Robinson+Cole

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

Also admitted in Massachusetts
and New York

May 15, 2023

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

Re: **Request of Cellco Partnership d/b/a Verizon Wireless for an Order to Approve the Shared Use of an Existing Tower at 85 Paper Mill Road, Woodbury, Connecticut**

Dear Attorney Bachman:

Pursuant to Connecticut General Statutes ("C.G.S.") §16-50aa, as amended, Cellco Partnership d/b/a Verizon Wireless ("Cellco") hereby requests an order from the Siting Council ("Council") to approve the shared use of an existing 150-foot monopole telecommunications tower located at 85 Paper Mill Road in Woodbury, CT (the "Property"). The Property is owned by Jodie A. Bryan. The tower was approved by the Council in Docket No. 375 on August 27, 2009 for New Cingular Wireless PCS, LLC ("AT&T"). Crown Castle ("Crown") currently owns the tower. A copy of the Docket No. 375 Decision and Order is included in Attachment 1.

Cellco requests that the Council find that the proposed shared use of the existing tower satisfies the criteria of C.G.S § 16-50aa and issue an order approving this request. A copy of this filing is being sent to Woodbury's First Selectman Barbara Perkins and Town Planner William Agresta.

Background

Cellco is licensed by the Federal Communications Commission ("FCC") to provide wireless services throughout the State of Connecticut. Cellco and Crown have agreed to the proposed shared use of the 85 Paper Mill Road tower pursuant to mutually acceptable terms and conditions. Likewise, Crown and Cellco have agreed to the proposed installation of equipment on the ground within the existing fenced compound area. Crown has authorized Cellco to apply for all permits and approvals that may be required for its shared use. (*See* Attachment 2).

Cellco proposes to install nine (9) antennas and six (6) remote radio heads ("RRHs") on a new antenna platform at a height of 118 feet above ground level ("AGL"). Cellco will also install its radio equipment, a battery cabinet and a 30-kW diesel-fueled generator within the existing fenced compound. Included in Attachment 3 are Cellco's project plans showing the location of Cellco's proposed facility improvements and a tower elevation drawing. Attachment 4 contains specifications for Cellco's proposed antennas, RRHs and generator.

C.G.S. § 16-50aa(c)(1) provides that, upon written request for approval of a proposed shared use, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns, the council shall issue an order approving such shared use." Cellco respectfully submits that the shared use of the tower satisfies these criteria.

A. Technical Feasibility. The existing tower is structurally capable of supporting Cellco's antennas, RRHs, antenna platform and related equipment. The proposed shared use of the existing tower is, therefore, technically feasible. A Structural Analysis Report ("SA") dated February 1, 2023, prepared by Crown, confirms that the tower can support Cellco's proposed shared use. A separate Mount Analysis Report ("MA"), dated December 25, 2022, prepared by Colliers Engineering + Design CT, P.C. was also prepared for the proposed antenna and RRH mount assembly. A copy of the SA is included in Attachment 5. A copy of the MA is included in Attachment 6.

B. Legal Feasibility. Under C.G.S. § 16-50aa, the Council has been authorized to issue orders approving the shared use of an existing tower, such as the existing tower at 85 Paper Mill Road. This authority complements the Council's prior-existing authority under C.G.S. § 16-50p to issue orders approving the construction of new towers that are subject to the Council's jurisdiction. In addition, §16-50x(a) directs the Council to "give such consideration to other state laws and municipal regulations as it shall deem appropriate" in ruling on requests for the shared use of existing tower facilities. Under the statutory authority vested in the Council, an order by

the Council approving the requested shared use would permit the Applicant to obtain a building permit for the proposed installations.

C. Environmental Feasibility. The proposed shared use of the existing tower would have minimal environmental effects, for the following reasons:

1. The proposed installation of nine (9) antennas and six (6) RRHs on a new antenna platform at a height of 118 feet AGL on the existing 150-foot monopole tower would have an insignificant incremental visual impact on the area around the Property. As mentioned above, Cellco's ground-based equipment will be located within the existing fenced compound. Cellco's shared use of the existing tower would, therefore, not cause any significant change or alteration in the physical or environmental characteristics of the existing facility, the Property or the surrounding area.

2. Noise associated with Cellco's proposed facility will comply with State and local noise standards. Noise associated with Cellco's backup generator is exempt from state and local noise standards.

3. Operation of all existing and proposed antennas at this site would not exceed the RF emissions standards adopted by the Federal Communications Commission ("FCC"). Included in Attachment 7 of this filing is a C-Squared Systems Calculated Radio Frequency Emissions Report that demonstrates that the Cellco, AT&T, T-Mobile and recently approved Dish antennas will operate well within the FCC's safety standards.

4. Under ordinary operating conditions, the proposed installation would not require the use of any water or sanitary facilities and would not generate air emissions or discharges to water bodies or sanitary facilities. After construction is complete the proposed installations would not generate any increased traffic to the facility other than periodic maintenance visits to the cell site.

The proposed shared use of the existing facility would, therefore, have a minimal environmental effect, and is environmentally feasible.

D. **Economic Feasibility.** As previously mentioned, Cellco has entered into an agreement with Crown for the shared use of the existing tower subject to mutually agreeable terms. The proposed tower sharing is, therefore, economically feasible.

E. **Public Safety Concerns.** As discussed above, the tower is structurally capable of supporting Cellco's antennas, RRHs, antenna platform and tower-mounted equipment. Cellco is not aware of any public safety concerns relative to the proposed sharing of the existing the Paper Mill Road tower. In fact, the provision of new and improved wireless service through Cellco's shared use of the tower would enhance the safety and welfare of area residents and members of the general public living in and traveling through Woodbury.

Conclusion

A Certificate of Mailing verifying that this filing was sent to municipal officials, the Property owners, and Crown is included in Attachment 8.

For the reasons discussed above, the proposed shared use of the existing tower at the Property satisfies the criteria stated in C.G.S. § 16-50aa and advances the General Assembly's and the Council's goal of preventing the unnecessary proliferation of towers in Connecticut. The Applicant, therefore, respectfully requests that the Council issue an order approving the proposed shared use.

Thank you for your consideration of this matter.

Very truly yours,

Kenneth C. Baldwin

Enclosures
Copy to:
Barbara Perkins, First Selectman
William Agresta, Town Planner
Jodie A. Bryan, Property Owner
Jeff Barbadora, Crown Castle
Tim Parks, Verizon Wireless

ATTACHMENT 1

DOCKET NO. 375 – New Cingular Wireless PCS, LLC application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 85 Paper Mill Road, Woodbury, Connecticut.	}	Connecticut Siting Council August 27, 2009

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the construction, operation, and maintenance of a telecommunications facility, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife are not disproportionate, either alone or cumulatively with other effects, when compared to need, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need, as provided by General Statutes § 16-50k, be issued to New Cingular Wireless PCS, LLC, hereinafter referred to as the Certificate Holder, for a telecommunications facility located at 85 Paper Mill Road, Woodbury, Connecticut.

The facility shall be constructed, operated, and maintained substantially as specified in the Council's record in this matter, and subject to the following conditions:

1. The tower shall be constructed as a monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of the Certificate Holder and other entities, both public and private, but such tower shall not exceed a height of 150 feet above ground level.

2. The Certificate Holder shall prepare a Development and Management (D&M) Plan for this site in compliance with Sections 16-50j-75 through 16-50j-77 of the Regulations of Connecticut State Agencies. Prior to the submission of the D&M Plan to the Council, the Certificate Holder shall discuss and resolve issues pertaining to the existing driveway that serves the site property with the Town of Woodbury. Once the driveway issues are resolved, the D&M Plan shall be served on the Town of Woodbury for comment, and all parties and intervenors as listed in the service list, and submitted to and approved by the Council prior to the commencement of facility construction and shall include:
    a) a final site plan(s) of site development to include specifications for the tower, tower foundation, antennas, equipment compound, radio equipment, access road, utility line, and landscaping; and
    b) construction plans for site clearing, grading, landscaping, water drainage, and erosion and sedimentation controls consistent with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control, as amended.

3. The Certificate Holder shall, prior to the commencement of operation, provide the Council worst-case modeling of the electromagnetic radio frequency power density of all proposed entities' antennas at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin No. 65, August 1997. The Certificate Holder shall ensure a recalculated report of the electromagnetic radio frequency power density be submitted to the Council if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.

4. Upon the establishment of any new State or federal radio frequency standards applicable to frequencies of this facility, the facility granted herein shall be brought into compliance with such standards.

5. The Certificate Holder shall permit public or private entities to share space on the proposed tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

6. The Certificate Holder shall provide reasonable space on the tower for no compensation for any Town of Woodbury public safety services (police, fire and medical services), provided such use can be accommodated and is compatible with the structural integrity of the tower.

7. Unless otherwise approved by the Council, if the facility authorized herein is not fully constructed and providing wireless services within eighteen months from the date of the mailing of the Council's Findings of Fact, Opinion, and Decision and Order (collectively called "Final Decision"), this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made. The time between the filing and resolution of any appeals of the Council's Final Decision shall not be counted in calculating this deadline.

8. Any request for extension of the time period referred to in Condition 7 shall be filed with the Council not later than 60 days prior to the expiration date of this Certificate and shall be served on all parties and intervenors, as listed in the service list, and the Town of Woodbury. Any proposed modifications to this Decision and Order shall likewise be so served.

9. If the facility ceases to provide wireless services for a period of one year, this Decision and Order shall be void, and the Certificate Holder shall dismantle the tower and remove all associated equipment or reapply for any continued or new use to the Council before any such use is made.

10. The Certificate Holder shall remove any nonfunctioning antenna, and associated antenna mounting equipment, within 60 days of the date the antenna ceased to function.

11. In accordance with Section 16-50j-77 of the Regulations of Connecticut State Agencies, the Certificate Holder shall provide the Council with written notice two weeks prior to the commencement of site construction activities. In addition, the Certificate Holder shall provide the Council with written notice of the completion of site construction and the commencement of site operation.

Pursuant to General Statutes § 16-50p, the Council hereby directs that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of issuance shall be published in the Republican-American and Voices.

By this Decision and Order, the Council disposes of the legal rights, duties, and privileges of each party named or admitted to the proceeding in accordance with Section 16-50j-17 of the Regulations of Connecticut State Agencies.

The parties and intervenors to this proceeding are:

Applicant	**Its Representative**
New Cingular Wireless PCS, LLC	Christopher B. Fisher, Esq. Cuddy & Feder LLP 445 Hamilton Avenue, 14th Floor White Plains, New York 10601

ATTACHMENT 2

CROWN CASTLE

9250 W Flagler St
Miami, FL 33174

Phone:
www.crowncastle.com

Crown Castle Letter of Authorization

CT - CONNECTICUT SITING COUNCIL
Connecticut Siting Council
TEN FRANKLIN SQUARE
NEW BRITAIN, CT 06051

Re: Application for Zoning/Building Permit
Crown Castle telecommunications site at: 85 PAPER MILL ROAD, WOODBURY, CT 06798

CCATT LLC ("Crown Castle") hereby authorizes VERIZON WIRELESS, including their Agent, to act as our Agent in the processing of all zoning applications, building permits and approvals through the CT - CONNECTICUT SITING COUNCIL for the existing wireless communications site described below:

Crown Site ID/Name:	**857528/WOODBURY PAPER MILL RD**
Customer Site ID:	**720892/WOODBURY NW CT**
Site Address:	**85 PAPER MILL ROAD, WOODBURY, CT 06798**
APN:	**WOOD-000040-000000-000032A-A000000**

Crown Castle

By: _____ Date: 4/4/23

Jerry Feathers
Real Estate Specialist

ATTACHMENT 3

verizon

VERIZON SITE NUMBER: 720892
VERIZON SITE NAME: WOODBURY NW CT
SITE TYPE: MONOPOLE
TOWER HEIGHT: 150'-0"

BUSINESS UNIT #: 857528
SITE ADDRESS: 85 PAPER MILL ROAD WOODBURY, CT 06798
COUNTY: LITCHFIELD
JURISDICTION: CONNECTICUT SITING COUNCIL

VERIZON INITIAL BUILD 16925401

SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:	WOODBURY PAPER MILL RD
SITE ADDRESS:	85 PAPER MILL ROAD WOODBURY, CT 06798
COUNTY:	LITCHFIELD
MAP/PARCEL #:	040-032A
AREA OF CONSTRUCTION:	EXISTING
LATITUDE:	41.573080°
LONGITUDE:	-73.227640°
LAT/LONG TYPE:	NAD83
GROUND ELEVATION:	528'
CURRENT ZONING:	OS 100 - OPEN SPACE DISTRICT 100
JURISDICTION:	CONNECTICUT SITING COUNCIL
OCCUPANCY CLASSIFICATION:	U
TYPE OF CONSTRUCTION:	IIB
A.D.A. COMPLIANCE:	FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER:	BRYAN JODIE A 754 PEACHTREE ST NE 16RL ATLANTA, GA 30308
TOWER OWNER:	CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317
CARRIER/APPLICANT:	VERIZON WIRELESS 20 ALEXANDER DRIVE, 2ND FLOOR WALLINGFORD, CT 06492
ELECTRIC PROVIDER:	CONNECTICUT LIGHT & POWER CO 1-800-286-2000
TELCO PROVIDER:	CROWN CASTLE 1-855-93-FIBER

PROJECT TEAM

A&E FIRM:	B+T GROUP 1717 S. BOULDER AVE. TULSA, OK 74119 MARVIN PHILLIPS MARVIN.PHILLIPS@BTGRP.COM
CROWN CASTLE USA INC. DISTRICT CONTACTS:	1500 CORPORATE DRIVE CANONSBURG, PA 15317 WILLIAM GATES - PROJECT MANAGER WILLIAM.GATES@CROWNCASTLE.COM JASON D'AMICO - CONSTRUCTION MANAGER JASON.DAMICO@CROWNCASTLE.COM
VERIZON CONTACT:	TIMOTHY PARKS TIMOTHY.PARKS@VERIZONWIRELESS.COM

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	OVERALL SITE PLAN
C-1.2	SITE PLAN
C-2	TOWER ELEVATION & ANTENNA PLANS
C-3	MOUNTING DETAILS
C-4	EQUIPMENT DETAILS
C-5	CONCRETE PAD DETAILS
C-6	GROUND EQUIPMENT PLAN
C-7	GENERATOR DETAILS
E-1	UTILITY PLAN
E-2	ONE LINE DIAGRAM & PANEL SCHEDULE
E-3	RISER DIAGRAM & TRENCH DETAILS
G-1	GROUNDING PLAN
G-2	GROUNDING DETAILS
G-3	GROUNDING DETAILS
REF1	CIRCUIT SCHEDULE

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

PROJECT DESCRIPTION

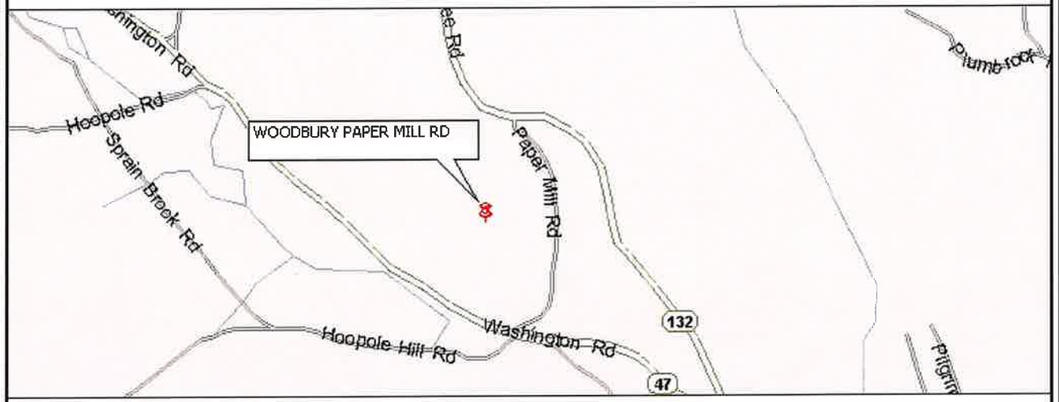
THE PURPOSE OF THIS PROJECT IS TO ENHANCE BROADBAND CONNECTIVITY AND CAPACITY TO THE EXISTING ELIGIBLE WIRELESS FACILITY.

TOWER SCOPE OF WORK:
- INSTALL (9) ANTENNAS
- INSTALL (6) RRHs
- INSTALL (1) OVP
- INSTALL (1) HYBRID CABLE
- INSTALL (1) PLATFORM MOUNT VALMONT - F3P-12 W/VALMONT - HRK12 SUPPORT RAIL KIT AND (12) 2" STD. x10'-6" LONG PIPES

GROUND SCOPE OF WORK:
- INSTALL (1) CONCRETE PAD W/ OUTDOOR EQUIPMENT CABINETS
- INSTALL (1) KOHLER - 30REOZK DIESEL GENERATOR
- INSTALL NEW CANOPY WITH NEW H-FRAME

GROUND SCOPE OF WORK:
- INSTALL NEW METER IN EXISTING METER BANK
- CONTRACTOR SHALL CALL POWER COMPANY TO START SERVICE ONCE INSPECTIONS ARE COMPLETE
- CONTRACTOR SHALL CONFORM SITE TO LOCAL UTILITY COMPANY CODES AND REGULATIONS
- CONTRACTOR SHALL PROVIDE AND SECURE ALL REQUIRED PERMITS, LICENSES, INSPECTIONS, APPROVALS AND PAYMENT OF ALL FEES

LOCATION MAP



DRIVING DIRECTIONS FROM VERIZON LOCAL OFFICE (278 OXFORD RD, OXFORD, CT 06478):
HEAD NORTH ON CT-67 W TOWARD OLD STATE RD 67 E, CONTINUE ONTO US-6 E/MAIN ST S, TURN LEFT ONTO CT-47 N/WASHINGTON RD, TURN LEFT ONTO CT-47 N, TURN RIGHT ONTO PAPER MILL RD, ARRIVE AT 857528.

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	2022 CONNECTICUT SBC/2021 IBC
MECHANICAL	2022 CONNECTICUT SBC/2021 IMC
ELECTRICAL	2022 CONNECTICUT SBC/2020 NEC

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS:	CROWN CASTLE
DATED:	2/1/23
MOUNT ANALYSIS:	B+T GROUP
DATED:	3/29/23
RFDS REVISION:	0
DATED:	6/15/22
ORDER ID:	623558
REVISION:	0

INSTALLER NOTES:

REFERENCE LATEST VERIZON CONSTRUCTION STANDARDS.

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

CALL CONNECTICUT ONE CALL
(800) 922-4455 CBYD.COM
CALL 2 WORKING DAYS BEFORE YOU DIG!

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER
SUITE 200
TULSA, OK 74119
PH: (918) 587 4630
btwe@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/16/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

SHEET NUMBER: T-1
REVISION: 5

CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:

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

GENERAL NOTES:

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

CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

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

GREENFIELD GROUNDING NOTES:

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

ELECTRICAL INSTALLATION NOTES:

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

CONDUCTOR COLOR CODE

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

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

APWA UNIFORM COLOR CODE:

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

ABBREVIATIONS:

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

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.

VERIZON SITE NUMBER:
720892

BU #: 857528
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

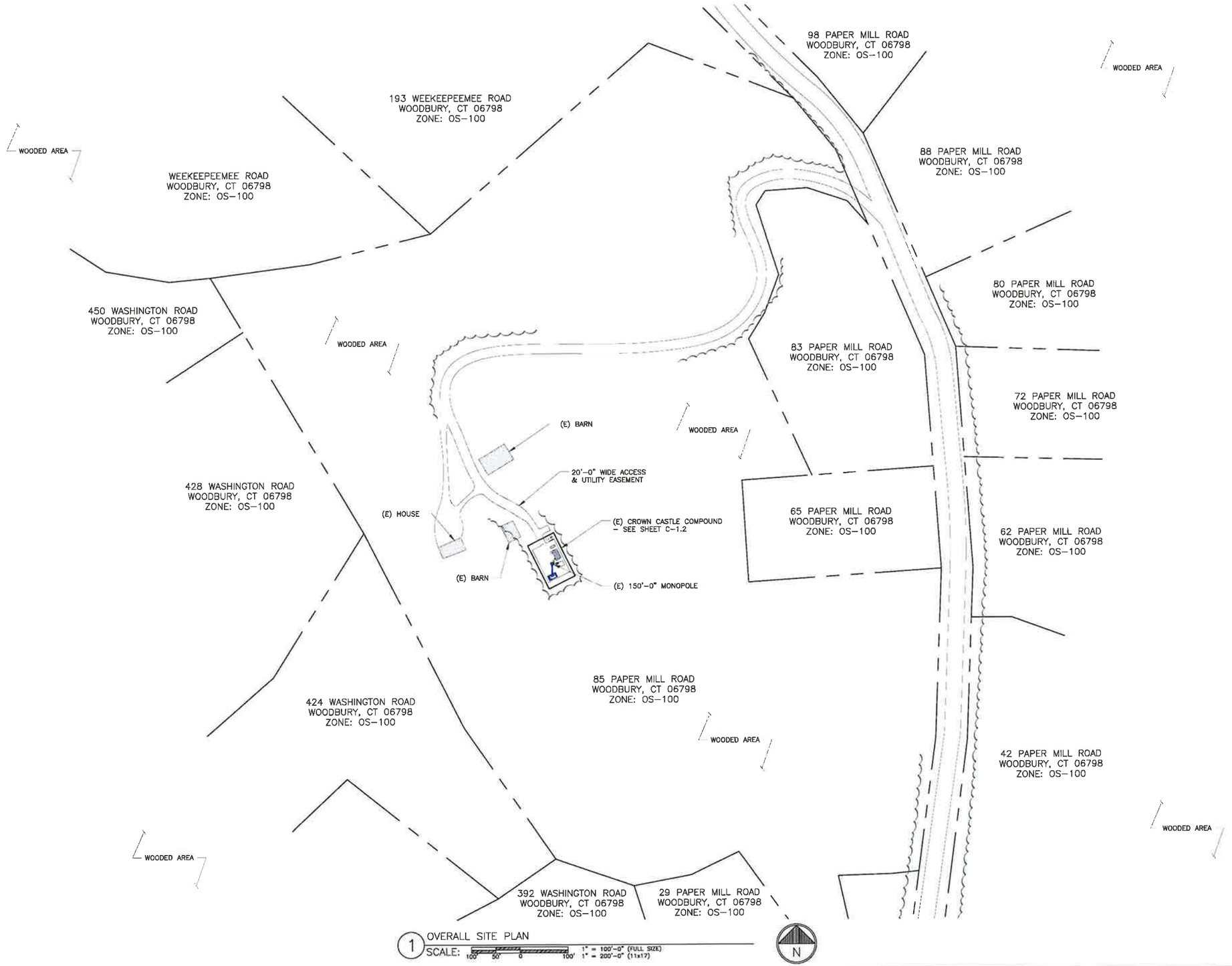
REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	YX	CONSTRUCTION	LR

5/12/23

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

SHEET NUMBER: **T-2**
REVISION: **5**



1 OVERALL SITE PLAN
SCALE: 100' 50' 0 100' 1" = 100'-0" (FULL SIZE) 1" = 200'-0" (11x17)

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER,
SUITE 200
TULSA, OK 74119
PH: (918) 587-4630
btvo@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	5/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

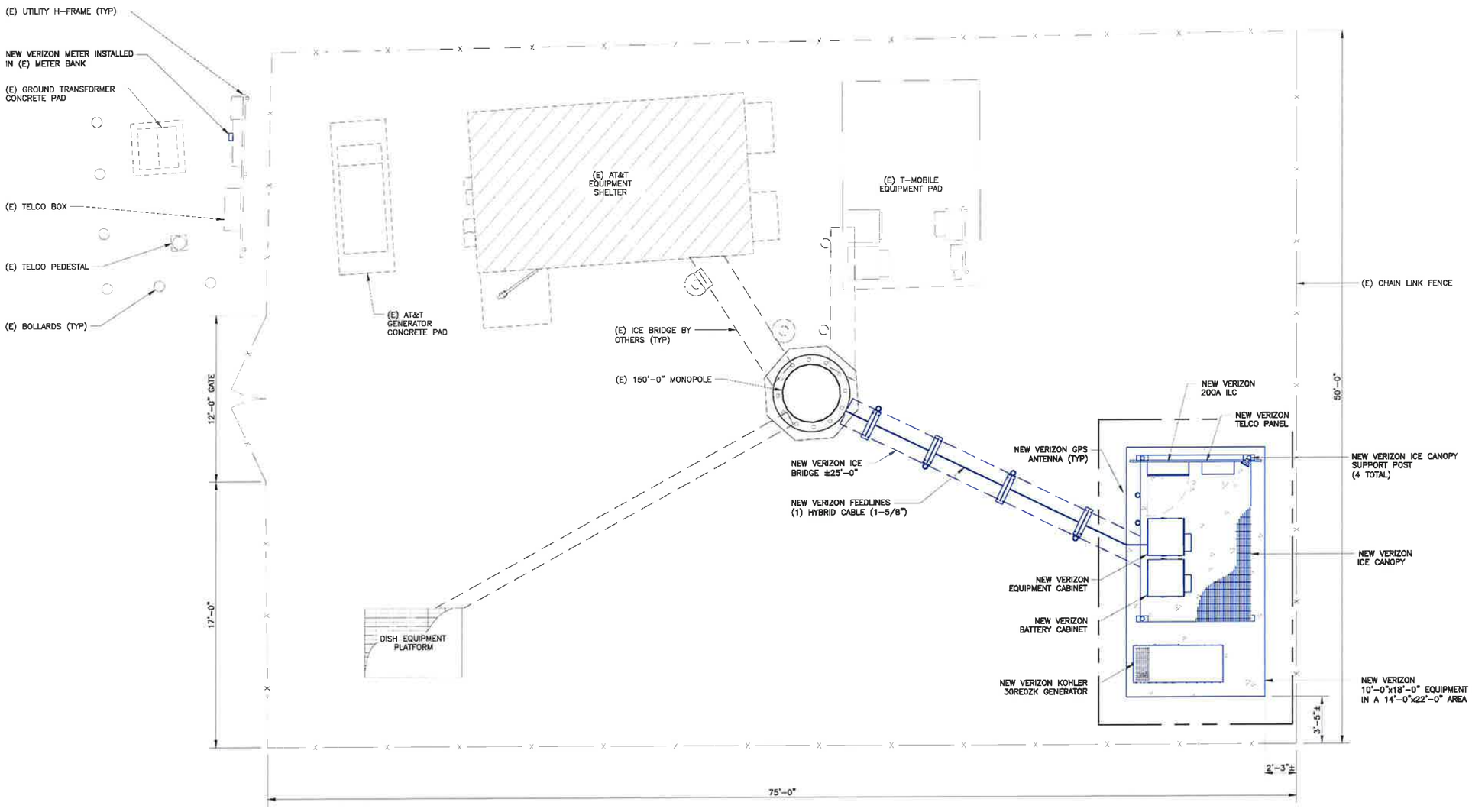
5/12/23

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

SHEET NUMBER: C-1.1

REVISION: 5



1 SITE PLAN
SCALE: 4' 3' 2' 1' 0' 4' 1/4"=1'-0" (FULL SIZE) 1/8"=1'-0" (11x17)

N

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
5111 S. BOULDER,
SUITE 200
TULSA, OK 74119
PH: (918) 587 4630
btwp@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

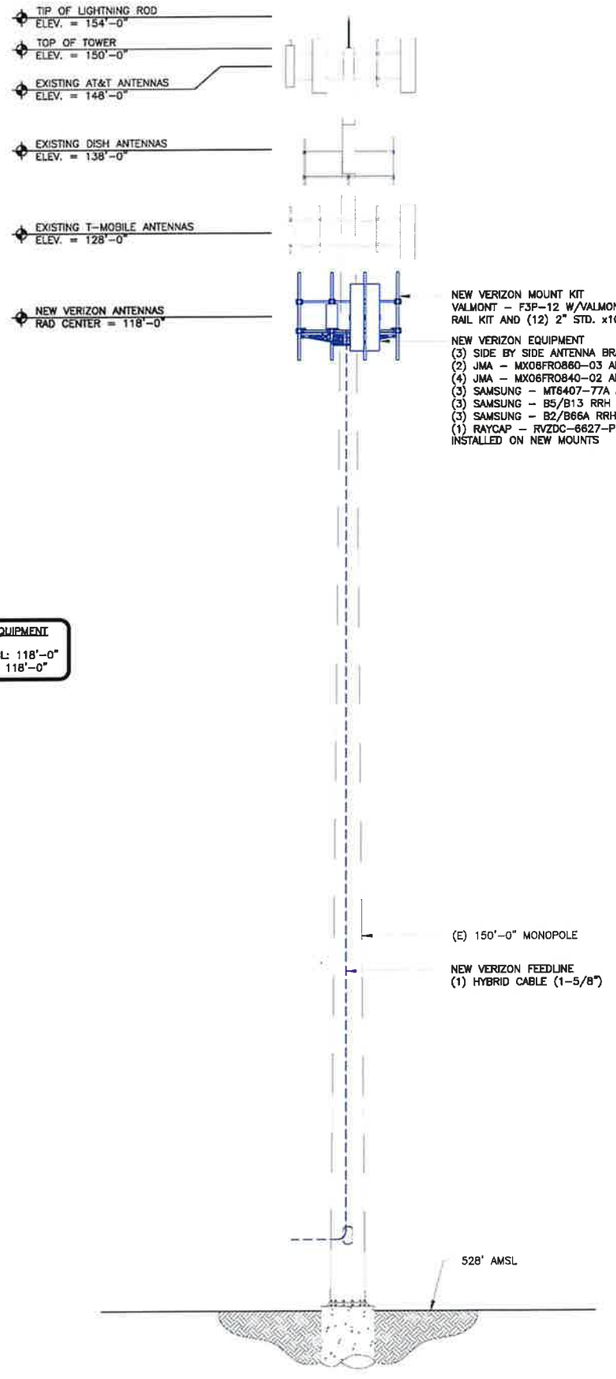
REV	DATE	DRWN	DESCRIPTION	DES /QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

5/12/23

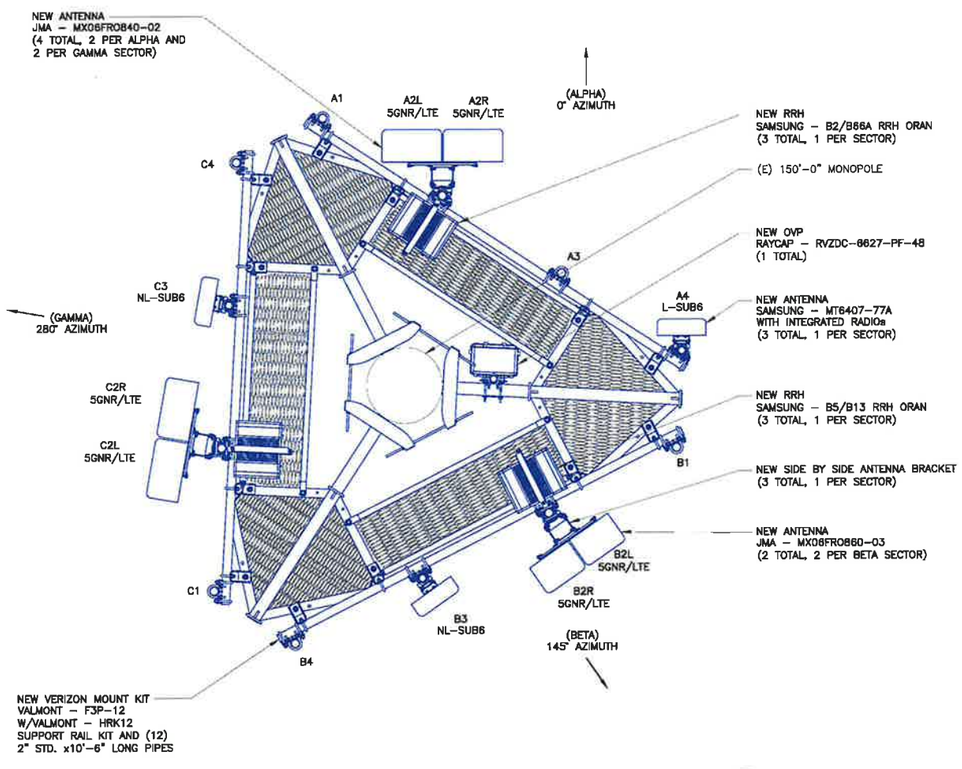
MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

SHEET NUMBER: C-1.2
REVISION: 5



1 TOWER ELEVATION
SCALE: NOT TO SCALE



2 NEW ANTENNA PLAN
SCALE: NOT TO SCALE

N

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER,
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
bbw@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

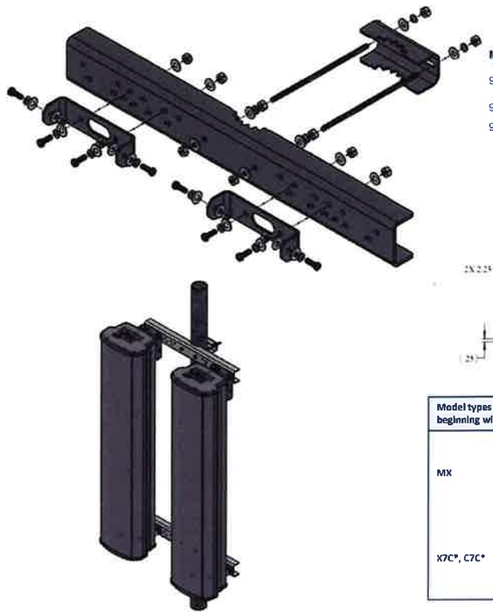
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

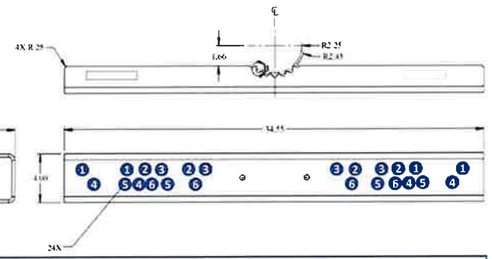
MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

SHEET NUMBER:	REVISION:
C-2	5



Mounting bracket model	Description
91900314-01	Single dual-mount antenna bracket assembly
91900314-02	Two dual-mount antenna bracket assemblies
91900314-03	Three dual-mount antenna bracket assemblies

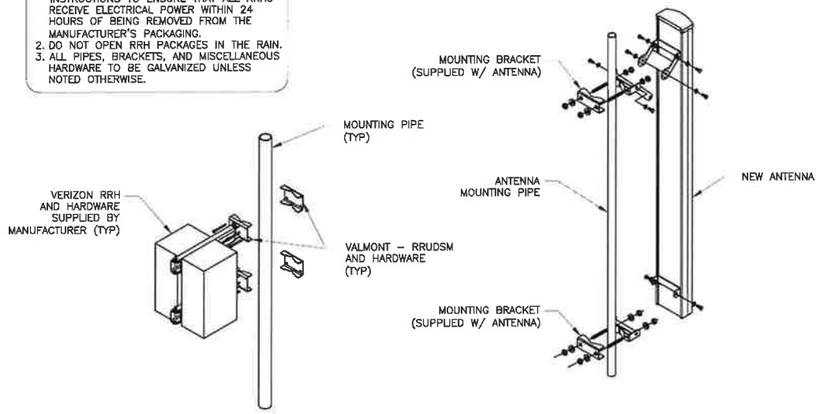


Model types beginning with:	Antenna width	Corresponding hole position	Resulting spacing between antennas
MX	15.4" (wide spacing)	1	12"
	15.4" (narrow spacing)	2	2"
	12"	3	2"
	20"	5	3/4"
X7C*, C7C*	12.5"	3	2"
	24.0"	4	2"
	18.8"	5	2"
	14.6"	6	2"

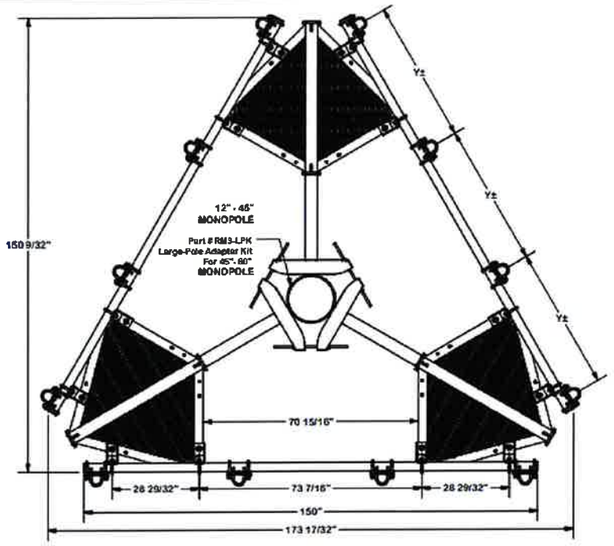
1 JMA – 91900314
SCALE: NOT TO SCALE

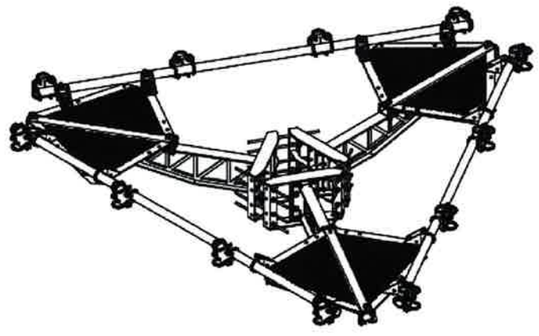
INSTALLER NOTES:

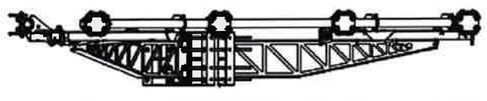
1. COMPLY WITH MANUFACTURERS INSTRUCTIONS TO ENSURE THAT ALL RRHs RECEIVE ELECTRICAL POWER WITHIN 24 HOURS OF BEING REMOVED FROM THE MANUFACTURER'S PACKAGING.
2. DO NOT OPEN RRH PACKAGES IN THE RAIN.
3. ALL PIPES, BRACKETS, AND MISCELLANEOUS HARDWARE TO BE GALVANIZED UNLESS NOTED OTHERWISE.



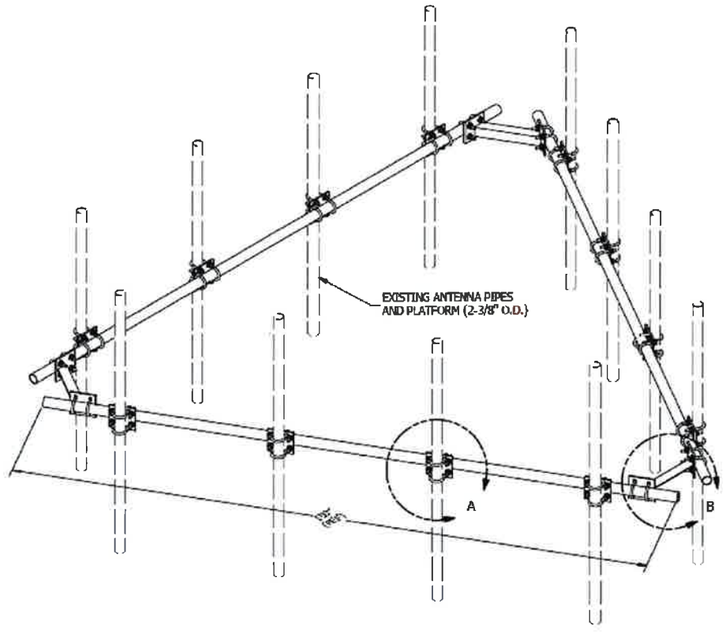
3 ANTENNA WITH RRHs MOUNTING DETAIL
SCALE: NOT TO SCALE







3 VALMONT – F3P–12W & VALMONT – HRK12
SCALE: NOT TO SCALE



verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER,
SUITE 300
TULSA, OK 74119
PH: (918) 587 4630
www.bt-grp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

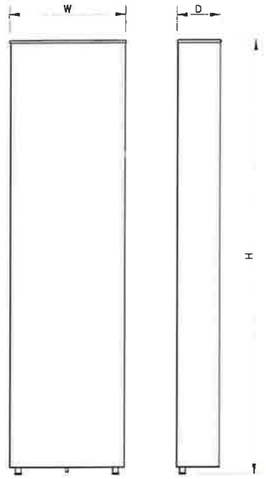
REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

STATE OF CONNECTICUT
No. 23924
LICENSED
PROFESSIONAL ENGINEER
5/12/23

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

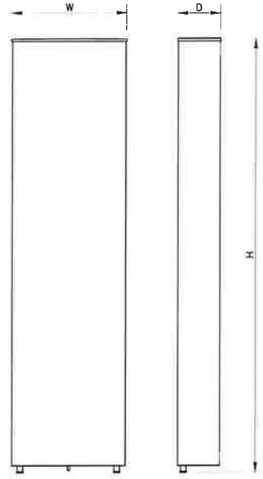
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: C-3
REVISION: 5



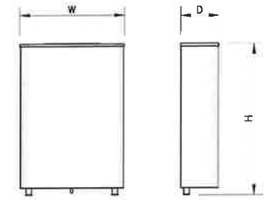
ANTENNA SPECS	
MANUFACTURER	JMA WIRELESS
MODEL #	MX06FRO840-02
WIDTH	19.80"
DEPTH	10.70"
HEIGHT	95.90"
WEIGHT	124.0 LBS

1 ANTENNA SPECS
SCALE: NOT TO SCALE



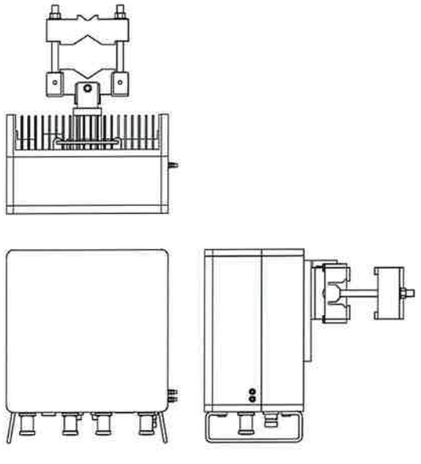
ANTENNA SPECS	
MANUFACTURER	JMA WIRELESS
MODEL #	MX06FRO860-03
WIDTH	15.40"
DEPTH	10.70"
HEIGHT	95.90"
WEIGHT	83.0 LBS

2 ANTENNA SPECS
SCALE: NOT TO SCALE



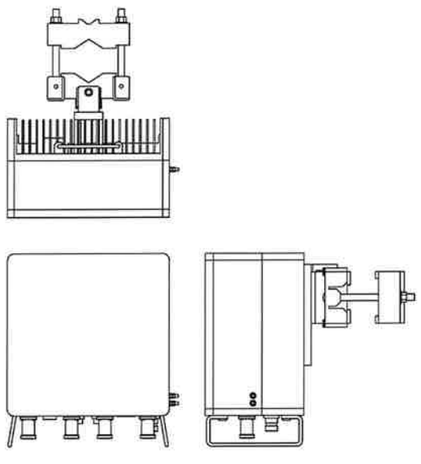
ANTENNA SPECS	
MANUFACTURER	SAMSUNG
MODEL #	MT6407-77A
WIDTH	16.06"
DEPTH	5.51"
HEIGHT	35.06"
WEIGHT	81.57 LBS

3 ANTENNA SPECS
SCALE: NOT TO SCALE



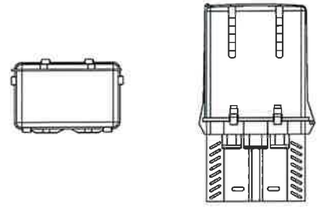
RRU SPECS	
MANUFACTURER	SAMSUNG
MODEL #	B2/B66A RRH ORAN
WIDTH	14.96"
DEPTH	10.04"
HEIGHT	14.96"
WEIGHT	74.7 LBS

4 RRU SPECS
SCALE: NOT TO SCALE



RRU SPECS	
MANUFACTURER	SAMSUNG
MODEL #	B5/B13 RRH ORAN
WIDTH	14.96"
DEPTH	9.06"
HEIGHT	14.96"
WEIGHT	72.5 LBS

5 RRU SPECS
SCALE: NOT TO SCALE



RAYCAP – RVZDC-6627-PF-48
WEIGHT (WITHOUT MOUNTING HARDWARE): 32.0 LBS
SIZE (HxWxD): 29.5x16.5x12.6 IN.

RATED WIND VELOCITY: 150 MPH (SUSTAINED)
OPERATING TEMPERATURE: -40° C TO +80° C
NOMINAL OPERATING DC VOLTAGE: 48 VDC

6 RAYCAP – RVZDC-6627-PF-48
SCALE: NOT TO SCALE

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER,
SUITE 200
TULSA, OK 74119
PH: (918) 587 4630
btwebgroup.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

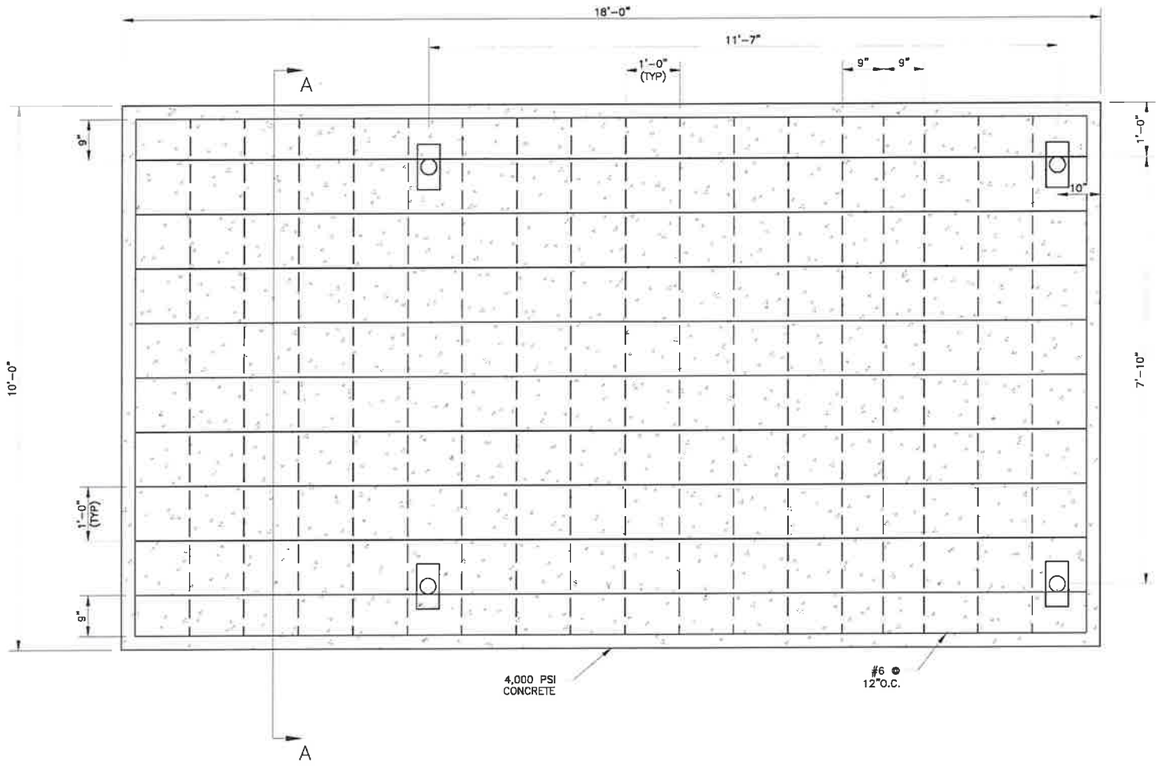
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

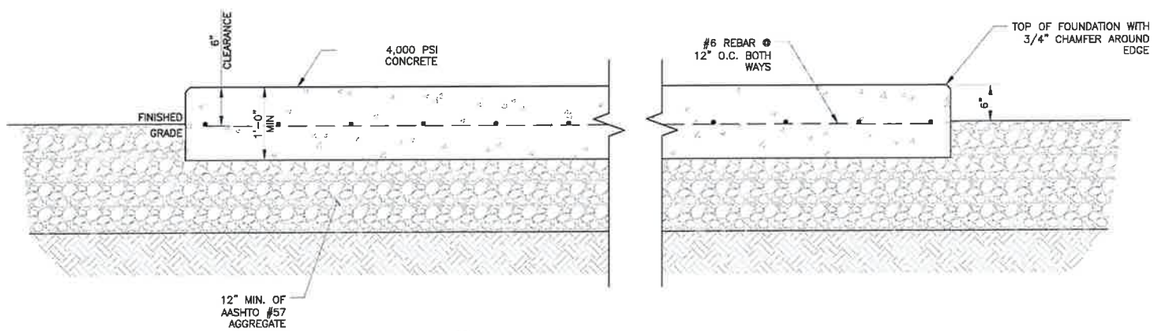
MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

SHEET NUMBER:	REVISION:
C-4	5



1 EQUIPMENT PAD FOUNDATION
SCALE: NOT TO SCALE



2 SECTION 'A-A'
SCALE: NOT TO SCALE

FOUNDATION NOTES:

1. REFER TO CIVIL DRAWINGS FOR ORIENTATION OF FOUNDATION.
2. FOUNDATION IS DESIGNED FOR THE FOLLOWING LOADS: FLOOR LIVE LOAD 40 PSF 3.
3. EQUIPMENT SHALL NOT BE SET UNTIL FOUNDATION HAS BEEN CURED FOR 72 HOURS MINIMUM.
4. ALL CONCRETE SHALL HAVE 28 DAY STRENGTH OF 4000 PSI MINIMUM, WITH A MAXIMUM SLUMP OF 3" AND SHALL BE AIR ENTRAINED.
5. REINFORCING STEEL TO HAVE INTERMEDIATE GRADE DEFORMED BARS OF NEW BILLET STEEL CONFORMING TO ASTM A615, GRADE 60.
6. FOUNDATION SHALL BE INSTALLED PER VERIZON WIRELESS STATEMENT OF WORK SECTION 7.1.
7. CONTRACTOR MUST GROUND THE FOUNDATION PER VERIZON WIRELESS NSTD46 STANDARDS.
8. CONTRACTOR TO ENSURE FOUNDATION IS POURED TO MEET FLATNESS LEVEL TOLERANCES AS INDICATED IN ACI 4.5.6 AND ACI 4.5.7.
9. SLAB TOLERANCE IS ± 1/4".
10. THIS FOUNDATION IS DESIGNED FOR A MINIMUM OF 1,000 PSF ALLOWABLE SOIL BEARING CAPACITY.
11. FOUNDATION BEARING MATERIAL SHALL BE TESTED & VERIFIED

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER,
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
blaw@bhtgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

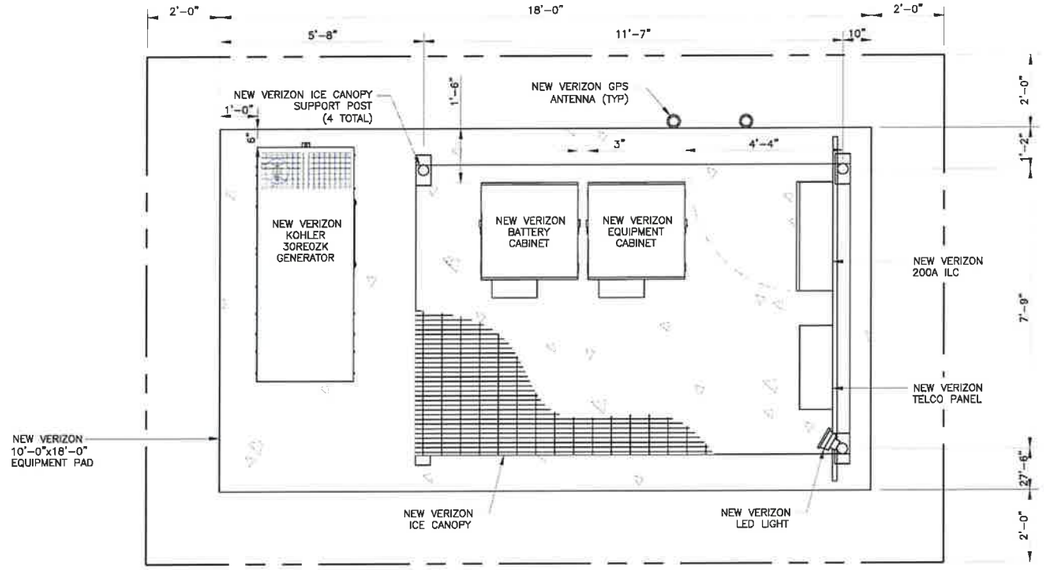
REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

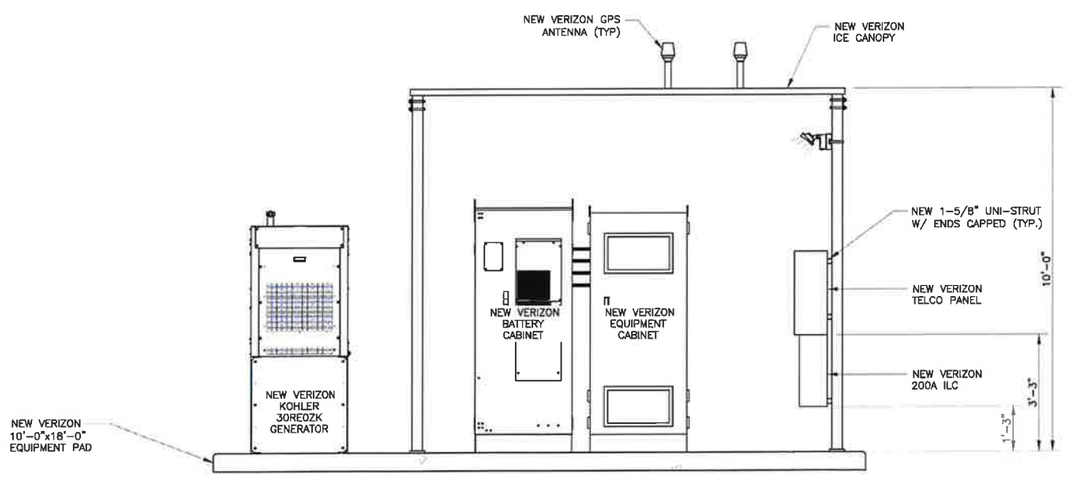
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: C-5

REVISION: 5



1 EQUIPMENT PAD PLAN
SCALE: NOT TO SCALE



2 ELEVATION
SCALE: NOT TO SCALE

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER,
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
bwc@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	YX	CONSTRUCTION	LR

5/12/23

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

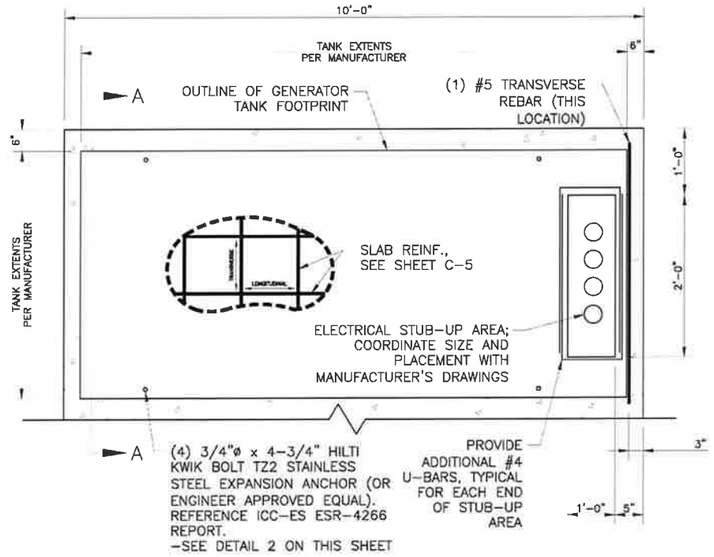
SHEET NUMBER: C-6

REVISION: 5

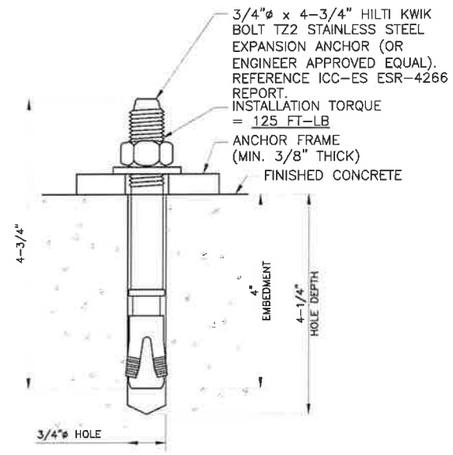
GENERAL NOTES:

1. FLEXIBLE UTILITY CONNECTIONS SHOULD BE USED AT UNDERGROUND TO GENERATOR INTERACTIONS.
2. INSTALL EQUIPMENT ANCHORAGE PER MANUFACTURER'S WRITTEN RECOMMENDATIONS.
3. THE ATTACHMENT OF THE GENERATOR TO THE FOUNDATION SLAB AND THE FOUNDATION ITSELF ARE DESIGNED TO RESIST A 3 SECOND GUST WIND SPEED OF 143 MPH (ULTIMATE WIND SPEED).
4. ELECTRICAL STUB-UP AREA WILL BE DETERMINED BY GENERATOR ORIENTATION.

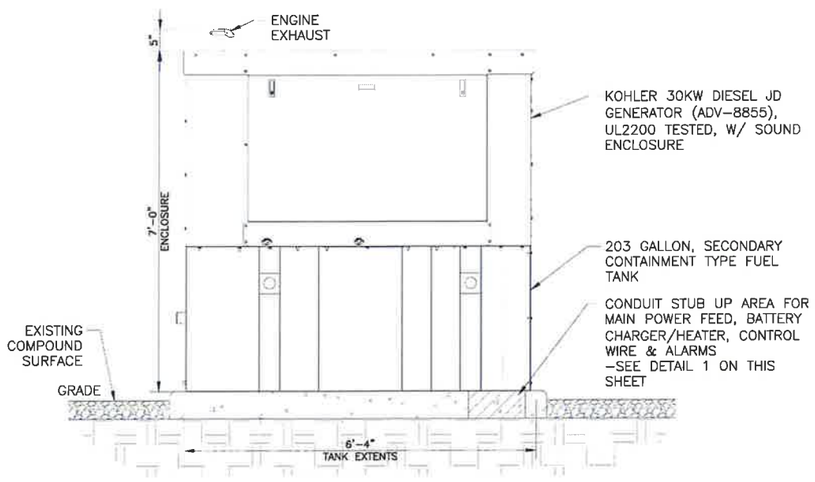
INSTALLER NOTE:
CONUIT STUB UP LOCATIONS SHALL BE COORDINATED ON SITE WITH CONSTRUCTION MANAGER, PRIOR TO INSTALLING CONCRETE PAD.



1 GENERATOR PAD DETAIL
SCALE: NOT TO SCALE



2 TYPICAL ANCHOR DETAIL
SCALE: NOT TO SCALE



3 ELEVATION VIEW
SCALE: NOT TO SCALE

NOTES

1. SEE GENERATOR MANUFACTURE'S DRAWINGS FOR PHYSICAL LOCATION OF FUEL LINES, CONTROL AND POWER INTERCONNECTIONS AND OTHER INTERFACES THAT ARE TO CAST INTO THE CONCRETE. THE PREFERRED METHOD IS TO BRING THE CONDUIT THROUGH THE PAD TO THE UNDERSIDE OF THE GENERATOR (MINIMIZES RODENT DAMAGE). FINISH CONNECTIONS WITH FLEXIBLE CONDUIT PER GENERATOR MANUFACTURES SPECS. RIGID CONDUITS SHALL BE SECURED TO THE EXISTING SLAB, THEN BURIED BETWEEN SLAB AND SHELTER.
2. THE GENERATOR SHALL BE LOCATED A MIN 5' AWAY FROM A COMBUSTIBLE WALL.
3. THE GENERATOR SHALL BE LOCATED A MIN OF 3' AWAY FROM A NON-COMBUSTIBLE WALL.

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1117 S. BOULDER,
SUITE 200
TULSA, OK 74119
PH: (918) 587 4630
btwebb@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/16/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

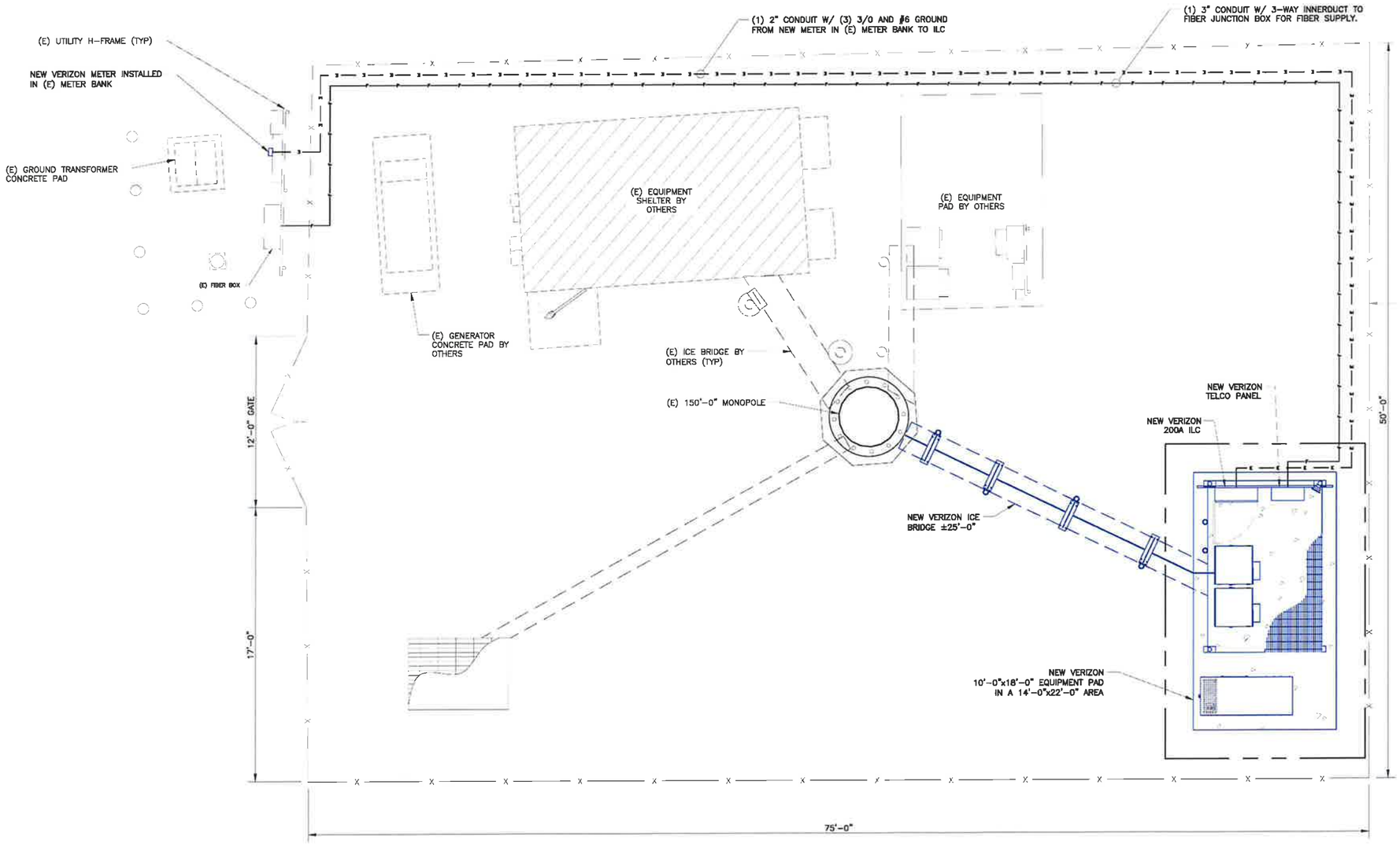
SHEET NUMBER: C-7
REVISION: 5

NOTE:

CONSTRUCTION MANAGER & UTILITY COORDINATOR TO ORDER POWER & TELCO SERVICES AT ONSET OF CONSTRUCTION.

NOTE:

THE EXISTING UTILITY INFORMATION SHOWN REPRESENTS THE BEST DATA AVAILABLE FROM EXISTING DOCUMENTATION AND FIELD EVIDENCE. ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE, AND A FIELD INVESTIGATION MUST BE PERFORMED IN THE VICINITY OF ANY CONSTRUCTION ACTIVITIES. NOTE THAT THESE PLANS MAY NOT SHOW ALL UTILITIES THAT ARE PRESENT AT THE SITE.



1 UTILITY PLAN
SCALE: 4" 3" 2" 1" 0 4' 1/4"=1'-0" (FULL SIZE) 1/8"=1'-0" (11x17)

N

verizon

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE

3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP

MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER,
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
bbw@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	YX	CONSTRUCTION	LR

5/12/23

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

SHEET NUMBER: E-1

REVISION: 5

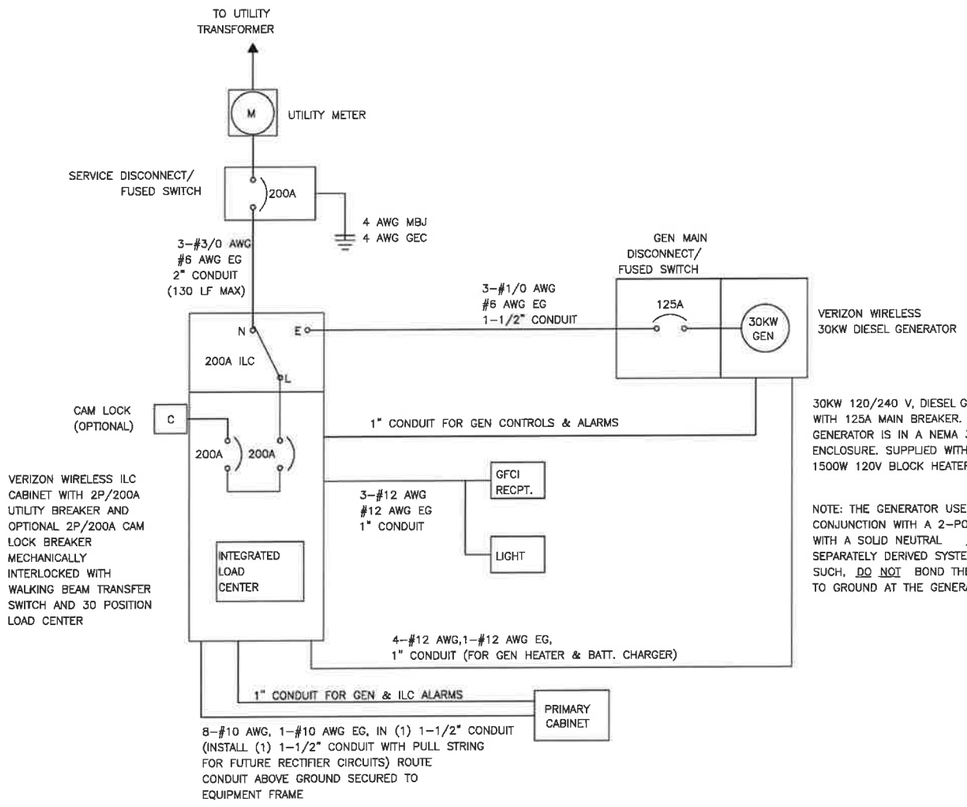
LOAD CALCULATION	
LOAD	AMPS
PROPOSED LOAD:	148.0
TOTAL DEMAND:	148.0
VOLTAGE: 120/240V SINGLE PHASE 3W 200A	

PANEL NAME:	VZW ILC			MODEL NUMBER:	ASCO 0300L SERIES									
RATED VOLTAGE:	240	120	VOLTS	PHASE/WIRE:	1	3								
MAIN BREAKER:	200	AMPS		BUS RATING:	200			KEY DOOR LATCH:	YES					
MOUNT:	SURFACE			NEUTRAL BAR:	YES			HENGED DOOR:	YES					
ENCLOSURE TYPE:	NEMA 3R			AIC:	65K									

POS	USAGE FACTOR	BUS AMPS L1	BUS AMPS L2	LOAD	POLES	AMPS	L1	L2	AMPS	POLES	LOAD	BUS AMPS L1	BUS AMPS L2	USAGE FACTOR	POS
1	1	18		RECTIFIER	2	30A			30A	2	FUTURE RECTIFIER	18		1	2
3	1		18										18	1	4
5	1	18		RECTIFIER	2	30A			30A	2	FUTURE RECTIFIER	18		1	6
7	1		18										18	1	8
9	1	18		RECTIFIER	2	30A									10
11	1		18												12
13	1	18		RECTIFIER	2	30A									14
15	1		18												16
17	1.25	16		GFI RECEPT. /LIGHT	1	20A									18
19	1		16	BLOCK HEATER	1	20A									20
21	1	16		BATT. CHARGER	1	20A									22
23	1		24	UPS RECEPT	1	30A									24
25															26
27															28
29															30
		104	112	:SUB TOTAL AMPS							SUB TOTAL AMPS:	36	36		
											FACTORED TOTAL AMPS:	140	148		

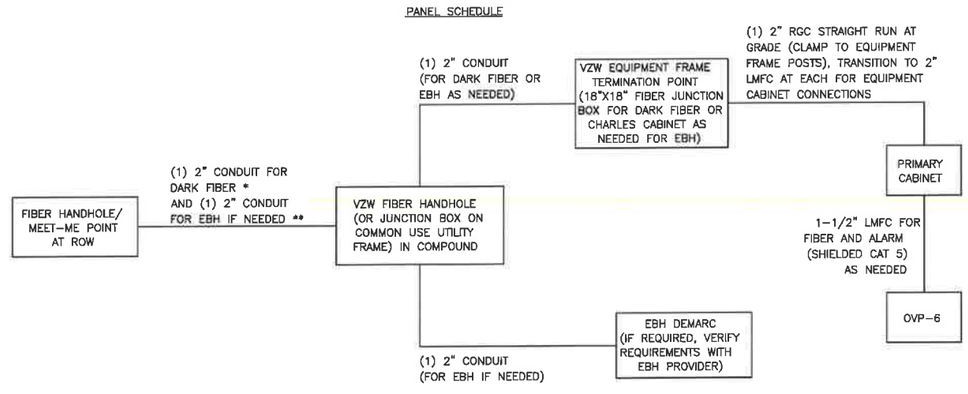
NOTES:
1. ALL CONDUCTORS ARE TYPE THWN (75°C) COPPER.
2. MAXIMUM LENGTH OF RUN FOR RECTIFIER CIRCUITS IS 50FT.
3. ASCO INTEGRATED LOAD CENTER INCLUDES 200 AMP MAIN DISCONNECT AND TRANSFER SWITCH FOR PORTABLE OR PERMANENT GENERATOR.
4. RECTIFIER LOADS ARE CONSIDERED TO BE NON-CONTINUOUS.
5. IF ADDITIONAL FUTURE LOADS ARE ADDED WHICH CAUSE TOTAL DEMAND TO EXCEED GENERATOR BREAKER SIZE, BACKUP POWER SYSTEM SHALL BE EVALUATED AND UPGRADED AS NECESSARY.

PANEL SCHEDULE



ELECTRICAL SINGLE LINE DIAGRAM

NOTES:
1. ALL EQUIPMENT SHALL BE NEMA 3R RATED.
2. ALL EQUIPMENT SHALL BE LIGHTNING PROTECTED IN ACCORDANCE WITH TIA-222-G AND VERIZON WIRELESS STANDARDS.
3. CONDUCTOR SIZES AND DISTANCES HAVE BEEN SIZED FOR 3% MAX VOLTAGE DROP (TOTAL SYSTEM VOLTAGE DROP ON BOTH FEEDERS AND BRANCH CIRCUITS TO THE FARTHEST DEMAND SHALL NOT EXCEED 5%).
4. WIRE SIZING AND MAXIMUM DISTANCE FROM GENERATOR TO ILC ASSUMES POWER FACTOR OF 0.9.
5. BELOW GRADE CONDUIT SHALL BE SCHEDULE 80 PVC. ABOVE GRADE CONDUIT SHALL BE GALVANIZED RIGID CONDUIT. BELOW GRADE PVC CONDUIT SHALL TRANSITION TO GRC PRIOR TO RISING ABOVE GRADE. ALL BENDS SHALL HAVE A MINIMUM 24" RADIUS. ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. VERIFY CONDUIT TYPE WITH LOCAL CONSTRUCTION MANAGER AND ADJUST IF NECESSARY. ALL CONDUIT SHALL MEET NEC, STATE, AND LOCAL CODE REQUIREMENTS AS REQUIRED.



FIBER SINGLE LINE DIAGRAM

NOTES:
* ADD (1) ADDITIONAL 2" CONDUIT FOR DARK FIBER (2 TOTAL) IF REQUIRED BY LOCAL MARKET FACILITIES, VERIFY PRIOR TO CONSTRUCTION. (ADD 2 PULL STRINGS TO EACH CONDUIT)
** VERIFY EBH REQUIREMENTS WITH TELCO PROVIDER PRIOR TO CONSTRUCTION. (ADD 2 PULL STRINGS TO EACH CONDUIT)

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
blue@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES /QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

STATE OF CONNECTICUT
No. 27339
LICENSED
PROFESSIONAL ENGINEER
5/12/23

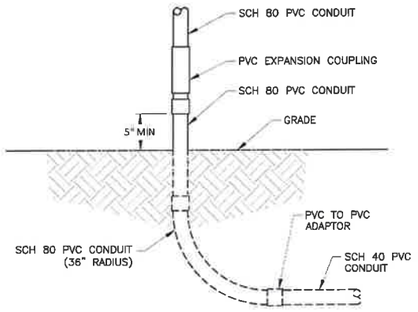
MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

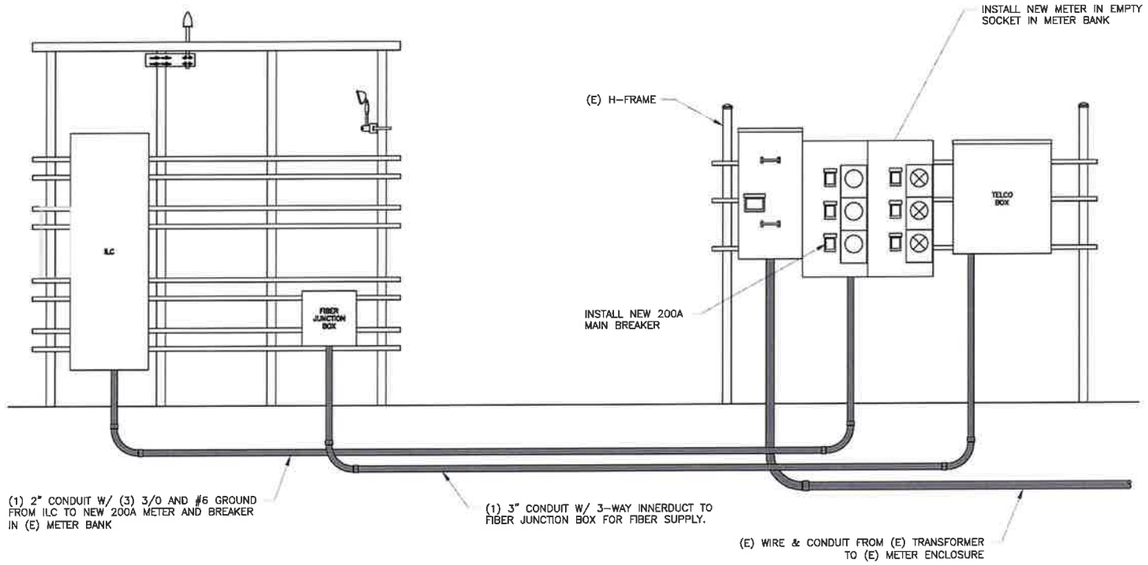
SHEET NUMBER: E-2

REVISION: 5

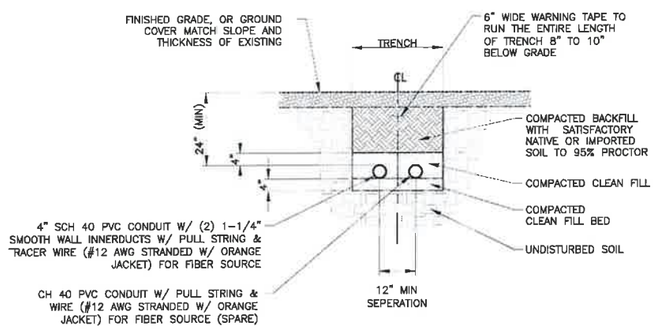
NOTES:
1. SEE E-1 SHEET FOR CONDUIT SIZES
2. ALL PVC CONDUITS THAT TRANSITION FROM BELOW GRADE TO ABOVE GRADE SHALL HAVE EXPANSION COUPLINGS INSTALLED.



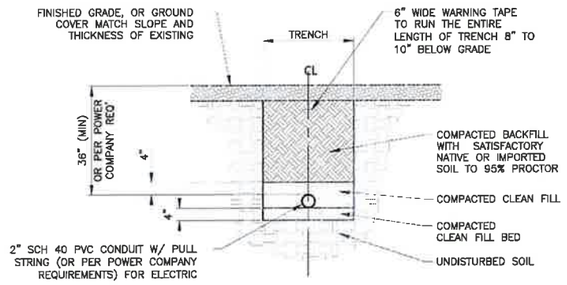
1 UNDERGROUND CONDUIT STUB-UP DETAIL
SCALE: NOT TO SCALE



2 TYPICAL ELECTRICAL RISER DIAGRAM
SCALE: NOT TO SCALE



3 FIBER TRENCH DETAIL (SOURCE)
SCALE: NOT TO SCALE



4 ELECRIC TRENCH DETAIL (SOURCE)
SCALE: NOT TO SCALE

UTILITY TRENCH NOTES:

1. CONDUIT SIZE, TYPE, QUANTITY, AND SEPARATION DIMENSION TO BE VERIFIED WITH LOCAL UTILITY.
2. ALL UTILITY TRENCHES WITHIN THE FENCED COMPOUND OR UNDER ANY POR OF A GRAVEL DRIVE AND/OR ROADWAY SHALL BE BACKFILLED WITH #57 COMPACTED AGGREGATE.
3. ALL CONDUITS SHALL BE INSTALLED WITH A PULL STRING.
4. ALL CONDUITS THAT ARE TO BE USED FOR FIBER/ALARM SHALL BE INSTALL WITH A TRACER WIRE (#12 AWG STRANDED W/ ORANGE JACKET).
5. ALL CONDUITS SHALL BE CLEAN INSIDE WITH NO DIRT OR ANY OTHER OBSTRUCTIONS.
6. ALL BENDS MUST SWEEP 36" RADIUS AND MAXIMUM OF 3 SWEEPS. ANY ADDITIONAL SWEEPS MUST BE APPROVED BY THE POWER COMPANY.
7. THE CONTRACTOR SHALL VERIFY AND FOLLOW THE POWER COMPANY SPECIFICATIONS FOR INSTALLATIONS INVOLVING PAD MOUNTED TRANSFORMERS UTILITY POLE, ETC...

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
111 S. BOULDER,
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
bsec@bhtp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

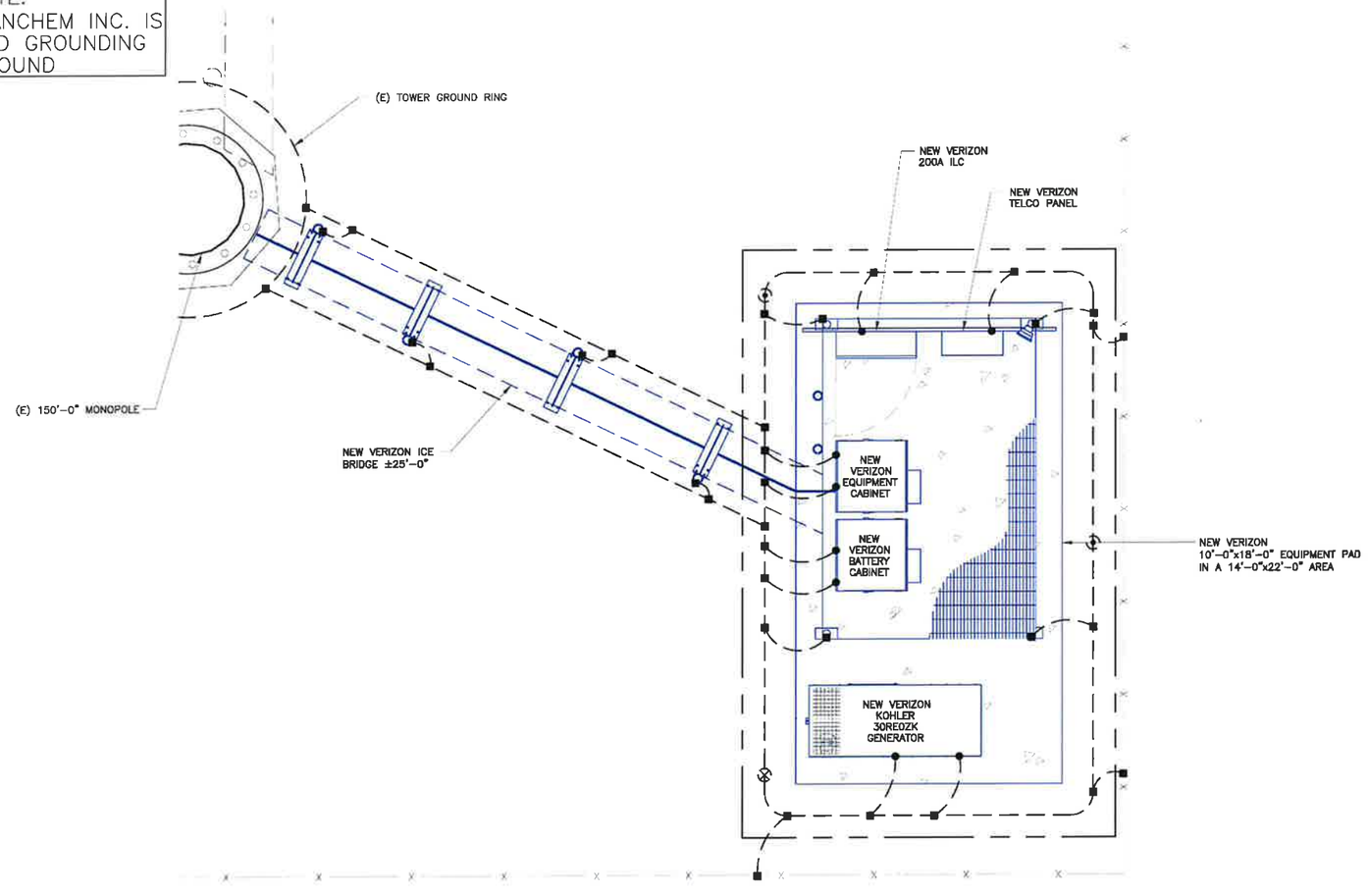
SHEET NUMBER: E-3
REVISION: 5

NOTES:

1. PROVIDE "ELECTRIC MOTION" TAMPER RESISTANT BUS BARS AT BULKHEAD AND ABOVE THE TURN AT THE ICE BRIDGE. UTILITY H-FRAME BUS BAR (IF REQUIRED) WILL BE AN ELECTRIC MOTION TINNED COPPER BUS BAR ON RED SEAL INSULATORS & STAINLESS STEEL BRACKET. COAT WITH ELECTRIC MOTION ANTI-THEFT COMPOUND.
2. CONTACT CONSTRUCTION MANAGER PRIOR TO BACKFILLING GROUNDING INSTALLATION.
3. ALL EXPOSED GROUND LEADS NEED TO USE EMC MODEL #2223-TMC THEFT-RESISTANT CABLE FROM 18" BELOW GRADE TO THE FINAL TERMINATION POINT. VERIFY ALL GROUND LEADS ARE VERTICAL AS THEY ENTER THE GROUND.
4. ALL BELOW GRADE GROUND LEADS ARE REQUIRED TO BE SEALED USING SEALTITE TO 18" BELOW GRADE. SEALTITE SHOULD EXTEND AS CLOSE AS POSSIBLE TO THE FINAL TERMINATION POINT AND FILL OPENINGS WITH SILICONE CAULKING.
5. ALL GROUND LEVEL BUS BARS NEED TO USE ANTI-THEFT MOUNTING HARDWARE.

NOTE: FOR ALL ABOVE GRADE CONNECTIONS TO TOWER, ICE BRIDGE, UTILITY H-FRAME, FENCE POSTS, GATE POSTS, GENERATORS, ETC... ALL OF THESE EXPOSED PIGTAILS SHALL BE WITH EMC MODEL #2223-TMC THEFT RESISTANT CABLE. THESE PIGTAILS SHALL THEN HAVE THE SHIELDS STRIPPED BACK AND CADWELDED TO THE TOWER AND EQUIPMENT PAD GROUND RING. ON LONG BELOW GRADE RUNS ONLY, THE ABOVE GROUND PORTIONS (FROM 18" BELOW GRADE UP TO ABOVE GRADE) SHALL BE IN THE EMC THEFT RESISTANT CABLE. CADWELD CONNECTIONS FOR IN-LINE BUT SPLICE FROM #2 TO THE EMC CABLE SHALL BE WITH SSC-1T.

NOTE:
"NO-OX-ID" SANCHEM INC. IS THE APPROVED GROUNDING COMPOUND



1 SITE PLAN
SCALE: 2 1' 0 2 — 3/8"=1'-0" (FULL SIZE) 3/16"=1'-0" (11x17)

N

NOTE: SEE SHEETS G-2 THROUGH G-3 FOR GROUNDING DETAILS

NOTE: ACTUAL RESISTANCE MUST BE MEASURED PRIOR TO CONNECTION TO THE POWER GRID.

GROUNDING PLAN LEGEND:

- #2 SOLID BARE TINNED COPPER GROUND WIRE
- EXOTHERMIC WELD
- MECHANICAL CONNECTION
- COPPER GROUND ROD
- GROUND ROD W/ TEST WELL

NOTE TO CONTRACTOR:

ALL FENCE POSTS WITHIN 6' OF VERIZON GROUND EQUIPMENT MUST BE GROUNDED.

verizon

20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE

3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP

MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587 4630
bseo@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES /QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

STATE OF CONNECTICUT — LICENSED PROFESSIONAL ENGINEER — No. 22024 — 5/12/23

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

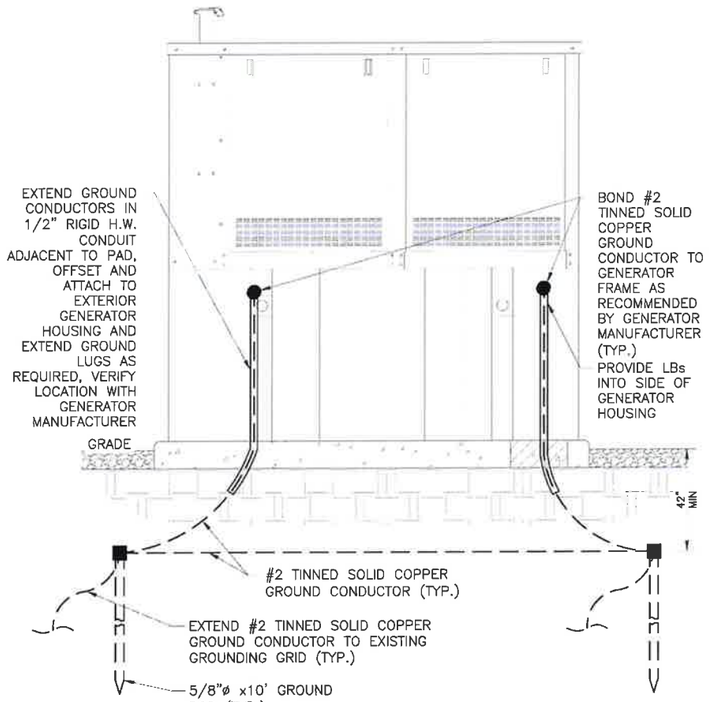
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER: G-1

REVISION: 5

NOTES:

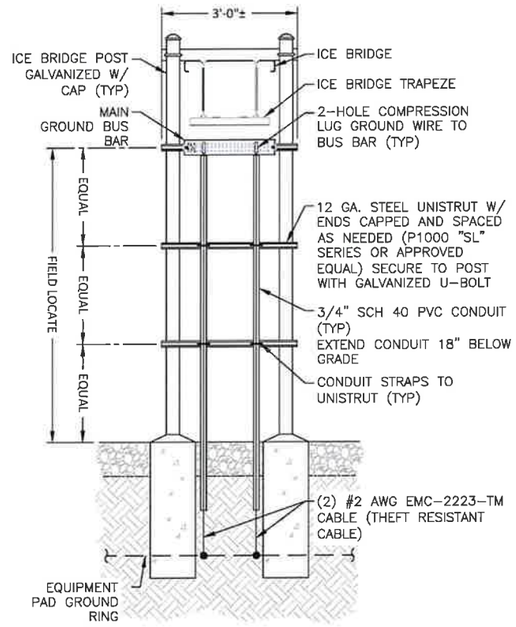
1. ALL GROUNDING LEADS TO FLOW CLOCKWISE
2. CONTACT CONSTRUCTION MANAGER PRIOR TO BACKFILLING GROUNDING INSTALLATION
3. MINIMUM 3 FOOT SPACING BETWEEN THE GROUND CONNECTIONS TO THE MAIN TOWER GROUND RING
4. UFER GROUNDING IS REQUIRED FOR ALL CORNERS OF THE EQUIPMENT PAD USING #2 SOLID BARE TINNED COPPER GROUND WIRE, MECHANICAL GROUND WITH (2) DIRECT BURY GROUND CLAMPS (NSI GROUND CLAMP HD1" OR EQUIVALENT) TO REBAR AND CADWELD TO EQUIPMENT PLATFORM GROUND RING, SEE 'CONCRETE-ENCASED ELECTRODE DETAIL' BELOW.
5. IF GROUND RODS ARE REFUSED, UTILIZE THOMPSON LIGHTNING PROTECTION GROUNDING PLATE NO. 233M AS APPLICABLE.
6. ALL CONNECTIONS TO EQUIPMENT SHALL BE HYPRESS LUGS WITH LONG BARREL.
7. UTILIZE SANCHEM NO-OX-ID GROUNDING COMPOUND.
8. ALL NON LIKE METALS NEED DRAGON TOOTH WASHERS AND BELLEVILLE WASHERS.
9. ANTI-THEFT MOUNTING HARDWARE IS STILL REQUIRED FOR GROUNDING BARS.
10. ALL ABOVE GRADE GROUND WIRES SHOULD BE SEALED WITH SEAL-TITE.



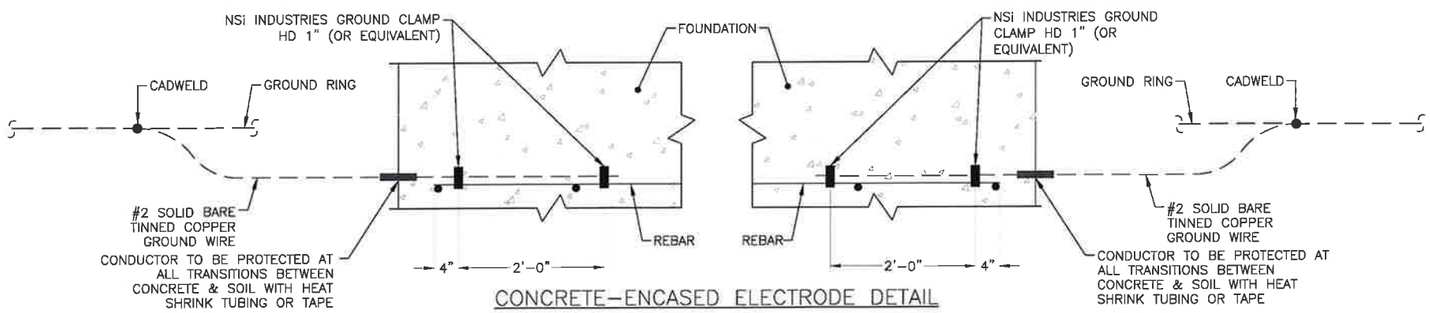
GENERATOR GROUNDING DETAIL
NOT TO SCALE

LEGEND

- #2 SOLID BARE TINNED COPPER GROUND WIRE
- GROUND ROD, SPACED AT 10' – 20' O.C. MAX, CADWELD CONNECTION TO GROUND ROD GTC-181T #90 CADWELD SHOT
- CADWELD CONNECTION: PCC-1T1T FOR #2 TO #2, #90 SHOT PARALLEL TYPE CONNECTION
- NSI INDUSTRIES GROUND CLAMP HD 1 (OR EQUIVALENT)



MAIN GROUND BUS BAR MOUNTING DETAIL
NOT TO SCALE



CONCRETE-ENCASED ELECTRODE DETAIL
NOT TO SCALE

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
bwright@tgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

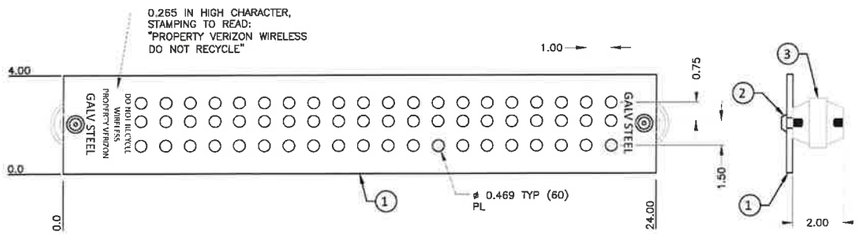
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/16/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	YX	CONSTRUCTION	LR

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

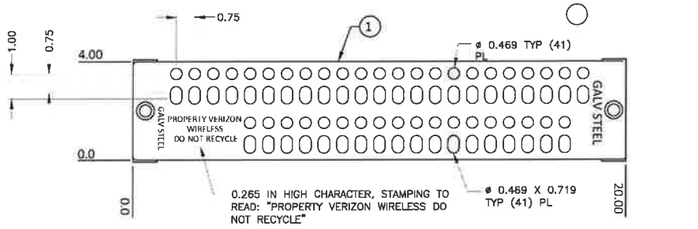
SHEET NUMBER: G-2
REVISION: 5



ELECTRIC MOTION CO., INC.
110 GROPPO DR./ BOX 626
WINSTED, CT 06098

ITEM	PART NO.	DESCRIPTION	REQ
3	03-009-0118-000	THREADED (3/8-16) INSULATORS, 2" DIA X 2" HEIGHT; FIBERGLASS	2
2	02-009-0633-000	3/8-16 X 5/8" TORQUE SHEAR HEAD BOLT (NON-REMOVABLE) WITH VIBRASEAL; STAINLESS STEEL	2
1	02-009-0662-000	GROUND BAR, GALVANIZED STEEL 1/4" X 4" X 24"	1

1 MAIN GROUND BUS BAR
SCALE: NOT TO SCALE



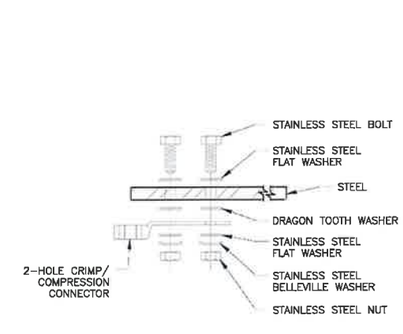
ELECTRIC MOTION CO., INC.
110 GROPPO DR./ BOX 626
WINSTED, CT 06098

PART #EM SGM420-BM-NR

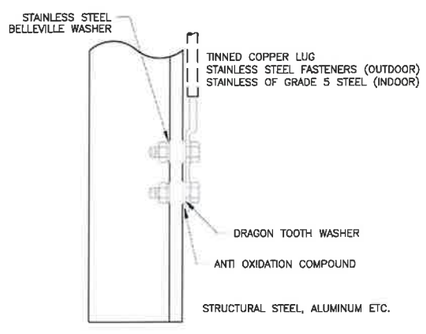
ATTENTION NOTE:
ALL NON LIKE METALS NEED DRAGON TOOTH WASHERS AND BELLEVILLE WASHERS

ITEM	PART NO.	DESCRIPTION	REQ
4	02-009-0663-000 (SUB-ASSEMBLY)	3/8-16 x 5/8" TORQUE SHEAR HEAD BOLT IN A STANDARD 4 x 6 BAG INCLUDES: (2) 3/8-16 x 5/8" TORQUE SHEAR HEAD BOLT (NON-REMOVABLE) WITH VIBRASEAL; STAINLESS STEEL (303) P/N 02-009-0603-000 (1) STANDARD 4" x 6" BAG (P/N 03-009-0209-00)	1
3	02-009-0633-000	3/8-16 x 5/8" TORQUE SHEAR HEAD BOLT (NON-REMOVABLE) WITH VIBRSEAL; STAINLESS STEEL (303)	2
2	02-009-0524-000	MOUNTING BRACKET; STAINLESS STEEL, 16 GA (.060) THICK	1
1	02-009-0672-000	20" GROUND BAR; STEEL; GALVANIZED	1
ITEM	PART NO.	DESCRIPTION	REQ

2 TOWER LEG BUS BAR (NON-INSULATED)
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GALVANIZED GROUND BARS & STEEL OBJECTS

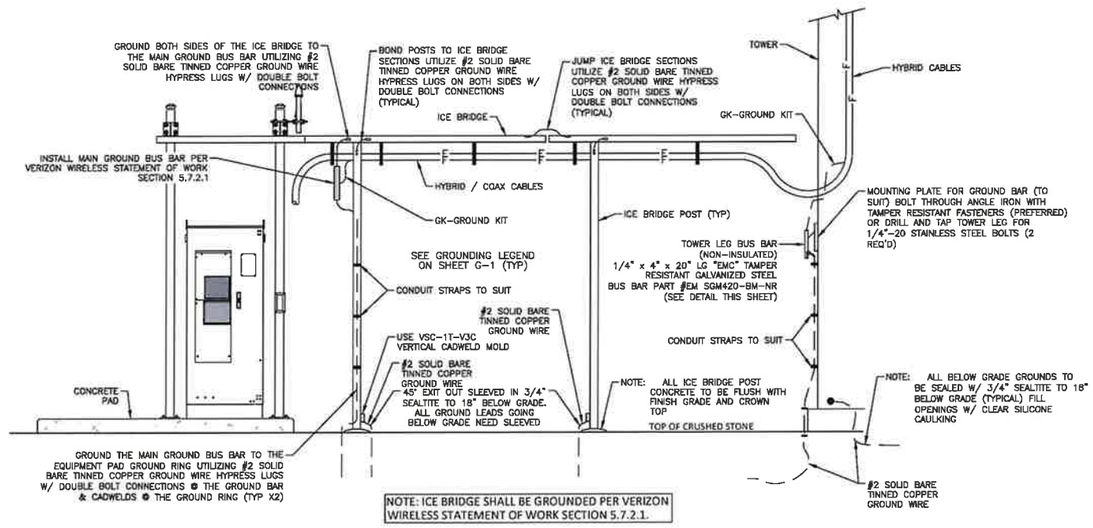


DISSIMILAR METAL CONNECTIONS

INSTALLATION NOTES:

1. ALL OUTDOOR HARDWARE (I.E. BOLTS, SCREWS, NUTS, WASHERS) SHOULD BE 18-8 GRADE STAINLESS STEEL.
2. ALL INDOOR HARDWARE (I.E. BOLTS, SCREWS, NUTS, WASHERS) SHOULD BE GRADE 5 STEEL HARDWARE.
3. BOLT LENGTH SHOULD ALLOW THE EXPOSURE OF AT TWO THREADS.
4. BACK TO BACK LUG CONNECTIONS ARE AN ACCEPTABLE PRACTICE WHEN BONDING TO A GROUND BAR OR STEEL OBJECTS.
5. ANY CONNECTIONS MADE BETWEEN STEEL OR OTHER DISSIMILAR METALS REQUIRE THE USE OF A DRAGON TOOTH WASHER.
6. 'SINGLE CONNECTOR AT GROUND BARS' PERTAINS TO COPPER GROUND BARS ONLY!
7. GALVANIZED GROUND BARS AND OTHER STEEL OBJECTS (I.E. CABINETS, GENERATOR TANKS, ICE BRIDGE POSTS, ETC.) SHOULD FOLLOW THE 'SINGLE CONNECTOR AT STEEL OBJECTS' DETAIL.

3 STANDARD GROUNDING HARDWARE CONFIGURATION
SCALE: NOT TO SCALE



4 ICE BRIDGE GROUNDING DETAIL
SCALE: NOT TO SCALE

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING P.L.L.C.
1711 S. BOULDER
SUITE 200
TULSA, OK 74119
PH: (918) 587-4630
blue@bandtgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

SHEET NUMBER: G-3
REVISION: 5

VZW GENERATOR RETROFIT ALARM LAYOUT

02/04/2010 GFH

New GEN PROG ALARM layout

Replaces existing alarm positions on BLK#2

All GEN PROG ALARMs on BLK#1 to remain the same

TB2

ROW	DESIGNATION	NOMENCLATURE	RELAY	CONTACT	WIRE COLOR	
1	GEN PROG ALARM J1	GEN OVERCRANK	1	1	W/BL	
2	GEN PROG ALARM J1	GEN OVERCRANK	1	2	BL/W	
3	GEN PROG ALARM J2	HIGH WATER TEMP	2	1	W/O	
4	GEN PROG ALARM J2	HIGH WATER TEMP	2	2	O/W	
5	GEN PROG ALARM J3	PRE-LOW OIL PRESSURE	3	1	W/GR	
6	GEN PROG ALARM J3	PRE-LOW OIL PRESSURE	3	2	GR/W	
7	GEN PROG ALARM J4	PRE-HIGH WATER TEMP	4	1	W/BR	
8	GEN PROG ALARM J4	PRE-HIGH WATER TEMP	4	2	BR/W	
9	GEN PROG ALARM J5	PRE-LOW FUEL	5	1	W/SL	
10	GEN PROG ALARM J5	PRE-LOW FUEL	5	2	SL/W	
11	GEN PROG ALARM J6	BATTERY CHARGER FAIL	6	1	R/BL	
12	GEN PROG ALARM J6	BATTERY CHARGER FAIL	6	2	BL/R	
13	GEN PROG ALARM J7	GEN RUN	7	1	R/O	
14	GEN PROG ALARM J7	GEN RUN	7	2	O/R	
15	GEN PROG ALARM J8	GEN NOT IN AUTO	8	1	R/GR	
16	GEN PROG ALARM J8	GEN NOT IN AUTO	8	2	GR/R	
17	GENERATOR SUMMARY ALARM	SUMMARY	9	C	R/BR	
18	GENERATOR SUMMARY ALARM	SUMMARY	9	NC	BR/R	
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35	SUB-PANEL AC POWER FAIL	EXT AC CKT SUB-PANEL	RELAY	NO	W/BL	TVSS ALARM CABLE
36	SUB-PANEL AC POWER FAIL	EXT AC CKT SUB-PANEL	RELAY	C	BL/W	
37	EXTERNAL AC CIRCUIT TVSS	LAE(TVSS3)	SA	NO	W/O	
38	EXTERNAL AC CIRCUIT TVSS	LAE(TVSS3)	SA	C	O/W	
39	GEN. FAIL COMMON (PROG RELAY	GPR2	GEN	NO	W/BL	CABLE 4A
40	GEN. FAIL COMMON (PROG RELAY	GPR2	GEN	C	BL/W	
41	CATCH BASIN (PROG RELAY #4)	GPR4	GEN	NO	W/O	
42	CATCH BASIN (PROG RELAY #4)	GPR4	GEN	C	O/W	
43	UTILITY POWER FAIL	PFA	ATS	NO	W/GR	
44	UTILITY POWER FAIL	PFA	ATS	C	GR/W	
45	ATS/UTILITY SURGE ARREST.	LAU (TVSS1)	ATS	NC	W/BR	
46	ATS/UTILITY SURGE ARREST.	LAU (TVSS1)	ATS	C	BR/W	
47	ATS/GEN SURGE ARREST.	LAG(TVSS2)	ATS	NC	W/SL	
48	ATS/GEN SURGE ARREST.	LAG(TVSS2)	ATS	C	SL/W	
49	ATS/ILC NOT IN AUTO	ATS/ILC	ILC	NC	R/BL	
50	ATS/ILC NOT IN AUTO	ATS/ILC	ILC	C	BL/R	

SURGE ARRESTOR BLOCK

ROW	CABLE #		DESIGNATION	CONTACT	ARRESTOR MODEL	
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19	4	1	GEN. FAIL COMMON (PROG RELAY #2)	GPR2		
20	4	2	GEN. FAIL COMMON (PROG RELAY #2)	GPR2	66PO80	
21	4	3	CATCH BASIN (PROG RELAY #4)	GPR4		
22	4	4	CATCH BASIN (PROG RELAY #4)	GPR4	66PO80	
23	7	1	UTILITY POWER FAIL	PFA		
24	7	2	UTILITY POWER FAIL	PFA	66PO80	
25	7	3	ATS/UTILITY SURGE ARREST.	LAU (TVSS1)		
26	7	4	ATS/UTILITY SURGE ARREST.	LAU (TVSS1)	66PO80	
27	7	5	ATS/GEN SURGE ARREST.	LAG(TVSS2)		
28	7	6	ATS/GEN SURGE ARREST.	LAG(TVSS2)	66PO80	
29	7	7	ATS/ILC NOT IN AUTO	ATS/ILC		
30	7	8	ATS/ILC NOT IN AUTO	ATS/ILC	66PO80	CABLE 4A
31						
32						
33	6	1	AI REMOTE RS232 PORT	DB9 PIN 2		B/WH
34	6	2	AI REMOTE RS232 PORT	DB9 PIN 3	66PO15	W/O
35	6	3	AI REMOTE RS232 PORT	DB9 PIN 5		W/G
36					66PO15	
37						
38						
39						
40						
41						
42						
43						
44						
45	5	1	21LT ANNUNCIATOR PANEL	RS485 (+)		
46	5	2	21LT ANNUNCIATOR PANEL	RS485(-)	66PO15	
47						
48	5	4	21LT ANNUNCIATOR PANEL	12V (-)	66PO80	
49						
50	5	3	21LT ANNUNCIATOR PANEL	12V (+)	66PO80	

NOTE: This document pertains to the install of the generator related alarms only. Adjust the placement of the alarms on TB1 as required based on current site configuration. For LP or Natural Gas generators substitute Pre-Low Water Temp for Pre-Low Fuel alarm on J5.

verizon
20 ALEXANDER DRIVE
WALLINGFORD, CT 06492

CROWN CASTLE
3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065

B+T GRP
MTS ENGINEERING, P.L.L.C.
1717 S. BOULDER
SUITE 300
TULSA, OK 74119
PH: (918) 587-4630
blue@btgrp.com

VERIZON SITE NUMBER:
720892

BU #: **857528**
WOODBURY PAPER MILL RD

85 PAPER MILL ROAD
WOODBURY, CT 06798

EXISTING 150'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
1	9/29/22	GAC	CONSTRUCTION	LR
2	11/18/22	CV	CONSTRUCTION	CV
3	12/01/22	CV	CONSTRUCTION	CV
4	3/29/23	GAC	CONSTRUCTION	LR
5	5/12/23	VX	CONSTRUCTION	LR

MTS ENGINEERING P.L.L.C.
BER:2386985
Expires 3/31/24

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

SHEET NUMBER: REF1

REVISION: 5

ATTACHMENT 4

JMA WIRELESS

MX06FRO840-02

NWAV™ X-Pol Hex-Port Antenna

X-Pol Hex-Port 8 ft 40° Fast Roll Off:

2 ports 698-894 MHz and 4 ports 1695-2180 MHz

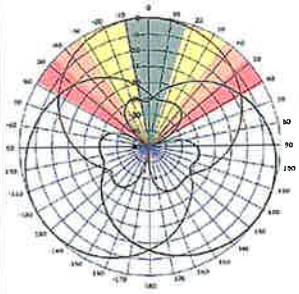
- Fast Roll Off (FRO™) azimuth beam pattern improves Intra- and Inter-cell SINR
- Excellent passive intermodulation (PIM) performance reduces harmful interference.
- Fully integrated (iRETs) with independent RET control for low and high bands for ease of network optimization
- SON-Ready array spacing supports beamforming capabilities
- Suitable for LTE/CDMA/PCS/UMTS/GSM air interface technologies
- Integrated Smart Bias-Ts reduce leasing costs

nwav

Fast Roll-Off antennas increase data throughput without compromising coverage

The horizontal beam produced by Fast Roll-Off (FRO) technology increases the Signal to Interference & Noise Ratio (SINR) by eliminating overlap between sectors

Non-FRO antenna



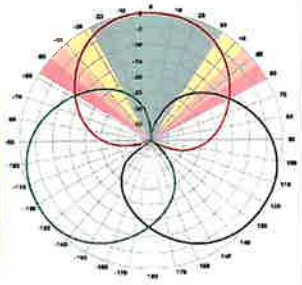
Large traditional antenna pattern overlap creates harmful interference.

JMA's FRO antenna pattern minimizes overlap, thereby minimizing interference.

LTE throughput	SINR	Speed (bps/Hz)	Speed increase	CQI
Excellent	>15	>4.5	333+%	8-15
Good	15-18	3.3-4.5	277%	6-7
Fair	10-15	2-3.3	160%	4-6
Poor	<10	<2	0%	1-3

The LTE radio automatically selects the best throughput based on measured SINR.

JMA FRO antenna



Electrical specification (minimum/maximum)	Ports 1, 2		Ports 3, 4, 5, 6		
Frequency bands, MHz	698-798	824-894	1695-1880	1850-1990	1920-2180
Polarization	±45°		±45°		
Average gain over all tilts, dBi	17.6	18.0	19.9	20.4	20.8
Horizontal beamwidth (HBW), degrees	42	37	39	36	34
Front-to-back ratio, co-polar power @180°± 30°, dB	>22.0	>22.0	>25.0	>25.0	>25.0
X-Pol discrimination (CPR) at boresight, dB	>18.0	>15.0	>18	>18	>15
Sector power ratio, percent	<4.5	<3.5	<3.7	<3.8	<3.6
Vertical beamwidth (VBW), degrees[1]	9.0	8.3	6.0	5.7	5.3
Electrical downtilt (EDT) range, degrees	2-12	2-12	0-9		
First upper side lobe (USLS) suppression, dB[1]	≤-15.0	≤-15.0	≤-16.0	≤-16.0	≤-16.0
Cross-polar isolation, port-to-port, dB[1]	25	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153		-153		
Max input power per any port, watts	300		250		
Total composite power all ports, watts	1500				

[1] Typical value over frequency and tilt

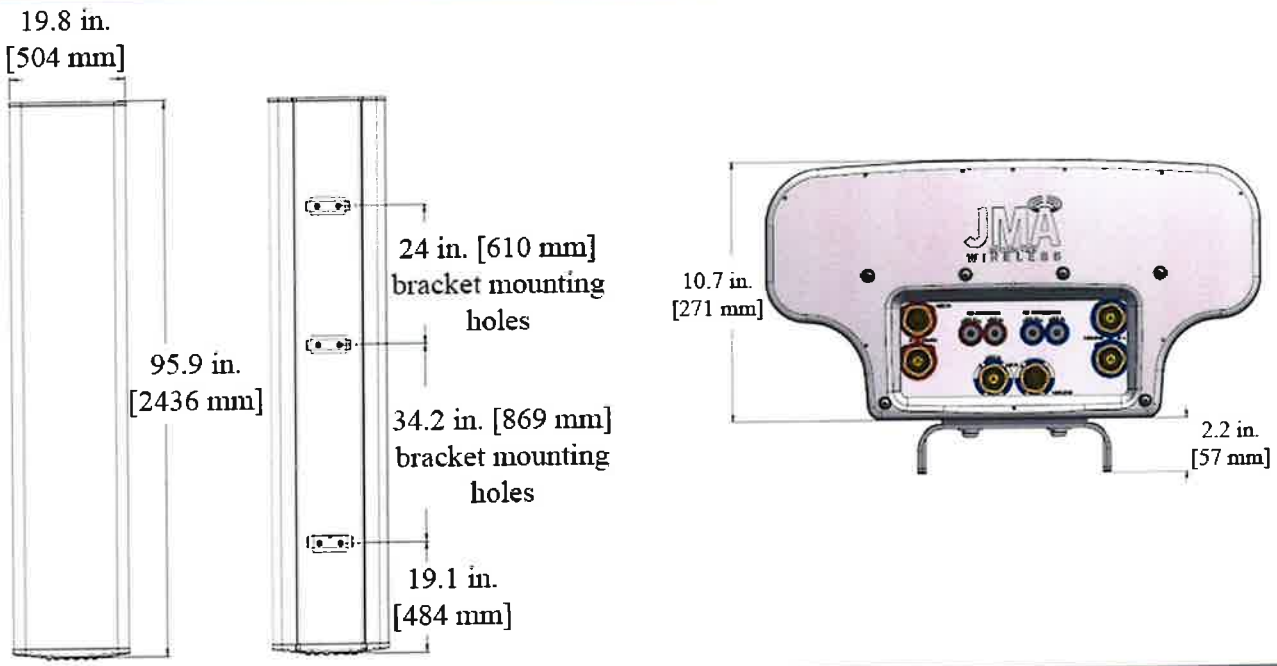
©2022 JMA Wireless. All rights reserved. This document contains proprietary information. All products, company names, brands, and logos are trademarks™ or registered® trademarks of their respective holders. All specifications are subject to change without notice. +1 315.431.7100 customerservice@jmawireless.com

MX06FRO840-02

NWAV™ X-Pol Hex-Port Antenna

Mechanical specifications	
Dimensions height/width/depth, inches (mm)	95.9/ 19.8/ 10.7 (2436/ 504/ 271)
Shipping dimensions length/width/height, inches (mm)	106/ 26/ 15 (2692/ 660/ 381)
No. of RF input ports, connector type, and location	6 x 4.3-10 female, bottom
RF connector torque	96 lbf·in (10.85 N·m or 8 lbf·ft)
Net antenna weight, lb (kg)	98 (44.55)
Shipping weight, lb (kg)	147 (66.82)
Antenna mounting and downtilt kit included with antenna	91900318, 91900319 (middle bracket)
Net weight of the mounting and downtilt kit, lb (kg)	26 (11.82)
Range of mechanical up/down tilt	-2° to 12°
Rated wind survival speed, mph (km/h)	150 (241)
Frontal and lateral wind loading @ 150 km/h, lbf (N)	213.4 (949.3), 105.4 (468.8)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	6.32
EPA frontal and lateral, ft^2, (m^2)	9.6 (0.89), 3.6 (0.33)

Front view | Back view | Bottom view



Ordering information	
Antenna model	**Description**
MX06FRO840-02	8F X-Pol HEX FRO 40°, 2-12° / 0-9° RET, 4.3-10 & SBT
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations

©2022 JMA Wireless. All rights reserved. This document contains proprietary information. All products, company names, brands, and logos are trademarks™ or registered® trademarks of their respective holders. All specifications are subject to change without notice. +1 315.431.7100 customerservice@jmawireless.com

MX06FRO840-02

NWAV™ X-Pol Hex-Port Antenna

Remote electrical tilt (RET 1000) information	
RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	2 pairs of AISG male/female connectors
RET interface connector location	Bottom of the antenna
Total no. of internal RETs (low bands)	1
Total no. of internal RETs (high bands)	1
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0 / 3GPP

RET and RF connector topology

Each RET device can be controlled either via the designated external AISG connector or RF port as shown below:

RET device	Band	RF port
R1	698-894	1-2

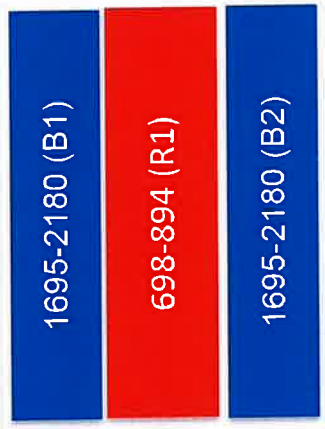
RET device	Band	RF port
B1/B2	1695-2180	3-6

Array topology

3 sets of radiating arrays

R1: 698-894 MHz
B1: 1695-2180 MHz
B2: 1695-2180 MHz

Band	RF port
1695-2180	3-4
698-894	1-2
1695-2180	5-6



©2022 JMA Wireless. All rights reserved. This document contains proprietary information. All products, company names, brands, and logos are trademarks™ or registered® trademarks of their respective holders. All specifications are subject to change without notice. +1 315.431.7100 customerservice@jmawireless.com

JMA WIRELESS

MX06FRO860-03

NWAV™ X-Pol Hex-Port Antenna

X-Pol Hex-Port 8 ft 60° Fast Roll Off antenna with independent tilt on 700 & 850 MHz:

2 ports 698-798, 824-894 MHz and 4 ports 1695-2180 MHz

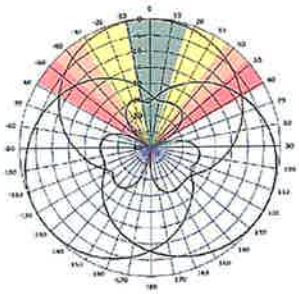
- Fast Roll Off (FRO™) azimuth beam pattern improves Intra- and Inter-cell SINR
- Compatible with dual band 700/850 MHz radios with independent low band EDT without external diplexers
- Fully integrated (iRETs) with independent RET control for low and high bands for ease of network optimization
- SON-Ready array spacing supports beamforming capabilities
- Suitable for LTE/CDMA/PCS/UMTS/GSM air interface technologies
- Integrated Smart Bias-Ts reduce leasing costs

nwav

Fast Roll-Off antennas increase data throughput without compromising coverage

The horizontal beam produced by Fast Roll-Off (FRO) technology increases the Signal to Interference & Noise Ratio (SINR) by eliminating overlap between sectors.

Non-FRO antenna



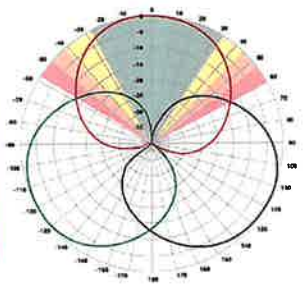
Large traditional antenna pattern overlap creates harmful interference.

JMA's FRO antenna pattern minimizes overlap, thereby minimizing interference.

LTE throughput	SINR	Speed (bps/Hz)	Speed Increase	CQI
Excellent	>18	>4.5	333+%	8-15
Good	15-18	3.3-4.5	277%	6-7
Fair	10-15	2-3.3	160%	4-6
Poor	<10	<2	0%	1-3

The LTE radio automatically selects the best throughput based on measured SINR.

JMA FRO antenna



Electrical specification (minimum/maximum)	Ports 1, 2		Ports 3, 4, 5, 6		
Frequency bands, MHz	698-798	824-894	1695-1880	1850-1990	1920-2180
Polarization	±45°		±45°		
Average gain over all tilts, dBi	15.3	14.5	17.6	17.9	18.2
Horizontal beamwidth (HBW), degrees	60.0	53.5	55.0	55.0	55.5
Front-to-back ratio, co-polar power @180°± 30°, dB	>22.0	>21.0	>25.0	>25.0	>25.0
X-Pol discrimination (CPR) at boresight, dB	>18.0	>15.0	>18	>18	>15
Sector power ratio, percent	<4.5	<3.5	<3.7	<3.8	<3.6
Vertical beamwidth (VBW), degrees[1]	9.0	8.3	6.0	5.5	5.5
Electrical downtilt (EDT) range, degrees	2-12	2-12	0-9		
First upper side lobe (USLS) suppression, dB[1]	≤-15.0	≤-15.0	≤-16.0	≤-16.0	≤-16.0
Cross-polar isolation, port-to-port, dB[1]	25	25	25	25	25
Max VSWR / return loss, dB	1.5:1 / -14.0		1.5:1 / -14.0		
Max passive intermodulation (PIM), 2x20W carrier, dBc	-153		-153		
Max input power per any port, watts	300		250		
Total composite power all ports, watts	1500				

[1] Typical value over frequency and tilt

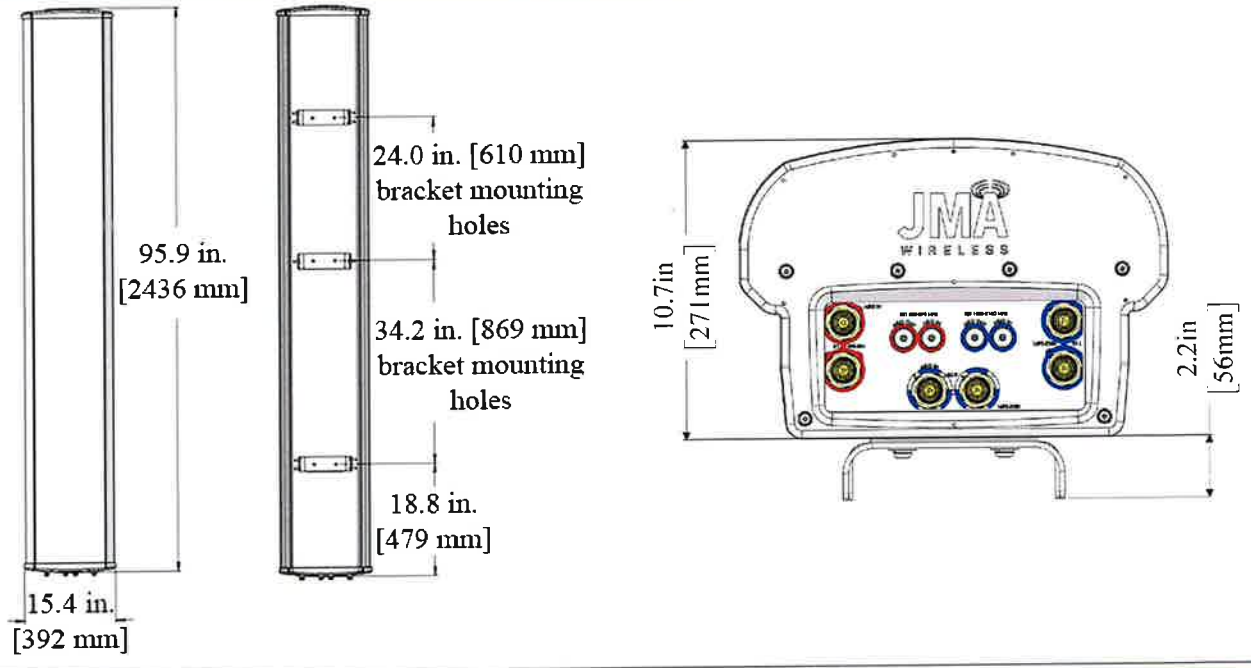
©2022 JMA Wireless. All rights reserved. This document contains proprietary information. All products, company names, brands, and logos are trademarks™ or registered® trademarks of their respective holders. All specifications are subject to change without notice. +1 315.431.7100 customerservice@jmawireless.com

MX06FRO860-03

NWAV™ X-Pol Hex-Port Antenna

Mechanical specifications	
Dimensions height/width/depth, inches (mm)	95.9/ 15.4/ 10.7 (2436/ 392/ 273)
Shipping dimensions length/width/height, inches (mm)	106/ 20/ 15 (2692/ 508/ 381)
No. of RF input ports, connector type, and location	6 x 4.3-10 female, bottom
RF connector torque	96 lbf·in (10.85 N·m or 8 lbf·ft)
Net antenna weight, lb (kg)	65 (29.5)
Shipping weight, lb (kg)	95 (43.1)
Antenna mounting and downtilt kit included with antenna	91900318, 91900319 (middle bracket)
Net weight of the mounting and downtilt kit, lb (kg)	26 (11.82)
Range of mechanical up/down tilt	-2° to 12°
Rated wind survival speed, mph (km/h)	150 (241)
Frontal and lateral wind loading @ 150 km/h, lbf (N)	141.4 (629.0), 105.8 (470.6)
Equivalent flat plate @ 100 mph and Cd=2, sq ft	3.46
EPA frontal and lateral, ft^2, (m^2)	6.4 (0.59), 3.2 (0.30)

Front view | Back view | Bottom view



Ordering information	
Antenna model	**Description**
MX06FRO860-03	8F X-Pol HEX FRO 60° independent tilt 700/850 RET, 4.3-10 & SBT
Optional accessories	
AISG cables	M/F cables for AISG connections
PCU-1000 RET controller	Stand-alone controller for RET control and configurations

©2022 JMA Wireless. All rights reserved. This document contains proprietary information. All products, company names, brands, and logos are trademarks™ or registered® trademarks of their respective holders. All specifications are subject to change without notice. +1 315.431.7100 customerservice@jmawireless.com

MX06FRO860-03

NWAV™ X-Pol Hex-Port Antenna

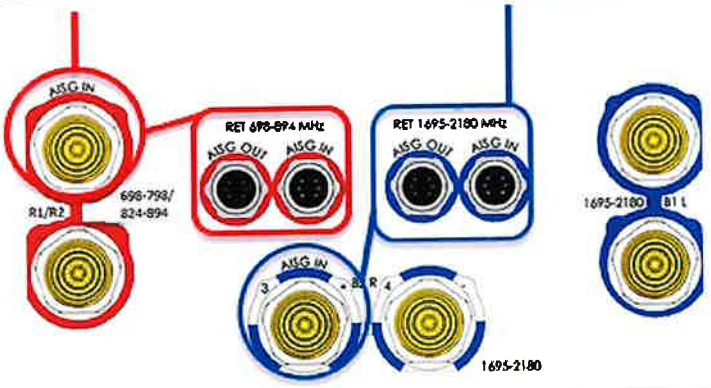
Remote electrical tilt (RET 1000) information	
RET location	Integrated into antenna
RET interface connector type	8-pin AISG connector per IEC 60130-9
RET connector torque	Min 0.5 N·m to max 1.0 N·m (hand pressure & finger tight)
RET interface connector quantity	2 pairs of AISG male/female connectors
RET interface connector location	Bottom of the antenna
Total no. of internal RETs (low bands)	2
Total no. of internal RETs (high bands)	1
RET input operating voltage, vdc	10-30
RET max power consumption, idle state, W	≤ 2.0
RET max power consumption, normal operating conditions, W	≤ 13.0
RET communication protocol	AISG 2.0 / 3GPP

RET and RF connector topology

Each RET device can be controlled either via the designated external AISG connector or RF port as shown below:

RET device	Band	RF port
R1	698-798	1-2
R2	824-894	1-2

RET device	Band	RF port
B1/B2	1695-2180	3-6

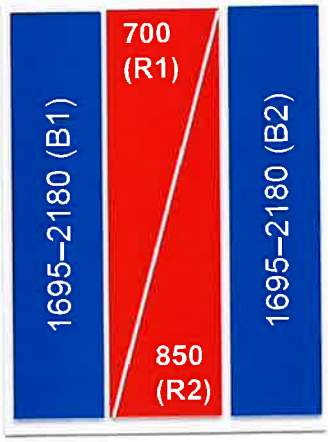


Array topology

3 sets of radiating arrays

R1/R2: 698-894 MHz
B1: 1695-2180 MHz
B2: 1695-2180 MHz

Band	RF port
1695-2180	3-4
698-894	1-2
1695-2180	5-6



©2022 JMA Wireless. All rights reserved. This document contains proprietary information. All products, company names, brands, and logos are trademarks™ or registered® trademarks of their respective holders. All specifications are subject to change without notice. +1 315.431.7100 customerservice@jmawireless.com

SAMSUNG

SAMSUNG C-Band 64T64R Massive MIMO Radio

for High Capacity and Wide Coverage

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

Model Code : MT6407-77A

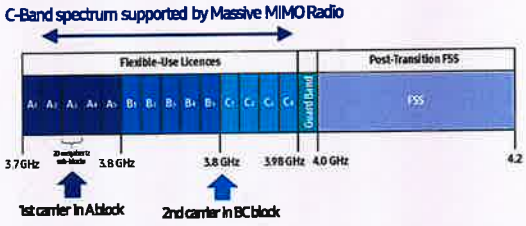
Points of Differentiation

Wide Bandwidth

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

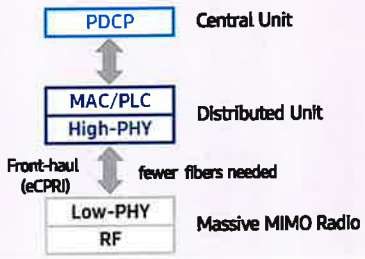
Samsung C-Band massive MIMO Radio covers the entire C-Band 280 MHz spectrum, so it can meet the operator's needs in current A block and future B/C blocks

C-Band spectrum supported by Massive MIMO Radio



Future Proof Product

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



Enhanced Performance

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

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

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

Well Matched Design

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

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

Technical Specifications

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

SAMSUNG

About Samsung Electronics Co., Ltd.

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

129 Samsung-ro, Yeongtong-gu, Suwon-si Gyeonggi-do, Korea

© 2021 Samsung Electronics Co., Ltd.

All rights reserved. Information in this leaflet is proprietary to Samsung Electronics Co., Ltd. and is subject to change without notice. No information contained here may be copied, translated, transcribed or duplicated by any form without the prior written consent of Samsung Electronics.

SAMSUNG

AWS/PCS MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This AWS/PCS 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code RF4439d-25A

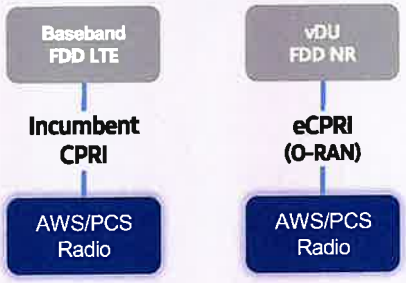
Homepage
samsungnetworks.com

Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

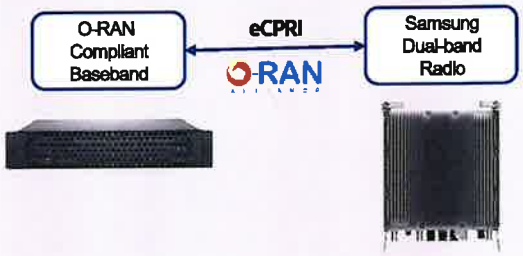
Samsung's AWS/PCS macro radio can support each incumbent CPRI interface as well as advanced eCPRI interfaces. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help in implementing cost-effective networks, which are capable of sending more data without compromising additional investments.

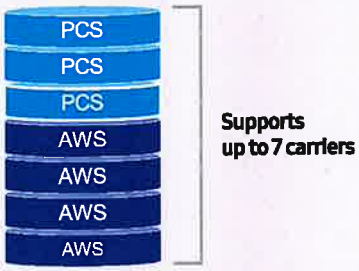
Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

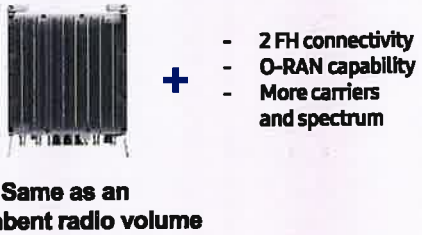
The number of required carriers varies according to site (region). Supporting many carriers is essential for using all frequencies that the operator has available.

The new AWS/PCS dual-band radio can support up to 3 carriers in the PCS (1.9GHz) band and 4 carriers in the AWS (2.1GHz) band, respectively.



Brand New Features in a Compact Size

Samsung's AWS/PCS macro radio offers several features, such as dual connectivity for baseband for both CDU and vDU, O-RAN capability, more carriers and an enlarged PCS spectrum, combined into an incumbent radio volume of 36.8L.



Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B25(PCS), B66(AWS)
Frequency Band	DL: 1930 – 1995MHz, UL: 1850 – 1915MHz DL: 2110 – 2200MHz, UL: 1710 – 1780MHz
RF Power	(B25) 4 × 40W or 2 × 60W (B66) 4 × 60W or 2 × 80W
IBW/OBW	(B25) 65MHz / 30MHz (B66) DL 90MHz, UL 70MHz / 60MHz
Installation	Pole, Wall
Size/ Weight	14.96 x 14.96 x 10.04inch (36.8L) / 74.7lb

SAMSUNG

700/850MHZ MACRO RADIO

DUAL-BAND AND HIGH POWER FOR MACRO COVERAGE

Samsung's future proof dual-band radio is designed to help effectively increase the coverage areas in wireless networks. This 700/850MHz 4T4R dual-band radio has 4Tx/4Rx to 2Tx/2Rx RF chains options and a total output power of 320W, making it ideal for macro sites.

Model Code	RF4440d-13A

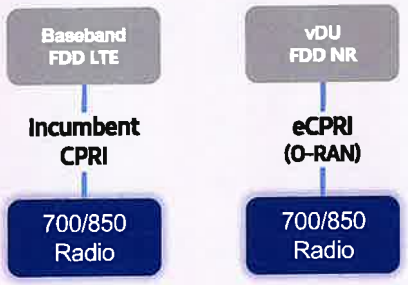
Homepage
samsungnetworks.com

Youtube
www.youtube.com/samsung5g

Points of Differentiation

Continuous Migration

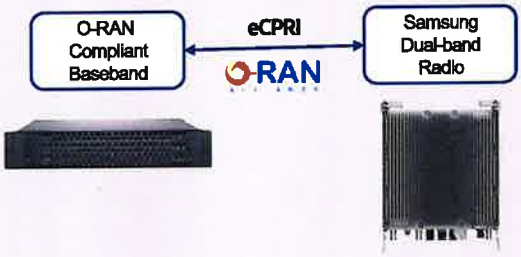
Samsung's 700/850MHz macro radio can support each incumbent CPRI interface as well as an advanced eCPRI interface. This feature provides installable options for both legacy LTE networks and added NR networks.



O-RAN Compliant

A standardized O-RAN radio can help when implementing cost-effective networks because it is capable of sending more data without compromising additional investments.

Samsung's state-of-the-art O-RAN technology will help accelerate the effort toward constructing a solid O-RAN ecosystem.



Optimum Spectrum Utilization

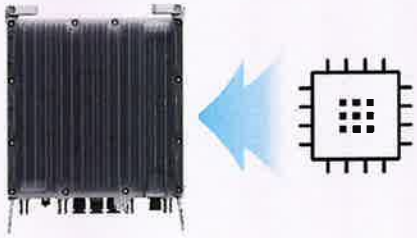
The number of required carriers varies according to site (region). The ability to support many carriers is essential for using all frequencies that the operator has available.

The new 700/850MHz dual-band radio can support up to 2 carriers in the B13 (700MHz) band and 3 carriers in the B5 (850MHz) band, respectively.

Secured Integrity

Access to sensitive data is allowed only to authorized software.

The Samsung radio's CPU can protect root of trust, which is credential information to verify SW integrity, and secure storage provides access control to sensitive data by using dedicated hardware (TPM).



Technical Specifications

Item	Specification
Tech	LTE / NR
Brand	B13(700MHz), B5(850MHz)
Frequency Band	DL: 746 – 756MHz, UL: 777 – 787MHz DL: 869 – 894MHz, UL: 824 – 849MHz
RF Power	(B13) 4 × 40W or 2 × 60W (B5) 4 × 40W or 2 × 60W
IBW/OBW	(B13) 10MHz / 10MHz (B5) 25MHz / 25MHz
Installation	Pole, Wall
Size/ Weight	14.96 x 14.96 x 9.05inch (33.2L) / 70.33 lb

30REOZK

30 kW Generator

LEGENDARY KOHLER QUALITY
FOR SMALL SPACES

COMPACT FOOTPRINT

Our 76.5" x 32" rectangular footprint is specially designed for cell tower site applications.

QUIET PERFORMANCE

Our sound enclosure delivers a sound performance of 65 dBA— which is among the quietest available.

RELIABLE POWER

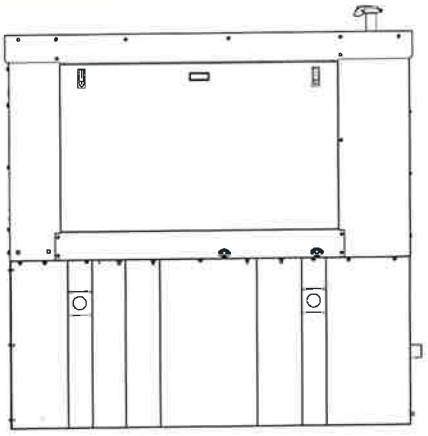
Our direct engine/alternator design eliminates the possibility of generator failure due to improper adjustment or belt breakdowns.

SINGLE-SIDE SERVICE

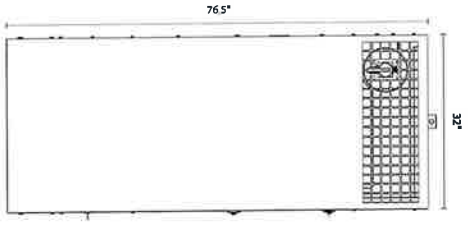
Maintenance is easy. All frequently serviced touch points are located on a single side and accessible by an easy-to-remove lift off door.

30REOZK

Front View



Top View



MODEL		30REOZK
FUEL TYPE		Diesel
ENGINE MAKER		Kohler KDI
OPERATING SPEED	(rpm)	1800
CONTROLLER		Kohler Decision-Maker 3000
VOLTAGE		120/240 1 Phase
TANK GALLON/48 HRS @ FULL LOAD		203
TANK*		Standard, Double Wall
OVERALL DIMENSIONS	L x W x H in	76.5 x 32.0 x 47.0
WEIGHT	lbs	1130
PEOPLESOFT NUMBER		21099077

*Alternative tank sizes, state tanks and 3 phase models available.

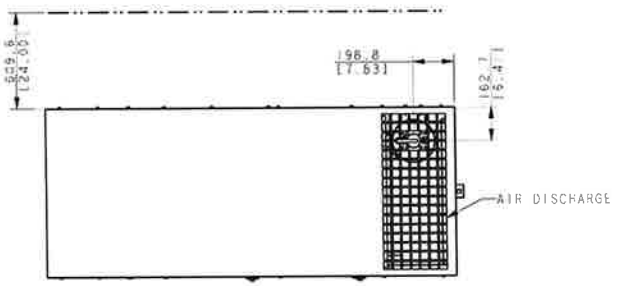
KOHLER.
IN POWER. SINCE 1920.

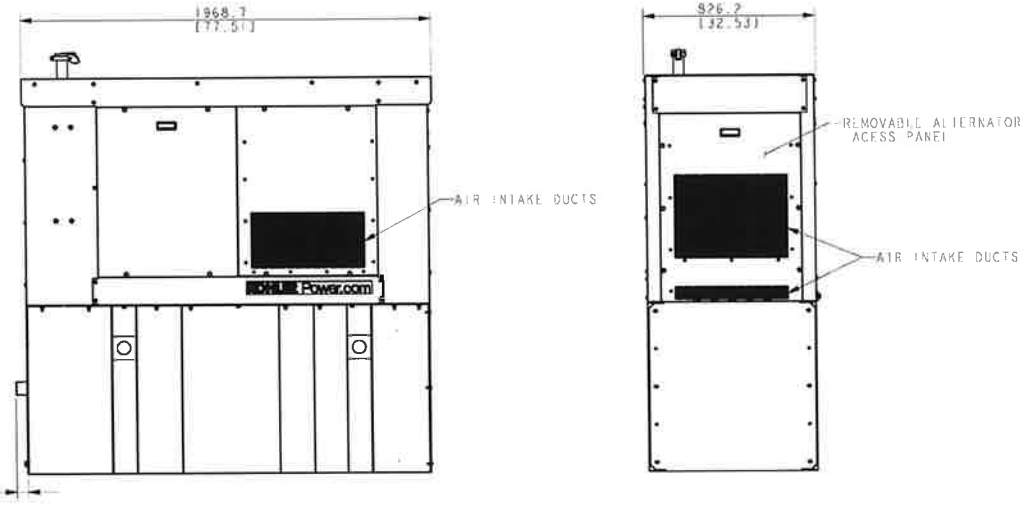
KOHLERPOWER.COM

PRINTED IN U.S.A G12-505 3/18 ©2018 BY KOHLER CO.

NOTES:
1. THE RIGHT SIDE OF THE GENERATOR IS SERVICE ACCESSIBLE.
2. 6 AMP BATTERY CHARGER.
3. 120VAC ENGINE BLOCK HEATER.
4. GENERATOR MUST BE GROUNDED.
5. SOUND ATTENUATED ENCLOSURE STANDARD WITH GENERATOR.
6. MUST ALLOW FREE FLOW OF DISCHARGE AIR AND EXHAUST.
7. MUST ALLOW FREE FLOW OF INTAKE AIR.
8. EASY ACCESS SERVICE PANEL IS LOCATED ON THE RIGHT SIDE OF THE GENERATOR ONLY
9. BASE TANK REQUIRES ALL STUB-UPS TO BE IN THE REAR TANK STUB-UP AREA.
10. SEE TABLE FOR SUBBASE FUEL TANK CAPACITY.
11. TANK EQUIPPED WITH FIRE SAFETY VALVE ON FUEL SUPPLY LINE
12. IT IS THE RESPONSIBILITY OF THE INSTALLATION TECHNICIAN TO ENSURE THAT THE GENERATOR INSTALLATION COMPLIES WITH ALL APPLICABLE CODES, STANDARDS, AND REGULATIONS.
13. GENERATOR IS INSTALLED ON A UL-142 RATE DOUBLE WALL SUBBASE FUEL TANK.

MINIMUM REQUIRED CLEARENCE FOR AIRFLOW





GENSET	TANK P/N	TANK HT (A) MM [IN]	DESCRIPTION	ASSY WEIGHT
20RLOZK	GM97093-MA1	812.8 [32.0]	SKID/TANK, 148 GAL	827 KG [1823 LBS]
20RLOZK	GM97093-MA2	1041.2 [41.0]	SKID/TANK, 203 GAL	893 KG [1968 LBS]
20RLOZK	GM97093-MA3	381.0 [15.0]	SKID/TANK, 53 GAL	706 KG [1557 LBS]
20RLOZK	GM97093-MA4	685.8 [27.0]	SKID/TANK, 120 GAL	793 KG [1745 LBS]
30REOZK	GM97093-MA1	812.8 [32.0]	SKID/TANK, 148 GAL	893 KG [1969 LBS]
30RLOZK	GM97093-MA2	1041.4 [41.0]	SKID/TANK, 203 GAL	959 KG [2114 LBS]
30RLOZK	GM97093-MA3	381.0 [15.0]	SKID/TANK, 53 GAL	772 KG [1703 LBS]
30REOZK	GM97093-MA4	685.8 [27.0]	SKID/TANK, 120 GAL	792 KG [1745 LBS]

20-30KW KOHLER DIESEL
SOUND ENCL W/LIFT OFF PANEL

REV	DATE	CN	BY
-	2-2-16	NEW DRAWING (CE:387913)	JMM

KOHLER CO. METRIC PRO-E

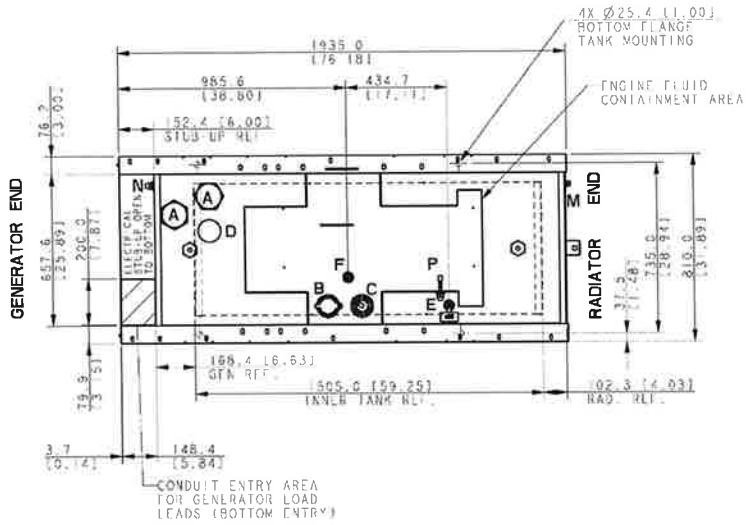
KOHLER SYSTEMS, KOHLER, WI 53044 U.S.A.

THIS DRAWING OR DETAIL IS KOHLER CO PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER EQUIPMENT. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DIMENSION PRINT, KD12504TM
VERIFON W/SOUND ENCLOSURE

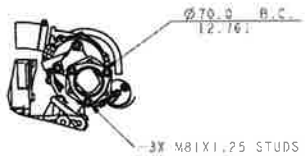
APPROVALS DATE
DRAWN MK 2-2-16
CHECKED JWS 2-2-16
APPROVED KLC 2-2-16

SCALE 0.06 DWG NO. ADV-8855 SHEET 1 OF 2 REV D

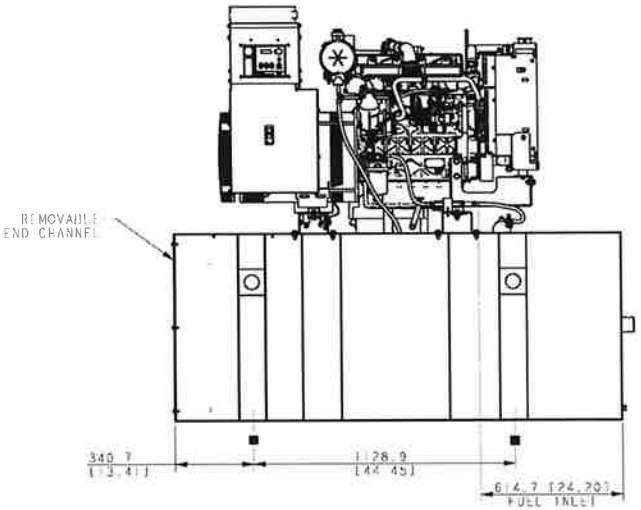


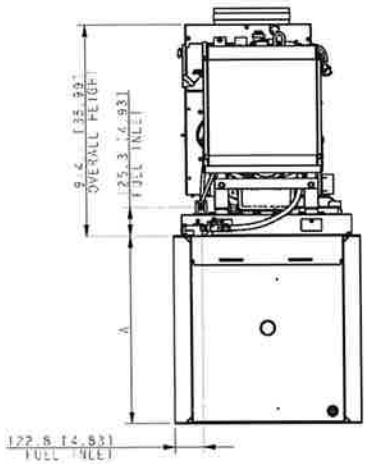
TANK FITTINGS:

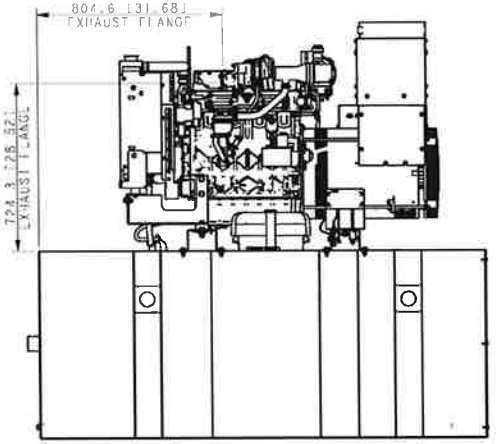
A. 3" NPT EMERGENCY VENT FITTING PER NFPA 30 WITH VENT CAPS (QTY 2).
B. 4" NPT FUEL FILL FITTING WITH 95% OVERFILL PREVENTION VALVE.
C. 2" NPT FITTING FOR FUEL LEVEL SENDING UNIT WITH MECHANICAL INDICATOR NEEDLE.
D. 2" NPT NORMAL VENT FITTING WITH MUSHROOM VENT CAP AND RISER.
E. 1/2" NPT FITTING REMOVABLE ENGINE SUPPLY DIP TUBE W/ FUEL SAFETY VALVE
F. 1/2" NPT FITTING REMOVABLE FUEL RETURN DIP TUBE.
M. 1/2" NPT RUPTURE BASIN DRAIN
N. 2" NPT FUEL IN BASIN SWITCH.
P. 1/2" NPT FLOAT SWITCH FOR ENGINE FLUID CONTAINMENT BASIN.



EXHAUST FLANGE DETAIL







NOTE:
FOR FURTHER TANK DETAIL SEE INDIVIDUAL DRAWINGS

■4X Ø25.4 [1.00] STANDARD MOUNTING

20-30KW KOHLER DIESEL

REV	DATE	DESCRIPTION	BY
-	7-7-16	NEW DRAWING (C1:387911)	JMK

KOHLER CO. METRIC PRO-E

POWER SYSTEMS, KOHLER, WI 53044 U.S.A.

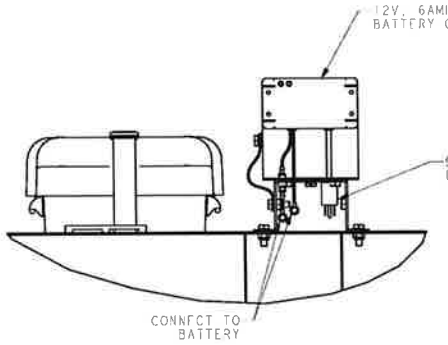
THIS DRAWING IS BASED AND DETAIL IS KOHLER CO. PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.

DIMENSION PRINT KDI2504TM VERIZON W/SOUND ENCLOSURE

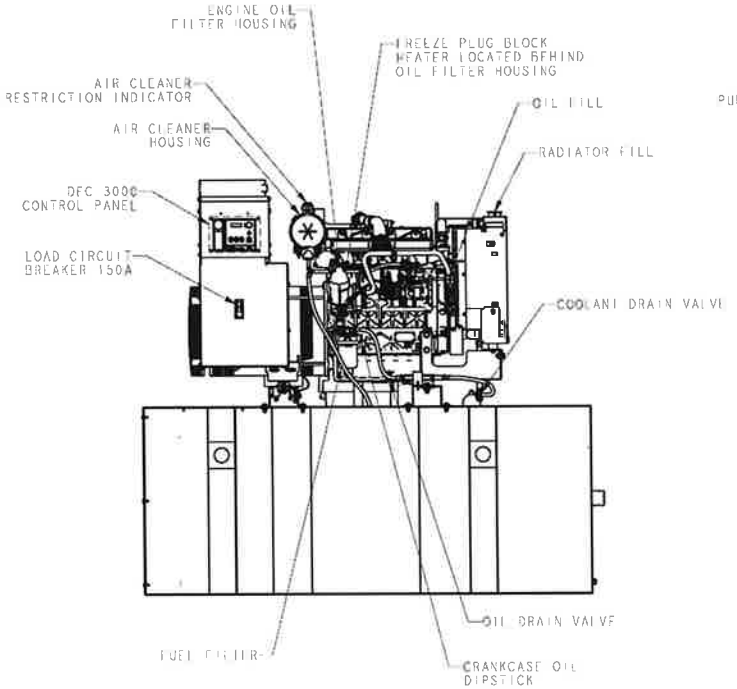
ADV-8855 D

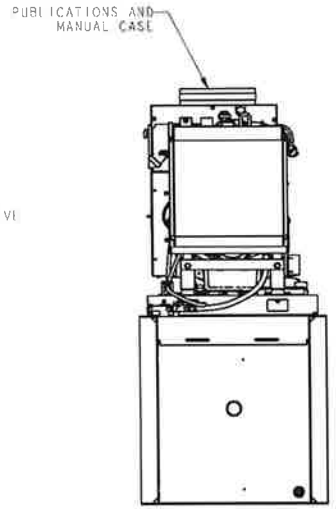
NOTE:
THIS GENERATOR SET HAS FRONT ACCESSIBILITY TO ALL ROUTINELY SERVICED COMPONENTS INCLUDING:

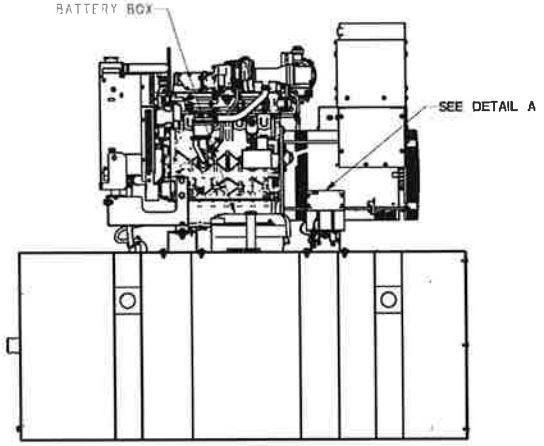
1. AIR FILTER
2. OIL FILTER / FILL
3. FUEL FILTER
4. OIL DRAIN
5. COOLANT DRAIN



DETAIL A
BATTERY CHARGER







20-30KW KOHLER DIESEL

REV	DATE	DESCRIPTION	BY
-	7-7-16	NEW DRAWING (C1357911)	JNB

KOHLER CO. METRIC PRO-E
POWER SYSTEMS, KOHLER, WI 53044 U.S.A.
THIS DRAWING IS ORIGINAL AND DETAIL IS KOHLER CO PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH KOHLER CO. WORK. ALL RIGHTS OF DESIGN OF INVENTION ARE RESERVED.

DIMENSION PRINT KDI2504TM
VERIZON W/SOUND ENCLOSURE

ADV-8855 D

ATTACHMENT 5

Date: **February 01, 2023**

Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317
(724) 416-2000

Subject:	**Structural Analysis Report**	
Carrier Designation:	***Verizon Wireless* Co-Locate**	
	Site Number:	720892
	Site Name:	WOODBURY NW CT
Crown Castle Designation:	**BU Number:**	857528
	Site Name:	WOODBURY PAPER MILL RD
	JDE Job Number:	740204
	Work Order Number:	2200757
	Order Number:	644453 Rev. 0
Engineering Firm Designation:	**Crown Castle Project Number:**	2200757
Site Data:	**85 PAPER MILL ROAD, WOODBURY, LITCHFIELD County, CT**	
	Latitude *41° 34' 23.07"*, Longitude *-73° 13' 39.51"*	
	150 Foot - Monopole Tower	

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

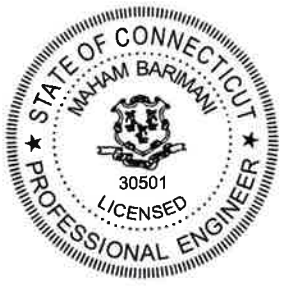
The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC5: Proposed Equipment Configuration **Sufficient Capacity – 75.1%**

This analysis has been performed in accordance with the 2022 Connecticut State Building Code based upon an ultimate 3-second gust wind speed of 115 mph. Applicable Standard references and design criteria are listed in Section 2 - "Analysis Criteria".

Structural analysis prepared by: Michael Lopienski

Respectfully submitted by:



Maham Barimani, P.E.
Senior Project Engineer

TABLE OF CONTENTS

1) INTRODUCTION

This tower is a 150 ft Monopole tower designed by Ehresmann Engineering 1995.

2) ANALYSIS CRITERIA

TIA-222 Revision:	TIA-222-H
Risk Category:	II
Wind Speed:	115 mph
Exposure Category:	B
Topographic Factor:	1
Ice Thickness:	1 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)
118.0	118.0	4	jma wireless	MX06FRO840-02_CCIV2 w/ Mount Pipe	1	1-5/8
		2	jma wireless	MX06FRO860-03 w/ Mount Pipe		
		1	raycap	RVZDC-6627-PF-48_CCIV2		
		3	samsung telecommunications	MT6407-77A w/ Mount Pipe		
		3	samsung telecommunications	RF4439D-25A		
		3	samsung telecommunications	RF4440D-13A		
		1	tower mounts	Platform Mount [LP 301-1_KCKR]		
		1	tower mounts	Site Pro 1 F3P-12[W]		
		1	tower mounts	Site Pro 1 F3P-HRK12		

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)
148.0	148.0	1	cci antennas	DMP65R-BU4D w/ Mount Pipe	2 3 2 6	3/8 3/4 5/8 1-5/8
		2	cci antennas	DMP65R-BU6D w/ Mount Pipe		
		1	cci antennas	OPA65R-BU4D w/ Mount Pipe		
		2	cci antennas	OPA65R-BU6D w/ Mount Pipe		
		3	ericsson	RRUS 4449 B5/B12		
		3	ericsson	RRUS 4478 B14		
		3	ericsson	RRUS 8843 B2/B66A		
		-	mounts	Mount Reinforcements		
		3	powerwave technologies	TT19-08BP111-001		
		3	powerwave technologies	P90-14-XLH-RR w/ Mount Pipe		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		2	raycap	DC6-48-60-18-8F		
		1	tower mounts	Miscellaneous [NA 507-1]		
		1	tower mounts	Platform Mount [LP 712-1]		
136.0	140.0	3	fujitsu	TA08025-B604	1	1-1/2
		3	fujitsu	TA08025-B605		
	138.0	3	jma wireless	MX08FRO665-21 w/ Mount Pipe		
		1	raycap	RDIDC-9181-PF-48		
	136.0	1	tower mounts	Commscope MC-PK8-DSH		
128.0	128.0	3	ericsson	AIR6449 B41_T-MOBILE w/ Mount Pipe	2	1-5/8
		3	ericsson	RADIO 4460 B2/B25 B66_TMO		
		3	ericsson	RADIO 4480 B71_TMO		
		3	rfs celwave	APXVAALL24_43-U-NA20_TMO w/ Mount Pipe		
		1	tower mounts	SitePro1 RMQP-4096-HK		

3) ANALYSIS PROCEDURE

Table 3 - Documents Provided

Document	Reference	Source
4-GEOTECHNICAL REPORTS	4570959	CCISITES
4-TOWER FOUNDATION DRAWINGS/DESIGN/SPECS	4724414	CCISITES
4-TOWER MANUFACTURER DRAWINGS	4724415	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.

3.2) Assumptions

1) 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. Crown Castle should be notified to determine the effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 4 - Section Capacity (Summary)

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (K)	SF*P_allow (K)	% Capacity	Pass / Fail
L1	150 - 104.5	Pole	TP28.1875x18x0.1875	1	-18.06	988.77	64.9	Pass
L2	104.5 - 68.75	Pole	TP35.75x26.8609x0.25	2	-22.98	1673.43	73.9	Pass
L3	68.75 - 34	Pole	TP43x34.0833x0.3125	3	-29.94	2519.29	66.0	Pass
L4	34 - 0	Pole	TP50x41.0375x0.3125	4	-39.73	3027.25	73.7	Pass
							Summary	
						Pole (L2)	73.9	Pass
						Rating =	73.9	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC5

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1	Anchor Rods	0	32.1	Pass
1	Base Plate	0	46.6	Pass
1	Base Foundation (Structure)	0	37.1	Pass
1	Base Foundation (Soil Interaction)	0	75.1	Pass

Structure Rating (max from all components) =	75.1%

Notes:
1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity consumed.

4.1) Recommendations

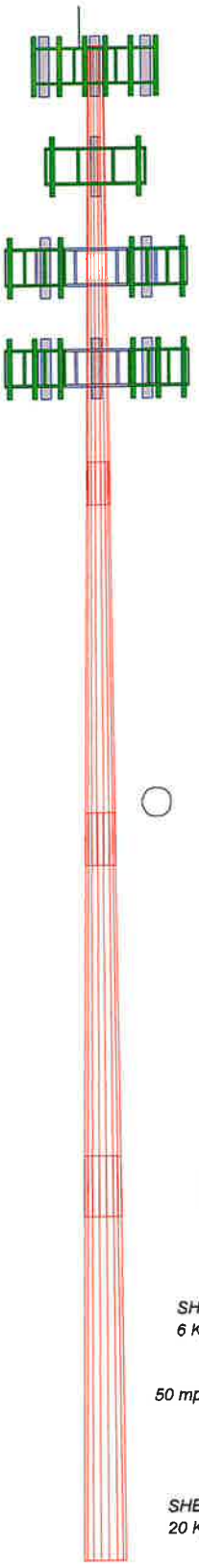
The tower and its foundation have sufficient capacity to carry the proposed load configuration. No modifications are required at this time.

APPENDIX A

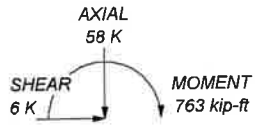
TNXTOWER OUTPUT

Section	1	2	3	4
Length (ft)	45.50	40.00	40.00	40.00
Number of Sides	18	18	18	18
Thickness (in)	0.1875	0.2500	0.3125	0.3125
Socket Length (ft)	4.25	5.25	6.00	
Top Dia (in)	18.0000	26.8609	34.0833	41.0375
Bot Dia (in)	28.1875	35.7500	43.0000	50.0000
Grade	A572-65			
Weight (K)	2.1	3.4	5.2	6.1

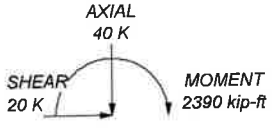
16.7



ALL REACTIONS ARE FACTORED



TORQUE 0 kip-ft
50 mph WIND - 1.0000 in ICE



TORQUE 1 kip-ft
REACTIONS - 115 mph WIND

MATERIAL STRENGTH

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

TOWER DESIGN NOTES

1. Tower designed for Exposure B to the TIA-222-H Standard.
2. Tower designed for a 115 mph basic wind in accordance with the TIA-222-H Standard.
3. Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
4. Deflections are based upon a 60 mph wind.
5. Tower Risk Category II.
6. Topographic Category 1 with Crest Height of 0.00 ft
7. TOWER RATING: 73.9%

CROWN CASTLE
The Pathway to Possible

Crown Castle
2000 Corporate Drive
Canonsburg, PA 15317
Phone: (724) 416-2000
FAX:

Job: BU 857528			
Project:			
Client: Crown Castle	Drawn by: MLopienski		App'd:
Code: TIA-222-H	Date: 02/01/23		Scale: NTS
Path: C:\Work Area\857528\WO 2200757 - SA\Prod\857528.eri			Dwg No. E-1

Tower Input Data

The tower is a monopole.
This tower is designed using the TIA-222-H standard.
The following design criteria apply:

- Tower base elevation above sea level: 528.00 ft.
- Basic wind speed of 115 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 1.0000 in.
- Ice thickness is considered to increase with height.
- Ice density of 56 pcf.
- A wind speed of 50 mph is used in combination with ice.
- Temperature drop of 50 °F.
- Deflections calculated using a wind speed of 60 mph.
- A non-linear (P-delta) analysis was used.
- Pressures are calculated at each section.
- 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

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

Tapered Pole Section Geometry

Section	*Elevation* ft	*Section Length* ft	*Splice Length* ft	*Number of Sides*	*Top Diameter* in	*Bottom Diameter* in	*Wall Thickness* in	*Bend Radius* in	*Pole Grade*

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	150.00-104.50	45.50	4.25	18	18.0000	28.1875	0.1875	0.7500	A572-65 (65 ksi)
L2	104.50-68.75	40.00	5.25	18	26.8609	35.7500	0.2500	1.0000	A572-65 (65 ksi)
L3	68.75-34.00	40.00	6.00	18	34.0833	43.0000	0.3125	1.2500	A572-65 (65 ksi)
L4	34.00-0.00	40.00		18	41.0375	50.0000	0.3125	1.2500	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	18.2488	10.6007	424.9328	6.3234	9.1440	46.4712	850.4248	5.3013	2.8380	15.136
	28.5934	16.6635	1650.5160	9.9400	14.3193	115.2655	3303.2038	8.3333	4.6310	24.699
L2	28.1958	21.1158	1889.1396	9.4469	13.6453	138.4457	3780.7650	10.5599	4.2875	17.15
	36.2629	28.1692	4485.0722	12.6025	18.1610	246.9617	8976.0460	14.0873	5.8520	23.408
L3	35.7493	33.4964	4826.3493	11.9886	17.3143	278.7490	9659.0492	16.7514	5.4487	17.436
	43.6151	42.3407	9747.5744	15.1541	21.8440	446.2358	19507.9749	21.1744	7.0180	22.458
L4	42.9875	40.3941	8464.0368	14.4574	20.8470	406.0065	16939.2109	20.2009	6.6726	21.352
	50.7231	49.2838	15372.1931	17.6391	25.4000	605.2045	30764.6134	24.6466	8.2500	26.4

Tower Elevation ft	Gusset Area (per face) ft^2	Gusset Thickness in	Gusset Grade	Adjust. Factor A_f	Adjust. Factor A_r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals in	Double Angle Stitch Bolt Spacing Horizontals in	Double Angle Stitch Bolt Spacing Redundants in
L1 150.00-104.50				1	1	1			
L2 104.50-68.75				1	1	1			
L3 68.75-34.00				1	1	1			
L4 34.00-0.00				1	1	1			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
*******											

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
** miscl **									
Safety Line 3/8	C	No	No	CaAa (Out Of Face)	150.00 - 0.00	1	No Ice	0.04	0.22
							1/2" Ice	0.14	0.75
							1" Ice	0.24	1.28
Step Pegs (5/8"	C	No	No	CaAa (Out	150.00 - 0.00	1	No Ice	0.03	0.49

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C_AA_A ft²/ft	Weight plf
SR) 7-in. w/30" step				Of Face)			1/2" Ice	0.14	1.01
							1" Ice	0.23	2.07
** 148 **									
LDF7-50A(1-5/8)	B	No	No	Inside Pole	148.00 - 0.00	6	No Ice	0.00	0.82
							1/2" Ice	0.00	0.82
							1" Ice	0.00	0.82
FB-L98B-034-XXX(3/8)	B	No	No	Inside Pole	148.00 - 0.00	2	No Ice	0.00	0.06
							1/2" Ice	0.00	0.06
							1" Ice	0.00	0.06
WR-VG82ST-BRDA(5/8)	B	No	No	Inside Pole	148.00 - 0.00	2	No Ice	0.00	0.31
							1/2" Ice	0.00	0.31
							1" Ice	0.00	0.31
WR-VG86ST-BRD(3/4)	B	No	No	Inside Pole	148.00 - 0.00	3	No Ice	0.00	0.58
							1/2" Ice	0.00	0.58
							1" Ice	0.00	0.58
2" Flexible Conduit	B	No	No	Inside Pole	148.00 - 0.00	2	No Ice	0.00	0.34
							1/2" Ice	0.00	0.34
							1" Ice	0.00	0.34
** 138 **									
CU12PSM9P6XXX (1-1/2)	A	No	No	Inside Pole	136.00 - 0.00	1	No Ice	0.00	2.35
							1/2" Ice	0.00	2.35
							1" Ice	0.00	2.35
** 128 **									
HB158-21U6S24-xxM_TMO(1-5/8)	C	No	No	Inside Pole	128.00 - 0.00	2	No Ice	0.00	2.50
							1/2" Ice	0.00	2.50
							1" Ice	0.00	2.50
** 118 **									
HB158-21U6S12-XXXM-01(1-5/8)	C	No	No	Inside Pole	118.00 - 0.00	1	No Ice	0.00	1.90
							1/2" Ice	0.00	1.90
							1" Ice	0.00	1.90
*******									

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A_R ft²	A_F ft²	C_AA_A In Face ft²	C_AA_A Out Face ft²	Weight K
L1	150.00-104.50	A	0.000	0.000	0.000	0.000	0.07
		B	0.000	0.000	0.000	0.000	0.35
		C	0.000	0.000	0.000	3.299	0.18
L2	104.50-68.75	A	0.000	0.000	0.000	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.29
		C	0.000	0.000	0.000	2.592	0.27
L3	68.75-34.00	A	0.000	0.000	0.000	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.28
		C	0.000	0.000	0.000	2.519	0.26
L4	34.00-0.00	A	0.000	0.000	0.000	0.000	0.08
		B	0.000	0.000	0.000	0.000	0.27
		C	0.000	0.000	0.000	2.465	0.26

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft²	A_F ft²	C_AA_A In Face ft²	C_AA_A Out Face ft²	Weight K
L1	150.00-104.50	A	0.972	0.000	0.000	0.000	0.000	0.07
		B		0.000	0.000	0.000	0.000	0.35
		C		0.000	0.000	0.000	20.985	0.29
L2	104.50-68.75	A	0.936	0.000	0.000	0.000	0.000	0.08
		B		0.000	0.000	0.000	0.000	0.29

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A_R ft²	A_F ft²	C_AA_A In Face ft²	C_AA_A Out Face ft²	Weight K
		C		0.000	0.000	0.000	16.488	0.36
L3	68.75-34.00	A	0.888	0.000	0.000	0.000	0.000	0.08
		B		0.000	0.000	0.000	0.000	0.28
		C		0.000	0.000	0.000	15.524	0.35
L4	34.00-0.00	A	0.793	0.000	0.000	0.000	0.000	0.08
		B		0.000	0.000	0.000	0.000	0.27
		C		0.000	0.000	0.000	14.545	0.34

Feed Line Center of Pressure

Section	Elevation ft	CP_X in	CP_Z in	CP_X Ice in	CP_Z Ice in
L1	150.00-104.50	-0.5568	0.3215	-1.6552	0.9557
L2	104.50-68.75	-0.5654	0.3264	-1.7692	1.0214
L3	68.75-34.00	-0.5698	0.3290	-1.7821	1.0289
L4	34.00-0.00	-0.5726	0.3306	-1.7575	1.0147

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

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft
1/2" x 4' LRod	C	From Leg	1.00 0.00 2.00	0.0000	150.00
** 148 ** DMP65R-BU6D w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 0.00	0.0000	148.00
DMP65R-BU6D w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 0.00	0.0000	148.00
OPA65R-BU6D w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 0.00	0.0000	148.00
OPA65R-BU6D w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 0.00	0.0000	148.00
P90-14-XLH-RR w/ Mount Pipe	A	From Centroid-Leg	4.00 0.00 0.00	0.0000	148.00
P90-14-XLH-RR w/ Mount Pipe	B	From Centroid-Leg	4.00 0.00 0.00	0.0000	148.00
P90-14-XLH-RR w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00 0.00	0.0000	148.00
DMP65R-BU4D w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00 0.00	0.0000	148.00
OPA65R-BU4D w/ Mount Pipe	C	From Centroid-Leg	4.00 0.00	0.0000	148.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft
RRUS 4449 B5/B12	A	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
RRUS 4449 B5/B12	B	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
RRUS 4449 B5/B12	C	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
RRUS 4478 B14	A	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
RRUS 4478 B14	B	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
RRUS 4478 B14	C	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
RRUS 8843 B2/B66A	A	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
RRUS 8843 B2/B66A	B	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
RRUS 8843 B2/B66A	C	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
DC6-48-60-18-8F	A	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
DC6-48-60-18-8F	B	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
TT19-08BP111-001	A	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
TT19-08BP111-001	B	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
TT19-08BP111-001	C	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
2.9" Dia. x 8-ft Mount Pipe	A	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
2.9" Dia. x 8-ft Mount Pipe	B	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
2.9" Dia. x 8-ft Mount Pipe	C	From Centroid-Leg	0.00 4.00 0.00	0.0000	148.00
Miscellaneous [NA 507-1]	C	None	0.00	0.0000	148.00
Platform Mount [LP 712-1]	C	None		0.0000	148.00
** 138 **					
MX08FRO665-21 w/ Mount Pipe	A	From Leg	4.00 0.00 2.00	0.0000	136.00
MX08FRO665-21 w/ Mount Pipe	B	From Leg	4.00 0.00 2.00	0.0000	136.00
MX08FRO665-21 w/ Mount Pipe	C	From Leg	4.00 0.00 2.00	0.0000	136.00
TA08025-B604	A	From Leg	4.00	0.0000	136.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft
TA08025-B604	B	From Leg	0.00 4.00 4.00 0.00	0.0000	136.00
TA08025-B604	C	From Leg	4.00 4.00 0.00	0.0000	136.00
TA08025-B605	A	From Leg	4.00 4.00 0.00	0.0000	136.00
TA08025-B605	B	From Leg	4.00 4.00 0.00	0.0000	136.00
TA08025-B605	C	From Leg	4.00 4.00 0.00	0.0000	136.00
RDIDC-9181-PF-48	A	From Leg	4.00 4.00 0.00	0.0000	136.00
(2) 2.4" Dia x 8-ft Mount Pipe	A	From Centroid-Leg	2.00 4.00 0.00	0.0000	138.00
(2) 2.4" Dia x 8-ft Mount Pipe	B	From Centroid-Leg	0.00 4.00 0.00	0.0000	138.00
(2) 2.4" Dia x 8-ft Mount Pipe	C	From Centroid-Leg	0.00 4.00 0.00	0.0000	138.00
Commscope MC-PK8-DSH	C	None	0.00	0.0000	138.00
** 128 **					
AIR6449 B41_T-MOBILE w/ Mount Pipe	A	From Leg	4.00 0.00	0.0000	128.00
AIR6449 B41_T-MOBILE w/ Mount Pipe	B	From Leg	0.00 4.00 0.00	0.0000	128.00
AIR6449 B41_T-MOBILE w/ Mount Pipe	C	From Leg	0.00 4.00 0.00	0.0000	128.00
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	A	From Leg	0.00 4.00 0.00	0.0000	128.00
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	B	From Leg	0.00 4.00 0.00	0.0000	128.00
APXVAALL24_43-U-NA20_TMO w/ Mount Pipe	C	From Leg	0.00 4.00 0.00	0.0000	128.00
RADIO 4460 B2/B25 B66_TMO	A	From Leg	0.00 4.00 0.00	0.0000	128.00
RADIO 4460 B2/B25 B66_TMO	B	From Leg	0.00 4.00 0.00	0.0000	128.00
RADIO 4460 B2/B25 B66_TMO	C	From Leg	0.00 4.00 0.00	0.0000	128.00
RADIO 4480 B71_TMO	A	From Leg	0.00 4.00 0.00	0.0000	128.00
RADIO 4480 B71_TMO	B	From Leg	0.00 4.00 0.00	0.0000	128.00
RADIO 4480 B71_TMO	C	From Leg	0.00 4.00	0.0000	128.00

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft Vert ft ft	Azimuth Adjustment °	Placement ft
			0.00 0.00		
(2) 2.9" Dia. x 8-ft Mount Pipe	A	From Centroid-Leg	4.00 0.00	0.0000	128.00
			0.00		
(2) 2.9" Dia. x 8-ft Mount Pipe	B	From Centroid-Leg	4.00 0.00	0.0000	128.00
			0.00		
(2) 2.9" Dia. x 8-ft Mount Pipe	C	From Centroid-Leg	4.00 0.00	0.0000	128.00
			0.00		
SitePro1 RMQP-4096-HK	C	None		0.0000	128.00
** 118 **					
(2) MX06FRO840-02_CCIV2 w/ Mount Pipe	A	From Leg	4.00 0.00	0.0000	118.00
			0.00		
(2) MX06FRO840-02_CCIV2 w/ Mount Pipe	C	From Leg	4.00 0.00	0.0000	118.00
			0.00		
(2) MX06FRO860-03 w/ Mount Pipe	B	From Leg	4.00 0.00	0.0000	118.00
			0.00		
MT6407-77A w/ Mount Pipe	A	From Leg	4.00 0.00	0.0000	118.00
			0.00		
MT6407-77A w/ Mount Pipe	B	From Leg	4.00 0.00	0.0000	118.00
			0.00		
MT6407-77A w/ Mount Pipe	C	From Leg	4.00 0.00	0.0000	118.00
			0.00		
RVZDC-6627-PF-48_CCIV2	A	From Leg	4.00 0.00	0.0000	118.00
			0.00		
RF4439D-25A	A	From Leg	4.00 0.00	0.0000	118.00
			0.00		
RF4439D-25A	B	From Leg	4.00 0.00	0.0000	118.00
			0.00		
RF4439D-25A	C	From Leg	4.00 0.00	0.0000	118.00
			0.00		
RF4440D-13A	A	From Leg	4.00 0.00	0.0000	118.00
			0.00		
RF4440D-13A	B	From Leg	4.00 0.00	0.0000	118.00
			0.00		
RF4440D-13A	C	From Leg	4.00 0.00	0.0000	118.00
			0.00		
(2) 12' x 2" Pipe Mount	A	From Leg	4.00 0.00	0.0000	118.00
			0.00		
(2) 12' x 2" Pipe Mount	B	From Leg	4.00 0.00	0.0000	118.00
			0.00		
(2) 12' x 2" Pipe Mount	C	From Leg	4.00 0.00	0.0000	118.00
			0.00		
Site Pro 1 F3P-HRK12	C	None		0.0000	118.00
Site Pro 1 F3P-12[W]	C	None		0.0000	118.00
*******					

Load Combinations

Comb. No.	Description
1	Dead Only
2	1.2 Dead+1.0 Wind 0 deg - No Ice
3	0.9 Dead+1.0 Wind 0 deg - No Ice
4	1.2 Dead+1.0 Wind 30 deg - No Ice
5	0.9 Dead+1.0 Wind 30 deg - No Ice
6	1.2 Dead+1.0 Wind 60 deg - No Ice
7	0.9 Dead+1.0 Wind 60 deg - No Ice
8	1.2 Dead+1.0 Wind 90 deg - No Ice
9	0.9 Dead+1.0 Wind 90 deg - No Ice
10	1.2 Dead+1.0 Wind 120 deg - No Ice
11	0.9 Dead+1.0 Wind 120 deg - No Ice
12	1.2 Dead+1.0 Wind 150 deg - No Ice
13	0.9 Dead+1.0 Wind 150 deg - No Ice
14	1.2 Dead+1.0 Wind 180 deg - No Ice
15	0.9 Dead+1.0 Wind 180 deg - No Ice
16	1.2 Dead+1.0 Wind 210 deg - No Ice
17	0.9 Dead+1.0 Wind 210 deg - No Ice
18	1.2 Dead+1.0 Wind 240 deg - No Ice
19	0.9 Dead+1.0 Wind 240 deg - No Ice
20	1.2 Dead+1.0 Wind 270 deg - No Ice
21	0.9 Dead+1.0 Wind 270 deg - No Ice
22	1.2 Dead+1.0 Wind 300 deg - No Ice
23	0.9 Dead+1.0 Wind 300 deg - No Ice
24	1.2 Dead+1.0 Wind 330 deg - No Ice
25	0.9 Dead+1.0 Wind 330 deg - No Ice
26	1.2 Dead+1.0 Ice+1.0 Temp
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	150 - 104.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-32.01	0.14	1.77
			Max. Mx	20	-18.10	378.63	2.73

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
			Max. My	2	-18.06	2.42	383.88
			Max. Vy	20	-15.97	378.63	2.73
			Max. Vx	2	-16.18	2.42	383.88
			Max. Torque	24			-1.01
L2	104.5 - 68.75	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-37.97	0.29	1.80
			Max. Mx	20	-23.01	959.40	3.20
			Max. My	2	-22.98	2.88	971.69
			Max. Vy	20	-17.42	959.40	3.20
			Max. Vx	2	-17.63	2.88	971.69
			Max. Torque	24			-0.98
L3	68.75 - 34	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-46.25	0.44	1.71
			Max. Mx	20	-29.96	1578.02	3.57
			Max. My	2	-29.94	3.29	1596.98
			Max. Vy	20	-18.89	1578.02	3.57
			Max. Vx	2	-19.09	3.29	1596.98
			Max. Torque	22			-0.87
L4	34 - 0	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-57.65	0.65	1.59
			Max. Mx	20	-39.73	2363.24	3.93
			Max. My	2	-39.73	3.73	2389.73
			Max. Vy	20	-20.30	2363.24	3.93
			Max. Vx	2	-20.49	3.73	2389.73
			Max. Torque	22			-0.77

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	27	57.65	0.00	6.45
	Max. H_x	20	39.75	20.28	0.01
	Max. H_z	2	39.75	0.01	20.46
	Max. M_x	2	2389.73	0.01	20.46
	Max. M_z	8	2362.37	-20.28	-0.01
	Max. Torsion	10	0.67	-17.56	-10.24
	Min. Vert	23	29.81	17.56	10.24
	Min. H_x	8	39.75	-20.28	-0.01
	Min. H_z	14	39.75	-0.01	-20.46
	Min. M_x	14	-2388.41	-0.01	-20.46
	Min. M_z	20	-2363.24	20.28	0.01
	Min. Torsion	22	-0.67	17.56	10.24

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	33.12	0.00	0.00	-0.47	0.33	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	39.75	-0.01	-20.46	-2389.73	3.73	0.44
0.9 Dead+1.0 Wind 0 deg - No Ice	29.81	-0.01	-20.46	-2342.42	3.51	0.44
1.2 Dead+1.0 Wind 30 deg - No Ice	39.75	10.13	-17.72	-2068.08	-1178.09	0.12
0.9 Dead+1.0 Wind 30 deg - No Ice	29.81	10.13	-17.72	-2027.12	-1155.01	0.12
1.2 Dead+1.0 Wind 60 deg - No Ice	39.75	17.56	-10.22	-1192.42	-2044.18	-0.23

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
0.9 Dead+1.0 Wind 60 deg - No Ice	29.81	17.56	-10.22	-1168.75	-2004.00	-0.23
1.2 Dead+1.0 Wind 90 deg - No Ice	39.75	20.28	0.01	2.63	-2362.37	-0.52
0.9 Dead+1.0 Wind 90 deg - No Ice	29.81	20.28	0.01	2.71	-2315.91	-0.52
1.2 Dead+1.0 Wind 120 deg - No Ice	39.75	17.56	10.24	1196.78	-2047.41	-0.67
0.9 Dead+1.0 Wind 120 deg - No Ice	29.81	17.56	10.24	1173.30	-2007.14	-0.67
1.2 Dead+1.0 Wind 150 deg - No Ice	39.75	10.15	17.72	2070.01	-1183.74	-0.64
0.9 Dead+1.0 Wind 150 deg - No Ice	29.81	10.15	17.72	2029.32	-1160.48	-0.64
1.2 Dead+1.0 Wind 180 deg - No Ice	39.75	0.01	20.46	2388.41	-2.83	-0.44
0.9 Dead+1.0 Wind 180 deg - No Ice	29.81	0.01	20.46	2341.47	-2.85	-0.44
1.2 Dead+1.0 Wind 210 deg - No Ice	39.75	-10.13	17.72	2066.75	1178.97	-0.12
0.9 Dead+1.0 Wind 210 deg - No Ice	29.81	-10.13	17.72	2026.17	1155.65	-0.12
1.2 Dead+1.0 Wind 240 deg - No Ice	39.75	-17.56	10.22	1191.10	2045.04	0.23
0.9 Dead+1.0 Wind 240 deg - No Ice	29.81	-17.56	10.22	1167.81	2004.64	0.23
1.2 Dead+1.0 Wind 270 deg - No Ice	39.75	-20.28	-0.01	-3.93	2363.24	0.52
0.9 Dead+1.0 Wind 270 deg - No Ice	29.81	-20.28	-0.01	-3.64	2316.54	0.52
1.2 Dead+1.0 Wind 300 deg - No Ice	39.75	-17.56	-10.24	-1198.06	2048.29	0.67
0.9 Dead+1.0 Wind 300 deg - No Ice	29.81	-17.56	-10.24	-1174.22	2007.78	0.67
1.2 Dead+1.0 Wind 330 deg - No Ice	39.75	-10.15	-17.72	-2071.30	1184.64	0.64
0.9 Dead+1.0 Wind 330 deg - No Ice	29.81	-10.15	-17.72	-2030.25	1161.14	0.64
1.2 Dead+1.0 Ice+1.0 Temp	57.65	-0.00	-0.00	-1.59	0.65	0.00
1.2 Dead+1.0 Wind 0 deg+1.0 Ice+1.0 Temp	57.65	-0.00	-6.45	-762.73	1.35	-0.24
1.2 Dead+1.0 Wind 30 deg+1.0 Ice+1.0 Temp	57.65	3.21	-5.59	-660.45	-376.53	-0.16
1.2 Dead+1.0 Wind 60 deg+1.0 Ice+1.0 Temp	57.65	5.56	-3.22	-381.66	-653.34	-0.04
1.2 Dead+1.0 Wind 90 deg+1.0 Ice+1.0 Temp	57.65	6.42	0.00	-1.08	-754.90	0.09
1.2 Dead+1.0 Wind 120 deg+1.0 Ice+1.0 Temp	57.65	5.56	3.23	379.33	-654.00	0.20
1.2 Dead+1.0 Wind 150 deg+1.0 Ice+1.0 Temp	57.65	3.21	5.59	657.63	-377.68	0.25
1.2 Dead+1.0 Wind 180 deg+1.0 Ice+1.0 Temp	57.65	0.00	6.45	759.26	0.03	0.24
1.2 Dead+1.0 Wind 210 deg+1.0 Ice+1.0 Temp	57.65	-3.21	5.59	656.98	377.91	0.16
1.2 Dead+1.0 Wind 240 deg+1.0 Ice+1.0 Temp	57.65	-5.56	3.22	378.19	654.72	0.04
1.2 Dead+1.0 Wind 270 deg+1.0 Ice+1.0 Temp	57.65	-6.42	-0.00	-2.40	756.28	-0.09
1.2 Dead+1.0 Wind 300 deg+1.0 Ice+1.0 Temp	57.65	-5.56	-3.23	-382.80	655.38	-0.19
1.2 Dead+1.0 Wind 330 deg+1.0 Ice+1.0 Temp	57.65	-3.21	-5.59	-661.10	379.05	-0.25
Dead+Wind 0 deg - Service	33.12	-0.00	-5.25	-606.48	1.19	0.12
Dead+Wind 30 deg - Service	33.12	2.60	-4.54	-524.90	-298.56	0.03
Dead+Wind 60 deg - Service	33.12	4.50	-2.62	-302.81	-518.22	-0.06
Dead+Wind 90 deg - Service	33.12	5.20	0.00	0.29	-598.90	-0.14
Dead+Wind 120 deg - Service	33.12	4.50	2.63	303.15	-519.04	-0.18

Load Combination	Vertical	$Shear_x$	$Shear_z$	Overturning Moment, M_x	Overturning Moment, M_z	Torque
	K	K	K	kip-ft	kip-ft	kip-ft
Dead+Wind 150 deg - Service	33.12	2.60	4.55	524.65	-299.99	-0.17
Dead+Wind 180 deg - Service	33.12	0.00	5.25	605.40	-0.47	-0.12
Dead+Wind 210 deg - Service	33.12	-2.60	4.54	523.82	299.28	-0.03
Dead+Wind 240 deg - Service	33.12	-4.50	2.62	301.72	518.93	0.06
Dead+Wind 270 deg - Service	33.12	-5.20	-0.00	-1.37	599.61	0.14
Dead+Wind 300 deg - Service	33.12	-4.50	-2.63	-304.24	519.76	0.18
Dead+Wind 330 deg - Service	33.12	-2.60	-4.55	-525.73	300.71	0.17

Solution Summary

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
1	0.00	-33.12	0.00	0.00	33.12	0.00	0.000%
2	-0.01	-39.75	-20.46	0.01	39.75	20.46	0.000%
3	-0.01	-29.81	-20.46	0.01	29.81	20.46	0.000%
4	10.13	-39.75	-17.72	-10.13	39.75	17.72	0.000%
5	10.13	-29.81	-17.72	-10.13	29.81	17.72	0.000%
6	17.56	-39.75	-10.22	-17.56	39.75	10.22	0.000%
7	17.56	-29.81	-10.22	-17.56	29.81	10.22	0.000%
8	20.28	-39.75	0.01	-20.28	39.75	-0.01	0.000%
9	20.28	-29.81	0.01	-20.28	29.81	-0.01	0.000%
10	17.56	-39.75	10.24	-17.56	39.75	-10.24	0.000%
11	17.56	-29.81	10.24	-17.56	29.81	-10.24	0.000%
12	10.15	-39.75	17.72	-10.15	39.75	-17.72	0.000%
13	10.15	-29.81	17.72	-10.15	29.81	-17.72	0.000%
14	0.01	-39.75	20.46	-0.01	39.75	-20.46	0.000%
15	0.01	-29.81	20.46	-0.01	29.81	-20.46	0.000%
16	-10.13	-39.75	17.72	10.13	39.75	-17.72	0.000%
17	-10.13	-29.81	17.72	10.13	29.81	-17.72	0.000%
18	-17.56	-39.75	10.22	17.56	39.75	-10.22	0.000%
19	-17.56	-29.81	10.22	17.56	29.81	-10.22	0.000%
20	-20.28	-39.75	-0.01	20.28	39.75	0.01	0.000%
21	-20.28	-29.81	-0.01	20.28	29.81	0.01	0.000%
22	-17.56	-39.75	-10.24	17.56	39.75	10.24	0.000%
23	-17.56	-29.81	-10.24	17.56	29.81	10.24	0.000%
24	-10.15	-39.75	-17.72	10.15	39.75	17.72	0.000%
25	-10.15	-29.81	-17.72	10.15	29.81	17.72	0.000%
26	0.00	-57.65	0.00	0.00	57.65	0.00	0.000%
27	-0.00	-57.65	-6.45	0.00	57.65	6.45	0.000%
28	3.21	-57.65	-5.59	-3.21	57.65	5.59	0.000%
29	5.56	-57.65	-3.22	-5.56	57.65	3.22	0.000%
30	6.42	-57.65	0.00	-6.42	57.65	-0.00	0.000%
31	5.56	-57.65	3.23	-5.56	57.65	-3.23	0.000%
32	3.21	-57.65	5.59	-3.21	57.65	-5.59	0.000%
33	0.00	-57.65	6.45	-0.00	57.65	-6.45	0.000%
34	-3.21	-57.65	5.59	3.21	57.65	-5.59	0.000%
35	-5.56	-57.65	3.22	5.56	57.65	-3.22	0.000%
36	-6.42	-57.65	-0.00	6.42	57.65	0.00	0.000%
37	-5.56	-57.65	-3.23	5.56	57.65	3.23	0.000%
38	-3.21	-57.65	-5.59	3.21	57.65	5.59	0.000%
39	-0.00	-33.12	-5.25	0.00	33.12	5.25	0.000%
40	2.60	-33.12	-4.54	-2.60	33.12	4.54	0.000%
41	4.50	-33.12	-2.62	-4.50	33.12	2.62	0.000%
42	5.20	-33.12	0.00	-5.20	33.12	-0.00	0.000%
43	4.50	-33.12	2.63	-4.50	33.12	-2.63	0.000%
44	2.60	-33.12	4.55	-2.60	33.12	-4.55	0.000%
45	0.00	-33.12	5.25	-0.00	33.12	-5.25	0.000%
46	-2.60	-33.12	4.54	2.60	33.12	-4.54	0.000%

Load Comb.	Sum of Applied Forces PX K	PY K	PZ K	Sum of Reactions PX K	PY K	PZ K	% Error
47	-4.50	-33.12	2.62	4.50	33.12	-2.62	0.000%
48	-5.20	-33.12	-0.00	5.20	33.12	0.00	0.000%
49	-4.50	-33.12	-2.63	4.50	33.12	2.63	0.000%
50	-2.60	-33.12	-4.55	2.60	33.12	4.55	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	5	0.00000001	0.00014636
3	Yes	5	0.00000001	0.00006886
4	Yes	6	0.00000001	0.00068927
5	Yes	6	0.00000001	0.00023330
6	Yes	6	0.00000001	0.00068700
7	Yes	6	0.00000001	0.00023280
8	Yes	5	0.00000001	0.00015507
9	Yes	5	0.00000001	0.00007298
10	Yes	6	0.00000001	0.00067894
11	Yes	6	0.00000001	0.00022921
12	Yes	6	0.00000001	0.00070326
13	Yes	6	0.00000001	0.00023818
14	Yes	5	0.00000001	0.00020753
15	Yes	5	0.00000001	0.00009937
16	Yes	6	0.00000001	0.00068247
17	Yes	6	0.00000001	0.00023086
18	Yes	6	0.00000001	0.00068039
19	Yes	6	0.00000001	0.00023035
20	Yes	5	0.00000001	0.00021654
21	Yes	5	0.00000001	0.00010342
22	Yes	6	0.00000001	0.00070249
23	Yes	6	0.00000001	0.00023793
24	Yes	6	0.00000001	0.00068249
25	Yes	6	0.00000001	0.00022994
26	Yes	4	0.00000001	0.00003743
27	Yes	6	0.00000001	0.00023423
28	Yes	6	0.00000001	0.00033816
29	Yes	6	0.00000001	0.00033842
30	Yes	6	0.00000001	0.00023108
31	Yes	6	0.00000001	0.00033523
32	Yes	6	0.00000001	0.00033611
33	Yes	6	0.00000001	0.00023171
34	Yes	6	0.00000001	0.00033551
35	Yes	6	0.00000001	0.00033366
36	Yes	6	0.00000001	0.00023137
37	Yes	6	0.00000001	0.00034041
38	Yes	6	0.00000001	0.00034113
39	Yes	4	0.00000001	0.00032159
40	Yes	5	0.00000001	0.00013207
41	Yes	5	0.00000001	0.00013134
42	Yes	4	0.00000001	0.00031667
43	Yes	5	0.00000001	0.00012486
44	Yes	5	0.00000001	0.00013794
45	Yes	4	0.00000001	0.00032408
46	Yes	5	0.00000001	0.00012808
47	Yes	5	0.00000001	0.00012741
48	Yes	4	0.00000001	0.00032222
49	Yes	5	0.00000001	0.00013857
50	Yes	5	0.00000001	0.00012684

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 104.5	30.137	39	1.8248	0.0049
L2	108.75 - 68.75	15.456	39	1.4402	0.0017
L3	74 - 34	6.840	39	0.8892	0.0006
L4	40 - 0	1.984	39	0.4542	0.0002

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
150.00	1/2" x 4' LRod	39	30.137	1.8248	0.0049	27515
148.00	DMP65R-BU6D w/ Mount Pipe	39	29.376	1.8103	0.0047	27515
138.00	(2) 2.4" Dia x 8-ft Mount Pipe	39	25.595	1.7360	0.0038	11464
136.00	MX08FRO665-21 w/ Mount Pipe	39	24.848	1.7203	0.0037	9826
128.00	AIR6449 B41_T-MOBILE w/ Mount Pipe	39	21.918	1.6527	0.0030	6252
118.00	(2) MX06FRO840-02_CCIV2 w/ Mount Pipe	39	18.433	1.5532	0.0022	4298

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	150 - 104.5	118.882	2	7.2085	0.0189
L2	108.75 - 68.75	61.002	2	5.6920	0.0064
L3	74 - 34	26.993	2	3.5123	0.0023
L4	40 - 0	7.823	2	1.7923	0.0009

Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
150.00	1/2" x 4' LRod	2	118.882	7.2085	0.0189	7171
148.00	DMP65R-BU6D w/ Mount Pipe	2	115.882	7.1513	0.0182	7171
138.00	(2) 2.4" Dia x 8-ft Mount Pipe	2	100.977	6.8584	0.0148	2986
136.00	MX08FRO665-21 w/ Mount Pipe	2	98.035	6.7967	0.0141	2559
128.00	AIR6449 B41_T-MOBILE w/ Mount Pipe	2	86.484	6.5307	0.0115	1626
118.00	(2) MX06FRO840-02_CCIV2 w/ Mount Pipe	2	72.743	6.1382	0.0086	1115

Compression Checks

Pole Design Data

Section No.	Elevation ft	Size	L ft	L_u ft	Kl/r	A in^2	P_u K	ϕP_n K	Ratio $\frac{P_u}{\phi P_n}$
L1	150 - 104.5 (1)	TP28.1875x18x0.1875	45.50	0.00	0.0	16.0972	-18.06	941.69	0.019
L2	104.5 - 68.75 (2)	TP35.75x26.8609x0.25	40.00	0.00	0.0	27.2435	-22.98	1593.74	0.014
L3	68.75 - 34 (3)	TP43x34.0833x0.3125	40.00	0.00	0.0	41.0140	-29.94	2399.32	0.012
L4	34 - 0 (4)	TP50x41.0375x0.3125	40.00	0.00	0.0	49.2838	-39.73	2883.10	0.014

Pole Bending Design Data

Section No.	Elevation ft	Size	M_{ux} kip-ft	ϕM_{nx} kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	M_{uy} kip-ft	ϕM_{ny} kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L1	150 - 104.5 (1)	TP28.1875x18x0.1875	384.52	583.66	0.659	0.00	583.66	0.000
L2	104.5 - 68.75 (2)	TP35.75x26.8609x0.25	971.69	1278.26	0.760	0.00	1278.26	0.000
L3	68.75 - 34 (3)	TP43x34.0833x0.3125	1596.98	2349.59	0.680	0.00	2349.59	0.000
L4	34 - 0 (4)	TP50x41.0375x0.3125	2389.72	3146.22	0.760	0.00	3146.22	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V_u K	ϕV_n K	Ratio $\frac{V_u}{\phi V_n}$	Actual T_u kip-ft	ϕT_n kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	150 - 104.5 (1)	TP28.1875x18x0.1875	16.14	282.51	0.057	1.00	669.19	0.001
L2	104.5 - 68.75 (2)	TP35.75x26.8609x0.25	17.63	478.12	0.037	0.65	1437.59	0.000
L3	68.75 - 34 (3)	TP43x34.0833x0.3125	19.09	719.80	0.027	0.56	2606.54	0.000
L4	34 - 0 (4)	TP50x41.0375x0.3125	20.49	864.93	0.024	0.45	3763.64	0.000

Pole Interaction Design Data

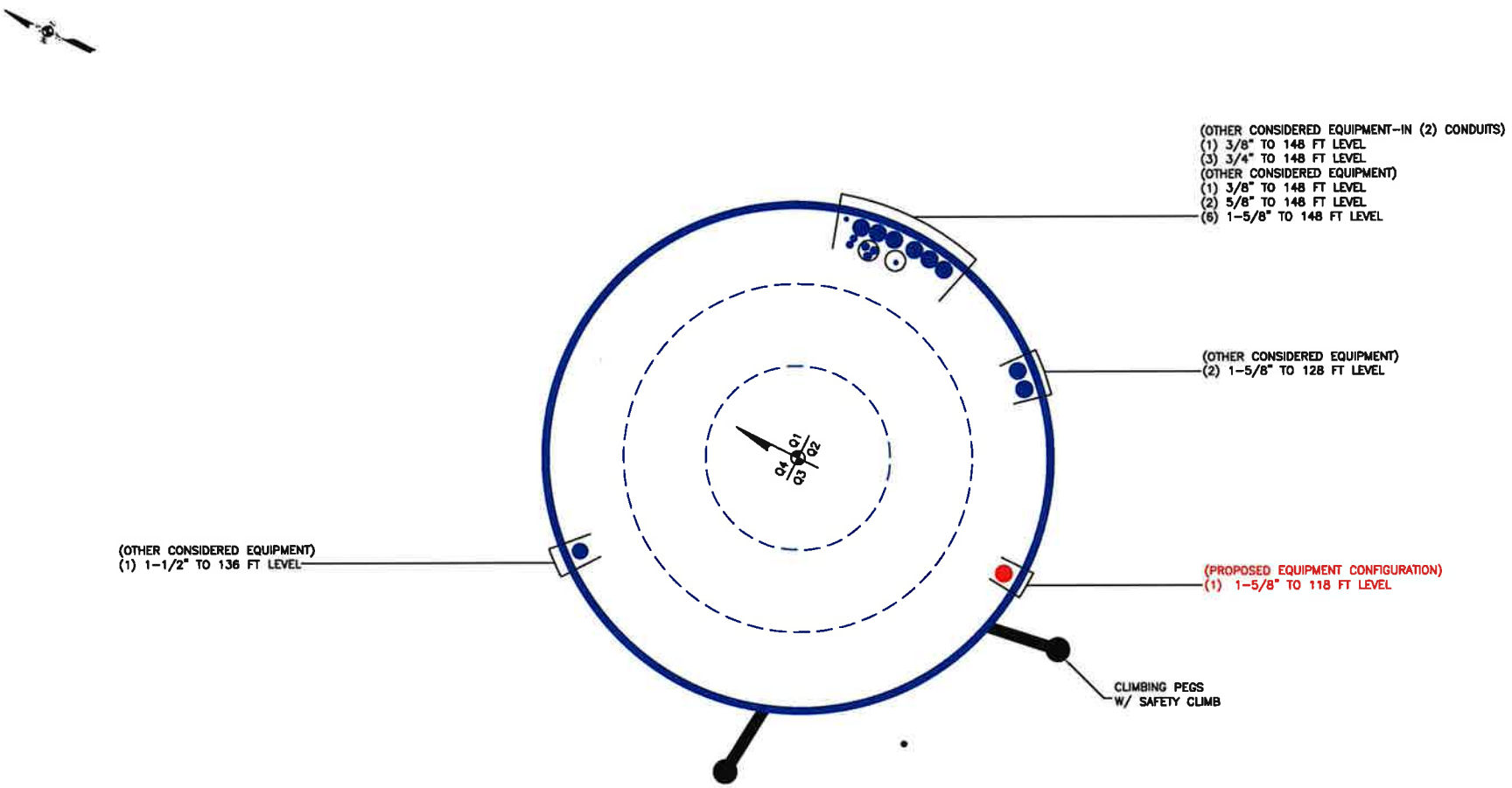
Section No.	Elevation ft	Ratio $\frac{P_u}{\phi P_n}$	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	Ratio $\frac{M_{uy}}{\phi M_{ny}}$	Ratio $\frac{V_u}{\phi V_n}$	Ratio $\frac{T_u}{\phi T_n}$	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	150 - 104.5 (1)	0.019	0.659	0.000	0.057	0.001	0.681	1.050	4.8.2
L2	104.5 - 68.75 (2)	0.014	0.760	0.000	0.037	0.000	0.776	1.050	4.8.2
L3	68.75 - 34 (3)	0.012	0.680	0.000	0.027	0.000	0.693	1.050	4.8.2
L4	34 - 0 (4)	0.014	0.760	0.000	0.024	0.000	0.774	1.050	4.8.2

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	150 - 104.5	Pole	TP28.1875x18x0.1875	1	-18.06	988.77	64.9	Pass
L2	104.5 - 68.75	Pole	TP35.75x26.8609x0.25	2	-22.98	1673.43	73.9	Pass
L3	68.75 - 34	Pole	TP43x34.0833x0.3125	3	-29.94	2519.29	66.0	Pass
L4	34 - 0	Pole	TP50x41.0375x0.3125	4	-39.73	3027.25	73.7	Pass
							Summary	
						Pole (L2)	73.9	Pass
						RATING =	**73.9**	**Pass**

APPENDIX B

BASE LEVEL DRAWING


(OTHER CONSIDERED EQUIPMENT-IN (2) CONDUITS)
(1) 3/8" TO 148 FT LEVEL
(3) 3/4" TO 148 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(1) 3/8" TO 148 FT LEVEL
(2) 5/8" TO 148 FT LEVEL
(6) 1-5/8" TO 148 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(2) 1-5/8" TO 128 FT LEVEL
(OTHER CONSIDERED EQUIPMENT)
(1) 1-1/2" TO 136 FT LEVEL
(PROPOSED EQUIPMENT CONFIGURATION)
(1) 1-5/8" TO 118 FT LEVEL
CLIMBING PEGS
W/ SAFETY CLIMB
Q1
Q2
Q3
Q4

APPENDIX C

ADDITIONAL CALCULATIONS

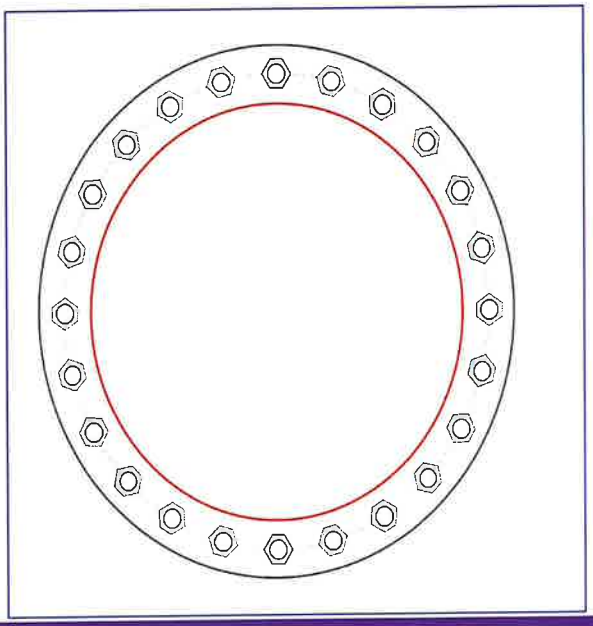
Monopole Base Plate Connection

Site Info	
BU #	857528
Site Name	Woodbury Paper Mill R
Order #	644453 Rev. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
l_{ar} (in)	2.25

Applied Loads	
Moment (kip-ft)	2389.73
Axial Force (kips)	39.73
Shear Force (kips)	20.49

**TIA-222-H Section 15.5 Applied*



Connection Properties

Anchor Rod Data

(24) 2-1/4" ø bolts (A615-75 N; Fy=75 ksi, Fu=100 ksi) on 57" BC

Base Plate Data

64" OD x 2.25" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

Stiffener Data

N/A

Pole Data

50" x 0.3125" 18-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)

Analysis Results

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

Pu_t = 82.14	ϕPn_t = 243.75	**Stress Rating**
Vu = 0.85	ϕVn = 149.1	**32.1%**
Mu = n/a	ϕMn = n/a	**Pass**

Base Plate Summary

Max Stress (ksi):	22.01	(Flexural)
Allowable Stress (ksi):	45	
Stress Rating:	**46.6%**	**Pass**

Pier and Pad Foundation

BU # :	857528
Site Name:	Woodbury Paper M
App. Number:	644453 Rev. 0

TIA-222 Revision:	H
Tower Type:	Monopole

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

Superstructure Analysis Reactions		
Compression, P_{comp}:	39.75	kips
Base Shear, Vu_comp:	20.46	kips
Moment, M_u:	2389.73	ft-kips
Tower Height, H:	150	ft
BP Dist. Above Fdn, bp_{dist}:	4.25	in

Pier Properties		
Pier Shape:	Circular	
Pier Diameter, **dpier**:	6.5	ft
Ext. Above Grade, **E**:	0.5	ft
Pier Rebar Size, **Sc**:	10	
Pier Rebar Quantity, **mc**:	34	
Pier Tie/Spiral Size, **St**:	4	
Pier Tie/Spiral Quantity, **mt**:	5	
Pier Reinforcement Type:	Tie	
Pier Clear Cover, cc_{pier}:	3	in

Pad Properties		
Depth, **D**:	4	ft
Pad Width, W_1:	24	ft
Pad Thickness, **T**:	2.5	ft
Pad Rebar Size (Bottom dir. 2), Sp_2:	10	
Pad Rebar Quantity (Bottom dir. 2), mp_2:	31	
Pad Clear Cover, cc_{pad}:	3	in

Material Properties		
Rebar Grade, **Fy**:	60	ksi
Concrete Compressive Strength, **F'c**:	4	ksi
Dry Concrete Density, δ**c**:	150	pcf

Soil Properties		
Total Soil Unit Weight, γ:	90	pcf
Ultimate Gross Bearing, Qult:	12.000	ksf
Cohesion, **Cu**:	0.000	ksf
Friction Angle, φ:	0	degrees
SPT Blow Count, N_{blows}:	79	
Base Friction, μ:	0.3	
Neglected Depth, **N**:	3.33	ft
Foundation Bearing on Rock?	Yes	
Groundwater Depth, **gw**:	N/A	ft

<--Toggle between Gross and Net

Foundation Analysis Checks	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	71.28	20.46	**27.3%**	**Pass**
Bearing Pressure (ksf)	9.00	3.08	**34.2%**	**Pass**
*Overturning (kip*ft)*	3314.62	2489.05	**75.1%**	**Pass**
*Pier Flexure (Comp.) (kip*ft)*	6241.43	2430.65	**37.1%**	**Pass**
Pier Compression (kip)	21120.36	51.70	**0.2%**	**Pass**
*Pad Flexure (kip*ft)*	4232.26	1104.97	**24.9%**	**Pass**
Pad Shear - 1-way (kips)	685.65	178.71	**24.8%**	**Pass**
Pad Shear - 2-way (Comp) (ksi)	0.190	0.037	**18.7%**	**Pass**
*Flexural 2-way (Comp) (kip*ft)*	4903.88	1458.39	**28.3%**	**Pass**

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

Structural Rating*:	**37.1%**
Soil Rating*:	**75.1%**

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Latitude: 41.573075
Longitude: -73.227642
Elevation: 528.06 ft (NAVD 88)

Wind

Results:

Wind Speed	115 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	89 Vmph
100-year MRI	96 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Wed Feb 01 2023

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

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

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

Seismic

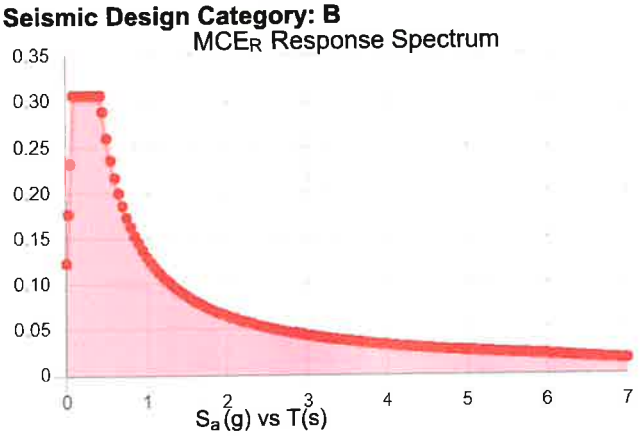
D - Default (see Section 11.4.3)

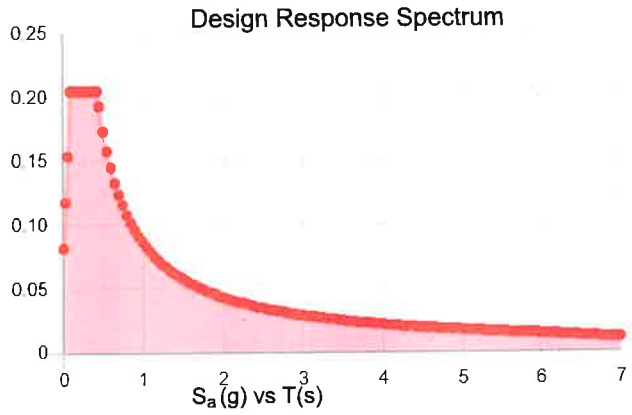
Site Soil Class:

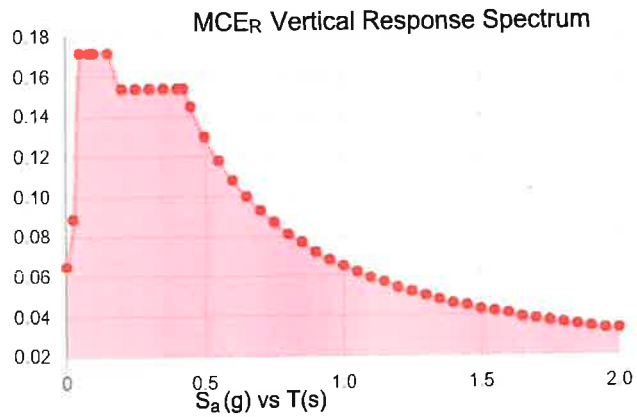
Results:

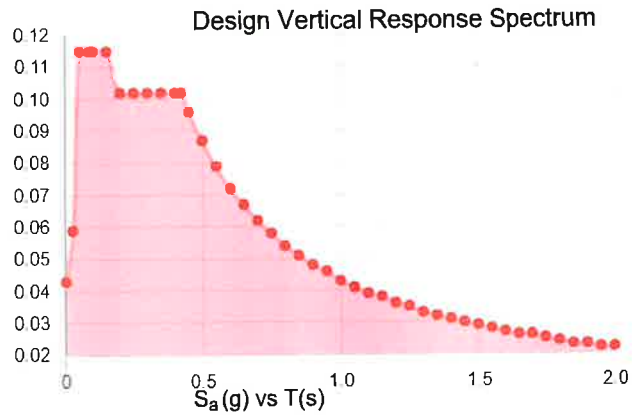
S_S :	0.192	S_{D1} :	0.087
S_1 :	0.054	T_L :	6
F_a :	1.6	PGA :	0.106
F_v :	2.4	PGA_M :	0.168
S_{MS} :	0.307	F_{PGA} :	1.589
S_{M1} :	0.13	I_e :	1
S_{DS} :	0.205	C_v :	0.7

Seismic Design Category: B









Data Accessed: **Wed Feb 01 2023**

Date Source:

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

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	15 F
Gust Speed	50 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Wed Feb 01 2023

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

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

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

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

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

ATTACHMENT 6

Date: March 29, 2023

MTS Engineering, P.L.L.C.
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630
towersupport@btgrp.com

Subject:	**Mount Analysis Report**	
Carrier Designation:	**Verizon Wireless Equipment Co-Locate**	
	Carrier Site Number:	720892
	Carrier Site Name:	Woodbury NW CT
Crown Castle Designation:	**BU Number:**	857528
	Site Name:	Woodbury Paper Mill RD
	JDE Job Number:	740204
	Order Number:	644453, Rev. 0
Engineering Firm Designation:	**Report Designation:**	152945.004.01.0001
Site Data:	**85 Paper Mill Road, Woodbury, CT, Litchfield County, 06798**	
	Latitude 41° 34' 23.07" Longitude -73° 13' 39.51"	
Structure Information:	**Tower Height & Type:**	**150 ft. Monopole**
	Mount Elevation:	**118 ft.**
	Mount Type:	**12.5 ft. Platform Mount**

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

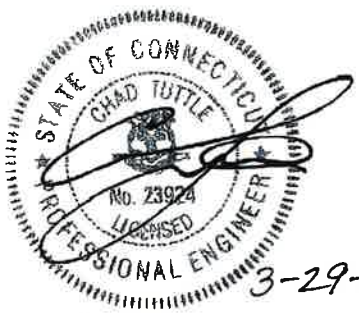
The purpose of the analysis is to determine acceptability of the mount's stress level. Based on our analysis we have determined the stress level to be:

Platform Mount **Sufficient**
***The capacities listed are based on recommendations listed in Sec.4.1 being installed.**

This analysis utilizes an ultimate 3-second gust wind speed of 115 mph as required by the 2022 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Mount structural analysis prepared by: Isaac Fulton

Respectfully submitted by: MTS Engineering, P.L.L.C.
COA: PEC. 0001564 Expires: 02/01/2024



Chad E. Tuttle, P.E.

3-29-23

TABLE OF CONTENTS

1) INTRODUCTION

This is a proposed 3 - sector 12.5' Platform Mount, designed by SitePro1 (Part# F3P-12 with HRK12 Support Rail).

2) ANALYSIS CRITERIA

Building Code:	2022 Connecticut State Building Code
TIA-222 Revision:	TIA-222-H
Risk Category:	II
Ultimate Wind Speed:	115 mph
Exposure Category:	B
Topographic Factor at Base:	1
Topographic Factor at Mount:	1
Ice Thickness:	1.0 in
Wind Speed with Ice:	50 mph
Seismic S_s:	0.192
Seismic S_1:	0.054
Live Loading Wind Speed:	30 mph
Man Live Load at Mid/End-Points:	250 lb.
Man Live Load at Mount Pipes:	500 lb.

Table 1 - Proposed Equipment Configuration

Mount Centerline (ft.)	Antenna Centerline (ft.)	Number of Antennas	Manufacturer	Model / Type	Mount / Modification Details
118	118	4	JMA Wireless	MX06FRO840-02_CCIV2	12.5' Platform Mount
		2	JMA Wireless	MX06FRO860-03	
		3	Samsung	MT6407-77A	
		1	Raycap	RVZDC-6627-PF-48_CCIV2	
		3	Samsung	RF4439D-25A	
		3	Samsung	RF4440D-13A	

Table 2 - Documents Provided

Document	Remarks	Reference	Source
CCI Order	Existing Loading Proposed Loading	Date: 01/26/2023	Crown Castle
RFDS		Date: 06/15/2022	
CDs		Date: 12/01/2022	On File
Previous MA	MTS Engineering, P.L.L.C.	Date: 09/07/2022	
Mount Manufacturer Drawing	SitePro1 (Part# F3P-12)	Date: 08/30/2017	SitePro1
	SitePro1 (Part# F3P-HRK12)	Date: 09/14/2017	

3) ANALYSIS PROCEDURE

3.1) Analysis Method

RISA-3D (Version 21.0.0), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases.

A tool internally developed by MTS Engineering, P.L.L.C., was used to calculate wind loading on all appurtenances, dishes and mount members for various loading cases. Selected output from the analysis is included in Appendix B.

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 *Mount Analysis* (Revision E). In addition, this analysis is in accordance with OTHER SOW.

Manufacturers drawing were used to create the model.

3.2) Assumptions

1. The antenna mounting system was properly fabricated, installed and maintained in good condition in accordance with its original design, TIA Standards, and/or manufacturer's specifications.
2. The configuration of antennas, mounts, and other appurtenances are as specified in Table-1.
3. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected members unless otherwise specified in this report.
4. Mount areas and weights are determined from field measurements, standard material properties, and/or manufacturer product data.
5. Serviceability with respect to antenna twist, tilt, roll or lateral translation is not checked and is left to the carrier or tower owner to ensure conformance.
6. Prior structural modifications to the tower mounting system are assumed to be installed as shown per available data.
7. The analysis will be required to be revised if the existing conditions in the field differ from those shown in the above-referenced documents or assumed in this analysis. No allowance was made for any damaged, missing, or rusted members.
8. The following material grades were assumed (Unless Noted Otherwise):
   (a) Connection Bolts : ASTM A325
   (b) Steel Pipe : ASTM A53 (GR. 35)
   (c) HSS (Round) : ASTM 500 (GR. B-42)
   (d) HSS (Rectangular) : ASTM 500 (GR. B-46)
   (e) Channel : ASTM A36 (GR. 36)
   (f) Steel Solid Rod : ASTM A36 (GR. 36)
   (g) Steel Plate : ASTM A36 (GR. 36)
   (h) Steel Angle : ASTM A36 (GR. 36)
   (i) UNISTRUT : ASTM A570 (GR. 33)

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

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity (Platform Mount)

Notes	Component	Centerline (ft.)	Critical Member	% Capacity	Pass / Fail
1,2	Main Horizontals	118	3	26.2	Pass
	Mount Pipes		196	61.9	Pass
	Chord Plates		240	61.5	Pass
	Web Vertical Plates		84	4.4	Pass
	Web Diagonal Plates		254	28.5	Pass
	PF Angles		12	42.5	Pass
	PJ Plates		34	21.0	Pass
	PS Tubes		42	13.8	Pass
	PB Plates		8	11.1	Pass
	Web Chord Plates		247	36.9	Pass
	Support Rails		191	42.7	Pass
	Connection WT		218	13.4	Pass
3	Mount to Tower Connection		-	61.3	Pass

Structure Rating with Recommendations (max from all components) =	61.9%

Notes:
1) Capacities listed are based on recommendations listed in Sec.4.1 being installed.
2) See additional documentation in "Appendix C - Software Analysis Output" for calculations supporting the % capacity consumed.
3) See additional documentation in "Appendix D - Additional Calculations" for calculations supporting the % capacity reported.

4.1) Recommendations

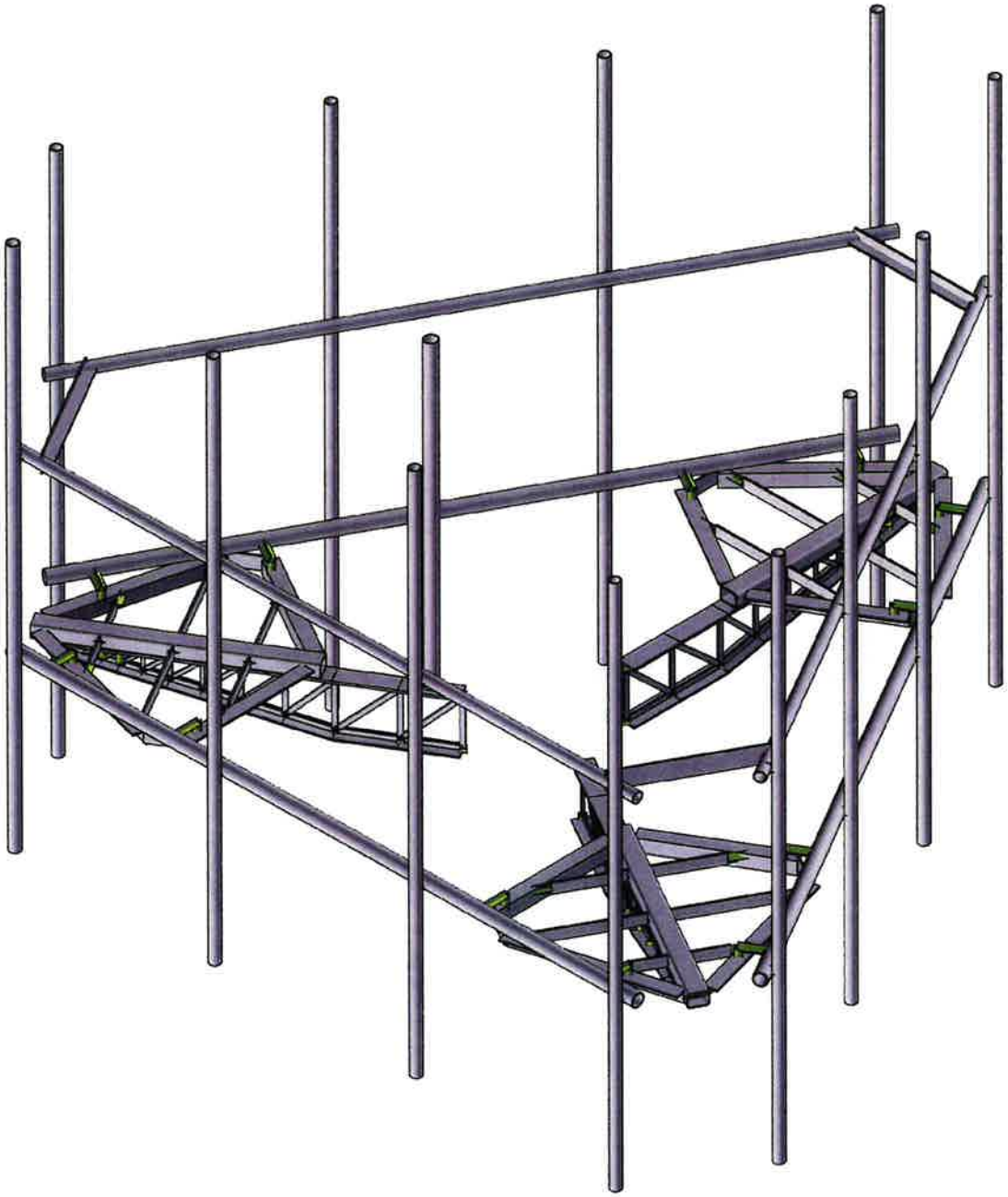
The proposed mount has sufficient capacity to support the proposed loading configuration. In order for the results of this analysis to be considered valid, the mount listed below shall be installed.

1. Proposed Mount, SitePro1 (Part# F3P-12 with HRK12 Support Rail).
2. Add (12) 2" Std. x 10'-6" long Mount Pipes.
3. Install (1) SitePro1 (Part# SAMAST-6) standoff arm mast to install new OVP Box.

No structural modifications are required at this time, provided that the above-listed changes are implemented.

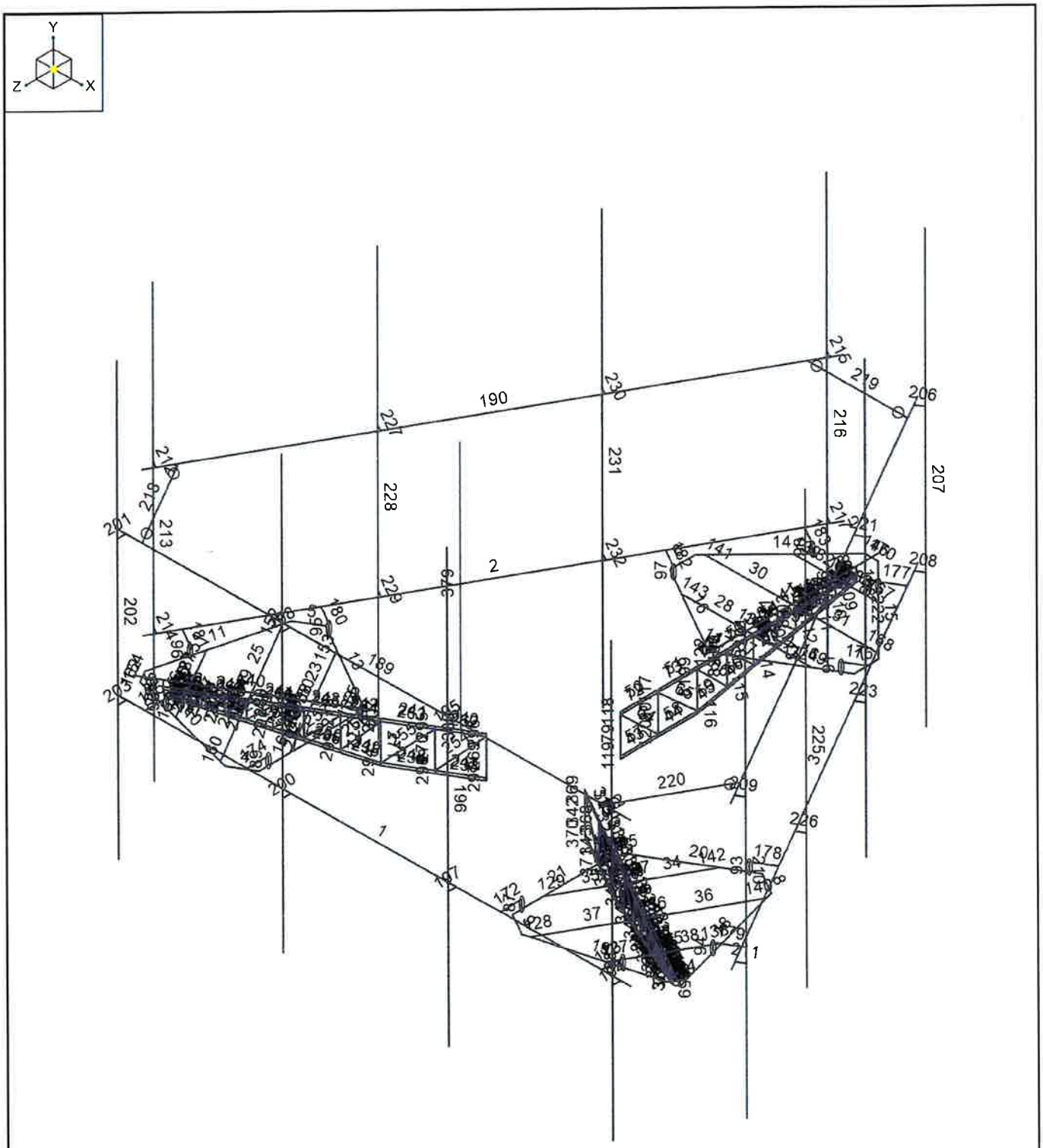
APPENDIX A

WIRE FRAME AND RENDERED MODELS



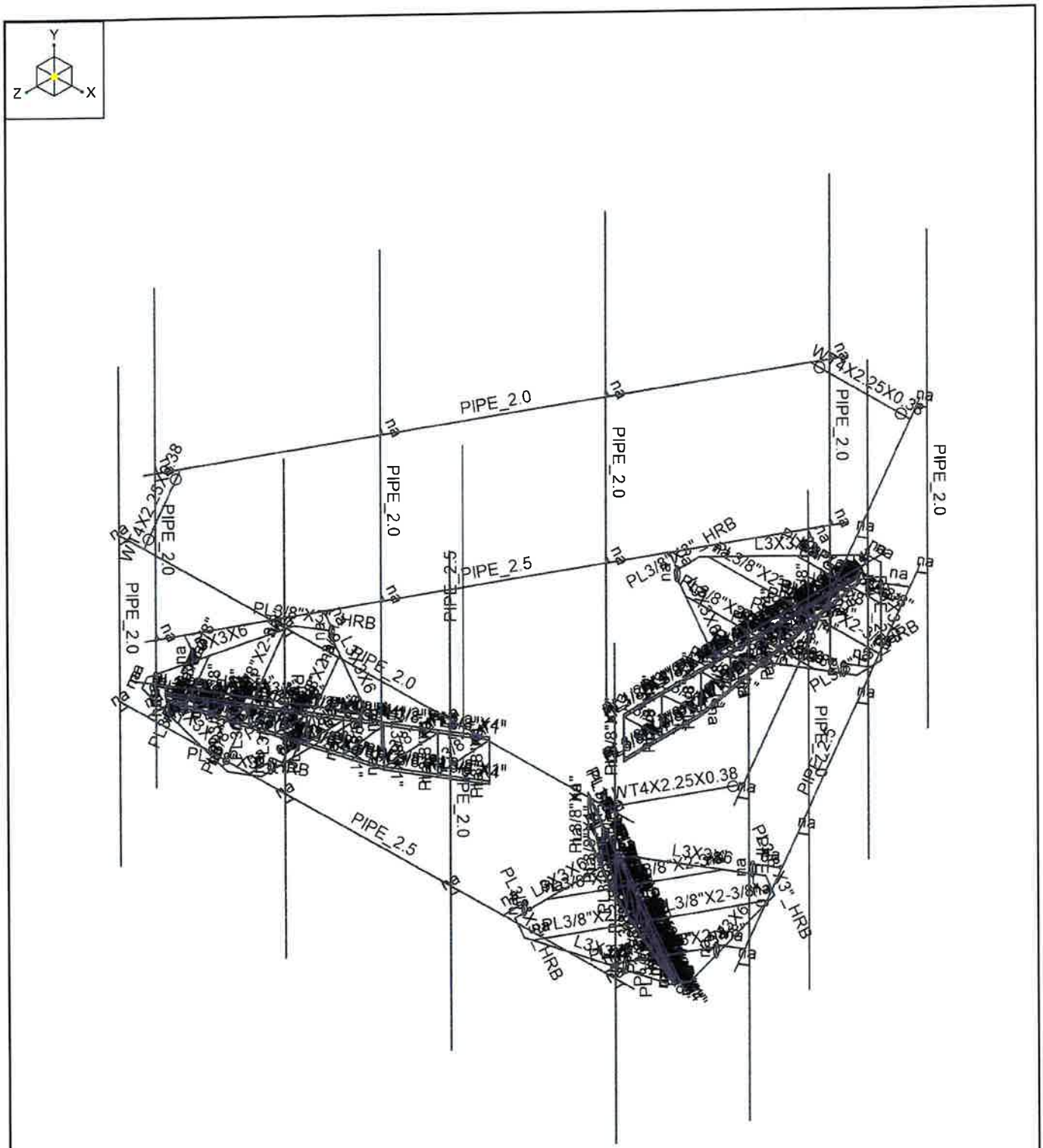
Envelope Only Solution

RISA	MTS Engineering, P.L.L.C.	857528 - Woodbury Paper Mill RD	SK-1
	KP		Mar 29, 2023 at 02:05 PM
	152945.004.01.0001		152945_004_01_0001_Woo...



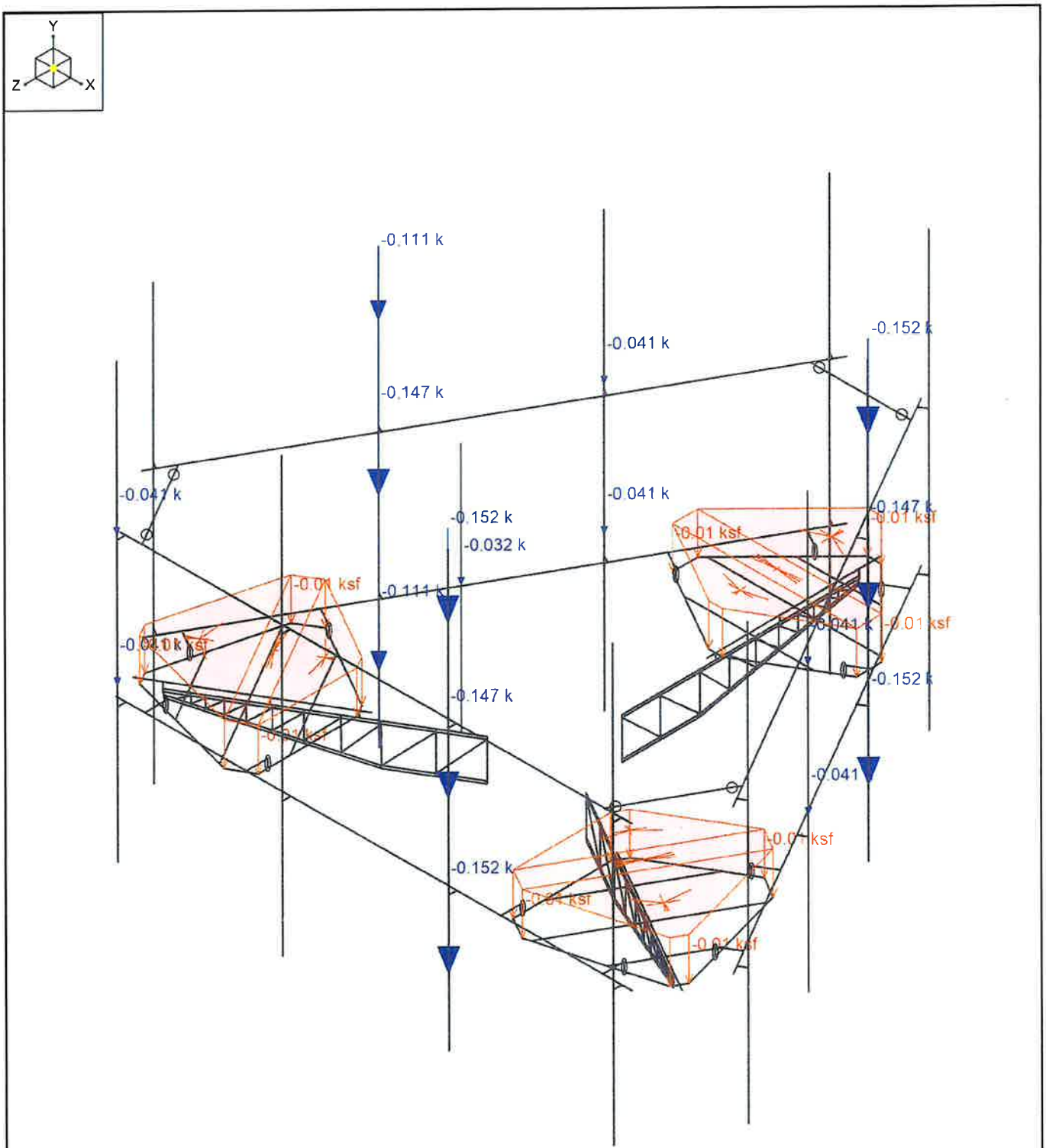
Envelope Only Solution

RISA	MTS Engineering, P.L.L.C.	857528 - Woodbury Paper Mill RD	SK-2
	KP		Mar 29, 2023 at 02:05 PM
	152945.004.01.0001		152945_004_01_0001_Woo...



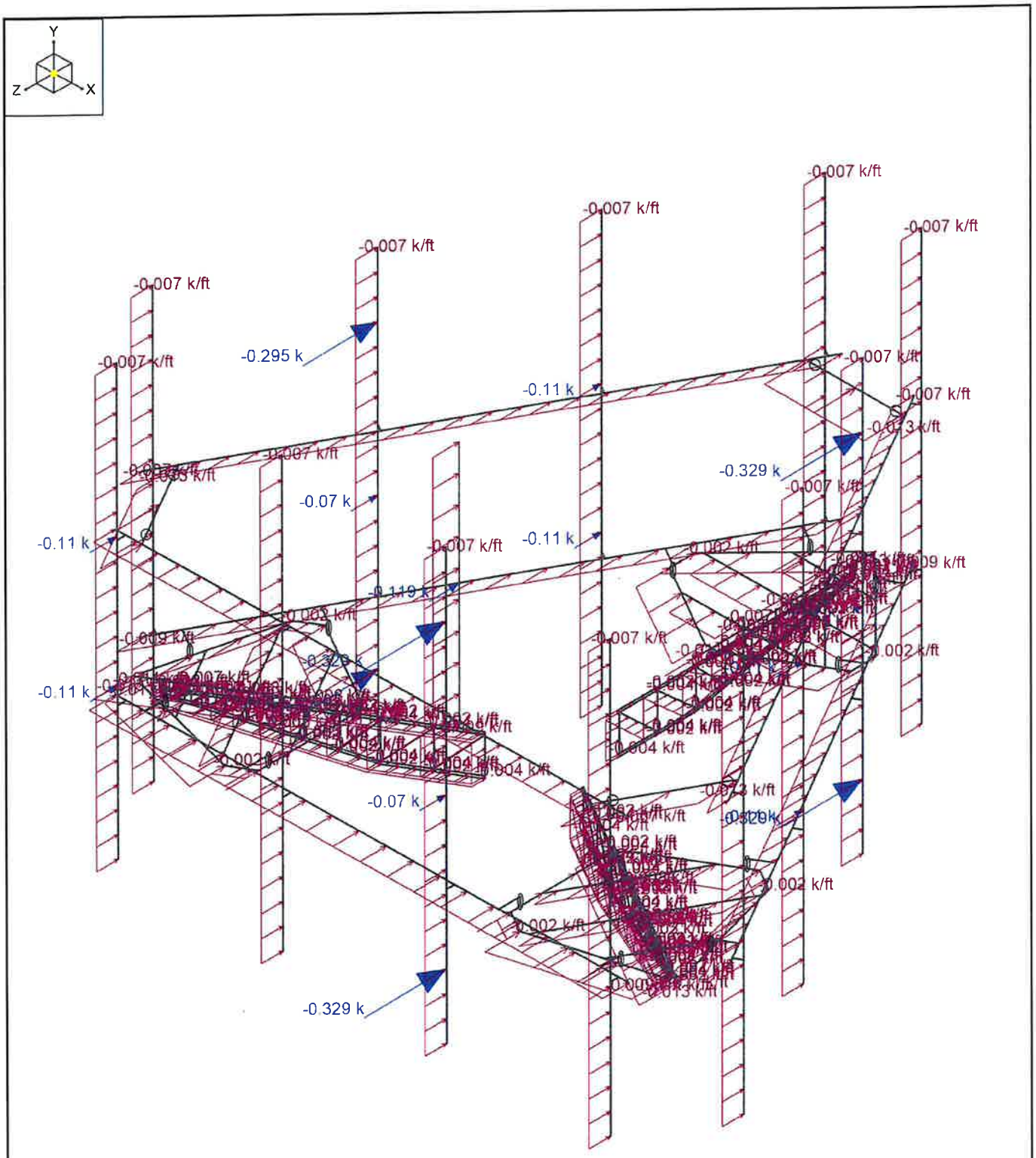
Envelope Only Solution

RISA	MTS Engineering, P.L.L.C.	857528 - Woodbury Paper Mill RD	SK-3
	KP		Mar 29, 2023 at 02:06 PM
	152945.004.01.0001		152945_004_01_0001_Woo...



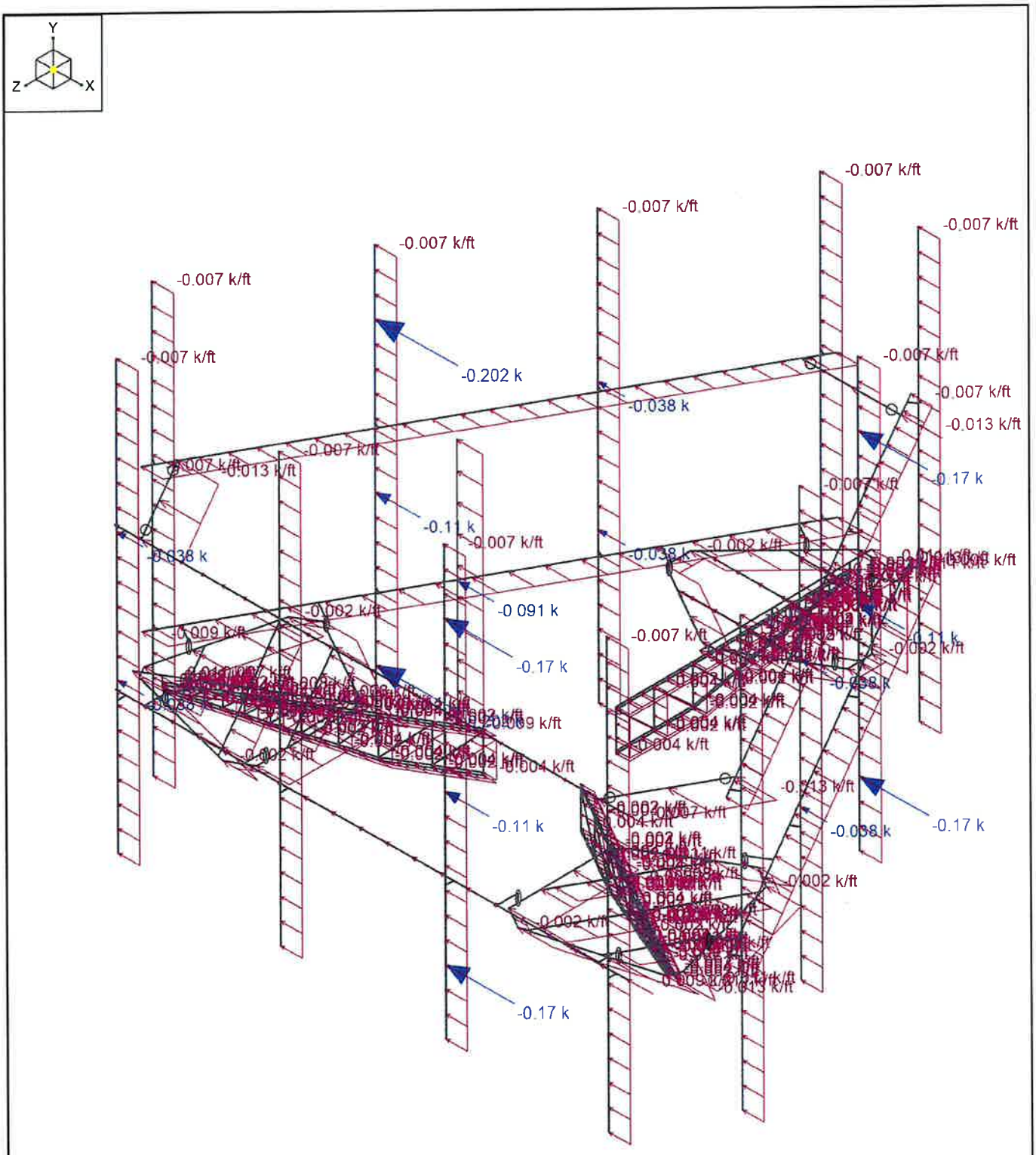
Loads: BLC 1, Dead
Envelope Only Solution

RISA	MTS Engineering, P.L.L.C.	857528 - Woodbury Paper Mill RD	SK-4
	KP		Mar 29, 2023 at 02:06 PM
	152945.004.01.0001		152945_004_01_0001_Woo...



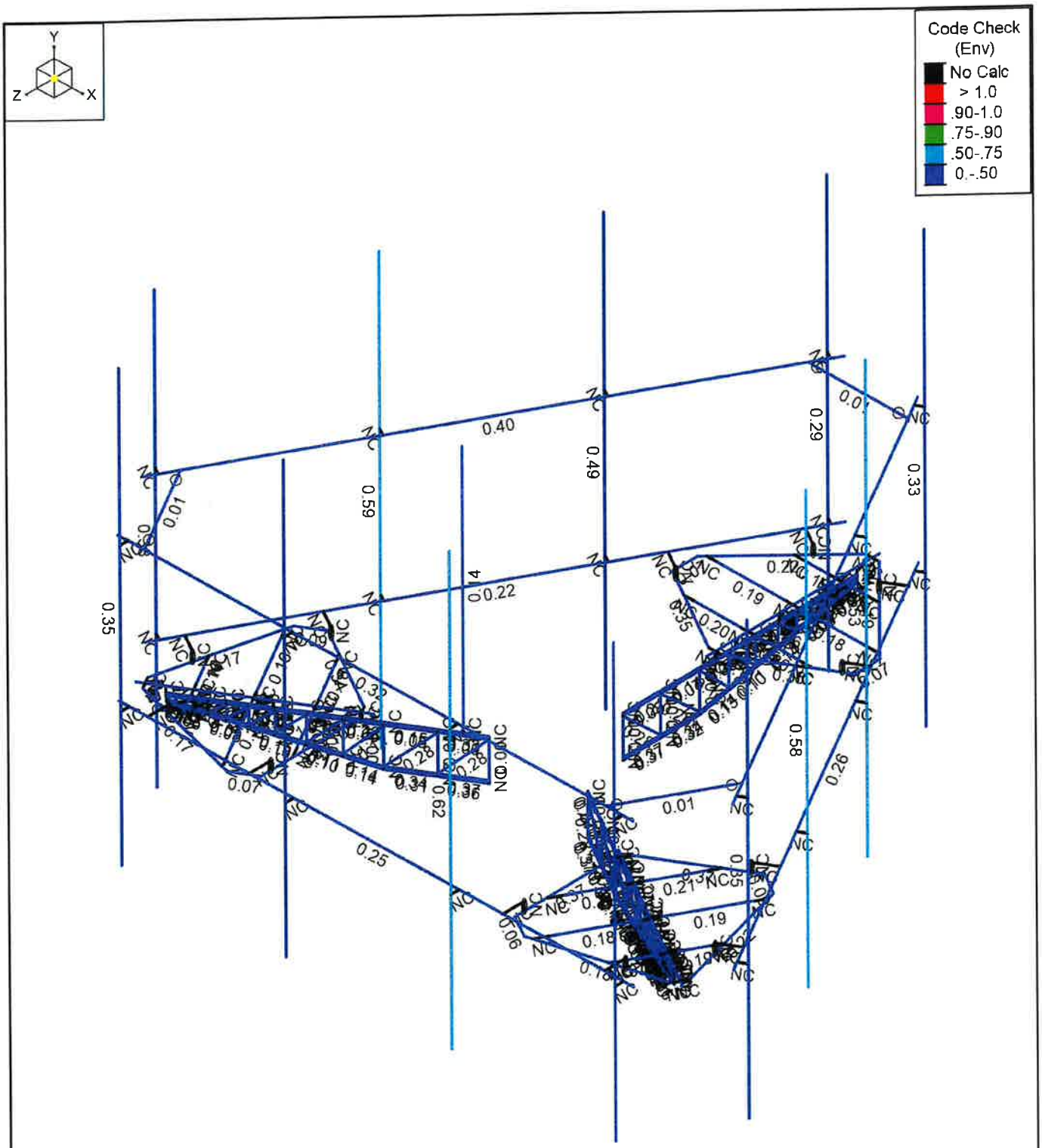
Loads: BLC 2, 0 Wind - No Ice Envelope Only Solution

RISA	MTS Engineering, P.L.L.C.	857528 - Woodbury Paper Mill RD	SK-5
	KP		Mar 29, 2023 at 02:06 PM
	152945.004.01.0001		152945_004_01_0001_Woo...



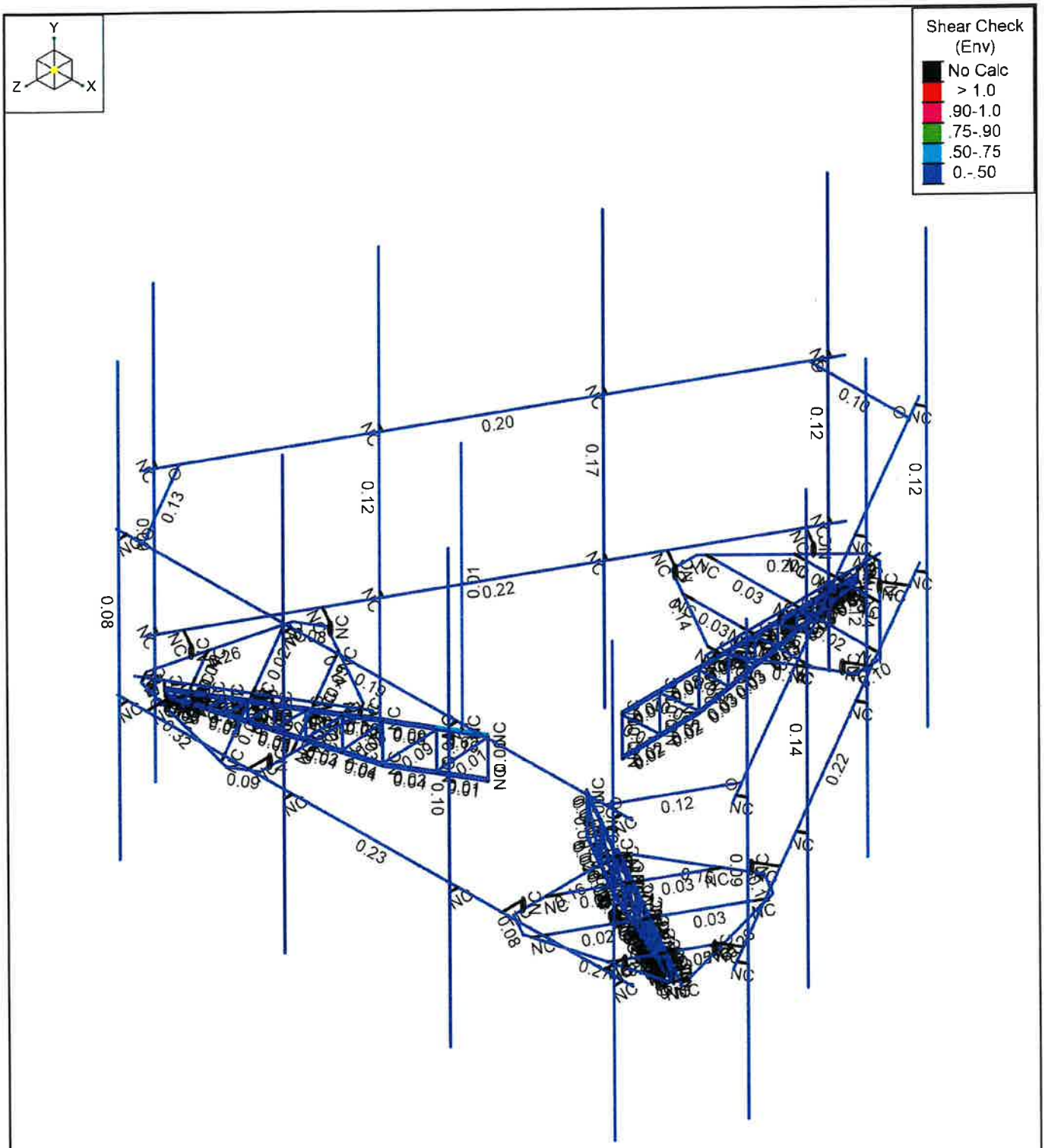
Loads: BLC 3, 90 Wind - No Ice Envelope Only Solution

RISA	MTS Engineering, P.L.L.C.	857528 - Woodbury Paper Mill RD	SK-6
	KP		Mar 29, 2023 at 02:07 PM
	152945.004.01.0001		152945_004_01_0001_Woo...



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

RISA	MTS Engineering, P.L.L.C.	857528 - Woodbury Paper Mill RD	SK-7
	KP		Mar 29, 2023 at 02:07 PM
	152945.004.01.0001		152945_004_01_0001_Woo...



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

RISA	MTS Engineering, P.L.L.C.	857528 - Woodbury Paper Mill RD	SK-8
	KP		Mar 29, 2023 at 02:07 PM
	152945.004.01.0001		152945_004_01_0001_Woo...

APPENDIX B

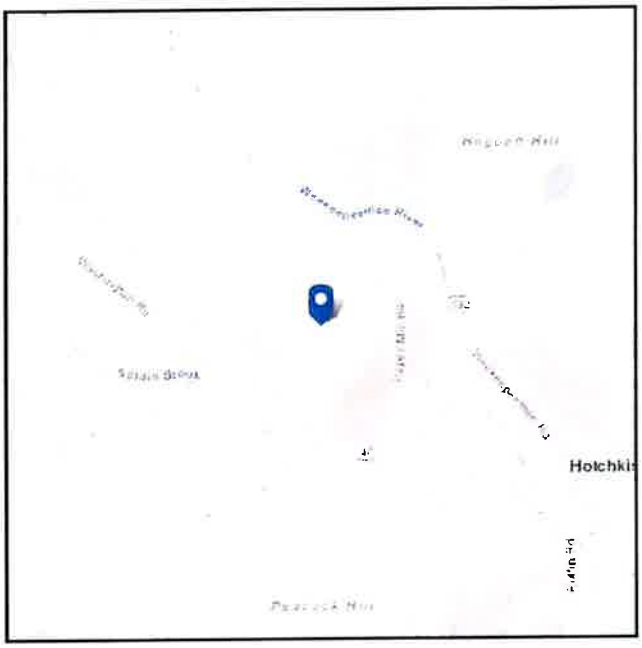
SOFTWARE INPUT CALCULATIONS

ASCE 7 Hazards Report

Address:
No Address at This Location

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

Latitude: 41.573075
Longitude: -73.227642
Elevation: 527.0222709887279 ft (NAVD 88)



Wind

Results:

Wind Speed	115 Vmph
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	89 Vmph
100-year MRI	96 Vmph

Data Source: ASCE/SEI 7-16, Fig. 26.5-1B and Figs. CC.2-1–CC.2-4, and Section 26.5.2
Date Accessed: Wed Mar 29 2023

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

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

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

Seismic

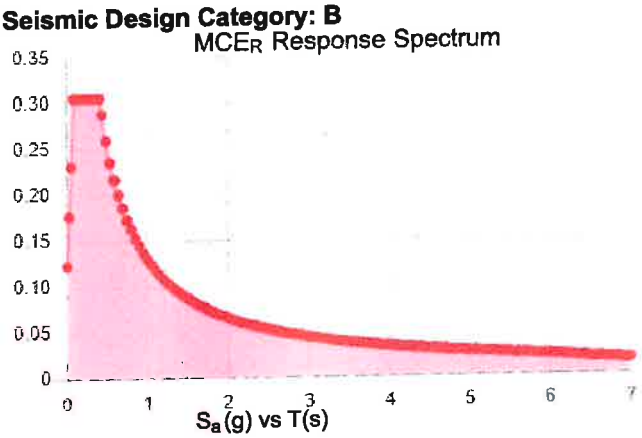
D - Default (see Section 11.4.3)

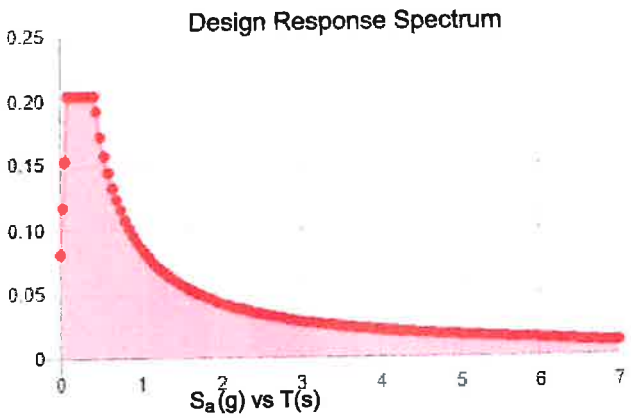
Site Soil Class:

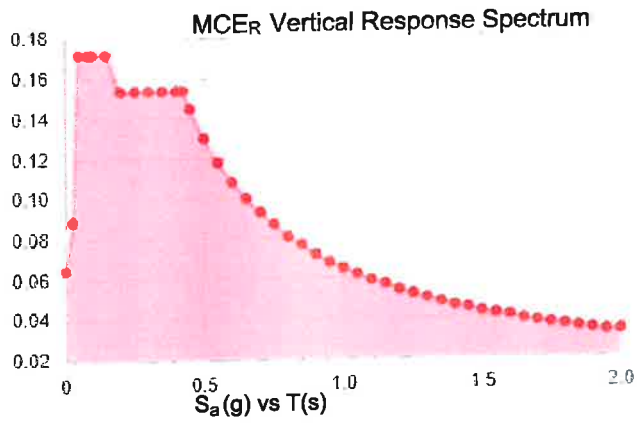
Results:

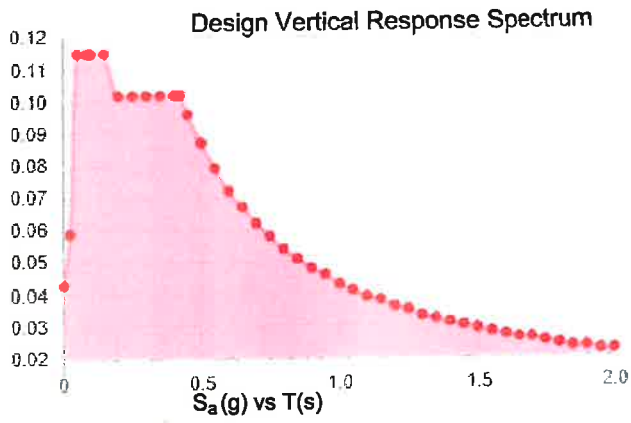
S_S :	0.192	S_{D1} :	0.087
S_1 :	0.054	T_L :	6
F_a :	1.6	PGA :	0.106
F_v :	2.4	PGA_M :	0.168
S_{MS} :	0.307	F_{PGA} :	1.589
S_{M1} :	0.13	I_e :	1
S_{DS} :	0.205	C_v :	0.7

Seismic Design Category: B









Data Accessed: **Wed Mar 29 2023**

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

ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

Ice

Results:

Ice Thickness:	1.00 in.
Concurrent Temperature:	15 F
Gust Speed	50 mph
Data Source:	Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8
Date Accessed:	Wed Mar 29 2023

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

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

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

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

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

PROJECT	**152945.004.01.0001 - WOODBURY PA KSC**
SUBJECT	**Platform Mount Analysis**
DATE	**03/29/23**

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

B+T GRP

Tower Type		:	Monopole		
Ground Elevation	z_s	:	527	ft	[ASCE7 Hazard Tool]
Tower Height		:	150.00	ft	
Mount Elevation		:	118.00	ft	
Antenna Elevation		:	118.00	ft	
Crest Height		:	0	ft	
Risk Category		:	II		[Table 2-1]
Exposure Category		:	B		[Sec. 2.6.5.1.2]
Topography Category		:	1.00		[Sec. 2.6.6.2]
Wind Velocity	V	:	115	mph	[ASCE7 Hazard Tool]
Ice wind Velocity	V_i	:	50	mph	[ASCE7 Hazard Tool]
Service Velocity	V_s	:	30	mph	[ASCE7 Hazard Tool]
Base Ice thickness	t_i	:	1.00	in	[ASCE7 Hazard Tool]
Seismic Design Cat.		:	B		[ASCE7 Hazard Tool]
	S_S	:	0.19		
	S_1	:	0.05		
	S_{DS}	:	0.21		
	S_{D1}	:	0.09		
Gust Factor	G_h	:	1.00		[Sec. 16.6]
Pressure Coefficient	K_z	:	1.04		[Sec. 2.6.5.2]
Topography Facto	K_{zt}	:	1.00		[Sec. 2.6.6]
Elevation Factor	K_e	:	0.98		[Sec. 2.6.8]
Directionality Factor	K_d	:	0.95		[Sec. 16.6]
Shielding Factor	K_a	:	0.90		[Sec. 16.6]
Design Ice Thickness	t_{iz}	:	1.14	in	[Sec. 2.6.10]
Importance Factor	I_e	:	1		[Table 2-3]
Response Coefficient	C_s	:	0.103		[Sec. 2.7.7.1]
Amplification	A_s	:	2.146667		[Sec. 16.7]
	q_z	:	32.69	psf	

PROJECT	**152945.004.01.0001 - WOODBURY PA KSC**
SUBJECT	**Platform Mount Analysis**
DATE	**03/29/23**

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

B+T GRP

Manufacturer	Model	Qty	Height (in^2)	Width (in^2)	Depth (in^2)	Weight (lbs)	C_aA_a (N) (ft^2)	C_aA_a (T) (ft^2)	C_aA_a (N) Ice (ft^2)	C_aA_a (T) Ice (ft^2)	$F_{A(N)}$ (k)	$F_{A(T)}$ (k)	$F_{A(N)}$ Ice (k)	$F_{A(T)}$ Ice (k)
JMA WIRELESS	MX06FRO840-02_CCIV2	1	95.9	19.8	10.7	152.0	10.06	5.19	11.29	6.32	0.33	0.17	0.07	0.04
JMA WIRELESS	MX06FRO840-02_CCIV2	1					10.06	5.19	11.29	6.32	0.33	0.17	0.07	0.04
G TELECOMMUNI(	RF4439D-25A	1	15.0	10.0	15.0	74.7	1.25	1.87	1.77	2.47	0.04	0.05	0.01	0.01
G TELECOMMUNI(	RF4440D-13A	1	15.0	9.1	15.0	72.5	1.13	1.87	1.63	2.47	0.03	0.05	0.01	0.01
G TELECOMMUNI(	MT6407-77A	0.5	35.1	16.1	5.5	81.6	3.37	1.17	4.00	1.68	0.11	0.04	0.02	0.01
G TELECOMMUNI(	MT6407-77A	0.5					3.37	1.17	4.00	1.68	0.11	0.04	0.02	0.01
JMA WIRELESS	MX06FRO860-03	1	95.9	15.4	10.7	111.0	9.01	6.19	10.43	7.54	0.29	0.20	0.06	0.05
JMA WIRELESS	MX06FRO860-03	1					9.01	6.19	10.43	7.54	0.29	0.20	0.06	0.05
G TELECOMMUNI(	RF4439D-25A	1	15.0	10.0	15.0	74.7	1.25	1.87	1.77	2.47	0.04	0.05	0.01	0.01
G TELECOMMUNI(	RF4440D-13A	1	15.0	9.1	15.0	72.5	1.13	1.87	1.63	2.47	0.03	0.05	0.01	0.01
G TELECOMMUNI(	MT6407-77A	0.5	35.1	16.1	5.5	81.6	3.37	1.17	4.00	1.68	0.11	0.04	0.02	0.01
G TELECOMMUNI(	MT6407-77A	0.5					3.37	1.17	4.00	1.68	0.11	0.04	0.02	0.01
JMA WIRELESS	MX06FRO840-02_CCIV2	1	95.9	19.8	10.7	152.0	10.06	5.19	11.29	6.32	0.33	0.17	0.07	0.04
JMA WIRELESS	MX06FRO840-02_CCIV2	1					10.06	5.19	11.29	6.32	0.33	0.17	0.07	0.04
G TELECOMMUNI(	RF4439D-25A	1	15.0	10.0	15.0	74.7	1.25	1.87	1.77	2.47	0.04	0.05	0.01	0.01
G TELECOMMUNI(	RF4440D-13A	1	15.0	9.1	15.0	72.5	1.13	1.87	1.63	2.47	0.03	0.05	0.01	0.01
G TELECOMMUNI(	MT6407-77A	0.5	35.1	16.1	5.5	81.6	3.37	1.17	4.00	1.68	0.11	0.04	0.02	0.01
G TELECOMMUNI(	MT6407-77A	0.5					3.37	1.17	4.00	1.68	0.11	0.04	0.02	0.01
RAYCAP	RVZDC-6627-PF-48_CCIV2	1	29.5	16.5	12.6	32.0	4.06	3.10	4.97	3.94	0.12	0.09	0.02	0.02

APPENDIX C

SOFTWARE ANALYSIS OUTPUT

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	1	0	0.145833	-7.66975	
2	2	0	0.145833	-3.425417	
3	3	0	0.145833	-6.633292	
4	4	0.75	0.145833	-6.633292	
5	5	0	0.145833	-5.558292	
6	6	0	0.145833	-4.450866	
7	7	1.825583	0.145833	-5.558292	
8	8	1.2905	0.145833	-4.455625	
9	9	0.166667	0.145833	-6.633292	
10	10	0.166667	0.145833	-5.558292	
11	11	0.166667	0.145833	-4.455625	
12	12	1.034612	0.145833	-6.633292	
13	13	2.10973	0.145833	-5.558292	
14	14	1.575011	0.145833	-4.455625	
15	15	0	0.145833	-7.501143	
16	16	0	0.145833	-3.642525	
17	17	0.166667	0.145833	-7.501143	
18	18	2.227593	0.145833	-5.440441	
19	19	0.166667	0.145833	-3.642525	
20	20	-0.75	0.145833	-6.633292	
21	21	-1.825583	0.145833	-5.558292	
22	22	-1.2905	0.145833	-4.455625	
23	23	-0.166667	0.145833	-6.633292	
24	24	-0.166667	0.145833	-5.558292	
25	25	-0.166667	0.145833	-4.455625	
26	26	-1.034612	0.145833	-6.633292	
27	27	-2.10973	0.145833	-5.558292	
28	28	-1.575011	0.145833	-4.455625	
29	29	-0.166667	0.145833	-7.501143	
30	30	-2.227593	0.145833	-5.440441	
31	31	-0.166667	0.145833	-3.642525	
32	32	-2.232836	0.145833	-4.835417	
33	33	2.232836	0.145833	-4.835417	
34	34	-0.803917	0.145833	-6.863962	
35	35	6.642192	0.145833	3.834871	
36	36	2.966491	0.145833	1.712704	
37	37	5.744592	0.145833	3.316642	
38	38	5.36959	0.145833	3.966165	
39	39	4.813615	0.145833	2.779142	
40	40	3.858678	0.145833	2.227809	
41	41	3.900821	0.145833	4.360148	
42	42	3.213425	0.145833	3.345419	
43	43	5.661257	0.145833	3.460984	
44	44	4.730279	0.145833	2.923484	
45	45	3.775342	0.145833	2.37215	
46	46	5.227284	0.145833	4.212647	
47	47	3.758748	0.145833	4.606226	
48	48	3.071177	0.145833	3.5918	
49	49	6.496173	0.145833	3.750567	
50	50	3.154519	0.145833	1.821262	
51	51	6.412837	0.145833	3.894909	
52	52	3.597754	0.145833	4.649373	
53	53	3.071177	0.145833	1.9656	
54	54	6.11959	0.145833	2.667127	
55	55	5.726404	0.145833	1.198145	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
56	56	4.503925	0.145833	1.110207	
57	57	5.827923	0.145833	3.172309	
58	58	4.896946	0.145833	2.634809	
59	59	3.942009	0.145833	2.083475	
60	60	6.261896	0.145833	2.420646	
61	61	5.868478	0.145833	0.952067	
62	62	4.646181	0.145833	0.863813	
63	63	6.579504	0.145833	3.606234	
64	64	5.825348	0.145833	0.791068	
65	65	3.237843	0.145833	1.676925	
66	66	5.304002	0.145833	0.484016	
67	67	3.071167	0.145833	4.351401	
68	68	3.071168	0.354083	4.120184	
69	69	5.542398	0.354083	4.128194	
70	70	3.071177	0.145833	4.120184	
71	71	3.071168	0.354083	4.641048	
72	72	5.542398	0.145833	4.128194	
73	73	5.542398	0.354083	4.641048	
74	74	-6.642189	0.145833	3.834853	
75	75	-2.966489	0.145833	1.712686	
76	76	-5.74459	0.145833	3.316624	
77	77	-6.11959	0.145833	2.667105	
78	78	-4.813613	0.145833	2.779124	
79	79	-3.858675	0.145833	2.22779	
80	80	-5.726404	0.145833	1.198122	
81	81	-4.503925	0.145833	1.110185	
82	82	-5.827923	0.145833	3.172286	
83	83	-4.896946	0.145833	2.634786	
84	84	-3.942009	0.145833	2.083453	
85	85	-6.261896	0.145833	2.420623	
86	86	-5.868478	0.145833	0.952044	
87	87	-4.646181	0.145833	0.863791	
88	88	-6.496171	0.145833	3.750549	
89	89	-3.154549	0.145833	1.821262	
90	90	-6.579504	0.145833	3.606211	
91	91	-5.825348	0.145833	0.791046	
92	92	-3.237843	0.145833	1.676903	
93	93	-5.36959	0.145833	3.966143	
94	94	-3.900821	0.145833	4.360125	
95	95	-3.213425	0.145833	3.345396	
96	96	-5.661257	0.145833	3.460961	
97	97	-4.730279	0.145833	2.923461	
98	98	-3.775342	0.145833	2.372128	
99	99	-5.227284	0.145833	4.212624	
100	100	-3.758748	0.145833	4.606203	
101	101	-3.071177	0.145833	3.591778	
102	102	-6.412837	0.145833	3.894887	
103	103	-3.597754	0.145833	4.649351	
104	104	-3.071177	0.145833	1.965578	
105	105	-3.071168	0.354083	4.120161	
106	106	-3.071167	0.145833	4.351379	
107	107	-5.304002	0.145833	0.483994	
108	108	-5.542398	0.354083	4.128171	
109	109	-3.071177	0.145833	4.120161	
110	110	-3.071168	0.354083	4.641048	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
111	111	-5.542398	0.145833	4.128171	
112	112	-5.542398	0.354083	4.641048	
113	113	-6.346315	0.354083	2.735747	
114	114	2.032595	0.354083	-4.719809	
115	115	0.803917	0.354083	-6.863962	
116	116	2.032595	0.145833	-4.719809	
117	117	2.483675	0.354083	-4.98024	
118	118	0.803917	0.145833	-6.863962	
119	119	1.248065	0.354083	-7.120381	
120	120	5.103763	0.354083	0.599626	
121	121	6.346315	0.354083	2.735769	
122	122	5.103763	0.145833	0.599626	
123	123	5.554846	0.354083	0.339193	
124	124	6.346315	0.145833	2.735769	
125	125	6.790457	0.354083	2.479338	
126	126	-5.103763	0.354083	0.599603	
127	127	-5.103763	0.145833	0.599603	
128	128	-5.554843	0.354083	0.339172	
129	129	-6.346315	0.145833	2.735747	
130	130	-6.790467	0.354083	2.479332	
131	131	-2.032595	0.354083	-4.719809	
132	132	-0.803917	0.354083	-6.863962	
133	133	-2.032595	0.145833	-4.719809	
134	134	-2.483677	0.354083	-4.980241	
135	135	-1.248066	0.354083	-7.120381	
136	136	-6.250009	0.354083	4.641048	
137	137	6.250009	0.354083	4.641048	
138	138	7.144265	0.354083	3.092151	
139	139	0.894256	0.354083	-7.733198	
140	140	-0.894256	0.354083	-7.733198	
141	141	-7.144265	0.354083	3.092129	
142	142	0	0.145833	-5.21517	
143	143	2.456763	0.354083	-5.026852	
144	144	4.01926	0.354083	-2.320521	
145	145	0	0	-3.256805	
146	146	0	0	-3.642525	
147	147	0	0	-6.039461	
148	148	0	0	-7.131837	
149	149	0	-0.994667	-3.256805	
150	150	0	-0.0625	-3.256805	
151	151	0	0	-3.975076	
152	152	0	0	-4.623067	
153	153	0	0	-5.17961	
154	154	0	0	-5.646265	
155	155	0	0	-6.371182	
156	156	0	0	-6.630627	
157	157	0	-0.0625	-3.975076	
158	158	0	-0.0625	-4.623067	
159	159	0	-0.0625	-5.17958	
160	160	0	-0.0625	-5.646265	
161	161	0	-0.0625	-6.039461	
162	162	0	-0.0625	-6.371182	
163	163	0	-0.0625	-6.630627	
164	164	0	-0.933227	-3.255454	
165	165	0	-0.645779	-4.623067	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
166	166	0	-0.843021	-3.983329	
167	167	0	-0.590665	-5.19234	
168	168	0	-0.70683	-4.635806	
169	169	0	-0.493261	-5.658997	
170	170	0	-0.41119	-6.052189	
171	171	0	-0.341951	-6.383906	
172	172	0	-0.287798	-6.643348	
173	173	0	-0.781876	-3.97057	
174	174	0	-0.529639	-5.17958	
175	175	0	-0.432245	-5.646265	
176	176	0	-0.350195	-6.039461	
177	177	0	-0.280974	-6.371182	
178	178	0	-0.226577	-6.630573	
179	179	0	-0.0625	-7.131837	
180	180	0	-0.125272	-7.113652	
181	181	0	-0.189155	-7.11594	
182	182	0	0	-2.298472	
183	183	0	-0.994667	-2.298472	
184	184	0	-0.0625	-2.298472	
185	185	0	-0.933213	-2.298472	
186	186	0	0	-1.381837	
187	187	0	-0.994667	-1.381837	
188	188	0	-0.0625	-1.381837	
189	189	0	-0.933213	-1.381837	
190	190	0	0	-5.21517	
191	191	0	-0.171393	-6.893724	
192	192	0	-0.0625	-6.263544	
193	193	0	0.145833	-7.131837	
194	194	5.581765	0.354083	0.385822	
195	195	-5.581763	0.354083	0.385807	
196	196	-4.01926	0.354083	-2.320521	
197	197	-2.456751	0.354083	-5.026861	
198	198	3.125	0.354083	4.641045	
199	199	0	0.354083	4.641042	
200	200	-3.125014	0.354083	4.641039	
201	201	0	0	0	
202	202	-6.250009	3.854083	4.641048	
203	203	6.250009	3.854083	4.641048	
204	204	7.144265	3.854083	3.092151	
205	205	0.894256	3.854083	-7.733198	
206	206	-0.894256	3.854083	-7.733198	
207	207	-7.144265	3.854083	3.092129	
208	208	6.000008	3.854083	4.641048	
209	209	6.000008	3.854083	4.844148	
210	210	6.000008	7.604083	4.844148	
211	211	6.000008	-2.895917	4.844148	
212	212	6.000008	0.354083	4.641048	
213	213	6.000008	0.354083	4.844148	
214	214	2.000008	3.854083	4.641048	
215	215	2.000008	3.854083	4.844148	
216	216	2.000008	7.604083	4.844148	
217	217	2.000008	-2.895917	4.844148	
218	218	2.000008	0.354083	4.641048	
219	219	2.000008	0.354083	4.844148	
220	220	-1.999992	3.854083	4.641048	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
221	221	-1.999992	3.854083	4.844148	
222	222	-1.999992	7.604083	4.844148	
223	223	-1.999992	-2.895917	4.844148	
224	224	-1.999992	0.354083	4.641048	
225	225	-1.999992	0.354083	4.844148	
226	226	-5.999992	3.854083	4.641048	
227	227	-5.999992	3.854083	4.844148	
228	228	-5.999992	7.604083	4.844148	
229	229	-5.999992	-2.895917	4.844148	
230	230	-5.999992	0.354083	4.641048	
231	231	-5.999992	0.354083	4.844148	
232	232	-3.154519	0	1.821263	
233	233	3.154519	0	1.821263	
234	234	1.019261	3.854083	-7.516683	
235	235	1.195151	3.854083	-7.618233	
236	236	1.195151	7.604083	-7.618233	
237	237	1.195151	-2.895917	-7.618233	
238	238	1.019261	0.354083	-7.516683	
239	239	1.195151	0.354083	-7.618233	
240	240	7.019254	3.854083	2.875626	
241	241	7.195151	3.854083	2.774072	
242	242	7.195151	7.604083	2.774072	
243	243	7.195151	-2.895917	2.774072	
244	244	7.019254	0.354083	2.875626	
245	245	7.195151	0.354083	2.774072	
246	246	-7.019271	3.854083	2.875634	
247	247	-7.195159	3.854083	2.774085	
248	248	-7.195159	7.604083	2.774085	
249	249	-7.195159	-2.895917	2.774085	
250	250	-7.019271	0.354083	2.875634	
251	251	-7.195159	0.354083	2.774085	
252	252	-1.019269	3.854083	-7.51667	
253	253	-1.195159	3.854083	-7.61822	
254	254	-1.195159	7.604083	-7.61822	
255	255	-1.195159	-2.895917	-7.61822	
256	256	-1.019269	0.354083	-7.51667	
257	257	-1.195159	0.354083	-7.61822	
258	258	5.601086	3.854083	4.641048	
259	259	-6.819803	3.854083	2.530145	
260	260	1.218717	3.854083	-7.171214	
261	261	-5.601062	3.854083	4.641048	
262	262	6.819785	3.854083	2.530134	
263	263	-1.218718	3.854083	-7.171214	
264	264	3.019259	3.854083	-4.05258	
265	265	3.195151	3.854083	-4.154131	
266	266	3.195151	7.604083	-4.154131	
267	267	3.195151	-2.895917	-4.154131	
268	268	3.019259	0.354083	-4.05258	
269	269	3.195151	0.354083	-4.154131	
270	270	5.019256	3.854083	-0.588477	
271	271	5.195151	3.854083	-0.69003	
272	272	5.195151	7.604083	-0.69003	
273	273	5.195151	-2.895917	-0.69003	
274	274	5.019256	0.354083	-0.588477	
275	275	5.195151	0.354083	-0.69003	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
276	276	-5.019271	3.854083	-0.588467	
277	277	-5.195159	3.854083	-0.690016	
278	278	-5.195159	7.604083	-0.690016	
279	279	-5.195159	-2.895917	-0.690016	
280	280	-5.019271	0.354083	-0.588467	
281	281	-5.195159	0.354083	-0.690016	
282	282	-3.01927	3.854083	-4.052568	
283	283	-3.195159	3.854083	-4.154118	
284	284	-3.195159	7.604083	-4.154118	
285	285	-3.195159	-2.895917	-4.154118	
286	286	-3.01927	0.354083	-4.052568	
287	287	-3.195159	0.354083	-4.154118	
288	288	-4.516499	0.145833	2.607585	
289	289	-2.820476	0	1.628403	
290	290	-5.230327	0	3.01973	
291	291	-6.176352	0	3.565918	
292	292	-2.820476	-0.994667	1.628403	
293	293	-2.820476	-0.0625	1.628403	
294	294	-3.442517	0	1.987538	
295	295	-4.003693	0	2.311533	
296	296	-4.485648	0	2.58979	
297	297	-4.889809	0	2.823132	
298	298	-5.517605	0	3.185591	
299	299	-5.742291	0	3.315313	
300	300	-3.442517	-0.0625	1.987538	
301	301	-4.003693	-0.0625	2.311533	
302	302	-4.485648	-0.0625	2.58979	
303	303	-4.889809	-0.0625	2.823132	
304	304	-5.230327	-0.0625	3.01973	
305	305	-5.517605	-0.0625	3.185591	
306	306	-5.742245	-0.0625	3.315286	
307	307	-2.819306	-0.933227	1.627727	
308	308	-4.003693	-0.645779	2.311533	
309	309	-3.449664	-0.843021	1.991665	
310	310	-4.496698	-0.590665	2.59617	
311	311	-4.014726	-0.70683	2.317903	
312	312	-4.900835	-0.493261	2.829498	
313	313	-5.241349	-0.41119	3.026095	
314	314	-5.528625	-0.341951	3.191953	
315	315	-5.753308	-0.287798	3.321674	
316	316	-3.438614	-0.781876	1.985285	
317	317	-4.485648	-0.529639	2.58979	
318	318	-4.889809	-0.432245	2.823132	
319	319	-5.230327	-0.350195	3.01973	
320	320	-5.517605	-0.280974	3.185591	
321	321	-5.742245	-0.226577	3.315286	
322	322	-6.176352	-0.0625	3.565918	
323	323	-6.160603	-0.125272	3.556826	
324	324	-6.162585	-0.189155	3.55797	
325	325	-1.990535	0	1.149236	
326	326	-1.990535	-0.994667	1.149236	
327	327	-1.990535	-0.0625	1.149236	
328	328	-1.990535	-0.933213	1.149236	
329	329	-1.196706	0	0.690918	
330	330	-1.196706	-0.994667	0.690918	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
331	331	-1.196706	-0.0625	0.690918	
332	332	-1.196706	-0.933213	0.690918	
333	333	-4.51647	0	2.607585	
334	334	-5.97014	-0.171393	3.446862	
335	335	-5.424388	-0.0625	3.131772	
336	336	-6.176381	0.145833	3.565918	
337	337	4.51647	0.145833	2.607585	
338	338	2.820476	0	1.628403	
339	339	5.230327	0	3.01973	
340	340	6.176352	0	3.565918	
341	341	2.820476	-0.994667	1.628403	
342	342	2.820476	-0.0625	1.628403	
343	343	3.442517	0	1.987538	
344	344	4.003693	0	2.311533	
345	345	4.485648	0	2.58979	
346	346	4.889809	0	2.823132	
347	347	5.517605	0	3.185591	
348	348	5.742291	0	3.315313	
349	349	3.442517	-0.0625	1.987538	
350	350	4.003693	-0.0625	2.311533	
351	351	4.485648	-0.0625	2.58979	
352	352	4.889809	-0.0625	2.823132	
353	353	5.230327	-0.0625	3.01973	
354	354	5.517605	-0.0625	3.185591	
355	355	5.742245	-0.0625	3.315286	
356	356	2.819306	-0.933227	1.627727	
357	357	4.003693	-0.645779	2.311533	
358	358	3.449664	-0.843021	1.991665	
359	359	4.496698	-0.590665	2.59617	
360	360	4.014726	-0.70683	2.317903	
361	361	4.900835	-0.493261	2.829498	
362	362	5.241349	-0.41119	3.026095	
363	363	5.528625	-0.341951	3.191953	
364	364	5.753308	-0.287798	3.321674	
365	365	3.438614	-0.781876	1.985285	
366	366	4.485648	-0.529639	2.58979	
367	367	4.889809	-0.432245	2.823132	
368	368	5.230327	-0.350195	3.01973	
369	369	5.517605	-0.280974	3.185591	
370	370	5.742245	-0.226577	3.315286	
371	371	6.176352	-0.0625	3.565918	
372	372	6.160603	-0.125272	3.556826	
373	373	6.162585	-0.189155	3.55797	
374	374	1.990535	0	1.149236	
375	375	1.990535	-0.994667	1.149236	
376	376	1.990535	-0.0625	1.149236	
377	377	1.990535	-0.933213	1.149236	
378	378	1.196706	0	0.690918	
379	379	1.196706	-0.994667	0.690918	
380	380	1.196706	-0.0625	0.690918	
381	381	1.196706	-0.933213	0.690918	
382	382	4.51647	0	2.607585	
383	383	5.97014	-0.171393	3.446862	
384	384	5.424388	-0.0625	3.131772	
385	385	6.176352	0.145833	3.565918	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
386	386	-1.59362	0	0.920077	
387	387	-1.59362	0.0625	0.920077	
388	388	-1.59362	6.0625	0.920077	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]	Y Rot [k-ft/rad]	Z Rot [k-ft/rad]
1	145						
2	149						
3	182						
4	183						
5	186	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	187	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
7	289						
8	292						
9	325						
10	326						
11	329	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
12	330	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
13	338						
14	341						
15	374						
16	375						
17	378	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
18	379	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e^{5}°F^{-1}]	Density [k/ft^{3}]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
8	Q235	29000	11154	0.3	0.65	0.49	35	1.5	58	1.2

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in^{2}]	Iyy [in^{4}]	Izz [in^{4}]	J [in^{4}]
1	FH-Pipe	PIPE 2.5	Beam	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
2	AM-Pipe	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
3	SA-TopChord-Plate	PL1/2"X4"	Beam	RECT	A572 Gr.50	Typical	2	0.042	2.667	0.154
4	SA-BotChord-Plate	PL3/8"X4"	Beam	RECT	A572 Gr.50	Typical	1.5	0.018	2	0.066
5	SA-WebVert-Plate	PL3/8"X1"	Column	RECT	A572 Gr.50	Typical	0.38	0.005	0.032	0.014
6	SA-WebDiag-Plate	PL3/8"X1"	VBrace	RECT	A572 Gr.50	Typical	0.38	0.005	0.032	0.014
7	PF-Angle	L3X3X6	Beam	Single Angle	A53 Gr.B	Typical	2.11	1.75	1.75	0.101
8	PJ-Plate	PL3/8"X2-3/8"	Beam	RECT	A572 Gr.50	Typical	0.904	0.011	0.427	0.039
9	PS-Tube	HSS4X3X4	Beam	Tube	A53 Gr.B	Typical	2.91	3.91	6.15	7.96
10	PB-Plate	PL3/8"X3" HRB	Beam	RECT	A572 Gr.50	Typical	1.125	0.013	0.844	0.049
11	F1-S7	PL3/8"X5/8"	Column	RECT	A572 Gr.50	Typical	0.234	0.003	0.008	0.007
12	F1-S8	PL3/8"X7/8"	Column	RECT	A572 Gr.50	Typical	0.328	0.004	0.021	0.011
13	SA-WebDiag-Rod#1	PL3/8"X7/8"	VBrace	RECT	A572 Gr.50	Typical	0.328	0.004	0.021	0.011
14	SA-WebDiag.Rod#3	PL3/8"X5/8"	VBrace	RECT	A572 Gr.50	Typical	0.234	0.003	0.008	0.007

Hot Rolled Steel Section Sets (Continued)

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
15	SA-WebDiag-Rod#2	PL3/8"X3/4"	VBrace	RECT	A572 Gr.50	Typical	0.281	0.003	0.013	0.009
16	F1-S9	PL3/8"X3/4"	Column	RECT	A572 Gr.50	Typical	0.281	0.003	0.013	0.009
17	SA-WebChord-Plate	PL3/8"X1"	Beam	RECT	A572 Gr.50	Typical	0.38	0.005	0.032	0.014
18	Support Rail	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
19	SR-CA1	WT4X2.25X0.38	Beam	W Tee	A36 Gr.36	Typical	2.203	2.008	0.829	0.104
20	RRU Pipe	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	1	137	136		FH-Pipe	Beam	Pipe	A53 Gr.B	Typical
2	2	141	140		FH-Pipe	Beam	Pipe	A53 Gr.B	Typical
3	3	139	138		FH-Pipe	Beam	Pipe	A53 Gr.B	Typical
4	4	103	106		PB-Plate	Beam	RECT	A572 Gr.50	Typical
5	5	91	107		PB-Plate	Beam	RECT	A572 Gr.50	Typical
6	6	30	32		PB-Plate	Beam	RECT	A572 Gr.50	Typical
7	7	18	33		PB-Plate	Beam	RECT	A572 Gr.50	Typical
8	8	64	66		PB-Plate	Beam	RECT	A572 Gr.50	Typical
9	9	52	67		PB-Plate	Beam	RECT	A572 Gr.50	Typical
10	10	102	103	90	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
11	11	90	91	180	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
12	12	104	106	180	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
13	13	92	107	90	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
14	14	29	30	90	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
15	15	17	18	180	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
16	16	31	32	180	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
17	17	19	33	90	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
18	18	63	64	90	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
19	19	51	52	180	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
20	20	65	66	180	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
21	21	53	67	90	PF-Angle	Beam	Single Angle	A53 Gr.B	Typical
22	22	98	95		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
23	23	84	81		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
24	24	97	94		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
25	25	83	80		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
26	26	96	93		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
27	27	82	77		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
28	28	25	22		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
29	29	11	8		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
30	30	24	21		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
31	31	10	7		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
32	32	23	20		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
33	33	9	4		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
34	34	59	56		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
35	35	45	42		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
36	36	58	55		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
37	37	44	41		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
38	38	57	54		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
39	39	43	38		PJ-Plate	Beam	RECT	A572 Gr.50	Typical
40	40	74	75	90	PS-Tube	Beam	Tube	A53 Gr.B	Typical
41	41	1	2	90	PS-Tube	Beam	Tube	A53 Gr.B	Typical
42	42	35	36	90	PS-Tube	Beam	Tube	A53 Gr.B	Typical
43	43	183	187	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
44	44	149	183	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
45	45	166	149	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
46	46	168	166	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
47	47	169	168	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
48	48	171	169	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
49	49	181	171	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
50	50	182	186	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
51	51	145	182	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
52	52	151	145	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
53	53	152	151	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
54	54	154	152	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
55	55	155	154	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
56	56	148	155	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
57	57	185	189		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
58	58	164	185		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
59	59	173	164		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
60	60	165	173		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
61	61	175	165		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
62	62	177	175		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
63	63	180	177		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
64	64	185	188		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
65	65	164	184		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
66	66	150	173		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
67	67	157	165		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
68	68	174	158		SA-WebDiag-Rod#1	VBrace	RECT	A572 Gr.50	Typical
69	69	175	159		SA-WebDiag-Rod#2	VBrace	RECT	A572 Gr.50	Typical
70	70	176	160		SA-WebDiag-Rod#2	VBrace	RECT	A572 Gr.50	Typical
71	71	177	161		SA-WebDiag.Rod#3	VBrace	RECT	A572 Gr.50	Typical
72	72	184	188		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
73	73	150	184		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
74	74	157	150		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
75	75	158	157		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
76	76	160	158		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
77	77	162	160		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
78	78	179	162		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
79	79	189	188	90	SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
80	80	185	184	90	SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
81	81	164	150		SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
82	82	173	157		SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
83	83	165	158	90	F1-S8	Column	RECT	A572 Gr.50	Typical
84	84	174	159	90	F1-S9	Column	RECT	A572 Gr.50	Typical
85	85	175	160	90	F1-S9	Column	RECT	A572 Gr.50	Typical
86	86	176	161	90	F1-S7	Column	RECT	A572 Gr.50	Typical
87	87	70	68		RIGID	None	None	RIGID	Typical
88	88	72	69		RIGID	None	None	RIGID	Typical
89	89	109	105		RIGID	None	None	RIGID	Typical
90	90	111	108		RIGID	None	None	RIGID	Typical
91	91	116	114		RIGID	None	None	RIGID	Typical
92	92	118	115		RIGID	None	None	RIGID	Typical
93	93	122	120		RIGID	None	None	RIGID	Typical
94	94	124	121		RIGID	None	None	RIGID	Typical
95	95	127	126		RIGID	None	None	RIGID	Typical
96	96	129	113		RIGID	None	None	RIGID	Typical
97	97	133	131		RIGID	None	None	RIGID	Typical
98	98	34	132		RIGID	None	None	RIGID	Typical
99	99	150	145		RIGID	None	None	RIGID	Typical
100	100	157	151		RIGID	None	None	RIGID	Typical
101	101	158	152		RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
102	102	159	153		RIGID	None	None	RIGID	Typical
103	103	160	154		RIGID	None	None	RIGID	Typical
104	104	161	147		RIGID	None	None	RIGID	Typical
105	105	162	155		RIGID	None	None	RIGID	Typical
106	106	163	156		RIGID	None	None	RIGID	Typical
107	107	179	148		RIGID	None	None	RIGID	Typical
108	108	181	180		RIGID	None	None	RIGID	Typical
109	109	172	178		RIGID	None	None	RIGID	Typical
110	110	171	177		RIGID	None	None	RIGID	Typical
111	111	170	176		RIGID	None	None	RIGID	Typical
112	112	169	175		RIGID	None	None	RIGID	Typical
113	113	167	174		RIGID	None	None	RIGID	Typical
114	114	168	165		RIGID	None	None	RIGID	Typical
115	115	166	173		RIGID	None	None	RIGID	Typical
116	116	149	164		RIGID	None	None	RIGID	Typical
117	117	184	182	90	RIGID	None	None	RIGID	Typical
118	118	188	186	90	RIGID	None	None	RIGID	Typical
119	119	187	189	90	RIGID	None	None	RIGID	Typical
120	120	183	185	90	RIGID	None	None	RIGID	Typical
121	121	190	142		CLAMP	None	None	RIGID	DR1
122	122	146	16		CLAMP	None	None	RIGID	DR1
123	123	148	193		CLAMP	None	None	RIGID	DR1
124	124	37	43		CONNECTION	None	None	RIGID	DR1
125	125	39	44		CONNECTION	None	None	RIGID	DR1
126	126	40	45		CONNECTION	None	None	RIGID	DR1
127	127	38	46		CONNECTION	None	None	RIGID	DR1
128	128	41	47		CONNECTION	None	None	RIGID	DR1
129	129	42	48		CONNECTION	None	None	RIGID	DR1
130	130	49	51		CONNECTION	None	None	RIGID	DR1
131	131	3	23		CONNECTION	None	None	RIGID	DR1
132	132	50	53		CONNECTION	None	None	RIGID	DR1
133	133	5	24		CONNECTION	None	None	RIGID	DR1
134	134	6	25		CONNECTION	None	None	RIGID	DR1
135	135	37	57		CONNECTION	None	None	RIGID	DR1
136	136	39	58		CONNECTION	None	None	RIGID	DR1
137	137	40	59		CONNECTION	None	None	RIGID	DR1
138	138	54	60		CONNECTION	None	None	RIGID	DR1
139	139	20	26		CONNECTION	None	None	RIGID	DR1
140	140	55	61		CONNECTION	None	None	RIGID	DR1
141	141	21	27		CONNECTION	None	None	RIGID	DR1
142	142	56	62		CONNECTION	None	None	RIGID	DR1
143	143	22	28		CONNECTION	None	None	RIGID	DR1
144	144	49	63		CONNECTION	None	None	RIGID	DR1
145	145	50	65		CONNECTION	None	None	RIGID	DR1
146	146	15	29		CONNECTION	None	None	RIGID	DR1
147	147	16	31		CONNECTION	None	None	RIGID	DR1
148	148	76	82		CONNECTION	None	None	RIGID	DR1
149	149	78	83		CONNECTION	None	None	RIGID	DR1
150	150	79	84		CONNECTION	None	None	RIGID	DR1
151	151	77	85		CONNECTION	None	None	RIGID	DR1
152	152	80	86		CONNECTION	None	None	RIGID	DR1
153	153	81	87		CONNECTION	None	None	RIGID	DR1
154	154	88	90		CONNECTION	None	None	RIGID	DR1
155	155	89	92		CONNECTION	None	None	RIGID	DR1
156	156	76	96		CONNECTION	None	None	RIGID	DR1

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
157	157	78	97		CONNECTION	None	None	RIGID	DR1
158	158	79	98		CONNECTION	None	None	RIGID	DR1
159	159	93	99		CONNECTION	None	None	RIGID	DR1
160	160	94	100		CONNECTION	None	None	RIGID	DR1
161	161	95	101		CONNECTION	None	None	RIGID	DR1
162	162	88	102		CONNECTION	None	None	RIGID	DR1
163	163	89	104		CONNECTION	None	None	RIGID	DR1
164	164	3	9		CONNECTION	None	None	RIGID	DR1
165	165	5	10		CONNECTION	None	None	RIGID	DR1
166	166	6	11		CONNECTION	None	None	RIGID	DR1
167	167	4	12		CONNECTION	None	None	RIGID	DR1
168	168	7	13		CONNECTION	None	None	RIGID	DR1
169	169	8	14		CONNECTION	None	None	RIGID	DR1
170	170	15	17		CONNECTION	None	None	RIGID	DR1
171	171	16	19		CONNECTION	None	None	RIGID	DR1
172	172	68	71		BRACKET	None	None	RIGID	DR1
173	173	69	73		BRACKET	None	None	RIGID	DR1
174	174	105	110		BRACKET	None	None	RIGID	DR1
175	175	108	112		BRACKET	None	None	RIGID	DR1
176	176	114	117		BRACKET	None	None	RIGID	DR1
177	177	115	119		BRACKET	None	None	RIGID	DR1
178	178	120	123		BRACKET	None	None	RIGID	DR1
179	179	121	125		BRACKET	None	None	RIGID	DR1
180	180	126	128		BRACKET	None	None	RIGID	DR1
181	181	113	130		BRACKET	None	None	RIGID	DR1
182	182	131	134		BRACKET	None	None	RIGID	DR1
183	183	132	135		BRACKET	None	None	RIGID	DR1
184	184	162	178		RIGID	None	None	RIGID	Typical
185	185	163	191		RIGID	None	None	RIGID	Typical
186	186	177	162		RIGID	None	None	RIGID	Typical
187	187	178	163		RIGID	None	None	RIGID	Typical
188	188	180	179		RIGID	None	None	RIGID	Typical
189	189	203	202		Support Rail	Beam	Pipe	A53 Gr.B	Typical
190	190	207	206		Support Rail	Beam	Pipe	A53 Gr.B	Typical
191	191	205	204		Support Rail	Beam	Pipe	A53 Gr.B	Typical
192	192	208	209		RIGID	None	None	RIGID	Typical
193	193	210	211		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
194	194	213	212		RIGID	None	None	RIGID	Typical
195	195	214	215		RIGID	None	None	RIGID	Typical
196	196	216	217		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
197	197	219	218		RIGID	None	None	RIGID	Typical
198	198	220	221		RIGID	None	None	RIGID	Typical
199	199	222	223		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
200	200	225	224		RIGID	None	None	RIGID	Typical
201	201	226	227		RIGID	None	None	RIGID	Typical
202	202	228	229		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
203	203	231	230		RIGID	None	None	RIGID	Typical
204	204	232	89		CLAMP	None	None	RIGID	DR1
205	205	233	50		CLAMP	None	None	RIGID	DR1
206	206	234	235		RIGID	None	None	RIGID	Typical
207	207	236	237		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
208	208	239	238		RIGID	None	None	RIGID	Typical
209	209	240	241		RIGID	None	None	RIGID	Typical
210	210	242	243		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
211	211	245	244		RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
212	212	246	247		RIGID	None	None	RIGID	Typical
213	213	248	249		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
214	214	251	250		RIGID	None	None	RIGID	Typical
215	215	252	253		RIGID	None	None	RIGID	Typical
216	216	254	255		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
217	217	257	256		RIGID	None	None	RIGID	Typical
218	218	259	261	90	SR-CA1	Beam	W Tee	A36 Gr.36	Typical
219	219	260	263	90	SR-CA1	Beam	W Tee	A36 Gr.36	Typical
220	220	262	258	270	SR-CA1	Beam	W Tee	A36 Gr.36	Typical
221	221	264	265		RIGID	None	None	RIGID	Typical
222	222	266	267		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
223	223	269	268		RIGID	None	None	RIGID	Typical
224	224	270	271		RIGID	None	None	RIGID	Typical
225	225	272	273		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
226	226	275	274		RIGID	None	None	RIGID	Typical
227	227	276	277		RIGID	None	None	RIGID	Typical
228	228	278	279		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
229	229	281	280		RIGID	None	None	RIGID	Typical
230	230	282	283		RIGID	None	None	RIGID	Typical
231	231	284	285		AM-Pipe	Column	Pipe	A53 Gr.B	Typical
232	232	287	286		RIGID	None	None	RIGID	Typical
233	233	326	330	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
234	234	292	326	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
235	235	309	292	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
236	236	311	309	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
237	237	312	311	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
238	238	314	312	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
239	239	324	314	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
240	240	325	329	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
241	241	289	325	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
242	242	294	289	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
243	243	295	294	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
244	244	297	295	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
245	245	298	297	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
246	246	291	298	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
247	247	328	332		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
248	248	307	328		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
249	249	316	307		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
250	250	308	316		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
251	251	318	308		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
252	252	320	318		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
253	253	323	320		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
254	254	328	331		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
255	255	307	327		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
256	256	293	316		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
257	257	300	308		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
258	258	317	301		SA-WebDiag-Rod#1	VBrace	RECT	A572 Gr.50	Typical
259	259	318	302		SA-WebDiag-Rod#2	VBrace	RECT	A572 Gr.50	Typical
260	260	319	303		SA-WebDiag-Rod#2	VBrace	RECT	A572 Gr.50	Typical
261	261	320	304		SA-WebDiag.Rod#3	VBrace	RECT	A572 Gr.50	Typical
262	262	327	331		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
263	263	293	327		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
264	264	300	293		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
265	265	301	300		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
266	266	303	301		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
267	267	305	303		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
268	268	322	305		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
269	269	332	331	30	SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
270	270	328	327	30	SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
271	271	307	293		SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
272	272	316	300		SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
273	273	308	301	30	F1-S8	Column	RECT	A572 Gr.50	Typical
274	274	317	302	30	F1-S9	Column	RECT	A572 Gr.50	Typical
275	275	318	303	30	F1-S9	Column	RECT	A572 Gr.50	Typical
276	276	319	304	30	F1-S7	Column	RECT	A572 Gr.50	Typical
277	277	293	289		RIGID	None	None	RIGID	Typical
278	278	300	294		RIGID	None	None	RIGID	Typical
279	279	301	295		RIGID	None	None	RIGID	Typical
280	280	302	296		RIGID	None	None	RIGID	Typical
281	281	303	297		RIGID	None	None	RIGID	Typical
282	282	304	290		RIGID	None	None	RIGID	Typical
283	283	305	298		RIGID	None	None	RIGID	Typical
284	284	306	299		RIGID	None	None	RIGID	Typical
285	285	322	291		RIGID	None	None	RIGID	Typical
286	286	324	323		RIGID	None	None	RIGID	Typical
287	287	315	321		RIGID	None	None	RIGID	Typical
288	288	314	320		RIGID	None	None	RIGID	Typical
289	289	313	319		RIGID	None	None	RIGID	Typical
290	290	312	318		RIGID	None	None	RIGID	Typical
291	291	310	317		RIGID	None	None	RIGID	Typical
292	292	311	308		RIGID	None	None	RIGID	Typical
293	293	309	316		RIGID	None	None	RIGID	Typical
294	294	292	307		RIGID	None	None	RIGID	Typical
295	295	327	325	90	RIGID	None	None	RIGID	Typical
296	296	331	329	90	RIGID	None	None	RIGID	Typical
297	297	330	332	90	RIGID	None	None	RIGID	Typical
298	298	326	328	90	RIGID	None	None	RIGID	Typical
299	299	333	288		CLAMP	None	None	RIGID	DR1
300	300	291	336		CLAMP	None	None	RIGID	DR1
301	301	305	321		RIGID	None	None	RIGID	Typical
302	302	306	334		RIGID	None	None	RIGID	Typical
303	303	320	305		RIGID	None	None	RIGID	Typical
304	304	321	306		RIGID	None	None	RIGID	Typical
305	305	323	322		RIGID	None	None	RIGID	Typical
306	306	375	379	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
307	307	341	375	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
308	308	358	341	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
309	309	360	358	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
310	310	361	360	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
311	311	363	361	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
312	312	373	363	90	SA-BotChord-Plate	Beam	RECT	A572 Gr.50	Typical
313	313	374	378	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
314	314	338	374	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
315	315	343	338	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
316	316	344	343	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
317	317	346	344	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
318	318	347	346	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
319	319	340	347	90	SA-TopChord-Plate	Beam	RECT	A572 Gr.50	Typical
320	320	377	381		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
321	321	356	377		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
322	322	365	356		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
323	323	357	365		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
324	324	367	357		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
325	325	369	367		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
326	326	372	369		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
327	327	377	380		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
328	328	356	376		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
329	329	342	365		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
330	330	349	357		SA-WebDiag-Plate	VBrace	RECT	A572 Gr.50	Typical
331	331	366	350		SA-WebDiag-Rod#1	VBrace	RECT	A572 Gr.50	Typical
332	332	367	351		SA-WebDiag-Rod#2	VBrace	RECT	A572 Gr.50	Typical
333	333	368	352		SA-WebDiag-Rod#2	VBrace	RECT	A572 Gr.50	Typical
334	334	369	353		SA-WebDiag.Rod#3	VBrace	RECT	A572 Gr.50	Typical
335	335	376	380		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
336	336	342	376		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
337	337	349	342		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
338	338	350	349		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
339	339	352	350		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
340	340	354	352		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
341	341	371	354		SA-WebChord-Plate	Beam	RECT	A572 Gr.50	Typical
342	342	381	380	150	SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
343	343	377	376	150	SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
344	344	356	342		SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
345	345	365	349		SA-WebVert-Plate	Column	RECT	A572 Gr.50	Typical
346	346	357	350	150	F1-S8	Column	RECT	A572 Gr.50	Typical
347	347	366	351	150	F1-S9	Column	RECT	A572 Gr.50	Typical
348	348	367	352	150	F1-S9	Column	RECT	A572 Gr.50	Typical
349	349	368	353	150	F1-S7	Column	RECT	A572 Gr.50	Typical
350	350	342	338		RIGID	None	None	RIGID	Typical
351	351	349	343		RIGID	None	None	RIGID	Typical
352	352	350	344		RIGID	None	None	RIGID	Typical
353	353	351	345		RIGID	None	None	RIGID	Typical
354	354	352	346		RIGID	None	None	RIGID	Typical
355	355	353	339		RIGID	None	None	RIGID	Typical
356	356	354	347		RIGID	None	None	RIGID	Typical
357	357	355	348		RIGID	None	None	RIGID	Typical
358	358	371	340		RIGID	None	None	RIGID	Typical
359	359	373	372		RIGID	None	None	RIGID	Typical
360	360	364	370		RIGID	None	None	RIGID	Typical
361	361	363	369		RIGID	None	None	RIGID	Typical
362	362	362	368		RIGID	None	None	RIGID	Typical
363	363	361	367		RIGID	None	None	RIGID	Typical
364	364	359	366		RIGID	None	None	RIGID	Typical
365	365	360	357		RIGID	None	None	RIGID	Typical
366	366	358	365		RIGID	None	None	RIGID	Typical
367	367	341	356		RIGID	None	None	RIGID	Typical
368	368	376	374	90	RIGID	None	None	RIGID	Typical
369	369	380	378	90	RIGID	None	None	RIGID	Typical
370	370	379	381	90	RIGID	None	None	RIGID	Typical
371	371	375	377	90	RIGID	None	None	RIGID	Typical
372	372	382	337		CLAMP	None	None	RIGID	DR1
373	373	340	385		CLAMP	None	None	RIGID	DR1
374	374	354	370		RIGID	None	None	RIGID	Typical
375	375	355	383		RIGID	None	None	RIGID	Typical
376	376	369	354		RIGID	None	None	RIGID	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
377	377	370	355		RIGID	None	None	RIGID	Typical
378	378	372	371		RIGID	None	None	RIGID	Typical
379	379	387	388		RRU Pipe	Column	Pipe	A53 Gr.B	Typical
380	380	386	387		RIGID	None	None	RIGID	Typical

Member Advanced Data

	Label	I Release	J Release	T/C Only	Physical	Deflection Ratio Options	Seismic DR
1	1				Yes	N/A	None
2	2				Yes	N/A	None
3	3				Yes	N/A	None
4	4				Yes	N/A	None
5	5				Yes	N/A	None
6	6				Yes	N/A	None
7	7				Yes	N/A	None
8	8				Yes	N/A	None
9	9				Yes	N/A	None
10	10				Yes	N/A	None
11	11				Yes	N/A	None
12	12				Yes	N/A	None
13	13				Yes	N/A	None
14	14				Yes	N/A	None
15	15				Yes	N/A	None
16	16				Yes	N/A	None
17	17				Yes	N/A	None
18	18				Yes	N/A	None
19	19				Yes	N/A	None
20	20				Yes	N/A	None
21	21				Yes	N/A	None
22	22				Yes	N/A	None
23	23				Yes	N/A	None
24	24				Yes	Default	None
25	25				Yes	N/A	None
26	26				Yes	N/A	None
27	27				Yes	N/A	None
28	28				Yes	N/A	None
29	29				Yes	N/A	None
30	30				Yes	N/A	None
31	31				Yes	N/A	None
32	32				Yes	N/A	None
33	33				Yes	N/A	None
34	34				Yes	N/A	None
35	35				Yes	N/A	None
36	36				Yes	N/A	None
37	37				Yes	N/A	None
38	38				Yes	N/A	None
39	39				Yes	N/A	None
40	40				Yes	N/A	None
41	41				Yes	N/A	None
42	42				Yes	N/A	None
43	43				Yes	N/A	None
44	44				Yes	N/A	None
45	45				Yes	N/A	None
46	46				Yes	N/A	None
47	47				Yes	N/A	None
48	48				Yes	N/A	None

Member Advanced Data (Continued)

	Label	I Release	J Release	T/C Only	Physical	Deflection Ratio Options	Seismic DR
49	49				Yes	N/A	None
50	50				Yes	N/A	None
51	51				Yes	N/A	None
52	52				Yes	N/A	None
53	53				Yes	N/A	None
54	54				Yes	N/A	None
55	55				Yes	N/A	None
56	56				Yes	N/A	None
57	57				Yes	N/A	None
58	58				Yes	N/A	None
59	59				Yes	N/A	None
60	60				Yes	N/A	None
61	61				Yes	N/A	None
62	62				Yes	N/A	None
63	63				Yes	N/A	None
64	64				Yes	** NA **	None
65	65				Yes	** NA **	None
66	66				Yes	** NA **	None
67	67				Yes	** NA **	None
68	68				Yes	** NA **	None
69	69				Yes	** NA **	None
70	70				Yes	** NA **	None
71	71				Yes	** NA **	None
72	72			Euler Buckling	Yes	N/A	None
73	73			Euler Buckling	Yes	N/A	None
74	74			Euler Buckling	Yes	N/A	None
75	75			Euler Buckling	Yes	N/A	None
76	76			Euler Buckling	Yes	N/A	None
77	77			Euler Buckling	Yes	N/A	None
78	78			Euler Buckling	Yes	N/A	None
79	79			Euler Buckling	Yes	** NA **	None
80	80			Euler Buckling	Yes	** NA **	None
81	81			Euler Buckling	Yes	** NA **	None
82	82			Euler Buckling	Yes	** NA **	None
83	83			Euler Buckling	Yes	** NA **	None
84	84			Euler Buckling	Yes	** NA **	None
85	85			Euler Buckling	Yes	** NA **	None
86	86			Euler Buckling	Yes	** NA **	None
87	87		OOOXOO		Yes	** NA **	None
88	88		OOOXOO		Yes	** NA **	None
89	89		OOOXOO		Yes	** NA **	None
90	90		OOOXOO		Yes	** NA **	None
91	91		OOOXOO		Yes	** NA **	None
92	92		OOOXOO		Yes	** NA **	None
93	93		OOOXOO		Yes	** NA **	None
94	94		OOOXOO		Yes	** NA **	None
95	95		OOOXOO		Yes	** NA **	None
96	96		OOOXOO		Yes	** NA **	None
97	97		OOOXOO		Yes	** NA **	None
98	98		OOOXOO		Yes	** NA **	None
99	99				Yes	** NA **	None
100	100				Yes	** NA **	None
101	101				Yes	** NA **	None
102	102				Yes	** NA **	None
103	103				Yes	** NA **	None

Member Advanced Data (Continued)

	Label	I Release	J Release	T/C Only	Physical	Deflection Ratio Options	Seismic DR
104	104				Yes	** NA **	None
105	105				Yes	** NA **	None
106	106				Yes	** NA **	None
107	107				Yes	** NA **	None
108	108				Yes	** NA **	None
109	109				Yes	** NA **	None
110	110				Yes	** NA **	None
111	111				Yes	** NA **	None
112	112				Yes	** NA **	None
113	113				Yes	** NA **	None
114	114				Yes	** NA **	None
115	115				Yes	** NA **	None
116	116				Yes	** NA **	None
117	117				Yes	** NA **	None
118	118				Yes	** NA **	None
119	119				Yes	** NA **	None
120	120				Yes	** NA **	None
121	121				Yes	** NA **	None
122	122				Yes	** NA **	None
123	123			Compression Only	Yes	** NA **	None
124	124				Yes	** NA **	None
125	125				Yes	** NA **	None
126	126				Yes	** NA **	None
127	127				Yes	** NA **	None
128	128				Yes	** NA **	None
129	129				Yes	** NA **	None
130	130				Yes	** NA **	None
131	131				Yes	** NA **	None
132	132				Yes	** NA **	None
133	133				Yes	** NA **	None
134	134				Yes	** NA **	None
135	135				Yes	** NA **	None
136	136				Yes	** NA **	None
137	137				Yes	** NA **	None
138	138				Yes	** NA **	None
139	139				Yes	** NA **	None
140	140				Yes	** NA **	None
141	141				Yes	** NA **	None
142	142				Yes	** NA **	None
143	143				Yes	** NA **	None
144	144				Yes	** NA **	None
145	145				Yes	** NA **	None
146	146				Yes	** NA **	None
147	147				Yes	** NA **	None
148	148				Yes	** NA **	None
149	149				Yes	** NA **	None
150	150				Yes	** NA **	None
151	151				Yes	** NA **	None
152	152				Yes	** NA **	None
153	153				Yes	** NA **	None
154	154				Yes	** NA **	None
155	155				Yes	** NA **	None
156	156				Yes	** NA **	None
157	157				Yes	** NA **	None
158	158				Yes	** NA **	None

Member Advanced Data (Continued)

	Label	I Release	J Release	T/C Only	Physical	Deflection Ratio Options	Seismic DR
159	159				Yes	** NA **	None
160	160				Yes	** NA **	None
161	161				Yes	** NA **	None
162	162				Yes	** NA **	None
163	163				Yes	** NA **	None
164	164				Yes	** NA **	None
165	165				Yes	** NA **	None
166	166				Yes	** NA **	None
167	167				Yes	** NA **	None
168	168				Yes	** NA **	None
169	169				Yes	** NA **	None
170	170				Yes	** NA **	None
171	171				Yes	** NA **	None
172	172				Yes	** NA **	None
173	173				Yes	** NA **	None
174	174				Yes	** NA **	None
175	175				Yes	** NA **	None
176	176				Yes	** NA **	None
177	177				Yes	** NA **	None
178	178				Yes	** NA **	None
179	179				Yes	** NA **	None
180	180				Yes	** NA **	None
181	181				Yes	** NA **	None
182	182				Yes	** NA **	None
183	183				Yes	** NA **	None
184	184				Yes	** NA **	None
185	185				Yes	** NA **	None
186	186				Yes	** NA **	None
187	187				Yes	** NA **	None
188	188				Yes	** NA **	None
189	189				Yes	N/A	None
190	190				Yes	Default	None
191	191				Yes	N/A	None
192	192				Yes	** NA **	None
193	193				Yes	** NA **	None
194	194				Yes	** NA **	None
195	195				Yes	** NA **	None
196	196				Yes	** NA **	None
197	197				Yes	** NA **	None
198	198				Yes	** NA **	None
199	199				Yes	** NA **	None
200	200				Yes	** NA **	None
201	201				Yes	** NA **	None
202	202				Yes	** NA **	None
203	203				Yes	** NA **	None
204	204				Yes	** NA **	None
205	205				Yes	** NA **	None
206	206				Yes	** NA **	None
207	207				Yes	** NA **	None
208	208				Yes	** NA **	None
209	209				Yes	** NA **	None
210	210				Yes	** NA **	None
211	211				Yes	** NA **	None
212	212				Yes	** NA **	None
213	213				Yes	** NA **	None

Member Advanced Data (Continued)

	Label	I Release	J Release	T/C Only	Physical	Deflection Ratio Options	Seismic DR
214	214				Yes	** NA **	None
215	215				Yes	** NA **	None
216	216				Yes	** NA **	None
217	217				Yes	** NA **	None
218	218	BenPIN	BenPIN		Yes	Default	None
219	219	BenPIN	BenPIN		Yes	Default	None
220	220	BenPIN	BenPIN		Yes	Default	None
221	221				Yes	** NA **	None
222	222				Yes	** NA **	None
223	223				Yes	** NA **	None
224	224				Yes	** NA **	None
225	225				Yes	** NA **	None
226	226				Yes	** NA **	None
227	227				Yes	** NA **	None
228	228				Yes	** NA **	None
229	229				Yes	** NA **	None
230	230				Yes	** NA **	None
231	231				Yes	** NA **	None
232	232				Yes	** NA **	None
233	233				Yes	N/A	None
234	234				Yes	N/A	None
235	235				Yes	N/A	None
236	236				Yes	N/A	None
237	237				Yes	N/A	None
238	238				Yes	N/A	None
239	239				Yes	N/A	None
240	240				Yes	N/A	None
241	241				Yes	N/A	None
242	242				Yes	N/A	None
243	243				Yes	N/A	None
244	244				Yes	N/A	None
245	245				Yes	N/A	None
246	246				Yes	N/A	None
247	247				Yes	N/A	None
248	248				Yes	N/A	None
249	249				Yes	N/A	None
250	250				Yes	N/A	None
251	251				Yes	N/A	None
252	252				Yes	N/A	None
253	253				Yes	** NA **	None
254	254				Yes	** NA **	None
255	255				Yes	** NA **	None
256	256				Yes	** NA **	None
257	257				Yes	** NA **	None
258	258				Yes	** NA **	None
259	259				Yes	** NA **	None
260	260				Yes	** NA **	None
261	261			Euler Buckling	Yes	N/A	None
262	262			Euler Buckling	Yes	N/A	None
263	263			Euler Buckling	Yes	N/A	None
264	264			Euler Buckling	Yes	N/A	None
265	265			Euler Buckling	Yes	N/A	None
266	266			Euler Buckling	Yes	N/A	None
267	267			Euler Buckling	Yes	N/A	None
268	268			Euler Buckling	Yes	N/A	None

Member Advanced Data (Continued)

	Label	I Release	J Release	T/C Only	Physical	Deflection Ratio Options	Seismic DR
269	269			Euler Buckling	Yes	** NA **	None
270	270			Euler Buckling	Yes	** NA **	None
271	271			Euler Buckling	Yes	** NA **	None
272	272			Euler Buckling	Yes	** NA **	None
273	273			Euler Buckling	Yes	** NA **	None
274	274			Euler Buckling	Yes	** NA **	None
275	275			Euler Buckling	Yes	** NA **	None
276	276			Euler Buckling	Yes	** NA **	None
277	277				Yes	** NA **	None
278	278				Yes	** NA **	None
279	279				Yes	** NA **	None
280	280				Yes	** NA **	None
281	281				Yes	** NA **	None
282	282				Yes	** NA **	None
283	283				Yes	** NA **	None
284	284				Yes	** NA **	None
285	285				Yes	** NA **	None
286	286				Yes	** NA **	None
287	287				Yes	** NA **	None
288	288				Yes	** NA **	None
289	289				Yes	** NA **	None
290	290				Yes	** NA **	None
291	291				Yes	** NA **	None
292	292				Yes	** NA **	None
293	293				Yes	** NA **	None
294	294				Yes	** NA **	None
295	295				Yes	** NA **	None
296	296				Yes	** NA **	None
297	297				Yes	** NA **	None
298	298				Yes	** NA **	None
299	299				Yes	** NA **	None
300	300			Compression Only	Yes	** NA **	None
301	301				Yes	** NA **	None
302	302				Yes	** NA **	None
303	303				Yes	** NA **	None
304	304				Yes	** NA **	None
305	305				Yes	** NA **	None
306	306				Yes	N/A	None
307	307				Yes	N/A	None
308	308				Yes	N/A	None
309	309				Yes	N/A	None
310	310				Yes	N/A	None
311	311				Yes	N/A	None
312	312				Yes	N/A	None
313	313				Yes	N/A	None
314	314				Yes	N/A	None
315	315				Yes	N/A	None
316	316				Yes	N/A	None
317	317				Yes	N/A	None
318	318				Yes	N/A	None
319	319				Yes	N/A	None
320	320				Yes	N/A	None
321	321				Yes	N/A	None
322	322				Yes	N/A	None
323	323				Yes	N/A	None

Member Advanced Data (Continued)

	Label	I Release	J Release	T/C Only	Physical	Deflection Ratio Options	Seismic DR
324	324				Yes	N/A	None
325	325				Yes	N/A	None
326	326				Yes	N/A	None
327	327				Yes	** NA **	None
328	328				Yes	** NA **	None
329	329				Yes	** NA **	None
330	330				Yes	** NA **	None
331	331				Yes	** NA **	None
332	332				Yes	** NA **	None
333	333				Yes	** NA **	None
334	334				Yes	** NA **	None
335	335			Euler Buckling	Yes	N/A	None
336	336			Euler Buckling	Yes	N/A	None
337	337			Euler Buckling	Yes	N/A	None
338	338			Euler Buckling	Yes	N/A	None
339	339			Euler Buckling	Yes	N/A	None
340	340			Euler Buckling	Yes	N/A	None
341	341			Euler Buckling	Yes	N/A	None
342	342			Euler Buckling	Yes	** NA **	None
343	343			Euler Buckling	Yes	** NA **	None
344	344			Euler Buckling	Yes	** NA **	None
345	345			Euler Buckling	Yes	** NA **	None
346	346			Euler Buckling	Yes	** NA **	None
347	347			Euler Buckling	Yes	** NA **	None
348	348			Euler Buckling	Yes	** NA **	None
349	349			Euler Buckling	Yes	** NA **	None
350	350				Yes	** NA **	None
351	351				Yes	** NA **	None
352	352				Yes	** NA **	None
353	353				Yes	** NA **	None
354	354				Yes	** NA **	None
355	355				Yes	** NA **	None
356	356				Yes	** NA **	None
357	357				Yes	** NA **	None
358	358				Yes	** NA **	None
359	359				Yes	** NA **	None
360	360				Yes	** NA **	None
361	361				Yes	** NA **	None
362	362				Yes	** NA **	None
363	363				Yes	** NA **	None
364	364				Yes	** NA **	None
365	365				Yes	** NA **	None
366	366				Yes	** NA **	None
367	367				Yes	** NA **	None
368	368				Yes	** NA **	None
369	369				Yes	** NA **	None
370	370				Yes	** NA **	None
371	371				Yes	** NA **	None
372	372			Compression Only	Yes	** NA **	None
373	373				Yes	** NA **	None
374	374				Yes	** NA **	None
375	375				Yes	** NA **	None
376	376				Yes	** NA **	None
377	377				Yes	** NA **	None
378	378				Yes	** NA **	None

Member Advanced Data (Continued)

	Label	I Release	J Release	T/C Only	Physical	Deflection Ratio Options	Seismic DR
379	379				Yes	** NA **	None
380	380				Yes	** NA **	None

Hot Rolled Steel Design Parameters

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	Channel Conn.	a [ft]	Function
1	1	FH-Pipe	12.5			Lbyy	N/A	N/A	Lateral
2	2	FH-Pipe	12.5			Lbyy	N/A	N/A	Lateral
3	3	FH-Pipe	12.5			Lbyy	N/A	N/A	Lateral
4	4	PB-Plate	0.605			Lbyy	N/A	N/A	Lateral
5	5	PB-Plate	0.605			Lbyy	N/A	N/A	Lateral
6	6	PB-Plate	0.605			Lbyy	N/A	N/A	Lateral
7	7	PB-Plate	0.605			Lbyy	N/A	N/A	Lateral
8	8	PB-Plate	0.605			Lbyy	N/A	N/A	Lateral
9	9	PB-Plate	0.605			Lbyy	N/A	N/A	Lateral
10	10	PF-Angle	2.914	Segment	Segment	Lbyy	N/A	N/A	Lateral
11	11	PF-Angle	2.914	Segment	Segment	Lbyy	N/A	N/A	Lateral
12	12	PF-Angle	2.386	Segment	Segment	Lbyy	N/A	N/A	Lateral
13	13	PF-Angle	2.386	Segment	Segment	Lbyy	N/A	N/A	Lateral
14	14	PF-Angle	2.914	Segment	Segment	Lbyy	N/A	N/A	Lateral
15	15	PF-Angle	2.914	Segment	Segment	Lbyy	N/A	N/A	Lateral
16	16	PF-Angle	2.386	Segment	Segment	Lbyy	N/A	N/A	Lateral
17	17	PF-Angle	2.386	Segment	Segment	Lbyy	N/A	N/A	Lateral
18	18	PF-Angle	2.914	Segment	Segment	Lbyy	N/A	N/A	Lateral
19	19	PF-Angle	2.914	Segment	Segment	Lbyy	N/A	N/A	Lateral
20	20	PF-Angle	2.386	Segment	Segment	Lbyy	N/A	N/A	Lateral
21	21	PF-Angle	2.386	Segment	Segment	Lbyy	N/A	N/A	Lateral
22	22	PJ-Plate	1.124	0.5	0.5	Lbyy	N/A	N/A	Lateral
23	23	PJ-Plate	1.124	0.5	0.5	Lbyy	N/A	N/A	Lateral
24	24	PJ-Plate	1.659	0.5	0.5	Lbyy	N/A	N/A	Lateral
25	25	PJ-Plate	1.659	0.5	0.5	Lbyy	N/A	N/A	Lateral
26	26	PJ-Plate	0.583	0.5	0.5	Lbyy	N/A	N/A	Lateral
27	27	PJ-Plate	0.583	0.5	0.5	Lbyy	N/A	N/A	Lateral
28	28	PJ-Plate	1.124	0.5	0.5	Lbyy	N/A	N/A	Lateral
29	29	PJ-Plate	1.124	0.5	0.5	Lbyy	N/A	N/A	Lateral
30	30	PJ-Plate	1.659	0.5	0.5	Lbyy	N/A	N/A	Lateral
31	31	PJ-Plate	1.659	0.5	0.5	Lbyy	N/A	N/A	Lateral
32	32	PJ-Plate	0.583	0.5	0.5	Lbyy	N/A	N/A	Lateral
33	33	PJ-Plate	0.583	0.5	0.5	Lbyy	N/A	N/A	Lateral
34	34	PJ-Plate	1.124	0.5	0.5	Lbyy	N/A	N/A	Lateral
35	35	PJ-Plate	1.124	0.5	0.5	Lbyy	N/A	N/A	Lateral
36	36	PJ-Plate	1.659	0.5	0.5	Lbyy	N/A	N/A	Lateral
37	37	PJ-Plate	1.659	0.5	0.5	Lbyy	N/A	N/A	Lateral
38	38	PJ-Plate	0.583	0.5	0.5	Lbyy	N/A	N/A	Lateral
39	39	PJ-Plate	0.583	0.5	0.5	Lbyy	N/A	N/A	Lateral
40	40	PS-Tube	4.244			Lbyy	N/A	N/A	Lateral
41	41	PS-Tube	4.244			Lbyy	N/A	N/A	Lateral
42	42	PS-Tube	4.244			Lbyy	N/A	N/A	Lateral
43	43	SA-BotChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
44	44	SA-BotChord-Plate	0.958			Lbyy	N/A	N/A	Lateral
45	45	SA-BotChord-Plate	0.742			Lbyy	N/A	N/A	Lateral
46	46	SA-BotChord-Plate	0.667			Lbyy	N/A	N/A	Lateral
47	47	SA-BotChord-Plate	1.045			Lbyy	N/A	N/A	Lateral
48	48	SA-BotChord-Plate	0.741			Lbyy	N/A	N/A	Lateral
49	49	SA-BotChord-Plate	0.748			Lbyy	N/A	N/A	Lateral
50	50	SA-TopChord-Plate	0.917			Lbyy	N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	Channel Conn.	a [ft]	Function
51	51	SA-TopChord-Plate	0.958			Lbyy	N/A	N/A	Lateral
52	52	SA-TopChord-Plate	0.718			Lbyy	N/A	N/A	Lateral
53	53	SA-TopChord-Plate	0.648			Lbyy	N/A	N/A	Lateral
54	54	SA-TopChord-Plate	1.023			Lbyy	N/A	N/A	Lateral
55	55	SA-TopChord-Plate	0.725			Lbyy	N/A	N/A	Lateral
56	56	SA-TopChord-Plate	0.761			Lbyy	N/A	N/A	Lateral
57	57	SA-WebChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
58	58	SA-WebChord-Plate	0.957			Lbyy	N/A	N/A	Lateral
59	59	SA-WebChord-Plate	0.731			Lbyy	N/A	N/A	Lateral
60	60	SA-WebChord-Plate	0.667			Lbyy	N/A	N/A	Lateral
61	61	SA-WebChord-Plate	1.045			Lbyy	N/A	N/A	Lateral
62	62	SA-WebChord-Plate	0.741			Lbyy	N/A	N/A	Lateral
63	63	SA-WebChord-Plate	0.759			Lbyy	N/A	N/A	Lateral
64	64	SA-WebDiag-Plate	1.264			Lbyy	N/A	N/A	Lateral
65	65	SA-WebDiag-Plate	1.294			Lbyy	N/A	N/A	Lateral
66	66	SA-WebDiag-Plate	1.013			Lbyy	N/A	N/A	Lateral
67	67	SA-WebDiag-Plate	0.872			Lbyy	N/A	N/A	Lateral
68	68	SA-WebDiag-Rod#1	0.727			Lbyy	N/A	N/A	Lateral
69	69	SA-WebDiag-Rod#2	0.595			Lbyy	N/A	N/A	Lateral
70	70	SA-WebDiag-Rod#2	0.487			Lbyy	N/A	N/A	Lateral
71	71	SA-WebDiag.Rod#3	0.397			Lbyy	N/A	N/A	Lateral
72	72	SA-WebChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
73	73	SA-WebChord-Plate	0.958			Lbyy	N/A	N/A	Lateral
74	74	SA-WebChord-Plate	0.718			Lbyy	N/A	N/A	Lateral
75	75	SA-WebChord-Plate	0.648			Lbyy	N/A	N/A	Lateral
76	76	SA-WebChord-Plate	1.023			Lbyy	N/A	N/A	Lateral
77	77	SA-WebChord-Plate	0.725			Lbyy	N/A	N/A	Lateral
78	78	SA-WebChord-Plate	0.761			Lbyy	N/A	N/A	Lateral
79	79	SA-WebVert-Plate	0.871			Lbyy	N/A	N/A	Lateral
80	80	SA-WebVert-Plate	0.871			Lbyy	N/A	N/A	Lateral
81	81	SA-WebVert-Plate	0.871			Lbyy	N/A	N/A	Lateral
82	82	SA-WebVert-Plate	0.719			Lbyy	N/A	N/A	Lateral
83	83	F1-S8	0.583			Lbyy	N/A	N/A	Lateral
84	84	F1-S9	0.467			Lbyy	N/A	N/A	Lateral
85	85	F1-S9	0.37			Lbyy	N/A	N/A	Lateral
86	86	F1-S7	0.288			Lbyy	N/A	N/A	Lateral
87	189	Support Rail	12.5			Lbyy	N/A	N/A	Lateral
88	190	Support Rail	12.5			Lbyy	N/A	N/A	Lateral
89	191	Support Rail	12.5			Lbyy	N/A	N/A	Lateral
90	193	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
91	196	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
92	199	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
93	202	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
94	207	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
95	210	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
96	213	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
97	216	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
98	218	SR-CA1	2.437			Lbyy	N/A	N/A	Lateral
99	219	SR-CA1	2.437			Lbyy	N/A	N/A	Lateral
100	220	SR-CA1	2.437			Lbyy	N/A	N/A	Lateral
101	222	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
102	225	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
103	228	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
104	231	AM-Pipe	10.5			Lbyy	N/A	N/A	Lateral
105	233	SA-BotChord-Plate	0.917			Lbyy	N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	Channel Conn.	a [ft]	Function
106	234	SA-BotChord-Plate	0.958			Lbyy	N/A	N/A	Lateral
107	235	SA-BotChord-Plate	0.742			Lbyy	N/A	N/A	Lateral
108	236	SA-BotChord-Plate	0.667			Lbyy	N/A	N/A	Lateral
109	237	SA-BotChord-Plate	1.045			Lbyy	N/A	N/A	Lateral
110	238	SA-BotChord-Plate	0.741			Lbyy	N/A	N/A	Lateral
111	239	SA-BotChord-Plate	0.748			Lbyy	N/A	N/A	Lateral
112	240	SA-TopChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
113	241	SA-TopChord-Plate	0.958			Lbyy	N/A	N/A	Lateral
114	242	SA-TopChord-Plate	0.718			Lbyy	N/A	N/A	Lateral
115	243	SA-TopChord-Plate	0.648			Lbyy	N/A	N/A	Lateral
116	244	SA-TopChord-Plate	1.023			Lbyy	N/A	N/A	Lateral
117	245	SA-TopChord-Plate	0.725			Lbyy	N/A	N/A	Lateral
118	246	SA-TopChord-Plate	0.761			Lbyy	N/A	N/A	Lateral
119	247	SA-WebChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
120	248	SA-WebChord-Plate	0.957			Lbyy	N/A	N/A	Lateral
121	249	SA-WebChord-Plate	0.731			Lbyy	N/A	N/A	Lateral
122	250	SA-WebChord-Plate	0.667			Lbyy	N/A	N/A	Lateral
123	251	SA-WebChord-Plate	1.045			Lbyy	N/A	N/A	Lateral
124	252	SA-WebChord-Plate	0.741			Lbyy	N/A	N/A	Lateral
125	253	SA-WebChord-Plate	0.759			Lbyy	N/A	N/A	Lateral
126	254	SA-WebDiag-Plate	1.264			Lbyy	N/A	N/A	Lateral
127	255	SA-WebDiag-Plate	1.294			Lbyy	N/A	N/A	Lateral
128	256	SA-WebDiag-Plate	1.013			Lbyy	N/A	N/A	Lateral
129	257	SA-WebDiag-Plate	0.872			Lbyy	N/A	N/A	Lateral
130	258	SA-WebDiag-Rod#1	0.727			Lbyy	N/A	N/A	Lateral
131	259	SA-WebDiag-Rod#2	0.595			Lbyy	N/A	N/A	Lateral
132	260	SA-WebDiag-Rod#2	0.487			Lbyy	N/A	N/A	Lateral
133	261	SA-WebDiag.Rod#3	0.397			Lbyy	N/A	N/A	Lateral
134	262	SA-WebChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
135	263	SA-WebChord-Plate	0.958			Lbyy	N/A	N/A	Lateral
136	264	SA-WebChord-Plate	0.718			Lbyy	N/A	N/A	Lateral
137	265	SA-WebChord-Plate	0.648			Lbyy	N/A	N/A	Lateral
138	266	SA-WebChord-Plate	1.023			Lbyy	N/A	N/A	Lateral
139	267	SA-WebChord-Plate	0.725			Lbyy	N/A	N/A	Lateral
140	268	SA-WebChord-Plate	0.761			Lbyy	N/A	N/A	Lateral
141	269	SA-WebVert-Plate	0.871			Lbyy	N/A	N/A	Lateral
142	270	SA-WebVert-Plate	0.871			Lbyy	N/A	N/A	Lateral
143	271	SA-WebVert-Plate	0.871			Lbyy	N/A	N/A	Lateral
144	272	SA-WebVert-Plate	0.719			Lbyy	N/A	N/A	Lateral
145	273	F1-S8	0.583			Lbyy	N/A	N/A	Lateral
146	274	F1-S9	0.467			Lbyy	N/A	N/A	Lateral
147	275	F1-S9	0.37			Lbyy	N/A	N/A	Lateral
148	276	F1-S7	0.288			Lbyy	N/A	N/A	Lateral
149	306	SA-BotChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
150	307	SA-BotChord-Plate	0.958			Lbyy	N/A	N/A	Lateral
151	308	SA-BotChord-Plate	0.742			Lbyy	N/A	N/A	Lateral
152	309	SA-BotChord-Plate	0.667			Lbyy	N/A	N/A	Lateral
153	310	SA-BotChord-Plate	1.045			Lbyy	N/A	N/A	Lateral
154	311	SA-BotChord-Plate	0.741			Lbyy	N/A	N/A	Lateral
155	312	SA-BotChord-Plate	0.748			Lbyy	N/A	N/A	Lateral
156	313	SA-TopChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
157	314	SA-TopChord-Plate	0.958			Lbyy	N/A	N/A	Lateral
158	315	SA-TopChord-Plate	0.718			Lbyy	N/A	N/A	Lateral
159	316	SA-TopChord-Plate	0.648			Lbyy	N/A	N/A	Lateral
160	317	SA-TopChord-Plate	1.023			Lbyy	N/A	N/A	Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	Channel Conn.	a [ft]	Function
161	318	SA-TopChord-Plate	0.725			Lbyy	N/A	N/A	Lateral
162	319	SA-TopChord-Plate	0.761			Lbyy	N/A	N/A	Lateral
163	320	SA-WebChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
164	321	SA-WebChord-Plate	0.957			Lbyy	N/A	N/A	Lateral
165	322	SA-WebChord-Plate	0.731			Lbyy	N/A	N/A	Lateral
166	323	SA-WebChord-Plate	0.667			Lbyy	N/A	N/A	Lateral
167	324	SA-WebChord-Plate	1.045			Lbyy	N/A	N/A	Lateral
168	325	SA-WebChord-Plate	0.741			Lbyy	N/A	N/A	Lateral
169	326	SA-WebChord-Plate	0.759			Lbyy	N/A	N/A	Lateral
170	327	SA-WebDiag-Plate	1.264			Lbyy	N/A	N/A	Lateral
171	328	SA-WebDiag-Plate	1.294			Lbyy	N/A	N/A	Lateral
172	329	SA-WebDiag-Plate	1.013			Lbyy	N/A	N/A	Lateral
173	330	SA-WebDiag-Plate	0.872			Lbyy	N/A	N/A	Lateral
174	331	SA-WebDiag-Rod#1	0.727			Lbyy	N/A	N/A	Lateral
175	332	SA-WebDiag-Rod#2	0.595			Lbyy	N/A	N/A	Lateral
176	333	SA-WebDiag-Rod#2	0.487			Lbyy	N/A	N/A	Lateral
177	334	SA-WebDiag.Rod#3	0.397			Lbyy	N/A	N/A	Lateral
178	335	SA-WebChord-Plate	0.917			Lbyy	N/A	N/A	Lateral
179	336	SA-WebChord-Plate	0.958			Lbyy	N/A	N/A	Lateral
180	337	SA-WebChord-Plate	0.718			Lbyy	N/A	N/A	Lateral
181	338	SA-WebChord-Plate	0.648			Lbyy	N/A	N/A	Lateral
182	339	SA-WebChord-Plate	1.023			Lbyy	N/A	N/A	Lateral
183	340	SA-WebChord-Plate	0.725			Lbyy	N/A	N/A	Lateral
184	341	SA-WebChord-Plate	0.761			Lbyy	N/A	N/A	Lateral
185	342	SA-WebVert-Plate	0.871			Lbyy	N/A	N/A	Lateral
186	343	SA-WebVert-Plate	0.871			Lbyy	N/A	N/A	Lateral
187	344	SA-WebVert-Plate	0.871			Lbyy	N/A	N/A	Lateral
188	345	SA-WebVert-Plate	0.719			Lbyy	N/A	N/A	Lateral
189	346	F1-S8	0.583			Lbyy	N/A	N/A	Lateral
190	347	F1-S9	0.467			Lbyy	N/A	N/A	Lateral
191	348	F1-S9	0.37			Lbyy	N/A	N/A	Lateral
192	349	F1-S7	0.288			Lbyy	N/A	N/A	Lateral
193	379	RRU Pipe	6			Lbyy	N/A	N/A	Lateral

Member Point Loads (BLC 1 : Dead)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	Y	-0.152	%15
2	196	Y	-0.152	%85
3	196	Y	-0.075	%50
4	196	Y	-0.072	%50
5	196	Y	0	0
6	202	Y	-0.041	%35
7	202	Y	-0.041	%65
8	202	Y	0	0
9	202	Y	0	0
10	202	Y	0	0
11	228	Y	-0.111	%15
12	228	Y	-0.111	%85
13	228	Y	-0.075	%50
14	228	Y	-0.072	%50
15	228	Y	0	0
16	231	Y	-0.041	%35
17	231	Y	-0.041	%65
18	231	Y	0	0
19	231	Y	0	0

Member Point Loads (BLC 1 : Dead) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
20	231	Y	0	0
21	222	Y	-0.152	%15
22	222	Y	-0.152	%85
23	222	Y	-0.075	%50
24	222	Y	-0.072	%50
25	222	Y	0	0
26	225	Y	-0.041	%35
27	225	Y	-0.041	%65
28	225	Y	0	0
29	225	Y	0	0
30	225	Y	0	0
31	379	Y	-0.032	%50
32	379	Y	0	0
33	379	Y	0	0
34	379	Y	0	0
35	379	Y	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	Z	-0.329	%15
2	196	Z	-0.329	%85
3	196	Z	-0.037	%50
4	196	Z	-0.033	%50
5	196	Z	0	0
6	202	Z	-0.11	%35
7	202	Z	-0.11	%65
8	202	Z	0	0
9	202	Z	0	0
10	202	Z	0	0
11	228	Z	-0.295	%15
12	228	Z	-0.295	%85
13	228	Z	-0.037	%50
14	228	Z	-0.033	%50
15	228	Z	0	0
16	231	Z	-0.11	%35
17	231	Z	-0.11	%65
18	231	Z	0	0
19	231	Z	0	0
20	231	Z	0	0
21	222	Z	-0.329	%15
22	222	Z	-0.329	%85
23	222	Z	-0.037	%50
24	222	Z	-0.033	%50
25	222	Z	0	0
26	225	Z	-0.11	%35
27	225	Z	-0.11	%65
28	225	Z	0	0
29	225	Z	0	0
30	225	Z	0	0
31	379	Z	-0.119	%50
32	379	Z	0	0
33	379	Z	0	0
34	379	Z	0	0
35	379	Z	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	X	-0.17	%15
2	196	X	-0.17	%85
3	196	X	-0.055	%50
4	196	X	-0.055	%50
5	196	X	0	0
6	202	X	-0.038	%35
7	202	X	-0.038	%65
8	202	X	0	0
9	202	X	0	0
10	202	X	0	0
11	228	X	-0.202	%15
12	228	X	-0.202	%85
13	228	X	-0.055	%50
14	228	X	-0.055	%50
15	228	X	0	0
16	231	X	-0.038	%35
17	231	X	-0.038	%65
18	231	X	0	0
19	231	X	0	0
20	231	X	0	0
21	222	X	-0.17	%15
22	222	X	-0.17	%85
23	222	X	-0.055	%50
24	222	X	-0.055	%50
25	222	X	0	0
26	225	X	-0.038	%35
27	225	X	-0.038	%65
28	225	X	0	0
29	225	X	0	0
30	225	X	0	0
31	379	X	-0.091	%50
32	379	X	0	0
33	379	X	0	0
34	379	X	0	0
35	379	X	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	Z	-0.07	%15
2	196	Z	-0.07	%85
3	196	Z	-0.007	%50
4	196	Z	-0.006	%50
5	196	Z	0	0
6	202	Z	-0.025	%35
7	202	Z	-0.025	%65
8	202	Z	0	0
9	202	Z	0	0
10	202	Z	0	0
11	228	Z	-0.065	%15
12	228	Z	-0.065	%85
13	228	Z	-0.007	%50
14	228	Z	-0.006	%50
15	228	Z	0	0
16	231	Z	-0.025	%35

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
17	231	Z	-0.025	%65
18	231	Z	0	0
19	231	Z	0	0
20	231	Z	0	0
21	222	Z	-0.07	%15
22	222	Z	-0.07	%85
23	222	Z	-0.007	%50
24	222	Z	-0.006	%50
25	222	Z	0	0
26	225	Z	-0.025	%35
27	225	Z	-0.025	%65
28	225	Z	0	0
29	225	Z	0	0
30	225	Z	0	0
31	379	Z	-0.023	%50
32	379	Z	0	0
33	379	Z	0	0
34	379	Z	0	0
35	379	Z	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	X	-0.039	%15
2	196	X	-0.039	%85
3	196	X	-0.01	%50
4	196	X	-0.01	%50
5	196	X	0	0
6	202	X	-0.01	%35
7	202	X	-0.01	%65
8	202	X	0	0
9	202	X	0	0
10	202	X	0	0
11	228	X	-0.047	%15
12	228	X	-0.047	%85
13	228	X	-0.01	%50
14	228	X	-0.01	%50
15	228	X	0	0
16	231	X	-0.01	%35
17	231	X	-0.01	%65
18	231	X	0	0
19	231	X	0	0
20	231	X	0	0
21	222	X	-0.039	%15
22	222	X	-0.039	%85
23	222	X	-0.01	%50
24	222	X	-0.01	%50
25	222	X	0	0
26	225	X	-0.01	%35
27	225	X	-0.01	%65
28	225	X	0	0
29	225	X	0	0
30	225	X	0	0
31	379	X	-0.017	%50
32	379	X	0	0
33	379	X	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
34	379	X	0	0
35	379	X	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	Z	-0.022	%15
2	196	Z	-0.022	%85
3	196	Z	-0.003	%50
4	196	Z	-0.002	%50
5	196	Z	0	0
6	202	Z	-0.007	%35
7	202	Z	-0.007	%65
8	202	Z	0	0
9	202	Z	0	0
10	202	Z	0	0
11	228	Z	-0.02	%15
12	228	Z	-0.02	%85
13	228	Z	-0.003	%50
14	228	Z	-0.002	%50
15	228	Z	0	0
16	231	Z	-0.007	%35
17	231	Z	-0.007	%65
18	231	Z	0	0
19	231	Z	0	0
20	231	Z	0	0
21	222	Z	-0.022	%15
22	222	Z	-0.022	%85
23	222	Z	-0.003	%50
24	222	Z	-0.002	%50
25	222	Z	0	0
26	225	Z	-0.007	%35
27	225	Z	-0.007	%65
28	225	Z	0	0
29	225	Z	0	0
30	225	Z	0	0
31	379	Z	-0.008	%50
32	379	Z	0	0
33	379	Z	0	0
34	379	Z	0	0
35	379	Z	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	X	-0.011	%15
2	196	X	-0.011	%85
3	196	X	-0.004	%50
4	196	X	-0.004	%50
5	196	X	0	0
6	202	X	-0.003	%35
7	202	X	-0.003	%65
8	202	X	0	0
9	202	X	0	0
10	202	X	0	0

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

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
11	228	X	-0.014	%15
12	228	X	-0.014	%85
13	228	X	-0.004	%50
14	228	X	-0.004	%50
15	228	X	0	0
16	231	X	-0.003	%35
17	231	X	-0.003	%65
18	231	X	0	0
19	231	X	0	0
20	231	X	0	0
21	222	X	-0.011	%15
22	222	X	-0.011	%85
23	222	X	-0.004	%50
24	222	X	-0.004	%50
25	222	X	0	0
26	225	X	-0.003	%35
27	225	X	-0.003	%65
28	225	X	0	0
29	225	X	0	0
30	225	X	0	0
31	379	X	-0.006	%50
32	379	X	0	0
33	379	X	0	0
34	379	X	0	0
35	379	X	0	0

Member Point Loads (BLC 8 : Ice)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	Y	-0.344	%15
2	196	Y	-0.344	%85
3	196	Y	-0.033	%50
4	196	Y	-0.032	%50
5	196	Y	0	0
6	202	Y	-0.072	%35
7	202	Y	-0.072	%65
8	202	Y	0	0
9	202	Y	0	0
10	202	Y	0	0
11	228	Y	-0.272	%15
12	228	Y	-0.272	%85
13	228	Y	-0.033	%50
14	228	Y	-0.032	%50
15	228	Y	0	0
16	231	Y	-0.072	%35
17	231	Y	-0.072	%65
18	231	Y	0	0
19	231	Y	0	0
20	231	Y	0	0
21	222	Y	-0.344	%15
22	222	Y	-0.344	%85
23	222	Y	-0.033	%50
24	222	Y	-0.032	%50
25	222	Y	0	0
26	225	Y	-0.072	%35
27	225	Y	-0.072	%65

Member Point Loads (BLC 8 : Ice) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
28	225	Y	0	0
29	225	Y	0	0
30	225	Y	0	0
31	379	Y	-0.075	%50
32	379	Y	0	0
33	379	Y	0	0
34	379	Y	0	0
35	379	Y	0	0

Member Point Loads (BLC 9 : 0 Seismic)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	Z	-0.033	%15
2	196	Z	-0.033	%85
3	196	Z	-0.016	%50
4	196	Z	-0.016	%50
5	196	Z	0	0
6	202	Z	-0.018	%35
7	202	Z	-0.018	%65
8	202	Z	0	0
9	202	Z	0	0
10	202	Z	0	0
11	228	Z	-0.024	%15
12	228	Z	-0.024	%85
13	228	Z	-0.016	%50
14	228	Z	-0.016	%50
15	228	Z	0	0
16	231	Z	-0.018	%35
17	231	Z	-0.018	%65
18	231	Z	0	0
19	231	Z	0	0
20	231	Z	0	0
21	222	Z	-0.033	%15
22	222	Z	-0.033	%85
23	222	Z	-0.016	%50
24	222	Z	-0.016	%50
25	222	Z	0	0
26	225	Z	-0.018	%35
27	225	Z	-0.018	%65
28	225	Z	0	0
29	225	Z	0	0
30	225	Z	0	0
31	379	Z	-0.007	%50
32	379	Z	0	0
33	379	Z	0	0
34	379	Z	0	0
35	379	Z	0	0

Member Point Loads (BLC 10 : 90 Seismic)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	196	X	-0.033	%15
2	196	X	-0.033	%85
3	196	X	-0.016	%50
4	196	X	-0.016	%50

Member Point Loads (BLC 10 : 90 Seismic) (Continued)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
5	196	X	0	0
6	202	X	-0.018	%35
7	202	X	-0.018	%65
8	202	X	0	0
9	202	X	0	0
10	202	X	0	0
11	228	X	-0.024	%15
12	228	X	-0.024	%85
13	228	X	-0.016	%50
14	228	X	-0.016	%50
15	228	X	0	0
16	231	X	-0.018	%35
17	231	X	-0.018	%65
18	231	X	0	0
19	231	X	0	0
20	231	X	0	0
21	222	X	-0.033	%15
22	222	X	-0.033	%85
23	222	X	-0.016	%50
24	222	X	-0.016	%50
25	222	X	0	0
26	225	X	-0.018	%35
27	225	X	-0.018	%65
28	225	X	0	0
29	225	X	0	0
30	225	X	0	0
31	379	X	-0.007	%50
32	379	X	0	0
33	379	X	0	0
34	379	X	0	0
35	379	X	0	0

Member Point Loads (BLC 15 : Maint LL 1)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	189	Y	-0.25	%5

Member Point Loads (BLC 16 : Maint LL 2)

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

Member Point Loads (BLC 17 : Maint LL 3)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	191	Y	-0.25	%5

Member Point Loads (BLC 18 : Maint LL 4)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	3	Y	-0.25	%5

Member Point Loads (BLC 19 : Maint LL 5)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	190	Y	-0.25	%5

Member Point Loads (BLC 20 : Maint LL 6)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	2	Y	-0.25	%5

Member Point Loads (BLC 21 : Maint LL 7)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	189	Y	-0.25	%95

Member Point Loads (BLC 22 : Maint LL 8)

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

Member Point Loads (BLC 23 : Maint LL 9)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	191	Y	-0.25	%95

Member Point Loads (BLC 24 : Maint LL 10)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	3	Y	-0.25	%95

Member Point Loads (BLC 25 : Maint LL 11)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	190	Y	-0.25	%95

Member Point Loads (BLC 26 : Maint LL 12)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	2	Y	-0.25	%95

Member Point Loads (BLC 27 : Maint LL 13)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	40	Y	-0.25	%5

Member Point Loads (BLC 28 : Maint LL 14)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	42	Y	-0.25	%5

Member Point Loads (BLC 29 : Maint LL 15)

	Member Label	Direction	Magnitude [k, k-ft]	Location [(ft, %)]
1	41	Y	-0.25	%5

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.009	-0.009	0	%100
2	2	Z	-0.009	-0.009	0	%100
3	3	Z	-0.009	-0.009	0	%100
4	4	Z	-0.002	-0.002	0	%100
5	5	Z	-0.002	-0.002	0	%100
6	6	Z	-0.002	-0.002	0	%100
7	7	Z	-0.002	-0.002	0	%100
8	8	Z	-0.002	-0.002	0	%100
9	9	Z	-0.002	-0.002	0	%100
10	10	Z	-0.011	-0.011	0	%100
11	11	Z	-0.011	-0.011	0	%100
12	12	Z	-0.011	-0.011	0	%100
13	13	Z	-0.011	-0.011	0	%100
14	14	Z	-0.011	-0.011	0	%100
15	15	Z	-0.011	-0.011	0	%100
16	16	Z	-0.011	-0.011	0	%100
17	17	Z	-0.011	-0.011	0	%100
18	18	Z	-0.011	-0.011	0	%100
19	19	Z	-0.011	-0.011	0	%100
20	20	Z	-0.011	-0.011	0	%100
21	21	Z	-0.011	-0.011	0	%100
22	22	Z	-0.008	-0.008	0	%100
23	23	Z	-0.008	-0.008	0	%100
24	24	Z	-0.008	-0.008	0	%100
25	25	Z	-0.008	-0.008	0	%100
26	26	Z	-0.007	-0.007	0	%100
27	27	Z	-0.007	-0.007	0	%100
28	28	Z	-0.008	-0.008	0	%100
29	29	Z	-0.008	-0.008	0	%100
30	30	Z	-0.008	-0.008	0	%100
31	31	Z	-0.008	-0.008	0	%100
32	32	Z	-0.007	-0.007	0	%100
33	33	Z	-0.007	-0.007	0	%100
34	34	Z	-0.008	-0.008	0	%100
35	35	Z	-0.008	-0.008	0	%100
36	36	Z	-0.008	-0.008	0	%100
37	37	Z	-0.008	-0.008	0	%100
38	38	Z	-0.007	-0.007	0	%100
39	39	Z	-0.007	-0.007	0	%100
40	40	Z	-0.013	-0.013	0	%100
41	41	Z	-0.013	-0.013	0	%100
42	42	Z	-0.013	-0.013	0	%100
43	43	Z	-0.002	-0.002	0	%100
44	44	Z	-0.002	-0.002	0	%100
45	45	Z	-0.002	-0.002	0	%100
46	46	Z	-0.002	-0.002	0	%100
47	47	Z	-0.002	-0.002	0	%100
48	48	Z	-0.002	-0.002	0	%100
49	49	Z	-0.002	-0.002	0	%100
50	50	Z	-0.002	-0.002	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
51	51	Z	-0.002	-0.002	0	%100
52	52	Z	-0.002	-0.002	0	%100
53	53	Z	-0.002	-0.002	0	%100
54	54	Z	-0.002	-0.002	0	%100
55	55	Z	-0.002	-0.002	0	%100
56	56	Z	-0.002	-0.002	0	%100
57	57	Z	-0.004	-0.004	0	%100
58	58	Z	-0.004	-0.004	0	%100
59	59	Z	-0.004	-0.004	0	%100
60	60	Z	-0.003	-0.003	0	%100
61	61	Z	-0.004	-0.004	0	%100
62	62	Z	-0.004	-0.004	0	%100
63	63	Z	-0.004	-0.004	0	%100
64	64	Z	-0.004	-0.004	0	%100
65	65	Z	-0.004	-0.004	0	%100
66	66	Z	-0.004	-0.004	0	%100
67	67	Z	-0.004	-0.004	0	%100
68	68	Z	-0.003	-0.003	0	%100
69	69	Z	-0.003	-0.003	0	%100
70	70	Z	-0.003	-0.003	0	%100
71	71	Z	-0.002	-0.002	0	%100
72	72	Z	-0.004	-0.004	0	%100
73	73	Z	-0.004	-0.004	0	%100
74	74	Z	-0.004	-0.004	0	%100
75	75	Z	-0.003	-0.003	0	%100
76	76	Z	-0.004	-0.004	0	%100
77	77	Z	-0.004	-0.004	0	%100
78	78	Z	-0.004	-0.004	0	%100
79	79	Z	-0.004	-0.004	0	%100
80	80	Z	-0.004	-0.004	0	%100
81	81	Z	-0.004	-0.004	0	%100
82	82	Z	-0.004	-0.004	0	%100
83	83	Z	-0.003	-0.003	0	%100
84	84	Z	-0.003	-0.003	0	%100
85	85	Z	-0.002	-0.002	0	%100
86	86	Z	-0.002	-0.002	0	%100
87	189	Z	-0.007	-0.007	0	%100
88	190	Z	-0.007	-0.007	0	%100
89	191	Z	-0.007	-0.007	0	%100
90	193	Z	-0.007	-0.007	0	%100
91	196	Z	-0.007	-0.007	0	%100
92	199	Z	-0.007	-0.007	0	%100
93	202	Z	-0.007	-0.007	0	%100
94	207	Z	-0.007	-0.007	0	%100
95	210	Z	-0.007	-0.007	0	%100
96	213	Z	-0.007	-0.007	0	%100
97	216	Z	-0.007	-0.007	0	%100
98	218	Z	-0.013	-0.013	0	%100
99	219	Z	-0.013	-0.013	0	%100
100	220	Z	-0.013	-0.013	0	%100
101	222	Z	-0.007	-0.007	0	%100
102	225	Z	-0.007	-0.007	0	%100
103	228	Z	-0.007	-0.007	0	%100
104	231	Z	-0.007	-0.007	0	%100
105	233	Z	-0.002	-0.002	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
106	234	Z	-0.002	-0.002	0	%100
107	235	Z	-0.002	-0.002	0	%100
108	236	Z	-0.002	-0.002	0	%100
109	237	Z	-0.002	-0.002	0	%100
110	238	Z	-0.002	-0.002	0	%100
111	239	Z	-0.002	-0.002	0	%100
112	240	Z	-0.002	-0.002	0	%100
113	241	Z	-0.002	-0.002	0	%100
114	242	Z	-0.002	-0.002	0	%100
115	243	Z	-0.002	-0.002	0	%100
116	244	Z	-0.002	-0.002	0	%100
117	245	Z	-0.002	-0.002	0	%100
118	246	Z	-0.002	-0.002	0	%100
119	247	Z	-0.004	-0.004	0	%100
120	248	Z	-0.004	-0.004	0	%100
121	249	Z	-0.004	-0.004	0	%100
122	250	Z	-0.003	-0.003	0	%100
123	251	Z	-0.004	-0.004	0	%100
124	252	Z	-0.004	-0.004	0	%100
125	253	Z	-0.004	-0.004	0	%100
126	254	Z	-0.004	-0.004	0	%100
127	255	Z	-0.004	-0.004	0	%100
128	256	Z	-0.004	-0.004	0	%100
129	257	Z	-0.004	-0.004	0	%100
130	258	Z	-0.003	-0.003	0	%100
131	259	Z	-0.003	-0.003	0	%100
132	260	Z	-0.003	-0.003	0	%100
133	261	Z	-0.002	-0.002	0	%100
134	262	Z	-0.004	-0.004	0	%100
135	263	Z	-0.004	-0.004	0	%100
136	264	Z	-0.004	-0.004	0	%100
137	265	Z	-0.003	-0.003	0	%100
138	266	Z	-0.004	-0.004	0	%100
139	267	Z	-0.004	-0.004	0	%100
140	268	Z	-0.004	-0.004	0	%100
141	269	Z	-0.004	-0.004	0	%100
142	270	Z	-0.004	-0.004	0	%100
143	271	Z	-0.004	-0.004	0	%100
144	272	Z	-0.004	-0.004	0	%100
145	273	Z	-0.003	-0.003	0	%100
146	274	Z	-0.003	-0.003	0	%100
147	275	Z	-0.002	-0.002	0	%100
148	276	Z	-0.002	-0.002	0	%100
149	306	Z	-0.002	-0.002	0	%100
150	307	Z	-0.002	-0.002	0	%100
151	308	Z	-0.002	-0.002	0	%100
152	309	Z	-0.002	-0.002	0	%100
153	310	Z	-0.002	-0.002	0	%100
154	311	Z	-0.002	-0.002	0	%100
155	312	Z	-0.002	-0.002	0	%100
156	313	Z	-0.002	-0.002	0	%100
157	314	Z	-0.002	-0.002	0	%100
158	315	Z	-0.002	-0.002	0	%100
159	316	Z	-0.002	-0.002	0	%100
160	317	Z	-0.002	-0.002	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
161	318	Z	-0.002	-0.002	0	%100
162	319	Z	-0.002	-0.002	0	%100
163	320	Z	-0.004	-0.004	0	%100
164	321	Z	-0.004	-0.004	0	%100
165	322	Z	-0.004	-0.004	0	%100
166	323	Z	-0.003	-0.003	0	%100
167	324	Z	-0.004	-0.004	0	%100
168	325	Z	-0.004	-0.004	0	%100
169	326	Z	-0.004	-0.004	0	%100
170	327	Z	-0.004	-0.004	0	%100
171	328	Z	-0.004	-0.004	0	%100
172	329	Z	-0.004	-0.004	0	%100
173	330	Z	-0.004	-0.004	0	%100
174	331	Z	-0.003	-0.003	0	%100
175	332	Z	-0.003	-0.003	0	%100
176	333	Z	-0.003	-0.003	0	%100
177	334	Z	-0.002	-0.002	0	%100
178	335	Z	-0.004	-0.004	0	%100
179	336	Z	-0.004	-0.004	0	%100
180	337	Z	-0.004	-0.004	0	%100
181	338	Z	-0.003	-0.003	0	%100
182	339	Z	-0.004	-0.004	0	%100
183	340	Z	-0.004	-0.004	0	%100
184	341	Z	-0.004	-0.004	0	%100
185	342	Z	-0.004	-0.004	0	%100
186	343	Z	-0.004	-0.004	0	%100
187	344	Z	-0.004	-0.004	0	%100
188	345	Z	-0.004	-0.004	0	%100
189	346	Z	-0.003	-0.003	0	%100
190	347	Z	-0.003	-0.003	0	%100
191	348	Z	-0.002	-0.002	0	%100
192	349	Z	-0.002	-0.002	0	%100
193	379	Z	-0.009	-0.009	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.009	-0.009	0	%100
2	2	X	-0.009	-0.009	0	%100
3	3	X	-0.009	-0.009	0	%100
4	4	X	-0.002	-0.002	0	%100
5	5	X	-0.002	-0.002	0	%100
6	6	X	-0.002	-0.002	0	%100
7	7	X	-0.002	-0.002	0	%100
8	8	X	-0.002	-0.002	0	%100
9	9	X	-0.002	-0.002	0	%100
10	10	X	-0.011	-0.011	0	%100
11	11	X	-0.011	-0.011	0	%100
12	12	X	-0.011	-0.011	0	%100
13	13	X	-0.011	-0.011	0	%100
14	14	X	-0.011	-0.011	0	%100
15	15	X	-0.011	-0.011	0	%100
16	16	X	-0.011	-0.011	0	%100
17	17	X	-0.011	-0.011	0	%100
18	18	X	-0.011	-0.011	0	%100
19	19	X	-0.011	-0.011	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
20	20	X	-0.011	-0.011	0	%100
21	21	X	-0.011	-0.011	0	%100
22	22	X	-0.008	-0.008	0	%100
23	23	X	-0.008	-0.008	0	%100
24	24	X	-0.008	-0.008	0	%100
25	25	X	-0.008	-0.008	0	%100
26	26	X	-0.007	-0.007	0	%100
27	27	X	-0.007	-0.007	0	%100
28	28	X	-0.008	-0.008	0	%100
29	29	X	-0.008	-0.008	0	%100
30	30	X	-0.008	-0.008	0	%100
31	31	X	-0.008	-0.008	0	%100
32	32	X	-0.007	-0.007	0	%100
33	33	X	-0.007	-0.007	0	%100
34	34	X	-0.008	-0.008	0	%100
35	35	X	-0.008	-0.008	0	%100
36	36	X	-0.008	-0.008	0	%100
37	37	X	-0.008	-0.008	0	%100
38	38	X	-0.007	-0.007	0	%100
39	39	X	-0.007	-0.007	0	%100
40	40	X	-0.013	-0.013	0	%100
41	41	X	-0.013	-0.013	0	%100
42	42	X	-0.013	-0.013	0	%100
43	43	X	-0.002	-0.002	0	%100
44	44	X	-0.002	-0.002	0	%100
45	45	X	-0.002	-0.002	0	%100
46	46	X	-0.002	-0.002	0	%100
47	47	X	-0.002	-0.002	0	%100
48	48	X	-0.002	-0.002	0	%100
49	49	X	-0.002	-0.002	0	%100
50	50	X	-0.002	-0.002	0	%100
51	51	X	-0.002	-0.002	0	%100
52	52	X	-0.002	-0.002	0	%100
53	53	X	-0.002	-0.002	0	%100
54	54	X	-0.002	-0.002	0	%100
55	55	X	-0.002	-0.002	0	%100
56	56	X	-0.002	-0.002	0	%100
57	57	X	-0.004	-0.004	0	%100
58	58	X	-0.004	-0.004	0	%100
59	59	X	-0.004	-0.004	0	%100
60	60	X	-0.003	-0.003	0	%100
61	61	X	-0.004	-0.004	0	%100
62	62	X	-0.004	-0.004	0	%100
63	63	X	-0.004	-0.004	0	%100
64	64	X	-0.004	-0.004	0	%100
65	65	X	-0.004	-0.004	0	%100
66	66	X	-0.004	-0.004	0	%100
67	67	X	-0.004	-0.004	0	%100
68	68	X	-0.003	-0.003	0	%100
69	69	X	-0.003	-0.003	0	%100
70	70	X	-0.003	-0.003	0	%100
71	71	X	-0.002	-0.002	0	%100
72	72	X	-0.004	-0.004	0	%100
73	73	X	-0.004	-0.004	0	%100
74	74	X	-0.004	-0.004	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
75	75	X	-0.003	-0.003	0	%100
76	76	X	-0.004	-0.004	0	%100
77	77	X	-0.004	-0.004	0	%100
78	78	X	-0.004	-0.004	0	%100
79	79	X	-0.004	-0.004	0	%100
80	80	X	-0.004	-0.004	0	%100
81	81	X	-0.004	-0.004	0	%100
82	82	X	-0.004	-0.004	0	%100
83	83	X	-0.003	-0.003	0	%100
84	84	X	-0.003	-0.003	0	%100
85	85	X	-0.002	-0.002	0	%100
86	86	X	-0.002	-0.002	0	%100
87	189	X	-0.007	-0.007	0	%100
88	190	X	-0.007	-0.007	0	%100
89	191	X	-0.007	-0.007	0	%100
90	193	X	-0.007	-0.007	0	%100
91	196	X	-0.007	-0.007	0	%100
92	199	X	-0.007	-0.007	0	%100
93	202	X	-0.007	-0.007	0	%100
94	207	X	-0.007	-0.007	0	%100
95	210	X	-0.007	-0.007	0	%100
96	213	X	-0.007	-0.007	0	%100
97	216	X	-0.007	-0.007	0	%100
98	218	X	-0.013	-0.013	0	%100
99	219	X	-0.013	-0.013	0	%100
100	220	X	-0.013	-0.013	0	%100
101	222	X	-0.007	-0.007	0	%100
102	225	X	-0.007	-0.007	0	%100
103	228	X	-0.007	-0.007	0	%100
104	231	X	-0.007	-0.007	0	%100
105	233	X	-0.002	-0.002	0	%100
106	234	X	-0.002	-0.002	0	%100
107	235	X	-0.002	-0.002	0	%100
108	236	X	-0.002	-0.002	0	%100
109	237	X	-0.002	-0.002	0	%100
110	238	X	-0.002	-0.002	0	%100
111	239	X	-0.002	-0.002	0	%100
112	240	X	-0.002	-0.002	0	%100
113	241	X	-0.002	-0.002	0	%100
114	242	X	-0.002	-0.002	0	%100
115	243	X	-0.002	-0.002	0	%100
116	244	X	-0.002	-0.002	0	%100
117	245	X	-0.002	-0.002	0	%100
118	246	X	-0.002	-0.002	0	%100
119	247	X	-0.004	-0.004	0	%100
120	248	X	-0.004	-0.004	0	%100
121	249	X	-0.004	-0.004	0	%100
122	250	X	-0.003	-0.003	0	%100
123	251	X	-0.004	-0.004	0	%100
124	252	X	-0.004	-0.004	0	%100
125	253	X	-0.004	-0.004	0	%100
126	254	X	-0.004	-0.004	0	%100
127	255	X	-0.004	-0.004	0	%100
128	256	X	-0.004	-0.004	0	%100
129	257	X	-0.004	-0.004	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
130	258	X	-0.003	-0.003	0	%100
131	259	X	-0.003	-0.003	0	%100
132	260	X	-0.003	-0.003	0	%100
133	261	X	-0.002	-0.002	0	%100
134	262	X	-0.004	-0.004	0	%100
135	263	X	-0.004	-0.004	0	%100
136	264	X	-0.004	-0.004	0	%100
137	265	X	-0.003	-0.003	0	%100
138	266	X	-0.004	-0.004	0	%100
139	267	X	-0.004	-0.004	0	%100
140	268	X	-0.004	-0.004	0	%100
141	269	X	-0.004	-0.004	0	%100
142	270	X	-0.004	-0.004	0	%100
143	271	X	-0.004	-0.004	0	%100
144	272	X	-0.004	-0.004	0	%100
145	273	X	-0.003	-0.003	0	%100
146	274	X	-0.003	-0.003	0	%100
147	275	X	-0.002	-0.002	0	%100
148	276	X	-0.002	-0.002	0	%100
149	306	X	-0.002	-0.002	0	%100
150	307	X	-0.002	-0.002	0	%100
151	308	X	-0.002	-0.002	0	%100
152	309	X	-0.002	-0.002	0	%100
153	310	X	-0.002	-0.002	0	%100
154	311	X	-0.002	-0.002	0	%100
155	312	X	-0.002	-0.002	0	%100
156	313	X	-0.002	-0.002	0	%100
157	314	X	-0.002	-0.002	0	%100
158	315	X	-0.002	-0.002	0	%100
159	316	X	-0.002	-0.002	0	%100
160	317	X	-0.002	-0.002	0	%100
161	318	X	-0.002	-0.002	0	%100
162	319	X	-0.002	-0.002	0	%100
163	320	X	-0.004	-0.004	0	%100
164	321	X	-0.004	-0.004	0	%100
165	322	X	-0.004	-0.004	0	%100
166	323	X	-0.003	-0.003	0	%100
167	324	X	-0.004	-0.004	0	%100
168	325	X	-0.004	-0.004	0	%100
169	326	X	-0.004	-0.004	0	%100
170	327	X	-0.004	-0.004	0	%100
171	328	X	-0.004	-0.004	0	%100
172	329	X	-0.004	-0.004	0	%100
173	330	X	-0.004	-0.004	0	%100
174	331	X	-0.003	-0.003	0	%100
175	332	X	-0.003	-0.003	0	%100
176	333	X	-0.003	-0.003	0	%100
177	334	X	-0.002	-0.002	0	%100
178	335	X	-0.004	-0.004	0	%100
179	336	X	-0.004	-0.004	0	%100
180	337	X	-0.004	-0.004	0	%100
181	338	X	-0.003	-0.003	0	%100
182	339	X	-0.004	-0.004	0	%100
183	340	X	-0.004	-0.004	0	%100
184	341	X	-0.004	-0.004	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
185	342	X	-0.004	-0.004	0	%100
186	343	X	-0.004	-0.004	0	%100
187	344	X	-0.004	-0.004	0	%100
188	345	X	-0.004	-0.004	0	%100
189	346	X	-0.003	-0.003	0	%100
190	347	X	-0.003	-0.003	0	%100
191	348	X	-0.002	-0.002	0	%100
192	349	X	-0.002	-0.002	0	%100
193	379	X	-0.009	-0.009	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.002	-0.002	0	%100
2	2	Z	-0.002	-0.002	0	%100
3	3	Z	-0.002	-0.002	0	%100
4	4	Z	-0.003	-0.003	0	%100
5	5	Z	-0.003	-0.003	0	%100
6	6	Z	-0.003	-0.003	0	%100
7	7	Z	-0.003	-0.003	0	%100
8	8	Z	-0.003	-0.003	0	%100
9	9	Z	-0.003	-0.003	0	%100
10	10	Z	-0.004	-0.004	0	%100
11	11	Z	-0.004	-0.004	0	%100
12	12	Z	-0.004	-0.004	0	%100
13	13	Z	-0.004	-0.004	0	%100
14	14	Z	-0.004	-0.004	0	%100
15	15	Z	-0.004	-0.004	0	%100
16	16	Z	-0.004	-0.004	0	%100
17	17	Z	-0.004	-0.004	0	%100
18	18	Z	-0.004	-0.004	0	%100
19	19	Z	-0.004	-0.004	0	%100
20	20	Z	-0.004	-0.004	0	%100
21	21	Z	-0.004	-0.003	0	%100
22	22	Z	-0.003	-0.003	0	%100
23	23	Z	-0.003	-0.003	0	%100
24	24	Z	-0.003	-0.003	0	%100
25	25	Z	-0.003	-0.004	0	%100
26	26	Z	-0.004	-0.004	0	%100
27	27	Z	-0.004	-0.003	0	%100
28	28	Z	-0.003	-0.003	0	%100
29	29	Z	-0.003	-0.003	0	%100
30	30	Z	-0.003	-0.003	0	%100
31	31	Z	-0.003	-0.004	0	%100
32	32	Z	-0.004	-0.004	0	%100
33	33	Z	-0.004	-0.003	0	%100
34	34	Z	-0.003	-0.003	0	%100
35	35	Z	-0.003	-0.003	0	%100
36	36	Z	-0.003	-0.003	0	%100
37	37	Z	-0.003	-0.004	0	%100
38	38	Z	-0.004	-0.004	0	%100
39	39	Z	-0.004	-0.004	0	%100
40	40	Z	-0.004	-0.004	0	%100
41	41	Z	-0.004	-0.004	0	%100
42	42	Z	-0.004	-0.003	0	%100
43	43	Z	-0.003			

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
44	44	Z	-0.003	-0.003	0	%100
45	45	Z	-0.003	-0.003	0	%100
46	46	Z	-0.003	-0.003	0	%100
47	47	Z	-0.003	-0.003	0	%100
48	48	Z	-0.003	-0.003	0	%100
49	49	Z	-0.003	-0.003	0	%100
50	50	Z	-0.003	-0.003	0	%100
51	51	Z	-0.003	-0.003	0	%100
52	52	Z	-0.003	-0.003	0	%100
53	53	Z	-0.003	-0.003	0	%100
54	54	Z	-0.003	-0.003	0	%100
55	55	Z	-0.003	-0.003	0	%100
56	56	Z	-0.003	-0.003	0	%100
57	57	Z	-0.003	-0.003	0	%100
58	58	Z	-0.003	-0.003	0	%100
59	59	Z	-0.003	-0.003	0	%100
60	60	Z	-0.003	-0.003	0	%100
61	61	Z	-0.003	-0.003	0	%100
62	62	Z	-0.003	-0.003	0	%100
63	63	Z	-0.003	-0.003	0	%100
64	64	Z	-0.003	-0.003	0	%100
65	65	Z	-0.003	-0.003	0	%100
66	66	Z	-0.003	-0.003	0	%100
67	67	Z	-0.003	-0.003	0	%100
68	68	Z	-0.003	-0.003	0	%100
69	69	Z	-0.003	-0.003	0	%100
70	70	Z	-0.003	-0.003	0	%100
71	71	Z	-0.003	-0.003	0	%100
72	72	Z	-0.003	-0.003	0	%100
73	73	Z	-0.003	-0.003	0	%100
74	74	Z	-0.003	-0.003	0	%100
75	75	Z	-0.003	-0.003	0	%100
76	76	Z	-0.003	-0.003	0	%100
77	77	Z	-0.003	-0.003	0	%100
78	78	Z	-0.003	-0.003	0	%100
79	79	Z	-0.003	-0.003	0	%100
80	80	Z	-0.003	-0.003	0	%100
81	81	Z	-0.003	-0.003	0	%100
82	82	Z	-0.003	-0.003	0	%100
83	83	Z	-0.003	-0.003	0	%100
84	84	Z	-0.003	-0.003	0	%100
85	85	Z	-0.003	-0.003	0	%100
86	86	Z	-0.003	-0.003	0	%100
87	189	Z	-0.001	-0.001	0	%100
88	190	Z	-0.001	-0.001	0	%100
89	191	Z	-0.001	-0.001	0	%100
90	193	Z	-0.001	-0.001	0	%100
91	196	Z	-0.001	-0.001	0	%100
92	199	Z	-0.001	-0.001	0	%100
93	202	Z	-0.001	-0.001	0	%100
94	207	Z	-0.001	-0.001	0	%100
95	210	Z	-0.001	-0.001	0	%100
96	213	Z	-0.001	-0.001	0	%100
97	216	Z	-0.001	-0.001	0	%100
98	218	Z	-0.004	-0.004	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
99	219	Z	-0.004	-0.004	0	%100
100	220	Z	-0.004	-0.004	0	%100
101	222	Z	-0.001	-0.001	0	%100
102	225	Z	-0.001	-0.001	0	%100
103	228	Z	-0.001	-0.001	0	%100
104	231	Z	-0.001	-0.001	0	%100
105	233	Z	-0.003	-0.003	0	%100
106	234	Z	-0.003	-0.003	0	%100
107	235	Z	-0.003	-0.003	0	%100
108	236	Z	-0.003	-0.003	0	%100
109	237	Z	-0.003	-0.003	0	%100
110	238	Z	-0.003	-0.003	0	%100
111	239	Z	-0.003	-0.003	0	%100
112	240	Z	-0.003	-0.003	0	%100
113	241	Z	-0.003	-0.003	0	%100
114	242	Z	-0.003	-0.003	0	%100
115	243	Z	-0.003	-0.003	0	%100
116	244	Z	-0.003	-0.003	0	%100
117	245	Z	-0.003	-0.003	0	%100
118	246	Z	-0.003	-0.003	0	%100
119	247	Z	-0.003	-0.003	0	%100
120	248	Z	-0.003	-0.003	0	%100
121	249	Z	-0.003	-0.003	0	%100
122	250	Z	-0.003	-0.003	0	%100
123	251	Z	-0.003	-0.003	0	%100
124	252	Z	-0.003	-0.003	0	%100
125	253	Z	-0.003	-0.003	0	%100
126	254	Z	-0.003	-0.003	0	%100
127	255	Z	-0.003	-0.003	0	%100
128	256	Z	-0.003	-0.003	0	%100
129	257	Z	-0.003	-0.003	0	%100
130	258	Z	-0.003	-0.003	0	%100
131	259	Z	-0.003	-0.003	0	%100
132	260	Z	-0.003	-0.003	0	%100
133	261	Z	-0.003	-0.003	0	%100
134	262	Z	-0.003	-0.003	0	%100
135	263	Z	-0.003	-0.003	0	%100
136	264	Z	-0.003	-0.003	0	%100
137	265	Z	-0.003	-0.003	0	%100
138	266	Z	-0.003	-0.003	0	%100
139	267	Z	-0.003	-0.003	0	%100
140	268	Z	-0.003	-0.003	0	%100
141	269	Z	-0.003	-0.003	0	%100
142	270	Z	-0.003	-0.003	0	%100
143	271	Z	-0.003	-0.003	0	%100
144	272	Z	-0.003	-0.003	0	%100
145	273	Z	-0.003	-0.003	0	%100
146	274	Z	-0.003	-0.003	0	%100
147	275	Z	-0.003	-0.003	0	%100
148	276	Z	-0.003	-0.003	0	%100
149	306	Z	-0.003	-0.003	0	%100
150	307	Z	-0.003	-0.003	0	%100
151	308	Z	-0.003	-0.003	0	%100
152	309	Z	-0.003	-0.003	0	%100
153	310	Z	-0.003	-0.003	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
154	311	Z	-0.003	-0.003	0	%100
155	312	Z	-0.003	-0.003	0	%100
156	313	Z	-0.003	-0.003	0	%100
157	314	Z	-0.003	-0.003	0	%100
158	315	Z	-0.003	-0.003	0	%100
159	316	Z	-0.003	-0.003	0	%100
160	317	Z	-0.003	-0.003	0	%100
161	318	Z	-0.003	-0.003	0	%100
162	319	Z	-0.003	-0.003	0	%100
163	320	Z	-0.003	-0.003	0	%100
164	321	Z	-0.003	-0.003	0	%100
165	322	Z	-0.003	-0.003	0	%100
166	323	Z	-0.003	-0.003	0	%100
167	324	Z	-0.003	-0.003	0	%100
168	325	Z	-0.003	-0.003	0	%100
169	326	Z	-0.003	-0.003	0	%100
170	327	Z	-0.003	-0.003	0	%100
171	328	Z	-0.003	-0.003	0	%100
172	329	Z	-0.003	-0.003	0	%100
173	330	Z	-0.003	-0.003	0	%100
174	331	Z	-0.003	-0.003	0	%100
175	332	Z	-0.003	-0.003	0	%100
176	333	Z	-0.003	-0.003	0	%100
177	334	Z	-0.003	-0.003	0	%100
178	335	Z	-0.003	-0.003	0	%100
179	336	Z	-0.003	-0.003	0	%100
180	337	Z	-0.003	-0.003	0	%100
181	338	Z	-0.003	-0.003	0	%100
182	339	Z	-0.003	-0.003	0	%100
183	340	Z	-0.003	-0.003	0	%100
184	341	Z	-0.003	-0.003	0	%100
185	342	Z	-0.003	-0.003	0	%100
186	343	Z	-0.003	-0.003	0	%100
187	344	Z	-0.003	-0.003	0	%100
188	345	Z	-0.003	-0.003	0	%100
189	346	Z	-0.003	-0.003	0	%100
190	347	Z	-0.003	-0.003	0	%100
191	348	Z	-0.003	-0.003	0	%100
192	349	Z	-0.003	-0.003	0	%100
193	379	Z	-0.002	-0.002	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.002	-0.002	0	%100
2	2	X	-0.002	-0.002	0	%100
3	3	X	-0.002	-0.002	0	%100
4	4	X	-0.003	-0.003	0	%100
5	5	X	-0.003	-0.003	0	%100
6	6	X	-0.003	-0.003	0	%100
7	7	X	-0.003	-0.003	0	%100
8	8	X	-0.003	-0.003	0	%100
9	9	X	-0.003	-0.003	0	%100
10	10	X	-0.004	-0.004	0	%100
11	11	X	-0.004	-0.004	0	%100
12	12	X	-0.004	-0.004	0	%100

Member Distributed Loads (BLC 5 : 90 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
13	13	X	-0.004	-0.004	0	%100
14	14	X	-0.004	-0.004	0	%100
15	15	X	-0.004	-0.004	0	%100
16	16	X	-0.004	-0.004	0	%100
17	17	X	-0.004	-0.004	0	%100
18	18	X	-0.004	-0.004	0	%100
19	19	X	-0.004	-0.004	0	%100
20	20	X	-0.004	-0.004	0	%100
21	21	X	-0.004	-0.004	0	%100
22	22	X	-0.003	-0.003	0	%100
23	23	X	-0.003	-0.003	0	%100
24	24	X	-0.003	-0.003	0	%100
25	25	X	-0.003	-0.003	0	%100
26	26	X	-0.004	-0.004	0	%100
27	27	X	-0.004	-0.004	0	%100
28	28	X	-0.003	-0.003	0	%100
29	29	X	-0.003	-0.003	0	%100
30	30	X	-0.003	-0.003	0	%100
31	31	X	-0.003	-0.003	0	%100
32	32	X	-0.004	-0.004	0	%100
33	33	X	-0.004	-0.004	0	%100
34	34	X	-0.003	-0.003	0	%100
35	35	X	-0.003	-0.003	0	%100
36	36	X	-0.003	-0.003	0	%100
37	37	X	-0.003	-0.003	0	%100
38	38	X	-0.004	-0.004	0	%100
39	39	X	-0.004	-0.004	0	%100
40	40	X	-0.004	-0.004	0	%100
41	41	X	-0.004	-0.004	0	%100
42	42	X	-0.004	-0.004	0	%100
43	43	X	-0.003	-0.003	0	%100
44	44	X	-0.003	-0.003	0	%100
45	45	X	-0.003	-0.003	0	%100
46	46	X	-0.003	-0.003	0	%100
47	47	X	-0.003	-0.003	0	%100
48	48	X	-0.003	-0.003	0	%100
49	49	X	-0.003	-0.003	0	%100
50	50	X	-0.003	-0.003	0	%100
51	51	X	-0.003	-0.003	0	%100
52	52	X	-0.003	-0.003	0	%100
53	53	X	-0.003	-0.003	0	%100
54	54	X	-0.003	-0.003	0	%100
55	55	X	-0.003	-0.003	0	%100
56	56	X	-0.003	-0.003	0	%100
57	57	X	-0.003	-0.003	0	%100
58	58	X	-0.003	-0.003	0	%100
59	59	X	-0.003	-0.003	0	%100
60	60	X	-0.003	-0.003	0	%100
61	61	X	-0.003	-0.003	0	%100
62	62	X	-0.003	-0.003	0	%100
63	63	X	-0.003	-0.003	0	%100
64	64	X	-0.003	-0.003	0	%100
65	65	X	-0.003	-0.003	0	%100
66	66	X	-0.003	-0.003	0	%100
67	67	X	-0.003	-0.003	0	%100

Member Distributed Loads (BLC 5 : 90 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
68	68	X	-0.003	-0.003	0	%100
69	69	X	-0.003	-0.003	0	%100
70	70	X	-0.003	-0.003	0	%100
71	71	X	-0.003	-0.003	0	%100
72	72	X	-0.003	-0.003	0	%100
73	73	X	-0.003	-0.003	0	%100
74	74	X	-0.003	-0.003	0	%100
75	75	X	-0.003	-0.003	0	%100
76	76	X	-0.003	-0.003	0	%100
77	77	X	-0.003	-0.003	0	%100
78	78	X	-0.003	-0.003	0	%100
79	79	X	-0.003	-0.003	0	%100
80	80	X	-0.003	-0.003	0	%100
81	81	X	-0.003	-0.003	0	%100
82	82	X	-0.003	-0.003	0	%100
83	83	X	-0.003	-0.003	0	%100
84	84	X	-0.003	-0.003	0	%100
85	85	X	-0.003	-0.003	0	%100
86	86	X	-0.003	-0.003	0	%100
87	189	X	-0.001	-0.001	0	%100
88	190	X	-0.001	-0.001	0	%100
89	191	X	-0.001	-0.001	0	%100
90	193	X	-0.001	-0.001	0	%100
91	196	X	-0.001	-0.001	0	%100
92	199	X	-0.001	-0.001	0	%100
93	202	X	-0.001	-0.001	0	%100
94	207	X	-0.001	-0.001	0	%100
95	210	X	-0.001	-0.001	0	%100
96	213	X	-0.001	-0.001	0	%100
97	216	X	-0.001	-0.001	0	%100
98	218	X	-0.004	-0.004	0	%100
99	219	X	-0.004	-0.004	0	%100
100	220	X	-0.004	-0.004	0	%100
101	222	X	-0.001	-0.001	0	%100
102	225	X	-0.001	-0.001	0	%100
103	228	X	-0.001	-0.001	0	%100
104	231	X	-0.001	-0.001	0	%100
105	233	X	-0.003	-0.003	0	%100
106	234	X	-0.003	-0.003	0	%100
107	235	X	-0.003	-0.003	0	%100
108	236	X	-0.003	-0.003	0	%100
109	237	X	-0.003	-0.003	0	%100
110	238	X	-0.003	-0.003	0	%100
111	239	X	-0.003	-0.003	0	%100
112	240	X	-0.003	-0.003	0	%100
113	241	X	-0.003	-0.003	0	%100
114	242	X	-0.003	-0.003	0	%100
115	243	X	-0.003	-0.003	0	%100
116	244	X	-0.003	-0.003	0	%100
117	245	X	-0.003	-0.003	0	%100
118	246	X	-0.003	-0.003	0	%100
119	247	X	-0.003	-0.003	0	%100
120	248	X	-0.003	-0.003	0	%100
121	249	X	-0.003	-0.003	0	%100
122	250	X	-0.003	-0.003	0	%100

Member Distributed Loads (BLC 5 : 90 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
123	251	X	-0.003	-0.003	0	%100
124	252	X	-0.003	-0.003	0	%100
125	253	X	-0.003	-0.003	0	%100
126	254	X	-0.003	-0.003	0	%100
127	255	X	-0.003	-0.003	0	%100
128	256	X	-0.003	-0.003	0	%100
129	257	X	-0.003	-0.003	0	%100
130	258	X	-0.003	-0.003	0	%100
131	259	X	-0.003	-0.003	0	%100
132	260	X	-0.003	-0.003	0	%100
133	261	X	-0.003	-0.003	0	%100
134	262	X	-0.003	-0.003	0	%100
135	263	X	-0.003	-0.003	0	%100
136	264	X	-0.003	-0.003	0	%100
137	265	X	-0.003	-0.003	0	%100
138	266	X	-0.003	-0.003	0	%100
139	267	X	-0.003	-0.003	0	%100
140	268	X	-0.003	-0.003	0	%100
141	269	X	-0.003	-0.003	0	%100
142	270	X	-0.003	-0.003	0	%100
143	271	X	-0.003	-0.003	0	%100
144	272	X	-0.003	-0.003	0	%100
145	273	X	-0.003	-0.003	0	%100
146	274	X	-0.003	-0.003	0	%100
147	275	X	-0.003	-0.003	0	%100
148	276	X	-0.003	-0.003	0	%100
149	306	X	-0.003	-0.003	0	%100
150	307	X	-0.003	-0.003	0	%100
151	308	X	-0.003	-0.003	0	%100
152	309	X	-0.003	-0.003	0	%100
153	310	X	-0.003	-0.003	0	%100
154	311	X	-0.003	-0.003	0	%100
155	312	X	-0.003	-0.003	0	%100
156	313	X	-0.003	-0.003	0	%100
157	314	X	-0.003	-0.003	0	%100
158	315	X	-0.003	-0.003	0	%100
159	316	X	-0.003	-0.003	0	%100
160	317	X	-0.003	-0.003	0	%100
161	318	X	-0.003	-0.003	0	%100
162	319	X	-0.003	-0.003	0	%100
163	320	X	-0.003	-0.003	0	%100
164	321	X	-0.003	-0.003	0	%100
165	322	X	-0.003	-0.003	0	%100
166	323	X	-0.003	-0.003	0	%100
167	324	X	-0.003	-0.003	0	%100
168	325	X	-0.003	-0.003	0	%100
169	326	X	-0.003	-0.003	0	%100
170	327	X	-0.003	-0.003	0	%100
171	328	X	-0.003	-0.003	0	%100
172	329	X	-0.003	-0.003	0	%100
173	330	X	-0.003	-0.003	0	%100
174	331	X	-0.003	-0.003	0	%100
175	332	X	-0.003	-0.003	0	%100
176	333	X	-0.003	-0.003	0	%100
177	334	X	-0.003	-0.003	0	%100

Member Distributed Loads (BLC 5 : 90 Wind - Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
178	335	X	-0.003	-0.003	0	%100
179	336	X	-0.003	-0.003	0	%100
180	337	X	-0.003	-0.003	0	%100
181	338	X	-0.003	-0.003	0	%100
182	339	X	-0.003	-0.003	0	%100
183	340	X	-0.003	-0.003	0	%100
184	341	X	-0.003	-0.003	0	%100
185	342	X	-0.003	-0.003	0	%100
186	343	X	-0.003	-0.003	0	%100
187	344	X	-0.003	-0.003	0	%100
188	345	X	-0.003	-0.003	0	%100
189	346	X	-0.003	-0.003	0	%100
190	347	X	-0.003	-0.003	0	%100
191	348	X	-0.003	-0.003	0	%100
192	349	X	-0.003	-0.003	0	%100
193	379	X	-0.002	-0.002	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.0003	-0.0003	0	%100
2	2	Z	-0.0003	-0.0003	0	%100
3	3	Z	-0.0003	-0.0003	0	%100
4	4	Z	-0.0001	-0.0001	0	%100
5	5	Z	-0.0001	-0.0001	0	%100
6	6	Z	-0.0001	-0.0001	0	%100
7	7	Z	-0.0001	-0.0001	0	%100
8	8	Z	-0.0001	-0.0001	0	%100
9	9	Z	-0.0001	-0.0001	0	%100
10	10	Z	-0.0008	-0.0008	0	%100
11	11	Z	-0.0008	-0.0008	0	%100
12	12	Z	-0.0007	-0.0007	0	%100
13	13	Z	-0.0007	-0.0007	0	%100
14	14	Z	-0.0008	-0.0008	0	%100
15	15	Z	-0.0008	-0.0008	0	%100
16	16	Z	-0.0007	-0.0007	0	%100
17	17	Z	-0.0007	-0.0007	0	%100
18	18	Z	-0.0008	-0.0008	0	%100
19	19	Z	-0.0008	-0.0008	0	%100
20	20	Z	-0.0007	-0.0007	0	%100
21	21	Z	-0.0007	-0.0007	0	%100
22	22	Z	-0.0005	-0.0005	0	%100
23	23	Z	-0.0005	-0.0005	0	%100
24	24	Z	-0.0006	-0.0006	0	%100
25	25	Z	-0.0006	-0.0006	0	%100
26	26	Z	-0.0005	-0.0005	0	%100
27	27	Z	-0.0005	-0.0005	0	%100
28	28	Z	-0.0005	-0.0005	0	%100
29	29	Z	-0.0005	-0.0005	0	%100
30	30	Z	-0.0006	-0.0006	0	%100
31	31	Z	-0.0006	-0.0006	0	%100
32	32	Z	-0.0005	-0.0005	0	%100
33	33	Z	-0.0005	-0.0005	0	%100
34	34	Z	-0.0005	-0.0005	0	%100
35	35	Z	-0.0005	-0.0005	0	%100
36	36	Z	-0.0006	-0.0006	0	%100

Member Distributed Loads (BLC 6 : 0 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
37	37	Z	-0.0006	-0.0006	0	%100
38	38	Z	-0.0005	-0.0005	0	%100
39	39	Z	-0.0005	-0.0005	0	%100
40	40	Z	-0.0009	-0.0009	0	%100
41	41	Z	-0.0009	-0.0009	0	%100
42	42	Z	-0.0009	-0.0009	0	%100
43	43	Z	-0.0001	-0.0001	0	%100
44	44	Z	-0.0001	-0.0001	0	%100
45	45	Z	-0.0001	-0.0001	0	%100
46	46	Z	-0.0001	-0.0001	0	%100
47	47	Z	-0.0001	-0.0001	0	%100
48	48	Z	-0.0001	-0.0001	0	%100
49	49	Z	-0.0001	-0.0001	0	%100
50	50	Z	-0.0002	-0.0002	0	%100
51	51	Z	-0.0002	-0.0002	0	%100
52	52	Z	-0.0001	-0.0001	0	%100
53	53	Z	-0.0001	-0.0001	0	%100
54	54	Z	-0.0002	-0.0002	0	%100
55	55	Z	-0.0001	-0.0001	0	%100
56	56	Z	-0.0001	-0.0001	0	%100
57	57	Z	-0.0003	-0.0003	0	%100
58	58	Z	-0.0003	-0.0003	0	%100
59	59	Z	-0.0002	-0.0002	0	%100
60	60	Z	-0.0002	-0.0002	0	%100
61	61	Z	-0.0003	-0.0003	0	%100
62	62	Z	-0.0002	-0.0002	0	%100
63	63	Z	-0.0002	-0.0002	0	%100
64	64	Z	-0.0003	-0.0003	0	%100
65	65	Z	-0.0003	-0.0003	0	%100
66	66	Z	-0.0003	-0.0003	0	%100
67	67	Z	-0.0002	-0.0002	0	%100
68	68	Z	-0.0002	-0.0002	0	%100
69	69	Z	-0.0002	-0.0002	0	%100
70	70	Z	-0.0002	-0.0002	0	%100
71	71	Z	-0.0001	-0.0001	0	%100
72	72	Z	-0.0003	-0.0003	0	%100
73	73	Z	-0.0003	-0.0003	0	%100
74	74	Z	-0.0002	-0.0002	0	%100
75	75	Z	-0.0002	-0.0002	0	%100
76	76	Z	-0.0003	-0.0003	0	%100
77	77	Z	-0.0002	-0.0002	0	%100
78	78	Z	-0.0002	-0.0002	0	%100
79	79	Z	-0.0002	-0.0002	0	%100
80	80	Z	-0.0002	-0.0002	0	%100
81	81	Z	-0.0002	-0.0002	0	%100
82	82	Z	-0.0002	-0.0002	0	%100
83	83	Z	-0.0002	-0.0002	0	%100
84	84	Z	-0.0002	-0.0002	0	%100
85	85	Z	-0.0002	-0.0002	0	%100
86	86	Z	-0.0001	-0.0001	0	%100
87	189	Z	-0.0002	-0.0002	0	%100
88	190	Z	-0.0002	-0.0002	0	%100
89	191	Z	-0.0002	-0.0002	0	%100
90	193	Z	-0.0002	-0.0002	0	%100
91	196	Z	-0.0002	-0.0002	0	%100

Member Distributed Loads (BLC 6 : 0 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
92	199	Z	-0.0002	-0.0002	0	%100
93	202	Z	-0.0002	-0.0002	0	%100
94	207	Z	-0.0002	-0.0002	0	%100
95	210	Z	-0.0002	-0.0002	0	%100
96	213	Z	-0.0002	-0.0002	0	%100
97	216	Z	-0.0002	-0.0002	0	%100
98	218	Z	-0.0009	-0.0009	0	%100
99	219	Z	-0.0009	-0.0009	0	%100
100	220	Z	-0.0009	-0.0009	0	%100
101	222	Z	-0.0002	-0.0002	0	%100
102	225	Z	-0.0002	-0.0002	0	%100
103	228	Z	-0.0002	-0.0002	0	%100
104	231	Z	-0.0002	-0.0002	0	%100
105	233	Z	-0.0001	-0.0001	0	%100
106	234	Z	-0.0001	-0.0001	0	%100
107	235	Z	-0.0001	-0.0001	0	%100
108	236	Z	-0.0001	-0.0001	0	%100
109	237	Z	-0.0001	-0.0001	0	%100
110	238	Z	-0.0001	-0.0001	0	%100
111	239	Z	-0.0001	-0.0001	0	%100
112	240	Z	-0.0002	-0.0002	0	%100
113	241	Z	-0.0002	-0.0002	0	%100
114	242	Z	-0.0001	-0.0001	0	%100
115	243	Z	-0.0001	-0.0001	0	%100
116	244	Z	-0.0002	-0.0002	0	%100
117	245	Z	-0.0001	-0.0001	0	%100
118	246	Z	-0.0001	-0.0001	0	%100
119	247	Z	-0.0003	-0.0003	0	%100
120	248	Z	-0.0003	-0.0003	0	%100
121	249	Z	-0.0002	-0.0002	0	%100
122	250	Z	-0.0002	-0.0002	0	%100
123	251	Z	-0.0003	-0.0003	0	%100
124	252	Z	-0.0002	-0.0002	0	%100
125	253	Z	-0.0002	-0.0002	0	%100
126	254	Z	-0.0003	-0.0003	0	%100
127	255	Z	-0.0003	-0.0003	0	%100
128	256	Z	-0.0003	-0.0003	0	%100
129	257	Z	-0.0002	-0.0002	0	%100
130	258	Z	-0.0002	-0.0002	0	%100
131	259	Z	-0.0002	-0.0002	0	%100
132	260	Z	-0.0002	-0.0002	0	%100
133	261	Z	-0.0001	-0.0001	0	%100
134	262	Z	-0.0003	-0.0003	0	%100
135	263	Z	-0.0003	-0.0003	0	%100
136	264	Z	-0.0002	-0.0002	0	%100
137	265	Z	-0.0002	-0.0002	0	%100
138	266	Z	-0.0003	-0.0003	0	%100
139	267	Z	-0.0002	-0.0002	0	%100
140	268	Z	-0.0002	-0.0002	0	%100
141	269	Z	-0.0002	-0.0002	0	%100
142	270	Z	-0.0002	-0.0002	0	%100
143	271	Z	-0.0002	-0.0002	0	%100
144	272	Z	-0.0002	-0.0002	0	%100
145	273	Z	-0.0002	-0.0002	0	%100
146	274	Z	-0.0002	-0.0002	0	%100

Member Distributed Loads (BLC 6 : 0 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
147	275	Z	-0.0002	-0.0002	0	%100
148	276	Z	-0.0001	-0.0001	0	%100
149	306	Z	-0.0001	-0.0001	0	%100
150	307	Z	-0.0001	-0.0001	0	%100
151	308	Z	-0.0001	-0.0001	0	%100
152	309	Z	-0.0001	-0.0001	0	%100
153	310	Z	-0.0001	-0.0001	0	%100
154	311	Z	-0.0001	-0.0001	0	%100
155	312	Z	-0.0001	-0.0001	0	%100
156	313	Z	-0.0002	-0.0002	0	%100
157	314	Z	-0.0002	-0.0002	0	%100
158	315	Z	-0.0001	-0.0001	0	%100
159	316	Z	-0.0001	-0.0001	0	%100
160	317	Z	-0.0002	-0.0002	0	%100
161	318	Z	-0.0001	-0.0001	0	%100
162	319	Z	-0.0001	-0.0001	0	%100
163	320	Z	-0.0003	-0.0003	0	%100
164	321	Z	-0.0003	-0.0003	0	%100
165	322	Z	-0.0002	-0.0002	0	%100
166	323	Z	-0.0002	-0.0002	0	%100
167	324	Z	-0.0003	-0.0003	0	%100
168	325	Z	-0.0002	-0.0002	0	%100
169	326	Z	-0.0002	-0.0002	0	%100
170	327	Z	-0.0003	-0.0003	0	%100
171	328	Z	-0.0003	-0.0003	0	%100
172	329	Z	-0.0003	-0.0003	0	%100
173	330	Z	-0.0002	-0.0002	0	%100
174	331	Z	-0.0002	-0.0002	0	%100
175	332	Z	-0.0002	-0.0002	0	%100
176	333	Z	-0.0002	-0.0002	0	%100
177	334	Z	-0.0001	-0.0001	0	%100
178	335	Z	-0.0003	-0.0003	0	%100
179	336	Z	-0.0003	-0.0003	0	%100
180	337	Z	-0.0002	-0.0002	0	%100
181	338	Z	-0.0002	-0.0002	0	%100
182	339	Z	-0.0003	-0.0003	0	%100
183	340	Z	-0.0002	-0.0002	0	%100
184	341	Z	-0.0002	-0.0002	0	%100
185	342	Z	-0.0002	-0.0002	0	%100
186	343	Z	-0.0002	-0.0002	0	%100
187	344	Z	-0.0002	-0.0002	0	%100
188	345	Z	-0.0002	-0.0002	0	%100
189	346	Z	-0.0002	-0.0002	0	%100
190	347	Z	-0.0002	-0.0002	0	%100
191	348	Z	-0.0002	-0.0002	0	%100
192	349	Z	-0.0001	-0.0001	0	%100
193	379	Z	-0.0003	-0.0003	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.0003	-0.0003	0	%100
2	2	X	-0.0003	-0.0003	0	%100
3	3	X	-0.0003	-0.0003	0	%100
4	4	X	-0.0001	-0.0001	0	%100
5	5	X	-0.0001	-0.0001	0	%100

Member Distributed Loads (BLC 7 : 90 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
6	6	X	-0.0001	-0.0001	0	%100
7	7	X	-0.0001	-0.0001	0	%100
8	8	X	-0.0001	-0.0001	0	%100
9	9	X	-0.0001	-0.0001	0	%100
10	10	X	-0.0008	-0.0008	0	%100
11	11	X	-0.0008	-0.0008	0	%100
12	12	X	-0.0007	-0.0007	0	%100
13	13	X	-0.0007	-0.0007	0	%100
14	14	X	-0.0008	-0.0008	0	%100
15	15	X	-0.0008	-0.0008	0	%100
16	16	X	-0.0007	-0.0007	0	%100
17	17	X	-0.0007	-0.0007	0	%100
18	18	X	-0.0008	-0.0008	0	%100
19	19	X	-0.0008	-0.0008	0	%100
20	20	X	-0.0007	-0.0007	0	%100
21	21	X	-0.0007	-0.0007	0	%100
22	22	X	-0.0005	-0.0005	0	%100
23	23	X	-0.0005	-0.0005	0	%100
24	24	X	-0.0006	-0.0006	0	%100
25	25	X	-0.0006	-0.0006	0	%100
26	26	X	-0.0005	-0.0005	0	%100
27	27	X	-0.0005	-0.0005	0	%100
28	28	X	-0.0005	-0.0005	0	%100
29	29	X	-0.0005	-0.0005	0	%100
30	30	X	-0.0006	-0.0006	0	%100
31	31	X	-0.0006	-0.0006	0	%100
32	32	X	-0.0005	-0.0005	0	%100
33	33	X	-0.0005	-0.0005	0	%100
34	34	X	-0.0005	-0.0005	0	%100
35	35	X	-0.0005	-0.0005	0	%100
36	36	X	-0.0006	-0.0006	0	%100
37	37	X	-0.0006	-0.0006	0	%100
38	38	X	-0.0005	-0.0005	0	%100
39	39	X	-0.0005	-0.0005	0	%100
40	40	X	-0.0009	-0.0009	0	%100
41	41	X	-0.0009	-0.0009	0	%100
42	42	X	-0.0009	-0.0009	0	%100
43	43	X	-0.0001	-0.0001	0	%100
44	44	X	-0.0001	-0.0001	0	%100
45	45	X	-0.0001	-0.0001	0	%100
46	46	X	-0.0001	-0.0001	0	%100
47	47	X	-0.0001	-0.0001	0	%100
48	48	X	-0.0001	-0.0001	0	%100
49	49	X	-0.0001	-0.0001	0	%100
50	50	X	-0.0002	-0.0002	0	%100
51	51	X	-0.0002	-0.0002	0	%100
52	52	X	-0.0001	-0.0001	0	%100
53	53	X	-0.0001	-0.0001	0	%100
54	54	X	-0.0002	-0.0002	0	%100
55	55	X	-0.0001	-0.0001	0	%100
56	56	X	-0.0001	-0.0001	0	%100
57	57	X	-0.0003	-0.0003	0	%100
58	58	X	-0.0003	-0.0003	0	%100
59	59	X	-0.0002	-0.0002	0	%100
60	60	X	-0.0002	-0.0002	0	%100

Member Distributed Loads (BLC 7 : 90 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
61	61	X	-0.0003	-0.0003	0	%100
62	62	X	-0.0002	-0.0002	0	%100
63	63	X	-0.0002	-0.0002	0	%100
64	64	X	-0.0003	-0.0003	0	%100
65	65	X	-0.0003	-0.0003	0	%100
66	66	X	-0.0003	-0.0003	0	%100
67	67	X	-0.0002	-0.0002	0	%100
68	68	X	-0.0002	-0.0002	0	%100
69	69	X	-0.0002	-0.0002	0	%100
70	70	X	-0.0002	-0.0002	0	%100
71	71	X	-0.0001	-0.0001	0	%100
72	72	X	-0.0003	-0.0003	0	%100
73	73	X	-0.0003	-0.0003	0	%100
74	74	X	-0.0002	-0.0002	0	%100
75	75	X	-0.0002	-0.0002	0	%100
76	76	X	-0.0003	-0.0003	0	%100
77	77	X	-0.0002	-0.0002	0	%100
78	78	X	-0.0002	-0.0002	0	%100
79	79	X	-0.0002	-0.0002	0	%100
80	80	X	-0.0002	-0.0002	0	%100
81	81	X	-0.0002	-0.0002	0	%100
82	82	X	-0.0002	-0.0002	0	%100
83	83	X	-0.0002	-0.0002	0	%100
84	84	X	-0.0002	-0.0002	0	%100
85	85	X	-0.0002	-0.0002	0	%100
86	86	X	-0.0001	-0.0001	0	%100
87	189	X	-0.0002	-0.0002	0	%100
88	190	X	-0.0002	-0.0002	0	%100
89	191	X	-0.0002	-0.0002	0	%100
90	193	X	-0.0002	-0.0002	0	%100
91	196	X	-0.0002	-0.0002	0	%100
92	199	X	-0.0002	-0.0002	0	%100
93	202	X	-0.0002	-0.0002	0	%100
94	207	X	-0.0002	-0.0002	0	%100
95	210	X	-0.0002	-0.0002	0	%100
96	213	X	-0.0002	-0.0002	0	%100
97	216	X	-0.0002	-0.0002	0	%100
98	218	X	-0.0009	-0.0009	0	%100
99	219	X	-0.0009	-0.0009	0	%100
100	220	X	-0.0009	-0.0009	0	%100
101	222	X	-0.0002	-0.0002	0	%100
102	225	X	-0.0002	-0.0002	0	%100
103	228	X	-0.0002	-0.0002	0	%100
104	231	X	-0.0002	-0.0001	0	%100
105	233	X	-0.0001	-0.0001	0	%100
106	234	X	-0.0001	-0.0001	0	%100
107	235	X	-0.0001	-0.0001	0	%100
108	236	X	-0.0001	-0.0001	0	%100
109	237	X	-0.0001	-0.0001	0	%100
110	238	X	-0.0001	-0.0001	0	%100
111	239	X	-0.0001	-0.0002	0	%100
112	240	X	-0.0002	-0.0002	0	%100
113	241	X	-0.0002	-0.0001	0	%100
114	242	X	-0.0001	-0.0001	0	%100
115	243	X	-0.0001			

Member Distributed Loads (BLC 7 : 90 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
116	244	X	-0.0002	-0.0002	0	%100
117	245	X	-0.0001	-0.0001	0	%100
118	246	X	-0.0001	-0.0001	0	%100
119	247	X	-0.0003	-0.0003	0	%100
120	248	X	-0.0003	-0.0003	0	%100
121	249	X	-0.0002	-0.0002	0	%100
122	250	X	-0.0002	-0.0002	0	%100
123	251	X	-0.0003	-0.0003	0	%100
124	252	X	-0.0002	-0.0002	0	%100
125	253	X	-0.0002	-0.0002	0	%100
126	254	X	-0.0003	-0.0003	0	%100
127	255	X	-0.0003	-0.0003	0	%100
128	256	X	-0.0003	-0.0003	0	%100
129	257	X	-0.0002	-0.0002	0	%100
130	258	X	-0.0002	-0.0002	0	%100
131	259	X	-0.0002	-0.0002	0	%100
132	260	X	-0.0002	-0.0002	0	%100
133	261	X	-0.0001	-0.0001	0	%100
134	262	X	-0.0003	-0.0003	0	%100
135	263	X	-0.0003	-0.0003	0	%100
136	264	X	-0.0002	-0.0002	0	%100
137	265	X	-0.0002	-0.0002	0	%100
138	266	X	-0.0003	-0.0003	0	%100
139	267	X	-0.0002	-0.0002	0	%100
140	268	X	-0.0002	-0.0002	0	%100
141	269	X	-0.0002	-0.0002	0	%100
142	270	X	-0.0002	-0.0002	0	%100
143	271	X	-0.0002	-0.0002	0	%100
144	272	X	-0.0002	-0.0002	0	%100
145	273	X	-0.0002	-0.0002	0	%100
146	274	X	-0.0002	-0.0002	0	%100
147	275	X	-0.0002	-0.0002	0	%100
148	276	X	-0.0001	-0.0001	0	%100
149	306	X	-0.0001	-0.0001	0	%100
150	307	X	-0.0001	-0.0001	0	%100
151	308	X	-0.0001	-0.0001	0	%100
152	309	X	-0.0001	-0.0001	0	%100
153	310	X	-0.0001	-0.0001	0	%100
154	311	X	-0.0001	-0.0001	0	%100
155	312	X	-0.0001	-0.0001	0	%100
156	313	X	-0.0002	-0.0002	0	%100
157	314	X	-0.0002	-0.0002	0	%100
158	315	X	-0.0001	-0.0001	0	%100
159	316	X	-0.0001	-0.0001	0	%100
160	317	X	-0.0002	-0.0002	0	%100
161	318	X	-0.0001	-0.0001	0	%100
162	319	X	-0.0001	-0.0001	0	%100
163	320	X	-0.0003	-0.0003	0	%100
164	321	X	-0.0003	-0.0003	0	%100
165	322	X	-0.0002	-0.0002	0	%100
166	323	X	-0.0002	-0.0002	0	%100
167	324	X	-0.0003	-0.0003	0	%100
168	325	X	-0.0002	-0.0002	0	%100
169	326	X	-0.0002	-0.0002	0	%100
170	327	X	-0.0003	-0.0003	0	%100

Member Distributed Loads (BLC 7 : 90 Wind - Service) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
171	328	X	-0.0003	-0.0003	0	%100
172	329	X	-0.0003	-0.0003	0	%100
173	330	X	-0.0002	-0.0002	0	%100
174	331	X	-0.0002	-0.0002	0	%100
175	332	X	-0.0002	-0.0002	0	%100
176	333	X	-0.0002	-0.0002	0	%100
177	334	X	-0.0001	-0.0001	0	%100
178	335	X	-0.0003	-0.0003	0	%100
179	336	X	-0.0003	-0.0003	0	%100
180	337	X	-0.0002	-0.0002	0	%100
181	338	X	-0.0002	-0.0002	0	%100
182	339	X	-0.0003	-0.0003	0	%100
183	340	X	-0.0002	-0.0002	0	%100
184	341	X	-0.0002	-0.0002	0	%100
185	342	X	-0.0002	-0.0002	0	%100
186	343	X	-0.0002	-0.0002	0	%100
187	344	X	-0.0002	-0.0002	0	%100
188	345	X	-0.0002	-0.0002	0	%100
189	346	X	-0.0002	-0.0002	0	%100
190	347	X	-0.0002	-0.0002	0	%100
191	348	X	-0.0002	-0.0002	0	%100
192	349	X	-0.0001	-0.0001	0	%100
193	379	X	-0.0003	-0.0003	0	%100

Member Distributed Loads (BLC 8 : Ice)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Y	-0.006	-0.006	0	%100
2	2	Y	-0.006	-0.006	0	%100
3	3	Y	-0.006	-0.006	0	%100
4	4	Y	-0.006	-0.006	0	%100
5	5	Y	-0.006	-0.006	0	%100
6	6	Y	-0.006	-0.006	0	%100
7	7	Y	-0.006	-0.006	0	%100
8	8	Y	-0.006	-0.006	0	%100
9	9	Y	-0.006	-0.006	0	%100
10	10	Y	-0.007	-0.007	0	%100
11	11	Y	-0.007	-0.007	0	%100
12	12	Y	-0.007	-0.007	0	%100
13	13	Y	-0.007	-0.007	0	%100
14	14	Y	-0.007	-0.007	0	%100
15	15	Y	-0.007	-0.007	0	%100
16	16	Y	-0.007	-0.007	0	%100
17	17	Y	-0.007	-0.007	0	%100
18	18	Y	-0.007	-0.007	0	%100
19	19	Y	-0.007	-0.007	0	%100
20	20	Y	-0.007	-0.007	0	%100
21	21	Y	-0.007	-0.007	0	%100
22	22	Y	-0.005	-0.005	0	%100
23	23	Y	-0.005	-0.005	0	%100
24	24	Y	-0.005	-0.005	0	%100
25	25	Y	-0.005	-0.005	0	%100
26	26	Y	-0.005	-0.005	0	%100
27	27	Y	-0.005	-0.005	0	%100
28	28	Y	-0.005	-0.005	0	%100
29	29	Y	-0.005	-0.005	0	%100

Member Distributed Loads (BLC 8 : Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
30	30	Y	-0.005	-0.005	0	%100
31	31	Y	-0.005	-0.005	0	%100
32	32	Y	-0.005	-0.005	0	%100
33	33	Y	-0.005	-0.005	0	%100
34	34	Y	-0.005	-0.005	0	%100
35	35	Y	-0.005	-0.005	0	%100
36	36	Y	-0.005	-0.005	0	%100
37	37	Y	-0.005	-0.005	0	%100
38	38	Y	-0.005	-0.005	0	%100
39	39	Y	-0.005	-0.005	0	%100
40	40	Y	-0.009	-0.009	0	%100
41	41	Y	-0.009	-0.009	0	%100
42	42	Y	-0.009	-0.009	0	%100
43	43	Y	-0.007	-0.007	0	%100
44	44	Y	-0.007	-0.007	0	%100
45	45	Y	-0.007	-0.007	0	%100
46	46	Y	-0.007	-0.007	0	%100
47	47	Y	-0.007	-0.007	0	%100
48	48	Y	-0.007	-0.007	0	%100
49	49	Y	-0.007	-0.007	0	%100
50	50	Y	-0.007	-0.007	0	%100
51	51	Y	-0.007	-0.007	0	%100
52	52	Y	-0.007	-0.007	0	%100
53	53	Y	-0.007	-0.007	0	%100
54	54	Y	-0.007	-0.007	0	%100
55	55	Y	-0.007	-0.007	0	%100
56	56	Y	-0.007	-0.007	0	%100
57	57	Y	-0.003	-0.003	0	%100
58	58	Y	-0.003	-0.003	0	%100
59	59	Y	-0.003	-0.003	0	%100
60	60	Y	-0.003	-0.003	0	%100
61	61	Y	-0.003	-0.003	0	%100
62	62	Y	-0.003	-0.003	0	%100
63	63	Y	-0.003	-0.003	0	%100
64	64	Y	-0.003	-0.003	0	%100
65	65	Y	-0.003	-0.003	0	%100
66	66	Y	-0.003	-0.003	0	%100
67	67	Y	-0.003	-0.003	0	%100
68	68	Y	-0.003	-0.003	0	%100
69	69	Y	-0.003	-0.003	0	%100
70	70	Y	-0.003	-0.003	0	%100
71	71	Y	-0.003	-0.003	0	%100
72	72	Y	-0.003	-0.003	0	%100
73	73	Y	-0.003	-0.003	0	%100
74	74	Y	-0.003	-0.003	0	%100
75	75	Y	-0.003	-0.003	0	%100
76	76	Y	-0.003	-0.003	0	%100
77	77	Y	-0.003	-0.003	0	%100
78	78	Y	-0.003	-0.003	0	%100
79	79	Y	-0.003	-0.003	0	%100
80	80	Y	-0.003	-0.003	0	%100
81	81	Y	-0.003	-0.003	0	%100
82	82	Y	-0.003	-0.003	0	%100
83	83	Y	-0.003	-0.003	0	%100
84	84	Y	-0.003	-0.003	0	%100

Member Distributed Loads (BLC 8 : Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
85	85	Y	-0.003	-0.003	0	%100
86	86	Y	-0.003	-0.003	0	%100
87	189	Y	-0.005	-0.005	0	%100
88	190	Y	-0.005	-0.005	0	%100
89	191	Y	-0.005	-0.005	0	%100
90	193	Y	-0.005	-0.005	0	%100
91	196	Y	-0.005	-0.005	0	%100
92	199	Y	-0.005	-0.005	0	%100
93	202	Y	-0.005	-0.005	0	%100
94	207	Y	-0.005	-0.005	0	%100
95	210	Y	-0.005	-0.005	0	%100
96	213	Y	-0.005	-0.005	0	%100
97	216	Y	-0.005	-0.005	0	%100
98	218	Y	-0.008	-0.008	0	%100
99	219	Y	-0.008	-0.008	0	%100
100	220	Y	-0.008	-0.008	0	%100
101	222	Y	-0.005	-0.005	0	%100
102	225	Y	-0.005	-0.005	0	%100
103	228	Y	-0.005	-0.005	0	%100
104	231	Y	-0.005	-0.005	0	%100
105	233	Y	-0.007	-0.007	0	%100
106	234	Y	-0.007	-0.007	0	%100
107	235	Y	-0.007	-0.007	0	%100
108	236	Y	-0.007	-0.007	0	%100
109	237	Y	-0.007	-0.007	0	%100
110	238	Y	-0.007	-0.007	0	%100
111	239	Y	-0.007	-0.007	0	%100
112	240	Y	-0.007	-0.007	0	%100
113	241	Y	-0.007	-0.007	0	%100
114	242	Y	-0.007	-0.007	0	%100
115	243	Y	-0.007	-0.007	0	%100
116	244	Y	-0.007	-0.007	0	%100
117	245	Y	-0.007	-0.007	0	%100
118	246	Y	-0.007	-0.003	0	%100
119	247	Y	-0.003	-0.003	0	%100
120	248	Y	-0.003	-0.003	0	%100
121	249	Y	-0.003	-0.003	0	%100
122	250	Y	-0.003	-0.003	0	%100
123	251	Y	-0.003	-0.003	0	%100
124	252	Y	-0.003	-0.003	0	%100
125	253	Y	-0.003	-0.003	0	%100
126	254	Y	-0.003	-0.003	0	%100
127	255	Y	-0.003	-0.003	0	%100
128	256	Y	-0.003	-0.003	0	%100
129	257	Y	-0.003	-0.003	0	%100
130	258	Y	-0.003	-0.003	0	%100
131	259	Y	-0.003	-0.003	0	%100
132	260	Y	-0.003	-0.003	0	%100
133	261	Y	-0.003	-0.003	0	%100
134	262	Y	-0.003	-0.003	0	%100
135	263	Y	-0.003	-0.003	0	%100
136	264	Y	-0.003	-0.003	0	%100
137	265	Y	-0.003	-0.003	0	%100
138	266	Y	-0.003	-0.003	0	%100
139	267	Y	-0.003	-0.003	0	%100

Member Distributed Loads (BLC 8 : Ice) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
140	268	Y	-0.003	-0.003	0	%100
141	269	Y	-0.003	-0.003	0	%100
142	270	Y	-0.003	-0.003	0	%100
143	271	Y	-0.003	-0.003	0	%100
144	272	Y	-0.003	-0.003	0	%100
145	273	Y	-0.003	-0.003	0	%100
146	274	Y	-0.003	-0.003	0	%100
147	275	Y	-0.003	-0.003	0	%100
148	276	Y	-0.003	-0.003	0	%100
149	306	Y	-0.007	-0.007	0	%100
150	307	Y	-0.007	-0.007	0	%100
151	308	Y	-0.007	-0.007	0	%100
152	309	Y	-0.007	-0.007	0	%100
153	310	Y	-0.007	-0.007	0	%100
154	311	Y	-0.007	-0.007	0	%100
155	312	Y	-0.007	-0.007	0	%100
156	313	Y	-0.007	-0.007	0	%100
157	314	Y	-0.007	-0.007	0	%100
158	315	Y	-0.007	-0.007	0	%100
159	316	Y	-0.007	-0.007	0	%100
160	317	Y	-0.007	-0.007	0	%100
161	318	Y	-0.007	-0.007	0	%100
162	319	Y	-0.007	-0.007	0	%100
163	320	Y	-0.003	-0.003	0	%100
164	321	Y	-0.003	-0.003	0	%100
165	322	Y	-0.003	-0.003	0	%100
166	323	Y	-0.003	-0.003	0	%100
167	324	Y	-0.003	-0.003	0	%100
168	325	Y	-0.003	-0.003	0	%100
169	326	Y	-0.003	-0.003	0	%100
170	327	Y	-0.003	-0.003	0	%100
171	328	Y	-0.003	-0.003	0	%100
172	329	Y	-0.003	-0.003	0	%100
173	330	Y	-0.003	-0.003	0	%100
174	331	Y	-0.003	-0.003	0	%100
175	332	Y	-0.003	-0.003	0	%100
176	333	Y	-0.003	-0.003	0	%100
177	334	Y	-0.003	-0.003	0	%100
178	335	Y	-0.003	-0.003	0	%100
179	336	Y	-0.003	-0.003	0	%100
180	337	Y	-0.003	-0.003	0	%100
181	338	Y	-0.003	-0.003	0	%100
182	339	Y	-0.003	-0.003	0	%100
183	340	Y	-0.003	-0.003	0	%100
184	341	Y	-0.003	-0.003	0	%100
185	342	Y	-0.003	-0.003	0	%100
186	343	Y	-0.003	-0.003	0	%100
187	344	Y	-0.003	-0.003	0	%100
188	345	Y	-0.003	-0.003	0	%100
189	346	Y	-0.003	-0.003	0	%100
190	347	Y	-0.003	-0.003	0	%100
191	348	Y	-0.003	-0.003	0	%100
192	349	Y	-0.003	-0.003	0	%100
193	379	Y	-0.006	-0.006	0	%100

Member Distributed Loads (BLC 9 : 0 Seismic)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	Z	-0.001	-0.001	0	%100
2	2	Z	-0.001	-0.001	0	%100
3	3	Z	-0.001	-0.001	0	%100
4	4	Z	-0.0008	-0.0008	0	%100
5	5	Z	-0.0008	-0.0008	0	%100
6	6	Z	-0.0008	-0.0008	0	%100
7	7	Z	-0.0008	-0.0008	0	%100
8	8	Z	-0.0008	-0.0008	0	%100
9	9	Z	-0.0008	-0.0008	0	%100
10	10	Z	-0.002	-0.002	0	%100
11	11	Z	-0.002	-0.002	0	%100
12	12	Z	-0.002	-0.002	0	%100
13	13	Z	-0.002	-0.002	0	%100
14	14	Z	-0.002	-0.002	0	%100
15	15	Z	-0.002	-0.002	0	%100
16	16	Z	-0.002	-0.002	0	%100
17	17	Z	-0.002	-0.002	0	%100
18	18	Z	-0.002	-0.002	0	%100
19	19	Z	-0.002	-0.002	0	%100
20	20	Z	-0.002	-0.002	0	%100
21	21	Z	-0.002	-0.002	0	%100
22	22	Z	-0.0006	-0.0006	0	%100
23	23	Z	-0.0006	-0.0006	0	%100
24	24	Z	-0.0006	-0.0006	0	%100
25	25	Z	-0.0006	-0.0006	0	%100
26	26	Z	-0.0006	-0.0006	0	%100
27	27	Z	-0.0006	-0.0006	0	%100
28	28	Z	-0.0006	-0.0006	0	%100
29	29	Z	-0.0006	-0.0006	0	%100
30	30	Z	-0.0006	-0.0006	0	%100
31	31	Z	-0.0006	-0.0006	0	%100
32	32	Z	-0.0006	-0.0006	0	%100
33	33	Z	-0.0006	-0.0006	0	%100
34	34	Z	-0.0006	-0.0006	0	%100
35	35	Z	-0.0006	-0.0006	0	%100
36	36	Z	-0.0006	-0.0006	0	%100
37	37	Z	-0.0006	-0.0006	0	%100
38	38	Z	-0.0006	-0.0006	0	%100
39	39	Z	-0.0006	-0.0006	0	%100
40	40	Z	-0.002	-0.002	0	%100
41	41	Z	-0.002	-0.002	0	%100
42	42	Z	-0.002	-0.002	0	%100
43	43	Z	-0.001	-0.001	0	%100
44	44	Z	-0.001	-0.001	0	%100
45	45	Z	-0.001	-0.001	0	%100
46	46	Z	-0.001	-0.001	0	%100
47	47	Z	-0.001	-0.001	0	%100
48	48	Z	-0.001	-0.001	0	%100
49	49	Z	-0.001	-0.001	0	%100
50	50	Z	-0.001	-0.001	0	%100
51	51	Z	-0.001	-0.001	0	%100
52	52	Z	-0.001	-0.001	0	%100
53	53	Z	-0.001	-0.001	0	%100
54	54	Z	-0.001	-0.001	0	%100
55	55	Z	-0.001	-0.001	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
56	56	Z	-0.001	-0.001	0	%100
57	57	Z	-0.0003	-0.0003	0	%100
58	58	Z	-0.0003	-0.0003	0	%100
59	59	Z	-0.0003	-0.0003	0	%100
60	60	Z	-0.0003	-0.0003	0	%100
61	61	Z	-0.0003	-0.0003	0	%100
62	62	Z	-0.0003	-0.0003	0	%100
63	63	Z	-0.0003	-0.0003	0	%100
64	64	Z	-0.0003	-0.0003	0	%100
65	65	Z	-0.0003	-0.0003	0	%100
66	66	Z	-0.0003	-0.0003	0	%100
67	67	Z	-0.0003	-0.0003	0	%100
68	68	Z	-0.0002	-0.0002	0	%100
69	69	Z	-0.0002	-0.0002	0	%100
70	70	Z	-0.0002	-0.0002	0	%100
71	71	Z	-0.0002	-0.0002	0	%100
72	72	Z	-0.0003	-0.0003	0	%100
73	73	Z	-0.0003	-0.0003	0	%100
74	74	Z	-0.0003	-0.0003	0	%100
75	75	Z	-0.0003	-0.0003	0	%100
76	76	Z	-0.0003	-0.0003	0	%100
77	77	Z	-0.0003	-0.0003	0	%100
78	78	Z	-0.0003	-0.0003	0	%100
79	79	Z	-0.0003	-0.0003	0	%100
80	80	Z	-0.0003	-0.0003	0	%100
81	81	Z	-0.0003	-0.0003	0	%100
82	82	Z	-0.0003	-0.0003	0	%100
83	83	Z	-0.0002	-0.0002	0	%100
84	84	Z	-0.0002	-0.0002	0	%100
85	85	Z	-0.0002	-0.0002	0	%100
86	86	Z	-0.0002	-0.0002	0	%100
87	189	Z	-0.0008	-0.0008	0	%100
88	190	Z	-0.0008	-0.0008	0	%100
89	191	Z	-0.0008	-0.0008	0	%100
90	193	Z	-0.0008	-0.0008	0	%100
91	196	Z	-0.0008	-0.0008	0	%100
92	199	Z	-0.0008	-0.0008	0	%100
93	202	Z	-0.0008	-0.0008	0	%100
94	207	Z	-0.0008	-0.0008	0	%100
95	210	Z	-0.0008	-0.0008	0	%100
96	213	Z	-0.0008	-0.0008	0	%100
97	216	Z	-0.0008	-0.0008	0	%100
98	218	Z	-0.002	-0.002	0	%100
99	219	Z	-0.002	-0.002	0	%100
100	220	Z	-0.002	-0.002	0	%100
101	222	Z	-0.0008	-0.0008	0	%100
102	225	Z	-0.0008	-0.0008	0	%100
103	228	Z	-0.0008	-0.0008	0	%100
104	231	Z	-0.0008	-0.0008	0	%100
105	233	Z	-0.001	-0.001	0	%100
106	234	Z	-0.001	-0.001	0	%100
107	235	Z	-0.001	-0.001	0	%100
108	236	Z	-0.001	-0.001	0	%100
109	237	Z	-0.001	-0.001	0	%100
110	238	Z	-0.001	-0.001	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
111	239	Z	-0.001	-0.001	0	%100
112	240	Z	-0.001	-0.001	0	%100
113	241	Z	-0.001	-0.001	0	%100
114	242	Z	-0.001	-0.001	0	%100
115	243	Z	-0.001	-0.001	0	%100
116	244	Z	-0.001	-0.001	0	%100
117	245	Z	-0.001	-0.001	0	%100
118	246	Z	-0.001	-0.001	0	%100
119	247	Z	-0.0003	-0.0003	0	%100
120	248	Z	-0.0003	-0.0003	0	%100
121	249	Z	-0.0003	-0.0003	0	%100
122	250	Z	-0.0003	-0.0003	0	%100
123	251	Z	-0.0003	-0.0003	0	%100
124	252	Z	-0.0003	-0.0003	0	%100
125	253	Z	-0.0003	-0.0003	0	%100
126	254	Z	-0.0003	-0.0003	0	%100
127	255	Z	-0.0003	-0.0003	0	%100
128	256	Z	-0.0003	-0.0003	0	%100
129	257	Z	-0.0003	-0.0003	0	%100
130	258	Z	-0.0002	-0.0002	0	%100
131	259	Z	-0.0002	-0.0002	0	%100
132	260	Z	-0.0002	-0.0002	0	%100
133	261	Z	-0.0002	-0.0002	0	%100
134	262	Z	-0.0003	-0.0003	0	%100
135	263	Z	-0.0003	-0.0003	0	%100
136	264	Z	-0.0003	-0.0003	0	%100
137	265	Z	-0.0003	-0.0003	0	%100
138	266	Z	-0.0003	-0.0003	0	%100
139	267	Z	-0.0003	-0.0003	0	%100
140	268	Z	-0.0003	-0.0003	0	%100
141	269	Z	-0.0003	-0.0003	0	%100
142	270	Z	-0.0003	-0.0003	0	%100
143	271	Z	-0.0003	-0.0003	0	%100
144	272	Z	-0.0003	-0.0003	0	%100
145	273	Z	-0.0002	-0.0002	0	%100
146	274	Z	-0.0002	-0.0002	0	%100
147	275	Z	-0.0002	-0.0002	0	%100
148	276	Z	-0.0002	-0.0002	0	%100
149	306	Z	-0.001	-0.001	0	%100
150	307	Z	-0.001	-0.001	0	%100
151	308	Z	-0.001	-0.001	0	%100
152	309	Z	-0.001	-0.001	0	%100
153	310	Z	-0.001	-0.001	0	%100
154	311	Z	-0.001	-0.001	0	%100
155	312	Z	-0.001	-0.001	0	%100
156	313	Z	-0.001	-0.001	0	%100
157	314	Z	-0.001	-0.001	0	%100
158	315	Z	-0.001	-0.001	0	%100
159	316	Z	-0.001	-0.001	0	%100
160	317	Z	-0.001	-0.001	0	%100
161	318	Z	-0.001	-0.001	0	%100
162	319	Z	-0.001	-0.001	0	%100
163	320	Z	-0.0003	-0.0003	0	%100
164	321	Z	-0.0003	-0.0003	0	%100
165	322	Z	-0.0003	-0.0003	0	%100

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

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
166	323	Z	-0.0003	-0.0003	0	%100
167	324	Z	-0.0003	-0.0003	0	%100
168	325	Z	-0.0003	-0.0003	0	%100
169	326	Z	-0.0003	-0.0003	0	%100
170	327	Z	-0.0003	-0.0003	0	%100
171	328	Z	-0.0003	-0.0003	0	%100
172	329	Z	-0.0003	-0.0003	0	%100
173	330	Z	-0.0003	-0.0003	0	%100
174	331	Z	-0.0002	-0.0002	0	%100
175	332	Z	-0.0002	-0.0002	0	%100
176	333	Z	-0.0002	-0.0002	0	%100
177	334	Z	-0.0002	-0.0002	0	%100
178	335	Z	-0.0003	-0.0003	0	%100
179	336	Z	-0.0003	-0.0003	0	%100
180	337	Z	-0.0003	-0.0003	0	%100
181	338	Z	-0.0003	-0.0003	0	%100
182	339	Z	-0.0003	-0.0003	0	%100
183	340	Z	-0.0003	-0.0003	0	%100
184	341	Z	-0.0003	-0.0003	0	%100
185	342	Z	-0.0003	-0.0003	0	%100
186	343	Z	-0.0003	-0.0003	0	%100
187	344	Z	-0.0003	-0.0003	0	%100
188	345	Z	-0.0003	-0.0003	0	%100
189	346	Z	-0.0002	-0.0002	0	%100
190	347	Z	-0.0002	-0.0002	0	%100
191	348	Z	-0.0002	-0.0002	0	%100
192	349	Z	-0.0002	-0.0002	0	%100
193	379	Z	-0.001	-0.001	0	%100

Member Distributed Loads (BLC 10 : 90 Seismic)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	1	X	-0.001	-0.001	0	%100
2	2	X	-0.001	-0.001	0	%100
3	3	X	-0.001	-0.001	0	%100
4	4	X	-0.0008	-0.0008	0	%100
5	5	X	-0.0008	-0.0008	0	%100
6	6	X	-0.0008	-0.0008	0	%100
7	7	X	-0.0008	-0.0008	0	%100
8	8	X	-0.0008	-0.0008	0	%100
9	9	X	-0.0008	-0.0008	0	%100
10	10	X	-0.002	-0.002	0	%100
11	11	X	-0.002	-0.002	0	%100
12	12	X	-0.002	-0.002	0	%100
13	13	X	-0.002	-0.002	0	%100
14	14	X	-0.002	-0.002	0	%100
15	15	X	-0.002	-0.002	0	%100
16	16	X	-0.002	-0.002	0	%100
17	17	X	-0.002	-0.002	0	%100
18	18	X	-0.002	-0.002	0	%100
19	19	X	-0.002	-0.002	0	%100
20	20	X	-0.002	-0.002	0	%100
21	21	X	-0.002	-0.002	0	%100
22	22	X	-0.0006	-0.0006	0	%100
23	23	X	-0.0006	-0.0006	0	%100
24	24	X	-0.0006	-0.0006	0	%100

Member Distributed Loads (BLC 10 : 90 Seismic) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
25	25	X	-0.0006	-0.0006	0	%100
26	26	X	-0.0006	-0.0006	0	%100
27	27	X	-0.0006	-0.0006	0	%100
28	28	X	-0.0006	-0.0006	0	%100
29	29	X	-0.0006	-0.0006	0	%100
30	30	X	-0.0006	-0.0006	0	%100
31	31	X	-0.0006	-0.0006	0	%100
32	32	X	-0.0006	-0.0006	0	%100
33	33	X	-0.0006	-0.0006	0	%100
34	34	X	-0.0006	-0.0006	0	%100
35	35	X	-0.0006	-0.0006	0	%100
36	36	X	-0.0006	-0.0006	0	%100
37	37	X	-0.0006	-0.0006	0	%100
38	38	X	-0.0006	-0.0006	0	%100
39	39	X	-0.0006	-0.0006	0	%100
40	40	X	-0.002	-0.002	0	%100
41	41	X	-0.002	-0.002	0	%100
42	42	X	-0.002	-0.002	0	%100
43	43	X	-0.001	-0.001	0	%100
44	44	X	-0.001	-0.001	0	%100
45	45	X	-0.001	-0.001	0	%100
46	46	X	-0.001	-0.001	0	%100
47	47	X	-0.001	-0.001	0	%100
48	48	X	-0.001	-0.001	0	%100
49	49	X	-0.001	-0.001	0	%100
50	50	X	-0.001	-0.001	0	%100
51	51	X	-0.001	-0.001	0	%100
52	52	X	-0.001	-0.001	0	%100
53	53	X	-0.001	-0.001	0	%100
54	54	X	-0.001	-0.001	0	%100
55	55	X	-0.001	-0.001	0	%100
56	56	X	-0.001	-0.001	0	%100
57	57	X	-0.0003	-0.0003	0	%100
58	58	X	-0.0003	-0.0003	0	%100
59	59	X	-0.0003	-0.0003	0	%100
60	60	X	-0.0003	-0.0003	0	%100
61	61	X	-0.0003	-0.0003	0	%100
62	62	X	-0.0003	-0.0003	0	%100
63	63	X	-0.0003	-0.0003	0	%100
64	64	X	-0.0003	-0.0003	0	%100
65	65	X	-0.0003	-0.0003	0	%100
66	66	X	-0.0003	-0.0003	0	%100
67	67	X	-0.0003	-0.0003	0	%100
68	68	X	-0.0002	-0.0002	0	%100
69	69	X	-0.0002	-0.0002	0	%100
70	70	X	-0.0002	-0.0002	0	%100
71	71	X	-0.0002	-0.0002	0	%100
72	72	X	-0.0003	-0.0003	0	%100
73	73	X	-0.0003	-0.0003	0	%100
74	74	X	-0.0003	-0.0003	0	%100
75	75	X	-0.0003	-0.0003	0	%100
76	76	X	-0.0003	-0.0003	0	%100
77	77	X	-0.0003	-0.0003	0	%100
78	78	X	-0.0003	-0.0003	0	%100
79	79	X	-0.0003	-0.0003	0	%100

Member Distributed Loads (BLC 10 : 90 Seismic) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
80	80	X	-0.0003	-0.0003	0	%100
81	81	X	-0.0003	-0.0003	0	%100
82	82	X	-0.0003	-0.0003	0	%100
83	83	X	-0.0002	-0.0002	0	%100
84	84	X	-0.0002	-0.0002	0	%100
85	85	X	-0.0002	-0.0002	0	%100
86	86	X	-0.0002	-0.0002	0	%100
87	189	X	-0.0008	-0.0008	0	%100
88	190	X	-0.0008	-0.0008	0	%100
89	191	X	-0.0008	-0.0008	0	%100
90	193	X	-0.0008	-0.0008	0	%100
91	196	X	-0.0008	-0.0008	0	%100
92	199	X	-0.0008	-0.0008	0	%100
93	202	X	-0.0008	-0.0008	0	%100
94	207	X	-0.0008	-0.0008	0	%100
95	210	X	-0.0008	-0.0008	0	%100
96	213	X	-0.0008	-0.0008	0	%100
97	216	X	-0.0008	-0.0008	0	%100
98	218	X	-0.002	-0.002	0	%100
99	219	X	-0.002	-0.002	0	%100
100	220	X	-0.002	-0.002	0	%100
101	222	X	-0.0008	-0.0008	0	%100
102	225	X	-0.0008	-0.0008	0	%100
103	228	X	-0.0008	-0.0008	0	%100
104	231	X	-0.0008	-0.0008	0	%100
105	233	X	-0.001	-0.001	0	%100
106	234	X	-0.001	-0.001	0	%100
107	235	X	-0.001	-0.001	0	%100
108	236	X	-0.001	-0.001	0	%100
109	237	X	-0.001	-0.001	0	%100
110	238	X	-0.001	-0.001	0	%100
111	239	X	-0.001	-0.001	0	%100
112	240	X	-0.001	-0.001	0	%100
113	241	X	-0.001	-0.001	0	%100
114	242	X	-0.001	-0.001	0	%100
115	243	X	-0.001	-0.001	0	%100
116	244	X	-0.001	-0.001	0	%100
117	245	X	-0.001	-0.001	0	%100
118	246	X	-0.001	-0.001	0	%100
119	247	X	-0.0003	-0.0003	0	%100
120	248	X	-0.0003	-0.0003	0	%100
121	249	X	-0.0003	-0.0003	0	%100
122	250	X	-0.0003	-0.0003	0	%100
123	251	X	-0.0003	-0.0003	0	%100
124	252	X	-0.0003	-0.0003	0	%100
125	253	X	-0.0003	-0.0003	0	%100
126	254	X	-0.0003	-0.0003	0	%100
127	255	X	-0.0003	-0.0003	0	%100
128	256	X	-0.0003	-0.0003	0	%100
129	257	X	-0.0003	-0.0003	0	%100
130	258	X	-0.0002	-0.0002	0	%100
131	259	X	-0.0002	-0.0002	0	%100
132	260	X	-0.0002	-0.0002	0	%100
133	261	X	-0.0002	-0.0002	0	%100
134	262	X	-0.0003	-0.0003	0	%100

Member Distributed Loads (BLC 10 : 90 Seismic) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
135	263	X	-0.0003	-0.0003	0	%100
136	264	X	-0.0003	-0.0003	0	%100
137	265	X	-0.0003	-0.0003	0	%100
138	266	X	-0.0003	-0.0003	0	%100
139	267	X	-0.0003	-0.0003	0	%100
140	268	X	-0.0003	-0.0003	0	%100
141	269	X	-0.0003	-0.0003	0	%100
142	270	X	-0.0003	-0.0003	0	%100
143	271	X	-0.0003	-0.0003	0	%100
144	272	X	-0.0003	-0.0003	0	%100
145	273	X	-0.0002	-0.0002	0	%100
146	274	X	-0.0002	-0.0002	0	%100
147	275	X	-0.0002	-0.0002	0	%100
148	276	X	-0.0002	-0.0002	0	%100
149	306	X	-0.001	-0.001	0	%100
150	307	X	-0.001	-0.001	0	%100
151	308	X	-0.001	-0.001	0	%100
152	309	X	-0.001	-0.001	0	%100
153	310	X	-0.001	-0.001	0	%100
154	311	X	-0.001	-0.001	0	%100
155	312	X	-0.001	-0.001	0	%100
156	313	X	-0.001	-0.001	0	%100
157	314	X	-0.001	-0.001	0	%100
158	315	X	-0.001	-0.001	0	%100
159	316	X	-0.001	-0.001	0	%100
160	317	X	-0.001	-0.001	0	%100
161	318	X	-0.001	-0.001	0	%100
162	319	X	-0.001	-0.001	0	%100
163	320	X	-0.0003	-0.0003	0	%100
164	321	X	-0.0003	-0.0003	0	%100
165	322	X	-0.0003	-0.0003	0	%100
166	323	X	-0.0003	-0.0003	0	%100
167	324	X	-0.0003	-0.0003	0	%100
168	325	X	-0.0003	-0.0003	0	%100
169	326	X	-0.0003	-0.0003	0	%100
170	327	X	-0.0003	-0.0003	0	%100
171	328	X	-0.0003	-0.0003	0	%100
172	329	X	-0.0003	-0.0003	0	%100
173	330	X	-0.0003	-0.0003	0	%100
174	331	X	-0.0002	-0.0002	0	%100
175	332	X	-0.0002	-0.0002	0	%100
176	333	X	-0.0002	-0.0002	0	%100
177	334	X	-0.0002	-0.0002	0	%100
178	335	X	-0.0003	-0.0003	0	%100
179	336	X	-0.0003	-0.0003	0	%100
180	337	X	-0.0003	-0.0003	0	%100
181	338	X	-0.0003	-0.0003	0	%100
182	339	X	-0.0003	-0.0003	0	%100
183	340	X	-0.0003	-0.0003	0	%100
184	341	X	-0.0003	-0.0003	0	%100
185	342	X	-0.0003	-0.0003	0	%100
186	343	X	-0.0003	-0.0003	0	%100
187	344	X	-0.0003	-0.0003	0	%100
188	345	X	-0.0003	-0.0003	0	%100
189	346	X	-0.0002	-0.0002	0	%100

Member Distributed Loads (BLC 10 : 90 Seismic) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
190	347	X	-0.0002	-0.0002	0	%100
191	348	X	-0.0002	-0.0002	0	%100
192	349	X	-0.0002	-0.0002	0	%100
193	379	X	-0.001	-0.001	0	%100

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	10	Y	-0.003	-0.002	0	0.583
2	10	Y	-0.002	-0.002	0.583	1.166
3	10	Y	-0.002	-0.003	1.166	1.749
4	10	Y	-0.003	-0.002	1.749	2.332
5	10	Y	-0.002	-2.275e-5	2.332	2.914
6	11	Y	-0.003	-0.002	0	0.583
7	11	Y	-0.002	-0.002	0.583	1.166
8	11	Y	-0.002	-0.003	1.166	1.749
9	11	Y	-0.003	-0.002	1.749	2.332
10	11	Y	-0.002	-2.332e-5	2.332	2.914
11	24	Y	-0.005	-0.006	0	0.332
12	24	Y	-0.006	-0.006	0.332	0.664
13	24	Y	-0.006	-0.006	0.664	0.995
14	24	Y	-0.006	-0.004	0.995	1.327
15	24	Y	-0.004	-0.003	1.327	1.659
16	25	Y	-0.004	-0.006	0	0.332
17	25	Y	-0.006	-0.006	0.332	0.664
18	25	Y	-0.006	-0.005	0.664	0.995
19	25	Y	-0.005	-0.004	0.995	1.327
20	25	Y	-0.004	-0.004	1.327	1.659
21	26	Y	-0.0004545	-0.005	0	0.117
22	26	Y	-0.005	-0.008	0.117	0.233
23	26	Y	-0.008	-0.006	0.233	0.35
24	26	Y	-0.006	-0.005	0.35	0.467
25	26	Y	-0.005	-0.008	0.467	0.583
26	27	Y	-0.0004475	-0.005	0	0.117
27	27	Y	-0.005	-0.008	0.117	0.233
28	27	Y	-0.008	-0.006	0.233	0.35
29	27	Y	-0.006	-0.005	0.35	0.467
30	27	Y	-0.005	-0.008	0.467	0.583
31	40	Y	-0.002	-0.003	0	0.594
32	40	Y	-0.003	-0.006	0.594	1.188
33	40	Y	-0.006	-0.005	1.188	1.783
34	40	Y	-0.005	-0.001	1.783	2.377
35	40	Y	-0.001	-6.965e-5	2.377	2.971
36	148	Y	-0.001	-0.001	0.009	0.161
37	149	Y	-0.002	-0.001	0	0.167
38	151	Y	-0.009	-0.005	0	0.142
39	151	Y	-0.005	-7.032e-5	0.142	0.285
40	152	Y	-0.001	-0.002	0	0.095
41	152	Y	-0.002	-0.002	0.095	0.189
42	152	Y	-0.002	-0.0001828	0.189	0.284
43	154	Y	-0.0009467	-0.0009467	0	0.167
44	156	Y	-0.001	-0.001	0.005	0.167
45	157	Y	-0.002	-0.001	0	0.167
46	159	Y	-0.009	-0.005	0	0.142
47	159	Y	-0.005	4.025e-7	0.142	0.285
48	160	Y	-0.001	-0.002	0	0.095

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
49	160	Y	-0.002	-0.002	0.095	0.189
50	160	Y	-0.002	-0.0001829	0.189	0.284
51	162	Y	-0.0009471	-0.0009471	0	0.167
52	4	Y	-0.003	-0.003	0	0.604
53	5	Y	-0.003	-0.003	0	0.604
54	12	Y	-0.001	-0.001	1.518	2.386
55	13	Y	-0.001	-0.001	1.518	2.386
56	22	Y	-0.001	-0.001	0.24	1.124
57	23	Y	-0.001	-0.001	0.24	1.124
58	24	Y	-0.003	-0.003	0	0.829
59	24	Y	-0.003	-0.003	0.829	1.659
60	25	Y	-0.003	-0.003	0	0.829
61	25	Y	-0.003	-0.003	0.829	1.659
62	40	Y	-0.01	-0.01	2.229	2.834
63	153	Y	-0.004	-0.004	0	0.285
64	161	Y	-0.004	-0.004	0	0.284
65	12	Y	-0.003	-0.003	0	0.477
66	12	Y	-0.003	-0.002	0.477	0.954
67	12	Y	-0.002	-0.002	0.954	1.431
68	12	Y	-0.002	-0.002	1.431	1.909
69	12	Y	-0.002	-0.0005493	1.909	2.386
70	13	Y	-0.003	-0.003	0	0.477
71	13	Y	-0.003	-0.002	0.477	0.954
72	13	Y	-0.002	-0.002	0.954	1.431
73	13	Y	-0.002	-0.002	1.431	1.909
74	13	Y	-0.002	-0.0005502	1.909	2.386
75	22	Y	-0.004	-0.007	0	0.225
76	22	Y	-0.007	-0.006	0.225	0.45
77	22	Y	-0.006	-0.005	0.45	0.674
78	22	Y	-0.005	-0.006	0.674	0.899
79	22	Y	-0.006	-0.004	0.899	1.124
80	23	Y	-0.004	-0.007	0	0.225
81	23	Y	-0.007	-0.006	0.225	0.45
82	23	Y	-0.006	-0.005	0.45	0.674
83	23	Y	-0.005	-0.006	0.674	0.899
84	23	Y	-0.006	-0.004	0.899	1.124
85	40	Y	-6.111e-5	-0.0008514	2.122	2.547
86	40	Y	-0.0008514	-0.002	2.547	2.971
87	40	Y	-0.002	-0.004	2.971	3.395
88	40	Y	-0.004	-0.003	3.395	3.82
89	40	Y	-0.003	-6.111e-5	3.82	4.244
90	150	Y	-0.003	-0.0008514	0	0.167
91	153	Y	-0.006	-0.004	0	0.071
92	153	Y	-0.004	-0.002	0.071	0.142
93	153	Y	-0.002	-0.002	0.142	0.213
94	153	Y	-0.002	-0.002	0.213	0.285
95	155	Y	-0.0009189	-0.0009189	0	0.167
96	158	Y	-0.003	-0.0009189	0	0.167
97	161	Y	-0.009	-0.003	0	0.095
98	161	Y	-0.003	-0.0007438	0.095	0.19
99	161	Y	-0.0007438	-0.003	0.19	0.284
100	163	Y	-0.0009192	-0.0009192	0	0.167
101	18	Y	-0.003	-0.002	0	0.583
102	18	Y	-0.002	-0.002	0.583	1.166
103	18	Y	-0.002	-0.003	1.166	1.749

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
104	18	Y	-0.003	-0.002	1.749	2.332
105	18	Y	-0.002	-2.275e-5	2.332	2.914
106	19	Y	-0.003	-0.002	0	0.583
107	19	Y	-0.002	-0.002	0.583	1.166
108	19	Y	-0.002	-0.003	1.166	1.749
109	19	Y	-0.003	-0.002	1.749	2.332
110	19	Y	-0.002	-2.332e-5	2.332	2.914
111	36	Y	-0.005	-0.006	0	0.332
112	36	Y	-0.006	-0.006	0.332	0.664
113	36	Y	-0.006	-0.006	0.664	0.995
114	36	Y	-0.006	-0.004	0.995	1.327
115	36	Y	-0.004	-0.003	1.327	1.659
116	37	Y	-0.004	-0.006	0	0.332
117	37	Y	-0.006	-0.007	0.332	0.664
118	37	Y	-0.007	-0.006	0.664	0.995
119	37	Y	-0.006	-0.004	0.995	1.327
120	37	Y	-0.004	-0.003	1.327	1.659
121	38	Y	-0.0004544	-0.005	0	0.117
122	38	Y	-0.005	-0.008	0.117	0.233
123	38	Y	-0.008	-0.006	0.233	0.35
124	38	Y	-0.006	-0.005	0.35	0.467
125	38	Y	-0.005	-0.008	0.467	0.583
126	39	Y	-0.0004436	-0.005	0	0.117
127	39	Y	-0.005	-0.008	0.117	0.233
128	39	Y	-0.008	-0.006	0.233	0.35
129	39	Y	-0.006	-0.005	0.35	0.467
130	39	Y	-0.005	-0.008	0.467	0.583
131	42	Y	-0.002	-0.003	0	0.594
132	42	Y	-0.003	-0.006	0.594	1.188
133	42	Y	-0.006	-0.005	1.188	1.783
134	42	Y	-0.005	-0.001	1.783	2.377
135	42	Y	-0.001	-6.965e-5	2.377	2.971
136	124	Y	-0.001	-0.001	0.009	0.161
137	125	Y	-0.002	-0.001	0	0.167
138	127	Y	-0.009	-0.005	0	0.142
139	127	Y	-0.005	-5.095e-5	0.142	0.285
140	128	Y	-0.001	-0.002	0	0.095
141	128	Y	-0.002	-0.002	0.095	0.189
142	128	Y	-0.002	-0.0001828	0.189	0.284
143	130	Y	-0.0009467	-0.0009467	0	0.167
144	135	Y	-0.001	-0.001	0.005	0.167
145	136	Y	-0.002	-0.001	0	0.167
146	138	Y	-0.009	-0.005	0	0.142
147	138	Y	-0.005	4.022e-7	0.142	0.285
148	140	Y	-0.001	-0.002	0	0.095
149	140	Y	-0.002	-0.002	0.095	0.189
150	140	Y	-0.002	-0.0001829	0.189	0.284
151	144	Y	-0.0009471	-0.0009471	0	0.167
152	8	Y	-0.003	-0.003	0	0.604
153	9	Y	-0.003	-0.003	0	0.604
154	20	Y	-0.001	-0.001	1.518	2.386
155	21	Y	-0.001	-0.001	1.518	2.386
156	34	Y	-0.001	-0.001	0.24	1.124
157	35	Y	-0.001	-0.001	0.24	1.124
158	36	Y	-0.003	-0.003	0	0.829

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
159	36	Y	-0.003	-0.003	0.829	1.659
160	37	Y	-0.003	-0.003	0	0.829
161	37	Y	-0.003	-0.003	0.829	1.659
162	42	Y	-0.01	-0.01	2.229	2.834
163	129	Y	-0.004	-0.004	0	0.284
164	142	Y	-0.004	-0.004	0	0.285
165	20	Y	-0.003	-0.003	0	0.477
166	20	Y	-0.003	-0.002	0.477	0.954
167	20	Y	-0.002	-0.002	0.954	1.431
168	20	Y	-0.002	-0.002	1.431	1.909
169	20	Y	-0.002	-0.0005492	1.909	2.386
170	21	Y	-0.003	-0.003	0	0.477
171	21	Y	-0.003	-0.002	0.477	0.954
172	21	Y	-0.002	-0.002	0.954	1.431
173	21	Y	-0.002	-0.002	1.431	1.909
174	21	Y	-0.002	-0.0005492	1.909	2.386
175	34	Y	-0.004	-0.007	0	0.225
176	34	Y	-0.007	-0.006	0.225	0.45
177	34	Y	-0.006	-0.005	0.45	0.674
178	34	Y	-0.005	-0.006	0.674	0.899
179	34	Y	-0.006	-0.004	0.899	1.124
180	35	Y	-0.004	-0.007	0	0.225
181	35	Y	-0.007	-0.006	0.225	0.45
182	35	Y	-0.006	-0.005	0.45	0.674
183	35	Y	-0.005	-0.006	0.674	0.899
184	35	Y	-0.006	-0.004	0.899	1.124
185	42	Y	-6.111e-5	-0.0008514	2.122	2.547
186	42	Y	-0.0008514	-0.002	2.547	2.971
187	42	Y	-0.002	-0.004	2.971	3.395
188	42	Y	-0.004	-0.003	3.395	3.82
189	42	Y	-0.003	-6.111e-5	3.82	4.244
190	126	Y	-0.003	-0.0008514	0	0.167
191	129	Y	-0.007	-0.003	0	0.095
192	129	Y	-0.003	-0.001	0.095	0.19
193	129	Y	-0.001	-0.003	0.19	0.284
194	132	Y	-0.0009189	-0.0009189	0	0.167
195	137	Y	-0.003	-0.0009189	0	0.167
196	142	Y	-0.009	-0.003	0	0.095
197	142	Y	-0.003	-0.0007445	0.095	0.19
198	142	Y	-0.0007445	-0.003	0.19	0.285
199	145	Y	-0.0009192	-0.0009192	0	0.167
200	14	Y	-0.003	-0.002	0	0.583
201	14	Y	-0.002	-0.002	0.583	1.166
202	14	Y	-0.002	-0.003	1.166	1.749
203	14	Y	-0.003	-0.002	1.749	2.332
204	14	Y	-0.002	-2.237e-5	2.332	2.914
205	15	Y	-0.003	-0.002	0	0.583
206	15	Y	-0.002	-0.002	0.583	1.166
207	15	Y	-0.002	-0.003	1.166	1.749
208	15	Y	-0.003	-0.002	1.749	2.332
209	15	Y	-0.002	-2.294e-5	2.332	2.914
210	30	Y	-0.005	-0.006	0	0.332
211	30	Y	-0.006	-0.006	0.332	0.664
212	30	Y	-0.006	-0.006	0.664	0.995
213	30	Y	-0.006	-0.004	0.995	1.327

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
214	30	Y	-0.004	-0.003	1.327	1.659
215	31	Y	-0.004	-0.006	0	0.332
216	31	Y	-0.006	-0.007	0.332	0.664
217	31	Y	-0.007	-0.006	0.664	0.995
218	31	Y	-0.006	-0.004	0.995	1.327
219	31	Y	-0.004	-0.003	1.327	1.659
220	32	Y	-0.000456	-0.005	0	0.117
221	32	Y	-0.005	-0.008	0.117	0.233
222	32	Y	-0.008	-0.006	0.233	0.35
223	32	Y	-0.006	-0.005	0.35	0.467
224	32	Y	-0.005	-0.008	0.467	0.583
225	33	Y	-0.000445	-0.005	0	0.117
226	33	Y	-0.005	-0.008	0.117	0.233
227	33	Y	-0.008	-0.006	0.233	0.35
228	33	Y	-0.006	-0.005	0.35	0.467
229	33	Y	-0.005	-0.008	0.467	0.583
230	41	Y	-0.002	-0.003	0	0.594
231	41	Y	-0.003	-0.006	0.594	1.188
232	41	Y	-0.006	-0.005	1.188	1.783
233	41	Y	-0.005	-0.001	1.783	2.377
234	41	Y	-0.001	-6.965e-5	2.377	2.971
235	131	Y	-0.001	-0.001	0.005	0.167
236	133	Y	-0.002	-0.001	0	0.167
237	139	Y	-0.009	-0.005	0	0.142
238	139	Y	-0.005	-2.257e-5	0.142	0.285
239	141	Y	-0.001	-0.002	0	0.095
240	141	Y	-0.002	-0.002	0.095	0.189
241	141	Y	-0.002	-0.0001827	0.189	0.284
242	146	Y	-0.0009471	-0.0009471	0	0.167
243	164	Y	-0.001	-0.001	0.009	0.161
244	165	Y	-0.002	-0.001	0	0.167
245	167	Y	-0.009	-0.004	0	0.142
246	167	Y	-0.004	-5.044e-5	0.142	0.285
247	168	Y	-0.001	-0.002	0	0.095
248	168	Y	-0.002	-0.002	0.095	0.189
249	168	Y	-0.002	-0.0001827	0.189	0.284
250	170	Y	-0.0009467	-0.0009467	0	0.167
251	6	Y	-0.003	-0.003	0	0.604
252	7	Y	-0.003	-0.003	0	0.604
253	16	Y	-0.001	-0.001	1.518	2.386
254	17	Y	-0.001	-0.001	1.518	2.386
255	28	Y	-0.001	-0.001	0.24	1.124
256	29	Y	-0.001	-0.001	0.24	1.124
257	30	Y	-0.003	-0.003	0	0.829
258	30	Y	-0.003	-0.003	0.829	1.659
259	31	Y	-0.003	-0.003	0	0.829
260	31	Y	-0.003	-0.003	0.829	1.659
261	41	Y	-0.01	-0.01	2.229	2.834
262	143	Y	-0.004	-0.004	0	0.285
263	169	Y	-0.004	-0.004	0	0.285
264	16	Y	-0.003	-0.003	0	0.477
265	16	Y	-0.003	-0.002	0.477	0.954
266	16	Y	-0.002	-0.002	0.954	1.431
267	16	Y	-0.002	-0.002	1.431	1.909
268	16	Y	-0.002	-0.0005496	1.909	2.386

Member Distributed Loads (BLC 39 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
269	17	Y	-0.003	-0.003	0	0.477
270	17	Y	-0.003	-0.002	0.477	0.954
271	17	Y	-0.002	-0.002	0.954	1.431
272	17	Y	-0.002	-0.002	1.431	1.909
273	17	Y	-0.002	-0.0005475	1.909	2.386
274	28	Y	-0.004	-0.007	0	0.225
275	28	Y	-0.007	-0.006	0.225	0.45
276	28	Y	-0.006	-0.005	0.45	0.674
277	28	Y	-0.005	-0.006	0.674	0.899
278	28	Y	-0.006	-0.004	0.899	1.124
279	29	Y	-0.004	-0.007	0	0.225
280	29	Y	-0.007	-0.006	0.225	0.45
281	29	Y	-0.006	-0.005	0.45	0.674
282	29	Y	-0.005	-0.006	0.674	0.899
283	29	Y	-0.006	-0.004	0.899	1.124
284	41	Y	-6.081e-5	-0.0008585	2.122	2.547
285	41	Y	-0.0008585	-0.002	2.547	2.971
286	41	Y	-0.002	-0.004	2.971	3.395
287	41	Y	-0.004	-0.003	3.395	3.82
288	41	Y	-0.003	-6.081e-5	3.82	4.244
289	134	Y	-0.003	-0.0008585	0	0.167
290	143	Y	-0.009	-0.003	0	0.095
291	143	Y	-0.003	-0.0007513	0.095	0.19
292	143	Y	-0.0007513	-0.003	0.19	0.285
293	147	Y	-0.0009159	-0.0009159	0	0.167
294	166	Y	-0.003	-0.0009159	0	0.167
295	169	Y	-0.006	-0.004	0	0.071
296	169	Y	-0.004	-0.002	0.071	0.142
297	169	Y	-0.002	-0.002	0.142	0.213
298	169	Y	-0.002	-0.002	0.213	0.285
299	171	Y	-0.0009156	-0.0009156	0	0.167

Member Distributed Loads (BLC 40 : BLC 8 Transient Area Loads)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	129	Y	-0.0006769	-0.001	0.19	0.284
2	132	Y	-0.0004594	-0.0004594	0	0.167
3	137	Y	-0.002	-0.0004594	0	0.167
4	142	Y	-0.004	-0.001	0	0.095
5	142	Y	-0.001	-0.0003722	0.095	0.19
6	142	Y	-0.0003722	-0.002	0.19	0.285
7	145	Y	-0.0004596	-0.0004596	0	0.167
8	14	Y	-0.001	-0.0008656	0	0.583
9	14	Y	-0.0008656	-0.001	0.583	1.166
10	14	Y	-0.001	-0.001	1.166	1.749
11	14	Y	-0.001	-0.0009372	1.749	2.332
12	14	Y	-0.0009372	-1.119e-5	2.332	2.914
13	15	Y	-0.001	-0.0008658	0	0.583
14	15	Y	-0.0008658	-0.001	0.583	1.166
15	15	Y	-0.001	-0.001	1.166	1.749
16	15	Y	-0.001	-0.0009388	1.749	2.332
17	15	Y	-0.0009388	-1.147e-5	2.332	2.914
18	30	Y	-0.002	-0.003	0	0.332
19	30	Y	-0.003	-0.003	0.332	0.664
20	30	Y	-0.003	-0.003	0.664	0.995
21	30	Y	-0.003	-0.002	0.995	1.327

Member Distributed Loads (BLC 40 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
22	30	Y	-0.002	-0.001	1.327	1.659
23	31	Y	-0.002	-0.003	0	0.332
24	31	Y	-0.003	-0.003	0.332	0.664
25	31	Y	-0.003	-0.003	0.664	0.995
26	31	Y	-0.003	-0.002	0.995	1.327
27	31	Y	-0.002	-0.001	1.327	1.659
28	32	Y	-0.000228	-0.003	0	0.117
29	32	Y	-0.003	-0.004	0.117	0.233
30	32	Y	-0.004	-0.003	0.233	0.35
31	32	Y	-0.003	-0.003	0.35	0.467
32	32	Y	-0.003	-0.004	0.467	0.583
33	33	Y	-0.0002225	-0.003	0	0.117
34	33	Y	-0.003	-0.004	0.117	0.233
35	33	Y	-0.004	-0.003	0.233	0.35
36	33	Y	-0.003	-0.003	0.35	0.467
37	33	Y	-0.003	-0.004	0.467	0.583
38	41	Y	-0.0007524	-0.001	0	0.594
39	41	Y	-0.001	-0.003	0.594	1.188
40	41	Y	-0.003	-0.002	1.188	1.783
41	41	Y	-0.002	-0.000556	1.783	2.377
42	41	Y	-0.000556	-3.482e-5	2.377	2.971
43	131	Y	-0.0006252	-0.0006252	0.005	0.167
44	133	Y	-0.001	-0.0006252	0	0.167
45	139	Y	-0.005	-0.002	0	0.142
46	139	Y	-0.002	-1.128e-5	0.142	0.285
47	141	Y	-0.0007241	-0.001	0	0.095
48	141	Y	-0.001	-0.0009084	0.095	0.189
49	141	Y	-0.0009084	-9.136e-5	0.189	0.284
50	146	Y	-0.0004736	-0.0004736	0	0.167
51	164	Y	-0.0006645	-0.0006645	0.009	0.161
52	165	Y	-0.001	-0.0006645	0	0.167
53	167	Y	-0.004	-0.002	0	0.142
54	167	Y	-0.002	-2.522e-5	0.142	0.285
55	168	Y	-0.0007242	-0.001	0	0.095
56	168	Y	-0.001	-0.0009083	0.095	0.189
57	168	Y	-0.0009083	-9.135e-5	0.189	0.284
58	170	Y	-0.0004733	-0.0004733	0	0.167
59	6	Y	-0.002	-0.002	0	0.604
60	7	Y	-0.002	-0.002	0	0.604
61	16	Y	-0.0006448	-0.0006448	1.518	2.386
62	17	Y	-0.0006448	-0.0006448	1.518	2.386
63	28	Y	-0.0007187	-0.0007187	0.24	1.124
64	29	Y	-0.0007187	-0.0007187	0.24	1.124
65	30	Y	-0.001	-0.001	0	0.829
66	30	Y	-0.001	-0.001	0.829	1.659
67	31	Y	-0.001	-0.001	0	0.829
68	31	Y	-0.001	-0.001	0.829	1.659
69	41	Y	-0.005	-0.005	2.229	2.834
70	143	Y	-0.002	-0.002	0	0.285
71	169	Y	-0.002	-0.002	0	0.285
72	16	Y	-0.002	-0.001	0	0.477
73	16	Y	-0.001	-0.0009186	0.477	0.954
74	16	Y	-0.0009186	-0.0009169	0.954	1.431
75	16	Y	-0.0009169	-0.0008826	1.431	1.909
76	16	Y	-0.0008826	-0.0002748	1.909	2.386

Member Distributed Loads (BLC 40 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
77	17	Y	-0.002	-0.001	0	0.477
78	17	Y	-0.001	-0.0009194	0.477	0.954
79	17	Y	-0.0009194	-0.0009187	0.954	1.431
80	17	Y	-0.0009187	-0.0008828	1.431	1.909
81	17	Y	-0.0008828	-0.0002737	1.909	2.386
82	28	Y	-0.002	-0.003	0	0.225
83	28	Y	-0.003	-0.003	0.225	0.45
84	28	Y	-0.003	-0.003	0.45	0.674
85	28	Y	-0.003	-0.003	0.674	0.899
86	28	Y	-0.003	-0.002	0.899	1.124
87	29	Y	-0.002	-0.003	0	0.225
88	29	Y	-0.003	-0.003	0.225	0.45
89	29	Y	-0.003	-0.003	0.45	0.674
90	29	Y	-0.003	-0.003	0.674	0.899
91	29	Y	-0.003	-0.002	0.899	1.124
92	41	Y	-3.041e-5	-0.0004292	2.122	2.547
93	41	Y	-0.0004292	-0.0008637	2.547	2.971
94	41	Y	-0.0008637	-0.002	2.971	3.395
95	41	Y	-0.002	-0.001	3.395	3.82
96	41	Y	-0.001	-3.041e-5	3.82	4.244
97	134	Y	-0.002	-0.0004292	0	0.167
98	143	Y	-0.004	-0.001	0	0.095
99	143	Y	-0.001	-0.0003756	0.095	0.19
100	143	Y	-0.0003756	-0.002	0.19	0.285
101	147	Y	-0.000458	-0.000458	0	0.167
102	166	Y	-0.002	-0.000458	0	0.167
103	169	Y	-0.003	-0.002	0	0.071
104	169	Y	-0.002	-0.001	0.071	0.142
105	169	Y	-0.001	-0.0008827	0.142	0.213
106	169	Y	-0.0008827	-0.0008604	0.213	0.285
107	171	Y	-0.0004578	-0.0004578	0	0.167
108	10	Y	-0.002	-0.0009409	0	0.583
109	10	Y	-0.0009409	-0.001	0.583	1.166
110	10	Y	-0.001	-0.002	1.166	1.749
111	10	Y	-0.002	-0.001	1.749	2.332
112	10	Y	-0.001	-1.236e-5	2.332	2.914
113	11	Y	-0.002	-0.0009412	0	0.583
114	11	Y	-0.0009412	-0.001	0.583	1.166
115	11	Y	-0.001	-0.002	1.166	1.749
116	11	Y	-0.002	-0.001	1.749	2.332
117	11	Y	-0.001	-1.267e-5	2.332	2.914
118	24	Y	-0.002	-0.003	0	0.332
119	24	Y	-0.003	-0.004	0.332	0.664
120	24	Y	-0.004	-0.003	0.664	0.995
121	24	Y	-0.003	-0.002	0.995	1.327
122	24	Y	-0.002	-0.001	1.327	1.659
123	25	Y	-0.002	-0.003	0	0.332
124	25	Y	-0.003	-0.004	0.332	0.664
125	25	Y	-0.004	-0.003	0.664	0.995
126	25	Y	-0.003	-0.002	0.995	1.327
127	25	Y	-0.002	-0.002	1.327	1.659
128	26	Y	-0.000247	-0.003	0	0.117
129	26	Y	-0.003	-0.004	0.117	0.233
130	26	Y	-0.004	-0.003	0.233	0.35
131	26	Y	-0.003	-0.003	0.35	0.467

Member Distributed Loads (BLC 40 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
132	26	Y	-0.003	-0.005	0.467	0.583
133	27	Y	-0.0002431	-0.003	0	0.117
134	27	Y	-0.003	-0.004	0.117	0.233
135	27	Y	-0.004	-0.003	0.233	0.35
136	27	Y	-0.003	-0.003	0.35	0.467
137	27	Y	-0.003	-0.005	0.467	0.583
138	40	Y	-0.0008177	-0.002	0	0.594
139	40	Y	-0.002	-0.003	0.594	1.188
140	40	Y	-0.003	-0.003	1.188	1.783
141	40	Y	-0.003	-0.0006044	1.783	2.377
142	40	Y	-0.0006044	-3.785e-5	2.377	2.971
143	148	Y	-0.0007222	-0.0007222	0.009	0.161
144	149	Y	-0.001	-0.0007222	0	0.167
145	151	Y	-0.005	-0.002	0	0.142
146	151	Y	-0.002	-3.821e-5	0.142	0.285
147	152	Y	-0.0007905	-0.001	0	0.095
148	152	Y	-0.001	-0.0009886	0.095	0.189
149	152	Y	-0.0009886	-9.932e-5	0.189	0.284
150	154	Y	-0.0005144	-0.0005144	0	0.167
151	156	Y	-0.0006795	-0.0006795	0.005	0.167
152	157	Y	-0.001	-0.0006795	0	0.167
153	159	Y	-0.005	-0.002	0	0.142
154	159	Y	-0.002	2.187e-7	0.142	0.285
155	160	Y	-0.0007901	-0.001	0	0.095
156	160	Y	-0.001	-0.0009888	0.095	0.189
157	160	Y	-0.0009888	-9.936e-5	0.189	0.284
158	162	Y	-0.0005147	-0.0005147	0	0.167
159	4	Y	-0.002	-0.002	0	0.604
160	5	Y	-0.002	-0.002	0	0.604
161	12	Y	-0.0006448	-0.0006448	1.518	2.386
162	13	Y	-0.0006448	-0.0006448	1.518	2.386
163	22	Y	-0.0007187	-0.0007187	0.24	1.124
164	23	Y	-0.0007187	-0.0007187	0.24	1.124
165	24	Y	-0.001	-0.001	0	0.829
166	24	Y	-0.001	-0.001	0.829	1.659
167	25	Y	-0.001	-0.001	0	0.829
168	25	Y	-0.001	-0.001	0.829	1.659
169	40	Y	-0.005	-0.005	2.229	2.834
170	153	Y	-0.002	-0.002	0	0.285
171	161	Y	-0.002	-0.002	0	0.284
172	12	Y	-0.002	-0.001	0	0.477
173	12	Y	-0.001	-0.0009186	0.477	0.954
174	12	Y	-0.0009186	-0.0009169	0.954	1.431
175	12	Y	-0.0009169	-0.0008826	1.431	1.909
176	12	Y	-0.0008826	-0.0002747	1.909	2.386
177	13	Y	-0.002	-0.001	0	0.477
178	13	Y	-0.001	-0.0009201	0.477	0.954
179	13	Y	-0.0009201	-0.0009188	0.954	1.431
180	13	Y	-0.0009188	-0.0008824	1.431	1.909
181	13	Y	-0.0008824	-0.0002751	1.909	2.386
182	22	Y	-0.002	-0.003	0	0.225
183	22	Y	-0.003	-0.003	0.225	0.45
184	22	Y	-0.003	-0.003	0.45	0.674
185	22	Y	-0.003	-0.003	0.674	0.899
186	22	Y	-0.003	-0.002	0.899	1.124

Member Distributed Loads (BLC 40 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
187	23	Y	-0.002	-0.003	0	0.225
188	23	Y	-0.003	-0.003	0.225	0.45
189	23	Y	-0.003	-0.003	0.45	0.674
190	23	Y	-0.003	-0.003	0.674	0.899
191	23	Y	-0.003	-0.002	0.899	1.124
192	40	Y	-3.056e-5	-0.0004257	2.122	2.547
193	40	Y	-0.0004257	-0.0008578	2.547	2.971
194	40	Y	-0.0008578	-0.002	2.971	3.395
195	40	Y	-0.002	-0.001	3.395	3.82
196	40	Y	-0.001	-3.056e-5	3.82	4.244
197	150	Y	-0.002	-0.0004257	0	0.167
198	153	Y	-0.003	-0.002	0	0.071
199	153	Y	-0.002	-0.001	0.071	0.142
200	153	Y	-0.001	-0.0008809	0.142	0.213
201	153	Y	-0.0008809	-0.0008694	0.213	0.285
202	155	Y	-0.0004594	-0.0004594	0	0.167
203	158	Y	-0.002	-0.0004594	0	0.167
204	161	Y	-0.004	-0.001	0	0.095
205	161	Y	-0.001	-0.0003719	0.095	0.19
206	161	Y	-0.0003719	-0.002	0.19	0.284
207	163	Y	-0.0004596	-0.0004596	0	0.167
208	18	Y	-0.001	-0.0008658	0	0.583
209	18	Y	-0.0008658	-0.001	0.583	1.166
210	18	Y	-0.001	-0.001	1.166	1.749
211	18	Y	-0.001	-0.0009402	1.749	2.332
212	18	Y	-0.0009402	-1.138e-5	2.332	2.914
213	19	Y	-0.001	-0.000866	0	0.583
214	19	Y	-0.000866	-0.001	0.583	1.166
215	19	Y	-0.001	-0.001	1.166	1.749
216	19	Y	-0.001	-0.0009339	1.749	2.332
217	19	Y	-0.0009339	-1.166e-5	2.332	2.914
218	36	Y	-0.002	-0.003	0	0.332
219	36	Y	-0.003	-0.003	0.332	0.664
220	36	Y	-0.003	-0.003	0.664	0.995
221	36	Y	-0.003	-0.002	0.995	1.327
222	36	Y	-0.002	-0.001	1.327	1.659
223	37	Y	-0.002	-0.003	0	0.332
224	37	Y	-0.003	-0.003	0.332	0.664
225	37	Y	-0.003	-0.003	0.664	0.995
226	37	Y	-0.003	-0.002	0.995	1.327
227	37	Y	-0.002	-0.001	1.327	1.659
228	38	Y	-0.0002272	-0.003	0	0.117
229	38	Y	-0.003	-0.004	0.117	0.233
230	38	Y	-0.004	-0.003	0.233	0.35
231	38	Y	-0.003	-0.003	0.35	0.467
232	38	Y	-0.003	-0.004	0.467	0.583
233	39	Y	-0.0002218	-0.003	0	0.117
234	39	Y	-0.003	-0.004	0.117	0.233
235	39	Y	-0.004	-0.003	0.233	0.35
236	39	Y	-0.003	-0.003	0.35	0.467
237	39	Y	-0.003	-0.004	0.467	0.583
238	42	Y	-0.0007524	-0.001	0	0.594
239	42	Y	-0.001	-0.003	0.594	1.188
240	42	Y	-0.003	-0.002	1.188	1.783
241	42	Y	-0.002	-0.0005562	1.783	2.377

Member Distributed Loads (BLC 40 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
242	42	Y	-0.0005562	-3.483e-5	2.377	2.971
243	124	Y	-0.0006645	-0.0006645	0.009	0.161
244	125	Y	-0.001	-0.0006645	0	0.167
245	127	Y	-0.004	-0.002	0	0.142
246	127	Y	-0.002	-2.547e-5	0.142	0.285
247	128	Y	-0.0007274	-0.001	0	0.095
248	128	Y	-0.001	-0.0009097	0.095	0.189
249	128	Y	-0.0009097	-9.138e-5	0.189	0.284
250	130	Y	-0.0004733	-0.0004733	0	0.167
251	135	Y	-0.0006252	-0.0006252	0.005	0.167
252	136	Y	-0.001	-0.0006252	0	0.167
253	138	Y	-0.005	-0.002	0	0.142
254	138	Y	-0.002	2.011e-7	0.142	0.285
255	140	Y	-0.000727	-0.001	0	0.095
256	140	Y	-0.001	-0.0009099	0.095	0.189
257	140	Y	-0.0009099	-9.143e-5	0.189	0.284
258	144	Y	-0.0004736	-0.0004736	0	0.167
259	8	Y	-0.002	-0.002	0	0.604
260	9	Y	-0.002	-0.002	0	0.604
261	20	Y	-0.0006448	-0.0006448	1.518	2.386
262	21	Y	-0.0006448	-0.0006448	1.518	2.386
263	34	Y	-0.0007187	-0.0007187	0.24	1.124
264	35	Y	-0.0007187	-0.0007187	0.24	1.124
265	36	Y	-0.001	-0.001	0	0.829
266	36	Y	-0.001	-0.001	0.829	1.659
267	37	Y	-0.001	-0.001	0	0.829
268	37	Y	-0.001	-0.001	0.829	1.659
269	42	Y	-0.005	-0.005	2.229	2.834
270	129	Y	-0.002	-0.002	0	0.284
271	142	Y	-0.002	-0.002	0	0.285
272	20	Y	-0.002	-0.001	0	0.477
273	20	Y	-0.001	-0.0009188	0.477	0.954
274	20	Y	-0.0009188	-0.0009171	0.954	1.431
275	20	Y	-0.0009171	-0.0008826	1.431	1.909
276	20	Y	-0.0008826	-0.0002746	1.909	2.386
277	21	Y	-0.002	-0.001	0	0.477
278	21	Y	-0.001	-0.0009187	0.477	0.954
279	21	Y	-0.0009187	-0.0009186	0.954	1.431
280	21	Y	-0.0009186	-0.0008839	1.431	1.909
281	21	Y	-0.0008839	-0.0002746	1.909	2.386
282	34	Y	-0.002	-0.003	0	0.225
283	34	Y	-0.003	-0.003	0.225	0.45
284	34	Y	-0.003	-0.003	0.45	0.674
285	34	Y	-0.003	-0.003	0.674	0.899
286	34	Y	-0.003	-0.002	0.899	1.124
287	35	Y	-0.002	-0.003	0	0.225
288	35	Y	-0.003	-0.003	0.225	0.45
289	35	Y	-0.003	-0.003	0.45	0.674
290	35	Y	-0.003	-0.003	0.674	0.899
291	35	Y	-0.003	-0.002	0.899	1.124
292	42	Y	-3.056e-5	-0.0004257	2.122	2.547
293	42	Y	-0.0004257	-0.0008578	2.547	2.971
294	42	Y	-0.0008578	-0.002	2.971	3.395
295	42	Y	-0.002	-0.001	3.395	3.82
296	42	Y	-0.001	-3.056e-5	3.82	4.244

Member Distributed Loads (BLC 40 : BLC 8 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, k-ft/ft]	End Magnitude [k/ft, F, ksf, k-ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
297	126	Y	-0.002	-0.0004257	0	0.167
298	129	Y	-0.004	-0.001	0	0.095
299	129	Y	-0.001	-0.0006769	0.095	0.19

Member Area Loads (BLC 1 : Dead)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	102	90	91	103	Y	Two Way	-0.01
2	91	107	106	103	Y	Two Way	-0.01
3	106	104	92	107	Y	Two Way	-0.01
4	63	51	52	64	Y	Two Way	-0.01
5	52	67	66	64	Y	Two Way	-0.01
6	66	65	53	67	Y	Two Way	-0.01
7	29	17	18	30	Y	Two Way	-0.01
8	18	33	32	30	Y	Two Way	-0.01
9	32	31	19	33	Y	Two Way	-0.01

Member Area Loads (BLC 8 : Ice)

	Node A	Node B	Node C	Node D	Direction	Load Direction	Magnitude [ksf]
1	102	90	91	103	Y	Two Way	-0.005
2	91	107	106	103	Y	Two Way	-0.005
3	106	104	92	107	Y	Two Way	-0.005
4	63	51	52	64	Y	Two Way	-0.005
5	52	67	66	64	Y	Two Way	-0.005
6	66	65	53	67	Y	Two Way	-0.005
7	29	17	18	30	Y	Two Way	-0.005
8	18	33	32	30	Y	Two Way	-0.005
9	32	31	19	33	Y	Two Way	-0.005

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

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	230	L	Y	-0.5
2	244	L	Y	-0.5
3	256	L	Y	-0.5

Node Loads and Enforced Displacements (BLC 12 : Live Load b)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	224	L	Y	-0.5
2	274	L	Y	-0.5
3	286	L	Y	-0.5

Node Loads and Enforced Displacements (BLC 13 : Live Load c)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	218	L	Y	-0.5
2	268	L	Y	-0.5
3	280	L	Y	-0.5

Node Loads and Enforced Displacements (BLC 14 : Live Load d)

	Node Label	L, D, M	Direction	Magnitude [(k, k-ft), (in, rad), (k*s²/ft, k*s²*ft)]
1	212	L	Y	-0.5
2	238	L	Y	-0.5
3	250	L	Y	-0.5

Basic Load Cases

	BLC Description	Category	Y Gravity	Nodal	Point	Distributed	Area(Member)
1	Dead	DL	-1		35		9
2	0 Wind - No Ice	WLZ			35	193	
3	90 Wind - No Ice	WLX			35	193	
4	0 Wind - Ice	WLZ			35	193	
5	90 Wind - Ice	WLX			35	193	
6	0 Wind - Service	WLZ			35	193	
7	90 Wind - Service	WLX			35	193	
8	Ice	OL1			35	193	9
9	0 Seismic	ELZ			35	193	
10	90 Seismic	ELX			35	193	
11	Live Load a	LL		3			
12	Live Load b	LL		3			
13	Live Load c	LL		3			
14	Live Load d	LL		3			
15	Maint LL 1	LL			1		
16	Maint LL 2	LL			1		
17	Maint LL 3	LL			1		
18	Maint LL 4	LL			1		
19	Maint LL 5	LL			1		
20	Maint LL 6	LL			1		
21	Maint LL 7	LL			1		
22	Maint LL 8	LL			1		
23	Maint LL 9	LL			1		
24	Maint LL 10	LL			1		
25	Maint LL 11	LL			1		
26	Maint LL 12	LL			1		
27	Maint LL 13	LL			1		
28	Maint LL 14	LL			1		
29	Maint LL 15	LL			1		
30	Maint LL 16	LL					
31	Maint LL 17	LL					
32	Maint LL 18	LL					
33	Maint LL 19	LL					
34	Maint LL 20	LL					
35	Maint LL 21	LL					
36	Maint LL 22	LL					
37	Maint LL 23	LL					
38	Maint LL 24	LL					
39	BLC 1 Transient Area Loads	None				299	
40	BLC 8 Transient Area Loads	None				299	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4 Dead	Yes	Y	1	1.4						
2	1.2 D + 1.0 - 0 W	Yes	Y	1	1.2	2	1				
3	1.2 D + 1.0 - 30 W	Yes	Y	1	1.2	2	0.866	3	0.5		

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
4	1.2 D + 1.0 - 60 W	Yes	Y	1	1.2	3	0.866	2	0.5		
5	1.2 D + 1.0 - 90 W	Yes	Y	1	1.2	3	1				
6	1.2 D + 1.0 - 120 W	Yes	Y	1	1.2	3	0.866	2	-0.5		
7	1.2 D + 1.0 - 150 W	Yes	Y	1	1.2	2	-0.866	3	0.5		
8	1.2 D + 1.0 - 180 W	Yes	Y	1	1.2	2	-1				
9	1.2 D + 1.0 - 210 W	Yes	Y	1	1.2	2	-0.866	3	-0.5		
10	1.2 D + 1.0 - 240 W	Yes	Y	1	1.2	3	-0.866	2	-0.5		
11	1.2 D + 1.0 - 270 W	Yes	Y	1	1.2	3	-1				
12	1.2 D + 1.0 - 300 W	Yes	Y	1	1.2	3	-0.866	2	0.5		
13	1.2 D + 1.0 - 330 W	Yes	Y	1	1.2	2	0.866	3	-0.5		
14	1.2 D + 1.0 - 0 W/Ice	Yes	Y	1	1.2	4	1			8	1
15	1.2 D + 1.0 - 30 W/Ice	Yes	Y	1	1.2	4	0.866	5	0.5	8	1
16	1.2 D + 1.0 - 60 W/Ice	Yes	Y	1	1.2	5	0.866	4	0.5	8	1
17	1.2 D + 1.0 - 90 W/Ice	Yes	Y	1	1.2	5	1			8	1
18	1.2 D + 1.0 - 120 W/Ice	Yes	Y	1	1.2	5	0.866	4	-0.5	8	1
19	1.2 D + 1.0 - 150 W/Ice	Yes	Y	1	1.2	4	-0.866	5	0.5	8	1
20	1.2 D + 1.0 - 180 W/Ice	Yes	Y	1	1.2	4	-1			8	1
21	1.2 D + 1.0 - 210 W/Ice	Yes	Y	1	1.2	4	-0.866	5	-0.5	8	1
22	1.2 D + 1.0 - 240 W/Ice	Yes	Y	1	1.2	5	-0.866	4	-0.5	8	1
23	1.2 D + 1.0 - 270 W/Ice	Yes	Y	1	1.2	5	-1			8	1
24	1.2 D + 1.0 - 300 W/Ice	Yes	Y	1	1.2	5	-0.866	4	0.5	8	1
25	1.2 D + 1.0 - 330 W/Ice	Yes	Y	1	1.2	4	0.866	5	-0.5	8	1
26	1.2 D + 1.0 E - 0	Yes	Y	1	1.2	9	1				
27	1.2 D + 1.0 E - 30	Yes	Y	1	1.2	9	0.866	10	0.5		
28	1.2 D + 1.0 E - 60	Yes	Y	1	1.2	10	0.866	9	0.5		
29	1.2 D + 1.0 E - 90	Yes	Y	1	1.2	10	1				
30	1.2 D + 1.0 E - 120	Yes	Y	1	1.2	10	0.866	9	-0.5		
31	1.2 D + 1.0 E - 150	Yes	Y	1	1.2	9	-0.866	10	0.5		
32	1.2 D + 1.0 E - 180	Yes	Y	1	1.2	9	-1				
33	1.2 D + 1.0 E - 210	Yes	Y	1	1.2	9	-0.866	10	-0.5		
34	1.2 D + 1.0 E - 240	Yes	Y	1	1.2	10	-0.866	9	-0.5		
35	1.2 D + 1.0 E - 270	Yes	Y	1	1.2	10	-1				
36	1.2 D + 1.0 E - 300	Yes	Y	1	1.2	10	-0.866	9	0.5		
37	1.2 D + 1.0 E - 330	Yes	Y	1	1.2	9	0.866	10	-0.5		
38	1.2 D + 1.5 LL a + Service - 0 W	Yes	Y	1	1.2	6	1			11	1.5
39	1.2 D + 1.5 LL a + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	11	1.5
40	1.2 D + 1.5 LL a + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	11	1.5
41	1.2 D + 1.5 LL a + Service - 90 W	Yes	Y	1	1.2	7	1			11	1.5
42	1.2 D + 1.5 LL a + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	11	1.5
43	1.2 D + 1.5 LL a + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	11	1.5
44	1.2 D + 1.5 LL a + Service - 180 W	Yes	Y	1	1.2	6	-1			11	1.5
45	1.2 D + 1.5 LL a + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	11	1.5
46	1.2 D + 1.5 LL a + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	11	1.5
47	1.2 D + 1.5 LL a + Service - 270 W	Yes	Y	1	1.2	7	-1			11	1.5
48	1.2 D + 1.5 LL a + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	11	1.5
49	1.2 D + 1.5 LL a + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	11	1.5
50	1.2 D + 1.5 LL b + Service - 0 W	Yes	Y	1	1.2	6	1			12	1.5
51	1.2 D + 1.5 LL b + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	12	1.5
52	1.2 D + 1.5 LL b + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	12	1.5
53	1.2 D + 1.5 LL b + Service - 90 W	Yes	Y	1	1.2	7	1			12	1.5
54	1.2 D + 1.5 LL b + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	12	1.5
55	1.2 D + 1.5 LL b + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	12	1.5
56	1.2 D + 1.5 LL b + Service - 180 W	Yes	Y	1	1.2	6	-1			12	1.5
57	1.2 D + 1.5 LL b + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	12	1.5
58	1.2 D + 1.5 LL b + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	12	1.5

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
59	1.2 D + 1.5 LL b + Service - 270 W	Yes	Y	1	1.2	7	-1			12	1.5
60	1.2 D + 1.5 LL b + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	12	1.5
61	1.2 D + 1.5 LL b + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	12	1.5
62	1.2 D + 1.5 LL c + Service - 0 W	Yes	Y	1	1.2	6	1			13	1.5
63	1.2 D + 1.5 LL c + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	13	1.5
64	1.2 D + 1.5 LL c + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	13	1.5
65	1.2 D + 1.5 LL c + Service - 90 W	Yes	Y	1	1.2	7	1			13	1.5
66	1.2 D + 1.5 LL c + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	13	1.5
67	1.2 D + 1.5 LL c + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	13	1.5
68	1.2 D + 1.5 LL c + Service - 180 W	Yes	Y	1	1.2	6	-1			13	1.5
69	1.2 D + 1.5 LL c + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	13	1.5
70	1.2 D + 1.5 LL c + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	13	1.5
71	1.2 D + 1.5 LL c + Service - 270 W	Yes	Y	1	1.2	7	-1			13	1.5
72	1.2 D + 1.5 LL c + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	13	1.5
73	1.2 D + 1.5 LL c + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	13	1.5
74	1.2 D + 1.5 LL d + Service - 0 W	Yes	Y	1	1.2	6	1			14	1.5
75	1.2 D + 1.5 LL d + Service - 30 W	Yes	Y	1	1.2	6	0.866	7	0.5	14	1.5
76	1.2 D + 1.5 LL d + Service - 60 W	Yes	Y	1	1.2	7	0.866	6	0.5	14	1.5
77	1.2 D + 1.5 LL d + Service - 90 W	Yes	Y	1	1.2	7	1			14	1.5
78	1.2 D + 1.5 LL d + Service - 120 W	Yes	Y	1	1.2	7	0.866	6	-0.5	14	1.5
79	1.2 D + 1.5 LL d + Service - 150 W	Yes	Y	1	1.2	6	-0.866	7	0.5	14	1.5
80	1.2 D + 1.5 LL d + Service - 180 W	Yes	Y	1	1.2	6	-1			14	1.5
81	1.2 D + 1.5 LL d + Service - 210 W	Yes	Y	1	1.2	6	-0.866	7	-0.5	14	1.5
82	1.2 D + 1.5 LL d + Service - 240 W	Yes	Y	1	1.2	7	-0.866	6	-0.5	14	1.5
83	1.2 D + 1.5 LL d + Service - 270 W	Yes	Y	1	1.2	7	-1			14	1.5
84	1.2 D + 1.5 LL d + Service - 300 W	Yes	Y	1	1.2	7	-0.866	6	0.5	14	1.5
85	1.2 D + 1.5 LL d + Service - 330 W	Yes	Y	1	1.2	6	0.866	7	-0.5	14	1.5
86	1.2 D + 1.5 LL Maint (1)	Yes	Y	1	1.2					15	1.5
87	1.2 D + 1.5 LL Maint (2)	Yes	Y	1	1.2					16	1.5
88	1.2 D + 1.5 LL Maint (3)	Yes	Y	1	1.2					17	1.5
89	1.2 D + 1.5 LL Maint (4)	Yes	Y	1	1.2					18	1.5
90	1.2 D + 1.5 LL Maint (5)	Yes	Y	1	1.2					19	1.5
91	1.2 D + 1.5 LL Maint (6)	Yes	Y	1	1.2					20	1.5
92	1.2 D + 1.5 LL Maint (7)	Yes	Y	1	1.2					21	1.5
93	1.2 D + 1.5 LL Maint (8)	Yes	Y	1	1.2					22	1.5
94	1.2 D + 1.5 LL Maint (9)	Yes	Y	1	1.2					23	1.5
95	1.2 D + 1.5 LL Maint (10)	Yes	Y	1	1.2					24	1.5
96	1.2 D + 1.5 LL Maint (11)	Yes	Y	1	1.2					25	1.5
97	1.2 D + 1.5 LL Maint (12)	Yes	Y	1	1.2					26	1.5
98	1.2 D + 1.5 LL Maint (13)	Yes	Y	1	1.2					27	1.5
99	1.2 D + 1.5 LL Maint (14)	Yes	Y	1	1.2					28	1.5
100	1.2 D + 1.5 LL Maint (15)	Yes	Y	1	1.2					29	1.5
101	1.2 D + 1.5 LL Maint (16)	Yes	Y	1	1.2					30	1.5
102	1.2 D + 1.5 LL Maint (17)	Yes	Y	1	1.2					31	1.5
103	1.2 D + 1.5 LL Maint (18)	Yes	Y	1	1.2					32	1.5
104	1.2 D + 1.5 LL Maint (19)	Yes	Y	1	1.2					33	1.5
105	1.2 D + 1.5 LL Maint (20)	Yes	Y	1	1.2					34	1.5
106	1.2 D + 1.5 LL Maint (21)	Yes	Y	1	1.2					35	1.5
107	1.2 D + 1.5 LL Maint (22)	Yes	Y	1	1.2					36	1.5
108	1.2 D + 1.5 LL Maint (23)	Yes	Y	1	1.2					37	1.5
109	1.2 D + 1.5 LL Maint (24)	Yes	Y	1	1.2					38	1.5

Envelope Node Reactions

	Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	186	max	0.923	5	3.012	14	12.852	2	0.025	8	1.084	11	0.032	11
2		min	-0.992	11	0.382	8	-2.891	8	-0.138	14	-0.985	5	-0.021	5
3	187	max	0.132	11	0.115	14	0.19	8	0.008	8	0.164	5	0.006	11
4		min	-0.059	5	0.021	8	-12.363	14	-0.087	14	-0.293	11	-0.005	5
5	329	max	10.659	18	3.07	18	1.438	13	0.37	3	1.459	3	0.324	8
6		min	-1.866	12	0.657	12	-6.494	7	-0.318	9	-1.387	9	-0.244	2
7	330	max	-0.338	12	0.118	18	6.204	18	0.044	18	0.32	9	0.075	18
8		min	-10.804	18	0.002	12	0.172	12	0.002	13	-0.352	3	0.005	12
9	378	max	1.153	4	3.041	22	1.148	3	0.062	23	1.195	7	0.016	3
10		min	-10.483	22	0.588	4	-6.273	9	-0.01	5	-1.121	13	-0.124	21
11	379	max	10.656	22	0.116	22	6.22	22	0.042	22	0.31	13	-0.002	4
12		min	0.871	4	0.029	4	0.493	4	0.001	4	-0.376	7	-0.075	22
13	Totals:	max	4.333	5	8.968	19	5.494	2						
14		min	-4.333	11	4.137	13	-5.494	8						

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
1	1	PIPE_2.5	0.251	4.167	19	0.233	9.245		2	14.559	50.715	3.596	3.596	1	H1-1b
2	2	PIPE_2.5	0.216	4.167	63	0.217	9.245		3	14.559	50.715	3.596	3.596	1	H1-1b
3	3	PIPE_2.5	0.262	4.167	23	0.217	9.245		7	14.559	50.715	3.596	3.596	1	H1-1b
4	4	PL3/8"X3"_HRB	0.07	0	4	0.087	0	y	18	36.436	50.625	0.396	3.164	1.5	H1-1b
5	5	PL3/8"X3"_HRB	0.088	0	8	0.082	0	y	7	36.436	50.625	0.396	3.164	1.638	H1-1b
6	6	PL3/8"X3"_HRB	0.073	0	12	0.107	0	y	14	36.436	50.625	0.396	3.164	1.723	H1-1b
7	7	PL3/8"X3"_HRB	0.067	0	4	0.097	0	y	2	36.436	50.625	0.396	3.164	1.908	H1-1b
8	8	PL3/8"X3"_HRB	0.087	0	8	0.111	0	y	22	36.436	50.625	0.396	3.164	1.618	H1-1b
9	9	PL3/8"X3"_HRB	0.064	0	12	0.084	0	y	22	36.436	50.625	0.396	3.164	1.717	H1-1b
10	10	L3X3X6	0.172	0	44	0.318	1.214	y	9	65.297	66.465	2.243	5.174	1.5	H2-1
11	11	L3X3X6	0.172	0	77	0.261	1.214	z	3	65.297	66.465	2.243	5.174	1.5	H2-1
12	12	L3X3X6	0.425	2.137	8	0.151	2.386	z	8	66.061	66.465	2.243	5.174	1.057	H2-1
13	13	L3X3X6	0.342	2.137	10	0.142	2.386	y	4	66.061	66.465	2.243	5.174	1.104	H2-1
14	14	L3X3X6	0.222	0.88	23	0.2	1.214	y	5	65.297	66.465	2.243	5.174	1.378	H2-1
15	15	L3X3X6	0.185	0	25	0.239	0.911	z	12	65.297	66.465	2.243	5.174	1.266	H2-1
16	16	L3X3X6	0.35	0	25	0.143	1.64	y	25	62.736	66.465	2.243	5.174	1.404	H2-1
17	17	L3X3X6	0.347	0	15	0.144	2.386	z	13	62.736	66.465	2.243	5.174	1.5	H2-1
18	18	L3X3X6	0.217	0.88	19	0.255	1.214	y	13	65.297	66.465	2.243	5.174	1.325	H2-1
19	19	L3X3X6	0.182	0	21	0.273	0.911	z	8	65.297	66.465	2.243	5.174	1.213	H2-1
20	20	L3X3X6	0.369	0	20	0.148	1.64	y	21	62.736	66.465	2.243	5.174	1.443	H2-1
21	21	L3X3X6	0.367	2.137	2	0.156	2.386	y	8	66.061	66.465	2.243	5.174	1.077	H2-1
22	22	PL3/8"X2-3/8"	0.175	0	18	0.036	0	y	8	32.767	40.68	0.323	2.018	1.329	H1-1b
23	23	PL3/8"X2-3/8"	0.178	0	19	0.031	0	y	4	32.767	40.68	0.323	2.018	1.394	H1-1b
24	24	PL3/8"X2-3/8"	0.164	0	19	0.023	0	y	17	32.767	40.68	0.323	2.018	1.777	H1-1b
25	25	PL3/8"X2-3/8"	0.157	0	18	0.024	0	y	8	32.767	40.68	0.323	2.018	1.795	H1-1b
26	26	PL3/8"X2-3/8"	0.167	0	19	0.041	0	y	3	32.767	40.68	0.323	2.018	1.245	H1-1b
27	27	PL3/8"X2-3/8"	0.164	0	17	0.042	0	y	9	32.767	40.68	0.323	2.018	1.274	H1-1b
28	28	PL3/8"X2-3/8"	0.203	0	14	0.031	0	y	4	32.767	40.68	0.323	2.018	1.327	H1-1b
29	29	PL3/8"X2-3/8"	0.202	0	14	0.032	0	y	12	32.767	40.68	0.323	2.018	1.387	H1-1b
30	30	PL3/8"X2-3/8"	0.187	0	14	0.029	0	y	25	32.767	40.68	0.323	2.018	1.819	H1-1b
31	31	PL3/8"X2-3/8"	0.177	0	14	0.024	0	y	15	32.767	40.68	0.323	2.018	1.766	H1-1b
32	32	PL3/8"X2-3/8"	0.185	0	14	0.045	0	y	24	32.767	40.68	0.323	2.018	1.319	H1-1b
33	33	PL3/8"X2-3/8"	0.184	0	25	0.033	0	y	5	32.767	40.68	0.323	2.018	1.255	H1-1b
34	34	PL3/8"X2-3/8"	0.21	0	22	0.032	0	y	12	32.767	40.68	0.323	2.018	1.328	H1-1b
35	35	PL3/8"X2-3/8"	0.207	0	22	0.036	0	y	8	32.767	40.68	0.323	2.018	1.383	H1-1b
36	36	PL3/8"X2-3/8"	0.193	0	22	0.03	0	y	21	32.767	40.68	0.323	2.018	1.818	H1-1b
37	37	PL3/8"X2-3/8"	0.182	0	22	0.024	0	y	23	32.767	40.68	0.323	2.018	1.768	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	Lcphi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
38	38	PL3/8"X2-3/8"	0.189	0	22	0.046	0	y	20 32.767	40.68	0.323	2.018	1.316	H1-1b
39	39	PL3/8"X2-3/8"	0.191	0	21	0.038	0	y	13 32.767	40.68	0.323	2.018	1.265	H1-1b
40	40	HSS4X3X4	0.123	4.023	8	0.067	0.531	z	76 83.04	91.665	8.19	10.001	2.306	H1-1b
41	41	HSS4X3X4	0.123	4.023	13	0.069	0.531	z	85 83.04	91.665	8.19	10.001	2.739	H1-1b
42	42	HSS4X3X4	0.138	4.023	8	0.067	0.531	z	80 83.04	91.665	8.19	10.001	2.745	H1-1b
43	43	PL3/8"X4"	0.375	0.917	14	0.016	0	y	11 31.728	67.5	0.527	5.625	1.276	H1-1a
44	44	PL3/8"X4"	0.317	0.958	14	0.019	0	y	11 29.576	67.5	0.527	5.625	1.873	H1-1a
45	45	PL3/8"X4"	0.134	0	2	0.03	0	y	11 41.15	67.5	0.527	5.625	1.216	H1-1b*
46	46	PL3/8"X4"	0.101	0	2	0.029	0	y	11 45.284	67.5	0.527	5.625	1.106	H1-1b*
47	47	PL3/8"X4"	0.139	0.479	2	0.029	0	y	11 25.241	67.5	0.527	5.49	1.083	H1-1b*
48	48	PL3/8"X4"	0.081	0	12	0.027	0.339	y	11 41.24	67.5	0.527	5.625	1.111	H1-1b
49	49	PL3/8"X4"	0.052	0	24	0.023	0	y	11 40.841	67.5	0.527	5.625	2.885	H1-1b
50	50	PL1/2"X4"	0.21	0.917	12	0.072	0.917	y	11 59.059	90	0.938	7.5	1.48	H1-1b
51	51	PL1/2"X4"	0.137	0	12	0.079	0.958	y	11 56.789	90	0.938	7.5	2.087	H1-1b
52	52	PL1/2"X4"	0.205	0.337	7	0.094	0.718	y	11 69.487	90	0.938	7.5	1.324	H1-1b
53	53	PL1/2"X4"	0.059	0.648	25	0.012	0	y	11 72.914	90	0.938	7.5	1.473	H1-1b
54	54	PL1/2"X4"	0.077	0.458	8	0.063	0.437	y	10 53.245	90	0.938	7.5	2.143	H1-1b
55	55	PL1/2"X4"	0.036	0	12	0.031	0.332	y	10 69.154	90	0.938	7.5	1.586	H1-1b
56	56	PL1/2"X4"	0.045	0.499	24	0.024	0.499	y	11 67.337	90	0.938	7.5	2.308	H1-1b
57	57	PL3/8"X1"	0.366	0.917	14	0.017	0.917	y	12 8.73	17.1	0.135	0.356	2.274	H1-1a
58	58	PL3/8"X1"	0.345	0.957	14	0.023	0.957	y	12 8.217	17.1	0.135	0.356	2.278	H1-1a
59	59	PL3/8"X1"	0.142	0.731	14	0.03	0.731	y	11 11.151	17.1	0.135	0.356	2.251	H1-1b
60	60	PL3/8"X1"	0.111	0.667	14	0.027	0.667	y	11 11.984	17.1	0.135	0.356	2.268	H1-1b
61	61	PL3/8"X1"	0.15	1.045	14	0.031	1.045	y	24 7.134	17.1	0.135	0.356	1.988	H1-1b
62	62	PL3/8"X1"	0.054	0.332	13	0.023	0.741	y	11 11.026	17.1	0.135	0.356	2.762	H1-1b
63	63	PL3/8"X1"	0.225	0	2	0.096	0.221	y	14 10.789	17.1	0.135	0.356	2.894	H1-1b
64	64	PL3/8"X1"	0.276	1.264	14	0.006	1.264	y	18 4.908	17.1	0.135	0.356	2.267	H1-1a
65	65	PL3/8"X1"	0.281	0	14	0.021	1.294	y	10 4.686	17.1	0.135	0.356	2.229	H1-1a
66	66	PL3/8"X1"	0.118	0	14	0.039	1.013	y	10 7.518	17.1	0.135	0.356	1.019	H1-1b*
67	67	PL3/8"X1"	0.109	0	14	0.043	0	y	10 9.308	17.1	0.135	0.356	2.231	H1-1b*
68	68	PL3/8"X7/8"	0.147	0.727	14	0.043	0.727	y	10 9.357	14.76	0.116	0.27	2.158	H1-1b*
69	69	PL3/8"X3/4"	0.063	0.595	9	0.054	0	y	10 8.914	12.645	0.096	0.199	2.214	H1-1b
70	70	PL3/8"X3/4"	0.04	0.487	14	0.034	0	y	10 10.006	12.645	0.096	0.199	2.348	H1-1b*
71	71	PL3/8"X5/8"	0.043	0.397	14	0.012	0.397	y	10 9.25	10.53	0.082	0.139	2.148	H1-1b*
72	72	PL3/8"X1"	0.085	0.917	2	0.038	0.917	y	11 8.73	17.1	0.135	0.356	2.241	H1-1b*
73	73	PL3/8"X1"	0.072	0.958	2	0.042	0.958	y	11 8.2	17.1	0.135	0.356	2.257	H1-1b*
74	74	PL3/8"X1"	0.058	0.718	14	0.025	0.718	y	11 11.316	17.1	0.135	0.356	2.217	H1-1b*
75	75	PL3/8"X1"	0.037	0.648	2	0.011	0.648	y	24 12.22	17.1	0.135	0.356	2.245	H1-1b*
76	76	PL3/8"X1"	0.038	0.458	2	0.029	0	y	10 7.399	17.1	0.135	0.356	2.035	H1-1b*
77	77	PL3/8"X1"	0.021	0.325	2	0.023	0.725	y	10 11.23	17.1	0.135	0.356	2.587	H1-1b*
78	78	PL3/8"X1"	0.011	0.499	2	0.015	0.499	y	25 10.763	17.1	0.135	0.356	2.493	H1-1b*
79	79	PL3/8"X1"	0	0.871	20	0	0.871	y	8 9.322	17.1	0.135	0.356	2.381	H1-1b*
80	80	PL3/8"X1"	0	0.871	109	0.03	0.871	y	11 9.322	17.1	0.135	0.356	1.326	H1-1a
81	81	PL3/8"X1"	0	0.871	109	0.025	0.871	y	11 9.322	17.1	0.135	0.356	1.355	H1-1a
82	82	PL3/8"X1"	0	0.719	109	0.017	0	y	11 11.302	17.1	0.135	0.356	2.158	H1-1a
83	83	PL3/8"X7/8"	0.029	0.583	8	0.019	0.583	y	11 11.003	14.76	0.116	0.27	2.242	H1-1b*
84	84	PL3/8"X3/4"	0.044	0.467	8	0.023	0.467	y	11 10.197	12.645	0.096	0.199	2.194	H1-1b*
85	85	PL3/8"X3/4"	0.013	0.37	8	0.023	0.37	y	11 11.05	12.645	0.096	0.199	2.054	H1-1b*
86	86	PL3/8"X5/8"	0	0.288	109	0.017	0.288	y	11 9.838	10.53	0.082	0.139	2.265	H1-1a
87	189	PIPE 2.0	0.316	4.297	5	0.192	0.651		9 6.295	32.13	1.872	1.872	1	H1-1b
88	190	PIPE 2.0	0.404	4.297	13	0.198	8.203		2 6.295	32.13	1.872	1.872	1	H1-1b
89	191	PIPE 2.0	0.427	4.297	9	0.193	0.651		2 6.295	32.13	1.872	1.872	1	H1-1b
90	193	PIPE 2.0	0.331	7.219	13	0.107	7.219		9 8.922	32.13	1.872	1.872	1	H1-1b
91	196	PIPE 2.0	0.619	7.219	2	0.096	7.219		11 8.922	32.13	1.872	1.872	1	H1-1b
92	199	PIPE 2.0	0.473	7.219	3	0.117	7.219		6 8.922	32.13	1.872	1.872	1	H1-1b

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
93	202	PIPE 2.0	0.347	7.219	3	0.081	7.219		5	8.922	32.13	1.872	1.872	1	H1-1b
94	207	PIPE 2.0	0.335	7.219	3	0.118	7.219		2	8.922	32.13	1.872	1.872	1	H1-1b
95	210	PIPE 2.0	0.348	7.219	8	0.09	7.219		10	8.922	32.13	1.872	1.872	1	H1-1b
96	213	PIPE 2.0	0.382	7.219	8	0.092	7.219		6	8.922	32.13	1.872	1.872	1	H1-1b
97	216	PIPE 2.0	0.288	7.219	12	0.117	7.219		2	8.922	32.13	1.872	1.872	1	H1-1b
98	218	WT4X2.25X0.38	0.011	1.219	6	0.134	2.437	z	9	63.333	71.381	4.228	1.315	1	H1-1b
99	219	WT4X2.25X0.38	0.012	1.219	2	0.098	2.437	z	11	63.333	71.381	4.228	1.315	1	H1-1b
100	220	WT4X2.25X0.38	0.011	1.219	10	0.123	2.437	z	7	63.333	71.381	4.228	1.315	1	H1-1b
101	222	PIPE 2.0	0.525	7.219	7	0.117	7.219		3	8.922	32.13	1.872	1.872	1	H1-1b
102	225	PIPE 2.0	0.58	7.219	8	0.136	7.219		9	8.922	32.13	1.872	1.872	1	H1-1b
103	228	PIPE 2.0	0.587	7.219	9	0.117	7.219		7	8.922	32.13	1.872	1.872	1	H1-1b
104	231	PIPE 2.0	0.49	7.219	13	0.169	7.219		2	8.922	32.13	1.872	1.872	1	H1-1b
105	233	PL3/8"X4"	0.361	0.917	18	0.013	0	y	9	31.728	67.5	0.527	5.625	1.364	H1-1a
106	234	PL3/8"X4"	0.308	0.958	18	0.035	0	y	3	29.576	67.5	0.527	5.625	2.261	H1-1a
107	235	PL3/8"X4"	0.137	0	18	0.039	0	y	3	41.15	67.5	0.527	5.625	1.298	H1-1b*
108	236	PL3/8"X4"	0.099	0	18	0.036	0	y	3	45.284	67.5	0.527	5.625	1.126	H1-1b*
109	237	PL3/8"X4"	0.129	0.479	18	0.033	0.479	y	3	25.241	67.5	0.527	5.457	1.077	H1-1b*
110	238	PL3/8"X4"	0.082	0	3	0.029	0.339	y	3	41.24	67.5	0.527	5.625	1.105	H1-1b
111	239	PL3/8"X4"	0.046	0	4	0.026	0	y	3	40.841	67.5	0.527	5.625	3	H1-1b
112	240	PL1/2"X4"	0.327	0.458	7	0.615	0.917	y	3	59.059	90	0.938	7.5	1.545	H1-1b
113	241	PL1/2"X4"	0.154	0	8	0.09	0.958	y	9	56.789	90	0.938	7.5	1.986	H1-1b
114	242	PL1/2"X4"	0.216	0.337	8	0.064	0.718	y	9	69.487	90	0.938	7.5	1.317	H1-1b
115	243	PL1/2"X4"	0.056	0.648	8	0.014	0	y	9	72.914	90	0.938	7.5	1.641	H1-1b
116	244	PL1/2"X4"	0.049	0.469	8	0.042	0.437	y	13	53.245	90	0.938	7.5	1.563	H1-1b
117	245	PL1/2"X4"	0.038	0	8	0.02	0.332	y	13	69.154	90	0.938	7.5	1.603	H1-1b
118	246	PL1/2"X4"	0.04	0	16	0.027	0.499	y	3	67.337	90	0.938	7.5	2.511	H1-1b
119	247	PL3/8"X1"	0.369	0.917	18	0.013	0.917	y	18	8.73	17.1	0.135	0.356	2.274	H1-1a
120	248	PL3/8"X1"	0.34	0.957	18	0.035	0.957	y	3	8.217	17.1	0.135	0.356	2.277	H1-1a
121	249	PL3/8"X1"	0.135	0.731	18	0.038	0.731	y	9	11.151	17.1	0.135	0.356	2.25	H1-1b
122	250	PL3/8"X1"	0.107	0.667	18	0.034	0.667	y	3	11.984	17.1	0.135	0.356	2.267	H1-1b
123	251	PL3/8"X1"	0.146	1.045	18	0.034	1.045	y	3	7.134	17.1	0.135	0.356	1.977	H1-1b
124	252	PL3/8"X1"	0.054	0	18	0.026	0.741	y	3	11.026	17.1	0.135	0.356	2.83	H1-1b
125	253	PL3/8"X1"	0.225	0	18	0.095	0.221	y	18	10.789	17.1	0.135	0.356	2.947	H1-1b
126	254	PL3/8"X1"	0.285	1.264	18	0.009	1.264	y	9	4.908	17.1	0.135	0.356	2.268	H1-1a
127	255	PL3/8"X1"	0.277	1.294	16	0.088	1.294	y	3	4.686	17.1	0.135	0.356	2.269	H1-1a
128	256	PL3/8"X1"	0.109	0	18	0.062	1.013	y	3	7.518	17.1	0.135	0.356	1.153	H1-1b*
129	257	PL3/8"X1"	0.103	0	18	0.038	0	y	3	9.308	17.1	0.135	0.356	2.237	H1-1b*
130	258	PL3/8"X7/8"	0.139	0.727	18	0.03	0	y	13	9.357	14.76	0.116	0.27	2.159	H1-1b*
131	259	PL3/8"X3/4"	0.051	0.595	17	0.037	0.595	y	13	8.914	12.645	0.096	0.199	2.19	H1-1b
132	260	PL3/8"X3/4"	0.04	0.487	18	0.023	0.487	y	13	10.006	12.645	0.096	0.199	2.158	H1-1b*
133	261	PL3/8"X5/8"	0.044	0.397	18	0.008	0	y	13	9.25	10.53	0.082	0.139	2.156	H1-1b*
134	262	PL3/8"X1"	0.088	0.917	6	0.161	0.917	y	3	8.73	17.1	0.135	0.356	2.276	H1-1b*
135	263	PL3/8"X1"	0.051	0.958	6	0.047	0.958	y	9	8.2	17.1	0.135	0.356	2.232	H1-1b*
136	264	PL3/8"X1"	0.055	0.718	18	0.019	0.718	y	8	11.316	17.1	0.135	0.356	2.223	H1-1b*
137	265	PL3/8"X1"	0.032	0.648	6	0.009	0.648	y	20	12.22	17.1	0.135	0.356	2.245	H1-1b*
138	266	PL3/8"X1"	0.034	0.458	18	0.02	0.458	y	13	7.399	17.1	0.135	0.356	2.007	H1-1b*
139	267	PL3/8"X1"	0.019	0.325	6	0.014	0.725	y	13	11.23	17.1	0.135	0.356	2.583	H1-1b*
140	268	PL3/8"X1"	0.01	0.499	6	0.014	0.499	y	8	10.763	17.1	0.135	0.356	2.487	H1-1b*
141	269	PL3/8"X1"	0	0.871	24	0	0.871	y	12	9.322	17.1	0.135	0.356	2.381	H1-1b*
142	270	PL3/8"X1"	0.007	0.871	12	0.037	0.871	y	3	9.322	17.1	0.135	0.356	2.149	H1-1b*
143	271	PL3/8"X1"	0	0.871	109	0.03	0.871	y	3	9.322	17.1	0.135	0.356	1.305	H1-1a
144	272	PL3/8"X1"	0	0.719	109	0.019	0	y	3	11.302	17.1	0.135	0.356	2.144	H1-1a
145	273	PL3/8"X7/8"	0.01	0.583	12	0.021	0.583	y	3	11.003	14.76	0.116	0.27	1.622	H1-1b*
146	274	PL3/8"X3/4"	0.016	0.467	12	0.025	0.467	y	3	10.197	12.645	0.096	0.199	2.204	H1-1b*
147	275	PL3/8"X3/4"	0.006	0.37	12	0.025	0.37	y	3	11.05	12.645	0.096	0.199	2.069	H1-1b*

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

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	phi*Pnc [k]	phi*Pnt [k]	phi*Mn y-y [k-ft]	phi*Mn z-z [k-ft]	Cb	Eqn
148	276	PL3/8"X5/8"	0	0.288	109	0.019	0.288	y	3	9.838	10.53	0.082	0.139	2.263	H1-1a
149	306	PL3/8"X4"	0.368	0.917	21	0.016	0	y	7	31.728	67.5	0.527	5.625	1.239	H1-1a
150	307	PL3/8"X4"	0.313	0.958	21	0.019	0	y	7	29.576	67.5	0.527	5.625	1.642	H1-1a
151	308	PL3/8"X4"	0.132	0	22	0.039	0	y	7	41.15	67.5	0.527	5.625	1.489	H1-1b*
152	309	PL3/8"X4"	0.092	0	22	0.034	0	y	7	45.284	67.5	0.527	5.625	1.184	H1-1b*
153	310	PL3/8"X4"	0.118	0.479	10	0.033	0	y	7	25.241	67.5	0.527	5.625	1.214	H1-1b*
154	311	PL3/8"X4"	0.095	0	8	0.031	0.339	y	7	41.24	67.5	0.527	5.625	1.121	H1-1b
155	312	PL3/8"X4"	0.057	0	8	0.027	0	y	7	40.841	67.5	0.527	5.625	2.82	H1-1b
156	313	PL1/2"X4"	0.224	0.917	8	0.083	0.917	y	7	59.059	90	0.938	7.5	1.549	H1-1b
157	314	PL1/2"X4"	0.169	0	8	0.091	0.958	y	7	56.789	90	0.938	7.5	1.852	H1-1b
158	315	PL1/2"X4"	0.228	0.337	2	0.106	0.718	y	7	69.487	90	0.938	7.5	1.313	H1-1b
159	316	PL1/2"X4"	0.062	0.648	8	0.014	0	y	7	72.914	90	0.938	7.5	1.561	H1-1b
160	317	PL1/2"X4"	0.056	0.458	3	0.065	0.437	y	2	53.245	90	0.938	7.5	1.572	H1-1b
161	318	PL1/2"X4"	0.042	0	8	0.032	0.725	y	2	69.154	90	0.938	7.5	1.575	H1-1b
162	319	PL1/2"X4"	0.047	0.499	8	0.028	0.499	y	7	67.337	90	0.938	7.5	2.256	H1-1b
163	320	PL3/8"X1"	0.366	0.917	22	0.016	0.917	y	8	8.73	17.1	0.135	0.356	2.274	H1-1a
164	321	PL3/8"X1"	0.344	0.957	22	0.021	0.957	y	20	8.217	17.1	0.135	0.356	2.278	H1-1a
165	322	PL3/8"X1"	0.142	0.731	21	0.039	0.731	y	8	11.151	17.1	0.135	0.356	2.251	H1-1b
166	323	PL3/8"X1"	0.11	0.667	21	0.034	0.667	y	8	11.984	17.1	0.135	0.356	2.268	H1-1b
167	324	PL3/8"X1"	0.148	0.479	22	0.037	1.045	y	8	7.134	17.1	0.135	0.356	1.991	H1-1b
168	325	PL3/8"X1"	0.052	0.332	9	0.027	0.741	y	8	11.026	17.1	0.135	0.356	2.774	H1-1b
169	326	PL3/8"X1"	0.212	0	22	0.094	0.221	y	21	10.789	17.1	0.135	0.356	2.979	H1-1b
170	327	PL3/8"X1"	0.28	1.264	21	0.004	1.264	y	24	4.908	17.1	0.135	0.356	2.273	H1-1a
171	328	PL3/8"X1"	0.283	0	22	0.028	0	y	8	4.686	17.1	0.135	0.356	2.229	H1-1a
172	329	PL3/8"X1"	0.12	0	22	0.043	1.013	y	7	7.518	17.1	0.135	0.356	1.026	H1-1b*
173	330	PL3/8"X1"	0.11	0	22	0.042	0	y	2	9.308	17.1	0.135	0.356	2.229	H1-1b*
174	331	PL3/8"X7/8"	0.149	0.727	22	0.042	0.727	y	2	9.357	14.76	0.116	0.27	2.157	H1-1b*
175	332	PL3/8"X3/4"	0.057	0.595	2	0.055	0	y	2	8.914	12.645	0.096	0.199	2.361	H1-1b
176	333	PL3/8"X3/4"	0.039	0.487	22	0.035	0	y	2	10.006	12.645	0.096	0.199	2.362	H1-1b*
177	334	PL3/8"X5/8"	0.043	0.397	22	0.013	0.397	y	2	9.25	10.53	0.082	0.139	2.144	H1-1b*
178	335	PL3/8"X1"	0.075	0.917	10	0.044	0.917	y	8	8.73	17.1	0.135	0.356	2.243	H1-1b*
179	336	PL3/8"X1"	0.062	0.958	10	0.048	0.958	y	7	8.2	17.1	0.135	0.356	2.256	H1-1b*
180	337	PL3/8"X1"	0.058	0.718	22	0.028	0.718	y	8	11.316	17.1	0.135	0.356	2.215	H1-1b*
181	338	PL3/8"X1"	0.032	0.648	10	0.011	0.648	y	20	12.22	17.1	0.135	0.356	2.243	H1-1b*
182	339	PL3/8"X1"	0.036	0.458	22	0.03	0	y	2	7.399	17.1	0.135	0.356	1.983	H1-1b*
183	340	PL3/8"X1"	0.019	0.325	10	0.024	0.725	y	2	11.23	17.1	0.135	0.356	2.588	H1-1b*
184	341	PL3/8"X1"	0.01	0.499	10	0.015	0.499	y	8	10.763	17.1	0.135	0.356	2.499	H1-1b*
185	342	PL3/8"X1"	0	0.871	16	0	0.871	y	4	9.322	17.1	0.135	0.356	2.381	H1-1b*
186	343	PL3/8"X1"	0	0.871	109	0.034	0.871	y	7	9.322	17.1	0.135	0.356	1.325	H1-1a
187	344	PL3/8"X1"	0	0.871	109	0.028	0.871	y	7	9.322	17.1	0.135	0.356	1.354	H1-1a
188	345	PL3/8"X1"	0	0.719	109	0.018	0	y	7	11.302	17.1	0.135	0.356	2.157	H1-1a
189	346	PL3/8"X7/8"	0.011	0.583	4	0.021	0.583	y	7	11.003	14.76	0.116	0.27	1.645	H1-1b*
190	347	PL3/8"X3/4"	0.016	0.467	4	0.026	0.467	y	8	10.197	12.645	0.096	0.199	2.203	H1-1b*
191	348	PL3/8"X3/4"	0.007	0.37	4	0.026	0.37	y	7	11.05	12.645	0.096	0.199	2.089	H1-1b*
192	349	PL3/8"X5/8"	0	0.288	109	0.02	0.288	y	8	9.838	10.53	0.082	0.139	2.266	H1-1a
193	379	PIPE 2.5	0.144	0	8	0.011	0		8	37.774	50.715	3.596	3.596	1	H1-1b

APPENDIX D

ADDITIONAL CALCUATIONS

PROJECT	**152945.004.01.0001 - WOODBURY PA KSC**				
SUBJECT	**Platform Mount Analysis**				
DATE	**03/29/23**	PAGE	1	OF	1

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

B+T GRP

[REF: AISC 360-05]

Reactions at Bolted Connection

Tension	:	13.837	k
Vertical Shear	:	3.104	k
Horizontal Shear	:	1.259	k
Torsion	:	0.319	k.ft
Moment from Horizontal Forces	:	1.282	k.ft
Moment from Vertical Forces	:	0.279	k.ft

Bolt Parameters

Bolt Grade	:	A325	
Bolt Diameter	:	0.625	in
Nominal Bolt Area	:	0.307	in^2
Bolt spacing, Horizontal	:	6	in
Bolt spacing, Vertical	:	6	in
Bolt edge distance, plate height	:	1.5	in
Bolt edge distance, plate width	:	1.5	in
Total Number of Bolts	:	4	bolts

Summary of Forces

Shear Resultant Force	:	3.35	k
Force from Horz. Moment	:	2.32	k
Force from Vert. Moment	:	0.51	k
Shear Load / Bolt	:	0.84	k
Tension Load / Bolt	:	3.46	k
Resultant from Moments / Bolt	:	1.19	k

Bolt Checks

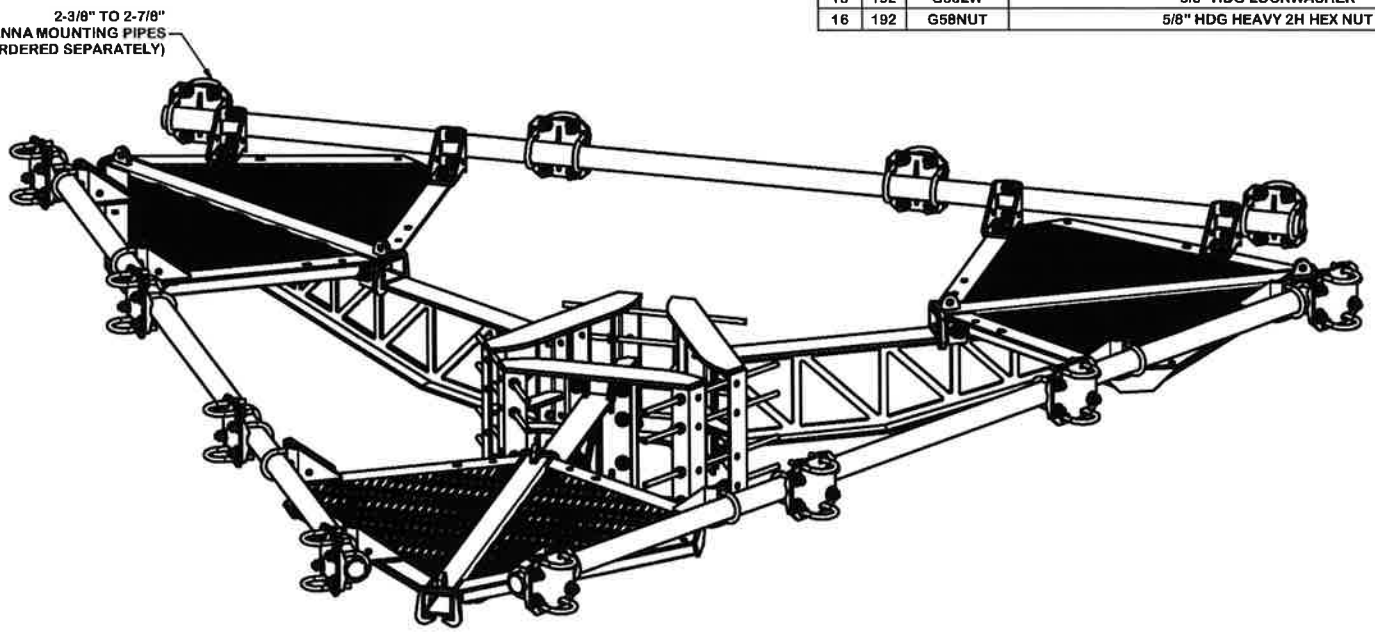
Nominal Tensile Stress, F_{nt}	:	90.00	ksi	[AISC Table J3.2]
Available Tensile Stress, ΦR_{nt}	:	20.72	k/bolt	[Eq. J3-1]
Unity Check, Bolt Tension	:	**22.43%**		**OKAY**
Nominal Shear Stress, F_{nv}	:	48.00	ksi	[AISC Table J3.2]
Available Shear Stress, ΦR_{nv}	:	11.05	k/bolt	[Eq. J3-1]
Unity Check, Bolt Shear	:	**38.88%**		**OKAY**
Unity Check, Combined	:	**61.30%**		**OKAY**
Available Bearing Strength, ΦR_n	:	34.66	k/bolt	
Unity Check, Bolt Bearing	:	**2.42%**		**OKAY**

APPENDIX E

SUPPLEMENTAL DRAWINGS

PARTS LIST

ITEM	QTY	PART NO.	PART DESCRIPTION	LENGTH	UNIT WT.	NET WT.
1	3	X-LPP-CW	LOW PROFILE PLATFORM CORNER WELDMENT		198.75	596.26
2	3	X-LPP-SA12	SIDE ARM WELDMENT FOR 12' LOW PROFILE PLATFORMS		119.21	357.63
3	3	X-RM3HD	WELDMENT FOR 3-SIDED HEAVY DUTY RING MOUNT		84.42	253.25
4	12	X-LPP-PC	FACE PIPE CONNECTION BRACKET FORTRESS PLATFORM		7.01	84.11
5	12	X-SCX3-FR	FORTRESS CROSSOVER PLATE		6.61	79.37
6	12	X-LPP-A7	CORNER WELDMENT ATTACHMENT ANGLE	2 1/2 in	1.27	15.25
7	3	P30150	2-7/8" X 150" (2-1/2" SCH. 40) GALVANIZED PIPE	150 in	76.94	230.81
8	12	G58R-48	5/8" x 48" THREADED ROD (HDG.)	48 in	0.40	4.79
8	12	G58R-24	5/8" x 24" THREADED ROD (HDG.)	24 in	0.40	4.79
9	6	G58R-8	5/8" x 8" THREADED ROD (HDG.)		0.70	4.18
10	48	X-UB5300	5/8" X 3" X 5-1/4" X 2-1/2" U-BOLT (HDG.)		1.15	55.17
11	24	X-UB5258	5/8" X 2-5/8" X 4-1/2" X 2" U-BOLT (HDG.)		1.00	24.00
12	12	X-UB5304	5/8" X 3" X 4-1/4" X 2-1/2" U-BOLT (HDG.)		0.98	11.70
13	36	G58214	5/8" x 2-1/4" HDG HEX BOLT GR5		0.29	10.49
14	168	G58FW	5/8" HDG USS FLATWASHER	1/8 in	0.07	11.84
15	192	G58LW	5/8" HDG LOCKWASHER		0.03	5.01
16	192	G58NUT	5/8" HDG HEAVY 2H HEX NUT		0.13	24.94
					TOTAL WT. #	1839.28



TOLERANCE NOTES

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

PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION
12' FORTRESS™
TRI-PLATFORM MOUNT

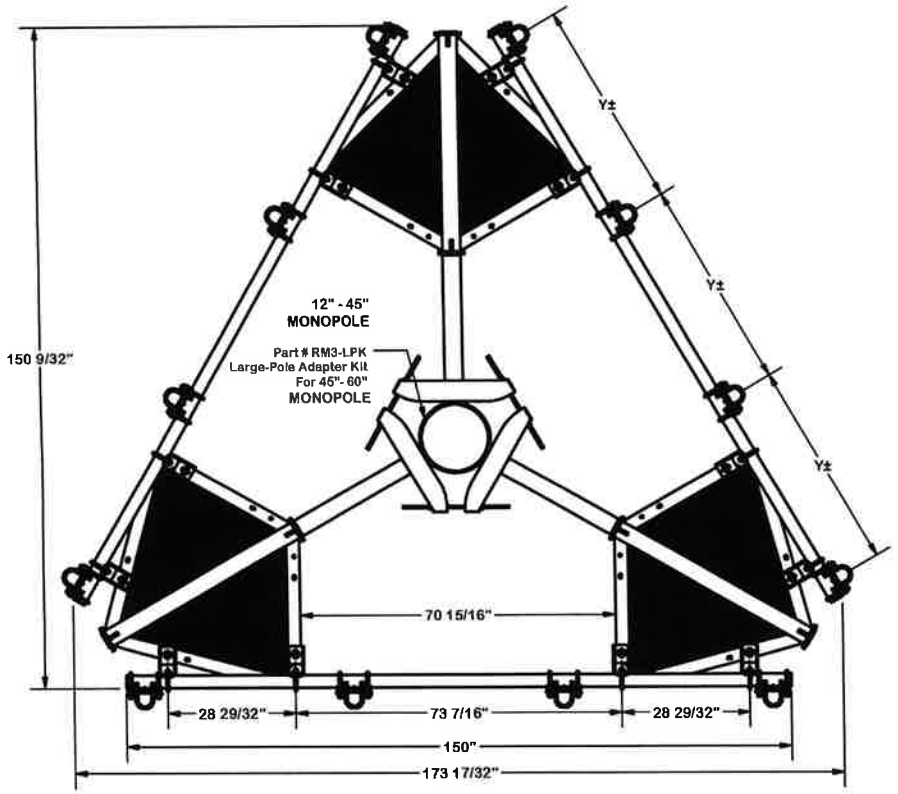
SITE PRO 1 — A valmont company

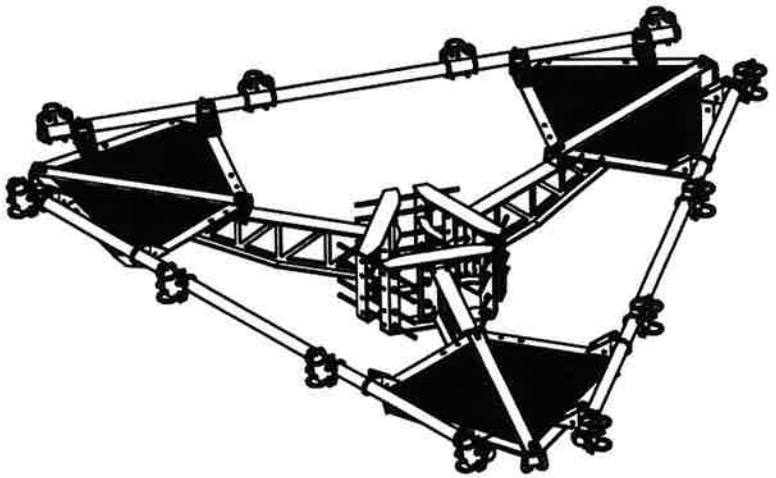
Engineering Support Team: 1-888-753-7446

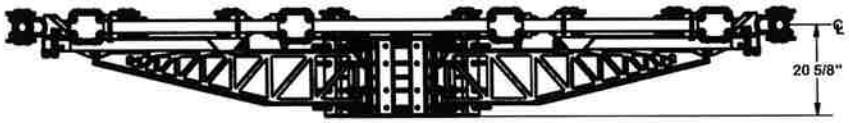
Locations: New York, NY; Atlanta, GA; Los Angeles, CA; Plymouth, IN; Salem, OR; Dallas, TX

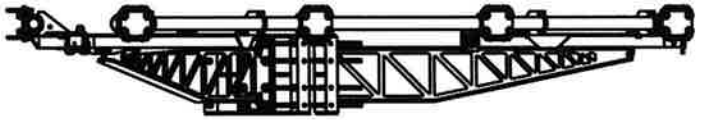
CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
	CEK 8/9/2017		F3P-12

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 8/30/2017	F3P-12









TOLERANCE NOTES

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

PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION
12' FORTRESS™
TRI-PLATFORM MOUNT

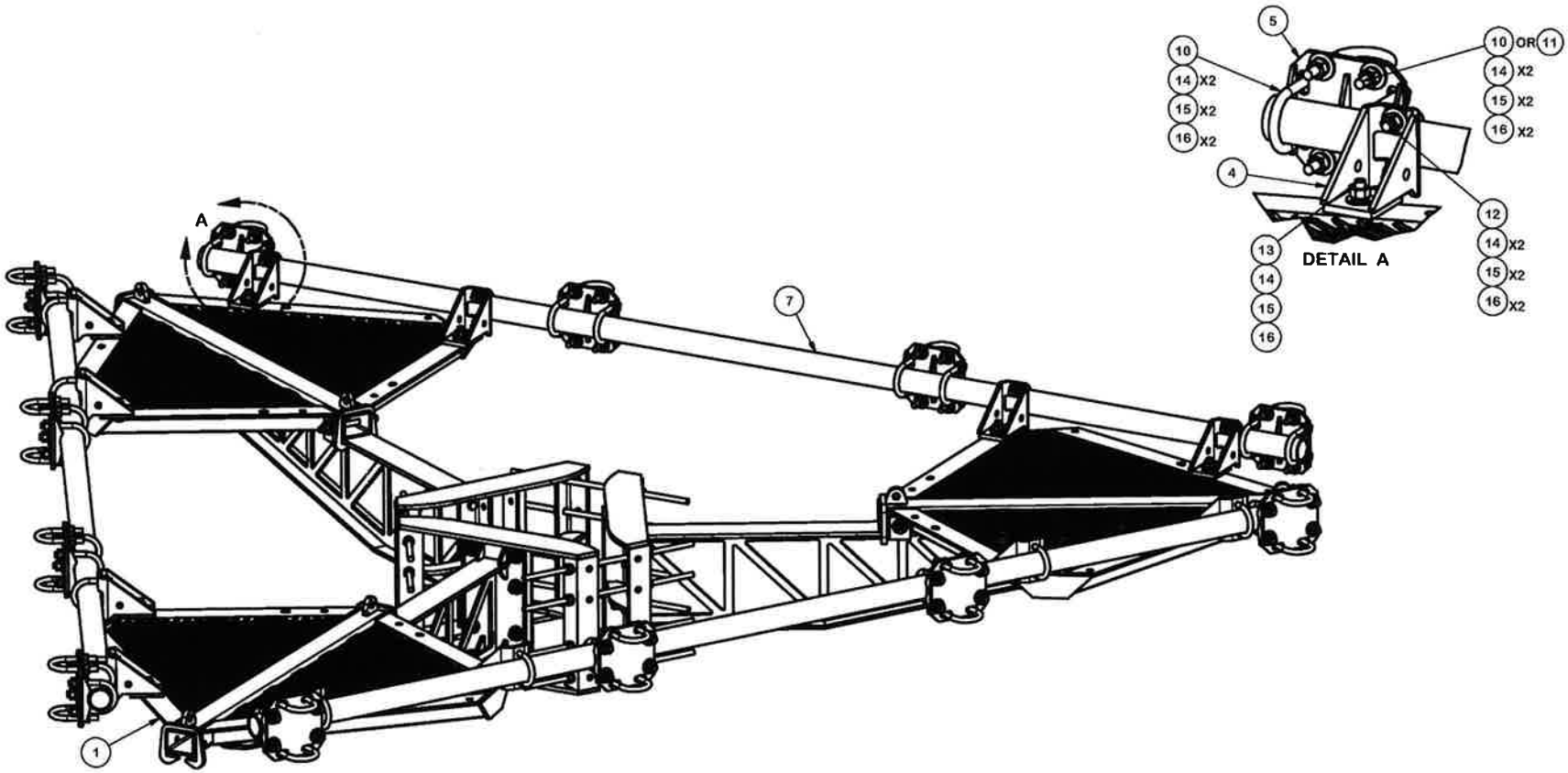
SITE PRO 1 — A valmont company

Engineering Support Team: 1-888-753-7446

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

CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
	CEK 8/9/2017		F3P-12

CLASS	SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81	02	CUSTOMER	BMC 8/30/2017	F3P-12



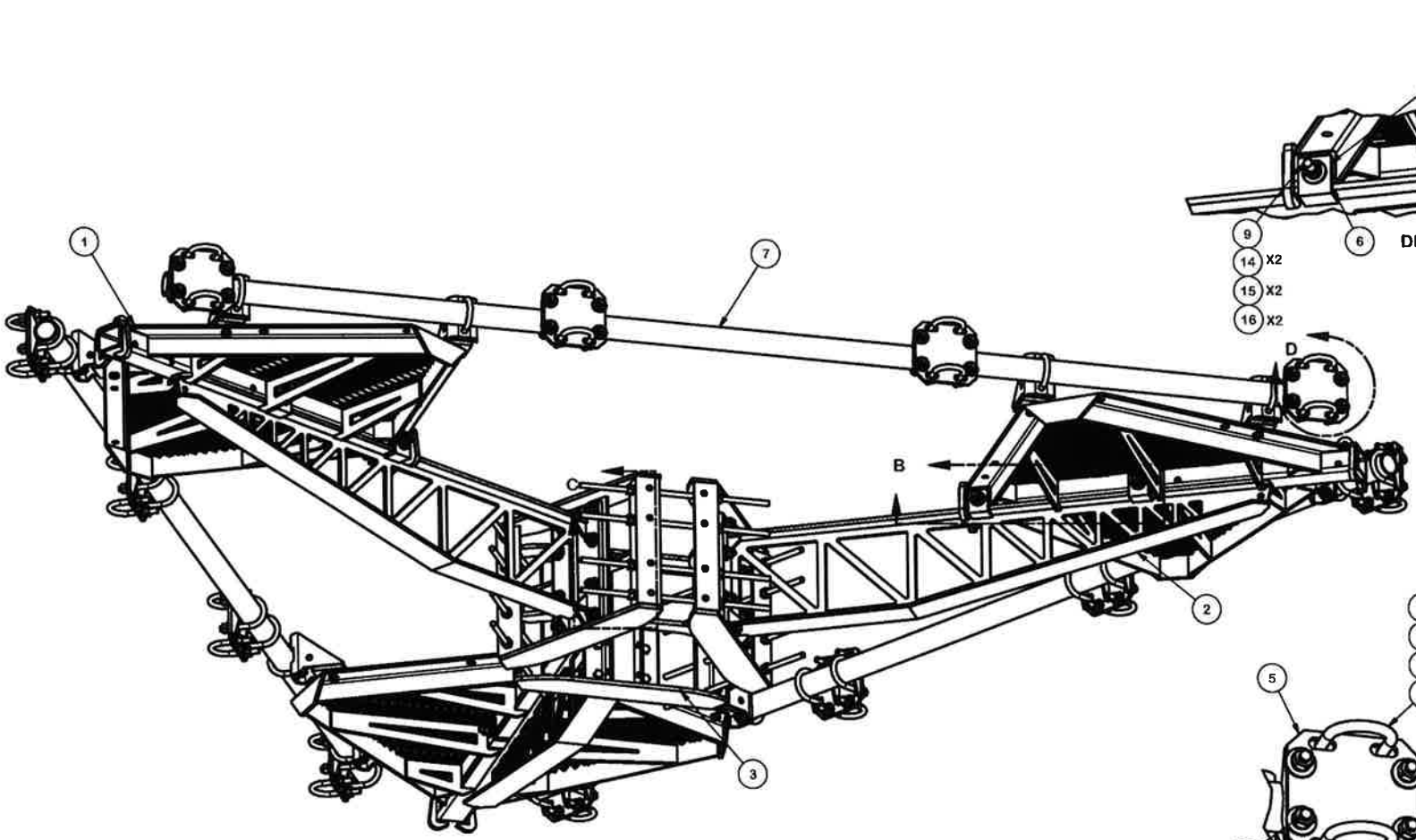
TOLERANCE NOTES

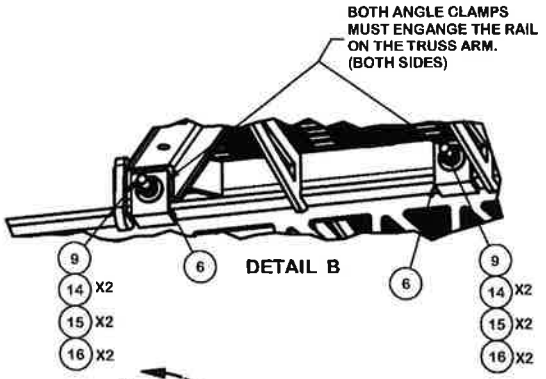
TOLERANCES ON DIMENSIONS, UNLESS OTHERWISE NOTED ARE:
SAWED, SHEARED AND GAS CUT EDGES *(± 0.030")*
DRILLED AND GAS CUT HOLES *(± 0.030")* - NO CONING OF HOLES
LASER CUT EDGES AND HOLES *(± 0.010")* - NO CONING OF HOLES
BENDS ARE ± 1/2 DEGREE
ALL OTHER MACHINING *(± 0.030")*
ALL OTHER ASSEMBLY *(± 0.060")*

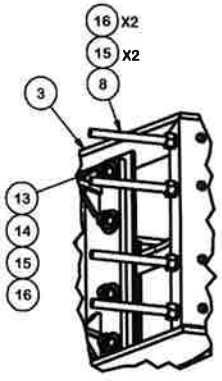
PROPRIETARY NOTE:
THE DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALIDUS MOUNTING AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALIDUS MOUNTING IS STRICTLY PROHIBITED.

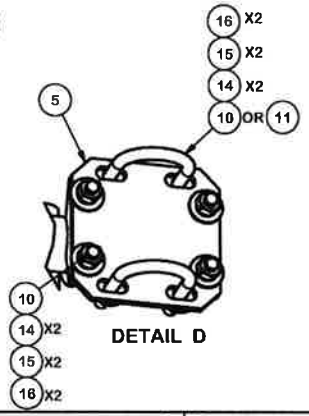
DESCRIPTION			
12' FORTRESS™ TRI-PLATFORM MOUNT			
CPD NO.	DRAWN BY	ENG. APPROVAL	PART NO.
	CEK 8/9/2017		F3P-12
CLASS / SUB	DRAWING USAGE	CHECKED BY	DWG. NO.
81 / 02	CUSTOMER	BMC 8/30/2017	F3P-12

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









TOLERANCE NOTES

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

PROPRIETARY NOTE:
THIS DATA AND TECHNIQUES CONTAINED IN THIS DRAWING ARE PROPRIETARY INFORMATION OF VALMONT INDUSTRIES AND CONSIDERED A TRADE SECRET. ANY USE OR DISCLOSURE WITHOUT THE CONSENT OF VALMONT INDUSTRIES IS STRICTLY PROHIBITED.

DESCRIPTION			
12' FORTRESS™ TRI-PLATFORM MOUNT			
CPD NO.	DRAWN BY: CEK 8/9/2017	ENG. APPROVAL	PART NO.: F3P-12
CLASS: 81 / SUB: 02	DRAWING USAGE: CUSTOMER	CHECKED BY: BMC 8/30/2017	DWG. NO.: F3P-12

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

Product Specifications

91900314

Dual-mount antenna bracket

JMA WIRELESS

Dual-mount antenna bracket

- Enables optimal spacing for low-band 4T4R beamforming by allowing for two of the same antenna on one bracket
- Mechanical tilt in line with specified antenna
- Spacing achieved can be 3/4", 2", or 12" (edge-to-edge) dependent on antenna model
- Compatible with MX*, MC*, X7C*, C7C* antenna ranges

Dual-mount bracket assembled

Spacing options between dual antennas

X7C* and C7C* models	2 of same antennas locked at 2" spacing Example: (2) X7CQAP-FRO-645-V can be locked at 2" of spacing
MX*, MC* models	2 of same antennas locked at 3/4", 2", or 12" spacing Example: (2) MX08FRO660-02 can be locked at 2" or 12" spacing (see above image)

Brackets needed per antenna type

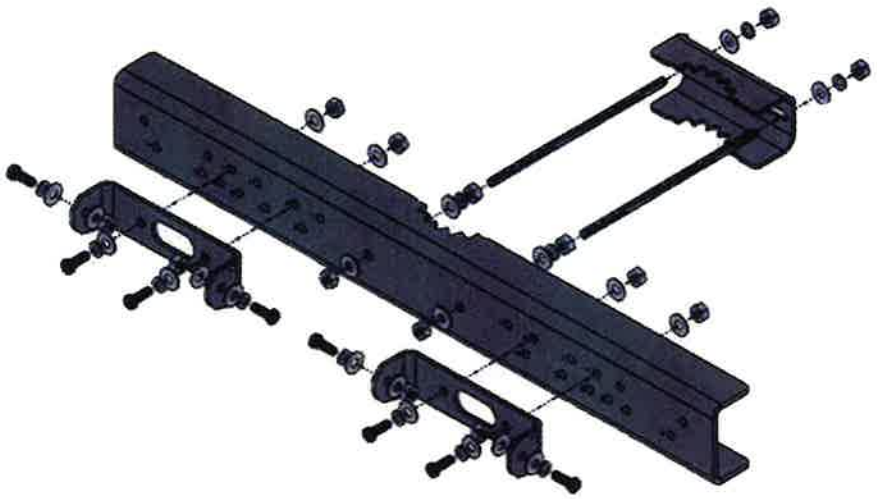
X7C* and C7C* models	**All 4' and these 6' antennas:**			
	X7CQAP-FRO-645-V X7CQAP-FRO-660-V X7CQAP-665-V C7CQCAP-FRO-656-V	X7CAP-665-V X7C-FRO-640-V X7C-FRO-660-V	X7C-665-V X7C-680-V C7C-FRO-656-V	91900314-02 (2 brackets needed)
	All 8' and this 6' antenna:			
	X7CAP-FRO-640-V			91900314-03 (3 brackets needed)
MX*, MC* models	**4', 6' antennas**			91900314-02
	8' antennas			91900314-03

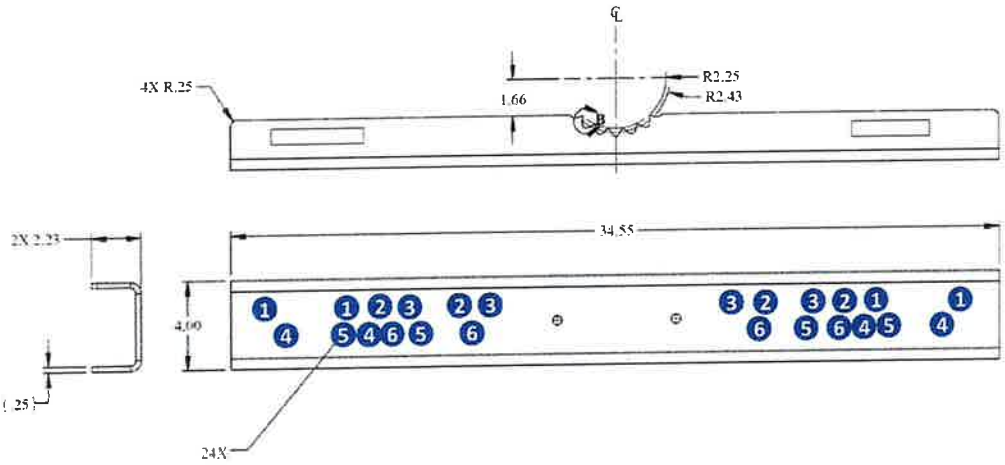
Mechanical specifications	
Weight per bracket, lb (kg)	28 lb (12.7 kg) – dual mount bracket parts only
Range of allowable mechanical up/down tilt	Tilt range is not affected by dual mount bracket (see antenna datasheet)
Rated wind survival speed, mph (km/h)	150 mph (241 km/h)
Material specification	0.16" to 0.25" thick hot-dipped, galvanized steel

Ordering information	
Mounting bracket model	**Description**
91900314-01	Single dual-mount antenna bracket assembly (see table above, "Brackets per antenna type")
91900314-02	Two dual-mount antenna bracket assemblies
91900314-03	Three dual-mount antenna bracket assemblies
***Compatible antennas**	
4'–8' Quad-, Hex-, and Octo-Port macro antennas in the X7C; C7C; X7CAP; C7CAP; X7CQAP; MX, MC models	
Installation instructions	
81900506	Installation instructions for dual-mount bracket assembly (comes with kit)

brands, and logos are trademarks™ or registered® trademarks of their respective holders. All specifications are subject to change without notice. Revised: May 28, 2019

Dual-mount bracket assembly guide overview





Model types beginning with:	Antenna width	Corresponding hole position	Resulting spacing between antennas
MX*, MC*	15.4" (wide spacing)	1	12"
	15.4" (narrow spacing)	2	2"
	12"	3	2"
	20"	5	3/4"
X7C*, C7C*	12.5"	3	2"
	24.0"	4	2"
	18.8"	5	2"
	14.6"	6	2"

©2019 JMA Wireless. All rights reserved. This document contains proprietary and confidential information. All products, company names, brands, and logos are trademarks™ or registered® trademarks of their respective holders. All specifications are subject to change without notice. Revised: May 28, 2019

ATTACHMENT 7

C Squared Systems, LLC
65 Dartmouth Drive
Auburn, NH 03032
(603) 644-2800
support@csquaredsystems.com

Calculated Radio Frequency Emissions Report

Woodbury NW

85 Paper Mill Road, Woodbury, CT 06798

April 24, 2023

Table of Contents

List of Figures

List of Tables

1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the proposed installation of Verizon's antenna arrays to be mounted at 118' AGL on an existing monopole tower located at 85 Paper Mill Road in Woodbury, CT. The coordinates of the monopole tower are 41° 34' 23.07" N, 73° 13' 39.51" W.

Verizon is proposing the following:

1) Install nine (9) multi-band antennas (three (3) per sector) to support its commercial LTE network.

This report considers the planned antenna configuration for Verizon[1] and the existing antennas for AT&T[2], Dish[3], and T-Mobile[4] to derive the resulting % MPE of its proposed installation.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include Maximum Permissible Exposure (MPE) limits for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based upon those recommended by the National Council on Radiation Protection and Measurements (NCRP), developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

The FCC general population/uncontrolled limits set the maximum exposure to which most people may be subjected. General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Public exposure to radio frequencies is regulated and enforced in units of milliwatts per square centimeter (mW/cm^2). The general population exposure limits for the various frequency ranges are defined in the attached "FCC Limits for Maximum Permissible Exposure (MPE)" in Attachment C of this report.

Higher exposure limits are permitted under the occupational/controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure, and they must be able to exercise control over their exposure. General population/uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals. Attachment C contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population/uncontrolled exposure and for occupational/controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

---

[1] As referenced to Verizon's Radio Frequency Design Sheet updated 11/22/2022.

[2] As referenced to AT&T's filing, Connecticut Siting Council Notice of Exempt Modification – 85 Paper Mill Road, Woodbury, Connecticut, dated 7/14/2020.

[3] As referenced to Dish's filing, Connecticut Siting Council Tower Share Application – 85 Paper Mill Road, Woodbury, Connecticut, dated 9/21/2021.

[4] As referenced to T-Mobile's EBI Consulting, Radio Frequency Emissions Analysis Report, dated 5/24/2022.

3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{PowerDensity} = \left(\frac{EIRP}{\pi \times R^2}\right) \times \text{Off BeamLoss}$$

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance = $\sqrt{(H^2 + V^2)}$

H = Horizontal Distance from antenna in meters

V = Vertical Distance from radiation center of antenna in meters

Off Beam Loss is determined by the selected antenna patterns

Ground reflection factor of 1.6

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings, etc.) that would normally attenuate the signal are not taken into account. The calculations assume even terrain in the area of study and do not take into account actual terrain elevations which could attenuate the signal. As a result, the predicted signal levels reported below are much higher than the actual signal levels will be from the final installations.

4. Antenna Inventory

Table 1 below outlines Verizon's proposed antenna configuration for the site. The associated data sheets and antenna patterns for these specific antenna models are included in Attachments C.

Operator	Sector / Call Sign	TX Freq (MHz)	Power at Antenna (Watts)	Ant Gain (dBi)	Power EIRP (Watts)	Antenna Model	Beam Width	Mech. Tilt	Length (ft)	Antenna Centerline Height (ft)
Verizon	Alpha / 0°	746	160	17.6	9207	MX06FRO840-02	42	0	7.99	118
		880	160	18.0	10095		37			
		1970	160	20.4	17544		36			
		2145	240	20.8	28854		34			
		3700	200	25.5	70963	MT6407-77A	-	0	2.92	118
	Beta / 145°	746	160	15.3	5422	MX06FRO860-03	60	0	7.99	118
		880	160	14.5	4509		53.5			
		1970	160	17.9	9866		55			
		2145	240	18.2	15857		55.5			
		3700	200	25.5	70963	MT6407-77A	-	0	2.92	118
	Gamma / 280°	746	160	17.6	9207	MX06FRO840-02	42	0	7.99	118
		880	160	18.0	10095		37			
		1970	160	20.4	17544		36			
		2145	240	20.8	28854		34			
		3700	200	25.5	70963	MT6407-77A	-	0	2.92	118

Table 1: Proposed Antenna Inventory[5] [6]

[5] Antenna heights are in reference to Verizon's Radio Frequency Design Sheet updated 6/15/2022.

[6] Transmit power assumes 0 dB of cable loss.

5. Calculation Results

The calculated power density results are shown in Figure 1 below. For completeness, the calculations for this analysis range from 0 feet horizontal distance (directly below the antennas) to a value of 3,000 feet horizontal distance from the site. In addition to the other worst-case scenario considerations that were previously mentioned, the power density calculations to each horizontal distance point away from the antennas was completed using a local maximum off beam antenna gain (within ± 5 degrees of the true mathematical angle) to incorporate a realistic worst-case scenario.

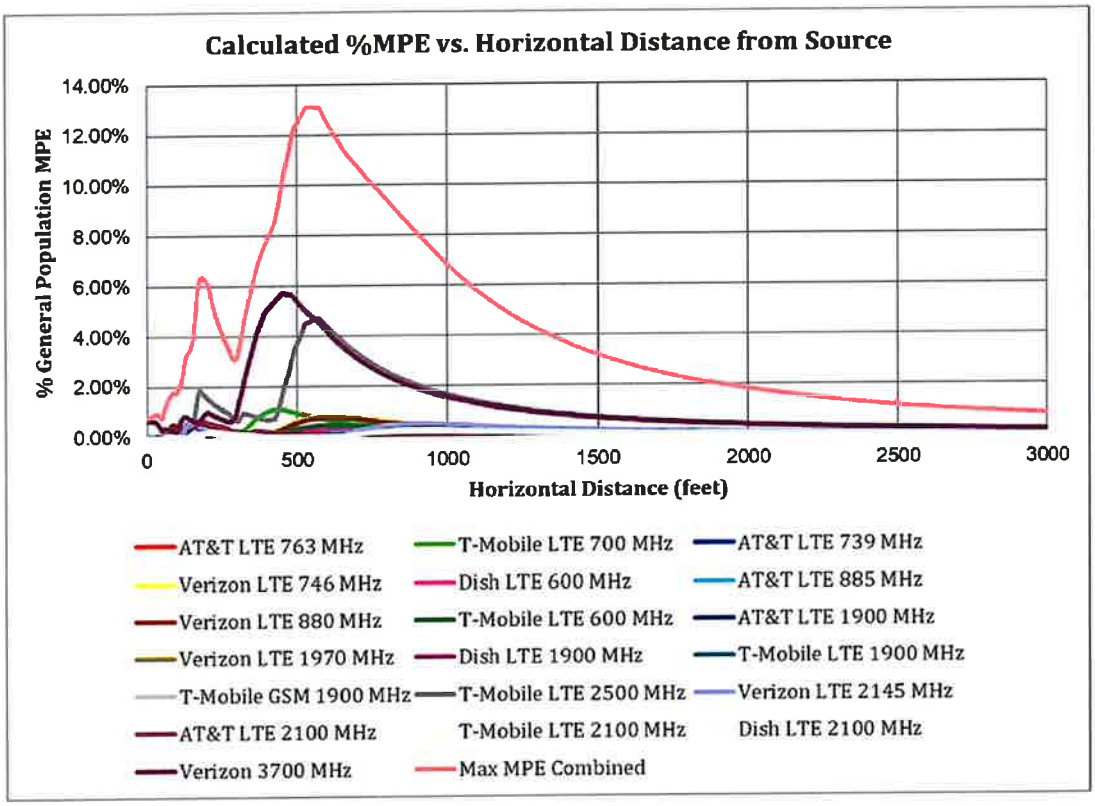


Figure 1: Graph of General Population % MPE vs. Distance

The highest percent of MPE (13.08% of the General Population limit) is calculated to occur at a horizontal distance of 530 feet from antennas. Please note that the percent of MPE calculations close to the site take into account off beam loss, which is determined from the vertical pattern of the antennas used. Therefore, RF power density levels may increase as the distance from the site increases. At distances of approximately 1500 feet and beyond, one would now be in the main beam of the antenna pattern and off beam loss is no longer considered. Beyond this point, RF levels become calculated solely on distance from the site and the percent of MPE decreases significantly as distance from the site increases.

Table 2 below lists percent of MPE values as well as the associated parameters that were included in the calculations. The highest percent of MPE value was calculated to occur at a horizontal distance of 530 feet from the site (reference Figure 1).

As stated in Section 3, all calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. In addition, a six foot height offset was considered in this analysis to account for average human height. As a result, the predicted signal levels are significantly higher than the actual signal levels will be from the final configuration. The results presented in Figure 1 and Table 2 assume level ground elevation from the base of the tower out to the horizontal distances calculated.

Carrier	Number of Transmitters	Power out of Base Station Per Transmitter (Watts)	Antenna Height (Feet)	Distance to the Base of Antennas (Feet)	Power Density (mW/cm^2)	Limit (mW/cm^2)	% MPE
AT&T LTE 1900 MHz	1	160.0	148.0	530	0.000362	1.000	0.04%
AT&T LTE 2100 MHz	1	240.0	148.0	530	0.001323	1.000	0.13%
AT&T LTE 739 MHz	1	160.0	148.0	530	0.000850	0.493	0.17%
AT&T LTE 763 MHz	1	160.0	148.0	530	0.000913	0.509	0.18%
AT&T LTE 885 MHz	1	160.0	148.0	530	0.000532	0.590	0.09%
Dish LTE 1900 MHz	1	160.0	138.0	530	0.000120	1.000	0.01%
Dish LTE 2100 MHz	1	160.0	138.0	530	0.000087	1.000	0.01%
Dish LTE 600 MHz	1	120.0	138.0	530	0.000992	0.400	0.25%
T-Mobile GSM 1900 MHz	1	120.0	128.0	530	0.000101	1.000	0.01%
T-Mobile LTE 1900 MHz	1	120.0	128.0	530	0.000101	1.000	0.01%
T-Mobile LTE 2100 MHz	1	120.0	128.0	530	0.000158	1.000	0.02%
T-Mobile LTE 2500 MHz	1	240.0	128.0	530	0.044830	1.000	4.48%
T-Mobile LTE 600 MHz	1	140.0	128.0	530	0.001561	0.400	0.39%
T-Mobile LTE 700 MHz	1	160.0	128.0	530	0.003928	0.467	0.84%
Verizon 3700 MHz	1	200.0	118.0	530	0.049721	1.000	4.97%
Verizon LTE 1970 MHz	1	160.0	118.0	530	0.000232	1.000	0.02%
Verizon LTE 2145 MHz	1	240.0	118.0	530	0.000554	1.000	0.06%
Verizon LTE 746 MHz	1	160.0	118.0	530	0.003595	0.497	0.72%
Verizon LTE 880 MHz	1	160.0	118.0	530	0.003948	0.587	0.67%
						Total	**13.08%**

Table 2: Maximum Percent of General Population Exposure Values

6. Conclusion

The above analysis verifies that RF exposure levels from the site with Verizon's proposed antenna configuration will be well below the maximum permissible levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Using the conservative calculation methods and parameters detailed above, the maximum cumulative percent of MPE in consideration of all transmitters is calculated to be **13.08% of the FCC limit (General Population/Uncontrolled)**. This maximum cumulative percent of MPE value is calculated to occur 530 feet away from the site.

7. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.

Report Prepared By: Ram Acharya
RF Engineer 1
C Squared Systems, LLC

April 21, 2023
Date

Reviewed/Approved By: Martin J. Lavin
Senior RF Engineer
C Squared Systems, LLC

April 24, 2023
Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

IEEE C95.1-2005, IEEE Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz IEEE-SA Standards Board

IEEE C95.3-2002 (R2008), IEEE Recommended Practice for Measurements and Computations of Radio Frequency Electromagnetic Fields With Respect to Human Exposure to Such Fields, 100 kHz-300 GHz IEEE-SA Standards Board

Attachment B: FCC Limits for Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure[7]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

(B) Limits for General Population/Uncontrolled Exposure[8]

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * Plane-wave equivalent power density

Table 3: FCC Limits for Maximum Permissible Exposure

[7] Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

[8] General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

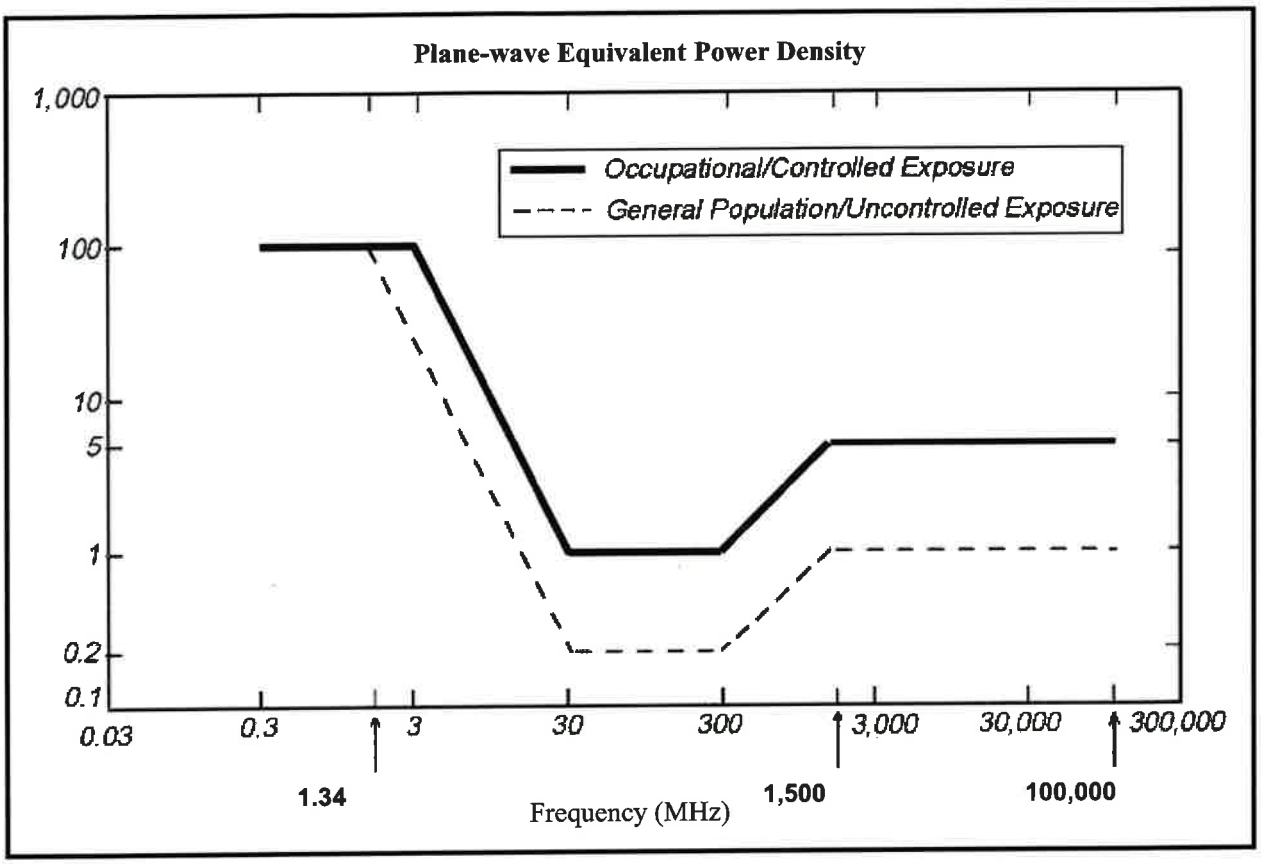
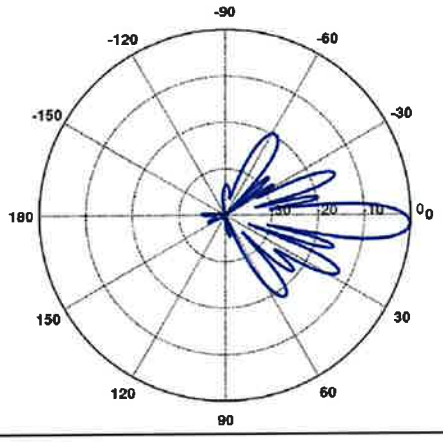


Figure 2: Graph of FCC Limits for Maximum Permissible Exposure (MPE)

Attachment C: Verizon Antenna Model Data Sheets and Electrical Patterns

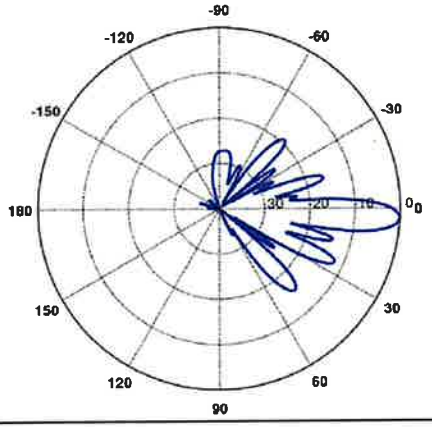
746 MHz

Manufacturer:	JMA
Model #:	MX06FRO840-2
Frequency Band:	698-798 MHz
Gain:	17.6 dBi
Vertical Beamwidth:	9.0°
Horizontal Beamwidth:	42°
Polarization:	±45°
Dimensions (L x W x D):	95.9" x 19.8" x 10.7"



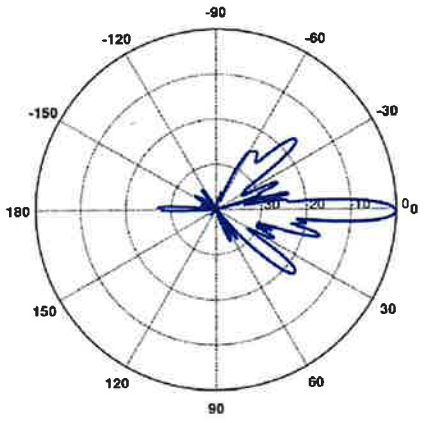
880 MHz

Manufacturer:	JMA
Model #:	MX06FRO840-2
Frequency Band:	824-894 MHz
Gain:	18.0 dBi
Vertical Beamwidth:	8.3°
Horizontal Beamwidth:	37°
Polarization:	±45°
Dimensions (L x W x D):	95.9" x 19.8" x 10.7"



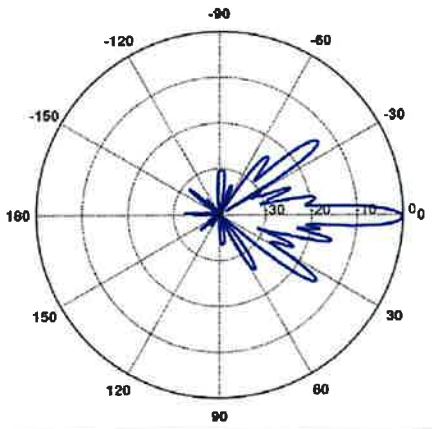
1970 MHz

Manufacturer:	JMA
Model #:	MX06FRO840-2
Frequency Band:	1850-1990 MHz
Gain:	20.4 dBi
Vertical Beamwidth:	5.7°
Horizontal Beamwidth:	36°
Polarization:	±45°
Dimensions (L x W x D):	95.9" x 19.8" x 10.7"



2100 MHz

Manufacturer:	JMA
Model #:	MX06FRO840-2
Frequency Band:	1920-2180 MHz
Gain:	20.8 dBi
Vertical Beamwidth:	5.3°
Horizontal Beamwidth:	34°
Polarization:	±45°
Dimensions (L x W x D):	95.9" x 19.8" x 10.7"



ATTACHMENT 8

Woodbury NW

UNITED STATES POSTAL SERVICE®

Certificate of Mailing — Firm

Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here *Postmark with Date of Receipt.*
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	4	4	neopost 05/15/2023 US POSTAGE $003.55 ZIP 06103 041L1220[illegible] OLD STATE HOUSE STATION 06103 MAY 15 2023
	Postmaster, per *(name of receiving employee)*		

USPS® Tracking Number / Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Barbara Perkins, First Selectman Town of Woodbury 281 Main Street South Woodbury, CT 06798				
2.	William Agresta, Town Planner Town of Woodbury 281 Main Street South Woodbury, CT 06798				
3.	Jodie A. Bryan 85 Paper Mill Road Woodbury, CT 06798				
4.	Crown Castle Attn: Jeff Barbadora 1800 West Park Drive Westborough, MA 01581				
5.					
6.					

See Reverse for Instructions