



1 Cityplace Dr, Suite 490
Creve Coeur, MO 63141

Phone: (314) 513-0147
www.crowncastle.com

June 6, 2022

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

RE: **Notice of Exempt Modification for AT&T
Crown Site ID#806376; AT&T Site ID# 2051A0Z8JQ
1455 Forbes Street, EAST HARTFORD, CT 06118
Latitude: 41° 43' 53.30"/ Longitude: -72° 36' 28.00"**

Dear Ms. Bachman:

AT&T currently maintains (12) antennas at the 121-foot mounts on the existing 131-foot Monopole Tower located at **1455 Forbes Street, EAST HARTFORD**. The property is owned by Handel-Jack Rebecca and tower is owned by Crown Castle. AT&T now intends to replace six (12) antennas. This modification/proposal includes hardware that is both 4G(LTE) and 5G capable through remote software configuration and either or both services may be turned on or off at various times.

Planned Modifications:

Tower:

REMOVE AND REPLACE

- (3) KATHREIN – 800 – 10798 Antennas (**REMOVE**), (3) Quintel – QD6616-7 Antennas (**REPLACE**)
- (6) KATHREIN – 800 -10965 antennas (**REMOVE**), (3) Ericsson – AIR6419 N77G antennas (**REPLACE**), (3) Ericsson – AIR6449 N77D (**REPLACE**) (antennas stacked)
- (3) KATHREIN – 800 – 10121 antennas (**REMOVE**), (3) CCI-DMP65R-BU6DA antennas (**REPLACE**)
- (6) POWERWAVE TECH – LGP21401 TMA (**REMOVE**)
- (6) POWERWAVE TECH – LGP21901 Diplexer (**REMOVE**)
- (6) Coax Cables (**REMOVE**)

INSTALL

- (6) Y-Cables
- (1) 18 Pair Fiber trunk cable
- (2) #8 AWG DC cables

RELOCATE

- (3) Ericsson – 4449 B5/B12 RRU
- (3) Ericsson – 8843 B2/B66A RRU
- (3) Ericsson – RRUs-E2 B29 RRU
- (3) Ericsson – RRUs- 32 B30 RRU



1 Cityplace Dr, Suite 490
Creve Coeur, MO 63141

Phone: (314) 513-0147
www.crowncastle.com

Ground:

REMOVE:

- (1) 5216
- (1) XMU

INSTALL:

- (3) GE -48v Rectifiers
- (1) 6673 Fronthaul Gateway

The Facility was approved by the Connecticut siting Council in Docket #139 on September 18, 1991. This approval was given with conditions which this exempt modification complies with.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies §16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. §16-50j-72(b)(2). In accordance with R.C.S.A. §16-50j-73, a copy of this letter is being sent to Michael Walsh, Town of East Hartford Mayor, Eileen Buckheit, Town of East Hartford Development Director, Handel-Jack Rebecca, the property owner and Crown Castle tower owner.

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

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

Sincerely,

Ersilia Davis
Crown Castle, Agent for AT&T
edavis@nbcllc.com
(551)804-0667



1 Cityplace Dr, Suite 490
Creve Coeur, MO 63141

Phone: (314) 513-0147
www.crowncastle.com

cc:

Michael Walsh, Mayor
Town of East Hartford
740 Main Street
East Hartford, CT 06108
(860) 291-7200
(Via Fedex)

Eileen Buckheit, Development Director
Town of East Hartford
740 Main Street
East Hartford, CT 06108
(860) 291-7300
(Via Fedex)

Handel-Jack Rebecca
1455 Forbes St.
East Hartford, CT 06118
(860) 916-1411
(Via Fedex)

(https://www.fedex.com/en-us/home.html)



FedEx® Tracking



777053990441



ADD NICKNAME

Delivered
Tuesday, 06/07/2022 at 11:36 am



DELIVERED

Signed for by: C.TCHELIDZE



GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

Ersilia Davis

1777 Sentry Parkway
VEVA 17, Suite 210
Blue Bell, PA US 19422
551-804-0667

TO

Michael Walsh, Mayor
Town of East Hartford

740 Main Street
EAST HARTFORD, CT US 06108
860-291-7200

MANAGE DELIVERY

Travel History

TIME ZONE

Local Scan Time



Tuesday, June 7,
2022

11:36 AM

EAST HARTFORD, CT

Delivered

9:39 AM

WINDSOR LOCKS, CT

On FedEx vehicle for delivery

(https://www.fedex.com/en-us/home.html)



FedEx® Tracking



777054016065



ADD NICKNAME

Delivered
Tuesday, 06/07/2022 at 11:35 am



DELIVERED

Signed for by: M.DANIELS



GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

Ersilia Davis

1777 Sentry Parkway
VEVA 17, Suite 210
Blue Bell, PA US 19422
551-804-0667

TO

Eileen Buckheit, Development Direct
Town of East Hartford

740 Main Street
EAST HARTFORD, CT US 06108
860-291-7300

MANAGE DELIVERY

Travel History

TIME ZONE

Local Scan Time



Tuesday, June 7,
2022

11:35 AM

EAST HARTFORD, CT

Delivered

9:39 AM

WINDSOR LOCKS, CT

On FedEx vehicle for delivery

(https://www.fedex.com/en-us/home.html)



FedEx® Tracking



777054039787



ADD NICKNAME

Delivered
Tuesday, 06/07/2022 at 10:25 am



DELIVERED

Signature not required

GET STATUS UPDATES

OBTAIN PROOF OF DELIVERY

FROM

Ersilia Davis

1777 Sentry Parkway
VEVA 17, Suite 210
Blue Bell, PA US 19422
551-804-0667

TO

Handel-Jack Rebecca

1455 Forbes St.
EAST HARTFORD, CT US 06118
860-916-1411

MANAGE DELIVERY

Travel History

TIME ZONE

Local Scan Time



Tuesday, June 7, 2022

10:25 AM	EAST HARTFORD, CT	Delivered Package delivered to recipient address - release authorized
9:00 AM	WINDSOR LOCKS, CT	On FedEx vehicle for delivery
8:43 AM	WINDSOR LOCKS, CT	At local FedEx facility
6:59 AM	EAST GRANBY, CT	At destination sort facility

Exhibit A

Original Facility Approval

DOCKET NO. 139 - An application of
Metro Mobile CTS of Hartford, Inc., : Connecticut
for a Certificate of Environmental :
Compatibility and Public Need for : Siting
the construction, maintenance, and :
operation of cellular facilities in : Council
the Towns of Enfield, East Hartford,
and Wethersfield, Connecticut. September 18, 1991

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 cellular telecommunications towers and equipment buildings at the proposed Enfield, Connecticut, alternate site and the proposed East Hartford, Connecticut, prime site 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 section 16-50k of the Connecticut General Statutes (CGS), be issued to Metro Mobile CTS of Hartford, Inc., for the construction, operation, and maintenance of a cellular telecommunications tower, associated equipment, and building at the proposed alternate site in Enfield, Connecticut, and the proposed prime site in East Hartford, Connecticut.

The facilities 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 self-supporting monopole towers shall be no taller than necessary to provide the proposed communication service and in no event shall the towers exceed a total height of 163 feet above ground level (AGL) at the proposed Enfield alternate site and 123 feet AGL at the proposed East Hartford prime site, with antennas and appurtenances.
2. The Certificate holder shall prepare a Development and Management (D&M) Plan, for approval by the Council, for these sites in compliance with sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies. This D&M plan

shall include detailed plans of the towers, tower foundations, soil boring reports, equipment buildings, access roads, security fences, landscaping plans, detailed erosion and sedimentation control plans, and a final schedule. In addition, the D&M plan shall include for Council consideration, detailed plans and itemized costs for the placement of service utilities underground in order to further mitigate the visual effect of the facilities.

3. The Certificate holder shall comply with any existing and future radio frequency (RF) standards promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facilities granted herein shall be brought into compliance with such standards.
4. The Certificate holder shall provide the Council with a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels originally calculated and provided in the application.
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. If the facility does not initially provide or permanently ceases to provide cellular service following completion of construction, this Decision and Order shall be void, and the tower and all associated equipment shall be dismantled and removed or reapplication for any new use shall be made to the Council as soon as practicable before any such new use is made.
7. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the effective date of this Decision and Order or within three years after all appeals to this Decision and Order have been resolved.

Pursuant to CGS section 16-50p, we hereby direct that a copy of the Findings of Fact, Opinion, and Decision and Order be served on each person listed below, and notice of this issuance shall be published in the Hartford Courant and the Journal Inquirer.

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 State Agencies.

The parties to this proceeding are:

PARTIES	ITS REPRESENTATIVE
Metro Mobile CTS of Hartford, Inc. 20 Alexander Drive P.O. Box 5029 Wallingford, CT 06492 Attn: Gary Schulman	Robinson and Cole One Commercial Plaza Hartford, CT 06103-3597 Attn: Earl Phillips, Jr. (203) 275-8200
The Town of East Hartford	G. Barry Goodberg Assistant Corporation Counsel Town of East Hartford 740 Main Street East Hartford, CT 06108 (203) 289-2781
The Town of Enfield	Christopher W. Bromson Enfield Town Attorney 47 No. Main Street Enfield, CT 06082 (203) 745-0371 Ext. 290

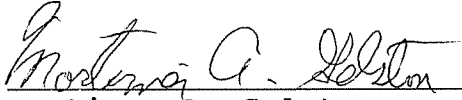

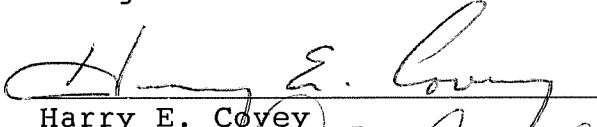
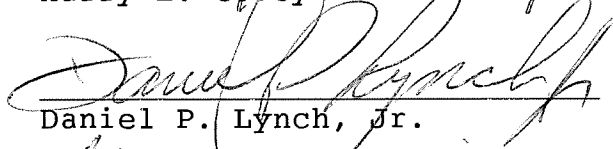
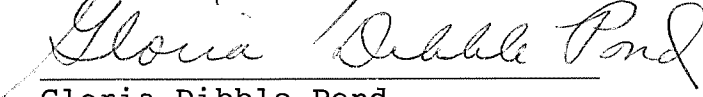
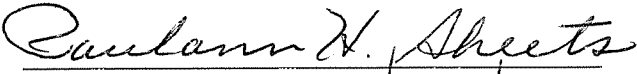
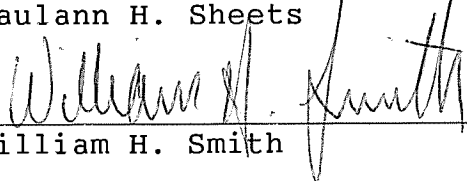
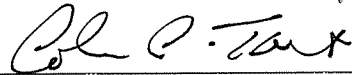
SMH:bw

5534E

CERTIFICATION

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in DOCKET NO. 139 - An application of Metro Mobile CTS of Hartford, Inc., for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of cellular facilities in the Towns of Enfield, East Hartford, and Wethersfield, Connecticut, or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 18th day of September, 1991.

<u>Council Members</u>	<u>Vote Cast</u>
 Mortimer A. Gelston Chairman	YES
 Commissioner Clifton A. Leonhardt Designee: Commissioner Richard G. Patterson	ABSTAIN
Commissioner Timothy R.E. Keeney Designee: Brian Emerick	ABSENT
 Harry E. Covey	NO
 Daniel P. Lynch, Jr.	NO
 Gloria Dibble Pond	YES
 Paulann H. Sheets	YES
 William H. Smith	YES
 Colin C. Tait	YES

PETITION NO. 535 - AT&T Wireless PCS, LLC and Crown Atlantic Company LLC petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for proposed modification of an existing telecommunications tower located at 1455 Forbes Street, East Hartford, Connecticut.	} Connecticut } Siting } Council } May 21, 2002
--	--

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council (Council) finds that the effects associated with the extension of an existing telecommunications tower and installation of associated equipment at an existing facility located at 1455 Forbes Street in East Hartford, Connecticut, are not significant, are not disproportionate either alone or cumulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny this petition.

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 extension shall be compatible with and installed on the existing monopole, no taller than necessary to provide the proposed telecommunications services, sufficient to accommodate the antennas of AT&T Wireless PCS, LLC (AT&T) and XM Satellite Radio, but such extension shall not exceed a height of 133 feet above ground level, including antennas and appurtenances.
2. The Certificate Holder shall provide a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power density above the levels calculated and provided pursuant to this Decision and Order.
3. 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.
4. The Certificate Holder shall permit public or private entities to share space on the tower for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
5. If the facility does not initially provide, or permanently ceases to provide cellular services following completion of construction, 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.
6. Any antenna that becomes obsolete and ceases to function shall be removed within 60 days after such antennas become obsolete and ceases to function.
7. Unless otherwise approved by the Council, this Decision and Order shall be void if the facility authorized herein is not completed within one year of the effective date of this Decision and Order or within one year after all appeals to this Decision and Order have been resolved.

8. All other applicable provisions of the Council's September 18, 1991 Decision and Order in Docket No. 139 remain in effect.

Pursuant to General Statutes § 16-50p, we hereby direct 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 Hartford Courant, and The East Hartford Gazette.

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:

Crown Atlantic Company LLC and
AT&T Wireless PCS, LLC

Kenneth C. Baldwin, Esq.
Robinson & Cole LLP
280 Trumbull Street
Hartford, CT 06103-3597

Exhibit B

Property Card

Town of East Hartford Property Summary Report

1455 FORBES ST

MAP LOT:	41-233	CAMA PID:	4723
LOCATION:	1455 FORBES ST		
OWNER NAME:	HANDEL-JACK REBECCA		



OWNER OF RECORD
HANDEL-JACK REBECCA
1455 FORBES ST
EAST HARTFORD, CT 06118

LIVING AREA:	720	ZONING:	R2	ACREAGE:	25.01
---------------------	-----	----------------	----	-----------------	-------

SALES HISTORY

OWNER	BOOK / PAGE	SALE DATE	SALE PRICE
HANDEL-JACK REBECCA	3909/186	07-Jul-2020	\$0.00
HANDEL ROBERT D	3582/0113	23-Jan-2016	\$0.00
HANDEL JESSIE K EST OF C/O ROBERT D HANDEL EXECUTOR	3534/0329	19-May-2015	\$0.00
HANDEL JESSIE K	1874/0345	01-Jan-2000	\$0.00
HANDEL ALBERT P JR EST OF HANDEL JESSIE K EXEC	0000/0000	30-Dec-1999	\$0.00

CURRENT PARCEL ASSESSMENT

TOTAL:	\$319,830.00	IMPROVEMENTS:	\$279,140.00	LAND:	\$40,690.00
---------------	--------------	----------------------	--------------	--------------	-------------

ASSESSING HISTORY

FISCAL YEAR	TOTAL VALUE	IMPROVEMENT VALUE	LAND VALUE
2019	\$332,880.00	\$291,500.00	\$41,380.00
2018	\$332,880.00	\$291,500.00	\$41,380.00
2017	\$332,880.00	\$291,500.00	\$41,380.00
2016	\$332,880.00	\$291,500.00	\$41,380.00
2015	\$346,650.00	\$302,420.00	\$44,230.00

Town of East Hartford Property Summary Report

1455 FORBES ST

MAP LOT:	41-233	CAMA PID:	4723
LOCATION:	1455 FORBES ST		
OWNER NAME:	HANDEL-JACK REBECCA		

BUILDING # 1

YEAR BUILT	1865	EXT WALL 1	Vinyl Siding
STYLE	Colonial	INT WALLS 1	Plaster
MODEL	Residential	HEAT FUEL	Gas
STORIES	2.0	HEAT TYPE	Hot Water
OCCUPANCY	One Family	AC TYPE	None
ROOF	Gable	BEDROOMS	4
ROOF COVER	Asphalt	FULL BATHS	1
FLOOR COVER 1	Hardwood	HALF BATHS	1
% BSMT	100	TOTAL ROOMS	9
% FIN BSMT	0	% REC RM	60
% SEMI FIN	0	% ATTIC FINISH	0
BSMT GARAGE		FIREPLACES	0



EXTRA FEATURES

DESCRIPTION	CODE	UNITS
1 Story Barn	BRN1	1x5112 (5112.00 SF)
Shed	SHD1	1x64 (64.00 S.F.)
1 Story Barn	BRN1	1x3072 (3072.00 SF)
Shed	SHD1	1x300 (300.00 S.F.)
Shed	SHD1	1x561 (561.00 S.F.)
1 Story Barn	BRN1	1x4928 (4928.00 SF)
Shed	SHD1	1x600 (600.00 S.F.)

Town of East Hartford Property Summary Report

1455 FORBES ST

MAP LOT:	41-233	CAMA PID:	4723
LOCATION:	1455 FORBES ST		
OWNER NAME:	HANDEL-JACK REBECCA		

BUILDING # 2

YEAR BUILT	1934	EXT WALL 1	Vinyl Siding
STYLE	Single Family	INT WALLS 1	Plaster
MODEL	Residential	HEAT FUEL	Other
STORIES	1.0	HEAT TYPE	Other
OCCUPANCY	One Family	AC TYPE	None
ROOF	Gable	BEDROOMS	1
ROOF COVER	Asphalt	FULL BATHS	1
FLOOR COVER 1	Hardwood	HALF BATHS	0
% BSMT	0	TOTAL ROOMS	4
% FIN BSMT	0	% REC RM	0
% SEMI FIN	0	% ATTIC FINISH	0
BSMT GARAGE		FIREPLACES	0



EXTRA FEATURES

DESCRIPTION	CODE	UNITS
Shed	SHD1	1x105 (105.00 S.F.)
FR/SHED	MSC55	30.00 UNIT
1 Story Barn	BRN1	1x840 (840.00 SF)
Shed	SHD1	1x144 (144.00 S.F.)
Shed	SHD1	1x308 (308.00 S.F.)

Exhibit C

Construction Drawings

THIS PAGE CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



THIS SUBMISSION CONTAINS CONFIDENTIAL, PROPRIETARY, OR TRADE SECRET INFORMATION THAT IS EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAWS. PLEASE MAKE SURE THESE PAGES ARE NOT DISCLOSED. IF ANY REQUEST IS MADE FOR THIS INFORMATION, PLEASE CONTACT THE SENDER IN ADDITION TO ANY LEGAL NOTICE REQUIREMENTS UNDER APPLICABLE LAW.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



1025 LENOX PARK BOULEVARD NE
3RD FLOOR, ATLANTA, GA 30319



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



3530 TORINGDON WAY, SUITE 300
RALEIGH, NC 27615

AT&T SITE NUMBER: CTL05276
AT&T SITE NAME: EAST HARTFORD SOUTH
AT&T FA CODE: 10090919
AT&T PACE NUMBER: MRCTB022491, MRCTB033885, MRCTB052317, MRCTB033824, MRCTB051704, MRCTB051596
AT&T PROJECT: 5G NR RADIO, 5G NR 1SR CBAND

BUSINESS UNIT #: 806376
SITE ADDRESS: 1455 FORBES STREET
EAST HARTFORD, CT 06118
COUNTY: HARTFORD
SITE TYPE: MONOPOLE
TOWER HEIGHT: 131'-0"

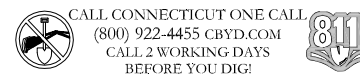
SITE INFORMATION

CROWN CASTLE USA INC. HRT 100 943239
SITE NAME:
SITE ADDRESS: 1455 FORBES STREET
EAST HARTFORD, CT 06118
COUNTY: HARTFORD
MAP/PARCEL #: EHAR-000000-000000-004723
AREA OF CONSTRUCTION: EXISTING
LATITUDE: 41° 43' 53.30"
LONGITUDE: -72° 36' 28.00"
LAT/LONG TYPE: NAD83
GROUND ELEVATION: 59'-0"
CURRENT ZONING: R-2
JURISDICTION: TOWN OF EAST HARTFORD
OCCUPANCY CLASSIFICATION: U
TYPE OF CONSTRUCTION: IIB
A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION
PROPERTY OWNER: CROWN ATLANTIC COMPANY, LLC
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
TOWER OWNER: CROWN CASTLE
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
CARRIER/APPLICANT: 1025 LENOX PARK BOULEVARD
NE 3RD FLOOR
ATLANTA, GA 30319
ELECTRIC PROVIDER: CONNECTICUT LIGHT & POWER CO
TELCO PROVIDER: LIGHTOWER

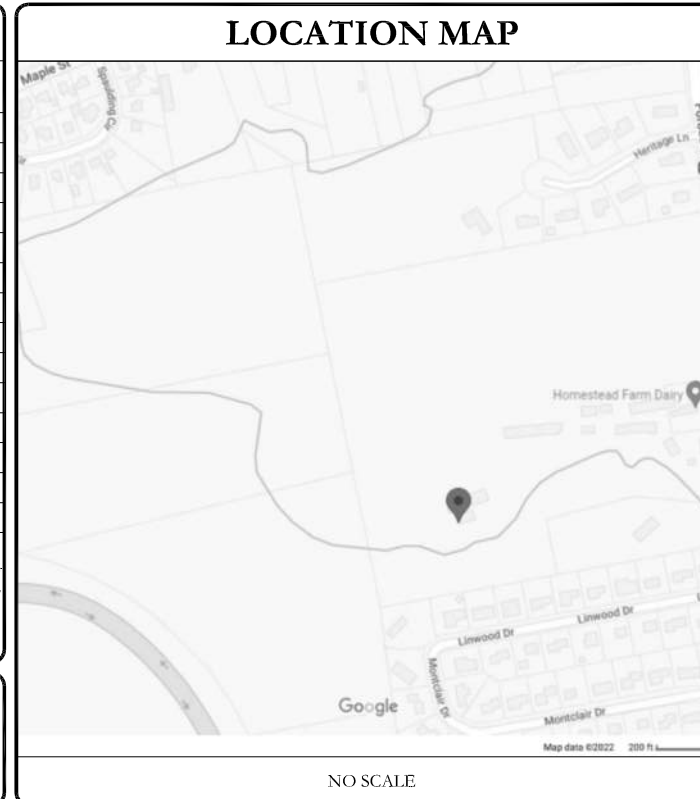
DRAWING INDEX

SHEET #	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1.1	SITE PLAN
C-1.2	EXISTING & FINAL EQUIPMENT PLANS
C-2	FINAL ELEVATION & ANTENNA PLANS
C-3	FINAL EQUIPMENT SCHEDULE
C-4	EQUIPMENT MOUNTING DETAILS
C-5	EQUIPMENT SPECS
G-1	GROUNDING SCHEMATIC
G-2	GROUNDING DETAILS
ATTACHED	PLUMBING DIAGRAM

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



LOCATION MAP



SITE PHOTO



AT&T SITE NUMBER:
CTL05276
BU #: 806376
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118
 EXISTING 131'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
0	09/28/2021	VA	CONSTRUCTION	VA
1	12/17/2021	MT	CONSTRUCTION	VA
2	02/01/2022	VA	CONSTRUCTION	VA
3	02/01/2022	VA	CONSTRUCTION	VA
4	05/03/2022	AM	CONSTRUCTION	VA

PROJECT TEAM

A&E FIRM: CROWN CASTLE USA INC.
2000 CORPORATE DRIVE
CANONSBURG, PA 15317
CROWN.AE.APPROVAL@CROWNCastle.COM
CROWN CASTLE USA INC. DISTRICT CONTACTS: 3 CORPORATE PARK DRIVE, SUITE 101
CLIFTON PARK, NY 12065
 PAUL PEDICONE - PROJECT MANAGER
PAUL.PEDICONE@CROWNCastle.COM
 JASON D'AMICO - CONSTRUCTION MANAGER
JASON.DAMICO@CROWNCastle.COM

PROJECT DESCRIPTION

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

TOWER SCOPE OF WORK:

- REMOVE (3) KATHREIN - 800-10798 ANTENNAS
- REMOVE (3) KATHREIN - 800-10121 ANTENNAS
- REMOVE (6) KATHREIN - 800-10965 ANTENNAS
- REMOVE (6) POWERWAVE TECH - LGP21401TMA
- REMOVE (6) POWERWAVE TECH - LGP21901 DIPLEXER
- REMOVE (6) COAX CABLES
- RELOCATE (3) ERICSSON - 4449 B5/B12 RRU
- RELOCATE (3) ERICSSON - 8843 B2/B66A RRU
- RELOCATE (3) ERICSSON - RRUS-E2 B29 RRU
- RELOCATE (3) ERICSSON - RRUS-32 B30 RRU
- INSTALL (3) CCI - DMP65R-BU6DA ANTENNAS
- INSTALL (3) ERICSSON - AIR 6449 B77D ANTENNAS
- INSTALL (3) ERICSSON - AIR 6419 B77G ANTENNAS
- INSTALL (3) QUINTEL - QD6616-7 ANTENNAS
- INSTALL (6) Y-CABLES
- INSTALL (1) 18-PAIR FIBER TRUNK CABLE

GROUND SCOPE OF WORK:

- REMOVE (1) 5216
- REMOVE (1) XMU
- INSTALL (3) GE -48v RECTIFIERS
- INSTALL (1) 6673 FRONT HAUL GATEWAY

APPLICABLE CODES/REFERENCE DOCUMENTS

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

CODE TYPE	CODE
BUILDING	2015 IBC
MECHANICAL	2015 IMC
ELECTRICAL	2017 NEC

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS: Black & Veatch
DATED: 07/07/2021
 MOUNT ANALYSIS: INFINIGY ENGINEERING
DATED: 09/08/2021
 RFDS REVISION: 4.00
DATED: 03/25/2022
 ORDER ID: 557898
REVISION: 2



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.

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

SHEET NUMBER: T-1
REVISION: 2

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.
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.
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...
21. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

GREENFIELD GROUNDING NOTES:

- 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-OFF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR GROUND ELECTRODE SYSTEMS, THE CONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
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).

GENERAL NOTES:

- 1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY: CONTRACTOR: GENERAL CONTRACTOR RESPONSIBLE FOR CONSTRUCTION CARRIER: AT&T 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. 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.
13. 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 318.1, 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.

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. VERIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
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, ANSII/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 NEW FITTINGS ARE NOT ACCEPTABLE.
20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSII/IEEE AND THE NEC.
21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS (WIREMOLD SPECIMATE WIREWAY).
22. SLOTTED WIRING CUIT 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. 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.
24. 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.
25. 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.
26. 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.
27. 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.
28. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "AT&T".
29. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

Table with 3 columns: SYSTEM, CONDUCTOR, COLOR. Lists conductor color codes for systems 120/240V, 10; 120/208V, 30; and 277/480V, 30. Includes DC VOLTAGE codes for POS (+) and NEG (-).

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

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

ABBREVIATIONS:

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

AT&T logo and address: 1025 LENOX PARK BOULEVARD NE 3RD FLOOR, ATLANTA, GA 30319

CROWN CASTLE logo and address: 3 CORPORATE PARK DRIVE, SUITE 101 CLIFTON PARK, NY 12065

ENGINEERED TOWER SOLUTIONS logo and address: 3530 TORINGTON DOW, SUITE 300 RALEIGH, NC 27615

AT&T SITE NUMBER: CTL05276
BU #: 806376
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118
EXISTING 131'-0" MONOPOLE

ISSUED FOR: Table with columns REV, DATE, DRWN, DESCRIPTION, DES/QA. Lists revision history for construction drawings.

Professional Engineer seal for Frederick Post, State of Connecticut, License No. PEN 0029529, dated 05/03/2022.

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: 2



1025 LENOX PARK BOULEVARD NE
3RD FLOOR, ATLANTA, GA 30319



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



3530 TORINGDON WAY, SUITE 300
RALEIGH, NC 27615

AT&T SITE NUMBER:
CTL05276

BU #: 806376
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118

EXISTING 131'-0" MONOPOLE

ISSUED FOR:

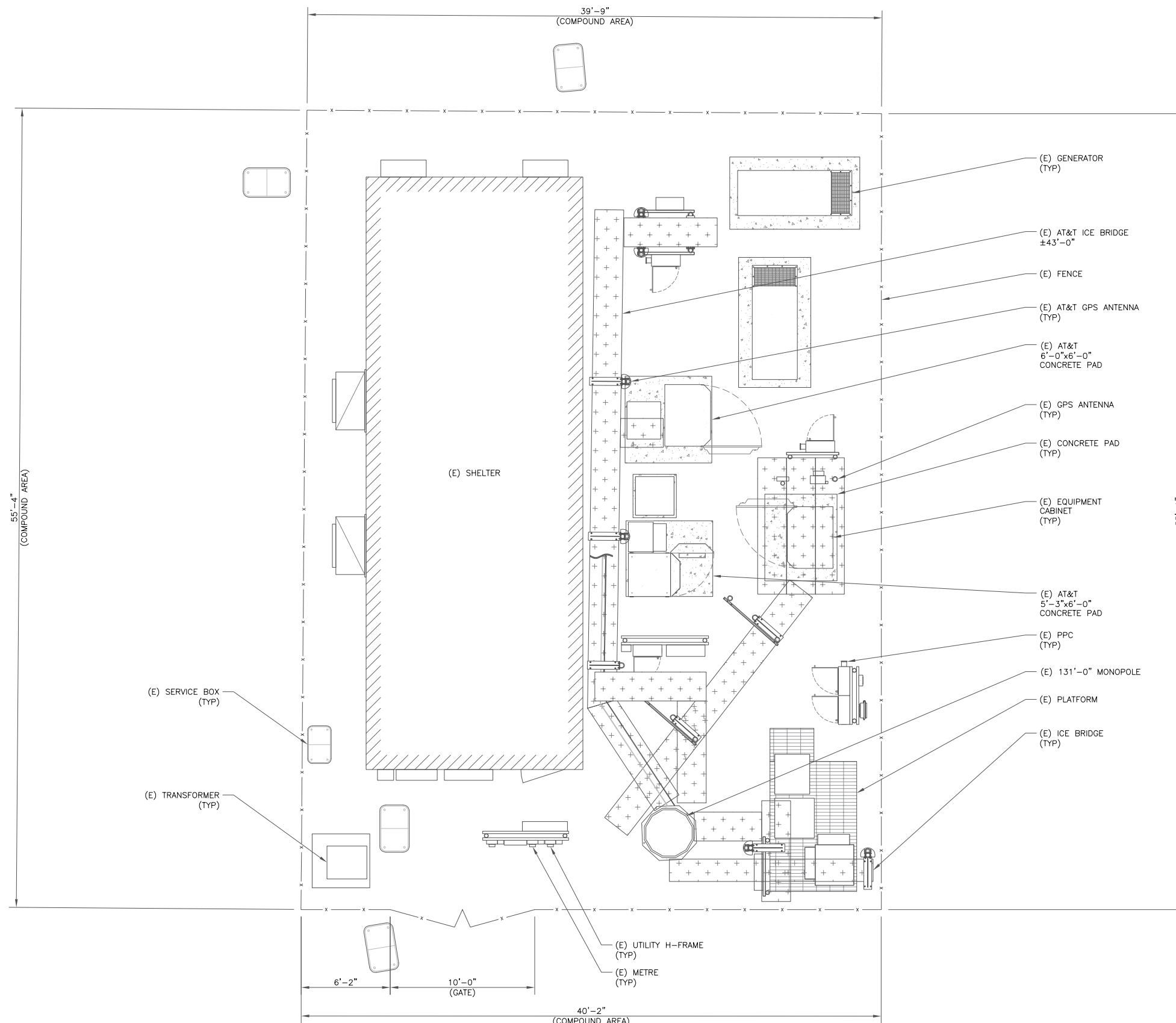
REV	DATE	DRWN	DESCRIPTION	DES/QA
0	09/28/2021	VA	CONSTRUCTION	VA
1	12/17/2021	MT	CONSTRUCTION	VA
2	02/01/2022	VA	CONSTRUCTION	VA
3	02/01/2022	VA	CONSTRUCTION	VA
4	05/03/2022	AM	CONSTRUCTION	VA



05/03/2022

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: **2**



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





1025 LENOX PARK BOULEVARD NE
3RD FLOOR, ATLANTA, GA 30319



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



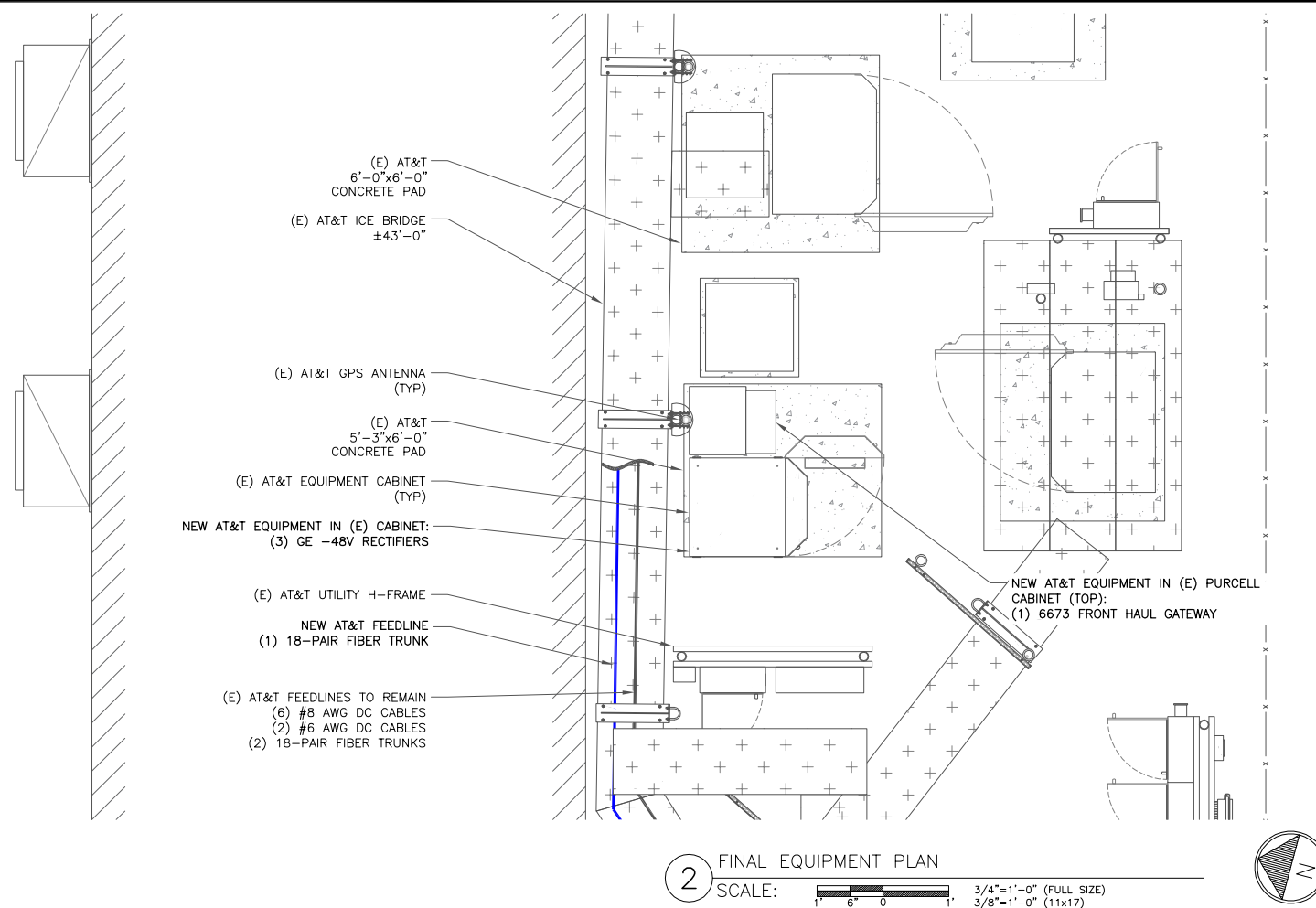
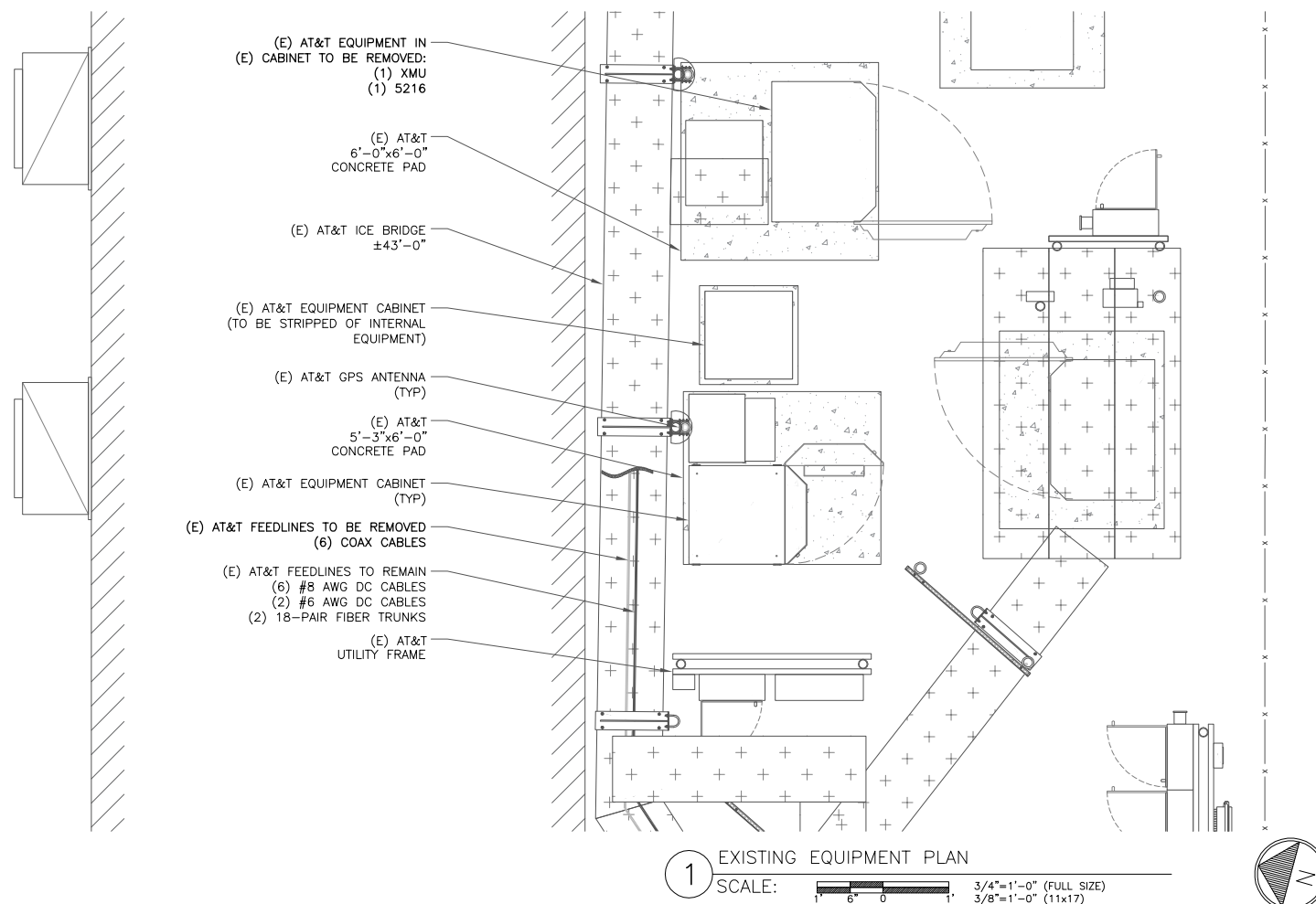
3530 TORINGDON WAY, SUITE 300
RALEIGH, NC 27615

AT&T SITE NUMBER:
CTL05276

BU #: 806376
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118

EXISTING 131'-0" MONOPOLE



GROUND SCOPE OF WORK:

- INSTALL (1) 6673 FRONT HAUL GATEWAY
- INSTALL (3) GE -48V RECTIFIERS

NOTE:

THE POWER DESIGN FOR ANY AC ELECTRICAL POWER CHANGES IS TO BE PERFORMED BY OTHERS AND IS SHOWN HERE FOR REFERENCE PURPOSES ONLY. AT&T IS SOLELY RESPONSIBLE FOR THE ELECTRICAL POWER DESIGN.

ISSUED FOR:

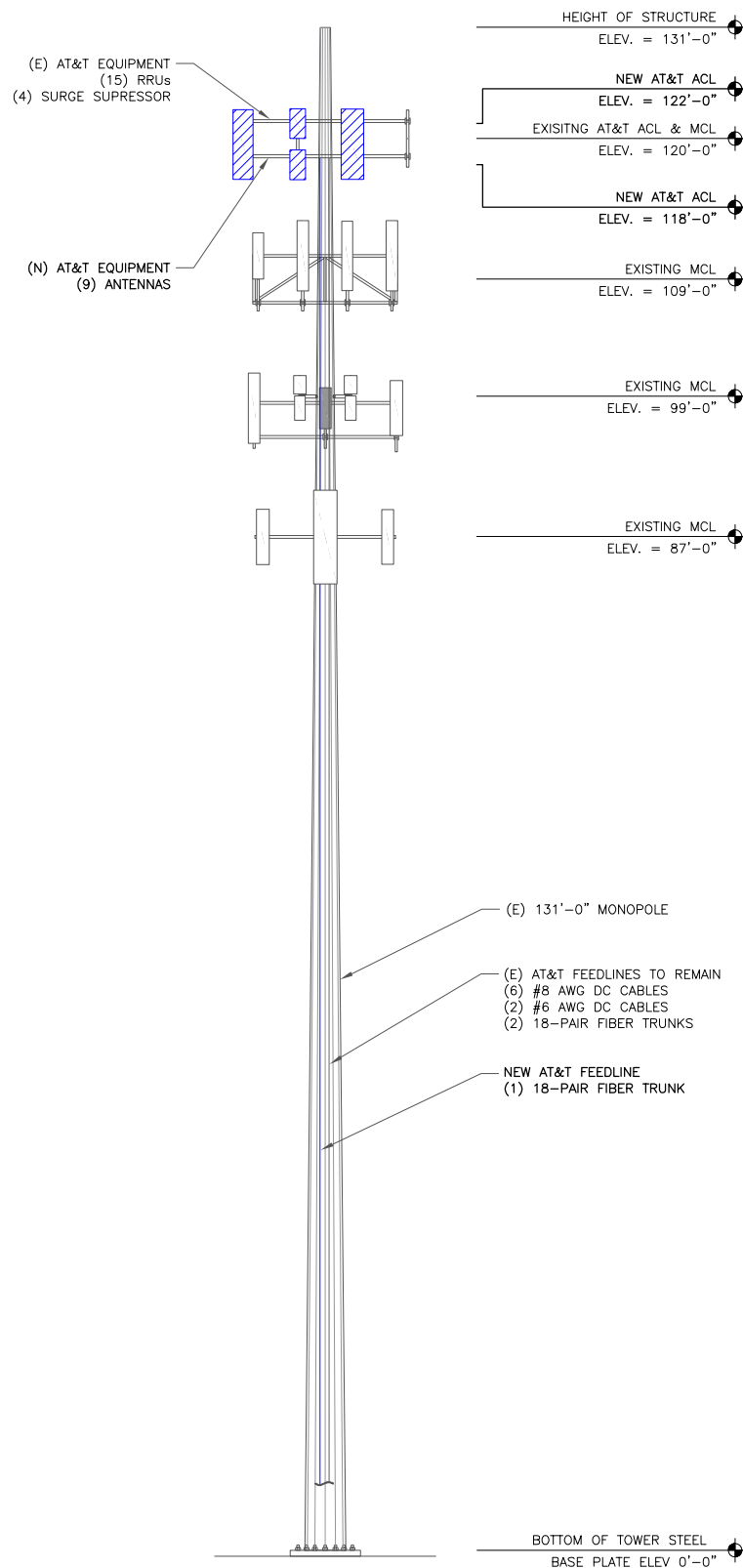
REV	DATE	DRWN	DESCRIPTION	DES/QA
0	09/28/2021	VA	CONSTRUCTION	VA
1	12/17/2021	MT	CONSTRUCTION	VA
2	02/01/2022	VA	CONSTRUCTION	VA
3	02/01/2022	VA	CONSTRUCTION	VA
4	05/03/2022	AM	CONSTRUCTION	VA



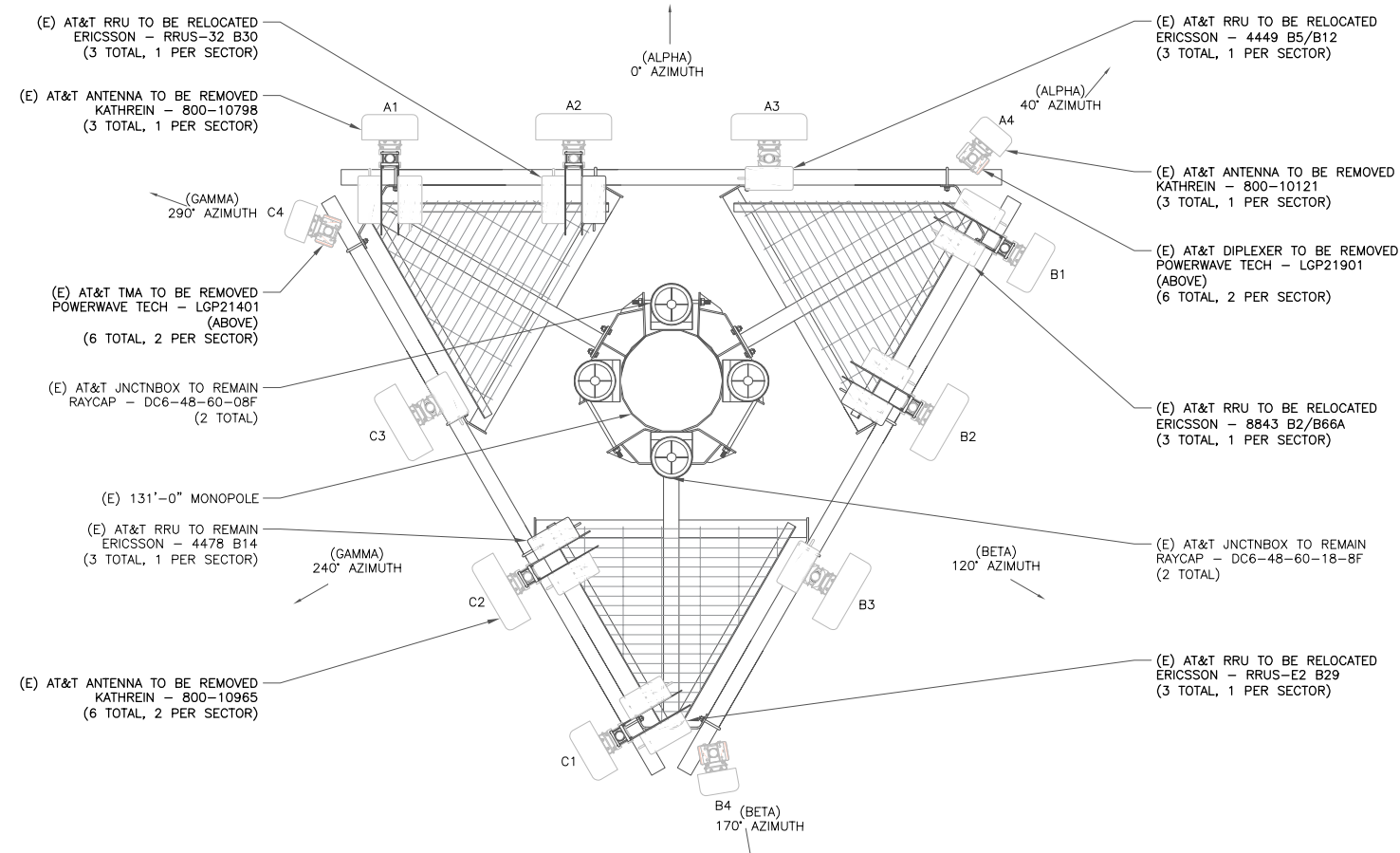
05/03/2022

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: **2**

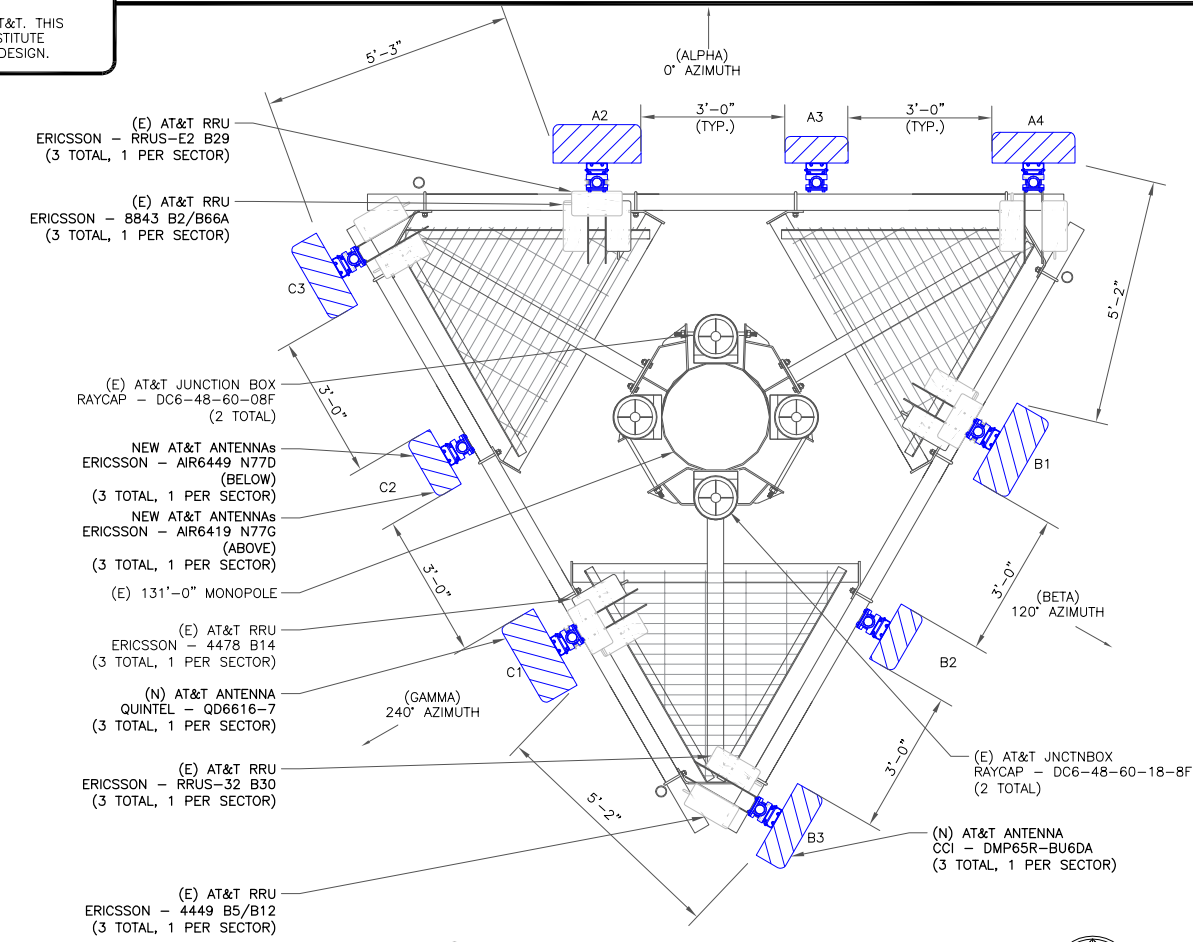


1 FINAL ELEVATION
SCALE: NOT TO SCALE



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

THIS PAGE CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW.
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



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

"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.

- INSTALLER NOTES:
- REFERENCE C-3 FOR FINAL EQUIPMENT SCHEDULE.
 - REFERENCE C-4 FOR NEW EQUIPMENT SPECIFICATIONS.
 - CONTRACTOR TO VERIFY ALL ANTENNA TIP HEIGHTS DO NOT EXCEED BEACON BASE HEIGHT.
 - 3'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE ANTENNAS ON SAME SECTOR.
 - 6'-0" MINIMUM DISTANCE REQUIRED BETWEEN 700BC & 700DE ANTENNAS ON SAME SECTOR.
 - 4'-0" MINIMUM DISTANCE REQUIRED BETWEEN LTE 700 ANTENNAS ON OPPOSING SECTORS.
 - ALL ANTENNA MEASUREMENT DISTANCES MUST BE EDGE TO EDGE (RELOCATE ANTENNAS AS NEEDED).
 - 8" MINIMUM DISTANCE REQUIRED BETWEEN ANTENNA & RADIO. SEE GENERIC EXAMPLE DETAIL ON SHEET C-4.



AT&T SITE NUMBER:
CTL05276

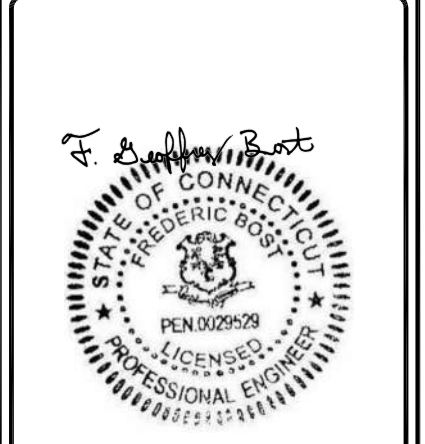
BU #: 806376
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118

EXISTING 131'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
0	09/28/2021	VA	CONSTRUCTION	VA
1	12/17/2021	MT	CONSTRUCTION	VA
2	02/01/2022	VA	CONSTRUCTION	VA
3	02/01/2022	VA	CONSTRUCTION	VA
4	05/03/2022	AM	CONSTRUCTION	VA



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.

THIS PAGE CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW.

DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.



1025 LENOX PARK BOULEVARD NE
3RD FLOOR, ATLANTA, GA 30319



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



3530 TORINGDON WAY, SUITE 300
RALEIGH, NC 27615

AT&T SITE NUMBER:
CTL05276

BU #: **806376**
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118
EXISTING 131'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
0	09/28/2021	VA	CONSTRUCTION	VA
1	12/17/2021	MT	CONSTRUCTION	VA
2	02/01/2022	VA	CONSTRUCTION	VA
3	02/01/2022	VA	CONSTRUCTION	VA
4	05/03/2022	AM	CONSTRUCTION	VA



05/03/2022

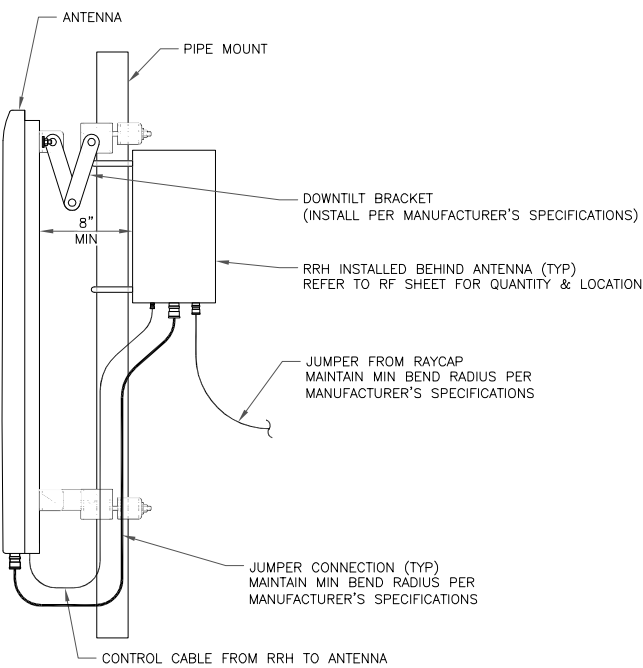
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SHEET NUMBER:
C-3

REVISION:
2

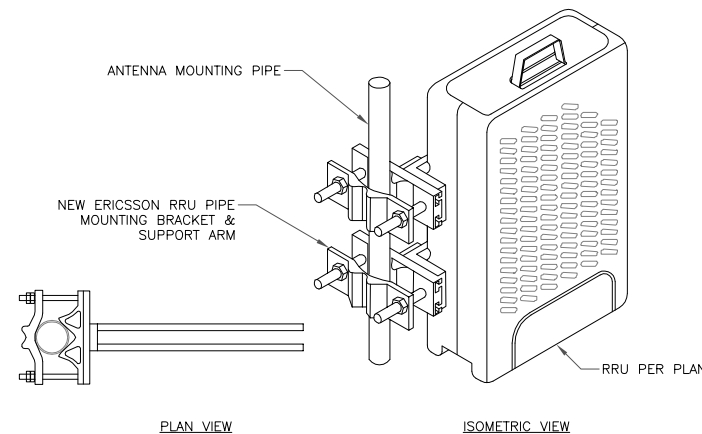
FINAL EQUIPMENT SCHEDULE
(VERIFY WITH CURRENT RFDS)

ALPHA																					
POSITION	ANTENNA				RADIO			DIPLEXER			TMA		SURGE PROTECTION		CABLES						
	TECH.	STATUS/MANUFACTURER MODEL	AZIMUTH	RAD CENTER	QTY.	STATUS/MODEL	LOCATION	QTY.	STATUS	LOCATION	QTY.	STATUS/MODEL	QTY.	STATUS/MODEL	QTY.	STATUS/TYPE	SIZE	LENGTH			
A1	LTE 700	(N) QUINTEL - QD6616-7	0°	120'-0"	1	(E) 4478 B14	TOWER	-	-	-	-	-	-	2	(E) DC6-48-60-0-8F	2	(E) 18- PAIR FIBER	3/8"	170'-0"		
					1	(E) 8843 B2/B66A	TOWER	-	-	-	-	-	-	-	-	-	-	-	-	-	-
					1	(E) RRUS-E2 B29	TOWER	-	-	-	-	-	-	-	-	-	-	-	-	-	-
A2	LTE 1900/AWS 5G AWS/1900	(N) AIR6419 N77G	0°	122'-0"	-	-	-	-	-	-	-	-	-	-	6	#8 AWG DC CABLES	13/16"	170'-0"			
		(N) AIR6449 N77D		118'-0"	-	-	-	-	-	-	-	-	-	-	2	#6 AWG DC CABLES	7/8"	170'-0"			
A3	LTE 700/WCS 5G/850	(N) CCI DMP65R-BU6DA	0°	120'-0"	1	(E) 4449 B5/B12	TOWER	-	-	-	-	-	-	2	(E) DC6-48-60-0-8F	1	(N) 18- PAIR FIBER	3/8"	170'-0"		
					1	(E) RRUS-32 B30	TOWER	-	-	-	-	-	-	-	-	-	-	-	-	-	
BETA																					
B1	LTE 700	(N) QUINTEL - QD6616-7	120°	120'-0"	1	(E) 4478 B14	TOWER	-	-	-	-	-	-	-	-	-	-	-	-		
					1	(E) 8843 B2/B66A	TOWER	-	-	-	-	-	-	-	-	-	-	-	-	-	
					1	(E) RRUS-E2 B29	TOWER	-	-	-	-	-	-	-	-	-	-	-	-	-	-
B2	LTE 1900/AWS 5G AWS/1900	(N) AIR6419 N77G	120°	122'-0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
		(N) AIR6449 N77D		118'-0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
B3	LTE 700/WCS 5G/850	(N) CCI DMP65R-BU6DA	120°	120'-0"	1	(E) 4449 B5/B12	TOWER	-	-	-	-	-	-	-	-	-	-	-			
					1	(E) RRUS-32 B30	TOWER	-	-	-	-	-	-	-	-	-	-	-	-	-	
GAMMA																					
C1	LTE 700	(N) QUINTEL - QD6616-7	240°	120'-0"	1	(E) 4478 B14	TOWER	-	-	-	-	-	-	-	-	-	-	-			
					1	(E) 8843 B2/B66A	TOWER	-	-	-	-	-	-	-	-	-	-	-	-		
					1	(E) RRUS-E2 B29	TOWER	-	-	-	-	-	-	-	-	-	-	-	-	-	
C2	LTE 1900/AWS 5G AWS/1900	(N) AIR6419 N77G	240°	122'-0"	-	-	-	-	-	-	-	-	-	-	-	-	-				
		(N) AIR6449 N77D		118'-0"	-	-	-	-	-	-	-	-	-	-	-	-	-				
C3	LTE 700/WCS 5G/850	(N) CCI DMP65R-BU6DA	240°	120'-0"	1	(E) 4449 B5/B12	TOWER	-	-	-	-	-	-	-	-	-	-				
					1	(E) RRUS-32 B30	TOWER	-	-	-	-	-	-	-	-	-	-	-			
NOTE: (E) - EXISTING (N) - NEW														UNUSED FEEDLINES:							

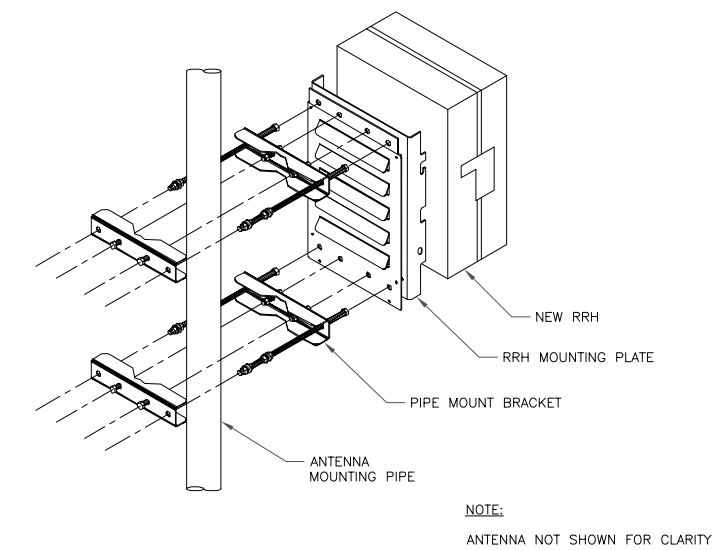


1 GENERIC ANTENNA MOUNTING ELEVATION
SCALE: NOT TO SCALE

ERICSSON RRU MOUNTING KIT:
 SXX 107 2839/1: SINGLE RRU SUPPORT KIT (PART # 5335) (OR ENGINEER APPROVED EQUIVALENT)
 SXX 107 2839/2: EXPANSION KIT (PART # 5336) (OR ENGINEER APPROVED EQUIVALENT)
MOUNTING NOTES:
 REFER TO PRODUCT SPECS FOR BOLT SIZE & PIPE DIAMETER TOLERANCES. THE PART NO. SXX107-2839/2 IS REQUIRED FOR (2) RRUS.

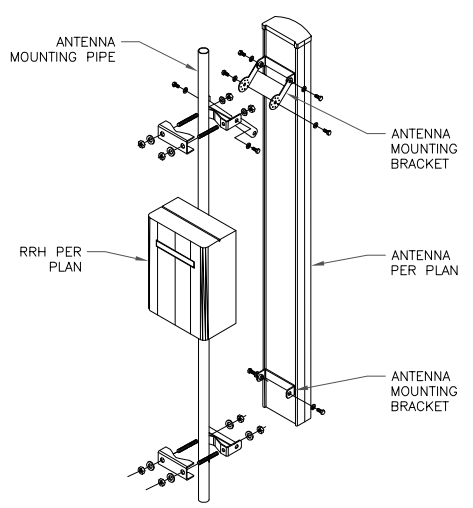


2 ERICSSON - SXX 107 2839
SCALE: NOT TO SCALE



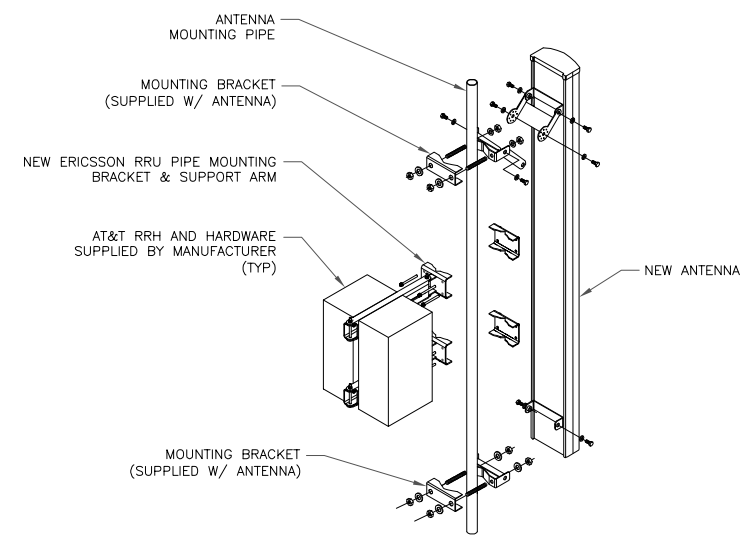
3 SINGLE RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

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

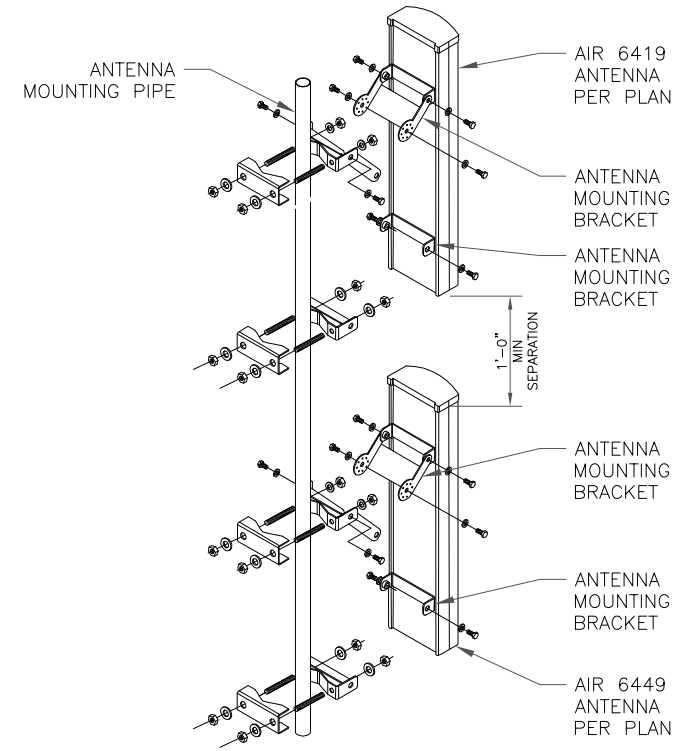


4 ANTENNA WITH RRH MOUNTING DETAIL
SCALE: NOT TO SCALE

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.



5 ANTENNA WITH DUAL RRH MOUNTING DETAIL
SCALE: NOT TO SCALE



6 DUAL ANTENNA MOUNTING DETAIL
SCALE: NOT TO SCALE

1025 LENOX PARK BOULEVARD NE
3RD FLOOR, ATLANTA, GA 30319

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

3530 TORINGDON WAY, SUITE 300
RALEIGH, NC 27615

AT&T SITE NUMBER:
CTL05276

BU #: **806376**
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118

EXISTING 131'-0" MONOPOLE

ISSUED FOR:

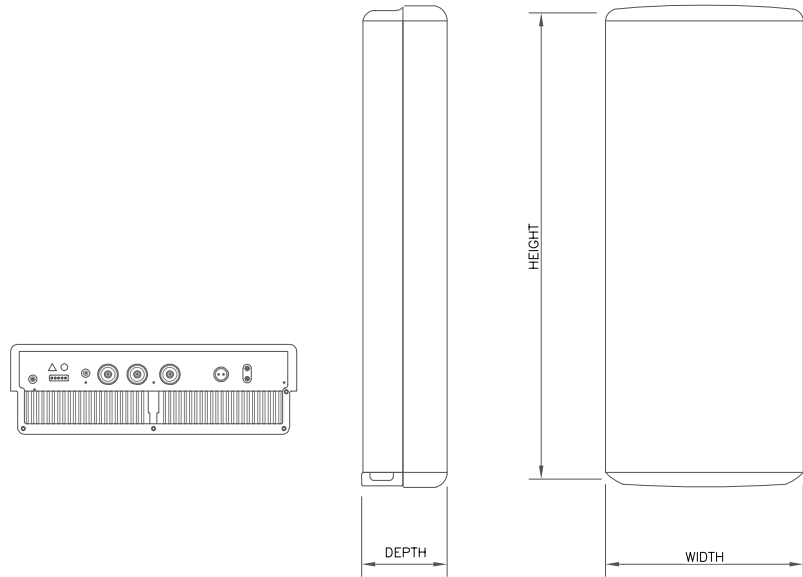
REV	DATE	DRWN	DESCRIPTION	DES/QA
0	09/28/2021	VA	CONSTRUCTION	VA
1	12/17/2021	MT	CONSTRUCTION	VA
2	02/01/2022	VA	CONSTRUCTION	VA
3	02/01/2022	VA	CONSTRUCTION	VA
4	05/03/2022	AM	CONSTRUCTION	VA

05/03/2022

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.

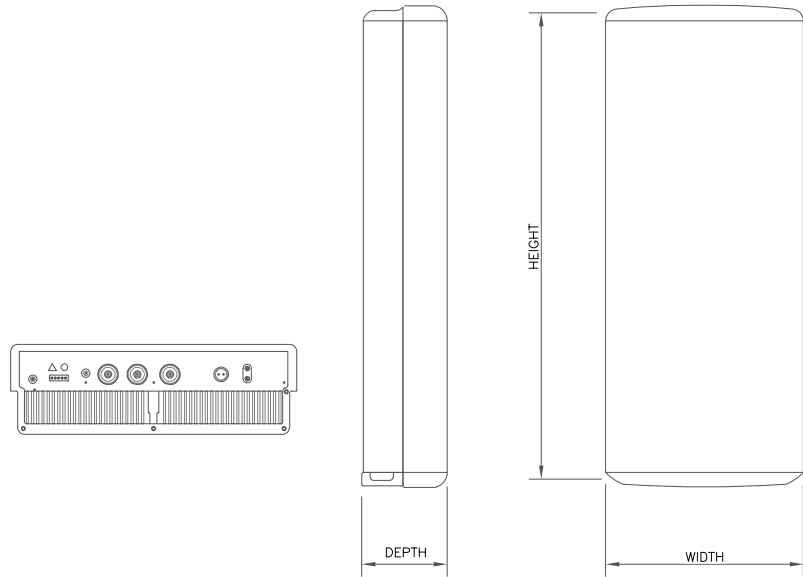
SHEET NUMBER: **C-4** REVISION: **2**

HEIGHT	WIDTH	DEPTH	WEIGHT
30.39"	15.87"	8.07"	81.60 LBS



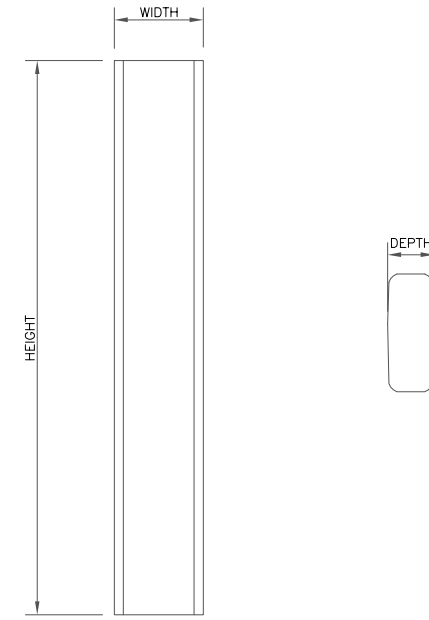
1 ERICSSON – AIR 6449 B77D
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
27.95"	15.75"	6.68"	66.20 LBS



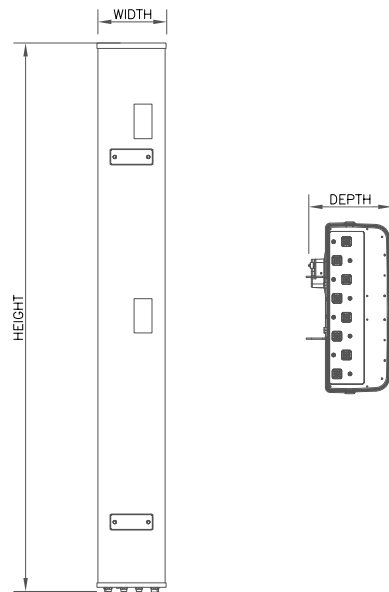
2 ERICSSON – AIR 6419 B77G
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
96.00"	22.00"	09.60"	150.00 LBS



3 QUINTEL – QD6616-7
SCALE: NOT TO SCALE

HEIGHT	WIDTH	DEPTH	WEIGHT
96.00"	20.70"	7.70"	105.60 LBS



4 CCI – DMP65R-BU6DA
SCALE: NOT TO SCALE

5 NOT USED
SCALE: NOT TO SCALE

6 NOT USED
SCALE: NOT TO SCALE

THIS PAGE CONTAINS CONFIDENTIAL, PROPRIETARY OR TRADE SECRET INFORMATION EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW.
DISCLAIMER PROVIDED BY AT&T. THIS STATEMENT DOES NOT CONSTITUTE ENGINEERING ANALYSIS OR DESIGN.

1025 LENOX PARK BOULEVARD NE
3RD FLOOR, ATLANTA, GA 30319

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

3530 TORINGDON WAY, SUITE 300
RALEIGH, NC 27615

AT&T SITE NUMBER:
CTL05276

BU #: **806376**
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118

EXISTING 131'-0" MONOPOLE

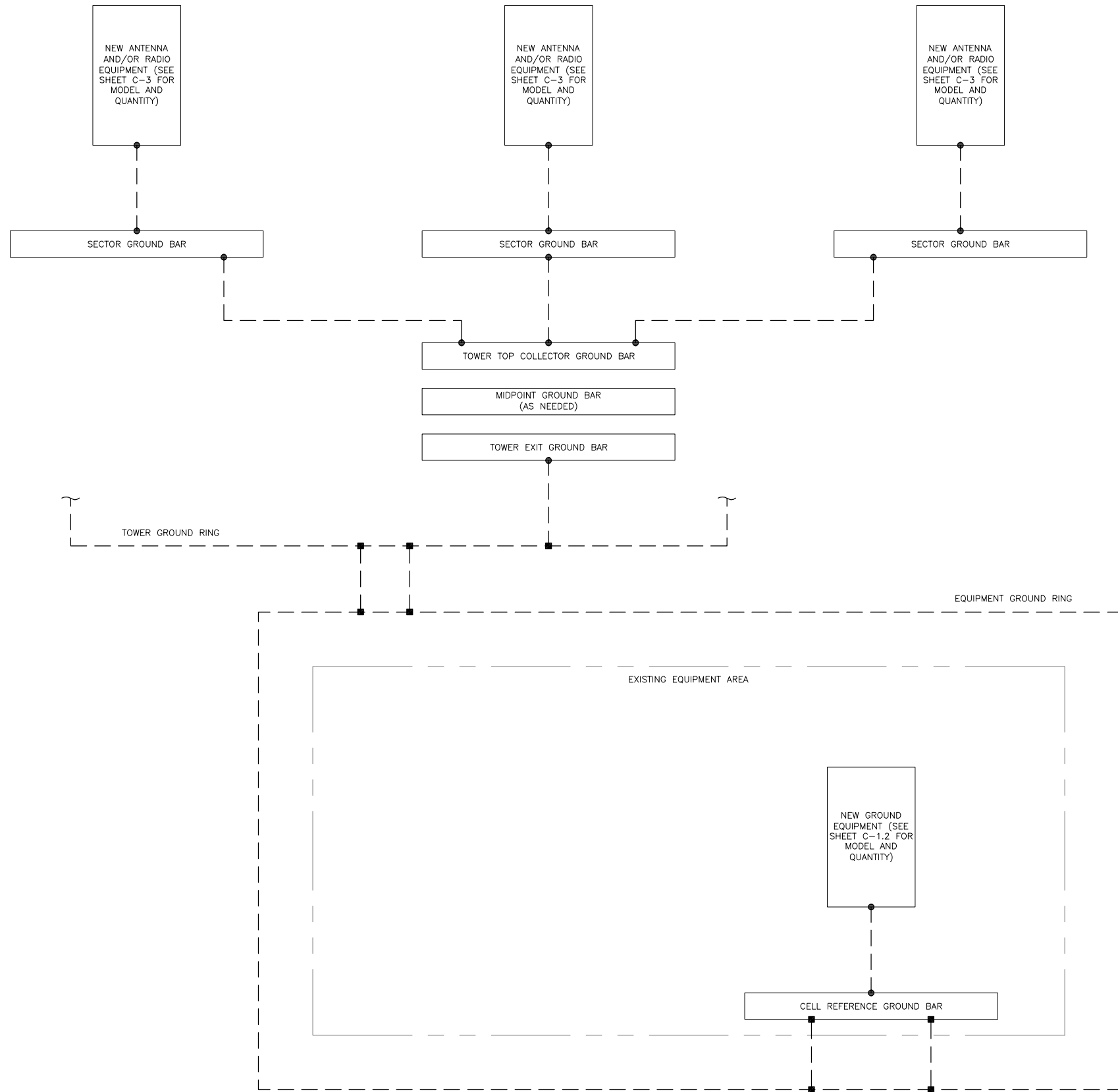
ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
0	09/28/2021	VA	CONSTRUCTION	VA
1	12/17/2021	MT	CONSTRUCTION	VA
2	02/01/2022	VA	CONSTRUCTION	VA
3	02/01/2022	VA	CONSTRUCTION	VA
4	05/03/2022	AM	CONSTRUCTION	VA

05/03/2022

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: 2
-----------------------------	-----------------------



GROUNDING PLAN LEGEND:

- GROUND WIRE
- EXOTHERMIC WELD
- MECHANICAL CONNECTION
- ⊙ COPPER GROUND ROD
- ⊗ GROUND ROD W/ TEST WELL

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

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

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

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

1025 LENOX PARK BOULEVARD NE
3RD FLOOR, ATLANTA, GA 30319

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

3530 TORINGDON WAY, SUITE 300
RALEIGH, NC 27615

AT&T SITE NUMBER:
CTL05276

BU #: 806376
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118

EXISTING 131'-0" MONOPOLE

ISSUED FOR:

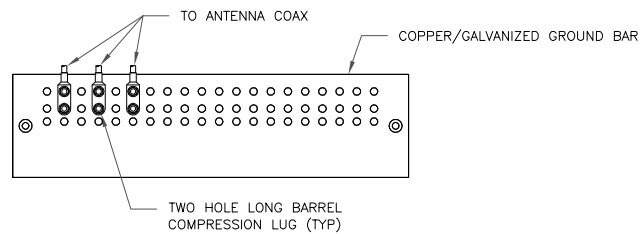
REV	DATE	DRWN	DESCRIPTION	DES/QA
0	09/28/2021	VA	CONSTRUCTION	VA
1	12/17/2021	MT	CONSTRUCTION	VA
2	02/01/2022	VA	CONSTRUCTION	VA
3	02/01/2022	VA	CONSTRUCTION	VA
4	05/03/2022	AM	CONSTRUCTION	VA

05/03/2022

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:** **2**

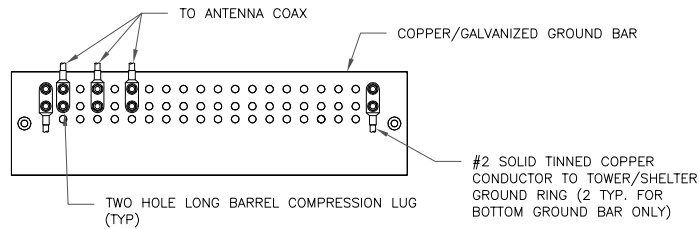
1 GROUNDING SCHEMATIC
SCALE: NOT TO SCALE



NOTES:

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

1 ANTENNA SECTOR GROUND BAR DETAIL
SCALE: NOT TO SCALE

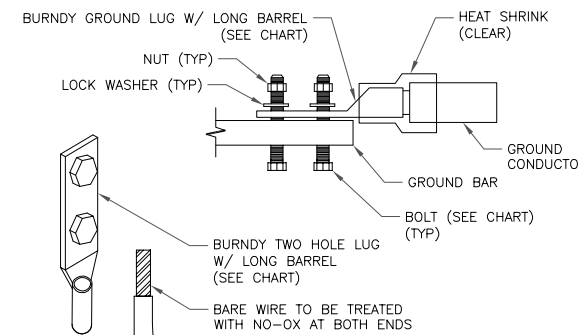


NOTES:

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

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

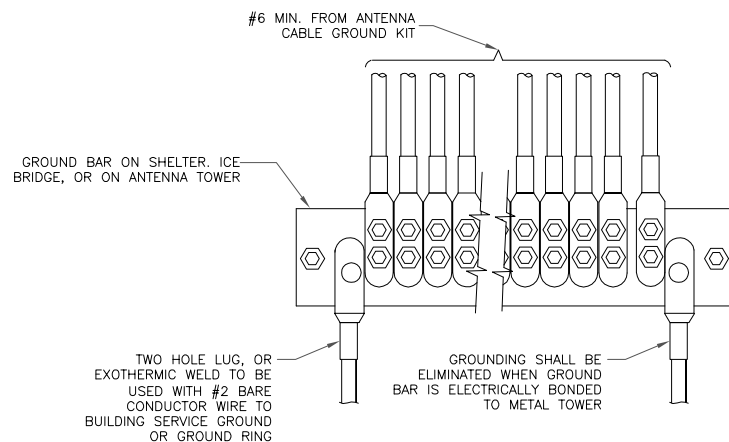
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 SOLID TINNED	YA3C-2TC38	3/8" - 16 NC SS 2 BOLT
#2 STRANDED	YA2C-2TC38	3/8" - 16 NC SS 2 BOLT
#2/0 STRANDED	YA26-2TC38	3/8" - 16 NC SS 2 BOLT
#4/0 STRANDED	YA28-2N	1/2" - 16 NC SS 2 BOLT



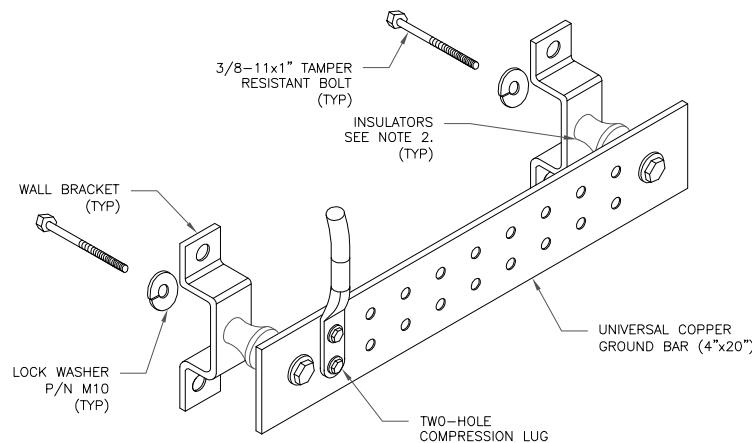
NOTE:

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

3 MECHANICAL LUG CONNECTION
SCALE: NOT TO SCALE



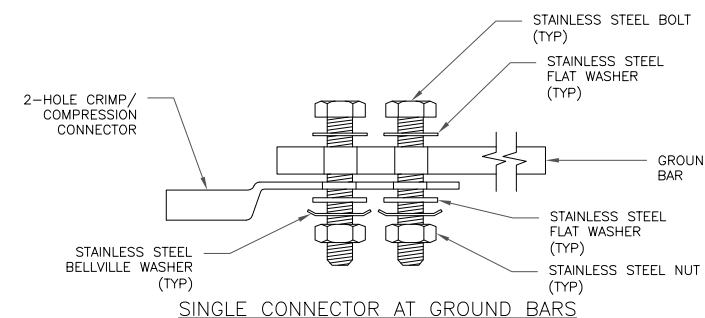
4 GROUNDWIRE INSTALLATION
SCALE: NOT TO SCALE



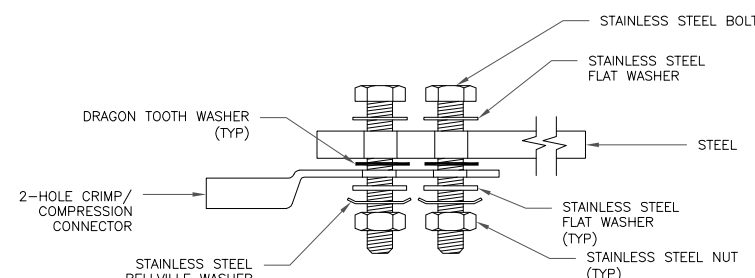
NOTES:

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

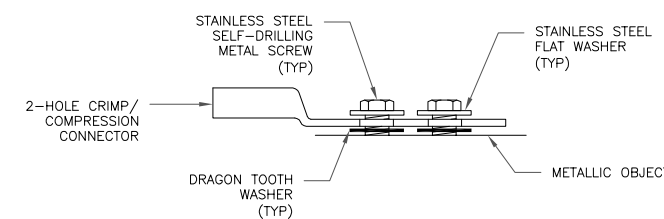
5 GROUND BAR DETAIL
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

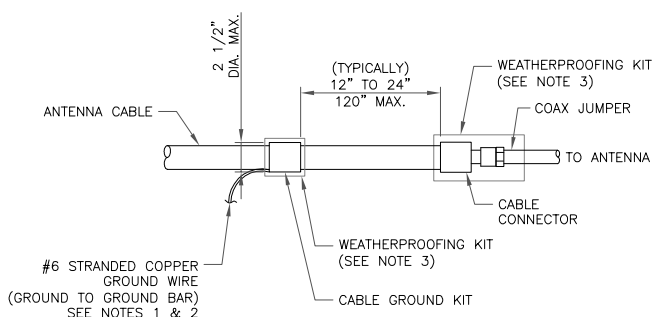


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

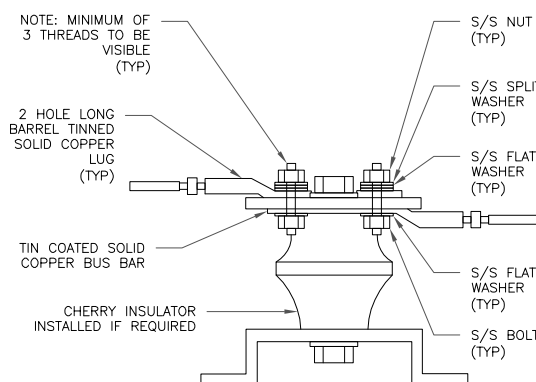
8 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS
SCALE: NOT TO SCALE



NOTES:

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

6 CABLE GROUND KIT CONNECTION
SCALE: NOT TO SCALE



7 LUG DETAIL
SCALE: NOT TO SCALE



1025 LENOX PARK BOULEVARD NE
3RD FLOOR, ATLANTA, GA 30319



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



3530 TORINGTON WAY, SUITE 300
RALEIGH, NC 27615

AT&T SITE NUMBER:
CTL05276

BU #: 806376
HRT 100 943239

1455 FORBES STREET
EAST HARTFORD, CT 06118

EXISTING 131'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES/QA
0	09/28/2021	VA	CONSTRUCTION	VA
1	12/17/2021	MT	CONSTRUCTION	VA
2	02/01/2022	VA	CONSTRUCTION	VA
3	02/01/2022	VA	CONSTRUCTION	VA
4	05/03/2022	AM	CONSTRUCTION	VA



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: **2**

Exhibit E

Mount Analysis

Date: **September 8, 2021**

INFINIGY
FROM ZERO TO INFINIGY
the solutions are endless
Infinigy Engineering, PLLC
1033 Watervliet Shaker Road
Albany, NY 12205
518-690-0790
structural@infinigy.com

Jacob Montoya
Crown Castle
2055 S. Stearman Drive
Chandler, AZ 85286
480-298-9641

Subject: **Mount Analysis Report**

Carrier Designation: **AT&T Mobility Direct**
Carrier Site Number: CTL05276
Carrier Site Name: EAST HARTFORD SOUTH
Carrier FA Number: 10090919

Crown Castle Designation: **Crown Castle BU Number:** 806376
Crown Castle Site Name: HRT 100 943239
Crown Castle JDE Job Number: 649381
Crown Castle Order Number: 556524 Rev.0

Engineering Firm Designation: **Infinigy Engineering, PLLC Report Designation:** 1039-Z0001-B

Site Data: **1455 Forbes Street, East Hartford, Hartford County, CT, 06118**
Latitude 41°43'53.30" Longitude -72°36'28.0"

Structure Information: **Tower Height & Type:** **130.0 ft Monopole**
Mount Elevation: **121.0 ft**
Mount Type: **12.5 ft Platform**

Dear Jacob Montoya,

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

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

Platform

Sufficient

This analysis has been performed in accordance with the 2018 International Building Code based upon an ultimate 3-second gust wind speed of 125 mph. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Mount analysis prepared by: Leehou Proc

Respectfully Submitted by:
Emmanuel Poulin, P.E.
518-690-0790
structural@infinigy.com
CT PE License No. 22947

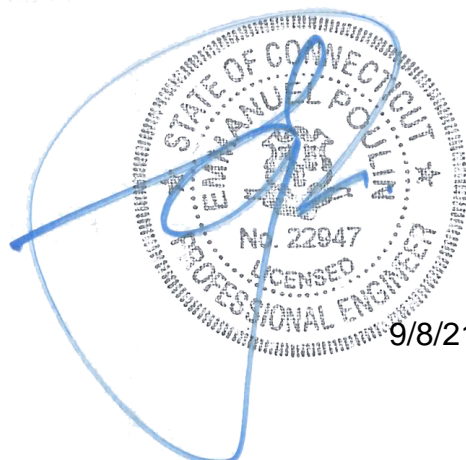


TABLE OF CONTENTS

1) INTRODUCTION

2) ANALYSIS CRITERIA

Table 1 - Proposed Equipment Configuration

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

3.1) Analysis Method

3.2) Assumptions

4) ANALYSIS RESULTS

Table 3 - Mount Component Stresses vs. Capacity

4.1) Recommendations

5) APPENDIX A

Wire Frame and Rendered Models

6) APPENDIX B

Software Input Calculations

7) APPENDIX C

Software Analysis Output

8) APPENDIX D

Additional Calculations

1) INTRODUCTION

This is an existing 3 sector 12.5 ft Platform designed by Connect-It Wireless.

2) ANALYSIS CRITERIA

Building Code: 2018 IBC
TIA-222 Revision: TIA-222-H
Risk Category: II
Ultimate Wind Speed: 125 mph
Exposure Category: C
Topographic Factor at Base: 1.0
Topographic Factor at Mount: 1.0
Ice Thickness: 1.5 in
Wind Speed with Ice: 50 mph
Seismic S_s: 0.181
Seismic S₁: 0.064
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	Antenna Manufacturer	Antenna Model	Mount / Modification Details
121.0	122.0	3	ERICSSON	AIR 6449 B77D	12.5 ft Platform
	120.0	3	CCI ANTENNAS	DMP65R-BU6D	
		3	QUINTEL TECHNOLOGY	QD6616-7	
		3	ERICSSON	RRUS 32 B30	
		3	ERICSSON	RRUS 4449 B5/B12	
		3	ERICSSON	RRUS 4478 B14	
		3	ERICSSON	RRUS 8843 B2/B66A	
		3	ERICSSON	RRUS E2 B29	
		1	RAYCAP	DC6-48-60-0-8F	
		3	RAYCAP	DC6-48-60-18-8F	
	118.0	3	ERICSSON	AIR 6419 B77G	

3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Remarks	Reference	Source
Crown Application	AT&T Mobility Application	556524 Rev. 0	CCI Sites
Mount Manufacturer Drawings	Connect-It Wireless	ATT-LPPS14-HD-PHK	Infinigy
Loading Documents	AT&T Mobility	RFDS ID: 4392770	TSA

3.1) Analysis Method

RISA-3D (Version 19.0.4), a commercially available analysis software package, was used to create a three-dimensional model of the antenna mounting system and calculate member stresses for various loading cases.

Infinigy Mount Analysis Tool V2.1.7, a tool internally developed by Infinigy, 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 "Software Input Calculations".

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

3.2) Assumptions

- 1) The antenna mounting system was properly fabricated, installed and maintained in good condition in accordance with its original design and manufacturer's specifications.
- 2) The configuration of antennas, mounts, and other appurtenances are as specified in Table 1 and the referenced drawings.
- 3) All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
- 4) The 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.
- 5) Prior structural modifications to the tower mounting system are assumed to be installed as shown per available data.
- 6) Steel grades have been assumed as follows, unless noted otherwise:

Channel, Solid Round, Angle, Plate	ASTM A36 (GR 36)
HSS (Rectangular)	ASTM A500 (GR B-46)
Pipe	ASTM A53 (GR 35)
Connection Bolts	ASTM A325

This analysis may be affected if any assumptions are not valid or have been made in error. Infinigy Engineering, PLLC 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, All Sectors)

Notes	Component	Critical Member	Centerline (ft)	% Capacity	Pass / Fail
1,2	Mount Pipe(s)	MP10	121.0	21.2	Pass
	Horizontal(s)	HOR1		13.2	Pass
	Standoff(s)	M33		24.1	Pass
	Handrail(s)	HR1		52.0	Pass
	Bracing(s)	M81		65.1	Pass
	Handrail Corner Plate(s)	M32		64.2	Pass
	Mount Connections	--		17.9	Pass

Structure Rating (max from all components) =	65.1%
---	--------------

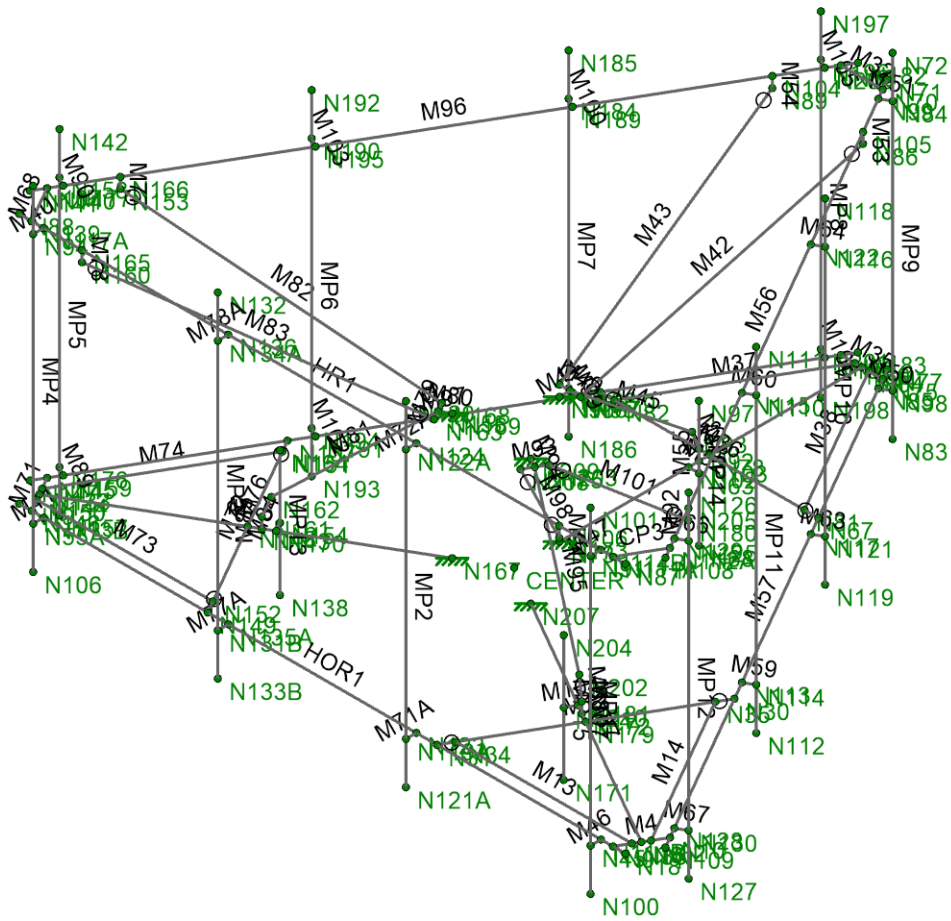
Notes:

- 1) See additional documentation in "Appendix C - Software Analysis Output" for calculations supporting the % capacity consumed.
- 2) See additional documentation in "Appendix D – Additional Calculations" for detailed mount connection calculations.

4.1) Recommendations

The mount has sufficient capacity to carry the proposed loading configuration. No modifications are required at this time.

APPENDIX A
WIRE FRAME AND RENDERED MODELS



Infinigy Engineering, PLLC

806376

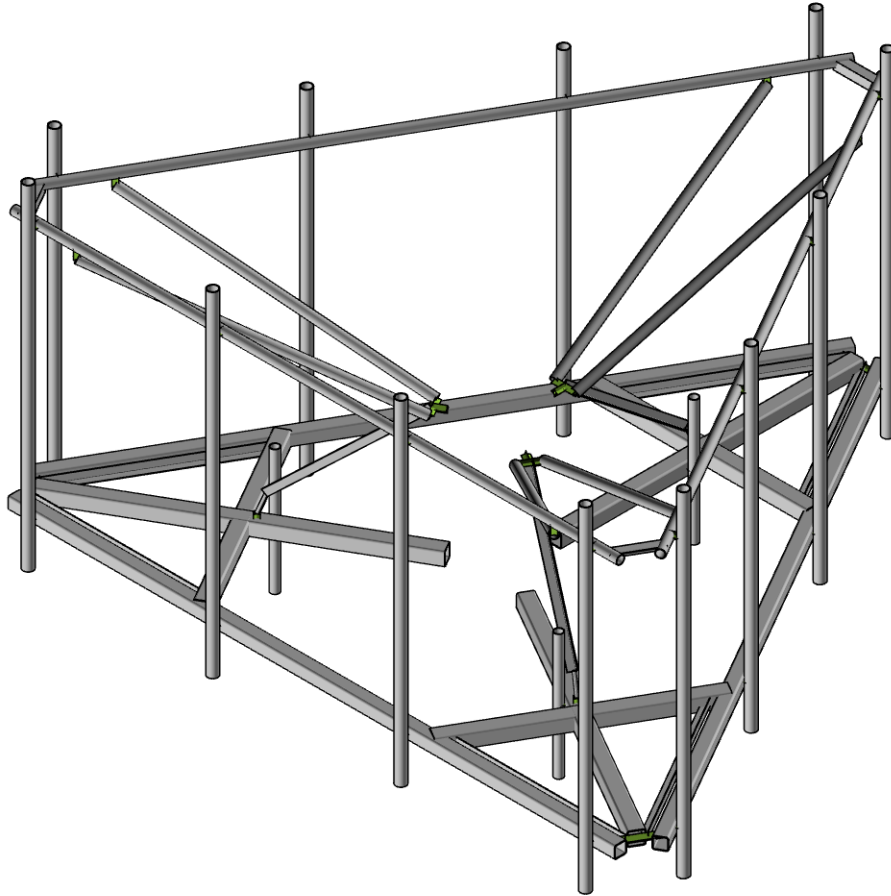
Wireframe - 1

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Infinigy Engineering, PLLC

806376

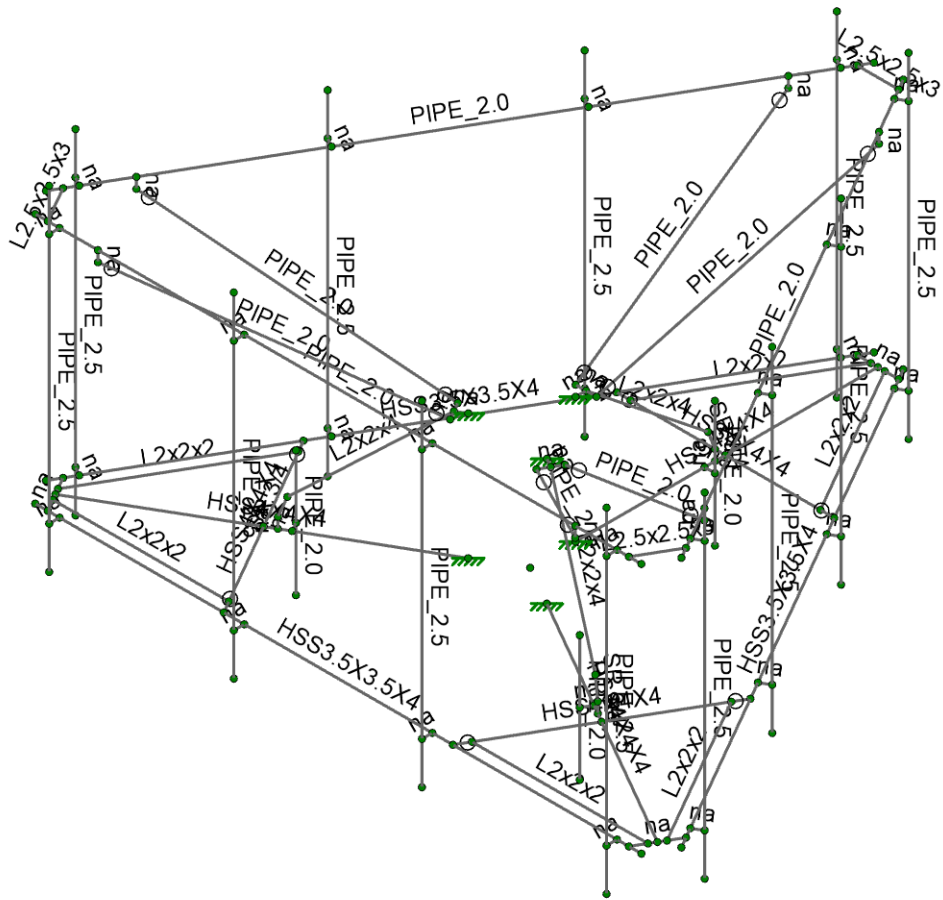
Rendered - 2

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Infinigy Engineering, PLLC

806376

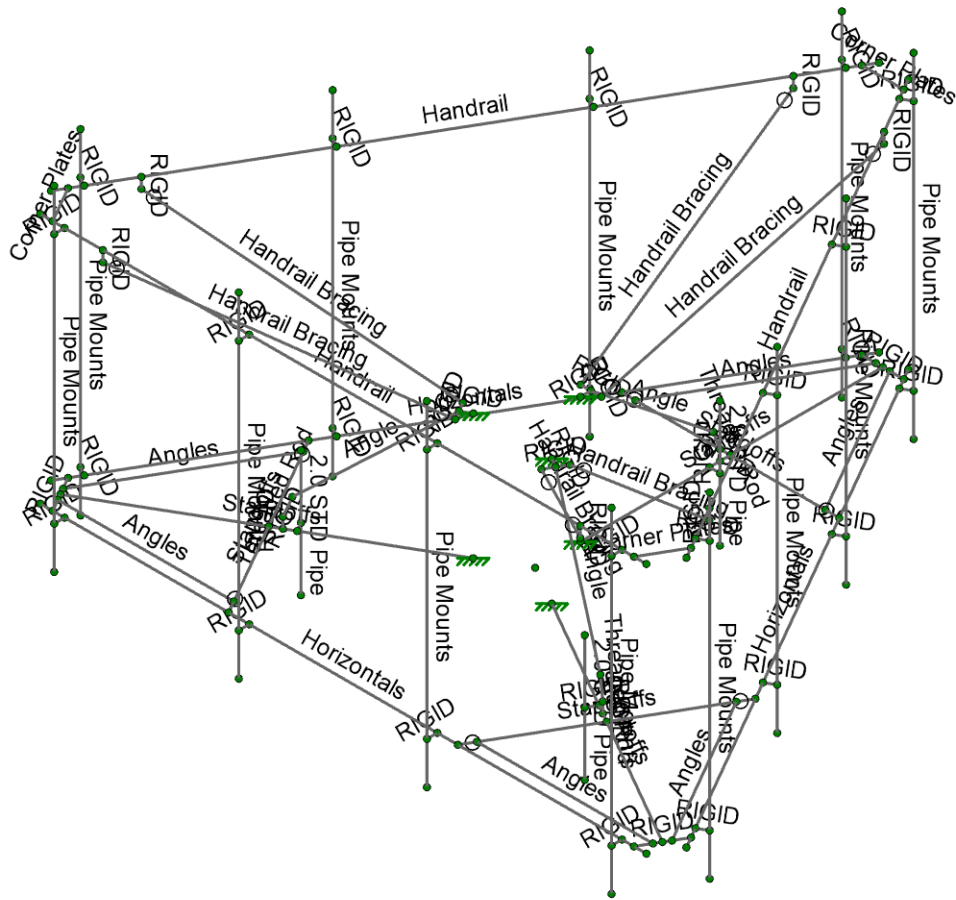
Shape - 3

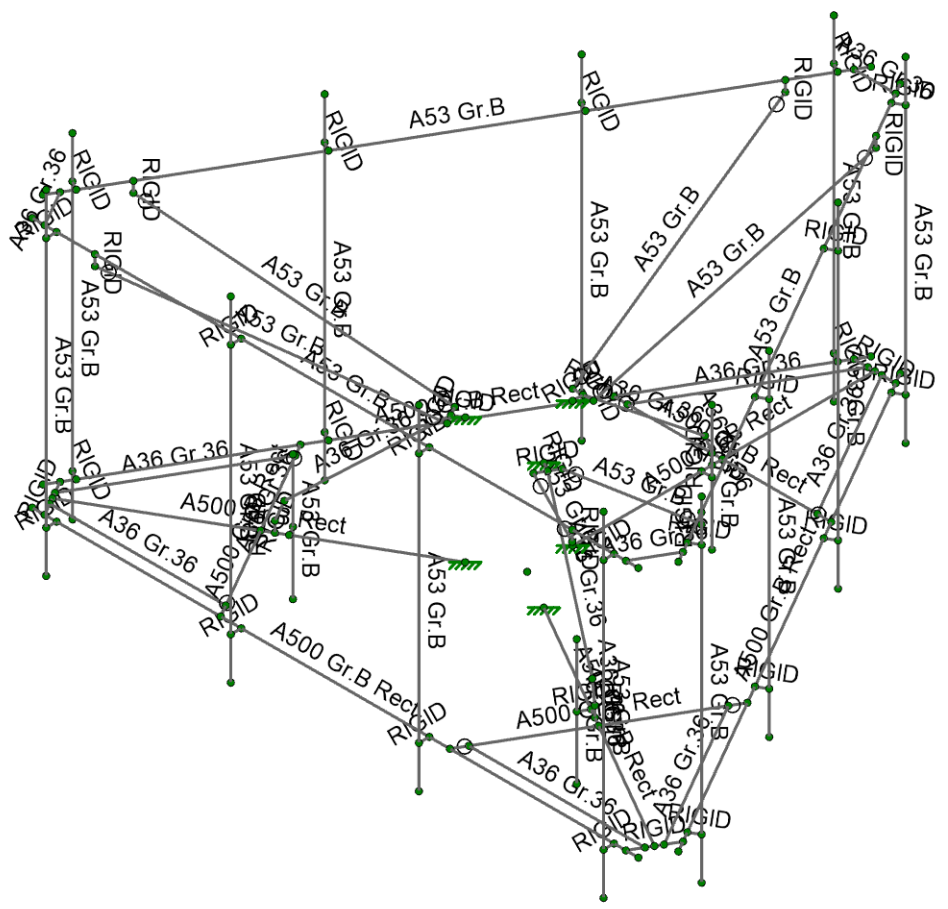
LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d





Infinigy Engineering, PLLC

806376

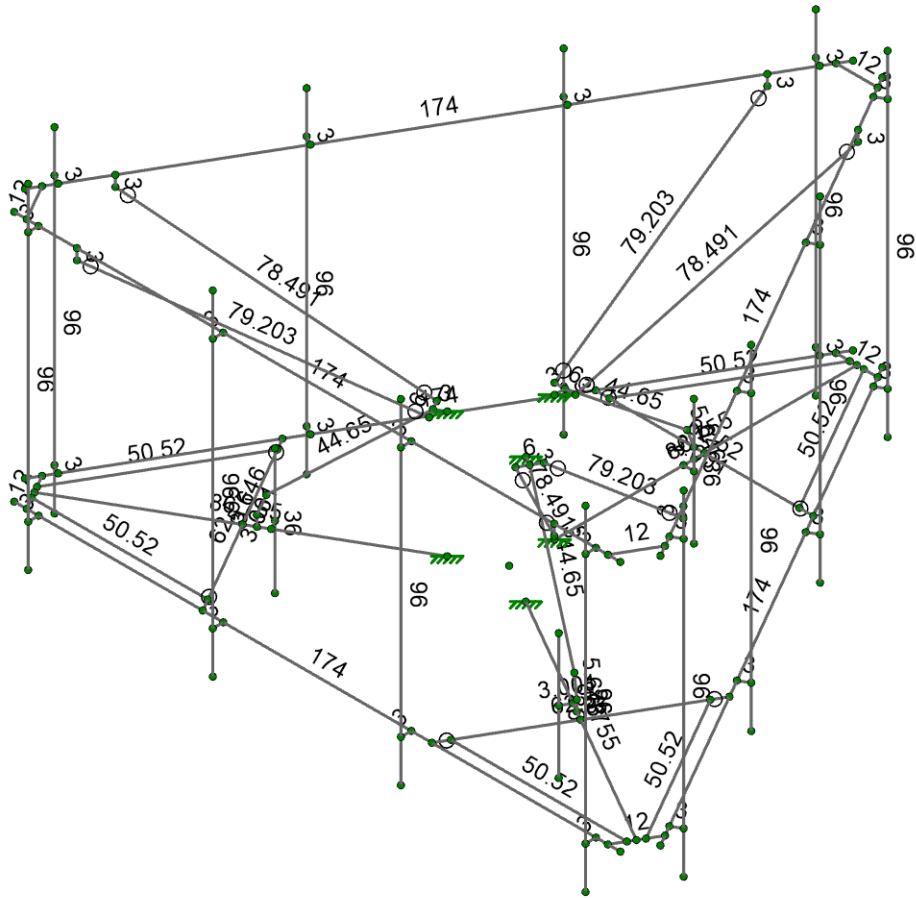
Grade - 5

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Member Length (in) Displayed

Infinigy Engineering, PLLC

806376

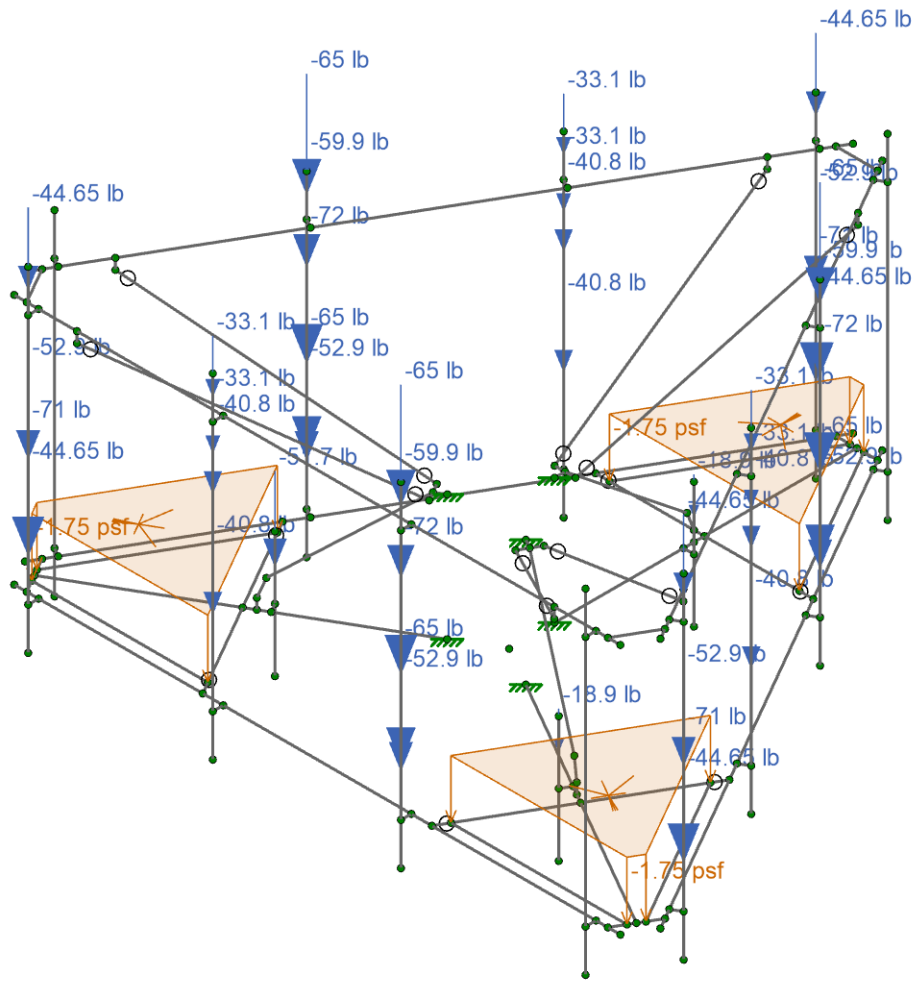
Length - 6

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 1, Self Weight

Infinigy Engineering, PLLC

LP

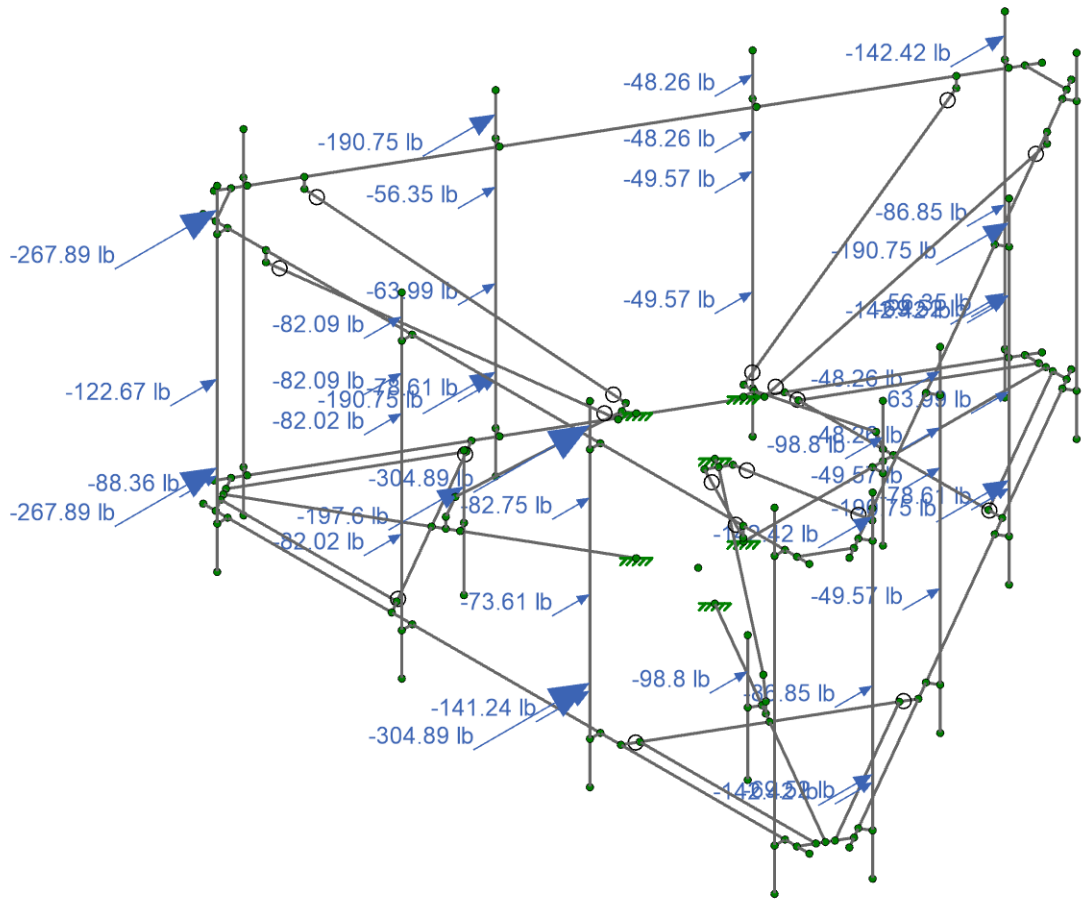
1039-Z0001-B

806376

Self Weight - 7

Sep 07, 2021

806376_loaded.r3d



Loads: BLC 2, Wind Load AZI 0

Infinigy Engineering, PLLC

LP

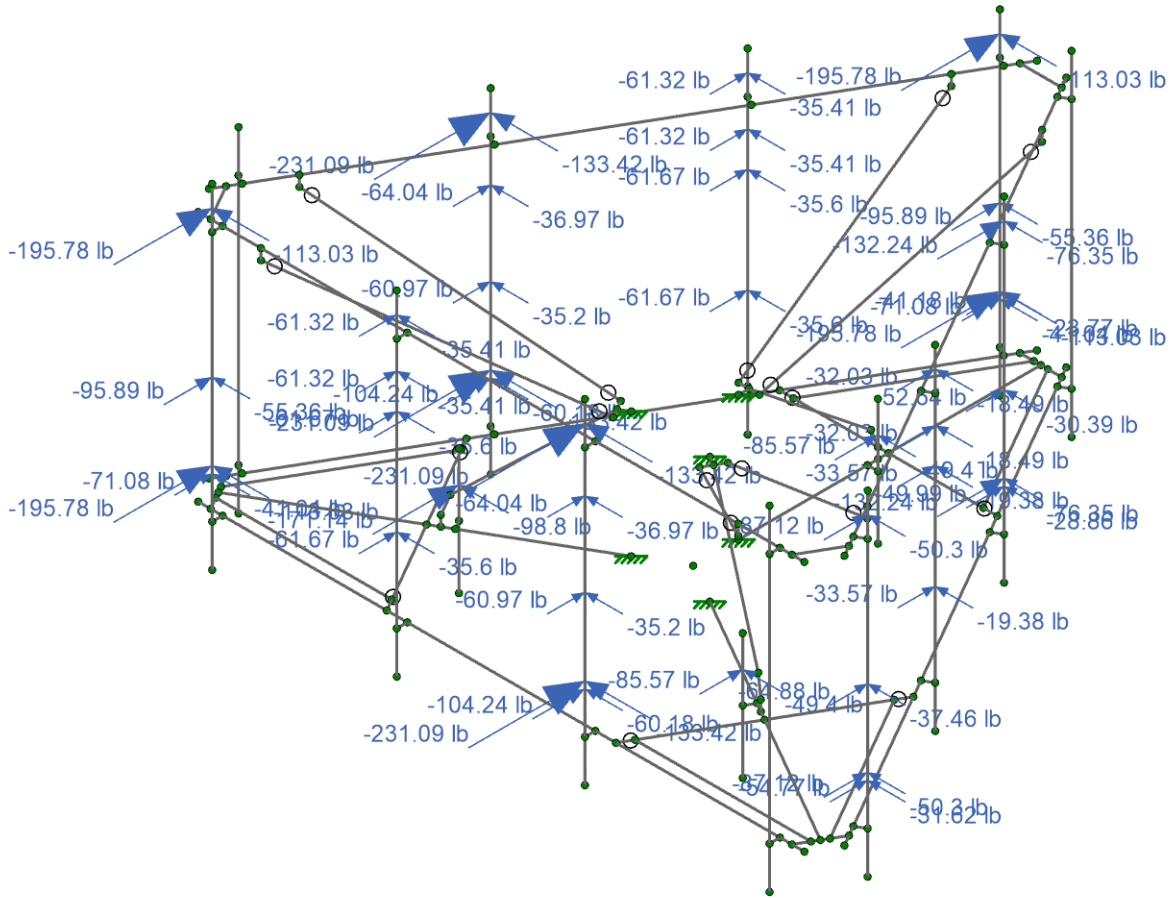
1039-Z0001-B

806376

Wind Loading 0 - 8

Sep 07, 2021

806376_loaded.r3d



Loads: BLC 3, Wind Load AZI 30

Infinigy Engineering, PLLC

LP

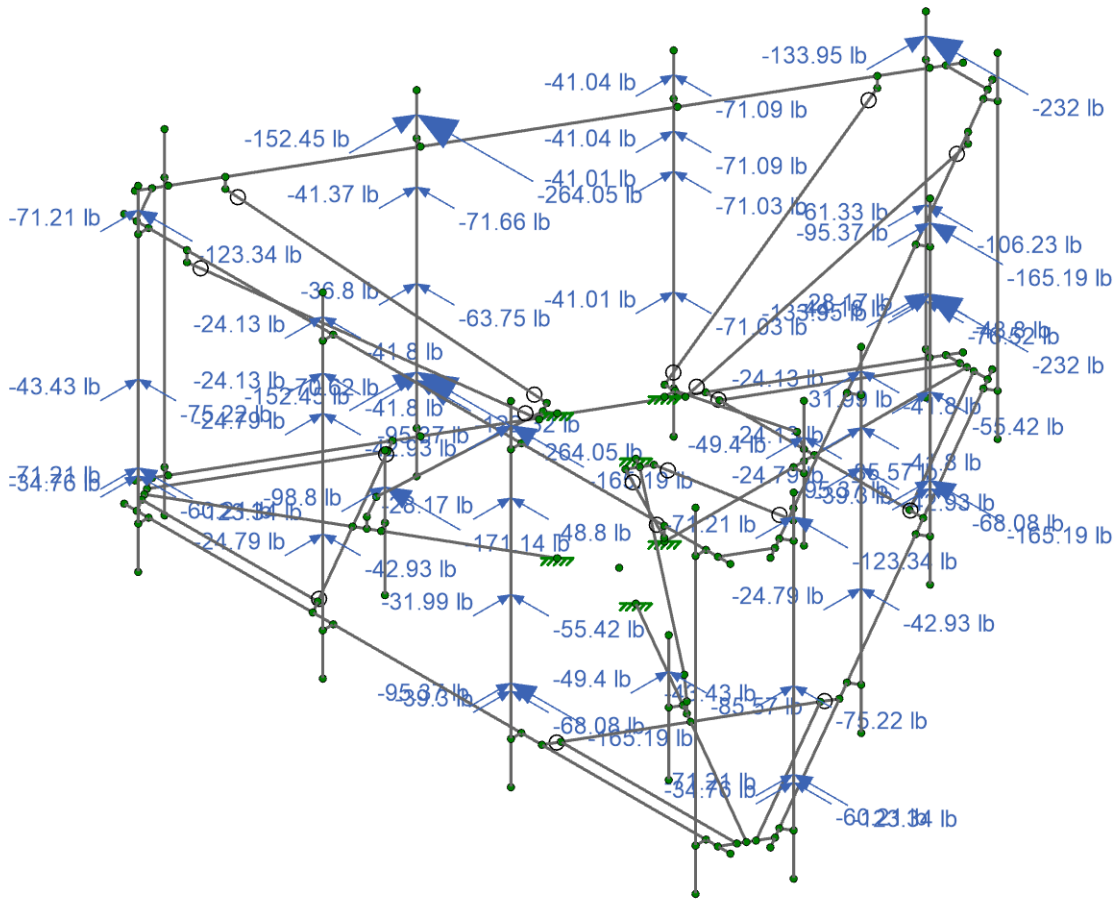
1039-Z0001-B

806376

Wind Loading 30 - 9

Sep 07, 2021

806376_loaded.r3d



Loads: BLC 4, Wind Load AZI 60

Infinigy Engineering, PLLC

LP

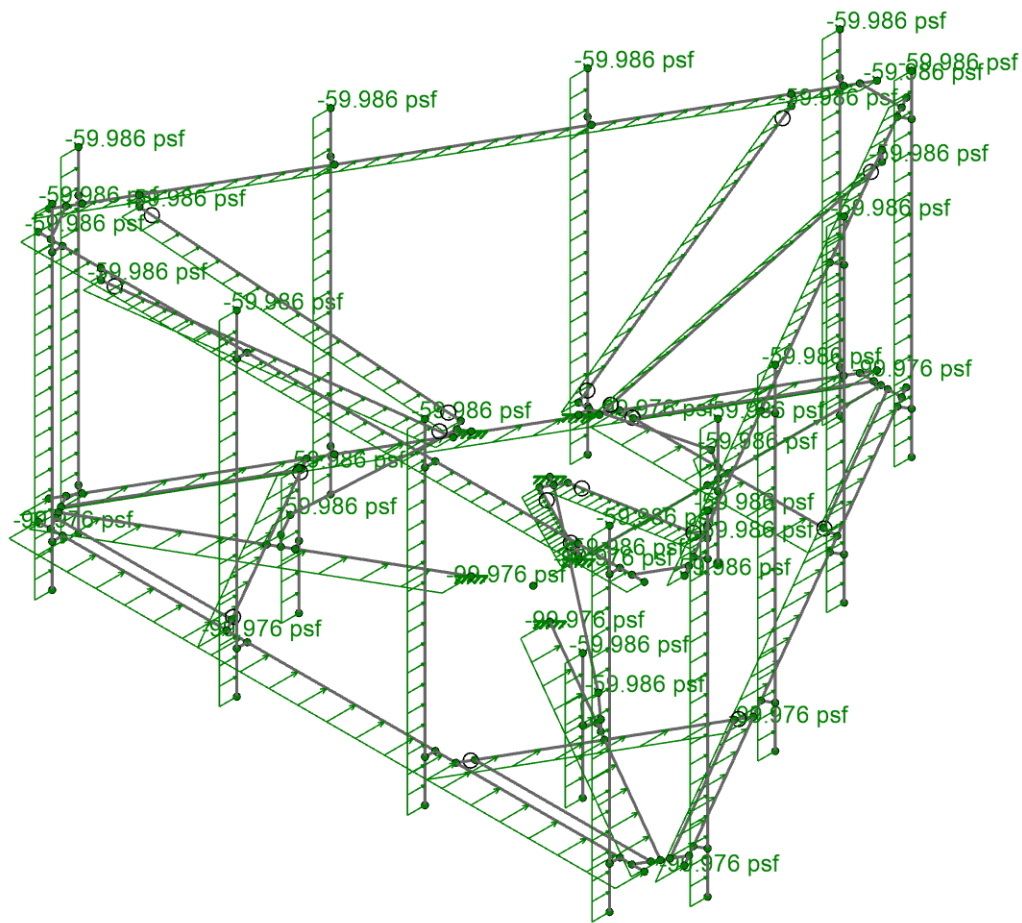
1039-Z0001-B

806376

Wind Loading 60 - 10

Sep 07, 2021

806376_loaded.r3d



Loads: BLC 14, Distr. Wind Load Z

Infinigy Engineering, PLLC

806376

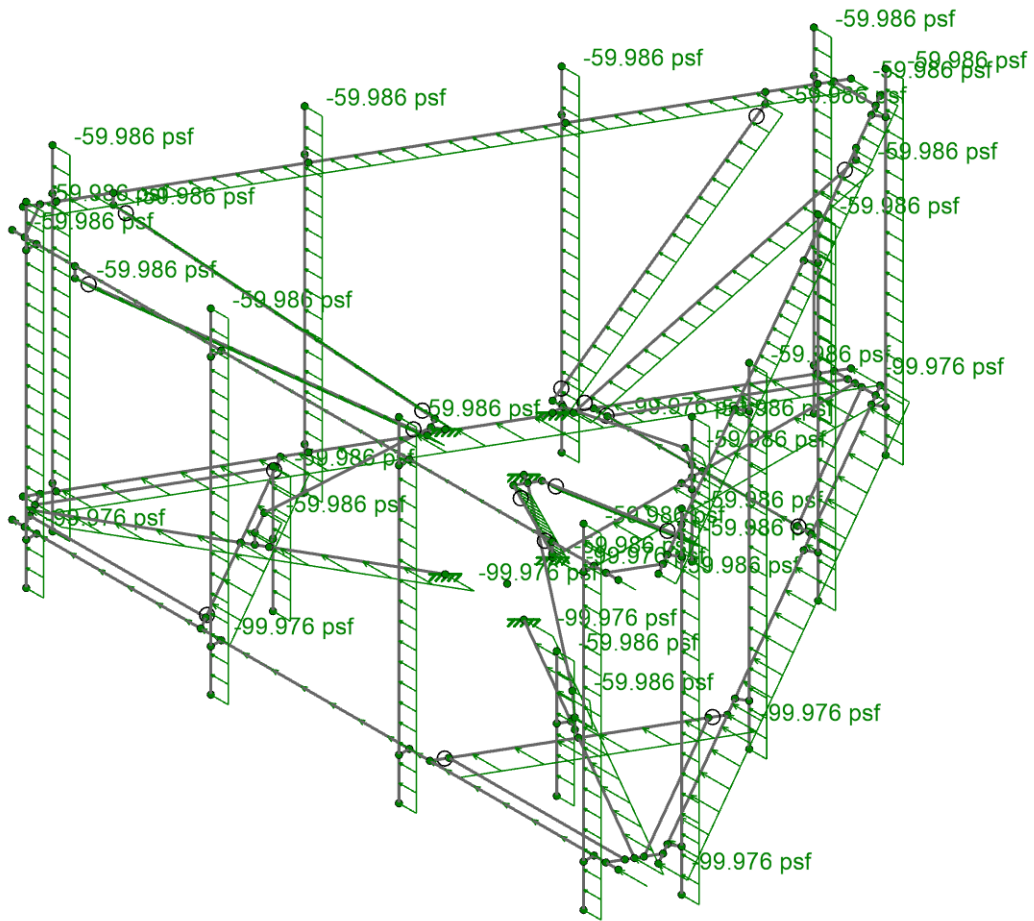
Dist. Wind Loading 0 - 12

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 15, Distr. Wind Load X

Infinigy Engineering, PLLC

806376

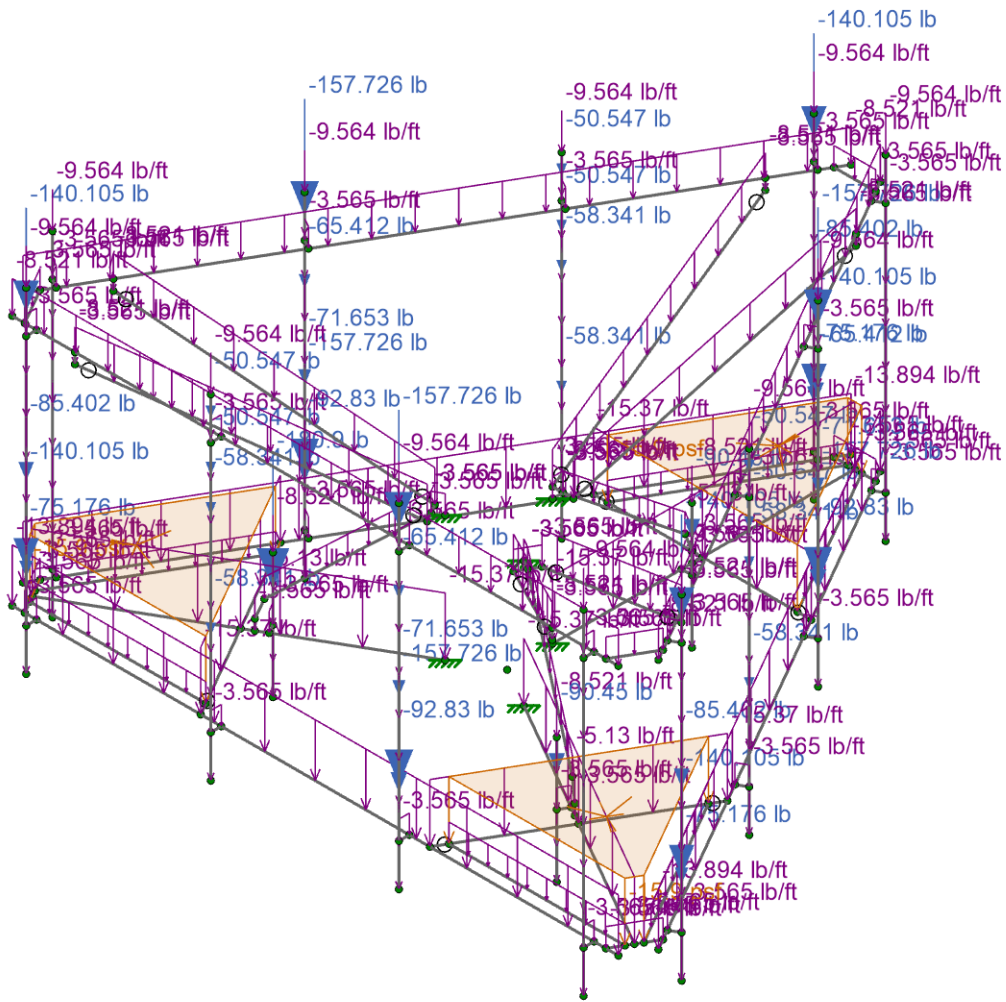
Dist. Wind Loading 90 - 13

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 16, Ice Weight

Infinigy Engineering, PLLC

806376

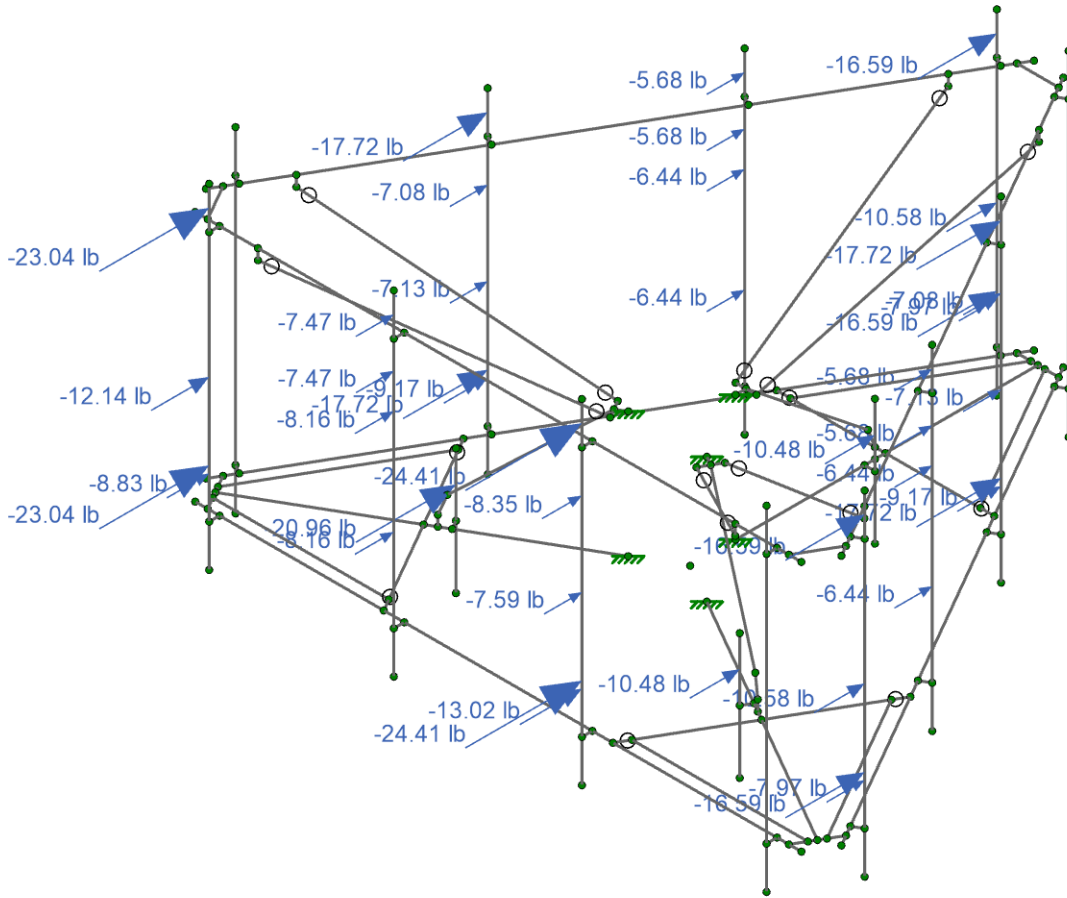
Ice Weight - 14

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d

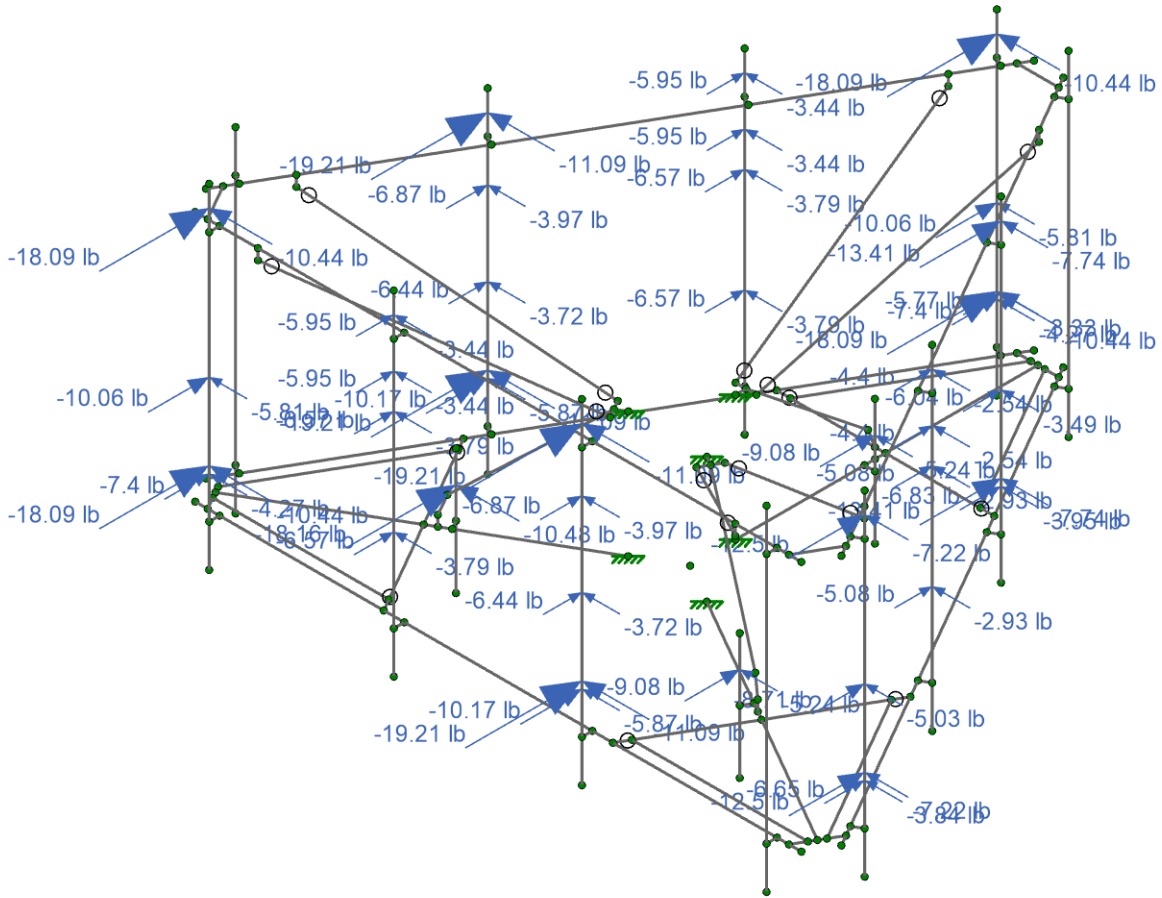


Loads: BLC 17, Ice Wind Load AZI 0

Infinigy Engineering, PLLC
 LP
 1039-Z0001-B

806376

Ice Wind Loading 0 - 15
 Sep 07, 2021
 806376_loaded.r3d



Loads: BLC 18, Ice Wind Load AZI 30

Infinigy Engineering, PLLC

806376

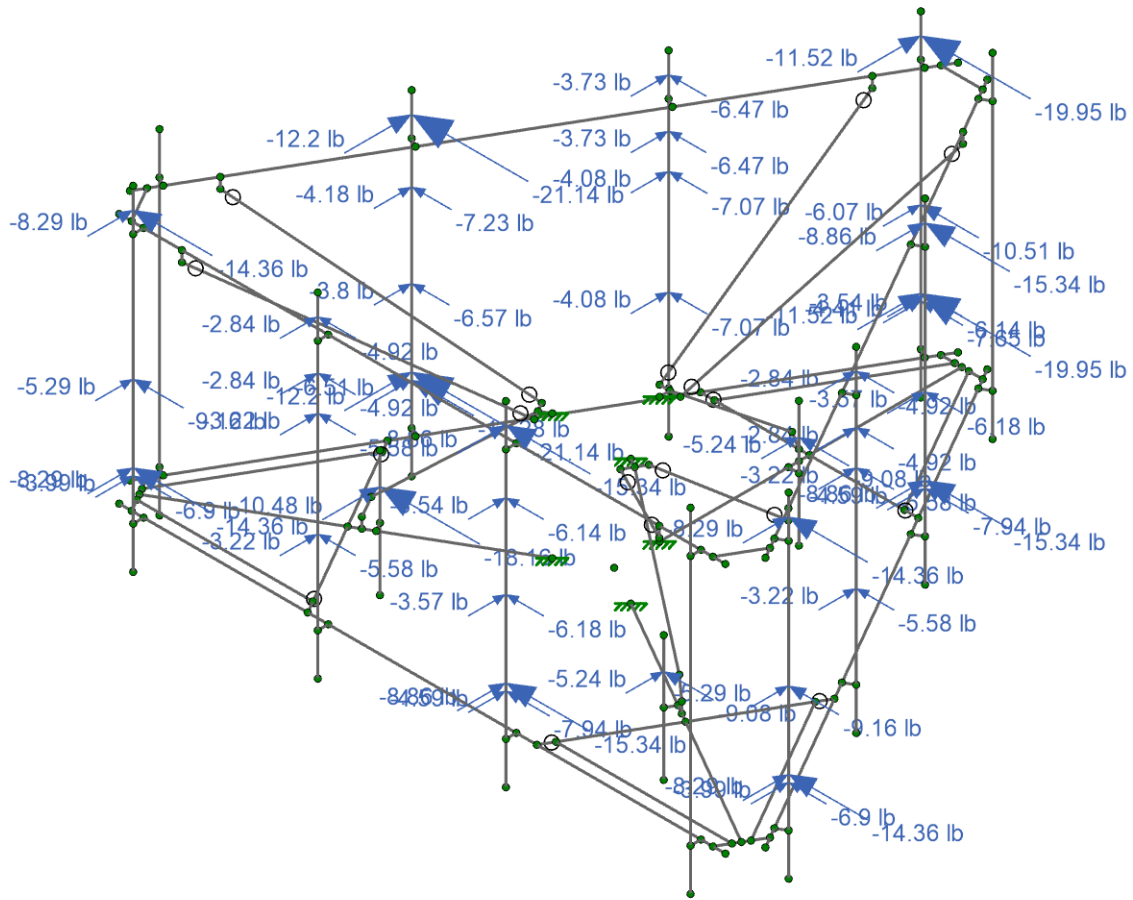
Ice Wind Loading 30 - 16

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 19, Ice Wind Load AZI 60

Infinigy Engineering, PLLC

806376

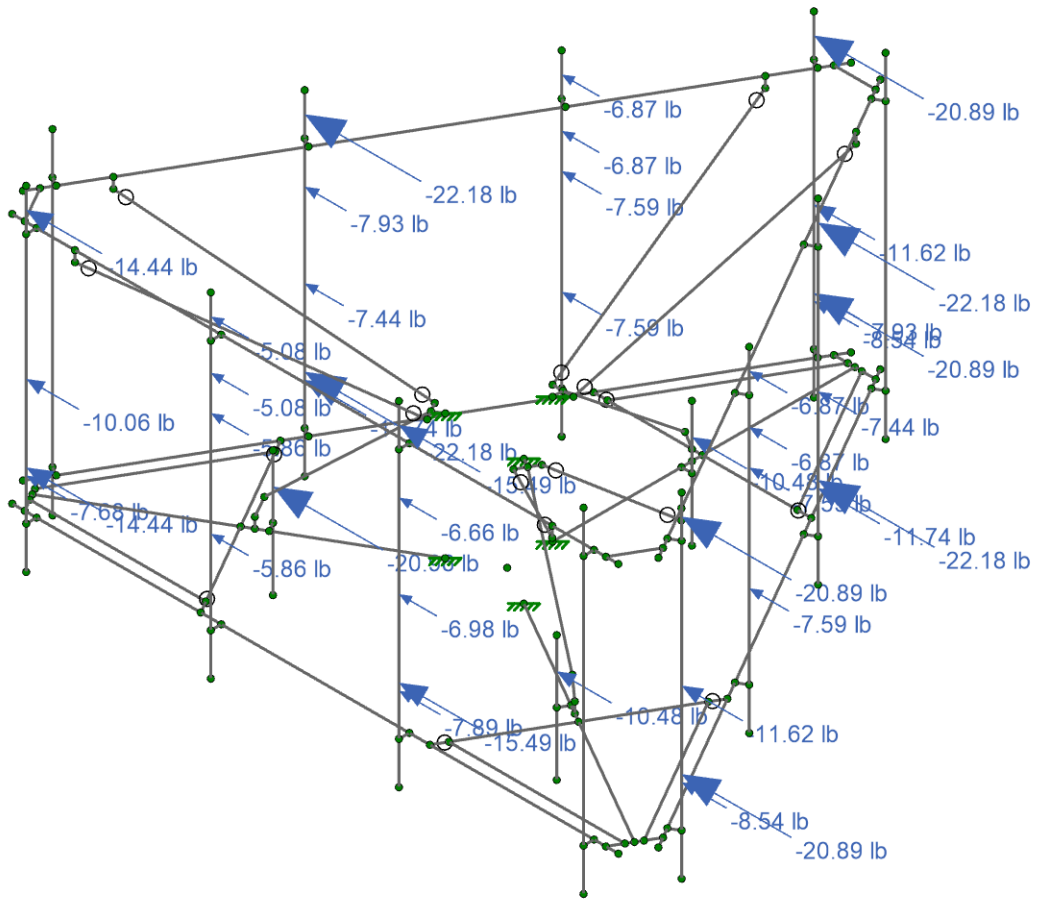
Ice Wind Loading 60 - 17

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 20, Ice Wind Load AZI 90

Infinigy Engineering, PLLC

806376

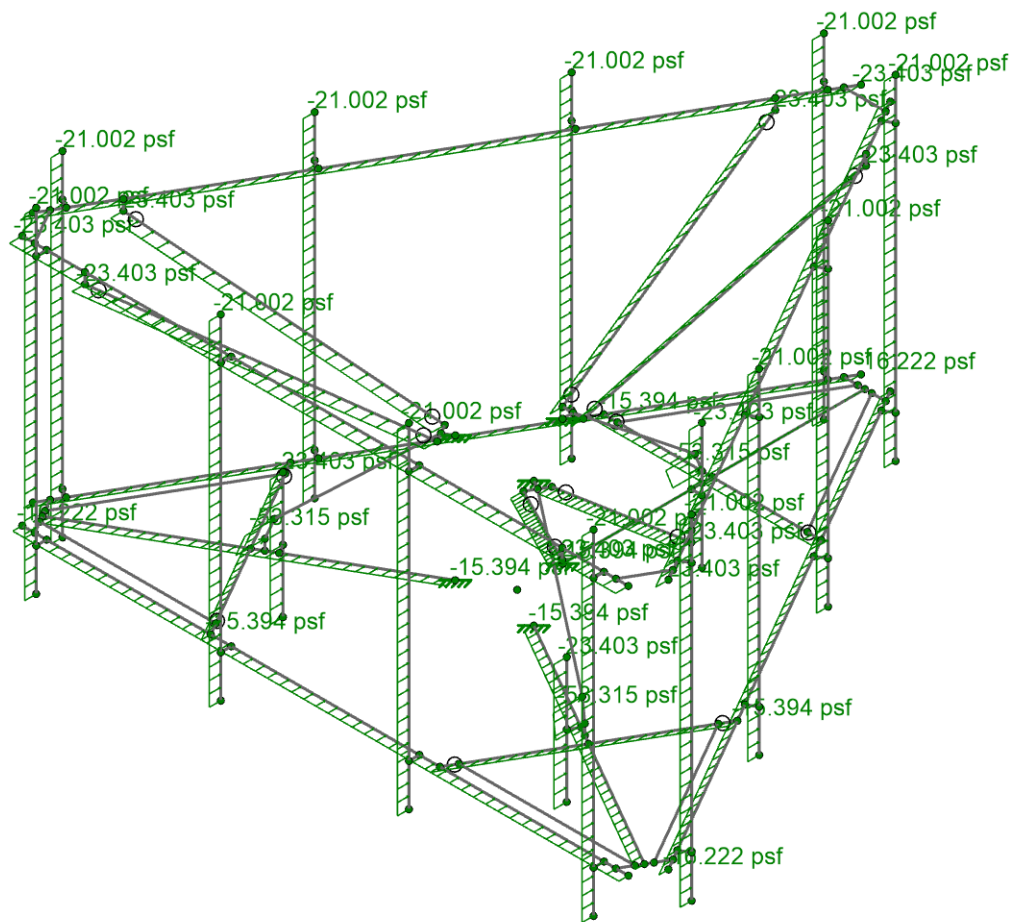
Ice Wind Loading 90 - 18

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 29, Distr. Ice Wind Load Z

Infinigy Engineering, PLLC

806376

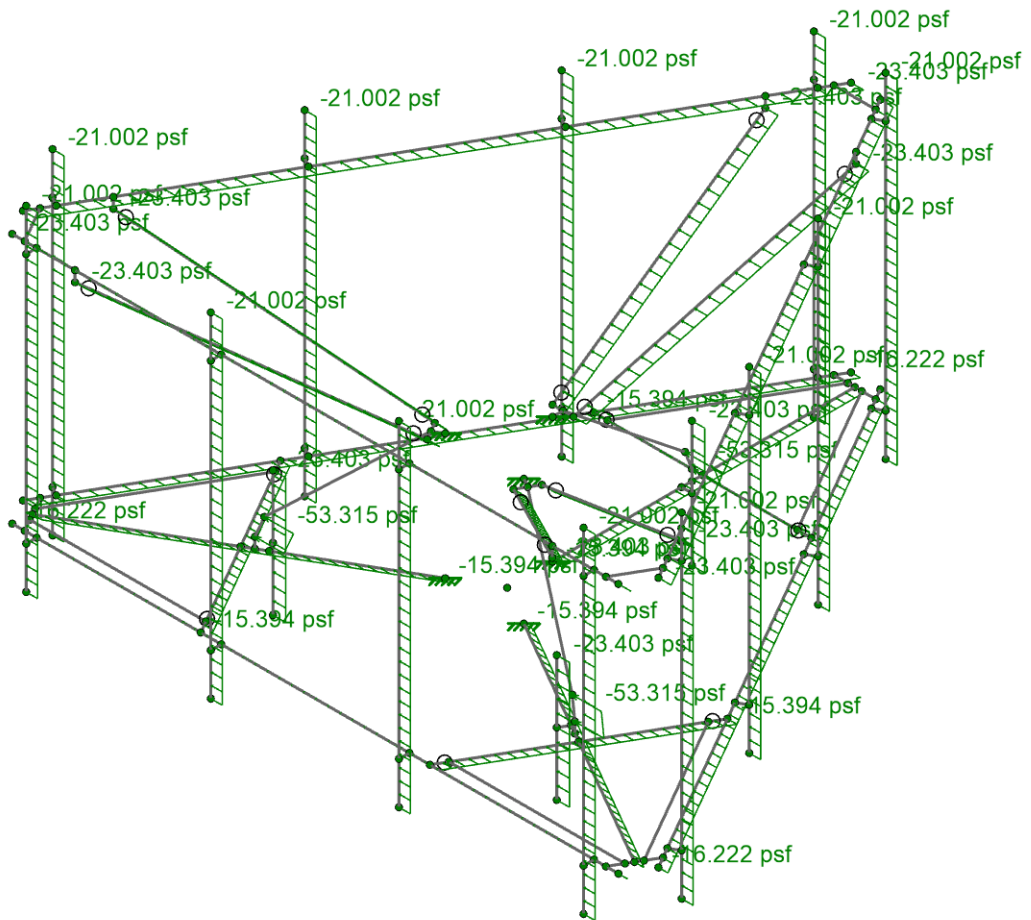
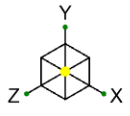
Dist. Ice Wind Loading 0 - 19

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 30, Distr. Ice Wind Load X

Infinigy Engineering, PLLC

806376

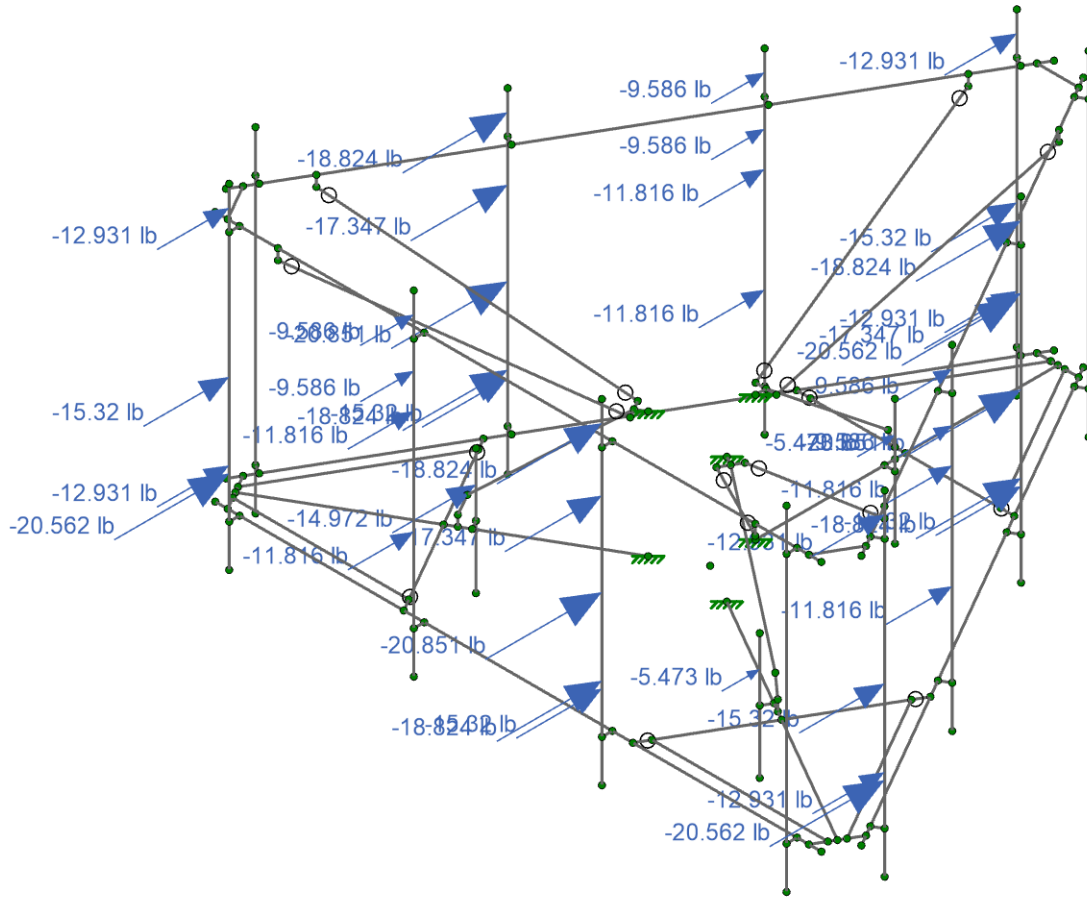
Dist. Ice Wind Loading 90 - 20

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d

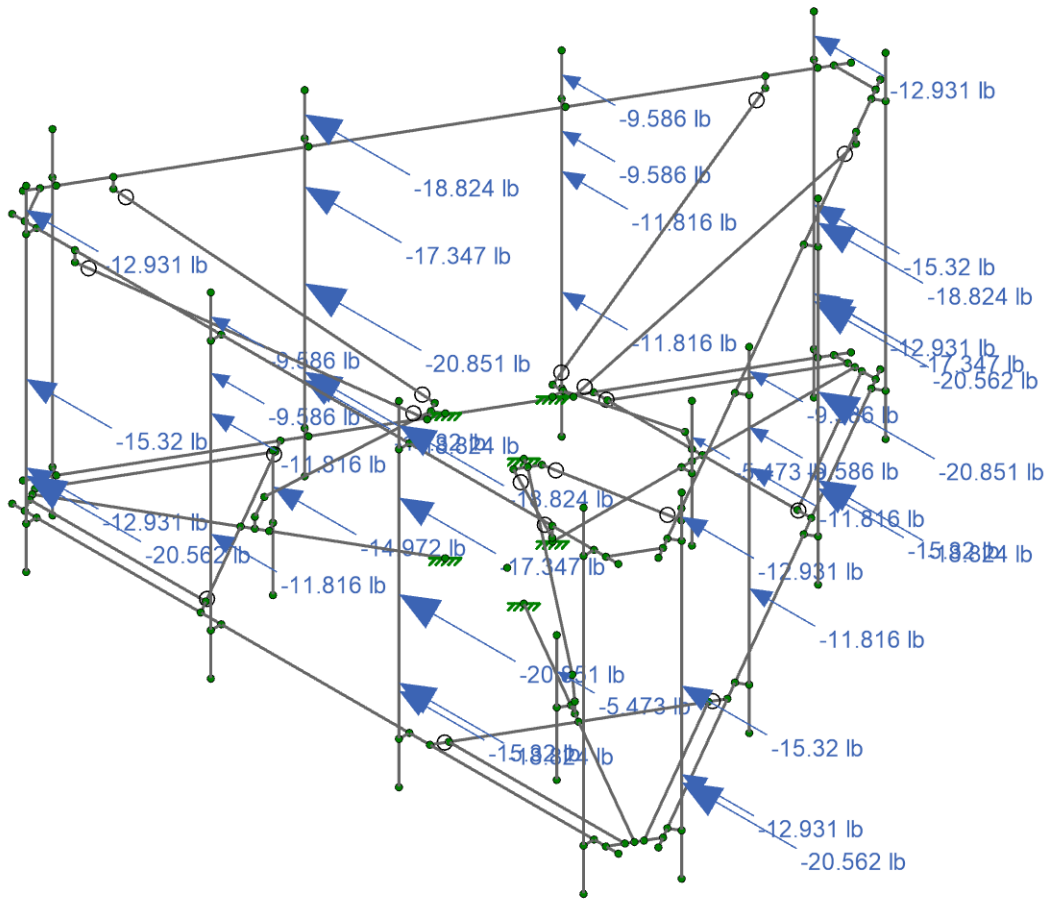


Loads: BLC 31, Seismic Load Z

Infinigy Engineering, PLLC
LP
1039-Z0001-B

806376

Seismic Loading 0 - 21
Sep 07, 2021
806376_loaded.r3d



Loads: BLC 32, Seismic Load X

Infinigy Engineering, PLLC

806376

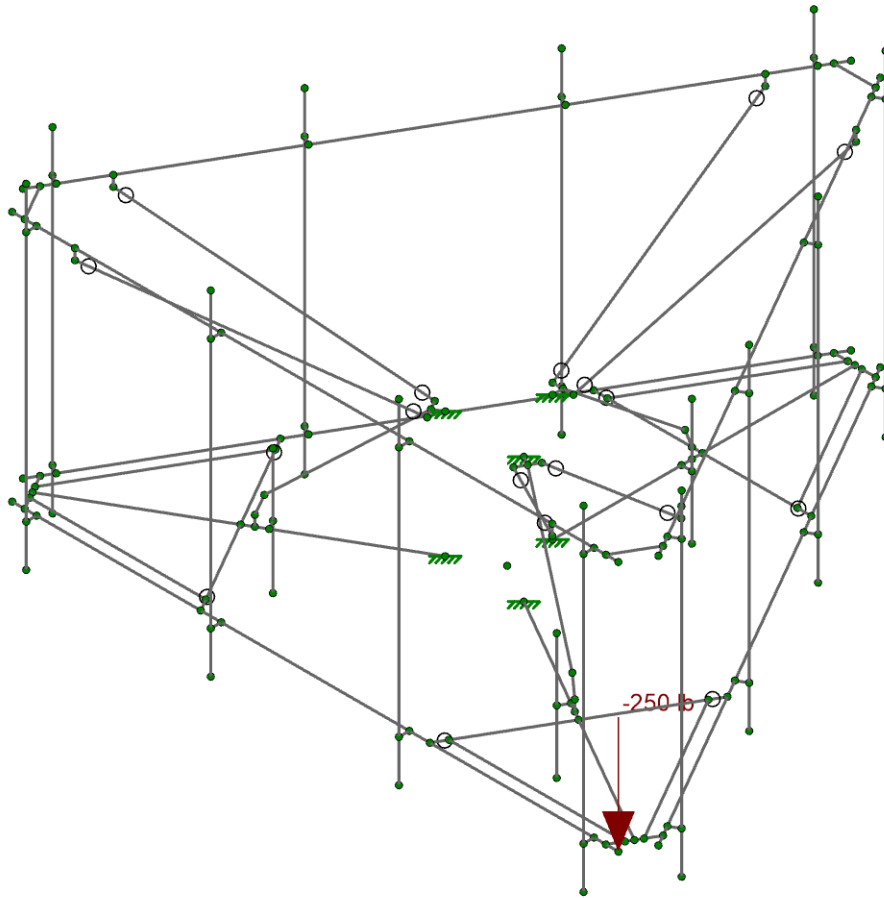
Seismic Loading 90 - 22

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 33, Service Live Loads

Infinigy Engineering, PLLC

LP

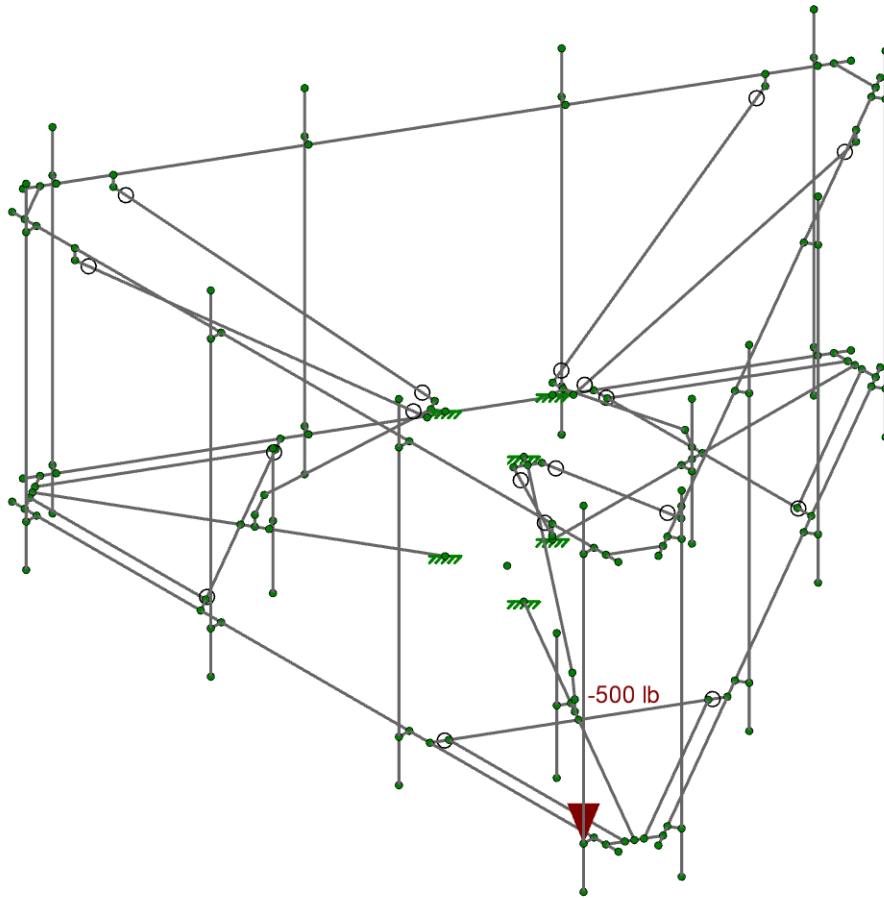
1039-Z0001-B

806376

Service - 23

Sep 07, 2021

806376_loaded.r3d



Loads: BLC 34, Maintenance Load 1

Infinigy Engineering, PLLC

LP

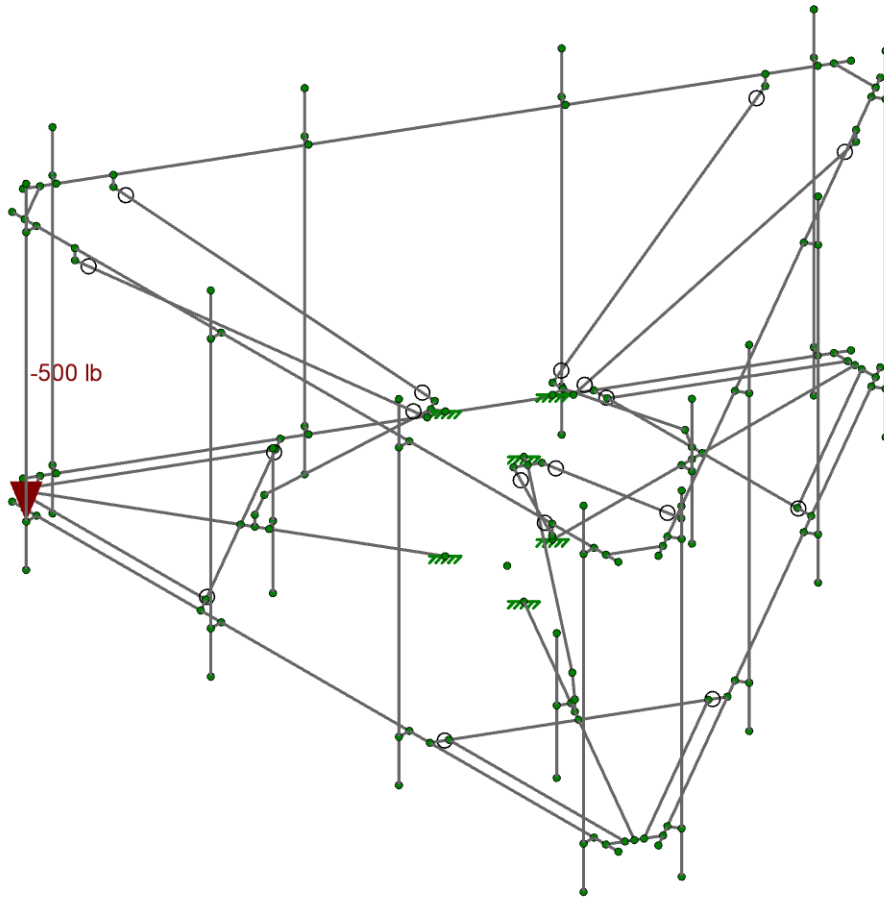
1039-Z0001-B

806376

Maintenance Load 1 - 24

Sep 07, 2021

806376_loaded.r3d



Loads: BLC 35, Maintenance Load 2

Infinigy Engineering, PLLC

LP

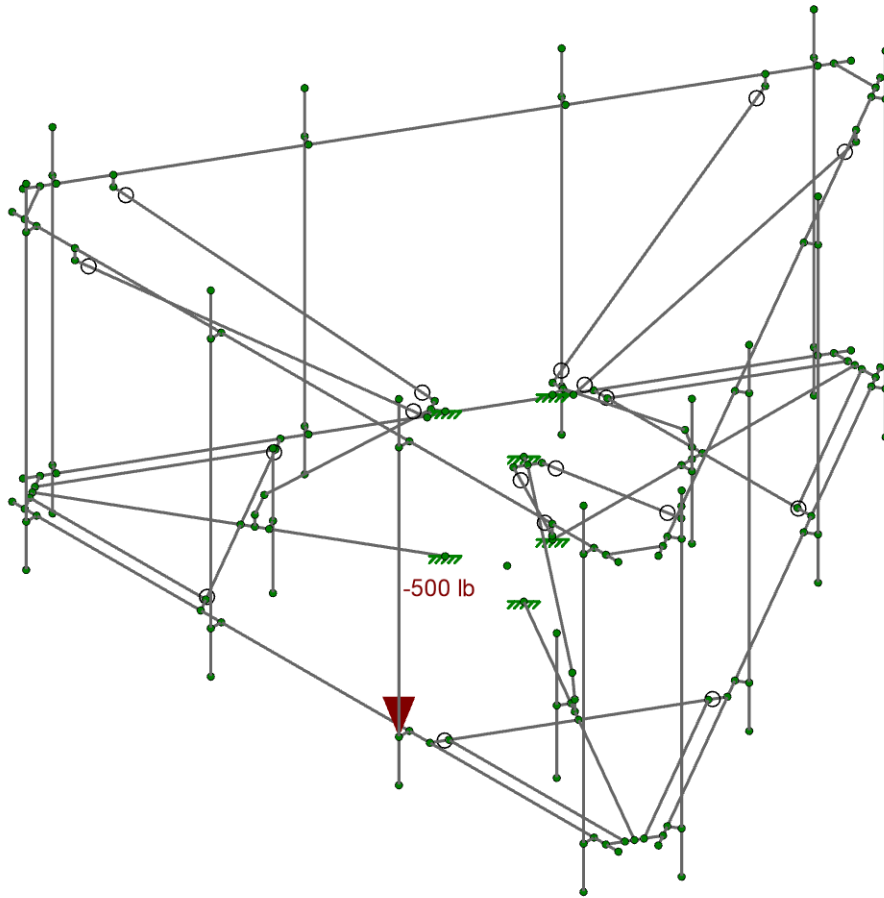
1039-Z0001-B

806376

Maintenance Load 2 - 25

Sep 07, 2021

806376_loaded.r3d



Loads: BLC 36, Maintenance Load 3

Infinigy Engineering, PLLC

LP

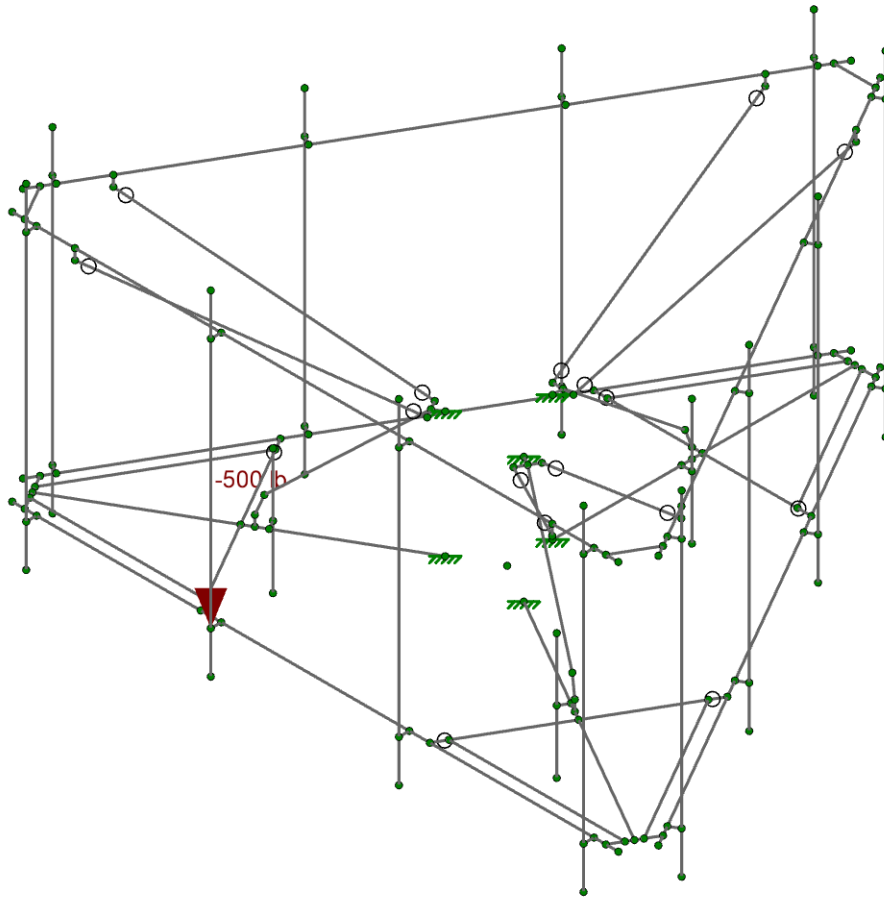
1039-Z0001-B

806376

Maintenance Load 3 - 26

Sep 07, 2021

806376_loaded.r3d



Loads: BLC 37, Maintenance Load 4

Infinigy Engineering, PLLC

806376

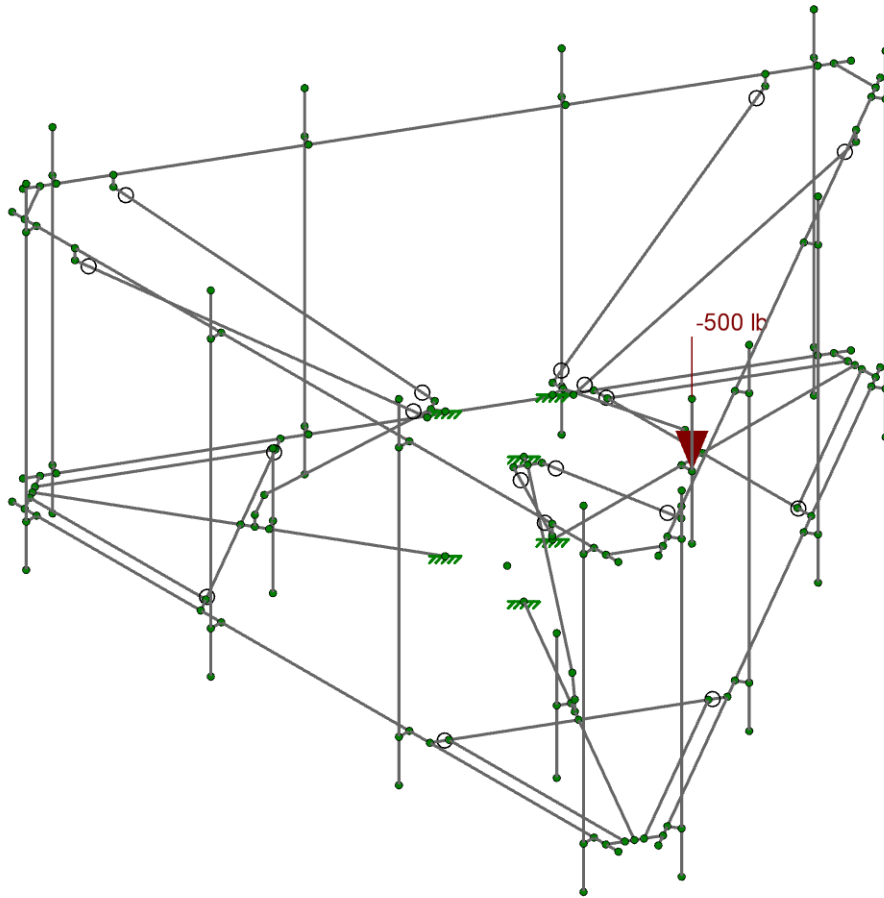
Maintenance Load 4 - 27

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 38, Maintenance Load 5

Infinigy Engineering, PLLC

806376

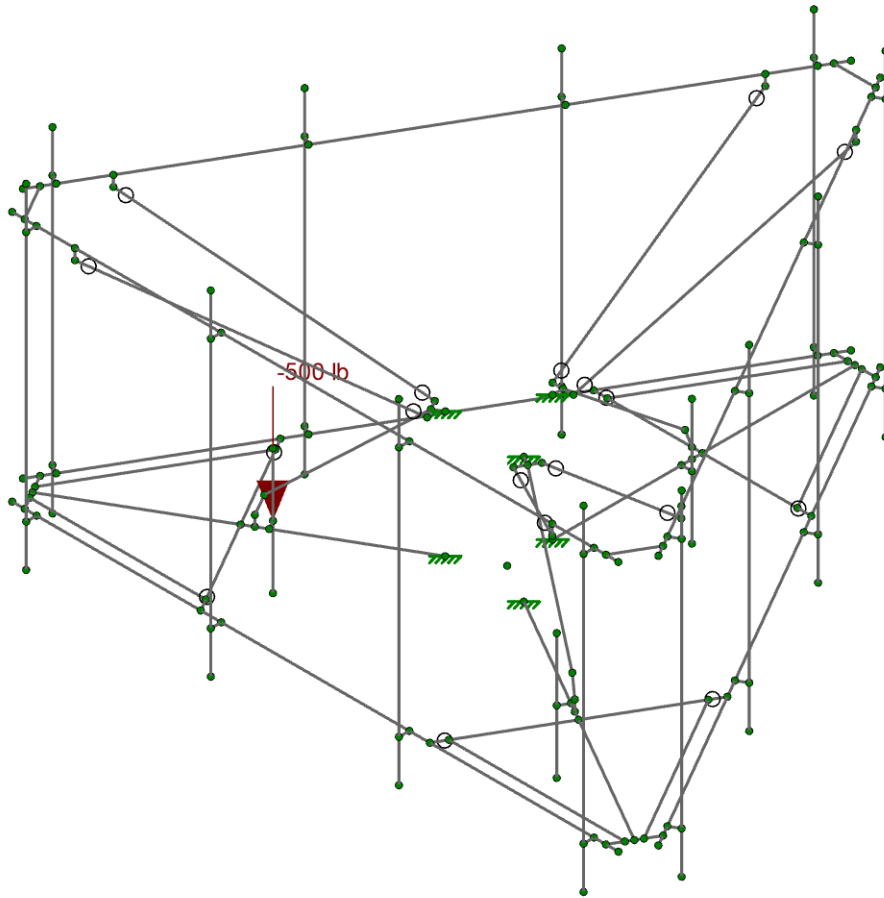
Maintenance Load 5 - 28

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 47, Maintenance Load 14

Infinigy Engineering, PLLC

806376

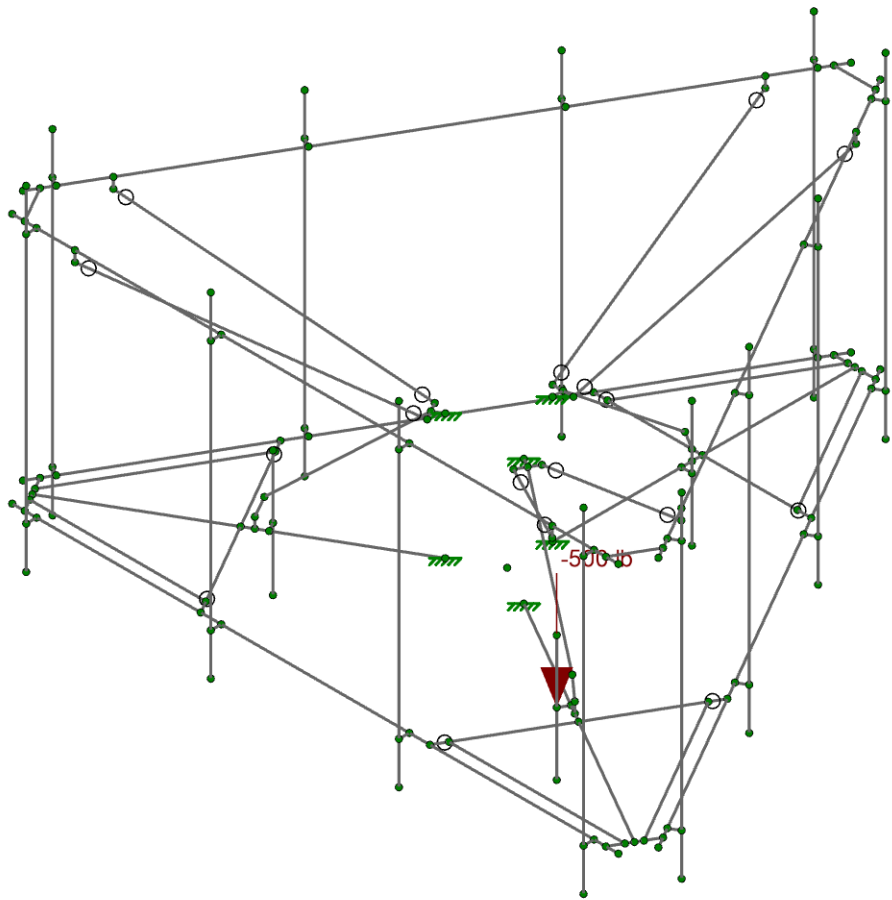
Maintenance Load 14 - 29

LP

Sep 07, 2021

1039-Z0001-B

806376_loaded.r3d



Loads: BLC 48, Maintenance Load 15

Infinigy Engineering, PLLC

LP

1039-Z0001-B

806376

Maintenance Load 15 - 30

Sep 07, 2021

806376_loaded.r3d

APPENDIX B
SOFTWARE INPUT CALCULATIONS

Program Inputs

PROJECT INFORMATION		
Client:	Crown Castle	
Carrier:	AT&T Mobility	
Engineer:	Leehou Proc	

SITE INFORMATION		
Risk Category:	II	
Exposure Category:	C	
Topo Factor Procedure:	Method 1, Category 1	
Site Class:	D - Stiff Soil (Assumed)	
Ground Elevation:	41.23	ft *Rev H

MOUNT INFORMATION		
Mount Type:	Platform	
Num Sectors:	3	
Centerline AGL:	121.00	ft
Tower Height AGL:	130.00	ft

TOPOGRAPHIC DATA		
Topo Feature:	N/A	
Slope Distance:	N/A	ft
Crest Distance:	N/A	ft
Crest Height:	N/A	ft

FACTORS		
Directionality Fact. (K_d):	0.950	
Ground Ele. Factor (K_e):	0.999	*Rev H Only
Rooftop Speed-Up (K_s):	1.000	*Rev H Only
Topographic Factor (K_{zt}):	1.000	
Gust Effect Factor (G_h):	1.000	

CODE STANDARDS		
Building Code:	2018 IBC	
TIA Standard:	TIA-222-H	
ASCE Standard:	ASCE 7-16	

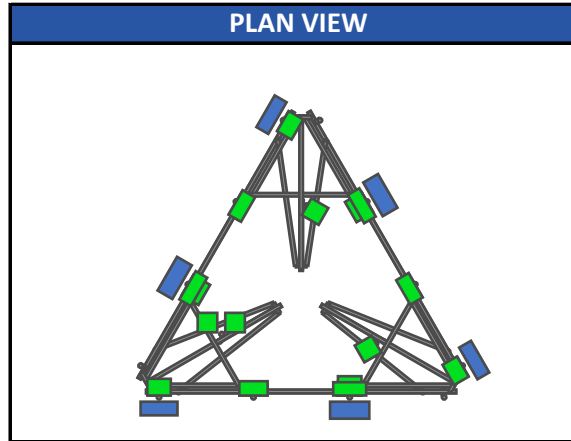
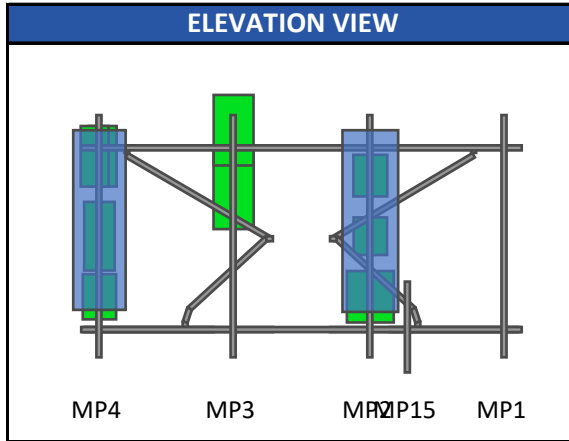
WIND AND ICE DATA		
Ultimate Wind (V_{ult}):	125	mph
Design Wind (V):	N/A	mph
Ice Wind (V_{ice}):	50	mph
Base Ice Thickness (t_i):	1.5	in
Flat Pressure:	99.976	psf
Round Pressure:	59.986	psf
Ice Wind Pressure:	9.598	psf

SEISMIC DATA		
Short-Period Accel. (S_s):	0.181	g
1-Second Accel. (S_1):	0.064	g
Short-Period Design (S_{DS}):	0.193	
1-Second Design (S_{D1}):	0.102	
Short-Period Coeff. (F_a):	1.600	
1-Second Coeff. (F_v):	2.400	
Amplification Factor (A_s):	3.000	
Response Mod. Coeff. (R):	2.000	



Infinigy Load Calculator V2.1.7

Program Inputs



Infinigy Load Calculator V2.1.7

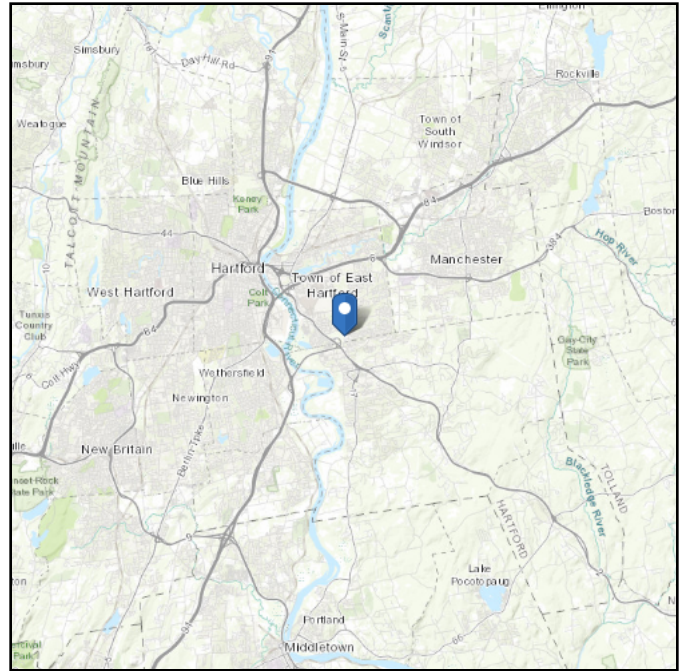
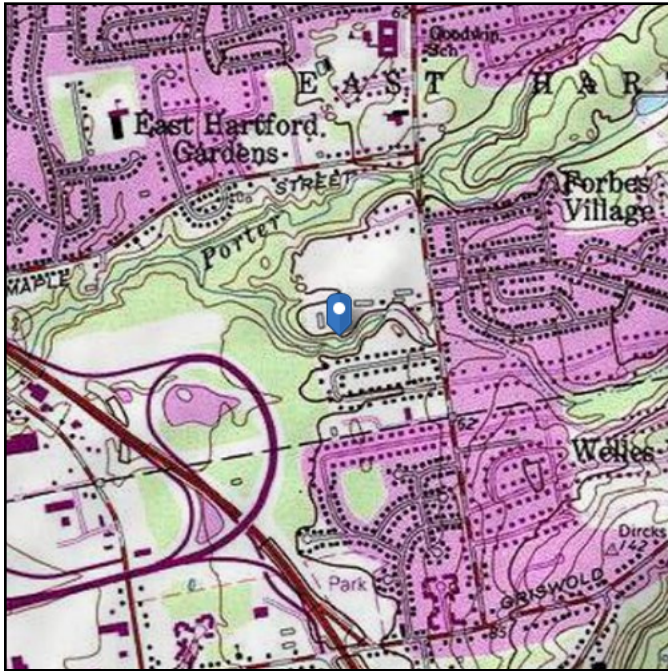
APPURTENANCE INFORMATION												
Appurtenance Name	Elevation	Qty.	K_a	q_z (psf)	EPA_N (ft ²)	EPA_T (ft ²)	Wind F_z (lbs)	Wind F_x (lbs)	Weight (lbs)	Seismic F (lbs)	Member (α sector)	
CCI ANTENNAS DMP65R-BU6D	120.0	3	0.90	49.90	11.93	4.48	535.79	201.20	89.30	25.86	MP4	
ERICSSON AIR 6419 B77G	118.0	3	0.90	49.72	3.67	1.65	164.17	73.97	66.20	19.17	MP3	
ERICSSON AIR 6449 B77D	122.0	3	0.90	50.07	3.64	1.72	164.05	77.52	81.60	23.63	MP3	
QUINTEL TECHNOLOGY QD6616-7	120.0	3	0.90	49.90	13.58	6.80	609.79	305.39	130.00	37.65	MP2	
ERICSSON TME-RRUS 32 B30	120.0	3	0.90	49.90	2.73	1.67	122.67	74.92	52.90	15.32	MP4	
ERICSSON RRUS 4449 B5/B12	120.0	3	0.90	49.90	1.97	1.41	88.36	63.24	71.00	20.56	MP4	
ERICSSON RRUS 4478 B14	120.0	3	0.90	49.90	1.84	1.06	82.75	47.55	59.90	17.35	MP2	
ERICSSON RRUS 8843 B2/B66A	120.0	3	0.90	49.90	1.64	1.35	73.61	60.78	72.00	20.85	MP2	
ERICSSON RRUS E2 B29	120.0	3	0.90	49.90	3.15	1.29	141.24	57.73	52.90	15.32	MP2	
RAYCAP TME-DC6-48-60-0-8F	120.0	1	0.90	49.90	2.20	2.20	98.80	98.80	32.80	9.50	MP13	
RAYCAP TME-DC6-48-60-18-8F	120.0	3	0.90	49.90	2.20	2.20	98.80	98.80	18.90	5.47	MP13	

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)

Elevation: 41.23 ft (NAVD 88)
Latitude: 41.731472
Longitude: -72.607778



Wind

Results:

Wind Speed:	125 Vmph per Hartford County Requirements
10-year MRI	75 Vmph
25-year MRI	84 Vmph
50-year MRI	90 Vmph
100-year MRI	98 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: Tue Sep 07 2021

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

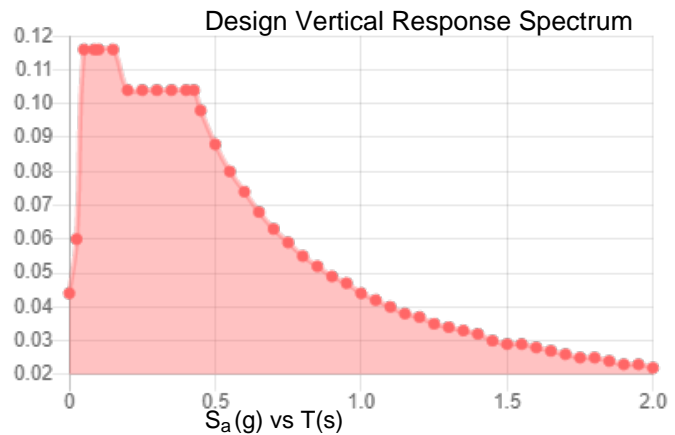
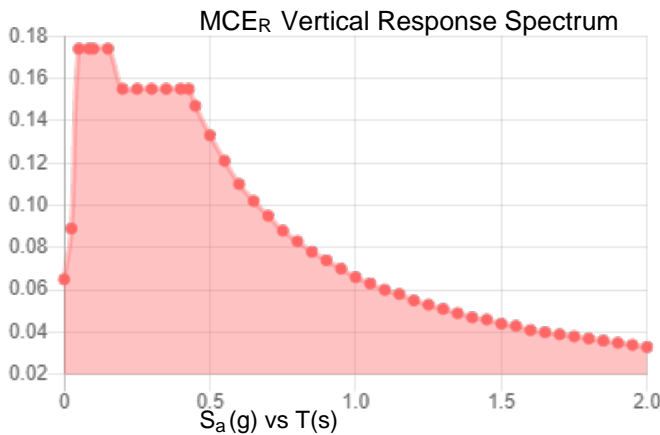
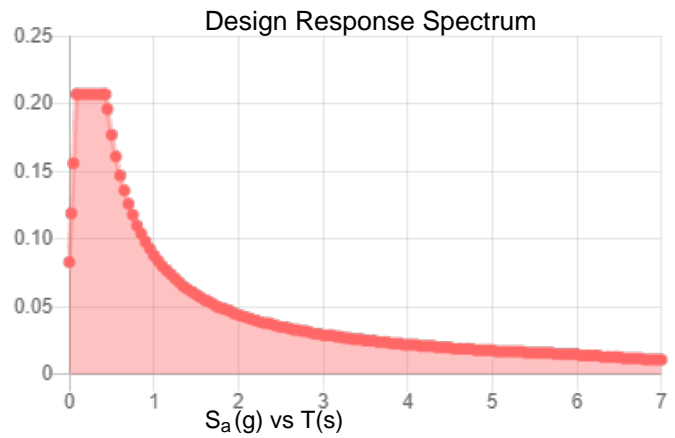
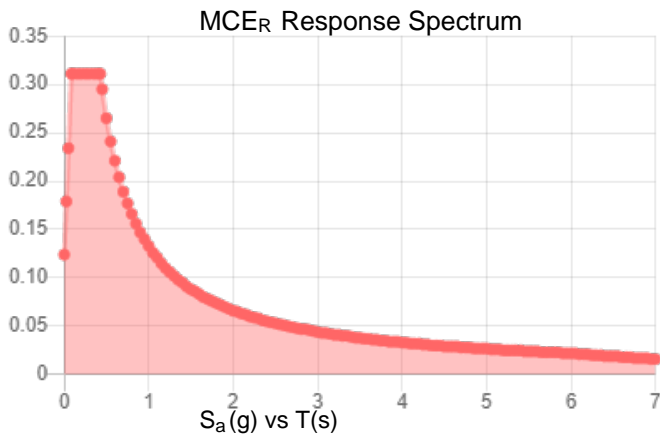
Site is in a hurricane-prone region as defined in ASCE/SEI 7-16 Section 26.2. Glazed openings need not be protected against wind-borne debris.

Site Soil Class: D - Default (see Section 11.4.3)

Results:

S_S :	0.181 per Hartford County Requirements	S_{D1} :	0.088
S_1 :	0.064 per Hartford County Requirements	T_L :	6
F_a :	1.6	PGA :	0.105
F_v :	2.4	PGA _M :	0.168
S_{MS} :	0.311	F_{PGA} :	1.589
S_{M1} :	0.133	I_e :	1
S_{DS} :	0.207	C_v :	0.7

Seismic Design Category B



Data Accessed: Tue Sep 07 2021
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.

Ice

Results:

Ice Thickness: 1.50 in.
Concurrent Temperature: 15 F
Gust Speed: 50 mph

Data Source: Standard ASCE/SEI 7-16, Figs. 10-2 through 10-8

Date Accessed: Tue Sep 07 2021

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

Values provided are equivalent radial ice thicknesses due to freezing rain with concurrent 3-second gust speeds, for a 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.

APPENDIX C
SOFTWARE ANALYSIS OUTPUT

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M4	N9	N10		RIGID	None	None	RIGID	Typical
2	HOR1	N19	N18		Horizontals	Beam	Tube	A500 Gr.B Rect	Typical
3	M12	N30	N31		Standoffs	Beam	Tube	A500 Gr.B Rect	Typical
4	M13	N33	N34		Angles	Beam	Single Angle	A36 Gr.36	Typical
5	M14	N32	N35	270	Angles	Beam	Single Angle	A36 Gr.36	Typical
6	MP1	N101	N100		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
7	MP4	N107	N106		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
8	HR1	N88	N87		Handrail	Beam	Pipe	A53 Gr.B	Typical
9	CP3	N111A	N112A	90	Corner Plates	Beam	Single Angle	A36 Gr.36	Typical
10	M40	N94	N117A		RIGID	None	None	RIGID	Typical
11	M41	N55A	N113B		RIGID	None	None	RIGID	Typical
12	M46	N45	N111B		RIGID	None	None	RIGID	Typical
13	M47	N91	N114B		RIGID	None	None	RIGID	Typical
14	MP2	N120	N121A		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
15	M71A	N119A	N123		RIGID	None	None	RIGID	Typical
16	M72A	N122A	N124		RIGID	None	None	RIGID	Typical
17	MP3	N132	N133B		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
18	M77A	N131B	N135A		RIGID	None	None	RIGID	Typical
19	M78A	N134A	N136		RIGID	None	None	RIGID	Typical
20	M32	N70	N69	90	Corner Plates	Beam	Single Angle	A36 Gr.36	Typical
21	M33	N73	N74		Standoffs	Beam	Tube	A500 Gr.B Rect	Typical
22	MP14	N97	N68		2.0 STD Pipe	Column	Pipe	A53 Gr.B	Typical
23	M35	N75	N76		RIGID	None	None	RIGID	Typical
24	M36	N79	N67		Standoffs	Beam	Tube	A500 Gr.B Rect	Typical
25	M37	N80	N82	270	Angles	Beam	Single Angle	A36 Gr.36	Typical
26	M38	N64	N81		Angles	Beam	Single Angle	A36 Gr.36	Typical
27	MP9	N72	N83		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
28	M42	N86	N95		Handrail Bracing	Beam	Pipe	A53 Gr.B	Typical
29	M43	N89	N96		Handrail Bracing	Beam	Pipe	A53 Gr.B	Typical
30	M44	N66	N90		RIGID	None	None	RIGID	Typical
31	M45	N66	N93		Angle	Beam	Single Angle	A36 Gr.36	Typical
32	M48	N93	N92		Threaded Rod	Beam	BAR	A36 Gr.36	Typical
33	M49	N96	N95		RIGID	None	None	RIGID	Typical
34	M50	N98	N85		RIGID	None	None	RIGID	Typical
35	M51	N84	N99		RIGID	None	None	RIGID	Typical
36	M52	N63	N102		RIGID	None	None	RIGID	Typical
37	M53	N105	N86		RIGID	None	None	RIGID	Typical
38	M54	N104	N89		RIGID	None	None	RIGID	Typical
39	M55	N103	N92		RIGID	None	None	RIGID	Typical
40	M56	N108	N71		Handrail	Beam	Pipe	A53 Gr.B	Typical
41	M57	N109	N77		Horizontals	Beam	Tube	A500 Gr.B Rect	Typical
42	MP11	N111	N112		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
43	M59	N114	N113		RIGID	None	None	RIGID	Typical
44	M60	N110	N115		RIGID	None	None	RIGID	Typical
45	MP10	N118	N119		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
46	M63	N121	N117		RIGID	None	None	RIGID	Typical
47	M64	N116	N122		RIGID	None	None	RIGID	Typical
48	MP12	N126	N127		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
49	M66	N125	N129		RIGID	None	None	RIGID	Typical
50	M67	N130	N128		RIGID	None	None	RIGID	Typical
51	M68	N140	N139	90	Corner Plates	Beam	Single Angle	A36 Gr.36	Typical
52	M71	N145	N146		RIGID	None	None	RIGID	Typical
53	M72	N149	N137		Standoffs	Beam	Tube	A500 Gr.B Rect	Typical
54	M73	N150	N152	270	Angles	Beam	Single Angle	A36 Gr.36	Typical
55	M74	N133	N151		Angles	Beam	Single Angle	A36 Gr.36	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
56	MP5	N142	N157		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
57	M89	N176	N159		RIGID	None	None	RIGID	Typical
58	M90	N158	N177		RIGID	None	None	RIGID	Typical
59	M96	N182	N141		Handrail	Beam	Pipe	A53 Gr.B	Typical
60	M97	N183	N147		Horizontals	Beam	Tube	A500 Gr.B Rect	Typical
61	MP7	N185	N186		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
62	M99	N188	N187		RIGID	None	None	RIGID	Typical
63	M100	N184	N189		RIGID	None	None	RIGID	Typical
64	MP6	N192	N193		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
65	M102	N194	N191		RIGID	None	None	RIGID	Typical
66	M103	N190	N195		RIGID	None	None	RIGID	Typical
67	MP8	N197	N198		Pipe Mounts	Column	Pipe	A53 Gr.B	Typical
68	M105	N196	N200		RIGID	None	None	RIGID	Typical
69	M106	N201	N199		RIGID	None	None	RIGID	Typical
70	MP13	N164	N138		2.0 STD Pipe	Column	Pipe	A53 Gr.B	Typical
71	M75	N167	N144		Standoffs	Beam	Tube	A500 Gr.B Rect	Typical
72	M76	N162	N161		Threaded Rod	Beam	BAR	A36 Gr.36	Typical
73	M77	N166	N153		RIGID	None	None	RIGID	Typical
74	M78	N165	N160		RIGID	None	None	RIGID	Typical
75	M79	N163	N168		RIGID	None	None	RIGID	Typical
76	M80	N155	N169		RIGID	None	None	RIGID	Typical
77	M81	N155	N162		Angle	Beam	Single Angle	A36 Gr.36	Typical
78	M82	N153	N168		Handrail Bracing	Beam	Pipe	A53 Gr.B	Typical
79	M83	N160	N163		Handrail Bracing	Beam	Pipe	A53 Gr.B	Typical
80	M84	N154	N170		RIGID	None	None	RIGID	Typical
81	M85	N143	N161		RIGID	None	None	RIGID	Typical
82	MP15	N204	N171		2.0 STD Pipe	Column	Pipe	A53 Gr.B	Typical
83	M87	N207	N8		Standoffs	Beam	Tube	A500 Gr.B Rect	Typical
84	M88	N202	N181		Threaded Rod	Beam	BAR	A36 Gr.36	Typical
85	M91	N206	N173		RIGID	None	None	RIGID	Typical
86	M92	N205	N180		RIGID	None	None	RIGID	Typical
87	M93	N203	N208		RIGID	None	None	RIGID	Typical
88	M94	N175	N209		RIGID	None	None	RIGID	Typical
89	M95	N175	N202		Angle	Beam	Single Angle	A36 Gr.36	Typical
90	M98	N173	N208		Handrail Bracing	Beam	Pipe	A53 Gr.B	Typical
91	M101	N180	N203		Handrail Bracing	Beam	Pipe	A53 Gr.B	Typical
92	M104	N174	N210		RIGID	None	None	RIGID	Typical
93	M107	N172	N181		RIGID	None	None	RIGID	Typical

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e°F ⁻¹]	Density [k/ft ³]	Yield [psi]	Ry	Fu [psi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50000	1.1	65000	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36000	1.5	58000	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50000	1.1	65000	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42000	1.4	58000	1.3
5	A500 Gr.B Rect	29000	11154	0.3	0.65	0.527	46000	1.4	58000	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35000	1.6	60000	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50000	1.4	65000	1.3
8	Q345	29000	11154	0.3	0.65	0.49	50000	1.4	65000	1.3
9	Q235-GB	29000	11154	0.3	0.65	0.49	35000	1.6	60000	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	Standoffs	HSS4X4X4	Beam	Tube	A500 Gr.B Rect	Typical	3.37	7.8	7.8	12.8
2	Horizontals	HSS3.5X3.5X4	Beam	Tube	A500 Gr.B Rect	Typical	2.91	5.04	5.04	8.35
3	Angles	L2x2x2	Beam	Single Angle	A36 Gr.36	Typical	0.491	0.189	0.189	0.003
4	Handrail	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
5	Handrail Bracing	PIPE 2.0	Beam	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
6	Pipe Mounts	PIPE 2.5	Column	Pipe	A53 Gr.B	Typical	1.61	1.45	1.45	2.89
7	2.0 STD Pipe	PIPE 2.0	Column	Pipe	A53 Gr.B	Typical	1.02	0.627	0.627	1.25
8	Corner Plates	L2.5x2.5x3	Beam	Single Angle	A36 Gr.36	Typical	0.901	0.535	0.535	0.011
9	Threaded Rod	SR 3/4	Beam	BAR	A36 Gr.36	Typical	0.442	0.016	0.016	0.031
10	Angle	L2x2x4	Beam	Single Angle	A36 Gr.36	Typical	0.944	0.346	0.346	0.021

Node Coordinates

Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
1	N8	86.411589	0	19.288333
2	N9	83.411589	0	24.484486
3	N10	89.4118	0	14.091816
4	N18	87.000011	0	24.484486
5	N19	-86.999989	0	24.484486
6	N30	64.151872	0	-29.659663
7	N31	32.891733	0	24.484486
8	N32	87.411589	0	17.556283
9	N33	85.411589	0	21.020384
10	N34	34.891733	0	21.020384
11	N35	62.151661	0	-26.195197
12	N45	80.000011	0	27.484486
13	N55A	-79.999989	0	27.484486
14	N101	80.000011	84	27.484486
15	N107	-79.999989	84	27.484486
16	N100	80.000011	-12	27.484486
17	N106	-79.999989	-12	27.484486
18	N87	87.000011	72	24.484486
19	N88	-86.999989	72	24.484486
20	N91	80.000011	72	27.484486
21	N94	-79.999989	72	27.484486
22	N111A	83.411589	72	24.484486
23	N112A	89.4118	72	14.091816
24	N111B	80.000011	0	24.484486
25	N113B	-79.999989	0	24.484486
26	N114B	80.000011	72	24.484486
27	N117A	-79.999989	72	24.484486
28	N119A	27.000011	0	27.484486
29	N120	27.000011	84	27.484486
30	N121A	27.000011	-12	27.484486
31	N122A	27.000011	72	27.484486
32	N123	27.000011	0	24.484486
33	N124	27.000011	72	24.484486
34	N131B	-26.999989	0	27.484486
35	N132	-26.999989	84	27.484486
36	N133B	-26.999989	-12	27.484486
37	N134A	-26.999989	72	27.484486
38	N135A	-26.999989	0	24.484486
39	N136	-26.999989	72	24.484486
40	CENTER	0.000011	0	-30.601658
41	N63	3.000822	0	-80.629798

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
42	N64	2.000221	0	-130.381276	
43	N66	0.001075	36	-46.626798	
44	N67	31.260149	0	-86.629797	
45	N68	3.000822	-18	-80.629798	
46	N69	-6.0002	72	-130.381276	
47	N70	6.000221	72	-130.381276	
48	N71	4.206011	72	-133.48894	
49	N72	10.304087	84	-128.926763	
50	N73	0.000011	0	-43.626658	
51	N74	0.000011	0	-130.381276	
52	N75	6.000221	0	-130.381276	
53	N76	-6.0002	0	-130.381276	
54	N77	4.206011	0	-133.48894	
55	N78	-0.000379	0	-86.629797	
56	N79	-31.260128	0	-86.629797	
57	N80	-1.999779	0	-130.381276	
58	N81	27.260149	0	-86.629797	
59	N82	-27.259707	0	-86.629797	
60	N83	10.304087	-12	-128.926763	
61	N84	10.304087	72	-128.926763	
62	N85	7.706011	0	-127.426762	
63	N86	13.706011	69	-117.034458	
64	N89	-13.205779	69	-117.900118	
65	N90	0.001075	36	-43.626798	
66	N92	0.000822	3	-83.629798	
67	N93	0.000822	8.28	-81.629798	
68	N95	3.001075	36	-46.626798	
69	N96	-2.998925	36	-46.626798	
70	N97	3.000822	18	-80.629798	
71	N98	10.304087	0	-128.926763	
72	N99	7.70601	72	-127.426763	
73	N102	0.000011	0	-80.629798	
74	N103	0.000011	0	-83.629798	
75	N104	-13.205779	72	-117.900118	
76	N105	13.706011	72	-117.034458	
77	N108	91.206011	72	17.19948	
78	N109	91.206011	0	17.19948	
79	N110	63.804087	72	-36.262045	
80	N111	63.804087	84	-36.262045	
81	N112	63.804087	-12	-36.262045	
82	N113	61.206011	0	-34.762044	
83	N114	63.804087	0	-36.262045	
84	N115	61.20601	72	-34.762045	
85	N116	36.804087	72	-83.027416	
86	N117	34.206011	0	-81.527416	
87	N118	36.804087	84	-83.027416	
88	N119	36.804087	-12	-83.027416	
89	N121	36.804087	0	-83.027416	
90	N122	34.20601	72	-81.527416	
91	N125	90.304087	72	9.637302	
92	N126	90.304087	84	9.637302	
93	N127	90.304087	-12	9.637302	
94	N128	87.706011	0	11.137302	
95	N129	87.70601	72	11.137302	
96	N130	90.304087	0	9.637302	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
97	N133	-87.411779	0	17.555918	
98	N137	-64.151851	0	-29.659663	
99	N139	-83.411568	72	24.484486	
100	N140	-89.411779	72	14.091816	
101	N141	-91.205989	72	17.19948	
102	N142	-90.304066	84	9.637302	
103	N144	-86.411779	0	19.287969	
104	N145	-89.411779	0	14.091816	
105	N146	-83.411568	0	24.484486	
106	N147	-91.205989	0	17.19948	
107	N148	-48.521586	0	-2.587251	
108	N149	-32.891712	0	24.484486	
109	N150	-85.411779	0	21.020019	
110	N151	-62.151851	0	-26.195561	
111	N152	-34.891922	0	21.020019	
112	N157	-90.304066	-12	9.637302	
113	N158	-90.304066	72	9.637302	
114	N159	-87.705989	0	11.137302	
115	N176	-90.304066	0	9.637302	
116	N177	-87.70599	72	11.137303	
117	N182	-4.205989	72	-133.48894	
118	N183	-4.205989	0	-133.48894	
119	N184	-36.804066	72	-83.027416	
120	N185	-36.804066	84	-83.027416	
121	N186	-36.804066	-12	-83.027416	
122	N187	-34.205989	0	-81.527416	
123	N188	-36.804066	0	-83.027416	
124	N189	-34.20599	72	-81.527416	
125	N190	-63.804066	72	-36.262044	
126	N191	-61.205989	0	-34.762044	
127	N192	-63.804066	84	-36.262044	
128	N193	-63.804066	-12	-36.262044	
129	N194	-63.804066	0	-36.262044	
130	N195	-61.20599	72	-34.762044	
131	N196	-10.304066	72	-128.926762	
132	N197	-10.304066	84	-128.926762	
133	N198	-10.304066	-12	-128.926762	
134	N199	-7.705989	0	-127.426762	
135	N200	-7.70599	72	-127.426762	
136	N201	-10.304066	0	-128.926762	
137	N138	-44.826035	-18	-8.186367	
138	N143	-45.9239	0	-4.087588	
139	N153	-81.70599	69	0.744998	
140	N154	-44.826035	0	-8.186367	
141	N155	-13.8787	36	-22.590011	
142	N160	-68.999779	69	24.484121	
143	N161	-45.924111	3	-4.088291	
144	N162	-44.19206	8.28	-5.088291	
145	N163	-12.3787	36	-19.991934	
146	N164	-44.826035	18	-8.186367	
147	N165	-68.999779	72	24.484486	
148	N166	-81.70599	72	0.744998	
149	N167	-11.27997	0	-24.089158	
150	N168	-15.3787	36	-25.188087	
151	N169	-11.280624	36	-24.090011	

Node Coordinates (Continued)

	Label	X [in]	Y [in]	Z [in]	Detach From Diaphragm
152	N170	-43.325674	0	-5.587666	
153	N171	41.825245	-18	-2.98881	
154	N172	45.923532	0	-4.087588	
155	N173	68.000011	69	24.484486	
156	N174	41.825245	0	-2.98881	
157	N175	13.877656	36	-22.588166	
158	N179	48.521997	0	-2.587926	
159	N180	82.205589	69	1.611023	
160	N181	45.923321	3	-4.086886	
161	N202	44.19127	8.28	-5.086886	
162	N203	15.377656	36	-25.186242	
163	N204	41.825245	18	-2.98881	
164	N205	82.206011	72	1.611023	
165	N206	68.000011	72	24.484486	
166	N207	11.279991	0	-24.089158	
167	N208	12.377656	36	-19.99009	
168	N209	11.27958	36	-24.088166	
169	N210	43.325605	0	-5.587511	

Hot Rolled Steel Design Parameters

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Lcomp bot [in]	L-Torque [in]	Function
1	HOR1	Horizontals	174			Lbyy			Lateral
2	M12	Standoffs	62.52			Lbyy			Lateral
3	M13	Angles	50.52			Lbyy			Lateral
4	M14	Angles	50.52			Lbyy			Lateral
5	MP1	Pipe Mounts	96			Lbyy			Lateral
6	MP4	Pipe Mounts	96			Lbyy			Lateral
7	HR1	Handrail	174	Segment	Segment	Segment	Segment	Segment	Lateral
8	CP3	Corner Plates	12			Lbyy			Lateral
9	MP2	Pipe Mounts	96			Lbyy			Lateral
10	MP3	Pipe Mounts	96			Lbyy			Lateral
11	M32	Corner Plates	12			Lbyy			Lateral
12	M33	Standoffs	86.755			Lbyy			Lateral
13	MP14	2.0 STD Pipe	36						Lateral
14	M36	Standoffs	62.52			Lbyy			Lateral
15	M37	Angles	50.52			Lbyy			Lateral
16	M38	Angles	50.52			Lbyy			Lateral
17	MP9	Pipe Mounts	96			Lbyy			Lateral
18	M42	Handrail Bracing	78.491			Lbyy			Lateral
19	M43	Handrail Bracing	79.203			Lbyy			Lateral
20	M45	Angle	44.65			Lbyy			Lateral
21	M48	Threaded Rod	5.646			Lbyy			Lateral
22	M56	Handrail	174	Segment	Segment	Segment	Segment	Segment	Lateral
23	M57	Horizontals	174			Lbyy			Lateral
24	MP11	Pipe Mounts	96			Lbyy			Lateral
25	MP10	Pipe Mounts	96			Lbyy			Lateral
26	MP12	Pipe Mounts	96			Lbyy			Lateral
27	M68	Corner Plates	12			Lbyy			Lateral
28	M72	Standoffs	62.52			Lbyy			Lateral
29	M73	Angles	50.52			Lbyy			Lateral
30	M74	Angles	50.52			Lbyy			Lateral
31	MP5	Pipe Mounts	96			Lbyy			Lateral
32	M96	Handrail	174	Segment	Segment	Segment	Segment	Segment	Lateral
33	M97	Horizontals	174			Lbyy			Lateral
34	MP7	Pipe Mounts	96			Lbyy			Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [in]	Lb y-y [in]	Lb z-z [in]	Lcomp top [in]	Lcomp bot [in]	L-Torque [in]	Function
35	MP6	Pipe Mounts	96			Lbyy			Lateral
36	MP8	Pipe Mounts	96			Lbyy			Lateral
37	MP13	2.0 STD Pipe	36						Lateral
38	M75	Standoffs	86.755			Lbyy			Lateral
39	M76	Threaded Rod	5.646			Lbyy			Lateral
40	M81	Angle	44.65			Lbyy			Lateral
41	M82	Handrail Bracing	78.491			Lbyy			Lateral
42	M83	Handrail Bracing	79.203			Lbyy			Lateral
43	MP15	2.0 STD Pipe	36						Lateral
44	M87	Standoffs	86.755			Lbyy			Lateral
45	M88	Threaded Rod	5.646			Lbyy			Lateral
46	M95	Angle	44.65			Lbyy			Lateral
47	M98	Handrail Bracing	78.491			Lbyy			Lateral
48	M101	Handrail Bracing	79.203			Lbyy			Lateral

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Nodal	Point	Distributed	Area(Member)
1	Self Weight	DL		-1			43		3
2	Wind Load AZI 0	WLZ					86		
3	Wind Load AZI 30	None					86		
4	Wind Load AZI 60	None					86		
5	Wind Load AZI 90	WLX					86		
6	Wind Load AZI 120	None					86		
7	Wind Load AZI 150	None					86		
8	Wind Load AZI 180	None					86		
9	Wind Load AZI 210	None					86		
10	Wind Load AZI 240	None					86		
11	Wind Load AZI 270	None					86		
12	Wind Load AZI 300	None					86		
13	Wind Load AZI 330	None					86		
14	Distr. Wind Load Z	WLZ						93	
15	Distr. Wind Load X	WLX						93	
16	Ice Weight	OL1					43	93	3
17	Ice Wind Load AZI 0	OL2					86		
18	Ice Wind Load AZI 30	None					86		
19	Ice Wind Load AZI 60	None					86		
20	Ice Wind Load AZI 90	OL3					86		
21	Ice Wind Load AZI 120	None					86		
22	Ice Wind Load AZI 150	None					86		
23	Ice Wind Load AZI 180	None					86		
24	Ice Wind Load AZI 210	None					86		
25	Ice Wind Load AZI 240	None					86		
26	Ice Wind Load AZI 270	None					86		
27	Ice Wind Load AZI 300	None					86		
28	Ice Wind Load AZI 330	None					86		
29	Distr. Ice Wind Load Z	OL2						93	
30	Distr. Ice Wind Load X	OL3						93	
31	Seismic Load Z	ELZ			-0.29		43		
32	Seismic Load X	ELX	-0.29				43		
33	Service Live Loads	LL				1			
34	Maintenance Load 1	LL				1			
35	Maintenance Load 2	LL				1			
36	Maintenance Load 3	LL				1			
37	Maintenance Load 4	LL				1			
38	Maintenance Load 5	LL				1			

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Nodal	Point	Distributed	Area(Member)
39	Maintenance Load 6	LL				1			
40	Maintenance Load 7	LL				1			
41	Maintenance Load 8	LL				1			
42	Maintenance Load 9	LL				1			
43	Maintenance Load 10	LL				1			
44	Maintenance Load 11	LL				1			
45	Maintenance Load 12	LL				1			
46	Maintenance Load 13	LL				1			
47	Maintenance Load 14	LL				1			
48	Maintenance Load 15	LL				1			
49	BLC 1 Transient Area Loads	None						60	
50	BLC 16 Transient Area Loads	None						60	

Member Point Loads (BLC 1 : Self Weight)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	Y	-44.65	6
2	MP4	Y	-44.65	70
3	MP3	Y	-33.1	6
4	MP3	Y	-33.1	20
5	MP3	Y	-40.8	30
6	MP3	Y	-40.8	60
7	MP2	Y	-65	6
8	MP2	Y	-65	70
9	MP4	Y	-52.9	%50
10	MP4	Y	-71	%75
11	MP2	Y	-59.9	%25
12	MP2	Y	-72	%50
13	MP2	Y	-52.9	%75
14	MP13	Y	-32.8	%25
15	MP13	Y	-18.9	%25
16	MP8	Y	-44.65	6
17	MP8	Y	-44.65	70
18	MP7	Y	-33.1	6
19	MP7	Y	-33.1	20
20	MP7	Y	-40.8	30
21	MP7	Y	-40.8	60
22	MP6	Y	-65	6
23	MP6	Y	-65	70
24	MP8	Y	-52.9	%50
25	MP8	Y	-71	%75
26	MP6	Y	-59.9	%25
27	MP6	Y	-72	%50
28	MP6	Y	-52.9	%75
29	MP14	Y	-18.9	%25
30	MP12	Y	-44.65	6
31	MP12	Y	-44.65	70
32	MP11	Y	-33.1	6
33	MP11	Y	-33.1	20
34	MP11	Y	-40.8	30
35	MP11	Y	-40.8	60
36	MP10	Y	-65	6
37	MP10	Y	-65	70
38	MP12	Y	-52.9	%50
39	MP12	Y	-71	%75
40	MP10	Y	-59.9	%25

Member Point Loads (BLC 1 : Self Weight) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
41	MP10	Y	-72	%50
42	MP10	Y	-52.9	%75
43	MP15	Y	-18.9	%25

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

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	0	6
2	MP4	Z	-267.89	6
3	MP4	X	0	70
4	MP4	Z	-267.89	70
5	MP3	X	0	6
6	MP3	Z	-82.09	6
7	MP3	X	0	20
8	MP3	Z	-82.09	20
9	MP3	X	0	30
10	MP3	Z	-82.02	30
11	MP3	X	0	60
12	MP3	Z	-82.02	60
13	MP2	X	0	6
14	MP2	Z	-304.89	6
15	MP2	X	0	70
16	MP2	Z	-304.89	70
17	MP4	X	0	%50
18	MP4	Z	-122.67	%50
19	MP4	X	0	%75
20	MP4	Z	-88.36	%75
21	MP2	X	0	%25
22	MP2	Z	-82.75	%25
23	MP2	X	0	%50
24	MP2	Z	-73.61	%50
25	MP2	X	0	%75
26	MP2	Z	-141.24	%75
27	MP13	X	0	%25
28	MP13	Z	-98.8	%25
29	MP13	X	0	%25
30	MP13	Z	-98.8	%25
31	MP8	X	0	6
32	MP8	Z	-142.42	6
33	MP8	X	0	70
34	MP8	Z	-142.42	70
35	MP7	X	0	6
36	MP7	Z	-48.26	6
37	MP7	X	0	20
38	MP7	Z	-48.26	20
39	MP7	X	0	30
40	MP7	Z	-49.57	30
41	MP7	X	0	60
42	MP7	Z	-49.57	60
43	MP6	X	0	6
44	MP6	Z	-190.75	6
45	MP6	X	0	70
46	MP6	Z	-190.75	70
47	MP8	X	0	%50
48	MP8	Z	-86.85	%50
49	MP8	X	0	%75

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

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
50	MP8	Z	-69.52	%75
51	MP6	X	0	%25
52	MP6	Z	-56.35	%25
53	MP6	X	0	%50
54	MP6	Z	-63.99	%50
55	MP6	X	0	%75
56	MP6	Z	-78.61	%75
57	MP14	X	0	%25
58	MP14	Z	-98.8	%25
59	MP12	X	0	6
60	MP12	Z	-142.42	6
61	MP12	X	0	70
62	MP12	Z	-142.42	70
63	MP11	X	0	6
64	MP11	Z	-48.26	6
65	MP11	X	0	20
66	MP11	Z	-48.26	20
67	MP11	X	0	30
68	MP11	Z	-49.57	30
69	MP11	X	0	60
70	MP11	Z	-49.57	60
71	MP10	X	0	6
72	MP10	Z	-190.75	6
73	MP10	X	0	70
74	MP10	Z	-190.75	70
75	MP12	X	0	%50
76	MP12	Z	-86.85	%50
77	MP12	X	0	%75
78	MP12	Z	-69.52	%75
79	MP10	X	0	%25
80	MP10	Z	-56.35	%25
81	MP10	X	0	%50
82	MP10	Z	-63.99	%50
83	MP10	X	0	%75
84	MP10	Z	-78.61	%75
85	MP15	X	0	%25
86	MP15	Z	-98.8	%25

Member Point Loads (BLC 3 : Wind Load AZI 30)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-113.03	6
2	MP4	Z	-195.78	6
3	MP4	X	-113.03	70
4	MP4	Z	-195.78	70
5	MP3	X	-35.41	6
6	MP3	Z	-61.32	6
7	MP3	X	-35.41	20
8	MP3	Z	-61.32	20
9	MP3	X	-35.6	30
10	MP3	Z	-61.67	30
11	MP3	X	-35.6	60
12	MP3	Z	-61.67	60
13	MP2	X	-133.42	6
14	MP2	Z	-231.09	6
15	MP2	X	-133.42	70

Member Point Loads (BLC 3 : Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
16	MP2	Z	-231.09	70
17	MP4	X	-55.36	%50
18	MP4	Z	-95.89	%50
19	MP4	X	-41.04	%75
20	MP4	Z	-71.08	%75
21	MP2	X	-36.97	%25
22	MP2	Z	-64.04	%25
23	MP2	X	-35.2	%50
24	MP2	Z	-60.97	%50
25	MP2	X	-60.18	%75
26	MP2	Z	-104.24	%75
27	MP13	X	-49.4	%25
28	MP13	Z	-85.57	%25
29	MP13	X	-49.4	%25
30	MP13	Z	-85.57	%25
31	MP8	X	-113.03	6
32	MP8	Z	-195.78	6
33	MP8	X	-113.03	70
34	MP8	Z	-195.78	70
35	MP7	X	-35.41	6
36	MP7	Z	-61.32	6
37	MP7	X	-35.41	20
38	MP7	Z	-61.32	20
39	MP7	X	-35.6	30
40	MP7	Z	-61.67	30
41	MP7	X	-35.6	60
42	MP7	Z	-61.67	60
43	MP6	X	-133.42	6
44	MP6	Z	-231.09	6
45	MP6	X	-133.42	70
46	MP6	Z	-231.09	70
47	MP8	X	-55.36	%50
48	MP8	Z	-95.89	%50
49	MP8	X	-41.04	%75
50	MP8	Z	-71.08	%75
51	MP6	X	-36.97	%25
52	MP6	Z	-64.04	%25
53	MP6	X	-35.2	%50
54	MP6	Z	-60.97	%50
55	MP6	X	-60.18	%75
56	MP6	Z	-104.24	%75
57	MP14	X	-49.4	%25
58	MP14	Z	-85.57	%25
59	MP12	X	-50.3	6
60	MP12	Z	-87.12	6
61	MP12	X	-50.3	70
62	MP12	Z	-87.12	70
63	MP11	X	-18.49	6
64	MP11	Z	-32.03	6
65	MP11	X	-18.49	20
66	MP11	Z	-32.03	20
67	MP11	X	-19.38	30
68	MP11	Z	-33.57	30
69	MP11	X	-19.38	60
70	MP11	Z	-33.57	60

Member Point Loads (BLC 3 : Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
71	MP10	X	-76.35	6
72	MP10	Z	-132.24	6
73	MP10	X	-76.35	70
74	MP10	Z	-132.24	70
75	MP12	X	-37.46	%50
76	MP12	Z	-64.88	%50
77	MP12	X	-31.62	%75
78	MP12	Z	-54.77	%75
79	MP10	X	-23.77	%25
80	MP10	Z	-41.18	%25
81	MP10	X	-30.39	%50
82	MP10	Z	-52.64	%50
83	MP10	X	-28.86	%75
84	MP10	Z	-49.99	%75
85	MP15	X	-49.4	%25
86	MP15	Z	-85.57	%25

Member Point Loads (BLC 4 : Wind Load AZI 60)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-123.34	6
2	MP4	Z	-71.21	6
3	MP4	X	-123.34	70
4	MP4	Z	-71.21	70
5	MP3	X	-41.8	6
6	MP3	Z	-24.13	6
7	MP3	X	-41.8	20
8	MP3	Z	-24.13	20
9	MP3	X	-42.93	30
10	MP3	Z	-24.79	30
11	MP3	X	-42.93	60
12	MP3	Z	-24.79	60
13	MP2	X	-165.19	6
14	MP2	Z	-95.37	6
15	MP2	X	-165.19	70
16	MP2	Z	-95.37	70
17	MP4	X	-75.22	%50
18	MP4	Z	-43.43	%50
19	MP4	X	-60.21	%75
20	MP4	Z	-34.76	%75
21	MP2	X	-48.8	%25
22	MP2	Z	-28.17	%25
23	MP2	X	-55.42	%50
24	MP2	Z	-31.99	%50
25	MP2	X	-68.08	%75
26	MP2	Z	-39.3	%75
27	MP13	X	-85.57	%25
28	MP13	Z	-49.4	%25
29	MP13	X	-85.57	%25
30	MP13	Z	-49.4	%25
31	MP8	X	-232	6
32	MP8	Z	-133.95	6
33	MP8	X	-232	70
34	MP8	Z	-133.95	70
35	MP7	X	-71.09	6
36	MP7	Z	-41.04	6

Member Point Loads (BLC 4 : Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
37	MP7	X	-71.09	20
38	MP7	Z	-41.04	20
39	MP7	X	-71.03	30
40	MP7	Z	-41.01	30
41	MP7	X	-71.03	60
42	MP7	Z	-41.01	60
43	MP6	X	-264.05	6
44	MP6	Z	-152.45	6
45	MP6	X	-264.05	70
46	MP6	Z	-152.45	70
47	MP8	X	-106.23	%50
48	MP8	Z	-61.33	%50
49	MP8	X	-76.52	%75
50	MP8	Z	-44.18	%75
51	MP6	X	-71.66	%25
52	MP6	Z	-41.37	%25
53	MP6	X	-63.75	%50
54	MP6	Z	-36.8	%50
55	MP6	X	-122.32	%75
56	MP6	Z	-70.62	%75
57	MP14	X	-85.57	%25
58	MP14	Z	-49.4	%25
59	MP12	X	-123.34	6
60	MP12	Z	-71.21	6
61	MP12	X	-123.34	70
62	MP12	Z	-71.21	70
63	MP11	X	-41.8	6
64	MP11	Z	-24.13	6
65	MP11	X	-41.8	20
66	MP11	Z	-24.13	20
67	MP11	X	-42.93	30
68	MP11	Z	-24.79	30
69	MP11	X	-42.93	60
70	MP11	Z	-24.79	60
71	MP10	X	-165.19	6
72	MP10	Z	-95.37	6
73	MP10	X	-165.19	70
74	MP10	Z	-95.37	70
75	MP12	X	-75.22	%50
76	MP12	Z	-43.43	%50
77	MP12	X	-60.21	%75
78	MP12	Z	-34.76	%75
79	MP10	X	-48.8	%25
80	MP10	Z	-28.17	%25
81	MP10	X	-55.42	%50
82	MP10	Z	-31.99	%50
83	MP10	X	-68.08	%75
84	MP10	Z	-39.3	%75
85	MP15	X	-85.57	%25
86	MP15	Z	-49.4	%25

Member Point Loads (BLC 5 : Wind Load AZI 90)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-100.6	6
2	MP4	Z	0	6

Member Point Loads (BLC 5 : Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
3	MP4	X	-100.6	70
4	MP4	Z	0	70
5	MP3	X	-36.99	6
6	MP3	Z	0	6
7	MP3	X	-36.99	20
8	MP3	Z	0	20
9	MP3	X	-38.76	30
10	MP3	Z	0	30
11	MP3	X	-38.76	60
12	MP3	Z	0	60
13	MP2	X	-152.7	6
14	MP2	Z	0	6
15	MP2	X	-152.7	70
16	MP2	Z	0	70
17	MP4	X	-74.92	%50
18	MP4	Z	0	%50
19	MP4	X	-63.24	%75
20	MP4	Z	0	%75
21	MP2	X	-47.55	%25
22	MP2	Z	0	%25
23	MP2	X	-60.78	%50
24	MP2	Z	0	%50
25	MP2	X	-57.73	%75
26	MP2	Z	0	%75
27	MP13	X	-98.8	%25
28	MP13	Z	0	%25
29	MP13	X	-98.8	%25
30	MP13	Z	0	%25
31	MP8	X	-226.07	6
32	MP8	Z	0	6
33	MP8	X	-226.07	70
34	MP8	Z	0	70
35	MP7	X	-70.81	6
36	MP7	Z	0	6
37	MP7	X	-70.81	20
38	MP7	Z	0	20
39	MP7	X	-71.21	30
40	MP7	Z	0	30
41	MP7	X	-71.21	60
42	MP7	Z	0	60
43	MP6	X	-266.84	6
44	MP6	Z	0	6
45	MP6	X	-266.84	70
46	MP6	Z	0	70
47	MP8	X	-110.73	%50
48	MP8	Z	0	%50
49	MP8	X	-82.08	%75
50	MP8	Z	0	%75
51	MP6	X	-73.95	%25
52	MP6	Z	0	%25
53	MP6	X	-70.4	%50
54	MP6	Z	0	%50
55	MP6	X	-120.37	%75
56	MP6	Z	0	%75
57	MP14	X	-98.8	%25

Member Point Loads (BLC 5 : Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
58	MP14	Z	0	%25
59	MP12	X	-226.07	6
60	MP12	Z	0	6
61	MP12	X	-226.07	70
62	MP12	Z	0	70
63	MP11	X	-70.81	6
64	MP11	Z	0	6
65	MP11	X	-70.81	20
66	MP11	Z	0	20
67	MP11	X	-71.21	30
68	MP11	Z	0	30
69	MP11	X	-71.21	60
70	MP11	Z	0	60
71	MP10	X	-266.84	6
72	MP10	Z	0	6
73	MP10	X	-266.84	70
74	MP10	Z	0	70
75	MP12	X	-110.73	%50
76	MP12	Z	0	%50
77	MP12	X	-82.08	%75
78	MP12	Z	0	%75
79	MP10	X	-73.95	%25
80	MP10	Z	0	%25
81	MP10	X	-70.4	%50
82	MP10	Z	0	%50
83	MP10	X	-120.37	%75
84	MP10	Z	0	%75
85	MP15	X	-98.8	%25
86	MP15	Z	0	%25

Member Point Loads (BLC 6 : Wind Load AZI 120)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-123.34	6
2	MP4	Z	71.21	6
3	MP4	X	-123.34	70
4	MP4	Z	71.21	70
5	MP3	X	-41.8	6
6	MP3	Z	24.13	6
7	MP3	X	-41.8	20
8	MP3	Z	24.13	20
9	MP3	X	-42.93	30
10	MP3	Z	24.79	30
11	MP3	X	-42.93	60
12	MP3	Z	24.79	60
13	MP2	X	-165.19	6
14	MP2	Z	95.37	6
15	MP2	X	-165.19	70
16	MP2	Z	95.37	70
17	MP4	X	-75.22	%50
18	MP4	Z	43.43	%50
19	MP4	X	-60.21	%75
20	MP4	Z	34.76	%75
21	MP2	X	-48.8	%25
22	MP2	Z	28.17	%25
23	MP2	X	-55.42	%50

Member Point Loads (BLC 6 : Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
24	MP2	Z	31.99	%50
25	MP2	X	-68.08	%75
26	MP2	Z	39.3	%75
27	MP13	X	-85.57	%25
28	MP13	Z	49.4	%25
29	MP13	X	-85.57	%25
30	MP13	Z	49.4	%25
31	MP8	X	-123.34	6
32	MP8	Z	71.21	6
33	MP8	X	-123.34	70
34	MP8	Z	71.21	70
35	MP7	X	-41.8	6
36	MP7	Z	24.13	6
37	MP7	X	-41.8	20
38	MP7	Z	24.13	20
39	MP7	X	-42.93	30
40	MP7	Z	24.79	30
41	MP7	X	-42.93	60
42	MP7	Z	24.79	60
43	MP6	X	-165.19	6
44	MP6	Z	95.37	6
45	MP6	X	-165.19	70
46	MP6	Z	95.37	70
47	MP8	X	-75.22	%50
48	MP8	Z	43.43	%50
49	MP8	X	-60.21	%75
50	MP8	Z	34.76	%75
51	MP6	X	-48.8	%25
52	MP6	Z	28.17	%25
53	MP6	X	-55.42	%50
54	MP6	Z	31.99	%50
55	MP6	X	-68.08	%75
56	MP6	Z	39.3	%75
57	MP14	X	-85.57	%25
58	MP14	Z	49.4	%25
59	MP12	X	-232	6
60	MP12	Z	133.95	6
61	MP12	X	-232	70
62	MP12	Z	133.95	70
63	MP11	X	-71.09	6
64	MP11	Z	41.04	6
65	MP11	X	-71.09	20
66	MP11	Z	41.04	20
67	MP11	X	-71.03	30
68	MP11	Z	41.01	30
69	MP11	X	-71.03	60
70	MP11	Z	41.01	60
71	MP10	X	-264.05	6
72	MP10	Z	152.45	6
73	MP10	X	-264.05	70
74	MP10	Z	152.45	70
75	MP12	X	-106.23	%50
76	MP12	Z	61.33	%50
77	MP12	X	-76.52	%75
78	MP12	Z	44.18	%75

Member Point Loads (BLC 6 : Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
79	MP10	X	-71.66	%25
80	MP10	Z	41.37	%25
81	MP10	X	-63.75	%50
82	MP10	Z	36.8	%50
83	MP10	X	-122.32	%75
84	MP10	Z	70.62	%75
85	MP15	X	-85.57	%25
86	MP15	Z	49.4	%25

Member Point Loads (BLC 7 : Wind Load AZI 150)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-113.03	6
2	MP4	Z	195.78	6
3	MP4	X	-113.03	70
4	MP4	Z	195.78	70
5	MP3	X	-35.41	6
6	MP3	Z	61.32	6
7	MP3	X	-35.41	20
8	MP3	Z	61.32	20
9	MP3	X	-35.6	30
10	MP3	Z	61.67	30
11	MP3	X	-35.6	60
12	MP3	Z	61.67	60
13	MP2	X	-133.42	6
14	MP2	Z	231.09	6
15	MP2	X	-133.42	70
16	MP2	Z	231.09	70
17	MP4	X	-55.36	%50
18	MP4	Z	95.89	%50
19	MP4	X	-41.04	%75
20	MP4	Z	71.08	%75
21	MP2	X	-36.97	%25
22	MP2	Z	64.04	%25
23	MP2	X	-35.2	%50
24	MP2	Z	60.97	%50
25	MP2	X	-60.18	%75
26	MP2	Z	104.24	%75
27	MP13	X	-49.4	%25
28	MP13	Z	85.57	%25
29	MP13	X	-49.4	%25
30	MP13	Z	85.57	%25
31	MP8	X	-50.3	6
32	MP8	Z	87.12	6
33	MP8	X	-50.3	70
34	MP8	Z	87.12	70
35	MP7	X	-18.49	6
36	MP7	Z	32.03	6
37	MP7	X	-18.49	20
38	MP7	Z	32.03	20
39	MP7	X	-19.38	30
40	MP7	Z	33.57	30
41	MP7	X	-19.38	60
42	MP7	Z	33.57	60
43	MP6	X	-76.35	6
44	MP6	Z	132.24	6

Member Point Loads (BLC 7 : Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
45	MP6	X	-76.35	70
46	MP6	Z	132.24	70
47	MP8	X	-37.46	%50
48	MP8	Z	64.88	%50
49	MP8	X	-31.62	%75
50	MP8	Z	54.77	%75
51	MP6	X	-23.77	%25
52	MP6	Z	41.18	%25
53	MP6	X	-30.39	%50
54	MP6	Z	52.64	%50
55	MP6	X	-28.86	%75
56	MP6	Z	49.99	%75
57	MP14	X	-49.4	%25
58	MP14	Z	85.57	%25
59	MP12	X	-113.03	6
60	MP12	Z	195.78	6
61	MP12	X	-113.03	70
62	MP12	Z	195.78	70
63	MP11	X	-35.41	6
64	MP11	Z	61.32	6
65	MP11	X	-35.41	20
66	MP11	Z	61.32	20
67	MP11	X	-35.6	30
68	MP11	Z	61.67	30
69	MP11	X	-35.6	60
70	MP11	Z	61.67	60
71	MP10	X	-133.42	6
72	MP10	Z	231.09	6
73	MP10	X	-133.42	70
74	MP10	Z	231.09	70
75	MP12	X	-55.36	%50
76	MP12	Z	95.89	%50
77	MP12	X	-41.04	%75
78	MP12	Z	71.08	%75
79	MP10	X	-36.97	%25
80	MP10	Z	64.04	%25
81	MP10	X	-35.2	%50
82	MP10	Z	60.97	%50
83	MP10	X	-60.18	%75
84	MP10	Z	104.24	%75
85	MP15	X	-49.4	%25
86	MP15	Z	85.57	%25

Member Point Loads (BLC 8 : Wind Load AZI 180)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	0	6
2	MP4	Z	267.89	6
3	MP4	X	0	70
4	MP4	Z	267.89	70
5	MP3	X	0	6
6	MP3	Z	82.09	6
7	MP3	X	0	20
8	MP3	Z	82.09	20
9	MP3	X	0	30
10	MP3	Z	82.02	30

Member Point Loads (BLC 8 : Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
11	MP3	X	0	60
12	MP3	Z	82.02	60
13	MP2	X	0	6
14	MP2	Z	304.89	6
15	MP2	X	0	70
16	MP2	Z	304.89	70
17	MP4	X	0	%50
18	MP4	Z	122.67	%50
19	MP4	X	0	%75
20	MP4	Z	88.36	%75
21	MP2	X	0	%25
22	MP2	Z	82.75	%25
23	MP2	X	0	%50
24	MP2	Z	73.61	%50
25	MP2	X	0	%75
26	MP2	Z	141.24	%75
27	MP13	X	0	%25
28	MP13	Z	98.8	%25
29	MP13	X	0	%25
30	MP13	Z	98.8	%25
31	MP8	X	0	6
32	MP8	Z	142.42	6
33	MP8	X	0	70
34	MP8	Z	142.42	70
35	MP7	X	0	6
36	MP7	Z	48.26	6
37	MP7	X	0	20
38	MP7	Z	48.26	20
39	MP7	X	0	30
40	MP7	Z	49.57	30
41	MP7	X	0	60
42	MP7	Z	49.57	60
43	MP6	X	0	6
44	MP6	Z	190.75	6
45	MP6	X	0	70
46	MP6	Z	190.75	70
47	MP8	X	0	%50
48	MP8	Z	86.85	%50
49	MP8	X	0	%75
50	MP8	Z	69.52	%75
51	MP6	X	0	%25
52	MP6	Z	56.35	%25
53	MP6	X	0	%50
54	MP6	Z	63.99	%50
55	MP6	X	0	%75
56	MP6	Z	78.61	%75
57	MP14	X	0	%25
58	MP14	Z	98.8	%25
59	MP12	X	0	6
60	MP12	Z	142.42	6
61	MP12	X	0	70
62	MP12	Z	142.42	70
63	MP11	X	0	6
64	MP11	Z	48.26	6
65	MP11	X	0	20

Member Point Loads (BLC 8 : Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
66	MP11	Z	48.26	20
67	MP11	X	0	30
68	MP11	Z	49.57	30
69	MP11	X	0	60
70	MP11	Z	49.57	60
71	MP10	X	0	6
72	MP10	Z	190.75	6
73	MP10	X	0	70
74	MP10	Z	190.75	70
75	MP12	X	0	%50
76	MP12	Z	86.85	%50
77	MP12	X	0	%75
78	MP12	Z	69.52	%75
79	MP10	X	0	%25
80	MP10	Z	56.35	%25
81	MP10	X	0	%50
82	MP10	Z	63.99	%50
83	MP10	X	0	%75
84	MP10	Z	78.61	%75
85	MP15	X	0	%25
86	MP15	Z	98.8	%25

Member Point Loads (BLC 9 : Wind Load AZI 210)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	113.03	6
2	MP4	Z	195.78	6
3	MP4	X	113.03	70
4	MP4	Z	195.78	70
5	MP3	X	35.41	6
6	MP3	Z	61.32	6
7	MP3	X	35.41	20
8	MP3	Z	61.32	20
9	MP3	X	35.6	30
10	MP3	Z	61.67	30
11	MP3	X	35.6	60
12	MP3	Z	61.67	60
13	MP2	X	133.42	6
14	MP2	Z	231.09	6
15	MP2	X	133.42	70
16	MP2	Z	231.09	70
17	MP4	X	55.36	%50
18	MP4	Z	95.89	%50
19	MP4	X	41.04	%75
20	MP4	Z	71.08	%75
21	MP2	X	36.97	%25
22	MP2	Z	64.04	%25
23	MP2	X	35.2	%50
24	MP2	Z	60.97	%50
25	MP2	X	60.18	%75
26	MP2	Z	104.24	%75
27	MP13	X	49.4	%25
28	MP13	Z	85.57	%25
29	MP13	X	49.4	%25
30	MP13	Z	85.57	%25
31	MP8	X	113.03	6

Member Point Loads (BLC 9 : Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
32	MP8	Z	195.78	6
33	MP8	X	113.03	70
34	MP8	Z	195.78	70
35	MP7	X	35.41	6
36	MP7	Z	61.32	6
37	MP7	X	35.41	20
38	MP7	Z	61.32	20
39	MP7	X	35.6	30
40	MP7	Z	61.67	30
41	MP7	X	35.6	60
42	MP7	Z	61.67	60
43	MP6	X	133.42	6
44	MP6	Z	231.09	6
45	MP6	X	133.42	70
46	MP6	Z	231.09	70
47	MP8	X	55.36	%50
48	MP8	Z	95.89	%50
49	MP8	X	41.04	%75
50	MP8	Z	71.08	%75
51	MP6	X	36.97	%25
52	MP6	Z	64.04	%25
53	MP6	X	35.2	%50
54	MP6	Z	60.97	%50
55	MP6	X	60.18	%75
56	MP6	Z	104.24	%75
57	MP14	X	49.4	%25
58	MP14	Z	85.57	%25
59	MP12	X	50.3	6
60	MP12	Z	87.12	6
61	MP12	X	50.3	70
62	MP12	Z	87.12	70
63	MP11	X	18.49	6
64	MP11	Z	32.03	6
65	MP11	X	18.49	20
66	MP11	Z	32.03	20
67	MP11	X	19.38	30
68	MP11	Z	33.57	30
69	MP11	X	19.38	60
70	MP11	Z	33.57	60
71	MP10	X	76.35	6
72	MP10	Z	132.24	6
73	MP10	X	76.35	70
74	MP10	Z	132.24	70
75	MP12	X	37.46	%50
76	MP12	Z	64.88	%50
77	MP12	X	31.62	%75
78	MP12	Z	54.77	%75
79	MP10	X	23.77	%25
80	MP10	Z	41.18	%25
81	MP10	X	30.39	%50
82	MP10	Z	52.64	%50
83	MP10	X	28.86	%75
84	MP10	Z	49.99	%75
85	MP15	X	49.4	%25
86	MP15	Z	85.57	%25

Company :Infinigy Engineering, PLLC
Designer :LP
Job Number :1039-Z0001-B
Model Name:806376

9/7/2021
4:47:45 PM
Checked By : _____

Member Point Loads (BLC 9 : Wind Load AZI 210) (Continued)

Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
--------------	-----------	-----------------------	--------------------

Member Point Loads (BLC 10 : Wind Load AZI 240)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	123.34	6
2	MP4	Z	71.21	6
3	MP4	X	123.34	70
4	MP4	Z	71.21	70
5	MP3	X	41.8	6
6	MP3	Z	24.13	6
7	MP3	X	41.8	20
8	MP3	Z	24.13	20
9	MP3	X	42.93	30
10	MP3	Z	24.79	30
11	MP3	X	42.93	60
12	MP3	Z	24.79	60
13	MP2	X	165.19	6
14	MP2	Z	95.37	6
15	MP2	X	165.19	70
16	MP2	Z	95.37	70
17	MP4	X	75.22	%50
18	MP4	Z	43.43	%50
19	MP4	X	60.21	%75
20	MP4	Z	34.76	%75
21	MP2	X	48.8	%25
22	MP2	Z	28.17	%25
23	MP2	X	55.42	%50
24	MP2	Z	31.99	%50
25	MP2	X	68.08	%75
26	MP2	Z	39.3	%75
27	MP13	X	85.57	%25
28	MP13	Z	49.4	%25
29	MP13	X	85.57	%25
30	MP13	Z	49.4	%25
31	MP8	X	232	6
32	MP8	Z	133.95	6
33	MP8	X	232	70
34	MP8	Z	133.95	70
35	MP7	X	71.09	6
36	MP7	Z	41.04	6
37	MP7	X	71.09	20
38	MP7	Z	41.04	20
39	MP7	X	71.03	30
40	MP7	Z	41.01	30
41	MP7	X	71.03	60
42	MP7	Z	41.01	60
43	MP6	X	264.05	6
44	MP6	Z	152.45	6
45	MP6	X	264.05	70
46	MP6	Z	152.45	70
47	MP8	X	106.23	%50
48	MP8	Z	61.33	%50
49	MP8	X	76.52	%75
50	MP8	Z	44.18	%75
51	MP6	X	71.66	%25
52	MP6	Z	41.37	%25
53	MP6	X	63.75	%50
54	MP6	Z	36.8	%50
55	MP6	X	122.32	%75

Member Point Loads (BLC 10 : Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
56	MP6	Z	70.62	%75
57	MP14	X	85.57	%25
58	MP14	Z	49.4	%25
59	MP12	X	123.34	6
60	MP12	Z	71.21	6
61	MP12	X	123.34	70
62	MP12	Z	71.21	70
63	MP11	X	41.8	6
64	MP11	Z	24.13	6
65	MP11	X	41.8	20
66	MP11	Z	24.13	20
67	MP11	X	42.93	30
68	MP11	Z	24.79	30
69	MP11	X	42.93	60
70	MP11	Z	24.79	60
71	MP10	X	165.19	6
72	MP10	Z	95.37	6
73	MP10	X	165.19	70
74	MP10	Z	95.37	70
75	MP12	X	75.22	%50
76	MP12	Z	43.43	%50
77	MP12	X	60.21	%75
78	MP12	Z	34.76	%75
79	MP10	X	48.8	%25
80	MP10	Z	28.17	%25
81	MP10	X	55.42	%50
82	MP10	Z	31.99	%50
83	MP10	X	68.08	%75
84	MP10	Z	39.3	%75
85	MP15	X	85.57	%25
86	MP15	Z	49.4	%25

Member Point Loads (BLC 11 : Wind Load AZI 270)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	100.6	6
2	MP4	Z	0	6
3	MP4	X	100.6	70
4	MP4	Z	0	70
5	MP3	X	36.99	6
6	MP3	Z	0	6
7	MP3	X	36.99	20
8	MP3	Z	0	20
9	MP3	X	38.76	30
10	MP3	Z	0	30
11	MP3	X	38.76	60
12	MP3	Z	0	60
13	MP2	X	152.7	6
14	MP2	Z	0	6
15	MP2	X	152.7	70
16	MP2	Z	0	70
17	MP4	X	74.92	%50
18	MP4	Z	0	%50
19	MP4	X	63.24	%75
20	MP4	Z	0	%75
21	MP2	X	47.55	%25

Member Point Loads (BLC 11 : Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
22	MP2	Z	0	%25
23	MP2	X	60.78	%50
24	MP2	Z	0	%50
25	MP2	X	57.73	%75
26	MP2	Z	0	%75
27	MP13	X	98.8	%25
28	MP13	Z	0	%25
29	MP13	X	98.8	%25
30	MP13	Z	0	%25
31	MP8	X	226.07	6
32	MP8	Z	0	6
33	MP8	X	226.07	70
34	MP8	Z	0	70
35	MP7	X	70.81	6
36	MP7	Z	0	6
37	MP7	X	70.81	20
38	MP7	Z	0	20
39	MP7	X	71.21	30
40	MP7	Z	0	30
41	MP7	X	71.21	60
42	MP7	Z	0	60
43	MP6	X	266.84	6
44	MP6	Z	0	6
45	MP6	X	266.84	70
46	MP6	Z	0	70
47	MP8	X	110.73	%50
48	MP8	Z	0	%50
49	MP8	X	82.08	%75
50	MP8	Z	0	%75
51	MP6	X	73.95	%25
52	MP6	Z	0	%25
53	MP6	X	70.4	%50
54	MP6	Z	0	%50
55	MP6	X	120.37	%75
56	MP6	Z	0	%75
57	MP14	X	98.8	%25
58	MP14	Z	0	%25
59	MP12	X	226.07	6
60	MP12	Z	0	6
61	MP12	X	226.07	70
62	MP12	Z	0	70
63	MP11	X	70.81	6
64	MP11	Z	0	6
65	MP11	X	70.81	20
66	MP11	Z	0	20
67	MP11	X	71.21	30
68	MP11	Z	0	30
69	MP11	X	71.21	60
70	MP11	Z	0	60
71	MP10	X	266.84	6
72	MP10	Z	0	6
73	MP10	X	266.84	70
74	MP10	Z	0	70
75	MP12	X	110.73	%50
76	MP12	Z	0	%50

Member Point Loads (BLC 11 : Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
77	MP12	X	82.08	%75
78	MP12	Z	0	%75
79	MP10	X	73.95	%25
80	MP10	Z	0	%25
81	MP10	X	70.4	%50
82	MP10	Z	0	%50
83	MP10	X	120.37	%75
84	MP10	Z	0	%75
85	MP15	X	98.8	%25
86	MP15	Z	0	%25

Member Point Loads (BLC 12 : Wind Load AZI 300)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	123.34	6
2	MP4	Z	-71.21	6
3	MP4	X	123.34	70
4	MP4	Z	-71.21	70
5	MP3	X	41.8	6
6	MP3	Z	-24.13	6
7	MP3	X	41.8	20
8	MP3	Z	-24.13	20
9	MP3	X	42.93	30
10	MP3	Z	-24.79	30
11	MP3	X	42.93	60
12	MP3	Z	-24.79	60
13	MP2	X	165.19	6
14	MP2	Z	-95.37	6
15	MP2	X	165.19	70
16	MP2	Z	-95.37	70
17	MP4	X	75.22	%50
18	MP4	Z	-43.43	%50
19	MP4	X	60.21	%75
20	MP4	Z	-34.76	%75
21	MP2	X	48.8	%25
22	MP2	Z	-28.17	%25
23	MP2	X	55.42	%50
24	MP2	Z	-31.99	%50
25	MP2	X	68.08	%75
26	MP2	Z	-39.3	%75
27	MP13	X	85.57	%25
28	MP13	Z	-49.4	%25
29	MP13	X	85.57	%25
30	MP13	Z	-49.4	%25
31	MP8	X	123.34	6
32	MP8	Z	-71.21	6
33	MP8	X	123.34	70
34	MP8	Z	-71.21	70
35	MP7	X	41.8	6
36	MP7	Z	-24.13	6
37	MP7	X	41.8	20
38	MP7	Z	-24.13	20
39	MP7	X	42.93	30
40	MP7	Z	-24.79	30
41	MP7	X	42.93	60
42	MP7	Z	-24.79	60

Member Point Loads (BLC 12 : Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
43	MP6	X	165.19	6
44	MP6	Z	-95.37	6
45	MP6	X	165.19	70
46	MP6	Z	-95.37	70
47	MP8	X	75.22	%50
48	MP8	Z	-43.43	%50
49	MP8	X	60.21	%75
50	MP8	Z	-34.76	%75
51	MP6	X	48.8	%25
52	MP6	Z	-28.17	%25
53	MP6	X	55.42	%50
54	MP6	Z	-31.99	%50
55	MP6	X	68.08	%75
56	MP6	Z	-39.3	%75
57	MP14	X	85.57	%25
58	MP14	Z	-49.4	%25
59	MP12	X	232	6
60	MP12	Z	-133.95	6
61	MP12	X	232	70
62	MP12	Z	-133.95	70
63	MP11	X	71.09	6
64	MP11	Z	-41.04	6
65	MP11	X	71.09	20
66	MP11	Z	-41.04	20
67	MP11	X	71.03	30
68	MP11	Z	-41.01	30
69	MP11	X	71.03	60
70	MP11	Z	-41.01	60
71	MP10	X	264.05	6
72	MP10	Z	-152.45	6
73	MP10	X	264.05	70
74	MP10	Z	-152.45	70
75	MP12	X	106.23	%50
76	MP12	Z	-61.33	%50
77	MP12	X	76.52	%75
78	MP12	Z	-44.18	%75
79	MP10	X	71.66	%25
80	MP10	Z	-41.37	%25
81	MP10	X	63.75	%50
82	MP10	Z	-36.8	%50
83	MP10	X	122.32	%75
84	MP10	Z	-70.62	%75
85	MP15	X	85.57	%25
86	MP15	Z	-49.4	%25

Member Point Loads (BLC 13 : Wind Load AZI 330)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	113.03	6
2	MP4	Z	-195.78	6
3	MP4	X	113.03	70
4	MP4	Z	-195.78	70
5	MP3	X	35.41	6
6	MP3	Z	-61.32	6
7	MP3	X	35.41	20
8	MP3	Z	-61.32	20

Member Point Loads (BLC 13 : Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
9	MP3	X	35.6	30
10	MP3	Z	-61.67	30
11	MP3	X	35.6	60
12	MP3	Z	-61.67	60
13	MP2	X	133.42	6
14	MP2	Z	-231.09	6
15	MP2	X	133.42	70
16	MP2	Z	-231.09	70
17	MP4	X	55.36	%50
18	MP4	Z	-95.89	%50
19	MP4	X	41.04	%75
20	MP4	Z	-71.08	%75
21	MP2	X	36.97	%25
22	MP2	Z	-64.04	%25
23	MP2	X	35.2	%50
24	MP2	Z	-60.97	%50
25	MP2	X	60.18	%75
26	MP2	Z	-104.24	%75
27	MP13	X	49.4	%25
28	MP13	Z	-85.57	%25
29	MP13	X	49.4	%25
30	MP13	Z	-85.57	%25
31	MP8	X	50.3	6
32	MP8	Z	-87.12	6
33	MP8	X	50.3	70
34	MP8	Z	-87.12	70
35	MP7	X	18.49	6
36	MP7	Z	-32.03	6
37	MP7	X	18.49	20
38	MP7	Z	-32.03	20
39	MP7	X	19.38	30
40	MP7	Z	-33.57	30
41	MP7	X	19.38	60
42	MP7	Z	-33.57	60
43	MP6	X	76.35	6
44	MP6	Z	-132.24	6
45	MP6	X	76.35	70
46	MP6	Z	-132.24	70
47	MP8	X	37.46	%50
48	MP8	Z	-64.88	%50
49	MP8	X	31.62	%75
50	MP8	Z	-54.77	%75
51	MP6	X	23.77	%25
52	MP6	Z	-41.18	%25
53	MP6	X	30.39	%50
54	MP6	Z	-52.64	%50
55	MP6	X	28.86	%75
56	MP6	Z	-49.99	%75
57	MP14	X	49.4	%25
58	MP14	Z	-85.57	%25
59	MP12	X	113.03	6
60	MP12	Z	-195.78	6
61	MP12	X	113.03	70
62	MP12	Z	-195.78	70
63	MP11	X	35.41	6

Member Point Loads (BLC 13 : Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
64	MP11	Z	-61.32	6
65	MP11	X	35.41	20
66	MP11	Z	-61.32	20
67	MP11	X	35.6	30
68	MP11	Z	-61.67	30
69	MP11	X	35.6	60
70	MP11	Z	-61.67	60
71	MP10	X	133.42	6
72	MP10	Z	-231.09	6
73	MP10	X	133.42	70
74	MP10	Z	-231.09	70
75	MP12	X	55.36	%50
76	MP12	Z	-95.89	%50
77	MP12	X	41.04	%75
78	MP12	Z	-71.08	%75
79	MP10	X	36.97	%25
80	MP10	Z	-64.04	%25
81	MP10	X	35.2	%50
82	MP10	Z	-60.97	%50
83	MP10	X	60.18	%75
84	MP10	Z	-104.24	%75
85	MP15	X	49.4	%25
86	MP15	Z	-85.57	%25

Member Point Loads (BLC 16 : Ice Weight)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	Y	-140.105	6
2	MP4	Y	-140.105	70
3	MP3	Y	-50.547	6
4	MP3	Y	-50.547	20
5	MP3	Y	-58.341	30
6	MP3	Y	-58.341	60
7	MP2	Y	-157.726	6
8	MP2	Y	-157.726	70
9	MP4	Y	-85.402	%50
10	MP4	Y	-75.176	%75
11	MP2	Y	-65.412	%25
12	MP2	Y	-71.653	%50
13	MP2	Y	-92.83	%75
14	MP13	Y	-90.45	%25
15	MP13	Y	-90.45	%25
16	MP8	Y	-140.105	6
17	MP8	Y	-140.105	70
18	MP7	Y	-50.547	6
19	MP7	Y	-50.547	20
20	MP7	Y	-58.341	30
21	MP7	Y	-58.341	60
22	MP6	Y	-157.726	6
23	MP6	Y	-157.726	70
24	MP8	Y	-85.402	%50
25	MP8	Y	-75.176	%75
26	MP6	Y	-65.412	%25
27	MP6	Y	-71.653	%50
28	MP6	Y	-92.83	%75
29	MP14	Y	-90.45	%25

Member Point Loads (BLC 16 : Ice Weight) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
30	MP12	Y	-140.105	6
31	MP12	Y	-140.105	70
32	MP11	Y	-50.547	6
33	MP11	Y	-50.547	20
34	MP11	Y	-58.341	30
35	MP11	Y	-58.341	60
36	MP10	Y	-157.726	6
37	MP10	Y	-157.726	70
38	MP12	Y	-85.402	%50
39	MP12	Y	-75.176	%75
40	MP10	Y	-65.412	%25
41	MP10	Y	-71.653	%50
42	MP10	Y	-92.83	%75
43	MP15	Y	-90.45	%25

Member Point Loads (BLC 17 : Ice Wind Load AZI 0)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	0	6
2	MP4	Z	-23.04	6
3	MP4	X	0	70
4	MP4	Z	-23.04	70
5	MP3	X	0	6
6	MP3	Z	-7.47	6
7	MP3	X	0	20
8	MP3	Z	-7.47	20
9	MP3	X	0	30
10	MP3	Z	-8.16	30
11	MP3	X	0	60
12	MP3	Z	-8.16	60
13	MP2	X	0	6
14	MP2	Z	-24.41	6
15	MP2	X	0	70
16	MP2	Z	-24.41	70
17	MP4	X	0	%50
18	MP4	Z	-12.14	%50
19	MP4	X	0	%75
20	MP4	Z	-8.83	%75
21	MP2	X	0	%25
22	MP2	Z	-8.35	%25
23	MP2	X	0	%50
24	MP2	Z	-7.59	%50
25	MP2	X	0	%75
26	MP2	Z	-13.02	%75
27	MP13	X	0	%25
28	MP13	Z	-10.48	%25
29	MP13	X	0	%25
30	MP13	Z	-10.48	%25
31	MP8	X	0	6
32	MP8	Z	-16.59	6
33	MP8	X	0	70
34	MP8	Z	-16.59	70
35	MP7	X	0	6
36	MP7	Z	-5.68	6
37	MP7	X	0	20
38	MP7	Z	-5.68	20

Member Point Loads (BLC 17 : Ice Wind Load AZI 0) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
39	MP7	X	0	30
40	MP7	Z	-6.44	30
41	MP7	X	0	60
42	MP7	Z	-6.44	60
43	MP6	X	0	6
44	MP6	Z	-17.72	6
45	MP6	X	0	70
46	MP6	Z	-17.72	70
47	MP8	X	0	%50
48	MP8	Z	-10.58	%50
49	MP8	X	0	%75
50	MP8	Z	-7.97	%75
51	MP6	X	0	%25
52	MP6	Z	-7.08	%25
53	MP6	X	0	%50
54	MP6	Z	-7.13	%50
55	MP6	X	0	%75
56	MP6	Z	-9.17	%75
57	MP14	X	0	%25
58	MP14	Z	-10.48	%25
59	MP12	X	0	6
60	MP12	Z	-16.59	6
61	MP12	X	0	70
62	MP12	Z	-16.59	70
63	MP11	X	0	6
64	MP11	Z	-5.68	6
65	MP11	X	0	20
66	MP11	Z	-5.68	20
67	MP11	X	0	30
68	MP11	Z	-6.44	30
69	MP11	X	0	60
70	MP11	Z	-6.44	60
71	MP10	X	0	6
72	MP10	Z	-17.72	6
73	MP10	X	0	70
74	MP10	Z	-17.72	70
75	MP12	X	0	%50
76	MP12	Z	-10.58	%50
77	MP12	X	0	%75
78	MP12	Z	-7.97	%75
79	MP10	X	0	%25
80	MP10	Z	-7.08	%25
81	MP10	X	0	%50
82	MP10	Z	-7.13	%50
83	MP10	X	0	%75
84	MP10	Z	-9.17	%75
85	MP15	X	0	%25
86	MP15	Z	-10.48	%25

Member Point Loads (BLC 18 : Ice Wind Load AZI 30)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-10.44	6
2	MP4	Z	-18.09	6
3	MP4	X	-10.44	70
4	MP4	Z	-18.09	70

Member Point Loads (BLC 18 : Ice Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
5	MP3	X	-3.44	6
6	MP3	Z	-5.95	6
7	MP3	X	-3.44	20
8	MP3	Z	-5.95	20
9	MP3	X	-3.79	30
10	MP3	Z	-6.57	30
11	MP3	X	-3.79	60
12	MP3	Z	-6.57	60
13	MP2	X	-11.09	6
14	MP2	Z	-19.21	6
15	MP2	X	-11.09	70
16	MP2	Z	-19.21	70
17	MP4	X	-5.81	%50
18	MP4	Z	-10.06	%50
19	MP4	X	-4.27	%75
20	MP4	Z	-7.4	%75
21	MP2	X	-3.97	%25
22	MP2	Z	-6.87	%25
23	MP2	X	-3.72	%50
24	MP2	Z	-6.44	%50
25	MP2	X	-5.87	%75
26	MP2	Z	-10.17	%75
27	MP13	X	-5.24	%25
28	MP13	Z	-9.08	%25
29	MP13	X	-5.24	%25
30	MP13	Z	-9.08	%25
31	MP8	X	-10.44	6
32	MP8	Z	-18.09	6
33	MP8	X	-10.44	70
34	MP8	Z	-18.09	70
35	MP7	X	-3.44	6
36	MP7	Z	-5.95	6
37	MP7	X	-3.44	20
38	MP7	Z	-5.95	20
39	MP7	X	-3.79	30
40	MP7	Z	-6.57	30
41	MP7	X	-3.79	60
42	MP7	Z	-6.57	60
43	MP6	X	-11.09	6
44	MP6	Z	-19.21	6
45	MP6	X	-11.09	70
46	MP6	Z	-19.21	70
47	MP8	X	-5.81	%50
48	MP8	Z	-10.06	%50
49	MP8	X	-4.27	%75
50	MP8	Z	-7.4	%75
51	MP6	X	-3.97	%25
52	MP6	Z	-6.87	%25
53	MP6	X	-3.72	%50
54	MP6	Z	-6.44	%50
55	MP6	X	-5.87	%75
56	MP6	Z	-10.17	%75
57	MP14	X	-5.24	%25
58	MP14	Z	-9.08	%25
59	MP12	X	-7.22	6

Member Point Loads (BLC 18 : Ice Wind Load AZI 30) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
60	MP12	Z	-12.5	6
61	MP12	X	-7.22	70
62	MP12	Z	-12.5	70
63	MP11	X	-2.54	6
64	MP11	Z	-4.4	6
65	MP11	X	-2.54	20
66	MP11	Z	-4.4	20
67	MP11	X	-2.93	30
68	MP11	Z	-5.08	30
69	MP11	X	-2.93	60
70	MP11	Z	-5.08	60
71	MP10	X	-7.74	6
72	MP10	Z	-13.41	6
73	MP10	X	-7.74	70
74	MP10	Z	-13.41	70
75	MP12	X	-5.03	%50
76	MP12	Z	-8.71	%50
77	MP12	X	-3.84	%75
78	MP12	Z	-6.65	%75
79	MP10	X	-3.33	%25
80	MP10	Z	-5.77	%25
81	MP10	X	-3.49	%50
82	MP10	Z	-6.04	%50
83	MP10	X	-3.95	%75
84	MP10	Z	-6.83	%75
85	MP15	X	-5.24	%25
86	MP15	Z	-9.08	%25

Member Point Loads (BLC 19 : Ice Wind Load AZI 60)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-14.36	6
2	MP4	Z	-8.29	6
3	MP4	X	-14.36	70
4	MP4	Z	-8.29	70
5	MP3	X	-4.92	6
6	MP3	Z	-2.84	6
7	MP3	X	-4.92	20
8	MP3	Z	-2.84	20
9	MP3	X	-5.58	30
10	MP3	Z	-3.22	30
11	MP3	X	-5.58	60
12	MP3	Z	-3.22	60
13	MP2	X	-15.34	6
14	MP2	Z	-8.86	6
15	MP2	X	-15.34	70
16	MP2	Z	-8.86	70
17	MP4	X	-9.16	%50
18	MP4	Z	-5.29	%50
19	MP4	X	-6.9	%75
20	MP4	Z	-3.99	%75
21	MP2	X	-6.14	%25
22	MP2	Z	-3.54	%25
23	MP2	X	-6.18	%50
24	MP2	Z	-3.57	%50
25	MP2	X	-7.94	%75

Member Point Loads (BLC 19 : Ice Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
26	MP2	Z	-4.59	%75
27	MP13	X	-9.08	%25
28	MP13	Z	-5.24	%25
29	MP13	X	-9.08	%25
30	MP13	Z	-5.24	%25
31	MP8	X	-19.95	6
32	MP8	Z	-11.52	6
33	MP8	X	-19.95	70
34	MP8	Z	-11.52	70
35	MP7	X	-6.47	6
36	MP7	Z	-3.73	6
37	MP7	X	-6.47	20
38	MP7	Z	-3.73	20
39	MP7	X	-7.07	30
40	MP7	Z	-4.08	30
41	MP7	X	-7.07	60
42	MP7	Z	-4.08	60
43	MP6	X	-21.14	6
44	MP6	Z	-12.2	6
45	MP6	X	-21.14	70
46	MP6	Z	-12.2	70
47	MP8	X	-10.51	%50
48	MP8	Z	-6.07	%50
49	MP8	X	-7.65	%75
50	MP8	Z	-4.41	%75
51	MP6	X	-7.23	%25
52	MP6	Z	-4.18	%25
53	MP6	X	-6.57	%50
54	MP6	Z	-3.8	%50
55	MP6	X	-11.28	%75
56	MP6	Z	-6.51	%75
57	MP14	X	-9.08	%25
58	MP14	Z	-5.24	%25
59	MP12	X	-14.36	6
60	MP12	Z	-8.29	6
61	MP12	X	-14.36	70
62	MP12	Z	-8.29	70
63	MP11	X	-4.92	6
64	MP11	Z	-2.84	6
65	MP11	X	-4.92	20
66	MP11	Z	-2.84	20
67	MP11	X	-5.58	30
68	MP11	Z	-3.22	30
69	MP11	X	-5.58	60
70	MP11	Z	-3.22	60
71	MP10	X	-15.34	6
72	MP10	Z	-8.86	6
73	MP10	X	-15.34	70
74	MP10	Z	-8.86	70
75	MP12	X	-9.16	%50
76	MP12	Z	-5.29	%50
77	MP12	X	-6.9	%75
78	MP12	Z	-3.99	%75
79	MP10	X	-6.14	%25
80	MP10	Z	-3.54	%25

Member Point Loads (BLC 19 : Ice Wind Load AZI 60) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
81	MP10	X	-6.18	%50
82	MP10	Z	-3.57	%50
83	MP10	X	-7.94	%75
84	MP10	Z	-4.59	%75
85	MP15	X	-9.08	%25
86	MP15	Z	-5.24	%25

Member Point Loads (BLC 20 : Ice Wind Load AZI 90)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-14.44	6
2	MP4	Z	0	6
3	MP4	X	-14.44	70
4	MP4	Z	0	70
5	MP3	X	-5.08	6
6	MP3	Z	0	6
7	MP3	X	-5.08	20
8	MP3	Z	0	20
9	MP3	X	-5.86	30
10	MP3	Z	0	30
11	MP3	X	-5.86	60
12	MP3	Z	0	60
13	MP2	X	-15.49	6
14	MP2	Z	0	6
15	MP2	X	-15.49	70
16	MP2	Z	0	70
17	MP4	X	-10.06	%50
18	MP4	Z	0	%50
19	MP4	X	-7.68	%75
20	MP4	Z	0	%75
21	MP2	X	-6.66	%25
22	MP2	Z	0	%25
23	MP2	X	-6.98	%50
24	MP2	Z	0	%50
25	MP2	X	-7.89	%75
26	MP2	Z	0	%75
27	MP13	X	-10.48	%25
28	MP13	Z	0	%25
29	MP13	X	-10.48	%25
30	MP13	Z	0	%25
31	MP8	X	-20.89	6
32	MP8	Z	0	6
33	MP8	X	-20.89	70
34	MP8	Z	0	70
35	MP7	X	-6.87	6
36	MP7	Z	0	6
37	MP7	X	-6.87	20
38	MP7	Z	0	20
39	MP7	X	-7.59	30
40	MP7	Z	0	30
41	MP7	X	-7.59	60
42	MP7	Z	0	60
43	MP6	X	-22.18	6
44	MP6	Z	0	6
45	MP6	X	-22.18	70
46	MP6	Z	0	70

Member Point Loads (BLC 20 : Ice Wind Load AZI 90) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
47	MP8	X	-11.62	%50
48	MP8	Z	0	%50
49	MP8	X	-8.54	%75
50	MP8	Z	0	%75
51	MP6	X	-7.93	%25
52	MP6	Z	0	%25
53	MP6	X	-7.44	%50
54	MP6	Z	0	%50
55	MP6	X	-11.74	%75
56	MP6	Z	0	%75
57	MP14	X	-10.48	%25
58	MP14	Z	0	%25
59	MP12	X	-20.89	6
60	MP12	Z	0	6
61	MP12	X	-20.89	70
62	MP12	Z	0	70
63	MP11	X	-6.87	6
64	MP11	Z	0	6
65	MP11	X	-6.87	20
66	MP11	Z	0	20
67	MP11	X	-7.59	30
68	MP11	Z	0	30
69	MP11	X	-7.59	60
70	MP11	Z	0	60
71	MP10	X	-22.18	6
72	MP10	Z	0	6
73	MP10	X	-22.18	70
74	MP10	Z	0	70
75	MP12	X	-11.62	%50
76	MP12	Z	0	%50
77	MP12	X	-8.54	%75
78	MP12	Z	0	%75
79	MP10	X	-7.93	%25
80	MP10	Z	0	%25
81	MP10	X	-7.44	%50
82	MP10	Z	0	%50
83	MP10	X	-11.74	%75
84	MP10	Z	0	%75
85	MP15	X	-10.48	%25
86	MP15	Z	0	%25

Member Point Loads (BLC 21 : Ice Wind Load AZI 120)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-14.36	6
2	MP4	Z	8.29	6
3	MP4	X	-14.36	70
4	MP4	Z	8.29	70
5	MP3	X	-4.92	6
6	MP3	Z	2.84	6
7	MP3	X	-4.92	20
8	MP3	Z	2.84	20
9	MP3	X	-5.58	30
10	MP3	Z	3.22	30
11	MP3	X	-5.58	60
12	MP3	Z	3.22	60

Member Point Loads (BLC 21 : Ice Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
13	MP2	X	-15.34	6
14	MP2	Z	8.86	6
15	MP2	X	-15.34	70
16	MP2	Z	8.86	70
17	MP4	X	-9.16	%50
18	MP4	Z	5.29	%50
19	MP4	X	-6.9	%75
20	MP4	Z	3.99	%75
21	MP2	X	-6.14	%25
22	MP2	Z	3.54	%25
23	MP2	X	-6.18	%50
24	MP2	Z	3.57	%50
25	MP2	X	-7.94	%75
26	MP2	Z	4.59	%75
27	MP13	X	-9.08	%25
28	MP13	Z	5.24	%25
29	MP13	X	-9.08	%25
30	MP13	Z	5.24	%25
31	MP8	X	-14.36	6
32	MP8	Z	8.29	6
33	MP8	X	-14.36	70
34	MP8	Z	8.29	70
35	MP7	X	-4.92	6
36	MP7	Z	2.84	6
37	MP7	X	-4.92	20
38	MP7	Z	2.84	20
39	MP7	X	-5.58	30
40	MP7	Z	3.22	30
41	MP7	X	-5.58	60
42	MP7	Z	3.22	60
43	MP6	X	-15.34	6
44	MP6	Z	8.86	6
45	MP6	X	-15.34	70
46	MP6	Z	8.86	70
47	MP8	X	-9.16	%50
48	MP8	Z	5.29	%50
49	MP8	X	-6.9	%75
50	MP8	Z	3.99	%75
51	MP6	X	-6.14	%25
52	MP6	Z	3.54	%25
53	MP6	X	-6.18	%50
54	MP6	Z	3.57	%50
55	MP6	X	-7.94	%75
56	MP6	Z	4.59	%75
57	MP14	X	-9.08	%25
58	MP14	Z	5.24	%25
59	MP12	X	-19.95	6
60	MP12	Z	11.52	6
61	MP12	X	-19.95	70
62	MP12	Z	11.52	70
63	MP11	X	-6.47	6
64	MP11	Z	3.73	6
65	MP11	X	-6.47	20
66	MP11	Z	3.73	20
67	MP11	X	-7.07	30

Member Point Loads (BLC 21 : Ice Wind Load AZI 120) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
68	MP11	Z	4.08	30
69	MP11	X	-7.07	60
70	MP11	Z	4.08	60
71	MP10	X	-21.14	6
72	MP10	Z	12.2	6
73	MP10	X	-21.14	70
74	MP10	Z	12.2	70
75	MP12	X	-10.51	%50
76	MP12	Z	6.07	%50
77	MP12	X	-7.65	%75
78	MP12	Z	4.41	%75
79	MP10	X	-7.23	%25
80	MP10	Z	4.18	%25
81	MP10	X	-6.57	%50
82	MP10	Z	3.8	%50
83	MP10	X	-11.28	%75
84	MP10	Z	6.51	%75
85	MP15	X	-9.08	%25
86	MP15	Z	5.24	%25

Member Point Loads (BLC 22 : Ice Wind Load AZI 150)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-10.44	6
2	MP4	Z	18.09	6
3	MP4	X	-10.44	70
4	MP4	Z	18.09	70
5	MP3	X	-3.44	6
6	MP3	Z	5.95	6
7	MP3	X	-3.44	20
8	MP3	Z	5.95	20
9	MP3	X	-3.79	30
10	MP3	Z	6.57	30
11	MP3	X	-3.79	60
12	MP3	Z	6.57	60
13	MP2	X	-11.09	6
14	MP2	Z	19.21	6
15	MP2	X	-11.09	70
16	MP2	Z	19.21	70
17	MP4	X	-5.81	%50
18	MP4	Z	10.06	%50
19	MP4	X	-4.27	%75
20	MP4	Z	7.4	%75
21	MP2	X	-3.97	%25
22	MP2	Z	6.87	%25
23	MP2	X	-3.72	%50
24	MP2	Z	6.44	%50
25	MP2	X	-5.87	%75
26	MP2	Z	10.17	%75
27	MP13	X	-5.24	%25
28	MP13	Z	9.08	%25
29	MP13	X	-5.24	%25
30	MP13	Z	9.08	%25
31	MP8	X	-7.22	6
32	MP8	Z	12.5	6
33	MP8	X	-7.22	70

Member Point Loads (BLC 22 : Ice Wind Load AZI 150) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
34	MP8	Z	12.5	70
35	MP7	X	-2.54	6
36	MP7	Z	4.4	6
37	MP7	X	-2.54	20
38	MP7	Z	4.4	20
39	MP7	X	-2.93	30
40	MP7	Z	5.08	30
41	MP7	X	-2.93	60
42	MP7	Z	5.08	60
43	MP6	X	-7.74	6
44	MP6	Z	13.41	6
45	MP6	X	-7.74	70
46	MP6	Z	13.41	70
47	MP8	X	-5.03	%50
48	MP8	Z	8.71	%50
49	MP8	X	-3.84	%75
50	MP8	Z	6.65	%75
51	MP6	X	-3.33	%25
52	MP6	Z	5.77	%25
53	MP6	X	-3.49	%50
54	MP6	Z	6.04	%50
55	MP6	X	-3.95	%75
56	MP6	Z	6.83	%75
57	MP14	X	-5.24	%25
58	MP14	Z	9.08	%25
59	MP12	X	-10.44	6
60	MP12	Z	18.09	6
61	MP12	X	-10.44	70
62	MP12	Z	18.09	70
63	MP11	X	-3.44	6
64	MP11	Z	5.95	6
65	MP11	X	-3.44	20
66	MP11	Z	5.95	20
67	MP11	X	-3.79	30
68	MP11	Z	6.57	30
69	MP11	X	-3.79	60
70	MP11	Z	6.57	60
71	MP10	X	-11.09	6
72	MP10	Z	19.21	6
73	MP10	X	-11.09	70
74	MP10	Z	19.21	70
75	MP12	X	-5.81	%50
76	MP12	Z	10.06	%50
77	MP12	X	-4.27	%75
78	MP12	Z	7.4	%75
79	MP10	X	-3.97	%25
80	MP10	Z	6.87	%25
81	MP10	X	-3.72	%50
82	MP10	Z	6.44	%50
83	MP10	X	-5.87	%75
84	MP10	Z	10.17	%75
85	MP15	X	-5.24	%25
86	MP15	Z	9.08	%25

Member Point Loads (BLC 23 : Ice Wind Load AZI 180)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	0	6
2	MP4	Z	23.04	6
3	MP4	X	0	70
4	MP4	Z	23.04	70
5	MP3	X	0	6
6	MP3	Z	7.47	6
7	MP3	X	0	20
8	MP3	Z	7.47	20
9	MP3	X	0	30
10	MP3	Z	8.16	30
11	MP3	X	0	60
12	MP3	Z	8.16	60
13	MP2	X	0	6
14	MP2	Z	24.41	6
15	MP2	X	0	70
16	MP2	Z	24.41	70
17	MP4	X	0	%50
18	MP4	Z	12.14	%50
19	MP4	X	0	%75
20	MP4	Z	8.83	%75
21	MP2	X	0	%25
22	MP2	Z	8.35	%25
23	MP2	X	0	%50
24	MP2	Z	7.59	%50
25	MP2	X	0	%75
26	MP2	Z	13.02	%75
27	MP13	X	0	%25
28	MP13	Z	10.48	%25
29	MP13	X	0	%25
30	MP13	Z	10.48	%25
31	MP8	X	0	6
32	MP8	Z	16.59	6
33	MP8	X	0	70
34	MP8	Z	16.59	70
35	MP7	X	0	6
36	MP7	Z	5.68	6
37	MP7	X	0	20
38	MP7	Z	5.68	20
39	MP7	X	0	30
40	MP7	Z	6.44	30
41	MP7	X	0	60
42	MP7	Z	6.44	60
43	MP6	X	0	6
44	MP6	Z	17.72	6
45	MP6	X	0	70
46	MP6	Z	17.72	70
47	MP8	X	0	%50
48	MP8	Z	10.58	%50
49	MP8	X	0	%75
50	MP8	Z	7.97	%75
51	MP6	X	0	%25
52	MP6	Z	7.08	%25
53	MP6	X	0	%50
54	MP6	Z	7.13	%50
55	MP6	X	0	%75

Member Point Loads (BLC 23 : Ice Wind Load AZI 180) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
56	MP6	Z	9.17	%75
57	MP14	X	0	%25
58	MP14	Z	10.48	%25
59	MP12	X	0	6
60	MP12	Z	16.59	6
61	MP12	X	0	70
62	MP12	Z	16.59	70
63	MP11	X	0	6
64	MP11	Z	5.68	6
65	MP11	X	0	20
66	MP11	Z	5.68	20
67	MP11	X	0	30
68	MP11	Z	6.44	30
69	MP11	X	0	60
70	MP11	Z	6.44	60
71	MP10	X	0	6
72	MP10	Z	17.72	6
73	MP10	X	0	70
74	MP10	Z	17.72	70
75	MP12	X	0	%50
76	MP12	Z	10.58	%50
77	MP12	X	0	%75
78	MP12	Z	7.97	%75
79	MP10	X	0	%25
80	MP10	Z	7.08	%25
81	MP10	X	0	%50
82	MP10	Z	7.13	%50
83	MP10	X	0	%75
84	MP10	Z	9.17	%75
85	MP15	X	0	%25
86	MP15	Z	10.48	%25

Member Point Loads (BLC 24 : Ice Wind Load AZI 210)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	10.44	6
2	MP4	Z	18.09	6
3	MP4	X	10.44	70
4	MP4	Z	18.09	70
5	MP3	X	3.44	6
6	MP3	Z	5.95	6
7	MP3	X	3.44	20
8	MP3	Z	5.95	20
9	MP3	X	3.79	30
10	MP3	Z	6.57	30
11	MP3	X	3.79	60
12	MP3	Z	6.57	60
13	MP2	X	11.09	6
14	MP2	Z	19.21	6
15	MP2	X	11.09	70
16	MP2	Z	19.21	70
17	MP4	X	5.81	%50
18	MP4	Z	10.06	%50
19	MP4	X	4.27	%75
20	MP4	Z	7.4	%75
21	MP2	X	3.97	%25

Member Point Loads (BLC 24 : Ice Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
22	MP2	Z	6.87	%25
23	MP2	X	3.72	%50
24	MP2	Z	6.44	%50
25	MP2	X	5.87	%75
26	MP2	Z	10.17	%75
27	MP13	X	5.24	%25
28	MP13	Z	9.08	%25
29	MP13	X	5.24	%25
30	MP13	Z	9.08	%25
31	MP8	X	10.44	6
32	MP8	Z	18.09	6
33	MP8	X	10.44	70
34	MP8	Z	18.09	70
35	MP7	X	3.44	6
36	MP7	Z	5.95	6
37	MP7	X	3.44	20
38	MP7	Z	5.95	20
39	MP7	X	3.79	30
40	MP7	Z	6.57	30
41	MP7	X	3.79	60
42	MP7	Z	6.57	60
43	MP6	X	11.09	6
44	MP6	Z	19.21	6
45	MP6	X	11.09	70
46	MP6	Z	19.21	70
47	MP8	X	5.81	%50
48	MP8	Z	10.06	%50
49	MP8	X	4.27	%75
50	MP8	Z	7.4	%75
51	MP6	X	3.97	%25
52	MP6	Z	6.87	%25
53	MP6	X	3.72	%50
54	MP6	Z	6.44	%50
55	MP6	X	5.87	%75
56	MP6	Z	10.17	%75
57	MP14	X	5.24	%25
58	MP14	Z	9.08	%25
59	MP12	X	7.22	6
60	MP12	Z	12.5	6
61	MP12	X	7.22	70
62	MP12	Z	12.5	70
63	MP11	X	2.54	6
64	MP11	Z	4.4	6
65	MP11	X	2.54	20
66	MP11	Z	4.4	20
67	MP11	X	2.93	30
68	MP11	Z	5.08	30
69	MP11	X	2.93	60
70	MP11	Z	5.08	60
71	MP10	X	7.74	6
72	MP10	Z	13.41	6
73	MP10	X	7.74	70
74	MP10	Z	13.41	70
75	MP12	X	5.03	%50
76	MP12	Z	8.71	%50

Member Point Loads (BLC 24 : Ice Wind Load AZI 210) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
77	MP12	X	3.84	%75
78	MP12	Z	6.65	%75
79	MP10	X	3.33	%25
80	MP10	Z	5.77	%25
81	MP10	X	3.49	%50
82	MP10	Z	6.04	%50
83	MP10	X	3.95	%75
84	MP10	Z	6.83	%75
85	MP15	X	5.24	%25
86	MP15	Z	9.08	%25

Member Point Loads (BLC 25 : Ice Wind Load AZI 240)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	14.36	6
2	MP4	Z	8.29	6
3	MP4	X	14.36	70
4	MP4	Z	8.29	70
5	MP3	X	4.92	6
6	MP3	Z	2.84	6
7	MP3	X	4.92	20
8	MP3	Z	2.84	20
9	MP3	X	5.58	30
10	MP3	Z	3.22	30
11	MP3	X	5.58	60
12	MP3	Z	3.22	60
13	MP2	X	15.34	6
14	MP2	Z	8.86	6
15	MP2	X	15.34	70
16	MP2	Z	8.86	70
17	MP4	X	9.16	%50
18	MP4	Z	5.29	%50
19	MP4	X	6.9	%75
20	MP4	Z	3.99	%75
21	MP2	X	6.14	%25
22	MP2	Z	3.54	%25
23	MP2	X	6.18	%50
24	MP2	Z	3.57	%50
25	MP2	X	7.94	%75
26	MP2	Z	4.59	%75
27	MP13	X	9.08	%25
28	MP13	Z	5.24	%25
29	MP13	X	9.08	%25
30	MP13	Z	5.24	%25
31	MP8	X	19.95	6
32	MP8	Z	11.52	6
33	MP8	X	19.95	70
34	MP8	Z	11.52	70
35	MP7	X	6.47	6
36	MP7	Z	3.73	6
37	MP7	X	6.47	20
38	MP7	Z	3.73	20
39	MP7	X	7.07	30
40	MP7	Z	4.08	30
41	MP7	X	7.07	60
42	MP7	Z	4.08	60

Member Point Loads (BLC 25 : Ice Wind Load AZI 240) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
43	MP6	X	21.14	6
44	MP6	Z	12.2	6
45	MP6	X	21.14	70
46	MP6	Z	12.2	70
47	MP8	X	10.51	%50
48	MP8	Z	6.07	%50
49	MP8	X	7.65	%75
50	MP8	Z	4.41	%75
51	MP6	X	7.23	%25
52	MP6	Z	4.18	%25
53	MP6	X	6.57	%50
54	MP6	Z	3.8	%50
55	MP6	X	11.28	%75
56	MP6	Z	6.51	%75
57	MP14	X	9.08	%25
58	MP14	Z	5.24	%25
59	MP12	X	14.36	6
60	MP12	Z	8.29	6
61	MP12	X	14.36	70
62	MP12	Z	8.29	70
63	MP11	X	4.92	6
64	MP11	Z	2.84	6
65	MP11	X	4.92	20
66	MP11	Z	2.84	20
67	MP11	X	5.58	30
68	MP11	Z	3.22	30
69	MP11	X	5.58	60
70	MP11	Z	3.22	60
71	MP10	X	15.34	6
72	MP10	Z	8.86	6
73	MP10	X	15.34	70
74	MP10	Z	8.86	70
75	MP12	X	9.16	%50
76	MP12	Z	5.29	%50
77	MP12	X	6.9	%75
78	MP12	Z	3.99	%75
79	MP10	X	6.14	%25
80	MP10	Z	3.54	%25
81	MP10	X	6.18	%50
82	MP10	Z	3.57	%50
83	MP10	X	7.94	%75
84	MP10	Z	4.59	%75
85	MP15	X	9.08	%25
86	MP15	Z	5.24	%25

Member Point Loads (BLC 26 : Ice Wind Load AZI 270)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	14.44	6
2	MP4	Z	0	6
3	MP4	X	14.44	70
4	MP4	Z	0	70
5	MP3	X	5.08	6
6	MP3	Z	0	6
7	MP3	X	5.08	20
8	MP3	Z	0	20

Member Point Loads (BLC 26 : Ice Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
9	MP3	X	5.86	30
10	MP3	Z	0	30
11	MP3	X	5.86	60
12	MP3	Z	0	60
13	MP2	X	15.49	6
14	MP2	Z	0	6
15	MP2	X	15.49	70
16	MP2	Z	0	70
17	MP4	X	10.06	%50
18	MP4	Z	0	%50
19	MP4	X	7.68	%75
20	MP4	Z	0	%75
21	MP2	X	6.66	%25
22	MP2	Z	0	%25
23	MP2	X	6.98	%50
24	MP2	Z	0	%50
25	MP2	X	7.89	%75
26	MP2	Z	0	%75
27	MP13	X	10.48	%25
28	MP13	Z	0	%25
29	MP13	X	10.48	%25
30	MP13	Z	0	%25
31	MP8	X	20.89	6
32	MP8	Z	0	6
33	MP8	X	20.89	70
34	MP8	Z	0	70
35	MP7	X	6.87	6
36	MP7	Z	0	6
37	MP7	X	6.87	20
38	MP7	Z	0	20
39	MP7	X	7.59	30
40	MP7	Z	0	30
41	MP7	X	7.59	60
42	MP7	Z	0	60
43	MP6	X	22.18	6
44	MP6	Z	0	6
45	MP6	X	22.18	70
46	MP6	Z	0	70
47	MP8	X	11.62	%50
48	MP8	Z	0	%50
49	MP8	X	8.54	%75
50	MP8	Z	0	%75
51	MP6	X	7.93	%25
52	MP6	Z	0	%25
53	MP6	X	7.44	%50
54	MP6	Z	0	%50
55	MP6	X	11.74	%75
56	MP6	Z	0	%75
57	MP14	X	10.48	%25
58	MP14	Z	0	%25
59	MP12	X	20.89	6
60	MP12	Z	0	6
61	MP12	X	20.89	70
62	MP12	Z	0	70
63	MP11	X	6.87	6

Member Point Loads (BLC 26 : Ice Wind Load AZI 270) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
64	MP11	Z	0	6
65	MP11	X	6.87	20
66	MP11	Z	0	20
67	MP11	X	7.59	30
68	MP11	Z	0	30
69	MP11	X	7.59	60
70	MP11	Z	0	60
71	MP10	X	22.18	6
72	MP10	Z	0	6
73	MP10	X	22.18	70
74	MP10	Z	0	70
75	MP12	X	11.62	%50
76	MP12	Z	0	%50
77	MP12	X	8.54	%75
78	MP12	Z	0	%75
79	MP10	X	7.93	%25
80	MP10	Z	0	%25
81	MP10	X	7.44	%50
82	MP10	Z	0	%50
83	MP10	X	11.74	%75
84	MP10	Z	0	%75
85	MP15	X	10.48	%25
86	MP15	Z	0	%25

Member Point Loads (BLC 27 : Ice Wind Load AZI 300)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	14.36	6
2	MP4	Z	-8.29	6
3	MP4	X	14.36	70
4	MP4	Z	-8.29	70
5	MP3	X	4.92	6
6	MP3	Z	-2.84	6
7	MP3	X	4.92	20
8	MP3	Z	-2.84	20
9	MP3	X	5.58	30
10	MP3	Z	-3.22	30
11	MP3	X	5.58	60
12	MP3	Z	-3.22	60
13	MP2	X	15.34	6
14	MP2	Z	-8.86	6
15	MP2	X	15.34	70
16	MP2	Z	-8.86	70
17	MP4	X	9.16	%50
18	MP4	Z	-5.29	%50
19	MP4	X	6.9	%75
20	MP4	Z	-3.99	%75
21	MP2	X	6.14	%25
22	MP2	Z	-3.54	%25
23	MP2	X	6.18	%50
24	MP2	Z	-3.57	%50
25	MP2	X	7.94	%75
26	MP2	Z	-4.59	%75
27	MP13	X	9.08	%25
28	MP13	Z	-5.24	%25
29	MP13	X	9.08	%25

Member Point Loads (BLC 27 : Ice Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
30	MP13	Z	-5.24	%25
31	MP8	X	14.36	6
32	MP8	Z	-8.29	6
33	MP8	X	14.36	70
34	MP8	Z	-8.29	70
35	MP7	X	4.92	6
36	MP7	Z	-2.84	6
37	MP7	X	4.92	20
38	MP7	Z	-2.84	20
39	MP7	X	5.58	30
40	MP7	Z	-3.22	30
41	MP7	X	5.58	60
42	MP7	Z	-3.22	60
43	MP6	X	15.34	6
44	MP6	Z	-8.86	6
45	MP6	X	15.34	70
46	MP6	Z	-8.86	70
47	MP8	X	9.16	%50
48	MP8	Z	-5.29	%50
49	MP8	X	6.9	%75
50	MP8	Z	-3.99	%75
51	MP6	X	6.14	%25
52	MP6	Z	-3.54	%25
53	MP6	X	6.18	%50
54	MP6	Z	-3.57	%50
55	MP6	X	7.94	%75
56	MP6	Z	-4.59	%75
57	MP14	X	9.08	%25
58	MP14	Z	-5.24	%25
59	MP12	X	19.95	6
60	MP12	Z	-11.52	6
61	MP12	X	19.95	70
62	MP12	Z	-11.52	70
63	MP11	X	6.47	6
64	MP11	Z	-3.73	6
65	MP11	X	6.47	20
66	MP11	Z	-3.73	20
67	MP11	X	7.07	30
68	MP11	Z	-4.08	30
69	MP11	X	7.07	60
70	MP11	Z	-4.08	60
71	MP10	X	21.14	6
72	MP10	Z	-12.2	6
73	MP10	X	21.14	70
74	MP10	Z	-12.2	70
75	MP12	X	10.51	%50
76	MP12	Z	-6.07	%50
77	MP12	X	7.65	%75
78	MP12	Z	-4.41	%75
79	MP10	X	7.23	%25
80	MP10	Z	-4.18	%25
81	MP10	X	6.57	%50
82	MP10	Z	-3.8	%50
83	MP10	X	11.28	%75
84	MP10	Z	-6.51	%75

Member Point Loads (BLC 27 : Ice Wind Load AZI 300) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
85	MP15	X	9.08	%25
86	MP15	Z	-5.24	%25

Member Point Loads (BLC 28 : Ice Wind Load AZI 330)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	10.44	6
2	MP4	Z	-18.09	6
3	MP4	X	10.44	70
4	MP4	Z	-18.09	70
5	MP3	X	3.44	6
6	MP3	Z	-5.95	6
7	MP3	X	3.44	20
8	MP3	Z	-5.95	20
9	MP3	X	3.79	30
10	MP3	Z	-6.57	30
11	MP3	X	3.79	60
12	MP3	Z	-6.57	60
13	MP2	X	11.09	6
14	MP2	Z	-19.21	6
15	MP2	X	11.09	70
16	MP2	Z	-19.21	70
17	MP4	X	5.81	%50
18	MP4	Z	-10.06	%50
19	MP4	X	4.27	%75
20	MP4	Z	-7.4	%75
21	MP2	X	3.97	%25
22	MP2	Z	-6.87	%25
23	MP2	X	3.72	%50
24	MP2	Z	-6.44	%50
25	MP2	X	5.87	%75
26	MP2	Z	-10.17	%75
27	MP13	X	5.24	%25
28	MP13	Z	-9.08	%25
29	MP13	X	5.24	%25
30	MP13	Z	-9.08	%25
31	MP8	X	7.22	6
32	MP8	Z	-12.5	6
33	MP8	X	7.22	70
34	MP8	Z	-12.5	70
35	MP7	X	2.54	6
36	MP7	Z	-4.4	6
37	MP7	X	2.54	20
38	MP7	Z	-4.4	20
39	MP7	X	2.93	30
40	MP7	Z	-5.08	30
41	MP7	X	2.93	60
42	MP7	Z	-5.08	60
43	MP6	X	7.74	6
44	MP6	Z	-13.41	6
45	MP6	X	7.74	70
46	MP6	Z	-13.41	70
47	MP8	X	5.03	%50
48	MP8	Z	-8.71	%50
49	MP8	X	3.84	%75
50	MP8	Z	-6.65	%75

Member Point Loads (BLC 28 : Ice Wind Load AZI 330) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
51	MP6	X	3.33	%25
52	MP6	Z	-5.77	%25
53	MP6	X	3.49	%50
54	MP6	Z	-6.04	%50
55	MP6	X	3.95	%75
56	MP6	Z	-6.83	%75
57	MP14	X	5.24	%25
58	MP14	Z	-9.08	%25
59	MP12	X	10.44	6
60	MP12	Z	-18.09	6
61	MP12	X	10.44	70
62	MP12	Z	-18.09	70
63	MP11	X	3.44	6
64	MP11	Z	-5.95	6
65	MP11	X	3.44	20
66	MP11	Z	-5.95	20
67	MP11	X	3.79	30
68	MP11	Z	-6.57	30
69	MP11	X	3.79	60
70	MP11	Z	-6.57	60
71	MP10	X	11.09	6
72	MP10	Z	-19.21	6
73	MP10	X	11.09	70
74	MP10	Z	-19.21	70
75	MP12	X	5.81	%50
76	MP12	Z	-10.06	%50
77	MP12	X	4.27	%75
78	MP12	Z	-7.4	%75
79	MP10	X	3.97	%25
80	MP10	Z	-6.87	%25
81	MP10	X	3.72	%50
82	MP10	Z	-6.44	%50
83	MP10	X	5.87	%75
84	MP10	Z	-10.17	%75
85	MP15	X	5.24	%25
86	MP15	Z	-9.08	%25

Member Point Loads (BLC 31 : Seismic Load Z)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	Z	-12.931	6
2	MP4	Z	-12.931	70
3	MP3	Z	-9.586	6
4	MP3	Z	-9.586	20
5	MP3	Z	-11.816	30
6	MP3	Z	-11.816	60
7	MP2	Z	-18.824	6
8	MP2	Z	-18.824	70
9	MP4	Z	-15.32	%50
10	MP4	Z	-20.562	%75
11	MP2	Z	-17.347	%25
12	MP2	Z	-20.851	%50
13	MP2	Z	-15.32	%75
14	MP13	Z	-9.499	%25
15	MP13	Z	-5.473	%25
16	MP8	Z	-12.931	6

Member Point Loads (BLC 31 : Seismic Load Z) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
17	MP8	Z	-12.931	70
18	MP7	Z	-9.586	6
19	MP7	Z	-9.586	20
20	MP7	Z	-11.816	30
21	MP7	Z	-11.816	60
22	MP6	Z	-18.824	6
23	MP6	Z	-18.824	70
24	MP8	Z	-15.32	%50
25	MP8	Z	-20.562	%75
26	MP6	Z	-17.347	%25
27	MP6	Z	-20.851	%50
28	MP6	Z	-15.32	%75
29	MP14	Z	-5.473	%25
30	MP12	Z	-12.931	6
31	MP12	Z	-12.931	70
32	MP11	Z	-9.586	6
33	MP11	Z	-9.586	20
34	MP11	Z	-11.816	30
35	MP11	Z	-11.816	60
36	MP10	Z	-18.824	6
37	MP10	Z	-18.824	70
38	MP12	Z	-15.32	%50
39	MP12	Z	-20.562	%75
40	MP10	Z	-17.347	%25
41	MP10	Z	-20.851	%50
42	MP10	Z	-15.32	%75
43	MP15	Z	-5.473	%25

Member Point Loads (BLC 32 : Seismic Load X)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
1	MP4	X	-12.931	6
2	MP4	X	-12.931	70
3	MP3	X	-9.586	6
4	MP3	X	-9.586	20
5	MP3	X	-11.816	30
6	MP3	X	-11.816	60
7	MP2	X	-18.824	6
8	MP2	X	-18.824	70
9	MP4	X	-15.32	%50
10	MP4	X	-20.562	%75
11	MP2	X	-17.347	%25
12	MP2	X	-20.851	%50
13	MP2	X	-15.32	%75
14	MP13	X	-9.499	%25
15	MP13	X	-5.473	%25
16	MP8	X	-12.931	6
17	MP8	X	-12.931	70
18	MP7	X	-9.586	6
19	MP7	X	-9.586	20
20	MP7	X	-11.816	30
21	MP7	X	-11.816	60
22	MP6	X	-18.824	6
23	MP6	X	-18.824	70
24	MP8	X	-15.32	%50
25	MP8	X	-20.562	%75

Member Point Loads (BLC 32 : Seismic Load X) (Continued)

	Member Label	Direction	Magnitude [lb, lb-ft]	Location [(in, %)]
26	MP6	X	-17.347	%25
27	MP6	X	-20.851	%50
28	MP6	X	-15.32	%75
29	MP14	X	-5.473	%25
30	MP12	X	-12.931	6
31	MP12	X	-12.931	70
32	MP11	X	-9.586	6
33	MP11	X	-9.586	20
34	MP11	X	-11.816	30
35	MP11	X	-11.816	60
36	MP10	X	-18.824	6
37	MP10	X	-18.824	70
38	MP12	X	-15.32	%50
39	MP12	X	-20.562	%75
40	MP10	X	-17.347	%25
41	MP10	X	-20.851	%50
42	MP10	X	-15.32	%75
43	MP15	X	-5.473	%25

Node Loads and Enforced Displacements (BLC 33 : Service Live Loads)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N18	L	Y	-250

Node Loads and Enforced Displacements (BLC 34 : Maintenance Load 1)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N45	L	Y	-500

Node Loads and Enforced Displacements (BLC 35 : Maintenance Load 2)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N55A	L	Y	-500

Node Loads and Enforced Displacements (BLC 36 : Maintenance Load 3)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N119A	L	Y	-500

Node Loads and Enforced Displacements (BLC 37 : Maintenance Load 4)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N131B	L	Y	-500

Node Loads and Enforced Displacements (BLC 38 : Maintenance Load 5)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N63	L	Y	-500

Node Loads and Enforced Displacements (BLC 39 : Maintenance Load 6)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N98	L	Y	-500

Node Loads and Enforced Displacements (BLC 40 : Maintenance Load 7)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N114	L	Y	-500

Node Loads and Enforced Displacements (BLC 41 : Maintenance Load 8)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N121	L	Y	-500

Node Loads and Enforced Displacements (BLC 42 : Maintenance Load 9)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N130	L	Y	-500

Node Loads and Enforced Displacements (BLC 43 : Maintenance Load 10)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N176	L	Y	-500

Node Loads and Enforced Displacements (BLC 44 : Maintenance Load 11)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N188	L	Y	-500

Node Loads and Enforced Displacements (BLC 45 : Maintenance Load 12)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N194	L	Y	-500

Node Loads and Enforced Displacements (BLC 46 : Maintenance Load 13)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N201	L	Y	-500

Node Loads and Enforced Displacements (BLC 47 : Maintenance Load 14)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N154	L	Y	-500

Node Loads and Enforced Displacements (BLC 48 : Maintenance Load 15)

	Node Label	L, D, M	Direction	Magnitude [(lb, lb-ft), (in, rad), (lb*s ² /in, lb*s ² *in)]
1	N174	L	Y	-500

Member Distributed Loads (BLC 14 : Distr. Wind Load Z)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M4	SZ	0	0	%100
2	HOR1	SZ	-99.976	-99.976	0
3	M12	SZ	-99.976	-99.976	0
4	M13	SZ	0	0	%100
5	M14	SZ	0	0	%100
6	MP1	SZ	-59.986	-59.986	0
7	MP4	SZ	-59.986	-59.986	0
8	HR1	SZ	-59.986	-59.986	0
9	CP3	SZ	0	0	%100
10	M40	SZ	0	0	%100
11	M41	SZ	0	0	%100
12	M46	SZ	0	0	%100
13	M47	SZ	0	0	%100
14	MP2	SZ	-59.986	-59.986	0
15	M71A	SZ	0	0	%100
16	M72A	SZ	0	0	%100
17	MP3	SZ	-59.986	-59.986	0
18	M77A	SZ	0	0	%100
19	M78A	SZ	0	0	%100
20	M32	SZ	0	0	%100
21	M33	SZ	-99.976	-99.976	0
22	MP14	SZ	-59.986	-59.986	0
23	M35	SZ	0	0	%100
24	M36	SZ	-99.976	-99.976	0
25	M37	SZ	0	0	%100
26	M38	SZ	0	0	%100
27	MP9	SZ	-59.986	-59.986	0
28	M42	SZ	-59.986	-59.986	0
29	M43	SZ	-59.986	-59.986	0
30	M44	SZ	0	0	%100
31	M45	SZ	0	0	%100
32	M48	SZ	-59.986	-59.986	0
33	M49	SZ	0	0	%100
34	M50	SZ	0	0	%100
35	M51	SZ	0	0	%100
36	M52	SZ	0	0	%100
37	M53	SZ	0	0	%100
38	M54	SZ	0	0	%100
39	M55	SZ	0	0	%100
40	M56	SZ	-59.986	-59.986	0
41	M57	SZ	-99.976	-99.976	0
42	MP11	SZ	-59.986	-59.986	0
43	M59	SZ	0	0	%100
44	M60	SZ	0	0	%100
45	MP10	SZ	-59.986	-59.986	0
46	M63	SZ	0	0	%100
47	M64	SZ	0	0	%100
48	MP12	SZ	-59.986	-59.986	0
49	M66	SZ	0	0	%100
50	M67	SZ	0	0	%100
51	M68	SZ	0	0	%100
52	M71	SZ	0	0	%100
53	M72	SZ	-99.976	-99.976	0
54	M73	SZ	0	0	%100
55	M74	SZ	0	0	%100

Member Distributed Loads (BLC 14 : Distr. Wind Load Z) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
56	MP5	SZ	-59.986	-59.986	0 %100
57	M89	SZ	0	0	0 %100
58	M90	SZ	0	0	0 %100
59	M96	SZ	-59.986	-59.986	0 %100
60	M97	SZ	-99.976	-99.976	0 %100
61	MP7	SZ	-59.986	-59.986	0 %100
62	M99	SZ	0	0	0 %100
63	M100	SZ	0	0	0 %100
64	MP6	SZ	-59.986	-59.986	0 %100
65	M102	SZ	0	0	0 %100
66	M103	SZ	0	0	0 %100
67	MP8	SZ	-59.986	-59.986	0 %100
68	M105	SZ	0	0	0 %100
69	M106	SZ	0	0	0 %100
70	MP13	SZ	-59.986	-59.986	0 %100
71	M75	SZ	-99.976	-99.976	0 %100
72	M76	SZ	-59.986	-59.986	0 %100
73	M77	SZ	0	0	0 %100
74	M78	SZ	0	0	0 %100
75	M79	SZ	0	0	0 %100
76	M80	SZ	0	0	0 %100
77	M81	SZ	0	0	0 %100
78	M82	SZ	-59.986	-59.986	0 %100
79	M83	SZ	-59.986	-59.986	0 %100
80	M84	SZ	0	0	0 %100
81	M85	SZ	0	0	0 %100
82	MP15	SZ	-59.986	-59.986	0 %100
83	M87	SZ	-99.976	-99.976	0 %100
84	M88	SZ	-59.986	-59.986	0 %100
85	M91	SZ	0	0	0 %100
86	M92	SZ	0	0	0 %100
87	M93	SZ	0	0	0 %100
88	M94	SZ	0	0	0 %100
89	M95	SZ	0	0	0 %100
90	M98	SZ	-59.986	-59.986	0 %100
91	M101	SZ	-59.986	-59.986	0 %100
92	M104	SZ	0	0	0 %100
93	M107	SZ	0	0	0 %100

Member Distributed Loads (BLC 15 : Distr. Wind Load X)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M4	SX	0	0	0 %100
2	HOR1	SX	-99.976	-99.976	0 %100
3	M12	SX	-99.976	-99.976	0 %100
4	M13	SX	0	0	0 %100
5	M14	SX	0	0	0 %100
6	MP1	SX	-59.986	-59.986	0 %100
7	MP4	SX	-59.986	-59.986	0 %100
8	HR1	SX	-59.986	-59.986	0 %100
9	CP3	SX	0	0	0 %100
10	M40	SX	0	0	0 %100
11	M41	SX	0	0	0 %100
12	M46	SX	0	0	0 %100
13	M47	SX	0	0	0 %100
14	MP2	SX	-59.986	-59.986	0 %100

Member Distributed Loads (BLC 15 : Distr. Wind Load X) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
15	M71A	SX	0	0	%100
16	M72A	SX	0	0	%100
17	MP3	SX	-59.986	-59.986	%100
18	M77A	SX	0	0	%100
19	M78A	SX	0	0	%100
20	M32	SX	0	0	%100
21	M33	SX	-99.976	-99.976	%100
22	MP14	SX	-59.986	-59.986	%100
23	M35	SX	0	0	%100
24	M36	SX	-99.976	-99.976	%100
25	M37	SX	0	0	%100
26	M38	SX	0	0	%100
27	MP9	SX	-59.986	-59.986	%100
28	M42	SX	-59.986	-59.986	%100
29	M43	SX	-59.986	-59.986	%100
30	M44	SX	0	0	%100
31	M45	SX	0	0	%100
32	M48	SX	-59.986	-59.986	%100
33	M49	SX	0	0	%100
34	M50	SX	0	0	%100
35	M51	SX	0	0	%100
36	M52	SX	0	0	%100
37	M53	SX	0	0	%100
38	M54	SX	0	0	%100
39	M55	SX	0	0	%100
40	M56	SX	-59.986	-59.986	%100
41	M57	SX	-99.976	-99.976	%100
42	MP11	SX	-59.986	-59.986	%100
43	M59	SX	0	0	%100
44	M60	SX	0	0	%100
45	MP10	SX	-59.986	-59.986	%100
46	M63	SX	0	0	%100
47	M64	SX	0	0	%100
48	MP12	SX	-59.986	-59.986	%100
49	M66	SX	0	0	%100
50	M67	SX	0	0	%100
51	M68	SX	0	0	%100
52	M71	SX	0	0	%100
53	M72	SX	-99.976	-99.976	%100
54	M73	SX	0	0	%100
55	M74	SX	0	0	%100
56	MP5	SX	-59.986	-59.986	%100
57	M89	SX	0	0	%100
58	M90	SX	0	0	%100
59	M96	SX	-59.986	-59.986	%100
60	M97	SX	-99.976	-99.976	%100
61	MP7	SX	-59.986	-59.986	%100
62	M99	SX	0	0	%100
63	M100	SX	0	0	%100
64	MP6	SX	-59.986	-59.986	%100
65	M102	SX	0	0	%100
66	M103	SX	0	0	%100
67	MP8	SX	-59.986	-59.986	%100
68	M105	SX	0	0	%100
69	M106	SX	0	0	%100

Member Distributed Loads (BLC 15 : Distr. Wind Load X) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
70	MP13	SX	-59.986	-59.986	0 %100
71	M75	SX	-99.976	-99.976	0 %100
72	M76	SX	-59.986	-59.986	0 %100
73	M77	SX	0	0	0 %100
74	M78	SX	0	0	0 %100
75	M79	SX	0	0	0 %100
76	M80	SX	0	0	0 %100
77	M81	SX	0	0	0 %100
78	M82	SX	-59.986	-59.986	0 %100
79	M83	SX	-59.986	-59.986	0 %100
80	M84	SX	0	0	0 %100
81	M85	SX	0	0	0 %100
82	MP15	SX	-59.986	-59.986	0 %100
83	M87	SX	-99.976	-99.976	0 %100
84	M88	SX	-59.986	-59.986	0 %100
85	M91	SX	0	0	0 %100
86	M92	SX	0	0	0 %100
87	M93	SX	0	0	0 %100
88	M94	SX	0	0	0 %100
89	M95	SX	0	0	0 %100
90	M98	SX	-59.986	-59.986	0 %100
91	M101	SX	-59.986	-59.986	0 %100
92	M104	SX	0	0	0 %100
93	M107	SX	0	0	0 %100

Member Distributed Loads (BLC 16 : Ice Weight)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M4	Y	-3.565	-3.565	0 %100
2	HOR1	Y	-13.894	-13.894	0 %100
3	M12	Y	-15.37	-15.37	0 %100
4	M13	Y	-3.565	-3.565	0 %100
5	M14	Y	-3.565	-3.565	0 %100
6	MP1	Y	-9.564	-9.564	0 %100
7	MP4	Y	-9.564	-9.564	0 %100
8	HR1	Y	-8.521	-8.521	0 %100
9	CP3	Y	-3.565	-3.565	0 %100
10	M40	Y	-3.565	-3.565	0 %100
11	M41	Y	-3.565	-3.565	0 %100
12	M46	Y	-3.565	-3.565	0 %100
13	M47	Y	-3.565	-3.565	0 %100
14	MP2	Y	-9.564	-9.564	0 %100
15	M71A	Y	-3.565	-3.565	0 %100
16	M72A	Y	-3.565	-3.565	0 %100
17	MP3	Y	-9.564	-9.564	0 %100
18	M77A	Y	-3.565	-3.565	0 %100
19	M78A	Y	-3.565	-3.565	0 %100
20	M32	Y	-3.565	-3.565	0 %100
21	M33	Y	-15.37	-15.37	0 %100
22	MP14	Y	-8.521	-8.521	0 %100
23	M35	Y	-3.565	-3.565	0 %100
24	M36	Y	-15.37	-15.37	0 %100
25	M37	Y	-3.565	-3.565	0 %100
26	M38	Y	-3.565	-3.565	0 %100
27	MP9	Y	-9.564	-9.564	0 %100
28	M42	Y	-8.521	-8.521	0 %100

Member Distributed Loads (BLC 16 : Ice Weight) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
29	M43	Y	-8.521	0	%100
30	M44	Y	-3.565	0	%100
31	M45	Y	-3.565	0	%100
32	M48	Y	-5.13	0	%100
33	M49	Y	-3.565	0	%100
34	M50	Y	-3.565	0	%100
35	M51	Y	-3.565	0	%100
36	M52	Y	-3.565	0	%100
37	M53	Y	-3.565	0	%100
38	M54	Y	-3.565	0	%100
39	M55	Y	-3.565	0	%100
40	M56	Y	-8.521	0	%100
41	M57	Y	-13.894	0	%100
42	MP11	Y	-9.564	0	%100
43	M59	Y	-3.565	0	%100
44	M60	Y	-3.565	0	%100
45	MP10	Y	-9.564	0	%100
46	M63	Y	-3.565	0	%100
47	M64	Y	-3.565	0	%100
48	MP12	Y	-9.564	0	%100
49	M66	Y	-3.565	0	%100
50	M67	Y	-3.565	0	%100
51	M68	Y	-3.565	0	%100
52	M71	Y	-3.565	0	%100
53	M72	Y	-15.37	0	%100
54	M73	Y	-3.565	0	%100
55	M74	Y	-3.565	0	%100
56	MP5	Y	-9.564	0	%100
57	M89	Y	-3.565	0	%100
58	M90	Y	-3.565	0	%100
59	M96	Y	-8.521	0	%100
60	M97	Y	-13.894	0	%100
61	MP7	Y	-9.564	0	%100
62	M99	Y	-3.565	0	%100
63	M100	Y	-3.565	0	%100
64	MP6	Y	-9.564	0	%100
65	M102	Y	-3.565	0	%100
66	M103	Y	-3.565	0	%100
67	MP8	Y	-9.564	0	%100
68	M105	Y	-3.565	0	%100
69	M106	Y	-3.565	0	%100
70	MP13	Y	-8.521	0	%100
71	M75	Y	-15.37	0	%100
72	M76	Y	-5.13	0	%100
73	M77	Y	-3.565	0	%100
74	M78	Y	-3.565	0	%100
75	M79	Y	-3.565	0	%100
76	M80	Y	-3.565	0	%100
77	M81	Y	-3.565	0	%100
78	M82	Y	-8.521	0	%100
79	M83	Y	-8.521	0	%100
80	M84	Y	-3.565	0	%100
81	M85	Y	-3.565	0	%100
82	MP15	Y	-8.521	0	%100
83	M87	Y	-15.37	0	%100

Member Distributed Loads (BLC 16 : Ice Weight) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
84	M88	Y	-5.13	-5.13	0 %100
85	M91	Y	-3.565	-3.565	0 %100
86	M92	Y	-3.565	-3.565	0 %100
87	M93	Y	-3.565	-3.565	0 %100
88	M94	Y	-3.565	-3.565	0 %100
89	M95	Y	-3.565	-3.565	0 %100
90	M98	Y	-8.521	-8.521	0 %100
91	M101	Y	-8.521	-8.521	0 %100
92	M104	Y	-3.565	-3.565	0 %100
93	M107	Y	-3.565	-3.565	0 %100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M4	SZ	0	0	0 %100
2	HOR1	SZ	-16.222	-16.222	0 %100
3	M12	SZ	-15.394	-15.394	0 %100
4	M13	SZ	0	0	0 %100
5	M14	SZ	0	0	0 %100
6	MP1	SZ	-21.002	-21.002	0 %100
7	MP4	SZ	-21.002	-21.002	0 %100
8	HR1	SZ	-23.403	-23.403	0 %100
9	CP3	SZ	0	0	0 %100
10	M40	SZ	0	0	0 %100
11	M41	SZ	0	0	0 %100
12	M46	SZ	0	0	0 %100
13	M47	SZ	0	0	0 %100
14	MP2	SZ	-21.002	-21.002	0 %100
15	M71A	SZ	0	0	0 %100
16	M72A	SZ	0	0	0 %100
17	MP3	SZ	-21.002	-21.002	0 %100
18	M77A	SZ	0	0	0 %100
19	M78A	SZ	0	0	0 %100
20	M32	SZ	0	0	0 %100
21	M33	SZ	-15.394	-15.394	0 %100
22	MP14	SZ	-23.403	-23.403	0 %100
23	M35	SZ	0	0	0 %100
24	M36	SZ	-15.394	-15.394	0 %100
25	M37	SZ	0	0	0 %100
26	M38	SZ	0	0	0 %100
27	MP9	SZ	-21.002	-21.002	0 %100
28	M42	SZ	-23.403	-23.403	0 %100
29	M43	SZ	-23.403	-23.403	0 %100
30	M44	SZ	0	0	0 %100
31	M45	SZ	0	0	0 %100
32	M48	SZ	-53.315	-53.315	0 %100
33	M49	SZ	0	0	0 %100
34	M50	SZ	0	0	0 %100
35	M51	SZ	0	0	0 %100
36	M52	SZ	0	0	0 %100
37	M53	SZ	0	0	0 %100
38	M54	SZ	0	0	0 %100
39	M55	SZ	0	0	0 %100
40	M56	SZ	-23.403	-23.403	0 %100
41	M57	SZ	-16.222	-16.222	0 %100
42	MP11	SZ	-21.002	-21.002	0 %100

Member Distributed Loads (BLC 29 : Distr. Ice Wind Load Z) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
43	M59	SZ	0	0	%100
44	M60	SZ	0	0	%100
45	MP10	SZ	-21.002	-21.002	%100
46	M63	SZ	0	0	%100
47	M64	SZ	0	0	%100
48	MP12	SZ	-21.002	-21.002	%100
49	M66	SZ	0	0	%100
50	M67	SZ	0	0	%100
51	M68	SZ	0	0	%100
52	M71	SZ	0	0	%100
53	M72	SZ	-15.394	-15.394	%100
54	M73	SZ	0	0	%100
55	M74	SZ	0	0	%100
56	MP5	SZ	-21.002	-21.002	%100
57	M89	SZ	0	0	%100
58	M90	SZ	0	0	%100
59	M96	SZ	-23.403	-23.403	%100
60	M97	SZ	-16.222	-16.222	%100
61	MP7	SZ	-21.002	-21.002	%100
62	M99	SZ	0	0	%100
63	M100	SZ	0	0	%100
64	MP6	SZ	-21.002	-21.002	%100
65	M102	SZ	0	0	%100
66	M103	SZ	0	0	%100
67	MP8	SZ	-21.002	-21.002	%100
68	M105	SZ	0	0	%100
69	M106	SZ	0	0	%100
70	MP13	SZ	-23.403	-23.403	%100
71	M75	SZ	-15.394	-15.394	%100
72	M76	SZ	-53.315	-53.315	%100
73	M77	SZ	0	0	%100
74	M78	SZ	0	0	%100
75	M79	SZ	0	0	%100
76	M80	SZ	0	0	%100
77	M81	SZ	0	0	%100
78	M82	SZ	-23.403	-23.403	%100
79	M83	SZ	-23.403	-23.403	%100
80	M84	SZ	0	0	%100
81	M85	SZ	0	0	%100
82	MP15	SZ	-23.403	-23.403	%100
83	M87	SZ	-15.394	-15.394	%100
84	M88	SZ	-53.315	-53.315	%100
85	M91	SZ	0	0	%100
86	M92	SZ	0	0	%100
87	M93	SZ	0	0	%100
88	M94	SZ	0	0	%100
89	M95	SZ	0	0	%100
90	M98	SZ	-23.403	-23.403	%100
91	M101	SZ	-23.403	-23.403	%100
92	M104	SZ	0	0	%100
93	M107	SZ	0	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M4	SX	0	0	%100
2	HOR1	SX	-16.222	0	%100
3	M12	SX	-15.394	0	%100
4	M13	SX	0	0	%100
5	M14	SX	0	0	%100
6	MP1	SX	-21.002	0	%100
7	MP4	SX	-21.002	0	%100
8	HR1	SX	-23.403	0	%100
9	CP3	SX	0	0	%100
10	M40	SX	0	0	%100
11	M41	SX	0	0	%100
12	M46	SX	0	0	%100
13	M47	SX	0	0	%100
14	MP2	SX	-21.002	0	%100
15	M71A	SX	0	0	%100
16	M72A	SX	0	0	%100
17	MP3	SX	-21.002	0	%100
18	M77A	SX	0	0	%100
19	M78A	SX	0	0	%100
20	M32	SX	0	0	%100
21	M33	SX	-15.394	0	%100
22	MP14	SX	-23.403	0	%100
23	M35	SX	0	0	%100
24	M36	SX	-15.394	0	%100
25	M37	SX	0	0	%100
26	M38	SX	0	0	%100
27	MP9	SX	-21.002	0	%100
28	M42	SX	-23.403	0	%100
29	M43	SX	-23.403	0	%100
30	M44	SX	0	0	%100
31	M45	SX	0	0	%100
32	M48	SX	-53.315	0	%100
33	M49	SX	0	0	%100
34	M50	SX	0	0	%100
35	M51	SX	0	0	%100
36	M52	SX	0	0	%100
37	M53	SX	0	0	%100
38	M54	SX	0	0	%100
39	M55	SX	0	0	%100
40	M56	SX	-23.403	0	%100
41	M57	SX	-16.222	0	%100
42	MP11	SX	-21.002	0	%100
43	M59	SX	0	0	%100
44	M60	SX	0	0	%100
45	MP10	SX	-21.002	0	%100
46	M63	SX	0	0	%100
47	M64	SX	0	0	%100
48	MP12	SX	-21.002	0	%100
49	M66	SX	0	0	%100
50	M67	SX	0	0	%100
51	M68	SX	0	0	%100
52	M71	SX	0	0	%100
53	M72	SX	-15.394	0	%100
54	M73	SX	0	0	%100
55	M74	SX	0	0	%100

Member Distributed Loads (BLC 30 : Distr. Ice Wind Load X) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
56	MP5	SX	-21.002	-21.002	0 %100
57	M89	SX	0	0	0 %100
58	M90	SX	0	0	0 %100
59	M96	SX	-23.403	-23.403	0 %100
60	M97	SX	-16.222	-16.222	0 %100
61	MP7	SX	-21.002	-21.002	0 %100
62	M99	SX	0	0	0 %100
63	M100	SX	0	0	0 %100
64	MP6	SX	-21.002	-21.002	0 %100
65	M102	SX	0	0	0 %100
66	M103	SX	0	0	0 %100
67	MP8	SX	-21.002	-21.002	0 %100
68	M105	SX	0	0	0 %100
69	M106	SX	0	0	0 %100
70	MP13	SX	-23.403	-23.403	0 %100
71	M75	SX	-15.394	-15.394	0 %100
72	M76	SX	-53.315	-53.315	0 %100
73	M77	SX	0	0	0 %100
74	M78	SX	0	0	0 %100
75	M79	SX	0	0	0 %100
76	M80	SX	0	0	0 %100
77	M81	SX	0	0	0 %100
78	M82	SX	-23.403	-23.403	0 %100
79	M83	SX	-23.403	-23.403	0 %100
80	M84	SX	0	0	0 %100
81	M85	SX	0	0	0 %100
82	MP15	SX	-23.403	-23.403	0 %100
83	M87	SX	-15.394	-15.394	0 %100
84	M88	SX	-53.315	-53.315	0 %100
85	M91	SX	0	0	0 %100
86	M92	SX	0	0	0 %100
87	M93	SX	0	0	0 %100
88	M94	SX	0	0	0 %100
89	M95	SX	0	0	0 %100
90	M98	SX	-23.403	-23.403	0 %100
91	M101	SX	-23.403	-23.403	0 %100
92	M104	SX	0	0	0 %100
93	M107	SX	0	0	0 %100

Member Distributed Loads (BLC 49 : BLC 1 Transient Area Loads)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M4	Y	-0.145	-0.161	3.734 4.867
2	M4	Y	-0.161	-0.169	4.867 6
3	M4	Y	-0.169	-0.161	6 7.133
4	M4	Y	-0.161	-0.145	7.133 8.266
5	M12	Y	-1.085	-1.085	6.341 56.18
6	M13	Y	-0.137	-0.614	0 9.094
7	M13	Y	-0.614	-0.844	9.094 18.187
8	M13	Y	-0.844	-1.141	18.187 27.281
9	M13	Y	-1.141	-0.735	27.281 36.374
10	M13	Y	-0.735	-0.024	36.374 45.468
11	M14	Y	-0.137	-0.614	0 9.094
12	M14	Y	-0.614	-0.844	9.094 18.187
13	M14	Y	-0.844	-1.141	18.187 27.281
14	M14	Y	-1.141	-0.735	27.281 36.374

Member Distributed Loads (BLC 49 : BLC 1 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
15	M14	Y	-0.735	-0.024	36.374 45.468
16	M87	Y	-0.04	-2.037	43.377 52.053
17	M87	Y	-2.037	-3.164	52.053 60.728
18	M87	Y	-3.164	-1.818	60.728 69.404
19	M87	Y	-1.818	-0.94	69.404 78.079
20	M87	Y	-0.94	-0.136	78.079 86.755
21	M71	Y	-0.145	-0.161	3.734 4.867
22	M71	Y	-0.161	-0.169	4.867 6
23	M71	Y	-0.169	-0.161	6 7.133
24	M71	Y	-0.161	-0.145	7.133 8.266
25	M72	Y	-1.085	-1.085	6.341 56.179
26	M73	Y	-0.137	-0.614	0 9.094
27	M73	Y	-0.614	-0.844	9.094 18.187
28	M73	Y	-0.844	-1.141	18.187 27.281
29	M73	Y	-1.141	-0.735	27.281 36.374
30	M73	Y	-0.735	-0.024	36.374 45.468
31	M74	Y	-0.137	-0.614	0 9.094
32	M74	Y	-0.614	-0.843	9.094 18.187
33	M74	Y	-0.843	-1.14	18.187 27.281
34	M74	Y	-1.14	-0.735	27.281 36.374
35	M74	Y	-0.735	-0.024	36.374 45.468
36	M75	Y	-0.04	-2.038	43.377 52.053
37	M75	Y	-2.038	-3.165	52.053 60.728
38	M75	Y	-3.165	-1.818	60.728 69.404
39	M75	Y	-1.818	-0.94	69.404 78.079
40	M75	Y	-0.94	-0.136	78.079 86.755
41	M33	Y	-0.04	-2.037	43.377 52.053
42	M33	Y	-2.037	-3.164	52.053 60.728
43	M33	Y	-3.164	-1.818	60.728 69.404
44	M33	Y	-1.818	-0.94	69.404 78.079
45	M33	Y	-0.94	-0.136	78.079 86.755
46	M35	Y	-0.145	-0.161	3.734 4.867
47	M35	Y	-0.161	-0.169	4.867 6
48	M35	Y	-0.169	-0.161	6 7.133
49	M35	Y	-0.161	-0.145	7.133 8.266
50	M36	Y	-1.085	-1.085	6.341 56.179
51	M37	Y	-0.137	-0.614	0 9.094
52	M37	Y	-0.614	-0.844	9.094 18.187
53	M37	Y	-0.844	-1.141	18.187 27.281
54	M37	Y	-1.141	-0.735	27.281 36.374
55	M37	Y	-0.735	-0.024	36.374 45.468
56	M38	Y	-0.137	-0.614	0 9.094
57	M38	Y	-0.614	-0.844	9.094 18.187
58	M38	Y	-0.844	-1.141	18.187 27.281
59	M38	Y	-1.141	-0.735	27.281 36.374
60	M38	Y	-0.735	-0.024	36.374 45.468

Member Distributed Loads (BLC 50 : BLC 16 Transient Area Loads)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
1	M71	Y	-1.463	-1.316	7.133 8.266
2	M72	Y	-9.854	-9.854	6.341 56.179
3	M73	Y	-1.243	-5.581	0 9.094
4	M73	Y	-5.581	-7.672	9.094 18.187
5	M73	Y	-7.672	-10.369	18.187 27.281
6	M73	Y	-10.369	-6.681	27.281 36.374

Member Distributed Loads (BLC 50 : BLC 16 Transient Area Loads) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, psf, lb-ft/in]	End Magnitude [lb/ft, F, psf, lb-ft/in]	Start Location [(in, %)]	End Location [(in, %)]
7	M73	Y	-6.681	-0.217	36.374 45.468
8	M74	Y	-1.243	-5.581	0 9.094
9	M74	Y	-5.581	-7.662	9.094 18.187
10	M74	Y	-7.662	-10.356	18.187 27.281
11	M74	Y	-10.356	-6.677	27.281 36.374
12	M74	Y	-6.677	-0.217	36.374 45.468
13	M75	Y	-0.365	-18.513	43.377 52.053
14	M75	Y	-18.513	-28.754	52.053 60.728
15	M75	Y	-28.754	-16.519	60.728 69.404
16	M75	Y	-16.519	-8.539	69.404 78.079
17	M75	Y	-8.539	-1.234	78.079 86.755
18	M33	Y	-0.365	-18.504	43.377 52.053
19	M33	Y	-18.504	-28.744	52.053 60.728
20	M33	Y	-28.744	-16.519	60.728 69.404
21	M33	Y	-16.519	-8.539	69.404 78.079
22	M33	Y	-8.539	-1.233	78.079 86.755
23	M35	Y	-1.317	-1.463	3.734 4.867
24	M35	Y	-1.463	-1.537	4.867 6
25	M35	Y	-1.537	-1.463	6 7.133
26	M35	Y	-1.463	-1.316	7.133 8.266
27	M36	Y	-9.855	-9.855	6.341 56.179
28	M37	Y	-1.243	-5.581	0 9.094
29	M37	Y	-5.581	-7.67	9.094 18.187
30	M37	Y	-7.67	-10.367	18.187 27.281
31	M37	Y	-10.367	-6.68	27.281 36.374
32	M37	Y	-6.68	-0.217	36.374 45.468
33	M38	Y	-1.244	-5.581	0 9.094
34	M38	Y	-5.581	-7.67	9.094 18.187
35	M38	Y	-7.67	-10.367	18.187 27.281
36	M38	Y	-10.367	-6.68	27.281 36.374
37	M38	Y	-6.68	-0.217	36.374 45.468
38	M4	Y	-1.316	-1.463	3.734 4.867
39	M4	Y	-1.463	-1.537	4.867 6
40	M4	Y	-1.537	-1.463	6 7.133
41	M4	Y	-1.463	-1.316	7.133 8.266
42	M12	Y	-9.854	-9.854	6.341 56.18
43	M13	Y	-1.243	-5.581	0 9.094
44	M13	Y	-5.581	-7.67	9.094 18.187
45	M13	Y	-7.67	-10.367	18.187 27.281
46	M13	Y	-10.367	-6.68	27.281 36.374
47	M13	Y	-6.68	-0.217	36.374 45.468
48	M14	Y	-1.243	-5.581	0 9.094
49	M14	Y	-5.581	-7.67	9.094 18.187
50	M14	Y	-7.67	-10.367	18.187 27.281
51	M14	Y	-10.367	-6.68	27.281 36.374
52	M14	Y	-6.68	-0.217	36.374 45.468
53	M87	Y	-0.365	-18.503	43.377 52.053
54	M87	Y	-18.503	-28.744	52.053 60.728
55	M87	Y	-28.744	-16.519	60.728 69.404
56	M87	Y	-16.519	-8.539	69.404 78.079
57	M87	Y	-8.539	-1.234	78.079 86.755
58	M71	Y	-1.316	-1.463	3.734 4.867
59	M71	Y	-1.463	-1.537	4.867 6
60	M71	Y	-1.537	-1.463	6 7.133

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	1.4DL	Yes	Y	1	1.4								
2	1.2DL + 1WL AZI 0	Yes	Y	1	1.2	2	1	14	1	15			
3	1.2DL + 1WL AZI 30	Yes	Y	1	1.2	3	1	14	0.866	15	0.5		
4	1.2DL + 1WL AZI 60	Yes	Y	1	1.2	4	1	14	0.5	15	0.866		
5	1.2DL + 1WL AZI 90	Yes	Y	1	1.2	5	1	14		15	1		
6	1.2DL + 1WL AZI 120	Yes	Y	1	1.2	6	1	14	-0.5	15	0.866		
7	1.2DL + 1WL AZI 150	Yes	Y	1	1.2	7	1	14	-0.866	15	0.5		
8	1.2DL + 1WL AZI 180	Yes	Y	1	1.2	8	1	14	-1	15			
9	1.2DL + 1WL AZI 210	Yes	Y	1	1.2	9	1	14	-0.866	15	-0.5		
10	1.2DL + 1WL AZI 240	Yes	Y	1	1.2	10	1	14	-0.5	15	-0.866		
11	1.2DL + 1WL AZI 270	Yes	Y	1	1.2	11	1	14		15	-1		
12	1.2DL + 1WL AZI 300	Yes	Y	1	1.2	12	1	14	0.5	15	-0.866		
13	1.2DL + 1WL AZI 330	Yes	Y	1	1.2	13	1	14	0.866	15	-0.5		
14	0.9DL + 1WL AZI 0	Yes	Y	1	0.9	2	1	14	1	15			
15	0.9DL + 1WL AZI 30	Yes	Y	1	0.9	3	1	14	0.866	15	0.5		
16	0.9DL + 1WL AZI 60	Yes	Y	1	0.9	4	1	14	0.5	15	0.866		
17	0.9DL + 1WL AZI 90	Yes	Y	1	0.9	5	1	14		15	1		
18	0.9DL + 1WL AZI 120	Yes	Y	1	0.9	6	1	14	-0.5	15	0.866		
19	0.9DL + 1WL AZI 150	Yes	Y	1	0.9	7	1	14	-0.866	15	0.5		
20	0.9DL + 1WL AZI 180	Yes	Y	1	0.9	8	1	14	-1	15			
21	0.9DL + 1WL AZI 210	Yes	Y	1	0.9	9	1	14	-0.866	15	-0.5		
22	0.9DL + 1WL AZI 240	Yes	Y	1	0.9	10	1	14	-0.5	15	-0.866		
23	0.9DL + 1WL AZI 270	Yes	Y	1	0.9	11	1	14		15	-1		
24	0.9DL + 1WL AZI 300	Yes	Y	1	0.9	12	1	14	0.5	15	-0.866		
25	0.9DL + 1WL AZI 330	Yes	Y	1	0.9	13	1	14	0.866	15	-0.5		
26	1.2D + 1.0Di	Yes	Y	1	1.2	16	1						
27	1.2D + 1.0Di + 1.0Wi AZI 0	Yes	Y	1	1.2	16	1	17	1	29	1	30	
28	1.2D + 1.0Di + 1.0Wi AZI 30	Yes	Y	1	1.2	16	1	18	1	29	0.866	30	0.5
29	1.2D + 1.0Di + 1.0Wi AZI 60	Yes	Y	1	1.2	16	1	19	1	29	0.5	30	0.866
30	1.2D + 1.0Di + 1.0Wi AZI 90	Yes	Y	1	1.2	16	1	20	1	29		30	1
31	1.2D + 1.0Di + 1.0Wi AZI 120	Yes	Y	1	1.2	16	1	21	1	29	-0.5	30	0.866
32	1.2D + 1.0Di + 1.0Wi AZI 150	Yes	Y	1	1.2	16	1	22	1	29	-0.866	30	0.5
33	1.2D + 1.0Di + 1.0Wi AZI 180	Yes	Y	1	1.2	16	1	23	1	29	-1	30	
34	1.2D + 1.0Di + 1.0Wi AZI 210	Yes	Y	1	1.2	16	1	24	1	29	-0.866	30	-0.5
35	1.2D + 1.0Di + 1.0Wi AZI 240	Yes	Y	1	1.2	16	1	25	1	29	-0.5	30	-0.866
36	1.2D + 1.0Di + 1.0Wi AZI 270	Yes	Y	1	1.2	16	1	26	1	29		30	-1
37	1.2D + 1.0Di + 1.0Wi AZI 300	Yes	Y	1	1.2	16	1	27	1	29	0.5	30	-0.866
38	1.2D + 1.0Di + 1.0Wi AZI 330	Yes	Y	1	1.2	16	1	28	1	29	0.866	30	-0.5
39	(1.2 + 0.2Sds)DL + 1.0E AZI 0	Yes	Y	1	1.239	31	1	32					
40	(1.2 + 0.2Sds)DL + 1.0E AZI 30	Yes	Y	1	1.239	31	0.866	32	0.5				
41	(1.2 + 0.2Sds)DL + 1.0E AZI 60	Yes	Y	1	1.239	31	0.5	32	0.866				
42	(1.2 + 0.2Sds)DL + 1.0E AZI 90	Yes	Y	1	1.239	31		32	1				
43	(1.2 + 0.2Sds)DL + 1.0E AZI 120	Yes	Y	1	1.239	31	-0.5	32	0.866				
44	(1.2 + 0.2Sds)DL + 1.0E AZI 150	Yes	Y	1	1.239	31	-0.866	32	0.5				
45	(1.2 + 0.2Sds)DL + 1.0E AZI 180	Yes	Y	1	1.239	31	-1	32					
46	(1.2 + 0.2Sds)DL + 1.0E AZI 210	Yes	Y	1	1.239	31	-0.866	32	-0.5				
47	(1.2 + 0.2Sds)DL + 1.0E AZI 240	Yes	Y	1	1.239	31	-0.5	32	-0.866				
48	(1.2 + 0.2Sds)DL + 1.0E AZI 270	Yes	Y	1	1.239	31		32	-1				
49	(1.2 + 0.2Sds)DL + 1.0E AZI 300	Yes	Y	1	1.239	31	0.5	32	-0.866				
50	(1.2 + 0.2Sds)DL + 1.0E AZI 330	Yes	Y	1	1.239	31	0.866	32	-0.5				
51	(0.9 - 0.2Sds)DL + 1.0E AZI 0	Yes	Y	1	0.861	31	1	32					
52	(0.9 - 0.2Sds)DL + 1.0E AZI 30	Yes	Y	1	0.861	31	0.866	32	0.5				
53	(0.9 - 0.2Sds)DL + 1.0E AZI 60	Yes	Y	1	0.861	31	0.5	32	0.866				
54	(0.9 - 0.2Sds)DL + 1.0E AZI 90	Yes	Y	1	0.861	31		32	1				
55	(0.9 - 0.2Sds)DL + 1.0E AZI 120	Yes	Y	1	0.861	31	-0.5	32	0.866				

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
56	(0.9 - 0.2Sds)DL + 1.0E AZI 150	Yes	Y	1	0.861	31	-0.866	32	0.5				
57	(0.9 - 0.2Sds)DL + 1.0E AZI 180	Yes	Y	1	0.861	31	-1	32					
58	(0.9 - 0.2Sds)DL + 1.0E AZI 210	Yes	Y	1	0.861	31	-0.866	32	-0.5				
59	(0.9 - 0.2Sds)DL + 1.0E AZI 240	Yes	Y	1	0.861	31	-0.5	32	-0.866				
60	(0.9 - 0.2Sds)DL + 1.0E AZI 270	Yes	Y	1	0.861	31		32	-1				
61	(0.9 - 0.2Sds)DL + 1.0E AZI 300	Yes	Y	1	0.861	31	0.5	32	-0.866				
62	(0.9 - 0.2Sds)DL + 1.0E AZI 330	Yes	Y	1	0.861	31	0.866	32	-0.5				
63	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 0	Yes	Y	1	1	2	0.23	14	0.23	15		33	1.5
64	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 30	Yes	Y	1	1	3	0.23	14	0.2	15	0.115	33	1.5
65	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 60	Yes	Y	1	1	4	0.23	14	0.115	15	0.2	33	1.5
66	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 90	Yes	Y	1	1	5	0.23	14		15	0.23	33	1.5
67	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 120	Yes	Y	1	1	6	0.23	14	-0.115	15	0.2	33	1.5
68	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 150	Yes	Y	1	1	7	0.23	14	-0.2	15	0.115	33	1.5
69	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 180	Yes	Y	1	1	8	0.23	14	-0.23	15		33	1.5
70	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 210	Yes	Y	1	1	9	0.23	14	-0.2	15	-0.115	33	1.5
71	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 240	Yes	Y	1	1	10	0.23	14	-0.115	15	-0.2	33	1.5
72	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 270	Yes	Y	1	1	11	0.23	14		15	-0.23	33	1.5
73	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 300	Yes	Y	1	1	12	0.23	14	0.115	15	-0.2	33	1.5
74	1.0DL + 1.5LL + 1.0SWL (60 mph) AZI 330	Yes	Y	1	1	13	0.23	14	0.2	15	-0.115	33	1.5
75	1.2DL + 1.5LL	Yes	Y	1	1.2	33	1.5						
76	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	34	1.5	2	0.058	14	0.058	15	
77	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	34	1.5	3	0.058	14	0.05	15	0.029
78	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	34	1.5	4	0.058	14	0.029	15	0.05
79	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	34	1.5	5	0.058	14		15	0.058
80	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	34	1.5	6	0.058	14	-0.029	15	0.05
81	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	34	1.5	7	0.058	14	-0.05	15	0.029
82	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	34	1.5	8	0.058	14	-0.058	15	
83	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	34	1.5	9	0.058	14	-0.05	15	-0.029
84	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	34	1.5	10	0.058	14	-0.029	15	-0.05
85	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	34	1.5	11	0.058	14		15	-0.058
86	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	34	1.5	12	0.058	14	0.029	15	-0.05
87	1.2DL + 1.5LM-MP1 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	34	1.5	13	0.058	14	0.05	15	-0.029
88	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	35	1.5	2	0.058	14	0.058	15	
89	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	35	1.5	3	0.058	14	0.05	15	0.029
90	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	35	1.5	4	0.058	14	0.029	15	0.05
91	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	35	1.5	5	0.058	14		15	0.058
92	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	35	1.5	6	0.058	14	-0.029	15	0.05
93	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	35	1.5	7	0.058	14	-0.05	15	0.029
94	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	35	1.5	8	0.058	14	-0.058	15	
95	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	35	1.5	9	0.058	14	-0.05	15	-0.029
96	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	35	1.5	10	0.058	14	-0.029	15	-0.05
97	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	35	1.5	11	0.058	14		15	-0.058
98	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	35	1.5	12	0.058	14	0.029	15	-0.05
99	1.2DL + 1.5LM-MP2 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	35	1.5	13	0.058	14	0.05	15	-0.029
100	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	36	1.5	2	0.058	14	0.058	15	
101	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	36	1.5	3	0.058	14	0.05	15	0.029
102	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	36	1.5	4	0.058	14	0.029	15	0.05
103	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	36	1.5	5	0.058	14		15	0.058
104	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	36	1.5	6	0.058	14	-0.029	15	0.05
105	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	36	1.5	7	0.058	14	-0.05	15	0.029
106	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	36	1.5	8	0.058	14	-0.058	15	
107	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	36	1.5	9	0.058	14	-0.05	15	-0.029
108	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	36	1.5	10	0.058	14	-0.029	15	-0.05
109	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	36	1.5	11	0.058	14		15	-0.058
110	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	36	1.5	12	0.058	14	0.029	15	-0.05

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
111	1.2DL + 1.5LM-MP3 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	36	1.5	13	0.058	14	0.05	15	-0.029
112	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	37	1.5	2	0.058	14	0.058	15	
113	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	37	1.5	3	0.058	14	0.05	15	0.029
114	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	37	1.5	4	0.058	14	0.029	15	0.05
115	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	37	1.5	5	0.058	14		15	0.058
116	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	37	1.5	6	0.058	14	-0.029	15	0.05
117	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	37	1.5	7	0.058	14	-0.05	15	0.029
118	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	37	1.5	8	0.058	14	-0.058	15	
119	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	37	1.5	9	0.058	14	-0.05	15	-0.029
120	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	37	1.5	10	0.058	14	-0.029	15	-0.05
121	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	37	1.5	11	0.058	14		15	-0.058
122	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	37	1.5	12	0.058	14	0.029	15	-0.05
123	1.2DL + 1.5LM-MP4 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	37	1.5	13	0.058	14	0.05	15	-0.029
124	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	38	1.5	2	0.058	14	0.058	15	
125	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	38	1.5	3	0.058	14	0.05	15	0.029
126	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	38	1.5	4	0.058	14	0.029	15	0.05
127	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	38	1.5	5	0.058	14		15	0.058
128	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	38	1.5	6	0.058	14	-0.029	15	0.05
129	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	38	1.5	7	0.058	14	-0.05	15	0.029
130	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	38	1.5	8	0.058	14	-0.058	15	
131	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	38	1.5	9	0.058	14	-0.05	15	-0.029
132	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	38	1.5	10	0.058	14	-0.029	15	-0.05
133	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	38	1.5	11	0.058	14		15	-0.058
134	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	38	1.5	12	0.058	14	0.029	15	-0.05
135	1.2DL + 1.5LM-MP5 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	38	1.5	13	0.058	14	0.05	15	-0.029
136	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	39	1.5	2	0.058	14	0.058	15	
137	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	39	1.5	3	0.058	14	0.05	15	0.029
138	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	39	1.5	4	0.058	14	0.029	15	0.05
139	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	39	1.5	5	0.058	14		15	0.058
140	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	39	1.5	6	0.058	14	-0.029	15	0.05
141	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	39	1.5	7	0.058	14	-0.05	15	0.029
142	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	39	1.5	8	0.058	14	-0.058	15	
143	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	39	1.5	9	0.058	14	-0.05	15	-0.029
144	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	39	1.5	10	0.058	14	-0.029	15	-0.05
145	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	39	1.5	11	0.058	14		15	-0.058
146	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	39	1.5	12	0.058	14	0.029	15	-0.05
147	1.2DL + 1.5LM-MP6 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	39	1.5	13	0.058	14	0.05	15	-0.029
148	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	40	1.5	2	0.058	14	0.058	15	
149	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	40	1.5	3	0.058	14	0.05	15	0.029
150	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	40	1.5	4	0.058	14	0.029	15	0.05
151	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	40	1.5	5	0.058	14		15	0.058
152	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	40	1.5	6	0.058	14	-0.029	15	0.05
153	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	40	1.5	7	0.058	14	-0.05	15	0.029
154	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	40	1.5	8	0.058	14	-0.058	15	
155	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	40	1.5	9	0.058	14	-0.05	15	-0.029
156	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	40	1.5	10	0.058	14	-0.029	15	-0.05
157	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	40	1.5	11	0.058	14		15	-0.058
158	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	40	1.5	12	0.058	14	0.029	15	-0.05
159	1.2DL + 1.5LM-MP7 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	40	1.5	13	0.058	14	0.05	15	-0.029
160	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	41	1.5	2	0.058	14	0.058	15	
161	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	41	1.5	3	0.058	14	0.05	15	0.029
162	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	41	1.5	4	0.058	14	0.029	15	0.05
163	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	41	1.5	5	0.058	14		15	0.058
164	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	41	1.5	6	0.058	14	-0.029	15	0.05
165	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	41	1.5	7	0.058	14	-0.05	15	0.029

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
166	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	41	1.5	8	0.058	14	-0.058	15	
167	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	41	1.5	9	0.058	14	-0.05	15	-0.029
168	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	41	1.5	10	0.058	14	-0.029	15	-0.05
169	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	41	1.5	11	0.058	14		15	-0.058
170	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	41	1.5	12	0.058	14	0.029	15	-0.05
171	1.2DL + 1.5LM-MP8 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	41	1.5	13	0.058	14	0.05	15	-0.029
172	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	42	1.5	2	0.058	14	0.058	15	
173	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	42	1.5	3	0.058	14	0.05	15	0.029
174	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	42	1.5	4	0.058	14	0.029	15	0.05
175	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	42	1.5	5	0.058	14		15	0.058
176	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	42	1.5	6	0.058	14	-0.029	15	0.05
177	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	42	1.5	7	0.058	14	-0.05	15	0.029
178	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	42	1.5	8	0.058	14	-0.058	15	
179	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	42	1.5	9	0.058	14	-0.05	15	-0.029
180	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	42	1.5	10	0.058	14	-0.029	15	-0.05
181	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	42	1.5	11	0.058	14		15	-0.058
182	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	42	1.5	12	0.058	14	0.029	15	-0.05
183	1.2DL + 1.5LM-MP9 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	42	1.5	13	0.058	14	0.05	15	-0.029
184	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	43	1.5	2	0.058	14	0.058	15	
185	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	43	1.5	3	0.058	14	0.05	15	0.029
186	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	43	1.5	4	0.058	14	0.029	15	0.05
187	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	43	1.5	5	0.058	14		15	0.058
188	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	43	1.5	6	0.058	14	-0.029	15	0.05
189	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	43	1.5	7	0.058	14	-0.05	15	0.029
190	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	43	1.5	8	0.058	14	-0.058	15	
191	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	43	1.5	9	0.058	14	-0.05	15	-0.029
192	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	43	1.5	10	0.058	14	-0.029	15	-0.05
193	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	43	1.5	11	0.058	14		15	-0.058
194	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	43	1.5	12	0.058	14	0.029	15	-0.05
195	1.2DL + 1.5LM-MP10 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	43	1.5	13	0.058	14	0.05	15	-0.029
196	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	44	1.5	2	0.058	14	0.058	15	
197	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	44	1.5	3	0.058	14	0.05	15	0.029
198	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	44	1.5	4	0.058	14	0.029	15	0.05
199	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	44	1.5	5	0.058	14		15	0.058
200	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	44	1.5	6	0.058	14	-0.029	15	0.05
201	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	44	1.5	7	0.058	14	-0.05	15	0.029
202	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	44	1.5	8	0.058	14	-0.058	15	
203	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	44	1.5	9	0.058	14	-0.05	15	-0.029
204	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	44	1.5	10	0.058	14	-0.029	15	-0.05
205	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	44	1.5	11	0.058	14		15	-0.058
206	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	44	1.5	12	0.058	14	0.029	15	-0.05
207	1.2DL + 1.5LM-MP11 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	44	1.5	13	0.058	14	0.05	15	-0.029
208	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	45	1.5	2	0.058	14	0.058	15	
209	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	45	1.5	3	0.058	14	0.05	15	0.029
210	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	45	1.5	4	0.058	14	0.029	15	0.05
211	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	45	1.5	5	0.058	14		15	0.058
212	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	45	1.5	6	0.058	14	-0.029	15	0.05
213	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	45	1.5	7	0.058	14	-0.05	15	0.029
214	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	45	1.5	8	0.058	14	-0.058	15	
215	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	45	1.5	9	0.058	14	-0.05	15	-0.029
216	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	45	1.5	10	0.058	14	-0.029	15	-0.05
217	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	45	1.5	11	0.058	14		15	-0.058
218	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	45	1.5	12	0.058	14	0.029	15	-0.05
219	1.2DL + 1.5LM-MP12 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	45	1.5	13	0.058	14	0.05	15	-0.029
220	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	46	1.5	2	0.058	14	0.058	15	

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
221	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	46	1.5	3	0.058	14	0.05	15	0.029
222	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	46	1.5	4	0.058	14	0.029	15	0.05
223	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	46	1.5	5	0.058	14		15	0.058
224	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	46	1.5	6	0.058	14	-0.029	15	0.05
225	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	46	1.5	7	0.058	14	-0.05	15	0.029
226	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	46	1.5	8	0.058	14	-0.058	15	
227	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	46	1.5	9	0.058	14	-0.05	15	-0.029
228	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	46	1.5	10	0.058	14	-0.029	15	-0.05
229	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	46	1.5	11	0.058	14		15	-0.058
230	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	46	1.5	12	0.058	14	0.029	15	-0.05
231	1.2DL + 1.5LM-MP13 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	46	1.5	13	0.058	14	0.05	15	-0.029
232	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	47	1.5	2	0.058	14	0.058	15	
233	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	47	1.5	3	0.058	14	0.05	15	0.029
234	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	47	1.5	4	0.058	14	0.029	15	0.05
235	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	47	1.5	5	0.058	14		15	0.058
236	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	47	1.5	6	0.058	14	-0.029	15	0.05
237	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	47	1.5	7	0.058	14	-0.05	15	0.029
238	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	47	1.5	8	0.058	14	-0.058	15	
239	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	47	1.5	9	0.058	14	-0.05	15	-0.029
240	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	47	1.5	10	0.058	14	-0.029	15	-0.05
241	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	47	1.5	11	0.058	14		15	-0.058
242	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	47	1.5	12	0.058	14	0.029	15	-0.05
243	1.2DL + 1.5LM-MP14 + 1SWL (30 mph) AZI 330	Yes	Y	1	1.2	47	1.5	13	0.058	14	0.05	15	-0.029
244	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 0	Yes	Y	1	1.2	48	1.5	2	0.058	14	0.058	15	
245	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 30	Yes	Y	1	1.2	48	1.5	3	0.058	14	0.05	15	0.029
246	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 60	Yes	Y	1	1.2	48	1.5	4	0.058	14	0.029	15	0.05
247	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 90	Yes	Y	1	1.2	48	1.5	5	0.058	14		15	0.058
248	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 120	Yes	Y	1	1.2	48	1.5	6	0.058	14	-0.029	15	0.05
249	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 150	Yes	Y	1	1.2	48	1.5	7	0.058	14	-0.05	15	0.029
250	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 180	Yes	Y	1	1.2	48	1.5	8	0.058	14	-0.058	15	
251	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 210	Yes	Y	1	1.2	48	1.5	9	0.058	14	-0.05	15	-0.029
252	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 240	Yes	Y	1	1.2	48	1.5	10	0.058	14	-0.029	15	-0.05
253	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 270	Yes	Y	1	1.2	48	1.5	11	0.058	14		15	-0.058
254	1.2DL + 1.5LM-MP15 + 1SWL (30 mph) AZI 300	Yes	Y	1	1.2	48	1.5	12	0.058	14	0.029	15	-0.05

Envelope Node Reactions

Node Label	X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [lb-ft]	LC	MY [lb-ft]	LC	MZ [lb-ft]	LC		
1	N73	max	1426.374	5	771.026	33	-278.59	84	2069.541	27	3010.807	23	554.32	11
2		min	-1413.979	23	83.403	15	-1785.388	28	-110.857	20	-3036.086	5	-522.724	17
3	N90	max	420.652	17	3435.246	27	4028.062	14	1144.719	27	435.013	4	182.253	17
4		min	-435.072	11	328.112	20	-4018.352	8	-43.172	20	-410.404	22	-211.594	11
5	N167	max	189.686	15	824.52	37	1410.426	3	316.885	14	2391.014	15	91.265	23
6		min	-1698.541	33	71.717	19	-790.585	21	-1063.845	33	-2415.517	9	-1913.296	30
7	N169	max	3576.039	6	3510.944	31	2065.589	13	48.525	22	464.449	9	43.959	25
8		min	-3520.012	12	328.268	24	-2073.714	19	-632.237	30	-439.645	15	-992.399	32
9	N207	max	1584.972	33	771.84	29	1410.886	13	233.823	14	2190.272	19	1763.785	36
10		min	-28.984	25	77.542	23	-791.956	19	-1118.056	33	-2215.937	13	-148.419	17
11	N209	max	3541.138	4	3434.04	35	2064.055	3	65.974	18	475.152	12	1016.544	35
12		min	-3534.347	22	324.539	16	-2073.21	21	-540.58	36	-449.241	18	-53.569	16
13	Totals:	max	8545.635	5	12301.341	31	8675.652	2						
14		min	-8545.624	23	3464.04	61	-8675.648	20						

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

Member	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	Dir	LC	phi*Pnc [lb]	phi*Pnt [lb]	phi*Mn y-y [lb-ft]	phi*Mn z-z [lb-ft]	Cb	Eqn	
1	M81	L2x2x4	0.651	44.65	6	0.02	0	y	31	15176.794	30585.6	690.934	1558.13	1.5	H2-1
2	M32	L2.5x2.5x3	0.642	0	33	0.044	12	y	12	27702.833	29192.4	872.574	1971.83	1.009	H2-1
3	M95	L2x2x4	0.641	44.65	10	0.02	0	y	10	15176.794	30585.6	690.934	1558.13	1.5	H2-1
4	M45	L2x2x4	0.638	44.65	2	0.019	0	y	27	15176.794	30585.6	690.934	1558.13	1.5	H2-1
5	M68	L2.5x2.5x3	0.634	0	37	0.047	12	y	4	27702.833	29192.4	872.574	1971.83	1.006	H2-1
6	CP3	L2.5x2.5x3	0.634	0	30	0.046	12	y	8	27702.833	29192.4	872.574	1971.83	1.031	H2-1
7	HR1	PIPE 2.0	0.52	155.875	2	0.319	16.312		13	31747.067	32130	1871.625	1871.625	1.869	H1-1b
8	M96	PIPE 2.0	0.513	155.875	10	0.317	16.313		9	31747.067	32130	1871.625	1871.625	1.897	H1-1b
9	M56	PIPE 2.0	0.509	155.875	6	0.322	16.313		5	31747.067	32130	1871.625	1871.625	1.865	H1-1b
10	M33	HSS4X4X4	0.241	0	5	0.078	40.666	y	38	112106.978	139518	16180.5	16180.5	2.755	H1-1b
11	M76	SR 3/4	0.234	0	6	0.354	0		6	13646.651	14313.866	178.929	178.929	2.232	H1-1a*
12	M88	SR 3/4	0.231	0	10	0.344	0		10	13646.651	14313.866	178.929	178.929	2.232	H1-1a*
13	M48	SR 3/4	0.23	0	2	0.344	5.646		2	13646.651	14313.866	178.929	178.929	2.232	H1-1a*
14	MP10	PIPE 2.5	0.212	84	12	0.122	84		12	30038.461	50715	3596.25	3596.25	2.851	H1-1b
15	MP2	PIPE 2.5	0.211	84	8	0.127	84		8	30038.461	50715	3596.25	3596.25	1.626	H1-1b
16	M75	HSS4X4X4	0.205	0	9	0.077	40.666	y	30	112106.978	139518	16180.5	16180.5	2.718	H1-1b
17	MP6	PIPE 2.5	0.203	84	4	0.127	84		4	30038.461	50715	3596.25	3596.25	3	H1-1b
18	M87	HSS4X4X4	0.19	0	13	0.079	40.666	y	34	112106.978	139518	16180.5	16180.5	2.792	H1-1b
19	M12	HSS4X4X4	0.188	31.26	34	0.055	58.613	y	13	124535.636	139518	16180.5	16180.5	1.341	H1-1b
20	M36	HSS4X4X4	0.187	31.26	38	0.057	58.613	y	5	124535.636	139518	16180.5	16180.5	1.34	H1-1b
21	M72	HSS4X4X4	0.186	31.26	30	0.055	58.613	y	9	124535.636	139518	16180.5	16180.5	1.34	H1-1b
22	MP7	PIPE 2.5	0.132	84	4	0.096	84		4	30038.461	50715	3596.25	3596.25	2.144	H1-1b
23	HOR1	HSS3.5X3.5X4	0.132	54.375	5	0.094	119.625	z	8	37607.277	120474	12075	12075	2.145	H1-1b
24	MP3	PIPE 2.5	0.131	84	8	0.101	84		8	30038.461	50715	3596.25	3596.25	1.923	H1-1b
25	M101	PIPE 2.0	0.126	79.203	5	0.049	79.203		12	19057.821	32130	1871.625	1871.625	1.136	H1-1b*
26	M83	PIPE 2.0	0.125	79.203	13	0.049	79.203		8	19057.821	32130	1871.625	1871.625	1.136	H1-1b*
27	M43	PIPE 2.0	0.124	79.203	9	0.047	79.203		4	19057.821	32130	1871.625	1871.625	1.136	H1-1b*
28	MP12	PIPE 2.5	0.123	12	12	0.071	84		30	30038.461	50715	3596.25	3596.25	1.359	H1-1b
29	MP11	PIPE 2.5	0.123	84	12	0.101	84		12	30038.461	50715	3596.25	3596.25	2.435	H1-1b
30	MP4	PIPE 2.5	0.121	12	8	0.071	84		38	30038.461	50715	3596.25	3596.25	1.078	H1-1b
31	M98	PIPE 2.0	0.121	78.491	2	0.061	78.491		8	19236.746	32130	1871.625	1871.625	1.136	H1-1b*
32	M82	PIPE 2.0	0.119	78.491	10	0.06	78.491		4	19236.746	32130	1871.625	1871.625	1.136	H1-1b*
33	M42	PIPE 2.0	0.118	78.491	6	0.058	78.491		12	19236.746	32130	1871.625	1871.625	1.136	H1-1b*
34	M57	HSS3.5X3.5X4	0.116	54.375	9	0.094	119.625	z	12	37607.277	120474	12075	12075	2.144	H1-1b
35	MP1	PIPE 2.5	0.115	84	11	0.066	84		29	30038.461	50715	3596.25	3596.25	1.752	H1-1b
36	MP8	PIPE 2.5	0.114	12	4	0.072	84		34	30038.461	50715	3596.25	3596.25	1.821	H1-1b
37	M97	HSS3.5X3.5X4	0.113	54.375	13	0.091	119.625	y	4	37607.277	120474	12075	12075	2.123	H1-1b
38	M37	L2x2x2	0.111	50.52	38	0.009	50.52	z	38	6606.013	15908.4	402.563	720.708	1.5	H2-1
39	M14	L2x2x2	0.11	50.52	34	0.009	50.52	z	34	6606.013	15908.4	402.563	720.708	1.5	H2-1
40	MP5	PIPE 2.5	0.109	84	7	0.066	84		36	30038.461	50715	3596.25	3596.25	1.777	H1-1b
41	M73	L2x2x2	0.109	50.52	30	0.009	50.52	z	30	6606.013	15908.4	402.563	720.708	1.5	H2-1
42	MP9	PIPE 2.5	0.107	84	3	0.067	84		33	30038.461	50715	3596.25	3596.25	1.806	H1-1b
43	M38	L2x2x2	0.098	50.52	28	0.009	0	y	34	6606.013	15908.4	402.563	720.708	1.5	H2-1
44	M13	L2x2x2	0.098	50.52	11	0.009	0	y	30	6606.013	15908.4	402.563	720.708	1.5	H2-1
45	M74	L2x2x2	0.098	50.52	32	0.009	0	y	28	6606.013	15908.4	402.563	720.708	1.5	H2-1
46	MP13	PIPE 2.0	0.088	18	6	0.022	18		6	28843.414	32130	1871.625	1871.625	1.887	H1-1b
47	MP15	PIPE 2.0	0.047	18	10	0.012	18		10	28843.414	32130	1871.625	1871.625	1.857	H1-1b
48	MP14	PIPE 2.0	0.047	18	2	0.012	18		3	28843.414	32130	1871.625	1871.625	1	H1-1b

Material Take-Off

	Material	Size	Pieces	Length[in]	Weight[K]
1	General Members				
2	RIGID		45	171	0
3	Total General		45	171	0

Material Take-Off (Continued)

	Material	Size	Pieces	Length[in]	Weight[K]
4					
5	Hot Rolled Steel				
6	A36 Gr.36	L2x2x2	6	303.1	0.042
7	A36 Gr.36	L2.5x2.5x3	3	36	0.009
8	A36 Gr.36	L2x2x4	3	133.9	0.036
9	A36 Gr.36	SR 3/4	3	16.9	0.002
10	A500 Gr.B Rect	HSS3.5X3.5X4	3	522	0.463
11	A500 Gr.B Rect	HSS4X4X4	6	447.8	0.46
12	A53 Gr.B	PIPE_2.0	12	1103.1	0.319
13	A53 Gr.B	PIPE_2.5	12	1152	0.526
14	Total HR Steel		48	3714.9	1.858

APPENDIX D
ADDITIONAL CALCUATIONS

Bolt Calculation Tool, V1.5.1

PROJECT DATA	
Site Name:	HRT 100 943239
Site Number:	806376
Connection Description:	Mount to Tower

MAXIMUM BOLT LOADS		
Bolt Tension:	3650.61	lbs
Bolt Shear:	721.33	lbs

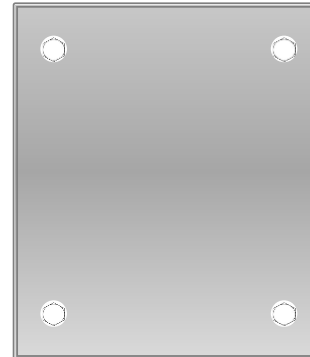
WORST CASE BOLT LOADS ¹		
Bolt Tension:	3650.61	lbs
Bolt Shear:	641.22	lbs

BOLT PROPERTIES		
Bolt Type:	Bolt	-
Bolt Diameter:	0.625	in
Bolt Grade:	A325	-
# of Bolts:	4	-
Threads Excluded?	No	-

¹ Worst case bolt loads correspond to Load combination #5 on member M33 in RISA-3D, which causes the maximum demand on the bolts.

Member Information
I nodes of M33, M75, M87

BOLT CHECK		
Tensile Strength	20340.15	
Shear Strength	13805.83	
Max Tensile Usage	17.9%	
Max Shear Usage	5.2%	
Interaction Check (Worst Case)	0.03	≤1.05
Result	Pass	



Bolt Calculation Tool, V1.5.1

PROJECT DATA	
Site Name:	HRT 100 943239
Site Number:	806376
Connection Description:	Reinforcements to Tower

MAXIMUM BOLT LOADS		
Bolt Tension:	2058.32	lbs
Bolt Shear:	904.29	lbs

WORST CASE BOLT LOADS ¹		
Bolt Tension:	2058.32	lbs
Bolt Shear:	494.54	lbs

BOLT PROPERTIES		
Bolt Type:	Bolt	-
Bolt Diameter:	0.625	in
Bolt Grade:	A325	-
# of Bolts:	4	-
Threads Excluded?	No	-

¹ Worst case bolt loads correspond to Load combination #11 on member M94 in RISA-3D, which causes the maximum demand on the bolts.

Member Information
J nodes of M44, M80, M94

BOLT CHECK		
Tensile Strength	20340.15	
Shear Strength	13805.83	
Max Tensile Usage	10.1%	
Max Shear Usage	6.6%	
Interaction Check (Worst Case)	0.01	≤1.05
Result	Pass	

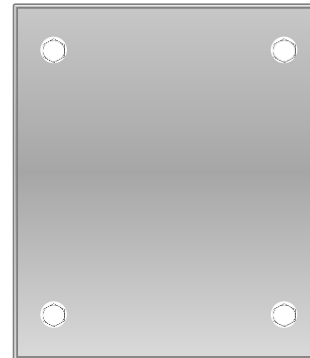


Exhibit F

Power Density/RF Emissions Report

Radio Frequency Safety Survey Report Predictive (RFSSRP) Prepared For AT&T



Site Name:	EAST HARTFORD SOUTH
FA#	10090919
USID:	25922
Site ID:	CTL05276
Address:	1455 FORBES AVENUE EAST HARTFORD, CT 06118
County:	HARTFORD
Latitude:	41.7313919
Longitude:	-72.6080989
Structure Type:	MONOPOLE
Property Owner:	CROWN ATLANTIC COMPANY, LLC
Pace Job:	MRCTB051704
RFDS Technology:	5G NR 1SR CBAND

Report Information

Report Writer: Sunita

Report Generated Date: 05-17-2022

Compliance Statement

AT&T Mobility Compliance Statement: Based on the information collected, AT&T Mobility will be Compliant when the remediation recommended in section 5 or appropriate remediation determined by AT&T is implemented



Table of Contents

1. Executive Summary	3
1.1 Site Summary	3
1.2 Signage Summary (Proposed)	3
1.3 List of Documents used to prepare this Report	3
2. Site Scale Map	4
3. Antenna Inventory	5
4. Predicted Emission	7
4.1 Predictive Cumulative MPE Contribution from All Sources at Antennas Centerline Level (118 ft.)	7
4.2 Predictive Cumulative MPE Contribution from All Sources at Adjacent Building Level (30 ft.)	8
4.3 Predictive Cumulative MPE Contribution from All Sources at Ground Level (0 ft.)	9
5. Statement of Compliance	10
5.1 Statement of AT&T Mobility Compliance	10
Appendix A – Statement of Limiting Conditions	12
Appendix B – FCC Guidelines and Emissions Threshold Limits	13
Appendix C – Rules & Regulations	15
Appendix D – General Safety Recommendations	16
Appendix E – References	17
Appendix F – Proprietary Statement	20

1. Executive Summary

1.1 Site Summary

Max Predictive Spatial Average MPE% & Location on Site (General Public)	459546% on Antennas Centerline Level & at AT&T Sec-A antenna no. #A3-2
Max Predictive Spatial Average MPE% at Ground Level (General Public)	1.5%
AT&T Mobility Site Compliance	AT&T Mobility will be Compliant by implementing remediation recommended as per section 5 in this report.

TABLE 1: Site Summary

1.2 Signage Summary (Proposed)

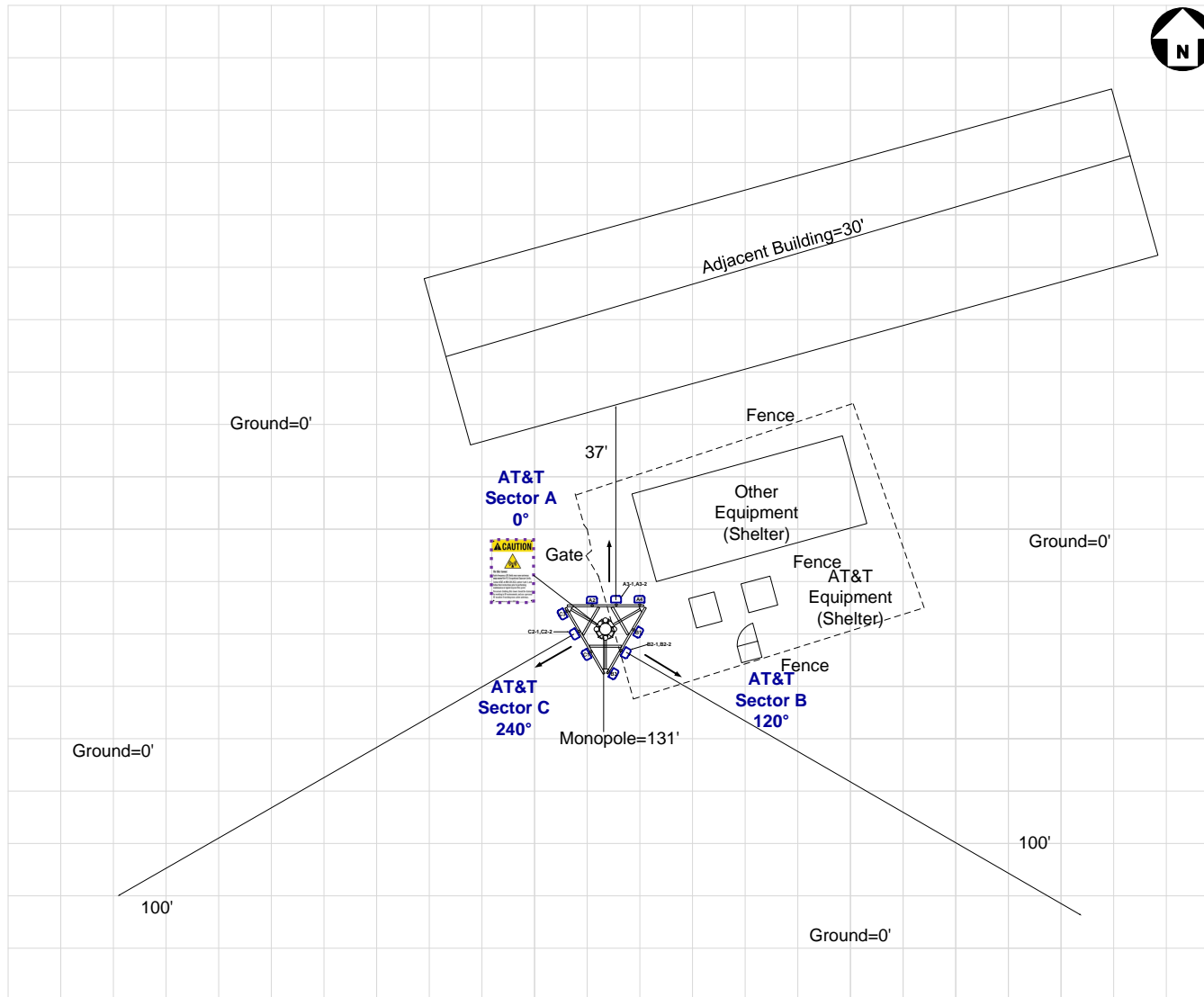
AT&T Signage Locations	Sign Type									
	Safety Instructions	Notice Sign 2	Caution Sign 2	Caution Sign 2B	Caution Sign 2C	Caution 7"x7"	Warning Sign 1B	RF Exposure Map	Lock	Barriers
Access Point(s)				1						
Alpha										
Beta										
Gamma										

TABLE 2: Signage Summary (Proposed)

1.3 List of Documents used to prepare this Report

- 806376_556524 CD
- 806376_556524 RFDS

2. Site Scale Map



AT&T Antenna		Proposed										Map Scale = 10 ft	
	Panel		Barrier										
	OMNI		Posts										

3. Antenna Inventory

Ant ID	Operator	Antenna Mfg	Antenna Model	Antenna Type	FREQ. (MHz)	TECH.	AZ. (0)	H B W (0)	Antenna Gain (dBd)	Antenna Aperture (ft)	Transmitter Power (Watts)	Total Loss (dB)	Total ERP (Watts)	Total EIRP (Watts)
A2	AT&T	Quintel	QD6616-7	Panel	700	LTE(FN)	0	71	12.05	6	120.00	0.5	1714.67	2813.07
A2	AT&T	Quintel	QD6616-7	Panel	700	LTE(B29)	0	71	12.05	6	60.00	0.5	857.34	1406.54
A2	AT&T	Quintel	QD6616-7	Panel	1900	LTE/5G	0	67	15.05	6	120.00	0.5	3421.22	5612.82
A2	AT&T	Quintel	QD6616-7	Panel	2100	LTE/5G	0	62	15.55	6	120.00	0.5	3838.67	6297.69
A3-1	AT&T	Ericsson	AIR 6419 B77G^	Panel	3450	5G	0	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
A3-2	AT&T	Ericsson	AIR 6449 B77D^	Panel	3840	5G	0	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
A4	AT&T	CCI	DMP65R-BU6D	Panel	700	LTE	0	74	11.85	6	120.00	0.5	1637.50	2686.47
A4	AT&T	CCI	DMP65R-BU6D	Panel	850	5G	0	63	12.45	6	120.00	0.5	1880.10	3084.47
A4	AT&T	CCI	DMP65R-BU6D	Panel	2300	LTE	0	54	16.25	6	75.00	0.5	2818.78	4624.46
B1	AT&T	Quintel	QD6616-7	Panel	700	LTE(FN)	120	71	12.05	6	120.00	0.5	1714.67	2813.07
B1	AT&T	Quintel	QD6616-7	Panel	700	LTE(B29)	120	71	12.05	6	60.00	0.5	857.34	1406.54
B1	AT&T	Quintel	QD6616-7	Panel	1900	LTE/5G	120	67	15.05	6	120.00	0.5	3421.22	5612.82
B1	AT&T	Quintel	QD6616-7	Panel	2100	LTE/5G	120	62	15.55	6	120.00	0.5	3838.67	6297.69
B2-1	AT&T	Ericsson	AIR 6419 B77G^	Panel	3450	5G	120	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
B2-2	AT&T	Ericsson	AIR 6449 B77D^	Panel	3840	5G	120	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
B3	AT&T	CCI	DMP65R-BU6D	Panel	700	LTE	120	74	11.85	6	120.00	0.5	1637.50	2686.47
B3	AT&T	CCI	DMP65R-BU6D	Panel	850	5G	120	63	12.45	6	120.00	0.5	1880.10	3084.47
B3	AT&T	CCI	DMP65R-BU6D	Panel	2300	LTE	120	54	16.25	6	75.00	0.5	2818.78	4624.46
C1	AT&T	Quintel	QD6616-7	Panel	700	LTE(FN)	240	71	12.05	6	120.00	0.5	1714.67	2813.07
C1	AT&T	Quintel	QD6616-7	Panel	700	LTE(B29)	240	71	12.05	6	60.00	0.5	857.34	1406.54
C1	AT&T	Quintel	QD6616-7	Panel	1900	LTE/5G	240	67	15.05	6	120.00	0.5	3421.22	5612.82
C1	AT&T	Quintel	QD6616-7	Panel	2100	LTE/5G	240	62	15.55	6	120.00	0.5	3838.67	6297.69
C2-1	AT&T	Ericsson	AIR 6419 B77G^	Panel	3450	5G	240	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
C2-2	AT&T	Ericsson	AIR 6449 B77D^	Panel	3840	5G	240	11	23.5	2.55	108.44*	0	24277.05*	39828.68*
C3	AT&T	CCI	DMP65R-BU6D	Panel	700	LTE	240	74	11.85	6	120.00	0.5	1637.50	2686.47
C3	AT&T	CCI	DMP65R-BU6D	Panel	850	5G	240	63	12.45	6	120.00	0.5	1880.10	3084.47
C3	AT&T	CCI	DMP65R-BU6D	Panel	2300	LTE	240	54	16.25	6	75.00	0.5	2818.78	4624.46

Table 3.1: Antenna Inventory Table

Note: ^ **Mechanical Tilt value of "0°" MUST be retained for C-BAND and/or DoD AAS antenna(s) at all times to ensure that "EME (Predictive) Study" shall remain valid.**

* 75% TDD duty Cycle, 1.5dB Power Tolerance & 0.32 Power Reduction factor¹ are used to calculate Transmitter Power & ERP/EIRP

AT&T Proprietary (Internal use Only). Not for use or disclosure outside the AT&T Companies, Except under written agreement. © 2022 AT&T Intellectual property. All rights Reserved.

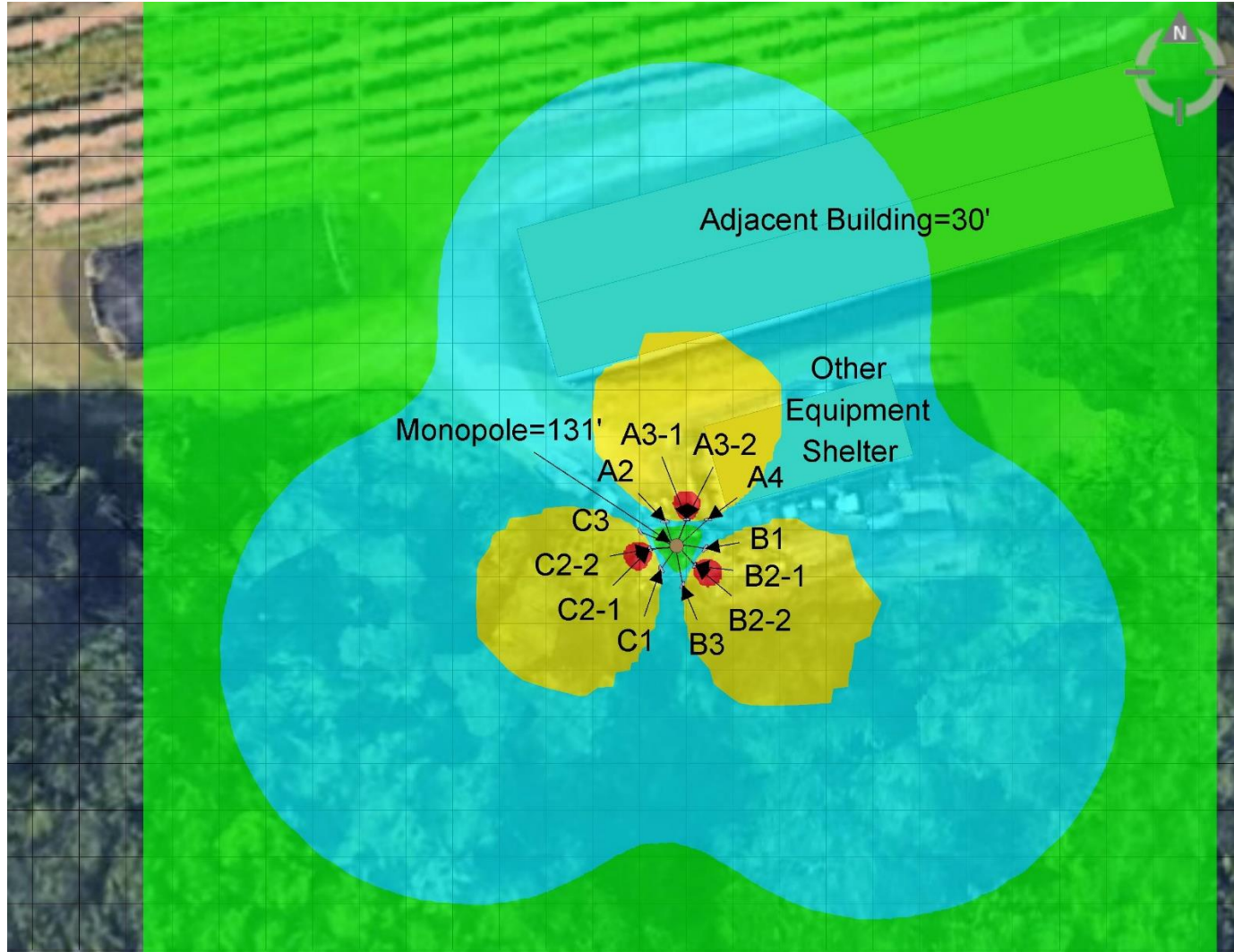
Antenna Heights (Z)

Ant ID	Operator	Antenna Radiation Centerline	Z-Height from Adj. Bldg	Z-Height from Ground
A2	AT&T	120.00	87.00	117.00
A3-1	AT&T	122.00	90.73	120.73
A3-2	AT&T	118.00	86.73	116.73
A4	AT&T	120.00	87.00	117.00
B1	AT&T	120.00	87.00	117.00
B2-1	AT&T	122.00	90.73	120.73
B2-2	AT&T	118.00	86.73	116.73
B3	AT&T	120.00	87.00	117.00
C1	AT&T	120.00	87.00	117.00
C2-1	AT&T	122.00	90.73	120.73
C2-2	AT&T	118.00	86.73	116.73
C3	AT&T	120.00	87.00	117.00

Table 3.2: Antenna Height(s) Summary Table

4. Predicted Emission

4.1 Predictive Cumulative MPE Contribution from All Sources at Antennas Centerline Level (118 ft.)



Max. Predictive Spatial Average MPE% = **459546.0%**

% of FCC General Public Exposure Limit (Predictive Spatial Average)

Proposed Barrier

Proposed Posts

Non-Simulated	0-1	1-100	100-500	500-5000	>5000

Map Scale = 10 ft

4.2 Predictive Cumulative MPE Contribution from All Sources at Adjacent Building Level (30 ft.)



Max. Predictive Spatial Average MPE% = 2.7%

% of FCC General Public Exposure Limit (Predictive Spatial Average)

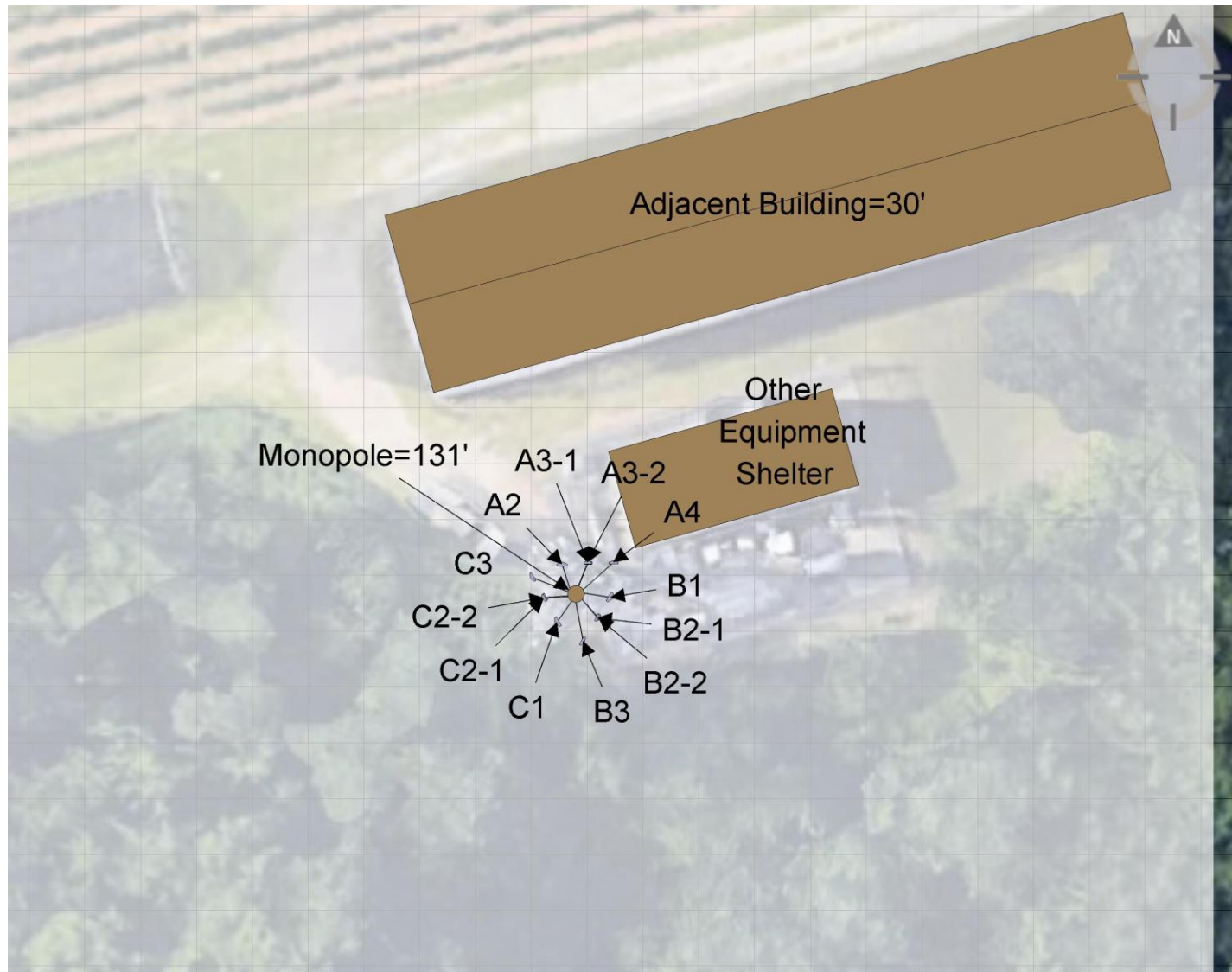
Non-Simulated	0-1	1-100	100-500	500-5000	>5000

Proposed Barrier

Proposed Posts

Map Scale = 10 ft

4.3 Predictive Cumulative MPE Contribution from All Sources at Ground Level (0 ft.)



Max. Predictive Spatial Average MPE% = 1.5%

% of FCC General Public Exposure Limit (Predictive Spatial Average)

Non-Simulated	0-1	1-100	100-500	500-5000	>5000

Proposed Barrier

Proposed Posts

Map Scale = 10 ft

5. Statement of Compliance

5.1 *Statement of AT&T Mobility Compliance*

At the time of our Analysis, AT&T Mobility is required to take action to fulfill their Obligations to comply with the FCC's mandate as defined in OET-65

Recommendations

AT&T Alpha Sector:

- No Action Required

AT&T Beta Sector:

- No Action Required

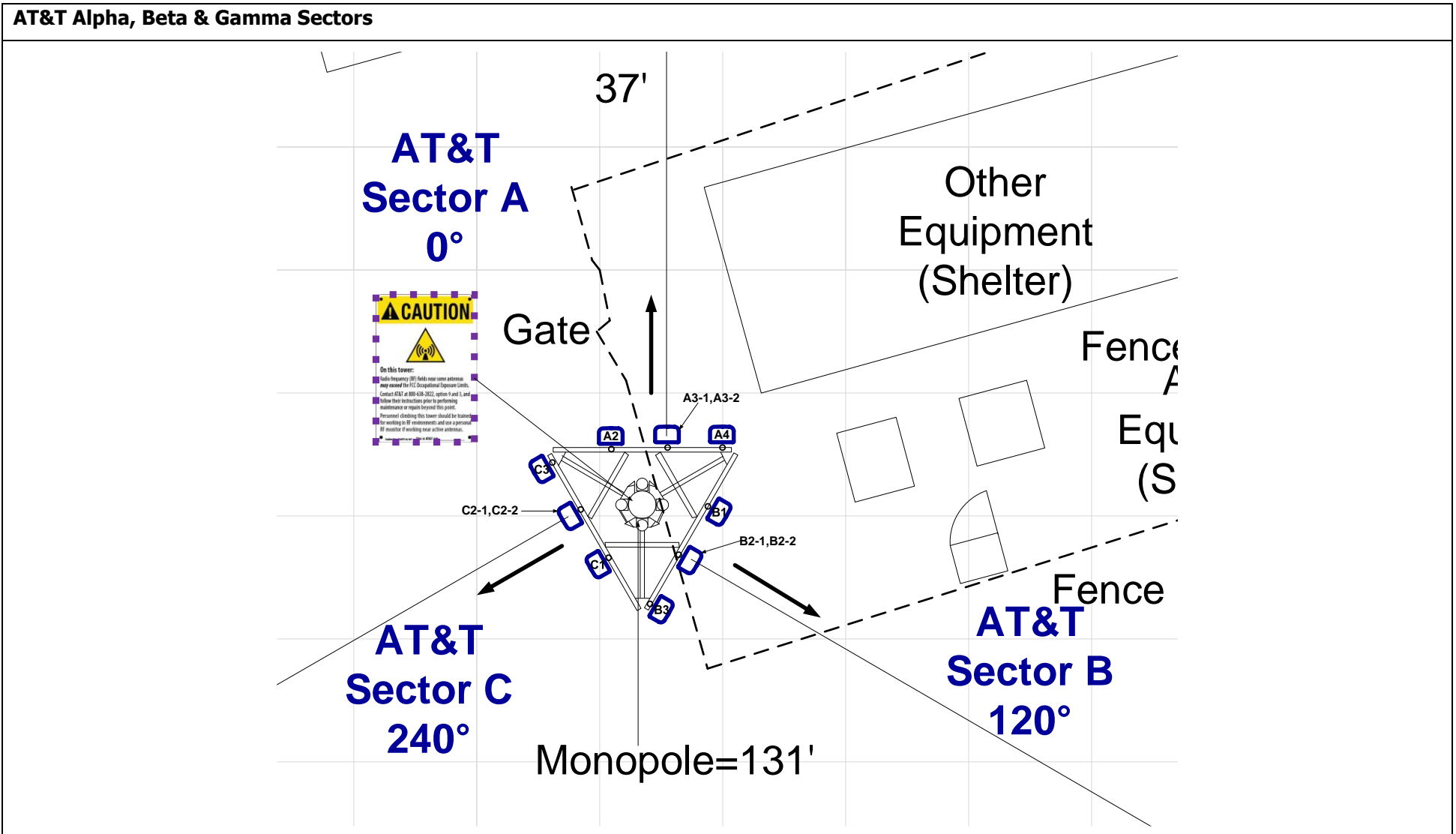
AT&T Gamma Sector:

- No Action Required

Monopole:

- One Caution 2B Sign to be posted on the Monopole at climbing access, facing outwards so approaching people can see as shown in "Recommendations Map – Detailed View" on page 11. (1 Total Sign)

Recommendations Map – Detailed View



AT&T Antenna Panel OMNI		Proposed Barrier Posts		Proposed Signage								Map Scale = 10 ft
		Safety Instructions	Notice 2	Caution 2	Caution 2B	Caution 2C	Caution 7"x7"	Warning 1B	RF Exposure Map	Lock		

Appendix A – Statement of Limiting Conditions

General Model Assumptions

In this site compliance report, it is assumed that all antennas are operating at full power at all times. AT&T has further recommended to assume a 75% duty cycle of maximum radiated power for all LTE & 5G carriers (& consider 100% duty cycle for all UMTS carriers).

In this site compliance report, it is assumed that Mechanical Tilt value of “0°” MUST be retained for C-BAND and/or DoD AAS[^] antenna(s) at all times to ensure that “EME (Predictive) Study” shall remain valid.

AT&T recommended to consider - For C-BAND and/or DoD AAS[^] antenna(s) 75% TDD duty Cycle, 1.5dB Power Tolerance & 0.32 Power Reduction factor¹ are used to calculate Transmitter Power & ERP/EIRP.

AT&T recommended to use worst-case tilts for the simulations.

¹ **Power Reduction Factor:** IEC Standard 62232: 2017 allows for a statistically conservative power density model to more realistically define the RF exposure area. AT&T recommends a “0.32” factor to calculate the “Actual Maximum” (time averaged) power value, which accounts for “Beam Scanning,” “Scheduling,” and “RBS Utilization” This recommended value is a conservative figure modelled and supported by other vendors and through measurements published in scientific articles and white papers by IEEE and others. Those publication are listed below:

1. IEEE Access, *Time-Averaged Realistic Maximum Power Levels for the Assessment of RF Exposure for 5G Radio Base Stations Using Massive MIMO* (Published Sept. 18, 2017 / BJÖRN THORS, ANDERS FURUSKÅR, DAVIDE COLOMBI, AND CHRISTER TÖRNEVIK)
2. IEEE Explore, *A Statistical Approach for RF Exposure Compliance Boundary Assessment in Massive MIMO Systems* (Published Jan. 25, 2018 / Paolo Baracca, Andreas Weber, Thorsten Wild, Christophe Grangeat)
3. IEEE Access, *In-situ Measurement Methodology for the Assessment of 5G NR Massive MIMO Base Station Exposure at Sub-6 GHz Frequencies* (Published Dec. 20, 2019 / SAM AERTS, LEEN VERLOOCK, MATTHIAS VAN DEN BOSSCHE, DAVIDE COLOMBI, LUC MARTENS, CHRISTER TÖRNEVIK AND WOUT JOSEPH)
4. Applied Sciences, *Analysis of the Actual Power and EMF Exposure from Base Stations in a Commercial 5G Network* (Published July 30, 2020 / Davide Colombi, Paramananda Joshi, Bo Xu, Fatemeh Ghasemifard, Vignesh Narasaraju and Christer Törnevik)
5. Ofcom Technical Report, *Electromagnetic Field (EMF) measurements near 5G mobile phone base stations* (Published Feb. 21, 2020 / Davide Colombi, Paramananda Joshi, Bo Xu, Fatemeh Ghasemifard, Vignesh Narasaraju and Christer Törnevik)

MobileComm believes these areas to be safe for entry by occupationally trained personnel utilizing appropriate personal protective equipment (in most cases, a personal monitor). Thus, at any time, if power density measurements were made, we believe the real time measurements would indicate levels below those depicted in the RF emission diagram(s) in this report. By modelling in this way, MobileComm has conservatively shown exclusion areas – areas that should not be entered without the use of a personal monitor, carriers reducing power, or performing real-time measurements to indicate real-time exposure levels.

Use of Generic Antennas

For the purposes of this report, the use of “Generic” as an antenna model, or “Other Carrier” for an operator means the information about a carrier, their FCC license and/or antenna information was not provided and could not be obtained while on site. In the event of unknown information, MobileComm will use our industry specific knowledge of equipment, antenna models, and transmit power to model the site. Information about similar facilities is used when the service is identified and associated with a particular antenna. If no information is available regarding the transmitting service associated with an unidentified antenna, using the antenna manufacturer’s published data regarding the antenna’s physical characteristics makes more conservative assumptions.

Where the frequency is unknown, MobileComm uses the closest frequency in the antenna’s range that corresponds to the highest Maximum Exposure Limit (MPE), resulting in a conservative analysis.

Appendix B – FCC Guidelines and Emissions Threshold Limits

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

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

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

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the 700 and 800 MHz Bands is approximately $467 \mu\text{W}/\text{cm}^2$ and $567 \mu\text{W}/\text{cm}^2$ respectively, and the general population exposure limit for the 1900 MHz PCS and 2100 MHz AWS bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure, have been properly trained in RF safety and can exercise control over their exposure. Occupational/Controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure, have been trained in RF safety and can exercise control over his or her exposure by leaving the area or by some other appropriate means. The Occupational/Controlled exposure limits all utilized frequency bands is five (5) times the FCC's General Public / Uncontrolled exposure limit.

Additional details can be found in FCC OET 65.

Table 1: Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (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
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (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
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

Appendix C – Rules & Regulations

Explanation of Applicable Rules and Regulations

FCC has set forth guidelines in OET Bulletin 65 for human exposure to radio frequency electromagnetic fields. Currently, there are two different levels of MPE - General Public MPE and Occupational MPE. An individual classified as Occupational can be defined as an individual who has received appropriate RF training and meets the conditions outlined below. General Public is defined as anyone who does not meet the conditions of being Occupational. FCC Rules and Regulations define compliance in terms of total exposure to total RF energy, regardless of location of or proximity to the sources of energy.

It is the responsibility of all licensees to ensure these guidelines are maintained at all times. It is the ongoing responsibility of all licensees composing the site to maintain ongoing compliance with FCC rules and regulations.

A building owner or site manager can use this report as part of an overall RF Health and Safety Policy. It is important for building owners/site managers to identify areas in excess of the General Population MPE and ensure that only persons qualified as Occupational are granted access to those areas.

Occupational Environment Explained

The FCC definition of Occupational exposure limits apply to persons who:

- *are exposed to RF energy as a consequence of their employment;*
- *have been made aware of the possibility of exposure; and*
- *can exercise control over their exposure.*

FCC guidelines go further to state that persons must complete RF Safety Awareness training and must be trained in the use of appropriate personal protective equipment.

In order to consider this site an Occupational Environment, the site must be controlled to prevent access by any individuals classified as the General Public. Compliance is also maintained when any non-occupational individuals (the General Public) are prevented from accessing areas indicated as Red or Yellow in the attached RF Emissions diagram. In addition, a person must be aware of the RF environment into which they are entering. This can be accomplished by an RF Safety Awareness class, and by appropriate written documentation such as this Site Compliance Report.

Appendix D – General Safety Recommendations

The following are general recommendations appropriate for any site with accessible areas in excess of 100% General Public MPE. These recommendations are not specific to this site. These are safety recommendations appropriate for typical site management, building management, and other tenant operations.

- All individuals needing access to the main site should be instructed to read and obey all posted placards and signs.
- The site should be routinely inspected and this or similar report updated with the addition of any antennas or upon any changes to the RF environment including:
 - adding new antennas that may have been located on the site
 - removing of any existing antennas
 - changes in the radiating power or number of RF emitters
- Post the appropriate SAFETY INSTRUCTIONS, NOTICE, CAUTION & WARNING sign at the main site access point(s) and other locations as required. Note: Please refer to RF Exposure Diagrams in the report section above, to inform everyone who has access to this site that beyond posted signs there may be levels in excess of the limits prescribed by the FCC. The signs below are examples of signs meeting FCC guidelines.



- Ensure that the site door remains locked (or appropriately controlled) to deny access to the general public if deemed as policy by the building/site owner.
- For a General Public environment the five color levels identified in measured RF emission diagram can be interpreted in the following manner:
 - White represents areas predicted to be greater than or equal to 0% and less than 1% of the MPE general public limits
 - Green represents areas predicted to be greater than or equal to 1% and less than 100% of the MPE general public limits
 - Blue represents areas predicted to be greater than or equal to 100% and lesser than 500% of the MPE general public limits.
 - Yellow represents areas predicted to be greater than or equal to 500% and lesser than 5000% of the MPE general public limits.
 - Red areas indicates predicted levels greater than or equal to 5000% of the MPE general public limits.

Appendix E – References

1 - FCC Definition

FCC defines an Occupational or Controlled environment as one where persons are exposed to RF fields as a consequence of their employment and where those persons exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Typical criteria for an Occupational or Controlled environment is restricted access (i.e. locked doors, gates, etc.) to areas where antennas are located coupled with proper RF warning signage.

FCC defines a site as a General Public or Uncontrolled environment when human exposure to RF fields occurs to the general public or in which persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over the exposure. Typical criteria for a General Public or Uncontrolled environment are unrestricted access (i.e. unlocked or no restrictions) to areas where antennas are located without proper RF warning signage being posted.

2 - Physical Testing measurement procedure and Tools

The Narda Broadband Field Meter NBM-550 can make rapid conformance measurements with evaluation in the time domain when used in conjunction EA5091 probe. This probe is a so-called Shaped Probe, i.e. it is frequency weighted so that it automatically takes account of the FCC Occupational limit values. To collect data, the probe is pointed towards the potential source(s) of EME radiation and moved slowly from ground level up to slightly above head height (approx. 6 ft).

Spatial Average Measurement A technique used to average a minimum of ten (10) measurements taken in a ten (10) second interval from zero (0) to six (6) feet. This measurement is intended to model the average energy an average sized human body will absorb while present in an electromagnetic field of energy.

3 - Site Safety Procedures

The following items are general safety recommendations that should be administered on a site by site basis as needed by the carrier.

General Maintenance Work: *Any maintenance personnel required to work immediately in front of antennas and / or in areas indicated as above 100% of the Occupational MPE limits should coordinate with the wireless operators to disable transmitters during their work activities.*

Training and Qualification Verification: *All personnel accessing areas indicated as exceeding the General Population MPE limits should have a basic understanding of EME awareness and RF Safety procedures when working around transmitting antennas. Awareness training increases a workers understanding to potential RF exposure scenarios. Awareness can be achieved in a number of ways (e.g. videos, formal classroom lecture or internet based courses).*

Physical Access Control: *Access restrictions to transmitting antennas locations is the primary element in a site safety plan. Examples of access restrictions are as follows:*

- *Locked door or gate*
- *Alarmed door*
- *Locked ladder access*
- *Restrictive Barrier at antenna locations (e.g. Chain link with posted RF Sign)*

RF Signage: *Everyone should obey all posted signs at all times. RF signs play an important role in properly warning a worker prior to entering into a potential RF Exposure area.*

Assume all antennas are active: *Due to the nature of telecommunications transmissions, an antenna transmits intermittently. Always assume an antenna is transmitting. Never stop in front of an antenna. If you have to pass by an antenna, move through as quickly and safely as possible thereby reducing any exposure to a minimum.*

Maintain a 3 foot clearance from all antennas: *There is a direct correlation between the strength of an EME field and the distance from the transmitting antenna. The further away from an antenna, the lower the corresponding EME field is.*

Rooftop RF Emissions Diagram: *Section 4 of this report contains an RF Emissions Diagram that outlines various theoretical Maximum Permissible Exposure (MPE) areas on the rooftop. This analysis is all theoretical and assumes a duty cycle of 75% for each transmitting antenna at full power. This analysis is a worst case scenario. This analysis is based on one of two access control criteria: General Public criteria means the access to the site is uncontrolled and anyone can gain access. Occupational criteria means the access is restricted and only properly trained individuals can gain access to the antenna locations.*

4 - Definitions

Compliance- *The determination of whether a site is safe or not with regards to Human Exposure to Radio Frequency Radiation from transmitting antennas.*

Decibel (dB) – *A unit for measuring power or strength of a signal.*

Duty Cycle – *The percent of pulse duration to the pulse period of a periodic pulse train. Also, may be a measure of the temporal transmission characteristic of an intermittently transmitting RF source such as a paging antenna by dividing average transmission duration by the average period for transmission. A duty cycle of 75% corresponds to continuous operation.*

Effective (or Equivalent) Isotropic Radiated Power (EIRP) – *The product of the power supplied to the antenna and the antenna gain in a given direction relative to an isotropic antenna, this product is divided by the cable losses*

Effective Radiated Power (ERP) – *In a given direction, the relative gain of a transmitting antenna with respect to the maximum directivity of a half wave dipole multiplied by the net power accepted by the antenna from the connecting transmitter.*

Gain (of an antenna in dbd) – *The ratio of the maximum intensity in a given direction to the maximum radiation in the same direction from a reference dipole. Gain is a measure of the relative efficiency of a directional antennas as compared to a reference dipole.*

General Population/Uncontrolled Environment – *Defined by the FCC, as an area where RFR exposure may occur to persons who are unaware of the potential for exposure and who have no control of their exposure. General Population is also referenced as General Public.*

Generic Antenna – *For the purposes of this report, the use of “Generic” as an antenna model means the antenna information was not provided and could not be obtained while on site. In the event of unknown information, MobileComm will use our industry specific knowledge of antenna models to select a worst case scenario antenna to model the site.*

Isotropic Antenna – *An antenna that is completely non-directional. In other words, an antenna that radiates energy equally in all directions.*

Maximum Measurement – *This measurement represents the single largest measurement recorded when performing a spatial average measurement.*

Maximum Exposure Limit (MPE) – *The RMS and peak electric and magnetic field strength, their squares, or the plane-wave equivalent power densities associated with these fields to which a person may be exposed without harmful effect and with acceptable safety factor.*

Occupational/Controlled Environment – *Defined by the FCC, as an area where Radio Frequency Radiation (RFR) exposure may occur to persons who are aware of the potential for exposure as a condition of employment or specific activity and can exercise control over their exposure.*

Radio Frequency Radiation – *Electromagnetic waves that are propagated from antennas through space.*

Spatial Average Measurement – *A technique used to average a minimum of ten (10) measurements taken in a ten (10) second interval from zero (0) to six (6) feet. This measurement is intended to model the average energy an average sized human body will absorb while present in an electromagnetic field of energy.*

Transmitter Power Output (TPO) – *The radio frequency output power of a transmitter's final radio frequency stage as measured at the output terminal while connected to a load.*



Appendix F – Proprietary Statement

This report was prepared for the use of AT&T Mobility, LLC to meet requirements specified in AT&T's corporate RF safety guidelines. It was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same locale under like circumstances. The conclusions provided by MobileComm are based solely on the information provided by AT&T Mobility and all observations in this report are valid on the date of the investigation. Any additional information that becomes available concerning the site should be provided to MobileComm so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report. No other warranty, expressed or implied, is made.

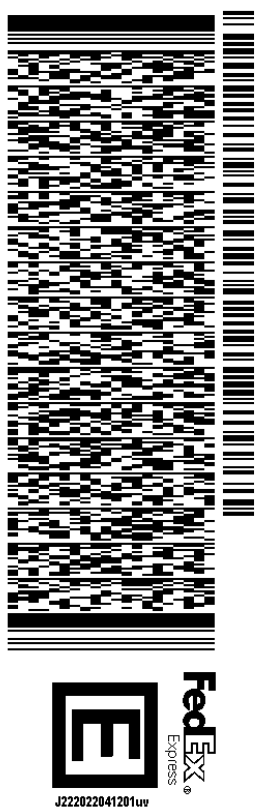
ORIGIN ID:QFEMA (551) 804-0667
 ERSILIA DAVIS
 1777 SENTRY PARKWAY
 VEVA 17, SUITE 210
 BLUE BELL, PA 19422
 UNITED STATES US

SHIP DATE: 07 JUN 22
 ACTWGT: 1.00 LB
 CAD: 108980334IN/NET4490

BILL SENDER

TO **MELANIE A. BACHMAN**
CONNECTICUT SITING COUNCIL
10 FRANKLIN SQUARE

NEW BRITAIN CT 06051
 (860) 827-2935 REF: 100789NBC
 INV: DEPT: 806376 CSC
 PO:



577 J2274F/FE4A

TRK# 7770 6521 9273
 0201
 WED - 08 JUN 10:30A
 PRIORITY OVERNIGHT

EB BDLA
 CT-US BDL
 06051

After printing this label:

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

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

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