4545 East River Road
Suite 320
West Henrietta, NY 14586

January 10, 2020

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

RE: **Notice of Exempt Modification for Verizon**
Crown Site BU: 806386
83 Reeds Gap Rd, North Branford, CT 06472
Lat: 41 ° 24' 12.47"/ Long: -72° 44' 38.90"

Dear Ms. Bachman:

Verizon currently maintains twelve (12) total antennas at the 90-foot mount on the existing 92- foot self-support tower, located at 83 Reeds Gap Road in North Branford. The tower is owned by Crown Castle and the property is owned by David Tamulevich. Verizon now intends to replace nine (9) existing RRU's with six (6) new RRU's at the 90-foot mount.

Tower modifications:

- Remove nine (9) remote radio units
- Add six (6) new remote radio units
- Add three (3) diplexers

Ground modifications:

- None

Melanie A. Bachman

This facility was approved by the Connecticut Siting Council via Decision and Order in 1986 (Docket No. 56).

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 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.S.C.A. § 16-50j-73, a copy of this letter is being sent to The Honorable Robert Viglione, Mayor, Town of North Branford, Carey Duques, Town Planner for the Town of North Branford, as well as the property owner.

Additionally:

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

For the foregoing reasons, Verizon respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2). Please send approval/rejection letter to my attention at the address listed below.

Sincerely,

Richard Zajac
Network Real Estate Specialist
4545 East River Road, Suite 320
West Henrietta, NY 14586
585-445-5896
richard.zajac@crowncastle.com

Melanie A. Bachman

cc:

The Honorable Robert Viglione, Mayor
Town of North Branford - Town Manager's Office
909 Faxon Road
North Branford, CT 06471
(203) 484-6010

Carey Duques - Town Planner
Town of North Branford
909 Foxon Road
North Branford, CT 06471
(203) 484-6010

Mr. David Tamulevich
83 Reeds Gap Road
Northford, CT 06472

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

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

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Exhibit A

Original Facility Approval

DOCKET NO. 56

AN APPLICATION OF METRO MOBILE CTS OF NEW HAVEN, INC., FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF FACILITIES TO PROVIDE CELLULAR SERVICE IN NEW HAVEN COUNTY.	:	CONNECTICUT SITING COUNCIL April 14, 1986

D E C I S I O N A N D O R D E R

Pursuant to the foregoing opinion, the Council hereby directs that a certificate of environmental compatibility and public need as required by section 16-50k of the General Statutes of Connecticut (CGS) be issued to Metro Mobile CTS of New Haven, Inc., for the construction, maintenance, and operation of cellular mobile phone telecommunication towers and associated equipment in the towns of Wolcott, Naugatuck, West Haven (existing tower), Milford, Hamden (existing tower), Guilford, and North Branford subject to the conditions below.

1. The proposed and alternate Beacon Falls sites are rejected without prejudice.
2. The Wolcott tower shall be constructed to meet Zone C wind loading with 1" of radial ice and shall not exceed 180' in height excluding antennas.
3. The Naugatuck tower shall not exceed 160' in height, excluding antennas. The certificate holder shall offer to remove the existing privately owned, unused tower now on the site.
4. Any future actions requiring the removal of the existing West Haven or Hamden towers to be shared by the certificate holder shall also apply to the equipment mounted on those towers by the certificate holder, regardless of that equipment's status under Chapter 277a of the CGS.

5. The Milford tower shall be a monopole structure not to exceed 100' in height, excluding antennas.
6. The Guilford tower shall be a monopole structure not to exceed 150' in height, excluding antennas.
7. The North Branford Route 17 site is rejected. The North Branford East Reeds Gap Road tower shall not exceed 160' in height, excluding antennas.
8. The certificate holder shall submit a development and management plan for the Wolcott, Naugatuck, Milford, Hamden, Guilford, and North Branford sites pursuant to sections 16-50j-75 through 16-50j-77 of the RSA, except that irrelevant items in section 16-50j-76 need only be identified as such. In addition to the requirements of section 16-50j-76, the D&M plan shall provide plans for evergreen screening around the fenced perimeter at the Wolcott, Milford, Hamden, Guilford, and North Branford sites. The D&M plan shall include a proposal for painting the approved monopole structures to blend with the sky. Any changes to specifications in the D&M plan must be approved by the Council prior to facility operation.
9. All certified facilities shall be constructed, operated, and maintained as specified in the Council's record and in the site development and management plan required by order 8.
10. The certificate holder shall permit public or private entities to share space on the towers approved herein, for due consideration received, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing. In addition to complying with 16-50j-73, the

certificate holder shall notify the Council of the addition of any equipment to any approved tower.

11. A fence not lower than 8' shall surround each tower and associated equipment.

12. Unless necessary to comply with order 13, below, no lights shall be installed on any of these towers.

13. The facilities' construction and any future tower sharing shall be in accordance with all applicable federal, state, and municipal laws and regulations. Shared uses by entities not subject to jurisdiction pursuant to sections 16-50i and 16-50k of the CGS shall be subject to all applicable federal, state, and municipal laws and regulations.

14. Construction activities shall take place during daylight working hours.

15. This decision and order shall be void and the towers and associated equipment shall be dismantled and removed, or reapplication for any new use shall be made to the CSC before any such new use is made, if the towers do not provide or permanently cease to provide cellular service following completion of construction.

16. This decision and order shall be void if all construction authorized herein is not completed within three years of the issuance of this decision, or within three years of the completion of any appeal if appeal of this decision is taken, unless otherwise approved by the Council.

Pursuant to CGS section 16-50p, we hereby direct that a copy of the decision and order shall be served on each person listed below. A notice

of the issuance shall be published in The Record-Journal, The New Haven Register, The Branford Review, The Evening Sentinel, The Waterbury American, and The Waterbury Republican.

The parties to this proceeding are:

Metro Mobile CTS of New Haven, Inc. (Applicant)
5 Eversley Avenue
Norwalk, Connecticut 06855

ATTN: Armand Mascioli
General Manager

Mr. Kevin B. Sullivan, Esq. (its attorneys)
Byrne, Slater, Sandler, Shulman & Rouse, P.C.
111 Pearl Street
P.O. Box 3216
Hartford, Connecticut 06103

Mr. Richard Rubin, Esq.
Fleischman and Walsh, P.C.
1725 N Street, N.W.
Washington, D.C. 20036

Guilford Conservation Commission represented by:

Mr. David B. Damer
Chairman
Guilford Conservation Commission
440 Great Hill Road
Guilford, Connecticut 06437

Mr. Robert W. Griswold, Jr.
100 Rimmon Hill Road
Beacon Falls, Connecticut 06403

Town of Hamden
Memorial Town Hall
2372 Whitney Avenue
Hamden, Connecticut 06518

ATTN: Shirley Gonzales
Town Planner

Guilford Planning and Zoning Commission — represented by:

Mr. David W. Fisher
Chairman
Town Hall
31 Park Street
Guilford, Connecticut 06437

Town of Hamden — represented by:

John DeNicola, Jr.
Mayor
Town of Hamden
Memorial Town Hall
2372 Whitney Avenue
New Haven, Connecticut 06518

Citizens Park Council of New Haven — represented by:

Mr. John J. Ciarleglio
President
Citizens Park Council
of New Haven
36 Elmwood Road
New Haven, Connecticut 06515

Mr. Thomas V. Keating
343 Rimmon Hill Road
Beacon Falls, Connecticut 06403

Ms. Evelyn M. Sirowich
245 Rimmon Hill Road
Beacon Falls, Connecticut 06403

Mr. Jack B. Levine
11 White Birch Lane
Beacon Falls, Connecticut 06403

Southern New England Telephone Company — represented by:

Mr. Peter J. Tyrrell, Esq.
227 Church Street
New Haven, Connecticut 06506

Mr. Dennis Bialecki
96 West Road
Beacon Falls, Connecticut 06403

Brittany Woods Homeowner's Association

represented by:

Mr. Stephen P. Del Sole, Esq.
Del Sole & Del Sole
152 Temple Street
P.O. Box 405
New Haven, Connecticut 06502-0405

Ms. Barbara G. Schlein
Box 2993 Westville Station
New Haven, Connecticut 06515

Mr. & Mrs. Joseph T. Farrell, Jr.
334 Rimmon Hill Road
Beacon Falls, Connecticut 06403

Town of Beacon Falls

represented by:

The Honorable Leonard F. D'Amico
First Selectman
10 Maple Avenue
Beacon Falls, Connecticut 06403

West Rock Ridge Park Association

represented by:

Mr. William L. Doheny Jr., D.D.S.
President
220 Mountain Road
Hamden, Connecticut 06514

Department of Parks,
Recreation & Trees

represented by:

Mr. Robert G. Sheeley
Director
Parks, Recreation & Trees
P.O. Box 1416
New Haven, Connecticut 06506

Town of Wallingford

represented by:

William W. Dickinson, Jr.
Mayor
Municipal Building
350 Center Street
P.O. Box 427
Wallingford, Connecticut 06492

New Haven Sierra Club

represented by:

Ms. Laurie Klein
270 Edgewood Avenue
New Haven, Connecticut 06511

Peter M. Lerner
State Representative
8 Merritt Avenue
Woodbridge, Connecticut 06525

Carleton J. Benson
State Representative
161 Scott Road
Prospect, Connecticut 06712

Dr. Stephen Collins (service waived)
Vice Chairman
West Rock State Park
Advisory Council
Bethany, Connecticut

Mr. Louis Melillo (service wavied)
985 Wintergreen Avenue
Hamden, Connecticut

Mr. John McGeever (service waived)
339 Rimmon Hill
Beacon Falls, Connecticut 06403

Senator John Consoli (service waived)
51 Luke Hill Road
Bethany, Connecticut 06525

Representative George P. Bassing (service waived)
14 Oakwood Drive
Seymour, Connecticut 06483

Dr. George D. Whitney (service waived)
858 Oakwood Road
Orange, Connecticut

Mr. Steve Molnar (service waived)
205 West Road
Beacon Falls, Connecticut

Mr. James W. Grandy (service waived)
President
Hamden Land Conservation Trust
Hamden, Connecticut

Senator Richard S. Eaton (service waived)
269 Mulberry Point Road
Guilford, Connecticut 06437

Representative Robert M. Ward
719 Totoket Road
Northford, Connecticut 06472

Town of North Branford	represented by: John Gesmonde, Esquire 3127 Whitney Avenue Hamden, Connecticut 06518
Regina Smith 1887 Middletown Avenue Northford, Connecticut 06472	(service waived)
Richard A. Nizolek The Restland Farm Corporation Route 17 Northford, Connecticut 06472	
Mary Liska 83 Reeds Gap Road Northford, Connecticut 06472	
Ben Bullard 50 Christmas Hill Road Guilford, Connecticut 06437	(service waived)
Roland Robichaud 31 Berncliff Drive North Branford, Connecticut 06471	(service waived)
Irene Flynn 1926 Middletown Avenue Northford, Connecticut 06472	(service waived)
Charles Pope 199 Donalds Road Guilford, Connecticut 06437	
Richard Abate 131 Manor Road Guilford, Connecticut 06437	(service waived)
City of Milford	represented by: Mayor Alberta Jagoe Alderman Maurice Condon Alderman Frederick Lisman City Hall River Street Milford, Connecticut 06460
Thomas Scelfo 81 Berncliff Drive North Branford, Connecticut 06471	(service waived)

Senator Thomas Scott (service waived)
22 Meyers Court
Milford, Connecticut 06460

Helen Moore (service waived)
385 Oronoque Road
Milford, Connecticut 06460

William Barberi (service waived)
298 Oronoque Road
Milford, Connecticut 06460

C E R T I F I C A T I O N

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut, this 14th day of April, 1986.

Council Members	Vote Cast
Gloria Dibble Pond Chairperson	Yes
Commissioner John Downey Designee: Commissioner Peter G. Boucher	Absent
Commissioner Stanley Pac Designee: Christopher Cooper	No
Owen L. Clark	Yes
Mortimer A. Gelston	Yes
James G. Horsfall	Yes
Pamela B. Katz	Yes
William H. Smith	No
Colin C. Tait	No

STATE OF CONNECTICUT)
: ss. New Britain, April 14, 1986
COUNTY OF HARTFORD)

I hereby certify that the foregoing is a true and correct copy of the decision and order issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:

Christopher S. Wood

Christopher S. Wood, Executive Director
Connecticut Siting Council

Exhibit B

Property Card

83 REEDS GAP RD

Location	83 REEDS GAP RD	**Mblu**	70/B 6/ / /
Acct#	002385	**Owner**	TAMULEVICH DAVID
Assessment	$269,400	**Appraisal**	$384,800
PID	4398	**Building Count**	1

Current Value

Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2015	$186,100	$198,700	$384,800
Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2015	$130,300	$139,100	$269,400

Owner of Record

Owner	TAMULEVICH DAVID	**Sale Price**	$120,000
Co-Owner		**Certificate**	
Address	83 REEDS GAP RD NORTHFORD, CT 06472-1122	**Book & Page**	465/1113
		Sale Date	01/02/2014
		Instrument	08

Ownership History

Ownership History					
Owner	**Sale Price**	**Certificate**	**Book & Page**	**Instrument**	**Sale Date**
TAMULEVICH DAVID	$120,000		465/1113	08	01/02/2014
LISKA MARY TRUSTEE	$0		451/ 511		06/14/2012
LISKA MARY	$0		212/ 677		09/20/1991

Building Information

Building 1 : Section 1

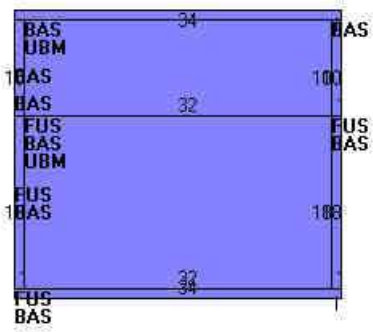
Year Built:	1983
Living Area:	1,666
Replacement Cost:	$140,202
Building Percent Good:	86
Replacement Cost Less Depreciation:	$120,600

Building Attributes	
Field	**Description**
Style	Colonial
Model	Residential
Grade:	Average
Stories:	2 Stories
Occupancy	1
Exterior Wall 1	Cedar or Redwd
Exterior Wall 2	
Roof Structure:	Salt Box
Roof Cover	Asphalt Shingl
Interior Wall 1	Drywall/Sheet
Interior Wall 2	Knotty Pine Pa
Interior Flr 1	Pine/Soft Wood
Interior Flr 2	Carpet
Heat Fuel	Electric
Heat Type:	Geothermal
AC Type:	Heat Pump
Total Bedrooms:	2 Bedrooms
Total Bthrms:	2
Total Half Baths:	0
Total Xtra Fixtrs:	
Total Rooms:	4 Rooms
Bath Style:	Average
Kitchen Style:	Average

Building Photo

(http://images.vgsi.com/photos/NorthBranfordCTPhotos//\00\00\

Building Layout



(http://images.vgsi.com/photos/NorthBranfordCTPhotos//Sketche

Building Sub-Areas (sq ft)			Legend
Code	**Description**	**Gross Area**	**Living Area**
BAS	First Floor	1,020	1,020
FUS	Full Upper Story	646	646
UBM	Basement, Unfinished	896	0
		2,562	1,666

Extra Features

Extra Features				Legend
Code	**Description**	**Size**	**Value**	**Bldg #**
FPL1	FIREPLACE 1STY	1 UNITS	$3,400	1
FPO	EXTRA FPL OPEN	1 UNITS	$1,300	1

Land

Land Use

Land Line Valuation

Use Code	1010	**Size (Acres)**	4.69
Description	SINGLE FAM MDL-01	**Frontage**	0
Zone	R80	**Depth**	0
Neighborhood		**Assessed Value**	$139,100
Alt Land Appr	No	**Appraised Value**	$198,700
Category			

Outbuildings

Outbuildings						Legend
Code	**Description**	**Sub Code**	**Sub Description**	**Size**	**Value**	**Bldg #**
BRN3	BARN 1 STY W/LOFT			1200 S.F.	$29,300	1
ELCB	ELECTRONIC COMM BLDG			200 S.F.	$31,500	1

Valuation History

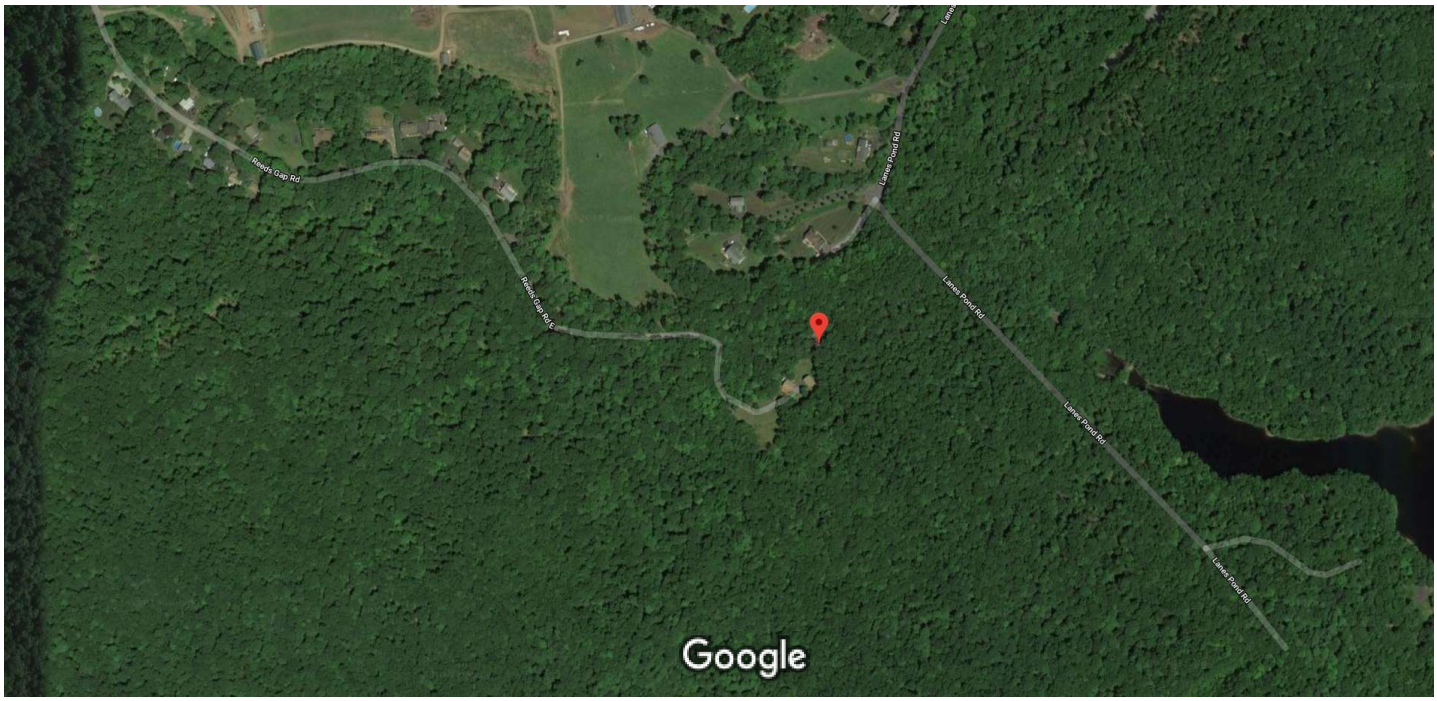
Appraisal			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$186,100	$198,700	$384,800
2017	$186,100	$198,700	$384,800
2016	$186,100	$198,700	$384,800

Assessment			
Valuation Year	**Improvements**	**Land**	**Total**
2018	$130,300	$139,100	$269,400
2017	$130,300	$139,100	$269,400
2016	$130,300	$139,100	$269,400

Google Maps

41°24'12.5"N 72°44'38.9"W

Crown Castle - tower location



Imagery ©2020 Maxar Technologies, U.S. Geological Survey, USDA Farm Service Agency, Map data ©2020 200 ft

41°24'12.5"N 72°44'38.9"W

41.403464, -72.744139

Directions | Save | Nearby | Send to your phone | Share

Northford, CT 06472

C734+98 Northford, Connecticut

Exhibit C

Construction Drawings

verizon

N BRANFORD CT
83 REEDS GAP RD
NORTH BRANFORD, CT 06472
LOCATION CODE: 468991

PROJECT SUMMARY

SITE NAME:	N BRANFORD CT
SITE ADDRESS:	83 REEDS GAP RD NORTH BRANFORD, CT 06472
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DR CANONSBURG, PA 15317
BU NUMBER:	806386
COUNTY:	NEW HAVEN
CUSTOMER/APPLICANT:	VERIZON WIRELESS 20 ALEXANDER DRIVE WALLINGFORD, CT 06492
CONTACT:	ANDREW LEONE (617) 620-4175
NAD83	
LATITUDE:	41° 24' 12.34" N
LONGITUDE:	72° 44' 39.34" W
ELEVATION:	625'
CURRENT ZONING:	R80
A&E FIRM:	B+T GROUP 1717 S. BOULDER, SUITE 300 TULSA, OK 74119 MIKE OAKES (918) 587-4630
OCCUPANCY TYPE:	UNMANNED
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

CODE COMPLIANCE

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

CODE TYPE	CODE
BUILDING	2018 CT SBC (IBC 2015)
STRUCTURAL	2018 CT SBC (IBC 2015)
MECHANICAL	2018 CT SBC (IBC 2015)
ELECTRICAL	NEC 2017

LOCATION MAP

NO SCALE

DRIVING DIRECTIONS

DEPART BRADLEY INTERNATIONAL AIRPORT ON TERMINAL RD. ROAD NAME CHANGES TO BRADLEY FIELD CONNECTOR. ROAD NAME CHANGES TO CT-20 [BRADLEY FIELD CONNECTOR]. TAKE RAMP (RIGHT) ONTO I-91 [RICHARD P HORAN MEMORIAL HWY]. AT EXIT 14, TURN RIGHT ONTO RAMP. TURN LEFT ONTO E CENTER ST. TURN RIGHT ONTO WHIRLWIND HILL RD. TURN RIGHT ONTO S BRANFORD RD. ROAD NAME CHANGES TO REEDS GAP RD [REEDS GAP RD W]. BEAR RIGHT ONTO CT-17 [MIDDLETOWN AVE], THEN IMMEDIATELY TURN LEFT ONTO REEDS GAP RD [REEDS GAP RD E]. TURN LEFT ONTO ACCESS ROAD AND ARRIVE AT N BRANFORD CT.

DRAWING INDEX

SHEET #	SHEET DESCRIPTION	REV. #
T-1	TITLE SHEET	2
A-1	COMPOUND PLAN AND TOWER ELEVATION	2
A-2	EQUIPMENT DETAILS	2
A-3	ANTENNA AZIMUTH CHARTS & PLUMBING DIAGRAM	2

A/E DOCUMENT REVIEW STATUS

TITLE	SIGNATURE	DATE
OWNER:		
R.F. ENGINEER:		
CONSTRUCTION MGR.:		
LEASING & ZONING:		
VERIZON WIRELESS:		

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

DO NOT SCALE DRAWINGS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11x17. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CALL CONNECTICUT ONE CALL
(800) 922-4455
CALL 3 WORKING DAYS
BEFORE YOU DIG!

811

B+T GRP

verizon
400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (508) 330-3300

N BRANFORD CT
83 REEDS GAP RD
NORTH BRANFORD, CT 06472
EXISTING SELF-SUPPORT TOWER

PROJECT NO: 139816.001.01
CHECKED BY: GEH

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	11/8/19	MLC	CONSTRUCTION
1	12/20/19	JCO	CONSTRUCTION
2	12/26/19	MLC	CONSTRUCTION

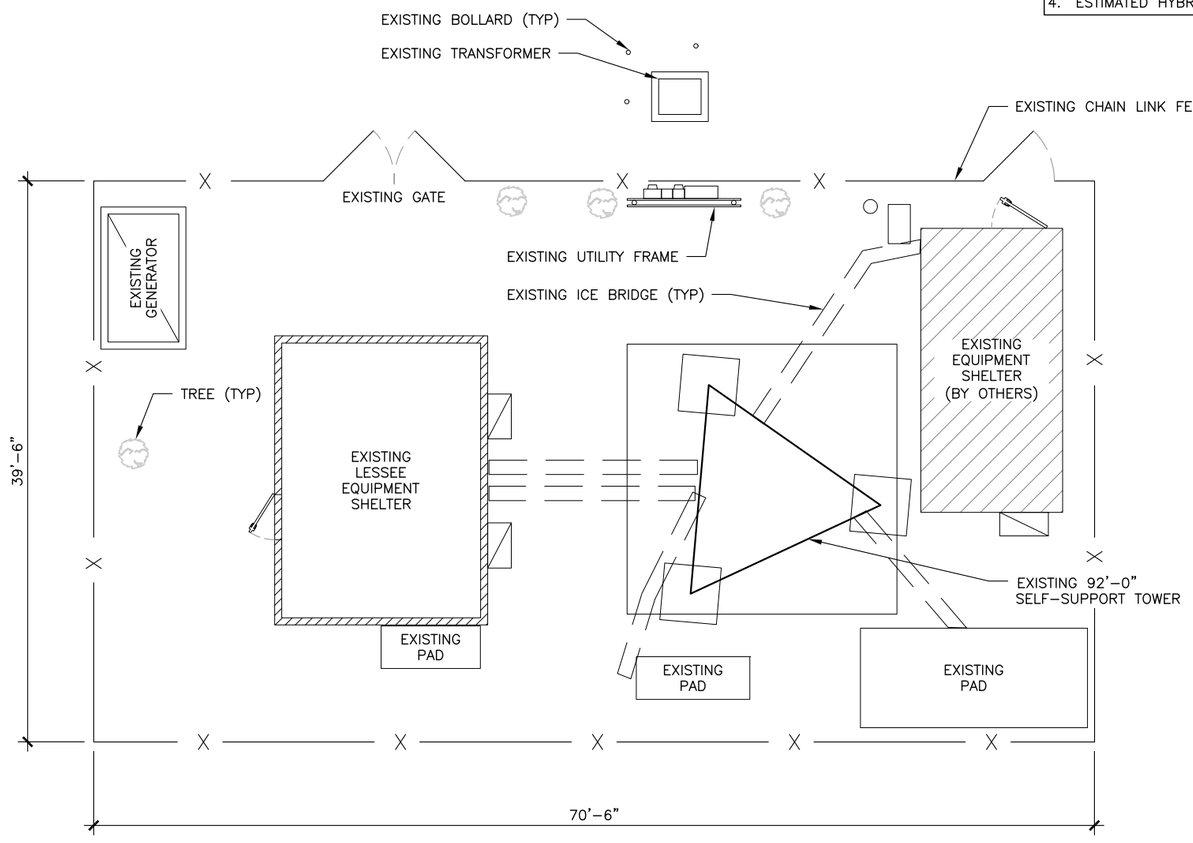
B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

STATE OF CONNECTICUT
31627
LICENSED
PROFESSIONAL ENGINEER
12/26/19

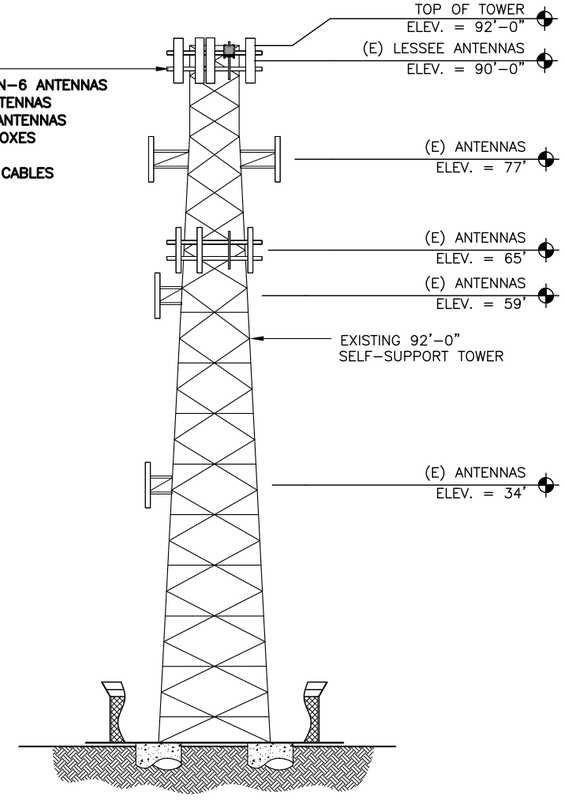
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: T-1
REVISION: 2

NOTES:
1. CONTRACTOR TO VERIFY EXACT COAX AND ANTENNA INSTALLATION AND ANTENNA HEIGHT WITH LATEST RF DATA SHEETS PRIOR TO INSTALLATION.
2. STRUCTURAL ANALYSIS DONE BY OTHERS.
3. VERIZON SHALL PROVIDE A STRUCTURAL ANALYSIS OF THE TOWER PREPARED BY A LICENSED STATE STRUCTURAL ENGINEER CERTIFYING THAT THE EXISTING TOWER AND PROPOSED IMPROVEMENTS HAVE SUFFICIENT CAPACITY TO SUPPORT ALL NEW WORK THAT WILL BE DONE IN COMPLIANCE WITH THE CURRENT EDITION OF BUILDING CODES AND EIA/TIA CRITERIA. THE CONTRACTOR IS RESPONSIBLE TO CONFIRM THAT ANY AND ALL IMPROVEMENTS REQUIRED BY THE STRUCTURAL ANALYSIS CERTIFICATION ARE PROPERLY INSTALLED PRIOR TO THE ADDITION OF ANTENNAS, SUPPORTS AND APPURTENANCES PROPOSED ON THESE DRAWING OTHERWISE NOTED IN THE STRUCTURAL ANALYSIS.CAP AND WEATHERPROFF UNUSED ANTENNA PORTS.
4. ESTIMATED HYBRIFLEX CABLE LENGTH: 140' (EACH RUN)



EXISTING TO REMAIN:
(2) 850 CDMA LPA-80063-6CF-EDIN-6 ANTENNAS
(4) 850 CDMA DB844G65ZAXY_H ANTENNAS
(6) OCTAPORT LTE JAHH-65B-R3B ANTENNAS
(2) DB-T1-6Z-8AB-0Z JUNCTION BOXES
(12) LDF7-50A COAX CABLES
(2) HB114-1-0813U4-M5F HYBRID CABLES
(3) SECTOR FRAMES
EXISTING TO BE REMOVED:
(3) 850 LTE AHCA B5 RRHS
(3) 700 LTE UHBA B13 RRHS
(3) AWS LTE UHIE B66A RRHS
PROPOSED:
(3) RFV01U-D1A B2/B66A RRHS
(3) RFV01U-D2A B5/B13 RRHS
(3) CBC78T-DS-43-2X DIPLEXERS



1 COMPOUND PLAN
SCALE: 0' 1' 4' 8' 16'

N

2 FINAL TOWER ELEVATION
SCALE: 0' 4' 8' 16' 32'

B+T GRP

verizon
400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (508) 330-3300

N BRANFORD CT

83 REEDS GAP RD
NORTH BRANFORD, CT 06472

EXISTING SELF-SUPPORT TOWER

PROJECT NO:	139816.001.01
CHECKED BY:	GEH

ISSUED FOR:

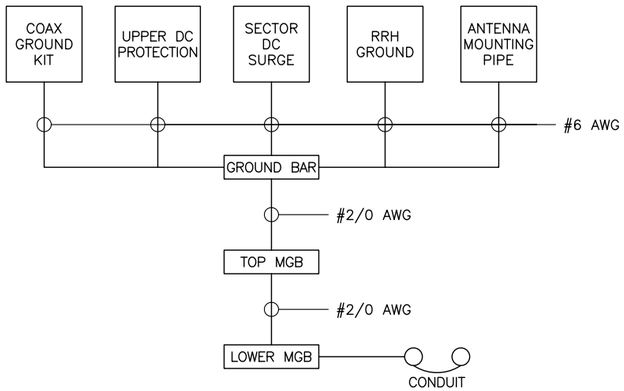
REV	DATE	DRWN	DESCRIPTION
0	11/8/19	MLC	CONSTRUCTION
1	12/20/19	JCO	CONSTRUCTION
2	12/26/19	MLC	CONSTRUCTION

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

STATE OF CONNECTICUT
31627
LICENSED PROFESSIONAL ENGINEER
12/26/19

SHEET NUMBER:	REVISION:
A-1	2

NOTE:
1. INSTALL ALL EQUIPMENT, MOUNTING BRACKETS AND HARDWARE ACCORDING WITH MANUFACTURE'S RECOMMENDATIONS.
2. GROUND DISTRIBUTION BOXES, MOUNTING PIPES AND RRHs IN ACCORDANCE WITH MANUFACTURE'S RECOMMENDATIONS.
3. INSTALLED EQUIPMENT AND MOUNTING BRACKETS SHALL NOT INTERFERE WITH CLIMBING ACCESS NOR ANT INSTALLED SAFETY DEVICES.
4. EQUIPMENT TO BE INSTALLED AT VERIZON'S RAD. CENTER IN ACCORDANCE WITH TOWER STRUCTURAL ANALYSIS (ANALYSIS BY OTHERS).

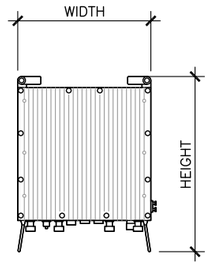


NOTE:
1. BOND ANTENNA GROUNDING KIT CABLES TO TOP CIBE.
2. BOND ANTENNA GROUNDING KIT CABLE TO BOTTOM CIBE.
3. TYPICAL FOR ALL SECTORS.

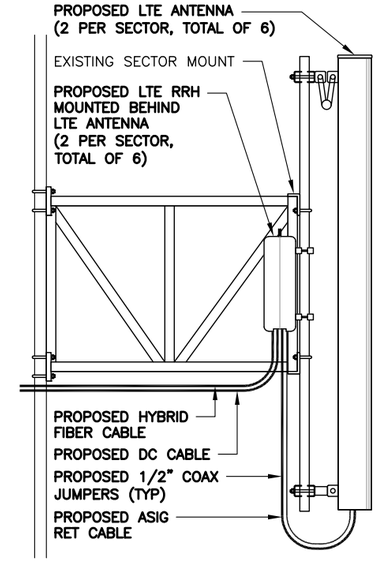
1 GROUNDING SCHEMATIC DIAGRAM
SCALE: N.T.S.

REMOTE RADIO HEAD DIMENSIONS (INCHES)

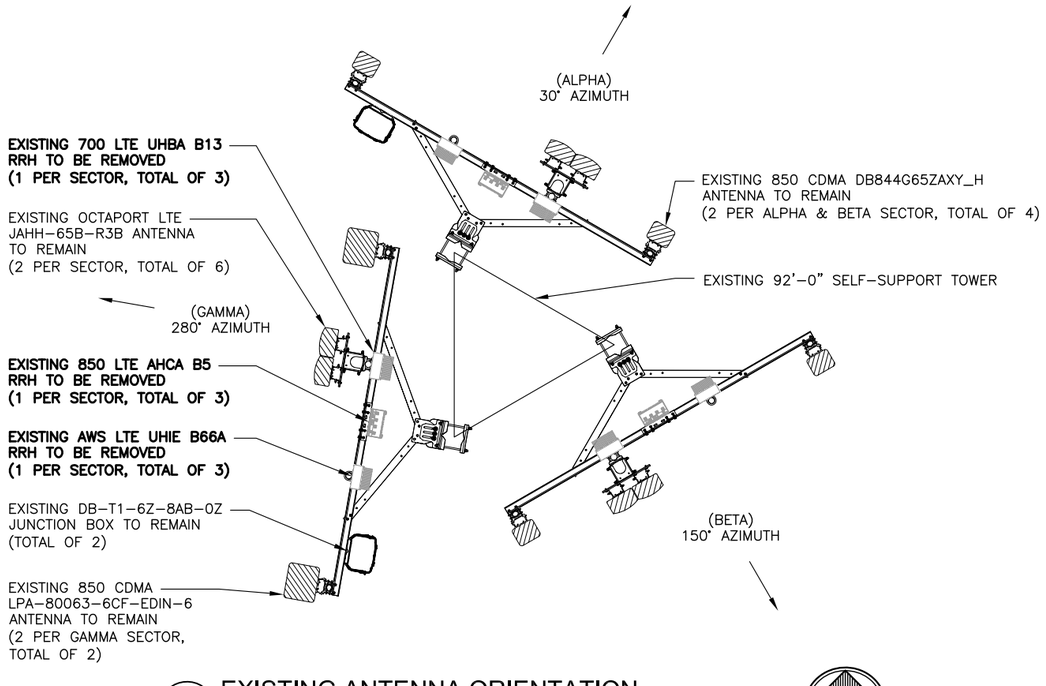
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
B2/B66A RRH-BR049	15"	15"	10"	84.4 LBS
B5/B13 RRH-BR04C	15"	15"	8.1"	70.3 LBS



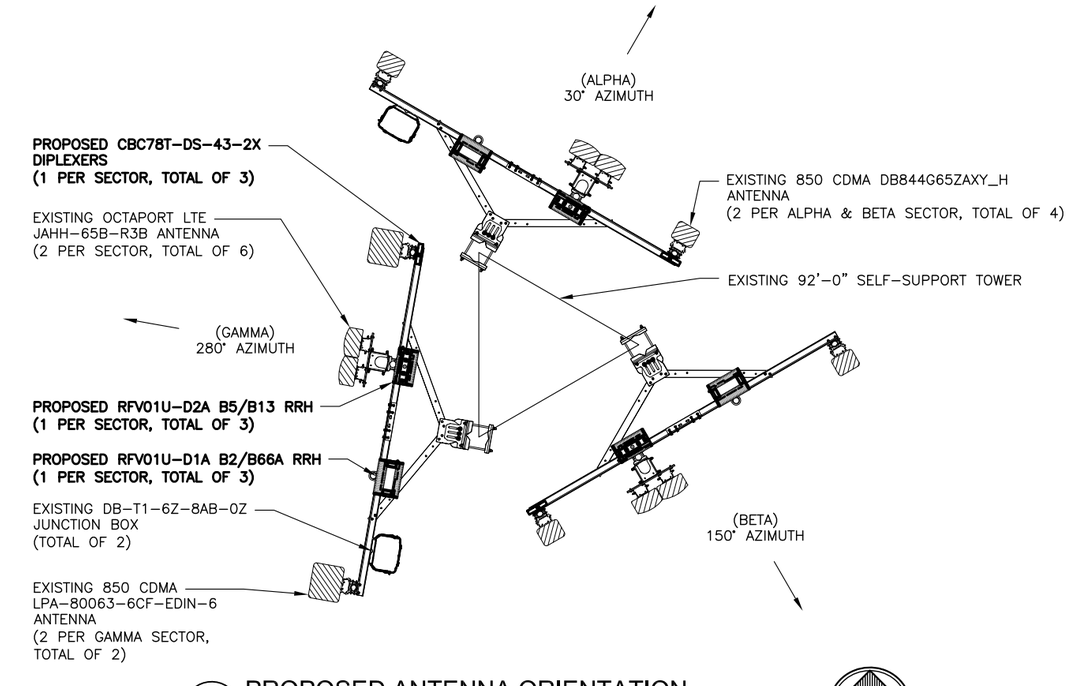
2 RRH SPECIFICATIONS
SCALE: N.T.S.



3 ANTENNA MOUNTING DETAIL
SCALE: N.T.S.



4 EXISTING ANTENNA ORIENTATION
SCALE: N.T.S.



5 PROPOSED ANTENNA ORIENTATION
SCALE: N.T.S.

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verizon

400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (508) 330-3300

NORTH BRANFORD CT

83 REEDS GAP RD
NORTH BRANFORD, CT 06472

EXISTING SELF-SUPPORT TOWER

PROJECT NO:	139816.001.01
CHECKED BY:	GEH

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION
0	11/8/19	MLC	CONSTRUCTION
1	12/20/19	JCO	CONSTRUCTION
2	12/26/19	MLC	CONSTRUCTION

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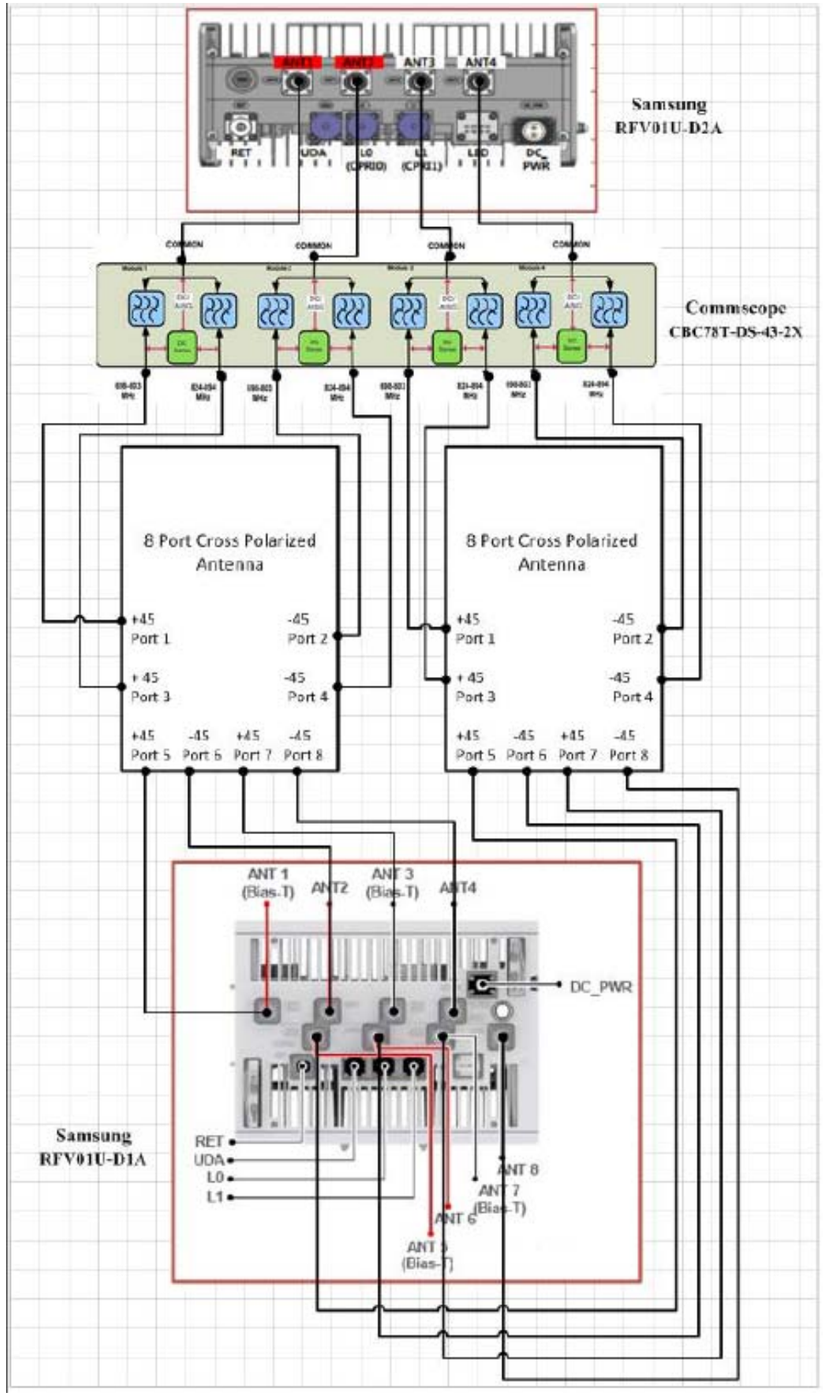
PEC.0001564
Expires 2/10/20

SHEET NUMBER:	REVISION:
A-2	2



1 ANTENNA SYSTEM LAYOUT

SCALE: N.T.S.

B+T GRP

verizon

400 FRIBERG PARKWAY
WESTBOROUGH, MA 01581
PH: (508) 330-3300

NORTH BRANFORD CT

83 REEDS GAP RD
NORTH BRANFORD, CT 06472

EXISTING SELF-SUPPORT TOWER

PROJECT NO:	139816.001.01
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REV	DATE	DRWN	DESCRIPTION
0	11/8/19	MLC	CONSTRUCTION
1	12/20/19	JCO	CONSTRUCTION
2	12/26/19	MLC	CONSTRUCTION

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/20

STATE OF CONNECTICUT
31627
LICENSED
PROFESSIONAL ENGINEER

12/26/19

SHEET NUMBER:	REVISION:
A-3	2

Exhibit D

Structural Analysis Report

Date: **November 5, 2019**

Amanda Brown
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277

Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351

Subject: Structural Analysis Report

Carrier Designation:	***Verizon Wireless* Co-Locate**	
	Carrier Site Number:	NG1919
	Carrier Site Name:	N Branford CT
Crown Castle Designation:	**Crown Castle BU Number:**	806386
	Crown Castle Site Name:	NHV 106 943628
	Crown Castle JDE Job Number:	592668
	Crown Castle Work Order Number:	1802991
	Crown Castle Order Number:	506766 Rev. 0
Engineering Firm Designation:	**TEP Project Number:**	48909.318469
Site Data:	**83 Reeds Gap Road, North Branford, New Haven County, CT 06472** **Latitude *41° 24' 12.47"*, Longitude *-72° 44' 38.90"*** **92 Foot - Self Supporting Tower**	

Dear Amanda Brown,

Tower Engineering Professionals is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above-mentioned tower.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

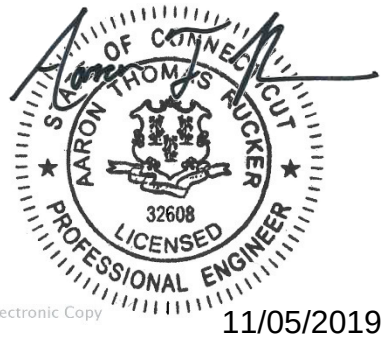
LC7: Proposed Equipment Configuration **Sufficient Capacity**

This analysis utilizes an ultimate 3-second gust wind speed of 125 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Gregory D. Keller, E.I. / ZSC

Respectfully submitted by:

Aaron T. Rucker, P.E.



Electronic Copy

11/05/2019

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 92-ft self supporting tower designed by Rohn. The tower has been modified multiple times in the past to accommodate additional loading. All information provided to TEP was assumed to be accurate and complete.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	125 mph
Exposure Category:	C
Topographic Factor:	1.0
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
90.0	90.0	2	Antel	LPA-80063/6CF w/ Mount Pipe	12 2	1-5/8 1-1/4
		6	Commscope	JAHH-65B-R3B w/ Mount Pipe		
		4	Decibel	DB844G65ZAXY w/ Mount Pipe		
		3	Commscope	CBC78T-DS-43-2X		
		2	RFS Celwave	DB-T1-6Z-8AB-0Z		
		3	Samsung Telecommunications	RFV01U-D1A		
		3	Samsung Telecommunications	RFV01UD2A		
		3	Site Pro 1	VFA12-HD Sector Mount		

Table 2 - Other Considered Equipment

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
91.0	97.0	1	Sinclair	SD210D-SF2P4SNM	3	7/8
	94.0	1	Sinclair	SD310-HF2P4SNM		
	91.0	2	Tower Mounts	Side Arm Mount [SO 304-1]		
77.0	77.0	3	CCI Antennas	HPA65R-BU6A w/ Mount Pipe	-	-
		1	Tower Mounts	Side Arm Mount [SO 305-3]		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
65.0	68.0	3	Powerwave Technologies	7770.00 w/ Mount Pipe	2 2 2 12	3/4 7/16 3/8 7/8
	66.0	3	Kathrein	80010965 w/ Mount Pipe		
		3	Ericsson	RRUS 4449 B5/B12		
		3	Ericsson	RRUS 8843 B2/B66A		
		3	Kathrein	782 10253		
		2	Raycap	DC6-48-60-18-8F		
	65.0	6	Powerwave Technologies	LGP21401		
		1	Tower Mounts	Sector Mount [SM 502-3]		
59.0	60.0	1	GPS	GPS_A	1	1/2
	59.0	1	Tower Mounts	Side Arm Mount [SO 305-1]		
34.0	35.0	1	Spectracom	8225	1	1/2

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Remarks	Reference	Source
Geotechnical Report	JGI Eastern, Inc.	1069632	CCISites
Foundation Calculations	Vertical Structures, Inc.	4063555	CCISites
Tower Manufacturer Drawings	Rohn	962042	CCISites
Tower Reinforcement Drawings	All-Points Technology Corp.	962041	CCISites
Tower Reinforcement Drawings	Vertical Structures, Inc.	1093271	CCISites
Post Modification Inspection	Vertical Structures, Inc.	1285457	CCISites
Tower Reinforcement Drawings	FDH Engineering, Inc.	3841012	CCISites
Post Modification Inspection	Tower Engineering Professionals	4061638	CCISites

3.1) Analysis Method

tnxTower (version 8.0.5.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

1) The tower and foundation were built and maintained in accordance with the manufacturer's specification.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2, and the referenced drawings.
3) All tower components are in sufficient condition to carry their full design capacity.
4) Serviceability with respect to antenna twist, tilt, roll, or lateral translation, is not checked and is left to the carrier or tower owner to ensure conformance.
5) All antenna mounts and mounting hardware are structurally sufficient to carry the full design capacity requirements of appurtenance wind area and weight as provided by the original manufacturer specifications. It is the carrier's responsibility to ensure compliance to the structural limitations of the existing and/or proposed antenna mounts. TEP did not perform a site visit to verify the size, condition or capacity of the antenna mounts and did not analyze antennas supporting mounts as part of this structural analysis report.
6) When applicable, the effective projected area (EPA) of appurtenances was determined by computation fluid dynamics (CFD) testing performed by Crown Castle. TEP assumes the means and methods used to determine the EPA's yields results that follow the intent of TIA-222-H and are accurate and complete.
7) The foundation steel reinforcement was assumed to be the minimum required per ACI 318.
8) The existing base plate grout was not considered in this analysis.

This analysis may be affected if any assumptions are not valid or have been made in error. Tower Engineering Professionals should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (lb)	ϕP_{allow} (lb)	% Capacity	Pass / Fail
T1	92 - 80	Leg	ROHN 2 STD	1	-9810	38684	25.4	Pass
T2	80 - 75	Leg	ROHN 2.5 STD	27	-13845	59993	23.1	Pass
T3	75 - 70	Leg	ROHN 2.5 STD	36	-19050	59993	31.8	Pass
T4	70 - 65	Leg	ROHN 2.5 STD	44	-23639	59993	39.4	Pass
T5	65 - 60	Leg	ROHN 2.5 STD	53	-30857	59993	51.4	Pass
T6	60 - 40	Leg	ROHN 2.5 X-STR	65	-55504	91946	60.4	Pass
T7	40 - 20	Leg	ROHN 3 X-STR	95	-80405	129461	62.1	Pass
T8	20 - 13.3333	Leg	ROHN 3.5 X-STR	125	-88431	161657	54.7	Pass
T9	13.3333 - 6.66667	Leg	ROHN 3.5 X-STR	137	-96664	161687	59.8	Pass
T10	6.66667 - 0	Leg	ROHN 3.5 X-STR	149	-104503	161715	64.6	Pass
T1	92 - 80	Diagonal	L1 1/2x1 1/2x1/8	14	-2444	5027	48.6 67.5 (b)	Pass
T2	80 - 75	Diagonal	L1 3/4x1 3/4x1/8	29	-2592	6214	41.7 55.7 (b)	Pass
T3	75 - 70	Diagonal	L2x2x1/4	38	-2526	16102	15.7 34.2 (b)	Pass
T4	70 - 65	Diagonal	L1 3/4x1 3/4x1/8	47	-2615	5137	50.9 56.8 (b)	Pass
T5	65 - 60	Diagonal	L2x2x1/4	59	-3527	13367	26.4 45.5 (b)	Pass
T6	60 - 40	Diagonal	L2x2x1/4	69	-4077	8106	50.3 52.4 (b)	Pass
T7	40 - 20	Diagonal	L2 1/2x2 1/2x3/16	99	-4638	9640	48.1	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (lb)	ϕP_{allow} (lb)	% Capacity	Pass / Fail
							69.1 (b)	
T8	20 - 13.3333	Diagonal	L2 1/2x2 1/2x3/16	129	-4816	8902	54.1 70.8 (b)	Pass
T9	13.3333 - 6.66667	Diagonal	L2 1/2x2 1/2x3/8	141	-4986	15287	32.6 62.4 (b)	Pass
T10	6.66667 - 0	Diagonal	L2 1/2x2 1/2x3/8	153	-5195	14094	36.9 64.9 (b)	Pass
T6	60 - 40	Secondary Horizontal	L2 1/2x2 1/2x1/4	73	-963	24818	3.9 12.8 (b)	Pass
T7	40 - 20	Secondary Horizontal	L2x2x1/4	103	-1394	8739	16.0 19.3 (b)	Pass
T8	20 - 13.3333	Secondary Horizontal	L2x2x1/4	133	-1534	7855	19.5 21.3 (b)	Pass
T9	13.3333 - 6.66667	Secondary Horizontal	L2x2x1/4	145	-1677	7048	23.8	Pass
T10	6.66667 - 0	Secondary Horizontal	L2x2x1/4	157	-1812	6359	28.5	Pass
T1	92 - 80	Top Girt	L2x2x1/8	4	-74	4273	1.7 2.0 (b)	Pass
T5	65 - 60	Top Girt	L2 1/2x2 1/2x3/16	56	-148	7955	1.9 3.8 (b)	Pass
							Summary	
						Leg (T10)	64.6	Pass
						Diagonal (T8)	70.8	Pass
						Secondary Horizontal (T10)	28.5	Pass
						Top Girt (T5)	3.8	Pass
						Bolt Checks	70.8	Pass
						RATING =	**70.8**	**Pass**

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Anchor Rods	-	68.3	Pass
1,2	Base Foundation Soil Interaction	-	80.2	Pass
1,2	Base Foundation Structural	-	14.9	Pass

Structure Rating (max from all components) =	80.2%

Notes:
1) See additional documentation in "Appendix C - Additional Calculations" for calculations supporting the % capacity listed.
2) Rating per TIA-222-H Section 15.5

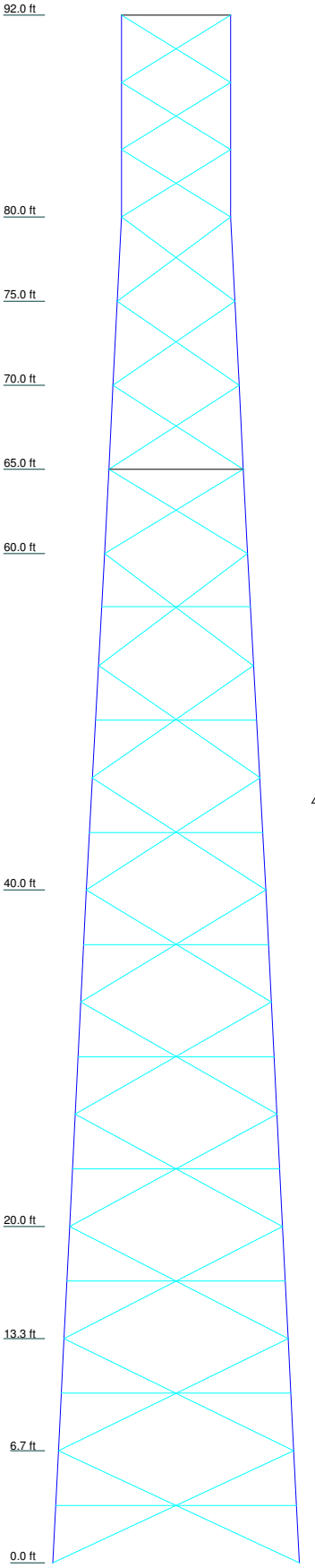
4.1) Recommendations

1) If the load differs from that described in Tables 1 and 2 of this report, the referenced drawings, or the provisions of this analysis are found to be invalid, another structural analysis should be performed.
2) The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A

TNXTOWER OUTPUT

Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
Legs	ROHN 2 STD		ROHN 2.5 STD			ROHN 2.5 X-STR	ROHN 3 X-STR		ROHN 3.5 X-STR	
Leg Grade	A572-50									
Diagonals	L1 1/2x1 1/2x1/8	A	L2x2x1/4	A	B	L2x2x1/4	L2 1/2x2 1/2x3/16		L2 1/2x2 1/2x3/8	
Diagonal Grade	A36									
Top Girts	L2x2x1/8	A	N.A.	A	B	L2 1/2x2 1/2x1/4	N.A.			
Sec. Horizontals	N.A.						L2x2x1/4			
Face Width (ft)	6.52083	6.5625	7.0625	7.5625	8.0625	8.5625	10.6042	12.6354	13.3229	14.0104
# Panels @ (ft)	3 @ 4	4 @ 5				9 @ 6.66667				
Weight (lb)	349.3	167.9	269.6	175.4	364.5	1554.8	1775.5	676.0	964.6	994.6
										7292.3



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
SD210-SF2P4SNM	91	7770.00 w/ Mount Pipe	65
SD310-HF2P4SNM	91	7770.00 w/ Mount Pipe	65
Side Arm Mount [SO 304-1]	91	7770.00 w/ Mount Pipe	65
Side Arm Mount [SO 304-1]	91	80010965 w/ Mount Pipe	65
(2) DB844G65ZAXY w/ Mount Pipe	90	80010965 w/ Mount Pipe	65
(2) DB844G65ZAXY w/ Mount Pipe	90	80010965 w/ Mount Pipe	65
(2) LPA-80063/6CF w/ Mount Pipe	90	782 10253	65
(2) JAHH-65B-R3B w/ Mount Pipe	90	782 10253	65
(2) JAHH-65B-R3B w/ Mount Pipe	90	782 10253	65
(2) JAHH-65B-R3B w/ Mount Pipe	90	(2) LGP21401	65
RFV01U-D1A	90	(2) LGP21401	65
(2) RFV01U-D1A	90	(2) LGP21401	65
(3) RFV01U-D2A	90	DC6-48-60-18-8F	65
CBC78T-DS-43-2X	90	DC6-48-60-18-8F	65
CBC78T-DS-43-2X	90	RRUS 8843 B2/B66A	65
CBC78T-DS-43-2X	90	RRUS 8843 B2/B66A	65
(2) DB-T1-6Z-8AB-0Z	90	RRUS 8843 B2/B66A	65
2.4" x 12' pipe	90	RRUS 4449 B5/B12	65
2.4" x 12' pipe	90	RRUS 4449 B5/B12	65
2.4" x 12' pipe	90	RRUS 4449 B5/B12	65
Sitepro VFA12-HD Sector Mount (3)	90	Sector Mount [SM 502-3]	65
HPA65R-BU6A w/ Mount Pipe	77	GPS_A	59
HPA65R-BU6A w/ Mount Pipe	77	Side Arm Mount [SO 305-1]	59
HPA65R-BU6A w/ Mount Pipe	77	8225	34
Side Arm Mount [SO 305-3]	77		

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L1 3/4x1 3/4x1/8	B	L2 1/2x2 1/2x3/16

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

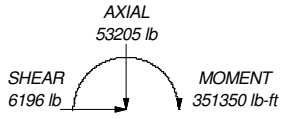
TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure C to the TIA-222-H Standard.
3. Tower designed for a 125 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 70.8%

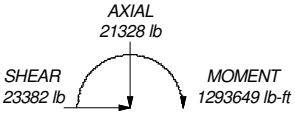
ALL REACTIONS ARE FACTORED

MAX. CORNER REACTIONS AT BASE:
DOWN: 108737 lb
SHEAR: 14242 lb

UPLIFT: -92558 lb
SHEAR: 12438 lb



TORQUE 1241 lb-ft
50 mph WIND - 1.5000 in ICE



TORQUE 6803 lb-ft
REACTIONS - 125 mph WIND

Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
Phone: (919) 661-6351
FAX: (919) 661-6350
Tower Engineering Professionals

Job: ***NHV 106 943628 (BU 806386)***			
Project: ***TEP No. 48909.318469***			
Client: Crown Castle	Drawn by: gdkeller	App'd:	
Code: TIA-222-H	Date: 11/05/19	Scale: NTS	
Path: C:\Users\gdkeller\Documents\TNX\NHV 106 943628 48909\806386_180291_LC7.eri		Dwg No. E-1	

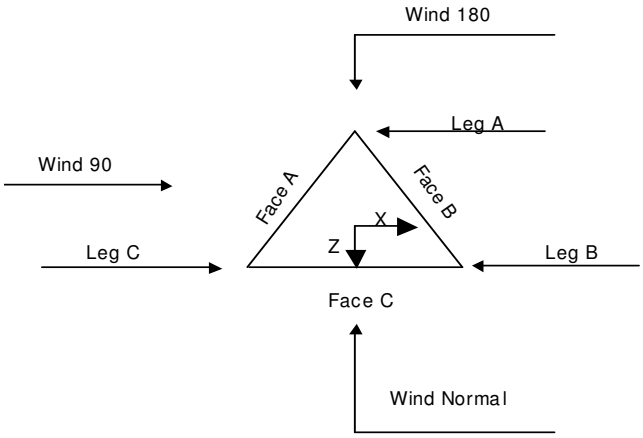
Tower Input Data

The main tower is a 3x free standing tower with an overall height of 92.00 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 6.52 ft at the top and 14.70 ft at the base.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

Tower is located in New Haven County, Connecticut.
Tower base elevation above sea level: 583.00 ft.
Basic wind speed of 125 mph.
Risk Category II.
Exposure Category C.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.00 ft.
Nominal ice thickness of 1.5000 in.
Ice thickness is considered to increase with height.
Ice density of 56 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Tower analysis based on target reliabilities in accordance with Annex S.
Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
Stress ratio used in tower member design is 1.05.
Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	Distribute Leg Loads As Uniform	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Horizontals	Assume Legs Pinned	√ Calculate Redundant Bracing Forces
Consider Moments - Diagonals	√ Assume Rigid Index Plate	Ignore Redundant Members in FEA
Use Moment Magnification	√ Use Clear Spans For Wind Area	SR Leg Bolts Resist Compression
Use Code Stress Ratios	√ Use Clear Spans For KL/r	All Leg Panels Have Same Allowable
Use Code Safety Factors - Guys	Retension Guys To Initial Tension	Offset Girt At Foundation
Escalate Ice	√ Bypass Mast Stability Checks	√ Consider Feed Line Torque
Always Use Max Kz	√ Use Azimuth Dish Coefficients	√ Include Angle Block Shear Check
Use Special Wind Profile	√ Project Wind Area of Appurt.	Use TIA-222-H Bracing Resist. Exemption
√ Include Bolts In Member Capacity	Autocalc Torque Arm Areas	Use TIA-222-H Tension Splice Exemption
Leg Bolts Are At Top Of Section	Add IBC .6D+W Combination	Poles
√ Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Include Shear-Torsion Interaction
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Always Use Sub-Critical Flow
SR Members Have Cut Ends	Treat Feed Line Bundles As Cylinder	Use Top Mounted Sockets
SR Members Are Concentric	Ignore KL/ry For 60 Deg. Angle Legs	Pole Without Linear Attachments
		Pole With Shroud Or No Appurtenances
		Outside and Inside Corner Radii Are Known



Triangular Tower

Tower Section Geometry

Tower Section	Tower Elevation ft	Assembly Database	Description	Section Width ft	Number of Sections	Section Length ft
T1	92.00-80.00			6.52	1	12.00
T2	80.00-75.00			6.56	1	5.00
T3	75.00-70.00			7.06	1	5.00
T4	70.00-65.00			7.56	1	5.00
T5	65.00-60.00			8.06	1	5.00
T6	60.00-40.00			8.56	1	20.00
T7	40.00-20.00			10.60	1	20.00
T8	20.00-13.33			12.64	1	6.67
T9	13.33-6.67			13.32	1	6.67
T10	6.67-0.00			14.01	1	6.67

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T1	92.00-80.00	4.00	X Brace	No	No	0.0000	0.0000
T2	80.00-75.00	5.00	X Brace	No	No	0.0000	0.0000
T3	75.00-70.00	5.00	X Brace	No	No	0.0000	0.0000
T4	70.00-65.00	5.00	X Brace	No	No	0.0000	0.0000
T5	65.00-60.00	5.00	X Brace	No	No	0.0000	0.0000

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T6	60.00-40.00	6.67	X Brace	No	Yes	0.0000	0.0000
T7	40.00-20.00	6.67	X Brace	No	Yes	0.0000	0.0000
T8	20.00-13.33	6.67	X Brace	No	Yes	0.0000	0.0000
T9	13.33-6.67	6.67	X Brace	No	Yes	0.0000	0.0000
T10	6.67-0.00	6.67	X Brace	No	Yes	0.0000	0.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 92.00-80.00	Pipe	ROHN 2 STD	A572-50 (50 ksi)	Equal Angle	L1 1/2x1 1/2x1/8	A36 (36 ksi)
T2 80.00-75.00	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x1/8	A36 (36 ksi)
T3 75.00-70.00	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T4 70.00-65.00	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L1 3/4x1 3/4x1/8	A36 (36 ksi)
T5 65.00-60.00	Pipe	ROHN 2.5 STD	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T6 60.00-40.00	Pipe	ROHN 2.5 X-STR	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T7 40.00-20.00	Pipe	ROHN 3 X-STR	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T8 20.00-13.33	Pipe	ROHN 3.5 X-STR	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)
T9 13.33-6.67	Pipe	ROHN 3.5 X-STR	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/8	A36 (36 ksi)
T10 6.67-0.00	Pipe	ROHN 3.5 X-STR	A572-50 (50 ksi)	Equal Angle	L2 1/2x2 1/2x3/8	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 92.00-80.00	Equal Angle	L2x2x1/8	A36 (36 ksi)	Pipe		A36 (36 ksi)
T5 65.00-60.00	Equal Angle	L2 1/2x2 1/2x3/16	A36 (36 ksi)	Pipe		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Secondary Horizontal Type	Secondary Horizontal Size	Secondary Horizontal Grade	Inner Bracing Type	Inner Bracing Size	Inner Bracing Grade
T6 60.00-40.00	Equal Angle	L2 1/2x2 1/2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T7 40.00-20.00	Equal Angle	L2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T8 20.00-13.33	Equal Angle	L2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T9 13.33-6.67	Equal Angle	L2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)
T10 6.67-0.00	Equal Angle	L2x2x1/4	A36 (36 ksi)	Pipe		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
T1 92.00-80.00	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000
T2 80.00-75.00	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000
T3 75.00-70.00	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000
T4 70.00-65.00	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000
T5 65.00-60.00	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000
T6 60.00-40.00	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000
T7 40.00-20.00	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000
T8 20.00-13.33	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000
T9 13.33-6.67	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000
T10 6.67-0.00	0.00	0.1793	A36 (36 ksi)	1.03	1	1.05	36.0000	36.0000	36.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
T1	Yes	No	1	1	1	1	1	1	1	1
92.00-80.00				1	1	1	1	1	1	1
T2	Yes	No	1	1	1	1	1	1	1	1
80.00-75.00				1	1	1	1	1	1	1
T3	Yes	No	1	1	1	1	1	1	1	1

Tower Elevation ft	Calc K Single Angles	Calc K Solid Rounds	K Factors[1] Legs	X Brace Diags X Y	K Brace Diags X Y	Single Diags X Y	Girts X Y	Horiz. X Y	Sec. Horiz. X Y	Inner Brace X Y
75.00-70.00				1	1	1	1	1	1	1
T4	Yes	No	1	1	1	1	1	1	1	1
70.00-65.00				1	1	1	1	1	1	1
T5	Yes	No	1	1	1	1	1	1	1	1
65.00-60.00				1	1	1	1	1	1	1
T6	Yes	No	1	1	1	1	1	1	1	1
60.00-40.00				1	1	1	1	1	0.5	1
T7	Yes	No	1	1	1	1	1	1	1	1
40.00-20.00				1	1	1	1	1	0.5	1
T8	Yes	No	1	1	1	1	1	1	1	1
20.00-13.33				1	1	1	1	1	0.5	1
T9 13.33-6.67	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	0.5	1
T10 6.67-0.00	Yes	No	1	1	1	1	1	1	1	1
				1	1	1	1	1	0.5	1

[1]*Note: K factors are applied to member segment lengths. K-braces without inner supporting members will have the K factor in the out-of-plane direction applied to the overall length.*

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Net Width Deduct in	Leg U	Diagonal Net Width Deduct in	Diagonal U	Top Girt Net Width Deduct in	Top Girt U	Bottom Girt Net Width Deduct in	Bottom Girt U	Mid Girt Net Width Deduct in	Mid Girt U	Long Horizontal Net Width Deduct in	Long Horizontal U	Short Horizontal Net Width Deduct in	Short Horizontal U
T1 92.00-80.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T2 80.00-75.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T3 75.00-70.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T4 70.00-65.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T5 65.00-60.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T6 60.00-40.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T7 40.00-20.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T8 20.00-13.33	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T9 13.33-6.67	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75
T10 6.67-0.00	0.0000	1	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75	0.0000	0.75

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg Bolt Size in	Leg No.	Diagonal Bolt Size in	Diagonal No.	Top Girt Bolt Size in	Top Girt No.	Bottom Girt Bolt Size in	Bottom Girt No.	Mid Girt Bolt Size in	Mid Girt No.	Long Horizontal Bolt Size in	Long Horizontal No.	Short Horizontal Bolt Size in	Short Horizontal No.
T1 92.00-80.00	Flange	0.6250 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0
T2 80.00-75.00	Flange	0.6250 A325X	0	0.5000 A325X	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T3 75.00-70.00	Flange	0.6250 A325X	0	0.5000 A325X	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0
T4 70.00-65.00	Flange	0.6250 A325X	0	0.5000 A325X	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0
T5 65.00-60.00	Flange	0.6250 A325X	4	0.5000 A325X	1	0.5000 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	0
T6 60.00-40.00	Flange	0.7500 A325X	4	0.5000 A325N	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.5000 A325N	1
T7 40.00-20.00	Flange	0.8750 A325X	4	0.5000 A325X	1	0.5000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325X	1
T8 20.00-13.33	Flange	0.8750 A449	0	0.5000 A325X	1	0.5000 A325N	0	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325X	1
T9 13.33-6.67	Flange	0.8750 A449	0	0.5000 A325X	1	0.6250 A325N	0	0.0000 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325X	1
T10 6.67-0.00	Flange	0.8750 A449	0	0.5000 A325X	1	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325N	0	0.6250 A325X	1

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Face Offset in	Lateral Offset (Frac FW)	#	# Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
A Face													
LDF4-50A(1/2)	A	No	No	Ar (CaAa)	59.00 - 0.00	0.0000	0.1	1	1	0.5000	0.6250		0.15
LDF4-50A(1/2)	A	No	No	Ar (CaAa)	34.00 - 0.00	-1.0000	0.1	1	1	0.5000	0.6250		0.15
LDF5-50A(7/8)	A	No	No	Ar (CaAa)	91.00 - 0.00	-2.0000	0.1	3	2	0.5000	1.0900		0.33
LDF7-50A(1-5/8)	A	No	No	Ar (CaAa)	90.00 - 0.00	1.5000	0.1	12	12	0.5000	1.9800		0.82
HB114-1-0813U4-M5F(1-1/4)	A	No	No	Ar (CaAa)	90.00 - 0.00	3.2500	0.15	2	2	0.5000	1.5400		1.20
Feedline Ladder (Af)	A	No	No	Af (CaAa)	92.00 - 0.00	1.5000	0.1	1	1	3.0000	3.0000		8.40
Feedline Ladder (Af)	A	No	No	Af (CaAa)	92.00 - 0.00	-2.0000	0.1	1	1	3.0000	3.0000		8.40
C Face													
AVA5-50(7/8)	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.35	12	7	0.5000	1.1020		0.30
2.25" Flexible Conduit	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.3	1	1	2.2500	2.2500		0.34
FB-L98B-002-75000(3/8)	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.3	2	2	0.3937	0.3937		0.06
WR-VG122ST-BRDA(7/16)	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.3	2	2	0.4600	0.4600		0.14
WR-VG86ST-BRD(3/4)	C	No	No	Ar (CaAa)	65.00 - 0.00	0.0000	-0.3	2	2	0.7950	0.7950		0.58
Feedline Ladder (Af) ***	C	No	No	Af (CaAa)	65.00 - 0.00	0.0000	-0.35	1	1	3.0000	3.0000		8.40

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C_AA_A ft^2/ft	Weight plf
***								

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T1	92.00-80.00	A	0.000	0.000	42.437	0.000	335
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	0.000	0.000	0
T2	80.00-75.00	A	0.000	0.000	20.055	0.000	150
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	0.000	0.000	0
T3	75.00-70.00	A	0.000	0.000	20.055	0.000	150
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	0.000	0.000	0
T4	70.00-65.00	A	0.000	0.000	20.055	0.000	150
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	0.000	0.000	0
T5	65.00-60.00	A	0.000	0.000	20.055	0.000	150
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	11.886	0.000	70
T6	60.00-40.00	A	0.000	0.000	81.407	0.000	603
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	47.543	0.000	278
T7	40.00-20.00	A	0.000	0.000	82.345	0.000	606
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	47.543	0.000	278
T8	20.00-13.33	A	0.000	0.000	27.573	0.000	202
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	15.848	0.000	93
T9	13.33-6.67	A	0.000	0.000	27.573	0.000	202
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	15.848	0.000	93
T10	6.67-0.00	A	0.000	0.000	27.573	0.000	202
		B	0.000	0.000	0.000	0.000	0
		C	0.000	0.000	15.848	0.000	93

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T1	92.00-80.00	A	1.403	0.000	0.000	79.587	0.000	1162
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	0.000	0.000	0

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft^2	A_F ft^2	C_AA_A In Face ft^2	C_AA_A Out Face ft^2	Weight lb
T2	80.00-75.00	A	1.389	0.000	0.000	37.647	0.000	537
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	0.000	0.000	0
T3	75.00-70.00	A	1.379	0.000	0.000	37.583	0.000	534
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	0.000	0.000	0
T4	70.00-65.00	A	1.370	0.000	0.000	37.515	0.000	531
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	0.000	0.000	0
T5	65.00-60.00	A	1.359	0.000	0.000	37.442	0.000	528
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	25.628	0.000	314
T6	60.00-40.00	A	1.329	0.000	0.000	155.176	0.000	2140
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	101.447	0.000	1230
T7	40.00-20.00	A	1.263	0.000	0.000	157.819	0.000	2106
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	99.099	0.000	1176
T8	20.00-13.33	A	1.191	0.000	0.000	52.380	0.000	677
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	32.181	0.000	372
T9	13.33-6.67	A	1.132	0.000	0.000	51.676	0.000	653
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	31.481	0.000	357
T10	6.67-0.00	A	1.014	0.000	0.000	50.279	0.000	605
		B		0.000	0.000	0.000	0.000	0
		C		0.000	0.000	30.094	0.000	327

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
T1	92.00-80.00	-6.1102	-9.5790	-6.1691	-9.1242
T2	80.00-75.00	-6.9576	-10.7578	-7.1282	-10.4901
T3	75.00-70.00	-6.9342	-10.9362	-7.2808	-10.8485
T4	70.00-65.00	-7.5586	-11.8566	-7.7480	-11.5430
T5	65.00-60.00	2.4542	-5.7538	3.6833	-3.1287
T6	60.00-40.00	2.7749	-6.8459	3.8120	-4.1144
T7	40.00-20.00	2.8868	-7.4495	3.8407	-5.0370
T8	20.00-13.33	3.0096	-7.8748	3.9484	-5.6254
T9	13.33-6.67	3.1066	-8.1111	4.0817	-5.9211
T10	6.67-0.00	3.1975	-8.3340	4.2089	-6.3442

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T1	4	LDF5-50A(7/8)	80.00 - 91.00	0.6000	0.6000
T1	6	LDF7-50A(1-5/8)	80.00 - 90.00	0.6000	0.6000
T1	7	HB114-1-0813U4-M5F(1-1/4	80.00 - 90.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
		)			
T1	8	Feedline Ladder (Af)	80.00 - 92.00	0.6000	0.6000
T1	9	Feedline Ladder (Af)	80.00 - 92.00	0.6000	0.6000
T2	4	LDF5-50A(7/8)	75.00 - 80.00	0.6000	0.6000
T2	6	LDF7-50A(1-5/8)	75.00 - 80.00	0.6000	0.6000
T2	7	HB114-1-0813U4-M5F(1-1/4	75.00 - 80.00	0.6000	0.6000
		)			
T2	8	Feedline Ladder (Af)	75.00 - 80.00	0.6000	0.6000
T2	9	Feedline Ladder (Af)	75.00 - 80.00	0.6000	0.6000
T3	4	LDF5-50A(7/8)	70.00 - 75.00	0.6000	0.6000
T3	6	LDF7-50A(1-5/8)	70.00 - 75.00	0.6000	0.6000
T3	7	HB114-1-0813U4-M5F(1-1/4	70.00 - 75.00	0.6000	0.6000
		)			
T3	8	Feedline Ladder (Af)	70.00 - 75.00	0.6000	0.6000
T3	9	Feedline Ladder (Af)	70.00 - 75.00	0.6000	0.6000
T4	4	LDF5-50A(7/8)	65.00 - 70.00	0.6000	0.6000
T4	6	LDF7-50A(1-5/8)	65.00 - 70.00	0.6000	0.6000
T4	7	HB114-1-0813U4-M5F(1-1/4	65.00 - 70.00	0.6000	0.6000
		)			
T4	8	Feedline Ladder (Af)	65.00 - 70.00	0.6000	0.6000
T4	9	Feedline Ladder (Af)	65.00 - 70.00	0.6000	0.6000
T5	4	LDF5-50A(7/8)	60.00 - 65.00	0.6000	0.6000
T5	6	LDF7-50A(1-5/8)	60.00 - 65.00	0.6000	0.6000
T5	7	HB114-1-0813U4-M5F(1-1/4	60.00 - 65.00	0.6000	0.6000
		)			
T5	8	Feedline Ladder (Af)	60.00 - 65.00	0.6000	0.6000
T5	9	Feedline Ladder (Af)	60.00 - 65.00	0.6000	0.6000
T5	11	AVA5-50(7/8)	60.00 - 65.00	0.6000	0.6000
T5	12	2.25" Flexible Conduit	60.00 - 65.00	0.6000	0.6000
T5	13	FB-L98B-002-75000(3/8)	60.00 - 65.00	0.6000	0.6000
T5	14	WR-VG122ST-BRDA(7/16)	60.00 - 65.00	0.6000	0.6000
T5	15	WR-VG86ST-BRD(3/4)	60.00 - 65.00	0.6000	0.6000
T5	16	Feedline Ladder (Af)	60.00 - 65.00	0.6000	0.6000
T6	2	LDF4-50A(1/2)	40.00 - 59.00	0.6000	0.6000
T6	4	LDF5-50A(7/8)	40.00 - 60.00	0.6000	0.6000
T6	6	LDF7-50A(1-5/8)	40.00 - 60.00	0.6000	0.6000
T6	7	HB114-1-0813U4-M5F(1-1/4	40.00 - 60.00	0.6000	0.6000
		)			
T6	8	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T6	9	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T6	11	AVA5-50(7/8)	40.00 - 60.00	0.6000	0.6000
T6	12	2.25" Flexible Conduit	40.00 - 60.00	0.6000	0.6000
T6	13	FB-L98B-002-75000(3/8)	40.00 - 60.00	0.6000	0.6000
T6	14	WR-VG122ST-BRDA(7/16)	40.00 - 60.00	0.6000	0.6000
T6	15	WR-VG86ST-BRD(3/4)	40.00 - 60.00	0.6000	0.6000
T6	16	Feedline Ladder (Af)	40.00 - 60.00	0.6000	0.6000
T7	2	LDF4-50A(1/2)	20.00 - 40.00	0.6000	0.6000
T7	3	LDF4-50A(1/2)	20.00 - 34.00	0.6000	0.6000
T7	4	LDF5-50A(7/8)	20.00 - 40.00	0.6000	0.6000
T7	6	LDF7-50A(1-5/8)	20.00 - 40.00	0.6000	0.6000
T7	7	HB114-1-0813U4-M5F(1-1/4	20.00 - 40.00	0.6000	0.6000
		)			
T7	8	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T7	9	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T7	11	AVA5-50(7/8)	20.00 - 40.00	0.6000	0.6000
T7	12	2.25" Flexible Conduit	20.00 - 40.00	0.6000	0.6000
T7	13	FB-L98B-002-75000(3/8)	20.00 - 40.00	0.6000	0.6000
T7	14	WR-VG122ST-BRDA(7/16)	20.00 - 40.00	0.6000	0.6000
T7	15	WR-VG86ST-BRD(3/4)	20.00 - 40.00	0.6000	0.6000
T7	16	Feedline Ladder (Af)	20.00 - 40.00	0.6000	0.6000
T8	2	LDF4-50A(1/2)	13.33 - 20.00	0.6000	0.6000
T8	3	LDF4-50A(1/2)	13.33 - 20.00	0.6000	0.6000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
T8	4	LDF5-50A(7/8)	13.33 - 20.00	0.6000	0.6000
T8	6	LDF7-50A(1-5/8)	13.33 - 20.00	0.6000	0.6000
T8	7	HB114-1-0813U4-M5F(1-1/4)	13.33 - 20.00	0.6000	0.6000
T8	8	Feedline Ladder (Af)	13.33 - 20.00	0.6000	0.6000
T8	9	Feedline Ladder (Af)	13.33 - 20.00	0.6000	0.6000
T8	11	AVA5-50(7/8)	13.33 - 20.00	0.6000	0.6000
T8	12	2.25" Flexible Conduit	13.33 - 20.00	0.6000	0.6000
T8	13	FB-L98B-002-75000(3/8)	13.33 - 20.00	0.6000	0.6000
T8	14	WR-VG122ST-BRDA(7/16)	13.33 - 20.00	0.6000	0.6000
T8	15	WR-VG86ST-BRD(3/4)	13.33 - 20.00	0.6000	0.6000
T8	16	Feedline Ladder (Af)	13.33 - 20.00	0.6000	0.6000
T9	2	LDF4-50A(1/2)	6.67 - 13.33	0.6000	0.6000
T9	3	LDF4-50A(1/2)	6.67 - 13.33	0.6000	0.6000
T9	4	LDF5-50A(7/8)	6.67 - 13.33	0.6000	0.6000
T9	6	LDF7-50A(1-5/8)	6.67 - 13.33	0.6000	0.6000
T9	7	HB114-1-0813U4-M5F(1-1/4)	6.67 - 13.33	0.6000	0.6000
T9	8	Feedline Ladder (Af)	6.67 - 13.33	0.6000	0.6000
T9	9	Feedline Ladder (Af)	6.67 - 13.33	0.6000	0.6000
T9	11	AVA5-50(7/8)	6.67 - 13.33	0.6000	0.6000
T9	12	2.25" Flexible Conduit	6.67 - 13.33	0.6000	0.6000
T9	13	FB-L98B-002-75000(3/8)	6.67 - 13.33	0.6000	0.6000
T9	14	WR-VG122ST-BRDA(7/16)	6.67 - 13.33	0.6000	0.6000
T9	15	WR-VG86ST-BRD(3/4)	6.67 - 13.33	0.6000	0.6000
T9	16	Feedline Ladder (Af)	6.67 - 13.33	0.6000	0.6000
T10	2	LDF4-50A(1/2)	0.00 - 6.67	0.6000	0.6000
T10	3	LDF4-50A(1/2)	0.00 - 6.67	0.6000	0.6000
T10	4	LDF5-50A(7/8)	0.00 - 6.67	0.6000	0.6000
T10	6	LDF7-50A(1-5/8)	0.00 - 6.67	0.6000	0.6000
T10	7	HB114-1-0813U4-M5F(1-1/4)	0.00 - 6.67	0.6000	0.6000
T10	8	Feedline Ladder (Af)	0.00 - 6.67	0.6000	0.6000
T10	9	Feedline Ladder (Af)	0.00 - 6.67	0.6000	0.6000
T10	11	AVA5-50(7/8)	0.00 - 6.67	0.6000	0.6000
T10	12	2.25" Flexible Conduit	0.00 - 6.67	0.6000	0.6000
T10	13	FB-L98B-002-75000(3/8)	0.00 - 6.67	0.6000	0.6000
T10	14	WR-VG122ST-BRDA(7/16)	0.00 - 6.67	0.6000	0.6000
T10	15	WR-VG86ST-BRD(3/4)	0.00 - 6.67	0.6000	0.6000
T10	16	Feedline Ladder (Af)	0.00 - 6.67	0.6000	0.6000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
91									
SD210-SF2P4SNM	B	From Leg	2.00 0.00 6.00	0.0000	91.00	No Ice 1/2" Ice 1" Ice 2" Ice	10.74 15.26 15.95 17.36	10.74 15.26 15.95 17.36	20 179 346 706

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
SD310-HF2P4SNM	C	From Leg	2.00 0.00 3.00	0.0000	91.00	No Ice 1/2" Ice 1" Ice 2" Ice	10.74 15.26 15.95 17.36	10.74 15.26 15.95 17.36	20 179 346 706
Side Arm Mount [SO 304-1]	B	From Leg	1.00 0.00 0.00	0.0000	91.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.31 0.50 0.73 1.29	0.88 1.26 1.67 2.58	23 32 46 90
Side Arm Mount [SO 304-1]	C	From Leg	1.00 0.00 0.00	0.0000	91.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.31 0.50 0.73 1.29	0.88 1.26 1.67 2.58	23 32 46 90
90									
(2) DB844G65ZAXY w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.58 4.96 5.34 6.14	4.80 5.42 6.04 7.34	34 80 132 257
(2) DB844G65ZAXY w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.58 4.96 5.34 6.14	4.80 5.42 6.04 7.34	34 80 132 257
(2) LPA-80063/6CF w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	10.06 10.75 11.40 12.62	10.45 11.74 12.87 14.82	56 151 255 493
(2) JAHH-65B-R3B w/ Mount Pipe	A	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.50 5.97 6.45 7.44	4.38 4.84 5.30 6.26	96 169 254 457
(2) JAHH-65B-R3B w/ Mount Pipe	B	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.50 5.97 6.45 7.44	4.38 4.84 5.30 6.26	96 169 254 457
(2) JAHH-65B-R3B w/ Mount Pipe	C	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.50 5.97 6.45 7.44	4.38 4.84 5.30 6.26	96 169 254 457
RFV01U-D1A	A	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.88 2.05 2.22 2.60	1.25 1.39 1.54 1.86	84 103 124 175
(2) RFV01U-D1A	B	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.88 2.05 2.22 2.60	1.25 1.39 1.54 1.86	84 103 124 175
(3) RFV01U-D2A	C	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.88 2.05 2.22 2.60	1.01 1.14 1.28 1.59	70 87 106 153
CBC78T-DS-43-2X	A	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.37 0.45 0.53 0.72	0.51 0.60 0.70 0.93	21 27 35 57
CBC78T-DS-43-2X	B	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.37 0.45 0.53 0.72	0.51 0.60 0.70 0.93	21 27 35 57

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
CBC78T-DS-43-2X	C	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.37 0.45 0.53 0.72	0.51 0.60 0.70 0.93	21 27 35 57
(2) DB-T1-6Z-8AB-0Z	A	From Leg	4.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	4.80 5.07 5.35 5.93	2.00 2.19 2.39 2.81	44 80 120 213
2.4" x 12' pipe	A	From Leg	2.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.88 4.11 5.35 7.62	2.88 4.11 5.35 7.62	44 65 95 177
2.4" x 12' pipe	B	From Leg	2.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.88 4.11 5.35 7.62	2.88 4.11 5.35 7.62	44 65 95 177
2.4" x 12' pipe	C	From Leg	2.00 0.00 0.00	0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.88 4.11 5.35 7.62	2.88 4.11 5.35 7.62	44 65 95 177
Sitepro VFA12-HD Sector Mount (3)	C	None		0.0000	90.00	No Ice 1/2" Ice 1" Ice 2" Ice	25.20 38.36 51.52 77.84	25.20 38.36 51.52 77.84	1974 2412 2850 3726
77									
HPA65R-BU6A w/ Mount Pipe	A	From Leg	3.00 0.00 0.00	0.0000	77.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.83 6.40 6.99 8.19	5.00 5.56 6.13 7.32	80 142 216 396
HPA65R-BU6A w/ Mount Pipe	B	From Leg	3.00 0.00 0.00	0.0000	77.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.83 6.40 6.99 8.19	5.00 5.56 6.13 7.32	80 142 216 396
HPA65R-BU6A w/ Mount Pipe	C	From Leg	3.00 0.00 0.00	0.0000	77.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.83 6.40 6.99 8.19	5.00 5.56 6.13 7.32	80 142 216 396
Side Arm Mount [SO 305-3]	C	None		0.0000	77.00	No Ice 1/2" Ice 1" Ice 2" Ice	2.46 3.42 4.46 6.77	2.46 3.42 4.46 6.77	90 131 191 376
67									
65									
7770.00 w/ Mount Pipe	A	From Leg	4.00 0.00 3.00	0.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.75 6.18 6.61 7.49	4.25 5.01 5.71 7.16	55 103 157 287
7770.00 w/ Mount Pipe	B	From Leg	4.00 0.00 3.00	0.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.75 6.18 6.61 7.49	4.25 5.01 5.71 7.16	55 103 157 287
7770.00 w/ Mount Pipe	C	From Leg	4.00 0.00 3.00	0.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	5.75 6.18 6.61 7.49	4.25 5.01 5.71 7.16	55 103 157 287
80010965 w/ Mount Pipe	A	From Leg	4.00 0.00	0.0000	65.00	No Ice 1/2" Ice	12.26 13.03	5.79 6.47	136 226

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
			1.00			1" Ice	13.80	7.17	328
						2" Ice	15.41	8.60	570
80010965 w/ Mount Pipe	B	From Leg	4.00	0.0000	65.00	No Ice	12.26	5.79	136
			0.00			1/2" Ice	13.03	6.47	226
			1.00			1" Ice	13.80	7.17	328
						2" Ice	15.41	8.60	570
80010965 w/ Mount Pipe	C	From Leg	4.00	0.0000	65.00	No Ice	12.26	5.79	136
			0.00			1/2" Ice	13.03	6.47	226
			1.00			1" Ice	13.80	7.17	328
						2" Ice	15.41	8.60	570
782 10253	A	From Leg	4.00	0.0000	65.00	No Ice	0.11	0.06	3
			0.00			1/2" Ice	0.15	0.10	4
			1.00			1" Ice	0.20	0.14	6
						2" Ice	0.33	0.25	13
782 10253	B	From Leg	4.00	0.0000	65.00	No Ice	0.11	0.06	3
			0.00			1/2" Ice	0.15	0.10	4
			1.00			1" Ice	0.20	0.14	6
						2" Ice	0.33	0.25	13
782 10253	C	From Leg	4.00	0.0000	65.00	No Ice	0.11	0.06	3
			0.00			1/2" Ice	0.15	0.10	4
			1.00			1" Ice	0.20	0.14	6
						2" Ice	0.33	0.25	13
(2) LGP21401	A	From Leg	4.00	0.0000	65.00	No Ice	1.10	0.21	14
			0.00			1/2" Ice	1.24	0.27	21
			0.00			1" Ice	1.38	0.35	30
						2" Ice	1.69	0.52	55
(2) LGP21401	B	From Leg	4.00	0.0000	65.00	No Ice	1.10	0.21	14
			0.00			1/2" Ice	1.24	0.27	21
			0.00			1" Ice	1.38	0.35	30
						2" Ice	1.69	0.52	55
(2) LGP21401	C	From Leg	4.00	0.0000	65.00	No Ice	1.10	0.21	14
			0.00			1/2" Ice	1.24	0.27	21
			0.00			1" Ice	1.38	0.35	30
						2" Ice	1.69	0.52	55
DC6-48-60-18-8F	A	From Leg	4.00	0.0000	65.00	No Ice	1.21	1.21	33
			0.00			1/2" Ice	1.89	1.89	55
			1.00			1" Ice	2.11	2.11	80
						2" Ice	2.57	2.57	138
DC6-48-60-18-8F	B	From Leg	4.00	0.0000	65.00	No Ice	1.21	1.21	33
			0.00			1/2" Ice	1.89	1.89	55
			1.00			1" Ice	2.11	2.11	80
						2" Ice	2.57	2.57	138
RRUS 8843 B2/B66A	A	From Leg	4.00	0.0000	65.00	No Ice	1.64	1.35	72
			0.00			1/2" Ice	1.80	1.50	90
			1.00			1" Ice	1.97	1.65	110
						2" Ice	2.32	1.99	159
RRUS 8843 B2/B66A	B	From Leg	4.00	0.0000	65.00	No Ice	1.64	1.35	72
			0.00			1/2" Ice	1.80	1.50	90
			1.00			1" Ice	1.97	1.65	110
						2" Ice	2.32	1.99	159
RRUS 8843 B2/B66A	C	From Leg	4.00	0.0000	65.00	No Ice	1.64	1.35	72
			0.00			1/2" Ice	1.80	1.50	90
			1.00			1" Ice	1.97	1.65	110
						2" Ice	2.32	1.99	159
RRUS 4449 B5/B12	A	From Leg	4.00	0.0000	65.00	No Ice	1.97	1.41	71
			0.00			1/2" Ice	2.14	1.56	90
			1.00			1" Ice	2.33	1.73	111

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight lb
						2" Ice	2.72	2.07	163
RRUS 4449 B5/B12	B	From Leg	4.00 0.00 1.00	0.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.97 2.14 2.33 2.72	1.41 1.56 1.73 2.07	71 90 111 163
RRUS 4449 B5/B12	C	From Leg	4.00 0.00 1.00	0.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	1.97 2.14 2.33 2.72	1.41 1.56 1.73 2.07	71 90 111 163
Sector Mount [SM 502-3]	C	None		0.0000	65.00	No Ice 1/2" Ice 1" Ice 2" Ice	29.82 42.21 54.43 78.49	29.82 42.21 54.43 78.49	1673 2266 3052 5180
59									
GPS_A	C	From Leg	3.00 0.00 1.00	0.0000	59.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.26 0.32 0.39 0.56	0.26 0.32 0.39 0.56	1 5 10 25
Side Arm Mount [SO 305-1]	C	From Leg	1.50 0.00 0.00	0.0000	59.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.53 0.78 1.06 1.73	1.52 2.07 2.66 3.91	30 44 64 125
34									
8225	B	From Leg	2.00 0.00 1.00	0.0000	34.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.89 1.06 1.23 1.59	0.89 1.06 1.23 1.59	1 9 18 46
****									

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice

Comb. No.	Description
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	92 - 80	1.424	50	0.1242	0.0180
T2	80 - 75	1.104	50	0.1178	0.0117
T3	75 - 70	0.976	50	0.1137	0.0091
T4	70 - 65	0.857	50	0.1079	0.0081
T5	65 - 60	0.742	50	0.1013	0.0060
T6	60 - 40	0.635	50	0.0931	0.0052
T7	40 - 20	0.292	50	0.0605	0.0027
T8	20 - 13.3333	0.079	50	0.0293	0.0012
T9	13.3333 - 6.66667	0.037	50	0.0200	0.0007
T10	6.66667 - 0	0.010	43	0.0101	0.0003

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
91.00	SD210-SF2P4SNM	50	1.397	0.1237	0.0175	185467

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
90.00	(2) DB844G65ZAXY w/ Mount Pipe	50	1.370	0.1233	0.0170	185467
77.00	HPA65R-BU6A w/ Mount Pipe	50	1.026	0.1155	0.0100	39037
65.00	7770.00 w/ Mount Pipe	50	0.742	0.1013	0.0060	38632
59.00	GPS_A	50	0.615	0.0914	0.0051	33939
34.00	8225	50	0.215	0.0508	0.0023	37379

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	92 - 80	5.802	24	0.5043	0.0742
T2	80 - 75	4.504	11	0.4785	0.0481
T3	75 - 70	3.989	10	0.4618	0.0376
T4	70 - 65	3.506	10	0.4386	0.0333
T5	65 - 60	3.038	10	0.4121	0.0247
T6	60 - 40	2.602	10	0.3792	0.0214
T7	40 - 20	1.201	10	0.2470	0.0111
T8	20 - 13.3333	0.327	10	0.1201	0.0050
T9	13.3333 - 6.66667	0.154	10	0.0820	0.0027
T10	6.66667 - 0	0.042	11	0.0413	0.0014

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
91.00	SD210-SF2P4SNM	24	5.693	0.5024	0.0721	48890
90.00	(2) DB844G65ZAXY w/ Mount Pipe	24	5.583	0.5006	0.0701	48890
77.00	HPA65R-BU6A w/ Mount Pipe	10	4.191	0.4693	0.0411	9648
65.00	7770.00 w/ Mount Pipe	10	3.038	0.4121	0.0247	9521
59.00	GPS_A	10	2.519	0.3723	0.0210	8399
34.00	8225	10	0.884	0.2076	0.0096	9175

Bolt Design Data

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
T1	92	Leg	A325X	0.6250	4	1730	20340	0.085	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	2467	3480	0.709	1.05	Member Block Shear
		Top Girt	A325X	0.5000	1	86	4133	0.021	1.05	Member Bearing
T2	80	Diagonal	A325X	0.5000	1	2418	4133	0.585	1.05	Member Bearing
T3	75	Diagonal	A325X	0.5000	1	2575	7176	0.359	1.05	Gusset Bearing

Section No.	Elevation ft	Component Type	Bolt Grade	Bolt Size in	Number Of Bolts	Maximum Load per Bolt lb	Allowable Load per Bolt lb	Ratio Load / Allowable	Allowable Ratio	Criteria
T4	70	Diagonal	A325X	0.5000	1	2466	4133	0.597	1.05	Member Bearing
T5	65	Leg	A325X	0.6250	4	6155	20340	0.303	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	3429	7176	0.478	1.05	Gusset Bearing
		Top Girt	A325X	0.5000	1	250	6199	0.040	1.05	Member Bearing
T6	60	Leg	A325X	0.7500	4	11681	30101	0.388	1.05	Bolt Tension
		Diagonal	A325N	0.5000	1	3946	7176	0.550	1.05	Gusset Bearing
		Secondary Horizontal	A325N	0.5000	1	963	7176	0.134	1.05	Gusset Bearing
T7	40	Leg	A325X	0.8750	4	17146	41556	0.413	1.05	Bolt Tension
		Diagonal	A325X	0.5000	1	4498	6199	0.726	1.05	Member Bearing
		Secondary Horizontal	A325X	0.6250	1	1394	6864	0.203	1.05	Gusset Bearing
T8	20	Diagonal	A325X	0.5000	1	4606	6199	0.743	1.05	Member Bearing
		Secondary Horizontal	A325X	0.6250	1	1534	6864	0.223	1.05	Gusset Bearing
T9	13.3333	Diagonal	A325X	0.5000	1	4704	7176	0.656	1.05	Gusset Bearing
		Secondary Horizontal	A325X	0.6250	1	1677	6864	0.244	1.05	Gusset Bearing
T10	6.66667	Diagonal	A325X	0.5000	1	4890	7176	0.682	1.05	Gusset Bearing
		Secondary Horizontal	A325X	0.6250	1	1812	6864	0.264	1.05	Gusset Bearing

Compression Checks

Leg Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	92 - 80	ROHN 2 STD	12.00	4.00	61.0 K=1.00	1.0745	-9810	36842	0.266 [1]
T2	80 - 75	ROHN 2.5 STD	5.01	5.01	63.4 K=1.00	1.7040	-13845	57136	0.242 [1]
T3	75 - 70	ROHN 2.5 STD	5.01	5.01	63.4 K=1.00	1.7040	-19050	57136	0.333 [1]
T4	70 - 65	ROHN 2.5 STD	5.01	5.01	63.4 K=1.00	1.7040	-23639	57136	0.414 [1]
T5	65 - 60	ROHN 2.5 STD	5.01	5.01	63.4 K=1.00	1.7040	-30857	57136	0.540 [1]
T6	60 - 40	ROHN 2.5 X-STR	20.03	3.45	44.8 K=1.00	2.2535	-55504	87568	0.634 [1]
T7	40 - 20	ROHN 3 X-STR	20.03	3.43	36.2 K=1.00	3.0159	-80405	123296	0.652 [1]
T8	20 - 13.3333	ROHN 3.5 X-STR	6.68	3.43	31.5 K=1.00	3.6784	-88431	153959	0.574 [1]
T9	13.3333 - 6.66667	ROHN 3.5 X-STR	6.68	3.42	31.4 K=1.00	3.6784	-96664	153988	0.628 [1]
T10	6.66667 - 0	ROHN 3.5 X-STR	6.68	3.42	31.4 K=1.00	3.6784	-104503	154014	0.679 [1]

[1] P_u / ϕP_n controls

Diagonal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	92 - 80	L1 1/2x1 1/2x1/8	7.67	3.62	146.6 K=1.00	0.3594	-2444	4788	0.510 [1]
T2	80 - 75	L1 3/4x1 3/4x1/8	8.45	4.13	142.8 K=1.00	0.4219	-2592	5918	0.438 [1]
T3	75 - 70	L2x2x1/4	8.86	4.31	132.3 K=1.00	0.9380	-2526	15336	0.165 [1]
T4	70 - 65	L1 3/4x1 3/4x1/8	9.28	4.54	157.1 K=1.00	0.4219	-2615	4892	0.534 [1]
T5	65 - 60	L2x2x1/4	9.70	4.73	145.2 K=1.00	0.9380	-3527	12730	0.277 [1]
T6	60 - 40	L2x2x1/4	12.24	6.08	186.5 K=1.00	0.9380	-4077	7720	0.528 [1]
T7	40 - 20	L2 1/2x2 1/2x3/16	13.99	6.92	167.7 K=1.00	0.9023	-4638	9181	0.505 [1]
T8	20 - 13.3333	L2 1/2x2 1/2x3/16	14.59	7.20	174.5 K=1.00	0.9023	-4816	8478	0.568 [1]
T9	13.3333 - 6.66667	L2 1/2x2 1/2x3/8	15.21	7.48	184.4 K=1.00	1.7300	-4986	14559	0.342 [1]
T10	6.66667 - 0	L2 1/2x2 1/2x3/8	15.83	7.79	192.1 K=1.00	1.7300	-5195	13423	0.387 [1]

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T6	60 - 40	L2 1/2x2 1/2x1/4	10.25	4.86	119.4 K=1.01	1.1900	-963	23636	0.041 [1]
T7	40 - 20	L2x2x1/4	12.29	5.85	179.6 K=1.00	0.9380	-1394	8323	0.168 [1]
T8	20 - 13.3333	L2x2x1/4	12.97	6.17	189.4 K=1.00	0.9380	-1534	7481	0.205 [1]
T9	13.3333 - 6.66667	L2x2x1/4	13.66	6.52	200.0 K=1.00	0.9380	-1677	6712	0.250 [1]
T10	6.66667 - 0	L2x2x1/4	14.35	6.86	210.6 K=1.00	0.9380	-1812	6056	0.299 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Compression)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	92 - 80	L2x2x1/8	6.52	6.11	184.6 K=1.00	0.4844	-74	4070	0.018 [1]
T5	65 - 60	L2 1/2x2 1/2x3/16	8.06	7.61	184.6 K=1.00	0.9023	-148	7576	0.020 [1]

[1] P_u / ϕP_n controls

Tension Checks

Leg Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	92 - 80	ROHN 2 STD	12.00	4.00	61.0	1.0745	6920	48354	0.143 [1]
T2	80 - 75	ROHN 2.5 STD	5.01	5.01	63.4	1.7040	10753	76682	0.140 [1]
T3	75 - 70	ROHN 2.5 STD	5.01	5.01	63.4	1.7040	15519	76682	0.202 [1]
T4	70 - 65	ROHN 2.5 STD	5.01	5.01	63.4	1.7040	19887	76682	0.259 [1]
T5	65 - 60	ROHN 2.5 STD	5.01	5.01	63.4	1.7040	24620	76682	0.321 [1]
T6	60 - 40	ROHN 2.5 X-STR	20.03	3.23	41.9	2.2535	46770	101409	0.461 [1]
T7	40 - 20	ROHN 3 X-STR	20.03	3.25	34.3	3.0159	68649	135717	0.506 [1]
T8	20 - 13.3333	ROHN 3.5 X-STR	6.68	3.25	29.9	3.6784	75637	165529	0.457 [1]
T9	13.3333 - 6.66667	ROHN 3.5 X-STR	6.68	3.26	29.9	3.6784	82631	165529	0.499 [1]
T10	6.66667 - 0	ROHN 3.5 X-STR	6.68	3.26	29.9	3.6784	89099	165529	0.538 [1]

[1] P_u / ϕP_n controls

Diagonal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	92 - 80	L1 1/2x1 1/2x1/8	7.67	3.62	96.0	0.2109	2467	9176	0.269 [1]
T2	80 - 75	L1 3/4x1 3/4x1/8	8.45	4.13	93.1	0.2578	2418	11215	0.216 [1]
T3	75 - 70	L2x2x1/4	8.86	4.31	87.4	0.5863	2575	25505	0.101 [1]
T4	70 - 65	L1 3/4x1 3/4x1/8	9.28	4.54	102.1	0.2578	2466	11215	0.220 [1]
T5	65 - 60	L2x2x1/4	9.70	4.73	95.7	0.5863	3429	25505	0.134 [1]
T6	60 - 40	L2x2x1/4	12.24	6.08	121.8	0.5863	3946	25505	0.155 [1]
T7	40 - 20	L2 1/2x2 1/2x3/16	13.99	6.92	108.3	0.5889	4498	25616	0.176 [1]
T8	20 - 13.3333	L2 1/2x2 1/2x3/16	14.59	7.20	112.6	0.5889	4606	25616	0.180 [1]
T9	13.3333 - 6.66667	L2 1/2x2 1/2x3/8	15.21	7.48	121.3	1.1217	4704	48795	0.096 [1]
T10	6.66667 - 0	L2 1/2x2 1/2x3/8	15.83	7.79	126.2	1.1217	4890	48795	0.100 [1]

[1] P_u / ϕP_n controls

Secondary Horizontal Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T6	60 - 40	L2 1/2x2 1/2x1/4	10.25	4.86	156.3	0.7753	963	33726	0.029 [1]
T7	40 - 20	L2x2x1/4	12.29	5.85	236.4	0.5629	1394	24485	0.057 [1]
T8	20 - 13.3333	L2x2x1/4	12.97	6.17	249.0	0.5629	1534	24485	0.063 [1]
T9	13.3333 - 6.66667	L2x2x1/4	13.66	6.52	262.6	0.5629	1677	24485	0.068 [1]
T10	6.66667 - 0	L2x2x1/4	14.35	6.86	276.1	0.5629	1812	24485	0.074 [1]

[1] P_u / ϕP_n controls

Top Girt Design Data (Tension)

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u lb	ϕP_n lb	Ratio $\frac{P_u}{\phi P_n}$
T1	92 - 80	L2x2x1/8	6.52	6.11	121.2	0.3047	86	13254	0.006 [1]
T5	65 - 60	L2 1/2x2 1/2x3/16	8.06	7.61	120.6	0.5889	250	25616	0.010 [1]

[1] P_u / ϕP_n controls

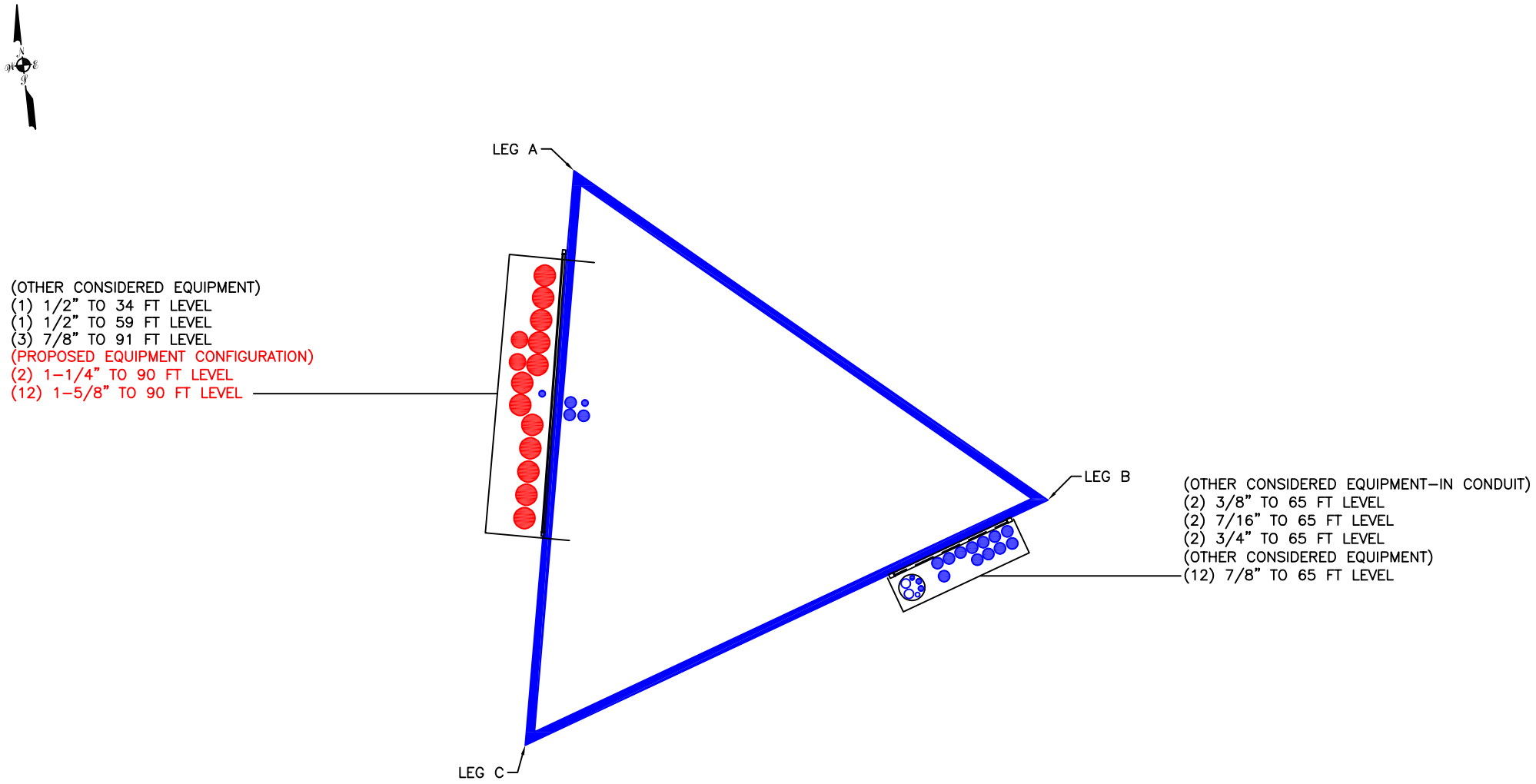
Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
T1	92 - 80	Leg	ROHN 2 STD	1	-9810	38684	25.4	Pass
T2	80 - 75	Leg	ROHN 2.5 STD	27	-13845	59993	23.1	Pass
T3	75 - 70	Leg	ROHN 2.5 STD	36	-19050	59993	31.8	Pass
T4	70 - 65	Leg	ROHN 2.5 STD	44	-23639	59993	39.4	Pass
T5	65 - 60	Leg	ROHN 2.5 STD	53	-30857	59993	51.4	Pass
T6	60 - 40	Leg	ROHN 2.5 X-STR	65	-55504	91946	60.4	Pass
T7	40 - 20	Leg	ROHN 3 X-STR	95	-80405	129461	62.1	Pass
T8	20 - 13.3333	Leg	ROHN 3.5 X-STR	125	-88431	161657	54.7	Pass
T9	13.3333 - 6.66667	Leg	ROHN 3.5 X-STR	137	-96664	161687	59.8	Pass
T10	6.66667 - 0	Leg	ROHN 3.5 X-STR	149	-104503	161715	64.6	Pass
T1	92 - 80	Diagonal	L1 1/2x1 1/2x1/8	14	-2444	5027	48.6 67.5 (b)	Pass
T2	80 - 75	Diagonal	L1 3/4x1 3/4x1/8	29	-2592	6214	41.7 55.7 (b)	Pass
T3	75 - 70	Diagonal	L2x2x1/4	38	-2526	16102	15.7 34.2 (b)	Pass
T4	70 - 65	Diagonal	L1 3/4x1 3/4x1/8	47	-2615	5137	50.9 56.8 (b)	Pass
T5	65 - 60	Diagonal	L2x2x1/4	59	-3527	13367	26.4 45.5 (b)	Pass
T6	60 - 40	Diagonal	L2x2x1/4	69	-4077	8106	50.3 52.4 (b)	Pass
T7	40 - 20	Diagonal	L2 1/2x2 1/2x3/16	99	-4638	9640	48.1	Pass

Section No.	Elevation ft	Component Type	Size	Critical Element	P lb	ϕP_{allow} lb	% Capacity	Pass Fail
							69.1 (b)	
T8	20 - 13.3333	Diagonal	L2 1/2x2 1/2x3/16	129	-4816	8902	54.1	Pass
							70.8 (b)	
T9	13.3333 - 6.66667	Diagonal	L2 1/2x2 1/2x3/8	141	-4986	15287	32.6	Pass
							62.4 (b)	
T10	6.66667 - 0	Diagonal	L2 1/2x2 1/2x3/8	153	-5195	14094	36.9	Pass
							64.9 (b)	
T6	60 - 40	Secondary Horizontal	L2 1/2x2 1/2x1/4	73	-963	24818	3.9	Pass
							12.8 (b)	
T7	40 - 20	Secondary Horizontal	L2x2x1/4	103	-1394	8739	16.0	Pass
							19.3 (b)	
T8	20 - 13.3333	Secondary Horizontal	L2x2x1/4	133	-1534	7855	19.5	Pass
							21.3 (b)	
T9	13.3333 - 6.66667	Secondary Horizontal	L2x2x1/4	145	-1677	7048	23.8	Pass
T10	6.66667 - 0	Secondary Horizontal	L2x2x1/4	157	-1812	6359	28.5	Pass
T1	92 - 80	Top Girt	L2x2x1/8	4	-74	4273	1.7	Pass
							2.0 (b)	
T5	65 - 60	Top Girt	L2 1/2x2 1/2x3/16	56	-148	7955	1.9	Pass
							3.8 (b)	
							Summary	
						Leg (T10)	64.6	Pass
						Diagonal (T8)	70.8	Pass
						Secondary Horizontal (T10)	28.5	Pass
						Top Girt (T5)	3.8	Pass
						Bolt Checks	70.8	Pass
						RATING =	**70.8**	**Pass**

APPENDIX B

BASE LEVEL DRAWING


LEG A
(OTHER CONSIDERED EQUIPMENT)
(1) 1/2" TO 34 FT LEVEL
(1) 1/2" TO 59 FT LEVEL
(3) 7/8" TO 91 FT LEVEL
(PROPOSED EQUIPMENT CONFIGURATION)
(2) 1-1/4" TO 90 FT LEVEL
(12) 1-5/8" TO 90 FT LEVEL
LEG B
(OTHER CONSIDERED EQUIPMENT-IN CONDUIT)
(2) 3/8" TO 65 FT LEVEL
(2) 7/16" TO 65 FT LEVEL
(2) 3/4" TO 65 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(12) 7/8" TO 65 FT LEVEL
LEG C

APPENDIX C

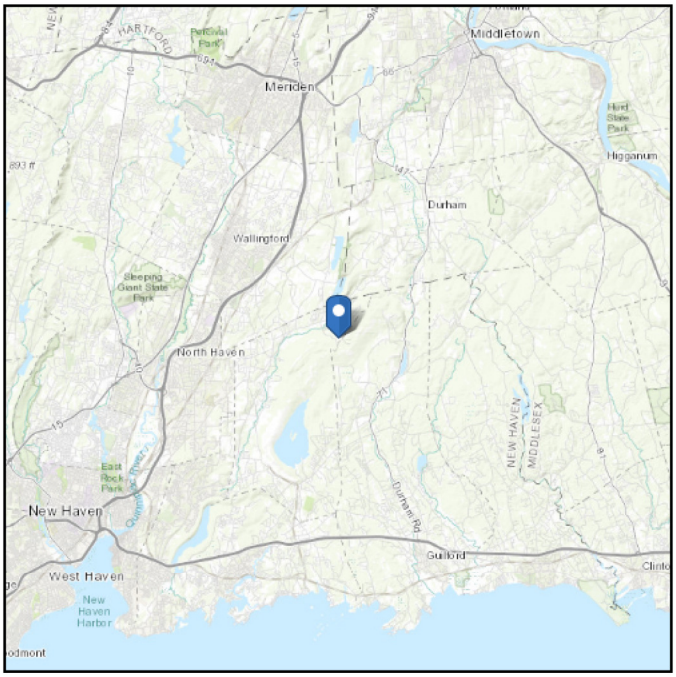
ADDITIONAL CALCULATIONS

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard: ASCE/SEI 7-10
Risk Category: II
Soil Class: D - Stiff Soil

Elevation: 583.14 ft (NAVD 88)
Latitude: 41.403464
Longitude: -72.744139



Wind

Results:	**78 Vmph**	
Wind Speed:	126 Vmph	Using an ultimate 3-second gust speed of 125 mph as required by Connecticut State Building Code requirements.
10-year MRI	78 Vmph	
25-year MRI	87 Vmph	
50-year MRI	94 Vmph	
100-year MRI	103 Vmph	
Data Source:	ASCE/SEI 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, incorporating errata of March 12, 2014	
Date Accessed:	Thu Dec 13 2018	

Value provided is 3-second gust wind speeds at 33 ft above ground for Exposure C Category, based on linear interpolation between contours. Wind speeds are interpolated in accordance with the 7-10 Standard. Wind speeds correspond to approximately a 7% probability of exceedance in 50 years (annual exceedance probability = 0.00143, MRI = 700 years).

Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Mountainous terrain, gorges, ocean promontories, and special wind regions should be examined for unusual wind conditions.

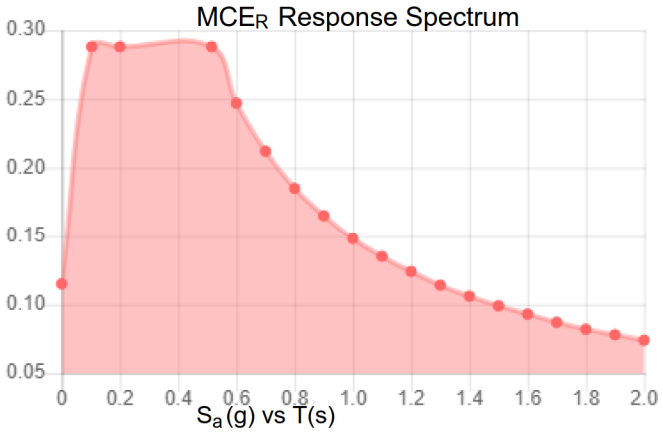
Seismic

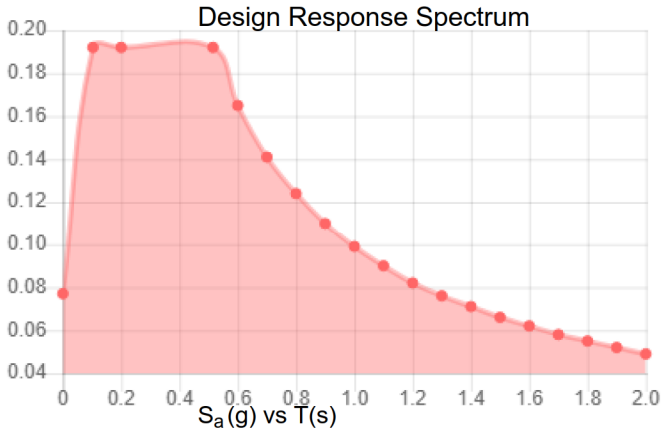
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.180	S_{DS} :	0.192
S_1 :	0.062	S_{D1} :	0.099
F_a :	1.600	T_L :	6.000
F_v :	2.400	PGA :	0.092
S_{MS} :	0.288	PGA_M :	0.147
S_{M1} :	0.148	F_{PGA} :	1.600
		I_e :	1

Seismic Design Category B





Data Accessed: Thu Dec 13 2018

Date Source: USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

Ice

Results:

Ice Thickness:	0.75 in.
Concurrent Temperature:	15 F
Gust Speed:	50 mph
Data Source:	Standard ASCE/SEI 7-10, Figs. 10-2 through 10-8
Date Accessed:	Thu Dec 13 2018

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

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 50-year mean recurrence interval, and temperatures concurrent with ice thicknesses due to freezing rain. Thicknesses for ice accretions caused by other sources shall be obtained from local meteorological studies. Ice thicknesses in exposed locations at elevations higher than the surrounding terrain and in valleys and gorges may exceed the mapped values.

CCIplate

Project Information

BU #	806386
Site Name	NHV 106 943628
Order #	506766 Rev. 0

Tower Information

Tower Type	Self Support
TIA-222 Rev	H

☑ Apply TIA-222-H Section 15.5

Applied Loads

	Comp.	Uplift
Axial (k)	108.74	92.56
Shear (k)	14.24	12.44

Anchor Rod Data

Quantity:	4	
Diameter (in):	0.875	
Material Grade:	A449	Fy=92 ksi Fu=120 ksi
Grout Considered:		Not Considered, lar<=1(d)
l_{ar} (in):	0.125	
Eta Factor, η:		
Thread Type:	N-Included	
Configuration:	Symmetrical	

Anchor Rod Results

Axial, Pu_c (kips)	27.18	
Shear, Vu (kips)	3.56	
Moment, Mu (kip-in)	-	
Axial Cap., φPn_c (kips)	42.50	
Shear Cap., ϕVn (kips)	12.75	
Moment Cap., ϕMn (kip-in)	-	
Stress Rating	68.3%	**Pass**

SST Unit Base Foundation

BU # :	806386
Site Name:	NHV 106 943628
App. Number:	506766 Rev. 0

TIA-222 Revision: H

Top & Bot. Pad Rein. Different?:	☐
Tower Centroid Offset?:	☐
Block Foundation?:	☑

Superstructure Analysis Reactions		
Global Moment, **M**:	1293.649	ft-kips
Global Axial, **P**:	21.328	kips
Global Shear, **V**:	23.382	kips
Leg Compression, $\mathbf{P_{comp}}$:	108.737	kips
Leg Comp. Shear, $\mathbf{V_{u\_comp}}$:	14.242	kips
Leg Uplift, $\mathbf{P_{uplift}}$:	92.558	kips
Leg Uplift. Shear, $\mathbf{V_{u\_uplift}}$:	12.438	kips
Tower Height, **H**:	92	ft
Base Face Width, **BW**:	14.6979	ft
BP Dist. Above Fdn, $\mathbf{bp_{dist}}$:	1	in
Anchor Bolt Circle, **BC**:	7.0625	in

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	41.98	23.38	**53.0%**	**Pass**
Bearing Pressure (ksf)	22.50	3.82	**17.0%**	**Pass**
*Overturning (kip*ft)*	1718.12	1377.43	**80.2%**	**Pass**
*Pad Flexure (kip*ft)*	2862.74	446.76	**14.9%**	**Pass**
Pad Shear - 1-way (kips)	702.45	75.71	**10.3%**	**Pass**
Pad Shear - Comp 2-way (ksi)	0.164	0.020	**11.7%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	1277.14	0.00	**0.0%**	**Pass**
Pad Shear - Tension 2-way (ksi)	0.164	0.017	**10.0%**	**Pass**
*Flexural 2-way (Tension) (kip*ft)*	1277.14	0.00	**0.0%**	**Pass**

**Rating per TIA-222-H Section 15.5*

Soil Rating*:	**80.2%**
Structural Rating*:	**14.9%**

Pad Properties		
Depth, **D**:	2.00	ft
Pad Width, **W**:	19.00	ft
Pad Thickness, **T**:	3.50	ft
Pad Rebar Size (Bottom), **Sp**:	8	
Pad Rebar Quantity (Bottom), **mp**:	22	
Pad Clear Cover, $\mathbf{cc_{pad}}$:	3	in

Material Properties		
Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	3	ksi
Dry Concrete Density, δ**c**:	150	pcf

Soil Properties		
Total Soil Unit Weight, γ:		pcf
Ultimate Net Bearing, Qnet:	30.000	ksf
Cohesion, **Cu**:		ksf
Friction Angle, φ:		degrees
SPT Blow Count, $\mathbf{N_{blows}}$:		
Base Friction, μ:	0.3	
Neglected Depth, **N**:	99.0	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, **gw**:	99	ft

<-- Toggle between Gross and Net

Exhibit E

Mount Analysis

October 30, 2019

Darcy Tarr
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277

Tower Engineering Professionals
326 Tryon Road
Raleigh, NC 27603
(919) 661-6351
Structures@tepgroup.net

Subject:	**Mount Analysis**	
Carrier Designation:	***Verizon Wireless* Reconfiguration**	
	Client Site Number:	NG1919
	Client Site Name:	N Branford Ct
Crown Castle Designation:	**Crown Castle BU Number:**	806386
	Crown Castle Site Name:	NHV 106 943628
	Crown Castle JDE Job Number:	592668
	Crown Castle Order Number:	506766 Rev. 0
Engineering Firm Designation:	**TEP Project Number:**	48909.317476
Site Data:	**83 Reeds Gap Road, North Branford, New Haven County, CT 06472** **Latitude *41° 24' 12.47"*, Longitude *-72° 44' 38.90"***	
Structure Information:	**Tower Height & Type:**	92.0± ft Self-Supporting Tower
	Mount Elevation:	90.0 ft
	Mount Width & Type:	12.5 ft Sector Mount

Dear Darcy Tarr,

Tower Engineering Professionals is pleased to submit this **"Mount Analysis"** to determine the structural integrity of Verizon Wireless's antenna mounting system with proposed appurtenance and equipment addition on the above mentioned supporting tower structure. Analysis of the existing supporting tower structure is to be completed by others and therefore is not part of this analysis. Analysis of the antenna mounting system as a tie-off point for fall protection or rigging is not part of this document.

The purpose of the analysis is to determine acceptability of the mount stress level. Based on our analysis, we have determined the mount stress level to be:

Sector Mount **Sufficient Capacity**

This analysis utilizes an ultimate 3-second gust wind speed of 125 mph from the 2018 Connecticut State Building Code (2015 IBC). Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Taylor C. Sears / HBC

Respectfully submitted by:

Aaron T. Rucker, P.E.
Structural Division Manager

Electronic Copy

10/30/2019

TABLE OF CONTENTS

1) INTRODUCTION

The mount is an existing 12.5-ft Sector mount, designed by SitePro.

2) ANALYSIS CRITERIA

Building Code: 2018 Connecticut State Building Code
TIA-222 Revision: TIA-222-H
Risk Category: II
Ultimate Wind Speed: 125 mph
Exposure Category: C
Topographic Category at Base: 1.0
Topographic Category at Mount: 1.0
Ice Thickness: 1.50 in
Wind Speed with Ice: 50 mph
Seismic Design Category: B
Seismic S_s: 0.18
Seismic S_1: 0.062
Live Loading Wind Speed: 30 mph
Live Loading at Mid/End-Points: 250 lb
Man Live Loading at Mount Pipes: 500 lb

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
90.0	90.0	2	Antel	LPA-80063/6CF	Sector Mount
		6	Commscope	JAHH-65B-R3B	
		4	Decibel	DB844G65ZAXY	
		3	Samsung Telecommunication	RFV01U-D1A	
		3	Samsung Telecommunication	RFV01U-D2A	
		3	Commscope	CBC78T-DS-43-2X	
		2	RFS/Celwave	DB-T1-6Z-8AB-0Z	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Mount Manufacturer Drawings	SitePro	VFA12-HD	TEP
Loading Application	Verizon Wireless	Order 506766 Rev. 0	CCIsites

3.1) Analysis Method

RISA-3D (Version 17.0.1), a commercially available analysis software package, was used to create a three-dimensional model of the mount and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A and Appendix C.

TEP Mount Analysis Tool, a tool internally developed by TEP using Microsoft Excel, was used to calculate member loading for various load cases. Selected output from the analysis is included in Appendix B.

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 *Tower Mount Analysis (Revision C)*.

In addition, this analysis is in accordance with NSTD-445 *Antennas Mounting System Classification Standard*.

3.2) Assumptions

1) The mount was built in accordance with the manufacturer's specifications.
2) The mount has been maintained in accordance with the manufacturer's specification.
3) The configuration of antennas, mounts and other appurtenances are as specified in Table 1. All mount components have been assumed to be in sufficient condition to carry their full design capacity for this analysis. Refer to the issued mapping for any structural and/or maintenance issues found during our site visit if applicable.
4) All mount components are in sufficient condition to carry their full design capacity.
5) All material grades used for this analysis, unless verified by mount manufacturer design, were assumed per AISC Table 2-4, 15th Edition. See RISA-3D output for confirmation on grades used in this analysis.

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

4) ANALYSIS RESULTS

Table 3(a) - Mount Component Stresses vs. Capacity (Sector Mount, Alpha & Beta)

Notes	Component	Critical Member	Mount Centerline (ft)	% Capacity	Pass / Fail
1	Face Horizontals	FFBH-3	90.0	23.6	Pass
1	Support Horizontals	SF3-TH	90.0	23.4	Pass
1	Support Frame Internals	SF3-V2	90.0	40.4	Pass
1	Mount Pipes	MP-4	90.0	38.5	Pass
2	Connection Bolts	-	90.0	8.6	Pass
2	Connection Plate	-	90.0	10.8	Pass

Table 3(b) - Mount Component Stresses vs. Capacity (Sector Mount, Gamma)

Notes	Component	Critical Member	Mount Centerline (ft)	% Capacity	Pass / Fail
1	Face Horizontals	FFTH-2	90.0	36.1	Pass
1	Support Horizontals	SF3-TH	90.0	24.8	Pass
1	Support Frame Internals	SF3-V2	90.0	44.0	Pass
1	Mount Pipes	MP-4	90.0	38.2	Pass
2	Connection Bolts	-	90.0	9.6	Pass
2	Connection Plate	-	90.0	11.3	Pass

Structure Rating (max from all components) =	44.0%

Notes:
1) See additional documentation in "Appendix C - Analysis Output" for calculations supporting the % capacity listed.
2) See additional documentation in "Appendix D - Additional Calculations" for calculations supporting the % capacity listed.

Table 4 - Tieback Connection Data Table

Tower Connection Node No.	Existing/ Proposed	Resultant End Reaction (lb)	Connected Member Type	Connected Member Size	Member Compressive Capacity (lb)[3]	Notes
N56A	Existing	697	Leg	ROHN 2 STD	1842	1
N57	Existing	424	Leg	ROHN 2 STD	1842	1
N56AG	Existing	902	Leg	ROHN 2 STD	1842	1
N57G	Existing	538	Leg	ROHN 2 STD	1842	1

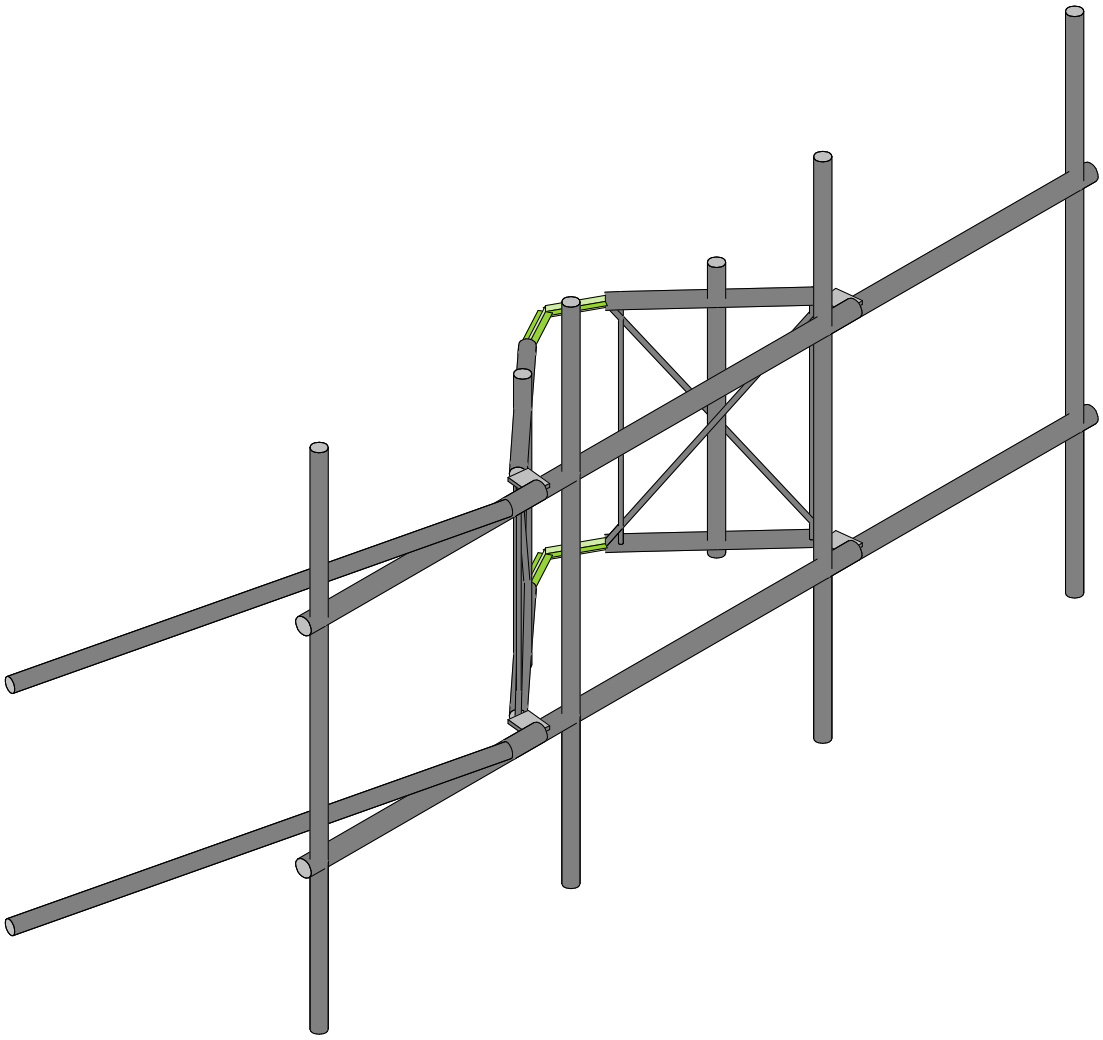
Notes:
1) Tieback connection point is within 25% of either end of the connected tower member.
2) Tower connection point is NOT within 25% of either end of the connected tower member.
3) Reduced member compressive capacity according to CED-STD-10294 *Standard for Installation of Mounts and Appurtenances.*

4.1) Recommendations

1) If the load differs from that described in Table 1 of this report or the provisions of this analysis are found to be invalid, another structural analysis should be performed.
2) The mount and its connection have sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

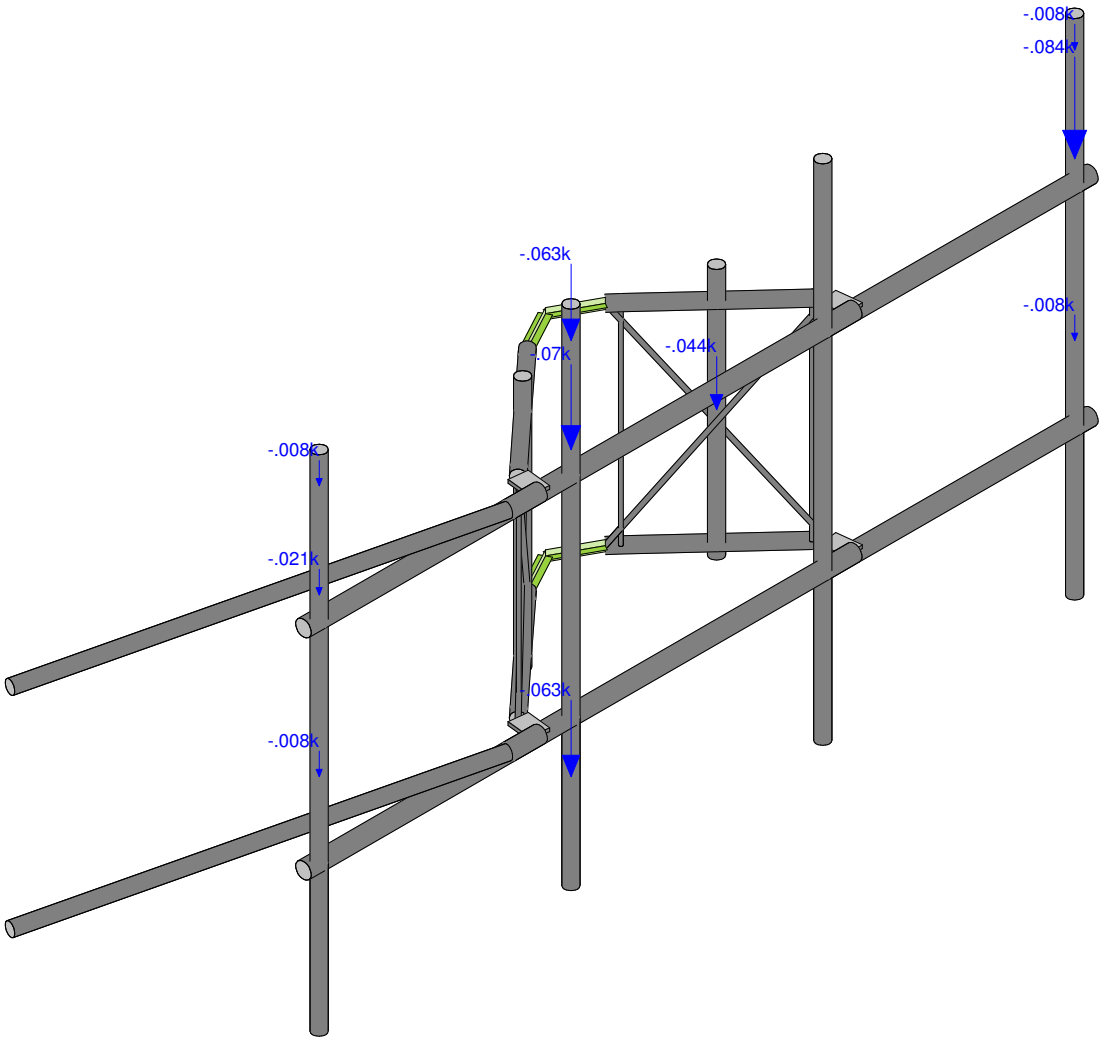
APPENDIX A

WIRE FRAME AND RENDERED MODELS



Envelope Only Solution

Tower Engineering Profes...	BU# 806386 - NHV 106 943628 (Alpha & Beta)	SK - 1
TCS		Oct 30, 2019 at 1:31 PM
48909.317476		SitePro VFA12-HD.r3d



Loads: BLC 1, Dead
Envelope Only Solution

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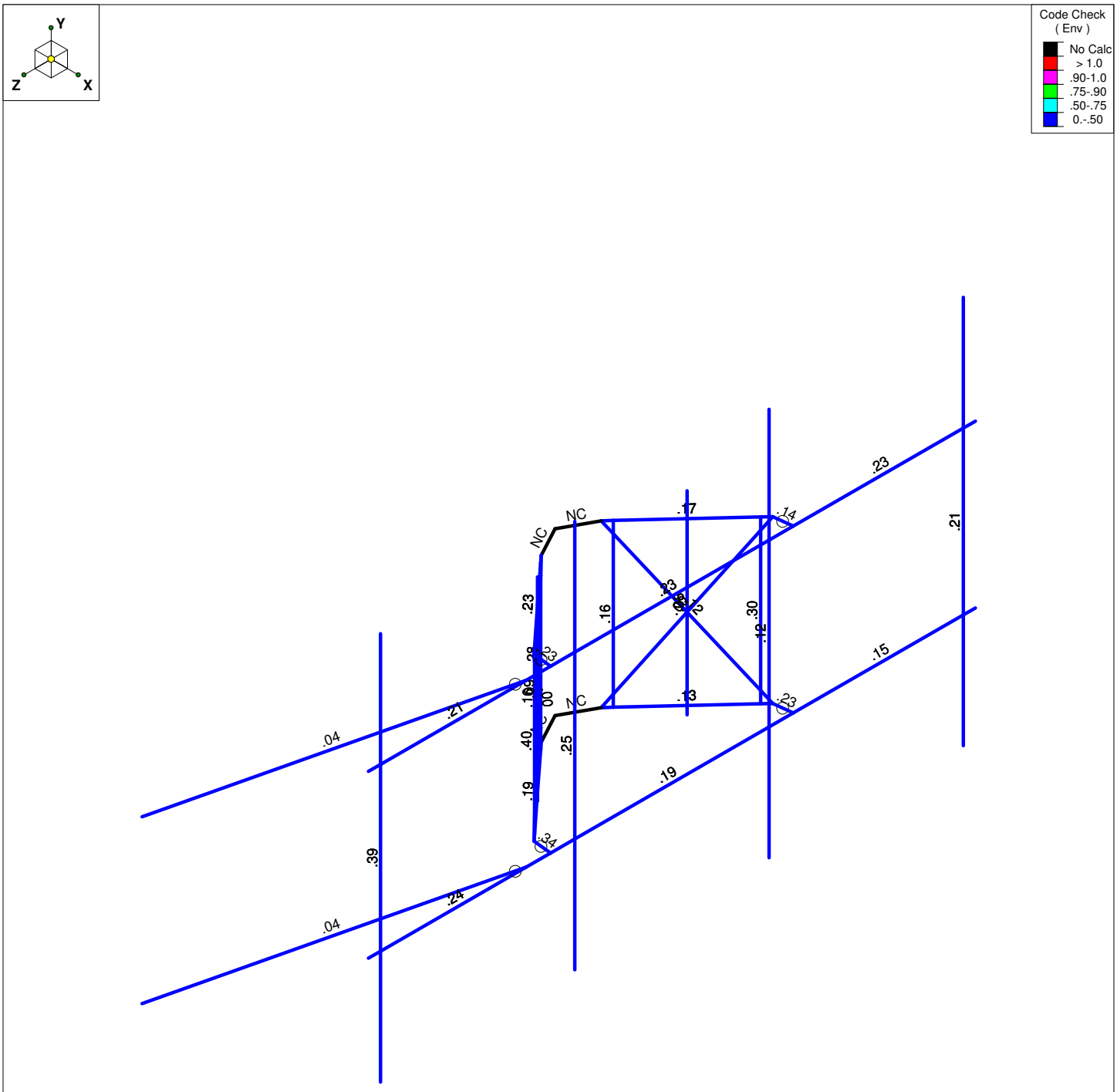

Member Code Checks Displayed (Enveloped)
Envelope Only Solution

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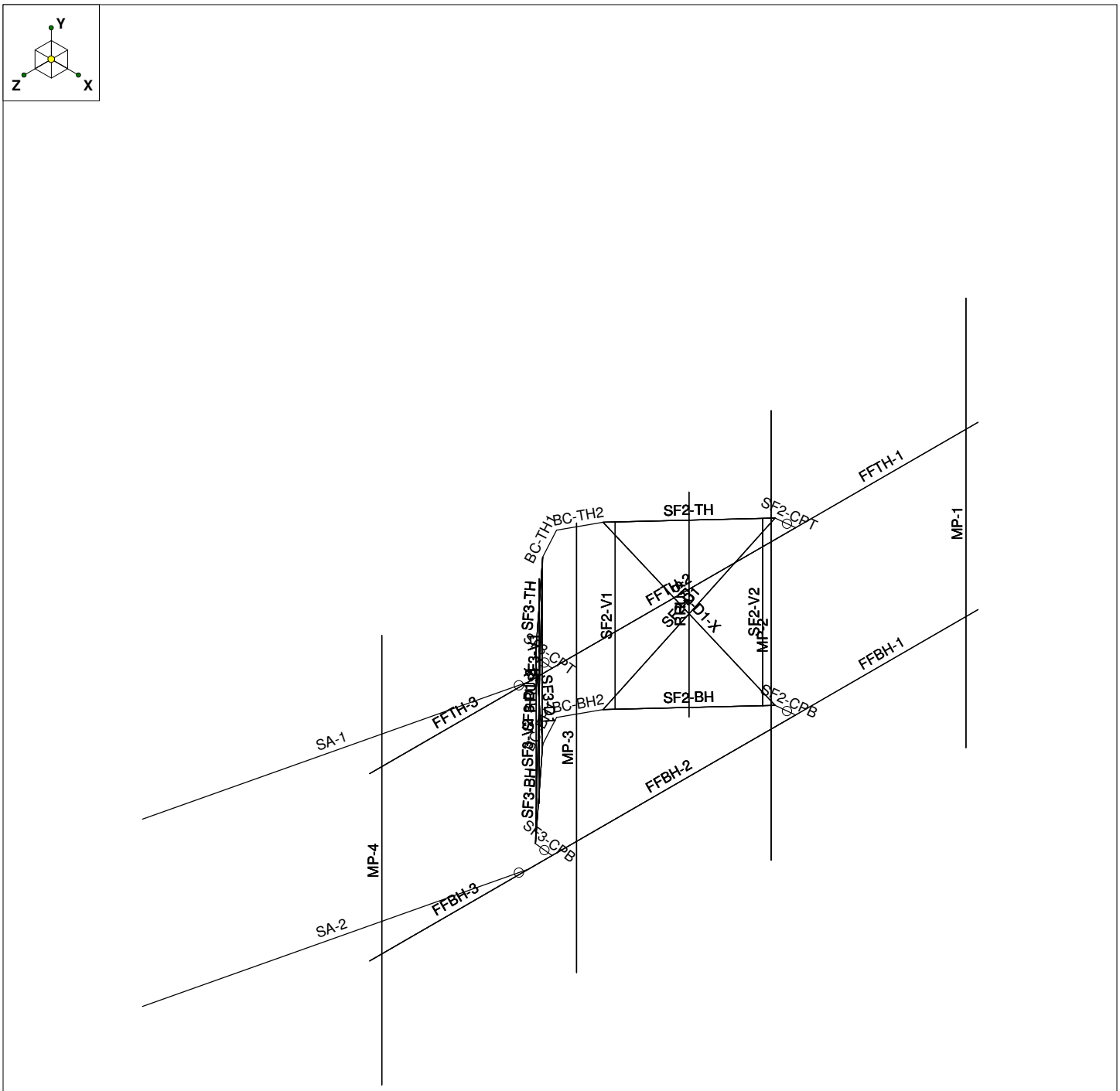

Envelope Only Solution

Tower Engineering Profes...	BU# 806386 - NHV 106 943628 (Alpha & Beta)	SK - 4
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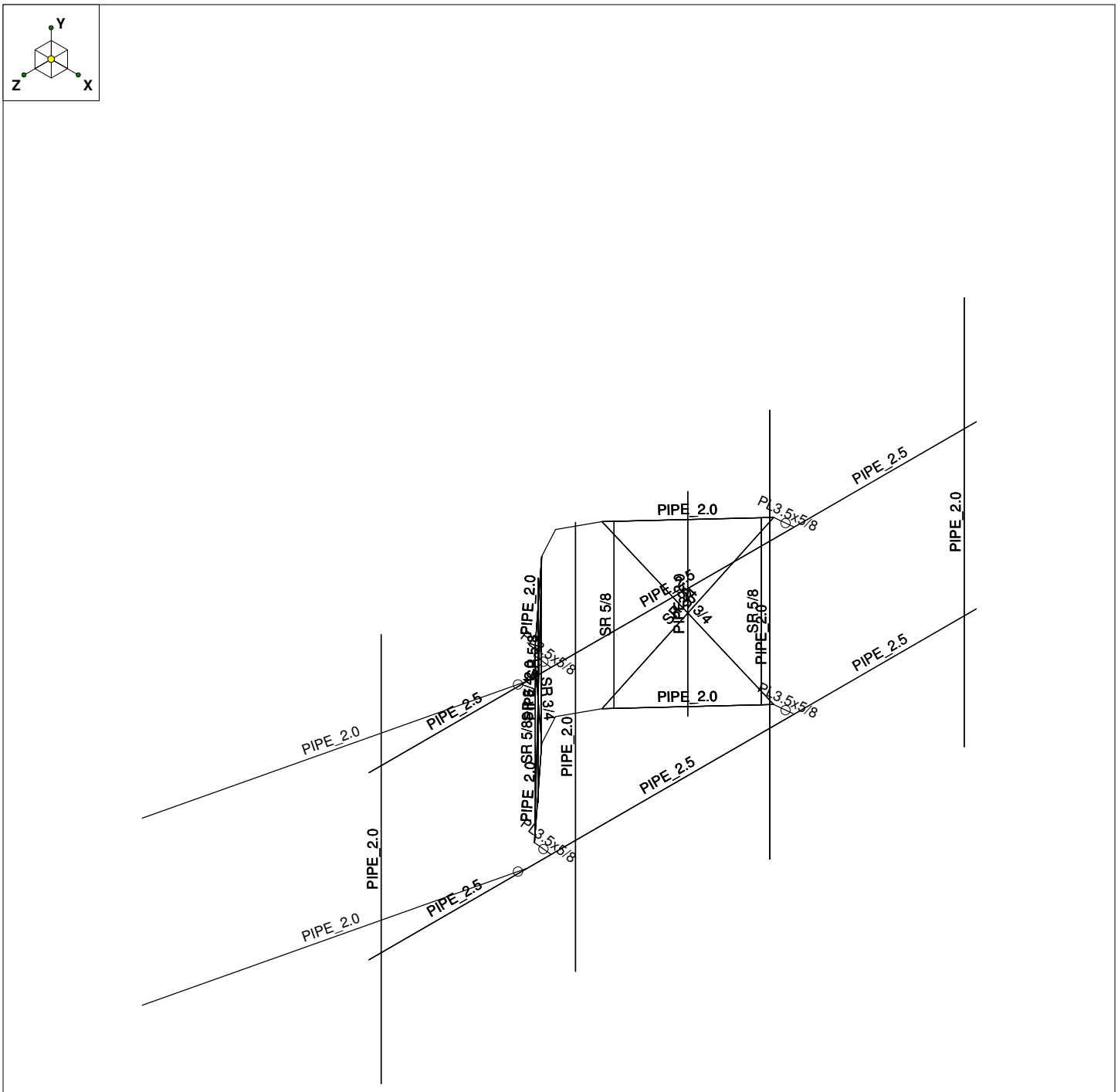

Envelope Only Solution

Tower Engineering Profes...	BU# 806386 - NHV 106 943628 (Alpha & Beta)	SK - 5
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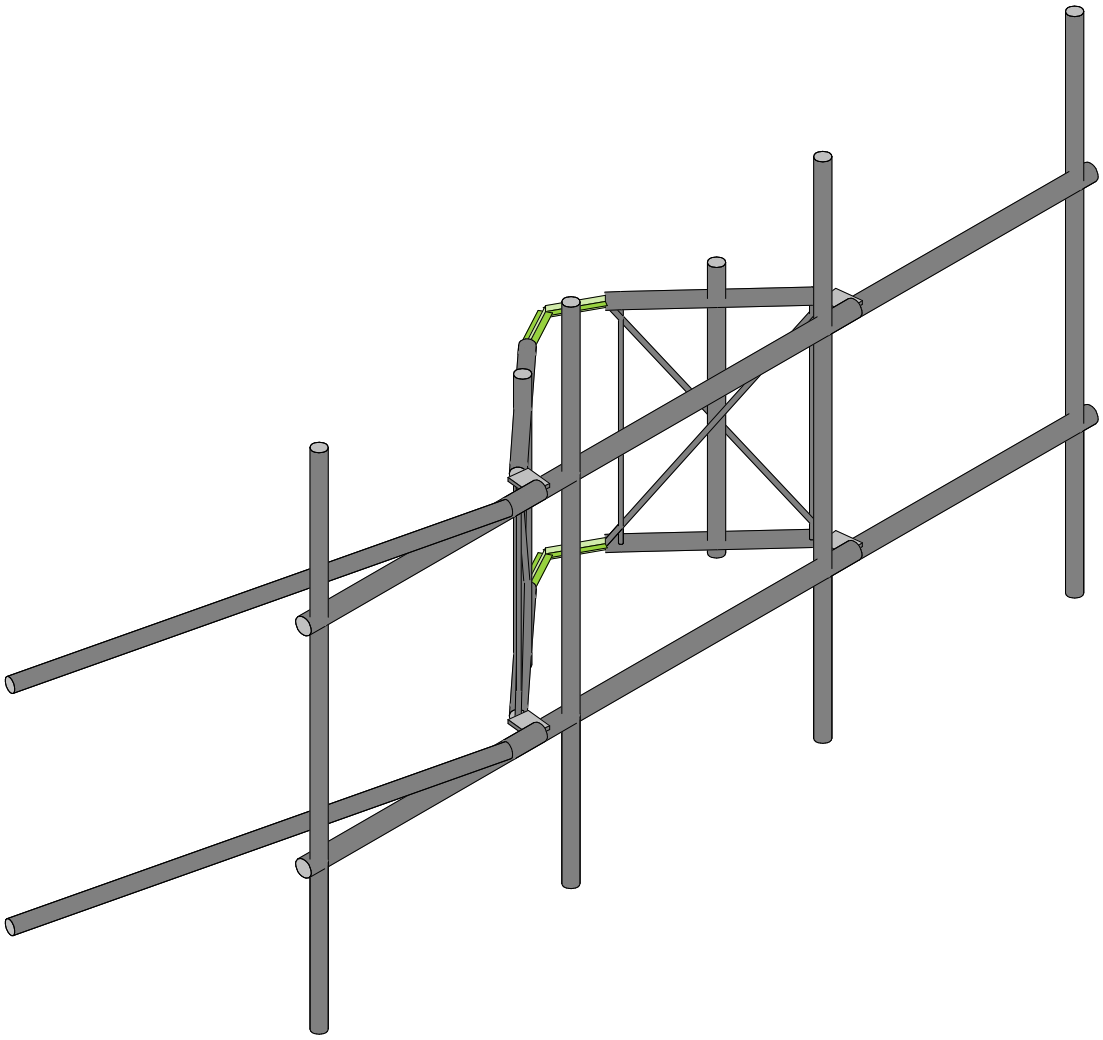

Envelope Only Solution

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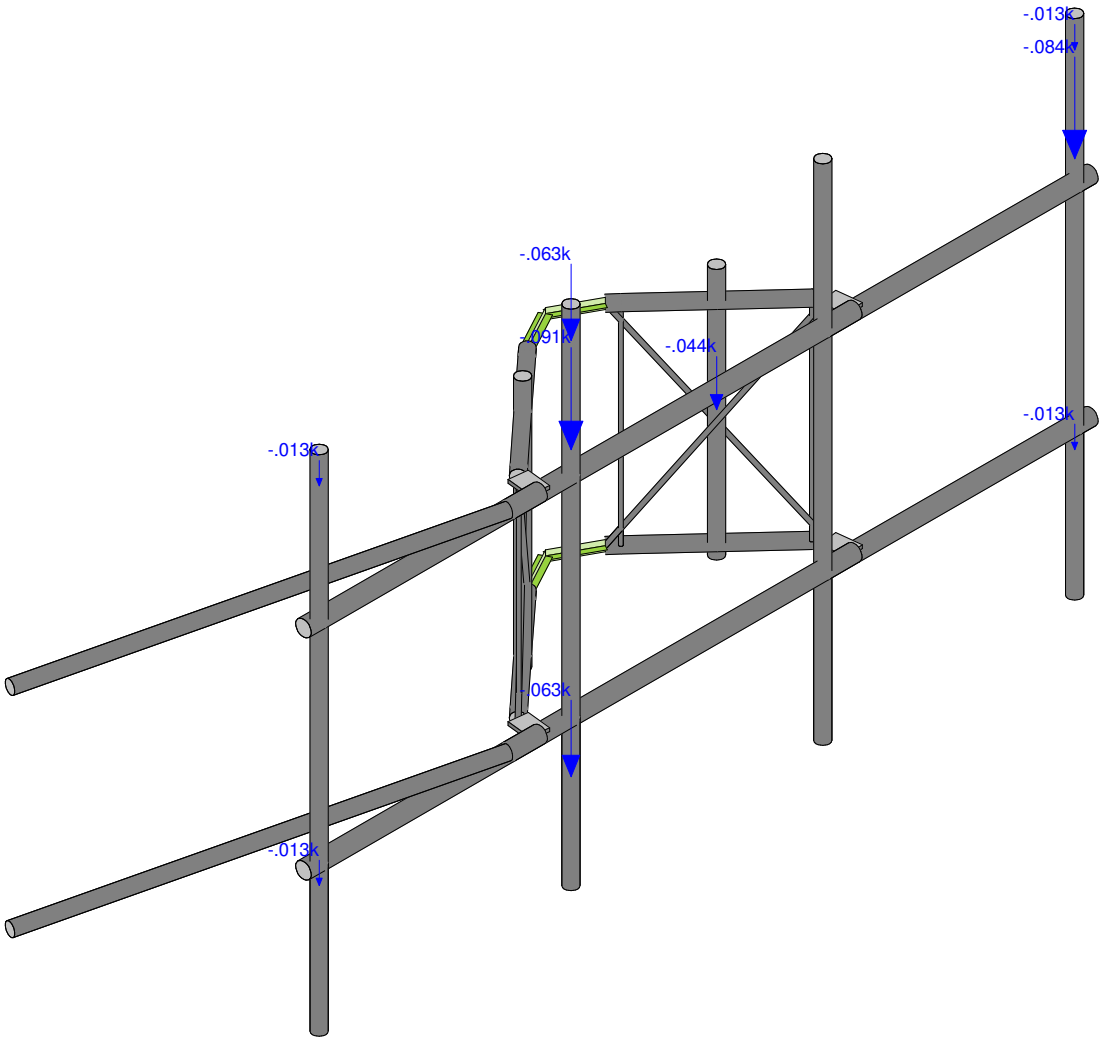

Loads: BLC 1, Dead
Envelope Only Solution

Tower Engineering Profes...	BU# 806386 - NHV 106 943628 (Gamma)	SK - 1
TCS		Oct 30, 2019 at 2:13 PM
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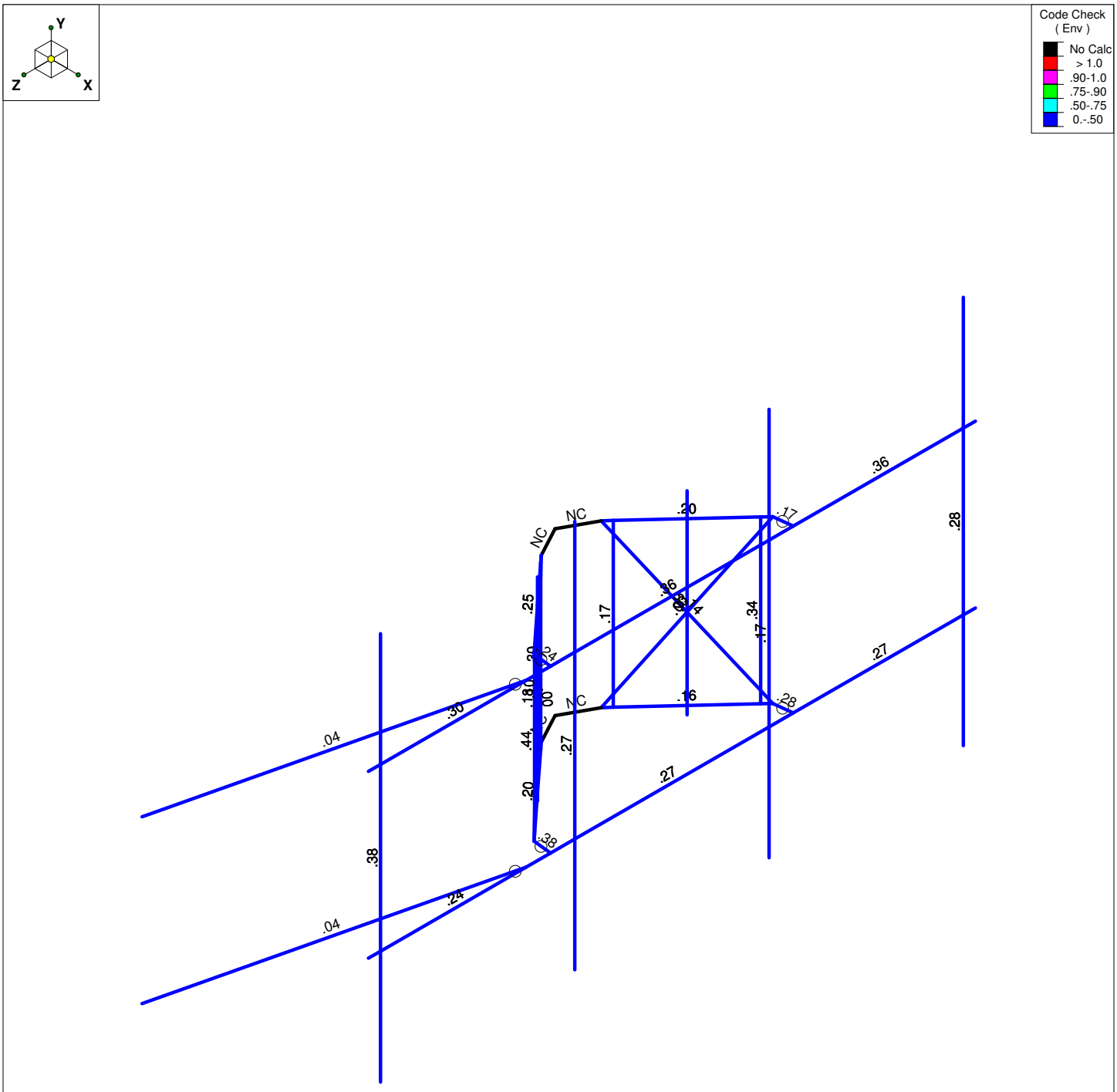

Member Code Checks Displayed (Enveloped)
Envelope Only Solution

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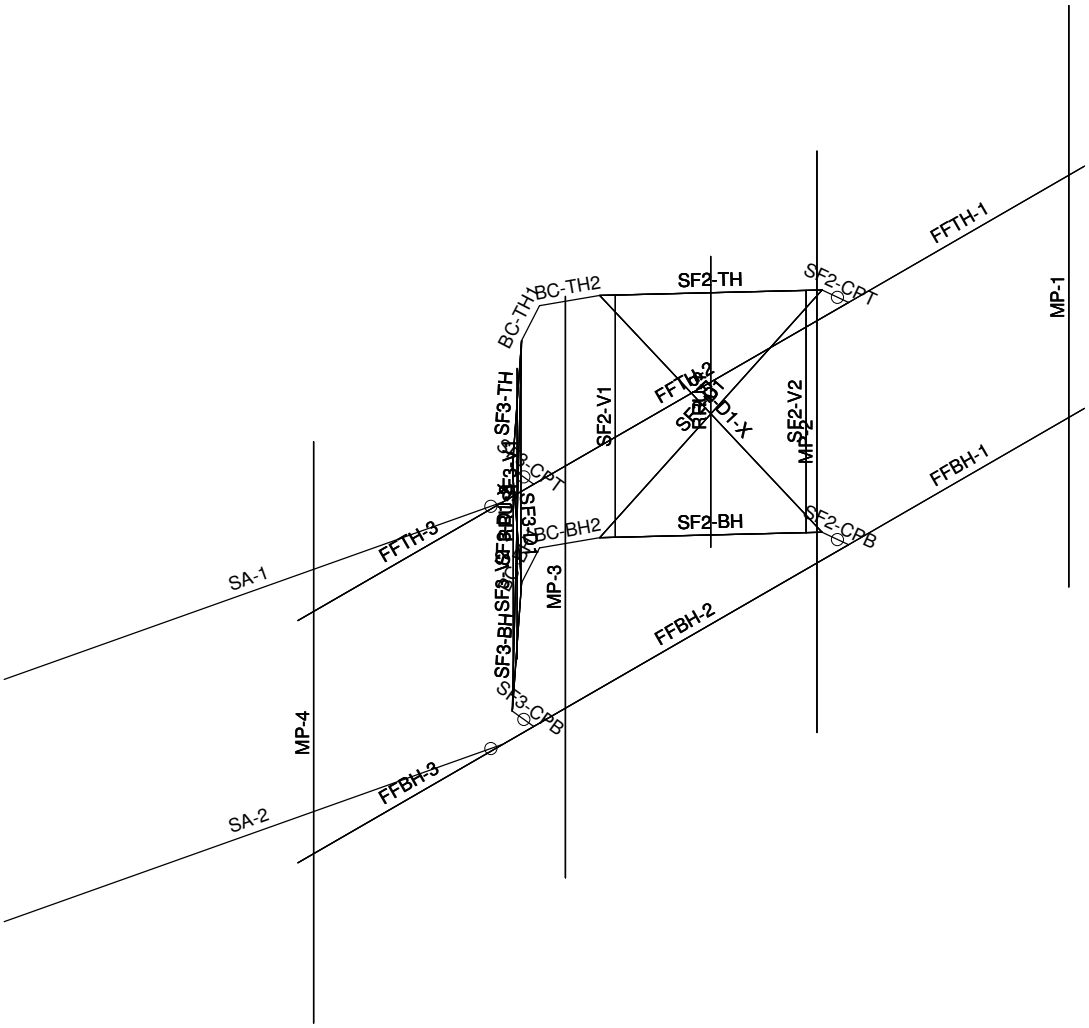

Envelope Only Solution

Tower Engineering Profes...	BU# 806386 - NHV 106 943628 (Gamma)	SK - 4
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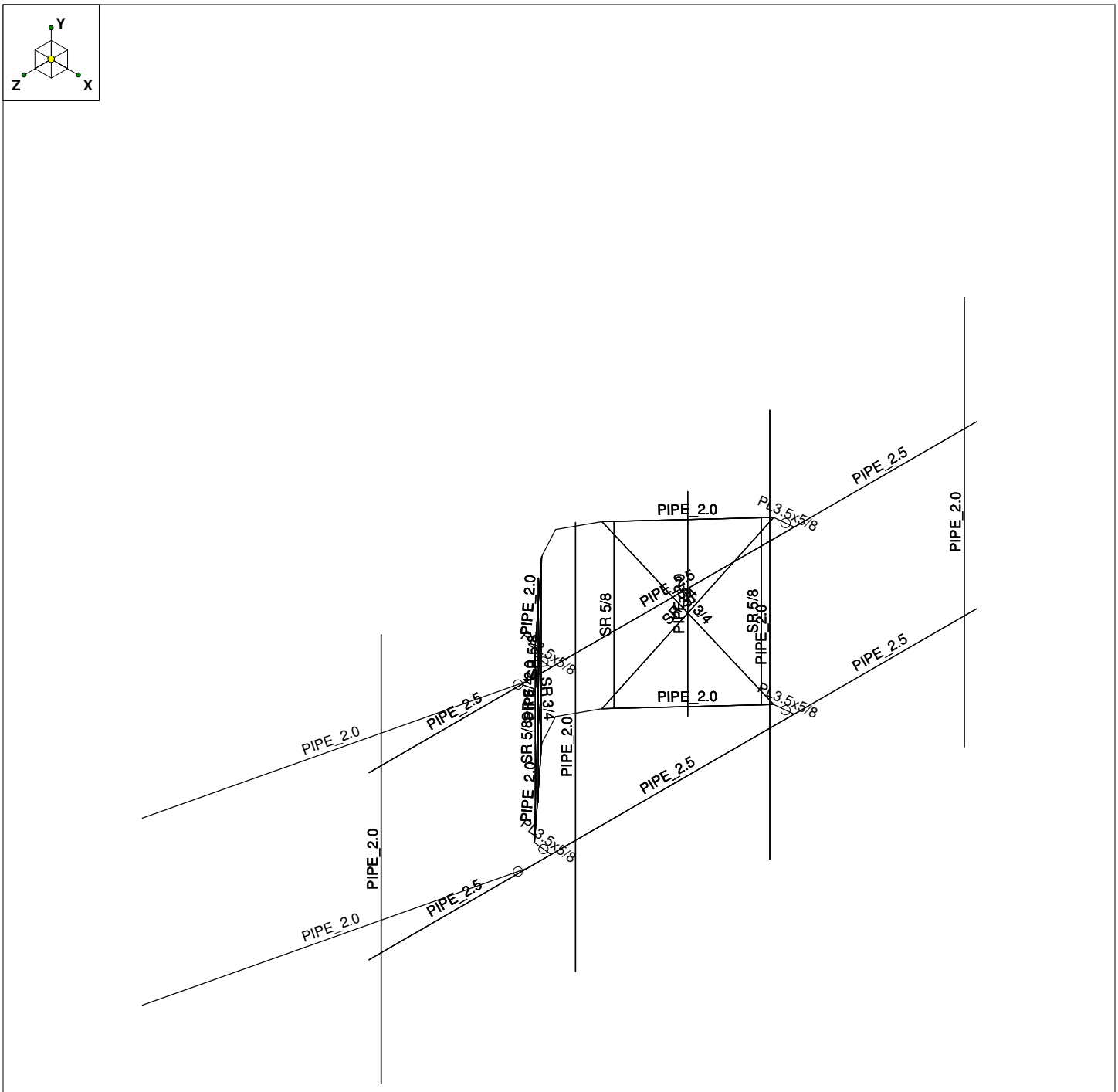

Envelope Only Solution

Tower Engineering Profes...	BU# 806386 - NHV 106 943628 (Gamma)	SK - 5
TCS		Oct 30, 2019 at 1:48 PM
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APPENDIX B

SOFTWARE INPUT CALCULATIONS

TOWER ENGINEERING PROFESSIONALS

BU# 806386 - NHV 106 943628 (Alpha & Beta)

TEP No.	48909.317476	
Analysis By:	TCS	10/30/2019
Checked By:	HBC	10/30/2019

Code Revisions:	TIA-222-H	IBC 2018
Tower Type:	3 Sided Self-Support	

Wind Inputs:

Ult. Wind Velocity:	125.0	mph
Live Load Velocity:	30.0	mph
Ice Wind Velocity:	50.0	mph
Base Ice Thickness:	1.50	inches
Mount Centerline:	90.0	ft
Antenna Centerline:	90.0	ft
Exposure Category:	C	
Topo Category:	1	
Risk Category:	II	
Ground Elevation:	583	ft

Wind Calculations:

K_{zt}:	1.000	Section 2.6.6
K_d:	0.950	
$K_{z\text{-}Mount}$:	1.238	Section 2.6.5.2
$K_{z\text{-}Antenna}$:	1.238	Section 2.6.5.2
K_{iz}:	1.106	Section 2.6.10
Ice Thickness:	1.658	inches - Section 2.6.10

Without Ice - (psf)		With Ice - (psf)	
$(q_zG_h)_{Mount}$:	46.06	$(q_zG_h)_{Mount}$:	7.37
$(q_zG_h)_{Antenna}$:	46.06	$(q_zG_h)_{Antenna}$:	7.37

Seismic Code Revisions:	TIA-222-H
Seismic Risk Category:	II

Seismic Input

S_{DS}:	0.192	Design Short Period Spectral Accel.
I_p:	1.0	Importance Factor
R_p:	2.0	Response Modification Factor
ρ:	1.0	
A_s:	1.0	Applification Factor - TIA-222-H Section 2.7.8.1
S_1:	0.062	Short Period Spectral Accel.

Seismic Design Force

Cs:	0.096	kips/kip	TIA-H Sec 2.7.7.1.1
Cs-min:	0.030	kips/kip	TIA-H Sec 2.7.7.1.1

TOWER ENGINEERING PROFESSIONALS

BU# 806386 - NHV 106 943628 (Alpha & Beta)

TEP No.	48909.317476	
Analysis By:	TCS	10/30/2019
Checked By:	HBC	10/30/2019

Antenna Loads are Calculated in Accordance with TIA-222-H

Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.

										Distance from start node of the member		
MFR	**Model**	**Height (in)**	**Width (in)**	**Depth (in)**	**Wt. (lbs)**	**Azimuth°**	**Qty**	**Shape**	**Member Label**	**Location #1 (ft,%)**	**Location #2 (ft,%)**	**Location #3 (ft,%)**
DECIBEL	DB844G65ZAXY	48.00	10.00	8.00	16.00	0.00	1	Flat	MP-1	0.50	4.50	
SAMSUNG TELECOMMUNICATIONS	RFV01U-D1A	15.00	15.00	10.00	84.40	0.00	1	Flat	MP-1	2.00		
COMMSCOPE	JAHH-65B-R3B	72.00	13.80	8.20	63.30	0.00	1	Flat	MP-3	0.50	6.50	
COMMSCOPE	JAHH-65B-R3B	72.00	13.80	8.20	63.30	0.00	1	Flat	MP-3	0.50	6.50	
SAMSUNG TELECOMMUNICATIONS	RFV01U-D2A	15.00	15.00	8.10	70.30	0.00	1	Flat	MP-3	2.00		
DECIBEL	DB844G65ZAXY	48.00	10.00	8.00	16.00	0.00	1	Flat	MP-4	0.50	4.50	
COMMSCOPE	CBC78T-DS-43-2X	6.40	6.90	9.60	20.70	0.00	1	Flat	MP-4	2.00		
RFS/CELWAVE	DB-T1-6Z-8AB-0Z	24.00	24.00	10.00	44.00	0.00	1	Flat	RRU-1	2.00		

Member Forces are Calculated in Accordance with TIA-222-H

Member Name	Wind Proj. (in)	Length (in)	Shape	θ (°)	Perimeter (in)
SF2-V1	0.625	40.00	Round		1.96
SF2-V2	0.625	40.00	Round		1.96
SF3-V1	0.625	40.00	Round		1.96
SF3-V2	0.625	40.00	Round		1.96
SF2-D1	0.750	50.00	Round		2.36
SF2-D1-X	0.750	50.00	Round		2.36
SF3-D1	0.750	50.00	Round		2.36
SF3-D1-X	0.750	50.00	Round		2.36
SF2-CPB	0.625	4.59	Flat	6.22	2.50
SF2-CPT	0.625	4.59	Flat	6.22	2.50
SF3-CPB	0.625	4.59	Flat	-6.22	2.50
SF3-CPT	0.625	4.59	Flat	-6.22	2.50
FFBH-1	2.875	45.00	Round	89.99	9.03
FFBH-2	2.875	60.00	Round	90.00	9.03
FFBH-3	2.875	45.00	Round	-89.99	9.03
FFTH-1	2.875	45.00	Round	89.99	9.03
FFTH-2	2.875	60.00	Round	90.00	9.03
FFTH-3	2.875	45.00	Round	-89.99	9.03
SF2-BH	2.375	30.00	Round	47.38	7.46
SF2-TH	2.375	30.00	Round	47.38	7.46
SF3-BH	2.375	30.00	Round	-47.38	7.46
SF3-TH	2.375	30.00	Round	-47.38	7.46
SA-1	2.375	78.85	Round	76.62	7.46
SA-2	2.375	78.85	Round	76.62	7.46
MP-1	2.375	96.00	Round		7.46
MP-2	2.375	96.00	Round		7.46
MP-3	2.375	96.00	Round		7.46
MP-4	2.375	96.00	Round		7.46
RRU-1	2.375	48.00	Round		7.46
RRU-2	2.375	48.00	Round		7.46

TOWER ENGINEERING PROFESSIONALS

BU# 806386 - NHV 106 943628 (Gamma)

TEP No.	48909.317476	
Analysis By:	TCS	10/30/2019
Checked By:	HBC	10/30/2019

Code Revisions:	TIA-222-H	IBC 2018
Tower Type:	Monopole	

Wind Inputs:

Ult. Wind Velocity:	130.0	mph
Live Load Velocity:	30.0	mph
Ice Wind Velocity:	30.0	mph
Base Ice Thickness:	1.50	inches
Mount Centerline:	90.0	ft
Antenna Centerline:	90.0	ft
Exposure Category:	C	
Topo Category:	1	
Risk Category:	II	
Ground Elevation:	583	ft

Wind Calculations:

K_{zt}:	1.000	Section 2.6.6
K_d:	0.950	
$K_{z\text{-}Mount}$:	1.238	Section 2.6.5.2
$K_{z\text{-}Antenna}$:	1.238	Section 2.6.5.2
K_{iz}:	1.106	Section 2.6.10
Ice Thickness:	1.658	inches - Section 2.6.10

Without Ice - (psf)		With Ice - (psf)	
$(q_zG_h)_{Mount}$:	49.81	$(q_zG_h)_{Mount}$:	2.65
$(q_zG_h)_{Antenna}$:	49.81	$(q_zG_h)_{Antenna}$:	2.65

Seismic Code Revisions:	TIA-222-H
Seismic Risk Category:	II

Seismic Input

S_{DS}:	0.192	Design Short Period Spectral Accel.
I_p:	1.0	Importance Factor
R_p:	2.0	Response Modification Factor
ρ:	1.0	
A_s:	1.0	Applification Factor - TIA-222-H Section 2.7.8.1
S_1:	0.062	Short Period Spectral Accel.

Seismic Design Force

Cs:	0.096	kips/kip	TIA-H Sec 2.7.7.1.1
Cs-min:	0.030	kips/kip	TIA-H Sec 2.7.7.1.1

TOWER ENGINEERING PROFESSIONALS

BU# 806386 - NHV 106 943628 (Gamma)

TEP No.	48909.317476	
Analysis By:	TCS	10/30/2019
Checked By:	HBC	10/30/2019

Antenna Loads are Calculated in Accordance with TIA-222-H

Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.

										Distance from start node of the member		
MFR	Model	Height (in)	Width (in)	Depth (in)	Wt. (lbs)	Azimuth°	Qty	Shape	Member Label	Location #1 (ft,%)	Location #2 (ft,%)	Location #3 (ft,%)
ANTEL	LPA-80063/6CF	70.90	15.00	13.10	27.00	0.00	1	Flat	MP-1	0.50	6.00	
SAMSUNG TELECOMMUNICATIONS	RFV01U-D1A	15.00	15.00	10.00	84.40	0.00	1	Flat	MP-1	2.00		
COMMSCOPE	JAHH-65B-R3B	72.00	13.80	8.20	63.30	0.00	1	Flat	MP-3	0.50	6.50	
COMMSCOPE	JAHH-65B-R3B	72.00	13.80	8.20	63.30	0.00	1	Flat	MP-3	0.50	6.50	
COMMSCOPE	CBC78T-DS-43-2X	6.40	9.60	6.90	20.70	0.00	1	Flat	MP-3	2.00		
SAMSUNG TELECOMMUNICATIONS	RFV01U-D2A	15.00	8.10	15.00	70.30	0.00	1	Flat	MP-3	2.00		
ANTEL	LPA-80063/6CF	70.90	15.00	13.10	27.00	0.00	1	Flat	MP-4	0.50	6.00	
RFS/CELWAVE	DB-T1-6Z-8AB-0Z	24.00	24.00	10.00	44.00	0.00	1	Flat	RRU-1	2.00		

Member Forces are Calculated in Accordance with TIA-222-H

Member Name	Wind Proj. (in)	Length (in)	Shape	θ (°)	Perimeter (in)
SF2-V1	0.625	40.00	Round		1.96
SF2-V2	0.625	40.00	Round		1.96
SF3-V1	0.625	40.00	Round		1.96
SF3-V2	0.625	40.00	Round		1.96
SF2-D1	0.750	50.00	Round		2.36
SF2-D1-X	0.750	50.00	Round		2.36
SF3-D1	0.750	50.00	Round		2.36
SF3-D1-X	0.750	50.00	Round		2.36
SF2-CPB	0.625	4.59	Flat	6.22	2.50
SF2-CPT	0.625	4.59	Flat	6.22	2.50
SF3-CPB	0.625	4.59	Flat	-6.22	2.50
SF3-CPT	0.625	4.59	Flat	-6.22	2.50
FFBH-1	2.875	45.00	Round	89.99	9.03
FFBH-2	2.875	60.00	Round	90.00	9.03
FFBH-3	2.875	45.00	Round	-89.99	9.03
FFTH-1	2.875	45.00	Round	89.99	9.03
FFTH-2	2.875	60.00	Round	90.00	9.03
FFTH-3	2.875	45.00	Round	-89.99	9.03
SF2-BH	2.375	30.00	Round	47.38	7.46
SF2-TH	2.375	30.00	Round	47.38	7.46
SF3-BH	2.375	30.00	Round	-47.38	7.46
SF3-TH	2.375	30.00	Round	-47.38	7.46
SA-1	2.375	78.85	Round	76.62	7.46
SA-2	2.375	78.85	Round	76.62	7.46
MP-1	2.375	96.00	Round		7.46
MP-2	2.375	96.00	Round		7.46
MP-3	2.375	96.00	Round		7.46
MP-4	2.375	96.00	Round		7.46
RRU-1	2.375	48.00	Round		7.46
RRU-2	2.375	48.00	Round		7.46

APPENDIX C

SOFTWARE ANALYSIS OUTPUT

(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	24
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 15th(360-16): LRFD
Adjust Stiffness?	No
RISAConnection Code	None
Cold Formed Steel Code	None
Wood Code	None
Wood Temperature	< 100F
Concrete Code	None
Masonry Code	None
Aluminum Code	None - Building
Stainless Steel Code	None

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	No
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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(Global) Model Settings, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	1
Cd X	1
Rho Z	1
Rho X	1

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horizontals	PIPE_2.5	None	None	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
2	Support Horizontal	PIPE_2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
3	Bracing 1	SR 5/8	None	None	A36 Gr.36	Typical	.307	.007	.007	.015
4	Bracing 2	SR 3/4	None	None	A36 Gr.36	Typical	.442	.016	.016	.031
5	Connection Plate	PL3.5x5/8	None	None	A36 Gr.36	Typical	2.188	.071	2.233	.253
6	Mount Pipe	PIPE_2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
7	Stabilizer Arm	PIPE_2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
8	Mount Pipe Connection	L3X3X4	None	None	A36 Gr.36	Typical	1.44	1.23	1.23	.031

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Ru...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	CF1A	8CU1.25X057	Beam	None	A653 SS ...	Typical	.581	.057	4.41	.00063

Material Takeoff

	Material	Size	Pieces	Length[ft]	Weight[K]
1	General				
2	RIGID		4	2.8	0
3	Total General		4	2.8	0
4					
5	Hot Rolled Steel				
6	A36 Gr.36	PL3.5x5/8	4	1.5	0
7	A36 Gr.36	SR 3/4	4	16.7	0
8	A36 Gr.36	SR 5/8	4	13.3	0
9	A53 Gr.B	PIPE_2.0	12	63.1	.2
10	A53 Gr.B	PIPE_2.5	6	25	.1
11	Total HR Steel		30	119.7	.4

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	SF1-1	Reaction	Reaction	Reaction			
2	SF1-2	Reaction	Reaction	Reaction			
3	N56A	Reaction	Reaction	Reaction			
4	N57	Reaction	Reaction	Reaction			

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design Rules
1	SF2-V1	SF2-V...	SF2-V...			Bracing 1	None	None	A36 Gr.36	Typical
2	SF2-V2	SF2-V...	SF2-V...			Bracing 1	None	None	A36 Gr.36	Typical
3	SF3-V1	SF3-V...	SF3-V...			Bracing 1	None	None	A36 Gr.36	Typical
4	SF3-V2	SF3-V...	SF3-V...			Bracing 1	None	None	A36 Gr.36	Typical
5	SF2-D1	SF2-2	SF2-3			Bracing 2	None	None	A36 Gr.36	Typical
6	SF2-D1-X	SF2-1	SF2-4			Bracing 2	None	None	A36 Gr.36	Typical
7	SF3-D1	SF3-2	SF3-3			Bracing 2	None	None	A36 Gr.36	Typical
8	SF3-D1-X	SF3-1	SF3-4			Bracing 2	None	None	A36 Gr.36	Typical
9	SF2-CPB	SF2-4	SF2-6		90	Connection Plate	None	None	A36 Gr.36	Typical
10	SF2-CPT	SF2-3	SF2-5		90	Connection Plate	None	None	A36 Gr.36	Typical
11	SF3-CPB	SF3-4	SF3-6		90	Connection Plate	None	None	A36 Gr.36	Typical
12	SF3-CPT	SF3-3	SF3-5		90	Connection Plate	None	None	A36 Gr.36	Typical
13	FFBH-1	FF3	SF2-6			Face Horizontals	None	None	A53 Gr.B	Typical
14	FFBH-2	SF2-6	SF3-6			Face Horizontals	None	None	A53 Gr.B	Typical
15	FFBH-3	SF3-6	FF4			Face Horizontals	None	None	A53 Gr.B	Typical
16	FFTH-1	FF1	SF2-5			Face Horizontals	None	None	A53 Gr.B	Typical
17	FFTH-2	SF2-5	SF3-5			Face Horizontals	None	None	A53 Gr.B	Typical
18	FFTH-3	SF3-5	FF2			Face Horizontals	None	None	A53 Gr.B	Typical
19	BC-BH1	SF3-2	SF1-2			RIGID	None	None	RIGID	Typical
20	BC-BH2	SF1-2	SF2-2			RIGID	None	None	RIGID	Typical
21	BC-TH1	SF3-1	SF1-1			RIGID	None	None	RIGID	Typical
22	BC-TH2	SF1-1	SF2-1			RIGID	None	None	RIGID	Typical
23	SF2-BH	SF2-2	SF2-4			Support Horizontal	None	None	A53 Gr.B	Typical
24	SF2-TH	SF2-1	SF2-3			Support Horizontal	None	None	A53 Gr.B	Typical
25	SF3-BH	SF3-2	SF3-4			Support Horizontal	None	None	A53 Gr.B	Typical
26	SF3-TH	SF3-1	SF3-3			Support Horizontal	None	None	A53 Gr.B	Typical
27	SA-1	SA-1A	N56A			Stabilizer Arm	None	None	A53 Gr.B	Typical
28	SA-2	N53B	N57			Stabilizer Arm	None	None	A53 Gr.B	Typical
29	MP-1	N41	N45			Mount Pipe	None	None	A53 Gr.B	Typical
30	MP-2	N44	N48A			Mount Pipe	None	None	A53 Gr.B	Typical
31	MP-3	N43	N47			Mount Pipe	None	None	A53 Gr.B	Typical
32	MP-4	N42	N46			Mount Pipe	None	None	A53 Gr.B	Typical
33	RRU-1	N53A	N55A			Mount Pipe	None	None	A53 Gr.B	Typical
34	RRU-2	N54A	N56B			Mount Pipe	None	None	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	SF2-V1						Yes	** NA **			None
2	SF2-V2						Yes	** NA **			None
3	SF3-V1						Yes	** NA **			None
4	SF3-V2						Yes	** NA **			None
5	SF2-D1					Tension ...	Yes	** NA **			None
6	SF2-D1-X					Tension ...	Yes	** NA **			None
7	SF3-D1					Tension ...	Yes	** NA **			None
8	SF3-D1-X					Tension ...	Yes	** NA **			None
9	SF2-CPB		BenPIN				Yes	** NA **			None

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
10	SF2-CPT		BenPIN				Yes	** NA **			None
11	SF3-CPB		BenPIN				Yes	** NA **			None
12	SF3-CPT		BenPIN				Yes	** NA **			None
13	FFBH-1						Yes	** NA **			None
14	FFBH-2						Yes	** NA **			None
15	FFBH-3						Yes	** NA **			None
16	FFTH-1						Yes	** NA **			None
17	FFTH-2						Yes	** NA **			None
18	FFTH-3						Yes	** NA **			None
19	BC-BH1						Yes	** NA **			None
20	BC-BH2						Yes	** NA **			None
21	BC-TH1						Yes	** NA **			None
22	BC-TH2						Yes	** NA **			None
23	SF2-BH						Yes	** NA **			None
24	SF2-TH						Yes	** NA **			None
25	SF3-BH						Yes	** NA **			None
26	SF3-TH						Yes	** NA **			None
27	SA-1	BenPIN					Yes	** NA **			None
28	SA-2	BenPIN					Yes	** NA **			None
29	MP-1						Yes	** NA **			None
30	MP-2						Yes	** NA **			None
31	MP-3						Yes	** NA **			None
32	MP-4						Yes	** NA **			None
33	RRU-1						Yes	** NA **			None
34	RRU-2						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
1	SF2-V1	Bracing 1	3.333						.65	.65		Lateral
2	SF2-V2	Bracing 1	3.333						.65	.65		Lateral
3	SF3-V1	Bracing 1	3.333						.65	.65		Lateral
4	SF3-V2	Bracing 1	3.333						.65	.65		Lateral
5	SF2-D1	Bracing 2	4.167						.65	.65		Lateral
6	SF2-D1-X	Bracing 2	4.167						.65	.65		Lateral
7	SF3-D1	Bracing 2	4.167						.65	.65		Lateral
8	SF3-D1-X	Bracing 2	4.167						.65	.65		Lateral
9	SF2-CPB	Connection Plate	.383						1	1		Lateral
10	SF2-CPT	Connection Plate	.383						1	1		Lateral
11	SF3-CPB	Connection Plate	.383						1	1		Lateral
12	SF3-CPT	Connection Plate	.383						1	1		Lateral
13	FFBH-1	Face Horizontals	3.75						2.1	2.1		Lateral
14	FFBH-2	Face Horizontals	5						1	1		Lateral
15	FFBH-3	Face Horizontals	3.75						2.1	2.1		Lateral
16	FFTH-1	Face Horizontals	3.75						2.1	2.1		Lateral
17	FFTH-2	Face Horizontals	5						1	1		Lateral
18	FFTH-3	Face Horizontals	3.75						2.1	2.1		Lateral
19	SF2-BH	Support Horizontal	2.5		2.145				1	1		Lateral
20	SF2-TH	Support Horizontal	2.5		2.145				1	1		Lateral
21	SF3-BH	Support Horizontal	2.5		2.145				1	1		Lateral
22	SF3-TH	Support Horizontal	2.5		2.145				1	1		Lateral
23	SA-1	Stabilizer Arm	6.571						1	1		Lateral
24	SA-2	Stabilizer Arm	6.571						1	1		Lateral
25	MP-1	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
26	MP-2	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
27	MP-3	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
28	MP-4	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
29	RRU-1	Mount Pipe	4	Segment	Segment				2.1	2.1		Lateral
30	RRU-2	Mount Pipe	4	Segment	Segment				2.1	2.1		Lateral

Cold Formed Steel Design Parameters

Label	Shape	Lengt...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp b...	Kyy	Kzz	Cm-yy	Cm-zz	Cb	R	y sway	z sway
No Data to Print ...														

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Dead	None		-1			12			
2	0 Wind - No Ice	None					12	30		
3	30 Wind - No Ice	None					24	60		
4	45 Wind - No Ice	None					24	60		
5	60 Wind - No Ice	None					24	60		
6	90 Wind - No Ice	None					12	30		
7	120 Wind - No Ice	None					24	60		
8	135 Wind - No Ice	None					24	60		
9	150 Wind - No Ice	None					24	60		
10	180 Wind - No Ice	None					12	30		
11	210 Wind - No Ice	None					24	60		
12	225 Wind - No Ice	None					24	60		
13	240 Wind - No Ice	None					24	60		
14	270 Wind - No Ice	None					12	30		
15	300 Wind - No Ice	None					24	60		
16	315 Wind - No Ice	None					24	60		
17	330 Wind - No Ice	None					24	60		
18	Ice Weight	None					12	30		
19	0 Wind - Ice	None					12	30		
20	30 Wind - Ice	None					24	60		
21	45 Wind - Ice	None					24	60		
22	60 Wind - Ice	None					24	60		
23	90 Wind - Ice	None					12	30		
24	120 Wind - Ice	None					24	60		
25	135 Wind - Ice	None					24	60		
26	150 Wind - Ice	None					24	60		
27	180 Wind - Ice	None					12	30		
28	210 Wind - Ice	None					24	60		
29	225 Wind - Ice	None					24	60		
30	240 Wind - Ice	None					24	60		
31	270 Wind - Ice	None					12	30		
32	300 Wind - Ice	None					24	60		
33	315 Wind - Ice	None					24	60		
34	330 Wind - Ice	None					24	60		
35	Lm	None				1				
36	Lv	None				1				
37	Seismic Load X	ELX	-1				12			
38	Seismic Load Z	ELZ			-1		12			

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Load Combinations

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.4D	Yes	Y		1	1.4																				
2	0.9D+1.0 0-Wind	Yes	Y		1	.9	2	1																		
3	0.9D+1.0 30-Wi...	Yes	Y		1	.9	3	1																		
4	0.9D+1.0 45-Wi...	Yes	Y		1	.9	4	1																		
5	0.9D+1.0 60-Wi...	Yes	Y		1	.9	5	1																		
6	0.9D+1.0 90-Wi...	Yes	Y		1	.9	6	1																		
7	0.9D+1.0 120-...	Yes	Y		1	.9	7	1																		
8	0.9D+1.0 135-...	Yes	Y		1	.9	8	1																		
9	0.9D+1.0 150-...	Yes	Y		1	.9	9	1																		
10	0.9D+1.0 180-...	Yes	Y		1	.9	10	1																		
11	0.9D+1.0 210-...	Yes	Y		1	.9	11	1																		
12	0.9D+1.0 225-...	Yes	Y		1	.9	12	1																		
13	0.9D+1.0 240-...	Yes	Y		1	.9	13	1																		
14	0.9D+1.0 270-...	Yes	Y		1	.9	14	1																		
15	0.9D+1.0 300-...	Yes	Y		1	.9	15	1																		
16	0.9D+1.0 315-...	Yes	Y		1	.9	16	1																		
17	0.9D+1.0 330-...	Yes	Y		1	.9	17	1																		
18	1.2D+1.0 0-Wind	Yes	Y		1	1.2	2	1																		
19	1.2D+1.0 30-Wi...	Yes	Y		1	1.2	3	1																		
20	1.2D+1.0 45-Wi...	Yes	Y		1	1.2	4	1																		
21	1.2D+1.0 60-Wi...	Yes	Y		1	1.2	5	1																		
22	1.2D+1.0 90-Wi...	Yes	Y		1	1.2	6	1																		
23	1.2D+1.0 120-...	Yes	Y		1	1.2	7	1																		
24	1.2D+1.0 135-...	Yes	Y		1	1.2	8	1																		
25	1.2D+1.0 150-...	Yes	Y		1	1.2	9	1																		
26	1.2D+1.0 180-...	Yes	Y		1	1.2	10	1																		
27	1.2D+1.0 210-...	Yes	Y		1	1.2	11	1																		
28	1.2D+1.0 225-...	Yes	Y		1	1.2	12	1																		
29	1.2D+1.0 240-...	Yes	Y		1	1.2	13	1																		
30	1.2D+1.0 270-...	Yes	Y		1	1.2	14	1																		
31	1.2D+1.0 300-...	Yes	Y		1	1.2	15	1																		
32	1.2D+1.0 315-...	Yes	Y		1	1.2	16	1																		
33	1.2D+1.0 330-...	Yes	Y		1	1.2	17	1																		
34	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	19	1																
35	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	20	1																
36	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	21	1																
37	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	22	1																
38	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	23	1																
39	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	24	1																
40	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	25	1																
41	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	26	1																
42	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	27	1																
43	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	28	1																
44	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	29	1																
45	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	30	1																
46	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	31	1																
47	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	32	1																
48	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	33	1																
49	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	34	1																
50	1.2D+1.5Lv	Yes	Y		36	1.5	1	1.2																		
51	1.2D+1.5Lm+1....	Yes	Y		1	1.2	2	.058	35	1.5																
52	1.2D+1.5Lm+1....	Yes	Y		1	1.2	3	.058	35	1.5																
53	1.2D+1.5Lm+1....	Yes	Y		1	1.2	4	.058	35	1.5																
54	1.2D+1.5Lm+1....	Yes	Y		1	1.2	5	.058	35	1.5																
55	1.2D+1.5Lm+1....	Yes	Y		1	1.2	6	.058	35	1.5																
56	1.2D+1.5Lm+1....	Yes	Y		1	1.2	7	.058	35	1.5																
57	1.2D+1.5Lm+1....	Yes	Y		1	1.2	8	.058	35	1.5																

Load Combinations (Continued)

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
58	1.2D+1.5Lm+1....	Yes	Y		1	1.2	9	.058	35	1.5																
59	1.2D+1.5Lm+1....	Yes	Y		1	1.2	10	.058	35	1.5																
60	1.2D+1.5Lm+1....	Yes	Y		1	1.2	11	.058	35	1.5																
61	1.2D+1.5Lm+1....	Yes	Y		1	1.2	12	.058	35	1.5																
62	1.2D+1.5Lm+1....	Yes	Y		1	1.2	13	.058	35	1.5																
63	1.2D+1.5Lm+1....	Yes	Y		1	1.2	14	.058	35	1.5																
64	1.2D+1.5Lm+1....	Yes	Y		1	1.2	15	.058	35	1.5																
65	1.2D+1.5Lm+1....	Yes	Y		1	1.2	16	.058	35	1.5																
66	1.2D+1.5Lm+1....	Yes	Y		1	1.2	17	.058	35	1.5																
67	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.096	0																	
68	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.083	ELZ	.048																
69	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.068	ELZ	.068																
70	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.048	ELZ	.083																
71	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	0		ELZ	.096																
72	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.048	ELZ	.083																
73	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.068	ELZ	.068																
74	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.083	ELZ	.048																
75	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.096	0																	
76	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.083	ELZ	-.048																
77	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.068	ELZ	-.068																
78	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.048	ELZ	-.083																
79	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	0		ELZ	-.096																
80	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.048	ELZ	-.083																
81	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.068	ELZ	-.068																
82	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.083	ELZ	-.048																
83	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.096	0																	
84	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.083	ELZ	.048																
85	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.068	ELZ	.068																
86	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.048	ELZ	.083																
87	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	0		ELZ	.096																
88	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.048	ELZ	.083																
89	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.068	ELZ	.068																
90	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.083	ELZ	.048																
91	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.096	0																	
92	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.083	ELZ	-.048																
93	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.068	ELZ	-.068																
94	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.048	ELZ	-.083																
95	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	0		ELZ	-.096																
96	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.048	ELZ	-.083																
97	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.068	ELZ	-.068																
98	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.083	ELZ	-.048																

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	SF1-1	-0.333333	1.666667	0	0	
2	SF1-2	-0.333333	-1.666667	0	0	
3	FF1	2.07387	1.666667	-6.25	0	
4	FF2	2.07387	1.666667	6.25	0	
5	FF3	2.07387	-1.666667	-6.25	0	
6	FF4	2.07387	-1.666667	6.25	0	
7	SA-1A	2.073529	1.666667	2.999917	0	
8	SF2-1	0	1.666667	-0.618717	0	
9	SF2-2	0	-1.666667	-0.618717	0	
10	SF2-3	1.69287	1.666667	-2.458333	0	
11	SF2-4	1.69287	-1.666667	-2.458333	0	

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
12	SF2-V1A	0.119912	1.666667	-0.749023	0	
13	SF2-V2A	1.572959	1.666667	-2.328027	0	
14	SF2-V1B	0.119912	-1.666667	-0.749023	0	
15	SF2-V2B	1.572959	-1.666667	-2.328027	0	
16	SF3-1	0	1.666667	0.618717	0	
17	SF3-2	0	-1.666667	0.618717	0	
18	SF3-3	1.69287	1.666667	2.458333	0	
19	SF3-4	1.69287	-1.666667	2.458333	0	
20	SF3-V1A	0.119912	1.666667	0.749023	0	
21	SF3-V2A	1.572959	1.666667	2.328027	0	
22	SF3-V1B	0.119912	-1.666667	0.749023	0	
23	SF3-V2B	1.572959	-1.666667	2.328027	0	
24	SF2-5	2.073529	1.666667	-2.499833	0	
25	SF2-6	2.073529	-1.666667	-2.499833	0	
26	SF3-5	2.073529	1.666667	2.499833	0	
27	SF3-6	2.073529	-1.666667	2.499833	0	
28	N48	0.119912	-1.430556	-0.749023	0	
29	N49	1.572959	1.430556	-2.328027	0	
30	N50	0.119912	1.430556	-0.749023	0	
31	N51	1.572959	-1.430556	-2.328027	0	
32	N53	0.119912	-1.430556	0.749023	0	
33	N54	1.572959	1.430556	2.328027	0	
34	N55	0.119912	1.430556	0.749023	0	
35	N56	1.572959	-1.430556	2.328027	0	
36	N53B	2.073529	-1.666667	2.999777	0	
37	N56A	0.553173	1.666667	9.392231	0	
38	N57	0.553173	-1.666667	9.392231	0	
39	N39	2.07387	1.666667	-5.999997	0	
40	N47A	2.07387	1.666667	6.	0	
41	N41	2.07387	4.	-5.999997	0	
42	N42	2.07387	4.	6.	0	
43	N43	2.07387	4.	2.	0	
44	N44	2.07387	4.	-2.	0	
45	N45	2.07387	-4.	-5.999997	0	
46	N46	2.07387	-4.	6.	0	
47	N47	2.07387	-4.	2.	0	
48	N48A	2.07387	-4.	-2.	0	
49	N49A	0.846435	-1.666667	-1.538525	0	
50	N50A	0.846435	1.666667	-1.538525	0	
51	N51A	0.846435	-1.666667	1.538525	0	
52	N52	0.846435	1.666667	1.538525	0	
53	N53A	0.846435	2.166667	-1.538525	0	
54	N54A	0.846435	2.166667	1.538525	0	
55	N55A	0.846435	-1.833334	-1.538525	0	
56	N56B	0.846435	-1.833334	1.538525	0	
57	N59	2.07387	-1.666667	-5.999997	0	
58	N60	2.073529	-1.666667	-2.	0	
59	N61	2.073529	-1.666667	2.	0	
60	N62	2.073529	-1.666667	6.	0	
61	N63	2.073529	1.666667	-2.	0	
62	N64	2.073529	1.666667	2.	0	

Joint Loads and Enforced Displacements (BLC 35 : Lm)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft...
1	N62	L	Y	-.5

Joint Loads and Enforced Displacements (BLC 36 : Lv)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft,...
1	FF4	L	Y	-.25

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.008	.5
2	MP-1	Y	-.084	2
3	MP-3	Y	-.032	.5
4	MP-3	Y	-.032	.5
5	MP-3	Y	-.07	2
6	MP-4	Y	-.008	.5
7	MP-4	Y	-.021	2
8	RRU-1	Y	-.044	2
9	MP-1	Y	-.008	4.5
10	MP-3	Y	-.032	6.5
11	MP-3	Y	-.032	6.5
12	MP-4	Y	-.008	4.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.09	.5
2	MP-1	X	-.078	2
3	MP-3	X	-.11	.5
4	MP-3	X	-.11	.5
5	MP-3	X	-.078	2
6	MP-4	X	-.09	.5
7	MP-4	X	-.015	2
8	RRU-1	X	-.199	2
9	MP-1	X	-.09	4.5
10	MP-3	X	-.11	6.5
11	MP-3	X	-.11	6.5
12	MP-4	X	-.09	4.5

Member Point Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.075	.5
2	MP-1	X	-.062	2
3	MP-3	X	-.085	.5
4	MP-3	X	-.085	.5
5	MP-3	X	-.06	2
6	MP-4	X	-.075	.5
7	MP-4	X	-.015	2
8	RRU-1	X	-.147	2
9	MP-1	X	-.075	4.5
10	MP-3	X	-.085	6.5
11	MP-3	X	-.085	6.5
12	MP-4	X	-.075	4.5
13	MP-1	Z	-.043	.5
14	MP-1	Z	-.036	2
15	MP-3	Z	-.049	.5
16	MP-3	Z	-.049	.5
17	MP-3	Z	-.034	2
18	MP-4	Z	-.043	.5
19	MP-4	Z	-.008	2
20	RRU-1	Z	-.085	2

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
21	MP-1	Z	-.043	4.5
22	MP-3	Z	-.049	6.5
23	MP-3	Z	-.049	6.5
24	MP-4	Z	-.043	4.5

Member Point Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.058	.5
2	MP-1	X	-.046	2
3	MP-3	X	-.061	.5
4	MP-3	X	-.061	.5
5	MP-3	X	-.042	2
6	MP-4	X	-.058	.5
7	MP-4	X	-.013	2
8	RRU-1	X	-.1	2
9	MP-1	X	-.058	4.5
10	MP-3	X	-.061	6.5
11	MP-3	X	-.061	6.5
12	MP-4	X	-.058	4.5
13	MP-1	Z	-.058	.5
14	MP-1	Z	-.046	2
15	MP-3	Z	-.061	.5
16	MP-3	Z	-.061	.5
17	MP-3	Z	-.042	2
18	MP-4	Z	-.058	.5
19	MP-4	Z	-.013	2
20	RRU-1	Z	-.1	2
21	MP-1	Z	-.058	4.5
22	MP-3	Z	-.061	6.5
23	MP-3	Z	-.061	6.5
24	MP-4	Z	-.058	4.5

Member Point Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.039	.5
2	MP-1	X	-.029	2
3	MP-3	X	-.037	.5
4	MP-3	X	-.037	.5
5	MP-3	X	-.025	2
6	MP-4	X	-.039	.5
7	MP-4	X	-.01	2
8	RRU-1	X	-.056	2
9	MP-1	X	-.039	4.5
10	MP-3	X	-.037	6.5
11	MP-3	X	-.037	6.5
12	MP-4	X	-.039	4.5
13	MP-1	Z	-.068	.5
14	MP-1	Z	-.05	2
15	MP-3	Z	-.065	.5
16	MP-3	Z	-.065	.5
17	MP-3	Z	-.044	2
18	MP-4	Z	-.068	.5
19	MP-4	Z	-.017	2
20	RRU-1	Z	-.097	2
21	MP-1	Z	-.068	4.5
22	MP-3	Z	-.065	6.5

Member Point Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
23	MP-3	Z	-.065	6.5
24	MP-4	Z	-.068	4.5

Member Point Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.075	.5
2	MP-1	Z	-.052	2
3	MP-3	Z	-.063	.5
4	MP-3	Z	-.063	.5
5	MP-3	Z	-.042	2
6	MP-4	Z	-.075	.5
7	MP-4	Z	-.021	2
8	RRU-1	Z	-.083	2
9	MP-1	Z	-.075	4.5
10	MP-3	Z	-.063	6.5
11	MP-3	Z	-.063	6.5
12	MP-4	Z	-.075	4.5

Member Point Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.039	.5
2	MP-1	X	.029	2
3	MP-3	X	.037	.5
4	MP-3	X	.037	.5
5	MP-3	X	.025	2
6	MP-4	X	.039	.5
7	MP-4	X	.01	2
8	RRU-1	X	.056	2
9	MP-1	X	.039	4.5
10	MP-3	X	.037	6.5
11	MP-3	X	.037	6.5
12	MP-4	X	.039	4.5
13	MP-1	Z	-.068	.5
14	MP-1	Z	-.05	2
15	MP-3	Z	-.065	.5
16	MP-3	Z	-.065	.5
17	MP-3	Z	-.044	2
18	MP-4	Z	-.068	.5
19	MP-4	Z	-.017	2
20	RRU-1	Z	-.097	2
21	MP-1	Z	-.068	4.5
22	MP-3	Z	-.065	6.5
23	MP-3	Z	-.065	6.5
24	MP-4	Z	-.068	4.5

Member Point Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.058	.5
2	MP-1	X	.046	2
3	MP-3	X	.061	.5
4	MP-3	X	.061	.5
5	MP-3	X	.042	2
6	MP-4	X	.058	.5
7	MP-4	X	.013	2
8	RRU-1	X	.1	2

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Member Point Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
9	MP-1	X	.058	4.5
10	MP-3	X	.061	6.5
11	MP-3	X	.061	6.5
12	MP-4	X	.058	4.5
13	MP-1	Z	-.058	.5
14	MP-1	Z	-.046	2
15	MP-3	Z	-.061	.5
16	MP-3	Z	-.061	.5
17	MP-3	Z	-.042	2
18	MP-4	Z	-.058	.5
19	MP-4	Z	-.013	2
20	RRU-1	Z	-.1	2
21	MP-1	Z	-.058	4.5
22	MP-3	Z	-.061	6.5
23	MP-3	Z	-.061	6.5
24	MP-4	Z	-.058	4.5

Member Point Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.075	.5
2	MP-1	X	.062	2
3	MP-3	X	.085	.5
4	MP-3	X	.085	.5
5	MP-3	X	.06	2
6	MP-4	X	.075	.5
7	MP-4	X	.015	2
8	RRU-1	X	.147	2
9	MP-1	X	.075	4.5
10	MP-3	X	.085	6.5
11	MP-3	X	.085	6.5
12	MP-4	X	.075	4.5
13	MP-1	Z	-.043	.5
14	MP-1	Z	-.036	2
15	MP-3	Z	-.049	.5
16	MP-3	Z	-.049	.5
17	MP-3	Z	-.034	2
18	MP-4	Z	-.043	.5
19	MP-4	Z	-.008	2
20	RRU-1	Z	-.085	2
21	MP-1	Z	-.043	4.5
22	MP-3	Z	-.049	6.5
23	MP-3	Z	-.049	6.5
24	MP-4	Z	-.043	4.5

Member Point Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.09	.5
2	MP-1	X	.078	2
3	MP-3	X	.11	.5
4	MP-3	X	.11	.5
5	MP-3	X	.078	2
6	MP-4	X	.09	.5
7	MP-4	X	.015	2
8	RRU-1	X	.199	2
9	MP-1	X	.09	4.5
10	MP-3	X	.11	6.5

Member Point Loads (BLC 10 : 180 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
11	MP-3	X	.11	6.5
12	MP-4	X	.09	4.5

Member Point Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.075	.5
2	MP-1	X	.062	2
3	MP-3	X	.085	.5
4	MP-3	X	.085	.5
5	MP-3	X	.06	2
6	MP-4	X	.075	.5
7	MP-4	X	.015	2
8	RRU-1	X	.147	2
9	MP-1	X	.075	4.5
10	MP-3	X	.085	6.5
11	MP-3	X	.085	6.5
12	MP-4	X	.075	4.5
13	MP-1	Z	.043	.5
14	MP-1	Z	.036	2
15	MP-3	Z	.049	.5
16	MP-3	Z	.049	.5
17	MP-3	Z	.034	2
18	MP-4	Z	.043	.5
19	MP-4	Z	.008	2
20	RRU-1	Z	.085	2
21	MP-1	Z	.043	4.5
22	MP-3	Z	.049	6.5
23	MP-3	Z	.049	6.5
24	MP-4	Z	.043	4.5

Member Point Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.058	.5
2	MP-1	X	.046	2
3	MP-3	X	.061	.5
4	MP-3	X	.061	.5
5	MP-3	X	.042	2
6	MP-4	X	.058	.5
7	MP-4	X	.013	2
8	RRU-1	X	.1	2
9	MP-1	X	.058	4.5
10	MP-3	X	.061	6.5
11	MP-3	X	.061	6.5
12	MP-4	X	.058	4.5
13	MP-1	Z	.058	.5
14	MP-1	Z	.046	2
15	MP-3	Z	.061	.5
16	MP-3	Z	.061	.5
17	MP-3	Z	.042	2
18	MP-4	Z	.058	.5
19	MP-4	Z	.013	2
20	RRU-1	Z	.1	2
21	MP-1	Z	.058	4.5
22	MP-3	Z	.061	6.5
23	MP-3	Z	.061	6.5
24	MP-4	Z	.058	4.5

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Member Point Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.039	.5
2	MP-1	X	.029	2
3	MP-3	X	.037	.5
4	MP-3	X	.037	.5
5	MP-3	X	.025	2
6	MP-4	X	.039	.5
7	MP-4	X	.01	2
8	RRU-1	X	.056	2
9	MP-1	X	.039	4.5
10	MP-3	X	.037	6.5
11	MP-3	X	.037	6.5
12	MP-4	X	.039	4.5
13	MP-1	Z	.068	.5
14	MP-1	Z	.05	2
15	MP-3	Z	.065	.5
16	MP-3	Z	.065	.5
17	MP-3	Z	.044	2
18	MP-4	Z	.068	.5
19	MP-4	Z	.017	2
20	RRU-1	Z	.097	2
21	MP-1	Z	.068	4.5
22	MP-3	Z	.065	6.5
23	MP-3	Z	.065	6.5
24	MP-4	Z	.068	4.5

Member Point Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.075	.5
2	MP-1	Z	.052	2
3	MP-3	Z	.063	.5
4	MP-3	Z	.063	.5
5	MP-3	Z	.042	2
6	MP-4	Z	.075	.5
7	MP-4	Z	.021	2
8	RRU-1	Z	.083	2
9	MP-1	Z	.075	4.5
10	MP-3	Z	.063	6.5
11	MP-3	Z	.063	6.5
12	MP-4	Z	.075	4.5

Member Point Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.039	.5
2	MP-1	X	-.029	2
3	MP-3	X	-.037	.5
4	MP-3	X	-.037	.5
5	MP-3	X	-.025	2
6	MP-4	X	-.039	.5
7	MP-4	X	-.01	2
8	RRU-1	X	-.056	2
9	MP-1	X	-.039	4.5
10	MP-3	X	-.037	6.5
11	MP-3	X	-.037	6.5
12	MP-4	X	-.039	4.5
13	MP-1	Z	.068	.5
14	MP-1	Z	.05	2

Member Point Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-3	Z	.065	.5
16	MP-3	Z	.065	.5
17	MP-3	Z	.044	2
18	MP-4	Z	.068	.5
19	MP-4	Z	.017	2
20	RRU-1	Z	.097	2
21	MP-1	Z	.068	4.5
22	MP-3	Z	.065	6.5
23	MP-3	Z	.065	6.5
24	MP-4	Z	.068	4.5

Member Point Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.058	.5
2	MP-1	X	-.046	2
3	MP-3	X	-.061	.5
4	MP-3	X	-.061	.5
5	MP-3	X	-.042	2
6	MP-4	X	-.058	.5
7	MP-4	X	-.013	2
8	RRU-1	X	-.1	2
9	MP-1	X	-.058	4.5
10	MP-3	X	-.061	6.5
11	MP-3	X	-.061	6.5
12	MP-4	X	-.058	4.5
13	MP-1	Z	.058	.5
14	MP-1	Z	.046	2
15	MP-3	Z	.061	.5
16	MP-3	Z	.061	.5
17	MP-3	Z	.042	2
18	MP-4	Z	.058	.5
19	MP-4	Z	.013	2
20	RRU-1	Z	.1	2
21	MP-1	Z	.058	4.5
22	MP-3	Z	.061	6.5
23	MP-3	Z	.061	6.5
24	MP-4	Z	.058	4.5

Member Point Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.075	.5
2	MP-1	X	-.062	2
3	MP-3	X	-.085	.5
4	MP-3	X	-.085	.5
5	MP-3	X	-.06	2
6	MP-4	X	-.075	.5
7	MP-4	X	-.015	2
8	RRU-1	X	-.147	2
9	MP-1	X	-.075	4.5
10	MP-3	X	-.085	6.5
11	MP-3	X	-.085	6.5
12	MP-4	X	-.075	4.5
13	MP-1	Z	.043	.5
14	MP-1	Z	.036	2
15	MP-3	Z	.049	.5
16	MP-3	Z	.049	.5

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Designer : TCS
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Member Point Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
17	MP-3	Z	.034	2
18	MP-4	Z	.043	.5
19	MP-4	Z	.008	2
20	RRU-1	Z	.085	2
21	MP-1	Z	.043	4.5
22	MP-3	Z	.049	6.5
23	MP-3	Z	.049	6.5
24	MP-4	Z	.043	4.5

Member Point Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.063	.5
2	MP-1	Y	-.072	2
3	MP-3	Y	-.109	.5
4	MP-3	Y	-.109	.5
5	MP-3	Y	-.065	2
6	MP-4	Y	-.063	.5
7	MP-4	Y	-.028	2
8	RRU-1	Y	-.135	2
9	MP-1	Y	-.063	4.5
10	MP-3	Y	-.109	6.5
11	MP-3	Y	-.109	6.5
12	MP-4	Y	-.063	4.5

Member Point Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.02	.5
2	MP-1	X	-.019	2
3	MP-3	X	-.022	.5
4	MP-3	X	-.022	.5
5	MP-3	X	-.019	2
6	MP-4	X	-.02	.5
7	MP-4	X	-.005	2
8	RRU-1	X	-.041	2
9	MP-1	X	-.02	4.5
10	MP-3	X	-.022	6.5
11	MP-3	X	-.022	6.5
12	MP-4	X	-.02	4.5

Member Point Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.017	.5
2	MP-1	X	-.015	2
3	MP-3	X	-.018	.5
4	MP-3	X	-.018	.5
5	MP-3	X	-.015	2
6	MP-4	X	-.017	.5
7	MP-4	X	-.005	2
8	RRU-1	X	-.031	2
9	MP-1	X	-.017	4.5
10	MP-3	X	-.018	6.5
11	MP-3	X	-.018	6.5
12	MP-4	X	-.017	4.5
13	MP-1	Z	-.01	.5
14	MP-1	Z	-.009	2

Member Point Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-3	Z	-.01	.5
16	MP-3	Z	-.01	.5
17	MP-3	Z	-.008	2
18	MP-4	Z	-.01	.5
19	MP-4	Z	-.003	2
20	RRU-1	Z	-.018	2
21	MP-1	Z	-.01	4.5
22	MP-3	Z	-.01	6.5
23	MP-3	Z	-.01	6.5
24	MP-4	Z	-.01	4.5

Member Point Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.013	.5
2	MP-1	X	-.011	2
3	MP-3	X	-.013	.5
4	MP-3	X	-.013	.5
5	MP-3	X	-.011	2
6	MP-4	X	-.013	.5
7	MP-4	X	-.004	2
8	RRU-1	X	-.022	2
9	MP-1	X	-.013	4.5
10	MP-3	X	-.013	6.5
11	MP-3	X	-.013	6.5
12	MP-4	X	-.013	4.5
13	MP-1	Z	-.013	.5
14	MP-1	Z	-.011	2
15	MP-3	Z	-.013	.5
16	MP-3	Z	-.013	.5
17	MP-3	Z	-.011	2
18	MP-4	Z	-.013	.5
19	MP-4	Z	-.004	2
20	RRU-1	Z	-.022	2
21	MP-1	Z	-.013	4.5
22	MP-3	Z	-.013	6.5
23	MP-3	Z	-.013	6.5
24	MP-4	Z	-.013	4.5

Member Point Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.009	.5
2	MP-1	X	-.007	2
3	MP-3	X	-.008	.5
4	MP-3	X	-.008	.5
5	MP-3	X	-.007	2
6	MP-4	X	-.009	.5
7	MP-4	X	-.003	2
8	RRU-1	X	-.013	2
9	MP-1	X	-.009	4.5
10	MP-3	X	-.008	6.5
11	MP-3	X	-.008	6.5
12	MP-4	X	-.009	4.5
13	MP-1	Z	-.016	.5
14	MP-1	Z	-.013	2
15	MP-3	Z	-.014	.5
16	MP-3	Z	-.014	.5

Company : Tower Engineering Professionals, Inc.
Designer : TCS
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Member Point Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
17	MP-3	Z	-.012	2
18	MP-4	Z	-.016	.5
19	MP-4	Z	-.006	2
20	RRU-1	Z	-.022	2
21	MP-1	Z	-.016	4.5
22	MP-3	Z	-.014	6.5
23	MP-3	Z	-.014	6.5
24	MP-4	Z	-.016	4.5

Member Point Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.017	.5
2	MP-1	Z	-.013	2
3	MP-3	Z	-.015	.5
4	MP-3	Z	-.015	.5
5	MP-3	Z	-.012	2
6	MP-4	Z	-.017	.5
7	MP-4	Z	-.007	2
8	RRU-1	Z	-.02	2
9	MP-1	Z	-.017	4.5
10	MP-3	Z	-.015	6.5
11	MP-3	Z	-.015	6.5
12	MP-4	Z	-.017	4.5

Member Point Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.009	.5
2	MP-1	X	.007	2
3	MP-3	X	.008	.5
4	MP-3	X	.008	.5
5	MP-3	X	.007	2
6	MP-4	X	.009	.5
7	MP-4	X	.003	2
8	RRU-1	X	.013	2
9	MP-1	X	.009	4.5
10	MP-3	X	.008	6.5
11	MP-3	X	.008	6.5
12	MP-4	X	.009	4.5
13	MP-1	Z	-.016	.5
14	MP-1	Z	-.013	2
15	MP-3	Z	-.014	.5
16	MP-3	Z	-.014	.5
17	MP-3	Z	-.012	2
18	MP-4	Z	-.016	.5
19	MP-4	Z	-.006	2
20	RRU-1	Z	-.022	2
21	MP-1	Z	-.016	4.5
22	MP-3	Z	-.014	6.5
23	MP-3	Z	-.014	6.5
24	MP-4	Z	-.016	4.5

Member Point Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.013	.5
2	MP-1	X	.011	2

Member Point Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
3	MP-3	X	.013	.5
4	MP-3	X	.013	.5
5	MP-3	X	.011	2
6	MP-4	X	.013	.5
7	MP-4	X	.004	2
8	RRU-1	X	.022	2
9	MP-1	X	.013	4.5
10	MP-3	X	.013	6.5
11	MP-3	X	.013	6.5
12	MP-4	X	.013	4.5
13	MP-1	Z	-.013	.5
14	MP-1	Z	-.011	2
15	MP-3	Z	-.013	.5
16	MP-3	Z	-.013	.5
17	MP-3	Z	-.011	2
18	MP-4	Z	-.013	.5
19	MP-4	Z	-.004	2
20	RRU-1	Z	-.022	2
21	MP-1	Z	-.013	4.5
22	MP-3	Z	-.013	6.5
23	MP-3	Z	-.013	6.5
24	MP-4	Z	-.013	4.5

Member Point Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.017	.5
2	MP-1	X	.015	2
3	MP-3	X	.018	.5
4	MP-3	X	.018	.5
5	MP-3	X	.015	2
6	MP-4	X	.017	.5
7	MP-4	X	.005	2
8	RRU-1	X	.031	2
9	MP-1	X	.017	4.5
10	MP-3	X	.018	6.5
11	MP-3	X	.018	6.5
12	MP-4	X	.017	4.5
13	MP-1	Z	-.01	.5
14	MP-1	Z	-.009	2
15	MP-3	Z	-.01	.5
16	MP-3	Z	-.01	.5
17	MP-3	Z	-.008	2
18	MP-4	Z	-.01	.5
19	MP-4	Z	-.003	2
20	RRU-1	Z	-.018	2
21	MP-1	Z	-.01	4.5
22	MP-3	Z	-.01	6.5
23	MP-3	Z	-.01	6.5
24	MP-4	Z	-.01	4.5

Member Point Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.02	.5
2	MP-1	X	.019	2
3	MP-3	X	.022	.5
4	MP-3	X	.022	.5

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Member Point Loads (BLC 27 : 180 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP-3	X	.019	2
6	MP-4	X	.02	.5
7	MP-4	X	.005	2
8	RRU-1	X	.041	2
9	MP-1	X	.02	4.5
10	MP-3	X	.022	6.5
11	MP-3	X	.022	6.5
12	MP-4	X	.02	4.5

Member Point Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.017	.5
2	MP-1	X	.015	2
3	MP-3	X	.018	.5
4	MP-3	X	.018	.5
5	MP-3	X	.015	2
6	MP-4	X	.017	.5
7	MP-4	X	.005	2
8	RRU-1	X	.031	2
9	MP-1	X	.017	4.5
10	MP-3	X	.018	6.5
11	MP-3	X	.018	6.5
12	MP-4	X	.017	4.5
13	MP-1	Z	.01	.5
14	MP-1	Z	.009	2
15	MP-3	Z	.01	.5
16	MP-3	Z	.01	.5
17	MP-3	Z	.008	2
18	MP-4	Z	.01	.5
19	MP-4	Z	.003	2
20	RRU-1	Z	.018	2
21	MP-1	Z	.01	4.5
22	MP-3	Z	.01	6.5
23	MP-3	Z	.01	6.5
24	MP-4	Z	.01	4.5

Member Point Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.013	.5
2	MP-1	X	.011	2
3	MP-3	X	.013	.5
4	MP-3	X	.013	.5
5	MP-3	X	.011	2
6	MP-4	X	.013	.5
7	MP-4	X	.004	2
8	RRU-1	X	.022	2
9	MP-1	X	.013	4.5
10	MP-3	X	.013	6.5
11	MP-3	X	.013	6.5
12	MP-4	X	.013	4.5
13	MP-1	Z	.013	.5
14	MP-1	Z	.011	2
15	MP-3	Z	.013	.5
16	MP-3	Z	.013	.5
17	MP-3	Z	.011	2
18	MP-4	Z	.013	.5

Member Point Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
19	MP-4	Z	.004	2
20	RRU-1	Z	.022	2
21	MP-1	Z	.013	4.5
22	MP-3	Z	.013	6.5
23	MP-3	Z	.013	6.5
24	MP-4	Z	.013	4.5

Member Point Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.009	.5
2	MP-1	X	.007	2
3	MP-3	X	.008	.5
4	MP-3	X	.008	.5
5	MP-3	X	.007	2
6	MP-4	X	.009	.5
7	MP-4	X	.003	2
8	RRU-1	X	.013	2
9	MP-1	X	.009	4.5
10	MP-3	X	.008	6.5
11	MP-3	X	.008	6.5
12	MP-4	X	.009	4.5
13	MP-1	Z	.016	.5
14	MP-1	Z	.013	2
15	MP-3	Z	.014	.5
16	MP-3	Z	.014	.5
17	MP-3	Z	.012	2
18	MP-4	Z	.016	.5
19	MP-4	Z	.006	2
20	RRU-1	Z	.022	2
21	MP-1	Z	.016	4.5
22	MP-3	Z	.014	6.5
23	MP-3	Z	.014	6.5
24	MP-4	Z	.016	4.5

Member Point Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.017	.5
2	MP-1	Z	.013	2
3	MP-3	Z	.015	.5
4	MP-3	Z	.015	.5
5	MP-3	Z	.012	2
6	MP-4	Z	.017	.5
7	MP-4	Z	.007	2
8	RRU-1	Z	.02	2
9	MP-1	Z	.017	4.5
10	MP-3	Z	.015	6.5
11	MP-3	Z	.015	6.5
12	MP-4	Z	.017	4.5

Member Point Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.009	.5
2	MP-1	X	-.007	2
3	MP-3	X	-.008	.5
4	MP-3	X	-.008	.5

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Member Point Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP-3	X	-.007	2
6	MP-4	X	-.009	.5
7	MP-4	X	-.003	2
8	RRU-1	X	-.013	2
9	MP-1	X	-.009	4.5
10	MP-3	X	-.008	6.5
11	MP-3	X	-.008	6.5
12	MP-4	X	-.009	4.5
13	MP-1	Z	.016	.5
14	MP-1	Z	.013	2
15	MP-3	Z	.014	.5
16	MP-3	Z	.014	.5
17	MP-3	Z	.012	2
18	MP-4	Z	.016	.5
19	MP-4	Z	.006	2
20	RRU-1	Z	.022	2
21	MP-1	Z	.016	4.5
22	MP-3	Z	.014	6.5
23	MP-3	Z	.014	6.5
24	MP-4	Z	.016	4.5

Member Point Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.013	.5
2	MP-1	X	-.011	2
3	MP-3	X	-.013	.5
4	MP-3	X	-.013	.5
5	MP-3	X	-.011	2
6	MP-4	X	-.013	.5
7	MP-4	X	-.004	2
8	RRU-1	X	-.022	2
9	MP-1	X	-.013	4.5
10	MP-3	X	-.013	6.5
11	MP-3	X	-.013	6.5
12	MP-4	X	-.013	4.5
13	MP-1	Z	.013	.5
14	MP-1	Z	.011	2
15	MP-3	Z	.013	.5
16	MP-3	Z	.013	.5
17	MP-3	Z	.011	2
18	MP-4	Z	.013	.5
19	MP-4	Z	.004	2
20	RRU-1	Z	.022	2
21	MP-1	Z	.013	4.5
22	MP-3	Z	.013	6.5
23	MP-3	Z	.013	6.5
24	MP-4	Z	.013	4.5

Member Point Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.017	.5
2	MP-1	X	-.015	2
3	MP-3	X	-.018	.5
4	MP-3	X	-.018	.5
5	MP-3	X	-.015	2
6	MP-4	X	-.017	.5

Member Point Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
7	MP-4	X	-.005	2
8	RRU-1	X	-.031	2
9	MP-1	X	-.017	4.5
10	MP-3	X	-.018	6.5
11	MP-3	X	-.018	6.5
12	MP-4	X	-.017	4.5
13	MP-1	Z	.01	.5
14	MP-1	Z	.009	2
15	MP-3	Z	.01	.5
16	MP-3	Z	.01	.5
17	MP-3	Z	.008	2
18	MP-4	Z	.01	.5
19	MP-4	Z	.003	2
20	RRU-1	Z	.018	2
21	MP-1	Z	.01	4.5
22	MP-3	Z	.01	6.5
23	MP-3	Z	.01	6.5
24	MP-4	Z	.01	4.5

Member Point Loads (BLC 37 : Seismic Load X)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.008	.5
2	MP-1	X	-.084	2
3	MP-3	X	-.032	.5
4	MP-3	X	-.032	.5
5	MP-3	X	-.07	2
6	MP-4	X	-.008	.5
7	MP-4	X	-.021	2
8	RRU-1	X	-.044	2
9	MP-1	X	-.008	4.5
10	MP-3	X	-.032	6.5
11	MP-3	X	-.032	6.5
12	MP-4	X	-.008	4.5

Member Point Loads (BLC 38 : Seismic Load Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.008	.5
2	MP-1	Z	-.084	2
3	MP-3	Z	-.032	.5
4	MP-3	Z	-.032	.5
5	MP-3	Z	-.07	2
6	MP-4	Z	-.008	.5
7	MP-4	Z	-.021	2
8	RRU-1	Z	-.044	2
9	MP-1	Z	-.008	4.5
10	MP-3	Z	-.032	6.5
11	MP-3	Z	-.032	6.5
12	MP-4	Z	-.008	4.5

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

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.003	-.003	0	%100
2	SF2-V2	X	-.003	-.003	0	%100
3	SF3-V1	X	-.003	-.003	0	%100

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

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
4	SF3-V2	X	-.003	-.003	0	%100
5	SF2-D1	X	-.003	-.003	0	%100
6	SF2-D1-X	X	-.003	-.003	0	%100
7	SF3-D1	X	-.003	-.003	0	%100
8	SF3-D1-X	X	-.003	-.003	0	%100
9	SF2-CPB	X	-.000281	-.000281	0	%100
10	SF2-CPT	X	-.000281	-.000281	0	%100
11	SF3-CPB	X	-.000281	-.000281	0	%100
12	SF3-CPT	X	-.000281	-.000281	0	%100
13	FFBH-1	X	-.009	-.009	0	%100
14	FFBH-2	X	-.01	-.01	0	%100
15	FFBH-3	X	-.009	-.009	0	%100
16	FFTH-1	X	-.009	-.009	0	%100
17	FFTH-2	X	-.01	-.01	0	%100
18	FFTH-3	X	-.009	-.009	0	%100
19	SF2-BH	X	-.005	-.005	0	%100
20	SF2-TH	X	-.005	-.005	0	%100
21	SF3-BH	X	-.005	-.005	0	%100
22	SF3-TH	X	-.005	-.005	0	%100
23	SA-1	X	-.01	-.01	0	%100
24	SA-2	X	-.01	-.01	0	%100
25	MP-1	X	-.01	-.01	0	%100
26	MP-2	X	-.01	-.01	0	%100
27	MP-3	X	-.01	-.01	0	%100
28	MP-4	X	-.01	-.01	0	%100
29	RRU-1	X	-.009	-.009	0	%100
30	RRU-2	X	-.009	-.009	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.003	-.003	0	%100
6	SF2-D1-X	X	-.003	-.003	0	%100
7	SF3-D1	X	-.003	-.003	0	%100
8	SF3-D1-X	X	-.003	-.003	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.000905	-.000905	0	%100
12	SF3-CPT	X	-.000905	-.000905	0	%100
13	FFBH-1	X	-.007	-.007	0	%100
14	FFBH-2	X	-.008	-.008	0	%100
15	FFBH-3	X	-.007	-.007	0	%100
16	FFTH-1	X	-.007	-.007	0	%100
17	FFTH-2	X	-.008	-.008	0	%100
18	FFTH-3	X	-.007	-.007	0	%100
19	SF2-BH	X	-.006	-.006	0	%100
20	SF2-TH	X	-.006	-.006	0	%100
21	SF3-BH	X	-.002	-.002	0	%100
22	SF3-TH	X	-.002	-.002	0	%100
23	SA-1	X	-.008	-.008	0	%100
24	SA-2	X	-.008	-.008	0	%100
25	MP-1	X	-.009	-.009	0	%100
26	MP-2	X	-.009	-.009	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
27	MP-3	X	-.009	-.009	0	%100
28	MP-4	X	-.009	-.009	0	%100
29	RRU-1	X	-.008	-.008	0	%100
30	RRU-2	X	-.008	-.008	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.0009	-.0009	0	%100
40	SF2-CPT	Z	-.0009	-.0009	0	%100
41	SF3-CPB	Z	-.000614	-.000614	0	%100
42	SF3-CPT	Z	-.000614	-.000614	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.004	-.004	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.004	-.004	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.003	-.003	0	%100
50	SF2-TH	Z	-.003	-.003	0	%100
51	SF3-BH	Z	-.001	-.001	0	%100
52	SF3-TH	Z	-.001	-.001	0	%100
53	SA-1	Z	-.003	-.003	0	%100
54	SA-2	Z	-.003	-.003	0	%100
55	MP-1	Z	-.005	-.005	0	%100
56	MP-2	Z	-.005	-.005	0	%100
57	MP-3	Z	-.005	-.005	0	%100
58	MP-4	Z	-.005	-.005	0	%100
59	RRU-1	Z	-.004	-.004	0	%100
60	RRU-2	Z	-.004	-.004	0	%100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100
13	FFBH-1	X	-.004	-.004	0	%100
14	FFBH-2	X	-.005	-.005	0	%100
15	FFBH-3	X	-.004	-.004	0	%100
16	FFTH-1	X	-.004	-.004	0	%100
17	FFTH-2	X	-.005	-.005	0	%100
18	FFTH-3	X	-.004	-.004	0	%100
19	SF2-BH	X	-.005	-.005	0	%100

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Member Distributed Loads (BLC 4 : 45 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
20	SF2-TH	X	-.005	-.005	0	%100
21	SF3-BH	X	-.000205	-.000205	0	%100
22	SF3-TH	X	-.000205	-.000205	0	%100
23	SA-1	X	-.006	-.006	0	%100
24	SA-2	X	-.006	-.006	0	%100
25	MP-1	X	-.007	-.007	0	%100
26	MP-2	X	-.007	-.007	0	%100
27	MP-3	X	-.007	-.007	0	%100
28	MP-4	X	-.007	-.007	0	%100
29	RRU-1	X	-.006	-.006	0	%100
30	RRU-2	X	-.006	-.006	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.001	-.001	0	%100
42	SF3-CPT	Z	-.001	-.001	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.005	-.005	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.005	-.005	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.005	-.005	0	%100
50	SF2-TH	Z	-.005	-.005	0	%100
51	SF3-BH	Z	-.000201	-.000201	0	%100
52	SF3-TH	Z	-.000201	-.000201	0	%100
53	SA-1	Z	-.004	-.004	0	%100
54	SA-2	Z	-.004	-.004	0	%100
55	MP-1	Z	-.007	-.007	0	%100
56	MP-2	Z	-.007	-.007	0	%100
57	MP-3	Z	-.007	-.007	0	%100
58	MP-4	Z	-.007	-.007	0	%100
59	RRU-1	Z	-.006	-.006	0	%100
60	RRU-2	Z	-.006	-.006	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.001	-.001	0	%100
2	SF2-V2	X	-.001	-.001	0	%100
3	SF3-V1	X	-.001	-.001	0	%100
4	SF3-V2	X	-.001	-.001	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.003	-.003	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.003	-.003	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.003	-.003	0	%100
20	SF2-TH	X	-.003	-.003	0	%100
21	SF3-BH	X	-.000763	-.000763	0	%100
22	SF3-TH	X	-.000763	-.000763	0	%100
23	SA-1	X	-.003	-.003	0	%100
24	SA-2	X	-.003	-.003	0	%100
25	MP-1	X	-.005	-.005	0	%100
26	MP-2	X	-.005	-.005	0	%100
27	MP-3	X	-.005	-.005	0	%100
28	MP-4	X	-.005	-.005	0	%100
29	RRU-1	X	-.004	-.004	0	%100
30	RRU-2	X	-.004	-.004	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.003	-.003	0	%100
36	SF2-D1-X	Z	-.003	-.003	0	%100
37	SF3-D1	Z	-.003	-.003	0	%100
38	SF3-D1-X	Z	-.003	-.003	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.004	-.004	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.004	-.004	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.006	-.006	0	%100
50	SF2-TH	Z	-.006	-.006	0	%100
51	SF3-BH	Z	-.001	-.001	0	%100
52	SF3-TH	Z	-.001	-.001	0	%100
53	SA-1	Z	-.004	-.004	0	%100
54	SA-2	Z	-.004	-.004	0	%100
55	MP-1	Z	-.009	-.009	0	%100
56	MP-2	Z	-.009	-.009	0	%100
57	MP-3	Z	-.009	-.009	0	%100
58	MP-4	Z	-.009	-.009	0	%100
59	RRU-1	Z	-.008	-.008	0	%100
60	RRU-2	Z	-.008	-.008	0	%100

Member Distributed Loads (BLC 6 : 90 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Z	-.003	-.003	0	%100
2	SF2-V2	Z	-.003	-.003	0	%100
3	SF3-V1	Z	-.003	-.003	0	%100
4	SF3-V2	Z	-.003	-.003	0	%100
5	SF2-D1	Z	-.003	-.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 6 : 90 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
6	SF2-D1-X	Z	-.003	-.003	0	%100
7	SF3-D1	Z	-.003	-.003	0	%100
8	SF3-D1-X	Z	-.003	-.003	0	%100
9	SF2-CPB	Z	-.003	-.003	0	%100
10	SF2-CPT	Z	-.003	-.003	0	%100
11	SF3-CPB	Z	-.003	-.003	0	%100
12	SF3-CPT	Z	-.003	-.003	0	%100
13	FFBH-1	Z	-1e-6	-1e-6	0	%100
14	FFBH-2	Z	0	0	0	%100
15	FFBH-3	Z	-1e-6	-1e-6	0	%100
16	FFTH-1	Z	-1e-6	-1e-6	0	%100
17	FFTH-2	Z	0	0	0	%100
18	FFTH-3	Z	-1e-6	-1e-6	0	%100
19	SF2-BH	Z	-.005	-.005	0	%100
20	SF2-TH	Z	-.005	-.005	0	%100
21	SF3-BH	Z	-.005	-.005	0	%100
22	SF3-TH	Z	-.005	-.005	0	%100
23	SA-1	Z	-.002	-.002	0	%100
24	SA-2	Z	-.002	-.002	0	%100
25	MP-1	Z	-.01	-.01	0	%100
26	MP-2	Z	-.01	-.01	0	%100
27	MP-3	Z	-.01	-.01	0	%100
28	MP-4	Z	-.01	-.01	0	%100
29	RRU-1	Z	-.009	-.009	0	%100
30	RRU-2	Z	-.009	-.009	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.001	.001	0	%100
2	SF2-V2	X	.001	.001	0	%100
3	SF3-V1	X	.001	.001	0	%100
4	SF3-V2	X	.001	.001	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.003	.003	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.003	.003	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.000763	.000763	0	%100
20	SF2-TH	X	.000763	.000763	0	%100
21	SF3-BH	X	.003	.003	0	%100
22	SF3-TH	X	.003	.003	0	%100
23	SA-1	X	.001	.001	0	%100
24	SA-2	X	.001	.001	0	%100
25	MP-1	X	.005	.005	0	%100
26	MP-2	X	.005	.005	0	%100
27	MP-3	X	.005	.005	0	%100
28	MP-4	X	.005	.005	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
29	RRU-1	X	.004	.004	0	%100
30	RRU-2	X	.004	.004	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.003	-.003	0	%100
36	SF2-D1-X	Z	-.003	-.003	0	%100
37	SF3-D1	Z	-.003	-.003	0	%100
38	SF3-D1-X	Z	-.003	-.003	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.004	-.004	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.004	-.004	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.001	-.001	0	%100
50	SF2-TH	Z	-.001	-.001	0	%100
51	SF3-BH	Z	-.006	-.006	0	%100
52	SF3-TH	Z	-.006	-.006	0	%100
53	SA-1	Z	-.002	-.002	0	%100
54	SA-2	Z	-.002	-.002	0	%100
55	MP-1	Z	-.009	-.009	0	%100
56	MP-2	Z	-.009	-.009	0	%100
57	MP-3	Z	-.009	-.009	0	%100
58	MP-4	Z	-.009	-.009	0	%100
59	RRU-1	Z	-.008	-.008	0	%100
60	RRU-2	Z	-.008	-.008	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.004	.004	0	%100
14	FFBH-2	X	.005	.005	0	%100
15	FFBH-3	X	.004	.004	0	%100
16	FFTH-1	X	.004	.004	0	%100
17	FFTH-2	X	.005	.005	0	%100
18	FFTH-3	X	.004	.004	0	%100
19	SF2-BH	X	.000205	.000205	0	%100
20	SF2-TH	X	.000205	.000205	0	%100
21	SF3-BH	X	.005	.005	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
22	SF3-TH	X	.005	.005	0	%100
23	SA-1	X	.004	.004	0	%100
24	SA-2	X	.004	.004	0	%100
25	MP-1	X	.007	.007	0	%100
26	MP-2	X	.007	.007	0	%100
27	MP-3	X	.007	.007	0	%100
28	MP-4	X	.007	.007	0	%100
29	RRU-1	X	.006	.006	0	%100
30	RRU-2	X	.006	.006	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.001	-.001	0	%100
40	SF2-CPT	Z	-.001	-.001	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.005	-.005	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.005	-.005	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.000201	-.000201	0	%100
50	SF2-TH	Z	-.000201	-.000201	0	%100
51	SF3-BH	Z	-.005	-.005	0	%100
52	SF3-TH	Z	-.005	-.005	0	%100
53	SA-1	Z	-.002	-.002	0	%100
54	SA-2	Z	-.002	-.002	0	%100
55	MP-1	Z	-.007	-.007	0	%100
56	MP-2	Z	-.007	-.007	0	%100
57	MP-3	Z	-.007	-.007	0	%100
58	MP-4	Z	-.007	-.007	0	%100
59	RRU-1	Z	-.006	-.006	0	%100
60	RRU-2	Z	-.006	-.006	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.003	.003	0	%100
6	SF2-D1-X	X	.003	.003	0	%100
7	SF3-D1	X	.003	.003	0	%100
8	SF3-D1-X	X	.003	.003	0	%100
9	SF2-CPB	X	.000905	.000905	0	%100
10	SF2-CPT	X	.000905	.000905	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.007	.007	0	%100
14	FFBH-2	X	.008	.008	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
15	FFBH-3	X	.007	.007	0	%100
16	FFTH-1	X	.007	.007	0	%100
17	FFTH-2	X	.008	.008	0	%100
18	FFTH-3	X	.007	.007	0	%100
19	SF2-BH	X	.002	.002	0	%100
20	SF2-TH	X	.002	.002	0	%100
21	SF3-BH	X	.006	.006	0	%100
22	SF3-TH	X	.006	.006	0	%100
23	SA-1	X	.006	.006	0	%100
24	SA-2	X	.006	.006	0	%100
25	MP-1	X	.009	.009	0	%100
26	MP-2	X	.009	.009	0	%100
27	MP-3	X	.009	.009	0	%100
28	MP-4	X	.009	.009	0	%100
29	RRU-1	X	.008	.008	0	%100
30	RRU-2	X	.008	.008	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.000614	-.000614	0	%100
40	SF2-CPT	Z	-.000614	-.000614	0	%100
41	SF3-CPB	Z	-.0009	-.0009	0	%100
42	SF3-CPT	Z	-.0009	-.0009	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.004	-.004	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.004	-.004	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.001	-.001	0	%100
50	SF2-TH	Z	-.001	-.001	0	%100
51	SF3-BH	Z	-.003	-.003	0	%100
52	SF3-TH	Z	-.003	-.003	0	%100
53	SA-1	Z	-.002	-.002	0	%100
54	SA-2	Z	-.002	-.002	0	%100
55	MP-1	Z	-.005	-.005	0	%100
56	MP-2	Z	-.005	-.005	0	%100
57	MP-3	Z	-.005	-.005	0	%100
58	MP-4	Z	-.005	-.005	0	%100
59	RRU-1	Z	-.004	-.004	0	%100
60	RRU-2	Z	-.004	-.004	0	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.003	.003	0	%100
2	SF2-V2	X	.003	.003	0	%100
3	SF3-V1	X	.003	.003	0	%100
4	SF3-V2	X	.003	.003	0	%100
5	SF2-D1	X	.003	.003	0	%100
6	SF2-D1-X	X	.003	.003	0	%100
7	SF3-D1	X	.003	.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 10 : 180 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
8	SF3-D1-X	X	.003	.003	0	%100
9	SF2-CPB	X	.000281	.000281	0	%100
10	SF2-CPT	X	.000281	.000281	0	%100
11	SF3-CPB	X	.000281	.000281	0	%100
12	SF3-CPT	X	.000281	.000281	0	%100
13	FFBH-1	X	.009	.009	0	%100
14	FFBH-2	X	.01	.01	0	%100
15	FFBH-3	X	.009	.009	0	%100
16	FFTH-1	X	.009	.009	0	%100
17	FFTH-2	X	.01	.01	0	%100
18	FFTH-3	X	.009	.009	0	%100
19	SF2-BH	X	.005	.005	0	%100
20	SF2-TH	X	.005	.005	0	%100
21	SF3-BH	X	.005	.005	0	%100
22	SF3-TH	X	.005	.005	0	%100
23	SA-1	X	.01	.01	0	%100
24	SA-2	X	.01	.01	0	%100
25	MP-1	X	.01	.01	0	%100
26	MP-2	X	.01	.01	0	%100
27	MP-3	X	.01	.01	0	%100
28	MP-4	X	.01	.01	0	%100
29	RRU-1	X	.009	.009	0	%100
30	RRU-2	X	.009	.009	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.003	.003	0	%100
6	SF2-D1-X	X	.003	.003	0	%100
7	SF3-D1	X	.003	.003	0	%100
8	SF3-D1-X	X	.003	.003	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.000905	.000905	0	%100
12	SF3-CPT	X	.000905	.000905	0	%100
13	FFBH-1	X	.007	.007	0	%100
14	FFBH-2	X	.008	.008	0	%100
15	FFBH-3	X	.007	.007	0	%100
16	FFTH-1	X	.007	.007	0	%100
17	FFTH-2	X	.008	.008	0	%100
18	FFTH-3	X	.007	.007	0	%100
19	SF2-BH	X	.006	.006	0	%100
20	SF2-TH	X	.006	.006	0	%100
21	SF3-BH	X	.002	.002	0	%100
22	SF3-TH	X	.002	.002	0	%100
23	SA-1	X	.008	.008	0	%100
24	SA-2	X	.008	.008	0	%100
25	MP-1	X	.009	.009	0	%100
26	MP-2	X	.009	.009	0	%100
27	MP-3	X	.009	.009	0	%100
28	MP-4	X	.009	.009	0	%100
29	RRU-1	X	.008	.008	0	%100
30	RRU-2	X	.008	.008	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.0009	.0009	0	%100
40	SF2-CPT	Z	.0009	.0009	0	%100
41	SF3-CPB	Z	.000614	.000614	0	%100
42	SF3-CPT	Z	.000614	.000614	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.004	.004	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.004	.004	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.003	.003	0	%100
50	SF2-TH	Z	.003	.003	0	%100
51	SF3-BH	Z	.001	.001	0	%100
52	SF3-TH	Z	.001	.001	0	%100
53	SA-1	Z	.003	.003	0	%100
54	SA-2	Z	.003	.003	0	%100
55	MP-1	Z	.005	.005	0	%100
56	MP-2	Z	.005	.005	0	%100
57	MP-3	Z	.005	.005	0	%100
58	MP-4	Z	.005	.005	0	%100
59	RRU-1	Z	.004	.004	0	%100
60	RRU-2	Z	.004	.004	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.004	.004	0	%100
14	FFBH-2	X	.005	.005	0	%100
15	FFBH-3	X	.004	.004	0	%100
16	FFTH-1	X	.004	.004	0	%100
17	FFTH-2	X	.005	.005	0	%100
18	FFTH-3	X	.004	.004	0	%100
19	SF2-BH	X	.005	.005	0	%100
20	SF2-TH	X	.005	.005	0	%100
21	SF3-BH	X	.000205	.000205	0	%100
22	SF3-TH	X	.000205	.000205	0	%100
23	SA-1	X	.006	.006	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 12 : 225 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
24	SA-2	X	.006	.006	0	%100
25	MP-1	X	.007	.007	0	%100
26	MP-2	X	.007	.007	0	%100
27	MP-3	X	.007	.007	0	%100
28	MP-4	X	.007	.007	0	%100
29	RRU-1	X	.006	.006	0	%100
30	RRU-2	X	.006	.006	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.001	.001	0	%100
42	SF3-CPT	Z	.001	.001	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.005	.005	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.005	.005	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.005	.005	0	%100
50	SF2-TH	Z	.005	.005	0	%100
51	SF3-BH	Z	.000201	.000201	0	%100
52	SF3-TH	Z	.000201	.000201	0	%100
53	SA-1	Z	.004	.004	0	%100
54	SA-2	Z	.004	.004	0	%100
55	MP-1	Z	.007	.007	0	%100
56	MP-2	Z	.007	.007	0	%100
57	MP-3	Z	.007	.007	0	%100
58	MP-4	Z	.007	.007	0	%100
59	RRU-1	Z	.006	.006	0	%100
60	RRU-2	Z	.006	.006	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.001	.001	0	%100
2	SF2-V2	X	.001	.001	0	%100
3	SF3-V1	X	.001	.001	0	%100
4	SF3-V2	X	.001	.001	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.003	.003	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
17	FFTH-2	X	.003	.003	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.003	.003	0	%100
20	SF2-TH	X	.003	.003	0	%100
21	SF3-BH	X	.000763	.000763	0	%100
22	SF3-TH	X	.000763	.000763	0	%100
23	SA-1	X	.003	.003	0	%100
24	SA-2	X	.003	.003	0	%100
25	MP-1	X	.005	.005	0	%100
26	MP-2	X	.005	.005	0	%100
27	MP-3	X	.005	.005	0	%100
28	MP-4	X	.005	.005	0	%100
29	RRU-1	X	.004	.004	0	%100
30	RRU-2	X	.004	.004	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.003	.003	0	%100
36	SF2-D1-X	Z	.003	.003	0	%100
37	SF3-D1	Z	.003	.003	0	%100
38	SF3-D1-X	Z	.003	.003	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.004	.004	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.004	.004	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.006	.006	0	%100
50	SF2-TH	Z	.006	.006	0	%100
51	SF3-BH	Z	.001	.001	0	%100
52	SF3-TH	Z	.001	.001	0	%100
53	SA-1	Z	.004	.004	0	%100
54	SA-2	Z	.004	.004	0	%100
55	MP-1	Z	.009	.009	0	%100
56	MP-2	Z	.009	.009	0	%100
57	MP-3	Z	.009	.009	0	%100
58	MP-4	Z	.009	.009	0	%100
59	RRU-1	Z	.008	.008	0	%100
60	RRU-2	Z	.008	.008	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Z	.003	.003	0	%100
2	SF2-V2	Z	.003	.003	0	%100
3	SF3-V1	Z	.003	.003	0	%100
4	SF3-V2	Z	.003	.003	0	%100
5	SF2-D1	Z	.003	.003	0	%100
6	SF2-D1-X	Z	.003	.003	0	%100
7	SF3-D1	Z	.003	.003	0	%100
8	SF3-D1-X	Z	.003	.003	0	%100
9	SF2-CPB	Z	.003	.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 14 : 270 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
10	SF2-CPT	Z	.003	.003	0	%100
11	SF3-CPB	Z	.003	.003	0	%100
12	SF3-CPT	Z	.003	.003	0	%100
13	FFBH-1	Z	1e-6	1e-6	0	%100
14	FFBH-2	Z	0	0	0	%100
15	FFBH-3	Z	1e-6	1e-6	0	%100
16	FFTH-1	Z	1e-6	1e-6	0	%100
17	FFTH-2	Z	0	0	0	%100
18	FFTH-3	Z	1e-6	1e-6	0	%100
19	SF2-BH	Z	.005	.005	0	%100
20	SF2-TH	Z	.005	.005	0	%100
21	SF3-BH	Z	.005	.005	0	%100
22	SF3-TH	Z	.005	.005	0	%100
23	SA-1	Z	.002	.002	0	%100
24	SA-2	Z	.002	.002	0	%100
25	MP-1	Z	.01	.01	0	%100
26	MP-2	Z	.01	.01	0	%100
27	MP-3	Z	.01	.01	0	%100
28	MP-4	Z	.01	.01	0	%100
29	RRU-1	Z	.009	.009	0	%100
30	RRU-2	Z	.009	.009	0	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.001	-.001	0	%100
2	SF2-V2	X	-.001	-.001	0	%100
3	SF3-V1	X	-.001	-.001	0	%100
4	SF3-V2	X	-.001	-.001	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.003	-.003	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.003	-.003	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.000763	-.000763	0	%100
20	SF2-TH	X	-.000763	-.000763	0	%100
21	SF3-BH	X	-.003	-.003	0	%100
22	SF3-TH	X	-.003	-.003	0	%100
23	SA-1	X	-.001	-.001	0	%100
24	SA-2	X	-.001	-.001	0	%100
25	MP-1	X	-.005	-.005	0	%100
26	MP-2	X	-.005	-.005	0	%100
27	MP-3	X	-.005	-.005	0	%100
28	MP-4	X	-.005	-.005	0	%100
29	RRU-1	X	-.004	-.004	0	%100
30	RRU-2	X	-.004	-.004	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.003	.003	0	%100
36	SF2-D1-X	Z	.003	.003	0	%100
37	SF3-D1	Z	.003	.003	0	%100
38	SF3-D1-X	Z	.003	.003	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.004	.004	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.004	.004	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.001	.001	0	%100
50	SF2-TH	Z	.001	.001	0	%100
51	SF3-BH	Z	.006	.006	0	%100
52	SF3-TH	Z	.006	.006	0	%100
53	SA-1	Z	.002	.002	0	%100
54	SA-2	Z	.002	.002	0	%100
55	MP-1	Z	.009	.009	0	%100
56	MP-2	Z	.009	.009	0	%100
57	MP-3	Z	.009	.009	0	%100
58	MP-4	Z	.009	.009	0	%100
59	RRU-1	Z	.008	.008	0	%100
60	RRU-2	Z	.008	.008	0	%100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100
13	FFBH-1	X	-.004	-.004	0	%100
14	FFBH-2	X	-.005	-.005	0	%100
15	FFBH-3	X	-.004	-.004	0	%100
16	FFTH-1	X	-.004	-.004	0	%100
17	FFTH-2	X	-.005	-.005	0	%100
18	FFTH-3	X	-.004	-.004	0	%100
19	SF2-BH	X	-.000205	-.000205	0	%100
20	SF2-TH	X	-.000205	-.000205	0	%100
21	SF3-BH	X	-.005	-.005	0	%100
22	SF3-TH	X	-.005	-.005	0	%100
23	SA-1	X	-.004	-.004	0	%100
24	SA-2	X	-.004	-.004	0	%100
25	MP-1	X	-.007	-.007	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
26	MP-2	X	-.007	-.007	0	%100
27	MP-3	X	-.007	-.007	0	%100
28	MP-4	X	-.007	-.007	0	%100
29	RRU-1	X	-.006	-.006	0	%100
30	RRU-2	X	-.006	-.006	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.001	.001	0	%100
40	SF2-CPT	Z	.001	.001	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.005	.005	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.005	.005	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.000201	.000201	0	%100
50	SF2-TH	Z	.000201	.000201	0	%100
51	SF3-BH	Z	.005	.005	0	%100
52	SF3-TH	Z	.005	.005	0	%100
53	SA-1	Z	.002	.002	0	%100
54	SA-2	Z	.002	.002	0	%100
55	MP-1	Z	.007	.007	0	%100
56	MP-2	Z	.007	.007	0	%100
57	MP-3	Z	.007	.007	0	%100
58	MP-4	Z	.007	.007	0	%100
59	RRU-1	Z	.006	.006	0	%100
60	RRU-2	Z	.006	.006	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.003	-.003	0	%100
6	SF2-D1-X	X	-.003	-.003	0	%100
7	SF3-D1	X	-.003	-.003	0	%100
8	SF3-D1-X	X	-.003	-.003	0	%100
9	SF2-CPB	X	-.000905	-.000905	0	%100
10	SF2-CPT	X	-.000905	-.000905	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100
13	FFBH-1	X	-.007	-.007	0	%100
14	FFBH-2	X	-.008	-.008	0	%100
15	FFBH-3	X	-.007	-.007	0	%100
16	FFTH-1	X	-.007	-.007	0	%100
17	FFTH-2	X	-.008	-.008	0	%100
18	FFTH-3	X	-.007	-.007	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
19	SF2-BH	X	-.002	-.002	0	%100
20	SF2-TH	X	-.002	-.002	0	%100
21	SF3-BH	X	-.006	-.006	0	%100
22	SF3-TH	X	-.006	-.006	0	%100
23	SA-1	X	-.006	-.006	0	%100
24	SA-2	X	-.006	-.006	0	%100
25	MP-1	X	-.009	-.009	0	%100
26	MP-2	X	-.009	-.009	0	%100
27	MP-3	X	-.009	-.009	0	%100
28	MP-4	X	-.009	-.009	0	%100
29	RRU-1	X	-.008	-.008	0	%100
30	RRU-2	X	-.008	-.008	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.000614	.000614	0	%100
40	SF2-CPT	Z	.000614	.000614	0	%100
41	SF3-CPB	Z	.0009	.0009	0	%100
42	SF3-CPT	Z	.0009	.0009	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.004	.004	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.004	.004	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.001	.001	0	%100
50	SF2-TH	Z	.001	.001	0	%100
51	SF3-BH	Z	.003	.003	0	%100
52	SF3-TH	Z	.003	.003	0	%100
53	SA-1	Z	.002	.002	0	%100
54	SA-2	Z	.002	.002	0	%100
55	MP-1	Z	.005	.005	0	%100
56	MP-2	Z	.005	.005	0	%100
57	MP-3	Z	.005	.005	0	%100
58	MP-4	Z	.005	.005	0	%100
59	RRU-1	Z	.004	.004	0	%100
60	RRU-2	Z	.004	.004	0	%100

Member Distributed Loads (BLC 18 : Ice Weight)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Y	-.005	-.005	0	%100
2	SF2-V2	Y	-.005	-.005	0	%100
3	SF3-V1	Y	-.005	-.005	0	%100
4	SF3-V2	Y	-.005	-.005	0	%100
5	SF2-D1	Y	-.005	-.005	0	%100
6	SF2-D1-X	Y	-.005	-.005	0	%100
7	SF3-D1	Y	-.005	-.005	0	%100
8	SF3-D1-X	Y	-.005	-.005	0	%100
9	SF2-CPB	Y	-.003	-.003	0	%100
10	SF2-CPT	Y	-.003	-.003	0	%100
11	SF3-CPB	Y	-.003	-.003	0	%100

Member Distributed Loads (BLC 18 : Ice Weight) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
12	SF3-CPT	Y	-.003	-.003	0	%100
13	FFBH-1	Y	-.01	-.01	0	%100
14	FFBH-2	Y	-.01	-.01	0	%100
15	FFBH-3	Y	-.01	-.01	0	%100
16	FFTH-1	Y	-.01	-.01	0	%100
17	FFTH-2	Y	-.01	-.01	0	%100
18	FFTH-3	Y	-.01	-.01	0	%100
19	SF2-BH	Y	-.009	-.009	0	%100
20	SF2-TH	Y	-.009	-.009	0	%100
21	SF3-BH	Y	-.009	-.009	0	%100
22	SF3-TH	Y	-.009	-.009	0	%100
23	SA-1	Y	-.009	-.009	0	%100
24	SA-2	Y	-.009	-.009	0	%100
25	MP-1	Y	-.008	-.008	0	%100
26	MP-2	Y	-.008	-.008	0	%100
27	MP-3	Y	-.008	-.008	0	%100
28	MP-4	Y	-.008	-.008	0	%100
29	RRU-1	Y	-.009	-.009	0	%100
30	RRU-2	Y	-.009	-.009	0	%100

Member Distributed Loads (BLC 19 : 0 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.005	-.005	0	%100
10	SF2-CPT	X	-.005	-.005	0	%100
11	SF3-CPB	X	-.005	-.005	0	%100
12	SF3-CPT	X	-.005	-.005	0	%100
13	FFBH-1	X	-.003	-.003	0	%100
14	FFBH-2	X	-.003	-.003	0	%100
15	FFBH-3	X	-.003	-.003	0	%100
16	FFTH-1	X	-.003	-.003	0	%100
17	FFTH-2	X	-.003	-.003	0	%100
18	FFTH-3	X	-.003	-.003	0	%100
19	SF2-BH	X	-.003	-.003	0	%100
20	SF2-TH	X	-.003	-.003	0	%100
21	SF3-BH	X	-.003	-.003	0	%100
22	SF3-TH	X	-.003	-.003	0	%100
23	SA-1	X	-.003	-.003	0	%100
24	SA-2	X	-.003	-.003	0	%100
25	MP-1	X	-.003	-.003	0	%100
26	MP-2	X	-.003	-.003	0	%100
27	MP-3	X	-.003	-.003	0	%100
28	MP-4	X	-.003	-.003	0	%100
29	RRU-1	X	-.003	-.003	0	%100
30	RRU-2	X	-.003	-.003	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.002	-.002	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.002	-.002	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.002	-.002	0	%100
20	SF2-TH	X	-.002	-.002	0	%100
21	SF3-BH	X	-.000672	-.000672	0	%100
22	SF3-TH	X	-.000672	-.000672	0	%100
23	SA-1	X	-.003	-.003	0	%100
24	SA-2	X	-.003	-.003	0	%100
25	MP-1	X	-.003	-.003	0	%100
26	MP-2	X	-.003	-.003	0	%100
27	MP-3	X	-.003	-.003	0	%100
28	MP-4	X	-.003	-.003	0	%100
29	RRU-1	X	-.002	-.002	0	%100
30	RRU-2	X	-.002	-.002	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.001	-.001	0	%100
36	SF2-D1-X	Z	-.001	-.001	0	%100
37	SF3-D1	Z	-.001	-.001	0	%100
38	SF3-D1-X	Z	-.001	-.001	0	%100
39	SF2-CPB	Z	-.001	-.001	0	%100
40	SF2-CPT	Z	-.001	-.001	0	%100
41	SF3-CPB	Z	-.000907	-.000907	0	%100
42	SF3-CPT	Z	-.000907	-.000907	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.001	-.001	0	%100
50	SF2-TH	Z	-.001	-.001	0	%100
51	SF3-BH	Z	-.000384	-.000384	0	%100
52	SF3-TH	Z	-.000384	-.000384	0	%100
53	SA-1	Z	-.001	-.001	0	%100
54	SA-2	Z	-.001	-.001	0	%100
55	MP-1	Z	-.002	-.002	0	%100
56	MP-2	Z	-.002	-.002	0	%100
57	MP-3	Z	-.002	-.002	0	%100
58	MP-4	Z	-.002	-.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
59	RRU-1	Z	-.001	-.001	0	%100
60	RRU-2	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.001	-.001	0	%100
2	SF2-V2	X	-.001	-.001	0	%100
3	SF3-V1	X	-.001	-.001	0	%100
4	SF3-V2	X	-.001	-.001	0	%100
5	SF2-D1	X	-.001	-.001	0	%100
6	SF2-D1-X	X	-.001	-.001	0	%100
7	SF3-D1	X	-.001	-.001	0	%100
8	SF3-D1-X	X	-.001	-.001	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.002	-.002	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.002	-.002	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.002	-.002	0	%100
20	SF2-TH	X	-.002	-.002	0	%100
21	SF3-BH	X	-7.6e-5	-7.6e-5	0	%100
22	SF3-TH	X	-7.6e-5	-7.6e-5	0	%100
23	SA-1	X	-.002	-.002	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	MP-1	X	-.002	-.002	0	%100
26	MP-2	X	-.002	-.002	0	%100
27	MP-3	X	-.002	-.002	0	%100
28	MP-4	X	-.002	-.002	0	%100
29	RRU-1	X	-.002	-.002	0	%100
30	RRU-2	X	-.002	-.002	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.002	-.002	0	%100
50	SF2-TH	Z	-.002	-.002	0	%100
51	SF3-BH	Z	-7.6e-5	-7.6e-5	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
52	SF3-TH	Z	-7.6e-5	-7.6e-5	0	%100
53	SA-1	Z	-.001	-.001	0	%100
54	SA-2	Z	-.001	-.001	0	%100
55	MP-1	Z	-.002	-.002	0	%100
56	MP-2	Z	-.002	-.002	0	%100
57	MP-3	Z	-.002	-.002	0	%100
58	MP-4	Z	-.002	-.002	0	%100
59	RRU-1	Z	-.002	-.002	0	%100
60	RRU-2	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.000943	-.000943	0	%100
2	SF2-V2	X	-.000943	-.000943	0	%100
3	SF3-V1	X	-.000943	-.000943	0	%100
4	SF3-V2	X	-.000943	-.000943	0	%100
5	SF2-D1	X	-.001	-.001	0	%100
6	SF2-D1-X	X	-.001	-.001	0	%100
7	SF3-D1	X	-.001	-.001	0	%100
8	SF3-D1-X	X	-.001	-.001	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.000751	-.000751	0	%100
14	FFBH-2	X	-.000787	-.000787	0	%100
15	FFBH-3	X	-.000751	-.000751	0	%100
16	FFTH-1	X	-.000751	-.000751	0	%100
17	FFTH-2	X	-.000787	-.000787	0	%100
18	FFTH-3	X	-.000751	-.000751	0	%100
19	SF2-BH	X	-.001	-.001	0	%100
20	SF2-TH	X	-.001	-.001	0	%100
21	SF3-BH	X	-.000284	-.000284	0	%100
22	SF3-TH	X	-.000284	-.000284	0	%100
23	SA-1	X	-.001	-.001	0	%100
24	SA-2	X	-.001	-.001	0	%100
25	MP-1	X	-.002	-.002	0	%100
26	MP-2	X	-.002	-.002	0	%100
27	MP-3	X	-.002	-.002	0	%100
28	MP-4	X	-.002	-.002	0	%100
29	RRU-1	X	-.001	-.001	0	%100
30	RRU-2	X	-.001	-.001	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.004	-.004	0	%100
40	SF2-CPT	Z	-.004	-.004	0	%100
41	SF3-CPB	Z	-.003	-.003	0	%100
42	SF3-CPT	Z	-.003	-.003	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.002	-.002	0	%100
50	SF2-TH	Z	-.002	-.002	0	%100
51	SF3-BH	Z	-.000487	-.000487	0	%100
52	SF3-TH	Z	-.000487	-.000487	0	%100
53	SA-1	Z	-.001	-.001	0	%100
54	SA-2	Z	-.001	-.001	0	%100
55	MP-1	Z	-.003	-.003	0	%100
56	MP-2	Z	-.003	-.003	0	%100
57	MP-3	Z	-.003	-.003	0	%100
58	MP-4	Z	-.003	-.003	0	%100
59	RRU-1	Z	-.002	-.002	0	%100
60	RRU-2	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 23 : 90 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Z	-.002	-.002	0	%100
2	SF2-V2	Z	-.002	-.002	0	%100
3	SF3-V1	Z	-.002	-.002	0	%100
4	SF3-V2	Z	-.002	-.002	0	%100
5	SF2-D1	Z	-.002	-.002	0	%100
6	SF2-D1-X	Z	-.002	-.002	0	%100
7	SF3-D1	Z	-.002	-.002	0	%100
8	SF3-D1-X	Z	-.002	-.002	0	%100
9	SF2-CPB	Z	-.004	-.004	0	%100
10	SF2-CPT	Z	-.004	-.004	0	%100
11	SF3-CPB	Z	-.004	-.004	0	%100
12	SF3-CPT	Z	-.004	-.004	0	%100
13	FFBH-1	Z	0	0	0	%100
14	FFBH-2	Z	0	0	0	%100
15	FFBH-3	Z	0	0	0	%100
16	FFTH-1	Z	0	0	0	%100
17	FFTH-2	Z	0	0	0	%100
18	FFTH-3	Z	0	0	0	%100
19	SF2-BH	Z	-.002	-.002	0	%100
20	SF2-TH	Z	-.002	-.002	0	%100
21	SF3-BH	Z	-.002	-.002	0	%100
22	SF3-TH	Z	-.002	-.002	0	%100
23	SA-1	Z	-.000553	-.000553	0	%100
24	SA-2	Z	-.000553	-.000553	0	%100
25	MP-1	Z	-.003	-.003	0	%100
26	MP-2	Z	-.003	-.003	0	%100
27	MP-3	Z	-.003	-.003	0	%100
28	MP-4	Z	-.003	-.003	0	%100
29	RRU-1	Z	-.003	-.003	0	%100
30	RRU-2	Z	-.003	-.003	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.000943	.000943	0	%100
2	SF2-V2	X	.000943	.000943	0	%100
3	SF3-V1	X	.000943	.000943	0	%100
4	SF3-V2	X	.000943	.000943	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
5	SF2-D1	X	.001	.001	0	%100
6	SF2-D1-X	X	.001	.001	0	%100
7	SF3-D1	X	.001	.001	0	%100
8	SF3-D1-X	X	.001	.001	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.000751	.000751	0	%100
14	FFBH-2	X	.000787	.000787	0	%100
15	FFBH-3	X	.000751	.000751	0	%100
16	FFTH-1	X	.000751	.000751	0	%100
17	FFTH-2	X	.000787	.000787	0	%100
18	FFTH-3	X	.000751	.000751	0	%100
19	SF2-BH	X	.000284	.000284	0	%100
20	SF2-TH	X	.000284	.000284	0	%100
21	SF3-BH	X	.001	.001	0	%100
22	SF3-TH	X	.001	.001	0	%100
23	SA-1	X	.000449	.000449	0	%100
24	SA-2	X	.000449	.000449	0	%100
25	MP-1	X	.002	.002	0	%100
26	MP-2	X	.002	.002	0	%100
27	MP-3	X	.002	.002	0	%100
28	MP-4	X	.002	.002	0	%100
29	RRU-1	X	.001	.001	0	%100
30	RRU-2	X	.001	.001	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.003	-.003	0	%100
40	SF2-CPT	Z	-.003	-.003	0	%100
41	SF3-CPB	Z	-.004	-.004	0	%100
42	SF3-CPT	Z	-.004	-.004	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.000487	-.000487	0	%100
50	SF2-TH	Z	-.000487	-.000487	0	%100
51	SF3-BH	Z	-.002	-.002	0	%100
52	SF3-TH	Z	-.002	-.002	0	%100
53	SA-1	Z	-.000592	-.000592	0	%100
54	SA-2	Z	-.000592	-.000592	0	%100
55	MP-1	Z	-.003	-.003	0	%100
56	MP-2	Z	-.003	-.003	0	%100
57	MP-3	Z	-.003	-.003	0	%100
58	MP-4	Z	-.003	-.003	0	%100
59	RRU-1	Z	-.002	-.002	0	%100
60	RRU-2	Z	-.002	-.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 25 : 135 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.001	.001	0	%100
2	SF2-V2	X	.001	.001	0	%100
3	SF3-V1	X	.001	.001	0	%100
4	SF3-V2	X	.001	.001	0	%100
5	SF2-D1	X	.001	.001	0	%100
6	SF2-D1-X	X	.001	.001	0	%100
7	SF3-D1	X	.001	.001	0	%100
8	SF3-D1-X	X	.001	.001	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.002	.002	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.002	.002	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	7.6e-5	7.6e-5	0	%100
20	SF2-TH	X	7.6e-5	7.6e-5	0	%100
21	SF3-BH	X	.002	.002	0	%100
22	SF3-TH	X	.002	.002	0	%100
23	SA-1	X	.001	.001	0	%100
24	SA-2	X	.001	.001	0	%100
25	MP-1	X	.002	.002	0	%100
26	MP-2	X	.002	.002	0	%100
27	MP-3	X	.002	.002	0	%100
28	MP-4	X	.002	.002	0	%100
29	RRU-1	X	.002	.002	0	%100
30	RRU-2	X	.002	.002	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-7.6e-5	-7.6e-5	0	%100
50	SF2-TH	Z	-7.6e-5	-7.6e-5	0	%100
51	SF3-BH	Z	-.002	-.002	0	%100
52	SF3-TH	Z	-.002	-.002	0	%100
53	SA-1	Z	-.000885	-.000885	0	%100
54	SA-2	Z	-.000885	-.000885	0	%100
55	MP-1	Z	-.002	-.002	0	%100
56	MP-2	Z	-.002	-.002	0	%100
57	MP-3	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
58	MP-4	Z	-.002	-.002	0	%100
59	RRU-1	Z	-.002	-.002	0	%100
60	RRU-2	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 26 : 150 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.002	.002	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.002	.002	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.000672	.000672	0	%100
20	SF2-TH	X	.000672	.000672	0	%100
21	SF3-BH	X	.002	.002	0	%100
22	SF3-TH	X	.002	.002	0	%100
23	SA-1	X	.002	.002	0	%100
24	SA-2	X	.002	.002	0	%100
25	MP-1	X	.003	.003	0	%100
26	MP-2	X	.003	.003	0	%100
27	MP-3	X	.003	.003	0	%100
28	MP-4	X	.003	.003	0	%100
29	RRU-1	X	.002	.002	0	%100
30	RRU-2	X	.002	.002	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.001	-.001	0	%100
36	SF2-D1-X	Z	-.001	-.001	0	%100
37	SF3-D1	Z	-.001	-.001	0	%100
38	SF3-D1-X	Z	-.001	-.001	0	%100
39	SF2-CPB	Z	-.000907	-.000907	0	%100
40	SF2-CPT	Z	-.000907	-.000907	0	%100
41	SF3-CPB	Z	-.001	-.001	0	%100
42	SF3-CPT	Z	-.001	-.001	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.000384	-.000384	0	%100
50	SF2-TH	Z	-.000384	-.000384	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
51	SF3-BH	Z	-.001	-.001	0	%100
52	SF3-TH	Z	-.001	-.001	0	%100
53	SA-1	Z	-.000868	-.000868	0	%100
54	SA-2	Z	-.000868	-.000868	0	%100
55	MP-1	Z	-.002	-.002	0	%100
56	MP-2	Z	-.002	-.002	0	%100
57	MP-3	Z	-.002	-.002	0	%100
58	MP-4	Z	-.002	-.002	0	%100
59	RRU-1	Z	-.001	-.001	0	%100
60	RRU-2	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 27 : 180 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.005	.005	0	%100
10	SF2-CPT	X	.005	.005	0	%100
11	SF3-CPB	X	.005	.005	0	%100
12	SF3-CPT	X	.005	.005	0	%100
13	FFBH-1	X	.003	.003	0	%100
14	FFBH-2	X	.003	.003	0	%100
15	FFBH-3	X	.003	.003	0	%100
16	FFTH-1	X	.003	.003	0	%100
17	FFTH-2	X	.003	.003	0	%100
18	FFTH-3	X	.003	.003	0	%100
19	SF2-BH	X	.003	.003	0	%100
20	SF2-TH	X	.003	.003	0	%100
21	SF3-BH	X	.003	.003	0	%100
22	SF3-TH	X	.003	.003	0	%100
23	SA-1	X	.003	.003	0	%100
24	SA-2	X	.003	.003	0	%100
25	MP-1	X	.003	.003	0	%100
26	MP-2	X	.003	.003	0	%100
27	MP-3	X	.003	.003	0	%100
28	MP-4	X	.003	.003	0	%100
29	RRU-1	X	.003	.003	0	%100
30	RRU-2	X	.003	.003	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.002	.002	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.002	.002	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.002	.002	0	%100
20	SF2-TH	X	.002	.002	0	%100
21	SF3-BH	X	.000672	.000672	0	%100
22	SF3-TH	X	.000672	.000672	0	%100
23	SA-1	X	.003	.003	0	%100
24	SA-2	X	.003	.003	0	%100
25	MP-1	X	.003	.003	0	%100
26	MP-2	X	.003	.003	0	%100
27	MP-3	X	.003	.003	0	%100
28	MP-4	X	.003	.003	0	%100
29	RRU-1	X	.002	.002	0	%100
30	RRU-2	X	.002	.002	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.001	.001	0	%100
36	SF2-D1-X	Z	.001	.001	0	%100
37	SF3-D1	Z	.001	.001	0	%100
38	SF3-D1-X	Z	.001	.001	0	%100
39	SF2-CPB	Z	.001	.001	0	%100
40	SF2-CPT	Z	.001	.001	0	%100
41	SF3-CPB	Z	.000907	.000907	0	%100
42	SF3-CPT	Z	.000907	.000907	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.001	.001	0	%100
50	SF2-TH	Z	.001	.001	0	%100
51	SF3-BH	Z	.000384	.000384	0	%100
52	SF3-TH	Z	.000384	.000384	0	%100
53	SA-1	Z	.001	.001	0	%100
54	SA-2	Z	.001	.001	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	RRU-1	Z	.001	.001	0	%100
60	RRU-2	Z	.001	.001	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.001	.001	0	%100
2	SF2-V2	X	.001	.001	0	%100
3	SF3-V1	X	.001	.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
4	SF3-V2	X	.001	.001	0	%100
5	SF2-D1	X	.001	.001	0	%100
6	SF2-D1-X	X	.001	.001	0	%100
7	SF3-D1	X	.001	.001	0	%100
8	SF3-D1-X	X	.001	.001	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.002	.002	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.002	.002	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.002	.002	0	%100
20	SF2-TH	X	.002	.002	0	%100
21	SF3-BH	X	7.6e-5	7.6e-5	0	%100
22	SF3-TH	X	7.6e-5	7.6e-5	0	%100
23	SA-1	X	.002	.002	0	%100
24	SA-2	X	.002	.002	0	%100
25	MP-1	X	.002	.002	0	%100
26	MP-2	X	.002	.002	0	%100
27	MP-3	X	.002	.002	0	%100
28	MP-4	X	.002	.002	0	%100
29	RRU-1	X	.002	.002	0	%100
30	RRU-2	X	.002	.002	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.002	.002	0	%100
50	SF2-TH	Z	.002	.002	0	%100
51	SF3-BH	Z	7.6e-5	7.6e-5	0	%100
52	SF3-TH	Z	7.6e-5	7.6e-5	0	%100
53	SA-1	Z	.001	.001	0	%100
54	SA-2	Z	.001	.001	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	RRU-1	Z	.002	.002	0	%100
60	RRU-2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.000943	.000943	0	%100
2	SF2-V2	X	.000943	.000943	0	%100
3	SF3-V1	X	.000943	.000943	0	%100
4	SF3-V2	X	.000943	.000943	0	%100
5	SF2-D1	X	.001	.001	0	%100
6	SF2-D1-X	X	.001	.001	0	%100
7	SF3-D1	X	.001	.001	0	%100
8	SF3-D1-X	X	.001	.001	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.000751	.000751	0	%100
14	FFBH-2	X	.000787	.000787	0	%100
15	FFBH-3	X	.000751	.000751	0	%100
16	FFTH-1	X	.000751	.000751	0	%100
17	FFTH-2	X	.000787	.000787	0	%100
18	FFTH-3	X	.000751	.000751	0	%100
19	SF2-BH	X	.001	.001	0	%100
20	SF2-TH	X	.001	.001	0	%100
21	SF3-BH	X	.000284	.000284	0	%100
22	SF3-TH	X	.000284	.000284	0	%100
23	SA-1	X	.001	.001	0	%100
24	SA-2	X	.001	.001	0	%100
25	MP-1	X	.002	.002	0	%100
26	MP-2	X	.002	.002	0	%100
27	MP-3	X	.002	.002	0	%100
28	MP-4	X	.002	.002	0	%100
29	RRU-1	X	.001	.001	0	%100
30	RRU-2	X	.001	.001	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.004	.004	0	%100
40	SF2-CPT	Z	.004	.004	0	%100
41	SF3-CPB	Z	.003	.003	0	%100
42	SF3-CPT	Z	.003	.003	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.002	.002	0	%100
50	SF2-TH	Z	.002	.002	0	%100
51	SF3-BH	Z	.000487	.000487	0	%100
52	SF3-TH	Z	.000487	.000487	0	%100
53	SA-1	Z	.001	.001	0	%100
54	SA-2	Z	.001	.001	0	%100
55	MP-1	Z	.003	.003	0	%100
56	MP-2	Z	.003	.003	0	%100
57	MP-3	Z	.003	.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 30 : 240 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
58	MP-4	Z	.003	.003	0	%100
59	RRU-1	Z	.002	.002	0	%100
60	RRU-2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Z	.002	.002	0	%100
2	SF2-V2	Z	.002	.002	0	%100
3	SF3-V1	Z	.002	.002	0	%100
4	SF3-V2	Z	.002	.002	0	%100
5	SF2-D1	Z	.002	.002	0	%100
6	SF2-D1-X	Z	.002	.002	0	%100
7	SF3-D1	Z	.002	.002	0	%100
8	SF3-D1-X	Z	.002	.002	0	%100
9	SF2-CPB	Z	.004	.004	0	%100
10	SF2-CPT	Z	.004	.004	0	%100
11	SF3-CPB	Z	.004	.004	0	%100
12	SF3-CPT	Z	.004	.004	0	%100
13	FFBH-1	Z	0	0	0	%100
14	FFBH-2	Z	0	0	0	%100
15	FFBH-3	Z	0	0	0	%100
16	FFTH-1	Z	0	0	0	%100
17	FFTH-2	Z	0	0	0	%100
18	FFTH-3	Z	0	0	0	%100
19	SF2-BH	Z	.002	.002	0	%100
20	SF2-TH	Z	.002	.002	0	%100
21	SF3-BH	Z	.002	.002	0	%100
22	SF3-TH	Z	.002	.002	0	%100
23	SA-1	Z	.000553	.000553	0	%100
24	SA-2	Z	.000553	.000553	0	%100
25	MP-1	Z	.003	.003	0	%100
26	MP-2	Z	.003	.003	0	%100
27	MP-3	Z	.003	.003	0	%100
28	MP-4	Z	.003	.003	0	%100
29	RRU-1	Z	.003	.003	0	%100
30	RRU-2	Z	.003	.003	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.000943	-.000943	0	%100
2	SF2-V2	X	-.000943	-.000943	0	%100
3	SF3-V1	X	-.000943	-.000943	0	%100
4	SF3-V2	X	-.000943	-.000943	0	%100
5	SF2-D1	X	-.001	-.001	0	%100
6	SF2-D1-X	X	-.001	-.001	0	%100
7	SF3-D1	X	-.001	-.001	0	%100
8	SF3-D1-X	X	-.001	-.001	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.000751	-.000751	0	%100
14	FFBH-2	X	-.000787	-.000787	0	%100
15	FFBH-3	X	-.000751	-.000751	0	%100
16	FFTH-1	X	-.000751	-.000751	0	%100
17	FFTH-2	X	-.000787	-.000787	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
18	FFTH-3	X	-.000751	-.000751	0	%100
19	SF2-BH	X	-.000284	-.000284	0	%100
20	SF2-TH	X	-.000284	-.000284	0	%100
21	SF3-BH	X	-.001	-.001	0	%100
22	SF3-TH	X	-.001	-.001	0	%100
23	SA-1	X	-.000449	-.000449	0	%100
24	SA-2	X	-.000449	-.000449	0	%100
25	MP-1	X	-.002	-.002	0	%100
26	MP-2	X	-.002	-.002	0	%100
27	MP-3	X	-.002	-.002	0	%100
28	MP-4	X	-.002	-.002	0	%100
29	RRU-1	X	-.001	-.001	0	%100
30	RRU-2	X	-.001	-.001	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.003	.003	0	%100
40	SF2-CPT	Z	.003	.003	0	%100
41	SF3-CPB	Z	.004	.004	0	%100
42	SF3-CPT	Z	.004	.004	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.000487	.000487	0	%100
50	SF2-TH	Z	.000487	.000487	0	%100
51	SF3-BH	Z	.002	.002	0	%100
52	SF3-TH	Z	.002	.002	0	%100
53	SA-1	Z	.000592	.000592	0	%100
54	SA-2	Z	.000592	.000592	0	%100
55	MP-1	Z	.003	.003	0	%100
56	MP-2	Z	.003	.003	0	%100
57	MP-3	Z	.003	.003	0	%100
58	MP-4	Z	.003	.003	0	%100
59	RRU-1	Z	.002	.002	0	%100
60	RRU-2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.001	-.001	0	%100
2	SF2-V2	X	-.001	-.001	0	%100
3	SF3-V1	X	-.001	-.001	0	%100
4	SF3-V2	X	-.001	-.001	0	%100
5	SF2-D1	X	-.001	-.001	0	%100
6	SF2-D1-X	X	-.001	-.001	0	%100
7	SF3-D1	X	-.001	-.001	0	%100
8	SF3-D1-X	X	-.001	-.001	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Distributed Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.002	-.002	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.002	-.002	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-7.6e-5	-7.6e-5	0	%100
20	SF2-TH	X	-7.6e-5	-7.6e-5	0	%100
21	SF3-BH	X	-.002	-.002	0	%100
22	SF3-TH	X	-.002	-.002	0	%100
23	SA-1	X	-.001	-.001	0	%100
24	SA-2	X	-.001	-.001	0	%100
25	MP-1	X	-.002	-.002	0	%100
26	MP-2	X	-.002	-.002	0	%100
27	MP-3	X	-.002	-.002	0	%100
28	MP-4	X	-.002	-.002	0	%100
29	RRU-1	X	-.002	-.002	0	%100
30	RRU-2	X	-.002	-.002	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	7.6e-5	7.6e-5	0	%100
50	SF2-TH	Z	7.6e-5	7.6e-5	0	%100
51	SF3-BH	Z	.002	.002	0	%100
52	SF3-TH	Z	.002	.002	0	%100
53	SA-1	Z	.000885	.000885	0	%100
54	SA-2	Z	.000885	.000885	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	RRU-1	Z	.002	.002	0	%100
60	RRU-2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.002	-.002	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.002	-.002	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.000672	-.000672	0	%100
20	SF2-TH	X	-.000672	-.000672	0	%100
21	SF3-BH	X	-.002	-.002	0	%100
22	SF3-TH	X	-.002	-.002	0	%100
23	SA-1	X	-.002	-.002	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	MP-1	X	-.003	-.003	0	%100
26	MP-2	X	-.003	-.003	0	%100
27	MP-3	X	-.003	-.003	0	%100
28	MP-4	X	-.003	-.003	0	%100
29	RRU-1	X	-.002	-.002	0	%100
30	RRU-2	X	-.002	-.002	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.001	.001	0	%100
36	SF2-D1-X	Z	.001	.001	0	%100
37	SF3-D1	Z	.001	.001	0	%100
38	SF3-D1-X	Z	.001	.001	0	%100
39	SF2-CPB	Z	.000907	.000907	0	%100
40	SF2-CPT	Z	.000907	.000907	0	%100
41	SF3-CPB	Z	.001	.001	0	%100
42	SF3-CPT	Z	.001	.001	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.000384	.000384	0	%100
50	SF2-TH	Z	.000384	.000384	0	%100
51	SF3-BH	Z	.001	.001	0	%100
52	SF3-TH	Z	.001	.001	0	%100
53	SA-1	Z	.000868	.000868	0	%100
54	SA-2	Z	.000868	.000868	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	RRU-1	Z	.001	.001	0	%100
60	RRU-2	Z	.001	.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Alpha & Beta)

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Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
No Data to Print ...						

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Lo...	...	phi*...	phi*...	phi*...	phi*...	...	Eqn
1	SF3-V2	SR 5/8	.404	0	43	.028	3....		2.503	9.94	.104	.104		H1-...
2	MP-4	PIPE_2.0	.385	5.667	62	.048	5....		17.8...	32.13	1.872	1.872		H1-...
3	SF3-C...	PL3.5x5/8	.341	0	34	.249	0	y	68.4...	70.8...	.923	5.168		H1-...
4	SF2-V2	SR 5/8	.298	0	42	.027	0		2.503	9.94	.104	.104		H1-...
5	SF3-V1	SR 5/8	.279	3.333	49	.027	3....		2.503	9.94	.104	.104		H1-...
6	MP-3	PIPE_2.0	.249	2.333	18	.044	2....		17.8...	32.13	1.872	1.872		H1-...
7	FFBH-3	PIPE_2.5	.236	0	64	.049	0		30.5...	50.7...	3.596	3.596		H1-...
8	SF2-C...	PL3.5x5/8	.234	0	35	.154	.383	y	68.4...	70.8...	.923	5.168		H1-...
9	SF3-TH	PIPE_2.0	.234	0	61	.117	.156		29.81	32.13	1.872	1.872		H1-...
10	FFTH-2	PIPE_2.5	.231	0	26	.047	0		41.3...	50.7...	3.596	3.596		H1-...
11	FFTH-1	PIPE_2.5	.228	3.75	26	.052	3.75		30.5...	50.7...	3.596	3.596		H1-...
12	SF3-C...	PL3.5x5/8	.225	0	43	.189	0	y	68.4...	70.8...	.923	5.168		H1-...
13	MP-1	PIPE_2.0	.213	2.333	38	.060	2....		17.8...	32.13	1.872	1.872		H1-...
14	FFTH-3	PIPE_2.5	.211	0	57	.033	0		30.5...	50.7...	3.596	3.596		H1-...
15	FFBH-2	PIPE_2.5	.192	5	65	.054	5		41.3...	50.7...	3.596	3.596		H1-...
16	SF3-BH	PIPE_2.0	.191	2.5	52	.162	2.5		29.81	32.13	1.872	1.872		H1-...
17	SF2-TH	PIPE_2.0	.175	0	42	.118	.156		29.81	32.13	1.872	1.872		H1-...
18	SF3-D...	SR 3/4	.161	.304	45	.029	4....		3.322	14.3...	.179	.179		H1-...
19	SF2-V1	SR 5/8	.159	3.333	36	.026	3....		2.503	9.94	.104	.104		H1-...
20	FFBH-1	PIPE_2.5	.155	3.75	34	.048	3.75		30.5...	50.7...	3.596	3.596		H1-...
21	SF2-C...	PL3.5x5/8	.144	0	42	.118	.383	y	68.4...	70.8...	.923	5.168		H1-...
22	SF2-BH	PIPE_2.0	.130	2.5	35	.111	2.5		29.81	32.13	1.872	1.872		H1-...
23	MP-2	PIPE_2.0	.123	2.333	26	.025	2....		17.8...	32.13	1.872	1.872		H1-...
24	SF2-D...	SR 3/4	.120	.304	38	.024	.26		3.322	14.3...	.179	.179		H1-...
25	RRU-2	PIPE_2.0	.089	3.833	35	.013	.5		32.0...	32.13	1.872	1.872		H1-...
26	RRU-1	PIPE_2.0	.085	3.833	34	.021	.5		32.0...	32.13	1.872	1.872		H1-...
27	SA-2	PIPE_2.0	.041	3.285	45	.004	0		19.1...	32.13	1.872	1.872		H1-...
28	SA-1	PIPE_2.0	.040	3.285	39	.004	0		19.1...	32.13	1.872	1.872		H1-...
29	SF2-D1	SR 3/4	.000	0	98	.000	0		3.322	14.3...	.179	.179	1	H1-...
30	SF3-D1	SR 3/4	.000	0	98	.000	0		3.322	14.3...	.179	.179	1	H1-...

Envelope None Cold Formed Steel Code Checks

Member	Shape	Code Check	Loc[ft]	LC	Shea...	Loc[...	Dir	LC	Pn[k]	Tn[k]	Mnyy[...	Mnzz[...	Cb	Cmyy	Cmzz	Eqn
No Data to Print ...																

(Global) Model Settings

Display Sections for Member Calcs	5
Max Internal Sections for Member Calcs	97
Include Shear Deformation?	Yes
Increase Nailing Capacity for Wind?	Yes
Include Warping?	Yes
Trans Load Btwn Intersecting Wood Wall?	Yes
Area Load Mesh (in^2)	144
Merge Tolerance (in)	.12
P-Delta Analysis Tolerance	0.50%
Include P-Delta for Walls?	Yes
Automatically Iterate Stiffness for Walls?	Yes
Max Iterations for Wall Stiffness	3
Gravity Acceleration (ft/sec^2)	32.2
Wall Mesh Size (in)	24
Eigensolution Convergence Tol. (1.E-)	4
Vertical Axis	Y
Global Member Orientation Plane	XZ
Static Solver	Sparse Accelerated
Dynamic Solver	Accelerated Solver

Hot Rolled Steel Code	AISC 15th(360-16): LRFD
Adjust Stiffness?	No
RISAConnection Code	None
Cold Formed Steel Code	None
Wood Code	None
Wood Temperature	< 100F
Concrete Code	None
Masonry Code	None
Aluminum Code	None - Building
Stainless Steel Code	None

Number of Shear Regions	4
Region Spacing Increment (in)	4
Biaxial Column Method	Exact Integration
Parme Beta Factor (PCA)	.65
Concrete Stress Block	Rectangular
Use Cracked Sections?	Yes
Use Cracked Sections Slab?	No
Bad Framing Warnings?	No
Unused Force Warnings?	Yes
Min 1 Bar Diam. Spacing?	No
Concrete Rebar Set	REBAR_SET_ASTMA615
Min % Steel for Column	1
Max % Steel for Column	8

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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(Global) Model Settings, Continued

Seismic Code	ASCE 7-10
Seismic Base Elevation (ft)	Not Entered
Add Base Weight?	Yes
Ct X	.02
Ct Z	.02
T X (sec)	Not Entered
T Z (sec)	Not Entered
R X	3
R Z	3
Ct Exp. X	.75
Ct Exp. Z	.75
SD1	1
SDS	1
S1	1
TL (sec)	5
Risk Cat	I or II
Drift Cat	Other
Om Z	1
Om X	1
Cd Z	1
Cd X	1
Rho Z	1
Rho X	1

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Face Horizontals	PIPE_2.5	None	None	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
2	Support Horizontal	PIPE_2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
3	Bracing 1	SR 5/8	None	None	A36 Gr.36	Typical	.307	.007	.007	.015
4	Bracing 2	SR 3/4	None	None	A36 Gr.36	Typical	.442	.016	.016	.031
5	Connection Plate	PL3.5x5/8	None	None	A36 Gr.36	Typical	2.188	.071	2.233	.253
6	Mount Pipe	PIPE_2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
7	Stabilizer Arm	PIPE_2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
8	Mount Pipe Connection	L3X3X4	None	None	A36 Gr.36	Typical	1.44	1.23	1.23	.031

Cold Formed Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Ru...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	CF1A	8CU1.25X057	Beam	None	A653 SS ...	Typical	.581	.057	4.41	.00063

Material Takeoff

	Material	Size	Pieces	Length[ft]	Weight[K]
1	General				
2	RIGID		4	2.8	0
3	Total General		4	2.8	0
4					
5	Hot Rolled Steel				
6	A36 Gr.36	PL3.5x5/8	4	1.5	0
7	A36 Gr.36	SR 3/4	4	16.7	0
8	A36 Gr.36	SR 5/8	4	13.3	0
9	A53 Gr.B	PIPE_2.0	12	63.1	.2
10	A53 Gr.B	PIPE_2.5	6	25	.1
11	Total HR Steel		30	119.7	.4

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	SF1-1	Reaction	Reaction	Reaction			
2	SF1-2	Reaction	Reaction	Reaction			
3	N56AG	Reaction	Reaction	Reaction			
4	N57G	Reaction	Reaction	Reaction			

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design Rules
1	SF2-V1	SF2-V...	SF2-V...			Bracing 1	None	None	A36 Gr.36	Typical
2	SF2-V2	SF2-V...	SF2-V...			Bracing 1	None	None	A36 Gr.36	Typical
3	SF3-V1	SF3-V...	SF3-V...			Bracing 1	None	None	A36 Gr.36	Typical
4	SF3-V2	SF3-V...	SF3-V...			Bracing 1	None	None	A36 Gr.36	Typical
5	SF2-D1	SF2-2	SF2-3			Bracing 2	None	None	A36 Gr.36	Typical
6	SF2-D1-X	SF2-1	SF2-4			Bracing 2	None	None	A36 Gr.36	Typical
7	SF3-D1	SF3-2	SF3-3			Bracing 2	None	None	A36 Gr.36	Typical
8	SF3-D1-X	SF3-1	SF3-4			Bracing 2	None	None	A36 Gr.36	Typical
9	SF2-CPB	SF2-4	SF2-6		90	Connection Plate	None	None	A36 Gr.36	Typical
10	SF2-CPT	SF2-3	SF2-5		90	Connection Plate	None	None	A36 Gr.36	Typical
11	SF3-CPB	SF3-4	SF3-6		90	Connection Plate	None	None	A36 Gr.36	Typical
12	SF3-CPT	SF3-3	SF3-5		90	Connection Plate	None	None	A36 Gr.36	Typical
13	FFBH-1	FF3	SF2-6			Face Horizontals	None	None	A53 Gr.B	Typical
14	FFBH-2	SF2-6	SF3-6			Face Horizontals	None	None	A53 Gr.B	Typical
15	FFBH-3	SF3-6	FF4			Face Horizontals	None	None	A53 Gr.B	Typical
16	FFTH-1	FF1	SF2-5			Face Horizontals	None	None	A53 Gr.B	Typical
17	FFTH-2	SF2-5	SF3-5			Face Horizontals	None	None	A53 Gr.B	Typical
18	FFTH-3	SF3-5	FF2			Face Horizontals	None	None	A53 Gr.B	Typical
19	BC-BH1	SF3-2	SF1-2			RIGID	None	None	RIGID	Typical
20	BC-BH2	SF1-2	SF2-2			RIGID	None	None	RIGID	Typical
21	BC-TH1	SF3-1	SF1-1			RIGID	None	None	RIGID	Typical
22	BC-TH2	SF1-1	SF2-1			RIGID	None	None	RIGID	Typical
23	SF2-BH	SF2-2	SF2-4			Support Horizontal	None	None	A53 Gr.B	Typical
24	SF2-TH	SF2-1	SF2-3			Support Horizontal	None	None	A53 Gr.B	Typical
25	SF3-BH	SF3-2	SF3-4			Support Horizontal	None	None	A53 Gr.B	Typical
26	SF3-TH	SF3-1	SF3-3			Support Horizontal	None	None	A53 Gr.B	Typical
27	SA-1	SA-1A	N56AG			Stabilizer Arm	None	None	A53 Gr.B	Typical
28	SA-2	N53B	N57G			Stabilizer Arm	None	None	A53 Gr.B	Typical
29	MP-1	N41	N45			Mount Pipe	None	None	A53 Gr.B	Typical
30	MP-2	N44	N48A			Mount Pipe	None	None	A53 Gr.B	Typical
31	MP-3	N43	N47			Mount Pipe	None	None	A53 Gr.B	Typical
32	MP-4	N42	N46			Mount Pipe	None	None	A53 Gr.B	Typical
33	RRU-1	N53A	N55A			Mount Pipe	None	None	A53 Gr.B	Typical
34	RRU-2	N54A	N56B			Mount Pipe	None	None	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	SF2-V1						Yes	** NA **			None
2	SF2-V2						Yes	** NA **			None
3	SF3-V1						Yes	** NA **			None
4	SF3-V2						Yes	** NA **			None
5	SF2-D1					Tension ...	Yes	** NA **			None
6	SF2-D1-X					Tension ...	Yes	** NA **			None
7	SF3-D1					Tension ...	Yes	** NA **			None
8	SF3-D1-X					Tension ...	Yes	** NA **			None
9	SF2-CPB		BenPIN				Yes	** NA **			None

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
10	SF2-CPT		BenPIN				Yes	** NA **			None
11	SF3-CPB		BenPIN				Yes	** NA **			None
12	SF3-CPT		BenPIN				Yes	** NA **			None
13	FFBH-1						Yes	** NA **			None
14	FFBH-2						Yes	** NA **			None
15	FFBH-3						Yes	** NA **			None
16	FFTH-1						Yes	** NA **			None
17	FFTH-2						Yes	** NA **			None
18	FFTH-3						Yes	** NA **			None
19	BC-BH1						Yes	** NA **			None
20	BC-BH2						Yes	** NA **			None
21	BC-TH1						Yes	** NA **			None
22	BC-TH2						Yes	** NA **			None
23	SF2-BH						Yes	** NA **			None
24	SF2-TH						Yes	** NA **			None
25	SF3-BH						Yes	** NA **			None
26	SF3-TH						Yes	** NA **			None
27	SA-1	BenPIN					Yes	** NA **			None
28	SA-2	BenPIN					Yes	** NA **			None
29	MP-1						Yes	** NA **			None
30	MP-2						Yes	** NA **			None
31	MP-3						Yes	** NA **			None
32	MP-4						Yes	** NA **			None
33	RRU-1						Yes	** NA **			None
34	RRU-2						Yes	** NA **			None

Hot Rolled Steel Design Parameters

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
1	SF2-V1	Bracing 1	3.333						.65	.65		Lateral
2	SF2-V2	Bracing 1	3.333						.65	.65		Lateral
3	SF3-V1	Bracing 1	3.333						.65	.65		Lateral
4	SF3-V2	Bracing 1	3.333						.65	.65		Lateral
5	SF2-D1	Bracing 2	4.167						.65	.65		Lateral
6	SF2-D1-X	Bracing 2	4.167						.65	.65		Lateral
7	SF3-D1	Bracing 2	4.167						.65	.65		Lateral
8	SF3-D1-X	Bracing 2	4.167						.65	.65		Lateral
9	SF2-CPB	Connection Plate	.383						1	1		Lateral
10	SF2-CPT	Connection Plate	.383						1	1		Lateral
11	SF3-CPB	Connection Plate	.383						1	1		Lateral
12	SF3-CPT	Connection Plate	.383						1	1		Lateral
13	FFBH-1	Face Horizontals	3.75						2.1	2.1		Lateral
14	FFBH-2	Face Horizontals	5						1	1		Lateral
15	FFBH-3	Face Horizontals	3.75						2.1	2.1		Lateral
16	FFTH-1	Face Horizontals	3.75						2.1	2.1		Lateral
17	FFTH-2	Face Horizontals	5						1	1		Lateral
18	FFTH-3	Face Horizontals	3.75						2.1	2.1		Lateral
19	SF2-BH	Support Horizontal	2.5		2.145				1	1		Lateral
20	SF2-TH	Support Horizontal	2.5		2.145				1	1		Lateral
21	SF3-BH	Support Horizontal	2.5		2.145				1	1		Lateral
22	SF3-TH	Support Horizontal	2.5		2.145				1	1		Lateral
23	SA-1	Stabilizer Arm	6.571						1	1		Lateral
24	SA-2	Stabilizer Arm	6.571						1	1		Lateral
25	MP-1	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
26	MP-2	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
27	MP-3	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length...	Lbyy[ft]	Lbzz[ft]	Lcomp top...	Lcomp bot...	L-torq...	Kyy	Kzz	Cb	Funct...
28	MP-4	Mount Pipe	8	Segment	Segment				2.1	2.1		Lateral
29	RRU-1	Mount Pipe	4	Segment	Segment				2.1	2.1		Lateral
30	RRU-2	Mount Pipe	4	Segment	Segment				2.1	2.1		Lateral

Cold Formed Steel Design Parameters

Label	Shape	Lengt...	Lbyy[ft]	Lbzz[ft]	Lcomp to...	Lcomp b...	Kyy	Kzz	Cm-yy	Cm-zz	Cb	R	y sway	z sway
No Data to Print ...														

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(P...
1	Dead	None		-1			12			
2	0 Wind - No Ice	None					12	30		
3	30 Wind - No Ice	None					24	60		
4	45 Wind - No Ice	None					24	60		
5	60 Wind - No Ice	None					24	60		
6	90 Wind - No Ice	None					12	30		
7	120 Wind - No Ice	None					24	60		
8	135 Wind - No Ice	None					24	60		
9	150 Wind - No Ice	None					24	60		
10	180 Wind - No Ice	None					12	30		
11	210 Wind - No Ice	None					24	60		
12	225 Wind - No Ice	None					24	60		
13	240 Wind - No Ice	None					24	60		
14	270 Wind - No Ice	None					12	30		
15	300 Wind - No Ice	None					24	60		
16	315 Wind - No Ice	None					24	60		
17	330 Wind - No Ice	None					24	60		
18	Ice Weight	None					12	30		
19	0 Wind - Ice	None					12	30		
20	30 Wind - Ice	None					24	60		
21	45 Wind - Ice	None					24	60		
22	60 Wind - Ice	None					24	60		
23	90 Wind - Ice	None					12	30		
24	120 Wind - Ice	None					24	60		
25	135 Wind - Ice	None					24	60		
26	150 Wind - Ice	None					24	60		
27	180 Wind - Ice	None					12	30		
28	210 Wind - Ice	None					24	60		
29	225 Wind - Ice	None					24	60		
30	240 Wind - Ice	None					24	60		
31	270 Wind - Ice	None					12	30		
32	300 Wind - Ice	None					24	60		
33	315 Wind - Ice	None					24	60		
34	330 Wind - Ice	None					24	60		
35	Lm	None				1				
36	Lv	None				1				
37	Seismic Load X	ELX	-1				12			
38	Seismic Load Z	ELZ			-1		12			

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Load Combinations

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	1.4D	Yes	Y		1	1.4																				
2	0.9D+1.0 0-Wind	Yes	Y		1	.9	2	1																		
3	0.9D+1.0 30-Wi...	Yes	Y		1	.9	3	1																		
4	0.9D+1.0 45-Wi...	Yes	Y		1	.9	4	1																		
5	0.9D+1.0 60-Wi...	Yes	Y		1	.9	5	1																		
6	0.9D+1.0 90-Wi...	Yes	Y		1	.9	6	1																		
7	0.9D+1.0 120-...	Yes	Y		1	.9	7	1																		
8	0.9D+1.0 135-...	Yes	Y		1	.9	8	1																		
9	0.9D+1.0 150-...	Yes	Y		1	.9	9	1																		
10	0.9D+1.0 180-...	Yes	Y		1	.9	10	1																		
11	0.9D+1.0 210-...	Yes	Y		1	.9	11	1																		
12	0.9D+1.0 225-...	Yes	Y		1	.9	12	1																		
13	0.9D+1.0 240-...	Yes	Y		1	.9	13	1																		
14	0.9D+1.0 270-...	Yes	Y		1	.9	14	1																		
15	0.9D+1.0 300-...	Yes	Y		1	.9	15	1																		
16	0.9D+1.0 315-...	Yes	Y		1	.9	16	1																		
17	0.9D+1.0 330-...	Yes	Y		1	.9	17	1																		
18	1.2D+1.0 0-Wind	Yes	Y		1	1.2	2	1																		
19	1.2D+1.0 30-Wi...	Yes	Y		1	1.2	3	1																		
20	1.2D+1.0 45-Wi...	Yes	Y		1	1.2	4	1																		
21	1.2D+1.0 60-Wi...	Yes	Y		1	1.2	5	1																		
22	1.2D+1.0 90-Wi...	Yes	Y		1	1.2	6	1																		
23	1.2D+1.0 120-...	Yes	Y		1	1.2	7	1																		
24	1.2D+1.0 135-...	Yes	Y		1	1.2	8	1																		
25	1.2D+1.0 150-...	Yes	Y		1	1.2	9	1																		
26	1.2D+1.0 180-...	Yes	Y		1	1.2	10	1																		
27	1.2D+1.0 210-...	Yes	Y		1	1.2	11	1																		
28	1.2D+1.0 225-...	Yes	Y		1	1.2	12	1																		
29	1.2D+1.0 240-...	Yes	Y		1	1.2	13	1																		
30	1.2D+1.0 270-...	Yes	Y		1	1.2	14	1																		
31	1.2D+1.0 300-...	Yes	Y		1	1.2	15	1																		
32	1.2D+1.0 315-...	Yes	Y		1	1.2	16	1																		
33	1.2D+1.0 330-...	Yes	Y		1	1.2	17	1																		
34	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	19	1																
35	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	20	1																
36	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	21	1																
37	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	22	1																
38	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	23	1																
39	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	24	1																
40	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	25	1																
41	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	26	1																
42	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	27	1																
43	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	28	1																
44	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	29	1																
45	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	30	1																
46	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	31	1																
47	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	32	1																
48	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	33	1																
49	1.2D+1.0Di+1.0 ...	Yes	Y		1	1.2	18	1	34	1																
50	1.2D+1.5Lv	Yes	Y		36	1.5	1	1.2																		
51	1.2D+1.5Lm+1....	Yes	Y		1	1.2	2	.053	35	1.5																
52	1.2D+1.5Lm+1....	Yes	Y		1	1.2	3	.053	35	1.5																
53	1.2D+1.5Lm+1....	Yes	Y		1	1.2	4	.053	35	1.5																
54	1.2D+1.5Lm+1....	Yes	Y		1	1.2	5	.053	35	1.5																
55	1.2D+1.5Lm+1....	Yes	Y		1	1.2	6	.053	35	1.5																
56	1.2D+1.5Lm+1....	Yes	Y		1	1.2	7	.053	35	1.5																
57	1.2D+1.5Lm+1....	Yes	Y		1	1.2	8	.053	35	1.5																

Load Combinations (Continued)

	Description	So...	P...	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
58	1.2D+1.5Lm+1....	Yes	Y		1	1.2	9	.053	35	1.5																
59	1.2D+1.5Lm+1....	Yes	Y		1	1.2	10	.053	35	1.5																
60	1.2D+1.5Lm+1....	Yes	Y		1	1.2	11	.053	35	1.5																
61	1.2D+1.5Lm+1....	Yes	Y		1	1.2	12	.053	35	1.5																
62	1.2D+1.5Lm+1....	Yes	Y		1	1.2	13	.053	35	1.5																
63	1.2D+1.5Lm+1....	Yes	Y		1	1.2	14	.053	35	1.5																
64	1.2D+1.5Lm+1....	Yes	Y		1	1.2	15	.053	35	1.5																
65	1.2D+1.5Lm+1....	Yes	Y		1	1.2	16	.053	35	1.5																
66	1.2D+1.5Lm+1....	Yes	Y		1	1.2	17	.053	35	1.5																
67	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.096	0																	
68	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.083	ELZ	.048																
69	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.068	ELZ	.068																
70	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.048	ELZ	.083																
71	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	0		ELZ	.096																
72	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.048	ELZ	.083																
73	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.068	ELZ	.068																
74	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.083	ELZ	.048																
75	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.096	0																	
76	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.083	ELZ	-.048																
77	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.068	ELZ	-.068																
78	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	-.048	ELZ	-.083																
79	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	0		ELZ	-.096																
80	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.048	ELZ	-.083																
81	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.068	ELZ	-.068																
82	(1.2+0.2Sds)D+...	Yes	Y		1	1.238	ELX	.083	ELZ	-.048																
83	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.096	0																	
84	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.083	ELZ	.048																
85	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.068	ELZ	.068																
86	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.048	ELZ	.083																
87	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	0		ELZ	.096																
88	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.048	ELZ	.083																
89	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.068	ELZ	.068																
90	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.083	ELZ	.048																
91	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.096	0																	
92	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.083	ELZ	-.048																
93	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.068	ELZ	-.068																
94	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	-.048	ELZ	-.083																
95	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	0		ELZ	-.096																
96	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.048	ELZ	-.083																
97	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.068	ELZ	-.068																
98	(0.9-0.2Sds)*DL...	Yes	Y		1	.862	ELX	.083	ELZ	-.048																

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	SF1-1	-0.333333	1.666667	0	0	
2	SF1-2	-0.333333	-1.666667	0	0	
3	FF1	2.07387	1.666667	-6.25	0	
4	FF2	2.07387	1.666667	6.25	0	
5	FF3	2.07387	-1.666667	-6.25	0	
6	FF4	2.07387	-1.666667	6.25	0	
7	SA-1A	2.073529	1.666667	2.999917	0	
8	SF2-1	0	1.666667	-0.618717	0	
9	SF2-2	0	-1.666667	-0.618717	0	
10	SF2-3	1.69287	1.666667	-2.458333	0	
11	SF2-4	1.69287	-1.666667	-2.458333	0	

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
12	SF2-V1A	0.119912	1.666667	-0.749023	0	
13	SF2-V2A	1.572959	1.666667	-2.328027	0	
14	SF2-V1B	0.119912	-1.666667	-0.749023	0	
15	SF2-V2B	1.572959	-1.666667	-2.328027	0	
16	SF3-1	0	1.666667	0.618717	0	
17	SF3-2	0	-1.666667	0.618717	0	
18	SF3-3	1.69287	1.666667	2.458333	0	
19	SF3-4	1.69287	-1.666667	2.458333	0	
20	SF3-V1A	0.119912	1.666667	0.749023	0	
21	SF3-V2A	1.572959	1.666667	2.328027	0	
22	SF3-V1B	0.119912	-1.666667	0.749023	0	
23	SF3-V2B	1.572959	-1.666667	2.328027	0	
24	SF2-5	2.073529	1.666667	-2.499833	0	
25	SF2-6	2.073529	-1.666667	-2.499833	0	
26	SF3-5	2.073529	1.666667	2.499833	0	
27	SF3-6	2.073529	-1.666667	2.499833	0	
28	N48	0.119912	-1.430556	-0.749023	0	
29	N49	1.572959	1.430556	-2.328027	0	
30	N50	0.119912	1.430556	-0.749023	0	
31	N51	1.572959	-1.430556	-2.328027	0	
32	N53	0.119912	-1.430556	0.749023	0	
33	N54	1.572959	1.430556	2.328027	0	
34	N55	0.119912	1.430556	0.749023	0	
35	N56	1.572959	-1.430556	2.328027	0	
36	N53B	2.073529	-1.666667	2.999777	0	
37	N56AG	0.553173	1.666667	9.392231	0	
38	N57G	0.553173	-1.666667	9.392231	0	
39	N39	2.07387	1.666667	-5.999997	0	
40	N47A	2.07387	1.666667	6.	0	
41	N41	2.07387	4.	-5.999997	0	
42	N42	2.07387	4.	6.	0	
43	N43	2.07387	4.	2.	0	
44	N44	2.07387	4.	-2.	0	
45	N45	2.07387	-4.	-5.999997	0	
46	N46	2.07387	-4.	6.	0	
47	N47	2.07387	-4.	2.	0	
48	N48A	2.07387	-4.	-2.	0	
49	N49A	0.846435	-1.666667	-1.538525	0	
50	N50A	0.846435	1.666667	-1.538525	0	
51	N51A	0.846435	-1.666667	1.538525	0	
52	N52	0.846435	1.666667	1.538525	0	
53	N53A	0.846435	2.166667	-1.538525	0	
54	N54A	0.846435	2.166667	1.538525	0	
55	N55A	0.846435	-1.833334	-1.538525	0	
56	N56B	0.846435	-1.833334	1.538525	0	
57	N59	2.07387	-1.666667	-5.999997	0	
58	N60	2.073529	-1.666667	-2.	0	
59	N61	2.073529	-1.666667	2.	0	
60	N62	2.073529	-1.666667	6.	0	
61	N63	2.073529	1.666667	-2.	0	
62	N64	2.073529	1.666667	2.	0	

Joint Loads and Enforced Displacements (BLC 35 : Lm)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft...
1	N62	L	Y	-.5

Joint Loads and Enforced Displacements (BLC 36 : Lv)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft,...
1	FF4	L	Y	-.25

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.013	.5
2	MP-1	Y	-.084	2
3	MP-3	Y	-.032	.5
4	MP-3	Y	-.032	.5
5	MP-3	Y	-.021	2
6	MP-3	Y	-.07	2
7	MP-4	Y	-.013	.5
8	RRU-1	Y	-.044	2
9	MP-1	Y	-.013	6
10	MP-3	Y	-.032	6.5
11	MP-3	Y	-.032	6.5
12	MP-4	Y	-.013	6

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.215	.5
2	MP-1	X	-.084	2
3	MP-3	X	-.119	.5
4	MP-3	X	-.119	.5
5	MP-3	X	-.016	2
6	MP-3	X	-.084	2
7	MP-4	X	-.215	.5
8	RRU-1	X	-.215	2
9	MP-1	X	-.215	6
10	MP-3	X	-.119	6.5
11	MP-3	X	-.119	6.5
12	MP-4	X	-.215	6

Member Point Loads (BLC 3 : 30 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.181	.5
2	MP-1	X	-.067	2
3	MP-3	X	-.092	.5
4	MP-3	X	-.092	.5
5	MP-3	X	-.016	2
6	MP-3	X	-.064	2
7	MP-4	X	-.181	.5
8	RRU-1	X	-.159	2
9	MP-1	X	-.181	6
10	MP-3	X	-.092	6.5
11	MP-3	X	-.092	6.5
12	MP-4	X	-.181	6
13	MP-1	Z	-.105	.5
14	MP-1	Z	-.039	2
15	MP-3	Z	-.053	.5
16	MP-3	Z	-.053	.5
17	MP-3	Z	-.009	2
18	MP-3	Z	-.037	2
19	MP-4	Z	-.105	.5
20	RRU-1	Z	-.092	2

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
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Member Point Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
21	MP-1	Z	-.105	6
22	MP-3	Z	-.053	6.5
23	MP-3	Z	-.053	6.5
24	MP-4	Z	-.105	6

Member Point Loads (BLC 4 : 45 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.144	.5
2	MP-1	X	-.05	2
3	MP-3	X	-.066	.5
4	MP-3	X	-.066	.5
5	MP-3	X	-.014	2
6	MP-3	X	-.046	2
7	MP-4	X	-.144	.5
8	RRU-1	X	-.108	2
9	MP-1	X	-.144	6
10	MP-3	X	-.066	6.5
11	MP-3	X	-.066	6.5
12	MP-4	X	-.144	6
13	MP-1	Z	-.144	.5
14	MP-1	Z	-.05	2
15	MP-3	Z	-.066	.5
16	MP-3	Z	-.066	.5
17	MP-3	Z	-.014	2
18	MP-3	Z	-.046	2
19	MP-4	Z	-.144	.5
20	RRU-1	Z	-.108	2
21	MP-1	Z	-.144	6
22	MP-3	Z	-.066	6.5
23	MP-3	Z	-.066	6.5
24	MP-4	Z	-.144	6

Member Point Loads (BLC 5 : 60 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.099	.5
2	MP-1	X	-.032	2
3	MP-3	X	-.04	.5
4	MP-3	X	-.04	.5
5	MP-3	X	-.011	2
6	MP-3	X	-.028	2
7	MP-4	X	-.099	.5
8	RRU-1	X	-.061	2
9	MP-1	X	-.099	6
10	MP-3	X	-.04	6.5
11	MP-3	X	-.04	6.5
12	MP-4	X	-.099	6
13	MP-1	Z	-.171	.5
14	MP-1	Z	-.055	2
15	MP-3	Z	-.07	.5
16	MP-3	Z	-.07	.5
17	MP-3	Z	-.018	2
18	MP-3	Z	-.048	2
19	MP-4	Z	-.171	.5
20	RRU-1	Z	-.105	2
21	MP-1	Z	-.171	6
22	MP-3	Z	-.07	6.5

Member Point Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
23	MP-3	Z	-.07	6.5
24	MP-4	Z	-.171	6

Member Point Loads (BLC 6 : 90 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.192	.5
2	MP-1	Z	-.056	2
3	MP-3	Z	-.068	.5
4	MP-3	Z	-.068	.5
5	MP-3	Z	-.023	2
6	MP-3	Z	-.045	2
7	MP-4	Z	-.192	.5
8	RRU-1	Z	-.09	2
9	MP-1	Z	-.192	6
10	MP-3	Z	-.068	6.5
11	MP-3	Z	-.068	6.5
12	MP-4	Z	-.192	6

Member Point Loads (BLC 7 : 120 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.099	.5
2	MP-1	X	.032	2
3	MP-3	X	.04	.5
4	MP-3	X	.04	.5
5	MP-3	X	.011	2
6	MP-3	X	.028	2
7	MP-4	X	.099	.5
8	RRU-1	X	.061	2
9	MP-1	X	.099	6
10	MP-3	X	.04	6.5
11	MP-3	X	.04	6.5
12	MP-4	X	.099	6
13	MP-1	Z	-.171	.5
14	MP-1	Z	-.055	2
15	MP-3	Z	-.07	.5
16	MP-3	Z	-.07	.5
17	MP-3	Z	-.018	2
18	MP-3	Z	-.048	2
19	MP-4	Z	-.171	.5
20	RRU-1	Z	-.105	2
21	MP-1	Z	-.171	6
22	MP-3	Z	-.07	6.5
23	MP-3	Z	-.07	6.5
24	MP-4	Z	-.171	6

Member Point Loads (BLC 8 : 135 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.144	.5
2	MP-1	X	.05	2
3	MP-3	X	.066	.5
4	MP-3	X	.066	.5
5	MP-3	X	.014	2
6	MP-3	X	.046	2
7	MP-4	X	.144	.5
8	RRU-1	X	.108	2

Company : Tower Engineering Professionals, Inc.
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Member Point Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
9	MP-1	X	.144	6
10	MP-3	X	.066	6.5
11	MP-3	X	.066	6.5
12	MP-4	X	.144	6
13	MP-1	Z	-.144	.5
14	MP-1	Z	-.05	2
15	MP-3	Z	-.066	.5
16	MP-3	Z	-.066	.5
17	MP-3	Z	-.014	2
18	MP-3	Z	-.046	2
19	MP-4	Z	-.144	.5
20	RRU-1	Z	-.108	2
21	MP-1	Z	-.144	6
22	MP-3	Z	-.066	6.5
23	MP-3	Z	-.066	6.5
24	MP-4	Z	-.144	6

Member Point Loads (BLC 9 : 150 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.181	.5
2	MP-1	X	.067	2
3	MP-3	X	.092	.5
4	MP-3	X	.092	.5
5	MP-3	X	.016	2
6	MP-3	X	.064	2
7	MP-4	X	.181	.5
8	RRU-1	X	.159	2
9	MP-1	X	.181	6
10	MP-3	X	.092	6.5
11	MP-3	X	.092	6.5
12	MP-4	X	.181	6
13	MP-1	Z	-.105	.5
14	MP-1	Z	-.039	2
15	MP-3	Z	-.053	.5
16	MP-3	Z	-.053	.5
17	MP-3	Z	-.009	2
18	MP-3	Z	-.037	2
19	MP-4	Z	-.105	.5
20	RRU-1	Z	-.092	2
21	MP-1	Z	-.105	6
22	MP-3	Z	-.053	6.5
23	MP-3	Z	-.053	6.5
24	MP-4	Z	-.105	6

Member Point Loads (BLC 10 : 180 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.215	.5
2	MP-1	X	.084	2
3	MP-3	X	.119	.5
4	MP-3	X	.119	.5
5	MP-3	X	.016	2
6	MP-3	X	.084	2
7	MP-4	X	.215	.5
8	RRU-1	X	.215	2
9	MP-1	X	.215	6
10	MP-3	X	.119	6.5

Member Point Loads (BLC 10 : 180 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
11	MP-3	X	.119	6.5
12	MP-4	X	.215	6

Member Point Loads (BLC 11 : 210 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.181	.5
2	MP-1	X	.067	2
3	MP-3	X	.092	.5
4	MP-3	X	.092	.5
5	MP-3	X	.016	2
6	MP-3	X	.064	2
7	MP-4	X	.181	.5
8	RRU-1	X	.159	2
9	MP-1	X	.181	6
10	MP-3	X	.092	6.5
11	MP-3	X	.092	6.5
12	MP-4	X	.181	6
13	MP-1	Z	.105	.5
14	MP-1	Z	.039	2
15	MP-3	Z	.053	.5
16	MP-3	Z	.053	.5
17	MP-3	Z	.009	2
18	MP-3	Z	.037	2
19	MP-4	Z	.105	.5
20	RRU-1	Z	.092	2
21	MP-1	Z	.105	6
22	MP-3	Z	.053	6.5
23	MP-3	Z	.053	6.5
24	MP-4	Z	.105	6

Member Point Loads (BLC 12 : 225 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.144	.5
2	MP-1	X	.05	2
3	MP-3	X	.066	.5
4	MP-3	X	.066	.5
5	MP-3	X	.014	2
6	MP-3	X	.046	2
7	MP-4	X	.144	.5
8	RRU-1	X	.108	2
9	MP-1	X	.144	6
10	MP-3	X	.066	6.5
11	MP-3	X	.066	6.5
12	MP-4	X	.144	6
13	MP-1	Z	.144	.5
14	MP-1	Z	.05	2
15	MP-3	Z	.066	.5
16	MP-3	Z	.066	.5
17	MP-3	Z	.014	2
18	MP-3	Z	.046	2
19	MP-4	Z	.144	.5
20	RRU-1	Z	.108	2
21	MP-1	Z	.144	6
22	MP-3	Z	.066	6.5
23	MP-3	Z	.066	6.5
24	MP-4	Z	.144	6

Company : Tower Engineering Professionals, Inc.
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Member Point Loads (BLC 13 : 240 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.099	.5
2	MP-1	X	.032	2
3	MP-3	X	.04	.5
4	MP-3	X	.04	.5
5	MP-3	X	.011	2
6	MP-3	X	.028	2
7	MP-4	X	.099	.5
8	RRU-1	X	.061	2
9	MP-1	X	.099	6
10	MP-3	X	.04	6.5
11	MP-3	X	.04	6.5
12	MP-4	X	.099	6
13	MP-1	Z	.171	.5
14	MP-1	Z	.055	2
15	MP-3	Z	.07	.5
16	MP-3	Z	.07	.5
17	MP-3	Z	.018	2
18	MP-3	Z	.048	2
19	MP-4	Z	.171	.5
20	RRU-1	Z	.105	2
21	MP-1	Z	.171	6
22	MP-3	Z	.07	6.5
23	MP-3	Z	.07	6.5
24	MP-4	Z	.171	6

Member Point Loads (BLC 14 : 270 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.192	.5
2	MP-1	Z	.056	2
3	MP-3	Z	.068	.5
4	MP-3	Z	.068	.5
5	MP-3	Z	.023	2
6	MP-3	Z	.045	2
7	MP-4	Z	.192	.5
8	RRU-1	Z	.09	2
9	MP-1	Z	.192	6
10	MP-3	Z	.068	6.5
11	MP-3	Z	.068	6.5
12	MP-4	Z	.192	6

Member Point Loads (BLC 15 : 300 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.099	.5
2	MP-1	X	-.032	2
3	MP-3	X	-.04	.5
4	MP-3	X	-.04	.5
5	MP-3	X	-.011	2
6	MP-3	X	-.028	2
7	MP-4	X	-.099	.5
8	RRU-1	X	-.061	2
9	MP-1	X	-.099	6
10	MP-3	X	-.04	6.5
11	MP-3	X	-.04	6.5
12	MP-4	X	-.099	6
13	MP-1	Z	.171	.5
14	MP-1	Z	.055	2

Member Point Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-3	Z	.07	.5
16	MP-3	Z	.07	.5
17	MP-3	Z	.018	2
18	MP-3	Z	.048	2
19	MP-4	Z	.171	.5
20	RRU-1	Z	.105	2
21	MP-1	Z	.171	6
22	MP-3	Z	.07	6.5
23	MP-3	Z	.07	6.5
24	MP-4	Z	.171	6

Member Point Loads (BLC 16 : 315 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.144	.5
2	MP-1	X	-.05	2
3	MP-3	X	-.066	.5
4	MP-3	X	-.066	.5
5	MP-3	X	-.014	2
6	MP-3	X	-.046	2
7	MP-4	X	-.144	.5
8	RRU-1	X	-.108	2
9	MP-1	X	-.144	6
10	MP-3	X	-.066	6.5
11	MP-3	X	-.066	6.5
12	MP-4	X	-.144	6
13	MP-1	Z	.144	.5
14	MP-1	Z	.05	2
15	MP-3	Z	.066	.5
16	MP-3	Z	.066	.5
17	MP-3	Z	.014	2
18	MP-3	Z	.046	2
19	MP-4	Z	.144	.5
20	RRU-1	Z	.108	2
21	MP-1	Z	.144	6
22	MP-3	Z	.066	6.5
23	MP-3	Z	.066	6.5
24	MP-4	Z	.144	6

Member Point Loads (BLC 17 : 330 Wind - No Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.181	.5
2	MP-1	X	-.067	2
3	MP-3	X	-.092	.5
4	MP-3	X	-.092	.5
5	MP-3	X	-.016	2
6	MP-3	X	-.064	2
7	MP-4	X	-.181	.5
8	RRU-1	X	-.159	2
9	MP-1	X	-.181	6
10	MP-3	X	-.092	6.5
11	MP-3	X	-.092	6.5
12	MP-4	X	-.181	6
13	MP-1	Z	.105	.5
14	MP-1	Z	.039	2
15	MP-3	Z	.053	.5
16	MP-3	Z	.053	.5

Member Point Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
17	MP-3	Z	.009	2
18	MP-3	Z	.037	2
19	MP-4	Z	.105	.5
20	RRU-1	Z	.092	2
21	MP-1	Z	.105	6
22	MP-3	Z	.053	6.5
23	MP-3	Z	.053	6.5
24	MP-4	Z	.105	6

Member Point Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	-.136	.5
2	MP-1	Y	-.072	2
3	MP-3	Y	-.109	.5
4	MP-3	Y	-.109	.5
5	MP-3	Y	-.028	2
6	MP-3	Y	-.065	2
7	MP-4	Y	-.136	.5
8	RRU-1	Y	-.135	2
9	MP-1	Y	-.136	6
10	MP-3	Y	-.109	6.5
11	MP-3	Y	-.109	6.5
12	MP-4	Y	-.136	6

Member Point Loads (BLC 19 : 0 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.014	.5
2	MP-1	X	-.007	2
3	MP-3	X	-.008	.5
4	MP-3	X	-.008	.5
5	MP-3	X	-.002	2
6	MP-3	X	-.007	2
7	MP-4	X	-.014	.5
8	RRU-1	X	-.015	2
9	MP-1	X	-.014	6
10	MP-3	X	-.008	6.5
11	MP-3	X	-.008	6.5
12	MP-4	X	-.014	6

Member Point Loads (BLC 20 : 30 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.012	.5
2	MP-1	X	-.005	2
3	MP-3	X	-.006	.5
4	MP-3	X	-.006	.5
5	MP-3	X	-.002	2
6	MP-3	X	-.005	2
7	MP-4	X	-.012	.5
8	RRU-1	X	-.011	2
9	MP-1	X	-.012	6
10	MP-3	X	-.006	6.5
11	MP-3	X	-.006	6.5
12	MP-4	X	-.012	6
13	MP-1	Z	-.007	.5
14	MP-1	Z	-.003	2

Member Point Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-3	Z	-.004	.5
16	MP-3	Z	-.004	.5
17	MP-3	Z	-.001	2
18	MP-3	Z	-.003	2
19	MP-4	Z	-.007	.5
20	RRU-1	Z	-.006	2
21	MP-1	Z	-.007	6
22	MP-3	Z	-.004	6.5
23	MP-3	Z	-.004	6.5
24	MP-4	Z	-.007	6

Member Point Loads (BLC 21 : 45 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.01	.5
2	MP-1	X	-.004	2
3	MP-3	X	-.005	.5
4	MP-3	X	-.005	.5
5	MP-3	X	-.002	2
6	MP-3	X	-.004	2
7	MP-4	X	-.01	.5
8	RRU-1	X	-.008	2
9	MP-1	X	-.01	6
10	MP-3	X	-.005	6.5
11	MP-3	X	-.005	6.5
12	MP-4	X	-.01	6
13	MP-1	Z	-.01	.5
14	MP-1	Z	-.004	2
15	MP-3	Z	-.005	.5
16	MP-3	Z	-.005	.5
17	MP-3	Z	-.002	2
18	MP-3	Z	-.004	2
19	MP-4	Z	-.01	.5
20	RRU-1	Z	-.008	2
21	MP-1	Z	-.01	6
22	MP-3	Z	-.005	6.5
23	MP-3	Z	-.005	6.5
24	MP-4	Z	-.01	6

Member Point Loads (BLC 22 : 60 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.007	.5
2	MP-1	X	-.003	2
3	MP-3	X	-.003	.5
4	MP-3	X	-.003	.5
5	MP-3	X	-.001	2
6	MP-3	X	-.002	2
7	MP-4	X	-.007	.5
8	RRU-1	X	-.005	2
9	MP-1	X	-.007	6
10	MP-3	X	-.003	6.5
11	MP-3	X	-.003	6.5
12	MP-4	X	-.007	6
13	MP-1	Z	-.012	.5
14	MP-1	Z	-.005	2
15	MP-3	Z	-.005	.5
16	MP-3	Z	-.005	.5

Member Point Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
17	MP-3	Z	-.002	2
18	MP-3	Z	-.004	2
19	MP-4	Z	-.012	.5
20	RRU-1	Z	-.008	2
21	MP-1	Z	-.012	6
22	MP-3	Z	-.005	6.5
23	MP-3	Z	-.005	6.5
24	MP-4	Z	-.012	6

Member Point Loads (BLC 23 : 90 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.013	.5
2	MP-1	Z	-.005	2
3	MP-3	Z	-.005	.5
4	MP-3	Z	-.005	.5
5	MP-3	Z	-.002	2
6	MP-3	Z	-.004	2
7	MP-4	Z	-.013	.5
8	RRU-1	Z	-.007	2
9	MP-1	Z	-.013	6
10	MP-3	Z	-.005	6.5
11	MP-3	Z	-.005	6.5
12	MP-4	Z	-.013	6

Member Point Loads (BLC 24 : 120 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.007	.5
2	MP-1	X	.003	2
3	MP-3	X	.003	.5
4	MP-3	X	.003	.5
5	MP-3	X	.001	2
6	MP-3	X	.002	2
7	MP-4	X	.007	.5
8	RRU-1	X	.005	2
9	MP-1	X	.007	6
10	MP-3	X	.003	6.5
11	MP-3	X	.003	6.5
12	MP-4	X	.007	6
13	MP-1	Z	-.012	.5
14	MP-1	Z	-.005	2
15	MP-3	Z	-.005	.5
16	MP-3	Z	-.005	.5
17	MP-3	Z	-.002	2
18	MP-3	Z	-.004	2
19	MP-4	Z	-.012	.5
20	RRU-1	Z	-.008	2
21	MP-1	Z	-.012	6
22	MP-3	Z	-.005	6.5
23	MP-3	Z	-.005	6.5
24	MP-4	Z	-.012	6

Member Point Loads (BLC 25 : 135 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.01	.5
2	MP-1	X	.004	2

Member Point Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
3	MP-3	X	.005	.5
4	MP-3	X	.005	.5
5	MP-3	X	.002	2
6	MP-3	X	.004	2
7	MP-4	X	.01	.5
8	RRU-1	X	.008	2
9	MP-1	X	.01	6
10	MP-3	X	.005	6.5
11	MP-3	X	.005	6.5
12	MP-4	X	.01	6
13	MP-1	Z	-.01	.5
14	MP-1	Z	-.004	2
15	MP-3	Z	-.005	.5
16	MP-3	Z	-.005	.5
17	MP-3	Z	-.002	2
18	MP-3	Z	-.004	2
19	MP-4	Z	-.01	.5
20	RRU-1	Z	-.008	2
21	MP-1	Z	-.01	6
22	MP-3	Z	-.005	6.5
23	MP-3	Z	-.005	6.5
24	MP-4	Z	-.01	6

Member Point Loads (BLC 26 : 150 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.012	.5
2	MP-1	X	.005	2
3	MP-3	X	.006	.5
4	MP-3	X	.006	.5
5	MP-3	X	.002	2
6	MP-3	X	.005	2
7	MP-4	X	.012	.5
8	RRU-1	X	.011	2
9	MP-1	X	.012	6
10	MP-3	X	.006	6.5
11	MP-3	X	.006	6.5
12	MP-4	X	.012	6
13	MP-1	Z	-.007	.5
14	MP-1	Z	-.003	2
15	MP-3	Z	-.004	.5
16	MP-3	Z	-.004	.5
17	MP-3	Z	-.001	2
18	MP-3	Z	-.003	2
19	MP-4	Z	-.007	.5
20	RRU-1	Z	-.006	2
21	MP-1	Z	-.007	6
22	MP-3	Z	-.004	6.5
23	MP-3	Z	-.004	6.5
24	MP-4	Z	-.007	6

Member Point Loads (BLC 27 : 180 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.014	.5
2	MP-1	X	.007	2
3	MP-3	X	.008	.5
4	MP-3	X	.008	.5

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Point Loads (BLC 27 : 180 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP-3	X	.002	2
6	MP-3	X	.007	2
7	MP-4	X	.014	.5
8	RRU-1	X	.015	2
9	MP-1	X	.014	6
10	MP-3	X	.008	6.5
11	MP-3	X	.008	6.5
12	MP-4	X	.014	6

Member Point Loads (BLC 28 : 210 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.012	.5
2	MP-1	X	.005	2
3	MP-3	X	.006	.5
4	MP-3	X	.006	.5
5	MP-3	X	.002	2
6	MP-3	X	.005	2
7	MP-4	X	.012	.5
8	RRU-1	X	.011	2
9	MP-1	X	.012	6
10	MP-3	X	.006	6.5
11	MP-3	X	.006	6.5
12	MP-4	X	.012	6
13	MP-1	Z	.007	.5
14	MP-1	Z	.003	2
15	MP-3	Z	.004	.5
16	MP-3	Z	.004	.5
17	MP-3	Z	.001	2
18	MP-3	Z	.003	2
19	MP-4	Z	.007	.5
20	RRU-1	Z	.006	2
21	MP-1	Z	.007	6
22	MP-3	Z	.004	6.5
23	MP-3	Z	.004	6.5
24	MP-4	Z	.007	6

Member Point Loads (BLC 29 : 225 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.01	.5
2	MP-1	X	.004	2
3	MP-3	X	.005	.5
4	MP-3	X	.005	.5
5	MP-3	X	.002	2
6	MP-3	X	.004	2
7	MP-4	X	.01	.5
8	RRU-1	X	.008	2
9	MP-1	X	.01	6
10	MP-3	X	.005	6.5
11	MP-3	X	.005	6.5
12	MP-4	X	.01	6
13	MP-1	Z	.01	.5
14	MP-1	Z	.004	2
15	MP-3	Z	.005	.5
16	MP-3	Z	.005	.5
17	MP-3	Z	.002	2
18	MP-3	Z	.004	2

Member Point Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
19	MP-4	Z	.01	.5
20	RRU-1	Z	.008	2
21	MP-1	Z	.01	6
22	MP-3	Z	.005	6.5
23	MP-3	Z	.005	6.5
24	MP-4	Z	.01	6

Member Point Loads (BLC 30 : 240 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.007	.5
2	MP-1	X	.003	2
3	MP-3	X	.003	.5
4	MP-3	X	.003	.5
5	MP-3	X	.001	2
6	MP-3	X	.002	2
7	MP-4	X	.007	.5
8	RRU-1	X	.005	2
9	MP-1	X	.007	6
10	MP-3	X	.003	6.5
11	MP-3	X	.003	6.5
12	MP-4	X	.007	6
13	MP-1	Z	.012	.5
14	MP-1	Z	.005	2
15	MP-3	Z	.005	.5
16	MP-3	Z	.005	.5
17	MP-3	Z	.002	2
18	MP-3	Z	.004	2
19	MP-4	Z	.012	.5
20	RRU-1	Z	.008	2
21	MP-1	Z	.012	6
22	MP-3	Z	.005	6.5
23	MP-3	Z	.005	6.5
24	MP-4	Z	.012	6

Member Point Loads (BLC 31 : 270 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.013	.5
2	MP-1	Z	.005	2
3	MP-3	Z	.005	.5
4	MP-3	Z	.005	.5
5	MP-3	Z	.002	2
6	MP-3	Z	.004	2
7	MP-4	Z	.013	.5
8	RRU-1	Z	.007	2
9	MP-1	Z	.013	6
10	MP-3	Z	.005	6.5
11	MP-3	Z	.005	6.5
12	MP-4	Z	.013	6

Member Point Loads (BLC 32 : 300 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.007	.5
2	MP-1	X	-.003	2
3	MP-3	X	-.003	.5
4	MP-3	X	-.003	.5

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Point Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP-3	X	-.001	2
6	MP-3	X	-.002	2
7	MP-4	X	-.007	.5
8	RRU-1	X	-.005	2
9	MP-1	X	-.007	6
10	MP-3	X	-.003	6.5
11	MP-3	X	-.003	6.5
12	MP-4	X	-.007	6
13	MP-1	Z	.012	.5
14	MP-1	Z	.005	2
15	MP-3	Z	.005	.5
16	MP-3	Z	.005	.5
17	MP-3	Z	.002	2
18	MP-3	Z	.004	2
19	MP-4	Z	.012	.5
20	RRU-1	Z	.008	2
21	MP-1	Z	.012	6
22	MP-3	Z	.005	6.5
23	MP-3	Z	.005	6.5
24	MP-4	Z	.012	6

Member Point Loads (BLC 33 : 315 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.01	.5
2	MP-1	X	-.004	2
3	MP-3	X	-.005	.5
4	MP-3	X	-.005	.5
5	MP-3	X	-.002	2
6	MP-3	X	-.004	2
7	MP-4	X	-.01	.5
8	RRU-1	X	-.008	2
9	MP-1	X	-.01	6
10	MP-3	X	-.005	6.5
11	MP-3	X	-.005	6.5
12	MP-4	X	-.01	6
13	MP-1	Z	.01	.5
14	MP-1	Z	.004	2
15	MP-3	Z	.005	.5
16	MP-3	Z	.005	.5
17	MP-3	Z	.002	2
18	MP-3	Z	.004	2
19	MP-4	Z	.01	.5
20	RRU-1	Z	.008	2
21	MP-1	Z	.01	6
22	MP-3	Z	.005	6.5
23	MP-3	Z	.005	6.5
24	MP-4	Z	.01	6

Member Point Loads (BLC 34 : 330 Wind - Ice)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.012	.5
2	MP-1	X	-.005	2
3	MP-3	X	-.006	.5
4	MP-3	X	-.006	.5
5	MP-3	X	-.002	2
6	MP-3	X	-.005	2

Member Point Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
7	MP-4	X	-.012	.5
8	RRU-1	X	-.011	2
9	MP-1	X	-.012	6
10	MP-3	X	-.006	6.5
11	MP-3	X	-.006	6.5
12	MP-4	X	-.012	6
13	MP-1	Z	.007	.5
14	MP-1	Z	.003	2
15	MP-3	Z	.004	.5
16	MP-3	Z	.004	.5
17	MP-3	Z	.001	2
18	MP-3	Z	.003	2
19	MP-4	Z	.007	.5
20	RRU-1	Z	.006	2
21	MP-1	Z	.007	6
22	MP-3	Z	.004	6.5
23	MP-3	Z	.004	6.5
24	MP-4	Z	.007	6

Member Point Loads (BLC 37 : Seismic Load X)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	-.013	.5
2	MP-1	X	-.084	2
3	MP-3	X	-.032	.5
4	MP-3	X	-.032	.5
5	MP-3	X	-.021	2
6	MP-3	X	-.07	2
7	MP-4	X	-.013	.5
8	RRU-1	X	-.044	2
9	MP-1	X	-.013	6
10	MP-3	X	-.032	6.5
11	MP-3	X	-.032	6.5
12	MP-4	X	-.013	6

Member Point Loads (BLC 38 : Seismic Load Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	-.013	.5
2	MP-1	Z	-.084	2
3	MP-3	Z	-.032	.5
4	MP-3	Z	-.032	.5
5	MP-3	Z	-.021	2
6	MP-3	Z	-.07	2
7	MP-4	Z	-.013	.5
8	RRU-1	Z	-.044	2
9	MP-1	Z	-.013	6
10	MP-3	Z	-.032	6.5
11	MP-3	Z	-.032	6.5
12	MP-4	Z	-.013	6

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

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.003	-.003	0	%100
2	SF2-V2	X	-.003	-.003	0	%100
3	SF3-V1	X	-.003	-.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
4	SF3-V2	X	-.003	-.003	0	%100
5	SF2-D1	X	-.003	-.003	0	%100
6	SF2-D1-X	X	-.003	-.003	0	%100
7	SF3-D1	X	-.003	-.003	0	%100
8	SF3-D1-X	X	-.003	-.003	0	%100
9	SF2-CPB	X	-.000281	-.000281	0	%100
10	SF2-CPT	X	-.000281	-.000281	0	%100
11	SF3-CPB	X	-.000281	-.000281	0	%100
12	SF3-CPT	X	-.000281	-.000281	0	%100
13	FFBH-1	X	-.009	-.009	0	%100
14	FFBH-2	X	-.01	-.01	0	%100
15	FFBH-3	X	-.009	-.009	0	%100
16	FFTH-1	X	-.009	-.009	0	%100
17	FFTH-2	X	-.01	-.01	0	%100
18	FFTH-3	X	-.009	-.009	0	%100
19	SF2-BH	X	-.005	-.005	0	%100
20	SF2-TH	X	-.005	-.005	0	%100
21	SF3-BH	X	-.005	-.005	0	%100
22	SF3-TH	X	-.005	-.005	0	%100
23	SA-1	X	-.01	-.01	0	%100
24	SA-2	X	-.01	-.01	0	%100
25	MP-1	X	-.01	-.01	0	%100
26	MP-2	X	-.01	-.01	0	%100
27	MP-3	X	-.01	-.01	0	%100
28	MP-4	X	-.01	-.01	0	%100
29	RRU-1	X	-.009	-.009	0	%100
30	RRU-2	X	-.009	-.009	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.003	-.003	0	%100
6	SF2-D1-X	X	-.003	-.003	0	%100
7	SF3-D1	X	-.003	-.003	0	%100
8	SF3-D1-X	X	-.003	-.003	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.000905	-.000905	0	%100
12	SF3-CPT	X	-.000905	-.000905	0	%100
13	FFBH-1	X	-.007	-.007	0	%100
14	FFBH-2	X	-.008	-.008	0	%100
15	FFBH-3	X	-.007	-.007	0	%100
16	FFTH-1	X	-.007	-.007	0	%100
17	FFTH-2	X	-.008	-.008	0	%100
18	FFTH-3	X	-.007	-.007	0	%100
19	SF2-BH	X	-.006	-.006	0	%100
20	SF2-TH	X	-.006	-.006	0	%100
21	SF3-BH	X	-.002	-.002	0	%100
22	SF3-TH	X	-.002	-.002	0	%100
23	SA-1	X	-.008	-.008	0	%100
24	SA-2	X	-.008	-.008	0	%100
25	MP-1	X	-.009	-.009	0	%100
26	MP-2	X	-.009	-.009	0	%100

Member Distributed Loads (BLC 3 : 30 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
27	MP-3	X	-.009	-.009	0	%100
28	MP-4	X	-.009	-.009	0	%100
29	RRU-1	X	-.008	-.008	0	%100
30	RRU-2	X	-.008	-.008	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.0009	-.0009	0	%100
40	SF2-CPT	Z	-.0009	-.0009	0	%100
41	SF3-CPB	Z	-.000614	-.000614	0	%100
42	SF3-CPT	Z	-.000614	-.000614	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.004	-.004	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.004	-.004	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.003	-.003	0	%100
50	SF2-TH	Z	-.003	-.003	0	%100
51	SF3-BH	Z	-.001	-.001	0	%100
52	SF3-TH	Z	-.001	-.001	0	%100
53	SA-1	Z	-.003	-.003	0	%100
54	SA-2	Z	-.003	-.003	0	%100
55	MP-1	Z	-.005	-.005	0	%100
56	MP-2	Z	-.005	-.005	0	%100
57	MP-3	Z	-.005	-.005	0	%100
58	MP-4	Z	-.005	-.005	0	%100
59	RRU-1	Z	-.004	-.004	0	%100
60	RRU-2	Z	-.004	-.004	0	%100

Member Distributed Loads (BLC 4 : 45 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100
13	FFBH-1	X	-.004	-.004	0	%100
14	FFBH-2	X	-.005	-.005	0	%100
15	FFBH-3	X	-.004	-.004	0	%100
16	FFTH-1	X	-.004	-.004	0	%100
17	FFTH-2	X	-.005	-.005	0	%100
18	FFTH-3	X	-.004	-.004	0	%100
19	SF2-BH	X	-.005	-.005	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 4 : 45 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
20	SF2-TH	X	-.005	-.005	0	%100
21	SF3-BH	X	-.000205	-.000205	0	%100
22	SF3-TH	X	-.000205	-.000205	0	%100
23	SA-1	X	-.006	-.006	0	%100
24	SA-2	X	-.006	-.006	0	%100
25	MP-1	X	-.007	-.007	0	%100
26	MP-2	X	-.007	-.007	0	%100
27	MP-3	X	-.007	-.007	0	%100
28	MP-4	X	-.007	-.007	0	%100
29	RRU-1	X	-.006	-.006	0	%100
30	RRU-2	X	-.006	-.006	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.001	-.001	0	%100
42	SF3-CPT	Z	-.001	-.001	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.005	-.005	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.005	-.005	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.005	-.005	0	%100
50	SF2-TH	Z	-.005	-.005	0	%100
51	SF3-BH	Z	-.000201	-.000201	0	%100
52	SF3-TH	Z	-.000201	-.000201	0	%100
53	SA-1	Z	-.004	-.004	0	%100
54	SA-2	Z	-.004	-.004	0	%100
55	MP-1	Z	-.007	-.007	0	%100
56	MP-2	Z	-.007	-.007	0	%100
57	MP-3	Z	-.007	-.007	0	%100
58	MP-4	Z	-.007	-.007	0	%100
59	RRU-1	Z	-.006	-.006	0	%100
60	RRU-2	Z	-.006	-.006	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.001	-.001	0	%100
2	SF2-V2	X	-.001	-.001	0	%100
3	SF3-V1	X	-.001	-.001	0	%100
4	SF3-V2	X	-.001	-.001	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100

Member Distributed Loads (BLC 5 : 60 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.003	-.003	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.003	-.003	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.003	-.003	0	%100
20	SF2-TH	X	-.003	-.003	0	%100
21	SF3-BH	X	-.000763	-.000763	0	%100
22	SF3-TH	X	-.000763	-.000763	0	%100
23	SA-1	X	-.003	-.003	0	%100
24	SA-2	X	-.003	-.003	0	%100
25	MP-1	X	-.005	-.005	0	%100
26	MP-2	X	-.005	-.005	0	%100
27	MP-3	X	-.005	-.005	0	%100
28	MP-4	X	-.005	-.005	0	%100
29	RRU-1	X	-.004	-.004	0	%100
30	RRU-2	X	-.004	-.004	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.003	-.003	0	%100
36	SF2-D1-X	Z	-.003	-.003	0	%100
37	SF3-D1	Z	-.003	-.003	0	%100
38	SF3-D1-X	Z	-.003	-.003	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.004	-.004	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.004	-.004	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.006	-.006	0	%100
50	SF2-TH	Z	-.006	-.006	0	%100
51	SF3-BH	Z	-.001	-.001	0	%100
52	SF3-TH	Z	-.001	-.001	0	%100
53	SA-1	Z	-.004	-.004	0	%100
54	SA-2	Z	-.004	-.004	0	%100
55	MP-1	Z	-.009	-.009	0	%100
56	MP-2	Z	-.009	-.009	0	%100
57	MP-3	Z	-.009	-.009	0	%100
58	MP-4	Z	-.009	-.009	0	%100
59	RRU-1	Z	-.008	-.008	0	%100
60	RRU-2	Z	-.008	-.008	0	%100

Member Distributed Loads (BLC 6 : 90 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Z	-.003	-.003	0	%100
2	SF2-V2	Z	-.003	-.003	0	%100
3	SF3-V1	Z	-.003	-.003	0	%100
4	SF3-V2	Z	-.003	-.003	0	%100
5	SF2-D1	Z	-.003	-.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 6 : 90 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
6	SF2-D1-X	Z	-.003	-.003	0	%100
7	SF3-D1	Z	-.003	-.003	0	%100
8	SF3-D1-X	Z	-.003	-.003	0	%100
9	SF2-CPB	Z	-.003	-.003	0	%100
10	SF2-CPT	Z	-.003	-.003	0	%100
11	SF3-CPB	Z	-.003	-.003	0	%100
12	SF3-CPT	Z	-.003	-.003	0	%100
13	FFBH-1	Z	-1e-6	-1e-6	0	%100
14	FFBH-2	Z	0	0	0	%100
15	FFBH-3	Z	-1e-6	-1e-6	0	%100
16	FFTH-1	Z	-1e-6	-1e-6	0	%100
17	FFTH-2	Z	0	0	0	%100
18	FFTH-3	Z	-1e-6	-1e-6	0	%100
19	SF2-BH	Z	-.005	-.005	0	%100
20	SF2-TH	Z	-.005	-.005	0	%100
21	SF3-BH	Z	-.005	-.005	0	%100
22	SF3-TH	Z	-.005	-.005	0	%100
23	SA-1	Z	-.002	-.002	0	%100
24	SA-2	Z	-.002	-.002	0	%100
25	MP-1	Z	-.01	-.01	0	%100
26	MP-2	Z	-.01	-.01	0	%100
27	MP-3	Z	-.01	-.01	0	%100
28	MP-4	Z	-.01	-.01	0	%100
29	RRU-1	Z	-.009	-.009	0	%100
30	RRU-2	Z	-.009	-.009	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.001	.001	0	%100
2	SF2-V2	X	.001	.001	0	%100
3	SF3-V1	X	.001	.001	0	%100
4	SF3-V2	X	.001	.001	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.003	.003	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.003	.003	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.000763	.000763	0	%100
20	SF2-TH	X	.000763	.000763	0	%100
21	SF3-BH	X	.003	.003	0	%100
22	SF3-TH	X	.003	.003	0	%100
23	SA-1	X	.001	.001	0	%100
24	SA-2	X	.001	.001	0	%100
25	MP-1	X	.005	.005	0	%100
26	MP-2	X	.005	.005	0	%100
27	MP-3	X	.005	.005	0	%100
28	MP-4	X	.005	.005	0	%100

Member Distributed Loads (BLC 7 : 120 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
29	RRU-1	X	.004	.004	0	%100
30	RRU-2	X	.004	.004	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.003	-.003	0	%100
36	SF2-D1-X	Z	-.003	-.003	0	%100
37	SF3-D1	Z	-.003	-.003	0	%100
38	SF3-D1-X	Z	-.003	-.003	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.004	-.004	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.004	-.004	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.001	-.001	0	%100
50	SF2-TH	Z	-.001	-.001	0	%100
51	SF3-BH	Z	-.006	-.006	0	%100
52	SF3-TH	Z	-.006	-.006	0	%100
53	SA-1	Z	-.002	-.002	0	%100
54	SA-2	Z	-.002	-.002	0	%100
55	MP-1	Z	-.009	-.009	0	%100
56	MP-2	Z	-.009	-.009	0	%100
57	MP-3	Z	-.009	-.009	0	%100
58	MP-4	Z	-.009	-.009	0	%100
59	RRU-1	Z	-.008	-.008	0	%100
60	RRU-2	Z	-.008	-.008	0	%100

Member Distributed Loads (BLC 8 : 135 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.004	.004	0	%100
14	FFBH-2	X	.005	.005	0	%100
15	FFBH-3	X	.004	.004	0	%100
16	FFTH-1	X	.004	.004	0	%100
17	FFTH-2	X	.005	.005	0	%100
18	FFTH-3	X	.004	.004	0	%100
19	SF2-BH	X	.000205	.000205	0	%100
20	SF2-TH	X	.000205	.000205	0	%100
21	SF3-BH	X	.005	.005	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 8 : 135 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
22	SF3-TH	X	.005	.005	0	%100
23	SA-1	X	.004	.004	0	%100
24	SA-2	X	.004	.004	0	%100
25	MP-1	X	.007	.007	0	%100
26	MP-2	X	.007	.007	0	%100
27	MP-3	X	.007	.007	0	%100
28	MP-4	X	.007	.007	0	%100
29	RRU-1	X	.006	.006	0	%100
30	RRU-2	X	.006	.006	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.001	-.001	0	%100
40	SF2-CPT	Z	-.001	-.001	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.005	-.005	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.005	-.005	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.000201	-.000201	0	%100
50	SF2-TH	Z	-.000201	-.000201	0	%100
51	SF3-BH	Z	-.005	-.005	0	%100
52	SF3-TH	Z	-.005	-.005	0	%100
53	SA-1	Z	-.002	-.002	0	%100
54	SA-2	Z	-.002	-.002	0	%100
55	MP-1	Z	-.007	-.007	0	%100
56	MP-2	Z	-.007	-.007	0	%100
57	MP-3	Z	-.007	-.007	0	%100
58	MP-4	Z	-.007	-.007	0	%100
59	RRU-1	Z	-.006	-.006	0	%100
60	RRU-2	Z	-.006	-.006	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.003	.003	0	%100
6	SF2-D1-X	X	.003	.003	0	%100
7	SF3-D1	X	.003	.003	0	%100
8	SF3-D1-X	X	.003	.003	0	%100
9	SF2-CPB	X	.000905	.000905	0	%100
10	SF2-CPT	X	.000905	.000905	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.007	.007	0	%100
14	FFBH-2	X	.008	.008	0	%100

Member Distributed Loads (BLC 9 : 150 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
15	FFBH-3	X	.007	.007	0	%100
16	FFTH-1	X	.007	.007	0	%100
17	FFTH-2	X	.008	.008	0	%100
18	FFTH-3	X	.007	.007	0	%100
19	SF2-BH	X	.002	.002	0	%100
20	SF2-TH	X	.002	.002	0	%100
21	SF3-BH	X	.006	.006	0	%100
22	SF3-TH	X	.006	.006	0	%100
23	SA-1	X	.006	.006	0	%100
24	SA-2	X	.006	.006	0	%100
25	MP-1	X	.009	.009	0	%100
26	MP-2	X	.009	.009	0	%100
27	MP-3	X	.009	.009	0	%100
28	MP-4	X	.009	.009	0	%100
29	RRU-1	X	.008	.008	0	%100
30	RRU-2	X	.008	.008	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.000614	-.000614	0	%100
40	SF2-CPT	Z	-.000614	-.000614	0	%100
41	SF3-CPB	Z	-.0009	-.0009	0	%100
42	SF3-CPT	Z	-.0009	-.0009	0	%100
43	FFBH-1	Z	-.003	-.003	0	%100
44	FFBH-2	Z	-.004	-.004	0	%100
45	FFBH-3	Z	-.003	-.003	0	%100
46	FFTH-1	Z	-.003	-.003	0	%100
47	FFTH-2	Z	-.004	-.004	0	%100
48	FFTH-3	Z	-.003	-.003	0	%100
49	SF2-BH	Z	-.001	-.001	0	%100
50	SF2-TH	Z	-.001	-.001	0	%100
51	SF3-BH	Z	-.003	-.003	0	%100
52	SF3-TH	Z	-.003	-.003	0	%100
53	SA-1	Z	-.002	-.002	0	%100
54	SA-2	Z	-.002	-.002	0	%100
55	MP-1	Z	-.005	-.005	0	%100
56	MP-2	Z	-.005	-.005	0	%100
57	MP-3	Z	-.005	-.005	0	%100
58	MP-4	Z	-.005	-.005	0	%100
59	RRU-1	Z	-.004	-.004	0	%100
60	RRU-2	Z	-.004	-.004	0	%100

Member Distributed Loads (BLC 10 : 180 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.003	.003	0	%100
2	SF2-V2	X	.003	.003	0	%100
3	SF3-V1	X	.003	.003	0	%100
4	SF3-V2	X	.003	.003	0	%100
5	SF2-D1	X	.003	.003	0	%100
6	SF2-D1-X	X	.003	.003	0	%100
7	SF3-D1	X	.003	.003	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 10 : 180 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
8	SF3-D1-X	X	.003	.003	0	%100
9	SF2-CPB	X	.000281	.000281	0	%100
10	SF2-CPT	X	.000281	.000281	0	%100
11	SF3-CPB	X	.000281	.000281	0	%100
12	SF3-CPT	X	.000281	.000281	0	%100
13	FFBH-1	X	.009	.009	0	%100
14	FFBH-2	X	.01	.01	0	%100
15	FFBH-3	X	.009	.009	0	%100
16	FFTH-1	X	.009	.009	0	%100
17	FFTH-2	X	.01	.01	0	%100
18	FFTH-3	X	.009	.009	0	%100
19	SF2-BH	X	.005	.005	0	%100
20	SF2-TH	X	.005	.005	0	%100
21	SF3-BH	X	.005	.005	0	%100
22	SF3-TH	X	.005	.005	0	%100
23	SA-1	X	.01	.01	0	%100
24	SA-2	X	.01	.01	0	%100
25	MP-1	X	.01	.01	0	%100
26	MP-2	X	.01	.01	0	%100
27	MP-3	X	.01	.01	0	%100
28	MP-4	X	.01	.01	0	%100
29	RRU-1	X	.009	.009	0	%100
30	RRU-2	X	.009	.009	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.003	.003	0	%100
6	SF2-D1-X	X	.003	.003	0	%100
7	SF3-D1	X	.003	.003	0	%100
8	SF3-D1-X	X	.003	.003	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.000905	.000905	0	%100
12	SF3-CPT	X	.000905	.000905	0	%100
13	FFBH-1	X	.007	.007	0	%100
14	FFBH-2	X	.008	.008	0	%100
15	FFBH-3	X	.007	.007	0	%100
16	FFTH-1	X	.007	.007	0	%100
17	FFTH-2	X	.008	.008	0	%100
18	FFTH-3	X	.007	.007	0	%100
19	SF2-BH	X	.006	.006	0	%100
20	SF2-TH	X	.006	.006	0	%100
21	SF3-BH	X	.002	.002	0	%100
22	SF3-TH	X	.002	.002	0	%100
23	SA-1	X	.008	.008	0	%100
24	SA-2	X	.008	.008	0	%100
25	MP-1	X	.009	.009	0	%100
26	MP-2	X	.009	.009	0	%100
27	MP-3	X	.009	.009	0	%100
28	MP-4	X	.009	.009	0	%100
29	RRU-1	X	.008	.008	0	%100
30	RRU-2	X	.008	.008	0	%100

Member Distributed Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.0009	.0009	0	%100
40	SF2-CPT	Z	.0009	.0009	0	%100
41	SF3-CPB	Z	.000614	.000614	0	%100
42	SF3-CPT	Z	.000614	.000614	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.004	.004	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.004	.004	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.003	.003	0	%100
50	SF2-TH	Z	.003	.003	0	%100
51	SF3-BH	Z	.001	.001	0	%100
52	SF3-TH	Z	.001	.001	0	%100
53	SA-1	Z	.003	.003	0	%100
54	SA-2	Z	.003	.003	0	%100
55	MP-1	Z	.005	.005	0	%100
56	MP-2	Z	.005	.005	0	%100
57	MP-3	Z	.005	.005	0	%100
58	MP-4	Z	.005	.005	0	%100
59	RRU-1	Z	.004	.004	0	%100
60	RRU-2	Z	.004	.004	0	%100

Member Distributed Loads (BLC 12 : 225 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.004	.004	0	%100
14	FFBH-2	X	.005	.005	0	%100
15	FFBH-3	X	.004	.004	0	%100
16	FFTH-1	X	.004	.004	0	%100
17	FFTH-2	X	.005	.005	0	%100
18	FFTH-3	X	.004	.004	0	%100
19	SF2-BH	X	.005	.005	0	%100
20	SF2-TH	X	.005	.005	0	%100
21	SF3-BH	X	.000205	.000205	0	%100
22	SF3-TH	X	.000205	.000205	0	%100
23	SA-1	X	.006	.006	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 12 : 225 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
24	SA-2	X	.006	.006	0	%100
25	MP-1	X	.007	.007	0	%100
26	MP-2	X	.007	.007	0	%100
27	MP-3	X	.007	.007	0	%100
28	MP-4	X	.007	.007	0	%100
29	RRU-1	X	.006	.006	0	%100
30	RRU-2	X	.006	.006	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.001	.001	0	%100
42	SF3-CPT	Z	.001	.001	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.005	.005	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.005	.005	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.005	.005	0	%100
50	SF2-TH	Z	.005	.005	0	%100
51	SF3-BH	Z	.000201	.000201	0	%100
52	SF3-TH	Z	.000201	.000201	0	%100
53	SA-1	Z	.004	.004	0	%100
54	SA-2	Z	.004	.004	0	%100
55	MP-1	Z	.007	.007	0	%100
56	MP-2	Z	.007	.007	0	%100
57	MP-3	Z	.007	.007	0	%100
58	MP-4	Z	.007	.007	0	%100
59	RRU-1	Z	.006	.006	0	%100
60	RRU-2	Z	.006	.006	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.001	.001	0	%100
2	SF2-V2	X	.001	.001	0	%100
3	SF3-V1	X	.001	.001	0	%100
4	SF3-V2	X	.001	.001	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.001	.001	0	%100
10	SF2-CPT	X	.001	.001	0	%100
11	SF3-CPB	X	.001	.001	0	%100
12	SF3-CPT	X	.001	.001	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.003	.003	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100

Member Distributed Loads (BLC 13 : 240 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
17	FFTH-2	X	.003	.003	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.003	.003	0	%100
20	SF2-TH	X	.003	.003	0	%100
21	SF3-BH	X	.000763	.000763	0	%100
22	SF3-TH	X	.000763	.000763	0	%100
23	SA-1	X	.003	.003	0	%100
24	SA-2	X	.003	.003	0	%100
25	MP-1	X	.005	.005	0	%100
26	MP-2	X	.005	.005	0	%100
27	MP-3	X	.005	.005	0	%100
28	MP-4	X	.005	.005	0	%100
29	RRU-1	X	.004	.004	0	%100
30	RRU-2	X	.004	.004	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.003	.003	0	%100
36	SF2-D1-X	Z	.003	.003	0	%100
37	SF3-D1	Z	.003	.003	0	%100
38	SF3-D1-X	Z	.003	.003	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.004	.004	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.004	.004	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.006	.006	0	%100
50	SF2-TH	Z	.006	.006	0	%100
51	SF3-BH	Z	.001	.001	0	%100
52	SF3-TH	Z	.001	.001	0	%100
53	SA-1	Z	.004	.004	0	%100
54	SA-2	Z	.004	.004	0	%100
55	MP-1	Z	.009	.009	0	%100
56	MP-2	Z	.009	.009	0	%100
57	MP-3	Z	.009	.009	0	%100
58	MP-4	Z	.009	.009	0	%100
59	RRU-1	Z	.008	.008	0	%100
60	RRU-2	Z	.008	.008	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Z	.003	.003	0	%100
2	SF2-V2	Z	.003	.003	0	%100
3	SF3-V1	Z	.003	.003	0	%100
4	SF3-V2	Z	.003	.003	0	%100
5	SF2-D1	Z	.003	.003	0	%100
6	SF2-D1-X	Z	.003	.003	0	%100
7	SF3-D1	Z	.003	.003	0	%100
8	SF3-D1-X	Z	.003	.003	0	%100
9	SF2-CPB	Z	.003	.003	0	%100

Member Distributed Loads (BLC 14 : 270 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
10	SF2-CPT	Z	.003	.003	0	%100
11	SF3-CPB	Z	.003	.003	0	%100
12	SF3-CPT	Z	.003	.003	0	%100
13	FFBH-1	Z	1e-6	1e-6	0	%100
14	FFBH-2	Z	0	0	0	%100
15	FFBH-3	Z	1e-6	1e-6	0	%100
16	FFTH-1	Z	1e-6	1e-6	0	%100
17	FFTH-2	Z	0	0	0	%100
18	FFTH-3	Z	1e-6	1e-6	0	%100
19	SF2-BH	Z	.005	.005	0	%100
20	SF2-TH	Z	.005	.005	0	%100
21	SF3-BH	Z	.005	.005	0	%100
22	SF3-TH	Z	.005	.005	0	%100
23	SA-1	Z	.002	.002	0	%100
24	SA-2	Z	.002	.002	0	%100
25	MP-1	Z	.01	.01	0	%100
26	MP-2	Z	.01	.01	0	%100
27	MP-3	Z	.01	.01	0	%100
28	MP-4	Z	.01	.01	0	%100
29	RRU-1	Z	.009	.009	0	%100
30	RRU-2	Z	.009	.009	0	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.001	-.001	0	%100
2	SF2-V2	X	-.001	-.001	0	%100
3	SF3-V1	X	-.001	-.001	0	%100
4	SF3-V2	X	-.001	-.001	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.003	-.003	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.003	-.003	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.000763	-.000763	0	%100
20	SF2-TH	X	-.000763	-.000763	0	%100
21	SF3-BH	X	-.003	-.003	0	%100
22	SF3-TH	X	-.003	-.003	0	%100
23	SA-1	X	-.001	-.001	0	%100
24	SA-2	X	-.001	-.001	0	%100
25	MP-1	X	-.005	-.005	0	%100
26	MP-2	X	-.005	-.005	0	%100
27	MP-3	X	-.005	-.005	0	%100
28	MP-4	X	-.005	-.005	0	%100
29	RRU-1	X	-.004	-.004	0	%100
30	RRU-2	X	-.004	-.004	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 15 : 300 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.003	.003	0	%100
36	SF2-D1-X	Z	.003	.003	0	%100
37	SF3-D1	Z	.003	.003	0	%100
38	SF3-D1-X	Z	.003	.003	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.004	.004	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.004	.004	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.001	.001	0	%100
50	SF2-TH	Z	.001	.001	0	%100
51	SF3-BH	Z	.006	.006	0	%100
52	SF3-TH	Z	.006	.006	0	%100
53	SA-1	Z	.002	.002	0	%100
54	SA-2	Z	.002	.002	0	%100
55	MP-1	Z	.009	.009	0	%100
56	MP-2	Z	.009	.009	0	%100
57	MP-3	Z	.009	.009	0	%100
58	MP-4	Z	.009	.009	0	%100
59	RRU-1	Z	.008	.008	0	%100
60	RRU-2	Z	.008	.008	0	%100

Member Distributed Loads (BLC 16 : 315 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.001	-.001	0	%100
10	SF2-CPT	X	-.001	-.001	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100
13	FFBH-1	X	-.004	-.004	0	%100
14	FFBH-2	X	-.005	-.005	0	%100
15	FFBH-3	X	-.004	-.004	0	%100
16	FFTH-1	X	-.004	-.004	0	%100
17	FFTH-2	X	-.005	-.005	0	%100
18	FFTH-3	X	-.004	-.004	0	%100
19	SF2-BH	X	-.000205	-.000205	0	%100
20	SF2-TH	X	-.000205	-.000205	0	%100
21	SF3-BH	X	-.005	-.005	0	%100
22	SF3-TH	X	-.005	-.005	0	%100
23	SA-1	X	-.004	-.004	0	%100
24	SA-2	X	-.004	-.004	0	%100
25	MP-1	X	-.007	-.007	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

Oct 30, 2019
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Member Distributed Loads (BLC 16 : 315 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
26	MP-2	X	-.007	-.007	0	%100
27	MP-3	X	-.007	-.007	0	%100
28	MP-4	X	-.007	-.007	0	%100
29	RRU-1	X	-.006	-.006	0	%100
30	RRU-2	X	-.006	-.006	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.001	.001	0	%100
40	SF2-CPT	Z	.001	.001	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.005	.005	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.005	.005	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.000201	.000201	0	%100
50	SF2-TH	Z	.000201	.000201	0	%100
51	SF3-BH	Z	.005	.005	0	%100
52	SF3-TH	Z	.005	.005	0	%100
53	SA-1	Z	.002	.002	0	%100
54	SA-2	Z	.002	.002	0	%100
55	MP-1	Z	.007	.007	0	%100
56	MP-2	Z	.007	.007	0	%100
57	MP-3	Z	.007	.007	0	%100
58	MP-4	Z	.007	.007	0	%100
59	RRU-1	Z	.006	.006	0	%100
60	RRU-2	Z	.006	.006	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.003	-.003	0	%100
6	SF2-D1-X	X	-.003	-.003	0	%100
7	SF3-D1	X	-.003	-.003	0	%100
8	SF3-D1-X	X	-.003	-.003	0	%100
9	SF2-CPB	X	-.000905	-.000905	0	%100
10	SF2-CPT	X	-.000905	-.000905	0	%100
11	SF3-CPB	X	-.001	-.001	0	%100
12	SF3-CPT	X	-.001	-.001	0	%100
13	FFBH-1	X	-.007	-.007	0	%100
14	FFBH-2	X	-.008	-.008	0	%100
15	FFBH-3	X	-.007	-.007	0	%100
16	FFTH-1	X	-.007	-.007	0	%100
17	FFTH-2	X	-.008	-.008	0	%100
18	FFTH-3	X	-.007	-.007	0	%100

Member Distributed Loads (BLC 17 : 330 Wind - No Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
19	SF2-BH	X	-.002	-.002	0	%100
20	SF2-TH	X	-.002	-.002	0	%100
21	SF3-BH	X	-.006	-.006	0	%100
22	SF3-TH	X	-.006	-.006	0	%100
23	SA-1	X	-.006	-.006	0	%100
24	SA-2	X	-.006	-.006	0	%100
25	MP-1	X	-.009	-.009	0	%100
26	MP-2	X	-.009	-.009	0	%100
27	MP-3	X	-.009	-.009	0	%100
28	MP-4	X	-.009	-.009	0	%100
29	RRU-1	X	-.008	-.008	0	%100
30	RRU-2	X	-.008	-.008	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.000614	.000614	0	%100
40	SF2-CPT	Z	.000614	.000614	0	%100
41	SF3-CPB	Z	.0009	.0009	0	%100
42	SF3-CPT	Z	.0009	.0009	0	%100
43	FFBH-1	Z	.003	.003	0	%100
44	FFBH-2	Z	.004	.004	0	%100
45	FFBH-3	Z	.003	.003	0	%100
46	FFTH-1	Z	.003	.003	0	%100
47	FFTH-2	Z	.004	.004	0	%100
48	FFTH-3	Z	.003	.003	0	%100
49	SF2-BH	Z	.001	.001	0	%100
50	SF2-TH	Z	.001	.001	0	%100
51	SF3-BH	Z	.003	.003	0	%100
52	SF3-TH	Z	.003	.003	0	%100
53	SA-1	Z	.002	.002	0	%100
54	SA-2	Z	.002	.002	0	%100
55	MP-1	Z	.005	.005	0	%100
56	MP-2	Z	.005	.005	0	%100
57	MP-3	Z	.005	.005	0	%100
58	MP-4	Z	.005	.005	0	%100
59	RRU-1	Z	.004	.004	0	%100
60	RRU-2	Z	.004	.004	0	%100

Member Distributed Loads (BLC 18 : Ice Weight)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Y	-.005	-.005	0	%100
2	SF2-V2	Y	-.005	-.005	0	%100
3	SF3-V1	Y	-.005	-.005	0	%100
4	SF3-V2	Y	-.005	-.005	0	%100
5	SF2-D1	Y	-.005	-.005	0	%100
6	SF2-D1-X	Y	-.005	-.005	0	%100
7	SF3-D1	Y	-.005	-.005	0	%100
8	SF3-D1-X	Y	-.005	-.005	0	%100
9	SF2-CPB	Y	-.003	-.003	0	%100
10	SF2-CPT	Y	-.003	-.003	0	%100
11	SF3-CPB	Y	-.003	-.003	0	%100

Member Distributed Loads (BLC 18 : Ice Weight) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
12	SF3-CPT	Y	-.003	-.003	0	%100
13	FFBH-1	Y	-.01	-.01	0	%100
14	FFBH-2	Y	-.01	-.01	0	%100
15	FFBH-3	Y	-.01	-.01	0	%100
16	FFTH-1	Y	-.01	-.01	0	%100
17	FFTH-2	Y	-.01	-.01	0	%100
18	FFTH-3	Y	-.01	-.01	0	%100
19	SF2-BH	Y	-.009	-.009	0	%100
20	SF2-TH	Y	-.009	-.009	0	%100
21	SF3-BH	Y	-.009	-.009	0	%100
22	SF3-TH	Y	-.009	-.009	0	%100
23	SA-1	Y	-.009	-.009	0	%100
24	SA-2	Y	-.009	-.009	0	%100
25	MP-1	Y	-.008	-.008	0	%100
26	MP-2	Y	-.008	-.008	0	%100
27	MP-3	Y	-.008	-.008	0	%100
28	MP-4	Y	-.008	-.008	0	%100
29	RRU-1	Y	-.009	-.009	0	%100
30	RRU-2	Y	-.009	-.009	0	%100

Member Distributed Loads (BLC 19 : 0 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.005	-.005	0	%100
10	SF2-CPT	X	-.005	-.005	0	%100
11	SF3-CPB	X	-.005	-.005	0	%100
12	SF3-CPT	X	-.005	-.005	0	%100
13	FFBH-1	X	-.003	-.003	0	%100
14	FFBH-2	X	-.003	-.003	0	%100
15	FFBH-3	X	-.003	-.003	0	%100
16	FFTH-1	X	-.003	-.003	0	%100
17	FFTH-2	X	-.003	-.003	0	%100
18	FFTH-3	X	-.003	-.003	0	%100
19	SF2-BH	X	-.003	-.003	0	%100
20	SF2-TH	X	-.003	-.003	0	%100
21	SF3-BH	X	-.003	-.003	0	%100
22	SF3-TH	X	-.003	-.003	0	%100
23	SA-1	X	-.003	-.003	0	%100
24	SA-2	X	-.003	-.003	0	%100
25	MP-1	X	-.003	-.003	0	%100
26	MP-2	X	-.003	-.003	0	%100
27	MP-3	X	-.003	-.003	0	%100
28	MP-4	X	-.003	-.003	0	%100
29	RRU-1	X	-.003	-.003	0	%100
30	RRU-2	X	-.003	-.003	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.002	-.002	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.002	-.002	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.002	-.002	0	%100
20	SF2-TH	X	-.002	-.002	0	%100
21	SF3-BH	X	-.000672	-.000672	0	%100
22	SF3-TH	X	-.000672	-.000672	0	%100
23	SA-1	X	-.003	-.003	0	%100
24	SA-2	X	-.003	-.003	0	%100
25	MP-1	X	-.003	-.003	0	%100
26	MP-2	X	-.003	-.003	0	%100
27	MP-3	X	-.003	-.003	0	%100
28	MP-4	X	-.003	-.003	0	%100
29	RRU-1	X	-.002	-.002	0	%100
30	RRU-2	X	-.002	-.002	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.001	-.001	0	%100
36	SF2-D1-X	Z	-.001	-.001	0	%100
37	SF3-D1	Z	-.001	-.001	0	%100
38	SF3-D1-X	Z	-.001	-.001	0	%100
39	SF2-CPB	Z	-.001	-.001	0	%100
40	SF2-CPT	Z	-.001	-.001	0	%100
41	SF3-CPB	Z	-.000907	-.000907	0	%100
42	SF3-CPT	Z	-.000907	-.000907	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.001	-.001	0	%100
50	SF2-TH	Z	-.001	-.001	0	%100
51	SF3-BH	Z	-.000384	-.000384	0	%100
52	SF3-TH	Z	-.000384	-.000384	0	%100
53	SA-1	Z	-.001	-.001	0	%100
54	SA-2	Z	-.001	-.001	0	%100
55	MP-1	Z	-.002	-.002	0	%100
56	MP-2	Z	-.002	-.002	0	%100
57	MP-3	Z	-.002	-.002	0	%100
58	MP-4	Z	-.002	-.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
59	RRU-1	Z	-.001	-.001	0	%100
60	RRU-2	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.001	-.001	0	%100
2	SF2-V2	X	-.001	-.001	0	%100
3	SF3-V1	X	-.001	-.001	0	%100
4	SF3-V2	X	-.001	-.001	0	%100
5	SF2-D1	X	-.001	-.001	0	%100
6	SF2-D1-X	X	-.001	-.001	0	%100
7	SF3-D1	X	-.001	-.001	0	%100
8	SF3-D1-X	X	-.001	-.001	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.002	-.002	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.002	-.002	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.002	-.002	0	%100
20	SF2-TH	X	-.002	-.002	0	%100
21	SF3-BH	X	-7.6e-5	-7.6e-5	0	%100
22	SF3-TH	X	-7.6e-5	-7.6e-5	0	%100
23	SA-1	X	-.002	-.002	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	MP-1	X	-.002	-.002	0	%100
26	MP-2	X	-.002	-.002	0	%100
27	MP-3	X	-.002	-.002	0	%100
28	MP-4	X	-.002	-.002	0	%100
29	RRU-1	X	-.002	-.002	0	%100
30	RRU-2	X	-.002	-.002	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.002	-.002	0	%100
50	SF2-TH	Z	-.002	-.002	0	%100
51	SF3-BH	Z	-7.6e-5	-7.6e-5	0	%100

Member Distributed Loads (BLC 21 : 45 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
52	SF3-TH	Z	-7.6e-5	-7.6e-5	0	%100
53	SA-1	Z	-.001	-.001	0	%100
54	SA-2	Z	-.001	-.001	0	%100
55	MP-1	Z	-.002	-.002	0	%100
56	MP-2	Z	-.002	-.002	0	%100
57	MP-3	Z	-.002	-.002	0	%100
58	MP-4	Z	-.002	-.002	0	%100
59	RRU-1	Z	-.002	-.002	0	%100
60	RRU-2	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 22 : 60 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.000943	-.000943	0	%100
2	SF2-V2	X	-.000943	-.000943	0	%100
3	SF3-V1	X	-.000943	-.000943	0	%100
4	SF3-V2	X	-.000943	-.000943	0	%100
5	SF2-D1	X	-.001	-.001	0	%100
6	SF2-D1-X	X	-.001	-.001	0	%100
7	SF3-D1	X	-.001	-.001	0	%100
8	SF3-D1-X	X	-.001	-.001	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.000751	-.000751	0	%100
14	FFBH-2	X	-.000787	-.000787	0	%100
15	FFBH-3	X	-.000751	-.000751	0	%100
16	FFTH-1	X	-.000751	-.000751	0	%100
17	FFTH-2	X	-.000787	-.000787	0	%100
18	FFTH-3	X	-.000751	-.000751	0	%100
19	SF2-BH	X	-.001	-.001	0	%100
20	SF2-TH	X	-.001	-.001	0	%100
21	SF3-BH	X	-.000284	-.000284	0	%100
22	SF3-TH	X	-.000284	-.000284	0	%100
23	SA-1	X	-.001	-.001	0	%100
24	SA-2	X	-.001	-.001	0	%100
25	MP-1	X	-.002	-.002	0	%100
26	MP-2	X	-.002	-.002	0	%100
27	MP-3	X	-.002	-.002	0	%100
28	MP-4	X	-.002	-.002	0	%100
29	RRU-1	X	-.001	-.001	0	%100
30	RRU-2	X	-.001	-.001	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.004	-.004	0	%100
40	SF2-CPT	Z	-.004	-.004	0	%100
41	SF3-CPB	Z	-.003	-.003	0	%100
42	SF3-CPT	Z	-.003	-.003	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.002	-.002	0	%100
50	SF2-TH	Z	-.002	-.002	0	%100
51	SF3-BH	Z	-.000487	-.000487	0	%100
52	SF3-TH	Z	-.000487	-.000487	0	%100
53	SA-1	Z	-.001	-.001	0	%100
54	SA-2	Z	-.001	-.001	0	%100
55	MP-1	Z	-.003	-.003	0	%100
56	MP-2	Z	-.003	-.003	0	%100
57	MP-3	Z	-.003	-.003	0	%100
58	MP-4	Z	-.003	-.003	0	%100
59	RRU-1	Z	-.002	-.002	0	%100
60	RRU-2	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 23 : 90 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Z	-.002	-.002	0	%100
2	SF2-V2	Z	-.002	-.002	0	%100
3	SF3-V1	Z	-.002	-.002	0	%100
4	SF3-V2	Z	-.002	-.002	0	%100
5	SF2-D1	Z	-.002	-.002	0	%100
6	SF2-D1-X	Z	-.002	-.002	0	%100
7	SF3-D1	Z	-.002	-.002	0	%100
8	SF3-D1-X	Z	-.002	-.002	0	%100
9	SF2-CPB	Z	-.004	-.004	0	%100
10	SF2-CPT	Z	-.004	-.004	0	%100
11	SF3-CPB	Z	-.004	-.004	0	%100
12	SF3-CPT	Z	-.004	-.004	0	%100
13	FFBH-1	Z	0	0	0	%100
14	FFBH-2	Z	0	0	0	%100
15	FFBH-3	Z	0	0	0	%100
16	FFTH-1	Z	0	0	0	%100
17	FFTH-2	Z	0	0	0	%100
18	FFTH-3	Z	0	0	0	%100
19	SF2-BH	Z	-.002	-.002	0	%100
20	SF2-TH	Z	-.002	-.002	0	%100
21	SF3-BH	Z	-.002	-.002	0	%100
22	SF3-TH	Z	-.002	-.002	0	%100
23	SA-1	Z	-.000553	-.000553	0	%100
24	SA-2	Z	-.000553	-.000553	0	%100
25	MP-1	Z	-.003	-.003	0	%100
26	MP-2	Z	-.003	-.003	0	%100
27	MP-3	Z	-.003	-.003	0	%100
28	MP-4	Z	-.003	-.003	0	%100
29	RRU-1	Z	-.003	-.003	0	%100
30	RRU-2	Z	-.003	-.003	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.000943	.000943	0	%100
2	SF2-V2	X	.000943	.000943	0	%100
3	SF3-V1	X	.000943	.000943	0	%100
4	SF3-V2	X	.000943	.000943	0	%100

Member Distributed Loads (BLC 24 : 120 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
5	SF2-D1	X	.001	.001	0	%100
6	SF2-D1-X	X	.001	.001	0	%100
7	SF3-D1	X	.001	.001	0	%100
8	SF3-D1-X	X	.001	.001	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.000751	.000751	0	%100
14	FFBH-2	X	.000787	.000787	0	%100
15	FFBH-3	X	.000751	.000751	0	%100
16	FFTH-1	X	.000751	.000751	0	%100
17	FFTH-2	X	.000787	.000787	0	%100
18	FFTH-3	X	.000751	.000751	0	%100
19	SF2-BH	X	.000284	.000284	0	%100
20	SF2-TH	X	.000284	.000284	0	%100
21	SF3-BH	X	.001	.001	0	%100
22	SF3-TH	X	.001	.001	0	%100
23	SA-1	X	.000449	.000449	0	%100
24	SA-2	X	.000449	.000449	0	%100
25	MP-1	X	.002	.002	0	%100
26	MP-2	X	.002	.002	0	%100
27	MP-3	X	.002	.002	0	%100
28	MP-4	X	.002	.002	0	%100
29	RRU-1	X	.001	.001	0	%100
30	RRU-2	X	.001	.001	0	%100
31	SF2-V1	Z	-.002	-.002	0	%100
32	SF2-V2	Z	-.002	-.002	0	%100
33	SF3-V1	Z	-.002	-.002	0	%100
34	SF3-V2	Z	-.002	-.002	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.003	-.003	0	%100
40	SF2-CPT	Z	-.003	-.003	0	%100
41	SF3-CPB	Z	-.004	-.004	0	%100
42	SF3-CPT	Z	-.004	-.004	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.000487	-.000487	0	%100
50	SF2-TH	Z	-.000487	-.000487	0	%100
51	SF3-BH	Z	-.002	-.002	0	%100
52	SF3-TH	Z	-.002	-.002	0	%100
53	SA-1	Z	-.000592	-.000592	0	%100
54	SA-2	Z	-.000592	-.000592	0	%100
55	MP-1	Z	-.003	-.003	0	%100
56	MP-2	Z	-.003	-.003	0	%100
57	MP-3	Z	-.003	-.003	0	%100
58	MP-4	Z	-.003	-.003	0	%100
59	RRU-1	Z	-.002	-.002	0	%100
60	RRU-2	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.001	.001	0	%100
2	SF2-V2	X	.001	.001	0	%100
3	SF3-V1	X	.001	.001	0	%100
4	SF3-V2	X	.001	.001	0	%100
5	SF2-D1	X	.001	.001	0	%100
6	SF2-D1-X	X	.001	.001	0	%100
7	SF3-D1	X	.001	.001	0	%100
8	SF3-D1-X	X	.001	.001	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.002	.002	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.002	.002	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	7.6e-5	7.6e-5	0	%100
20	SF2-TH	X	7.6e-5	7.6e-5	0	%100
21	SF3-BH	X	.002	.002	0	%100
22	SF3-TH	X	.002	.002	0	%100
23	SA-1	X	.001	.001	0	%100
24	SA-2	X	.001	.001	0	%100
25	MP-1	X	.002	.002	0	%100
26	MP-2	X	.002	.002	0	%100
27	MP-3	X	.002	.002	0	%100
28	MP-4	X	.002	.002	0	%100
29	RRU-1	X	.002	.002	0	%100
30	RRU-2	X	.002	.002	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.002	-.002	0	%100
36	SF2-D1-X	Z	-.002	-.002	0	%100
37	SF3-D1	Z	-.002	-.002	0	%100
38	SF3-D1-X	Z	-.002	-.002	0	%100
39	SF2-CPB	Z	-.002	-.002	0	%100
40	SF2-CPT	Z	-.002	-.002	0	%100
41	SF3-CPB	Z	-.002	-.002	0	%100
42	SF3-CPT	Z	-.002	-.002	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-7.6e-5	-7.6e-5	0	%100
50	SF2-TH	Z	-7.6e-5	-7.6e-5	0	%100
51	SF3-BH	Z	-.002	-.002	0	%100
52	SF3-TH	Z	-.002	-.002	0	%100
53	SA-1	Z	-.000885	-.000885	0	%100
54	SA-2	Z	-.000885	-.000885	0	%100
55	MP-1	Z	-.002	-.002	0	%100
56	MP-2	Z	-.002	-.002	0	%100
57	MP-3	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 25 : 135 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
58	MP-4	Z	-.002	-.002	0	%100
59	RRU-1	Z	-.002	-.002	0	%100
60	RRU-2	Z	-.002	-.002	0	%100

Member Distributed Loads (BLC 26 : 150 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.002	.002	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.002	.002	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.000672	.000672	0	%100
20	SF2-TH	X	.000672	.000672	0	%100
21	SF3-BH	X	.002	.002	0	%100
22	SF3-TH	X	.002	.002	0	%100
23	SA-1	X	.002	.002	0	%100
24	SA-2	X	.002	.002	0	%100
25	MP-1	X	.003	.003	0	%100
26	MP-2	X	.003	.003	0	%100
27	MP-3	X	.003	.003	0	%100
28	MP-4	X	.003	.003	0	%100
29	RRU-1	X	.002	.002	0	%100
30	RRU-2	X	.002	.002	0	%100
31	SF2-V1	Z	-.001	-.001	0	%100
32	SF2-V2	Z	-.001	-.001	0	%100
33	SF3-V1	Z	-.001	-.001	0	%100
34	SF3-V2	Z	-.001	-.001	0	%100
35	SF2-D1	Z	-.001	-.001	0	%100
36	SF2-D1-X	Z	-.001	-.001	0	%100
37	SF3-D1	Z	-.001	-.001	0	%100
38	SF3-D1-X	Z	-.001	-.001	0	%100
39	SF2-CPB	Z	-.000907	-.000907	0	%100
40	SF2-CPT	Z	-.000907	-.000907	0	%100
41	SF3-CPB	Z	-.001	-.001	0	%100
42	SF3-CPT	Z	-.001	-.001	0	%100
43	FFBH-1	Z	-.001	-.001	0	%100
44	FFBH-2	Z	-.001	-.001	0	%100
45	FFBH-3	Z	-.001	-.001	0	%100
46	FFTH-1	Z	-.001	-.001	0	%100
47	FFTH-2	Z	-.001	-.001	0	%100
48	FFTH-3	Z	-.001	-.001	0	%100
49	SF2-BH	Z	-.000384	-.000384	0	%100
50	SF2-TH	Z	-.000384	-.000384	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 26 : 150 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
51	SF3-BH	Z	-.001	-.001	0	%100
52	SF3-TH	Z	-.001	-.001	0	%100
53	SA-1	Z	-.000868	-.000868	0	%100
54	SA-2	Z	-.000868	-.000868	0	%100
55	MP-1	Z	-.002	-.002	0	%100
56	MP-2	Z	-.002	-.002	0	%100
57	MP-3	Z	-.002	-.002	0	%100
58	MP-4	Z	-.002	-.002	0	%100
59	RRU-1	Z	-.001	-.001	0	%100
60	RRU-2	Z	-.001	-.001	0	%100

Member Distributed Loads (BLC 27 : 180 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.005	.005	0	%100
10	SF2-CPT	X	.005	.005	0	%100
11	SF3-CPB	X	.005	.005	0	%100
12	SF3-CPT	X	.005	.005	0	%100
13	FFBH-1	X	.003	.003	0	%100
14	FFBH-2	X	.003	.003	0	%100
15	FFBH-3	X	.003	.003	0	%100
16	FFTH-1	X	.003	.003	0	%100
17	FFTH-2	X	.003	.003	0	%100
18	FFTH-3	X	.003	.003	0	%100
19	SF2-BH	X	.003	.003	0	%100
20	SF2-TH	X	.003	.003	0	%100
21	SF3-BH	X	.003	.003	0	%100
22	SF3-TH	X	.003	.003	0	%100
23	SA-1	X	.003	.003	0	%100
24	SA-2	X	.003	.003	0	%100
25	MP-1	X	.003	.003	0	%100
26	MP-2	X	.003	.003	0	%100
27	MP-3	X	.003	.003	0	%100
28	MP-4	X	.003	.003	0	%100
29	RRU-1	X	.003	.003	0	%100
30	RRU-2	X	.003	.003	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.002	.002	0	%100
2	SF2-V2	X	.002	.002	0	%100
3	SF3-V1	X	.002	.002	0	%100
4	SF3-V2	X	.002	.002	0	%100
5	SF2-D1	X	.002	.002	0	%100
6	SF2-D1-X	X	.002	.002	0	%100
7	SF3-D1	X	.002	.002	0	%100
8	SF3-D1-X	X	.002	.002	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100

Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.002	.002	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.002	.002	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.002	.002	0	%100
20	SF2-TH	X	.002	.002	0	%100
21	SF3-BH	X	.000672	.000672	0	%100
22	SF3-TH	X	.000672	.000672	0	%100
23	SA-1	X	.003	.003	0	%100
24	SA-2	X	.003	.003	0	%100
25	MP-1	X	.003	.003	0	%100
26	MP-2	X	.003	.003	0	%100
27	MP-3	X	.003	.003	0	%100
28	MP-4	X	.003	.003	0	%100
29	RRU-1	X	.002	.002	0	%100
30	RRU-2	X	.002	.002	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.001	.001	0	%100
36	SF2-D1-X	Z	.001	.001	0	%100
37	SF3-D1	Z	.001	.001	0	%100
38	SF3-D1-X	Z	.001	.001	0	%100
39	SF2-CPB	Z	.001	.001	0	%100
40	SF2-CPT	Z	.001	.001	0	%100
41	SF3-CPB	Z	.000907	.000907	0	%100
42	SF3-CPT	Z	.000907	.000907	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.001	.001	0	%100
50	SF2-TH	Z	.001	.001	0	%100
51	SF3-BH	Z	.000384	.000384	0	%100
52	SF3-TH	Z	.000384	.000384	0	%100
53	SA-1	Z	.001	.001	0	%100
54	SA-2	Z	.001	.001	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	RRU-1	Z	.001	.001	0	%100
60	RRU-2	Z	.001	.001	0	%100

Member Distributed Loads (BLC 29 : 225 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.001	.001	0	%100
2	SF2-V2	X	.001	.001	0	%100
3	SF3-V1	X	.001	.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 29 : 225 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
4	SF3-V2	X	.001	.001	0	%100
5	SF2-D1	X	.001	.001	0	%100
6	SF2-D1-X	X	.001	.001	0	%100
7	SF3-D1	X	.001	.001	0	%100
8	SF3-D1-X	X	.001	.001	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.002	.002	0	%100
14	FFBH-2	X	.002	.002	0	%100
15	FFBH-3	X	.002	.002	0	%100
16	FFTH-1	X	.002	.002	0	%100
17	FFTH-2	X	.002	.002	0	%100
18	FFTH-3	X	.002	.002	0	%100
19	SF2-BH	X	.002	.002	0	%100
20	SF2-TH	X	.002	.002	0	%100
21	SF3-BH	X	7.6e-5	7.6e-5	0	%100
22	SF3-TH	X	7.6e-5	7.6e-5	0	%100
23	SA-1	X	.002	.002	0	%100
24	SA-2	X	.002	.002	0	%100
25	MP-1	X	.002	.002	0	%100
26	MP-2	X	.002	.002	0	%100
27	MP-3	X	.002	.002	0	%100
28	MP-4	X	.002	.002	0	%100
29	RRU-1	X	.002	.002	0	%100
30	RRU-2	X	.002	.002	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.002	.002	0	%100
50	SF2-TH	Z	.002	.002	0	%100
51	SF3-BH	Z	7.6e-5	7.6e-5	0	%100
52	SF3-TH	Z	7.6e-5	7.6e-5	0	%100
53	SA-1	Z	.001	.001	0	%100
54	SA-2	Z	.001	.001	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	RRU-1	Z	.002	.002	0	%100
60	RRU-2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	.000943	.000943	0	%100
2	SF2-V2	X	.000943	.000943	0	%100
3	SF3-V1	X	.000943	.000943	0	%100
4	SF3-V2	X	.000943	.000943	0	%100
5	SF2-D1	X	.001	.001	0	%100
6	SF2-D1-X	X	.001	.001	0	%100
7	SF3-D1	X	.001	.001	0	%100
8	SF3-D1-X	X	.001	.001	0	%100
9	SF2-CPB	X	.002	.002	0	%100
10	SF2-CPT	X	.002	.002	0	%100
11	SF3-CPB	X	.002	.002	0	%100
12	SF3-CPT	X	.002	.002	0	%100
13	FFBH-1	X	.000751	.000751	0	%100
14	FFBH-2	X	.000787	.000787	0	%100
15	FFBH-3	X	.000751	.000751	0	%100
16	FFTH-1	X	.000751	.000751	0	%100
17	FFTH-2	X	.000787	.000787	0	%100
18	FFTH-3	X	.000751	.000751	0	%100
19	SF2-BH	X	.001	.001	0	%100
20	SF2-TH	X	.001	.001	0	%100
21	SF3-BH	X	.000284	.000284	0	%100
22	SF3-TH	X	.000284	.000284	0	%100
23	SA-1	X	.001	.001	0	%100
24	SA-2	X	.001	.001	0	%100
25	MP-1	X	.002	.002	0	%100
26	MP-2	X	.002	.002	0	%100
27	MP-3	X	.002	.002	0	%100
28	MP-4	X	.002	.002	0	%100
29	RRU-1	X	.001	.001	0	%100
30	RRU-2	X	.001	.001	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.004	.004	0	%100
40	SF2-CPT	Z	.004	.004	0	%100
41	SF3-CPB	Z	.003	.003	0	%100
42	SF3-CPT	Z	.003	.003	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.002	.002	0	%100
50	SF2-TH	Z	.002	.002	0	%100
51	SF3-BH	Z	.000487	.000487	0	%100
52	SF3-TH	Z	.000487	.000487	0	%100
53	SA-1	Z	.001	.001	0	%100
54	SA-2	Z	.001	.001	0	%100
55	MP-1	Z	.003	.003	0	%100
56	MP-2	Z	.003	.003	0	%100
57	MP-3	Z	.003	.003	0	%100

Member Distributed Loads (BLC 30 : 240 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
58	MP-4	Z	.003	.003	0	%100
59	RRU-1	Z	.002	.002	0	%100
60	RRU-2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 31 : 270 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	Z	.002	.002	0	%100
2	SF2-V2	Z	.002	.002	0	%100
3	SF3-V1	Z	.002	.002	0	%100
4	SF3-V2	Z	.002	.002	0	%100
5	SF2-D1	Z	.002	.002	0	%100
6	SF2-D1-X	Z	.002	.002	0	%100
7	SF3-D1	Z	.002	.002	0	%100
8	SF3-D1-X	Z	.002	.002	0	%100
9	SF2-CPB	Z	.004	.004	0	%100
10	SF2-CPT	Z	.004	.004	0	%100
11	SF3-CPB	Z	.004	.004	0	%100
12	SF3-CPT	Z	.004	.004	0	%100
13	FFBH-1	Z	0	0	0	%100
14	FFBH-2	Z	0	0	0	%100
15	FFBH-3	Z	0	0	0	%100
16	FFTH-1	Z	0	0	0	%100
17	FFTH-2	Z	0	0	0	%100
18	FFTH-3	Z	0	0	0	%100
19	SF2-BH	Z	.002	.002	0	%100
20	SF2-TH	Z	.002	.002	0	%100
21	SF3-BH	Z	.002	.002	0	%100
22	SF3-TH	Z	.002	.002	0	%100
23	SA-1	Z	.000553	.000553	0	%100
24	SA-2	Z	.000553	.000553	0	%100
25	MP-1	Z	.003	.003	0	%100
26	MP-2	Z	.003	.003	0	%100
27	MP-3	Z	.003	.003	0	%100
28	MP-4	Z	.003	.003	0	%100
29	RRU-1	Z	.003	.003	0	%100
30	RRU-2	Z	.003	.003	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.000943	-.000943	0	%100
2	SF2-V2	X	-.000943	-.000943	0	%100
3	SF3-V1	X	-.000943	-.000943	0	%100
4	SF3-V2	X	-.000943	-.000943	0	%100
5	SF2-D1	X	-.001	-.001	0	%100
6	SF2-D1-X	X	-.001	-.001	0	%100
7	SF3-D1	X	-.001	-.001	0	%100
8	SF3-D1-X	X	-.001	-.001	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.000751	-.000751	0	%100
14	FFBH-2	X	-.000787	-.000787	0	%100
15	FFBH-3	X	-.000751	-.000751	0	%100
16	FFTH-1	X	-.000751	-.000751	0	%100
17	FFTH-2	X	-.000787	-.000787	0	%100

Member Distributed Loads (BLC 32 : 300 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
18	FFTH-3	X	-.000751	-.000751	0	%100
19	SF2-BH	X	-.000284	-.000284	0	%100
20	SF2-TH	X	-.000284	-.000284	0	%100
21	SF3-BH	X	-.001	-.001	0	%100
22	SF3-TH	X	-.001	-.001	0	%100
23	SA-1	X	-.000449	-.000449	0	%100
24	SA-2	X	-.000449	-.000449	0	%100
25	MP-1	X	-.002	-.002	0	%100
26	MP-2	X	-.002	-.002	0	%100
27	MP-3	X	-.002	-.002	0	%100
28	MP-4	X	-.002	-.002	0	%100
29	RRU-1	X	-.001	-.001	0	%100
30	RRU-2	X	-.001	-.001	0	%100
31	SF2-V1	Z	.002	.002	0	%100
32	SF2-V2	Z	.002	.002	0	%100
33	SF3-V1	Z	.002	.002	0	%100
34	SF3-V2	Z	.002	.002	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.003	.003	0	%100
40	SF2-CPT	Z	.003	.003	0	%100
41	SF3-CPB	Z	.004	.004	0	%100
42	SF3-CPT	Z	.004	.004	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.000487	.000487	0	%100
50	SF2-TH	Z	.000487	.000487	0	%100
51	SF3-BH	Z	.002	.002	0	%100
52	SF3-TH	Z	.002	.002	0	%100
53	SA-1	Z	.000592	.000592	0	%100
54	SA-2	Z	.000592	.000592	0	%100
55	MP-1	Z	.003	.003	0	%100
56	MP-2	Z	.003	.003	0	%100
57	MP-3	Z	.003	.003	0	%100
58	MP-4	Z	.003	.003	0	%100
59	RRU-1	Z	.002	.002	0	%100
60	RRU-2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 33 : 315 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.001	-.001	0	%100
2	SF2-V2	X	-.001	-.001	0	%100
3	SF3-V1	X	-.001	-.001	0	%100
4	SF3-V2	X	-.001	-.001	0	%100
5	SF2-D1	X	-.001	-.001	0	%100
6	SF2-D1-X	X	-.001	-.001	0	%100
7	SF3-D1	X	-.001	-.001	0	%100
8	SF3-D1-X	X	-.001	-.001	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
Job Number : 48909.317476
Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Distributed Loads (BLC 33 : 315 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.002	-.002	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.002	-.002	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-7.6e-5	-7.6e-5	0	%100
20	SF2-TH	X	-7.6e-5	-7.6e-5	0	%100
21	SF3-BH	X	-.002	-.002	0	%100
22	SF3-TH	X	-.002	-.002	0	%100
23	SA-1	X	-.001	-.001	0	%100
24	SA-2	X	-.001	-.001	0	%100
25	MP-1	X	-.002	-.002	0	%100
26	MP-2	X	-.002	-.002	0	%100
27	MP-3	X	-.002	-.002	0	%100
28	MP-4	X	-.002	-.002	0	%100
29	RRU-1	X	-.002	-.002	0	%100
30	RRU-2	X	-.002	-.002	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.002	.002	0	%100
36	SF2-D1-X	Z	.002	.002	0	%100
37	SF3-D1	Z	.002	.002	0	%100
38	SF3-D1-X	Z	.002	.002	0	%100
39	SF2-CPB	Z	.002	.002	0	%100
40	SF2-CPT	Z	.002	.002	0	%100
41	SF3-CPB	Z	.002	.002	0	%100
42	SF3-CPT	Z	.002	.002	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	7.6e-5	7.6e-5	0	%100
50	SF2-TH	Z	7.6e-5	7.6e-5	0	%100
51	SF3-BH	Z	.002	.002	0	%100
52	SF3-TH	Z	.002	.002	0	%100
53	SA-1	Z	.000885	.000885	0	%100
54	SA-2	Z	.000885	.000885	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	RRU-1	Z	.002	.002	0	%100
60	RRU-2	Z	.002	.002	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
1	SF2-V1	X	-.002	-.002	0	%100
2	SF2-V2	X	-.002	-.002	0	%100
3	SF3-V1	X	-.002	-.002	0	%100

Member Distributed Loads (BLC 34 : 330 Wind - Ice) (Continued)

	Member L...	Direct...	Start Magnitude[k/ft,F,...	End Magnitude[k/ft,F,ksf]	Start Location[ft,%]	End Loc...
4	SF3-V2	X	-.002	-.002	0	%100
5	SF2-D1	X	-.002	-.002	0	%100
6	SF2-D1-X	X	-.002	-.002	0	%100
7	SF3-D1	X	-.002	-.002	0	%100
8	SF3-D1-X	X	-.002	-.002	0	%100
9	SF2-CPB	X	-.002	-.002	0	%100
10	SF2-CPT	X	-.002	-.002	0	%100
11	SF3-CPB	X	-.002	-.002	0	%100
12	SF3-CPT	X	-.002	-.002	0	%100
13	FFBH-1	X	-.002	-.002	0	%100
14	FFBH-2	X	-.002	-.002	0	%100
15	FFBH-3	X	-.002	-.002	0	%100
16	FFTH-1	X	-.002	-.002	0	%100
17	FFTH-2	X	-.002	-.002	0	%100
18	FFTH-3	X	-.002	-.002	0	%100
19	SF2-BH	X	-.000672	-.000672	0	%100
20	SF2-TH	X	-.000672	-.000672	0	%100
21	SF3-BH	X	-.002	-.002	0	%100
22	SF3-TH	X	-.002	-.002	0	%100
23	SA-1	X	-.002	-.002	0	%100
24	SA-2	X	-.002	-.002	0	%100
25	MP-1	X	-.003	-.003	0	%100
26	MP-2	X	-.003	-.003	0	%100
27	MP-3	X	-.003	-.003	0	%100
28	MP-4	X	-.003	-.003	0	%100
29	RRU-1	X	-.002	-.002	0	%100
30	RRU-2	X	-.002	-.002	0	%100
31	SF2-V1	Z	.001	.001	0	%100
32	SF2-V2	Z	.001	.001	0	%100
33	SF3-V1	Z	.001	.001	0	%100
34	SF3-V2	Z	.001	.001	0	%100
35	SF2-D1	Z	.001	.001	0	%100
36	SF2-D1-X	Z	.001	.001	0	%100
37	SF3-D1	Z	.001	.001	0	%100
38	SF3-D1-X	Z	.001	.001	0	%100
39	SF2-CPB	Z	.000907	.000907	0	%100
40	SF2-CPT	Z	.000907	.000907	0	%100
41	SF3-CPB	Z	.001	.001	0	%100
42	SF3-CPT	Z	.001	.001	0	%100
43	FFBH-1	Z	.001	.001	0	%100
44	FFBH-2	Z	.001	.001	0	%100
45	FFBH-3	Z	.001	.001	0	%100
46	FFTH-1	Z	.001	.001	0	%100
47	FFTH-2	Z	.001	.001	0	%100
48	FFTH-3	Z	.001	.001	0	%100
49	SF2-BH	Z	.000384	.000384	0	%100
50	SF2-TH	Z	.000384	.000384	0	%100
51	SF3-BH	Z	.001	.001	0	%100
52	SF3-TH	Z	.001	.001	0	%100
53	SA-1	Z	.000868	.000868	0	%100
54	SA-2	Z	.000868	.000868	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	RRU-1	Z	.001	.001	0	%100
60	RRU-2	Z	.001	.001	0	%100

Company : Tower Engineering Professionals, Inc.
Designer : TCS
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Model Name : BU# 806386 - NHV 106 943628 (Gamma)

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Member Area Loads

Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
No Data to Print ...						

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Lo...	...	phi*...	phi*...	phi*...	phi*...	...	Eqn
1	SF3-V2	SR 5/8	.440	0	42	.030	3....		2.503	9.94	.104	.104	...	H1-...
2	MP-4	PIPE_2.0	.382	5.667	63	.056	2....	2	17.8...	32.13	1.872	1.872	...	H1-...
3	SF3-C...	PL3.5x5/8	.377	0	34	.247	.383	y	68.4...	70.8...	.923	5.168	...	H1-...
4	FFTH-2	PIPE_2.5	.361	0	26	.072	0		41.3...	50.7...	3.596	3.596	...	H1-...
5	FFTH-1	PIPE_2.5	.356	3.75	26	.084	3.75		30.5...	50.7...	3.596	3.596	...	H1-...
6	SF2-V2	SR 5/8	.344	0	42	.027	0		2.503	9.94	.104	.104	...	H1-...
7	FFTH-3	PIPE_2.5	.302	0	18	.051	0		30.5...	50.7...	3.596	3.596	...	H1-...
8	SF3-V1	SR 5/8	.301	3.333	49	.026	3....		2.503	9.94	.104	.104	...	H1-...
9	MP-1	PIPE_2.0	.279	2.333	38	.078	2....		17.8...	32.13	1.872	1.872	...	H1-...
10	SF2-C...	PL3.5x5/8	.276	0	35	.191	.383	y	68.4...	70.8...	.923	5.168	...	H1-...
11	MP-3	PIPE_2.0	.271	2.333	18	.048	2....		17.8...	32.13	1.872	1.872	...	H1-...
12	FFBH-2	PIPE_2.5	.269	.521	26	.042	5		41.3...	50.7...	3.596	3.596	...	H1-...
13	FFBH-1	PIPE_2.5	.267	3.75	18	.044	3.75		30.5...	50.7...	3.596	3.596	...	H1-...
14	SF3-TH	PIPE_2.0	.248	0	43	.132	.156		29.81	32.13	1.872	1.872	...	H1-...
15	SF3-C...	PL3.5x5/8	.243	0	42	.187	0	y	68.4...	70.8...	.923	5.168	...	H1-...
16	FFBH-3	PIPE_2.5	.237	0	26	.044	0		30.5...	50.7...	3.596	3.596	...	H1-...
17	SF2-TH	PIPE_2.0	.199	0	42	.130	.156		29.81	32.13	1.872	1.872	...	H1-...
18	SF3-BH	PIPE_2.0	.198	2.5	35	.176	2.5		29.81	32.13	1.872	1.872	...	H1-...
19	SF3-D...	SR 3/4	.176	.304	45	.031	4....		3.322	14.3...	.179	.179	...	H1-...
20	SF2-V1	SR 5/8	.174	3.333	35	.026	3....		2.503	9.94	.104	.104	...	H1-...
21	SF2-C...	PL3.5x5/8	.169	0	42	.146	.383	y	68.4...	70.8...	.923	5.168	...	H1-...
22	MP-2	PIPE_2.0	.166	2.333	26	.027	2....		17.8...	32.13	1.872	1.872	...	H1-...
23	SF2-BH	PIPE_2.0	.156	2.5	34	.127	2.5		29.81	32.13	1.872	1.872	...	H1-...
24	SF2-D...	SR 3/4	.140	.304	38	.027	.26		3.322	14.3...	.179	.179	...	H1-...
25	RRU-2	PIPE_2.0	.096	3.833	35	.014	.5		32.0...	32.13	1.872	1.872	...	H1-...
26	RRU-1	PIPE_2.0	.087	3.833	34	.022	.5		32.0...	32.13	1.872	1.872	...	H1-...
27	SA-1	PIPE_2.0	.042	6.571	15	.004	0		19.1...	32.13	1.872	1.872	...	H1-...
28	SA-2	PIPE_2.0	.041	3.285	45	.004	0		19.1...	32.13	1.872	1.872	...	H1-...
29	SF2-D1	SR 3/4	.000	0	98	.000	0		3.322	14.3...	.179	.179	1	H1-...
30	SF3-D1	SR 3/4	.000	0	98	.000	0		3.322	14.3...	.179	.179	1	H1-...

Envelope None Cold Formed Steel Code Checks

Member	Shape	Code Check	Loc[ft]	LC	Shea...	Loc[...	Dir	LC	Pn[k]	Tn[k]	Mnyy[...	Mnzz[...	Cb	Cmyy	Cmzz	Eqn
No Data to Print ...																

APPENDIX D

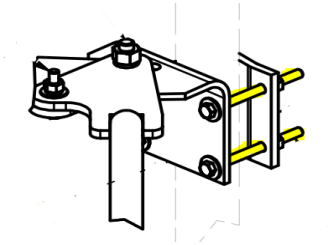
ADDITIONAL CALCULATIONS

Job Name: BU# 806386 - NHV 106 943628 (Alpha and Beta)
TEP#48909.317476
Calc: TCS Check: HBC
Date: 10/30/2019

Moment Bolt Group - Tower Leg

Bolt Size:	0.625	in
# Bolts:	4	
Plate Width:	-	in
Plate Height:	-	in
Bolt H Gap:	9.5	in
Bolt V Gap:	3.5	in
Plate T:	0.375	in
Tower Leg Ø:	N/A	in
Bolt Grade:	A36	
Fu_{bolt}	58	ksi
r:	5.0621	in
J:	23.1652	in^4
$Bolt_{Area}$:	0.307	in^2
$Bolt_{Area, Net Tensile}$:	0.226	in^2
Pretension:	9	kips
Slotted Holes:	No	

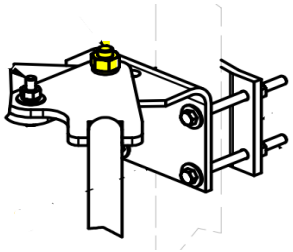
Code Checks Per ANSI/TIA-222-H:		
Bolt Group Capacity =	**8.6%**	**GOOD**
Single Bolt Capacity =	**10.8%**	**GOOD**



Single Bolt Check

Bolt Size:	0.75	in
Bolt F_u:	120	ksi
$Bolt_{A, Net Tensile}$:	0.334	in^2

Bolts: A325N



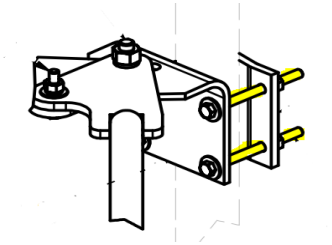
V_{max}=	2.142	kips
$ØR_{NV}$ =	19.880	kips
T_{max} =	2.041	kips
$ØR_{NT}$ =	30.060	kips

Job Name: BU# 806386 - NHV 106 943628 (Gamma)
TEP#48909.317476
Calc: TCS Check: HBC
Date: 10/30/2019

Moment Bolt Group - Tower Leg

Bolt Size:	0.625	in
# Bolts:	4	
Plate Width:	-	in
Plate Height:	-	in
Bolt H Gap:	9.5	in
Bolt V Gap:	3.5	in
Plate T:	0.375	in
Tower Leg Ø:	N/A	in
Bolt Grade:	A36	
Fu_{bolt}	58	ksi
r:	5.0621	in
J:	23.1652	in^4
$Bolt_{Area}$:	0.307	in^2
$Bolt_{Area, Net Tensile}$:	0.226	in^2
Pretension:	9	kips
Slotted Holes:	No	

Code Checks Per ANSI/TIA-222-H:		
Bolt Group Capacity =	**9.6%**	**GOOD**
Single Bolt Capacity =	**11.3%**	**GOOD**



Single Bolt Check

Bolt Size:	0.75	in
Bolt F_u:	120	ksi
$Bolt_{A, Net Tensile}$:	0.334	in^2

Bolts: A325N

V_{max}=	2.246	kips
$ØR_{NV}$ =	19.880	kips
T_{max} =	2.279	kips
$ØR_{NT}$ =	30.060	kips

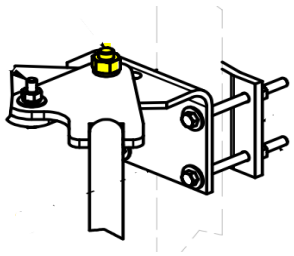


Exhibit F

Power Density/RF Emissions Report

Site Name: N. Branford CT
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)	(mW/cm^2)	(%)
VZW 700	746	4	634	2534.28	90	0.1125	0.497333333	22.62%
VZW Cellular	869	2	368	736.24	90	0.0327	0.579333333	5.64%
VZW Cellular	880	4	364	1454.32	90	0.0646	0.586666667	11.01%
VZW PCS	1970	4	1493	5972.52	90	0.2652	1.0	26.52%
VZW AWS	2145	4	1493	5972.52	90	0.2652	1.0	26.52%
Total Percentage of Maximum Permissible Exposure								92.31%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Section 1.13101 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

MHz = Megahertz
mW/cm^2 = milliwatts per square centimeter
ERP = Effective Radiated Power

Absolute worst case maximum values used, including the following assumptions:
1. closest accessible point is distance from antenna to base of pole;
2. continuous transmission from all available channels at full power for indefinite time period; and,
3. all RF energy is assumed to be directed solely to the base of the pole.