.4	±0.5	±0.6
Gain by Beam Tilt, average, dBi	2 ° | 14.3 8 ° | 14.3 14 ° | 14.3	2 ° | 15.0 8 ° | 14.9 14 ° | 15.4	0 ° | 17.2 5 ° | 17.6 10 ° | 17.6	0 ° | 17.6 5 ° | 18.2 10 ° | 18.2	0 ° | 17.7 5 ° | 18.3 10 ° | 18.3	0 ° | 17.9 5 ° | 18.7 10 ° | 18.7
Beamwidth, Horizontal Tolerance, degrees	±1.2	±1.4	±4	±2.4	±2.9	±2.7
Beamwidth, Vertical Tolerance, degrees	±0.9	±0.5	±0.3	±0.2	±0.3	±0.1
USLS, beampeak to 20° above beampeak, dB	18	17	17	18	19	18
Front-to-Back Total Power at 180° ± 30°, dB	25	24	26	29	27	29
CPR at Boresight, dB	22	23	20	21	21	24

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CPR at Sector, dB	11	12	11	11	11	8

Mechanical Specifications

Wind Loading at Velocity, frontal	301.0 N @ 150 km/h | 67.7 lbf @ 150 km/h
Wind Loading at Velocity, lateral	254.0 N @ 150 km/h | 57.1 lbf @ 150 km/h
Wind Loading at Velocity, maximum	143.4 lbf @ 150 km/h | 638.0 N @ 150 km/h
Wind Speed, maximum	241 km/h | 149.75 mph

Packaging and Weights

Width, packed	456 mm | 17.953 in
Depth, packed	357 mm | 14.055 in
Length, packed	1975 mm | 77.756 in
Net Weight, without mounting kit	29.2 kg | 64.375 lb
Weight, gross	42.5 kg | 93.696 lb

Regulatory Compliance/Certifications

Agency	Classification
CHINA-ROHS	Above maximum concentration value
ISO 9001:2015	Designed, manufactured and/or distributed under this quality management system
ROHS	Compliant/Exempted

Included Products

BSAMNT-3	—	Wide Profile Antenna Downtilt Mounting Kit for 2.4 - 4.5 in (60 - 115 mm) OD round members. Kit contains one scissor top bracket set and one bottom bracket set.

* Footnotes

Performance Note	Severe environmental conditions may degrade optimum performance

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SAMSUNG

Dual-Band Radio Unit
AWS/PCS (B66/B2)
RFV01U-D1A

Samsung's RFV01U-D1A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.

The RFV01U-D1A RU targets dual-band support across Band 66 (AWS) and Band 2 (PCS), making it an ideal product for broad coverage footprints across multiple common mid-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation
- Built-in Broadcast Auxiliary Services (BAS) filter ensures compliant AWS operation without impacting footprint

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
    B66: DL(2,110-2,180MHz)/UL(1,710-1,780MHz)
    B2: DL(1,930-1,990MHz)/UL(1,850-1,910MHz)
Instantaneous Bandwidth:
    70MHz(B66) + 60MHz(B2)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 255mm (36.8L)
Weight: 38.3kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

SAMSUNG

Dual-Band Radio Unit
700/850MHz (B13/B5)
RFV01U-D2A

Samsung's RFV01U-D2A is a compact remote Radio Unit (RU) designed for deployments that require flexibility in installation and rapid onlining, without compromising on coverage, capacity or operational expenses.

The RFV01U-D2A RU targets dual-band support across Band 13 (700MHz) and Band 5 (850MHz), making it an ideal product for broad coverage footprints across multiple common low-end, long-range frequencies.

The RU handles all Radio Frequency (RF) processing in a single, compact unit, and is designed to interface via CPRI with Samsung's CDU baseband offerings, in both distributed- and central-RAN configurations.

In addition to its minimal footprint and ease of installation, the RU is also designed to reduce cost of ownership through its integrated spectrum analyzer, which allows for remote RF monitoring, greatly reducing the need for on-site maintenance visits.

Features and Benefits

- Dual-band support for broad frequency coverage
- Minimal footprint reduces site costs
- Rapid, easy installation
- Flexibly deployable in any location
- Remote RF monitoring capability
- Convection cooled, silent operation

Key Technical Specifications

Duplex Type: FDD
Operating Frequencies:
B13: DL(746-756MHz)/UL(777-787MHz)
B5: DL(869-894MHz)/UL(824-849MHz)
Instantaneous Bandwidth: 10MHz(B13) + 25MHz(B5)
RF Chain: 4T4R/2T4R/2T2R
Output Power: Total 320W
DU-RU Interface: CPRI (10Gbps)
Dimensions: 380 x 380 x 207mm (29.9L)
Weight: 31.9kg
Input Power: -48V DC
Operating Temp.: -40 - 55°(w/o solar load)
Cooling: Natural convection

SAMSUNG

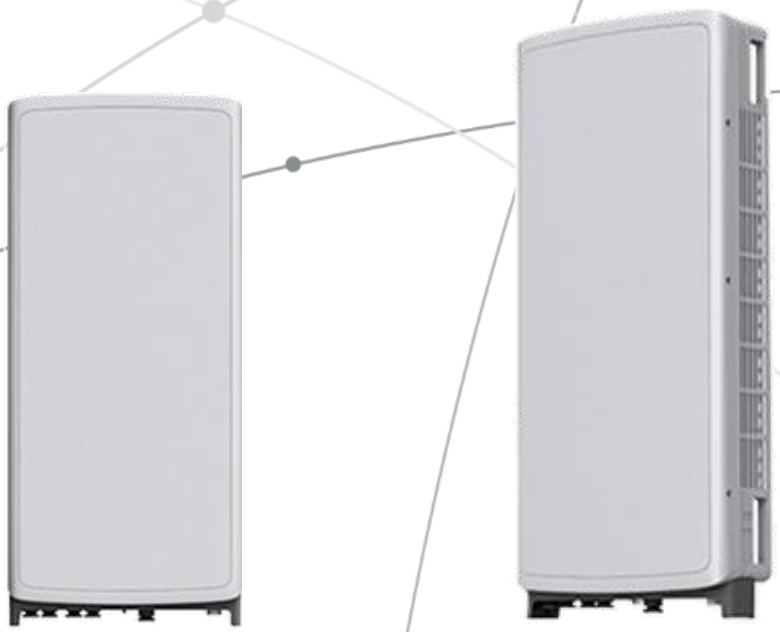
SAMSUNG

C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

Samsung C-Band 64T64R Massive MIMO Radio enables mobile operators to increase coverage range, boost data speeds and ultimately offer enriched 5G experiences to users in the U.S..

Model Code : MT6407-77A

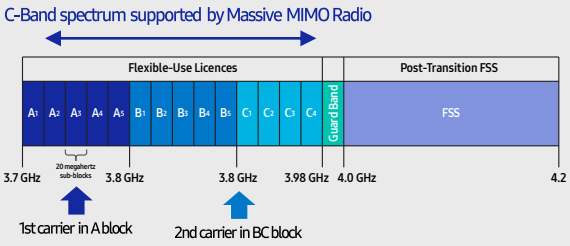


Points of Differentiation

Wide Bandwidth

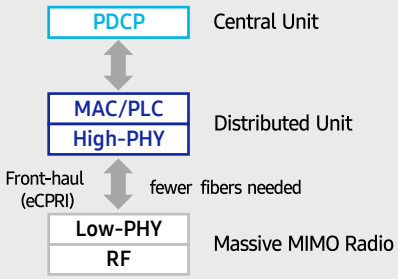
With capability to support up to 2 CC carrier configuration, Samsung C-Band massive MIMO Radio supports 200 MHz bandwidth in the C-Band spectrum.

Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks



Future Proof Product

Samsung C-Band 64T64R Massive MIMO radio supports not only CPRI but also eCPRI as front-haul interface.
It enables operators can cut down on OPEX/CAPEX by reducing front-haul bandwidth through low layer split and using ethernet based higher efficient line.



Enhanced Performance

C-Band massive MIMO Radio creates sharp beams and extends networks' coverage on the critical mid-band spectrum using a large number of antenna elements and high output power to boost data speeds.

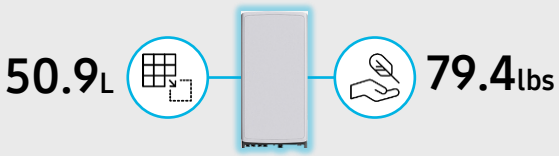
This helps operators reduce their CAPEX as they now need less products to cover the same area than before.

Furthermore, as C-Band massive MIMO Radio supports MU-MIMO(Multi-user MIMO) , it enables to increase user throughput by minimizing interference.

Well Matched Design

Samsung C-Band Massive MIMO radio utilizes 64 antennas, supports up to 280MHz bandwidth, and delivers a 200W output power. despite the above advanced performance, the Radio has a compact size of 50.9L and 79.4lbs. This makes it easy to install the Radio.

It is designed to look solid and compact, with a low profile appearance so that, when installed, harmonizes well with the surrounding environment..



Technical Specifications

Item	Specification
Tech	NR
Band	n77
Frequency Band	3700 - 3980 MHz
EIRP	78.5dBm (53.0 dBm+25.5 dBi)
IBW/OBW	280 MHz / 200 MHz
Installation	Pole/Wall
Size/ Weight	16.06 x 35.06 x 5.51 inch (50.86L)/ 79.4 lbs

SAMSUNG

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Samsung inspires the world and shapes the future with transformative ideas and technologies. The company is redefining the worlds of TVs, smartphones, wearable devices, tablets, digital appliances, network systems, and memory, system LSI, foundry and LED solutions.

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[CBRS] Clip-on Antenna Specifications

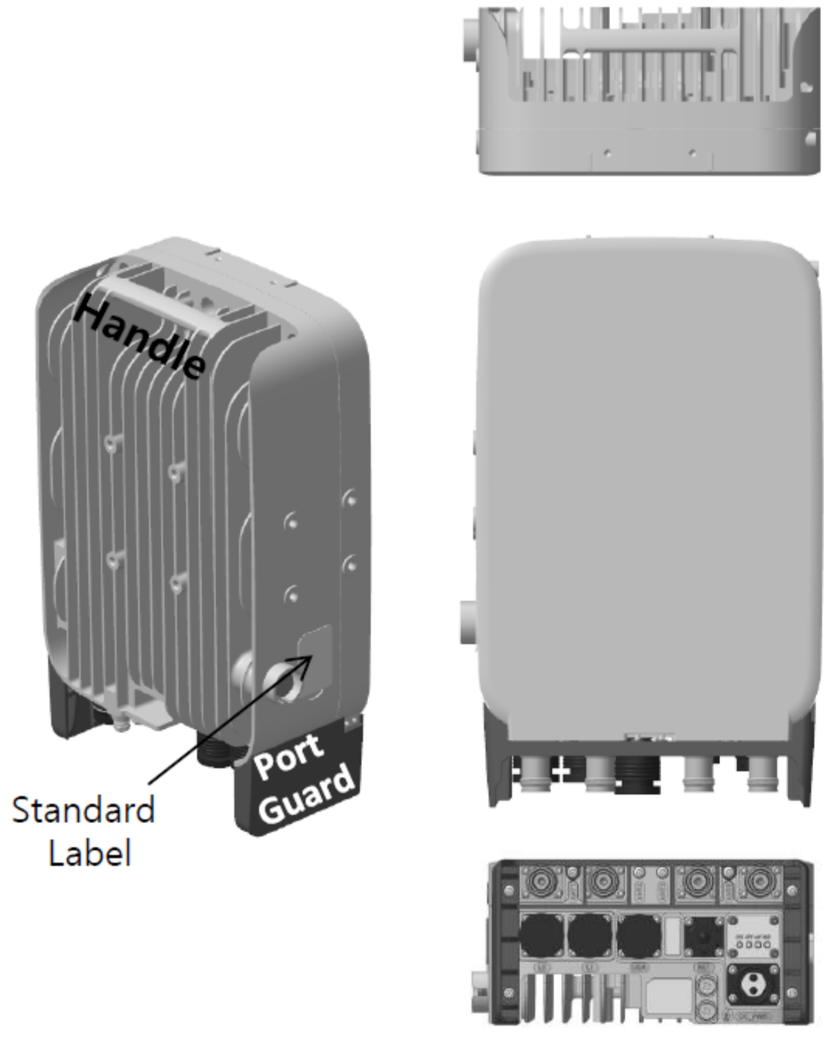
VzW accepted IP45 in FLD, but IP55 is Samsung Spec.

Items	Clip-on Antenna, BASTA**
Antenna Gain	12.5 ± 0.5 dBi (Max 13 dBi)
Horizontal BW (-3dB)	65° ± 5°
Vertical BW (-3dB)	17° ±3°
Electrical Tilt	8° (fixed) ±2°
Front-to-Back Ratio	> 25 dB
Port-to-Port Tracking	< 3 dB
VSWR	< 1.5
Isolation	> 25 dB
Ingress Protection	**IP55**
Size	220(W)×313(H)×34.3(D) mm (*) (8.7 x 12.3 x 1.4 inch.)
Weight	< **2.0** kg [Typ. 1.3 kg]
It is required that the radio should be weatherproofed properly with JMA WPS Boot with external antenna or with Weatherproof Boot for clip-on antennas.	

Antenna includes integrated cable with connector
* Design is subject to minor change

** Ant. spec. follows NGMN recommendations on Base Station Antenna Standards (BASTA). For example, 'mean ± tolerance of 86.6%' is applied to double-sided specification of statistical RF parameters.

[CBRS RRH] Spec.



Current Size: 216 x 307 x 105.5 mm (6.99L)
(8.5 x 12.1 x 4.1 inch., excluding Port Guard)
Design is subject to minor change

Item	Specification
Band	Band 48 (3.5 GHz)
Frequency	3550~3700 MHz
IBW	150 MHz
OBW	80 MHz
# of Carriers	5/10/15/20 MHz x 4 carriers
RF Chain	4TX / 4RX
RF Output Power & EIRP	4 path x 5 W (Total: 20 W = 43 dBm) (EIRP: 47 dBm / 10 MHz)
RX Sensitivity	Typical : -101.5 dBm @ 1 Rx (3GPP 36.104, Wide Area)
Modulation	256-QAM support (1024-QAM with 1~2dB power back-off)
Input Power	-48 VDC (-38 to -57 VDC, 1 SKU), with clip-on AC-DC converter (Option)
Power Consumption	About 160 Watt @ 100% RF load, typical conditions
Volume	**Under 7L** (w/o Antenna), Under 9.6L (with antenna)
Weight	**Under 8.0 kg** (**18.64** lb) (w/o Antenna), Under 10.5 Kg (with ant.)
Operating Temperature	-40°C (-40°F) ~ 55°C (131°F) (W/o solar load)
Cooling	Natural convection
Unwanted Emission	3GPP 36.104 Category A
	[B48] : FCC 47 CFR 96.41 e)
Optic Interface	20km, 2 ports (9.8Gbps x 2), SFP, single mode, duplex or Bi-Di
CPRI Cascade	Not supported
# of Antenna Port	4
External Alarm (UDA)	4
RET	AISG 2.2
TMA & built-in Bias-T I//F and PIM cancellation	Not supported
Mounting Options	Pole, wall, tower, back to back, side by side (for external ant), 3 RRH with Clip-on Antenna on the pole
Antenna Type	Integrated (Clip-on) antenna (Option), External antenna (Option)
NB-IoT	Not Supported (HW Resource reserved for 1 Guard Band NB-IoT per LTE carrier)
Spectrum Analyzer	TX/RX Support
External Alarm (UDA)	4
5G NR	Support with S/W upgrade
XRAN	Support with S/W upgrade

ATTACHMENT 3

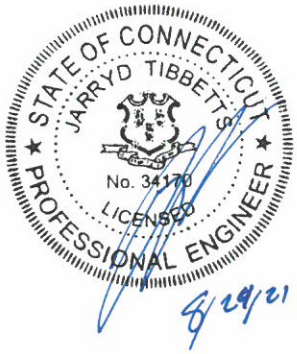
	General	Power	Density					
Site Name: Danielson (Killingly)								
Tower Height: Verizon @ 153ft, 155ft, and 156.5ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**FREQ.**	**CALC. POWER DENS**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
*T-Mobile	4	1028	137	1900	0.0862	1.0000	0.86%	
*T-Mobile	2	2057	137	1900	0.0862	1.0000	0.86%	
*T-Mobile	2	2308	137	2100	0.0967	1.0000	0.97%	
*T-Mobile	1	19239	137	2500	0.4032	1.0000	4.03%	
*T-Mobile	1	19239	137	2500	0.4032	1.0000	4.03%	
*T-Mobile	2	592	137	600	0.0248	0.4000	0.62%	
*T-Mobile	1	1578	137	600	0.0331	0.4000	0.83%	
*T-Mobile	2	649	137	700	0.0272	0.4667	0.58%	
*T-Mobile	2	2204	137	1900	0.0924	1.0000	0.92%	
*AT&T	1	1476	127	725	0.0363	0.4833	0.75%	
*AT&T	1	1000	127	850	0.0246	0.5667	0.43%	
*AT&T	1	3837	127	2170	0.0942	1.0000	0.94%	
*AT&T	1	1000	127	850	0.0246	0.5667	0.43%	
*AT&T	2	2951	127	770	0.1450	0.5133	2.82%	
*AT&T	1	3664	127	1930	0.0900	1.0000	0.90%	
*AT&T	1	1285	127	2355	0.0316	1.0000	0.32%	
*AT&T	4	302	127	880	0.0297	0.5867	0.51%	
*MetroPCS	3	444	117	2140	0.0388	1.0000	0.39%	
*Sprint	1	438	147	850	0.0079	0.5667	0.14%	
*Sprint	2	438	147	850	0.0158	0.5667	0.28%	
*Sprint	5	623	147	1900	0.0563	1.0000	0.56%	
*Sprint	2	1556	147	1900	0.0563	1.0000	0.56%	
*Sprint	8	778	147	2500	0.1126	1.0000	1.13%	
*V'Stream	2	449	137	1930	0.0188	1.0000	0.19%	
VZW 700	**4**	**621**	**155**	**751**	**0.0037**	**0.5007**	**0.74%**	
VZW CDMA	**2**	**446**	**155**	**877.26**	**0.0013**	**0.5848**	**0.22%**	
VZW Cellular	**4**	**708**	**155**	**874**	**0.0042**	**0.5827**	**0.72%**	
VZW PCS	**4**	**1525**	**155**	**1977.5**	**0.0091**	**1.0000**	**0.91%**	
VZW AWS	**4**	**1493**	**155**	**2120**	**0.0089**	**1.0000**	**0.89%**	
VZW CBRS	**4**	**56**	**153**	**3560.3**	**0.0003**	**1.0000**	**0.03%**	
VZW CBAND	**4**	**6531**	**156.5**	**3730.08**	**0.0384**	**1.0000**	**3.84%**	
								31.41%
* Source: Siting Council								

ATTACHMENT 4

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: Verizon (App#: 164700-2)
Carrier Site ID / Name: 118620 / DANIELSON_CT
Site Location: 246 East Franklin Street
Danielson, Connecticut
Windham County
Latitude: 41.795822
Longitude: -71.870333



Analysis Result:

Max Structural Usage: 90.6% [Pass]
Max Foundation Usage: 61.0% [Pass]
Additional Usage Caused by New Mount/Mount Modification: +0.0%

Report Prepared By: Mohammed Al Rubaye

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: Verizon (App#: 164700-2)

Carrier Site ID / Name: 118620 / DANIELSON_CT

Site Location: 246 East Franklin Street

Danielson, Connecticut

Windham County

Latitude: 41.795822

Longitude: -71.870333

Analysis Result:

Max Structural Usage: 90.6% [Pass]

Max Foundation Usage: 61.0% [Pass]

Additional Usage Caused by New Mount/Mount Modification:

Report Prepared By: Mohammed Al Rubaye

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
Mount Analysis	SMART Tool Project# 10007398. Dated 06/17/2021

Analysis Criteria

The rigorous analysis was performed in accordance with the requirements and stipulations of the TIA- 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:	
Structure Class:	
Topographic Category:	
Crest Height:	172 ft
Seismic Parameters:	

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
			Commscope LNX-6514DS-A1M - Panel	(3) T-Frame w/ Platforms	Fiber	Verizon
			BXA-70080-4BF - Panel			
		6	Commscope HBXX-6517DS-A2M - Panel			
			Alcatel Lucent RRH2X60-AWS			
			Alcatel Lucent RRH2X60-PCS			
			Alcatel Lucent RRH2X60-700			
			RFS Celwave FD9R6004/2C-3L			
			RFS APXVSPP18-C-A20 - Panel	(3) T-Frame w/ Platforms (1) SitePro1 PRK-SFS-L (1) SitePro1 PRK-1245L	Hybrid	Sprint Nextel
			RFS APXVTM14-C-120 - Panel			
			ALU TD-RRH8x20-25			
			ALU 1900MHz RRH			
			ALU 800 MHz RRH			
			ALU 800 MHz Filters			
		2	Ericsson Air 32 KRD901146-1_B66A_B2A	(3) T-Frame w/ walking platform w/ mount modifications	(3) 1 5/8" Fiber	T-Mobile
			Ericsson AIR6449 B41			
			Ericsson KRY 112 144/2			
			Ericsson 4449 B71 + B85			
			Ericsson 4415 B25			
			Powerwave 7770	Low Profile Platform (12) Pipe Mast (1) Handrail kitSitePro1	(1)3"conduit { housing(2) 3/4" DC and (1) 7/16" fiber line} conduit {Housing (1) 7/16" fiber &	
			Cci DMP65R-BU8DA			
			Kathrein 840370799			
			Powerwave DTMABP7819VG12A			
			Powerwave LGP13519 Diplexer			
			Ericsson 4449 B5/B12			
			Ericsson RRUS 4478 B14			
			Ericsson RRUS 8843 B2 B66A			
			Ericsson 4415 B30			
			Raycap DC6-48-60-18-8F			
			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
			Samsung MT6407-77A – Panel	T-Frame w/ Walkaways (3) Commscope	(11) 1 5/8" Coax (2) 1 5/8" Hybrid	Verizon
			Antel BXA-70080-4BF-EDIN - Panel			
			Andrew JAHH-65B-R3B - Panel			
			Commscope CBC78T-DS-43-2X - Diplexer			
			Samsung B2/B66A - RRU			
			Samsung B5/B13 - RRU			
			Raycap RVZDC-6627-PF-48 - OVP			
		3	Samsung XXDWMM-12.5-65-8T-CBRS - Panel			
			Samsung CBRS RRH - RT 4401-48A - RRU			

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

Analysis Results

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

	Pole shafts	Anchor Bolts	Base Plate	Reinforcement Plate
Max. Usage:				
Pass/Fail	**Pass**	**Pass**	**Pass**	**Pass**

Foundations

	Moment (Kip-Ft)	Shear (Kips)	Axial (Kips)
Analysis Reactions			

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 1.1472 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

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

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.

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 . 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, should be notified in writing and the applicable minimum values provided by the client.

The configuration of the existing mounts, antennas, coax and other appurtenances were supplied by the customer for the current structural analysis. 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, should be notified immediately to evaluate the effect of the discrepancy on the analysis results.

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.

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

Usage Diagram - Max Ratio 80.28% at 0.0ft

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021
Site Name:	Danielson	**Exposure:**	B	
Height:	155.00 (ft)	**Gh:**	1.1	
Base Elev:	0.000 (ft)			Page: 1

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Dead Load Factor:	1.20
Wind Load Factor:	1.60

Load Case : 1.2D + 1.6W 101 mph Wind

Iterations: 25

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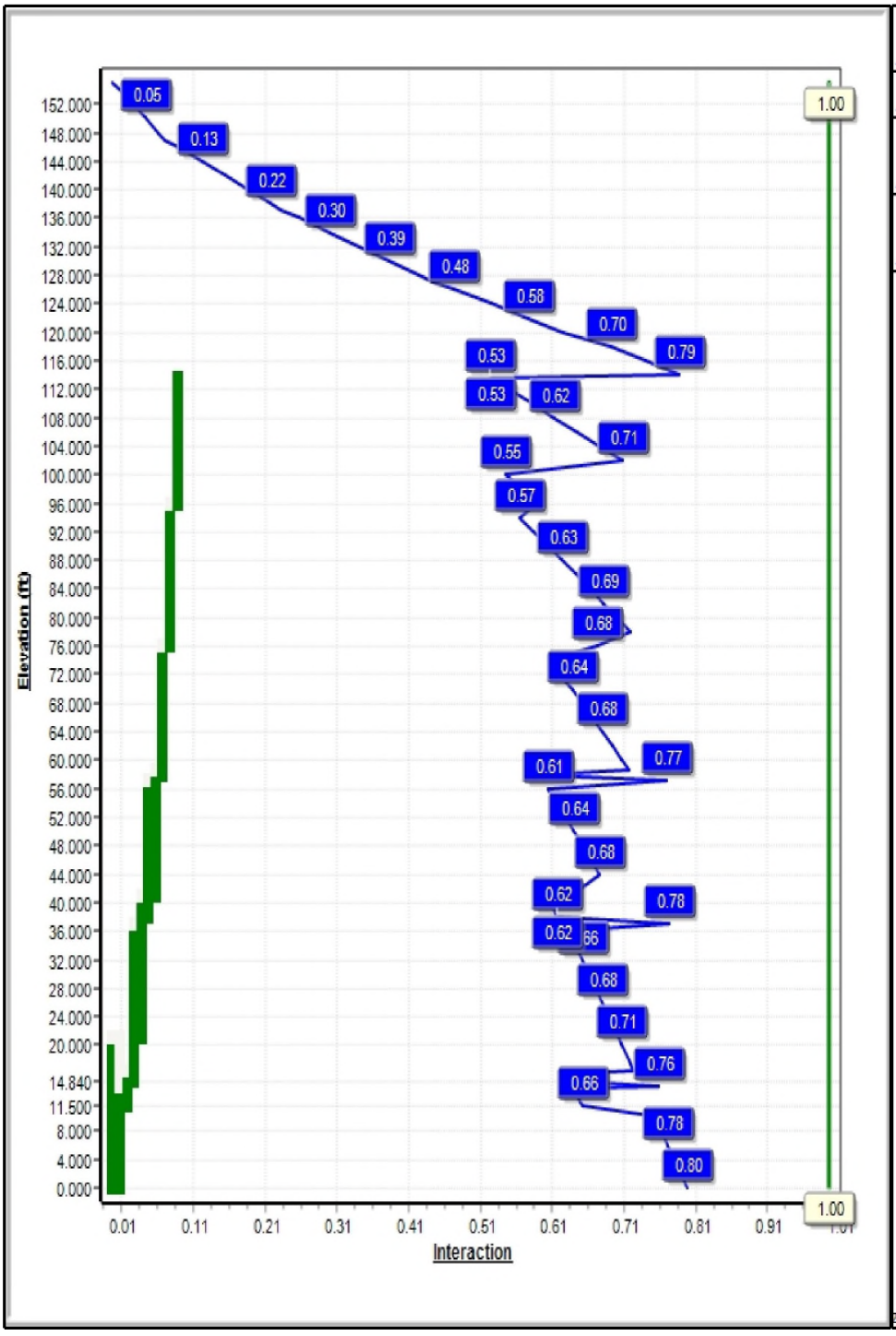
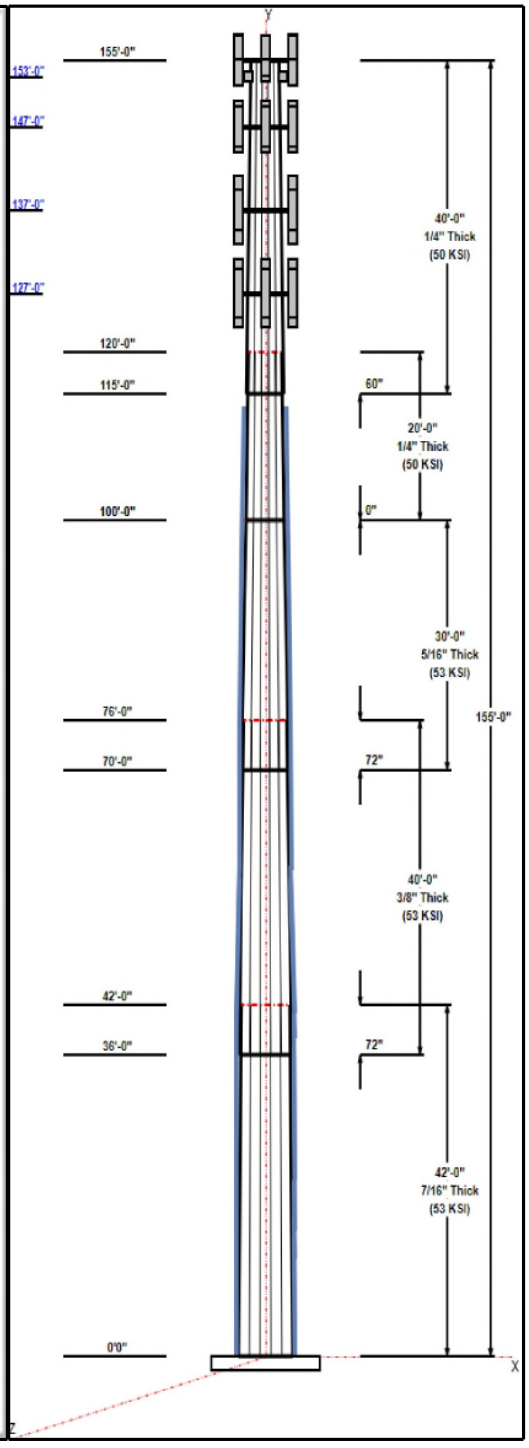




Structure: CT00302-S-SBA

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

Base Shape: 12 Sided
Taper: 0.19129

8/24/2021

Tower Engineering Solutions

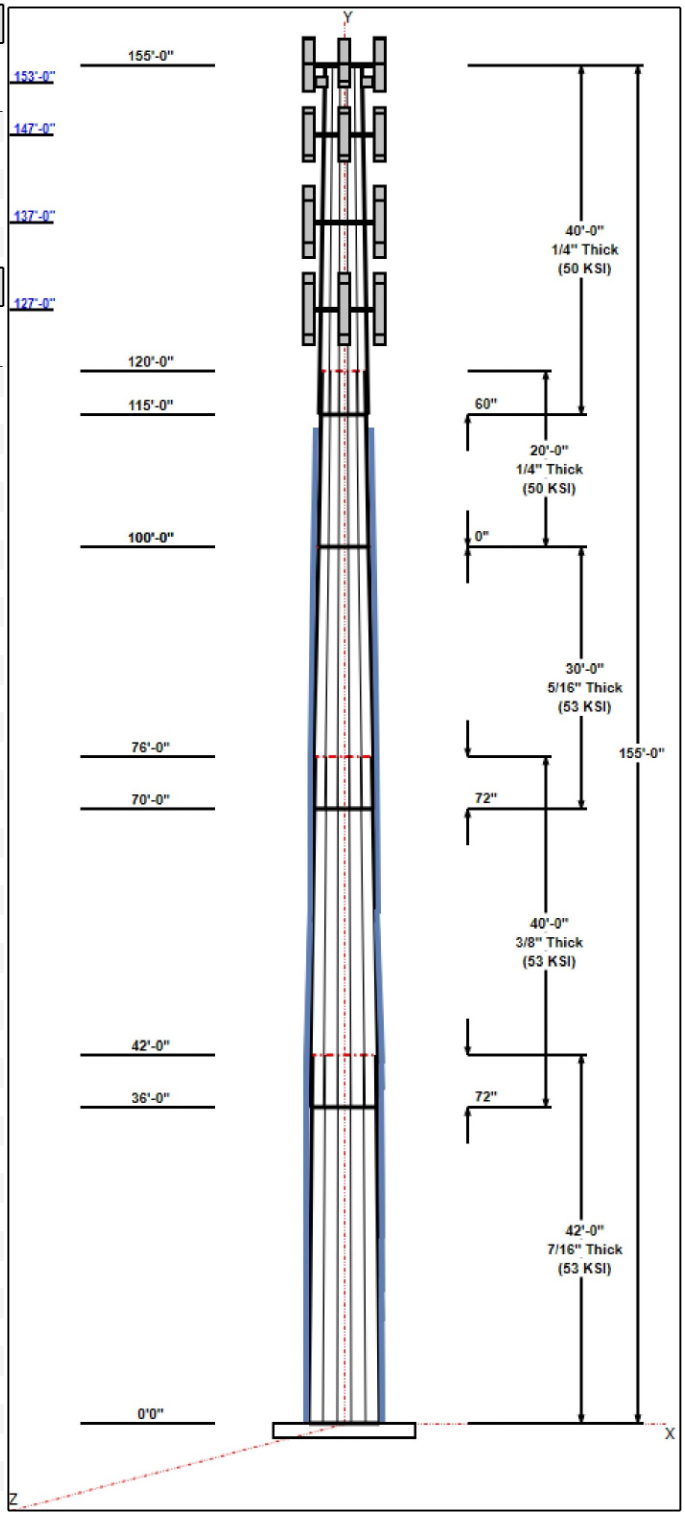
Shaft Properties

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	1	(3) T-Frame w/ Platforms	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	3	B5/B13	Verizon
155.00	155.00	6	JAHH-65B-R3B	Verizon
155.00	156.50	3	MT6407-77A	Verizon
155.00	155.00	1	RVZDC-6627-PF-48	Verizon
153.00	153.00	3	XXDWMM-12.5-65-8T-CB	Verizon
153.00	153.00	3	CBRS RRH - RT 4401-48A	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	APXVSPP18-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	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	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	1	(3) T-Framew/ walking	T-Mobile
127.00	127.00	1	Low Profile	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
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

Linear Appurtenances



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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
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	5097.6	50.8	52.4
0.9D + 1.6W 101 mph Wind	5055.1	50.8	39.3
1.2D + 1.0Di + 1.0Wi 50 mph Wind	1147.3	10.8	86.9
1.2D + 1.0E	294.1	2.3	52.5
0.9D + 1.0E	291.3	2.3	39.3
1.0D + 1.0W 60 mph Wind	1119.1	11.2	43.7

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Structure: CT00302-S-SBA - Coax Line Placement

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

8/24/2021

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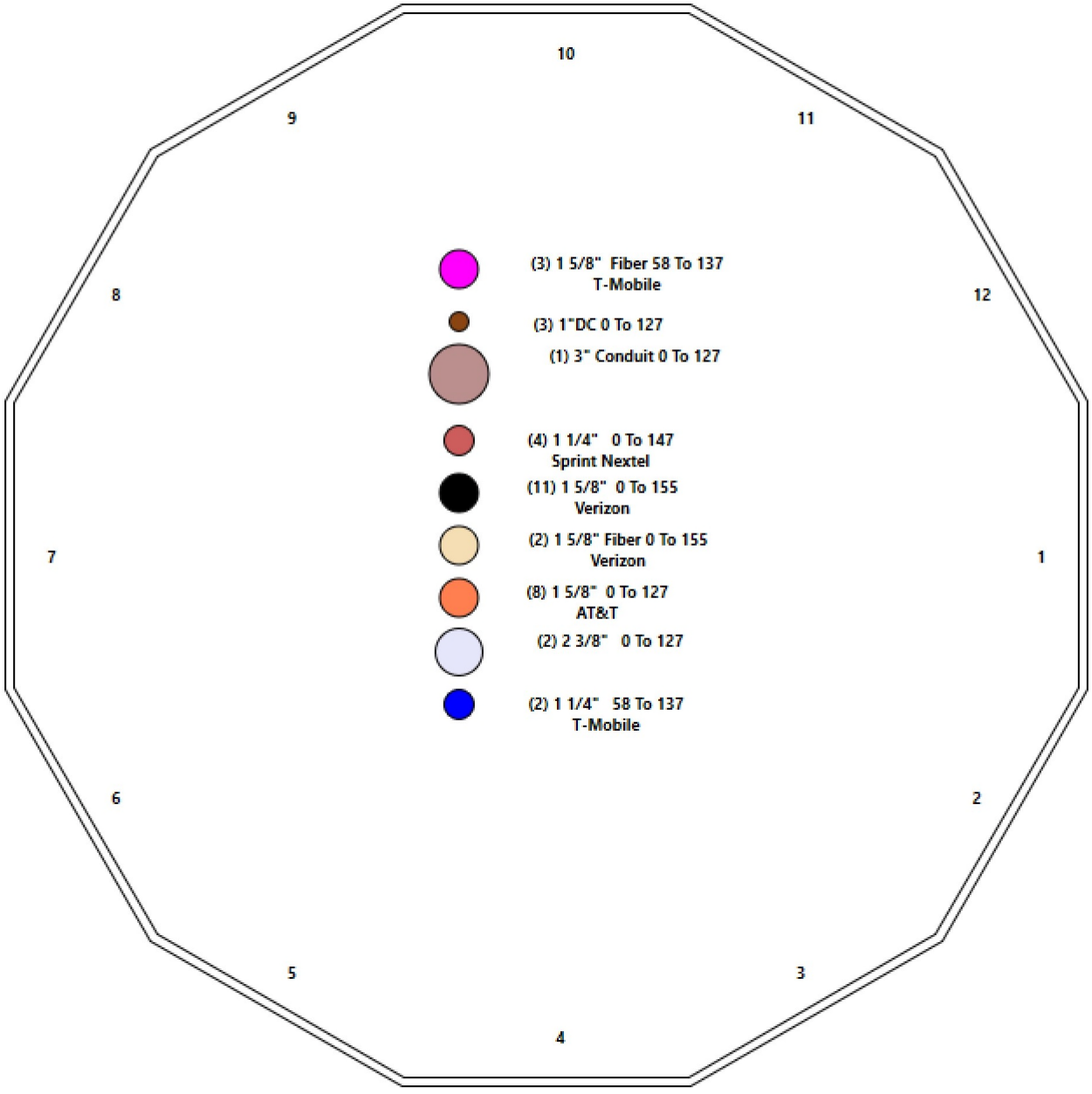

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Shaft Properties

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 5

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

							Intermediate Connectors		Termination Connectors			
Elev From (ft)	Elev To (ft)	Qty	Description	Fy (ksi)	Fu (ksi)	Offset (in)	Description	Spacing (in)	Description	Spacing (in)	Lower Qty	Upper Qty
0.00	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

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Load Summary

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 6	

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Discrete Appurtenances

				No Ice			Ice				
No.	Elev (ft)	Description	Qty	Weight (lb)	CaAa (sf)	CaAa Factor	Weight (lb)	CaAa (sf)	CaAa Factor	Hor. Ecc. (ft)	Vert Ecc (ft)
1	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	(3) T-Frame w/ Platforms	1	1620.00	25.00	1.00	3115.49	46.232	1.00	0.00	0.00
3	155.00	BSAMNT-SBS-2-2	3	25.35	0.00	1.00	44.07	0.000	1.00	0.00	0.00
4	155.00	CBC78T-DS-43-2X	3	10.40	0.37	0.50	32.95	0.673	0.50	0.00	0.00
5	155.00	B2/B66A	3	84.40	1.87	0.50	166.53	2.480	0.50	0.00	0.00
6	155.00	B5/B13	3	70.30	1.87	0.50	144.77	2.480	0.50	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	RVZDC-6627-PF-48	1	32.00	4.06	0.50	152.53	4.930	0.50	0.00	0.00
10	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
11	153.00	CBRS RRH - RT 4401-48A	3	18.60	0.99	0.50	47.90	1.436	0.50	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	808.14	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	AIR6449 B41	2	103.00	5.65	0.71	247.98	6.655	0.71	0.00	0.00
23	137.00	KRY 112 144/2	3	11.00	0.41	0.50	22.40	0.912	0.50	0.00	0.00
24	137.00	4449 B71 + B85	2	73.20	1.97	0.50	134.25	2.572	0.50	0.00	0.00
25	137.00	RRUS 4415 B25	2	46.00	1.64	0.50	89.46	2.185	0.50	0.00	0.00
26	137.00	KRD 9011461-B66A-B2A	2	132.20	6.51	0.87	327.99	7.700	0.87	0.00	0.00
27	137.00	APXVAALL24_43-U-NA20	2	128.00	20.24	0.70	573.12	22.253	0.70	0.00	0.00
28	137.00	PRK-1245 (kicker kit)	1	445.91	8.50	1.00	775.04	17.911	1.00	0.00	0.00
29	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
30	137.00	(3) T-Framew/ 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	DMP65R-BU6DA	3	79.40	12.71	0.72	390.83	14.258	0.72	0.00	0.00
33	127.00	840370799	3	18.70	15.93	0.69	337.35	19.822	0.69	0.00	0.00
34	127.00	8843 B2 B66A	3	70.00	1.64	0.50	118.62	2.186	0.50	0.00	0.00
35	127.00	4415 B30	3	44.10	1.86	0.50	94.26	2.465	0.50	0.00	0.00
36	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
37	127.00	HRK12 (Handrail Kit)	1	261.72	6.75	1.00	590.12	13.725	1.00	0.00	0.00
38	127.00	7770.00	3	35.00	5.50	0.73	179.79	6.630	0.73	0.00	0.00
39	127.00	DTMABP7819VG12A	3	19.20	1.14	0.50	46.18	1.954	0.50	0.00	0.00
40	127.00	4449 B5/B12	3	71.00	1.97	0.50	127.44	2.549	0.50	0.00	0.00
41	127.00	RRUS 4478 B14	3	59.40	1.65	0.50	103.24	2.198	0.50	0.00	0.00
42	127.00	DC6-48-60-18-8F	1	31.80	0.92	0.50	97.17	1.383	0.50	0.00	0.00
43	127.00	LGP13519	6	5.30	0.34	0.50	15.34	0.820	0.50	0.00	0.00
		Totals:	**107**	**12,700.79**			**31,336.03**				

Linear Appurtenances

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Discrete Appurtenances

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

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Shaft Section Properties

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 8	

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Increment Length: **2 (ft)**

											Additional Reinforcing			
Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)	Area (in^2)	Ixp (in^4)	Iyp (in^4)	Weight (lb)
0.00	RB1 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

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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)
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				
118.00		0.2500	32.703	26.124	3511.9	32.91	130.81	50	56	360.4				
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**

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Wind Loading - Shaft

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 10	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60

Iterations 25

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

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Wind Loading - Shaft

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 11	

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
118.00	1.26	1.04	32.299	35.53	325.14	1.000	0.000	2.00	5.762	5.76	327.6	0.0	432.5
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**			**30,890.3**		**31,328.6**

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Discrete Appurtenance Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 12	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60

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	RVZDC-6627-PF-48	1	32.332	35.565	0.40	0.80	1.62	38.40	0.000	0.000	92.41	0.00	0.00
2	155.00	MT6407-77A	3	32.339	35.573	0.56	0.80	7.88	285.84	0.000	1.500	448.46	0.00	672.69
3	155.00	JAHH-65B-R3B	6	32.332	35.565	0.66	0.80	36.29	455.76	0.000	0.000	2065.29	0.00	0.00
4	155.00	B5/B13	3	32.332	35.565	0.40	0.80	2.24	253.08	0.000	0.000	127.69	0.00	0.00
5	155.00	B2/B66A	3	32.332	35.565	0.40	0.80	2.24	303.84	0.000	0.000	127.69	0.00	0.00
6	155.00	CBC78T-DS-43-2X	3	32.332	35.565	0.40	0.80	0.44	37.44	0.000	0.000	25.27	0.00	0.00
7	155.00	BSAMNT-SBS-2-2	3	32.332	35.565	1.00	1.00	0.00	91.26	0.000	0.000	0.00	0.00	0.00
8	155.00	(3) T-Frame w/ Platforms	1	32.332	35.565	1.00	1.00	25.00	1944.00	0.000	0.000	1422.60	0.00	0.00
9	155.00	BXA-70080-4BF	3	32.332	35.565	0.68	0.90	9.77	46.80	0.000	0.000	555.81	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	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	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	0.000	0.000	683.36	0.00	0.00
13	147.00	(3) T-Frame w/ Platforms	1	32.300	35.530	1.00	1.00	25.00	1944.00	0.000	0.000	1421.22	0.00	0.00
14	147.00	PRK-1245 (kicker kit)	1	32.300	35.530	1.00	1.00	9.50	557.89	0.000	0.000	540.06	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	0.000	0.000	409.31	0.00	0.00
16	147.00	APXVSPP18-C-A20	3	32.300	35.530	0.66	0.80	15.98	205.20	0.000	0.000	908.21	0.00	0.00
17	147.00	Alcatel Lucent	3	32.300	35.530	0.40	0.80	4.86	252.00	0.000	0.000	276.28	0.00	0.00
18	147.00	Alcatel Lucent 1900 MHz	3	32.300	35.530	0.40	0.80	2.77	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	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	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	0.000	0.000	12.73	0.00	0.00
22	137.00	(3) T-Framew/ walking	1	32.280	35.508	1.00	1.00	25.00	1944.00	0.000	0.000	1420.33	0.00	0.00
23	137.00	RRUS 4415 B25	2	32.280	35.508	0.40	0.80	1.31	110.40	0.000	0.000	74.54	0.00	0.00
24	137.00	AIR6449 B41	2	32.280	35.508	0.57	0.80	6.42	247.20	0.000	0.000	364.65	0.00	0.00
25	137.00	KRY 112 144/2	3	32.280	35.508	0.40	0.80	0.49	39.60	0.000	0.000	27.95	0.00	0.00
26	137.00	4449 B71 + B85	2	32.280	35.508	0.40	0.80	1.58	175.68	0.000	0.000	89.54	0.00	0.00
27	137.00	(3) HR w/ V-Brace Kits	1	32.280	35.508	1.00	1.00	8.50	540.00	0.000	0.000	482.91	0.00	0.00
28	137.00	KRD 9011461-B66A-B2A	2	32.280	35.508	0.70	0.80	9.06	317.28	0.000	0.000	514.84	0.00	0.00
29	137.00	APXVAALL24_43-U-NA20	2	32.280	35.508	0.56	0.80	22.67	307.20	0.000	0.000	1287.89	0.00	0.00
30	137.00	PRK-1245 (kicker kit)	1	32.280	35.508	1.00	1.00	8.50	535.09	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	0.000	0.000	118.89	0.00	0.00
32	127.00	8843 B2 B66A	3	32.281	35.509	0.38	0.75	1.85	252.00	0.000	0.000	104.82	0.00	0.00
33	127.00	840370799	3	32.281	35.509	0.52	0.75	24.73	67.32	0.000	0.000	1405.11	0.00	0.00
34	127.00	DC9-48-60-24-8C-EV	1	32.281	35.509	0.38	0.75	0.43	31.44	0.000	0.000	24.29	0.00	0.00
35	127.00	DMP65R-BU6DA	3	32.281	35.509	0.54	0.75	20.59	285.84	0.000	0.000	1169.83	0.00	0.00
36	127.00	Low Profile	1	32.281	35.509	1.00	1.00	25.00	1800.00	0.000	0.000	1420.37	0.00	0.00
37	127.00	RRUS 4478 B14	3	32.281	35.509	0.38	0.75	1.86	213.84	0.000	0.000	105.46	0.00	0.00
38	127.00	HRK12 (Handrail Kit)	1	32.281	35.509	1.00	1.00	6.75	314.06	0.000	0.000	383.50	0.00	0.00
39	127.00	7770.00	3	32.281	35.509	0.55	0.75	9.03	126.00	0.000	0.000	513.25	0.00	0.00
40	127.00	DTMABP7819VG12A	3	32.281	35.509	0.38	0.75	1.28	69.12	0.000	0.000	72.87	0.00	0.00
41	127.00	4449 B5/B12	3	32.281	35.509	0.38	0.75	2.22	255.60	0.000	0.000	125.92	0.00	0.00
42	127.00	DC6-48-60-18-8F	1	32.281	35.509	0.38	0.75	0.35	38.16	0.000	0.000	19.60	0.00	0.00
43	127.00	LGP13519	6	32.281	35.509	0.38	0.75	0.77	38.16	0.000	0.000	43.46	0.00	0.00
							Totals:		**15,240.95**			**19,922.07**		

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Total Applied Force Summary

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 13

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60

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		608.77	684.13	0.00	0.00
4.00		595.64	679.77	0.00	0.00
6.00		582.89	675.41	0.00	0.00
8.00		570.52	671.06	0.00	0.00
10.00		558.50	666.70	0.00	0.00
11.50		411.91	497.16	0.00	0.00
12.00		136.33	165.18	0.00	0.00
14.00		535.51	657.98	0.00	0.00
14.16		42.62	52.45	0.00	0.00
14.84		180.04	222.60	0.00	0.00
16.00		303.73	378.57	0.00	0.00
16.50		130.08	162.73	0.00	0.00
18.00		384.98	486.54	0.00	0.00
20.00		503.40	644.91	0.00	0.00
21.00		248.68	320.82	0.00	0.00
22.00		246.17	319.73	0.00	0.00
24.00		483.45	636.20	0.00	0.00
26.00		473.89	631.84	0.00	0.00
28.00		464.58	627.48	0.00	0.00
30.00		455.90	623.13	0.00	0.00
32.00		455.40	618.77	0.00	0.00
34.00		454.44	614.41	0.00	0.00
36.00		453.10	610.05	0.00	0.00
37.06		243.06	568.71	0.00	0.00
37.96		205.96	481.07	0.00	0.00
38.00		9.14	21.34	0.00	0.00
40.00		456.72	1062.99	0.00	0.00
41.00		227.36	528.45	0.00	0.00
42.00		226.80	526.41	0.00	0.00
44.00		452.10	531.47	0.00	0.00
46.00		449.47	527.70	0.00	0.00
48.00		446.67	523.93	0.00	0.00
50.00		443.72	520.15	0.00	0.00
52.00		440.63	516.38	0.00	0.00
54.00		437.43	512.61	0.00	0.00
56.00		434.12	508.84	0.00	0.00
57.11		239.43	280.78	0.00	0.00
58.00		191.20	224.29	0.00	0.00
58.50		107.11	128.34	0.00	0.00
60.00		320.08	383.61	0.00	0.00
62.00		423.70	508.17	0.00	0.00
64.00		420.09	504.40	0.00	0.00
66.00		416.43	500.63	0.00	0.00
68.00		412.73	496.86	0.00	0.00
70.00		409.00	493.08	0.00	0.00
72.00		411.39	829.37	0.00	0.00

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Total Applied Force Summary

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 14

74.00		407.59	822.45	0.00	0.00
76.00		403.77	815.53	0.00	0.00
78.00		399.93	418.65	0.00	0.00
80.00		396.08	415.50	0.00	0.00
82.00		392.21	412.36	0.00	0.00
84.00		388.34	409.21	0.00	0.00
86.00		384.46	406.07	0.00	0.00
88.00		380.57	402.93	0.00	0.00
90.00		376.68	399.78	0.00	0.00
92.00		372.79	396.64	0.00	0.00
94.00		368.90	393.50	0.00	0.00
96.00		365.01	390.35	0.00	0.00
98.00		361.13	387.21	0.00	0.00
100.00		357.25	384.06	0.00	0.00
102.00		353.38	322.75	0.00	0.00
104.00		349.51	320.24	0.00	0.00
106.00		345.65	317.72	0.00	0.00
108.00		341.80	315.21	0.00	0.00
110.00		337.95	312.69	0.00	0.00
112.00		334.11	310.18	0.00	0.00
113.50		248.08	230.98	0.00	0.00
114.00		82.22	76.68	0.00	0.00
115.00		163.72	152.89	0.00	0.00
116.00		165.21	262.15	0.00	0.00
118.00		327.55	520.52	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:	**50,812.41**	**52,460.31**	**0.00**	**672.69**

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Linear Appurtenance Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 15	

Tower Engineering Solutions

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60

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)
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.028	0.000	32.427	0.00	0.00
60.00	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.028	0.000	32.444	0.00	0.00
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	32.461	0.00	0.00
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	32.474	0.00	0.00
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.483	0.00	0.00
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.488	0.00	0.00
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.491	0.00	0.00
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.492	0.00	0.00
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.490	0.00	0.00

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Linear Appurtenance Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 16	

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60

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)
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	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.481	0.00	0.00
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.474	0.00	0.00
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.466	0.00	0.00
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.458	0.00	0.00
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.448	0.00	0.00
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.438	0.00	0.00
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.428	0.00	0.00
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.417	0.00	0.00
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.407	0.00	0.00
96.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.396	0.00	0.00
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.385	0.00	0.00
100.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.375	0.00	0.00
102.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.364	0.00	0.00
104.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.355	0.00	0.00
106.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.345	0.00	0.00
108.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.336	0.00	0.00
110.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.327	0.00	0.00
112.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.319	0.00	0.00
113.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.036	0.000	32.314	0.00	0.00
114.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.036	0.000	32.312	0.00	0.00
115.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.036	0.000	32.309	0.00	0.00
										Totals:	**0.0**	**0.0**

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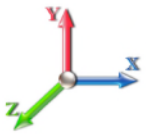
Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 17	

Load Case: 1.2D + 1.6W 101 mph Wind

Dead Load Factor 1.20

Wind Load Factor 1.60



Iterations 25

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-52.43	-50.84	0.00	-5097.6	0.00	5097.63	4048.32	2024.16	8933.65	4411.99	0.00	0.000	0.000	0.803
2.00	-51.68	-50.30	0.00	-4995.9	0.00	4995.94	4032.02	2016.01	8833.50	4362.53	0.02	-0.072	0.000	0.794
4.00	-50.94	-49.77	0.00	-4895.3	0.00	4895.34	4015.53	2007.77	8733.46	4313.13	0.06	-0.145	0.000	0.785
6.00	-50.20	-49.25	0.00	-4795.8	0.00	4795.81	3998.87	1999.43	8633.56	4263.79	0.14	-0.217	0.000	0.775
8.00	-49.47	-48.74	0.00	-4697.3	0.00	4697.32	3982.01	1991.01	8533.79	4214.52	0.25	-0.289	0.000	0.766
10.00	-48.76	-48.23	0.00	-4599.8	0.00	4599.85	3964.98	1982.49	8434.18	4165.32	0.38	-0.361	0.000	0.757
11.50	-48.23	-47.84	0.00	-4527.5	0.00	4527.51	3952.09	1976.04	8359.57	4128.48	0.51	-0.416	0.000	0.656
12.00	-48.04	-47.74	0.00	-4503.5	0.00	4503.59	3947.76	1973.88	8334.72	4116.20	0.55	-0.431	0.000	0.654
14.00	-47.35	-47.22	0.00	-4408.1	0.00	4408.12	3930.37	1965.18	8235.42	4067.17	0.74	-0.494	0.000	0.646
14.16	-47.29	-47.19	0.00	-4400.5	0.00	4400.56	3928.97	1964.48	8227.49	4063.25	0.76	-0.499	0.000	0.763
14.84	-47.04	-47.04	0.00	-4368.4	0.00	4368.47	3923.00	1961.50	8193.77	4046.60	0.83	-0.525	0.000	0.642
16.00	-46.65	-46.75	0.00	-4313.9	0.00	4313.91	3912.78	1956.39	8136.31	4018.22	0.97	-0.561	0.000	0.637
16.50	-46.46	-46.65	0.00	-4290.5	0.00	4290.54	3908.36	1954.18	8111.55	4005.99	1.03	-0.577	0.000	0.728
18.00	-45.92	-46.31	0.00	-4220.5	0.00	4220.57	3895.02	1947.51	8037.37	3969.35	1.22	-0.631	0.000	0.721
20.00	-45.24	-45.84	0.00	-4127.9	0.00	4127.96	3877.07	1938.54	7938.63	3920.59	1.50	-0.702	0.000	0.712
21.00	-44.90	-45.61	0.00	-4082.1	0.00	4082.12	3868.03	1934.02	7889.33	3896.24	1.65	-0.738	0.000	0.707
22.00	-44.54	-45.40	0.00	-4036.5	0.00	4036.51	3858.94	1929.47	7840.08	3871.92	1.81	-0.774	0.000	0.702
24.00	-43.85	-44.97	0.00	-3945.7	0.00	3945.70	3840.63	1920.32	7741.75	3823.36	2.15	-0.845	0.000	0.693
26.00	-43.17	-44.54	0.00	-3855.7	0.00	3855.77	3822.14	1911.07	7643.63	3774.90	2.52	-0.916	0.000	0.684
28.00	-42.50	-44.11	0.00	-3766.6	0.00	3766.69	3803.46	1901.73	7545.74	3726.56	2.91	-0.986	0.000	0.675
30.00	-41.83	-43.70	0.00	-3678.4	0.00	3678.47	3784.60	1892.30	7448.09	3678.33	3.34	-1.057	0.000	0.666
32.00	-41.17	-43.28	0.00	-3591.0	0.00	3591.07	3765.56	1882.78	7350.68	3630.22	3.80	-1.127	0.000	0.656
34.00	-40.51	-42.86	0.00	-3504.5	0.00	3504.51	3746.34	1873.17	7253.52	3582.24	4.29	-1.197	0.000	0.647
36.00	-39.87	-42.44	0.00	-3418.7	0.00	3418.78	3726.93	1863.47	7156.62	3534.39	4.81	-1.267	0.000	0.638
37.06	-39.28	-42.21	0.00	-3373.8	0.00	3373.80	3716.57	1858.29	7105.38	3509.08	5.09	-1.304	0.000	0.777
37.96	-38.79	-42.00	0.00	-3335.8	0.00	3335.82	3707.74	1853.87	7061.93	3487.62	5.34	-1.343	0.000	0.622
38.00	-38.74	-42.02	0.00	-3334.1	0.00	3334.14	3707.34	1853.67	7060.00	3486.67	5.35	-1.344	0.000	0.622
40.00	-37.65	-41.57	0.00	-3250.1	0.00	3250.11	3687.57	1843.78	6963.65	3439.09	5.93	-1.413	0.000	0.612
41.00	-37.10	-41.35	0.00	-3208.5	0.00	3208.54	3677.62	1838.81	6915.58	3415.35	6.23	-1.447	0.000	0.607
42.00	-36.55	-41.14	0.00	-3167.1	0.00	3167.19	3033.05	1516.53	5788.55	2858.75	6.54	-1.482	0.000	0.653
44.00	-35.98	-40.72	0.00	-3084.9	0.00	3084.91	3018.90	1509.45	5713.49	2821.68	7.17	-1.550	0.000	0.680
46.00	-35.41	-40.30	0.00	-3003.4	0.00	3003.47	3004.56	1502.28	5638.53	2784.66	7.84	-1.621	0.000	0.668
48.00	-34.85	-39.88	0.00	-2922.8	0.00	2922.87	2990.04	1495.02	5563.69	2747.70	8.53	-1.692	0.000	0.656
50.00	-34.30	-39.47	0.00	-2843.1	0.00	2843.10	2975.34	1487.67	5488.97	2710.80	9.26	-1.763	0.000	0.645
52.00	-33.75	-39.05	0.00	-2764.1	0.00	2764.18	2960.46	1480.23	5414.39	2673.96	10.01	-1.833	0.000	0.633
54.00	-33.20	-38.64	0.00	-2686.0	0.00	2686.08	2945.39	1472.69	5339.95	2637.20	10.79	-1.903	0.000	0.621
56.00	-32.67	-38.22	0.00	-2608.8	0.00	2608.81	2930.14	1465.07	5265.67	2600.52	11.61	-1.973	0.000	0.609
57.11	-32.37	-37.99	0.00	-2566.3	0.00	2566.39	2921.60	1460.80	5224.51	2580.19	12.07	-2.011	0.000	0.773
58.00	-32.14	-37.81	0.00	-2532.5	0.00	2532.58	2914.71	1457.35	5191.54	2563.91	12.45	-2.051	0.000	0.593
58.50	-31.99	-37.72	0.00	-2513.6	0.00	2513.68	2910.82	1455.41	5173.04	2554.77	12.66	-2.068	0.000	0.721
60.00	-31.57	-37.42	0.00	-2457.1	0.00	2457.10	2899.09	1449.55	5117.58	2527.38	13.32	-2.130	0.000	0.711
62.00	-31.02	-37.02	0.00	-2382.2	0.00	2382.26	2883.30	1441.65	5043.81	2490.95	14.24	-2.213	0.000	0.697
64.00	-30.48	-36.63	0.00	-2308.2	0.00	2308.21	2867.32	1433.66	4970.21	2454.60	15.18	-2.294	0.000	0.684
66.00	-29.95	-36.23	0.00	-2234.9	0.00	2234.96	2851.15	1425.58	4896.82	2418.35	16.16	-2.375	0.000	0.670
68.00	-29.42	-35.84	0.00	-2162.4	0.00	2162.49	2834.81	1417.40	4823.62	2382.21	17.17	-2.456	0.000	0.657
70.00	-28.90	-35.45	0.00	-2090.8	0.00	2090.81	2818.28	1409.14	4750.64	2346.16	18.22	-2.536	0.000	0.643
72.00	-28.04	-35.04	0.00	-2019.9	0.00	2019.90	2801.57	1400.79	4677.88	2310.23	19.30	-2.615	0.000	0.623
74.00	-27.19	-34.63	0.00	-1949.8	0.00	1949.82	2784.68	1392.34	4605.35	2274.41	20.41	-2.692	0.000	0.609

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Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 18

76.00	-26.35	-34.23	0.00	-1880.5	0.00	1880.56	2161.97	1080.98	3608.45	1782.08	21.55	-2.769	0.000	0.677
78.00	-25.90	-33.84	0.00	-1812.1	0.00	1812.10	2151.06	1075.53	3556.01	1756.18	22.73	-2.848	0.000	0.724
80.00	-25.46	-33.47	0.00	-1744.4	0.00	1744.42	2139.97	1069.98	3503.61	1730.30	23.94	-2.933	0.000	0.705
82.00	-25.02	-33.09	0.00	-1677.4	0.00	1677.49	2128.69	1064.35	3451.27	1704.45	25.19	-3.016	0.000	0.686
84.00	-24.58	-32.71	0.00	-1611.3	0.00	1611.31	2117.24	1058.62	3398.99	1678.63	26.47	-3.099	0.000	0.667
86.00	-24.15	-32.34	0.00	-1545.8	0.00	1545.89	2105.60	1052.80	3346.79	1652.86	27.78	-3.181	0.000	0.648
88.00	-23.73	-31.97	0.00	-1481.2	0.00	1481.20	2093.78	1046.89	3294.68	1627.12	29.13	-3.261	0.000	0.629
90.00	-23.31	-31.61	0.00	-1417.2	0.00	1417.26	2081.77	1040.89	3242.65	1601.42	30.52	-3.340	0.000	0.609
92.00	-22.89	-31.24	0.00	-1354.0	0.00	1354.05	2069.59	1034.79	3190.73	1575.78	31.93	-3.417	0.000	0.589
94.00	-22.48	-30.88	0.00	-1291.5	0.00	1291.57	2057.22	1028.61	3138.91	1550.19	33.38	-3.493	0.000	0.570
96.00	-22.07	-30.52	0.00	-1229.8	0.00	1229.82	2044.67	1022.33	3087.22	1524.66	34.86	-3.567	0.000	0.593
98.00	-21.67	-30.16	0.00	-1168.7	0.00	1168.78	2031.93	1015.97	3035.65	1499.19	36.37	-3.646	0.000	0.572
100.00	-21.27	-29.81	0.00	-1108.4	0.00	1108.45	2019.02	1009.51	2984.22	1473.79	37.91	-3.723	0.000	0.550
100.00	-21.27	-29.81	0.00	-1108.4	0.00	1108.45	1394.49	697.25	2068.33	1021.47	37.91	-3.723	0.000	0.639
102.00	-20.93	-29.47	0.00	-1048.8	0.00	1048.83	1387.39	693.70	2035.72	1005.36	39.49	-3.797	0.000	0.712
104.00	-20.59	-29.13	0.00	-989.90	0.00	989.90	1380.13	690.06	2003.09	989.25	41.10	-3.882	0.000	0.681
106.00	-20.26	-28.79	0.00	-931.65	0.00	931.65	1372.69	686.35	1970.45	973.13	42.74	-3.964	0.000	0.649
108.00	-19.93	-28.45	0.00	-874.08	0.00	874.08	1365.09	682.55	1937.81	957.01	44.42	-4.043	0.000	0.617
110.00	-19.60	-28.12	0.00	-817.17	0.00	817.17	1357.32	678.66	1905.17	940.89	46.12	-4.120	0.000	0.585
112.00	-19.29	-27.78	0.00	-760.94	0.00	760.94	1349.39	674.69	1872.56	924.79	47.87	-4.193	0.000	0.552
113.50	-19.06	-27.53	0.00	-719.26	0.00	719.26	1343.33	671.66	1848.11	912.71	49.19	-4.247	0.000	0.528
113.50	-19.06	-27.53	0.00	-719.26	0.00	719.26	1343.33	671.66	1848.11	912.71	49.19	-4.247	0.000	0.528
114.00	-18.97	-27.46	0.00	-705.50	0.00	705.50	1341.28	670.64	1839.96	908.69	49.64	-4.264	0.000	0.792
115.00	-18.81	-27.30	0.00	-678.04	0.00	678.04	1337.17	668.58	1823.68	900.65	50.54	-4.316	0.000	0.769
116.00	-18.52	-27.14	0.00	-650.74	0.00	650.74	1333.01	666.51	1807.40	892.61	51.44	-4.367	0.000	0.745
118.00	-17.98	-26.80	0.00	-596.47	0.00	596.47	1324.58	662.29	1774.88	876.54	53.29	-4.465	0.000	0.696
120.00	-17.45	-26.47	0.00	-542.87	0.00	542.87	1327.18	663.59	1784.85	881.47	55.18	-4.557	0.000	0.631
122.00	-17.14	-26.15	0.00	-489.94	0.00	489.94	1318.63	659.32	1752.36	865.43	57.11	-4.644	0.000	0.581
124.00	-16.84	-25.83	0.00	-437.65	0.00	437.65	1309.91	654.95	1719.92	849.40	59.07	-4.721	0.000	0.530
126.00	-16.54	-25.51	0.00	-385.99	0.00	385.99	1301.02	650.51	1687.54	833.41	61.06	-4.792	0.000	0.477
127.00	-13.22	-19.55	0.00	-360.49	0.00	360.49	1296.51	648.26	1671.38	825.43	62.07	-4.825	0.000	0.448
128.00	-13.09	-19.40	0.00	-340.93	0.00	340.93	1291.97	645.98	1655.23	817.46	63.08	-4.857	0.000	0.428
130.00	-12.85	-19.09	0.00	-302.13	0.00	302.13	1282.74	641.37	1623.00	801.54	65.13	-4.917	0.000	0.388
132.00	-12.60	-18.78	0.00	-263.95	0.00	263.95	1273.35	636.68	1590.85	785.66	67.20	-4.971	0.000	0.347
134.00	-12.37	-18.47	0.00	-226.40	0.00	226.40	1263.80	631.90	1558.80	769.83	69.29	-5.020	0.000	0.305
136.00	-12.14	-18.16	0.00	-189.46	0.00	189.46	1254.07	627.04	1526.84	754.05	71.40	-5.063	0.000	0.262
137.00	-8.24	-12.91	0.00	-171.30	0.00	171.30	1249.15	624.57	1510.90	746.18	72.46	-5.082	0.000	0.237
138.00	-8.13	-12.76	0.00	-158.39	0.00	158.39	1244.18	622.09	1494.99	738.32	73.53	-5.101	0.000	0.221
140.00	-7.92	-12.46	0.00	-132.87	0.00	132.87	1234.12	617.06	1463.26	722.65	75.67	-5.133	0.000	0.191
142.00	-7.71	-12.16	0.00	-107.96	0.00	107.96	1223.90	611.95	1431.66	707.04	77.83	-5.161	0.000	0.159
144.00	-7.51	-11.86	0.00	-83.64	0.00	83.64	1213.50	606.75	1400.19	691.50	79.99	-5.185	0.000	0.128
146.00	-7.31	-11.57	0.00	-59.91	0.00	59.91	1202.94	601.47	1368.85	676.02	82.16	-5.203	0.000	0.095
147.00	-3.80	-6.46	0.00	-48.34	0.00	48.34	1197.60	598.80	1353.24	668.32	83.25	-5.210	0.000	0.076
148.00	-3.71	-6.32	0.00	-41.87	0.00	41.87	1192.22	596.11	1337.67	660.62	84.34	-5.216	0.000	0.067
150.00	-3.52	-6.04	0.00	-29.23	0.00	29.23	1181.32	590.66	1306.64	645.30	86.53	-5.226	0.000	0.048
152.00	-3.33	-5.75	0.00	-17.16	0.00	17.16	1170.26	585.13	1275.78	630.06	88.72	-5.232	0.000	0.030
153.00	-3.18	-5.44	0.00	-11.41	0.00	11.41	1164.66	582.33	1260.41	622.47	89.81	-5.234	0.000	0.021
154.00	-3.09	-5.30	0.00	-5.97	0.00	5.97	1159.03	579.51	1245.09	614.90	90.91	-5.236	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	92.00	-5.236	0.000	0.001

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Wind Loading - Shaft

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 19	

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Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60

Iterations 25

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

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Wind Loading - Shaft

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 20	

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
118.00	1.26	1.04	32.299	35.53	325.14	1.000	0.000	2.00	5.762	5.76	327.6	0.0	324.4
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**			**30,890.3**		**23,496.5**

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Discrete Appurtenance Forces

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60

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	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
2	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
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
4	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
5	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
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
7	155.00	BSAMNT-SBS-2-2	3	32.332	35.565	1.00	1.00	0.00	68.45	0.000	0.000	0.00	0.00	0.00
8	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
9	155.00	BXA-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
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
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
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
13	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
14	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
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
16	147.00	APXVSPP18-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
17	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
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
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
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
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
22	137.00	(3) T-Framew/ walking	1	32.280	35.508	1.00	1.00	25.00	1458.00	0.000	0.000	1420.33	0.00	0.00
23	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
24	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
25	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
26	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
27	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
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
29	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
30	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
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
32	127.00	8843 B2 B66A	3	32.281	35.509	0.38	0.75	1.85	189.00	0.000	0.000	104.82	0.00	0.00
33	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
34	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
35	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
36	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
37	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
38	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
39	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
40	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
41	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
42	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
43	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
							Totals:		**11,430.71**			**19,922.07**		

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Total Applied Force Summary

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 22

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60

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		608.77	513.10	0.00	0.00
4.00		595.64	509.83	0.00	0.00
6.00		582.89	506.56	0.00	0.00
8.00		570.52	503.29	0.00	0.00
10.00		558.50	500.02	0.00	0.00
11.50		411.91	372.87	0.00	0.00
12.00		136.33	123.88	0.00	0.00
14.00		535.51	493.49	0.00	0.00
14.16		42.62	39.34	0.00	0.00
14.84		180.04	166.95	0.00	0.00
16.00		303.73	283.93	0.00	0.00
16.50		130.08	122.04	0.00	0.00
18.00		384.98	364.91	0.00	0.00
20.00		503.40	483.68	0.00	0.00
21.00		248.68	240.62	0.00	0.00
22.00		246.17	239.80	0.00	0.00
24.00		483.45	477.15	0.00	0.00
26.00		473.89	473.88	0.00	0.00
28.00		464.58	470.61	0.00	0.00
30.00		455.90	467.34	0.00	0.00
32.00		455.40	464.08	0.00	0.00
34.00		454.44	460.81	0.00	0.00
36.00		453.10	457.54	0.00	0.00
37.06		243.06	426.53	0.00	0.00
37.96		205.96	360.80	0.00	0.00
38.00		9.14	16.01	0.00	0.00
40.00		456.72	797.24	0.00	0.00
41.00		227.36	396.33	0.00	0.00
42.00		226.80	394.81	0.00	0.00
44.00		452.10	398.60	0.00	0.00
46.00		449.47	395.77	0.00	0.00
48.00		446.67	392.95	0.00	0.00
50.00		443.72	390.12	0.00	0.00
52.00		440.63	387.29	0.00	0.00
54.00		437.43	384.46	0.00	0.00
56.00		434.12	381.63	0.00	0.00
57.11		239.43	210.58	0.00	0.00
58.00		191.20	168.22	0.00	0.00
58.50		107.11	96.26	0.00	0.00
60.00		320.08	287.70	0.00	0.00
62.00		423.70	381.13	0.00	0.00
64.00		420.09	378.30	0.00	0.00
66.00		416.43	375.47	0.00	0.00
68.00		412.73	372.64	0.00	0.00
70.00		409.00	369.81	0.00	0.00
72.00		411.39	622.02	0.00	0.00

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Total Applied Force Summary

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 23

74.00		407.59	616.84	0.00	0.00
76.00		403.77	611.65	0.00	0.00
78.00		399.93	313.98	0.00	0.00
80.00		396.08	311.63	0.00	0.00
82.00		392.21	309.27	0.00	0.00
84.00		388.34	306.91	0.00	0.00
86.00		384.46	304.55	0.00	0.00
88.00		380.57	302.20	0.00	0.00
90.00		376.68	299.84	0.00	0.00
92.00		372.79	297.48	0.00	0.00
94.00		368.90	295.12	0.00	0.00
96.00		365.01	292.76	0.00	0.00
98.00		361.13	290.41	0.00	0.00
100.00		357.25	288.05	0.00	0.00
102.00		353.38	242.06	0.00	0.00
104.00		349.51	240.18	0.00	0.00
106.00		345.65	238.29	0.00	0.00
108.00		341.80	236.40	0.00	0.00
110.00		337.95	234.52	0.00	0.00
112.00		334.11	232.63	0.00	0.00
113.50		248.08	173.24	0.00	0.00
114.00		82.22	57.51	0.00	0.00
115.00		163.72	114.67	0.00	0.00
116.00		165.21	196.61	0.00	0.00
118.00		327.55	390.39	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:	**50,812.41**	**39,345.23**	**0.00**	**672.69**

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Linear Appurtenance Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 24	

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60

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)
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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.028	0.000	32.427	0.00	0.00
60.00	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.028	0.000	32.444	0.00	0.00
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	32.461	0.00	0.00
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	32.474	0.00	0.00
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.483	0.00	0.00
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.488	0.00	0.00
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.491	0.00	0.00
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	32.492	0.00	0.00
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.490	0.00	0.00

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Linear Appurtenance Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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	

Tower Engineering Solutions

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60

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)
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	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.481	0.00	0.00
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.474	0.00	0.00
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	32.466	0.00	0.00
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.458	0.00	0.00
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.448	0.00	0.00
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	32.438	0.00	0.00
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.428	0.00	0.00
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.417	0.00	0.00
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	32.407	0.00	0.00
96.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.396	0.00	0.00
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.385	0.00	0.00
100.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	32.375	0.00	0.00
102.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.364	0.00	0.00
104.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.355	0.00	0.00
106.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	32.345	0.00	0.00
108.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.336	0.00	0.00
110.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.327	0.00	0.00
112.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	32.319	0.00	0.00
113.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.036	0.000	32.314	0.00	0.00
114.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.036	0.000	32.312	0.00	0.00
115.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.036	0.000	32.309	0.00	0.00
										Totals:	**0.0**	**0.0**

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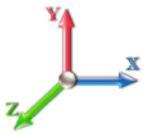
Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 26	

Load Case: 0.9D + 1.6W 101 mph Wind

Dead Load Factor 0.90

Wind Load Factor 1.60



Iterations 25

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-39.31	-50.84	0.00	-5055.0	0.00	5055.05	4048.32	2024.16	8933.65	4411.99	0.00	0.000	0.000	0.794
2.00	-38.74	-50.28	0.00	-4953.3	0.00	4953.38	4032.02	2016.01	8833.50	4362.53	0.02	-0.072	0.000	0.785
4.00	-38.16	-49.73	0.00	-4852.8	0.00	4852.83	4015.53	2007.77	8733.46	4313.13	0.06	-0.144	0.000	0.776
6.00	-37.60	-49.19	0.00	-4753.3	0.00	4753.38	3998.87	1999.43	8633.56	4263.79	0.14	-0.215	0.000	0.767
8.00	-37.04	-48.66	0.00	-4655.0	0.00	4655.01	3982.01	1991.01	8533.79	4214.52	0.24	-0.287	0.000	0.757
10.00	-36.49	-48.14	0.00	-4557.6	0.00	4557.68	3964.98	1982.49	8434.18	4165.32	0.38	-0.358	0.000	0.748
11.50	-36.09	-47.75	0.00	-4485.4	0.00	4485.47	3952.09	1976.04	8359.57	4128.48	0.50	-0.412	0.000	0.648
12.00	-35.93	-47.64	0.00	-4461.6	0.00	4461.60	3947.76	1973.88	8334.72	4116.20	0.55	-0.428	0.000	0.646
14.00	-35.42	-47.12	0.00	-4366.3	0.00	4366.33	3930.37	1965.18	8235.42	4067.17	0.74	-0.490	0.000	0.638
14.16	-35.37	-47.08	0.00	-4358.7	0.00	4358.79	3928.97	1964.48	8227.49	4063.25	0.75	-0.495	0.000	0.754
14.84	-35.18	-46.92	0.00	-4326.7	0.00	4326.77	3923.00	1961.50	8193.77	4046.60	0.83	-0.520	0.000	0.634
16.00	-34.87	-46.63	0.00	-4272.3	0.00	4272.35	3912.78	1956.39	8136.31	4018.22	0.96	-0.556	0.000	0.629
16.50	-34.72	-46.52	0.00	-4249.0	0.00	4249.03	3908.36	1954.18	8111.55	4005.99	1.02	-0.572	0.000	0.719
18.00	-34.31	-46.17	0.00	-4179.2	0.00	4179.25	3895.02	1947.51	8037.37	3969.35	1.21	-0.625	0.000	0.712
20.00	-33.79	-45.69	0.00	-4086.9	0.00	4086.92	3877.07	1938.54	7938.63	3920.59	1.48	-0.696	0.000	0.703
21.00	-33.53	-45.46	0.00	-4041.2	0.00	4041.23	3868.03	1934.02	7889.33	3896.24	1.63	-0.731	0.000	0.698
22.00	-33.25	-45.24	0.00	-3995.7	0.00	3995.77	3858.94	1929.47	7840.08	3871.92	1.79	-0.767	0.000	0.694
24.00	-32.72	-44.79	0.00	-3905.2	0.00	3905.29	3840.63	1920.32	7741.75	3823.36	2.13	-0.837	0.000	0.684
26.00	-32.20	-44.35	0.00	-3815.7	0.00	3815.71	3822.14	1911.07	7643.63	3774.90	2.49	-0.907	0.000	0.675
28.00	-31.69	-43.92	0.00	-3727.0	0.00	3727.01	3803.46	1901.73	7545.74	3726.56	2.89	-0.977	0.000	0.666
30.00	-31.18	-43.49	0.00	-3639.1	0.00	3639.18	3784.60	1892.30	7448.09	3678.33	3.31	-1.047	0.000	0.657
32.00	-30.67	-43.06	0.00	-3552.2	0.00	3552.21	3765.56	1882.78	7350.68	3630.22	3.77	-1.116	0.000	0.647
34.00	-30.16	-42.64	0.00	-3466.0	0.00	3466.08	3746.34	1873.17	7253.52	3582.24	4.25	-1.186	0.000	0.638
36.00	-29.68	-42.20	0.00	-3380.8	0.00	3380.81	3726.93	1863.47	7156.62	3534.39	4.76	-1.255	0.000	0.629
37.06	-29.23	-41.97	0.00	-3336.0	0.00	3336.08	3716.57	1858.29	7105.38	3509.08	5.04	-1.291	0.000	0.766
37.96	-28.86	-41.76	0.00	-3298.3	0.00	3298.31	3707.74	1853.87	7061.93	3487.62	5.29	-1.330	0.000	0.613
38.00	-28.82	-41.77	0.00	-3296.6	0.00	3296.64	3707.34	1853.67	7060.00	3486.67	5.30	-1.331	0.000	0.613
40.00	-28.00	-41.32	0.00	-3213.1	0.00	3213.10	3687.57	1843.78	6963.65	3439.09	5.88	-1.399	0.000	0.604
41.00	-27.58	-41.10	0.00	-3171.7	0.00	3171.78	3677.62	1838.81	6915.58	3415.35	6.17	-1.433	0.000	0.599
42.00	-27.16	-40.89	0.00	-3130.6	0.00	3130.68	3033.05	1516.53	5788.55	2858.75	6.48	-1.467	0.000	0.643
44.00	-26.72	-40.46	0.00	-3048.9	0.00	3048.91	3018.90	1509.45	5713.49	2821.68	7.11	-1.534	0.000	0.670
46.00	-26.29	-40.03	0.00	-2968.0	0.00	2968.00	3004.56	1502.28	5638.53	2784.66	7.76	-1.605	0.000	0.658
48.00	-25.86	-39.60	0.00	-2887.9	0.00	2887.94	2990.04	1495.02	5563.69	2747.70	8.45	-1.675	0.000	0.647
50.00	-25.43	-39.18	0.00	-2808.7	0.00	2808.74	2975.34	1487.67	5488.97	2710.80	9.17	-1.745	0.000	0.635
52.00	-25.01	-38.76	0.00	-2730.3	0.00	2730.39	2960.46	1480.23	5414.39	2673.96	9.91	-1.815	0.000	0.623
54.00	-24.60	-38.34	0.00	-2652.8	0.00	2652.88	2945.39	1472.69	5339.95	2637.20	10.69	-1.884	0.000	0.612
56.00	-24.20	-37.91	0.00	-2576.2	0.00	2576.20	2930.14	1465.07	5265.67	2600.52	11.49	-1.952	0.000	0.600
57.11	-23.97	-37.68	0.00	-2534.1	0.00	2534.12	2921.60	1460.80	5224.51	2580.19	11.95	-1.990	0.000	0.761
58.00	-23.79	-37.50	0.00	-2500.5	0.00	2500.59	2914.71	1457.35	5191.54	2563.91	12.33	-2.029	0.000	0.584
58.50	-23.67	-37.40	0.00	-2481.8	0.00	2481.84	2910.82	1455.41	5173.04	2554.77	12.54	-2.046	0.000	0.710
60.00	-23.35	-37.10	0.00	-2425.7	0.00	2425.74	2899.09	1449.55	5117.58	2527.38	13.19	-2.108	0.000	0.700
62.00	-22.93	-36.70	0.00	-2351.5	0.00	2351.54	2883.30	1441.65	5043.81	2490.95	14.09	-2.189	0.000	0.686
64.00	-22.52	-36.29	0.00	-2278.1	0.00	2278.15	2867.32	1433.66	4970.21	2454.60	15.03	-2.269	0.000	0.673
66.00	-22.11	-35.89	0.00	-2205.5	0.00	2205.56	2851.15	1425.58	4896.82	2418.35	16.00	-2.350	0.000	0.660
68.00	-21.71	-35.49	0.00	-2133.7	0.00	2133.78	2834.81	1417.40	4823.62	2382.21	17.00	-2.429	0.000	0.646
70.00	-21.31	-35.10	0.00	-2062.7	0.00	2062.79	2818.28	1409.14	4750.64	2346.16	18.03	-2.508	0.000	0.632
72.00	-20.66	-34.69	0.00	-1992.6	0.00	1992.60	2801.57	1400.79	4677.88	2310.23	19.10	-2.586	0.000	0.613
74.00	-20.01	-34.28	0.00	-1923.2	0.00	1923.22	2784.68	1392.34	4605.35	2274.41	20.20	-2.662	0.000	0.599

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Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 27

76.00	-19.38	-33.87	0.00	-1854.6	0.00	1854.66	2161.97	1080.98	3608.45	1782.08	21.33	-2.738	0.000	0.665
78.00	-19.04	-33.49	0.00	-1786.9	0.00	1786.92	2151.06	1075.53	3556.01	1756.18	22.49	-2.815	0.000	0.712
80.00	-18.70	-33.10	0.00	-1719.9	0.00	1719.95	2139.97	1069.98	3503.61	1730.30	23.69	-2.899	0.000	0.693
82.00	-18.36	-32.72	0.00	-1653.7	0.00	1653.75	2128.69	1064.35	3451.27	1704.45	24.92	-2.982	0.000	0.674
84.00	-18.03	-32.34	0.00	-1588.3	0.00	1588.31	2117.24	1058.62	3398.99	1678.63	26.19	-3.063	0.000	0.655
86.00	-17.70	-31.97	0.00	-1523.6	0.00	1523.62	2105.60	1052.80	3346.79	1652.86	27.49	-3.144	0.000	0.636
88.00	-17.38	-31.59	0.00	-1459.6	0.00	1459.69	2093.78	1046.89	3294.68	1627.12	28.82	-3.223	0.000	0.617
90.00	-17.06	-31.22	0.00	-1396.5	0.00	1396.51	2081.77	1040.89	3242.65	1601.42	30.19	-3.300	0.000	0.598
92.00	-16.74	-30.86	0.00	-1334.0	0.00	1334.06	2069.59	1034.79	3190.73	1575.78	31.59	-3.377	0.000	0.579
94.00	-16.43	-30.49	0.00	-1272.3	0.00	1272.35	2057.22	1028.61	3138.91	1550.19	33.02	-3.451	0.000	0.559
96.00	-16.12	-30.13	0.00	-1211.3	0.00	1211.37	2044.67	1022.33	3087.22	1524.66	34.48	-3.525	0.000	0.582
98.00	-15.81	-29.77	0.00	-1151.1	0.00	1151.11	2031.93	1015.97	3035.65	1499.19	35.97	-3.602	0.000	0.561
100.00	-15.51	-29.42	0.00	-1091.5	0.00	1091.57	2019.02	1009.51	2984.22	1473.79	37.50	-3.678	0.000	0.540
100.00	-15.51	-29.42	0.00	-1091.5	0.00	1091.57	1394.49	697.25	2068.33	1021.47	37.50	-3.678	0.000	0.627
102.00	-15.25	-29.07	0.00	-1032.7	0.00	1032.73	1387.39	693.70	2035.72	1005.36	39.05	-3.751	0.000	0.699
104.00	-14.99	-28.73	0.00	-974.59	0.00	974.59	1380.13	690.06	2003.09	989.25	40.64	-3.834	0.000	0.668
106.00	-14.74	-28.39	0.00	-917.14	0.00	917.14	1372.69	686.35	1970.45	973.13	42.27	-3.915	0.000	0.637
108.00	-14.49	-28.05	0.00	-860.36	0.00	860.36	1365.09	682.55	1937.81	957.01	43.92	-3.993	0.000	0.605
110.00	-14.24	-27.71	0.00	-804.26	0.00	804.26	1357.32	678.66	1905.17	940.89	45.61	-4.069	0.000	0.573
112.00	-14.01	-27.38	0.00	-748.84	0.00	748.84	1349.39	674.69	1872.56	924.79	47.33	-4.141	0.000	0.541
113.50	-13.84	-27.13	0.00	-707.77	0.00	707.77	1343.33	671.66	1848.11	912.71	48.64	-4.193	0.000	0.517
113.50	-13.84	-27.13	0.00	-707.77	0.00	707.77	1343.33	671.66	1848.11	912.71	48.64	-4.193	0.000	0.517
114.00	-13.77	-27.05	0.00	-694.20	0.00	694.20	1341.28	670.64	1839.96	908.69	49.08	-4.211	0.000	0.776
115.00	-13.64	-26.89	0.00	-667.15	0.00	667.15	1337.17	668.58	1823.68	900.65	49.97	-4.262	0.000	0.753
116.00	-13.42	-26.73	0.00	-640.26	0.00	640.26	1333.01	666.51	1807.40	892.61	50.86	-4.312	0.000	0.729
118.00	-13.02	-26.39	0.00	-586.81	0.00	586.81	1324.58	662.29	1774.88	876.54	52.69	-4.408	0.000	0.681
120.00	-12.62	-26.06	0.00	-534.02	0.00	534.02	1327.18	663.59	1784.85	881.47	54.56	-4.499	0.000	0.617
122.00	-12.38	-25.74	0.00	-481.90	0.00	481.90	1318.63	659.32	1752.36	865.43	56.46	-4.584	0.000	0.568
124.00	-12.15	-25.42	0.00	-430.42	0.00	430.42	1309.91	654.95	1719.92	849.40	58.40	-4.660	0.000	0.518
126.00	-11.93	-25.10	0.00	-379.57	0.00	379.57	1301.02	650.51	1687.54	833.41	60.36	-4.730	0.000	0.466
127.00	-9.55	-19.23	0.00	-354.47	0.00	354.47	1296.51	648.26	1671.38	825.43	61.36	-4.763	0.000	0.438
128.00	-9.45	-19.08	0.00	-335.24	0.00	335.24	1291.97	645.98	1655.23	817.46	62.36	-4.794	0.000	0.418
130.00	-9.27	-18.77	0.00	-297.08	0.00	297.08	1282.74	641.37	1623.00	801.54	64.37	-4.852	0.000	0.379
132.00	-9.09	-18.46	0.00	-259.55	0.00	259.55	1273.35	636.68	1590.85	785.66	66.42	-4.906	0.000	0.338
134.00	-8.92	-18.15	0.00	-222.64	0.00	222.64	1263.80	631.90	1558.80	769.83	68.48	-4.954	0.000	0.297
136.00	-8.75	-17.85	0.00	-186.33	0.00	186.33	1254.07	627.04	1526.84	754.05	70.56	-4.996	0.000	0.255
137.00	-5.93	-12.69	0.00	-168.48	0.00	168.48	1249.15	624.57	1510.90	746.18	71.61	-5.016	0.000	0.231
138.00	-5.85	-12.55	0.00	-155.79	0.00	155.79	1244.18	622.09	1494.99	738.32	72.66	-5.033	0.000	0.216
140.00	-5.69	-12.25	0.00	-130.69	0.00	130.69	1234.12	617.06	1463.26	722.65	74.78	-5.065	0.000	0.186
142.00	-5.54	-11.95	0.00	-106.20	0.00	106.20	1223.90	611.95	1431.66	707.04	76.90	-5.093	0.000	0.155
144.00	-5.39	-11.66	0.00	-82.29	0.00	82.29	1213.50	606.75	1400.19	691.50	79.04	-5.116	0.000	0.124
146.00	-5.25	-11.38	0.00	-58.96	0.00	58.96	1202.94	601.47	1368.85	676.02	81.18	-5.134	0.000	0.092
147.00	-2.72	-6.36	0.00	-47.58	0.00	47.58	1197.60	598.80	1353.24	668.32	82.26	-5.141	0.000	0.074
148.00	-2.65	-6.22	0.00	-41.22	0.00	41.22	1192.22	596.11	1337.67	660.62	83.34	-5.147	0.000	0.065
150.00	-2.52	-5.94	0.00	-28.78	0.00	28.78	1181.32	590.66	1306.64	645.30	85.49	-5.156	0.000	0.047
152.00	-2.38	-5.66	0.00	-16.90	0.00	16.90	1170.26	585.13	1275.78	630.06	87.65	-5.163	0.000	0.029
153.00	-2.27	-5.35	0.00	-11.24	0.00	11.24	1164.66	582.33	1260.41	622.47	88.73	-5.165	0.000	0.020
154.00	-2.21	-5.21	0.00	-5.89	0.00	5.89	1159.03	579.51	1245.09	614.90	89.81	-5.166	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	90.89	-5.167	0.000	0.001

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Wind Loading - Shaft

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 28	

Tower Engineering Solutions

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	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

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Wind Loading - Shaft

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 29	

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	414.5
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	410.2
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	405.8
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	401.4
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	397.1
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	392.7
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
118.00	1.26	1.04	7.916	8.71	0.00	1.200	1.846	2.00	6.377	7.65	66.6	167.4	599.9
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**		**46,546.1**

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Discrete Appurtenance Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 30	

Tower Engineering Solutions

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	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
2	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
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	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
5	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
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	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
8	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
9	155.00	BXA-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
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	(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
14	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
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	APXVSPP18-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
17	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
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	(3) T-Framew/ walking	1	7.911	8.702	1.00	1.00	46.22	3258.65	0.000	0.000	402.22	0.00	0.00
23	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
24	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
25	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
26	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
27	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
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	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
30	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
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	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
33	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
34	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
35	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
36	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
37	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
38	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
39	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
40	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
41	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
42	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
43	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
							Totals:		**30,845.09**			**4,590.09**		

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Total Applied Force Summary

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 31

Tower Engineering Solutions

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	985.95	0.00	0.00
4.00		115.75	998.74	0.00	0.00
6.00		113.54	1003.63	0.00	0.00
8.00		111.32	1005.09	0.00	0.00
10.00		109.14	1004.62	0.00	0.00
11.50		80.57	752.15	0.00	0.00
12.00		26.68	250.31	0.00	0.00
14.00		104.89	1000.28	0.00	0.00
14.16		8.35	79.84	0.00	0.00
14.84		35.29	339.17	0.00	0.00
16.00		59.56	577.75	0.00	0.00
16.50		25.52	248.62	0.00	0.00
18.00		75.56	744.55	0.00	0.00
20.00		98.88	989.14	0.00	0.00
21.00		48.87	492.93	0.00	0.00
22.00		48.40	491.80	0.00	0.00
24.00		95.11	979.97	0.00	0.00
26.00		93.30	975.05	0.00	0.00
28.00		91.54	969.95	0.00	0.00
30.00		89.89	964.69	0.00	0.00
32.00		89.85	959.31	0.00	0.00
34.00		89.73	953.81	0.00	0.00
36.00		89.53	948.22	0.00	0.00
37.06		48.00	749.46	0.00	0.00
37.96		40.68	634.27	0.00	0.00
38.00		1.81	28.15	0.00	0.00
40.00		90.26	1402.02	0.00	0.00
41.00		44.95	697.60	0.00	0.00
42.00		44.86	695.21	0.00	0.00
44.00		89.46	867.55	0.00	0.00
46.00		89.00	862.23	0.00	0.00
48.00		88.51	856.86	0.00	0.00
50.00		87.98	851.46	0.00	0.00
52.00		87.42	846.02	0.00	0.00
54.00		86.85	840.56	0.00	0.00
56.00		86.25	835.06	0.00	0.00
57.11		47.59	461.30	0.00	0.00
58.00		38.02	368.68	0.00	0.00
58.50		21.30	187.52	0.00	0.00
60.00		63.68	560.15	0.00	0.00
62.00		84.35	741.78	0.00	0.00
64.00		83.69	736.20	0.00	0.00
66.00		83.02	730.62	0.00	0.00
68.00		82.34	725.03	0.00	0.00
70.00		81.66	719.43	0.00	0.00
72.00		82.10	1056.88	0.00	0.00

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Total Applied Force Summary

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 32

74.00		81.40	1048.12	0.00	0.00
76.00		80.69	1039.36	0.00	0.00
78.00		79.99	640.63	0.00	0.00
80.00		79.28	635.63	0.00	0.00
82.00		78.56	630.63	0.00	0.00
84.00		77.85	625.63	0.00	0.00
86.00		77.13	620.63	0.00	0.00
88.00		76.42	615.63	0.00	0.00
90.00		75.70	610.63	0.00	0.00
92.00		74.98	605.62	0.00	0.00
94.00		74.26	600.62	0.00	0.00
96.00		73.55	595.62	0.00	0.00
98.00		72.83	590.62	0.00	0.00
100.00		72.11	585.61	0.00	0.00
102.00		71.40	522.45	0.00	0.00
104.00		70.69	518.08	0.00	0.00
106.00		69.97	513.71	0.00	0.00
108.00		69.26	509.34	0.00	0.00
110.00		68.55	504.97	0.00	0.00
112.00		67.85	500.61	0.00	0.00
113.50		50.42	372.77	0.00	0.00
114.00		16.72	123.83	0.00	0.00
115.00		33.31	246.72	0.00	0.00
116.00		33.58	346.78	0.00	0.00
118.00		66.63	687.94	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:	**10,764.16**	**86,871.59**	**0.00**	**125.11**

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Linear Appurtenance Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 33	

Tower Engineering Solutions

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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.21	0.00	0.028	0.000	7.947	0.00	4.98
60.00	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.62	0.00	0.028	0.000	7.951	0.00	14.94
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.028	0.000	7.955	0.00	19.92
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.028	0.000	7.958	0.00	19.92
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.029	0.000	7.961	0.00	19.93
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.029	0.000	7.962	0.00	19.93
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.029	0.000	7.963	0.00	19.93
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.029	0.000	7.963	0.00	19.93
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.030	0.000	7.962	0.00	19.93

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Linear Appurtenance Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 34	

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)
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	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.030	0.000	7.960	0.00	19.93
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.030	0.000	7.959	0.00	19.92
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.030	0.000	7.957	0.00	19.92
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.031	0.000	7.955	0.00	19.92
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.031	0.000	7.952	0.00	19.92
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.031	0.000	7.950	0.00	19.91
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.032	0.000	7.947	0.00	19.91
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.032	0.000	7.945	0.00	19.91
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.032	0.000	7.942	0.00	19.90
96.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.033	0.000	7.939	0.00	19.90
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.033	0.000	7.937	0.00	19.90
100.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.033	0.000	7.934	0.00	19.89
102.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.034	0.000	7.932	0.00	19.89
104.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.034	0.000	7.929	0.00	19.89
106.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.034	0.000	7.927	0.00	19.89
108.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.035	0.000	7.925	0.00	19.88
110.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.035	0.000	7.923	0.00	19.88
112.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.82	0.00	0.035	0.000	7.921	0.00	19.88
113.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.62	0.00	0.036	0.000	7.919	0.00	14.91
114.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.21	0.00	0.036	0.000	7.919	0.00	4.97
115.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.41	0.00	0.036	0.000	7.918	0.00	9.94
										Totals:	**0.0**	**3,589.6**

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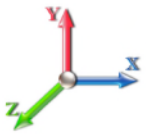
Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 35	

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

Dead Load Factor 1.20

Wind Load Factor 1.00



Iterations 25

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	-86.87	-10.78	0.00	-1147.2	0.00	1147.26	4048.32	2024.16	8933.65	4411.99	0.00	0.000	0.000	0.193
2.00	-85.88	-10.68	0.00	-1125.7	0.00	1125.70	4032.02	2016.01	8833.50	4362.53	0.00	-0.016	0.000	0.191
4.00	-84.88	-10.59	0.00	-1104.3	0.00	1104.34	4015.53	2007.77	8733.46	4313.13	0.01	-0.033	0.000	0.189
6.00	-83.87	-10.50	0.00	-1083.1	0.00	1083.16	3998.87	1999.43	8633.56	4263.79	0.03	-0.049	0.000	0.187
8.00	-82.86	-10.41	0.00	-1062.1	0.00	1062.16	3982.01	1991.01	8533.79	4214.52	0.06	-0.065	0.000	0.185
10.00	-81.86	-10.32	0.00	-1041.3	0.00	1041.34	3964.98	1982.49	8434.18	4165.32	0.09	-0.082	0.000	0.183
11.50	-81.10	-10.25	0.00	-1025.8	0.00	1025.85	3952.09	1976.04	8359.57	4128.48	0.11	-0.094	0.000	0.159
12.00	-80.85	-10.24	0.00	-1020.7	0.00	1020.73	3947.76	1973.88	8334.72	4116.20	0.12	-0.097	0.000	0.159
14.00	-79.85	-10.14	0.00	-1000.2	0.00	1000.26	3930.37	1965.18	8235.42	4067.17	0.17	-0.112	0.000	0.157
14.16	-79.77	-10.14	0.00	-998.63	0.00	998.63	3928.97	1964.48	8227.49	4063.25	0.17	-0.113	0.000	0.185
14.84	-79.43	-10.11	0.00	-991.74	0.00	991.74	3923.00	1961.50	8193.77	4046.60	0.19	-0.119	0.000	0.156
16.00	-78.85	-10.06	0.00	-980.01	0.00	980.01	3912.78	1956.39	8136.31	4018.22	0.22	-0.127	0.000	0.155
16.50	-78.60	-10.04	0.00	-974.98	0.00	974.98	3908.36	1954.18	8111.55	4005.99	0.23	-0.130	0.000	0.177
18.00	-77.85	-9.98	0.00	-959.92	0.00	959.92	3895.02	1947.51	8037.37	3969.35	0.27	-0.143	0.000	0.175
20.00	-76.86	-9.90	0.00	-939.95	0.00	939.95	3877.07	1938.54	7938.63	3920.59	0.34	-0.159	0.000	0.173
21.00	-76.37	-9.86	0.00	-930.05	0.00	930.05	3868.03	1934.02	7889.33	3896.24	0.37	-0.167	0.000	0.172
22.00	-75.88	-9.83	0.00	-920.19	0.00	920.19	3858.94	1929.47	7840.08	3871.92	0.41	-0.175	0.000	0.171
24.00	-74.89	-9.75	0.00	-900.54	0.00	900.54	3840.63	1920.32	7741.75	3823.36	0.49	-0.191	0.000	0.169
26.00	-73.92	-9.67	0.00	-881.04	0.00	881.04	3822.14	1911.07	7643.63	3774.90	0.57	-0.208	0.000	0.167
28.00	-72.94	-9.60	0.00	-861.69	0.00	861.69	3803.46	1901.73	7545.74	3726.56	0.66	-0.224	0.000	0.165
30.00	-71.98	-9.53	0.00	-842.50	0.00	842.50	3784.60	1892.30	7448.09	3678.33	0.76	-0.240	0.000	0.163
32.00	-71.02	-9.45	0.00	-823.45	0.00	823.45	3765.56	1882.78	7350.68	3630.22	0.86	-0.256	0.000	0.161
34.00	-70.06	-9.38	0.00	-804.54	0.00	804.54	3746.34	1873.17	7253.52	3582.24	0.97	-0.272	0.000	0.159
36.00	-69.11	-9.30	0.00	-785.79	0.00	785.79	3726.93	1863.47	7156.62	3534.39	1.09	-0.288	0.000	0.157
37.06	-68.36	-9.26	0.00	-775.93	0.00	775.93	3716.57	1858.29	7105.38	3509.08	1.15	-0.297	0.000	0.190
37.96	-67.72	-9.22	0.00	-767.60	0.00	767.60	3707.74	1853.87	7061.93	3487.62	1.21	-0.306	0.000	0.153
38.00	-67.69	-9.23	0.00	-767.24	0.00	767.24	3707.34	1853.67	7060.00	3486.67	1.21	-0.306	0.000	0.153
40.00	-66.29	-9.14	0.00	-748.79	0.00	748.79	3687.57	1843.78	6963.65	3439.09	1.35	-0.322	0.000	0.151
41.00	-65.59	-9.10	0.00	-739.65	0.00	739.65	3677.62	1838.81	6915.58	3415.35	1.41	-0.330	0.000	0.150
42.00	-64.90	-9.07	0.00	-730.54	0.00	730.54	3033.05	1516.53	5788.55	2858.75	1.48	-0.338	0.000	0.161
44.00	-64.03	-8.99	0.00	-712.41	0.00	712.41	3018.90	1509.45	5713.49	2821.68	1.63	-0.353	0.000	0.168
46.00	-63.16	-8.91	0.00	-694.44	0.00	694.44	3004.56	1502.28	5638.53	2784.66	1.78	-0.370	0.000	0.165
48.00	-62.30	-8.84	0.00	-676.61	0.00	676.61	2990.04	1495.02	5563.69	2747.70	1.94	-0.386	0.000	0.163
50.00	-61.45	-8.76	0.00	-658.94	0.00	658.94	2975.34	1487.67	5488.97	2710.80	2.10	-0.403	0.000	0.160
52.00	-60.60	-8.68	0.00	-641.42	0.00	641.42	2960.46	1480.23	5414.39	2673.96	2.28	-0.419	0.000	0.157
54.00	-59.76	-8.61	0.00	-624.05	0.00	624.05	2945.39	1472.69	5339.95	2637.20	2.46	-0.435	0.000	0.155
56.00	-58.92	-8.53	0.00	-606.84	0.00	606.84	2930.14	1465.07	5265.67	2600.52	2.64	-0.451	0.000	0.152
57.11	-58.46	-8.49	0.00	-597.37	0.00	597.37	2921.60	1460.80	5224.51	2580.19	2.75	-0.460	0.000	0.192
58.00	-58.09	-8.45	0.00	-589.82	0.00	589.82	2914.71	1457.35	5191.54	2563.91	2.83	-0.469	0.000	0.148
58.50	-57.90	-8.44	0.00	-585.60	0.00	585.60	2910.82	1455.41	5173.04	2554.77	2.88	-0.473	0.000	0.181
60.00	-57.34	-8.39	0.00	-572.94	0.00	572.94	2899.09	1449.55	5117.58	2527.38	3.03	-0.488	0.000	0.178
62.00	-56.60	-8.31	0.00	-556.17	0.00	556.17	2883.30	1441.65	5043.81	2490.95	3.24	-0.507	0.000	0.175
64.00	-55.86	-8.24	0.00	-539.54	0.00	539.54	2867.32	1433.66	4970.21	2454.60	3.46	-0.526	0.000	0.172
66.00	-55.13	-8.17	0.00	-523.05	0.00	523.05	2851.15	1425.58	4896.82	2418.35	3.68	-0.545	0.000	0.169
68.00	-54.40	-8.10	0.00	-506.71	0.00	506.71	2834.81	1417.40	4823.62	2382.21	3.92	-0.564	0.000	0.166
70.00	-53.68	-8.03	0.00	-490.51	0.00	490.51	2818.28	1409.14	4750.64	2346.16	4.16	-0.583	0.000	0.163
72.00	-52.62	-7.95	0.00	-474.46	0.00	474.46	2801.57	1400.79	4677.88	2310.23	4.41	-0.601	0.000	0.158
74.00	-51.57	-7.88	0.00	-458.55	0.00	458.55	2784.68	1392.34	4605.35	2274.41	4.66	-0.620	0.000	0.155

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Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 36

76.00	-50.53	-7.80	0.00	-442.80	0.00	442.80	2161.97	1080.98	3608.45	1782.08	4.92	-0.638	0.000	0.172
78.00	-49.89	-7.73	0.00	-427.20	0.00	427.20	2151.06	1075.53	3556.01	1756.18	5.20	-0.656	0.000	0.185
80.00	-49.25	-7.66	0.00	-411.74	0.00	411.74	2139.97	1069.98	3503.61	1730.30	5.48	-0.676	0.000	0.180
82.00	-48.62	-7.59	0.00	-396.42	0.00	396.42	2128.69	1064.35	3451.27	1704.45	5.76	-0.696	0.000	0.176
84.00	-47.99	-7.52	0.00	-381.24	0.00	381.24	2117.24	1058.62	3398.99	1678.63	6.06	-0.716	0.000	0.172
86.00	-47.37	-7.45	0.00	-366.20	0.00	366.20	2105.60	1052.80	3346.79	1652.86	6.36	-0.735	0.000	0.167
88.00	-46.75	-7.38	0.00	-351.30	0.00	351.30	2093.78	1046.89	3294.68	1627.12	6.68	-0.754	0.000	0.163
90.00	-46.14	-7.31	0.00	-336.53	0.00	336.53	2081.77	1040.89	3242.65	1601.42	6.99	-0.773	0.000	0.158
92.00	-45.53	-7.25	0.00	-321.90	0.00	321.90	2069.59	1034.79	3190.73	1575.78	7.32	-0.791	0.000	0.153
94.00	-44.93	-7.18	0.00	-307.41	0.00	307.41	2057.22	1028.61	3138.91	1550.19	7.66	-0.809	0.000	0.149
96.00	-44.33	-7.11	0.00	-293.06	0.00	293.06	2044.67	1022.33	3087.22	1524.66	8.00	-0.827	0.000	0.155
98.00	-43.74	-7.04	0.00	-278.84	0.00	278.84	2031.93	1015.97	3035.65	1499.19	8.35	-0.845	0.000	0.150
100.00	-43.16	-6.97	0.00	-264.76	0.00	264.76	2019.02	1009.51	2984.22	1473.79	8.71	-0.864	0.000	0.145
100.00	-43.16	-6.97	0.00	-264.76	0.00	264.76	1394.49	697.25	2068.33	1021.47	8.71	-0.864	0.000	0.168
102.00	-42.63	-6.91	0.00	-250.81	0.00	250.81	1387.39	693.70	2035.72	1005.36	9.08	-0.882	0.000	0.189
104.00	-42.11	-6.85	0.00	-236.99	0.00	236.99	1380.13	690.06	2003.09	989.25	9.45	-0.902	0.000	0.181
106.00	-41.60	-6.78	0.00	-223.30	0.00	223.30	1372.69	686.35	1970.45	973.13	9.83	-0.922	0.000	0.174
108.00	-41.09	-6.72	0.00	-209.74	0.00	209.74	1365.09	682.55	1937.81	957.01	10.22	-0.941	0.000	0.166
110.00	-40.58	-6.65	0.00	-196.31	0.00	196.31	1357.32	678.66	1905.17	940.89	10.62	-0.959	0.000	0.158
112.00	-40.08	-6.59	0.00	-183.00	0.00	183.00	1349.39	674.69	1872.56	924.79	11.03	-0.977	0.000	0.150
113.50	-39.71	-6.54	0.00	-173.12	0.00	173.12	1343.33	671.66	1848.11	912.71	11.33	-0.989	0.000	0.144
113.50	-39.71	-6.54	0.00	-173.12	0.00	173.12	1343.33	671.66	1848.11	912.71	11.33	-0.989	0.000	0.144
114.00	-39.58	-6.52	0.00	-169.85	0.00	169.85	1341.28	670.64	1839.96	908.69	11.44	-0.994	0.000	0.217
115.00	-39.34	-6.49	0.00	-163.33	0.00	163.33	1337.17	668.58	1823.68	900.65	11.65	-1.006	0.000	0.211
116.00	-38.99	-6.47	0.00	-156.83	0.00	156.83	1333.01	666.51	1807.40	892.61	11.86	-1.019	0.000	0.205
118.00	-38.30	-6.40	0.00	-143.90	0.00	143.90	1324.58	662.29	1774.88	876.54	12.29	-1.042	0.000	0.193
120.00	-37.62	-6.34	0.00	-131.09	0.00	131.09	1327.18	663.59	1784.85	881.47	12.73	-1.064	0.000	0.177
122.00	-37.15	-6.28	0.00	-118.42	0.00	118.42	1318.63	659.32	1752.36	865.43	13.18	-1.085	0.000	0.165
124.00	-36.69	-6.22	0.00	-105.86	0.00	105.86	1309.91	654.95	1719.92	849.40	13.64	-1.104	0.000	0.153
126.00	-36.23	-6.15	0.00	-93.43	0.00	93.43	1301.02	650.51	1687.54	833.41	14.11	-1.121	0.000	0.140
127.00	-28.14	-4.74	0.00	-87.28	0.00	87.28	1296.51	648.26	1671.38	825.43	14.35	-1.129	0.000	0.127
128.00	-27.93	-4.71	0.00	-82.54	0.00	82.54	1291.97	645.98	1655.23	817.46	14.58	-1.137	0.000	0.123
130.00	-27.52	-4.64	0.00	-73.12	0.00	73.12	1282.74	641.37	1623.00	801.54	15.06	-1.151	0.000	0.113
132.00	-27.11	-4.58	0.00	-63.84	0.00	63.84	1273.35	636.68	1590.85	785.66	15.55	-1.164	0.000	0.103
134.00	-26.71	-4.52	0.00	-54.68	0.00	54.68	1263.80	631.90	1558.80	769.83	16.04	-1.176	0.000	0.092
136.00	-26.31	-4.45	0.00	-45.65	0.00	45.65	1254.07	627.04	1526.84	754.05	16.53	-1.187	0.000	0.082
137.00	-18.54	-3.13	0.00	-41.20	0.00	41.20	1249.15	624.57	1510.90	746.18	16.78	-1.191	0.000	0.070
138.00	-18.35	-3.10	0.00	-38.07	0.00	38.07	1244.18	622.09	1494.99	738.32	17.03	-1.196	0.000	0.066
140.00	-17.97	-3.03	0.00	-31.88	0.00	31.88	1234.12	617.06	1463.26	722.65	17.54	-1.204	0.000	0.059
142.00	-17.59	-2.97	0.00	-25.81	0.00	25.81	1223.90	611.95	1431.66	707.04	18.04	-1.210	0.000	0.051
144.00	-17.23	-2.90	0.00	-19.88	0.00	19.88	1213.50	606.75	1400.19	691.50	18.55	-1.216	0.000	0.043
146.00	-16.86	-2.84	0.00	-14.07	0.00	14.07	1202.94	601.47	1368.85	676.02	19.06	-1.220	0.000	0.035
147.00	-9.03	-1.50	0.00	-11.23	0.00	11.23	1197.60	598.80	1353.24	668.32	19.32	-1.222	0.000	0.024
148.00	-8.86	-1.47	0.00	-9.73	0.00	9.73	1192.22	596.11	1337.67	660.62	19.57	-1.223	0.000	0.022
150.00	-8.51	-1.41	0.00	-6.80	0.00	6.80	1181.32	590.66	1306.64	645.30	20.08	-1.225	0.000	0.018
152.00	-8.16	-1.34	0.00	-3.98	0.00	3.98	1170.26	585.13	1275.78	630.06	20.60	-1.227	0.000	0.013
153.00	-7.88	-1.27	0.00	-2.64	0.00	2.64	1164.66	582.33	1260.41	622.47	20.86	-1.227	0.000	0.011
154.00	-7.71	-1.24	0.00	-1.37	0.00	1.37	1159.03	579.51	1245.09	614.90	21.11	-1.228	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	21.37	-1.228	0.000	0.000

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Seismic Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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	

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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		**Sd1**	0.10		**S1**	0.06
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.32		**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	4.58	
4.00		502.00	0.00	0.03	0.01	7.69	
6.00		498.37	0.00	0.04	0.02	9.90	
8.00		494.74	0.01	0.04	0.03	11.49	
10.00		491.11	0.01	0.05	0.03	12.64	
11.50	RB3	365.95	0.01	0.06	0.03	9.96	
12.00		121.53	0.01	0.06	0.03	3.36	
14.00		483.85	0.02	0.06	0.04	14.09	
14.16	RT2	38.55	0.02	0.06	0.04	1.13	
14.84	RB4	163.58	0.02	0.06	0.04	4.85	
16.00		278.08	0.02	0.06	0.04	8.41	
16.50	RT3	119.49	0.02	0.06	0.04	3.64	
18.00		357.10	0.03	0.07	0.04	11.11	
20.00		472.95	0.03	0.07	0.04	15.03	
21.00	RT1 RB5	235.12	0.03	0.07	0.04	7.54	
22.00		234.21	0.04	0.07	0.04	7.57	
24.00		465.69	0.05	0.07	0.04	15.26	
26.00		462.06	0.05	0.07	0.04	15.32	
28.00		458.43	0.06	0.07	0.04	15.35	
30.00		454.80	0.07	0.07	0.04	15.38	
32.00		451.17	0.08	0.07	0.04	15.40	
34.00		447.54	0.09	0.07	0.04	15.42	
36.00	Bot - Section 2	443.91	0.10	0.07	0.04	15.44	
37.06	RT4	439.75	0.11	0.07	0.04	15.37	
37.96	RB6	371.88	0.11	0.07	0.04	13.05	
38.00		16.50	0.11	0.07	0.04	0.58	
40.00		821.35	0.13	0.07	0.03	29.09	
41.00	RT5 RB7	408.14	0.13	0.07	0.03	14.52	
42.00	Top - Section 1	406.44	0.14	0.07	0.03	14.51	
44.00		378.42	0.15	0.07	0.03	13.61	
46.00		375.28	0.17	0.07	0.03	13.57	
48.00		372.13	0.18	0.06	0.03	13.51	
50.00		368.99	0.20	0.06	0.02	13.40	
52.00		365.85	0.21	0.06	0.02	13.23	
54.00		362.70	0.23	0.06	0.02	13.01	
56.00		359.56	0.25	0.06	0.02	12.70	
57.11	RT6	198.20	0.26	0.05	0.02	6.92	
58.00	RB8	158.22	0.26	0.05	0.02	5.46	
58.50	RT7	88.61	0.27	0.05	0.02	3.04	
60.00		264.66	0.28	0.05	0.01	8.84	
62.00		350.13	0.30	0.04	0.01	11.18	
64.00		346.98	0.32	0.04	0.01	10.43	
66.00		343.84	0.34	0.03	0.01	9.53	
68.00		340.69	0.36	0.03	0.01	8.48	
70.00	Bot - Section 3	337.55	0.39	0.02	0.01	7.29	

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Seismic Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 38	

72.00		617.79	0.41	0.02	0.01	10.98	
74.00		612.02	0.43	0.01	0.01	8.25	
76.00	Top - Section 2 RT8 RB9	606.26	0.45	0.00	0.01	5.32	
78.00		275.52	0.48	-0.01	0.01	1.03	
80.00		272.90	0.50	-0.02	0.01	-0.41	
82.00		270.28	0.53	-0.03	0.01	-1.84	
84.00		267.66	0.56	-0.04	0.01	-3.22	
86.00		265.04	0.58	-0.05	0.01	-4.52	
88.00		262.42	0.61	-0.06	0.02	-5.70	
90.00		259.80	0.64	-0.07	0.02	-6.72	
92.00		257.18	0.67	-0.08	0.02	-7.58	
94.00		254.56	0.70	-0.09	0.03	-8.25	
96.00	RT9 RB10	251.94	0.73	-0.09	0.03	-8.73	
98.00		249.32	0.76	-0.10	0.04	-9.01	
100.00	Top - Section 3	246.70	0.79	-0.11	0.05	-9.10	
102.00		195.61	0.82	-0.12	0.06	-7.22	
104.00		193.51	0.85	-0.12	0.07	-7.00	
106.00		191.42	0.88	-0.12	0.08	-6.63	
108.00		189.32	0.92	-0.12	0.09	-6.14	
110.00		187.22	0.95	-0.12	0.11	-5.52	
112.00		185.13	0.99	-0.11	0.12	-4.77	
113.50	RT10	137.47	1.01	-0.11	0.14	-3.10	
114.00		45.56	1.02	-0.10	0.14	-0.97	
115.00	Bot - Section 5	90.73	1.04	-0.10	0.15	-1.72	
116.00		181.78	1.06	-0.09	0.16	-2.96	
118.00		360.42	1.10	-0.07	0.18	-3.77	
120.00	Top - Section 4	356.23	1.13	-0.05	0.21	-1.40	
122.00		177.39	1.17	-0.02	0.23	0.59	
124.00		175.29	1.21	0.01	0.26	1.98	
126.00		173.19	1.25	0.06	0.29	3.45	
127.00	Appurtenance(s)	3127.7	1.27	0.08	0.31	76.77	
128.00		85.29	1.29	0.11	0.33	2.50	
130.00		169.00	1.33	0.16	0.36	6.66	
132.00		166.91	1.37	0.23	0.40	8.39	
134.00		164.81	1.41	0.31	0.44	10.19	
136.00		162.72	1.46	0.40	0.49	12.06	
137.00	Appurtenance(s)	3594.2	1.48	0.44	0.52	289.48	
138.00		80.05	1.50	0.50	0.54	6.98	
140.00		158.52	1.54	0.61	0.59	16.00	
142.00		156.43	1.59	0.74	0.65	18.07	
144.00		154.33	1.63	0.88	0.71	20.19	
146.00		152.24	1.68	1.04	0.78	22.36	
147.00	Appurtenance(s)	3275.6	1.70	1.12	0.81	508.39	
148.00		74.81	1.72	1.21	0.85	12.25	
150.00		148.04	1.77	1.41	0.93	26.85	
152.00		145.95	1.82	1.62	1.01	29.16	
153.00	Appurtenance(s)	136.69	1.84	1.73	1.05	28.61	
154.00		71.66	1.87	1.85	1.09	15.70	
155.00	Appurtenance(s)	2951.4	1.89	1.98	1.14	675.75	
	Totals:	**38,808.0**				**2,193.6**	**Total Wind:** **50,812.4**

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

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Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 39	

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Load Case: 1.2D + 1.0E

Gust Response Factor	1.10			**Sds**	0.18			**Iterations**	23
Dead Load Factor	1.20	**Seismic Load Factor**	1.00	**Sd1**	0.10			**Ss**	0.17
Wind Load Factor	0.00	**Structure Frequency (f1)**	0.32	**SA**	0.03			**S1**	0.06
								Seismic Importance Factor	1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-52.46	-2.31	0.00	-294.09	0.00	294.09	4048.32	2024.16	8933.65	4411.99		0.00	0.00	0.054
2.00	-51.78	-2.31	0.00	-289.47	0.00	289.47	4032.02	2016.01	8833.50	4362.53		0.00	0.00	0.054
4.00	-51.10	-2.31	0.00	-284.85	0.00	284.85	4015.53	2007.77	8733.46	4313.13		0.00	-0.01	0.054
6.00	-50.42	-2.30	0.00	-280.24	0.00	280.24	3998.87	1999.43	8633.56	4263.79		0.01	-0.01	0.053
8.00	-49.75	-2.29	0.00	-275.64	0.00	275.64	3982.01	1991.01	8533.79	4214.52		0.01	-0.02	0.053
10.00	-49.08	-2.28	0.00	-271.06	0.00	271.06	3964.98	1982.49	8434.18	4165.32		0.02	-0.02	0.052
11.50	-48.59	-2.27	0.00	-267.64	0.00	267.64	3952.09	1976.04	8359.57	4128.48		0.03	-0.02	0.046
12.00	-48.42	-2.27	0.00	-266.50	0.00	266.50	3947.76	1973.88	8334.72	4116.20		0.03	-0.03	0.046
14.00	-47.76	-2.26	0.00	-261.96	0.00	261.96	3930.37	1965.18	8235.42	4067.17		0.04	-0.03	0.045
14.16	-47.71	-2.26	0.00	-261.60	0.00	261.60	3928.97	1964.48	8227.49	4063.25		0.04	-0.03	0.053
14.84	-47.49	-2.25	0.00	-260.06	0.00	260.06	3923.00	1961.50	8193.77	4046.60		0.05	-0.03	0.045
16.00	-47.11	-2.25	0.00	-257.44	0.00	257.44	3912.78	1956.39	8136.31	4018.22		0.06	-0.03	0.045
16.50	-46.95	-2.25	0.00	-256.32	0.00	256.32	3908.36	1954.18	8111.55	4005.99		0.06	-0.03	0.051
18.00	-46.46	-2.24	0.00	-252.95	0.00	252.95	3895.02	1947.51	8037.37	3969.35		0.07	-0.04	0.050
20.00	-45.81	-2.22	0.00	-248.48	0.00	248.48	3877.07	1938.54	7938.63	3920.59		0.09	-0.04	0.050
21.00	-45.49	-2.22	0.00	-246.25	0.00	246.25	3868.03	1934.02	7889.33	3896.24		0.10	-0.04	0.050
22.00	-45.17	-2.21	0.00	-244.04	0.00	244.04	3858.94	1929.47	7840.08	3871.92		0.11	-0.05	0.050
24.00	-44.54	-2.20	0.00	-239.61	0.00	239.61	3840.63	1920.32	7741.75	3823.36		0.13	-0.05	0.049
26.00	-43.90	-2.19	0.00	-235.21	0.00	235.21	3822.14	1911.07	7643.63	3774.90		0.15	-0.05	0.049
28.00	-43.28	-2.18	0.00	-230.83	0.00	230.83	3803.46	1901.73	7545.74	3726.56		0.17	-0.06	0.048
30.00	-42.65	-2.16	0.00	-226.48	0.00	226.48	3784.60	1892.30	7448.09	3678.33		0.20	-0.06	0.048
32.00	-42.03	-2.15	0.00	-222.16	0.00	222.16	3765.56	1882.78	7350.68	3630.22		0.22	-0.07	0.047
34.00	-41.42	-2.14	0.00	-217.86	0.00	217.86	3746.34	1873.17	7253.52	3582.24		0.25	-0.07	0.047
36.00	-40.81	-2.12	0.00	-213.59	0.00	213.59	3726.93	1863.47	7156.62	3534.39		0.28	-0.08	0.046
37.06	-40.24	-2.11	0.00	-211.34	0.00	211.34	3716.57	1858.29	7105.38	3509.08		0.30	-0.08	0.056
37.96	-39.76	-2.10	0.00	-209.44	0.00	209.44	3707.74	1853.87	7061.93	3487.62		0.32	-0.08	0.045
38.00	-39.74	-2.10	0.00	-209.36	0.00	209.36	3707.34	1853.67	7060.00	3486.67		0.32	-0.08	0.045
40.00	-38.68	-2.07	0.00	-205.16	0.00	205.16	3687.57	1843.78	6963.65	3439.09		0.35	-0.09	0.045
41.00	-38.15	-2.05	0.00	-203.10	0.00	203.10	3677.62	1838.81	6915.58	3415.35		0.37	-0.09	0.045
42.00	-37.62	-2.04	0.00	-201.04	0.00	201.04	3033.05	1516.53	5788.55	2858.75		0.39	-0.09	0.048
44.00	-37.09	-2.03	0.00	-196.96	0.00	196.96	3018.90	1509.45	5713.49	2821.68		0.43	-0.09	0.050
46.00	-36.56	-2.02	0.00	-192.90	0.00	192.90	3004.56	1502.28	5638.53	2784.66		0.47	-0.10	0.050
48.00	-36.04	-2.01	0.00	-188.87	0.00	188.87	2990.04	1495.02	5563.69	2747.70		0.51	-0.10	0.049
50.00	-35.52	-1.99	0.00	-184.86	0.00	184.86	2975.34	1487.67	5488.97	2710.80		0.55	-0.11	0.048
52.00	-35.00	-1.98	0.00	-180.87	0.00	180.87	2960.46	1480.23	5414.39	2673.96		0.60	-0.11	0.048
54.00	-34.49	-1.97	0.00	-176.90	0.00	176.90	2945.39	1472.69	5339.95	2637.20		0.65	-0.12	0.047
56.00	-33.98	-1.96	0.00	-172.96	0.00	172.96	2930.14	1465.07	5265.67	2600.52		0.70	-0.12	0.047
57.11	-33.70	-1.95	0.00	-170.78	0.00	170.78	2921.60	1460.80	5224.51	2580.19		0.73	-0.12	0.059
58.00	-33.47	-1.95	0.00	-169.04	0.00	169.04	2914.71	1457.35	5191.54	2563.91		0.75	-0.13	0.046
58.50	-33.34	-1.95	0.00	-168.07	0.00	168.07	2910.82	1455.41	5173.04	2554.77		0.76	-0.13	0.056
60.00	-32.96	-1.94	0.00	-165.15	0.00	165.15	2899.09	1449.55	5117.58	2527.38		0.80	-0.13	0.056
62.00	-32.45	-1.93	0.00	-161.27	0.00	161.27	2883.30	1441.65	5043.81	2490.95		0.86	-0.14	0.055
64.00	-31.95	-1.92	0.00	-157.40	0.00	157.40	2867.32	1433.66	4970.21	2454.60		0.92	-0.14	0.054
66.00	-31.45	-1.92	0.00	-153.56	0.00	153.56	2851.15	1425.58	4896.82	2418.35		0.98	-0.15	0.054
68.00	-30.95	-1.91	0.00	-149.73	0.00	149.73	2834.81	1417.40	4823.62	2382.21		1.04	-0.15	0.053
70.00	-30.46	-1.90	0.00	-145.91	0.00	145.91	2818.28	1409.14	4750.64	2346.16		1.11	-0.16	0.052
72.00	-29.63	-1.89	0.00	-142.10	0.00	142.10	2801.57	1400.79	4677.88	2310.23		1.18	-0.17	0.051

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Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 40

74.00	-28.81	-1.88	0.00	-138.32	0.00	138.32	2784.68	1392.34	4605.35	2274.41	1.25	-0.17	0.050
76.00	-27.99	-1.88	0.00	-134.55	0.00	134.55	2161.97	1080.98	3608.45	1782.08	1.32	-0.18	0.056
78.00	-27.57	-1.88	0.00	-130.79	0.00	130.79	2151.06	1075.53	3556.01	1756.18	1.40	-0.18	0.061
80.00	-27.15	-1.88	0.00	-127.03	0.00	127.03	2139.97	1069.98	3503.61	1730.30	1.47	-0.19	0.060
82.00	-26.74	-1.88	0.00	-123.27	0.00	123.27	2128.69	1064.35	3451.27	1704.45	1.55	-0.19	0.059
84.00	-26.33	-1.88	0.00	-119.50	0.00	119.50	2117.24	1058.62	3398.99	1678.63	1.64	-0.20	0.057
86.00	-25.93	-1.89	0.00	-115.74	0.00	115.74	2105.60	1052.80	3346.79	1652.86	1.72	-0.21	0.056
88.00	-25.52	-1.89	0.00	-111.96	0.00	111.96	2093.78	1046.89	3294.68	1627.12	1.81	-0.21	0.055
90.00	-25.12	-1.89	0.00	-108.19	0.00	108.19	2081.77	1040.89	3242.65	1601.42	1.90	-0.22	0.054
92.00	-24.73	-1.89	0.00	-104.42	0.00	104.42	2069.59	1034.79	3190.73	1575.78	1.99	-0.22	0.053
94.00	-24.33	-1.89	0.00	-100.64	0.00	100.64	2057.22	1028.61	3138.91	1550.19	2.09	-0.23	0.052
96.00	-23.94	-1.89	0.00	-96.86	0.00	96.86	2044.67	1022.33	3087.22	1524.66	2.18	-0.24	0.055
98.00	-23.56	-1.89	0.00	-93.08	0.00	93.08	2031.93	1015.97	3035.65	1499.19	2.28	-0.24	0.053
100.00	-23.17	-1.89	0.00	-89.29	0.00	89.29	2019.02	1009.51	2984.22	1473.79	2.39	-0.25	0.052
100.00	-23.17	-1.89	0.00	-89.29	0.00	89.29	1394.49	697.25	2068.33	1021.47	2.39	-0.25	0.060
102.00	-22.85	-1.89	0.00	-85.51	0.00	85.51	1387.39	693.70	2035.72	1005.36	2.49	-0.25	0.068
104.00	-22.53	-1.90	0.00	-81.72	0.00	81.72	1380.13	690.06	2003.09	989.25	2.60	-0.26	0.066
106.00	-22.21	-1.90	0.00	-77.93	0.00	77.93	1372.69	686.35	1970.45	973.13	2.71	-0.27	0.064
108.00	-21.89	-1.90	0.00	-74.14	0.00	74.14	1365.09	682.55	1937.81	957.01	2.83	-0.27	0.062
110.00	-21.58	-1.90	0.00	-70.34	0.00	70.34	1357.32	678.66	1905.17	940.89	2.94	-0.28	0.060
112.00	-21.27	-1.90	0.00	-66.54	0.00	66.54	1349.39	674.69	1872.56	924.79	3.06	-0.29	0.058
113.50	-21.04	-1.90	0.00	-63.70	0.00	63.70	1343.33	671.66	1848.11	912.71	3.15	-0.29	0.056
113.50	-21.04	-1.90	0.00	-63.70	0.00	63.70	1343.33	671.66	1848.11	912.71	3.15	-0.29	0.056
114.00	-20.96	-1.90	0.00	-62.75	0.00	62.75	1341.28	670.64	1839.96	908.69	3.18	-0.29	0.085
115.00	-20.81	-1.90	0.00	-60.85	0.00	60.85	1337.17	668.58	1823.68	900.65	3.24	-0.30	0.083
116.00	-20.55	-1.90	0.00	-58.95	0.00	58.95	1333.01	666.51	1807.40	892.61	3.31	-0.30	0.081
118.00	-20.03	-1.90	0.00	-55.14	0.00	55.14	1324.58	662.29	1774.88	876.54	3.44	-0.31	0.078
120.00	-19.51	-1.90	0.00	-51.34	0.00	51.34	1327.18	663.59	1784.85	881.47	3.57	-0.32	0.073
122.00	-19.21	-1.90	0.00	-47.53	0.00	47.53	1318.63	659.32	1752.36	865.43	3.71	-0.33	0.070
124.00	-18.91	-1.90	0.00	-43.73	0.00	43.73	1309.91	654.95	1719.92	849.40	3.85	-0.34	0.066
126.00	-18.62	-1.90	0.00	-39.93	0.00	39.93	1301.02	650.51	1687.54	833.41	3.99	-0.34	0.062
127.00	-14.82	-1.80	0.00	-38.03	0.00	38.03	1296.51	648.26	1671.38	825.43	4.06	-0.35	0.058
128.00	-14.69	-1.80	0.00	-36.23	0.00	36.23	1291.97	645.98	1655.23	817.46	4.13	-0.35	0.056
130.00	-14.43	-1.79	0.00	-32.64	0.00	32.64	1282.74	641.37	1623.00	801.54	4.28	-0.36	0.052
132.00	-14.18	-1.78	0.00	-29.06	0.00	29.06	1273.35	636.68	1590.85	785.66	4.43	-0.36	0.048
134.00	-13.93	-1.77	0.00	-25.49	0.00	25.49	1263.80	631.90	1558.80	769.83	4.59	-0.37	0.044
136.00	-13.68	-1.76	0.00	-21.95	0.00	21.95	1254.07	627.04	1526.84	754.05	4.74	-0.37	0.040
137.00	-9.35	-1.44	0.00	-20.19	0.00	20.19	1249.15	624.57	1510.90	746.18	4.82	-0.38	0.035
138.00	-9.23	-1.43	0.00	-18.75	0.00	18.75	1244.18	622.09	1494.99	738.32	4.90	-0.38	0.033
140.00	-9.00	-1.42	0.00	-15.88	0.00	15.88	1234.12	617.06	1463.26	722.65	5.06	-0.38	0.029
142.00	-8.77	-1.40	0.00	-13.05	0.00	13.05	1223.90	611.95	1431.66	707.04	5.22	-0.38	0.026
144.00	-8.54	-1.38	0.00	-10.25	0.00	10.25	1213.50	606.75	1400.19	691.50	5.38	-0.39	0.022
146.00	-8.32	-1.35	0.00	-7.50	0.00	7.50	1202.94	601.47	1368.85	676.02	5.54	-0.39	0.018
147.00	-4.37	-0.82	0.00	-6.14	0.00	6.14	1197.60	598.80	1353.24	668.32	5.63	-0.39	0.013
148.00	-4.26	-0.81	0.00	-5.33	0.00	5.33	1192.22	596.11	1337.67	660.62	5.71	-0.39	0.012
150.00	-4.05	-0.78	0.00	-3.72	0.00	3.72	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	6.04	-0.39	0.007
153.00	-3.66	-0.72	0.00	-1.42	0.00	1.42	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	-0.68	0.00	0.00	0.00	0.00	1153.35	576.68	1229.81	607.36	6.28	-0.39	0.000

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Seismic Segment Forces (Factored)

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 41

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)**	0.32	**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	4.58	
4.00		502.00	0.00	0.03	0.01	7.69	
6.00		498.37	0.00	0.04	0.02	9.90	
8.00		494.74	0.01	0.04	0.03	11.49	
10.00		491.11	0.01	0.05	0.03	12.64	
11.50	RB3	365.95	0.01	0.06	0.03	9.96	
12.00		121.53	0.01	0.06	0.03	3.36	
14.00		483.85	0.02	0.06	0.04	14.09	
14.16	RT2	38.55	0.02	0.06	0.04	1.13	
14.84	RB4	163.58	0.02	0.06	0.04	4.85	
16.00		278.08	0.02	0.06	0.04	8.41	
16.50	RT3	119.49	0.02	0.06	0.04	3.64	
18.00		357.10	0.03	0.07	0.04	11.11	
20.00		472.95	0.03	0.07	0.04	15.03	
21.00	RT1 RB5	235.12	0.03	0.07	0.04	7.54	
22.00		234.21	0.04	0.07	0.04	7.57	
24.00		465.69	0.05	0.07	0.04	15.26	
26.00		462.06	0.05	0.07	0.04	15.32	
28.00		458.43	0.06	0.07	0.04	15.35	
30.00		454.80	0.07	0.07	0.04	15.38	
32.00		451.17	0.08	0.07	0.04	15.40	
34.00		447.54	0.09	0.07	0.04	15.42	
36.00	Bot - Section 2	443.91	0.10	0.07	0.04	15.44	
37.06	RT4	439.75	0.11	0.07	0.04	15.37	
37.96	RB6	371.88	0.11	0.07	0.04	13.05	
38.00		16.50	0.11	0.07	0.04	0.58	
40.00		821.35	0.13	0.07	0.03	29.09	
41.00	RT5 RB7	408.14	0.13	0.07	0.03	14.52	
42.00	Top - Section 1	406.44	0.14	0.07	0.03	14.51	
44.00		378.42	0.15	0.07	0.03	13.61	
46.00		375.28	0.17	0.07	0.03	13.57	
48.00		372.13	0.18	0.06	0.03	13.51	
50.00		368.99	0.20	0.06	0.02	13.40	
52.00		365.85	0.21	0.06	0.02	13.23	
54.00		362.70	0.23	0.06	0.02	13.01	
56.00		359.56	0.25	0.06	0.02	12.70	
57.11	RT6	198.20	0.26	0.05	0.02	6.92	
58.00	RB8	158.22	0.26	0.05	0.02	5.46	
58.50	RT7	88.61	0.27	0.05	0.02	3.04	
60.00		264.66	0.28	0.05	0.01	8.84	
62.00		350.13	0.30	0.04	0.01	11.18	
64.00		346.98	0.32	0.04	0.01	10.43	
66.00		343.84	0.34	0.03	0.01	9.53	
68.00		340.69	0.36	0.03	0.01	8.48	
70.00	Bot - Section 3	337.55	0.39	0.02	0.01	7.29	

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Seismic Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 42	

72.00		617.79	0.41	0.02	0.01	10.98	
74.00		612.02	0.43	0.01	0.01	8.25	
76.00	Top - Section 2 RT8 RB9	606.26	0.45	0.00	0.01	5.32	
78.00		275.52	0.48	-0.01	0.01	1.03	
80.00		272.90	0.50	-0.02	0.01	-0.41	
82.00		270.28	0.53	-0.03	0.01	-1.84	
84.00		267.66	0.56	-0.04	0.01	-3.22	
86.00		265.04	0.58	-0.05	0.01	-4.52	
88.00		262.42	0.61	-0.06	0.02	-5.70	
90.00		259.80	0.64	-0.07	0.02	-6.72	
92.00		257.18	0.67	-0.08	0.02	-7.58	
94.00		254.56	0.70	-0.09	0.03	-8.25	
96.00	RT9 RB10	251.94	0.73	-0.09	0.03	-8.73	
98.00		249.32	0.76	-0.10	0.04	-9.01	
100.00	Top - Section 3	246.70	0.79	-0.11	0.05	-9.10	
102.00		195.61	0.82	-0.12	0.06	-7.22	
104.00		193.51	0.85	-0.12	0.07	-7.00	
106.00		191.42	0.88	-0.12	0.08	-6.63	
108.00		189.32	0.92	-0.12	0.09	-6.14	
110.00		187.22	0.95	-0.12	0.11	-5.52	
112.00		185.13	0.99	-0.11	0.12	-4.77	
113.50	RT10	137.47	1.01	-0.11	0.14	-3.10	
114.00		45.56	1.02	-0.10	0.14	-0.97	
115.00	Bot - Section 5	90.73	1.04	-0.10	0.15	-1.72	
116.00		181.78	1.06	-0.09	0.16	-2.96	
118.00		360.42	1.10	-0.07	0.18	-3.77	
120.00	Top - Section 4	356.23	1.13	-0.05	0.21	-1.40	
122.00		177.39	1.17	-0.02	0.23	0.59	
124.00		175.29	1.21	0.01	0.26	1.98	
126.00		173.19	1.25	0.06	0.29	3.45	
127.00	Appurtenance(s)	3127.7	1.27	0.08	0.31	76.77	
128.00		85.29	1.29	0.11	0.33	2.50	
130.00		169.00	1.33	0.16	0.36	6.66	
132.00		166.91	1.37	0.23	0.40	8.39	
134.00		164.81	1.41	0.31	0.44	10.19	
136.00		162.72	1.46	0.40	0.49	12.06	
137.00	Appurtenance(s)	3594.2	1.48	0.44	0.52	289.48	
138.00		80.05	1.50	0.50	0.54	6.98	
140.00		158.52	1.54	0.61	0.59	16.00	
142.00		156.43	1.59	0.74	0.65	18.07	
144.00		154.33	1.63	0.88	0.71	20.19	
146.00		152.24	1.68	1.04	0.78	22.36	
147.00	Appurtenance(s)	3275.6	1.70	1.12	0.81	508.39	
148.00		74.81	1.72	1.21	0.85	12.25	
150.00		148.04	1.77	1.41	0.93	26.85	
152.00		145.95	1.82	1.62	1.01	29.16	
153.00	Appurtenance(s)	136.69	1.84	1.73	1.05	28.61	
154.00		71.66	1.87	1.85	1.09	15.70	
155.00	Appurtenance(s)	2951.4	1.89	1.98	1.14	675.75	
	Totals:	**38,808.0**				**2,193.6**	**Total Wind:** **50,812.4**

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

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Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 43	

Tower Engineering Solutions

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)**	0.32	**SA**	0.03			**Seismic Importance Factor**	1.00

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-39.35	-2.31	0.00	-291.28	0.00	291.28	4048.32	2024.16	8933.65	4411.99		0.00	0.00	0.052
2.00	-38.83	-2.31	0.00	-286.67	0.00	286.67	4032.02	2016.01	8833.50	4362.53		0.00	0.00	0.051
4.00	-38.32	-2.30	0.00	-282.05	0.00	282.05	4015.53	2007.77	8733.46	4313.13		0.00	-0.01	0.051
6.00	-37.82	-2.30	0.00	-277.44	0.00	277.44	3998.87	1999.43	8633.56	4263.79		0.01	-0.01	0.051
8.00	-37.31	-2.29	0.00	-272.85	0.00	272.85	3982.01	1991.01	8533.79	4214.52		0.01	-0.02	0.050
10.00	-36.81	-2.28	0.00	-268.28	0.00	268.28	3964.98	1982.49	8434.18	4165.32		0.02	-0.02	0.050
11.50	-36.44	-2.27	0.00	-264.86	0.00	264.86	3952.09	1976.04	8359.57	4128.48		0.03	-0.02	0.044
12.00	-36.31	-2.27	0.00	-263.73	0.00	263.73	3947.76	1973.88	8334.72	4116.20		0.03	-0.02	0.043
14.00	-35.82	-2.25	0.00	-259.20	0.00	259.20	3930.37	1965.18	8235.42	4067.17		0.04	-0.03	0.043
14.16	-35.78	-2.25	0.00	-258.84	0.00	258.84	3928.97	1964.48	8227.49	4063.25		0.04	-0.03	0.051
14.84	-35.61	-2.25	0.00	-257.31	0.00	257.31	3923.00	1961.50	8193.77	4046.60		0.05	-0.03	0.043
16.00	-35.33	-2.24	0.00	-254.70	0.00	254.70	3912.78	1956.39	8136.31	4018.22		0.06	-0.03	0.043
16.50	-35.21	-2.24	0.00	-253.58	0.00	253.58	3908.36	1954.18	8111.55	4005.99		0.06	-0.03	0.048
18.00	-34.84	-2.23	0.00	-250.22	0.00	250.22	3895.02	1947.51	8037.37	3969.35		0.07	-0.04	0.048
20.00	-34.36	-2.22	0.00	-245.77	0.00	245.77	3877.07	1938.54	7938.63	3920.59		0.09	-0.04	0.048
21.00	-34.12	-2.21	0.00	-243.55	0.00	243.55	3868.03	1934.02	7889.33	3896.24		0.10	-0.04	0.047
22.00	-33.88	-2.20	0.00	-241.34	0.00	241.34	3858.94	1929.47	7840.08	3871.92		0.10	-0.05	0.047
24.00	-33.40	-2.19	0.00	-236.93	0.00	236.93	3840.63	1920.32	7741.75	3823.36		0.12	-0.05	0.047
26.00	-32.93	-2.18	0.00	-232.55	0.00	232.55	3822.14	1911.07	7643.63	3774.90		0.15	-0.05	0.046
28.00	-32.46	-2.16	0.00	-228.20	0.00	228.20	3803.46	1901.73	7545.74	3726.56		0.17	-0.06	0.046
30.00	-31.99	-2.15	0.00	-223.87	0.00	223.87	3784.60	1892.30	7448.09	3678.33		0.19	-0.06	0.045
32.00	-31.53	-2.14	0.00	-219.57	0.00	219.57	3765.56	1882.78	7350.68	3630.22		0.22	-0.07	0.045
34.00	-31.06	-2.12	0.00	-215.30	0.00	215.30	3746.34	1873.17	7253.52	3582.24		0.25	-0.07	0.045
36.00	-30.61	-2.11	0.00	-211.06	0.00	211.06	3726.93	1863.47	7156.62	3534.39		0.28	-0.08	0.044
37.06	-30.18	-2.09	0.00	-208.82	0.00	208.82	3716.57	1858.29	7105.38	3509.08		0.30	-0.08	0.054
37.96	-29.82	-2.08	0.00	-206.94	0.00	206.94	3707.74	1853.87	7061.93	3487.62		0.31	-0.08	0.043
38.00	-29.80	-2.08	0.00	-206.85	0.00	206.85	3707.34	1853.67	7060.00	3486.67		0.31	-0.08	0.043
40.00	-29.01	-2.05	0.00	-202.69	0.00	202.69	3687.57	1843.78	6963.65	3439.09		0.35	-0.08	0.043
41.00	-28.61	-2.04	0.00	-200.64	0.00	200.64	3677.62	1838.81	6915.58	3415.35		0.37	-0.09	0.042
42.00	-28.21	-2.03	0.00	-198.60	0.00	198.60	3033.05	1516.53	5788.55	2858.75		0.38	-0.09	0.046
44.00	-27.82	-2.01	0.00	-194.55	0.00	194.55	3018.90	1509.45	5713.49	2821.68		0.42	-0.09	0.048
46.00	-27.42	-2.00	0.00	-190.52	0.00	190.52	3004.56	1502.28	5638.53	2784.66		0.46	-0.10	0.047
48.00	-27.03	-1.99	0.00	-186.52	0.00	186.52	2990.04	1495.02	5563.69	2747.70		0.50	-0.10	0.047
50.00	-26.64	-1.98	0.00	-182.54	0.00	182.54	2975.34	1487.67	5488.97	2710.80		0.55	-0.11	0.046
52.00	-26.25	-1.97	0.00	-178.59	0.00	178.59	2960.46	1480.23	5414.39	2673.96		0.59	-0.11	0.046
54.00	-25.86	-1.95	0.00	-174.66	0.00	174.66	2945.39	1472.69	5339.95	2637.20		0.64	-0.12	0.045
56.00	-25.48	-1.94	0.00	-170.75	0.00	170.75	2930.14	1465.07	5265.67	2600.52		0.69	-0.12	0.044
57.11	-25.27	-1.94	0.00	-168.60	0.00	168.60	2921.60	1460.80	5224.51	2580.19		0.72	-0.12	0.056
58.00	-25.10	-1.93	0.00	-166.87	0.00	166.87	2914.71	1457.35	5191.54	2563.91		0.74	-0.13	0.043
58.50	-25.01	-1.93	0.00	-165.91	0.00	165.91	2910.82	1455.41	5173.04	2554.77		0.75	-0.13	0.053
60.00	-24.72	-1.92	0.00	-163.02	0.00	163.02	2899.09	1449.55	5117.58	2527.38		0.79	-0.13	0.053
62.00	-24.34	-1.91	0.00	-159.18	0.00	159.18	2883.30	1441.65	5043.81	2490.95		0.85	-0.14	0.052
64.00	-23.96	-1.90	0.00	-155.35	0.00	155.35	2867.32	1433.66	4970.21	2454.60		0.91	-0.14	0.052
66.00	-23.58	-1.89	0.00	-151.55	0.00	151.55	2851.15	1425.58	4896.82	2418.35		0.97	-0.15	0.051
68.00	-23.21	-1.89	0.00	-147.76	0.00	147.76	2834.81	1417.40	4823.62	2382.21		1.03	-0.15	0.050
70.00	-22.84	-1.88	0.00	-143.99	0.00	143.99	2818.28	1409.14	4750.64	2346.16		1.10	-0.16	0.050
72.00	-22.22	-1.87	0.00	-140.23	0.00	140.23	2801.57	1400.79	4677.88	2310.23		1.16	-0.16	0.048

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Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 44

74.00	-21.60	-1.86	0.00	-136.49	0.00	136.49	2784.68	1392.34	4605.35	2274.41	1.23	-0.17	0.048
76.00	-20.99	-1.86	0.00	-132.76	0.00	132.76	2161.97	1080.98	3608.45	1782.08	1.31	-0.17	0.053
78.00	-20.68	-1.86	0.00	-129.05	0.00	129.05	2151.06	1075.53	3556.01	1756.18	1.38	-0.18	0.058
80.00	-20.36	-1.86	0.00	-125.34	0.00	125.34	2139.97	1069.98	3503.61	1730.30	1.46	-0.19	0.057
82.00	-20.06	-1.86	0.00	-121.62	0.00	121.62	2128.69	1064.35	3451.27	1704.45	1.54	-0.19	0.056
84.00	-19.75	-1.86	0.00	-117.90	0.00	117.90	2117.24	1058.62	3398.99	1678.63	1.62	-0.20	0.055
86.00	-19.44	-1.86	0.00	-114.18	0.00	114.18	2105.60	1052.80	3346.79	1652.86	1.70	-0.20	0.054
88.00	-19.14	-1.86	0.00	-110.46	0.00	110.46	2093.78	1046.89	3294.68	1627.12	1.79	-0.21	0.053
90.00	-18.84	-1.86	0.00	-106.74	0.00	106.74	2081.77	1040.89	3242.65	1601.42	1.88	-0.22	0.051
92.00	-18.54	-1.86	0.00	-103.01	0.00	103.01	2069.59	1034.79	3190.73	1575.78	1.97	-0.22	0.050
94.00	-18.25	-1.86	0.00	-99.28	0.00	99.28	2057.22	1028.61	3138.91	1550.19	2.06	-0.23	0.049
96.00	-17.96	-1.87	0.00	-95.55	0.00	95.55	2044.67	1022.33	3087.22	1524.66	2.16	-0.23	0.052
98.00	-17.66	-1.87	0.00	-91.82	0.00	91.82	2031.93	1015.97	3035.65	1499.19	2.26	-0.24	0.051
100.00	-17.38	-1.87	0.00	-88.09	0.00	88.09	2019.02	1009.51	2984.22	1473.79	2.36	-0.25	0.049
100.00	-17.38	-1.87	0.00	-88.09	0.00	88.09	1394.49	697.25	2068.33	1021.47	2.36	-0.25	0.057
102.00	-17.13	-1.87	0.00	-84.36	0.00	84.36	1387.39	693.70	2035.72	1005.36	2.46	-0.25	0.065
104.00	-16.89	-1.87	0.00	-80.63	0.00	80.63	1380.13	690.06	2003.09	989.25	2.57	-0.26	0.063
106.00	-16.66	-1.87	0.00	-76.89	0.00	76.89	1372.69	686.35	1970.45	973.13	2.68	-0.26	0.061
108.00	-16.42	-1.87	0.00	-73.15	0.00	73.15	1365.09	682.55	1937.81	957.01	2.79	-0.27	0.059
110.00	-16.18	-1.87	0.00	-69.41	0.00	69.41	1357.32	678.66	1905.17	940.89	2.91	-0.28	0.057
112.00	-15.95	-1.87	0.00	-65.67	0.00	65.67	1349.39	674.69	1872.56	924.79	3.02	-0.28	0.055
113.50	-15.78	-1.87	0.00	-62.86	0.00	62.86	1343.33	671.66	1848.11	912.71	3.11	-0.29	0.053
113.50	-15.78	-1.87	0.00	-62.86	0.00	62.86	1343.33	671.66	1848.11	912.71	3.11	-0.29	0.053
114.00	-15.72	-1.87	0.00	-61.93	0.00	61.93	1341.28	670.64	1839.96	908.69	3.15	-0.29	0.080
115.00	-15.61	-1.87	0.00	-60.06	0.00	60.06	1337.17	668.58	1823.68	900.65	3.21	-0.29	0.078
116.00	-15.41	-1.87	0.00	-58.18	0.00	58.18	1333.01	666.51	1807.40	892.61	3.27	-0.30	0.077
118.00	-15.02	-1.87	0.00	-54.44	0.00	54.44	1324.58	662.29	1774.88	876.54	3.40	-0.31	0.073
120.00	-14.63	-1.87	0.00	-50.69	0.00	50.69	1327.18	663.59	1784.85	881.47	3.53	-0.32	0.069
122.00	-14.40	-1.87	0.00	-46.94	0.00	46.94	1318.63	659.32	1752.36	865.43	3.66	-0.32	0.065
124.00	-14.18	-1.87	0.00	-43.20	0.00	43.20	1309.91	654.95	1719.92	849.40	3.80	-0.33	0.062
126.00	-13.96	-1.87	0.00	-39.45	0.00	39.45	1301.02	650.51	1687.54	833.41	3.94	-0.34	0.058
127.00	-11.11	-1.78	0.00	-37.58	0.00	37.58	1296.51	648.26	1671.38	825.43	4.01	-0.34	0.054
128.00	-11.01	-1.77	0.00	-35.81	0.00	35.81	1291.97	645.98	1655.23	817.46	4.08	-0.35	0.052
130.00	-10.82	-1.77	0.00	-32.26	0.00	32.26	1282.74	641.37	1623.00	801.54	4.23	-0.35	0.049
132.00	-10.63	-1.76	0.00	-28.73	0.00	28.73	1273.35	636.68	1590.85	785.66	4.38	-0.36	0.045
134.00	-10.45	-1.75	0.00	-25.21	0.00	25.21	1263.80	631.90	1558.80	769.83	4.53	-0.36	0.041
136.00	-10.26	-1.74	0.00	-21.71	0.00	21.71	1254.07	627.04	1526.84	754.05	4.68	-0.37	0.037
137.00	-7.01	-1.43	0.00	-19.98	0.00	19.98	1249.15	624.57	1510.90	746.18	4.76	-0.37	0.032
138.00	-6.92	-1.42	0.00	-18.55	0.00	18.55	1244.18	622.09	1494.99	738.32	4.84	-0.37	0.031
140.00	-6.75	-1.40	0.00	-15.72	0.00	15.72	1234.12	617.06	1463.26	722.65	5.00	-0.38	0.027
142.00	-6.57	-1.38	0.00	-12.91	0.00	12.91	1223.90	611.95	1431.66	707.04	5.16	-0.38	0.024
144.00	-6.40	-1.36	0.00	-10.15	0.00	10.15	1213.50	606.75	1400.19	691.50	5.32	-0.38	0.020
146.00	-6.24	-1.34	0.00	-7.43	0.00	7.43	1202.94	601.47	1368.85	676.02	5.48	-0.39	0.016
147.00	-3.28	-0.81	0.00	-6.09	0.00	6.09	1197.60	598.80	1353.24	668.32	5.56	-0.39	0.012
148.00	-3.20	-0.80	0.00	-5.28	0.00	5.28	1192.22	596.11	1337.67	660.62	5.64	-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	5.80	-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	6.05	-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	6.13	-0.39	0.003
155.00	0.00	-0.68	0.00	0.00	0.00	0.00	1153.35	576.68	1229.81	607.36	6.21	-0.39	0.000

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Wind Loading - Shaft

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 45	

Tower Engineering Solutions

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00

Iterations 24

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

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Wind Loading - Shaft

Structure: CT00302-S-SBA | **Code:** EIA/TIA-222-G | 8/24/2021

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: 46

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
118.00		1.26	1.04	11.399	12.54	193.15	1.000	0.000	2.00	5.762	5.76	72.2	0.0	360.4
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**

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Discrete Appurtenance Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 47	

Tower Engineering Solutions

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	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
2	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
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	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
5	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
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	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
8	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
9	155.00	BXA-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
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	(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
14	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
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	APXVSPP18-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
17	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
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	(3) T-Framew/ walking	1	11.392	12.531	1.00	1.00	25.00	1620.00	0.000	0.000	313.28	0.00	0.00
23	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
24	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
25	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
26	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
27	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
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	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
30	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
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	8843 B2 B66A	3	11.392	12.531	0.38	0.75	1.85	210.00	0.000	0.000	23.12	0.00	0.00
33	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
34	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
35	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
36	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
37	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
38	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
39	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
40	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
41	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
42	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
43	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
							Totals:		**12,700.79**			**4,394.14**		

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Total Applied Force Summary

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 48

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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	570.11	0.00	0.00
4.00		131.38	566.47	0.00	0.00
6.00		128.57	562.84	0.00	0.00
8.00		125.84	559.21	0.00	0.00
10.00		123.19	555.58	0.00	0.00
11.50		90.85	414.30	0.00	0.00
12.00		30.07	137.65	0.00	0.00
14.00		118.11	548.32	0.00	0.00
14.16		9.40	43.71	0.00	0.00
14.84		39.71	185.50	0.00	0.00
16.00		66.99	315.48	0.00	0.00
16.50		28.69	135.60	0.00	0.00
18.00		84.91	405.45	0.00	0.00
20.00		111.03	537.43	0.00	0.00
21.00		54.85	267.35	0.00	0.00
22.00		54.30	266.44	0.00	0.00
24.00		106.63	530.16	0.00	0.00
26.00		104.52	526.53	0.00	0.00
28.00		102.47	522.90	0.00	0.00
30.00		100.56	519.27	0.00	0.00
32.00		100.44	515.64	0.00	0.00
34.00		100.23	512.01	0.00	0.00
36.00		99.94	508.38	0.00	0.00
37.06		53.61	473.92	0.00	0.00
37.96		45.43	400.89	0.00	0.00
38.00		2.02	17.79	0.00	0.00
40.00		100.74	885.83	0.00	0.00
41.00		50.15	440.37	0.00	0.00
42.00		50.02	438.68	0.00	0.00
44.00		99.72	442.89	0.00	0.00
46.00		99.14	439.75	0.00	0.00
48.00		98.52	436.61	0.00	0.00
50.00		97.87	433.46	0.00	0.00
52.00		97.19	430.32	0.00	0.00
54.00		96.48	427.17	0.00	0.00
56.00		95.75	424.03	0.00	0.00
57.11		52.81	233.98	0.00	0.00
58.00		42.17	186.91	0.00	0.00
58.50		23.63	106.95	0.00	0.00
60.00		70.60	319.67	0.00	0.00
62.00		93.45	423.48	0.00	0.00
64.00		92.66	420.33	0.00	0.00
66.00		91.85	417.19	0.00	0.00
68.00		91.04	414.05	0.00	0.00
70.00		90.21	410.90	0.00	0.00
72.00		90.74	691.14	0.00	0.00

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Total Applied Force Summary

Structure:	CT00302-S-SBA		**Code:**	EIA/TIA-222-G	8/24/2021
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: 49

74.00		89.90	685.37	0.00	0.00
76.00		89.06	679.61	0.00	0.00
78.00		88.21	348.87	0.00	0.00
80.00		87.36	346.25	0.00	0.00
82.00		86.51	343.63	0.00	0.00
84.00		85.65	341.01	0.00	0.00
86.00		84.80	338.39	0.00	0.00
88.00		83.94	335.77	0.00	0.00
90.00		83.08	333.15	0.00	0.00
92.00		82.23	330.53	0.00	0.00
94.00		81.37	327.91	0.00	0.00
96.00		80.51	325.29	0.00	0.00
98.00		79.65	322.67	0.00	0.00
100.00		78.80	320.05	0.00	0.00
102.00		77.94	268.96	0.00	0.00
104.00		77.09	266.86	0.00	0.00
106.00		76.24	264.77	0.00	0.00
108.00		75.39	262.67	0.00	0.00
110.00		74.54	260.58	0.00	0.00
112.00		73.69	258.48	0.00	0.00
113.50		54.72	192.48	0.00	0.00
114.00		18.13	63.90	0.00	0.00
115.00		36.11	127.41	0.00	0.00
116.00		36.44	218.46	0.00	0.00
118.00		72.25	433.77	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:	**11,207.52**	**43,716.92**	**0.00**	**148.37**

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Linear Appurtenance Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 50	

Tower Engineering Solutions

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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.028	0.000	11.444	0.00	0.00
60.00	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.028	0.000	11.450	0.00	0.00
62.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	11.456	0.00	0.00
64.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.028	0.000	11.460	0.00	0.00
66.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	11.463	0.00	0.00
68.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	11.465	0.00	0.00
70.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	11.466	0.00	0.00
72.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.029	0.000	11.467	0.00	0.00
74.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	11.466	0.00	0.00

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Linear Appurtenance Segment Forces (Factored)

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 51	

Tower Engineering Solutions

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)
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	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	11.463	0.00	0.00
80.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	11.460	0.00	0.00
82.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.030	0.000	11.458	0.00	0.00
84.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	11.455	0.00	0.00
86.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	11.451	0.00	0.00
88.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.031	0.000	11.448	0.00	0.00
90.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	11.444	0.00	0.00
92.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	11.440	0.00	0.00
94.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.032	0.000	11.437	0.00	0.00
96.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	11.433	0.00	0.00
98.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	11.429	0.00	0.00
100.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.033	0.000	11.425	0.00	0.00
102.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	11.422	0.00	0.00
104.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	11.418	0.00	0.00
106.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.034	0.000	11.415	0.00	0.00
108.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	11.412	0.00	0.00
110.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	11.409	0.00	0.00
112.00	1.25" Reinforcing	Yes	2.00	0.000	1.25	0.21	0.00	0.035	0.000	11.406	0.00	0.00
113.50	1.25" Reinforcing	Yes	1.50	0.000	1.25	0.16	0.00	0.036	0.000	11.404	0.00	0.00
114.00	1.25" Reinforcing	Yes	0.50	0.000	1.25	0.05	0.00	0.036	0.000	11.403	0.00	0.00
115.00	1.25" Reinforcing	Yes	1.00	0.000	1.25	0.10	0.00	0.036	0.000	11.402	0.00	0.00
										Totals:	**0.0**	**0.0**

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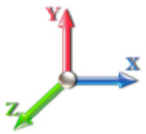
Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 52	

Load Case: 1.0D + 1.0W 60 mph Wind

Dead Load Factor 1.00

Wind Load Factor 1.00



Iterations 24

Seg Elev (ft)	Pu FY (-) (kips)	Vu FX (-) (kips)	Tu MY (-) (ft-kips)	Mu MZ (ft-kips)	Mu MX (ft-kips)	Resultant Moment (ft-kips)	phi Pn (kips)	phi Vn (kips)	phi Tn (ft-kips)	phi Mn (ft-kips)	Total Deflect (in)	Rotation Sway (deg)	Rotation Twist (deg)	Stress Ratio
0.00	-43.72	-11.21	0.00	-1119.1	0.00	1119.13	4048.32	2024.16	8933.65	4411.99	0.00	0.000	0.000	0.181
2.00	-43.14	-11.09	0.00	-1096.7	0.00	1096.71	4032.02	2016.01	8833.50	4362.53	0.00	-0.016	0.000	0.179
4.00	-42.57	-10.97	0.00	-1074.5	0.00	1074.53	4015.53	2007.77	8733.46	4313.13	0.01	-0.032	0.000	0.177
6.00	-42.01	-10.85	0.00	-1052.5	0.00	1052.59	3998.87	1999.43	8633.56	4263.79	0.03	-0.048	0.000	0.175
8.00	-41.44	-10.74	0.00	-1030.8	0.00	1030.89	3982.01	1991.01	8533.79	4214.52	0.05	-0.064	0.000	0.173
10.00	-40.89	-10.62	0.00	-1009.4	0.00	1009.41	3964.98	1982.49	8434.18	4165.32	0.08	-0.079	0.000	0.171
11.50	-40.47	-10.54	0.00	-993.48	0.00	993.48	3952.09	1976.04	8359.57	4128.48	0.11	-0.091	0.000	0.148
12.00	-40.33	-10.51	0.00	-988.21	0.00	988.21	3947.76	1973.88	8334.72	4116.20	0.12	-0.095	0.000	0.148
14.00	-39.78	-10.40	0.00	-967.18	0.00	967.18	3930.37	1965.18	8235.42	4067.17	0.16	-0.108	0.000	0.146
14.16	-39.74	-10.39	0.00	-965.52	0.00	965.52	3928.97	1964.48	8227.49	4063.25	0.17	-0.110	0.000	0.173
14.84	-39.55	-10.36	0.00	-958.45	0.00	958.45	3923.00	1961.50	8193.77	4046.60	0.18	-0.115	0.000	0.145
16.00	-39.24	-10.29	0.00	-946.44	0.00	946.44	3912.78	1956.39	8136.31	4018.22	0.21	-0.123	0.000	0.144
16.50	-39.10	-10.27	0.00	-941.29	0.00	941.29	3908.36	1954.18	8111.55	4005.99	0.23	-0.127	0.000	0.164
18.00	-38.69	-10.19	0.00	-925.89	0.00	925.89	3895.02	1947.51	8037.37	3969.35	0.27	-0.138	0.000	0.163
20.00	-38.15	-10.09	0.00	-905.50	0.00	905.50	3877.07	1938.54	7938.63	3920.59	0.33	-0.154	0.000	0.161
21.00	-37.88	-10.04	0.00	-895.41	0.00	895.41	3868.03	1934.02	7889.33	3896.24	0.36	-0.162	0.000	0.160
22.00	-37.61	-9.99	0.00	-885.38	0.00	885.38	3858.94	1929.47	7840.08	3871.92	0.40	-0.170	0.000	0.159
24.00	-37.08	-9.89	0.00	-865.40	0.00	865.40	3840.63	1920.32	7741.75	3823.36	0.47	-0.185	0.000	0.157
26.00	-36.55	-9.80	0.00	-845.61	0.00	845.61	3822.14	1911.07	7643.63	3774.90	0.55	-0.201	0.000	0.154
28.00	-36.03	-9.70	0.00	-826.02	0.00	826.02	3803.46	1901.73	7545.74	3726.56	0.64	-0.216	0.000	0.152
30.00	-35.51	-9.61	0.00	-806.62	0.00	806.62	3784.60	1892.30	7448.09	3678.33	0.73	-0.232	0.000	0.150
32.00	-34.99	-9.51	0.00	-787.40	0.00	787.40	3765.56	1882.78	7350.68	3630.22	0.83	-0.247	0.000	0.148
34.00	-34.47	-9.42	0.00	-768.37	0.00	768.37	3746.34	1873.17	7253.52	3582.24	0.94	-0.263	0.000	0.146
36.00	-33.96	-9.33	0.00	-749.53	0.00	749.53	3726.93	1863.47	7156.62	3534.39	1.05	-0.278	0.000	0.144
37.06	-33.49	-9.28	0.00	-739.64	0.00	739.64	3716.57	1858.29	7105.38	3509.08	1.12	-0.286	0.000	0.175
37.96	-33.09	-9.23	0.00	-731.30	0.00	731.30	3707.74	1853.87	7061.93	3487.62	1.17	-0.295	0.000	0.140
38.00	-33.07	-9.23	0.00	-730.93	0.00	730.93	3707.34	1853.67	7060.00	3486.67	1.17	-0.295	0.000	0.140
40.00	-32.18	-9.13	0.00	-712.46	0.00	712.46	3687.57	1843.78	6963.65	3439.09	1.30	-0.310	0.000	0.138
41.00	-31.74	-9.09	0.00	-703.33	0.00	703.33	3677.62	1838.81	6915.58	3415.35	1.37	-0.317	0.000	0.137
42.00	-31.30	-9.04	0.00	-694.25	0.00	694.25	3033.05	1516.53	5788.55	2858.75	1.43	-0.325	0.000	0.147
44.00	-30.86	-8.94	0.00	-676.17	0.00	676.17	3018.90	1509.45	5713.49	2821.68	1.57	-0.340	0.000	0.153
46.00	-30.41	-8.85	0.00	-658.28	0.00	658.28	3004.56	1502.28	5638.53	2784.66	1.72	-0.356	0.000	0.151
48.00	-29.98	-8.76	0.00	-640.58	0.00	640.58	2990.04	1495.02	5563.69	2747.70	1.87	-0.371	0.000	0.148
50.00	-29.54	-8.67	0.00	-623.06	0.00	623.06	2975.34	1487.67	5488.97	2710.80	2.03	-0.387	0.000	0.146
52.00	-29.11	-8.57	0.00	-605.73	0.00	605.73	2960.46	1480.23	5414.39	2673.96	2.20	-0.402	0.000	0.143
54.00	-28.68	-8.48	0.00	-588.59	0.00	588.59	2945.39	1472.69	5339.95	2637.20	2.37	-0.417	0.000	0.140
56.00	-28.26	-8.39	0.00	-571.62	0.00	571.62	2930.14	1465.07	5265.67	2600.52	2.55	-0.433	0.000	0.138
57.11	-28.02	-8.34	0.00	-562.31	0.00	562.31	2921.60	1460.80	5224.51	2580.19	2.65	-0.441	0.000	0.174
58.00	-27.83	-8.30	0.00	-554.89	0.00	554.89	2914.71	1457.35	5191.54	2563.91	2.73	-0.450	0.000	0.134
58.50	-27.73	-8.28	0.00	-550.74	0.00	550.74	2910.82	1455.41	5173.04	2554.77	2.78	-0.453	0.000	0.163
60.00	-27.40	-8.21	0.00	-538.33	0.00	538.33	2899.09	1449.55	5117.58	2527.38	2.92	-0.467	0.000	0.161
62.00	-26.98	-8.12	0.00	-521.91	0.00	521.91	2883.30	1441.65	5043.81	2490.95	3.12	-0.485	0.000	0.158
64.00	-26.56	-8.03	0.00	-505.66	0.00	505.66	2867.32	1433.66	4970.21	2454.60	3.33	-0.503	0.000	0.155
66.00	-26.14	-7.95	0.00	-489.59	0.00	489.59	2851.15	1425.58	4896.82	2418.35	3.54	-0.521	0.000	0.152
68.00	-25.72	-7.86	0.00	-473.70	0.00	473.70	2834.81	1417.40	4823.62	2382.21	3.77	-0.538	0.000	0.149
70.00	-25.31	-7.77	0.00	-457.98	0.00	457.98	2818.28	1409.14	4750.64	2346.16	4.00	-0.556	0.000	0.146
72.00	-24.62	-7.68	0.00	-442.43	0.00	442.43	2801.57	1400.79	4677.88	2310.23	4.23	-0.573	0.000	0.141
74.00	-23.93	-7.59	0.00	-427.06	0.00	427.06	2784.68	1392.34	4605.35	2274.41	4.48	-0.590	0.000	0.138

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Calculated Forces

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 53

76.00	-23.25	-7.50	0.00	-411.88	0.00	411.88	2161.97	1080.98	3608.45	1782.08	4.73	-0.607	0.000	0.153
78.00	-22.90	-7.42	0.00	-396.87	0.00	396.87	2151.06	1075.53	3556.01	1756.18	4.99	-0.624	0.000	0.164
80.00	-22.55	-7.34	0.00	-382.03	0.00	382.03	2139.97	1069.98	3503.61	1730.30	5.25	-0.643	0.000	0.160
82.00	-22.21	-7.25	0.00	-367.36	0.00	367.36	2128.69	1064.35	3451.27	1704.45	5.53	-0.661	0.000	0.156
84.00	-21.86	-7.17	0.00	-352.85	0.00	352.85	2117.24	1058.62	3398.99	1678.63	5.81	-0.679	0.000	0.151
86.00	-21.53	-7.09	0.00	-338.51	0.00	338.51	2105.60	1052.80	3346.79	1652.86	6.09	-0.697	0.000	0.147
88.00	-21.19	-7.01	0.00	-324.34	0.00	324.34	2093.78	1046.89	3294.68	1627.12	6.39	-0.715	0.000	0.143
90.00	-20.85	-6.92	0.00	-310.33	0.00	310.33	2081.77	1040.89	3242.65	1601.42	6.69	-0.732	0.000	0.138
92.00	-20.52	-6.84	0.00	-296.48	0.00	296.48	2069.59	1034.79	3190.73	1575.78	7.00	-0.749	0.000	0.134
94.00	-20.19	-6.76	0.00	-282.79	0.00	282.79	2057.22	1028.61	3138.91	1550.19	7.32	-0.766	0.000	0.130
96.00	-19.87	-6.69	0.00	-269.26	0.00	269.26	2044.67	1022.33	3087.22	1524.66	7.65	-0.782	0.000	0.135
98.00	-19.54	-6.61	0.00	-255.89	0.00	255.89	2031.93	1015.97	3035.65	1499.19	7.98	-0.799	0.000	0.130
100.00	-19.22	-6.53	0.00	-242.67	0.00	242.67	2019.02	1009.51	2984.22	1473.79	8.32	-0.816	0.000	0.126
100.00	-19.22	-6.53	0.00	-242.67	0.00	242.67	1394.49	697.25	2068.33	1021.47	8.32	-0.816	0.000	0.146
102.00	-18.95	-6.45	0.00	-229.61	0.00	229.61	1387.39	693.70	2035.72	1005.36	8.66	-0.832	0.000	0.163
104.00	-18.69	-6.38	0.00	-216.71	0.00	216.71	1380.13	690.06	2003.09	989.25	9.01	-0.851	0.000	0.156
106.00	-18.42	-6.30	0.00	-203.95	0.00	203.95	1372.69	686.35	1970.45	973.13	9.37	-0.869	0.000	0.149
108.00	-18.16	-6.23	0.00	-191.34	0.00	191.34	1365.09	682.55	1937.81	957.01	9.74	-0.886	0.000	0.142
110.00	-17.90	-6.16	0.00	-178.88	0.00	178.88	1357.32	678.66	1905.17	940.89	10.12	-0.903	0.000	0.135
112.00	-17.64	-6.08	0.00	-166.57	0.00	166.57	1349.39	674.69	1872.56	924.79	10.50	-0.919	0.000	0.127
113.50	-17.45	-6.03	0.00	-157.45	0.00	157.45	1343.33	671.66	1848.11	912.71	10.79	-0.931	0.000	0.122
113.50	-17.45	-6.03	0.00	-157.45	0.00	157.45	1343.33	671.66	1848.11	912.71	10.79	-0.931	0.000	0.122
114.00	-17.38	-6.01	0.00	-154.43	0.00	154.43	1341.28	670.64	1839.96	908.69	10.89	-0.934	0.000	0.183
115.00	-17.25	-5.98	0.00	-148.42	0.00	148.42	1337.17	668.58	1823.68	900.65	11.08	-0.946	0.000	0.178
116.00	-17.03	-5.94	0.00	-142.44	0.00	142.44	1333.01	666.51	1807.40	892.61	11.28	-0.957	0.000	0.172
118.00	-16.60	-5.87	0.00	-130.56	0.00	130.56	1324.58	662.29	1774.88	876.54	11.69	-0.978	0.000	0.162
120.00	-16.17	-5.79	0.00	-118.83	0.00	118.83	1327.18	663.59	1784.85	881.47	12.10	-0.999	0.000	0.147
122.00	-15.92	-5.72	0.00	-107.24	0.00	107.24	1318.63	659.32	1752.36	865.43	12.53	-1.018	0.000	0.136
124.00	-15.67	-5.65	0.00	-95.79	0.00	95.79	1309.91	654.95	1719.92	849.40	12.96	-1.034	0.000	0.125
126.00	-15.42	-5.58	0.00	-84.48	0.00	84.48	1301.02	650.51	1687.54	833.41	13.39	-1.050	0.000	0.113
127.00	-12.28	-4.28	0.00	-78.90	0.00	78.90	1296.51	648.26	1671.38	825.43	13.61	-1.057	0.000	0.105
128.00	-12.17	-4.25	0.00	-74.62	0.00	74.62	1291.97	645.98	1655.23	817.46	13.84	-1.064	0.000	0.101
130.00	-11.96	-4.18	0.00	-66.13	0.00	66.13	1282.74	641.37	1623.00	801.54	14.29	-1.077	0.000	0.092
132.00	-11.75	-4.11	0.00	-57.78	0.00	57.78	1273.35	636.68	1590.85	785.66	14.74	-1.089	0.000	0.083
134.00	-11.54	-4.04	0.00	-49.56	0.00	49.56	1263.80	631.90	1558.80	769.83	15.20	-1.100	0.000	0.074
136.00	-11.34	-3.97	0.00	-41.48	0.00	41.48	1254.07	627.04	1526.84	754.05	15.66	-1.109	0.000	0.064
137.00	-7.74	-2.83	0.00	-37.50	0.00	37.50	1249.15	624.57	1510.90	746.18	15.89	-1.114	0.000	0.056
138.00	-7.65	-2.79	0.00	-34.68	0.00	34.68	1244.18	622.09	1494.99	738.32	16.13	-1.118	0.000	0.053
140.00	-7.45	-2.73	0.00	-29.09	0.00	29.09	1234.12	617.06	1463.26	722.65	16.60	-1.125	0.000	0.046
142.00	-7.26	-2.66	0.00	-23.64	0.00	23.64	1223.90	611.95	1431.66	707.04	17.07	-1.131	0.000	0.039
144.00	-7.08	-2.60	0.00	-18.32	0.00	18.32	1213.50	606.75	1400.19	691.50	17.55	-1.136	0.000	0.032
146.00	-6.89	-2.53	0.00	-13.12	0.00	13.12	1202.94	601.47	1368.85	676.02	18.02	-1.140	0.000	0.025
147.00	-3.62	-1.42	0.00	-10.59	0.00	10.59	1197.60	598.80	1353.24	668.32	18.26	-1.141	0.000	0.019
148.00	-3.53	-1.38	0.00	-9.17	0.00	9.17	1192.22	596.11	1337.67	660.62	18.50	-1.143	0.000	0.017
150.00	-3.35	-1.32	0.00	-6.40	0.00	6.40	1181.32	590.66	1306.64	645.30	18.98	-1.145	0.000	0.013
152.00	-3.18	-1.26	0.00	-3.76	0.00	3.76	1170.26	585.13	1275.78	630.06	19.46	-1.146	0.000	0.009
153.00	-3.03	-1.19	0.00	-2.50	0.00	2.50	1164.66	582.33	1260.41	622.47	19.70	-1.147	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	19.94	-1.147	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	20.18	-1.147	0.000	0.000

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Final Analysis Summary

Structure:	CT00302-S-SBA	**Code:**	EIA/TIA-222-G	8/24/2021	
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: 54	

Tower Engineering Solutions

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	50.8	0.00	52.43	0.00	0.00	5097.63
0.9D + 1.6W 101 mph Wind	50.8	0.00	39.31	0.00	0.00	5055.05
1.2D + 1.0Di + 1.0Wi 50 mph Wind	10.8	0.00	86.87	0.00	0.00	1147.26
1.2D + 1.0E	2.3	0.00	52.46	0.00	0.00	294.09
0.9D + 1.0E	2.3	0.00	39.35	0.00	0.00	291.28
1.0D + 1.0W 60 mph Wind	11.2	0.00	43.72	0.00	0.00	1119.13

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	-52.43	-50.84	0.00	-5097.6	0.00	-5097.6	4048.32	2024.1	8933.65	4411.99	0.00	0.803
0.9D + 1.6W 101 mph Wind	-39.31	-50.84	0.00	-5055.0	0.00	-5055.0	4048.32	2024.1	8933.65	4411.99	0.00	0.794
1.2D + 1.0Di + 1.0Wi 50 mph Wind	-39.58	-6.52	0.00	-169.85	0.00	-169.85	1341.28	670.64	1839.96	908.69	114.00	0.217
1.2D + 1.0E	-20.96	-1.90	0.00	-62.75	0.00	-62.75	1341.28	670.64	1839.96	908.69	114.00	0.085
0.9D + 1.0E	-15.72	-1.87	0.00	-61.93	0.00	-61.93	1341.28	670.64	1839.96	908.69	114.00	0.080
1.0D + 1.0W 60 mph Wind	-17.38	-6.01	0.00	-154.43	0.00	-154.43	1341.28	670.64	1839.96	908.69	114.00	0.183

Additional Steel Summary

Elev From (ft)	Elev To (ft)	Member	Intermediate Connectors VQ/I (lb/in)	Vu (kips)	phi Vn (kips)	Lower Termination MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Upper Termination MQ/I (kips)	phi Vn (kips)	Num Reqd	Num Actual	Max Member Pu (kips)	phi Pn (kips)	phi Tn (kips)	Ratio
0.0	21.0	(3) PLT-6"X1-1/4"(1.25" Hole	284.5	5.12	37.1	300.1	37.1	9	0	272.7	37.1			318.03	413.6	351.56	0.905
0.0	14.2	(3) PLT-10"x1/2" (90deg)	-194.4	-3.50	37.1	231.0	37.1	7	0	198.8	37.1	6	0	230.97	290.0	255.00	0.906
11.5	16.5	(1) PLT-6"X1-1/4"(1.25" Hole	-264.4	-4.76	37.1	254.7	37.1	7	11	248.4	37.1	7	11	295.58	413.6	351.56	0.841
14.8	37.1	(3) PLT-10"x1/2" (90deg)	199.5	3.59	37.1	196.9	37.1	6	0	191.4	37.1	6	0	211.03	290.0	255.00	0.828
21.0	41.0	(3) PLT-6"X1-1/4"(1.25" Hole	321.6	5.79	37.1	272.7	37.1			244.9	37.1			307.92	413.6	351.56	0.876
38.0	57.1	(3) PLT-10"x1/2" (90deg)	-225.0	-4.05	37.1	195.2	37.1	6	0	182.4	37.1	5	0	199.67	290.0	255.00	0.783
41.0	58.5	(3) PLT-6"X1-1/4"(1.25" Hole	358.7	6.46	37.1	244.9	37.1			225.9	37.1	7	11	290.21	413.6	351.56	0.825
58.0	76.0	(3) PLT-5"x1-1/4"(1.25"Hole)	-324.9	-5.85	37.1	209.7	37.1	6	8	214.2	37.1			247.44	344.6	276.56	0.895
76.0	96.0	(3) PLT-4.5"x 1-1/4"(1.25"ho	-349.1	-6.28	37.1	198.8	37.1			168.8	37.1			213.60	310.2	239.06	0.893
96.0	113.5	(3) PLT-3.5x1.25(1.25 Hole)	-361.8	-6.51	37.1	141.7	37.1			113.4	37.1	4	6	148.61	241.2	164.06	0.906

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Monopole Mat Foundation Design

			Date: 8/24/2021
Customer Name:	Verizon	EIA/TIA Standard:	EIA-222-G
Site Name:		Structure Height (Ft.):	155
Site Number:	CT00302-S-SBA	Engineer Name:	J. Tibbetts
Engr. Number:	113831	Engineer Login ID:	

Foundation Info Obtained from: Mapping Operation

Structure Type: Monopole

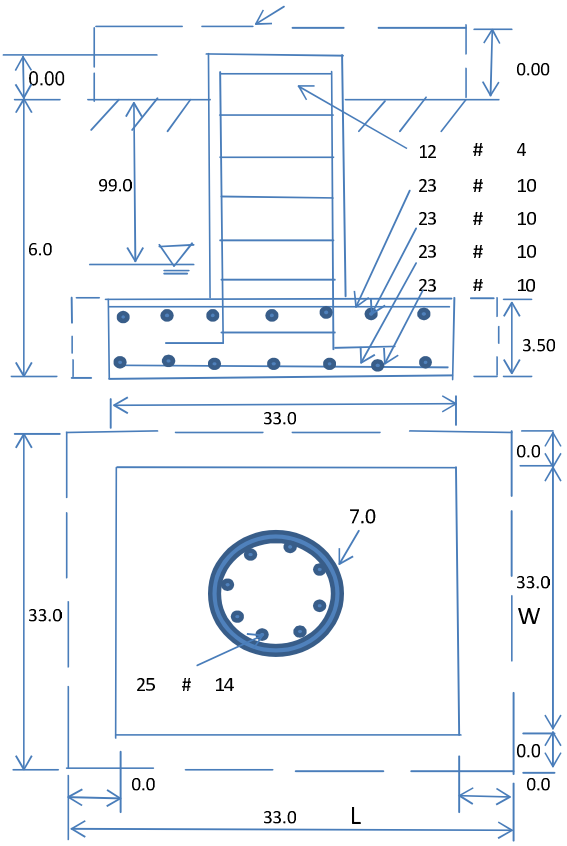
Analysis or Design? Analysis

Base Reactions (Factored):

Axial Load (Kips):	52.4	Shear Force (Kips):	50.8
Uplift Force (Kips):	0.0	Moment (Kips-ft):	5097.6
Allowable overstress %:	5.0%		

Foundation Geometries:

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



Material Properties and Reabr 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		
Water Table B.G.S. (ft):	99.0	Unit Weight of Water:	62.4	pcf	Angle from Top of Pad:	30
Ultimate Bearing Pressure (psf):	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		Angle from Bottm of Pad:	25
Consider soil hor. resist. for OTM.:	No	Reduction factor on the maximum soil bearing pressure:			1.00	

Foundation Analysis and Design: Uplift Strength Reduction Factor: 0.75 — Compression Strength Reduction Factor: 0.75

Total Dry Soil Volume (cu. Ft.):	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):	980.00

Check Soil Capacities:

					Load/ Capacity Ratio	
Calculated Maxium Net Soil Pressure under the base (psf):	1680	<	Allowable Factored Soil Bearing (psf):	24000	0.07	OK!
Allowable Foundation Overturning Resistance (kips-ft.):	14639.5	>	Design Factored Momont (kips-ft):	5403	0.37	OK!
Factor of Safety Against Overturning (O. R. Moment/Design Moment):	2.71	OK!				

Check the capacities of Reinforceing Concrete:

Strength reduction factor (Flexure and axial tension):			Strength reduction factor (Shear):			
Strength reduction factor (Axial compresion):			Wind Load Factor on Concrete Design:			
						ad Capacity Ratio
(1) Concrete Pier:						
Vertical Steel Rebar Area (sq. in./each):			Tie / Stirrup Area (sq. in./each):			
Calculated Moment Capacity (Mn,Kips-Ft):			>	Design Factored Moment (Mu, Kips-		
Calculated Shear Capacity (Kips):			>	Design Factored Shear (Kips):		
Calculated Tension Capacity (Tn, Kips):			>	Design Factored Tension (Tu Kips):		
Calculated Compression Capacity (Pn, Kips):			>	Design Factored Axial Load (Pu Kips):		
Moment & Axial Strength Combination:			OK!	Check Tie Spacing (Design/Required):		
Pier Reinforcement Ratio:				Reinforcement Ratio is satisfied per ACI		
(2).Concrete Pad:						
One-Way Design Shear Capacity (L-Direction, Kips):				One-Way Factored Shear (L-D. Kips):	307.1	
One-Way Design Shear Capacity (W-Direction, Kips):				One-Way Factored Shear (W-D., Kips		
One-Way Design Shear Capacity (Corner-Corner. Kips):				One-Way Factored Shear (C-C, Kips):	301.5	
Lower Steel Pad Reinforcement Ratio (L-Direct.):				Lower Steel Pad Reinf. Ratio (W-Direc		
Lower Steel Pad Moment Capacity (L-Direction. Kips-ft):				Moment at Bottom (L-Dir. K-Ft):		
Lower Steel Pad Moment Capacity (W-Direction. Kips-ft):				Moment at Bottom (W-Dir. K-Ft):		
Lower Steel Pad Moment Capacity (Corner-Corner,K-ft):				Moment at Bottom (C-C Dir. K-Ft):	3280.0	
Upper Steel Pad Reinforcement Ratio (L-Direct.):				Upper Steel Reinf. Ratio (W-Dir.):		
Upper Steel Pad Moment Capacity (L-Direc. Kips-ft):				Moment at the top (L-Dir K-Ft):		
Upper Steel Pad Moment Capacity (W-Direc. Kips-ft):				Moment at the top (W-Dir K-Ft):		
Upper Steel Pad Moment Capacity (Corner-Corner. K-ft):				Moment at the top (C-C Dir. K-Ft):		
(3).Check Punching Shear Capacity due to Moment in the Pier:						
Moment transferred by punching shear:	2039.0	k-ft.	Max. factored shear stress v_{u_CD}			Psi
Max. factored shear stress v_{u_AB}		Psi	Factored shear Strength ϕv_n			Psi
Max. factored shear stress v_u		Psi	Check Usage of Punching Shear Capacity:			OK!

Maser Consulting Connecticut
2000 Midlantic Drive, Suite 100
Mt. Laurel, NJ 08054
(856) 797-0412
peter.albano@colliersengineering.com

Antenna Mount Analysis Report and PMI Requirements

Mount Analysis

SMART Tool Project #: 10007398
Maser Consulting Connecticut Project #: 21777301A

June 17, 2021

Site Information	*Site ID:*	*468168-VZW / DANIELSON CT*
	Site Name:	*DANIELSON CT*
	Carrier Name:	*Verizon Wireless*
	Address:	*246 East Franklin Street* *Danielson, Connecticut 6239* *Windham County*
	Latitude:	*41.795814°*
	Longitude:	*-71.870331°*
Structure Information	*Tower Type:*	*152-Ft Monopole*
	Mount Type:	*14.58-Ft T-Arm*

FUZE ID # 16056920

Analysis Results

T-Arm: **97.7% Pass**

Digitally signed by Taqi Khawaja
Date: 2021.06.18 09:55:29-04'00'

******Contractor PMI Requirements*:**
Included at the end of this MA report
Available & Submitted via portal at https://pmi.vzwsmart.com
Contractor - Please Review Specific Site PMI Requirements Upon Award
Requirements also Noted on Mount Modification Drawings
Requirements may also be Noted on A & E drawings

Report Prepared By: Andy Hanes

Executive Summary:

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

This analysis is inclusive of the mount structure only and does not address the structural capacity of the supporting structure. This mounting frame was not analyzed as an anchor attachment point for fall protection. All climbing activities are required to have a fall protection plan completed by a competent person.

Sources of Information:

Document Type	Remarks
Radio Frequency Data Sheet (RFDS)	*Verizon RFDS, Site ID: 323718, dated June 11, 2021*
Mount Mapping Report	*Roaming Networks Inc., Site ID: 468168, dated March 29, 2021*

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H	
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT}:	122 mph
	Ice Wind Speed (3-sec. Gust):	50 mph
	Design Ice Thickness:	1.00 in
	Risk Category:	II
	Exposure Category:	B
	Topographic Category:	1
	Topographic Feature Considered:	N/A
	Topographic Method:	N/A
	Ground Elevation Factor, K_e:	0.983
Seismic Parameters:	S_S:	0.185
	S_1:	0.054
Maintenance Parameters:	Wind Speed (3-sec. Gust):	30 mph
	Maintenance Live Load, Lv:	250 lbs.
	Maintenance Live Load, Lm:	500 lbs.
Analysis Software:	RISA-3D (V17)	

Final Loading Configuration:

The following equipment has been considered for the analysis of the mounts:

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
151.50	156.50	3	Samsung	MT6407-77A	Added
	155.00	6	Commscope	JAHH-65B-R3B	
		3	Commscope	CBC78T-DS-43-2X	
		1	Raycap	RVZDC-6627-PF-48	
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		3	Amphenol Antel	BXA-70080-4BF-EDIN	Retained
	153.00	3	Samsung	XXDWMM-12.5-65-8T-CBRS	Added

The recent mount mapping did not report existing OVP units. However, it is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required.

Model Number	Ports	AKA
DB-B1-6C-12AB-0Z	6	OVP-6
RVZDC-6627-PF-48	12	OVP-12

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation and field observations. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.

2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

   Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping and reported in the Mount Mapping Report are assumed to be corrected and documented as part of the PMI process and are not considered in the mount analysis.

   The mount analysis and the mount mapping are not a condition assessment of the mount. Proper maintenance and condition assessments are still required post analysis.

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.

4. 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.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
   - Channel, Solid Round, Angle, Plate — ASTM A36 (Gr. 36)
   - HSS (Rectangular) — ASTM 500 (Gr. B-46)
   - Pipe — ASTM A53 (Gr. B-35)
   - Threaded Rod — F1554 (Gr. 36)
   - Bolts — ASTM A325

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Maser Consulting Connecticut.

Analysis Results:

Component	Utilization %	Pass/Fail
Connection	97.7 %	Pass
Face Horizontal	98.1 %	Pass
Standoff	94.5 %	Pass
Grating Angle	8.7 %	Pass
Mount Pipe	70.6 %	Pass

Structure Rating – *(Controlling Utilization of all Components)*	**97.7%**

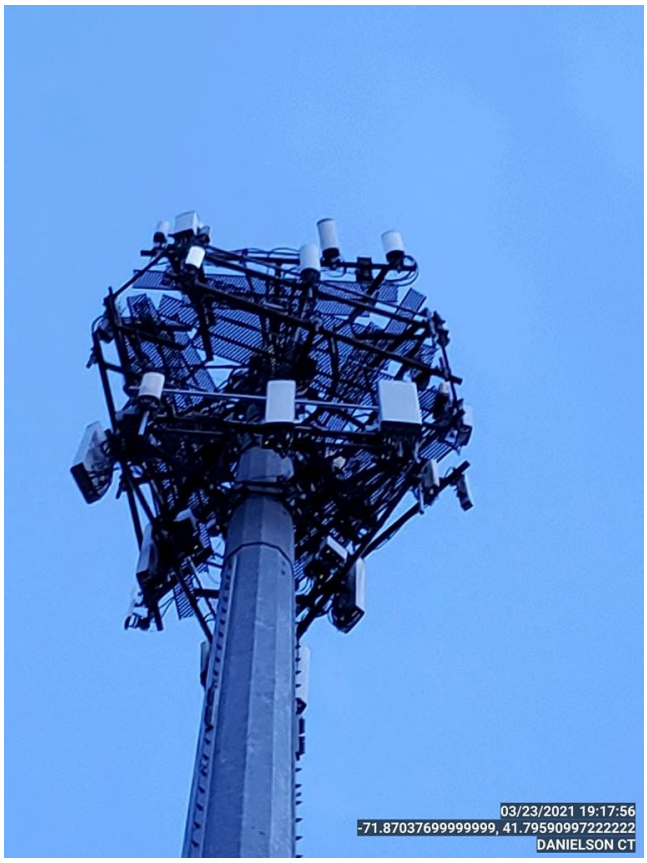
Recommendation:

The existing mounts are **SUFFICIENT** for the final loading configuration and do not require modifications.

ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Analysis Calculations
4. **Contractor Required Post Installation Inspection (PMI) Report Deliverables**
5. Antenna Placement Diagrams
6. TIA Adoption and Wind Speed Usage Letter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DANIELSON CT


03/23/2021 18:51:51
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DANIELSON CT

V3.0 Updated on 8-31-2020

PAUL J. FORD & COMPANY

Antenna Mount Mapping Form (PATENT PENDING)

FCC # N/A

Tower Owner:	Other	**Mapping Date:**	03.29.2021.
Site Name:	DANIELSON CT	**Tower Type:**	Monopole
Site Number or ID:	468168	**Tower Height (Ft.):**	N/A
Mapping Contractor:	Roaming Networks inc.	**Mount Elevation (Ft.):**	157.62

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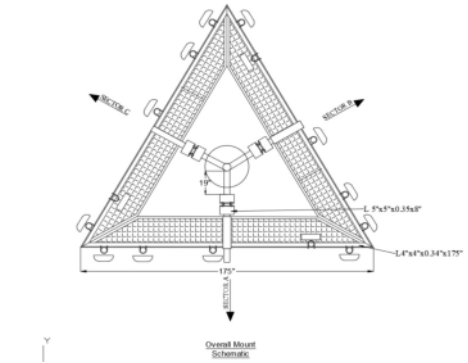


Overall Mount Schematic

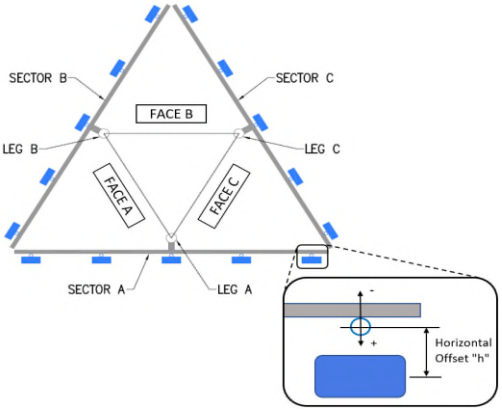
Mount Pipe Configuration and Geometries [Unit = Inches]

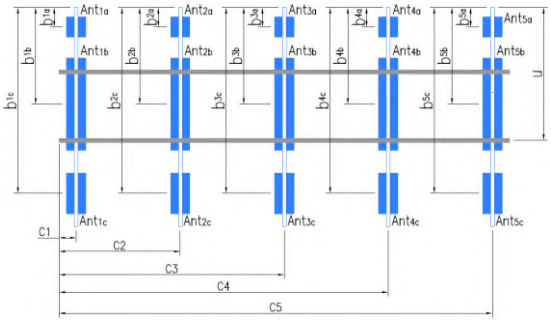
Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."	Sector / Position	Mount Pipe Size & Length	Vertical Offset Dimension "u"	Horizontal Offset "C1, C2, C3, etc."
A1	PIPE Ø 2.37" x0.23"x84.5"	48.50	11.50	C1	PIPE Ø 2.37" x0.23"x84.5"	48.50	11.50
A2	PIPE Ø 2.40" x0.15"x85"	38.00	32.00	C2	PIPE Ø 2.40" x0.15"x85"	38.00	32.00
A3	PIPE Ø 2.36" x0.15"x85"	38.00	53.50	C3	PIPE Ø 2.36" x0.15"x85"	38.00	53.50
A4	PIPE Ø 2.37" x0.21"x84.5"	47.00	143.50	C4	PIPE Ø 2.37" x0.21"x84.5"	47.00	143.50
A5	PIPE Ø 2.36" x0.15"x72"	41.00	162.50	C5	PIPE Ø 2.36" x0.15"x72"	41.00	162.50
A6				C6			
B1	PIPE Ø 2.37" x0.23"x84.5"	48.50	11.50	D1			
B2	PIPE Ø 2.40" x0.15"x85"	38.00	32.00	D2			
B3	PIPE Ø 2.36" x0.15"x85"	38.00	53.50	D3			
B4	PIPE Ø 2.37" x0.21"x84.5"	47.00	143.50	D4			
B5	PIPE Ø 2.36" x0.15"x72"	41.00	162.50	D5			
B6				D6			

Distance between bottom rail and mount CL elevation (dim d). Unit is inches. See 'Mount Elev Ref' tab for details. :	24.00
Distance from top of bottom support rail to lowest tip of ant./eqpt. of Carrier above. (N/A if > 10 ft.) :	
Distance from top of bottom support rail to highest tip of ant./eqpt. of Carrier below. (N/A if > 10 ft.) :	4.52

Please enter additional infomation or comments below.

Tower Face Width at Mount Elev. (ft.):		Tower Leg Size or Pole Shaft Diameter at Mount Elev. (in.):	27.7



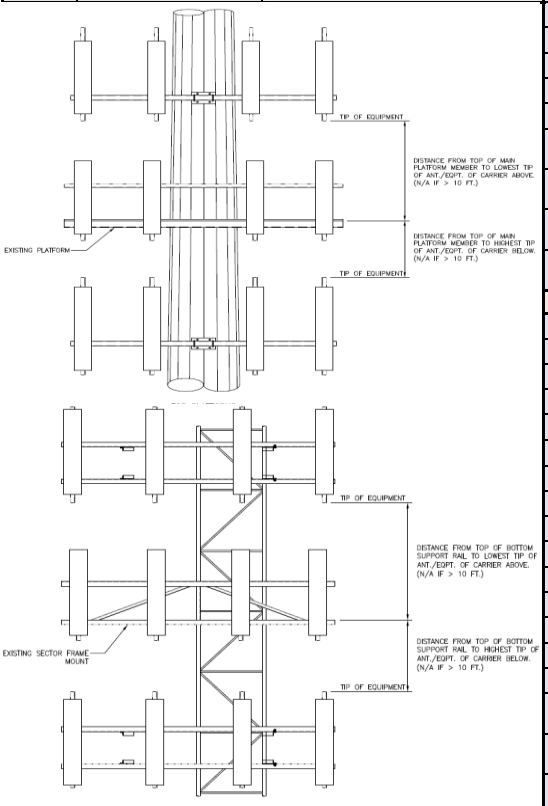


Antenna Layout (Looking Out From Tower)

Ants. Items	Enter antenna model. If not labeled, enter "Unknown". Antenna Models if Known	Width (in.)	Depth (in.)	Height (in.)	Coax Size and Qty	Antenna Center-line (Ft.)	Mounting Locations [Units are inches and degrees] Vertical Distances"b_{1a}, b_{2a}, b_{3a}, b_{1b}..." (Inches)	Horiz. Offset "h" (Use "-" if Ant. is behind)	Antenna Azimuth (Degrees)	Photos of antennas Photo Numbers
Sector A										
Ant_{1a}	HBXX-6517DS-A2M	12.00	6.53	75.04		156.912	33.00	8.50	60.00	159
Ant_{1b}										
Ant_{1c}										
Ant_{2a}	B4RRH2x60-4R	11.2	6.4	71.50		156.287	30.00	15.50	60.00	159
Ant_{2b}										
Ant_{2c}										
Ant_{3a}	B4RRH2x60-4R	11.2	6.4	71.50		155.312	41.70	9.00	60.00	
Ant_{3b}										
Ant_{3c}										
Ant_{4a}	HBXX-6517DS-A2M	12	6.4	75.04		157.262	27.30	10.50	60.00	162
Ant_{4b}										
Ant_{4c}										
Ant_{5a}	BXA-70080-4BF- EDIN	8	5.9	94.60		157.828	14.50		60.00	162
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector	
Sector A:		Deg	Leg A:		Deg
Sector B:		Deg	Leg B:		Deg
Sector C:		Deg	Leg C:		Deg
Sector D:		Deg	Leg D:		Deg

Climbing Facility Information			
Location:		Deg	On Leg C
Climbing Facility	Corrosion Type:		Good condition.
	Access:		Climbing path was unobstructed.
	Condition:		Good condition.



Sector B										
Ant										
Ant_{1b}										
Ant_{1c}										
Ant	B4RRH2x60-4R									
Ant_{2b}										
Ant_{2c}										
Ant	B4RRH2x60-4R									
Ant_{3b}										
Ant_{3c}										
Ant										
Ant_{4b}										
Ant_{4c}										
Ant										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Sector C										
Ant										
Ant_{1b}										
Ant_{1c}										
Ant	B4RRH2x60-4R									
Ant_{2b}										
Ant_{2c}										
Ant										
Ant_{3b}										
Ant_{3c}										
Ant										
Ant_{4b}										
Ant_{4c}										
Ant	B4RRH2x60-4R									
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Sector D										
Ant										
Ant_{1b}										
Ant_{1c}										
Ant										
Ant_{2b}										
Ant_{2c}										
Ant										
Ant_{3b}										
Ant_{3c}										
Ant										
Ant_{4b}										
Ant_{4c}										
Ant										
Ant_{5b}										
Ant_{5c}										
Ant on Standoff										
Ant on Standoff										
Ant on Tower										
Ant on Tower										

Observed Safety and Structural Issues During the Mount Mapping		
Issue #	Description of Issue	Photo #

Mapping Notes
1. Please report any visible structural or safety issues observed on the antenna mounts (Damaged members, loose connections, tilting mounts, safety climb issues, etc.)
2. If the thickness of the existing pipes or tubing can't be obtained from a general tool (such as Caliper), please use an ultrasonic measurement tool (thickness gauge) to measure the thickness.
3. Please create all required detail sketches of the mounts and insert them into the "Sketches" tab.
4. Please measure and enter the bolt sizes and types under the Members Box in the spreadsheet of the mount type.
5. Take and label the photos of the tower, mounts, connections, antennas and all measurements. Minimum 50 photos are required.
6. Please measure and report the size and length of all existing antenna mounting pipes.
7. Please measure and report the antenna information for all sectors.
8. Don't delete or rearrange any sheet or contents of any sheet from this mapping form.

Standard Conditions
1. Obvious safety and structural issues/deficiencies noticed at the time of the mount mapping are to be reported in this mapping. However, this mount mapping is not a condition assessment of the mount.

Antenna Mount Mapping Form (PATENT PENDING)

Tower Owner:	Other	**Mapping Date:**	03.29.2021.
Site Name:	DANIELSON CT	**Tower Type:**	Monopole
Site Number or ID:	468168	**Tower Height (Ft.):**	N/A
Mapping Contractor:	Roaming Networks inc.	**Mount Elevation (Ft.):**	157.62

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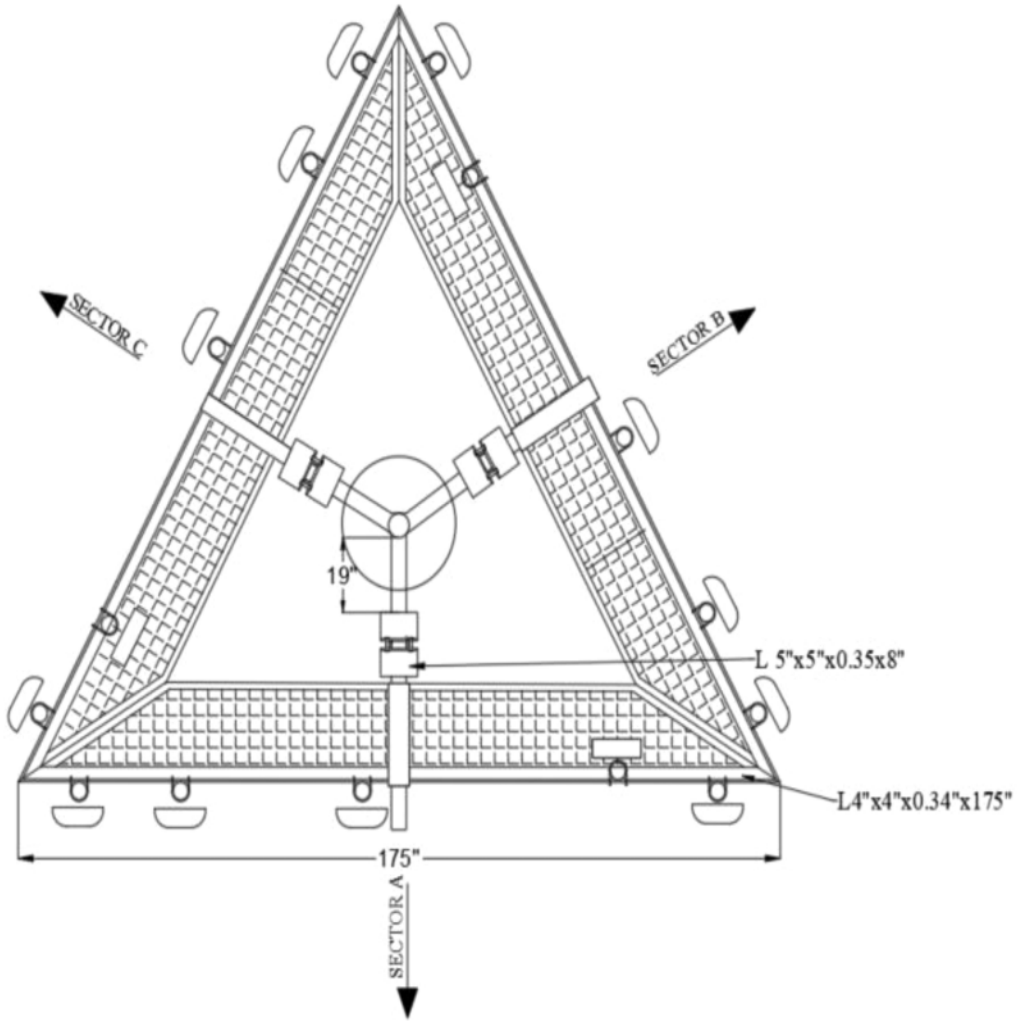
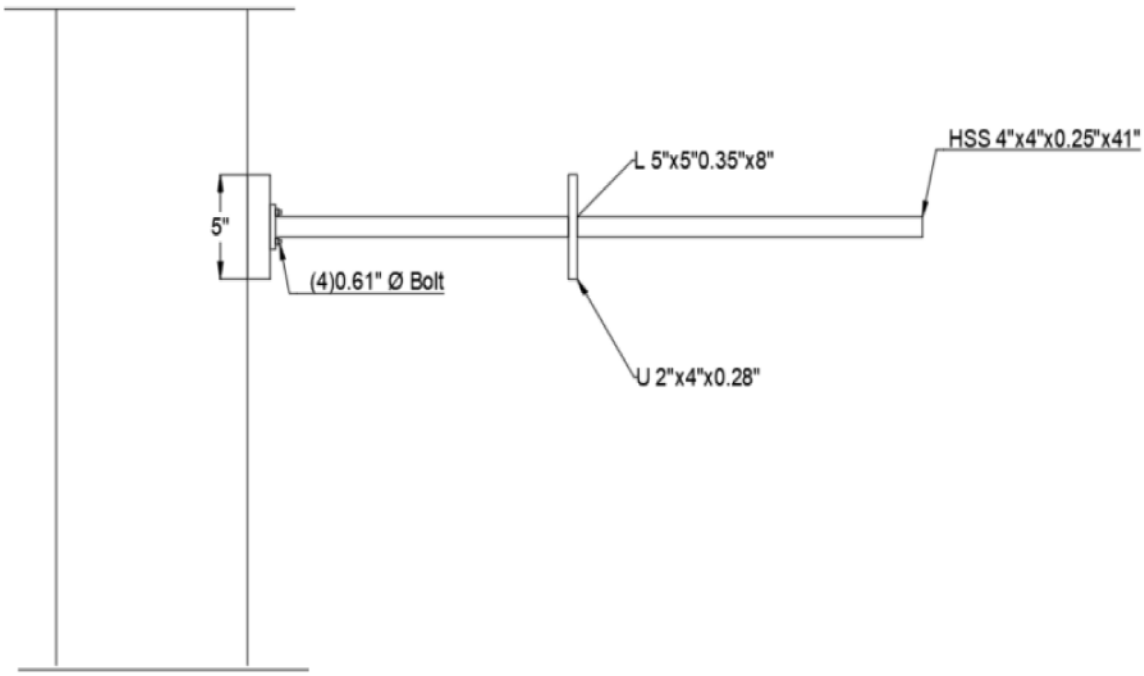
Please Insert Sketches of the Antenna Mount



Y

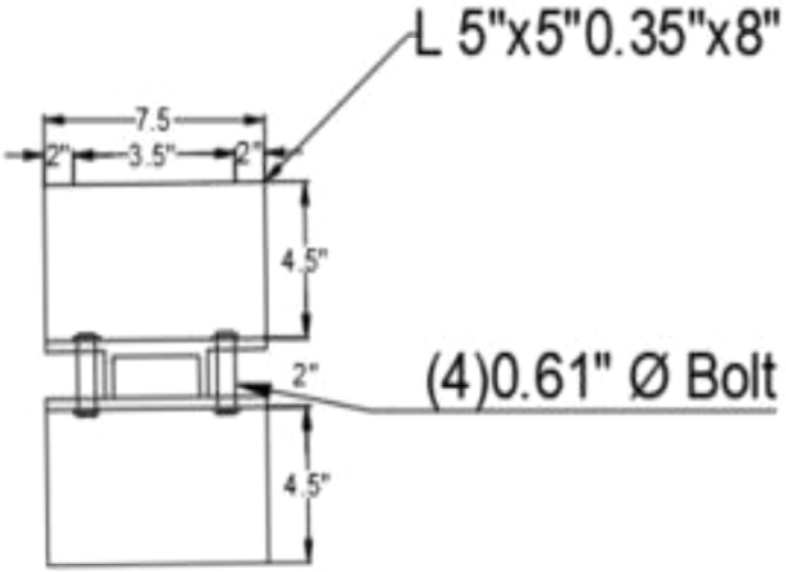
Overall Mount Schematic

Please Insert Sketches of the Antenna Mount, cont'd



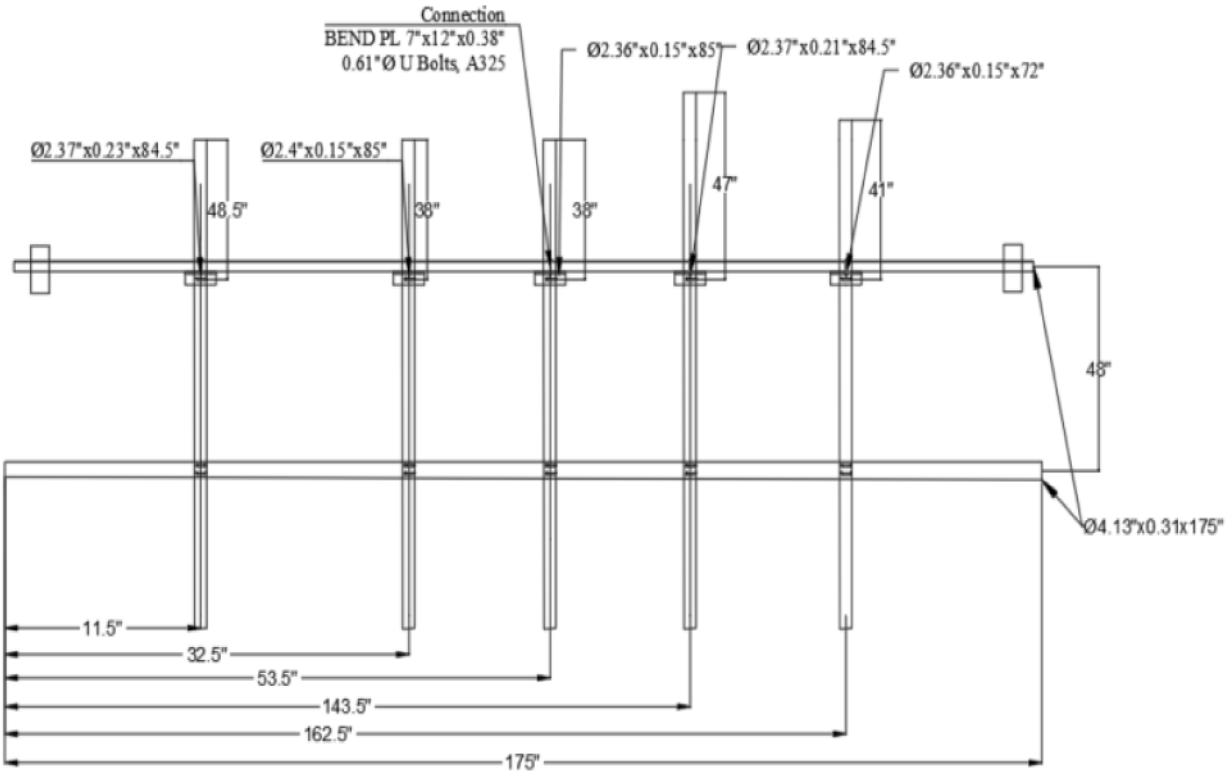
View A

Please Insert Sketches of the Antenna Mount, cont'd

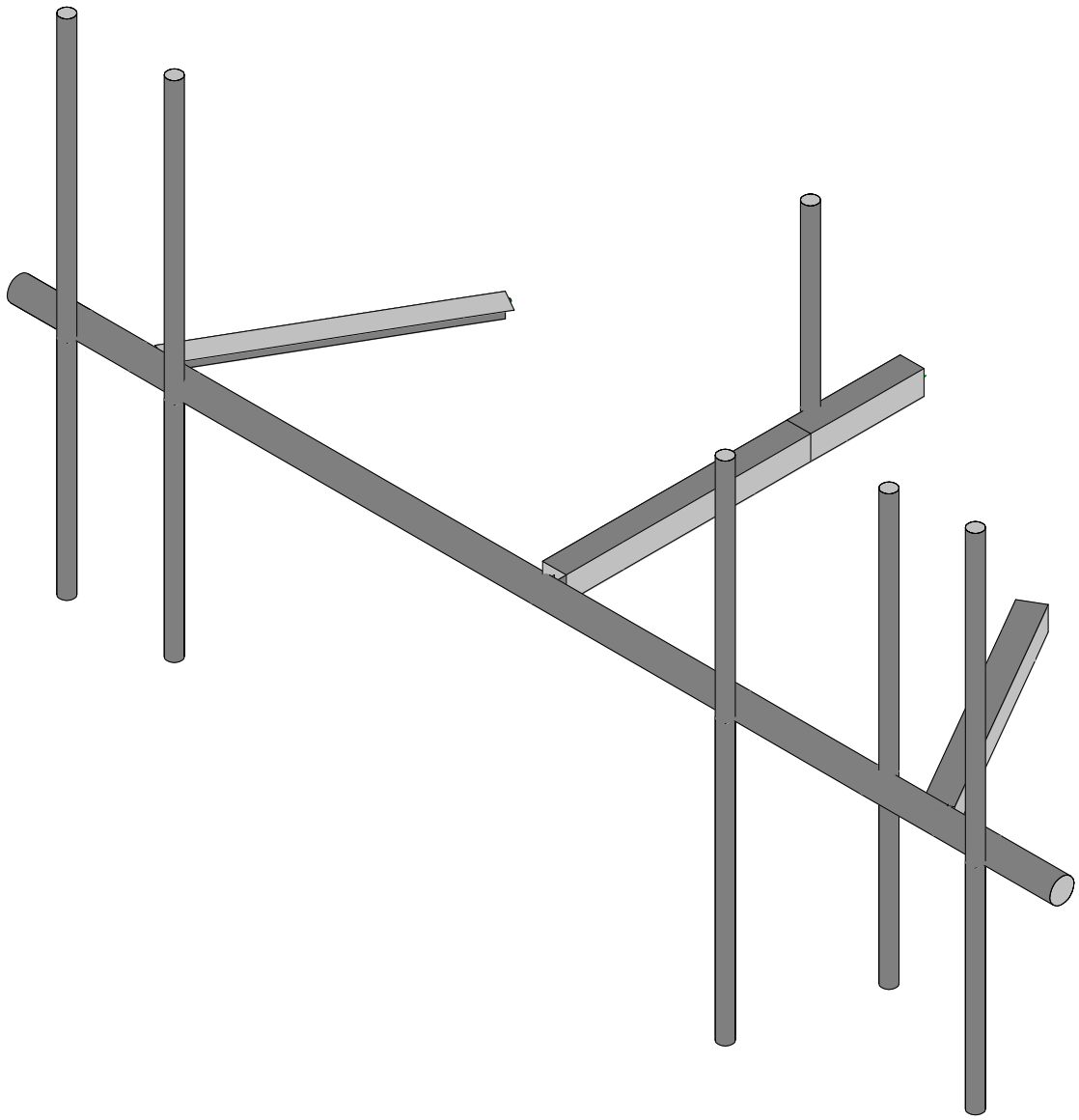


DETAIL "A"

Please Insert Sketches of the Antenna Mount, cont'd



SECTOR A,B,C



Envelope Only Solution

Maser Consulting	468168-VZW_MT_LOT_SectorA_H	SK - 1
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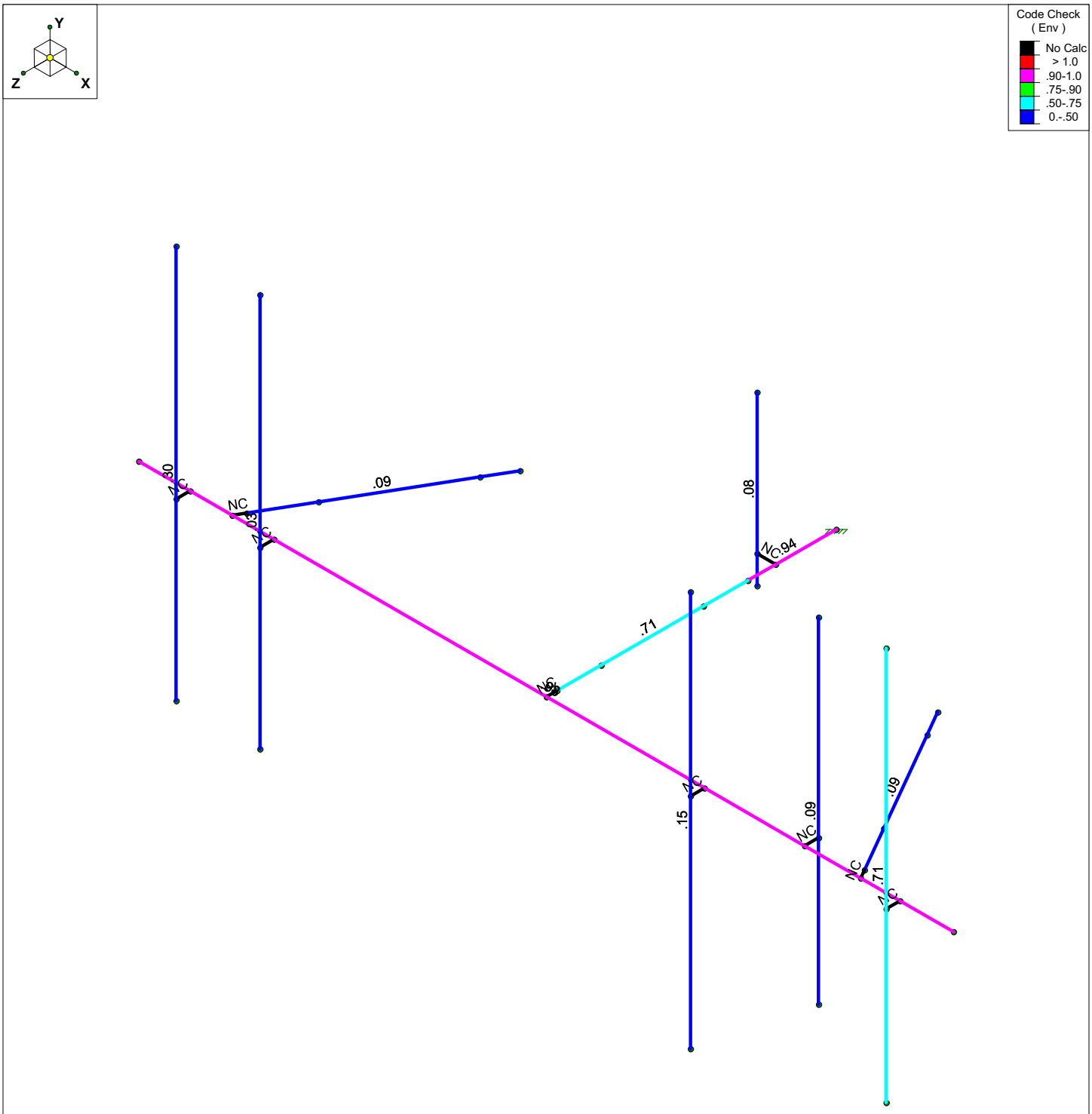
		468168-VZW_MT_LOT_A_H.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

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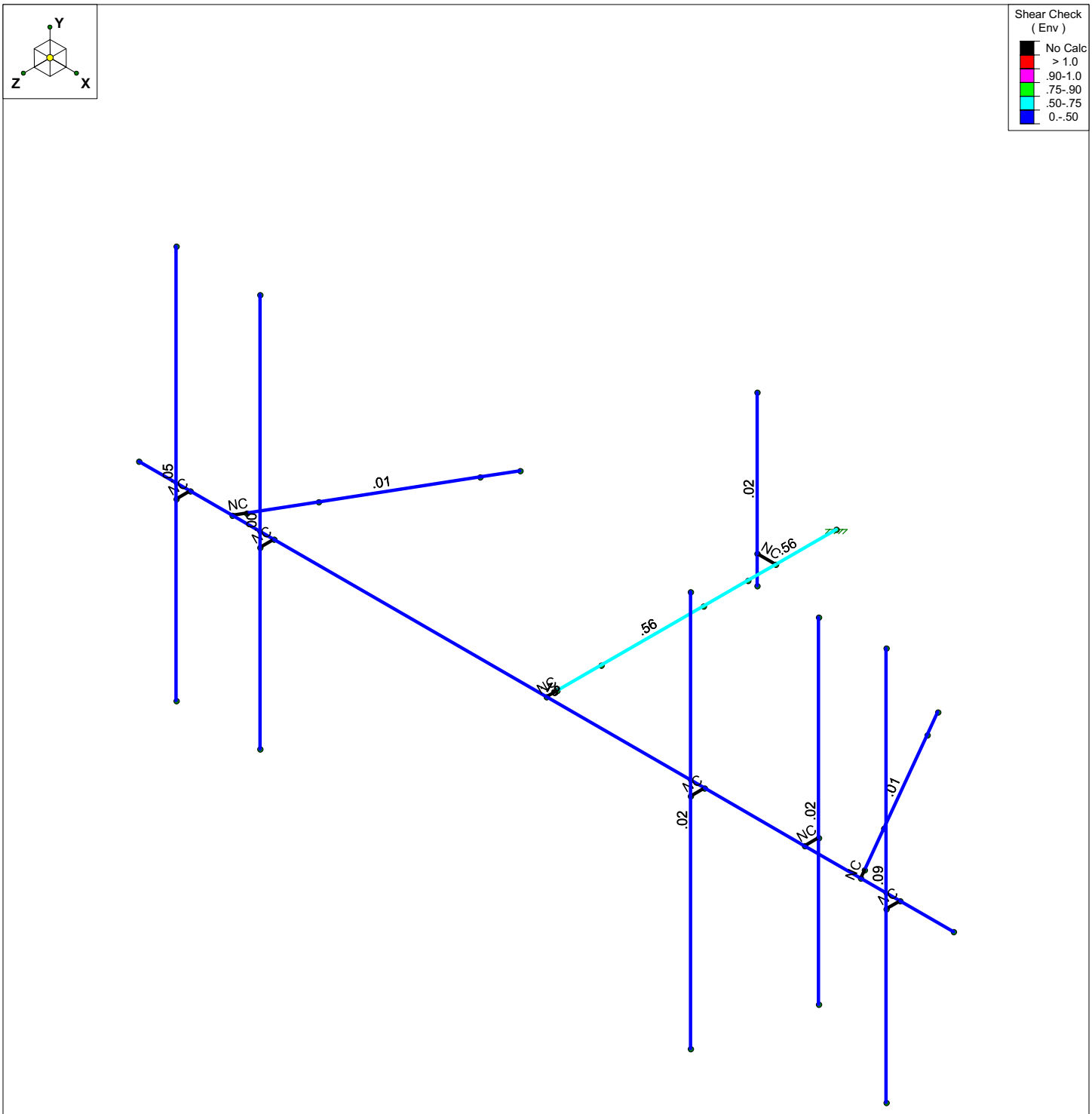

Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

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Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Antenna D	None					39			
2	Antenna Di	None					39			
3	Antenna Wo (0 Deg)	None					39			
4	Antenna Wo (30 Deg)	None					39			
5	Antenna Wo (60 Deg)	None					39			
6	Antenna Wo (90 Deg)	None					39			
7	Antenna Wo (120 Deg)	None					39			
8	Antenna Wo (150 Deg)	None					39			
9	Antenna Wo (180 Deg)	None					39			
10	Antenna Wo (210 Deg)	None					39			
11	Antenna Wo (240 Deg)	None					39			
12	Antenna Wo (270 Deg)	None					39			
13	Antenna Wo (300 Deg)	None					39			
14	Antenna Wo (330 Deg)	None					39			
15	Antenna Wi (0 Deg)	None					39			
16	Antenna Wi (30 Deg)	None					39			
17	Antenna Wi (60 Deg)	None					39			
18	Antenna Wi (90 Deg)	None					39			
19	Antenna Wi (120 Deg)	None					39			
20	Antenna Wi (150 Deg)	None					39			
21	Antenna Wi (180 Deg)	None					39			
22	Antenna Wi (210 Deg)	None					39			
23	Antenna Wi (240 Deg)	None					39			
24	Antenna Wi (270 Deg)	None					39			
25	Antenna Wi (300 Deg)	None					39			
26	Antenna Wi (330 Deg)	None					39			
27	Antenna Wm (0 Deg)	None					39			
28	Antenna Wm (30 Deg)	None					39			
29	Antenna Wm (60 Deg)	None					39			
30	Antenna Wm (90 Deg)	None					39			
31	Antenna Wm (120 Deg)	None					39			
32	Antenna Wm (150 Deg)	None					39			
33	Antenna Wm (180 Deg)	None					39			
34	Antenna Wm (210 Deg)	None					39			
35	Antenna Wm (240 Deg)	None					39			
36	Antenna Wm (270 Deg)	None					39			
37	Antenna Wm (300 Deg)	None					39			
38	Antenna Wm (330 Deg)	None					39			
39	Structure D	None		-1					1	
40	Structure Di	None						11	1	
41	Structure Wo (0 Deg)	None						22		
42	Structure Wo (30 Deg)	None						22		
43	Structure Wo (60 Deg)	None						22		
44	Structure Wo (90 Deg)	None						22		
45	Structure Wo (120 D...	None						22		
46	Structure Wo (150 D...	None						22		
47	Structure Wo (180 D...	None						22		
48	Structure Wo (210 D...	None						22		
49	Structure Wo (240 D...	None						22		
50	Structure Wo (270 D...	None						22		
51	Structure Wo (300 D...	None						22		
52	Structure Wo (330 D...	None						22		
53	Structure Wi (0 Deg)	None						22		
54	Structure Wi (30 Deg)	None						22		
55	Structure Wi (60 Deg)	None						22		
56	Structure Wi (90 Deg)	None						22		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
57	Structure Wi (120 De...	None						22		
58	Structure Wi (150 De...	None						22		
59	Structure Wi (180 De...	None						22		
60	Structure Wi (210 De...	None						22		
61	Structure Wi (240 De...	None						22		
62	Structure Wi (270 De...	None						22		
63	Structure Wi (300 De...	None						22		
64	Structure Wi (330 De...	None						22		
65	Structure Wm (0 Deg)	None						22		
66	Structure Wm (30 De...	None						22		
67	Structure Wm (60 De...	None						22		
68	Structure Wm (90 De...	None						22		
69	Structure Wm (120 D...	None						22		
70	Structure Wm (150 D...	None						22		
71	Structure Wm (180 D...	None						22		
72	Structure Wm (210 D...	None						22		
73	Structure Wm (240 D...	None						22		
74	Structure Wm (270 D...	None						22		
75	Structure Wm (300 D...	None						22		
76	Structure Wm (330 D...	None						22		
77	Lm1	None					1			
78	Lm2	None					1			
79	Lv1	None					1			
80	Lv2	None					1			
81	BLC 39 Transient Are...	None						7		
82	BLC 40 Transient Are...	None						7		

Load Combinations

	Description	Sol...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.2D+1.0Wo (0 D...	Yes	Y		1	1.2	39	1.2	3	1	41	1												
2	1.2D+1.0Wo (30 ...	Yes	Y		1	1.2	39	1.2	4	1	42	1												
3	1.2D+1.0Wo (60 ...	Yes	Y		1	1.2	39	1.2	5	1	43	1												
4	1.2D+1.0Wo (90 ...	Yes	Y		1	1.2	39	1.2	6	1	44	1												
5	1.2D+1.0Wo (12...	Yes	Y		1	1.2	39	1.2	7	1	45	1												
6	1.2D+1.0Wo (15...	Yes	Y		1	1.2	39	1.2	8	1	46	1												
7	1.2D+1.0Wo (18...	Yes	Y		1	1.2	39	1.2	9	1	47	1												
8	1.2D+1.0Wo (21...	Yes	Y		1	1.2	39	1.2	10	1	48	1												
9	1.2D+1.0Wo (24...	Yes	Y		1	1.2	39	1.2	11	1	49	1												
10	1.2D+1.0Wo (27...	Yes	Y		1	1.2	39	1.2	12	1	50	1												
11	1.2D+1.0Wo (30...	Yes	Y		1	1.2	39	1.2	13	1	51	1												
12	1.2D+1.0Wo (33...	Yes	Y		1	1.2	39	1.2	14	1	52	1												
13	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1								
14	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1								
15	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	17	1	55	1								
16	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	18	1	56	1								
17	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	19	1	57	1								
18	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	20	1	58	1								
19	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	21	1	59	1								
20	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	22	1	60	1								
21	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	23	1	61	1								
22	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	24	1	62	1								
23	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	25	1	63	1								
24	1.2D + 1.0Di + 1....	Yes	Y		1	1.2	39	1.2	2	1	40	1	26	1	64	1								
25	1.2D + 1.5Lm1 + ...	Yes	Y		1	1.2	39	1.2	77	1.5	27	1	65	1										
26	1.2D + 1.5Lm1 + ...	Yes	Y		1	1.2	39	1.2	77	1.5	28	1	66	1										

Load Combinations (Continued)

	Description	Sol...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
27	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	29	1	67	1										
28	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	30	1	68	1										
29	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	31	1	69	1										
30	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	32	1	70	1										
31	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	33	1	71	1										
32	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	34	1	72	1										
33	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	35	1	73	1										
34	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	36	1	74	1										
35	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	37	1	75	1										
36	1.2D + 1.5Lm1 + ..	Yes	Y		1	1.2	39	1.2	77	1.5	38	1	76	1										
37	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	27	1	65	1										
38	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	28	1	66	1										
39	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	29	1	67	1										
40	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	30	1	68	1										
41	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	31	1	69	1										
42	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	32	1	70	1										
43	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	33	1	71	1										
44	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	34	1	72	1										
45	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	35	1	73	1										
46	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	36	1	74	1										
47	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	37	1	75	1										
48	1.2D + 1.5Lm2 + ..	Yes	Y		1	1.2	39	1.2	78	1.5	38	1	76	1										
49	1.2D + 1.5Lv1	Yes	Y		1	1.2	39	1.2	79	1.5														
50	1.2D + 1.5Lv2	Yes	Y		1	1.2	39	1.2	80	1.5														
51	1.4D	Yes	Y		1	1.4	39	1.4																
52	Seismic Mass		Y		1	1	39	1																
53	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX		SY	1	SZ	-1										
54	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	-.866										
55	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	-.5										
56	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	1	SY	1	SZ											
57	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	.866	SY	1	SZ	.5										
58	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	.5	SY	1	SZ	.866										
59	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX		SY	1	SZ	1										
60	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	.866										
61	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	.5										
62	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	-1	SY	1	SZ											
63	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	-.866	SY	1	SZ	-.5										
64	1.2D + 1.0Ev + 1....		Y		1	1.2	39	1.2	SX	-.5	SY	1	SZ	-.866										

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	-1.045833	0	0	0	
2	N2	13.5375	0	0	0	
3	N3	6.25	0	0	0	
4	N4	6.25	0	-0.1875	0	
5	N5	6.25	0	-3.60417	0	
6	N9	.625	0	0	0	
7	N10	0.71875	0	-0.16238	0	
8	N11	2.51025	0	-3.265349	0	
9	N12	11.875	0	0	0	
10	N13	11.78125	0	-0.16238	0	
11	N14	9.98975	0	-3.265349	0	
12	N25	6.25	0	-2.81217	0	
13	N26	6.25	0	-0.97917	0	
14	N31	1.190324	0	-0.97917	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
15	N32	2.248607	0	-2.81217	0	
16	N33	11.309676	0	-0.97917	0	
17	N34	10.251393	0	-2.81217	0	
18	N18	12.579167	0	0	0	
19	N19	12.579167	0	.25	0	
20	N20	12.579167	4.041667	.25	0	
21	N21	12.579167	-3	.25	0	
22	N22	10.870833	0	0	0	
23	N23	10.870833	0.	-.25	0	
24	N24	9.079167	0	0	0	
25	N25A	9.079167	0	.25	0	
26	N26A	1.370833	0	0	0	
27	N27	1.370833	0	.25	0	
28	N28	-0.129167	0	0	0	
29	N29	-0.129167	0	.25	0	
30	N32A	9.079167	3.166667	.25	0	
31	N33A	9.079167	-3.916667	.25	0	
32	N34A	1.370833	3.916667	.25	0	
33	N35	1.370833	-3.125	.25	0	
34	N38	10.870833	3.416667	-.25	0	
35	N39	10.870833	-2.583333	-.25	0	
36	N36	-0.129167	3.916667	.25	0	
37	N37	-0.129167	-3.125	.25	0	
38	N38A	6.25	0	-5.187503	0	
39	N39A	6.25	0	-4.10417	0	
40	N40	5.916667	0	-4.10417	0	
41	N41	5.916667	-.5	-4.10417	0	
42	N42	5.916667	2.5	-4.10417	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Ru...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Mount Pipe	PIPE_2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Standoff	HSS4X4X4	Beam	SquareTube	A500 Gr. B 46	Typical	3.37	7.8	7.8	12.8
3	Grating Angle	L4X4X4	Beam	Single Angle	A36 Gr.36	Typical	1.93	3	3	.044
4	Face Horizontal	PIPE_3.5	Beam	Pipe	A53 Gr. B	Typical	2.5	4.52	4.52	9.04

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N1	N2			Face Horizontal	Beam	Pipe	A53 Gr. B	Typical
2	M2	N3	N4			RIGID	None	None	RIGID	Typical
3	M3	N4	N5			Standoff	Beam	SquareTube	A500 Gr. ...	Typical
4	M6	N9	N10			RIGID	None	None	RIGID	Typical
5	M7	N10	N11		90	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
6	M8	N12	N13			RIGID	None	None	RIGID	Typical
7	M9	N13	N14		180	Grating Angle	Beam	Single Angle	A36 Gr.36	Typical
8	M8A	N18	N19			RIGID	None	None	RIGID	Typical
9	MP1A	N20	N21			Mount Pipe	Column	Pipe	A53 Gr. B	Typical
10	M10	N22	N23			RIGID	None	None	RIGID	Typical
11	M11	N24	N25A			RIGID	None	None	RIGID	Typical
12	M12	N26A	N27			RIGID	None	None	RIGID	Typical
13	M13	N28	N29			RIGID	None	None	RIGID	Typical
14	MP3A	N32A	N33A			Mount Pipe	Column	Pipe	A53 Gr. B	Typical
15	MP4A	N34A	N35			Mount Pipe	Column	Pipe	A53 Gr. B	Typical
16	MP2A	N38	N39			Mount Pipe	Column	Pipe	A53 Gr. B	Typical
17	MP5A	N36	N37			Mount Pipe	Column	Pipe	A53 Gr. B	Typical
18	M18	N5	N38A			Standoff	Beam	SquareTube	A500 Gr. ...	Typical
19	M19	N40	N39A			RIGID	None	None	RIGID	Typical
20	M20	N42	N41			Mount Pipe	Column	Pipe	A53 Gr. B	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes	Default			None
2	M2						Yes	** NA **			None
3	M3						Yes				None
4	M6						Yes	** NA **			None
5	M7						Yes	Default			None
6	M8						Yes	** NA **			None
7	M9						Yes	Default			None
8	M8A						Yes	** NA **			None
9	MP1A						Yes	** NA **			None
10	M10						Yes	** NA **			None
11	M11						Yes	** NA **			None
12	M12						Yes	** NA **			None
13	M13						Yes	** NA **			None
14	MP3A						Yes	** NA **			None
15	MP4A						Yes	** NA **			None
16	MP2A						Yes	** NA **			None
17	MP5A						Yes	** NA **			None
18	M18						Yes				None
19	M19						Yes	** NA **			None
20	M20						Yes	** NA **			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-31.65	.75
2	MP1A	My	-.023	.75
3	MP1A	Mz	.008	.75
4	MP1A	Y	-31.65	5.75
5	MP1A	My	-.023	5.75
6	MP1A	Mz	.008	5.75
7	MP1A	Y	-31.65	.75
8	MP1A	My	-.004	.75
9	MP1A	Mz	-.024	.75
10	MP1A	Y	-31.65	5.75
11	MP1A	My	-.004	5.75
12	MP1A	Mz	-.024	5.75
13	MP3A	Y	-43.55	.75

Member Point Loads (BLC 1 : Antenna D) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
14	MP3A	My	0	.75
15	MP3A	Mz	0	.75
16	MP3A	Y	-43.55	2.75
17	MP3A	My	0	2.75
18	MP3A	Mz	0	2.75
19	MP3A	Y	-4.4	4.5
20	MP3A	My	-.002	4.5
21	MP3A	Mz	-.001	4.5
22	MP1A	Y	-10.4	1
23	MP1A	My	.005	1
24	MP1A	Mz	.003	1
25	M20	Y	-32	1.5
26	M20	My	0	1.5
27	M20	Mz	0	1.5
28	MP2A	Y	-84.4	2.5
29	MP2A	My	.037	2.5
30	MP2A	Mz	.021	2.5
31	MP1A	Y	-70.3	2.5
32	MP1A	My	.005	2.5
33	MP1A	Mz	.003	2.5
34	MP5A	Y	-11.5	.5
35	MP5A	My	-.006	.5
36	MP5A	Mz	0	.5
37	MP5A	Y	-11.5	6
38	MP5A	My	-.006	6
39	MP5A	Mz	0	6

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	Y	-70.653	.75
2	MP1A	My	-.051	.75
3	MP1A	Mz	.018	.75
4	MP1A	Y	-70.653	5.75
5	MP1A	My	-.051	5.75
6	MP1A	Mz	.018	5.75
7	MP1A	Y	-70.653	.75
8	MP1A	My	-.01	.75
9	MP1A	Mz	-.053	.75
10	MP1A	Y	-70.653	5.75
11	MP1A	My	-.01	5.75
12	MP1A	Mz	-.053	5.75
13	MP3A	Y	-35.979	.75
14	MP3A	My	0	.75
15	MP3A	Mz	0	.75
16	MP3A	Y	-35.979	2.75
17	MP3A	My	0	2.75
18	MP3A	Mz	0	2.75
19	MP3A	Y	-13.605	4.5
20	MP3A	My	-.006	4.5
21	MP3A	Mz	-.003	4.5
22	MP1A	Y	-10.866	1
23	MP1A	My	.005	1
24	MP1A	Mz	.003	1
25	M20	Y	-76.722	1.5
26	M20	My	0	1.5
27	M20	Mz	0	1.5

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
28	MP2A	Y	-45.368	2.5
29	MP2A	My	.02	2.5
30	MP2A	Mz	.011	2.5
31	MP1A	Y	-40.803	2.5
32	MP1A	My	.003	2.5
33	MP1A	Mz	.002	2.5
34	MP5A	Y	-59.01	.5
35	MP5A	My	-.03	.5
36	MP5A	Mz	0	.5
37	MP5A	Y	-59.01	6
38	MP5A	My	-.03	6
39	MP5A	Mz	0	6

Member Point Loads (BLC 3 : Antenna Wo (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.75
2	MP1A	Z	-148.395	.75
3	MP1A	Mx	-.038	.75
4	MP1A	X	0	5.75
5	MP1A	Z	-148.395	5.75
6	MP1A	Mx	-.038	5.75
7	MP1A	X	0	.75
8	MP1A	Z	-148.395	.75
9	MP1A	Mx	.112	.75
10	MP1A	X	0	5.75
11	MP1A	Z	-148.395	5.75
12	MP1A	Mx	.112	5.75
13	MP3A	X	0	.75
14	MP3A	Z	-71.005	.75
15	MP3A	Mx	0	.75
16	MP3A	X	0	2.75
17	MP3A	Z	-71.005	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	0	4.5
20	MP3A	Z	-25.342	4.5
21	MP3A	Mx	.006	4.5
22	MP1A	X	0	1
23	MP1A	Z	-12.17	1
24	MP1A	Mx	-.003	1
25	M20	X	0	1.5
26	M20	Z	-89.4	1.5
27	M20	Mx	0	1.5
28	MP2A	X	0	2.5
29	MP2A	Z	-61.116	2.5
30	MP2A	Mx	-.015	2.5
31	MP1A	X	0	2.5
32	MP1A	Z	-59	2.5
33	MP1A	Mx	-.002	2.5
34	MP5A	X	0	.5
35	MP5A	Z	-146.109	.5
36	MP5A	Mx	0	.5
37	MP5A	X	0	6
38	MP5A	Z	-146.109	6
39	MP5A	Mx	0	6

Member Point Loads (BLC 4 : Antenna Wo (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	81.162	.75
2	MP1A	Z	-140.576	.75
3	MP1A	Mx	-.095	.75
4	MP1A	X	81.162	5.75
5	MP1A	Z	-140.576	5.75
6	MP1A	Mx	-.095	5.75
7	MP1A	X	81.162	.75
8	MP1A	Z	-140.576	.75
9	MP1A	Mx	.095	.75
10	MP1A	X	81.162	5.75
11	MP1A	Z	-140.576	5.75
12	MP1A	Mx	.095	5.75
13	MP3A	X	41.873	.75
14	MP3A	Z	-72.525	.75
15	MP3A	Mx	0	.75
16	MP3A	X	41.873	2.75
17	MP3A	Z	-72.525	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	15.858	4.5
20	MP3A	Z	-27.467	4.5
21	MP3A	Mx	0	4.5
22	MP1A	X	6.593	1
23	MP1A	Z	-11.419	1
24	MP1A	Mx	0	1
25	M20	X	50.408	1.5
26	M20	Z	-87.309	1.5
27	M20	Mx	0	1.5
28	MP2A	X	33.32	2.5
29	MP2A	Z	-57.712	2.5
30	MP2A	Mx	0	2.5
31	MP1A	X	33.32	2.5
32	MP1A	Z	-57.712	2.5
33	MP1A	Mx	0	2.5
34	MP5A	X	69.476	.5
35	MP5A	Z	-120.336	.5
36	MP5A	Mx	-.035	.5
37	MP5A	X	69.476	6
38	MP5A	Z	-120.336	6
39	MP5A	Mx	-.035	6

Member Point Loads (BLC 5 : Antenna Wo (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	128.514	.75
2	MP1A	Z	-74.198	.75
3	MP1A	Mx	-.112	.75
4	MP1A	X	128.514	5.75
5	MP1A	Z	-74.198	5.75
6	MP1A	Mx	-.112	5.75
7	MP1A	X	128.514	.75
8	MP1A	Z	-74.198	.75
9	MP1A	Mx	.038	.75
10	MP1A	X	128.514	5.75
11	MP1A	Z	-74.198	5.75
12	MP1A	Mx	.038	5.75
13	MP3A	X	61.492	.75
14	MP3A	Z	-35.503	.75

Member Point Loads (BLC 5 : Antenna Wo (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	0	.75
16	MP3A	X	61.492	2.75
17	MP3A	Z	-35.503	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	21.947	4.5
20	MP3A	Z	-12.671	4.5
21	MP3A	Mx	-.006	4.5
22	MP1A	X	10.539	1
23	MP1A	Z	-6.085	1
24	MP1A	Mx	.003	1
25	M20	X	107.081	1.5
26	M20	Z	-61.823	1.5
27	M20	Mx	0	1.5
28	MP2A	X	52.928	2.5
29	MP2A	Z	-30.558	2.5
30	MP2A	Mx	.015	2.5
31	MP1A	X	51.096	2.5
32	MP1A	Z	-29.5	2.5
33	MP1A	Mx	.002	2.5
34	MP5A	X	107.942	.5
35	MP5A	Z	-62.32	.5
36	MP5A	Mx	-.054	.5
37	MP5A	X	107.942	6
38	MP5A	Z	-62.32	6
39	MP5A	Mx	-.054	6

Member Point Loads (BLC 6 : Antenna Wo (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	120.54	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	-.087	.75
4	MP1A	X	120.54	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	-.087	5.75
7	MP1A	X	120.54	.75
8	MP1A	Z	0	.75
9	MP1A	Mx	-.017	.75
10	MP1A	X	120.54	5.75
11	MP1A	Z	0	5.75
12	MP1A	Mx	-.017	5.75
13	MP3A	X	45.526	.75
14	MP3A	Z	0	.75
15	MP3A	Mx	0	.75
16	MP3A	X	45.526	2.75
17	MP3A	Z	0	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	12.594	4.5
20	MP3A	Z	0	4.5
21	MP3A	Mx	-.005	4.5
22	MP1A	X	10.139	1
23	MP1A	Z	0	1
24	MP1A	Mx	.004	1
25	M20	X	135.061	1.5
26	M20	Z	0	1.5
27	M20	Mx	0	1.5
28	MP2A	X	50.069	2.5

Member Point Loads (BLC 6 : Antenna Wo (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	0	2.5
30	MP2A	Mx	.022	2.5
31	MP1A	X	43.721	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	.003	2.5
34	MP5A	X	117.484	.5
35	MP5A	Z	0	.5
36	MP5A	Mx	-.059	.5
37	MP5A	X	117.484	6
38	MP5A	Z	0	6
39	MP5A	Mx	-.059	6

Member Point Loads (BLC 7 : Antenna Wo (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	92.329	.75
2	MP1A	Z	53.306	.75
3	MP1A	Mx	-.053	.75
4	MP1A	X	92.329	5.75
5	MP1A	Z	53.306	5.75
6	MP1A	Mx	-.053	5.75
7	MP1A	X	92.329	.75
8	MP1A	Z	53.306	.75
9	MP1A	Mx	-.053	.75
10	MP1A	X	92.329	5.75
11	MP1A	Z	53.306	5.75
12	MP1A	Mx	-.053	5.75
13	MP3A	X	28.394	.75
14	MP3A	Z	16.393	.75
15	MP3A	Mx	0	.75
16	MP3A	X	28.394	2.75
17	MP3A	Z	16.393	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	5.386	4.5
20	MP3A	Z	3.11	4.5
21	MP3A	Mx	-.003	4.5
22	MP1A	X	7.901	1
23	MP1A	Z	4.561	1
24	MP1A	Mx	.005	1
25	M20	X	107.081	1.5
26	M20	Z	61.823	1.5
27	M20	Mx	0	1.5
28	MP2A	X	38.577	2.5
29	MP2A	Z	22.273	2.5
30	MP2A	Mx	.022	2.5
31	MP1A	X	31.248	2.5
32	MP1A	Z	18.041	2.5
33	MP1A	Mx	.003	2.5
34	MP5A	X	107.942	.5
35	MP5A	Z	62.32	.5
36	MP5A	Mx	-.054	.5
37	MP5A	X	107.942	6
38	MP5A	Z	62.32	6
39	MP5A	Mx	-.054	6

Member Point Loads (BLC 8 : Antenna Wo (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 8 : Antenna Wo (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	60.27	.75
2	MP1A	Z	104.39	.75
3	MP1A	Mx	-.017	.75
4	MP1A	X	60.27	5.75
5	MP1A	Z	104.39	5.75
6	MP1A	Mx	-.017	5.75
7	MP1A	X	60.27	.75
8	MP1A	Z	104.39	.75
9	MP1A	Mx	-.087	.75
10	MP1A	X	60.27	5.75
11	MP1A	Z	104.39	5.75
12	MP1A	Mx	-.087	5.75
13	MP3A	X	22.763	.75
14	MP3A	Z	39.427	.75
15	MP3A	Mx	0	.75
16	MP3A	X	22.763	2.75
17	MP3A	Z	39.427	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	6.297	4.5
20	MP3A	Z	10.907	4.5
21	MP3A	Mx	-.005	4.5
22	MP1A	X	5.069	1
23	MP1A	Z	8.78	1
24	MP1A	Mx	.004	1
25	M20	X	50.408	1.5
26	M20	Z	87.309	1.5
27	M20	Mx	0	1.5
28	MP2A	X	25.034	2.5
29	MP2A	Z	43.361	2.5
30	MP2A	Mx	.022	2.5
31	MP1A	X	21.861	2.5
32	MP1A	Z	37.864	2.5
33	MP1A	Mx	.003	2.5
34	MP5A	X	69.476	.5
35	MP5A	Z	120.336	.5
36	MP5A	Mx	-.035	.5
37	MP5A	X	69.476	6
38	MP5A	Z	120.336	6
39	MP5A	Mx	-.035	6

Member Point Loads (BLC 9 : Antenna Wo (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.75
2	MP1A	Z	148.395	.75
3	MP1A	Mx	.038	.75
4	MP1A	X	0	5.75
5	MP1A	Z	148.395	5.75
6	MP1A	Mx	.038	5.75
7	MP1A	X	0	.75
8	MP1A	Z	148.395	.75
9	MP1A	Mx	-.112	.75
10	MP1A	X	0	5.75
11	MP1A	Z	148.395	5.75
12	MP1A	Mx	-.112	5.75
13	MP3A	X	0	.75
14	MP3A	Z	71.005	.75

Member Point Loads (BLC 9 : Antenna Wo (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	0	.75
16	MP3A	X	0	2.75
17	MP3A	Z	71.005	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	0	4.5
20	MP3A	Z	25.342	4.5
21	MP3A	Mx	-.006	4.5
22	MP1A	X	0	1
23	MP1A	Z	12.17	1
24	MP1A	Mx	.003	1
25	M20	X	0	1.5
26	M20	Z	89.4	1.5
27	M20	Mx	0	1.5
28	MP2A	X	0	2.5
29	MP2A	Z	61.116	2.5
30	MP2A	Mx	.015	2.5
31	MP1A	X	0	2.5
32	MP1A	Z	59	2.5
33	MP1A	Mx	.002	2.5
34	MP5A	X	0	.5
35	MP5A	Z	146.109	.5
36	MP5A	Mx	0	.5
37	MP5A	X	0	6
38	MP5A	Z	146.109	6
39	MP5A	Mx	0	6

Member Point Loads (BLC 10 : Antenna Wo (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-81.162	.75
2	MP1A	Z	140.576	.75
3	MP1A	Mx	.095	.75
4	MP1A	X	-81.162	5.75
5	MP1A	Z	140.576	5.75
6	MP1A	Mx	.095	5.75
7	MP1A	X	-81.162	.75
8	MP1A	Z	140.576	.75
9	MP1A	Mx	-.095	.75
10	MP1A	X	-81.162	5.75
11	MP1A	Z	140.576	5.75
12	MP1A	Mx	-.095	5.75
13	MP3A	X	-41.873	.75
14	MP3A	Z	72.525	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-41.873	2.75
17	MP3A	Z	72.525	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-15.858	4.5
20	MP3A	Z	27.467	4.5
21	MP3A	Mx	0	4.5
22	MP1A	X	-6.593	1
23	MP1A	Z	11.419	1
24	MP1A	Mx	0	1
25	M20	X	-50.408	1.5
26	M20	Z	87.309	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-33.32	2.5

Member Point Loads (BLC 10 : Antenna Wo (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	57.712	2.5
30	MP2A	Mx	0	2.5
31	MP1A	X	-33.32	2.5
32	MP1A	Z	57.712	2.5
33	MP1A	Mx	0	2.5
34	MP5A	X	-69.476	.5
35	MP5A	Z	120.336	.5
36	MP5A	Mx	.035	.5
37	MP5A	X	-69.476	6
38	MP5A	Z	120.336	6
39	MP5A	Mx	.035	6

Member Point Loads (BLC 11 : Antenna Wo (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-128.514	.75
2	MP1A	Z	74.198	.75
3	MP1A	Mx	.112	.75
4	MP1A	X	-128.514	5.75
5	MP1A	Z	74.198	5.75
6	MP1A	Mx	.112	5.75
7	MP1A	X	-128.514	.75
8	MP1A	Z	74.198	.75
9	MP1A	Mx	-.038	.75
10	MP1A	X	-128.514	5.75
11	MP1A	Z	74.198	5.75
12	MP1A	Mx	-.038	5.75
13	MP3A	X	-61.492	.75
14	MP3A	Z	35.503	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-61.492	2.75
17	MP3A	Z	35.503	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-21.947	4.5
20	MP3A	Z	12.671	4.5
21	MP3A	Mx	.006	4.5
22	MP1A	X	-10.539	1
23	MP1A	Z	6.085	1
24	MP1A	Mx	-.003	1
25	M20	X	-107.081	1.5
26	M20	Z	61.823	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-52.928	2.5
29	MP2A	Z	30.558	2.5
30	MP2A	Mx	-.015	2.5
31	MP1A	X	-51.096	2.5
32	MP1A	Z	29.5	2.5
33	MP1A	Mx	-.002	2.5
34	MP5A	X	-107.942	.5
35	MP5A	Z	62.32	.5
36	MP5A	Mx	.054	.5
37	MP5A	X	-107.942	6
38	MP5A	Z	62.32	6
39	MP5A	Mx	.054	6

Member Point Loads (BLC 12 : Antenna Wo (270 Deg))

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 12 : Antenna Wo (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-120.54	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	.087	.75
4	MP1A	X	-120.54	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	.087	5.75
7	MP1A	X	-120.54	.75
8	MP1A	Z	0	.75
9	MP1A	Mx	.017	.75
10	MP1A	X	-120.54	5.75
11	MP1A	Z	0	5.75
12	MP1A	Mx	.017	5.75
13	MP3A	X	-45.526	.75
14	MP3A	Z	0	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-45.526	2.75
17	MP3A	Z	0	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-12.594	4.5
20	MP3A	Z	0	4.5
21	MP3A	Mx	.005	4.5
22	MP1A	X	-10.139	1
23	MP1A	Z	0	1
24	MP1A	Mx	-.004	1
25	M20	X	-135.061	1.5
26	M20	Z	0	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-50.069	2.5
29	MP2A	Z	0	2.5
30	MP2A	Mx	-.022	2.5
31	MP1A	X	-43.721	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	-.003	2.5
34	MP5A	X	-117.484	.5
35	MP5A	Z	0	.5
36	MP5A	Mx	.059	.5
37	MP5A	X	-117.484	6
38	MP5A	Z	0	6
39	MP5A	Mx	.059	6

Member Point Loads (BLC 13 : Antenna Wo (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-92.329	.75
2	MP1A	Z	-53.306	.75
3	MP1A	Mx	.053	.75
4	MP1A	X	-92.329	5.75
5	MP1A	Z	-53.306	5.75
6	MP1A	Mx	.053	5.75
7	MP1A	X	-92.329	.75
8	MP1A	Z	-53.306	.75
9	MP1A	Mx	.053	.75
10	MP1A	X	-92.329	5.75
11	MP1A	Z	-53.306	5.75
12	MP1A	Mx	.053	5.75
13	MP3A	X	-28.394	.75
14	MP3A	Z	-16.393	.75

Member Point Loads (BLC 13 : Antenna Wo (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	0	.75
16	MP3A	X	-28.394	2.75
17	MP3A	Z	-16.393	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-5.386	4.5
20	MP3A	Z	-3.11	4.5
21	MP3A	Mx	.003	4.5
22	MP1A	X	-7.901	1
23	MP1A	Z	-4.561	1
24	MP1A	Mx	-.005	1
25	M20	X	-107.081	1.5
26	M20	Z	-61.823	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-38.577	2.5
29	MP2A	Z	-22.273	2.5
30	MP2A	Mx	-.022	2.5
31	MP1A	X	-31.248	2.5
32	MP1A	Z	-18.041	2.5
33	MP1A	Mx	-.003	2.5
34	MP5A	X	-107.942	.5
35	MP5A	Z	-62.32	.5
36	MP5A	Mx	.054	.5
37	MP5A	X	-107.942	6
38	MP5A	Z	-62.32	6
39	MP5A	Mx	.054	6

Member Point Loads (BLC 14 : Antenna Wo (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-60.27	.75
2	MP1A	Z	-104.39	.75
3	MP1A	Mx	.017	.75
4	MP1A	X	-60.27	5.75
5	MP1A	Z	-104.39	5.75
6	MP1A	Mx	.017	5.75
7	MP1A	X	-60.27	.75
8	MP1A	Z	-104.39	.75
9	MP1A	Mx	.087	.75
10	MP1A	X	-60.27	5.75
11	MP1A	Z	-104.39	5.75
12	MP1A	Mx	.087	5.75
13	MP3A	X	-22.763	.75
14	MP3A	Z	-39.427	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-22.763	2.75
17	MP3A	Z	-39.427	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-6.297	4.5
20	MP3A	Z	-10.907	4.5
21	MP3A	Mx	.005	4.5
22	MP1A	X	-5.069	1
23	MP1A	Z	-8.78	1
24	MP1A	Mx	-.004	1
25	M20	X	-50.408	1.5
26	M20	Z	-87.309	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-25.034	2.5

Member Point Loads (BLC 14 : Antenna Wo (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	-43.361	2.5
30	MP2A	Mx	-.022	2.5
31	MP1A	X	-21.861	2.5
32	MP1A	Z	-37.864	2.5
33	MP1A	Mx	-.003	2.5
34	MP5A	X	-69.476	.5
35	MP5A	Z	-120.336	.5
36	MP5A	Mx	.035	.5
37	MP5A	X	-69.476	6
38	MP5A	Z	-120.336	6
39	MP5A	Mx	.035	6

Member Point Loads (BLC 15 : Antenna Wi (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.75
2	MP1A	Z	-27.528	.75
3	MP1A	Mx	-.007	.75
4	MP1A	X	0	5.75
5	MP1A	Z	-27.528	5.75
6	MP1A	Mx	-.007	5.75
7	MP1A	X	0	.75
8	MP1A	Z	-27.528	.75
9	MP1A	Mx	.021	.75
10	MP1A	X	0	5.75
11	MP1A	Z	-27.528	5.75
12	MP1A	Mx	.021	5.75
13	MP3A	X	0	.75
14	MP3A	Z	-13.626	.75
15	MP3A	Mx	0	.75
16	MP3A	X	0	2.75
17	MP3A	Z	-13.626	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	0	4.5
20	MP3A	Z	-5.699	4.5
21	MP3A	Mx	.001	4.5
22	MP1A	X	0	1
23	MP1A	Z	-3.059	1
24	MP1A	Mx	-.000765	1
25	M20	X	0	1.5
26	M20	Z	-17.663	1.5
27	M20	Mx	0	1.5
28	MP2A	X	0	2.5
29	MP2A	Z	-12.394	2.5
30	MP2A	Mx	-.003	2.5
31	MP1A	X	0	2.5
32	MP1A	Z	-12.007	2.5
33	MP1A	Mx	-.0005	2.5
34	MP5A	X	0	.5
35	MP5A	Z	-27.603	.5
36	MP5A	Mx	0	.5
37	MP5A	X	0	6
38	MP5A	Z	-27.603	6
39	MP5A	Mx	0	6

Member Point Loads (BLC 16 : Antenna Wi (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 16 : Antenna Wi (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	14.951	.75
2	MP1A	Z	-25.896	.75
3	MP1A	Mx	-.017	.75
4	MP1A	X	14.951	5.75
5	MP1A	Z	-25.896	5.75
6	MP1A	Mx	-.017	5.75
7	MP1A	X	14.951	.75
8	MP1A	Z	-25.896	.75
9	MP1A	Mx	.017	.75
10	MP1A	X	14.951	5.75
11	MP1A	Z	-25.896	5.75
12	MP1A	Mx	.017	5.75
13	MP3A	X	7.954	.75
14	MP3A	Z	-13.777	.75
15	MP3A	Mx	0	.75
16	MP3A	X	7.954	2.75
17	MP3A	Z	-13.777	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	3.459	4.5
20	MP3A	Z	-5.992	4.5
21	MP3A	Mx	0	4.5
22	MP1A	X	1.631	1
23	MP1A	Z	-2.825	1
24	MP1A	Mx	0	1
25	M20	X	9.85	1.5
26	M20	Z	-17.061	1.5
27	M20	Mx	0	1.5
28	MP2A	X	6.707	2.5
29	MP2A	Z	-11.617	2.5
30	MP2A	Mx	0	2.5
31	MP1A	X	6.707	2.5
32	MP1A	Z	-11.617	2.5
33	MP1A	Mx	0	2.5
34	MP5A	X	13.176	.5
35	MP5A	Z	-22.822	.5
36	MP5A	Mx	-.007	.5
37	MP5A	X	13.176	6
38	MP5A	Z	-22.822	6
39	MP5A	Mx	-.007	6

Member Point Loads (BLC 17 : Antenna Wi (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	23.84	.75
2	MP1A	Z	-13.764	.75
3	MP1A	Mx	-.021	.75
4	MP1A	X	23.84	5.75
5	MP1A	Z	-13.764	5.75
6	MP1A	Mx	-.021	5.75
7	MP1A	X	23.84	.75
8	MP1A	Z	-13.764	.75
9	MP1A	Mx	.007	.75
10	MP1A	X	23.84	5.75
11	MP1A	Z	-13.764	5.75
12	MP1A	Mx	.007	5.75
13	MP3A	X	11.801	.75
14	MP3A	Z	-6.813	.75

Member Point Loads (BLC 17 : Antenna Wi (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	0	.75
16	MP3A	X	11.801	2.75
17	MP3A	Z	-6.813	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	4.936	4.5
20	MP3A	Z	-2.85	4.5
21	MP3A	Mx	-.001	4.5
22	MP1A	X	2.649	1
23	MP1A	Z	-1.529	1
24	MP1A	Mx	.000765	1
25	M20	X	20.59	1.5
26	M20	Z	-11.888	1.5
27	M20	Mx	0	1.5
28	MP2A	X	10.734	2.5
29	MP2A	Z	-6.197	2.5
30	MP2A	Mx	.003	2.5
31	MP1A	X	10.398	2.5
32	MP1A	Z	-6.003	2.5
33	MP1A	Mx	.0005	2.5
34	MP5A	X	20.655	.5
35	MP5A	Z	-11.925	.5
36	MP5A	Mx	-.01	.5
37	MP5A	X	20.655	6
38	MP5A	Z	-11.925	6
39	MP5A	Mx	-.01	6

Member Point Loads (BLC 18 : Antenna Wi (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	22.779	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	-.017	.75
4	MP1A	X	22.779	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	-.017	5.75
7	MP1A	X	22.779	.75
8	MP1A	Z	0	.75
9	MP1A	Mx	-.003	.75
10	MP1A	X	22.779	5.75
11	MP1A	Z	0	5.75
12	MP1A	Mx	-.003	5.75
13	MP3A	X	9.063	.75
14	MP3A	Z	0	.75
15	MP3A	Mx	0	.75
16	MP3A	X	9.063	2.75
17	MP3A	Z	0	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	3.259	4.5
20	MP3A	Z	0	4.5
21	MP3A	Mx	-.001	4.5
22	MP1A	X	2.652	1
23	MP1A	Z	0	1
24	MP1A	Mx	.001	1
25	M20	X	25.813	1.5
26	M20	Z	0	1.5
27	M20	Mx	0	1.5
28	MP2A	X	10.354	2.5

Member Point Loads (BLC 18 : Antenna Wi (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	0	2.5
30	MP2A	Mx	.004	2.5
31	MP1A	X	9.192	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	.000663	2.5
34	MP5A	X	22.599	.5
35	MP5A	Z	0	.5
36	MP5A	Mx	-.011	.5
37	MP5A	X	22.599	6
38	MP5A	Z	0	6
39	MP5A	Mx	-.011	6

Member Point Loads (BLC 19 : Antenna Wi (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	17.671	.75
2	MP1A	Z	10.202	.75
3	MP1A	Mx	-.01	.75
4	MP1A	X	17.671	5.75
5	MP1A	Z	10.202	5.75
6	MP1A	Mx	-.01	5.75
7	MP1A	X	17.671	.75
8	MP1A	Z	10.202	.75
9	MP1A	Mx	-.01	.75
10	MP1A	X	17.671	5.75
11	MP1A	Z	10.202	5.75
12	MP1A	Mx	-.01	5.75
13	MP3A	X	5.873	.75
14	MP3A	Z	3.391	.75
15	MP3A	Mx	0	.75
16	MP3A	X	5.873	2.75
17	MP3A	Z	3.391	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	1.766	4.5
20	MP3A	Z	1.02	4.5
21	MP3A	Mx	-.001	4.5
22	MP1A	X	2.121	1
23	MP1A	Z	1.225	1
24	MP1A	Mx	.001	1
25	M20	X	20.59	1.5
26	M20	Z	11.888	1.5
27	M20	Mx	0	1.5
28	MP2A	X	8.084	2.5
29	MP2A	Z	4.667	2.5
30	MP2A	Mx	.005	2.5
31	MP1A	X	6.741	2.5
32	MP1A	Z	3.892	2.5
33	MP1A	Mx	.000649	2.5
34	MP5A	X	20.655	.5
35	MP5A	Z	11.925	.5
36	MP5A	Mx	-.01	.5
37	MP5A	X	20.655	6
38	MP5A	Z	11.925	6
39	MP5A	Mx	-.01	6

Member Point Loads (BLC 20 : Antenna Wi (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 20 : Antenna Wi (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	11.389	.75
2	MP1A	Z	19.727	.75
3	MP1A	Mx	-.003	.75
4	MP1A	X	11.389	5.75
5	MP1A	Z	19.727	5.75
6	MP1A	Mx	-.003	5.75
7	MP1A	X	11.389	.75
8	MP1A	Z	19.727	.75
9	MP1A	Mx	-.017	.75
10	MP1A	X	11.389	5.75
11	MP1A	Z	19.727	5.75
12	MP1A	Mx	-.017	5.75
13	MP3A	X	4.532	.75
14	MP3A	Z	7.849	.75
15	MP3A	Mx	0	.75
16	MP3A	X	4.532	2.75
17	MP3A	Z	7.849	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	1.63	4.5
20	MP3A	Z	2.823	4.5
21	MP3A	Mx	-.001	4.5
22	MP1A	X	1.326	1
23	MP1A	Z	2.297	1
24	MP1A	Mx	.001	1
25	M20	X	9.85	1.5
26	M20	Z	17.061	1.5
27	M20	Mx	0	1.5
28	MP2A	X	5.177	2.5
29	MP2A	Z	8.967	2.5
30	MP2A	Mx	.004	2.5
31	MP1A	X	4.596	2.5
32	MP1A	Z	7.96	2.5
33	MP1A	Mx	.000663	2.5
34	MP5A	X	13.176	.5
35	MP5A	Z	22.822	.5
36	MP5A	Mx	-.007	.5
37	MP5A	X	13.176	6
38	MP5A	Z	22.822	6
39	MP5A	Mx	-.007	6

Member Point Loads (BLC 21 : Antenna Wi (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.75
2	MP1A	Z	27.528	.75
3	MP1A	Mx	.007	.75
4	MP1A	X	0	5.75
5	MP1A	Z	27.528	5.75
6	MP1A	Mx	.007	5.75
7	MP1A	X	0	.75
8	MP1A	Z	27.528	.75
9	MP1A	Mx	-.021	.75
10	MP1A	X	0	5.75
11	MP1A	Z	27.528	5.75
12	MP1A	Mx	-.021	5.75
13	MP3A	X	0	.75
14	MP3A	Z	13.626	.75

Member Point Loads (BLC 21 : Antenna Wi (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	0	.75
16	MP3A	X	0	2.75
17	MP3A	Z	13.626	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	0	4.5
20	MP3A	Z	5.699	4.5
21	MP3A	Mx	-.001	4.5
22	MP1A	X	0	1
23	MP1A	Z	3.059	1
24	MP1A	Mx	.000765	1
25	M20	X	0	1.5
26	M20	Z	17.663	1.5
27	M20	Mx	0	1.5
28	MP2A	X	0	2.5
29	MP2A	Z	12.394	2.5
30	MP2A	Mx	.003	2.5
31	MP1A	X	0	2.5
32	MP1A	Z	12.007	2.5
33	MP1A	Mx	.0005	2.5
34	MP5A	X	0	.5
35	MP5A	Z	27.603	.5
36	MP5A	Mx	0	.5
37	MP5A	X	0	6
38	MP5A	Z	27.603	6
39	MP5A	Mx	0	6

Member Point Loads (BLC 22 : Antenna Wi (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-14.951	.75
2	MP1A	Z	25.896	.75
3	MP1A	Mx	.017	.75
4	MP1A	X	-14.951	5.75
5	MP1A	Z	25.896	5.75
6	MP1A	Mx	.017	5.75
7	MP1A	X	-14.951	.75
8	MP1A	Z	25.896	.75
9	MP1A	Mx	-.017	.75
10	MP1A	X	-14.951	5.75
11	MP1A	Z	25.896	5.75
12	MP1A	Mx	-.017	5.75
13	MP3A	X	-7.954	.75
14	MP3A	Z	13.777	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-7.954	2.75
17	MP3A	Z	13.777	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-3.459	4.5
20	MP3A	Z	5.992	4.5
21	MP3A	Mx	0	4.5
22	MP1A	X	-1.631	1
23	MP1A	Z	2.825	1
24	MP1A	Mx	0	1
25	M20	X	-9.85	1.5
26	M20	Z	17.061	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-6.707	2.5

Member Point Loads (BLC 22 : Antenna Wi (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	11.617	2.5
30	MP2A	Mx	0	2.5
31	MP1A	X	-6.707	2.5
32	MP1A	Z	11.617	2.5
33	MP1A	Mx	0	2.5
34	MP5A	X	-13.176	.5
35	MP5A	Z	22.822	.5
36	MP5A	Mx	.007	.5
37	MP5A	X	-13.176	6
38	MP5A	Z	22.822	6
39	MP5A	Mx	.007	6

Member Point Loads (BLC 23 : Antenna Wi (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-23.84	.75
2	MP1A	Z	13.764	.75
3	MP1A	Mx	.021	.75
4	MP1A	X	-23.84	5.75
5	MP1A	Z	13.764	5.75
6	MP1A	Mx	.021	5.75
7	MP1A	X	-23.84	.75
8	MP1A	Z	13.764	.75
9	MP1A	Mx	-.007	.75
10	MP1A	X	-23.84	5.75
11	MP1A	Z	13.764	5.75
12	MP1A	Mx	-.007	5.75
13	MP3A	X	-11.801	.75
14	MP3A	Z	6.813	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-11.801	2.75
17	MP3A	Z	6.813	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-4.936	4.5
20	MP3A	Z	2.85	4.5
21	MP3A	Mx	.001	4.5
22	MP1A	X	-2.649	1
23	MP1A	Z	1.529	1
24	MP1A	Mx	-.000765	1
25	M20	X	-20.59	1.5
26	M20	Z	11.888	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-10.734	2.5
29	MP2A	Z	6.197	2.5
30	MP2A	Mx	-.003	2.5
31	MP1A	X	-10.398	2.5
32	MP1A	Z	6.003	2.5
33	MP1A	Mx	-.0005	2.5
34	MP5A	X	-20.655	.5
35	MP5A	Z	11.925	.5
36	MP5A	Mx	.01	.5
37	MP5A	X	-20.655	6
38	MP5A	Z	11.925	6
39	MP5A	Mx	.01	6

Member Point Loads (BLC 24 : Antenna Wi (270 Deg))

Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 24 : Antenna Wi (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-22.779	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	.017	.75
4	MP1A	X	-22.779	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	.017	5.75
7	MP1A	X	-22.779	.75
8	MP1A	Z	0	.75
9	MP1A	Mx	.003	.75
10	MP1A	X	-22.779	5.75
11	MP1A	Z	0	5.75
12	MP1A	Mx	.003	5.75
13	MP3A	X	-9.063	.75
14	MP3A	Z	0	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-9.063	2.75
17	MP3A	Z	0	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-3.259	4.5
20	MP3A	Z	0	4.5
21	MP3A	Mx	.001	4.5
22	MP1A	X	-2.652	1
23	MP1A	Z	0	1
24	MP1A	Mx	-.001	1
25	M20	X	-25.813	1.5
26	M20	Z	0	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-10.354	2.5
29	MP2A	Z	0	2.5
30	MP2A	Mx	-.004	2.5
31	MP1A	X	-9.192	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	-.000663	2.5
34	MP5A	X	-22.599	.5
35	MP5A	Z	0	.5
36	MP5A	Mx	.011	.5
37	MP5A	X	-22.599	6
38	MP5A	Z	0	6
39	MP5A	Mx	.011	6

Member Point Loads (BLC 25 : Antenna Wi (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-17.671	.75
2	MP1A	Z	-10.202	.75
3	MP1A	Mx	.01	.75
4	MP1A	X	-17.671	5.75
5	MP1A	Z	-10.202	5.75
6	MP1A	Mx	.01	5.75
7	MP1A	X	-17.671	.75
8	MP1A	Z	-10.202	.75
9	MP1A	Mx	.01	.75
10	MP1A	X	-17.671	5.75
11	MP1A	Z	-10.202	5.75
12	MP1A	Mx	.01	5.75
13	MP3A	X	-5.873	.75
14	MP3A	Z	-3.391	.75

Member Point Loads (BLC 25 : Antenna Wi (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	0	.75
16	MP3A	X	-5.873	2.75
17	MP3A	Z	-3.391	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-1.766	4.5
20	MP3A	Z	-1.02	4.5
21	MP3A	Mx	.001	4.5
22	MP1A	X	-2.121	1
23	MP1A	Z	-1.225	1
24	MP1A	Mx	-.001	1
25	M20	X	-20.59	1.5
26	M20	Z	-11.888	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-8.084	2.5
29	MP2A	Z	-4.667	2.5
30	MP2A	Mx	-.005	2.5
31	MP1A	X	-6.741	2.5
32	MP1A	Z	-3.892	2.5
33	MP1A	Mx	-.000649	2.5
34	MP5A	X	-20.655	.5
35	MP5A	Z	-11.925	.5
36	MP5A	Mx	.01	.5
37	MP5A	X	-20.655	6
38	MP5A	Z	-11.925	6
39	MP5A	Mx	.01	6

Member Point Loads (BLC 26 : Antenna Wi (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-11.389	.75
2	MP1A	Z	-19.727	.75
3	MP1A	Mx	.003	.75
4	MP1A	X	-11.389	5.75
5	MP1A	Z	-19.727	5.75
6	MP1A	Mx	.003	5.75
7	MP1A	X	-11.389	.75
8	MP1A	Z	-19.727	.75
9	MP1A	Mx	.017	.75
10	MP1A	X	-11.389	5.75
11	MP1A	Z	-19.727	5.75
12	MP1A	Mx	.017	5.75
13	MP3A	X	-4.532	.75
14	MP3A	Z	-7.849	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-4.532	2.75
17	MP3A	Z	-7.849	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-1.63	4.5
20	MP3A	Z	-2.823	4.5
21	MP3A	Mx	.001	4.5
22	MP1A	X	-1.326	1
23	MP1A	Z	-2.297	1
24	MP1A	Mx	-.001	1
25	M20	X	-9.85	1.5
26	M20	Z	-17.061	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-5.177	2.5

Member Point Loads (BLC 26 : Antenna Wi (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	-8.967	2.5
30	MP2A	Mx	-.004	2.5
31	MP1A	X	-4.596	2.5
32	MP1A	Z	-7.96	2.5
33	MP1A	Mx	-.000663	2.5
34	MP5A	X	-13.176	.5
35	MP5A	Z	-22.822	.5
36	MP5A	Mx	.007	.5
37	MP5A	X	-13.176	6
38	MP5A	Z	-22.822	6
39	MP5A	Mx	.007	6

Member Point Loads (BLC 27 : Antenna Wm (0 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.75
2	MP1A	Z	-8.973	.75
3	MP1A	Mx	-.002	.75
4	MP1A	X	0	5.75
5	MP1A	Z	-8.973	5.75
6	MP1A	Mx	-.002	5.75
7	MP1A	X	0	.75
8	MP1A	Z	-8.973	.75
9	MP1A	Mx	.007	.75
10	MP1A	X	0	5.75
11	MP1A	Z	-8.973	5.75
12	MP1A	Mx	.007	5.75
13	MP3A	X	0	.75
14	MP3A	Z	-4.294	.75
15	MP3A	Mx	0	.75
16	MP3A	X	0	2.75
17	MP3A	Z	-4.294	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	0	4.5
20	MP3A	Z	-1.532	4.5
21	MP3A	Mx	.000383	4.5
22	MP1A	X	0	1
23	MP1A	Z	-.736	1
24	MP1A	Mx	-.000184	1
25	M20	X	0	1.5
26	M20	Z	-5.406	1.5
27	M20	Mx	0	1.5
28	MP2A	X	0	2.5
29	MP2A	Z	-3.696	2.5
30	MP2A	Mx	-.000924	2.5
31	MP1A	X	0	2.5
32	MP1A	Z	-3.568	2.5
33	MP1A	Mx	-.000149	2.5
34	MP5A	X	0	.5
35	MP5A	Z	-8.835	.5
36	MP5A	Mx	0	.5
37	MP5A	X	0	6
38	MP5A	Z	-8.835	6
39	MP5A	Mx	0	6

Member Point Loads (BLC 28 : Antenna Wm (30 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 28 : Antenna Wm (30 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	4.908	.75
2	MP1A	Z	-8.5	.75
3	MP1A	Mx	-.006	.75
4	MP1A	X	4.908	5.75
5	MP1A	Z	-8.5	5.75
6	MP1A	Mx	-.006	5.75
7	MP1A	X	4.908	.75
8	MP1A	Z	-8.5	.75
9	MP1A	Mx	.006	.75
10	MP1A	X	4.908	5.75
11	MP1A	Z	-8.5	5.75
12	MP1A	Mx	.006	5.75
13	MP3A	X	2.532	.75
14	MP3A	Z	-4.385	.75
15	MP3A	Mx	0	.75
16	MP3A	X	2.532	2.75
17	MP3A	Z	-4.385	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	.959	4.5
20	MP3A	Z	-1.661	4.5
21	MP3A	Mx	0	4.5
22	MP1A	X	.399	1
23	MP1A	Z	-.69	1
24	MP1A	Mx	0	1
25	M20	X	3.048	1.5
26	M20	Z	-5.279	1.5
27	M20	Mx	0	1.5
28	MP2A	X	2.015	2.5
29	MP2A	Z	-3.49	2.5
30	MP2A	Mx	0	2.5
31	MP1A	X	2.015	2.5
32	MP1A	Z	-3.49	2.5
33	MP1A	Mx	0	2.5
34	MP5A	X	4.201	.5
35	MP5A	Z	-7.276	.5
36	MP5A	Mx	-.002	.5
37	MP5A	X	4.201	6
38	MP5A	Z	-7.276	6
39	MP5A	Mx	-.002	6

Member Point Loads (BLC 29 : Antenna Wm (60 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	7.771	.75
2	MP1A	Z	-4.487	.75
3	MP1A	Mx	-.007	.75
4	MP1A	X	7.771	5.75
5	MP1A	Z	-4.487	5.75
6	MP1A	Mx	-.007	5.75
7	MP1A	X	7.771	.75
8	MP1A	Z	-4.487	.75
9	MP1A	Mx	.002	.75
10	MP1A	X	7.771	5.75
11	MP1A	Z	-4.487	5.75
12	MP1A	Mx	.002	5.75
13	MP3A	X	3.718	.75
14	MP3A	Z	-2.147	.75

Member Point Loads (BLC 29 : Antenna Wm (60 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	0	.75
16	MP3A	X	3.718	2.75
17	MP3A	Z	-2.147	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	1.327	4.5
20	MP3A	Z	-.766	4.5
21	MP3A	Mx	-.000383	4.5
22	MP1A	X	.637	1
23	MP1A	Z	-.368	1
24	MP1A	Mx	.000184	1
25	M20	X	6.475	1.5
26	M20	Z	-3.738	1.5
27	M20	Mx	0	1.5
28	MP2A	X	3.2	2.5
29	MP2A	Z	-1.848	2.5
30	MP2A	Mx	.000924	2.5
31	MP1A	X	3.09	2.5
32	MP1A	Z	-1.784	2.5
33	MP1A	Mx	.000149	2.5
34	MP5A	X	6.527	.5
35	MP5A	Z	-3.768	.5
36	MP5A	Mx	-.003	.5
37	MP5A	X	6.527	6
38	MP5A	Z	-3.768	6
39	MP5A	Mx	-.003	6

Member Point Loads (BLC 30 : Antenna Wm (90 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	7.289	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	-.005	.75
4	MP1A	X	7.289	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	-.005	5.75
7	MP1A	X	7.289	.75
8	MP1A	Z	0	.75
9	MP1A	Mx	-.001	.75
10	MP1A	X	7.289	5.75
11	MP1A	Z	0	5.75
12	MP1A	Mx	-.001	5.75
13	MP3A	X	2.753	.75
14	MP3A	Z	0	.75
15	MP3A	Mx	0	.75
16	MP3A	X	2.753	2.75
17	MP3A	Z	0	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	.762	4.5
20	MP3A	Z	0	4.5
21	MP3A	Mx	-.00033	4.5
22	MP1A	X	.613	1
23	MP1A	Z	0	1
24	MP1A	Mx	.000265	1
25	M20	X	8.167	1.5
26	M20	Z	0	1.5
27	M20	Mx	0	1.5
28	MP2A	X	3.028	2.5

Member Point Loads (BLC 30 : Antenna Wm (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	0	2.5
30	MP2A	Mx	.001	2.5
31	MP1A	X	2.644	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	.000191	2.5
34	MP5A	X	7.104	.5
35	MP5A	Z	0	.5
36	MP5A	Mx	-.004	.5
37	MP5A	X	7.104	6
38	MP5A	Z	0	6
39	MP5A	Mx	-.004	6

Member Point Loads (BLC 31 : Antenna Wm (120 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	5.583	.75
2	MP1A	Z	3.223	.75
3	MP1A	Mx	-.003	.75
4	MP1A	X	5.583	5.75
5	MP1A	Z	3.223	5.75
6	MP1A	Mx	-.003	5.75
7	MP1A	X	5.583	.75
8	MP1A	Z	3.223	.75
9	MP1A	Mx	-.003	.75
10	MP1A	X	5.583	5.75
11	MP1A	Z	3.223	5.75
12	MP1A	Mx	-.003	5.75
13	MP3A	X	1.717	.75
14	MP3A	Z	.991	.75
15	MP3A	Mx	0	.75
16	MP3A	X	1.717	2.75
17	MP3A	Z	.991	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	.326	4.5
20	MP3A	Z	.188	4.5
21	MP3A	Mx	-.000188	4.5
22	MP1A	X	.478	1
23	MP1A	Z	.276	1
24	MP1A	Mx	.000276	1
25	M20	X	6.475	1.5
26	M20	Z	3.738	1.5
27	M20	Mx	0	1.5
28	MP2A	X	2.333	2.5
29	MP2A	Z	1.347	2.5
30	MP2A	Mx	.001	2.5
31	MP1A	X	1.889	2.5
32	MP1A	Z	1.091	2.5
33	MP1A	Mx	.000182	2.5
34	MP5A	X	6.527	.5
35	MP5A	Z	3.768	.5
36	MP5A	Mx	-.003	.5
37	MP5A	X	6.527	6
38	MP5A	Z	3.768	6
39	MP5A	Mx	-.003	6

Member Point Loads (BLC 32 : Antenna Wm (150 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 32 : Antenna Wm (150 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	3.644	.75
2	MP1A	Z	6.312	.75
3	MP1A	Mx	-.001	.75
4	MP1A	X	3.644	5.75
5	MP1A	Z	6.312	5.75
6	MP1A	Mx	-.001	5.75
7	MP1A	X	3.644	.75
8	MP1A	Z	6.312	.75
9	MP1A	Mx	-.005	.75
10	MP1A	X	3.644	5.75
11	MP1A	Z	6.312	5.75
12	MP1A	Mx	-.005	5.75
13	MP3A	X	1.376	.75
14	MP3A	Z	2.384	.75
15	MP3A	Mx	0	.75
16	MP3A	X	1.376	2.75
17	MP3A	Z	2.384	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	.381	4.5
20	MP3A	Z	.659	4.5
21	MP3A	Mx	-.00033	4.5
22	MP1A	X	.307	1
23	MP1A	Z	.531	1
24	MP1A	Mx	.000266	1
25	M20	X	3.048	1.5
26	M20	Z	5.279	1.5
27	M20	Mx	0	1.5
28	MP2A	X	1.514	2.5
29	MP2A	Z	2.622	2.5
30	MP2A	Mx	.001	2.5
31	MP1A	X	1.322	2.5
32	MP1A	Z	2.29	2.5
33	MP1A	Mx	.000191	2.5
34	MP5A	X	4.201	.5
35	MP5A	Z	7.276	.5
36	MP5A	Mx	-.002	.5
37	MP5A	X	4.201	6
38	MP5A	Z	7.276	6
39	MP5A	Mx	-.002	6

Member Point Loads (BLC 33 : Antenna Wm (180 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	0	.75
2	MP1A	Z	8.973	.75
3	MP1A	Mx	.002	.75
4	MP1A	X	0	5.75
5	MP1A	Z	8.973	5.75
6	MP1A	Mx	.002	5.75
7	MP1A	X	0	.75
8	MP1A	Z	8.973	.75
9	MP1A	Mx	-.007	.75
10	MP1A	X	0	5.75
11	MP1A	Z	8.973	5.75
12	MP1A	Mx	-.007	5.75
13	MP3A	X	0	.75
14	MP3A	Z	4.294	.75

Member Point Loads (BLC 33 : Antenna Wm (180 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	0	.75
16	MP3A	X	0	2.75
17	MP3A	Z	4.294	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	0	4.5
20	MP3A	Z	1.532	4.5
21	MP3A	Mx	-.000383	4.5
22	MP1A	X	0	1
23	MP1A	Z	.736	1
24	MP1A	Mx	.000184	1
25	M20	X	0	1.5
26	M20	Z	5.406	1.5
27	M20	Mx	0	1.5
28	MP2A	X	0	2.5
29	MP2A	Z	3.696	2.5
30	MP2A	Mx	.000924	2.5
31	MP1A	X	0	2.5
32	MP1A	Z	3.568	2.5
33	MP1A	Mx	.000149	2.5
34	MP5A	X	0	.5
35	MP5A	Z	8.835	.5
36	MP5A	Mx	0	.5
37	MP5A	X	0	6
38	MP5A	Z	8.835	6
39	MP5A	Mx	0	6

Member Point Loads (BLC 34 : Antenna Wm (210 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-4.908	.75
2	MP1A	Z	8.5	.75
3	MP1A	Mx	.006	.75
4	MP1A	X	-4.908	5.75
5	MP1A	Z	8.5	5.75
6	MP1A	Mx	.006	5.75
7	MP1A	X	-4.908	.75
8	MP1A	Z	8.5	.75
9	MP1A	Mx	-.006	.75
10	MP1A	X	-4.908	5.75
11	MP1A	Z	8.5	5.75
12	MP1A	Mx	-.006	5.75
13	MP3A	X	-2.532	.75
14	MP3A	Z	4.385	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-2.532	2.75
17	MP3A	Z	4.385	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-.959	4.5
20	MP3A	Z	1.661	4.5
21	MP3A	Mx	0	4.5
22	MP1A	X	-.399	1
23	MP1A	Z	.69	1
24	MP1A	Mx	0	1
25	M20	X	-3.048	1.5
26	M20	Z	5.279	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-2.015	2.5

Member Point Loads (BLC 34 : Antenna Wm (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	3.49	2.5
30	MP2A	Mx	0	2.5
31	MP1A	X	-2.015	2.5
32	MP1A	Z	3.49	2.5
33	MP1A	Mx	0	2.5
34	MP5A	X	-4.201	.5
35	MP5A	Z	7.276	.5
36	MP5A	Mx	.002	.5
37	MP5A	X	-4.201	6
38	MP5A	Z	7.276	6
39	MP5A	Mx	.002	6

Member Point Loads (BLC 35 : Antenna Wm (240 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-7.771	.75
2	MP1A	Z	4.487	.75
3	MP1A	Mx	.007	.75
4	MP1A	X	-7.771	5.75
5	MP1A	Z	4.487	5.75
6	MP1A	Mx	.007	5.75
7	MP1A	X	-7.771	.75
8	MP1A	Z	4.487	.75
9	MP1A	Mx	-.002	.75
10	MP1A	X	-7.771	5.75
11	MP1A	Z	4.487	5.75
12	MP1A	Mx	-.002	5.75
13	MP3A	X	-3.718	.75
14	MP3A	Z	2.147	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-3.718	2.75
17	MP3A	Z	2.147	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-1.327	4.5
20	MP3A	Z	.766	4.5
21	MP3A	Mx	.000383	4.5
22	MP1A	X	-.637	1
23	MP1A	Z	.368	1
24	MP1A	Mx	-.000184	1
25	M20	X	-6.475	1.5
26	M20	Z	3.738	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-3.2	2.5
29	MP2A	Z	1.848	2.5
30	MP2A	Mx	-.000924	2.5
31	MP1A	X	-3.09	2.5
32	MP1A	Z	1.784	2.5
33	MP1A	Mx	-.000149	2.5
34	MP5A	X	-6.527	.5
35	MP5A	Z	3.768	.5
36	MP5A	Mx	.003	.5
37	MP5A	X	-6.527	6
38	MP5A	Z	3.768	6
39	MP5A	Mx	.003	6

Member Point Loads (BLC 36 : Antenna Wm (270 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]

Member Point Loads (BLC 36 : Antenna Wm (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-7.289	.75
2	MP1A	Z	0	.75
3	MP1A	Mx	.005	.75
4	MP1A	X	-7.289	5.75
5	MP1A	Z	0	5.75
6	MP1A	Mx	.005	5.75
7	MP1A	X	-7.289	.75
8	MP1A	Z	0	.75
9	MP1A	Mx	.001	.75
10	MP1A	X	-7.289	5.75
11	MP1A	Z	0	5.75
12	MP1A	Mx	.001	5.75
13	MP3A	X	-2.753	.75
14	MP3A	Z	0	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-2.753	2.75
17	MP3A	Z	0	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-.762	4.5
20	MP3A	Z	0	4.5
21	MP3A	Mx	.00033	4.5
22	MP1A	X	-.613	1
23	MP1A	Z	0	1
24	MP1A	Mx	-.000265	1
25	M20	X	-8.167	1.5
26	M20	Z	0	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-3.028	2.5
29	MP2A	Z	0	2.5
30	MP2A	Mx	-.001	2.5
31	MP1A	X	-2.644	2.5
32	MP1A	Z	0	2.5
33	MP1A	Mx	-.000191	2.5
34	MP5A	X	-7.104	.5
35	MP5A	Z	0	.5
36	MP5A	Mx	.004	.5
37	MP5A	X	-7.104	6
38	MP5A	Z	0	6
39	MP5A	Mx	.004	6

Member Point Loads (BLC 37 : Antenna Wm (300 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-5.583	.75
2	MP1A	Z	-3.223	.75
3	MP1A	Mx	.003	.75
4	MP1A	X	-5.583	5.75
5	MP1A	Z	-3.223	5.75
6	MP1A	Mx	.003	5.75
7	MP1A	X	-5.583	.75
8	MP1A	Z	-3.223	.75
9	MP1A	Mx	.003	.75
10	MP1A	X	-5.583	5.75
11	MP1A	Z	-3.223	5.75
12	MP1A	Mx	.003	5.75
13	MP3A	X	-1.717	.75
14	MP3A	Z	-.991	.75

Member Point Loads (BLC 37 : Antenna Wm (300 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
15	MP3A	Mx	0	.75
16	MP3A	X	-1.717	2.75
17	MP3A	Z	-.991	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-.326	4.5
20	MP3A	Z	-.188	4.5
21	MP3A	Mx	.000188	4.5
22	MP1A	X	-.478	1
23	MP1A	Z	-.276	1
24	MP1A	Mx	-.000276	1
25	M20	X	-6.475	1.5
26	M20	Z	-3.738	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-2.333	2.5
29	MP2A	Z	-1.347	2.5
30	MP2A	Mx	-.001	2.5
31	MP1A	X	-1.889	2.5
32	MP1A	Z	-1.091	2.5
33	MP1A	Mx	-.000182	2.5
34	MP5A	X	-6.527	.5
35	MP5A	Z	-3.768	.5
36	MP5A	Mx	.003	.5
37	MP5A	X	-6.527	6
38	MP5A	Z	-3.768	6
39	MP5A	Mx	.003	6

Member Point Loads (BLC 38 : Antenna Wm (330 Deg))

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP1A	X	-3.644	.75
2	MP1A	Z	-6.312	.75
3	MP1A	Mx	.001	.75
4	MP1A	X	-3.644	5.75
5	MP1A	Z	-6.312	5.75
6	MP1A	Mx	.001	5.75
7	MP1A	X	-3.644	.75
8	MP1A	Z	-6.312	.75
9	MP1A	Mx	.005	.75
10	MP1A	X	-3.644	5.75
11	MP1A	Z	-6.312	5.75
12	MP1A	Mx	.005	5.75
13	MP3A	X	-1.376	.75
14	MP3A	Z	-2.384	.75
15	MP3A	Mx	0	.75
16	MP3A	X	-1.376	2.75
17	MP3A	Z	-2.384	2.75
18	MP3A	Mx	0	2.75
19	MP3A	X	-.381	4.5
20	MP3A	Z	-.659	4.5
21	MP3A	Mx	.00033	4.5
22	MP1A	X	-.307	1
23	MP1A	Z	-.531	1
24	MP1A	Mx	-.000266	1
25	M20	X	-3.048	1.5
26	M20	Z	-5.279	1.5
27	M20	Mx	0	1.5
28	MP2A	X	-1.514	2.5

Member Point Loads (BLC 38 : Antenna Wm (330 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
29	MP2A	Z	-2.622	2.5
30	MP2A	Mx	-.001	2.5
31	MP1A	X	-1.322	2.5
32	MP1A	Z	-2.29	2.5
33	MP1A	Mx	-.000191	2.5
34	MP5A	X	-4.201	.5
35	MP5A	Z	-7.276	.5
36	MP5A	Mx	.002	.5
37	MP5A	X	-4.201	6
38	MP5A	Z	-7.276	6
39	MP5A	Mx	.002	6

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%93

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-500	%69

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M1	Y	-250	%50

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	Y	-7.349	-7.349	0	%100
2	M3	Y	-9.706	-9.706	0	%100
3	M7	Y	-9.706	-9.706	0	%100
4	M9	Y	-9.706	-9.706	0	%100
5	MP1A	Y	-5.036	-5.036	0	%100
6	MP3A	Y	-5.036	-5.036	0	%100
7	MP4A	Y	-5.036	-5.036	0	%100
8	MP2A	Y	-5.036	-5.036	0	%100
9	MP5A	Y	-5.036	-5.036	0	%100
10	M18	Y	-9.706	-9.706	0	%100
11	M20	Y	-5.036	-5.036	0	%100

Member Distributed Loads (BLC 41 : Structure Wo (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-13.071	-13.071	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	-4.529	-4.529	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	-4.529	-4.529	0	%100
9	MP1A	X	0	0	0	%100

Member Distributed Loads (BLC 41 : Structure Wo (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
10	MP1A	Z	-8.464	-8.464	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-8.464	-8.464	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	-8.464	-8.464	0	%100
15	MP2A	X	0	0	0	%100
16	MP2A	Z	-8.464	-8.464	0	%100
17	MP5A	X	0	0	0	%100
18	MP5A	Z	-8.464	-8.464	0	%100
19	M18	X	0	0	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	0	0	0	%100
22	M20	Z	-6.921	-6.921	0	%100

Member Distributed Loads (BLC 42 : Structure Wo (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.901	4.901	0	%100
2	M1	Z	-8.49	-8.49	0	%100
3	M3	X	1.43	1.43	0	%100
4	M3	Z	-2.477	-2.477	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	6.793	6.793	0	%100
8	M9	Z	-11.766	-11.766	0	%100
9	MP1A	X	4.232	4.232	0	%100
10	MP1A	Z	-7.33	-7.33	0	%100
11	MP3A	X	4.232	4.232	0	%100
12	MP3A	Z	-7.33	-7.33	0	%100
13	MP4A	X	4.232	4.232	0	%100
14	MP4A	Z	-7.33	-7.33	0	%100
15	MP2A	X	4.232	4.232	0	%100
16	MP2A	Z	-7.33	-7.33	0	%100
17	MP5A	X	4.232	4.232	0	%100
18	MP5A	Z	-7.33	-7.33	0	%100
19	M18	X	1.299	1.299	0	%100
20	M18	Z	-2.25	-2.25	0	%100
21	M20	X	3.461	3.461	0	%100
22	M20	Z	-5.994	-5.994	0	%100

Member Distributed Loads (BLC 43 : Structure Wo (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.83	2.83	0	%100
2	M1	Z	-1.634	-1.634	0	%100
3	M3	X	7.432	7.432	0	%100
4	M3	Z	-4.291	-4.291	0	%100
5	M7	X	3.922	3.922	0	%100
6	M7	Z	-2.264	-2.264	0	%100
7	M9	X	15.688	15.688	0	%100
8	M9	Z	-9.057	-9.057	0	%100
9	MP1A	X	7.33	7.33	0	%100
10	MP1A	Z	-4.232	-4.232	0	%100
11	MP3A	X	7.33	7.33	0	%100
12	MP3A	Z	-4.232	-4.232	0	%100
13	MP4A	X	7.33	7.33	0	%100
14	MP4A	Z	-4.232	-4.232	0	%100
15	MP2A	X	7.33	7.33	0	%100

Member Distributed Loads (BLC 43 : Structure Wo (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
16	MP2A	Z	-4.232	-4.232	0	%100
17	MP5A	X	7.33	7.33	0	%100
18	MP5A	Z	-4.232	-4.232	0	%100
19	M18	X	6.751	6.751	0	%100
20	M18	Z	-3.898	-3.898	0	%100
21	M20	X	5.994	5.994	0	%100
22	M20	Z	-3.461	-3.461	0	%100

Member Distributed Loads (BLC 44 : Structure Wo (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	11.442	11.442	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	13.586	13.586	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	13.586	13.586	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	8.464	8.464	0	%100
10	MP1A	Z	0	0	0	%100
11	MP3A	X	8.464	8.464	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	8.464	8.464	0	%100
14	MP4A	Z	0	0	0	%100
15	MP2A	X	8.464	8.464	0	%100
16	MP2A	Z	0	0	0	%100
17	MP5A	X	8.464	8.464	0	%100
18	MP5A	Z	0	0	0	%100
19	M18	X	10.394	10.394	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	6.921	6.921	0	%100
22	M20	Z	0	0	0	%100

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	2.83	2.83	0	%100
2	M1	Z	1.634	1.634	0	%100
3	M3	X	7.432	7.432	0	%100
4	M3	Z	4.291	4.291	0	%100
5	M7	X	15.688	15.688	0	%100
6	M7	Z	9.057	9.057	0	%100
7	M9	X	3.922	3.922	0	%100
8	M9	Z	2.264	2.264	0	%100
9	MP1A	X	7.33	7.33	0	%100
10	MP1A	Z	4.232	4.232	0	%100
11	MP3A	X	7.33	7.33	0	%100
12	MP3A	Z	4.232	4.232	0	%100
13	MP4A	X	7.33	7.33	0	%100
14	MP4A	Z	4.232	4.232	0	%100
15	MP2A	X	7.33	7.33	0	%100
16	MP2A	Z	4.232	4.232	0	%100
17	MP5A	X	7.33	7.33	0	%100
18	MP5A	Z	4.232	4.232	0	%100
19	M18	X	6.751	6.751	0	%100
20	M18	Z	3.898	3.898	0	%100
21	M20	X	5.994	5.994	0	%100

Member Distributed Loads (BLC 45 : Structure Wo (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
22	M20	Z	3.461	3.461	0	%100

Member Distributed Loads (BLC 46 : Structure Wo (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	4.901	4.901	0	%100
2	M1	Z	8.49	8.49	0	%100
3	M3	X	1.43	1.43	0	%100
4	M3	Z	2.477	2.477	0	%100
5	M7	X	6.793	6.793	0	%100
6	M7	Z	11.766	11.766	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	4.232	4.232	0	%100
10	MP1A	Z	7.33	7.33	0	%100
11	MP3A	X	4.232	4.232	0	%100
12	MP3A	Z	7.33	7.33	0	%100
13	MP4A	X	4.232	4.232	0	%100
14	MP4A	Z	7.33	7.33	0	%100
15	MP2A	X	4.232	4.232	0	%100
16	MP2A	Z	7.33	7.33	0	%100
17	MP5A	X	4.232	4.232	0	%100
18	MP5A	Z	7.33	7.33	0	%100
19	M18	X	1.299	1.299	0	%100
20	M18	Z	2.25	2.25	0	%100
21	M20	X	3.461	3.461	0	%100
22	M20	Z	5.994	5.994	0	%100

Member Distributed Loads (BLC 47 : Structure Wo (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	13.071	13.071	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	4.529	4.529	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	4.529	4.529	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	8.464	8.464	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	8.464	8.464	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	8.464	8.464	0	%100
15	MP2A	X	0	0	0	%100
16	MP2A	Z	8.464	8.464	0	%100
17	MP5A	X	0	0	0	%100
18	MP5A	Z	8.464	8.464	0	%100
19	M18	X	0	0	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	0	0	0	%100
22	M20	Z	6.921	6.921	0	%100

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.901	-4.901	0	%100

Member Distributed Loads (BLC 48 : Structure Wo (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
2	M1	Z	8.49	8.49	0	%100
3	M3	X	-1.43	-1.43	0	%100
4	M3	Z	2.477	2.477	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	-6.793	-6.793	0	%100
8	M9	Z	11.766	11.766	0	%100
9	MP1A	X	-4.232	-4.232	0	%100
10	MP1A	Z	7.33	7.33	0	%100
11	MP3A	X	-4.232	-4.232	0	%100
12	MP3A	Z	7.33	7.33	0	%100
13	MP4A	X	-4.232	-4.232	0	%100
14	MP4A	Z	7.33	7.33	0	%100
15	MP2A	X	-4.232	-4.232	0	%100
16	MP2A	Z	7.33	7.33	0	%100
17	MP5A	X	-4.232	-4.232	0	%100
18	MP5A	Z	7.33	7.33	0	%100
19	M18	X	-1.299	-1.299	0	%100
20	M18	Z	2.25	2.25	0	%100
21	M20	X	-3.461	-3.461	0	%100
22	M20	Z	5.994	5.994	0	%100

Member Distributed Loads (BLC 49 : Structure Wo (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.83	-2.83	0	%100
2	M1	Z	1.634	1.634	0	%100
3	M3	X	-7.432	-7.432	0	%100
4	M3	Z	4.291	4.291	0	%100
5	M7	X	-3.922	-3.922	0	%100
6	M7	Z	2.264	2.264	0	%100
7	M9	X	-15.688	-15.688	0	%100
8	M9	Z	9.057	9.057	0	%100
9	MP1A	X	-7.33	-7.33	0	%100
10	MP1A	Z	4.232	4.232	0	%100
11	MP3A	X	-7.33	-7.33	0	%100
12	MP3A	Z	4.232	4.232	0	%100
13	MP4A	X	-7.33	-7.33	0	%100
14	MP4A	Z	4.232	4.232	0	%100
15	MP2A	X	-7.33	-7.33	0	%100
16	MP2A	Z	4.232	4.232	0	%100
17	MP5A	X	-7.33	-7.33	0	%100
18	MP5A	Z	4.232	4.232	0	%100
19	M18	X	-6.751	-6.751	0	%100
20	M18	Z	3.898	3.898	0	%100
21	M20	X	-5.994	-5.994	0	%100
22	M20	Z	3.461	3.461	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	-11.442	-11.442	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	-13.586	-13.586	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	-13.586	-13.586	0	%100

Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
8	M9	Z	0	0	0	%100
9	MP1A	X	-8.464	-8.464	0	%100
10	MP1A	Z	0	0	0	%100
11	MP3A	X	-8.464	-8.464	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	-8.464	-8.464	0	%100
14	MP4A	Z	0	0	0	%100
15	MP2A	X	-8.464	-8.464	0	%100
16	MP2A	Z	0	0	0	%100
17	MP5A	X	-8.464	-8.464	0	%100
18	MP5A	Z	0	0	0	%100
19	M18	X	-10.394	-10.394	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	-6.921	-6.921	0	%100
22	M20	Z	0	0	0	%100

Member Distributed Loads (BLC 51 : Structure Wo (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-2.83	-2.83	0	%100
2	M1	Z	-1.634	-1.634	0	%100
3	M3	X	-7.432	-7.432	0	%100
4	M3	Z	-4.291	-4.291	0	%100
5	M7	X	-15.688	-15.688	0	%100
6	M7	Z	-9.057	-9.057	0	%100
7	M9	X	-3.922	-3.922	0	%100
8	M9	Z	-2.264	-2.264	0	%100
9	MP1A	X	-7.33	-7.33	0	%100
10	MP1A	Z	-4.232	-4.232	0	%100
11	MP3A	X	-7.33	-7.33	0	%100
12	MP3A	Z	-4.232	-4.232	0	%100
13	MP4A	X	-7.33	-7.33	0	%100
14	MP4A	Z	-4.232	-4.232	0	%100
15	MP2A	X	-7.33	-7.33	0	%100
16	MP2A	Z	-4.232	-4.232	0	%100
17	MP5A	X	-7.33	-7.33	0	%100
18	MP5A	Z	-4.232	-4.232	0	%100
19	M18	X	-6.751	-6.751	0	%100
20	M18	Z	-3.898	-3.898	0	%100
21	M20	X	-5.994	-5.994	0	%100
22	M20	Z	-3.461	-3.461	0	%100

Member Distributed Loads (BLC 52 : Structure Wo (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-4.901	-4.901	0	%100
2	M1	Z	-8.49	-8.49	0	%100
3	M3	X	-1.43	-1.43	0	%100
4	M3	Z	-2.477	-2.477	0	%100
5	M7	X	-6.793	-6.793	0	%100
6	M7	Z	-11.766	-11.766	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	-4.232	-4.232	0	%100
10	MP1A	Z	-7.33	-7.33	0	%100
11	MP3A	X	-4.232	-4.232	0	%100
12	MP3A	Z	-7.33	-7.33	0	%100
13	MP4A	X	-4.232	-4.232	0	%100

Member Distributed Loads (BLC 52 : Structure Wo (330 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
14	MP4A	Z	-7.33	-7.33	0	%100
15	MP2A	X	-4.232	-4.232	0	%100
16	MP2A	Z	-7.33	-7.33	0	%100
17	MP5A	X	-4.232	-4.232	0	%100
18	MP5A	Z	-7.33	-7.33	0	%100
19	M18	X	-1.299	-1.299	0	%100
20	M18	Z	-2.25	-2.25	0	%100
21	M20	X	-3.461	-3.461	0	%100
22	M20	Z	-5.994	-5.994	0	%100

Member Distributed Loads (BLC 53 : Structure Wi (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-3.788	-3.788	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	-1.067	-1.067	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	-1.067	-1.067	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	-2.816	-2.816	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-2.816	-2.816	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	-2.816	-2.816	0	%100
15	MP2A	X	0	0	0	%100
16	MP2A	Z	-2.816	-2.816	0	%100
17	MP5A	X	0	0	0	%100
18	MP5A	Z	-2.816	-2.816	0	%100
19	M18	X	0	0	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	0	0	0	%100
22	M20	Z	-2.31	-2.31	0	%100

Member Distributed Loads (BLC 54 : Structure Wi (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.421	1.421	0	%100
2	M1	Z	-2.461	-2.461	0	%100
3	M3	X	.391	.391	0	%100
4	M3	Z	-.677	-.677	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	1.6	1.6	0	%100
8	M9	Z	-2.772	-2.772	0	%100
9	MP1A	X	1.408	1.408	0	%100
10	MP1A	Z	-2.439	-2.439	0	%100
11	MP3A	X	1.408	1.408	0	%100
12	MP3A	Z	-2.439	-2.439	0	%100
13	MP4A	X	1.408	1.408	0	%100
14	MP4A	Z	-2.439	-2.439	0	%100
15	MP2A	X	1.408	1.408	0	%100
16	MP2A	Z	-2.439	-2.439	0	%100
17	MP5A	X	1.408	1.408	0	%100
18	MP5A	Z	-2.439	-2.439	0	%100
19	M18	X	.338	.338	0	%100

Member Distributed Loads (BLC 54 : Structure Wi (30 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
20	M18	Z	-.586	-.586	0	%100
21	M20	X	1.155	1.155	0	%100
22	M20	Z	-2.001	-2.001	0	%100

Member Distributed Loads (BLC 55 : Structure Wi (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.82	.82	0	%100
2	M1	Z	-.474	-.474	0	%100
3	M3	X	2.03	2.03	0	%100
4	M3	Z	-1.172	-1.172	0	%100
5	M7	X	.924	.924	0	%100
6	M7	Z	-.533	-.533	0	%100
7	M9	X	3.696	3.696	0	%100
8	M9	Z	-2.134	-2.134	0	%100
9	MP1A	X	2.439	2.439	0	%100
10	MP1A	Z	-1.408	-1.408	0	%100
11	MP3A	X	2.439	2.439	0	%100
12	MP3A	Z	-1.408	-1.408	0	%100
13	MP4A	X	2.439	2.439	0	%100
14	MP4A	Z	-1.408	-1.408	0	%100
15	MP2A	X	2.439	2.439	0	%100
16	MP2A	Z	-1.408	-1.408	0	%100
17	MP5A	X	2.439	2.439	0	%100
18	MP5A	Z	-1.408	-1.408	0	%100
19	M18	X	1.757	1.757	0	%100
20	M18	Z	-1.014	-1.014	0	%100
21	M20	X	2.001	2.001	0	%100
22	M20	Z	-1.155	-1.155	0	%100

Member Distributed Loads (BLC 56 : Structure Wi (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	3.125	3.125	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	3.201	3.201	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	3.201	3.201	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	2.816	2.816	0	%100
10	MP1A	Z	0	0	0	%100
11	MP3A	X	2.816	2.816	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	2.816	2.816	0	%100
14	MP4A	Z	0	0	0	%100
15	MP2A	X	2.816	2.816	0	%100
16	MP2A	Z	0	0	0	%100
17	MP5A	X	2.816	2.816	0	%100
18	MP5A	Z	0	0	0	%100
19	M18	X	2.705	2.705	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	2.31	2.31	0	%100
22	M20	Z	0	0	0	%100

Member Distributed Loads (BLC 57 : Structure Wi (120 Deg))

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]

Member Distributed Loads (BLC 57 : Structure Wi (120 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.82	.82	0	%100
2	M1	Z	.474	.474	0	%100
3	M3	X	2.03	2.03	0	%100
4	M3	Z	1.172	1.172	0	%100
5	M7	X	3.696	3.696	0	%100
6	M7	Z	2.134	2.134	0	%100
7	M9	X	.924	.924	0	%100
8	M9	Z	.533	.533	0	%100
9	MP1A	X	2.439	2.439	0	%100
10	MP1A	Z	1.408	1.408	0	%100
11	MP3A	X	2.439	2.439	0	%100
12	MP3A	Z	1.408	1.408	0	%100
13	MP4A	X	2.439	2.439	0	%100
14	MP4A	Z	1.408	1.408	0	%100
15	MP2A	X	2.439	2.439	0	%100
16	MP2A	Z	1.408	1.408	0	%100
17	MP5A	X	2.439	2.439	0	%100
18	MP5A	Z	1.408	1.408	0	%100
19	M18	X	1.757	1.757	0	%100
20	M18	Z	1.014	1.014	0	%100
21	M20	X	2.001	2.001	0	%100
22	M20	Z	1.155	1.155	0	%100

Member Distributed Loads (BLC 58 : Structure Wi (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	1.421	1.421	0	%100
2	M1	Z	2.461	2.461	0	%100
3	M3	X	.391	.391	0	%100
4	M3	Z	.677	.677	0	%100
5	M7	X	1.6	1.6	0	%100
6	M7	Z	2.772	2.772	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	1.408	1.408	0	%100
10	MP1A	Z	2.439	2.439	0	%100
11	MP3A	X	1.408	1.408	0	%100
12	MP3A	Z	2.439	2.439	0	%100
13	MP4A	X	1.408	1.408	0	%100
14	MP4A	Z	2.439	2.439	0	%100
15	MP2A	X	1.408	1.408	0	%100
16	MP2A	Z	2.439	2.439	0	%100
17	MP5A	X	1.408	1.408	0	%100
18	MP5A	Z	2.439	2.439	0	%100
19	M18	X	.338	.338	0	%100
20	M18	Z	.586	.586	0	%100
21	M20	X	1.155	1.155	0	%100
22	M20	Z	2.001	2.001	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	3.788	3.788	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	1.067	1.067	0	%100

Member Distributed Loads (BLC 59 : Structure Wi (180 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
7	M9	X	0	0	0	%100
8	M9	Z	1.067	1.067	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	2.816	2.816	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	2.816	2.816	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	2.816	2.816	0	%100
15	MP2A	X	0	0	0	%100
16	MP2A	Z	2.816	2.816	0	%100
17	MP5A	X	0	0	0	%100
18	MP5A	Z	2.816	2.816	0	%100
19	M18	X	0	0	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	0	0	0	%100
22	M20	Z	2.31	2.31	0	%100

Member Distributed Loads (BLC 60 : Structure Wi (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.421	-1.421	0	%100
2	M1	Z	2.461	2.461	0	%100
3	M3	X	-.391	-.391	0	%100
4	M3	Z	.677	.677	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	-1.6	-1.6	0	%100
8	M9	Z	2.772	2.772	0	%100
9	MP1A	X	-1.408	-1.408	0	%100
10	MP1A	Z	2.439	2.439	0	%100
11	MP3A	X	-1.408	-1.408	0	%100
12	MP3A	Z	2.439	2.439	0	%100
13	MP4A	X	-1.408	-1.408	0	%100
14	MP4A	Z	2.439	2.439	0	%100
15	MP2A	X	-1.408	-1.408	0	%100
16	MP2A	Z	2.439	2.439	0	%100
17	MP5A	X	-1.408	-1.408	0	%100
18	MP5A	Z	2.439	2.439	0	%100
19	M18	X	-.338	-.338	0	%100
20	M18	Z	.586	.586	0	%100
21	M20	X	-1.155	-1.155	0	%100
22	M20	Z	2.001	2.001	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.82	-.82	0	%100
2	M1	Z	.474	.474	0	%100
3	M3	X	-2.03	-2.03	0	%100
4	M3	Z	1.172	1.172	0	%100
5	M7	X	-.924	-.924	0	%100
6	M7	Z	.533	.533	0	%100
7	M9	X	-3.696	-3.696	0	%100
8	M9	Z	2.134	2.134	0	%100
9	MP1A	X	-2.439	-2.439	0	%100
10	MP1A	Z	1.408	1.408	0	%100
11	MP3A	X	-2.439	-2.439	0	%100
12	MP3A	Z	1.408	1.408	0	%100

Member Distributed Loads (BLC 61 : Structure Wi (240 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	MP4A	X	-2.439	-2.439	0	%100
14	MP4A	Z	1.408	1.408	0	%100
15	MP2A	X	-2.439	-2.439	0	%100
16	MP2A	Z	1.408	1.408	0	%100
17	MP5A	X	-2.439	-2.439	0	%100
18	MP5A	Z	1.408	1.408	0	%100
19	M18	X	-1.757	-1.757	0	%100
20	M18	Z	1.014	1.014	0	%100
21	M20	X	-2.001	-2.001	0	%100
22	M20	Z	1.155	1.155	0	%100

Member Distributed Loads (BLC 62 : Structure Wi (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	-3.125	-3.125	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	-3.201	-3.201	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	-3.201	-3.201	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	-2.816	-2.816	0	%100
10	MP1A	Z	0	0	0	%100
11	MP3A	X	-2.816	-2.816	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	-2.816	-2.816	0	%100
14	MP4A	Z	0	0	0	%100
15	MP2A	X	-2.816	-2.816	0	%100
16	MP2A	Z	0	0	0	%100
17	MP5A	X	-2.816	-2.816	0	%100
18	MP5A	Z	0	0	0	%100
19	M18	X	-2.705	-2.705	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	-2.31	-2.31	0	%100
22	M20	Z	0	0	0	%100

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.82	-.82	0	%100
2	M1	Z	-.474	-.474	0	%100
3	M3	X	-2.03	-2.03	0	%100
4	M3	Z	-1.172	-1.172	0	%100
5	M7	X	-3.696	-3.696	0	%100
6	M7	Z	-2.134	-2.134	0	%100
7	M9	X	-.924	-.924	0	%100
8	M9	Z	-.533	-.533	0	%100
9	MP1A	X	-2.439	-2.439	0	%100
10	MP1A	Z	-1.408	-1.408	0	%100
11	MP3A	X	-2.439	-2.439	0	%100
12	MP3A	Z	-1.408	-1.408	0	%100
13	MP4A	X	-2.439	-2.439	0	%100
14	MP4A	Z	-1.408	-1.408	0	%100
15	MP2A	X	-2.439	-2.439	0	%100
16	MP2A	Z	-1.408	-1.408	0	%100
17	MP5A	X	-2.439	-2.439	0	%100
18	MP5A	Z	-1.408	-1.408	0	%100

Member Distributed Loads (BLC 63 : Structure Wi (300 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	M18	X	-1.757	-1.757	0	%100
20	M18	Z	-1.014	-1.014	0	%100
21	M20	X	-2.001	-2.001	0	%100
22	M20	Z	-1.155	-1.155	0	%100

Member Distributed Loads (BLC 64 : Structure Wi (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-1.421	-1.421	0	%100
2	M1	Z	-2.461	-2.461	0	%100
3	M3	X	-.391	-.391	0	%100
4	M3	Z	-.677	-.677	0	%100
5	M7	X	-1.6	-1.6	0	%100
6	M7	Z	-2.772	-2.772	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	-1.408	-1.408	0	%100
10	MP1A	Z	-2.439	-2.439	0	%100
11	MP3A	X	-1.408	-1.408	0	%100
12	MP3A	Z	-2.439	-2.439	0	%100
13	MP4A	X	-1.408	-1.408	0	%100
14	MP4A	Z	-2.439	-2.439	0	%100
15	MP2A	X	-1.408	-1.408	0	%100
16	MP2A	Z	-2.439	-2.439	0	%100
17	MP5A	X	-1.408	-1.408	0	%100
18	MP5A	Z	-2.439	-2.439	0	%100
19	M18	X	-.338	-.338	0	%100
20	M18	Z	-.586	-.586	0	%100
21	M20	X	-1.155	-1.155	0	%100
22	M20	Z	-2.001	-2.001	0	%100

Member Distributed Loads (BLC 65 : Structure Wm (0 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	-.79	-.79	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	-.274	-.274	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	-.274	-.274	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	-.512	-.512	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	-.512	-.512	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	-.512	-.512	0	%100
15	MP2A	X	0	0	0	%100
16	MP2A	Z	-.512	-.512	0	%100
17	MP5A	X	0	0	0	%100
18	MP5A	Z	-.512	-.512	0	%100
19	M18	X	0	0	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	0	0	0	%100
22	M20	Z	-.418	-.418	0	%100

Member Distributed Loads (BLC 66 : Structure Wm (30 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.296	.296	0	%100
2	M1	Z	-.513	-.513	0	%100
3	M3	X	.086	.086	0	%100
4	M3	Z	-.15	-.15	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	.411	.411	0	%100
8	M9	Z	-.711	-.711	0	%100
9	MP1A	X	.256	.256	0	%100
10	MP1A	Z	-.443	-.443	0	%100
11	MP3A	X	.256	.256	0	%100
12	MP3A	Z	-.443	-.443	0	%100
13	MP4A	X	.256	.256	0	%100
14	MP4A	Z	-.443	-.443	0	%100
15	MP2A	X	.256	.256	0	%100
16	MP2A	Z	-.443	-.443	0	%100
17	MP5A	X	.256	.256	0	%100
18	MP5A	Z	-.443	-.443	0	%100
19	M18	X	.079	.079	0	%100
20	M18	Z	-.136	-.136	0	%100
21	M20	X	.209	.209	0	%100
22	M20	Z	-.362	-.362	0	%100

Member Distributed Loads (BLC 67 : Structure Wm (60 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.171	.171	0	%100
2	M1	Z	-.099	-.099	0	%100
3	M3	X	.449	.449	0	%100
4	M3	Z	-.259	-.259	0	%100
5	M7	X	.237	.237	0	%100
6	M7	Z	-.137	-.137	0	%100
7	M9	X	.949	.949	0	%100
8	M9	Z	-.548	-.548	0	%100
9	MP1A	X	.443	.443	0	%100
10	MP1A	Z	-.256	-.256	0	%100
11	MP3A	X	.443	.443	0	%100
12	MP3A	Z	-.256	-.256	0	%100
13	MP4A	X	.443	.443	0	%100
14	MP4A	Z	-.256	-.256	0	%100
15	MP2A	X	.443	.443	0	%100
16	MP2A	Z	-.256	-.256	0	%100
17	MP5A	X	.443	.443	0	%100
18	MP5A	Z	-.256	-.256	0	%100
19	M18	X	.408	.408	0	%100
20	M18	Z	-.236	-.236	0	%100
21	M20	X	.362	.362	0	%100
22	M20	Z	-.209	-.209	0	%100

Member Distributed Loads (BLC 68 : Structure Wm (90 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	.692	.692	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	.822	.822	0	%100
6	M7	Z	0	0	0	%100

Member Distributed Loads (BLC 68 : Structure Wm (90 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
7	M9	X	.822	.822	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	.512	.512	0	%100
10	MP1A	Z	0	0	0	%100
11	MP3A	X	.512	.512	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	.512	.512	0	%100
14	MP4A	Z	0	0	0	%100
15	MP2A	X	.512	.512	0	%100
16	MP2A	Z	0	0	0	%100
17	MP5A	X	.512	.512	0	%100
18	MP5A	Z	0	0	0	%100
19	M18	X	.628	.628	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	.418	.418	0	%100
22	M20	Z	0	0	0	%100

Member Distributed Loads (BLC 69 : Structure Wm (120 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.171	.171	0	%100
2	M1	Z	.099	.099	0	%100
3	M3	X	.449	.449	0	%100
4	M3	Z	.259	.259	0	%100
5	M7	X	.949	.949	0	%100
6	M7	Z	.548	.548	0	%100
7	M9	X	.237	.237	0	%100
8	M9	Z	.137	.137	0	%100
9	MP1A	X	.443	.443	0	%100
10	MP1A	Z	.256	.256	0	%100
11	MP3A	X	.443	.443	0	%100
12	MP3A	Z	.256	.256	0	%100
13	MP4A	X	.443	.443	0	%100
14	MP4A	Z	.256	.256	0	%100
15	MP2A	X	.443	.443	0	%100
16	MP2A	Z	.256	.256	0	%100
17	MP5A	X	.443	.443	0	%100
18	MP5A	Z	.256	.256	0	%100
19	M18	X	.408	.408	0	%100
20	M18	Z	.236	.236	0	%100
21	M20	X	.362	.362	0	%100
22	M20	Z	.209	.209	0	%100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	.296	.296	0	%100
2	M1	Z	.513	.513	0	%100
3	M3	X	.086	.086	0	%100
4	M3	Z	.15	.15	0	%100
5	M7	X	.411	.411	0	%100
6	M7	Z	.711	.711	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	.256	.256	0	%100
10	MP1A	Z	.443	.443	0	%100
11	MP3A	X	.256	.256	0	%100
12	MP3A	Z	.443	.443	0	%100

Member Distributed Loads (BLC 70 : Structure Wm (150 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
13	MP4A	X	.256	.256	0	%100
14	MP4A	Z	.443	.443	0	%100
15	MP2A	X	.256	.256	0	%100
16	MP2A	Z	.443	.443	0	%100
17	MP5A	X	.256	.256	0	%100
18	MP5A	Z	.443	.443	0	%100
19	M18	X	.079	.079	0	%100
20	M18	Z	.136	.136	0	%100
21	M20	X	.209	.209	0	%100
22	M20	Z	.362	.362	0	%100

Member Distributed Loads (BLC 71 : Structure Wm (180 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	.79	.79	0	%100
3	M3	X	0	0	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	.274	.274	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	.274	.274	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	.512	.512	0	%100
11	MP3A	X	0	0	0	%100
12	MP3A	Z	.512	.512	0	%100
13	MP4A	X	0	0	0	%100
14	MP4A	Z	.512	.512	0	%100
15	MP2A	X	0	0	0	%100
16	MP2A	Z	.512	.512	0	%100
17	MP5A	X	0	0	0	%100
18	MP5A	Z	.512	.512	0	%100
19	M18	X	0	0	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	0	0	0	%100
22	M20	Z	.418	.418	0	%100

Member Distributed Loads (BLC 72 : Structure Wm (210 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.296	-.296	0	%100
2	M1	Z	.513	.513	0	%100
3	M3	X	-.086	-.086	0	%100
4	M3	Z	.15	.15	0	%100
5	M7	X	0	0	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	-.411	-.411	0	%100
8	M9	Z	.711	.711	0	%100
9	MP1A	X	-.256	-.256	0	%100
10	MP1A	Z	.443	.443	0	%100
11	MP3A	X	-.256	-.256	0	%100
12	MP3A	Z	.443	.443	0	%100
13	MP4A	X	-.256	-.256	0	%100
14	MP4A	Z	.443	.443	0	%100
15	MP2A	X	-.256	-.256	0	%100
16	MP2A	Z	.443	.443	0	%100
17	MP5A	X	-.256	-.256	0	%100
18	MP5A	Z	.443	.443	0	%100

Member Distributed Loads (BLC 72 : Structure Wm (210 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
19	M18	X	-.079	-.079	0	%100
20	M18	Z	.136	.136	0	%100
21	M20	X	-.209	-.209	0	%100
22	M20	Z	.362	.362	0	%100

Member Distributed Loads (BLC 73 : Structure Wm (240 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.171	-.171	0	%100
2	M1	Z	.099	.099	0	%100
3	M3	X	-.449	-.449	0	%100
4	M3	Z	.259	.259	0	%100
5	M7	X	-.237	-.237	0	%100
6	M7	Z	.137	.137	0	%100
7	M9	X	-.949	-.949	0	%100
8	M9	Z	.548	.548	0	%100
9	MP1A	X	-.443	-.443	0	%100
10	MP1A	Z	.256	.256	0	%100
11	MP3A	X	-.443	-.443	0	%100
12	MP3A	Z	.256	.256	0	%100
13	MP4A	X	-.443	-.443	0	%100
14	MP4A	Z	.256	.256	0	%100
15	MP2A	X	-.443	-.443	0	%100
16	MP2A	Z	.256	.256	0	%100
17	MP5A	X	-.443	-.443	0	%100
18	MP5A	Z	.256	.256	0	%100
19	M18	X	-.408	-.408	0	%100
20	M18	Z	.236	.236	0	%100
21	M20	X	-.362	-.362	0	%100
22	M20	Z	.209	.209	0	%100

Member Distributed Loads (BLC 74 : Structure Wm (270 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M3	X	-.692	-.692	0	%100
4	M3	Z	0	0	0	%100
5	M7	X	-.822	-.822	0	%100
6	M7	Z	0	0	0	%100
7	M9	X	-.822	-.822	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	-.512	-.512	0	%100
10	MP1A	Z	0	0	0	%100
11	MP3A	X	-.512	-.512	0	%100
12	MP3A	Z	0	0	0	%100
13	MP4A	X	-.512	-.512	0	%100
14	MP4A	Z	0	0	0	%100
15	MP2A	X	-.512	-.512	0	%100
16	MP2A	Z	0	0	0	%100
17	MP5A	X	-.512	-.512	0	%100
18	MP5A	Z	0	0	0	%100
19	M18	X	-.628	-.628	0	%100
20	M18	Z	0	0	0	%100
21	M20	X	-.418	-.418	0	%100
22	M20	Z	0	0	0	%100

Member Distributed Loads (BLC 75 : Structure Wm (300 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.171	-.171	0	%100
2	M1	Z	-.099	-.099	0	%100
3	M3	X	-.449	-.449	0	%100
4	M3	Z	-.259	-.259	0	%100
5	M7	X	-.949	-.949	0	%100
6	M7	Z	-.548	-.548	0	%100
7	M9	X	-.237	-.237	0	%100
8	M9	Z	-.137	-.137	0	%100
9	MP1A	X	-.443	-.443	0	%100
10	MP1A	Z	-.256	-.256	0	%100
11	MP3A	X	-.443	-.443	0	%100
12	MP3A	Z	-.256	-.256	0	%100
13	MP4A	X	-.443	-.443	0	%100
14	MP4A	Z	-.256	-.256	0	%100
15	MP2A	X	-.443	-.443	0	%100
16	MP2A	Z	-.256	-.256	0	%100
17	MP5A	X	-.443	-.443	0	%100
18	MP5A	Z	-.256	-.256	0	%100
19	M18	X	-.408	-.408	0	%100
20	M18	Z	-.236	-.236	0	%100
21	M20	X	-.362	-.362	0	%100
22	M20	Z	-.209	-.209	0	%100

Member Distributed Loads (BLC 76 : Structure Wm (330 Deg))

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M1	X	-.296	-.296	0	%100
2	M1	Z	-.513	-.513	0	%100
3	M3	X	-.086	-.086	0	%100
4	M3	Z	-.15	-.15	0	%100
5	M7	X	-.411	-.411	0	%100
6	M7	Z	-.711	-.711	0	%100
7	M9	X	0	0	0	%100
8	M9	Z	0	0	0	%100
9	MP1A	X	-.256	-.256	0	%100
10	MP1A	Z	-.443	-.443	0	%100
11	MP3A	X	-.256	-.256	0	%100
12	MP3A	Z	-.443	-.443	0	%100
13	MP4A	X	-.256	-.256	0	%100
14	MP4A	Z	-.443	-.443	0	%100
15	MP2A	X	-.256	-.256	0	%100
16	MP2A	Z	-.443	-.443	0	%100
17	MP5A	X	-.256	-.256	0	%100
18	MP5A	Z	-.443	-.443	0	%100
19	M18	X	-.079	-.079	0	%100
20	M18	Z	-.136	-.136	0	%100
21	M20	X	-.209	-.209	0	%100
22	M20	Z	-.362	-.362	0	%100

Member Distributed Loads (BLC 81 : BLC 39 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	Y	-22.661	-22.661	.791	2.624
2	M7	Y	-12.287	-5.823	.717	1.553
3	M7	Y	-5.823	-6.18	1.553	2.389
4	M7	Y	-6.18	-13.357	2.389	3.225
5	M9	Y	-12.286	-5.823	.717	1.553
6	M9	Y	-5.823	-6.18	1.553	2.389

Member Distributed Loads (BLC 81 : BLC 39 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
7	M9	Y	-6.18	-13.358	2.389	3.225

Member Distributed Loads (BLC 82 : BLC 40 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
1	M3	Y	-49.401	-49.401	.791	2.624
2	M7	Y	-26.785	-12.694	.717	1.553
3	M7	Y	-12.694	-13.472	1.553	2.389
4	M7	Y	-13.472	-29.118	2.389	3.225
5	M9	Y	-26.783	-12.693	.717	1.553
6	M9	Y	-12.693	-13.473	1.553	2.389
7	M9	Y	-13.473	-29.12	2.389	3.225

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N32	N34	N33	N31	Y	A-B	-5

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	N32	N34	N33	N31	Y	A-B	-10.9

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N38A	max	1522.834	10	2308.224	24	1808.349	1	-3.74	1	9.521	9	6.996	28
2		min	-1522.837	4	1054.597	6	-1808.348	7	-11	19	-9.392	3	-.525	49
3	Totals:	max	1522.834	10	2308.224	24	1808.349	1						
4		min	-1522.837	4	1054.597	6	-1808.348	7						

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear ...	Loc[ft]	Dir	LC	phi*Pnc [...	phi*Pnt [lb]	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	M1	PIPE_3.5	.981	7.444	27	.179	7.444		1	33093.107	78750	7.954	7.954	2...	H1-1b
2	M3	HSS4X4X4	.713	3.417	27	.557	3.417	y	27	132865.6...	139518	16.181	16.181	1...	H3-6
3	M7	L4X4X4	.087	0	17	.007	0	z	24	46815.38	62532	3.138	6.715	2...	H2-1
4	M9	L4X4X4	.087	0	21	.007	0	y	22	46815.38	62532	3.138	6.715	2...	H2-1
5	MP1A	PIPE_2.0	.706	4.034	8	.093	4.034		4	17730.272	32130	1.872	1.872	1...	H1-1b
6	MP3A	PIPE_2.0	.147	3.099	2	.020	3.099		2	17605.599	32130	1.872	1.872	2...	H1-1b
7	MP4A	PIPE_2.0	.035	3.888	6	.003	3.888		6	17730.272	32130	1.872	1.872	1...	H1-1b
8	MP2A	PIPE_2.0	.088	3.375	2	.021	3.375		4	20866.733	32130	1.872	1.872	2...	H1-1b
9	MP5A	PIPE_2.0	.304	3.888	7	.051	3.888		4	17730.272	32130	1.872	1.872	1...	H1-1b
10	M18	HSS4X4X4	.945	1.583	3	.558	1.583	y	28	138061.8...	139518	16.181	16.181	1...	H3-6
11	M20	PIPE_2.0	.085	2.5	4	.016	2.5		4	28843.414	32130	1.872	1.872	2...	H1-1b

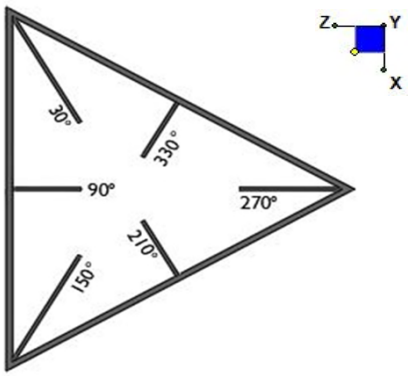
Client:	Verizon Wireless	Date:	6/16/2021
Site Name:	DANIELSON CT		
Project No.	21777301A		
Title:	Mount Analysis	Page:	1

Version 3.1

I. Mount-to-Tower Connection Check

RISA Model Data

Nodes *(labeled per RISA)*	Orientation *(per graphic of typical platform)*
N38A	90



TYPICAL PLATFORM

Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:	
Plate Width (in):	
Plate Height (in):	
W1 (in):	
W2 (in):	
Fy (ksi, plate):	
t_{Plate} (in):	
Weld Size (1/16 in):	4
Phi*Rn (kip/in):	5.57
Required Weld Strength (kip/in):	5.44
Weld Capacity:	**97.7%**

Weld Pattern:	Rect
L1 (in):	5
L2 (in):	4

Max Plate Bending Strengths

Mu_{xx} *(kip-in)* :	#N/A
$Phi*Mn_{xx}$ *(kip-in)* :	0.0
$Phi*Mn_{yy}$ *(kip-in)* :	0.0

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Passing Mount Analysis

Purpose – to provide Maser Consulting the proper documentation in order to complete the required Mount Desktop review of the Post Modification Inspection Report.

- Contractor is responsible for making certain the photos provided as noted below provide confirmation that the installation was completed in accordance with this Passing Mount Analysis.
- Contractor shall relay any data that can impact the performance of the mount, this includes safety issues.

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the passing MA
- Verification that loading is as communicated in the Passing Mount Analysis. NOTE If loading is different than what is conveyed contact Maser Consulting immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded to ***https://pmi.vzwsmart.com*** as depicted on the drawings

Photo Requirements:

- *Base and "During Installation Photos"*
  - Base pictures include
    - Photo of Gate Signs showing the tower owner, site name, and number
    - Photo of carrier shelter showing the carrier site name and number if available
    - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
  - "During Installation Photos if provided - must be placed only in this folder
- *Photos taken at ground level*
  - Overall tower structure before and after installation of the equipment modifications
  - Photos of the appropriate mount before and after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed
- *Photos taken at Mount Elevation*
  - Photos showing each individual sector before and also after installation of equipment.
    - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis

- Photos showing the safety climb wire rope above and below the mount prior to modification.
- Photos showing the climbing facility and safety climb if present.

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.

☐ The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.

☐ The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____

Name _____

Signature _____

Special Instructions / Validation as required from the MA or any other information the contractor deems necessary to share that was identified:

Issue:

Contractor shall verify the weld length and thickness at the standoff and center connection.

Response:

Schedule A – Photo & Document File Structure

- VzW Site Number / Name
  - Base & “During Installation” Photos
  - Pre-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
  - Post-Installation Photos
    - Alpha
    - Beta
    - Gamma
    - Ground Level
    - Tape Drop
    - Photos of climbing facility and safety climb – If Present
  - Certifications – Submission of this document including certifications
  - Specific Required Additional Photos

Structure: 468168-VZW - NE DANIELSON

Sector: **A**

Structure Type: Monopole

Mount Elev: 151.50

10007398

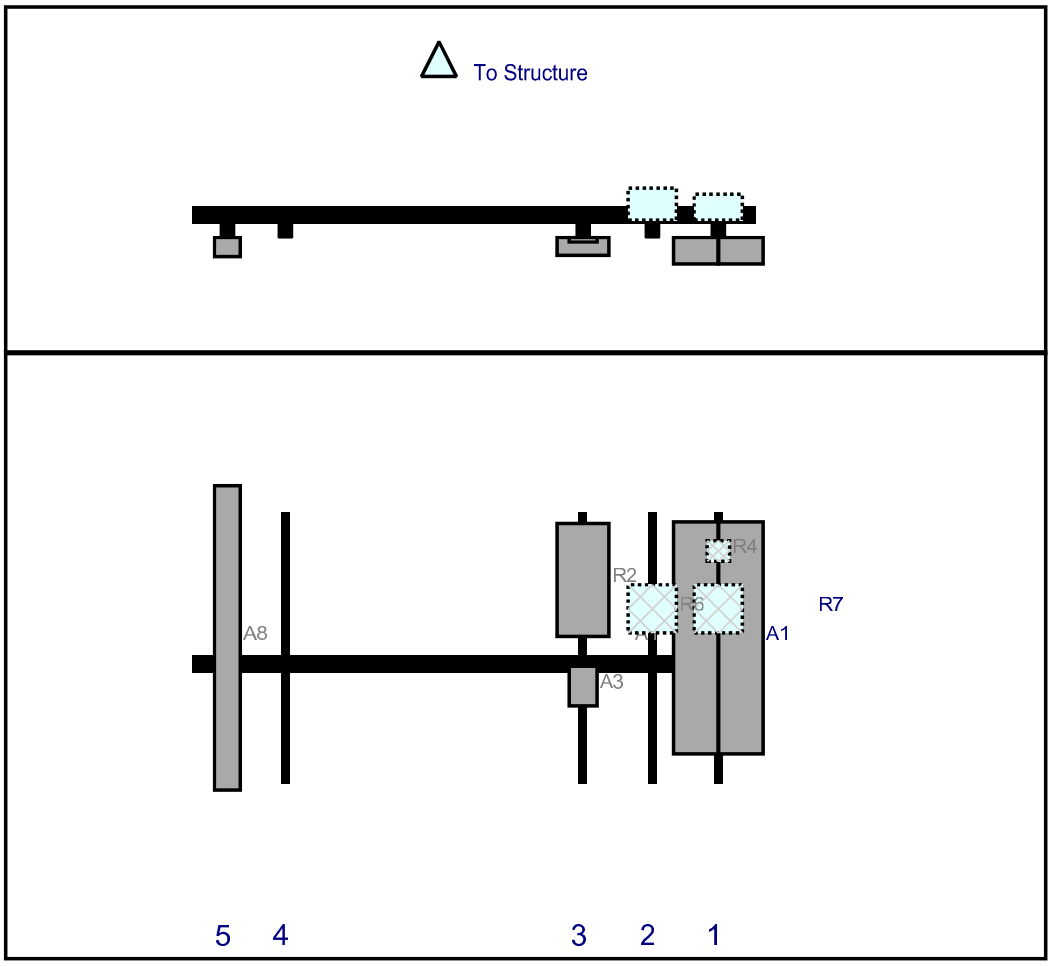
6/14/2021

Page: 1

MASER CONSULTING — CONNECTICUT —

Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	JAHH-65B-R3B	72	13.8	163.5	1	a	Front	39	7	Added	
A1	JAHH-65B-R3B	72	13.8	163.5	1	b	Front	39	-7	Added	
R4	CBC78T-DS-43-2X	6.4	6.9	163.5	1	a	Behind	12	0	Added	
R7	B5/B13 RRH-BR04C	15	15	163.5	1	a	Behind	30	0	Added	
R6	B2/B66A RRH-BR049	15	15	143	2	a	Behind	30	0	Added	
A3	XXDWMM-12.5-65-8T-CBRS	12.3	8.7	121.5	3	a	Front	54	0	Added	
R2	MT6407-77A	35.1	16.1	121.5	3	a	Front	21	0	Added	
A8	BXA-70080-4BF-EDIN	94.6	8	11	5	a	Front	39	0	Retained	03/29/2021

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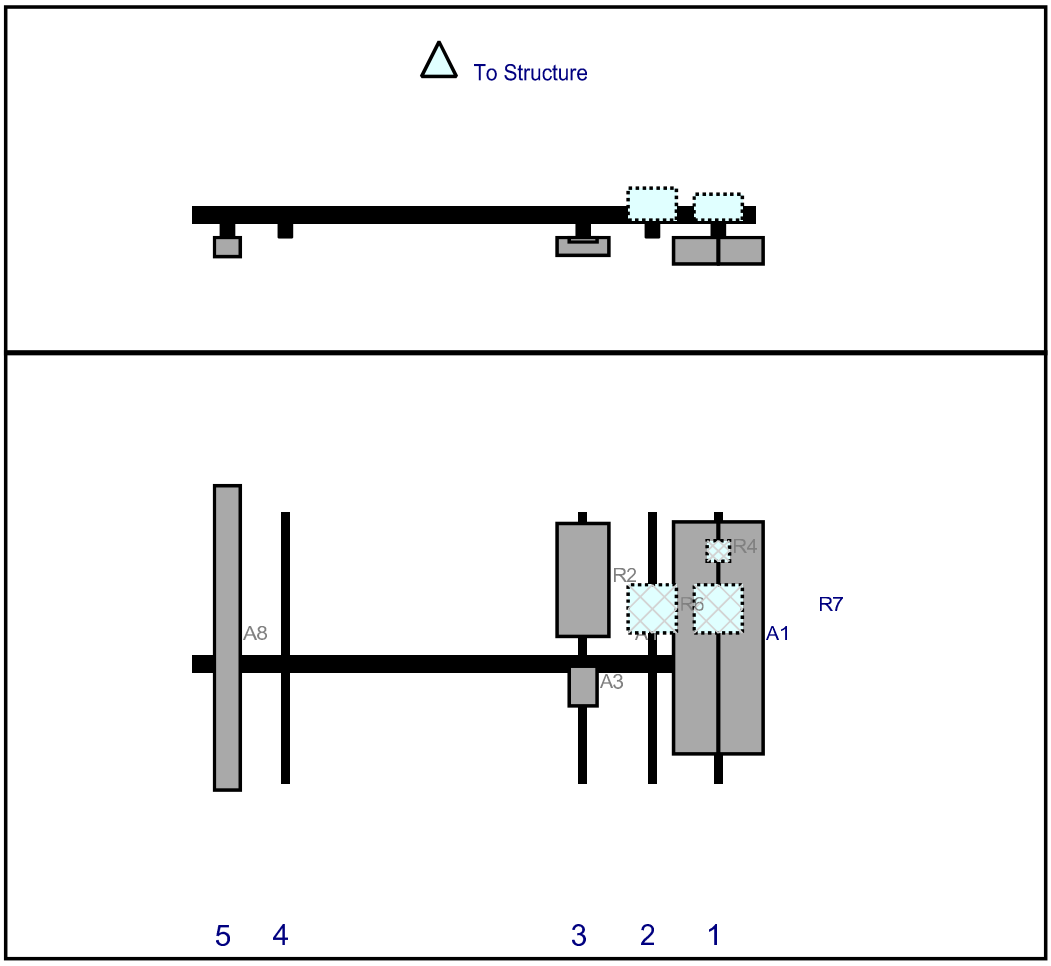
Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	JAHH-65B-R3B	72	13.8	163.5	1	a	Front	39	-7	Added	
A1	JAHH-65B-R3B	72	13.8	163.5	1	b	Front	39	7	Added	
R4	CBC78T-DS-43-2X	6.4	6.9	163.5	1	a	Behind	12	0	Added	
R7	B5/B13 RRH-BR04C	15	15	163.5	1	a	Behind	30	0	Added	
R6	B2/B66A RRH-BR049	15	15	143	2	a	Behind	30	0	Added	
A3	XXDWMM-12.5-65-8T-CBRS	12.3	8.7	121.5	3	a	Front	54	0	Added	
R2	MT6407-77A	35.1	16.1	121.5	3	a	Front	21	0	Added	
A8	BXA-70080-4BF-EDIN	94.6	8	11	5	a	Front	39	0	Retained	03/29/2021

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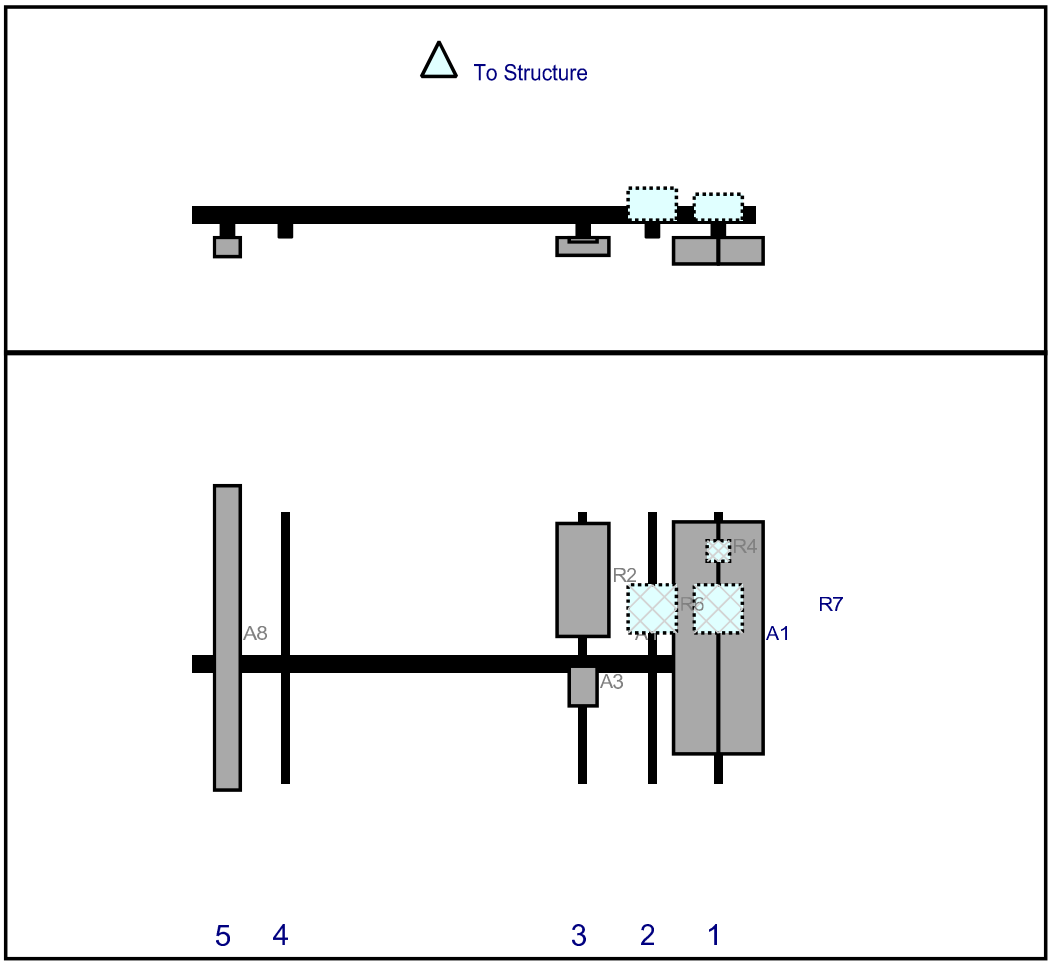
Plan View

Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A1	JAHH-65B-R3B	72	13.8	163.5	1	a	Front	39	7	Added	
A1	JAHH-65B-R3B	72	13.8	163.5	1	b	Front	39	-7	Added	
R4	CBC78T-DS-43-2X	6.4	6.9	163.5	1	a	Behind	12	0	Added	
R7	B5/B13 RRH-BR04C	15	15	163.5	1	a	Behind	30	0	Added	
R6	B2/B66A RRH-BR049	15	15	143	2	a	Behind	30	0	Added	
A3	XXDWMM-12.5-65-8T-CBRS	12.3	8.7	121.5	3	a	Front	54	0	Added	
R2	MT6407-77A	35.1	16.1	121.5	3	a	Front	21	0	Added	
A8	BXA-70080-4BF-EDIN	94.6	8	11	5	a	Front	39	0	Retained	03/29/2021

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Maser Consulting Connecticut

Subject	TIA-222-H Usage	
Site Information	Site ID:	468168-VZW / DANIELSON CT
	Site Name:	DANIELSON CT
	Carrier Name:	Verizon Wireless
	Address:	246 East Franklin Street Danielson, Connecticut 6239 Windham County
	Latitude:	41.795814°
	Longitude:	-71.870331°
Structure Information	Tower Type:	152-Ft Monopole
	Mount Type:	14.58-Ft T-Arm

To Whom It May Concern,

We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

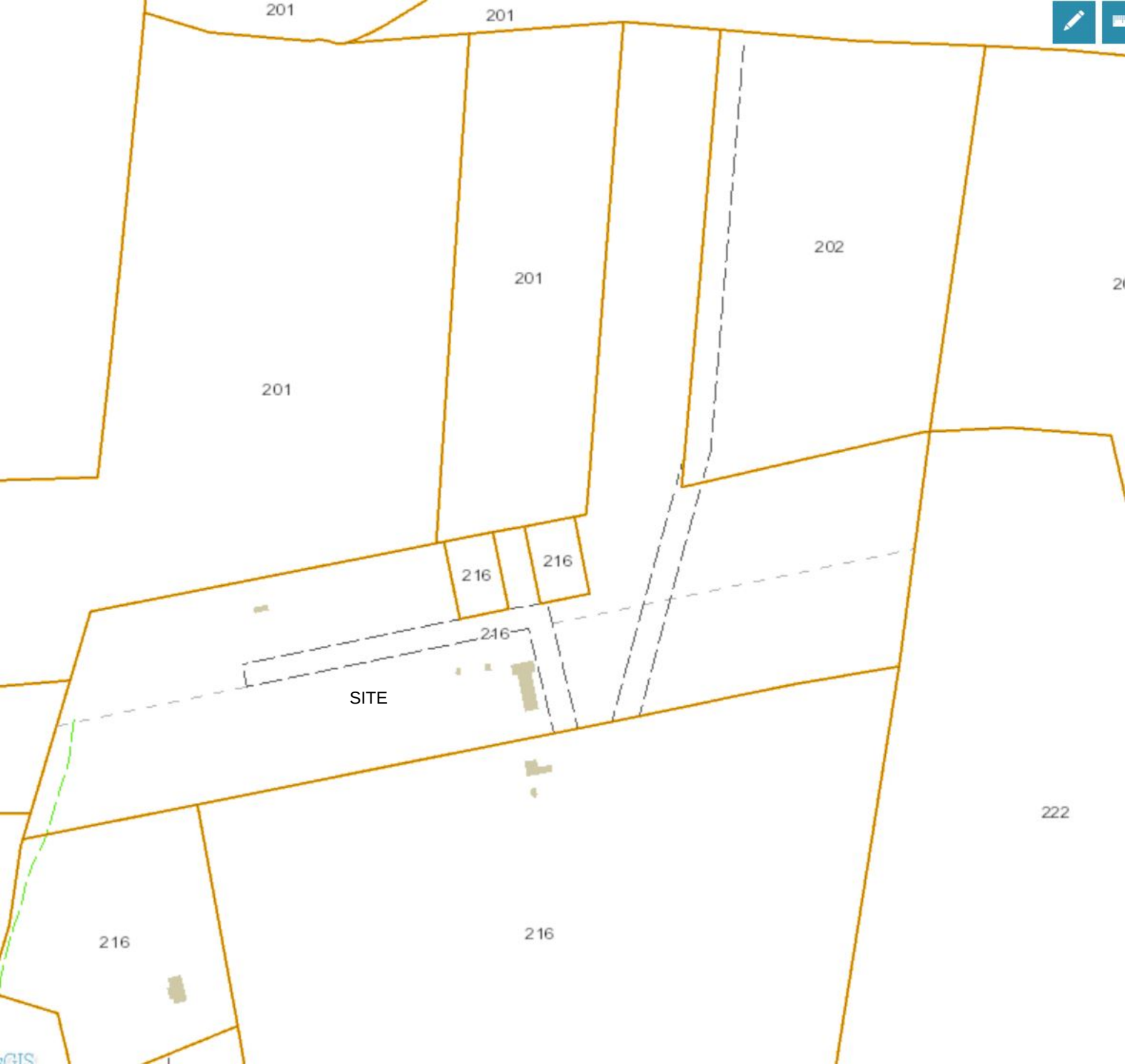
As with all ANSI standards and engineering best practice is to apply the most current revision of the standard. This ensures the engineer is applying all updates. As an example, the TIA-222-H Standard includes updates to bring it in line with the latest AISC and ACI standards and it also incorporates the latest wind speed maps by ASCE 7 based on updated studies of the wind data.

The TIA-222-H standard clarifies these specific requirements for the antenna mount analysis such as modeling methods, seismic analysis, 30-degree increment wind directions and maintenance loading. Therefore, it is our opinion that TIA-222-H is the most appropriate standard for antenna mount structural analysis and is acceptable for use at this site to ensure the engineer is taking into account the most current engineering standard available.

Sincerely,

Taqi Khawaja, PE
Technical Manager

ATTACHMENT 5


201
201
201
201
202
216
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216
SITE
222
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216

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 9/16/2021.

Property Summary Information

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

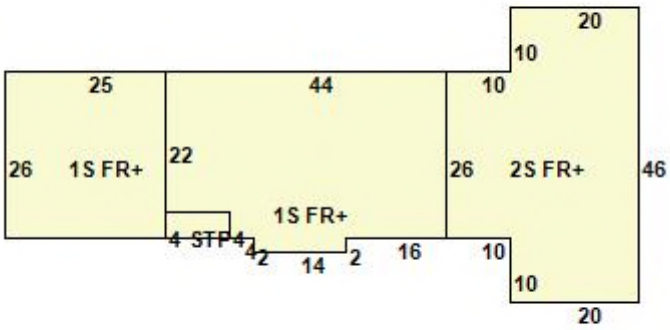
	Appraised Value	Assessed Value
Land	112,130	78,470
Buildings	277,170	172,520
Detached Outbuildings	1,640	1,150
Total	390,940	252,140

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:	0	Heating:	Hot Water
Fuel:	Oil	Cooling Percent:	0	Basement Area:	2,962
Basement Finished Area:	0	Basement Garages:	0	Roof Material:	
Siding:	Wood Frame	Units:			

Special Features

Bsmt Gar 3 Car	1
Extra Fixtures	1
Fireplace	1
Fireplace Opening	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
21-000391	T:COMMERCIAL REPLACT	04/12/2021	
21-000391	T:COMMERCIAL ROOF	03/18/2021	REPLACE 4 & INSTAL 2 CELL ANTENNAS & ASSOC EQUIP
27800	T:COMMERCIAL ELECTRICAL	10/01/2020	REPL 6 ANTENNAS, 6 REMOTE RADIO UNITS & ADD 6 RRU'S
27023	T:COMMERCIAL ELECTRICAL	08/08/2019	TELECOMMUNICATIONS FACILITY UPGRADE + REPLACEMENT OF EXISTING ANTENNA
25925	T:COMMERCIAL ELECTRICAL	04/06/2018	ADDING 3 ANTENNAS
25284	T:BUSINESS PERSONAL PROPERTY	05/11/2017	TELECOM -MODIFY EXISTING AT&T ANTENNAS: REMOVE & REPL 3 ANTENNAS & INSTALL 3 RRV
23794	T:BUSINESS PERSONAL PROPERTY	08/03/2015	REPL EXISTING ANTENNAES & ADD 3 REMOTE RADIO HEADS
23346	T:BUSINESS PERSONAL PROPERTY	12/11/2014	REPL OLD PANEL/ANTENNAE MODELS WITH NEW ONE ON EXISTING TOWER
23221	T:COMMERCIAL REPAIR	10/06/2014	NVC MAINT WORK - ADD STEEL PLATES & BASE GUSSET EXTENSIONS TO EXIST STRUCTURE
23133	T:BUSINESS PERSONAL PROPERTY	08/28/2014	ADD 3 NEWER CELL ANTENNAS & ASSOC EQUIP
22648	T:BUSINESS PERSONAL PROPERTY	10/11/2013	INSTALL 3 NEW ANTENNAS & ASSOC RADIO EQUIP ON EXISTING TOWER
22323	T:BUILDING	05/08/2013	REMOVE 6 CELL ANTENNAS & REPL W/3 NEW TECH ANTENNAS & ASSOC EQUIP
15440	T:BUSINESS PERSONAL PROPERTY	08/16/2002	NEW ANTENNA PP
15351	T:BUILDING	07/02/2002	TOWER MODIFICAT
13760	T:BUILDING	07/29/1999	ANTENNA/TOWER
13610	T:RESIDENTIAL ELECTRICAL	05/14/1999	NVC ELEC

Permit Number	Permit Type	Date Opened	Reason
13495	T:BUILDING	03/30/1999	TOWER C-5/99
13462	T:BUILDING	03/03/1999	TOWER C-5/99
13425	T:BUILDING	02/02/1999	TOWER C-5/99
11694	T:RESIDENTIAL ADDITION	01/01/1995	ADDN 5/99-50% NO WORK HAS BEEN DONE IN THE LAST 10 YEARS

Google Map

Unique Id: 2601

Location: 246 E FRANKLIN

MBL: 216-12

Primary Use: Residential

Zone: RD

Acres: 17.00

Appraised Value: $390,940

Assessed Value: $252,140

Back To Search

Print View

Information Published With Permission From The Assessor

ATTACHMENT 6

UNITED STATES POSTAL SERVICE®

DANIELSON

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here ***Postmark with Date of Receipt.***
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	3	neopost 09/21/2021 US POSTAGE $002.99 ZIP 06103 041L12203937
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Mary Calorio, Town Manager Town of Killingly 172 Main Street Killingly, CT 06239				
2.	Ann-Marie Aubrey, Director of Planning & Development Town of Killingly 172 Main Street Killingly, CT 06239				
3.	Charles R. Lu Hutchins & Amanda Martell Trustee Charles R. Hutchins Irrevocable Trust 246 E. Franklin Street Killingly, CT 06239		OLD STATE HOUSE STATION 06103 SEP 21 2021 USPS		
4.					
5.					
6.					