Crown Castle
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065

July 28, 2020

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

RE: **Notice of Exempt Modification for AT&T - 876315**
1116 Johnson Road AKA 1027 Racebrook Road, Woodbridge, CT 06525
Latitude: 41° 19′ 0.30″ / Longitude: -73° 0′ 41.80″

Dear Ms. Bachman:

AT&T currently maintains nine (9) antennas at the 102-foot mount on the existing 151-foot Monopole Tower, located at 1116 Johnson Road, Woodbridge, CT. The tower is owned by Crown Castle and the property is owned by Tradition Golf Club at Oak Lane LLC. AT&T now intends to remove and replace six (6) existing antennas with six (6) new antennas. The new antennas will be installed at the 102-ft level of the tower. AT&T is also proposing mount modification, pursuant to the enclosed Mount Analysis.

This facility was approved by the Town of Woodbridge Planning and Zoning Commission sometime between July of 1997 and January of 1998. Despite diligent searching I was unable to find an original decision granting approval for the facility. I was able to locate the facility's building permit dated January 21, 1998 issued to Sprint PCS.

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.C.S.A. § 16-50j-73, a copy of this letter is being sent to Beth Heller, Town of Woodbridge First Selectwoman, Kristine Sullivan, Zoning Enforcement Officer, Tradition Golf Club at Oak Lane LLC as the property owner, and Crown Castle is the tower owner.

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, AT&T 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 Attn: Anne Marie Zsamba.

Sincerely,

Anne Marie Zsamba
Site Acquisition Specialist
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
(201) 236-9224
AnneMarie.Zsamba@crowncastle.com

Attachments
cc:

Beth Heller, First Selectwoman *(via email only to bheller@woodbridgect.org)*
The Town of Woodbridge
11 Meetinghouse Lane
Woodbridge, CT 06525

Kristine Sullivan, Land Use Analyst & Zoning Enforcement Officer
(via email only to ksullivan@woodbridgect.org)
The Town of Woodbridge
11 Meetinghouse Lane
Woodbridge, CT 06525

The Tradition Golf Club at Oak Lane LLC (*via email only to gina@traditiongolfct.com*)
1027 Racebrook Road
Woodbridge, CT 06525

Crown Castle, Tower Owner

From: Zsamba, Anne Marie
To: "gina@traditiongolfct.com"
Subject: Notice of Exempt Modification - AT&T - 1116 Johnson Rd (aka 1027 Racebrook Rd) Woodbridge
Date: Tuesday, July 28, 2020 1:27:00 PM
Attachments: EM-AT&T-1116 Johnson Rd aka 1027 Racebrook Rd Woodbridge-876315_notice.pdf

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Dear Property Owner:

Attached please find AT&T's exempt modification application that is being submitted to the Connecticut Siting Council, today July 28, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

From:	Zsamba, Anne Marie
To:	bheller@woodbridgect.org
Subject:	Notice of Exempt Modification - AT&T - 1116 Johnson Rd (aka 1027 Racebrook Rd) Woodbridge
Date:	Tuesday, July 28, 2020 1:26:00 PM
Attachments:	EM-AT&T-1116 Johnson Rd aka 1027 Racebrook Rd Woodbridge-876315_notice.pdf

Dear First Selectwoman Heller:

Attached please find AT&T's exempt modification application that is being submitted to the Connecticut Siting Council, today July 28, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

ANNE MARIE ZSAMBA
Site Acquisition Specialist
T: (201) 236-9224
M: (518) 350-3639
F: (724) 416-6112

CROWN CASTLE
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065
CrownCastle.com

From: Zsamba, Anne Marie
To: "ksullivan@woodbridgect.org"
Subject: Notice of Exempt Modification - AT&T - 1116 Johnson Rd (aka 1027 Racebrook Rd) Woodbridge
Date: Tuesday, July 28, 2020 1:26:00 PM
Attachments: EM-AT&T-1116 Johnson Rd aka 1027 Racebrook Rd Woodbridge-876315_notice.pdf

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Dear ZEO Sullivan:

Attached please find AT&T's exempt modification application that is being submitted to the Connecticut Siting Council, today July 28, 2020.

In light of the present circumstances with Covid-19, The Council has advised that electronic notification of this filing is acceptable. If you could kindly confirm receipt. Thank you.

Best,
Anne Marie Zsamba

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CrownCastle.com

Exhibit A

Original Facility Approval

020.07

TOWN OF WOODBRIDGE, CONN.
BUILDING DEPARTMENT

Date Issued January 21 **19** 98

BUILDING PERMIT No. 9937

ISSUED TO SPRINT PCS (Michael Evanchick-Agent)

TO ERECT Installation of telecommunications TOWER & ANTENNAS and associated telecommunications equipment per application specifications & approved plans

LOCATION 1116 JOHNSON ROAD

DO NOT BACKFILL until the following inspections are made and approved..

Footings .....

Foundation drains & Dampproofing .....

DO NOT INSULATE or COVER until the following inspections are made and approved.

Structural ..... Plumbing .....

Electrical ..... Heating .....

Alarm System ..... Fireplace Hearth .....

Fireplace Smoke Chamber & Throat .....

DO NOT COVER until the following inspections are made and approved.

Insulation .....

The following FINAL INSPECTIONS are necessary for a CERTIFICATE OF OCCUPANCY.

Structural ..... Plumbing .....

Electrical ..... Heating .....

Alarm System ..... Air Conditioning .....

Water Heater ..... Oil Burner .....

Water Pump .....

THIS CARD MUST BE CONSPICUOUSLY DISPLAYED AT ALL TIMES DURING THE PROGRESS OF CONSTRUCTION.

Signed by _____
Building Official

rev. 11/93 tfk

Exhibit B

Property Card

Town of Woodbridge, CT

Property Listing Report

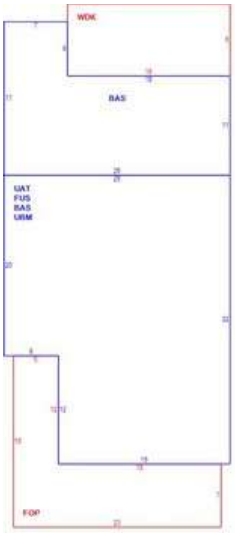
Map Block Lot	3003/890/1116//	Building #	1	PID	768	Account	102287

Property Information

Property Location	1116 JOHNSON RD
Owner	THE TRADITION GOLF CLUB AT
Co-Owner	OAK LANE LLC
Mailing Address	1027 RACEBROOK RD WOODBRIDGE CT 06525
Land Use	380R Golf Course
Land Class	C
Zoning Code	A
Census Tract	

Neighborhood	
Acreage	84.5
Utilities	Well,Septic
Lot Setting/Desc	Rural Level,Rolling
Book / Page	0682/0010
Additional Info	

Photo



Primary Construction Details

Year Built	1905
Building Desc.	Golf Course
Building Style	Conventional
Building Grade	C
Stories	2
Occupancy	1.00
Exterior Walls	Vinyl Siding
Exterior Walls 2	NA
Roof Style	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Walls	Plastered
Interior Walls 2	Drywall/Sheet
Interior Floors 1	Carpet
Interior Floors 2	Hardwood

Heating Fuel	Oil
Heating Type	Hot Water
AC Type	01
Bedrooms	04
Full Bathrooms	2
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	6
Bath Style	Average
Kitchen Style	Average
Fin Bsmt Area	NA
Fin Bsmt Quality	NA
Bsmt Gar	NA
Fireplaces	NA

(*Industrial / Commercial Details)

Building Use	Residential
Building Condition	A
Sprinkler %	NA
Heat / AC	NA
Frame Type	NA
Baths / Plumbing	NA
Ceiling / Wall	NA
Rooms / Prtns	NA
Wall Height	NA
First Floor Use	NA
Foundation	NA

Report Created On 7/28/2020

Town of Woodbridge, CT

Property Listing Report | Map Block Lot 3003/890/1116// | Building # 1 | PID 768 | Account 102287

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

Item	Appraised	Assessed
Buildings	243400	170380
Extras	0	0
Improvements		
Outbuildings	841600	589120
Land	998300	408310
Total	2083300	1167810

Outbuilding and Extra Features

Type	Description
Shed	64 S.F.
GREENS	10 UNIT
Silo	644 DIAxHT

Sub Areas

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
First Floor	1045	1045
Open Porch	221	0
Upper Story, Finished	728	728
Attic, Unfinished	728	0
Basement, Unfinished	728	0
Wood Deck	144	0
Total Area	3594	1773

Sales History

Owner of Record	Book/ Page	Sale Date	Sale Price
THE TRADITION GOLF CLUB AT	0682/0010	2012-01-05	1092561
OAK LANE COUNTRY CLUB INC	0622/0298	2009-06-19	0
OAK LANE COUNTRY CLUB INC	0094/0510	1970-12-14	0
OAK LANE COUNTRY CLUB INC	0073/0511	1963-01-10	0
OAK LANE COUNTRY CLUB INC	0070/0071	1961-05-11	0

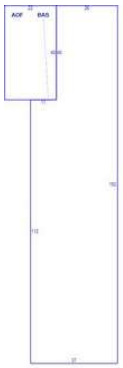
Report Created On 7/28/2020

Town of Woodbridge, CT

Property Listing Report | Map Block Lot 3003/890/1116// | Building # 2 | PID 768 | Account 102287

Photo

Sketch



Primary Construction Details

Year Built	1983
Building Desc.	Industrial
Building Style	Warehouse
Building Grade	C
Stories	1
Occupancy	1.00
Exterior Walls	Clapboard
Exterior Walls 2	NA
Roof Style	Gable/Hip
Roof Cover	Asph/F Gls/Cmp
Interior Walls	Minim/Masonry
Interior Walls 2	NA
Interior Floors 1	Concr-Finished
Interior Floors 2	

Heating Fuel	Coal or Wood
Heating Type	None
AC Type	01
Bedrooms	0
Full Bathrooms	0
Half Bathrooms	0
Extra Fixtures	0
Total Rooms	
Bath Style	NA
Kitchen Style	NA
Fin Bsmt Area	NA
Fin Bsmt Quality	NA
Bsmt Gar	NA
Fireplaces	NA

(*Industrial / Commercial Details)

Building Use	Comm. Warehouse
Building Condition	A
Sprinkler %	NA
Heat / AC	NONE
Frame Type	WOOD FRAME
Baths / Plumbing	AVERAGE
Ceiling / Wall	CEIL & WALLS
Rooms / Prtns	AVERAGE
Wall Height	10.00
First Floor Use	NA
Foundation	NA

Sub Areas

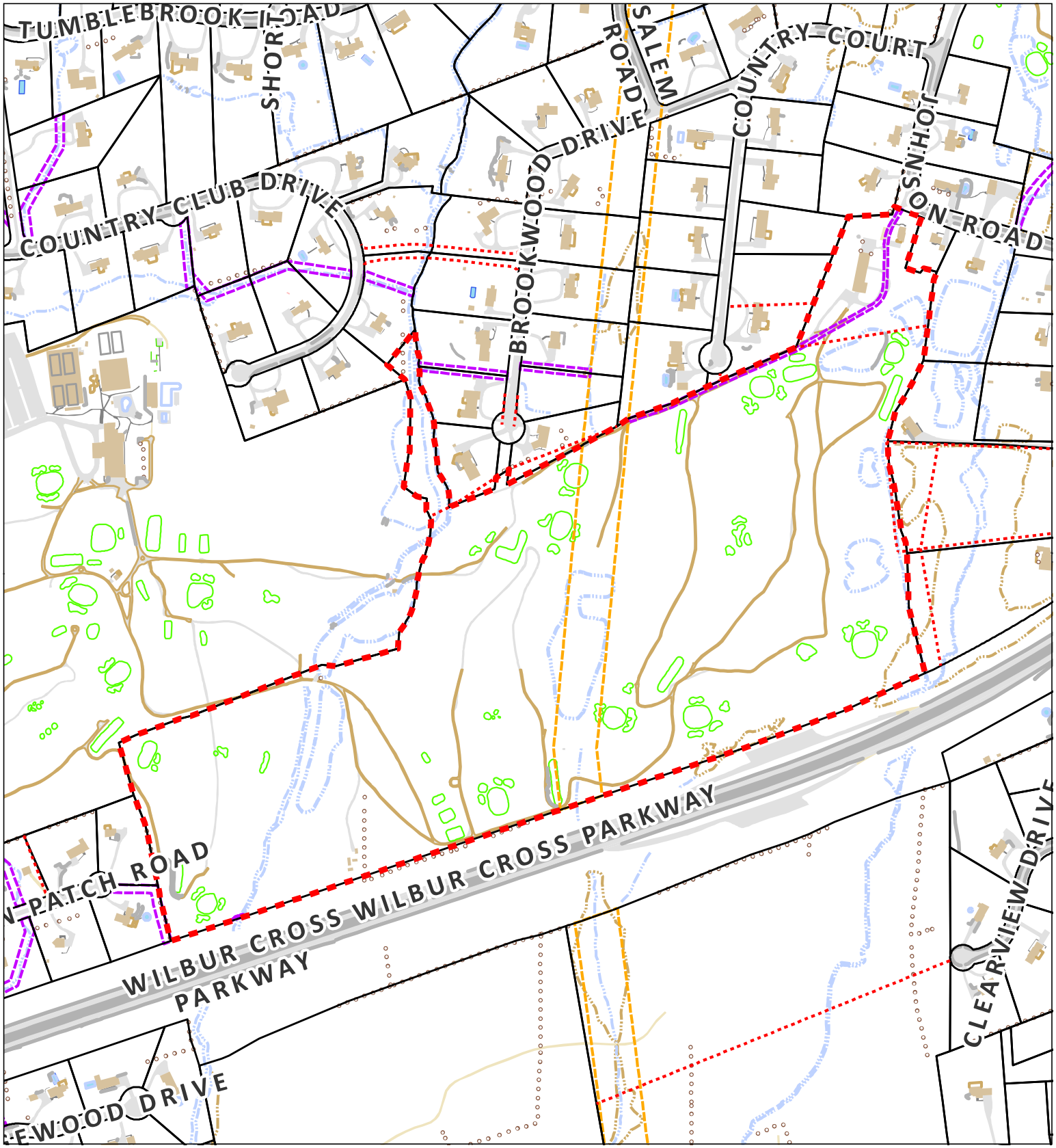
Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Office	880	880
First Floor	5184	5184

Subarea Type	Gross Area (sq ft)	Living Area (sq ft)
Total Area	6064	6064

Report Created On 7/28/2020

Town of Woodbridge, Connecticut - Assessment Parcel Map

GIS ID: 768 **Address:**



Approximate Scale:

1:6,000

Map Produced July 2019

Exhibit C

Construction Drawings

AT&T MOBILITY SITE NUMBER: CT2008
AT&T MOBILITY SITE NAME: WOODBRIDGE JOHNSON ROAD
AT&T MOBILITY FA CODE: 10035421
AT&T MOBILITY PACE NUMBER: MRCTB046953, MRCTB046818, MRCTB046698, MRCTB046582

AT&T MOBILITY PTN NUMBER: 2051A0V4WH, 2051A0V4DK, 2051A0V4FS, 2051A0V4YC

BUSINESS UNIT #: 876315
SITE ADDRESS: 1027 RACEBROOK ROAD WOODBRIDGE, CT 06525

COUNTY: NEW HAVEN
TOWER HEIGHT: 150'-0"
SITE TYPE: MONOPOLE

PROJECT: AT&T MOBILITY LTE 2C, 3C, 5G NR

SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:	OAK LANE CC, INC. TOWER (SSUSA
SITE ADDRESS:	1027 RACEBROOK ROAD WOODBRIDGE, CT 06525
COUNTY:	NEW HAVEN
MAP/PARCEL #:	NOT PROVIDED
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41.3167450
LONGITUDE:	-73.0116161
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	304'
CURRENT ZONING:	RURAL
JURISDICTION:	NEW HAVEN COUNTY
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	NOT PROVIDED
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	AT&T TOWER ASSET GROUP 7900 XERXES AVE S BLOOMINGTON, MN 55431
ELECTRIC PROVIDER:	NOT PROVIDED
TELCO PROVIDER:	NOT PROVIDED

PROJECT TEAM

A&E FIRM:	B+T GROUP 1717 S BOULDER AVE, SUITE 300 TULSA, OK 74119 jpaul@btgrp.com
CROWN CASTLE USA INC. DISTRICT CONTACTS:	12 GILL STREET, SUITE 5800 WOBURN, MA 01801

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1	SITE PLAN
C-2	EXISTING & FINAL ANTENNA PLANS
C-3	FINAL ANTENNA & COAXIAL CABLE SCHEDULE
C-4	EQUIPMENT SPECIFICATION
G-1	GROUNDING SCHEMATIC
G-2	GROUNDING DETAILS
ATTACHED	PLUMBING DIAGRAM
S-01	MOUNT MODIFICATION
S-02	MOUNT MODIFICATION

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 24X36. 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.

PROJECT DESCRIPTION

THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

TOWER SCOPE OF WORK

- REMOVE (6) POWERWAVE- P65-16-XLH-RR ANTENNAS
- REMOVE (3) ERICSSON - RRUS-11 B12 RRHS
- REMOVE (3) CCI - DTMABP7819VG12A TMAS
- INSTALL (1) HRK14-HD HANDRAIL KIT AND (3) PRK-SFS-L STABILIZER KITS PER MOUNT MODIFICATION BY POD GROUP DATED 6/2/20
- INSTALL (3) CCI - OPA65R-BU6DA ANTENNAS
- INSTALL (3) CCI - DMP65R-BU6DA ANTENNAS
- INSTALL (3) ERICSSON - RRUS 4449 B5/B12
- INSTALL (3) ERICSSON - RRUS 8843 B2/B66A
- INSTALL (1) RAYCAP - DC6-48-60-18-8F SURGE SUPPRESSOR
- INSTALL (1) 24 PAIR FIBER TRUNK
- INSTALL (2) 8AWG POWER TRUNKS

GROUND SCOPE OF WORK

- REMOVE (6) CCI - GM1907-DBPXBC-003 DIPLEXERS
- INSTALL (2) BB6630S+IDLe AND (1) XMU03

LOCATION MAP

I-TAKE INTERSTATE 91 SOUTH TO RTE 15 SOUTH TO WOODBRIDGE APPROX 2 MILES PAST EXIT 59 WILL PASS MONOPOLE ON RIGHT SIDE OF ROAD THIS IS IT EITHER STOP ON SIDE OF HWY AND CROSS FENCE OR CONTINUE CONTINUE 1 MILE AND TAKE EXIT 57 FOR HWY 34 EAST AT END OF RAMP TURN RIGHT ONTO RTE 34 AND CONTINUE APPROX 1 MILE TO HWY 114 TURN LEFT NORTH ONTO 114 RACEBROOK RD AND GO APPROX 1.5 MILES TO OAK LANE COUNTRY CLUB GOLF COURSE ENTRANCE ON RIGHT

SITE PHOTO

APPLICABLE CODES/REFERENCE DOCUMENTS

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	2015 IBC
MECHANICAL	2015 IMC
ELECTRICAL	2017 NEC

REFERENCE DOCUMENTS

STRUCTURAL ANALYSIS DATED:	B+T GROUP 06/30/20
MOUNT ANALYSIS DATED:	POD GROUP 06/02/20
RFDS REVISION: DATED:	BRONZE STANDARD 03/10/20
ORDER ID:	517074
REVISION:	0

NOTE:
PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN NOC AT (800) 788-7011 & CROWN CONSTRUCTION MANAGER

CALL TEXAS ONE CALL (800) DIG-TESS CALL 3 WORKING DAYS BEFORE YOU DIG!

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

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

AT&T MOBILITY
SITE NUMBER: **CT2008**

BU #: **876315**
OAK LANE CC, INC. TOWER (SSUSA

1027 RACEBROOK ROAD
WOODBRIDGE, CT 06525

EXISTING
150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QBS/QA
0	7/12/20	MVG	FINALS	MD
1	7/17/20	GBH	FINALS	SMC

7/17/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

SHEET NUMBER:	REVISION:
T-1	1

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

1. NOTICE TO PROCEED– NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800–788–7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
2. "LOOK UP" – CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT:
   THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
3. PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
4. ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED–STD–10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA–322 (LATEST EDITION).
5. ALL SITE WORK TO COMPLY WITH QAS–STD–10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE" AND LATEST VERSION OF ANSI/TIA–1019–A–2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS."
6. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
9. THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION
   CARRIER: AT&T MOBILITY
   TOWER OWNER: CROWN CASTLE USA INC.
2. THESE DRAWINGS HAVE BEEN PREPARED USING STANDARDS OF PROFESSIONAL CARE AND COMPLETENESS NORMALLY EXERCISED UNDER SIMILAR CIRCUMSTANCES BY REPUTABLE ENGINEERS IN THIS OR SIMILAR LOCALITIES. IT IS ASSUMED THAT THE WORK DEPICTED WILL BE PERFORMED BY AN EXPERIENCED CONTRACTOR AND/OR WORKPEOPLE WHO HAVE A WORKING KNOWLEDGE OF THE APPLICABLE CODE STANDARDS AND REQUIREMENTS AND OF INDUSTRY ACCEPTED STANDARD GOOD PRACTICE. AS NOT EVERY CONDITION OR ELEMENT IS (OR CAN BE) EXPLICITLY SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL USE INDUSTRY ACCEPTED STANDARD GOOD PRACTICE FOR MISCELLANEOUS WORK NOT EXPLICITLY SHOWN.
3. THESE DRAWINGS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE MEANS OR METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY FOR PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, FORMWORK, SHORING, ETC. SITE VISITS BY THE ENGINEER OR HIS REPRESENTATIVE WILL NOT INCLUDE INSPECTION OF THESE ITEMS AND IS FOR STRUCTURAL OBSERVATION OF THE FINISHED STRUCTURE ONLY.
4. NOTES AND DETAILS IN THE CONSTRUCTION DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT, AND/OR AS PROVIDED FOR IN THE CONTRACT DOCUMENTS. WHERE DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL NOTES, AND SPECIFICATIONS, THE GREATER, MORE STRICT REQUIREMENTS, SHALL GOVERN. IF FURTHER CLARIFICATION IS REQUIRED CONTACT THE ENGINEER OF RECORD.
5. SUBSTANTIAL EFFORT HAS BEEN MADE TO PROVIDE ACCURATE DIMENSIONS AND MEASUREMENTS ON THE DRAWINGS TO ASSIST IN THE FABRICATION AND/OR PLACEMENT OF CONSTRUCTION ELEMENTS BUT IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE DIMENSIONS, MEASUREMENTS, AND/OR CLEARANCES SHOWN IN THE CONSTRUCTION DRAWINGS PRIOR TO FABRICATION OR CUTTING OF ANY NEW OR EXISTING CONSTRUCTION ELEMENTS. IF IT IS DETERMINED THAT THERE ARE DISCREPANCIES AND/OR CONFLICTS WITH THE CONSTRUCTION DRAWINGS THE ENGINEER OF RECORD IS TO BE NOTIFIED AS SOON AS POSSIBLE.
6. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING CONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CROWN CASTLE.
7. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
8. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
9. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
10. IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CARRIER AND CROWN CASTLE PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
11. CONTRACTOR IS TO PERFORM A SITE INVESTIGATION AND IS TO DETERMINE THE BEST ROUTING OF ALL CONDUITS FOR POWER, AND TELCO AND FOR GROUNDING CABLES AS SHOWN IN THE POWER, TELCO, AND GROUNDING PLAN DRAWINGS.
12. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF CROWN CASTLE USA INC.
13. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
14. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST–IN–PLACE CONCRETE.
2. UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
3. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3000 psi AT 28 DAYS, UNLESS NOTED OTHERWISE. NO MORE THAN 90 MINUTES SHALL ELAPSE FROM BATCH TIME TO TIME OF PLACEMENT UNLESS APPROVED BY THE ENGINEER OF RECORD. TEMPERATURE OF CONCRETE SHALL NOT EXCEED 90°f AT TIME OF PLACEMENT.
4. CONCRETE EXPOSED TO FREEZE–THAW CYCLES SHALL CONTAIN AIR ENTRAINING ADMIXTURES. AMOUNT OF AIR ENTRAINMENT TO BE BASED ON SIZE OF AGGREGATE AND F3 CLASS EXPOSURE (VERY SEVERE). CEMENT USED TO BE TYPE II PORTLAND CEMENT WITH A MAXIMUM WATER–TO–CEMENT RATIO (W/C) OF 0.45.
5. ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WWF) SHALL CONFORM TO ASTM A185. ALL SPLICES SHALL BE CLASS "B" TENSION SPLICES, UNLESS NOTED OTHERWISE. ALL HOOKS SHALL BE STANDARD 90 DEGREE HOOKS, UNLESS NOTED OTHERWISE. YIELD STRENGTH (Fy) OF STANDARD DEFORMED BARS ARE AS FOLLOWS:
   #4 BARS AND SMALLER — 40 ksi
   #5 BARS AND LARGER — 60 ksi
6. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH — 3"
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 BARS AND LARGER — 2"
   #5 BARS AND SMALLER — 1–1/2"
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER:
   SLAB AND WALLS — 3/4"
   BEAMS AND COLUMNS — 1–1/2"
7. A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

GREENFIELD GROUNDING NOTES:

1. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION AND AC POWER GES'S) SHALL BE BONDED TOGETHER AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
2. THE CONTRACTOR SHALL PERFORM IEEE FALL–OF–POTENTAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROPERLY SEQUENCING GROUNDING AND UNDERGROUND CONDUIT INSTALLATION AS TO PREVENT ANY LOSS OF CONTINUITY IN THE GROUNDING SYSTEM OR DAMAGE TO THE CONDUIT AND PROVIDE TESTING RESULTS.
4. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH #6 COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
5. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
6. EACH CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, #6 STRANDED COPPER OR LARGER FOR INDOOR BTS; #2 BARE SOLID TINNED COPPER FOR OUTDOOR BTS.
7. CONNECTIONS TO THE GROUND BUS SHALL NOT BE DOUBLED UP OR STACKED BACK TO BACK CONNECTIONS ON OPPOSITE SIDE OF THE GROUND BUS ARE PERMITTED.
8. ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
10. USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
11. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
12. ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
13. COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
14. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
15. APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
16. ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
17. MISCELLANEOUS ELECTRICAL AND NON–ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
18. BOND ALL METALLIC OBJECTS WITHIN 6 ft OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
19. GROUND CONDUCTORS USED FOR THE FACILITY GROUNDING AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON–METALLIC MATERIAL SUCH AS PVC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (i.e., NONMETALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.
20. ALL GROUNDS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE MUST BE #2 BARE SOLID TINNED COPPER IN 3/4" NON–METALLIC, FLEXIBLE CONDUIT FROM 24" BELOW GRADE TO WITHIN 3" TO 6" OF CAD–WELD TERMINATION POINT. THE EXPOSED END OF THE CONDUIT MUST BE SEALED WITH SILICONE CAULK. (ADD TRANSITIONING GROUND STANDARD DETAIL AS WELL).
21. BUILDINGS WHERE THE MAIN GROUNDING CONDUCTORS ARE REQUIRED TO BE ROUTED TO GRADE, THE CONTRACTOR SHALL ROUTE TWO GROUNDING CONDUCTORS FROM THE ROOFTOP, TOWERS, AND WATER TOWERS GROUNDING RING, TO THE EXISTING GROUNDING SYSTEM, THE GROUNDING CONDUCTORS SHALL NOT BE SMALLER THAN 2/0 COPPER. ROOFTOP GROUNDING RING SHALL BE BONDED TO THE EXISTING GROUNDING SYSTEM, THE BUILDING STEEL COLUMNS, LIGHTNING PROTECTION SYSTEM, AND BUILDING MAIN WATER LINE (FERROUS OR NONFERROUS METAL PIPING ONLY).

ELECTRICAL INSTALLATION NOTES:

1. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
2. CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
3. WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
4. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
   4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
   4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERYIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
5. EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR–CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
6. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
7. PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
8. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
9. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
10. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
11. POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI–CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
12. POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI–CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THHW, THWN, THWN–2, XHHW, XHHW–2, THW, THW–2, RHW, OR RHW–2 INSULATION UNLESS OTHERWISE SPECIFIED.
13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP–STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND NEC.
15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
16. ELECTRICAL METALLIC TUBING (EMT) OR METAL–CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
18. LIQUID–TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID–TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION–TYPE AND APPROVED FOR THE LOCATION USED. SET SCREW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND THE NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECMATE WIREWAY).
22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON–PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER–ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE.
24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY–COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR BETTER) FOR EXTERIOR LOCATIONS.
25. METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY–COATED OR NON–CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
26. NONMETALLIC RECEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.
28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY.
29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "AT&T MOBILITY".
30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

CONDUCTOR COLOR CODE

SYSTEM	CONDUCTOR	COLOR
120/240V, 1Ø	A PHASE	BLACK
	B PHASE	RED
	NEUTRAL	WHITE
	GROUND	GREEN
120/208V, 3Ø	A PHASE	BLACK
	B PHASE	RED
	C PHASE	BLUE
	NEUTRAL	WHITE
	GROUND	GREEN
277/480V, 3Ø	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
	NEUTRAL	GREY
	GROUND	GREEN
DC VOLTAGE	POS (+)	RED**
	NEG (–)	BLACK**

* SEE NEC 210.5(C)(1) AND (2)
** POLARITY MARKED AT TERMINATION

APWA UNIFORM COLOR CODE:

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT, AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM, OR GASEOUS MATERIALS
ORANGE	COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION, AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES

ABBREVIATIONS:

ANT	ANTENNA
(E)	EXISTING
FIF	FACILITY INTERFACE FRAME
GEN	GENERATOR
GPS	GLOBAL POSITIONING SYSTEM
GSM	GLOBAL SYSTEM FOR MOBILE
LTE	LONG TERM EVOLUTION
MGB	MASTER GROUND BAR
MW	MICROWAVE
(N)	NEW
NEC	NATIONAL ELECTRIC CODE
(P)	PROPOSED
PP	POWER PLANT
QTY	QUANTITY
RECT	RECTIFIER
RBS	RADIO BASE STATION
RET	REMOTE ELECTRIC TILT
RFDS	RADIO FREQUENCY DATA SHEET
RRH	REMOTE RADIO HEAD
RRU	REMOTE RADIO UNIT
SIAD	SMART INTEGRATED DEVICE
TMA	TOWER MOUNTED AMPLIFIER
TYP	TYPICAL
UMTS	UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM
W.P.	WORK POINT

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

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

AT&T MOBILITY
SITE NUMBER: **CT2008**

BU #: **876315**
OAK LANE CC, INC. TOWER (SSUSA

1027 RACEBROOK ROAD
WOODBRIDGE, CT 06525

EXISTING
150'-0" MONOPOLE

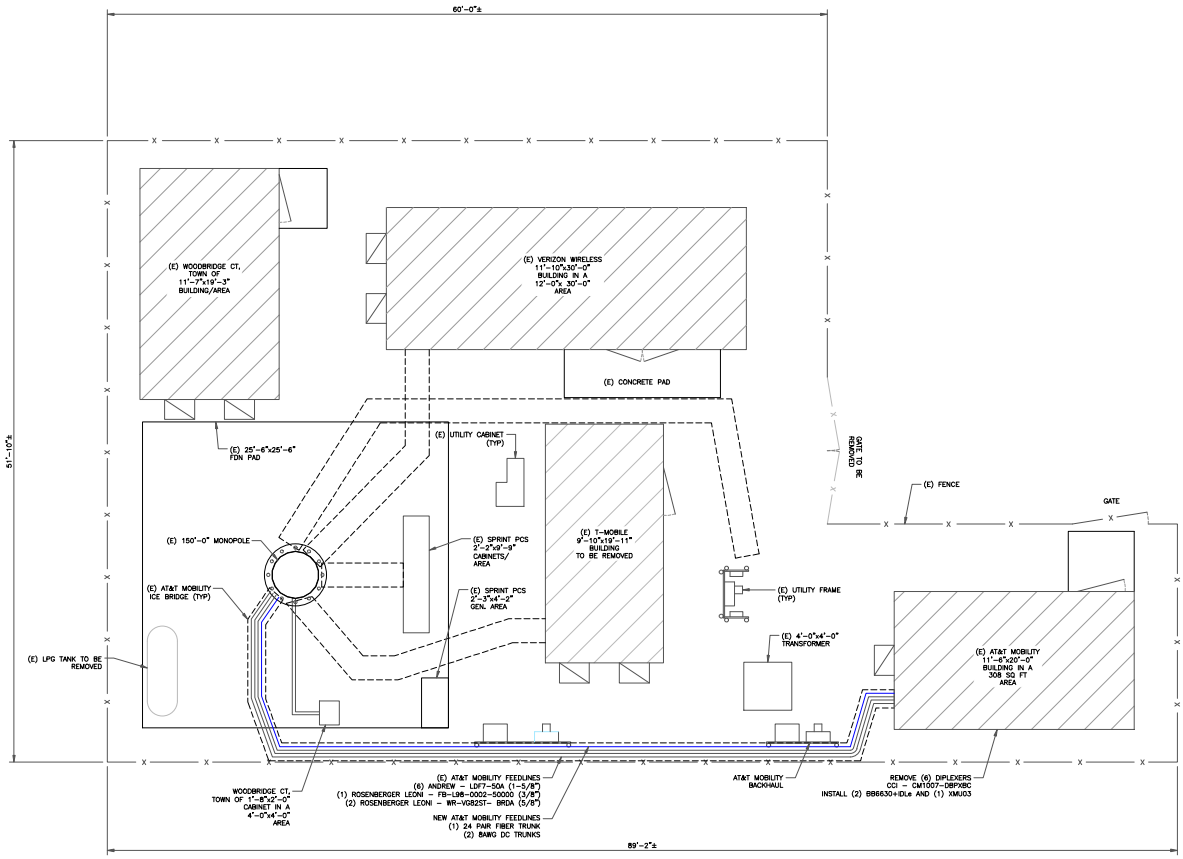
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	7/12/20	NVG	FINALS	MTJ
1	7/17/20	GEH	FINALS	SMC

STATE OF CONNECTICUT · 31627 · LICENSED · PROFESSIONAL ENGINEER
7/17/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

SHEET NUMBER: **T-2** REVISION: **1**



1 SITE PLAN
SCALE: 1/2"=1'-0" (FULL SIZE) 1/4"=1'-0" (11x17)

N

AT&T
575 MOROSGO DRIVE
ATLANTA, GA 30324-3300

CROWN CASTLE
3530 TORINGDON WAY, SUITE 300
CHARLOTTE, NC 28277

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

AT&T MOBILITY
SITE NUMBER: **CT2008**

BU #: **876315**
OAK LANE CC, INC. TOWER (SSUSA

1027 RACEBROOK ROAD
WOODBRIDGE, CT 06525

EXISTING
150'-0" MONOPOLE

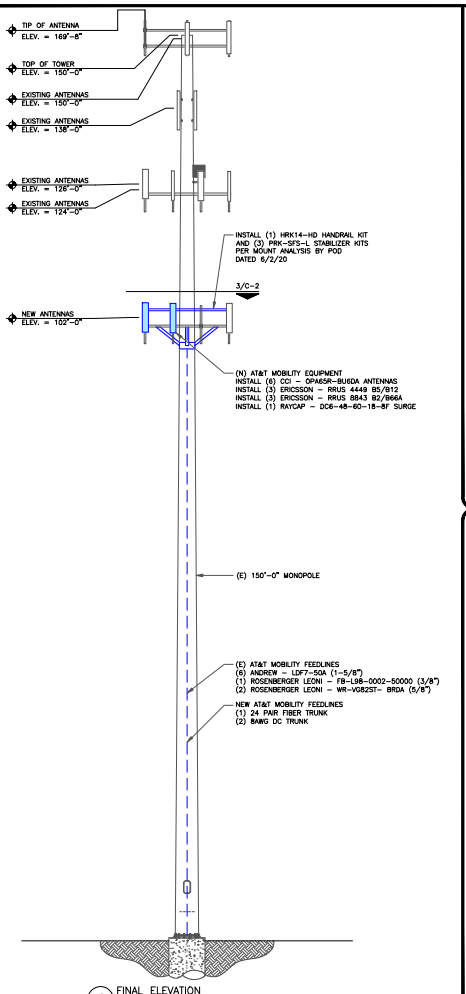
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	CHK/QA
0	7/12/20	NYG	FINALS	MD
1	7/17/20	GBH	FINALS	SMC

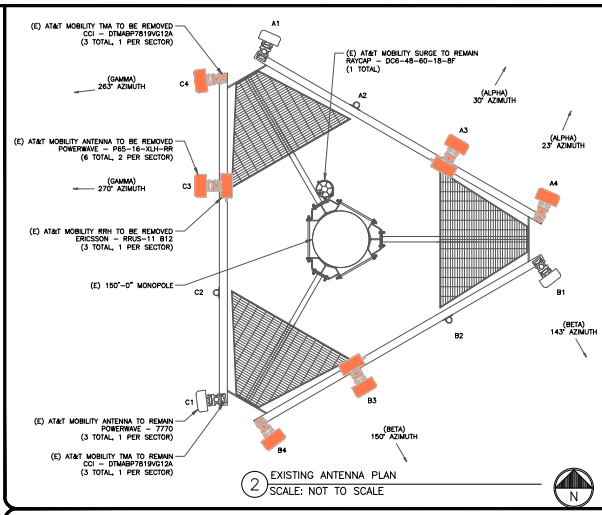
7/17/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

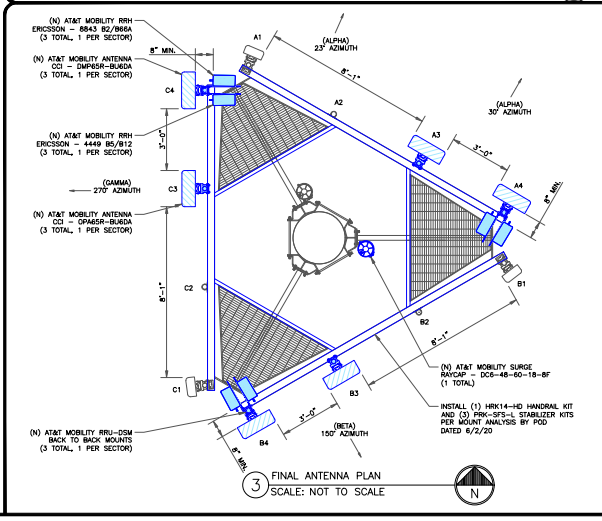
SHEET NUMBER: C-1
REVISION: 1



1 FINAL ELEVATION
SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN
SCALE: NOT TO SCALE



3 FINAL ANTENNA PLAN
SCALE: NOT TO SCALE

"LOOK UP" - CROWN CASTLE USA INC.
SAFETY CLIMB REQUIREMENT:

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

NOTES:

1. REFERENCE C-3 FOR FINAL EQUIPMENT SCHEDULE.
2. REFERENCE C-4 FOR NEW EQUIPMENT SPECIFICATIONS.
3. CONTRACTOR TO VERIFY ALL ANTENNA TIP HEIGHTS DO NOT EXCEED BEACON BASE HEIGHT.

MOUNT ANALYSIS NOTES:

1. THE DESIGN DEPICTED IN THESE DRAWINGS IS VALID WHEN ACCOMPANIED BY A CORRESPONDING PASSING MOUNT ANALYSIS.
2. CONSTRUCTION MANAGER / GENERAL CONTRACTOR SHALL REVIEW THE MOUNT ANALYSIS FOR ANY CONDITIONS PRIOR TO INSTALLATION.
3. ANY REQUIRED MOUNT MODIFICATION DESIGN OR MOUNT REPLACEMENT SHALL BE APPROVED BY EOR.

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AT&T MOBILITY
SITE NUMBER: **CT2008**

BU #: **876315**
OAK LANE CC, INC. TOWER (SSUSA

1027 RACEBROOK ROAD
WOODBRIDGE, CT 06525

EXISTING
150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	CHK/QA
0	7/12/20	MYG	FINALS	MD
1	7/17/20	GBH	FINALS	SMC

7/17/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

SHEET NUMBER: C-2
REVISION: 1

FINAL ANTENNA AND COAXIAL CABLE SCHEDULE

POS.	TECH	STATUS	AZIMUTH	ANTENNA TYPE	ANTENNA RAD CENTER	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	MAIN COAX SIZE	MAIN COAX LENGTH	COAX QTY	TMA QTY AND MODEL	SURGE PROTECTION	DC/FIBER CABLES	RRHs QTY & MODEL ON TOWER	LOCATION	DIPLEXER ON TOWER	DIPLEXER ON GROUND	RET CABLE
ALPHA SECTOR																		
A1	UMTS	EXISTING	23°	POWERWAVE 7770	104'-0"	0°	4°	1 5/8"	120'-0"	2	(1) DTMAP7819VG12A	DC6-48-60-18-8F	(1) 3/8" FIBER (2) 5/8" DC LINES	–	–	–	Y	Y
A2	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–
A3	LTE	NEW	30°	CCI OPA65R-BU6DA	104'-0"	0°	2°	–	–	–	–			–	–	–	–	Y
A4	LTE	NEW	30°	CCI DMP65R-BU6DA	104'-0"	0°	2°/2°/2°/2°/2°	–	–	–	–			(1) 4449 B5/B12 (1) 8843 B2/B66A	–	–	–	Y
BETA SECTOR																		
B1	UMTS	EXISTING	143°	POWERWAVE 7770	104'-0"	4°	6°	1 5/8"	120'-0"	2	(1) DTMAP7819VG12A	DC6-48-60-18-8F	(1) 3/8" FIBER (2) 3/4" DC LINES	–	–	–	Y	Y
B2	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–
B3	LTE	NEW	150°	CCI OPA65R-BU6DA	104'-0"	0°	2°	–	–	–	–			–	–	–	–	Y
B4	LTE	NEW	150°	CCI DMP65R-BU6DA	104'-0"	0°	2°/2°/2°/2°/2°	–	–	–	–			(1) 4449 B5/B12 (1) 8843 B2/B66A	–	–	–	Y
GAMMA SECTOR																		
C1	UMTS	EXISTING	263°	POWERWAVE 7770	104'-0"	0°	4°	1 5/8"	120'-0"	2	(1) DTMAP7819VG12A	–	–	–	–	–	Y	Y
C2	–	–	–	–	–	–	–	–	–	–	–			–	–	–	–	–
C3	LTE	NEW	270°	CCI OPA65R-BU6DA	104'-0"	0°	4°	–	–	–	–			–	–	–	–	Y
C4	LTE	NEW	270°	CCI DMP65R-BU6DA	104'-0"	0°	6°/6°/4°/4°/6°	–	–	–	–			(1) 4449 B5/B12 (1) 8843 B2/B66A	–	–	–	Y

NOTE: BOLD DENOTES NEW EQUIPMENT

1 FINAL ANTENNA AND COAXIAL CABLE SCHEDULE
SCALE: NOT TO SCALE

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AT&T MOBILITY
SITE NUMBER: **CT2008**

BU #: **876315**
OAK LANE CC, INC. TOWER (SSUSA

1027 RACEBROOK ROAD
WOODBRIDGE, CT 06525

EXISTING
150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QBS/QA
0	7/12/20	NYG	FINALS	MD
1	7/17/20	GBH	FINALS	SMC

7/17/20

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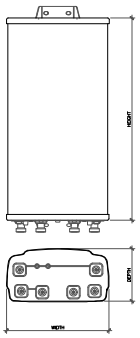
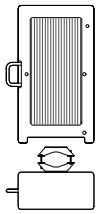
PEC.0001564
Expires 2/10/21

SHEET NUMBER: C-3
REVISION: 1



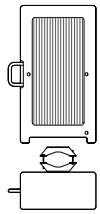
ANTENNA DIMENSIONS (INCHES)				
MODEL	HEIGHT	WIDTH	DEPTH	WEIGHT
DMP65R-BU6DA	71.20"	20.70"	7.7"	89.30 lbs
OPA65R-BU6DA	71.20"	21.00"	7.8"	63.50 lbs

1 ANTENNA DETAIL
SCALE: NOT TO SCALE



ERICSSON – RRUS 8843 B2/B66A
WEIGHT (FULLY EQUIPPED): 72 LBS
SIZE (HxWxD): 14.90x13.20x10.90 IN.
CONNECTOR TYPE: 4.3-10 FEMALE (4 TOTAL PORTS)

2 ERICSSON 8843 B2/B66A
SCALE: NOT TO SCALE

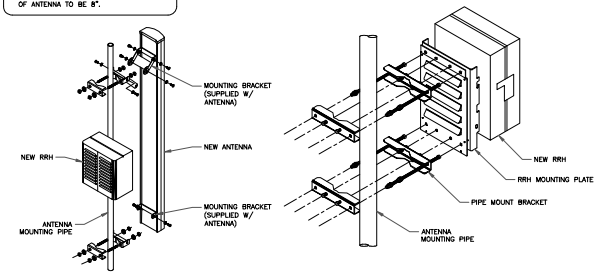


ERICSSON – RRUS 4449 B5/B12
WEIGHT (FULLY EQUIPPED): 71 LBS
SIZE (HxWxD): 17.90x13.19x9.44 IN.
CONNECTOR TYPE: 4.3-10 FEMALE (4 TOTAL PORTS)

3 ERICSSON 4449 B5/B12
SCALE: NOT TO SCALE

INSTALLER NOTES:

1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRHs RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
2. DO NOT OPEN RRH PACKAGES IN THE RAIN.
3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.
4. MINIMUM DISTANCE BETWEEN RRH AND BACK OF ANTENNA TO BE 8".



4 ANTENNA WITH RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

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150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	QBS/QA
0	7/12/20	NYG	FINALS	MD
1	7/17/20	GBH	FINALS	SMC

7/17/20

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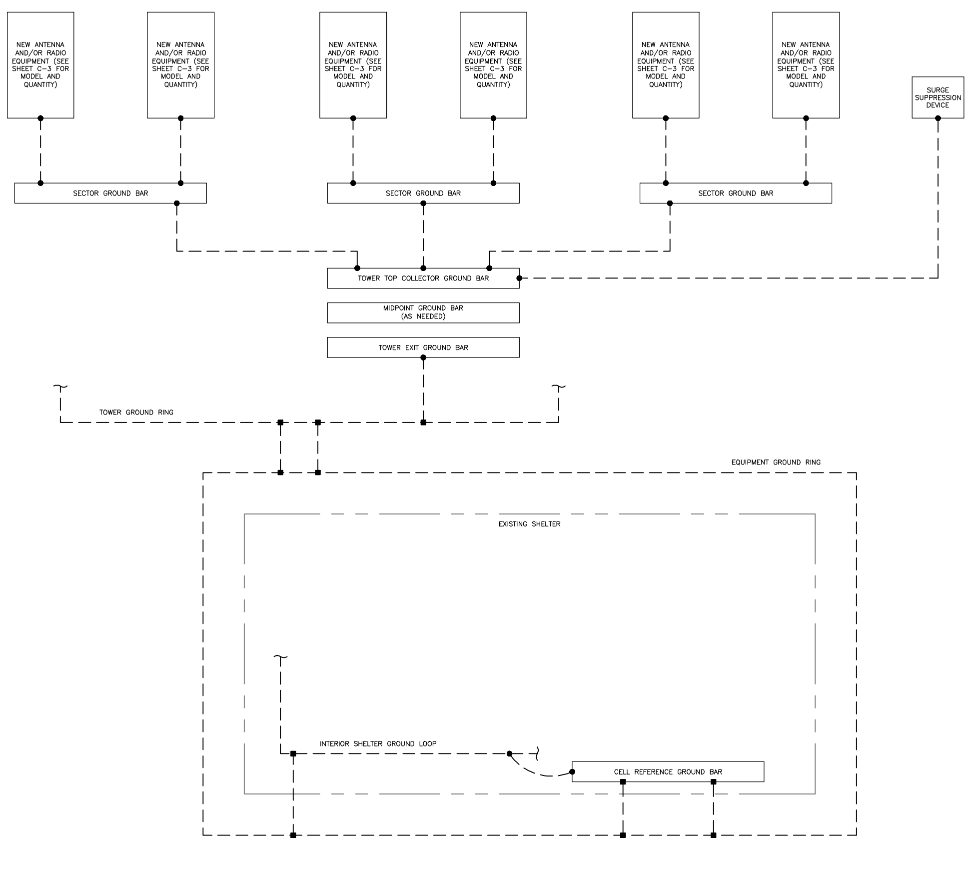
SHEET NUMBER: C-4
REVISION: 1



1 GROUNDING SCHEMATIC
SCALE: NOT TO SCALE

GROUNDING PLAN LEGEND:

- --- GROUND WIRE
- ■ EXOTHERMIC WELD
- ● MECHANICAL CONNECTION
- COPPER GROUND ROD
- GROUND ROD W/ TEST WELL

CELL REFERENCE GROUND BAR: POINT OF GROUND REFERENCE FOR ALL COMMUNICATIONS EQUIPMENT FRAMES. ALL BONDS ARE MADE WITH #2 STRANDED GREEN INSULATED COPPER CONDUCTORS. BOND TO GROUND RING WITH (2) #2 SOLID TINNED COPPER CONDUITS (ATT-TP-76416 7.6.7).

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

EXTERIOR CABLE ENTRY PORT GROUND BARS: LOCATED AT THE ENTRANCE TO THE CELL SITE BUILDING. BOND TO GROUND RING WITH A #2 SOLID TINNED COPPER CONDUCTORS WITH AN EXOTHERMIC WELD AND INSPECTION SLEEVE (ATT-TP-76416 7.6.7.2).

DURING ALL DC POWER SYSTEM CHANGES INCLUDING DC SYSTEM CHANGE OUTS, RECTIFIER REPLACEMENTS OR ADDITIONS, BREAKER DISTRIBUTION CHANGES, BATTERY ADDITIONS, BATTERY REPLACEMENTS AND INSTALLATIONS OR CHANGES TO DC CONVERTER SYSTEMS IT SHALL BE REQUIRED THAT SERVICES CONTRACTORS VERIFY ALL DC POWER SYSTEMS ARE EQUIPPED WITH MASTER DC SYSTEM RETURN GROUND CONDUCTOR FROM THE DC POWER SYSTEM COMMON RETURN BUS DIRECTLY CONNECTED TO THE CELL SITE REFERENCE GROUND BAR PER TP76300 SECTION H 6 AND TP76416 FIGURE 7-11 REQUIREMENTS.

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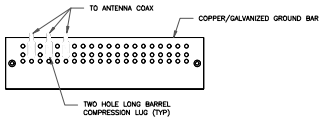
EXISTING
150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	7/12/20	NVG	FINALS	MTJ
1	7/17/20	GEH	FINALS	SMC

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

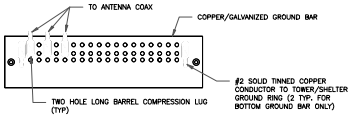
SHEET NUMBER: G-1
REVISION: 1



NOTES:

1. DOUBLING UP "OR STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
3. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL.

1 ANTENNA GROUND BAR DETAIL
SCALE: NOT TO SCALE

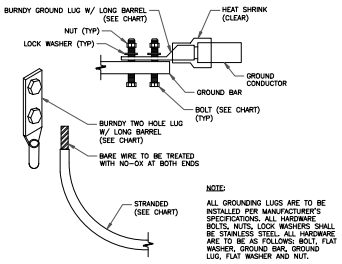


NOTES:

1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
3. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

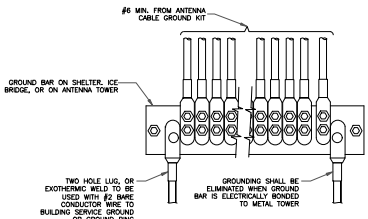
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE

WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT

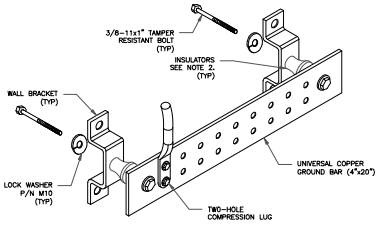


NOTE:
ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG, FLAT WASHER AND NUT.

3 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



4 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE

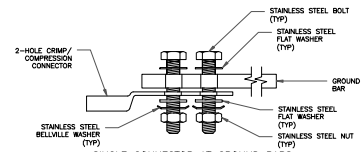


NOTES:

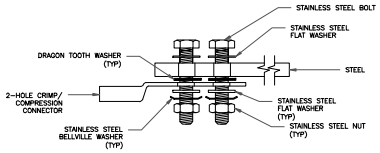
1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY GAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION. CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.

2. OMIT INSULATOR WHEN MOUNTING TO TOWER STEEL OR PLATFORM STEEL USE INSULATORS WHEN ATTACHING TO BUILDING OR SHELTERS.

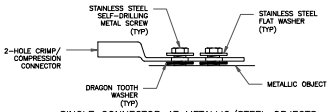
5 GROUND BAR DETAIL
SCALE: NOT TO SCALE



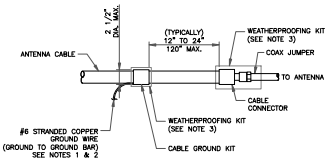
SINGLE CONNECTOR AT GROUND BARS



SINGLE CONNECTOR AT STEEL OBJECTS



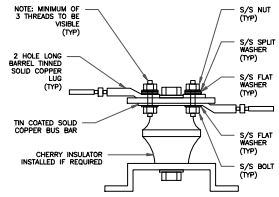
SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO GROUND BAR.
2. GROUNDING KIT SHALL BE TYPE AND PART NUMBER AS SUPPLIED OR RECOMMENDED BY CABLE MANUFACTURER.
3. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT, COLD SHRINK SHALL NOT BE USED.

6 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE

8 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE

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7/17/20

B&T ENGINEERING, INC.
PEC.0001564
Expires 2/10/21

SHEET NUMBER: G-2
REVISION: 1

Exhibit D

Structural Analysis Report

Date: **June 10, 2020**

Cheryl Schultz
Crown Castle
6325 Ardrey Kell RddSuite 600
Charlotte, NC 28277

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

Subject:	**Structural Analysis Report**	
Carrier Designation:	***AT&T Mobility* Co-Locate**	
	Carrier Site Number:	CT2008
	Carrier Site Name:	Woodbridge Johnson Road
Crown Castle Designation:	**Crown Castle BU Number:**	876315
	Crown Castle Site Name:	Oak Lane Cc, Inc. Tower (Ssusa
	Crown Castle JDE Job Number:	605409
	Crown Castle Work Order Number:	1856622
	Crown Castle Order Number:	517074 Rev. 0
Engineering Firm Designation:	**B+T Group Project Number:**	81150.007.01
Site Data:	**1027 Racebrook Road, Woodbridge, New Haven County, CT** **Latitude *41° 19' 0.3"*, Longitude *-73° 0' 41.8"*** **150 Foot - Monopole**	

Dear Cheryl Schultz,

B+T Group is pleased to submit this **"Structural Analysis Report"** to determine the structural integrity of the above-mentioned tower.

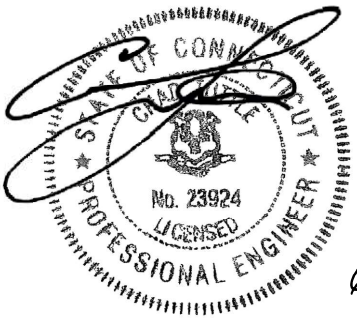
The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC7: Proposed Equipment Configuration **Sufficient Capacity**

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

Structural analysis prepared by: Jacob Johnson, E.I.T.

Respectfully submitted by: B+T Engineering, Inc.
COA: PEC.0001564; Expires: 02/10/2020



6/10/20

Chad E. Tuttle, P.E.

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 150 ft. Monopole designed by SUMMIT in February 1998. This tower has been modified multiple times to accommodate additional loading.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	125 mph
Exposure Category:	B
Topographic Factor:	1
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)
102.0	104.0	3	CCI antennas	DMP65R-BU6D	6 2 2 2	1-5/8 3/4 5/8 3/8
		3	CCI antennas	OPA65R-BU6D		
		3	Ericsson	RRUS 4449 B5/B12		
		3	Ericsson	RRUS 8843 B2/B66A		
		3	Powerwave Tech.	7770.00		
		3	Powerwave Tech.	LGP12104		
		2	Raycap	DC6-48-60-18-8F		
	102.0	3	Site Pro 1	PRK-SFS-L Stabilizer Kit		
		3	Site Pro 1	HRK14-HD Handrail Kit		
		1	--	Platform Mount [LP 1201-1]		

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)
150.0	160.0	1	Dbspectra	DS4C06F36D-D	3 1	1-1/4 7/8
	150.0	3	Alcatel Lucent	1900MHZ RRH (65MHZ)		
		3	Alcatel Lucent	800 EXTERNAL NOTCH FILTER		
		3	Alcatel Lucent	800MHZ RRH		
		9	Rfs Celwave	ACU-A20-N		
		3	Rfs Celwave	APXVSPP18-C-A20		
		3	Rfs Celwave	APXVTM14-C-120		
		1	--	Platform Mount [LP 1201-1]		
	148.0	3	Alcatel Lucent	TD-RRH8X20-25		
138.0	138.0	4	Ericsson	AIR 32 B2A/B66AA	11 2 1	1-5/8 1/2 1-3/8
		4	Ericsson	ERICSSON AIR 21 B2A B4P		
		4	Ericsson	RADIO 4449 B12/B71		
		1	Gps	GPS_A		
		4	Rfs Celwave	APXVAA24_43-U-A20		
		4	Rfs Celwave	ATMA4P4DBP-1A20		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
138.0	138.0	1	Rfs Celwave	SC2-W100AC	--	--
		1	--	Platform Mount [LP 701-1]		
126.0	129.0	1	Rfs Celwave	TMA-DB-T1-6Z-8AB-0Z	--	--
124.0	127.0	1	Gps	GPS_A	6 1	1-5/8 1/2
	126.0	3	Alcatel Lucent	RRH2X40-AWS		
		1	Antel	BXA-70080/4CF		
		2	Antel	BXA-80063/4CF		
		3	Powerwave Tech.	P65.16.XL.2		
		3	Rymsa Wireless	MG D3-800TV		
		3	Rymsa Wireless	MG D3-800TX		
	124.0	1	--	Platform Mount [LP 1201-1]		
82.0	83.0	1	Lucent	KS24019-L112A	1	1/2
	82.0	1	--	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3- Documents Provided

Document	Remarks	Reference	Source
Online Order Information	AT&T Mobility Co-Locate, Rev# 0	517074	CCI Sites
Tower Manufacturing Drawings	Summit Manufacturing LLC., Job No. 2249	2134236	CCI Sites
Mount Reinforcement Report	POD, Date:06/02/2020	9121020	CCI Sites
Tower Modification Drawings	PJF, Date: 10/22/2001	2134235	CCI Sites
Tower Modification Drawings	B&T Engineering, Date: 11/25/2008	2414123	CCI Sites
Post Modification Inspection	B&T Engineering, Date: 04/03/2009	2414121	CCI Sites
Tower Modification Drawings	PJF, Date: 06/24/2012	3313096	CCI Sites
Post Modification Inspection	TEP, Date: 11/21/2013	4137621	CCI Sites
Foundation Drawings	Summit Manufacturing LLC., Job No. 2249	2112237	CCI Sites
Geotech Report	Clough, Harbour & Associates, Project No. 5835.07.15	2134233	CCI Sites
Antenna Configuration	Crown CAD Package	Date: 05/29/2020	CCI Sites

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. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 standard. tnxTower was used to determine the loads on the modified structure. Additional calculations were performed to determine the stresses in the pole and in the reinforcing elements. These calculations are presented in Appendix C.

3.2) Assumptions

1) The tower and structures were maintained in accordance with the - TIA-222 standard.
2) The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.

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

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L1	150 - 145	Pole	TP22.875x22x0.25	1	-4.378	1032.692	4.2	Pass
L2	145 - 140	Pole	TP23.75x22.875x0.25	2	-4.732	1072.638	7.6	Pass
L3	140 - 135	Pole	TP24.625x23.75x0.25	3	-10.215	1112.580	14.7	Pass
L4	135 - 130	Pole	TP25.501x24.625x0.25	4	-10.647	1152.532	22.6	Pass
L5	130 - 125	Pole	TP26.376x25.501x0.25	5	-11.172	1192.474	30.2	Pass
L6	125 - 120	Pole	TP27.251x26.376x0.25	6	-14.709	1232.416	39.6	Pass
L7	120 - 115	Pole	TP28.126x27.251x0.25	7	-15.303	1272.358	48.1	Pass
L8	115 - 110	Pole	TP29.001x28.126x0.25	8	-15.925	1312.311	56.0	Pass
L9	110 - 106.25	Pole	TP30.314x29.001x0.25	9	-16.407	1342.267	61.7	Pass
L10	106.25 - 101.25	Pole	TP30.033x29.158x0.3125	10	-21.680	1836.975	49.5	Pass
L11	101.25 - 96.25	Pole	TP30.908x30.033x0.3125	11	-22.555	1891.071	55.6	Pass
L12	96.25 - 91.25	Pole	TP31.783x30.908x0.3125	12	-23.458	1945.167	61.3	Pass
L13	91.25 - 86.25	Pole	TP32.658x31.783x0.3125	13	-24.392	1999.263	66.6	Pass
L14	86.25 - 81.25	Pole	TP33.534x32.658x0.3125	14	-25.434	2053.359	71.5	Pass
L15	81.25 - 76.25	Pole	TP34.409x33.534x0.3125	15	-26.426	2107.455	76.2	Pass
L16	76.25 - 73.5	Pole	TP34.89x34.409x0.3125	16	-26.977	2137.201	78.7	Pass
L17	73.5 - 73.25	Pole + Reinf.	TP34.934x34.89x0.4	17	-27.054	2732.163	71.5	Pass
L18	73.25 - 68.25	Pole + Reinf.	TP35.809x34.934x0.4	18	-28.227	2801.400	74.9	Pass
L19	68.25 - 66.75	Pole + Reinf.	TP36.903x35.809x0.4	19	-28.581	2822.169	75.9	Pass
L20	66.75 - 61	Pole	TP36.453x35.447x0.375	20	-30.752	2675.925	71.1	Pass
L21	61 - 56.25	Pole	TP37.284x36.453x0.375	21	-31.900	2737.591	73.7	Pass
L22	56.25 - 56	Pole + Reinf.	TP37.328x37.284x0.4563	22	-31.985	3327.355	73.5	Pass
L23	56 - 51	Pole + Reinf.	TP38.203x37.328x0.4563	23	-33.370	3406.326	75.8	Pass
L24	51 - 46	Pole + Reinf.	TP39.078x38.203x0.45	24	-34.793	3438.109	77.9	Pass
L25	46 - 41	Pole + Reinf.	TP39.954x39.078x0.45	25	-36.222	3515.998	79.8	Pass
L26	41 - 39.5	Pole + Reinf.	TP40.216x39.954x0.45	26	-36.654	3539.371	80.4	Pass
L27	39.5 - 39.25	Pole + Reinf.	TP40.26x40.216x0.4875	27	-36.753	3834.925	77.5	Pass
L28	39.25 - 38.75	Pole + Reinf.	TP40.347x40.26x0.4875	28	-36.912	3843.357	77.7	Pass
L29	38.75 - 38.5	Pole + Reinf.	TP40.391x40.347x0.475	29	-36.991	3750.096	76.9	Pass
L30	38.5 - 37.5	Pole + Reinf.	TP41.485x40.391x0.475	30	-37.288	3766.539	77.3	Pass
L31	37.5 - 31.25	Pole + Reinf.	TP40.91x39.816x0.5375	31	-40.643	4292.064	72.8	Pass
L32	31.25 - 26.25	Pole + Reinf.	TP41.785x40.91x0.5375	32	-42.364	4385.104	74.2	Pass
L33	26.25 - 21.25	Pole + Reinf.	TP42.66x41.785x0.5375	33	-44.112	4478.145	75.5	Pass
L34	21.25 - 16.25	Pole + Reinf.	TP43.536x42.66x0.5313	34	-45.890	4518.696	76.7	Pass
L35	16.25 - 11.25	Pole + Reinf.	TP44.411x43.536x0.525	35	-47.696	4557.063	77.8	Pass
L36	11.25 - 10	Pole + Reinf.	TP44.63x44.411x0.525	36	-48.149	4579.774	78.1	Pass
L37	10 - 9.75	Pole + Reinf.	TP44.673x44.63x0.4625	37	-48.250	4044.285	77.5	Pass
L38	9.75 - 7.25	Pole + Reinf.	TP45.111x44.673x0.4625	38	-49.121	4084.321	78.2	Pass
L39	7.25 - 7	Pole + Reinf.	TP45.155x45.111x0.5063	39	-49.224	4470.669	78.9	Pass

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L40	7 - 2	Pole + Reinf.	TP46.03x45.155x0.5	40	-50.997	4502.652	79.9	Pass
L41	2 - 0	Pole + Reinf.	TP46.38x46.03x0.5	41	-51.718	4537.270	80.2	Pass
							Summary	
						Pole (L16)	78.7	Pass
						Reinforcement	80.4	Pass
						Rating =	80.4	Pass

Table 5 - Tower Component Stresses vs. Capacity – LC7

Notes	Component	Elevation	% Capacity	Pass / Fail
1,2	Anchor Rods	Base	55.9	Pass
1,2	Base Plate	Base	46.3	Pass
1,2	Base Foundation (Structure)	Base	20.5	Pass
1,2	Base Foundation (Soil Interaction)	Base	74.4	Pass

Structure Rating (max from all components) =	80.4%

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

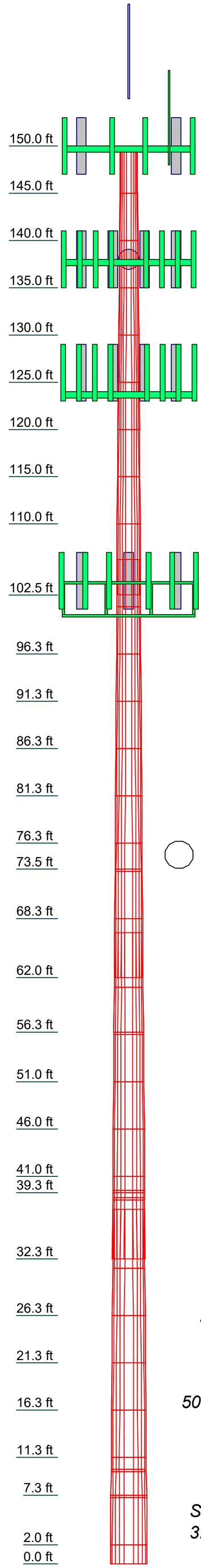
4.1) Recommendations

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	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	5.000	12	0.250		22.000	22.875	A607-60	0.3
2	5.000	12	0.250		22.875	23.750		0.3
3	5.000	12	0.250		23.750	24.625		0.3
4	5.000	12	0.250		24.625	25.501		0.3
5	5.000	12	0.250		25.501	26.376		0.4
6	5.000	12	0.250		26.376	27.251		0.4
7	5.000	12	0.250		27.251	28.126		0.4
8	5.000	12	0.250		28.126	29.001		0.4
9	[illegible]	12	0.250	3.750	29.001	30.314		0.6
10	[illegible]	12	0.313		[illegible]	[illegible]		0.5
11	5.000	12	0.313		[illegible]	[illegible]		0.5
12	5.000	12	0.313		30.908	31.783		0.5
13	5.000	12	0.313		31.783	32.658		0.5
14	5.000	12	0.313		32.658	33.534		0.6
15	5.000	12	0.313		33.534	34.409		0.6
16	[illegible]	12	[illegible]		[illegible]	[illegible]		[illegible]
17	[illegible]	12	[illegible]		[illegible]	[illegible]		[illegible]
18	5.000	12	0.400		[illegible]	[illegible]		0.8
19	[illegible]	12	0.400	4.750	[illegible]	36.903		1.0
20	[illegible]	12	[illegible]		[illegible]	[illegible]		0.8
21	[illegible]	12	[illegible]		[illegible]	[illegible]		0.7
22	[illegible]	12	[illegible]		[illegible]	[illegible]		[illegible]
23	5.000	12	0.450		[illegible]	[illegible]		0.9
24	5.000	12	0.450		38.203	39.078	A607-65	0.9
25	5.000	12	0.450		39.078	39.954		1.0
26	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
27	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
28	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
29	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
30	[illegible]	12	[illegible]	5.250	[illegible]	[illegible]		1.3
31	[illegible]	12	[illegible]		[illegible]	[illegible]		1.4
32	5.000	12	[illegible]		[illegible]	[illegible]		1.2
33	5.000	12	0.537		41.785	42.660		1.2
34	5.000	12	0.531		42.660	43.536		1.2
35	5.000	12	0.525		43.536	44.411		1.2
36	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
37	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
38	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
39	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]		[illegible]
40	[illegible]	12	[illegible]		[illegible]	[illegible]		1.2
41	2.000	12	0.500		[illegible]	[illegible]		0.5
								24.0



MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A607-60	60 ksi	75 ksi	A607-65	65 ksi	80 ksi

TOWER DESIGN NOTES

1. Tower is located in New Haven County, Connecticut.
2. Tower designed for Exposure B 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 0.000 ft
8. TIA-222-H Annex S
9. TOWER RATING:80.4%

ALL REACTIONS ARE FACTORED

AXIAL 85 K
SHEAR 7 K
MOMENT 825 kip-ft
TORQUE 1 kip-ft
50 mph WIND - 1.500 in ICE

AXIAL 52 K
SHEAR 32 K
MOMENT 3448 kip-ft
TORQUE 3 kip-ft
REACTIONS - 125 mph WIND

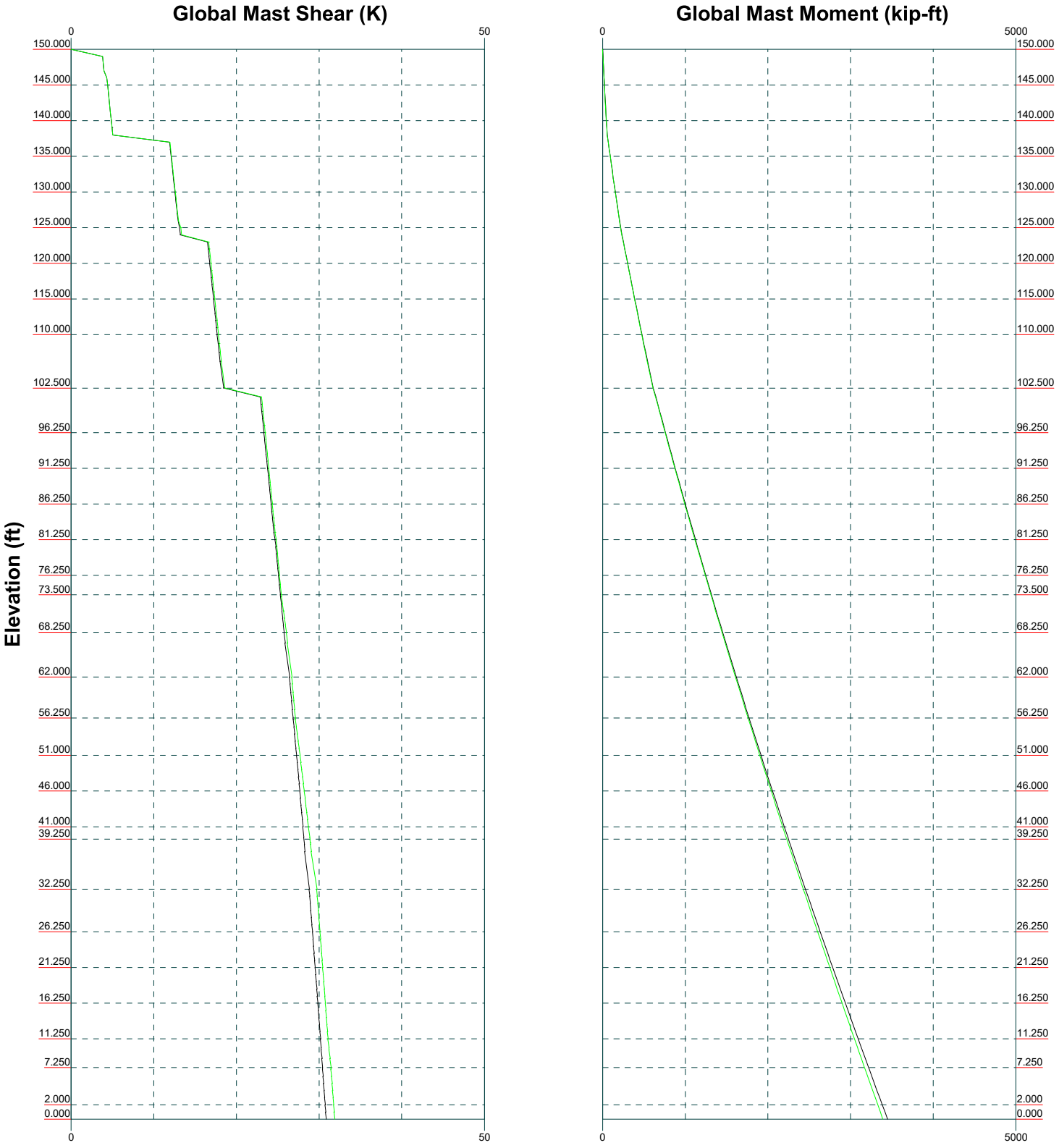
B+T Group
1717 S. Boulder, Suite 300
Tulsa, OK 74119
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: *81150.007.01 - OAK LANE CC, INC. TOWER (SSUSA, CT (BU# 87631*		
Project:		
Client: Crown Castle	Drawn by: Jayaraj B	App'd:
Code: TIA-222-H	Date: 06/10/20	Scale: NTS
Path:		Dwg No. E-1

TIA-222-H - 125 mph/50 mph 1.500 in Ice Exposure B

Maximum Values

Vx Vz Mx Mz



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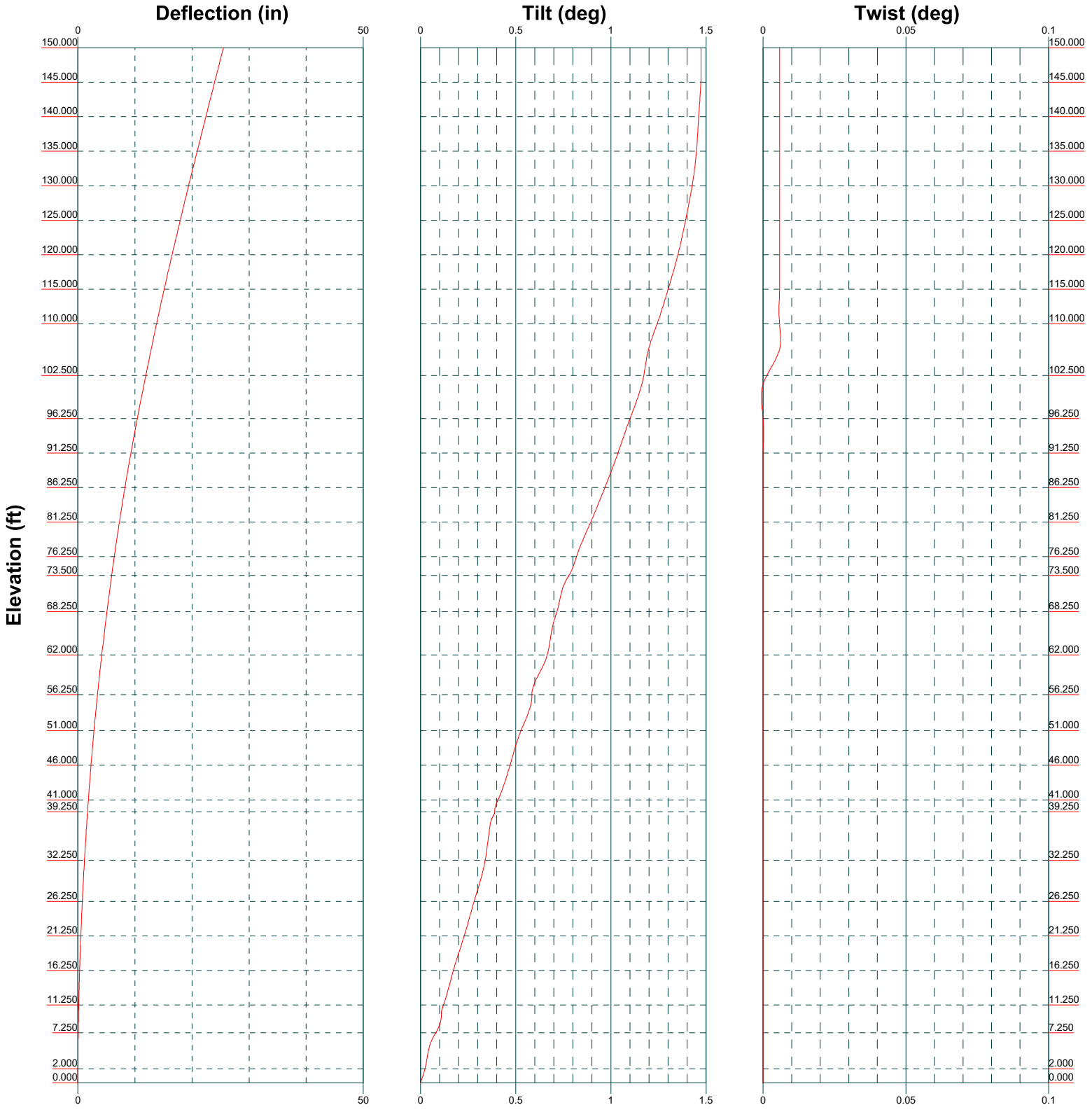
Project:			
Client: Crown Castle	Drawn by: Jayaraj B	App'd:	
Code: TIA-222-H	Date: 06/10/20	Scale: NTS	
Path:		Dwg No. E-4	

TIA-222-H - Service - 60 mph

Maximum Values



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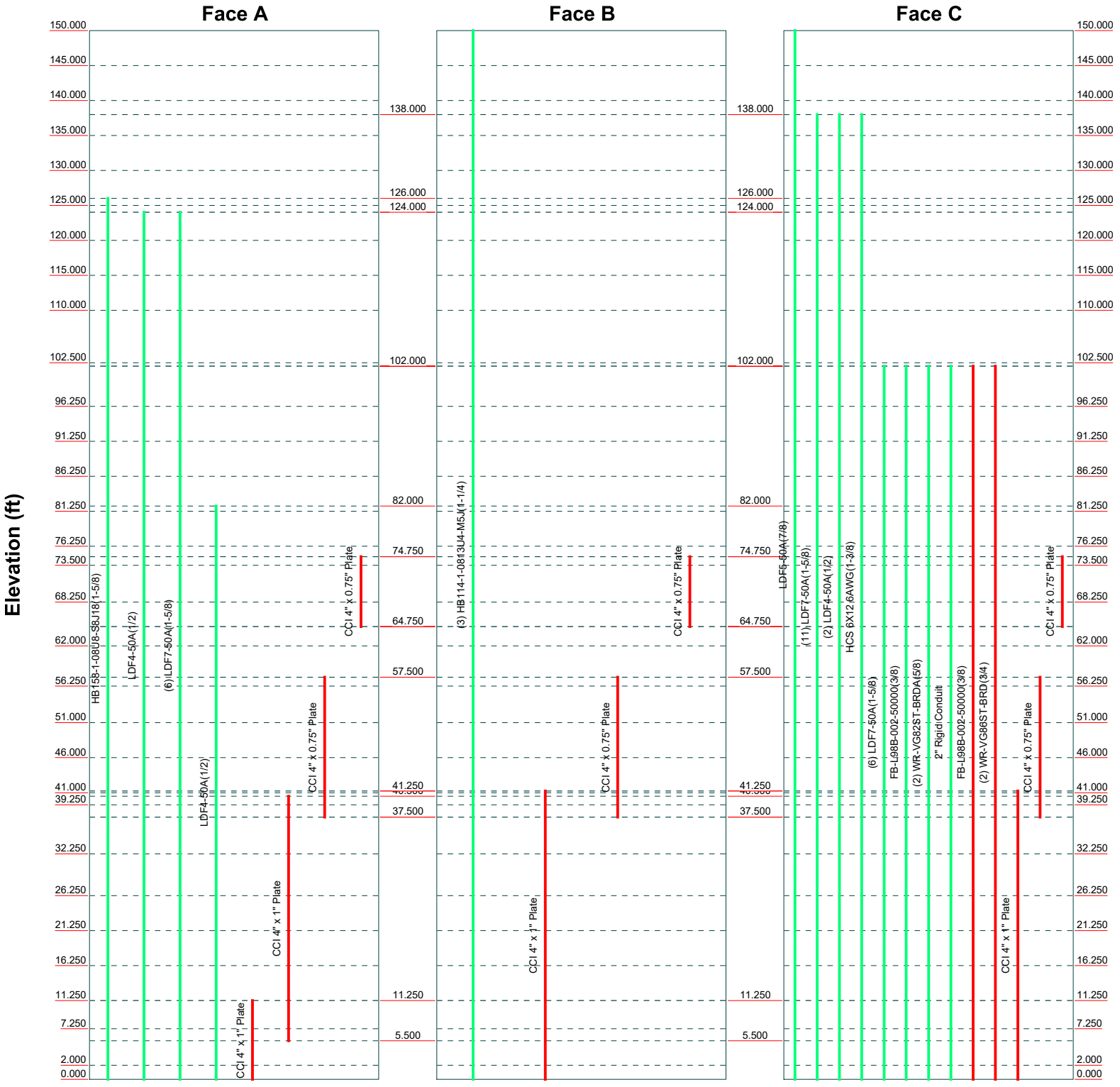
Job: *81150.007.01 - OAK LANE CC, INC. TOWER (SSUSA, CT (BU# 87631*			
Project:			
Client: Crown Castle	Drawn by: Jayaraj B	App'd:	
Code: TIA-222-H	Date: 06/10/20	Scale: NTS	
Path:		Dwg No. E-5	

Feed Line Distribution Chart
0' - 150'

Round | Flat | App In Face | App Out Face | Truss Leg



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Phone: (918) 587-4630
FAX: (918) 295-0265

Job: 81150.007.01 - OAK LANE CC, INC. TOWER (SSUSA, CT (BU# 87631			
Project:			
Client: Crown Castle	Drawn by: Jayaraj B	App'd:	
Code: TIA-222-H	Date: 06/10/20	Scale: NTS	
Path:		Dwg No. E-7	

Tower Input Data

The tower is a monopole.
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: 238.000 ft.
Basic wind speed of 125 mph.
Risk Category II.
Exposure Category B.
Simplified Topographic Factor Procedure for wind speed-up calculations is used.
Topographic Category: 1.
Crest Height: 0.000 ft.
Nominal ice thickness of 1.500 in.
Ice thickness is considered to increase with height.
Ice density of 56.000 pcf.
A wind speed of 50 mph is used in combination with ice.
Temperature drop of 50.000 °F.
Deflections calculated using a wind speed of 60 mph.
TIA-222-H Annex S.
TOWER RATING:80.4%.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.05.
Tower analysis based on target reliabilities in accordance with Annex S.
Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.
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

Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	150.000-145.000	5.000	0.000	12	22.000	22.875	0.250	1.000	A607-60 (60 ksi)
L2	145.000-140.000	5.000	0.000	12	22.875	23.750	0.250	1.000	A607-60 (60 ksi)
L3	140.000-135.000	5.000	0.000	12	23.750	24.625	0.250	1.000	A607-60 (60 ksi)
L4	135.000-130.000	5.000	0.000	12	24.625	25.501	0.250	1.000	A607-60 (60 ksi)
L5	130.000-125.000	5.000	0.000	12	25.501	26.376	0.250	1.000	A607-60 (60 ksi)
L6	125.000-120.000	5.000	0.000	12	26.376	27.251	0.250	1.000	A607-60 (60 ksi)
L7	120.000-115.000	5.000	0.000	12	27.251	28.126	0.250	1.000	A607-60 (60 ksi)
L8	115.000-110.000	5.000	0.000	12	28.126	29.001	0.250	1.000	A607-60 (60 ksi)
L9	110.000-102.500	7.500	3.750	12	29.001	30.314	0.250	1.000	A607-60 (60 ksi)
L10	102.500-101.250	5.000	0.000	12	29.158	30.033	0.313	1.250	A607-65 (65 ksi)
L11	101.250-96.250	5.000	0.000	12	30.033	30.908	0.313	1.250	A607-65 (65 ksi)
L12	96.250-91.250	5.000	0.000	12	30.908	31.783	0.313	1.250	A607-65 (65 ksi)
L13	91.250-86.250	5.000	0.000	12	31.783	32.658	0.313	1.250	A607-65 (65 ksi)
L14	86.250-81.250	5.000	0.000	12	32.658	33.534	0.313	1.250	A607-65 (65 ksi)
L15	81.250-76.250	5.000	0.000	12	33.534	34.409	0.313	1.250	A607-65 (65 ksi)
L16	76.250-73.500	2.750	0.000	12	34.409	34.890	0.313	1.250	A607-65 (65 ksi)
L17	73.500-73.250	0.250	0.000	12	34.890	34.934	0.400	1.600	A607-65 (65 ksi)
L18	73.250-68.250	5.000	0.000	12	34.934	35.809	0.400	1.600	A607-65 (65 ksi)
L19	68.250-62.000	6.250	4.750	12	35.809	36.903	0.400	1.600	A607-65 (65 ksi)
L20	62.000-61.000	5.750	0.000	12	35.447	36.453	0.375	1.500	A607-65 (65 ksi)
L21	61.000-56.250	4.750	0.000	12	36.453	37.284	0.375	1.500	A607-65 (65 ksi)
L22	56.250-56.000	0.250	0.000	12	37.284	37.328	0.456	1.825	A607-65 (65 ksi)
L23	56.000-51.000	5.000	0.000	12	37.328	38.203	0.456	1.825	A607-65 (65 ksi)
L24	51.000-46.000	5.000	0.000	12	38.203	39.078	0.450	1.800	A607-65 (65 ksi)
L25	46.000-41.000	5.000	0.000	12	39.078	39.954	0.450	1.800	A607-65 (65 ksi)
L26	41.000-39.500	1.500	0.000	12	39.954	40.216	0.450	1.800	A607-65 (65 ksi)
L27	39.500-39.250	0.250	0.000	12	40.216	40.260	0.487	1.950	A607-65 (65 ksi)
L28	39.250-38.750	0.500	0.000	12	40.260	40.347	0.487	1.950	A607-65 (65 ksi)
L29	38.750-38.500	0.250	0.000	12	40.347	40.391	0.475	1.900	A607-65 (65 ksi)

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L30	38.500-32.250	6.250	5.250	12	40.391	41.485	0.475	1.900	A607-65 (65 ksi)
L31	32.250-31.250	6.250	0.000	12	39.816	40.910	0.537	2.150	A607-65 (65 ksi)
L32	31.250-26.250	5.000	0.000	12	40.910	41.785	0.537	2.150	A607-65 (65 ksi)
L33	26.250-21.250	5.000	0.000	12	41.785	42.660	0.537	2.150	A607-65 (65 ksi)
L34	21.250-16.250	5.000	0.000	12	42.660	43.536	0.531	2.125	A607-65 (65 ksi)
L35	16.250-11.250	5.000	0.000	12	43.536	44.411	0.525	2.100	A607-65 (65 ksi)
L36	11.250-10.000	1.250	0.000	12	44.411	44.630	0.525	2.100	A607-65 (65 ksi)
L37	10.000-9.750	0.250	0.000	12	44.630	44.673	0.463	1.850	A607-65 (65 ksi)
L38	9.750-7.250	2.500	0.000	12	44.673	45.111	0.463	1.850	A607-65 (65 ksi)
L39	7.250-7.000	0.250	0.000	12	45.111	45.155	0.506	2.025	A607-65 (65 ksi)
L40	7.000-2.000	5.000	0.000	12	45.155	46.030	0.500	2.000	A607-65 (65 ksi)
L41	2.000-0.000	2.000		12	46.030	46.380	0.500	2.000	A607-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
L1	22.688	17.509	1057.206	7.786	11.396	92.770	2142.186	8.617	5.226	20.904
	23.594	18.213	1190.027	8.100	11.849	100.430	2411.317	8.964	5.461	21.842
L2	23.594	18.213	1190.027	8.100	11.849	100.430	2411.317	8.964	5.461	21.842
	24.500	18.918	1333.530	8.413	12.303	108.394	2702.094	9.311	5.695	22.78
L3	24.500	18.918	1333.530	8.413	12.303	108.394	2702.094	9.311	5.695	22.78
	25.406	19.622	1488.131	8.726	12.756	116.661	3015.356	9.657	5.930	23.719
L4	25.406	19.622	1488.131	8.726	12.756	116.661	3015.356	9.657	5.930	23.719
	26.312	20.327	1654.240	9.040	13.209	125.233	3351.939	10.004	6.164	24.657
L5	26.312	20.327	1654.240	9.040	13.209	125.233	3351.939	10.004	6.164	24.657
	27.218	21.031	1832.273	9.353	13.663	134.108	3712.681	10.351	6.399	25.595
L6	27.218	21.031	1832.273	9.353	13.663	134.108	3712.681	10.351	6.399	25.595
	28.124	21.736	2022.641	9.666	14.116	143.287	4098.419	10.698	6.633	26.533
L7	28.124	21.736	2022.641	9.666	14.116	143.287	4098.419	10.698	6.633	26.533
	29.030	22.440	2225.759	9.980	14.569	152.770	4509.991	11.044	6.868	27.471
L8	29.030	22.440	2225.759	9.980	14.569	152.770	4509.991	11.044	6.868	27.471
	29.936	23.145	2442.039	10.293	15.023	162.557	4948.233	11.391	7.102	28.409
L9	29.936	23.145	2442.039	10.293	15.023	162.557	4948.233	11.391	7.102	28.409
	31.295	24.202	2792.043	10.763	15.703	177.807	5657.436	11.911	7.454	29.817
L10	30.756	29.025	3082.545	10.327	15.104	204.093	6246.072	14.285	6.977	22.326
	30.982	29.906	3371.724	10.640	15.557	216.734	6832.027	14.719	7.211	23.076
L11	30.982	29.906	3371.724	10.640	15.557	216.734	6832.027	14.719	7.211	23.076
	31.888	30.787	3678.446	10.953	16.010	229.754	7453.529	15.152	7.446	23.827
L12	31.888	30.787	3678.446	10.953	16.010	229.754	7453.529	15.152	7.446	23.827
	32.794	31.667	4003.227	11.267	16.464	243.155	8111.624	15.586	7.680	24.577
L13	32.794	31.667	4003.227	11.267	16.464	243.155	8111.624	15.586	7.680	24.577
	33.700	32.548	4346.584	11.580	16.917	256.935	8807.358	16.019	7.915	25.328
L14	33.700	32.548	4346.584	11.580	16.917	256.935	8807.358	16.019	7.915	25.328

Section	Tip Dia. in	Area in^2	I in^4	r in	C in	I/C in^3	J in^4	It/Q in^2	w in	w/t
	34.606	33.429	4709.033	11.893	17.370	271.096	9541.778	16.453	8.149	26.078
L15	34.606	33.429	4709.033	11.893	17.370	271.096	9541.778	16.453	8.149	26.078
	35.512	34.309	5091.091	12.206	17.824	285.636	10315.931	16.886	8.384	26.829
L16	35.512	34.309	5091.091	12.206	17.824	285.636	10315.931	16.886	8.384	26.829
	36.011	34.794	5309.769	12.379	18.073	293.795	10759.031	17.124	8.513	27.242
L17	35.980	44.423	6745.038	12.347	18.073	373.209	13667.275	21.864	8.279	20.696
	36.025	44.480	6770.744	12.363	18.096	374.163	13719.362	21.891	8.290	20.726
L18	36.025	44.480	6770.744	12.363	18.096	374.163	13719.362	21.891	8.290	20.726
	36.931	45.607	7298.668	12.676	18.549	393.479	14789.079	22.446	8.525	21.312
L19	36.931	45.607	7298.668	12.676	18.549	393.479	14789.079	22.446	8.525	21.312
	38.064	47.016	7996.271	13.068	19.116	418.308	16202.612	23.140	8.818	22.045
L20	37.425	42.349	6648.734	12.556	18.361	362.105	13472.137	20.843	8.495	22.652
	37.607	43.564	7237.686	12.916	18.883	383.298	14665.514	21.441	8.764	23.372
L21	37.607	43.564	7237.686	12.916	18.883	383.298	14665.514	21.441	8.764	23.372
	38.467	44.568	7749.658	13.214	19.313	401.260	15702.908	21.935	8.987	23.966
L22	38.439	54.105	9366.620	13.184	19.313	484.983	18979.312	26.629	8.769	19.221
	38.484	54.169	9400.046	13.200	19.336	486.143	19047.042	26.661	8.781	19.246
L23	38.484	54.169	9400.046	13.200	19.336	486.143	19047.042	26.661	8.781	19.246
	39.390	55.455	10085.373	13.513	19.789	509.638	20435.699	27.293	9.016	19.76
L24	39.392	54.704	9952.159	13.516	19.789	502.907	20165.772	26.924	9.032	20.072
	40.298	55.973	10660.409	13.829	20.243	526.632	21600.880	27.548	9.267	20.593
L25	40.298	55.973	10660.409	13.829	20.243	526.632	21600.880	27.548	9.267	20.593
	41.204	57.241	11401.489	14.142	20.696	550.905	23102.508	28.172	9.502	21.115
L26	41.204	57.241	11401.489	14.142	20.696	550.905	23102.508	28.172	9.502	21.115
	41.476	57.621	11630.326	14.236	20.832	558.294	23566.194	28.359	9.572	21.271
L27	41.463	62.364	12563.909	14.223	20.832	603.109	25457.886	30.694	9.471	19.429
	41.508	62.433	12605.468	14.238	20.855	604.446	25542.096	30.727	9.483	19.453
L28	41.508	62.433	12605.468	14.238	20.855	604.446	25542.096	30.727	9.483	19.453
	41.599	62.570	12688.861	14.270	20.900	607.125	25711.072	30.795	9.507	19.501
L29	41.603	60.985	12375.141	14.274	20.900	592.114	25075.390	30.015	9.540	20.084
	41.648	61.052	12415.928	14.290	20.923	593.422	25158.035	30.048	9.552	20.109
L30	41.648	61.052	12415.928	14.290	20.923	593.422	25158.035	30.048	9.552	20.109
	42.781	62.725	13464.950	14.682	21.489	626.591	27283.639	30.871	9.845	20.726
L31	41.982	67.981	13387.165	14.062	20.625	649.083	27126.025	33.458	9.230	17.172
	42.164	69.875	14537.180	14.453	21.191	685.993	29456.268	34.390	9.523	17.718
L32	42.164	69.875	14537.180	14.453	21.191	685.993	29456.268	34.390	9.523	17.718
	43.070	71.390	15503.220	14.767	21.645	716.257	31413.728	35.136	9.758	18.154
L33	43.070	71.390	15503.220	14.767	21.645	716.257	31413.728	35.136	9.758	18.154
	43.976	72.904	16511.138	15.080	22.098	747.174	33456.041	35.881	9.993	18.591
L34	43.978	72.067	16326.413	15.082	22.098	738.815	33081.739	35.469	10.009	18.841
	44.884	73.564	17365.183	15.396	22.551	770.025	35186.569	36.206	10.244	19.282
L35	44.886	72.709	17168.370	15.398	22.551	761.297	34787.772	35.785	10.261	19.544
	45.792	74.189	18237.872	15.711	23.005	792.785	36954.873	36.514	10.495	19.991
L36	45.792	74.189	18237.872	15.711	23.005	792.785	36954.873	36.514	10.495	19.991
	46.019	74.559	18512.013	15.789	23.118	800.757	37510.358	36.696	10.554	20.102
L37	46.041	65.776	16377.631	15.812	23.118	708.432	33185.520	32.373	10.721	23.181
	46.086	65.841	16426.358	15.827	23.141	709.844	33284.255	32.405	10.733	23.206
L38	46.086	65.841	16426.358	15.827	23.141	709.844	33284.255	32.405	10.733	23.206
	46.539	66.493	16918.959	15.984	23.367	724.038	34282.397	32.726	10.850	23.46
L39	46.524	72.711	18465.014	15.968	23.367	790.201	37415.124	35.786	10.733	21.201
	46.569	72.783	18519.412	15.984	23.390	791.761	37525.350	35.821	10.745	21.224
L40	46.571	71.894	18298.460	15.986	23.390	782.315	37077.640	35.384	10.761	21.523
	47.477	73.303	19395.575	16.300	23.844	813.453	39300.693	36.078	10.996	21.992
L41	47.477	73.303	19395.575	16.300	23.844	813.453	39300.693	36.078	10.996	21.992
	47.840	73.867	19846.414	16.425	24.025	826.079	40214.216	36.355	11.090	22.18

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

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
L1 150.000-145.000				1	1	1			
L2 145.000-140.000				1	1	1			
L3 140.000-135.000				1	1	1			
L4 135.000-130.000				1	1	1			
L5 130.000-125.000				1	1	1			
L6 125.000-120.000				1	1	1			
L7 120.000-115.000				1	1	1			
L8 115.000-110.000				1	1	1			
L9 110.000-102.500				1	1	1			
L10 102.500-101.250				1	1	1			
L11 101.250-96.250				1	1	1			
L12 96.250-91.250				1	1	1			
L13 91.250-86.250				1	1	1			
L14 86.250-81.250				1	1	1			
L15 81.250-76.250				1	1	1			
L16 76.250-73.500				1	1	1			
L17 73.500-73.250				1	1	0.98586			
L18 73.250-68.250				1	1	0.980802			
L19 68.250-62.000				1	1	0.979334			
L20 62.000-61.000				1	1	1			
L21 61.000-56.250				1	1	1			
L22 56.250-56.000				1	1	0.990113			
L23 56.000-51.000				1	1	0.986213			
L24 51.000-46.000				1	1	0.995975			

Tower Elevation ft	Gusset Area (per face) ft²	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
L25 46.000-41.000				1	1	0.992372			
L26 41.000-39.500				1	1	0.991322			
L27 39.500-39.250				1	1	1.04409			
L28 39.250-38.750				1	1	1.04349			
L29 38.750-38.500				1	1	0.988288			
L30 38.500-32.250				1	1	0.98742			
L31 32.250-31.250				1	1	0.987951			
L32 31.250-26.250				1	1	0.98426			
L33 26.250-21.250				1	1	0.980721			
L34 21.250-16.250				1	1	0.988681			
L35 16.250-11.250				1	1	0.996976			
L36 11.250-10.000				1	1	0.996164			
L37 10.000-9.750				1	1	1.06816			
L38 9.750-7.250				1	1	1.06696			
L39 7.250-7.000				1	1	0.975602			
L40 7.000-2.000				1	1	0.985493			
L41 2.000-0.000				1	1	0.98465			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
FB-L98B-002-50000(3/8)	C	No	Surface Ar (CaAa)	102.000 - 0.000	1	1	-0.360 -0.350	0.394		0.000
WR-VG86ST-BRD(3/4) *	C	No	Surface Ar (CaAa)	102.000 - 0.000	2	2	-0.400 -0.370	0.795		0.001
CCI 4" x 1" Plate	A	No	Surface Af (CaAa)	11.250 - 0.000	1	1	0.000 0.000	4.000	10.000	0.000
CCI 4" x 1" Plate	A	No	Surface Af (CaAa)	40.500 - 5.500	1	1	0.000 0.000	4.000	10.000	0.000
CCI 4" x 1" Plate	B	No	Surface Af (CaAa)	41.250 - 0.000	1	1	0.000 0.000	4.000	10.000	0.000
CCI 4" x 1" Plate	C	No	Surface Af (CaAa)	41.250 - 0.000	1	1	0.000 0.000	4.000	10.000	0.000
CCI 4" x 0.75" Plate	A	No	Surface Af	57.500 -	1	1	0.000	4.000	9.500	0.000

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight klf
			(CaAa)	37.500			0.000			
CCI 4" x 0.75" Plate	B	No	Surface Af (CaAa)	57.500 - 37.500	1	1	0.000 0.000	4.000	9.500	0.000
CCI 4" x 0.75" Plate	C	No	Surface Af (CaAa)	57.500 - 37.500	1	1	0.000 0.000	4.000	9.500	0.000
CCI 4" x 0.75" Plate	A	No	Surface Af (CaAa)	74.750 - 64.750	1	1	0.000 0.000	4.000	9.500	0.000
CCI 4" x 0.75" Plate	B	No	Surface Af (CaAa)	74.750 - 64.750	1	1	0.000 0.000	4.000	9.500	0.000
CCI 4" x 0.75" Plate	C	No	Surface Af (CaAa)	74.750 - 64.750	1	1	0.000 0.000	4.000	9.500	0.000

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 klf
HB114-1-0813U4-M5J(1-1/4)	B	No	No	Inside Pole	150.000 - 0.000	3	No Ice 1/2" Ice 1" Ice 2" Ice	0.000 0.000 0.000 0.000	0.001 0.001 0.001 0.001
LDF5-50A(7/8)	C	No	No	Inside Pole	150.000 - 0.000	1	No Ice 1/2" Ice 1" Ice 2" Ice	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000
*									
LDF7-50A(1-5/8)	C	No	No	Inside Pole	138.000 - 0.000	11	No Ice 1/2" Ice 1" Ice 2" Ice	0.000 0.000 0.000 0.000	0.001 0.001 0.001 0.001
LDF4-50A(1/2)	C	No	No	Inside Pole	138.000 - 0.000	2	No Ice 1/2" Ice 1" Ice 2" Ice	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000
HCS 6X12 6AWG(1-3/8)	C	No	No	Inside Pole	138.000 - 0.000	1	No Ice 1/2" Ice 1" Ice 2" Ice	0.000 0.000 0.000 0.000	0.002 0.002 0.002 0.002
*									
HB158-1-08U8-S8J18(1-5/8)	A	No	No	Inside Pole	126.000 - 0.000	1	No Ice 1/2" Ice 1" Ice 2" Ice	0.000 0.000 0.000 0.000	0.001 0.001 0.001 0.001
LDF4-50A(1/2)	A	No	No	Inside Pole	124.000 - 0.000	1	No Ice 1/2" Ice 1" Ice 2" Ice	0.000 0.000 0.000 0.000	0.000 0.000 0.000 0.000
LDF7-50A(1-5/8)	A	No	No	Inside Pole	124.000 - 0.000	6	No Ice 1/2" Ice 1" Ice 2" Ice	0.000 0.000 0.000 0.000	0.001 0.001 0.001 0.001
*									
LDF7-50A(1-5/8)	C	No	No	Inside Pole	102.000 - 0.000	6	No Ice 1/2" Ice 1" Ice 2" Ice	0.000 0.000 0.000 0.000	0.001 0.001 0.001 0.001

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight klf
FB-L98B-002-50000 (3/8)	C	No	No	Inside Pole	102.000 - 0.000	1	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
WR-VG82ST-BRD A(5/8)	C	No	No	Inside Pole	102.000 - 0.000	2	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000
2" Rigid Conduit	C	No	No	Inside Pole	102.000 - 0.000	1	No Ice	0.000	0.003
							1/2" Ice	0.000	0.003
							1" Ice	0.000	0.003
							2" Ice	0.000	0.003
* LDF4-50A(1/2)	A	No	No	Inside Pole	82.000 - 0.000	1	No Ice	0.000	0.000
							1/2" Ice	0.000	0.000
							1" Ice	0.000	0.000
							2" Ice	0.000	0.000

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 K
L1	150.000-145.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.000	0.000	0.002
L2	145.000-140.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.000	0.000	0.002
L3	140.000-135.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.000	0.000	0.035
L4	135.000-130.000	A	0.000	0.000	0.000	0.000	0.000
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.000	0.000	0.057
L5	130.000-125.000	A	0.000	0.000	0.000	0.000	0.001
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.000	0.000	0.057
L6	125.000-120.000	A	0.000	0.000	0.000	0.000	0.027
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.000	0.000	0.057
L7	120.000-115.000	A	0.000	0.000	0.000	0.000	0.032
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.000	0.000	0.057
L8	115.000-110.000	A	0.000	0.000	0.000	0.000	0.032
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.000	0.000	0.057
L9	110.000-102.500	A	0.000	0.000	0.000	0.000	0.048
		B	0.000	0.000	0.000	0.000	0.027
		C	0.000	0.000	0.000	0.000	0.085
L10	102.500-101.250	A	0.000	0.000	0.000	0.000	0.008
		B	0.000	0.000	0.000	0.000	0.004
		C	0.000	0.000	0.149	0.000	0.021
L11	101.250-96.250	A	0.000	0.000	0.000	0.000	0.032

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 K
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.992	0.000	0.105
L12	96.250-91.250	A	0.000	0.000	0.000	0.000	0.032
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.992	0.000	0.105
L13	91.250-86.250	A	0.000	0.000	0.000	0.000	0.032
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.992	0.000	0.105
L14	86.250-81.250	A	0.000	0.000	0.000	0.000	0.032
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.992	0.000	0.105
L15	81.250-76.250	A	0.000	0.000	0.000	0.000	0.033
		B	0.000	0.000	0.000	0.000	0.018
		C	0.000	0.000	0.992	0.000	0.105
L16	76.250-73.500	A	0.000	0.000	0.833	0.000	0.018
		B	0.000	0.000	0.833	0.000	0.010
		C	0.000	0.000	1.379	0.000	0.058
L17	73.500-73.250	A	0.000	0.000	0.167	0.000	0.002
		B	0.000	0.000	0.167	0.000	0.001
		C	0.000	0.000	0.216	0.000	0.005
L18	73.250-68.250	A	0.000	0.000	3.333	0.000	0.033
		B	0.000	0.000	3.333	0.000	0.018
		C	0.000	0.000	4.325	0.000	0.105
L19	68.250-62.000	A	0.000	0.000	2.333	0.000	0.041
		B	0.000	0.000	2.333	0.000	0.022
		C	0.000	0.000	3.573	0.000	0.131
L20	62.000-61.000	A	0.000	0.000	0.000	0.000	0.007
		B	0.000	0.000	0.000	0.000	0.004
		C	0.000	0.000	0.198	0.000	0.021
L21	61.000-56.250	A	0.000	0.000	0.833	0.000	0.031
		B	0.000	0.000	0.833	0.000	0.017
		C	0.000	0.000	1.776	0.000	0.100
L22	56.250-56.000	A	0.000	0.000	0.167	0.000	0.002
		B	0.000	0.000	0.167	0.000	0.001
		C	0.000	0.000	0.216	0.000	0.005
L23	56.000-51.000	A	0.000	0.000	3.333	0.000	0.033
		B	0.000	0.000	3.333	0.000	0.018
		C	0.000	0.000	4.325	0.000	0.105
L24	51.000-46.000	A	0.000	0.000	3.333	0.000	0.033
		B	0.000	0.000	3.333	0.000	0.018
		C	0.000	0.000	4.325	0.000	0.105
L25	46.000-41.000	A	0.000	0.000	3.333	0.000	0.033
		B	0.000	0.000	3.500	0.000	0.018
		C	0.000	0.000	4.492	0.000	0.105
L26	41.000-39.500	A	0.000	0.000	1.667	0.000	0.010
		B	0.000	0.000	2.000	0.000	0.005
		C	0.000	0.000	2.298	0.000	0.031
L27	39.500-39.250	A	0.000	0.000	0.333	0.000	0.002
		B	0.000	0.000	0.333	0.000	0.001
		C	0.000	0.000	0.383	0.000	0.005
L28	39.250-38.750	A	0.000	0.000	0.667	0.000	0.003
		B	0.000	0.000	0.667	0.000	0.002
		C	0.000	0.000	0.766	0.000	0.010
L29	38.750-38.500	A	0.000	0.000	0.333	0.000	0.002
		B	0.000	0.000	0.333	0.000	0.001
		C	0.000	0.000	0.383	0.000	0.005
L30	38.500-32.250	A	0.000	0.000	4.833	0.000	0.041
		B	0.000	0.000	4.833	0.000	0.022
		C	0.000	0.000	6.073	0.000	0.131
L31	32.250-31.250	A	0.000	0.000	0.667	0.000	0.007
		B	0.000	0.000	0.667	0.000	0.004

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 K
		C	0.000	0.000	0.865	0.000	0.021
L32	31.250-26.250	A	0.000	0.000	3.333	0.000	0.033
		B	0.000	0.000	3.333	0.000	0.018
		C	0.000	0.000	4.325	0.000	0.105
L33	26.250-21.250	A	0.000	0.000	3.333	0.000	0.033
		B	0.000	0.000	3.333	0.000	0.018
		C	0.000	0.000	4.325	0.000	0.105
L34	21.250-16.250	A	0.000	0.000	3.333	0.000	0.033
		B	0.000	0.000	3.333	0.000	0.018
		C	0.000	0.000	4.325	0.000	0.105
L35	16.250-11.250	A	0.000	0.000	3.333	0.000	0.033
		B	0.000	0.000	3.333	0.000	0.018
		C	0.000	0.000	4.325	0.000	0.105
L36	11.250-10.000	A	0.000	0.000	1.667	0.000	0.008
		B	0.000	0.000	0.833	0.000	0.004
		C	0.000	0.000	1.081	0.000	0.026
L37	10.000-9.750	A	0.000	0.000	0.333	0.000	0.002
		B	0.000	0.000	0.167	0.000	0.001
		C	0.000	0.000	0.216	0.000	0.005
L38	9.750-7.250	A	0.000	0.000	3.333	0.000	0.016
		B	0.000	0.000	1.667	0.000	0.009
		C	0.000	0.000	2.163	0.000	0.052
L39	7.250-7.000	A	0.000	0.000	0.333	0.000	0.002
		B	0.000	0.000	0.167	0.000	0.001
		C	0.000	0.000	0.216	0.000	0.005
L40	7.000-2.000	A	0.000	0.000	4.333	0.000	0.033
		B	0.000	0.000	3.333	0.000	0.018
		C	0.000	0.000	4.325	0.000	0.105
L41	2.000-0.000	A	0.000	0.000	1.333	0.000	0.013
		B	0.000	0.000	1.333	0.000	0.007
		C	0.000	0.000	1.730	0.000	0.042

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 K
L1	150.000-145.000	A	1.481	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	0.000	0.000	0.002
L2	145.000-140.000	A	1.476	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	0.000	0.000	0.002
L3	140.000-135.000	A	1.471	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	0.000	0.000	0.035
L4	135.000-130.000	A	1.465	0.000	0.000	0.000	0.000	0.000
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	0.000	0.000	0.057
L5	130.000-125.000	A	1.460	0.000	0.000	0.000	0.000	0.001
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	0.000	0.000	0.057
L6	125.000-120.000	A	1.454	0.000	0.000	0.000	0.000	0.027
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	0.000	0.000	0.057
L7	120.000-115.000	A	1.448	0.000	0.000	0.000	0.000	0.032
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	0.000	0.000	0.057

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 K
L8	115.000-110.000	A	1.441	0.000	0.000	0.000	0.000	0.032
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	0.000	0.000	0.057
L9	110.000-102.500	A	1.433	0.000	0.000	0.000	0.000	0.048
		B		0.000	0.000	0.000	0.000	0.027
		C		0.000	0.000	0.000	0.000	0.085
L10	102.500-101.250	A	1.427	0.000	0.000	0.000	0.000	0.008
		B		0.000	0.000	0.000	0.000	0.004
		C		0.000	0.000	0.662	0.000	0.027
L11	101.250-96.250	A	1.423	0.000	0.000	0.000	0.000	0.032
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	4.392	0.000	0.145
L12	96.250-91.250	A	1.415	0.000	0.000	0.000	0.000	0.032
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	4.375	0.000	0.144
L13	91.250-86.250	A	1.408	0.000	0.000	0.000	0.000	0.032
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	4.358	0.000	0.144
L14	86.250-81.250	A	1.399	0.000	0.000	0.000	0.000	0.032
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	4.339	0.000	0.144
L15	81.250-76.250	A	1.391	0.000	0.000	0.000	0.000	0.033
		B		0.000	0.000	0.000	0.000	0.018
		C		0.000	0.000	4.320	0.000	0.143
L16	76.250-73.500	A	1.384	0.000	0.000	1.073	0.000	0.028
		B		0.000	0.000	1.073	0.000	0.020
		C		0.000	0.000	3.440	0.000	0.088
L17	73.500-73.250	A	1.381	0.000	0.000	0.215	0.000	0.004
		B		0.000	0.000	0.215	0.000	0.003
		C		0.000	0.000	0.429	0.000	0.009
L18	73.250-68.250	A	1.376	0.000	0.000	4.288	0.000	0.072
		B		0.000	0.000	4.288	0.000	0.057
		C		0.000	0.000	8.575	0.000	0.182
L19	68.250-62.000	A	1.365	0.000	0.000	2.998	0.000	0.068
		B		0.000	0.000	2.998	0.000	0.050
		C		0.000	0.000	8.324	0.000	0.205
L20	62.000-61.000	A	1.357	0.000	0.000	0.000	0.000	0.007
		B		0.000	0.000	0.000	0.000	0.004
		C		0.000	0.000	0.852	0.000	0.028
L21	61.000-56.250	A	1.350	0.000	0.000	1.171	0.000	0.041
		B		0.000	0.000	1.171	0.000	0.027
		C		0.000	0.000	5.188	0.000	0.144
L22	56.250-56.000	A	1.345	0.000	0.000	0.234	0.000	0.004
		B		0.000	0.000	0.234	0.000	0.003
		C		0.000	0.000	0.445	0.000	0.009
L23	56.000-51.000	A	1.338	0.000	0.000	4.671	0.000	0.070
		B		0.000	0.000	4.671	0.000	0.056
		C		0.000	0.000	8.873	0.000	0.179
L24	51.000-46.000	A	1.325	0.000	0.000	4.658	0.000	0.070
		B		0.000	0.000	4.658	0.000	0.055
		C		0.000	0.000	8.830	0.000	0.178
L25	46.000-41.000	A	1.311	0.000	0.000	4.644	0.000	0.069
		B		0.000	0.000	4.876	0.000	0.057
		C		0.000	0.000	9.016	0.000	0.178
L26	41.000-39.500	A	1.301	0.000	0.000	2.317	0.000	0.028
		B		0.000	0.000	2.780	0.000	0.028
		C		0.000	0.000	4.015	0.000	0.064
L27	39.500-39.250	A	1.298	0.000	0.000	0.463	0.000	0.005
		B		0.000	0.000	0.463	0.000	0.005
		C		0.000	0.000	0.669	0.000	0.011
L28	39.250-38.750	A	1.296	0.000	0.000	0.926	0.000	0.011

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 K
		B		0.000	0.000	0.926	0.000	0.009
		C		0.000	0.000	1.337	0.000	0.021
L29	38.750-38.500	A	1.295	0.000	0.000	0.463	0.000	0.005
		B		0.000	0.000	0.463	0.000	0.005
		C		0.000	0.000	0.668	0.000	0.011
L30	38.500-32.250	A	1.284	0.000	0.000	6.695	0.000	0.094
		B		0.000	0.000	6.695	0.000	0.076
		C		0.000	0.000	11.794	0.000	0.227
L31	32.250-31.250	A	1.270	0.000	0.000	0.923	0.000	0.014
		B		0.000	0.000	0.923	0.000	0.011
		C		0.000	0.000	1.739	0.000	0.035
L32	31.250-26.250	A	1.258	0.000	0.000	4.591	0.000	0.069
		B		0.000	0.000	4.591	0.000	0.054
		C		0.000	0.000	8.611	0.000	0.174
L33	26.250-21.250	A	1.234	0.000	0.000	4.567	0.000	0.068
		B		0.000	0.000	4.567	0.000	0.053
		C		0.000	0.000	8.533	0.000	0.172
L34	21.250-16.250	A	1.205	0.000	0.000	4.538	0.000	0.067
		B		0.000	0.000	4.538	0.000	0.052
		C		0.000	0.000	8.440	0.000	0.169
L35	16.250-11.250	A	1.168	0.000	0.000	4.501	0.000	0.065
		B		0.000	0.000	4.501	0.000	0.051
		C		0.000	0.000	8.320	0.000	0.167
L36	11.250-10.000	A	1.138	0.000	0.000	2.206	0.000	0.024
		B		0.000	0.000	1.118	0.000	0.012
		C		0.000	0.000	2.056	0.000	0.041
L37	10.000-9.750	A	1.130	0.000	0.000	0.441	0.000	0.005
		B		0.000	0.000	0.223	0.000	0.002
		C		0.000	0.000	0.410	0.000	0.008
L38	9.750-7.250	A	1.113	0.000	0.000	4.393	0.000	0.047
		B		0.000	0.000	2.223	0.000	0.024
		C		0.000	0.000	4.071	0.000	0.081
L39	7.250-7.000	A	1.094	0.000	0.000	0.438	0.000	0.005
		B		0.000	0.000	0.221	0.000	0.002
		C		0.000	0.000	0.404	0.000	0.008
L40	7.000-2.000	A	1.044	0.000	0.000	5.619	0.000	0.069
		B		0.000	0.000	4.378	0.000	0.046
		C		0.000	0.000	7.919	0.000	0.158
L41	2.000-0.000	A	0.899	0.000	0.000	1.680	0.000	0.022
		B		0.000	0.000	1.693	0.000	0.017
		C		0.000	0.000	2.978	0.000	0.059

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L1	150.000-145.000	0.000	0.000	0.000	0.000
L2	145.000-140.000	0.000	0.000	0.000	0.000
L3	140.000-135.000	0.000	0.000	0.000	0.000
L4	135.000-130.000	0.000	0.000	0.000	0.000
L5	130.000-125.000	0.000	0.000	0.000	0.000
L6	125.000-120.000	0.000	0.000	0.000	0.000
L7	120.000-115.000	0.000	0.000	0.000	0.000
L8	115.000-110.000	0.000	0.000	0.000	0.000
L9	110.000-102.500	0.000	0.000	0.000	0.000
L10	102.500-101.250	0.508	0.499	1.369	1.375

Section	Elevation	CP_X	CP_Z	CP_X Ice	CP_Z Ice
	ft	in	in	in	in
L11	101.250-96.250	0.821	0.807	2.024	2.033
L12	96.250-91.250	0.822	0.808	2.038	2.046
L13	91.250-86.250	0.823	0.809	2.050	2.058
L14	86.250-81.250	0.824	0.810	2.061	2.069
L15	81.250-76.250	0.825	0.811	2.070	2.079
L16	76.250-73.500	0.635	0.624	1.693	1.700
L17	73.500-73.250	0.499	0.491	1.390	1.396
L18	73.250-68.250	0.502	0.493	1.397	1.402
L19	68.250-62.000	0.611	0.601	1.647	1.653
L20	62.000-61.000	0.828	0.813	2.092	2.100
L21	61.000-56.250	0.711	0.699	1.836	1.843
L22	56.250-56.000	0.513	0.504	1.377	1.382
L23	56.000-51.000	0.515	0.506	1.382	1.387
L24	51.000-46.000	0.520	0.511	1.392	1.397
L25	46.000-41.000	0.626	0.571	1.482	1.446
L26	41.000-39.500	0.942	0.705	1.590	1.381
L27	39.500-39.250	0.387	0.380	1.058	1.061
L28	39.250-38.750	0.387	0.381	1.058	1.062
L29	38.750-38.500	0.388	0.381	1.059	1.062
L30	38.500-32.250	0.503	0.494	1.341	1.345
L31	32.250-31.250	0.531	0.522	1.409	1.414
L32	31.250-26.250	0.534	0.525	1.404	1.409
L33	26.250-21.250	0.538	0.529	1.405	1.410
L34	21.250-16.250	0.542	0.533	1.403	1.407
L35	16.250-11.250	0.546	0.537	1.395	1.399
L36	11.250-10.000	-1.530	-0.684	-0.546	0.220
L37	10.000-9.750	-1.531	-0.684	-0.552	0.215
L38	9.750-7.250	-1.535	-0.686	-0.565	0.205
L39	7.250-7.000	-1.538	-0.687	-0.579	0.194
L40	7.000-2.000	-0.120	0.148	0.744	0.984
L41	2.000-0.000	0.556	0.546	1.275	1.269

Note: For pole sections, center of pressure calculations do not consider feed line shielding.

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L9	21	FB-L98B-002-50000(3/8)	102.50 - 102.00	1.0000	1.0000
L9	22	WR-VG86ST-BRD(3/4)	102.50 - 102.00	1.0000	1.0000
L11	21	FB-L98B-002-50000(3/8)	96.25 - 101.25	1.0000	1.0000
L11	22	WR-VG86ST-BRD(3/4)	96.25 - 101.25	1.0000	1.0000
L12	21	FB-L98B-002-50000(3/8)	91.25 - 96.25	1.0000	1.0000
L12	22	WR-VG86ST-BRD(3/4)	91.25 - 96.25	1.0000	1.0000
L13	21	FB-L98B-002-50000(3/8)	86.25 - 91.25	1.0000	1.0000
L13	22	WR-VG86ST-BRD(3/4)	86.25 - 91.25	1.0000	1.0000
L14	21	FB-L98B-002-50000(3/8)	81.25 - 86.25	1.0000	1.0000
L14	22	WR-VG86ST-BRD(3/4)	81.25 - 86.25	1.0000	1.0000
L15	21	FB-L98B-002-50000(3/8)	76.25 - 81.25	1.0000	1.0000
L15	22	WR-VG86ST-BRD(3/4)	76.25 - 81.25	1.0000	1.0000
L16	21	FB-L98B-002-50000(3/8)	73.50 - 76.25	1.0000	1.0000
L16	22	WR-VG86ST-BRD(3/4)	73.50 - 76.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L16	33	CCI 4" x 0.75" Plate	73.50 - 74.75	1.0000	1.0000
L16	34	CCI 4" x 0.75" Plate	73.50 - 74.75	1.0000	1.0000
L16	35	CCI 4" x 0.75" Plate	73.50 - 74.75	1.0000	1.0000
L17	21	FB-L98B-002-50000(3/8)	73.25 - 73.50	1.0000	1.0000
L17	22	WR-VG86ST-BRD(3/4)	73.25 - 73.50	1.0000	1.0000
L17	33	CCI 4" x 0.75" Plate	73.25 - 73.50	1.0000	1.0000
L17	34	CCI 4" x 0.75" Plate	73.25 - 73.50	1.0000	1.0000
L17	35	CCI 4" x 0.75" Plate	73.25 - 73.50	1.0000	1.0000
L18	21	FB-L98B-002-50000(3/8)	68.25 - 73.25	1.0000	1.0000
L18	22	WR-VG86ST-BRD(3/4)	68.25 - 73.25	1.0000	1.0000
L18	33	CCI 4" x 0.75" Plate	68.25 - 73.25	1.0000	1.0000
L18	34	CCI 4" x 0.75" Plate	68.25 - 73.25	1.0000	1.0000
L18	35	CCI 4" x 0.75" Plate	68.25 - 73.25	1.0000	1.0000
L19	21	FB-L98B-002-50000(3/8)	62.00 - 68.25	1.0000	1.0000
L19	22	WR-VG86ST-BRD(3/4)	62.00 - 68.25	1.0000	1.0000
L19	33	CCI 4" x 0.75" Plate	64.75 - 68.25	1.0000	1.0000
L19	34	CCI 4" x 0.75" Plate	64.75 - 68.25	1.0000	1.0000
L19	35	CCI 4" x 0.75" Plate	64.75 - 68.25	1.0000	1.0000
L21	21	FB-L98B-002-50000(3/8)	56.25 - 61.00	1.0000	1.0000
L21	22	WR-VG86ST-BRD(3/4)	56.25 - 61.00	1.0000	1.0000
L21	30	CCI 4" x 0.75" Plate	56.25 - 57.50	1.0000	1.0000
L21	31	CCI 4" x 0.75" Plate	56.25 - 57.50	1.0000	1.0000
L21	32	CCI 4" x 0.75" Plate	56.25 - 57.50	1.0000	1.0000
L22	21	FB-L98B-002-50000(3/8)	56.00 - 56.25	1.0000	1.0000
L22	22	WR-VG86ST-BRD(3/4)	56.00 - 56.25	1.0000	1.0000
L22	30	CCI 4" x 0.75" Plate	56.00 - 56.25	1.0000	1.0000
L22	31	CCI 4" x 0.75" Plate	56.00 - 56.25	1.0000	1.0000
L22	32	CCI 4" x 0.75" Plate	56.00 - 56.25	1.0000	1.0000
L23	21	FB-L98B-002-50000(3/8)	51.00 - 56.00	1.0000	1.0000
L23	22	WR-VG86ST-BRD(3/4)	51.00 - 56.00	1.0000	1.0000
L23	30	CCI 4" x 0.75" Plate	51.00 - 56.00	1.0000	1.0000
L23	31	CCI 4" x 0.75" Plate	51.00 - 56.00	1.0000	1.0000
L23	32	CCI 4" x 0.75" Plate	51.00 - 56.00	1.0000	1.0000
L24	21	FB-L98B-002-50000(3/8)	46.00 - 51.00	1.0000	1.0000
L24	22	WR-VG86ST-BRD(3/4)	46.00 - 51.00	1.0000	1.0000
L24	30	CCI 4" x 0.75" Plate	46.00 - 51.00	1.0000	1.0000
L24	31	CCI 4" x 0.75" Plate	46.00 - 51.00	1.0000	1.0000
L24	32	CCI 4" x 0.75" Plate	46.00 - 51.00	1.0000	1.0000
L25	21	FB-L98B-002-50000(3/8)	41.00 - 46.00	1.0000	1.0000
L25	22	WR-VG86ST-BRD(3/4)	41.00 - 46.00	1.0000	1.0000
L25	28	CCI 4" x 1" Plate	41.00 - 41.25	1.0000	1.0000
L25	29	CCI 4" x 1" Plate	41.00 - 41.25	1.0000	1.0000
L25	30	CCI 4" x 0.75" Plate	41.00 - 46.00	1.0000	1.0000
L25	31	CCI 4" x 0.75" Plate	41.00 - 46.00	1.0000	1.0000
L25	32	CCI 4" x 0.75" Plate	41.00 - 46.00	1.0000	1.0000
L26	21	FB-L98B-002-50000(3/8)	39.50 - 41.00	1.0000	1.0000
L26	22	WR-VG86ST-BRD(3/4)	39.50 - 41.00	1.0000	1.0000
L26	27	CCI 4" x 1" Plate	39.50 - 40.50	1.0000	1.0000
L26	28	CCI 4" x 1" Plate	39.50 - 41.00	1.0000	1.0000
L26	29	CCI 4" x 1" Plate	39.50 - 41.00	1.0000	1.0000
L26	30	CCI 4" x 0.75" Plate	39.50 - 41.00	1.0000	1.0000
L26	31	CCI 4" x 0.75" Plate	39.50 - 41.00	1.0000	1.0000
L26	32	CCI 4" x 0.75" Plate	39.50 - 41.00	1.0000	1.0000
L27	21	FB-L98B-002-50000(3/8)	39.25 - 39.50	1.0000	1.0000
L27	22	WR-VG86ST-BRD(3/4)	39.25 - 39.50	1.0000	1.0000
L27	27	CCI 4" x 1" Plate	39.25 - 39.50	1.0000	1.0000
L27	28	CCI 4" x 1" Plate	39.25 - 39.50	1.0000	1.0000
L27	29	CCI 4" x 1" Plate	39.25 - 39.50	1.0000	1.0000
L27	30	CCI 4" x 0.75" Plate	39.25 - 39.50	1.0000	1.0000
L27	31	CCI 4" x 0.75" Plate	39.25 - 39.50	1.0000	1.0000
L27	32	CCI 4" x 0.75" Plate	39.25 - 39.50	1.0000	1.0000
L28	21	FB-L98B-002-50000(3/8)	38.75 - 39.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L28	22	WR-VG86ST-BRD(3/4)	38.75 - 39.25	1.0000	1.0000
L28	27	CCI 4" x 1" Plate	38.75 - 39.25	1.0000	1.0000
L28	28	CCI 4" x 1" Plate	38.75 - 39.25	1.0000	1.0000
L28	29	CCI 4" x 1" Plate	38.75 - 39.25	1.0000	1.0000
L28	30	CCI 4" x 0.75" Plate	38.75 - 39.25	1.0000	1.0000
L28	31	CCI 4" x 0.75" Plate	38.75 - 39.25	1.0000	1.0000
L28	32	CCI 4" x 0.75" Plate	38.75 - 39.25	1.0000	1.0000
L29	21	FB-L98B-002-50000(3/8)	38.50 - 38.75	1.0000	1.0000
L29	22	WR-VG86ST-BRD(3/4)	38.50 - 38.75	1.0000	1.0000
L29	27	CCI 4" x 1" Plate	38.50 - 38.75	1.0000	1.0000
L29	28	CCI 4" x 1" Plate	38.50 - 38.75	1.0000	1.0000
L29	29	CCI 4" x 1" Plate	38.50 - 38.75	1.0000	1.0000
L29	30	CCI 4" x 0.75" Plate	38.50 - 38.75	1.0000	1.0000
L29	31	CCI 4" x 0.75" Plate	38.50 - 38.75	1.0000	1.0000
L29	32	CCI 4" x 0.75" Plate	38.50 - 38.75	1.0000	1.0000
L30	21	FB-L98B-002-50000(3/8)	32.25 - 38.50	1.0000	1.0000
L30	22	WR-VG86ST-BRD(3/4)	32.25 - 38.50	1.0000	1.0000
L30	27	CCI 4" x 1" Plate	32.25 - 38.50	1.0000	1.0000
L30	28	CCI 4" x 1" Plate	32.25 - 38.50	1.0000	1.0000
L30	29	CCI 4" x 1" Plate	32.25 - 38.50	1.0000	1.0000
L30	30	CCI 4" x 0.75" Plate	37.50 - 38.50	1.0000	1.0000
L30	31	CCI 4" x 0.75" Plate	37.50 - 38.50	1.0000	1.0000
L30	32	CCI 4" x 0.75" Plate	37.50 - 38.50	1.0000	1.0000
L32	21	FB-L98B-002-50000(3/8)	26.25 - 31.25	1.0000	1.0000
L32	22	WR-VG86ST-BRD(3/4)	26.25 - 31.25	1.0000	1.0000
L32	27	CCI 4" x 1" Plate	26.25 - 31.25	1.0000	1.0000
L32	28	CCI 4" x 1" Plate	26.25 - 31.25	1.0000	1.0000
L32	29	CCI 4" x 1" Plate	26.25 - 31.25	1.0000	1.0000
L33	21	FB-L98B-002-50000(3/8)	21.25 - 26.25	1.0000	1.0000
L33	22	WR-VG86ST-BRD(3/4)	21.25 - 26.25	1.0000	1.0000
L33	27	CCI 4" x 1" Plate	21.25 - 26.25	1.0000	1.0000
L33	28	CCI 4" x 1" Plate	21.25 - 26.25	1.0000	1.0000
L33	29	CCI 4" x 1" Plate	21.25 - 26.25	1.0000	1.0000
L34	21	FB-L98B-002-50000(3/8)	16.25 - 21.25	1.0000	1.0000
L34	22	WR-VG86ST-BRD(3/4)	16.25 - 21.25	1.0000	1.0000
L34	27	CCI 4" x 1" Plate	16.25 - 21.25	1.0000	1.0000
L34	28	CCI 4" x 1" Plate	16.25 - 21.25	1.0000	1.0000
L34	29	CCI 4" x 1" Plate	16.25 - 21.25	1.0000	1.0000
L35	21	FB-L98B-002-50000(3/8)	11.25 - 16.25	1.0000	1.0000
L35	22	WR-VG86ST-BRD(3/4)	11.25 - 16.25	1.0000	1.0000
L35	27	CCI 4" x 1" Plate	11.25 - 16.25	1.0000	1.0000
L35	28	CCI 4" x 1" Plate	11.25 - 16.25	1.0000	1.0000
L35	29	CCI 4" x 1" Plate	11.25 - 16.25	1.0000	1.0000
L36	21	FB-L98B-002-50000(3/8)	10.00 - 11.25	1.0000	1.0000
L36	22	WR-VG86ST-BRD(3/4)	10.00 - 11.25	1.0000	1.0000
L36	26	CCI 4" x 1" Plate	10.00 - 11.25	1.0000	1.0000
L36	27	CCI 4" x 1" Plate	10.00 - 11.25	1.0000	1.0000
L36	28	CCI 4" x 1" Plate	10.00 - 11.25	1.0000	1.0000
L36	29	CCI 4" x 1" Plate	10.00 - 11.25	1.0000	1.0000
L37	21	FB-L98B-002-50000(3/8)	9.75 - 10.00	1.0000	1.0000
L37	22	WR-VG86ST-BRD(3/4)	9.75 - 10.00	1.0000	1.0000
L37	26	CCI 4" x 1" Plate	9.75 - 10.00	1.0000	1.0000
L37	27	CCI 4" x 1" Plate	9.75 - 10.00	1.0000	1.0000
L37	28	CCI 4" x 1" Plate	9.75 - 10.00	1.0000	1.0000
L37	29	CCI 4" x 1" Plate	9.75 - 10.00	1.0000	1.0000
L38	21	FB-L98B-002-50000(3/8)	7.25 - 9.75	1.0000	1.0000
L38	22	WR-VG86ST-BRD(3/4)	7.25 - 9.75	1.0000	1.0000
L38	26	CCI 4" x 1" Plate	7.25 - 9.75	1.0000	1.0000
L38	27	CCI 4" x 1" Plate	7.25 - 9.75	1.0000	1.0000
L38	28	CCI 4" x 1" Plate	7.25 - 9.75	1.0000	1.0000
L38	29	CCI 4" x 1" Plate	7.25 - 9.75	1.0000	1.0000
L39	21	FB-L98B-002-50000(3/8)	7.00 - 7.25	1.0000	1.0000

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L39	22	WR-VG86ST-BRD(3/4)	7.00 - 7.25	1.0000	1.0000
L39	26	CCI 4" x 1" Plate	7.00 - 7.25	1.0000	1.0000
L39	27	CCI 4" x 1" Plate	7.00 - 7.25	1.0000	1.0000
L39	28	CCI 4" x 1" Plate	7.00 - 7.25	1.0000	1.0000
L39	29	CCI 4" x 1" Plate	7.00 - 7.25	1.0000	1.0000
L40	21	FB-L98B-002-50000(3/8)	2.00 - 7.00	1.0000	1.0000
L40	22	WR-VG86ST-BRD(3/4)	2.00 - 7.00	1.0000	1.0000
L40	26	CCI 4" x 1" Plate	2.00 - 7.00	1.0000	1.0000
L40	27	CCI 4" x 1" Plate	5.50 - 7.00	1.0000	1.0000
L40	28	CCI 4" x 1" Plate	2.00 - 7.00	1.0000	1.0000
L40	29	CCI 4" x 1" Plate	2.00 - 7.00	1.0000	1.0000
L41	21	FB-L98B-002-50000(3/8)	0.00 - 2.00	1.0000	1.0000
L41	22	WR-VG86ST-BRD(3/4)	0.00 - 2.00	1.0000	1.0000
L41	26	CCI 4" x 1" Plate	0.00 - 2.00	1.0000	1.0000
L41	28	CCI 4" x 1" Plate	0.00 - 2.00	1.0000	1.0000
L41	29	CCI 4" x 1" Plate	0.00 - 2.00	1.0000	1.0000

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 K
Lightning Rod 5/8" x 6' *	B	From Leg	4.000 0.000 0.000	0.000	153.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.375 0.989 1.619 2.464	0.375 0.989 1.619 2.464	0.006 0.010 0.019 0.047
APXVTM14-C-120 w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
APXVTM14-C-120 w/ Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
APXVTM14-C-120 w/ Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.090 4.480 4.880 5.710	2.860 3.230 3.610 4.400	0.077 0.127 0.185 0.331
APXVSPP18-C-A20 w/ Mount Pipe	A	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
APXVSPP18-C-A20 w/ Mount Pipe	B	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419
APXVSPP18-C-A20 w/ Mount Pipe	C	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.600 5.050 5.500 6.440	4.010 4.450 4.890 5.820	0.095 0.160 0.235 0.419

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 K
DS4C06F36D-D	A	From Leg	4.000 0.000 10.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	5.820 7.793 9.783 13.813	5.820 7.793 9.783 13.813	0.050 0.092 0.146 0.292
TD-RRH8X20-25	A	From Leg	4.000 0.000 -2.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8X20-25	B	From Leg	4.000 0.000 -2.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
TD-RRH8X20-25	C	From Leg	4.000 0.000 -2.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.045 4.298 4.557 5.098	1.535 1.714 1.901 2.295	0.070 0.097 0.128 0.201
1900MHZ RRH (65MHZ)	A	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.313 2.517 2.728 3.174	2.375 2.581 2.794 3.243	0.060 0.084 0.111 0.176
1900MHZ RRH (65MHZ)	B	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.313 2.517 2.728 3.174	2.375 2.581 2.794 3.243	0.060 0.084 0.111 0.176
1900MHZ RRH (65MHZ)	C	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.313 2.517 2.728 3.174	2.375 2.581 2.794 3.243	0.060 0.084 0.111 0.176
800MHZ RRH	A	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.134 2.320 2.512 2.920	1.773 1.946 2.127 2.510	0.053 0.074 0.098 0.157
800MHZ RRH	B	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.134 2.320 2.512 2.920	1.773 1.946 2.127 2.510	0.053 0.074 0.098 0.157
800MHZ RRH	C	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.134 2.320 2.512 2.920	1.773 1.946 2.127 2.510	0.053 0.074 0.098 0.157
(3) ACU-A20-N	A	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.067 0.104 0.148 0.259	0.117 0.162 0.215 0.343	0.001 0.002 0.004 0.012
(3) ACU-A20-N	B	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.067 0.104 0.148 0.259	0.117 0.162 0.215 0.343	0.001 0.002 0.004 0.012
(3) ACU-A20-N	C	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.067 0.104 0.148 0.259	0.117 0.162 0.215 0.343	0.001 0.002 0.004 0.012
800 EXTERNAL NOTCH FILTER	A	From Leg	4.000 0.000 0.000	0.000	150.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.660 0.763 0.873 1.115	0.321 0.398 0.483 0.674	0.011 0.017 0.024 0.045
800 EXTERNAL NOTCH	B	From Leg	4.000	0.000	150.000	No Ice	0.660	0.321	0.011

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 K
FILTER			0.000			1/2" Ice	0.763	0.398	0.017
			0.000			1" Ice	0.873	0.483	0.024
						2" Ice	1.115	0.674	0.045
800 EXTERNAL NOTCH FILTER	C	From Leg	4.000	0.000	150.000	No Ice	0.660	0.321	0.011
			0.000			1/2" Ice	0.763	0.398	0.017
			0.000			1" Ice	0.873	0.483	0.024
						2" Ice	1.115	0.674	0.045
6' x 2" Mount Pipe	A	From Face	4.000	0.000	150.000	No Ice	1.200	1.200	0.022
			0.000			1/2" Ice	1.802	1.802	0.031
			0.000			1" Ice	2.170	2.170	0.045
						2" Ice	2.932	2.932	0.084
6' x 2" Mount Pipe	B	From Face	4.000	0.000	150.000	No Ice	1.200	1.200	0.022
			0.000			1/2" Ice	1.802	1.802	0.031
			0.000			1" Ice	2.170	2.170	0.045
						2" Ice	2.932	2.932	0.084
6' x 2" Mount Pipe	C	From Face	4.000	0.000	150.000	No Ice	1.200	1.200	0.022
			0.000			1/2" Ice	1.802	1.802	0.031
			0.000			1" Ice	2.170	2.170	0.045
						2" Ice	2.932	2.932	0.084
4' x 2" Pipe Mount	A	From Leg	1.000	0.000	147.000	No Ice	0.785	0.785	0.029
			0.000			1/2" Ice	1.028	1.028	0.035
			0.000			1" Ice	1.281	1.281	0.044
						2" Ice	1.814	1.814	0.072
4' x 2" Pipe Mount	B	From Leg	1.000	0.000	147.000	No Ice	0.785	0.785	0.029
			0.000			1/2" Ice	1.028	1.028	0.035
			0.000			1" Ice	1.281	1.281	0.044
						2" Ice	1.814	1.814	0.072
4' x 2" Pipe Mount	C	From Leg	1.000	0.000	147.000	No Ice	0.785	0.785	0.029
			0.000			1/2" Ice	1.028	1.028	0.035
			0.000			1" Ice	1.281	1.281	0.044
						2" Ice	1.814	1.814	0.072
Miscellaneous [NA 507-1]	C	None		0.000	150.000	No Ice	4.560	4.560	0.245
						1/2" Ice	6.390	6.390	0.311
						1" Ice	8.180	8.180	0.402
						2" Ice	11.660	11.660	0.657
Platform Mount [LP 1201-1]	C	None		0.000	150.000	No Ice	18.380	18.380	2.100
						1/2" Ice	22.110	22.110	2.652
						1" Ice	25.870	25.870	3.263
						2" Ice	33.470	33.470	4.662
Side Arm Mount [SO 102-3]	C	None		0.000	147.000	No Ice	3.600	3.600	0.075
						1/2" Ice	4.180	4.180	0.105
						1" Ice	4.750	4.750	0.135
						2" Ice	5.900	5.900	0.195
*									
(2) ERICSSON AIR 21 B2A B4P w/ Mount Pipe	A	From Leg	4.000	0.000	138.000	No Ice	6.329	5.642	0.112
			0.000			1/2" Ice	6.775	6.426	0.169
			0.000			1" Ice	7.214	7.131	0.233
						2" Ice	8.117	8.591	0.383
(2) ERICSSON AIR 21 B2A B4P w/ Mount Pipe	C	From Leg	4.000	0.000	138.000	No Ice	6.329	5.642	0.112
			0.000			1/2" Ice	6.775	6.426	0.169
			0.000			1" Ice	7.214	7.131	0.233
						2" Ice	8.117	8.591	0.383
AIR 32 B2A/B66AA w/ Mount Pipe	A	From Leg	4.000	0.000	138.000	No Ice	6.747	6.070	0.153
			0.000			1/2" Ice	7.202	6.867	0.214
			0.000			1" Ice	7.648	7.583	0.282
						2" Ice	8.565	9.063	0.441
(2) AIR 32 B2A/B66AA w/	B	From Leg	4.000	0.000	138.000	No Ice	6.747	6.070	0.153

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 K
Mount Pipe			0.000			1/2" Ice	7.202	6.867	0.214
			0.000			1" Ice	7.648	7.583	0.282
						2" Ice	8.565	9.063	0.441
AIR 32 B2A/B66AA w/ Mount Pipe	C	From Leg	4.000	0.000	138.000	No Ice	6.747	6.070	0.153
			0.000			1/2" Ice	7.202	6.867	0.214
			0.000			1" Ice	7.648	7.583	0.282
						2" Ice	8.565	9.063	0.441
APXVAA24_43-U-A20 w/ Mount Pipe	A	From Leg	4.000	0.000	138.000	No Ice	14.690	6.870	0.157
			0.000			1/2" Ice	15.460	7.550	0.285
			0.000			1" Ice	16.230	8.250	0.427
						2" Ice	17.820	9.670	0.756
(2) APXVAA24_43-U-A20 w/ Mount Pipe	B	From Leg	4.000	0.000	138.000	No Ice	14.690	6.870	0.157
			0.000			1/2" Ice	15.460	7.550	0.285
			0.000			1" Ice	16.230	8.250	0.427
						2" Ice	17.820	9.670	0.756
APXVAA24_43-U-A20 w/ Mount Pipe	C	From Leg	4.000	0.000	138.000	No Ice	14.690	6.870	0.157
			0.000			1/2" Ice	15.460	7.550	0.285
			0.000			1" Ice	16.230	8.250	0.427
						2" Ice	17.820	9.670	0.756
(4) ATMA4P4DBP-1A20	A	From Leg	4.000	0.000	138.000	No Ice	0.747	0.457	0.017
			0.000			1/2" Ice	0.857	0.550	0.024
			0.000			1" Ice	0.975	0.651	0.032
						2" Ice	1.233	0.874	0.055
(2) RADIO 4449 B12/B71	A	From Leg	4.000	0.000	138.000	No Ice	1.650	1.163	0.074
			0.000			1/2" Ice	1.810	1.301	0.090
			0.000			1" Ice	1.978	1.447	0.109
						2" Ice	2.336	1.762	0.155
(2) RADIO 4449 B12/B71	B	From Leg	4.000	0.000	138.000	No Ice	1.650	1.163	0.074
			0.000			1/2" Ice	1.810	1.301	0.090
			0.000			1" Ice	1.978	1.447	0.109
						2" Ice	2.336	1.762	0.155
GPS_A	A	From Leg	4.000	0.000	138.000	No Ice	0.255	0.255	0.001
			0.000			1/2" Ice	0.320	0.320	0.005
			0.000			1" Ice	0.393	0.393	0.010
						2" Ice	0.561	0.561	0.025
5' x 2" Pipe Mount	A	From Leg	4.000	0.000	138.000	No Ice	1.188	1.188	0.018
			0.000			1/2" Ice	1.496	1.496	0.027
			0.000			1" Ice	1.807	1.807	0.040
						2" Ice	2.458	2.458	0.076
Platform Mount [LP 701-1]	C	None		0.000	138.000	No Ice	58.680	58.680	2.750
						1/2" Ice	66.010	66.010	3.841
						1" Ice	73.410	73.410	5.069
						2" Ice	88.400	88.400	7.939
*									
TMA-DB-T1-6Z-8AB-0Z	A	From Leg	1.000	0.000	126.000	No Ice	4.800	2.000	0.044
			0.000			1/2" Ice	5.070	2.193	0.080
			3.000			1" Ice	5.348	2.393	0.120
						2" Ice	5.926	2.815	0.213
*									
MG D3-800TV w/ Mount Pipe	A	From Leg	4.000	0.000	124.000	No Ice	3.570	3.418	0.037
			0.000			1/2" Ice	3.979	4.119	0.071
			2.000			1" Ice	4.387	4.784	0.111
						2" Ice	5.199	6.164	0.210
MG D3-800TV w/ Mount Pipe	B	From Leg	4.000	0.000	124.000	No Ice	3.570	3.418	0.037
			0.000			1/2" Ice	3.979	4.119	0.071
			2.000			1" Ice	4.387	4.784	0.111
						2" Ice	5.199	6.164	0.210

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 K
MG D3-800TV w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	3.570 3.979 4.387 5.199	3.418 4.119 4.784 6.164	0.037 0.071 0.111 0.210
MG D3-800TX w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	3.570 3.979 4.387 5.199	3.418 4.119 4.784 6.164	0.035 0.068 0.108 0.208
MG D3-800TX w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	3.570 3.979 4.387 5.199	3.418 4.119 4.784 6.164	0.035 0.068 0.108 0.208
MG D3-800TX w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	3.570 3.979 4.387 5.199	3.418 4.119 4.784 6.164	0.035 0.068 0.108 0.208
BXA-70080/4CF w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.991 5.373 5.763 6.569	3.997 4.611 5.232 6.504	0.031 0.075 0.125 0.245
BXA-80063/4CF w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.945 5.324 5.712 6.514	3.424 4.022 4.637 5.916	0.028 0.069 0.116 0.229
BXA-80063/4CF w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	4.945 5.324 5.712 6.514	3.424 4.022 4.637 5.916	0.028 0.069 0.116 0.229
P65.16.XL.2 w/ Mount Pipe	A	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	8.371 8.931 9.457 10.531	5.779 6.949 7.833 9.634	0.059 0.122 0.192 0.361
P65.16.XL.2 w/ Mount Pipe	B	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	8.371 8.931 9.457 10.531	5.779 6.949 7.833 9.634	0.059 0.122 0.192 0.361
P65.16.XL.2 w/ Mount Pipe	C	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	8.371 8.931 9.457 10.531	5.779 6.949 7.833 9.634	0.059 0.122 0.192 0.361
GPS_A	A	From Leg	4.000 0.000 3.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.255 0.320 0.393 0.561	0.255 0.320 0.393 0.561	0.001 0.005 0.010 0.025
RRH2X40-AWS	A	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.161 2.360 2.565 2.999	1.420 1.590 1.768 2.143	0.044 0.061 0.082 0.132
RRH2X40-AWS	B	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.161 2.360 2.565 2.999	1.420 1.590 1.768 2.143	0.044 0.061 0.082 0.132
RRH2X40-AWS	C	From Leg	4.000 0.000 2.000	0.000	124.000	No Ice 1/2" Ice 1" Ice 2" Ice	2.161 2.360 2.565 2.999	1.420 1.590 1.768 2.143	0.044 0.061 0.082 0.132
4' x 2" Pipe Mount	B	From Leg	4.000	0.000	124.000	No Ice	0.785	0.785	0.029

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 K
			0.000			1/2" Ice	1.028	1.028	0.035
			2.000			1" Ice	1.281	1.281	0.044
						2" Ice	1.814	1.814	0.072
4' x 2" Pipe Mount	C	From Leg	4.000	0.000	124.000	No Ice	0.785	0.785	0.029
			0.000			1/2" Ice	1.028	1.028	0.035
			2.000			1" Ice	1.281	1.281	0.044
						2" Ice	1.814	1.814	0.072
Platform Mount [LP 1201-1]	C	None		0.000	124.000	No Ice	18.380	18.380	2.100
						1/2" Ice	22.110	22.110	2.652
						1" Ice	25.870	25.870	3.263
						2" Ice	33.470	33.470	4.662
*									
7770.00 w/ Mount Pipe	A	From Leg	4.000	0.000	102.000	No Ice	5.746	4.254	0.055
			0.000			1/2" Ice	6.179	5.014	0.103
			2.000			1" Ice	6.607	5.711	0.157
						2" Ice	7.488	7.155	0.287
7770.00 w/ Mount Pipe	B	From Leg	4.000	0.000	102.000	No Ice	5.746	4.254	0.055
			0.000			1/2" Ice	6.179	5.014	0.103
			2.000			1" Ice	6.607	5.711	0.157
						2" Ice	7.488	7.155	0.287
7770.00 w/ Mount Pipe	C	From Leg	4.000	0.000	102.000	No Ice	5.746	4.254	0.055
			0.000			1/2" Ice	6.179	5.014	0.103
			2.000			1" Ice	6.607	5.711	0.157
						2" Ice	7.488	7.155	0.287
DC6-48-60-18-8F	C	From Leg	4.000	0.000	102.000	No Ice	1.212	1.212	0.033
			0.000			1/2" Ice	1.892	1.892	0.055
			2.000			1" Ice	2.105	2.105	0.080
						2" Ice	2.570	2.570	0.138
DMP65R-BU6D w/ Mount Pipe	A	From Leg	4.000	0.000	102.000	No Ice	11.960	5.970	0.115
			0.000			1/2" Ice	12.700	6.630	0.201
			2.000			1" Ice	13.460	7.300	0.298
						2" Ice	15.020	8.690	0.529
DMP65R-BU6D w/ Mount Pipe	B	From Leg	4.000	0.000	102.000	No Ice	11.960	5.970	0.115
			0.000			1/2" Ice	12.700	6.630	0.201
			2.000			1" Ice	13.460	7.300	0.298
						2" Ice	15.020	8.690	0.529
DMP65R-BU6D w/ Mount Pipe	C	From Leg	4.000	0.000	102.000	No Ice	11.960	5.970	0.115
			0.000			1/2" Ice	12.700	6.630	0.201
			2.000			1" Ice	13.460	7.300	0.298
						2" Ice	15.020	8.690	0.529
OPA65R-BU6D w/ Mount Pipe	A	From Leg	4.000	0.000	102.000	No Ice	12.250	6.050	0.089
			0.000			1/2" Ice	13.000	6.710	0.176
			2.000			1" Ice	13.760	7.390	0.275
						2" Ice	15.340	8.790	0.508
OPA65R-BU6D w/ Mount Pipe	B	From Leg	4.000	0.000	102.000	No Ice	12.250	6.050	0.089
			0.000			1/2" Ice	13.000	6.710	0.176
			2.000			1" Ice	13.760	7.390	0.275
						2" Ice	15.340	8.790	0.508
OPA65R-BU6D w/ Mount Pipe	C	From Leg	4.000	0.000	102.000	No Ice	12.250	6.050	0.089
			0.000			1/2" Ice	13.000	6.710	0.176
			2.000			1" Ice	13.760	7.390	0.275
						2" Ice	15.340	8.790	0.508
RRUS 4449 B5/B12	A	From Leg	4.000	0.000	102.000	No Ice	1.968	1.408	0.071
			0.000			1/2" Ice	2.144	1.564	0.090
			2.000			1" Ice	2.328	1.727	0.111
						2" Ice	2.718	2.075	0.163
RRUS 4449 B5/B12	B	From Leg	4.000	0.000	102.000	No Ice	1.968	1.408	0.071

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 K
			0.000			1/2" Ice	2.144	1.564	0.090
			2.000			1" Ice	2.328	1.727	0.111
						2" Ice	2.718	2.075	0.163
RRUS 4449 B5/B12	C	From Leg	4.000	0.000	102.000	No Ice	1.968	1.408	0.071
			0.000			1/2" Ice	2.144	1.564	0.090
			2.000			1" Ice	2.328	1.727	0.111
						2" Ice	2.718	2.075	0.163
RRUS 8843 B2/B66A	A	From Leg	4.000	0.000	102.000	No Ice	1.639	1.353	0.072
			0.000			1/2" Ice	1.799	1.500	0.090
			2.000			1" Ice	1.966	1.655	0.110
						2" Ice	2.323	1.986	0.159
RRUS 8843 B2/B66A	B	From Leg	4.000	0.000	102.000	No Ice	1.639	1.353	0.072
			0.000			1/2" Ice	1.799	1.500	0.090
			2.000			1" Ice	1.966	1.655	0.110
						2" Ice	2.323	1.986	0.159
RRUS 8843 B2/B66A	C	From Leg	4.000	0.000	102.000	No Ice	1.639	1.353	0.072
			0.000			1/2" Ice	1.799	1.500	0.090
			2.000			1" Ice	1.966	1.655	0.110
						2" Ice	2.323	1.986	0.159
LGP12104	A	From Leg	4.000	0.000	102.000	No Ice	0.443	0.024	0.002
			0.000			1/2" Ice	0.568	0.048	0.005
			2.000			1" Ice	0.700	0.080	0.010
						2" Ice	0.987	0.167	0.025
LGP12104	B	From Leg	4.000	0.000	102.000	No Ice	0.443	0.024	0.002
			0.000			1/2" Ice	0.568	0.048	0.005
			2.000			1" Ice	0.700	0.080	0.010
						2" Ice	0.987	0.167	0.025
LGP12104	C	From Leg	4.000	0.000	102.000	No Ice	0.443	0.024	0.002
			0.000			1/2" Ice	0.568	0.048	0.005
			2.000			1" Ice	0.700	0.080	0.010
						2" Ice	0.987	0.167	0.025
DC6-48-60-18-8F	A	From Leg	4.000	0.000	102.000	No Ice	1.212	1.212	0.033
			0.000			1/2" Ice	1.892	1.892	0.055
			2.000			1" Ice	2.105	2.105	0.080
						2" Ice	2.570	2.570	0.138
3' x 2" Pipe Mount	A	From Leg	3.000	0.000	102.000	No Ice	0.583	0.583	0.011
			0.000			1/2" Ice	0.770	0.770	0.017
			1.000			1" Ice	0.967	0.967	0.024
						2" Ice	1.388	1.388	0.047
3' x 2" Pipe Mount	B	From Leg	3.000	0.000	102.000	No Ice	0.583	0.583	0.011
			0.000			1/2" Ice	0.770	0.770	0.017
			1.000			1" Ice	0.967	0.967	0.024
						2" Ice	1.388	1.388	0.047
3' x 2" Pipe Mount	C	From Leg	3.000	0.000	102.000	No Ice	0.583	0.583	0.011
			0.000			1/2" Ice	0.770	0.770	0.017
			1.000			1" Ice	0.967	0.967	0.024
						2" Ice	1.388	1.388	0.047
(2) L 2.5x2.5x3/16x6'	A	From Leg	4.000	0.000	102.000	No Ice	1.500	0.005	0.025
			0.000			1/2" Ice	1.918	0.024	0.034
			-3.000			1" Ice	2.343	0.049	0.048
						2" Ice	3.215	0.123	0.091
(2) L 2.5x2.5x3/16x6'	B	From Leg	4.000	0.000	102.000	No Ice	1.500	0.005	0.025
			0.000			1/2" Ice	1.918	0.024	0.034
			-3.000			1" Ice	2.343	0.049	0.048
						2" Ice	3.215	0.123	0.091
(2) L 2.5x2.5x3/16x6'	C	From Leg	4.000	0.000	102.000	No Ice	1.500	0.005	0.025
			0.000			1/2" Ice	1.918	0.024	0.034

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 K
			-3.000			1" Ice	2.343	0.049	0.048
						2" Ice	3.215	0.123	0.091
14.5' x 2.375" horizontal mount pipe	A	From Leg	4.000 0.000 3.000	0.000	102.000	No Ice 1/2" Ice 1" Ice 2" Ice	5.740 7.379 9.030 12.371	0.000 1.617 3.247 6.543	0.053 0.072 0.103 0.200
14.5' x 2.375" horizontal mount pipe	B	From Leg	4.000 0.000 3.000	0.000	102.000	No Ice 1/2" Ice 1" Ice 2" Ice	5.740 7.379 9.030 12.371	0.000 1.617 3.247 6.543	0.053 0.072 0.103 0.200
14.5' x 2.375" horizontal mount pipe	C	From Leg	4.000 0.000 3.000	0.000	102.000	No Ice 1/2" Ice 1" Ice 2" Ice	5.740 7.379 9.030 12.371	0.000 1.617 3.247 6.543	0.053 0.072 0.103 0.200
7'x2.375" Horizontal Mount Pipe	A	From Face	4.000 0.000 3.000	0.000	102.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.663 2.391 2.825 3.706	1.663 2.391 2.825 3.706	0.026 0.039 0.056 0.105
7'x2.375" Horizontal Mount Pipe	B	From Face	4.000 0.000 3.000	0.000	102.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.663 2.391 2.825 3.706	1.663 2.391 2.825 3.706	0.026 0.039 0.056 0.105
7'x2.375" Horizontal Mount Pipe	C	From Face	4.000 0.000 3.000	0.000	102.000	No Ice 1/2" Ice 1" Ice 2" Ice	1.663 2.391 2.825 3.706	1.663 2.391 2.825 3.706	0.026 0.039 0.056 0.105
Platform Mount [LP 1201-1]	C	None		0.000	102.000	No Ice 1/2" Ice 1" Ice 2" Ice	18.380 22.110 25.870 33.470	18.380 22.110 25.870 33.470	2.100 2.652 3.263 4.662
*									
KS24019-L112A	A	From Leg	4.000 0.000 1.000	0.000	82.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.141 0.198 0.262 0.415	0.141 0.198 0.262 0.415	0.005 0.007 0.009 0.018
Side Arm Mount [SO 701-1]	A	From Leg	2.000 0.000 0.000	0.000	82.000	No Ice 1/2" Ice 1" Ice 2" Ice	0.850 1.140 1.430 2.010	1.670 2.340 3.010 4.350	0.065 0.079 0.093 0.121
* *									

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
SC2-W100AC	A	Paraboloid w/Shroud (HP)	From Leg	4.000 0.000	0.000		138.000	2.200	No Ice 1/2" Ice	3.801 4.095	0.022 0.043

Description	Face or Leg	Dish Type	Offset Type	Offsets: Horz Lateral Vert ft	Azimuth Adjustment °	3 dB Beam Width °	Elevation ft	Outside Diameter ft		Aperture Area ft^2	Weight K
*				0.000					1" Ice 2" Ice	4.388 4.975	0.064 0.106

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
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

Comb. No.	Description
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	150 - 145	Pole	Max Tension	26	0.000	0.001	-0.001
			Max. Compression	26	-9.809	-0.165	1.064
			Max. Mx	8	-4.380	-22.257	0.130
			Max. My	2	-4.378	-0.013	22.514
			Max. Vy	8	4.412	-22.257	0.130
			Max. Vx	14	4.414	-0.045	-21.963
			Max. Torque	8			1.258
L2	145 - 140	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-10.441	-0.188	1.089
			Max. Mx	8	-4.735	-45.436	0.130
			Max. My	2	-4.732	-0.002	45.703
			Max. Vy	8	4.863	-45.436	0.130
			Max. Vx	14	4.866	-0.070	-45.157
			Max. Torque	8			1.258
L3	140 - 135	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-24.346	-3.005	2.745
			Max. Mx	8	-10.202	-92.411	0.522
			Max. My	2	-10.197	-0.764	92.312
			Max. Vy	8	12.090	-92.411	0.522
			Max. Vx	14	12.134	-1.613	-90.216
			Max. Torque	8			2.507
L4	135 - 130	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-25.087	-3.055	2.799
			Max. Mx	8	-10.669	-154.015	0.010
			Max. My	2	-10.664	-0.139	153.928
			Max. Vy	8	12.557	-154.015	0.010
			Max. Vx	14	12.602	-2.267	-152.044
			Max. Torque	8			2.507
L5	130 - 125	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-26.022	-3.101	3.208
			Max. Mx	8	-11.205	-218.294	-0.416
			Max. My	2	-11.186	0.488	218.800
			Max. Vy	8	13.115	-218.294	-0.416
			Max. Vx	14	13.277	-2.921	-216.908
			Max. Torque	8			2.692
L6	125 - 120	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-33.992	-3.151	3.096
			Max. Mx	8	-14.749	-301.948	-1.090
			Max. My	2	-14.731	1.123	302.797
			Max. Vy	8	16.773	-301.948	-1.090
			Max. Vx	14	16.921	-3.586	-301.434
			Max. Torque	8			2.692
L7	120 - 115	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-34.835	-3.198	3.151
			Max. Mx	8	-15.343	-386.933	-1.615
			Max. My	2	-15.325	1.761	388.299
			Max. Vy	8	17.233	-386.933	-1.615
			Max. Vx	14	17.382	-4.251	-387.158
			Max. Torque	8			2.683
L8	115 - 110	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-35.699	-3.241	3.200

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Mx	8	-15.963	-474.207	-2.143
			Max. My	2	-15.946	2.401	476.090
			Max. Vy	8	17.691	-474.207	-2.143
			Max. Vx	14	17.839	-4.915	-475.174
			Max. Torque	8			2.682
L9	110 - 102.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-36.363	-3.269	3.233
			Max. Mx	8	-16.444	-541.152	-2.539
			Max. My	2	-16.428	2.880	543.423
			Max. Vy	8	18.032	-541.152	-2.539
			Max. Vx	14	18.181	-5.410	-542.677
			Max. Torque	8			2.680
L10	102.5 - 101.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-47.754	-2.799	3.561
			Max. Mx	8	-21.720	-641.756	-2.975
			Max. My	2	-21.702	3.685	644.828
			Max. Vy	8	22.903	-641.756	-2.975
			Max. Vx	14	23.056	-5.910	-644.107
			Max. Torque	8			2.772
L11	101.25 - 96.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-48.883	-2.842	3.551
			Max. Mx	8	-22.593	-757.318	-3.521
			Max. My	2	-22.576	4.336	760.906
			Max. Vy	8	23.346	-757.318	-3.521
			Max. Vx	14	23.499	-6.584	-760.443
			Max. Torque	8			2.772
L12	96.25 - 91.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-50.036	-2.880	3.535
			Max. Mx	8	-23.494	-875.082	-4.069
			Max. My	2	-23.478	4.986	879.186
			Max. Vy	8	23.784	-875.082	-4.069
			Max. Vx	14	23.937	-7.255	-878.982
			Max. Torque	8			2.770
L13	91.25 - 86.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-51.212	-2.914	3.513
			Max. Mx	8	-24.426	-995.006	-4.618
			Max. My	14	-24.398	-7.923	-999.682
			Max. Vy	8	24.212	-995.006	-4.618
			Max. Vx	14	24.366	-7.923	-999.682
			Max. Torque	8			2.768
L14	86.25 - 81.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-52.543	-2.945	3.956
			Max. Mx	8	-25.464	-1117.105	-4.888
			Max. My	2	-25.453	6.281	1122.508
			Max. Vy	8	24.705	-1117.105	-4.888
			Max. Vx	14	24.828	-8.587	-1122.239
			Max. Torque	8			2.997
L15	81.25 - 76.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-53.768	-2.972	3.923
			Max. Mx	8	-26.454	-1241.574	-5.437
			Max. My	2	-26.443	6.926	1247.337
			Max. Vy	8	25.114	-1241.574	-5.437
			Max. Vx	14	25.237	-9.247	-1247.335
			Max. Torque	8			2.996
L16	76.25 - 73.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-54.480	-2.986	3.902
			Max. Mx	8	-27.004	-1310.897	-5.739
			Max. My	14	-26.982	-9.609	-1317.003
			Max. Vy	8	25.341	-1310.897	-5.739
			Max. Vx	14	25.464	-9.609	-1317.003
			Max. Torque	8			2.994

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L17	73.5 - 73.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-54.558	-2.993	3.907
			Max. Mx	8	-27.080	-1317.229	-5.767
			Max. My	14	-27.058	-9.641	-1323.367
			Max. Vy	8	25.345	-1317.229	-5.767
			Max. Vx	14	25.475	-9.641	-1323.367
			Max. Torque	8			2.993
L18	73.25 - 68.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-56.119	-3.010	3.859
			Max. Mx	8	-28.251	-1445.027	-6.316
			Max. My	14	-28.222	-10.295	-1452.169
			Max. Vy	8	25.793	-1445.027	-6.316
			Max. Vx	14	26.061	-10.295	-1452.169
			Max. Torque	8			2.993
L19	68.25 - 62	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-56.577	-3.016	3.845
			Max. Mx	8	-28.604	-1483.792	-6.480
			Max. My	14	-28.575	-10.491	-1491.339
			Max. Vy	8	25.928	-1483.792	-6.480
			Max. Vx	14	26.196	-10.491	-1491.339
			Max. Torque	8			2.991
L20	62 - 61	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-59.462	-3.041	3.794
			Max. Mx	8	-30.775	-1634.540	-7.111
			Max. My	14	-30.746	-11.240	-1643.642
			Max. Vy	8	26.518	-1634.540	-7.111
			Max. Vx	14	26.786	-11.240	-1643.642
			Max. Torque	8			2.990
L21	61 - 56.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-60.865	-3.045	3.734
			Max. Mx	8	-31.921	-1761.276	-7.633
			Max. My	14	-31.895	-11.856	-1771.663
			Max. Vy	8	26.883	-1761.276	-7.633
			Max. Vx	14	27.151	-11.856	-1771.663
			Max. Torque	8			2.990
L22	56.25 - 56	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-60.953	-3.051	3.738
			Max. Mx	8	-32.005	-1767.994	-7.660
			Max. My	14	-31.979	-11.888	-1778.449
			Max. Vy	8	26.887	-1767.994	-7.660
			Max. Vx	14	27.161	-11.888	-1778.449
			Max. Torque	8			2.988
L23	56 - 51	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-62.720	-3.045	3.661
			Max. Mx	8	-33.388	-1903.419	-8.208
			Max. My	14	-33.358	-12.533	-1915.590
			Max. Vy	8	27.303	-1903.419	-8.208
			Max. Vx	14	27.711	-12.533	-1915.590
			Max. Torque	8			2.988
L24	51 - 46	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-64.511	-3.045	3.591
			Max. Mx	8	-34.809	-2040.830	-8.756
			Max. My	14	-34.777	-13.173	-2055.377
			Max. Vy	8	27.693	-2040.830	-8.756
			Max. Vx	14	28.232	-13.173	-2055.377
			Max. Torque	8			2.987
L25	46 - 41	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-66.329	-3.048	3.519
			Max. Mx	8	-36.257	-2180.145	-9.301
			Max. My	14	-36.223	-13.810	-2197.720
			Max. Vy	8	28.066	-2180.145	-9.301

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. Vx	14	28.735	-13.810	-2197.720
			Max. Torque	8			2.986
L26	41 - 39.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-66.908	-3.053	3.494
			Max. Mx	8	-36.690	-2222.300	-9.465
			Max. My	14	-36.655	-14.000	-2240.917
			Max. Vy	8	28.184	-2222.300	-9.465
			Max. Vx	14	28.900	-14.000	-2240.917
			Max. Torque	8			2.985
L27	39.5 - 39.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-67.013	-3.058	3.496
			Max. Mx	8	-36.788	-2229.342	-9.492
			Max. My	14	-36.754	-14.032	-2248.139
			Max. Vy	8	28.181	-2229.342	-9.492
			Max. Vx	14	28.905	-14.032	-2248.139
			Max. Torque	8			2.984
L28	39.25 - 38.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-67.225	-3.055	3.485
			Max. Mx	8	-36.947	-2243.439	-9.547
			Max. My	14	-36.913	-14.095	-2262.604
			Max. Vy	8	28.222	-2243.439	-9.547
			Max. Vx	14	28.963	-14.095	-2262.604
			Max. Torque	8			2.984
L29	38.75 - 38.5	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-67.325	-3.058	3.485
			Max. Mx	8	-37.027	-2250.495	-9.574
			Max. My	14	-36.993	-14.126	-2269.847
			Max. Vy	8	28.237	-2250.495	-9.574
			Max. Vx	14	28.986	-14.126	-2269.847
			Max. Torque	8			2.984
L30	38.5 - 32.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-67.710	-3.053	3.466
			Max. Mx	8	-37.324	-2278.762	-9.683
			Max. My	14	-37.289	-14.253	-2298.878
			Max. Vy	8	28.320	-2278.762	-9.683
			Max. Vx	14	29.094	-14.253	-2298.878
			Max. Torque	8			2.984
L31	32.25 - 31.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-71.968	-3.053	3.377
			Max. Mx	8	-40.679	-2457.520	-10.361
			Max. My	14	-40.644	-15.042	-2482.990
			Max. Vy	8	28.892	-2457.520	-10.361
			Max. Vx	14	29.804	-15.042	-2482.990
			Max. Torque	8			2.984
L32	31.25 - 26.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-74.050	-3.053	3.307
			Max. Mx	8	-42.395	-2602.718	-10.904
			Max. My	14	-42.365	-15.671	-2632.759
			Max. Vy	8	29.222	-2602.718	-10.904
			Max. Vx	14	30.133	-15.671	-2632.759
			Max. Torque	8			2.983
L33	26.25 - 21.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-76.154	-3.053	3.237
			Max. Mx	8	-44.138	-2749.561	-11.444
			Max. My	14	-44.113	-16.294	-2784.165
			Max. Vy	8	29.551	-2749.561	-11.444
			Max. Vx	14	30.460	-16.294	-2784.165
			Max. Torque	8			2.983
L34	21.25 - 16.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-78.277	-3.053	3.168
			Max. Mx	8	-45.910	-2898.034	-11.983

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	14	-45.890	-16.913	-2937.193
			Max. Vy	8	29.875	-2898.034	-11.983
			Max. Vx	14	30.783	-16.913	-2937.193
			Max. Torque	8			2.982
L35	16.25 - 11.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-80.416	-3.053	3.100
			Max. Mx	8	-47.710	-3048.114	-12.519
			Max. My	14	-47.696	-17.527	-3091.817
			Max. Vy	8	30.195	-3048.114	-12.519
			Max. Vx	14	31.100	-17.527	-3091.817
			Max. Torque	8			2.982
L36	11.25 - 10	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-80.961	-3.039	3.090
			Max. Mx	8	-48.162	-3085.883	-12.653
			Max. My	14	-48.149	-17.680	-3130.743
			Max. Vy	8	30.280	-3085.883	-12.653
			Max. Vx	14	31.221	-17.680	-3130.743
			Max. Torque	8			2.981
L37	10 - 9.75	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-81.066	-3.038	3.090
			Max. Mx	8	-48.262	-3093.449	-12.680
			Max. My	14	-48.250	-17.710	-3138.546
			Max. Vy	8	30.276	-3093.449	-12.680
			Max. Vx	14	31.223	-17.710	-3138.546
			Max. Torque	8			2.981
L38	9.75 - 7.25	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-82.115	-3.011	3.071
			Max. Mx	8	-49.131	-3169.305	-12.946
			Max. My	14	-49.120	-18.014	-3216.866
			Max. Vy	8	30.443	-3169.305	-12.946
			Max. Vx	14	31.462	-18.014	-3216.866
			Max. Torque	8			2.981
L39	7.25 - 7	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-82.220	-3.010	3.070
			Max. Mx	8	-49.233	-3176.910	-12.973
			Max. My	14	-49.224	-18.045	-3224.727
			Max. Vy	8	30.436	-3176.910	-12.973
			Max. Vx	14	31.461	-18.045	-3224.727
			Max. Torque	8			2.981
L40	7 - 2	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-84.290	-2.994	3.016
			Max. Mx	8	-51.000	-3329.824	-13.504
			Max. My	14	-50.996	-18.648	-3382.774
			Max. Vy	8	30.756	-3329.824	-13.504
			Max. Vx	14	31.779	-18.648	-3382.774
			Max. Torque	8			2.981
L41	2 - 0	Pole	Max Tension	1	0.000	0.000	0.000
			Max. Compression	26	-85.099	-2.994	2.994
			Max. Mx	8	-51.718	-3391.414	-13.715
			Max. My	14	-51.718	-18.887	-3446.413
			Max. Vy	8	30.878	-3391.414	-13.715
			Max. Vx	14	31.899	-18.887	-3446.413
			Max. Torque	8			2.981

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	27	85.099	0.022	6.915
	Max. H_x	20	51.731	30.856	0.137
	Max. H_z	2	51.731	0.120	30.923
	Max. M_x	2	3402.411	0.120	30.923
	Max. M_z	8	3391.414	-30.856	-0.102
	Max. Torsion	8	2.981	-30.856	-0.102
	Min. Vert	19	38.799	26.634	-15.429
	Min. H_x	8	51.731	-30.856	-0.102
	Min. H_z	15	38.799	-0.120	-31.876
	Min. M_x	14	-3446.413	-0.120	-31.876
	Min. M_z	20	-3388.997	30.856	0.137
	Min. Torsion	20	-2.977	30.856	0.137

Tower Mast Reaction Summary

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
Dead Only	43.109	0.000	-0.000	-1.073	-0.936	0.000
1.2 Dead+1.0 Wind 0 deg - No Ice	51.731	-0.120	-30.923	-3402.411	16.470	0.632
0.9 Dead+1.0 Wind 0 deg - No Ice	38.799	-0.120	-30.923	-3347.881	16.483	0.591
1.2 Dead+1.0 Wind 30 deg - No Ice	51.731	15.302	-26.733	-2939.852	-1677.761	-0.853
0.9 Dead+1.0 Wind 30 deg - No Ice	38.799	15.302	-26.733	-2892.695	-1650.780	-0.873
1.2 Dead+1.0 Wind 60 deg - No Ice	51.731	27.436	-15.848	-1711.939	-2961.387	-2.204
0.9 Dead+1.0 Wind 60 deg - No Ice	38.799	27.436	-15.848	-1684.535	-2914.281	-2.199
1.2 Dead+1.0 Wind 90 deg - No Ice	51.731	30.856	0.102	13.715	-3391.414	-2.981
0.9 Dead+1.0 Wind 90 deg - No Ice	38.799	30.856	0.102	13.812	-3337.126	-2.952
1.2 Dead+1.0 Wind 120 deg - No Ice	51.731	26.753	15.636	1724.924	-2941.779	-2.711
0.9 Dead+1.0 Wind 120 deg - No Ice	38.799	26.753	15.636	1697.756	-2894.647	-2.665
1.2 Dead+1.0 Wind 150 deg - No Ice	51.731	15.519	26.894	2960.696	-1709.659	-1.921
0.9 Dead+1.0 Wind 150 deg - No Ice	38.799	15.519	26.894	2913.878	-1682.116	-1.872
1.2 Dead+1.0 Wind 180 deg - No Ice	51.731	0.120	31.876	3446.413	-18.887	-0.627
0.9 Dead+1.0 Wind 180 deg - No Ice	38.799	0.120	31.876	3392.256	-18.236	-0.586
1.2 Dead+1.0 Wind 210 deg - No Ice	51.731	-15.312	26.774	2943.151	1676.698	0.834
0.9 Dead+1.0 Wind 210 deg - No Ice	38.799	-15.312	26.774	2896.643	1650.366	0.855
1.2 Dead+1.0 Wind 240 deg - No Ice	51.731	-26.634	15.429	1694.380	2921.817	2.079
0.9 Dead+1.0 Wind 240 deg - No Ice	38.799	-26.634	15.429	1667.759	2875.657	2.074
1.2 Dead+1.0 Wind 270 deg - No Ice	51.731	-30.856	-0.137	-21.644	3388.997	2.977

Load Combination	Vertical K	$Shear_x$ K	$Shear_z$ K	Overturning Moment, M_x kip-ft	Overturning Moment, M_z kip-ft	Torque kip-ft
0.9 Dead+1.0 Wind 270 deg - No Ice	38.799	-30.856	-0.137	-20.909	3335.373	2.947
1.2 Dead+1.0 Wind 300 deg - No Ice	51.731	-27.452	-15.995	-1741.978	2975.643	2.831
0.9 Dead+1.0 Wind 300 deg - No Ice	38.799	-27.452	-15.995	-1714.027	2928.893	2.785
1.2 Dead+1.0 Wind 330 deg - No Ice	51.731	-15.509	-26.853	-2957.397	1705.888	1.945
0.9 Dead+1.0 Wind 330 deg - No Ice	38.799	-15.509	-26.853	-2909.931	1679.024	1.895
1.2 Dead+1.0 Ice+1.0 Temp	85.099	0.000	-0.000	-2.994	-2.994	0.000
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	85.099	-0.022	-6.915	-824.262	0.397	0.213
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	85.099	3.431	-5.980	-712.887	-409.120	-0.232
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	85.099	5.974	-3.448	-411.791	-710.719	-0.635
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	85.099	6.909	0.019	-0.160	-822.591	-0.873
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	85.099	5.988	3.491	412.711	-713.672	-0.828
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	85.099	3.471	6.010	711.439	-415.496	-0.601
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	85.099	0.022	6.929	819.487	-6.630	-0.212
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	85.099	-3.433	5.988	707.928	403.179	0.233
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	85.099	-5.966	3.452	406.626	703.927	0.615
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	85.099	-6.909	-0.026	-7.187	816.358	0.874
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	85.099	-5.995	-3.486	-417.878	708.002	0.848
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	85.099	-3.469	-6.002	-716.398	408.972	0.601
Dead+Wind 0 deg - Service	43.109	-0.026	-6.710	-732.710	2.805	0.133
Dead+Wind 30 deg - Service	43.109	3.321	-5.801	-633.198	-361.616	-0.189
Dead+Wind 60 deg - Service	43.109	5.954	-3.439	-369.107	-637.758	-0.482
Dead+Wind 90 deg - Service	43.109	6.696	0.022	2.094	-730.224	-0.652
Dead+Wind 120 deg - Service	43.109	5.805	3.393	370.183	-633.528	-0.593
Dead+Wind 150 deg - Service	43.109	3.368	5.836	636.016	-368.495	-0.419
Dead+Wind 180 deg - Service	43.109	0.026	6.917	740.540	-4.793	-0.133
Dead+Wind 210 deg - Service	43.109	-3.323	5.810	632.219	359.928	0.189
Dead+Wind 240 deg - Service	43.109	-5.779	3.348	363.603	627.742	0.460
Dead+Wind 270 deg - Service	43.109	-6.696	-0.030	-5.504	728.236	0.652
Dead+Wind 300 deg - Service	43.109	-5.957	-3.471	-375.577	639.379	0.615
Dead+Wind 330 deg - Service	43.109	-3.365	-5.827	-636.996	366.208	0.419

Solution Summary

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
1	0.000	-43.109	0.000	-0.000	43.109	0.000	0.000%
2	-0.120	-51.731	-30.923	0.120	51.731	30.923	0.000%
3	-0.120	-38.799	-30.923	0.120	38.799	30.923	0.000%
4	15.302	-51.731	-26.733	-15.302	51.731	26.733	0.000%
5	15.302	-38.799	-26.733	-15.302	38.799	26.733	0.000%

	Sum of Applied Forces			Sum of Reactions			
Load Comb.	PX K	PY K	PZ K	PX K	PY K	PZ K	% Error
6	27.436	-51.731	-15.848	-27.436	51.731	15.848	0.000%
7	27.436	-38.799	-15.848	-27.436	38.799	15.848	0.000%
8	30.856	-51.731	0.102	-30.856	51.731	-0.102	0.000%
9	30.856	-38.799	0.102	-30.856	38.799	-0.102	0.000%
10	26.753	-51.731	15.636	-26.753	51.731	-15.636	0.000%
11	26.753	-38.799	15.636	-26.753	38.799	-15.636	0.000%
12	15.519	-51.731	26.894	-15.519	51.731	-26.894	0.000%
13	15.519	-38.799	26.894	-15.519	38.799	-26.894	0.000%
14	0.120	-51.731	31.876	-0.120	51.731	-31.876	0.000%
15	0.120	-38.799	31.876	-0.120	38.799	-31.876	0.000%
16	-15.312	-51.731	26.774	15.312	51.731	-26.774	0.000%
17	-15.312	-38.799	26.774	15.312	38.799	-26.774	0.000%
18	-26.634	-51.731	15.429	26.634	51.731	-15.429	0.000%
19	-26.634	-38.799	15.429	26.634	38.799	-15.429	0.000%
20	-30.856	-51.731	-0.137	30.856	51.731	0.137	0.000%
21	-30.856	-38.799	-0.137	30.856	38.799	0.137	0.000%
22	-27.452	-51.731	-15.995	27.452	51.731	15.995	0.000%
23	-27.452	-38.799	-15.995	27.452	38.799	15.995	0.000%
24	-15.509	-51.731	-26.853	15.509	51.731	26.853	0.000%
25	-15.509	-38.799	-26.853	15.509	38.799	26.853	0.000%
26	0.000	-85.099	0.000	-0.000	85.099	0.000	0.000%
27	-0.022	-85.099	-6.915	0.022	85.099	6.915	0.000%
28	3.431	-85.099	-5.980	-3.431	85.099	5.980	0.000%
29	5.974	-85.099	-3.448	-5.974	85.099	3.448	0.000%
30	6.909	-85.099	0.019	-6.909	85.099	-0.019	0.000%
31	5.988	-85.099	3.491	-5.988	85.099	-3.491	0.000%
32	3.471	-85.099	6.010	-3.471	85.099	-6.010	0.000%
33	0.022	-85.099	6.929	-0.022	85.099	-6.929	0.000%
34	-3.433	-85.099	5.988	3.433	85.099	-5.988	0.000%
35	-5.966	-85.099	3.452	5.966	85.099	-3.452	0.000%
36	-6.909	-85.099	-0.026	6.909	85.099	0.026	0.000%
37	-5.995	-85.099	-3.486	5.995	85.099	3.486	0.000%
38	-3.469	-85.099	-6.002	3.469	85.099	6.002	0.000%
39	-0.026	-43.109	-6.710	0.026	43.109	6.710	0.000%
40	3.321	-43.109	-5.801	-3.321	43.109	5.801	0.000%
41	5.954	-43.109	-3.439	-5.954	43.109	3.439	0.000%
42	6.696	-43.109	0.022	-6.696	43.109	-0.022	0.000%
43	5.805	-43.109	3.393	-5.805	43.109	-3.393	0.000%
44	3.368	-43.109	5.836	-3.368	43.109	-5.836	0.000%
45	0.026	-43.109	6.917	-0.026	43.109	-6.917	0.000%
46	-3.323	-43.109	5.810	3.323	43.109	-5.810	0.000%
47	-5.779	-43.109	3.348	5.779	43.109	-3.348	0.000%
48	-6.696	-43.109	-0.030	6.696	43.109	0.030	0.000%
49	-5.957	-43.109	-3.471	5.957	43.109	3.471	0.000%
50	-3.365	-43.109	-5.827	3.365	43.109	5.827	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000335
2	Yes	5	0.00000001	0.00057153
3	Yes	5	0.00000001	0.00020878
4	Yes	7	0.00000001	0.00017324
5	Yes	6	0.00000001	0.00076214
6	Yes	7	0.00000001	0.00018315

7	Yes	6	0.00000001	0.00080637
8	Yes	6	0.00000001	0.00016582
9	Yes	6	0.00000001	0.00005722
10	Yes	7	0.00000001	0.00017259
11	Yes	6	0.00000001	0.00075894
12	Yes	7	0.00000001	0.00018467
13	Yes	6	0.00000001	0.00081325
14	Yes	6	0.00000001	0.00008840
15	Yes	5	0.00000001	0.00049843
16	Yes	7	0.00000001	0.00017739
17	Yes	6	0.00000001	0.00078269
18	Yes	7	0.00000001	0.00016995
19	Yes	6	0.00000001	0.00074844
20	Yes	6	0.00000001	0.00023051
21	Yes	6	0.00000001	0.00007936
22	Yes	7	0.00000001	0.00018813
23	Yes	6	0.00000001	0.00082787
24	Yes	7	0.00000001	0.00017363
25	Yes	6	0.00000001	0.00076371
26	Yes	4	0.00000001	0.00098463
27	Yes	7	0.00000001	0.00034315
28	Yes	7	0.00000001	0.00039669
29	Yes	7	0.00000001	0.00039930
30	Yes	7	0.00000001	0.00034235
31	Yes	7	0.00000001	0.00039418
32	Yes	7	0.00000001	0.00039731
33	Yes	7	0.00000001	0.00033647
34	Yes	7	0.00000001	0.00038551
35	Yes	7	0.00000001	0.00038325
36	Yes	7	0.00000001	0.00033638
37	Yes	7	0.00000001	0.00039831
38	Yes	7	0.00000001	0.00039493
39	Yes	5	0.00000001	0.00010438
40	Yes	5	0.00000001	0.00040064
41	Yes	5	0.00000001	0.00045917
42	Yes	5	0.00000001	0.00015193
43	Yes	5	0.00000001	0.00039271
44	Yes	5	0.00000001	0.00045820
45	Yes	5	0.00000001	0.00010643
46	Yes	5	0.00000001	0.00041902
47	Yes	5	0.00000001	0.00038015
48	Yes	5	0.00000001	0.00015749
49	Yes	5	0.00000001	0.00048095
50	Yes	5	0.00000001	0.00039631

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 145	25.498	50	1.474	0.007
L2	145 - 140	23.957	49	1.471	0.007
L3	140 - 135	22.426	49	1.462	0.007
L4	135 - 130	20.907	49	1.448	0.006
L5	130 - 125	19.406	49	1.424	0.005
L6	125 - 120	17.934	49	1.392	0.005
L7	120 - 115	16.501	49	1.350	0.004
L8	115 - 110	15.115	49	1.301	0.004
L9	110 - 102.5	13.784	49	1.244	0.003
L10	106.25 - 101.25	12.826	49	1.198	0.003

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L11	101.25 - 96.25	11.589	49	1.161	0.003
L12	96.25 - 91.25	10.406	49	1.100	0.003
L13	91.25 - 86.25	9.288	49	1.034	0.002
L14	86.25 - 81.25	8.241	49	0.966	0.002
L15	81.25 - 76.25	7.267	49	0.894	0.002
L16	76.25 - 73.5	6.369	49	0.821	0.002
L17	73.5 - 73.25	5.908	49	0.779	0.001
L18	73.25 - 68.25	5.867	49	0.776	0.001
L19	68.25 - 62	5.086	49	0.716	0.001
L20	66.75 - 61	4.864	49	0.698	0.001
L21	61 - 56.25	4.046	49	0.653	0.001
L22	56.25 - 56	3.429	49	0.587	0.001
L23	56 - 51	3.398	49	0.584	0.001
L24	51 - 46	2.817	49	0.526	0.001
L25	46 - 41	2.296	49	0.468	0.001
L26	41 - 39.5	1.838	49	0.409	0.001
L27	39.5 - 39.25	1.712	49	0.391	0.001
L28	39.25 - 38.75	1.691	49	0.389	0.001
L29	38.75 - 38.5	1.651	49	0.383	0.001
L30	38.5 - 32.25	1.631	49	0.380	0.001
L31	37.5 - 31.25	1.553	49	0.369	0.000
L32	31.25 - 26.25	1.092	49	0.330	0.000
L33	26.25 - 21.25	0.773	49	0.278	0.000
L34	21.25 - 16.25	0.509	49	0.227	0.000
L35	16.25 - 11.25	0.299	49	0.175	0.000
L36	11.25 - 10	0.143	49	0.123	0.000
L37	10 - 9.75	0.113	49	0.110	0.000
L38	9.75 - 7.25	0.107	49	0.107	0.000
L39	7.25 - 7	0.059	49	0.078	0.000
L40	7 - 2	0.055	49	0.075	0.000
L41	2 - 0	0.004	49	0.021	0.000

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
153.000	Lightning Rod 5/8" x 6'	50	25.498	1.474	0.007	48483
150.000	APXVTM14-C-120 w/ Mount Pipe	50	25.498	1.474	0.007	48483
147.000	4' x 2" Pipe Mount	50	24.573	1.472	0.007	48483
138.000	SC2-W100AC	49	21.817	1.458	0.006	20386
126.000	TMA-DB-T1-6Z-8AB-0Z	49	18.226	1.399	0.005	8069
124.000	MG D3-800TV w/ Mount Pipe	49	17.644	1.384	0.005	7357
102.000	7770.00 w/ Mount Pipe	49	11.771	1.167	0.003	5804
82.000	KS24019-L112A	49	7.408	0.905	0.002	3947

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 145	118.648	22	6.868	0.033

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L2	145 - 140	111.497	22	6.854	0.031
L3	140 - 135	104.374	22	6.816	0.030
L4	135 - 130	97.301	22	6.752	0.027
L5	130 - 125	90.319	22	6.642	0.024
L6	125 - 120	83.472	22	6.490	0.022
L7	120 - 115	76.802	22	6.298	0.019
L8	115 - 110	70.352	22	6.066	0.017
L9	110 - 102.5	64.159	22	5.801	0.015
L10	106.25 - 101.25	59.701	22	5.585	0.014
L11	101.25 - 96.25	53.946	22	5.412	0.013
L12	96.25 - 91.25	48.439	22	5.128	0.011
L13	91.25 - 86.25	43.238	22	4.824	0.010
L14	86.25 - 81.25	38.363	22	4.504	0.009
L15	81.25 - 76.25	33.828	22	4.170	0.008
L16	76.25 - 73.5	29.647	22	3.826	0.007
L17	73.5 - 73.25	27.501	22	3.632	0.006
L18	73.25 - 68.25	27.312	22	3.618	0.006
L19	68.25 - 62	23.673	22	3.337	0.006
L20	66.75 - 61	22.639	22	3.252	0.005
L21	61 - 56.25	18.833	22	3.044	0.005
L22	56.25 - 56	15.960	22	2.736	0.004
L23	56 - 51	15.818	22	2.722	0.004
L24	51 - 46	13.110	22	2.452	0.004
L25	46 - 41	10.687	22	2.178	0.003
L26	41 - 39.5	8.551	22	1.903	0.003
L27	39.5 - 39.25	7.966	22	1.822	0.002
L28	39.25 - 38.75	7.871	22	1.809	0.002
L29	38.75 - 38.5	7.683	22	1.784	0.002
L30	38.5 - 32.25	7.590	22	1.771	0.002
L31	37.5 - 31.25	7.225	22	1.719	0.002
L32	31.25 - 26.25	5.080	22	1.538	0.002
L33	26.25 - 21.25	3.597	22	1.295	0.002
L34	21.25 - 16.25	2.367	22	1.054	0.001
L35	16.25 - 11.25	1.390	22	0.813	0.001
L36	11.25 - 10	0.666	22	0.570	0.001
L37	10 - 9.75	0.524	22	0.510	0.001
L38	9.75 - 7.25	0.498	22	0.497	0.001
L39	7.25 - 7	0.274	22	0.361	0.000
L40	7 - 2	0.255	22	0.349	0.000
L41	2 - 0	0.021	22	0.099	0.000

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
153.000	Lightning Rod 5/8" x 6'	22	118.648	6.868	0.034	11024
150.000	APXVTM14-C-120 w/ Mount Pipe	22	118.648	6.868	0.034	11024
147.000	4' x 2" Pipe Mount	22	114.355	6.862	0.033	11024
138.000	SC2-W100AC	22	101.537	6.795	0.029	4655
126.000	TMA-DB-T1-6Z-8AB-0Z	22	84.829	6.524	0.023	1801
124.000	MG D3-800TV w/ Mount Pipe	22	82.123	6.455	0.022	1635
102.000	7770.00 w/ Mount Pipe	22	54.795	5.441	0.013	1269
82.000	KS24019-L112A	22	34.486	4.220	0.008	856

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L1	150 - 149	TP22.875x22x0.25	5.000	0.000	0.0	17.650	-3.941	953.081	0.004
	149 - 148					17.791	-4.008	960.690	0.004
	148 - 147					17.931	-4.076	968.298	0.004
	147 - 146					18.072	-4.309	975.907	0.004
	146 - 145					18.213	-4.378	983.516	0.004
L2	145 - 144	TP23.75x22.875x0.25	5.000	0.000	0.0	18.354	-4.448	991.124	0.004
	144 - 143					18.495	-4.518	998.733	0.005
	143 - 142					18.636	-4.589	1006.340	0.005
	142 - 141					18.777	-4.660	1013.950	0.005
	141 - 140					18.918	-4.732	1021.560	0.005
L3	140 - 139	TP24.625x23.75x0.25	5.000	0.000	0.0	19.059	-4.813	1029.170	0.005
	139 - 138					19.200	-4.894	1036.780	0.005
	138 - 137					19.340	-10.046	1044.380	0.010
	137 - 136					19.481	-10.130	1051.990	0.010
	136 - 135					19.622	-10.215	1059.600	0.010
L4	135 - 134	TP25.501x24.625x0.25	5.000	0.000	0.0	19.763	-10.293	1067.210	0.010
	134 - 133					19.904	-10.386	1074.820	0.010
	133 - 132					20.045	-10.457	1082.430	0.010
	132 - 131					20.186	-10.551	1090.040	0.010
	131 - 130					20.327	-10.647	1097.650	0.010
L5	130 - 129	TP26.376x25.501x0.25	5.000	0.000	0.0	20.468	-10.743	1105.250	0.010
	129 - 128					20.609	-10.841	1112.860	0.010
	128 - 127					20.750	-10.940	1120.470	0.010
	127 - 126					20.890	-11.039	1128.080	0.010
	126 - 125					21.031	-11.172	1135.690	0.010
L6	125 - 124	TP27.251x26.376x0.25	5.000	0.000	0.0	21.172	-11.280	1143.300	0.010
	124 - 123					21.313	-14.383	1150.910	0.012
	123 - 122					21.454	-14.495	1158.510	0.013
	122 - 121					21.595	-14.595	1166.120	0.013
	121 - 120					21.736	-14.709	1173.730	0.013
L7	120 - 119	TP28.126x27.251x0.25	5.000	0.000	0.0	21.877	-14.825	1181.340	0.013
	119 - 118					22.018	-14.943	1188.950	0.013
	118 - 117					22.159	-15.062	1196.560	0.013
	117 - 116					22.299	-15.182	1204.170	0.013
	116 - 115					22.440	-15.303	1211.770	0.013
L8	115 - 114	TP29.001x28.126x0.25	5.000	0.000	0.0	22.581	-15.425	1219.380	0.013
	114 - 113					22.722	-15.549	1226.990	0.013
	113 - 112					22.863	-15.673	1234.600	0.013
	112 - 111					23.004	-15.799	1242.210	0.013
	111 - 110					23.145	-15.925	1249.820	0.013
L9	110 - 108.75	TP30.314x29.001x0.25	7.500	0.000	0.0	23.321	-16.083	1259.330	0.013
	108.75 - 107.5					23.497	-16.244	1268.840	0.013
	107.5 - 106.25					23.673	-16.407	1278.350	0.013
	106.25 - 102.5					24.201	-7.791	1306.880	0.006
L10	106.25 - 102.5	TP30.033x29.158x0.313	5.000	0.000	0.0	29.686	-9.517	1736.630	0.005
	102.5 - 101.25					29.906	-21.680	1749.500	0.012
L11	101.25 - 100.25	TP30.908x30.033x0.313	5.000	0.000	0.0	30.082	-21.854	1759.810	0.012
	100.25 - 99.25					30.258	-22.028	1770.110	0.012
	99.25 - 98.25					30.434	-22.202	1780.420	0.012
	98.25 - 97.25					30.611	-22.378	1790.720	0.012
	97.25 - 96.25					30.787	-22.555	1801.020	0.013

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L12	96.25 - 95.25	TP31.783x30.908x0.313	5.000	0.000	0.0	30.963	-22.733	1811.330	0.013
	95.25 - 94.25					31.139	-22.913	1821.630	0.013
	94.25 - 93.25					31.315	-23.093	1831.930	0.013
	93.25 - 92.25					31.491	-23.275	1842.240	0.013
	92.25 - 91.25					31.667	-23.458	1852.540	0.013
L13	91.25 - 90.25	TP32.658x31.783x0.313	5.000	0.000	0.0	31.844	-23.642	1862.840	0.013
	90.25 - 89.25					32.020	-23.828	1873.150	0.013
	89.25 - 88.25					32.196	-24.015	1883.450	0.013
	88.25 - 87.25					32.372	-24.203	1893.760	0.013
	87.25 - 86.25					32.548	-24.392	1904.060	0.013
L14	86.25 - 85.25	TP33.534x32.658x0.313	5.000	0.000	0.0	32.724	-24.582	1914.360	0.013
	85.25 - 84.25					32.900	-24.773	1924.670	0.013
	84.25 - 83.25					33.076	-24.965	1934.970	0.013
	83.25 - 82.25					33.252	-25.159	1945.270	0.013
	82.25 - 81.25					33.429	-25.434	1955.580	0.013
L15	81.25 - 80.25	TP34.409x33.534x0.313	5.000	0.000	0.0	33.605	-25.631	1965.880	0.013
	80.25 - 79.25					33.781	-25.828	1976.180	0.013
	79.25 - 78.25					33.957	-26.026	1986.490	0.013
	78.25 - 77.25					34.133	-26.226	1996.790	0.013
	77.25 - 76.25					34.309	-26.426	2007.100	0.013
L16	76.25 - 74.875	TP34.89x34.409x0.313	2.750	0.000	0.0	34.551	-26.698	2021.260	0.013
	74.875 - 73.5					34.794	-26.977	2035.430	0.013
L17	73.5 - 73.25 (17)	TP34.934x34.89x0.4	0.250	0.000	0.0	44.480	-27.054	2602.060	0.010
L18	73.25 - 72.25	TP35.809x34.934x0.4	5.000	0.000	0.0	44.705	-27.279	2615.240	0.010
	72.25 - 71.25					44.931	-27.514	2628.430	0.010
	71.25 - 70.25					45.156	-27.751	2641.620	0.011
	70.25 - 69.25					45.381	-27.988	2654.810	0.011
	69.25 - 68.25					45.607	-28.227	2668.000	0.011
L19	68.25 - 66.75	TP36.903x35.809x0.4	6.250	0.000	0.0	45.945	-28.581	2687.780	0.011
	66.75 - 62					47.016	-15.898	2750.430	0.006
L20	66.75 - 62	TP36.453x35.447x0.375	5.750	0.000	0.0	43.353	-14.596	2536.140	0.006
	62 - 61					43.564	-30.752	2548.500	0.012
L21	61 - 59.8125	TP37.284x36.453x0.375	4.750	0.000	0.0	43.815	-31.035	2563.190	0.012
	59.8125 - 58.625					44.066	-31.322	2577.870	0.012
	58.625 - 57.4375					44.317	-31.610	2592.550	0.012
	57.4375 - 56.25					44.568	-31.900	2607.230	0.012
L22	56.25 - 56 (22)	TP37.328x37.284x0.456	0.250	0.000	0.0	54.169	-31.985	3168.910	0.010
L23	56 - 55	TP38.203x37.328x0.456	5.000	0.000	0.0	54.426	-32.252	3183.950	0.010
	55 - 54					54.684	-32.529	3198.990	0.010
	54 - 53					54.941	-32.808	3214.040	0.010
	53 - 52					55.198	-33.089	3229.080	0.010
	52 - 51					55.455	-33.370	3244.120	0.010
L24	51 - 50	TP39.078x38.203x0.45	5.000	0.000	0.0	54.958	-33.652	3215.050	0.010
	50 - 49					55.212	-33.936	3229.880	0.011
	49 - 48					55.465	-34.220	3244.720	0.011
	48 - 47					55.719	-34.506	3259.560	0.011
	47 - 46					55.972	-34.793	3274.390	0.011
L25	46 - 45	TP39.954x39.078x0.45	5.000	0.000	0.0	56.226	-35.081	3289.230	0.011
	45 - 44					56.480	-35.369	3304.070	0.011
	44 - 43					56.733	-35.659	3318.900	0.011
	43 - 42					56.987	-35.930	3333.740	0.011
	42 - 41					57.241	-36.222	3348.570	0.011
L26	41 - 39.5 (26)	TP40.216x39.954x0.45	1.500	0.000	0.0	57.621	-36.654	3370.830	0.011
L27	39.5 - 39.25 (27)	TP40.26x40.216x0.488	0.250	0.000	0.0	62.433	-36.753	3652.310	0.010
L28	39.25 - 38.75	TP40.347x40.26x0.488	0.500	0.000	0.0	62.570	-36.912	3660.340	0.010

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
	(28)								
L29	38.75 - 38.5	TP40.391x40.347x0.475	0.250	0.000	0.0	61.052	-36.991	3571.520	0.010
	(29)								
L30	38.5 - 37.5	TP41.485x40.391x0.475	6.250	0.000	0.0	61.319	-37.288	3587.180	0.010
	37.5 - 32.25					62.725	-19.146	3669.400	0.005
L31	37.5 - 32.25	TP40.91x39.816x0.538	6.250	0.000	0.0	69.572	-21.134	4069.960	0.005
	32.25 - 31.25					69.875	-40.643	4087.680	0.010
L32	31.25 - 30.25	TP41.785x40.91x0.538	5.000	0.000	0.0	70.178	-40.985	4105.400	0.010
	30.25 - 29.25					70.481	-41.328	4123.120	0.010
	29.25 - 28.25					70.784	-41.672	4140.850	0.010
	28.25 - 27.25					71.087	-42.017	4158.570	0.010
	27.25 - 26.25					71.390	-42.364	4176.290	0.010
L33	26.25 - 25.25	TP42.66x41.785x0.538	5.000	0.000	0.0	71.692	-42.711	4194.010	0.010
	25.25 - 24.25					71.995	-43.059	4211.740	0.010
	24.25 - 23.25					72.298	-43.409	4229.460	0.010
	23.25 - 22.25					72.601	-43.760	4247.180	0.010
	22.25 - 21.25					72.904	-44.112	4264.900	0.010
L34	21.25 - 20.25	TP43.536x42.66x0.531	5.000	0.000	0.0	72.367	-44.465	4233.450	0.011
	20.25 - 19.25					72.666	-44.819	4250.970	0.011
	19.25 - 18.25					72.966	-45.175	4268.490	0.011
	18.25 - 17.25					73.265	-45.532	4286.000	0.011
	17.25 - 16.25					73.564	-45.890	4303.520	0.011
L35	16.25 - 15.25	TP44.411x43.536x0.525	5.000	0.000	0.0	73.005	-46.248	4270.820	0.011
	15.25 - 14.25					73.301	-46.608	4288.130	0.011
	14.25 - 13.25					73.597	-46.969	4305.440	0.011
	13.25 - 12.25					73.893	-47.332	4322.750	0.011
	12.25 - 11.25					74.189	-47.696	4340.060	0.011
L36	11.25 - 10 (36)	TP44.63x44.411x0.525	1.250	0.000	0.0	74.559	-48.149	4361.690	0.011
L37	10 - 9.75 (37)	TP44.673x44.63x0.463	0.250	0.000	0.0	65.841	-48.250	3851.700	0.013
L38	9.75 - 8.5	TP45.111x44.673x0.463	2.500	0.000	0.0	66.167	-48.677	3870.760	0.013
	8.5 - 7.25					66.493	-49.121	3889.830	0.013
L39	7.25 - 7 (39)	TP45.155x45.111x0.506	0.250	0.000	0.0	72.783	-49.224	4257.780	0.012
L40	7 - 6	TP46.03x45.155x0.5	5.000	0.000	0.0	72.176	-49.568	4222.290	0.012
	6 - 5					72.458	-49.923	4238.780	0.012
	5 - 4					72.740	-50.280	4255.260	0.012
	4 - 3					73.021	-50.638	4271.750	0.012
	3 - 2					73.303	-50.997	4288.240	0.012
L41	2 - 1	TP46.38x46.03x0.5	2.000	0.000	0.0	73.585	-51.356	4304.720	0.012
	1 - 0					73.867	-51.718	4321.210	0.012

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	150 - 149	TP22.875x22x0.25	6.090	530.048	0.011	0.000	530.048	0.000
	149 - 148		9.934	537.288	0.018	0.000	537.288	0.000
	148 - 147		13.865	544.556	0.025	0.000	544.556	0.000
	147 - 146		18.145	551.849	0.033	0.000	551.849	0.000
	146 - 145		22.514	559.168	0.040	0.000	559.168	0.000
L2	145 - 144	TP23.75x22.875x0.25	26.971	566.513	0.048	0.000	566.513	0.000
	144 - 143		31.519	573.882	0.055	0.000	573.882	0.000
	143 - 142		36.156	581.275	0.062	0.000	581.275	0.000
	142 - 141		40.884	588.692	0.069	0.000	588.692	0.000
	141 - 140		45.703	596.132	0.077	0.000	596.132	0.000
L3	140 - 139	TP24.625x23.75x0.25	50.614	603.594	0.084	0.000	603.594	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	139 - 138		55.617	611.079	0.091	0.000	611.079	0.000
	138 - 137		68.704	618.585	0.111	0.000	618.585	0.000
	137 - 136		80.551	626.112	0.129	0.000	626.112	0.000
	136 - 135		92.490	633.661	0.146	0.000	633.661	0.000
L4	135 - 134	TP25.501x24.625x0.25	104.547	641.229	0.163	0.000	641.229	0.000
	134 - 133		116.773	648.818	0.180	0.000	648.818	0.000
	133 - 132		129.129	656.425	0.197	0.000	656.425	0.000
	132 - 131		141.663	664.051	0.213	0.000	664.051	0.000
	131 - 130		154.292	671.695	0.230	0.000	671.695	0.000
L5	130 - 129	TP26.376x25.501x0.25	167.013	679.357	0.246	0.000	679.357	0.000
	129 - 128		179.828	687.036	0.262	0.000	687.036	0.000
	128 - 127		192.738	694.732	0.277	0.000	694.732	0.000
	127 - 126		205.740	702.443	0.293	0.000	702.443	0.000
	126 - 125		219.321	710.171	0.309	0.000	710.171	0.000
L6	125 - 124	TP27.251x26.376x0.25	232.678	717.913	0.324	0.000	717.913	0.000
	124 - 123		253.376	725.672	0.349	0.000	725.672	0.000
	123 - 122		270.062	733.443	0.368	0.000	733.443	0.000
	122 - 121		286.957	741.228	0.387	0.000	741.228	0.000
	121 - 120		303.909	749.028	0.406	0.000	749.028	0.000
L7	120 - 119	TP28.126x27.251x0.25	320.952	756.838	0.424	0.000	756.838	0.000
	119 - 118		338.087	764.663	0.442	0.000	764.663	0.000
	118 - 117		355.313	772.497	0.460	0.000	772.497	0.000
	117 - 116		372.632	780.344	0.478	0.000	780.344	0.000
	116 - 115		390.043	788.202	0.495	0.000	788.202	0.000
L8	115 - 114	TP29.001x28.126x0.25	407.546	796.069	0.512	0.000	796.069	0.000
	114 - 113		425.140	803.947	0.529	0.000	803.947	0.000
	113 - 112		442.824	811.833	0.545	0.000	811.833	0.000
	112 - 111		460.601	819.729	0.562	0.000	819.729	0.000
	111 - 110		478.468	827.633	0.578	0.000	827.633	0.000
L9	110 - 108.75	TP30.314x29.001x0.25	500.930	837.525	0.598	0.000	837.525	0.000
	108.75 - 107.5		523.533	847.425	0.618	0.000	847.425	0.000
	107.5 - 106.25		546.277	857.333	0.637	0.000	857.333	0.000
	106.25 - 102.5		282.350	887.125	0.318	0.000	887.125	0.000
L10	106.25 - 102.5	TP30.033x29.158x0.313	333.155	1253.842	0.266	0.000	1253.842	0.000
	102.5 - 101.25		648.038	1269.275	0.511	0.000	1269.275	0.000
L11	101.25 - 100.25	TP30.908x30.033x0.313	671.208	1281.658	0.524	0.000	1281.658	0.000
	100.25 - 99.25		694.468	1294.067	0.537	0.000	1294.067	0.000
	99.25 - 98.25		717.817	1306.492	0.549	0.000	1306.492	0.000
	98.25 - 97.25		741.253	1318.950	0.562	0.000	1318.950	0.000
	97.25 - 96.25		764.779	1331.425	0.574	0.000	1331.425	0.000
L12	96.25 - 95.25	TP31.783x30.908x0.313	788.393	1343.925	0.587	0.000	1343.925	0.000
	95.25 - 94.25		812.095	1356.450	0.599	0.000	1356.450	0.000
	94.25 - 93.25		835.883	1369.000	0.611	0.000	1369.000	0.000
	93.25 - 92.25		859.758	1381.567	0.622	0.000	1381.567	0.000
	92.25 - 91.25		883.725	1394.158	0.634	0.000	1394.158	0.000
L13	91.25 - 90.25	TP32.658x31.783x0.313	907.767	1406.767	0.645	0.000	1406.767	0.000
	90.25 - 89.25		931.908	1419.392	0.657	0.000	1419.392	0.000
	89.25 - 88.25		956.125	1432.042	0.668	0.000	1432.042	0.000
	88.25 - 87.25		980.433	1444.708	0.679	0.000	1444.708	0.000
	87.25 - 86.25		1004.825	1457.392	0.689	0.000	1457.392	0.000
L14	86.25 - 85.25	TP33.534x32.658x0.313	1029.300	1470.092	0.700	0.000	1470.092	0.000
	85.25 - 84.25		1053.858	1482.817	0.711	0.000	1482.817	0.000
	84.25 - 83.25		1078.500	1495.550	0.721	0.000	1495.550	0.000
	83.25 - 82.25		1103.225	1508.300	0.731	0.000	1508.300	0.000
	82.25 - 81.25		1127.817	1521.067	0.741	0.000	1521.067	0.000
L15	81.25 - 80.25	TP34.409x33.534x0.313	1152.767	1533.850	0.752	0.000	1533.850	0.000
	80.25 - 79.25		1177.783	1546.642	0.762	0.000	1546.642	0.000
	79.25 - 78.25		1202.892	1559.458	0.771	0.000	1559.458	0.000
	78.25 - 77.25		1228.083	1572.275	0.781	0.000	1572.275	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	77.25 - 76.25		1253.350	1585.117	0.791	0.000	1585.117	0.000
L16	76.25 - 74.875	TP34.89x34.409x0.313	1288.225	1602.783	0.804	0.000	1602.783	0.000
	74.875 - 73.5		1323.250	1620.467	0.817	0.000	1620.467	0.000
L17	73.5 - 73.25 (17)	TP34.934x34.89x0.4	1329.633	2263.183	0.588	0.000	2263.183	0.000
L18	73.25 - 72.25	TP35.809x34.934x0.4	1355.233	2282.692	0.594	0.000	2282.692	0.000
	72.25 - 71.25		1380.917	2302.242	0.600	0.000	2302.242	0.000
	71.25 - 70.25		1406.683	2321.833	0.606	0.000	2321.833	0.000
	70.25 - 69.25		1432.542	2341.467	0.612	0.000	2341.467	0.000
	69.25 - 68.25		1458.483	2361.150	0.618	0.000	2361.150	0.000
L19	68.25 - 66.75	TP36.903x35.809x0.4	1497.567	2390.742	0.626	0.000	2390.742	0.000
	66.75 - 62		858.050	2485.058	0.345	0.000	2485.058	0.000
L20	66.75 - 62	TP36.453x35.447x0.375	764.798	2217.617	0.345	0.000	2217.617	0.000
	62 - 61		1649.525	2235.483	0.738	0.000	2235.483	0.000
L21	61 - 59.8125	TP37.284x36.453x0.375	1681.292	2256.733	0.745	0.000	2256.733	0.000
	59.8125 - 58.625		1713.175	2278.025	0.752	0.000	2278.025	0.000
	58.625 - 57.4375		1745.158	2299.358	0.759	0.000	2299.358	0.000
	57.4375 - 56.25		1777.250	2320.733	0.766	0.000	2320.733	0.000
L22	56.25 - 56 (22)	TP37.328x37.284x0.456	1784.025	2986.133	0.597	0.000	2986.133	0.000
L23	56 - 55	TP38.203x37.328x0.456	1811.158	3014.725	0.601	0.000	3014.725	0.000
	55 - 54		1838.367	3043.450	0.604	0.000	3043.450	0.000
	54 - 53		1865.658	3072.317	0.607	0.000	3072.317	0.000
	53 - 52		1893.033	3098.050	0.611	0.000	3098.050	0.000
	52 - 51		1920.492	3122.867	0.615	0.000	3122.867	0.000
L24	51 - 50	TP39.078x38.203x0.45	1948.025	3093.158	0.630	0.000	3093.158	0.000
	50 - 49		1975.642	3117.567	0.634	0.000	3117.567	0.000
	49 - 48		2003.325	3142.033	0.638	0.000	3142.033	0.000
	48 - 47		2031.100	3166.550	0.641	0.000	3166.550	0.000
	47 - 46		2058.942	3191.125	0.645	0.000	3191.125	0.000
L25	46 - 45	TP39.954x39.078x0.45	2086.867	3215.742	0.649	0.000	3215.742	0.000
	45 - 44		2114.858	3240.408	0.653	0.000	3240.408	0.000
	44 - 43		2142.925	3265.133	0.656	0.000	3265.133	0.000
	43 - 42		2171.183	3289.900	0.660	0.000	3289.900	0.000
	42 - 41		2199.867	3314.717	0.664	0.000	3314.717	0.000
L26	41 - 39.5 (26)	TP40.216x39.954x0.45	2243.083	3352.033	0.669	0.000	3352.033	0.000
L27	39.5 - 39.25 (27)	TP40.26x40.216x0.488	2250.308	3712.808	0.606	0.000	3712.808	0.000
L28	39.25 - 38.75 (28)	TP40.347x40.26x0.488	2264.783	3729.267	0.607	0.000	3729.267	0.000
L29	38.75 - 38.5 (29)	TP40.391x40.347x0.475	2272.025	3619.342	0.628	0.000	3619.342	0.000
L30	38.5 - 37.5	TP41.485x40.391x0.475	2301.075	3646.508	0.631	0.000	3646.508	0.000
	37.5 - 32.25		1189.292	3790.008	0.314	0.000	3790.008	0.000
L31	37.5 - 32.25	TP40.91x39.816x0.538	1266.217	4177.017	0.303	0.000	4177.017	0.000
	32.25 - 31.25		2485.283	4213.717	0.590	0.000	4213.717	0.000
L32	31.25 - 30.25	TP41.785x40.91x0.538	2515.117	4250.575	0.592	0.000	4250.575	0.000
	30.25 - 29.25		2545.017	4287.592	0.594	0.000	4287.592	0.000
	29.25 - 28.25		2574.992	4324.767	0.595	0.000	4324.767	0.000
	28.25 - 27.25		2605.025	4362.108	0.597	0.000	4362.108	0.000
	27.25 - 26.25		2635.125	4399.608	0.599	0.000	4399.608	0.000
L33	26.25 - 25.25	TP42.66x41.785x0.538	2665.292	4437.267	0.601	0.000	4437.267	0.000
	25.25 - 24.25		2695.517	4475.092	0.602	0.000	4475.092	0.000
	24.25 - 23.25		2725.817	4513.075	0.604	0.000	4513.075	0.000
	23.25 - 22.25		2756.175	4551.217	0.606	0.000	4551.217	0.000
	22.25 - 21.25		2786.608	4589.517	0.607	0.000	4589.517	0.000
L34	21.25 - 20.25	TP43.536x42.66x0.531	2817.092	4576.192	0.616	0.000	4576.192	0.000
	20.25 - 19.25		2847.650	4614.375	0.617	0.000	4614.375	0.000

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
	19.25 - 18.25		2878.275	4652.717	0.619	0.000	4652.717	0.000
	18.25 - 17.25		2908.958	4691.217	0.620	0.000	4691.217	0.000
	17.25 - 16.25		2939.708	4729.875	0.622	0.000	4729.875	0.000
L35	16.25 - 15.25	TP44.411x43.536x0.525	2970.517	4711.200	0.631	0.000	4711.200	0.000
	15.25 - 14.25		3001.392	4744.042	0.633	0.000	4744.042	0.000
	14.25 - 13.25		3032.333	4776.950	0.635	0.000	4776.950	0.000
	13.25 - 12.25		3063.333	4809.925	0.637	0.000	4809.925	0.000
	12.25 - 11.25		3094.400	4842.958	0.639	0.000	4842.958	0.000
L36	11.25 - 10 (36)	TP44.63x44.411x0.525	3133.325	4884.333	0.642	0.000	4884.333	0.000
L37	10 - 9.75 (37)	TP44.673x44.63x0.463	3141.117	4149.558	0.757	0.000	4149.558	0.000
L38	9.75 - 8.5	TP45.111x44.673x0.463	3180.150	4183.517	0.760	0.000	4183.517	0.000
	8.5 - 7.25		3219.275	4217.525	0.763	0.000	4217.525	0.000
L39	7.25 - 7 (39)	TP45.155x45.111x0.506	3227.108	4756.817	0.678	0.000	4756.817	0.000
L40	7 - 6	TP46.03x45.155x0.5	3258.492	4711.858	0.692	0.000	4711.858	0.000
	6 - 5		3289.933	4742.833	0.694	0.000	4742.833	0.000
	5 - 4		3321.433	4773.850	0.696	0.000	4773.850	0.000
	4 - 3		3352.992	4804.925	0.698	0.000	4804.925	0.000
	3 - 2		3384.617	4836.042	0.700	0.000	4836.042	0.000
L41	2 - 1	TP46.38x46.03x0.5	3416.292	4867.208	0.702	0.000	4867.208	0.000
	1 - 0		3448.033	4898.425	0.704	0.000	4898.425	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	150 - 149	TP22.875x22x0.25	3.800	285.924	0.013	0.075	551.431	0.000
	149 - 148		3.888	288.207	0.013	0.075	560.271	0.000
	148 - 147		3.976	290.490	0.014	0.075	569.180	0.000
	147 - 146		4.324	292.772	0.015	0.075	578.160	0.000
	146 - 145		4.414	295.055	0.015	0.075	587.211	0.000
L2	145 - 144	TP23.75x22.875x0.25	4.503	297.337	0.015	0.075	596.332	0.000
	144 - 143		4.593	299.620	0.015	0.075	605.523	0.000
	143 - 142		4.683	301.902	0.016	0.075	614.783	0.000
	142 - 141		4.774	304.185	0.016	0.075	624.115	0.000
	141 - 140		4.865	306.468	0.016	0.075	633.517	0.000
L3	140 - 139	TP24.625x23.75x0.25	4.958	308.750	0.016	0.075	642.989	0.000
	139 - 138		5.050	311.033	0.016	0.075	652.532	0.000
	138 - 137		11.802	313.315	0.038	1.692	662.144	0.003
	137 - 136		11.895	315.598	0.038	1.692	671.827	0.003
	136 - 135		11.988	317.881	0.038	1.692	681.580	0.002
L4	135 - 134	TP25.501x24.625x0.25	12.183	320.163	0.038	2.507	691.403	0.004
	134 - 133		12.276	322.446	0.038	2.507	701.298	0.004
	133 - 132		12.491	324.728	0.038	2.399	711.262	0.003
	132 - 131		12.585	327.011	0.038	2.399	721.296	0.003
	131 - 130		12.679	329.294	0.039	2.399	731.401	0.003
L5	130 - 129	TP26.376x25.501x0.25	12.772	331.576	0.039	2.399	741.576	0.003
	129 - 128		12.866	333.859	0.039	2.399	751.821	0.003
	128 - 127		12.960	336.141	0.039	2.399	762.136	0.003
	127 - 126		13.054	338.424	0.039	2.399	772.522	0.003
	126 - 125		13.314	340.706	0.039	1.951	782.978	0.002
L6	125 - 124	TP27.251x26.376x0.25	13.408	342.989	0.039	1.951	793.504	0.002
	124 - 123		16.644	345.272	0.048	2.539	804.101	0.003
	123 - 122		16.737	347.554	0.048	2.539	814.768	0.003
	122 - 121		16.910	349.837	0.048	1.919	825.505	0.002
	121 - 120		17.003	352.119	0.048	1.919	836.317	0.002

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L7	120 - 119	TP28.126x27.251x0.25	17.095	354.402	0.048	1.919	847.192	0.002
	119 - 118		17.187	356.685	0.048	1.919	858.142	0.002
	118 - 117		17.280	358.967	0.048	1.919	869.158	0.002
	117 - 116		17.372	361.250	0.048	1.919	880.242	0.002
	116 - 115		17.464	363.532	0.048	1.918	891.408	0.002
L8	115 - 114	TP29.001x28.126x0.25	17.555	365.815	0.048	1.918	902.633	0.002
	114 - 113		17.647	368.097	0.048	1.918	913.933	0.002
	113 - 112		17.738	370.380	0.048	1.918	925.300	0.002
	112 - 111		17.830	372.663	0.048	1.917	936.742	0.002
	111 - 110		17.922	374.945	0.048	1.917	948.250	0.002
L9	110 - 108.75	TP30.314x29.001x0.25	18.036	377.798	0.048	1.917	962.742	0.002
	108.75 - 107.5		18.149	380.652	0.048	1.917	977.333	0.002
	107.5 - 106.25		18.262	383.505	0.048	1.916	992.042	0.002
	106.25 - 102.5		8.671	392.065	0.022	0.879	1036.825	0.001
L10	106.25 - 102.5	TP30.033x29.158x0.313	10.016	520.988	0.019	1.037	1351.983	0.001
	102.5 - 101.25		23.138	524.851	0.044	1.916	1372.108	0.001
L11	101.25 - 100.25	TP30.908x30.033x0.313	23.224	527.943	0.044	1.820	1388.325	0.001
	100.25 - 99.25		23.314	531.034	0.044	1.820	1404.625	0.001
	99.25 - 98.25		23.403	534.125	0.044	1.820	1421.025	0.001
	98.25 - 97.25		23.492	537.216	0.044	1.819	1437.525	0.001
	97.25 - 96.25		23.581	540.307	0.044	1.819	1454.108	0.001
L12	96.25 - 95.25	TP31.783x30.908x0.313	23.668	543.398	0.044	1.819	1470.800	0.001
	95.25 - 94.25		23.756	546.489	0.043	1.819	1487.575	0.001
	94.25 - 93.25		23.843	549.580	0.043	1.818	1504.458	0.001
	93.25 - 92.25		23.930	552.671	0.043	1.818	1521.425	0.001
	92.25 - 91.25		24.018	555.762	0.043	1.818	1538.492	0.001
L13	91.25 - 90.25	TP32.658x31.783x0.313	24.104	558.854	0.043	1.818	1555.650	0.001
	90.25 - 89.25		24.189	561.945	0.043	1.817	1572.908	0.001
	89.25 - 88.25		24.275	565.036	0.043	1.817	1590.258	0.001
	88.25 - 87.25		24.360	568.127	0.043	1.817	1607.708	0.001
	87.25 - 86.25		24.446	571.218	0.043	1.816	1625.250	0.001
L14	86.25 - 85.25	TP33.534x32.658x0.313	24.530	574.309	0.043	1.816	1642.892	0.001
	85.25 - 84.25		24.614	577.400	0.043	1.816	1660.617	0.001
	84.25 - 83.25		24.698	580.491	0.043	1.816	1678.450	0.001
	83.25 - 82.25		24.781	583.582	0.042	1.815	1696.375	0.001
	82.25 - 81.25		24.915	586.673	0.042	1.931	1714.392	0.001
L15	81.25 - 80.25	TP34.409x33.534x0.313	24.997	589.764	0.042	1.931	1732.500	0.001
	80.25 - 79.25		25.079	592.856	0.042	1.931	1750.708	0.001
	79.25 - 78.25		25.160	595.947	0.042	1.931	1769.017	0.001
	78.25 - 77.25		25.242	599.038	0.042	1.930	1787.417	0.001
	77.25 - 76.25		25.324	602.129	0.042	1.930	1805.908	0.001
L16	76.25 - 74.875	TP34.89x34.409x0.313	25.440	606.379	0.042	1.930	1831.492	0.001
	74.875 - 73.5		25.550	610.629	0.042	1.929	1857.258	0.001
L17	73.5 - 73.25 (17)	TP34.934x34.89x0.4	25.556	780.617	0.033	1.929	2371.275	0.001
L18	73.25 - 72.25	TP35.809x34.934x0.4	25.650	784.573	0.033	1.929	2395.375	0.001
	72.25 - 71.25		25.738	788.530	0.033	1.929	2419.600	0.001
	71.25 - 70.25		25.826	792.487	0.033	1.929	2443.942	0.001
	70.25 - 69.25		25.913	796.443	0.033	1.928	2468.408	0.001
	69.25 - 68.25		26.001	800.400	0.032	1.928	2492.992	0.001
L19	68.25 - 66.75	TP36.903x35.809x0.4	26.136	806.335	0.032	1.928	2530.100	0.001
	66.75 - 62		14.216	825.128	0.017	1.019	2649.417	0.000
L20	66.75 - 62	TP36.453x35.447x0.375	12.454	760.842	0.016	0.908	2402.842	0.000
	62 - 61		26.726	764.551	0.035	1.927	2426.325	0.001
L21	61 - 59.8125	TP37.284x36.453x0.375	26.820	768.956	0.035	1.927	2454.358	0.001
	59.8125 - 58.625		26.910	773.360	0.035	1.927	2482.558	0.001
	58.625 - 57.4375		27.000	777.765	0.035	1.926	2510.917	0.001

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
	57.4375 - 56.25		27.090	782.169	0.035	1.926	2539.433	0.001
L22	56.25 - 56 (22)	TP37.328x37.284x0.456	27.095	950.673	0.029	1.926	3083.375	0.001
L23	56 - 55	TP38.203x37.328x0.456	27.186	955.185	0.028	1.926	3112.717	0.001
	55 - 54		27.267	959.698	0.028	1.926	3142.192	0.001
	54 - 53		27.348	964.211	0.028	1.926	3171.817	0.001
	53 - 52		27.429	968.724	0.028	1.925	3201.575	0.001
	52 - 51		27.510	973.236	0.028	1.925	3231.475	0.001
L24	51 - 50	TP39.078x38.203x0.45	27.588	964.514	0.029	1.925	3217.892	0.001
	50 - 49		27.666	968.965	0.029	1.925	3247.658	0.001
	49 - 48		27.743	973.416	0.029	1.925	3277.567	0.001
	48 - 47		27.821	977.867	0.028	1.925	3307.608	0.001
	47 - 46		27.899	982.318	0.028	1.924	3337.783	0.001
L25	46 - 45	TP39.954x39.078x0.45	27.973	986.769	0.028	1.924	3368.100	0.001
	45 - 44		28.048	991.220	0.028	1.924	3398.550	0.001
	44 - 43		28.122	995.671	0.028	1.924	3429.142	0.001
	43 - 42		28.651	1000.120	0.029	2.835	3459.867	0.001
	42 - 41		28.752	1004.570	0.029	2.835	3490.733	0.001
L26	41 - 39.5 (26)	TP40.216x39.954x0.45	28.919	1011.250	0.029	2.835	3537.292	0.001
L27	39.5 - 39.25 (27)	TP40.26x40.216x0.488	28.924	1095.690	0.026	2.835	3833.267	0.001
L28	39.25 - 38.75 (28)	TP40.347x40.26x0.488	28.982	1098.100	0.026	2.834	3850.158	0.001
L29	38.75 - 38.5 (29)	TP40.391x40.347x0.475	29.005	1071.460	0.027	2.834	3762.033	0.001
L30	38.5 - 37.5	TP41.485x40.391x0.475	29.113	1076.150	0.027	2.834	3795.092	0.001
	37.5 - 32.25		14.593	1100.820	0.013	1.372	3971.058	0.000
L31	37.5 - 32.25	TP40.91x39.816x0.538	15.192	1220.990	0.012	1.462	4317.283	0.000
	32.25 - 31.25		29.823	1226.300	0.024	2.834	4354.967	0.001
L32	31.25 - 30.25	TP41.785x40.91x0.538	29.889	1231.620	0.024	2.834	4392.808	0.001
	30.25 - 29.25		29.955	1236.940	0.024	2.833	4430.817	0.001
	29.25 - 28.25		30.021	1242.250	0.024	2.833	4468.983	0.001
	28.25 - 27.25		30.087	1247.570	0.024	2.833	4507.325	0.001
	27.25 - 26.25		30.152	1252.890	0.024	2.833	4545.825	0.001
L33	26.25 - 25.25	TP42.66x41.785x0.538	30.218	1258.200	0.024	2.833	4584.483	0.001
	25.25 - 24.25		30.283	1263.520	0.024	2.833	4623.308	0.001
	24.25 - 23.25		30.349	1268.840	0.024	2.833	4662.300	0.001
	23.25 - 22.25		30.414	1274.150	0.024	2.833	4701.458	0.001
	22.25 - 21.25		30.479	1279.470	0.024	2.832	4740.775	0.001
L34	21.25 - 20.25	TP43.536x42.66x0.531	30.544	1270.040	0.024	2.832	4726.067	0.001
	20.25 - 19.25		30.608	1275.290	0.024	2.832	4765.258	0.001
	19.25 - 18.25		30.673	1280.550	0.024	2.832	4804.608	0.001
	18.25 - 17.25		30.737	1285.800	0.024	2.832	4844.117	0.001
	17.25 - 16.25		30.801	1291.060	0.024	2.832	4883.800	0.001
L35	16.25 - 15.25	TP44.411x43.536x0.525	30.865	1281.240	0.024	2.832	4867.117	0.001
	15.25 - 14.25		30.929	1286.440	0.024	2.832	4906.650	0.001
	14.25 - 13.25		30.992	1291.630	0.024	2.832	4946.342	0.001
	13.25 - 12.25		31.056	1296.820	0.024	2.832	4986.200	0.001
	12.25 - 11.25		31.119	1302.020	0.024	2.832	5026.208	0.001
L36	11.25 - 10 (36)	TP44.63x44.411x0.525	31.203	1308.510	0.024	2.832	5076.458	0.001
L37	10 - 9.75 (37)	TP44.673x44.63x0.463	31.198	1155.510	0.027	2.832	4493.692	0.001
L38	9.75 - 8.5	TP45.111x44.673x0.463	31.293	1161.230	0.027	2.831	4538.275	0.001
	8.5 - 7.25		31.365	1166.950	0.027	2.831	4583.083	0.001
L39	7.25 - 7 (39)	TP45.155x45.111x0.506	31.356	1277.340	0.025	2.831	5016.625	0.001
L40	7 - 6	TP46.03x45.155x0.5	31.433	1266.690	0.025	2.831	4995.008	0.001
	6 - 5		31.494	1271.630	0.025	2.831	5034.092	0.001
	5 - 4		31.554	1276.580	0.025	2.831	5073.325	0.001
	4 - 3		31.614	1281.530	0.025	2.831	5112.708	0.001
	3 - 2		31.674	1286.470	0.025	2.831	5152.250	0.001
L41	2 - 1	TP46.38x46.03x0.5	31.734	1291.420	0.025	2.831	5191.942	0.001

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
	1 - 0		31.794	1296.360	0.025	2.831	5231.783	0.001

Pole Interaction Design Data

Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	150 - 149	0.004	0.011	0.000	0.013	0.000	0.016 ✔	1.050	4.8.2 ✔
	149 - 148	0.004	0.018	0.000	0.013	0.000	0.023 ✔	1.050	4.8.2 ✔
	148 - 147	0.004	0.025	0.000	0.014	0.000	0.030 ✔	1.050	4.8.2 ✔
	147 - 146	0.004	0.033	0.000	0.015	0.000	0.038 ✔	1.050	4.8.2 ✔
	146 - 145	0.004	0.040	0.000	0.015	0.000	0.045 ✔	1.050	4.8.2 ✔
L2	145 - 144	0.004	0.048	0.000	0.015	0.000	0.052 ✔	1.050	4.8.2 ✔
	144 - 143	0.005	0.055	0.000	0.015	0.000	0.060 ✔	1.050	4.8.2 ✔
	143 - 142	0.005	0.062	0.000	0.016	0.000	0.067 ✔	1.050	4.8.2 ✔
	142 - 141	0.005	0.069	0.000	0.016	0.000	0.074 ✔	1.050	4.8.2 ✔
	141 - 140	0.005	0.077	0.000	0.016	0.000	0.082 ✔	1.050	4.8.2 ✔
L3	140 - 139	0.005	0.084	0.000	0.016	0.000	0.089 ✔	1.050	4.8.2 ✔
	139 - 138	0.005	0.091	0.000	0.016	0.000	0.096 ✔	1.050	4.8.2 ✔
	138 - 137	0.010	0.111	0.000	0.038	0.003	0.122 ✔	1.050	4.8.2 ✔
	137 - 136	0.010	0.129	0.000	0.038	0.003	0.140 ✔	1.050	4.8.2 ✔
	136 - 135	0.010	0.146	0.000	0.038	0.002	0.157 ✔	1.050	4.8.2 ✔
L4	135 - 134	0.010	0.163	0.000	0.038	0.004	0.174 ✔	1.050	4.8.2 ✔
	134 - 133	0.010	0.180	0.000	0.038	0.004	0.191 ✔	1.050	4.8.2 ✔
	133 - 132	0.010	0.197	0.000	0.038	0.003	0.208 ✔	1.050	4.8.2 ✔
	132 - 131	0.010	0.213	0.000	0.038	0.003	0.225 ✔	1.050	4.8.2 ✔
	131 - 130	0.010	0.230	0.000	0.039	0.003	0.241 ✔	1.050	4.8.2 ✔
L5	130 - 129	0.010	0.246	0.000	0.039	0.003	0.257	1.050	4.8.2 ✔

Section No.	Elevation ft	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Ratio $V_u/\phi V_n$	Ratio $T_u/\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
	129 - 128	0.010	0.262	0.000	0.039	0.003	0.273 ✔	1.050	4.8.2 ✔
	128 - 127	0.010	0.277	0.000	0.039	0.003	0.289 ✔	1.050	4.8.2 ✔
	127 - 126	0.010	0.293	0.000	0.039	0.003	0.304 ✔	1.050	4.8.2 ✔
	126 - 125	0.010	0.309	0.000	0.039	0.002	0.320 ✔	1.050	4.8.2 ✔
L6	125 - 124	0.010	0.324	0.000	0.039	0.002	0.336 ✔	1.050	4.8.2 ✔
	124 - 123	0.012	0.349	0.000	0.048	0.003	0.364 ✔	1.050	4.8.2 ✔
	123 - 122	0.013	0.368	0.000	0.048	0.003	0.383 ✔	1.050	4.8.2 ✔
	122 - 121	0.013	0.387	0.000	0.048	0.002	0.402 ✔	1.050	4.8.2 ✔
	121 - 120	0.013	0.406	0.000	0.048	0.002	0.421 ✔	1.050	4.8.2 ✔
L7	120 - 119	0.013	0.424	0.000	0.048	0.002	0.439 ✔	1.050	4.8.2 ✔
	119 - 118	0.013	0.442	0.000	0.048	0.002	0.457 ✔	1.050	4.8.2 ✔
	118 - 117	0.013	0.460	0.000	0.048	0.002	0.475 ✔	1.050	4.8.2 ✔
	117 - 116	0.013	0.478	0.000	0.048	0.002	0.493 ✔	1.050	4.8.2 ✔
	116 - 115	0.013	0.495	0.000	0.048	0.002	0.510 ✔	1.050	4.8.2 ✔
L8	115 - 114	0.013	0.512	0.000	0.048	0.002	0.527 ✔	1.050	4.8.2 ✔
	114 - 113	0.013	0.529	0.000	0.048	0.002	0.544 ✔	1.050	4.8.2 ✔
	113 - 112	0.013	0.545	0.000	0.048	0.002	0.561 ✔	1.050	4.8.2 ✔
	112 - 111	0.013	0.562	0.000	0.048	0.002	0.577 ✔	1.050	4.8.2 ✔
	111 - 110	0.013	0.578	0.000	0.048	0.002	0.593 ✔	1.050	4.8.2 ✔
L9	110 - 108.75	0.013	0.598	0.000	0.048	0.002	0.613 ✔	1.050	4.8.2 ✔
	108.75 - 107.5	0.013	0.618	0.000	0.048	0.002	0.633 ✔	1.050	4.8.2 ✔
	107.5 - 106.25	0.013	0.637	0.000	0.048	0.002	0.652 ✔	1.050	4.8.2 ✔
	106.25 - 102.5	0.006	0.318	0.000	0.022	0.001	0.325 ✔	1.050	4.8.2 ✔
L10	106.25 - 102.5	0.005	0.266	0.000	0.019	0.001	0.272 ✔	1.050	4.8.2 ✔
	102.5 - 101.25	0.012	0.511	0.000	0.044	0.001	0.525 ✔	1.050	4.8.2 ✔
L11	101.25 -	0.012	0.524	0.000	0.044	0.001	0.538 ✔	1.050	4.8.2 ✔

Section No.	Elevation ft	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Ratio $V_u/\phi V_n$	Ratio $T_u/\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
	100.25						✔		
	100.25 - 99.25	0.012	0.537	0.000	0.044	0.001	0.551 ✔	1.050	4.8.2 ✔
	99.25 - 98.25	0.012	0.549	0.000	0.044	0.001	0.564 ✔	1.050	4.8.2 ✔
	98.25 - 97.25	0.012	0.562	0.000	0.044	0.001	0.577 ✔	1.050	4.8.2 ✔
	97.25 - 96.25	0.013	0.574	0.000	0.044	0.001	0.589 ✔	1.050	4.8.2 ✔
L12	96.25 - 95.25	0.013	0.587	0.000	0.044	0.001	0.601 ✔	1.050	4.8.2 ✔
	95.25 - 94.25	0.013	0.599	0.000	0.043	0.001	0.613 ✔	1.050	4.8.2 ✔
	94.25 - 93.25	0.013	0.611	0.000	0.043	0.001	0.625 ✔	1.050	4.8.2 ✔
	93.25 - 92.25	0.013	0.622	0.000	0.043	0.001	0.637 ✔	1.050	4.8.2 ✔
	92.25 - 91.25	0.013	0.634	0.000	0.043	0.001	0.649 ✔	1.050	4.8.2 ✔
L13	91.25 - 90.25	0.013	0.645	0.000	0.043	0.001	0.660 ✔	1.050	4.8.2 ✔
	90.25 - 89.25	0.013	0.657	0.000	0.043	0.001	0.671 ✔	1.050	4.8.2 ✔
	89.25 - 88.25	0.013	0.668	0.000	0.043	0.001	0.682 ✔	1.050	4.8.2 ✔
	88.25 - 87.25	0.013	0.679	0.000	0.043	0.001	0.693 ✔	1.050	4.8.2 ✔
	87.25 - 86.25	0.013	0.689	0.000	0.043	0.001	0.704 ✔	1.050	4.8.2 ✔
L14	86.25 - 85.25	0.013	0.700	0.000	0.043	0.001	0.715 ✔	1.050	4.8.2 ✔
	85.25 - 84.25	0.013	0.711	0.000	0.043	0.001	0.725 ✔	1.050	4.8.2 ✔
	84.25 - 83.25	0.013	0.721	0.000	0.043	0.001	0.736 ✔	1.050	4.8.2 ✔
	83.25 - 82.25	0.013	0.731	0.000	0.042	0.001	0.746 ✔	1.050	4.8.2 ✔
	82.25 - 81.25	0.013	0.741	0.000	0.042	0.001	0.756 ✔	1.050	4.8.2 ✔
L15	81.25 - 80.25	0.013	0.752	0.000	0.042	0.001	0.766 ✔	1.050	4.8.2 ✔
	80.25 - 79.25	0.013	0.762	0.000	0.042	0.001	0.776 ✔	1.050	4.8.2 ✔
	79.25 - 78.25	0.013	0.771	0.000	0.042	0.001	0.786 ✔	1.050	4.8.2 ✔
	78.25 - 77.25	0.013	0.781	0.000	0.042	0.001	0.796 ✔	1.050	4.8.2 ✔
	77.25 - 76.25	0.013	0.791	0.000	0.042	0.001	0.806 ✔	1.050	4.8.2 ✔
L16	76.25 - 74.875	0.013	0.804	0.000	0.042	0.001	0.819 ✔	1.050	4.8.2 ✔
	74.875 - 73.5	0.013	0.817	0.000	0.042	0.001	0.832	1.050	4.8.2 ✔

Section No.	Elevation ft	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Ratio $V_u/\phi V_n$	Ratio $T_u/\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L17	73.5 - 73.25 (17)	0.010	0.588	0.000	0.033	0.001	0.599	1.050	4.8.2
L18	73.25 - 72.25	0.010	0.594	0.000	0.033	0.001	0.605	1.050	4.8.2
	72.25 - 71.25	0.010	0.600	0.000	0.033	0.001	0.611	1.050	4.8.2
	71.25 - 70.25	0.011	0.606	0.000	0.033	0.001	0.617	1.050	4.8.2
	70.25 - 69.25	0.011	0.612	0.000	0.033	0.001	0.623	1.050	4.8.2
	69.25 - 68.25	0.011	0.618	0.000	0.032	0.001	0.629	1.050	4.8.2
L19	68.25 - 66.75	0.011	0.626	0.000	0.032	0.001	0.638	1.050	4.8.2
	66.75 - 62	0.006	0.345	0.000	0.017	0.000	0.351	1.050	4.8.2
L20	66.75 - 62	0.006	0.345	0.000	0.016	0.000	0.351	1.050	4.8.2
	62 - 61	0.012	0.738	0.000	0.035	0.001	0.751	1.050	4.8.2
L21	61 - 59.8125	0.012	0.745	0.000	0.035	0.001	0.758	1.050	4.8.2
	59.8125 - 58.625	0.012	0.752	0.000	0.035	0.001	0.765	1.050	4.8.2
	58.625 - 57.4375	0.012	0.759	0.000	0.035	0.001	0.772	1.050	4.8.2
	57.4375 - 56.25	0.012	0.766	0.000	0.035	0.001	0.779	1.050	4.8.2
L22	56.25 - 56 (22)	0.010	0.597	0.000	0.029	0.001	0.608	1.050	4.8.2
L23	56 - 55	0.010	0.601	0.000	0.028	0.001	0.612	1.050	4.8.2
	55 - 54	0.010	0.604	0.000	0.028	0.001	0.615	1.050	4.8.2
	54 - 53	0.010	0.607	0.000	0.028	0.001	0.618	1.050	4.8.2
	53 - 52	0.010	0.611	0.000	0.028	0.001	0.622	1.050	4.8.2
	52 - 51	0.010	0.615	0.000	0.028	0.001	0.626	1.050	4.8.2
L24	51 - 50	0.010	0.630	0.000	0.029	0.001	0.641	1.050	4.8.2
	50 - 49	0.011	0.634	0.000	0.029	0.001	0.645	1.050	4.8.2
	49 - 48	0.011	0.638	0.000	0.029	0.001	0.649	1.050	4.8.2
	48 - 47	0.011	0.641	0.000	0.028	0.001	0.653	1.050	4.8.2
	47 - 46	0.011	0.645	0.000	0.028	0.001	0.657	1.050	4.8.2
L25	46 - 45	0.011	0.649	0.000	0.028	0.001	0.660	1.050	4.8.2

Section No.	Elevation ft	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Ratio $V_u/\phi V_n$	Ratio $T_u/\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
	45 - 44	0.011	0.653	0.000	0.028	0.001	0.664	1.050	4.8.2
	44 - 43	0.011	0.656	0.000	0.028	0.001	0.668	1.050	4.8.2
	43 - 42	0.011	0.660	0.000	0.029	0.001	0.672	1.050	4.8.2
	42 - 41	0.011	0.664	0.000	0.029	0.001	0.675	1.050	4.8.2
L26	41 - 39.5 (26)	0.011	0.669	0.000	0.029	0.001	0.681	1.050	4.8.2
L27	39.5 - 39.25 (27)	0.010	0.606	0.000	0.026	0.001	0.617	1.050	4.8.2
L28	39.25 - 38.75 (28)	0.010	0.607	0.000	0.026	0.001	0.618	1.050	4.8.2
L29	38.75 - 38.5 (29)	0.010	0.628	0.000	0.027	0.001	0.639	1.050	4.8.2
L30	38.5 - 37.5	0.010	0.631	0.000	0.027	0.001	0.642	1.050	4.8.2
	37.5 - 32.25	0.005	0.314	0.000	0.013	0.000	0.319	1.050	4.8.2
L31	37.5 - 32.25	0.005	0.303	0.000	0.012	0.000	0.308	1.050	4.8.2
	32.25 - 31.25	0.010	0.590	0.000	0.024	0.001	0.600	1.050	4.8.2
L32	31.25 - 30.25	0.010	0.592	0.000	0.024	0.001	0.602	1.050	4.8.2
	30.25 - 29.25	0.010	0.594	0.000	0.024	0.001	0.604	1.050	4.8.2
	29.25 - 28.25	0.010	0.595	0.000	0.024	0.001	0.606	1.050	4.8.2
	28.25 - 27.25	0.010	0.597	0.000	0.024	0.001	0.608	1.050	4.8.2
	27.25 - 26.25	0.010	0.599	0.000	0.024	0.001	0.610	1.050	4.8.2
L33	26.25 - 25.25	0.010	0.601	0.000	0.024	0.001	0.611	1.050	4.8.2
	25.25 - 24.25	0.010	0.602	0.000	0.024	0.001	0.613	1.050	4.8.2
	24.25 - 23.25	0.010	0.604	0.000	0.024	0.001	0.615	1.050	4.8.2
	23.25 - 22.25	0.010	0.606	0.000	0.024	0.001	0.616	1.050	4.8.2
	22.25 - 21.25	0.010	0.607	0.000	0.024	0.001	0.618	1.050	4.8.2
L34	21.25 - 20.25	0.011	0.616	0.000	0.024	0.001	0.627	1.050	4.8.2
	20.25 - 19.25	0.011	0.617	0.000	0.024	0.001	0.628	1.050	4.8.2
	19.25 - 18.25	0.011	0.619	0.000	0.024	0.001	0.630	1.050	4.8.2
	18.25 - 17.25	0.011	0.620	0.000	0.024	0.001	0.631	1.050	4.8.2

Section No.	Elevation ft	Ratio $P_u/\phi P_n$	Ratio $M_{ux}/\phi M_{nx}$	Ratio $M_{uy}/\phi M_{ny}$	Ratio $V_u/\phi V_n$	Ratio $T_u/\phi T_n$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
	17.25 - 16.25	0.011	0.622	0.000	0.024	0.001	0.633	1.050	4.8.2
L35	16.25 - 15.25	0.011	0.631	0.000	0.024	0.001	0.642	1.050	4.8.2
	15.25 - 14.25	0.011	0.633	0.000	0.024	0.001	0.644	1.050	4.8.2
	14.25 - 13.25	0.011	0.635	0.000	0.024	0.001	0.646	1.050	4.8.2
	13.25 - 12.25	0.011	0.637	0.000	0.024	0.001	0.648	1.050	4.8.2
	12.25 - 11.25	0.011	0.639	0.000	0.024	0.001	0.651	1.050	4.8.2
L36	11.25 - 10 (36)	0.011	0.642	0.000	0.024	0.001	0.653	1.050	4.8.2
L37	10 - 9.75 (37)	0.013	0.757	0.000	0.027	0.001	0.770	1.050	4.8.2
L38	9.75 - 8.5	0.013	0.760	0.000	0.027	0.001	0.773	1.050	4.8.2
	8.5 - 7.25	0.013	0.763	0.000	0.027	0.001	0.777	1.050	4.8.2
L39	7.25 - 7 (39)	0.012	0.678	0.000	0.025	0.001	0.691	1.050	4.8.2
L40	7 - 6	0.012	0.692	0.000	0.025	0.001	0.704	1.050	4.8.2
	6 - 5	0.012	0.694	0.000	0.025	0.001	0.706	1.050	4.8.2
	5 - 4	0.012	0.696	0.000	0.025	0.001	0.708	1.050	4.8.2
	4 - 3	0.012	0.698	0.000	0.025	0.001	0.710	1.050	4.8.2
	3 - 2	0.012	0.700	0.000	0.025	0.001	0.712	1.050	4.8.2
L41	2 - 1	0.012	0.702	0.000	0.025	0.001	0.714	1.050	4.8.2
	1 - 0	0.012	0.704	0.000	0.025	0.001	0.717	1.050	4.8.2

Section Capacity Table

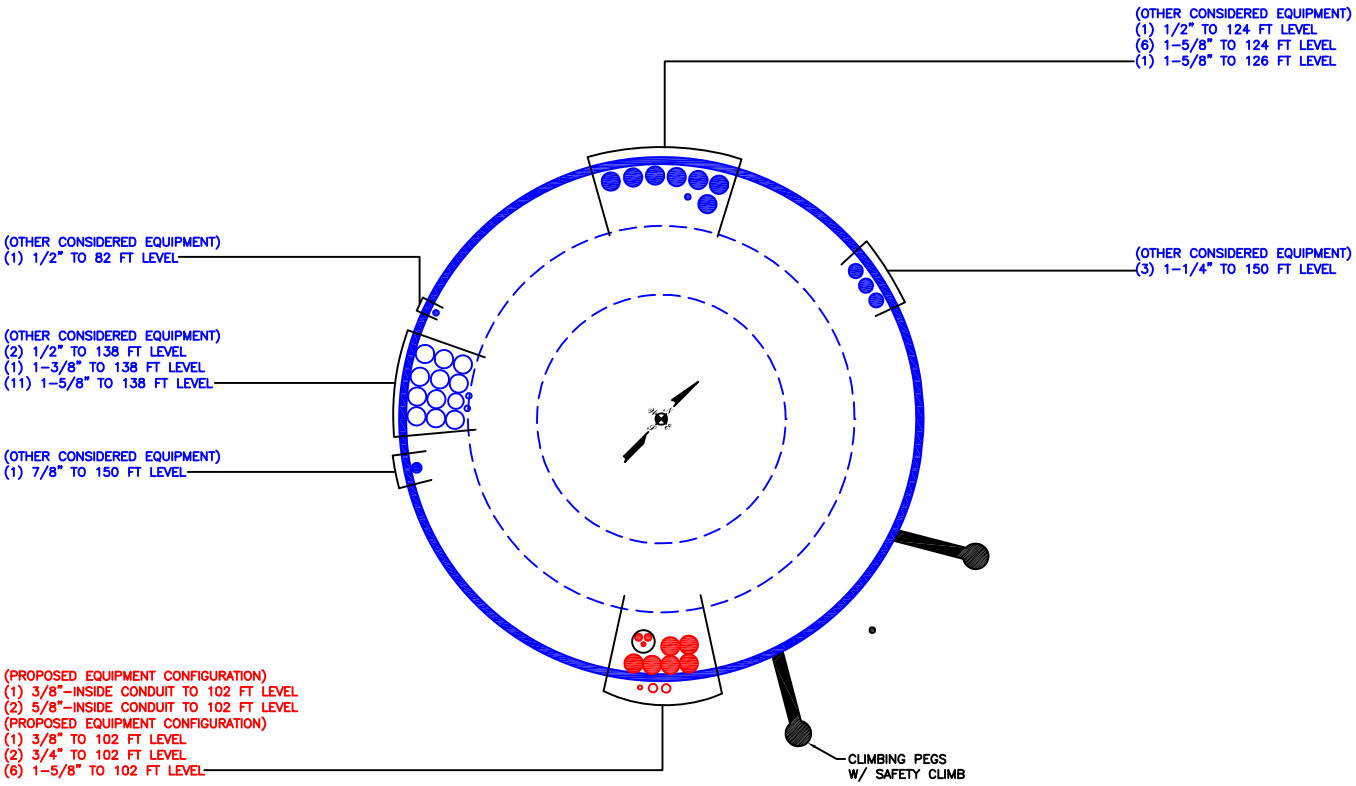
Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	150 - 145	Pole	TP22.875x22x0.25	1	-4.378	1032.692	**	**
L2	145 - 140	Pole	TP23.75x22.875x0.25	2	-4.732	1072.638	**	**
L3	140 - 135	Pole	TP24.625x23.75x0.25	3	-10.215	1112.580	**	**
L4	135 - 130	Pole	TP25.501x24.625x0.25	4	-10.647	1152.532	**	**
L5	130 - 125	Pole	TP26.376x25.501x0.25	5	-11.172	1192.474	**	**
L6	125 - 120	Pole	TP27.251x26.376x0.25	6	-14.709	1232.416	**	**

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	øP$_{allow}$ K	% Capacity	Pass Fail
L7	120 - 115	Pole	TP28.126x27.251x0.25	7	-15.303	1272.358	**	**
L8	115 - 110	Pole	TP29.001x28.126x0.25	8	-15.925	1312.311	**	**
L9	110 - 102.5	Pole	TP30.314x29.001x0.25	9	-16.407	1342.267	**	**
L10	102.5 - 101.25	Pole	TP30.033x29.158x0.313	10	-21.680	1836.975	**	**
L11	101.25 - 96.25	Pole	TP30.908x30.033x0.313	11	-22.555	1891.071	**	**
L12	96.25 - 91.25	Pole	TP31.783x30.908x0.313	12	-23.458	1945.167	**	**
L13	91.25 - 86.25	Pole	TP32.658x31.783x0.313	13	-24.392	1999.263	**	**
L14	86.25 - 81.25	Pole	TP33.534x32.658x0.313	14	-25.434	2053.359	**	**
L15	81.25 - 76.25	Pole	TP34.409x33.534x0.313	15	-26.426	2107.455	**	**
L16	76.25 - 73.5	Pole	TP34.89x34.409x0.313	16	-26.977	2137.201	**	**
L17	73.5 - 73.25	Pole	TP34.934x34.89x0.4	17	-27.054	2732.163	**	**
L18	73.25 - 68.25	Pole	TP35.809x34.934x0.4	18	-28.227	2801.400	**	**
L19	68.25 - 62	Pole	TP36.903x35.809x0.4	19	-28.581	2822.169	**	**
L20	62 - 61	Pole	TP36.453x35.447x0.375	20	-30.752	2675.925	**	**
L21	61 - 56.25	Pole	TP37.284x36.453x0.375	21	-31.900	2737.591	**	**
L22	56.25 - 56	Pole	TP37.328x37.284x0.456	22	-31.985	3327.355	**	**
L23	56 - 51	Pole	TP38.203x37.328x0.456	23	-33.370	3406.326	**	**
L24	51 - 46	Pole	TP39.078x38.203x0.45	24	-34.793	3438.109	**	**
L25	46 - 41	Pole	TP39.954x39.078x0.45	25	-36.222	3515.998	**	**
L26	41 - 39.5	Pole	TP40.216x39.954x0.45	26	-36.654	3539.371	**	**
L27	39.5 - 39.25	Pole	TP40.26x40.216x0.488	27	-36.753	3834.925	**	**
L28	39.25 - 38.75	Pole	TP40.347x40.26x0.488	28	-36.912	3843.357	**	**
L29	38.75 - 38.5	Pole	TP40.391x40.347x0.475	29	-36.991	3750.096	**	**
L30	38.5 - 32.25	Pole	TP41.485x40.391x0.475	30	-37.288	3766.539	**	**
L31	32.25 - 31.25	Pole	TP40.91x39.816x0.538	31	-40.643	4292.064	**	**
L32	31.25 - 26.25	Pole	TP41.785x40.91x0.538	32	-42.364	4385.104	**	**
L33	26.25 - 21.25	Pole	TP42.66x41.785x0.538	33	-44.112	4478.145	**	**
L34	21.25 - 16.25	Pole	TP43.536x42.66x0.531	34	-45.890	4518.696	**	**
L35	16.25 - 11.25	Pole	TP44.411x43.536x0.525	35	-47.696	4557.063	**	**
L36	11.25 - 10	Pole	TP44.63x44.411x0.525	36	-48.149	4579.774	**	**
L37	10 - 9.75	Pole	TP44.673x44.63x0.463	37	-48.250	4044.285	**	**
L38	9.75 - 7.25	Pole	TP45.111x44.673x0.463	38	-49.121	4084.321	**	**
L39	7.25 - 7	Pole	TP45.155x45.111x0.506	39	-49.224	4470.669	**	**
L40	7 - 2	Pole	TP46.03x45.155x0.5	40	-50.997	4502.652	**	**
L41	2 - 0	Pole	TP46.38x46.03x0.5	41	-51.718	4537.270	**	**
							Summary	
						Pole (L16)	**	**
						RATING =	**	**

** Above stress ratios for reinforced sections are approximate. More exact calculations are presented in Appendix C.

APPENDIX B

BASE LEVEL DRAWING



BUSINESS UNIT:876315

APPENDIX C

ADDITIONAL CALCULATIONS

CCIpole

per TIA-222- H

Site BU: 876315

Work Order: 1856622

CROWN CASTLE

Pole Geometry

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	150	47.5	3.75	12	22	30.314	0.25	Auto	A607-60
2	106.25	44.25	4.75	12	29.16	36.903	0.3125	Auto	A607-65
3	66.75	34.5	5.25	12	35.45	41.485	0.375	Auto	A607-65
4	37.5	37.5	0	12	39.82	46.38	0.4375	Auto	A607-65

Reinforcement Configuration

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12
1	0	10	plate	PL 4x1 (5TB)	1			E2									
2	0	39.5	plate	Plate 4x1 (7TB)	2								E2				E2
3	7.25	38.75	plate	Plate 4x1 (7TB)	1				E2								
4	38.75	56.25	plate	Plate 4x0.75 (5TB)	3			E2				E2				E2	
5	66	73.5	plate	Plate 4x0.75 (5TB)	3				E2				E2				E2
6																	
7																	
8																	
9																	
10																	

Reinforcement Details

	B (in)	H (in)	Gross Area (in^2)	Pole Face to Centroid (in)	Bottom Termination Length (in)	Top Termination Length (in)	L_u (in)	Net Area (in^2)	Bolt Hole Size (in)	Reinforcement Material
1	4	1	4	0.5	15.000	15.000	20.000	2.750	1.1875	A514-GR100
2	4	1	4	0.5	21.000	21.000	20.000	2.750	1.1875	A514-GR100
3	4	1	4	0.5	21.000	21.000	20.000	2.750	1.1875	A514-GR100
4	4	0.75	3	0.375	15.000	15.000	15.000	2.063	1.1875	A514-GR100
5	4	0.75	3	0.375	15.000	15.000	15.000	2.063	1.1875	A514-GR100

TNX Geometry Input

Increment (ft): 5 Export to TNX

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	150 - 145	5		12	22.000	22.875	0.25	A607-60	1.000
2	145 - 140	5		12	22.875	23.750	0.25	A607-60	1.000
3	140 - 135	5		12	23.750	24.625	0.25	A607-60	1.000
4	135 - 130	5		12	24.625	25.501	0.25	A607-60	1.000
5	130 - 125	5		12	25.501	26.376	0.25	A607-60	1.000
6	125 - 120	5		12	26.376	27.251	0.25	A607-60	1.000
7	120 - 115	5		12	27.251	28.126	0.25	A607-60	1.000
8	115 - 110	5		12	28.126	29.001	0.25	A607-60	1.000
9	110 - 106.25	7.5	3.75	12	29.001	30.314	0.25	A607-60	1.000
10	106.25 - 101.25	5		12	29.158	30.033	0.3125	A607-65	1.000
11	101.25 - 96.25	5		12	30.033	30.908	0.3125	A607-65	1.000
12	96.25 - 91.25	5		12	30.908	31.783	0.3125	A607-65	1.000
13	91.25 - 86.25	5		12	31.783	32.658	0.3125	A607-65	1.000
14	86.25 - 81.25	5		12	32.658	33.534	0.3125	A607-65	1.000
15	81.25 - 76.25	5		12	33.534	34.409	0.3125	A607-65	1.000
16	76.25 - 73.5	2.75		12	34.409	34.890	0.3125	A607-65	1.000
17	73.5 - 73.25	0.25		12	34.890	34.934	0.4	A607-65	0.986
18	73.25 - 68.25	5		12	34.934	35.809	0.4	A607-65	0.981
19	68.25 - 66.75	6.25	4.75	12	35.809	36.903	0.4	A607-65	0.979
20	66.75 - 61	5.75		12	35.447	36.453	0.375	A607-65	1.000
21	61 - 56.25	4.75		12	36.453	37.284	0.375	A607-65	1.000
22	56.25 - 56	0.25		12	37.284	37.328	0.45625	A607-65	0.990
23	56 - 51	5		12	37.328	38.203	0.45625	A607-65	0.986
24	51 - 46	5		12	38.203	39.078	0.45	A607-65	0.996
25	46 - 41	5		12	39.078	39.954	0.45	A607-65	0.992
26	41 - 39.5	1.5		12	39.954	40.216	0.45	A607-65	0.991
27	39.5 - 39.25	0.25		12	40.216	40.260	0.4875	A607-65	1.044
28	39.25 - 38.75	0.5		12	40.260	40.347	0.4875	A607-65	1.043
29	38.75 - 38.5	0.25		12	40.347	40.391	0.475	A607-65	0.988
30	38.5 - 37.5	6.25	5.25	12	40.391	41.485	0.475	A607-65	0.987
31	37.5 - 31.25	6.25		12	39.816	40.910	0.5375	A607-65	0.988
32	31.25 - 26.25	5		12	40.910	41.785	0.5375	A607-65	0.984
33	26.25 - 21.25	5		12	41.785	42.660	0.5375	A607-65	0.981
34	21.25 - 16.25	5		12	42.660	43.536	0.53125	A607-65	0.989
35	16.25 - 11.25	5		12	43.536	44.411	0.525	A607-65	0.997
36	11.25 - 10	1.25		12	44.411	44.630	0.525	A607-65	0.996
37	10 - 9.75	0.25		12	44.630	44.673	0.4625	A607-65	1.068
38	9.75 - 7.25	2.5		12	44.673	45.111	0.4625	A607-65	1.067
39	7.25 - 7	0.25		12	45.111	45.155	0.50625	A607-65	0.976
40	7 - 2	5		12	45.155	46.030	0.5	A607-65	0.985
41	2 - 0	2		12	46.030	46.380	0.5	A607-65	0.985

TNX Section Forces

Increment (ft):	5	TNX Output		
	Section Height (ft)	P_u (K)	M_{ux} (kip-ft)	V_u (K)
1	150 - 145	4.38	22.51	4.41
2	145 - 140	4.73	45.70	4.87
3	140 - 135	10.22	92.49	11.99
4	135 - 130	10.65	154.29	12.68
5	130 - 125	11.17	219.32	13.31
6	125 - 120	14.71	303.91	17.00
7	120 - 115	15.30	390.04	17.46
8	115 - 110	15.93	478.47	17.92
9	110 - 106.25	16.41	546.28	18.26
10	106.25 - 101.25	21.68	648.04	23.14
11	101.25 - 96.25	22.55	764.78	23.58
12	96.25 - 91.25	23.46	883.72	24.02
13	91.25 - 86.25	24.39	1004.82	24.45
14	86.25 - 81.25	25.43	1127.82	24.91
15	81.25 - 76.25	26.43	1253.35	25.32
16	76.25 - 73.5	26.98	1323.25	25.55
17	73.5 - 73.25	27.05	1329.64	25.56
18	73.25 - 68.25	28.23	1458.49	26.00
19	68.25 - 66.75	28.58	1497.57	26.14
20	66.75 - 61	30.75	1649.52	26.73
21	61 - 56.25	31.90	1777.25	27.09
22	56.25 - 56	31.98	1784.02	27.10
23	56 - 51	33.37	1920.49	27.51
24	51 - 46	34.79	2058.94	27.90
25	46 - 41	36.22	2199.86	28.75
26	41 - 39.5	36.65	2243.08	28.92
27	39.5 - 39.25	36.75	2250.31	28.92
28	39.25 - 38.75	36.91	2264.78	28.98
29	38.75 - 38.5	36.99	2272.03	29.00
30	38.5 - 37.5	37.29	2301.07	29.11
31	37.5 - 31.25	40.64	2485.28	29.82
32	31.25 - 26.25	42.36	2635.12	30.15
33	26.25 - 21.25	44.11	2786.60	30.48
34	21.25 - 16.25	45.89	2939.71	30.80
35	16.25 - 11.25	47.70	3094.40	31.12
36	11.25 - 10	48.15	3133.32	31.20
37	10 - 9.75	48.25	3141.12	31.20
38	9.75 - 7.25	49.12	3219.28	31.36
39	7.25 - 7	49.22	3227.11	31.36
40	7 - 2	51.00	3384.61	31.67
41	2 - 0	51.72	3448.03	31.79

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
150 - 145	Pole	TP22.875x22x0.25	Pole	4.2%	Pass
145 - 140	Pole	TP23.75x22.875x0.25	Pole	7.6%	Pass
140 - 135	Pole	TP24.625x23.75x0.25	Pole	14.7%	Pass
135 - 130	Pole	TP25.501x24.625x0.25	Pole	22.6%	Pass
130 - 125	Pole	TP26.376x25.501x0.25	Pole	30.2%	Pass
125 - 120	Pole	TP27.251x26.376x0.25	Pole	39.6%	Pass
120 - 115	Pole	TP28.126x27.251x0.25	Pole	48.1%	Pass
115 - 110	Pole	TP29.001x28.126x0.25	Pole	56.0%	Pass
110 - 106.25	Pole	TP30.314x29.001x0.25	Pole	61.7%	Pass
106.25 - 101.25	Pole	TP30.033x29.158x0.3125	Pole	49.5%	Pass
101.25 - 96.25	Pole	TP30.908x30.033x0.3125	Pole	55.6%	Pass
96.25 - 91.25	Pole	TP31.783x30.908x0.3125	Pole	61.3%	Pass
91.25 - 86.25	Pole	TP32.658x31.783x0.3125	Pole	66.6%	Pass
86.25 - 81.25	Pole	TP33.534x32.658x0.3125	Pole	71.5%	Pass
81.25 - 76.25	Pole	TP34.409x33.534x0.3125	Pole	76.2%	Pass
76.25 - 73.5	Pole	TP34.89x34.409x0.3125	Pole	78.7%	Pass
73.5 - 73.25	Pole + Reinf.	TP34.934x34.89x0.4	Reinf. 5 Tension Rupture	71.5%	Pass
73.25 - 68.25	Pole + Reinf.	TP35.809x34.934x0.4	Reinf. 5 Tension Rupture	74.9%	Pass
68.25 - 66.75	Pole + Reinf.	TP36.903x35.809x0.4	Reinf. 5 Tension Rupture	75.9%	Pass
66.75 - 61	Pole	TP36.453x35.447x0.375	Pole	71.1%	Pass
61 - 56.25	Pole	TP37.284x36.453x0.375	Pole	73.7%	Pass
56.25 - 56	Pole + Reinf.	TP37.328x37.284x0.4563	Reinf. 4 Tension Rupture	73.5%	Pass
56 - 51	Pole + Reinf.	TP38.203x37.328x0.4563	Reinf. 4 Tension Rupture	75.8%	Pass
51 - 46	Pole + Reinf.	TP39.078x38.203x0.45	Reinf. 4 Tension Rupture	77.9%	Pass
46 - 41	Pole + Reinf.	TP39.954x39.078x0.45	Reinf. 4 Tension Rupture	79.8%	Pass
41 - 39.5	Pole + Reinf.	TP40.216x39.954x0.45	Reinf. 4 Tension Rupture	80.4%	Pass
39.5 - 39.25	Pole + Reinf.	TP40.26x40.216x0.4875	Reinf. 4 Tension Rupture	77.5%	Pass
39.25 - 38.75	Pole + Reinf.	TP40.347x40.26x0.4875	Reinf. 4 Tension Rupture	77.7%	Pass
38.75 - 38.5	Pole + Reinf.	TP40.391x40.347x0.475	Reinf. 3 Tension Rupture	76.9%	Pass
38.5 - 37.5	Pole + Reinf.	TP41.485x40.391x0.475	Reinf. 3 Tension Rupture	77.3%	Pass
37.5 - 31.25	Pole + Reinf.	TP40.91x39.816x0.5375	Reinf. 3 Tension Rupture	72.8%	Pass
31.25 - 26.25	Pole + Reinf.	TP41.785x40.91x0.5375	Reinf. 3 Tension Rupture	74.2%	Pass
26.25 - 21.25	Pole + Reinf.	TP42.66x41.785x0.5375	Reinf. 3 Tension Rupture	75.5%	Pass
21.25 - 16.25	Pole + Reinf.	TP43.536x42.66x0.5313	Reinf. 3 Tension Rupture	76.7%	Pass
16.25 - 11.25	Pole + Reinf.	TP44.411x43.536x0.525	Reinf. 3 Tension Rupture	77.8%	Pass
11.25 - 10	Pole + Reinf.	TP44.63x44.411x0.525	Reinf. 3 Tension Rupture	78.1%	Pass
10 - 9.75	Pole + Reinf.	TP44.673x44.63x0.4625	Pole	77.5%	Pass
9.75 - 7.25	Pole + Reinf.	TP45.111x44.673x0.4625	Pole	78.2%	Pass
7.25 - 7	Pole + Reinf.	TP45.155x45.111x0.5063	Reinf. 2 Tension Rupture	78.9%	Pass
7 - 2	Pole + Reinf.	TP46.03x45.155x0.5	Reinf. 2 Tension Rupture	79.9%	Pass
2 - 0	Pole + Reinf.	TP46.38x46.03x0.5	Reinf. 2 Tension Rupture	80.2%	Pass
				Summary	
			Pole	78.7%	Pass
			Reinforcement	80.4%	Pass
			Overall	80.4%	Pass

Additional Calculations

Section Elevation (ft)	Moment of Inertia (in^4)			Area (in^2)			% Capacity*					
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1	R2	R3	R4	R5
150 - 145	1192	n/a	1192	18.19	n/a	18.19	4.2%					
145 - 140	1335	n/a	1335	18.89	n/a	18.89	7.6%					
140 - 135	1490	n/a	1490	19.59	n/a	19.59	14.7%					
135 - 130	1656	n/a	1656	20.30	n/a	20.30	22.6%					
130 - 125	1835	n/a	1835	21.00	n/a	21.00	30.2%					
125 - 120	2025	n/a	2025	21.70	n/a	21.70	39.6%					
120 - 115	2229	n/a	2229	22.41	n/a	22.41	48.1%					
115 - 110	2445	n/a	2445	23.11	n/a	23.11	56.0%					
110 - 106.25	2617	n/a	2617	23.64	n/a	23.64	61.7%					
106.25 - 101.25	3376	n/a	3376	29.86	n/a	29.86	49.5%					
101.25 - 96.25	3683	n/a	3683	30.74	n/a	30.74	55.6%					
96.25 - 91.25	4009	n/a	4009	31.62	n/a	31.62	61.3%					
91.25 - 86.25	4352	n/a	4352	32.50	n/a	32.50	66.6%					
86.25 - 81.25	4715	n/a	4715	33.38	n/a	33.38	71.5%					
81.25 - 76.25	5098	n/a	5098	34.26	n/a	34.26	76.2%					
76.25 - 73.5	5317	n/a	5317	34.74	n/a	34.74	78.7%					
73.5 - 73.25	5337	1439	6776	34.79	9.00	43.79	60.2%					71.5%
73.25 - 68.25	5752	1510	7262	35.67	9.00	44.67	63.8%					74.9%
68.25 - 66.75	5881	1532	7412	35.93	9.00	44.93	64.9%					75.9%
66.75 - 61	7247	n/a	7247	43.50	n/a	43.50	71.1%					
61 - 56.25	7760	n/a	7760	44.50	n/a	44.50	73.7%					
56.25 - 56	7788	1637	9425	44.56	9.00	53.56	59.1%				73.5%	
56 - 51	8354	1713	10068	45.61	9.00	54.61	61.4%				75.8%	
51 - 46	8948	1791	10738	46.67	9.00	55.67	63.7%				77.9%	
46 - 41	9568	1870	11438	47.72	9.00	56.72	66.0%				79.8%	
41 - 39.5	9760	1894	11654	48.04	9.00	57.04	66.6%				80.4%	
39.5 - 39.25	9856	2911	12767	48.09	17.00	65.09	65.7%		66.7%		77.5%	
39.25 - 38.75	9921	2924	12844	48.20	17.00	65.20	65.9%		66.9%		77.7%	
38.75 - 38.5	9889	2578	12468	48.25	12.00	60.25	63.5%		76.9%	76.9%		
38.5 - 37.5	10020	2600	12620	48.46	12.00	60.46	63.9%		77.3%	77.3%		
37.5 - 31.25	11937	2643	14580	56.93	12.00	68.93	57.0%		72.8%	72.8%		
31.25 - 26.25	12728	2754	15483	58.17	12.00	70.17	58.6%		74.2%	74.2%		
26.25 - 21.25	13554	2868	16421	59.40	12.00	71.40	60.1%		75.5%	75.5%		
21.25 - 16.25	14414	2984	17398	60.63	12.00	72.63	61.5%		76.7%	76.7%		
16.25 - 11.25	15310	3102	18412	61.86	12.00	73.86	62.9%		77.8%	77.8%		
11.25 - 10	15540	3132	18671	62.17	12.00	74.17	63.2%		78.1%	78.1%		
10 - 9.75	15656	784	16440	62.23	8.00	70.23	77.5%	70.2%		70.2%		
9.75 - 7.25	16124	800	16924	62.84	8.00	70.84	78.2%	70.7%		70.7%		
7.25 - 7	16135	2425	18560	62.91	8.00	70.91	70.0%		78.9%			
7 - 2	17100	2519	19619	64.14	8.00	72.14	71.3%		79.9%			
2 - 0	17496	2557	20053	64.63	8.00	72.63	71.8%		80.2%			

Note: Section capacity checked in 5 degree increments.
Rating per TIA-222-H Section 15.5.

PROJECT	**81150.007.01 - OAK LANE CC, INC. TOWER (SSUSA, CT**
SUBJECT	**Anchor Rod Bracket Analysis**
DATE	**06-10-20**

v4.5.1

TIA-222 Rev.

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

Analysis Criteria		
Design/Analysis	Analysis	
Load Type	Current Load	
Current load	192.7	kips
AR Capacity	325.0	kips

Tower Type	Monopole	

Manufacturers Tower Prop.		
Pole Thickness	0.4375	in
Pole Grade	A572-65	
Fy	65	ksi
Fu	80	ksi
Base Plate Gr.	A572-60	
Fy	60	ksi
Fu	75	ksi

Post-Installed Adhesive AR Mod.		
ARB Type	Welded	
Size	2.25	in
Grade	A193 Gr B7	
Fy	105	ksi
Fu	125	ksi

Anchor Rod Bracket Analysis Checks		
Tube Bearing	39.4%	-
Tube Compression	N/A	
Gusset Shear	14.6%	-
Gusset Flexure	N/A	-
Welds: Gusset to Tower and BP	28.2%	-
Welds: Gusset to Tube	14.7%	-
Welds: Geometry	N/A	
Tower Punching	19.5%	-
Tube Punching	8.5%	-
Utilization	**39.4%**	

Bracket Properties

Gusset		
Thickness	1.25	in
Width at Tube	9.75	in
Height at Pole	48	in
Height at Tube	36	in
Grade	A572-50	
Fy	50	ksi
Fu	65	ksi

Pipe/Tube		
Size	HSS5x5x1/2	
Total Length	41	in
Length above Gusset	0	in
Length below Gusset	5	in
Grade	A500 Grade B (Square)	
Fy	46	ksi
Fu	58	ksi

Weld - Gusset to Pipe/Tube		
FEXX	70	ksi
Weld Type	PJP - Double Bevel	
Fillet Size	5/8	in
Bevel Depth	1/2	in

Weld - Gusset to Tower		
FEXX	70	ksi
Weld Type	Double Fillet	
Fillet Size	3/8	in

Weld - Gusset to Base Plate		
FEXX	70	ksi
Weld Type	PJP - Double Bevel	
Fillet Size	5/8	in
Bevel Depth	1/2	in
Gap	2	in
Notch (horiz)	0.75	in
Notch (vert)	0.75	in
Pipe/Tube Welded to Base/Footpad?	No	

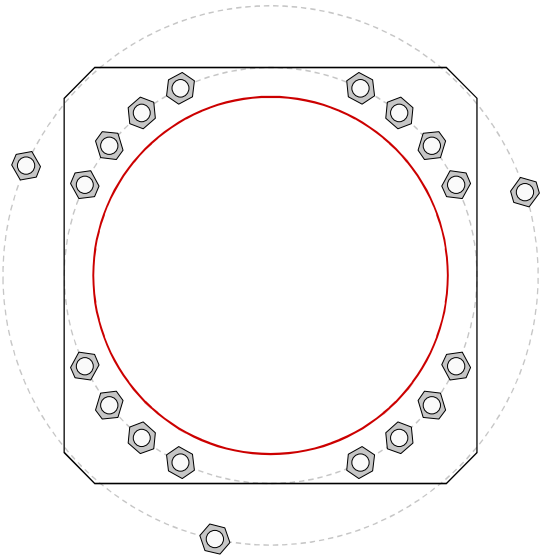
Monopole Base Plate Connection

Site Info	
BU #	876315
Site Name	NE CC, INC. TOWER(SSL
Order #	517074, Rev# 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{ar} (in)	0

Applied Loads	
Moment (kip-ft)	3448.00
Axial Force (kips)	52.00
Shear Force (kips)	32.00

**TIA-222-H Section 15.5 Applied*



Connection Properties

Anchor Rod Data

GROUP 1: (16) 2-1/4" ø bolts (A615-75 N; Fy=75 ksi, Fu=100 ksi) on 54" BC
Anchor Spacing: 6 in
GROUP 2: (3) 2-1/4" ø bolts (A193 Gr. B7 N; Fy=105 ksi, Fu=125 ksi) on 70" BC
pos. (deg): 18, 156, 258

Base Plate Data

54" OD x 3" Plate (A572-60; Fy=60 ksi, Fu=75 ksi)

Stiffener Data

N/A

Pole Data

46.38" x 0.4375" 12-sided pole (A607-65; Fy=65 ksi, Fu=80 ksi)

Analysis Results

Anchor Rod Summary *(units of kips, kip-in)*

GROUP 1:		
Pu_c = 157.31	ϕPn_c = 268.39	**Stress Rating**
Vu = 2	ϕVn = 120.77	**55.9%**
Mu = n/a	ϕMn = n/a	**Pass**
GROUP 2:		
Pu_c = 192.7	ϕPn_c = 375.74	**Stress Rating**
Vu = 0	ϕVn = 169.08	**48.8%**
Mu = n/a	ϕMn = n/a	**Pass**

Base Plate Summary

Max Stress (ksi):	26.27	(Flexural)
Allowable Stress (ksi):	54	
Stress Rating:	**46.3%**	**Pass**

Pier and Pad Foundation

BU # :	876315
Site Name:	OAK LANE CC,
Order Number:	517074, Rev# 0

TIA-222 Revision:	H
Tower Type:	Monopole

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

Superstructure Analysis Reactions		
Compression, P_{comp}:	52	kips
Base Shear, Vu_comp:	32	kips
Moment, M_u:	3448	ft-kips
Tower Height, **H**:	150	ft
BP Dist. Above Fdn, bp_{dist}:	4.75	in
Bolt Circle / Bearing Plate Width, **BC**:	54	in

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	133.44	32.00	**22.8%**	**Pass**
Bearing Pressure (ksf)	18.00	3.92	**21.8%**	**Pass**
*Overturning (kip*ft)*	4868.52	3620.67	**74.4%**	**Pass**
*Pad Flexure (kip*ft)*	8967.19	1926.63	**20.5%**	**Pass**
Pad Shear - 1-way (kips)	1363.20	230.03	**16.1%**	**Pass**
Pad Shear - 2-way (Comp) (ksi)	0.164	0.002	**1.2%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	10725.59	0.00	**0.0%**	**Pass**

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

Soil Rating*:	**74.4%**
Structural Rating*:	**20.5%**

Pad Properties		
Depth, **D**:	4.5	ft
Pad Width, **W**:	25	ft
Pad Thickness, **T**:	5	ft
Pad Rebar Size (Bottom), **Sp**:	9	
Pad Rebar Quantity (Bottom), **mp**:	37	
Pad Clear Cover, cc_{pad}:	3	in

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

Soil Properties		
Total Soil Unit Weight, γ:	100	pcf
Ultimate Gross Bearing, Qult:	24.000	ksf
Cohesion, **Cu**:	0.000	ksf
Friction Angle, φ:	30	degrees
SPT Blow Count, N_{blows}:		
Base Friction, μ:		
Neglected Depth, **N**:	3.33	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, **gw**:	3	ft

<--Toggle between Gross and Net

ASCE 7 Hazards Report

Address:
No Address at This Location

Standard:	ASCE/SEI 7-10	**Elevation:**	238.48 ft (NAVD 88)
Risk Category:	II	**Latitude:**	41.31675
Soil Class:	D - Stiff Soil	**Longitude:**	-73.011611

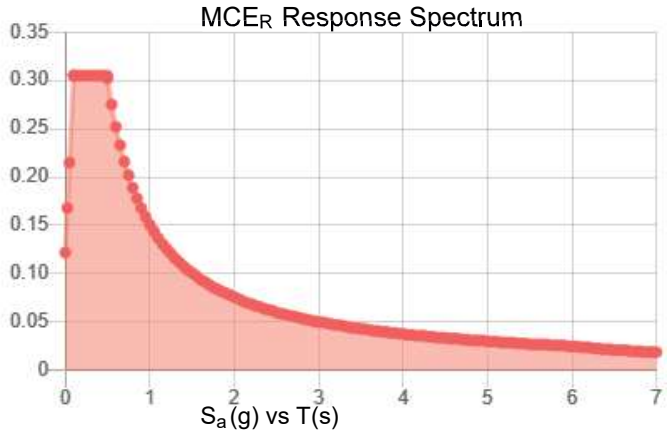
Seismic

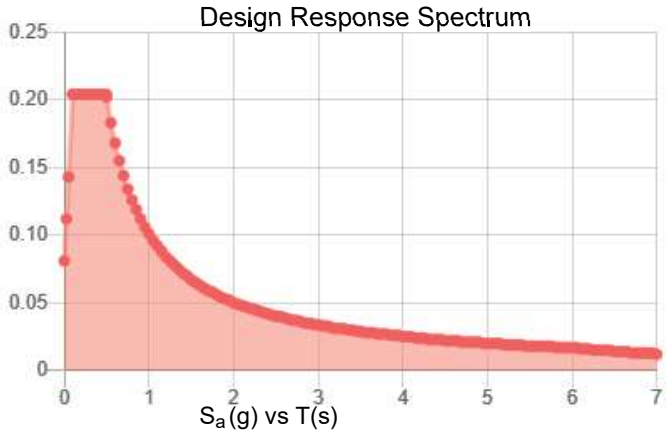
Site Soil Class: D - Stiff Soil

Results:

S_S :	0.191	S_{DS} :	0.204
S_1 :	0.063	S_{D1} :	0.101
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.1
S_{MS} :	0.305	PGA_M :	0.161
S_{M1} :	0.151	F_{PGA} :	1.599
		I_e :	1

Seismic Design Category B





Data Accessed: Tue Jun 09 2020

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:	Tue Jun 09 2020

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.

Exhibit E

Mount Analysis

Date: **June 2, 2020**

Kevin Morrow
Crown Castle
3530 Toringdon Way, Suite 300
Charlotte, NC 28277
704-405-6619

POD Group
1033 E Turkeyfoot Lake Rd. Suite 206
Akron, OH 44312
(330) 961.7432
mhoudeshell@podgrp.com

Subject:	**Mount Modification Analysis Report**	
Carrier Designation:	**AT&T Mobility**	
	Carrier Site Number:	**CT2008**
	Carrier Site Name:	**WOODBRIDGE JOHNSON ROAD**
	PACE Ref #	**MRCTB046818**
	FA Number:	**10035421**
Crown Castle Designation:	**Crown Castle BU Number:**	**876315**
	Crown Castle Site Name:	**[OAK LANE CC, INC. TOWER (SSUSA**
	Crown Castle JDE Job Number:	**605409**
	Crown Castle Order Number:	**517074 Rev 0**
Engineering Firm Designation:	**POD Report Designation:**	**20-64773**
Site Data:	**1027 Racebrook Road, Woodbridge, New Haven County, CT 06525** **Latitude 41°19'0.30" Longitude -73°00'41.80"**	
Structure Information:	**Tower Height & Type:**	**150.5 ft Monopole**
	Mount Elevation:	**102 ft**
	Mount Type:	**14 ft Platform with Support Rails**

Dear Kevin Morrow,

POD Group is pleased to submit this "Mount Modification Analysis Report" to determine the structural integrity of AT&T Mobility's antenna mounting system with the proposed appurtenance and equipment addition on the abovementioned 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:

14 ft Platform with Support Rails (Multiple Sectors) Sufficient*
***See Section 4.1 of this report for the loading and structural modifications required in order for the mount to support the loading listed in Table 1.**

This analysis has been performed in accordance with the 2018 International Building Code based upon an ultimate 3-second gust wind speed of 119 mph. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Mount structural analysis prepared by: Julianna Murphy

Respectfully submitted by:

6/2/20

Jason Cheronis, P.E.
Connecticut PE #: 0032793

TABLE OF CONTENTS

1) INTRODUCTION

This mount is an existing 14 ft Platform with Support Rails mapped by Tower Engineering Professional. This mount is installed at the 102 ft elevation of the 150.5 ft Monopole.

2) ANALYSIS CRITERIA

Building Code:	2018 IBC
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	119 mph
Exposure Category:	B
Topographic Factor at Base:	1.000
Topographic Factor at Mount:	1.000
Ice Thickness:	1 in
Wind Speed with Ice:	50 mph
Seismic S_s:	0.201
Seismic S_1:	0.054
Live Loading Wind Speed:	30 mph
Man Live Load at Mid/End-Points:	250 lb
Man Live Load at Mount Pipes:	500 lb

Table 1 - Final Equipment Configuration

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details	Note
102	104	3	CCI Antennas	DMP65R-BU6D	14 ft Platform with Support Rails	
		3	CCI Antennas	OPA65R-BU6D		
		3	Powerwave Technologies	7770.00		
		3	Ericsson	RRUS 4449 B5/B12		
		3	Ericsson	RRUS 8843 B2/B66A		
		3	Powerwave Technologies	LGP12104		
		2	Raycap	DC6-48-60-18-8F		

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Crown Application	-	Crown Castle App ID: 517074 Rev 0 Dated: 5/28/2020	Crown
Tower Manufacturer Drawings	-	Paul J. Ford and Company Job No: 29297-080 Dated: 2/23/1998	Crown
RFDS	-	AT&T Mobility RFDS Name: CT2008 Dated: 3/10/2020	Crown
Manufacture Specifications Sheets	-	Site Pro1 Part Number: PRK-SFS-L Dated:2/23/2017	SitePro1
Manufacture Specifications Sheets	-	Site Pro1 Part Number: HRK14-HD Dated:3/31/2015	SitePro1
Mount Modification Design Drawings	-	Power of Design Group Project #: 20-64773 Dated: 6/2/2020	POD

3.1) Analysis Method

RISA-3D (Version 17.0.4), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases. Selected output from the analysis are included in the Appendices.

A tool internally developed, using Microsoft Excel, by POD Group, was used to calculate wind loading on all appurtenances, dishes, and mount members for various load cases. Selected output from the calculations is included in Appendices B.

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 Tower Mount Analysis (Revision B). In addition, this analysis is in accordance with AT&T's mount technical directive.

3.2) Assumptions

1) The antenna mounting system was properly fabricated, installed, and maintained in good condition in accordance with its original design, TIA Standards, and/or manufacturer's specifications.
2) The configuration of antennas, mounts, and other appurtenances are as specified in Table 1 and the referenced drawings.
3) All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
4) The weight of the mount was increased 10% in the analysis to account for connections, coax, and jumpers.
5) Member sizes have been assumed from photos of the site and experience with similar mounting systems. If the sizes assumed in this report differ from the actual member sizes, POD Group shall be contacted immediately, and the results of the analysis shall be considered null and void.
6) The analysis will be required to be revised if the existing conditions in the field differ from those shown in the above-referenced documents or assumed in this analysis. No allowance was made for any damaged, missing, or rusted members.
7) Prior structural modifications to the tower mounting system are assumed to be installed as shown per available data.
8) Steel grades have been assumed as follows, unless noted otherwise:
    a. Angle, Plate — ASTM A36 (GR 36)
    b. HSS (Rectangular) — ASTM 500 (GR B-46)
    c. Pipe — ASTM A53 (GR 35)
    d. Connection Bolts — ASTM A325

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and POD Group should be allowed to review any new information to determine its effect on the structural integrity of the mount.

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (14 ft Platform with Support Rails)

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
	Face	FACE1	102	57.8	Pass
	Mount Pipe	MP BETA2	104	50.2	Pass
	Stabilizer	Stabilizer2	102	45.3	Pass
	Rail	Rail3	105	32.9	Pass
	Rail Connect	RailConnect2	105	23.6	Pass
	Inner Face	INNERFACE2	102	22.5	Pass
	Standoff	STANDOFF3	102	17.8	Pass
	Strut	STRUT2	102	17.6	Pass

Structure Rating (max from all components) =	57.8%

4.1) Recommendations

The mount has sufficient capacity to carry the proposed loading configuration. In order for the results of the analysis to be considered valid, the structural modifications listed below must be completed.

1. Stabilizer Kit, Site Pro P/N: PRK-SFS-L
2. Top-rail kit, Site Pro P/N: HRK14-HD

Engineering detail drawings have been provided in Appendix F – Mount Modification Design Drawings. Connection from the mount to the tower and local stresses on the tower are sufficient.

Table 4 – AT&T Specification

Wind Speed (mph)	Ice Thickness (in)	Height (ft)	Exposure	Class	Topo	# of Pipes	Allowable EPA per Pipe (ft sq.)	Allowable Weight per Sector (lbs)
119	1	102	B	II	1	3	10.76	2,658

5) DISCLAIMER OF WARRANTIES

POD Group has not performed a site visit to the structure to verify the member sizes or antenna/coax loading unless noted otherwise. If the existing conditions are not as represented in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the structure or foundation. This report does not replace a full structure inspection. The structure, foundations, and mounting systems are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by POD Group in connection with this Structural Analysis are limited to a computer analysis of the structure and theoretical capacity of its main structural members. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

POD Group does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing structure. POD Group provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the feasibility of adding appurtenances usually accompanied by transmission lines to the structure.

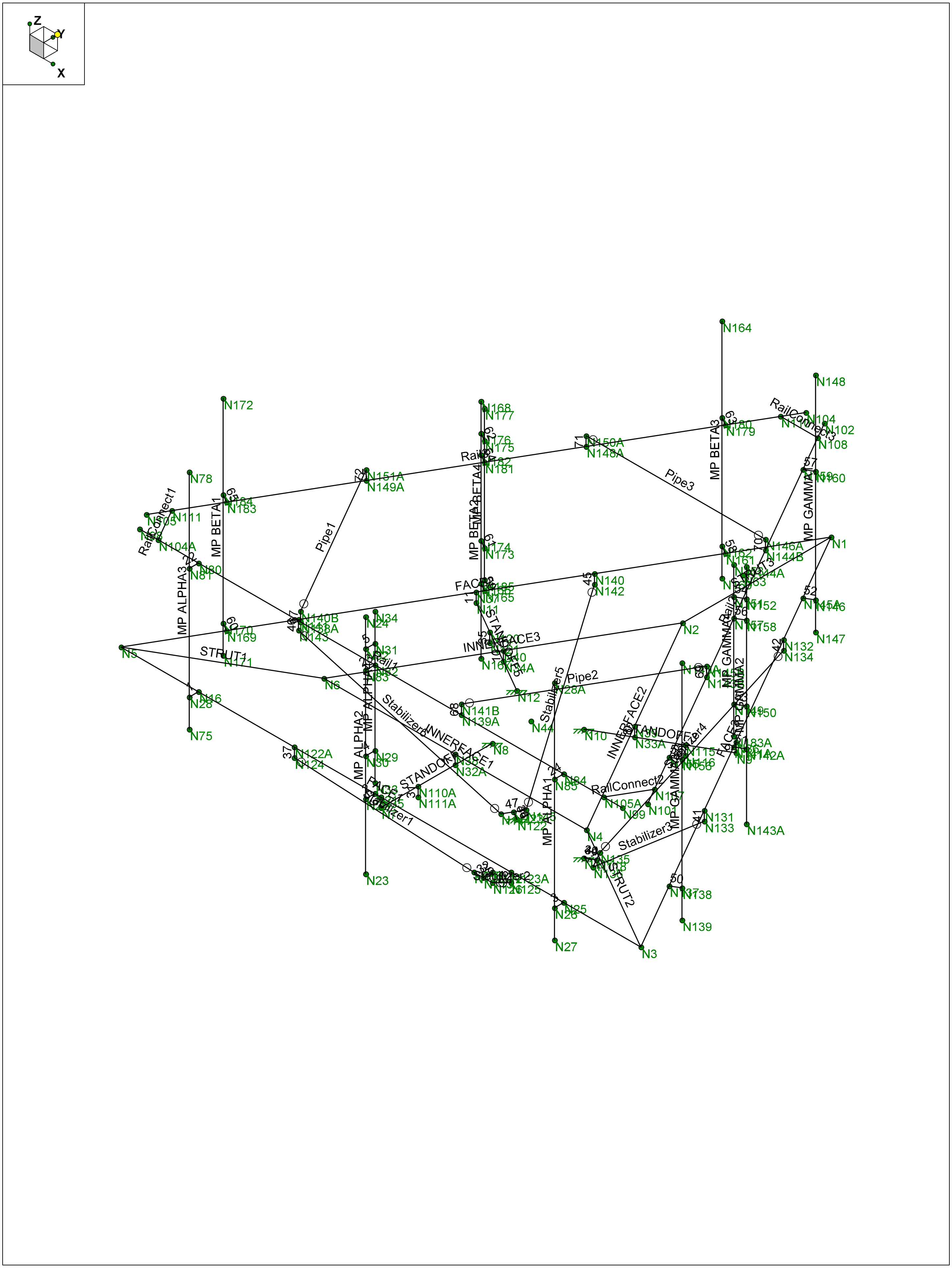
It is the owner's responsibility to determine the amount of ice accumulation in excess of the code specified amount, if any, that should be considered in the structural analysis.

The attached sketches are a schematic representation of the analyzed structure. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from POD Group, but are beyond the scope of this report.

POD Group makes no warranties, expressed and/or implied, in connection with this report and disclaims any liability arising from material, fabrication, and erection of this structure. POD Group will not be responsible whatsoever, for or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of POD Group pursuant to this report will be limited to the total fee received for preparation of this report.

APPENDIX A

Wire Frame and Rendered Models



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MP BETA4
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Pipe2
Pipe3
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RailConnect2
RailConnect3
Stabilizer1
Stabilizer3
Stabilizer5
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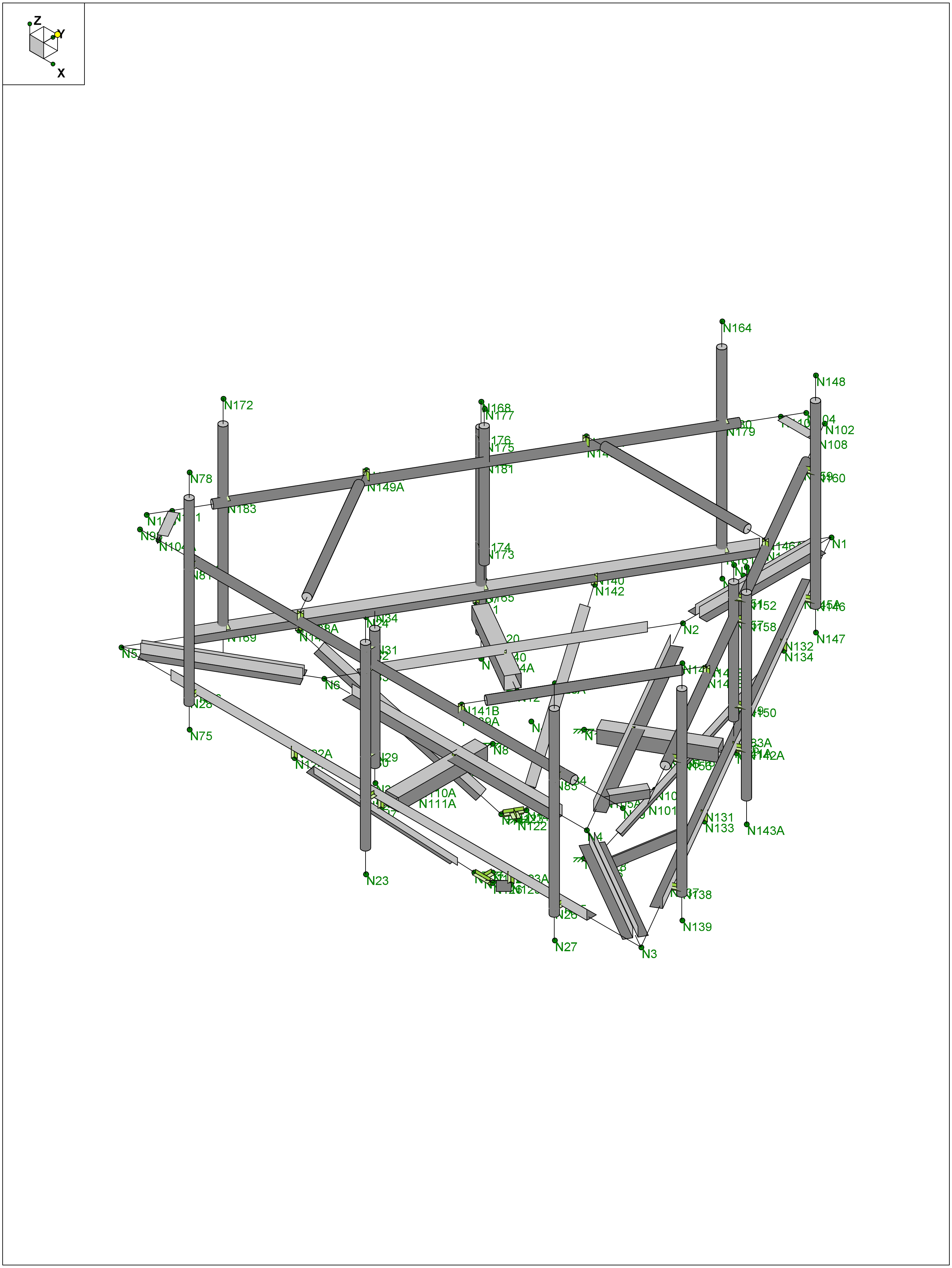
N139
N23
N25
N26
N27
N3
N123A
N125
N150
N152
N158
N160
STRUT2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N147
N169
N132
N134
N5
N6
N2
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N141B
N150
N142A
N143A
N75
N28
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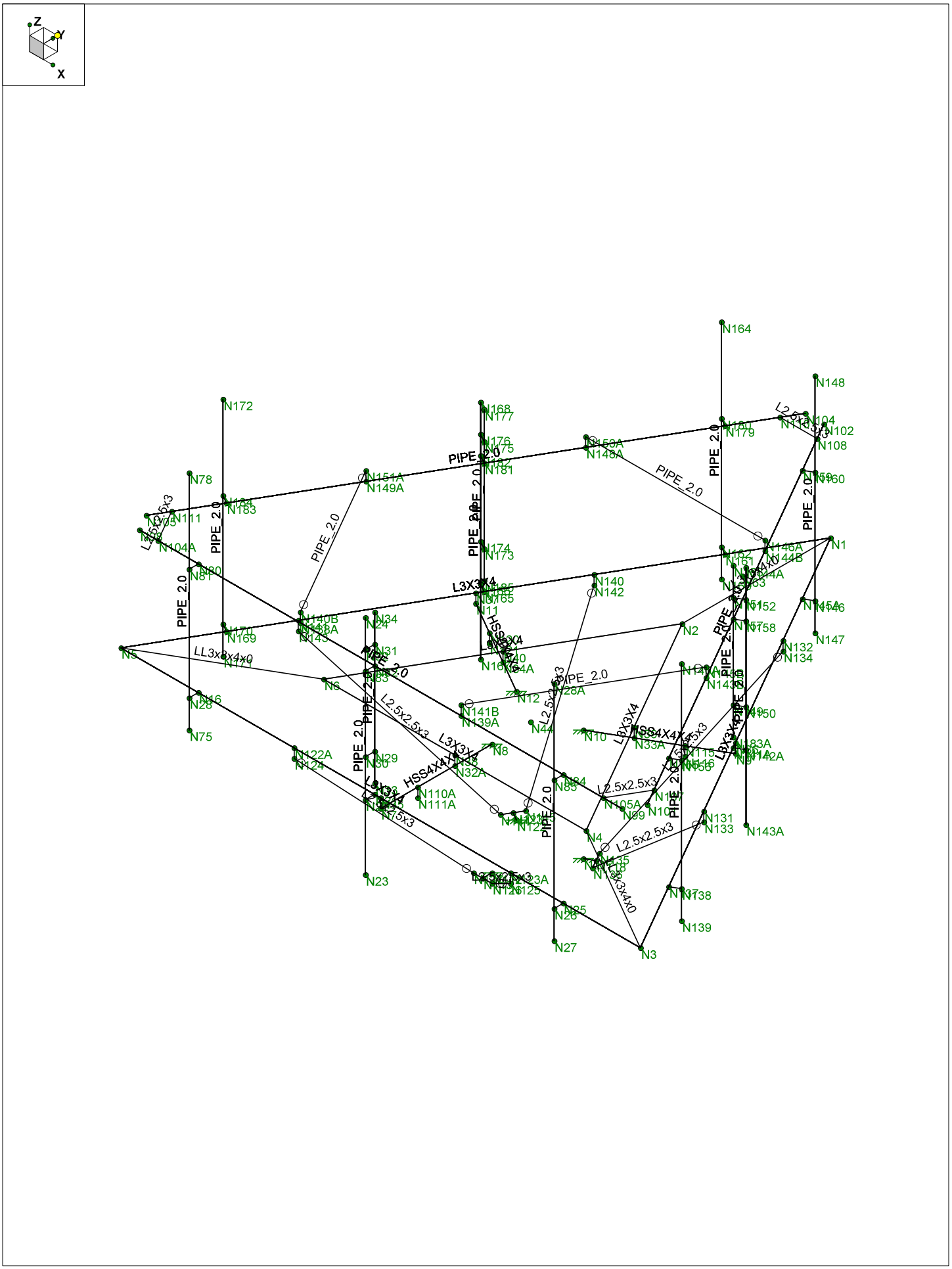
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X
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N183
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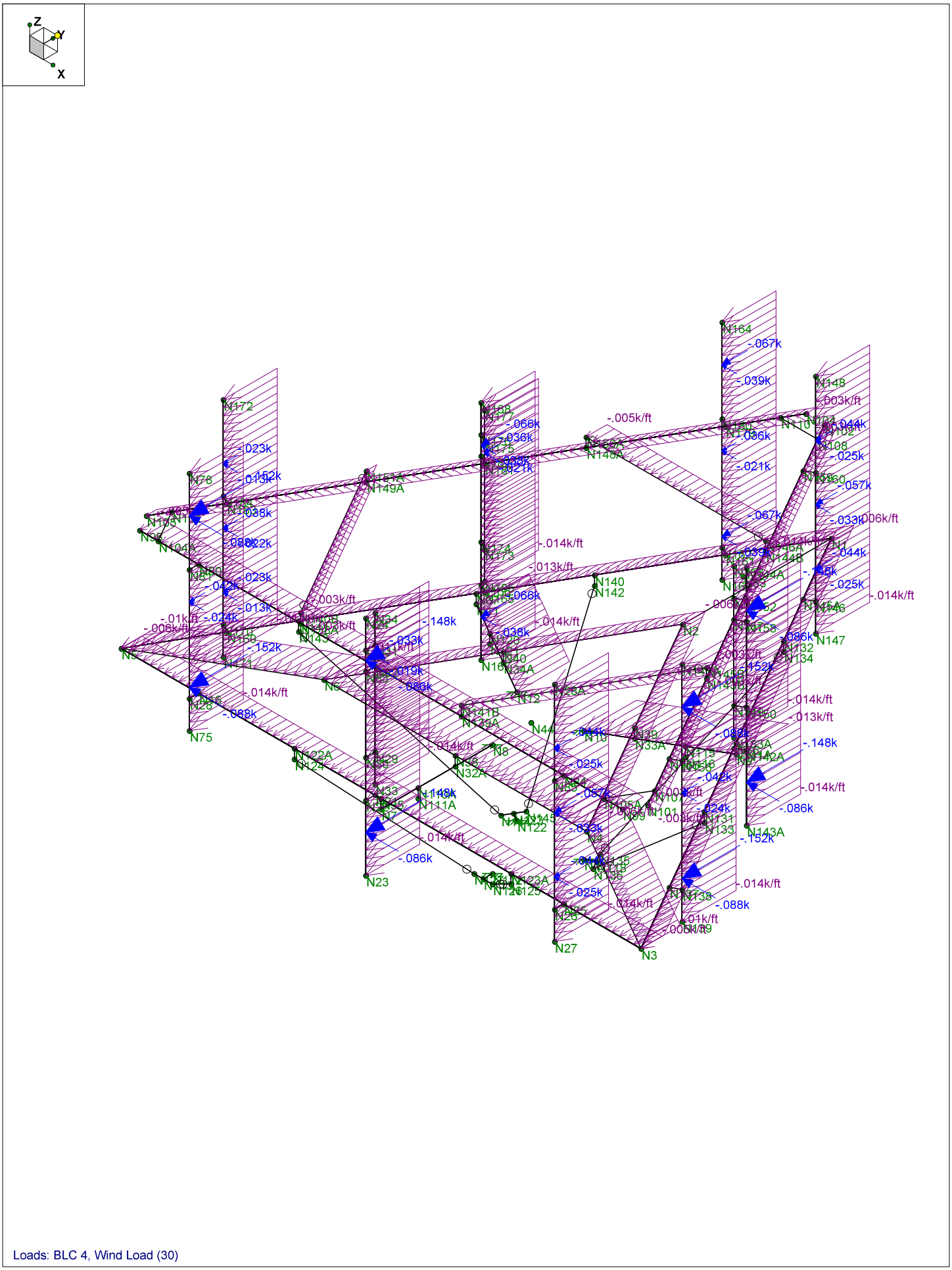
N104A
N80
N81
N174
N173
N162
N161
N146A
N144B
N1
N140
N142
N165
N11
N34
N24
N140B
N143A
N143
N170
N169
N171
N31
N33
N6
N28
N75
N2
N152
N157
N158
N154
N146
N147
N132
N134
N12
N128A
N141B
N139A
N44
N10
N33A
N8
N32A
N122A
N124
N29
N30
N110A
N111A
N84
N85
N105A
N109
N107
N131
N133
N143A
N4
N135
N23
N125
N26
N27
N3
N137
N138
N139
N150
N83A
N142A
N115
N116
N158
N5
PIPE_2.0
L3X3X4
HSS4X4X4
L2.5x2.5x3
L3X3X4x0
LL3x3x4x0
L2.5x2.5x3
L3X3X4
HSS4X4X4
L2.5x2.5x3
L3X3X4
L2.5x2.5x3
L3X3X4x0



Loads: BLC 4, Wind Load (30)

APPENDIX B

Software Input Calculations

POD Job #	**20-64773**
Site Number	**876315**
Site Name	**OAK LANE CC, INC. TOWER (SSUSA**

General Site Information

Mount Type	SFP	Risk Category	II	I (seismic)	1	
V (Wind Speed)	119	I(ice)	1	Sms	0.322	
Zs	295			Sm1	0.130	
ti	1	Ss	0.201	Sds	0.214	
Vi	50	S1	0.054	Sd1	0.086	
Kzt	1	Soil Site Class	D (assumed)	Seismic Design Category		
Exposure	B	Fa	1.600		B	
zg	1200	Fv	2.400	Seismic Analysis Not Required		
α	7			R	2	TIA-222-H 16.7
Kmin	0.7	Tower Type	Monopole	As	1	TIA-222-H 16.7
G_H	1	Tower Height	150.5	Cs, Min	0.03	TIA-222-H 2.7.7.1.1
Ke	0.99			Cs	0.1072	TIA-222-H 2.7.7.1.1
K_D	0.95					
K_s	0.9					

Appurtenance Information

Model	Shielded	% Shielded	Centerline	Centerline on MP	Spacing (in)	Azimuth	Sector	Quantity			MP #
DMP65R-BU6D			104	3	48		A/B/C	1	3		
OPA65R-BU6D			104	3	48		A/B/C	1	2		
7770			104	3	36		A/B/C	1	1		
RRUS 4449 B5/B12			104	3			A/B/C	1	3		
RRUS 8843 B2/B66A			104	3			A/B/C	1	3		
LGP12104			104	3			A/B/C	1	1		
DC6-48-60-18-8F			104	3			A	1	3	4	

Mount Information

Elevation (ft)	102	Grating Thickness (in)	1
K_z	0.99	Grating Ice Weight (k/ft²)	0.014
Kiz	1.12		
tiz	1.12		

	Length (ft)	Width (in)	Centerline
Mount Pipes	6	2.375	104

Round Members

Member	Length (ft)	Width (in)	Frame Member	# of Members
Rail On	14	2.375	Yes	2
Rail Off	14	2.375	No	1
Pipe	4.833	2.375	Yes	3

Flat Members

Member	Length (ft)	Width (in)	Shape	A	B	C	D	Frame Member	# of Members
Face On	14	3	Angle	3	0.25			Yes	2
Face Off	14	3	Angle	3	0.25			No	1
Standoff	3	4	Square HSS	4	0.25	4		No	3
Inner Face	7	3	Angle	3	0.25			No	3
Strut	4	3	D. Angle	3	0.25	0		No	3
Rail Connect	1	2.5	Angle	2.5	0.1875			No	3
Stabilzer	5.208	2.5	Angle	2.5	0.1875			No	6

Version 3.12

Appurtenance Wind Calculations

									Wind Force (Kips)				
Model	Height	Width	Depth	Weight (lbs)	Kz	qz (lb/ft$_2$)	$(EPA)_N$ (ft^2)	$(EPA)_T$(ft^2)	Front	Side	Alpha	Beta	Gamma
DMP65R-BU6D	71.2	20.7	7.7	89.3	1.00	34.05	11.93	4.48	0.406	0.152	0.343	0.343	0.152
OPA65R-BU6D	71.2	21.0	7.8	63.5	1.00	34.05	12.22	4.54	0.416	0.155	0.351	0.351	0.155
7770	55.0	11.0	5.0	35.0	1.00	34.05	3.42	1.56	0.117	0.053	0.101	0.101	0.053
RRUS 4449 B5/B12	17.9	13.2	9.4	71.0	1.00	34.05	1.77	1.27	0.060	0.043	0.056	0.056	0.043
RRUS 8843 B2/B66A	14.9	13.2	10.9	72.0	1.00	34.05	1.48	1.22	0.050	0.041	0.048	0.048	0.041
LGP12104	2.8	19.0	1.0	1.8	1.00	34.05	0.40	0.02	0.014	0.001	0.010	0.010	0.001
DC6-48-60-18-8F	31.3	11.0	11.0	32.8	1.00	34.05	1.09	1.21	0.037	0.041	0.038	0.038	0.041

Appurtenance Ice Calculations

										Wind Force (Kips)				
Model	tiz (in)	Height	Width	Depth	Weight (lbs)	Kiz	qz (lb/ft$_2$)	$(EPA)_N$ (ft^2)	$(EPA)_T$(ft^2)	Front	Side	Alpha	Beta	Gamma
DMP65R-BU6D	1.12	73.44	22.94	9.94	175.20	1.12	6.01	12.28	5.36	0.074	0.032	0.063	0.063	0.032
OPA65R-BU6D	1.12	73.44	23.24	10.04	177.66	1.12	6.01	12.55	5.43	0.075	0.033	0.065	0.065	0.033
7770	1.12	57.24	13.24	7.24	79.92	1.12	6.01	3.86	2.12	0.023	0.013	0.021	0.021	0.013
RRUS 4449 B5/B12	1.12	20.14	15.43	11.68	45.48	1.12	6.01	1.36	1.03	0.008	0.006	0.008	0.008	0.006
RRUS 8843 B2/B66A	1.12	17.14	15.44	13.14	43.29	1.12	6.01	1.16	0.99	0.007	0.006	0.007	0.007	0.006
LGP12104	1.12	5.04	21.24	3.24	9.54	1.12	6.01	0.47	0.07	0.003	0.000	0.002	0.002	0.000
DC6-48-60-18-8F	1.12	33.49	13.24	13.24	67.83	1.12	6.01	1.94	1.94	0.012	0.012	0.012	0.012	0.012

Flat Members

	Wind Calculations								Ice Calculations					
Member	q_z (lb/ft^2)	Af	Cf	EPA	Load (k/ft)		Width (in)	Weight (k/ft)	q_z (lb/ft^2)	Arice	Rrice	Cf	EPA	Load (k/ft)
Face On	33.86	7.00	31.93	100.59	0.243		5.24	0.01	5.98	12.22	-2.29	31.93	-402.12	-0.172
Face Off	33.86	3.50	1.20	3.78	0.005		5.24	0.01	5.98	6.11	-2.29	31.93	-402.12	-0.086
Standoff	33.86	3.00	1.20	1.08	0.006		6.24	0.01	5.98	4.68	-2.29	31.93	-102.62	-0.102
Inner Face	33.86	5.25	1.20	1.89	0.005		5.24	0.01	5.98	9.17	-2.29	31.93	-201.06	-0.086
Strut	33.86	3.00	1.20	1.08	0.005		5.24	0.01	5.98	5.24	-2.29	31.93	-114.89	-0.086

Appurtenance Seismic Calculations

Model	Weight	Sds	ρ	Cs	As	Ev	Eh	
DMP65R-BU6D	89.3	0.214	1.000	0.107	1.000	0.004	0.010	
OPA65R-BU6D	63.5	0.214	1.000	0.107	1.000	0.003	0.007	
7770	35.0	0.214	1.000	0.107	1.000	0.002	0.004	
RRUS 4449 B5/B12	71.0	0.214	1.000	0.107	1.000	0.003	0.008	
RRUS 8843 B2/B66A	72.0	0.214	1.000	0.107	1.000	0.003	0.008	
LGP12104	1.8	0.214	1.000	0.107	1.000	0.000	0.000	
DC6-48-60-18-8F	32.8	0.214	1.000	0.107	1.000	0.001	0.004	

Version 3.12

APPENDIX C

Software Analysis Output

Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top[ft]	Lcomp bot[ft]	L-torq...	Kyy	Kzz	Cb	Function
1	FACE1	L3X3X4	14	7		Lbyy						Lateral
2	FACE2	L3X3X4	14	7		Lbyy						Lateral
3	FACE3	L3X3X4	14	7		Lbyy						Lateral
4	INNERFAC...	L3X3X4	7.072		3.5	Lbyy						Lateral
5	INNERFAC...	L3X3X4	7.072		3.5	Lbyy						Lateral
6	INNERFAC...	L3X3X4	7.072		3.5	Lbyy						Lateral
7	MP ALPHA1	PIPE_2.0	6			Lbyy						Lateral
8	MP ALPHA2	PIPE_2.0	6			Lbyy						Lateral
9	MP ALPHA3	PIPE_2.0	6			Lbyy						Lateral
10	MP ALPHA4	PIPE_2.0	4			Lbyy						Lateral
11	MP BETA1	PIPE_2.0	6			Lbyy						Lateral
12	MP BETA2	PIPE_2.0	6			Lbyy						Lateral
13	MP BETA3	PIPE_2.0	6			Lbyy						Lateral
14	MP BETA4	PIPE_2.0	4			Lbyy						Lateral
15	MP GAMMA1	PIPE_2.0	6			Lbyy						Lateral
16	MP GAMMA2	PIPE_2.0	6			Lbyy						Lateral
17	MP GAMMA3	PIPE_2.0	6			Lbyy						Lateral
18	MP GAMMA4	PIPE_2.0	4			Lbyy						Lateral
19	Pipe1	PIPE_2.0	4.833	7		Lbyy						Lateral
20	Pipe2	PIPE_2.0	4.833	7		Lbyy						Lateral
21	Pipe3	PIPE_2.0	4.833	7		Lbyy						Lateral
22	Rail1	PIPE_2.0	13	7		Lbyy						Lateral
23	Rail2	PIPE_2.0	13	7		Lbyy						Lateral
24	Rail3	PIPE_2.0	13	7		Lbyy						Lateral
25	RailConnect1	L2.5x2.5x3	1			Lbyy						Lateral
26	RailConnect2	L2.5x2.5x3	1			Lbyy						Lateral
27	RailConnect3	L2.5x2.5x3	1			Lbyy						Lateral
28	STANDOFF1	HSS4X4X4	3			Lbyy						Lateral
29	STANDOFF3	HSS4X4X4	3			Lbyy						Lateral
30	STANDOFF5	HSS4X4X4	3			Lbyy						Lateral
31	STRUT1	LL3x3x4x0	4			Lbyy						Lateral
32	STRUT2	LL3x3x4x0	4			Lbyy						Lateral
33	STRUT3	LL3x3x4x0	4			Lbyy						Lateral
34	Stabilizer1	L2.5x2.5x3	4.572			Lbyy						Lateral
35	Stabilizer2	L2.5x2.5x3	5.208			Lbyy						Lateral
36	Stabilizer3	L2.5x2.5x3	4.572			Lbyy						Lateral
37	Stabilizer4	L2.5x2.5x3	5.208			Lbyy						Lateral
38	Stabilizer5	L2.5x2.5x3	4.572			Lbyy						Lateral
39	Stabilizer6	L2.5x2.5x3	5.208			Lbyy						Lateral

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
1	1	N16	N28			RIGID	None	None	RIGID	Typical
2	2	N21	N22			RIGID	None	None	RIGID	Typical
3	3	N25	N26			RIGID	None	None	RIGID	Typical
4	4	N29	N30			RIGID	None	None	RIGID	Typical
5	5	N31	N32			RIGID	None	None	RIGID	Typical
6	6	N35	N7			RIGID	None	None	RIGID	Typical
7	7	N38	N32A			RIGID	None	None	RIGID	Typical
8	8	N39	N33A			RIGID	None	None	RIGID	Typical
9	9	N36	N9			RIGID	None	None	RIGID	Typical
10	10	N40	N34A			RIGID	None	None	RIGID	Typical
11	11	N37	N11			RIGID	None	None	RIGID	Typical
12	22	N80	N81			RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
13	23	N82	N83			RIGID	None	None	RIGID	Typical
14	24	N84	N85			RIGID	None	None	RIGID	Typical
15	31	N110A	N111A			RIGID	None	None	RIGID	Typical
16	32	N113	N112			RIGID	None	None	RIGID	Typical
17	33	N115	N116			RIGID	None	None	RIGID	Typical
18	34	N118	N117			RIGID	None	None	RIGID	Typical
19	35	N120	N121			RIGID	None	None	RIGID	Typical
20	36	N123	N122			RIGID	None	None	RIGID	Typical
21	37	N122A	N124			RIGID	None	None	RIGID	Typical
22	38	N123A	N125			RIGID	None	None	RIGID	Typical
23	39	N127	N126			RIGID	None	None	RIGID	Typical
24	40	N118	N117			RIGID	None	None	RIGID	Typical
25	41	N131	N133			RIGID	None	None	RIGID	Typical
26	42	N132	N134			RIGID	None	None	RIGID	Typical
27	43	N136	N135			RIGID	None	None	RIGID	Typical
28	44	N123	N122			RIGID	None	None	RIGID	Typical
29	45	N140	N142			RIGID	None	None	RIGID	Typical
30	46	N141	N143			RIGID	None	None	RIGID	Typical
31	47	N145	N144			RIGID	None	None	RIGID	Typical
32	50	N137	N138			RIGID	None	None	RIGID	Typical
33	51	N141A	N142A			RIGID	None	None	RIGID	Typical
34	52	N145A	N146			RIGID	None	None	RIGID	Typical
35	53	N149	N150			RIGID	None	None	RIGID	Typical
36	54	N151	N152			RIGID	None	None	RIGID	Typical
37	55	N155	N156			RIGID	None	None	RIGID	Typical
38	56	N157	N158			RIGID	None	None	RIGID	Typical
39	57	N159	N160			RIGID	None	None	RIGID	Typical
40	58	N161	N162			RIGID	None	None	RIGID	Typical
41	59	N165	N166			RIGID	None	None	RIGID	Typical
42	60	N169	N170			RIGID	None	None	RIGID	Typical
43	61	N173	N174			RIGID	None	None	RIGID	Typical
44	62	N175	N176			RIGID	None	None	RIGID	Typical
45	63	N179	N180			RIGID	None	None	RIGID	Typical
46	64	N181	N182			RIGID	None	None	RIGID	Typical
47	65	N183	N184			RIGID	None	None	RIGID	Typical
48	67	N138A	N140B			RIGID	None	None	RIGID	Typical
49	68	N139A	N141B			RIGID	None	None	RIGID	Typical
50	69	N143B	N145B			RIGID	None	None	RIGID	Typical
51	70	N144B	N146A			RIGID	None	None	RIGID	Typical
52	71	N148A	N150A			RIGID	None	None	RIGID	Typical
53	72	N149A	N151A			RIGID	None	None	RIGID	Typical
54	FACE1	N3	N5		270	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical
55	FACE2	N5	N1		90	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical
56	FACE3	N1	N3		90	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical
57	INNERFACE1	N6	N4		90	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical
58	INNERFACE2	N4	N2		270	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical
59	INNERFACE3	N2	N6		270	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical
60	MP ALPHA1	N27	N28A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
61	MP ALPHA2	N23	N24			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
62	MP ALPHA3	N75	N78			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
63	MP ALPHA4	N33	N34			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
64	MP BETA1	N171	N172			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
65	MP BETA2	N167	N168			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
66	MP BETA3	N163	N164			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
67	MP BETA4	N185	N177			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
68	MP GAMMA1	N147	N148			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
69	MP GAMMA2	N143A	N144A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical

Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(...	Section/Shape	Type	Design List	Material	Design R...
70	MP GAMMA3	N139	N140A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
71	MP GAMMA4	N183A	N153			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
72	Pipe1	N140B	N151A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
73	Pipe2	N145B	N141B			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
74	Pipe3	N150A	N146A			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
75	Rail1	N98	N99			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
76	Rail2	N101	N102			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
77	Rail3	N104	N105			PIPE_2.0	Beam	Pipe	A53 Gr.B	Typical
78	RailConnect1	N104A	N111			L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical
79	RailConnect2	N107	N105A			L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical
80	RailConnect3	N110	N108		180	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical
81	STANDOFF1	N7	N8			HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical
82	STANDOFF3	N9	N10			HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical
83	STANDOFF5	N11	N12			HSS4X4X4	Beam	SquareTube	A500 Gr.B Rect	Typical
84	STRUT1	N5	N6		270	LL3x3x4x0	Beam	Double Angle (3/8 G...	A36 Gr.36	Typical
85	STRUT2	N3	N4		90	LL3x3x4x0	Beam	Double Angle (3/8 G...	A36 Gr.36	Typical
86	STRUT3	N1	N2		90	LL3x3x4x0	Beam	Double Angle (3/8 G...	A36 Gr.36	Typical
87	Stabilizer1	N124	N127		150	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical
88	Stabilizer2	N126	N125		150	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical
89	Stabilizer3	N133	N136			L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical
90	Stabilizer4	N135	N134		240	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical
91	Stabilizer5	N142	N145		210	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical
92	Stabilizer6	N144	N143			L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ra...	Analysis ...	Inactive	Seismic...
1	1						Yes	** NA **			None
2	2						Yes	** NA **			None
3	3						Yes	** NA **			None
4	4						Yes	** NA **			None
5	5						Yes	** NA **			None
6	6						Yes	** NA **			None
7	7						Yes	** NA **			None
8	8						Yes	** NA **			None
9	9						Yes	** NA **			None
10	10						Yes	** NA **			None
11	11						Yes	** NA **			None
12	22						Yes	** NA **			None
13	23						Yes	** NA **			None
14	24						Yes	** NA **			None
15	31						Yes	** NA **			None
16	32						Yes	** NA **			None
17	33						Yes	** NA **			None
18	34						Yes	** NA **			None
19	35						Yes	** NA **			None
20	36						Yes	** NA **			None
21	37						Yes	** NA **			None
22	38						Yes	** NA **			None
23	39						Yes	** NA **			None
24	40						Yes	** NA **			None
25	41						Yes	** NA **			None
26	42						Yes	** NA **			None
27	43						Yes	** NA **			None
28	44						Yes	** NA **			None
29	45						Yes	** NA **			None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ra...	Analysis ...	Inactive	Seismic...
30	46						Yes	** NA **			None
31	47						Yes	** NA **			None
32	50						Yes	** NA **			None
33	51						Yes	** NA **			None
34	52						Yes	** NA **			None
35	53						Yes	** NA **			None
36	54						Yes	** NA **			None
37	55						Yes	** NA **			None
38	56						Yes	** NA **			None
39	57						Yes	** NA **			None
40	58						Yes	** NA **			None
41	59						Yes	** NA **			None
42	60						Yes	** NA **			None
43	61						Yes	** NA **			None
44	62						Yes	** NA **			None
45	63						Yes	** NA **			None
46	64						Yes	** NA **			None
47	65						Yes	** NA **			None
48	67						Yes	** NA **			None
49	68						Yes	** NA **			None
50	69						Yes	** NA **			None
51	70						Yes	** NA **			None
52	71						Yes	** NA **			None
53	72						Yes	** NA **			None
54	FACE1						Yes				None
55	FACE2						Yes				None
56	FACE3						Yes				None
57	INNERFACE1						Yes				None
58	INNERFACE2						Yes				None
59	INNERFACE3						Yes				None
60	MP ALPHA1						Yes				None
61	MP ALPHA2						Yes				None
62	MP ALPHA3						Yes				None
63	MP ALPHA4						Yes				None
64	MP BETA1						Yes				None
65	MP BETA2						Yes				None
66	MP BETA3						Yes				None
67	MP BETA4						Yes				None
68	MP GAMMA1						Yes	Default			None
69	MP GAMMA2						Yes				None
70	MP GAMMA3						Yes				None
71	MP GAMMA4						Yes				None
72	Pipe1	OOOOOX	OOOOOX				Yes	Default			None
73	Pipe2	OOOOOX	OOOOOX				Yes	Default			None
74	Pipe3	OOOOOX	OOOOOX				Yes	Default			None
75	Rail1						Yes				None
76	Rail2						Yes				None
77	Rail3						Yes				None
78	RailConnect1						Yes				None
79	RailConnect2						Yes				None
80	RailConnect3						Yes				None
81	STANDOFF1						Yes				None
82	STANDOFF3						Yes				None
83	STANDOFF5						Yes				None
84	STRUT1						Yes				None
85	STRUT2						Yes				None
86	STRUT3						Yes				None

Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ra...	Analysis ...	Inactive	Seismic...
87	Stabilizer1	OOOOOX	OOOOOX				Yes	Default			None
88	Stabilizer2	OOOOOX	OOOOOX				Yes	Default			None
89	Stabilizer3	OOOOOX	OOOOOX				Yes	Default			None
90	Stabilizer4	OOOOOX	OOOOOX				Yes	Default			None
91	Stabilizer5	OOOOOX	OOOOOX				Yes	Default			None
92	Stabilizer6	OOOOOX	OOOOOX				Yes	Default			None

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (\1E5 ...	Density[k/ft^3]	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

Member Point Loads (BLC 1 : Live Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	FACE1	Z	-.5	0

Member Point Loads (BLC 2 : Wind Load (0))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.203	5
2	MP ALPHA2	Y	-.203	1
3	MP BETA2	Y	-.108	5
4	MP BETA2	Y	-.108	1
5	MP GAMMA2	Y	-.108	5
6	MP GAMMA2	Y	-.108	1
7	MP ALPHA3	Y	-.208	5
8	MP ALPHA3	Y	-.208	1
9	MP BETA3	Y	-.11	5
10	MP BETA3	Y	-.11	1
11	MP GAMMA3	Y	-.11	5
12	MP GAMMA3	Y	-.11	1
13	MP ALPHA1	Y	-.058	4.5
14	MP ALPHA1	Y	-.058	1.5
15	MP BETA1	Y	-.034	4.5
16	MP BETA1	Y	-.034	1.5
17	MP GAMMA1	Y	-.034	4.5
18	MP GAMMA1	Y	-.034	1.5
19	MP ALPHA1	Y	-.06	3
20	MP BETA1	Y	-.047	3
21	MP GAMMA1	Y	-.047	3
22	MP ALPHA3	Y	-.05	3
23	MP BETA3	Y	-.044	3
24	MP GAMMA3	Y	-.044	3
25	MP ALPHA1	Y	-.014	3
26	MP BETA1	Y	-.004	3
27	MP GAMMA1	Y	-.004	3
28	MP ALPHA4	Y	-.037	3
29	MP BETA4	Y	-.04	3

Member Point Loads (BLC 3 : Dead Load)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.045	5
2	MP ALPHA2	Z	-.045	1
3	MP BETA2	Z	-.045	5
4	MP BETA2	Z	-.045	1
5	MP GAMMA2	Z	-.045	5
6	MP GAMMA2	Z	-.045	1
7	MP ALPHA3	Z	-.032	5
8	MP ALPHA3	Z	-.032	1
9	MP BETA3	Z	-.032	5
10	MP BETA3	Z	-.032	1
11	MP GAMMA3	Z	-.032	5
12	MP GAMMA3	Z	-.032	1
13	MP ALPHA1	Z	-.018	4.5
14	MP ALPHA1	Z	-.018	1.5
15	MP BETA1	Z	-.018	4.5
16	MP BETA1	Z	-.018	1.5
17	MP GAMMA1	Z	-.018	4.5
18	MP GAMMA1	Z	-.018	1.5
19	MP ALPHA1	Z	-.071	3
20	MP BETA1	Z	-.071	3
21	MP GAMMA1	Z	-.071	3
22	MP ALPHA3	Z	-.072	3
23	MP BETA3	Z	-.072	3
24	MP GAMMA3	Z	-.072	3
25	MP ALPHA1	Z	-.002	3
26	MP BETA1	Z	-.002	3
27	MP GAMMA1	Z	-.002	3
28	MP ALPHA4	Z	-.033	3
29	MP BETA4	Z	-.033	3

Member Point Loads (BLC 4 : Wind Load (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.148	5
2	MP ALPHA2	Y	-.148	1
3	MP ALPHA2	X	-.086	5
4	MP ALPHA2	X	-.086	1
5	MP BETA2	Y	-.066	5
6	MP BETA2	Y	-.066	1
7	MP BETA2	X	-.038	5
8	MP BETA2	X	-.038	1
9	MP GAMMA2	Y	-.148	5
10	MP GAMMA2	Y	-.148	1
11	MP GAMMA2	X	-.086	5
12	MP GAMMA2	X	-.086	1
13	MP ALPHA3	Y	-.152	5
14	MP ALPHA3	Y	-.152	1
15	MP ALPHA3	X	-.088	5
16	MP ALPHA3	X	-.088	1
17	MP BETA3	Y	-.067	5
18	MP BETA3	Y	-.067	1
19	MP BETA3	X	-.039	5
20	MP BETA3	X	-.039	1
21	MP GAMMA3	Y	-.152	5
22	MP GAMMA3	Y	-.152	1
23	MP GAMMA3	X	-.088	5
24	MP GAMMA3	X	-.088	1

Member Point Loads (BLC 4 : Wind Load (30)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
25	MP ALPHA1	Y	-.044	4.5
26	MP ALPHA1	Y	-.044	1.5
27	MP ALPHA1	X	-.025	4.5
28	MP ALPHA1	X	-.025	1.5
29	MP BETA1	Y	-.023	4.5
30	MP BETA1	Y	-.023	1.5
31	MP BETA1	X	-.013	4.5
32	MP BETA1	X	-.013	1.5
33	MP GAMMA1	Y	-.044	4.5
34	MP GAMMA1	Y	-.044	1.5
35	MP GAMMA1	X	-.025	4.5
36	MP GAMMA1	X	-.025	1.5
37	MP ALPHA1	Y	-.049	3
38	MP ALPHA1	X	-.028	3
39	MP BETA1	Y	-.037	3
40	MP BETA1	X	-.022	3
41	MP GAMMA1	Y	-.049	3
42	MP GAMMA1	X	-.028	3
43	MP ALPHA3	Y	-.042	3
44	MP ALPHA3	X	-.024	3
45	MP BETA3	Y	-.036	3
46	MP BETA3	X	-.021	3
47	MP GAMMA3	Y	-.042	3
48	MP GAMMA3	X	-.024	3
49	MP ALPHA1	Y	-.009	3
50	MP ALPHA1	X	-.005	3
51	MP BETA1	Y	-.000626	3
52	MP BETA1	X	-.000362	3
53	MP GAMMA1	Y	-.009	3
54	MP GAMMA1	X	-.005	3
55	MP ALPHA4	Y	-.033	3
56	MP ALPHA4	X	-.019	3
57	MP BETA4	Y	-.036	3
58	MP BETA4	X	-.021	3

Member Point Loads (BLC 5 : Wind Load (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.054	5
2	MP ALPHA2	Y	-.054	1
3	MP ALPHA2	X	-.093	5
4	MP ALPHA2	X	-.093	1
5	MP BETA2	Y	-.054	5
6	MP BETA2	Y	-.054	1
7	MP BETA2	X	-.093	5
8	MP BETA2	X	-.093	1
9	MP GAMMA2	Y	-.102	5
10	MP GAMMA2	Y	-.102	1
11	MP GAMMA2	X	-.176	5
12	MP GAMMA2	X	-.176	1
13	MP ALPHA3	Y	-.055	5
14	MP ALPHA3	Y	-.055	1
15	MP ALPHA3	X	-.095	5
16	MP ALPHA3	X	-.095	1
17	MP BETA3	Y	-.055	5
18	MP BETA3	Y	-.055	1
19	MP BETA3	X	-.095	5

Member Point Loads (BLC 5 : Wind Load (60)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
20	MP BETA3	X	-.095	1
21	MP GAMMA3	Y	-.104	5
22	MP GAMMA3	Y	-.104	1
23	MP GAMMA3	X	-.18	5
24	MP GAMMA3	X	-.18	1
25	MP ALPHA1	Y	-.017	4.5
26	MP ALPHA1	Y	-.017	1.5
27	MP ALPHA1	X	-.03	4.5
28	MP ALPHA1	X	-.03	1.5
29	MP BETA1	Y	-.017	4.5
30	MP BETA1	Y	-.017	1.5
31	MP BETA1	X	-.03	4.5
32	MP BETA1	X	-.03	1.5
33	MP GAMMA1	Y	-.029	4.5
34	MP GAMMA1	Y	-.029	1.5
35	MP GAMMA1	X	-.05	4.5
36	MP GAMMA1	X	-.05	1.5
37	MP ALPHA1	Y	-.024	3
38	MP ALPHA1	X	-.041	3
39	MP BETA1	Y	-.024	3
40	MP BETA1	X	-.041	3
41	MP GAMMA1	Y	-.03	3
42	MP GAMMA1	X	-.052	3
43	MP ALPHA3	Y	-.022	3
44	MP ALPHA3	X	-.038	3
45	MP BETA3	Y	-.022	3
46	MP BETA3	X	-.038	3
47	MP GAMMA3	Y	-.025	3
48	MP GAMMA3	X	-.044	3
49	MP ALPHA1	Y	-.002	3
50	MP ALPHA1	X	-.003	3
51	MP BETA1	Y	-.002	3
52	MP BETA1	X	-.003	3
53	MP GAMMA1	Y	-.007	3
54	MP GAMMA1	X	-.012	3
55	MP ALPHA4	Y	-.02	3
56	MP ALPHA4	X	-.035	3
57	MP BETA4	Y	-.02	3
58	MP BETA4	X	-.035	3

Member Point Loads (BLC 6 : Wind Load (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.076	5
2	MP ALPHA2	X	-.076	1
3	MP BETA2	X	-.171	5
4	MP BETA2	X	-.171	1
5	MP GAMMA2	X	-.171	5
6	MP GAMMA2	X	-.171	1
7	MP ALPHA3	X	-.077	5
8	MP ALPHA3	X	-.077	1
9	MP BETA3	X	-.175	5
10	MP BETA3	X	-.175	1
11	MP GAMMA3	X	-.175	5
12	MP GAMMA3	X	-.175	1
13	MP ALPHA1	X	-.027	4.5
14	MP ALPHA1	X	-.027	1.5

Member Point Loads (BLC 6 : Wind Load (90)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP BETA1	X	-.05	4.5
16	MP BETA1	X	-.05	1.5
17	MP GAMMA1	X	-.05	4.5
18	MP GAMMA1	X	-.05	1.5
19	MP ALPHA1	X	-.043	3
20	MP BETA1	X	-.056	3
21	MP GAMMA1	X	-.056	3
22	MP ALPHA3	X	-.041	3
23	MP BETA3	X	-.048	3
24	MP GAMMA3	X	-.048	3
25	MP ALPHA1	X	-.000723	3
26	MP BETA1	X	-.01	3
27	MP GAMMA1	X	-.01	3
28	MP ALPHA4	X	-.041	3
29	MP BETA4	X	-.038	3

Member Point Loads (BLC 7 : Wind Load (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.054	5
2	MP ALPHA2	Y	.054	1
3	MP ALPHA2	X	-.093	5
4	MP ALPHA2	X	-.093	1
5	MP BETA2	Y	.102	5
6	MP BETA2	Y	.102	1
7	MP BETA2	X	-.176	5
8	MP BETA2	X	-.176	1
9	MP GAMMA2	Y	.054	5
10	MP GAMMA2	Y	.054	1
11	MP GAMMA2	X	-.093	5
12	MP GAMMA2	X	-.093	1
13	MP ALPHA3	Y	.055	5
14	MP ALPHA3	Y	.055	1
15	MP ALPHA3	X	-.095	5
16	MP ALPHA3	X	-.095	1
17	MP BETA3	Y	.104	5
18	MP BETA3	Y	.104	1
19	MP BETA3	X	-.18	5
20	MP BETA3	X	-.18	1
21	MP GAMMA3	Y	.055	5
22	MP GAMMA3	Y	.055	1
23	MP GAMMA3	X	-.095	5
24	MP GAMMA3	X	-.095	1
25	MP ALPHA1	Y	.017	4.5
26	MP ALPHA1	Y	.017	1.5
27	MP ALPHA1	X	-.03	4.5
28	MP ALPHA1	X	-.03	1.5
29	MP BETA1	Y	.029	4.5
30	MP BETA1	Y	.029	1.5
31	MP BETA1	X	-.05	4.5
32	MP BETA1	X	-.05	1.5
33	MP GAMMA1	Y	.017	4.5
34	MP GAMMA1	Y	.017	1.5
35	MP GAMMA1	X	-.03	4.5
36	MP GAMMA1	X	-.03	1.5
37	MP ALPHA1	Y	.024	3
38	MP ALPHA1	X	-.041	3

Member Point Loads (BLC 7 : Wind Load (120)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
39	MP BETA1	Y	.03	3
40	MP BETA1	X	-.052	3
41	MP GAMMA1	Y	.024	3
42	MP GAMMA1	X	-.041	3
43	MP ALPHA3	Y	.022	3
44	MP ALPHA3	X	-.038	3
45	MP BETA3	Y	.025	3
46	MP BETA3	X	-.044	3
47	MP GAMMA3	Y	.022	3
48	MP GAMMA3	X	-.038	3
49	MP ALPHA1	Y	.002	3
50	MP ALPHA1	X	-.003	3
51	MP BETA1	Y	.007	3
52	MP BETA1	X	-.012	3
53	MP GAMMA1	Y	.002	3
54	MP GAMMA1	X	-.003	3
55	MP ALPHA4	Y	.02	3
56	MP ALPHA4	X	-.035	3
57	MP BETA4	Y	.019	3
58	MP BETA4	X	-.032	3

Member Point Loads (BLC 8 : Wind Load (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.148	5
2	MP ALPHA2	Y	.148	1
3	MP ALPHA2	X	-.086	5
4	MP ALPHA2	X	-.086	1
5	MP BETA2	Y	.148	5
6	MP BETA2	Y	.148	1
7	MP BETA2	X	-.086	5
8	MP BETA2	X	-.086	1
9	MP GAMMA2	Y	.066	5
10	MP GAMMA2	Y	.066	1
11	MP GAMMA2	X	-.038	5
12	MP GAMMA2	X	-.038	1
13	MP ALPHA3	Y	.152	5
14	MP ALPHA3	Y	.152	1
15	MP ALPHA3	X	-.088	5
16	MP ALPHA3	X	-.088	1
17	MP BETA3	Y	.152	5
18	MP BETA3	Y	.152	1
19	MP BETA3	X	-.088	5
20	MP BETA3	X	-.088	1
21	MP GAMMA3	Y	.067	5
22	MP GAMMA3	Y	.067	1
23	MP GAMMA3	X	-.039	5
24	MP GAMMA3	X	-.039	1
25	MP ALPHA1	Y	.044	4.5
26	MP ALPHA1	Y	.044	1.5
27	MP ALPHA1	X	-.025	4.5
28	MP ALPHA1	X	-.025	1.5
29	MP BETA1	Y	.044	4.5
30	MP BETA1	Y	.044	1.5
31	MP BETA1	X	-.025	4.5
32	MP BETA1	X	-.025	1.5
33	MP GAMMA1	Y	.023	4.5

Member Point Loads (BLC 8 : Wind Load (150)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
34	MP GAMMA1	Y	.023	1.5
35	MP GAMMA1	X	-.013	4.5
36	MP GAMMA1	X	-.013	1.5
37	MP ALPHA1	Y	.049	3
38	MP ALPHA1	X	-.028	3
39	MP BETA1	Y	.049	3
40	MP BETA1	X	-.028	3
41	MP GAMMA1	Y	.037	3
42	MP GAMMA1	X	-.022	3
43	MP ALPHA3	Y	.042	3
44	MP ALPHA3	X	-.024	3
45	MP BETA3	Y	.042	3
46	MP BETA3	X	-.024	3
47	MP GAMMA3	Y	.036	3
48	MP GAMMA3	X	-.021	3
49	MP ALPHA1	Y	.009	3
50	MP ALPHA1	X	-.005	3
51	MP BETA1	Y	.009	3
52	MP BETA1	X	-.005	3
53	MP GAMMA1	Y	.000626	3
54	MP GAMMA1	X	-.000362	3
55	MP ALPHA4	Y	.033	3
56	MP ALPHA4	X	-.019	3
57	MP BETA4	Y	.033	3
58	MP BETA4	X	-.019	3

Member Point Loads (BLC 9 : Wind Load (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.203	5
2	MP ALPHA2	Y	.203	1
3	MP BETA2	Y	.108	5
4	MP BETA2	Y	.108	1
5	MP GAMMA2	Y	.108	5
6	MP GAMMA2	Y	.108	1
7	MP ALPHA3	Y	.208	5
8	MP ALPHA3	Y	.208	1
9	MP BETA3	Y	.11	5
10	MP BETA3	Y	.11	1
11	MP GAMMA3	Y	.11	5
12	MP GAMMA3	Y	.11	1
13	MP ALPHA1	Y	.058	4.5
14	MP ALPHA1	Y	.058	1.5
15	MP BETA1	Y	.034	4.5
16	MP BETA1	Y	.034	1.5
17	MP GAMMA1	Y	.034	4.5
18	MP GAMMA1	Y	.034	1.5
19	MP ALPHA1	Y	.06	3
20	MP BETA1	Y	.047	3
21	MP GAMMA1	Y	.047	3
22	MP ALPHA3	Y	.05	3
23	MP BETA3	Y	.044	3
24	MP GAMMA3	Y	.044	3
25	MP ALPHA1	Y	.014	3
26	MP BETA1	Y	.004	3
27	MP GAMMA1	Y	.004	3
28	MP ALPHA4	Y	.037	3

Member Point Loads (BLC 9 : Wind Load (180)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
29	MP BETA4	Y	.04	3

Member Point Loads (BLC 10 : Wind Load (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.148	5
2	MP ALPHA2	Y	.148	1
3	MP ALPHA2	X	.086	5
4	MP ALPHA2	X	.086	1
5	MP BETA2	Y	.066	5
6	MP BETA2	Y	.066	1
7	MP BETA2	X	.038	5
8	MP BETA2	X	.038	1
9	MP GAMMA2	Y	.148	5
10	MP GAMMA2	Y	.148	1
11	MP GAMMA2	X	.086	5
12	MP GAMMA2	X	.086	1
13	MP ALPHA3	Y	.152	5
14	MP ALPHA3	Y	.152	1
15	MP ALPHA3	X	.088	5
16	MP ALPHA3	X	.088	1
17	MP BETA3	Y	.067	5
18	MP BETA3	Y	.067	1
19	MP BETA3	X	.039	5
20	MP BETA3	X	.039	1
21	MP GAMMA3	Y	.152	5
22	MP GAMMA3	Y	.152	1
23	MP GAMMA3	X	.088	5
24	MP GAMMA3	X	.088	1
25	MP ALPHA1	Y	.044	4.5
26	MP ALPHA1	Y	.044	1.5
27	MP ALPHA1	X	.025	4.5
28	MP ALPHA1	X	.025	1.5
29	MP BETA1	Y	.023	4.5
30	MP BETA1	Y	.023	1.5
31	MP BETA1	X	.013	4.5
32	MP BETA1	X	.013	1.5
33	MP GAMMA1	Y	.044	4.5
34	MP GAMMA1	Y	.044	1.5
35	MP GAMMA1	X	.025	4.5
36	MP GAMMA1	X	.025	1.5
37	MP ALPHA1	Y	.049	3
38	MP ALPHA1	X	.028	3
39	MP BETA1	Y	.037	3
40	MP BETA1	X	.022	3
41	MP GAMMA1	Y	.049	3
42	MP GAMMA1	X	.028	3
43	MP ALPHA3	Y	.042	3
44	MP ALPHA3	X	.024	3
45	MP BETA3	Y	.036	3
46	MP BETA3	X	.021	3
47	MP GAMMA3	Y	.042	3
48	MP GAMMA3	X	.024	3
49	MP ALPHA1	Y	.009	3
50	MP ALPHA1	X	.005	3
51	MP BETA1	Y	.000626	3
52	MP BETA1	X	.000362	3

Member Point Loads (BLC 10 : Wind Load (210)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
53	MP GAMMA1	Y	.009	3
54	MP GAMMA1	X	.005	3
55	MP ALPHA4	Y	.033	3
56	MP ALPHA4	X	.019	3
57	MP BETA4	Y	.036	3
58	MP BETA4	X	.021	3

Member Point Loads (BLC 11 : Wind Load (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.054	5
2	MP ALPHA2	Y	.054	1
3	MP ALPHA2	X	.093	5
4	MP ALPHA2	X	.093	1
5	MP BETA2	Y	.054	5
6	MP BETA2	Y	.054	1
7	MP BETA2	X	.093	5
8	MP BETA2	X	.093	1
9	MP GAMMA2	Y	.102	5
10	MP GAMMA2	Y	.102	1
11	MP GAMMA2	X	.176	5
12	MP GAMMA2	X	.176	1
13	MP ALPHA3	Y	.055	5
14	MP ALPHA3	Y	.055	1
15	MP ALPHA3	X	.095	5
16	MP ALPHA3	X	.095	1
17	MP BETA3	Y	.055	5
18	MP BETA3	Y	.055	1
19	MP BETA3	X	.095	5
20	MP BETA3	X	.095	1
21	MP GAMMA3	Y	.104	5
22	MP GAMMA3	Y	.104	1
23	MP GAMMA3	X	.18	5
24	MP GAMMA3	X	.18	1
25	MP ALPHA1	Y	.017	4.5
26	MP ALPHA1	Y	.017	1.5
27	MP ALPHA1	X	.03	4.5
28	MP ALPHA1	X	.03	1.5
29	MP BETA1	Y	.017	4.5
30	MP BETA1	Y	.017	1.5
31	MP BETA1	X	.03	4.5
32	MP BETA1	X	.03	1.5
33	MP GAMMA1	Y	.029	4.5
34	MP GAMMA1	Y	.029	1.5
35	MP GAMMA1	X	.05	4.5
36	MP GAMMA1	X	.05	1.5
37	MP ALPHA1	Y	.024	3
38	MP ALPHA1	X	.041	3
39	MP BETA1	Y	.024	3
40	MP BETA1	X	.041	3
41	MP GAMMA1	Y	.03	3
42	MP GAMMA1	X	.052	3
43	MP ALPHA3	Y	.022	3
44	MP ALPHA3	X	.038	3
45	MP BETA3	Y	.022	3
46	MP BETA3	X	.038	3
47	MP GAMMA3	Y	.025	3

Member Point Loads (BLC 11 : Wind Load (240)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
48	MP GAMMA3	X	.044	3
49	MP ALPHA1	Y	.002	3
50	MP ALPHA1	X	.003	3
51	MP BETA1	Y	.002	3
52	MP BETA1	X	.003	3
53	MP GAMMA1	Y	.007	3
54	MP GAMMA1	X	.012	3
55	MP ALPHA4	Y	.02	3
56	MP ALPHA4	X	.035	3
57	MP BETA4	Y	.02	3
58	MP BETA4	X	.035	3

Member Point Loads (BLC 12 : Wind Load (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.076	5
2	MP ALPHA2	X	.076	1
3	MP BETA2	X	.171	5
4	MP BETA2	X	.171	1
5	MP GAMMA2	X	.171	5
6	MP GAMMA2	X	.171	1
7	MP ALPHA3	X	.077	5
8	MP ALPHA3	X	.077	1
9	MP BETA3	X	.175	5
10	MP BETA3	X	.175	1
11	MP GAMMA3	X	.175	5
12	MP GAMMA3	X	.175	1
13	MP ALPHA1	X	.027	4.5
14	MP ALPHA1	X	.027	1.5
15	MP BETA1	X	.05	4.5
16	MP BETA1	X	.05	1.5
17	MP GAMMA1	X	.05	4.5
18	MP GAMMA1	X	.05	1.5
19	MP ALPHA1	X	.043	3
20	MP BETA1	X	.056	3
21	MP GAMMA1	X	.056	3
22	MP ALPHA3	X	.041	3
23	MP BETA3	X	.048	3
24	MP GAMMA3	X	.048	3
25	MP ALPHA1	X	.000723	3
26	MP BETA1	X	.01	3
27	MP GAMMA1	X	.01	3
28	MP ALPHA4	X	.041	3
29	MP BETA4	X	.038	3

Member Point Loads (BLC 13 : Wind Load (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.054	5
2	MP ALPHA2	Y	-.054	1
3	MP ALPHA2	X	.093	5
4	MP ALPHA2	X	.093	1
5	MP BETA2	Y	-.102	5
6	MP BETA2	Y	-.102	1
7	MP BETA2	X	.176	5
8	MP BETA2	X	.176	1
9	MP GAMMA2	Y	-.054	5
10	MP GAMMA2	Y	-.054	1

Member Point Loads (BLC 13 : Wind Load (300)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
11	MP GAMMA2	X	.093	5
12	MP GAMMA2	X	.093	1
13	MP ALPHA3	Y	-.055	5
14	MP ALPHA3	Y	-.055	1
15	MP ALPHA3	X	.095	5
16	MP ALPHA3	X	.095	1
17	MP BETA3	Y	-.104	5
18	MP BETA3	Y	-.104	1
19	MP BETA3	X	.18	5
20	MP BETA3	X	.18	1
21	MP GAMMA3	Y	-.055	5
22	MP GAMMA3	Y	-.055	1
23	MP GAMMA3	X	.095	5
24	MP GAMMA3	X	.095	1
25	MP ALPHA1	Y	-.017	4.5
26	MP ALPHA1	Y	-.017	1.5
27	MP ALPHA1	X	.03	4.5
28	MP ALPHA1	X	.03	1.5
29	MP BETA1	Y	-.029	4.5
30	MP BETA1	Y	-.029	1.5
31	MP BETA1	X	.05	4.5
32	MP BETA1	X	.05	1.5
33	MP GAMMA1	Y	-.017	4.5
34	MP GAMMA1	Y	-.017	1.5
35	MP GAMMA1	X	.03	4.5
36	MP GAMMA1	X	.03	1.5
37	MP ALPHA1	Y	-.024	3
38	MP ALPHA1	X	.041	3
39	MP BETA1	Y	-.03	3
40	MP BETA1	X	.052	3
41	MP GAMMA1	Y	-.024	3
42	MP GAMMA1	X	.041	3
43	MP ALPHA3	Y	-.022	3
44	MP ALPHA3	X	.038	3
45	MP BETA3	Y	-.025	3
46	MP BETA3	X	.044	3
47	MP GAMMA3	Y	-.022	3
48	MP GAMMA3	X	.038	3
49	MP ALPHA1	Y	-.002	3
50	MP ALPHA1	X	.003	3
51	MP BETA1	Y	-.007	3
52	MP BETA1	X	.012	3
53	MP GAMMA1	Y	-.002	3
54	MP GAMMA1	X	.003	3
55	MP ALPHA4	Y	-.02	3
56	MP ALPHA4	X	.035	3
57	MP BETA4	Y	-.019	3
58	MP BETA4	X	.032	3

Member Point Loads (BLC 14 : Wind Load (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.148	5
2	MP ALPHA2	Y	-.148	1
3	MP ALPHA2	X	.086	5
4	MP ALPHA2	X	.086	1
5	MP BETA2	Y	-.148	5

Member Point Loads (BLC 14 : Wind Load (330)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
6	MP BETA2	Y	-.148	1
7	MP BETA2	X	.086	5
8	MP BETA2	X	.086	1
9	MP GAMMA2	Y	-.066	5
10	MP GAMMA2	Y	-.066	1
11	MP GAMMA2	X	.038	5
12	MP GAMMA2	X	.038	1
13	MP ALPHA3	Y	-.152	5
14	MP ALPHA3	Y	-.152	1
15	MP ALPHA3	X	.088	5
16	MP ALPHA3	X	.088	1
17	MP BETA3	Y	-.152	5
18	MP BETA3	Y	-.152	1
19	MP BETA3	X	.088	5
20	MP BETA3	X	.088	1
21	MP GAMMA3	Y	-.067	5
22	MP GAMMA3	Y	-.067	1
23	MP GAMMA3	X	.039	5
24	MP GAMMA3	X	.039	1
25	MP ALPHA1	Y	-.044	4.5
26	MP ALPHA1	Y	-.044	1.5
27	MP ALPHA1	X	.025	4.5
28	MP ALPHA1	X	.025	1.5
29	MP BETA1	Y	-.044	4.5
30	MP BETA1	Y	-.044	1.5
31	MP BETA1	X	.025	4.5
32	MP BETA1	X	.025	1.5
33	MP GAMMA1	Y	-.023	4.5
34	MP GAMMA1	Y	-.023	1.5
35	MP GAMMA1	X	.013	4.5
36	MP GAMMA1	X	.013	1.5
37	MP ALPHA1	Y	-.049	3
38	MP ALPHA1	X	.028	3
39	MP BETA1	Y	-.049	3
40	MP BETA1	X	.028	3
41	MP GAMMA1	Y	-.037	3
42	MP GAMMA1	X	.022	3
43	MP ALPHA3	Y	-.042	3
44	MP ALPHA3	X	.024	3
45	MP BETA3	Y	-.042	3
46	MP BETA3	X	.024	3
47	MP GAMMA3	Y	-.036	3
48	MP GAMMA3	X	.021	3
49	MP ALPHA1	Y	-.009	3
50	MP ALPHA1	X	.005	3
51	MP BETA1	Y	-.009	3
52	MP BETA1	X	.005	3
53	MP GAMMA1	Y	-.000626	3
54	MP GAMMA1	X	.000362	3
55	MP ALPHA4	Y	-.033	3
56	MP ALPHA4	X	.019	3
57	MP BETA4	Y	-.033	3
58	MP BETA4	X	.019	3

Member Point Loads (BLC 15 : Maintanence (0))

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

Member Point Loads (BLC 15 : Maintanence (0)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.013	5
2	MP ALPHA2	Y	-.013	1
3	MP BETA2	Y	-.007	5
4	MP BETA2	Y	-.007	1
5	MP GAMMA2	Y	-.007	5
6	MP GAMMA2	Y	-.007	1
7	MP ALPHA3	Y	-.013	5
8	MP ALPHA3	Y	-.013	1
9	MP BETA3	Y	-.007	5
10	MP BETA3	Y	-.007	1
11	MP GAMMA3	Y	-.007	5
12	MP GAMMA3	Y	-.007	1
13	MP ALPHA1	Y	-.004	4.5
14	MP ALPHA1	Y	-.004	1.5
15	MP BETA1	Y	-.002	4.5
16	MP BETA1	Y	-.002	1.5
17	MP GAMMA1	Y	-.002	4.5
18	MP GAMMA1	Y	-.002	1.5
19	MP ALPHA1	Y	-.004	3
20	MP BETA1	Y	-.003	3
21	MP GAMMA1	Y	-.003	3
22	MP ALPHA3	Y	-.003	3
23	MP BETA3	Y	-.003	3
24	MP GAMMA3	Y	-.003	3
25	MP ALPHA1	Y	-.000864	3
26	MP BETA1	Y	-.00025	3
27	MP GAMMA1	Y	-.00025	3
28	MP ALPHA4	Y	-.002	3
29	MP BETA4	Y	-.003	3

Member Point Loads (BLC 16 : Maintanence (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.009	5
2	MP ALPHA2	Y	-.009	1
3	MP ALPHA2	X	-.005	5
4	MP ALPHA2	X	-.005	1
5	MP BETA2	Y	-.004	5
6	MP BETA2	Y	-.004	1
7	MP BETA2	X	-.002	5
8	MP BETA2	X	-.002	1
9	MP GAMMA2	Y	-.009	5
10	MP GAMMA2	Y	-.009	1
11	MP GAMMA2	X	-.005	5
12	MP GAMMA2	X	-.005	1
13	MP ALPHA3	Y	-.01	5
14	MP ALPHA3	Y	-.01	1
15	MP ALPHA3	X	-.006	5
16	MP ALPHA3	X	-.006	1
17	MP BETA3	Y	-.004	5
18	MP BETA3	Y	-.004	1
19	MP BETA3	X	-.002	5
20	MP BETA3	X	-.002	1
21	MP GAMMA3	Y	-.01	5
22	MP GAMMA3	Y	-.01	1
23	MP GAMMA3	X	-.006	5
24	MP GAMMA3	X	-.006	1

Member Point Loads (BLC 16 : Maintanence (30)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
25	MP ALPHA1	Y	-.003	4.5
26	MP ALPHA1	Y	-.003	1.5
27	MP ALPHA1	X	-.002	4.5
28	MP ALPHA1	X	-.002	1.5
29	MP BETA1	Y	-.001	4.5
30	MP BETA1	Y	-.001	1.5
31	MP BETA1	X	-.000844	4.5
32	MP BETA1	X	-.000844	1.5
33	MP GAMMA1	Y	-.003	4.5
34	MP GAMMA1	Y	-.003	1.5
35	MP GAMMA1	X	-.002	4.5
36	MP GAMMA1	X	-.002	1.5
37	MP ALPHA1	Y	-.003	3
38	MP ALPHA1	X	-.002	3
39	MP BETA1	Y	-.002	3
40	MP BETA1	X	-.001	3
41	MP GAMMA1	Y	-.003	3
42	MP GAMMA1	X	-.002	3
43	MP ALPHA3	Y	-.003	3
44	MP ALPHA3	X	-.002	3
45	MP BETA3	Y	-.002	3
46	MP BETA3	X	-.001	3
47	MP GAMMA3	Y	-.003	3
48	MP GAMMA3	X	-.002	3
49	MP ALPHA1	Y	-.000571	3
50	MP ALPHA1	X	-.00033	3
51	MP BETA1	Y	-4e-5	3
52	MP BETA1	X	-2.3e-5	3
53	MP GAMMA1	Y	-.000571	3
54	MP GAMMA1	X	-.00033	3
55	MP ALPHA4	Y	-.002	3
56	MP ALPHA4	X	-.001	3
57	MP BETA4	Y	-.002	3
58	MP BETA4	X	-.001	3

Member Point Loads (BLC 17 : Maintanence (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.003	5
2	MP ALPHA2	Y	-.003	1
3	MP ALPHA2	X	-.006	5
4	MP ALPHA2	X	-.006	1
5	MP BETA2	Y	-.003	5
6	MP BETA2	Y	-.003	1
7	MP BETA2	X	-.006	5
8	MP BETA2	X	-.006	1
9	MP GAMMA2	Y	-.006	5
10	MP GAMMA2	Y	-.006	1
11	MP GAMMA2	X	-.011	5
12	MP GAMMA2	X	-.011	1
13	MP ALPHA3	Y	-.003	5
14	MP ALPHA3	Y	-.003	1
15	MP ALPHA3	X	-.006	5
16	MP ALPHA3	X	-.006	1
17	MP BETA3	Y	-.003	5
18	MP BETA3	Y	-.003	1
19	MP BETA3	X	-.006	5

Member Point Loads (BLC 17 : Maintanence (60)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
20	MP BETA3	X	-.006	1
21	MP GAMMA3	Y	-.007	5
22	MP GAMMA3	Y	-.007	1
23	MP GAMMA3	X	-.011	5
24	MP GAMMA3	X	-.011	1
25	MP ALPHA1	Y	-.001	4.5
26	MP ALPHA1	Y	-.001	1.5
27	MP ALPHA1	X	-.002	4.5
28	MP ALPHA1	X	-.002	1.5
29	MP BETA1	Y	-.001	4.5
30	MP BETA1	Y	-.001	1.5
31	MP BETA1	X	-.002	4.5
32	MP BETA1	X	-.002	1.5
33	MP GAMMA1	Y	-.002	4.5
34	MP GAMMA1	Y	-.002	1.5
35	MP GAMMA1	X	-.003	4.5
36	MP GAMMA1	X	-.003	1.5
37	MP ALPHA1	Y	-.002	3
38	MP ALPHA1	X	-.003	3
39	MP BETA1	Y	-.002	3
40	MP BETA1	X	-.003	3
41	MP GAMMA1	Y	-.002	3
42	MP GAMMA1	X	-.003	3
43	MP ALPHA3	Y	-.001	3
44	MP ALPHA3	X	-.002	3
45	MP BETA3	Y	-.001	3
46	MP BETA3	X	-.002	3
47	MP GAMMA3	Y	-.002	3
48	MP GAMMA3	X	-.003	3
49	MP ALPHA1	Y	-.000125	3
50	MP ALPHA1	X	-.000217	3
51	MP BETA1	Y	-.000125	3
52	MP BETA1	X	-.000217	3
53	MP GAMMA1	Y	-.000432	3
54	MP GAMMA1	X	-.000748	3
55	MP ALPHA4	Y	-.001	3
56	MP ALPHA4	X	-.002	3
57	MP BETA4	Y	-.001	3
58	MP BETA4	X	-.002	3

Member Point Loads (BLC 18 : Maintanence (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.005	5
2	MP ALPHA2	X	-.005	1
3	MP BETA2	X	-.011	5
4	MP BETA2	X	-.011	1
5	MP GAMMA2	X	-.011	5
6	MP GAMMA2	X	-.011	1
7	MP ALPHA3	X	-.005	5
8	MP ALPHA3	X	-.005	1
9	MP BETA3	X	-.011	5
10	MP BETA3	X	-.011	1
11	MP GAMMA3	X	-.011	5
12	MP GAMMA3	X	-.011	1
13	MP ALPHA1	X	-.002	4.5
14	MP ALPHA1	X	-.002	1.5

Member Point Loads (BLC 18 : Maintanence (90)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP BETA1	X	-.003	4.5
16	MP BETA1	X	-.003	1.5
17	MP GAMMA1	X	-.003	4.5
18	MP GAMMA1	X	-.003	1.5
19	MP ALPHA1	X	-.003	3
20	MP BETA1	X	-.004	3
21	MP GAMMA1	X	-.004	3
22	MP ALPHA3	X	-.003	3
23	MP BETA3	X	-.003	3
24	MP GAMMA3	X	-.003	3
25	MP ALPHA1	X	-4.6e-5	3
26	MP BETA1	X	-.000659	3
27	MP GAMMA1	X	-.000659	3
28	MP ALPHA4	X	-.003	3
29	MP BETA4	X	-.002	3

Member Point Loads (BLC 19 : Maintanence (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.003	5
2	MP ALPHA2	Y	.003	1
3	MP ALPHA2	X	-.006	5
4	MP ALPHA2	X	-.006	1
5	MP BETA2	Y	.006	5
6	MP BETA2	Y	.006	1
7	MP BETA2	X	-.011	5
8	MP BETA2	X	-.011	1
9	MP GAMMA2	Y	.003	5
10	MP GAMMA2	Y	.003	1
11	MP GAMMA2	X	-.006	5
12	MP GAMMA2	X	-.006	1
13	MP ALPHA3	Y	.003	5
14	MP ALPHA3	Y	.003	1
15	MP ALPHA3	X	-.006	5
16	MP ALPHA3	X	-.006	1
17	MP BETA3	Y	.007	5
18	MP BETA3	Y	.007	1
19	MP BETA3	X	-.011	5
20	MP BETA3	X	-.011	1
21	MP GAMMA3	Y	.003	5
22	MP GAMMA3	Y	.003	1
23	MP GAMMA3	X	-.006	5
24	MP GAMMA3	X	-.006	1
25	MP ALPHA1	Y	.001	4.5
26	MP ALPHA1	Y	.001	1.5
27	MP ALPHA1	X	-.002	4.5
28	MP ALPHA1	X	-.002	1.5
29	MP BETA1	Y	.002	4.5
30	MP BETA1	Y	.002	1.5
31	MP BETA1	X	-.003	4.5
32	MP BETA1	X	-.003	1.5
33	MP GAMMA1	Y	.001	4.5
34	MP GAMMA1	Y	.001	1.5
35	MP GAMMA1	X	-.002	4.5
36	MP GAMMA1	X	-.002	1.5
37	MP ALPHA1	Y	.002	3
38	MP ALPHA1	X	-.003	3

Member Point Loads (BLC 19 : Maintanence (120)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
39	MP BETA1	Y	.002	3
40	MP BETA1	X	-.003	3
41	MP GAMMA1	Y	.002	3
42	MP GAMMA1	X	-.003	3
43	MP ALPHA3	Y	.001	3
44	MP ALPHA3	X	-.002	3
45	MP BETA3	Y	.002	3
46	MP BETA3	X	-.003	3
47	MP GAMMA3	Y	.001	3
48	MP GAMMA3	X	-.002	3
49	MP ALPHA1	Y	.000125	3
50	MP ALPHA1	X	-.000217	3
51	MP BETA1	Y	.000432	3
52	MP BETA1	X	-.000748	3
53	MP GAMMA1	Y	.000125	3
54	MP GAMMA1	X	-.000217	3
55	MP ALPHA4	Y	.001	3
56	MP ALPHA4	X	-.002	3
57	MP BETA4	Y	.001	3
58	MP BETA4	X	-.002	3

Member Point Loads (BLC 20 : Maintanence (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.009	5
2	MP ALPHA2	Y	.009	1
3	MP ALPHA2	X	-.005	5
4	MP ALPHA2	X	-.005	1
5	MP BETA2	Y	.009	5
6	MP BETA2	Y	.009	1
7	MP BETA2	X	-.005	5
8	MP BETA2	X	-.005	1
9	MP GAMMA2	Y	.004	5
10	MP GAMMA2	Y	.004	1
11	MP GAMMA2	X	-.002	5
12	MP GAMMA2	X	-.002	1
13	MP ALPHA3	Y	.01	5
14	MP ALPHA3	Y	.01	1
15	MP ALPHA3	X	-.006	5
16	MP ALPHA3	X	-.006	1
17	MP BETA3	Y	.01	5
18	MP BETA3	Y	.01	1
19	MP BETA3	X	-.006	5
20	MP BETA3	X	-.006	1
21	MP GAMMA3	Y	.004	5
22	MP GAMMA3	Y	.004	1
23	MP GAMMA3	X	-.002	5
24	MP GAMMA3	X	-.002	1
25	MP ALPHA1	Y	.003	4.5
26	MP ALPHA1	Y	.003	1.5
27	MP ALPHA1	X	-.002	4.5
28	MP ALPHA1	X	-.002	1.5
29	MP BETA1	Y	.003	4.5
30	MP BETA1	Y	.003	1.5
31	MP BETA1	X	-.002	4.5
32	MP BETA1	X	-.002	1.5
33	MP GAMMA1	Y	.001	4.5

Member Point Loads (BLC 20 : Maintanence (150)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
34	MP GAMMA1	Y	.001	1.5
35	MP GAMMA1	X	-.000844	4.5
36	MP GAMMA1	X	-.000844	1.5
37	MP ALPHA1	Y	.003	3
38	MP ALPHA1	X	-.002	3
39	MP BETA1	Y	.003	3
40	MP BETA1	X	-.002	3
41	MP GAMMA1	Y	.002	3
42	MP GAMMA1	X	-.001	3
43	MP ALPHA3	Y	.003	3
44	MP ALPHA3	X	-.002	3
45	MP BETA3	Y	.003	3
46	MP BETA3	X	-.002	3
47	MP GAMMA3	Y	.002	3
48	MP GAMMA3	X	-.001	3
49	MP ALPHA1	Y	.000571	3
50	MP ALPHA1	X	-.00033	3
51	MP BETA1	Y	.000571	3
52	MP BETA1	X	-.00033	3
53	MP GAMMA1	Y	4e-5	3
54	MP GAMMA1	X	-2.3e-5	3
55	MP ALPHA4	Y	.002	3
56	MP ALPHA4	X	-.001	3
57	MP BETA4	Y	.002	3
58	MP BETA4	X	-.001	3

Member Point Loads (BLC 21 : Maintanence (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.013	5
2	MP ALPHA2	Y	.013	1
3	MP BETA2	Y	.007	5
4	MP BETA2	Y	.007	1
5	MP GAMMA2	Y	.007	5
6	MP GAMMA2	Y	.007	1
7	MP ALPHA3	Y	.013	5
8	MP ALPHA3	Y	.013	1
9	MP BETA3	Y	.007	5
10	MP BETA3	Y	.007	1
11	MP GAMMA3	Y	.007	5
12	MP GAMMA3	Y	.007	1
13	MP ALPHA1	Y	.004	4.5
14	MP ALPHA1	Y	.004	1.5
15	MP BETA1	Y	.002	4.5
16	MP BETA1	Y	.002	1.5
17	MP GAMMA1	Y	.002	4.5
18	MP GAMMA1	Y	.002	1.5
19	MP ALPHA1	Y	.004	3
20	MP BETA1	Y	.003	3
21	MP GAMMA1	Y	.003	3
22	MP ALPHA3	Y	.003	3
23	MP BETA3	Y	.003	3
24	MP GAMMA3	Y	.003	3
25	MP ALPHA1	Y	.000864	3
26	MP BETA1	Y	.00025	3
27	MP GAMMA1	Y	.00025	3
28	MP ALPHA4	Y	.002	3

Member Point Loads (BLC 21 : Maintanence (180)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
29	MP BETA4	Y	.003	3

Member Point Loads (BLC 22 : Maintanence (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.009	5
2	MP ALPHA2	Y	.009	1
3	MP ALPHA2	X	.005	5
4	MP ALPHA2	X	.005	1
5	MP BETA2	Y	.004	5
6	MP BETA2	Y	.004	1
7	MP BETA2	X	.002	5
8	MP BETA2	X	.002	1
9	MP GAMMA2	Y	.009	5
10	MP GAMMA2	Y	.009	1
11	MP GAMMA2	X	.005	5
12	MP GAMMA2	X	.005	1
13	MP ALPHA3	Y	.01	5
14	MP ALPHA3	Y	.01	1
15	MP ALPHA3	X	.006	5
16	MP ALPHA3	X	.006	1
17	MP BETA3	Y	.004	5
18	MP BETA3	Y	.004	1
19	MP BETA3	X	.002	5
20	MP BETA3	X	.002	1
21	MP GAMMA3	Y	.01	5
22	MP GAMMA3	Y	.01	1
23	MP GAMMA3	X	.006	5
24	MP GAMMA3	X	.006	1
25	MP ALPHA1	Y	.003	4.5
26	MP ALPHA1	Y	.003	1.5
27	MP ALPHA1	X	.002	4.5
28	MP ALPHA1	X	.002	1.5
29	MP BETA1	Y	.001	4.5
30	MP BETA1	Y	.001	1.5
31	MP BETA1	X	.000844	4.5
32	MP BETA1	X	.000844	1.5
33	MP GAMMA1	Y	.003	4.5
34	MP GAMMA1	Y	.003	1.5
35	MP GAMMA1	X	.002	4.5
36	MP GAMMA1	X	.002	1.5
37	MP ALPHA1	Y	.003	3
38	MP ALPHA1	X	.002	3
39	MP BETA1	Y	.002	3
40	MP BETA1	X	.001	3
41	MP GAMMA1	Y	.003	3
42	MP GAMMA1	X	.002	3
43	MP ALPHA3	Y	.003	3
44	MP ALPHA3	X	.002	3
45	MP BETA3	Y	.002	3
46	MP BETA3	X	.001	3
47	MP GAMMA3	Y	.003	3
48	MP GAMMA3	X	.002	3
49	MP ALPHA1	Y	.000571	3
50	MP ALPHA1	X	.00033	3
51	MP BETA1	Y	4e-5	3
52	MP BETA1	X	2.3e-5	3

Member Point Loads (BLC 22 : Maintanence (210)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
53	MP GAMMA1	Y	.000571	3
54	MP GAMMA1	X	.00033	3
55	MP ALPHA4	Y	.002	3
56	MP ALPHA4	X	.001	3
57	MP BETA4	Y	.002	3
58	MP BETA4	X	.001	3

Member Point Loads (BLC 23 : Maintanence (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.003	5
2	MP ALPHA2	Y	.003	1
3	MP ALPHA2	X	.006	5
4	MP ALPHA2	X	.006	1
5	MP BETA2	Y	.003	5
6	MP BETA2	Y	.003	1
7	MP BETA2	X	.006	5
8	MP BETA2	X	.006	1
9	MP GAMMA2	Y	.006	5
10	MP GAMMA2	Y	.006	1
11	MP GAMMA2	X	.011	5
12	MP GAMMA2	X	.011	1
13	MP ALPHA3	Y	.003	5
14	MP ALPHA3	Y	.003	1
15	MP ALPHA3	X	.006	5
16	MP ALPHA3	X	.006	1
17	MP BETA3	Y	.003	5
18	MP BETA3	Y	.003	1
19	MP BETA3	X	.006	5
20	MP BETA3	X	.006	1
21	MP GAMMA3	Y	.007	5
22	MP GAMMA3	Y	.007	1
23	MP GAMMA3	X	.011	5
24	MP GAMMA3	X	.011	1
25	MP ALPHA1	Y	.001	4.5
26	MP ALPHA1	Y	.001	1.5
27	MP ALPHA1	X	.002	4.5
28	MP ALPHA1	X	.002	1.5
29	MP BETA1	Y	.001	4.5
30	MP BETA1	Y	.001	1.5
31	MP BETA1	X	.002	4.5
32	MP BETA1	X	.002	1.5
33	MP GAMMA1	Y	.002	4.5
34	MP GAMMA1	Y	.002	1.5
35	MP GAMMA1	X	.003	4.5
36	MP GAMMA1	X	.003	1.5
37	MP ALPHA1	Y	.002	3
38	MP ALPHA1	X	.003	3
39	MP BETA1	Y	.002	3
40	MP BETA1	X	.003	3
41	MP GAMMA1	Y	.002	3
42	MP GAMMA1	X	.003	3
43	MP ALPHA3	Y	.001	3
44	MP ALPHA3	X	.002	3
45	MP BETA3	Y	.001	3
46	MP BETA3	X	.002	3
47	MP GAMMA3	Y	.002	3

Member Point Loads (BLC 23 : Maintanence (240)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
48	MP GAMMA3	X	.003	3
49	MP ALPHA1	Y	.000125	3
50	MP ALPHA1	X	.000217	3
51	MP BETA1	Y	.000125	3
52	MP BETA1	X	.000217	3
53	MP GAMMA1	Y	.000432	3
54	MP GAMMA1	X	.000748	3
55	MP ALPHA4	Y	.001	3
56	MP ALPHA4	X	.002	3
57	MP BETA4	Y	.001	3
58	MP BETA4	X	.002	3

Member Point Loads (BLC 24 : Maintanence (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.005	5
2	MP ALPHA2	X	.005	1
3	MP BETA2	X	.011	5
4	MP BETA2	X	.011	1
5	MP GAMMA2	X	.011	5
6	MP GAMMA2	X	.011	1
7	MP ALPHA3	X	.005	5
8	MP ALPHA3	X	.005	1
9	MP BETA3	X	.011	5
10	MP BETA3	X	.011	1
11	MP GAMMA3	X	.011	5
12	MP GAMMA3	X	.011	1
13	MP ALPHA1	X	.002	4.5
14	MP ALPHA1	X	.002	1.5
15	MP BETA1	X	.003	4.5
16	MP BETA1	X	.003	1.5
17	MP GAMMA1	X	.003	4.5
18	MP GAMMA1	X	.003	1.5
19	MP ALPHA1	X	.003	3
20	MP BETA1	X	.004	3
21	MP GAMMA1	X	.004	3
22	MP ALPHA3	X	.003	3
23	MP BETA3	X	.003	3
24	MP GAMMA3	X	.003	3
25	MP ALPHA1	X	4.6e-5	3
26	MP BETA1	X	.000659	3
27	MP GAMMA1	X	.000659	3
28	MP ALPHA4	X	.003	3
29	MP BETA4	X	.002	3

Member Point Loads (BLC 25 : Maintanence (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.003	5
2	MP ALPHA2	Y	-.003	1
3	MP ALPHA2	X	.006	5
4	MP ALPHA2	X	.006	1
5	MP BETA2	Y	-.006	5
6	MP BETA2	Y	-.006	1
7	MP BETA2	X	.011	5
8	MP BETA2	X	.011	1
9	MP GAMMA2	Y	-.003	5
10	MP GAMMA2	Y	-.003	1

Member Point Loads (BLC 25 : Maintanence (300)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
11	MP GAMMA2	X	.006	5
12	MP GAMMA2	X	.006	1
13	MP ALPHA3	Y	-.003	5
14	MP ALPHA3	Y	-.003	1
15	MP ALPHA3	X	.006	5
16	MP ALPHA3	X	.006	1
17	MP BETA3	Y	-.007	5
18	MP BETA3	Y	-.007	1
19	MP BETA3	X	.011	5
20	MP BETA3	X	.011	1
21	MP GAMMA3	Y	-.003	5
22	MP GAMMA3	Y	-.003	1
23	MP GAMMA3	X	.006	5
24	MP GAMMA3	X	.006	1
25	MP ALPHA1	Y	-.001	4.5
26	MP ALPHA1	Y	-.001	1.5
27	MP ALPHA1	X	.002	4.5
28	MP ALPHA1	X	.002	1.5
29	MP BETA1	Y	-.002	4.5
30	MP BETA1	Y	-.002	1.5
31	MP BETA1	X	.003	4.5
32	MP BETA1	X	.003	1.5
33	MP GAMMA1	Y	-.001	4.5
34	MP GAMMA1	Y	-.001	1.5
35	MP GAMMA1	X	.002	4.5
36	MP GAMMA1	X	.002	1.5
37	MP ALPHA1	Y	-.002	3
38	MP ALPHA1	X	.003	3
39	MP BETA1	Y	-.002	3
40	MP BETA1	X	.003	3
41	MP GAMMA1	Y	-.002	3
42	MP GAMMA1	X	.003	3
43	MP ALPHA3	Y	-.001	3
44	MP ALPHA3	X	.002	3
45	MP BETA3	Y	-.002	3
46	MP BETA3	X	.003	3
47	MP GAMMA3	Y	-.001	3
48	MP GAMMA3	X	.002	3
49	MP ALPHA1	Y	-.000125	3
50	MP ALPHA1	X	.000217	3
51	MP BETA1	Y	-.000432	3
52	MP BETA1	X	.000748	3
53	MP GAMMA1	Y	-.000125	3
54	MP GAMMA1	X	.000217	3
55	MP ALPHA4	Y	-.001	3
56	MP ALPHA4	X	.002	3
57	MP BETA4	Y	-.001	3
58	MP BETA4	X	.002	3

Member Point Loads (BLC 26 : Maintanence (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.009	5
2	MP ALPHA2	Y	-.009	1
3	MP ALPHA2	X	.005	5
4	MP ALPHA2	X	.005	1
5	MP BETA2	Y	-.009	5

Member Point Loads (BLC 26 : Maintanence (330)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
6	MP BETA2	Y	-.009	1
7	MP BETA2	X	.005	5
8	MP BETA2	X	.005	1
9	MP GAMMA2	Y	-.004	5
10	MP GAMMA2	Y	-.004	1
11	MP GAMMA2	X	.002	5
12	MP GAMMA2	X	.002	1
13	MP ALPHA3	Y	-.01	5
14	MP ALPHA3	Y	-.01	1
15	MP ALPHA3	X	.006	5
16	MP ALPHA3	X	.006	1
17	MP BETA3	Y	-.01	5
18	MP BETA3	Y	-.01	1
19	MP BETA3	X	.006	5
20	MP BETA3	X	.006	1
21	MP GAMMA3	Y	-.004	5
22	MP GAMMA3	Y	-.004	1
23	MP GAMMA3	X	.002	5
24	MP GAMMA3	X	.002	1
25	MP ALPHA1	Y	-.003	4.5
26	MP ALPHA1	Y	-.003	1.5
27	MP ALPHA1	X	.002	4.5
28	MP ALPHA1	X	.002	1.5
29	MP BETA1	Y	-.003	4.5
30	MP BETA1	Y	-.003	1.5
31	MP BETA1	X	.002	4.5
32	MP BETA1	X	.002	1.5
33	MP GAMMA1	Y	-.001	4.5
34	MP GAMMA1	Y	-.001	1.5
35	MP GAMMA1	X	.000844	4.5
36	MP GAMMA1	X	.000844	1.5
37	MP ALPHA1	Y	-.003	3
38	MP ALPHA1	X	.002	3
39	MP BETA1	Y	-.003	3
40	MP BETA1	X	.002	3
41	MP GAMMA1	Y	-.002	3
42	MP GAMMA1	X	.001	3
43	MP ALPHA3	Y	-.003	3
44	MP ALPHA3	X	.002	3
45	MP BETA3	Y	-.003	3
46	MP BETA3	X	.002	3
47	MP GAMMA3	Y	-.002	3
48	MP GAMMA3	X	.001	3
49	MP ALPHA1	Y	-.000571	3
50	MP ALPHA1	X	.00033	3
51	MP BETA1	Y	-.000571	3
52	MP BETA1	X	.00033	3
53	MP GAMMA1	Y	-4e-5	3
54	MP GAMMA1	X	2.3e-5	3
55	MP ALPHA4	Y	-.002	3
56	MP ALPHA4	X	.001	3
57	MP BETA4	Y	-.002	3
58	MP BETA4	X	.001	3

Member Point Loads (BLC 27 : Ice Dead Load)

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

Member Point Loads (BLC 27 : Ice Dead Load) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.088	5
2	MP ALPHA2	Z	-.088	1
3	MP BETA2	Z	-.088	5
4	MP BETA2	Z	-.088	1
5	MP GAMMA2	Z	-.088	5
6	MP GAMMA2	Z	-.088	1
7	MP ALPHA3	Z	-.089	5
8	MP ALPHA3	Z	-.089	1
9	MP BETA3	Z	-.089	5
10	MP BETA3	Z	-.089	1
11	MP GAMMA3	Z	-.089	5
12	MP GAMMA3	Z	-.089	1
13	MP ALPHA1	Z	-.04	4.5
14	MP ALPHA1	Z	-.04	1.5
15	MP BETA1	Z	-.04	4.5
16	MP BETA1	Z	-.04	1.5
17	MP GAMMA1	Z	-.04	4.5
18	MP GAMMA1	Z	-.04	1.5
19	MP ALPHA1	Z	-.045	3
20	MP BETA1	Z	-.045	3
21	MP GAMMA1	Z	-.045	3
22	MP ALPHA3	Z	-.043	3
23	MP BETA3	Z	-.043	3
24	MP GAMMA3	Z	-.043	3
25	MP ALPHA1	Z	-.01	3
26	MP BETA1	Z	-.01	3
27	MP GAMMA1	Z	-.01	3
28	MP ALPHA4	Z	-.068	3
29	MP BETA4	Z	-.068	3

Member Point Loads (BLC 28 : Ice Wind Load (0))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.037	5
2	MP ALPHA2	Y	-.037	1
3	MP BETA2	Y	-.021	5
4	MP BETA2	Y	-.021	1
5	MP GAMMA2	Y	-.021	5
6	MP GAMMA2	Y	-.021	1
7	MP ALPHA3	Y	-.038	5
8	MP ALPHA3	Y	-.038	1
9	MP BETA3	Y	-.022	5
10	MP BETA3	Y	-.022	1
11	MP GAMMA3	Y	-.022	5
12	MP GAMMA3	Y	-.022	1
13	MP ALPHA1	Y	-.012	4.5
14	MP ALPHA1	Y	-.012	1.5
15	MP BETA1	Y	-.008	4.5
16	MP BETA1	Y	-.008	1.5
17	MP GAMMA1	Y	-.008	4.5
18	MP GAMMA1	Y	-.008	1.5
19	MP ALPHA1	Y	-.008	3
20	MP BETA1	Y	-.007	3
21	MP GAMMA1	Y	-.007	3
22	MP ALPHA3	Y	-.007	3
23	MP BETA3	Y	-.006	3
24	MP GAMMA3	Y	-.006	3

Member Point Loads (BLC 28 : Ice Wind Load (0)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
25	MP ALPHA1	Y	-.003	3
26	MP BETA1	Y	-.001	3
27	MP GAMMA1	Y	-.001	3
28	MP ALPHA4	Y	-.012	3
29	MP BETA4	Y	-.012	3

Member Point Loads (BLC 29 : Ice Wind Load (30))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.027	5
2	MP ALPHA2	Y	-.027	1
3	MP ALPHA2	X	-.016	5
4	MP ALPHA2	X	-.016	1
5	MP BETA2	Y	-.014	5
6	MP BETA2	Y	-.014	1
7	MP BETA2	X	-.008	5
8	MP BETA2	X	-.008	1
9	MP GAMMA2	Y	-.027	5
10	MP GAMMA2	Y	-.027	1
11	MP GAMMA2	X	-.016	5
12	MP GAMMA2	X	-.016	1
13	MP ALPHA3	Y	-.028	5
14	MP ALPHA3	Y	-.028	1
15	MP ALPHA3	X	-.016	5
16	MP ALPHA3	X	-.016	1
17	MP BETA3	Y	-.014	5
18	MP BETA3	Y	-.014	1
19	MP BETA3	X	-.008	5
20	MP BETA3	X	-.008	1
21	MP GAMMA3	Y	-.028	5
22	MP GAMMA3	Y	-.028	1
23	MP GAMMA3	X	-.016	5
24	MP GAMMA3	X	-.016	1
25	MP ALPHA1	Y	-.009	4.5
26	MP ALPHA1	Y	-.009	1.5
27	MP ALPHA1	X	-.005	4.5
28	MP ALPHA1	X	-.005	1.5
29	MP BETA1	Y	-.006	4.5
30	MP BETA1	Y	-.006	1.5
31	MP BETA1	X	-.003	4.5
32	MP BETA1	X	-.003	1.5
33	MP GAMMA1	Y	-.009	4.5
34	MP GAMMA1	Y	-.009	1.5
35	MP GAMMA1	X	-.005	4.5
36	MP GAMMA1	X	-.005	1.5
37	MP ALPHA1	Y	-.007	3
38	MP ALPHA1	X	-.004	3
39	MP BETA1	Y	-.005	3
40	MP BETA1	X	-.003	3
41	MP GAMMA1	Y	-.007	3
42	MP GAMMA1	X	-.004	3
43	MP ALPHA3	Y	-.006	3
44	MP ALPHA3	X	-.003	3
45	MP BETA3	Y	-.005	3
46	MP BETA3	X	-.003	3
47	MP GAMMA3	Y	-.006	3
48	MP GAMMA3	X	-.003	3

Member Point Loads (BLC 29 : Ice Wind Load (30)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
49	MP ALPHA1	Y	-.002	3
50	MP ALPHA1	X	-.001	3
51	MP BETA1	Y	-.000382	3
52	MP BETA1	X	-.000221	3
53	MP GAMMA1	Y	-.002	3
54	MP GAMMA1	X	-.001	3
55	MP ALPHA4	Y	-.01	3
56	MP ALPHA4	X	-.006	3
57	MP BETA4	Y	-.01	3
58	MP BETA4	X	-.006	3

Member Point Loads (BLC 30 : Ice Wind Load (60))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.011	5
2	MP ALPHA2	Y	-.011	1
3	MP ALPHA2	X	-.018	5
4	MP ALPHA2	X	-.018	1
5	MP BETA2	Y	-.011	5
6	MP BETA2	Y	-.011	1
7	MP BETA2	X	-.018	5
8	MP BETA2	X	-.018	1
9	MP GAMMA2	Y	-.018	5
10	MP GAMMA2	Y	-.018	1
11	MP GAMMA2	X	-.032	5
12	MP GAMMA2	X	-.032	1
13	MP ALPHA3	Y	-.011	5
14	MP ALPHA3	Y	-.011	1
15	MP ALPHA3	X	-.019	5
16	MP ALPHA3	X	-.019	1
17	MP BETA3	Y	-.011	5
18	MP BETA3	Y	-.011	1
19	MP BETA3	X	-.019	5
20	MP BETA3	X	-.019	1
21	MP GAMMA3	Y	-.019	5
22	MP GAMMA3	Y	-.019	1
23	MP GAMMA3	X	-.033	5
24	MP GAMMA3	X	-.033	1
25	MP ALPHA1	Y	-.004	4.5
26	MP ALPHA1	Y	-.004	1.5
27	MP ALPHA1	X	-.007	4.5
28	MP ALPHA1	X	-.007	1.5
29	MP BETA1	Y	-.004	4.5
30	MP BETA1	Y	-.004	1.5
31	MP BETA1	X	-.007	4.5
32	MP BETA1	X	-.007	1.5
33	MP GAMMA1	Y	-.006	4.5
34	MP GAMMA1	Y	-.006	1.5
35	MP GAMMA1	X	-.01	4.5
36	MP GAMMA1	X	-.01	1.5
37	MP ALPHA1	Y	-.003	3
38	MP ALPHA1	X	-.006	3
39	MP BETA1	Y	-.003	3
40	MP BETA1	X	-.006	3
41	MP GAMMA1	Y	-.004	3
42	MP GAMMA1	X	-.007	3
43	MP ALPHA3	Y	-.003	3

Member Point Loads (BLC 30 : Ice Wind Load (60)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
44	MP ALPHA3	X	-.005	3
45	MP BETA3	Y	-.003	3
46	MP BETA3	X	-.005	3
47	MP GAMMA3	Y	-.003	3
48	MP GAMMA3	X	-.006	3
49	MP ALPHA1	Y	-.000519	3
50	MP ALPHA1	X	-.000899	3
51	MP BETA1	Y	-.000519	3
52	MP BETA1	X	-.000899	3
53	MP GAMMA1	Y	-.001	3
54	MP GAMMA1	X	-.002	3
55	MP ALPHA4	Y	-.006	3
56	MP ALPHA4	X	-.01	3
57	MP BETA4	Y	-.006	3
58	MP BETA4	X	-.01	3

Member Point Loads (BLC 31 : Ice Wind Load (90))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.016	5
2	MP ALPHA2	X	-.016	1
3	MP BETA2	X	-.032	5
4	MP BETA2	X	-.032	1
5	MP GAMMA2	X	-.032	5
6	MP GAMMA2	X	-.032	1
7	MP ALPHA3	X	-.016	5
8	MP ALPHA3	X	-.016	1
9	MP BETA3	X	-.032	5
10	MP BETA3	X	-.032	1
11	MP GAMMA3	X	-.032	5
12	MP GAMMA3	X	-.032	1
13	MP ALPHA1	X	-.006	4.5
14	MP ALPHA1	X	-.006	1.5
15	MP BETA1	X	-.01	4.5
16	MP BETA1	X	-.01	1.5
17	MP GAMMA1	X	-.01	4.5
18	MP GAMMA1	X	-.01	1.5
19	MP ALPHA1	X	-.006	3
20	MP BETA1	X	-.008	3
21	MP GAMMA1	X	-.008	3
22	MP ALPHA3	X	-.006	3
23	MP BETA3	X	-.007	3
24	MP GAMMA3	X	-.007	3
25	MP ALPHA1	X	-.000441	3
26	MP BETA1	X	-.002	3
27	MP GAMMA1	X	-.002	3
28	MP ALPHA4	X	-.012	3
29	MP BETA4	X	-.012	3

Member Point Loads (BLC 32 : Ice Wind Load (120))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.011	5
2	MP ALPHA2	Y	.011	1
3	MP ALPHA2	X	-.018	5
4	MP ALPHA2	X	-.018	1
5	MP BETA2	Y	.018	5
6	MP BETA2	Y	.018	1

Member Point Loads (BLC 32 : Ice Wind Load (120)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
7	MP BETA2	X	-.032	5
8	MP BETA2	X	-.032	1
9	MP GAMMA2	Y	.011	5
10	MP GAMMA2	Y	.011	1
11	MP GAMMA2	X	-.018	5
12	MP GAMMA2	X	-.018	1
13	MP ALPHA3	Y	.011	5
14	MP ALPHA3	Y	.011	1
15	MP ALPHA3	X	-.019	5
16	MP ALPHA3	X	-.019	1
17	MP BETA3	Y	.019	5
18	MP BETA3	Y	.019	1
19	MP BETA3	X	-.033	5
20	MP BETA3	X	-.033	1
21	MP GAMMA3	Y	.011	5
22	MP GAMMA3	Y	.011	1
23	MP GAMMA3	X	-.019	5
24	MP GAMMA3	X	-.019	1
25	MP ALPHA1	Y	.004	4.5
26	MP ALPHA1	Y	.004	1.5
27	MP ALPHA1	X	-.007	4.5
28	MP ALPHA1	X	-.007	1.5
29	MP BETA1	Y	.006	4.5
30	MP BETA1	Y	.006	1.5
31	MP BETA1	X	-.01	4.5
32	MP BETA1	X	-.01	1.5
33	MP GAMMA1	Y	.004	4.5
34	MP GAMMA1	Y	.004	1.5
35	MP GAMMA1	X	-.007	4.5
36	MP GAMMA1	X	-.007	1.5
37	MP ALPHA1	Y	.003	3
38	MP ALPHA1	X	-.006	3
39	MP BETA1	Y	.004	3
40	MP BETA1	X	-.007	3
41	MP GAMMA1	Y	.003	3
42	MP GAMMA1	X	-.006	3
43	MP ALPHA3	Y	.003	3
44	MP ALPHA3	X	-.005	3
45	MP BETA3	Y	.003	3
46	MP BETA3	X	-.006	3
47	MP GAMMA3	Y	.003	3
48	MP GAMMA3	X	-.005	3
49	MP ALPHA1	Y	.000519	3
50	MP ALPHA1	X	-.000899	3
51	MP BETA1	Y	.001	3
52	MP BETA1	X	-.002	3
53	MP GAMMA1	Y	.000519	3
54	MP GAMMA1	X	-.000899	3
55	MP ALPHA4	Y	.006	3
56	MP ALPHA4	X	-.01	3
57	MP BETA4	Y	.006	3
58	MP BETA4	X	-.01	3

Member Point Loads (BLC 33 : Ice Wind Load (150))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.027	5

Member Point Loads (BLC 33 : Ice Wind Load (150)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
2	MP ALPHA2	Y	.027	1
3	MP ALPHA2	X	-.016	5
4	MP ALPHA2	X	-.016	1
5	MP BETA2	Y	.027	5
6	MP BETA2	Y	.027	1
7	MP BETA2	X	-.016	5
8	MP BETA2	X	-.016	1
9	MP GAMMA2	Y	.014	5
10	MP GAMMA2	Y	.014	1
11	MP GAMMA2	X	-.008	5
12	MP GAMMA2	X	-.008	1
13	MP ALPHA3	Y	.028	5
14	MP ALPHA3	Y	.028	1
15	MP ALPHA3	X	-.016	5
16	MP ALPHA3	X	-.016	1
17	MP BETA3	Y	.028	5
18	MP BETA3	Y	.028	1
19	MP BETA3	X	-.016	5
20	MP BETA3	X	-.016	1
21	MP GAMMA3	Y	.014	5
22	MP GAMMA3	Y	.014	1
23	MP GAMMA3	X	-.008	5
24	MP GAMMA3	X	-.008	1
25	MP ALPHA1	Y	.009	4.5
26	MP ALPHA1	Y	.009	1.5
27	MP ALPHA1	X	-.005	4.5
28	MP ALPHA1	X	-.005	1.5
29	MP BETA1	Y	.009	4.5
30	MP BETA1	Y	.009	1.5
31	MP BETA1	X	-.005	4.5
32	MP BETA1	X	-.005	1.5
33	MP GAMMA1	Y	.006	4.5
34	MP GAMMA1	Y	.006	1.5
35	MP GAMMA1	X	-.003	4.5
36	MP GAMMA1	X	-.003	1.5
37	MP ALPHA1	Y	.007	3
38	MP ALPHA1	X	-.004	3
39	MP BETA1	Y	.007	3
40	MP BETA1	X	-.004	3
41	MP GAMMA1	Y	.005	3
42	MP GAMMA1	X	-.003	3
43	MP ALPHA3	Y	.006	3
44	MP ALPHA3	X	-.003	3
45	MP BETA3	Y	.006	3
46	MP BETA3	X	-.003	3
47	MP GAMMA3	Y	.005	3
48	MP GAMMA3	X	-.003	3
49	MP ALPHA1	Y	.002	3
50	MP ALPHA1	X	-.001	3
51	MP BETA1	Y	.002	3
52	MP BETA1	X	-.001	3
53	MP GAMMA1	Y	.000382	3
54	MP GAMMA1	X	-.000221	3
55	MP ALPHA4	Y	.01	3
56	MP ALPHA4	X	-.006	3
57	MP BETA4	Y	.01	3
58	MP BETA4	X	-.006	3

Member Point Loads (BLC 34 : Ice Wind Load (180))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.037	5
2	MP ALPHA2	Y	.037	1
3	MP BETA2	Y	.021	5
4	MP BETA2	Y	.021	1
5	MP GAMMA2	Y	.021	5
6	MP GAMMA2	Y	.021	1
7	MP ALPHA3	Y	.038	5
8	MP ALPHA3	Y	.038	1
9	MP BETA3	Y	.022	5
10	MP BETA3	Y	.022	1
11	MP GAMMA3	Y	.022	5
12	MP GAMMA3	Y	.022	1
13	MP ALPHA1	Y	.012	4.5
14	MP ALPHA1	Y	.012	1.5
15	MP BETA1	Y	.008	4.5
16	MP BETA1	Y	.008	1.5
17	MP GAMMA1	Y	.008	4.5
18	MP GAMMA1	Y	.008	1.5
19	MP ALPHA1	Y	.008	3
20	MP BETA1	Y	.007	3
21	MP GAMMA1	Y	.007	3
22	MP ALPHA3	Y	.007	3
23	MP BETA3	Y	.006	3
24	MP GAMMA3	Y	.006	3
25	MP ALPHA1	Y	.003	3
26	MP BETA1	Y	.001	3
27	MP GAMMA1	Y	.001	3
28	MP ALPHA4	Y	.012	3
29	MP BETA4	Y	.012	3

Member Point Loads (BLC 35 : Ice Wind Load (210))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.027	5
2	MP ALPHA2	Y	.027	1
3	MP ALPHA2	X	.016	5
4	MP ALPHA2	X	.016	1
5	MP BETA2	Y	.014	5
6	MP BETA2	Y	.014	1
7	MP BETA2	X	.008	5
8	MP BETA2	X	.008	1
9	MP GAMMA2	Y	.027	5
10	MP GAMMA2	Y	.027	1
11	MP GAMMA2	X	.016	5
12	MP GAMMA2	X	.016	1
13	MP ALPHA3	Y	.028	5
14	MP ALPHA3	Y	.028	1
15	MP ALPHA3	X	.016	5
16	MP ALPHA3	X	.016	1
17	MP BETA3	Y	.014	5
18	MP BETA3	Y	.014	1
19	MP BETA3	X	.008	5
20	MP BETA3	X	.008	1
21	MP GAMMA3	Y	.028	5
22	MP GAMMA3	Y	.028	1
23	MP GAMMA3	X	.016	5
24	MP GAMMA3	X	.016	1

Member Point Loads (BLC 35 : Ice Wind Load (210)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
25	MP ALPHA1	Y	.009	4.5
26	MP ALPHA1	Y	.009	1.5
27	MP ALPHA1	X	.005	4.5
28	MP ALPHA1	X	.005	1.5
29	MP BETA1	Y	.006	4.5
30	MP BETA1	Y	.006	1.5
31	MP BETA1	X	.003	4.5
32	MP BETA1	X	.003	1.5
33	MP GAMMA1	Y	.009	4.5
34	MP GAMMA1	Y	.009	1.5
35	MP GAMMA1	X	.005	4.5
36	MP GAMMA1	X	.005	1.5
37	MP ALPHA1	Y	.007	3
38	MP ALPHA1	X	.004	3
39	MP BETA1	Y	.005	3
40	MP BETA1	X	.003	3
41	MP GAMMA1	Y	.007	3
42	MP GAMMA1	X	.004	3
43	MP ALPHA3	Y	.006	3
44	MP ALPHA3	X	.003	3
45	MP BETA3	Y	.005	3
46	MP BETA3	X	.003	3
47	MP GAMMA3	Y	.006	3
48	MP GAMMA3	X	.003	3
49	MP ALPHA1	Y	.002	3
50	MP ALPHA1	X	.001	3
51	MP BETA1	Y	.000382	3
52	MP BETA1	X	.000221	3
53	MP GAMMA1	Y	.002	3
54	MP GAMMA1	X	.001	3
55	MP ALPHA4	Y	.01	3
56	MP ALPHA4	X	.006	3
57	MP BETA4	Y	.01	3
58	MP BETA4	X	.006	3

Member Point Loads (BLC 36 : Ice Wind Load (240))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	.011	5
2	MP ALPHA2	Y	.011	1
3	MP ALPHA2	X	.018	5
4	MP ALPHA2	X	.018	1
5	MP BETA2	Y	.011	5
6	MP BETA2	Y	.011	1
7	MP BETA2	X	.018	5
8	MP BETA2	X	.018	1
9	MP GAMMA2	Y	.018	5
10	MP GAMMA2	Y	.018	1
11	MP GAMMA2	X	.032	5
12	MP GAMMA2	X	.032	1
13	MP ALPHA3	Y	.011	5
14	MP ALPHA3	Y	.011	1
15	MP ALPHA3	X	.019	5
16	MP ALPHA3	X	.019	1
17	MP BETA3	Y	.011	5
18	MP BETA3	Y	.011	1
19	MP BETA3	X	.019	5

Member Point Loads (BLC 36 : Ice Wind Load (240)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
20	MP BETA3	X	.019	1
21	MP GAMMA3	Y	.019	5
22	MP GAMMA3	Y	.019	1
23	MP GAMMA3	X	.033	5
24	MP GAMMA3	X	.033	1
25	MP ALPHA1	Y	.004	4.5
26	MP ALPHA1	Y	.004	1.5
27	MP ALPHA1	X	.007	4.5
28	MP ALPHA1	X	.007	1.5
29	MP BETA1	Y	.004	4.5
30	MP BETA1	Y	.004	1.5
31	MP BETA1	X	.007	4.5
32	MP BETA1	X	.007	1.5
33	MP GAMMA1	Y	.006	4.5
34	MP GAMMA1	Y	.006	1.5
35	MP GAMMA1	X	.01	4.5
36	MP GAMMA1	X	.01	1.5
37	MP ALPHA1	Y	.003	3
38	MP ALPHA1	X	.006	3
39	MP BETA1	Y	.003	3
40	MP BETA1	X	.006	3
41	MP GAMMA1	Y	.004	3
42	MP GAMMA1	X	.007	3
43	MP ALPHA3	Y	.003	3
44	MP ALPHA3	X	.005	3
45	MP BETA3	Y	.003	3
46	MP BETA3	X	.005	3
47	MP GAMMA3	Y	.003	3
48	MP GAMMA3	X	.006	3
49	MP ALPHA1	Y	.000519	3
50	MP ALPHA1	X	.000899	3
51	MP BETA1	Y	.000519	3
52	MP BETA1	X	.000899	3
53	MP GAMMA1	Y	.001	3
54	MP GAMMA1	X	.002	3
55	MP ALPHA4	Y	.006	3
56	MP ALPHA4	X	.01	3
57	MP BETA4	Y	.006	3
58	MP BETA4	X	.01	3

Member Point Loads (BLC 37 : Ice Wind Load (270))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	.016	5
2	MP ALPHA2	X	.016	1
3	MP BETA2	X	.032	5
4	MP BETA2	X	.032	1
5	MP GAMMA2	X	.032	5
6	MP GAMMA2	X	.032	1
7	MP ALPHA3	X	.016	5
8	MP ALPHA3	X	.016	1
9	MP BETA3	X	.032	5
10	MP BETA3	X	.032	1
11	MP GAMMA3	X	.032	5
12	MP GAMMA3	X	.032	1
13	MP ALPHA1	X	.006	4.5
14	MP ALPHA1	X	.006	1.5

Member Point Loads (BLC 37 : Ice Wind Load (270)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP BETA1	X	.01	4.5
16	MP BETA1	X	.01	1.5
17	MP GAMMA1	X	.01	4.5
18	MP GAMMA1	X	.01	1.5
19	MP ALPHA1	X	.006	3
20	MP BETA1	X	.008	3
21	MP GAMMA1	X	.008	3
22	MP ALPHA3	X	.006	3
23	MP BETA3	X	.007	3
24	MP GAMMA3	X	.007	3
25	MP ALPHA1	X	.000441	3
26	MP BETA1	X	.002	3
27	MP GAMMA1	X	.002	3
28	MP ALPHA4	X	.012	3
29	MP BETA4	X	.012	3

Member Point Loads (BLC 38 : Ice Wind Load (300))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.011	5
2	MP ALPHA2	Y	-.011	1
3	MP ALPHA2	X	.018	5
4	MP ALPHA2	X	.018	1
5	MP BETA2	Y	-.018	5
6	MP BETA2	Y	-.018	1
7	MP BETA2	X	.032	5
8	MP BETA2	X	.032	1
9	MP GAMMA2	Y	-.011	5
10	MP GAMMA2	Y	-.011	1
11	MP GAMMA2	X	.018	5
12	MP GAMMA2	X	.018	1
13	MP ALPHA3	Y	-.011	5
14	MP ALPHA3	Y	-.011	1
15	MP ALPHA3	X	.019	5
16	MP ALPHA3	X	.019	1
17	MP BETA3	Y	-.019	5
18	MP BETA3	Y	-.019	1
19	MP BETA3	X	.033	5
20	MP BETA3	X	.033	1
21	MP GAMMA3	Y	-.011	5
22	MP GAMMA3	Y	-.011	1
23	MP GAMMA3	X	.019	5
24	MP GAMMA3	X	.019	1
25	MP ALPHA1	Y	-.004	4.5
26	MP ALPHA1	Y	-.004	1.5
27	MP ALPHA1	X	.007	4.5
28	MP ALPHA1	X	.007	1.5
29	MP BETA1	Y	-.006	4.5
30	MP BETA1	Y	-.006	1.5
31	MP BETA1	X	.01	4.5
32	MP BETA1	X	.01	1.5
33	MP GAMMA1	Y	-.004	4.5
34	MP GAMMA1	Y	-.004	1.5
35	MP GAMMA1	X	.007	4.5
36	MP GAMMA1	X	.007	1.5
37	MP ALPHA1	Y	-.003	3
38	MP ALPHA1	X	.006	3

Member Point Loads (BLC 38 : Ice Wind Load (300)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
39	MP BETA1	Y	-.004	3
40	MP BETA1	X	.007	3
41	MP GAMMA1	Y	-.003	3
42	MP GAMMA1	X	.006	3
43	MP ALPHA3	Y	-.003	3
44	MP ALPHA3	X	.005	3
45	MP BETA3	Y	-.003	3
46	MP BETA3	X	.006	3
47	MP GAMMA3	Y	-.003	3
48	MP GAMMA3	X	.005	3
49	MP ALPHA1	Y	-.000519	3
50	MP ALPHA1	X	.000899	3
51	MP BETA1	Y	-.001	3
52	MP BETA1	X	.002	3
53	MP GAMMA1	Y	-.000519	3
54	MP GAMMA1	X	.000899	3
55	MP ALPHA4	Y	-.006	3
56	MP ALPHA4	X	.01	3
57	MP BETA4	Y	-.006	3
58	MP BETA4	X	.01	3

Member Point Loads (BLC 39 : Ice Wind Load (330))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.027	5
2	MP ALPHA2	Y	-.027	1
3	MP ALPHA2	X	.016	5
4	MP ALPHA2	X	.016	1
5	MP BETA2	Y	-.027	5
6	MP BETA2	Y	-.027	1
7	MP BETA2	X	.016	5
8	MP BETA2	X	.016	1
9	MP GAMMA2	Y	-.014	5
10	MP GAMMA2	Y	-.014	1
11	MP GAMMA2	X	.008	5
12	MP GAMMA2	X	.008	1
13	MP ALPHA3	Y	-.028	5
14	MP ALPHA3	Y	-.028	1
15	MP ALPHA3	X	.016	5
16	MP ALPHA3	X	.016	1
17	MP BETA3	Y	-.028	5
18	MP BETA3	Y	-.028	1
19	MP BETA3	X	.016	5
20	MP BETA3	X	.016	1
21	MP GAMMA3	Y	-.014	5
22	MP GAMMA3	Y	-.014	1
23	MP GAMMA3	X	.008	5
24	MP GAMMA3	X	.008	1
25	MP ALPHA1	Y	-.009	4.5
26	MP ALPHA1	Y	-.009	1.5
27	MP ALPHA1	X	.005	4.5
28	MP ALPHA1	X	.005	1.5
29	MP BETA1	Y	-.009	4.5
30	MP BETA1	Y	-.009	1.5
31	MP BETA1	X	.005	4.5
32	MP BETA1	X	.005	1.5
33	MP GAMMA1	Y	-.006	4.5

Member Point Loads (BLC 39 : Ice Wind Load (330)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
34	MP GAMMA1	Y	-.006	1.5
35	MP GAMMA1	X	.003	4.5
36	MP GAMMA1	X	.003	1.5
37	MP ALPHA1	Y	-.007	3
38	MP ALPHA1	X	.004	3
39	MP BETA1	Y	-.007	3
40	MP BETA1	X	.004	3
41	MP GAMMA1	Y	-.005	3
42	MP GAMMA1	X	.003	3
43	MP ALPHA3	Y	-.006	3
44	MP ALPHA3	X	.003	3
45	MP BETA3	Y	-.006	3
46	MP BETA3	X	.003	3
47	MP GAMMA3	Y	-.005	3
48	MP GAMMA3	X	.003	3
49	MP ALPHA1	Y	-.002	3
50	MP ALPHA1	X	.001	3
51	MP BETA1	Y	-.002	3
52	MP BETA1	X	.001	3
53	MP GAMMA1	Y	-.000382	3
54	MP GAMMA1	X	.000221	3
55	MP ALPHA4	Y	-.01	3
56	MP ALPHA4	X	.006	3
57	MP BETA4	Y	-.01	3
58	MP BETA4	X	.006	3

Member Point Loads (BLC 40 : Earthquake (x-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	X	-.005	5
2	MP ALPHA2	X	-.005	1
3	MP BETA2	X	-.005	5
4	MP BETA2	X	-.005	1
5	MP GAMMA2	X	-.005	5
6	MP GAMMA2	X	-.005	1
7	MP ALPHA3	X	-.003	5
8	MP ALPHA3	X	-.003	1
9	MP BETA3	X	-.003	5
10	MP BETA3	X	-.003	1
11	MP GAMMA3	X	-.003	5
12	MP GAMMA3	X	-.003	1
13	MP ALPHA1	X	-.002	4.5
14	MP ALPHA1	X	-.002	1.5
15	MP BETA1	X	-.002	4.5
16	MP BETA1	X	-.002	1.5
17	MP GAMMA1	X	-.002	4.5
18	MP GAMMA1	X	-.002	1.5
19	MP ALPHA1	X	-.008	3
20	MP BETA1	X	-.008	3
21	MP GAMMA1	X	-.008	3
22	MP ALPHA3	X	-.008	3
23	MP BETA3	X	-.008	3
24	MP GAMMA3	X	-.008	3
25	MP ALPHA1	X	-.000193	3
26	MP BETA1	X	-.000193	3
27	MP GAMMA1	X	-.000193	3
28	MP ALPHA4	X	-.004	3

Member Point Loads (BLC 40 : Earthquake (x-direction)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
29	MP BETA4	X	-.004	3

Member Point Loads (BLC 41 : Earthquake (y-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Y	-.005	5
2	MP ALPHA2	Y	-.005	1
3	MP BETA2	Y	-.005	5
4	MP BETA2	Y	-.005	1
5	MP GAMMA2	Y	-.005	5
6	MP GAMMA2	Y	-.005	1
7	MP ALPHA3	Y	-.003	5
8	MP ALPHA3	Y	-.003	1
9	MP BETA3	Y	-.003	5
10	MP BETA3	Y	-.003	1
11	MP GAMMA3	Y	-.003	5
12	MP GAMMA3	Y	-.003	1
13	MP ALPHA1	Y	-.002	4.5
14	MP ALPHA1	Y	-.002	1.5
15	MP BETA1	Y	-.002	4.5
16	MP BETA1	Y	-.002	1.5
17	MP GAMMA1	Y	-.002	4.5
18	MP GAMMA1	Y	-.002	1.5
19	MP ALPHA1	Y	-.008	3
20	MP BETA1	Y	-.008	3
21	MP GAMMA1	Y	-.008	3
22	MP ALPHA3	Y	-.008	3
23	MP BETA3	Y	-.008	3
24	MP GAMMA3	Y	-.008	3
25	MP ALPHA1	Y	-.000193	3
26	MP BETA1	Y	-.000193	3
27	MP GAMMA1	Y	-.000193	3
28	MP ALPHA4	Y	-.004	3
29	MP BETA4	Y	-.004	3

Member Point Loads (BLC 42 : Earthquake (z-direction))

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP ALPHA2	Z	-.002	5
2	MP ALPHA2	Z	-.002	1
3	MP BETA2	Z	-.002	5
4	MP BETA2	Z	-.002	1
5	MP GAMMA2	Z	-.002	5
6	MP GAMMA2	Z	-.002	1
7	MP ALPHA3	Z	-.001	5
8	MP ALPHA3	Z	-.001	1
9	MP BETA3	Z	-.001	5
10	MP BETA3	Z	-.001	1
11	MP GAMMA3	Z	-.001	5
12	MP GAMMA3	Z	-.001	1
13	MP ALPHA1	Z	-.00075	4.5
14	MP ALPHA1	Z	-.00075	1.5
15	MP BETA1	Z	-.00075	4.5
16	MP BETA1	Z	-.00075	1.5
17	MP GAMMA1	Z	-.00075	4.5
18	MP GAMMA1	Z	-.00075	1.5
19	MP ALPHA1	Z	-.003	3
20	MP BETA1	Z	-.003	3

Member Point Loads (BLC 42 : Earthquake (z-direction)) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
21	MP GAMMA1	Z	-.003	3
22	MP ALPHA3	Z	-.003	3
23	MP BETA3	Z	-.003	3
24	MP GAMMA3	Z	-.003	3
25	MP ALPHA1	Z	-7.7e-5	3
26	MP BETA1	Z	-7.7e-5	3
27	MP GAMMA1	Z	-7.7e-5	3
28	MP ALPHA4	Z	-.001	3
29	MP BETA4	Z	-.001	3

Member Area Loads (BLC 3 : Dead Load)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N5	N6	N4	N3	Z	Two Way	-.01
2	N3	N4	N2	N1	Z	Two Way	-.01
3	N1	N2	N6	N5	Z	Two Way	-.01

Member Area Loads (BLC 27 : Ice Dead Load)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N5	N6	N4	N3	Z	Two Way	-.014
2	N3	N4	N2	N1	Z	Two Way	-.014
3	N1	N2	N6	N5	Z	Two Way	-.014

Member Distributed Loads (BLC 2 : Wind Load (0))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE1	PY	-.006	-.006	0	0
2	Rail1	PY	-.006	-.006	0	0
3	Rail2	PY	-.006	-.006	0	0
4	Rail3	PY	-.006	-.006	0	0
5	Pipe1	PY	-.006	-.006	0	0
6	Pipe2	PY	-.006	-.006	0	0
7	Pipe3	PY	-.006	-.006	0	0

Member Distributed Loads (BLC 4 : Wind Load (30))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PY	-.006	-.006	0	0
2	FACE3	PY	-.006	-.006	0	0
3	INNERFACE1	PY	-.006	-.006	0	0
4	INNERFACE2	PY	-.006	-.006	0	0
5	INNERFACE3	PY	-.006	-.006	0	0
6	MP ALPHA1	PY	-.007	-.007	0	0
7	MP ALPHA2	PY	-.007	-.007	0	0
8	MP ALPHA3	PY	-.007	-.007	0	0
9	MP ALPHA4	PY	-.007	-.007	0	0
10	MP BETA1	PY	-.007	-.007	0	0
11	MP BETA2	PY	-.007	-.007	0	0
12	MP BETA3	PY	-.007	-.007	0	0
13	MP BETA4	PY	-.007	-.007	0	0
14	MP GAMMA1	PY	-.007	-.007	0	0
15	MP GAMMA2	PY	-.007	-.007	0	0
16	MP GAMMA3	PY	-.007	-.007	0	0
17	MP GAMMA4	PY	-.007	-.007	0	0
18	STANDOFF1	PY	-.008	-.008	0	0
19	STANDOFF3	PY	-.008	-.008	0	0

Member Distributed Loads (BLC 4 : Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
20	STANDOFF5	PY	-.008	-.008	0	0
21	STRUT1	PY	-.006	-.006	0	0
22	STRUT2	PY	-.006	-.006	0	0
23	STRUT3	PY	-.006	-.006	0	0
24	FACE1	PY	-.005	-.005	0	0
25	FACE2	PY	-.005	-.005	0	0
26	FACE3	PY	-.005	-.005	0	0
27	INNERFACE1	PY	-.005	-.005	0	0
28	INNERFACE2	PY	-.005	-.005	0	0
29	INNERFACE3	PY	-.005	-.005	0	0
30	MP ALPHA1	PY	-.006	-.006	0	0
31	MP ALPHA2	PY	-.006	-.006	0	0
32	MP ALPHA3	PY	-.006	-.006	0	0
33	MP ALPHA4	PY	-.006	-.006	0	0
34	MP BETA1	PY	-.006	-.006	0	0
35	MP BETA2	PY	-.006	-.006	0	0
36	MP BETA3	PY	-.006	-.006	0	0
37	MP BETA4	PY	-.006	-.006	0	0
38	MP GAMMA1	PY	-.006	-.006	0	0
39	MP GAMMA2	PY	-.006	-.006	0	0
40	MP GAMMA3	PY	-.006	-.006	0	0
41	MP GAMMA4	PY	-.006	-.006	0	0
42	STANDOFF1	PY	-.007	-.007	0	0
43	STANDOFF3	PY	-.007	-.007	0	0
44	STANDOFF5	PY	-.007	-.007	0	0
45	STRUT1	PY	-.005	-.005	0	0
46	STRUT2	PY	-.005	-.005	0	0
47	STRUT3	PY	-.005	-.005	0	0
48	FACE1	PX	-.003	-.003	0	0
49	Rail1	PY	-.005	-.005	0	0
50	Rail1	PX	-.003	-.003	0	0
51	Rail2	PY	-.005	-.005	0	0
52	Rail2	PX	-.003	-.003	0	0
53	Rail3	PY	-.005	-.005	0	0
54	Rail3	PX	-.003	-.003	0	0
55	Pipe1	PY	-.005	-.005	0	0
56	Pipe1	PX	-.003	-.003	0	0
57	Pipe2	PY	-.005	-.005	0	0
58	Pipe2	PX	-.003	-.003	0	0
59	Pipe3	PY	-.005	-.005	0	0
60	Pipe3	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 5 : Wind Load (60))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.003	-.003	0	0
2	FACE3	PX	-.003	-.003	0	0
3	INNERFACE1	PX	-.003	-.003	0	0
4	INNERFACE2	PX	-.003	-.003	0	0
5	INNERFACE3	PX	-.003	-.003	0	0
6	MP ALPHA1	PX	-.004	-.004	0	0
7	MP ALPHA2	PX	-.004	-.004	0	0
8	MP ALPHA3	PX	-.004	-.004	0	0
9	MP ALPHA4	PX	-.004	-.004	0	0
10	MP BETA1	PX	-.004	-.004	0	0
11	MP BETA2	PX	-.004	-.004	0	0
12	MP BETA3	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 5 : Wind Load (60)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
13	MP BETA4	PX	-.004	-.004	0	0
14	MP GAMMA1	PX	-.004	-.004	0	0
15	MP GAMMA2	PX	-.004	-.004	0	0
16	MP GAMMA3	PX	-.004	-.004	0	0
17	MP GAMMA4	PX	-.004	-.004	0	0
18	STANDOFF1	PX	-.004	-.004	0	0
19	STANDOFF3	PX	-.004	-.004	0	0
20	STANDOFF5	PX	-.004	-.004	0	0
21	STRUT1	PX	-.003	-.003	0	0
22	STRUT2	PX	-.003	-.003	0	0
23	STRUT3	PX	-.003	-.003	0	0
24	FACE1	PY	-.003	-.003	0	0
25	FACE2	PY	-.003	-.003	0	0
26	FACE3	PY	-.003	-.003	0	0
27	INNERFACE1	PY	-.003	-.003	0	0
28	INNERFACE2	PY	-.003	-.003	0	0
29	INNERFACE3	PY	-.003	-.003	0	0
30	MP ALPHA1	PY	-.004	-.004	0	0
31	MP ALPHA2	PY	-.004	-.004	0	0
32	MP ALPHA3	PY	-.004	-.004	0	0
33	MP ALPHA4	PY	-.004	-.004	0	0
34	MP BETA1	PY	-.004	-.004	0	0
35	MP BETA2	PY	-.004	-.004	0	0
36	MP BETA3	PY	-.004	-.004	0	0
37	MP BETA4	PY	-.004	-.004	0	0
38	MP GAMMA1	PY	-.004	-.004	0	0
39	MP GAMMA2	PY	-.004	-.004	0	0
40	MP GAMMA3	PY	-.004	-.004	0	0
41	MP GAMMA4	PY	-.004	-.004	0	0
42	STANDOFF1	PY	-.004	-.004	0	0
43	STANDOFF3	PY	-.004	-.004	0	0
44	STANDOFF5	PY	-.004	-.004	0	0
45	STRUT1	PY	-.003	-.003	0	0
46	STRUT2	PY	-.003	-.003	0	0
47	STRUT3	PY	-.003	-.003	0	0
48	FACE1	PX	-.005	-.005	0	0
49	Rail1	PY	-.003	-.003	0	0
50	Rail1	PX	-.005	-.005	0	0
51	Rail2	PY	-.003	-.003	0	0
52	Rail2	PX	-.005	-.005	0	0
53	Rail3	PY	-.003	-.003	0	0
54	Rail3	PX	-.005	-.005	0	0
55	Pipe1	PY	-.003	-.003	0	0
56	Pipe1	PX	-.005	-.005	0	0
57	Pipe2	PY	-.003	-.003	0	0
58	Pipe2	PX	-.005	-.005	0	0
59	Pipe3	PY	-.003	-.003	0	0
60	Pipe3	PX	-.005	-.005	0	0

Member Distributed Loads (BLC 6 : Wind Load (90))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.005	-.005	0	0
2	FACE3	PX	-.005	-.005	0	0
3	INNERFACE1	PX	-.005	-.005	0	0
4	INNERFACE2	PX	-.005	-.005	0	0
5	INNERFACE3	PX	-.005	-.005	0	0

Member Distributed Loads (BLC 6 : Wind Load (90)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
6	MP ALPHA1	PX	-.006	-.006	0	0
7	MP ALPHA2	PX	-.006	-.006	0	0
8	MP ALPHA3	PX	-.006	-.006	0	0
9	MP ALPHA4	PX	-.006	-.006	0	0
10	MP BETA1	PX	-.006	-.006	0	0
11	MP BETA2	PX	-.006	-.006	0	0
12	MP BETA3	PX	-.006	-.006	0	0
13	MP BETA4	PX	-.006	-.006	0	0
14	MP GAMMA1	PX	-.006	-.006	0	0
15	MP GAMMA2	PX	-.006	-.006	0	0
16	MP GAMMA3	PX	-.006	-.006	0	0
17	MP GAMMA4	PX	-.006	-.006	0	0
18	STANDOFF1	PX	-.007	-.007	0	0
19	STANDOFF3	PX	-.007	-.007	0	0
20	STANDOFF5	PX	-.007	-.007	0	0
21	STRUT1	PX	-.005	-.005	0	0
22	STRUT2	PX	-.005	-.005	0	0
23	STRUT3	PX	-.005	-.005	0	0
24	FACE1	PX	-.006	-.006	0	0
25	Rail1	PX	-.006	-.006	0	0
26	Rail2	PX	-.006	-.006	0	0
27	Rail3	PX	-.006	-.006	0	0
28	Pipe1	PX	-.006	-.006	0	0
29	Pipe2	PX	-.006	-.006	0	0
30	Pipe3	PX	-.006	-.006	0	0

Member Distributed Loads (BLC 7 : Wind Load (120))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.006	-.006	0	0
2	FACE3	PX	-.006	-.006	0	0
3	INNERFACE1	PX	-.006	-.006	0	0
4	INNERFACE2	PX	-.006	-.006	0	0
5	INNERFACE3	PX	-.006	-.006	0	0
6	MP ALPHA1	PX	-.007	-.007	0	0
7	MP ALPHA2	PX	-.007	-.007	0	0
8	MP ALPHA3	PX	-.007	-.007	0	0
9	MP ALPHA4	PX	-.007	-.007	0	0
10	MP BETA1	PX	-.007	-.007	0	0
11	MP BETA2	PX	-.007	-.007	0	0
12	MP BETA3	PX	-.007	-.007	0	0
13	MP BETA4	PX	-.007	-.007	0	0
14	MP GAMMA1	PX	-.007	-.007	0	0
15	MP GAMMA2	PX	-.007	-.007	0	0
16	MP GAMMA3	PX	-.007	-.007	0	0
17	MP GAMMA4	PX	-.007	-.007	0	0
18	STANDOFF1	PX	-.008	-.008	0	0
19	STANDOFF3	PX	-.008	-.008	0	0
20	STANDOFF5	PX	-.008	-.008	0	0
21	STRUT1	PX	-.006	-.006	0	0
22	STRUT2	PX	-.006	-.006	0	0
23	STRUT3	PX	-.006	-.006	0	0
24	FACE1	PY	.003	.003	0	0
25	FACE2	PY	.003	.003	0	0
26	FACE3	PY	.003	.003	0	0
27	INNERFACE1	PY	.003	.003	0	0
28	INNERFACE2	PY	.003	.003	0	0

Member Distributed Loads (BLC 7 : Wind Load (120)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
29	INNERFACE3	PY	.003	.003	0	0
30	MP ALPHA1	PY	.004	.004	0	0
31	MP ALPHA2	PY	.004	.004	0	0
32	MP ALPHA3	PY	.004	.004	0	0
33	MP ALPHA4	PY	.004	.004	0	0
34	MP BETA1	PY	.004	.004	0	0
35	MP BETA2	PY	.004	.004	0	0
36	MP BETA3	PY	.004	.004	0	0
37	MP BETA4	PY	.004	.004	0	0
38	MP GAMMA1	PY	.004	.004	0	0
39	MP GAMMA2	PY	.004	.004	0	0
40	MP GAMMA3	PY	.004	.004	0	0
41	MP GAMMA4	PY	.004	.004	0	0
42	STANDOFF1	PY	.004	.004	0	0
43	STANDOFF3	PY	.004	.004	0	0
44	STANDOFF5	PY	.004	.004	0	0
45	STRUT1	PY	.003	.003	0	0
46	STRUT2	PY	.003	.003	0	0
47	STRUT3	PY	.003	.003	0	0
48	FACE1	PX	-.005	-.005	0	0
49	Rail1	PY	.003	.003	0	0
50	Rail1	PX	-.005	-.005	0	0
51	Rail2	PY	.003	.003	0	0
52	Rail2	PX	-.005	-.005	0	0
53	Rail3	PY	.003	.003	0	0
54	Rail3	PX	-.005	-.005	0	0
55	Pipe1	PY	.003	.003	0	0
56	Pipe1	PX	-.005	-.005	0	0
57	Pipe2	PY	.003	.003	0	0
58	Pipe2	PX	-.005	-.005	0	0
59	Pipe3	PY	.003	.003	0	0
60	Pipe3	PX	-.005	-.005	0	0

Member Distributed Loads (BLC 8 : Wind Load (150))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.005	-.005	0	0
2	FACE3	PX	-.005	-.005	0	0
3	INNERFACE1	PX	-.005	-.005	0	0
4	INNERFACE2	PX	-.005	-.005	0	0
5	INNERFACE3	PX	-.005	-.005	0	0
6	MP ALPHA1	PX	-.006	-.006	0	0
7	MP ALPHA2	PX	-.006	-.006	0	0
8	MP ALPHA3	PX	-.006	-.006	0	0
9	MP ALPHA4	PX	-.006	-.006	0	0
10	MP BETA1	PX	-.006	-.006	0	0
11	MP BETA2	PX	-.006	-.006	0	0
12	MP BETA3	PX	-.006	-.006	0	0
13	MP BETA4	PX	-.006	-.006	0	0
14	MP GAMMA1	PX	-.006	-.006	0	0
15	MP GAMMA2	PX	-.006	-.006	0	0
16	MP GAMMA3	PX	-.006	-.006	0	0
17	MP GAMMA4	PX	-.006	-.006	0	0
18	STANDOFF1	PX	-.007	-.007	0	0
19	STANDOFF3	PX	-.007	-.007	0	0
20	STANDOFF5	PX	-.007	-.007	0	0
21	STRUT1	PX	-.005	-.005	0	0

Member Distributed Loads (BLC 8 : Wind Load (150)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
22	STRUT2	PX	-.005	-.005	0	0
23	STRUT3	PX	-.005	-.005	0	0
24	FACE1	PY	.005	.005	0	0
25	FACE2	PY	.005	.005	0	0
26	FACE3	PY	.005	.005	0	0
27	INNERFACE1	PY	.005	.005	0	0
28	INNERFACE2	PY	.005	.005	0	0
29	INNERFACE3	PY	.005	.005	0	0
30	MP ALPHA1	PY	.006	.006	0	0
31	MP ALPHA2	PY	.006	.006	0	0
32	MP ALPHA3	PY	.006	.006	0	0
33	MP ALPHA4	PY	.006	.006	0	0
34	MP BETA1	PY	.006	.006	0	0
35	MP BETA2	PY	.006	.006	0	0
36	MP BETA3	PY	.006	.006	0	0
37	MP BETA4	PY	.006	.006	0	0
38	MP GAMMA1	PY	.006	.006	0	0
39	MP GAMMA2	PY	.006	.006	0	0
40	MP GAMMA3	PY	.006	.006	0	0
41	MP GAMMA4	PY	.006	.006	0	0
42	STANDOFF1	PY	.007	.007	0	0
43	STANDOFF3	PY	.007	.007	0	0
44	STANDOFF5	PY	.007	.007	0	0
45	STRUT1	PY	.005	.005	0	0
46	STRUT2	PY	.005	.005	0	0
47	STRUT3	PY	.005	.005	0	0
48	FACE1	PX	-.003	-.003	0	0
49	Rail1	PY	.005	.005	0	0
50	Rail1	PX	-.003	-.003	0	0
51	Rail2	PY	.005	.005	0	0
52	Rail2	PX	-.003	-.003	0	0
53	Rail3	PY	.005	.005	0	0
54	Rail3	PX	-.003	-.003	0	0
55	Pipe1	PY	.005	.005	0	0
56	Pipe1	PX	-.003	-.003	0	0
57	Pipe2	PY	.005	.005	0	0
58	Pipe2	PX	-.003	-.003	0	0
59	Pipe3	PY	.005	.005	0	0
60	Pipe3	PX	-.003	-.003	0	0

Member Distributed Loads (BLC 9 : Wind Load (180))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.003	-.003	0	0
2	FACE3	PX	-.003	-.003	0	0
3	INNERFACE1	PX	-.003	-.003	0	0
4	INNERFACE2	PX	-.003	-.003	0	0
5	INNERFACE3	PX	-.003	-.003	0	0
6	MP ALPHA1	PX	-.004	-.004	0	0
7	MP ALPHA2	PX	-.004	-.004	0	0
8	MP ALPHA3	PX	-.004	-.004	0	0
9	MP ALPHA4	PX	-.004	-.004	0	0
10	MP BETA1	PX	-.004	-.004	0	0
11	MP BETA2	PX	-.004	-.004	0	0
12	MP BETA3	PX	-.004	-.004	0	0
13	MP BETA4	PX	-.004	-.004	0	0
14	MP GAMMA1	PX	-.004	-.004	0	0

Member Distributed Loads (BLC 9 : Wind Load (180)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
15	MP GAMMA2	PX	-.004	-.004	0	0
16	MP GAMMA3	PX	-.004	-.004	0	0
17	MP GAMMA4	PX	-.004	-.004	0	0
18	STANDOFF1	PX	-.004	-.004	0	0
19	STANDOFF3	PX	-.004	-.004	0	0
20	STANDOFF5	PX	-.004	-.004	0	0
21	STRUT1	PX	-.003	-.003	0	0
22	STRUT2	PX	-.003	-.003	0	0
23	STRUT3	PX	-.003	-.003	0	0
24	FACE1	PY	.006	.006	0	0
25	Rail1	PY	.006	.006	0	0
26	Rail2	PY	.006	.006	0	0
27	Rail3	PY	.006	.006	0	0
28	Pipe1	PY	.006	.006	0	0
29	Pipe2	PY	.006	.006	0	0
30	Pipe3	PY	.006	.006	0	0

Member Distributed Loads (BLC 10 : Wind Load (210))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PY	.006	.006	0	0
2	FACE3	PY	.006	.006	0	0
3	INNERFACE1	PY	.006	.006	0	0
4	INNERFACE2	PY	.006	.006	0	0
5	INNERFACE3	PY	.006	.006	0	0
6	MP ALPHA1	PY	.007	.007	0	0
7	MP ALPHA2	PY	.007	.007	0	0
8	MP ALPHA3	PY	.007	.007	0	0
9	MP ALPHA4	PY	.007	.007	0	0
10	MP BETA1	PY	.007	.007	0	0
11	MP BETA2	PY	.007	.007	0	0
12	MP BETA3	PY	.007	.007	0	0
13	MP BETA4	PY	.007	.007	0	0
14	MP GAMMA1	PY	.007	.007	0	0
15	MP GAMMA2	PY	.007	.007	0	0
16	MP GAMMA3	PY	.007	.007	0	0
17	MP GAMMA4	PY	.007	.007	0	0
18	STANDOFF1	PY	.008	.008	0	0
19	STANDOFF3	PY	.008	.008	0	0
20	STANDOFF5	PY	.008	.008	0	0
21	STRUT1	PY	.006	.006	0	0
22	STRUT2	PY	.006	.006	0	0
23	STRUT3	PY	.006	.006	0	0
24	FACE1	PY	.005	.005	0	0
25	FACE2	PY	.005	.005	0	0
26	FACE3	PY	.005	.005	0	0
27	INNERFACE1	PY	.005	.005	0	0
28	INNERFACE2	PY	.005	.005	0	0
29	INNERFACE3	PY	.005	.005	0	0
30	MP ALPHA1	PY	.006	.006	0	0
31	MP ALPHA2	PY	.006	.006	0	0
32	MP ALPHA3	PY	.006	.006	0	0
33	MP ALPHA4	PY	.006	.006	0	0
34	MP BETA1	PY	.006	.006	0	0
35	MP BETA2	PY	.006	.006	0	0
36	MP BETA3	PY	.006	.006	0	0
37	MP BETA4	PY	.006	.006	0	0

Member Distributed Loads (BLC 10 : Wind Load (210)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
38	MP GAMMA1	PY	.006	.006	0	0
39	MP GAMMA2	PY	.006	.006	0	0
40	MP GAMMA3	PY	.006	.006	0	0
41	MP GAMMA4	PY	.006	.006	0	0
42	STANDOFF1	PY	.007	.007	0	0
43	STANDOFF3	PY	.007	.007	0	0
44	STANDOFF5	PY	.007	.007	0	0
45	STRUT1	PY	.005	.005	0	0
46	STRUT2	PY	.005	.005	0	0
47	STRUT3	PY	.005	.005	0	0
48	FACE1	PX	.003	.003	0	0
49	Rail1	PY	.005	.005	0	0
50	Rail1	PX	.003	.003	0	0
51	Rail2	PY	.005	.005	0	0
52	Rail2	PX	.003	.003	0	0
53	Rail3	PY	.005	.005	0	0
54	Rail3	PX	.003	.003	0	0
55	Pipe1	PY	.005	.005	0	0
56	Pipe1	PX	.003	.003	0	0
57	Pipe2	PY	.005	.005	0	0
58	Pipe2	PX	.003	.003	0	0
59	Pipe3	PY	.005	.005	0	0
60	Pipe3	PX	.003	.003	0	0

Member Distributed Loads (BLC 11 : Wind Load (240))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.003	.003	0	0
2	FACE3	PX	.003	.003	0	0
3	INNERFACE1	PX	.003	.003	0	0
4	INNERFACE2	PX	.003	.003	0	0
5	INNERFACE3	PX	.003	.003	0	0
6	MP ALPHA1	PX	.004	.004	0	0
7	MP ALPHA2	PX	.004	.004	0	0
8	MP ALPHA3	PX	.004	.004	0	0
9	MP ALPHA4	PX	.004	.004	0	0
10	MP BETA1	PX	.004	.004	0	0
11	MP BETA2	PX	.004	.004	0	0
12	MP BETA3	PX	.004	.004	0	0
13	MP BETA4	PX	.004	.004	0	0
14	MP GAMMA1	PX	.004	.004	0	0
15	MP GAMMA2	PX	.004	.004	0	0
16	MP GAMMA3	PX	.004	.004	0	0
17	MP GAMMA4	PX	.004	.004	0	0
18	STANDOFF1	PX	.004	.004	0	0
19	STANDOFF3	PX	.004	.004	0	0
20	STANDOFF5	PX	.004	.004	0	0
21	STRUT1	PX	.003	.003	0	0
22	STRUT2	PX	.003	.003	0	0
23	STRUT3	PX	.003	.003	0	0
24	FACE1	PY	.003	.003	0	0
25	FACE2	PY	.003	.003	0	0
26	FACE3	PY	.003	.003	0	0
27	INNERFACE1	PY	.003	.003	0	0
28	INNERFACE2	PY	.003	.003	0	0
29	INNERFACE3	PY	.003	.003	0	0
30	MP ALPHA1	PY	.004	.004	0	0

Member Distributed Loads (BLC 11 : Wind Load (240)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
31	MP ALPHA2	PY	.004	.004	0	0
32	MP ALPHA3	PY	.004	.004	0	0
33	MP ALPHA4	PY	.004	.004	0	0
34	MP BETA1	PY	.004	.004	0	0
35	MP BETA2	PY	.004	.004	0	0
36	MP BETA3	PY	.004	.004	0	0
37	MP BETA4	PY	.004	.004	0	0
38	MP GAMMA1	PY	.004	.004	0	0
39	MP GAMMA2	PY	.004	.004	0	0
40	MP GAMMA3	PY	.004	.004	0	0
41	MP GAMMA4	PY	.004	.004	0	0
42	STANDOFF1	PY	.004	.004	0	0
43	STANDOFF3	PY	.004	.004	0	0
44	STANDOFF5	PY	.004	.004	0	0
45	STRUT1	PY	.003	.003	0	0
46	STRUT2	PY	.003	.003	0	0
47	STRUT3	PY	.003	.003	0	0
48	FACE1	PX	.005	.005	0	0
49	Rail1	PY	.003	.003	0	0
50	Rail1	PX	.005	.005	0	0
51	Rail2	PY	.003	.003	0	0
52	Rail2	PX	.005	.005	0	0
53	Rail3	PY	.003	.003	0	0
54	Rail3	PX	.005	.005	0	0
55	Pipe1	PY	.003	.003	0	0
56	Pipe1	PX	.005	.005	0	0
57	Pipe2	PY	.003	.003	0	0
58	Pipe2	PX	.005	.005	0	0
59	Pipe3	PY	.003	.003	0	0
60	Pipe3	PX	.005	.005	0	0

Member Distributed Loads (BLC 12 : Wind Load (270))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.005	.005	0	0
2	FACE3	PX	.005	.005	0	0
3	INNERFACE1	PX	.005	.005	0	0
4	INNERFACE2	PX	.005	.005	0	0
5	INNERFACE3	PX	.005	.005	0	0
6	MP ALPHA1	PX	.006	.006	0	0
7	MP ALPHA2	PX	.006	.006	0	0
8	MP ALPHA3	PX	.006	.006	0	0
9	MP ALPHA4	PX	.006	.006	0	0
10	MP BETA1	PX	.006	.006	0	0
11	MP BETA2	PX	.006	.006	0	0
12	MP BETA3	PX	.006	.006	0	0
13	MP BETA4	PX	.006	.006	0	0
14	MP GAMMA1	PX	.006	.006	0	0
15	MP GAMMA2	PX	.006	.006	0	0
16	MP GAMMA3	PX	.006	.006	0	0
17	MP GAMMA4	PX	.006	.006	0	0
18	STANDOFF1	PX	.007	.007	0	0
19	STANDOFF3	PX	.007	.007	0	0
20	STANDOFF5	PX	.007	.007	0	0
21	STRUT1	PX	.005	.005	0	0
22	STRUT2	PX	.005	.005	0	0
23	STRUT3	PX	.005	.005	0	0

Member Distributed Loads (BLC 12 : Wind Load (270)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
24	FACE1	PX	.006	.006	0	0
25	Rail1	PX	.006	.006	0	0
26	Rail2	PX	.006	.006	0	0
27	Rail3	PX	.006	.006	0	0
28	Pipe1	PX	.006	.006	0	0
29	Pipe2	PX	.006	.006	0	0
30	Pipe3	PX	.006	.006	0	0

Member Distributed Loads (BLC 13 : Wind Load (300))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.006	.006	0	0
2	FACE3	PX	.006	.006	0	0
3	INNERFACE1	PX	.006	.006	0	0
4	INNERFACE2	PX	.006	.006	0	0
5	INNERFACE3	PX	.006	.006	0	0
6	MP ALPHA1	PX	.007	.007	0	0
7	MP ALPHA2	PX	.007	.007	0	0
8	MP ALPHA3	PX	.007	.007	0	0
9	MP ALPHA4	PX	.007	.007	0	0
10	MP BETA1	PX	.007	.007	0	0
11	MP BETA2	PX	.007	.007	0	0
12	MP BETA3	PX	.007	.007	0	0
13	MP BETA4	PX	.007	.007	0	0
14	MP GAMMA1	PX	.007	.007	0	0
15	MP GAMMA2	PX	.007	.007	0	0
16	MP GAMMA3	PX	.007	.007	0	0
17	MP GAMMA4	PX	.007	.007	0	0
18	STANDOFF1	PX	.008	.008	0	0
19	STANDOFF3	PX	.008	.008	0	0
20	STANDOFF5	PX	.008	.008	0	0
21	STRUT1	PX	.006	.006	0	0
22	STRUT2	PX	.006	.006	0	0
23	STRUT3	PX	.006	.006	0	0
24	FACE1	PY	-.003	-.003	0	0
25	FACE2	PY	-.003	-.003	0	0
26	FACE3	PY	-.003	-.003	0	0
27	INNERFACE1	PY	-.003	-.003	0	0
28	INNERFACE2	PY	-.003	-.003	0	0
29	INNERFACE3	PY	-.003	-.003	0	0
30	MP ALPHA1	PY	-.004	-.004	0	0
31	MP ALPHA2	PY	-.004	-.004	0	0
32	MP ALPHA3	PY	-.004	-.004	0	0
33	MP ALPHA4	PY	-.004	-.004	0	0
34	MP BETA1	PY	-.004	-.004	0	0
35	MP BETA2	PY	-.004	-.004	0	0
36	MP BETA3	PY	-.004	-.004	0	0
37	MP BETA4	PY	-.004	-.004	0	0
38	MP GAMMA1	PY	-.004	-.004	0	0
39	MP GAMMA2	PY	-.004	-.004	0	0
40	MP GAMMA3	PY	-.004	-.004	0	0
41	MP GAMMA4	PY	-.004	-.004	0	0
42	STANDOFF1	PY	-.004	-.004	0	0
43	STANDOFF3	PY	-.004	-.004	0	0
44	STANDOFF5	PY	-.004	-.004	0	0
45	STRUT1	PY	-.003	-.003	0	0
46	STRUT2	PY	-.003	-.003	0	0

Member Distributed Loads (BLC 13 : Wind Load (300)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
47	STRUT3	PY	-.003	-.003	0	0
48	FACE1	PX	.005	.005	0	0
49	Rail1	PY	-.003	-.003	0	0
50	Rail1	PX	.005	.005	0	0
51	Rail2	PY	-.003	-.003	0	0
52	Rail2	PX	.005	.005	0	0
53	Rail3	PY	-.003	-.003	0	0
54	Rail3	PX	.005	.005	0	0
55	Pipe1	PY	-.003	-.003	0	0
56	Pipe1	PX	.005	.005	0	0
57	Pipe2	PY	-.003	-.003	0	0
58	Pipe2	PX	.005	.005	0	0
59	Pipe3	PY	-.003	-.003	0	0
60	Pipe3	PX	.005	.005	0	0

Member Distributed Loads (BLC 14 : Wind Load (330))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.005	.005	0	0
2	FACE3	PX	.005	.005	0	0
3	INNERFACE1	PX	.005	.005	0	0
4	INNERFACE2	PX	.005	.005	0	0
5	INNERFACE3	PX	.005	.005	0	0
6	MP ALPHA1	PX	.006	.006	0	0
7	MP ALPHA2	PX	.006	.006	0	0
8	MP ALPHA3	PX	.006	.006	0	0
9	MP ALPHA4	PX	.006	.006	0	0
10	MP BETA1	PX	.006	.006	0	0
11	MP BETA2	PX	.006	.006	0	0
12	MP BETA3	PX	.006	.006	0	0
13	MP BETA4	PX	.006	.006	0	0
14	MP GAMMA1	PX	.006	.006	0	0
15	MP GAMMA2	PX	.006	.006	0	0
16	MP GAMMA3	PX	.006	.006	0	0
17	MP GAMMA4	PX	.006	.006	0	0
18	STANDOFF1	PX	.007	.007	0	0
19	STANDOFF3	PX	.007	.007	0	0
20	STANDOFF5	PX	.007	.007	0	0
21	STRUT1	PX	.005	.005	0	0
22	STRUT2	PX	.005	.005	0	0
23	STRUT3	PX	.005	.005	0	0
24	FACE1	PY	-.005	-.005	0	0
25	FACE2	PY	-.005	-.005	0	0
26	FACE3	PY	-.005	-.005	0	0
27	INNERFACE1	PY	-.005	-.005	0	0
28	INNERFACE2	PY	-.005	-.005	0	0
29	INNERFACE3	PY	-.005	-.005	0	0
30	MP ALPHA1	PY	-.006	-.006	0	0
31	MP ALPHA2	PY	-.006	-.006	0	0
32	MP ALPHA3	PY	-.006	-.006	0	0
33	MP ALPHA4	PY	-.006	-.006	0	0
34	MP BETA1	PY	-.006	-.006	0	0
35	MP BETA2	PY	-.006	-.006	0	0
36	MP BETA3	PY	-.006	-.006	0	0
37	MP BETA4	PY	-.006	-.006	0	0
38	MP GAMMA1	PY	-.006	-.006	0	0
39	MP GAMMA2	PY	-.006	-.006	0	0

Member Distributed Loads (BLC 14 : Wind Load (330)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
40	MP GAMMA3	PY	-.006	-.006	0	0
41	MP GAMMA4	PY	-.006	-.006	0	0
42	STANDOFF1	PY	-.007	-.007	0	0
43	STANDOFF3	PY	-.007	-.007	0	0
44	STANDOFF5	PY	-.007	-.007	0	0
45	STRUT1	PY	-.005	-.005	0	0
46	STRUT2	PY	-.005	-.005	0	0
47	STRUT3	PY	-.005	-.005	0	0
48	FACE1	PX	.003	.003	0	0
49	Rail1	PY	-.005	-.005	0	0
50	Rail1	PX	.003	.003	0	0
51	Rail2	PY	-.005	-.005	0	0
52	Rail2	PX	.003	.003	0	0
53	Rail3	PY	-.005	-.005	0	0
54	Rail3	PX	.003	.003	0	0
55	Pipe1	PY	-.005	-.005	0	0
56	Pipe1	PX	.003	.003	0	0
57	Pipe2	PY	-.005	-.005	0	0
58	Pipe2	PX	.003	.003	0	0
59	Pipe3	PY	-.005	-.005	0	0
60	Pipe3	PX	.003	.003	0	0

Member Distributed Loads (BLC 15 : Maintanence (0))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.003	.003	0	0
2	FACE3	PX	.003	.003	0	0
3	INNERFACE1	PX	.003	.003	0	0
4	INNERFACE2	PX	.003	.003	0	0
5	INNERFACE3	PX	.003	.003	0	0
6	MP ALPHA1	PX	.004	.004	0	0
7	MP ALPHA2	PX	.004	.004	0	0
8	MP ALPHA3	PX	.004	.004	0	0
9	MP ALPHA4	PX	.004	.004	0	0
10	MP BETA1	PX	.004	.004	0	0
11	MP BETA2	PX	.004	.004	0	0
12	MP BETA3	PX	.004	.004	0	0
13	MP BETA4	PX	.004	.004	0	0
14	MP GAMMA1	PX	.004	.004	0	0
15	MP GAMMA2	PX	.004	.004	0	0
16	MP GAMMA3	PX	.004	.004	0	0
17	MP GAMMA4	PX	.004	.004	0	0
18	STANDOFF1	PX	.004	.004	0	0
19	STANDOFF3	PX	.004	.004	0	0
20	STANDOFF5	PX	.004	.004	0	0
21	STRUT1	PX	.003	.003	0	0
22	STRUT2	PX	.003	.003	0	0
23	STRUT3	PX	.003	.003	0	0
24	FACE1	PY	-.000389	-.000389	0	0
25	Rail1	PY	-.000389	-.000389	0	0
26	Rail2	PY	-.000389	-.000389	0	0
27	Rail3	PY	-.000389	-.000389	0	0
28	Pipe1	PY	-.000389	-.000389	0	0
29	Pipe2	PY	-.000389	-.000389	0	0
30	Pipe3	PY	-.000389	-.000389	0	0

Member Distributed Loads (BLC 16 : Maintanence (30))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PY	-.000389	-.000389	0	0
2	FACE3	PY	-.000389	-.000389	0	0
3	INNERFACE1	PY	-.000389	-.000389	0	0
4	INNERFACE2	PY	-.000389	-.000389	0	0
5	INNERFACE3	PY	-.000389	-.000389	0	0
6	MP ALPHA1	PY	-.000463	-.000463	0	0
7	MP ALPHA2	PY	-.000463	-.000463	0	0
8	MP ALPHA3	PY	-.000463	-.000463	0	0
9	MP ALPHA4	PY	-.000463	-.000463	0	0
10	MP BETA1	PY	-.000463	-.000463	0	0
11	MP BETA2	PY	-.000463	-.000463	0	0
12	MP BETA3	PY	-.000463	-.000463	0	0
13	MP BETA4	PY	-.000463	-.000463	0	0
14	MP GAMMA1	PY	-.000463	-.000463	0	0
15	MP GAMMA2	PY	-.000463	-.000463	0	0
16	MP GAMMA3	PY	-.000463	-.000463	0	0
17	MP GAMMA4	PY	-.000463	-.000463	0	0
18	STANDOFF1	PY	-.000519	-.000519	0	0
19	STANDOFF3	PY	-.000519	-.000519	0	0
20	STANDOFF5	PY	-.000519	-.000519	0	0
21	STRUT1	PY	-.000389	-.000389	0	0
22	STRUT2	PY	-.000389	-.000389	0	0
23	STRUT3	PY	-.000389	-.000389	0	0
24	FACE1	PY	-.000337	-.000337	0	0
25	FACE2	PY	-.000337	-.000337	0	0
26	FACE3	PY	-.000337	-.000337	0	0
27	INNERFACE1	PY	-.000337	-.000337	0	0
28	INNERFACE2	PY	-.000337	-.000337	0	0
29	INNERFACE3	PY	-.000337	-.000337	0	0
30	MP ALPHA1	PY	-.000401	-.000401	0	0
31	MP ALPHA2	PY	-.000401	-.000401	0	0
32	MP ALPHA3	PY	-.000401	-.000401	0	0
33	MP ALPHA4	PY	-.000401	-.000401	0	0
34	MP BETA1	PY	-.000401	-.000401	0	0
35	MP BETA2	PY	-.000401	-.000401	0	0
36	MP BETA3	PY	-.000401	-.000401	0	0
37	MP BETA4	PY	-.000401	-.000401	0	0
38	MP GAMMA1	PY	-.000401	-.000401	0	0
39	MP GAMMA2	PY	-.000401	-.000401	0	0
40	MP GAMMA3	PY	-.000401	-.000401	0	0
41	MP GAMMA4	PY	-.000401	-.000401	0	0
42	STANDOFF1	PY	-.00045	-.00045	0	0
43	STANDOFF3	PY	-.00045	-.00045	0	0
44	STANDOFF5	PY	-.00045	-.00045	0	0
45	STRUT1	PY	-.000337	-.000337	0	0
46	STRUT2	PY	-.000337	-.000337	0	0
47	STRUT3	PY	-.000337	-.000337	0	0
48	FACE1	PX	-.000195	-.000195	0	0
49	Rail1	PY	-.000337	-.000337	0	0
50	Rail1	PX	-.000195	-.000195	0	0
51	Rail2	PY	-.000337	-.000337	0	0
52	Rail2	PX	-.000195	-.000195	0	0
53	Rail3	PY	-.000337	-.000337	0	0
54	Rail3	PX	-.000195	-.000195	0	0
55	Pipe1	PY	-.000337	-.000337	0	0
56	Pipe1	PX	-.000195	-.000195	0	0
57	Pipe2	PY	-.000337	-.000337	0	0

Member Distributed Loads (BLC 16 : Maintanence (30)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
58	Pipe2	PX	-.000195	-.000195	0	0
59	Pipe3	PY	-.000337	-.000337	0	0
60	Pipe3	PX	-.000195	-.000195	0	0

Member Distributed Loads (BLC 17 : Maintanence (60))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.000195	-.000195	0	0
2	FACE3	PX	-.000195	-.000195	0	0
3	INNERFACE1	PX	-.000195	-.000195	0	0
4	INNERFACE2	PX	-.000195	-.000195	0	0
5	INNERFACE3	PX	-.000195	-.000195	0	0
6	MP ALPHA1	PX	-.000231	-.000231	0	0
7	MP ALPHA2	PX	-.000231	-.000231	0	0
8	MP ALPHA3	PX	-.000231	-.000231	0	0
9	MP ALPHA4	PX	-.000231	-.000231	0	0
10	MP BETA1	PX	-.000231	-.000231	0	0
11	MP BETA2	PX	-.000231	-.000231	0	0
12	MP BETA3	PX	-.000231	-.000231	0	0
13	MP BETA4	PX	-.000231	-.000231	0	0
14	MP GAMMA1	PX	-.000231	-.000231	0	0
15	MP GAMMA2	PX	-.000231	-.000231	0	0
16	MP GAMMA3	PX	-.000231	-.000231	0	0
17	MP GAMMA4	PX	-.000231	-.000231	0	0
18	STANDOFF1	PX	-.00026	-.00026	0	0
19	STANDOFF3	PX	-.00026	-.00026	0	0
20	STANDOFF5	PX	-.00026	-.00026	0	0
21	STRUT1	PX	-.000195	-.000195	0	0
22	STRUT2	PX	-.000195	-.000195	0	0
23	STRUT3	PX	-.000195	-.000195	0	0
24	FACE1	PY	-.000195	-.000195	0	0
25	FACE2	PY	-.000195	-.000195	0	0
26	FACE3	PY	-.000195	-.000195	0	0
27	INNERFACE1	PY	-.000195	-.000195	0	0
28	INNERFACE2	PY	-.000195	-.000195	0	0
29	INNERFACE3	PY	-.000195	-.000195	0	0
30	MP ALPHA1	PY	-.000231	-.000231	0	0
31	MP ALPHA2	PY	-.000231	-.000231	0	0
32	MP ALPHA3	PY	-.000231	-.000231	0	0
33	MP ALPHA4	PY	-.000231	-.000231	0	0
34	MP BETA1	PY	-.000231	-.000231	0	0
35	MP BETA2	PY	-.000231	-.000231	0	0
36	MP BETA3	PY	-.000231	-.000231	0	0
37	MP BETA4	PY	-.000231	-.000231	0	0
38	MP GAMMA1	PY	-.000231	-.000231	0	0
39	MP GAMMA2	PY	-.000231	-.000231	0	0
40	MP GAMMA3	PY	-.000231	-.000231	0	0
41	MP GAMMA4	PY	-.000231	-.000231	0	0
42	STANDOFF1	PY	-.00026	-.00026	0	0
43	STANDOFF3	PY	-.00026	-.00026	0	0
44	STANDOFF5	PY	-.00026	-.00026	0	0
45	STRUT1	PY	-.000195	-.000195	0	0
46	STRUT2	PY	-.000195	-.000195	0	0
47	STRUT3	PY	-.000195	-.000195	0	0
48	FACE1	PX	-.000337	-.000337	0	0
49	Rail1	PY	-.000195	-.000195	0	0
50	Rail1	PX	-.000337	-.000337	0	0

Member Distributed Loads (BLC 17 : Maintanence (60)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
51	Rail2	PY	-.000195	-.000195	0	0
52	Rail2	PX	-.000337	-.000337	0	0
53	Rail3	PY	-.000195	-.000195	0	0
54	Rail3	PX	-.000337	-.000337	0	0
55	Pipe1	PY	-.000195	-.000195	0	0
56	Pipe1	PX	-.000337	-.000337	0	0
57	Pipe2	PY	-.000195	-.000195	0	0
58	Pipe2	PX	-.000337	-.000337	0	0
59	Pipe3	PY	-.000195	-.000195	0	0
60	Pipe3	PX	-.000337	-.000337	0	0

Member Distributed Loads (BLC 18 : Maintanence (90))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.000337	-.000337	0	0
2	FACE3	PX	-.000337	-.000337	0	0
3	INNERFACE1	PX	-.000337	-.000337	0	0
4	INNERFACE2	PX	-.000337	-.000337	0	0
5	INNERFACE3	PX	-.000337	-.000337	0	0
6	MP ALPHA1	PX	-.000401	-.000401	0	0
7	MP ALPHA2	PX	-.000401	-.000401	0	0
8	MP ALPHA3	PX	-.000401	-.000401	0	0
9	MP ALPHA4	PX	-.000401	-.000401	0	0
10	MP BETA1	PX	-.000401	-.000401	0	0
11	MP BETA2	PX	-.000401	-.000401	0	0
12	MP BETA3	PX	-.000401	-.000401	0	0
13	MP BETA4	PX	-.000401	-.000401	0	0
14	MP GAMMA1	PX	-.000401	-.000401	0	0
15	MP GAMMA2	PX	-.000401	-.000401	0	0
16	MP GAMMA3	PX	-.000401	-.000401	0	0
17	MP GAMMA4	PX	-.000401	-.000401	0	0
18	STANDOFF1	PX	-.00045	-.00045	0	0
19	STANDOFF3	PX	-.00045	-.00045	0	0
20	STANDOFF5	PX	-.00045	-.00045	0	0
21	STRUT1	PX	-.000337	-.000337	0	0
22	STRUT2	PX	-.000337	-.000337	0	0
23	STRUT3	PX	-.000337	-.000337	0	0
24	FACE1	PX	-.000389	-.000389	0	0
25	Rail1	PX	-.000389	-.000389	0	0
26	Rail2	PX	-.000389	-.000389	0	0
27	Rail3	PX	-.000389	-.000389	0	0
28	Pipe1	PX	-.000389	-.000389	0	0
29	Pipe2	PX	-.000389	-.000389	0	0
30	Pipe3	PX	-.000389	-.000389	0	0

Member Distributed Loads (BLC 19 : Maintanence (120))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.000389	-.000389	0	0
2	FACE3	PX	-.000389	-.000389	0	0
3	INNERFACE1	PX	-.000389	-.000389	0	0
4	INNERFACE2	PX	-.000389	-.000389	0	0
5	INNERFACE3	PX	-.000389	-.000389	0	0
6	MP ALPHA1	PX	-.000463	-.000463	0	0
7	MP ALPHA2	PX	-.000463	-.000463	0	0
8	MP ALPHA3	PX	-.000463	-.000463	0	0
9	MP ALPHA4	PX	-.000463	-.000463	0	0
10	MP BETA1	PX	-.000463	-.000463	0	0

Member Distributed Loads (BLC 19 : Maintanence (120)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
11	MP BETA2	PX	-.000463	-.000463	0	0
12	MP BETA3	PX	-.000463	-.000463	0	0
13	MP BETA4	PX	-.000463	-.000463	0	0
14	MP GAMMA1	PX	-.000463	-.000463	0	0
15	MP GAMMA2	PX	-.000463	-.000463	0	0
16	MP GAMMA3	PX	-.000463	-.000463	0	0
17	MP GAMMA4	PX	-.000463	-.000463	0	0
18	STANDOFF1	PX	-.000519	-.000519	0	0
19	STANDOFF3	PX	-.000519	-.000519	0	0
20	STANDOFF5	PX	-.000519	-.000519	0	0
21	STRUT1	PX	-.000389	-.000389	0	0
22	STRUT2	PX	-.000389	-.000389	0	0
23	STRUT3	PX	-.000389	-.000389	0	0
24	FACE1	PY	.000195	.000195	0	0
25	FACE2	PY	.000195	.000195	0	0
26	FACE3	PY	.000195	.000195	0	0
27	INNERFACE1	PY	.000195	.000195	0	0
28	INNERFACE2	PY	.000195	.000195	0	0
29	INNERFACE3	PY	.000195	.000195	0	0
30	MP ALPHA1	PY	.000231	.000231	0	0
31	MP ALPHA2	PY	.000231	.000231	0	0
32	MP ALPHA3	PY	.000231	.000231	0	0
33	MP ALPHA4	PY	.000231	.000231	0	0
34	MP BETA1	PY	.000231	.000231	0	0
35	MP BETA2	PY	.000231	.000231	0	0
36	MP BETA3	PY	.000231	.000231	0	0
37	MP BETA4	PY	.000231	.000231	0	0
38	MP GAMMA1	PY	.000231	.000231	0	0
39	MP GAMMA2	PY	.000231	.000231	0	0
40	MP GAMMA3	PY	.000231	.000231	0	0
41	MP GAMMA4	PY	.000231	.000231	0	0
42	STANDOFF1	PY	.00026	.00026	0	0
43	STANDOFF3	PY	.00026	.00026	0	0
44	STANDOFF5	PY	.00026	.00026	0	0
45	STRUT1	PY	.000195	.000195	0	0
46	STRUT2	PY	.000195	.000195	0	0
47	STRUT3	PY	.000195	.000195	0	0
48	FACE1	PX	-.000337	-.000337	0	0
49	Rail1	PY	.000195	.000195	0	0
50	Rail1	PX	-.000337	-.000337	0	0
51	Rail2	PY	.000195	.000195	0	0
52	Rail2	PX	-.000337	-.000337	0	0
53	Rail3	PY	.000195	.000195	0	0
54	Rail3	PX	-.000337	-.000337	0	0
55	Pipe1	PY	.000195	.000195	0	0
56	Pipe1	PX	-.000337	-.000337	0	0
57	Pipe2	PY	.000195	.000195	0	0
58	Pipe2	PX	-.000337	-.000337	0	0
59	Pipe3	PY	.000195	.000195	0	0
60	Pipe3	PX	-.000337	-.000337	0	0

Member Distributed Loads (BLC 20 : Maintanence (150))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.000337	-.000337	0	0
2	FACE3	PX	-.000337	-.000337	0	0
3	INNERFACE1	PX	-.000337	-.000337	0	0

Member Distributed Loads (BLC 20 : Maintanence (150)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
4	INNERFACE2	PX	-.000337	-.000337	0	0
5	INNERFACE3	PX	-.000337	-.000337	0	0
6	MP ALPHA1	PX	-.000401	-.000401	0	0
7	MP ALPHA2	PX	-.000401	-.000401	0	0
8	MP ALPHA3	PX	-.000401	-.000401	0	0
9	MP ALPHA4	PX	-.000401	-.000401	0	0
10	MP BETA1	PX	-.000401	-.000401	0	0
11	MP BETA2	PX	-.000401	-.000401	0	0
12	MP BETA3	PX	-.000401	-.000401	0	0
13	MP BETA4	PX	-.000401	-.000401	0	0
14	MP GAMMA1	PX	-.000401	-.000401	0	0
15	MP GAMMA2	PX	-.000401	-.000401	0	0
16	MP GAMMA3	PX	-.000401	-.000401	0	0
17	MP GAMMA4	PX	-.000401	-.000401	0	0
18	STANDOFF1	PX	-.00045	-.00045	0	0
19	STANDOFF3	PX	-.00045	-.00045	0	0
20	STANDOFF5	PX	-.00045	-.00045	0	0
21	STRUT1	PX	-.000337	-.000337	0	0
22	STRUT2	PX	-.000337	-.000337	0	0
23	STRUT3	PX	-.000337	-.000337	0	0
24	FACE1	PY	.000337	.000337	0	0
25	FACE2	PY	.000337	.000337	0	0
26	FACE3	PY	.000337	.000337	0	0
27	INNERFACE1	PY	.000337	.000337	0	0
28	INNERFACE2	PY	.000337	.000337	0	0
29	INNERFACE3	PY	.000337	.000337	0	0
30	MP ALPHA1	PY	.000401	.000401	0	0
31	MP ALPHA2	PY	.000401	.000401	0	0
32	MP ALPHA3	PY	.000401	.000401	0	0
33	MP ALPHA4	PY	.000401	.000401	0	0
34	MP BETA1	PY	.000401	.000401	0	0
35	MP BETA2	PY	.000401	.000401	0	0
36	MP BETA3	PY	.000401	.000401	0	0
37	MP BETA4	PY	.000401	.000401	0	0
38	MP GAMMA1	PY	.000401	.000401	0	0
39	MP GAMMA2	PY	.000401	.000401	0	0
40	MP GAMMA3	PY	.000401	.000401	0	0
41	MP GAMMA4	PY	.000401	.000401	0	0
42	STANDOFF1	PY	.00045	.00045	0	0
43	STANDOFF3	PY	.00045	.00045	0	0
44	STANDOFF5	PY	.00045	.00045	0	0
45	STRUT1	PY	.000337	.000337	0	0
46	STRUT2	PY	.000337	.000337	0	0
47	STRUT3	PY	.000337	.000337	0	0
48	FACE1	PX	-.000195	-.000195	0	0
49	Rail1	PY	.000337	.000337	0	0
50	Rail1	PX	-.000195	-.000195	0	0
51	Rail2	PY	.000337	.000337	0	0
52	Rail2	PX	-.000195	-.000195	0	0
53	Rail3	PY	.000337	.000337	0	0
54	Rail3	PX	-.000195	-.000195	0	0
55	Pipe1	PY	.000337	.000337	0	0
56	Pipe1	PX	-.000195	-.000195	0	0
57	Pipe2	PY	.000337	.000337	0	0
58	Pipe2	PX	-.000195	-.000195	0	0
59	Pipe3	PY	.000337	.000337	0	0
60	Pipe3	PX	-.000195	-.000195	0	0

Member Distributed Loads (BLC 21 : Maintanence (180))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.000195	-.000195	0	0
2	FACE3	PX	-.000195	-.000195	0	0
3	INNERFACE1	PX	-.000195	-.000195	0	0
4	INNERFACE2	PX	-.000195	-.000195	0	0
5	INNERFACE3	PX	-.000195	-.000195	0	0
6	MP ALPHA1	PX	-.000231	-.000231	0	0
7	MP ALPHA2	PX	-.000231	-.000231	0	0
8	MP ALPHA3	PX	-.000231	-.000231	0	0
9	MP ALPHA4	PX	-.000231	-.000231	0	0
10	MP BETA1	PX	-.000231	-.000231	0	0
11	MP BETA2	PX	-.000231	-.000231	0	0
12	MP BETA3	PX	-.000231	-.000231	0	0
13	MP BETA4	PX	-.000231	-.000231	0	0
14	MP GAMMA1	PX	-.000231	-.000231	0	0
15	MP GAMMA2	PX	-.000231	-.000231	0	0
16	MP GAMMA3	PX	-.000231	-.000231	0	0
17	MP GAMMA4	PX	-.000231	-.000231	0	0
18	STANDOFF1	PX	-.00026	-.00026	0	0
19	STANDOFF3	PX	-.00026	-.00026	0	0
20	STANDOFF5	PX	-.00026	-.00026	0	0
21	STRUT1	PX	-.000195	-.000195	0	0
22	STRUT2	PX	-.000195	-.000195	0	0
23	STRUT3	PX	-.000195	-.000195	0	0
24	FACE1	PY	.000389	.000389	0	0
25	Rail1	PY	.000389	.000389	0	0
26	Rail2	PY	.000389	.000389	0	0
27	Rail3	PY	.000389	.000389	0	0
28	Pipe1	PY	.000389	.000389	0	0
29	Pipe2	PY	.000389	.000389	0	0
30	Pipe3	PY	.000389	.000389	0	0

Member Distributed Loads (BLC 22 : Maintanence (210))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PY	.000389	.000389	0	0
2	FACE3	PY	.000389	.000389	0	0
3	INNERFACE1	PY	.000389	.000389	0	0
4	INNERFACE2	PY	.000389	.000389	0	0
5	INNERFACE3	PY	.000389	.000389	0	0
6	MP ALPHA1	PY	.000463	.000463	0	0
7	MP ALPHA2	PY	.000463	.000463	0	0
8	MP ALPHA3	PY	.000463	.000463	0	0
9	MP ALPHA4	PY	.000463	.000463	0	0
10	MP BETA1	PY	.000463	.000463	0	0
11	MP BETA2	PY	.000463	.000463	0	0
12	MP BETA3	PY	.000463	.000463	0	0
13	MP BETA4	PY	.000463	.000463	0	0
14	MP GAMMA1	PY	.000463	.000463	0	0
15	MP GAMMA2	PY	.000463	.000463	0	0
16	MP GAMMA3	PY	.000463	.000463	0	0
17	MP GAMMA4	PY	.000463	.000463	0	0
18	STANDOFF1	PY	.000519	.000519	0	0
19	STANDOFF3	PY	.000519	.000519	0	0
20	STANDOFF5	PY	.000519	.000519	0	0
21	STRUT1	PY	.000389	.000389	0	0
22	STRUT2	PY	.000389	.000389	0	0
23	STRUT3	PY	.000389	.000389	0	0

Member Distributed Loads (BLC 22 : Maintanence (210)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
24	FACE1	PY	.000337	.000337	0	0
25	FACE2	PY	.000337	.000337	0	0
26	FACE3	PY	.000337	.000337	0	0
27	INNERFACE1	PY	.000337	.000337	0	0
28	INNERFACE2	PY	.000337	.000337	0	0
29	INNERFACE3	PY	.000337	.000337	0	0
30	MP ALPHA1	PY	.000401	.000401	0	0
31	MP ALPHA2	PY	.000401	.000401	0	0
32	MP ALPHA3	PY	.000401	.000401	0	0
33	MP ALPHA4	PY	.000401	.000401	0	0
34	MP BETA1	PY	.000401	.000401	0	0
35	MP BETA2	PY	.000401	.000401	0	0
36	MP BETA3	PY	.000401	.000401	0	0
37	MP BETA4	PY	.000401	.000401	0	0
38	MP GAMMA1	PY	.000401	.000401	0	0
39	MP GAMMA2	PY	.000401	.000401	0	0
40	MP GAMMA3	PY	.000401	.000401	0	0
41	MP GAMMA4	PY	.000401	.000401	0	0
42	STANDOFF1	PY	.00045	.00045	0	0
43	STANDOFF3	PY	.00045	.00045	0	0
44	STANDOFF5	PY	.00045	.00045	0	0
45	STRUT1	PY	.000337	.000337	0	0
46	STRUT2	PY	.000337	.000337	0	0
47	STRUT3	PY	.000337	.000337	0	0
48	FACE1	PX	.000195	.000195	0	0
49	Rail1	PY	.000337	.000337	0	0
50	Rail1	PX	.000195	.000195	0	0
51	Rail2	PY	.000337	.000337	0	0
52	Rail2	PX	.000195	.000195	0	0
53	Rail3	PY	.000337	.000337	0	0
54	Rail3	PX	.000195	.000195	0	0
55	Pipe1	PY	.000337	.000337	0	0
56	Pipe1	PX	.000195	.000195	0	0
57	Pipe2	PY	.000337	.000337	0	0
58	Pipe2	PX	.000195	.000195	0	0
59	Pipe3	PY	.000337	.000337	0	0
60	Pipe3	PX	.000195	.000195	0	0

Member Distributed Loads (BLC 23 : Maintanence (240))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.000195	.000195	0	0
2	FACE3	PX	.000195	.000195	0	0
3	INNERFACE1	PX	.000195	.000195	0	0
4	INNERFACE2	PX	.000195	.000195	0	0
5	INNERFACE3	PX	.000195	.000195	0	0
6	MP ALPHA1	PX	.000231	.000231	0	0
7	MP ALPHA2	PX	.000231	.000231	0	0
8	MP ALPHA3	PX	.000231	.000231	0	0
9	MP ALPHA4	PX	.000231	.000231	0	0
10	MP BETA1	PX	.000231	.000231	0	0
11	MP BETA2	PX	.000231	.000231	0	0
12	MP BETA3	PX	.000231	.000231	0	0
13	MP BETA4	PX	.000231	.000231	0	0
14	MP GAMMA1	PX	.000231	.000231	0	0
15	MP GAMMA2	PX	.000231	.000231	0	0
16	MP GAMMA3	PX	.000231	.000231	0	0

Member Distributed Loads (BLC 23 : Maintanence (240)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
17	MP GAMMA4	PX	.000231	.000231	0	0
18	STANDOFF1	PX	.00026	.00026	0	0
19	STANDOFF3	PX	.00026	.00026	0	0
20	STANDOFF5	PX	.00026	.00026	0	0
21	STRUT1	PX	.000195	.000195	0	0
22	STRUT2	PX	.000195	.000195	0	0
23	STRUT3	PX	.000195	.000195	0	0
24	FACE1	PY	.000195	.000195	0	0
25	FACE2	PY	.000195	.000195	0	0
26	FACE3	PY	.000195	.000195	0	0
27	INNERFACE1	PY	.000195	.000195	0	0
28	INNERFACE2	PY	.000195	.000195	0	0
29	INNERFACE3	PY	.000195	.000195	0	0
30	MP ALPHA1	PY	.000231	.000231	0	0
31	MP ALPHA2	PY	.000231	.000231	0	0
32	MP ALPHA3	PY	.000231	.000231	0	0
33	MP ALPHA4	PY	.000231	.000231	0	0
34	MP BETA1	PY	.000231	.000231	0	0
35	MP BETA2	PY	.000231	.000231	0	0
36	MP BETA3	PY	.000231	.000231	0	0
37	MP BETA4	PY	.000231	.000231	0	0
38	MP GAMMA1	PY	.000231	.000231	0	0
39	MP GAMMA2	PY	.000231	.000231	0	0
40	MP GAMMA3	PY	.000231	.000231	0	0
41	MP GAMMA4	PY	.000231	.000231	0	0
42	STANDOFF1	PY	.00026	.00026	0	0
43	STANDOFF3	PY	.00026	.00026	0	0
44	STANDOFF5	PY	.00026	.00026	0	0
45	STRUT1	PY	.000195	.000195	0	0
46	STRUT2	PY	.000195	.000195	0	0
47	STRUT3	PY	.000195	.000195	0	0
48	FACE1	PX	.000337	.000337	0	0
49	Rail1	PY	.000195	.000195	0	0
50	Rail1	PX	.000337	.000337	0	0
51	Rail2	PY	.000195	.000195	0	0
52	Rail2	PX	.000337	.000337	0	0
53	Rail3	PY	.000195	.000195	0	0
54	Rail3	PX	.000337	.000337	0	0
55	Pipe1	PY	.000195	.000195	0	0
56	Pipe1	PX	.000337	.000337	0	0
57	Pipe2	PY	.000195	.000195	0	0
58	Pipe2	PX	.000337	.000337	0	0
59	Pipe3	PY	.000195	.000195	0	0
60	Pipe3	PX	.000337	.000337	0	0

Member Distributed Loads (BLC 24 : Maintanence (270))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.000337	.000337	0	0
2	FACE3	PX	.000337	.000337	0	0
3	INNERFACE1	PX	.000337	.000337	0	0
4	INNERFACE2	PX	.000337	.000337	0	0
5	INNERFACE3	PX	.000337	.000337	0	0
6	MP ALPHA1	PX	.000401	.000401	0	0
7	MP ALPHA2	PX	.000401	.000401	0	0
8	MP ALPHA3	PX	.000401	.000401	0	0
9	MP ALPHA4	PX	.000401	.000401	0	0

Member Distributed Loads (BLC 24 : Maintanence (270)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
10	MP BETA1	PX	.000401	.000401	0	0
11	MP BETA2	PX	.000401	.000401	0	0
12	MP BETA3	PX	.000401	.000401	0	0
13	MP BETA4	PX	.000401	.000401	0	0
14	MP GAMMA1	PX	.000401	.000401	0	0
15	MP GAMMA2	PX	.000401	.000401	0	0
16	MP GAMMA3	PX	.000401	.000401	0	0
17	MP GAMMA4	PX	.000401	.000401	0	0
18	STANDOFF1	PX	.00045	.00045	0	0
19	STANDOFF3	PX	.00045	.00045	0	0
20	STANDOFF5	PX	.00045	.00045	0	0
21	STRUT1	PX	.000337	.000337	0	0
22	STRUT2	PX	.000337	.000337	0	0
23	STRUT3	PX	.000337	.000337	0	0
24	FACE1	PX	.000389	.000389	0	0
25	Rail1	PX	.000389	.000389	0	0
26	Rail2	PX	.000389	.000389	0	0
27	Rail3	PX	.000389	.000389	0	0
28	Pipe1	PX	.000389	.000389	0	0
29	Pipe2	PX	.000389	.000389	0	0
30	Pipe3	PX	.000389	.000389	0	0

Member Distributed Loads (BLC 25 : Maintanence (300))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.000389	.000389	0	0
2	FACE3	PX	.000389	.000389	0	0
3	INNERFACE1	PX	.000389	.000389	0	0
4	INNERFACE2	PX	.000389	.000389	0	0
5	INNERFACE3	PX	.000389	.000389	0	0
6	MP ALPHA1	PX	.000463	.000463	0	0
7	MP ALPHA2	PX	.000463	.000463	0	0
8	MP ALPHA3	PX	.000463	.000463	0	0
9	MP ALPHA4	PX	.000463	.000463	0	0
10	MP BETA1	PX	.000463	.000463	0	0
11	MP BETA2	PX	.000463	.000463	0	0
12	MP BETA3	PX	.000463	.000463	0	0
13	MP BETA4	PX	.000463	.000463	0	0
14	MP GAMMA1	PX	.000463	.000463	0	0
15	MP GAMMA2	PX	.000463	.000463	0	0
16	MP GAMMA3	PX	.000463	.000463	0	0
17	MP GAMMA4	PX	.000463	.000463	0	0
18	STANDOFF1	PX	.000519	.000519	0	0
19	STANDOFF3	PX	.000519	.000519	0	0
20	STANDOFF5	PX	.000519	.000519	0	0
21	STRUT1	PX	.000389	.000389	0	0
22	STRUT2	PX	.000389	.000389	0	0
23	STRUT3	PX	.000389	.000389	0	0
24	FACE1	PY	-.000195	-.000195	0	0
25	FACE2	PY	-.000195	-.000195	0	0
26	FACE3	PY	-.000195	-.000195	0	0
27	INNERFACE1	PY	-.000195	-.000195	0	0
28	INNERFACE2	PY	-.000195	-.000195	0	0
29	INNERFACE3	PY	-.000195	-.000195	0	0
30	MP ALPHA1	PY	-.000231	-.000231	0	0
31	MP ALPHA2	PY	-.000231	-.000231	0	0
32	MP ALPHA3	PY	-.000231	-.000231	0	0

Member Distributed Loads (BLC 25 : Maintanence (300)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
33	MP ALPHA4	PY	-.000231	-.000231	0	0
34	MP BETA1	PY	-.000231	-.000231	0	0
35	MP BETA2	PY	-.000231	-.000231	0	0
36	MP BETA3	PY	-.000231	-.000231	0	0
37	MP BETA4	PY	-.000231	-.000231	0	0
38	MP GAMMA1	PY	-.000231	-.000231	0	0
39	MP GAMMA2	PY	-.000231	-.000231	0	0
40	MP GAMMA3	PY	-.000231	-.000231	0	0
41	MP GAMMA4	PY	-.000231	-.000231	0	0
42	STANDOFF1	PY	-.00026	-.00026	0	0
43	STANDOFF3	PY	-.00026	-.00026	0	0
44	STANDOFF5	PY	-.00026	-.00026	0	0
45	STRUT1	PY	-.000195	-.000195	0	0
46	STRUT2	PY	-.000195	-.000195	0	0
47	STRUT3	PY	-.000195	-.000195	0	0
48	FACE1	PX	.000337	.000337	0	0
49	Rail1	PY	-.000195	-.000195	0	0
50	Rail1	PX	.000337	.000337	0	0
51	Rail2	PY	-.000195	-.000195	0	0
52	Rail2	PX	.000337	.000337	0	0
53	Rail3	PY	-.000195	-.000195	0	0
54	Rail3	PX	.000337	.000337	0	0
55	Pipe1	PY	-.000195	-.000195	0	0
56	Pipe1	PX	.000337	.000337	0	0
57	Pipe2	PY	-.000195	-.000195	0	0
58	Pipe2	PX	.000337	.000337	0	0
59	Pipe3	PY	-.000195	-.000195	0	0
60	Pipe3	PX	.000337	.000337	0	0

Member Distributed Loads (BLC 26 : Maintanence (330))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.000337	.000337	0	0
2	FACE3	PX	.000337	.000337	0	0
3	INNERFACE1	PX	.000337	.000337	0	0
4	INNERFACE2	PX	.000337	.000337	0	0
5	INNERFACE3	PX	.000337	.000337	0	0
6	MP ALPHA1	PX	.000401	.000401	0	0
7	MP ALPHA2	PX	.000401	.000401	0	0
8	MP ALPHA3	PX	.000401	.000401	0	0
9	MP ALPHA4	PX	.000401	.000401	0	0
10	MP BETA1	PX	.000401	.000401	0	0
11	MP BETA2	PX	.000401	.000401	0	0
12	MP BETA3	PX	.000401	.000401	0	0
13	MP BETA4	PX	.000401	.000401	0	0
14	MP GAMMA1	PX	.000401	.000401	0	0
15	MP GAMMA2	PX	.000401	.000401	0	0
16	MP GAMMA3	PX	.000401	.000401	0	0
17	MP GAMMA4	PX	.000401	.000401	0	0
18	STANDOFF1	PX	.00045	.00045	0	0
19	STANDOFF3	PX	.00045	.00045	0	0
20	STANDOFF5	PX	.00045	.00045	0	0
21	STRUT1	PX	.000337	.000337	0	0
22	STRUT2	PX	.000337	.000337	0	0
23	STRUT3	PX	.000337	.000337	0	0
24	FACE1	PY	-.000337	-.000337	0	0
25	FACE2	PY	-.000337	-.000337	0	0

Member Distributed Loads (BLC 26 : Maintanence (330)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
26	FACE3	PY	-.000337	-.000337	0	0
27	INNERFACE1	PY	-.000337	-.000337	0	0
28	INNERFACE2	PY	-.000337	-.000337	0	0
29	INNERFACE3	PY	-.000337	-.000337	0	0
30	MP ALPHA1	PY	-.000401	-.000401	0	0
31	MP ALPHA2	PY	-.000401	-.000401	0	0
32	MP ALPHA3	PY	-.000401	-.000401	0	0
33	MP ALPHA4	PY	-.000401	-.000401	0	0
34	MP BETA1	PY	-.000401	-.000401	0	0
35	MP BETA2	PY	-.000401	-.000401	0	0
36	MP BETA3	PY	-.000401	-.000401	0	0
37	MP BETA4	PY	-.000401	-.000401	0	0
38	MP GAMMA1	PY	-.000401	-.000401	0	0
39	MP GAMMA2	PY	-.000401	-.000401	0	0
40	MP GAMMA3	PY	-.000401	-.000401	0	0
41	MP GAMMA4	PY	-.000401	-.000401	0	0
42	STANDOFF1	PY	-.00045	-.00045	0	0
43	STANDOFF3	PY	-.00045	-.00045	0	0
44	STANDOFF5	PY	-.00045	-.00045	0	0
45	STRUT1	PY	-.000337	-.000337	0	0
46	STRUT2	PY	-.000337	-.000337	0	0
47	STRUT3	PY	-.000337	-.000337	0	0
48	FACE1	PX	.000195	.000195	0	0
49	Rail1	PY	-.000337	-.000337	0	0
50	Rail1	PX	.000195	.000195	0	0
51	Rail2	PY	-.000337	-.000337	0	0
52	Rail2	PX	.000195	.000195	0	0
53	Rail3	PY	-.000337	-.000337	0	0
54	Rail3	PX	.000195	.000195	0	0
55	Pipe1	PY	-.000337	-.000337	0	0
56	Pipe1	PX	.000195	.000195	0	0
57	Pipe2	PY	-.000337	-.000337	0	0
58	Pipe2	PX	.000195	.000195	0	0
59	Pipe3	PY	-.000337	-.000337	0	0
60	Pipe3	PX	.000195	.000195	0	0

Member Distributed Loads (BLC 27 : Ice Dead Load)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.000195	.000195	0	0
2	FACE3	PX	.000195	.000195	0	0
3	INNERFACE1	PX	.000195	.000195	0	0
4	INNERFACE2	PX	.000195	.000195	0	0
5	INNERFACE3	PX	.000195	.000195	0	0
6	MP ALPHA1	PX	.000231	.000231	0	0
7	MP ALPHA2	PX	.000231	.000231	0	0
8	MP ALPHA3	PX	.000231	.000231	0	0
9	MP ALPHA4	PX	.000231	.000231	0	0
10	MP BETA1	PX	.000231	.000231	0	0
11	MP BETA2	PX	.000231	.000231	0	0
12	MP BETA3	PX	.000231	.000231	0	0
13	MP BETA4	PX	.000231	.000231	0	0
14	MP GAMMA1	PX	.000231	.000231	0	0
15	MP GAMMA2	PX	.000231	.000231	0	0
16	MP GAMMA3	PX	.000231	.000231	0	0
17	MP GAMMA4	PX	.000231	.000231	0	0
18	STANDOFF1	PX	.00026	.00026	0	0

Member Distributed Loads (BLC 27 : Ice Dead Load) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
19	STANDOFF3	PX	.00026	.00026	0	0
20	STANDOFF5	PX	.00026	.00026	0	0
21	STRUT1	PX	.000195	.000195	0	0
22	STRUT2	PX	.000195	.000195	0	0
23	STRUT3	PX	.000195	.000195	0	0
24	FACE1	Z	-.007	-.007	0	0
25	Rail1	Z	-.007	-.007	0	0
26	Rail2	Z	-.007	-.007	0	0
27	Rail3	Z	-.007	-.007	0	0
28	Pipe1	Z	-.007	-.007	0	0
29	Pipe2	Z	-.007	-.007	0	0
30	Pipe3	Z	-.007	-.007	0	0

Member Distributed Loads (BLC 28 : Ice Wind Load (0))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	Z	-.007	-.007	0	0
2	FACE3	Z	-.007	-.007	0	0
3	INNERFACE1	Z	-.007	-.007	0	0
4	INNERFACE2	Z	-.007	-.007	0	0
5	INNERFACE3	Z	-.007	-.007	0	0
6	MP ALPHA1	Z	-.005	-.005	0	0
7	MP ALPHA2	Z	-.005	-.005	0	0
8	MP ALPHA3	Z	-.005	-.005	0	0
9	MP ALPHA4	Z	-.005	-.005	0	0
10	MP BETA1	Z	-.005	-.005	0	0
11	MP BETA2	Z	-.005	-.005	0	0
12	MP BETA3	Z	-.005	-.005	0	0
13	MP BETA4	Z	-.005	-.005	0	0
14	MP GAMMA1	Z	-.005	-.005	0	0
15	MP GAMMA2	Z	-.005	-.005	0	0
16	MP GAMMA3	Z	-.005	-.005	0	0
17	MP GAMMA4	Z	-.005	-.005	0	0
18	STANDOFF1	Z	-.009	-.009	0	0
19	STANDOFF3	Z	-.009	-.009	0	0
20	STANDOFF5	Z	-.009	-.009	0	0
21	STRUT1	Z	-.011	-.011	0	0
22	STRUT2	Z	-.011	-.011	0	0
23	STRUT3	Z	-.011	-.011	0	0
24	FACE1	PY	-.002	-.002	0	0
25	Rail1	PY	-.002	-.002	0	0
26	Rail2	PY	-.002	-.002	0	0
27	Rail3	PY	-.002	-.002	0	0
28	Pipe1	PY	-.002	-.002	0	0
29	Pipe2	PY	-.002	-.002	0	0
30	Pipe3	PY	-.002	-.002	0	0

Member Distributed Loads (BLC 29 : Ice Wind Load (30))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PY	-.002	-.002	0	0
2	FACE3	PY	-.002	-.002	0	0
3	INNERFACE1	PY	-.002	-.002	0	0
4	INNERFACE2	PY	-.002	-.002	0	0
5	INNERFACE3	PY	-.002	-.002	0	0
6	MP ALPHA1	PY	-.002	-.002	0	0
7	MP ALPHA2	PY	-.002	-.002	0	0
8	MP ALPHA3	PY	-.002	-.002	0	0

Member Distributed Loads (BLC 29 : Ice Wind Load (30)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
9	MP ALPHA4	PY	-.002	-.002	0	0
10	MP BETA1	PY	-.002	-.002	0	0
11	MP BETA2	PY	-.002	-.002	0	0
12	MP BETA3	PY	-.002	-.002	0	0
13	MP BETA4	PY	-.002	-.002	0	0
14	MP GAMMA1	PY	-.002	-.002	0	0
15	MP GAMMA2	PY	-.002	-.002	0	0
16	MP GAMMA3	PY	-.002	-.002	0	0
17	MP GAMMA4	PY	-.002	-.002	0	0
18	STANDOFF1	PY	-.002	-.002	0	0
19	STANDOFF3	PY	-.002	-.002	0	0
20	STANDOFF5	PY	-.002	-.002	0	0
21	STRUT1	PY	-.002	-.002	0	0
22	STRUT2	PY	-.002	-.002	0	0
23	STRUT3	PY	-.002	-.002	0	0
24	FACE1	PY	-.002	-.002	0	0
25	FACE2	PY	-.002	-.002	0	0
26	FACE3	PY	-.002	-.002	0	0
27	INNERFACE1	PY	-.002	-.002	0	0
28	INNERFACE2	PY	-.002	-.002	0	0
29	INNERFACE3	PY	-.002	-.002	0	0
30	MP ALPHA1	PY	-.002	-.002	0	0
31	MP ALPHA2	PY	-.002	-.002	0	0
32	MP ALPHA3	PY	-.002	-.002	0	0
33	MP ALPHA4	PY	-.002	-.002	0	0
34	MP BETA1	PY	-.002	-.002	0	0
35	MP BETA2	PY	-.002	-.002	0	0
36	MP BETA3	PY	-.002	-.002	0	0
37	MP BETA4	PY	-.002	-.002	0	0
38	MP GAMMA1	PY	-.002	-.002	0	0
39	MP GAMMA2	PY	-.002	-.002	0	0
40	MP GAMMA3	PY	-.002	-.002	0	0
41	MP GAMMA4	PY	-.002	-.002	0	0
42	STANDOFF1	PY	-.002	-.002	0	0
43	STANDOFF3	PY	-.002	-.002	0	0
44	STANDOFF5	PY	-.002	-.002	0	0
45	STRUT1	PY	-.002	-.002	0	0
46	STRUT2	PY	-.002	-.002	0	0
47	STRUT3	PY	-.002	-.002	0	0
48	FACE1	PX	-.000944	-.000944	0	0
49	Rail1	PY	-.002	-.002	0	0
50	Rail1	PX	-.000944	-.000944	0	0
51	Rail2	PY	-.002	-.002	0	0
52	Rail2	PX	-.000944	-.000944	0	0
53	Rail3	PY	-.002	-.002	0	0
54	Rail3	PX	-.000944	-.000944	0	0
55	Pipe1	PY	-.002	-.002	0	0
56	Pipe1	PX	-.000944	-.000944	0	0
57	Pipe2	PY	-.002	-.002	0	0
58	Pipe2	PX	-.000944	-.000944	0	0
59	Pipe3	PY	-.002	-.002	0	0
60	Pipe3	PX	-.000944	-.000944	0	0

Member Distributed Loads (BLC 30 : Ice Wind Load (60))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.000944	-.000944	0	0

Member Distributed Loads (BLC 30 : Ice Wind Load (60)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
2	FACE3	PX	-.000944	-.000944	0	0
3	INNERFACE1	PX	-.000944	-.000944	0	0
4	INNERFACE2	PX	-.000944	-.000944	0	0
5	INNERFACE3	PX	-.000944	-.000944	0	0
6	MP ALPHA1	PX	-.001	-.001	0	0
7	MP ALPHA2	PX	-.001	-.001	0	0
8	MP ALPHA3	PX	-.001	-.001	0	0
9	MP ALPHA4	PX	-.001	-.001	0	0
10	MP BETA1	PX	-.001	-.001	0	0
11	MP BETA2	PX	-.001	-.001	0	0
12	MP BETA3	PX	-.001	-.001	0	0
13	MP BETA4	PX	-.001	-.001	0	0
14	MP GAMMA1	PX	-.001	-.001	0	0
15	MP GAMMA2	PX	-.001	-.001	0	0
16	MP GAMMA3	PX	-.001	-.001	0	0
17	MP GAMMA4	PX	-.001	-.001	0	0
18	STANDOFF1	PX	-.001	-.001	0	0
19	STANDOFF3	PX	-.001	-.001	0	0
20	STANDOFF5	PX	-.001	-.001	0	0
21	STRUT1	PX	-.000944	-.000944	0	0
22	STRUT2	PX	-.000944	-.000944	0	0
23	STRUT3	PX	-.000944	-.000944	0	0
24	FACE1	PY	-.000944	-.000944	0	0
25	FACE2	PY	-.000944	-.000944	0	0
26	FACE3	PY	-.000944	-.000944	0	0
27	INNERFACE1	PY	-.000944	-.000944	0	0
28	INNERFACE2	PY	-.000944	-.000944	0	0
29	INNERFACE3	PY	-.000944	-.000944	0	0
30	MP ALPHA1	PY	-.001	-.001	0	0
31	MP ALPHA2	PY	-.001	-.001	0	0
32	MP ALPHA3	PY	-.001	-.001	0	0
33	MP ALPHA4	PY	-.001	-.001	0	0
34	MP BETA1	PY	-.001	-.001	0	0
35	MP BETA2	PY	-.001	-.001	0	0
36	MP BETA3	PY	-.001	-.001	0	0
37	MP BETA4	PY	-.001	-.001	0	0
38	MP GAMMA1	PY	-.001	-.001	0	0
39	MP GAMMA2	PY	-.001	-.001	0	0
40	MP GAMMA3	PY	-.001	-.001	0	0
41	MP GAMMA4	PY	-.001	-.001	0	0
42	STANDOFF1	PY	-.001	-.001	0	0
43	STANDOFF3	PY	-.001	-.001	0	0
44	STANDOFF5	PY	-.001	-.001	0	0
45	STRUT1	PY	-.000944	-.000944	0	0
46	STRUT2	PY	-.000944	-.000944	0	0
47	STRUT3	PY	-.000944	-.000944	0	0
48	FACE1	PX	-.002	-.002	0	0
49	Rail1	PY	-.000944	-.000944	0	0
50	Rail1	PX	-.002	-.002	0	0
51	Rail2	PY	-.000944	-.000944	0	0
52	Rail2	PX	-.002	-.002	0	0
53	Rail3	PY	-.000944	-.000944	0	0
54	Rail3	PX	-.002	-.002	0	0
55	Pipe1	PY	-.000944	-.000944	0	0
56	Pipe1	PX	-.002	-.002	0	0
57	Pipe2	PY	-.000944	-.000944	0	0
58	Pipe2	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 30 : Ice Wind Load (60)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
59	Pipe3	PY	-.000944	-.000944	0	0
60	Pipe3	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 31 : Ice Wind Load (90))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.002	-.002	0	0
2	FACE3	PX	-.002	-.002	0	0
3	INNERFACE1	PX	-.002	-.002	0	0
4	INNERFACE2	PX	-.002	-.002	0	0
5	INNERFACE3	PX	-.002	-.002	0	0
6	MP ALPHA1	PX	-.002	-.002	0	0
7	MP ALPHA2	PX	-.002	-.002	0	0
8	MP ALPHA3	PX	-.002	-.002	0	0
9	MP ALPHA4	PX	-.002	-.002	0	0
10	MP BETA1	PX	-.002	-.002	0	0
11	MP BETA2	PX	-.002	-.002	0	0
12	MP BETA3	PX	-.002	-.002	0	0
13	MP BETA4	PX	-.002	-.002	0	0
14	MP GAMMA1	PX	-.002	-.002	0	0
15	MP GAMMA2	PX	-.002	-.002	0	0
16	MP GAMMA3	PX	-.002	-.002	0	0
17	MP GAMMA4	PX	-.002	-.002	0	0
18	STANDOFF1	PX	-.002	-.002	0	0
19	STANDOFF3	PX	-.002	-.002	0	0
20	STANDOFF5	PX	-.002	-.002	0	0
21	STRUT1	PX	-.002	-.002	0	0
22	STRUT2	PX	-.002	-.002	0	0
23	STRUT3	PX	-.002	-.002	0	0
24	FACE1	PX	-.002	-.002	0	0
25	Rail1	PX	-.002	-.002	0	0
26	Rail2	PX	-.002	-.002	0	0
27	Rail3	PX	-.002	-.002	0	0
28	Pipe1	PX	-.002	-.002	0	0
29	Pipe2	PX	-.002	-.002	0	0
30	Pipe3	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 32 : Ice Wind Load (120))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.002	-.002	0	0
2	FACE3	PX	-.002	-.002	0	0
3	INNERFACE1	PX	-.002	-.002	0	0
4	INNERFACE2	PX	-.002	-.002	0	0
5	INNERFACE3	PX	-.002	-.002	0	0
6	MP ALPHA1	PX	-.002	-.002	0	0
7	MP ALPHA2	PX	-.002	-.002	0	0
8	MP ALPHA3	PX	-.002	-.002	0	0
9	MP ALPHA4	PX	-.002	-.002	0	0
10	MP BETA1	PX	-.002	-.002	0	0
11	MP BETA2	PX	-.002	-.002	0	0
12	MP BETA3	PX	-.002	-.002	0	0
13	MP BETA4	PX	-.002	-.002	0	0
14	MP GAMMA1	PX	-.002	-.002	0	0
15	MP GAMMA2	PX	-.002	-.002	0	0
16	MP GAMMA3	PX	-.002	-.002	0	0
17	MP GAMMA4	PX	-.002	-.002	0	0
18	STANDOFF1	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 32 : Ice Wind Load (120)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
19	STANDOFF3	PX	-.002	-.002	0	0
20	STANDOFF5	PX	-.002	-.002	0	0
21	STRUT1	PX	-.002	-.002	0	0
22	STRUT2	PX	-.002	-.002	0	0
23	STRUT3	PX	-.002	-.002	0	0
24	FACE1	PY	.000944	.000944	0	0
25	FACE2	PY	.000944	.000944	0	0
26	FACE3	PY	.000944	.000944	0	0
27	INNERFACE1	PY	.000944	.000944	0	0
28	INNERFACE2	PY	.000944	.000944	0	0
29	INNERFACE3	PY	.000944	.000944	0	0
30	MP ALPHA1	PY	.001	.001	0	0
31	MP ALPHA2	PY	.001	.001	0	0
32	MP ALPHA3	PY	.001	.001	0	0
33	MP ALPHA4	PY	.001	.001	0	0
34	MP BETA1	PY	.001	.001	0	0
35	MP BETA2	PY	.001	.001	0	0
36	MP BETA3	PY	.001	.001	0	0
37	MP BETA4	PY	.001	.001	0	0
38	MP GAMMA1	PY	.001	.001	0	0
39	MP GAMMA2	PY	.001	.001	0	0
40	MP GAMMA3	PY	.001	.001	0	0
41	MP GAMMA4	PY	.001	.001	0	0
42	STANDOFF1	PY	.001	.001	0	0
43	STANDOFF3	PY	.001	.001	0	0
44	STANDOFF5	PY	.001	.001	0	0
45	STRUT1	PY	.000944	.000944	0	0
46	STRUT2	PY	.000944	.000944	0	0
47	STRUT3	PY	.000944	.000944	0	0
48	FACE1	PX	-.002	-.002	0	0
49	Rail1	PY	.000944	.000944	0	0
50	Rail1	PX	-.002	-.002	0	0
51	Rail2	PY	.000944	.000944	0	0
52	Rail2	PX	-.002	-.002	0	0
53	Rail3	PY	.000944	.000944	0	0
54	Rail3	PX	-.002	-.002	0	0
55	Pipe1	PY	.000944	.000944	0	0
56	Pipe1	PX	-.002	-.002	0	0
57	Pipe2	PY	.000944	.000944	0	0
58	Pipe2	PX	-.002	-.002	0	0
59	Pipe3	PY	.000944	.000944	0	0
60	Pipe3	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 33 : Ice Wind Load (150))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.002	-.002	0	0
2	FACE3	PX	-.002	-.002	0	0
3	INNERFACE1	PX	-.002	-.002	0	0
4	INNERFACE2	PX	-.002	-.002	0	0
5	INNERFACE3	PX	-.002	-.002	0	0
6	MP ALPHA1	PX	-.002	-.002	0	0
7	MP ALPHA2	PX	-.002	-.002	0	0
8	MP ALPHA3	PX	-.002	-.002	0	0
9	MP ALPHA4	PX	-.002	-.002	0	0
10	MP BETA1	PX	-.002	-.002	0	0
11	MP BETA2	PX	-.002	-.002	0	0

Member Distributed Loads (BLC 33 : Ice Wind Load (150)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
12	MP BETA3	PX	-.002	-.002	0	0
13	MP BETA4	PX	-.002	-.002	0	0
14	MP GAMMA1	PX	-.002	-.002	0	0
15	MP GAMMA2	PX	-.002	-.002	0	0
16	MP GAMMA3	PX	-.002	-.002	0	0
17	MP GAMMA4	PX	-.002	-.002	0	0
18	STANDOFF1	PX	-.002	-.002	0	0
19	STANDOFF3	PX	-.002	-.002	0	0
20	STANDOFF5	PX	-.002	-.002	0	0
21	STRUT1	PX	-.002	-.002	0	0
22	STRUT2	PX	-.002	-.002	0	0
23	STRUT3	PX	-.002	-.002	0	0
24	FACE1	PY	.002	.002	0	0
25	FACE2	PY	.002	.002	0	0
26	FACE3	PY	.002	.002	0	0
27	INNERFACE1	PY	.002	.002	0	0
28	INNERFACE2	PY	.002	.002	0	0
29	INNERFACE3	PY	.002	.002	0	0
30	MP ALPHA1	PY	.002	.002	0	0
31	MP ALPHA2	PY	.002	.002	0	0
32	MP ALPHA3	PY	.002	.002	0	0
33	MP ALPHA4	PY	.002	.002	0	0
34	MP BETA1	PY	.002	.002	0	0
35	MP BETA2	PY	.002	.002	0	0
36	MP BETA3	PY	.002	.002	0	0
37	MP BETA4	PY	.002	.002	0	0
38	MP GAMMA1	PY	.002	.002	0	0
39	MP GAMMA2	PY	.002	.002	0	0
40	MP GAMMA3	PY	.002	.002	0	0
41	MP GAMMA4	PY	.002	.002	0	0
42	STANDOFF1	PY	.002	.002	0	0
43	STANDOFF3	PY	.002	.002	0	0
44	STANDOFF5	PY	.002	.002	0	0
45	STRUT1	PY	.002	.002	0	0
46	STRUT2	PY	.002	.002	0	0
47	STRUT3	PY	.002	.002	0	0
48	FACE1	PX	-.000944	-.000944	0	0
49	Rail1	PY	.002	.002	0	0
50	Rail1	PX	-.000944	-.000944	0	0
51	Rail2	PY	.002	.002	0	0
52	Rail2	PX	-.000944	-.000944	0	0
53	Rail3	PY	.002	.002	0	0
54	Rail3	PX	-.000944	-.000944	0	0
55	Pipe1	PY	.002	.002	0	0
56	Pipe1	PX	-.000944	-.000944	0	0
57	Pipe2	PY	.002	.002	0	0
58	Pipe2	PX	-.000944	-.000944	0	0
59	Pipe3	PY	.002	.002	0	0
60	Pipe3	PX	-.000944	-.000944	0	0

Member Distributed Loads (BLC 34 : Ice Wind Load (180))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	-.000944	-.000944	0	0
2	FACE3	PX	-.000944	-.000944	0	0
3	INNERFACE1	PX	-.000944	-.000944	0	0
4	INNERFACE2	PX	-.000944	-.000944	0	0

Member Distributed Loads (BLC 34 : Ice Wind Load (180)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
5	INNERFACE3	PX	-.000944	-.000944	0	0
6	MP ALPHA1	PX	-.001	-.001	0	0
7	MP ALPHA2	PX	-.001	-.001	0	0
8	MP ALPHA3	PX	-.001	-.001	0	0
9	MP ALPHA4	PX	-.001	-.001	0	0
10	MP BETA1	PX	-.001	-.001	0	0
11	MP BETA2	PX	-.001	-.001	0	0
12	MP BETA3	PX	-.001	-.001	0	0
13	MP BETA4	PX	-.001	-.001	0	0
14	MP GAMMA1	PX	-.001	-.001	0	0
15	MP GAMMA2	PX	-.001	-.001	0	0
16	MP GAMMA3	PX	-.001	-.001	0	0
17	MP GAMMA4	PX	-.001	-.001	0	0
18	STANDOFF1	PX	-.001	-.001	0	0
19	STANDOFF3	PX	-.001	-.001	0	0
20	STANDOFF5	PX	-.001	-.001	0	0
21	STRUT1	PX	-.000944	-.000944	0	0
22	STRUT2	PX	-.000944	-.000944	0	0
23	STRUT3	PX	-.000944	-.000944	0	0
24	FACE1	PY	.002	.002	0	0
25	Rail1	PY	.002	.002	0	0
26	Rail2	PY	.002	.002	0	0
27	Rail3	PY	.002	.002	0	0
28	Pipe1	PY	.002	.002	0	0
29	Pipe2	PY	.002	.002	0	0
30	Pipe3	PY	.002	.002	0	0

Member Distributed Loads (BLC 35 : Ice Wind Load (210))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PY	.002	.002	0	0
2	FACE3	PY	.002	.002	0	0
3	INNERFACE1	PY	.002	.002	0	0
4	INNERFACE2	PY	.002	.002	0	0
5	INNERFACE3	PY	.002	.002	0	0
6	MP ALPHA1	PY	.002	.002	0	0
7	MP ALPHA2	PY	.002	.002	0	0
8	MP ALPHA3	PY	.002	.002	0	0
9	MP ALPHA4	PY	.002	.002	0	0
10	MP BETA1	PY	.002	.002	0	0
11	MP BETA2	PY	.002	.002	0	0
12	MP BETA3	PY	.002	.002	0	0
13	MP BETA4	PY	.002	.002	0	0
14	MP GAMMA1	PY	.002	.002	0	0
15	MP GAMMA2	PY	.002	.002	0	0
16	MP GAMMA3	PY	.002	.002	0	0
17	MP GAMMA4	PY	.002	.002	0	0
18	STANDOFF1	PY	.002	.002	0	0
19	STANDOFF3	PY	.002	.002	0	0
20	STANDOFF5	PY	.002	.002	0	0
21	STRUT1	PY	.002	.002	0	0
22	STRUT2	PY	.002	.002	0	0
23	STRUT3	PY	.002	.002	0	0
24	FACE1	PY	.002	.002	0	0
25	FACE2	PY	.002	.002	0	0
26	FACE3	PY	.002	.002	0	0
27	INNERFACE1	PY	.002	.002	0	0

Member Distributed Loads (BLC 35 : Ice Wind Load (210)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
28	INNERFACE2	PY	.002	.002	0	0
29	INNERFACE3	PY	.002	.002	0	0
30	MP ALPHA1	PY	.002	.002	0	0
31	MP ALPHA2	PY	.002	.002	0	0
32	MP ALPHA3	PY	.002	.002	0	0
33	MP ALPHA4	PY	.002	.002	0	0
34	MP BETA1	PY	.002	.002	0	0
35	MP BETA2	PY	.002	.002	0	0
36	MP BETA3	PY	.002	.002	0	0
37	MP BETA4	PY	.002	.002	0	0
38	MP GAMMA1	PY	.002	.002	0	0
39	MP GAMMA2	PY	.002	.002	0	0
40	MP GAMMA3	PY	.002	.002	0	0
41	MP GAMMA4	PY	.002	.002	0	0
42	STANDOFF1	PY	.002	.002	0	0
43	STANDOFF3	PY	.002	.002	0	0
44	STANDOFF5	PY	.002	.002	0	0
45	STRUT1	PY	.002	.002	0	0
46	STRUT2	PY	.002	.002	0	0
47	STRUT3	PY	.002	.002	0	0
48	FACE1	PX	.000944	.000944	0	0
49	Rail1	PY	.002	.002	0	0
50	Rail1	PX	.000944	.000944	0	0
51	Rail2	PY	.002	.002	0	0
52	Rail2	PX	.000944	.000944	0	0
53	Rail3	PY	.002	.002	0	0
54	Rail3	PX	.000944	.000944	0	0
55	Pipe1	PY	.002	.002	0	0
56	Pipe1	PX	.000944	.000944	0	0
57	Pipe2	PY	.002	.002	0	0
58	Pipe2	PX	.000944	.000944	0	0
59	Pipe3	PY	.002	.002	0	0
60	Pipe3	PX	.000944	.000944	0	0

Member Distributed Loads (BLC 36 : Ice Wind Load (240))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.000944	.000944	0	0
2	FACE3	PX	.000944	.000944	0	0
3	INNERFACE1	PX	.000944	.000944	0	0
4	INNERFACE2	PX	.000944	.000944	0	0
5	INNERFACE3	PX	.000944	.000944	0	0
6	MP ALPHA1	PX	.001	.001	0	0
7	MP ALPHA2	PX	.001	.001	0	0
8	MP ALPHA3	PX	.001	.001	0	0
9	MP ALPHA4	PX	.001	.001	0	0
10	MP BETA1	PX	.001	.001	0	0
11	MP BETA2	PX	.001	.001	0	0
12	MP BETA3	PX	.001	.001	0	0
13	MP BETA4	PX	.001	.001	0	0
14	MP GAMMA1	PX	.001	.001	0	0
15	MP GAMMA2	PX	.001	.001	0	0
16	MP GAMMA3	PX	.001	.001	0	0
17	MP GAMMA4	PX	.001	.001	0	0
18	STANDOFF1	PX	.001	.001	0	0
19	STANDOFF3	PX	.001	.001	0	0
20	STANDOFF5	PX	.001	.001	0	0

Member Distributed Loads (BLC 36 : Ice Wind Load (240)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
21	STRUT1	PX	.000944	.000944	0	0
22	STRUT2	PX	.000944	.000944	0	0
23	STRUT3	PX	.000944	.000944	0	0
24	FACE1	PY	.000944	.000944	0	0
25	FACE2	PY	.000944	.000944	0	0
26	FACE3	PY	.000944	.000944	0	0
27	INNERFACE1	PY	.000944	.000944	0	0
28	INNERFACE2	PY	.000944	.000944	0	0
29	INNERFACE3	PY	.000944	.000944	0	0
30	MP ALPHA1	PY	.001	.001	0	0
31	MP ALPHA2	PY	.001	.001	0	0
32	MP ALPHA3	PY	.001	.001	0	0
33	MP ALPHA4	PY	.001	.001	0	0
34	MP BETA1	PY	.001	.001	0	0
35	MP BETA2	PY	.001	.001	0	0
36	MP BETA3	PY	.001	.001	0	0
37	MP BETA4	PY	.001	.001	0	0
38	MP GAMMA1	PY	.001	.001	0	0
39	MP GAMMA2	PY	.001	.001	0	0
40	MP GAMMA3	PY	.001	.001	0	0
41	MP GAMMA4	PY	.001	.001	0	0
42	STANDOFF1	PY	.001	.001	0	0
43	STANDOFF3	PY	.001	.001	0	0
44	STANDOFF5	PY	.001	.001	0	0
45	STRUT1	PY	.000944	.000944	0	0
46	STRUT2	PY	.000944	.000944	0	0
47	STRUT3	PY	.000944	.000944	0	0
48	FACE1	PX	.002	.002	0	0
49	Rail1	PY	.000944	.000944	0	0
50	Rail1	PX	.002	.002	0	0
51	Rail2	PY	.000944	.000944	0	0
52	Rail2	PX	.002	.002	0	0
53	Rail3	PY	.000944	.000944	0	0
54	Rail3	PX	.002	.002	0	0
55	Pipe1	PY	.000944	.000944	0	0
56	Pipe1	PX	.002	.002	0	0
57	Pipe2	PY	.000944	.000944	0	0
58	Pipe2	PX	.002	.002	0	0
59	Pipe3	PY	.000944	.000944	0	0
60	Pipe3	PX	.002	.002	0	0

Member Distributed Loads (BLC 37 : Ice Wind Load (270))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.002	.002	0	0
2	FACE3	PX	.002	.002	0	0
3	INNERFACE1	PX	.002	.002	0	0
4	INNERFACE2	PX	.002	.002	0	0
5	INNERFACE3	PX	.002	.002	0	0
6	MP ALPHA1	PX	.002	.002	0	0
7	MP ALPHA2	PX	.002	.002	0	0
8	MP ALPHA3	PX	.002	.002	0	0
9	MP ALPHA4	PX	.002	.002	0	0
10	MP BETA1	PX	.002	.002	0	0
11	MP BETA2	PX	.002	.002	0	0
12	MP BETA3	PX	.002	.002	0	0
13	MP BETA4	PX	.002	.002	0	0

Member Distributed Loads (BLC 37 : Ice Wind Load (270)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
14	MP GAMMA1	PX	.002	.002	0	0
15	MP GAMMA2	PX	.002	.002	0	0
16	MP GAMMA3	PX	.002	.002	0	0
17	MP GAMMA4	PX	.002	.002	0	0
18	STANDOFF1	PX	.002	.002	0	0
19	STANDOFF3	PX	.002	.002	0	0
20	STANDOFF5	PX	.002	.002	0	0
21	STRUT1	PX	.002	.002	0	0
22	STRUT2	PX	.002	.002	0	0
23	STRUT3	PX	.002	.002	0	0
24	FACE1	PX	.002	.002	0	0
25	Rail1	PX	.002	.002	0	0
26	Rail2	PX	.002	.002	0	0
27	Rail3	PX	.002	.002	0	0
28	Pipe1	PX	.002	.002	0	0
29	Pipe2	PX	.002	.002	0	0
30	Pipe3	PX	.002	.002	0	0

Member Distributed Loads (BLC 38 : Ice Wind Load (300))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.002	.002	0	0
2	FACE3	PX	.002	.002	0	0
3	INNERFACE1	PX	.002	.002	0	0
4	INNERFACE2	PX	.002	.002	0	0
5	INNERFACE3	PX	.002	.002	0	0
6	MP ALPHA1	PX	.002	.002	0	0
7	MP ALPHA2	PX	.002	.002	0	0
8	MP ALPHA3	PX	.002	.002	0	0
9	MP ALPHA4	PX	.002	.002	0	0
10	MP BETA1	PX	.002	.002	0	0
11	MP BETA2	PX	.002	.002	0	0
12	MP BETA3	PX	.002	.002	0	0
13	MP BETA4	PX	.002	.002	0	0
14	MP GAMMA1	PX	.002	.002	0	0
15	MP GAMMA2	PX	.002	.002	0	0
16	MP GAMMA3	PX	.002	.002	0	0
17	MP GAMMA4	PX	.002	.002	0	0
18	STANDOFF1	PX	.002	.002	0	0
19	STANDOFF3	PX	.002	.002	0	0
20	STANDOFF5	PX	.002	.002	0	0
21	STRUT1	PX	.002	.002	0	0
22	STRUT2	PX	.002	.002	0	0
23	STRUT3	PX	.002	.002	0	0
24	FACE1	PY	-.000944	-.000944	0	0
25	FACE2	PY	-.000944	-.000944	0	0
26	FACE3	PY	-.000944	-.000944	0	0
27	INNERFACE1	PY	-.000944	-.000944	0	0
28	INNERFACE2	PY	-.000944	-.000944	0	0
29	INNERFACE3	PY	-.000944	-.000944	0	0
30	MP ALPHA1	PY	-.001	-.001	0	0
31	MP ALPHA2	PY	-.001	-.001	0	0
32	MP ALPHA3	PY	-.001	-.001	0	0
33	MP ALPHA4	PY	-.001	-.001	0	0
34	MP BETA1	PY	-.001	-.001	0	0
35	MP BETA2	PY	-.001	-.001	0	0
36	MP BETA3	PY	-.001	-.001	0	0

Member Distributed Loads (BLC 38 : Ice Wind Load (300)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
37	MP BETA4	PY	-.001	-.001	0	0
38	MP GAMMA1	PY	-.001	-.001	0	0
39	MP GAMMA2	PY	-.001	-.001	0	0
40	MP GAMMA3	PY	-.001	-.001	0	0
41	MP GAMMA4	PY	-.001	-.001	0	0
42	STANDOFF1	PY	-.001	-.001	0	0
43	STANDOFF3	PY	-.001	-.001	0	0
44	STANDOFF5	PY	-.001	-.001	0	0
45	STRUT1	PY	-.000944	-.000944	0	0
46	STRUT2	PY	-.000944	-.000944	0	0
47	STRUT3	PY	-.000944	-.000944	0	0
48	FACE1	PX	.002	.002	0	0
49	Rail1	PY	-.000944	-.000944	0	0
50	Rail1	PX	.002	.002	0	0
51	Rail2	PY	-.000944	-.000944	0	0
52	Rail2	PX	.002	.002	0	0
53	Rail3	PY	-.000944	-.000944	0	0
54	Rail3	PX	.002	.002	0	0
55	Pipe1	PY	-.000944	-.000944	0	0
56	Pipe1	PX	.002	.002	0	0
57	Pipe2	PY	-.000944	-.000944	0	0
58	Pipe2	PX	.002	.002	0	0
59	Pipe3	PY	-.000944	-.000944	0	0
60	Pipe3	PX	.002	.002	0	0

Member Distributed Loads (BLC 39 : Ice Wind Load (330))

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE2	PX	.002	.002	0	0
2	FACE3	PX	.002	.002	0	0
3	INNERFACE1	PX	.002	.002	0	0
4	INNERFACE2	PX	.002	.002	0	0
5	INNERFACE3	PX	.002	.002	0	0
6	MP ALPHA1	PX	.002	.002	0	0
7	MP ALPHA2	PX	.002	.002	0	0
8	MP ALPHA3	PX	.002	.002	0	0
9	MP ALPHA4	PX	.002	.002	0	0
10	MP BETA1	PX	.002	.002	0	0
11	MP BETA2	PX	.002	.002	0	0
12	MP BETA3	PX	.002	.002	0	0
13	MP BETA4	PX	.002	.002	0	0
14	MP GAMMA1	PX	.002	.002	0	0
15	MP GAMMA2	PX	.002	.002	0	0
16	MP GAMMA3	PX	.002	.002	0	0
17	MP GAMMA4	PX	.002	.002	0	0
18	STANDOFF1	PX	.002	.002	0	0
19	STANDOFF3	PX	.002	.002	0	0
20	STANDOFF5	PX	.002	.002	0	0
21	STRUT1	PX	.002	.002	0	0
22	STRUT2	PX	.002	.002	0	0
23	STRUT3	PX	.002	.002	0	0
24	FACE1	PY	-.002	-.002	0	0
25	FACE2	PY	-.002	-.002	0	0
26	FACE3	PY	-.002	-.002	0	0
27	INNERFACE1	PY	-.002	-.002	0	0
28	INNERFACE2	PY	-.002	-.002	0	0
29	INNERFACE3	PY	-.002	-.002	0	0

Member Distributed Loads (BLC 39 : Ice Wind Load (330)) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
30	MP ALPHA1	PY	-.002	-.002	0	0
31	MP ALPHA2	PY	-.002	-.002	0	0
32	MP ALPHA3	PY	-.002	-.002	0	0
33	MP ALPHA4	PY	-.002	-.002	0	0
34	MP BETA1	PY	-.002	-.002	0	0
35	MP BETA2	PY	-.002	-.002	0	0
36	MP BETA3	PY	-.002	-.002	0	0
37	MP BETA4	PY	-.002	-.002	0	0
38	MP GAMMA1	PY	-.002	-.002	0	0
39	MP GAMMA2	PY	-.002	-.002	0	0
40	MP GAMMA3	PY	-.002	-.002	0	0
41	MP GAMMA4	PY	-.002	-.002	0	0
42	STANDOFF1	PY	-.002	-.002	0	0
43	STANDOFF3	PY	-.002	-.002	0	0
44	STANDOFF5	PY	-.002	-.002	0	0
45	STRUT1	PY	-.002	-.002	0	0
46	STRUT2	PY	-.002	-.002	0	0
47	STRUT3	PY	-.002	-.002	0	0
48	FACE1	PX	.000944	.000944	0	0
49	Rail1	PY	-.002	-.002	0	0
50	Rail1	PX	.000944	.000944	0	0
51	Rail2	PY	-.002	-.002	0	0
52	Rail2	PX	.000944	.000944	0	0
53	Rail3	PY	-.002	-.002	0	0
54	Rail3	PX	.000944	.000944	0	0
55	Pipe1	PY	-.002	-.002	0	0
56	Pipe1	PX	.000944	.000944	0	0
57	Pipe2	PY	-.002	-.002	0	0
58	Pipe2	PX	.000944	.000944	0	0
59	Pipe3	PY	-.002	-.002	0	0
60	Pipe3	PX	.000944	.000944	0	0

Member Distributed Loads (BLC 43 : BLC 3 Transient Area Loads)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE1	Z	-.002	-.006	0	2
2	FACE1	Z	-.006	-.009	2	4
3	FACE1	Z	-.009	-.012	4	6
4	FACE1	Z	-.012	-.012	6	8
5	FACE1	Z	-.012	-.009	8	10
6	FACE1	Z	-.009	-.006	10	12
7	FACE1	Z	-.006	-.002	12	14
8	INNERFACE1	Z	-.012	-.009	0	1.768
9	INNERFACE1	Z	-.009	-.007	1.768	3.536
10	INNERFACE1	Z	-.007	-.009	3.536	5.304
11	INNERFACE1	Z	-.009	-.012	5.304	7.072
12	STRUT1	Z	-.005	-.019	.8	4
13	STRUT2	Z	-.008	-.016	.8	4
14	FACE3	Z	-.0002479	-.006	0	2
15	FACE3	Z	-.006	-.011	2	4
16	FACE3	Z	-.011	-.011	4	6
17	FACE3	Z	-.011	-.01	6	8
18	FACE3	Z	-.01	-.009	8	10
19	FACE3	Z	-.009	-.006	10	12
20	FACE3	Z	-.006	-.002	12	14
21	INNERFACE2	Z	-.008	-.008	0	1.768
22	INNERFACE2	Z	-.008	-.009	1.768	3.536

Member Distributed Loads (BLC 43 : BLC 3 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
23	INNERFACE2	Z	-.009	-.01	3.536	5.304
24	INNERFACE2	Z	-.01	-.011	5.304	7.072
25	STRUT3	Z	-.002	-.01	0	2
26	STRUT3	Z	-.01	-.018	2	4
27	FACE2	Z	-.002	-.006	0	2
28	FACE2	Z	-.006	-.009	2	4
29	FACE2	Z	-.009	-.01	4	6
30	FACE2	Z	-.01	-.011	6	8
31	FACE2	Z	-.011	-.011	8	10
32	FACE2	Z	-.011	-.006	10	12
33	FACE2	Z	-.006	-.0002477	12	14
34	INNERFACE3	Z	-.011	-.01	0	1.768
35	INNERFACE3	Z	-.01	-.009	1.768	3.536
36	INNERFACE3	Z	-.009	-.008	3.536	5.304
37	INNERFACE3	Z	-.008	-.008	5.304	7.072

Member Distributed Loads (BLC 44 : BLC 27 Transient Area Loads)

	Member Label	Direction	Start Magnitude[k/ft,F,ksf]	End Magnitude[k/ft,...	Start Location[ft,%]	End Location[ft,%]
1	FACE1	Z	-.003	-.008	0	2
2	FACE1	Z	-.008	-.012	2	4
3	FACE1	Z	-.012	-.017	4	6
4	FACE1	Z	-.017	-.017	6	8
5	FACE1	Z	-.017	-.012	8	10
6	FACE1	Z	-.012	-.008	10	12
7	FACE1	Z	-.008	-.003	12	14
8	INNERFACE1	Z	-.017	-.012	0	1.768
9	INNERFACE1	Z	-.012	-.01	1.768	3.536
10	INNERFACE1	Z	-.01	-.012	3.536	5.304
11	INNERFACE1	Z	-.012	-.017	5.304	7.072
12	STRUT1	Z	-.007	-.027	.8	4
13	STRUT2	Z	-.011	-.023	.8	4
14	FACE3	Z	-.0003471	-.009	0	2
15	FACE3	Z	-.009	-.015	2	4
16	FACE3	Z	-.015	-.015	4	6
17	FACE3	Z	-.015	-.014	6	8
18	FACE3	Z	-.014	-.012	8	10
19	FACE3	Z	-.012	-.008	10	12
20	FACE3	Z	-.008	-.003	12	14
21	INNERFACE2	Z	-.011	-.011	0	1.768
22	INNERFACE2	Z	-.011	-.012	1.768	3.536
23	INNERFACE2	Z	-.012	-.015	3.536	5.304
24	INNERFACE2	Z	-.015	-.015	5.304	7.072
25	STRUT3	Z	-.003	-.014	0	2
26	STRUT3	Z	-.014	-.025	2	4
27	FACE2	Z	-.003	-.008	0	2
28	FACE2	Z	-.008	-.012	2	4
29	FACE2	Z	-.012	-.014	4	6
30	FACE2	Z	-.014	-.015	6	8
31	FACE2	Z	-.015	-.015	8	10
32	FACE2	Z	-.015	-.009	10	12
33	FACE2	Z	-.009	-.0003467	12	14
34	INNERFACE3	Z	-.015	-.015	0	1.768
35	INNERFACE3	Z	-.015	-.012	1.768	3.536
36	INNERFACE3	Z	-.012	-.011	3.536	5.304
37	INNERFACE3	Z	-.011	-.011	5.304	7.072

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N12	max	1.621	11	2.037	5	.815	3	1.132	23	1.646	3	1.465	23
2		min	-.977	29	-2.276	23	.324	29	-.316	5	.175	29	-1.731	5
3	N10	max	1.174	14	1.802	5	.685	3	1.099	17	-.181	14	1.574	32
4		min	-1.715	32	-2.275	23	.234	7	-.367	35	-1.286	3	-1.852	14
5	N8	max	1.849	14	1.252	5	.727	3	-.343	17	.68	11	1.26	8
6		min	-1.963	29	-.518	23	.253	16	-1.689	3	-.723	29	-1.519	26
7	N112	max	.905	4	-.221	23	1.858	3	-.121	23	.15	11	.166	4
8		min	-.329	11	-1.496	3	.306	23	-.717	3	-.211	4	-.007	14
9	N117	max	1.044	3	.992	23	1.67	3	.342	24	-.105	11	.113	17
10		min	.122	11	-.092	5	.32	8	-.005	5	-.557	3	-.014	35
11	N122	max	-.143	29	.63	23	1.648	3	.248	24	.584	3	.1	5
12		min	-1.327	3	-.259	5	.284	32	.001	5	.101	29	-.048	23
13	Totals:	max	3.226	11	3.669	5	7.402	3						
14		min	-3.226	29	-3.669	23	3.424	32						

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
1	Live Load	DL					1			
2	Wind Load (0)	DL					29	7		
3	Dead Load	DL			-1.1		29		3	
4	Wind Load (30)	DL					58	60		
5	Wind Load (60)	DL					58	60		
6	Wind Load (90)	DL					29	30		
7	Wind Load (120)	DL					58	60		
8	Wind Load (150)	DL					58	60		
9	Wind Load (180)	DL					29	30		
10	Wind Load (210)	DL					58	60		
11	Wind Load (240)	DL					58	60		
12	Wind Load (270)	DL					29	30		
13	Wind Load (300)	DL					58	60		
14	Wind Load (330)	DL					58	60		
15	Maintanence (0)	DL					29	30		
16	Maintanence (30)	DL					58	60		
17	Maintanence (60)	DL					58	60		
18	Maintanence (90)	DL					29	30		
19	Maintanence (120)	DL					58	60		
20	Maintanence (150)	DL					58	60		
21	Maintanence (180)	DL					29	30		
22	Maintanence (210)	DL					58	60		
23	Maintanence (240)	DL					58	60		
24	Maintanence (270)	DL					29	30		
25	Maintanence (300)	DL					58	60		
26	Maintanence (330)	DL					58	60		
27	Ice Dead Load	DL					29	30	3	
28	Ice Wind Load (0)	DL					29	30		
29	Ice Wind Load (30)	DL					58	60		
30	Ice Wind Load (60)	DL					58	60		
31	Ice Wind Load (90)	DL					29	30		
32	Ice Wind Load (120)	DL					58	60		
33	Ice Wind Load (150)	DL					58	60		
34	Ice Wind Load (180)	DL					29	30		
35	Ice Wind Load (210)	DL					58	60		
36	Ice Wind Load (240)	DL					58	60		
37	Ice Wind Load (270)	DL					29	30		

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
38	Ice Wind Load (300)	DL					58	60		
39	Ice Wind Load (330)	DL					58	60		
40	Earthquake (x-directi...	DL	-.118				29			
41	Earthquake (y-directi...	DL		-.118			29			
42	Earthquake (z-directi...	DL			-.047		29			
43	BLC 3 Transient Are...	None						37		
44	BLC 27 Transient Ar...	None						37		

Load Combinations

	Description	Solve	PDelta	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	1.4D	Yes	Y		3	1.4																				
2	1.2D + 1.0W(0)	Yes	Y		3	1.2	2	1																		
3	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	28	1																
4	1.2D + 1.5L + 1.0Wl(0)	Yes	Y		3	1.2	1	1.5	15	1																
5	1.2D + 1.0W(30)	Yes	Y		3	1.2	4	1																		
6	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	29	1																
7	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	16	1																
8	1.2D + 1.0W(60)	Yes	Y		3	1.2	5	1																		
9	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	30	1																
10	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	17	1																
11	1.2D + 1.0W(90)	Yes	Y		3	1.2	6	1																		
12	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	31	1																
13	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	18	1																
14	1.2D + 1.0W(120)	Yes	Y		3	1.2	7	1																		
15	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	32	1																
16	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	19	1																
17	1.2D + 1.0W(150)	Yes	Y		3	1.2	8	1																		
18	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	33	1																
19	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	20	1																
20	1.2D + 1.0W(180)	Yes	Y		3	1.2	9	1																		
21	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	34	1																
22	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	21	1																
23	1.2D + 1.0W(210)	Yes	Y		3	1.2	10	1																		
24	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	35	1																
25	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	22	1																
26	1.2D + 1.0W(240)	Yes	Y		3	1.2	11	1																		
27	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	36	1																
28	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	23	1																
29	1.2D + 1.0W(270)	Yes	Y		3	1.2	12	1																		
30	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	37	1																
31	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	24	1																
32	1.2D + 1.0W(300)	Yes	Y		3	1.2	13	1																		
33	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	38	1																
34	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	25	1																
35	1.2D + 1.0W(330)	Yes	Y		3	1.2	14	1																		
36	1.2D + 1.0Di + 1.0Wi(...	Yes	Y		3	1.2	27	1	39	1																
37	1.2D + 1.5L + 1.0Wl(...	Yes	Y		3	1.2	1	1.5	26	1																
38	1.2D + 1.0E(x) + 1.0E...	Yes	Y		3	1.2	40	1	42	1	1	1														
39	1.2D + 1.0E(y) + 1.0E...	Yes	Y		3	1.2	41	1	42	1	1	1														
40	1.2D - 1.0E(x) + 1.0E(...	Yes	Y		3	1.2	40	-1	42	1	1	1														
41	1.2D - 1.0E(y) + 1.0E(...	Yes	Y		3	1.2	41	-1	42	1	1	1														

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

	Member	Shape	Code Check	Lo...	LC	She...	Loc[ft]	Dir	LC	phi*...	phi*...	phi*...	phi*...	...	Eqn
1	FACE1	L3X3X4	.516	3.5	4	.578	7	z	5	15.7...	46.6...	1.688	3.382	...	H2-1
2	MP BETA2	PIPE_2.0	.502	1.75	5	.142	1.75		23	20.8...	32.13	1.872	1.872	...	H1-...
3	FACE3	L3X3X4	.477	0	23	.488	7	z	26	15.7...	46.6...	1.688	2.161	1	H2-1
4	MP GAMMA2	PIPE_2.0	.463	1.75	17	.137	1.75		35	20.8...	32.13	1.872	1.872	...	H1-...
5	Stabilizer2	L2.5x2.5x3	.453	5....	4	.022	0	z	4	12.0...	29.1...	.873	1.599	...	H2-1
6	MP ALPHA2	PIPE_2.0	.437	1.75	29	.128	1.75		11	20.8...	32.13	1.872	1.872	...	H1-...
7	FACE2	L3X3X4	.436	7	14	.545	7	z	32	15.7...	46.6...	1.688	2.161	1	H2-1
8	Stabilizer6	L2.5x2.5x3	.374	5....	3	.016	0	z	3	12.0...	29.1...	.873	1.599	...	H2-1
9	MP ALPHA1	PIPE_2.0	.365	.75	10	.079	.75		26	20.8...	32.13	1.872	1.872	...	H1-...
10	Stabilizer4	L2.5x2.5x3	.360	5....	24	.016	0	z	24	12.0...	29.1...	.873	1.599	...	H2-1
11	Stabilizer5	L2.5x2.5x3	.346	0	24	.019	4.572	z	18	14.7...	29.1...	.873	1.657	...	H2-1
12	MP GAMMA3	PIPE_2.0	.329	.75	25	.086	.75		5	20.8...	32.13	1.872	1.872	...	H1-...
13	Rail3	PIPE_2.0	.329	6....	23	.155	6.365		14	5.82	32.13	1.872	1.872	1	H1-...
14	Stabilizer3	L2.5x2.5x3	.326	0	4	.017	4.572	z	4	14.7...	29.1...	.873	1.657	...	H2-1
15	Rail2	PIPE_2.0	.323	6....	32	.142	6.365		26	5.82	32.13	1.872	1.872	1	H1-...
16	Stabilizer1	L2.5x2.5x3	.319	0	3	.016	4.572	z	3	14.7...	29.1...	.873	1.657	...	H2-1
17	Rail1	PIPE_2.0	.300	6....	32	.162	6.365		5	5.82	32.13	1.872	1.872	...	H1-...
18	MP GAMMA1	PIPE_2.0	.291	.75	32	.084	.75		14	20.8...	32.13	1.872	1.872	...	H1-...
19	MP ALPHA3	PIPE_2.0	.287	.75	32	.081	.75		17	20.8...	32.13	1.872	1.872	...	H1-...
20	MP BETA3	PIPE_2.0	.285	.75	5	.073	.75		29	20.8...	32.13	1.872	1.872	...	H1-...
21	MP BETA1	PIPE_2.0	.276	.75	23	.089	.75		5	20.8...	32.13	1.872	1.872	...	H1-...
22	RailConnect2	L2.5x2.5x3	.236	1	23	.077	0	y	23	27.7...	29.1...	.873	1.972	...	H2-1
23	INNERFACE2	L3X3X4	.225	3....	23	.013	3.536	y	3	15.4...	46.6...	1.688	3.243	...	H2-1
24	RailConnect1	L2.5x2.5x3	.224	1	35	.074	0	y	35	27.7...	29.1...	.873	1.972	...	H2-1
25	INNERFACE3	L3X3X4	.222	3....	5	.012	3.536	y	3	15.4...	46.6...	1.688	3.256	...	H2-1
26	RailConnect3	L2.5x2.5x3	.218	1	14	.075	0	y	14	27.7...	29.1...	.873	1.972	...	H2-1
27	MP BETA4	PIPE_2.0	.214	2.75	5	.085	.75		23	26.5...	32.13	1.872	1.872	...	H1-...
28	INNERFACE1	L3X3X4	.208	3....	3	.012	3.536	y	3	15.4...	46.6...	1.688	3.227	...	H2-1
29	MP GAMMA4	PIPE_2.0	.200	2.75	17	.082	.75		35	26.5...	32.13	1.872	1.872	...	H1-...
30	MP ALPHA4	PIPE_2.0	.190	2.75	32	.076	.75		11	26.5...	32.13	1.872	1.872	...	H1-...
31	STANDOFF3	HSS4X4X4	.178	3	23	.119	3	y	17	134....	139....	16.1...	16.1...	...	H1-...
32	STRUT2	LL3x3x4x0	.176	0	4	.010	0	y	31	76.2...	93.3...	6.48	4.911	...	H1-...
33	Pipe3	PIPE_2.0	.169	0	32	.095	0		11	17.8...	32.13	1.872	1.872	1	H1-...
34	STANDOFF5	HSS4X4X4	.165	3	11	.126	3	y	5	134....	139....	16.1...	16.1...	...	H1-...
35	Pipe2	PIPE_2.0	.164	0	5	.105	0		23	17.8...	32.13	1.872	1.872	1	H1-...
36	Pipe1	PIPE_2.0	.161	0	17	.101	0		35	17.8...	32.13	1.872	1.872	1	H1-...
37	STANDOFF1	HSS4X4X4	.160	3	35	.104	3	y	29	134....	139....	16.1...	16.1...	...	H1-...
38	STRUT1	LL3x3x4x0	.102	0	17	.009	0	y	5	76.2...	93.3...	6.48	4.357	...	H1-...
39	STRUT3	LL3x3x4x0	.098	0	29	.009	4	z	14	76.2...	93.3...	6.48	4.357	...	H1-...

APPENDIX D

Wind Speed Documentation

Hazards by Location

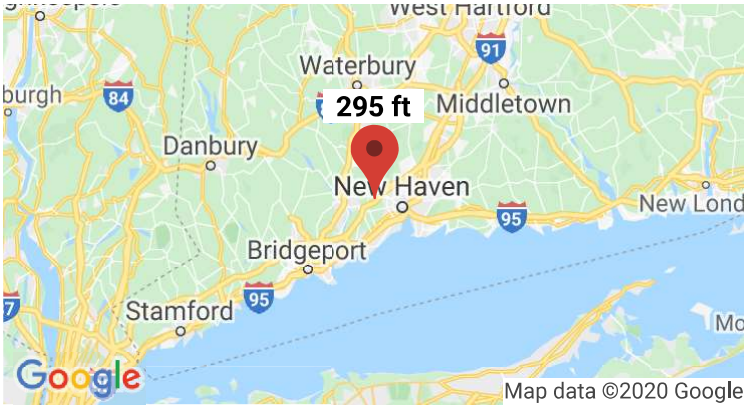
Search Information

Coordinates: 41.316750, -73.011611

Elevation: 295 ft

Timestamp: 2020-05-29T13:21:11.469Z

Hazard Type: Wind



ASCE 7-16

MRI 10-Year	75 mph
MRI 25-Year	84 mph
MRI 50-Year	90 mph
MRI 100-Year	97 mph
Risk Category I	109 mph
Risk Category II	119 mph
Risk Category III	129 mph
Risk Category IV	⚠ 133 mph

You are in a wind-borne debris region if you are also within 1 mile of the coastal mean high water line.

ASCE 7-10

MRI 10-Year	77 mph
MRI 25-Year	86 mph
MRI 50-Year	94 mph
MRI 100-Year	101 mph
Risk Category I	113 mph
Risk Category II	124 mph
Risk Category III-IV	⚠ 134 mph

If the structure under consideration is a healthcare facility and you are also within 1 mile of the coastal mean high water line, you are in a wind-borne debris region. If other occupancy, use the Risk Category II basic wind speed contours to determine if you are in a wind-borne debris region.

ASCE 7-05

ASCE 7-05 Wind Speed	⚠ 110 mph

You are in a wind-borne debris region if you are also within 1 mile of the coastal mean high water line.

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Disclaimer

Hazard loads are interpolated from data provided in ASCE 7 and rounded up to the nearest whole integer. Per ASCE 7, islands and coastal areas outside the last contour should use the last wind speed contour of the coastal area – in some cases, this website will extrapolate past the last wind speed contour and therefore, provide a wind speed that is slightly higher. NOTE: For queries near wind-borne debris region boundaries, the resulting determination is sensitive to rounding which may affect whether or not it is considered to be within a wind-borne debris region.

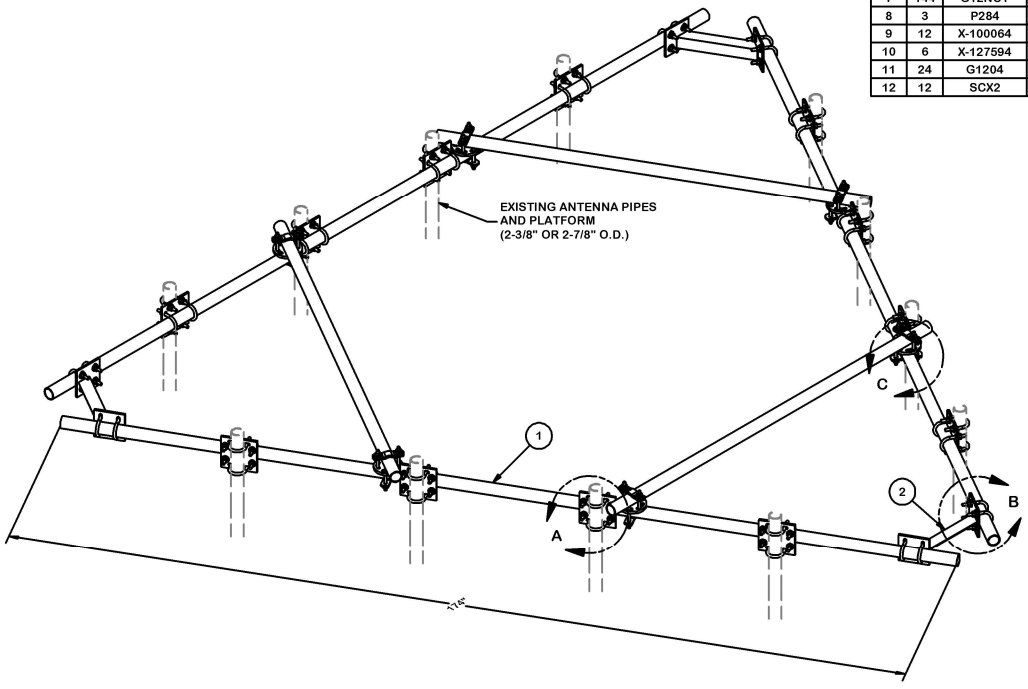
Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.

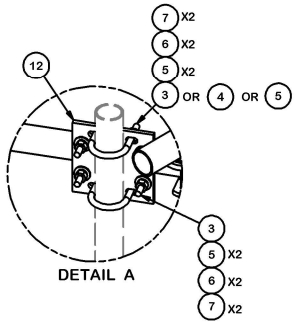
While the information presented on this website is believed to be correct, ATC and its sponsors and contributors assume no responsibility or liability for its accuracy. The material presented in the report should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. ATC does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the report provided by this website. Users of the information from this website assume all liability arising from such use. Use of the output of this website does not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the report.

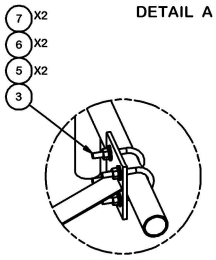
APPENDIX E

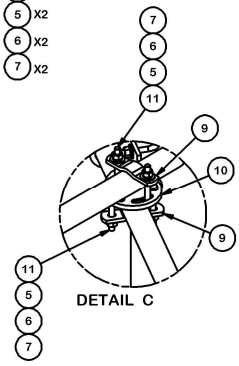
Manufacturer Specification Sheets

PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	P2174	2-3/8" OD X 174" SCH 40 GALVANIZED PIPE	174 in	55.75	167.24
2	3	X-AHCP	ANGLE HANDRAIL CORNER PLATE		12.92	38.76
3	60	X-UB1212	1/2" X 2-1/2" X 4-1/2" X 2" U-BOLT (HDG.)		0.26	15.42
4	24	X-UB1300	1/2" X 3" X 5" X 2" U-BOLT (HDG.)		0.26	6.17
5	144	G12FW	1/2" HDG USS FLATWASHER		0.03	4.91
6	144	G12LW	1/2" HDG LOCKWASHER		0.01	2.00
7	144	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	10.31
8	3	P284	2-3/8" X 84" SCH 40 GALVANIZED PIPE	84 in	26.91	80.74
9	12	X-100064	CLAMP (S) (4" V-CLAMP) GALVANIZED		0.91	10.95
10	6	X-127594	FLAT DISK CLAMP PLATE 4" CENTERS (GALV.)		2.48	14.90
11	24	G1204	1/2" x 4" HDG HEX BOLT GR5 FULL THREAD	4 in	0.27	6.48
12	12	SCX2	CROSSOVER PLATE	7 in	4.80	57.56
					TOTAL WT. #	448.08









TOLERANCE NOTES

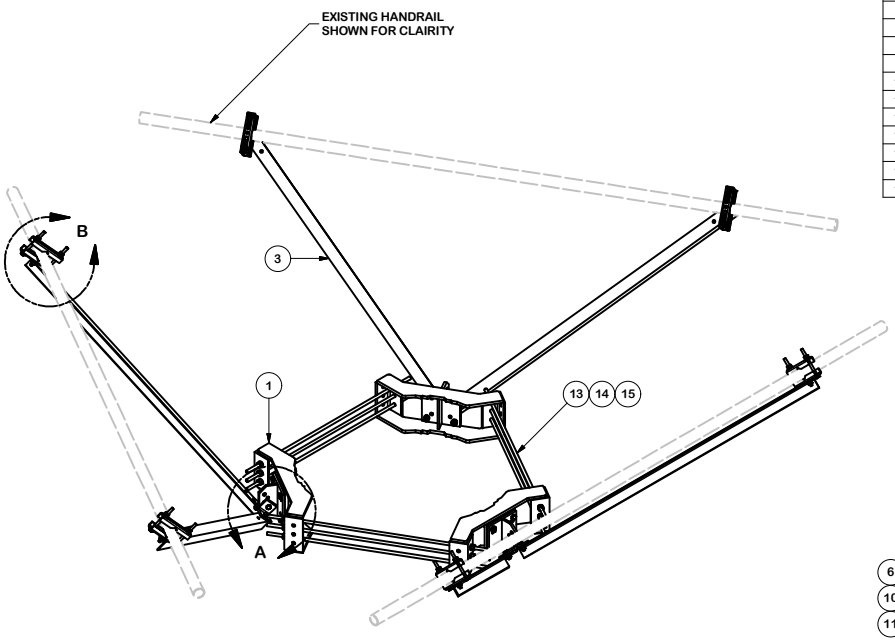
TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

DESCRIPTION
HEAY DUTY HANDRAIL KIT
FOR 14' PLATFORMS WITH
2-3/8" OR 2-7/8" ANTENNA PIPES

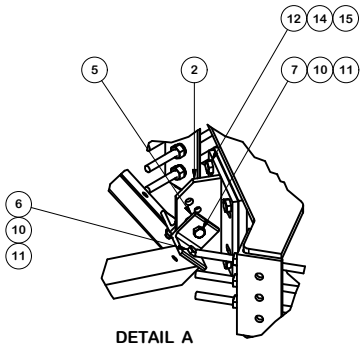
SITE PRO 1 — A valmont COMPANY
Engineering Support Team: 1-888-753-7446
Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.	PAGE
	CEK 3/31/2015		HRK14-HD	1 OF 1

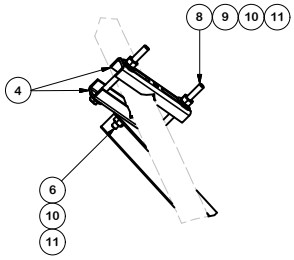
CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	01	CUSTOMER	BMC 3/31/2015	HRK14-HD



PARTS LIST						
ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	X-LWRM	RING MOUNT WELDMENT		68.81	206.42
2	3	X-TBW	T-BRACKET WELDMENT		13.60	40.80
3	6	X-254924	DIAGONAL ANGLE - SITE PRO 1	72 in	19.71	118.24
4	12	X-STU	STIFF ARM CHANNEL BRACKET	8 1/2 in	1.37	16.46
5	6	SHCM-T	CHAIN MOUNT TIGHTENER BRACKET	3 in	1.86	11.15
6	12	G12112	1/2" x 1-1/2" HDG HEX BOLT GR5	1/2 in	0.15	1.77
7	3	G12212	1/2" x 2-1/2" HDG HEX BOLT GR5	2 1/2 in	0.20	0.61
8	12	G12065	1/2" x 6-1/2" HDG HEX BOLT GR5 FULL THREAD	6 1/2 in	0.41	4.91
9	24	G12FW	1/2" HDG USS FLATWASHER	3/32 in	0.03	0.82
10	27	G12LW	1/2" HDG LOCKWASHER	1/8 in	0.01	0.38
11	27	G12NUT	1/2" HDG HEAVY 2H HEX NUT		0.07	1.93
12	12	A582114	5/8" x 2-1/4" HDG A325 HEX BOLT	2 1/4 in	0.31	3.75
13	9	G58R-24	5/8" x 24" THREADED ROD (HDG.)	24 in	0.40	3.59
13	9	G58R-48	5/8" x 48" THREADED ROD (HDG.)	48 in	0.40	3.59
14	30	G58LW	5/8" HDG LOCKWASHER		0.03	0.78
15	30	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	3.90
					TOTAL WT. #	642.04



DETAIL A



DETAIL B

REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED MAX. DIA. FOR HANDRAIL CONNECTION	SP1	BC	10/25/2017

REVISION HISTORY

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES (± 0.030")
DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES
LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING (± 0.030")
ALL OTHER ASSEMBLY (± 0.060")

DESCRIPTION: HANDRAIL REINFORCEMENT KIT (LONG)

SITE PRO 1 — A valmont COMPANY

Engineering Support Team: 1-888-753-7446

Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
SP1	CSL3 2/23/2017	3RD PARTY	PRK-SFS-L

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
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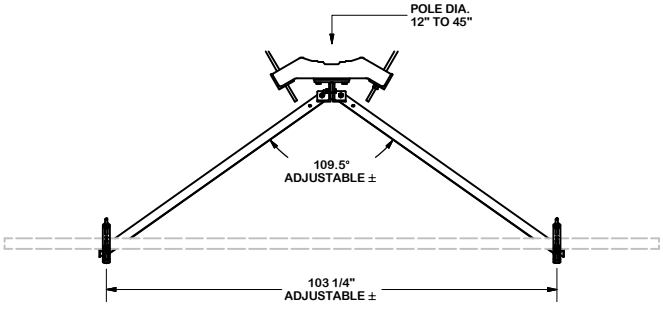
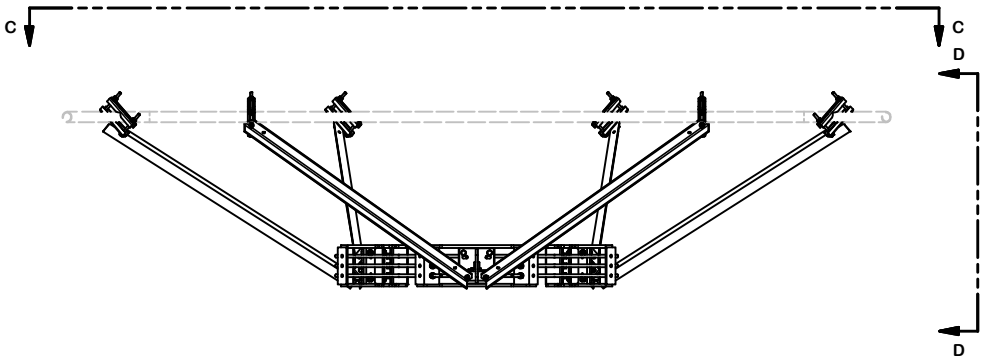
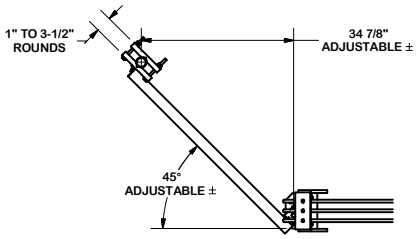


PARTIAL VIEW C-C

VERTICAL POSITION





PARTIAL VIEW D-D

REVISION HISTORY				
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED MAX. DIA. FOR HANDRAIL CONNECTION	SP1	BC	10/25/2017

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES (± 0.030")
DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES
LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING (± 0.030")
ALL OTHER ASSEMBLY (± 0.060")

DESCRIPTION: HANDRAIL REINFORCEMENT KIT (LONG)

SITE PRO 1 — A valmont COMPANY

Engineering Support Team: 1-888-753-7446

Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
SP1	CSL3 2/23/2017	3RD PARTY	PRK-SFS-L

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
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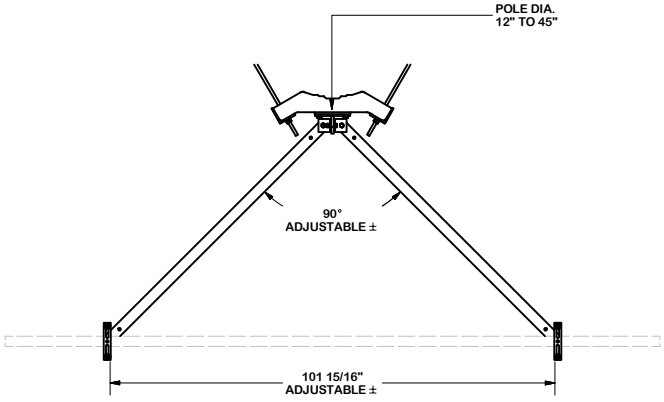
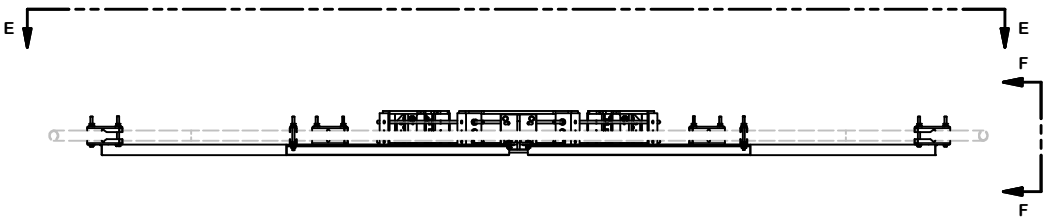
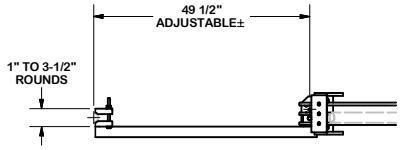


PARTIAL VIEW E-E

HORIZONTAL POSITION





PARTIAL VIEW F-F

TOLERANCE NOTES

TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES (± 0.030")
DRILLED AND GAS CUT HOLES (± 0.030") - NO CONING OF HOLES
LASER CUT EDGES AND HOLES (± 0.010") - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING (± 0.030")
ALL OTHER ASSEMBLY (± 0.060")

REVISION HISTORY				
REV	DESCRIPTION OF REVISIONS	CPD	BY	DATE
A	CHANGED MAX. DIA. FOR HANDRAIL CONNECTION	SP1	BC	10/25/2017

DESCRIPTION: HANDRAIL REINFORCEMENT KIT (LONG)

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
SP1	CSL3 2/23/2017	3RD PARTY	PRK-SFS-L

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	SHOP	BMC 9/8/2017	PRK-SFS-L

SITE PRO 1
A valmont COMPANY
Engineering Support Team: 1-888-753-7446
Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

APPENDIX F

Mount Modification Design Drawings

CROWN CASTLE

SITE:

876315 [OAK LANE CC, INC. TOWER (SSUSA (10035421)

MODIFICATION DRAWING FOR AN EXISTING 14' LOW PROFILE PLATFORM AT 102' ON A 150.5' MONOPOLE TOWER

SHEET INDEX	
T-01	TITLE SHEET
N-01	NOTES
S-01	PLAN VIEW
S-02	ELEVATION VIEW
MI-01	MODIFICATION CHECKLIST

PROJECT INFORMATION	
COUNTY:	NEW HAVEN
SITE ADDRESS:	1027 RACEBROOK ROAD WOODBRIDGE, CT 06525
LATITUDE:	41° 19' 0.30"
LONGITUDE:	-73° 00' 41.80"

SCOPE OF WORK:

MOUNT MODIFICATION DRAWINGS INCLUDES:
INSTALL PROPOSED SUPPORT RAIL & STABILIZER KIT.
RELOCATE EXISTING MOUNT PIPES.

PLANS PREPARED FOR:
CROWN CASTLE

PLANS PREPARED BY:
POD
POWER OF DESIGN
1033 E. TURKEYFOOT LAKE RD.
SUITE 206 AKRON, OHIO 44312
330-961-7432

CARRIER:
AT&T

MODIFICATION DRAWING

REV.	DATE	DESCRIPTION

SITE INFORMATION:
[OAK LANE CC, INC. TOWER
(SSUSA (10035421)

1027 RACEBROOK ROAD
WOODBRIDGE, CT 06525

SITE NUMBER:
876315

POD NUMBER: 20-64773

DRAWN BY: TAJ
CHECKED BY: JGC
DATE: 06/02/2020

SHEET TITLE:
TITLE SHEET

T-01

GENERAL NOTES

1. THE MODIFICATIONS REPRESENTED IN THESE DRAWINGS ARE BASED ON THE STRUCTURAL DOCUMENTS PROVIDED IN THE STRUCTURAL DOCUMENTS TABLE. THE CONTRACTOR SHALL OBTAIN AND BECOME FAMILIAR WITH ALL REFERENCED DOCUMENTS.

REFERENCE DOCUMENTS	
DOCUMENT TYPE	DESIGNATION
MOUNT ANALYSIS	POD PROJECT NUMBER: 20-64644 DATED: 05/29/2020

2. ALL MODIFICATIONS MUST BE INSTALLED TO BRING THE TOWER INTO CONFORMANCE WITH ALL APPLICABLE CODES.

GOVERNING CODES	TIA-222-H & 2018 IBC
ULTIMATE WIND SPEED	119 MPH 3 SECOND GUST
RADIAL ICE THICKNESS	1"
WIND SPEED W/ ICE	50 MPH 3 SECOND GUST
STRUCTURE CLASS	II
EXPOSURE CATEGORY	B
TOPOGRAPHIC CATEGORY	1
SPECTRAL RESPONSE ACCELERATIONS	SS= 0.201 & S1= 0.054

3. ALL WORK PRESENTED ON THESE DRAWINGS MUST BE COMPLETED BY THE CONTRACTOR UNLESS NOTED OTHERWISE OR APPROVED BY THE EOR. THE CONTRACTOR MUST HAVE CONSIDERABLE EXPERIENCE PERFORMING WORK SIMILAR TO THAT DESCRIBED WITHIN THESE DRAWINGS. BY ACCEPTANCE OF THIS PROJECT, THE CONTRACTOR IS ATTESTING THAT HE HAS SUFFICIENT EXPERIENCE AND ABILITY, THAT HE IS KNOWLEDGEABLE OF THE WORK TO BE PERFORMED AND THAT HE IS PROPERLY LICENSED AND REGISTERED TO PERFORM THE WORK IN THE PROJECT JURISDICTION.
4. WORK SHALL ONLY BE PERFORMED DURING CALM, DRY DAYS [WINDS LESS THAN 10XMPH]. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE INSTILLATION PROCEDURE AND SEQUENCE TO INSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION AND/OR MODIFICATIONS. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF TEMPORARY BRACING, GUYS OR TIEDOWNS THAT MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.
5. ALL DIMENSIONS, ELEVATIONS AND EXISTING CONDITIONS SHOWN ON THE DRAWINGS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO BEGINNING ANY MATERIALS ORDERING, FABRICATION OR CONSTRUCTION WORK ON THIS PROJECT. CONTRACTOR SHALL NOT SCALE CONTRACT DRAWINGS IN LIEU OF FIELD VERIFICATIONS. ANY DISCREPANCIES SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND EOR. THE DISCREPANCIES MUST BE RESOLVED BEFORE THE CONTRACTOR IS TO PROCEED WITH THE WORK. THE CONTRACT DOCUMENTS DO NOT INDICATE THE METHODS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND IS SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES. OBSERVATION VISITS TO THE SITE BY THE OWNER AND/OR THE EOR SHALL NOT INCLUDE INSPECTION OF THE PROTECTIVE MEASURES AND PROCEDURES.
6. THE DESIGN WITHIN THESE DRAWINGS ASSUMES THE TOWER AND ITS FOUNDATIONS HAVE BEEN WELL MAINTAINED, IN GOOD CONDITION AND ARE WITHOUT DEFECT. BENT MEMBERS, CORRODED MEMBER, LOOSE BOLTS, CRACKED WELDS, AND OTHER STRUCTURAL DEFECTS HAVE NOT BEEN CONSIDERED UNLESS SPECIFICALLY NOTED. THE TOWER IS ASSUMED TO BE PLUMB AND THE SITE IS ASSUMED LEVEL. THE OWNER AND/OR EOR SHALL BE NOTIFIED IMMEDIATELY IF ANY VARIANCES ARE FOUND.
7. THE CONTRACTOR SHALL ONLY WORK WITHIN THE LIMITS OF THE TOWER OWNER'S PROPERTY, LEASE AREA OR APPROVED EASEMENTS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WORK IS PERFORMED WITHIN THESE BOUNDARIES. CONSTRUCTION STAKING AND BOUNDARY MARKING IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL EMPLOY A SURVEYOR AS REQUIRED. ANY WORK OUTSIDE THESE BOUNDARIES SHALL BE APPROVED IN WRITING BY THE OWNER.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INITIATING, MAINTAIN AND SUPERVISING ALL SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK. THE CONTRACTOR IS RESPONSIBLE FOR INSURING THAT ALL WORK PERFORMED COMPLIES WITH ALL APPLICATION SAFETY CODES AND GOVERNING REGULATIONS.
9. ACCESS TO THE PROPOSED WORK SITE MAY BE RESTRICTED. THE CONTRACTOR SHALL COORDINATE INTENDED CONSTRUCTION ACTIVITY, INCLUDING WORK SCHEDULES AND MATERIAL DELIVERIES, WITH THE OWNER/RESIDENT LEASING AGENT FOR APPROVAL.
10. THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS FOR THIS PROJECT FROM ALL APPLICABLE GOVERNING AGENCIES. THE CONTRACTOR WILL BE RESPONSIBLE FOR ABIDING BY ALL CONDITIONS AND REQUIREMENTS OF THE PERMITS.
11. ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDED BUT NOT LIMITED TO ALTERED SIZED AND/OR STRENGTHS, MUST BE APPROVED BY THE EOR.
12. UNLESS NOTED OTHERWISE, ALL NEW MEMBERS SHALL MAINTAIN THE EXISTING MEMBER WORKING LINES AND NOT INTRODUCE ECCENTRICITIES INTO THE STRUCTURE.
13. ALL DIMENSIONS AND QUANTITIES LISTED WITHIN THESE DRAWINGS ARE INTENDED TO AID THE CONTRACTOR. THE CONTRACTOR SHALL VERIFY ALL DIMENSION AND QUANTITIES PRIOR TO BIDDING AND/OR ORDERING MATERIALS.
14. ALL MANUFACTURERS' INSTRUCTIONS SHALL BE FOLLOWED EXACTLY. ANY DEVIATION REQUIRES WRITTEN APPROVAL FROM THE EOR.
15. THE CONTRACTOR IS RESPONSIBLE FOR TEMPORARILY REMOVING COAX, BRACKETS, ANTENNAS MOUNTS AND ANY OTHER TOWER APPURTENANCE THAT MAY INTERFERE WITH THE INSTILLATION OF THE TOWER MODIFICATIONS. ALL TOWER APPURTENANCES MUST BE REPLACE AND/OR RESTORED TO ITS ORIGINAL LOCATION. SOME MOUNTS OR ATTACHMENTS MAY REQUIRE CUSTOM MODIFICATION TO PROPERLY FIT THE MODIFIED REGION OF THE STRUCTURE. THESE CUSTOM MOUNTS OR ATTACHMENTS ARE DESIGNED BY OTHERS AND MUST BE APPROVED BY THE OWNER/EOR PRIOR TO REMOVAL. ANY CARRIER DOWNTIME MUST BE COORDINATED WITH THE OWNER IN WRITING.
16. DO NOT SCALE DRAWINGS.

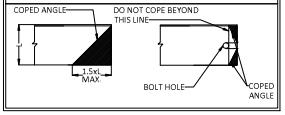
STRUCTURAL STEEL NOTES

1. ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS, LATEST EDITION.
2. ALL STRUCTURAL STEEL ELEMENTS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS.

MATERIAL SPECIFICATIONS	
ANGLES	ASTM A36 (36 KSI YIELD STRENGTH)
PIPES	ASTM A53 GR.B (35 KSI YIELD STRENGTH)
BOLTS	ASTM A325N
NUTS	ASTM A563
WASHER	ASTM F436
PLATE	ASTM A36 (36 KSI YIELD STRENGTH)
U-BOLTS	ASTM A307

3. ALL CONNECTIONS NOT FULLY DETAILED ON THESE PLANS SHALL BE DETAILED BY THE FABRICATOR IN ACCORDANCE WITH AISC SPECIFICATIONS, LATEST EDITION.
4. CAULKING SHALL BE PROVIDED AROUND PERIMETER OF ANY AND ALL MODIFICATION MEMBERS TO ENSURE COMPLETE SEAL BETWEEN EXISTING STRUCTURE AND REINFORCING MEMBERS IN FULL CONTACT WITH EXISTING STEEL. SEALANT IS TO BE EXTERIOR GRADE, PAINTABLE SILICONE CAULKING AS MANUFACTURED BY DOW AND ACCEPTABLE TO EOR.
5. HOLES SHALL NOT BE FLAME CUT THROUGH STEEL UNLESS APPROVED BY THE EOR.
6. ALL EXPOSED STEEL SHALL BE HOTXDIPPED GALVANIZED PER ASTM A123, ASTM A153/A153M, OR ASTM A653 G90, AS APPLICABLE FOR FULL WEATHER PROTECTION. FOR HIGH STRENGTH STEEL FASTENERS WHERE HOTXDIPPED GALVANIZING IS NOT PERMITTED DACROMET F1136 GRADE 3 COATING SHALL BE USED. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING TOWER STEEL. CONTRACTOR SHALL OBTAIN EOR APPROVAL FOR STEEL PROTECTION BY ANY OTHER MEANS.
7. REPAIR DANAGED PAINTED/GALVANIZED SURFACES WITH TWO COATS OF BRUSH OR ROLL ON ZRC COLD GALVANIZING COMPOUND OR EOR APPROVED COATING. SURFACES MUST BE WIRE BRUSHED AND SOLVENT CLEANED PRIOR TO APPLICATION OF GALVANIZING COMPOUND.
8. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES [LOCKING NUT/PAL NUT] TO BE INSTALLED IN ACCORDANCE WITH TIA/EIAX222 REQUIREMENTS.
9. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.

ALLOWABLE ANGLE COPE



1. ALL DIMENSIONS REPRESENTED IN THE ABOVE TABLES ARE AISC MINIMUM REQUIREMENTS. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
2. THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS WITHIN THESE DRAWINGS MAY VARY FROM THE AISC MINIMUM REQUIREMENT.

BOLT SCHEDULE

BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16x11/16	7/8	1-1/2
5/8	11/16	11/16x7/8	1-1/8	1-7/8
3/4	13/16	13/16x1	1-1/4	2-1/4
7/8	15/16	15/16x1-1/8	1-1/2	2-5/8
1	1-1/16	1-1/16x1-5/16	1-3/4	3

- DIMENSIONS GIVEN IN INCHES.
- SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED ON THE PLANS.

WORKABLE GAGES

LEG	3	2-1/2	----
G	1-3/4	1-3/8	----

- DIMENSIONS GIVEN IN INCHES.
- MATCH EXISTING WHEN APPLICABLE.

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CARRIER:

AT&T

DRAWING NOTICE:

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DATE:	06/02/2020

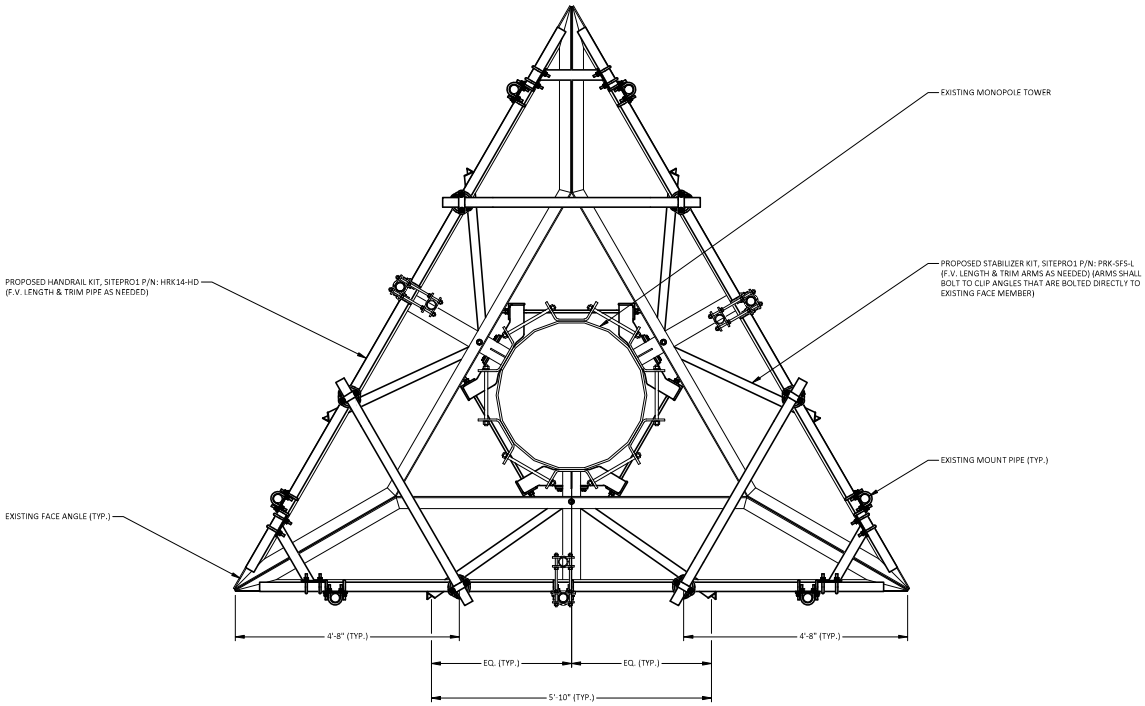
SHEET TITLE:

NOTES

N-01

NOTES:

- ANTENNAE & GRATING NOT SHOWN FOR CLARITY
- ALL FIELD DRILLED HOLES SHALL BE SOLVENT CLEANED AND TOUCHED UP WITH TWO COATS OF ZRC RICH PAINT
- EXCESS MATERIALS SHALL BE REMOVED AND DISPOSED OFF SITE BY THE CONTRACTOR
- ALL PROPOSED BOLTS ARE 1/2" Ø W/ 9/16" Ø BOLT HOLE UNLESS OTHERWISE NOTED
- ALL PROPOSED BOLT LOCATIONS SHALL COMPLY WITH THE BOLT SCHEDULE & WORKABLE GAGES TABLES ON N-01



PLAN VIEW

1/2" = 1'-0"

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PLAN VIEW

S-01

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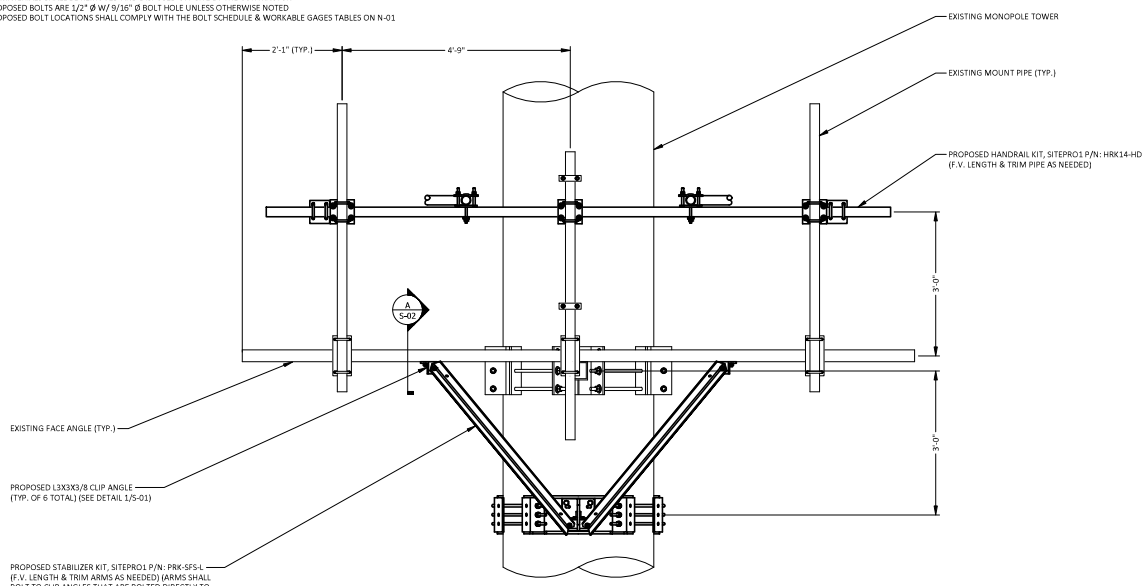
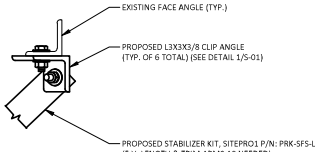
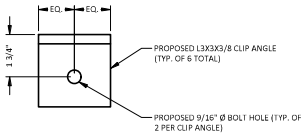


ELEVATION VIEW
1/2" = 1'-0"



SECTION A S-02
1-1/2" = 1'-0"



DETAIL 1 S-02
3" = 1'-0"

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SHEET TITLE:
ELEVATION VIEW

S-02

MODIFICATION INSPECTION CHECKLIST

BEFORE CONSTRUCTION		DURING CONSTRUCTION		AFTER CONSTRUCTION	
CONSTRUCTION/INSTALLATION INSPECTION AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM	CONSTRUCTION/INSTALLATION INSPECTION AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM	CONSTRUCTION/INSTALLATION INSPECTION AND TESTING REQUIRED (COMPLETED BY ENGINEER OF RECORD)	REPORT ITEM
X	MODIFICATION INSPECTION CHECKLIST DWG	X	CONSTRUCTION INSPECTION	X	MODIFICATION INSPECTOR REDLINE OR RECORD DRAWING(S)
-	ENGINEER OF RECORD APPROVED SHOP DRAWINGS	-	FOUNDATION INSPECTION	-	POST INSTALLED ANCHOR ROD PULL-OUT TESTING
-	FABRICATION INSPECTION	-	CONCRETE COMP. STRENGTH AND SLUMP TEST	X	PHOTOGRAPHS
X	MATERIAL TEST REPORT	-	POST INSTALLED ANCHOR ROD VERIFICATION	ADDITIONAL TESTING AND INSPECTION	
-	FABRICATOR NDE INSPECTION	-	BASE PLATE GROUT VERIFICATION		
-	NDE REPORT OF MONOPOLE BASEPLATE (AS REQUIRED)	-	THIRD PARTY CERTIFIED WELD INSPECTION		
X	PACKING SLIP	-	EARTHWORK LIFT AND DENSITY (REPORT REQUIRED)		
ADDITIONAL TESTING AND INSPECTION		X	ON SITE COLD GALVANIZING VERIFICATION		
		-	GUY WIRE TENSION REPORT		
		X	GC AS-BUILT DOCUMENTS		
		ADDITIONAL TESTING AND INSPECTION			

MODIFICATION INSPECTION NOTES:

GENERAL:

1. THE MODIFICATION INSPECTION IS A VISUAL INSPECTION OF TOWER MODIFICATION AND A REVIEW OF CONSTRUCTION INSPECTION AND OTHER REPORTS TO ENSURE THE INSTALLATION WAS CONSTRUCTED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. NAMELY THE MODIFICATION DRAWINGS., AS DESIGNED BY THE ENGINEER OF RECORD.
2. THE MODIFICATION INSPECTION IS TO CONFIRM INSTALLATION CONFIGURATION AND WORKMANSHIP ONLY AN IS NOT A REVIEW OF THE MODIFICATION DESIGN ITSELF. NOR DOES THE MODIFICATION INSPECTOR TAKE OWNERSHIP OF THE MODIFICATION DESIGN. OWNERSHIP OF THE STRUCTURAL MODIFICATION DESIGN EFFECTIVENESS AND INTENT RESIDES WITH THE ENGINEER OF RECORD AT ALL TIMES.
3. TO ENSURE THAT THE REQUIREMENT OF THE MODIFICATION INSPECTION ARE MET, IT IS VITAL THAT THE GENERAL CONTRACTOR (GC) AND THE MODIFICATION INSPECTOR BEGIN COMMUNICATION AND COORDINATING AS SOON AS A PO OR PAYMENT IS RECEIVED. IT IS EXPECTED THAT EACH PARTY WILL BE PROACTIVE IN REACHING OUT TO THE OTHER PARTY.

MODIFICATION INSPECTOR:

1. THE MODIFICATION INSPECTOR IS REQUIRED TO CONTACT THE GC AS SOON AS RECEIVING A PO OR PAYMENT FOR THE MODIFICATION INSPECTION TO:
   - REVIEW THE REQUIREMENT OF THE MODIFICATION INSPECTION CHECKLIST
   - WORK WITH THE GC TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE INSPECTIONS
   - DISCUSS ANY SITE SPECIFIC INSPECTIONS OR CONCERNS
2. THE MODIFICATION INSPECTOR IS RESPONSIBLE FOR COLLECTING ALL GENERAL CONTRACTOR (GC) INSPECTION AND TEST REPORTS. REVIEWING THE DOCUMENTS FOR ADHERENCE TO THE CONTRACT DOCUMENTS, CONDUCTING THE INXFEILD INSPECTIONS, AND SUBMITTING THE MODIFICATION INSPECTION REPORT.

GENERAL CONTRACTOR:

1. THE GC IS REQUIRED TO CONTACT THE MODIFICATION INSPECTOR AS SOON AS RECEIVING A PO OR PAYMENT FOR THE MODIFICATION INSTALLATION OR TURNKEY PROJECT TO:
   - REVIEW THE REQUIREMENT OF THE MODIFICATION INSPECTION CHECKLIST
   - WORK WITH THE MI INSPECTOR TO DEVELOP A SCHEDULE TO CONDUCT ON-SITE MODIFICATION INSPECTIONS, INCLUDING FOUNDATION INSPECTIONS
   - BETTER UNDERSTAND ALL INSPECTION AND TESTING REQUIREMENTS
2. THE GC SHALL PERFORM AND RECORD THE TEST AND INSPECTION RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MODIFICATION INSPECTION CHECKLIST.

RECOMMENDATIONS:

1. IT IS SUGGESTED THAT THE GC PROVIDE A MINIMUM OF 5 BUSINESS DAYS NOTICE, TO THE MODIFICATION INSPECTOR AS TO WHEN THE SITE WILL BE READY FOR HE MODIFICATION INSPECTION TO BE CONDUCTED.
   - THE GC AND MODIFICATION INSPECTION COORDINATE CLOSELY THROUGHOUT THE ENTIRE PROJECT.
   - WHEN POSSIBLE IT IS PREFERRED TO HAVE THE MODIFICATION INSPECTOR AND GC ON-SITE SIMULTANEOUSLY FOR ANY GUY WIRE TENSIONING OR RETENSIONING OPERATIONS.
   - IT MAY BE BENEFICIAL TO INSTALL ALL TOWER MODIFICATIONS PRIOR TO CONDUCTING THE FOUNDATION INSPECTION TO ALLOW FOUNDATION AND MODIFICATION INSPECTION(S) DONE IN ONE SITE VISIT.
   - WHEN POSSIBLE, IT IS PREFERRED TO HAVE THE GC AND MODIFICATION INSPECTOR ON-SITE DURING THE MODIFICATION INSPECTION. THEREFORE, THE GC MAY CHOOSE TO COORDINATE THE MODIFICATION INSPECTION CAREFULLY TO ENSURE ALL CONSTRUCTION FACILITIES AT THEIR DISPOSAL WHEN THE MI INSPECTOR IS ON SITE.

CANCELLATION OR DELAYS IN SCHEDULED MODIFICATION INSPECTION:

1. IF THE GC AND MODIFICATION INSPECTOR AGREE TO A DATE ON WHICH THE MODIFICATION INSPECTION WILL BE CONDUCTED, AND EITHER ARTY CANCELS OR DELAYS, THE TOWER OWNER SHALL NOT BE RESPONSIBLE FOR ANY COSTS, FEES, LOSS OR DEPOSITS AND/OR OTHER PENALTIES RELATE TO THE CANCELLATION OR DELAY INCURRED BY EITHER PARTY FOR ANY TIME. EXCEPTIONS MAY BE MADE IN THE DELAY/ CANCELLATION IS CAUSED BY WEATHER OR OTHER CONDITIONS THAT MAY COMPROMISE THE SAFETY OF THE PARTIES INVOLVED.

CORRECTION OF FAILING MODIFICATION INSPECTION:

1. IF THE MODIFICATION INSTALLATION WOULD FAIL THE MODIFICATION INSPECTION ("FAILED MODIFICATION INSPECTION"), THE GC SHALL WORK WITH MODIFICATION INSPECTOR TO COORDINATE A REMEDIATION PLAN IN ONE OF TWO WAYS:
   - CORRECT FAILING ISSUES TO COMPLY WITH THE SPECIFICATIONS CONTAINED IN THE ORIGINAL CONTRACT DOCUMENTS AND COORDINATE A SUPPLEMENT MODIFICATION INSPECTION. OR, WITH TOWER OWNER'S APPROVAL, THE GC MAY WORK WITH THE ENGINEER OF RECORD TO REXANALYZE THE MODIFCATION/REINFORCEMENT USING AS-BUILT CONDITION.

VERIFICATION INSPECTIONS:

1. TOWER OWNER RESERVES THE RIGHT TO CONDUCT A VERIFICATION INSPECTION TO VERIFY THE ACCURACY AND COMPLETENESS OF PREVIOUSLY COMPLETED MODIFICATION AND INSPECTION(S) ON TOWER MODIFICATION PRODUCTS.
2. VERIFICATION INSPECTION MAY BE CONDUCTED BY AN INDEPENDENT FIRM AFTER A MODIFICATION PROJECT IS COMPLETED, AS MARKED BY THE DATE OF AN ACCEPTED "PASSING MODIFICATION INSPECTION MODIFICATION INSPECTION" REPORT FOR THE ORIGINAL PROJECT.

REQUIRED PHOTOS:

1. BETWEEN THE GC AND THE MI INSPECTOR THE FOLLOWING PHOTOGRAPHS ARE TO BE TAKEN AND INCLUDED IN THE MODIFICATION INSPECTION REPORT:
   - PREXCONSTRUCTION GENERAL SITE CONDITION
   - PHOTOGRAPHS DURING THE REINFORCEMENT MODIFICATION CONSTRUCTION/ERECTION AND INSPECTION
     - RAW MATERIALS
     - PHOTOS OF ALL CRITICAL DETAILS
     - WELD PREPARATION
     - FOUNDATION MODIFICATION
     - BOLT INSTALLATION AND TORQUE
     - FINAL INSTALLED CONDITION
     - SURFACE COATING REPAIR
   - POST CONDITION PHOTOGRAPHS
   - FINAL INFIELD CONDITION ANY OTHER PHOTOS DEEMED RELEVANT TO SHOW COMPLETE DENTALS OF MODIFICATIONS
2. PHOTOS OF ELEVATED MODIFICATIONS TAKEN FROM THE GROUND SHALL BE CONSIDERED INADEQUATE.

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MODIFICATION CHECKLIST

MI-01

Exhibit F

Power Density/RF Emissions Report

Radio Frequency Emissions Analysis Report

AT&T Existing Facility

Site ID: CT2008

Project Type: AT&T LTE 5C

Woodbridge Johnson Road
1027 Racebrook Road
Woodbridge, CT 06525

July 13, 2020

Fullerton Project Number: 2020.0182.0015

Site Compliance Summary	
Compliance Status:	**COMPLIANT**
Site total MPE% of FCC general population allowable limit:	**17.62 %**

July 13, 2020

Crown Castle on Behalf of AT&T
Attn: Anne Marie Zsamba, Site Acquisition Specialist
3 Corporate Park Drive, Suite 101
Clifton Park, NY 12065

Emissions Analysis for Site: **CT2008 – Woodbridge Johnson Road**

Fullerton Engineering Consultants, LLC ("Fullerton") was directed to analyze the proposed upgrades to the AT&T facility located at **1027 Racebrook Road, Woodbridge, CT**, for the purpose of determining whether the emissions from the proposed AT&T antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of $\mu W/cm^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

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

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

Population exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limits for the 700 MHz & 850 MHz bands are approximately 467 $\mu W/cm^2$ and 567 $\mu W/cm^2$ respectively. The general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS) bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

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

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were performed for the proposed upgrades to the AT&T antenna facility located at **1027 Racebrook Road, Woodbridge, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was focused at the base of the tower. For this report, the sample point is the top of a 6-foot person standing at the base of the tower.

Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. All power values expressed and analyzed are maximum power levels expected to be used on all radios.

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

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

Technology	Frequency Band	Channel Count	Transmit Power per Channel (W)
UMTS	850 MHz	1	20
LTE	2100 MHz (AWS)	4	40
LTE	700 MHz (Band 12)	4	40
LTE / 5G NR	850 MHz	4	40
LTE	1900 MHz (PCS)	4	40

Table 1: Channel Data Table

The following antennas listed in *Table 2* were used in the modeling for transmission in the 700 MHz, 850 MHz, 1900 MHz (PCS) and 2100 MHz (AWS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB for directional panel antennas, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

Sector	Antenna Number	Antenna Make / Model	Antenna Centerline (ft)
A	1	Powerwave 7770	104
A	2	CCI OPA65R-BU6D	104
A	3	CCI DMP65R-BU8D	104
B	1	Powerwave 7770	104
B	2	CCI OPA65R-BU6D	104
B	3	CCI DMP65R-BU8D	104
C	1	Powerwave 7770	104
C	2	CCI OPA65R-BU6D	104
C	3	CCI DMP65R-BU8D	104

Table 2: Antenna Data

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

Cable losses were factored in the calculations for this site. For each **700 MHz** Remote Radio Unit (RRU) there was **0.18 dB** of cable loss calculated into the system gains / losses for this site. For each **850 MHz** Remote Radio Unit (RRU) there was **0.20 dB** of cable loss calculated into the system gains / losses for this site. For each **850 MHz** ground mounted radio there was **0.83 dB** of cable loss calculated into the system gains / losses for this site. For each **1900 MHz (PCS)** Remote Radio Unit (RRU) there was **0.32 dB** of cable loss calculated into the system gains / losses for this site. For each **2100 MHz (AWS)** Remote Radio Unit (RRU) there was **0.34 dB** of cable loss calculated into the system gains / losses for this site. These values were calculated based upon the manufacturers specifications for **10 feet** of **1/2"** coax for all Remote Radio Units (RRU) and **135 feet** of **1-5/8"** for all ground mounted radios.

RESULTS

Per the calculations completed for the proposed AT&T configurations *Table 3* shows resulting emissions power levels and percentages of the FCC's allowable general population limit.

Antenna ID	Antenna Make / Model	Frequency Bands	Antenna Gain (dBd)	Channel Count	Total TX Power (W)	ERP (W)	MPE %
Antenna A1	Powerwave 7770	850 MHz	11.4	1	40	456.10	0.30
Antenna A2	CCI OPA65R-BU6D	2100 MHz (AWS)	16.25	4	160	6,239.07	2.34
Antenna A3	CCI DMP65R-BU8D	700 MHz (Band 12) / 850 MHz / 1900 MHz (PCS)	12.95 / 13.85 / 15.65	12	400	10,340.75	5.69
						Sector A Composite MPE%	**8.33**
Antenna B1	Powerwave 7770	850 MHz	11.4	1	40	456.10	0.30
Antenna B2	CCI OPA65R-BU6D	2100 MHz (AWS)	16.25	4	160	6,239.07	2.34
Antenna B3	CCI DMP65R-BU8D	700 MHz (Band 12) / 850 MHz / 1900 MHz (PCS)	12.95 / 13.85 / 15.65	12	400	10,340.75	5.69
						Sector B Composite MPE%	**8.33**
Antenna C1	Powerwave 7770	850 MHz	11.4	1	40	456.10	0.30
Antenna C2	CCI OPA65R-BU6D	2100 MHz (AWS)	16.25	4	160	6,239.07	2.34
Antenna C3	CCI DMP65R-BU8D	700 MHz (Band 12) / 850 MHz / 1900 MHz (PCS)	12.95 / 13.85 / 15.65	12	400	10,340.75	5.69
						Sector C Composite MPE%	**8.33**

Table 3: AT&T *Emissions Levels*

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

Site Composite MPE%	
Carrier	**MPE%**
AT&T – Max Per Sector Value	**8.33 %**
T-Mobile	5.45 %
Verizon Wireless	2.41 %
Nextel	0.46 %
Sprint	0.58 %
MetroPCS	0.39 %
Site Total MPE %:	**17.62 %**

Table 4: All Carrier MPE Contributions

AT&T Sector A Total:	8.33 %
AT&T Sector B Total:	8.33 %
AT&T Sector C Total:	8.33 %
Site Total:	17.62 %

Table 5: Site MPE Summary

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

AT&T _ Frequency Band / Technology Max Power Values (Per Sector)	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu W/cm^2$)	Frequency (MHz)	Allowable MPE ($\mu W/cm^2$)	Calculated % MPE
AT&T 850 MHz LTE	1	456.10	104	1.71	850 MHz	567	0.30%
AT&T 2100 MHz (AWS) LTE	4	1,559.77	104	23.35	2100 MHz (AWS)	1000	2.34%
AT&T 700 MHz LTE (Band 12)	4	756.94	104	11.33	700 MHz	467	2.43%
AT&T 850 MHz LTE / 5G NR	4	463.48	104	6.94	850 MHz	567	1.22%
AT&T 1900 MHz (PCS) LTE	4	1,364.77	104	20.43	1900 MHz (PCS)	1000	2.04%
						Total:	**8.33%**

Table 6: AT&T *Maximum Sector MPE Power Values*

Summary

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

The anticipated maximum composite contributions from the AT&T facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general population exposure to RF Emissions are shown here:

AT&T Sector	Power Density Value (%)
Sector A:	8.33 %
Sector B:	8.33 %
Sector C:	8.33 %
AT&T Maximum Total (per sector):	8.33 %
Site Total:	17.62 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **17.62 %** of the allowable FCC established general population limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

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

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