



NSS **NORTHEAST**
SITE SOLUTIONS
Turnkey Wireless Development

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

November 3, 2021

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

RE: Exempt Modification Application
557 Route 82, Montville, CT 06370
Latitude: 41.505627
Longitude: -72.197500
Site #: 876371_Crown_VZW

Dear Ms. Bachman:

Verizon Wireless is requesting to file an exempt modification for an existing tower located at 557 Route 82, Montville, CT 06370. Verizon Wireless currently maintains fifteen (15) antennas at the 167-foot level of the existing 180-foot tower. The property is owned by Carolyn Besade and the tower is owned by Crown Castle. Verizon now intends to replace nine (9) antennas. The new antennas would be installed at the 167-foot level of the tower. This modification includes B2, B5 hardware that is both 4G (LTE), and 5G capable. Antenna mount modifications will be completed as per the attached Maser mount analysis dated August 20, 2021.

Verizon Planned Modifications:

Remove: None

Remove and Replace:

- (3) QUAD656C0000X Antennas (REMOVE) – (3) MT6407-77A Antennas (REPLACE)
- (6) HBXX-6516DS-A2 Antennas (REMOVE) – (6) NHH-65B-R2B Antennas (REPLACE)
- (3) Nokia B13 RRH (REMOVE) - (3) Samsung RF4440d-13A (REPLACE)
- (3) Nokia B66A RRH (REMOVE) - (3) Samsung RF4439d-25A (REPLACE)

Install New: None

Existing to Remain:

- (6) ANTEL Antennas
- (12) 1-5/8" Coax
- (2) Hybrid Lines
- (2) Raycap

The facility was approved by the Montville Planning & Zoning Commission on October 26, 1999. Please see attached.



Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16- SOj-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-SOj-73, a copy of this letter is being sent to The Honorable Ronald McDaniel, Mayor, and Liz Burdick, Town Planner for the Town of Montville. A copy is also being sent to the tower owner and property owner.

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

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

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

Sincerely,

Denise Sabo
Mobile: 203-435-3640
Fax: 413-521-0558
Office: 4 Angela's Way, Burlington CT 06013
E-mail: denise@northeastsitesolutions.com



NSS **NORTHEAST**
SITE SOLUTIONS
Turnkey Wireless Development

Attachments

Cc: The Honorable Ronald McDaniel - Mayor
Town of Montville
310 Norwich-New London Turnpike, Uncasville, CT 06382

Liz Burdick - Town Planner
Town of Montville
310 Norwich-New London Turnpike, Uncasville, CT 06382

Carolyn Besade – Property Owner
557 Route 82, Montville, CT 06370

Crown Castle, Tower Owner

Exhibit A

Original Facility Approval

Phone: 848-7166

Town of Montvill
Building Department
310 Norwich New London Tpke

Fax: 848-7231

Building / Trades Permit

Permit Number BP2000-2 Permit Date 1/5/2000 Permit Type Building Permit Code C2

Job Street # 557 Job Location Route 82 Map/Block-Lot 058/015-000

Job Description telecommunications tower & equip. building

Owner Carolyn Besade/Sprint PCS Mailing Address 1 International Blvd., Suite 800

City Mahwah State N.J. Zip 07495 Telephone 201/512/6700

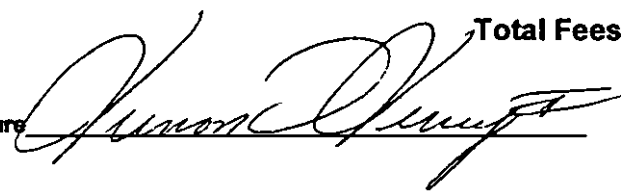
Contractor Sprint PCS *Mailing Address 1 International Blvd., Suite 800

*City Mahwah *State N.J. *Zip 07495 *Telephone 201/512/4700

Lic/Reg Number _____ Lic/Reg Type _____ Expiration Date _____

Use Group B Size 180' high Type Construction 2C

Building Value	\$130,000.00	Building Fee	\$778.00
Plumbing Value	\$0.00	Plumbing Fee	\$0.00
Heating Value	\$0.00	Heating Fee	\$0.00
Electrical Value	\$0.00	Electrical Fee	\$0.00
A/C Value	\$0.00	A/C Fee	\$0.00
Other Value	\$0.00	Other Fee	\$0.00
Total Values	\$130,000.00	State Ed Fee	\$20.80
		C/O Fee	\$25.00
		Plan Review Fee	\$111.60
		Total Fees	\$935.40

Building Official's Signature 

Date 1/5/00

Required Inspection

- Footings - Prior to pouring concrete
- Footing Drains / Waterproofing - Prior to backfill
- Framing
- Rough Electrical
- Electrical Service
- Rough Plumbing - Leak test required
- Pool Bonding and Electric
- Rough Heating and Air Conditioning
- Chimney - One flue above thimble
- Fireplace - Throat
- Fireplace - Final
- Firestopping / Draftstopping
- Insulation

Final Inspection for Certificate of Occupancy - PRIOR to Use or Occupancy

**TOWN OF MONTVILLE
PLANNING & ZONING COMMISSION**

310 NORWICH-NEW LONDON TPKE.
UNCASVILLE, CONNECTICUT 06382-2599

L E G A L N O T I C E

The Montville Planning and Zoning Commission at its meeting held on October 26, 1999, took the following action:

Carolyn Besade/Sprint Spectrum L.P.: Application for a special permit to construct a wireless telecommunications facility, including a 180 foot monopole tower with antenna, base station equipment, fencing, and an access drive on property located at 557 Route 82, Montville, Ct. Shown on Assessor's Map 58, Lot 15. **GRANTED WITH CONDITION.**

The Mohegan Tribe of Indians of Connecticut: Application for a special permit to develop 36 elderly housing units for senior members of the Mohegan Tribe of Indians of Connecticut on property located at 1710 Norwich-New London Tpke., Montville, Ct. Shown on Assessor's Map 41, Lot 1. **GRANTED.**

Maps and documentation concerning the above applications are on file in the office of the Town Planner, Town Hall Annex, Montville, Ct.

Dated at Montville, Ct. this 27th day of October 1999.

MONTVILLE PLANNING AND ZONING COMMISSION

Gregory Majewski, Chairman

PUBLISH IN THE NEW LONDON DAY October 29, 1999

PLEASE REFERENCE PURCHASE ORDER 6100 I 1 ON INVOICE.

ZONING PERMIT

ZONING PERMIT NUMBER 99-276 OR N/A EXPIRATION DATE 12-9-2004

APPLICANT Sprint Spectrum, L.P.

APPLICANT'S ADDRESS 1 International Blvd., Suite 800 TELEPHONE (201) 512-4700

PROPERTY OWNER Carolyn Besade Mahwah, NJ 07495

LOCATION 557 Route 82, Montville, CT LOT AREA 10.08 acres ZONE R-120

ASSESSOR'S MAP NUMBER 58 LOT NUMBER 15


BUILDING HEIGHT 180-ft Monopole Tower PROPOSED FLOOR AREA N/A


NATURE OF REQUEST/PROPOSED USE Telecommunications tower, antennas, and associated equipment

SKETCH ON REVERSE OR PROVIDE TWO COPIES OF PLANS DRAWN TO A SCALE OF AT LEAST 1" = 40' SHOWING: DIMENSIONS OF THE LOT, THE SIZE, AREA, AND LOCATION OF EXISTING, PROPOSED, PRINCIPAL AND ACCESSORY STRUCTURES, DRIVEWAYS, SANITARY FACILITIES AND WATER SUPPLY, PARKING FACILITIES, AND ADJACENT STREETS; DISTANCES OF PROPOSED STRUCTURES FROM PROPERTY LINES. IN THE CASE OF FILL OR EXCAVATION REQUESTS (UNDER 500 CUBIC YARDS), DIMENSIONS OF FILL OR EXCAVATION AREA MUST BE INCLUDED. A PLAN PREPARED BY A CONNECTICUT REGISTERED LAND SURVEYOR MAY BE REQUIRED. THE PROPOSED USE SPECIFIED ABOVE SHALL NOT BE AUTHORIZED UNTIL AN ACTUAL CERTIFICATE OF COMPLIANCE IS ISSUED BY THE COMMISSION OR ITS APPOINTED AGENTS.

- SKETCH PLAN OR GRADING PLAN YES N/A Submitted 9/21/99
- SEPTIC PERMIT YES N/A
- DRIVEWAY PERMIT (STATE, LOCAL) YES N/A Existing driveway
- WETLANDS PERMIT YES N/A
- HAS A VARIANCE EVER BEEN GRANTED FOR THIS PROPERTY YES NO
- HAS BOND BEEN FILED YES N/A
- FEE PAID CASH CHECK # N/A Submitted 9/21/99

- THE APPLICANT AGREES TO:
1. ADHERE TO ALL THE APPLICABLE REQUIREMENTS OF THE ZONING REGULATIONS.
 2. NOTIFY THE COMMISSION OR ITS APPOINTED AGENT OF ANY ALTERATION IN THE PLANS.
 3. CALL FOR FINAL INSPECTION AND REQUEST CERTIFICATE OF COMPLIANCE BEFORE ISSUANCE OF C. O.

APPLICANT'S SIGNATURE  DATE 12/8/99

COMMISSION AGENT Thomas E. Jandora DATE 12/9/99 CERTIFICATE OF COMPLIANCE  DATE 7/17/01

THIS SIGNED PERMIT AUTHORIZES THE APPLICANT TO PROCEED TO THE BUILDING DEPARTMENT FOR ANY REQUIRED PERMITS

CONTACT THE ZONING OFFICER (848-8549) AT LEAST 24 HOURS BEFORE CONSTRUCTION BEGINS TO ALLOW ZONING OFFICER TO INSPECT LOCATION.

Exhibit B

Property Card

The Assessor's office is responsible for the maintenance of records on the ownership of properties. Assessments are computed at 70% of the estimated market value of real property at the time of the last revaluation which was 2016.



Information on the Property Records for the Municipality of Montville was last updated on 3/17/2021.

Parcel Information

Location:	557 ROUTE 82	Property Use:	Residential	Primary Use:	Residential
Unique ID:	B0269700	Map Block Lot:	058/015/000	Acres:	11.22
490 Acres:	0.00	Zone:	R120	Volume / Page:	0429/0737
Developers Map / Lot:		Census:	695202		

Value Information

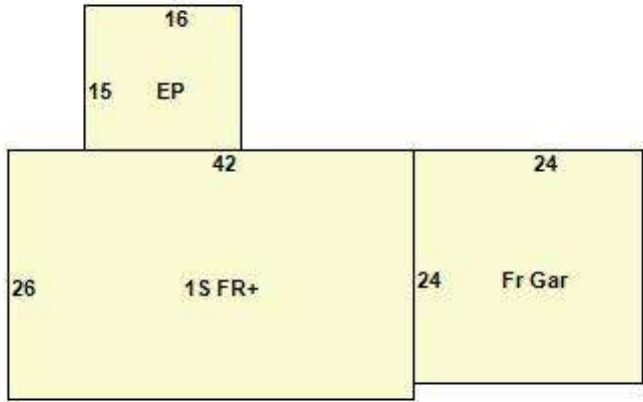
	Appraised Value	Assessed Value
Land	197,680	138,370
Buildings	147,894	103,530
Detached Outbuildings	676,910	473,840
Total	1,022,484	715,740

Owner's Information

Owner's Data

BESADE CAROLYN J L/U & BESADE THOMAS E &
 EDWARD J & JOHN R & BRIAN H
 557 ROUTE 82
 OAKDALE, CT 06370

Building 1



Building Use:	Single Family	Style:	Ranch	Living Area:	1,092
Stories:	1.00	Construction:	Wood Frame	Year Built:	1979
Total Rooms:	5	Bedrooms:	3	Full Baths:	2

Half Baths:	0	Fireplaces:	1	Heating:	Hot Water
Fuel:	Oil	Cooling Percent:	0	Basement Area:	1,092
Basement Finished Area:	0	Basement Garages:	0	Roof Material:	Asphalt
Siding:	Vinyl Siding	Units:			

Special Features

Attached Components

Type:	Year Built:	Area:
Frame Garage	1979	576
Enclosed Porch	1979	240

Detached Outbuildings

Type:	Year Built:	Length:	Width:	Area:
6 Ft Top Rail Fence	0000	288.00	0.00	288
Cell Shed	0000	120.00	0.00	120
Cell Shed	0000	160.00	0.00	160
Cell Tower	0000	4.00	0.00	4

Owner History - Sales

Owner Name	Volume	Page	Sale Date	Deed Type	Valid Sale	Sale Price
BESADE CAROLYN J L/U & BESADE THOMAS E &	0429	0737	02/04/2004	Warranty Deed	No	\$0
BESADE CAROLYN J L/U ET AL	0404	0638	05/29/2003	Warranty Deed	No	\$0

Owner Name	Volume	Page	Sale Date	Deed Type	Valid Sale	Sale Price
BESADE CAROLYN J	0170	0742	07/24/1986		No	\$0
BESADE THOMAS H EST & CAROLYN J	0163	0325	02/01/1985		No	\$0
BESADE THOMAS H & CAROLYN J	0138	1104	05/01/1979		No	\$0
COHEN RUBIN & GILBERT J MILONE	0119	0244	05/01/1973		No	\$0

Building Permits

Permit Number	Permit Type	Date Opened	Date Closed	Permit Status	Reason
B2020-0158	Commercial New	05/11/2020		Needs Visit	UPGRADE ANTENAS
B2018-0553	Commercial New	12/31/2018		Closed	SPRINT TO REPLACE SIX ANTENNAS & ADD NINE REMOTE RADIO HEADS
B2017-0002	Commercial New	01/03/2017		Closed	REPLACE ANTENNA PANELS & REMOTE RADIO HEADS TO EXISTING TOWER
E2013-0128	Electrical	06/14/2013		Closed	LTE EQUIPMENT
B2009-0044	Commercial New	02/25/2009		Closed	REPLACEMENT OF ANTENNAS
B2006-0398	Residential Addition	08/10/2006		Closed	CO ISSUED-ADDITION 14' X 16'
E2006-0169	Electrical	08/10/2006		Closed	ELECTRICAL FOR ADDITION 14' X 16'
E2003-0052	Electrical	03/19/2003		Closed	ELECTRIC SERVICE & WIRING FOR AT & T EQUIPMENT

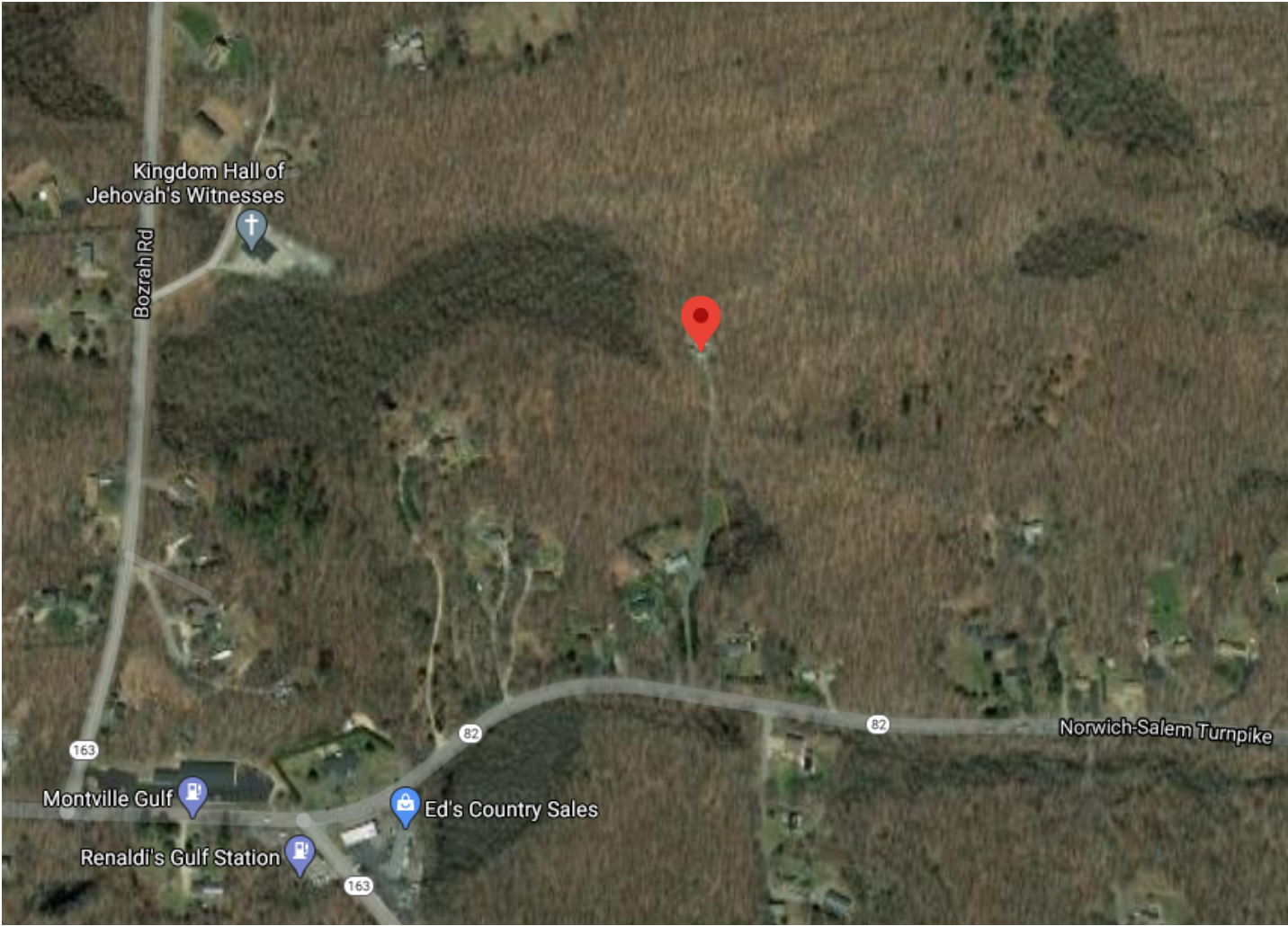


Exhibit C

Construction Drawings



VERIZON SITE NUMBER: 674974
VERIZON SITE NAME: MONTVILLE NW CT
SITE TYPE: MONOPOLE
TOWER HEIGHT: 180'-0"

BUSINESS UNIT #: 876371
SITE ADDRESS: 557 ROUTE 82
MONTVILLE, CT 06370
COUNTY: NEW LONDON
JURISDICTION: MOUNTVILLE

VERIZON 16272207



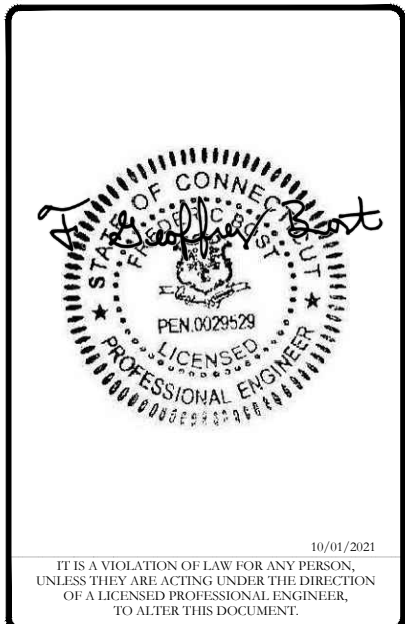
VERIZON SITE NUMBER:
674974

BU #: 876371
WALDEN / CAROLYN
BEDADE

557 ROUTE 82
MONTVILLE, CT 06370
EXISTING 180'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/01/2021	CP	CONSTRUCTION	DG



SHEET NUMBER: T-1
REVISION: 0

SITE INFORMATION

CROWN CASTLE USA INC. WALDEN / CAROLYN BEDADE
SITE NAME:
SITE ADDRESS: 557 ROUTE 82
MONTVILLE, CT 06370
COUNTY: NEW LONDON
MAP/PARCEL #: 86-058/015-000
AREA OF CONSTRUCTION: EXISTING
LATITUDE: 41° 30' 20.2608" N
LONGITUDE: 72° 11' 50.9892" W
LAT/LONG TYPE: NAD83
GROUND ELEVATION: 485'
CURRENT ZONING: R120
JURISDICTION: MOUNTVILLE
OCCUPANCY CLASSIFICATION: U
TYPE OF CONSTRUCTION: IIB
A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER: BESADE CAROLYN
557 ROUTE 82
OAKDALE, CT 06370
TOWER OWNER: CROWN CASTLE
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
CARRIER/APPLICANT: VERIZON WIRELESS
20 ALEXANDER DRIVE, 2ND FLOOR
WALLINGFORD, CT 06492
ELECTRIC PROVIDER: NORTHEAST UTILITIES
800-662-7764
TELCO PROVIDER: LIGHTOWER
888-583-4237

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1	SITE PLAN
C-2	TOWER ELEVATION & ANTENNA PLANS
C-3	EQUIPMENT SCHEDULES
C-4	EQUIPMENT DETAILS
C-5	EQUIPMENT DETAILS
C-6	PLUMBING DIAGRAM
G-1	GROUNDING DETAILS
G-2	GROUNDING DETAILS

ALL DRAWINGS CONTAINED HEREIN ARE FORMATTED FOR 11X17. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

APPROVALS

SIGNATURE	DATE
_____	_____
_____	_____
_____	_____
_____	_____

CONTRACTOR PMI REQUIREMENTS

PMI ACCESSED AT <https://pmi.vxwvsmart.com>
SMART TOOL VENDOR
PROJECT NUMBER 16272207
VzW LOCATION CODE (PSLC) 468903

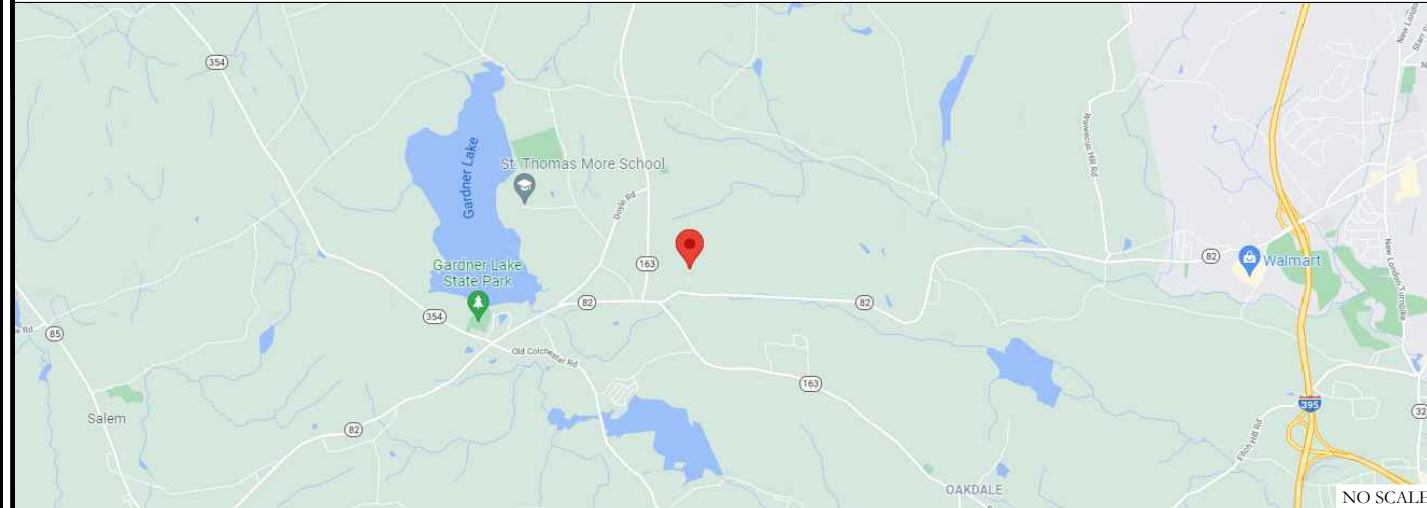
*** PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT

MOUNT MODIFICATION REQUIRED Y

VzW APPROVED SMART KIT VENDORS

REFER TO MOUNT MODIFICATION DRAWINGS PAGE FOR VzW SMART KIT APPROVED VENDORS

LOCATION MAP



DRIVING DIRECTIONS FROM VERIZON LOCAL OFFICE (20 ALEXANDER DRIVE, WALLINGFORD, CT 06492): HEAD SOUTH TOWARD ALEXANDER DR, SLIGHT RIGHT TOWARD ALEXANDER DR, TURN RIGHT TOWARD ALEXANDER DR, TURN RIGHT ONTO ALEXANDER DR, TURN RIGHT ONTO BARNES INDUSTRIAL PARK RD, TURN RIGHT ONTO CT-68 E, CONTINUE STRAIGHT TO STAY ON CT-68 E, SHARP LEFT TO MERGE ONTO I-91 N TOWARD HARTFORD, TAKE THE EXIT ONTO CT-3 N TOWARD GLASTONBURY, TAKE THE EXIT ONTO CT-2 E TOWARD NORWICH, USE THE RIGHT LANE TO KEEP RIGHT AT THE FORK, CONTINUE ON CT-11 S AND FOLLOW SIGNS FOR NEW LONDON, TAKE EXIT 6 FOR LAKE HAYWARD RD TOWARD CT-85/CT-354, TURN LEFT ONTO LAKE HAYWARD RD, TURN RIGHT ONTO CT-354 E, TURN LEFT ONTO CT-82 E, TURN LEFT ONTO ACCESS ROAD, ARRIVE AT 557 ROUTE 82

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: TOWER ENGINEERING PROFESSIONALS
DATED: 9/3/2021
MOUNT ANALYSIS: MASER CONSULTING
DATED: 8/20/2021
RFDS REVISION: 0
DATED: 07/30/2021
ORDER ID: 585191
REVISION: 0

PROJECT DESCRIPTION

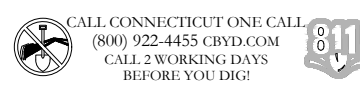
THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

- TOWER SCOPE OF WORK:**
- REMOVE (9) ANTENNAS
 - REMOVE (6) RRHS
 - INSTALL (9) ANTENNAS
 - INSTALL (6) RRHS
 - INSTALL (3) SIDE BY SIDE MOUNTS
 - INSTALL MOUNT MODIFICATIONS PER MOUNT MODIFICATION DRAWINGS BY MASER CONSULTING CONNECTICUT DATED AUGUST 20, 2021

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

PROJECT TEAM

A&E FIRM: CROWN CASTLE USA INC.
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
CROWN.AE.APPROVAL@CROWNCastle.COM
CROWN CASTLE USA INC. DISTRICT CONTACTS:
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430
WILLIAM GATES - PROJECT MANAGER
WILLIAMGATES@CROWNCastle.COM
VERIZON CONTACT: ANDREW LEONE
ALEONE@STRUCTURECONSULTING.NET



CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

- 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.
- "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. 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.
- PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
- ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND 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).
- ALL SITE WORK TO COMPLY WITH QAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE," CED-STD-10294 "STANDARD FOR INSTALLATION OF MOUNTS AND APPURTENANCES," AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS." IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
- ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS. LATEST APPROVED REVISION.
- CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
- THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GREENFIELD GROUNDING NOTES:

- 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.
- THE CONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- 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.
- 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.
- 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.
- 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.
- 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.
- ALL EXTERIOR GROUND CONDUCTORS BETWEEN EQUIPMENT/GROUND BARS AND THE GROUND RING SHALL BE #2 SOLID TINNED COPPER UNLESS OTHERWISE INDICATED.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- USE OF 90° BENDS IN THE PROTECTION GROUNDING CONDUCTORS SHALL BE AVOIDED WHEN 45° BENDS CAN BE ADEQUATELY SUPPORTED.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- ALL GROUND CONNECTIONS ABOVE GRADE (INTERIOR AND EXTERIOR) SHALL BE FORMED USING HIGH PRESS CRIMPS.
- COMPRESSION GROUND CONNECTIONS MAY BE REPLACED BY EXOTHERMIC WELD CONNECTIONS.
- ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO THE BRIDGE AND THE TOWER GROUND BAR.
- APPROVED ANTIOXIDANT COATINGS (i.e. CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ALL EXTERIOR GROUND CONNECTIONS SHALL BE COATED WITH A CORROSION RESISTANT MATERIAL.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- BOND ALL METALLIC OBJECTS WITHIN 6 ft. OF MAIN GROUND RING WITH (1) #2 BARE SOLID TINNED COPPER GROUND CONDUCTOR.
- 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.
- 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).
- 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).

GENERAL NOTES:

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

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATION FOR CAST-IN-PLACE CONCRETE.
- UNLESS NOTED OTHERWISE, SOIL BEARING PRESSURE USED FOR DESIGN OF SLABS AND FOUNDATIONS IS ASSUMED TO BE 1000 psf.
- 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.
- 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.
- ALL STEEL REINFORCING SHALL CONFORM TO ASTM A615. ALL WELDED WIRE FABRIC (WFF) 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
- 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"
- A TOOLED EDGE OR A 3/4" CHAMFER SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.

ELECTRICAL INSTALLATION NOTES:

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
- CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED AND TRIP HAZARDS ARE ELIMINATED.
- WIRING, RACEWAY AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC.
- ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY THE NEC.
4.1. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO REQUIREMENT OF THE NATIONAL ELECTRICAL CODE.
4.2. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
- 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.
- 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).
- PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS.
- ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES.
- ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE THW, THW, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
- SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE COPPER CONDUCTOR (#6 OR LARGER) WITH TYPE THW, THW, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING IN FLEXIBLE CORD SHALL BE MULTI-CONDUCTOR, TYPE SOOW CORD (#14 OR LARGER) UNLESS OTHERWISE SPECIFIED.
- POWER AND CONTROL WIRING FOR USE IN CABLE TRAY SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#14 OR LARGER), WITH TYPE THW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED.
- 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).
- RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEC AND NEC.
- ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR EXPOSED INDOOR LOCATIONS.
- ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE GRADE PVC CONDUIT.
- LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET NEWER FITTINGS NOT ACCEPTABLE.
- CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEC AND THE NEC.
- WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREFOLD SPECMATE WIREWAY).
- SLOTTED WIRING CADD SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL).
- 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.
- 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.
- 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.
- 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.
- 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.
- 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.
- INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "VERIZON".
- 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
120/208V, 3Ø	GROUND	GREEN
	A PHASE	BLACK
	B PHASE	RED
277/480V, 3Ø	C PHASE	BLUE
	NEUTRAL	WHITE
	GROUND	GREEN
DC VOLTAGE	A PHASE	BROWN
	B PHASE	ORANGE OR PURPLE
	C PHASE	YELLOW
	NEUTRAL	GREY
	GROUND	GREEN
	POS (+)	RED**
	NEG (-)	BLACK**

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

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
- RETS 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

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



180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921



1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430



3227 WELLINGTON COURT
RALEIGH, NC 27615

VERIZON SITE NUMBER:
674974


BU #: 876371
**WALDEN / CAROLYN
BEDADE**

557 ROUTE 82
MONTVILLE, CT 06370

EXISTING 180'-0" MONOPOLE

ISSUED FOR:

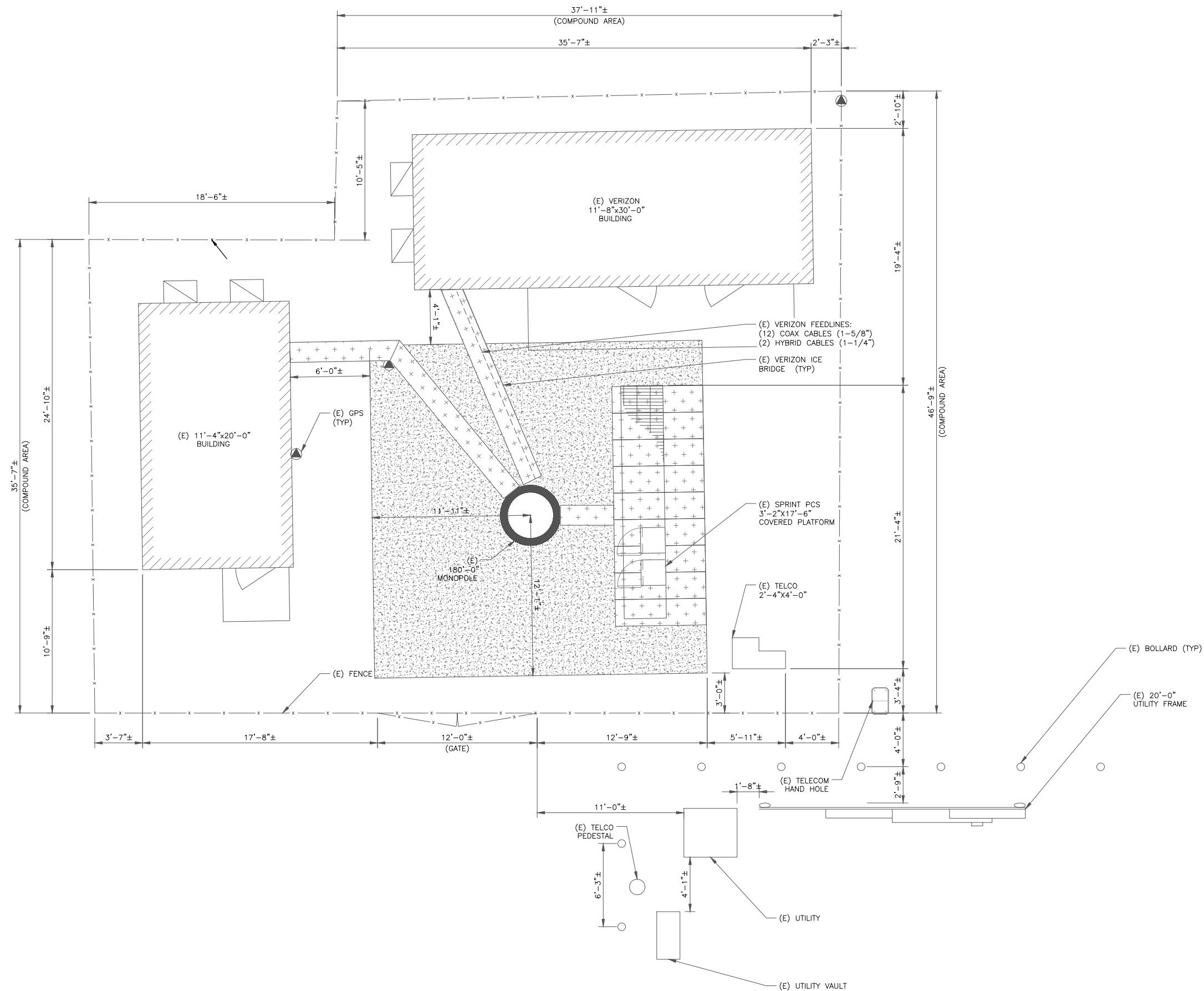
REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/01/2021	CP	CONSTRUCTION	DG



10/01/2021

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SHEET NUMBER: **T-2** REVISION: **0**



1 SITE PLAN
SCALE: 1/4"=1'-0" (FULL SIZE)
1/8"=1'-0" (11x17)



verizon
180 WASHINGTON VALLEY ROAD
BEDMINSTER, NJ 07921

CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
MAHWAH, NJ 07430

ETS
ENGINEERED TOWER SOLUTIONS, PLLC
3227 WELLINGTON COURT
RALEIGH, NC 27615

VERIZON SITE NUMBER:
674974

BU #: 876371
WALDEN / CAROLYN BEDADE

557 ROUTE 82
MONTVILLE, CT 06370

EXISTING 180'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
A	10/01/2021	CP	CONSTRUCTION	DG

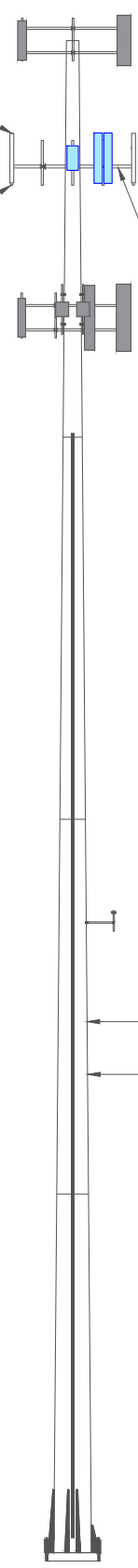


10/01/2021
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SHEET NUMBER: **C-1** REVISION: **0**

- NEW VERIZON EQUIPMENT
- (6) COMMSCOPE - NHH-65B-R2B ANTENNAS
 - (3) SAMSUNG - MT6407-77A ANTENNAS
 - (3) SAMSUNG - RF4439d-25A RRUs
 - (3) SAMSUNG - RF4440d-13A RRUs
 - (3) COMMSCOPE - BSAMNT-SBS-1-2

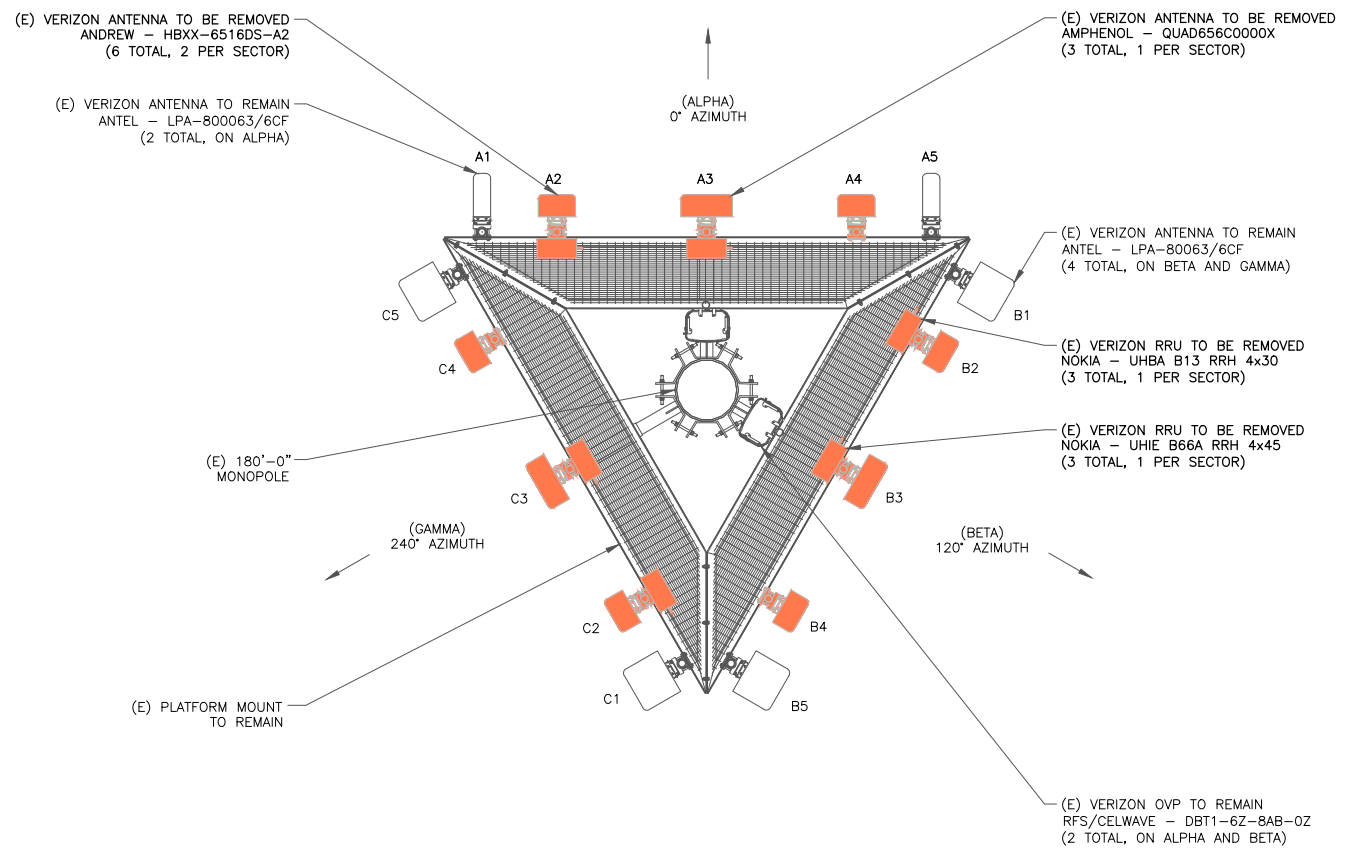
- (E) VERIZON EQUIPMENT TO REMAIN
- (4) ANTEL - LPA-80063/6CF ANTENNAS
 - (2) ANTEL - LPA-80080/6CF ANTENNAS
 - (2) RAYCAP - RFS/CELWAVE/DB-T1-6Z-8AB-0Z OVPs



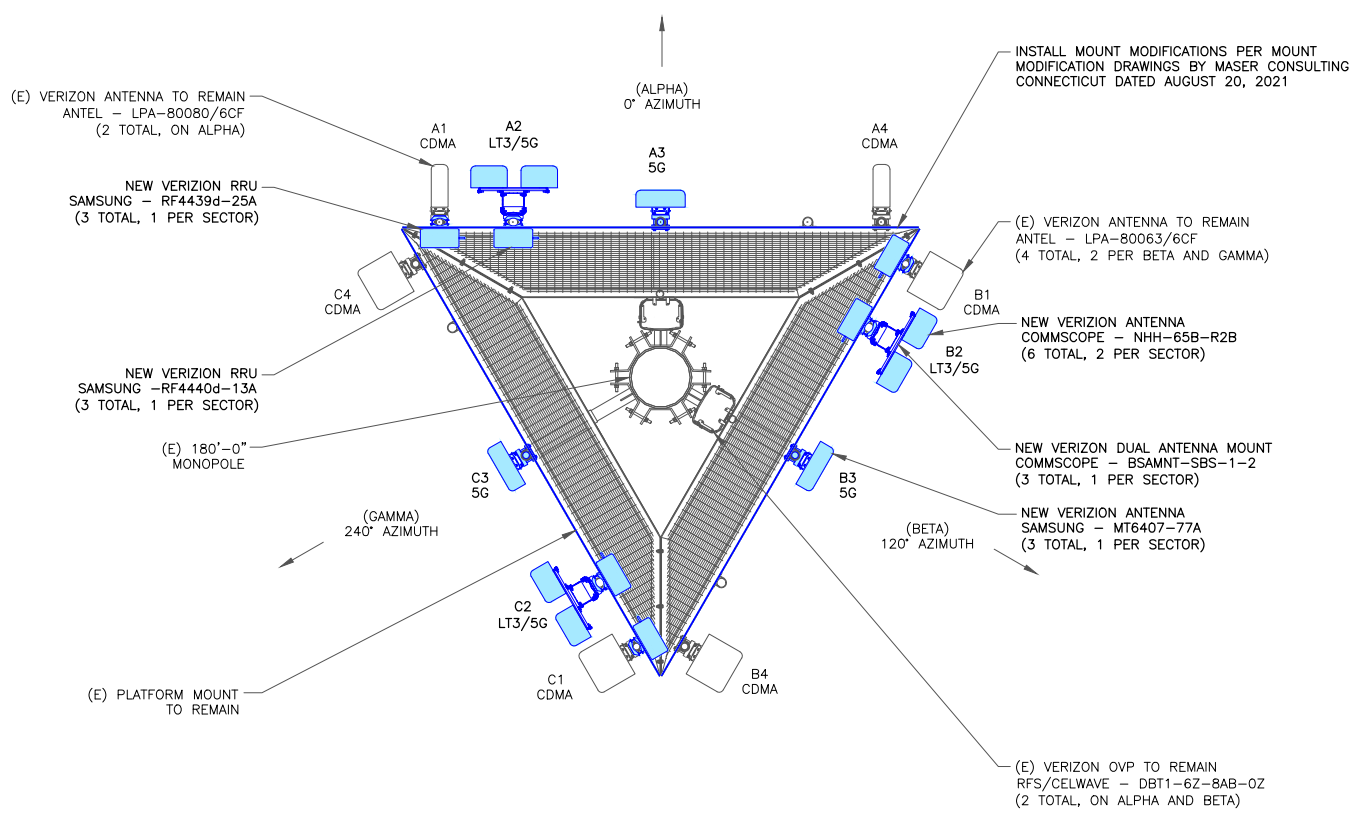
INSTALL MOUNT MODIFICATIONS PER MOUNT MODIFICATION DRAWINGS BY MASER CONSULTING CONNECTICUT DATED AUGUST 20, 2021

VERIZON EQUIPMENT
ANTENNA CL: 167'
MOUNT CL: 166'

1 TOWER ELEVATION
SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN
SCALE: NOT TO SCALE



3 NEW ANTENNA PLAN
SCALE: NOT TO SCALE

verizon
180 WASHINGTON VALLEY ROAD
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CROWN CASTLE
1200 MACARTHUR BLVD, SUITE 200
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ETS
ENGINEERED TOWER SOLUTIONS, PLLC
3227 WELLINGTON COURT
RALEIGH, NC 27615

VERIZON SITE NUMBER:
674974

BU #: 876371
WALDEN / CAROLYN BEDADE

557 ROUTE 82
MONTVILLE, CT 06370

EXISTING 180'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
A	10/01/2021	CP	CONSTRUCTION	DG

10/01/2021

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VERIZON SITE NUMBER:
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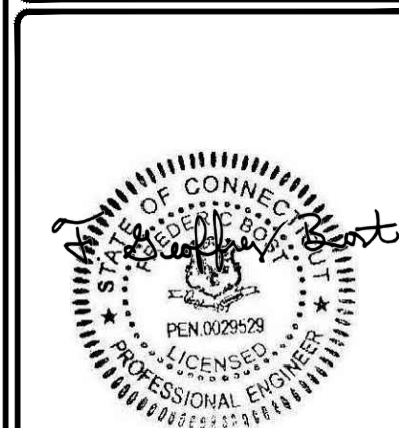
BU #: **876371**
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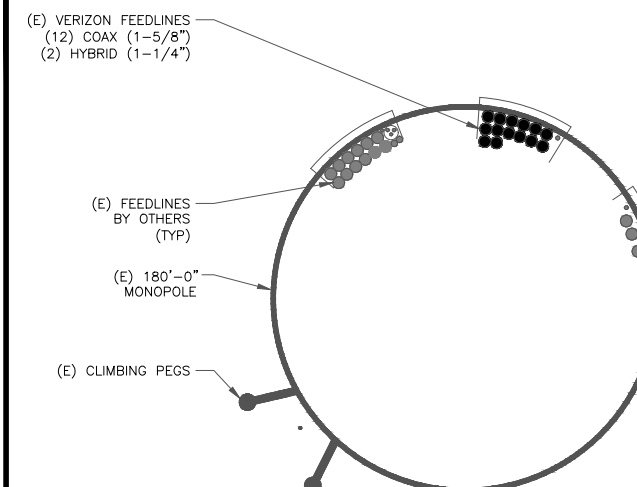
ANTENNA/RRH SCHEDULE

SECTOR	STATUS	ANTENNA MANUFACTURER	ANTENNA MODEL	ANTENNA CENTERLINE	AZIMUTH	MECHANICAL DOWNTILTS	ELECTRICAL DOWNTILTS	TOWER EQUIPMENT MANUFACTURER	TOWER EQUIPMENT QTY/MODEL
A1	EXISTING	ANTEL	LPA-80080/6CF	167'	0°	0°	0°	SAMSUNG	(3) RF4439d-25A
A2	NEW	COMMSCOPE	NHH-65B-R2B	167'	0°	0°	2°	SAMSUNG	(3) RF4440d-13A
		COMMSCOPE	NHH-65B-R2B						
A3	NEW	SAMSUNG	MT6407-77A	167'	0°	0°	6°	RFS/CELWAVE	DBT1-6Z-8AB-0Z
A4	EXISTING	ANTEL	LPA-80080/6CF	167'	0°	0°	0°	-	-
B1	EXISTING	ANTEL	LPA-80063/6CF	167'	120°	0°	0°	SAMSUNG	(3) RF4439d-25A
B2	NEW	COMMSCOPE	NHH-65B-R2B	167'	120°	0°	2°	SAMSUNG	(3) RF4440d-13A
		COMMSCOPE	NHH-65B-R2B						
B3	NEW	SAMSUNG	MT6407-77A	167'	120°	0°	6°	RFS/CELWAVE	DBT1-6Z-8AB-0Z
B4	EXISTING	ANTEL	LPA-80063/6CF	167'	120°	0°	0°	-	-
C1	EXISTING	ANTEL	LPA-80063/6CF	167'	240°	0°	0°	SAMSUNG	(3) RF4439d-25A
C2	NEW	COMMSCOPE	NHH-65B-R2B	167'	240°	0°	2°	SAMSUNG	(3) RF4440d-13A
		COMMSCOPE	NHH-65B-R2B						
C3	NEW	SAMSUNG	MT6407-77A	167'	240°	0°	6°	-	-
C4	EXISTING	ANTEL	LPA-80063/6CF	167'	240°	0°	0°	-	-

1 VERIZON TOWER EQUIPMENT SCHEDULE
 SCALE: NOT TO SCALE

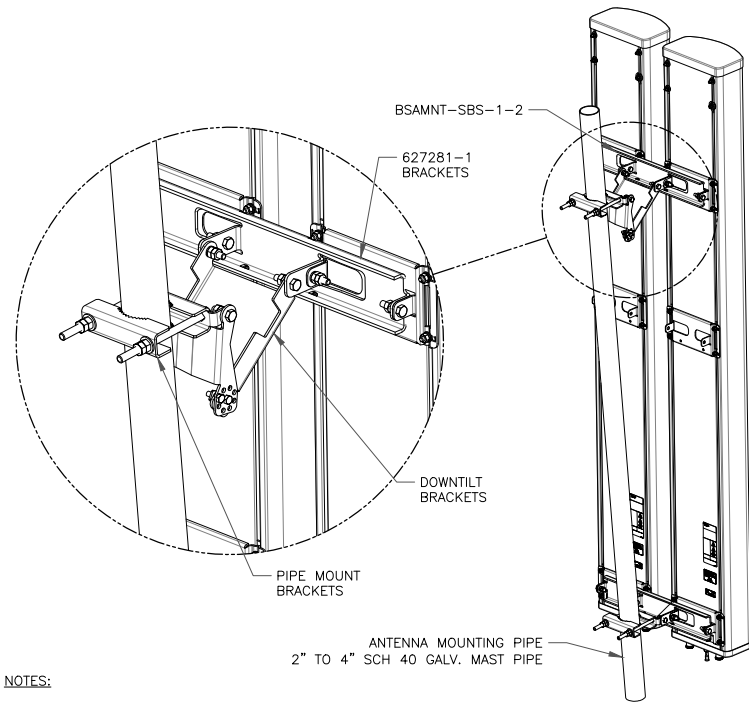
CABLE SCHEDULE

STATUS	CABLE TYPE	SIZE	LENGTH	QTY
EXISTING	COAX	1-5/8"	219'-0"±	12
EXISTING	HYBRID	1-1/4"	219'-0"±	2
TOTAL CABLE QTY:				14



2 BASE LEVEL DETAIL
 SCALE: NOT TO SCALE



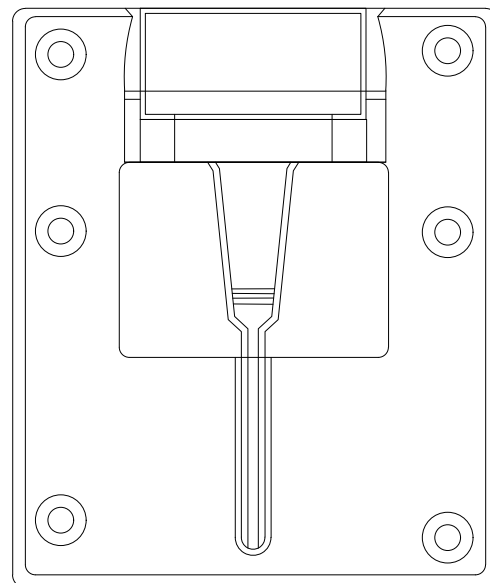


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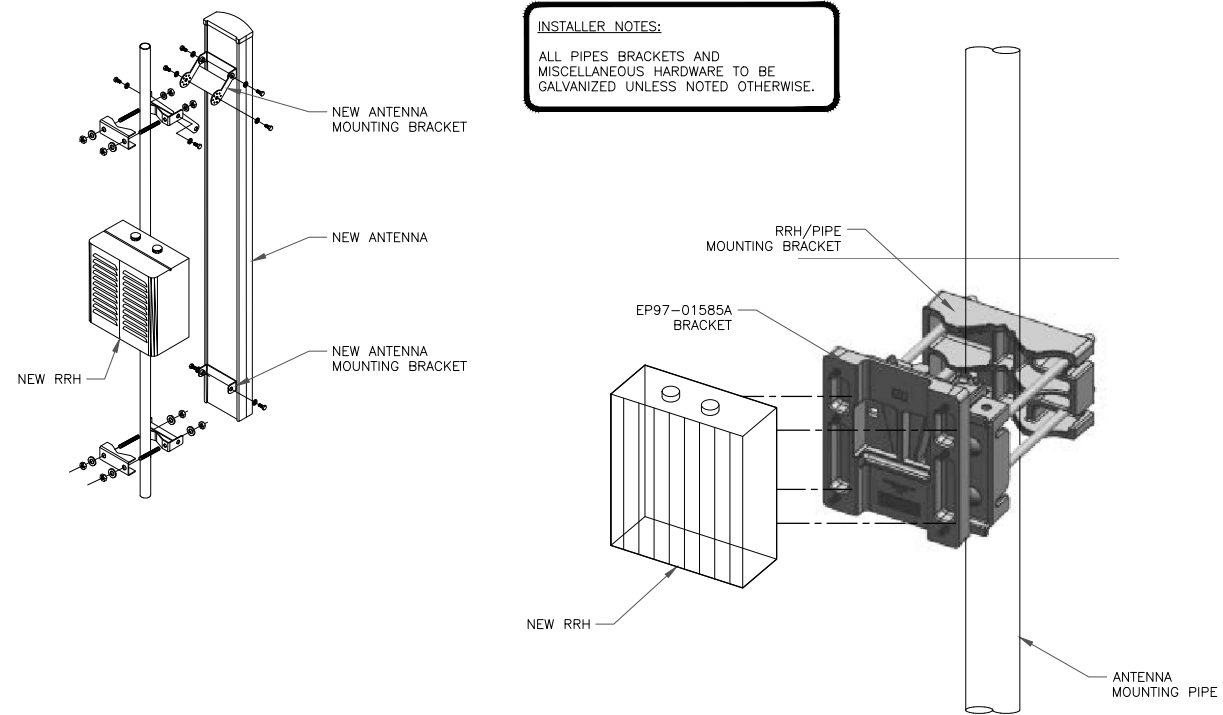
- BSAMNT-SBS-1-2 KIT CONTAINS (2) 627281 MOUNTING BRACKETS.
- TORQUE THE M10 BOLT ASSEMBLY TO 37 N.m. PER MANUFACTURE'S RECOMMENDATIONS.

1 COMMSCOPE - BSAMNT-SBS-1-2
SCALE: NOT TO SCALE

2 NOT USED
SCALE: NOT TO SCALE



3 SAMSUNG - XXXX BRACKET MOUNTING DETAIL
SCALE: NOT TO SCALE



INSTALLER NOTES:
ALL PIPES BRACKETS AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.

4 ANTENNA & RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

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RALEIGH, NC 27615

VERIZON SITE NUMBER:
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BU #: **876371**
WALDEN / CAROLYN BEDADE

557 ROUTE 82
MONTVILLE, CT 06370

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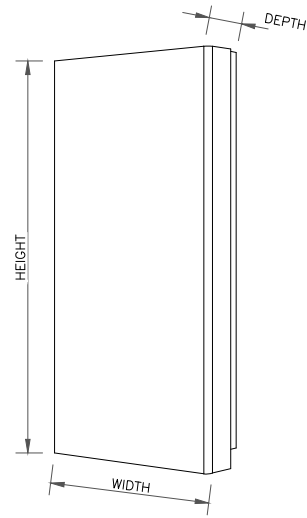
Professional Engineer Seal: STATE OF CONNECTICUT, PEN. 0029529, LICENSED PROFESSIONAL ENGINEER

10/01/2021

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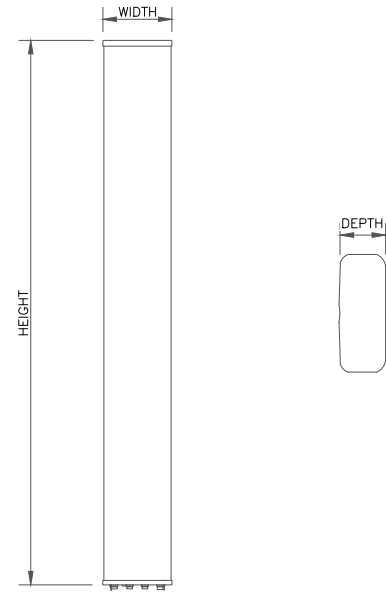
SHEET NUMBER: **C-4** REVISION: **0**

HEIGHT	WIDTH	DEPTH	WEIGHT
35.06"	16.06"	5.51"	81.57 LBS



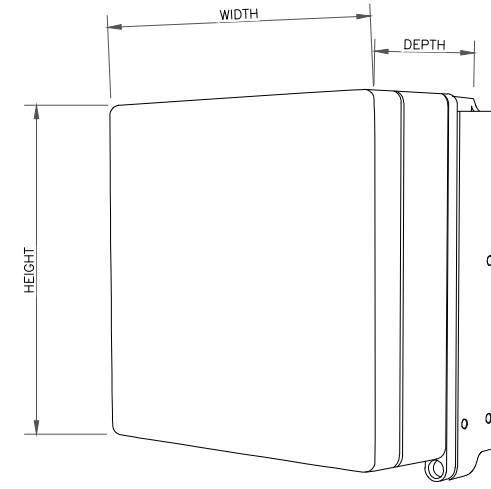
1 SAMSUNG - MT6407-77A
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
96.00"	11.90"	7.10"	51.60 LBS



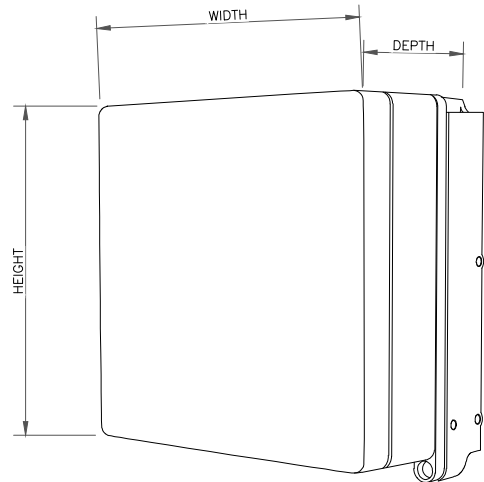
2 COMMSCOPE - NHH-65B-R2B
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
14.96"	14.96"	10.04"	74.70 LBS



3 SAMSUNG - RF4439d-25A
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
14.96"	14.96"	9.06"	72.50 LBS



4 SAMSUNG - RF4440d-13A
SCALE: NOT TO SCALE

5 NOT USED
SCALE: NOT TO SCALE

6 NOT USED
SCALE: NOT TO SCALE

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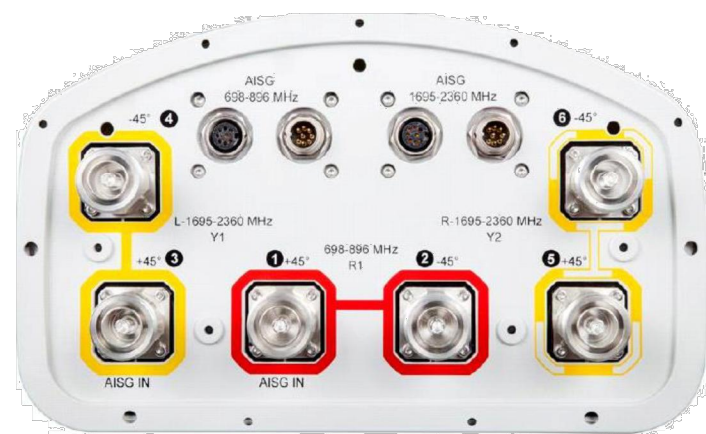
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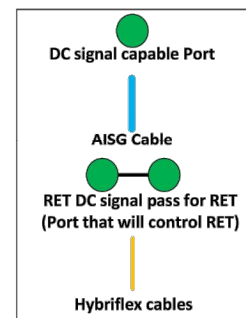
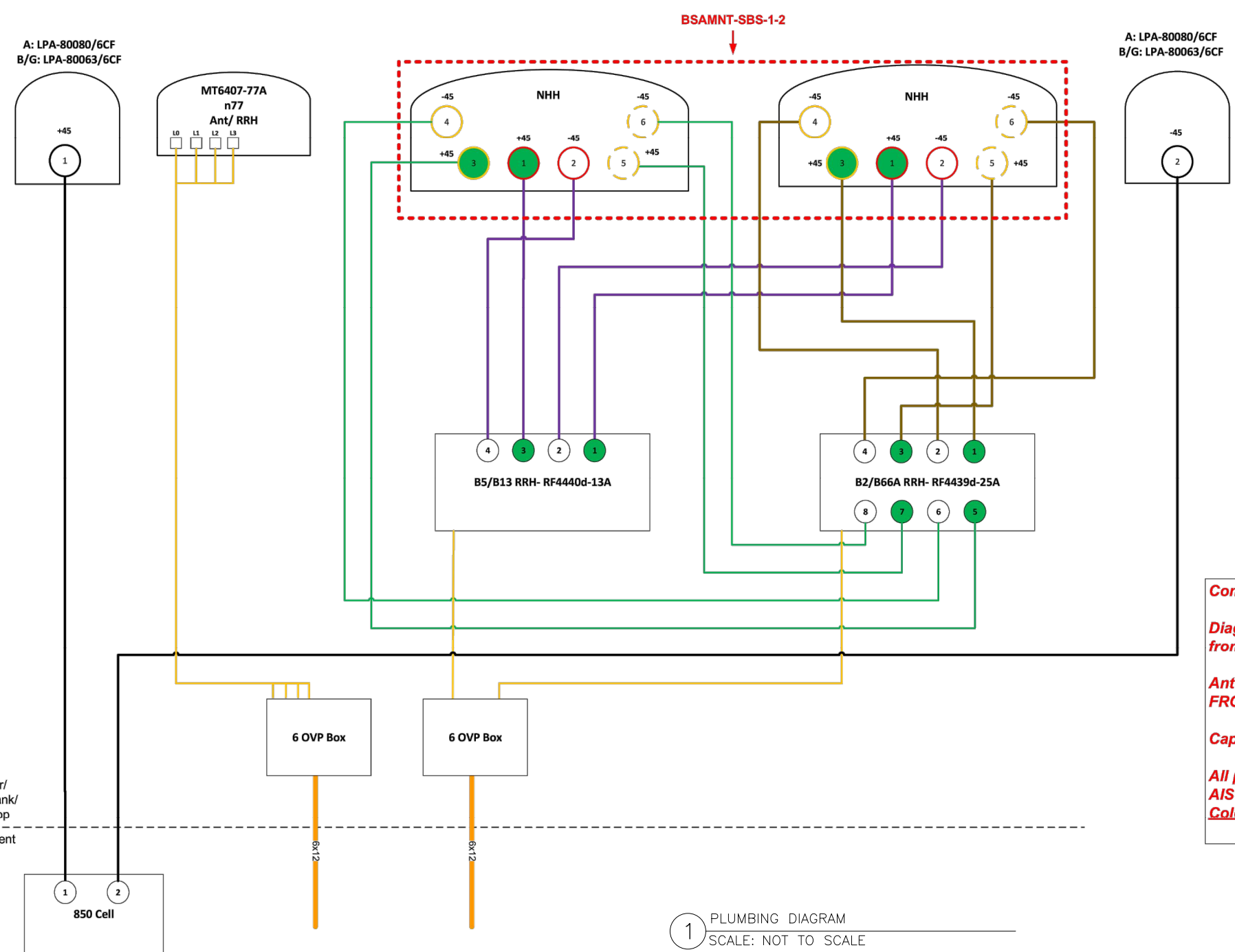
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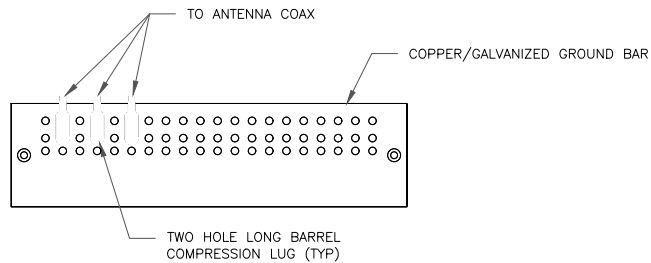


- Port 1 & 2 are for low band (698-896 MHz).
 - Port 3,4,5, & 6 are for high band (1695-2360 MHz).
 - Smart Bias Tee (SBT) is through port 1 & 3 for low band and port 1 for high band.
 - AISG cable is only needed when drawn in the diagrams below, if it is not drawn then SBT is enough to control all RET motors.
 - Not all SBT ports are needed to control RET, only green port connection to green port will control RET.
-



Comments:
 Diagram shows antenna port configuration as viewed from below antennas.
 Antenna positions are indicated as viewed from IN FRONT of antennas.
 Cap and weatherproof unused antenna ports.
 All plumbing diagram colors are irrelevant except for AISG & Hybriflex cable. (For the coax colors follow Coax Colors guide above)

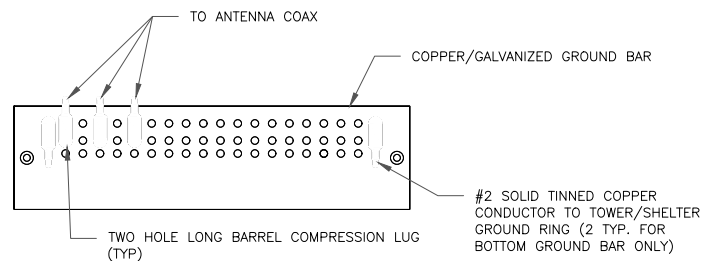
1 PLUMBING DIAGRAM
 SCALE: NOT TO SCALE



NOTES:

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

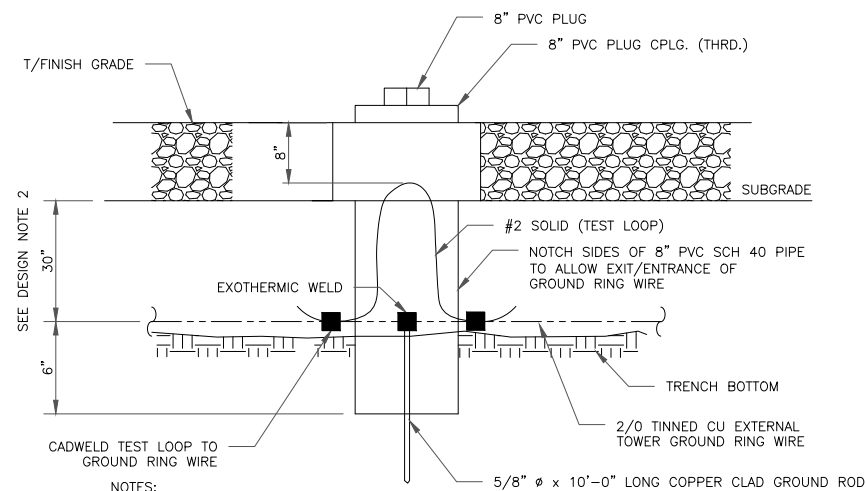
1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

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

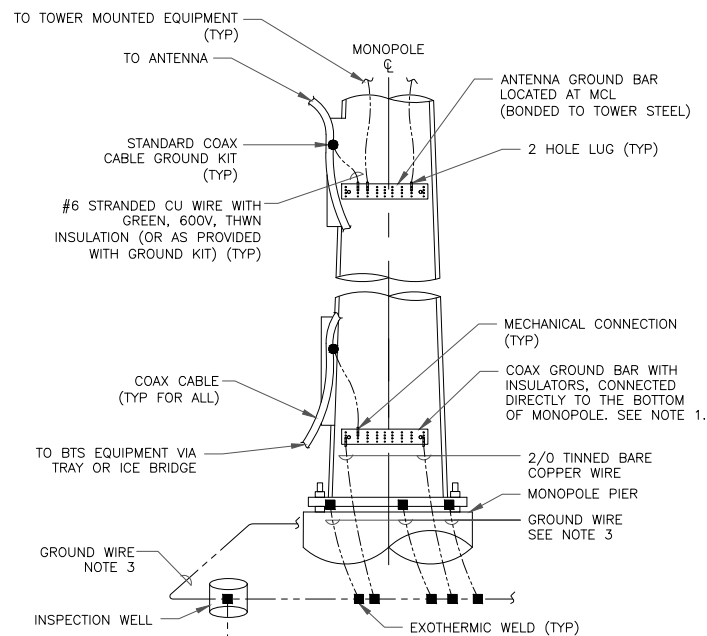
2 TOWER/SHELTER GROUND BAR DETAIL
SCALE: NOT TO SCALE



NOTES:

- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
- GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

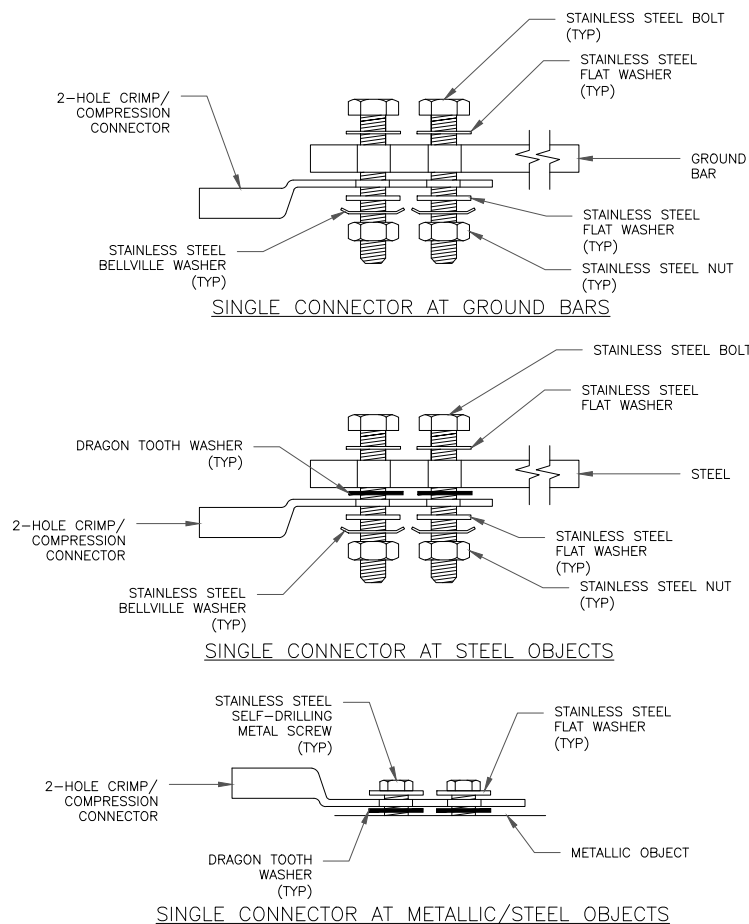
3 INSPECTION WELL DETAIL
SCALE: NOT TO SCALE



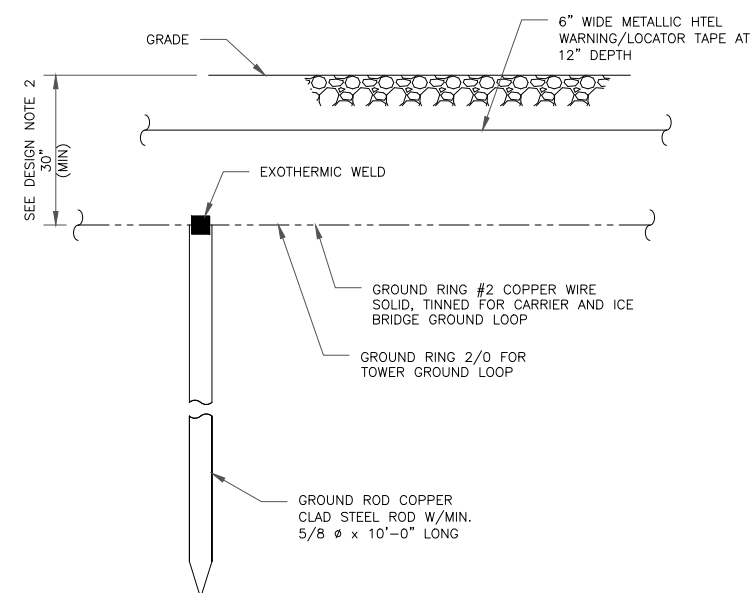
NOTES:

- NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET ON THE TOWER SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
- ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE USA INC. TOWERS. ALL MECHANICAL CONNECTIONS SHALL BE TREATED WITH AN ANTI-OXIDANT COATING.
- ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF THE RECOGNIZED EDITION OF ANSI/TIA 222 AND NFPA 780.

4 TYPICAL ANTENNA CABLE GROUNDING
SCALE: NOT TO SCALE



5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

- GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE VERTICAL
- GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

6 GROUND ROD DETAIL
SCALE: NOT TO SCALE

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BU #: 876371
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EXISTING 180'-0" MONOPOLE

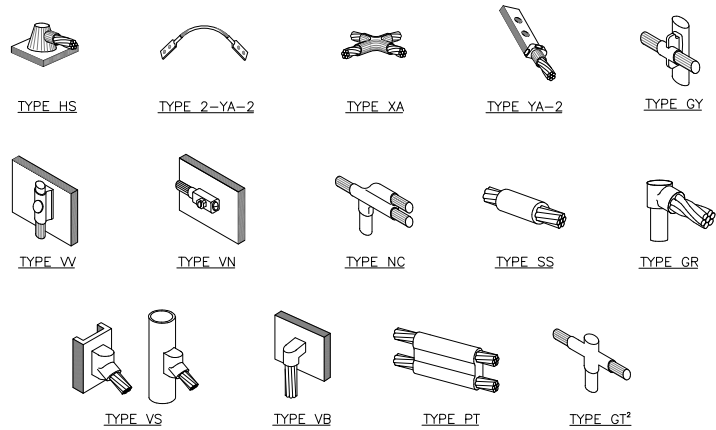
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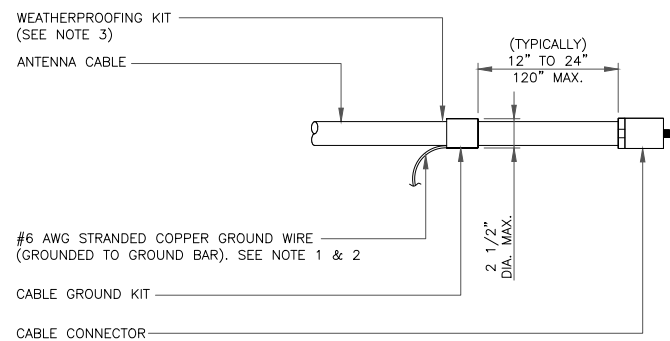
SHEET NUMBER: **G-1** REVISION: **0**



NOTE:

1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC MOLDS TO BE USED FOR THIS PROJECT.
2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

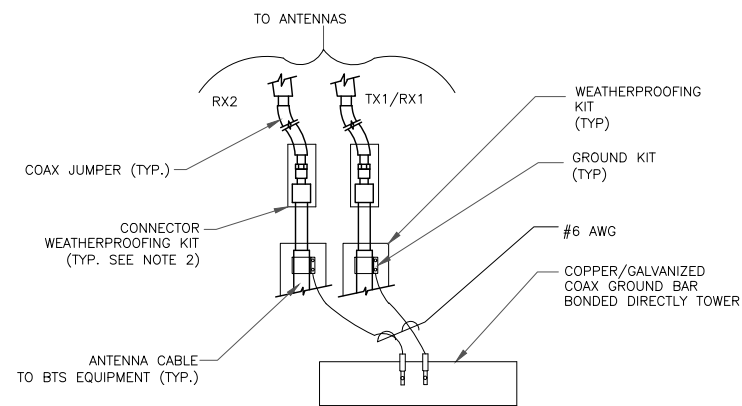
1 CADWELD GROUNDING CONNECTIONS
SCALE: NOT TO SCALE



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.

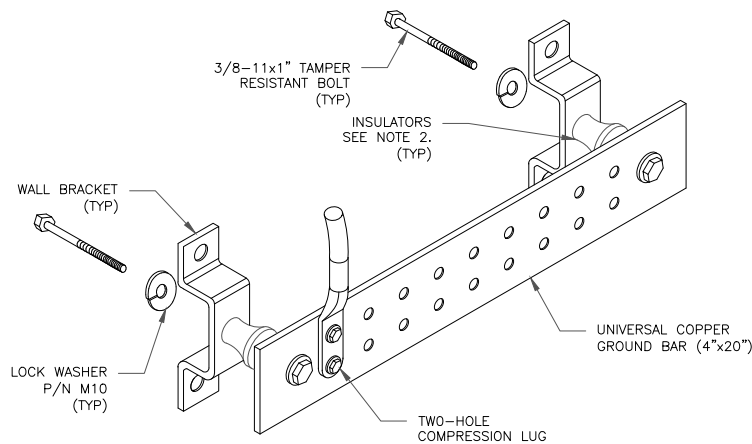
3 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



NOTES:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

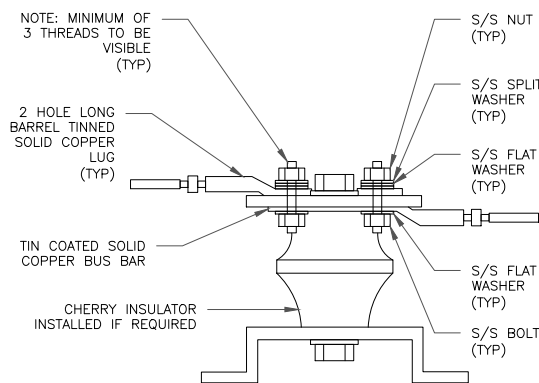
4 GROUND CABLE CONNECTION
SCALE: NOT TO SCALE



NOTES:

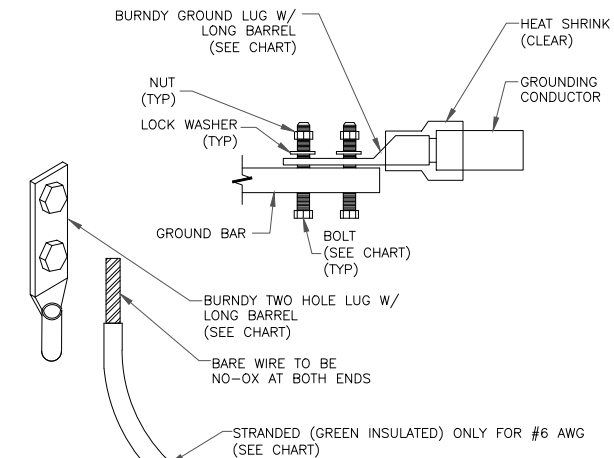
1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY GAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION. CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
2. OMIT INSULATOR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

6 GROUND BAR DETAIL
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE

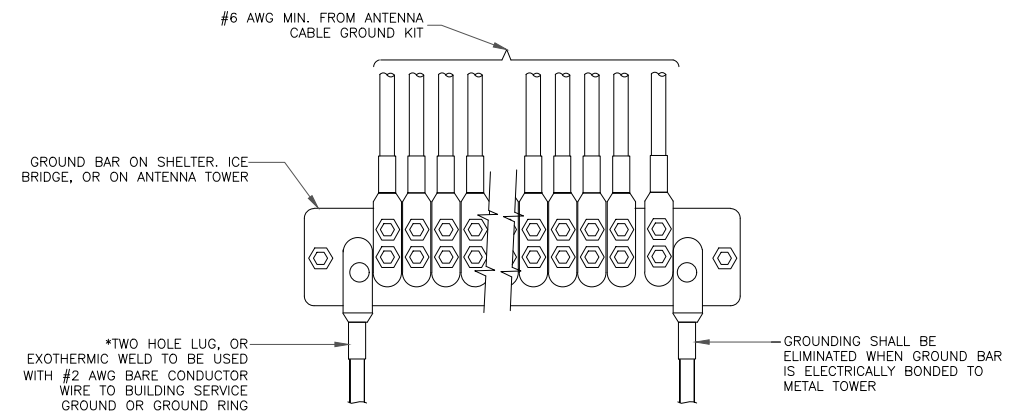
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



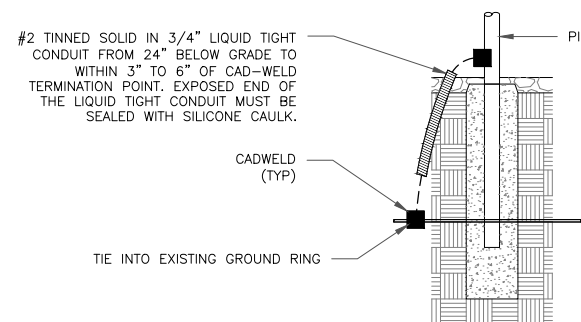
NOTES:

1. 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.

2 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



5 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL
SCALE: NOT TO SCALE

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VERIZON SITE NUMBER:
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WALDEN / CAROLYN BEDADE

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MONTVILLE, CT 06370

EXISTING 180'-0" MONOPOLE

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SHEET NUMBER: **G-2** REVISION: **0**

Exhibit D

Structural Analysis Report

Date: **September 3, 2021**



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

Subject: Structural Analysis Report

Carrier Designation: **Verizon Wireless Co-Locate**
Site Number: 468903
Site Name: MONTVILLE NW CT

Crown Castle Designation: **BU Number:** 876371
Site Name: WALDEN / CAROLYN BESADE
JDE Job Number: 685107
Work Order Number: 2015598
Order Number: 585191 Rev. 1

Engineering Firm Designation: **TEP Project Number:** 25624.594684

Site Data: **557 Rte. 82, Oakdale, New London County, CT 06370**
Latitude 41° 30' 20.30", Longitude -72° 11' 51.10"
180 Foot - Monopole Tower

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

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

LC5: Proposed Equipment Configuration

Sufficient Capacity – 86.9%

This analysis utilizes an ultimate 3-second gust wind speed of 135 mph as required by the 2015 International Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Dominick Brevig E.I.T. / DEN

Respectfully submitted by:

Aaron T. Rucker, P.E.



Electronic Copy

09/04/2021

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- Table 2 - Other Considered Equipment

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- Table 3 - Documents Provided
- 3.1) Analysis Method
- 3.2) Assumptions

4) ANALYSIS RESULTS

- Table 4 - Section Capacity (Summary)
- Table 5 - Tower Component Stresses vs. Capacity
- 4.1) Recommendations

5) APPENDIX A

- tnxTower Output

6) APPENDIX B

- Base Level Drawing

7) APPENDIX C

- Additional Calculations

1) INTRODUCTION

This tower is a 180-ft monopole tower designed by Engineered Endeavors, Inc. The tower has been modified multiple times in the past to accommodate additional loading.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	135 mph
Exposure Category:	B
Topographic Factor:	1.0
Ice Thickness:	1.5 in
Wind Speed with Ice:	50 mph
Service Wind Speed:	60 mph

Table 1 - Proposed Equipment Configuration

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
165.0	169.0	2	Antel	LPA-80080-6CF-EDIN w/ Mount Pipe	14	1/2 1-5/8
		4	Antel	LPA-80063/6CF w/ Mount Pipe		
		6	Commscope	NHH-65B-R2B w/ Mount Pipe		
		3	Samsung Telecom.	MT6407-77A w/ Mount Pipe		
		3	Samsung Telecom.	RF4439D-25A		
		3	Samsung Telecom.	RF4440D-13A		
	2	RFS Celwave	DB-T1-6Z-8AB-0Z			
	167.0	1	GPS	GPS_A		
165.0	1	Tower Mounts	Platform Mount [LP 712-1]			

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)
180.0	180.0	3	Ericsson	AIR6449 B41_T-MOBILE w/ Mount Pipe	4	1-5/8
		3	RFS Celwave	APX16DWV-16DWV-S-E-A20 w/ Mount Pipe		
		3	RFS Celwave	APXVAALL24_43-U-NA20_TMO w/ Mount Pipe		
		3	Ericsson	RADIO 4415 B66A		
		3	Ericsson	RADIO 4424 B25_TMO		
		3	Ericsson	RADIO 4449 B71 B85A_T-MOBILE		
		1	Tower Mounts	Platform Mount [LP 712-1_KCKR]		
		2	Tower Mounts	Miscellaneous [NA 507-1]		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
148.0	148.0	3	Ericsson	RRUS 12 B2/RRUS A2	-	-
		1	Tower Mounts	Pipe Mount [PM 601-3]		
147.0	147.0	3	CCI Antennas	DMP65R-BU8D w/ Mount Pipe	12 2 2 2	1-5/8 3/8 7/16 7/8
		3	CCI Antennas	HPA-65R-BUU-H8 w/ Mount Pipe		
		3	Powerwave Technologies	7770.00 w/ Mount Pipe		
		1	Raycap	DC6-48-60-18-8C-EV		
		3	Ericsson	RRUS 4449 B5/B12		
		1	Raycap	DC6-48-60-18-8F		
		3	Powerwave Technologies	LGP21401		
		1	Tower Mounts	Platform Mount [LP 1201-1_KCKR-HR-1]		
75.0	76.0	1	GPS	GPS_A	1	1/2
	75.0	1	Tower Mounts	Side Arm Mount [SO 701-1]		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
Geotechnical Report	2053524	CCISites
Tower Foundation Drawings	1615419	CCISites
Tower Manufacturer Drawings	1615393	CCISites
Tower Reinforcement Drawings	2254969	CCISites
Post-Modification Inspection	2447495	CCISites
Tower Reinforcement Drawings	3345718	CCISites
Post-Modification Inspection	3868204	CCISites

3.1) Analysis Method

tnxTower (version 8.1.1.0), 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. Tower Engineering Professionals should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)^{1,2}

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
180 - 175	Pole	TP19.063x18x0.25	Pole	8.2%	Pass
175 - 170	Pole	TP20.126x19.063x0.25	Pole	14.7%	Pass
170 - 165	Pole	TP21.188x20.126x0.25	Pole	20.3%	Pass
165 - 160	Pole	TP22.251x21.188x0.25	Pole	33.6%	Pass
160 - 155	Pole	TP23.314x22.251x0.25	Pole	41.6%	Pass
155 - 150	Pole	TP24.377x23.314x0.25	Pole	48.6%	Pass
150 - 145	Pole	TP25.439x24.377x0.25	Pole	57.3%	Pass
145 - 140	Pole	TP26.502x25.439x0.25	Pole	66.8%	Pass
140 - 137	Pole	TP27.99x26.502x0.25	Pole	71.9%	Pass
137 - 132	Pole	TP27.69x26.64x0.3125	Pole	63.8%	Pass
132 - 131.23	Pole	TP27.851x27.69x0.3125	Pole	64.5%	Pass
131.23 - 130.98	Pole + Reinf.	TP27.903x27.851x0.475	Reinf. 6 Tension Rupture	58.2%	Pass
130.98 - 125.98	Pole + Reinf.	TP28.953x27.903x0.4625	Reinf. 6 Tension Rupture	63.1%	Pass
125.98 - 120.98	Pole + Reinf.	TP30.003x28.953x0.4563	Reinf. 6 Tension Rupture	67.5%	Pass
120.98 - 115.98	Pole + Reinf.	TP31.053x30.003x0.45	Reinf. 6 Tension Rupture	71.4%	Pass
115.98 - 110.98	Pole + Reinf.	TP32.102x31.053x0.45	Reinf. 6 Tension Rupture	74.9%	Pass
110.98 - 105.98	Pole + Reinf.	TP33.152x32.102x0.4375	Reinf. 6 Tension Rupture	78.0%	Pass
105.98 - 104.47	Pole + Reinf.	TP33.471x33.152x0.475	Reinf. 5 Tension Rupture	67.6%	Pass
104.47 - 104.22	Pole + Reinf.	TP33.523x33.471x0.475	Reinf. 5 Tension Rupture	67.7%	Pass
104.22 - 99.22	Pole + Reinf.	TP34.573x33.523x0.4625	Reinf. 5 Tension Rupture	70.1%	Pass
99.22 - 94.22	Pole + Reinf.	TP35.623x34.573x0.4625	Reinf. 5 Tension Rupture	72.4%	Pass
94.22 - 92.59	Pole + Reinf.	TP37.05x35.623x0.4625	Reinf. 5 Tension Rupture	73.0%	Pass
92.59 - 86.42	Pole + Reinf.	TP36.633x35.339x0.525	Reinf. 5 Tension Rupture	68.5%	Pass
86.42 - 81.42	Pole + Reinf.	TP37.681x36.633x0.5125	Reinf. 5 Tension Rupture	69.9%	Pass
81.42 - 76.42	Pole + Reinf.	TP38.729x37.681x0.5125	Reinf. 5 Tension Rupture	71.3%	Pass
76.42 - 71.42	Pole + Reinf.	TP39.777x38.729x0.5125	Reinf. 5 Tension Rupture	72.5%	Pass
71.42 - 69.32	Pole + Reinf.	TP40.218x39.777x0.5063	Reinf. 5 Tension Rupture	72.9%	Pass
69.32 - 69.07	Pole	TP40.271x40.218x0.375	Pole	83.1%	Pass
69.07 - 68.83	Pole	TP40.32x40.271x0.375	Pole	83.1%	Pass
68.83 - 68.58	Pole + Reinf.	TP40.372x40.32x0.5375	Reinf. 4 Compression	66.2%	Pass
68.58 - 63.58	Pole + Reinf.	TP41.42x40.372x0.525	Reinf. 4 Compression	67.2%	Pass
63.58 - 58.58	Pole + Reinf.	TP42.468x41.42x0.525	Reinf. 4 Compression	68.1%	Pass
58.58 - 53.58	Pole + Reinf.	TP43.516x42.468x0.5188	Reinf. 4 Compression	68.9%	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
53.58 - 49.13	Pole + Reinf.	TP45.76x43.516x0.5125	Reinf. 4 Compression	69.5%	Pass
49.13 - 41.88	Pole + Reinf.	TP45.22x43.7x0.575	Reinf. 4 Compression	64.9%	Pass
41.88 - 36.88	Pole + Reinf.	TP46.268x45.22x0.575	Reinf. 4 Compression	65.3%	Pass
36.88 - 34.92	Pole + Reinf.	TP46.68x46.268x0.575	Reinf. 4 Compression	65.5%	Pass
34.92 - 34.67	Pole	TP46.732x46.68x0.4375	Pole	76.2%	Pass
34.67 - 34.42	Pole	TP46.784x46.732x0.4375	Pole	76.2%	Pass
34.42 - 34.17	Pole + Reinf.	TP46.837x46.784x0.55	Reinf. 3 Tension Rupture	71.6%	Pass
34.17 - 29.17	Pole + Reinf.	TP47.885x46.837x0.55	Reinf. 3 Tension Rupture	72.0%	Pass
29.17 - 24.17	Pole + Reinf.	TP48.933x47.885x0.5438	Reinf. 3 Tension Rupture	72.3%	Pass
24.17 - 19.17	Pole + Reinf.	TP49.982x48.933x0.5375	Reinf. 3 Tension Rupture	72.6%	Pass
19.17 - 14.17	Pole + Reinf.	TP51.03x49.982x0.5375	Reinf. 3 Tension Rupture	72.8%	Pass
14.17 - 9.17	Pole + Reinf.	TP52.078x51.03x0.5375	Reinf. 3 Tension Rupture	73.0%	Pass
9.17 - 5.5	Pole + Reinf.	TP52.847x52.078x0.5375	Reinf. 3 Tension Rupture	73.1%	Pass
5.5 - 5.15	Pole + Reinf.	TP52.92x52.847x0.875	Reinf. 2 Compression	54.0%	Pass
5.15 - 4.95	Pole + Reinf.	TP52.962x52.92x0.875	Reinf. 2 Compression	54.0%	Pass
4.95 - 4.25	Pole + Reinf.	TP53.109x52.962x0.8625	Reinf. 2 Compression	54.0%	Pass
4.25 - 4	Pole + Reinf.	TP53.161x53.109x0.775	Reinf. 1 Compression	60.7%	Pass
4 - 0	Pole + Reinf.	TP54x53.161x0.7625	Reinf. 1 Weldment	83.2%	Pass
				Summary	
			Pole	83.1%	Pass
			Reinforcement	83.2%	Pass
			Overall	83.2%	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Anchor Rods	-	62.6	Pass
1,2	Base Plate	-	49.1	Pass
1,2	Base Foundation Structural	-	34.0	Pass
1,2	Base Foundation Soil Interaction	-	86.9	Pass

Structure Rating (max from all components) =	86.9%
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Notes:

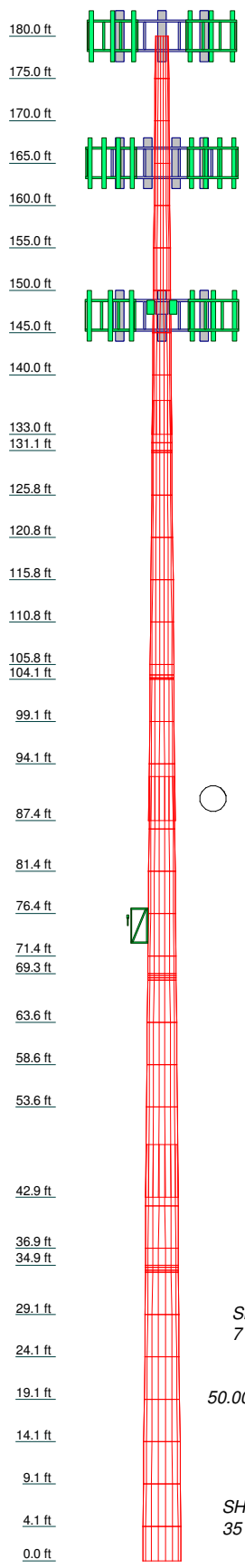
- 1) See additional documentation in "Appendix C - Additional Calculations" for calculations supporting the % capacity listed.
- 2) Rating per TIA-222-H Section 15.5

4.1) Recommendations

- 1) 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

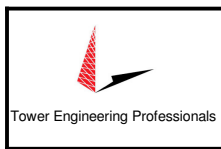
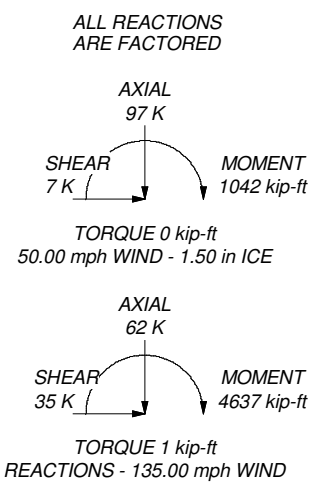
Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	5.00	18	0.25	4.00	25.44	26.50	A572-65	0.2
2	5.00	18	0.25	4.00	21.19	22.25	A572-65	0.3
3	5.00	18	0.25	4.00	17.00	18.00	A572-65	0.3
4	5.00	18	0.25	4.00	12.75	13.81	A572-65	0.3
5	5.00	18	0.25	4.00	8.50	9.56	A572-65	0.3
6	5.00	18	0.25	4.00	4.25	5.31	A572-65	0.3
7	5.00	18	0.25	4.00	0.00	1.06	A572-65	0.3
8	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.3
9	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.3
10	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
11	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
12	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
13	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
14	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
15	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
16	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
17	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
18	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
19	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
20	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
21	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
22	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
23	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
24	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
25	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
26	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
27	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
28	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
29	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
30	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
31	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
32	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
33	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
34	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
35	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
36	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
37	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
38	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
39	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
40	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
41	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
42	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
43	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
44	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
45	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
46	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
47	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5
48	5.00	18	0.25	4.00	0.00	0.00	A572-65	0.5



MATERIAL STRENGTH					
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in New London County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 135.00 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50.00 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60.00 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING = 83.1%



Tower Engineering Professionals, Inc.
 326 Tryon Road
 Raleigh, NC 27603
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Job: Walden / Carolyn Besade (BU 876371)		
Project: TEP No. 25624.594684		
Client: Crown Castle	Drawn by: djbrevig	App'd:
Code: TIA-222-H	Date: 09/03/21	Scale: NTS
Path:		Dwg No. E-1

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tnxTower Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350	Job Walden / Carolyn Besade (BU 876371)	Page 1 of 45
	Project TEP No. 25624.594684	Date 15:43:23 09/03/21
	Client Crown Castle	Designed by djbrevig

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 London County, Connecticut.

Tower base elevation above sea level: 481.00 ft.

Basic wind speed of 135.00 mph.

Risk Category II.

Exposure Category B.

Simplified Topographic Factor Procedure for wind speed-up calculations is used.

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.50 in.

Ice thickness is considered to increase with height.

Ice density of 56.00 pcf.

A wind speed of 50.00 mph is used in combination with ice.

Temperature drop of 50.00 °F.

Deflections calculated using a wind speed of 60.00 mph.

TOWER RATING = 83.1%.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

Tower analysis based on target reliabilities in accordance with Annex S.

Load Modification Factors used: $K_{es}(F_w) = 0.95$, $K_{es}(t_i) = 0.85$.

Maximum demand-capacity ratio is: 1.05.

Local bending stresses due to climbing loads, feed line supports, and appurtenance mounts are not considered.

Options

<ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric 	<ul style="list-style-type: none"> Distribute Leg Loads As Uniform Assume Legs Pinned √ Assume Rigid Index Plate √ Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension √ Bypass Mast Stability Checks √ Use Azimuth Dish Coefficients √ Project Wind Area of Appurt. Autocalc Torque Arm Areas Add IBC .6D+W Combination √ Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs 	<ul style="list-style-type: none"> Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <li style="text-align: center;">Poles √ Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known
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tnxTower Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350	Job Walden / Carolyn Besade (BU 876371)	Page 2 of 45
	Project TEP No. 25624.594684	Date 15:43:23 09/03/21
	Client Crown Castle	Designed by djbrevig

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	180.00-175.00	5.00	0.00	18	18.00	19.06	0.25	1.00	A572-65 (65 ksi)
L2	175.00-170.00	5.00	0.00	18	19.06	20.13	0.25	1.00	A572-65 (65 ksi)
L3	170.00-165.00	5.00	0.00	18	20.13	21.19	0.25	1.00	A572-65 (65 ksi)
L4	165.00-160.00	5.00	0.00	18	21.19	22.25	0.25	1.00	A572-65 (65 ksi)
L5	160.00-155.00	5.00	0.00	18	22.25	23.31	0.25	1.00	A572-65 (65 ksi)
L6	155.00-150.00	5.00	0.00	18	23.31	24.38	0.25	1.00	A572-65 (65 ksi)
L7	150.00-145.00	5.00	0.00	18	24.38	25.44	0.25	1.00	A572-65 (65 ksi)
L8	145.00-140.00	5.00	0.00	18	25.44	26.50	0.25	1.00	A572-65 (65 ksi)
L9	140.00-133.00	7.00	4.00	18	26.50	27.99	0.25	1.00	A572-65 (65 ksi)
L10	133.00-132.00	5.00	0.00	18	26.64	27.69	0.31	1.25	A572-65 (65 ksi)
L11	132.00-131.08	0.92	0.00	18	27.69	27.88	0.31	1.25	A572-65 (65 ksi)
L12	131.08-130.83	0.25	0.00	18	27.88	27.93	0.47	1.90	A572-65 (65 ksi)
L13	130.83-125.83	5.00	0.00	18	27.93	28.98	0.46	1.85	A572-65 (65 ksi)
L14	125.83-120.83	5.00	0.00	18	28.98	30.03	0.46	1.83	A572-65 (65 ksi)
L15	120.83-115.83	5.00	0.00	18	30.03	31.08	0.45	1.80	A572-65 (65 ksi)
L16	115.83-110.83	5.00	0.00	18	31.08	32.13	0.45	1.80	A572-65 (65 ksi)
L17	110.83-105.83	5.00	0.00	18	32.13	33.18	0.44	1.75	A572-65 (65 ksi)
L18	105.83-104.57	1.27	0.00	18	33.18	33.45	0.44	1.75	A572-65 (65 ksi)
L19	104.57-104.23	0.33	0.00	18	33.45	33.52	0.47	1.90	A572-65 (65 ksi)
L20	104.23-104.08	0.15	0.00	18	33.52	33.55	0.47	1.90	A572-65 (65 ksi)
L21	104.08-99.08	5.00	0.00	18	33.55	34.60	0.46	1.85	A572-65 (65 ksi)
L22	99.08-94.08	5.00	0.00	18	34.60	35.65	0.46	1.85	A572-65 (65 ksi)
L23	94.08-87.42	6.66	5.17	18	35.65	37.05	0.46	1.85	A572-65 (65 ksi)
L24	87.42-86.42	6.17	0.00	18	35.34	36.63	0.53	2.10	A572-65 (65 ksi)
L25	86.42-81.42	5.00	0.00	18	36.63	37.68	0.51	2.05	A572-65 (65 ksi)
L26	81.42-76.42	5.00	0.00	18	37.68	38.73	0.51	2.05	A572-65 (65 ksi)
L27	76.42-71.42	5.00	0.00	18	38.73	39.78	0.51	2.05	A572-65 (65 ksi)
L28	71.42-69.32	2.10	0.00	18	39.78	40.22	0.51	2.02	A572-65 (65 ksi)
L29	69.32-69.07	0.25	0.00	18	40.22	40.27	0.38	1.50	A572-65 (65 ksi)

<p>tnxTower</p> <p>Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350</p>	Job Walden / Carolyn Besade (BU 876371)	Page 3 of 45
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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	69.07-68.83	0.23	0.00	18	40.27	40.32	0.38	1.50	A572-65 (65 ksi)
L31	68.83-68.58	0.25	0.00	18	40.32	40.37	0.54	2.15	A572-65 (65 ksi)
L32	68.58-63.58	5.00	0.00	18	40.37	41.42	0.53	2.10	A572-65 (65 ksi)
L33	63.58-58.58	5.00	0.00	18	41.42	42.47	0.53	2.10	A572-65 (65 ksi)
L34	58.58-53.58	5.00	0.00	18	42.47	43.52	0.52	2.08	A572-65 (65 ksi)
L35	53.58-42.88	10.71	6.25	18	43.52	45.76	0.51	2.05	A572-65 (65 ksi)
L36	42.88-41.88	7.25	0.00	18	43.70	45.22	0.57	2.30	A572-65 (65 ksi)
L37	41.88-36.88	5.00	0.00	18	45.22	46.27	0.57	2.30	A572-65 (65 ksi)
L38	36.88-34.92	1.96	0.00	18	46.27	46.68	0.57	2.30	A572-65 (65 ksi)
L39	34.92-34.67	0.25	0.00	18	46.68	46.73	0.44	1.75	A572-65 (65 ksi)
L40	34.67-34.33	0.34	0.00	18	46.73	46.80	0.44	1.75	A572-65 (65 ksi)
L41	34.33-34.08	0.25	0.00	18	46.80	46.85	0.55	2.20	A572-65 (65 ksi)
L42	34.08-29.08	5.00	0.00	18	46.85	47.90	0.55	2.20	A572-65 (65 ksi)
L43	29.08-24.08	5.00	0.00	18	47.90	48.95	0.54	2.17	A572-65 (65 ksi)
L44	24.08-19.08	5.00	0.00	18	48.95	50.00	0.54	2.15	A572-65 (65 ksi)
L45	19.08-14.08	5.00	0.00	18	50.00	51.05	0.54	2.15	A572-65 (65 ksi)
L46	14.08-9.08	5.00	0.00	18	51.05	52.10	0.54	2.15	A572-65 (65 ksi)
L47	9.08-4.08	5.00	0.00	18	52.10	53.14	0.54	2.15	A572-65 (65 ksi)
L48	4.08-0.00	4.08		18	53.14	54.00	0.54	2.15	A572-65 (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	18.24	14.08	560.63	6.30	9.14	61.31	1122.01	7.04	2.73	10.912
	19.32	14.93	667.49	6.68	9.68	68.93	1335.85	7.47	2.92	11.66
L2	19.32	14.93	667.49	6.68	9.68	68.93	1335.85	7.47	2.92	11.66
	20.40	15.77	787.12	7.06	10.22	76.99	1575.27	7.89	3.10	12.408
L3	20.40	15.77	787.12	7.06	10.22	76.99	1575.27	7.89	3.10	12.408
	21.48	16.61	920.26	7.43	10.76	85.50	1841.72	8.31	3.29	13.157
L4	21.48	16.61	920.26	7.43	10.76	85.50	1841.72	8.31	3.29	13.157
	22.56	17.46	1067.62	7.81	11.30	94.45	2136.64	8.73	3.48	13.905
L5	22.56	17.46	1067.62	7.81	11.30	94.45	2136.64	8.73	3.48	13.905
	23.63	18.30	1229.93	8.19	11.84	103.85	2461.47	9.15	3.66	14.653
L6	23.63	18.30	1229.93	8.19	11.84	103.85	2461.47	9.15	3.66	14.653
	24.71	19.14	1407.90	8.56	12.38	113.69	2817.66	9.57	3.85	15.401
L7	24.71	19.14	1407.90	8.56	12.38	113.69	2817.66	9.57	3.85	15.401

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Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	I/Q in ²	w in	w/t
	25.79	19.99	1602.27	8.94	12.92	123.98	3206.65	10.00	4.04	16.149
L8	25.79	19.99	1602.27	8.94	12.92	123.98	3206.65	10.00	4.04	16.149
	26.87	20.83	1813.75	9.32	13.46	134.72	3629.89	10.42	4.22	16.897
L9	26.87	20.83	1813.75	9.32	13.46	134.72	3629.89	10.42	4.22	16.897
	28.38	22.01	2139.95	9.85	14.22	150.50	4282.72	11.01	4.49	17.945
L10	27.86	26.11	2286.72	9.35	13.53	168.97	4576.45	13.06	4.14	13.244
	28.07	27.15	2571.33	9.72	14.07	182.80	5146.05	13.58	4.32	13.835
L11	28.07	27.15	2571.33	9.72	14.07	182.80	5146.05	13.58	4.32	13.835
	28.26	27.35	2625.95	9.79	14.16	185.39	5255.35	13.68	4.36	13.943
L12	28.24	41.32	3921.28	9.73	14.16	276.85	7847.71	20.66	4.07	8.571
	28.29	41.40	3943.85	9.75	14.19	277.92	7892.89	20.70	4.08	8.591
L13	28.29	40.33	3845.31	9.75	14.19	270.97	7695.68	20.17	4.10	8.87
	29.36	41.87	4303.22	10.13	14.72	292.26	8612.09	20.94	4.29	9.27
L14	29.36	41.31	4247.86	10.13	14.72	288.50	8501.30	20.66	4.30	9.421
	30.43	42.83	4734.29	10.50	15.26	310.29	9474.81	21.42	4.48	9.826
L15	30.43	42.26	4672.40	10.50	15.26	306.24	9350.94	21.13	4.49	9.987
	31.49	43.75	5187.68	10.88	15.79	328.53	10382.18	21.88	4.68	10.397
L16	31.49	43.75	5187.68	10.88	15.79	328.53	10382.18	21.88	4.68	10.397
	32.56	45.25	5739.51	11.25	16.32	351.60	11486.58	22.63	4.86	10.808
L17	32.56	44.01	5586.69	11.25	16.32	342.24	11180.73	22.01	4.89	11.167
	33.63	45.47	6160.40	11.62	16.86	365.44	12328.91	22.74	5.07	11.589
L18	33.63	45.47	6160.40	11.62	16.86	365.44	12328.91	22.74	5.07	11.589
	33.90	45.84	6311.72	11.72	16.99	371.44	12631.74	22.93	5.12	11.696
L19	33.89	49.71	6829.39	11.71	16.99	401.91	13667.78	24.86	5.05	10.634
	33.96	49.82	6873.02	11.73	17.03	403.63	13755.09	24.91	5.06	10.66
L20	33.96	49.82	6873.02	11.73	17.03	403.63	13755.09	24.91	5.06	10.66
	34.00	49.87	6892.69	11.74	17.04	404.40	13794.45	24.94	5.07	10.672
L21	34.00	48.57	6718.92	11.75	17.04	394.21	13446.68	24.29	5.09	11.008
	35.06	50.11	7378.96	12.12	17.58	419.80	14767.62	25.06	5.28	11.407
L22	35.06	50.11	7378.96	12.12	17.58	419.80	14767.62	25.06	5.28	11.407
	36.13	51.66	8080.86	12.49	18.11	446.19	16172.36	25.83	5.46	11.807
L23	36.13	51.66	8080.86	12.49	18.11	446.19	16172.36	25.83	5.46	11.807
	37.55	53.71	9083.52	12.99	18.82	482.62	18179.00	26.86	5.71	12.339
L24	36.90	58.01	8884.00	12.36	17.95	494.85	17779.70	29.01	5.30	10.087
	37.12	60.17	9910.74	12.82	18.61	532.56	19834.51	30.09	5.52	10.521
L25	37.12	58.76	9684.82	12.82	18.61	520.42	19382.38	29.38	5.55	10.82
	38.18	60.46	10552.56	13.19	19.14	551.28	21119.00	30.24	5.73	11.18
L26	38.18	60.46	10552.56	13.19	19.14	551.28	21119.00	30.24	5.73	11.18
	39.25	62.17	11470.64	13.57	19.67	583.03	22956.37	31.09	5.91	11.54
L27	39.25	62.17	11470.64	13.57	19.67	583.03	22956.37	31.09	5.91	11.54
	40.31	63.87	12440.48	13.94	20.21	615.66	24897.34	31.94	6.10	11.9
L28	40.31	63.10	12294.64	13.94	20.21	608.44	24605.46	31.56	6.11	12.069
	40.76	63.81	12713.39	14.10	20.43	622.27	25443.51	31.91	6.19	12.222
L29	40.78	47.42	9511.01	14.14	20.43	465.53	19034.53	23.72	6.42	17.116
	40.83	47.49	9548.59	14.16	20.46	466.76	19109.74	23.75	6.43	17.14
L30	40.83	47.49	9548.59	14.16	20.46	466.76	19109.74	23.75	6.43	17.14
	40.88	47.54	9583.76	14.18	20.48	467.91	19180.13	23.78	6.44	17.163
L31	40.86	67.87	13569.75	14.12	20.48	662.52	27157.36	33.94	6.15	11.442
	40.91	67.96	13623.45	14.14	20.51	664.27	27264.82	33.99	6.16	11.459
L32	40.91	66.40	13319.15	14.15	20.51	649.44	26655.83	33.21	6.18	11.774
	41.98	68.14	14398.02	14.52	21.04	684.28	28814.98	34.08	6.37	12.125
L33	41.98	68.14	14398.02	14.52	21.04	684.28	28814.98	34.08	6.37	12.125
	43.04	69.89	15533.62	14.89	21.57	720.03	31087.69	34.95	6.55	12.477
L34	43.04	69.07	15355.56	14.89	21.57	711.78	30731.33	34.54	6.56	12.648
	44.11	70.80	16535.50	15.26	22.11	748.01	33092.76	35.40	6.75	13.004
L35	44.11	69.95	16343.40	15.27	22.11	739.32	32708.31	34.98	6.76	13.184
	46.39	73.60	19038.03	16.06	23.25	818.98	38101.11	36.81	7.15	13.955
L36	45.62	78.71	18492.57	15.31	22.20	833.01	37009.46	39.36	6.68	11.616
	45.83	81.48	20517.77	15.85	22.97	893.17	41062.54	40.75	6.95	12.081
L37	45.83	81.48	20517.77	15.85	22.97	893.17	41062.54	40.75	6.95	12.081
	46.89	83.39	21997.32	16.22	23.50	935.89	44023.59	41.70	7.13	12.402
L38	46.89	83.39	21997.32	16.22	23.50	935.89	44023.59	41.70	7.13	12.402

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Tower Elevation	Gusset Area (per face)	Gusset Thickness	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
ft	ft ²	in							
L18				1	1	0.978771			
105.83-104.57									
L19				1	1	0.962225			
104.57-104.23									
L20				1	1	0.961935			
104.23-104.08									
L21				1	1	0.977969			
104.08-99.08									
L22				1	1	0.96895			
99.08-94.08									
L23				1	1	0.966355			
94.08-87.42									
L24				1	1	0.966563			
87.42-86.42									
L25				1	1	0.982518			
86.42-81.42									
L26				1	1	0.975639			
81.42-76.42									
L27				1	1	0.969128			
76.42-71.42									
L28				1	1	0.97827			
71.42-69.32									
L29				1	1	1			
69.32-69.07									
L30				1	1	1			
69.07-68.83									
L31				1	1	0.9654			
68.83-68.58									
L32				1	1	0.981059			
68.58-63.58									
L33				1	1	0.974393			
63.58-58.58									
L34				1	1	0.979572			
58.58-53.58									
L35				1	1	0.985853			
53.58-42.88									
L36				1	1	0.984136			
42.88-41.88									
L37				1	1	0.979014			
41.88-36.88									
L38				1	1	0.977069			
36.88-34.92									
L39				1	1	1			
34.92-34.67									
L40				1	1	1			
34.67-34.33									
L41				1	1	0.982959			
34.33-34.08									
L42				1	1	0.978808			
34.08-29.08									
L43				1	1	0.985915			
29.08-24.08									
L44				1	1	0.993365			
24.08-19.08									
L45				1	1	0.989642			
19.08-14.08									
L46 14.08-9.08				1	1	0.986069			
L47 9.08-4.08				1	1	0.98264			
L48 4.08-0.00				1	1	0.97994			

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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
Misc										
Mods										
100FP-050100	C	No	Surface Af (CaAa)	36.75 - 0.00	1	1	-0.167 -0.167	5.00	12.00	0.00
100FP-050100	B	No	Surface Af (CaAa)	36.75 - 0.00	1	1	-0.167 -0.167	5.00	12.00	0.00
100FP-050100	A	No	Surface Af (CaAa)	36.75 - 0.00	1	1	-0.167 -0.167	5.00	12.00	0.00

100FP-060100	C	No	Surface Af (CaAa)	71.75 - 32.00	1	1	0.000 0.000	6.00	14.00	0.00
100FP-060100	B	No	Surface Af (CaAa)	71.75 - 32.00	1	1	0.000 0.000	6.00	14.00	0.00
100FP-060100	A	No	Surface Af (CaAa)	71.75 - 32.00	1	1	0.000 0.000	6.00	14.00	0.00

100FP-050100	C	No	Surface Af (CaAa)	106.75 - 66.90	1	1	-0.167 -0.167	5.00	12.00	0.00
100FP-050100	B	No	Surface Af (CaAa)	106.75 - 66.90	1	1	-0.167 -0.167	5.00	12.00	0.00
100FP-050100	A	No	Surface Af (CaAa)	106.75 - 66.90	1	1	-0.167 -0.167	5.00	12.00	0.00

100FP-040100	C	No	Surface Af (CaAa)	132.75 - 102.90	1	1	0.000 0.000	4.00	10.00	0.00
100FP-040100	B	No	Surface Af (CaAa)	132.75 - 102.90	1	1	0.000 0.000	4.00	10.00	0.00
100FP-040100	A	No	Surface Af (CaAa)	132.75 - 102.90	1	1	0.000 0.000	4.00	10.00	0.00

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	CAAA	Weight
							ft ² /ft	klf
**								
180								
HB158-21U6S24-xx M_TMO(1-5/8)	B	No	No	Inside Pole	180.00 - 0.00	4	No Ice 1/2" Ice 1" Ice 2" Ice	0.00 0.00 0.00 0.00
**								
165								
LDF4-50A(1/2)	B	No	No	Inside Pole	165.00 - 0.00	1	No Ice 1/2" Ice	0.00 0.00

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Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C _{AA} ft ² /ft	Weight klf	
LDF7-50A(1-5/8)	B	No	No	Inside Pole	165.00 - 0.00	12	1" Ice	0.00	0.00
							2" Ice	0.00	0.00
							No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
HB158-1-08U8-S8J 18(1-5/8)	B	No	No	Inside Pole	165.00 - 0.00	2	2" Ice	0.00	0.00
							No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
							2" Ice	0.00	0.00
** **147**									
LCF158-50A(1-5/8)	A	No	No	Inside Pole	147.00 - 0.00	12	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
							2" Ice	0.00	0.00
							No Ice	0.00	0.00
FB-L98B-002-75000 (3/8)	A	No	No	Inside Pole	147.00 - 0.00	1	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
							2" Ice	0.00	0.00
							No Ice	0.00	0.00
FB-L98B-034-XXX(3/8)	A	No	No	Inside Pole	147.00 - 0.00	1	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
							2" Ice	0.00	0.00
							No Ice	0.00	0.00
WR-VG122ST-BRD A(7/16)	A	No	No	Inside Pole	147.00 - 0.00	2	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
							2" Ice	0.00	0.00
							No Ice	0.00	0.00
WR-VG66ST-BRD(7/8)	A	No	No	Inside Pole	147.00 - 0.00	2	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
							2" Ice	0.00	0.00
							No Ice	0.00	0.00
2" Flexible Conduit	A	No	No	Inside Pole	147.00 - 0.00	1	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
							2" Ice	0.00	0.00
							No Ice	0.00	0.00
** **75**									
LCF12-50J(1/2)	B	No	No	Inside Pole	75.00 - 0.00	1	No Ice	0.00	0.00
							1/2" Ice	0.00	0.00
							1" Ice	0.00	0.00
							2" Ice	0.00	0.00
							No Ice	0.00	0.00

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L1	180.00-175.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.05
		C	0.000	0.000	0.000	0.000	0.00
L2	175.00-170.00	A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.05

<p>tnxTower</p> <p><i>Tower Engineering Professionals, Inc.</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350</p>	Job Walden / Carolyn Besade (BU 876371)	Page 9 of 45
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	Client Crown Castle	Designed by djbrevig

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L3	170.00-165.00	C	0.000	0.000	0.000	0.000	0.00
		A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.05
L4	165.00-160.00	C	0.000	0.000	0.000	0.000	0.00
		A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.11
L5	160.00-155.00	C	0.000	0.000	0.000	0.000	0.00
		A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.11
L6	155.00-150.00	C	0.000	0.000	0.000	0.000	0.00
		A	0.000	0.000	0.000	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.11
L7	150.00-145.00	C	0.000	0.000	0.000	0.000	0.00
		A	0.000	0.000	0.000	0.000	0.02
		B	0.000	0.000	0.000	0.000	0.11
L8	145.00-140.00	C	0.000	0.000	0.000	0.000	0.00
		A	0.000	0.000	0.000	0.000	0.06
		B	0.000	0.000	0.000	0.000	0.11
L9	140.00-133.00	C	0.000	0.000	0.000	0.000	0.00
		A	0.000	0.000	0.000	0.000	0.09
		B	0.000	0.000	0.000	0.000	0.16
L10	133.00-132.00	C	0.000	0.000	0.000	0.000	0.00
		A	0.000	0.000	0.500	0.000	0.01
		B	0.000	0.000	0.500	0.000	0.02
L11	132.00-131.08	C	0.000	0.000	0.500	0.000	0.00
		A	0.000	0.000	0.611	0.000	0.01
		B	0.000	0.000	0.611	0.000	0.02
L12	131.08-130.83	C	0.000	0.000	0.611	0.000	0.00
		A	0.000	0.000	0.167	0.000	0.00
		B	0.000	0.000	0.167	0.000	0.01
L13	130.83-125.83	C	0.000	0.000	0.167	0.000	0.00
		A	0.000	0.000	3.333	0.000	0.06
		B	0.000	0.000	3.333	0.000	0.11
L14	125.83-120.83	C	0.000	0.000	3.333	0.000	0.00
		A	0.000	0.000	3.333	0.000	0.06
		B	0.000	0.000	3.333	0.000	0.11
L15	120.83-115.83	C	0.000	0.000	3.333	0.000	0.00
		A	0.000	0.000	3.333	0.000	0.06
		B	0.000	0.000	3.333	0.000	0.11
L16	115.83-110.83	C	0.000	0.000	3.333	0.000	0.00
		A	0.000	0.000	3.333	0.000	0.06
		B	0.000	0.000	3.333	0.000	0.11
L17	110.83-105.83	C	0.000	0.000	3.333	0.000	0.00
		A	0.000	0.000	4.097	0.000	0.06
		B	0.000	0.000	4.097	0.000	0.11
L18	105.83-104.57	C	0.000	0.000	4.097	0.000	0.00
		A	0.000	0.000	1.900	0.000	0.02
		B	0.000	0.000	1.900	0.000	0.03
L19	104.57-104.23	C	0.000	0.000	1.900	0.000	0.00
		A	0.000	0.000	0.501	0.000	0.00
		B	0.000	0.000	0.501	0.000	0.01
L20	104.23-104.08	C	0.000	0.000	0.501	0.000	0.00
		A	0.000	0.000	0.225	0.000	0.00
		B	0.000	0.000	0.225	0.000	0.00
L21	104.08-99.08	C	0.000	0.000	0.225	0.000	0.00
		A	0.000	0.000	4.955	0.000	0.06
		B	0.000	0.000	4.955	0.000	0.11
L22	99.08-94.08	C	0.000	0.000	4.955	0.000	0.00
		A	0.000	0.000	4.167	0.000	0.06
		B	0.000	0.000	4.167	0.000	0.11
		C	0.000	0.000	4.167	0.000	0.00

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	Client Crown Castle	Designed by djbrevig

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L23	94.08-87.42	A	0.000	0.000	5.553	0.000	0.08
		B	0.000	0.000	5.553	0.000	0.15
		C	0.000	0.000	5.553	0.000	0.00
L24	87.42-86.42	A	0.000	0.000	0.833	0.000	0.01
		B	0.000	0.000	0.833	0.000	0.02
		C	0.000	0.000	0.833	0.000	0.00
L25	86.42-81.42	A	0.000	0.000	4.167	0.000	0.06
		B	0.000	0.000	4.167	0.000	0.11
		C	0.000	0.000	4.167	0.000	0.00
L26	81.42-76.42	A	0.000	0.000	4.167	0.000	0.06
		B	0.000	0.000	4.167	0.000	0.11
		C	0.000	0.000	4.167	0.000	0.00
L27	76.42-71.42	A	0.000	0.000	4.497	0.000	0.06
		B	0.000	0.000	4.497	0.000	0.11
		C	0.000	0.000	4.497	0.000	0.00
L28	71.42-69.32	A	0.000	0.000	3.856	0.000	0.03
		B	0.000	0.000	3.856	0.000	0.05
		C	0.000	0.000	3.856	0.000	0.00
L29	69.32-69.07	A	0.000	0.000	0.458	0.000	0.00
		B	0.000	0.000	0.458	0.000	0.01
		C	0.000	0.000	0.458	0.000	0.00
L30	69.07-68.83	A	0.000	0.000	0.428	0.000	0.00
		B	0.000	0.000	0.428	0.000	0.01
		C	0.000	0.000	0.428	0.000	0.00
L31	68.83-68.58	A	0.000	0.000	0.458	0.000	0.00
		B	0.000	0.000	0.458	0.000	0.01
		C	0.000	0.000	0.458	0.000	0.00
L32	68.58-63.58	A	0.000	0.000	6.403	0.000	0.06
		B	0.000	0.000	6.403	0.000	0.11
		C	0.000	0.000	6.403	0.000	0.00
L33	63.58-58.58	A	0.000	0.000	5.000	0.000	0.06
		B	0.000	0.000	5.000	0.000	0.11
		C	0.000	0.000	5.000	0.000	0.00
L34	58.58-53.58	A	0.000	0.000	5.000	0.000	0.06
		B	0.000	0.000	5.000	0.000	0.11
		C	0.000	0.000	5.000	0.000	0.00
L35	53.58-42.88	A	0.000	0.000	10.707	0.000	0.13
		B	0.000	0.000	10.707	0.000	0.24
		C	0.000	0.000	10.707	0.000	0.00
L36	42.88-41.88	A	0.000	0.000	1.000	0.000	0.01
		B	0.000	0.000	1.000	0.000	0.02
		C	0.000	0.000	1.000	0.000	0.00
L37	41.88-36.88	A	0.000	0.000	5.000	0.000	0.06
		B	0.000	0.000	5.000	0.000	0.11
		C	0.000	0.000	5.000	0.000	0.00
L38	36.88-34.92	A	0.000	0.000	3.488	0.000	0.02
		B	0.000	0.000	3.488	0.000	0.04
		C	0.000	0.000	3.488	0.000	0.00
L39	34.92-34.67	A	0.000	0.000	0.458	0.000	0.00
		B	0.000	0.000	0.458	0.000	0.01
		C	0.000	0.000	0.458	0.000	0.00
L40	34.67-34.33	A	0.000	0.000	0.617	0.000	0.00
		B	0.000	0.000	0.617	0.000	0.01
		C	0.000	0.000	0.617	0.000	0.00
L41	34.33-34.08	A	0.000	0.000	0.458	0.000	0.00
		B	0.000	0.000	0.458	0.000	0.01
		C	0.000	0.000	0.458	0.000	0.00
L42	34.08-29.08	A	0.000	0.000	6.247	0.000	0.06
		B	0.000	0.000	6.247	0.000	0.11
		C	0.000	0.000	6.247	0.000	0.00
L43	29.08-24.08	A	0.000	0.000	4.167	0.000	0.06

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Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L44	24.08-19.08	B	0.000	0.000	4.167	0.000	0.11
		C	0.000	0.000	4.167	0.000	0.00
		A	0.000	0.000	4.167	0.000	0.06
L45	19.08-14.08	B	0.000	0.000	4.167	0.000	0.11
		C	0.000	0.000	4.167	0.000	0.00
		A	0.000	0.000	4.167	0.000	0.06
L46	14.08-9.08	B	0.000	0.000	4.167	0.000	0.11
		C	0.000	0.000	4.167	0.000	0.00
		A	0.000	0.000	4.167	0.000	0.06
L47	9.08-4.08	B	0.000	0.000	4.167	0.000	0.11
		C	0.000	0.000	4.167	0.000	0.00
		A	0.000	0.000	4.167	0.000	0.06
L48	4.08-0.00	B	0.000	0.000	3.400	0.000	0.09
		C	0.000	0.000	3.400	0.000	0.00
		A	0.000	0.000	3.400	0.000	0.05

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} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L1	180.00-175.00	A	1.509	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.05
		C		0.000	0.000	0.000	0.000	0.00
L2	175.00-170.00	A	1.504	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.05
		C		0.000	0.000	0.000	0.000	0.00
L3	170.00-165.00	A	1.500	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.05
		C		0.000	0.000	0.000	0.000	0.00
L4	165.00-160.00	A	1.495	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.11
		C		0.000	0.000	0.000	0.000	0.00
L5	160.00-155.00	A	1.491	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.11
		C		0.000	0.000	0.000	0.000	0.00
L6	155.00-150.00	A	1.486	0.000	0.000	0.000	0.000	0.00
		B		0.000	0.000	0.000	0.000	0.11
		C		0.000	0.000	0.000	0.000	0.00
L7	150.00-145.00	A	1.481	0.000	0.000	0.000	0.000	0.02
		B		0.000	0.000	0.000	0.000	0.11
		C		0.000	0.000	0.000	0.000	0.00
L8	145.00-140.00	A	1.476	0.000	0.000	0.000	0.000	0.06
		B		0.000	0.000	0.000	0.000	0.11
		C		0.000	0.000	0.000	0.000	0.00
L9	140.00-133.00	A	1.469	0.000	0.000	0.000	0.000	0.09
		B		0.000	0.000	0.000	0.000	0.16
		C		0.000	0.000	0.000	0.000	0.00
L10	133.00-132.00	A	1.465	0.000	0.000	0.720	0.000	0.02
		B		0.000	0.000	0.720	0.000	0.03
		C		0.000	0.000	0.720	0.000	0.01
L11	132.00-131.08	A	1.464	0.000	0.000	0.880	0.000	0.02
		B		0.000	0.000	0.880	0.000	0.03
		C		0.000	0.000	0.880	0.000	0.01
L12	131.08-130.83	A	1.463	0.000	0.000	0.240	0.000	0.01
		B		0.000	0.000	0.240	0.000	0.01

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	Client	Crown Castle	Designed by	djbrevig

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L13	130.83-125.83	C		0.000	0.000	0.240	0.000	0.00
		A	1.460	0.000	0.000	4.794	0.000	0.10
		B		0.000	0.000	4.794	0.000	0.16
		C		0.000	0.000	4.794	0.000	0.04
L14	125.83-120.83	A	1.455	0.000	0.000	4.788	0.000	0.10
		B		0.000	0.000	4.788	0.000	0.16
		C		0.000	0.000	4.788	0.000	0.04
L15	120.83-115.83	A	1.449	0.000	0.000	4.782	0.000	0.10
		B		0.000	0.000	4.782	0.000	0.16
		C		0.000	0.000	4.782	0.000	0.04
L16	115.83-110.83	A	1.442	0.000	0.000	4.776	0.000	0.10
		B		0.000	0.000	4.776	0.000	0.16
		C		0.000	0.000	4.776	0.000	0.04
L17	110.83-105.83	A	1.436	0.000	0.000	5.796	0.000	0.11
		B		0.000	0.000	5.796	0.000	0.16
		C		0.000	0.000	5.796	0.000	0.05
L18	105.83-104.57	A	1.432	0.000	0.000	2.625	0.000	0.04
		B		0.000	0.000	2.625	0.000	0.05
		C		0.000	0.000	2.625	0.000	0.02
L19	104.57-104.23	A	1.431	0.000	0.000	0.692	0.000	0.01
		B		0.000	0.000	0.692	0.000	0.01
		C		0.000	0.000	0.692	0.000	0.01
L20	104.23-104.08	A	1.430	0.000	0.000	0.311	0.000	0.00
		B		0.000	0.000	0.311	0.000	0.01
		C		0.000	0.000	0.311	0.000	0.00
L21	104.08-99.08	A	1.427	0.000	0.000	6.720	0.000	0.12
		B		0.000	0.000	6.720	0.000	0.17
		C		0.000	0.000	6.720	0.000	0.06
L22	99.08-94.08	A	1.420	0.000	0.000	5.586	0.000	0.11
		B		0.000	0.000	5.586	0.000	0.16
		C		0.000	0.000	5.586	0.000	0.05
L23	94.08-87.42	A	1.411	0.000	0.000	7.432	0.000	0.14
		B		0.000	0.000	7.432	0.000	0.21
		C		0.000	0.000	7.432	0.000	0.06
L24	87.42-86.42	A	1.405	0.000	0.000	1.115	0.000	0.02
		B		0.000	0.000	1.115	0.000	0.03
		C		0.000	0.000	1.115	0.000	0.01
L25	86.42-81.42	A	1.400	0.000	0.000	5.566	0.000	0.11
		B		0.000	0.000	5.566	0.000	0.16
		C		0.000	0.000	5.566	0.000	0.05
L26	81.42-76.42	A	1.391	0.000	0.000	5.558	0.000	0.11
		B		0.000	0.000	5.558	0.000	0.16
		C		0.000	0.000	5.558	0.000	0.05
L27	76.42-71.42	A	1.382	0.000	0.000	5.970	0.000	0.11
		B		0.000	0.000	5.970	0.000	0.16
		C		0.000	0.000	5.970	0.000	0.05
L28	71.42-69.32	A	1.375	0.000	0.000	5.013	0.000	0.07
		B		0.000	0.000	5.013	0.000	0.09
		C		0.000	0.000	5.013	0.000	0.04
L29	69.32-69.07	A	1.373	0.000	0.000	0.596	0.000	0.01
		B		0.000	0.000	0.596	0.000	0.01
		C		0.000	0.000	0.596	0.000	0.00
L30	69.07-68.83	A	1.372	0.000	0.000	0.556	0.000	0.01
		B		0.000	0.000	0.556	0.000	0.01
		C		0.000	0.000	0.556	0.000	0.00
L31	68.83-68.58	A	1.372	0.000	0.000	0.596	0.000	0.01
		B		0.000	0.000	0.596	0.000	0.01
		C		0.000	0.000	0.596	0.000	0.00
L32	68.58-63.58	A	1.367	0.000	0.000	8.230	0.000	0.13
		B		0.000	0.000	8.230	0.000	0.18
		C		0.000	0.000	8.230	0.000	0.07

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	Client	Crown Castle	Designed by	djbrevig

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L33	63.58-58.58	A	1.356	0.000	0.000	6.356	0.000	0.11
		B		0.000	0.000	6.356	0.000	0.16
		C		0.000	0.000	6.356	0.000	0.05
L34	58.58-53.58	A	1.344	0.000	0.000	6.344	0.000	0.11
		B		0.000	0.000	6.344	0.000	0.16
		C		0.000	0.000	6.344	0.000	0.05
L35	53.58-42.88	A	1.324	0.000	0.000	13.542	0.000	0.24
		B		0.000	0.000	13.542	0.000	0.35
		C		0.000	0.000	13.542	0.000	0.10
L36	42.88-41.88	A	1.307	0.000	0.000	1.265	0.000	0.02
		B		0.000	0.000	1.265	0.000	0.03
		C		0.000	0.000	1.265	0.000	0.01
L37	41.88-36.88	A	1.298	0.000	0.000	6.298	0.000	0.11
		B		0.000	0.000	6.298	0.000	0.16
		C		0.000	0.000	6.298	0.000	0.05
L38	36.88-34.92	A	1.286	0.000	0.000	4.463	0.000	0.06
		B		0.000	0.000	4.463	0.000	0.08
		C		0.000	0.000	4.463	0.000	0.03
L39	34.92-34.67	A	1.282	0.000	0.000	0.587	0.000	0.01
		B		0.000	0.000	0.587	0.000	0.01
		C		0.000	0.000	0.587	0.000	0.00
L40	34.67-34.33	A	1.281	0.000	0.000	0.790	0.000	0.01
		B		0.000	0.000	0.790	0.000	0.01
		C		0.000	0.000	0.790	0.000	0.01
L41	34.33-34.08	A	1.280	0.000	0.000	0.586	0.000	0.01
		B		0.000	0.000	0.586	0.000	0.01
		C		0.000	0.000	0.586	0.000	0.00
L42	34.08-29.08	A	1.269	0.000	0.000	8.044	0.000	0.12
		B		0.000	0.000	8.044	0.000	0.17
		C		0.000	0.000	8.044	0.000	0.06
L43	29.08-24.08	A	1.248	0.000	0.000	5.414	0.000	0.10
		B		0.000	0.000	5.414	0.000	0.15
		C		0.000	0.000	5.414	0.000	0.04
L44	24.08-19.08	A	1.222	0.000	0.000	5.389	0.000	0.10
		B		0.000	0.000	5.389	0.000	0.15
		C		0.000	0.000	5.389	0.000	0.04
L45	19.08-14.08	A	1.190	0.000	0.000	5.357	0.000	0.10
		B		0.000	0.000	5.357	0.000	0.15
		C		0.000	0.000	5.357	0.000	0.04
L46	14.08-9.08	A	1.148	0.000	0.000	5.315	0.000	0.10
		B		0.000	0.000	5.315	0.000	0.15
		C		0.000	0.000	5.315	0.000	0.04
L47	9.08-4.08	A	1.085	0.000	0.000	5.252	0.000	0.09
		B		0.000	0.000	5.252	0.000	0.15
		C		0.000	0.000	5.252	0.000	0.03
L48	4.08-0.00	A	0.965	0.000	0.000	4.187	0.000	0.07
		B		0.000	0.000	4.187	0.000	0.12
		C		0.000	0.000	4.187	0.000	0.02

Feed Line Center of Pressure

Section	Elevation ft	CP _x in	CP _z in	CP _x Ice in	CP _z Ice in
L1	180.00-175.00	0.00	0.00	0.00	0.00
L2	175.00-170.00	0.00	0.00	0.00	0.00
L3	170.00-165.00	0.00	0.00	0.00	0.00

tnxTower Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350	Job Walden / Carolyn Besade (BU 876371)	Page 14 of 45
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Section	Elevation	CP _x	CP _z	CP _x Ice	CP _z Ice
	ft	in	in	in	in
L4	165.00-160.00	0.00	0.00	0.00	0.00
L5	160.00-155.00	0.00	0.00	0.00	0.00
L6	155.00-150.00	0.00	0.00	0.00	0.00
L7	150.00-145.00	0.00	0.00	0.00	0.00
L8	145.00-140.00	0.00	0.00	0.00	0.00
L9	140.00-133.00	0.00	0.00	0.00	0.00
L10	133.00-132.00	0.00	0.00	0.00	0.00
L11	132.00-131.08	0.00	0.00	0.00	0.00
L12	131.08-130.83	0.00	0.00	0.00	0.00
L13	130.83-125.83	0.00	0.00	0.00	0.00
L14	125.83-120.83	0.00	0.00	0.00	0.00
L15	120.83-115.83	0.00	0.00	0.00	0.00
L16	115.83-110.83	0.00	0.00	0.00	0.00
L17	110.83-105.83	0.00	0.00	0.00	0.00
L18	105.83-104.57	0.00	0.00	0.00	0.00
L19	104.57-104.23	0.00	0.00	0.00	0.00
L20	104.23-104.08	0.00	0.00	0.00	0.00
L21	104.08-99.08	0.00	0.00	0.00	0.00
L22	99.08-94.08	0.00	0.00	0.00	0.00
L23	94.08-87.42	0.00	0.00	0.00	0.00
L24	87.42-86.42	0.00	0.00	0.00	0.00
L25	86.42-81.42	0.00	0.00	0.00	0.00
L26	81.42-76.42	0.00	0.00	0.00	0.00
L27	76.42-71.42	0.00	0.00	0.00	0.00
L28	71.42-69.32	0.00	0.00	0.00	0.00
L29	69.32-69.07	0.00	0.00	0.00	0.00
L30	69.07-68.83	0.00	0.00	0.00	0.00
L31	68.83-68.58	0.00	0.00	0.00	0.00
L32	68.58-63.58	0.00	0.00	0.00	0.00
L33	63.58-58.58	0.00	0.00	0.00	0.00
L34	58.58-53.58	0.00	0.00	0.00	0.00
L35	53.58-42.88	0.00	0.00	0.00	0.00
L36	42.88-41.88	0.00	0.00	0.00	0.00
L37	41.88-36.88	0.00	0.00	0.00	0.00
L38	36.88-34.92	0.00	0.00	0.00	0.00
L39	34.92-34.67	0.00	0.00	0.00	0.00
L40	34.67-34.33	0.00	0.00	0.00	0.00
L41	34.33-34.08	0.00	0.00	0.00	0.00
L42	34.08-29.08	0.00	0.00	0.00	0.00
L43	29.08-24.08	0.00	0.00	0.00	0.00
L44	24.08-19.08	0.00	0.00	0.00	0.00
L45	19.08-14.08	0.00	0.00	0.00	0.00
L46	14.08-9.08	0.00	0.00	0.00	0.00
L47	9.08-4.08	0.00	0.00	0.00	0.00
L48	4.08-0.00	0.00	0.00	0.00	0.00

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
L10	35	100FP-040100	132.00 - 132.75	1.0000	1.0000

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Crown Castle

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<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
L10	36	100FP-040100	132.00 - 132.75	1.0000	1.0000
L10	37	100FP-040100	132.00 - 132.75	1.0000	1.0000
L11	35	100FP-040100	131.08 - 132.00	1.0000	1.0000
L11	36	100FP-040100	131.08 - 132.00	1.0000	1.0000
L11	37	100FP-040100	131.08 - 132.00	1.0000	1.0000
L12	35	100FP-040100	130.83 - 131.08	1.0000	1.0000
L12	36	100FP-040100	130.83 - 131.08	1.0000	1.0000
L12	37	100FP-040100	130.83 - 131.08	1.0000	1.0000
L13	35	100FP-040100	125.83 - 130.83	1.0000	1.0000
L13	36	100FP-040100	125.83 - 130.83	1.0000	1.0000
L13	37	100FP-040100	125.83 - 130.83	1.0000	1.0000
L14	35	100FP-040100	120.83 - 125.83	1.0000	1.0000
L14	36	100FP-040100	120.83 - 125.83	1.0000	1.0000
L14	37	100FP-040100	120.83 - 125.83	1.0000	1.0000
L15	35	100FP-040100	115.83 - 120.83	1.0000	1.0000
L15	36	100FP-040100	115.83 - 120.83	1.0000	1.0000
L15	37	100FP-040100	115.83 - 120.83	1.0000	1.0000
L16	35	100FP-040100	110.83 - 115.83	1.0000	1.0000
L16	36	100FP-040100	110.83 - 115.83	1.0000	1.0000
L16	37	100FP-040100	110.83 - 115.83	1.0000	1.0000
L17	31	100FP-050100	105.83 - 106.75	1.0000	1.0000
L17	32	100FP-050100	105.83 - 106.75	1.0000	1.0000
L17	33	100FP-050100	105.83 - 106.75	1.0000	1.0000
L17	35	100FP-040100	105.83 - 110.83	1.0000	1.0000
L17	36	100FP-040100	105.83 - 110.83	1.0000	1.0000
L17	37	100FP-040100	105.83 - 110.83	1.0000	1.0000
L18	31	100FP-050100	104.57 - 105.83	1.0000	1.0000
L18	32	100FP-050100	104.57 - 105.83	1.0000	1.0000
L18	33	100FP-050100	104.57 - 105.83	1.0000	1.0000
L18	35	100FP-040100	104.57 - 105.83	1.0000	1.0000
L18	36	100FP-040100	104.57 - 105.83	1.0000	1.0000

<i>Tower Section</i>	<i>Feed Line Record No.</i>	<i>Description</i>	<i>Feed Line Segment Elev.</i>	<i>K_a No Ice</i>	<i>K_a Ice</i>
L18	37	100FP-040100	104.57 - 105.83	1.0000	1.0000
L19	31	100FP-050100	104.23 - 104.57	1.0000	1.0000
L19	32	100FP-050100	104.23 - 104.57	1.0000	1.0000
L19	33	100FP-050100	104.23 - 104.57	1.0000	1.0000
L19	35	100FP-040100	104.23 - 104.57	1.0000	1.0000
L19	36	100FP-040100	104.23 - 104.57	1.0000	1.0000
L19	37	100FP-040100	104.23 - 104.57	1.0000	1.0000
L20	31	100FP-050100	104.08 - 104.23	1.0000	1.0000
L20	32	100FP-050100	104.08 - 104.23	1.0000	1.0000
L20	33	100FP-050100	104.08 - 104.23	1.0000	1.0000
L20	35	100FP-040100	104.08 - 104.23	1.0000	1.0000
L20	36	100FP-040100	104.08 - 104.23	1.0000	1.0000
L20	37	100FP-040100	104.08 - 104.23	1.0000	1.0000
L21	31	100FP-050100	99.08 - 104.08	1.0000	1.0000
L21	32	100FP-050100	99.08 - 104.08	1.0000	1.0000
L21	33	100FP-050100	99.08 - 104.08	1.0000	1.0000
L21	35	100FP-040100	102.90 - 104.08	1.0000	1.0000
L21	36	100FP-040100	102.90 - 104.08	1.0000	1.0000
L21	37	100FP-040100	102.90 - 104.08	1.0000	1.0000
L22	31	100FP-050100	94.08 - 99.08	1.0000	1.0000
L22	32	100FP-050100	94.08 - 99.08	1.0000	1.0000
L22	33	100FP-050100	94.08 - 99.08	1.0000	1.0000
L23	31	100FP-050100	87.42 - 94.08	1.0000	1.0000
L23	32	100FP-050100	87.42 - 94.08	1.0000	1.0000
L23	33	100FP-050100	87.42 - 94.08	1.0000	1.0000
L24	31	100FP-050100	86.42 - 87.42	1.0000	1.0000
L24	32	100FP-050100	86.42 - 87.42	1.0000	1.0000
L24	33	100FP-050100	86.42 - 87.42	1.0000	1.0000
L25	31	100FP-050100	81.42 - 86.42	1.0000	1.0000
L25	32	100FP-050100	81.42 - 86.42	1.0000	1.0000
L25	33	100FP-050100	81.42 - 86.42	1.0000	1.0000
L26	31	100FP-050100	76.42 - 81.42	1.0000	1.0000
L26	32	100FP-050100	76.42 - 81.42	1.0000	1.0000
L26	33	100FP-050100	76.42 - 81.42	1.0000	1.0000
L27	27	100FP-060100	71.42 - 71.75	1.0000	1.0000
L27	28	100FP-060100	71.42 - 71.75	1.0000	1.0000
L27	29	100FP-060100	71.42 - 71.75	1.0000	1.0000
L27	31	100FP-050100	71.42 - 76.42	1.0000	1.0000
L27	32	100FP-050100	71.42 - 76.42	1.0000	1.0000
L27	33	100FP-050100	71.42 - 76.42	1.0000	1.0000
L28	27	100FP-060100	69.32 - 71.42	1.0000	1.0000
L28	28	100FP-060100	69.32 - 71.42	1.0000	1.0000
L28	29	100FP-060100	69.32 - 71.42	1.0000	1.0000
L28	31	100FP-050100	69.32 - 71.42	1.0000	1.0000
L28	32	100FP-050100	69.32 - 71.42	1.0000	1.0000
L28	33	100FP-050100	69.32 - 71.42	1.0000	1.0000

<p>tnxTower</p> <p><i>Tower Engineering Professionals, Inc.</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350</p>	Job Walden / Carolyn Besade (BU 876371)	Page 17 of 45
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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L29	27	100FP-060100	69.07 - 69.32	1.0000	1.0000
L29	28	100FP-060100	69.07 - 69.32	1.0000	1.0000
L29	29	100FP-060100	69.07 - 69.32	1.0000	1.0000
L29	31	100FP-050100	69.07 - 69.32	1.0000	1.0000
L29	32	100FP-050100	69.07 - 69.32	1.0000	1.0000
L29	33	100FP-050100	69.07 - 69.32	1.0000	1.0000
L30	27	100FP-060100	68.83 - 69.07	1.0000	1.0000
L30	28	100FP-060100	68.83 - 69.07	1.0000	1.0000
L30	29	100FP-060100	68.83 - 69.07	1.0000	1.0000
L30	31	100FP-050100	68.83 - 69.07	1.0000	1.0000
L30	32	100FP-050100	68.83 - 69.07	1.0000	1.0000
L30	33	100FP-050100	68.83 - 69.07	1.0000	1.0000
L31	27	100FP-060100	68.58 - 68.83	1.0000	1.0000
L31	28	100FP-060100	68.58 - 68.83	1.0000	1.0000
L31	29	100FP-060100	68.58 - 68.83	1.0000	1.0000
L31	31	100FP-050100	68.58 - 68.83	1.0000	1.0000
L31	32	100FP-050100	68.58 - 68.83	1.0000	1.0000
L31	33	100FP-050100	68.58 - 68.83	1.0000	1.0000
L32	27	100FP-060100	63.58 - 68.58	1.0000	1.0000
L32	28	100FP-060100	63.58 - 68.58	1.0000	1.0000
L32	29	100FP-060100	63.58 - 68.58	1.0000	1.0000
L32	31	100FP-050100	66.90 - 68.58	1.0000	1.0000
L32	32	100FP-050100	66.90 - 68.58	1.0000	1.0000
L32	33	100FP-050100	66.90 - 68.58	1.0000	1.0000
L33	27	100FP-060100	58.58 - 63.58	1.0000	1.0000
L33	28	100FP-060100	58.58 - 63.58	1.0000	1.0000
L33	29	100FP-060100	58.58 - 63.58	1.0000	1.0000
L34	27	100FP-060100	53.58 - 58.58	1.0000	1.0000
L34	28	100FP-060100	53.58 - 58.58	1.0000	1.0000
L34	29	100FP-060100	53.58 - 58.58	1.0000	1.0000
L35	27	100FP-060100	42.88 - 53.58	1.0000	1.0000
L35	28	100FP-060100	42.88 - 53.58	1.0000	1.0000
L35	29	100FP-060100	42.88 - 53.58	1.0000	1.0000
L36	27	100FP-060100	41.88 - 42.88	1.0000	1.0000
L36	28	100FP-060100	41.88 - 42.88	1.0000	1.0000
L36	29	100FP-060100	41.88 - 42.88	1.0000	1.0000
L37	27	100FP-060100	36.88 - 41.88	1.0000	1.0000
L37	28	100FP-060100	36.88 - 41.88	1.0000	1.0000
L37	29	100FP-060100	36.88 - 41.88	1.0000	1.0000
L38	23	100FP-050100	34.92 - 36.75	1.0000	1.0000
L38	24	100FP-050100	34.92 - 36.75	1.0000	1.0000
L38	25	100FP-050100	34.92 - 36.75	1.0000	1.0000
L38	27	100FP-060100	34.92 - 36.88	1.0000	1.0000
L38	28	100FP-060100	34.92 - 36.88	1.0000	1.0000
L38	29	100FP-060100	34.92 - 36.88	1.0000	1.0000
L39	23	100FP-050100	34.67 - 34.92	1.0000	1.0000
L39	24	100FP-050100	34.67 - 34.92	1.0000	1.0000
L39	25	100FP-050100	34.67 - 34.92	1.0000	1.0000
L39	27	100FP-060100	34.67 - 34.92	1.0000	1.0000
L39	28	100FP-060100	34.67 - 34.92	1.0000	1.0000
L39	29	100FP-060100	34.67 - 34.92	1.0000	1.0000
L40	23	100FP-050100	34.33 - 34.67	1.0000	1.0000
L40	24	100FP-050100	34.33 - 34.67	1.0000	1.0000
L40	25	100FP-050100	34.33 - 34.67	1.0000	1.0000
L40	27	100FP-060100	34.33 - 34.67	1.0000	1.0000
L40	28	100FP-060100	34.33 - 34.67	1.0000	1.0000
L40	29	100FP-060100	34.33 - 34.67	1.0000	1.0000
L41	23	100FP-050100	34.08 - 34.33	1.0000	1.0000
L41	24	100FP-050100	34.08 - 34.33	1.0000	1.0000
L41	25	100FP-050100	34.08 - 34.33	1.0000	1.0000
L41	27	100FP-060100	34.08 - 34.33	1.0000	1.0000
L41	28	100FP-060100	34.08 - 34.33	1.0000	1.0000

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Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K_a No Ice	K_a Ice
L41	29	100FP-060100	34.08 - 34.33	1.0000	1.0000
L42	23	100FP-050100	29.08 - 34.08	1.0000	1.0000
L42	24	100FP-050100	29.08 - 34.08	1.0000	1.0000
L42	25	100FP-050100	29.08 - 34.08	1.0000	1.0000
L42	27	100FP-060100	32.00 - 34.08	1.0000	1.0000
L42	28	100FP-060100	32.00 - 34.08	1.0000	1.0000
L42	29	100FP-060100	32.00 - 34.08	1.0000	1.0000
L43	23	100FP-050100	24.08 - 29.08	1.0000	1.0000
L43	24	100FP-050100	24.08 - 29.08	1.0000	1.0000
L43	25	100FP-050100	24.08 - 29.08	1.0000	1.0000
L44	23	100FP-050100	19.08 - 24.08	1.0000	1.0000
L44	24	100FP-050100	19.08 - 24.08	1.0000	1.0000
L44	25	100FP-050100	19.08 - 24.08	1.0000	1.0000
L45	23	100FP-050100	14.08 - 19.08	1.0000	1.0000
L45	24	100FP-050100	14.08 - 19.08	1.0000	1.0000
L45	25	100FP-050100	14.08 - 19.08	1.0000	1.0000
L46	23	100FP-050100	9.08 - 14.08	1.0000	1.0000
L46	24	100FP-050100	9.08 - 14.08	1.0000	1.0000
L46	25	100FP-050100	9.08 - 14.08	1.0000	1.0000
L47	23	100FP-050100	4.08 - 9.08	1.0000	1.0000
L47	24	100FP-050100	4.08 - 9.08	1.0000	1.0000
L47	25	100FP-050100	4.08 - 9.08	1.0000	1.0000
L48	23	100FP-050100	0.00 - 4.08	1.0000	1.0000
L48	24	100FP-050100	0.00 - 4.08	1.0000	1.0000
L48	25	100FP-050100	0.00 - 4.08	1.0000	1.0000

Effective Width of Flat Linear Attachments / Feed Lines

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L10	35	100FP-040100	132.00 - 132.75	Auto	0.0000
L10	36	100FP-040100	132.00 - 132.75	Auto	0.0000
L10	37	100FP-040100	132.00 - 132.75	Auto	0.0000
L11	35	100FP-040100	131.08 - 132.00	Auto	0.0000
L11	36	100FP-040100	131.08 - 132.00	Auto	0.0000
L11	37	100FP-040100	131.08 - 132.00	Auto	0.0000
L12	35	100FP-040100	130.83 - 131.08	Auto	0.0000
L12	36	100FP-040100	130.83 - 131.08	Auto	0.0000
L12	37	100FP-040100	130.83 - 131.08	Auto	0.0000
L13	35	100FP-040100	125.83 - 130.83	Auto	0.0000
L13	36	100FP-040100	125.83 - 130.83	Auto	0.0000
L13	37	100FP-040100	125.83 -	Auto	0.0000

tnxTower**Tower Engineering
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FAX: (919) 661 6350**Job**

Walden / Carolyn Besade (BU 876371)

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Project

TEP No. 25624.594684

Date

15:43:23 09/03/21

Client

Crown Castle

Designed by

djbrevig

<i>Tower Section</i>	<i>Attachment Record No.</i>	<i>Description</i>	<i>Attachment Segment Elev.</i>	<i>Ratio Calculation Method</i>	<i>Effective Width Ratio</i>
L14	35	100FP-040100	130.83 120.83 - 125.83	Auto	0.0000
L14	36	100FP-040100	120.83 - 125.83	Auto	0.0000
L14	37	100FP-040100	120.83 - 125.83	Auto	0.0000
L15	35	100FP-040100	115.83 - 120.83	Auto	0.0000
L15	36	100FP-040100	115.83 - 120.83	Auto	0.0000
L15	37	100FP-040100	115.83 - 120.83	Auto	0.0000
L16	35	100FP-040100	110.83 - 115.83	Auto	0.0000
L16	36	100FP-040100	110.83 - 115.83	Auto	0.0000
L16	37	100FP-040100	110.83 - 115.83	Auto	0.0000
L17	31	100FP-050100	105.83 - 106.75	Auto	0.0000
L17	32	100FP-050100	105.83 - 106.75	Auto	0.0000
L17	33	100FP-050100	105.83 - 106.75	Auto	0.0000
L17	35	100FP-040100	105.83 - 110.83	Auto	0.0000
L17	36	100FP-040100	105.83 - 110.83	Auto	0.0000
L17	37	100FP-040100	105.83 - 110.83	Auto	0.0000
L18	31	100FP-050100	104.57 - 105.83	Auto	0.0000
L18	32	100FP-050100	104.57 - 105.83	Auto	0.0000
L18	33	100FP-050100	104.57 - 105.83	Auto	0.0000
L18	35	100FP-040100	104.57 - 105.83	Auto	0.0000
L18	36	100FP-040100	104.57 - 105.83	Auto	0.0000
L18	37	100FP-040100	104.57 - 105.83	Auto	0.0000
L19	31	100FP-050100	104.23 - 104.57	Auto	0.0000
L19	32	100FP-050100	104.23 - 104.57	Auto	0.0000
L19	33	100FP-050100	104.23 - 104.57	Auto	0.0000
L19	35	100FP-040100	104.23 - 104.57	Auto	0.0000
L19	36	100FP-040100	104.23 - 104.57	Auto	0.0000
L19	37	100FP-040100	104.23 - 104.57	Auto	0.0000
L20	31	100FP-050100	104.08 - 104.23	Auto	0.0000
L20	32	100FP-050100	104.08 - 104.23	Auto	0.0000
L20	33	100FP-050100	104.08 - 104.23	Auto	0.0000

<i>Tower Section</i>	<i>Attachment Record No.</i>	<i>Description</i>	<i>Attachment Segment Elev.</i>	<i>Ratio Calculation Method</i>	<i>Effective Width Ratio</i>
L20	35	100FP-040100	104.08 - 104.23	Auto	0.0000
L20	36	100FP-040100	104.08 - 104.23	Auto	0.0000
L20	37	100FP-040100	104.08 - 104.23	Auto	0.0000
L21	31	100FP-050100	99.08 - 104.08	Auto	0.0000
L21	32	100FP-050100	99.08 - 104.08	Auto	0.0000
L21	33	100FP-050100	99.08 - 104.08	Auto	0.0000
L21	35	100FP-040100	102.90 - 104.08	Auto	0.0000
L21	36	100FP-040100	102.90 - 104.08	Auto	0.0000
L21	37	100FP-040100	102.90 - 104.08	Auto	0.0000
L22	31	100FP-050100	94.08 - 99.08	Auto	0.0000
L22	32	100FP-050100	94.08 - 99.08	Auto	0.0000
L22	33	100FP-050100	94.08 - 99.08	Auto	0.0000
L23	31	100FP-050100	87.42 - 94.08	Auto	0.0000
L23	32	100FP-050100	87.42 - 94.08	Auto	0.0000
L23	33	100FP-050100	87.42 - 94.08	Auto	0.0000
L24	31	100FP-050100	86.42 - 87.42	Auto	0.0000
L24	32	100FP-050100	86.42 - 87.42	Auto	0.0000
L24	33	100FP-050100	86.42 - 87.42	Auto	0.0000
L25	31	100FP-050100	81.42 - 86.42	Auto	0.0000
L25	32	100FP-050100	81.42 - 86.42	Auto	0.0000
L25	33	100FP-050100	81.42 - 86.42	Auto	0.0000
L26	31	100FP-050100	76.42 - 81.42	Auto	0.0000
L26	32	100FP-050100	76.42 - 81.42	Auto	0.0000
L26	33	100FP-050100	76.42 - 81.42	Auto	0.0000
L27	27	100FP-060100	71.42 - 71.75	Auto	0.0000
L27	28	100FP-060100	71.42 - 71.75	Auto	0.0000
L27	29	100FP-060100	71.42 - 71.75	Auto	0.0000
L27	31	100FP-050100	71.42 - 76.42	Auto	0.0000
L27	32	100FP-050100	71.42 - 76.42	Auto	0.0000
L27	33	100FP-050100	71.42 - 76.42	Auto	0.0000
L28	27	100FP-060100	69.32 - 71.42	Auto	0.0000
L28	28	100FP-060100	69.32 - 71.42	Auto	0.0000
L28	29	100FP-060100	69.32 - 71.42	Auto	0.0000
L28	31	100FP-050100	69.32 - 71.42	Auto	0.0000
L28	32	100FP-050100	69.32 - 71.42	Auto	0.0000
L28	33	100FP-050100	69.32 - 71.42	Auto	0.0000
L29	27	100FP-060100	69.07 - 69.32	Auto	0.0000
L29	28	100FP-060100	69.07 - 69.32	Auto	0.0000
L29	29	100FP-060100	69.07 - 69.32	Auto	0.0000
L29	31	100FP-050100	69.07 - 69.32	Auto	0.0000
L29	32	100FP-050100	69.07 - 69.32	Auto	0.0000
L29	33	100FP-050100	69.07 - 69.32	Auto	0.0000
L30	27	100FP-060100	68.83 - 69.07	Auto	0.0000
L30	28	100FP-060100	68.83 - 69.07	Auto	0.0000
L30	29	100FP-060100	68.83 - 69.07	Auto	0.0000
L30	31	100FP-050100	68.83 - 69.07	Auto	0.0000
L30	32	100FP-050100	68.83 - 69.07	Auto	0.0000
L30	33	100FP-050100	68.83 - 69.07	Auto	0.0000
L31	27	100FP-060100	68.58 - 68.83	Auto	0.0000
L31	28	100FP-060100	68.58 - 68.83	Auto	0.0000
L31	29	100FP-060100	68.58 - 68.83	Auto	0.0000
L31	31	100FP-050100	68.58 - 68.83	Auto	0.0000
L31	32	100FP-050100	68.58 - 68.83	Auto	0.0000
L31	33	100FP-050100	68.58 - 68.83	Auto	0.0000
L32	27	100FP-060100	63.58 - 68.58	Auto	0.0000

tnxTower**Tower Engineering
Professionals, Inc.**326 Tryon Road
Raleigh, NC 27603
Phone: (919) 661 6351
FAX: (919) 661 6350**Job**

Walden / Carolyn Besade (BU 876371)

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Project

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Date

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Client

Crown Castle

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<i>Tower Section</i>	<i>Attachment Record No.</i>	<i>Description</i>	<i>Attachment Segment Elev.</i>	<i>Ratio Calculation Method</i>	<i>Effective Width Ratio</i>
L32	28	100FP-060100	63.58 - 68.58	Auto	0.0000
L32	29	100FP-060100	63.58 - 68.58	Auto	0.0000
L32	31	100FP-050100	66.90 - 68.58	Auto	0.0000
L32	32	100FP-050100	66.90 - 68.58	Auto	0.0000
L32	33	100FP-050100	66.90 - 68.58	Auto	0.0000
L33	27	100FP-060100	58.58 - 63.58	Auto	0.0000
L33	28	100FP-060100	58.58 - 63.58	Auto	0.0000
L33	29	100FP-060100	58.58 - 63.58	Auto	0.0000
L34	27	100FP-060100	53.58 - 58.58	Auto	0.0000
L34	28	100FP-060100	53.58 - 58.58	Auto	0.0000
L34	29	100FP-060100	53.58 - 58.58	Auto	0.0000
L35	27	100FP-060100	42.88 - 53.58	Auto	0.0000
L35	28	100FP-060100	42.88 - 53.58	Auto	0.0000
L35	29	100FP-060100	42.88 - 53.58	Auto	0.0000
L36	27	100FP-060100	41.88 - 42.88	Auto	0.0000
L36	28	100FP-060100	41.88 - 42.88	Auto	0.0000
L36	29	100FP-060100	41.88 - 42.88	Auto	0.0000
L37	27	100FP-060100	36.88 - 41.88	Auto	0.0000
L37	28	100FP-060100	36.88 - 41.88	Auto	0.0000
L37	29	100FP-060100	36.88 - 41.88	Auto	0.0000
L38	23	100FP-050100	34.92 - 36.75	Auto	0.0000
L38	24	100FP-050100	34.92 - 36.75	Auto	0.0000
L38	25	100FP-050100	34.92 - 36.75	Auto	0.0000
L38	27	100FP-060100	34.92 - 36.88	Auto	0.0000
L38	28	100FP-060100	34.92 - 36.88	Auto	0.0000
L38	29	100FP-060100	34.92 - 36.88	Auto	0.0000
L39	23	100FP-050100	34.67 - 34.92	Auto	0.0000
L39	24	100FP-050100	34.67 - 34.92	Auto	0.0000
L39	25	100FP-050100	34.67 - 34.92	Auto	0.0000
L39	27	100FP-060100	34.67 - 34.92	Auto	0.0000
L39	28	100FP-060100	34.67 - 34.92	Auto	0.0000
L39	29	100FP-060100	34.67 - 34.92	Auto	0.0000
L40	23	100FP-050100	34.33 - 34.67	Auto	0.0000
L40	24	100FP-050100	34.33 - 34.67	Auto	0.0000
L40	25	100FP-050100	34.33 - 34.67	Auto	0.0000
L40	27	100FP-060100	34.33 - 34.67	Auto	0.0000
L40	28	100FP-060100	34.33 - 34.67	Auto	0.0000
L40	29	100FP-060100	34.33 - 34.67	Auto	0.0000
L41	23	100FP-050100	34.08 - 34.33	Auto	0.0000
L41	24	100FP-050100	34.08 - 34.33	Auto	0.0000
L41	25	100FP-050100	34.08 - 34.33	Auto	0.0000
L41	27	100FP-060100	34.08 - 34.33	Auto	0.0000
L41	28	100FP-060100	34.08 - 34.33	Auto	0.0000
L41	29	100FP-060100	34.08 - 34.33	Auto	0.0000
L42	23	100FP-050100	29.08 - 34.08	Auto	0.0000
L42	24	100FP-050100	29.08 - 34.08	Auto	0.0000
L42	25	100FP-050100	29.08 - 34.08	Auto	0.0000
L42	27	100FP-060100	32.00 - 34.08	Auto	0.0000
L42	28	100FP-060100	32.00 - 34.08	Auto	0.0000
L42	29	100FP-060100	32.00 - 34.08	Auto	0.0000
L43	23	100FP-050100	24.08 - 29.08	Auto	0.0000
L43	24	100FP-050100	24.08 - 29.08	Auto	0.0000
L43	25	100FP-050100	24.08 - 29.08	Auto	0.0000
L44	23	100FP-050100	19.08 - 24.08	Auto	0.0000
L44	24	100FP-050100	19.08 - 24.08	Auto	0.0000
L44	25	100FP-050100	19.08 - 24.08	Auto	0.0000
L45	23	100FP-050100	14.08 - 19.08	Auto	0.0000
L45	24	100FP-050100	14.08 - 19.08	Auto	0.0000
L45	25	100FP-050100	14.08 - 19.08	Auto	0.0000
L46	23	100FP-050100	9.08 - 14.08	Auto	0.0000
L46	24	100FP-050100	9.08 - 14.08	Auto	0.0000

tnxTower Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350	Job	Walden / Carolyn Besade (BU 876371)	Page	22 of 45
	Project	TEP No. 25624.594684	Date	15:43:23 09/03/21
	Client	Crown Castle	Designed by	djbrevig

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L46	25	100FP-050100	9.08 - 14.08	Auto	0.0000
L47	23	100FP-050100	4.08 - 9.08	Auto	0.0000
L47	24	100FP-050100	4.08 - 9.08	Auto	0.0000
L47	25	100FP-050100	4.08 - 9.08	Auto	0.0000
L48	23	100FP-050100	0.00 - 4.08	Auto	0.0000
L48	24	100FP-050100	0.00 - 4.08	Auto	0.0000
L48	25	100FP-050100	0.00 - 4.08	Auto	0.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight	
			Horz Lateral	Vert						
			ft	ft	°	ft	ft ²	ft ²	K	
*** 180 ***										
AIR6449 B41_T-MOBILE w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	0.00	180.00	No Ice	5.19	2.71	0.13
			0.00	0.00			1/2" Ice	5.59	3.04	0.17
			0.00	0.00			1" Ice	6.02	3.38	0.23
			0.00	0.00			2" Ice	6.90	4.12	0.35
AIR6449 B41_T-MOBILE w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	0.00	180.00	No Ice	5.19	2.71	0.13
			0.00	0.00			1/2" Ice	5.59	3.04	0.17
			0.00	0.00			1" Ice	6.02	3.38	0.23
			0.00	0.00			2" Ice	6.90	4.12	0.35
AIR6449 B41_T-MOBILE w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	0.00	180.00	No Ice	5.19	2.71	0.13
			0.00	0.00			1/2" Ice	5.59	3.04	0.17
			0.00	0.00			1" Ice	6.02	3.38	0.23
			0.00	0.00			2" Ice	6.90	4.12	0.35
APX16DWV-16DWV-S-E-A 20 w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	0.00	180.00	No Ice	6.29	2.76	0.06
			0.00	0.00			1/2" Ice	6.86	3.27	0.11
			0.00	0.00			1" Ice	7.45	3.79	0.16
			0.00	0.00			2" Ice	8.68	4.90	0.29
APX16DWV-16DWV-S-E-A 20 w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	0.00	180.00	No Ice	6.29	2.76	0.06
			0.00	0.00			1/2" Ice	6.86	3.27	0.11
			0.00	0.00			1" Ice	7.45	3.79	0.16
			0.00	0.00			2" Ice	8.68	4.90	0.29
APX16DWV-16DWV-S-E-A 20 w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	0.00	180.00	No Ice	6.29	2.76	0.06
			0.00	0.00			1/2" Ice	6.86	3.27	0.11
			0.00	0.00			1" Ice	7.45	3.79	0.16
			0.00	0.00			2" Ice	8.68	4.90	0.29
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	0.00	180.00	No Ice	14.69	6.87	0.18
			0.00	0.00			1/2" Ice	15.46	7.55	0.31
			0.00	0.00			1" Ice	16.23	8.25	0.45
			0.00	0.00			2" Ice	17.82	9.67	0.78
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	0.00	180.00	No Ice	14.69	6.87	0.18
			0.00	0.00			1/2" Ice	15.46	7.55	0.31
			0.00	0.00			1" Ice	16.23	8.25	0.45
			0.00	0.00			2" Ice	17.82	9.67	0.78
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	0.00	180.00	No Ice	14.69	6.87	0.18
			0.00	0.00			1/2" Ice	15.46	7.55	0.31
			0.00	0.00			1" Ice	16.23	8.25	0.45
			0.00	0.00			2" Ice	17.82	9.67	0.78

tnxTower Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350	Job	Walden / Carolyn Besade (BU 876371)	Page	23 of 45
	Project	TEP No. 25624.594684	Date	15:43:23 09/03/21
	Client	Crown Castle	Designed by	djbrevig

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	CAAA		Weight	
			Horz	Vert			Front	Side		
			ft	ft	°	ft	ft ²	ft ²	K	
RADIO 4415 B66A	A	From	4.00	0.00	0.00	180.00	No Ice	1.86	0.87	0.05
		Centroid-Le	0.00	0.00			1/2" Ice	2.03	1.00	0.06
		g	0.00	0.00			1" Ice	2.20	1.13	0.08
							2" Ice	2.58	1.43	0.12
RADIO 4415 B66A	B	From	4.00	0.00	0.00	180.00	No Ice	1.86	0.87	0.05
		Centroid-Le	0.00	0.00			1/2" Ice	2.03	1.00	0.06
		g	0.00	0.00			1" Ice	2.20	1.13	0.08
							2" Ice	2.58	1.43	0.12
RADIO 4415 B66A	C	From	4.00	0.00	0.00	180.00	No Ice	1.86	0.87	0.05
		Centroid-Le	0.00	0.00			1/2" Ice	2.03	1.00	0.06
		g	0.00	0.00			1" Ice	2.20	1.13	0.08
							2" Ice	2.58	1.43	0.12
RADIO 4424 B25_TMO	A	From	4.00	0.00	0.00	180.00	No Ice	2.05	1.61	0.09
		Centroid-Le	0.00	0.00			1/2" Ice	2.23	1.77	0.11
		g	0.00	0.00			1" Ice	2.42	1.94	0.13
							2" Ice	2.81	2.30	0.19
RADIO 4424 B25_TMO	B	From	4.00	0.00	0.00	180.00	No Ice	2.05	1.61	0.09
		Centroid-Le	0.00	0.00			1/2" Ice	2.23	1.77	0.11
		g	0.00	0.00			1" Ice	2.42	1.94	0.13
							2" Ice	2.81	2.30	0.19
RADIO 4424 B25_TMO	C	From	4.00	0.00	0.00	180.00	No Ice	2.05	1.61	0.09
		Centroid-Le	0.00	0.00			1/2" Ice	2.23	1.77	0.11
		g	0.00	0.00			1" Ice	2.42	1.94	0.13
							2" Ice	2.81	2.30	0.19
RADIO 4449 B71 B85A_T-MOBILE	A	From	4.00	0.00	0.00	180.00	No Ice	1.97	1.59	0.07
		Centroid-Le	0.00	0.00			1/2" Ice	2.15	1.75	0.09
		g	0.00	0.00			1" Ice	2.33	1.92	0.12
							2" Ice	2.72	2.28	0.17
RADIO 4449 B71 B85A_T-MOBILE	B	From	4.00	0.00	0.00	180.00	No Ice	1.97	1.59	0.07
		Centroid-Le	0.00	0.00			1/2" Ice	2.15	1.75	0.09
		g	0.00	0.00			1" Ice	2.33	1.92	0.12
							2" Ice	2.72	2.28	0.17
RADIO 4449 B71 B85A_T-MOBILE	C	From	4.00	0.00	0.00	180.00	No Ice	1.97	1.59	0.07
		Centroid-Le	0.00	0.00			1/2" Ice	2.15	1.75	0.09
		g	0.00	0.00			1" Ice	2.33	1.92	0.12
							2" Ice	2.72	2.28	0.17
1-5/8" x 1-5/8" Unistrut (36" length)	A	From	4.00	0.00	0.00	180.00	No Ice	0.77	0.77	0.00
		Centroid-Le	0.00	0.00			1/2" Ice	0.99	0.99	0.01
		g	0.00	0.00			1" Ice	1.22	1.22	0.02
							2" Ice	1.69	1.69	0.04
1-5/8" x 1-5/8" Unistrut (36" length)	B	From	4.00	0.00	0.00	180.00	No Ice	0.77	0.77	0.00
		Centroid-Le	0.00	0.00			1/2" Ice	0.99	0.99	0.01
		g	0.00	0.00			1" Ice	1.22	1.22	0.02
							2" Ice	1.69	1.69	0.04
1-5/8" x 1-5/8" Unistrut (36" length)	C	From	4.00	0.00	0.00	180.00	No Ice	0.77	0.77	0.00
		Centroid-Le	0.00	0.00			1/2" Ice	0.99	0.99	0.01
		g	0.00	0.00			1" Ice	1.22	1.22	0.02
							2" Ice	1.69	1.69	0.04
Platform Mount [LP 712-1_KCKR]	C	None		0.00	0.00	180.00	No Ice	35.78	35.78	1.61
							1/2" Ice	42.14	42.14	2.33
							1" Ice	48.66	48.66	3.15
							2" Ice	62.23	62.23	5.06
(2) Miscellaneous [NA 507-1]	C	None		0.00	0.00	180.00	No Ice	4.56	4.56	0.25
							1/2" Ice	6.39	6.39	0.31
							1" Ice	8.18	8.18	0.40
							2" Ice	11.66	11.66	0.66
8' Ladder	A	From Leg	2.00	0.00	0.00	180.00	No Ice	1.53	5.33	0.10

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	Project	TEP No. 25624.594684	Date	15:43:23 09/03/21
	Client	Crown Castle	Designed by	djbrevig

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Vert					
			ft	ft	°	ft	ft ²	ft ²	K
			0.00			1/2" Ice	4.36	8.08	0.11
			-4.00			1" Ice	7.19	10.83	0.13
						2" Ice	12.86	16.33	0.16
165									
(2) LPA-80080-6CF-EDIN w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	165.00	No Ice	4.56	10.27	0.05
			0.00			1/2" Ice	5.10	11.44	0.11
			4.00			1" Ice	5.61	12.32	0.19
						2" Ice	6.65	14.14	0.36
(2) LPA-80063/6CF w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	165.00	No Ice	10.06	10.45	0.06
			0.00			1/2" Ice	10.75	11.74	0.15
			4.00			1" Ice	11.40	12.87	0.25
						2" Ice	12.62	14.82	0.49
(2) LPA-80063/6CF w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	165.00	No Ice	10.06	10.45	0.06
			0.00			1/2" Ice	10.75	11.74	0.15
			4.00			1" Ice	11.40	12.87	0.25
						2" Ice	12.62	14.82	0.49
GPS_A	A	From Centroid-Le g	4.00	0.00	165.00	No Ice	0.11	0.11	0.00
			0.00			1/2" Ice	0.21	0.21	0.00
			2.00			1" Ice	0.28	0.28	0.01
						2" Ice	0.44	0.44	0.02
(2) NHH-65B-R2B w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	165.00	No Ice	4.09	3.29	0.07
			0.00			1/2" Ice	4.48	3.67	0.13
			4.00			1" Ice	4.88	4.06	0.21
						2" Ice	5.70	4.86	0.39
(2) NHH-65B-R2B w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	165.00	No Ice	4.09	3.29	0.07
			0.00			1/2" Ice	4.48	3.67	0.13
			4.00			1" Ice	4.88	4.06	0.21
						2" Ice	5.70	4.86	0.39
(2) NHH-65B-R2B w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	165.00	No Ice	4.09	3.29	0.07
			0.00			1/2" Ice	4.48	3.67	0.13
			4.00			1" Ice	4.88	4.06	0.21
						2" Ice	5.70	4.86	0.39
MT6407-77A w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	165.00	No Ice	4.91	2.68	0.10
			0.00			1/2" Ice	5.26	3.14	0.14
			4.00			1" Ice	5.61	3.62	0.18
						2" Ice	6.36	4.63	0.29
MT6407-77A w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	165.00	No Ice	4.91	2.68	0.10
			0.00			1/2" Ice	5.26	3.14	0.14
			4.00			1" Ice	5.61	3.62	0.18
						2" Ice	6.36	4.63	0.29
MT6407-77A w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	165.00	No Ice	4.91	2.68	0.10
			0.00			1/2" Ice	5.26	3.14	0.14
			4.00			1" Ice	5.61	3.62	0.18
						2" Ice	6.36	4.63	0.29
(2) RF4439D-25A	A	From Centroid-Le g	4.00	0.00	165.00	No Ice	1.87	1.25	0.07
			0.00			1/2" Ice	2.03	1.39	0.09
			4.00			1" Ice	2.21	1.54	0.11
						2" Ice	2.59	1.87	0.17
RF4439D-25A	B	From Centroid-Le g	4.00	0.00	165.00	No Ice	1.87	1.25	0.07
			0.00			1/2" Ice	2.03	1.39	0.09
			4.00			1" Ice	2.21	1.54	0.11
						2" Ice	2.59	1.87	0.17
RF4440D-13A	A	From Centroid-Le g	4.00	0.00	165.00	No Ice	1.87	1.13	0.07
			0.00			1/2" Ice	2.03	1.27	0.09
			4.00			1" Ice	2.21	1.41	0.11
						2" Ice	2.59	1.72	0.16
RF4440D-13A	B	From	4.00	0.00	165.00	No Ice	1.87	1.13	0.07

tnxTower Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350	Job	Walden / Carolyn Besade (BU 876371)	Page	25 of 45
	Project	TEP No. 25624.594684	Date	15:43:23 09/03/21
	Client	Crown Castle	Designed by	djbrevig

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement	CAAA Front	CAAA Side	Weight			
			ft ft ft	°	ft	ft ²	ft ²	K			
RF4440D-13A	C	Centroid-Leg	0.00	0.00	165.00	1/2" Ice	2.03	1.27	0.09		
			4.00			1" Ice	2.21	1.41	0.11		
						2" Ice	2.59	1.72	0.16		
		From Centroid-Leg	4.00			No Ice	1.87	1.13	0.07		
DB-T1-6Z-8AB-0Z	A	Centroid-Leg	0.00	0.00	165.00	1/2" Ice	2.03	1.27	0.09		
			4.00			1" Ice	2.21	1.41	0.11		
						2" Ice	2.59	1.72	0.16		
		From Centroid-Leg	4.00			No Ice	4.80	2.00	0.04		
DB-T1-6Z-8AB-0Z	C	Centroid-Leg	0.00	0.00	165.00	1/2" Ice	5.07	2.19	0.08		
			4.00			1" Ice	5.35	2.39	0.12		
						2" Ice	5.93	2.81	0.21		
		From Centroid-Leg	4.00			No Ice	4.80	2.00	0.04		
Platform Mount [LP 712-1]	C	None		0.00	165.00	No Ice	24.56	24.56	1.34		
						1/2" Ice	27.92	27.92	1.91		
						1" Ice	31.27	31.27	2.55		
						2" Ice	37.98	37.98	3.97		
148	RRUS 12 B2/RRUS A2	A	From Leg	0.50	148.00	No Ice	3.15	1.84	0.07		
						0.00	1/2" Ice	3.36	2.01	0.10	
						0.00	1" Ice	3.59	2.20	0.13	
							2" Ice	4.07	2.59	0.20	
RRUS 12 B2/RRUS A2	B	From Leg	0.50	0.00	148.00	No Ice	3.15	1.84	0.07		
							0.00	1/2" Ice	3.36	2.01	0.10
							0.00	1" Ice	3.59	2.20	0.13
								2" Ice	4.07	2.59	0.20
RRUS 12 B2/RRUS A2	C	From Leg	0.50	0.00	148.00	No Ice	3.15	1.84	0.07		
							0.00	1/2" Ice	3.36	2.01	0.10
							0.00	1" Ice	3.59	2.20	0.13
								2" Ice	4.07	2.59	0.20
Pipe Mount [PM 601-3]	C	None		0.00	148.00	No Ice	3.17	3.17	0.20		
								1/2" Ice	3.79	3.79	0.23
								1" Ice	4.42	4.42	0.28
								2" Ice	5.76	5.76	0.40
*** 147 ***	DMP65R-BU8D w/ Mount Pipe	A	From Centroid-Leg	4.00	147.00	No Ice	15.89	7.89	0.14		
						0.00	1/2" Ice	16.81	8.74	0.25	
						0.00	1" Ice	17.76	9.60	0.38	
							2" Ice	19.70	11.37	0.68	
DMP65R-BU8D w/ Mount Pipe	B	From Centroid-Leg	4.00	0.00	147.00	No Ice	15.89	7.89	0.14		
							0.00	1/2" Ice	16.81	8.74	0.25
							0.00	1" Ice	17.76	9.60	0.38
								2" Ice	19.70	11.37	0.68
DMP65R-BU8D w/ Mount Pipe	C	From Centroid-Leg	4.00	0.00	147.00	No Ice	15.89	7.89	0.14		
							0.00	1/2" Ice	16.81	8.74	0.25
							0.00	1" Ice	17.76	9.60	0.38
								2" Ice	19.70	11.37	0.68
HPA-65R-BUU-H8 w/ Mount Pipe	A	From Centroid-Leg	4.00	0.00	147.00	No Ice	12.25	8.33	0.10		
							0.00	1/2" Ice	13.19	9.23	0.19
							0.00	1" Ice	14.16	10.15	0.30
								2" Ice	16.14	12.05	0.54
HPA-65R-BUU-H8 w/ Mount Pipe	B	From Centroid-Leg	4.00	0.00	147.00	No Ice	12.25	8.33	0.10		
							0.00	1/2" Ice	13.19	9.23	0.19
							0.00	1" Ice	14.16	10.15	0.30
								2" Ice	16.14	12.05	0.54

<p>tnxTower</p> <p><i>Tower Engineering Professionals, Inc.</i> 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350</p>	Job	Walden / Carolyn Besade (BU 876371)	Page	26 of 45
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	Client	Crown Castle	Designed by	djbrevig

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft ²	ft ²	K	
HPA-65R-BUU-H8 w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	12.25	8.33	0.10
			0.00	0.00			1/2" Ice	13.19	9.23	0.19
			0.00	0.00			1" Ice	14.16	10.15	0.30
			0.00	0.00			2" Ice	16.14	12.05	0.54
7770.00 w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	5.75	4.25	0.06
			0.00	0.00			1/2" Ice	6.18	5.01	0.10
			0.00	0.00			1" Ice	6.61	5.71	0.16
			0.00	0.00			2" Ice	7.49	7.16	0.29
7770.00 w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	5.75	4.25	0.06
			0.00	0.00			1/2" Ice	6.18	5.01	0.10
			0.00	0.00			1" Ice	6.61	5.71	0.16
			0.00	0.00			2" Ice	7.49	7.16	0.29
7770.00 w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	5.75	4.25	0.06
			0.00	0.00			1/2" Ice	6.18	5.01	0.10
			0.00	0.00			1" Ice	6.61	5.71	0.16
			0.00	0.00			2" Ice	7.49	7.16	0.29
DC6-48-60-18-8C-EV	B	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.14	1.14	0.03
			0.00	0.00			1/2" Ice	1.79	1.79	0.05
			0.00	0.00			1" Ice	2.00	2.00	0.07
			0.00	0.00			2" Ice	2.45	2.45	0.13
RRUS 4449 B5/B12	A	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.97	1.41	0.07
			0.00	0.00			1/2" Ice	2.14	1.56	0.09
			0.00	0.00			1" Ice	2.33	1.73	0.11
			0.00	0.00			2" Ice	2.72	2.07	0.16
RRUS 4449 B5/B12	B	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.97	1.41	0.07
			0.00	0.00			1/2" Ice	2.14	1.56	0.09
			0.00	0.00			1" Ice	2.33	1.73	0.11
			0.00	0.00			2" Ice	2.72	2.07	0.16
RRUS 4449 B5/B12	B	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.97	1.41	0.07
			0.00	0.00			1/2" Ice	2.14	1.56	0.09
			0.00	0.00			1" Ice	2.33	1.73	0.11
			0.00	0.00			2" Ice	2.72	2.07	0.16
DC6-48-60-18-8F	B	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.21	1.21	0.03
			0.00	0.00			1/2" Ice	1.89	1.89	0.05
			0.00	0.00			1" Ice	2.11	2.11	0.08
			0.00	0.00			2" Ice	2.57	2.57	0.14
LGP21401	A	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.10	0.21	0.01
			0.00	0.00			1/2" Ice	1.24	0.27	0.02
			0.00	0.00			1" Ice	1.38	0.35	0.03
			0.00	0.00			2" Ice	1.69	0.52	0.05
LGP21401	B	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.10	0.21	0.01
			0.00	0.00			1/2" Ice	1.24	0.27	0.02
			0.00	0.00			1" Ice	1.38	0.35	0.03
			0.00	0.00			2" Ice	1.69	0.52	0.05
LGP21401	C	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.10	0.21	0.01
			0.00	0.00			1/2" Ice	1.24	0.27	0.02
			0.00	0.00			1" Ice	1.38	0.35	0.03
			0.00	0.00			2" Ice	1.69	0.52	0.05
2.4" Dia x 6-ft Pipe	A	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.43	1.43	0.02
			0.00	0.00			1/2" Ice	1.93	1.93	0.03
			0.00	0.00			1" Ice	2.30	2.30	0.05
			0.00	0.00			2" Ice	3.06	3.06	0.09
2.4" Dia x 6-ft Pipe	B	From Centroid-Le g	4.00	0.00	0.00	147.00	No Ice	1.43	1.43	0.02
			0.00	0.00			1/2" Ice	1.93	1.93	0.03
			0.00	0.00			1" Ice	2.30	2.30	0.05
			0.00	0.00			2" Ice	3.06	3.06	0.09
2.4" Dia x 6-ft Pipe	C	From	4.00	0.00	0.00	147.00	No Ice	1.43	1.43	0.02

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	Client	Crown Castle	Designed by	djbrevig

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			ft ft ft	°	ft	ft ²	ft ²	K
		Centroid-Leg	0.00 0.00			1/2" Ice 1" Ice 2" Ice	1.93 2.30 3.06	0.03 0.05 0.09
Platform Mount [LP 1201-1_KCKR-HR-1]	C	None		0.00	147.00	No Ice 1/2" Ice 1" Ice 2" Ice	37.61 45.62 53.59 69.65	2.63 3.48 4.46 6.85
*** 75 ***								
GPS_A	C	From Leg	3.00 0.00 1.00	0.00	75.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.12 0.21 0.28 0.44	0.00 0.00 0.01 0.02
1.9" x 12" Pipe	C	From Leg	3.00 0.00 0.50	0.00	75.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.12 0.19 0.27 0.46	0.00 0.00 0.01 0.02
Side Arm Mount [SO 701-1]	C	From Leg	1.50 0.00 0.00	0.00	75.00	No Ice 1/2" Ice 1" Ice 2" Ice	0.85 1.14 1.43 2.01	0.07 0.08 0.09 0.12

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

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

Maximum 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	180 - 175	Pole	Max Tension	26	0.00	0.00	-0.00
			Max. Compression	26	-11.39	-0.01	0.47
			Max. Mx	8	-4.02	-34.26	0.24
			Max. My	2	-4.07	-0.01	34.36
			Max. Vy	8	7.20	-34.26	0.24
			Max. Vx	2	-7.03	-0.01	34.36
			Max. Torque	8			0.63
L2	175 - 170	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-11.96	-0.02	0.48
			Max. Mx	8	-4.35	-71.15	0.26
			Max. My	2	-4.40	-0.02	70.43
			Max. Vy	8	7.56	-71.15	0.26
			Max. Vx	2	-7.40	-0.02	70.43
			Max. Torque	8			0.63
L3	170 - 165	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-12.55	-0.03	0.49
			Max. Mx	8	-4.71	-109.90	0.27
			Max. My	2	-4.76	-0.03	108.35
			Max. Vy	8	7.94	-109.90	0.27
			Max. Vx	2	-7.77	-0.03	108.35
			Max. Torque	8			0.62
L4	165 - 160	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-22.78	0.02	1.02
			Max. Mx	8	-7.72	-200.59	1.09
			Max. My	2	-7.85	-0.54	195.43
			Max. Vy	8	14.65	-200.59	1.09
			Max. Vx	2	-14.12	-0.54	195.43
			Max. Torque	8			1.15

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L5	160 - 155	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-23.50	0.00	1.04
			Max. Mx	8	-8.24	-274.77	1.31
			Max. My	2	-8.36	-0.76	267.00
			Max. Vy	8	15.03	-274.77	1.31
			Max. Vx	2	-14.51	-0.76	267.00
			Max. Torque	8			1.15
L6	155 - 150	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-24.25	-0.02	1.04
			Max. Mx	8	-8.79	-350.90	1.53
			Max. My	2	-8.91	-0.97	340.51
			Max. Vy	8	15.43	-350.90	1.53
			Max. Vx	2	-14.90	-0.97	340.51
			Max. Torque	8			1.15
L7	150 - 145	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-36.77	-1.83	0.62
			Max. Mx	8	-13.70	-443.97	1.59
			Max. My	2	-13.84	-1.88	429.96
			Max. Vy	8	22.63	-443.97	1.59
			Max. Vx	2	-22.09	-1.88	429.96
			Max. Torque	10			1.20
L8	145 - 140	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-37.65	-1.86	0.63
			Max. Mx	8	-14.43	-558.02	1.72
			Max. My	2	-14.56	-2.01	541.31
			Max. Vy	8	23.01	-558.02	1.72
			Max. Vx	2	-22.47	-2.01	541.31
			Max. Torque	10			1.20
L9	140 - 133	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-38.19	-1.88	0.64
			Max. Mx	8	-14.89	-627.33	1.79
			Max. My	2	-15.01	-2.08	609.01
			Max. Vy	8	23.23	-627.33	1.79
			Max. Vx	2	-22.69	-2.08	609.01
			Max. Torque	10			1.20
L10	133 - 132	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-39.79	-1.90	0.64
			Max. Mx	8	-16.05	-744.63	1.91
			Max. My	2	-16.17	-2.20	723.63
			Max. Vy	8	23.70	-744.63	1.91
			Max. Vx	2	-23.16	-2.20	723.63
			Max. Torque	10			1.20
L11	132 - 131.083	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-40.00	-1.90	0.64
			Max. Mx	8	-16.21	-766.38	1.93
			Max. My	2	-16.33	-2.23	744.88
			Max. Vy	8	23.77	-766.38	1.93
			Max. Vx	2	-23.23	-2.23	744.88
			Max. Torque	10			1.19
L12	131.083 - 130.833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-40.07	-1.91	0.65
			Max. Mx	8	-16.28	-772.33	1.94
			Max. My	2	-16.39	-2.23	750.69
			Max. Vy	8	23.79	-772.33	1.94
			Max. Vx	2	-23.25	-2.23	750.69
			Max. Torque	10			1.19
L13	130.833 - 125.833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-41.49	-1.92	0.65
			Max. Mx	8	-17.35	-892.36	2.06

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L14	125.833 - 120.833	Pole	Max. My	2	-17.47	-2.35	868.03
			Max. Vy	8	24.24	-892.36	2.06
			Max. Vx	2	-23.70	-2.35	868.03
			Max. Torque	10			1.19
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-42.94	-1.92	0.65
			Max. Mx	8	-18.47	-1014.64	2.18
			Max. My	2	-18.58	-2.47	987.61
			Max. Vy	8	24.69	-1014.64	2.18
			Max. Vx	2	-24.15	-2.47	987.61
L15	120.833 - 115.833	Pole	Max. Torque	10			1.19
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-44.42	-1.92	0.65
			Max. Mx	8	-19.62	-1139.15	2.30
			Max. My	2	-19.72	-2.59	1109.43
			Max. Vy	8	25.14	-1139.15	2.30
			Max. Vx	2	-24.60	-2.59	1109.43
			Max. Torque	10			1.19
			Max Tension	1	0.00	0.00	0.00
			L16	115.833 - 110.833	Pole	Max. Compression	26
Max. Mx	8	-20.79				-1265.88	2.42
Max. My	2	-20.89				-2.71	1233.46
Max. Vy	8	25.58				-1265.88	2.42
Max. Vx	2	-25.04				-2.71	1233.46
Max. Torque	10						1.19
Max Tension	1	0.00				0.00	0.00
Max. Compression	26	-47.49				-1.92	0.65
Max. Mx	8	-21.99				-1394.83	2.53
Max. My	2	-22.09				-2.82	1359.71
L17	110.833 - 105.833	Pole	Max. Vy	8	26.02	-1394.83	2.53
			Max. Vx	2	-25.48	-2.82	1359.71
			Max. Torque	10			1.19
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-47.92	-1.92	0.65
			Max. Mx	8	-22.30	-1427.85	2.56
			Max. My	2	-22.39	-2.85	1392.05
			Max. Vy	8	26.14	-1427.85	2.56
			Max. Vx	2	-25.60	-2.85	1392.05
			Max. Torque	10			1.19
L18	105.833 - 104.567	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.04	-1.93	0.65
			Max. Mx	8	-22.40	-1436.57	2.57
			Max. My	2	-22.49	-2.86	1400.59
			Max. Vy	8	26.16	-1436.57	2.57
			Max. Vx	2	-25.62	-2.86	1400.59
			Max. Torque	10			1.19
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.09	-1.93	0.65
			Max. Mx	8	-22.44	-1440.49	2.57
L19	104.567 - 104.233	Pole	Max. My	2	-22.53	-2.87	1404.43
			Max. Vy	8	26.17	-1440.49	2.57
			Max. Vx	2	-25.63	-2.87	1404.43
			Max. Torque	10			1.19
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.09	-1.93	0.65
			Max. Mx	8	-22.44	-1440.49	2.57
			Max. My	2	-22.53	-2.87	1404.43
			Max. Vy	8	26.17	-1440.49	2.57
			Max. Vx	2	-25.63	-2.87	1404.43
L20	104.233 - 104.083	Pole	Max. Torque	10			1.19
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-48.09	-1.93	0.65
			Max. Mx	8	-22.44	-1440.49	2.57
			Max. My	2	-22.53	-2.87	1404.43
			Max. Vy	8	26.17	-1440.49	2.57
			Max. Vx	2	-25.63	-2.87	1404.43
			Max. Torque	10			1.19
			Max Tension	1	0.00	0.00	0.00
			L21	104.083 -	Pole	Max. Compression	26
Max. Mx	8	-22.44				-1440.49	2.57
Max. My	2	-22.53				-2.87	1404.43
Max. Vy	8	26.17				-1440.49	2.57
Max. Vx	2	-25.63				-2.87	1404.43
Max. Torque	10						1.19
Max Tension	1	0.00				0.00	0.00

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
	99.083		Max. Compression	26	-49.77	-1.92	0.65
			Max. Mx	8	-23.72	-1572.44	2.69
			Max. My	2	-23.80	-2.98	1533.69
			Max. Vy	8	26.63	-1572.44	2.69
			Max. Vx	2	-26.09	-2.98	1533.69
			Max. Torque	10			1.19
L22	99.083 - 94.083	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-51.45	-1.92	0.65
			Max. Mx	8	-25.03	-1706.62	2.80
			Max. My	2	-25.11	-3.09	1665.18
			Max. Vy	8	27.07	-1706.62	2.80
			Max. Vx	2	-26.54	-3.09	1665.18
			Max. Torque	10			1.19
L23	94.083 - 87.42	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-51.96	-1.92	0.65
			Max. Mx	8	-25.42	-1747.21	2.84
			Max. My	2	-25.50	-3.13	1704.96
			Max. Vy	8	27.21	-1747.21	2.84
			Max. Vx	2	-26.67	-3.13	1704.96
			Max. Torque	10			1.19
L24	87.42 - 86.42	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-55.66	-1.92	0.65
			Max. Mx	8	-28.25	-1917.15	2.98
			Max. My	2	-28.33	-3.27	1871.58
			Max. Vy	8	27.91	-1917.15	2.98
			Max. Vx	2	-27.37	-3.27	1871.58
			Max. Torque	10			1.19
L25	86.42 - 81.42	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-57.54	-1.92	0.65
			Max. Mx	8	-29.76	-2057.75	3.09
			Max. My	2	-29.83	-3.38	2009.48
			Max. Vy	8	28.35	-2057.75	3.09
			Max. Vx	2	-27.82	-3.38	2009.48
			Max. Torque	10			1.19
L26	81.42 - 76.42	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-59.45	-1.92	0.65
			Max. Mx	8	-31.29	-2200.53	3.20
			Max. My	2	-31.36	-3.50	2149.58
			Max. Vy	8	28.79	-2200.53	3.20
			Max. Vx	2	-28.25	-3.50	2149.58
			Max. Torque	10			1.19
L27	76.42 - 71.42	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-61.54	-1.51	0.41
			Max. Mx	8	-32.93	-2345.47	3.14
			Max. My	2	-32.99	-3.34	2291.99
			Max. Vy	8	29.28	-2345.47	3.14
			Max. Vx	2	-28.76	-3.34	2291.99
			Max. Torque	10			1.19
L28	71.42 - 69.3167	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.43	-1.51	0.41
			Max. Mx	8	-33.60	-2407.21	3.16
			Max. My	2	-33.66	-3.36	2352.64
			Max. Vy	8	29.46	-2407.21	3.16
			Max. Vx	2	-28.94	-3.36	2352.64
			Max. Torque	10			0.97
L29	69.3167 - 69.0667	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.52	-1.52	0.41

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L30	69.0667 - 68.8333	Pole	Max. Mx	8	-33.68	-2414.57	3.16
			Max. My	2	-33.73	-3.36	2359.87
			Max. Vy	8	29.47	-2414.57	3.16
			Max. Vx	2	-28.95	-3.36	2359.87
			Max. Torque	10			0.97
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.61	-1.52	0.41
			Max. Mx	8	-33.74	-2421.45	3.16
			Max. My	2	-33.80	-3.36	2366.63
			Max. Vy	8	29.48	-2421.45	3.16
L31	68.8333 - 68.5833	Pole	Max. Vx	2	-28.96	-3.36	2366.63
			Max. Torque	10			0.97
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-62.72	-1.52	0.41
			Max. Mx	8	-33.82	-2428.82	3.16
			Max. My	2	-33.88	-3.36	2373.87
			Max. Vy	8	29.50	-2428.82	3.16
			Max. Vx	2	-28.98	-3.36	2373.87
			Max. Torque	10			0.97
			Max Tension	1	0.00	0.00	0.00
L32	68.5833 - 63.5833	Pole	Max. Compression	26	-64.83	-1.51	0.41
			Max. Mx	8	-35.48	-2577.38	3.20
			Max. My	2	-35.53	-3.40	2519.84
			Max. Vy	8	29.94	-2577.38	3.20
			Max. Vx	2	-29.42	-3.40	2519.84
			Max. Torque	10			0.97
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-66.92	-1.51	0.41
			Max. Mx	8	-37.17	-2728.03	3.23
			Max. My	2	-37.22	-3.43	2667.92
L33	63.5833 - 58.5833	Pole	Max. Vy	8	30.36	-2728.03	3.23
			Max. Vx	2	-29.84	-3.43	2667.92
			Max. Torque	10			0.97
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-69.05	-1.51	0.41
			Max. Mx	8	-38.89	-2880.75	3.27
			Max. My	2	-38.93	-3.47	2818.07
			Max. Vy	8	30.76	-2880.75	3.27
			Max. Vx	2	-30.25	-3.47	2818.07
			Max. Torque	10			0.97
L34	58.5833 - 53.5833	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-70.97	-1.51	0.41
			Max. Mx	8	-40.44	-3018.52	3.30
			Max. My	2	-40.48	-3.50	2953.57
			Max. Vy	8	31.11	-3018.52	3.30
			Max. Vx	2	-30.60	-3.50	2953.57
			Max. Torque	10			0.96
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-76.66	-1.51	0.41
			Max. Mx	8	-44.99	-3246.68	3.35
L35	53.5833 - 42.8767	Pole	Max. My	2	-45.02	-3.55	3178.02
			Max. Vy	8	31.84	-3246.68	3.35
			Max. Vx	2	-31.33	-3.55	3178.02
			Max. Torque	10			0.96
			Max. Compression	26	-76.66	-1.51	0.41
			Max. Mx	8	-44.99	-3246.68	3.35
L36	42.8767 - 41.8767	Pole	Max. My	2	-45.02	-3.55	3178.02
			Max. Vy	8	31.84	-3246.68	3.35
			Max. Vx	2	-31.33	-3.55	3178.02
			Max. Torque	10			0.96
			Max. Compression	26	-76.66	-1.51	0.41
			Max. Mx	8	-44.99	-3246.68	3.35

<p>tnxTower</p> <p><i>Tower Engineering Professionals, Inc.</i></p> <p>326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350</p>	<p>Job</p> <p>Walden / Carolyn Besade (BU 876371)</p>	<p>Page</p> <p>33 of 45</p>
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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L37	41.8767 - 36.8767	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-79.03	-1.51	0.41
			Max. Mx	8	-46.95	-3406.71	3.38
			Max. My	2	-46.98	-3.58	3335.51
			Max. Vy	8	32.20	-3406.71	3.38
			Max. Vx	2	-31.70	-3.58	3335.51
			Max. Torque	10			0.96
L38	36.8767 - 34.9167	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-80.02	-1.51	0.41
			Max. Mx	8	-47.72	-3469.93	3.40
			Max. My	2	-47.75	-3.60	3397.73
			Max. Vy	8	32.36	-3469.93	3.40
			Max. Vx	2	-31.85	-3.60	3397.73
			Max. Torque	10			0.96
L39	34.9167 - 34.6667	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-80.13	-1.52	0.41
			Max. Mx	8	-47.82	-3478.01	3.40
			Max. My	2	-47.85	-3.60	3405.69
			Max. Vy	8	32.35	-3478.01	3.40
			Max. Vx	2	-31.84	-3.60	3405.69
			Max. Torque	10			0.96
L40	34.6667 - 34.33	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-80.28	-1.51	0.41
			Max. Mx	8	-47.93	-3488.90	3.40
			Max. My	2	-47.96	-3.60	3416.41
			Max. Vy	8	32.37	-3488.90	3.40
			Max. Vx	2	-31.86	-3.60	3416.41
			Max. Torque	10			0.96
L41	34.33 - 34.08	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-80.40	-1.52	0.41
			Max. Mx	8	-48.03	-3496.99	3.40
			Max. My	2	-48.06	-3.60	3424.37
			Max. Vy	8	32.38	-3496.99	3.40
			Max. Vx	2	-31.87	-3.60	3424.37
			Max. Torque	10			0.96
L42	34.08 - 29.08	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-82.81	-1.51	0.41
			Max. Mx	8	-49.98	-3659.68	3.43
			Max. My	2	-50.01	-3.63	3584.53
			Max. Vy	8	32.72	-3659.68	3.43
			Max. Vx	2	-32.21	-3.63	3584.53
			Max. Torque	10			0.96
L43	29.08 - 24.08	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-85.18	-1.51	0.41
			Max. Mx	8	-51.97	-3823.95	3.46
			Max. My	2	-51.99	-3.67	3746.30
			Max. Vy	8	33.03	-3823.95	3.46
			Max. Vx	2	-32.53	-3.67	3746.30
			Max. Torque	10			0.96
L44	24.08 - 19.08	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-87.59	-1.51	0.41
			Max. Mx	8	-54.00	-3989.80	3.49
			Max. My	2	-54.01	-3.70	3909.66
			Max. Vy	8	33.35	-3989.80	3.49
			Max. Vx	2	-32.85	-3.70	3909.66
			Max. Torque	10			0.96
L45	19.08 - 14.08	Pole	Max Tension	1	0.00	0.00	0.00

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Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L46	14.08 - 9.08	Pole	Max. Compression	26	-90.01	-1.51	0.41
			Max. Mx	8	-56.05	-4157.21	3.52
			Max. My	2	-56.06	-3.73	4074.60
			Max. Vy	8	33.66	-4157.21	3.52
			Max. Vx	2	-33.17	-3.73	4074.60
			Max. Torque	10			0.96
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-92.46	-1.51	0.41
			Max. Mx	8	-58.13	-4326.18	3.55
			Max. My	2	-58.14	-3.76	4241.12
L47	9.08 - 4.08	Pole	Max. Vy	8	33.97	-4326.18	3.55
			Max. Vx	2	-33.48	-3.76	4241.12
			Max. Torque	10			0.96
			Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-94.91	-1.51	0.41
			Max. Mx	8	-60.24	-4496.72	3.58
			Max. My	2	-60.25	-3.78	4409.22
			Max. Vy	8	34.29	-4496.72	3.58
			Max. Vx	2	-33.80	-3.78	4409.22
			Max. Torque	10			0.96
L48	4.08 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-96.90	-1.51	0.41
			Max. Mx	8	-61.99	-4637.05	3.60
			Max. My	2	-61.99	-3.81	4547.57
			Max. Vy	8	34.54	-4637.05	3.60
			Max. Vx	2	-34.06	-3.81	4547.57
			Max. Torque	10			0.96

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	96.90	-0.00	0.00
	Max. H _x	21	46.50	34.52	-0.01
	Max. H _z	3	46.50	-0.01	34.04
	Max. M _x	2	4547.57	-0.01	34.04
	Max. M _z	8	4637.05	-34.52	0.01
	Max. Torsion	10	0.96	-29.89	-17.01
	Min. Vert	19	46.50	29.90	-17.02
	Min. H _x	9	46.50	-34.52	0.01
	Min. H _z	15	46.50	0.01	-34.04
	Min. M _x	14	-4546.31	0.01	-34.04
	Min. M _z	20	-4635.40	34.52	-0.01
	Min. Torsion	22	-0.90	29.89	17.01

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	51.67	0.00	0.00	-0.48	-0.62	0.00
1.2 Dead+1.0 Wind 0 deg - No	62.00	0.01	-34.04	-4547.57	-3.81	0.52

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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
Ice						
0.9 Dead+1.0 Wind 0 deg - No Ice	46.50	0.01	-34.04	-4475.61	-3.51	0.49
1.2 Dead+1.0 Wind 30 deg - No Ice	62.00	17.27	-29.48	-3939.73	-2321.75	0.08
0.9 Dead+1.0 Wind 30 deg - No Ice	46.50	17.27	-29.48	-3877.36	-2284.76	0.06
1.2 Dead+1.0 Wind 60 deg - No Ice	62.00	29.90	-17.02	-2276.42	-4017.52	-0.41
0.9 Dead+1.0 Wind 60 deg - No Ice	46.50	29.90	-17.02	-2240.31	-3953.71	-0.41
1.2 Dead+1.0 Wind 90 deg - No Ice	62.00	34.52	-0.01	-3.60	-4637.05	-0.80
0.9 Dead+1.0 Wind 90 deg - No Ice	46.50	34.52	-0.01	-3.36	-4563.45	-0.78
1.2 Dead+1.0 Wind 120 deg - No Ice	62.00	29.89	17.01	2270.04	-4014.58	-0.96
0.9 Dead+1.0 Wind 120 deg - No Ice	46.50	29.89	17.01	2234.40	-3950.84	-0.92
1.2 Dead+1.0 Wind 150 deg - No Ice	62.00	17.26	29.48	3935.53	-2316.61	-0.84
0.9 Dead+1.0 Wind 150 deg - No Ice	46.50	17.26	29.48	3873.58	-2279.74	-0.80
1.2 Dead+1.0 Wind 180 deg - No Ice	62.00	-0.01	34.04	4546.31	2.16	-0.48
0.9 Dead+1.0 Wind 180 deg - No Ice	46.50	-0.01	34.04	4474.69	2.31	-0.45
1.2 Dead+1.0 Wind 210 deg - No Ice	62.00	-17.27	29.48	3938.47	2320.09	-0.01
0.9 Dead+1.0 Wind 210 deg - No Ice	46.50	-17.27	29.48	3876.45	2283.56	0.01
1.2 Dead+1.0 Wind 240 deg - No Ice	62.00	-29.90	17.02	2275.17	4015.87	0.44
0.9 Dead+1.0 Wind 240 deg - No Ice	46.50	-29.90	17.02	2239.41	3952.51	0.43
1.2 Dead+1.0 Wind 270 deg - No Ice	62.00	-34.52	0.01	2.36	4635.40	0.76
0.9 Dead+1.0 Wind 270 deg - No Ice	46.50	-34.52	0.01	2.46	4562.26	0.73
1.2 Dead+1.0 Wind 300 deg - No Ice	62.00	-29.89	-17.01	-2271.29	4012.94	0.90
0.9 Dead+1.0 Wind 300 deg - No Ice	46.50	-29.89	-17.01	-2235.30	3949.65	0.85
1.2 Dead+1.0 Wind 330 deg - No Ice	62.00	-17.26	-29.48	-3936.79	2314.97	0.81
0.9 Dead+1.0 Wind 330 deg - No Ice	46.50	-17.26	-29.48	-3874.49	2278.55	0.77
1.2 Dead+1.0 Ice+1.0 Temp	96.90	0.00	-0.00	-0.41	-1.51	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	96.90	-0.00	-7.42	-1028.61	-2.01	0.13
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	96.90	3.74	-6.43	-891.00	-522.27	0.01
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	96.90	6.48	-3.71	-514.78	-903.06	-0.11
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	96.90	7.48	0.00	-0.75	-1042.33	-0.21
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	96.90	6.48	3.71	513.35	-902.78	-0.24
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	96.90	3.74	6.43	889.77	-521.80	-0.21
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	96.90	0.00	7.42	1027.64	-1.47	-0.12

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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
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 210	96.90	-3.74	6.43	890.04	518.79	-0.00
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 240	96.90	-6.48	3.71	513.82	899.57	0.12
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 270	96.90	-7.48	-0.00	-0.20	1038.85	0.20
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 300	96.90	-6.48	-3.71	-514.30	899.30	0.24
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 330	96.90	-3.74	-6.43	-890.72	518.32	0.21
deg+1.0 Ice+1.0 Temp						
Dead+Wind 0 deg - Service	51.67	0.00	-6.34	-840.29	-1.23	0.10
Dead+Wind 30 deg - Service	51.67	3.21	-5.49	-728.06	-429.33	0.02
Dead+Wind 60 deg - Service	51.67	5.57	-3.17	-420.88	-742.58	-0.07
Dead+Wind 90 deg - Service	51.67	6.43	-0.00	-1.07	-857.03	-0.14
Dead+Wind 120 deg - Service	51.67	5.56	3.17	418.89	-742.03	-0.17
Dead+Wind 150 deg - Service	51.67	3.21	5.49	726.46	-428.38	-0.16
Dead+Wind 180 deg - Service	51.67	-0.00	6.34	839.25	-0.13	-0.10
Dead+Wind 210 deg - Service	51.67	-3.21	5.49	727.01	427.97	-0.02
Dead+Wind 240 deg - Service	51.67	-5.57	3.17	419.84	741.22	0.07
Dead+Wind 270 deg - Service	51.67	-6.43	0.00	0.02	855.67	0.14
Dead+Wind 300 deg - Service	51.67	-5.56	-3.17	-419.93	740.67	0.17
Dead+Wind 330 deg - Service	51.67	-3.21	-5.49	-727.51	427.02	0.16

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-51.67	0.00	0.00	51.67	0.00	0.000%
2	0.01	-62.00	-34.04	-0.01	62.00	34.04	0.000%
3	0.01	-46.50	-34.04	-0.01	46.50	34.04	0.000%
4	17.27	-62.00	-29.48	-17.27	62.00	29.48	0.000%
5	17.27	-46.50	-29.48	-17.27	46.50	29.48	0.000%
6	29.90	-62.00	-17.02	-29.90	62.00	17.02	0.000%
7	29.90	-46.50	-17.02	-29.90	46.50	17.02	0.000%
8	34.52	-62.00	-0.01	-34.52	62.00	0.01	0.000%
9	34.52	-46.50	-0.01	-34.52	46.50	0.01	0.000%
10	29.89	-62.00	17.01	-29.89	62.00	-17.01	0.000%
11	29.89	-46.50	17.01	-29.89	46.50	-17.01	0.000%
12	17.26	-62.00	29.48	-17.26	62.00	-29.48	0.000%
13	17.26	-46.50	29.48	-17.26	46.50	-29.48	0.000%
14	-0.01	-62.00	34.04	0.01	62.00	-34.04	0.000%
15	-0.01	-46.50	34.04	0.01	46.50	-34.04	0.000%
16	-17.27	-62.00	29.48	17.27	62.00	-29.48	0.000%
17	-17.27	-46.50	29.48	17.27	46.50	-29.48	0.000%
18	-29.90	-62.00	17.02	29.90	62.00	-17.02	0.000%
19	-29.90	-46.50	17.02	29.90	46.50	-17.02	0.000%
20	-34.52	-62.00	0.01	34.52	62.00	-0.01	0.000%
21	-34.52	-46.50	0.01	34.52	46.50	-0.01	0.000%
22	-29.89	-62.00	-17.01	29.89	62.00	17.01	0.000%
23	-29.89	-46.50	-17.01	29.89	46.50	17.01	0.000%
24	-17.26	-62.00	-29.48	17.26	62.00	29.48	0.000%
25	-17.26	-46.50	-29.48	17.26	46.50	29.48	0.000%
26	0.00	-96.90	0.00	-0.00	96.90	0.00	0.000%
27	-0.00	-96.90	-7.42	0.00	96.90	7.42	0.000%
28	3.74	-96.90	-6.43	-3.74	96.90	6.43	0.000%
29	6.48	-96.90	-3.71	-6.48	96.90	3.71	0.000%

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Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
30	7.48	-96.90	0.00	-7.48	96.90	-0.00	0.000%
31	6.48	-96.90	3.71	-6.48	96.90	-3.71	0.000%
32	3.74	-96.90	6.43	-3.74	96.90	-6.43	0.000%
33	0.00	-96.90	7.42	-0.00	96.90	-7.42	0.000%
34	-3.74	-96.90	6.43	3.74	96.90	-6.43	0.000%
35	-6.48	-96.90	3.71	6.48	96.90	-3.71	0.000%
36	-7.48	-96.90	-0.00	7.48	96.90	0.00	0.000%
37	-6.48	-96.90	-3.71	6.48	96.90	3.71	0.000%
38	-3.74	-96.90	-6.43	3.74	96.90	6.43	0.000%
39	0.00	-51.67	-6.34	-0.00	51.67	6.34	0.000%
40	3.21	-51.67	-5.49	-3.21	51.67	5.49	0.000%
41	5.57	-51.67	-3.17	-5.57	51.67	3.17	0.000%
42	6.43	-51.67	-0.00	-6.43	51.67	0.00	0.000%
43	5.56	-51.67	3.17	-5.56	51.67	-3.17	0.000%
44	3.21	-51.67	5.49	-3.21	51.67	-5.49	0.000%
45	-0.00	-51.67	6.34	0.00	51.67	-6.34	0.000%
46	-3.21	-51.67	5.49	3.21	51.67	-5.49	0.000%
47	-5.57	-51.67	3.17	5.57	51.67	-3.17	0.000%
48	-6.43	-51.67	0.00	6.43	51.67	-0.00	0.000%
49	-5.56	-51.67	-3.17	5.56	51.67	3.17	0.000%
50	-3.21	-51.67	-5.49	3.21	51.67	5.49	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	6	0.00000001	0.00012487
3	Yes	5	0.00000001	0.00074011
4	Yes	7	0.00000001	0.00054914
5	Yes	7	0.00000001	0.00011935
6	Yes	7	0.00000001	0.00055256
7	Yes	7	0.00000001	0.00012000
8	Yes	6	0.00000001	0.00015269
9	Yes	5	0.00000001	0.00093936
10	Yes	7	0.00000001	0.00054177
11	Yes	7	0.00000001	0.00011748
12	Yes	7	0.00000001	0.00055259
13	Yes	7	0.00000001	0.00012054
14	Yes	6	0.00000001	0.00008949
15	Yes	5	0.00000001	0.00050095
16	Yes	7	0.00000001	0.00054712
17	Yes	7	0.00000001	0.00011903
18	Yes	7	0.00000001	0.00054602
19	Yes	7	0.00000001	0.00011841
20	Yes	6	0.00000001	0.00011368
21	Yes	5	0.00000001	0.00068066
22	Yes	7	0.00000001	0.00055449
23	Yes	7	0.00000001	0.00012078
24	Yes	7	0.00000001	0.00054141
25	Yes	7	0.00000001	0.00011769
26	Yes	4	0.00000001	0.00042942
27	Yes	7	0.00000001	0.00071780
28	Yes	7	0.00000001	0.00097391
29	Yes	7	0.00000001	0.00097933
30	Yes	7	0.00000001	0.00072993

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31	Yes	7	0.0000001	0.00096917
32	Yes	7	0.0000001	0.00097133
33	Yes	7	0.0000001	0.00071508
34	Yes	7	0.0000001	0.00096105
35	Yes	7	0.0000001	0.00096465
36	Yes	7	0.0000001	0.00072379
37	Yes	7	0.0000001	0.00097110
38	Yes	7	0.0000001	0.00095999
39	Yes	5	0.0000001	0.00016016
40	Yes	6	0.0000001	0.00007120
41	Yes	6	0.0000001	0.00007245
42	Yes	5	0.0000001	0.00016821
43	Yes	6	0.0000001	0.00006841
44	Yes	6	0.0000001	0.00007219
45	Yes	5	0.0000001	0.00015819
46	Yes	6	0.0000001	0.00006956
47	Yes	6	0.0000001	0.00006971
48	Yes	5	0.0000001	0.00016580
49	Yes	6	0.0000001	0.00007310
50	Yes	6	0.0000001	0.00006795

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	180 - 175	30.59	42	1.68	0.00
L2	175 - 170	28.83	42	1.67	0.00
L3	170 - 165	27.09	42	1.65	0.00
L4	165 - 160	25.37	42	1.63	0.00
L5	160 - 155	23.69	42	1.58	0.00
L6	155 - 150	22.06	42	1.53	0.00
L7	150 - 145	20.50	42	1.47	0.00
L8	145 - 140	19.00	42	1.40	0.00
L9	140 - 133	17.58	42	1.32	0.00
L10	137 - 132	16.76	42	1.27	0.00
L11	132 - 131.083	15.46	42	1.22	0.00
L12	131.083 - 130.833	15.22	42	1.21	0.00
L13	130.833 - 125.833	15.16	42	1.21	0.00
L14	125.833 - 120.833	13.92	42	1.15	0.00
L15	120.833 - 115.833	12.75	42	1.10	0.00
L16	115.833 - 110.833	11.63	42	1.04	0.00
L17	110.833 - 105.833	10.57	42	0.98	0.00
L18	105.833 - 104.567	9.58	42	0.92	0.00
L19	104.567 - 104.233	9.34	42	0.91	0.00
L20	104.233 - 104.083	9.27	42	0.90	0.00
L21	104.083 - 99.083	9.25	42	0.90	0.00
L22	99.083 - 94.083	8.33	42	0.84	0.00
L23	94.083 - 87.42	7.48	42	0.79	0.00
L24	92.5867 - 86.42	7.23	42	0.77	0.00
L25	86.42 - 81.42	6.26	42	0.73	0.00
L26	81.42 - 76.42	5.52	42	0.68	0.00
L27	76.42 - 71.42	4.83	42	0.63	0.00
L28	71.42 - 69.3167	4.19	42	0.58	0.00
L29	69.3167 - 69.0667	3.94	42	0.56	0.00
L30	69.0667 - 68.8333	3.91	42	0.56	0.00
L31	68.8333 - 68.5833	3.89	42	0.55	0.00
L32	68.5833 - 63.5833	3.86	42	0.55	0.00
L33	63.5833 - 58.5833	3.30	42	0.50	0.00
L34	58.5833 - 53.5833	2.80	42	0.46	0.00

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Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L35	53.5833 - 42.8767	2.34	42	0.41	0.00
L36	49.1267 - 41.8767	1.98	42	0.37	0.00
L37	41.8767 - 36.8767	1.44	42	0.34	0.00
L38	36.8767 - 34.9167	1.11	42	0.29	0.00
L39	34.9167 - 34.6667	0.99	42	0.28	0.00
L40	34.6667 - 34.33	0.98	42	0.28	0.00
L41	34.33 - 34.08	0.96	42	0.27	0.00
L42	34.08 - 29.08	0.94	42	0.27	0.00
L43	29.08 - 24.08	0.68	42	0.23	0.00
L44	24.08 - 19.08	0.47	42	0.19	0.00
L45	19.08 - 14.08	0.29	42	0.15	0.00
L46	14.08 - 9.08	0.16	42	0.11	0.00
L47	9.08 - 4.08	0.06	42	0.07	0.00
L48	4.08 - 0	0.01	42	0.03	0.00

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
180.00	AIR6449 B41_T-MOBILE w/ Mount Pipe	42	30.59	1.68	0.00	20997
165.00	(2) LPA-80080-6CF-EDIN w/ Mount Pipe	42	25.37	1.63	0.00	8119
148.00	RRUS 12 B2/RRUS A2	42	19.89	1.44	0.00	4216
147.00	DMP65R-BU8D w/ Mount Pipe	42	19.59	1.42	0.00	4130
75.00	GPS_A	42	4.64	0.62	0.00	5733

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	180 - 175	165.18	8	9.08	0.02
L2	175 - 170	155.72	8	9.04	0.02
L3	170 - 165	146.34	8	8.94	0.01
L4	165 - 160	137.09	8	8.79	0.01
L5	160 - 155	128.04	8	8.56	0.01
L6	155 - 150	119.26	8	8.26	0.01
L7	150 - 145	110.81	8	7.92	0.01
L8	145 - 140	102.73	8	7.55	0.01
L9	140 - 133	95.05	8	7.14	0.01
L10	137 - 132	90.67	8	6.87	0.01
L11	132 - 131.083	83.61	8	6.61	0.01
L12	131.083 - 130.833	82.35	8	6.54	0.01
L13	130.833 - 125.833	82.01	8	6.52	0.01
L14	125.833 - 120.833	75.34	8	6.23	0.00
L15	120.833 - 115.833	68.98	8	5.93	0.00
L16	115.833 - 110.833	62.94	8	5.62	0.00
L17	110.833 - 105.833	57.23	8	5.31	0.00
L18	105.833 - 104.567	51.85	8	4.98	0.00
L19	104.567 - 104.233	50.54	8	4.90	0.00

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Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L20	104.233 - 104.083	50.20	8	4.88	0.00
L21	104.083 - 99.083	50.04	8	4.88	0.00
L22	99.083 - 94.083	45.10	8	4.57	0.00
L23	94.083 - 87.42	40.48	8	4.27	0.00
L24	92.5867 - 86.42	39.16	8	4.18	0.00
L25	86.42 - 81.42	33.88	8	3.98	0.00
L26	81.42 - 76.42	29.87	8	3.70	0.00
L27	76.42 - 71.42	26.14	8	3.42	0.00
L28	71.42 - 69.3167	22.70	8	3.15	0.00
L29	69.3167 - 69.0667	21.34	8	3.04	0.00
L30	69.0667 - 68.8333	21.18	8	3.02	0.00
L31	68.8333 - 68.5833	21.04	8	3.00	0.00
L32	68.5833 - 63.5833	20.88	8	2.99	0.00
L33	63.5833 - 58.5833	17.88	8	2.73	0.00
L34	58.5833 - 53.5833	15.16	8	2.48	0.00
L35	53.5833 - 42.8767	12.69	8	2.23	0.00
L36	49.1267 - 41.8767	10.71	8	2.01	0.00
L37	41.8767 - 36.8767	7.80	8	1.82	0.00
L38	36.8767 - 34.9167	6.01	8	1.59	0.00
L39	34.9167 - 34.6667	5.37	8	1.51	0.00
L40	34.6667 - 34.33	5.30	8	1.49	0.00
L41	34.33 - 34.08	5.19	8	1.48	0.00
L42	34.08 - 29.08	5.11	8	1.46	0.00
L43	29.08 - 24.08	3.70	8	1.24	0.00
L44	24.08 - 19.08	2.52	8	1.02	0.00
L45	19.08 - 14.08	1.57	8	0.80	0.00
L46	14.08 - 9.08	0.85	8	0.58	0.00
L47	9.08 - 4.08	0.35	8	0.37	0.00
L48	4.08 - 0	0.07	8	0.16	0.00

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
180.00	AIR6449 B41_T-MOBILE w/ Mount Pipe	8	165.18	9.08	0.02	4189
165.00	(2) LPA-80080-6CF-EDIN w/ Mount Pipe	8	137.09	8.79	0.01	1578
148.00	RRUS 12 B2/RRUS A2	8	107.53	7.78	0.01	810
147.00	DMP65R-BU8D w/ Mount Pipe	8	105.91	7.70	0.01	793
75.00	GPS_A	8	25.14	3.34	0.00	1065

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 $\frac{P_u}{\phi P_n}$
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Section No.	Elevation ft	Size	L ft	L_u ft	KI/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L1	180 - 175 (1)	TP19.06x18x0.25	5.00	0.00	0.0	14.93	-4.06	873.28	0.005
L2	175 - 170 (2)	TP20.13x19.06x0.25	5.00	0.00	0.0	15.77	-4.35	922.62	0.005
L3	170 - 165 (3)	TP21.19x20.13x0.25	5.00	0.00	0.0	16.61	-4.71	971.95	0.005
L4	165 - 160 (4)	TP22.25x21.19x0.25	5.00	0.00	0.0	17.46	-7.72	1021.28	0.008
L5	160 - 155 (5)	TP23.31x22.25x0.25	5.00	0.00	0.0	18.30	-8.24	1070.62	0.008
L6	155 - 150 (6)	TP24.38x23.31x0.25	5.00	0.00	0.0	19.14	-8.79	1119.95	0.008
L7	150 - 145 (7)	TP25.44x24.38x0.25	5.00	0.00	0.0	19.99	-13.70	1169.28	0.012
L8	145 - 140 (8)	TP26.5x25.44x0.25	5.00	0.00	0.0	20.83	-14.43	1218.62	0.012
L9	140 - 133 (9)	TP27.99x26.5x0.25	7.00	0.00	0.0	21.34	-14.89	1248.22	0.012
L10	133 - 132 (10)	TP27.69x26.64x0.31	5.00	0.00	0.0	27.15	-16.05	1588.55	0.010
L11	132 - 131.083 (11)	TP27.88x27.69x0.31	0.92	0.00	0.0	27.35	-16.21	1599.72	0.010
L12	131.083 - 130.833 (12)	TP27.93x27.88x0.48	0.25	0.00	0.0	41.40	-16.28	2421.87	0.007
L13	130.833 - 125.833 (13)	TP28.98x27.93x0.46	5.00	0.00	0.0	41.87	-17.35	2449.37	0.007
L14	125.833 - 120.833 (14)	TP30.03x28.98x0.46	5.00	0.00	0.0	42.83	-18.47	2505.73	0.007
L15	120.833 - 115.833 (15)	TP31.08x30.03x0.45	5.00	0.00	0.0	43.75	-19.62	2559.65	0.008
L16	115.833 - 110.833 (16)	TP32.13x31.08x0.45	5.00	0.00	0.0	45.25	-20.79	2647.37	0.008
L17	110.833 - 105.833 (17)	TP33.18x32.13x0.44	5.00	0.00	0.0	45.47	-21.99	2660.13	0.008
L18	105.833 - 104.567 (18)	TP33.45x33.18x0.44	1.27	0.00	0.0	45.84	-22.30	2681.74	0.008
L19	104.567 - 104.233 (19)	TP33.52x33.45x0.48	0.33	0.00	0.0	49.82	-22.40	2914.47	0.008
L20	104.233 - 104.083 (20)	TP33.55x33.52x0.48	0.15	0.00	0.0	49.87	-22.44	2917.25	0.008
L21	104.083 - 99.083 (21)	TP34.6x33.55x0.46	5.00	0.00	0.0	50.11	-23.72	2931.71	0.008
L22	99.083 - 94.083 (22)	TP35.65x34.6x0.46	5.00	0.00	0.0	51.66	-25.03	3021.87	0.008
L23	94.083 - 87.42 (23)	TP37.05x35.65x0.46	6.66	0.00	0.0	52.12	-25.42	3048.85	0.008
L24	87.42 - 86.42 (24)	TP36.63x35.34x0.53	6.17	0.00	0.0	60.17	-28.25	3519.84	0.008
L25	86.42 - 81.42 (25)	TP37.68x36.63x0.51	5.00	0.00	0.0	60.46	-29.76	3536.96	0.008
L26	81.42 - 76.42 (26)	TP38.73x37.68x0.51	5.00	0.00	0.0	62.17	-31.29	3636.69	0.009
L27	76.42 - 71.42 (27)	TP39.78x38.73x0.51	5.00	0.00	0.0	63.87	-32.93	3736.43	0.009
L28	71.42 - 69.3167 (28)	TP40.22x39.78x0.51	2.10	0.00	0.0	63.81	-33.60	3732.89	0.009
L29	69.3167 - 69.0667 (29)	TP40.27x40.22x0.38	0.25	0.00	0.0	47.49	-33.68	2777.89	0.012
L30	69.0667 - 68.8333 (30)	TP40.32x40.27x0.38	0.23	0.00	0.0	47.54	-33.74	2781.30	0.012
L31	68.8333 - 68.5833 (31)	TP40.37x40.32x0.54	0.25	0.00	0.0	67.96	-33.82	3975.54	0.009
L32	68.5833 - 63.5833 (32)	TP41.42x40.37x0.53	5.00	0.00	0.0	68.14	-35.48	3986.47	0.009
L33	63.5833 - 58.5833 (33)	TP42.47x41.42x0.53	5.00	0.00	0.0	69.89	-37.17	4088.64	0.009
L34	58.5833 - 53.5833 (34)	TP43.52x42.47x0.52	5.00	0.00	0.0	70.80	-38.89	4141.51	0.009
L35	53.5833 - 42.8767 (35)	TP45.76x43.52x0.51	10.71	0.00	0.0	71.47	-40.44	4181.11	0.010

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Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L36	42.8767 - 41.8767 (36)	TP45.22x43.7x0.58	7.25	0.00	0.0	81.48	-44.99	4766.54	0.009
L37	41.8767 - 36.8767 (37)	TP46.27x45.22x0.58	5.00	0.00	0.0	83.39	-46.95	4878.46	0.010
L38	36.8767 - 34.9167 (38)	TP46.68x46.27x0.58	1.96	0.00	0.0	84.14	-47.72	4922.34	0.010
L39	34.9167 - 34.6667 (39)	TP46.73x46.68x0.44	0.25	0.00	0.0	64.29	-47.82	3760.69	0.013
L40	34.6667 - 34.33 (40)	TP46.8x46.73x0.44	0.34	0.00	0.0	64.38	-47.93	3766.42	0.013
L41	34.33 - 34.08 (41)	TP46.85x46.8x0.55	0.25	0.00	0.0	80.83	-48.03	4728.79	0.010
L42	34.08 - 29.08 (42)	TP47.9x46.85x0.55	5.00	0.00	0.0	82.66	-49.98	4835.85	0.010
L43	29.08 - 24.08 (43)	TP48.95x47.9x0.54	5.00	0.00	0.0	83.18	-51.60	4866.20	0.011
L44	24.08 - 19.08 (44)	TP50x48.95x0.54	5.00	0.00	0.0	82.60	-52.00	4831.82	0.011
L45	19.08 - 14.08 (45)	TP51.05x50x0.54	5.00	0.00	0.0	84.38	-54.02	4936.44	0.011
L46	14.08 - 9.08 (46)	TP52.1x51.05x0.54	5.00	0.00	0.0	87.96	-58.13	5145.69	0.011
L47	9.08 - 4.08 (47)	TP53.14x52.1x0.54	5.00	0.00	0.0	89.75	-60.24	5250.32	0.011
L48	4.08 - 0 (48)	TP54x53.14x0.54	4.08	0.00	0.0	91.21	-61.99	5335.69	0.012

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{ux} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{ux}}$	M_{uy} kip-ft	ϕM_{uy} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{uy}}$
L1	180 - 175 (1)	TP19.06x18x0.25	34.38	426.75	0.081	0.00	426.75	0.000
L2	175 - 170 (2)	TP20.13x19.06x0.25	71.15	476.66	0.149	0.00	476.66	0.000
L3	170 - 165 (3)	TP21.19x20.13x0.25	109.90	529.33	0.208	0.00	529.33	0.000
L4	165 - 160 (4)	TP22.25x21.19x0.25	200.60	584.76	0.343	0.00	584.76	0.000
L5	160 - 155 (5)	TP23.31x22.25x0.25	274.78	642.95	0.427	0.00	642.95	0.000
L6	155 - 150 (6)	TP24.38x23.31x0.25	350.90	701.36	0.500	0.00	701.36	0.000
L7	150 - 145 (7)	TP25.44x24.38x0.25	443.98	756.65	0.587	0.00	756.65	0.000
L8	145 - 140 (8)	TP26.5x25.44x0.25	558.02	813.28	0.686	0.00	813.28	0.000
L9	140 - 133 (9)	TP27.99x26.5x0.25	627.33	847.87	0.740	0.00	847.87	0.000
L10	133 - 132 (10)	TP27.69x26.64x0.31	744.64	1131.77	0.658	0.00	1131.77	0.000
L11	132 - 131.083 (11)	TP27.88x27.69x0.31	766.39	1147.83	0.668	0.00	1147.83	0.000
L12	131.083 - 130.833 (12)	TP27.93x27.88x0.48	772.33	1720.65	0.449	0.00	1720.65	0.000
L13	130.833 - 125.833 (13)	TP28.98x27.93x0.46	892.37	1809.43	0.493	0.00	1809.43	0.000
L14	125.833 - 120.833 (14)	TP30.03x28.98x0.46	1014.64	1921.11	0.528	0.00	1921.11	0.000
L15	120.833 - 115.833 (15)	TP31.08x30.03x0.45	1139.15	2033.99	0.560	0.00	2033.99	0.000
L16	115.833 - 110.833 (16)	TP32.13x31.08x0.45	1265.88	2176.83	0.582	0.00	2176.83	0.000
L17	110.833 - 105.833 (17)	TP33.18x32.13x0.44	1394.83	2262.55	0.616	0.00	2262.55	0.000
L18	105.833 - 104.567 (18)	TP33.45x33.18x0.44	1427.85	2299.69	0.621	0.00	2299.69	0.000

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Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{rx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{rx}}$	M_{uy} kip-ft	ϕM_{ry} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ry}}$
L19	104.567 - 104.233 (19)	TP33.52x33.45x0.48	1436.58	2498.97	0.575	0.00	2498.97	0.000
L20	104.233 - 104.083 (20)	TP33.55x33.52x0.48	1440.49	2503.77	0.575	0.00	2503.77	0.000
L21	104.083 - 99.083 (21)	TP34.6x33.55x0.46	1572.44	2599.07	0.605	0.00	2599.07	0.000
L22	99.083 - 94.083 (22)	TP35.65x34.6x0.46	1706.63	2762.49	0.618	0.00	2762.49	0.000
L23	94.083 - 87.42 (23)	TP37.05x35.65x0.46	1747.22	2812.37	0.621	0.00	2812.37	0.000
L24	87.42 - 86.42 (24)	TP36.63x35.34x0.53	1917.16	3297.24	0.581	0.00	3297.24	0.000
L25	86.42 - 81.42 (25)	TP37.68x36.63x0.51	2057.75	3413.13	0.603	0.00	3413.13	0.000
L26	81.42 - 76.42 (26)	TP38.73x37.68x0.51	2200.53	3609.67	0.610	0.00	3609.67	0.000
L27	76.42 - 71.42 (27)	TP39.78x38.73x0.51	2345.47	3811.72	0.615	0.00	3811.72	0.000
L28	71.42 - 69.3167 (28)	TP40.22x39.78x0.51	2407.22	3852.63	0.625	0.00	3852.63	0.000
L29	69.3167 - 69.0667 (29)	TP40.27x40.22x0.38	2414.57	2807.74	0.860	0.00	2807.74	0.000
L30	69.0667 - 68.8333 (30)	TP40.32x40.27x0.38	2421.45	2813.72	0.861	0.00	2813.72	0.000
L31	68.8333 - 68.5833 (31)	TP40.37x40.32x0.54	2428.82	4112.69	0.591	0.00	4112.69	0.000
L32	68.5833 - 63.5833 (32)	TP41.42x40.37x0.53	2577.38	4236.54	0.608	0.00	4236.54	0.000
L33	63.5833 - 58.5833 (33)	TP42.47x41.42x0.53	2728.03	4457.88	0.612	0.00	4457.88	0.000
L34	58.5833 - 53.5833 (34)	TP43.52x42.47x0.52	2880.75	4631.12	0.622	0.00	4631.12	0.000
L35	53.5833 - 42.8767 (35)	TP45.76x43.52x0.51	3018.53	4779.53	0.632	0.00	4779.53	0.000
L36	42.8767 - 41.8767 (36)	TP45.22x43.7x0.58	3246.68	5529.87	0.587	0.00	5529.87	0.000
L37	41.8767 - 36.8767 (37)	TP46.27x45.22x0.58	3406.71	5794.30	0.588	0.00	5794.30	0.000
L38	36.8767 - 34.9167 (38)	TP46.68x46.27x0.58	3469.93	5899.64	0.588	0.00	5899.64	0.000
L39	34.9167 - 34.6667 (39)	TP46.73x46.68x0.44	3478.02	4417.06	0.787	0.00	4417.06	0.000
L40	34.6667 - 34.33 (40)	TP46.8x46.73x0.44	3488.91	4428.76	0.788	0.00	4428.76	0.000
L41	34.33 - 34.08 (41)	TP46.85x46.8x0.55	3497.00	5695.65	0.614	0.00	5695.65	0.000
L42	34.08 - 29.08 (42)	TP47.9x46.85x0.55	3659.68	5958.01	0.614	0.00	5958.01	0.000
L43	29.08 - 24.08 (43)	TP48.95x47.9x0.54	3790.97	6104.39	0.621	0.00	6104.39	0.000
L44	24.08 - 19.08 (44)	TP50x48.95x0.54	3823.96	6089.49	0.628	0.00	6089.49	0.000
L45	19.08 - 14.08 (45)	TP51.05x50x0.54	3989.80	6357.53	0.628	0.00	6357.53	0.000
L46	14.08 - 9.08 (46)	TP52.1x51.05x0.54	4326.18	6896.03	0.627	0.00	6896.03	0.000
L47	9.08 - 4.08 (47)	TP53.14x52.1x0.54	4496.73	7145.59	0.629	0.00	7145.59	0.000
L48	4.08 - 0 (48)	TP54x53.14x0.54	4637.05	7351.39	0.631	0.00	7351.39	0.000

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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	180 - 175 (1)	TP19.06x18x0.25	7.08	261.99	0.027	0.35	431.63	0.001
L2	175 - 170 (2)	TP20.13x19.06x0.25	7.56	276.79	0.027	0.62	481.77	0.001
L3	170 - 165 (3)	TP21.19x20.13x0.25	7.94	291.58	0.027	0.62	534.67	0.001
L4	165 - 160 (4)	TP22.25x21.19x0.25	14.65	306.38	0.048	1.15	590.33	0.002
L5	160 - 155 (5)	TP23.31x22.25x0.25	15.04	321.19	0.047	1.15	648.73	0.002
L6	155 - 150 (6)	TP24.38x23.31x0.25	15.43	335.99	0.046	1.15	709.90	0.002
L7	150 - 145 (7)	TP25.44x24.38x0.25	22.63	350.79	0.065	0.94	773.82	0.001
L8	145 - 140 (8)	TP26.5x25.44x0.25	23.01	365.58	0.063	0.94	840.49	0.001
L9	140 - 133 (9)	TP27.99x26.5x0.25	23.23	374.46	0.062	0.94	881.82	0.001
L10	133 - 132 (10)	TP27.69x26.64x0.31	23.70	476.57	0.050	0.94	1142.59	0.001
L11	132 - 131.083 (11)	TP27.88x27.69x0.31	23.77	479.92	0.050	0.94	1158.71	0.001
L12	131.083 - 130.833 (12)	TP27.93x27.88x0.48	23.79	726.56	0.033	0.94	1747.22	0.001
L13	130.833 - 125.833 (13)	TP28.98x27.93x0.46	24.24	734.81	0.033	0.94	1835.42	0.001
L14	125.833 - 120.833 (14)	TP30.03x28.98x0.46	24.69	751.72	0.033	0.94	1947.18	0.000
L15	120.833 - 115.833 (15)	TP31.08x30.03x0.45	25.14	767.89	0.033	0.94	2060.09	0.000
L16	115.833 - 110.833 (16)	TP32.13x31.08x0.45	25.58	794.21	0.032	0.94	2203.72	0.000
L17	110.833 - 105.833 (17)	TP33.18x32.13x0.44	26.02	798.04	0.033	0.94	2288.58	0.000
L18	105.833 - 104.567 (18)	TP33.45x33.18x0.44	26.14	804.52	0.032	0.94	2325.91	0.000
L19	104.567 - 104.233 (19)	TP33.52x33.45x0.48	26.16	874.34	0.030	0.94	2530.25	0.000
L20	104.233 - 104.083 (20)	TP33.55x33.52x0.48	26.17	875.17	0.030	0.94	2535.08	0.000
L21	104.083 - 99.083 (21)	TP34.6x33.55x0.46	26.63	879.51	0.030	0.94	2629.47	0.000
L22	99.083 - 94.083 (22)	TP35.65x34.6x0.46	27.07	906.56	0.030	0.94	2793.68	0.000
L23	94.083 - 87.42 (23)	TP37.05x35.65x0.46	27.21	914.65	0.030	0.94	2843.79	0.000
L24	87.42 - 86.42 (24)	TP36.63x35.34x0.53	27.91	1055.95	0.026	0.94	3339.07	0.000
L25	86.42 - 81.42 (25)	TP37.68x36.63x0.51	28.35	1061.09	0.027	0.93	3453.86	0.000
L26	81.42 - 76.42 (26)	TP38.73x37.68x0.51	28.79	1091.01	0.026	0.93	3651.38	0.000
L27	76.42 - 71.42 (27)	TP39.78x38.73x0.51	29.28	1120.93	0.026	0.81	3854.41	0.000
L28	71.42 - 69.3167 (28)	TP40.22x39.78x0.51	29.46	1119.87	0.026	0.81	3894.61	0.000
L29	69.3167 - 69.0667 (29)	TP40.27x40.22x0.38	29.47	833.37	0.035	0.81	2911.64	0.000
L30	69.0667 - 68.8333 (30)	TP40.32x40.27x0.38	29.48	834.39	0.035	0.81	2918.78	0.000
L31	68.8333 - 68.5833 (31)	TP40.37x40.32x0.54	29.50	1192.66	0.025	0.81	4160.56	0.000
L32	68.5833 - 63.5833 (32)	TP41.42x40.37x0.53	29.94	1195.94	0.025	0.81	4283.07	0.000
L33	63.5833 - 58.5833 (33)	TP42.47x41.42x0.53	30.36	1226.59	0.025	0.81	4505.43	0.000

<p>tnxTower</p> <p>Tower Engineering Professionals, Inc. 326 Tryon Road Raleigh, NC 27603 Phone: (919) 661 6351 FAX: (919) 661 6350</p>	Job	Walden / Carolyn Besade (BU 876371)	Page	45 of 45
	Project	TEP No. 25624.594684	Date	15:43:23 09/03/21
	Client	Crown Castle	Designed by	djbrevig

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 $\frac{T_u}{\phi T_n}$
L34	58.5833 - 53.5833 (34)	TP43.52x42.47x0.52	30.76	1242.45	0.025	0.81	4678.42	0.000
L35	53.5833 - 42.8767 (35)	TP45.76x43.52x0.51	31.11	1254.33	0.025	0.80	4826.44	0.000
L36	42.8767 - 41.8767 (36)	TP45.22x43.7x0.58	31.84	1429.96	0.022	0.80	5590.84	0.000
L37	41.8767 - 36.8767 (37)	TP46.27x45.22x0.58	32.20	1463.54	0.022	0.80	5856.48	0.000
L38	36.8767 - 34.9167 (38)	TP46.68x46.27x0.58	32.36	1476.70	0.022	0.80	5962.30	0.000
L39	34.9167 - 34.6667 (39)	TP46.73x46.68x0.44	32.35	1128.21	0.029	0.80	4573.98	0.000
L40	34.6667 - 34.33 (40)	TP46.8x46.73x0.44	32.37	1129.93	0.029	0.80	4587.94	0.000
L41	34.33 - 34.08 (41)	TP46.85x46.8x0.55	32.38	1418.64	0.023	0.80	5752.76	0.000
L42	34.08 - 29.08 (42)	TP47.9x46.85x0.55	32.72	1450.76	0.023	0.80	6016.19	0.000
L43	29.08 - 24.08 (43)	TP48.95x47.9x0.54	33.03	1466.21	0.023	0.80	6161.97	0.000
L44	24.08 - 19.08 (44)	TP50x48.95x0.54	33.10	1455.82	0.023	0.80	6145.83	0.000
L45	19.08 - 14.08 (45)	TP51.05x50x0.54	33.41	1487.21	0.022	0.80	6414.87	0.000
L46	14.08 - 9.08 (46)	TP52.1x51.05x0.54	33.97	1543.71	0.022	0.80	6970.23	0.000
L47	9.08 - 4.08 (47)	TP53.14x52.1x0.54	34.29	1575.09	0.022	0.80	7256.56	0.000
L48	4.08 - 0 (48)	TP54x53.14x0.54	34.54	1600.71	0.022	0.80	7494.47	0.000

APPENDIX B
BASE LEVEL DRAWING



(OTHER CONSIDERED EQUIPMENT-IN CONDUIT)

(1) 3/8" TO 147 FT LEVEL

(2) 7/16" TO 147 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)

(1) 3/8" TO 147 FT LEVEL

(2) 7/8" TO 147 FT LEVEL

(12) 1-5/8" TO 147 FT LEVEL

(PROPOSED EQUIPMENT CONFIGURATION)

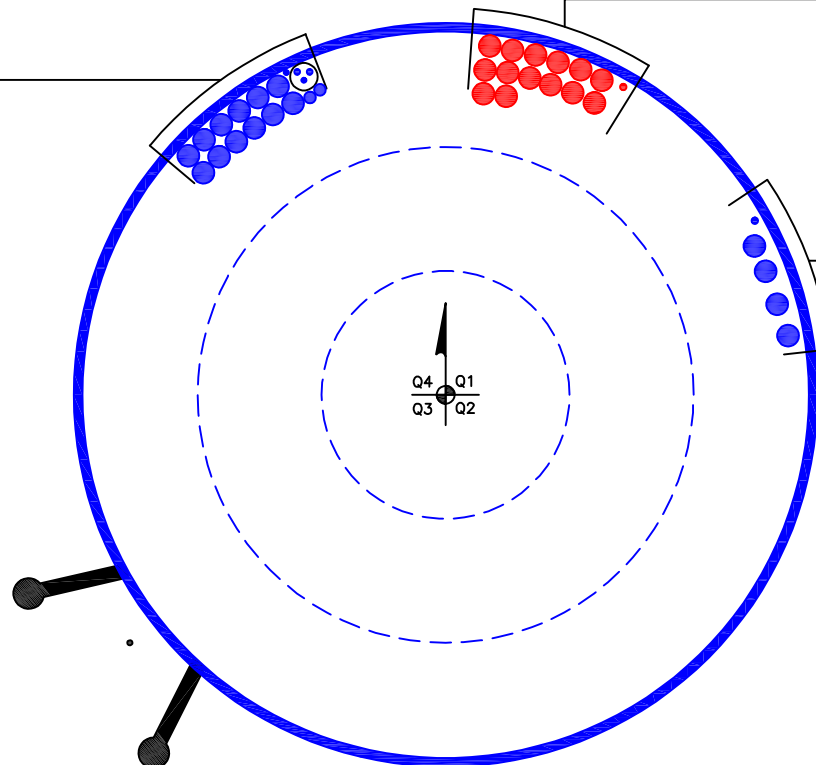
(1) 1/2" TO 165 FT LEVEL

(14) 1-5/8" TO 165 FT LEVEL

(OTHER CONSIDERED EQUIPMENT)

(1) 1/2" TO 75 FT LEVEL

(4) 1-5/8" TO 180 FT LEVEL



CLIMBING PEGS
W/ SAFETY CLIMB

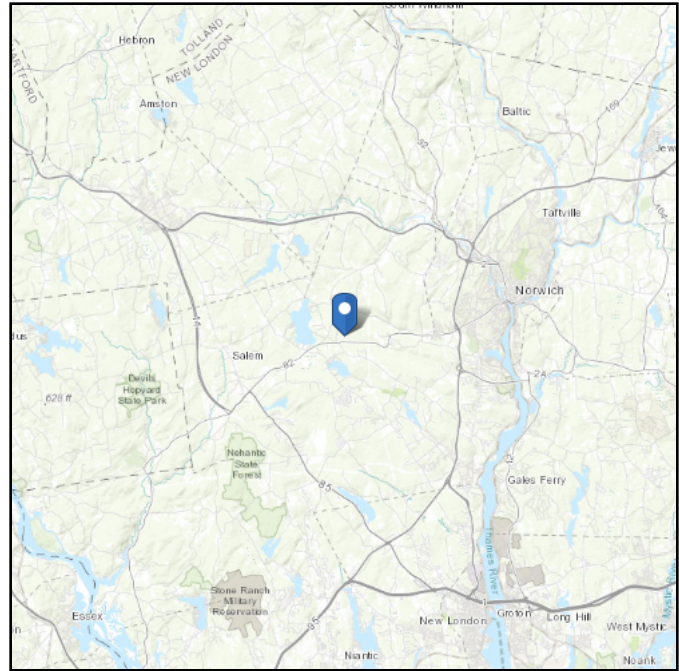
APPENDIX C
ADDITIONAL CALCULATIONS

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Elevation: 481.28 ft (NAVD 88)
Latitude: 41.505639
Longitude: -72.197528



Wind

Results:

Wind Speed:	131 Vmph	135 Vmph per Jdx requirements
10-year MRI	79 Vmph	
25-year MRI	89 Vmph	
50-year MRI	97 Vmph	
100-year MRI	107 Vmph	

Data Source: ASCE/SEI 7-10, Fig. 26.5-1A and Figs. CC-1–CC-4, incorporating errata of March 12, 2014

Date Accessed: Wed Feb 10 2021

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

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

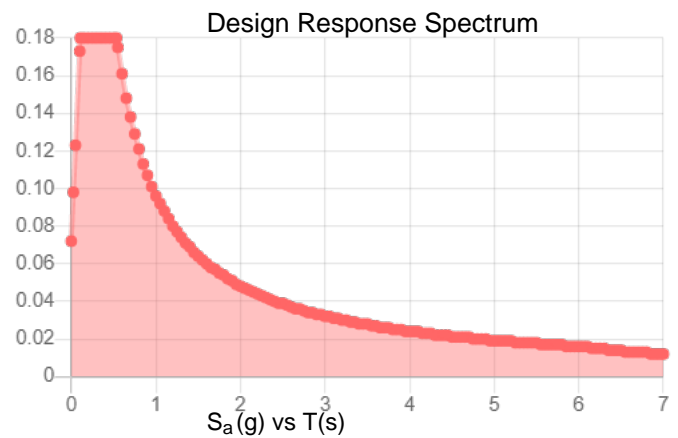
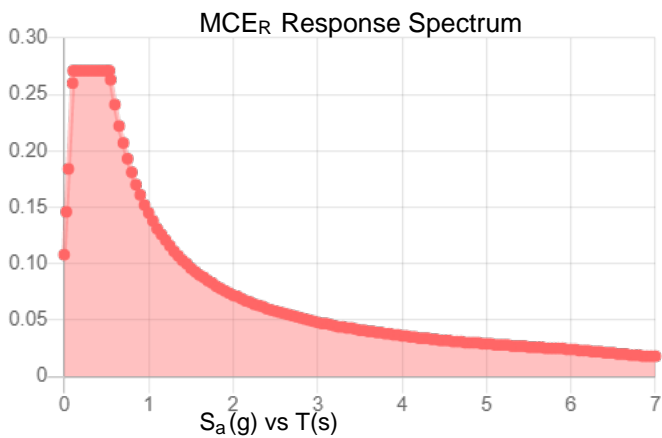
Mountainous terrain, gorges, ocean promontories, and special wind regions should be examined for unusual wind conditions.

Site Soil Class: D - Stiff Soil

Results:

S_S :	0.169	S_{DS} :	0.18
S_1 :	0.06	S_{D1} :	0.096
F_a :	1.6	T_L :	6
F_v :	2.4	PGA :	0.085
S_{MS} :	0.271	PGA _M :	0.136
S_{M1} :	0.145	F _{PGA} :	1.6
		I_e :	1

Seismic Design Category B



Data Accessed:

Wed Feb 10 2021

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: Wed Feb 10 2021

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.

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

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TNX Geometry Input

Increment (ft): [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	180 - 175	5		18	18.000	19.063	0.25	A572-65	1.000
2	175 - 170	5		18	19.063	20.126	0.25	A572-65	1.000
3	170 - 165	5		18	20.126	21.188	0.25	A572-65	1.000
4	165 - 160	5		18	21.188	22.251	0.25	A572-65	1.000
5	160 - 155	5		18	22.251	23.314	0.25	A572-65	1.000
6	155 - 150	5		18	23.314	24.377	0.25	A572-65	1.000
7	150 - 145	5		18	24.377	25.439	0.25	A572-65	1.000
8	145 - 140	5		18	25.439	26.502	0.25	A572-65	1.000
9	140 - 137	7	4	18	26.502	27.990	0.25	A572-65	1.000
10	137 - 132	5		18	26.640	27.690	0.3125	A572-65	1.000
11	132 - 131.2333	0.7667		18	27.690	27.851	0.3125	A572-65	1.000
12	131.2333 - 130.9833	0.25		18	27.851	27.903	0.475	A572-65	0.952
13	130.9833 - 125.9833	5		18	27.903	28.953	0.4625	A572-65	0.966
14	125.9833 - 120.9833	5		18	28.953	30.003	0.45625	A572-65	0.969
15	120.9833 - 115.9833	5		18	30.003	31.053	0.45	A572-65	0.972
16	115.9833 - 110.9833	5		18	31.053	32.102	0.45	A572-65	0.963
17	110.9833 - 105.9833	5		18	32.102	33.152	0.4375	A572-65	0.981
18	105.9833 - 104.4667	1.5166		18	33.152	33.471	0.475	A572-65	0.963
19	104.4667 - 104.2167	0.25		18	33.471	33.523	0.475	A572-65	0.962
20	104.2167 - 99.2167	5		18	33.523	34.573	0.4625	A572-65	0.978
21	99.2167 - 94.2167	5		18	34.573	35.623	0.4625	A572-65	0.969
22	94.2167 - 92.59	6.7967	5.17	18	35.623	37.050	0.4625	A572-65	0.966
23	92.59 - 86.42	6.17		18	35.339	36.633	0.525	A572-65	0.967
24	86.42 - 81.42	5		18	36.633	37.681	0.5125	A572-65	0.983
25	81.42 - 76.42	5		18	37.681	38.729	0.5125	A572-65	0.976
26	76.42 - 71.42	5		18	38.729	39.777	0.5125	A572-65	0.969
27	71.42 - 69.3167	2.1033		18	39.777	40.218	0.50625	A572-65	0.978
28	69.3167 - 69.0667	0.25		18	40.218	40.271	0.375	A572-65	1.000
29	69.0667 - 68.833	0.2337		18	40.271	40.320	0.375	A572-65	1.000
30	68.833 - 68.583	0.25		18	40.320	40.372	0.5375	A572-65	0.965
31	68.583 - 63.583	5		18	40.372	41.420	0.525	A572-65	0.981
32	63.583 - 58.583	5		18	41.420	42.468	0.525	A572-65	0.974
33	58.583 - 53.583	5		18	42.468	43.516	0.51875	A572-65	0.980
34	53.583 - 49.13	10.703	6.25	18	43.516	45.760	0.5125	A572-65	0.986
35	49.13 - 41.88	7.25		18	43.700	45.220	0.575	A572-65	0.984
36	41.88 - 36.88	5		18	45.220	46.268	0.575	A572-65	0.979
37	36.88 - 34.9167	1.9633		18	46.268	46.680	0.575	A572-65	0.977
38	34.9167 - 34.6667	0.25		18	46.680	46.732	0.4375	A572-65	1.000
39	34.6667 - 34.4167	0.25		18	46.732	46.784	0.4375	A572-65	1.000
40	34.4167 - 34.1667	0.25		18	46.784	46.837	0.55	A572-65	0.983
41	34.1667 - 29.1667	5		18	46.837	47.885	0.55	A572-65	0.979
42	29.1667 - 24.1667	5		18	47.885	48.933	0.54375	A572-65	0.986
43	24.1667 - 19.1667	5		18	48.933	49.982	0.5375	A572-65	0.993
44	19.1667 - 14.1667	5		18	49.982	51.030	0.5375	A572-65	0.990
45	14.1667 - 9.1667	5		18	51.030	52.078	0.5375	A572-65	0.986
46	9.1667 - 5.5	3.6667		18	52.078	52.847	0.5375	A572-65	0.984
47	5.5 - 5.15	0.35		18	52.847	52.920	0.875	A572-65	0.898
48	5.15 - 4.95	0.2		18	52.920	52.962	0.875	A572-65	0.897
49	4.95 - 4.25	0.7		18	52.962	53.109	0.8625	A572-65	0.909
50	4.25 - 4	0.25		18	53.109	53.161	0.775	A572-65	0.893
51	4 - 0	4		18	53.161	54.000	0.7625	A572-65	0.902

TNX Section Forces

Increment (ft):		TNX Output			
	5	Section Height (ft)	P _u (K)	M _{ux} (kip-ft)	V _u (K)
1		180 - 175	4.07	34.35	7.07
2		175 - 170	4.36	71.09	7.56
3		170 - 165	4.72	109.80	7.93
4		165 - 160	7.74	200.44	14.63
5		160 - 155	8.26	274.56	15.02
6		155 - 150	8.81	350.62	15.41
7		150 - 145	13.73	443.61	22.61
8		145 - 140	14.47	557.55	22.98
9		140 - 137	14.93	626.79	23.20
10		137 - 132	16.08	743.98	23.68
11		132 - 131.2333	16.22	762.15	23.73
12		131.2333 - 130.9833	16.28	768.08	23.75
13		130.9833 - 125.9833	17.36	887.93	24.20
14		125.9833 - 120.9833	18.48	1010.02	24.65
15		120.9833 - 115.9833	19.62	1134.33	25.10
16		115.9833 - 110.9833	20.80	1260.85	25.54
17		110.9833 - 105.9833	22.00	1389.58	25.98
18		105.9833 - 104.4667	22.38	1429.07	26.12
19		104.4667 - 104.2167	22.46	1435.60	26.13
20		104.2167 - 99.2167	23.74	1567.34	26.59
21		99.2167 - 94.2167	25.06	1701.32	27.03
22		94.2167 - 92.59	25.48	1745.38	27.18
23		92.59 - 86.42	28.32	1915.21	27.88
24		86.42 - 81.42	29.82	2055.63	28.32
25		81.42 - 76.42	31.36	2198.22	28.75
26		76.42 - 71.42	33.00	2342.97	29.24
27		71.42 - 69.3167	33.66	2404.62	29.42
28		69.3167 - 69.0667	33.74	2411.97	29.42
29		69.0667 - 68.833	33.80	2418.85	29.44
30		68.833 - 68.583	33.89	2426.21	29.46
31		68.583 - 63.583	35.54	2574.55	29.90
32		63.583 - 58.583	37.23	2724.98	30.31
33		58.583 - 53.583	38.95	2877.46	30.71
34		53.583 - 49.13	40.51	3014.91	31.06
35		49.13 - 41.88	45.05	3242.68	31.79
36		41.88 - 36.88	47.02	3402.42	32.15
37		36.88 - 34.9167	47.79	3465.64	32.30
38		34.9167 - 34.6667	47.89	3473.71	32.29
39		34.6667 - 34.4167	47.97	3481.78	32.30
40		34.4167 - 34.1667	48.07	3489.85	32.32
41		34.1667 - 29.1667	50.02	3652.21	32.65
42		29.1667 - 24.1667	52.01	3816.15	32.96
43		24.1667 - 19.1667	54.03	3981.65	33.28
44		19.1667 - 14.1667	56.08	4148.71	33.59
45		14.1667 - 9.1667	58.17	4317.31	33.90
46		9.1667 - 5.5	59.71	4441.95	34.13
47		5.5 - 5.15	59.93	4453.89	34.14
48		5.15 - 4.95	60.05	4460.72	34.15
49		4.95 - 4.25	60.45	4484.64	34.21
50		4.25 - 4	60.59	4493.19	34.23
51		4 - 0	62.00	4637.05	34.52

Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
180 - 175	Pole	TP19.063x18x0.25	Pole	8.2%	Pass
175 - 170	Pole	TP20.126x19.063x0.25	Pole	14.7%	Pass
170 - 165	Pole	TP21.188x20.126x0.25	Pole	20.3%	Pass
165 - 160	Pole	TP22.251x21.188x0.25	Pole	33.6%	Pass
160 - 155	Pole	TP23.314x22.251x0.25	Pole	41.6%	Pass
155 - 150	Pole	TP24.377x23.314x0.25	Pole	48.6%	Pass
150 - 145	Pole	TP25.439x24.377x0.25	Pole	57.3%	Pass
145 - 140	Pole	TP26.502x25.439x0.25	Pole	66.8%	Pass
140 - 137	Pole	TP27.99x26.502x0.25	Pole	71.9%	Pass
137 - 132	Pole	TP27.69x26.64x0.3125	Pole	63.8%	Pass
132 - 131.23	Pole	TP27.851x27.69x0.3125	Pole	64.5%	Pass
131.23 - 130.98	Pole + Reinf.	TP27.903x27.851x0.475	Reinf. 6 Tension Rupture	58.2%	Pass
130.98 - 125.98	Pole + Reinf.	TP28.953x27.903x0.4625	Reinf. 6 Tension Rupture	63.1%	Pass
125.98 - 120.98	Pole + Reinf.	TP30.003x28.953x0.4563	Reinf. 6 Tension Rupture	67.5%	Pass
120.98 - 115.98	Pole + Reinf.	TP31.053x30.003x0.45	Reinf. 6 Tension Rupture	71.4%	Pass
115.98 - 110.98	Pole + Reinf.	TP32.102x31.053x0.45	Reinf. 6 Tension Rupture	74.9%	Pass
110.98 - 105.98	Pole + Reinf.	TP33.152x32.102x0.4375	Reinf. 6 Tension Rupture	78.0%	Pass
105.98 - 104.47	Pole + Reinf.	TP33.471x33.152x0.475	Reinf. 5 Tension Rupture	67.6%	Pass
104.47 - 104.22	Pole + Reinf.	TP33.523x33.471x0.475	Reinf. 5 Tension Rupture	67.7%	Pass
104.22 - 99.22	Pole + Reinf.	TP34.573x33.523x0.4625	Reinf. 5 Tension Rupture	70.1%	Pass
99.22 - 94.22	Pole + Reinf.	TP35.623x34.573x0.4625	Reinf. 5 Tension Rupture	72.4%	Pass
94.22 - 92.59	Pole + Reinf.	TP37.05x35.623x0.4625	Reinf. 5 Tension Rupture	73.0%	Pass
92.59 - 86.42	Pole + Reinf.	TP36.633x35.339x0.525	Reinf. 5 Tension Rupture	68.5%	Pass
86.42 - 81.42	Pole + Reinf.	TP37.681x36.633x0.5125	Reinf. 5 Tension Rupture	69.9%	Pass
81.42 - 76.42	Pole + Reinf.	TP38.729x37.681x0.5125	Reinf. 5 Tension Rupture	71.3%	Pass
76.42 - 71.42	Pole + Reinf.	TP39.777x38.729x0.5125	Reinf. 5 Tension Rupture	72.5%	Pass
71.42 - 69.32	Pole + Reinf.	TP40.218x39.777x0.5063	Reinf. 5 Tension Rupture	72.9%	Pass
69.32 - 69.07	Pole	TP40.271x40.218x0.375	Pole	83.1%	Pass
69.07 - 68.83	Pole	TP40.32x40.271x0.375	Pole	83.1%	Pass
68.83 - 68.58	Pole + Reinf.	TP40.372x40.32x0.5375	Reinf. 4 Compression	66.2%	Pass
68.58 - 63.58	Pole + Reinf.	TP41.42x40.372x0.525	Reinf. 4 Compression	67.2%	Pass
63.58 - 58.58	Pole + Reinf.	TP42.468x41.42x0.525	Reinf. 4 Compression	68.1%	Pass
58.58 - 53.58	Pole + Reinf.	TP43.516x42.468x0.5188	Reinf. 4 Compression	68.9%	Pass
53.58 - 49.13	Pole + Reinf.	TP45.76x43.516x0.5125	Reinf. 4 Compression	69.5%	Pass
49.13 - 41.88	Pole + Reinf.	TP45.22x43.7x0.575	Reinf. 4 Compression	64.9%	Pass
41.88 - 36.88	Pole + Reinf.	TP46.268x45.22x0.575	Reinf. 4 Compression	65.3%	Pass
36.88 - 34.92	Pole + Reinf.	TP46.68x46.268x0.575	Reinf. 4 Compression	65.5%	Pass
34.92 - 34.67	Pole	TP46.732x46.68x0.4375	Pole	76.2%	Pass
34.67 - 34.42	Pole	TP46.784x46.732x0.4375	Pole	76.2%	Pass
34.42 - 34.17	Pole + Reinf.	TP46.837x46.784x0.55	Reinf. 3 Tension Rupture	71.6%	Pass
34.17 - 29.17	Pole + Reinf.	TP47.885x46.837x0.55	Reinf. 3 Tension Rupture	72.0%	Pass
29.17 - 24.17	Pole + Reinf.	TP48.933x47.885x0.5438	Reinf. 3 Tension Rupture	72.3%	Pass
24.17 - 19.17	Pole + Reinf.	TP49.982x48.933x0.5375	Reinf. 3 Tension Rupture	72.6%	Pass
19.17 - 14.17	Pole + Reinf.	TP51.03x49.982x0.5375	Reinf. 3 Tension Rupture	72.8%	Pass
14.17 - 9.17	Pole + Reinf.	TP52.078x51.03x0.5375	Reinf. 3 Tension Rupture	73.0%	Pass
9.17 - 5.5	Pole + Reinf.	TP52.847x52.078x0.5375	Reinf. 3 Tension Rupture	73.1%	Pass
5.5 - 5.15	Pole + Reinf.	TP52.92x52.847x0.875	Reinf. 2 Compression	54.0%	Pass
5.15 - 4.95	Pole + Reinf.	TP52.962x52.92x0.875	Reinf. 2 Compression	54.0%	Pass
4.95 - 4.25	Pole + Reinf.	TP53.109x52.962x0.8625	Reinf. 2 Compression	54.0%	Pass
4.25 - 4	Pole + Reinf.	TP53.161x53.109x0.775	Reinf. 1 Compression	60.7%	Pass
4 - 0	Pole + Reinf.	TP54x53.161x0.7625	Reinf. 1 Weldment	83.2%	Pass
				Summary	
			Pole	83.1%	Pass
			Reinforcement	83.2%	Pass
			Overall	83.2%	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	R6
180 - 175	667	n/a	667	14.93	n/a	14.93	8.2%						
175 - 170	787	n/a	787	15.77	n/a	15.77	14.7%						
170 - 165	920	n/a	920	16.61	n/a	16.61	20.3%						
165 - 160	1067	n/a	1067	17.46	n/a	17.46	33.6%						
160 - 155	1230	n/a	1230	18.30	n/a	18.30	41.6%						
155 - 150	1407	n/a	1407	19.14	n/a	19.14	48.6%						
150 - 145	1602	n/a	1602	19.99	n/a	19.99	57.3%						
145 - 140	1813	n/a	1813	20.83	n/a	20.83	66.8%						
140 - 137	1948	n/a	1948	21.34	n/a	21.34	71.9%						
137 - 132	2570	n/a	2570	27.15	n/a	27.15	63.8%						
132 - 131.23	2616	n/a	2616	27.31	n/a	27.31	64.5%						
131.23 - 130.98	2631	1262	3893	27.37	12.00	39.37	43.1%						58.2%
130.98 - 125.98	2943	1354	4297	28.41	12.00	40.41	46.8%						63.1%
125.98 - 120.98	3279	1450	4729	29.45	12.00	41.45	50.1%						67.5%
120.98 - 115.98	3639	1550	5188	30.49	12.00	42.49	53.5%						71.4%
115.98 - 110.98	4025	1652	5677	31.53	12.00	43.53	56.6%						74.9%
110.98 - 105.98	4437	1758	6195	32.57	12.00	44.57	59.6%						78.0%
105.98 - 104.47	4567	2244	6811	32.89	15.00	47.89	56.4%						67.6%
104.47 - 104.22	4589	2251	6840	32.94	15.00	47.94	56.5%						67.7%
104.22 - 99.22	5038	2389	7427	33.98	15.00	48.98	59.1%						70.1%
99.22 - 94.22	5515	2531	8046	35.02	15.00	50.02	61.5%						72.4%
94.22 - 92.59	5677	2578	8255	35.36	15.00	50.36	62.3%						73.0%
92.59 - 86.42	7165	2672	9837	43.15	15.00	58.15	55.9%						68.5%
86.42 - 81.42	7805	2822	10626	44.40	15.00	59.40	57.6%						69.9%
81.42 - 76.42	8481	2976	11457	45.65	15.00	60.65	59.1%						71.3%
76.42 - 71.42	9196	3134	12330	46.90	15.00	61.90	60.6%						72.5%
71.42 - 69.32	9508	3202	12710	47.42	15.00	62.42	61.1%						72.9%
69.32 - 69.07	9545	n/a	9545	47.48	n/a	47.48	83.1%						
69.07 - 68.83	9581	n/a	9581	47.54	n/a	47.54	83.1%						
68.83 - 68.58	9618	3879	13497	47.60	18.00	65.60	58.4%					66.2%	
68.58 - 63.58	10395	4077	14471	48.85	18.00	66.85	59.7%					67.2%	
63.58 - 58.58	11211	4279	15490	50.10	18.00	68.10	61.0%					68.1%	
58.58 - 53.58	12070	4487	16556	51.35	18.00	69.35	62.2%					68.9%	
53.58 - 49.13	12870	4676	17546	52.46	18.00	70.46	63.2%					69.5%	
49.13 - 41.88	15750	4834	20585	62.18	18.00	80.18	56.8%					64.9%	
41.88 - 36.88	16882	5055	21937	63.64	18.00	81.64	57.5%					65.3%	
36.88 - 34.92	17341	5143	22484	64.21	18.00	82.21	57.8%					65.5%	
34.92 - 34.67	17400	n/a	17400	64.28	n/a	64.28	76.2%						
34.67 - 34.42	17460	n/a	17460	64.36	n/a	64.36	76.2%						
34.42 - 34.17	17519	4307	21826	64.43	15.00	79.43	60.3%				71.6%		
34.17 - 29.17	18733	4497	23230	65.88	15.00	80.88	61.0%				72.0%		
29.17 - 24.17	20003	4691	24694	67.34	15.00	82.34	61.6%				72.3%		
24.17 - 19.17	21328	4890	26217	68.80	15.00	83.80	62.3%				72.6%		
19.17 - 14.17	22710	5092	27802	70.25	15.00	85.25	62.9%				72.8%		
14.17 - 9.17	24151	5299	29450	71.71	15.00	86.71	63.5%				73.0%		
9.17 - 5.5	25246	5453	30699	72.77	15.00	87.77	63.9%				73.1%		
5.5 - 5.15	25374	24023	49397	72.88	56.88	129.75	41.3%	53.8%	54.0%	45.7%			
5.15 - 4.95	25435	24056	49492	72.93	56.88	129.81	41.4%	53.8%	54.0%	45.7%			
4.95 - 4.25	25649	24174	49822	73.14	56.88	130.01	41.5%	53.9%	54.0%	45.8%			
4.25 - 4	25712	18869	44582	73.21	41.88	115.09	46.2%	60.7%	60.7%				
4 - 0	26958	19387	46346	74.38	41.88	116.25	46.8%	83.2%	83.2%				

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

Monopole Base Plate Connection

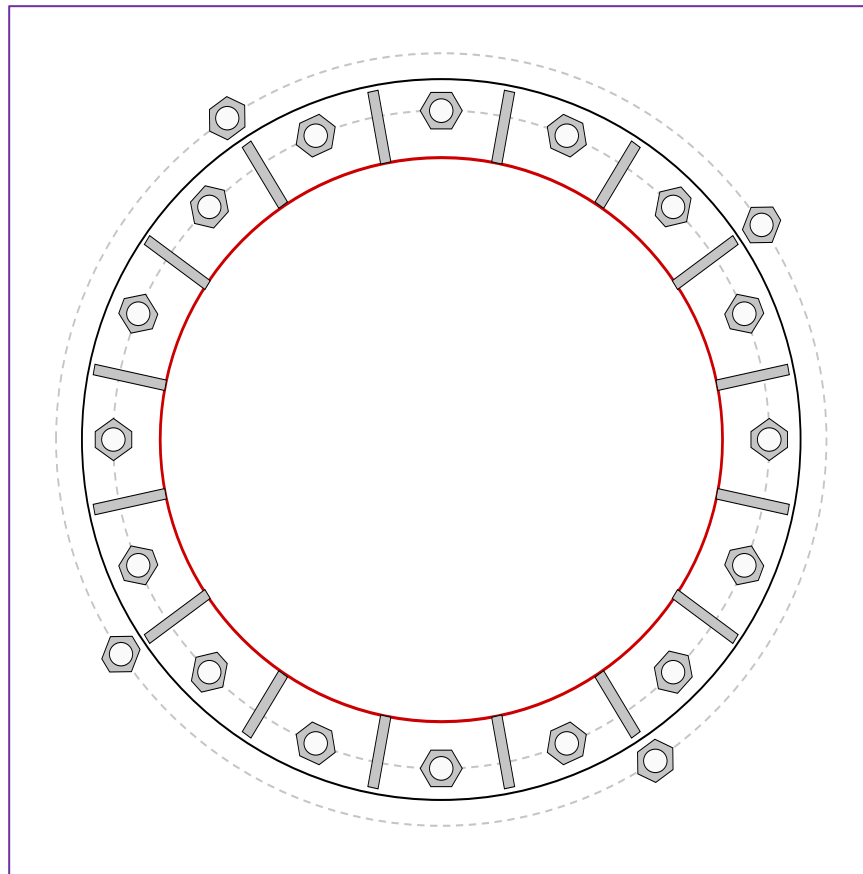


Site Info	
BU #	876371
Site Name	Walden / Carolyn Besada
Order #	585191 Rev. 1

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	See Custom Sheet
l_{ar} (in)	See Custom Sheet

Applied Loads	
Moment (kip-ft)	4637.00
Axial Force (kips)	62.00
Shear Force (kips)	35.00

*TIA-222-H Section 15.5 Applied



Connection Properties	Analysis Results
-----------------------	------------------

Anchor Rod Data
 GROUP 1: (16) 2-1/4" ϕ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 63" BC
 GROUP 2: (4) 2-1/4" ϕ bolts (A193 Gr. B7 N; $F_y=105$ ksi, $F_u=125$ ksi) on 74" BC

Base Plate Data
 69" OD x 2" Plate (A572-60; $F_y=60$ ksi, $F_u=75$ ksi)

Stiffener Data
 (16) 20"H x 7"W x 1"T, Notch: 0"
 plate: $F_y= 50$ ksi ; weld: $F_y= 70$ ksi
 horiz. weld: 0.75" fillet
 vert. weld: 0.4375" fillet

Pole Data
 54" x 0.4375" 18-sided pole (A572-65; $F_y=65$ ksi, $F_u=80$ ksi)

Anchor Rod Summary (units of kips, kip-in)
 GROUP 1:
 $P_{u,t} = 160.23$ $\phi P_{n,t} = 243.75$ **Stress Rating**
 $V_u = 2.19$ $\phi V_n = 149.1$ **62.6%**
 $M_u = n/a$ $\phi M_n = n/a$ **Pass**

GROUP 2:
 $P_{u,t} = 192.71$ $\phi P_{n,t} = 304.69$ **Stress Rating**
 $V_u = 0$ $\phi V_n = 186.38$ **60.2%**
 $M_u = n/a$ $\phi M_n = n/a$ **Pass**

Base Plate Summary
 Max Stress (ksi): 27.83 (Roark's Flexural)
 Allowable Stress (ksi): 54
 Stress Rating: **49.1%** **Pass**

Stiffener Summary
 Horizontal Weld: **47.9%** **Pass**
 Vertical Weld: **31.4%** **Pass**
 Plate Flexure+Shear: **9.7%** **Pass**
 Plate Tension+Shear: **36.3%** **Pass**
 Plate Compression: **45.0%** **Pass**

Pole Summary
 Punching Shear: **8.3%** **Pass**

CClplate

Elevation (ft) 0 (Base)

note: Bending interaction not considered when Grout Considered = "Yes"

Bolt Group	Resist Axial	Resist Shear	Induce Plate Bending	Grout Considered	Apply at BARB Elevation	BARB CL Elevation (ft)
1	Yes	Yes	Yes	Yes	No	
2	No	No	No	Yes	No	

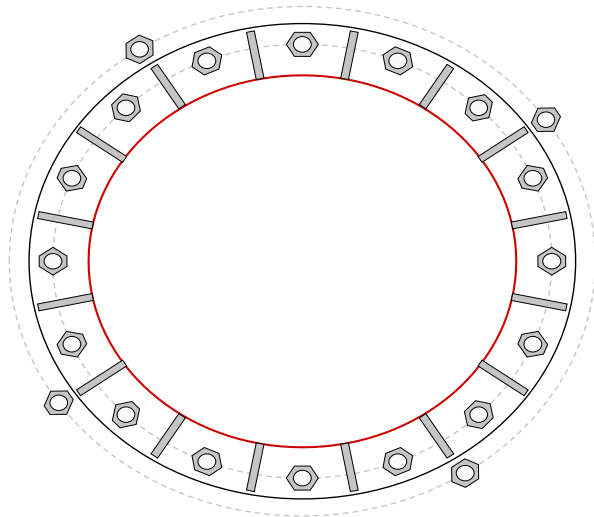
Custom Bolt Connection

Bolt	Bolt Group ID	Location (deg.)	Diameter (in)	Material	Bolt Circle (in)	Eta Factor, η	l_w (in):	Thread Type	Area Override, in ²	Tension Only
1	1	0	2.25	A615-75	63	0.5	1	N-Included		No
2	1	22.5	2.25	A615-75	63	0.5	1	N-Included		No
3	1	45	2.25	A615-75	63	0.5	1	N-Included		No
4	1	67.5	2.25	A615-75	63	0.5	1	N-Included		No
5	1	90	2.25	A615-75	63	0.5	1	N-Included		No
6	1	112.5	2.25	A615-75	63	0.5	1	N-Included		No
7	1	135	2.25	A615-75	63	0.5	1	N-Included		No
8	1	157.5	2.25	A615-75	63	0.5	1	N-Included		No
9	1	180	2.25	A615-75	63	0.5	1	N-Included		No
10	1	202.5	2.25	A615-75	63	0.5	1	N-Included		No
11	1	225	2.25	A615-75	63	0.5	1	N-Included		No
12	1	247.5	2.25	A615-75	63	0.5	1	N-Included		No
13	1	270	2.25	A615-75	63	0.5	1	N-Included		No
14	1	292.5	2.25	A615-75	63	0.5	1	N-Included		No
15	1	315	2.25	A615-75	63	0.5	1	N-Included		No
16	1	337.5	2.25	A615-75	63	0.5	1	N-Included		No
17	2	33.75	2.25	A193 Gr. B7	74	0.5	2.25	N-Included		No
18	2	123.75	2.25	A193 Gr. B7	74	0.5	2.25	N-Included		No
19	2	213.75	2.25	A193 Gr. B7	74	0.5	2.25	N-Included		No
20	2	303.75	2.25	A193 Gr. B7	74	0.5	2.25	N-Included		No

Custom Stiffener Connection

Stiffener	Stiffener Group ID	Location (deg.)	Width (in)	Height (in)	Thickness (in)	H. Notch (in)	V. Notch (in)	Grade (ksi)	Weld Type	Groove Depth (in)	Groove Angle (deg.)	H. Fillet Weld Size (in)	V. Fillet Weld Size (in)	Weld Strength (ksi)
1	1	11.25	7	20	1	0	0	50	Fillet			0.75	0.4375	70
2	1	33.75	7	20	1	0	0	50	Fillet			0.75	0.4375	70
3	1	56.25	7	20	1	0	0	50	Fillet			0.75	0.4375	70
4	1	78.75	7	20	1	0	0	50	Fillet			0.75	0.4375	70
5	1	101.25	7	20	1	0	0	50	Fillet			0.75	0.4375	70
6	1	123.75	7	20	1	0	0	50	Fillet			0.75	0.4375	70
7	1	146.25	7	20	1	0	0	50	Fillet			0.75	0.4375	70
8	1	168.75	7	20	1	0	0	50	Fillet			0.75	0.4375	70
9	1	191.25	7	20	1	0	0	50	Fillet			0.75	0.4375	70
10	1	213.75	7	20	1	0	0	50	Fillet			0.75	0.4375	70
11	1	236.25	7	20	1	0	0	50	Fillet			0.75	0.4375	70
12	1	258.75	7	20	1	0	0	50	Fillet			0.75	0.4375	70
13	1	281.25	7	20	1	0	0	50	Fillet			0.75	0.4375	70
14	1	303.75	7	20	1	0	0	50	Fillet			0.75	0.4375	70
15	1	326.25	7	20	1	0	0	50	Fillet			0.75	0.4375	70
16	1	348.75	7	20	1	0	0	50	Fillet			0.75	0.4375	70

Plot Graphic



Pier and Pad Foundation



BU #: 876371
 Site Name: Walden / Carolyn B
 App. Number: 585191 Rev. 1

TIA-222 Revision: H
 Tower Type: Monopole

Top & Bot. Pad Rein. Different?:
 Block Foundation?:
 Rectangular Pad?:

Superstructure Analysis Reactions		
Compression, P_{comp} :	62	kips
Base Shear, Vu_{comp} :	35	kips
Moment, M_u :	4637	ft-kips
Tower Height, H :	180	ft
BP Dist. Above Fdn, bp_{dist} :	3.25	in
Bolt Circle / Bearing Plate Width, BC :	63	in

Foundation Analysis Checks				
	Capacity	Demand	Rating*	Check
<i>Lateral (Sliding) (kips)</i>	236.30	35.00	14.1%	Pass
<i>Bearing Pressure (ksf)</i>	18.38	6.40	34.8%	Pass
<i>Overturning (kip*ft)</i>	5547.72	4821.48	86.9%	Pass
<i>Pad Flexure (kip*ft)</i>	7759.94	2769.21	34.0%	Pass
<i>Pad Shear - 1-way (kips)</i>	1579.56	359.77	21.7%	Pass
<i>Pad Shear - 2-way (Comp) (ksi)</i>	0.190	0.000	0.0%	Pass
<i>Flexural 2-way (Comp) (kip*ft)</i>	9296.30	0.00	0.0%	Pass

*Rating per TIA-222-H Section 15.5

Structural Rating*:	34.0%
Soil Rating*:	86.9%

Pad Properties		
Depth, D :	4.25	ft
Pad Width, W_1 :	25	ft
Pad Thickness, T :	5	ft
Pad Rebar Size (Bottom dir. 2), Sp_2 :	8	
Pad Rebar Quantity (Bottom dir. 2), mp_2 :	40	
Pad Clear Cover, cc_{pad} :	3	in

Material Properties		
Rebar Grade, F_y :	60	ksi
Concrete Compressive Strength, F'_c :	4	ksi
Dry Concrete Density, δ_c :	150	pcf

Soil Properties		
Total Soil Unit Weight, γ :	120	pcf
Ultimate Net Bearing, Q_{net} :	24.000	ksf
Cohesion, C_u :		ksf
Friction Angle, ϕ :	32	degrees
SPT Blow Count, N_{blows} :		
Base Friction, μ :	0.6	
Neglected Depth, N :	3.33	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, gw :	N/A	ft

<--Toggle between Gross and Net

Exhibit E

Mount Analysis



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

Post-Mod Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10094995
Maser Consulting Connecticut Project #: 21777342A

August 20, 2021

Site Information

Site ID: 468903-VZW / MONTVILLE NW CT
Site Name: MONTVILLE NW CT
Carrier Name: Verizon Wireless
Address: 557 Route 82
Montville, Connecticut 06370
New London County
Latitude: 41.505628°
Longitude: -72.197497°

Structure Information

Tower Type: Monopole
Mount Type: 14.00-Ft Platform

FUZE ID # 16272207

Analysis Results

Platform: 74.8% Pass

***Contractor PMI Requirements:

Included at the end of this MA report

Available & Submitted via portal at <https://pmi.vzwsmart.com>

Contractor - Please Review Specific Site PMI Requirements Upon Award

Requirements also Noted on Mount Modification Drawings

Requirements may also be Noted on A & E drawings

Report Prepared By: Grant Walters



Digitally signed by Derek Hartzell
Date: 2021.08.20 13:40:16-0700'

Executive Summary:

The objective of this report is to summarize the analysis results of the antenna support mount including the proposed modifications at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards.

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

Sources of Information:

Document Type	Remarks
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS, Site ID: 674974, dated July 30, 2021</i>
<i>Mount Mapping Report</i>	<i>RKS Design & Engineering, LLC, Site ID: CC: 876371, VZW: 468903, dated March 24, 2021</i>
<i>Previous Mount Analysis</i>	<i>Maser Consulting, Project #: 21777342A, dated August 10, 2021</i>
<i>Mount Modification Drawings</i>	<i>Maser Consulting, Project #: 21777342A, dated August 20, 2021</i>

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 124 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: II Exposure Category: B Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.983
Seismic Parameters:	S_s : 0.200 S_1 : 0.054
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Live Load, L_v : 250 lbs. Maintenance Live Load, L_m : 500 lbs.
Analysis Software:	RISA-3D (V17)

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
166.00	167.00	6	Commscope	NHH-65B-R2B	Added
		3	Samsung	MT6407-77A	
		3	Samsung	RF4439d-25A	
		3	Samsung	RF440d-13A	
		4	Amphenol Antel	LPA-80063/6CF	Retained
		2	Amphenol Antel	LPA-80080/6CF	
		2	Raycap	RRFDC-3315-PF-48*	

*Equipment is flush mounted directly to the Monopole. They are not mounted on the platform mount and will not be included in this mount analysis

The recent mount mapping reported existing OVP units. It is acceptable to install up to any three (3) of the OVP model numbers listed below as required at any location other than the mount face without affecting the structural capacity of the mount. If OVP units are installed on the mount face, a mount re-analysis may be required unless replacing an existing OVP.

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

Standard Conditions:

1. All engineering services are performed on the basis that the information provided to Maser Consulting Connecticut and used in this analysis is current and correct. The existing equipment loading has been applied at locations determined from the supplied documentation. Any deviation from the loading locations specified in this report shall be communicated to Maser Consulting Connecticut to verify deviation will not adversely impact the analysis.
2. Mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer’s specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.

5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325
8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

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

Analysis Results:

Component	Utilization %	Pass/Fail
Standoff_1	45.8 %	Pass
Standoff_2	19.5 %	Pass
Grating Angle	9.6 %	Pass
Cross Members	31.7 %	Pass
Face Horizontal	74.8 %	Pass
Mount Pipe	43.7 %	Pass
Mod Support Rail	20.4 %	Pass
Standoff_1	45.8 %	Pass
Mount Connection	48.4 %	Pass
Structure Rating – (Controlling Utilization of all Components)		74.8 %

Recommendation:

The existing mounts will be **SUFFICIENT** for the final loading after the proposed modifications are successfully completed.

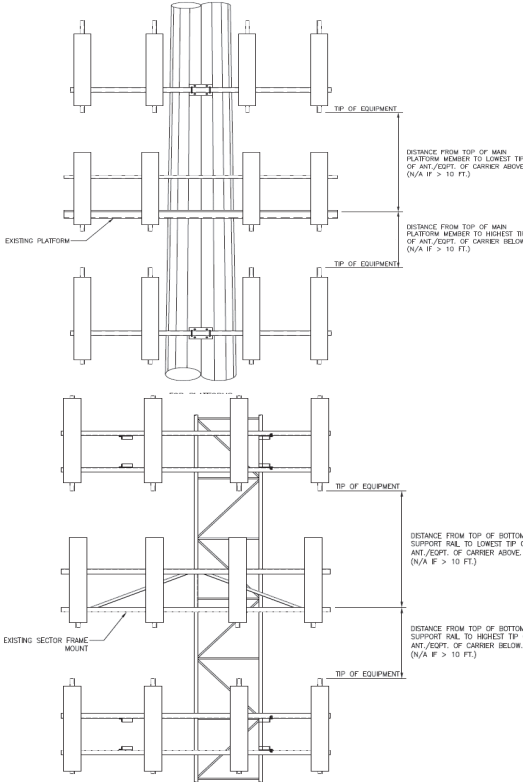
ANSI/ASSP rigging plan review services compliant with the requirements of ANSI/TIA 322 are available for a Construction Class IV site or other, if required. Separate review fees will apply.

Attachments:

1. Mount Photos
2. Mount Mapping Report (for reference only)
3. Analysis Calculations
- 4. Contractor Required PMI Report Deliverables**
5. Antenna Placement Diagrams
6. TIA Adoption and Windspeed Usage Letter



Mount Azimuth (Degree) for Each Sector			Tower Leg Azimuth (Degree) for Each Sector			Sector B														
Sector A:	30.00	Deg	Leg A:		Deg	Ant _{1a}														
Sector B:	150.00	Deg	Leg B:		Deg	Ant _{1b}	LPA-80063-6CF-EDIN	15.20	13.10	71.10		168.75	29.00	15.00	150.00	29, 211				
Sector C:	270.00	Deg	Leg C:		Deg	Ant _{1c}														
Sector D:		Deg	Leg D:		Deg	Ant _{2a}	UNKNOWN-TMA	6.50	0.75	4.75		169.563	30.00	2.50		29, 211				
Climbing Facility Information						Ant _{2b}	HBXX-6516DS-A2M	12.00	6.50	50.90		169.563	30.00	8.75	150.00	29, 211				
Location:		Deg	N/A		Deg	Ant _{2c}	B66A RRH 4X45	11.80	7.20	25.80		170.771	15.50	-7.00		29, 211				
Climbing Facility	Corrosion Type:	N/A				Ant _{3a}	B13 RRH 4X30	11.80	7.50	20.90		170.333	24.00	-7.00		29, 212				
	Access:	Climbing path was unobstructed.				Ant _{3b}	UNKNOWN PANEL	20.75	7.50	74.25		169	40.00	12.50	150.00	29, 212				
	Condition:	Good condition.				Ant _{3c}														
						Ant _{4a}	UNKNOWN-TMA	6.50	0.75	4.75		169.833	22.00	2.50		29, 214				
						Ant _{4b}	HBXX-6516DS-A2M	12.00	6.50	50.90		169.333	28.00	8.75	150.00	29, 214				
						Ant _{4c}														
						Ant _{5a}														
						Ant _{5b}	LPA-80063-6CF-EDIN	15.20	13.10	71.10		168.667	31.00	15.00	150.00	29, 214				
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower	RRFDC-3315-PF-48	15.73	10.25	25.66						29, 212				
						Ant on Tower														
						Sector C														
						Ant _{1a}														
						Ant _{1b}	LPA-80063-6CF-EDIN	15.20	13.10	71.10		168.75	29.00	15.00	270.00	38, 216				
						Ant _{1c}														
						Ant _{2a}	UNKNOWN-TMA	6.50	0.75	4.75		169.563	30.00	2.50		38, 216				
						Ant _{2b}	HBXX-6516DS-A2M	12.00	6.50	50.90		169.563	30.00	8.75	270.00	38, 216				
						Ant _{2c}	B66A RRH 4X45	11.80	7.20	25.80		170.771	15.50	-7.00		38, 216				
						Ant _{3a}	B13 RRH 4X30	11.80	7.50	20.90		170.333	24.00	-7.00		38, 217				
						Ant _{3b}	UNKNOWN PANEL	20.75	7.50	74.25		169	40.00	12.50	270.00	38, 217				
						Ant _{3c}														
						Ant _{4a}	UNKNOWN-TMA	6.50	0.75	4.75		169.833	22.00	2.50		38, 218				
						Ant _{4b}	HBXX-6516DS-A2M	12.00	6.50	50.90		169.333	28.00	8.75	270.00	38, 218				
						Ant _{4c}														
						Ant _{5a}	GPS-3"Ø	3.00	3.00	5.00		172.333	-13.00			38, 218				
						Ant _{5b}	LPA-80063-6CF-EDIN	15.20	13.10	71.10		168.667	31.00	15.00	270.00	38, 218				
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														
						Sector D														
						Ant _{1a}														
						Ant _{1b}														
						Ant _{1c}														
						Ant _{2a}														
						Ant _{2b}														
						Ant _{2c}														
						Ant _{3a}														
						Ant _{3b}														
						Ant _{3c}														
						Ant _{4a}														
						Ant _{4b}														
						Ant _{4c}														
						Ant _{5a}														
						Ant _{5b}														
						Ant _{5c}														
						Ant on Standoff														
						Ant on Standoff														
						Ant on Tower														
						Ant on Tower														



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

1	COAX:TOTAL(14): (6)FH 1-5/8, (6)FH 1-5/8 CUT, (2)1-1/2"Ø HYBRID	156
2		
3		
4		
5		
6		
7		
8		

Mapping Notes

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

Standard Conditions

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



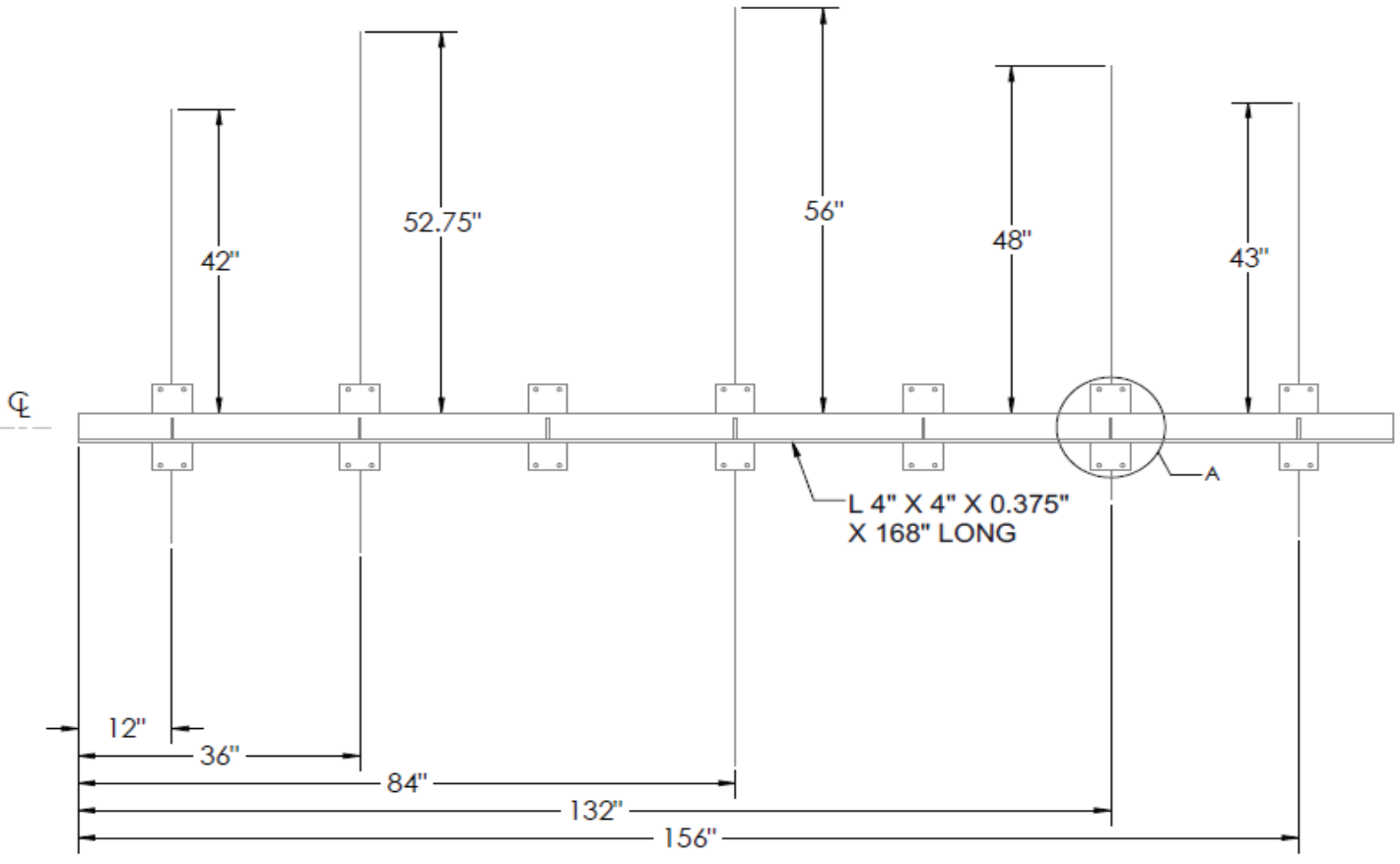
Antenna Mount Mapping Form (PATENT PENDING)

FCC #
UNKNOWN

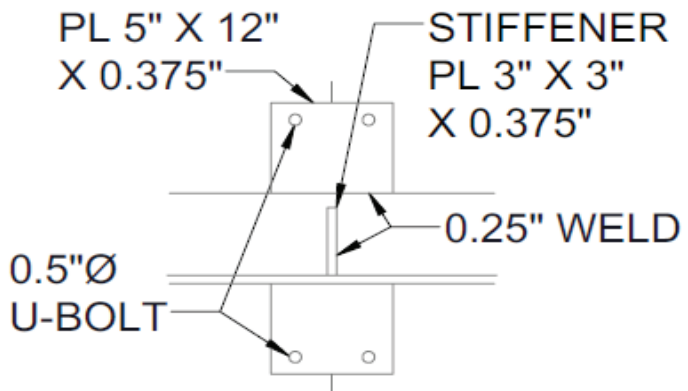
Tower Owner:	CROWN CASTLE	Mapping Date:	03-24-2021
Site Name:	CC: WALDEN / CAROLYN BESADE; VZW: MOUNTVILLE NW CT	Tower Type:	Monopole
Site Number or ID:	CC: 876371, VZW:468903	Tower Height (Ft.):	UNKNOWN
Mapping Contractor:	RKS Design & Engineering LLC	Mount Elevation (Ft.):	167.5

This antenna mapping form is the property of TES and under PATENT PENDING. The formation contained herein is considered confidential in nature and is to be used only for the specific customer it was intended for. Reproduction, transmission, publication, modification or disclosure by any method is prohibited except by express written permission of TES. All means and methods are the responsibility of the contractor and the work shall be compliant with ANSI/ASSE A 10.48, OSHA, FCC, FAA and other safety requirements that may apply. TES is not warranting the usability of the safety climb as it must be assessed prior to each use in compliance with OSHA requirements.

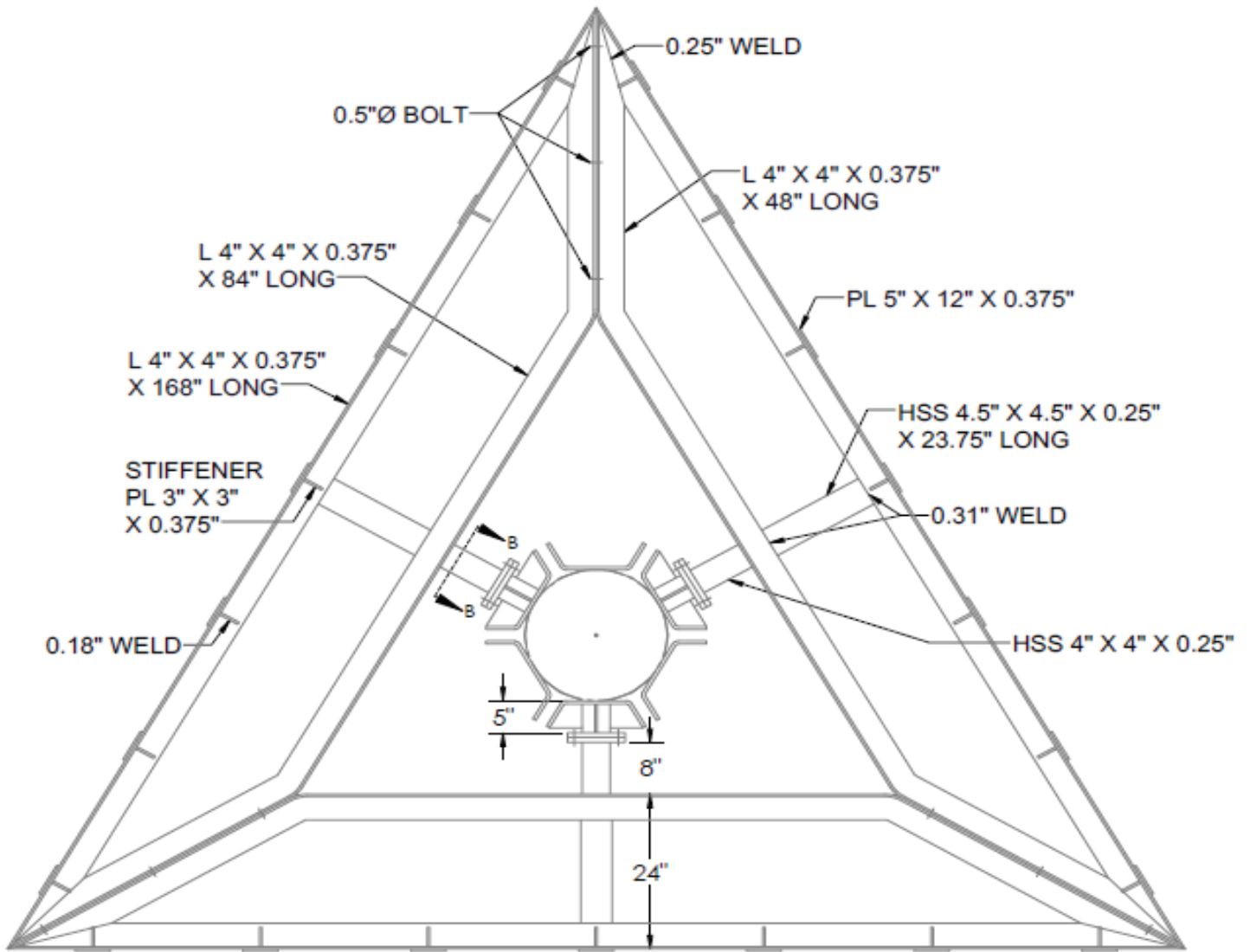
Please Insert Sketches of the Antenna Mount



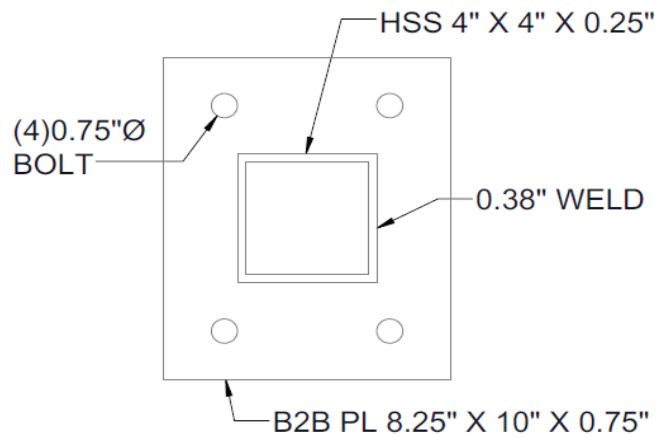
SECTOR A, B & C



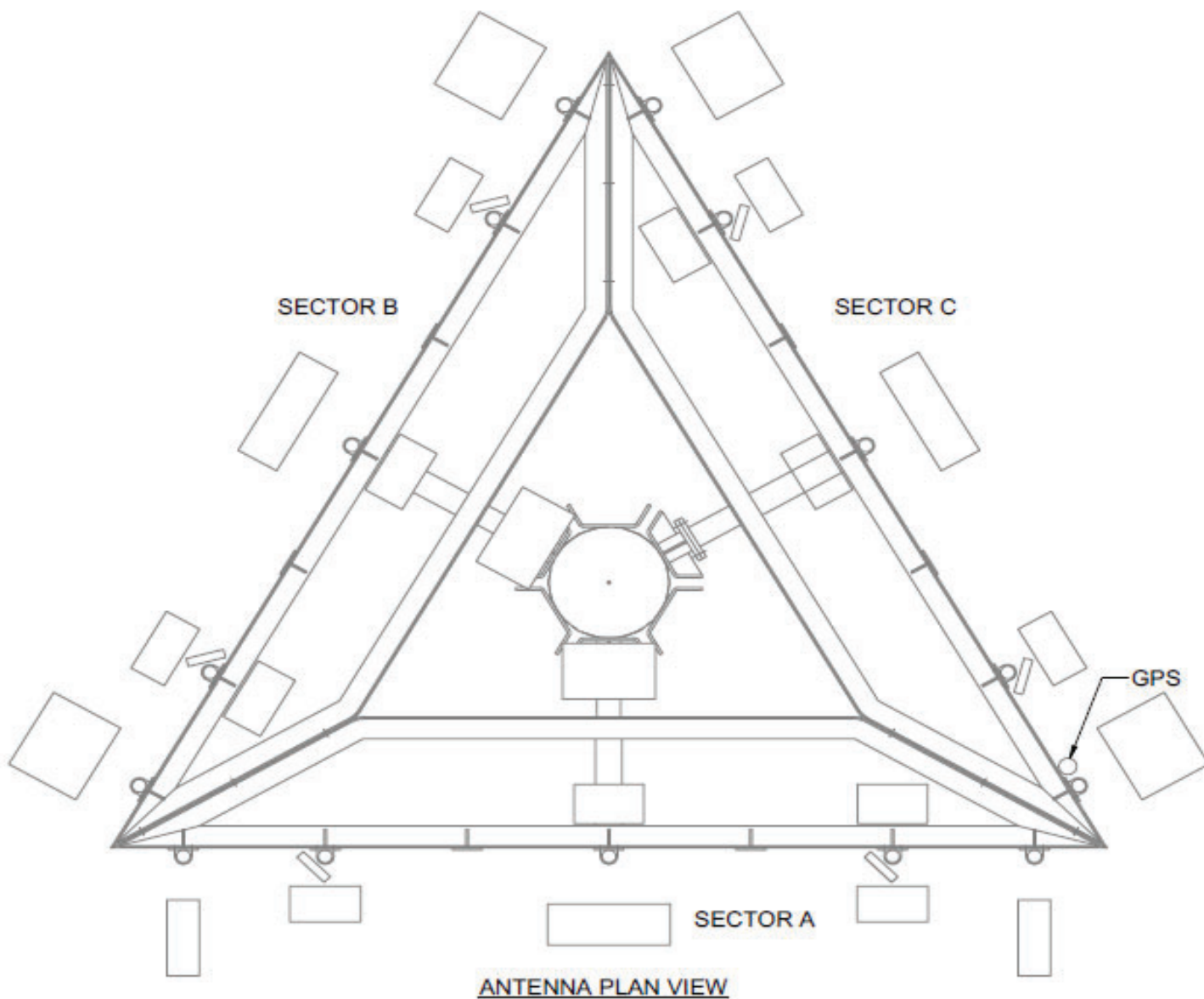
DETAIL A

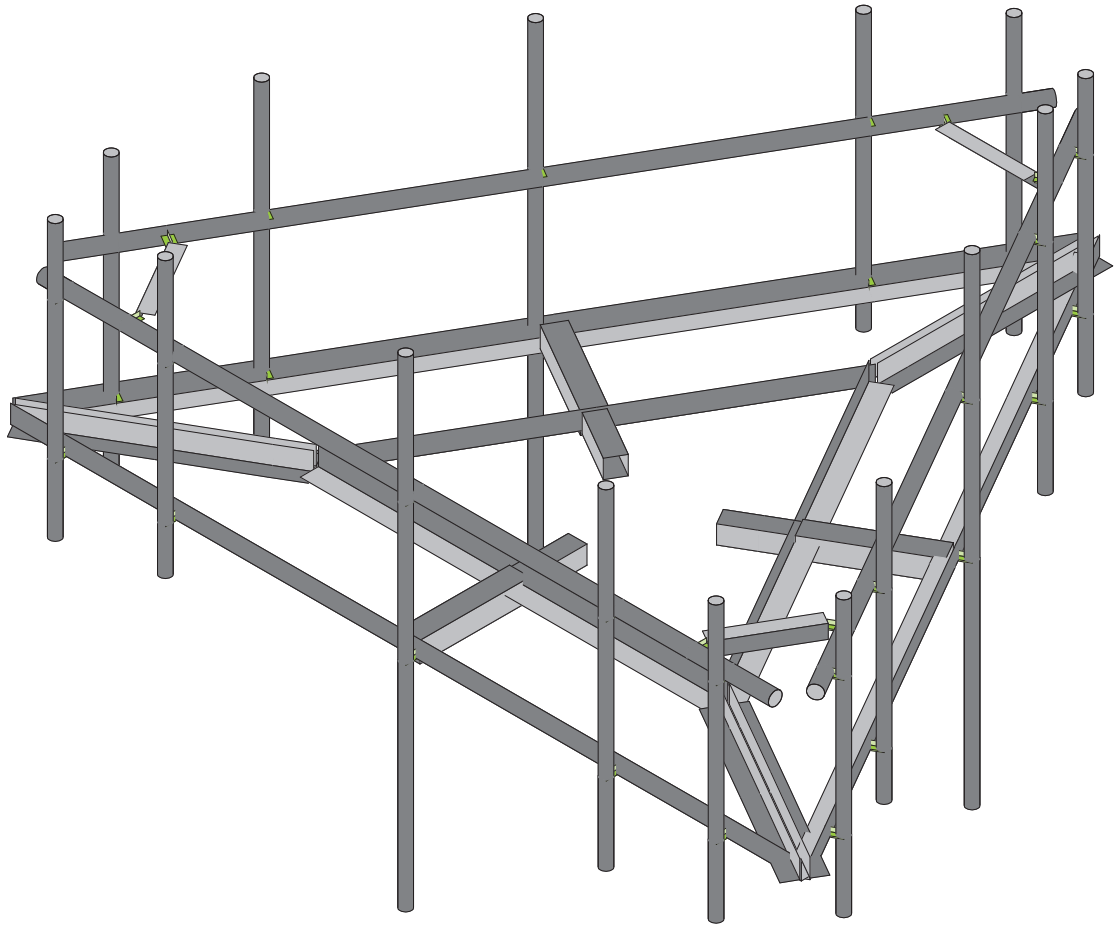
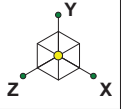


MOUNT PLAN VIEW



SECTION B-B





Maser Consulting

MNC

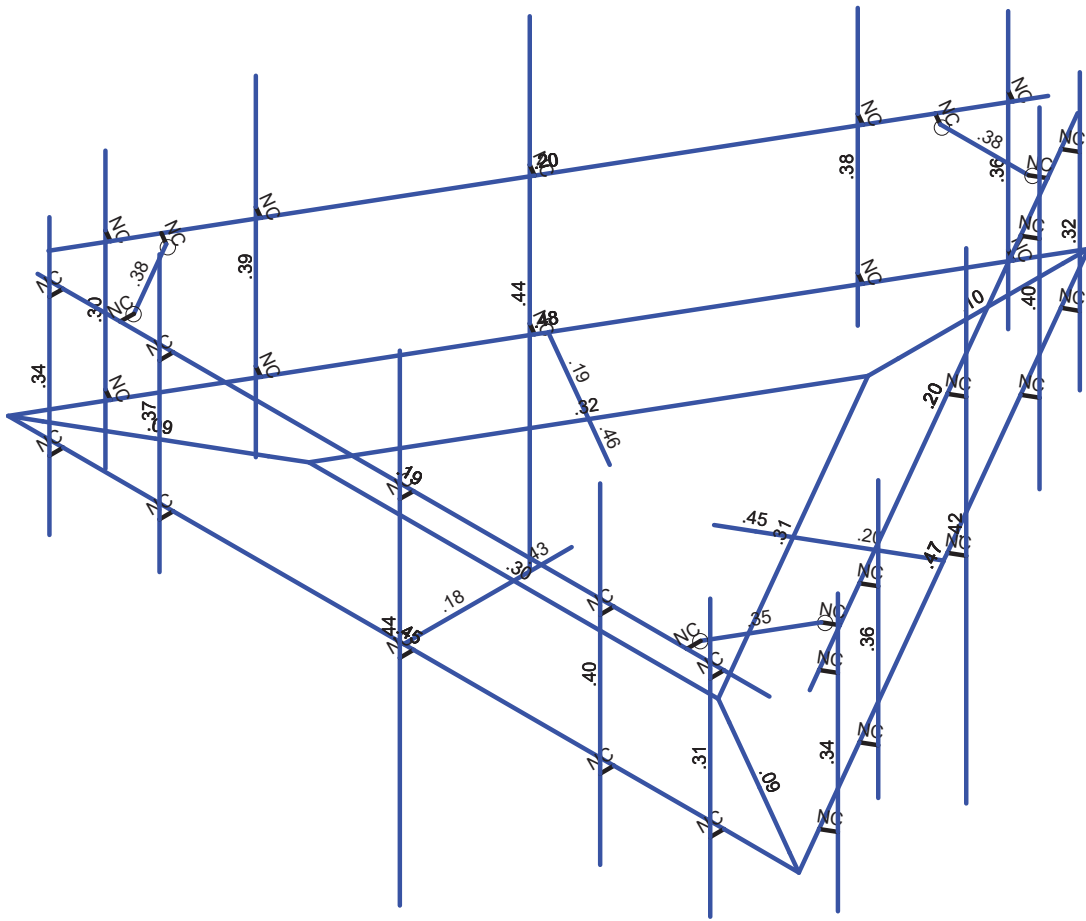
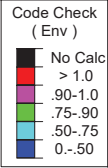
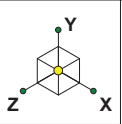
Project No. 10094995

468903-VZW_MT_LO_H

SK - 4

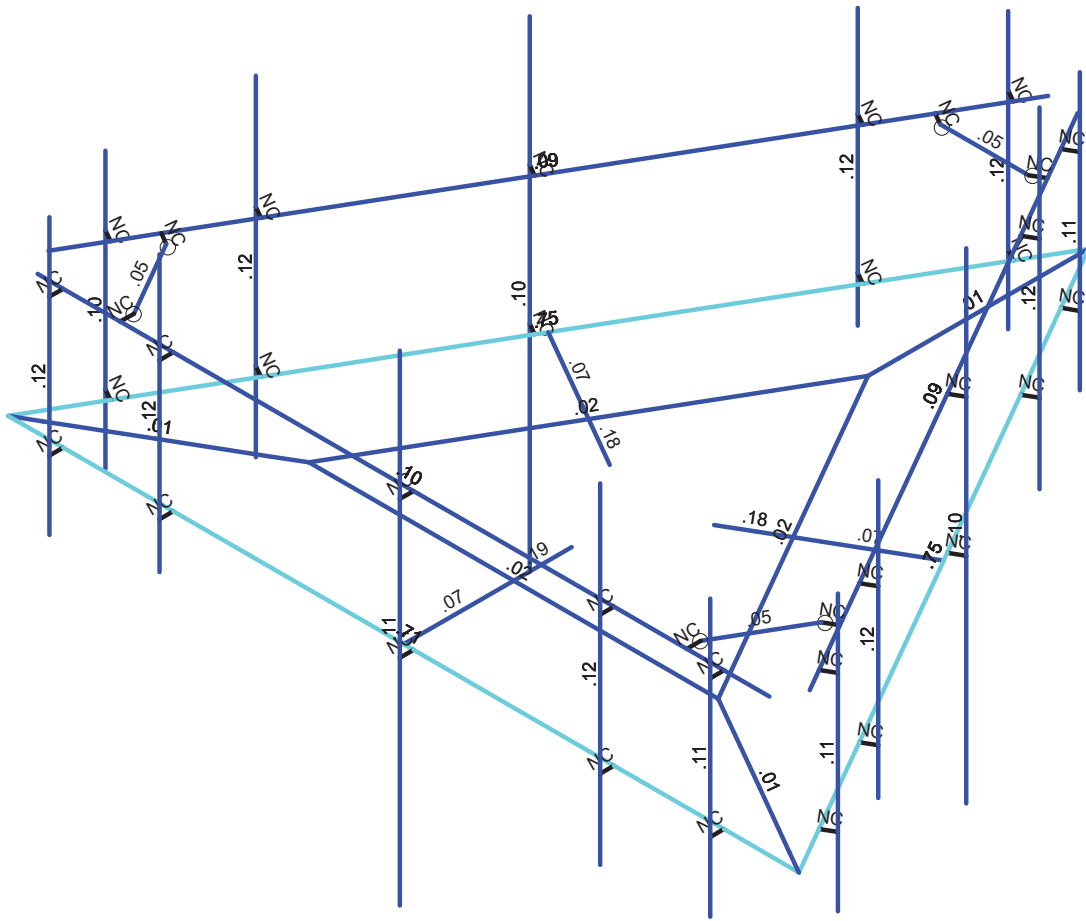
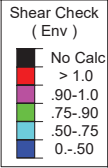
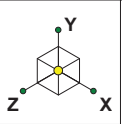
Aug 20, 2021 at 1:26 PM

468903-VZW_MT_LO_H - Mod Lo...



Member Code Checks Displayed (Enveloped)
Results for LC 1, 1.2D+1.0Wo (0 Deg)

Maser Consulting	468903-VZW_MT_LO_H	SK - 5
MNC		Aug 20, 2021 at 1:26 PM
Project No. 10094995		468903-VZW_MT_LO_H - Mod Lo...



Member Shear Checks Displayed (Enveloped)
 Results for LC 1, 1.2D+1.0Wo (0 Deg)

Maser Consulting	468903-VZW_MT_LO_H	SK - 6
MNC		Aug 20, 2021 at 1:26 PM
Project No. 10094995		468903-VZW_MT_LO_H - Mod Lo...



Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					108		
2	Antenna Di	None					108		
3	Antenna Wo (0 Deg)	None					108		
4	Antenna Wo (30 Deg)	None					108		
5	Antenna Wo (60 Deg)	None					108		
6	Antenna Wo (90 Deg)	None					108		
7	Antenna Wo (120 Deg)	None					108		
8	Antenna Wo (150 Deg)	None					108		
9	Antenna Wo (180 Deg)	None					108		
10	Antenna Wo (210 Deg)	None					108		
11	Antenna Wo (240 Deg)	None					108		
12	Antenna Wo (270 Deg)	None					108		
13	Antenna Wo (300 Deg)	None					108		
14	Antenna Wo (330 Deg)	None					108		
15	Antenna Wi (0 Deg)	None					108		
16	Antenna Wi (30 Deg)	None					108		
17	Antenna Wi (60 Deg)	None					108		
18	Antenna Wi (90 Deg)	None					108		
19	Antenna Wi (120 Deg)	None					108		
20	Antenna Wi (150 Deg)	None					108		
21	Antenna Wi (180 Deg)	None					108		
22	Antenna Wi (210 Deg)	None					108		
23	Antenna Wi (240 Deg)	None					108		
24	Antenna Wi (270 Deg)	None					108		
25	Antenna Wi (300 Deg)	None					108		
26	Antenna Wi (330 Deg)	None					108		
27	Antenna Wm (0 Deg)	None					108		
28	Antenna Wm (30 Deg)	None					108		
29	Antenna Wm (60 Deg)	None					108		
30	Antenna Wm (90 Deg)	None					108		
31	Antenna Wm (120 Deg)	None					108		
32	Antenna Wm (150 Deg)	None					108		
33	Antenna Wm (180 Deg)	None					108		
34	Antenna Wm (210 Deg)	None					108		
35	Antenna Wm (240 Deg)	None					108		
36	Antenna Wm (270 Deg)	None					108		
37	Antenna Wm (300 Deg)	None					108		
38	Antenna Wm (330 Deg)	None					108		
39	Structure D	None		-1				36	3
40	Structure Di	None						72	3
41	Structure Wo (0 Deg)	None						72	
42	Structure Wo (30 Deg)	None						72	
43	Structure Wo (60 Deg)	None						72	
44	Structure Wo (90 Deg)	None						72	
45	Structure Wo (120 D...	None						72	
46	Structure Wo (150 D...	None						72	
47	Structure Wo (180 D...	None						72	
48	Structure Wo (210 D...	None						72	
49	Structure Wo (240 D...	None						72	
50	Structure Wo (270 D...	None						72	
51	Structure Wo (300 D...	None						72	
52	Structure Wo (330 D...	None						72	
53	Structure Wi (0 Deg)	None						72	
54	Structure Wi (30 Deg)	None						72	
55	Structure Wi (60 Deg)	None						72	
56	Structure Wi (90 Deg)	None						72	



Load Combinations (Continued)

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

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	CP	0.	0	-0.	0	
2	N2	0.	0	1.095417	0	
3	N10	-0.	0	-4.291667	0	
4	N11	-0.	0	-4.833334	0	
5	N12	-0.	0	-6.333334	0	
6	N13	-0.	0	-7.833334	0	
7	N14	-0.	0	-8.291667	0	
8	N15	-3.716692	0	2.145833	0	
9	N16	-7.180794	0	4.145833	0	
10	N17	3.716693	0	2.145833	0	
11	N18	7.180794	0	4.145833	0	
12	N15A	0.	0	2.145833	0	
13	N16A	0.	0	4.145833	0	
14	N15B	-4.18579	0	2.416667	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
129	N130	6.162895	2.5	2.382779	0	
130	N131	1.018001	2.5	-6.528439	0	
131	N132	5.946388	2.5	2.507779	0	
132	N133	0.801494	2.5	-6.403439	0	
133	N135	-1.0179	2.5	-6.528613	0	
134	N136	-6.162794	2.5	2.382605	0	
135	N137	-0.801393	2.5	-6.403613	0	
136	N138	-5.946287	2.5	2.507605	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Mount Pipe	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
2	Dual Mounted Pipe	PIPE 2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
3	Support Rail	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	.627	.627	1.25
4	Bottom Corner Plate	L15X6.5X6	Beam	Single Angle	A36 Gr.36	Typical	7.922	24.473	192.705	.363
5	Standoff 2	HSS4.5X4.5...	Beam	Tube	A500 Gr.B Rect	Typical	3.84	11.4	11.4	18.5
6	Cross Members	L4X4X6	Beam	Channel	A36 Gr.36	Typical	2.86	4.32	4.32	.141
7	Face Horizontal	L4X4X6	Beam	Single Angle	A36 Gr.36	Typical	2.86	4.32	4.32	.141
8	Standoff_1	HSS4X4X4	Beam	Tube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
9	Grating Angle	LL4x4x6x0	Beam	Double Angl...	A36 Gr.36	Typical	5.72	16	8.64	.282
10	Top Corner Plate	L2.5x2.5x4	Beam	Single Angle	A36 Gr.36	Typical	1.19	.692	.692	.026
11	Mod Face Horizontal	L4X4X6	Beam	Double Angl...	A36 Gr.36	Typical	2.86	4.32	4.32	.141
12	Mod Support Rail	PIPE 2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
13	Mod Corner	L3X3X4	Beam	Single Angle	A36 Gr.36	Typical	1.44	1.23	1.23	.031

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...	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 Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N2	N15A			Standoff 1	Beam	Tube	A500 Gr.B...	Typical
2	M2	N15A	N16A			Standoff 2	Beam	Tube	A500 Gr.B...	Typical
3	M5	N14	N10		180	Grating Angle	Beam	Double Angle ...	A36 Gr.36	Typical
4	M6	N16	N15		180	Grating Angle	Beam	Double Angle ...	A36 Gr.36	Typical
5	M7	N18	N17		180	Grating Angle	Beam	Double Angle ...	A36 Gr.36	Typical
6	M6A	N17	N15		270	Cross Members	Beam	Channel	A36 Gr.36	Typical
7	M7A	N16	N18		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
8	M23A	N10	N17		270	Cross Members	Beam	Channel	A36 Gr.36	Typical
9	M24	N18	N14		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
10	M38	N77	N78			Standoff 1	Beam	Tube	A500 Gr.B...	Typical
11	M39A	N15	N10		270	Cross Members	Beam	Channel	A36 Gr.36	Typical
12	M40	N14	N16		270	Face Horizontal	Beam	Single Angle	A36 Gr.36	Typical
13	M54	N109	N110			Standoff 1	Beam	Tube	A500 Gr.B...	Typical
14	M55	N78	N108A			Standoff 2	Beam	Tube	A500 Gr.B...	Typical
15	M56	N110	N110A			Standoff 2	Beam	Tube	A500 Gr.B...	Typical



Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...A...	Inactive	Seismic ...
1	M1						Yes			None
2	M2						Yes			None
3	M5						Yes			None
4	M6						Yes			None
5	M7						Yes			None
6	M6A						Yes			None
7	M7A						Yes			None
8	M23A						Yes			None
9	M24						Yes			None
10	M38						Yes			None
11	M39A						Yes			None
12	M40						Yes			None
13	M54						Yes			None
14	M55						Yes			None
15	M56						Yes			None
16	M16						Yes	** NA **		None
17	M17						Yes	** NA **		None
18	MP5A						Yes			None
19	MP1A						Yes			None
20	M20						Yes	** NA **		None
21	M21						Yes	** NA **		None
22	M22						Yes	** NA **		None
23	MP4A						Yes			None
24	MP3A						Yes			None
25	MP2A						Yes			None
26	M26						Yes	** NA **		None
27	M27						Yes	** NA **		None
28	MP5C						Yes			None
29	MP1C						Yes			None
30	M30						Yes	** NA **		None
31	M31						Yes	** NA **		None
32	M32						Yes	** NA **		None
33	MP4C						Yes			None
34	MP3C						Yes			None
35	MP2C						Yes			None
36	M36						Yes	** NA **		None
37	M37						Yes	** NA **		None
38	MP5B						Yes			None
39	MP1B						Yes			None
40	M40A						Yes	** NA **		None
41	M41						Yes	** NA **		None
42	M42						Yes	** NA **		None
43	MP4B						Yes			None
44	MP3B						Yes			None
45	MP2B						Yes			None
46	M46						Yes			None
47	M47						Yes			None
48	M48						Yes			None
49	M49						Yes	** NA **		None
50	M50						Yes	** NA **		None
51	M51						Yes	** NA **		None
52	M52						Yes	** NA **		None
53	M53						Yes	** NA **		None
54	M54A						Yes	** NA **		None
55	M55A						Yes	** NA **		None
56	M56A						Yes	** NA **		None



Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rati...A...	Inactive	Seismic ...
57	M57						Yes	** NA **		None
58	M58						Yes	** NA **		None
59	M59						Yes	** NA **		None
60	M60						Yes	** NA **		None
61	M61						Yes	** NA **		None
62	M62						Yes	** NA **		None
63	M63						Yes	** NA **		None
64	M64		000000				Yes	** NA **		None
65	M65		000000				Yes	** NA **		None
66	M66		000000				Yes	** NA **		None
67	M67		000000				Yes	** NA **		None
68	M68		000000				Yes	** NA **		None
69	M69		000000				Yes	** NA **		None
70	M70						Yes			None
71	M71						Yes			None
72	M72						Yes			None

Member Point Loads (BLC 1 : Antenna D)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	Y	-21.85	1
2	MP2A	My	-.011	1
3	MP2A	Mz	.011	1
4	MP2A	Y	-21.85	6
5	MP2A	My	-.011	6
6	MP2A	Mz	.011	6
7	MP2B	Y	-21.85	1
8	MP2B	My	-.004	1
9	MP2B	Mz	-.015	1
10	MP2B	Y	-21.85	6
11	MP2B	My	-.004	6
12	MP2B	Mz	-.015	6
13	MP2C	Y	-21.85	1
14	MP2C	My	.015	1
15	MP2C	Mz	.004	1
16	MP2C	Y	-21.85	6
17	MP2C	My	.015	6
18	MP2C	Mz	.004	6
19	MP2A	Y	-21.85	1
20	MP2A	My	-.011	1
21	MP2A	Mz	-.011	1
22	MP2A	Y	-21.85	6
23	MP2A	My	-.011	6
24	MP2A	Mz	-.011	6
25	MP2B	Y	-21.85	1
26	MP2B	My	.015	1
27	MP2B	Mz	-.004	1
28	MP2B	Y	-21.85	6
29	MP2B	My	.015	6
30	MP2B	Mz	-.004	6
31	MP2C	Y	-21.85	1
32	MP2C	My	-.004	1
33	MP2C	Mz	.015	1
34	MP2C	Y	-21.85	6
35	MP2C	My	-.004	6
36	MP2C	Mz	.015	6



Company : Maser Consulting
 Designer : MNC
 Job Number : Project No. 10094995
 Model Name : 468903-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
37	MP3A	Y	-43.55	2
38	MP3A	My	-.022	2
39	MP3A	Mz	0	2
40	MP3A	Y	-43.55	4
41	MP3A	My	-.022	4
42	MP3A	Mz	0	4
43	MP3B	Y	-43.55	2
44	MP3B	My	.011	2
45	MP3B	Mz	-.019	2
46	MP3B	Y	-43.55	4
47	MP3B	My	.011	4
48	MP3B	Mz	-.019	4
49	MP3C	Y	-43.55	2
50	MP3C	My	.011	2
51	MP3C	Mz	.019	2
52	MP3C	Y	-43.55	4
53	MP3C	My	.011	4
54	MP3C	Mz	.019	4
55	MP1A	Y	-74.7	2
56	MP1A	My	.037	2
57	MP1A	Mz	0	2
58	MP1B	Y	-74.7	2
59	MP1B	My	-.019	2
60	MP1B	Mz	.032	2
61	MP1C	Y	-74.7	2
62	MP1C	My	-.019	2
63	MP1C	Mz	-.032	2
64	MP2A	Y	-62.8	2
65	MP2A	My	.031	2
66	MP2A	Mz	0	2
67	MP2B	Y	-62.8	2
68	MP2B	My	-.016	2
69	MP2B	Mz	.027	2
70	MP2C	Y	-62.8	2
71	MP2C	My	-.016	2
72	MP2C	Mz	-.027	2
73	MP1B	Y	-13.5	.25
74	MP1B	My	.003	.25
75	MP1B	Mz	-.006	.25
76	MP1B	Y	-13.5	4.75
77	MP1B	My	.003	4.75
78	MP1B	Mz	-.006	4.75
79	MP1C	Y	-13.5	.25
80	MP1C	My	.003	.25
81	MP1C	Mz	.006	.25
82	MP1C	Y	-13.5	4.75
83	MP1C	My	.003	4.75
84	MP1C	Mz	.006	4.75
85	MP5B	Y	-13.5	.25
86	MP5B	My	.003	.25
87	MP5B	Mz	-.006	.25
88	MP5B	Y	-13.5	4.75
89	MP5B	My	.003	4.75
90	MP5B	Mz	-.006	4.75
91	MP5C	Y	-13.5	.25
92	MP5C	My	.003	.25
93	MP5C	Mz	.006	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
94	MP5C	Y	-13.5	4.75
95	MP5C	My	.003	4.75
96	MP5C	Mz	.006	4.75
97	MP1A	Y	-10.5	.25
98	MP1A	My	-.005	.25
99	MP1A	Mz	0	.25
100	MP1A	Y	-10.5	4.75
101	MP1A	My	-.005	4.75
102	MP1A	Mz	0	4.75
103	MP5A	Y	-10.5	.25
104	MP5A	My	-.005	.25
105	MP5A	Mz	0	.25
106	MP5A	Y	-10.5	4.75
107	MP5A	My	-.005	4.75
108	MP5A	Mz	0	4.75

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	Y	-61.834	1
2	MP2A	My	-.031	1
3	MP2A	Mz	.031	1
4	MP2A	Y	-61.834	6
5	MP2A	My	-.031	6
6	MP2A	Mz	.031	6
7	MP2B	Y	-61.834	1
8	MP2B	My	-.011	1
9	MP2B	Mz	-.042	1
10	MP2B	Y	-61.834	6
11	MP2B	My	-.011	6
12	MP2B	Mz	-.042	6
13	MP2C	Y	-61.834	1
14	MP2C	My	.042	1
15	MP2C	Mz	.011	1
16	MP2C	Y	-61.834	6
17	MP2C	My	.042	6
18	MP2C	Mz	.011	6
19	MP2A	Y	-61.834	1
20	MP2A	My	-.031	1
21	MP2A	Mz	-.031	1
22	MP2A	Y	-61.834	6
23	MP2A	My	-.031	6
24	MP2A	Mz	-.031	6
25	MP2B	Y	-61.834	1
26	MP2B	My	.042	1
27	MP2B	Mz	-.011	1
28	MP2B	Y	-61.834	6
29	MP2B	My	.042	6
30	MP2B	Mz	-.011	6
31	MP2C	Y	-61.834	1
32	MP2C	My	-.011	1
33	MP2C	Mz	.042	1
34	MP2C	Y	-61.834	6
35	MP2C	My	-.011	6
36	MP2C	Mz	.042	6
37	MP3A	Y	-36.348	2
38	MP3A	My	-.018	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
39	MP3A	Mz	0	2
40	MP3A	Y	-36.348	4
41	MP3A	My	-.018	4
42	MP3A	Mz	0	4
43	MP3B	Y	-36.348	2
44	MP3B	My	.009	2
45	MP3B	Mz	-.016	2
46	MP3B	Y	-36.348	4
47	MP3B	My	.009	4
48	MP3B	Mz	-.016	4
49	MP3C	Y	-36.348	2
50	MP3C	My	.009	2
51	MP3C	Mz	.016	2
52	MP3C	Y	-36.348	4
53	MP3C	My	.009	4
54	MP3C	Mz	.016	4
55	MP1A	Y	-45.84	2
56	MP1A	My	.023	2
57	MP1A	Mz	0	2
58	MP1B	Y	-45.84	2
59	MP1B	My	-.011	2
60	MP1B	Mz	.02	2
61	MP1C	Y	-45.84	2
62	MP1C	My	-.011	2
63	MP1C	Mz	-.02	2
64	MP2A	Y	-36.895	2
65	MP2A	My	.018	2
66	MP2A	Mz	0	2
67	MP2B	Y	-36.895	2
68	MP2B	My	-.009	2
69	MP2B	Mz	.016	2
70	MP2C	Y	-36.895	2
71	MP2C	My	-.009	2
72	MP2C	Mz	-.016	2
73	MP1B	Y	-91.325	.25
74	MP1B	My	.023	.25
75	MP1B	Mz	-.04	.25
76	MP1B	Y	-91.325	4.75
77	MP1B	My	.023	4.75
78	MP1B	Mz	-.04	4.75
79	MP1C	Y	-91.325	.25
80	MP1C	My	.023	.25
81	MP1C	Mz	.04	.25
82	MP1C	Y	-91.325	4.75
83	MP1C	My	.023	4.75
84	MP1C	Mz	.04	4.75
85	MP5B	Y	-91.325	.25
86	MP5B	My	.023	.25
87	MP5B	Mz	-.04	.25
88	MP5B	Y	-91.325	4.75
89	MP5B	My	.023	4.75
90	MP5B	Mz	-.04	4.75
91	MP5C	Y	-91.325	.25
92	MP5C	My	.023	.25
93	MP5C	Mz	.04	.25
94	MP5C	Y	-91.325	4.75
95	MP5C	My	.023	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
96	MP5C	Mz	.04	4.75
97	MP1A	Y	-59.676	.25
98	MP1A	My	-.03	.25
99	MP1A	Mz	0	.25
100	MP1A	Y	-59.676	4.75
101	MP1A	My	-.03	4.75
102	MP1A	Mz	0	4.75
103	MP5A	Y	-59.676	.25
104	MP5A	My	-.03	.25
105	MP5A	Mz	0	.25
106	MP5A	Y	-59.676	4.75
107	MP5A	My	-.03	4.75
108	MP5A	Mz	0	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1
2	MP2A	Z	-152.606	1
3	MP2A	Mx	-.076	1
4	MP2A	X	0	6
5	MP2A	Z	-152.606	6
6	MP2A	Mx	-.076	6
7	MP2B	X	0	1
8	MP2B	Z	-113.817	1
9	MP2B	Mx	.078	1
10	MP2B	X	0	6
11	MP2B	Z	-113.817	6
12	MP2B	Mx	.078	6
13	MP2C	X	0	1
14	MP2C	Z	-113.817	1
15	MP2C	Mx	-.021	1
16	MP2C	X	0	6
17	MP2C	Z	-113.817	6
18	MP2C	Mx	-.021	6
19	MP2A	X	0	1
20	MP2A	Z	-152.606	1
21	MP2A	Mx	.076	1
22	MP2A	X	0	6
23	MP2A	Z	-152.606	6
24	MP2A	Mx	.076	6
25	MP2B	X	0	1
26	MP2B	Z	-113.817	1
27	MP2B	Mx	.021	1
28	MP2B	X	0	6
29	MP2B	Z	-113.817	6
30	MP2B	Mx	.021	6
31	MP2C	X	0	1
32	MP2C	Z	-113.817	1
33	MP2C	Mx	-.078	1
34	MP2C	X	0	6
35	MP2C	Z	-113.817	6
36	MP2C	Mx	-.078	6
37	MP3A	X	0	2
38	MP3A	Z	-88.768	2
39	MP3A	Mx	0	2
40	MP3A	X	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
41	MP3A	Z	-88.768	4
42	MP3A	Mx	0	4
43	MP3B	X	0	2
44	MP3B	Z	-48.257	2
45	MP3B	Mx	.021	2
46	MP3B	X	0	4
47	MP3B	Z	-48.257	4
48	MP3B	Mx	.021	4
49	MP3C	X	0	2
50	MP3C	Z	-48.257	2
51	MP3C	Mx	-.021	2
52	MP3C	X	0	4
53	MP3C	Z	-48.257	4
54	MP3C	Mx	-.021	4
55	MP1A	X	0	2
56	MP1A	Z	-70.637	2
57	MP1A	Mx	0	2
58	MP1B	X	0	2
59	MP1B	Z	-53.072	2
60	MP1B	Mx	-.023	2
61	MP1C	X	0	2
62	MP1C	Z	-53.072	2
63	MP1C	Mx	.023	2
64	MP2A	X	0	2
65	MP2A	Z	-55.15	2
66	MP2A	Mx	0	2
67	MP2B	X	0	2
68	MP2B	Z	-45.305	2
69	MP2B	Mx	-.02	2
70	MP2C	X	0	2
71	MP2C	Z	-45.305	2
72	MP2C	Mx	.02	2
73	MP1B	X	0	.25
74	MP1B	Z	-167.952	.25
75	MP1B	Mx	.073	.25
76	MP1B	X	0	4.75
77	MP1B	Z	-167.952	4.75
78	MP1B	Mx	.073	4.75
79	MP1C	X	0	.25
80	MP1C	Z	-167.952	.25
81	MP1C	Mx	-.073	.25
82	MP1C	X	0	4.75
83	MP1C	Z	-167.952	4.75
84	MP1C	Mx	-.073	4.75
85	MP5B	X	0	.25
86	MP5B	Z	-167.952	.25
87	MP5B	Mx	.073	.25
88	MP5B	X	0	4.75
89	MP5B	Z	-167.952	4.75
90	MP5B	Mx	.073	4.75
91	MP5C	X	0	.25
92	MP5C	Z	-167.952	.25
93	MP5C	Mx	-.073	.25
94	MP5C	X	0	4.75
95	MP5C	Z	-167.952	4.75
96	MP5C	Mx	-.073	4.75
97	MP1A	X	0	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
98	MP1A	Z	-81.78	.25
99	MP1A	Mx	0	.25
100	MP1A	X	0	4.75
101	MP1A	Z	-81.78	4.75
102	MP1A	Mx	0	4.75
103	MP5A	X	0	.25
104	MP5A	Z	-81.78	.25
105	MP5A	Mx	0	.25
106	MP5A	X	0	4.75
107	MP5A	Z	-81.78	4.75
108	MP5A	Mx	0	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	69.838	1
2	MP2A	Z	-120.963	1
3	MP2A	Mx	-.095	1
4	MP2A	X	69.838	6
5	MP2A	Z	-120.963	6
6	MP2A	Mx	-.095	6
7	MP2B	X	50.444	1
8	MP2B	Z	-87.371	1
9	MP2B	Mx	.05	1
10	MP2B	X	50.444	6
11	MP2B	Z	-87.371	6
12	MP2B	Mx	.05	6
13	MP2C	X	69.838	1
14	MP2C	Z	-120.963	1
15	MP2C	Mx	.026	1
16	MP2C	X	69.838	6
17	MP2C	Z	-120.963	6
18	MP2C	Mx	.026	6
19	MP2A	X	69.838	1
20	MP2A	Z	-120.963	1
21	MP2A	Mx	.026	1
22	MP2A	X	69.838	6
23	MP2A	Z	-120.963	6
24	MP2A	Mx	.026	6
25	MP2B	X	50.444	1
26	MP2B	Z	-87.371	1
27	MP2B	Mx	.05	1
28	MP2B	X	50.444	6
29	MP2B	Z	-87.371	6
30	MP2B	Mx	.05	6
31	MP2C	X	69.838	1
32	MP2C	Z	-120.963	1
33	MP2C	Mx	-.095	1
34	MP2C	X	69.838	6
35	MP2C	Z	-120.963	6
36	MP2C	Mx	-.095	6
37	MP3A	X	37.632	2
38	MP3A	Z	-65.181	2
39	MP3A	Mx	-.019	2
40	MP3A	X	37.632	4
41	MP3A	Z	-65.181	4
42	MP3A	Mx	-.019	4



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
43	MP3B	X	17.376	2
44	MP3B	Z	-30.097	2
45	MP3B	Mx	.017	2
46	MP3B	X	17.376	4
47	MP3B	Z	-30.097	4
48	MP3B	Mx	.017	4
49	MP3C	X	37.632	2
50	MP3C	Z	-65.181	2
51	MP3C	Mx	-.019	2
52	MP3C	X	37.632	4
53	MP3C	Z	-65.181	4
54	MP3C	Mx	-.019	4
55	MP1A	X	32.391	2
56	MP1A	Z	-56.103	2
57	MP1A	Mx	.016	2
58	MP1B	X	23.609	2
59	MP1B	Z	-40.891	2
60	MP1B	Mx	-.024	2
61	MP1C	X	32.391	2
62	MP1C	Z	-56.103	2
63	MP1C	Mx	.016	2
64	MP2A	X	25.934	2
65	MP2A	Z	-44.919	2
66	MP2A	Mx	.013	2
67	MP2B	X	21.012	2
68	MP2B	Z	-36.393	2
69	MP2B	Mx	-.021	2
70	MP2C	X	25.934	2
71	MP2C	Z	-44.919	2
72	MP2C	Mx	.013	2
73	MP1B	X	81.245	.25
74	MP1B	Z	-140.72	.25
75	MP1B	Mx	.081	.25
76	MP1B	X	81.245	4.75
77	MP1B	Z	-140.72	4.75
78	MP1B	Mx	.081	4.75
79	MP1C	X	89.437	.25
80	MP1C	Z	-154.91	.25
81	MP1C	Mx	-.045	.25
82	MP1C	X	89.437	4.75
83	MP1C	Z	-154.91	4.75
84	MP1C	Mx	-.045	4.75
85	MP5B	X	81.245	.25
86	MP5B	Z	-140.72	.25
87	MP5B	Mx	.081	.25
88	MP5B	X	81.245	4.75
89	MP5B	Z	-140.72	4.75
90	MP5B	Mx	.081	4.75
91	MP5C	X	89.437	.25
92	MP5C	Z	-154.91	.25
93	MP5C	Mx	-.045	.25
94	MP5C	X	89.437	4.75
95	MP5C	Z	-154.91	4.75
96	MP5C	Mx	-.045	4.75
97	MP1A	X	51.038	.25
98	MP1A	Z	-88.4	.25
99	MP1A	Mx	-.026	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
100	MP1A	X	51.038	4.75
101	MP1A	Z	-88.4	4.75
102	MP1A	Mx	-.026	4.75
103	MP5A	X	51.038	.25
104	MP5A	Z	-88.4	.25
105	MP5A	Mx	-.026	.25
106	MP5A	X	51.038	4.75
107	MP5A	Z	-88.4	4.75
108	MP5A	Mx	-.026	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	98.569	1
2	MP2A	Z	-56.909	1
3	MP2A	Mx	-.078	1
4	MP2A	X	98.569	6
5	MP2A	Z	-56.909	6
6	MP2A	Mx	-.078	6
7	MP2B	X	98.569	1
8	MP2B	Z	-56.909	1
9	MP2B	Mx	.021	1
10	MP2B	X	98.569	6
11	MP2B	Z	-56.909	6
12	MP2B	Mx	.021	6
13	MP2C	X	132.161	1
14	MP2C	Z	-76.303	1
15	MP2C	Mx	.076	1
16	MP2C	X	132.161	6
17	MP2C	Z	-76.303	6
18	MP2C	Mx	.076	6
19	MP2A	X	98.569	1
20	MP2A	Z	-56.909	1
21	MP2A	Mx	-.021	1
22	MP2A	X	98.569	6
23	MP2A	Z	-56.909	6
24	MP2A	Mx	-.021	6
25	MP2B	X	98.569	1
26	MP2B	Z	-56.909	1
27	MP2B	Mx	.078	1
28	MP2B	X	98.569	6
29	MP2B	Z	-56.909	6
30	MP2B	Mx	.078	6
31	MP2C	X	132.161	1
32	MP2C	Z	-76.303	1
33	MP2C	Mx	-.076	1
34	MP2C	X	132.161	6
35	MP2C	Z	-76.303	6
36	MP2C	Mx	-.076	6
37	MP3A	X	41.791	2
38	MP3A	Z	-24.128	2
39	MP3A	Mx	-.021	2
40	MP3A	X	41.791	4
41	MP3A	Z	-24.128	4
42	MP3A	Mx	-.021	4
43	MP3B	X	41.791	2
44	MP3B	Z	-24.128	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
45	MP3B	Mx	.021	2
46	MP3B	X	41.791	4
47	MP3B	Z	-24.128	4
48	MP3B	Mx	.021	4
49	MP3C	X	76.876	2
50	MP3C	Z	-44.384	2
51	MP3C	Mx	0	2
52	MP3C	X	76.876	4
53	MP3C	Z	-44.384	4
54	MP3C	Mx	0	4
55	MP1A	X	45.962	2
56	MP1A	Z	-26.536	2
57	MP1A	Mx	.023	2
58	MP1B	X	45.962	2
59	MP1B	Z	-26.536	2
60	MP1B	Mx	-.023	2
61	MP1C	X	61.173	2
62	MP1C	Z	-35.318	2
63	MP1C	Mx	0	2
64	MP2A	X	39.235	2
65	MP2A	Z	-22.652	2
66	MP2A	Mx	.02	2
67	MP2B	X	39.235	2
68	MP2B	Z	-22.652	2
69	MP2B	Mx	-.02	2
70	MP2C	X	47.761	2
71	MP2C	Z	-27.575	2
72	MP2C	Mx	0	2
73	MP1B	X	145.45	.25
74	MP1B	Z	-83.976	.25
75	MP1B	Mx	.073	.25
76	MP1B	X	145.45	4.75
77	MP1B	Z	-83.976	4.75
78	MP1B	Mx	.073	4.75
79	MP1C	X	159.64	.25
80	MP1C	Z	-92.168	.25
81	MP1C	Mx	0	.25
82	MP1C	X	159.64	4.75
83	MP1C	Z	-92.168	4.75
84	MP1C	Mx	0	4.75
85	MP5B	X	145.45	.25
86	MP5B	Z	-83.976	.25
87	MP5B	Mx	.073	.25
88	MP5B	X	145.45	4.75
89	MP5B	Z	-83.976	4.75
90	MP5B	Mx	.073	4.75
91	MP5C	X	159.64	.25
92	MP5C	Z	-92.168	.25
93	MP5C	Mx	0	.25
94	MP5C	X	159.64	4.75
95	MP5C	Z	-92.168	4.75
96	MP5C	Mx	0	4.75
97	MP1A	X	123.553	.25
98	MP1A	Z	-71.334	.25
99	MP1A	Mx	-.062	.25
100	MP1A	X	123.553	4.75
101	MP1A	Z	-71.334	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
102	MP1A	Mx	-.062	4.75
103	MP5A	X	123.553	.25
104	MP5A	Z	-71.334	.25
105	MP5A	Mx	-.062	.25
106	MP5A	X	123.553	4.75
107	MP5A	Z	-71.334	4.75
108	MP5A	Mx	-.062	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	100.888	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.05	1
4	MP2A	X	100.888	6
5	MP2A	Z	0	6
6	MP2A	Mx	-.05	6
7	MP2B	X	139.676	1
8	MP2B	Z	0	1
9	MP2B	Mx	-.026	1
10	MP2B	X	139.676	6
11	MP2B	Z	0	6
12	MP2B	Mx	-.026	6
13	MP2C	X	139.676	1
14	MP2C	Z	0	1
15	MP2C	Mx	.095	1
16	MP2C	X	139.676	6
17	MP2C	Z	0	6
18	MP2C	Mx	.095	6
19	MP2A	X	100.888	1
20	MP2A	Z	0	1
21	MP2A	Mx	-.05	1
22	MP2A	X	100.888	6
23	MP2A	Z	0	6
24	MP2A	Mx	-.05	6
25	MP2B	X	139.676	1
26	MP2B	Z	0	1
27	MP2B	Mx	.095	1
28	MP2B	X	139.676	6
29	MP2B	Z	0	6
30	MP2B	Mx	.095	6
31	MP2C	X	139.676	1
32	MP2C	Z	0	1
33	MP2C	Mx	-.026	1
34	MP2C	X	139.676	6
35	MP2C	Z	0	6
36	MP2C	Mx	-.026	6
37	MP3A	X	34.753	2
38	MP3A	Z	0	2
39	MP3A	Mx	-.017	2
40	MP3A	X	34.753	4
41	MP3A	Z	0	4
42	MP3A	Mx	-.017	4
43	MP3B	X	75.264	2
44	MP3B	Z	0	2
45	MP3B	Mx	.019	2
46	MP3B	X	75.264	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
106	MP5A	X	123.553	4.75
107	MP5A	Z	71.334	4.75
108	MP5A	Mx	-.062	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	69.838	1
2	MP2A	Z	120.963	1
3	MP2A	Mx	.026	1
4	MP2A	X	69.838	6
5	MP2A	Z	120.963	6
6	MP2A	Mx	.026	6
7	MP2B	X	69.838	1
8	MP2B	Z	120.963	1
9	MP2B	Mx	-.095	1
10	MP2B	X	69.838	6
11	MP2B	Z	120.963	6
12	MP2B	Mx	-.095	6
13	MP2C	X	50.444	1
14	MP2C	Z	87.371	1
15	MP2C	Mx	.05	1
16	MP2C	X	50.444	6
17	MP2C	Z	87.371	6
18	MP2C	Mx	.05	6
19	MP2A	X	69.838	1
20	MP2A	Z	120.963	1
21	MP2A	Mx	-.095	1
22	MP2A	X	69.838	6
23	MP2A	Z	120.963	6
24	MP2A	Mx	-.095	6
25	MP2B	X	69.838	1
26	MP2B	Z	120.963	1
27	MP2B	Mx	.026	1
28	MP2B	X	69.838	6
29	MP2B	Z	120.963	6
30	MP2B	Mx	.026	6
31	MP2C	X	50.444	1
32	MP2C	Z	87.371	1
33	MP2C	Mx	.05	1
34	MP2C	X	50.444	6
35	MP2C	Z	87.371	6
36	MP2C	Mx	.05	6
37	MP3A	X	37.632	2
38	MP3A	Z	65.181	2
39	MP3A	Mx	-.019	2
40	MP3A	X	37.632	4
41	MP3A	Z	65.181	4
42	MP3A	Mx	-.019	4
43	MP3B	X	37.632	2
44	MP3B	Z	65.181	2
45	MP3B	Mx	-.019	2
46	MP3B	X	37.632	4
47	MP3B	Z	65.181	4
48	MP3B	Mx	-.019	4
49	MP3C	X	17.376	2
50	MP3C	Z	30.097	2



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]	
51	MP3C	Mx	.017	2
52	MP3C	X	17.376	4
53	MP3C	Z	30.097	4
54	MP3C	Mx	.017	4
55	MP1A	X	32.391	2
56	MP1A	Z	56.103	2
57	MP1A	Mx	.016	2
58	MP1B	X	32.391	2
59	MP1B	Z	56.103	2
60	MP1B	Mx	.016	2
61	MP1C	X	23.609	2
62	MP1C	Z	40.891	2
63	MP1C	Mx	-.024	2
64	MP2A	X	25.934	2
65	MP2A	Z	44.919	2
66	MP2A	Mx	.013	2
67	MP2B	X	25.934	2
68	MP2B	Z	44.919	2
69	MP2B	Mx	.013	2
70	MP2C	X	21.012	2
71	MP2C	Z	36.393	2
72	MP2C	Mx	-.021	2
73	MP1B	X	89.437	.25
74	MP1B	Z	154.91	.25
75	MP1B	Mx	-.045	.25
76	MP1B	X	89.437	4.75
77	MP1B	Z	154.91	4.75
78	MP1B	Mx	-.045	4.75
79	MP1C	X	81.245	.25
80	MP1C	Z	140.72	.25
81	MP1C	Mx	.081	.25
82	MP1C	X	81.245	4.75
83	MP1C	Z	140.72	4.75
84	MP1C	Mx	.081	4.75
85	MP5B	X	89.437	.25
86	MP5B	Z	154.91	.25
87	MP5B	Mx	-.045	.25
88	MP5B	X	89.437	4.75
89	MP5B	Z	154.91	4.75
90	MP5B	Mx	-.045	4.75
91	MP5C	X	81.245	.25
92	MP5C	Z	140.72	.25
93	MP5C	Mx	.081	.25
94	MP5C	X	81.245	4.75
95	MP5C	Z	140.72	4.75
96	MP5C	Mx	.081	4.75
97	MP1A	X	51.038	.25
98	MP1A	Z	88.4	.25
99	MP1A	Mx	-.026	.25
100	MP1A	X	51.038	4.75
101	MP1A	Z	88.4	4.75
102	MP1A	Mx	-.026	4.75
103	MP5A	X	51.038	.25
104	MP5A	Z	88.4	.25
105	MP5A	Mx	-.026	.25
106	MP5A	X	51.038	4.75
107	MP5A	Z	88.4	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
108	MP5A	Mx	-.026	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	0	1
2	MP2A	Z	152.606	1
3	MP2A	Mx	.076	1
4	MP2A	X	0	6
5	MP2A	Z	152.606	6
6	MP2A	Mx	.076	6
7	MP2B	X	0	1
8	MP2B	Z	113.817	1
9	MP2B	Mx	-.078	1
10	MP2B	X	0	6
11	MP2B	Z	113.817	6
12	MP2B	Mx	-.078	6
13	MP2C	X	0	1
14	MP2C	Z	113.817	1
15	MP2C	Mx	.021	1
16	MP2C	X	0	6
17	MP2C	Z	113.817	6
18	MP2C	Mx	.021	6
19	MP2A	X	0	1
20	MP2A	Z	152.606	1
21	MP2A	Mx	-.076	1
22	MP2A	X	0	6
23	MP2A	Z	152.606	6
24	MP2A	Mx	-.076	6
25	MP2B	X	0	1
26	MP2B	Z	113.817	1
27	MP2B	Mx	-.021	1
28	MP2B	X	0	6
29	MP2B	Z	113.817	6
30	MP2B	Mx	-.021	6
31	MP2C	X	0	1
32	MP2C	Z	113.817	1
33	MP2C	Mx	.078	1
34	MP2C	X	0	6
35	MP2C	Z	113.817	6
36	MP2C	Mx	.078	6
37	MP3A	X	0	2
38	MP3A	Z	88.768	2
39	MP3A	Mx	0	2
40	MP3A	X	0	4
41	MP3A	Z	88.768	4
42	MP3A	Mx	0	4
43	MP3B	X	0	2
44	MP3B	Z	48.257	2
45	MP3B	Mx	-.021	2
46	MP3B	X	0	4
47	MP3B	Z	48.257	4
48	MP3B	Mx	-.021	4
49	MP3C	X	0	2
50	MP3C	Z	48.257	2
51	MP3C	Mx	.021	2
52	MP3C	X	0	4



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
53	MP3C	Z	48.257	4
54	MP3C	Mx	.021	4
55	MP1A	X	0	2
56	MP1A	Z	70.637	2
57	MP1A	Mx	0	2
58	MP1B	X	0	2
59	MP1B	Z	53.072	2
60	MP1B	Mx	.023	2
61	MP1C	X	0	2
62	MP1C	Z	53.072	2
63	MP1C	Mx	-.023	2
64	MP2A	X	0	2
65	MP2A	Z	55.15	2
66	MP2A	Mx	0	2
67	MP2B	X	0	2
68	MP2B	Z	45.305	2
69	MP2B	Mx	.02	2
70	MP2C	X	0	2
71	MP2C	Z	45.305	2
72	MP2C	Mx	-.02	2
73	MP1B	X	0	.25
74	MP1B	Z	167.952	.25
75	MP1B	Mx	-.073	.25
76	MP1B	X	0	4.75
77	MP1B	Z	167.952	4.75
78	MP1B	Mx	-.073	4.75
79	MP1C	X	0	.25
80	MP1C	Z	167.952	.25
81	MP1C	Mx	.073	.25
82	MP1C	X	0	4.75
83	MP1C	Z	167.952	4.75
84	MP1C	Mx	.073	4.75
85	MP5B	X	0	.25
86	MP5B	Z	167.952	.25
87	MP5B	Mx	-.073	.25
88	MP5B	X	0	4.75
89	MP5B	Z	167.952	4.75
90	MP5B	Mx	-.073	4.75
91	MP5C	X	0	.25
92	MP5C	Z	167.952	.25
93	MP5C	Mx	.073	.25
94	MP5C	X	0	4.75
95	MP5C	Z	167.952	4.75
96	MP5C	Mx	.073	4.75
97	MP1A	X	0	.25
98	MP1A	Z	81.78	.25
99	MP1A	Mx	0	.25
100	MP1A	X	0	4.75
101	MP1A	Z	81.78	4.75
102	MP1A	Mx	0	4.75
103	MP5A	X	0	.25
104	MP5A	Z	81.78	.25
105	MP5A	Mx	0	.25
106	MP5A	X	0	4.75
107	MP5A	Z	81.78	4.75
108	MP5A	Mx	0	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-69.838	1
2	MP2A	Z	120.963	1
3	MP2A	Mx	.095	1
4	MP2A	X	-69.838	6
5	MP2A	Z	120.963	6
6	MP2A	Mx	.095	6
7	MP2B	X	-50.444	1
8	MP2B	Z	87.371	1
9	MP2B	Mx	-.05	1
10	MP2B	X	-50.444	6
11	MP2B	Z	87.371	6
12	MP2B	Mx	-.05	6
13	MP2C	X	-69.838	1
14	MP2C	Z	120.963	1
15	MP2C	Mx	-.026	1
16	MP2C	X	-69.838	6
17	MP2C	Z	120.963	6
18	MP2C	Mx	-.026	6
19	MP2A	X	-69.838	1
20	MP2A	Z	120.963	1
21	MP2A	Mx	-.026	1
22	MP2A	X	-69.838	6
23	MP2A	Z	120.963	6
24	MP2A	Mx	-.026	6
25	MP2B	X	-50.444	1
26	MP2B	Z	87.371	1
27	MP2B	Mx	-.05	1
28	MP2B	X	-50.444	6
29	MP2B	Z	87.371	6
30	MP2B	Mx	-.05	6
31	MP2C	X	-69.838	1
32	MP2C	Z	120.963	1
33	MP2C	Mx	.095	1
34	MP2C	X	-69.838	6
35	MP2C	Z	120.963	6
36	MP2C	Mx	.095	6
37	MP3A	X	-37.632	2
38	MP3A	Z	65.181	2
39	MP3A	Mx	.019	2
40	MP3A	X	-37.632	4
41	MP3A	Z	65.181	4
42	MP3A	Mx	.019	4
43	MP3B	X	-17.376	2
44	MP3B	Z	30.097	2
45	MP3B	Mx	-.017	2
46	MP3B	X	-17.376	4
47	MP3B	Z	30.097	4
48	MP3B	Mx	-.017	4
49	MP3C	X	-37.632	2
50	MP3C	Z	65.181	2
51	MP3C	Mx	.019	2
52	MP3C	X	-37.632	4
53	MP3C	Z	65.181	4
54	MP3C	Mx	.019	4
55	MP1A	X	-32.391	2
56	MP1A	Z	56.103	2
57	MP1A	Mx	-.016	2



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
58	MP1B	X	-23.609	2
59	MP1B	Z	40.891	2
60	MP1B	Mx	.024	2
61	MP1C	X	-32.391	2
62	MP1C	Z	56.103	2
63	MP1C	Mx	-.016	2
64	MP2A	X	-25.934	2
65	MP2A	Z	44.919	2
66	MP2A	Mx	-.013	2
67	MP2B	X	-21.012	2
68	MP2B	Z	36.393	2
69	MP2B	Mx	.021	2
70	MP2C	X	-25.934	2
71	MP2C	Z	44.919	2
72	MP2C	Mx	-.013	2
73	MP1B	X	-81.245	.25
74	MP1B	Z	140.72	.25
75	MP1B	Mx	-.081	.25
76	MP1B	X	-81.245	4.75
77	MP1B	Z	140.72	4.75
78	MP1B	Mx	-.081	4.75
79	MP1C	X	-89.437	.25
80	MP1C	Z	154.91	.25
81	MP1C	Mx	.045	.25
82	MP1C	X	-89.437	4.75
83	MP1C	Z	154.91	4.75
84	MP1C	Mx	.045	4.75
85	MP5B	X	-81.245	.25
86	MP5B	Z	140.72	.25
87	MP5B	Mx	-.081	.25
88	MP5B	X	-81.245	4.75
89	MP5B	Z	140.72	4.75
90	MP5B	Mx	-.081	4.75
91	MP5C	X	-89.437	.25
92	MP5C	Z	154.91	.25
93	MP5C	Mx	.045	.25
94	MP5C	X	-89.437	4.75
95	MP5C	Z	154.91	4.75
96	MP5C	Mx	.045	4.75
97	MP1A	X	-51.038	.25
98	MP1A	Z	88.4	.25
99	MP1A	Mx	.026	.25
100	MP1A	X	-51.038	4.75
101	MP1A	Z	88.4	4.75
102	MP1A	Mx	.026	4.75
103	MP5A	X	-51.038	.25
104	MP5A	Z	88.4	.25
105	MP5A	Mx	.026	.25
106	MP5A	X	-51.038	4.75
107	MP5A	Z	88.4	4.75
108	MP5A	Mx	.026	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-98.569	1
2	MP2A	Z	56.909	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
60	MP1B	Mx	.023	2
61	MP1C	X	-61.173	2
62	MP1C	Z	35.318	2
63	MP1C	Mx	0	2
64	MP2A	X	-39.235	2
65	MP2A	Z	22.652	2
66	MP2A	Mx	-.02	2
67	MP2B	X	-39.235	2
68	MP2B	Z	22.652	2
69	MP2B	Mx	.02	2
70	MP2C	X	-47.761	2
71	MP2C	Z	27.575	2
72	MP2C	Mx	0	2
73	MP1B	X	-145.45	.25
74	MP1B	Z	83.976	.25
75	MP1B	Mx	-.073	.25
76	MP1B	X	-145.45	4.75
77	MP1B	Z	83.976	4.75
78	MP1B	Mx	-.073	4.75
79	MP1C	X	-159.64	.25
80	MP1C	Z	92.168	.25
81	MP1C	Mx	0	.25
82	MP1C	X	-159.64	4.75
83	MP1C	Z	92.168	4.75
84	MP1C	Mx	0	4.75
85	MP5B	X	-145.45	.25
86	MP5B	Z	83.976	.25
87	MP5B	Mx	-.073	.25
88	MP5B	X	-145.45	4.75
89	MP5B	Z	83.976	4.75
90	MP5B	Mx	-.073	4.75
91	MP5C	X	-159.64	.25
92	MP5C	Z	92.168	.25
93	MP5C	Mx	0	.25
94	MP5C	X	-159.64	4.75
95	MP5C	Z	92.168	4.75
96	MP5C	Mx	0	4.75
97	MP1A	X	-123.553	.25
98	MP1A	Z	71.334	.25
99	MP1A	Mx	.062	.25
100	MP1A	X	-123.553	4.75
101	MP1A	Z	71.334	4.75
102	MP1A	Mx	.062	4.75
103	MP5A	X	-123.553	.25
104	MP5A	Z	71.334	.25
105	MP5A	Mx	.062	.25
106	MP5A	X	-123.553	4.75
107	MP5A	Z	71.334	4.75
108	MP5A	Mx	.062	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-100.888	1
2	MP2A	Z	0	1
3	MP2A	Mx	.05	1
4	MP2A	X	-100.888	6



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
62	MP1C	Z	0	2
63	MP1C	Mx	.016	2
64	MP2A	X	-42.023	2
65	MP2A	Z	0	2
66	MP2A	Mx	-.021	2
67	MP2B	X	-51.868	2
68	MP2B	Z	0	2
69	MP2B	Mx	.013	2
70	MP2C	X	-51.868	2
71	MP2C	Z	0	2
72	MP2C	Mx	.013	2
73	MP1B	X	-178.875	.25
74	MP1B	Z	0	.25
75	MP1B	Mx	-.045	.25
76	MP1B	X	-178.875	4.75
77	MP1B	Z	0	4.75
78	MP1B	Mx	-.045	4.75
79	MP1C	X	-178.875	.25
80	MP1C	Z	0	.25
81	MP1C	Mx	-.045	.25
82	MP1C	X	-178.875	4.75
83	MP1C	Z	0	4.75
84	MP1C	Mx	-.045	4.75
85	MP5B	X	-178.875	.25
86	MP5B	Z	0	.25
87	MP5B	Mx	-.045	.25
88	MP5B	X	-178.875	4.75
89	MP5B	Z	0	4.75
90	MP5B	Mx	-.045	4.75
91	MP5C	X	-178.875	.25
92	MP5C	Z	0	.25
93	MP5C	Mx	-.045	.25
94	MP5C	X	-178.875	4.75
95	MP5C	Z	0	4.75
96	MP5C	Mx	-.045	4.75
97	MP1A	X	-162.963	.25
98	MP1A	Z	0	.25
99	MP1A	Mx	.081	.25
100	MP1A	X	-162.963	4.75
101	MP1A	Z	0	4.75
102	MP1A	Mx	.081	4.75
103	MP5A	X	-162.963	.25
104	MP5A	Z	0	.25
105	MP5A	Mx	.081	.25
106	MP5A	X	-162.963	4.75
107	MP5A	Z	0	4.75
108	MP5A	Mx	.081	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-98.569	1
2	MP2A	Z	-56.909	1
3	MP2A	Mx	.021	1
4	MP2A	X	-98.569	6
5	MP2A	Z	-56.909	6
6	MP2A	Mx	.021	6



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
7	MP2B	X	-132.161	1
8	MP2B	Z	-76.303	1
9	MP2B	Mx	.076	1
10	MP2B	X	-132.161	6
11	MP2B	Z	-76.303	6
12	MP2B	Mx	.076	6
13	MP2C	X	-98.569	1
14	MP2C	Z	-56.909	1
15	MP2C	Mx	-.078	1
16	MP2C	X	-98.569	6
17	MP2C	Z	-56.909	6
18	MP2C	Mx	-.078	6
19	MP2A	X	-98.569	1
20	MP2A	Z	-56.909	1
21	MP2A	Mx	.078	1
22	MP2A	X	-98.569	6
23	MP2A	Z	-56.909	6
24	MP2A	Mx	.078	6
25	MP2B	X	-132.161	1
26	MP2B	Z	-76.303	1
27	MP2B	Mx	-.076	1
28	MP2B	X	-132.161	6
29	MP2B	Z	-76.303	6
30	MP2B	Mx	-.076	6
31	MP2C	X	-98.569	1
32	MP2C	Z	-56.909	1
33	MP2C	Mx	-.021	1
34	MP2C	X	-98.569	6
35	MP2C	Z	-56.909	6
36	MP2C	Mx	-.021	6
37	MP3A	X	-41.791	2
38	MP3A	Z	-24.128	2
39	MP3A	Mx	.021	2
40	MP3A	X	-41.791	4
41	MP3A	Z	-24.128	4
42	MP3A	Mx	.021	4
43	MP3B	X	-76.876	2
44	MP3B	Z	-44.384	2
45	MP3B	Mx	0	2
46	MP3B	X	-76.876	4
47	MP3B	Z	-44.384	4
48	MP3B	Mx	0	4
49	MP3C	X	-41.791	2
50	MP3C	Z	-24.128	2
51	MP3C	Mx	-.021	2
52	MP3C	X	-41.791	4
53	MP3C	Z	-24.128	4
54	MP3C	Mx	-.021	4
55	MP1A	X	-45.962	2
56	MP1A	Z	-26.536	2
57	MP1A	Mx	-.023	2
58	MP1B	X	-61.173	2
59	MP1B	Z	-35.318	2
60	MP1B	Mx	0	2
61	MP1C	X	-45.962	2
62	MP1C	Z	-26.536	2
63	MP1C	Mx	.023	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
64	MP2A	X	-39.235	2
65	MP2A	Z	-22.652	2
66	MP2A	Mx	-.02	2
67	MP2B	X	-47.761	2
68	MP2B	Z	-27.575	2
69	MP2B	Mx	0	2
70	MP2C	X	-39.235	2
71	MP2C	Z	-22.652	2
72	MP2C	Mx	.02	2
73	MP1B	X	-159.64	.25
74	MP1B	Z	-92.168	.25
75	MP1B	Mx	0	.25
76	MP1B	X	-159.64	4.75
77	MP1B	Z	-92.168	4.75
78	MP1B	Mx	0	4.75
79	MP1C	X	-145.45	.25
80	MP1C	Z	-83.976	.25
81	MP1C	Mx	-.073	.25
82	MP1C	X	-145.45	4.75
83	MP1C	Z	-83.976	4.75
84	MP1C	Mx	-.073	4.75
85	MP5B	X	-159.64	.25
86	MP5B	Z	-92.168	.25
87	MP5B	Mx	0	.25
88	MP5B	X	-159.64	4.75
89	MP5B	Z	-92.168	4.75
90	MP5B	Mx	0	4.75
91	MP5C	X	-145.45	.25
92	MP5C	Z	-83.976	.25
93	MP5C	Mx	-.073	.25
94	MP5C	X	-145.45	4.75
95	MP5C	Z	-83.976	4.75
96	MP5C	Mx	-.073	4.75
97	MP1A	X	-123.553	.25
98	MP1A	Z	-71.334	.25
99	MP1A	Mx	.062	.25
100	MP1A	X	-123.553	4.75
101	MP1A	Z	-71.334	4.75
102	MP1A	Mx	.062	4.75
103	MP5A	X	-123.553	.25
104	MP5A	Z	-71.334	.25
105	MP5A	Mx	.062	.25
106	MP5A	X	-123.553	4.75
107	MP5A	Z	-71.334	4.75
108	MP5A	Mx	.062	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP2A	X	-69.838	1
2	MP2A	Z	-120.963	1
3	MP2A	Mx	-.026	1
4	MP2A	X	-69.838	6
5	MP2A	Z	-120.963	6
6	MP2A	Mx	-.026	6
7	MP2B	X	-69.838	1
8	MP2B	Z	-120.963	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP2B	Mx	.095	1
10	MP2B	X	-69.838	6
11	MP2B	Z	-120.963	6
12	MP2B	Mx	.095	6
13	MP2C	X	-50.444	1
14	MP2C	Z	-87.371	1
15	MP2C	Mx	-.05	1
16	MP2C	X	-50.444	6
17	MP2C	Z	-87.371	6
18	MP2C	Mx	-.05	6
19	MP2A	X	-69.838	1
20	MP2A	Z	-120.963	1
21	MP2A	Mx	.095	1
22	MP2A	X	-69.838	6
23	MP2A	Z	-120.963	6
24	MP2A	Mx	.095	6
25	MP2B	X	-69.838	1
26	MP2B	Z	-120.963	1
27	MP2B	Mx	-.026	1
28	MP2B	X	-69.838	6
29	MP2B	Z	-120.963	6
30	MP2B	Mx	-.026	6
31	MP2C	X	-50.444	1
32	MP2C	Z	-87.371	1
33	MP2C	Mx	-.05	1
34	MP2C	X	-50.444	6
35	MP2C	Z	-87.371	6
36	MP2C	Mx	-.05	6
37	MP3A	X	-37.632	2
38	MP3A	Z	-65.181	2
39	MP3A	Mx	.019	2
40	MP3A	X	-37.632	4
41	MP3A	Z	-65.181	4
42	MP3A	Mx	.019	4
43	MP3B	X	-37.632	2
44	MP3B	Z	-65.181	2
45	MP3B	Mx	.019	2
46	MP3B	X	-37.632	4
47	MP3B	Z	-65.181	4
48	MP3B	Mx	.019	4
49	MP3C	X	-17.376	2
50	MP3C	Z	-30.097	2
51	MP3C	Mx	-.017	2
52	MP3C	X	-17.376	4
53	MP3C	Z	-30.097	4
54	MP3C	Mx	-.017	4
55	MP1A	X	-32.391	2
56	MP1A	Z	-56.103	2
57	MP1A	Mx	-.016	2
58	MP1B	X	-32.391	2
59	MP1B	Z	-56.103	2
60	MP1B	Mx	-.016	2
61	MP1C	X	-23.609	2
62	MP1C	Z	-40.891	2
63	MP1C	Mx	.024	2
64	MP2A	X	-25.934	2
65	MP2A	Z	-44.919	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
66	MP2A	Mx	-.013	2
67	MP2B	X	-25.934	2
68	MP2B	Z	-44.919	2
69	MP2B	Mx	-.013	2
70	MP2C	X	-21.012	2
71	MP2C	Z	-36.393	2
72	MP2C	Mx	.021	2
73	MP1B	X	-89.437	.25
74	MP1B	Z	-154.91	.25
75	MP1B	Mx	.045	.25
76	MP1B	X	-89.437	4.75
77	MP1B	Z	-154.91	4.75
78	MP1B	Mx	.045	4.75
79	MP1C	X	-81.245	.25
80	MP1C	Z	-140.72	.25
81	MP1C	Mx	-.081	.25
82	MP1C	X	-81.245	4.75
83	MP1C	Z	-140.72	4.75
84	MP1C	Mx	-.081	4.75
85	MP5B	X	-89.437	.25
86	MP5B	Z	-154.91	.25
87	MP5B	Mx	.045	.25
88	MP5B	X	-89.437	4.75
89	MP5B	Z	-154.91	4.75
90	MP5B	Mx	.045	4.75
91	MP5C	X	-81.245	.25
92	MP5C	Z	-140.72	.25
93	MP5C	Mx	-.081	.25
94	MP5C	X	-81.245	4.75
95	MP5C	Z	-140.72	4.75
96	MP5C	Mx	-.081	4.75
97	MP1A	X	-51.038	.25
98	MP1A	Z	-88.4	.25
99	MP1A	Mx	.026	.25
100	MP1A	X	-51.038	4.75
101	MP1A	Z	-88.4	4.75
102	MP1A	Mx	.026	4.75
103	MP5A	X	-51.038	.25
104	MP5A	Z	-88.4	.25
105	MP5A	Mx	.026	.25
106	MP5A	X	-51.038	4.75
107	MP5A	Z	-88.4	4.75
108	MP5A	Mx	.026	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1
2	MP2A	Z	-27.42	1
3	MP2A	Mx	-.014	1
4	MP2A	X	0	6
5	MP2A	Z	-27.42	6
6	MP2A	Mx	-.014	6
7	MP2B	X	0	1
8	MP2B	Z	-21.047	1
9	MP2B	Mx	.014	1
10	MP2B	X	0	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
68	MP2B	Z	-9.282	2
69	MP2B	Mx	-.004	2
70	MP2C	X	0	2
71	MP2C	Z	-9.282	2
72	MP2C	Mx	.004	2
73	MP1B	X	0	.25
74	MP1B	Z	-29.974	.25
75	MP1B	Mx	.013	.25
76	MP1B	X	0	4.75
77	MP1B	Z	-29.974	4.75
78	MP1B	Mx	.013	4.75
79	MP1C	X	0	.25
80	MP1C	Z	-29.974	.25
81	MP1C	Mx	-.013	.25
82	MP1C	X	0	4.75
83	MP1C	Z	-29.974	4.75
84	MP1C	Mx	-.013	4.75
85	MP5B	X	0	.25
86	MP5B	Z	-29.974	.25
87	MP5B	Mx	.013	.25
88	MP5B	X	0	4.75
89	MP5B	Z	-29.974	4.75
90	MP5B	Mx	.013	4.75
91	MP5C	X	0	.25
92	MP5C	Z	-29.974	.25
93	MP5C	Mx	-.013	.25
94	MP5C	X	0	4.75
95	MP5C	Z	-29.974	4.75
96	MP5C	Mx	-.013	4.75
97	MP1A	X	0	.25
98	MP1A	Z	-15.651	.25
99	MP1A	Mx	0	.25
100	MP1A	X	0	4.75
101	MP1A	Z	-15.651	4.75
102	MP1A	Mx	0	4.75
103	MP5A	X	0	.25
104	MP5A	Z	-15.651	.25
105	MP5A	Mx	0	.25
106	MP5A	X	0	4.75
107	MP5A	Z	-15.651	4.75
108	MP5A	Mx	0	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	12.648	1
2	MP2A	Z	-21.907	1
3	MP2A	Mx	-.017	1
4	MP2A	X	12.648	6
5	MP2A	Z	-21.907	6
6	MP2A	Mx	-.017	6
7	MP2B	X	9.461	1
8	MP2B	Z	-16.387	1
9	MP2B	Mx	.009	1
10	MP2B	X	9.461	6
11	MP2B	Z	-16.387	6
12	MP2B	Mx	.009	6



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
13	MP2C	X	12.648	1
14	MP2C	Z	-21.907	1
15	MP2C	Mx	.005	1
16	MP2C	X	12.648	6
17	MP2C	Z	-21.907	6
18	MP2C	Mx	.005	6
19	MP2A	X	12.648	1
20	MP2A	Z	-21.907	1
21	MP2A	Mx	.005	1
22	MP2A	X	12.648	6
23	MP2A	Z	-21.907	6
24	MP2A	Mx	.005	6
25	MP2B	X	9.461	1
26	MP2B	Z	-16.387	1
27	MP2B	Mx	.009	1
28	MP2B	X	9.461	6
29	MP2B	Z	-16.387	6
30	MP2B	Mx	.009	6
31	MP2C	X	12.648	1
32	MP2C	Z	-21.907	1
33	MP2C	Mx	-.017	1
34	MP2C	X	12.648	6
35	MP2C	Z	-21.907	6
36	MP2C	Mx	-.017	6
37	MP3A	X	6.999	2
38	MP3A	Z	-12.123	2
39	MP3A	Mx	-.004	2
40	MP3A	X	6.999	4
41	MP3A	Z	-12.123	4
42	MP3A	Mx	-.004	4
43	MP3B	X	3.486	2
44	MP3B	Z	-6.037	2
45	MP3B	Mx	.003	2
46	MP3B	X	3.486	4
47	MP3B	Z	-6.037	4
48	MP3B	Mx	.003	4
49	MP3C	X	6.999	2
50	MP3C	Z	-12.123	2
51	MP3C	Mx	-.004	2
52	MP3C	X	6.999	4
53	MP3C	Z	-12.123	4
54	MP3C	Mx	-.004	4
55	MP1A	X	6.369	2
56	MP1A	Z	-11.032	2
57	MP1A	Mx	.003	2
58	MP1B	X	4.798	2
59	MP1B	Z	-8.311	2
60	MP1B	Mx	-.005	2
61	MP1C	X	6.369	2
62	MP1C	Z	-11.032	2
63	MP1C	Mx	.003	2
64	MP2A	X	5.249	2
65	MP2A	Z	-9.091	2
66	MP2A	Mx	.003	2
67	MP2B	X	4.337	2
68	MP2B	Z	-7.513	2
69	MP2B	Mx	-.004	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
70	MP2C	X	5.249	2
71	MP2C	Z	-9.091	2
72	MP2C	Mx	.003	2
73	MP1B	X	14.54	.25
74	MP1B	Z	-25.183	.25
75	MP1B	Mx	.015	.25
76	MP1B	X	14.54	4.75
77	MP1B	Z	-25.183	4.75
78	MP1B	Mx	.015	4.75
79	MP1C	X	15.882	.25
80	MP1C	Z	-27.509	.25
81	MP1C	Mx	-.008	.25
82	MP1C	X	15.882	4.75
83	MP1C	Z	-27.509	4.75
84	MP1C	Mx	-.008	4.75
85	MP5B	X	14.54	.25
86	MP5B	Z	-25.183	.25
87	MP5B	Mx	.015	.25
88	MP5B	X	14.54	4.75
89	MP5B	Z	-25.183	4.75
90	MP5B	Mx	.015	4.75
91	MP5C	X	15.882	.25
92	MP5C	Z	-27.509	.25
93	MP5C	Mx	-.008	.25
94	MP5C	X	15.882	4.75
95	MP5C	Z	-27.509	4.75
96	MP5C	Mx	-.008	4.75
97	MP1A	X	9.514	.25
98	MP1A	Z	-16.478	.25
99	MP1A	Mx	-.005	.25
100	MP1A	X	9.514	4.75
101	MP1A	Z	-16.478	4.75
102	MP1A	Mx	-.005	4.75
103	MP5A	X	9.514	.25
104	MP5A	Z	-16.478	.25
105	MP5A	Mx	-.005	.25
106	MP5A	X	9.514	4.75
107	MP5A	Z	-16.478	4.75
108	MP5A	Mx	-.005	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	18.227	1
2	MP2A	Z	-10.523	1
3	MP2A	Mx	-.014	1
4	MP2A	X	18.227	6
5	MP2A	Z	-10.523	6
6	MP2A	Mx	-.014	6
7	MP2B	X	18.227	1
8	MP2B	Z	-10.523	1
9	MP2B	Mx	.004	1
10	MP2B	X	18.227	6
11	MP2B	Z	-10.523	6
12	MP2B	Mx	.004	6
13	MP2C	X	23.746	1
14	MP2C	Z	-13.71	1



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
15	MP2C	Mx	.014	1
16	MP2C	X	23.746	6
17	MP2C	Z	-13.71	6
18	MP2C	Mx	.014	6
19	MP2A	X	18.227	1
20	MP2A	Z	-10.523	1
21	MP2A	Mx	-.004	1
22	MP2A	X	18.227	6
23	MP2A	Z	-10.523	6
24	MP2A	Mx	-.004	6
25	MP2B	X	18.227	1
26	MP2B	Z	-10.523	1
27	MP2B	Mx	.014	1
28	MP2B	X	18.227	6
29	MP2B	Z	-10.523	6
30	MP2B	Mx	.014	6
31	MP2C	X	23.746	1
32	MP2C	Z	-13.71	1
33	MP2C	Mx	-.014	1
34	MP2C	X	23.746	6
35	MP2C	Z	-13.71	6
36	MP2C	Mx	-.014	6
37	MP3A	X	8.066	2
38	MP3A	Z	-4.657	2
39	MP3A	Mx	-.004	2
40	MP3A	X	8.066	4
41	MP3A	Z	-4.657	4
42	MP3A	Mx	-.004	4
43	MP3B	X	8.066	2
44	MP3B	Z	-4.657	2
45	MP3B	Mx	.004	2
46	MP3B	X	8.066	4
47	MP3B	Z	-4.657	4
48	MP3B	Mx	.004	4
49	MP3C	X	14.151	2
50	MP3C	Z	-8.17	2
51	MP3C	Mx	0	2
52	MP3C	X	14.151	4
53	MP3C	Z	-8.17	4
54	MP3C	Mx	0	4
55	MP1A	X	9.218	2
56	MP1A	Z	-5.322	2
57	MP1A	Mx	.005	2
58	MP1B	X	9.218	2
59	MP1B	Z	-5.322	2
60	MP1B	Mx	-.005	2
61	MP1C	X	11.939	2
62	MP1C	Z	-6.893	2
63	MP1C	Mx	0	2
64	MP2A	X	8.039	2
65	MP2A	Z	-4.641	2
66	MP2A	Mx	.004	2
67	MP2B	X	8.039	2
68	MP2B	Z	-4.641	2
69	MP2B	Mx	-.004	2
70	MP2C	X	9.617	2
71	MP2C	Z	-5.552	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
72	MP2C	Mx	0	2
73	MP1B	X	25.958	.25
74	MP1B	Z	-14.987	.25
75	MP1B	Mx	.013	.25
76	MP1B	X	25.958	4.75
77	MP1B	Z	-14.987	4.75
78	MP1B	Mx	.013	4.75
79	MP1C	X	28.284	.25
80	MP1C	Z	-16.33	.25
81	MP1C	Mx	0	.25
82	MP1C	X	28.284	4.75
83	MP1C	Z	-16.33	4.75
84	MP1C	Mx	0	4.75
85	MP5B	X	25.958	.25
86	MP5B	Z	-14.987	.25
87	MP5B	Mx	.013	.25
88	MP5B	X	25.958	4.75
89	MP5B	Z	-14.987	4.75
90	MP5B	Mx	.013	4.75
91	MP5C	X	28.284	.25
92	MP5C	Z	-16.33	.25
93	MP5C	Mx	0	.25
94	MP5C	X	28.284	4.75
95	MP5C	Z	-16.33	4.75
96	MP5C	Mx	0	4.75
97	MP1A	X	22.326	.25
98	MP1A	Z	-12.89	.25
99	MP1A	Mx	-.011	.25
100	MP1A	X	22.326	4.75
101	MP1A	Z	-12.89	4.75
102	MP1A	Mx	-.011	4.75
103	MP5A	X	22.326	.25
104	MP5A	Z	-12.89	.25
105	MP5A	Mx	-.011	.25
106	MP5A	X	22.326	4.75
107	MP5A	Z	-12.89	4.75
108	MP5A	Mx	-.011	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	18.922	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.009	1
4	MP2A	X	18.922	6
5	MP2A	Z	0	6
6	MP2A	Mx	-.009	6
7	MP2B	X	25.296	1
8	MP2B	Z	0	1
9	MP2B	Mx	-.005	1
10	MP2B	X	25.296	6
11	MP2B	Z	0	6
12	MP2B	Mx	-.005	6
13	MP2C	X	25.296	1
14	MP2C	Z	0	1
15	MP2C	Mx	.017	1
16	MP2C	X	25.296	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
74	MP1B	Z	0	.25
75	MP1B	Mx	.008	.25
76	MP1B	X	31.764	4.75
77	MP1B	Z	0	4.75
78	MP1B	Mx	.008	4.75
79	MP1C	X	31.764	.25
80	MP1C	Z	0	.25
81	MP1C	Mx	.008	.25
82	MP1C	X	31.764	4.75
83	MP1C	Z	0	4.75
84	MP1C	Mx	.008	4.75
85	MP5B	X	31.764	.25
86	MP5B	Z	0	.25
87	MP5B	Mx	.008	.25
88	MP5B	X	31.764	4.75
89	MP5B	Z	0	4.75
90	MP5B	Mx	.008	4.75
91	MP5C	X	31.764	.25
92	MP5C	Z	0	.25
93	MP5C	Mx	.008	.25
94	MP5C	X	31.764	4.75
95	MP5C	Z	0	4.75
96	MP5C	Mx	.008	4.75
97	MP1A	X	29.157	.25
98	MP1A	Z	0	.25
99	MP1A	Mx	-.015	.25
100	MP1A	X	29.157	4.75
101	MP1A	Z	0	4.75
102	MP1A	Mx	-.015	4.75
103	MP5A	X	29.157	.25
104	MP5A	Z	0	.25
105	MP5A	Mx	-.015	.25
106	MP5A	X	29.157	4.75
107	MP5A	Z	0	4.75
108	MP5A	Mx	-.015	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	18.227	1
2	MP2A	Z	10.523	1
3	MP2A	Mx	-.004	1
4	MP2A	X	18.227	6
5	MP2A	Z	10.523	6
6	MP2A	Mx	-.004	6
7	MP2B	X	23.746	1
8	MP2B	Z	13.71	1
9	MP2B	Mx	-.014	1
10	MP2B	X	23.746	6
11	MP2B	Z	13.71	6
12	MP2B	Mx	-.014	6
13	MP2C	X	18.227	1
14	MP2C	Z	10.523	1
15	MP2C	Mx	.014	1
16	MP2C	X	18.227	6
17	MP2C	Z	10.523	6
18	MP2C	Mx	.014	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
21	MP2A	Mx	-.017	1
22	MP2A	X	12.648	6
23	MP2A	Z	21.907	6
24	MP2A	Mx	-.017	6
25	MP2B	X	12.648	1
26	MP2B	Z	21.907	1
27	MP2B	Mx	.005	1
28	MP2B	X	12.648	6
29	MP2B	Z	21.907	6
30	MP2B	Mx	.005	6
31	MP2C	X	9.461	1
32	MP2C	Z	16.387	1
33	MP2C	Mx	.009	1
34	MP2C	X	9.461	6
35	MP2C	Z	16.387	6
36	MP2C	Mx	.009	6
37	MP3A	X	6.999	2
38	MP3A	Z	12.123	2
39	MP3A	Mx	-.004	2
40	MP3A	X	6.999	4
41	MP3A	Z	12.123	4
42	MP3A	Mx	-.004	4
43	MP3B	X	6.999	2
44	MP3B	Z	12.123	2
45	MP3B	Mx	-.004	2
46	MP3B	X	6.999	4
47	MP3B	Z	12.123	4
48	MP3B	Mx	-.004	4
49	MP3C	X	3.486	2
50	MP3C	Z	6.037	2
51	MP3C	Mx	.003	2
52	MP3C	X	3.486	4
53	MP3C	Z	6.037	4
54	MP3C	Mx	.003	4
55	MP1A	X	6.369	2
56	MP1A	Z	11.032	2
57	MP1A	Mx	.003	2
58	MP1B	X	6.369	2
59	MP1B	Z	11.032	2
60	MP1B	Mx	.003	2
61	MP1C	X	4.798	2
62	MP1C	Z	8.311	2
63	MP1C	Mx	-.005	2
64	MP2A	X	5.249	2
65	MP2A	Z	9.091	2
66	MP2A	Mx	.003	2
67	MP2B	X	5.249	2
68	MP2B	Z	9.091	2
69	MP2B	Mx	.003	2
70	MP2C	X	4.337	2
71	MP2C	Z	7.513	2
72	MP2C	Mx	-.004	2
73	MP1B	X	15.882	.25
74	MP1B	Z	27.509	.25
75	MP1B	Mx	-.008	.25
76	MP1B	X	15.882	4.75
77	MP1B	Z	27.509	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
78	MP1B	Mx	-.008	4.75
79	MP1C	X	14.54	.25
80	MP1C	Z	25.183	.25
81	MP1C	Mx	.015	.25
82	MP1C	X	14.54	4.75
83	MP1C	Z	25.183	4.75
84	MP1C	Mx	.015	4.75
85	MP5B	X	15.882	.25
86	MP5B	Z	27.509	.25
87	MP5B	Mx	-.008	.25
88	MP5B	X	15.882	4.75
89	MP5B	Z	27.509	4.75
90	MP5B	Mx	-.008	4.75
91	MP5C	X	14.54	.25
92	MP5C	Z	25.183	.25
93	MP5C	Mx	.015	.25
94	MP5C	X	14.54	4.75
95	MP5C	Z	25.183	4.75
96	MP5C	Mx	.015	4.75
97	MP1A	X	9.514	.25
98	MP1A	Z	16.478	.25
99	MP1A	Mx	-.005	.25
100	MP1A	X	9.514	4.75
101	MP1A	Z	16.478	4.75
102	MP1A	Mx	-.005	4.75
103	MP5A	X	9.514	.25
104	MP5A	Z	16.478	.25
105	MP5A	Mx	-.005	.25
106	MP5A	X	9.514	4.75
107	MP5A	Z	16.478	4.75
108	MP5A	Mx	-.005	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1
2	MP2A	Z	27.42	1
3	MP2A	Mx	.014	1
4	MP2A	X	0	6
5	MP2A	Z	27.42	6
6	MP2A	Mx	.014	6
7	MP2B	X	0	1
8	MP2B	Z	21.047	1
9	MP2B	Mx	-.014	1
10	MP2B	X	0	6
11	MP2B	Z	21.047	6
12	MP2B	Mx	-.014	6
13	MP2C	X	0	1
14	MP2C	Z	21.047	1
15	MP2C	Mx	.004	1
16	MP2C	X	0	6
17	MP2C	Z	21.047	6
18	MP2C	Mx	.004	6
19	MP2A	X	0	1
20	MP2A	Z	27.42	1
21	MP2A	Mx	-.014	1
22	MP2A	X	0	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
80	MP1C	Z	29.974	.25
81	MP1C	Mx	.013	.25
82	MP1C	X	0	4.75
83	MP1C	Z	29.974	4.75
84	MP1C	Mx	.013	4.75
85	MP5B	X	0	.25
86	MP5B	Z	29.974	.25
87	MP5B	Mx	-.013	.25
88	MP5B	X	0	4.75
89	MP5B	Z	29.974	4.75
90	MP5B	Mx	-.013	4.75
91	MP5C	X	0	.25
92	MP5C	Z	29.974	.25
93	MP5C	Mx	.013	.25
94	MP5C	X	0	4.75
95	MP5C	Z	29.974	4.75
96	MP5C	Mx	.013	4.75
97	MP1A	X	0	.25
98	MP1A	Z	15.651	.25
99	MP1A	Mx	0	.25
100	MP1A	X	0	4.75
101	MP1A	Z	15.651	4.75
102	MP1A	Mx	0	4.75
103	MP5A	X	0	.25
104	MP5A	Z	15.651	.25
105	MP5A	Mx	0	.25
106	MP5A	X	0	4.75
107	MP5A	Z	15.651	4.75
108	MP5A	Mx	0	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-12.648	1
2	MP2A	Z	21.907	1
3	MP2A	Mx	.017	1
4	MP2A	X	-12.648	6
5	MP2A	Z	21.907	6
6	MP2A	Mx	.017	6
7	MP2B	X	-9.461	1
8	MP2B	Z	16.387	1
9	MP2B	Mx	-.009	1
10	MP2B	X	-9.461	6
11	MP2B	Z	16.387	6
12	MP2B	Mx	-.009	6
13	MP2C	X	-12.648	1
14	MP2C	Z	21.907	1
15	MP2C	Mx	-.005	1
16	MP2C	X	-12.648	6
17	MP2C	Z	21.907	6
18	MP2C	Mx	-.005	6
19	MP2A	X	-12.648	1
20	MP2A	Z	21.907	1
21	MP2A	Mx	-.005	1
22	MP2A	X	-12.648	6
23	MP2A	Z	21.907	6
24	MP2A	Mx	-.005	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP2B	X	-9.461	1
26	MP2B	Z	16.387	1
27	MP2B	Mx	-.009	1
28	MP2B	X	-9.461	6
29	MP2B	Z	16.387	6
30	MP2B	Mx	-.009	6
31	MP2C	X	-12.648	1
32	MP2C	Z	21.907	1
33	MP2C	Mx	.017	1
34	MP2C	X	-12.648	6
35	MP2C	Z	21.907	6
36	MP2C	Mx	.017	6
37	MP3A	X	-6.999	2
38	MP3A	Z	12.123	2
39	MP3A	Mx	.004	2
40	MP3A	X	-6.999	4
41	MP3A	Z	12.123	4
42	MP3A	Mx	.004	4
43	MP3B	X	-3.486	2
44	MP3B	Z	6.037	2
45	MP3B	Mx	-.003	2
46	MP3B	X	-3.486	4
47	MP3B	Z	6.037	4
48	MP3B	Mx	-.003	4
49	MP3C	X	-6.999	2
50	MP3C	Z	12.123	2
51	MP3C	Mx	.004	2
52	MP3C	X	-6.999	4
53	MP3C	Z	12.123	4
54	MP3C	Mx	.004	4
55	MP1A	X	-6.369	2
56	MP1A	Z	11.032	2
57	MP1A	Mx	-.003	2
58	MP1B	X	-4.798	2
59	MP1B	Z	8.311	2
60	MP1B	Mx	.005	2
61	MP1C	X	-6.369	2
62	MP1C	Z	11.032	2
63	MP1C	Mx	-.003	2
64	MP2A	X	-5.249	2
65	MP2A	Z	9.091	2
66	MP2A	Mx	-.003	2
67	MP2B	X	-4.337	2
68	MP2B	Z	7.513	2
69	MP2B	Mx	.004	2
70	MP2C	X	-5.249	2
71	MP2C	Z	9.091	2
72	MP2C	Mx	-.003	2
73	MP1B	X	-14.54	.25
74	MP1B	Z	25.183	.25
75	MP1B	Mx	-.015	.25
76	MP1B	X	-14.54	4.75
77	MP1B	Z	25.183	4.75
78	MP1B	Mx	-.015	4.75
79	MP1C	X	-15.882	.25
80	MP1C	Z	27.509	.25
81	MP1C	Mx	.008	.25



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
82	MP1C	X	-15.882	4.75
83	MP1C	Z	27.509	4.75
84	MP1C	Mx	.008	4.75
85	MP5B	X	-14.54	.25
86	MP5B	Z	25.183	.25
87	MP5B	Mx	-.015	.25
88	MP5B	X	-14.54	4.75
89	MP5B	Z	25.183	4.75
90	MP5B	Mx	-.015	4.75
91	MP5C	X	-15.882	.25
92	MP5C	Z	27.509	.25
93	MP5C	Mx	.008	.25
94	MP5C	X	-15.882	4.75
95	MP5C	Z	27.509	4.75
96	MP5C	Mx	.008	4.75
97	MP1A	X	-9.514	.25
98	MP1A	Z	16.478	.25
99	MP1A	Mx	.005	.25
100	MP1A	X	-9.514	4.75
101	MP1A	Z	16.478	4.75
102	MP1A	Mx	.005	4.75
103	MP5A	X	-9.514	.25
104	MP5A	Z	16.478	.25
105	MP5A	Mx	.005	.25
106	MP5A	X	-9.514	4.75
107	MP5A	Z	16.478	4.75
108	MP5A	Mx	.005	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-18.227	1
2	MP2A	Z	10.523	1
3	MP2A	Mx	.014	1
4	MP2A	X	-18.227	6
5	MP2A	Z	10.523	6
6	MP2A	Mx	.014	6
7	MP2B	X	-18.227	1
8	MP2B	Z	10.523	1
9	MP2B	Mx	-.004	1
10	MP2B	X	-18.227	6
11	MP2B	Z	10.523	6
12	MP2B	Mx	-.004	6
13	MP2C	X	-23.746	1
14	MP2C	Z	13.71	1
15	MP2C	Mx	-.014	1
16	MP2C	X	-23.746	6
17	MP2C	Z	13.71	6
18	MP2C	Mx	-.014	6
19	MP2A	X	-18.227	1
20	MP2A	Z	10.523	1
21	MP2A	Mx	.004	1
22	MP2A	X	-18.227	6
23	MP2A	Z	10.523	6
24	MP2A	Mx	.004	6
25	MP2B	X	-18.227	1
26	MP2B	Z	10.523	1



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
27	MP2B	Mx	1
28	MP2B	X	6
29	MP2B	Z	6
30	MP2B	Mx	6
31	MP2C	X	1
32	MP2C	Z	1
33	MP2C	Mx	1
34	MP2C	X	6
35	MP2C	Z	6
36	MP2C	Mx	6
37	MP3A	X	2
38	MP3A	Z	2
39	MP3A	Mx	2
40	MP3A	X	4
41	MP3A	Z	4
42	MP3A	Mx	4
43	MP3B	X	2
44	MP3B	Z	2
45	MP3B	Mx	2
46	MP3B	X	4
47	MP3B	Z	4
48	MP3B	Mx	4
49	MP3C	X	2
50	MP3C	Z	2
51	MP3C	Mx	2
52	MP3C	X	4
53	MP3C	Z	4
54	MP3C	Mx	4
55	MP1A	X	2
56	MP1A	Z	2
57	MP1A	Mx	2
58	MP1B	X	2
59	MP1B	Z	2
60	MP1B	Mx	2
61	MP1C	X	2
62	MP1C	Z	2
63	MP1C	Mx	2
64	MP2A	X	2
65	MP2A	Z	2
66	MP2A	Mx	2
67	MP2B	X	2
68	MP2B	Z	2
69	MP2B	Mx	2
70	MP2C	X	2
71	MP2C	Z	2
72	MP2C	Mx	2
73	MP1B	X	.25
74	MP1B	Z	.25
75	MP1B	Mx	.25
76	MP1B	X	4.75
77	MP1B	Z	4.75
78	MP1B	Mx	4.75
79	MP1C	X	.25
80	MP1C	Z	.25
81	MP1C	Mx	.25
82	MP1C	X	4.75
83	MP1C	Z	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
84	MP1C	Mx	0	4.75
85	MP5B	X	-25.958	.25
86	MP5B	Z	14.987	.25
87	MP5B	Mx	-.013	.25
88	MP5B	X	-25.958	4.75
89	MP5B	Z	14.987	4.75
90	MP5B	Mx	-.013	4.75
91	MP5C	X	-28.284	.25
92	MP5C	Z	16.33	.25
93	MP5C	Mx	0	.25
94	MP5C	X	-28.284	4.75
95	MP5C	Z	16.33	4.75
96	MP5C	Mx	0	4.75
97	MP1A	X	-22.326	.25
98	MP1A	Z	12.89	.25
99	MP1A	Mx	.011	.25
100	MP1A	X	-22.326	4.75
101	MP1A	Z	12.89	4.75
102	MP1A	Mx	.011	4.75
103	MP5A	X	-22.326	.25
104	MP5A	Z	12.89	.25
105	MP5A	Mx	.011	.25
106	MP5A	X	-22.326	4.75
107	MP5A	Z	12.89	4.75
108	MP5A	Mx	.011	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	-18.922	1
2	MP2A	Z	0	1
3	MP2A	Mx	.009	1
4	MP2A	X	-18.922	6
5	MP2A	Z	0	6
6	MP2A	Mx	.009	6
7	MP2B	X	-25.296	1
8	MP2B	Z	0	1
9	MP2B	Mx	.005	1
10	MP2B	X	-25.296	6
11	MP2B	Z	0	6
12	MP2B	Mx	.005	6
13	MP2C	X	-25.296	1
14	MP2C	Z	0	1
15	MP2C	Mx	-.017	1
16	MP2C	X	-25.296	6
17	MP2C	Z	0	6
18	MP2C	Mx	-.017	6
19	MP2A	X	-18.922	1
20	MP2A	Z	0	1
21	MP2A	Mx	.009	1
22	MP2A	X	-18.922	6
23	MP2A	Z	0	6
24	MP2A	Mx	.009	6
25	MP2B	X	-25.296	1
26	MP2B	Z	0	1
27	MP2B	Mx	-.017	1
28	MP2B	X	-25.296	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
29	MP2B	Z	0	6
30	MP2B	Mx	-.017	6
31	MP2C	X	-25.296	1
32	MP2C	Z	0	1
33	MP2C	Mx	.005	1
34	MP2C	X	-25.296	6
35	MP2C	Z	0	6
36	MP2C	Mx	.005	6
37	MP3A	X	-6.971	2
38	MP3A	Z	0	2
39	MP3A	Mx	.003	2
40	MP3A	X	-6.971	4
41	MP3A	Z	0	4
42	MP3A	Mx	.003	4
43	MP3B	X	-13.998	2
44	MP3B	Z	0	2
45	MP3B	Mx	-.004	2
46	MP3B	X	-13.998	4
47	MP3B	Z	0	4
48	MP3B	Mx	-.004	4
49	MP3C	X	-13.998	2
50	MP3C	Z	0	2
51	MP3C	Mx	-.004	2
52	MP3C	X	-13.998	4
53	MP3C	Z	0	4
54	MP3C	Mx	-.004	4
55	MP1A	X	-9.597	2
56	MP1A	Z	0	2
57	MP1A	Mx	-.005	2
58	MP1B	X	-12.739	2
59	MP1B	Z	0	2
60	MP1B	Mx	.003	2
61	MP1C	X	-12.739	2
62	MP1C	Z	0	2
63	MP1C	Mx	.003	2
64	MP2A	X	-8.675	2
65	MP2A	Z	0	2
66	MP2A	Mx	-.004	2
67	MP2B	X	-10.497	2
68	MP2B	Z	0	2
69	MP2B	Mx	.003	2
70	MP2C	X	-10.497	2
71	MP2C	Z	0	2
72	MP2C	Mx	.003	2
73	MP1B	X	-31.764	.25
74	MP1B	Z	0	.25
75	MP1B	Mx	-.008	.25
76	MP1B	X	-31.764	4.75
77	MP1B	Z	0	4.75
78	MP1B	Mx	-.008	4.75
79	MP1C	X	-31.764	.25
80	MP1C	Z	0	.25
81	MP1C	Mx	-.008	.25
82	MP1C	X	-31.764	4.75
83	MP1C	Z	0	4.75
84	MP1C	Mx	-.008	4.75
85	MP5B	X	-31.764	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
86	MP5B	Z	0	.25
87	MP5B	Mx	-.008	.25
88	MP5B	X	-31.764	4.75
89	MP5B	Z	0	4.75
90	MP5B	Mx	-.008	4.75
91	MP5C	X	-31.764	.25
92	MP5C	Z	0	.25
93	MP5C	Mx	-.008	.25
94	MP5C	X	-31.764	4.75
95	MP5C	Z	0	4.75
96	MP5C	Mx	-.008	4.75
97	MP1A	X	-29.157	.25
98	MP1A	Z	0	.25
99	MP1A	Mx	.015	.25
100	MP1A	X	-29.157	4.75
101	MP1A	Z	0	4.75
102	MP1A	Mx	.015	4.75
103	MP5A	X	-29.157	.25
104	MP5A	Z	0	.25
105	MP5A	Mx	.015	.25
106	MP5A	X	-29.157	4.75
107	MP5A	Z	0	4.75
108	MP5A	Mx	.015	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-18.227	1
2	MP2A	Z	-10.523	1
3	MP2A	Mx	.004	1
4	MP2A	X	-18.227	6
5	MP2A	Z	-10.523	6
6	MP2A	Mx	.004	6
7	MP2B	X	-23.746	1
8	MP2B	Z	-13.71	1
9	MP2B	Mx	.014	1
10	MP2B	X	-23.746	6
11	MP2B	Z	-13.71	6
12	MP2B	Mx	.014	6
13	MP2C	X	-18.227	1
14	MP2C	Z	-10.523	1
15	MP2C	Mx	-.014	1
16	MP2C	X	-18.227	6
17	MP2C	Z	-10.523	6
18	MP2C	Mx	-.014	6
19	MP2A	X	-18.227	1
20	MP2A	Z	-10.523	1
21	MP2A	Mx	.014	1
22	MP2A	X	-18.227	6
23	MP2A	Z	-10.523	6
24	MP2A	Mx	.014	6
25	MP2B	X	-23.746	1
26	MP2B	Z	-13.71	1
27	MP2B	Mx	-.014	1
28	MP2B	X	-23.746	6
29	MP2B	Z	-13.71	6
30	MP2B	Mx	-.014	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
31	MP2C	X	-18.227	1
32	MP2C	Z	-10.523	1
33	MP2C	Mx	-.004	1
34	MP2C	X	-18.227	6
35	MP2C	Z	-10.523	6
36	MP2C	Mx	-.004	6
37	MP3A	X	-8.066	2
38	MP3A	Z	-4.657	2
39	MP3A	Mx	.004	2
40	MP3A	X	-8.066	4
41	MP3A	Z	-4.657	4
42	MP3A	Mx	.004	4
43	MP3B	X	-14.151	2
44	MP3B	Z	-8.17	2
45	MP3B	Mx	0	2
46	MP3B	X	-14.151	4
47	MP3B	Z	-8.17	4
48	MP3B	Mx	0	4
49	MP3C	X	-8.066	2
50	MP3C	Z	-4.657	2
51	MP3C	Mx	-.004	2
52	MP3C	X	-8.066	4
53	MP3C	Z	-4.657	4
54	MP3C	Mx	-.004	4
55	MP1A	X	-9.218	2
56	MP1A	Z	-5.322	2
57	MP1A	Mx	-.005	2
58	MP1B	X	-11.939	2
59	MP1B	Z	-6.893	2
60	MP1B	Mx	0	2
61	MP1C	X	-9.218	2
62	MP1C	Z	-5.322	2
63	MP1C	Mx	.005	2
64	MP2A	X	-8.039	2
65	MP2A	Z	-4.641	2
66	MP2A	Mx	-.004	2
67	MP2B	X	-9.617	2
68	MP2B	Z	-5.552	2
69	MP2B	Mx	0	2
70	MP2C	X	-8.039	2
71	MP2C	Z	-4.641	2
72	MP2C	Mx	.004	2
73	MP1B	X	-28.284	.25
74	MP1B	Z	-16.33	.25
75	MP1B	Mx	0	.25
76	MP1B	X	-28.284	4.75
77	MP1B	Z	-16.33	4.75
78	MP1B	Mx	0	4.75
79	MP1C	X	-25.958	.25
80	MP1C	Z	-14.987	.25
81	MP1C	Mx	-.013	.25
82	MP1C	X	-25.958	4.75
83	MP1C	Z	-14.987	4.75
84	MP1C	Mx	-.013	4.75
85	MP5B	X	-28.284	.25
86	MP5B	Z	-16.33	.25
87	MP5B	Mx	0	.25



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
88	MP5B	X	-28.284	4.75
89	MP5B	Z	-16.33	4.75
90	MP5B	Mx	0	4.75
91	MP5C	X	-25.958	.25
92	MP5C	Z	-14.987	.25
93	MP5C	Mx	-.013	.25
94	MP5C	X	-25.958	4.75
95	MP5C	Z	-14.987	4.75
96	MP5C	Mx	-.013	4.75
97	MP1A	X	-22.326	.25
98	MP1A	Z	-12.89	.25
99	MP1A	Mx	.011	.25
100	MP1A	X	-22.326	4.75
101	MP1A	Z	-12.89	4.75
102	MP1A	Mx	.011	4.75
103	MP5A	X	-22.326	.25
104	MP5A	Z	-12.89	.25
105	MP5A	Mx	.011	.25
106	MP5A	X	-22.326	4.75
107	MP5A	Z	-12.89	4.75
108	MP5A	Mx	.011	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	-12.648	1
2	MP2A	Z	-21.907	1
3	MP2A	Mx	-.005	1
4	MP2A	X	-12.648	6
5	MP2A	Z	-21.907	6
6	MP2A	Mx	-.005	6
7	MP2B	X	-12.648	1
8	MP2B	Z	-21.907	1
9	MP2B	Mx	.017	1
10	MP2B	X	-12.648	6
11	MP2B	Z	-21.907	6
12	MP2B	Mx	.017	6
13	MP2C	X	-9.461	1
14	MP2C	Z	-16.387	1
15	MP2C	Mx	-.009	1
16	MP2C	X	-9.461	6
17	MP2C	Z	-16.387	6
18	MP2C	Mx	-.009	6
19	MP2A	X	-12.648	1
20	MP2A	Z	-21.907	1
21	MP2A	Mx	.017	1
22	MP2A	X	-12.648	6
23	MP2A	Z	-21.907	6
24	MP2A	Mx	.017	6
25	MP2B	X	-12.648	1
26	MP2B	Z	-21.907	1
27	MP2B	Mx	-.005	1
28	MP2B	X	-12.648	6
29	MP2B	Z	-21.907	6
30	MP2B	Mx	-.005	6
31	MP2C	X	-9.461	1
32	MP2C	Z	-16.387	1



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
33	MP2C	Mx	1
34	MP2C	X	6
35	MP2C	Z	6
36	MP2C	Mx	6
37	MP3A	X	2
38	MP3A	Z	2
39	MP3A	Mx	2
40	MP3A	X	4
41	MP3A	Z	4
42	MP3A	Mx	4
43	MP3B	X	2
44	MP3B	Z	2
45	MP3B	Mx	2
46	MP3B	X	4
47	MP3B	Z	4
48	MP3B	Mx	4
49	MP3C	X	2
50	MP3C	Z	2
51	MP3C	Mx	2
52	MP3C	X	4
53	MP3C	Z	4
54	MP3C	Mx	4
55	MP1A	X	2
56	MP1A	Z	2
57	MP1A	Mx	2
58	MP1B	X	2
59	MP1B	Z	2
60	MP1B	Mx	2
61	MP1C	X	2
62	MP1C	Z	2
63	MP1C	Mx	2
64	MP2A	X	2
65	MP2A	Z	2
66	MP2A	Mx	2
67	MP2B	X	2
68	MP2B	Z	2
69	MP2B	Mx	2
70	MP2C	X	2
71	MP2C	Z	2
72	MP2C	Mx	2
73	MP1B	X	.25
74	MP1B	Z	.25
75	MP1B	Mx	.25
76	MP1B	X	4.75
77	MP1B	Z	4.75
78	MP1B	Mx	4.75
79	MP1C	X	.25
80	MP1C	Z	.25
81	MP1C	Mx	.25
82	MP1C	X	4.75
83	MP1C	Z	4.75
84	MP1C	Mx	4.75
85	MP5B	X	.25
86	MP5B	Z	.25
87	MP5B	Mx	.25
88	MP5B	X	4.75
89	MP5B	Z	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
90	MP5B	Mx	.008	4.75
91	MP5C	X	-14.54	.25
92	MP5C	Z	-25.183	.25
93	MP5C	Mx	-.015	.25
94	MP5C	X	-14.54	4.75
95	MP5C	Z	-25.183	4.75
96	MP5C	Mx	-.015	4.75
97	MP1A	X	-9.514	.25
98	MP1A	Z	-16.478	.25
99	MP1A	Mx	.005	.25
100	MP1A	X	-9.514	4.75
101	MP1A	Z	-16.478	4.75
102	MP1A	Mx	.005	4.75
103	MP5A	X	-9.514	.25
104	MP5A	Z	-16.478	.25
105	MP5A	Mx	.005	.25
106	MP5A	X	-9.514	4.75
107	MP5A	Z	-16.478	4.75
108	MP5A	Mx	.005	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	0	1
2	MP2A	Z	-8.932	1
3	MP2A	Mx	-.004	1
4	MP2A	X	0	6
5	MP2A	Z	-8.932	6
6	MP2A	Mx	-.004	6
7	MP2B	X	0	1
8	MP2B	Z	-6.662	1
9	MP2B	Mx	.005	1
10	MP2B	X	0	6
11	MP2B	Z	-6.662	6
12	MP2B	Mx	.005	6
13	MP2C	X	0	1
14	MP2C	Z	-6.662	1
15	MP2C	Mx	-.001	1
16	MP2C	X	0	6
17	MP2C	Z	-6.662	6
18	MP2C	Mx	-.001	6
19	MP2A	X	0	1
20	MP2A	Z	-8.932	1
21	MP2A	Mx	.004	1
22	MP2A	X	0	6
23	MP2A	Z	-8.932	6
24	MP2A	Mx	.004	6
25	MP2B	X	0	1
26	MP2B	Z	-6.662	1
27	MP2B	Mx	.001	1
28	MP2B	X	0	6
29	MP2B	Z	-6.662	6
30	MP2B	Mx	.001	6
31	MP2C	X	0	1
32	MP2C	Z	-6.662	1
33	MP2C	Mx	-.005	1
34	MP2C	X	0	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
35	MP2C	Z	-6.662	6
36	MP2C	Mx	-.005	6
37	MP3A	X	0	2
38	MP3A	Z	-5.196	2
39	MP3A	Mx	0	2
40	MP3A	X	0	4
41	MP3A	Z	-5.196	4
42	MP3A	Mx	0	4
43	MP3B	X	0	2
44	MP3B	Z	-2.825	2
45	MP3B	Mx	.001	2
46	MP3B	X	0	4
47	MP3B	Z	-2.825	4
48	MP3B	Mx	.001	4
49	MP3C	X	0	2
50	MP3C	Z	-2.825	2
51	MP3C	Mx	-.001	2
52	MP3C	X	0	4
53	MP3C	Z	-2.825	4
54	MP3C	Mx	-.001	4
55	MP1A	X	0	2
56	MP1A	Z	-4.135	2
57	MP1A	Mx	0	2
58	MP1B	X	0	2
59	MP1B	Z	-3.106	2
60	MP1B	Mx	-.001	2
61	MP1C	X	0	2
62	MP1C	Z	-3.106	2
63	MP1C	Mx	.001	2
64	MP2A	X	0	2
65	MP2A	Z	-3.228	2
66	MP2A	Mx	0	2
67	MP2B	X	0	2
68	MP2B	Z	-2.652	2
69	MP2B	Mx	-.001	2
70	MP2C	X	0	2
71	MP2C	Z	-2.652	2
72	MP2C	Mx	.001	2
73	MP1B	X	0	.25
74	MP1B	Z	-9.831	.25
75	MP1B	Mx	.004	.25
76	MP1B	X	0	4.75
77	MP1B	Z	-9.831	4.75
78	MP1B	Mx	.004	4.75
79	MP1C	X	0	.25
80	MP1C	Z	-9.831	.25
81	MP1C	Mx	-.004	.25
82	MP1C	X	0	4.75
83	MP1C	Z	-9.831	4.75
84	MP1C	Mx	-.004	4.75
85	MP5B	X	0	.25
86	MP5B	Z	-9.831	.25
87	MP5B	Mx	.004	.25
88	MP5B	X	0	4.75
89	MP5B	Z	-9.831	4.75
90	MP5B	Mx	.004	4.75
91	MP5C	X	0	.25



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
92	MP5C	Z	-9.831	.25
93	MP5C	Mx	-.004	.25
94	MP5C	X	0	4.75
95	MP5C	Z	-9.831	4.75
96	MP5C	Mx	-.004	4.75
97	MP1A	X	0	.25
98	MP1A	Z	-4.787	.25
99	MP1A	Mx	0	.25
100	MP1A	X	0	4.75
101	MP1A	Z	-4.787	4.75
102	MP1A	Mx	0	4.75
103	MP5A	X	0	.25
104	MP5A	Z	-4.787	.25
105	MP5A	Mx	0	.25
106	MP5A	X	0	4.75
107	MP5A	Z	-4.787	4.75
108	MP5A	Mx	0	4.75

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP2A	X	4.088	1
2	MP2A	Z	-7.08	1
3	MP2A	Mx	-.006	1
4	MP2A	X	4.088	6
5	MP2A	Z	-7.08	6
6	MP2A	Mx	-.006	6
7	MP2B	X	2.953	1
8	MP2B	Z	-5.114	1
9	MP2B	Mx	.003	1
10	MP2B	X	2.953	6
11	MP2B	Z	-5.114	6
12	MP2B	Mx	.003	6
13	MP2C	X	4.088	1
14	MP2C	Z	-7.08	1
15	MP2C	Mx	.001	1
16	MP2C	X	4.088	6
17	MP2C	Z	-7.08	6
18	MP2C	Mx	.001	6
19	MP2A	X	4.088	1
20	MP2A	Z	-7.08	1
21	MP2A	Mx	.001	1
22	MP2A	X	4.088	6
23	MP2A	Z	-7.08	6
24	MP2A	Mx	.001	6
25	MP2B	X	2.953	1
26	MP2B	Z	-5.114	1
27	MP2B	Mx	.003	1
28	MP2B	X	2.953	6
29	MP2B	Z	-5.114	6
30	MP2B	Mx	.003	6
31	MP2C	X	4.088	1
32	MP2C	Z	-7.08	1
33	MP2C	Mx	-.006	1
34	MP2C	X	4.088	6
35	MP2C	Z	-7.08	6
36	MP2C	Mx	-.006	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
37	MP3A	X	2.203	2
38	MP3A	Z	-3.815	2
39	MP3A	Mx	-.001	2
40	MP3A	X	2.203	4
41	MP3A	Z	-3.815	4
42	MP3A	Mx	-.001	4
43	MP3B	X	1.017	2
44	MP3B	Z	-1.762	2
45	MP3B	Mx	.001	2
46	MP3B	X	1.017	4
47	MP3B	Z	-1.762	4
48	MP3B	Mx	.001	4
49	MP3C	X	2.203	2
50	MP3C	Z	-3.815	2
51	MP3C	Mx	-.001	2
52	MP3C	X	2.203	4
53	MP3C	Z	-3.815	4
54	MP3C	Mx	-.001	4
55	MP1A	X	1.896	2
56	MP1A	Z	-3.284	2
57	MP1A	Mx	.000948	2
58	MP1B	X	1.382	2
59	MP1B	Z	-2.393	2
60	MP1B	Mx	-.001	2
61	MP1C	X	1.896	2
62	MP1C	Z	-3.284	2
63	MP1C	Mx	.000948	2
64	MP2A	X	1.518	2
65	MP2A	Z	-2.629	2
66	MP2A	Mx	.000759	2
67	MP2B	X	1.23	2
68	MP2B	Z	-2.13	2
69	MP2B	Mx	-.001	2
70	MP2C	X	1.518	2
71	MP2C	Z	-2.629	2
72	MP2C	Mx	.000759	2
73	MP1B	X	4.755	.25
74	MP1B	Z	-8.237	.25
75	MP1B	Mx	.005	.25
76	MP1B	X	4.755	4.75
77	MP1B	Z	-8.237	4.75
78	MP1B	Mx	.005	4.75
79	MP1C	X	5.235	.25
80	MP1C	Z	-9.067	.25
81	MP1C	Mx	-.003	.25
82	MP1C	X	5.235	4.75
83	MP1C	Z	-9.067	4.75
84	MP1C	Mx	-.003	4.75
85	MP5B	X	4.755	.25
86	MP5B	Z	-8.237	.25
87	MP5B	Mx	.005	.25
88	MP5B	X	4.755	4.75
89	MP5B	Z	-8.237	4.75
90	MP5B	Mx	.005	4.75
91	MP5C	X	5.235	.25
92	MP5C	Z	-9.067	.25
93	MP5C	Mx	-.003	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
94	MP5C	X	5.235	4.75
95	MP5C	Z	-9.067	4.75
96	MP5C	Mx	-.003	4.75
97	MP1A	X	2.987	.25
98	MP1A	Z	-5.174	.25
99	MP1A	Mx	-.001	.25
100	MP1A	X	2.987	4.75
101	MP1A	Z	-5.174	4.75
102	MP1A	Mx	-.001	4.75
103	MP5A	X	2.987	.25
104	MP5A	Z	-5.174	.25
105	MP5A	Mx	-.001	.25
106	MP5A	X	2.987	4.75
107	MP5A	Z	-5.174	4.75
108	MP5A	Mx	-.001	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	5.769	1
2	MP2A	Z	-3.331	1
3	MP2A	Mx	-.005	1
4	MP2A	X	5.769	6
5	MP2A	Z	-3.331	6
6	MP2A	Mx	-.005	6
7	MP2B	X	5.769	1
8	MP2B	Z	-3.331	1
9	MP2B	Mx	.001	1
10	MP2B	X	5.769	6
11	MP2B	Z	-3.331	6
12	MP2B	Mx	.001	6
13	MP2C	X	7.736	1
14	MP2C	Z	-4.466	1
15	MP2C	Mx	.004	1
16	MP2C	X	7.736	6
17	MP2C	Z	-4.466	6
18	MP2C	Mx	.004	6
19	MP2A	X	5.769	1
20	MP2A	Z	-3.331	1
21	MP2A	Mx	-.001	1
22	MP2A	X	5.769	6
23	MP2A	Z	-3.331	6
24	MP2A	Mx	-.001	6
25	MP2B	X	5.769	1
26	MP2B	Z	-3.331	1
27	MP2B	Mx	.005	1
28	MP2B	X	5.769	6
29	MP2B	Z	-3.331	6
30	MP2B	Mx	.005	6
31	MP2C	X	7.736	1
32	MP2C	Z	-4.466	1
33	MP2C	Mx	-.004	1
34	MP2C	X	7.736	6
35	MP2C	Z	-4.466	6
36	MP2C	Mx	-.004	6
37	MP3A	X	2.446	2
38	MP3A	Z	-1.412	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
39	MP3A	Mx	-.001	2
40	MP3A	X	2.446	4
41	MP3A	Z	-1.412	4
42	MP3A	Mx	-.001	4
43	MP3B	X	2.446	2
44	MP3B	Z	-1.412	2
45	MP3B	Mx	.001	2
46	MP3B	X	2.446	4
47	MP3B	Z	-1.412	4
48	MP3B	Mx	.001	4
49	MP3C	X	4.5	2
50	MP3C	Z	-2.598	2
51	MP3C	Mx	0	2
52	MP3C	X	4.5	4
53	MP3C	Z	-2.598	4
54	MP3C	Mx	0	4
55	MP1A	X	2.69	2
56	MP1A	Z	-1.553	2
57	MP1A	Mx	.001	2
58	MP1B	X	2.69	2
59	MP1B	Z	-1.553	2
60	MP1B	Mx	-.001	2
61	MP1C	X	3.581	2
62	MP1C	Z	-2.067	2
63	MP1C	Mx	0	2
64	MP2A	X	2.297	2
65	MP2A	Z	-1.326	2
66	MP2A	Mx	.001	2
67	MP2B	X	2.297	2
68	MP2B	Z	-1.326	2
69	MP2B	Mx	-.001	2
70	MP2C	X	2.796	2
71	MP2C	Z	-1.614	2
72	MP2C	Mx	0	2
73	MP1B	X	8.514	.25
74	MP1B	Z	-4.915	.25
75	MP1B	Mx	.004	.25
76	MP1B	X	8.514	4.75
77	MP1B	Z	-4.915	4.75
78	MP1B	Mx	.004	4.75
79	MP1C	X	9.344	.25
80	MP1C	Z	-5.395	.25
81	MP1C	Mx	0	.25
82	MP1C	X	9.344	4.75
83	MP1C	Z	-5.395	4.75
84	MP1C	Mx	0	4.75
85	MP5B	X	8.514	.25
86	MP5B	Z	-4.915	.25
87	MP5B	Mx	.004	.25
88	MP5B	X	8.514	4.75
89	MP5B	Z	-4.915	4.75
90	MP5B	Mx	.004	4.75
91	MP5C	X	9.344	.25
92	MP5C	Z	-5.395	.25
93	MP5C	Mx	0	.25
94	MP5C	X	9.344	4.75
95	MP5C	Z	-5.395	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
96	MP5C	Mx	0	4.75
97	MP1A	X	7.232	.25
98	MP1A	Z	-4.175	.25
99	MP1A	Mx	-.004	.25
100	MP1A	X	7.232	4.75
101	MP1A	Z	-4.175	4.75
102	MP1A	Mx	-.004	4.75
103	MP5A	X	7.232	.25
104	MP5A	Z	-4.175	.25
105	MP5A	Mx	-.004	.25
106	MP5A	X	7.232	4.75
107	MP5A	Z	-4.175	4.75
108	MP5A	Mx	-.004	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	5.905	1
2	MP2A	Z	0	1
3	MP2A	Mx	-.003	1
4	MP2A	X	5.905	6
5	MP2A	Z	0	6
6	MP2A	Mx	-.003	6
7	MP2B	X	8.176	1
8	MP2B	Z	0	1
9	MP2B	Mx	-.001	1
10	MP2B	X	8.176	6
11	MP2B	Z	0	6
12	MP2B	Mx	-.001	6
13	MP2C	X	8.176	1
14	MP2C	Z	0	1
15	MP2C	Mx	.006	1
16	MP2C	X	8.176	6
17	MP2C	Z	0	6
18	MP2C	Mx	.006	6
19	MP2A	X	5.905	1
20	MP2A	Z	0	1
21	MP2A	Mx	-.003	1
22	MP2A	X	5.905	6
23	MP2A	Z	0	6
24	MP2A	Mx	-.003	6
25	MP2B	X	8.176	1
26	MP2B	Z	0	1
27	MP2B	Mx	.006	1
28	MP2B	X	8.176	6
29	MP2B	Z	0	6
30	MP2B	Mx	.006	6
31	MP2C	X	8.176	1
32	MP2C	Z	0	1
33	MP2C	Mx	-.001	1
34	MP2C	X	8.176	6
35	MP2C	Z	0	6
36	MP2C	Mx	-.001	6
37	MP3A	X	2.034	2
38	MP3A	Z	0	2
39	MP3A	Mx	-.001	2
40	MP3A	X	2.034	4



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
41	MP3A	Z	0	4
42	MP3A	Mx	-.001	4
43	MP3B	X	4.405	2
44	MP3B	Z	0	2
45	MP3B	Mx	.001	2
46	MP3B	X	4.405	4
47	MP3B	Z	0	4
48	MP3B	Mx	.001	4
49	MP3C	X	4.405	2
50	MP3C	Z	0	2
51	MP3C	Mx	.001	2
52	MP3C	X	4.405	4
53	MP3C	Z	0	4
54	MP3C	Mx	.001	4
55	MP1A	X	2.764	2
56	MP1A	Z	0	2
57	MP1A	Mx	.001	2
58	MP1B	X	3.792	2
59	MP1B	Z	0	2
60	MP1B	Mx	-.000948	2
61	MP1C	X	3.792	2
62	MP1C	Z	0	2
63	MP1C	Mx	-.000948	2
64	MP2A	X	2.46	2
65	MP2A	Z	0	2
66	MP2A	Mx	.001	2
67	MP2B	X	3.036	2
68	MP2B	Z	0	2
69	MP2B	Mx	-.000759	2
70	MP2C	X	3.036	2
71	MP2C	Z	0	2
72	MP2C	Mx	-.000759	2
73	MP1B	X	10.47	.25
74	MP1B	Z	0	.25
75	MP1B	Mx	.003	.25
76	MP1B	X	10.47	4.75
77	MP1B	Z	0	4.75
78	MP1B	Mx	.003	4.75
79	MP1C	X	10.47	.25
80	MP1C	Z	0	.25
81	MP1C	Mx	.003	.25
82	MP1C	X	10.47	4.75
83	MP1C	Z	0	4.75
84	MP1C	Mx	.003	4.75
85	MP5B	X	10.47	.25
86	MP5B	Z	0	.25
87	MP5B	Mx	.003	.25
88	MP5B	X	10.47	4.75
89	MP5B	Z	0	4.75
90	MP5B	Mx	.003	4.75
91	MP5C	X	10.47	.25
92	MP5C	Z	0	.25
93	MP5C	Mx	.003	.25
94	MP5C	X	10.47	4.75
95	MP5C	Z	0	4.75
96	MP5C	Mx	.003	4.75
97	MP1A	X	9.539	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
98	MP1A	Z	0	.25
99	MP1A	Mx	-.005	.25
100	MP1A	X	9.539	4.75
101	MP1A	Z	0	4.75
102	MP1A	Mx	-.005	4.75
103	MP5A	X	9.539	.25
104	MP5A	Z	0	.25
105	MP5A	Mx	-.005	.25
106	MP5A	X	9.539	4.75
107	MP5A	Z	0	4.75
108	MP5A	Mx	-.005	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	5.769	1
2	MP2A	Z	3.331	1
3	MP2A	Mx	-.001	1
4	MP2A	X	5.769	6
5	MP2A	Z	3.331	6
6	MP2A	Mx	-.001	6
7	MP2B	X	7.736	1
8	MP2B	Z	4.466	1
9	MP2B	Mx	-.004	1
10	MP2B	X	7.736	6
11	MP2B	Z	4.466	6
12	MP2B	Mx	-.004	6
13	MP2C	X	5.769	1
14	MP2C	Z	3.331	1
15	MP2C	Mx	.005	1
16	MP2C	X	5.769	6
17	MP2C	Z	3.331	6
18	MP2C	Mx	.005	6
19	MP2A	X	5.769	1
20	MP2A	Z	3.331	1
21	MP2A	Mx	-.005	1
22	MP2A	X	5.769	6
23	MP2A	Z	3.331	6
24	MP2A	Mx	-.005	6
25	MP2B	X	7.736	1
26	MP2B	Z	4.466	1
27	MP2B	Mx	.004	1
28	MP2B	X	7.736	6
29	MP2B	Z	4.466	6
30	MP2B	Mx	.004	6
31	MP2C	X	5.769	1
32	MP2C	Z	3.331	1
33	MP2C	Mx	.001	1
34	MP2C	X	5.769	6
35	MP2C	Z	3.331	6
36	MP2C	Mx	.001	6
37	MP3A	X	2.446	2
38	MP3A	Z	1.412	2
39	MP3A	Mx	-.001	2
40	MP3A	X	2.446	4
41	MP3A	Z	1.412	4
42	MP3A	Mx	-.001	4



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
43	MP3B	X	4.5	2
44	MP3B	Z	2.598	2
45	MP3B	Mx	0	2
46	MP3B	X	4.5	4
47	MP3B	Z	2.598	4
48	MP3B	Mx	0	4
49	MP3C	X	2.446	2
50	MP3C	Z	1.412	2
51	MP3C	Mx	.001	2
52	MP3C	X	2.446	4
53	MP3C	Z	1.412	4
54	MP3C	Mx	.001	4
55	MP1A	X	2.69	2
56	MP1A	Z	1.553	2
57	MP1A	Mx	.001	2
58	MP1B	X	3.581	2
59	MP1B	Z	2.067	2
60	MP1B	Mx	0	2
61	MP1C	X	2.69	2
62	MP1C	Z	1.553	2
63	MP1C	Mx	-.001	2
64	MP2A	X	2.297	2
65	MP2A	Z	1.326	2
66	MP2A	Mx	.001	2
67	MP2B	X	2.796	2
68	MP2B	Z	1.614	2
69	MP2B	Mx	0	2
70	MP2C	X	2.297	2
71	MP2C	Z	1.326	2
72	MP2C	Mx	-.001	2
73	MP1B	X	9.344	.25
74	MP1B	Z	5.395	.25
75	MP1B	Mx	0	.25
76	MP1B	X	9.344	4.75
77	MP1B	Z	5.395	4.75
78	MP1B	Mx	0	4.75
79	MP1C	X	8.514	.25
80	MP1C	Z	4.915	.25
81	MP1C	Mx	.004	.25
82	MP1C	X	8.514	4.75
83	MP1C	Z	4.915	4.75
84	MP1C	Mx	.004	4.75
85	MP5B	X	9.344	.25
86	MP5B	Z	5.395	.25
87	MP5B	Mx	0	.25
88	MP5B	X	9.344	4.75
89	MP5B	Z	5.395	4.75
90	MP5B	Mx	0	4.75
91	MP5C	X	8.514	.25
92	MP5C	Z	4.915	.25
93	MP5C	Mx	.004	.25
94	MP5C	X	8.514	4.75
95	MP5C	Z	4.915	4.75
96	MP5C	Mx	.004	4.75
97	MP1A	X	7.232	.25
98	MP1A	Z	4.175	.25
99	MP1A	Mx	-.004	.25



Company : Maser Consulting
 Designer : MNC
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Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
100	MP1A	X	7.232	4.75
101	MP1A	Z	4.175	4.75
102	MP1A	Mx	-.004	4.75
103	MP5A	X	7.232	.25
104	MP5A	Z	4.175	.25
105	MP5A	Mx	-.004	.25
106	MP5A	X	7.232	4.75
107	MP5A	Z	4.175	4.75
108	MP5A	Mx	-.004	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	4.088	1
2	MP2A	Z	7.08	1
3	MP2A	Mx	.001	1
4	MP2A	X	4.088	6
5	MP2A	Z	7.08	6
6	MP2A	Mx	.001	6
7	MP2B	X	4.088	1
8	MP2B	Z	7.08	1
9	MP2B	Mx	-.006	1
10	MP2B	X	4.088	6
11	MP2B	Z	7.08	6
12	MP2B	Mx	-.006	6
13	MP2C	X	2.953	1
14	MP2C	Z	5.114	1
15	MP2C	Mx	.003	1
16	MP2C	X	2.953	6
17	MP2C	Z	5.114	6
18	MP2C	Mx	.003	6
19	MP2A	X	4.088	1
20	MP2A	Z	7.08	1
21	MP2A	Mx	-.006	1
22	MP2A	X	4.088	6
23	MP2A	Z	7.08	6
24	MP2A	Mx	-.006	6
25	MP2B	X	4.088	1
26	MP2B	Z	7.08	1
27	MP2B	Mx	.001	1
28	MP2B	X	4.088	6
29	MP2B	Z	7.08	6
30	MP2B	Mx	.001	6
31	MP2C	X	2.953	1
32	MP2C	Z	5.114	1
33	MP2C	Mx	.003	1
34	MP2C	X	2.953	6
35	MP2C	Z	5.114	6
36	MP2C	Mx	.003	6
37	MP3A	X	2.203	2
38	MP3A	Z	3.815	2
39	MP3A	Mx	-.001	2
40	MP3A	X	2.203	4
41	MP3A	Z	3.815	4
42	MP3A	Mx	-.001	4
43	MP3B	X	2.203	2
44	MP3B	Z	3.815	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
45	MP3B	Mx	-.001	2
46	MP3B	X	2.203	4
47	MP3B	Z	3.815	4
48	MP3B	Mx	-.001	4
49	MP3C	X	1.017	2
50	MP3C	Z	1.762	2
51	MP3C	Mx	.001	2
52	MP3C	X	1.017	4
53	MP3C	Z	1.762	4
54	MP3C	Mx	.001	4
55	MP1A	X	1.896	2
56	MP1A	Z	3.284	2
57	MP1A	Mx	.000948	2
58	MP1B	X	1.896	2
59	MP1B	Z	3.284	2
60	MP1B	Mx	.000948	2
61	MP1C	X	1.382	2
62	MP1C	Z	2.393	2
63	MP1C	Mx	-.001	2
64	MP2A	X	1.518	2
65	MP2A	Z	2.629	2
66	MP2A	Mx	.000759	2
67	MP2B	X	1.518	2
68	MP2B	Z	2.629	2
69	MP2B	Mx	.000759	2
70	MP2C	X	1.23	2
71	MP2C	Z	2.13	2
72	MP2C	Mx	-.001	2
73	MP1B	X	5.235	.25
74	MP1B	Z	9.067	.25
75	MP1B	Mx	-.003	.25
76	MP1B	X	5.235	4.75
77	MP1B	Z	9.067	4.75
78	MP1B	Mx	-.003	4.75
79	MP1C	X	4.755	.25
80	MP1C	Z	8.237	.25
81	MP1C	Mx	.005	.25
82	MP1C	X	4.755	4.75
83	MP1C	Z	8.237	4.75
84	MP1C	Mx	.005	4.75
85	MP5B	X	5.235	.25
86	MP5B	Z	9.067	.25
87	MP5B	Mx	-.003	.25
88	MP5B	X	5.235	4.75
89	MP5B	Z	9.067	4.75
90	MP5B	Mx	-.003	4.75
91	MP5C	X	4.755	.25
92	MP5C	Z	8.237	.25
93	MP5C	Mx	.005	.25
94	MP5C	X	4.755	4.75
95	MP5C	Z	8.237	4.75
96	MP5C	Mx	.005	4.75
97	MP1A	X	2.987	.25
98	MP1A	Z	5.174	.25
99	MP1A	Mx	-.001	.25
100	MP1A	X	2.987	4.75
101	MP1A	Z	5.174	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
102	MP1A	Mx	-.001	4.75
103	MP5A	X	2.987	.25
104	MP5A	Z	5.174	.25
105	MP5A	Mx	-.001	.25
106	MP5A	X	2.987	4.75
107	MP5A	Z	5.174	4.75
108	MP5A	Mx	-.001	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	0	1
2	MP2A	Z	8.932	1
3	MP2A	Mx	.004	1
4	MP2A	X	0	6
5	MP2A	Z	8.932	6
6	MP2A	Mx	.004	6
7	MP2B	X	0	1
8	MP2B	Z	6.662	1
9	MP2B	Mx	-.005	1
10	MP2B	X	0	6
11	MP2B	Z	6.662	6
12	MP2B	Mx	-.005	6
13	MP2C	X	0	1
14	MP2C	Z	6.662	1
15	MP2C	Mx	.001	1
16	MP2C	X	0	6
17	MP2C	Z	6.662	6
18	MP2C	Mx	.001	6
19	MP2A	X	0	1
20	MP2A	Z	8.932	1
21	MP2A	Mx	-.004	1
22	MP2A	X	0	6
23	MP2A	Z	8.932	6
24	MP2A	Mx	-.004	6
25	MP2B	X	0	1
26	MP2B	Z	6.662	1
27	MP2B	Mx	-.001	1
28	MP2B	X	0	6
29	MP2B	Z	6.662	6
30	MP2B	Mx	-.001	6
31	MP2C	X	0	1
32	MP2C	Z	6.662	1
33	MP2C	Mx	.005	1
34	MP2C	X	0	6
35	MP2C	Z	6.662	6
36	MP2C	Mx	.005	6
37	MP3A	X	0	2
38	MP3A	Z	5.196	2
39	MP3A	Mx	0	2
40	MP3A	X	0	4
41	MP3A	Z	5.196	4
42	MP3A	Mx	0	4
43	MP3B	X	0	2
44	MP3B	Z	2.825	2
45	MP3B	Mx	-.001	2
46	MP3B	X	0	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
104	MP5A	Z	4.787	.25
105	MP5A	Mx	0	.25
106	MP5A	X	0	4.75
107	MP5A	Z	4.787	4.75
108	MP5A	Mx	0	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP2A	X	-4.088	1
2	MP2A	Z	7.08	1
3	MP2A	Mx	.006	1
4	MP2A	X	-4.088	6
5	MP2A	Z	7.08	6
6	MP2A	Mx	.006	6
7	MP2B	X	-2.953	1
8	MP2B	Z	5.114	1
9	MP2B	Mx	-.003	1
10	MP2B	X	-2.953	6
11	MP2B	Z	5.114	6
12	MP2B	Mx	-.003	6
13	MP2C	X	-4.088	1
14	MP2C	Z	7.08	1
15	MP2C	Mx	-.001	1
16	MP2C	X	-4.088	6
17	MP2C	Z	7.08	6
18	MP2C	Mx	-.001	6
19	MP2A	X	-4.088	1
20	MP2A	Z	7.08	1
21	MP2A	Mx	-.001	1
22	MP2A	X	-4.088	6
23	MP2A	Z	7.08	6
24	MP2A	Mx	-.001	6
25	MP2B	X	-2.953	1
26	MP2B	Z	5.114	1
27	MP2B	Mx	-.003	1
28	MP2B	X	-2.953	6
29	MP2B	Z	5.114	6
30	MP2B	Mx	-.003	6
31	MP2C	X	-4.088	1
32	MP2C	Z	7.08	1
33	MP2C	Mx	.006	1
34	MP2C	X	-4.088	6
35	MP2C	Z	7.08	6
36	MP2C	Mx	.006	6
37	MP3A	X	-2.203	2
38	MP3A	Z	3.815	2
39	MP3A	Mx	.001	2
40	MP3A	X	-2.203	4
41	MP3A	Z	3.815	4
42	MP3A	Mx	.001	4
43	MP3B	X	-1.017	2
44	MP3B	Z	1.762	2
45	MP3B	Mx	-.001	2
46	MP3B	X	-1.017	4
47	MP3B	Z	1.762	4
48	MP3B	Mx	-.001	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
49	MP3C	X	-2.203	2
50	MP3C	Z	3.815	2
51	MP3C	Mx	.001	2
52	MP3C	X	-2.203	4
53	MP3C	Z	3.815	4
54	MP3C	Mx	.001	4
55	MP1A	X	-1.896	2
56	MP1A	Z	3.284	2
57	MP1A	Mx	-.000948	2
58	MP1B	X	-1.382	2
59	MP1B	Z	2.393	2
60	MP1B	Mx	.001	2
61	MP1C	X	-1.896	2
62	MP1C	Z	3.284	2
63	MP1C	Mx	-.000948	2
64	MP2A	X	-1.518	2
65	MP2A	Z	2.629	2
66	MP2A	Mx	-.000759	2
67	MP2B	X	-1.23	2
68	MP2B	Z	2.13	2
69	MP2B	Mx	.001	2
70	MP2C	X	-1.518	2
71	MP2C	Z	2.629	2
72	MP2C	Mx	-.000759	2
73	MP1B	X	-4.755	.25
74	MP1B	Z	8.237	.25
75	MP1B	Mx	-.005	.25
76	MP1B	X	-4.755	4.75
77	MP1B	Z	8.237	4.75
78	MP1B	Mx	-.005	4.75
79	MP1C	X	-5.235	.25
80	MP1C	Z	9.067	.25
81	MP1C	Mx	.003	.25
82	MP1C	X	-5.235	4.75
83	MP1C	Z	9.067	4.75
84	MP1C	Mx	.003	4.75
85	MP5B	X	-4.755	.25
86	MP5B	Z	8.237	.25
87	MP5B	Mx	-.005	.25
88	MP5B	X	-4.755	4.75
89	MP5B	Z	8.237	4.75
90	MP5B	Mx	-.005	4.75
91	MP5C	X	-5.235	.25
92	MP5C	Z	9.067	.25
93	MP5C	Mx	.003	.25
94	MP5C	X	-5.235	4.75
95	MP5C	Z	9.067	4.75
96	MP5C	Mx	.003	4.75
97	MP1A	X	-2.987	.25
98	MP1A	Z	5.174	.25
99	MP1A	Mx	.001	.25
100	MP1A	X	-2.987	4.75
101	MP1A	Z	5.174	4.75
102	MP1A	Mx	.001	4.75
103	MP5A	X	-2.987	.25
104	MP5A	Z	5.174	.25
105	MP5A	Mx	.001	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
106	MP5A	X	-2.987	4.75
107	MP5A	Z	5.174	4.75
108	MP5A	Mx	.001	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-5.769	1
2	MP2A	Z	3.331	1
3	MP2A	Mx	.005	1
4	MP2A	X	-5.769	6
5	MP2A	Z	3.331	6
6	MP2A	Mx	.005	6
7	MP2B	X	-5.769	1
8	MP2B	Z	3.331	1
9	MP2B	Mx	-.001	1
10	MP2B	X	-5.769	6
11	MP2B	Z	3.331	6
12	MP2B	Mx	-.001	6
13	MP2C	X	-7.736	1
14	MP2C	Z	4.466	1
15	MP2C	Mx	-.004	1
16	MP2C	X	-7.736	6
17	MP2C	Z	4.466	6
18	MP2C	Mx	-.004	6
19	MP2A	X	-5.769	1
20	MP2A	Z	3.331	1
21	MP2A	Mx	.001	1
22	MP2A	X	-5.769	6
23	MP2A	Z	3.331	6
24	MP2A	Mx	.001	6
25	MP2B	X	-5.769	1
26	MP2B	Z	3.331	1
27	MP2B	Mx	-.005	1
28	MP2B	X	-5.769	6
29	MP2B	Z	3.331	6
30	MP2B	Mx	-.005	6
31	MP2C	X	-7.736	1
32	MP2C	Z	4.466	1
33	MP2C	Mx	.004	1
34	MP2C	X	-7.736	6
35	MP2C	Z	4.466	6
36	MP2C	Mx	.004	6
37	MP3A	X	-2.446	2
38	MP3A	Z	1.412	2
39	MP3A	Mx	.001	2
40	MP3A	X	-2.446	4
41	MP3A	Z	1.412	4
42	MP3A	Mx	.001	4
43	MP3B	X	-2.446	2
44	MP3B	Z	1.412	2
45	MP3B	Mx	-.001	2
46	MP3B	X	-2.446	4
47	MP3B	Z	1.412	4
48	MP3B	Mx	-.001	4
49	MP3C	X	-4.5	2
50	MP3C	Z	2.598	2



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
51	MP3C	Mx	0	2
52	MP3C	X	-4.5	4
53	MP3C	Z	2.598	4
54	MP3C	Mx	0	4
55	MP1A	X	-2.69	2
56	MP1A	Z	1.553	2
57	MP1A	Mx	-.001	2
58	MP1B	X	-2.69	2
59	MP1B	Z	1.553	2
60	MP1B	Mx	.001	2
61	MP1C	X	-3.581	2
62	MP1C	Z	2.067	2
63	MP1C	Mx	0	2
64	MP2A	X	-2.297	2
65	MP2A	Z	1.326	2
66	MP2A	Mx	-.001	2
67	MP2B	X	-2.297	2
68	MP2B	Z	1.326	2
69	MP2B	Mx	.001	2
70	MP2C	X	-2.796	2
71	MP2C	Z	1.614	2
72	MP2C	Mx	0	2
73	MP1B	X	-8.514	.25
74	MP1B	Z	4.915	.25
75	MP1B	Mx	-.004	.25
76	MP1B	X	-8.514	4.75
77	MP1B	Z	4.915	4.75
78	MP1B	Mx	-.004	4.75
79	MP1C	X	-9.344	.25
80	MP1C	Z	5.395	.25
81	MP1C	Mx	0	.25
82	MP1C	X	-9.344	4.75
83	MP1C	Z	5.395	4.75
84	MP1C	Mx	0	4.75
85	MP5B	X	-8.514	.25
86	MP5B	Z	4.915	.25
87	MP5B	Mx	-.004	.25
88	MP5B	X	-8.514	4.75
89	MP5B	Z	4.915	4.75
90	MP5B	Mx	-.004	4.75
91	MP5C	X	-9.344	.25
92	MP5C	Z	5.395	.25
93	MP5C	Mx	0	.25
94	MP5C	X	-9.344	4.75
95	MP5C	Z	5.395	4.75
96	MP5C	Mx	0	4.75
97	MP1A	X	-7.232	.25
98	MP1A	Z	4.175	.25
99	MP1A	Mx	.004	.25
100	MP1A	X	-7.232	4.75
101	MP1A	Z	4.175	4.75
102	MP1A	Mx	.004	4.75
103	MP5A	X	-7.232	.25
104	MP5A	Z	4.175	.25
105	MP5A	Mx	.004	.25
106	MP5A	X	-7.232	4.75
107	MP5A	Z	4.175	4.75



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
108	MP5A	Mx	.004	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-5.905	1
2	MP2A	Z	0	1
3	MP2A	Mx	.003	1
4	MP2A	X	-5.905	6
5	MP2A	Z	0	6
6	MP2A	Mx	.003	6
7	MP2B	X	-8.176	1
8	MP2B	Z	0	1
9	MP2B	Mx	.001	1
10	MP2B	X	-8.176	6
11	MP2B	Z	0	6
12	MP2B	Mx	.001	6
13	MP2C	X	-8.176	1
14	MP2C	Z	0	1
15	MP2C	Mx	-.006	1
16	MP2C	X	-8.176	6
17	MP2C	Z	0	6
18	MP2C	Mx	-.006	6
19	MP2A	X	-5.905	1
20	MP2A	Z	0	1
21	MP2A	Mx	.003	1
22	MP2A	X	-5.905	6
23	MP2A	Z	0	6
24	MP2A	Mx	.003	6
25	MP2B	X	-8.176	1
26	MP2B	Z	0	1
27	MP2B	Mx	-.006	1
28	MP2B	X	-8.176	6
29	MP2B	Z	0	6
30	MP2B	Mx	-.006	6
31	MP2C	X	-8.176	1
32	MP2C	Z	0	1
33	MP2C	Mx	.001	1
34	MP2C	X	-8.176	6
35	MP2C	Z	0	6
36	MP2C	Mx	.001	6
37	MP3A	X	-2.034	2
38	MP3A	Z	0	2
39	MP3A	Mx	.001	2
40	MP3A	X	-2.034	4
41	MP3A	Z	0	4
42	MP3A	Mx	.001	4
43	MP3B	X	-4.405	2
44	MP3B	Z	0	2
45	MP3B	Mx	-.001	2
46	MP3B	X	-4.405	4
47	MP3B	Z	0	4
48	MP3B	Mx	-.001	4
49	MP3C	X	-4.405	2
50	MP3C	Z	0	2
51	MP3C	Mx	-.001	2
52	MP3C	X	-4.405	4



Company : Maser Consulting
 Designer : MNC
 Job Number : Project No. 10094995
 Model Name : 468903-VZW_MT_LO_H

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP2A	X	-5.769	1
2	MP2A	Z	-3.331	1
3	MP2A	Mx	.001	1
4	MP2A	X	-5.769	6
5	MP2A	Z	-3.331	6
6	MP2A	Mx	.001	6
7	MP2B	X	-7.736	1
8	MP2B	Z	-4.466	1
9	MP2B	Mx	.004	1
10	MP2B	X	-7.736	6
11	MP2B	Z	-4.466	6
12	MP2B	Mx	.004	6
13	MP2C	X	-5.769	1
14	MP2C	Z	-3.331	1
15	MP2C	Mx	-.005	1
16	MP2C	X	-5.769	6
17	MP2C	Z	-3.331	6
18	MP2C	Mx	-.005	6
19	MP2A	X	-5.769	1
20	MP2A	Z	-3.331	1
21	MP2A	Mx	.005	1
22	MP2A	X	-5.769	6
23	MP2A	Z	-3.331	6
24	MP2A	Mx	.005	6
25	MP2B	X	-7.736	1
26	MP2B	Z	-4.466	1
27	MP2B	Mx	-.004	1
28	MP2B	X	-7.736	6
29	MP2B	Z	-4.466	6
30	MP2B	Mx	-.004	6
31	MP2C	X	-5.769	1
32	MP2C	Z	-3.331	1
33	MP2C	Mx	-.001	1
34	MP2C	X	-5.769	6
35	MP2C	Z	-3.331	6
36	MP2C	Mx	-.001	6
37	MP3A	X	-2.446	2
38	MP3A	Z	-1.412	2
39	MP3A	Mx	.001	2
40	MP3A	X	-2.446	4
41	MP3A	Z	-1.412	4
42	MP3A	Mx	.001	4
43	MP3B	X	-4.5	2
44	MP3B	Z	-2.598	2
45	MP3B	Mx	0	2
46	MP3B	X	-4.5	4
47	MP3B	Z	-2.598	4
48	MP3B	Mx	0	4
49	MP3C	X	-2.446	2
50	MP3C	Z	-1.412	2
51	MP3C	Mx	-.001	2
52	MP3C	X	-2.446	4
53	MP3C	Z	-1.412	4
54	MP3C	Mx	-.001	4
55	MP1A	X	-2.69	2
56	MP1A	Z	-1.553	2
57	MP1A	Mx	-.001	2



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
58	MP1B	X	-3.581	2
59	MP1B	Z	-2.067	2
60	MP1B	Mx	0	2
61	MP1C	X	-2.69	2
62	MP1C	Z	-1.553	2
63	MP1C	Mx	.001	2
64	MP2A	X	-2.297	2
65	MP2A	Z	-1.326	2
66	MP2A	Mx	-.001	2
67	MP2B	X	-2.796	2
68	MP2B	Z	-1.614	2
69	MP2B	Mx	0	2
70	MP2C	X	-2.297	2
71	MP2C	Z	-1.326	2
72	MP2C	Mx	.001	2
73	MP1B	X	-9.344	.25
74	MP1B	Z	-5.395	.25
75	MP1B	Mx	0	.25
76	MP1B	X	-9.344	4.75
77	MP1B	Z	-5.395	4.75
78	MP1B	Mx	0	4.75
79	MP1C	X	-8.514	.25
80	MP1C	Z	-4.915	.25
81	MP1C	Mx	-.004	.25
82	MP1C	X	-8.514	4.75
83	MP1C	Z	-4.915	4.75
84	MP1C	Mx	-.004	4.75
85	MP5B	X	-9.344	.25
86	MP5B	Z	-5.395	.25
87	MP5B	Mx	0	.25
88	MP5B	X	-9.344	4.75
89	MP5B	Z	-5.395	4.75
90	MP5B	Mx	0	4.75
91	MP5C	X	-8.514	.25
92	MP5C	Z	-4.915	.25
93	MP5C	Mx	-.004	.25
94	MP5C	X	-8.514	4.75
95	MP5C	Z	-4.915	4.75
96	MP5C	Mx	-.004	4.75
97	MP1A	X	-7.232	.25
98	MP1A	Z	-4.175	.25
99	MP1A	Mx	.004	.25
100	MP1A	X	-7.232	4.75
101	MP1A	Z	-4.175	4.75
102	MP1A	Mx	.004	4.75
103	MP5A	X	-7.232	.25
104	MP5A	Z	-4.175	.25
105	MP5A	Mx	.004	.25
106	MP5A	X	-7.232	4.75
107	MP5A	Z	-4.175	4.75
108	MP5A	Mx	.004	4.75

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.-%]
1	MP2A	X	-4.088	1
2	MP2A	Z	-7.08	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
3	MP2A	Mx	-.001	1
4	MP2A	X	-4.088	6
5	MP2A	Z	-7.08	6
6	MP2A	Mx	-.001	6
7	MP2B	X	-4.088	1
8	MP2B	Z	-7.08	1
9	MP2B	Mx	.006	1
10	MP2B	X	-4.088	6
11	MP2B	Z	-7.08	6
12	MP2B	Mx	.006	6
13	MP2C	X	-2.953	1
14	MP2C	Z	-5.114	1
15	MP2C	Mx	-.003	1
16	MP2C	X	-2.953	6
17	MP2C	Z	-5.114	6
18	MP2C	Mx	-.003	6
19	MP2A	X	-4.088	1
20	MP2A	Z	-7.08	1
21	MP2A	Mx	.006	1
22	MP2A	X	-4.088	6
23	MP2A	Z	-7.08	6
24	MP2A	Mx	.006	6
25	MP2B	X	-4.088	1
26	MP2B	Z	-7.08	1
27	MP2B	Mx	-.001	1
28	MP2B	X	-4.088	6
29	MP2B	Z	-7.08	6
30	MP2B	Mx	-.001	6
31	MP2C	X	-2.953	1
32	MP2C	Z	-5.114	1
33	MP2C	Mx	-.003	1
34	MP2C	X	-2.953	6
35	MP2C	Z	-5.114	6
36	MP2C	Mx	-.003	6
37	MP3A	X	-2.203	2
38	MP3A	Z	-3.815	2
39	MP3A	Mx	.001	2
40	MP3A	X	-2.203	4
41	MP3A	Z	-3.815	4
42	MP3A	Mx	.001	4
43	MP3B	X	-2.203	2
44	MP3B	Z	-3.815	2
45	MP3B	Mx	.001	2
46	MP3B	X	-2.203	4
47	MP3B	Z	-3.815	4
48	MP3B	Mx	.001	4
49	MP3C	X	-1.017	2
50	MP3C	Z	-1.762	2
51	MP3C	Mx	-.001	2
52	MP3C	X	-1.017	4
53	MP3C	Z	-1.762	4
54	MP3C	Mx	-.001	4
55	MP1A	X	-1.896	2
56	MP1A	Z	-3.284	2
57	MP1A	Mx	-.000948	2
58	MP1B	X	-1.896	2
59	MP1B	Z	-3.284	2



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
60	MP1B	Mx	-.000948	2
61	MP1C	X	-1.382	2
62	MP1C	Z	-2.393	2
63	MP1C	Mx	.001	2
64	MP2A	X	-1.518	2
65	MP2A	Z	-2.629	2
66	MP2A	Mx	-.000759	2
67	MP2B	X	-1.518	2
68	MP2B	Z	-2.629	2
69	MP2B	Mx	-.000759	2
70	MP2C	X	-1.23	2
71	MP2C	Z	-2.13	2
72	MP2C	Mx	.001	2
73	MP1B	X	-5.235	.25
74	MP1B	Z	-9.067	.25
75	MP1B	Mx	.003	.25
76	MP1B	X	-5.235	4.75
77	MP1B	Z	-9.067	4.75
78	MP1B	Mx	.003	4.75
79	MP1C	X	-4.755	.25
80	MP1C	Z	-8.237	.25
81	MP1C	Mx	-.005	.25
82	MP1C	X	-4.755	4.75
83	MP1C	Z	-8.237	4.75
84	MP1C	Mx	-.005	4.75
85	MP5B	X	-5.235	.25
86	MP5B	Z	-9.067	.25
87	MP5B	Mx	.003	.25
88	MP5B	X	-5.235	4.75
89	MP5B	Z	-9.067	4.75
90	MP5B	Mx	.003	4.75
91	MP5C	X	-4.755	.25
92	MP5C	Z	-8.237	.25
93	MP5C	Mx	-.005	.25
94	MP5C	X	-4.755	4.75
95	MP5C	Z	-8.237	4.75
96	MP5C	Mx	-.005	4.75
97	MP1A	X	-2.987	.25
98	MP1A	Z	-5.174	.25
99	MP1A	Mx	.001	.25
100	MP1A	X	-2.987	4.75
101	MP1A	Z	-5.174	4.75
102	MP1A	Mx	.001	4.75
103	MP5A	X	-2.987	.25
104	MP5A	Z	-5.174	.25
105	MP5A	Mx	.001	.25
106	MP5A	X	-2.987	4.75
107	MP5A	Z	-5.174	4.75
108	MP5A	Mx	.001	4.75

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	M7A	Y	-500	%77

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
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Member Point Loads (BLC 78 : Lm2) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M7A	Y	-500	%49

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M7A	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M7A	Y	-250	%50

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	Y	-9.811	-9.811	0	%100
2	M2	Y	-10.826	-10.826	0	%100
3	M5	Y	-13.872	-13.872	0	%100
4	M6	Y	-13.872	-13.872	0	%100
5	M7	Y	-13.872	-13.872	0	%100
6	M6A	Y	-9.811	-9.811	0	%100
7	M7A	Y	-9.811	-9.811	0	%100
8	M23A	Y	-9.811	-9.811	0	%100
9	M24	Y	-9.811	-9.811	0	%100
10	M38	Y	-9.811	-9.811	0	%100
11	M39A	Y	-9.811	-9.811	0	%100
12	M40	Y	-9.811	-9.811	0	%100
13	M54	Y	-9.811	-9.811	0	%100
14	M55	Y	-10.826	-10.826	0	%100
15	M56	Y	-10.826	-10.826	0	%100
16	MP5A	Y	-5.098	-5.098	0	%100
17	MP1A	Y	-5.098	-5.098	0	%100
18	MP4A	Y	-5.098	-5.098	0	%100
19	MP3A	Y	-5.098	-5.098	0	%100
20	MP2A	Y	-5.816	-5.816	0	%100
21	MP5C	Y	-5.098	-5.098	0	%100
22	MP1C	Y	-5.098	-5.098	0	%100
23	MP4C	Y	-5.098	-5.098	0	%100
24	MP3C	Y	-5.098	-5.098	0	%100
25	MP2C	Y	-5.816	-5.816	0	%100
26	MP5B	Y	-5.098	-5.098	0	%100
27	MP1B	Y	-5.098	-5.098	0	%100
28	MP4B	Y	-5.098	-5.098	0	%100
29	MP3B	Y	-5.098	-5.098	0	%100
30	MP2B	Y	-5.816	-5.816	0	%100
31	M46	Y	-5.816	-5.816	0	%100
32	M47	Y	-5.816	-5.816	0	%100
33	M48	Y	-5.816	-5.816	0	%100
34	M70	Y	-7.78	-7.78	0	%100
35	M71	Y	-7.78	-7.78	0	%100
36	M72	Y	-7.78	-7.78	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	-10.86	-10.86	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	-2.715	-2.715	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	-2.715	-2.715	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	-3.242	-3.242	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	-3.245	-3.245	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	-12.974	-12.974	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.349	1.349	0	%100
2	M1	Z	-2.337	-2.337	0	%100
3	M2	X	1.561	1.561	0	%100
4	M2	Z	-2.703	-2.703	0	%100
5	M5	X	3.384	3.384	0	%100
6	M5	Z	-5.861	-5.861	0	%100
7	M6	X	3.384	3.384	0	%100
8	M6	Z	-5.861	-5.861	0	%100
9	M7	X	13.536	13.536	0	%100
10	M7	Z	-23.444	-23.444	0	%100
11	M6A	X	9.019	9.019	0	%100
12	M6A	Z	-15.621	-15.621	0	%100
13	M7A	X	9.443	9.443	0	%100
14	M7A	Z	-16.357	-16.357	0	%100
15	M23A	X	9.019	9.019	0	%100
16	M23A	Z	-15.621	-15.621	0	%100
17	M24	X	9.443	9.443	0	%100
18	M24	Z	-16.357	-16.357	0	%100
19	M38	X	1.349	1.349	0	%100
20	M38	Z	-2.337	-2.337	0	%100
21	M39A	X	0	0	0	%100
22	M39A	Z	0	0	0	%100
23	M40	X	0	0	0	%100
24	M40	Z	0	0	0	%100
25	M54	X	5.397	5.397	0	%100
26	M54	Z	-9.348	-9.348	0	%100
27	M55	X	1.561	1.561	0	%100
28	M55	Z	-2.703	-2.703	0	%100
29	M56	X	6.243	6.243	0	%100
30	M56	Z	-10.813	-10.813	0	%100
31	MP5A	X	4.486	4.486	0	%100
32	MP5A	Z	-7.769	-7.769	0	%100
33	MP1A	X	4.486	4.486	0	%100
34	MP1A	Z	-7.769	-7.769	0	%100
35	MP4A	X	4.486	4.486	0	%100
36	MP4A	Z	-7.769	-7.769	0	%100
37	MP3A	X	4.486	4.486	0	%100
38	MP3A	Z	-7.769	-7.769	0	%100
39	MP2A	X	5.43	5.43	0	%100
40	MP2A	Z	-9.405	-9.405	0	%100
41	MP5C	X	4.486	4.486	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	-7.769	-7.769	0	%100
43	MP1C	X	4.486	4.486	0	%100
44	MP1C	Z	-7.769	-7.769	0	%100
45	MP4C	X	4.486	4.486	0	%100
46	MP4C	Z	-7.769	-7.769	0	%100
47	MP3C	X	4.486	4.486	0	%100
48	MP3C	Z	-7.769	-7.769	0	%100
49	MP2C	X	5.43	5.43	0	%100
50	MP2C	Z	-9.405	-9.405	0	%100
51	MP5B	X	4.486	4.486	0	%100
52	MP5B	Z	-7.769	-7.769	0	%100
53	MP1B	X	4.486	4.486	0	%100
54	MP1B	Z	-7.769	-7.769	0	%100
55	MP4B	X	4.486	4.486	0	%100
56	MP4B	Z	-7.769	-7.769	0	%100
57	MP3B	X	4.486	4.486	0	%100
58	MP3B	Z	-7.769	-7.769	0	%100
59	MP2B	X	5.43	5.43	0	%100
60	MP2B	Z	-9.405	-9.405	0	%100
61	M46	X	4.072	4.072	0	%100
62	M46	Z	-7.054	-7.054	0	%100
63	M47	X	4.072	4.072	0	%100
64	M47	Z	-7.054	-7.054	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	4.865	4.865	0	%100
68	M70	Z	-8.426	-8.426	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	4.866	4.866	0	%100
72	M72	Z	-8.428	-8.428	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	7.011	7.011	0	%100
2	M1	Z	-4.048	-4.048	0	%100
3	M2	X	8.11	8.11	0	%100
4	M2	Z	-4.682	-4.682	0	%100
5	M5	X	17.583	17.583	0	%100
6	M5	Z	-10.152	-10.152	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	17.583	17.583	0	%100
10	M7	Z	-10.152	-10.152	0	%100
11	M6A	X	5.207	5.207	0	%100
12	M6A	Z	-3.006	-3.006	0	%100
13	M7A	X	5.452	5.452	0	%100
14	M7A	Z	-3.148	-3.148	0	%100
15	M23A	X	20.827	20.827	0	%100
16	M23A	Z	-12.025	-12.025	0	%100
17	M24	X	21.809	21.809	0	%100
18	M24	Z	-12.591	-12.591	0	%100
19	M38	X	0	0	0	%100
20	M38	Z	0	0	0	%100
21	M39A	X	5.207	5.207	0	%100
22	M39A	Z	-3.006	-3.006	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	5.452	5.452	0	%100
24	M40	Z	-3.148	-3.148	0	%100
25	M54	X	7.011	7.011	0	%100
26	M54	Z	-4.048	-4.048	0	%100
27	M55	X	0	0	0	%100
28	M55	Z	0	0	0	%100
29	M56	X	8.11	8.11	0	%100
30	M56	Z	-4.682	-4.682	0	%100
31	MP5A	X	7.769	7.769	0	%100
32	MP5A	Z	-4.486	-4.486	0	%100
33	MP1A	X	7.769	7.769	0	%100
34	MP1A	Z	-4.486	-4.486	0	%100
35	MP4A	X	7.769	7.769	0	%100
36	MP4A	Z	-4.486	-4.486	0	%100
37	MP3A	X	7.769	7.769	0	%100
38	MP3A	Z	-4.486	-4.486	0	%100
39	MP2A	X	9.405	9.405	0	%100
40	MP2A	Z	-5.43	-5.43	0	%100
41	MP5C	X	7.769	7.769	0	%100
42	MP5C	Z	-4.486	-4.486	0	%100
43	MP1C	X	7.769	7.769	0	%100
44	MP1C	Z	-4.486	-4.486	0	%100
45	MP4C	X	7.769	7.769	0	%100
46	MP4C	Z	-4.486	-4.486	0	%100
47	MP3C	X	7.769	7.769	0	%100
48	MP3C	Z	-4.486	-4.486	0	%100
49	MP2C	X	9.405	9.405	0	%100
50	MP2C	Z	-5.43	-5.43	0	%100
51	MP5B	X	7.769	7.769	0	%100
52	MP5B	Z	-4.486	-4.486	0	%100
53	MP1B	X	7.769	7.769	0	%100
54	MP1B	Z	-4.486	-4.486	0	%100
55	MP4B	X	7.769	7.769	0	%100
56	MP4B	Z	-4.486	-4.486	0	%100
57	MP3B	X	7.769	7.769	0	%100
58	MP3B	Z	-4.486	-4.486	0	%100
59	MP2B	X	9.405	9.405	0	%100
60	MP2B	Z	-5.43	-5.43	0	%100
61	M46	X	2.351	2.351	0	%100
62	M46	Z	-1.357	-1.357	0	%100
63	M47	X	9.405	9.405	0	%100
64	M47	Z	-5.43	-5.43	0	%100
65	M48	X	2.351	2.351	0	%100
66	M48	Z	-1.357	-1.357	0	%100
67	M70	X	11.236	11.236	0	%100
68	M70	Z	-6.487	-6.487	0	%100
69	M71	X	2.808	2.808	0	%100
70	M71	Z	-1.621	-1.621	0	%100
71	M72	X	2.81	2.81	0	%100
72	M72	Z	-1.622	-1.622	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	10.794	10.794	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	12.486	12.486	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	0	0	0	%100
63	M47	X	8.145	8.145	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	8.145	8.145	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	9.732	9.732	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	9.729	9.729	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	7.011	7.011	0	%100
2	M1	Z	4.048	4.048	0	%100
3	M2	X	8.11	8.11	0	%100
4	M2	Z	4.682	4.682	0	%100
5	M5	X	17.583	17.583	0	%100
6	M5	Z	10.152	10.152	0	%100
7	M6	X	17.583	17.583	0	%100
8	M6	Z	10.152	10.152	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	5.207	5.207	0	%100
12	M6A	Z	3.006	3.006	0	%100
13	M7A	X	5.452	5.452	0	%100
14	M7A	Z	3.148	3.148	0	%100
15	M23A	X	5.207	5.207	0	%100
16	M23A	Z	3.006	3.006	0	%100
17	M24	X	5.452	5.452	0	%100
18	M24	Z	3.148	3.148	0	%100
19	M38	X	7.011	7.011	0	%100
20	M38	Z	4.048	4.048	0	%100
21	M39A	X	20.827	20.827	0	%100
22	M39A	Z	12.025	12.025	0	%100
23	M40	X	21.809	21.809	0	%100
24	M40	Z	12.591	12.591	0	%100
25	M54	X	0	0	0	%100
26	M54	Z	0	0	0	%100
27	M55	X	8.11	8.11	0	%100
28	M55	Z	4.682	4.682	0	%100
29	M56	X	0	0	0	%100
30	M56	Z	0	0	0	%100
31	MP5A	X	7.769	7.769	0	%100
32	MP5A	Z	4.486	4.486	0	%100
33	MP1A	X	7.769	7.769	0	%100
34	MP1A	Z	4.486	4.486	0	%100
35	MP4A	X	7.769	7.769	0	%100
36	MP4A	Z	4.486	4.486	0	%100
37	MP3A	X	7.769	7.769	0	%100
38	MP3A	Z	4.486	4.486	0	%100
39	MP2A	X	9.405	9.405	0	%100
40	MP2A	Z	5.43	5.43	0	%100
41	MP5C	X	7.769	7.769	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	4.486	4.486	0	%100
43	MP1C	X	7.769	7.769	0	%100
44	MP1C	Z	4.486	4.486	0	%100
45	MP4C	X	7.769	7.769	0	%100
46	MP4C	Z	4.486	4.486	0	%100
47	MP3C	X	7.769	7.769	0	%100
48	MP3C	Z	4.486	4.486	0	%100
49	MP2C	X	9.405	9.405	0	%100
50	MP2C	Z	5.43	5.43	0	%100
51	MP5B	X	7.769	7.769	0	%100
52	MP5B	Z	4.486	4.486	0	%100
53	MP1B	X	7.769	7.769	0	%100
54	MP1B	Z	4.486	4.486	0	%100
55	MP4B	X	7.769	7.769	0	%100
56	MP4B	Z	4.486	4.486	0	%100
57	MP3B	X	7.769	7.769	0	%100
58	MP3B	Z	4.486	4.486	0	%100
59	MP2B	X	9.405	9.405	0	%100
60	MP2B	Z	5.43	5.43	0	%100
61	M46	X	2.351	2.351	0	%100
62	M46	Z	1.357	1.357	0	%100
63	M47	X	2.351	2.351	0	%100
64	M47	Z	1.357	1.357	0	%100
65	M48	X	9.405	9.405	0	%100
66	M48	Z	5.43	5.43	0	%100
67	M70	X	2.81	2.81	0	%100
68	M70	Z	1.622	1.622	0	%100
69	M71	X	11.236	11.236	0	%100
70	M71	Z	6.487	6.487	0	%100
71	M72	X	2.808	2.808	0	%100
72	M72	Z	1.621	1.621	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.349	1.349	0	%100
2	M1	Z	2.337	2.337	0	%100
3	M2	X	1.561	1.561	0	%100
4	M2	Z	2.703	2.703	0	%100
5	M5	X	3.384	3.384	0	%100
6	M5	Z	5.861	5.861	0	%100
7	M6	X	13.536	13.536	0	%100
8	M6	Z	23.444	23.444	0	%100
9	M7	X	3.384	3.384	0	%100
10	M7	Z	5.861	5.861	0	%100
11	M6A	X	9.019	9.019	0	%100
12	M6A	Z	15.621	15.621	0	%100
13	M7A	X	9.443	9.443	0	%100
14	M7A	Z	16.357	16.357	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M38	X	5.397	5.397	0	%100
20	M38	Z	9.348	9.348	0	%100
21	M39A	X	9.019	9.019	0	%100
22	M39A	Z	15.621	15.621	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	9.443	9.443	0	%100
24	M40	Z	16.357	16.357	0	%100
25	M54	X	1.349	1.349	0	%100
26	M54	Z	2.337	2.337	0	%100
27	M55	X	6.243	6.243	0	%100
28	M55	Z	10.813	10.813	0	%100
29	M56	X	1.561	1.561	0	%100
30	M56	Z	2.703	2.703	0	%100
31	MP5A	X	4.486	4.486	0	%100
32	MP5A	Z	7.769	7.769	0	%100
33	MP1A	X	4.486	4.486	0	%100
34	MP1A	Z	7.769	7.769	0	%100
35	MP4A	X	4.486	4.486	0	%100
36	MP4A	Z	7.769	7.769	0	%100
37	MP3A	X	4.486	4.486	0	%100
38	MP3A	Z	7.769	7.769	0	%100
39	MP2A	X	5.43	5.43	0	%100
40	MP2A	Z	9.405	9.405	0	%100
41	MP5C	X	4.486	4.486	0	%100
42	MP5C	Z	7.769	7.769	0	%100
43	MP1C	X	4.486	4.486	0	%100
44	MP1C	Z	7.769	7.769	0	%100
45	MP4C	X	4.486	4.486	0	%100
46	MP4C	Z	7.769	7.769	0	%100
47	MP3C	X	4.486	4.486	0	%100
48	MP3C	Z	7.769	7.769	0	%100
49	MP2C	X	5.43	5.43	0	%100
50	MP2C	Z	9.405	9.405	0	%100
51	MP5B	X	4.486	4.486	0	%100
52	MP5B	Z	7.769	7.769	0	%100
53	MP1B	X	4.486	4.486	0	%100
54	MP1B	Z	7.769	7.769	0	%100
55	MP4B	X	4.486	4.486	0	%100
56	MP4B	Z	7.769	7.769	0	%100
57	MP3B	X	4.486	4.486	0	%100
58	MP3B	Z	7.769	7.769	0	%100
59	MP2B	X	5.43	5.43	0	%100
60	MP2B	Z	9.405	9.405	0	%100
61	M46	X	4.072	4.072	0	%100
62	M46	Z	7.054	7.054	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	4.072	4.072	0	%100
66	M48	Z	7.054	7.054	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	4.866	4.866	0	%100
70	M71	Z	8.428	8.428	0	%100
71	M72	X	4.865	4.865	0	%100
72	M72	Z	8.426	8.426	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	10.86	10.86	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	2.715	2.715	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	2.715	2.715	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	3.242	3.242	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	3.245	3.245	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	12.974	12.974	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.349	-1.349	0	%100
2	M1	Z	2.337	2.337	0	%100
3	M2	X	-1.561	-1.561	0	%100
4	M2	Z	2.703	2.703	0	%100
5	M5	X	-3.384	-3.384	0	%100
6	M5	Z	5.861	5.861	0	%100
7	M6	X	-3.384	-3.384	0	%100
8	M6	Z	5.861	5.861	0	%100
9	M7	X	-13.536	-13.536	0	%100
10	M7	Z	23.444	23.444	0	%100
11	M6A	X	-9.019	-9.019	0	%100
12	M6A	Z	15.621	15.621	0	%100
13	M7A	X	-9.443	-9.443	0	%100
14	M7A	Z	16.357	16.357	0	%100
15	M23A	X	-9.019	-9.019	0	%100
16	M23A	Z	15.621	15.621	0	%100
17	M24	X	-9.443	-9.443	0	%100
18	M24	Z	16.357	16.357	0	%100
19	M38	X	-1.349	-1.349	0	%100
20	M38	Z	2.337	2.337	0	%100
21	M39A	X	0	0	0	%100
22	M39A	Z	0	0	0	%100
23	M40	X	0	0	0	%100
24	M40	Z	0	0	0	%100
25	M54	X	-5.397	-5.397	0	%100
26	M54	Z	9.348	9.348	0	%100
27	M55	X	-1.561	-1.561	0	%100
28	M55	Z	2.703	2.703	0	%100
29	M56	X	-6.243	-6.243	0	%100
30	M56	Z	10.813	10.813	0	%100
31	MP5A	X	-4.486	-4.486	0	%100
32	MP5A	Z	7.769	7.769	0	%100
33	MP1A	X	-4.486	-4.486	0	%100
34	MP1A	Z	7.769	7.769	0	%100
35	MP4A	X	-4.486	-4.486	0	%100
36	MP4A	Z	7.769	7.769	0	%100
37	MP3A	X	-4.486	-4.486	0	%100
38	MP3A	Z	7.769	7.769	0	%100
39	MP2A	X	-5.43	-5.43	0	%100
40	MP2A	Z	9.405	9.405	0	%100
41	MP5C	X	-4.486	-4.486	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	7.769	7.769	0	%100
43	MP1C	X	-4.486	-4.486	0	%100
44	MP1C	Z	7.769	7.769	0	%100
45	MP4C	X	-4.486	-4.486	0	%100
46	MP4C	Z	7.769	7.769	0	%100
47	MP3C	X	-4.486	-4.486	0	%100
48	MP3C	Z	7.769	7.769	0	%100
49	MP2C	X	-5.43	-5.43	0	%100
50	MP2C	Z	9.405	9.405	0	%100
51	MP5B	X	-4.486	-4.486	0	%100
52	MP5B	Z	7.769	7.769	0	%100
53	MP1B	X	-4.486	-4.486	0	%100
54	MP1B	Z	7.769	7.769	0	%100
55	MP4B	X	-4.486	-4.486	0	%100
56	MP4B	Z	7.769	7.769	0	%100
57	MP3B	X	-4.486	-4.486	0	%100
58	MP3B	Z	7.769	7.769	0	%100
59	MP2B	X	-5.43	-5.43	0	%100
60	MP2B	Z	9.405	9.405	0	%100
61	M46	X	-4.072	-4.072	0	%100
62	M46	Z	7.054	7.054	0	%100
63	M47	X	-4.072	-4.072	0	%100
64	M47	Z	7.054	7.054	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	-4.865	-4.865	0	%100
68	M70	Z	8.426	8.426	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	-4.866	-4.866	0	%100
72	M72	Z	8.428	8.428	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-7.011	-7.011	0	%100
2	M1	Z	4.048	4.048	0	%100
3	M2	X	-8.11	-8.11	0	%100
4	M2	Z	4.682	4.682	0	%100
5	M5	X	-17.583	-17.583	0	%100
6	M5	Z	10.152	10.152	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-17.583	-17.583	0	%100
10	M7	Z	10.152	10.152	0	%100
11	M6A	X	-5.207	-5.207	0	%100
12	M6A	Z	3.006	3.006	0	%100
13	M7A	X	-5.452	-5.452	0	%100
14	M7A	Z	3.148	3.148	0	%100
15	M23A	X	-20.827	-20.827	0	%100
16	M23A	Z	12.025	12.025	0	%100
17	M24	X	-21.809	-21.809	0	%100
18	M24	Z	12.591	12.591	0	%100
19	M38	X	0	0	0	%100
20	M38	Z	0	0	0	%100
21	M39A	X	-5.207	-5.207	0	%100
22	M39A	Z	3.006	3.006	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	-5.452	-5.452	0	%100
24	M40	Z	3.148	3.148	0	%100
25	M54	X	-7.011	-7.011	0	%100
26	M54	Z	4.048	4.048	0	%100
27	M55	X	0	0	0	%100
28	M55	Z	0	0	0	%100
29	M56	X	-8.11	-8.11	0	%100
30	M56	Z	4.682	4.682	0	%100
31	MP5A	X	-7.769	-7.769	0	%100
32	MP5A	Z	4.486	4.486	0	%100
33	MP1A	X	-7.769	-7.769	0	%100
34	MP1A	Z	4.486	4.486	0	%100
35	MP4A	X	-7.769	-7.769	0	%100
36	MP4A	Z	4.486	4.486	0	%100
37	MP3A	X	-7.769	-7.769	0	%100
38	MP3A	Z	4.486	4.486	0	%100
39	MP2A	X	-9.405	-9.405	0	%100
40	MP2A	Z	5.43	5.43	0	%100
41	MP5C	X	-7.769	-7.769	0	%100
42	MP5C	Z	4.486	4.486	0	%100
43	MP1C	X	-7.769	-7.769	0	%100
44	MP1C	Z	4.486	4.486	0	%100
45	MP4C	X	-7.769	-7.769	0	%100
46	MP4C	Z	4.486	4.486	0	%100
47	MP3C	X	-7.769	-7.769	0	%100
48	MP3C	Z	4.486	4.486	0	%100
49	MP2C	X	-9.405	-9.405	0	%100
50	MP2C	Z	5.43	5.43	0	%100
51	MP5B	X	-7.769	-7.769	0	%100
52	MP5B	Z	4.486	4.486	0	%100
53	MP1B	X	-7.769	-7.769	0	%100
54	MP1B	Z	4.486	4.486	0	%100
55	MP4B	X	-7.769	-7.769	0	%100
56	MP4B	Z	4.486	4.486	0	%100
57	MP3B	X	-7.769	-7.769	0	%100
58	MP3B	Z	4.486	4.486	0	%100
59	MP2B	X	-9.405	-9.405	0	%100
60	MP2B	Z	5.43	5.43	0	%100
61	M46	X	-2.351	-2.351	0	%100
62	M46	Z	1.357	1.357	0	%100
63	M47	X	-9.405	-9.405	0	%100
64	M47	Z	5.43	5.43	0	%100
65	M48	X	-2.351	-2.351	0	%100
66	M48	Z	1.357	1.357	0	%100
67	M70	X	-11.236	-11.236	0	%100
68	M70	Z	6.487	6.487	0	%100
69	M71	X	-2.808	-2.808	0	%100
70	M71	Z	1.621	1.621	0	%100
71	M72	X	-2.81	-2.81	0	%100
72	M72	Z	1.622	1.622	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-10.794	-10.794	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-12.486	-12.486	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]	
4	M2	Z	0	0	0	%100
5	M5	X	-27.071	-27.071	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-6.768	-6.768	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-6.768	-6.768	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	-18.037	-18.037	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	-18.887	-18.887	0	%100
18	M24	Z	0	0	0	%100
19	M38	X	-2.698	-2.698	0	%100
20	M38	Z	0	0	0	%100
21	M39A	X	-18.037	-18.037	0	%100
22	M39A	Z	0	0	0	%100
23	M40	X	-18.887	-18.887	0	%100
24	M40	Z	0	0	0	%100
25	M54	X	-2.698	-2.698	0	%100
26	M54	Z	0	0	0	%100
27	M55	X	-3.122	-3.122	0	%100
28	M55	Z	0	0	0	%100
29	M56	X	-3.122	-3.122	0	%100
30	M56	Z	0	0	0	%100
31	MP5A	X	-8.971	-8.971	0	%100
32	MP5A	Z	0	0	0	%100
33	MP1A	X	-8.971	-8.971	0	%100
34	MP1A	Z	0	0	0	%100
35	MP4A	X	-8.971	-8.971	0	%100
36	MP4A	Z	0	0	0	%100
37	MP3A	X	-8.971	-8.971	0	%100
38	MP3A	Z	0	0	0	%100
39	MP2A	X	-10.86	-10.86	0	%100
40	MP2A	Z	0	0	0	%100
41	MP5C	X	-8.971	-8.971	0	%100
42	MP5C	Z	0	0	0	%100
43	MP1C	X	-8.971	-8.971	0	%100
44	MP1C	Z	0	0	0	%100
45	MP4C	X	-8.971	-8.971	0	%100
46	MP4C	Z	0	0	0	%100
47	MP3C	X	-8.971	-8.971	0	%100
48	MP3C	Z	0	0	0	%100
49	MP2C	X	-10.86	-10.86	0	%100
50	MP2C	Z	0	0	0	%100
51	MP5B	X	-8.971	-8.971	0	%100
52	MP5B	Z	0	0	0	%100
53	MP1B	X	-8.971	-8.971	0	%100
54	MP1B	Z	0	0	0	%100
55	MP4B	X	-8.971	-8.971	0	%100
56	MP4B	Z	0	0	0	%100
57	MP3B	X	-8.971	-8.971	0	%100
58	MP3B	Z	0	0	0	%100
59	MP2B	X	-10.86	-10.86	0	%100
60	MP2B	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	0	0	0	%100
63	M47	X	-8.145	-8.145	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	-8.145	-8.145	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	-9.732	-9.732	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	-9.729	-9.729	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-7.011	-7.011	0	%100
2	M1	Z	-4.048	-4.048	0	%100
3	M2	X	-8.11	-8.11	0	%100
4	M2	Z	-4.682	-4.682	0	%100
5	M5	X	-17.583	-17.583	0	%100
6	M5	Z	-10.152	-10.152	0	%100
7	M6	X	-17.583	-17.583	0	%100
8	M6	Z	-10.152	-10.152	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	-5.207	-5.207	0	%100
12	M6A	Z	-3.006	-3.006	0	%100
13	M7A	X	-5.452	-5.452	0	%100
14	M7A	Z	-3.148	-3.148	0	%100
15	M23A	X	-5.207	-5.207	0	%100
16	M23A	Z	-3.006	-3.006	0	%100
17	M24	X	-5.452	-5.452	0	%100
18	M24	Z	-3.148	-3.148	0	%100
19	M38	X	-7.011	-7.011	0	%100
20	M38	Z	-4.048	-4.048	0	%100
21	M39A	X	-20.827	-20.827	0	%100
22	M39A	Z	-12.025	-12.025	0	%100
23	M40	X	-21.809	-21.809	0	%100
24	M40	Z	-12.591	-12.591	0	%100
25	M54	X	0	0	0	%100
26	M54	Z	0	0	0	%100
27	M55	X	-8.11	-8.11	0	%100
28	M55	Z	-4.682	-4.682	0	%100
29	M56	X	0	0	0	%100
30	M56	Z	0	0	0	%100
31	MP5A	X	-7.769	-7.769	0	%100
32	MP5A	Z	-4.486	-4.486	0	%100
33	MP1A	X	-7.769	-7.769	0	%100
34	MP1A	Z	-4.486	-4.486	0	%100
35	MP4A	X	-7.769	-7.769	0	%100
36	MP4A	Z	-4.486	-4.486	0	%100
37	MP3A	X	-7.769	-7.769	0	%100
38	MP3A	Z	-4.486	-4.486	0	%100
39	MP2A	X	-9.405	-9.405	0	%100
40	MP2A	Z	-5.43	-5.43	0	%100
41	MP5C	X	-7.769	-7.769	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	-4.486	-4.486	0	%100
43	MP1C	X	-7.769	-7.769	0	%100
44	MP1C	Z	-4.486	-4.486	0	%100
45	MP4C	X	-7.769	-7.769	0	%100
46	MP4C	Z	-4.486	-4.486	0	%100
47	MP3C	X	-7.769	-7.769	0	%100
48	MP3C	Z	-4.486	-4.486	0	%100
49	MP2C	X	-9.405	-9.405	0	%100
50	MP2C	Z	-5.43	-5.43	0	%100
51	MP5B	X	-7.769	-7.769	0	%100
52	MP5B	Z	-4.486	-4.486	0	%100
53	MP1B	X	-7.769	-7.769	0	%100
54	MP1B	Z	-4.486	-4.486	0	%100
55	MP4B	X	-7.769	-7.769	0	%100
56	MP4B	Z	-4.486	-4.486	0	%100
57	MP3B	X	-7.769	-7.769	0	%100
58	MP3B	Z	-4.486	-4.486	0	%100
59	MP2B	X	-9.405	-9.405	0	%100
60	MP2B	Z	-5.43	-5.43	0	%100
61	M46	X	-2.351	-2.351	0	%100
62	M46	Z	-1.357	-1.357	0	%100
63	M47	X	-2.351	-2.351	0	%100
64	M47	Z	-1.357	-1.357	0	%100
65	M48	X	-9.405	-9.405	0	%100
66	M48	Z	-5.43	-5.43	0	%100
67	M70	X	-2.81	-2.81	0	%100
68	M70	Z	-1.622	-1.622	0	%100
69	M71	X	-11.236	-11.236	0	%100
70	M71	Z	-6.487	-6.487	0	%100
71	M72	X	-2.808	-2.808	0	%100
72	M72	Z	-1.621	-1.621	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.349	-1.349	0	%100
2	M1	Z	-2.337	-2.337	0	%100
3	M2	X	-1.561	-1.561	0	%100
4	M2	Z	-2.703	-2.703	0	%100
5	M5	X	-3.384	-3.384	0	%100
6	M5	Z	-5.861	-5.861	0	%100
7	M6	X	-13.536	-13.536	0	%100
8	M6	Z	-23.444	-23.444	0	%100
9	M7	X	-3.384	-3.384	0	%100
10	M7	Z	-5.861	-5.861	0	%100
11	M6A	X	-9.019	-9.019	0	%100
12	M6A	Z	-15.621	-15.621	0	%100
13	M7A	X	-9.443	-9.443	0	%100
14	M7A	Z	-16.357	-16.357	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M38	X	-5.397	-5.397	0	%100
20	M38	Z	-9.348	-9.348	0	%100
21	M39A	X	-9.019	-9.019	0	%100
22	M39A	Z	-15.621	-15.621	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	-9.443	-9.443	0	%100
24	M40	Z	-16.357	-16.357	0	%100
25	M54	X	-1.349	-1.349	0	%100
26	M54	Z	-2.337	-2.337	0	%100
27	M55	X	-6.243	-6.243	0	%100
28	M55	Z	-10.813	-10.813	0	%100
29	M56	X	-1.561	-1.561	0	%100
30	M56	Z	-2.703	-2.703	0	%100
31	MP5A	X	-4.486	-4.486	0	%100
32	MP5A	Z	-7.769	-7.769	0	%100
33	MP1A	X	-4.486	-4.486	0	%100
34	MP1A	Z	-7.769	-7.769	0	%100
35	MP4A	X	-4.486	-4.486	0	%100
36	MP4A	Z	-7.769	-7.769	0	%100
37	MP3A	X	-4.486	-4.486	0	%100
38	MP3A	Z	-7.769	-7.769	0	%100
39	MP2A	X	-5.43	-5.43	0	%100
40	MP2A	Z	-9.405	-9.405	0	%100
41	MP5C	X	-4.486	-4.486	0	%100
42	MP5C	Z	-7.769	-7.769	0	%100
43	MP1C	X	-4.486	-4.486	0	%100
44	MP1C	Z	-7.769	-7.769	0	%100
45	MP4C	X	-4.486	-4.486	0	%100
46	MP4C	Z	-7.769	-7.769	0	%100
47	MP3C	X	-4.486	-4.486	0	%100
48	MP3C	Z	-7.769	-7.769	0	%100
49	MP2C	X	-5.43	-5.43	0	%100
50	MP2C	Z	-9.405	-9.405	0	%100
51	MP5B	X	-4.486	-4.486	0	%100
52	MP5B	Z	-7.769	-7.769	0	%100
53	MP1B	X	-4.486	-4.486	0	%100
54	MP1B	Z	-7.769	-7.769	0	%100
55	MP4B	X	-4.486	-4.486	0	%100
56	MP4B	Z	-7.769	-7.769	0	%100
57	MP3B	X	-4.486	-4.486	0	%100
58	MP3B	Z	-7.769	-7.769	0	%100
59	MP2B	X	-5.43	-5.43	0	%100
60	MP2B	Z	-9.405	-9.405	0	%100
61	M46	X	-4.072	-4.072	0	%100
62	M46	Z	-7.054	-7.054	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	-4.072	-4.072	0	%100
66	M48	Z	-7.054	-7.054	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	-4.866	-4.866	0	%100
70	M71	Z	-8.428	-8.428	0	%100
71	M72	X	-4.865	-4.865	0	%100
72	M72	Z	-8.426	-8.426	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100



Company : Maser Consulting
 Designer : MNC
 Job Number : Project No. 10094995
 Model Name : 468903-VZW_MT_LO_H

Aug 20, 2021
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 Checked By: _____

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	0	0	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-4.292	-4.292	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-4.292	-4.292	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	-5.354	-5.354	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	-5.538	-5.538	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	-1.338	-1.338	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	-1.385	-1.385	0	%100
19	M38	X	0	0	0	%100
20	M38	Z	-2.005	-2.005	0	%100
21	M39A	X	0	0	0	%100
22	M39A	Z	-1.338	-1.338	0	%100
23	M40	X	0	0	0	%100
24	M40	Z	-1.385	-1.385	0	%100
25	M54	X	0	0	0	%100
26	M54	Z	-2.005	-2.005	0	%100
27	M55	X	0	0	0	%100
28	M55	Z	-2.309	-2.309	0	%100
29	M56	X	0	0	0	%100
30	M56	Z	-2.309	-2.309	0	%100
31	MP5A	X	0	0	0	%100
32	MP5A	Z	-2.902	-2.902	0	%100
33	MP1A	X	0	0	0	%100
34	MP1A	Z	-2.902	-2.902	0	%100
35	MP4A	X	0	0	0	%100
36	MP4A	Z	-2.902	-2.902	0	%100
37	MP3A	X	0	0	0	%100
38	MP3A	Z	-2.902	-2.902	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	-3.209	-3.209	0	%100
41	MP5C	X	0	0	0	%100
42	MP5C	Z	-2.902	-2.902	0	%100
43	MP1C	X	0	0	0	%100
44	MP1C	Z	-2.902	-2.902	0	%100
45	MP4C	X	0	0	0	%100
46	MP4C	Z	-2.902	-2.902	0	%100
47	MP3C	X	0	0	0	%100
48	MP3C	Z	-2.902	-2.902	0	%100
49	MP2C	X	0	0	0	%100
50	MP2C	Z	-3.209	-3.209	0	%100
51	MP5B	X	0	0	0	%100
52	MP5B	Z	-2.902	-2.902	0	%100
53	MP1B	X	0	0	0	%100
54	MP1B	Z	-2.902	-2.902	0	%100
55	MP4B	X	0	0	0	%100
56	MP4B	Z	-2.902	-2.902	0	%100
57	MP3B	X	0	0	0	%100
58	MP3B	Z	-2.902	-2.902	0	%100
59	MP2B	X	0	0	0	%100
60	MP2B	Z	-3.209	-3.209	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	-3.209	-3.209	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	-.802	-.802	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	-.802	-.802	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	-.776	-.776	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	-.776	-.776	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	-3.104	-3.104	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.334	.334	0	%100
2	M1	Z	-.579	-.579	0	%100
3	M2	X	.385	.385	0	%100
4	M2	Z	-.667	-.667	0	%100
5	M5	X	.715	.715	0	%100
6	M5	Z	-1.239	-1.239	0	%100
7	M6	X	.715	.715	0	%100
8	M6	Z	-1.239	-1.239	0	%100
9	M7	X	2.861	2.861	0	%100
10	M7	Z	-4.956	-4.956	0	%100
11	M6A	X	2.008	2.008	0	%100
12	M6A	Z	-3.477	-3.477	0	%100
13	M7A	X	2.077	2.077	0	%100
14	M7A	Z	-3.597	-3.597	0	%100
15	M23A	X	2.008	2.008	0	%100
16	M23A	Z	-3.477	-3.477	0	%100
17	M24	X	2.077	2.077	0	%100
18	M24	Z	-3.597	-3.597	0	%100
19	M38	X	.334	.334	0	%100
20	M38	Z	-.579	-.579	0	%100
21	M39A	X	0	0	0	%100
22	M39A	Z	0	0	0	%100
23	M40	X	0	0	0	%100
24	M40	Z	0	0	0	%100
25	M54	X	1.337	1.337	0	%100
26	M54	Z	-2.315	-2.315	0	%100
27	M55	X	.385	.385	0	%100
28	M55	Z	-.667	-.667	0	%100
29	M56	X	1.539	1.539	0	%100
30	M56	Z	-2.666	-2.666	0	%100
31	MP5A	X	1.451	1.451	0	%100
32	MP5A	Z	-2.514	-2.514	0	%100
33	MP1A	X	1.451	1.451	0	%100
34	MP1A	Z	-2.514	-2.514	0	%100
35	MP4A	X	1.451	1.451	0	%100
36	MP4A	Z	-2.514	-2.514	0	%100
37	MP3A	X	1.451	1.451	0	%100
38	MP3A	Z	-2.514	-2.514	0	%100
39	MP2A	X	1.605	1.605	0	%100
40	MP2A	Z	-2.779	-2.779	0	%100
41	MP5C	X	1.451	1.451	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	-2.514	-2.514	0	%100
43	MP1C	X	1.451	1.451	0	%100
44	MP1C	Z	-2.514	-2.514	0	%100
45	MP4C	X	1.451	1.451	0	%100
46	MP4C	Z	-2.514	-2.514	0	%100
47	MP3C	X	1.451	1.451	0	%100
48	MP3C	Z	-2.514	-2.514	0	%100
49	MP2C	X	1.605	1.605	0	%100
50	MP2C	Z	-2.779	-2.779	0	%100
51	MP5B	X	1.451	1.451	0	%100
52	MP5B	Z	-2.514	-2.514	0	%100
53	MP1B	X	1.451	1.451	0	%100
54	MP1B	Z	-2.514	-2.514	0	%100
55	MP4B	X	1.451	1.451	0	%100
56	MP4B	Z	-2.514	-2.514	0	%100
57	MP3B	X	1.451	1.451	0	%100
58	MP3B	Z	-2.514	-2.514	0	%100
59	MP2B	X	1.605	1.605	0	%100
60	MP2B	Z	-2.779	-2.779	0	%100
61	M46	X	1.204	1.204	0	%100
62	M46	Z	-2.085	-2.085	0	%100
63	M47	X	1.204	1.204	0	%100
64	M47	Z	-2.085	-2.085	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	1.164	1.164	0	%100
68	M70	Z	-2.016	-2.016	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	1.164	1.164	0	%100
72	M72	Z	-2.016	-2.016	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.737	1.737	0	%100
2	M1	Z	-1.003	-1.003	0	%100
3	M2	X	2	2	0	%100
4	M2	Z	-1.154	-1.154	0	%100
5	M5	X	3.717	3.717	0	%100
6	M5	Z	-2.146	-2.146	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	3.717	3.717	0	%100
10	M7	Z	-2.146	-2.146	0	%100
11	M6A	X	1.159	1.159	0	%100
12	M6A	Z	-.669	-.669	0	%100
13	M7A	X	1.199	1.199	0	%100
14	M7A	Z	-.692	-.692	0	%100
15	M23A	X	4.637	4.637	0	%100
16	M23A	Z	-2.677	-2.677	0	%100
17	M24	X	4.796	4.796	0	%100
18	M24	Z	-2.769	-2.769	0	%100
19	M38	X	0	0	0	%100
20	M38	Z	0	0	0	%100
21	M39A	X	1.159	1.159	0	%100
22	M39A	Z	-.669	-.669	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	1.199	1.199	0	%100
24	M40	Z	-.692	-.692	0	%100
25	M54	X	1.737	1.737	0	%100
26	M54	Z	-1.003	-1.003	0	%100
27	M55	X	0	0	0	%100
28	M55	Z	0	0	0	%100
29	M56	X	2	2	0	%100
30	M56	Z	-1.154	-1.154	0	%100
31	MP5A	X	2.514	2.514	0	%100
32	MP5A	Z	-1.451	-1.451	0	%100
33	MP1A	X	2.514	2.514	0	%100
34	MP1A	Z	-1.451	-1.451	0	%100
35	MP4A	X	2.514	2.514	0	%100
36	MP4A	Z	-1.451	-1.451	0	%100
37	MP3A	X	2.514	2.514	0	%100
38	MP3A	Z	-1.451	-1.451	0	%100
39	MP2A	X	2.779	2.779	0	%100
40	MP2A	Z	-1.605	-1.605	0	%100
41	MP5C	X	2.514	2.514	0	%100
42	MP5C	Z	-1.451	-1.451	0	%100
43	MP1C	X	2.514	2.514	0	%100
44	MP1C	Z	-1.451	-1.451	0	%100
45	MP4C	X	2.514	2.514	0	%100
46	MP4C	Z	-1.451	-1.451	0	%100
47	MP3C	X	2.514	2.514	0	%100
48	MP3C	Z	-1.451	-1.451	0	%100
49	MP2C	X	2.779	2.779	0	%100
50	MP2C	Z	-1.605	-1.605	0	%100
51	MP5B	X	2.514	2.514	0	%100
52	MP5B	Z	-1.451	-1.451	0	%100
53	MP1B	X	2.514	2.514	0	%100
54	MP1B	Z	-1.451	-1.451	0	%100
55	MP4B	X	2.514	2.514	0	%100
56	MP4B	Z	-1.451	-1.451	0	%100
57	MP3B	X	2.514	2.514	0	%100
58	MP3B	Z	-1.451	-1.451	0	%100
59	MP2B	X	2.779	2.779	0	%100
60	MP2B	Z	-1.605	-1.605	0	%100
61	M46	X	.695	.695	0	%100
62	M46	Z	-.401	-.401	0	%100
63	M47	X	2.779	2.779	0	%100
64	M47	Z	-1.605	-1.605	0	%100
65	M48	X	.695	.695	0	%100
66	M48	Z	-.401	-.401	0	%100
67	M70	X	2.688	2.688	0	%100
68	M70	Z	-1.552	-1.552	0	%100
69	M71	X	.672	.672	0	%100
70	M71	Z	-.388	-.388	0	%100
71	M72	X	.672	.672	0	%100
72	M72	Z	-.388	-.388	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	2.674	2.674	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	3.078	3.078	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	0	0	0	%100
63	M47	X	2.407	2.407	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	2.407	2.407	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	2.328	2.328	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	2.327	2.327	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	1.737	1.737	0	%100
2	M1	Z	1.003	1.003	0	%100
3	M2	X	2	2	0	%100
4	M2	Z	1.154	1.154	0	%100
5	M5	X	3.717	3.717	0	%100
6	M5	Z	2.146	2.146	0	%100
7	M6	X	3.717	3.717	0	%100
8	M6	Z	2.146	2.146	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	1.159	1.159	0	%100
12	M6A	Z	.669	.669	0	%100
13	M7A	X	1.199	1.199	0	%100
14	M7A	Z	.692	.692	0	%100
15	M23A	X	1.159	1.159	0	%100
16	M23A	Z	.669	.669	0	%100
17	M24	X	1.199	1.199	0	%100
18	M24	Z	.692	.692	0	%100
19	M38	X	1.737	1.737	0	%100
20	M38	Z	1.003	1.003	0	%100
21	M39A	X	4.637	4.637	0	%100
22	M39A	Z	2.677	2.677	0	%100
23	M40	X	4.796	4.796	0	%100
24	M40	Z	2.769	2.769	0	%100
25	M54	X	0	0	0	%100
26	M54	Z	0	0	0	%100
27	M55	X	2	2	0	%100
28	M55	Z	1.154	1.154	0	%100
29	M56	X	0	0	0	%100
30	M56	Z	0	0	0	%100
31	MP5A	X	2.514	2.514	0	%100
32	MP5A	Z	1.451	1.451	0	%100
33	MP1A	X	2.514	2.514	0	%100
34	MP1A	Z	1.451	1.451	0	%100
35	MP4A	X	2.514	2.514	0	%100
36	MP4A	Z	1.451	1.451	0	%100
37	MP3A	X	2.514	2.514	0	%100
38	MP3A	Z	1.451	1.451	0	%100
39	MP2A	X	2.779	2.779	0	%100
40	MP2A	Z	1.605	1.605	0	%100
41	MP5C	X	2.514	2.514	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	1.451	1.451	0	%100
43	MP1C	X	2.514	2.514	0	%100
44	MP1C	Z	1.451	1.451	0	%100
45	MP4C	X	2.514	2.514	0	%100
46	MP4C	Z	1.451	1.451	0	%100
47	MP3C	X	2.514	2.514	0	%100
48	MP3C	Z	1.451	1.451	0	%100
49	MP2C	X	2.779	2.779	0	%100
50	MP2C	Z	1.605	1.605	0	%100
51	MP5B	X	2.514	2.514	0	%100
52	MP5B	Z	1.451	1.451	0	%100
53	MP1B	X	2.514	2.514	0	%100
54	MP1B	Z	1.451	1.451	0	%100
55	MP4B	X	2.514	2.514	0	%100
56	MP4B	Z	1.451	1.451	0	%100
57	MP3B	X	2.514	2.514	0	%100
58	MP3B	Z	1.451	1.451	0	%100
59	MP2B	X	2.779	2.779	0	%100
60	MP2B	Z	1.605	1.605	0	%100
61	M46	X	.695	.695	0	%100
62	M46	Z	.401	.401	0	%100
63	M47	X	.695	.695	0	%100
64	M47	Z	.401	.401	0	%100
65	M48	X	2.779	2.779	0	%100
66	M48	Z	1.605	1.605	0	%100
67	M70	X	.672	.672	0	%100
68	M70	Z	.388	.388	0	%100
69	M71	X	2.688	2.688	0	%100
70	M71	Z	1.552	1.552	0	%100
71	M72	X	.672	.672	0	%100
72	M72	Z	.388	.388	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.334	.334	0	%100
2	M1	Z	.579	.579	0	%100
3	M2	X	.385	.385	0	%100
4	M2	Z	.667	.667	0	%100
5	M5	X	.715	.715	0	%100
6	M5	Z	1.239	1.239	0	%100
7	M6	X	2.861	2.861	0	%100
8	M6	Z	4.956	4.956	0	%100
9	M7	X	.715	.715	0	%100
10	M7	Z	1.239	1.239	0	%100
11	M6A	X	2.008	2.008	0	%100
12	M6A	Z	3.477	3.477	0	%100
13	M7A	X	2.077	2.077	0	%100
14	M7A	Z	3.597	3.597	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M38	X	1.337	1.337	0	%100
20	M38	Z	2.315	2.315	0	%100
21	M39A	X	2.008	2.008	0	%100
22	M39A	Z	3.477	3.477	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	2.077	2.077	0	%100
24	M40	Z	3.597	3.597	0	%100
25	M54	X	.334	.334	0	%100
26	M54	Z	.579	.579	0	%100
27	M55	X	1.539	1.539	0	%100
28	M55	Z	2.666	2.666	0	%100
29	M56	X	.385	.385	0	%100
30	M56	Z	.667	.667	0	%100
31	MP5A	X	1.451	1.451	0	%100
32	MP5A	Z	2.514	2.514	0	%100
33	MP1A	X	1.451	1.451	0	%100
34	MP1A	Z	2.514	2.514	0	%100
35	MP4A	X	1.451	1.451	0	%100
36	MP4A	Z	2.514	2.514	0	%100
37	MP3A	X	1.451	1.451	0	%100
38	MP3A	Z	2.514	2.514	0	%100
39	MP2A	X	1.605	1.605	0	%100
40	MP2A	Z	2.779	2.779	0	%100
41	MP5C	X	1.451	1.451	0	%100
42	MP5C	Z	2.514	2.514	0	%100
43	MP1C	X	1.451	1.451	0	%100
44	MP1C	Z	2.514	2.514	0	%100
45	MP4C	X	1.451	1.451	0	%100
46	MP4C	Z	2.514	2.514	0	%100
47	MP3C	X	1.451	1.451	0	%100
48	MP3C	Z	2.514	2.514	0	%100
49	MP2C	X	1.605	1.605	0	%100
50	MP2C	Z	2.779	2.779	0	%100
51	MP5B	X	1.451	1.451	0	%100
52	MP5B	Z	2.514	2.514	0	%100
53	MP1B	X	1.451	1.451	0	%100
54	MP1B	Z	2.514	2.514	0	%100
55	MP4B	X	1.451	1.451	0	%100
56	MP4B	Z	2.514	2.514	0	%100
57	MP3B	X	1.451	1.451	0	%100
58	MP3B	Z	2.514	2.514	0	%100
59	MP2B	X	1.605	1.605	0	%100
60	MP2B	Z	2.779	2.779	0	%100
61	M46	X	1.204	1.204	0	%100
62	M46	Z	2.085	2.085	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	1.204	1.204	0	%100
66	M48	Z	2.085	2.085	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	1.164	1.164	0	%100
70	M71	Z	2.016	2.016	0	%100
71	M72	X	1.164	1.164	0	%100
72	M72	Z	2.016	2.016	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100



Company : Maser Consulting
 Designer : MNC
 Job Number : Project No. 10094995
 Model Name : 468903-VZW_MT_LO_H

Aug 20, 2021
 1:26 PM
 Checked By: _____

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]	
4	M2	Z	0	0	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	4.292	4.292	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	4.292	4.292	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	5.354	5.354	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	5.538	5.538	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	1.338	1.338	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	1.385	1.385	0	%100
19	M38	X	0	0	0	%100
20	M38	Z	2.005	2.005	0	%100
21	M39A	X	0	0	0	%100
22	M39A	Z	1.338	1.338	0	%100
23	M40	X	0	0	0	%100
24	M40	Z	1.385	1.385	0	%100
25	M54	X	0	0	0	%100
26	M54	Z	2.005	2.005	0	%100
27	M55	X	0	0	0	%100
28	M55	Z	2.309	2.309	0	%100
29	M56	X	0	0	0	%100
30	M56	Z	2.309	2.309	0	%100
31	MP5A	X	0	0	0	%100
32	MP5A	Z	2.902	2.902	0	%100
33	MP1A	X	0	0	0	%100
34	MP1A	Z	2.902	2.902	0	%100
35	MP4A	X	0	0	0	%100
36	MP4A	Z	2.902	2.902	0	%100
37	MP3A	X	0	0	0	%100
38	MP3A	Z	2.902	2.902	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	3.209	3.209	0	%100
41	MP5C	X	0	0	0	%100
42	MP5C	Z	2.902	2.902	0	%100
43	MP1C	X	0	0	0	%100
44	MP1C	Z	2.902	2.902	0	%100
45	MP4C	X	0	0	0	%100
46	MP4C	Z	2.902	2.902	0	%100
47	MP3C	X	0	0	0	%100
48	MP3C	Z	2.902	2.902	0	%100
49	MP2C	X	0	0	0	%100
50	MP2C	Z	3.209	3.209	0	%100
51	MP5B	X	0	0	0	%100
52	MP5B	Z	2.902	2.902	0	%100
53	MP1B	X	0	0	0	%100
54	MP1B	Z	2.902	2.902	0	%100
55	MP4B	X	0	0	0	%100
56	MP4B	Z	2.902	2.902	0	%100
57	MP3B	X	0	0	0	%100
58	MP3B	Z	2.902	2.902	0	%100
59	MP2B	X	0	0	0	%100
60	MP2B	Z	3.209	3.209	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	3.209	3.209	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	.802	.802	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	.802	.802	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	.776	.776	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	.776	.776	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	3.104	3.104	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.334	-.334	0	%100
2	M1	Z	.579	.579	0	%100
3	M2	X	-.385	-.385	0	%100
4	M2	Z	.667	.667	0	%100
5	M5	X	-.715	-.715	0	%100
6	M5	Z	1.239	1.239	0	%100
7	M6	X	-.715	-.715	0	%100
8	M6	Z	1.239	1.239	0	%100
9	M7	X	-2.861	-2.861	0	%100
10	M7	Z	4.956	4.956	0	%100
11	M6A	X	-2.008	-2.008	0	%100
12	M6A	Z	3.477	3.477	0	%100
13	M7A	X	-2.077	-2.077	0	%100
14	M7A	Z	3.597	3.597	0	%100
15	M23A	X	-2.008	-2.008	0	%100
16	M23A	Z	3.477	3.477	0	%100
17	M24	X	-2.077	-2.077	0	%100
18	M24	Z	3.597	3.597	0	%100
19	M38	X	-.334	-.334	0	%100
20	M38	Z	.579	.579	0	%100
21	M39A	X	0	0	0	%100
22	M39A	Z	0	0	0	%100
23	M40	X	0	0	0	%100
24	M40	Z	0	0	0	%100
25	M54	X	-1.337	-1.337	0	%100
26	M54	Z	2.315	2.315	0	%100
27	M55	X	-.385	-.385	0	%100
28	M55	Z	.667	.667	0	%100
29	M56	X	-1.539	-1.539	0	%100
30	M56	Z	2.666	2.666	0	%100
31	MP5A	X	-1.451	-1.451	0	%100
32	MP5A	Z	2.514	2.514	0	%100
33	MP1A	X	-1.451	-1.451	0	%100
34	MP1A	Z	2.514	2.514	0	%100
35	MP4A	X	-1.451	-1.451	0	%100
36	MP4A	Z	2.514	2.514	0	%100
37	MP3A	X	-1.451	-1.451	0	%100
38	MP3A	Z	2.514	2.514	0	%100
39	MP2A	X	-1.605	-1.605	0	%100
40	MP2A	Z	2.779	2.779	0	%100
41	MP5C	X	-1.451	-1.451	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	2.514	2.514	0	%100
43	MP1C	X	-1.451	-1.451	0	%100
44	MP1C	Z	2.514	2.514	0	%100
45	MP4C	X	-1.451	-1.451	0	%100
46	MP4C	Z	2.514	2.514	0	%100
47	MP3C	X	-1.451	-1.451	0	%100
48	MP3C	Z	2.514	2.514	0	%100
49	MP2C	X	-1.605	-1.605	0	%100
50	MP2C	Z	2.779	2.779	0	%100
51	MP5B	X	-1.451	-1.451	0	%100
52	MP5B	Z	2.514	2.514	0	%100
53	MP1B	X	-1.451	-1.451	0	%100
54	MP1B	Z	2.514	2.514	0	%100
55	MP4B	X	-1.451	-1.451	0	%100
56	MP4B	Z	2.514	2.514	0	%100
57	MP3B	X	-1.451	-1.451	0	%100
58	MP3B	Z	2.514	2.514	0	%100
59	MP2B	X	-1.605	-1.605	0	%100
60	MP2B	Z	2.779	2.779	0	%100
61	M46	X	-1.204	-1.204	0	%100
62	M46	Z	2.085	2.085	0	%100
63	M47	X	-1.204	-1.204	0	%100
64	M47	Z	2.085	2.085	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	-1.164	-1.164	0	%100
68	M70	Z	2.016	2.016	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	-1.164	-1.164	0	%100
72	M72	Z	2.016	2.016	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.737	-1.737	0	%100
2	M1	Z	1.003	1.003	0	%100
3	M2	X	-2	-2	0	%100
4	M2	Z	1.154	1.154	0	%100
5	M5	X	-3.717	-3.717	0	%100
6	M5	Z	2.146	2.146	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-3.717	-3.717	0	%100
10	M7	Z	2.146	2.146	0	%100
11	M6A	X	-1.159	-1.159	0	%100
12	M6A	Z	.669	.669	0	%100
13	M7A	X	-1.199	-1.199	0	%100
14	M7A	Z	.692	.692	0	%100
15	M23A	X	-4.637	-4.637	0	%100
16	M23A	Z	2.677	2.677	0	%100
17	M24	X	-4.796	-4.796	0	%100
18	M24	Z	2.769	2.769	0	%100
19	M38	X	0	0	0	%100
20	M38	Z	0	0	0	%100
21	M39A	X	-1.159	-1.159	0	%100
22	M39A	Z	.669	.669	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	-1.199	-1.199	0	%100
24	M40	Z	.692	.692	0	%100
25	M54	X	-1.737	-1.737	0	%100
26	M54	Z	1.003	1.003	0	%100
27	M55	X	0	0	0	%100
28	M55	Z	0	0	0	%100
29	M56	X	-2	-2	0	%100
30	M56	Z	1.154	1.154	0	%100
31	MP5A	X	-2.514	-2.514	0	%100
32	MP5A	Z	1.451	1.451	0	%100
33	MP1A	X	-2.514	-2.514	0	%100
34	MP1A	Z	1.451	1.451	0	%100
35	MP4A	X	-2.514	-2.514	0	%100
36	MP4A	Z	1.451	1.451	0	%100
37	MP3A	X	-2.514	-2.514	0	%100
38	MP3A	Z	1.451	1.451	0	%100
39	MP2A	X	-2.779	-2.779	0	%100
40	MP2A	Z	1.605	1.605	0	%100
41	MP5C	X	-2.514	-2.514	0	%100
42	MP5C	Z	1.451	1.451	0	%100
43	MP1C	X	-2.514	-2.514	0	%100
44	MP1C	Z	1.451	1.451	0	%100
45	MP4C	X	-2.514	-2.514	0	%100
46	MP4C	Z	1.451	1.451	0	%100
47	MP3C	X	-2.514	-2.514	0	%100
48	MP3C	Z	1.451	1.451	0	%100
49	MP2C	X	-2.779	-2.779	0	%100
50	MP2C	Z	1.605	1.605	0	%100
51	MP5B	X	-2.514	-2.514	0	%100
52	MP5B	Z	1.451	1.451	0	%100
53	MP1B	X	-2.514	-2.514	0	%100
54	MP1B	Z	1.451	1.451	0	%100
55	MP4B	X	-2.514	-2.514	0	%100
56	MP4B	Z	1.451	1.451	0	%100
57	MP3B	X	-2.514	-2.514	0	%100
58	MP3B	Z	1.451	1.451	0	%100
59	MP2B	X	-2.779	-2.779	0	%100
60	MP2B	Z	1.605	1.605	0	%100
61	M46	X	-.695	-.695	0	%100
62	M46	Z	.401	.401	0	%100
63	M47	X	-2.779	-2.779	0	%100
64	M47	Z	1.605	1.605	0	%100
65	M48	X	-.695	-.695	0	%100
66	M48	Z	.401	.401	0	%100
67	M70	X	-2.688	-2.688	0	%100
68	M70	Z	1.552	1.552	0	%100
69	M71	X	-.672	-.672	0	%100
70	M71	Z	.388	.388	0	%100
71	M72	X	-.672	-.672	0	%100
72	M72	Z	.388	.388	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-2.674	-2.674	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-3.078	-3.078	0	%100



Company : Maser Consulting
 Designer : MNC
 Job Number : Project No. 10094995
 Model Name : 468903-VZW_MT_LO_H

Aug 20, 2021
 1:26 PM
 Checked By: _____

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]	
4	M2	Z	0	0	0	%100
5	M5	X	-5.723	-5.723	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	-1.431	-1.431	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-1.431	-1.431	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	0	0	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	0	0	0	%100
15	M23A	X	-4.015	-4.015	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	-4.154	-4.154	0	%100
18	M24	Z	0	0	0	%100
19	M38	X	-.668	-.668	0	%100
20	M38	Z	0	0	0	%100
21	M39A	X	-4.015	-4.015	0	%100
22	M39A	Z	0	0	0	%100
23	M40	X	-4.154	-4.154	0	%100
24	M40	Z	0	0	0	%100
25	M54	X	-.668	-.668	0	%100
26	M54	Z	0	0	0	%100
27	M55	X	-.77	-.77	0	%100
28	M55	Z	0	0	0	%100
29	M56	X	-.77	-.77	0	%100
30	M56	Z	0	0	0	%100
31	MP5A	X	-2.902	-2.902	0	%100
32	MP5A	Z	0	0	0	%100
33	MP1A	X	-2.902	-2.902	0	%100
34	MP1A	Z	0	0	0	%100
35	MP4A	X	-2.902	-2.902	0	%100
36	MP4A	Z	0	0	0	%100
37	MP3A	X	-2.902	-2.902	0	%100
38	MP3A	Z	0	0	0	%100
39	MP2A	X	-3.209	-3.209	0	%100
40	MP2A	Z	0	0	0	%100
41	MP5C	X	-2.902	-2.902	0	%100
42	MP5C	Z	0	0	0	%100
43	MP1C	X	-2.902	-2.902	0	%100
44	MP1C	Z	0	0	0	%100
45	MP4C	X	-2.902	-2.902	0	%100
46	MP4C	Z	0	0	0	%100
47	MP3C	X	-2.902	-2.902	0	%100
48	MP3C	Z	0	0	0	%100
49	MP2C	X	-3.209	-3.209	0	%100
50	MP2C	Z	0	0	0	%100
51	MP5B	X	-2.902	-2.902	0	%100
52	MP5B	Z	0	0	0	%100
53	MP1B	X	-2.902	-2.902	0	%100
54	MP1B	Z	0	0	0	%100
55	MP4B	X	-2.902	-2.902	0	%100
56	MP4B	Z	0	0	0	%100
57	MP3B	X	-2.902	-2.902	0	%100
58	MP3B	Z	0	0	0	%100
59	MP2B	X	-3.209	-3.209	0	%100
60	MP2B	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	0	0	0	%100
63	M47	X	-2.407	-2.407	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	-2.407	-2.407	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	-2.328	-2.328	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	-2.327	-2.327	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.737	-1.737	0	%100
2	M1	Z	-1.003	-1.003	0	%100
3	M2	X	-2	-2	0	%100
4	M2	Z	-1.154	-1.154	0	%100
5	M5	X	-3.717	-3.717	0	%100
6	M5	Z	-2.146	-2.146	0	%100
7	M6	X	-3.717	-3.717	0	%100
8	M6	Z	-2.146	-2.146	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	-1.159	-1.159	0	%100
12	M6A	Z	-.669	-.669	0	%100
13	M7A	X	-1.199	-1.199	0	%100
14	M7A	Z	-.692	-.692	0	%100
15	M23A	X	-1.159	-1.159	0	%100
16	M23A	Z	-.669	-.669	0	%100
17	M24	X	-1.199	-1.199	0	%100
18	M24	Z	-.692	-.692	0	%100
19	M38	X	-1.737	-1.737	0	%100
20	M38	Z	-1.003	-1.003	0	%100
21	M39A	X	-4.637	-4.637	0	%100
22	M39A	Z	-2.677	-2.677	0	%100
23	M40	X	-4.796	-4.796	0	%100
24	M40	Z	-2.769	-2.769	0	%100
25	M54	X	0	0	0	%100
26	M54	Z	0	0	0	%100
27	M55	X	-2	-2	0	%100
28	M55	Z	-1.154	-1.154	0	%100
29	M56	X	0	0	0	%100
30	M56	Z	0	0	0	%100
31	MP5A	X	-2.514	-2.514	0	%100
32	MP5A	Z	-1.451	-1.451	0	%100
33	MP1A	X	-2.514	-2.514	0	%100
34	MP1A	Z	-1.451	-1.451	0	%100
35	MP4A	X	-2.514	-2.514	0	%100
36	MP4A	Z	-1.451	-1.451	0	%100
37	MP3A	X	-2.514	-2.514	0	%100
38	MP3A	Z	-1.451	-1.451	0	%100
39	MP2A	X	-2.779	-2.779	0	%100
40	MP2A	Z	-1.605	-1.605	0	%100
41	MP5C	X	-2.514	-2.514	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	-1.451	-1.451	0	%100
43	MP1C	X	-2.514	-2.514	0	%100
44	MP1C	Z	-1.451	-1.451	0	%100
45	MP4C	X	-2.514	-2.514	0	%100
46	MP4C	Z	-1.451	-1.451	0	%100
47	MP3C	X	-2.514	-2.514	0	%100
48	MP3C	Z	-1.451	-1.451	0	%100
49	MP2C	X	-2.779	-2.779	0	%100
50	MP2C	Z	-1.605	-1.605	0	%100
51	MP5B	X	-2.514	-2.514	0	%100
52	MP5B	Z	-1.451	-1.451	0	%100
53	MP1B	X	-2.514	-2.514	0	%100
54	MP1B	Z	-1.451	-1.451	0	%100
55	MP4B	X	-2.514	-2.514	0	%100
56	MP4B	Z	-1.451	-1.451	0	%100
57	MP3B	X	-2.514	-2.514	0	%100
58	MP3B	Z	-1.451	-1.451	0	%100
59	MP2B	X	-2.779	-2.779	0	%100
60	MP2B	Z	-1.605	-1.605	0	%100
61	M46	X	-0.695	-0.695	0	%100
62	M46	Z	-0.401	-0.401	0	%100
63	M47	X	-0.695	-0.695	0	%100
64	M47	Z	-0.401	-0.401	0	%100
65	M48	X	-2.779	-2.779	0	%100
66	M48	Z	-1.605	-1.605	0	%100
67	M70	X	-0.672	-0.672	0	%100
68	M70	Z	-0.388	-0.388	0	%100
69	M71	X	-2.688	-2.688	0	%100
70	M71	Z	-1.552	-1.552	0	%100
71	M72	X	-0.672	-0.672	0	%100
72	M72	Z	-0.388	-0.388	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-0.334	-0.334	0	%100
2	M1	Z	-0.579	-0.579	0	%100
3	M2	X	-0.385	-0.385	0	%100
4	M2	Z	-0.667	-0.667	0	%100
5	M5	X	-0.715	-0.715	0	%100
6	M5	Z	-1.239	-1.239	0	%100
7	M6	X	-2.861	-2.861	0	%100
8	M6	Z	-4.956	-4.956	0	%100
9	M7	X	-0.715	-0.715	0	%100
10	M7	Z	-1.239	-1.239	0	%100
11	M6A	X	-2.008	-2.008	0	%100
12	M6A	Z	-3.477	-3.477	0	%100
13	M7A	X	-2.077	-2.077	0	%100
14	M7A	Z	-3.597	-3.597	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M38	X	-1.337	-1.337	0	%100
20	M38	Z	-2.315	-2.315	0	%100
21	M39A	X	-2.008	-2.008	0	%100
22	M39A	Z	-3.477	-3.477	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	-2.077	-2.077	0	%100
24	M40	Z	-3.597	-3.597	0	%100
25	M54	X	-.334	-.334	0	%100
26	M54	Z	-.579	-.579	0	%100
27	M55	X	-1.539	-1.539	0	%100
28	M55	Z	-2.666	-2.666	0	%100
29	M56	X	-.385	-.385	0	%100
30	M56	Z	-.667	-.667	0	%100
31	MP5A	X	-1.451	-1.451	0	%100
32	MP5A	Z	-2.514	-2.514	0	%100
33	MP1A	X	-1.451	-1.451	0	%100
34	MP1A	Z	-2.514	-2.514	0	%100
35	MP4A	X	-1.451	-1.451	0	%100
36	MP4A	Z	-2.514	-2.514	0	%100
37	MP3A	X	-1.451	-1.451	0	%100
38	MP3A	Z	-2.514	-2.514	0	%100
39	MP2A	X	-1.605	-1.605	0	%100
40	MP2A	Z	-2.779	-2.779	0	%100
41	MP5C	X	-1.451	-1.451	0	%100
42	MP5C	Z	-2.514	-2.514	0	%100
43	MP1C	X	-1.451	-1.451	0	%100
44	MP1C	Z	-2.514	-2.514	0	%100
45	MP4C	X	-1.451	-1.451	0	%100
46	MP4C	Z	-2.514	-2.514	0	%100
47	MP3C	X	-1.451	-1.451	0	%100
48	MP3C	Z	-2.514	-2.514	0	%100
49	MP2C	X	-1.605	-1.605	0	%100
50	MP2C	Z	-2.779	-2.779	0	%100
51	MP5B	X	-1.451	-1.451	0	%100
52	MP5B	Z	-2.514	-2.514	0	%100
53	MP1B	X	-1.451	-1.451	0	%100
54	MP1B	Z	-2.514	-2.514	0	%100
55	MP4B	X	-1.451	-1.451	0	%100
56	MP4B	Z	-2.514	-2.514	0	%100
57	MP3B	X	-1.451	-1.451	0	%100
58	MP3B	Z	-2.514	-2.514	0	%100
59	MP2B	X	-1.605	-1.605	0	%100
60	MP2B	Z	-2.779	-2.779	0	%100
61	M46	X	-1.204	-1.204	0	%100
62	M46	Z	-2.085	-2.085	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	-1.204	-1.204	0	%100
66	M48	Z	-2.085	-2.085	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	-1.164	-1.164	0	%100
70	M71	Z	-2.016	-2.016	0	%100
71	M72	X	-1.164	-1.164	0	%100
72	M72	Z	-2.016	-2.016	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100



Company : Maser Consulting
 Designer : MNC
 Job Number : Project No. 10094995
 Model Name : 468903-VZW_MT_LO_H

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]	
4	M2	Z	0	0	0	%100
5	M5	X	0	0	0	%100
6	M5	Z	0	0	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	-1.188	-1.188	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	-1.188	-1.188	0	%100
11	M6A	X	0	0	0	%100
12	M6A	Z	-1.408	-1.408	0	%100
13	M7A	X	0	0	0	%100
14	M7A	Z	-1.474	-1.474	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	-.352	-.352	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	-.369	-.369	0	%100
19	M38	X	0	0	0	%100
20	M38	Z	-.474	-.474	0	%100
21	M39A	X	0	0	0	%100
22	M39A	Z	-.352	-.352	0	%100
23	M40	X	0	0	0	%100
24	M40	Z	-.369	-.369	0	%100
25	M54	X	0	0	0	%100
26	M54	Z	-.474	-.474	0	%100
27	M55	X	0	0	0	%100
28	M55	Z	-.548	-.548	0	%100
29	M56	X	0	0	0	%100
30	M56	Z	-.548	-.548	0	%100
31	MP5A	X	0	0	0	%100
32	MP5A	Z	-.525	-.525	0	%100
33	MP1A	X	0	0	0	%100
34	MP1A	Z	-.525	-.525	0	%100
35	MP4A	X	0	0	0	%100
36	MP4A	Z	-.525	-.525	0	%100
37	MP3A	X	0	0	0	%100
38	MP3A	Z	-.525	-.525	0	%100
39	MP2A	X	0	0	0	%100
40	MP2A	Z	-.636	-.636	0	%100
41	MP5C	X	0	0	0	%100
42	MP5C	Z	-.525	-.525	0	%100
43	MP1C	X	0	0	0	%100
44	MP1C	Z	-.525	-.525	0	%100
45	MP4C	X	0	0	0	%100
46	MP4C	Z	-.525	-.525	0	%100
47	MP3C	X	0	0	0	%100
48	MP3C	Z	-.525	-.525	0	%100
49	MP2C	X	0	0	0	%100
50	MP2C	Z	-.636	-.636	0	%100
51	MP5B	X	0	0	0	%100
52	MP5B	Z	-.525	-.525	0	%100
53	MP1B	X	0	0	0	%100
54	MP1B	Z	-.525	-.525	0	%100
55	MP4B	X	0	0	0	%100
56	MP4B	Z	-.525	-.525	0	%100
57	MP3B	X	0	0	0	%100
58	MP3B	Z	-.525	-.525	0	%100
59	MP2B	X	0	0	0	%100
60	MP2B	Z	-.636	-.636	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	-.636	-.636	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	-.159	-.159	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	-.159	-.159	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	-.19	-.19	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	-.19	-.19	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	-.759	-.759	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.079	.079	0	%100
2	M1	Z	-.137	-.137	0	%100
3	M2	X	.091	.091	0	%100
4	M2	Z	-.158	-.158	0	%100
5	M5	X	.198	.198	0	%100
6	M5	Z	-.343	-.343	0	%100
7	M6	X	.198	.198	0	%100
8	M6	Z	-.343	-.343	0	%100
9	M7	X	.792	.792	0	%100
10	M7	Z	-1.372	-1.372	0	%100
11	M6A	X	.528	.528	0	%100
12	M6A	Z	-.914	-.914	0	%100
13	M7A	X	.553	.553	0	%100
14	M7A	Z	-.957	-.957	0	%100
15	M23A	X	.528	.528	0	%100
16	M23A	Z	-.914	-.914	0	%100
17	M24	X	.553	.553	0	%100
18	M24	Z	-.957	-.957	0	%100
19	M38	X	.079	.079	0	%100
20	M38	Z	-.137	-.137	0	%100
21	M39A	X	0	0	0	%100
22	M39A	Z	0	0	0	%100
23	M40	X	0	0	0	%100
24	M40	Z	0	0	0	%100
25	M54	X	.316	.316	0	%100
26	M54	Z	-.547	-.547	0	%100
27	M55	X	.091	.091	0	%100
28	M55	Z	-.158	-.158	0	%100
29	M56	X	.365	.365	0	%100
30	M56	Z	-.633	-.633	0	%100
31	MP5A	X	.263	.263	0	%100
32	MP5A	Z	-.455	-.455	0	%100
33	MP1A	X	.263	.263	0	%100
34	MP1A	Z	-.455	-.455	0	%100
35	MP4A	X	.263	.263	0	%100
36	MP4A	Z	-.455	-.455	0	%100
37	MP3A	X	.263	.263	0	%100
38	MP3A	Z	-.455	-.455	0	%100
39	MP2A	X	.318	.318	0	%100
40	MP2A	Z	-.551	-.551	0	%100
41	MP5C	X	.263	.263	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	-.455	-.455	0	%100
43	MP1C	X	.263	.263	0	%100
44	MP1C	Z	-.455	-.455	0	%100
45	MP4C	X	.263	.263	0	%100
46	MP4C	Z	-.455	-.455	0	%100
47	MP3C	X	.263	.263	0	%100
48	MP3C	Z	-.455	-.455	0	%100
49	MP2C	X	.318	.318	0	%100
50	MP2C	Z	-.551	-.551	0	%100
51	MP5B	X	.263	.263	0	%100
52	MP5B	Z	-.455	-.455	0	%100
53	MP1B	X	.263	.263	0	%100
54	MP1B	Z	-.455	-.455	0	%100
55	MP4B	X	.263	.263	0	%100
56	MP4B	Z	-.455	-.455	0	%100
57	MP3B	X	.263	.263	0	%100
58	MP3B	Z	-.455	-.455	0	%100
59	MP2B	X	.318	.318	0	%100
60	MP2B	Z	-.551	-.551	0	%100
61	M46	X	.238	.238	0	%100
62	M46	Z	-.413	-.413	0	%100
63	M47	X	.238	.238	0	%100
64	M47	Z	-.413	-.413	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	.285	.285	0	%100
68	M70	Z	-.493	-.493	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	.285	.285	0	%100
72	M72	Z	-.493	-.493	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.41	.41	0	%100
2	M1	Z	-.237	-.237	0	%100
3	M2	X	.475	.475	0	%100
4	M2	Z	-.274	-.274	0	%100
5	M5	X	1.029	1.029	0	%100
6	M5	Z	-.594	-.594	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	1.029	1.029	0	%100
10	M7	Z	-.594	-.594	0	%100
11	M6A	X	.305	.305	0	%100
12	M6A	Z	-.176	-.176	0	%100
13	M7A	X	.319	.319	0	%100
14	M7A	Z	-.184	-.184	0	%100
15	M23A	X	1.219	1.219	0	%100
16	M23A	Z	-.704	-.704	0	%100
17	M24	X	1.277	1.277	0	%100
18	M24	Z	-.737	-.737	0	%100
19	M38	X	0	0	0	%100
20	M38	Z	0	0	0	%100
21	M39A	X	.305	.305	0	%100
22	M39A	Z	-.176	-.176	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	.319	.319	0	%100
24	M40	Z	-.184	-.184	0	%100
25	M54	X	.41	.41	0	%100
26	M54	Z	-.237	-.237	0	%100
27	M55	X	0	0	0	%100
28	M55	Z	0	0	0	%100
29	M56	X	.475	.475	0	%100
30	M56	Z	-.274	-.274	0	%100
31	MP5A	X	.455	.455	0	%100
32	MP5A	Z	-.263	-.263	0	%100
33	MP1A	X	.455	.455	0	%100
34	MP1A	Z	-.263	-.263	0	%100
35	MP4A	X	.455	.455	0	%100
36	MP4A	Z	-.263	-.263	0	%100
37	MP3A	X	.455	.455	0	%100
38	MP3A	Z	-.263	-.263	0	%100
39	MP2A	X	.551	.551	0	%100
40	MP2A	Z	-.318	-.318	0	%100
41	MP5C	X	.455	.455	0	%100
42	MP5C	Z	-.263	-.263	0	%100
43	MP1C	X	.455	.455	0	%100
44	MP1C	Z	-.263	-.263	0	%100
45	MP4C	X	.455	.455	0	%100
46	MP4C	Z	-.263	-.263	0	%100
47	MP3C	X	.455	.455	0	%100
48	MP3C	Z	-.263	-.263	0	%100
49	MP2C	X	.551	.551	0	%100
50	MP2C	Z	-.318	-.318	0	%100
51	MP5B	X	.455	.455	0	%100
52	MP5B	Z	-.263	-.263	0	%100
53	MP1B	X	.455	.455	0	%100
54	MP1B	Z	-.263	-.263	0	%100
55	MP4B	X	.455	.455	0	%100
56	MP4B	Z	-.263	-.263	0	%100
57	MP3B	X	.455	.455	0	%100
58	MP3B	Z	-.263	-.263	0	%100
59	MP2B	X	.551	.551	0	%100
60	MP2B	Z	-.318	-.318	0	%100
61	M46	X	.138	.138	0	%100
62	M46	Z	-.079	-.079	0	%100
63	M47	X	.551	.551	0	%100
64	M47	Z	-.318	-.318	0	%100
65	M48	X	.138	.138	0	%100
66	M48	Z	-.079	-.079	0	%100
67	M70	X	.658	.658	0	%100
68	M70	Z	-.38	-.38	0	%100
69	M71	X	.164	.164	0	%100
70	M71	Z	-.095	-.095	0	%100
71	M72	X	.164	.164	0	%100
72	M72	Z	-.095	-.095	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.632	.632	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	.731	.731	0	%100



Company : Maser Consulting
 Designer : MNC
 Job Number : Project No. 10094995
 Model Name : 468903-VZW_MT_LO_H

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
4	M2	Z	0	0	%100
5	M5	X	1.585	1.585	%100
6	M5	Z	0	0	%100
7	M6	X	.396	.396	%100
8	M6	Z	0	0	%100
9	M7	X	.396	.396	%100
10	M7	Z	0	0	%100
11	M6A	X	0	0	%100
12	M6A	Z	0	0	%100
13	M7A	X	0	0	%100
14	M7A	Z	0	0	%100
15	M23A	X	1.056	1.056	%100
16	M23A	Z	0	0	%100
17	M24	X	1.106	1.106	%100
18	M24	Z	0	0	%100
19	M38	X	.158	.158	%100
20	M38	Z	0	0	%100
21	M39A	X	1.056	1.056	%100
22	M39A	Z	0	0	%100
23	M40	X	1.106	1.106	%100
24	M40	Z	0	0	%100
25	M54	X	.158	.158	%100
26	M54	Z	0	0	%100
27	M55	X	.183	.183	%100
28	M55	Z	0	0	%100
29	M56	X	.183	.183	%100
30	M56	Z	0	0	%100
31	MP5A	X	.525	.525	%100
32	MP5A	Z	0	0	%100
33	MP1A	X	.525	.525	%100
34	MP1A	Z	0	0	%100
35	MP4A	X	.525	.525	%100
36	MP4A	Z	0	0	%100
37	MP3A	X	.525	.525	%100
38	MP3A	Z	0	0	%100
39	MP2A	X	.636	.636	%100
40	MP2A	Z	0	0	%100
41	MP5C	X	.525	.525	%100
42	MP5C	Z	0	0	%100
43	MP1C	X	.525	.525	%100
44	MP1C	Z	0	0	%100
45	MP4C	X	.525	.525	%100
46	MP4C	Z	0	0	%100
47	MP3C	X	.525	.525	%100
48	MP3C	Z	0	0	%100
49	MP2C	X	.636	.636	%100
50	MP2C	Z	0	0	%100
51	MP5B	X	.525	.525	%100
52	MP5B	Z	0	0	%100
53	MP1B	X	.525	.525	%100
54	MP1B	Z	0	0	%100
55	MP4B	X	.525	.525	%100
56	MP4B	Z	0	0	%100
57	MP3B	X	.525	.525	%100
58	MP3B	Z	0	0	%100
59	MP2B	X	.636	.636	%100
60	MP2B	Z	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	0	0	0	%100
63	M47	X	.477	.477	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	.477	.477	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	.57	.57	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	.569	.569	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.41	.41	0	%100
2	M1	Z	.237	.237	0	%100
3	M2	X	.475	.475	0	%100
4	M2	Z	.274	.274	0	%100
5	M5	X	1.029	1.029	0	%100
6	M5	Z	.594	.594	0	%100
7	M6	X	1.029	1.029	0	%100
8	M6	Z	.594	.594	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	.305	.305	0	%100
12	M6A	Z	.176	.176	0	%100
13	M7A	X	.319	.319	0	%100
14	M7A	Z	.184	.184	0	%100
15	M23A	X	.305	.305	0	%100
16	M23A	Z	.176	.176	0	%100
17	M24	X	.319	.319	0	%100
18	M24	Z	.184	.184	0	%100
19	M38	X	.41	.41	0	%100
20	M38	Z	.237	.237	0	%100
21	M39A	X	1.219	1.219	0	%100
22	M39A	Z	.704	.704	0	%100
23	M40	X	1.277	1.277	0	%100
24	M40	Z	.737	.737	0	%100
25	M54	X	0	0	0	%100
26	M54	Z	0	0	0	%100
27	M55	X	.475	.475	0	%100
28	M55	Z	.274	.274	0	%100
29	M56	X	0	0	0	%100
30	M56	Z	0	0	0	%100
31	MP5A	X	.455	.455	0	%100
32	MP5A	Z	.263	.263	0	%100
33	MP1A	X	.455	.455	0	%100
34	MP1A	Z	.263	.263	0	%100
35	MP4A	X	.455	.455	0	%100
36	MP4A	Z	.263	.263	0	%100
37	MP3A	X	.455	.455	0	%100
38	MP3A	Z	.263	.263	0	%100
39	MP2A	X	.551	.551	0	%100
40	MP2A	Z	.318	.318	0	%100
41	MP5C	X	.455	.455	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	.263	.263	0	%100
43	MP1C	X	.455	.455	0	%100
44	MP1C	Z	.263	.263	0	%100
45	MP4C	X	.455	.455	0	%100
46	MP4C	Z	.263	.263	0	%100
47	MP3C	X	.455	.455	0	%100
48	MP3C	Z	.263	.263	0	%100
49	MP2C	X	.551	.551	0	%100
50	MP2C	Z	.318	.318	0	%100
51	MP5B	X	.455	.455	0	%100
52	MP5B	Z	.263	.263	0	%100
53	MP1B	X	.455	.455	0	%100
54	MP1B	Z	.263	.263	0	%100
55	MP4B	X	.455	.455	0	%100
56	MP4B	Z	.263	.263	0	%100
57	MP3B	X	.455	.455	0	%100
58	MP3B	Z	.263	.263	0	%100
59	MP2B	X	.551	.551	0	%100
60	MP2B	Z	.318	.318	0	%100
61	M46	X	.138	.138	0	%100
62	M46	Z	.079	.079	0	%100
63	M47	X	.138	.138	0	%100
64	M47	Z	.079	.079	0	%100
65	M48	X	.551	.551	0	%100
66	M48	Z	.318	.318	0	%100
67	M70	X	.164	.164	0	%100
68	M70	Z	.095	.095	0	%100
69	M71	X	.658	.658	0	%100
70	M71	Z	.38	.38	0	%100
71	M72	X	.164	.164	0	%100
72	M72	Z	.095	.095	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.079	.079	0	%100
2	M1	Z	.137	.137	0	%100
3	M2	X	.091	.091	0	%100
4	M2	Z	.158	.158	0	%100
5	M5	X	.198	.198	0	%100
6	M5	Z	.343	.343	0	%100
7	M6	X	.792	.792	0	%100
8	M6	Z	1.372	1.372	0	%100
9	M7	X	.198	.198	0	%100
10	M7	Z	.343	.343	0	%100
11	M6A	X	.528	.528	0	%100
12	M6A	Z	.914	.914	0	%100
13	M7A	X	.553	.553	0	%100
14	M7A	Z	.957	.957	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M38	X	.316	.316	0	%100
20	M38	Z	.547	.547	0	%100
21	M39A	X	.528	.528	0	%100
22	M39A	Z	.914	.914	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	.553	.553	0	%100
24	M40	Z	.957	.957	0	%100
25	M54	X	.079	.079	0	%100
26	M54	Z	.137	.137	0	%100
27	M55	X	.365	.365	0	%100
28	M55	Z	.633	.633	0	%100
29	M56	X	.091	.091	0	%100
30	M56	Z	.158	.158	0	%100
31	MP5A	X	.263	.263	0	%100
32	MP5A	Z	.455	.455	0	%100
33	MP1A	X	.263	.263	0	%100
34	MP1A	Z	.455	.455	0	%100
35	MP4A	X	.263	.263	0	%100
36	MP4A	Z	.455	.455	0	%100
37	MP3A	X	.263	.263	0	%100
38	MP3A	Z	.455	.455	0	%100
39	MP2A	X	.318	.318	0	%100
40	MP2A	Z	.551	.551	0	%100
41	MP5C	X	.263	.263	0	%100
42	MP5C	Z	.455	.455	0	%100
43	MP1C	X	.263	.263	0	%100
44	MP1C	Z	.455	.455	0	%100
45	MP4C	X	.263	.263	0	%100
46	MP4C	Z	.455	.455	0	%100
47	MP3C	X	.263	.263	0	%100
48	MP3C	Z	.455	.455	0	%100
49	MP2C	X	.318	.318	0	%100
50	MP2C	Z	.551	.551	0	%100
51	MP5B	X	.263	.263	0	%100
52	MP5B	Z	.455	.455	0	%100
53	MP1B	X	.263	.263	0	%100
54	MP1B	Z	.455	.455	0	%100
55	MP4B	X	.263	.263	0	%100
56	MP4B	Z	.455	.455	0	%100
57	MP3B	X	.263	.263	0	%100
58	MP3B	Z	.455	.455	0	%100
59	MP2B	X	.318	.318	0	%100
60	MP2B	Z	.551	.551	0	%100
61	M46	X	.238	.238	0	%100
62	M46	Z	.413	.413	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	.238	.238	0	%100
66	M48	Z	.413	.413	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	.285	.285	0	%100
70	M71	Z	.493	.493	0	%100
71	M72	X	.285	.285	0	%100
72	M72	Z	.493	.493	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
4	M2	Z	0	0	%100
5	M5	X	0	0	%100
6	M5	Z	0	0	%100
7	M6	X	0	0	%100
8	M6	Z	1.188	1.188	%100
9	M7	X	0	0	%100
10	M7	Z	1.188	1.188	%100
11	M6A	X	0	0	%100
12	M6A	Z	1.408	1.408	%100
13	M7A	X	0	0	%100
14	M7A	Z	1.474	1.474	%100
15	M23A	X	0	0	%100
16	M23A	Z	.352	.352	%100
17	M24	X	0	0	%100
18	M24	Z	.369	.369	%100
19	M38	X	0	0	%100
20	M38	Z	.474	.474	%100
21	M39A	X	0	0	%100
22	M39A	Z	.352	.352	%100
23	M40	X	0	0	%100
24	M40	Z	.369	.369	%100
25	M54	X	0	0	%100
26	M54	Z	.474	.474	%100
27	M55	X	0	0	%100
28	M55	Z	.548	.548	%100
29	M56	X	0	0	%100
30	M56	Z	.548	.548	%100
31	MP5A	X	0	0	%100
32	MP5A	Z	.525	.525	%100
33	MP1A	X	0	0	%100
34	MP1A	Z	.525	.525	%100
35	MP4A	X	0	0	%100
36	MP4A	Z	.525	.525	%100
37	MP3A	X	0	0	%100
38	MP3A	Z	.525	.525	%100
39	MP2A	X	0	0	%100
40	MP2A	Z	.636	.636	%100
41	MP5C	X	0	0	%100
42	MP5C	Z	.525	.525	%100
43	MP1C	X	0	0	%100
44	MP1C	Z	.525	.525	%100
45	MP4C	X	0	0	%100
46	MP4C	Z	.525	.525	%100
47	MP3C	X	0	0	%100
48	MP3C	Z	.525	.525	%100
49	MP2C	X	0	0	%100
50	MP2C	Z	.636	.636	%100
51	MP5B	X	0	0	%100
52	MP5B	Z	.525	.525	%100
53	MP1B	X	0	0	%100
54	MP1B	Z	.525	.525	%100
55	MP4B	X	0	0	%100
56	MP4B	Z	.525	.525	%100
57	MP3B	X	0	0	%100
58	MP3B	Z	.525	.525	%100
59	MP2B	X	0	0	%100
60	MP2B	Z	.636	.636	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	.636	.636	0	%100
63	M47	X	0	0	0	%100
64	M47	Z	.159	.159	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	.159	.159	0	%100
67	M70	X	0	0	0	%100
68	M70	Z	.19	.19	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	.19	.19	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	.759	.759	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.079	-.079	0	%100
2	M1	Z	.137	.137	0	%100
3	M2	X	-.091	-.091	0	%100
4	M2	Z	.158	.158	0	%100
5	M5	X	-.198	-.198	0	%100
6	M5	Z	.343	.343	0	%100
7	M6	X	-.198	-.198	0	%100
8	M6	Z	.343	.343	0	%100
9	M7	X	-.792	-.792	0	%100
10	M7	Z	1.372	1.372	0	%100
11	M6A	X	-.528	-.528	0	%100
12	M6A	Z	.914	.914	0	%100
13	M7A	X	-.553	-.553	0	%100
14	M7A	Z	.957	.957	0	%100
15	M23A	X	-.528	-.528	0	%100
16	M23A	Z	.914	.914	0	%100
17	M24	X	-.553	-.553	0	%100
18	M24	Z	.957	.957	0	%100
19	M38	X	-.079	-.079	0	%100
20	M38	Z	.137	.137	0	%100
21	M39A	X	0	0	0	%100
22	M39A	Z	0	0	0	%100
23	M40	X	0	0	0	%100
24	M40	Z	0	0	0	%100
25	M54	X	-.316	-.316	0	%100
26	M54	Z	.547	.547	0	%100
27	M55	X	-.091	-.091	0	%100
28	M55	Z	.158	.158	0	%100
29	M56	X	-.365	-.365	0	%100
30	M56	Z	.633	.633	0	%100
31	MP5A	X	-.263	-.263	0	%100
32	MP5A	Z	.455	.455	0	%100
33	MP1A	X	-.263	-.263	0	%100
34	MP1A	Z	.455	.455	0	%100
35	MP4A	X	-.263	-.263	0	%100
36	MP4A	Z	.455	.455	0	%100
37	MP3A	X	-.263	-.263	0	%100
38	MP3A	Z	.455	.455	0	%100
39	MP2A	X	-.318	-.318	0	%100
40	MP2A	Z	.551	.551	0	%100
41	MP5C	X	-.263	-.263	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	.455	.455	0	%100
43	MP1C	X	-.263	-.263	0	%100
44	MP1C	Z	.455	.455	0	%100
45	MP4C	X	-.263	-.263	0	%100
46	MP4C	Z	.455	.455	0	%100
47	MP3C	X	-.263	-.263	0	%100
48	MP3C	Z	.455	.455	0	%100
49	MP2C	X	-.318	-.318	0	%100
50	MP2C	Z	.551	.551	0	%100
51	MP5B	X	-.263	-.263	0	%100
52	MP5B	Z	.455	.455	0	%100
53	MP1B	X	-.263	-.263	0	%100
54	MP1B	Z	.455	.455	0	%100
55	MP4B	X	-.263	-.263	0	%100
56	MP4B	Z	.455	.455	0	%100
57	MP3B	X	-.263	-.263	0	%100
58	MP3B	Z	.455	.455	0	%100
59	MP2B	X	-.318	-.318	0	%100
60	MP2B	Z	.551	.551	0	%100
61	M46	X	-.238	-.238	0	%100
62	M46	Z	.413	.413	0	%100
63	M47	X	-.238	-.238	0	%100
64	M47	Z	.413	.413	0	%100
65	M48	X	0	0	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	-.285	-.285	0	%100
68	M70	Z	.493	.493	0	%100
69	M71	X	0	0	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	-.285	-.285	0	%100
72	M72	Z	.493	.493	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.41	-.41	0	%100
2	M1	Z	.237	.237	0	%100
3	M2	X	-.475	-.475	0	%100
4	M2	Z	.274	.274	0	%100
5	M5	X	-1.029	-1.029	0	%100
6	M5	Z	.594	.594	0	%100
7	M6	X	0	0	0	%100
8	M6	Z	0	0	0	%100
9	M7	X	-1.029	-1.029	0	%100
10	M7	Z	.594	.594	0	%100
11	M6A	X	-.305	-.305	0	%100
12	M6A	Z	.176	.176	0	%100
13	M7A	X	-.319	-.319	0	%100
14	M7A	Z	.184	.184	0	%100
15	M23A	X	-1.219	-1.219	0	%100
16	M23A	Z	.704	.704	0	%100
17	M24	X	-1.277	-1.277	0	%100
18	M24	Z	.737	.737	0	%100
19	M38	X	0	0	0	%100
20	M38	Z	0	0	0	%100
21	M39A	X	-.305	-.305	0	%100
22	M39A	Z	.176	.176	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	-.319	-.319	0	%100
24	M40	Z	.184	.184	0	%100
25	M54	X	-.41	-.41	0	%100
26	M54	Z	.237	.237	0	%100
27	M55	X	0	0	0	%100
28	M55	Z	0	0	0	%100
29	M56	X	-.475	-.475	0	%100
30	M56	Z	.274	.274	0	%100
31	MP5A	X	-.455	-.455	0	%100
32	MP5A	Z	.263	.263	0	%100
33	MP1A	X	-.455	-.455	0	%100
34	MP1A	Z	.263	.263	0	%100
35	MP4A	X	-.455	-.455	0	%100
36	MP4A	Z	.263	.263	0	%100
37	MP3A	X	-.455	-.455	0	%100
38	MP3A	Z	.263	.263	0	%100
39	MP2A	X	-.551	-.551	0	%100
40	MP2A	Z	.318	.318	0	%100
41	MP5C	X	-.455	-.455	0	%100
42	MP5C	Z	.263	.263	0	%100
43	MP1C	X	-.455	-.455	0	%100
44	MP1C	Z	.263	.263	0	%100
45	MP4C	X	-.455	-.455	0	%100
46	MP4C	Z	.263	.263	0	%100
47	MP3C	X	-.455	-.455	0	%100
48	MP3C	Z	.263	.263	0	%100
49	MP2C	X	-.551	-.551	0	%100
50	MP2C	Z	.318	.318	0	%100
51	MP5B	X	-.455	-.455	0	%100
52	MP5B	Z	.263	.263	0	%100
53	MP1B	X	-.455	-.455	0	%100
54	MP1B	Z	.263	.263	0	%100
55	MP4B	X	-.455	-.455	0	%100
56	MP4B	Z	.263	.263	0	%100
57	MP3B	X	-.455	-.455	0	%100
58	MP3B	Z	.263	.263	0	%100
59	MP2B	X	-.551	-.551	0	%100
60	MP2B	Z	.318	.318	0	%100
61	M46	X	-.138	-.138	0	%100
62	M46	Z	.079	.079	0	%100
63	M47	X	-.551	-.551	0	%100
64	M47	Z	.318	.318	0	%100
65	M48	X	-.138	-.138	0	%100
66	M48	Z	.079	.079	0	%100
67	M70	X	-.658	-.658	0	%100
68	M70	Z	.38	.38	0	%100
69	M71	X	-.164	-.164	0	%100
70	M71	Z	.095	.095	0	%100
71	M72	X	-.164	-.164	0	%100
72	M72	Z	.095	.095	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.632	-.632	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-.731	-.731	0	%100



Company : Maser Consulting
 Designer : MNC
 Job Number : Project No. 10094995
 Model Name : 468903-VZW_MT_LO_H

Aug 20, 2021
 1:26 PM
 Checked By: _____

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
4	M2	Z	0	0	%100
5	M5	X	-1.585	-1.585	%100
6	M5	Z	0	0	%100
7	M6	X	-.396	-.396	%100
8	M6	Z	0	0	%100
9	M7	X	-.396	-.396	%100
10	M7	Z	0	0	%100
11	M6A	X	0	0	%100
12	M6A	Z	0	0	%100
13	M7A	X	0	0	%100
14	M7A	Z	0	0	%100
15	M23A	X	-1.056	-1.056	%100
16	M23A	Z	0	0	%100
17	M24	X	-1.106	-1.106	%100
18	M24	Z	0	0	%100
19	M38	X	-.158	-.158	%100
20	M38	Z	0	0	%100
21	M39A	X	-1.056	-1.056	%100
22	M39A	Z	0	0	%100
23	M40	X	-1.106	-1.106	%100
24	M40	Z	0	0	%100
25	M54	X	-.158	-.158	%100
26	M54	Z	0	0	%100
27	M55	X	-.183	-.183	%100
28	M55	Z	0	0	%100
29	M56	X	-.183	-.183	%100
30	M56	Z	0	0	%100
31	MP5A	X	-.525	-.525	%100
32	MP5A	Z	0	0	%100
33	MP1A	X	-.525	-.525	%100
34	MP1A	Z	0	0	%100
35	MP4A	X	-.525	-.525	%100
36	MP4A	Z	0	0	%100
37	MP3A	X	-.525	-.525	%100
38	MP3A	Z	0	0	%100
39	MP2A	X	-.636	-.636	%100
40	MP2A	Z	0	0	%100
41	MP5C	X	-.525	-.525	%100
42	MP5C	Z	0	0	%100
43	MP1C	X	-.525	-.525	%100
44	MP1C	Z	0	0	%100
45	MP4C	X	-.525	-.525	%100
46	MP4C	Z	0	0	%100
47	MP3C	X	-.525	-.525	%100
48	MP3C	Z	0	0	%100
49	MP2C	X	-.636	-.636	%100
50	MP2C	Z	0	0	%100
51	MP5B	X	-.525	-.525	%100
52	MP5B	Z	0	0	%100
53	MP1B	X	-.525	-.525	%100
54	MP1B	Z	0	0	%100
55	MP4B	X	-.525	-.525	%100
56	MP4B	Z	0	0	%100
57	MP3B	X	-.525	-.525	%100
58	MP3B	Z	0	0	%100
59	MP2B	X	-.636	-.636	%100
60	MP2B	Z	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
61	M46	X	0	0	0	%100
62	M46	Z	0	0	0	%100
63	M47	X	-.477	-.477	0	%100
64	M47	Z	0	0	0	%100
65	M48	X	-.477	-.477	0	%100
66	M48	Z	0	0	0	%100
67	M70	X	-.57	-.57	0	%100
68	M70	Z	0	0	0	%100
69	M71	X	-.569	-.569	0	%100
70	M71	Z	0	0	0	%100
71	M72	X	0	0	0	%100
72	M72	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.41	-.41	0	%100
2	M1	Z	-.237	-.237	0	%100
3	M2	X	-.475	-.475	0	%100
4	M2	Z	-.274	-.274	0	%100
5	M5	X	-1.029	-1.029	0	%100
6	M5	Z	-.594	-.594	0	%100
7	M6	X	-1.029	-1.029	0	%100
8	M6	Z	-.594	-.594	0	%100
9	M7	X	0	0	0	%100
10	M7	Z	0	0	0	%100
11	M6A	X	-.305	-.305	0	%100
12	M6A	Z	-.176	-.176	0	%100
13	M7A	X	-.319	-.319	0	%100
14	M7A	Z	-.184	-.184	0	%100
15	M23A	X	-.305	-.305	0	%100
16	M23A	Z	-.176	-.176	0	%100
17	M24	X	-.319	-.319	0	%100
18	M24	Z	-.184	-.184	0	%100
19	M38	X	-.41	-.41	0	%100
20	M38	Z	-.237	-.237	0	%100
21	M39A	X	-1.219	-1.219	0	%100
22	M39A	Z	-.704	-.704	0	%100
23	M40	X	-1.277	-1.277	0	%100
24	M40	Z	-.737	-.737	0	%100
25	M54	X	0	0	0	%100
26	M54	Z	0	0	0	%100
27	M55	X	-.475	-.475	0	%100
28	M55	Z	-.274	-.274	0	%100
29	M56	X	0	0	0	%100
30	M56	Z	0	0	0	%100
31	MP5A	X	-.455	-.455	0	%100
32	MP5A	Z	-.263	-.263	0	%100
33	MP1A	X	-.455	-.455	0	%100
34	MP1A	Z	-.263	-.263	0	%100
35	MP4A	X	-.455	-.455	0	%100
36	MP4A	Z	-.263	-.263	0	%100
37	MP3A	X	-.455	-.455	0	%100
38	MP3A	Z	-.263	-.263	0	%100
39	MP2A	X	-.551	-.551	0	%100
40	MP2A	Z	-.318	-.318	0	%100
41	MP5C	X	-.455	-.455	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
42	MP5C	Z	-.263	-.263	0	%100
43	MP1C	X	-.455	-.455	0	%100
44	MP1C	Z	-.263	-.263	0	%100
45	MP4C	X	-.455	-.455	0	%100
46	MP4C	Z	-.263	-.263	0	%100
47	MP3C	X	-.455	-.455	0	%100
48	MP3C	Z	-.263	-.263	0	%100
49	MP2C	X	-.551	-.551	0	%100
50	MP2C	Z	-.318	-.318	0	%100
51	MP5B	X	-.455	-.455	0	%100
52	MP5B	Z	-.263	-.263	0	%100
53	MP1B	X	-.455	-.455	0	%100
54	MP1B	Z	-.263	-.263	0	%100
55	MP4B	X	-.455	-.455	0	%100
56	MP4B	Z	-.263	-.263	0	%100
57	MP3B	X	-.455	-.455	0	%100
58	MP3B	Z	-.263	-.263	0	%100
59	MP2B	X	-.551	-.551	0	%100
60	MP2B	Z	-.318	-.318	0	%100
61	M46	X	-.138	-.138	0	%100
62	M46	Z	-.079	-.079	0	%100
63	M47	X	-.138	-.138	0	%100
64	M47	Z	-.079	-.079	0	%100
65	M48	X	-.551	-.551	0	%100
66	M48	Z	-.318	-.318	0	%100
67	M70	X	-.164	-.164	0	%100
68	M70	Z	-.095	-.095	0	%100
69	M71	X	-.658	-.658	0	%100
70	M71	Z	-.38	-.38	0	%100
71	M72	X	-.164	-.164	0	%100
72	M72	Z	-.095	-.095	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-.079	-.079	0	%100
2	M1	Z	-.137	-.137	0	%100
3	M2	X	-.091	-.091	0	%100
4	M2	Z	-.158	-.158	0	%100
5	M5	X	-.198	-.198	0	%100
6	M5	Z	-.343	-.343	0	%100
7	M6	X	-.792	-.792	0	%100
8	M6	Z	-1.372	-1.372	0	%100
9	M7	X	-.198	-.198	0	%100
10	M7	Z	-.343	-.343	0	%100
11	M6A	X	-.528	-.528	0	%100
12	M6A	Z	-.914	-.914	0	%100
13	M7A	X	-.553	-.553	0	%100
14	M7A	Z	-.957	-.957	0	%100
15	M23A	X	0	0	0	%100
16	M23A	Z	0	0	0	%100
17	M24	X	0	0	0	%100
18	M24	Z	0	0	0	%100
19	M38	X	-.316	-.316	0	%100
20	M38	Z	-.547	-.547	0	%100
21	M39A	X	-.528	-.528	0	%100
22	M39A	Z	-.914	-.914	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M40	X	-.553	-.553	0 %100
24	M40	Z	-.957	-.957	0 %100
25	M54	X	-.079	-.079	0 %100
26	M54	Z	-.137	-.137	0 %100
27	M55	X	-.365	-.365	0 %100
28	M55	Z	-.633	-.633	0 %100
29	M56	X	-.091	-.091	0 %100
30	M56	Z	-.158	-.158	0 %100
31	MP5A	X	-.263	-.263	0 %100
32	MP5A	Z	-.455	-.455	0 %100
33	MP1A	X	-.263	-.263	0 %100
34	MP1A	Z	-.455	-.455	0 %100
35	MP4A	X	-.263	-.263	0 %100
36	MP4A	Z	-.455	-.455	0 %100
37	MP3A	X	-.263	-.263	0 %100
38	MP3A	Z	-.455	-.455	0 %100
39	MP2A	X	-.318	-.318	0 %100
40	MP2A	Z	-.551	-.551	0 %100
41	MP5C	X	-.263	-.263	0 %100
42	MP5C	Z	-.455	-.455	0 %100
43	MP1C	X	-.263	-.263	0 %100
44	MP1C	Z	-.455	-.455	0 %100
45	MP4C	X	-.263	-.263	0 %100
46	MP4C	Z	-.455	-.455	0 %100
47	MP3C	X	-.263	-.263	0 %100
48	MP3C	Z	-.455	-.455	0 %100
49	MP2C	X	-.318	-.318	0 %100
50	MP2C	Z	-.551	-.551	0 %100
51	MP5B	X	-.263	-.263	0 %100
52	MP5B	Z	-.455	-.455	0 %100
53	MP1B	X	-.263	-.263	0 %100
54	MP1B	Z	-.455	-.455	0 %100
55	MP4B	X	-.263	-.263	0 %100
56	MP4B	Z	-.455	-.455	0 %100
57	MP3B	X	-.263	-.263	0 %100
58	MP3B	Z	-.455	-.455	0 %100
59	MP2B	X	-.318	-.318	0 %100
60	MP2B	Z	-.551	-.551	0 %100
61	M46	X	-.238	-.238	0 %100
62	M46	Z	-.413	-.413	0 %100
63	M47	X	0	0	0 %100
64	M47	Z	0	0	0 %100
65	M48	X	-.238	-.238	0 %100
66	M48	Z	-.413	-.413	0 %100
67	M70	X	0	0	0 %100
68	M70	Z	0	0	0 %100
69	M71	X	-.285	-.285	0 %100
70	M71	Z	-.493	-.493	0 %100
71	M72	X	-.285	-.285	0 %100
72	M72	Z	-.493	-.493	0 %100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M2	Y	-9.213	-9.213	0 2
2	M6	Y	-1.048	-4.938	0 2
3	M6	Y	-4.938	-8.828	2 4



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
4	M7	Y	-1.048	-4.938	0	2
5	M7	Y	-4.938	-8.828	2	4
6	M6A	Y	-3.825	-3.825	.037	7.421
7	M7A	Y	-1.061	-2.648	0	2.394
8	M7A	Y	-2.648	-3.718	2.394	4.787
9	M7A	Y	-3.718	-3.946	4.787	7.181
10	M7A	Y	-3.946	-3.675	7.181	9.574
11	M7A	Y	-3.675	-2.685	9.574	11.968
12	M7A	Y	-2.685	-1.148	11.968	14.362
13	M5	Y	-1.048	-4.938	0	2
14	M5	Y	-4.938	-8.828	2	4
15	M23A	Y	-3.825	-3.825	.037	7.421
16	M24	Y	-1.061	-2.648	0	2.394
17	M24	Y	-2.648	-3.718	2.394	4.787
18	M24	Y	-3.718	-3.946	4.787	7.181
19	M24	Y	-3.946	-3.675	7.181	9.574
20	M24	Y	-3.675	-2.685	9.574	11.968
21	M24	Y	-2.685	-1.148	11.968	14.362
22	M55	Y	-9.213	-9.213	1.178e-7	2
23	M39A	Y	-3.825	-3.825	.037	7.421
24	M40	Y	-1.061	-2.648	0	2.394
25	M40	Y	-2.648	-3.718	2.394	4.787
26	M40	Y	-3.718	-3.946	4.787	7.181
27	M40	Y	-3.946	-3.675	7.181	9.574
28	M40	Y	-3.675	-2.685	9.574	11.968
29	M40	Y	-2.685	-1.148	11.968	14.362
30	M56	Y	-9.213	-9.213	0	2

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M2	Y	-20.268	-20.268	0	2
2	M6	Y	-2.307	-10.864	0	2
3	M6	Y	-10.864	-19.421	2	4
4	M7	Y	-2.307	-10.864	0	2
5	M7	Y	-10.864	-19.421	2	4
6	M6A	Y	-8.415	-8.415	.037	7.421
7	M7A	Y	-2.335	-5.826	0	2.394
8	M7A	Y	-5.826	-8.18	2.394	4.787
9	M7A	Y	-8.18	-8.682	4.787	7.181
10	M7A	Y	-8.682	-8.086	7.181	9.574
11	M7A	Y	-8.086	-5.906	9.574	11.968
12	M7A	Y	-5.906	-2.527	11.968	14.362
13	M5	Y	-2.307	-10.864	0	2
14	M5	Y	-10.864	-19.421	2	4
15	M23A	Y	-8.415	-8.415	.037	7.421
16	M24	Y	-2.335	-5.826	0	2.394
17	M24	Y	-5.826	-8.18	2.394	4.787
18	M24	Y	-8.18	-8.682	4.787	7.181
19	M24	Y	-8.682	-8.086	7.181	9.574
20	M24	Y	-8.086	-5.906	9.574	11.968
21	M24	Y	-5.906	-2.527	11.968	14.362
22	M55	Y	-20.268	-20.268	1.178e-7	2
23	M39A	Y	-8.415	-8.415	.037	7.421
24	M40	Y	-2.335	-5.826	0	2.394
25	M40	Y	-5.826	-8.18	2.394	4.787
26	M40	Y	-8.18	-8.682	4.787	7.181



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
27	M40	Y	-8.682	-8.086	7.181	9.574
28	M40	Y	-8.086	-5.906	9.574	11.968
29	M40	Y	-5.906	-2.527	11.968	14.362
30	M56	Y	-20.268	-20.268	0	2

Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N16	N15	N17	N18	Y	Two Way	-.005
2	N18	N17	N10	N14	Y	Two Way	-.005
3	N14	N10	N15	N16	Y	Two Way	-.005

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N16	N15	N17	N18	Y	Two Way	-.011
2	N18	N17	N10	N14	Y	Two Way	-.011
3	N14	N10	N15	N16	Y	Two Way	-.011

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

Member	Shape	Code Check	L...	LC	Shear C...	Loc.....	phi*P...	phi*P...	phi*M...	phi*M.....	Eqn		
1	M24	L4X4X6	.472	7...	3	.748	7.1...	y 9	13201..	92664	4.398	7.908	... H2-1
2	M40	L4X4X6	.476	7...	11	.748	7.1...	y 5	13201..	92664	4.398	7.919	... H2-1
3	M7A	L4X4X6	.455	7...	6	.709	7.1...	y 1	13201..	92664	4.398	8.092	... H2-1
4	M1	HSS4X4...	.432	0	18	.191	0	z 4	13887..	139518	16.181	16.181	... H1-1b
5	M38	HSS4X4...	.454	0	14	.184	0	z 12	13887..	139518	16.181	16.181	... H1-1b
6	M54	HSS4X4...	.458	0	22	.182	0	z 9	13887..	139518	16.181	16.181	... H1-1b
7	MP4B	PIPE_2.0	.375	4...	9	.125	4.1...	10	23808..	32130	1.872	1.872	... H1-1b
8	MP2B	PIPE_2.0	.392	4...	12	.123	2.0...	11	20866..	32130	1.872	1.872	... H1-1b
9	MP2C	PIPE_2.0	.404	4...	5	.123	2.0...	3	20866..	32130	1.872	1.872	... H1-1b
10	MP4C	PIPE_2.0	.360	4...	1	.121	4.1...	2	23808..	32130	1.872	1.872	... H1-1b
11	MP4A	PIPE_2.0	.370	4...	5	.121	4.1...	6	23808..	32130	1.872	1.872	... H1-1b
12	MP2A	PIPE_2.0	.403	4...	9	.119	2.0...	7	20866..	32130	1.872	1.872	... H1-1b
13	MP5A	PIPE_2.0	.339	3...	5	.118	3.75	6	23808..	32130	1.872	1.872	... H1-1b
14	MP5B	PIPE_2.0	.356	3...	10	.117	3.75	10	23808..	32130	1.872	1.872	... H1-1b
15	MP5C	PIPE_2.0	.341	3...	2	.110	3.75	2	23808..	32130	1.872	1.872	... H1-1b
16	MP1C	PIPE_2.0	.316	3...	5	.110	3.75	4	23808..	32130	1.872	1.872	... H1-1b
17	MP1A	PIPE_2.0	.308	3...	9	.108	3.75	8	23808..	32130	1.872	1.872	... H1-1b
18	MP3A	PIPE_2.0	.437	4...	10	.108	4.8...	10	12886..	32130	1.872	1.872	... H1-1b
19	MP3B	PIPE_2.0	.437	4...	3	.103	4.8...	2	12886..	32130	1.872	1.872	... H1-1b
20	MP1B	PIPE_2.0	.302	3...	1	.103	3.75	12	23808..	32130	1.872	1.872	... H1-1b
21	MP3C	PIPE_2.0	.419	4...	6	.103	4.8...	6	12886..	32130	1.872	1.872	... H1-1b
22	M46	PIPE_2.5	.192	6...	20	.097	11...	7	12879..	50715	3.596	3.596	... H1-1b
23	M48	PIPE_2.5	.204	6...	24	.089	11...	10	12879..	50715	3.596	3.596	... H1-1b
24	M47	PIPE_2.5	.203	6...	16	.088	11...	3	12879..	50715	3.596	3.596	... H1-1b
25	M2	HSS4.5...	.184	0	19	.070	0	y 4	15691..	158976	20.907	20.907	... H1-1b
26	M55	HSS4.5...	.195	0	15	.067	0	y 12	15691..	158976	20.907	20.907	... H1-1b
27	M56	HSS4.5...	.194	0	23	.067	0	y 8	15691..	158976	20.907	20.907	... H1-1b
28	M72	L3X3X4	.384	0	3	.051	0	y 10	44074..	46656	1.688	3.756	... H2-1
29	M70	L3X3X4	.378	0	11	.047	0	y 5	44074..	46656	1.688	3.756	... H2-1
30	M71	L3X3X4	.351	0	7	.046	0	y 2	44074..	46656	1.688	3.756	... H2-1
31	M39A	L4X4X6	.317	3...	24	.023	3.7...	z 13	46465..	92664	4.398	9.024	... H2-1
32	M23A	L4X4X6	.312	3...	14	.023	3.7...	z 13	46465..	92664	4.398	9.001	... H2-1
33	M6A	L4X4X6	.297	3...	20	.022	3.7...	z 17	46465..	92664	4.398	9.019	... H2-1
34	M7	LL4x4x6...	.093	0	20	.014	4	y 30	15917..	185328	17.28	12.066	... H1-1b



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

Member	Shape	Code Check	L...	LC	Shear C...	Loc.....	phi*P...	phi*P...	phi*M...	phi*M...	Eqn	
35	M6	LL4x4x6...	.094	0	24	.013	4	y	22	15917..185328	17.28	12.066 ... H1-1b
36	M5	LL4x4x6...	.096	0	16	.013	4	y	14	15917..185328	17.28	12.066 ... H1-1b

Envelope Joint Reactions

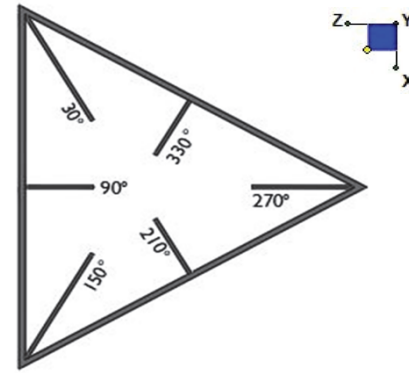
Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC	
1	N2	max	2882.413	11	2759.42	19	1034.641	1	-642	1	1.879	11	1.659	4
2		min	-2861.067	5	462.944	1	-1094.429	7	-6.696	19	-1.895	5	-1.591	10
3	N77	max	1744.666	10	2899.789	15	2663.48	1	3.813	13	1.869	7	6.075	16
4		min	-1804.457	4	437.254	9	-2649.35	7	-212	7	-1.884	1	.26	10
5	N109	max	1972.096	10	2894.476	23	2383.92	3	3.686	13	2.022	3	-.325	4
6		min	-1930.758	4	436.726	5	-2333.311	9	-.29	7	-2.04	9	-6.129	22
7	Totals:	max	6406.252	10	8086.573	17	5994.105	1						
8		min	-6406.25	4	3549.018	11	-5994.112	7						



I. Mount-to-Tower Connection Check

RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N2	90
N77	210
N109	330



TYPICAL PLATFORM

Tower Connection Bolt Checks

Any moment resistance?:

Bolt Quantity per Reaction:

d_x (in) (Delta X of typ. bolt config. sketch) :

d_y (in) (Delta Y of typ. bolt config. sketch) :

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength (kips):

Required Shear Strength (kips):

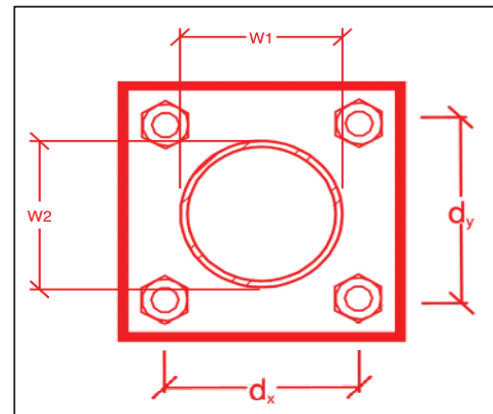
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
5
6
A325N
0.75
28.6
10.9
29.8
17.9
23.9%*
15.2%



*Note: Tension reduction not required if tension or shear capacity < 30%

Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:

Plate Width (in):

Plate Height (in):

W1 (in):

W2 (in):

Fy (ksi, plate):

t_{plate} (in):

Weld Size (1/16 in):

$\Phi \cdot R_n$ (kip/in):

Required Weld Strength (kip/in):

Plate Bending Capacity:

Weld Capacity:

Rect
8.25
10
4
4
36
0.75
6
8.35
4.00
38.6%
47.9%

Max Plate Bending Strengths

$M_{u_{xx}}$ (kip-in) :	14.1
$\Phi \cdot M_{n_{xx}}$ (kip-in) :	37.6
$M_{u_{yy}}$ (kip-in) :	0.5
$\Phi \cdot M_{n_{yy}}$ (kip-in) :	45.6

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

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

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

Base Requirements:

- Any special photos outside of the standard requirements will be indicated on the drawings
- Provide “as built drawings” showing contractor’s name, preparer’s signature, and date. Any deviations from the drawings (proposed modification) must be shown.
- Notation that all hardware was properly installed, and the existing hardware was inspected for any issues.
- Verification that loading is as communicated in the modification drawings. NOTE If loading is different than what is conveyed in the modification drawing contact Maser Consulting Connecticut immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded to <https://pmi.vzwsmart.com> as depicted on the drawings

Photo Requirements:

- Base and “During Installation Photos”
 - Base pictures include
 - Photo of Gate Signs showing the tower owner, site name, and number
 - Photo of carrier shelter showing the carrier site name and number if available
 - Photos of the galvanizing compound and/or paint used (if applicable), clearly showing the label and name
 - “During Installation Photos if provided - must be placed only in this folder
- Photos taken at ground level
 - Overall tower structure before and after installation of the modifications
 - Photos of the appropriate mount before and after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed

- Photos taken at Mount Elevation
 - Photos showing each individual sector before and also after installation of modifications. Each entire sector must be in one photo to show in the inter-connection of members.
 - These photos should also certify that the placement and geometry of the equipment on the mount is as depicted on the sketch and table in the mount analysis
 - Close-up photos of each installed modification per the modification drawings; pictures should also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
 - Photos showing the measurements of the installed modification member sizes (i.e. lengths, widths, depths, diameters, thicknesses)
 - Photos showing the elevation or distances of the installed modifications from the appropriate reference locations shown in the modification drawings
 - Photos showing the installed modifications onto the tower with tape drop measurements (if applicable) (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, a tape drop measurement shall be provided before the elevation change
 - Photos showing the safety climb wire rope above and below the mount prior to modification.
 - Photos showing the climbing facility and safety climb if present.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by Maser Consulting Connecticut.
 - If the drawings are as specified on the drawings
 - The contractor should provide the packing list or the materials utilized to perform the mount modification
 - If an equivalent is utilized
 - It is required that the Maser Consulting Connecticut certification of such is included in the contractor submission package. There may be an additional charge for this certification if the equivalent submission doesn't meet specifications as prescribed in the drawings.
- The contractor must certify that the materials meet these specifications by one of these methods.
 - The Material utilized was as specified on the Maser Consulting Connecticut Mount Modification Drawings and included in the Material certification folder is a packing list or invoice for these materials
 - The material utilized was an "equivalent" and included as part of the contractor submission is the Maser Consulting Connecticut certification, invoices, or specifications validating accepted status

Certifying Individual: Company _____

Name _____

Signature _____

Antenna & equipment placement and Geometry Confirmation:

- The contractor must certify that the antenna & equipment placement and geometry is in accordance with the antenna placement diagrams as included in this mount analysis.
- The contractor certifies that the photos support and the equipment on the mount is as depicted on the antenna placement diagrams as included in this mount analysis.
- The contractor notes that the equipment on the mount is not in accordance with the antenna placement diagrams and has accordingly marked up the diagrams or provided a diagram outlining the differences.

Certifying Individual: Company _____

Name _____


















Signature _____

Special Instructions / Validation as required from the MA or Mod Drawings:

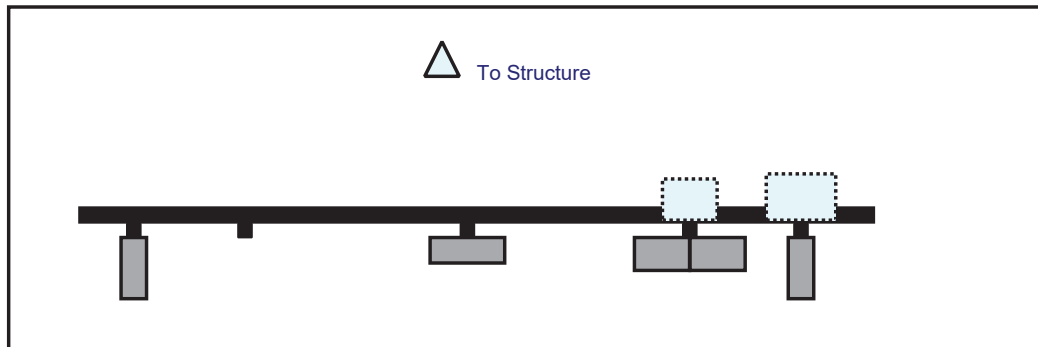
Issue:

Response:

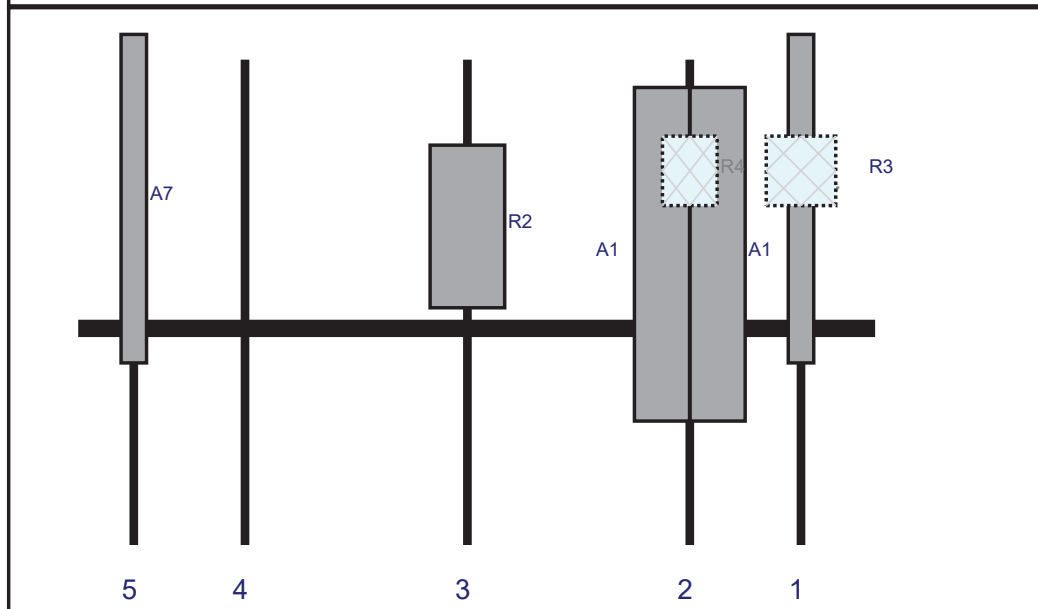
Schedule A – Photo & Document File Structure

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

Plan View

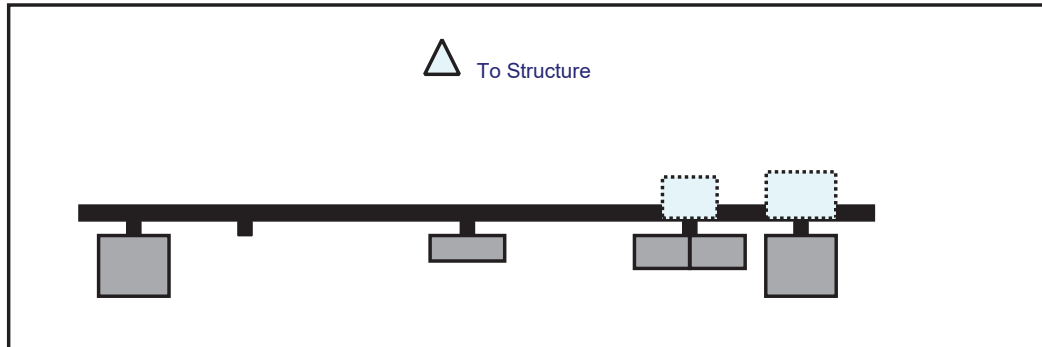


Front View
Looking at Structure

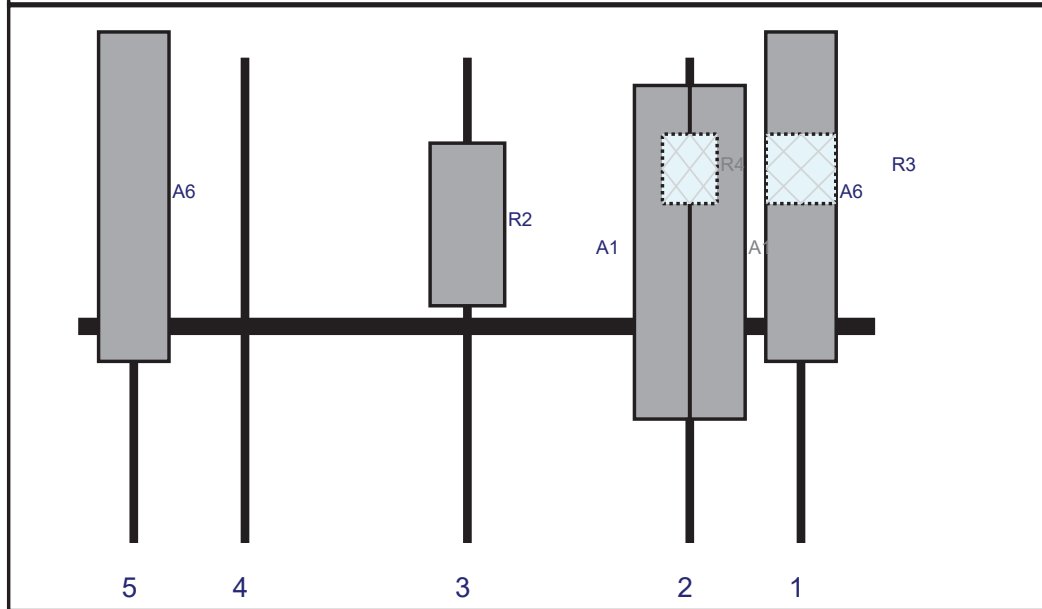


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A7	LPA-80080-6CF-EDIN-2	70.9	5.5	156	1	a	Front	30	0	Retained	03/24/2021
R3	RF4439d-25A	15	15	156	1	a	Behind	24	0	Added	
A1	NHH-65B-R2B	72	11.9	132	2	a	Front	42	6	Added	
A1	NHH-65B-R2B	72	11.9	132	2	b	Front	42	-6	Added	
R4	RF440d-13A	15	11.8	132	2	a	Behind	24	0	Added	
R2	MT6407-77A	35.1	16.1	84	3	a	Front	36	0	Added	
A7	LPA-80080-6CF-EDIN-2	70.9	5.5	12	5	a	Front	30	0	Retained	03/24/2021

Plan View

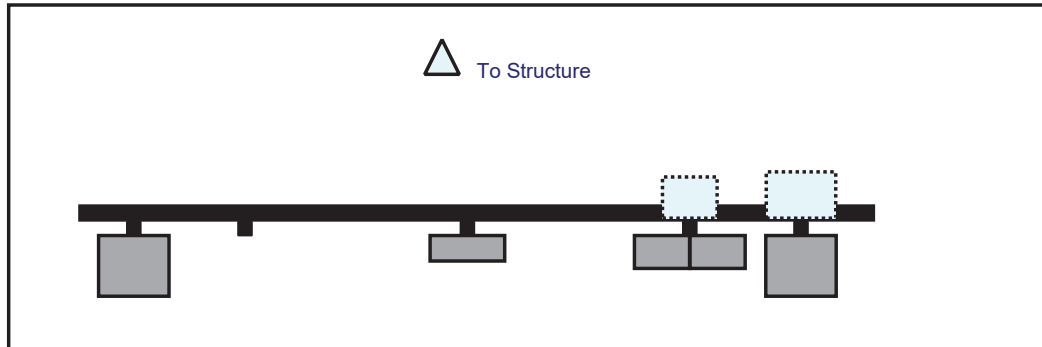


Front View
Looking at Structure

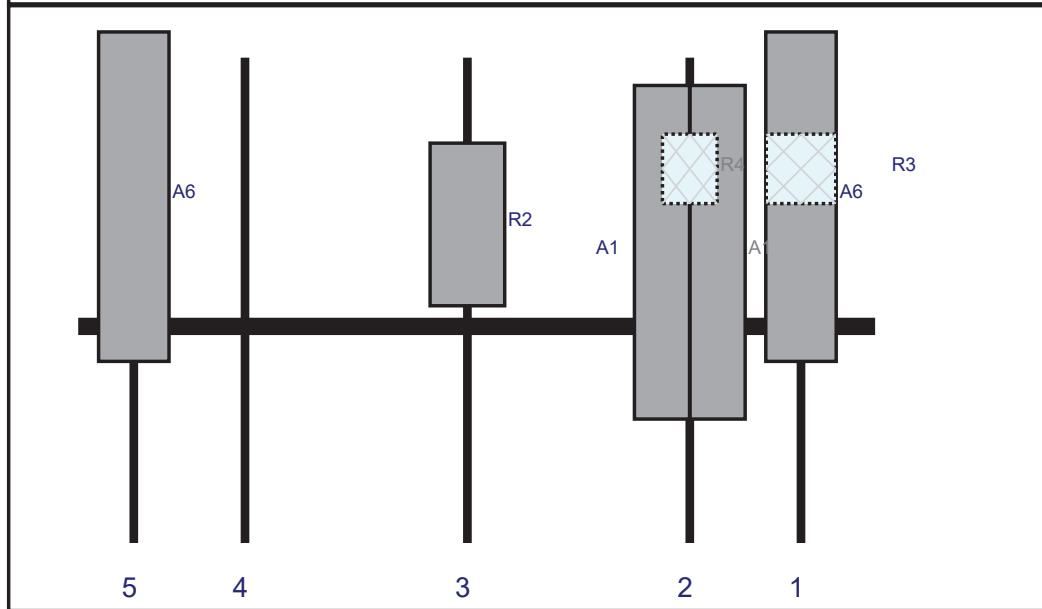


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LPA-80063-6CF-EDIN-X	71.1	15.2	156	1	a	Front	30	0	Retained	03/24/2021
R3	RF4439d-25A	15	15	156	1	a	Behind	24	0	Added	
A1	NHH-65B-R2B	72	11.9	132	2	a	Front	42	6	Added	
A1	NHH-65B-R2B	72	11.9	132	2	b	Front	42	-6	Added	
R4	RF440d-13A	15	11.8	132	2	a	Behind	24	0	Added	
R2	MT6407-77A	35.1	16.1	84	3	a	Front	36	0	Added	
A6	LPA-80063-6CF-EDIN-X	71.1	15.2	12	5	a	Front	30	0	Retained	03/24/2021

Plan View



Front View
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A6	LPA-80063-6CF-EDIN-X	71.1	15.2	156	1	a	Front	30	0	Retained	03/24/2021
R3	RF4439d-25A	15	15	156	1	a	Behind	24	0	Added	
A1	NHH-65B-R2B	72	11.9	132	2	a	Front	42	6	Added	
A1	NHH-65B-R2B	72	11.9	132	2	b	Front	42	-6	Added	
R4	RF440d-13A	15	11.8	132	2	a	Behind	24	0	Added	
R2	MT6407-77A	35.1	16.1	84	3	a	Front	36	0	Added	
A6	LPA-80063-6CF-EDIN-X	71.1	15.2	12	5	a	Front	30	0	Retained	03/24/2021

Maser Consulting Connecticut

Subject

TIA-222-H Usage

Site Information

Site ID: 468903-VZW / MONTVILLE NW CT
Site Name: MONTVILLE NW CT
Carrier Name: Verizon Wireless
Address: 557 Route 82
Montville, Connecticut 06370
New London County
Latitude: 41.505628°
Longitude: -72.197497°

Structure Information

Tower Type: Monopole
Mount Type: 14.00-Ft Platform

To Whom It May Concern,

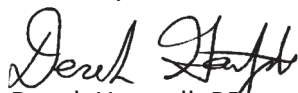
We respectfully submit the above referenced Antenna Mount Structural Analysis report in conformance with ANSI/TIA-222-H, Structural Standard for Antenna Supporting Structures and Antennas and Small Wind Turbine Support Structures.

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

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

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

Sincerely,



Derek Hartzell, PE
Technical Specialist

Exhibit F

Power Density/RF Emissions Report

Site Name: **MONTVILLE NW CT**
 Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density	Maximum Permissible Exposure*	Fraction of MPE
	(MHz)		(watts)	(watts)	(feet)	(mW/cm ²)	(mW/cm ²)	(%)
VZW 700	751	4	641	2565	167	0.0033	0.5007	0.66%
VZW CDMA	877.26	2	499	998	167	0.0013	0.5848	0.22%
VZW Cellular	874	4	690	2761	167	0.0036	0.5827	0.61%
VZW PCS	1977.5	4	1466	5862	167	0.0076	1.0000	0.76%
VZW AWS	2120	4	1626	6502	167	0.0084	1.0000	0.84%
VZW CBAND	3730.08	4	6531	26125	167	0.0337	1.0000	3.37%

Total Percentage of Maximum Permissible Exposure 6.45%

*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IEEE C95.1-1992

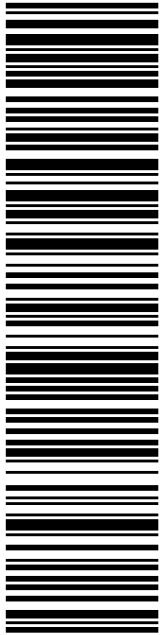
**Calculation includes a -10 dB Off Beam Antenna Pattern Adjustment pursuant to Attachments B and C of the Siting Council's November 10, 2015 Memorandum for Exempt Modification filings

MHz = Megahertz
 mW/cm² = milliwatts per square centimeter
 ERP = Effective Radiated Power

Absolute worst case maximum values used.

Exhibit F

Recipient Mailings



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CROWN CASTLE
4545 E RIVER RD
STE 320
W HENRIETTA NY 14586-9024

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CROWN CASTLE
4545 E RIVER RD
STE 320
W HENRIETTA NY 14586-9024

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R013



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Trans. #: 547509848	Priority Mail® Postage: \$8.70
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Ship Date: 11/03/2021	
Expected Delivery Date: 11/06/2021	

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

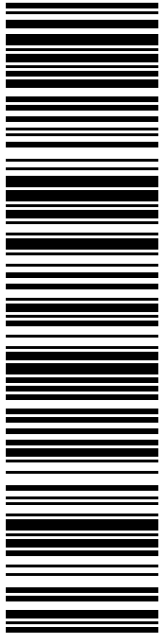
Ref#: CR-876371

To: RICH ZAJAC
 CROWN CASTLE
 4545 E RIVER RD
 STE 320
 W HENRIETTA NY 14586-9024

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RONALD K MCDANIEL
310 NORWICH NEW LONDON TPKE
UNCASVILLE CT 06382-2523

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Trans. #: 547509848	Priority Mail® Postage: \$8.70
Print Date: 11/03/2021	Total: \$8.70
Ship Date: 11/03/2021	
Expected Delivery Date: 11/06/2021	

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

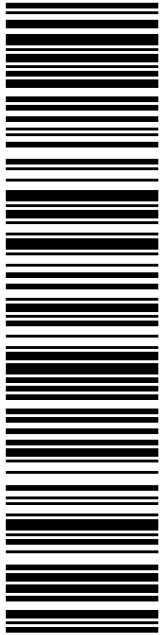
Ref#: CR-876371

To: RONALD K MCDANIEL
 310 NORWICH NEW LONDON TPKE
 UNCASVILLE CT 06382-2523

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Expected Delivery Date: 11/06/21
Ref#: CR-876371
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R010

SHIP TO: ELIZABETH BURDICK
PLANNING DIRECTOR-TOWN OF LEDYARD
741 COLONEL LEDYARD HWY
LEDYARD CT 06339-1511

DEBORAH CHASE
NORTHEAST SITE SOLUTIONS
420 MAIN ST
STE 1
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Trans. #: 547509848	Priority Mail® Postage: \$8.70
Print Date: 11/03/2021	Total: \$8.70
Ship Date: 11/03/2021	
Expected Delivery Date: 11/06/2021	


From: DEBORAH CHASE Ref#: CR-876371
NORTHEAST SITE SOLUTIONS
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STE 1
STURBRIDGE MA 01566-1359

To: ELIZABETH BURDICK
PLANNING DIRECTOR-TOWN OF LEDYARD
741 COLONEL LEDYARD HWY
LEDYARD CT 06339-1511

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R022

SHIP TO:
 CAROLYN BESADE
 557 ROUTE 82
 OAKDALE CT 06370-1131

USPS TRACKING #



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USPS TRACKING # :
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Trans. #: 547509848	Priority Mail® Postage: \$8.70
Print Date: 11/03/2021	Total: \$8.70
Ship Date: 11/03/2021	
Expected Delivery Date: 11/06/2021	

From: DEBORAH CHASE
 NORTHEAST SITE SOLUTIONS
 420 MAIN ST
 STE 1
 STURBRIDGE MA 01566-1359
 Ref#: CR-876371

To: CAROLYN BESADE
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 OAKDALE CT 06370-1131

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FARMINGTON, CT 06032-9998
(800)275-8777

11/04/2021 11:37 AM

Product	Qty	Unit Price	Price
Prepaid Mail West Henrietta, NY 14586 Weight: 0 lb 2.00 oz Acceptance Date: Thu 11/04/2021 Tracking #: 9405 5036 9930 0051 7494 38	1		\$0.00
Prepaid Mail Ledyard, CT 06339 Weight: 0 lb 8.00 oz Acceptance Date: Thu 11/04/2021 Tracking #: 9405 5036 9930 0051 7494 69	1		\$0.00
Prepaid Mail Uncasville, CT 06382 Weight: 0 lb 8.10 oz Acceptance Date: Thu 11/04/2021 Tracking #: 9405 5036 9930 0051 7494 45	1		\$0.00
Prepaid Mail Oakdale, CT 06370 Weight: 0 lb 8.00 oz Acceptance Date: Thu 11/04/2021 Tracking #: 9405 5036 9930 0051 7494 76	1		\$0.00
Grand Total:			\$0.00