

Crown Castle

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

August 24, 2021

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

**RE:** Notice of Exempt Modification for Verizon:

Crown Site BU: 826768

171 Town Hill Road, Plymouth, CT 06786

Latitude: 41° 40′ 6.20″ / Longitude: -73° 1′ 11.84″

Dear Ms. Bachman:

Verizon currently maintains twelve (12) total antennas at the 142-foot centerline on the existing 169- foot monopole tower, located at 171 Town Hill Road, Plymouth, CT. The property is owned by Terryville Country Fair Inc. and the tower is owned by Crown Castle. Verizon now intends to swap six (6) RRHs, modify the platform mount, install three (3) antennas and three (3) side-by-side antenna mounts.

## **Tower modifications:**

- Swap six (6) RRHs
- Modify platform mount
- -Install three (3) antennas
- Install three (3) side-by-side antenna mounts

#### **Ground modifications:**

- None

The facility was approved by the Town of Plymouth Planning and Zoning Commission on June 22, 2000 by way of a Special Permit issuance. The approval was given with conditions which this exempt modification follows.

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 David V. Merchant, Mayor for the Town of Plymouth, Margus T. Laan, Director of Planning, Crown Castle as the tower owner, and Terryville Country Fair Inc., the property owner.

## Page 2

# Additionally:

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

For the foregoing reasons, Verizon respectfully submits that the proposed modifications to the above-reference telecommunications facility constitutes an exempt modification under R.C.S.A. § 16-50j72(b)(2). Please send approval/rejection letter to my attention at the address listed below.

## Sincerely,

S. Shele

Sarah Snell Site Acquisition Specialist 1800 W. Park Drive Westborough, MA 01581 T: 508-621-9146 Sarah.Snell@crowncastle.com

#### Attachments

cc: David V. Merchant, Mayor Town of Plymouth
Town Hall – Mayor's Office
80 Main Street
Terryville, CT 06786
860-585-4001

Margus T. Laan, Planning Director Town of Plymouth Town Hall – Land Use Office

# Melanie A. Bachman

# Page 3

80 Main Street Terryville, CT 06786 860-585-4001

Terryville Country Fair Inc. 171 Town Hill Road PO Box 72 Terryville, CT 06786

Crown Castle, Tower Owner

# Snell, Sarah

**From:** TrackingUpdates@fedex.com

Sent: Wednesday, August 25, 2021 10:15 AM

**To:** Snell, Sarah

**Subject:** FedEx Shipment 774621109017: Your package has been delivered

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



# Hi. Your package was delivered Wed, 08/25/2021 at 10:13am.



Delivered to 80 MAIN ST, TERRYVILLE, CT 06786 Received by S.URBANSKI

## **OBTAIN PROOF OF DELIVERY**

**TRACKING NUMBER** <u>774621109017</u>

FROM Sarah Snell

1800 West Park Drive

Suite 200

WESTBOROUGH, MA, US, 01581

**TO** Town of Plymouth

Margus T. Laan, Planning Director

80 Main St.

TERRYVILLE, CT, US, 06786

**REFERENCE** 799001.7680

SHIPPER REFERENCE 799001.7680

**SHIP DATE** Tue 8/24/2021 06:36 PM

**DELIVERED TO** Receptionist/Front Desk

PACKAGING TYPE FedEx Envelope

ORIGIN WESTBOROUGH, MA, US, 01581

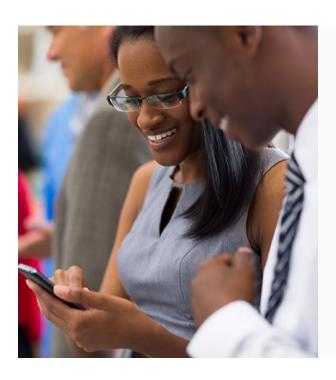
**DESTINATION** TERRYVILLE, CT, US, 06786

SPECIAL HANDLING Deliver Weekday

NUMBER OF PIECES 1

TOTAL SHIPMENT WEIGHT 1.00 LB

SERVICE TYPE FedEx Priority Overnight



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# Snell, Sarah

**From:** TrackingUpdates@fedex.com

Sent: Wednesday, August 25, 2021 10:15 AM

**To:** Snell, Sarah

**Subject:** FedEx Shipment 774621084020: Your package has been delivered

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# Hi. Your package was delivered Wed, 08/25/2021 at 10:13am.



Delivered to 80 MAIN ST, TERRYVILLE, CT 06786 Received by S.URBANSKI

## **OBTAIN PROOF OF DELIVERY**

**TRACKING NUMBER** <u>774621084020</u>

FROM Sarah Snell

1800 West Park Drive

Suite 200

WESTBOROUGH, MA, US, 01581

**TO** Town of Plymouth

David V. Merchant, Mayor

80 Main St.

TERRYVILLE, CT, US, 06786

**REFERENCE** 799001.7680

SHIPPER REFERENCE 799001.7680

**SHIP DATE** Tue 8/24/2021 06:36 PM

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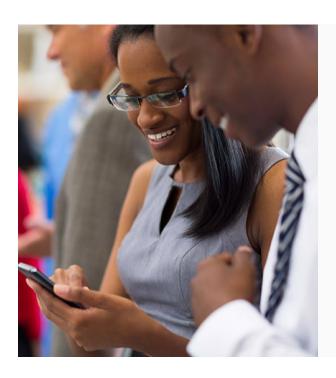
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# Snell, Sarah

**From:** TrackingUpdates@fedex.com

Sent: Wednesday, August 25, 2021 10:17 AM

**To:** Snell, Sarah

**Subject:** FedEx Shipment 774621131008: Your package has been delivered

**CAUTION:** This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.



# Hi. Your package was delivered Wed, 08/25/2021 at 10:15am.



Delivered to 171 TOWN HILL RD, TERRYVILLE, CT 06786 Received by N.HALE

## **OBTAIN PROOF OF DELIVERY**

**TRACKING NUMBER** <u>774621131008</u>

FROM Sarah Snell

1800 West Park Drive

Suite 200

WESTBOROUGH, MA, US, 01581

TO Terryville Country Fair Inc.

171 Town Hill Road

TERRYVILLE, CT, US, 06786

**REFERENCE** 799001.7680

SHIPPER REFERENCE 799001.7680

**SHIP DATE** Tue 8/24/2021 06:36 PM

**DELIVERED TO** Receptionist/Front Desk

PACKAGING TYPE FedEx Envelope

ORIGIN WESTBOROUGH, MA, US, 01581

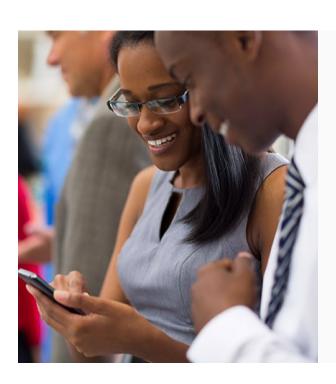
**DESTINATION** TERRYVILLE, CT, US, 06786

SPECIAL HANDLING Deliver Weekday

NUMBER OF PIECES 1

TOTAL SHIPMENT WEIGHT 1.00 LB

**SERVICE TYPE** FedEx Priority Overnight



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### **FOLLOW FEDEX**















# Exhibit A

**Original Facility Approval** 

TOWN	OF PL	YMOUTH,	CONNECTICUT
------	-------	---------	-------------

Total of Telmoonly continues.	
	Fee Paid: \$ /00.00 # 058 194
	Date: July 5 19 2000
Permission is hereby granted to Terryville Lions	
to erect a Tele communication To on the eas	t side of Town Hell Rd I gr
as follows: Size ft. long, ft. wide,	stories high; distance from
road center line ft; distance from each lot line: E	ft.; W ft.; S ft.;
N ft.; for the use of the facility as a Tele	communication Tower
an amount by P+2 on 6/22/0000	with stipulations
PLANNING AND ZONIN	IG COMMISSION, TOWN OF PLYMOUTH
e approved Lete Plan	CONNECTICUT
	+ Mornele
3/8/2020 4/23/2020 Agent of the Planning	ng and Zoning Commission
2/16/2006	

ZONING PERMIT NO MA 201

The recipient of this permit accepts this permit on the condition that he, as owner or as representing the owner, agrees to comply with all applicable ordinances and regulations of the Town of Plymouth and the State of Connecticut regarding the use, occupancy and type of activity to be instituted. It is furthermore understood that the facility can not be used until a Certificate of Occupancy has been issued by the Planning and Zoning Commission and that any change of use similarly does require a new Certificate of Occupancy. Before a Certificate of Occupancy will be issued a plot plan drawn to a scale of 1" – 50¹ prepared and certified by a licensed engineer or land surveyor must be submitted to the Planning and Zoning Commission showing all boundaries of the line of any public or private right-of-way, sanitary facilities and water supply. This permit shall be valid for one year.

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MOTION: Gaye Zukauskas made a motion to add Town Hill Road/Lions back on the agenda. Steve Panasuk seconded. VOTE: S. Panasuk – Aye, G. Zukauskas – Aye, W. Radke – Aye and Chairman Herzing so voted.

**MOTION:** Patrick Herzing made a motion for a 5-minute recess at 9:23 p.m. VOTE: All in favor.

Chairman Patrick Herzing called the meeting back to order at 9:28 p.m.

Town Hill Road/Lions - Special Permit — Telecommunication Tower — Omnipoint — MOTION: Gaye Zukauskas made a motion to approve the application for the telecommunication tower-Town Hill Road-Lions Club and Omnipoint-State ID #CT-11417C consisting of 5 sheets, cover dated 6/20/00, vicinity plan dated 3/8/00, sheet C-1, C-2 and C-3 all dated 6/20/00 with the only stipulation that Plymouth emergency services to have free access as needed with no charge to the Town. Any additional carriers to come in for a special permit. Bond to be set by Public Works in the event of abandonment. Steve Panasuk seconded. VOTE: S. Panasuk - Ave. G. Zukauskas — Ave. W. Radke — Aye and Chairman Herzing so voted.

- 11. Town Hill/Washington Roads Pines Subdivision Bond Reduction CT Water Co. CT Water Co. has sold most of the lots in the subdivision to Mr. Zappone. Discussion was had. MOTION: Wayne Radke made a motion to reduce the bond as requested and get a new bond from Mr. Zappone before reduction of CT Water Co.'s bond. Gaye Zukauskas seconded. VOTE: S. Panasuk Aye, G. Zukauskas Aye, W. Radke Aye and Chairman Herzing so voted.
- 16. Plymouth Housing Authority Section 8-24 Review Yefko Property Mr. Kuehn read the memo dated 6/21 from Anthony A. Lorenzetti, PE into the record. He is in support of this proposal. It would be a solution to the parking situation at Gosinski Park. Half of it would be for off street parking and the other half for a minimum 20,000 sq. ft. residential parcel for a low/moderate income housing. The resolution should be 39,100 not 29,100. Mr. Kuehn read the resolution into the record. MOTION: Gaye Zukauskas made a motion to accept the resolution for an 8-24 review. Wayne Radke seconded. VOTE: S. Panasuk Aye, G. Zukauskas Aye, W. Radke Aye and Chairman Herzing so voted.
- 18. Land Use Corner Gaye strikes again. The final revision has been faxed to the Plymouth News. Gaye suggested that Mr. Kuehn do one next month on industrial property.
- 21. Correspondence from ZBA Chairman Mike Cole Patrick Herzing will call Mike Cole and get a time set up probably in September to get together to discuss the zoning regulations. It was suggested to have Mike come up with an agenda of issues to look at ahead of time.
- 22. Proposed ordinance for zoning violations The Town Council tabled this item at their last meeting so no public hearing has been scheduled. It recommends a \$150 fine per violation. Maybe we can not issue any permits to people who have not finished and cleaned up their last items.

STAFF COMMENTS —Mr. Kuehn informed the Commission that 36 signs will be going up in the industrial park for the public hearing.

# Exhibit B

**Property Card** 

Parcel ID 048-073B-012

Account

00041600

## **Property Information**

Owner	TERRYVILLE COUNTRY FAIR INC			
Address	171 TOWN HILL RD			
Mailing Address	PO BOX 72 TERRYVILLE , CT 06786			
Land Use	-			
Land Class	E			

Census Tract	4254
Neighborhood	103
Zoning	RA1
Acreage	20.46
Utilities	
Lot Setting/ Desc	/1

#### Photo



#### PARCEL VALUATIONS (Assessed value = 70% of Appraised Value)

	Appraised	Assessed
Buildings	83250	
Outbuildings		
Improvements		
Extras		
Land	0	
Total	1042260	729580
Previous		

#### **Construction Details**

Year Built	
Stories	
Building Style	
Building Use	
<b>Building Condition</b>	
Total Rooms	
Bedrooms	
Full Bathrooms	
Half Bathrooms	
Bath Style	
Kitchen Style	
Roof Style	
Roof Cover	

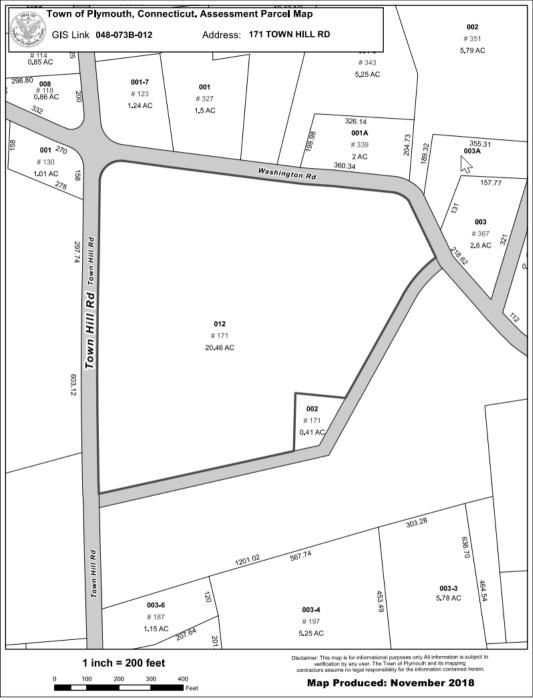
EXTERIOR WALLS:			
Primary			
Secondary			
INTERIOR WAL	LS:		
Primary			
Secondary			
FLOORS:			
Primary			
Secondary			
HEATING/AC:			
Heating Type			
Heating Fuel			
AC Type			

#### **BUILDING AREA:**

Effective Building Area	
Gross Building Area	
Total Living Area	

#### SALES HISTORY:

Sale Date	0
Sale Price	0
Book/ Page	152/643



# Exhibit C

**Construction Drawings** 

# Verizon

VERIZON SITE NUMBER: 468084

PLYMOUTH CT **VERIZON SITE NAME:** 

**VERIZON FUZE ID:** 16244611

MONOPOLE SITE TYPE:

169'-0'' TOWER HEIGHT:

**BUSINESS UNIT #: 826768** 

171 TOWN HILL ROAD SITE ADDRESS: PLYMOUTH, CT 06786

LITCHFIELD COUNTY:

**LOCATION MAP** 

DRIVING DIRECTIONS FROM DISTRICT OFFICE: 184- TAKE EXIT 20 ON THE LEFT TO MERGE ONTO CT-8 N TOWARD TORRINGTON 8.4 MI 14. CONTINUE ONTO

CT-8 N/US-6 E 0.9 MI 15. TAKE EXIT 39 FOR US-6 E TOWARD CT-222/THOMASTON/BRISTOL/TERRYVILLE/FAIRGROUNDS 0.2 MI 16. TURN RIGHT ONTO US-6 E/E

MAIN ST 2.2 MI 17. TURN RIGHT ONTO TOWN HILL RD DESTINATION WILL BE ON THE LEFT 0.7 MI 171 TOWN HILL RD PLYMOUTH, CT 06786 LOCK COMBO 2500

**JURISDICTION:** TOWN OF PLYMOUTH

# WALLINGFORD, CT 06492



MAHWAH, NJ 07430



**VERIZON SITE NUMBER:** 468084

> BU #: **826768** PLYMOUTH/RT 6

171 TOWN HILL ROAD PLYMOUTH, CT 06786

EXISTING 169'-0" MONOPOLI

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	08/17/21	JCH	CONSTRUCTION	JTC
1	08/20/21	JCH	CONSTRUCTION	JTC
7				

**ISSUED FOR:** 



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

**SHEET NUMBER:** 

**REVISION:** 

# VERIZON MODIFICATION;4G\_850,4G\_AWS,4G\_PCS,5G\_L-SUB6-PREP

# SITE INFORMATION

CROWN CASTLE USA INC. SITE NAME:

PLYMOUTH/RT 6

SITE ADDRESS: 171 TOWN HILL ROAD PLYMOUTH, CT 06786

LITCHFIELD COUNTY: 048-073B-012 MAP/PARCEL #: AREA OF CONSTRUCTION: **EXISTING** 

41° 40′ 6.20″ (41.668386) LATITUDE: LONGITUDE: -73° 1' 11.84" (-73.019886)

LAT/LONG TYPE: 882 FT GROUND ELEVATION CURRENT ZONING:

TOWN OF PLYMOUTH **JURISDICTION:** 

OCCUPANCY CLASSIFICATION: U TYPE OF CONSTRUCTION:

A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR **HUMAN HABITATION** 

PROPERTY OWNER: TERRYVILLE COUNTRY FAIR INC

PO BOX 72

TERRYVILLE, CT 06786

TOWER OWNER: CROWN CASTLE 2000 CORPORATE DRIVE CANONSBURG, PA 15317

VERIZON WIRELESS CARRIER/APPLICANT:

180 WASHINGTON VALLEY ROAD

BEDMINSTER, NJ 07921

ELECTRIC PROVIDER: CONNECTICUT LIGHT & POWER CO

(800) 286-2000 TELCO PROVIDER:

AT&T (800) 331-0500

	DRAWING INDEX
SHEET#	SHEET DESCRIPTION
T-1	TITLE SHEET
T-2	GENERAL NOTES
C-1	SITE PLAN
C-2	TOWER ELEVATION & ANTENNA PLANS
C-3	EQUIPMENT SCHEDULES
C-4	EQUIPMENT DETAILS
C-5	EQUIPMENT DETAILS
C-6	COLOR CODE MATRIX
C-7	PLUMBING DIAGRAM
G-1	GROUNDING DETAILS
G-2	GROUNDING DETAILS
ATTACHED	MOUNT MODIFICATION DRAWINGS

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

# **APPROVALS**

SIGNATURE DATE

# **PROJECT TEAM**

A&E FIRM: TOWER ENGINEERING PROFESSIONALS 326 TRYON ROAD

RALEIGH, NC 27603 (919) 661-6351

JOSEPH T. CRESS - PROJECT MANAGER GRAHAM M. ANDRES - CIVIL ENGINEER

CROWN CASTLE USA INC. DISTRIC CONTACTS:

6325 ARDREY KELL ROAD, SUITE 600 CHARLOTTE, NC 28277

SARA REA LOADHOLDT - A&E SPECIALIST

(704) 405-6548

# **CONTRACTOR PMI REQUIREMENTS**

https://pmi.vxwsmart.com PMI ACCESSED AT SMART TOOL VENDOR PROJECT NUMBER 16244611 VzW LOCATION CODE (PSLC) 468084

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

MOUNT MODIFICATION REQUIRED

**VzW APPROVED SMART KIT VENDORS** 

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

# 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 CODE TYPE

2018 CONNECTICUT STATE BUILDING CODE (2015 IBC) BUILDING 2018 CONNECTICUT STATE MECHANICAL CODE (2015 IMC) **MECHANICAL** 

ELECTRICAL 2017 NEC

REFERENCE DOCUMENTS:

STRUCTURAL ANALYSIS: TOWER ENGINEERING PROFESSIONALS

DATED: 05/23/21

MOUNT ANALYSIS: TOWER ENGINEERING PROFESSIONALS

06/18/21

RFDS REVISION: 0 DATED: 04/18/21 ORDER ID: 570318

REVISION: 0

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

# PROJECT DESCRIPTION

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

- INSTALL (3) ANTENNAS
- INSTALL (3) SIDE-BY-SIDE ANTENNA MOUNT

TOWER SCOPE OF WORK:

- REMOVE (6) RRHs • MODIFY PLATFORM MOUNT
- INSTALL (6) RRHs

MANAGER

NO SCALE

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

# 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.
- "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.
- PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS
- ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED-STD-10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA-322 (LATEST EDITION)
- 5. ALL SITE WORK TO COMPLY WITH QAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE," CED-STD-10294 "STANDARD FOR INSTALLATION OF MOUNTS AND APPURTENANCES," AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.
- IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- 10. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
- 11. ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS, LATEST APPROVED REVISION.
- 12. CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY
- 13. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES
- 14. THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
- 15. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
- 16. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED JRFACE APPLICATION.
- 17. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
- 18. CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- 19. THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION
- 20. CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- 21. CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
- 22. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

# GENERAL NOTES:

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

# CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:

DESIGNATED LOCATION.

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

# GREENFIELD GROUNDING NOTES:

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

# **ELECTRICAL INSTALLATION NOTES:**

- ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL CODES/ORDINANCES.
- CONDUIT ROUTINGS ARE SCHEMATIC. CONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED
- AND TRIP HAZARDS ARE ELIMINATED. 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. ALL EQUIPMENT SHALL BEAR THE UNDERWRITERS LABORATORIES LABEL OF APPROVAL, AND SHALL CONFORM TO
- REQUIREMENT OF THE NATIONAL ELECTRICAL CODE. ALL OVERCURRENT DEVICES SHALL HAVE AN INTERRUPTING CURRENT RATING THAT SHALL BE GREATER THAN THE SHORT
- CIRCUIT CURRENT TO WHICH THEY ARE SUBJECTED, 22,000 AIC MINIMUM. VERYIFY AVAILABLE SHORT CIRCUIT CURRENT DOES NOT EXCEED THE RATING OF ELECTRICAL EQUIPMENT IN ACCORDANCE WITH ARTICLE 110.24 NEC OR THE MOST CURRENT ADOPTED CODE PRE THE GOVERNING JURISDICTION.
- EACH END OF EVERY POWER PHASE CONDUCTOR, GROUNDING CONDUCTOR, AND TELCO CONDUCTOR OR CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2" PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC AND OSHA.
- ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH LAMICOID TAGS SHOWING THEIR RATED VOLTAGE, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACITY RATING AND BRANCH CIRCUIT ID NUMBERS (i.e. PANEL BOARD AND CIRCUIT ID'S).
- PANEL BOARDS (ID NUMBERS) SHALL BE CLEARLY LABELED WITH PLASTIC LABELS
- 8. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EDGES. ALL POWER AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE COPPER CONDUCTOR (#14 OR LARGER) WITH TYPE 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 TO CABLE (#14 OR LARGER), WITH
- TYPE THHW, THWN, THWN-2, XHHW, XHHW-2, THW, THW-2, RHW, OR RHW-2 INSULATION UNLESS OTHERWISE SPECIFIED. 13. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP—STYLE, COMPRESSION WIRE LUGS AND WIRE NUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRE NUTS SHALL BE RATED FOR OPERATION NOT LESS THAN 75° C (90° C IF AVAILABLE).
- 14. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE
- 15. ELECTRICAL METALLIC TUBING (EMT), INTERMEDIATE METAL CONDUIT (IMC), OR RIGID METAL CONDUIT (RMC) SHALL BE USED FOR
- EXPOSED INDOOR LOCATIONS
- 16. ELECTRICAL METALLIC TUBING (EMT) OR METAL-CLAD CABLE (MC) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS. 17. SCHEDULE 40 PVC UNDERGROUND ON STRAIGHTS AND SCHEDULE 80 PVC FOR ALL ELBOWS/90s AND ALL APPROVED ABOVE
- GRADE PVC CONDUIT 18. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION
- OCCURS OR FLEXIBILITY IS NEEDED. 19. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION-TYPE AND APPROVED FOR THE LOCATION USED. SET
- SCREW FITTINGS ARE NOT ACCEPTABLE. 20. CABINETS, BOXES AND WIRE WAYS SHALL BE LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE AND
- 21. WIREWAYS SHALL BE METAL WITH AN ENAMEL FINISH AND INCLUDE A HINGED COVER, DESIGNED TO SWING OPEN DOWNWARDS
- (WIREMOLD SPECMATE WIREWAY).
- 22. SLOTTED WIRING DUCT SHALL BE PVC AND INCLUDE COVER (PANDUIT TYPE E OR EQUAL). 23. CONDUITS SHALL BE FASTENED SECURELY IN PLACE WITH APPROVED NON-PERFORATED STRAPS AND HANGERS. EXPLOSIVE DEVICES (i.e. POWDER-ACTUATED) FOR ATTACHING HANGERS TO STRUCTURE WILL NOT BE PERMITTED. CLOSELY FOLLOW THE
- LINES OF THE STRUCTURE, MAINTAIN CLOSE PROXIMITY TO THE STRUCTURE AND KEEP CONDUITS IN TIGHT ENVELOPES. CHANGES IN DIRECTION TO ROUTE AROUND OBSTACLES SHALL BE MADE WITH CONDUIT OUTLET BODIES. CONDUIT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. PARALLEL AND PERPENDICULAR TO STRUCTURE WALL AND CEILING LINES. ALL CONDUIT SHALL BE FISHED TO CLEAR OBSTRUCTIONS. ENDS OF CONDUITS SHALL BE TEMPORARILY CAPPED FLUSH TO FINISH GRADE TO PREVENT CONCRETE, PLASTER OR DIRT FROM ENTERING. CONDUITS SHALL BE RIGIDLY CLAMPED TO BOXES BY GALVANIZED
- MALLEABLE IRON BUSHING ON INSIDE AND GALVANIZED MALLEABLE IRON LOCKNUT ON OUTSIDE AND INSIDE 24. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES AND PULL BOXES SHALL BE GALVANIZED OR EPOXY-COATED SHEET STEEL. SHALL MEET OR EXCEED UL 50 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND NEMA 3R (OR
- METAL RECEPTACLE, SWITCH AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY—COATED OR NON—CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1 AND BE RATED NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
- 26. NONMETALLIC RÉCEPTACLE, SWITCH AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2 (NEWEST REVISION) AND BE RATED | EXISTING 169'-0" MONOPOLE NEMA 1 (OR BETTER) FOR INTERIOR LOCATIONS AND WEATHER PROTECTED (WP OR BETTER) FOR EXTERIOR LOCATIONS.
- 27. THE CONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CARRIER AND/OR CROWN CASTLE USA INC. BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS.

APWA UNIFORM COLOR CODE:

PROPOSED EXCAVATION

GASEOUS MATERIALS

POTABLE WATER

SLURRY LINES

EMPORARY SURVEY MARKINGS

LECTRIC POWER LINES, CABLES,

GAS, OIL, STEAM, PETROLEUM, OR

COMMUNICATION, ALARM OR SIGNAL LINES, CABLES, OR CONDUIT AND TRAFFIC LOOPS

ECLAIMED WATER, IRRIGATION, AND

SEWERS AND DRAIN LINES

CONDUIT, AND LIGHTING CABLES

- 28. THE CONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD LIFE AND PROPERTY. 29. INSTALL LAMICOID LABEL ON THE METER CENTER TO SHOW "VERIZON".
- 30. ALL EMPTY/SPARE CONDUITS THAT ARE INSTALLED ARE TO HAVE A METERED MULE TAPE PULL CORD INSTALLED.

CONDUCTOR COLOR CODE			
SYSTEM	CONDUCTOR	COLOR	
	A PHASE	BLACK	
   120/240V, 1Ø	B PHASE	RED	
120/2400, 10	NEUTRAL	WHITE	
	GROUND	GREEN	
	A PHASE	BLACK	
	B PHASE	RED	
120/208V, 3Ø	C PHASE	BLUE	
	NEUTRAL	WHITE	
	GROUND	GREEN	
	A PHASE	BROWN	
	B PHASE	ORANGE OR PURPLE	
277/480V, 3Ø	C PHASE	YELLOW	
	NEUTRAL	GREY	
	GROUND	GREEN	
DC VOLTAGE	POS (+)	RED**	
DO VOLTAGE	NEG (-)	BLACK**	

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

# ABBREVIATIONS:

ANTENNA	
EXISTING	
FACILITY INTERFACE F	RAME
GENERATOR	
OLODAL BOOLTIONING	0) (0.7.5.1

- GLOBAL POSITIONING SYSTEM GSM GLOBAL SYSTEM FOR MOBILE LONG TERM EVOLUTION
- MGB MASTER GROUND BAR MICROWAVE MW NATIONAL ELECTRIC CODE NEC
- PROPOSED POWER PLANT QTY QUANTITY

RECT

W.P.

- RADIO BASE STATION RBS RET REMOTE ELECTRIC TILT RFDS RADIO FREQUENCY DATA SHEET
- REMOTE RADIO HEAD RRU REMOTE RADIO UNIT SIAD SMART INTEGRATED DEVICE

WORK POINT

RECTIFIER

TMA TOWER MOUNTED AMPLIFIER TYP TYPICAL UMTS UNIVERSAL MOBILE TELECOMMUNICATIONS SYSTEM



WALLINGFORD, CT 06492



MAHWAH, NJ 07430



TEP JOB #: 25661.587818

VERIZON SITE NUMBER: 468084

> BU #: **826768** PLYMOUTH/RT 6

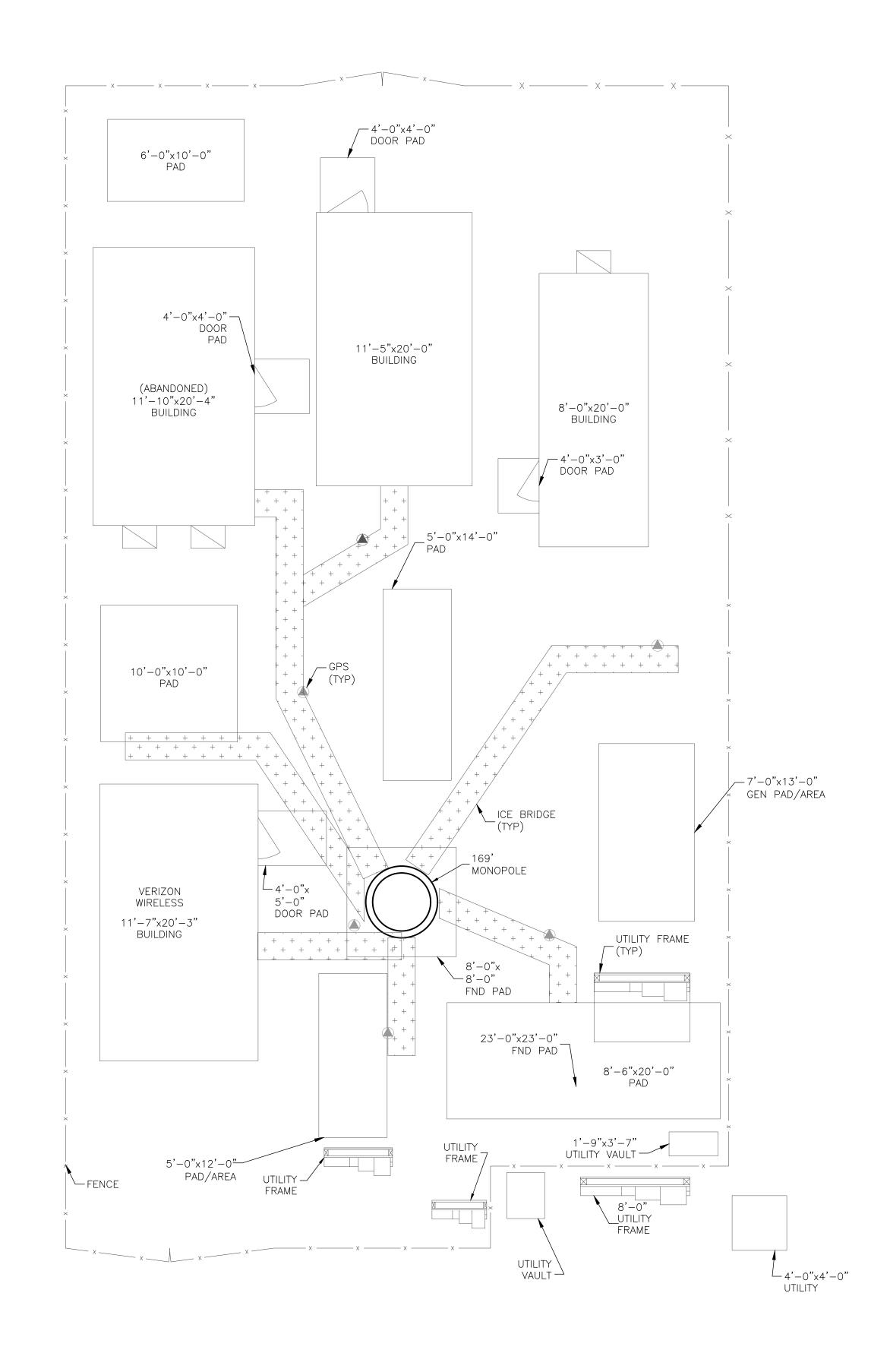
171 TOWN HILL ROAD PLYMOUTH, CT 06786

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E			ISSU	ED FOR:	
	REV	DATE	DRWN	DESCRIPTION	DES./Q
	0	08/17/21	JCH	CONSTRUCTION	JTC



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:** 



1/4"=1'-0" (FULL SIZE) 4' 1/8"=1'-0" (11x17)





1200 MACARTHUR BLVD, SUITE 200 MAHWAH, NJ 07430



TOWER ENGINEERING PROFESSIONALS

326 TRYON RD RALEIGH, NC 27603 (919) 661-6351

TEP JOB #: 25661.587818

VERIZON SITE NUMBER: 468084

BU #: **826768 PLYMOUTH/RT 6** 

171 TOWN HILL ROAD PLYMOUTH, CT 06786

EXISTING 169'-0" MONOPOLE

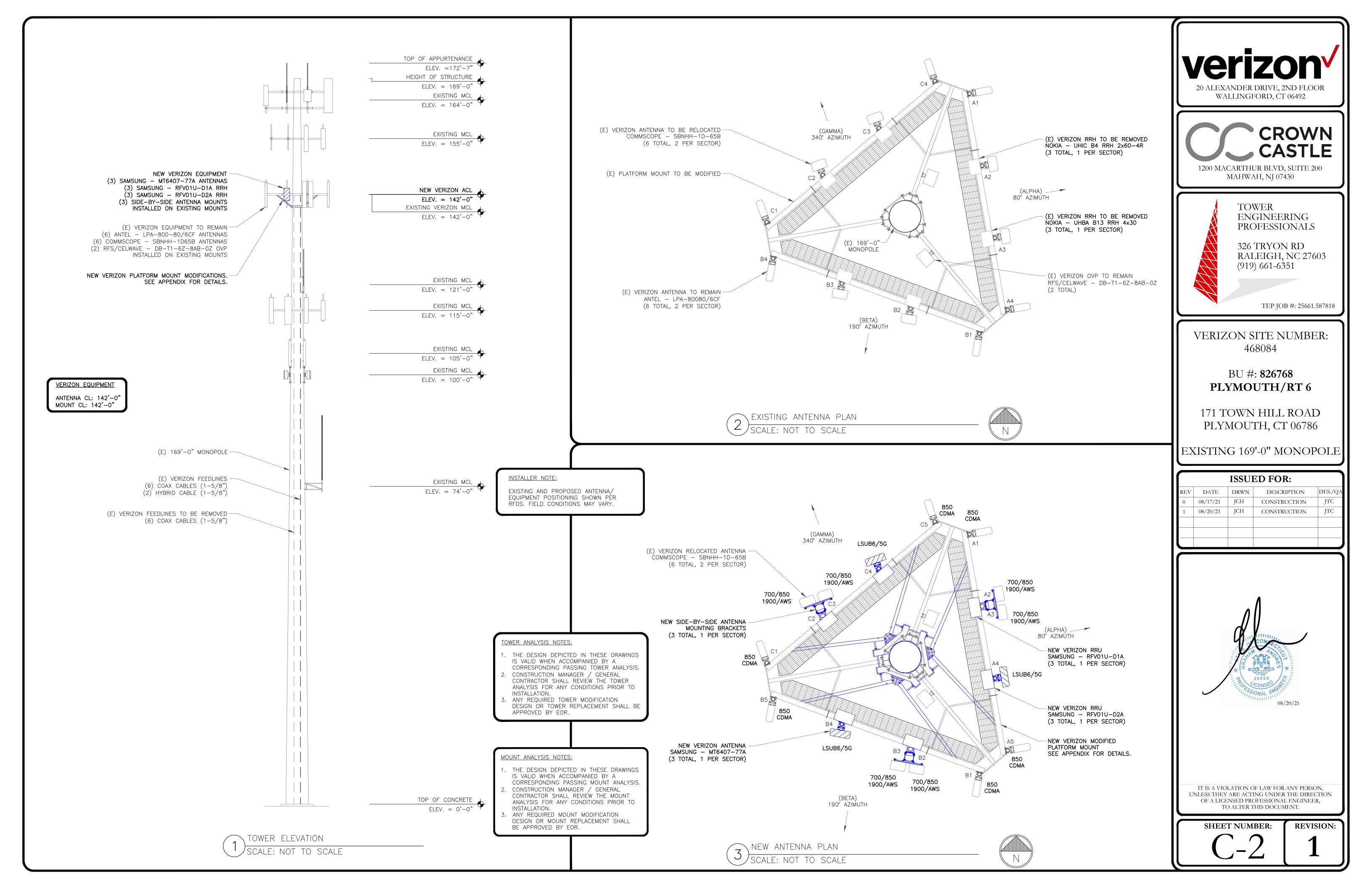
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REV	DATE	DRWN	DESCRIPTION	DES./QA						
0	08/17/21	JCH	CONSTRUCTION	JTC						



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



#### ANTENNA/RRH SCHEDULE ANTENNA MANUFACTURER ANTENNA CENTERLINE MECHANICAL DOWNTILTS ELECTRICAL DOWNTILTS TOWER EQUIPMENT AZIMUTH **SECTOR** STATUS ANTENNA MODEL TOWER EQUIPMENT QTY/MODEL MANUFACTURER Α1 80° **EXISTING** ANTEL LPA-80080-6CF 142'-0" RFS/CELWAVE (1) DB-T1-6Z-8AB-0Z OVP A2 80° (1) RFV01U-D1A RRH **EXISTING** COMMSCOPE 142'-0" SAMSUNG SBNHH-1D65B A3 **EXISTING** COMMSCOPE SBNHH-1D65B 142'-0" 80° 80° **A4** NEW MT6407-77A 142'-0" (1) RFV01U-D2A RRH SAMSUNG SAMSUNG Α5 142'-0" 80° EXISTING ANTEL LPA-80080-6CF 142'-0" 190° В1 ANTEL RFS/CELWAVE **EXISTING** LPA-80080-6CF (1) DB-T1-6Z-8AB-0Z OVP В2 190° EXISTING COMMSCOPE SBNHH-1D65B 142'-0" SAMSUNG (1) RFV01U-D1A RRH В3 190° EXISTING COMMSCOPE SBNHH-1D65B 142'-0" 190° B4 NEW MT6407-77A (1) RFV01U-D2A RRH SAMSUNG 142'-0" SAMSUNG B5 190° **EXISTING** ANTEL LPA-80080-6CF 142'-0" C1 **EXISTING** ANTEL LPA-80080-6CF 142'-0" 340° C2 142'-0" 340° (1) RFV01U-D1A RRH **EXISTING** COMMSCOPE SBNHH-1D65B SAMSUNG C3 **EXISTING** COMMSCOPE SBNHH-1D65B 142'-0" 340° C4 (1) RFV01U-D2A RRH NEW SAMSUNG MT6407-77A 142'-0" 340° SAMSUNG C5 **EXISTING** ANTEL LPA-80080-6CF 142'-0" 340°

NOTE - NEW	ANTENNA/EQUIPMENT	SHOWN	IN	BOLD
	/ " * 1 - 1 - 1 · 1 · 1 · 7 - L Q O · 1 · 1 · L · 1 · 1	0		

<sup>\* -</sup> CONTRACTOR TO REFERENCE MOST RECENT RFDS FOR MECHANICAL AND ELECTRICAL DOWNTILTS

VERIZON TOWER EQUIPMENT SCHEDULE SCALE: NOT TO SCALE

# CABLE SCHEDULE MANUFACTURER LENGTH QTY STATUS CABLE TYPE SIZE (MODEL #) ANDREW 192'-0"± 1-5/8" **EXISTING** COAX (LDF7-50A) ANDREW 1-5/8" 192'-0"± COAX **EXISTING** (LDF7-50A) RFS/CELWAVE 192'-0"± 1-5/8" EXISTING (HB158-1-08U8-S8J18) TOTAL CABLE QTY:

\*\* - EXISTING COAX CABLE TO BE REMOVED





MAHWAH, NJ 07430

TOWER ENGINEERING PROFESSIONALS 326 TRYON RD RALEIGH, NC 27603 (919) 661-6351

TEP JOB #: 25661.587818

VERIZON SITE NUMBER: 468084

> BU #: **826768** PLYMOUTH/RT 6

171 TOWN HILL ROAD PLYMOUTH, CT 06786

EXISTING 169'-0" MONOPOLE

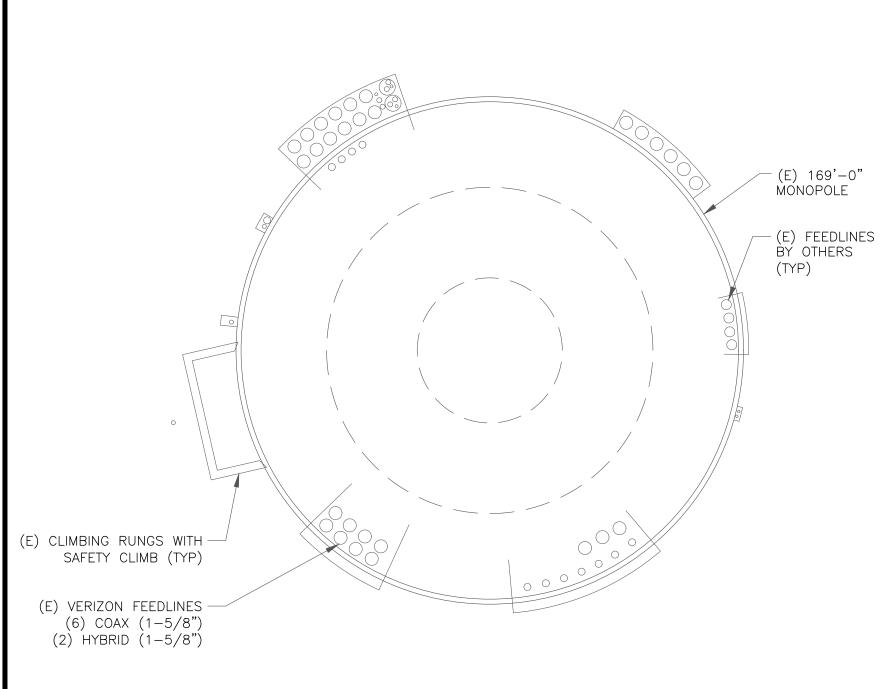
	ISSUED FOR:								
REV	DATE	DRWN	DESCRIPTION	DES./QA					
0	08/17/21	JCH	CONSTRUCTION	JTC					
1	08/20/21	JCH	CONSTRUCTION	JTC					



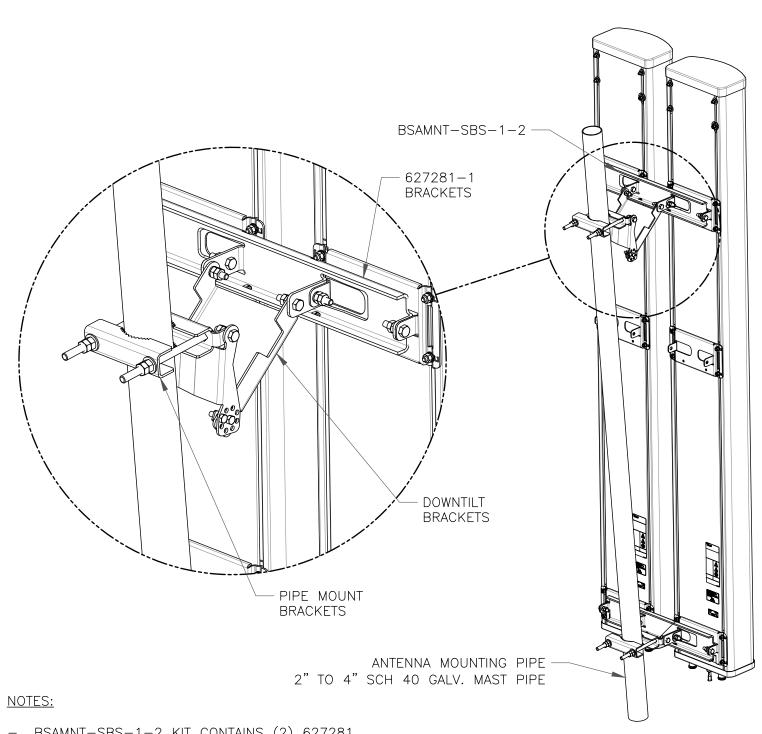
IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

**SHEET NUMBER:** 

**REVISION:** 



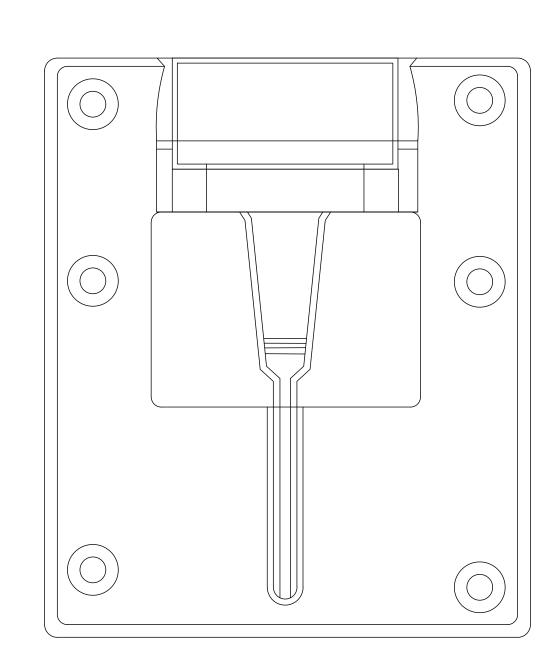
BASE LEVEL DETAIL (2) SCALE: NOT TO SCALE



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

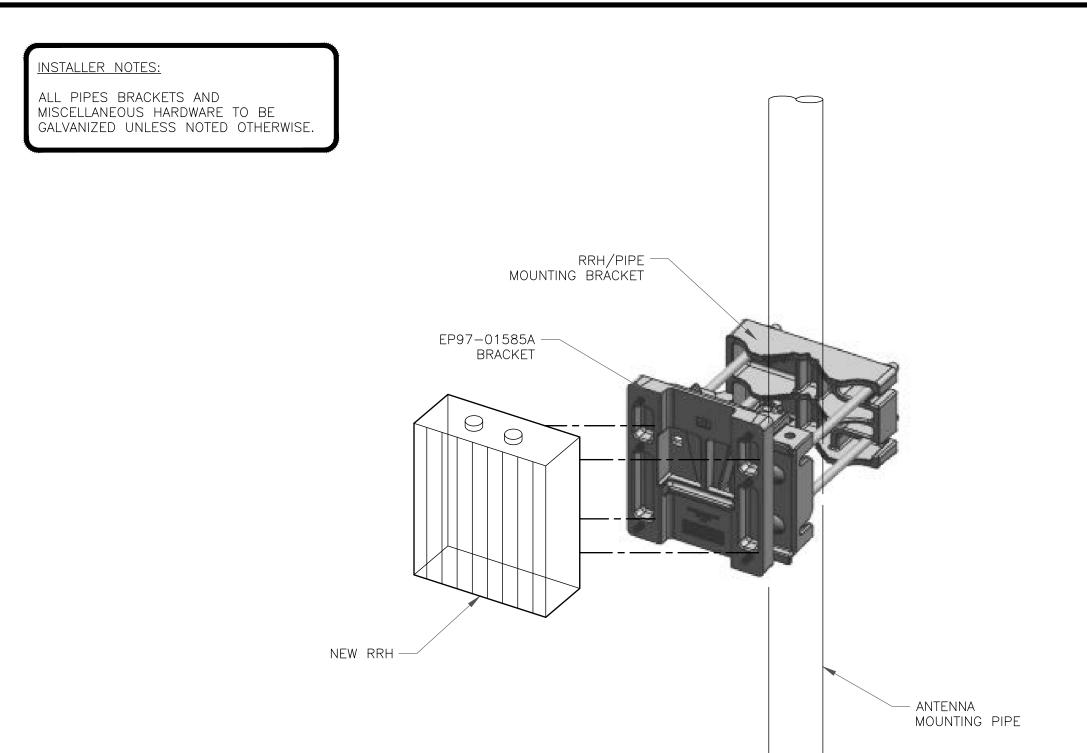
COMMSCOPE - BSAMNT-SBS-1-2 SCALE: NOT TO SCALE NOT USED

SCALE: NOT TO SCALE



SAMSUNG - EP97-01585A BRACKET DETAIL

SCALE: NOT TO SCALE



ANTENNA & RRH MOUNTING DETAIL

SCALE: NOT TO SCALE





MAHWAH, NJ 07430



TEP JOB #: 25661.587818

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171 TOWN HILL ROAD PLYMOUTH, CT 06786

EXISTING 169'-0" MONOPOLE

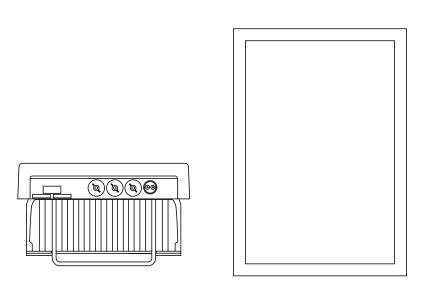
	ISSUED FOR:									
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REV	DATE	DRWN	DESCRIPTION	DES./QA						
0	08/17/21	JCH	CONSTRUCTION	JTC						



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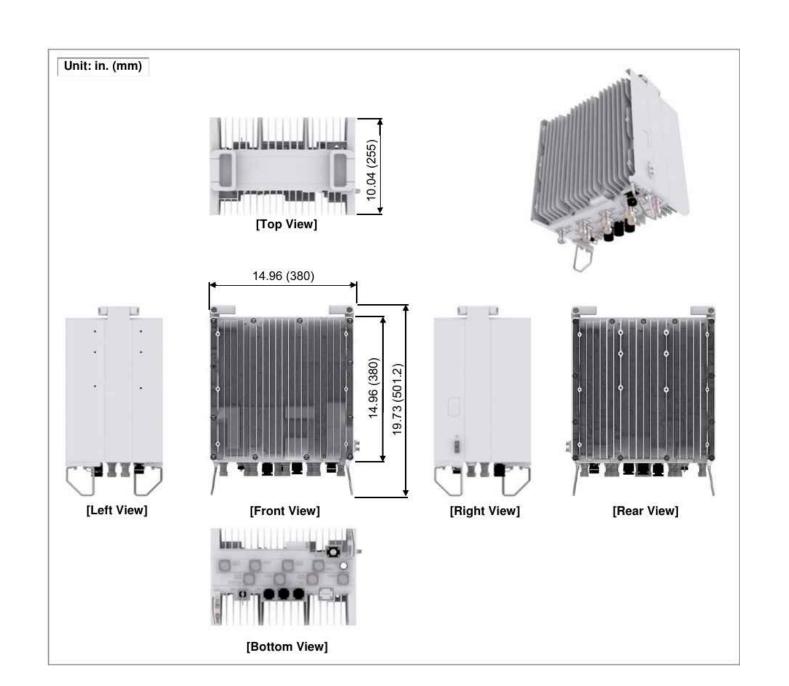
**SHEET NUMBER:** 

C-4



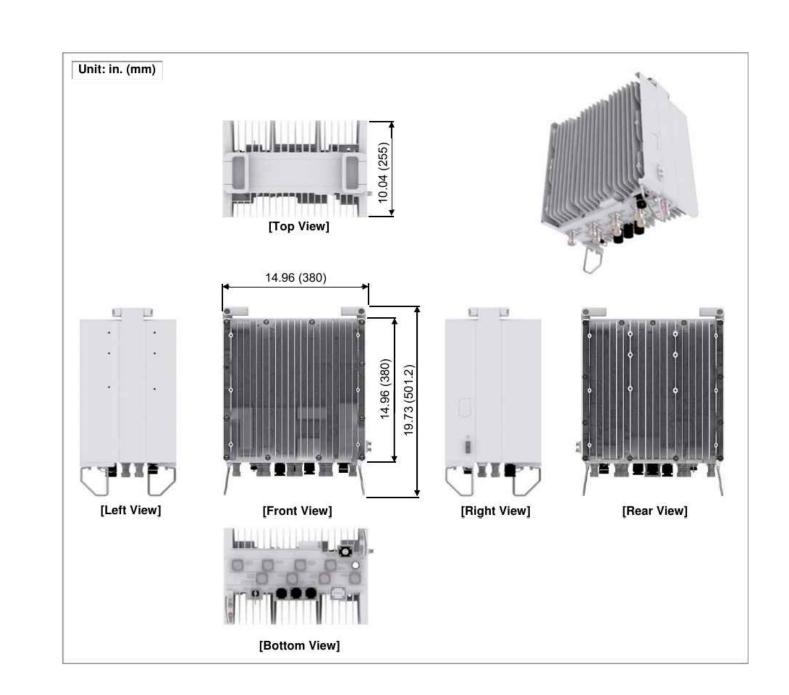
SAMSUNG TELECOMMUNICATIONS — MT6407—77A ANTENNA WEIGHT: 81.57 LBS SIZE (HxWxD): 35.06x16.06x5.51 IN.

SAMSUNG - MT6407-77A
SCALE: NOT TO SCALE



SAMSUNG — RFV01U—D1A WEIGHT: 84.40 LBS SIZE (HxWxD): 15.00x15.00x10.00 IN.

SAMSUNG TELECOMMUNICATIONS / RFV01U-D1A
SCALE: NOT TO SCALE



SAMSUNG — RFV01U—D2A WEIGHT: 70.30 LBS SIZE (HxWxD): 15.00x15.00x8.10 IN.

SAMSUNG TELECOMMUNICATIONS / RFV01U-D2A SCALE: NOT TO SCALE





MAHWAH, NJ 07430

TOWER ENGINEERING PROFESSIONALS 326 TRYON RD RALEIGH, NC 27603

(919) 661-6351

TEP JOB #: 25661.587818

VERIZON SITE NUMBER: 468084

BU #: **826768 PLYMOUTH/RT 6** 

171 TOWN HILL ROAD PLYMOUTH, CT 06786

EXISTING 169'-0" MONOPOLE

ISSUED FOR:								
REV	DATE	DRWN	DESCRIPTION	DES./QA				
0	08/17/21	JCH	CONSTRUCTION	JTC				
1	08/20/21	JCH	CONSTRUCTION	JTC				

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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.

HEET NUMBER:

REVISIO

NOT USED

SCALE: NOT TO SCALE

SCALE

NOT USED

SCALE: NOT TO SCALE

NOT USED

SCALE: NOT TO SCALE

# COLOR CODE MATRIX

Azimuth (1) Alpha								
Cell (850 CDMA)	Red							
PCS2 (1900 LTE)	Pink	Red	Pink					
700 LTE	Lt. Green	Red	Lt. Green					
850 LTE	Purple	Red	Purple					
2100 LTE	Orange	Red	Orange	100				
High Band Dual Band (Shared Lines)	Orange	Pink	Red	Pink	Orange			
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Red	Lt. Green	Purple			
5G	Brown	Red	Brown					
LAA	Gray	Red	Gray					
CBRS	White	Red	White	) (3				

	Azimuth (2) Beta								
Cell (850 CDMA)	Blue	18		93					
PCS2 (1900 LTE)	Pink	Blue	Pink						
700 LTE	Lt. Green	Blue	Lt. Green	8	3				
850 LTE	Purple	Blue	Purple						
2100 LTE	Orange	Blue	Orange	9					
High Band Dual Band (Shared Lines)	Orange	Pink	Blue	Pink	Orange				
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Blue	Lt. Green	Purple				
5G	Brown	Blue	Brown						
LAA	Gray	Blue	Gray	] (3					
CBRS	White	Blue	White						

Azimuth (3) Gamma								
Cell (850 CDMA)	Yellow	*	7					
PCS2 (1900 LTE)	Pink	Yellow	Pink	33				
700 LTE	Lt. Green	Yellow	Lt. Green	je Je				
850 LTE	Purple	Yellow	Purple					
2100 LTE	Orange	Yellow	Orange	5.5	-			
High Band Dual Band (Shared Lines)	Orange	Pink	Yellow	Pink	Orange			
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Yellow	Lt. Green	Purple			
5G	Brown	Yellow	Brown					
LAA	Gray	Yellow	Gray	52				
CBRS	White	Yellow	White					

# COLOR CODE MATRIX

Azimuth (4) Delta								
Cell (850 CDMA)	Orange							
PCS2 (1900 LTE)	Pink	Orange	Pink					
700 LTE	Lt. Green	Orange	Lt. Green					
850 LTE	Purple	Orange	Purple					
2100 LTE	Orange	Orange	Orange					
High Band Dual Band (Shared Lines)	Orange	Pink	Orange	Pink	Orange			
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Orange	Lt. Green	Purple			
5G	Brown	Orange	Brown					
LAA	Gray	Orange	Gray					
CBRS	White	Orange	White					

Azimuth (5) Epsilon								
Cell (850 CDMA)	White		3.					
PCS2 (1900 LTE)	Pink	White	Pink					
700 LTE	Lt. Green	White	Lt. Green					
850 LTE	Purple	White	Purple					
2100 LTE	Orange	White	Orange					
High Band Dual Band (Shared Lines)	Orange	Pink	White	Pink	Orange			
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	White	Lt. Green	Purple			
5G	Brown	White	Brown					
LAA	Gray	White	Gray					
CBRS	White	White	White		_			

Azimuth (6) Zeta							
Cell (850 CDMA)	Gray						
PCS2 (1900 LTE)	Pink	Ğray	Pink				
700 LTE	Lt. Green	Gray	Lt. Green				
850 LTE	Purple	Gray	Purple				
2100 LTE	Orange	Gray	Orange				
High Band Dual Band (Shared Lines)	Orange	Pink	Gray	Pink	Orange		
Low Band Dual Band (Shared Lines)	Purple	Lt. Green	Gray	Lt. Green	Purple		
5G	Brown	Gray	Brown				
LAA	Gray	Gray	Gray				
CBRS	White	Gray	White	5.			







TEP JOB #: 25661.587818

VERIZON SITE NUMBER: 468084

> BU #: **826768** PLYMOUTH/RT 6

171 TOWN HILL ROAD PLYMOUTH, CT 06786

EXISTING 169'-0" MONOPOLE

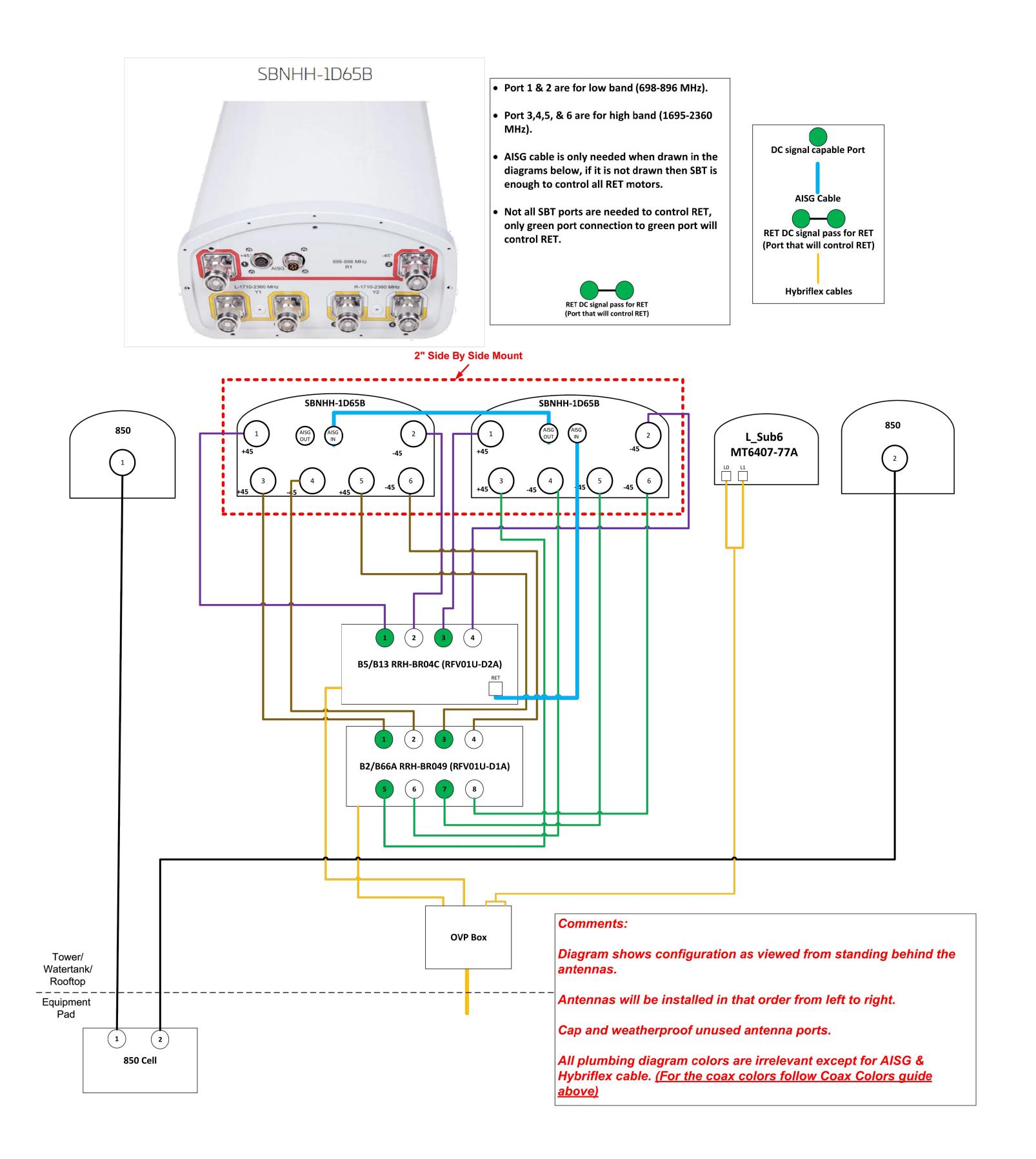
ISSUED FOR:						
REV	DATE	DRWN	DESCRIPTION	DES./QA		
0	08/17/21	ЈСН	CONSTRUCTION	JTC		



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.

**REVISION:** 

SHEET NUMBER:







1200 MACARTHUR BLVD, SUITE 200 MAHWAH, NJ 07430



TOWER ENGINEERING PROFESSIONALS

326 TRYON RD RALEIGH, NC 27603 (919) 661-6351

TEP JOB #: 25661.587818

VERIZON SITE NUMBER: 468084

BU #: **826768 PLYMOUTH/RT 6** 

171 TOWN HILL ROAD PLYMOUTH, CT 06786

EXISTING 169'-0" MONOPOLE

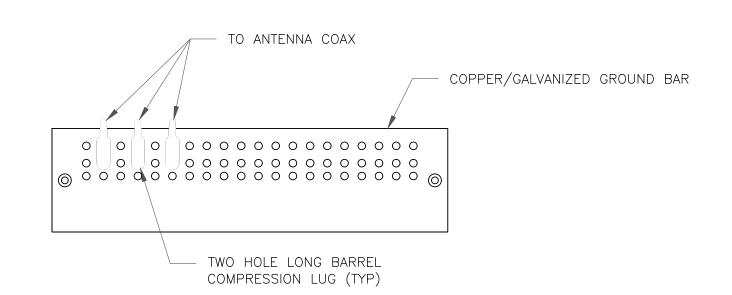
ISSUED FOR:						
REV	DATE	DRWN	DESCRIPTION	DES./QA		
0	08/17/21	JCH	CONSTRUCTION	JTC		



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SHEET NUMBER:

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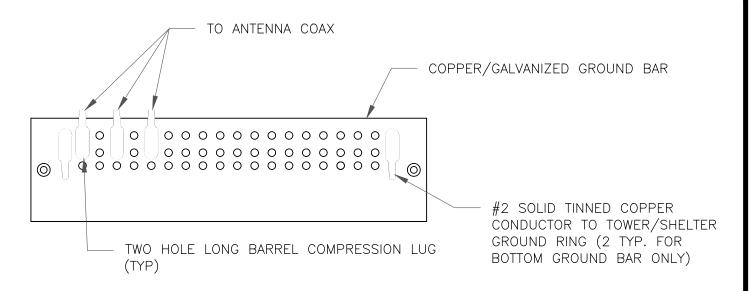


# NOTES:

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

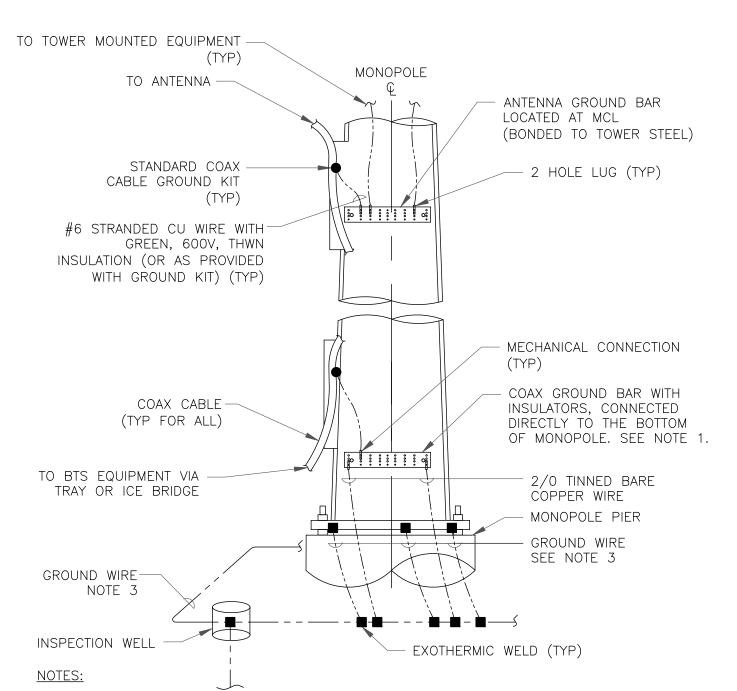


SCALE: NOT TO SCALE



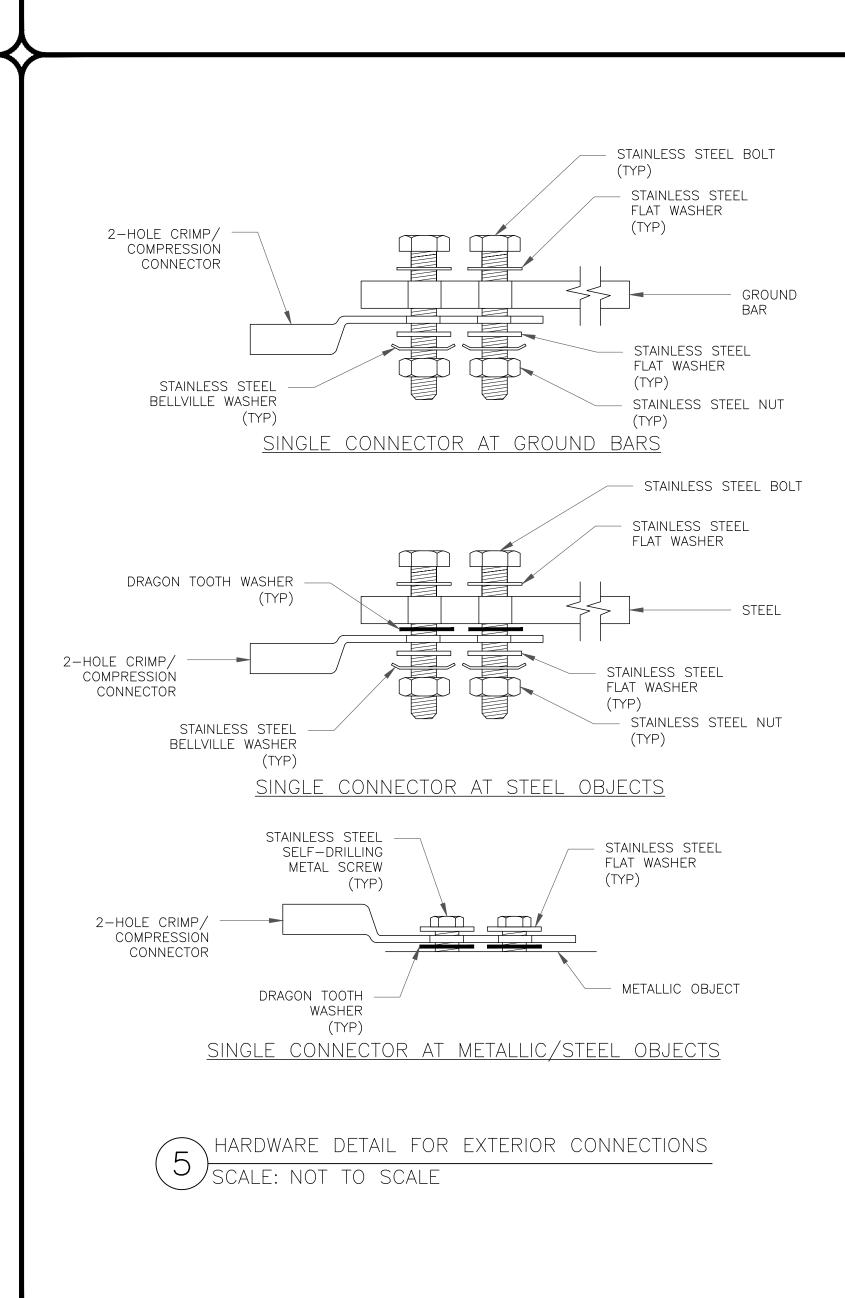
- 1. EXTERIOR ANTIOXIDANT JOINT COMPOUND TO BE USED ON ALL EXTERIOR CONNECTIONS.
- 2. GROUND BAR SHALL NOT BE ISOLATED FROM TOWER. MOUNT DIRECTLY TO TOWER STEEL (TOWER ONLY).
- 3. GROUND BAR SHALL BE ISOLATED FROM BUILDING OR SHELTER.

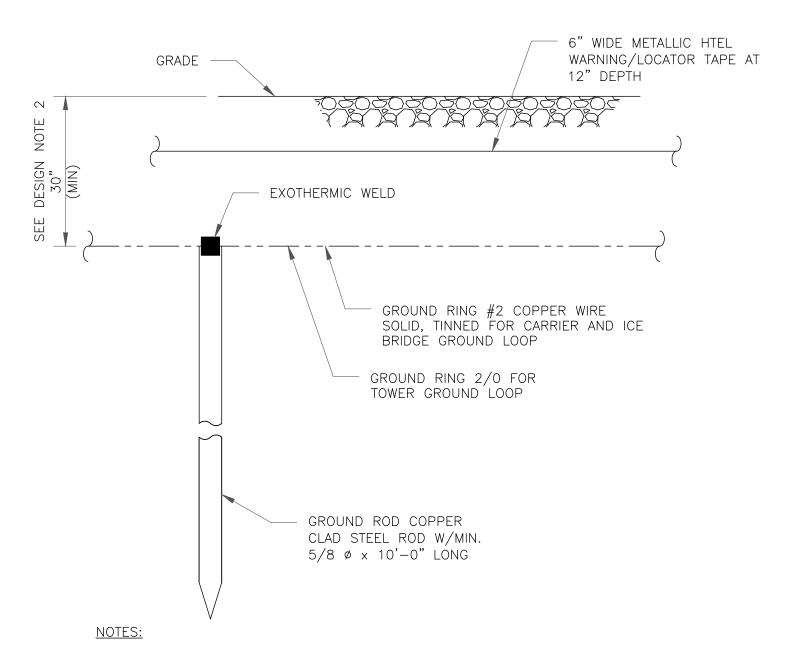




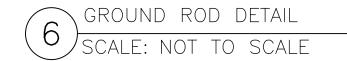
- 1. NUMBER OF GROUNDING BARS MAY VARY DEPENDING ON THE TYPE OF TOWER, ANTENNA LOCATIONS AND CONNECTION ORIENTATION. COAXIAL CABLES EXCEEDING 200 FEET ON THE TOWER SHALL HAVE GROUND KITS AT THE MIDPOINT. PROVIDE AS REQUIRED.
- 2. ONLY MECHANICAL CONNECTIONS ARE ALLOWED TO BE MADE TO CROWN CASTLE USA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

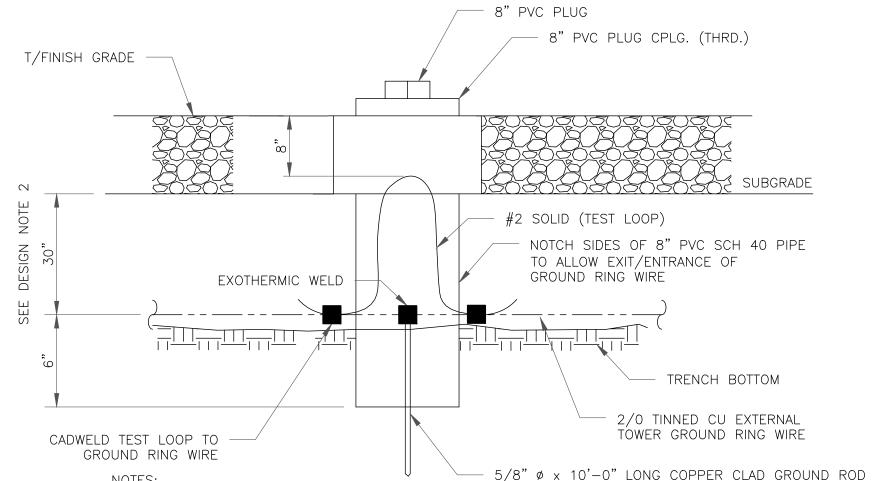






- 1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE
- 2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)





2. GROUND WIRE SHALL BE MIN. 30" BELOW GRADE OR 6" BELOW FROST LINE. (WHICH EVER IS GREATER) AS PER N.E.C. ARTICLE 250-50(D)

1. GROUND ROD SHALL BE DRIVEN VERTICALLY, NOT TO EXCEED 45 DEGREES FROM THE



WALLINGFORD, CT 06492



MAHWAH, NJ 07430



TOWER **ENGINEERING** PROFESSIONALS

326 TRYON RD RALEIGH, NC 27603 (919) 661-6351

TEP JOB #: 25661.587818

**VERIZON SITE NUMBER:** 468084

BU #: **826768** PLYMOUTH/RT 6

171 TOWN HILL ROAD PLYMOUTH, CT 06786

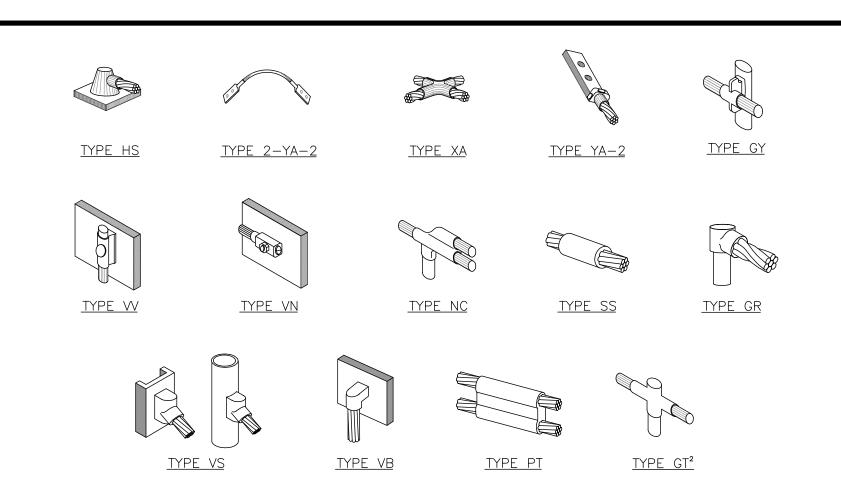
EXISTING 169'-0" MONOPOLE

$\bigcap$	ISSUED FOR:						
REV	DATE	DRWN	DESCRIPTION	DES./QA			
0	08/17/21	JCH	CONSTRUCTION	JTC			



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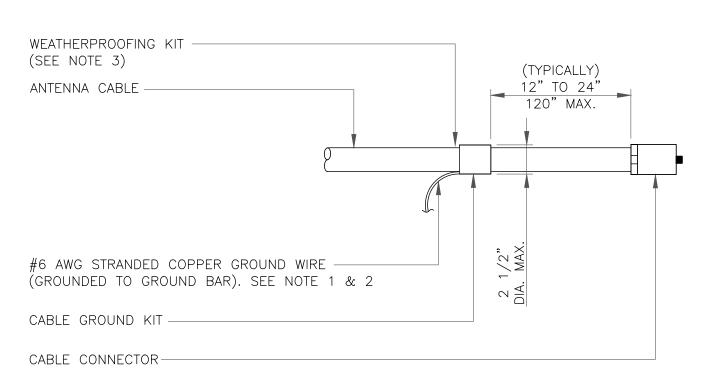


# NOTE:

- 1. ERICO EXOTHERMIC "MOLD TYPES" SHOWN HERE ARE EXAMPLES. CONSULT WITH CONSTRUCTION MANAGER FOR SPECIFIC
- MOLDS TO BE USED FOR THIS PROJECT.

  2. MOLD TYPE ONLY TO BE USED BELOW GRADE WHEN CONNECTING GROUND RING TO GROUND ROD.

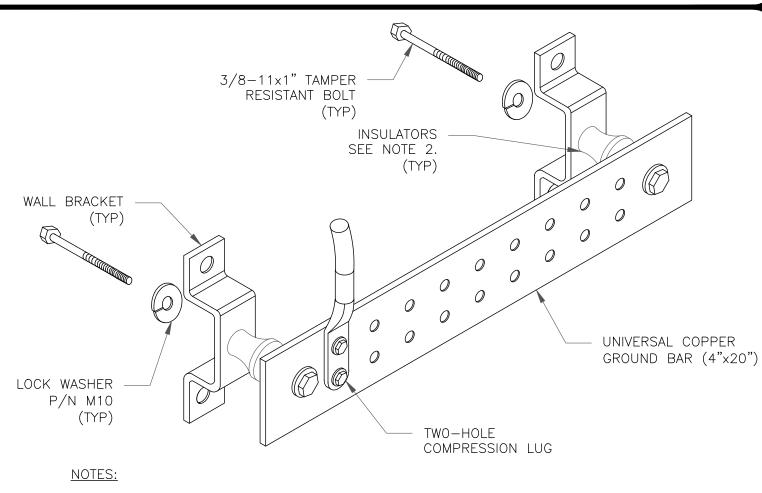
# CADWELD GROUNDING CONNECTIONS SCALE: NOT TO SCALE



# NOTES

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

3 CABLE GROUND KIT CONNECTION SCALE: NOT TO SCALE

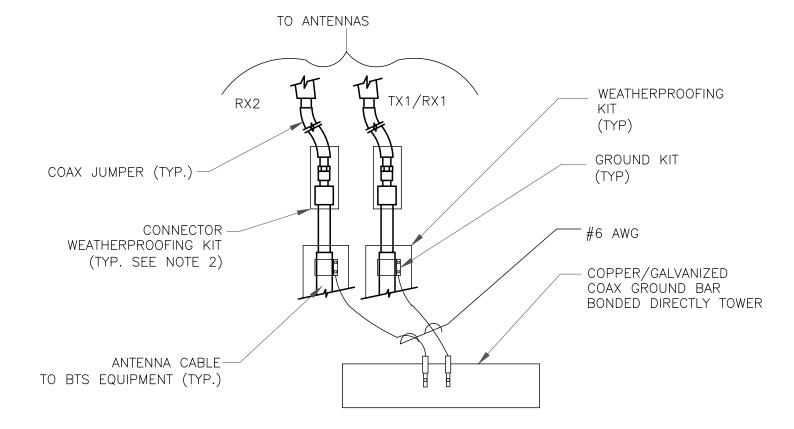


1. DOWN LEAD (HOME RUN) CONDUCTORS ARE <u>NOT</u> TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS—STD—10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION, CAD—WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.

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

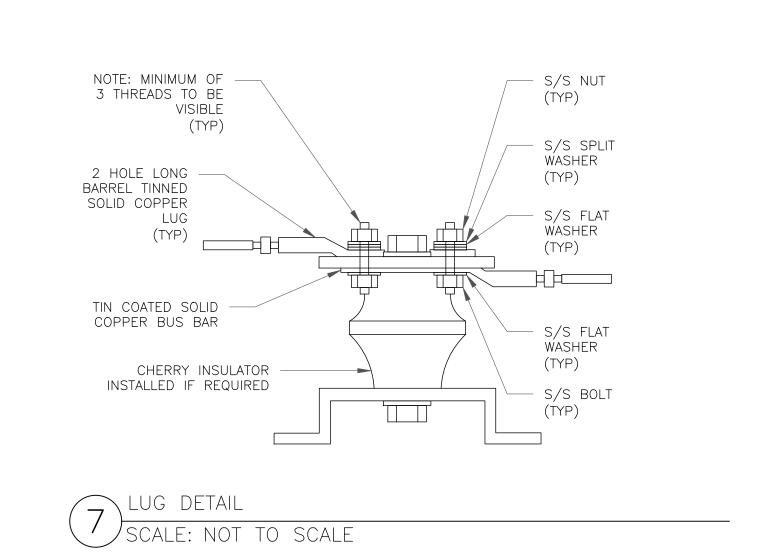
GROUND BAR DETAIL

SCALE: NOT TO SCALE

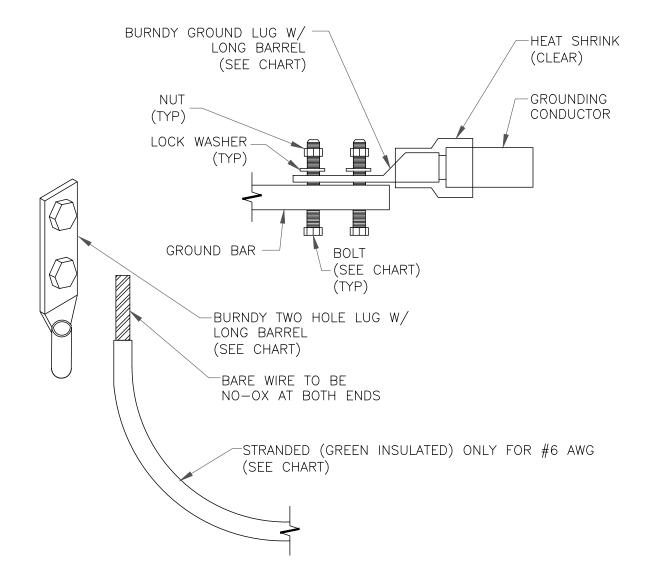


- NOTES:
- 1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO ANTENNA GROUND BAR.
- 2. WEATHER PROOFING SHALL BE TWO-PART TAPE KIT. COLD SHRINK SHALL NOT BE USED.

GROUND CABLE CONNECTION
SCALE: NOT TO SCALE

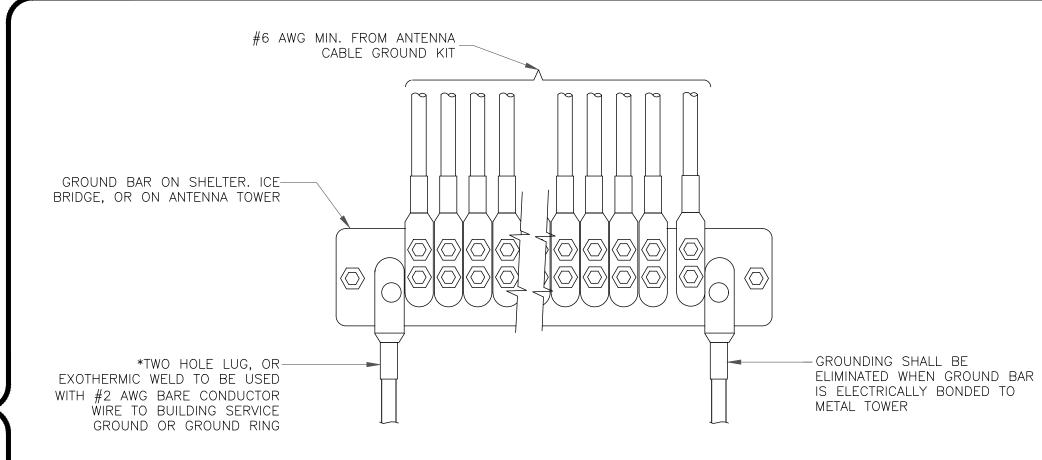


WIRE SIZE BURNDY LUG BOLT SIZE 3/8" - 16 NC S 2 BOLT #6 AWG GREEN INSULATED YA6C-2TC38 #2 AWG SOLID TINNED YA3C-2TC38 3/8" - 16 NC S 2 BOLT #2 AWG STRANDED YA2C-2TC38 3/8" - 16 NC S 2 BOLT 3/8" - 16 NC S 2 BOLT #2/0 AWG STRANDED YA26-2TC38 #4/0 AWG STRANDED YA28-2N 1/2" - 16 NC S 2 BOLT



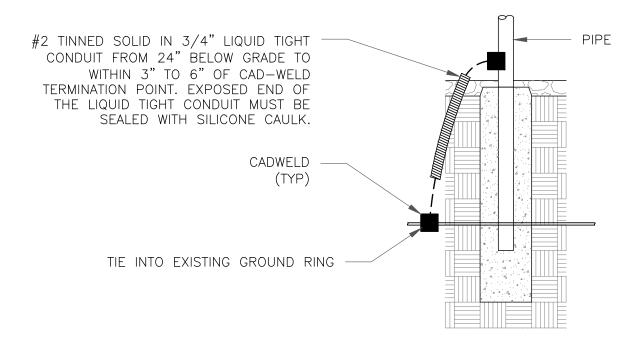
# NOTES:

- 1. ALL GROUNDING LUGS ARE TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
  ALL HARDWARE BOLTS, NUTS, LOCK WASHERS SHALL BE STAINLESS STEEL. ALL
  HARDWARE ARE TO BE AS FOLLOWS: BOLT, FLAT WASHER, GROUND BAR, GROUND LUG,
  FLAT WASHER AND NUT.
- 2 MECHANICAL LUG CONNECTION SCALE: NOT TO SCALE



GROUNDWIRE INSTALLATION

SCALE: NOT TO SCALE



8 TRANSITIONING GROUND DETAIL SCALE: NOT TO SCALE





MAHWAH, NJ 07430



TEP JOB #: 25661.587818

VERIZON SITE NUMBER: 468084

BU #: **826768 PLYMOUTH/RT 6** 

171 TOWN HILL ROAD PLYMOUTH, CT 06786

EXISTING 169'-0" MONOPOLE

	ISSUED FOR:						
REV	DATE	DRWN	DESCRIPTION	DES./QA			
0	08/17/21	JCH	CONSTRUCTION	JTC			



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SHEET NUMBER:

0

# **MOUNT DESIGN DRAWINGS**

SITE NAME:

# PLYMOUTH/RT 6

**CROWN CASTLE BU NUMBER:** 

826768

**SITE ADDRESS:** 

# 171 TOWN HILL ROAD PLYMOUTH, CT 06786 (LITCHFIELD COUNTY) N 41°40'06.20", W 73°01'11.84"

INDEM OF SHEETS

# **MODIFICATION PROVISIONS**

THE MODIFICATIONS DEPICTED ON THESE DRAWINGS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE MOUNT MODIFICATION ANALYSIS REPORT COMPLETED BY TEP, JOB NO.: 25661.584643 DATED AUGUST 13, 2021 (REV 0).

ATTENTION ALL CONTRACTORS, ANYTIME YOU ACCESS A CROWN SITE FOR ANY REASON YOU ARE TO CALL THE CROWN NOC UPON ARRIVAL AND DEPARTURE, DAILY AT 800-788-7011.

QUALIFIED ENGINEERING SERVICES ARE AVAILABLE FROM TEP TO ASSIST CONTRACTORS IN CLASS IV RIGGING PLAN REVIEWS. FOR REQUESTED QUALIFIED ENGINEERING SERVICES, CONTACT TEP FOR QUOTE AT RIGGING@TEPGROUP.NET

# **SAFETY CLIMB: 'LOOK UP'**



THE INTEGRITY OF THE WIRE ROPE SAFETY CLIMB SYSTEM SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. MOUNT REINFORCEMENTS AND EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF ANY WIRE ROPE SAFETY CLIMB ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING 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, OR IMPACT TO THE ANCHORAGE POINTS IN ANY WAY. ANY COMPROMISED SAFETY CLIMB MUST BE REPORTED TO YOUR CROWN POC FOR RESOLUTION, INCLUDING EXISTING CONDITIONS.

INDEX OF SHEETS					
SHEET TITLE	REV				
TITLE SHEET	0				
PROJECT NOTES	0				
MOUNT MODIFICATION SCHEDULE	0				
	TITLE SHEET PROJECT NOTES				

# **PROJECT INFORMATION**

TOWER HEIGHT: 169.0-FT
MOUNT ELEVATION: 142.0-FT
MOUNT WIDTH/TYPE: 13.5-FT/PLATFORM

JDE JOB NO.: 669335

ORDER NO.: 570318 REV. 0

DESIGN BUILDING CODE: 2018 CONNECTICUT STATE BUILDING

DESIGN STANDARD: TIA-222-H

# **PROJECT TEAM**

### **CCI MODIFICATION PROJECT MANAGER:**

NAME CROWN CASTLE
CONTACT DARCY TARR
PHONE (704) 405-6589
FMAIL DARCY TARR@CROW

MAIL DARCY.TARR@CROWNCASTLE.COM

## **ENGINEERING FIRM PROJECT MANAGER:**

NAME TOWER ENGINEERING PROFESSIONALS, INC. CONTACT RYAN W. TSCHETTER, P.E.

PHONE (480) 750–9063

RWTSCHETTER@TEPGROUP.NET

PLANS PREPARED FOR:

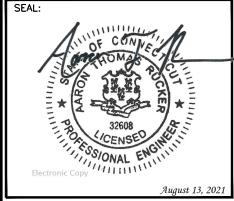
# CROWN CASTLE

6325 ARDREY KELL ROAD, SUITE 600 CHARLOTTE, NC 28277

PLANS PREPARED BY:



326 TRYON ROAD RALEIGH, NC 27603 OFFICE: (919) 661-6351 www.tepgroup.net



O 08-13-21 MODIFICATION DRAWINGS
REV DATE ISSUED FOR:

DRAWN BY: SCW CHECKED BY: PH

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

REVISION:

TEP#: 25661.58464

# **GENERAL NOTES:**

- 1. THE CONTRACT DOCUMENTS ARE THE PROPERTY OF CROWN CASTLE (CROWN). THEY ARE PROVIDED TO THE GC AND ITS LOWER TIER CONTRACTORS AND MATERIAL SUPPLIERS FOR THE LIMITED PURPOSE OF USE IN COMPLETING THE WORK FOR THIS SITE, AND SHALL BE KEPT IN STRICT CONFIDENCE AND NOT DISCLOSED TO ANY THIRD PARTIES. THE CONTRACT DOCUMENTS SHALL NOT BE USED FOR ANY OTHER PURPOSE WHATSOEVER WITHOUT THE PRIOR WRITTEN CONSENT OF CROWN.
- 2. DETAIL DRAWINGS, INCLUDING NOTES AND TABLES, SHALL GOVERN OVER GENERAL NOTES AND TYPICAL DETAILS. CONTACT THE CROWN POINT OF CONTACT (POC) AND ENGINEER OF RECORD (EOR) FOR CLARIFICATION AS NEEDED.
- 3. DO NOT SCALE DRAWINGS.
- 4. ANY WORK PERFORMED WITHOUT A PREFABRICATION MAPPING IS DONE AT THE RISK OF THE GC AND/OR FABRICATOR. ALL DIMENSIONS OF EXISTING STRUCTURAL ELEMENTS ARE ASSUMED BASED ON THE AVAILABLE DOCUMENTATION AND ARE PRELIMINARY UNTIL FIELD-VERIFIED BY THE GC, UNLESS NOTED OTHERWISE (UNO). WHERE DISCREPANCIES ARE FOUND, GC SHALL CONTACT THE CROWN POC AND EOR THROUGH RFI.
- 5. FOR THIS ANALYSIS AND MODIFICATION, THE MOUNT HAS BEEN ASSUMED TO BE IN GOOD CONDITION WITHOUT ANY STRUCTURAL DEFECTS, UNO. IF THE GC DISCOVERS ANY INDICATION OF AN EXISTING STRUCTURAL DEFECT, CONTACT THE CROWN POC AND EOR IMMEDIATELY.
- 6. 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 GC RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN STANDARD CED-STD-10253, "RIGGING PROGRAM", INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH THE ANSI/TIA-322 (LATEST EDITION).
- 7. THE STRUCTURAL INTEGRITY OF THE MODIFICATION DESIGN EXTENDS TO THE COMPLETE CONDITION ONLY. THE GC MUST BE COGNIZANT THAT THE REMOVAL OF ANY STRUCTURAL COMPONENT OF AN EXISTING TOWER HAS THE POTENTIAL TO CAUSE THE PARTIAL OR COMPLETE COLLAPSE OF THE STRUCTURE. ALL NECESSARY PRECAUTIONS MUST BE TAKEN TO ENSURE STRUCTURAL INTEGRITY, INCLUDING, BUT NOT LIMITED TO, ENGINEERING ASSESSMENT OF CONSTRUCTION STRESSES WITH INSTALLATION MAXIMUM WIND SPEED AND/OR TEMPORARY BRACING AND SHORING.
- 8. AERIAL AND UNDERGROUND UTILITIES AND FACILITIES MAY OR MAY NOT BE SHOWN ON THE DRAWINGS. THE GC SHALL TAKE EVERY PRECAUTION TO PRESERVE AND PROTECT THESE ITEMS, WHICH MAY INCLUDE AERIAL OR UNDERGROUND POWER LINES, TELEPHONE LINES, WATER LINES, SEWER LINES, CABLE TELEVISION FACILITIES, PIPELINES, STRUCTURES AND OTHER PUBLIC AND PRIVATE IMPROVEMENTS WITHIN OR ADJACENT TO THE WORK AREA. THE RESPONSIBILITY FOR DETERMINING THE ACTUAL ON—SITE LOCATION OF THESE ITEMS SHALL REST EXCLUSIVELY WITH THE GC.
- 9. ALL MANUFACTURER'S HARDWARE ASSEMBLY INSTRUCTIONS SHALL BE FOLLOWED, UNO. CONFLICTING NOTES SHALL BE BROUGHT TO THE ATTENTION OF THE EOR AND THE CROWN POC.
- 10. THE GC SHALL FABRICATE ALL REQUIRED ITEMS PER THE MATERIALS SPECIFIED BELOW, UNO ON THE DETAIL DRAWING SHEETS. IF THE GC FINDS FOR ANY COMPONENT THAT THE MATERIALS HAVE NOT BEEN CLEARLY SPECIFIED, THE GC SHALL SUBMIT AN RFI TO THE EOR TO CONFIRM THE REQUIRED MATERIAL.
- 11. CONTRACTOR PERSONNEL SHALL NOT DRILL HOLES IN ANY NEW OR EXISTING STRUCTURAL MEMBERS, OTHER THAN THOSE DRILLES HOLES SHOWN ON STRUCTURAL DRAWINGS, WITHOUT THE APPROVAL OF THE EOR.
- 12. FOR A LIST OF CROWN-APPROVED COLD GALVANIZING COMPOUNDS, REFER TO THE ENG-STD-10149. "TOWER PROTECTIVE COATINGS GUIDELINES".
- 13. ALL EXPOSES STRUCTURAL STEEL AS THE RESULT OF THIS SCOPE OF WORK INCLUDING BUT NOT LIMITED TO: FIELD DRILLED HOLES, AND SHAFT INTERIORS (WERE ACCESSIBLE), SHALL BE CLEANED AND TWO (2) COATS COLD GALVANIZING SHALL BE APPLIED BY BRUSH IN ACCORDANCE WITH ENG-STD-10149, "TOWER PROTECTIVE COATINGS GUIDELINES".
- 14. ALL TOWER GROUNDING AFFECTED BY THE WORK SHALL BE REPAIRED OR REPLACED IN ACCORDANCE WITH OPS-STD-10090, "TOWER GROUNDING", AND OPS-BUL-10133, "GROUNDING REPAIR RECOMMENDATION".
- 15. ANY HARDWARE REMOVED FROM THE EXISTING TOWER SHALL BE REPLACED WITH NEW HARDWARE OF EQUAL SIZE AND QUALITY, UNO. NO EXISTING FASTENERS SHALL BE REUSED.
- 16. ALL JOINTS USING ASTM A325 OR A490 BOLTS, U-BOLTS, V-BOLTS, AND THREADED RODS SHALL BE SNUG TIGHTENED, UNO.
- 17. A NUT LOCKING DEVICE SHALL BE INSTALLED ON ALL PROPOSED AND/OR REPLACED SNUG TIGHTENED ASTM A325 OR A490 BOLTS, U-BOLTS, V-BOLTS, AND THREADED RODS.
- 18. ALL JOINTS ARE BEARING TYPE CONNECTIONS UNO. IF NO BOLT LENGTH IS GIVEN IN THE BILL OF MATERIALS, THE CONNECTION MAY INCLUDE THREADS IN THE SHEAR PLANES, AND THE GC IS RESPONSIBLE FOR SIZING THE LENGTH OF THE BOLT.
- 19. IF ASTM A325 OR A490 BOLTS, AND/OR THREADED RODS ARE SPECIFIED TO BE PRE-TENSIONED, THESE SHALL BE INSTALLED AND TIGHTENED TO THE PRE-TENSIONED CONDITION ACCORDING TO THE REQUIREMENTS OF THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM HIGH STRENGTH BOLTS.
- 20. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.

PLANS PREPARED FOR:

# **CROWN CASTLE**

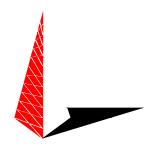
6325 ARDREY KELL ROAD, SUITE 600 CHARLOTTE, NC 28277

PROJECT INFORMATION:

# PLYMOUTH/RT 6 BU #: 826768 CARRIER: VERIZON

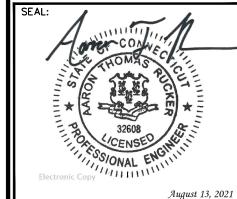
171 TOWN HILL ROAD PLYMOUTH, CT 06786 (LITCHFIELD COUNTY)

PLANS PREPARED BY:



#### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603 OFFICE: (919) 661-6351 www.tepgroup.net



August 15, 2021

REV	DATE	ISSUED FOR:
0	08-13-21	MODIFICATION DRAWINGS

DRAWN BY: SCW CHECKED BY: PH

SHEET TITLE:

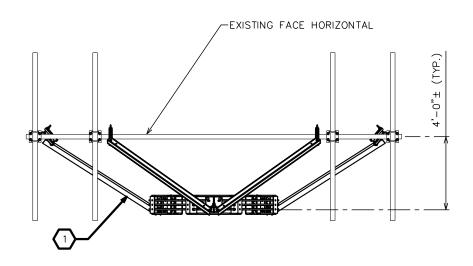
**PROJECT NOTES** 

SHEET NUMBER:

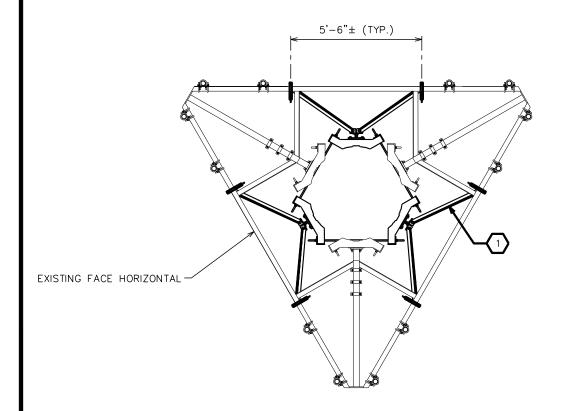
N-1

REVISION:

TEP#: 25661.584643



# **ELEVATION VIEW**



# **PLAN VIEW**

# MODIFICATION SCHEDULE

NO.	MODIFICATION DESCRIPTION	ELEVATION (FT.)	SHEET
	ADD SITE PRO 1 PRK-SFS-L REINFORCEMENT KIT.	142	S-1

# **NOTES:**

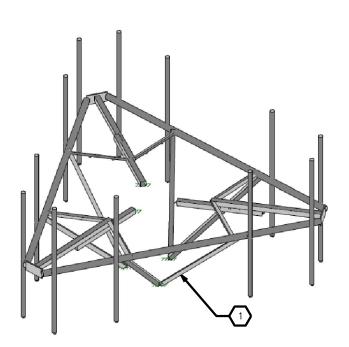
- . PRIOR TO FABRICATION, CONTRACTOR SHALL FIELD VERIFY ALL LENGTHS AND QUANTITIES GIVEN. LENGTHS AND QUANTITIES PROVIDED ARE FOR QUOTING PURPOSES ONLY AND SHALL NOT BE USED FOR FABRICATION.
- 2. PROPER FIT-UP OF THE PROPOSED MODIFICATIONS MAY REQUIRE FIELD CUTTING/TRIMMING. CONTACT EOR FOR APPROVAL UNO.

# **BILL OF MATERIALS**

MANUFACTURER	PART NUMBER	QUANTITY	NOTES
SITE PRO 1	PRK-SFS-L	1	1,2

# **NOTES:**

- 1. CONTRACTOR MAY SUBSTITUTE EQUIVALENT PARTS WITH EOR APPROVAL.
- 2. UNO, CONNECTION HARDWARE IS INCLUDED WITH REINFORCEMENT KITS.



**ISOMETRIC VIEW** 

PLANS PREPARED FOR:

# **CROWN CASTLE**

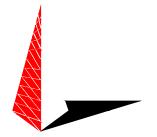
6325 ARDREY KELL ROAD, SUITE 600 CHARLOTTE, NC 28277

PROJECT INFORMATION:

# PLYMOUTH/RT 6 BU #: 826768 CARRIER: VERIZON

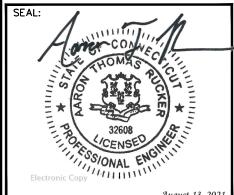
171 TOWN HILL ROAD PLYMOUTH, CT 06786 (LITCHFIELD COUNTY)

PLANS PREPARED BY:



## **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603 OFFICE: (919) 661-6351 www.tepgroup.net



August 15, 2021

0	08-13-21	MODIFICATION DRAWINGS
REV	DATE	ISSUED FOR:

DRAWN BY: SCW CHECKED BY: PHX

SHEET TITLE:

MOUNT MODIFICATION SCHEDULE

SHEET NUMBER:

REVISION:

TEP#: 25661.58464.

**S-1** 

# Exhibit D

**Structural Analysis Report** 

Date: May 23, 2021



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

**Structural Analysis Report** Subject:

Verizon Wireless Co-Locate Carrier Designation:

> Site Number: 468084 Site Name: Plymouth CT

Crown Castle Designation: **BU Number:** 826768

> Site Name: Plymouth/RT 6

> JDE Job Number: 669335 **Work Order Number:** 1967871 **Order Number:** 570318 Rev. 0

Engineering Firm Designation: **TEP Project Number:** 25661.548444

Site Data: 171 Town Hill Road, Plymouth, Litchfield County, CT 06786

Latitude 41° 40′ 6.20″, Longitude -73° 1′ 11.84″

169 Foot - Monopole Tower

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

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

LC7: Proposed Equipment Configuration

Sufficient Capacity - 58.0%

This analysis utilizes an ultimate 3-second gust wind speed of 120 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Matthew G. Young, P.E. / CLT

Respectfully submitted by:

Aaron T. Rucker, P.E.

05/24/2021

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# 2) ANALYSIS CRITERIA

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Table 5 - Tower Component Stresses vs. Capacity
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## 5) APPENDIX A

tnxTower Output

## 6) APPENDIX B

Base Level Drawing

# 7) APPENDIX C

Additional Calculations

# 1) INTRODUCTION

This tower is a 169-ft monopole tower designed by Pirod, Inc.

# 2) ANALYSIS CRITERIA

TIA-222 Revision: TIA-222-H

Risk Category:

Wind Speed: 120 mph

Exposure Category:BTopographic Factor:1.0Ice Thickness:1.5 inWind Speed with Ice:50 mphService Wind Speed:60 mph

**Table 1 - Proposed Equipment Configuration** 

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
		3	Samsung Telecom.	MT6407-77A w/ Mount Pipe		
	6	Antel	LPA-80080/6CF w/ Mount Pipe			
		6	Commscope	SBNHH-1D65B w/ Mount Pipe	8	1-5/8
142.0	142.0	3	Samsung Telecom.	RFV01U-D1A		
142.0	142.0	3	Samsung Telecom.	RFV01U-D2A	0	1-5/6
		2	RFS Celwave	DB-T1-6Z-8AB-0Z	1	
		3	Generic	Side by Side Mounting Kit		
		1	Tower Mounts	Platform Mount [LP 403-1]		

**Table 2 - Other Considered Equipment** 

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
	168.0	3	RFI Antennas	COL45-70		
		3	RFS Celwave	APXVAARR24_43-U-NA20 w/ Mount Pipe		
		3	Ericsson	AIR6449 B41 w/ Mount Pipe		
164.0	165.0	3	Ericsson	AIR 32 B2A/B66AA w/ Mount Pipe	7 3	7/8 1-5/8
		3	Ericsson	Radio 4449 B71 B85A_T-Mobile		
		3	Ericsson	RRUS 4415 B25		
	164.0	1	Tower Mounts	Platform Mount [LP 404-1_KCKR]		

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)		
		3	RFS Celwave	APXVTM14-C-120 w/ Mount Pipe		1-1/4		
		3	RFS Celwave	APXVSPP18-C-A20 w/ Mount Pipe	-			
155.0	155.0	3	Alcatel Lucent	TD-RRH8x20-25	4			
		3	Alcatel Lucent	800MHZ RRH				
		3	Alcatel Lucent	1900MHz RRH	-			
		1	Tower Mounts	Platform Mount [LP 305-1]	_			
121.0	125.0	1	RFS Celwave	201-4	1	1/2		
121.0	121.0	1	Tower Mounts	Side Arm Mount [SO 701-1]	-			
	115.0	3	Powerwave Technologies	7770.00		3/8 5/8 1-5/8		
		3	KMW Comm.	AM-X-CD-16-65-00T-RET				
		3	Kathrein	80010965	3 6			
		3	Quintel Technology	QS66512-2				
		6	Kaelus	DBCT108F1V92-1				
		3	Ericsson	RRUS 12 B2				
		3	CCI Antennas	DTMABP7819VG12A				
115.0		3	Ericsson	RRUS 4478 B5				
		3	Ericsson	RRUS 4478 B14	12			
				3	Ericsson	WCS RRUS-32-B30		
		6	CCI Antennas	TPX-070821	_			
		3	Ericsson	RRUS 11				
		3	Ericsson	RRUS 4426 B66	-			
		2	Raycap	DC6-48-60-18-8F				
		1	Raycap	DC6-48-60-18-8C				
		1	Tower Mounts	Platform Mount [LP 301-1]				
105.0	105.0	3	RFS Celwave	APXV18-206517S-C w/ Mount Pipe	6	1-5/8		
74.0	83.0	1	Decibel DB810T3E-XT		Decibel	- 1	7/8	
74.0	74.0	1	Tower Mounts	Side Arm Mount [SO 701-1]	<u> </u>			

# 3) ANALYSIS PROCEDURE

**Table 3 - Documents Provided** 

Document	Reference	Source	
Geotechnical Report	3491991	CCISites	
Tower Foundation Drawings	3678682	CCISites	
Tower Manufacturer Drawings	3491992	CCISites	

### 3.1) Analysis Method

tnxTower (version 8.0.9.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A. When applicable, Crown Castle has calculated and provided the effective area for panel antennas using approved methods following the intent of the TIA-222 Standard.

## 3.2) Assumptions

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

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

### 4) ANALYSIS RESULTS

**Table 4 - Section Capacity (Summary)** 

Section No.	Elevation (ft)	Component Type	Size	Critical Element	P (k)	ΦP <sub>allow</sub> (k)	% Capacity	Pass / Fail
L1	169 - 164.25	Pole	TP26x18x0.25	1	-0.62	1060.11	1.1	Pass
L2	164.25 - 129.75	Pole	TP34.0625x21.5x0.3125	2	-15.79	1976.75	18.9	Pass
L3	129.75 - 96.08	Pole	TP41.75x32.1327x0.375	3	-28.15	2937.41	30.1	Pass
L4	96.08 - 63.25	Pole	TP49.0625x39.8023x0.375	4	-37.76	3460.30	41.8	Pass
L5	63.25 - 31.25	Pole	TP56.125x46.9543x0.375	5	-48.59	3964.20	50.3	Pass
L6	31.25 - 0	Pole	TP62.9375x53.8466x0.375	6	-63.20	4574.01	58.0	Pass
							Summary	
						Pole (L6)	58.0	Pass
						RATING =	58.0	Pass

Table 5 - Tower Component Stresses vs. Capacity - LC7

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail	
1,2	Anchor Rods	-	55.7	Pass	
1,2,3	Base Plate	-	58.0	Pass	
1,2	Base Foundation Soil Interaction	-	39.5	Pass	
1,2	Base Foundation Structural	-	51.0	Pass	

Structure Rating (max from all components) =	58.0%
--	-------

#### Notes:

- 1) See additional documentation in "Appendix C Additional Calculations" for calculations supporting the % capacity listed.
- 2) Rating per TIA-222-H Section 15.5
- Base plates are assumed to have the same capacity as their respective splice bolts or shaft.

## 4.1) Recommendations

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

# APPENDIX A TNXTOWER OUTPUT

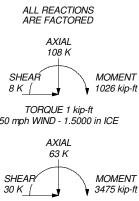
									169.0 ft	G
-	4.75	81	0.2500	2.38	18.0000	26.0000		0.3	164.3 ft	A572
2	36.88	18	0.3125	3.83	21.5000	34.0625		3.4		1. T 2. T 3. T 4. T ir 5. C 6. T 7. T 8. T
е	37.50	18	0.3750	4.67	32.1327	41.7500		5.6	129.8 ft	
4	37.50	18	0.3750	5.50	39.8023	49.0625	A572-65	6.7	96.1 ft	
D	37.50	18	0.3750	6.25	46.9543	56.1250		7.8	ALL REAC ARE FACT AXIA 108	TORED L
Q	37.50	18	0.3750		53.8466	62.9375		8.8	SHEAR 8 K  TORQUE 50 mph WIND -  AXIA 63 H  SHEAR 30 K	1.5000 in ICE L ( MOM 3475
Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K) 32.5	TORQUE REACTIONS - 12	2 kip-ft 20 mph WINE

#### **MATERIAL STRENGTH**

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

### **TOWER DESIGN NOTES**

- 1. Tower is located in Litchfield County, Connecticut.
- 2. Tower designed for Exposure B to the TIA-222-H Standard.
- 3. Tower designed for a 120 mph basic wind in accordance with the TIA-222-H Standard.
- Tower is also designed for a 50 mph basic wind with 1.50 in ice. Ice is considered to increase in thickness with height.
- 5. Deflections are based upon a 60 mph wind.
- Tower Risk Category II.
   Topographic Category 1 with Crest Height of 0.00 ft
   TOWER RATING: 58%



Tower Engineering Professionals

Tower Engineering Professionals 326 Tryon Road

Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350

<sup>ob:</sup> Plymouth/RT 6 (BU 826768)								
Project: <b>TEP No. 25661.548444</b>								
Client: Crown Castle	Drawn by: zschartraw	App'd:						
Code: TIA-222-H		Scale: NTS						
Path:	eis, Incidentaa TNO Oraen Managaintästinin Plemaum RT eistelinin 1967671 LCC ee	Dwg No. E-						

tnxTower	Job	Plymouth/RT 6 (BU 826768)	Page 1 of 17
Tower Engineering Professionals 326 Tryon Road	Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Raleigh, NC 27603 Phone: (919) 661-6351	Client	Crown Castle	Designed by

### **Tower Input Data**

The tower is a monopole.

This tower is designed using the TIA-222-H standard.

The following design criteria apply:

FAX: (919) 661-6350

Tower is located in Litchfield County, Connecticut.

Tower base elevation above sea level: 890.00 ft.

Basic wind speed of 120 mph.

Risk Category II.

Exposure Category B.

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

Topographic Category: 1. Crest Height: 0.00 ft.

Nominal ice thickness of 1.5000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

A wind speed of 50 mph is used in combination with ice.

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

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

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

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

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

Maximum demand-capacity ratio is: 1.05.

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

### **Options**

Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification

- Use Code Stress Ratios
- Use Code Safety Factors Guys Escalate Ice

Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric

- Distribute Leg Loads As Uniform Assume Legs Pinned
- Assume Rigid Index Plate
- Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension
- Bypass Mast Stability Checks
- Use Azimuth Dish Coefficients
- Project Wind Area of Appurt. Autocalc Torque Arm Areas Add IBC .6D+W Combination
- Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs

Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation

zschartraw

Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption Poles

Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known

Tower Engineering Professionals 326 Tryon Road

Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350

Job	Plymouth/RT 6 (BU 826768)	Page 2 of 17
Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

### **Tapered Pole Section Geometry**

Section	Elevation	Section	Splice	Number	Top	Bottom	Wall	Bend	Pole Grade
		Length	Length	of	Diameter	Diameter	Thickness	Radius	
	ft	ft	ft	Sides	in	in	in	in	
L1	169.00-164.25	4.75	2.38	18	18.0000	26.0000	0.2500	1.0000	A572-65
									(65 ksi)
L2	164.25-129.75	36.88	3.83	18	21.5000	34.0625	0.3125	1.2500	A572-65
									(65 ksi)
L3	129.75-96.08	37.50	4.67	18	32.1327	41.7500	0.3750	1.5000	A572-65
									(65 ksi)
L4	96.08-63.25	37.50	5.50	18	39.8023	49.0625	0.3750	1.5000	A572-65
									(65 ksi)
L5	63.25-31.25	37.50	6.25	18	46.9543	56.1250	0.3750	1.5000	A572-65
									(65 ksi)
L6	31.25-0.00	37.50		18	53.8466	62.9375	0.3750	1.5000	A572-65
									(65 ksi)

### **Tapered Pole Properties**

Section	Tip Dia.	Area	I	r	С	I/C	J	It/Q	w	w/t
	in	in <sup>2</sup>	in <sup>4</sup>	in	in	$in^3$	in <sup>4</sup>	in <sup>2</sup>	in	
L1	18.2391	14.0846	560.6340	6.3012	9.1440	61.3117	1122.0058	7.0437	2.7280	10.912
	26.3625	20.4326	1711.6544	9.1412	13.2080	129.5922	3425.5610	10.2183	4.1360	16.544
L2	22.6051	21.0154	1191.8828	7.5216	10.9220	109.1268	2385.3338	10.5097	3.2340	10.349
	34.5398	33.4758	4817.4335	11.9812	17.3038	278.4040	9641.2058	16.7411	5.4450	17.424
L3	33.5680	37.7996	4816.4040	11.2740	16.3234	295.0611	9639.1455	18.9034	4.9954	13.321
	42.3362	49.2466	10650.9822	14.6881	21.2090	502.1916	21315.9793	24.6280	6.6880	17.835
L4	41.5295	46.9284	9216.5336	13.9967	20.2196	455.8222	18445.1946	23.4686	6.3452	16.921
	49.7615	57.9503	17355.1378	17.2841	24.9238	696.3293	34733.1119	28.9807	7.9750	21.267
L5	48.9866	55.4411	15196.9230	16.5357	23.8528	637.1126	30413.8426	27.7258	7.6040	20.277
	56.9330	66.3564	26056.1506	19.7913	28.5115	913.8821	52146.5865	33.1845	9.2180	24.581
L6	56.1579	63.6445	22990.2730	18.9824	27.3541	840.4705	46010.7971	31.8283	8.8170	23.512
	63.8506	74.4650	36822.8946	22.2097	31.9722	1151.7142	73694.2417	37.2396	10.4170	27.779

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade Adjust. Fac $A_f$	tor Adjust. Factor A <sub>r</sub>	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft <sup>2</sup>	in				in	in	in
L1			1	1	1			
169.00-164.25								
L2			1	1	1			
164.25-129.75								
L3			1	1	1			
129.75-96.08								
L4 96.08-63.25			1	1	1			
L5 63.25-31.25			1	1	1			
L6 31.25-0.00			1	1	1			

### Feed Line/Linear Appurtenances - Entered As Round Or Flat

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Description	Sector	Exclude From	Component Type	Placement	Total Number	Number Per Row	Start/End Position	Width or Diameter	Perimeter	Weight
		Torque Calculation	••	ft				in	in	plf
Safety Line 3/8	A	No	Surface Ar (CaAa)	169.00 - 0.00	1	1	-0.500 -0.500	0.3750		0.22
PiRod Ladder *****121*****	A	No	Surface Af (CaAa)	169.00 - 0.00	1	1	-0.500 -0.500	0.5400	1.6965	2.00
LDF4-50A(1/2)	A	No	Surface Ar (CaAa)	121.00 - 0.00	1	1	-0.250 -0.250	0.6250		0.15
LDF4-50A(1/2) *****115*****	A	No	Surface Ar (CaAa)	121.00 - 0.00	1	1	0.000 0.000	0.6250		0.15
LDF7-50A(1-5/8)	A	No	Surface Ar (CaAa)	115.00 - 0.00	12	6	0.250 0.250	1.9800		0.82
2" Flexible Conduit ****105*****	A	No	Surface Ar (CaAa)	115.00 - 0.00	2	1	0.500 0.500	2.0000		0.34
LDF7-50A(1-5/8) *****74*****	В	No	Surface Ar (CaAa)	105.00 - 0.00	6	6	-0.250 -0.250	1.9800		0.82
LDF5-50A(7/8) *****	A	No	Surface Ar (CaAa)	74.00 - 0.00	1	1	-0.250 -0.250	1.0900		0.33

### Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque	Component Type	Placement ft	Total Number		C <sub>A</sub> A <sub>A</sub> ft²/ft	Weight plf
			Calculation						
*****164****									
810921-701(7/8)	C	No	No	Inside Pole	164.00 - 0.00	7	No Ice	0.00	0.34
							1/2" Ice	0.00	0.34
							1" Ice	0.00	0.34
							2" Ice	0.00	0.34
HCS 6X12	C	No	No	Inside Pole	164.00 - 0.00	3	No Ice	0.00	2.40
4AWG(1-5/8)							1/2" Ice	0.00	2.40
							1" Ice	0.00	2.40
							2" Ice	0.00	2.40
*****155*****									
HB114-1-08U4-M6	C	No	No	Inside Pole	155.00 - 0.00	3	No Ice	0.00	1.30
F(1-1/4)							1/2" Ice	0.00	1.30
							1" Ice	0.00	1.30
							2" Ice	0.00	1.30
HB114-21U3M12-X	C	No	No	Inside Pole	155.00 - 0.00	1	No Ice	0.00	1.22
XXF(1-1/4)							1/2" Ice	0.00	1.22
							1" Ice	0.00	1.22
							2" Ice	0.00	1.22
*****142*****									
HB158-1-08U8-S8J	C	No	No	Inside Pole	142.00 - 0.00	2	No Ice	0.00	1.30
18(1-5/8)							1/2" Ice	0.00	1.30
` ′							1" Ice	0.00	1.30
							2" Ice	0.00	1.30
LDF7-50A(1-5/8)	C	No	No	Inside Pole	142.00 - 0.00	6	No Ice	0.00	0.82
, ,							1/2" Ice	0.00	0.82
							1" Ice	0.00	0.82
							2" Ice	0.00	0.82
FB-L98B-034-XXX(	Α	No	No	Inside Pole	115.00 - 0.00	3	No Ice	0.00	0.06
3/8)						-	1/2" Ice	0.00	0.06

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Description	Face or	Allow Shield	Exclude From	Component Type	Placement	Total Number		$C_AA_A$	Weight
	Leg		Torque Calculation		ft			ft²/ft	plf
							1" Ice	0.00	0.06
							2" Ice	0.00	0.06
VR-VG82ST-BRD	A	No	No	Inside Pole	115.00 - 0.00	6	No Ice	0.00	0.31
A(5/8)							1/2" Ice	0.00	0.31
							1" Ice	0.00	0.31
							2" Ice	0.00	0.31
****									

### Feed Line/Linear Appurtenances Section Areas

Tower	Tower	Face	$A_R$	$A_F$	$C_A A_A$	$C_A A_A$	Weight
Section	Elevation				In Face	Out Face	
	ft		ft <sup>2</sup>	ft <sup>2</sup>	ft <sup>2</sup>	$ft^2$	K
L1	169.00-164.25	A	0.000	0.000	0.606	0.000	0.01
		В	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.00
L2	164.25-129.75	A	0.000	0.000	4.399	0.000	0.08
		В	0.000	0.000	0.000	0.000	0.00
		C	0.000	0.000	0.000	0.000	0.55
L3	129.75-96.08	A	0.000	0.000	33.669	0.000	0.32
		В	0.000	0.000	10.597	0.000	0.04
		C	0.000	0.000	0.000	0.000	0.75
L4	96.08-63.25	A	0.000	0.000	55.029	0.000	0.50
		В	0.000	0.000	39.002	0.000	0.16
		C	0.000	0.000	0.000	0.000	0.73
L5	63.25-31.25	A	0.000	0.000	55.984	0.000	0.49
		В	0.000	0.000	38.016	0.000	0.16
		C	0.000	0.000	0.000	0.000	0.71
L6	31.25-0.00	A	0.000	0.000	54.672	0.000	0.48
		В	0.000	0.000	37.125	0.000	0.15
		C	0.000	0.000	0.000	0.000	0.69

### Feed Line/Linear Appurtenances Section Areas - With Ice

Tower	Tower	Face	Ice Thickness	$A_R$	$A_F$	C <sub>A</sub> A <sub>A</sub> In Face	C <sub>A</sub> A <sub>A</sub> Out Face	Weight
Section	Elevation ft	or Leg	in	ft <sup>2</sup>	$ft^2$	in Face ft <sup>2</sup>	Out Face ft <sup>2</sup>	K
L1	169.00-164.25	A A	1.499	0.000	0.000	3.454	0.000	0.05
D.	107.00 101.23	В	1.177	0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.00
L2	164.25-129.75	Α	1.479	0.000	0.000	25.085	0.000	0.34
		В		0.000	0.000	0.000	0.000	0.00
		C		0.000	0.000	0.000	0.000	0.55
L3	129.75-96.08	A	1.441	0.000	0.000	86.554	0.000	1.45
		В		0.000	0.000	16.545	0.000	0.22
		C		0.000	0.000	0.000	0.000	0.75
L4	96.08-63.25	A	1.392	0.000	0.000	127.026	0.000	2.17
		В		0.000	0.000	60.582	0.000	0.78
		C		0.000	0.000	0.000	0.000	0.73
L5	63.25-31.25	A	1.322	0.000	0.000	130.078	0.000	2.14
		В		0.000	0.000	58.656	0.000	0.74

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Tower	Tower	Face	Ice	$A_R$	$A_F$	$C_AA_A$	$C_A A_A$	Weight
Section	Elevation	or	Thickness			In Face	Out Face	
	ft	Leg	in	ft <sup>2</sup>	ft <sup>2</sup>	$ft^2$	ft <sup>2</sup>	K
		C		0.000	0.000	0.000	0.000	0.71
L6	31.25-0.00	A	1.181	0.000	0.000	123.837	0.000	1.99
		В		0.000	0.000	56.731	0.000	0.69
		C		0.000	0.000	0.000	0.000	0.69

### **Feed Line Center of Pressure**

Section	Elevation	$CP_X$	$CP_Z$	$CP_X$	$CP_Z$
				Ice	Ice
	ft	in	in	in	in
L1	169.00-164.25	-0.4971	1.0572	-1.5012	2.3869
L2	164.25-129.75	-0.5039	1.0759	-1.6066	2.5624
L3	129.75-96.08	-1.8784	-5.1169	-3.1212	-3.1588
L4	96.08-63.25	-0.9946	-9.1788	-2.4285	-6.5648
L5	63.25-31.25	-1.3476	-9.6621	-3.0674	-6.9749
L6	31.25-0.00	-1.4132	-10.1642	-3.1913	-7.4693

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

### **Shielding Factor Ka**

Tower	Feed Line	Description	Feed Line	$K_a$	$K_a$
Section	Record No.		Segment Elev.	No Ice	Ice
L1	1	Safety Line 3/8	164.25 -	1.0000	1.0000
			169.00		
L1	2	PiRod Ladder	164.25 -	1.0000	1.0000
			169.00		
L2	1	Safety Line 3/8	129.75 -	1.0000	1.0000
			164.25		
L2	2	PiRod Ladder	129.75 -	1.0000	1.0000
			164.25		
L3	1	Safety Line 3/8	96.08 - 129.75	1.0000	1.0000
L3	2	PiRod Ladder	96.08 - 129.75	1.0000	1.0000
L3	16	LDF4-50A(1/2)	96.08 - 121.00	1.0000	1.0000
L3	17	LDF4-50A(1/2)	96.08 - 121.00	1.0000	1.0000
L3	19	LDF7-50A(1-5/8)	96.08 - 115.00	1.0000	1.0000
L3	20	2" Flexible Conduit	96.08 - 115.00	1.0000	1.0000
L3	24	LDF7-50A(1-5/8)	96.08 - 105.00	1.0000	1.0000
L4	1	Safety Line 3/8	63.25 - 96.08	1.0000	1.0000
L4	2	PiRod Ladder	63.25 - 96.08	1.0000	1.0000
L4	16	LDF4-50A(1/2)	63.25 - 96.08	1.0000	1.0000
L4	17	LDF4-50A(1/2)	63.25 - 96.08	1.0000	1.0000
L4	19	LDF7-50A(1-5/8)	63.25 - 96.08	1.0000	1.0000
L4	20	2" Flexible Conduit	63.25 - 96.08	1.0000	1.0000
L4	24	LDF7-50A(1-5/8)	63.25 - 96.08	1.0000	1.0000
L4	26	LDF5-50A(7/8)		1.0000	1.0000
L5	1	Safety Line 3/8	31.25 - 63.25	1.0000	1.0000
L5	2	PiRod Ladder	31.25 - 63.25	1.0000	1.0000
L5	16	LDF4-50A(1/2)	31.25 - 63.25	1.0000	1.0000

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Tower	Feed Line	Description	Feed Line	$K_a$	$K_a$
Section	Record No.		Segment Elev.	No Ice	Ice
L5	17	LDF4-50A(1/2)	31.25 - 63.25	1.0000	1.0000
L5	19	LDF7-50A(1-5/8)	31.25 - 63.25	1.0000	1.0000
L5	20	2" Flexible Conduit	31.25 - 63.25	1.0000	1.0000
L5	24	LDF7-50A(1-5/8)	31.25 - 63.25	1.0000	1.0000
L5	26	LDF5-50A(7/8)	31.25 - 63.25	1.0000	1.0000
L6	1	Safety Line 3/8	0.00 - 31.25	1.0000	1.0000
L6	2	PiRod Ladder	0.00 - 31.25	1.0000	1.0000
L6	16	LDF4-50A(1/2)	0.00 - 31.25	1.0000	1.0000
L6	17	LDF4-50A(1/2)	0.00 - 31.25	1.0000	1.0000
L6	19	LDF7-50A(1-5/8)	0.00 - 31.25	1.0000	1.0000
L6	20	2" Flexible Conduit	0.00 - 31.25	1.0000	1.0000
L6	24	LDF7-50A(1-5/8)	0.00 - 31.25	1.0000	1.0000
L6	26	LDF5-50A(7/8)	0.00 - 31.25	1.0000	1.0000

### **Effective Width of Flat Linear Attachments / Feed Lines**

Tower	Attachment	Description	Attachment	Ratio	Effective
Section	Record No.		Segment Elev.	Calculation	Width
				Method	Ratio
L1	2	PiRod Ladder	164.25 -	Manual	1.0000
			169.00		
L2	2	PiRod Ladder	129.75 -	Manual	1.0000
			164.25		
L3	2	PiRod Ladder	96.08 - 129.75	Manual	1.0000
L4	2	PiRod Ladder	63.25 - 96.08	Manual	1.0000
L5	2	PiRod Ladder	31.25 - 63.25	Manual	1.0000
L6	2	PiRod Ladder	0.00 - 31.25	Manual	1.0000

			Di	screte T	ower L	oads			
Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement		C <sub>A</sub> A <sub>A</sub> Front	C <sub>A</sub> A <sub>A</sub> Side	Weight
			ft ft ft	٥	ft		ft²	ft <sup>2</sup>	K
Lightning Rod 5/8"x4'	С	From Leg	3.00 0.00 2.00	0.0000	169.00	No Ice 1/2" Ice 1" Ice	0.25 0.66 0.97	0.25 0.66 0.97	0.00 0.01 0.01
8'x3" Mount Pipe	С	From Leg	3.00 0.00 0.00	0.0000	167.00	2" Ice No Ice 1/2" Ice 1" Ice 2" Ice	1.49 2.80 3.41 3.89 4.90	1.49 2.80 3.41 3.89 4.90	0.03 0.06 0.08 0.11 0.17
*** 15' Omni	A	From Leg	3.00	0.0000	167.00	No Ice	4.13	4.13	0.04

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral	Azimuth Adjustment	Placement		C <sub>A</sub> A <sub>A</sub> Front	C <sub>A</sub> A <sub>A</sub> Side	Weight
			Vert ft ft ft	0	ft		ft²	ft²	K
			0.00			1/2" Ice	5.66	5.66	0.07
			11.00			1" Ice	7.20	7.20	0.10
						2" Ice	10.35	10.35	0.21
15' Omni	В	From Leg	3.00	0.0000	167.00	No Ice	4.13	4.13	0.04
			0.00			1/2" Ice	5.66	5.66	0.07
			11.00			1" Ice	7.20	7.20	0.10
						2" Ice	10.35	10.35	0.21
15' Omni	C	From Leg	3.00	0.0000	167.00	No Ice	4.13	4.13	0.04
			0.00			1/2" Ice	5.66	5.66	0.07
			11.00			1" Ice	7.20	7.20	0.10
						2" Ice	10.35	10.35	0.21
2.4" Dia x 6-ft Pipe	Α	From Leg	3.00	0.0000	167.00	No Ice	1.43	1.43	0.02
			0.00			1/2" Ice	1.93	1.93	0.03
			0.00			1" Ice	2.30	2.30	0.05
0.411.D1 ( 6.D1	ъ.		2.00	0.0000	167.00	2" Ice	3.06	3.06	0.09
2.4" Dia x 6-ft Pipe	В	From Leg	3.00	0.0000	167.00	No Ice	1.43	1.43	0.02
			0.00			1/2" Ice 1" Ice	1.93	1.93	0.03
			0.00				2.30	2.30	0.05
2 4" Di ( & Di	C	E I	2.00	0.0000	167.00	2" Ice	3.06	3.06	0.09
2.4" Dia x 6-ft Pipe	С	From Leg	3.00	0.0000	167.00	No Ice 1/2" Ice	1.43 1.93	1.43 1.93	0.02 0.03
			0.00			1" Ice	2.30	2.30	0.05
			0.00			2" Ice	3.06	3.06	0.03
Side Arm Mount [SO 701-3]	C	None		0.0000	167.00	No Ice	3.00	3.00	0.09
Side Aim Would [50 701-5]	C	None		0.0000	107.00	1/2" Ice	4.18	4.18	0.24
						1" Ice	5.33	5.33	0.24
						2" Ice	7.63	7.63	0.26
*****164****						2 100	7.03	7.03	0.50
APXVAARR24_43-U-NA20	Α	From	4.00	0.0000	164.00	No Ice	14.69	6.87	0.19
w/ Mount Pipe		Centroid-Fa	0.00			1/2" Ice	15.46	7.55	0.31
		ce	1.00			1" Ice	16.23	8.25	0.46
						2" Ice	17.82	9.67	0.79
APXVAARR24_43-U-NA20	В	From	4.00	0.0000	164.00	No Ice	14.69	6.87	0.19
w/ Mount Pipe		Centroid-Fa	0.00			1/2" Ice	15.46	7.55	0.31
		ce	1.00			1" Ice	16.23	8.25	0.46
						2" Ice	17.82	9.67	0.79
APXVAARR24_43-U-NA20	C	From	4.00	0.0000	164.00	No Ice	14.69	6.87	0.19
w/ Mount Pipe		Centroid-Fa	0.00			1/2" Ice	15.46	7.55	0.31
		ce	1.00			1" Ice	16.23	8.25	0.46
						2" Ice	17.82	9.67	0.79
AIR6449 B41 w/ Mount Pipe	Α	From	4.00	0.0000	164.00	No Ice	5.18	2.72	0.12
		Centroid-Fa	0.00			1/2" Ice	5.59	3.05	0.16
		ce	1.00			1" Ice	6.01	3.39	0.22
						2" Ice	6.90	4.13	0.34
AIR6449 B41 w/ Mount Pipe	В	From	4.00	0.0000	164.00	No Ice	5.18	2.72	0.12
		Centroid-Fa	0.00			1/2" Ice	5.59	3.05	0.16
		ce	1.00			1" Ice	6.01	3.39	0.22
AID (440 D44 /35 )	~	F	4.00	0.0000	16460	2" Ice	6.90	4.13	0.34
AIR6449 B41 w/ Mount Pipe	C	From	4.00	0.0000	164.00	No Ice	5.18	2.72	0.12
		Centroid-Fa	0.00			1/2" Ice	5.59	3.05	0.16
		ce	1.00			1" Ice	6.01	3.39	0.22
A ID 22 D2 A /D ( ) A /		F	4.00	0.0000	16400	2" Ice	6.90	4.13	0.34
AIR 32 B2A/B66AA w/	A	From	4.00	0.0000	164.00	No Ice	3.76	3.15	0.19
Mount Pipe		Centroid-Fa	0.00			1/2" Ice	4.12	3.49	0.25
		ce	1.00			1" Ice	4.48	3.84	0.32
						2" T	5 2 4	150	0.40
AIR 32 B2A/B66AA w/	В	From	4.00	0.0000	164.00	2" Ice No Ice	5.24 3.76	4.58 3.15	0.48 0.19

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Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Description	Face or Leg	Offset Type	Offsets: Horz Lateral	Azimuth Adjustment	Placement		C <sub>A</sub> A <sub>A</sub> Front	C <sub>A</sub> A <sub>A</sub> Side	Weight
			Vert ft ft ft	0	ft		ft <sup>2</sup>	ft <sup>2</sup>	K
Mount Pipe		Centroid-Fa	0.00 1.00			1/2" Ice 1" Ice	4.12 4.48	3.49 3.84	0.25 0.32
1 TO 20 DO 1 TO 5 5 1 1 1	-	-	4.00	0.0000	16100	2" Ice	5.24	4.58	0.48
AIR 32 B2A/B66AA w/	C	From	4.00	0.0000	164.00	No Ice	3.76	3.15	0.19
Mount Pipe		Centroid-Fa ce	0.00 1.00			1/2" Ice 1" Ice	4.12 4.48	3.49 3.84	0.25 0.32
		CC	1.00			2" Ice	5.24	4.58	0.32
RADIO 4449 B71	Α	From	4.00	0.0000	164.00	No Ice	1.97	1.59	0.07
B85A_T-MOBILE		Centroid-Fa	0.00			1/2" Ice	2.15	1.75	0.09
		ce	1.00			1" Ice	2.33	1.92	0.12
						2" Ice	2.72	2.28	0.17
RADIO 4449 B71	В	From	4.00	0.0000	164.00	No Ice	1.97	1.59	0.07
B85A_T-MOBILE		Centroid-Fa	0.00			1/2" Ice	2.15	1.75	0.09
		ce	1.00			1" Ice	2.33	1.92	0.12
RADIO 4449 B71	C	Enom	4.00	0.0000	164.00	2" Ice No Ice	2.72 1.97	2.28	0.17 0.07
B85A_T-MOBILE	С	From Centroid-Fa	0.00	0.0000	104.00	1/2" Ice	2.15	1.59 1.75	0.07
B03A_1-MOBILE		ce centroid-i a	1.00			1" Ice	2.33	1.92	0.05
		CC	1.00			2" Ice	2.72	2.28	0.17
RRUS 4415 B25	Α	From	4.00	0.0000	164.00	No Ice	1.64	0.68	0.04
		Centroid-Fa	0.00			1/2" Ice	1.80	0.79	0.06
		ce	1.00			1" Ice	1.97	0.91	0.07
						2" Ice	2.33	1.18	0.11
RRUS 4415 B25	В	From	4.00	0.0000	164.00	No Ice	1.64	0.68	0.04
		Centroid-Fa	0.00			1/2" Ice	1.80	0.79	0.06
		ce	1.00			1" Ice 2" Ice	1.97	0.91	0.07
RRUS 4415 B25	С	From	4.00	0.0000	164.00	No Ice	2.33 1.64	1.18 0.68	0.11 0.04
KKUS 4413 B23	C	Centroid-Fa	0.00	0.0000	104.00	1/2" Ice	1.80	0.08	0.04
		ce	1.00			1" Ice	1.97	0.91	0.07
			1.00			2" Ice	2.33	1.18	0.11
(2) 2.4" Dia x 4-ft Mount Pipe	Α	From	4.00	0.0000	164.00	No Ice	0.87	0.87	0.01
		Centroid-Fa	0.00			1/2" Ice	1.12	1.12	0.02
		ce	0.00			1" Ice	1.37	1.37	0.03
						2" Ice	1.91	1.91	0.06
(2) 2.4" Dia x 4-ft Mount Pipe	В	From	4.00	0.0000	164.00	No Ice	0.87	0.87	0.01
		Centroid-Fa	0.00			1/2" Ice	1.12	1.12	0.02
		ce	0.00			1" Ice 2" Ice	1.37 1.91	1.37 1.91	0.03 0.06
(2) 2.4" Dia x 4-ft Mount Pipe	С	From	4.00	0.0000	164.00	No Ice	0.87	0.87	0.00
(2) 2.4 Dia x 4 it Woullt i ipe	C	Centroid-Fa	0.00	0.0000	104.00	1/2" Ice	1.12	1.12	0.02
		ce	0.00			1" Ice	1.37	1.37	0.03
						2" Ice	1.91	1.91	0.06
Platform Mount [LP	C	None		0.0000	164.00	No Ice	35.82	35.82	2.32
404-1_KCKR]						1/2" Ice	45.85	45.85	3.02
						1" Ice	55.76	55.76	3.89
477						2" Ice	75.77	75.77	6.14
*Plymouth*	P	Е.	4.00	0.0000	164.00	NI. T	1.20	1.20	0.01
COL45-70	В	From	4.00	0.0000	164.00	No Ice	1.38	1.38	0.01
		Centroid-Fa ce	0.00 4.00			1/2" Ice 1" Ice	2.32 3.27	2.32 3.27	0.02 0.03
		CE	4.00			2" Ice	4.82	4.82	0.03
COL45-70	В	From	4.00	0.0000	164.00	No Ice	1.38	1.38	0.09
202.2 70	~	Centroid-Fa	0.00	2.0000	-000	1/2" Ice	2.32	2.32	0.02
		ce	4.00			1" Ice	3.27	3.27	0.03
						2" Ice	4.82	4.82	0.09
COL45-70	A	From	4.00	0.0000	164.00	No Ice	1.38	1.38	0.01

Job	Plymouth/RT 6 (BU 826768)	<b>Page</b> 9 of 17
	1 lylllod(1/111 0 (DO 020700)	0 0
Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Description	Face or Leg	Offset Type	Offsets: Horz Lateral	Azimuth Adjustment	Placement		C <sub>A</sub> A <sub>A</sub> Front	$C_AA_A$ Side	Weigh
			Vert ft ft ft	0	ft		ft²	ft²	K
		Centroid-Fa	0.00 4.00			1/2" Ice 1" Ice	2.32 3.27	2.32 3.27	0.02 0.03
*****155****						2" Ice	4.82	4.82	0.09
APXVTM14-C-120 w/	Α	From	4.00	0.0000	155.00	No Ice	4.09	2.86	0.08
Mount Pipe		Centroid-Le	0.00			1/2" Ice	4.48	3.23	0.13
		g	0.00			1" Ice	4.88	3.61	0.19
A DXXX/TEN 41 4 CC 1200 /	D	F	4.00	0.0000	155.00	2" Ice	5.71	4.40	0.33
APXVTM14-C-120 w/	В	From Centroid-Le	4.00 0.00	0.0000	155.00	No Ice 1/2" Ice	4.09	2.86	0.08 0.13
Mount Pipe			0.00			1/2 Ice 1" Ice	4.48 4.88	3.23 3.61	0.13
		g	0.00			2" Ice	5.71	4.40	0.19
APXVTM14-C-120 w/	C	From	4.00	0.0000	155.00	No Ice	4.09	2.86	0.08
Mount Pipe	Ü	Centroid-Le	0.00	0.0000	100.00	1/2" Ice	4.48	3.23	0.13
1		g	0.00			1" Ice	4.88	3.61	0.19
		C				2" Ice	5.71	4.40	0.33
APXVSPP18-C-A20 w/	A	From	4.00	0.0000	155.00	No Ice	4.60	4.01	0.10
Mount Pipe		Centroid-Le	0.00			1/2" Ice	5.05	4.45	0.16
		g	0.00			1" Ice	5.50	4.89	0.23
ADVINCEDED OF A 20 /	ъ	F	4.00	0.0000	155.00	2" Ice	6.44	5.82	0.42
APXVSPP18-C-A20 w/	В	From	4.00	0.0000	155.00	No Ice	4.60	4.01	0.10
Mount Pipe		Centroid-Le	$0.00 \\ 0.00$			1/2" Ice 1" Ice	5.05 5.50	4.45 4.89	0.16 0.23
		g	0.00			2" Ice	6.44	5.82	0.23
APXVSPP18-C-A20 w/	C	From	4.00	0.0000	155.00	No Ice	4.60	4.01	0.10
Mount Pipe		Centroid-Le	0.00			1/2" Ice	5.05	4.45	0.16
1		g	0.00			1" Ice	5.50	4.89	0.23
		-				2" Ice	6.44	5.82	0.42
TD-RRH8x20-25	Α	From	4.00	0.0000	155.00	No Ice	3.70	1.29	0.07
		Centroid-Le	0.00			1/2" Ice	3.95	1.46	0.09
		g	0.00			1" Ice	4.20	1.64	0.12
TD-RRH8x20-25	В	From	4.00	0.0000	155.00	2" Ice No Ice	4.72 3.70	2.02	0.18 0.07
1D-KKH0X2U-23	ь	Centroid-Le	0.00	0.0000	133.00	1/2" Ice	3.70	1.29 1.46	0.07
		g	0.00			1" Ice	4.20	1.64	0.09
		5	0.00			2" Ice	4.72	2.02	0.12
TD-RRH8x20-25	C	From	4.00	0.0000	155.00	No Ice	3.70	1.29	0.07
		Centroid-Le	0.00			1/2" Ice	3.95	1.46	0.09
		g	0.00			1" Ice	4.20	1.64	0.12
						2" Ice	4.72	2.02	0.18
800MHZ RRH	Α	From	4.00	0.0000	155.00	No Ice	2.13	1.77	0.05
		Centroid-Le	0.00			1/2" Ice	2.32	1.95	0.07
		g	0.00			1" Ice	2.51	2.13	0.10
800MHZ RRH	В	From	4.00	0.0000	155.00	2" Ice No Ice	2.92	2.51	0.16 0.05
OUUMINZ KKII	ь	Centroid-Le	0.00	0.0000	133.00	1/2" Ice	2.13 2.32	1.77 1.95	0.03
		g g	0.00			1" Ice	2.51	2.13	0.10
		8	0.00			2" Ice	2.92	2.51	0.16
800MHZ RRH	C	From	4.00	0.0000	155.00	No Ice	2.13	1.77	0.05
		Centroid-Le	0.00			1/2" Ice	2.32	1.95	0.07
		g	0.00			1" Ice	2.51	2.13	0.10
						2" Ice	2.92	2.51	0.16
1900MHz RRH	A	From	4.00	0.0000	155.00	No Ice	2.49	3.26	0.04
		Centroid-Le	0.00			1/2" Ice	2.70	3.48	0.08
		g	0.00			1" Ice	2.91	3.72	0.11
1900MHz RRH	В	From	4.00	0.0000	155.00	2" Ice No Ice	3.35 2.49	4.21 3.26	0.19 0.04
			4 (10)	O OOOO	122 00	INO ICE	/ 49	1/0	0.04

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Project		Date
	TEP No. 25661.548444	19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Description	Face or Leg	Offset Type	Offsets: Horz Lateral	Azimuth Adjustment	Placement		C <sub>A</sub> A <sub>A</sub> Front	$C_AA_A$ Side	Weight
			Vert ft ft ft	o	ft		ft²	ft <sup>2</sup>	K
		Centroid-Le	0.00			1/2" Ice	2.70	3.48	0.08
		g	0.00			1" Ice	2.91	3.72	0.11
						2" Ice	3.35	4.21	0.19
1900MHz RRH	C	From	4.00	0.0000	155.00	No Ice	2.49	3.26	0.04
		Centroid-Le	0.00			1/2" Ice	2.70	3.48	0.08
		g	0.00			1" Ice	2.91	3.72	0.11
						2" Ice	3.35	4.21	0.19
2.4" Dia x 6-ft Pipe	A	From	4.00	0.0000	155.00	No Ice	1.43	1.43	0.02
		Centroid-Le	0.00			1/2" Ice	1.93	1.93	0.03
		g	0.00			1" Ice	2.30	2.30	0.05
2.4" D' ( C D'	ъ	Б	4.00	0.0000	155.00	2" Ice	3.06	3.06	0.09
2.4" Dia x 6-ft Pipe	В	From	4.00	0.0000	155.00	No Ice	1.43	1.43	0.02
		Centroid-Le	0.00			1/2" Ice	1.93	1.93	0.03
		g	0.00			1" Ice	2.30	2.30	0.05
2.4" Dia 6 & Dia-	C	F	4.00	0.0000	155.00	2" Ice	3.06	3.06	0.09
2.4" Dia x 6-ft Pipe	C	From	4.00 0.00	0.0000	155.00	No Ice 1/2" Ice	1.43 1.93	1.43	0.02 0.03
		Centroid-Le	0.00			1/2 Ice 1" Ice	2.30	1.93 2.30	0.03
		g	0.00			2" Ice	3.06	3.06	0.03
Platform Mount [LP 305-1]	C	None		0.0000	155.00	No Ice	18.04	18.04	1.12
Platform Mount [LP 303-1]	С	None		0.0000	133.00	1/2" Ice	22.04	22.04	1.12
						1" Ice	26.06	26.06	1.88
						2" Ice	34.16	34.16	2.90
*****142****						2 100	51.10	31.10	2.50
MT6407-77A w/ Mount Pipe	A	From	4.00	0.0000	142.00	No Ice	4.91	2.68	0.10
		Centroid-Le	0.00			1/2" Ice	5.26	3.14	0.14
		g	0.00			1" Ice	5.61	3.62	0.18
		C				2" Ice	6.36	4.63	0.29
MT6407-77A w/ Mount Pipe	В	From	4.00	0.0000	142.00	No Ice	4.91	2.68	0.10
•		Centroid-Le	0.00			1/2" Ice	5.26	3.14	0.14
		g	0.00			1" Ice	5.61	3.62	0.18
		_				2" Ice	6.36	4.63	0.29
MT6407-77A w/ Mount Pipe	C	From	4.00	0.0000	142.00	No Ice	4.91	2.68	0.10
		Centroid-Le	0.00			1/2" Ice	5.26	3.14	0.14
		g	0.00			1" Ice	5.61	3.62	0.18
						2" Ice	6.36	4.63	0.29
(2) LPA-80080/6CF w/	Α	From	4.00	0.0000	142.00	No Ice	4.93	10.92	0.07
Mount Pipe		Centroid-Le	0.00			1/2" Ice	5.58	12.21	0.14
		g	0.00			1" Ice	6.16	13.16	0.22
						2" Ice	7.33	15.11	0.41
(2) LPA-80080/6CF w/	В	From	4.00	0.0000	142.00	No Ice	4.93	10.92	0.07
Mount Pipe		Centroid-Le	0.00			1/2" Ice	5.58	12.21	0.14
		g	0.00			1" Ice	6.16	13.16	0.22
(A) 7 D 1 00000 (CAD 1		-	4.00	0.0000	4.42.00	2" Ice	7.33	15.11	0.41
(2) LPA-80080/6CF w/	C	From	4.00	0.0000	142.00	No Ice	4.93	10.92	0.07
Mount Pipe		Centroid-Le	0.00			1/2" Ice	5.58	12.21	0.14
		g	0.00			1" Ice 2" Ice	6.16	13.16	0.22
(2) SBNUU 1D65D/	٨	From	4.00	0.0000	142.00	No Ice	7.33 4.09	15.11 3.30	0.41
(2) SBNHH-1D65B w/ Mount Pipe	A	Centroid-Le	0.00	0.0000	142.00	1/2" Ice	4.09 4.49	3.50	0.07 0.13
would ripe			0.00			1/2 Ice 1" Ice	4.49	3.08 4.07	0.13
		g	0.00			2" Ice	5.72	4.07	0.20
(2) SBNHH-1D65B w/	В	From	4.00	0.0000	142.00	No Ice	4.09	3.30	0.39
Mount Pipe	ט	Centroid-Le	0.00	0.0000	172.00	1/2" Ice	4.49	3.68	0.07
Mount 1 ipo		g	0.00			1" Ice	4.89	4.07	0.13
		6	0.00			2" Ice	5.72	4.87	0.20

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Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Description	Face or	Offset Type	Offsets: Horz	Azimuth Adjustment	Placement		$C_AA_A$ Front	$C_AA_A$ Side	Weight
	Leg		Lateral Vert						
			ft	0	ft		$ft^2$	$ft^2$	K
			ft ft						
Mount Pipe		Centroid-Le	0.00			1/2" Ice	4.49	3.68	0.13
		g	0.00			1" Ice	4.89	4.07	0.20
(2) RFV01U-D1A	A	From	4.00	0.0000	142.00	2" Ice No Ice	5.72 1.88	4.87 1.25	0.39 0.08
(2) KI VOIO-DIA	А	Centroid-Le	0.00	0.0000	142.00	1/2" Ice	2.05	1.23	0.08
		g	0.00			1" Ice	2.22	1.54	0.12
						2" Ice	2.60	1.86	0.18
(2) RFV01U-D2A	В	From	4.00	0.0000	142.00	No Ice	1.88	1.01	0.07
		Centroid-Le	0.00			1/2" Ice	2.05	1.14	0.09
		g	0.00			1" Ice 2" Ice	2.22 2.60	1.28 1.59	0.11 0.15
RFV01U-D1A	C	From	4.00	0.0000	142.00	No Ice	1.88	1.25	0.13
10 1010 2111		Centroid-Le	0.00	0.0000	1.2.00	1/2" Ice	2.05	1.39	0.10
		g	0.00			1" Ice	2.22	1.54	0.12
						2" Ice	2.60	1.86	0.18
RFV01U-D2A	C	From	4.00	0.0000	142.00	No Ice	1.88	1.01	0.07
		Centroid-Le	0.00			1/2" Ice 1" Ice	2.05 2.22	1.14 1.28	0.09 0.11
		g	0.00			2" Ice	2.60	1.59	0.11
DB-T1-6Z-8AB-0Z	Α	From	4.00	0.0000	142.00	No Ice	4.80	2.00	0.04
		Centroid-Le	0.00		- 1-111	1/2" Ice	5.07	2.19	0.08
		g	0.00			1" Ice	5.35	2.39	0.12
						2" Ice	5.93	2.81	0.21
DB-T1-6Z-8AB-0Z	C	From	4.00	0.0000	142.00	No Ice	4.80	2.00	0.04
		Centroid-Le	0.00			1/2" Ice 1" Ice	5.07 5.35	2.19 2.39	0.08 0.12
		g	0.00			2" Ice	5.93	2.39	0.12
Platform Mount [LP 403-1]	C	None		0.0000	142.00	No Ice	18.94	18.94	1.50
,						1/2" Ice	23.31	23.31	1.90
						1" Ice	27.74	27.74	2.37
						2" Ice	36.77	36.77	3.53
*****121***** 201-4	A	From Leg	3.00	0.0000	121.00	No Ice	1.13	1.13	0.00
201-4	А	rioni Leg	0.00	0.0000	121.00	1/2" Ice	2.00	2.00	0.00
			4.00			1" Ice	2.90	2.90	0.03
						2" Ice	4.31	4.31	0.08
2.4" Dia x 4-ft Mount Pipe	A	From Leg	3.00	0.0000	121.00	No Ice	0.87	0.87	0.01
			0.00			1/2" Ice	1.12	1.12	0.02
			0.00			1" Ice 2" Ice	1.37 1.91	1.37	0.03 0.06
Side Arm Mount [SO 701-1]	A	From Leg	1.50	0.0000	121.00	No Ice	0.85	1.91 1.67	0.06
Side Arm Would [50 701-1]	А	1 Tolli Leg	0.00	0.0000	121.00	1/2" Ice	1.14	2.34	0.08
			0.00			1" Ice	1.43	3.01	0.09
						2" Ice	2.01	4.35	0.12
*****115****									
7770.00	Α	From	4.00	0.0000	115.00	No Ice	5.51	2.93	0.04
		Centroid-Le	$0.00 \\ 0.00$			1/2" Ice 1" Ice	5.87 6.23	3.27 3.63	0.07 0.11
		g	0.00			2" Ice	6.99	4.35	0.11
7770.00	В	From	4.00	0.0000	115.00	No Ice	5.51	2.93	0.04
		Centroid-Le	0.00			1/2" Ice	5.87	3.27	0.07
		g	0.00			1" Ice	6.23	3.63	0.11
7770 00	C	F	4.00	0.0000	115.00	2" Ice	6.99	4.35	0.20
7770.00	C	From	4.00	0.0000	115.00	No Ice	5.51	2.93	0.04
		Centroid-Le	0.00			1/2" Ice	5.87	3.27	0.07
		g	0.00			1" Ice	6.23	3.63	0.11

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Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Description	Face or Leg	Offset Type	Offsets: Horz Lateral	Azimuth Adjustment	Placement		C <sub>A</sub> A <sub>A</sub> Front	$C_AA_A$ Side	Weigh
			Vert ft ft	0	ft		ft <sup>2</sup>	ft <sup>2</sup>	K
AM V CD 16 65 00T DET	Α.	F	ft	0.0000	115.00	N - T	4.60	2.24	0.05
AM-X-CD-16-65-00T-RET	A	From	4.00 0.00	0.0000	115.00	No Ice 1/2" Ice	4.69 5.15	2.34	0.05
		Centroid-Le	0.00			1" Ice	5.61	2.77 3.20	0.10 0.15
		g	0.00			2" Ice	6.57	4.10	0.13
AM-X-CD-16-65-00T-RET	В	From	4.00	0.0000	115.00	No Ice	4.69	2.34	0.27
AWI-A-CD-10-03-001-KE1	ь	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	5.15	2.77	0.03
			0.00			1" Ice	5.61	3.20	0.10
		g	0.00			2" Ice	6.57	4.10	0.13
AM-X-CD-16-65-00T-RET	C	From	4.00	0.0000	115.00	No Ice	4.69	2.34	0.27
AW-X-CD-10-03-001-KL1	C	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	5.15	2.77	0.03
			0.00			1" Ice	5.61	3.20	0.10
		g	0.00			2" Ice	6.57	4.10	0.13
80010965	Α	From	4.00	0.0000	115.00	No Ice	12.23	4.21	0.27
80010703	А	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	13.00	4.88	0.11
		g	0.00			1" Ice	13.79	5.57	0.27
		5	0.00			2" Ice	15.41	6.99	0.46
80010965	В	From	4.00	0.0000	115.00	No Ice	12.23	4.21	0.11
80010703	ь	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	13.00	4.88	0.11
			0.00			1" Ice	13.79	5.57	0.17
		g	0.00			2" Ice	15.41	6.99	0.46
80010965	C	From	4.00	0.0000	115.00	No Ice	12.23	4.21	0.11
80010703	C	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	13.00	4.88	0.11
		g	0.00			1" Ice	13.79	5.57	0.19
		g	0.00			2" Ice	15.41	6.99	0.46
QS66512-2	A	From	4.00	0.0000	115.00	No Ice	4.01	3.37	0.11
Q500312 2	7.	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	4.41	3.76	0.17
		g	0.00			1" Ice	4.81	4.15	0.23
		5	0.00			2" Ice	5.65	4.97	0.23
QS66512-2	В	From	4.00	0.0000	115.00	No Ice	4.01	3.37	0.11
Q500312 2	ь	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	4.41	3.76	0.17
		g	0.00			1" Ice	4.81	4.15	0.23
		5	0.00			2" Ice	5.65	4.97	0.38
QS66512-2	C	From	4.00	0.0000	115.00	No Ice	4.01	3.37	0.11
<b>Q</b> 500012 2	Ü	Centroid-Le	0.00	0.0000	110.00	1/2" Ice	4.41	3.76	0.17
		g	0.00			1" Ice	4.81	4.15	0.23
		Б	0.00			2" Ice	5.65	4.97	0.38
(3) DBCT108F1V92-1	Α	From	4.00	0.0000	115.00	No Ice	0.64	0.60	0.03
		Centroid-Le	0.00			1/2" Ice	0.74	0.71	0.04
		g	0.00			1" Ice	0.85	0.81	0.04
						2" Ice	1.09	1.05	0.07
(2) DBCT108F1V92-1	В	From	4.00	0.0000	115.00	No Ice	0.64	0.60	0.03
		Centroid-Le	0.00			1/2" Ice	0.74	0.71	0.04
		g	0.00			1" Ice	0.85	0.81	0.04
						2" Ice	1.09	1.05	0.07
DBCT108F1V92-1	C	From	4.00	0.0000	115.00	No Ice	0.64	0.60	0.03
		Centroid-Le	0.00			1/2" Ice	0.74	0.71	0.04
		g	0.00			1" Ice	0.85	0.81	0.04
						2" Ice	1.09	1.05	0.07
RRUS 12 B2	A	From	4.00	0.0000	115.00	No Ice	3.15	1.29	0.05
		Centroid-Le	0.00			1/2" Ice	3.36	1.44	0.07
		g	0.00			1" Ice	3.59	1.60	0.10
		-				2" Ice	4.07	1.95	0.16
RRUS 12 B2	В	From	4.00	0.0000	115.00	No Ice	3.15	1.29	0.05
		Centroid-Le	0.00			1/2" Ice	3.36	1.44	0.07
		g	0.00			1" Ice	3.59	1.60	0.10
		-				2" Ice	4.07	1.95	0.16
RRUS 12 B2	C	From	4.00	0.0000	115.00	No Ice	3.15	1.29	0.05

Job	Plymouth/RT 6 (BU 826768)	<b>Page</b> 13 of 17
Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Description	Face or	Offset Type	Offsets: Horz	Azimuth Adjustment	Placement		$C_AA_A$ Front	$C_AA_A$ Side	Weigh
	Leg		Lateral Vert						
			ft ft	0	ft		ft <sup>2</sup>	ft <sup>2</sup>	K
			ft			4 (21) 7	226		
		Centroid-Le	0.00			1/2" Ice	3.36	1.44	0.07
		g	0.00			1" Ice 2" Ice	3.59 4.07	1.60 1.95	0.10 0.16
DTMABP7819VG12A	A	From	4.00	0.0000	115.00	No Ice	0.98	0.34	0.10
D114111D1 7017 V 012/1	71	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	1.10	0.42	0.03
		g	0.00			1" Ice	1.23	0.51	0.04
		S				2" Ice	1.52	0.71	0.06
DTMABP7819VG12A	В	From	4.00	0.0000	115.00	No Ice	0.98	0.34	0.02
		Centroid-Le	0.00			1/2" Ice	1.10	0.42	0.03
		g	0.00			1" Ice	1.23	0.51	0.04
D	-	_	4.00		445.00	2" Ice	1.52	0.71	0.06
DTMABP7819VG12A	C	From	4.00	0.0000	115.00	No Ice	0.98	0.34	0.02
		Centroid-Le	$0.00 \\ 0.00$			1/2" Ice 1" Ice	1.10 1.23	0.42 0.51	0.03 0.04
		g	0.00			2" Ice	1.23	0.51	0.04
RRUS 4478 B5	A	From	4.00	0.0000	115.00	No Ice	1.84	1.06	0.06
KKO5 4476 D5	А	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	2.01	1.20	0.08
		g	0.00			1" Ice	2.19	1.34	0.09
		S				2" Ice	2.57	1.66	0.14
RRUS 4478 B5	В	From	4.00	0.0000	115.00	No Ice	1.84	1.06	0.06
		Centroid-Le	0.00			1/2" Ice	2.01	1.20	0.08
		g	0.00			1" Ice	2.19	1.34	0.09
	_	_				2" Ice	2.57	1.66	0.14
RRUS 4478 B5	C	From	4.00	0.0000	115.00	No Ice	1.84	1.06	0.06
		Centroid-Le	0.00			1/2" Ice	2.01	1.20	0.08
		g	0.00			1" Ice 2" Ice	2.19 2.57	1.34 1.66	0.09 0.14
RRUS 4478 B14	A	From	4.00	0.0000	115.00	No Ice	1.84	1.06	0.14
KKU3 4476 D14	А	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	2.01	1.20	0.08
		g	0.00			1" Ice	2.19	1.34	0.09
		8				2" Ice	2.57	1.66	0.14
(2) RRUS 4478 B14	C	From	4.00	0.0000	115.00	No Ice	1.84	1.06	0.06
		Centroid-Le	0.00			1/2" Ice	2.01	1.20	0.08
		g	0.00			1" Ice	2.19	1.34	0.09
						2" Ice	2.57	1.66	0.14
WCS RRUS-32-B30	Α	From	4.00	0.0000	115.00	No Ice	3.31	2.42	0.08
		Centroid-Le	0.00			1/2" Ice	3.56	2.64	0.10
		g	0.00			1" Ice 2" Ice	3.81 4.33	2.86 3.32	0.14 0.21
WCS RRUS-32-B30	В	From	4.00	0.0000	115.00	No Ice	3.31	2.42	0.21
WC3 KK03-32-D30	ь	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	3.56	2.64	0.10
		g	0.00			1" Ice	3.81	2.86	0.14
		8	****			2" Ice	4.33	3.32	0.21
WCS RRUS-32-B30	C	From	4.00	0.0000	115.00	No Ice	3.31	2.42	0.08
		Centroid-Le	0.00			1/2" Ice	3.56	2.64	0.10
		g	0.00			1" Ice	3.81	2.86	0.14
						2" Ice	4.33	3.32	0.21
(2) TPX-070821	A	From	4.00	0.0000	115.00	No Ice	0.47	0.10	0.01
		Centroid-Le	0.00			1/2" Ice	0.56	0.15	0.01
		g	0.00			1" Ice	0.66	0.20	0.02
(2) TPX-070821	В	From	4.00	0.0000	115.00	2" Ice No Ice	0.87 0.47	0.33 0.10	0.03 0.01
(2) 11 A-U/U021	ь	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	0.47	0.10	0.01
		g	0.00			1" Ice	0.56	0.13	0.01
		Б	0.00			2" Ice	0.87	0.33	0.02
(2) TPX-070821	C	From	4.00	0.0000	115.00	No Ice	0.47	0.10	0.01
		Centroid-Le	0.00			1/2" Ice	0.56	0.15	0.01

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Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Description	Face or Leg	Offset Type	Offsets: Horz Lateral	Azimuth Adjustment	Placement		C <sub>A</sub> A <sub>A</sub> Front	$C_AA_A$ Side	Weight
			Vert ft ft ft	0	ft		ft²	ft²	K
		g	0.00			1" Ice	0.66	0.20	0.02
						2" Ice	0.87	0.33	0.03
(2) RRUS 11	В	From	4.00	0.0000	115.00	No Ice	2.79	1.19	0.05
		Centroid-Le	0.00			1/2" Ice	3.00	1.34	0.07
		g	0.00			1" Ice	3.21	1.50	0.10
DDIIC 11	C	F	4.00	0.0000	115.00	2" Ice	3.67	1.84	0.15
RRUS 11	C	From Centroid-Le	4.00 0.00	0.0000	115.00	No Ice 1/2" Ice	2.79 3.00	1.19 1.34	0.05 0.07
			0.00			1" Ice	3.21	1.54	0.07
		g	0.00			2" Ice	3.67	1.84	0.10
RRUS 4426 B66	В	From	4.00	0.0000	115.00	No Ice	1.64	0.73	0.15
KKU3 4420 B00	ь	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	1.80	0.73	0.05
		g	0.00			1" Ice	1.97	0.97	0.08
		5	0.00			2" Ice	2.33	1.24	0.11
(2) RRUS 4426 B66	C	From	4.00	0.0000	115.00	No Ice	1.64	0.73	0.05
(2) Idtes 1120 200	C	Centroid-Le	0.00	0.0000	113.00	1/2" Ice	1.80	0.84	0.06
		g g	0.00			1" Ice	1.97	0.97	0.08
		8				2" Ice	2.33	1.24	0.11
DC6-48-60-18-8F	Α	From	4.00	0.0000	115.00	No Ice	1.21	1.21	0.03
		Centroid-Le	0.00			1/2" Ice	1.89	1.89	0.05
		g	0.00			1" Ice	2.11	2.11	0.08
		C				2" Ice	2.57	2.57	0.14
DC6-48-60-18-8F	В	From	4.00	0.0000	115.00	No Ice	1.21	1.21	0.03
		Centroid-Le	0.00			1/2" Ice	1.89	1.89	0.05
		g	0.00			1" Ice	2.11	2.11	0.08
						2" Ice	2.57	2.57	0.14
DC6-48-60-18-8C	В	From	4.00	0.0000	115.00	No Ice	1.14	1.14	0.03
		Centroid-Le	0.00			1/2" Ice	1.79	1.79	0.05
		g	0.00			1" Ice	2.00	2.00	0.07
						2" Ice	2.45	2.45	0.13
2.4" Dia x 4-ft Mount Pipe	Α	From Leg	1.00	0.0000	115.00	No Ice	0.87	0.87	0.01
			0.00			1/2" Ice	1.12	1.12	0.02
			0.00			1" Ice	1.37	1.37	0.03
						2" Ice	1.91	1.91	0.06
2.4" Dia x 4-ft Mount Pipe	В	From Leg	1.00	0.0000	115.00	No Ice	0.87	0.87	0.01
			0.00			1/2" Ice	1.12	1.12	0.02
			0.00			1" Ice	1.37	1.37	0.03
2.4" D' 4.6.34 4 D'		Е Т	1.00	0.0000	115.00	2" Ice	1.91	1.91	0.06
2.4" Dia x 4-ft Mount Pipe	C	From Leg	1.00	0.0000	115.00	No Ice	0.87	0.87	0.01
			0.00			1/2" Ice	1.12	1.12	0.02
			0.00			1" Ice 2" Ice	1.37	1.37	0.03
Platform Mount [LP 301-1]	C	None		0.0000	115.00		1.91	1.91	0.06
Platform Mount [LP 301-1]	С	None		0.0000	115.00	No Ice 1/2" Ice	23.81 30.24	23.81 30.24	1.59 2.10
						1" Ice	36.33	36.33	2.73
						2" Ice	48.05	48.05	4.34
*****105****						2 ICC	40.03	+0.03	4.34
APXV18-206517S-C w/	Α	From Leg	1.00	0.0000	105.00	No Ice	3.79	3.16	0.05
Mount Pipe	. <b>1</b>	1 Ioni Leg	0.00	5.0000	105.00	1/2" Ice	4.38	3.75	0.03
			0.00			1" Ice	4.99	4.35	0.15
			0.00			2" Ice	6.25	5.59	0.28
APXV18-206517S-C w/	В	From Leg	1.00	0.0000	105.00	No Ice	3.79	3.16	0.05
Mount Pipe	_		0.00			1/2" Ice	4.38	3.75	0.09
1 .			0.00			1" Ice	4.99	4.35	0.15
						2" Ice	6.25	5.59	0.28
APXV18-206517S-C w/	C	From Leg	1.00	0.0000	105.00	No Ice	3.79	3.16	0.05
			0.00			1/2" Ice			0.09

## Tower Engineering

Professionals
326 Tryon Road
Raleigh, NC 27603
Phone: (919) 661-6351
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Job	Plymouth/RT 6 (BU 826768)	<b>Page</b> 15 of 17
	1 lylllod(1//111 0 (DO 020/00)	10 0
Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Description	Face or Leg	Offset Type	Offsets: Horz Lateral	Azimuth Adjustment	Placement		C <sub>A</sub> A <sub>A</sub> Front	$C_AA_A$ Side	Weight
	Les		Vert						
			ft	0	ft		$ft^2$	$ft^2$	K
			ft						
			ft			411.7	1.00		0.15
			0.00			1" Ice	4.99	4.35	0.15
*****74****						2" Ice	6.25	5.59	0.28
DB810T3E-XT	Α	From Leg	3.00	0.0000	74.00	No Ice	4.53	4.53	0.05
		C	0.00			1/2" Ice	6.07	6.07	0.08
			9.00			1" Ice	7.63	7.63	0.12
						2" Ice	10.79	10.79	0.24
2.4" Dia x 6-ft Pipe	Α	From Leg	3.00	0.0000	74.00	No Ice	1.43	1.43	0.02
•		C	0.00			1/2" Ice	1.93	1.93	0.03
			2.00			1" Ice	2.30	2.30	0.05
						2" Ice	3.06	3.06	0.09
Side Arm Mount [SO 701-1]	Α	From Leg	1.50	0.0000	74.00	No Ice	0.85	1.67	0.07
,		C	0.00			1/2" Ice	1.14	2.34	0.08
			0.00			1" Ice	1.43	3.01	0.09
						2" Ice	2.01	4.35	0.12
****									

### Compression Checks

	Pole Design Data								
Section No.	Elevation	Size	L	$L_u$	Kl/r	A	$P_u$	$\phi P_n$	Ratio P <sub>u</sub>
	ft		ft	ft		$in^2$	K	K	$\phi P_n$
L1	169 - 164.25 (1)	TP26x18x0.25	4.75	0.00	0.0	17.2586	-0.62	1009.63	0.001
L2	164.25 - 129.75 (2)	TP34.0625x21.5x0.3125	36.88	0.00	0.0	32.1816	-15.79	1882.62	0.008
L3	129.75 - 96.08 (3)	TP41.75x32.1327x0.375	37.50	0.00	0.0	47.8211	-28.15	2797.53	0.010
L4	96.08 - 63.25 (4)	TP49.0625x39.8023x0.375	37.50	0.00	0.0	56.3337	-37.76	3295.52	0.011
L5	63.25 - 31.25	TP56.125x46.9543x0.375	37.50	0.00	0.0	64.5372	-48.59	3775.43	0.013
L6	31.25 - 0 (6)	TP62.9375x53.8466x0.375	37.50	0.00	0.0	74.4650	-63.20	4356.20	0.015

Pole	<b>Bending</b>	Design	Data

Section	Elevation	Size	$M_{ux}$	$\phi M_{nx}$	Ratio	$M_{uy}$	$\phi M_{ny}$	Ratio
No.					$M_{ux}$			$M_{uy}$
	ft		kip-ft	kip-ft	$\phi M_{nx}$	kip-ft	kip-ft	$\phi M_{ny}$
L1	169 - 164.25	TP26x18x0.25	6.46	571.42	0.011	0.00	571.42	0.000
	(1)							
L2	164.25 -	TP34.0625x21.5x0.3125	294.81	1557.39	0.189	0.00	1557.39	0.000

## Tower Engineering Professionals

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

Job	Plymouth/RT 6 (BU 826768)	<b>Page</b> 16 of 17
Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Section No.	Elevation	Size	$M_{ux}$	$\phi M_{nx}$	Ratio $M_{ux}$	$M_{uy}$	$\phi M_{ny}$	Ratio M <sub>uy</sub>
	ft		kip-ft	kip-ft	$\phi M_{nx}$	kip-ft	kip-ft	$\phi M_{ny}$
	129.75 (2)							
L3	129.75 - 96.08 (3)	TP41.75x32.1327x0.375	866.92	2842.24	0.305	0.00	2842.24	0.000
L4	96.08 - 63.25 (4)	TP49.0625x39.8023x0.375	1603.72	3754.93	0.427	0.00	3754.93	0.000
L5	63.25 - 31.25	TP56.125x46.9543x0.375	2411.44	4686.48	0.515	0.00	4686.48	0.000
L6	31.25 - 0 (6)	TP62.9375x53.8466x0.375	3474.68	5847.24	0.594	0.00	5847.24	0.000

Pole Shear Design Data
------------------------

Section	Elevation	Size	Actual	$\phi V_n$	Ratio	Actual	$\phi T_n$	Ratio
No.			$V_u$		$V_u$	$T_u$		$T_u$
	ft		K	K	$\phi V_n$	kip-ft	kip-ft	$\phi T_n$
L1	169 - 164.25	TP26x18x0.25	1.09	302.89	0.004	0.00	576.93	0.000
	(1)							
L2	164.25 -	TP34.0625x21.5x0.3125	14.04	564.79	0.025	0.45	1604.78	0.000
	129.75 (2)							
L3	129.75 - 96.08	TP41.75x32.1327x0.375	21.54	839.26	0.026	0.62	2952.96	0.000
	(3)							
L4	96.08 - 63.25	TP49.0625x39.8023x0.375	24.55	988.66	0.025	1.61	4097.85	0.000
	(4)							
L5	63.25 - 31.25	TP56.125x46.9543x0.375	27.02	1132.63	0.024	1.61	5378.23	0.000
	(5)							
L6	31.25 - 0 (6)	TP62.9375x53.8466x0.375	29.60	1306.86	0.023	1.61	7160.17	0.000

### **Pole Interaction Design Data**

Section No.	Elevation	Ratio P <sub>u</sub>	Ratio M <sub>ux</sub>	Ratio M <sub>uy</sub>	Ratio $V_u$	Ratio $T_u$	Comb. Stress	Allow. Stress	Criteria
	ft	$\phi P_n$	$\phi M_{nx}$	$\phi M_{ny}$	$\phi V_n$	$\phi T_n$	Ratio	Ratio	
L1	169 - 164.25 (1)	0.001	0.011	0.000	0.004	0.000	0.012	1.050	4.8.2
L2	164.25 - 129.75 (2)	0.008	0.189	0.000	0.025	0.000	0.198	1.050	4.8.2
L3	129.75 - 96.08 (3)	0.010	0.305	0.000	0.026	0.000	0.316	1.050	4.8.2
L4	96.08 - 63.25 (4)	0.011	0.427	0.000	0.025	0.000	0.439	1.050	4.8.2
L5	63.25 - 31.25 (5)	0.013	0.515	0.000	0.024	0.000	0.528	1.050	4.8.2
L6	31.25 - 0 (6)	0.015	0.594	0.000	0.023	0.000	0.609	1.050	4.8.2

### **Section Capacity Table**

4	<b>7</b>
Invi	<i>'ower</i>
	UNGI

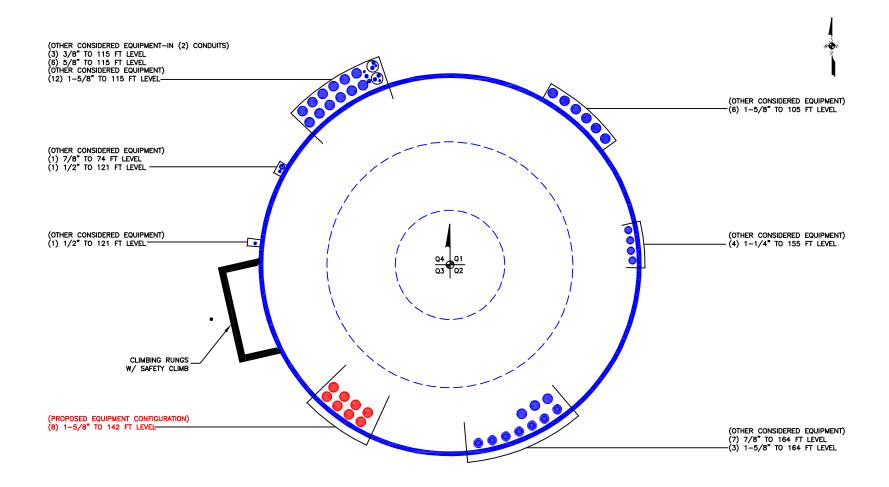
## Tower Engineering

Job	Dharacath/DT C (DLI 000700)	<b>Page</b> 17 of 17
	Plymouth/RT 6 (BU 826768)	17 01 17
Project	TEP No. 25661.548444	Date 19:37:39 05/23/21
Client	Crown Castle	Designed by zschartraw

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$\phi P_{allow} \ K$	% Capacity	Pass Fail
L1	169 - 164.25		TP26x18x0.25	1	0.62	1060.11		D
		Pole		1	-0.62		1.1	Pass
L2	164.25 - 129.75	Pole	TP34.0625x21.5x0.3125	2	-15.79	1976.75	18.9	Pass
L3	129.75 - 96.08	Pole	TP41.75x32.1327x0.375	3	-28.15	2937.41	30.1	Pass
L4	96.08 - 63.25	Pole	TP49.0625x39.8023x0.375	4	-37.76	3460.30	41.8	Pass
L5	63.25 - 31.25	Pole	TP56.125x46.9543x0.375	5	-48.59	3964.20	50.3	Pass
L6	31.25 - 0	Pole	TP62.9375x53.8466x0.375	6	-63.20	4574.01	58.0	Pass
							Summary	
						Pole (L6)	58.0	Pass
						RATING =	58.0	Pass

 $Program\ Version\ 8.0.9.0\ -\ 4/12/2021\ File: C:/Users/zschartraw. TOWER/One Drive\ -\ Tower\ Engineering\ Professionals,\\ Inc/Desktop/TNX/Crown/Monopole/826768\ -\ Plymouth\ RT\ 6/826768\_1967871\_LC7.eri$ 

# APPENDIX B BASE LEVEL DRAWING



# APPENDIX C ADDITIONAL CALCULATIONS



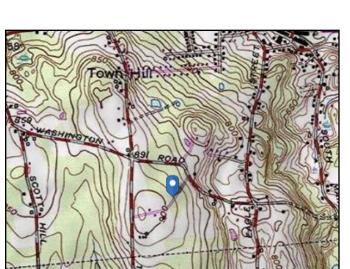
#### Address:

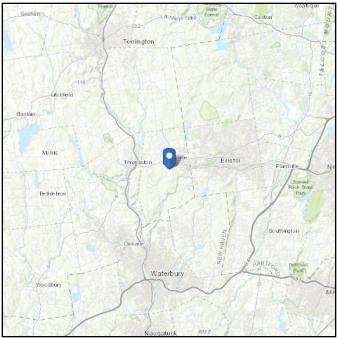
No Address at This Location

### **ASCE 7 Hazards Report**

ASCE/SEI 7-10 Standard: Elevation: 889.9 ft (NAVD 88)

Risk Category: || Latitude: 41.668389 D - Stiff Soil Soil Class: Longitude: -73.019956





### Wind

#### Results:

Wind Speed: 119 Vmph \*120 mph per jurisdiciton requirements

10-year MRI 76 Vmph 25-year MRI 86 Vmph 50-year MRI 91 Vmph 100-year MRI 98 Vmph

Date &ocessed: **AG€ 18-21002** Fig. 26.5-1A and Figs. CC-1–CC-4, and Section 26.5.2, incorporating errata of March 12, 2014

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

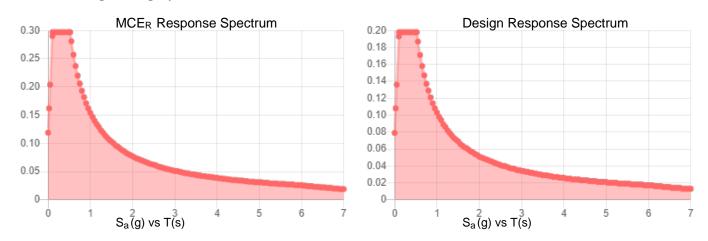
Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.



### Seismic

Site Soil Class: Results:	D - Stiff Soil			
S <sub>S</sub> :	0.186	S <sub>DS</sub> :	0.198	
$S_1$ :	0.064	S <sub>D1</sub> :	0.103	
F <sub>a</sub> :	1.6	$T_L$ :	6	
$F_v$ :	2.4	PGA:	0.095	
$S_{MS}$ :	0.297	PGA <sub>M</sub> :	0.152	
S <sub>M1</sub> :	0.154	F <sub>PGA</sub> :	1.6	
		1 .	1	

### Seismic Design Category B



Data Accessed: Tue May 18 2021

Date Source: USGS Seismic Design Maps based on ASCE/SEL7-10, incorporating

Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with

Tue May 18 2021

ASCE/SEI 7-10 Ch. 21 are available from USGS.



#### **Ice**

Results:

Ice Thickness: 0.75 in.

Concurrent Temperature: 5 F

Gust Speed: 50 mph

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

Date Accessed: Tue May 18 2021

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

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

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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.

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### **Monopole Base Plate Connection**

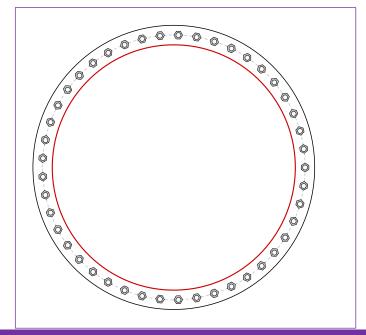


Site Info	
BU #	826768
Site Name	Plymouth/RT 6
Order #	570318 Rev. 0

<b>Analysis Considerations</b>	
TIA-222 Revision	Н
Grout Considered:	No
I <sub>ar</sub> (in)	1.5

Applied Loads				
	Moment (kip-ft)	3475.00		
	Axial Force (kips)	63.00		
	Shear Force (kips)	30.00		

<sup>\*</sup>TIA-222-H Section 15.5 Applied



### **Connection Properties**

#### **Anchor Rod Data**

(45) 1-1/4" ø bolts (A687 N; Fy=105 ksi, Fu=125 ksi) on 68" BC

#### Base Plate Data

73" OD x 2.5" Plate (A572-50; Fy=50 ksi, Fu=65 ksi)

#### Stiffener Data

N/A

#### Pole Data

62.9375" x 0.375" 18-sided pole (A572-65; Fy=65 ksi, Fu=80 ksi)

#### **Analysis Results**

Anchor Rod Summary		(units of kips, kip-in)
Pu_t = 53.1	φPn_t = 90.84	Stress Rating
Vu = 0.67	φVn = 57.52	55.7%
Mu = 0.65	φMn = 30.76	Pass

#### **Base Plate Summary**

Max Stress (ksi):

Allowable Stress (ksi):

Stress Rating: Pirod OK

CCIplate - Version 4.1.0 Analysis Date: 5/23/2021

### **Pier and Pad Foundation**

BU # : 826768
Site Name: Plymouth/RT 6
App. Number: 570318 Rev. 0



TIA-222 Revision: H
Tower Type: Monopole

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

Superstructure Analysis Reactions			
Compression, P <sub>comp</sub> :	63	kips	
Base Shear, Vu_comp:	30	kips	
Moment, <b>M</b> <sub>u</sub> :	3475	ft-kips	
Tower Height, H:	169	ft	
BP Dist. Above Fdn, <b>bp</b> <sub>dist</sub> :	2.75	in	

Pier Properties			
Pier Shape:	Circular		
Pier Diameter, dpier:	7.5	ft	
Ext. Above Grade, <b>E</b> :	0.5	ft	
Pier Rebar Size, <b>Sc</b> :	9		
Pier Rebar Quantity, mc:	39		
Pier Tie/Spiral Size, <b>St</b> :	4		
Pier Tie/Spiral Quantity, mt:	11		
Pier Reinforcement Type:	Tie		
Pier Clear Cover, <b>cc</b> pier:	3	in	

Pad Properties		
Depth, <b>D</b> :	8.5	ft
Pad Width, W <sub>1</sub> :	27	ft
Pad Thickness, T:	2.5	ft
Pad Rebar Size (Bottom dir. 2), Sp <sub>2</sub> :	9	
Pad Rebar Quantity (Bottom dir. 2), mp <sub>2</sub> :	36	
Pad Clear Cover, ccpad:	3	in

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

Soil Properties		
Total Soil Unit Weight, $\gamma$ :	125	pcf
Ultimate Gross Bearing, Qult:	12.000	ksf
Cohesion, Cu:		ksf
Friction Angle, $oldsymbol{arphi}$ :	34	degrees
SPT Blow Count, N <sub>blows</sub> :	104	
Base Friction, $\mu$ :	0.6	
Neglected Depth, N:	3.75	ft
Foundation Bearing on Rock?	No	
Groundwater Depth, gw:	14	ft

Foundation Analysis Checks				
	Capacity	Demand	Rating*	Check
Lateral (Sliding) (kips)	547.00	30.00	5.2%	Pass
Bearing Pressure (ksf)	9.00	2.24	23.7%	Pass
Overturning (kip*ft)	9504.58	3751.88	39.5%	Pass
Pier Flexure (Comp.) (kip*ft)	6854.10	3670.00	51.0%	Pass
Pier Compression (kip)	28118.83	114.69	0.4%	Pass
Pad Flexure (kip*ft)	3941.07	1246.31	30.1%	Pass
Pad Shear - 1-way (kips)	777.90	190.38	23.3%	Pass
Pad Shear - 2-way (Comp) (ksi)	0.190	0.050	25.0%	Pass
Flexural 2-way (Comp) (kip*ft)	4354.14	2202.00	48.2%	Pass

\*Rating per TIA-222-H Section 15.5

Soil Rating*:	39.5%
Structural Rating*:	51.0%

<--Toggle between Gross and Net

# Exhibit E

**Mount Analysis** 



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

Subject: Mount Modification Analysis

Carrier Designation: Verizon Wireless Reconfiguration

Client Site Number: 468084
Client Site Name: Plymouth CT

Crown Castle Designation: Crown Castle BU Number: 826768

Crown Castle Site Name: Plymouth/RT 6

Crown Castle JDE Job Number: 669335 Crown Castle Order Number: 570318 Rev. 0

Engineering Firm Designation: TEP Project Number: 25661.584643

Site Data: 171 Town Hill Road, Plymouth, Litchfield County, CT 06786

Latitude 41° 40′ 6.20″, Longitude -73° 1′ 11.84″

Structure Information: Tower Height & Type: 169.0± ft Monopole

Mount Elevation: 142.0 ft

**Mount Width & Type:** 13.5 ft Low Profile Platform

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

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

#### **Low Profile Platform Mount**

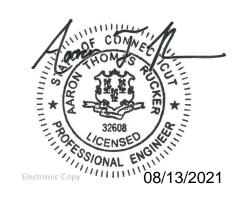
**Sufficient Capacity** 

This analysis utilizes an ultimate 3-second gust wind speed of 120 mph as required by the 2018 <u>Connecticut State Building Code</u>. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Steven C. Williams, P.E. / PHX

Respectfully submitted by:

Aaron T. Rucker, P.E. Structural Division Manager 919-661-6351 arucker@tepgroup.net



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#### 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** 

#### 9) APPENDIX E

Mount Modification Design Drawings (MDD)

#### 1) INTRODUCTION

The mount is an existing 13.5-ft, 3-sector Low Profile Platform mount, designed by PiRod. The mount is installed at the 142.0 ft elevation on the 169.0± ft Monopole.

#### 2) ANALYSIS CRITERIA

**Building Code:** 2018 Connecticut State Building Code

TIA-222 Revision: TIA-222-H

Risk Category:

Ultimate Wind Speed: 120 mph

**Exposure Category:** В **Topographic Category at Base:** 1.0 Ice Thickness: 1.5 in Wind Speed with Ice: 50 mph **Seismic Design Category:** В Seismic S<sub>s</sub>: 0.186 Seismic S<sub>1</sub>: 0.064 **Live Loading Wind Speed:** 30 mph Live Loading at Mid/End-Points: 250 lb Man Live Loading at Mount Pipes: 500 lb

**Table 1 - Proposed Equipment Configuration** 

Mount Centerline (ft)	Antenna Centerline (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount / Modification Details
		6	Antel	LPA-80080/6CF	
		6 <sup>1</sup>	Commscope	SBNHH-1D65B <sup>1</sup>	Low Profile Platform
142.0	142.0	3	Samsung	MT6407-77A	Mount
142.0	142.0	2	RFS/Celwave	DB-T1-6Z-8AB-0Z	Site Pro 1 PRK-SFS-L
		3	Samsung	RFV01U-D1A	Reinforcement Kit
		3	Samsung	RFV01U-D2A	

Notes:

#### 3) ANALYSIS PROCEDURE

Table 2 - Documents Provided

Document	Document Remarks		Source
Loading Application	Verizon Wireless	Order 570318 Rev. 0	CCIsites
Tower and Mount Manufacturer Drawings	PiRod	3491992	CCIsites
Previous Mount Analysis	Tower Engineering Professionals	9838731	CCIsites

<sup>1)</sup> Antennas to be mounted using side by side dual antenna brackets. Typical of (2) antennas per sector.

#### 3.1) Analysis Method

RISA-3D (Version 17.0.4), a commercially available analysis software package, was used to create a three-dimensional model of the mount and calculate member stresses for various loading cases. Selected output from the analysis is included in Appendix A and Appendix C.

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

This analysis was performed in accordance with Crown Castle's ENG-SOW-10208 *Tower Mount Analysis (Revision D)*. In addition, this analysis is in accordance with NSTD-446 *Antenna Mount Analysis and Modification Process*.

#### 3.2) Assumptions

- 1) The mount was built in accordance with the manufacturer's specifications.
- 2) The mount has been maintained in accordance with the manufacturer's specification.
- 3) The configuration of antennas, mounts and other appurtenances are as specified in Table 1. All mount components have been assumed to be in sufficient condition to carry their full design capacity for this analysis. Refer to the issued mapping for any structural and/or maintenance issues found during our site visit if applicable.
- 4) All mount components are in sufficient condition to carry their full design capacity.
- 5) TEP did not analyze the collar mount connection to the pole and assumes it to have sufficient structural capacity to transfer the applied forces from the mount to the tower.
- 6) All material grades used for this analysis, unless verified by mount manufacturer design, were assumed per AISC Table 2-4, 15<sup>th</sup> Edition. See RISA-3D output for confirmation on grades used in this analysis.

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

#### 4) ANALYSIS RESULTS

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

Notes	Component	Critical Member	Mount Centerline (ft)	% Capacity	Pass / Fail
	Face Horizontals	CP-2	50.0	Pass	
	Support Horizontals	SA-1B		36.1	Pass
1	Grating Supports	GSI-2		57.1	Pass
	Mount Pipes MP-	MP-5	142.0	32.4	Pass
	Kickers	SFS-3		26.2	Pass
2	Connection Bolts	-		54.9	Pass
	Connection Plates	-	-	12.9	Pass

Structure Rating (max from all components) <sup>3</sup> =	57.1%
---	-------

Notes:

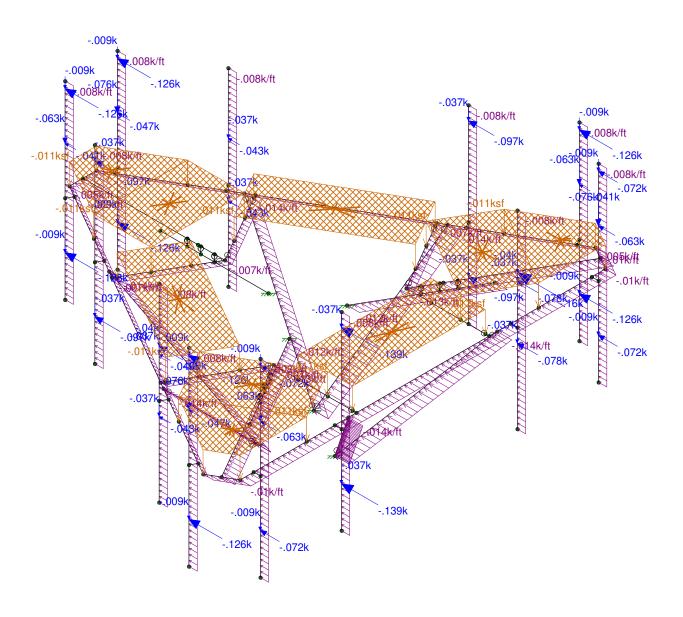
- 1) See additional documentation in "Appendix C Analysis Output" for calculations supporting the % capacity listed.
- 2) See additional documentation in "Appendix D Additional Calculations" for calculations supporting the % capacity listed.
- 3) Rating per TIA-222-H, Section 15.5.

### 4.1) Recommendations

1) The modifications depicted in "Appendix E - Mount Modification Design Drawings (MDD)" shall be installed and, upon completion, inspected. The mount has sufficient capacity to support the proposed loading configuration once the proposed modifications are completed.

# APPENDIX A WIRE FRAME AND RENDERED MODELS

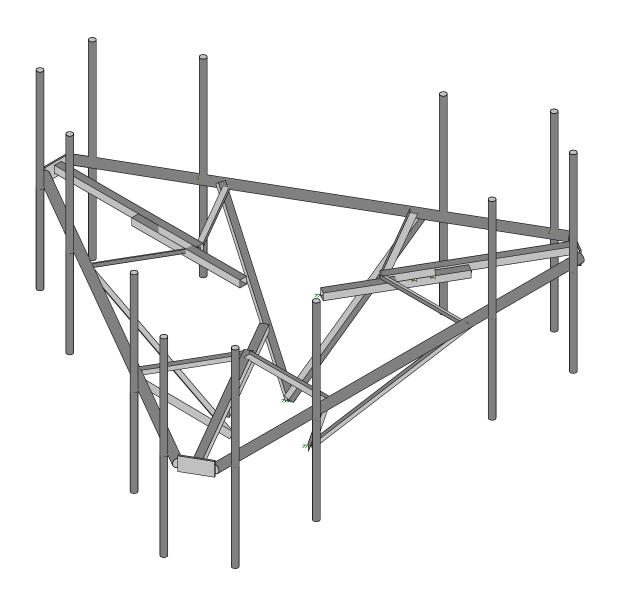




Loads: LC 2, 0.9D+1.0 0-Wind Envelope Only Solution

Tower Engineering Profes		SK - 1	
SCW	Plymouth/RT 6 (BU 826768)	Aug 13, 2021 at 8:01 AM	
TEP No. 25661.584643		Modifications.r3d	



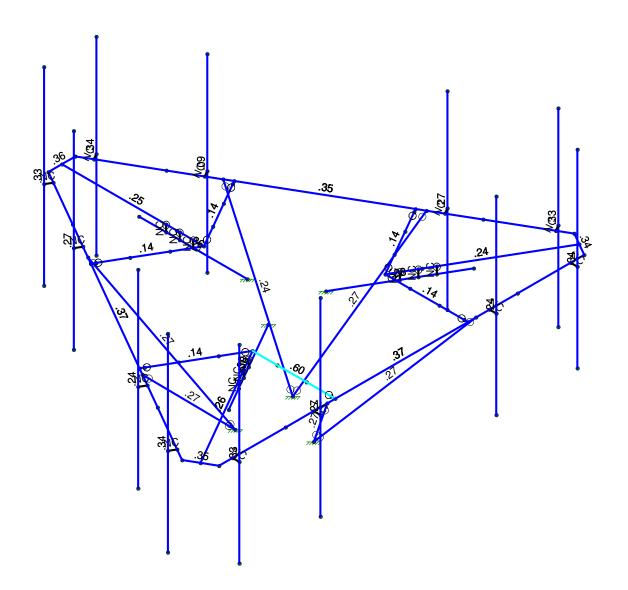


### Envelope Only Solution

Tower Engineering Profes		SK - 2
SCW	Plymouth/RT 6 (BU 826768)	Aug 13, 2021 at 8:01 AM
TEP No. 25661.584643		Modifications.r3d





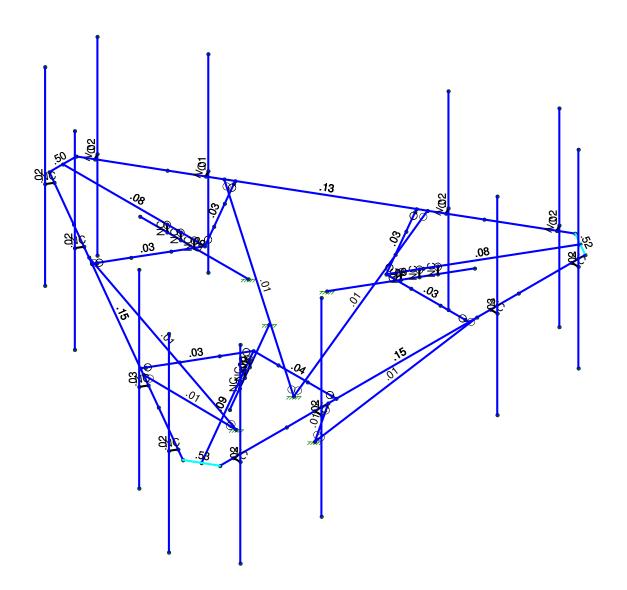


Member Code Checks Displayed (Enveloped) Envelope Only Solution

Tower Engineering Profes		SK - 3
SCW	Plymouth/RT 6 (BU 826768)	Aug 13, 2021 at 8:01 AM
TEP No. 25661.584643		Modifications.r3d







Member Shear Checks Displayed (Enveloped) Envelope Only Solution

Tower Engineering Profes		SK - 4
SCW	Plymouth/RT 6 (BU 826768)	Aug 13, 2021 at 8:01 AM
TEP No. 25661.584643		Modifications.r3d

# APPENDIX B SOFTWARE INPUT CALCULATIONS



#### Address:

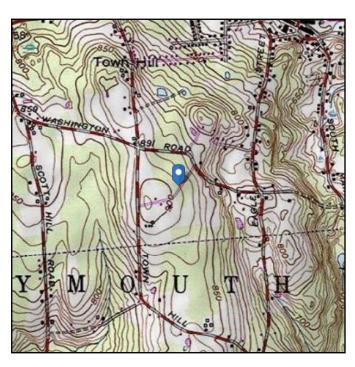
No Address at This Location

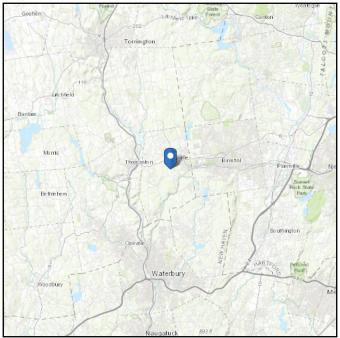
## ASCE 7 Hazards Report

Standard: ASCE/SEI 7-10 Elevation: 889.9 ft (NAVD 88)

Risk Category: || Latitude: 41.668389

Soil Class: D - Stiff Soil Longitude: -73.019956





## Wind

### Results:

Wind Speed: 119 Vmph \*120 mph per jurisdiciton requirements

 10-year MRI
 76 Vmph

 25-year MRI
 86 Vmph

 50-year MRI
 91 Vmph

 100-year MRI
 98 Vmph

Date Socressed: AGEMSE1872002, Fig. 26.5-1A and Figs. CC-1—CC-4, and Section 26.5.2, incorporating errata of March 12, 2014

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

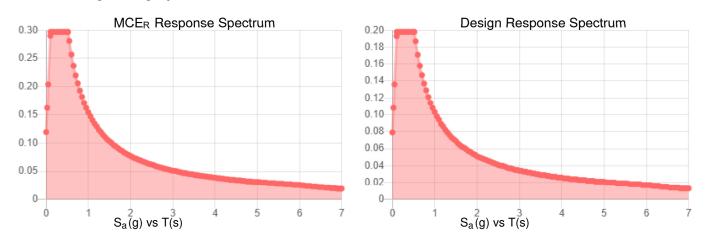
Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.



## Seismic

Site Soil Class: Results:	D - Stiff Soil			
S <sub>S</sub> :	0.186	S <sub>DS</sub> :	0.198	
$S_1$ :	0.064	$S_{D1}$ :	0.103	
F <sub>a</sub> :	1.6	$T_L$ :	6	
$F_{\nu}$ :	2.4	PGA:	0.095	
$S_{MS}$ :	0.297	PGA <sub>M</sub> :	0.152	
$S_{M1}$ :	0.154	F <sub>PGA</sub> :	1.6	
		l <sub>e</sub> :	1	

## Seismic Design Category B



Data Accessed: Tue May 18 2021

Date Source: USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating

Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with

ASCE/SEI 7-10 Ch. 21 are available from USGS.



## **Ice**

Results:

Ice Thickness: 0.75 in.

Concurrent Temperature: 5 F

Gust Speed: 50 mph

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

Date Accessed: Tue May 18 2021

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

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

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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.

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**TEP No.** 25661.584643

**Analysis By:** SCW 8/13/2021

**Checked By:** PHX 8/13/2021

Code Revisions: TIA-222-H IBC 2015
Tower Type: Monopole

Wind Inputs:

## **Wind Calculations:**

Ult. Wind Velocity:	120.0	mph	K <sub>zt</sub> :	1.000	Section 2.6.6
Live Load Velocity:	30.0	mph	K <sub>d</sub> :	0.950	
Ice Wind Velocity:	50.0	mph	$K_{z-Mount}$ :	1.092	Section 2.6.5.2
Base Ice Thickness:	1.50	inches	K <sub>z-Antenna</sub> :	1.092	Section 2.6.5.2
<b>Mount Centerline:</b>	142.0	ft	K <sub>iz</sub> :	1.157	Section 2.6.10
Antenna Centerline:	142.0	ft	Ice Thickness:	1.736	inches - Section 2.6.10
<b>Exposure Category:</b>	В				
Topo Category:	1				

Without Ice	- (psf)	With Ice -	(psf)
$(q_zG_h)_{Mount}$ :	37.04	$(q_zG_h)_{Mount}$ :	6.43
(q <sub>z</sub> G <sub>h</sub> ) <sub>Antenna</sub> :	37.04	$(q_zG_h)_{Antenna}$ :	6.43

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

Ш

890

ft

**Risk Category:** 

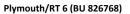
**Ground Elevation:** 

**Seismic Input** 

S <sub>DS</sub> :	0.198	Design Short Period Spectral Accel.
I <sub>p</sub> :	1.0	Importance Factor
R <sub>p</sub> :	2.0	Response Modification Factor
ρ:	1.0	
A <sub>s</sub> :	1.0	Applification Factor - TIA-222-H Section 2.7.8.1
S <sub>1</sub> :	0.064	Spectral Acceleration at a Period of 1 Second

**Seismic Design Force** 

Cs: 0.099 kips/kip TIA-H Sec 2.7.7.1.1
Cs-min: 0.030 kips/kip TIA-H Sec 2.7.7.1.1





**Samsung Telecommunications** 

**TEP No.** 25661.584643

**Analysis By:** SCW 8/13/2021

**Checked By:** PHX 8/13/2021

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

Azimuth is the absolute angle measured clockwise from RISA-3D global X-axis.						Distance fr	om start node of	the member				
MFR	Model	Height (in)	Width (in)	Depth (in)	Wt. (lbs)	Azimuth°	Qty	Shape	Member Label	Location #1 (ft,%)	Location #2 (ft,%)	Location #3 (ft,%)
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	0.00	1	Flat	MP-1	0.25	5.50	
Samsung Telecommunications	RFV01U-D1A	15.00	15.00	10.00	84.40	0.00	1	Flat	MP-1	2.00		
<b>Samsung Telecommunications</b>	MT6407-77A	35.06	16.06	5.51	81.57	0.00	1	Flat	MP-2	2.25	4.25	
RFS/Celwave	DB-T1-6Z-8AB-0Z	24.00	24.00	10.00	44.00	0.00	1	Flat	MP-2	2.00		
Commscope	SBNHH-1D65B	72.90	11.90	7.10	40.60	0.00	1	Flat	MP-3	0.50	5.50	
Commscope	SBNHH-1D65B	72.90	11.90	7.10	40.60	0.00	1	Flat	MP-3	0.50	5.50	
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	0.00	1	Flat	MP-4	0.25	5.50	
Samsung Telecommunications	RFV01U-D2A	15.00	15.00	8.10	70.30	0.00	1	Flat	MP-4	2.00		
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	120.00	1	Flat	MP-5	0.25	5.50	
Samsung Telecommunications	RFV01U-D1A	15.00	15.00	10.00	84.40	120.00	1	Flat	MP-5	2.00		
Samsung Telecommunications	MT6407-77A	35.06	16.06	5.51	81.57	120.00	1	Flat	MP-6	2.25	4.25	
RFS/Celwave	DB-T1-6Z-8AB-0Z	24.00	24.00	10.00	44.00	120.00	1	Flat	MP-6	2.00		
Commscope	SBNHH-1D65B	72.90	11.90	7.10	40.60	120.00	1	Flat	MP-7	0.50	5.50	
Commscope	SBNHH-1D65B	72.90	11.90	7.10	40.60	120.00	1	Flat	MP-7	0.50	5.50	
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	120.00	1	Flat	MP-8	0.25	5.50	
Samsung Telecommunications	RFV01U-D2A	15.00	15.00	8.10	70.30	120.00	1	Flat	MP-8	2.00		
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	240.00	1	Flat	MP-9	0.25	5.50	
Samsung Telecommunications	RFV01U-D1A	15.00	15.00	10.00	84.40	240.00	1	Flat	MP-9	2.00		
Samsung Telecommunications	MT6407-77A	35.06	16.06	5.51	81.57	240.00	1	Flat	MP-10	2.25	4.25	
Commscope	SBNHH-1D65B	72.90	11.90	7.10	40.60	240.00	1	Flat	MP-11	0.50	5.50	
Commscope	SBNHH-1D65B	72.90	11.90	7.10	40.60	240.00	1	Flat	MP-11	0.50	5.50	
Antel	LPA-80080/6CF	70.87	5.51	13.19	21.00	240.00	1	Flat	MP-12	0.25	5.50	

15.00

RFV01U-D2A

15.00

8.10

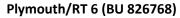
70.30

240.00

Flat

MP-12

2.00





**TEP No.** 25661.584643

 Analysis By:
 SCW
 8/13/2021

 Checked By:
 PHX
 8/13/2021

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

Member Name	Wind Proj. (in)	Length (in)	Shape	θ (°)	Perimeter (in)
FFTH-1	3.500	162.00	Round	90.00	11.00
FFTH-3	3.500	162.00	Round	30.00	11.00
FFTH-2	3.500	162.00	Round	-30.00	11.00
SA-1	3.000	63.00	Flat	-60.00	12.00
SA-2	3.000	63.00	Flat	60.00	12.00
SA-3	3.000	63.00	Flat	0.00	12.00
CP-1	6.000	12.00	Flat	-30.00	13.25
CP-2	6.000	12.00	Flat	30.00	13.25
CP-3	6.000	12.00	Flat	90.00	13.25
SA-3B	3.000	48.00	Flat	0.00	12.00
SA-2B	3.000	48.00	Flat	60.00	12.00
SA-1B	3.000	48.00	Flat	-60.00	12.00
GSI-1	1.500	36.70	Flat	0.00	8.00
GSI-2	1.500	36.70	Flat	0.00	8.00
GSI-3	1.500	36.70	Flat	-60.00	8.00
GSI-4	1.500	36.70	Flat	-60.00	8.00
GSI-5	1.500	36.70	Flat	60.00	8.00
GSI-6	1.500	36.70	Flat	60.00	8.00
MP-1	2.375	84.00	Round		7.46
MP-2	2.375	84.00	Round		7.46
MP-3	2.375	84.00	Round		7.46
MP-4	2.375	84.00	Round		7.46
MP-9	2.375	84.00	Round		7.46
MP-10	2.375	84.00	Round		7.46
MP-11	2.375	84.00	Round		7.46
MP-12	2.375	84.00	Round		7.46
MP-5	2.375	84.00	Round		7.46
MP-6	2.375	84.00	Round		7.46
MP-7	2.375	84.00	Round		7.46
MP-8	2.375	84.00	Round		7.46
SFS-1	2.500	72.00	Flat		10.00
SFS-2	2.500	72.00	Flat		10.00
SFS-3	2.500	72.00	Flat		10.00
SFS-4	2.500	72.00	Flat		10.00
SFS-5	2.500	72.00	Flat		10.00
SFS-6	2.500	72.00	Flat		10.00

# APPENDIX C SOFTWARE ANALYSIS OUTPUT



: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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#### (Global) Model Settings

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

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

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



Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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#### (Global) Model Settings, Continued

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

#### Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/1E.	.Densitv[k/ft	. Yield[ksi]	Rv	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.49	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.49	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A500 Gr C	29000	11154	.3	.65	.49	50	1.4	62	1.3

#### Hot Rolled Steel Section Sets

	Label	Shape	Type	Design	Material	Design	A [in2]	lyy [in4]	Izz [in4]	J [in4]
1	Face Horizontal	PIPE 3.0	None	None	A53 Gr.B	Typical	2.07	2.85	2.85	5.69
2	Corner Plate	PL 6x5/8	None	None	A36 Gr.36	Typical	3.75	.122	11.25	.456
3	Support Arm	HSS3X3X5	None	None	A53 Gr.B	Typical	2.94	3.45	3.45	5.94
4	Internal	L2.5x1.5x4	None	None	A36 Gr.36	Typical	.947	.16	.594	.021
5	Mount Pipe	PIPE 2.0	None	None	A53 Gr.B	Typical	1.02	.627	.627	1.25
6	PRK-SFS-L	L2.5x2.5x3	None	None	A36 Gr.36	Typical	.901	.535	.535	.011

#### Material Takeoff

	Material	Size	Pieces	Length[ft]	Weight[K]
1	General				
2	RIGID		21	5.2	0
3	Total General		21	5.2	0
4					
5	Hot Rolled Steel				
6	A36 Gr.36	L2.5x1.5x4	6	18.3	.059
7	A36 Gr.36	L2.5x2.5x3	6	36	.11
8	A36 Gr.36	PL 6x5/8	3	3	.038



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## Material Takeoff (Continued)

	Material	Size	Pieces	Length[ft]	Weight[K]
9	A53 Gr.B	HSS3X3X5	6	27.8	.278
10	A53 Gr.B	PIPE 2.0	12	84	.292
11	A53 Gr.B	PIPE 3.0	3	40.5	.285
12	Total HR Steel		36	209.6	1 062

#### Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]
1	SA3	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	SA2	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	SA1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	K2	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	K3	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	K1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

#### Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(de	. Section/Shape	Type	Design List	Material	Design Rul
1	CP-1	N8	N7			Corner Plate	None	None	A36 Gr.36	Typical
2	CP-2	N10	N12			Corner Plate	None	None	A36 Gr.36	Typical
3	CP-3	N9	N11			Corner Plate	None	None	A36 Gr.36	Typical
4	FFTH-1	N7	N10			Face Horizontal	None	None	A53 Gr.B	Typical
5	FFTH-2	N9	N12			Face Horizontal	None	None	A53 Gr.B	Typical
6	FFTH-3	N8	N11			Face Horizontal	None	None	A53 Gr.B	Typical
7	GSI-1	N17	N40A		270	Internal	None	None	A36 Gr.36	Typical
8	GSI-2	N42	N16		270	Internal	None	None	A36 Gr.36	Typical
9	GSI-3	N21	N44		270	Internal	None	None	A36 Gr.36	Typical
10	GSI-4	N45	N17		270	Internal	None	None	A36 Gr.36	Typical
11	GSI-5	N16	N46		270	Internal	None	None	A36 Gr.36	Typical
12	GSI-6	N47	N21		270	Internal	None	None	A36 Gr.36	Typical
13	MP-1	N78	N74			Mount Pipe	None	None	A53 Gr.B	Typical
14	MP-2	N80	N76			Mount Pipe	None	None	A53 Gr.B	Typical
15	MP-3	N81	N77			Mount Pipe	None	None	A53 Gr.B	Typical
16	MP-4	N79	N75			Mount Pipe	None	None	A53 Gr.B	Typical
17	MP-5	N128	N124			Mount Pipe	None	None	A53 Gr.B	Typical
18	MP-6	N130	N126			Mount Pipe	None	None	A53 Gr.B	Typical
19	MP-7	N131	N127			Mount Pipe	None	None	A53 Gr.B	Typical
20	MP-8	N129	N125			Mount Pipe	None	None	A53 Gr.B	Typical
21	MP-9	N108	N104A			Mount Pipe	None	None	A53 Gr.B	Typical
22	MP-10	N110	N106A			Mount Pipe	None	None	A53 Gr.B	Typical
23	MP-11	N111	N107A			Mount Pipe	None	None	A53 Gr.B	Typical
24	MP-12	N109	N105A			Mount Pipe	None	None	A53 Gr.B	Typical
25	SFS-1	N122	K1		180	PRK-SFS-L	None	None	A36 Gr.36	Typical
26	SFS-2	N121	K1		90	PRK-SFS-L	None	None	A36 Gr.36	Typical
27	SFS-3	N126A	K2		180	PRK-SFS-L	None	None	A36 Gr.36	Typical
28	SFS-4	N125A	K2		90	PRK-SFS-L	None	None	A36 Gr.36	Typical
29	SFS-5	N124A	K3		180	PRK-SFS-L	None	None	A36 Gr.36	Typical
30	SFS-6	N123	K3		90	PRK-SFS-L	None	None	A36 Gr.36	Typical
31	M13	N22	N27A			RIGID	None	None	RIGID	Typical
32	M14	N23	N28A			RIGID	None	None	RIGID	Typical
33	M15	N24	N29			RIGID	None	None	RIGID	Typical
34	M16	N30	N33			RIGID	None	None	RIGID	Typical
35	M17	N31	N34			RIGID	None	None	RIGID	Typical
36	M18	N32	N35			RIGID	None	None	RIGID	Typical
37	M19	N36	N39			RIGID	None	None	RIGID	Typical
38	M20	N37	N40			RIGID	None	None	RIGID	Typical

RISA-3D Version 17.0.4 [C:\...\...\...\RISA-3D\Modifications.r3d]



Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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## Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(de	. Section/Shape	Type	Design List	Material	Design Rul
39	M21	N38	N41			RIGID	None	None	RIGID	Typical
40	M33	N70	N95			RIGID	None	None	RIGID	Typical
41	M34	N72	N97			RIGID	None	None	RIGID	Typical
42	M36	N73	N98A			RIGID	None	None	RIGID	Typical
43	M37	N71	N96			RIGID	None	None	RIGID	Typical
44	M43	N98	N115			RIGID	None	None	RIGID	Typical
45	M44	N99	N117			RIGID	None	None	RIGID	Typical
46	M46	N100	N118			RIGID	None	None	RIGID	Typical
47	M47	N101	N116			RIGID	None	None	RIGID	Typical
48	M53	N102	N135			RIGID	None	None	RIGID	Typical
49	M54	N103	N137			RIGID	None	None	RIGID	Typical
50	M56	N104	N138			RIGID	None	None	RIGID	Typical
51	M57	N105	N136			RIGID	None	None	RIGID	Typical
52	SA-1	N16	N13			Support Arm	None	None	A53 Gr.B	Typical
53	SA-1B	SA1	N27			Support Arm	None	None	A53 Gr.B	Typical
54	SA-2	N17	N14			Support Arm	None	None	A53 Gr.B	Typical
55	SA-2B	SA2	N25			Support Arm	None	None	A53 Gr.B	Typical
56	SA-3	N21	N15			Support Arm	None	None	A53 Gr.B	Typical
57	SA-3B	SA3	N20			Support Arm	None	None	A53 Gr.B	Typical

#### Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Ra Analysis	Inactive	Seismi
1	CP-1						Yes	** NA **		None
2	CP-2						Yes	** NA **		None
3	CP-3						Yes	** NA **		None
4	FFTH-1						Yes	** NA **		None
5	FFTH-2						Yes	** NA **		None
6	FFTH-3						Yes	** NA **		None
7	GSI-1	BenPIN	BenPIN				Yes	** NA **		None
8	GSI-2	BenPIN					Yes	** NA **		None
9	GSI-3	BenPIN	BenPIN				Yes	** NA **		None
10	GSI-4	BenPIN	BenPIN				Yes	** NA **		None
11	GSI-5	BenPIN	BenPIN				Yes	** NA **		None
12	GSI-6	BenPIN	BenPIN				Yes	** NA **		None
13	MP-1						Yes	** NA **		None
14	MP-2						Yes	** NA **		None
15	MP-3						Yes	** NA **		None
16	MP-4						Yes	** NA **		None
17	MP-5						Yes	** NA **		None
18	MP-6						Yes	** NA **		None
19	MP-7						Yes	** NA **		None
20	MP-8						Yes	** NA **		None
21	MP-9						Yes	** NA **		None
22	MP-10						Yes	** NA **		None
23	MP-11						Yes	** NA **		None
24	MP-12						Yes	** NA **		None
25	SFS-1	BenPIN	BenPIN				Yes	** NA **		None
26	SFS-2	BenPIN	BenPIN				Yes	** NA **		None
27	SFS-3	BenPIN	BenPIN				Yes	** NA **		None
28	SFS-4	BenPIN	BenPIN				Yes	** NA **		None
29	SFS-5	BenPIN	BenPIN				Yes	** NA **		None
30	SFS-6	BenPIN	BenPIN				Yes	** NA **		None
31	M13		AIIPIN				Yes	** NA **		None
32	M14		AIIPIN				Yes	** NA **		None
33	M15		AIIPIN				Yes	** NA **		None

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## Member Advanced Data (Continued)

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl RaAnalysis	Inactive	Seismi
34	M16		AIIPIN				Yes	** NA **		None
35	M17		AIIPIN				Yes	** NA **		None
36	M18		AIIPIN				Yes	** NA **		None
37	M19		AIIPIN				Yes	** NA **		None
38	M20		AliPIN				Yes	** NA **		None
39	M21		AllPIN				Yes	** NA **		None
40	M33						Yes	** NA **		None
41	M34						Yes	** NA **		None
42	M36						Yes	** NA **		None
43	M37						Yes	** NA **		None
44	M43						Yes	** NA **		None
45	M44						Yes	** NA **		None
46	M46						Yes	** NA **		None
47	M47						Yes	** NA **		None
48	M53						Yes	** NA **		None
49	M54						Yes	** NA **		None
50	M56						Yes	** NA **		None
51	M57						Yes	** NA **		None
52	SA-1						Yes	** NA **		None
53	SA-1B						Yes	** NA **		None
54	SA-2						Yes	** NA **		None
55	SA-2B						Yes	** NA **		None
56	SA-3						Yes	** NA **		None
57	SA-3B						Yes	** NA **		None

#### Hot Rolled Steel Design Parameters

	Label	Shape	Length[ft]	Lbyy[ft]	Lbzz[ft]	Lcomp top	.Lcomp bot[ft]	L-torg	Kyy	Kzz	Cb	Functi
1	CP-1	Corner Plate	1	.375	.375				.65	.65		Lateral
2	CP-2	Corner Plate	1	.375	.375				.65	.65		Lateral
3	CP-3	Corner Plate	1	.375	.375				.65	.65		Lateral
4	FFTH-1	Face Horizontal	13.5	5.5	5.5				1	- 1		Lateral
5	FFTH-2	Face Horizontal	13.5	5.5	5.5				- 1	- 1		Lateral
6	FFTH-3	Face Horizontal	13.5	5.5	5.5				- 1	- 1		Lateral
7	GSI-1	Internal	3.058						1	1		Lateral
8	GSI-2	Internal	3.058						1	1		Lateral
9	GSI-3	Internal	3.058						1	1		Lateral
10	GSI-4	Internal	3.058						1	1		Lateral
11	GSI-5	Internal	3.058						1	1		Lateral
12	GSI-6	Internal	3.058						1	- 1		Lateral
13	MP-1	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
14	MP-2	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
15	MP-3	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
16	MP-4	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
17	MP-5	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
18	MP-6	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
19	MP-7	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
20	MP-8	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
21	MP-9	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
22	MP-10	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
23	MP-11	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
24	MP-12	Mount Pipe	7	Segment	Segment				2.1	2.1		Lateral
25	SFS-1	PRK-SFS-L	6						1	1		Lateral
26	SFS-2	PRK-SFS-L	6						1	1		Lateral
27	SFS-3	PRK-SFS-L	6						1	1		Lateral
28	SFS-4	PRK-SFS-L	6						1	1		Lateral
		_										

Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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## Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[ft]	Lbyv[ft]	Lbzz[ft]	Lcomp top	.Lcomp bot[ft]	L-tora	Kvv	Kzz	Cb	Functi
29	SFS-5	PRK-SFS-L	6						1	1		Lateral
30	SFS-6	PRK-SFS-L	6						1	1		Lateral
31	SA-1	Support Arm	5.25						2.1	2.1		Lateral
32	SA-1B	Support Arm	4						2.1	2.1		Lateral
33	SA-2	Support Arm	5.25						2.1	2.1		Lateral
34	SA-2B	Support Arm	4						2.1	2.1		Lateral
35	SA-3	Support Arm	5.25						2.1	2.1		Lateral
36	SA-3B	Support Arm	4						2.1	2.1		Lateral

#### Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed		Surface(P.
1	Dead	None		-1			38		9	
2	0 Wind - No Ice	None					38	36		
3	30 Wind - No Ice	None					76	72		
4	45 Wind - No Ice	None					76	72		
5	60 Wind - No Ice	None					76	72		
6	90 Wind - No Ice	None					38	36		
7	120 Wind - No Ice	None					76	72		
8	135 Wind - No Ice	None					76	72		
9	150 Wind - No Ice	None					76	72		
10	180 Wind - No Ice	None					38	36		
11	210 Wind - No Ice	None					76	72		
12	225 Wind - No Ice	None					76	72		
13	240 Wind - No Ice	None					76	72		
14	270 Wind - No Ice	None					38	36		
15	300 Wind - No Ice	None					76	72		
16	315 Wind - No Ice	None					76	72		
17	330 Wind - No Ice	None					76	72		
18	Ice Weight	None					38	36	9	
19	0 Wind - Ice	None					38	36		
20	30 Wind - Ice	None					76	72		
21	45 Wind - Ice	None					76	72		
22	60 Wind - Ice	None					76	72		
23	90 Wind - Ice	None	_				38	36		
		None					76	72		
24	120 Wind - Ice		_				76	72		-
25	135 Wind - Ice	None								_
26	150 Wind - Ice	None					76	72		
27	180 Wind - Ice	None					38	36		_
28	210 Wind - Ice	None					76	72		
29	225 Wind - Ice	None					76	72		
30	240 Wind - Ice	None					76	72		
31	270 Wind - Ice	None					38	36		
32	300 Wind - Ice	None					76	72		
33	315 Wind - Ice	None					76	72		
34	330 Wind - Ice	None					76	72		
35	Lm	None				1				
36	Lv	None				1				
37	Seismic Load X	ELX	-1				38			
38	Seismic Load Z	ELZ			-1		38			
39	BLC 1 Transient Area	None						45		
	BLC 18 Transient Are	None						45		



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#### Load Combinations

1 1.4D Yes Y 1 1.4		Description	So	.P	S	BLC	Fac	BLC	Fac	.BLC	Fac	.BLC	Fac	.BLC	Fac	.BLC	Fac	BLC	Fac	.BLC	Fac	.BLC	Fac	BLC	Fac.
3 0.90+10.930-Wind Yes Y 1 9 4 1 1 9 1 1 1 1 9 3 1 1 1 9 1 1 1 1 9 1 1 1 1	1															T				Γ		T			
4   0.90+10.45-Wind Yes   Y   1   9   4   1   1   1   1   1   1   1   1   1	2	0.9D+1.0 0-Wind	Yes	Υ		1	.9	2	1																
5	3	0.9D+1.0 30-Wind	Yes	Υ		1	.9	3	1																
6 0.90+10.90-Wind Yes Y 1 .9 6 1 9 7 1 9 7 1 9 7 1 9 7 1 9 7 1 9 7 1 9 7 1 9 7 1 9 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 9 1 9 9 1 9 9 1 9 9 1 9 9 1 9 .	4	0.9D+1.0 45-Wind	Yes	Υ		1	.9	4	1																
6 0.9D+10.90-Wind Yes Y 1 9 7 1 1 9 6 1 9 7 1 1 9 1 0 9 7 1 1 9 1 1 9 7 1 1 9 1 1 9 7 1 1 9 1 1 9 7 1 1 9 1 1 9 7 1 1 9 1 1 9 1 1 1 1	5	0.9D+1.0 60-Wind	Yes	Ý		1		5	1																
7	6	0.9D+1.0 90-Wind	Yes			1																			
8 0.90+1.0 135-Wind Yes Y 1			_			_																			
9	_		_																						
10				_		_																			
11				_		·		_	_																
12   0.9D-1.0 225 Wind Yes   Y			_	_																					
13   0.9D+1.0 240-Wind   Yes   Y				_		ľ			_																
14						_			_																
15 0.9D+1.0 300-Wind Yes Y 1 .9 15 .1				_		_			_																
16   0.90±1.0 315-Wind   Ves   Y   1   .9   16   1																									
17						_																			
18				_		_			_																
19			-																						
20						_			_																
21 1.2D+1.0 60-Wind Ves Y 1 1.2 5 1			_			_																			
22 1.2D+1.0 90-Wind Ves Y																									
23 1.2D+1.0 135-Wind Yes Y 1 1.2 8 1 2 5 1.2D+1.0 150-Wind Yes Y 1 1.2 9 1 1 2 8 1 2 5 1.2D+1.0 150-Wind Yes Y 1 1.2 9 1 1 2 9 1 1 2 1 1 1 1 1 1 1 1 1 1 1						_						_				_				$\perp$				$\Box$	
24 1.2D+1.0 135-Wind Ves Y			_																						
25 1.2D+1.0 150-Wind Yes Y 1 1.2 9 1 1			_	_		_			_																
26 1.2D+1.0 180-Wind Yes Y	24			Υ		1	1.2	8	1																
27   1.2D+1.0 210-Wind   Ves   Y	25	1.2D+1.0 150-Wind	Yes	Υ		1	1.2	9	1																
28 1.2D+1.0 225-Wind Ves Y	26	1.2D+1.0 180-Wind	Yes	Υ		1	1.2	10	1																
29 1.2D+1.0 240-Wind Yes Y 1 1.2 13 1 1	27	1.2D+1.0 210-Wind	Yes	Υ		1	1.2	11	1																
30 1.2D+1.0 270-Wind Yes Y 1 1.2 14 1 1 31 1.2D+1.0 300-Wind Yes Y 1 1 1.2 15 1 1 32 1.2D+1.0 330-Wind Yes Y 1 1 1.2 16 1 1 33 1.2D+1.0 330-Wind Yes Y 1 1 1.2 16 1 1 33 1.2D+1.0 330-Wind Yes Y 1 1 1.2 17 1 1 34 1.2D+1.0 330-Wind Yes Y 1 1 1.2 18 1 1 9 1 35 1.2D+1.0 10-1.0 30 Yes Y 1 1 1.2 18 1 1 20 1 1 36 1.2D+1.0 10-1.0 45 Yes Y 1 1 1.2 18 1 20 1 1 37 1.2D+1.0 10-1.0 45 Yes Y 1 1 1.2 18 1 22 1 1 37 1.2D+1.0 10-1.0 60 Yes Y 1 1 1.2 18 1 22 1 1 33 1.2D+1.0 10-1.0 60 Yes Y 1 1 1.2 18 1 22 1 1 33 1.2D+1.0 10-1.0 10-0 Yes Y 1 1 1.2 18 1 24 1 1 22 1 1 33 1 1.2D+1.0 10-1.	28	1.2D+1.0 225-Wind	Yes	Υ		1	1.2	12	1																
31 1.2D+1.0 300-Wind Ves Y 1 1.2 15 1 1 32 1.2D+1.0 315-Wind Ves Y 1 1.2 16 1 33 1.2D+1.0 315-Wind Ves Y 1 1.2 16 1 33 1.2D+1.0 300-Wind Ves Y 1 1.2 17 1 34 1.2D+1.0 01-1.0 01-0 01-0 01-0 01-0 01-0 01-0	29	1.2D+1.0 240-Wind	Yes	Υ		1	1.2	13	1																
31 1.2D+1.0 310-Wind Ves Y	30	1.2D+1.0 270-Wind	Yes	Υ		1	1.2	14	1																
32 1.2D+1.0315-Wind Yes Y 1 1.2 16 1		1.2D+1.0 300-Wind	Yes	Ý		1			1																
33 1.2D+1.0 330-Wind Ves Y		1.2D+1.0 315-Wind	Yes			ľ																			
34 1.2D+1.0Di+1.0 0						1																			
35 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 20 1 36 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 21 1 37 1.2D+1.0Di+1.0 60 Yes Y 1 1.2 18 1 22 1 38 1.2D+1.0Di+1.0 90 Yes Y 1 1.2 18 1 23 1 39 1.2D+1.0Di+1.0 10 Yes Y 1 1.2 18 1 23 1 39 1.2D+1.0Di+1.0 13 Yes Y 1 1.2 18 1 24 1 30 1 39 1.2D+1.0Di+1.0 13 Yes Y 1 1.2 18 1 26 1 31 26 1 31 31 31 31 31 31 31 31 31 31 31 31 3						_				19	1														
36 1.2D+1.0Di+1.0 45 Yes Y 1 1.2 18 1 21 1																								$\vdash$	
37 1.2D+1.0Di+1.0 60 Ves Y 1 1.2 18 1 22 1 38 1.2D+1.0Di+1.0 90 Yes Y 1 1.2 18 1 23 1 39 1.2D+1.0Di+1.0 12 Yes Y 1 1.2 18 1 23 1 40 1.2D+1.0Di+1.0 13 Ves Y 1 1.2 18 1 25 1 41 1.2D+1.0Di+1.0 13 Ves Y 1 1.2 18 1 26 1 42 1.2D+1.0Di+1.0 15 Yes Y 1 1.2 18 1 26 1 43 1.2D+1.0Di+1.0 12 Yes Y 1 1.2 18 1 27 1 43 1.2D+1.0Di+1.0 21 Yes Y 1 1.2 18 1 27 1 44 1.2D+1.0Di+1.0 22 Yes Y 1 1.2 18 1 29 1 45 1.2D+1.0Di+1.0 24 Yes Y 1 1.2 18 1 30 1 46 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 31 1 47 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 33 1 48 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 34 1 50 1.2D+1.0Di+1.0 33 Yes Y 1 1.2 18 1 34 1 50 1.2D+1.0Di+1.0 3 Yes Y 36 1.5 1 1.2 51 1.2D+1.5D+1.5Lv Yes Y 36 1.5 1 1.2 51 1.2D+1.5Lm+1.0 0 Yes Y 1 1.2 2 063 35 1.5				_		_																			
38 1.2D+1.0Di+1.0 90 Yes Y 1 1.2 18 1 23 1 39 1.2D+1.0Di+1.0 13 Yes Y 1 1.2 18 1 24 1 40 1.2D+1.0Di+1.0 13 Yes Y 1 1 1.2 18 1 25 1 41 1.2D+1.0Di+1.0 15 Yes Y 1 1 1.2 18 1 26 1 42 1.2D+1.0Di+1.0 18 Yes Y 1 1.2 18 1 26 1 43 1.2D+1.0Di+1.0 18 Yes Y 1 1.2 18 1 27 1 43 1.2D+1.0Di+1.0 21 Yes Y 1 1.2 18 1 27 1 44 1.2D+1.0Di+1.0 22 Yes Y 1 1.2 18 1 29 1 45 1.2D+1.0Di+1.0 22 Yes Y 1 1.2 18 1 30 1 46 1.2D+1.0Di+1.0 24 Yes Y 1 1.2 18 1 30 1 47 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 32 1 48 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 34 1 50 1.2D+1.0Di+1.0 3 Yes Y 1 1.2 18 1 34 1 51 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 34 1						_					_														
39 1.2D+1.0Di+1.0 12 Yes Y 1 1.2 18 1 24 1 40 1.2D+1.0Di+1.0 13 Yes Y 1 1.2 18 1 25 1 41 1.2D+1.0Di+1.0 15 Yes Y 1 1.2 18 1 25 1 42 1.2D+1.0Di+1.0 18 Yes Y 1 1.2 18 1 26 1 42 1.2D+1.0Di+1.0 18 Yes Y 1 1.2 18 1 27 1 43 1.2D+1.0Di+1.0 21 Yes Y 1 1.2 18 1 27 1 43 1.2D+1.0Di+1.0 22 Yes Y 1 1.2 18 1 28 1 44 1.2D+1.0Di+1.0 22 Yes Y 1 1.2 18 1 29 1 45 1.2D+1.0Di+1.0 22 Yes Y 1 1.2 18 1 30 1 46 1.2D+1.0Di+1.0 27 Yes Y 1 1.2 18 1 31 1 47 1.2D+1.0Di+1.0 3 Yes Y 1 1.2 18 1 32 1 48 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 33 Yes Y 1 1.2 18 1 34 1 50 1.2D+1.5Lv Yes Y 36 1.5 1 1.2 51 1.2D+1.5Lm+1.0 0 Yes Y 1 1.2 2 063 35 1.5	- 0.		_								_														
40 1.2D+1.0Di+1.0 13 Yes Y 1 1 1.2 18 1 25 1 41 1.2D+1.0Di+1.0 15 Yes Y 1 1 1.2 18 1 26 1 42 1.2D+1.0Di+1.0 18 Yes Y 1 1 1.2 18 1 26 1 43 1.2D+1.0Di+1.0 18 Yes Y 1 1 1.2 18 1 27 1 43 1.2D+1.0Di+1.0 21 Yes Y 1 1 1.2 18 1 28 1 44 1.2D+1.0Di+1.0 21 Yes Y 1 1 1.2 18 1 29 1 45 1.2D+1.0Di+1.0 24 Yes Y 1 1 1.2 18 1 30 1 46 1.2D+1.0Di+1.0 27 Yes Y 1 1 1.2 18 1 30 1 47 1.2D+1.0Di+1.0 30 Yes Y 1 1 1.2 18 1 31 1 47 1.2D+1.0Di+1.0 31 Yes Y 1 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 31 Yes Y 1 1 1.2 18 1 33 1 50 1.2D+1.5Ly Yes Y 36 1.5 1 1.2 51 1.2D+1.5Lm+1.0 0 Yes Y 1 1 1.2 2 063 35 1.5						_					_													$\vdash$	
41       1.2D+1.0Di+1.0 15 Yes       Y       1       1.2       18       1       26       1         42       1.2D+1.0Di+1.0 2 Yes       Y       1       1.2       18       1       27       1         43       1.2D+1.0Di+1.0 21 Yes       Y       1       1.2       18       1       28       1         44       1.2D+1.0Di+1.0 22 Yes       Y       1       1.2       18       1       29       1         45       1.2D+1.0Di+1.0 24 Yes       Y       1       1.2       18       1       30       1         46       1.2D+1.0Di+1.0 30 Yes       Y       1       1.2       18       1       31       1         47       1.2D+1.0Di+1.0 30 Yes       Y       1       1.2       18       1       32       1         48       1.2D+1.0Di+1.0 31 Yes       Y       1       1.2       18       1       33       1         49       1.2D+1.5Lv       Yes       Y       1       1.2       18       1       34       1         50       1.2D+1.5Lm+1.0 0 Yes       Y       1       1.2       2.063 35       1.5       1.5       1.5       1.5       1			_	<u> </u>		ľ																			
42 1.2D+1.0Di+1.0 18 Yes Y 1 1 1.2 18 1 27 1 43 1.2D+1.0Di+1.0 18 Yes Y 1 1 1.2 18 1 28 1 44 1.2D+1.0Di+1.0 22 Yes Y 1 1 1.2 18 1 29 1 45 1.2D+1.0Di+1.0 24 Yes Y 1 1 1.2 18 1 29 1 45 1.2D+1.0Di+1.0 24 Yes Y 1 1 1.2 18 1 30 1 46 1.2D+1.0Di+1.0 1.2 1.2 18 1 1 31 1 1 47 1.2D+1.0Di+1.0 30 Yes Y 1 1 1.2 18 1 31 1 1 47 1.2D+1.0Di+1.0 31 Yes Y 1 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 31 Yes Y 1 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 33 Yes Y 1 1 1.2 18 1 33 1 50 1.2D+1.5Lv Yes Y 36 1.5 1 1.2D+1.5Lv Yes Y 36 1.5 1 1.2D+1.5Lm+1.0 0 Yes Y 1 1 1.2 2 Yes Y 1 1 1.2 Yes Y 1 1 1.2 2 Yes Y 1 1 1.2 Yes Y 1 1 1.2 Yes						_					_													$\vdash$	
43     1.2D+1.0Di+1.0 21 Yes     Y     1     1.2     18     1     28     1       44     1.2D+1.0Di+1.0 22 Yes     Y     1     1.2     18     1     29     1       45     1.2D+1.0Di+1.0 27 Yes     Y     1     1.2     18     1     30     1       46     1.2D+1.0Di+1.0 27 Yes     Y     1     1.2     18     1     31     1       47     1.2D+1.0Di+1.0 31 Yes     Y     1     1.2     18     1     33     1       49     1.2D+1.0Di+1.0 33 Yes     Y     1     1.2     18     1     34     1       50     1.2D+1.5Lv     Yes     Y     36     1.5     1     1.2     1       51     1.2D+1.5Lm+1.0 0· Yes     Y     1     1.2     2     063     35     1.5						·																			
44 1.2D+1.0Di+1.0 22 Yes Y 1 1.2 18 1 29 1 45 1.2D+1.0Di+1.0 24 Yes Y 1 1.2 18 1 30 1 46 1.2D+1.0Di+1.0 27 Yes Y 1 1.2 18 1 31 1 47 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 32 1 48 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 33 Yes Y 1 1.2 18 1 33 1 50 1.2D+1.5Lv Yes Y 36 1.5 1 1.2 51 1.2D+1.5Lm+1.0 0 Yes Y 1 1.2 2 .063 35 1.5			_			_					_														
45 1.2D+1.0Di+1.0 24 Ves Y 1 1.2 18 1 30 1 46 1.2D+1.0Di+1.0 12 Ves Y 1 1 1.2 18 1 31 1 1 47 1.2D+1.0Di+1.0 30 Ves Y 1 1 1.2 18 1 32 1 48 1.2D+1.0Di+1.0 31 Ves Y 1 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 31 Ves Y 1 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 33 Ves Y 1 1 1.2 18 1 34 1 50 1.2D+1.5Lv Ves Y 36 1.5 1 1.2D+1.5Lv Ves Y 36 1.5 1 1.2D+1.5Lm+1.0 0 Ves Y 1 1 1.2 2 .063 35 1.5			_	_		-					_														
46 1.2D+1.0Di+1.0 27 Yes Y 1 1.2 18 1 31 1 4 47 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 32 1 48 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 33 1 4 49 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 34 1 5 5 1.2D+1.5Lv Yes Y 36 1.5 1 1.2						1					_														
47 1.2D+1.0Di+1.0 30 Yes Y 1 1.2 18 1 32 1 48 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 34 1 50 1.2D+1.5Lv Yes Y 36 1.5 1 1.2 51 1.2D+1.5Lv Yes Y 1 1.2 2 .063 35 1.5				<u> </u>		_					_					_									
48 1.2D+1.0Di+1.0 31 Yes Y 1 1.2 18 1 33 1 49 1.2D+1.0Di+1.0 33 Yes Y 1 1 1.2 18 1 34 1 50 1.2D+1.5Lv Yes Y 36 1.5 1 1.2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			_	_		_					_														
49 1.2D+1.0Di+1.0 33 Yes Y 1 1.2 18 1 34 1 50 1.2D+1.5Lv Yes Y 36 1.5 1 1.2 51 1.2D+1.5Lm+1.0 0 Yes Y 1 1.2 2063 35 1.5			_	_		ľ					_					_									
50 1.2D+1.5Lv Yes Y 36 1.5 1 1.2 51 1.2D+1.5Lm+1.0 0 Yes Y 1 1 1.2 2 .063 35 1.5																									
51 1.2D+1.5Lm+1.0 0 Yes   Y   1   1.2   2   .063   35   1.5			_			_				34	1														
			_			36																			
FO   1 2D, 1 Fl m   1 0 20   Vool V	<u> </u>																								
		1.2D+1.5Lm+1.0 30		Υ		1	1.2	3	.063	35	1.5														
53 1.2D+1.5Lm+1.0 45Yes Y 1 1.2 4 .063 35 1.5	53	1.2D+1.5Lm+1.0 45	Yes	Υ		1	1.2	4	.063	35	1.5														
54 1.2D+1.5Lm+1.0 60 Yes Y 1 1.2 5 .063 35 1.5	54	1.2D+1.5Lm+1.0 60	Yes	Υ		1		5																	
55 1.2D+1.5Lm+1.0 90 Yes Y 1 1.2 6 .063 35 1.5			_	Ÿ		_																			
						1																			

RISA-3D Version 17.0.4 [C:\...\...\...\RISA-3D\Modifications.r3d]

Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW TEP No. 25661.584643 Plymouth/RT 6 (BU 826768)

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#### Load Combinations (Continued)

	u Combination																					
	Description	So	P	S BLC						BLC	acE	BLC	Fac	BLCF	acBL	CFac.	BLC	Fac	BLC	Fac	BLC	Fac
57					1.2																ш	
	1.2D+1.5Lm+1.0 15				1.2											-					$\blacksquare$	
	1.2D+1.5Lm+1.0 18				1.2											_					$\vdash$	
	1.2D+1.5Lm+1.0 21				1.2										_	_	-				$\vdash$	
				1	1.2										_	_					$\vdash$	
	1.2D+1.5Lm+1.0 24			1	1.2											_					$\boldsymbol{-}$	
	1.2D+1.5Lm+1.0 27			1	1.2		.063									_					ш	
	1.2D+1.5Lm+1.0 30				1.2											-					$\boldsymbol{\vdash}$	
				1	1.2								_	_	_	+	-				$\vdash$	
	1.2D+1.5Lm+1.0 33				1.2				1.5								-				$\blacksquare$	
	(1.2+0.2Sds)D+1.0				1.24											_					$\vdash$	
68					1.24										_	_	-				$\boldsymbol{\vdash}$	
	(1.2+0.2Sds)D+1.0				1.24											-					$\vdash$	
	(1.2+0.2Sds)D+1.0				1.24											-	-				$\boldsymbol{\vdash}$	
	(1.2+0.2Sds)D+1.0				1.24				.099				_		_	-					$\vdash$	
					1.24											-					$\blacksquare$	
	(1.2+0.2Sds)D+1.0				1.24																$\vdash$	
					1.24				.05			-	_	-	_	+	+				$\vdash$	
	(1.2+0.2Sds)D+1.0				1.24				0.5												$\vdash$	
	(1.2+0.2Sds)D+1.0				1.24									-	_	+	-				$\vdash$	
					1.24								_	_	_	-	$\vdash$				$\vdash$	
	(1.2+0.2Sds)D+1.0 (1.2+0.2Sds)D+1.0				1.24 1.24				099					-		_	+				$\vdash$	
					1.24																$\vdash$	
80	(1.2+0.2Sds)D+1.0 (1.2+0.2Sds)D+1.0				1.24																$\vdash$	
81					1.24																$\vdash$	
82	(0.9-0.2Sds)*DL+1						.099		05					-	_	_	+				$\vdash$	
84				1	.86				OF							+					$\vdash$	
85	(0.9-0.2Sds)*DL+1			1			.07							-	_	_	-				$\vdash$	
				1					.086				_		-	_					$\vdash$	
86 87				1	.86				.000							_					-	
88				1					.086												$\vdash$	
			Y	1			05					_				_					-	
	(0.9-0.2Sds)*DL+1			1			07														$\vdash$	
91	(0.9-0.2Sds)*DL+1			1			099		.05					_	_	_	+				$\overline{}$	
92				1					05												$\vdash$	
	(0.9-0.2Sds)*DL+1			1					05	H												
94				1					07							+					$\vdash$	
95	(0.9-0.2Sds)*DL+1			1	.86				099													
96				1	.00	FLX			086												$\vdash$	
96	(0.9-0.2Sds)*DL+1			1					07													
	(0.9-0.2Sds)*DL+1			1					07												$\vdash$	
98	(U.3-U.23US) DL+1	168			J.db	LLΛ	.ugb	ELZ	05													

#### Joint Loads and Enforced Displacements (BLC 35 : Lm)

		Joint Label	L.D.M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft
	1	N70	L	Υ	5
_			•	•	

## Joint Loads and Enforced Displacements (BLC 36 : Lv)

	Joint Label	L,D,M	Direction	Magnitude[(k,k-ft), (in,rad), (k*s^2/ft
1	N7	L	Υ	25



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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Y	011	.25
2	MP-1	Υ	084	2
3	MP-2	Υ	041	2.25
4	MP-2	Υ	044	2
5	MP-3	Υ	02	.5
6	MP-3	Υ	02	.5
7	MP-4	Υ	011	.25
8	MP-4	Υ	07	2
9	MP-5	Υ	011	.25
10	MP-5	Υ	084	2
11	MP-6	Υ	041	2.25
12	MP-6	Υ	044	2
13	MP-7	Υ	02	.5
14	MP-7	Υ	02	.5
15	MP-8	Υ	011	.25
16	MP-8	Υ	07	2
17	MP-9	Υ	011	.25
18	MP-9	Υ	084	2
19	MP-10	Υ	041	2.25
20	MP-11	Υ	02	.5
21	MP-11	Υ	02	.5
22	MP-12	Υ	011	.25
23	MP-12	Υ	07	2
24	MP-1	Υ	011	5.5
25	MP-2	Υ	041	4.25
26	MP-3	Υ	02	5.5
27	MP-3	Υ	02	5.5
28	MP-4	Υ	011	5.5
29	MP-5	Υ	011	5.5
30	MP-6	Υ	041	4.25
31	MP-7	Y	02	5.5
32	MP-7	Υ	02	5.5
33	MP-8	Y	011	5.5
34	MP-9	Υ	011	5.5
35	MP-10	Υ	041	4.25
36	MP-11	Υ	02	5.5
37	MP-11	Υ	02	5.5
38	MP-12	Υ	011	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	072	.25
2	MP-1	X	063	2
3	MP-2	X	078	2.25
4	MP-2	Χ	16	2
5	MP-3	X	069	.5
6	MP-3	Χ	069	.5
7	MP-4	X	072	.25
8	MP-4	X	063	2
9	MP-5	X	126	.25
10	MP-5	Χ	047	2
11	MP-6	X	043	2.25
12	MP-6	X	09	2
13	MP-7	X	048	.5
14	MP-7	X	048	.5

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15	MP-8	X	126	.25
16	MP-8	X	041	2
17	MP-9	X	126	.25
18	MP-9	X	047	2
19	MP-10	X	043	2.25
20	MP-11	X	048	.5
21	MP-11	X	048	.5
22	MP-12	X	126	.25
23	MP-12	X	041	2
24	MP-1	X	072	5.5
25	MP-2	X	078	4.25
26	MP-3	X	069	5.5
27	MP-3	X	069	5.5
28	MP-4	X	072	5.5
29	MP-5	X	126	5.5
30	MP-6	X	043	4.25
31	MP-7	X	048	5.5
32	MP-7	X	048	5.5
33	MP-8	X	126	5.5
34	MP-9	X	126	5.5
35	MP-10	X	043	4.25
36	MP-11	X	048	5.5
37	MP-11	X	048	5.5
38	MP-12	X	126	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	078	.25
2	MP-1	l x	05	2
3	MP-2	X	057	2.25
4	MP-2	X	118	2
5	MP-3	X	054	.5
6	MP-3	X	054	.5
7	MP-4	X	078	.25
8	MP-4	X	048	2
9	MP-5	X	124	.25
10	MP-5	X	036	2
11	MP-6	X	027	2.25
12	MP-6	X	058	2
13	MP-7	X	036	.5
14	MP-7	X	036	.5
15	MP-8	X	124	.25
16	MP-8	X	029	2
17	MP-9	X	078	.25
18	MP-9	X	05	2
19	MP-10	X	057	2.25
20	MP-11	X	054	.5
21	MP-11	X	054	.5
22	MP-12	X	078	.25
23	MP-12	X	048	2
24	MP-1	X	078	5.5
25	MP-2	X	057	4.25
26	MP-3	Χ	054	5.5
27	MP-3	X	054	5.5
28	MP-4	X	078	5.5
29	MP-5	X	124	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
30	MP-6	X	027	4.25
31	MP-7	X	036	5.5
32	MP-7	X	036	5.5
33	MP-8	X	124	5.5
34	MP-9	X	078	5.5
35	MP-10	X	057	4.25
36	MP-11	X	054	5.5
37	MP-11	X	054	5.5
38	MP-12	X	078	5.5
39	MP-1	Z	045	.25
40	MP-1	Z	029	2
41	MP-2	Z	033	2.25
42	MP-2	Z	068	2
43	MP-3	Z	031	.5
44	MP-3	Z	031	.5
45	MP-4	Z	045	.25
46	MP-4	Z	028	2
47	MP-5	Z	072	.25
48	MP-5	Z	021	2
49	MP-6	Z	015	2.25
50	MP-6	Z	033	2
51	MP-7	Z	021	.5
52	MP-7	Z	021	.5
53	MP-8	Z	072	.25
54	MP-8	Z	017	2
55	MP-9	Z	045	.25
56	MP-9	Z	029	2
57	MP-10	Z	033	2.25
58	MP-11	Z	031	.5
59	MP-11	Z	031	.5
60	MP-12	Z	045	.25
61	MP-12	Z	028	2
62	MP-1	Z	045	5.5
63	MP-2	Z	033	4.25
64	MP-3	Z	031	5.5
65	MP-3	Z	031	5.5
66	MP-4	Z	045	5.5
67	MP-5	Z	072	5.5
68	MP-6	Z	015	4.25
69	MP-7	Z	021	5.5
70	MP-7	Z	021	5.5
71	MP-8	Z	072	5.5
72	MP-9	Z	045	5.5
73	MP-10	Z	033	4.25
74	MP-11	Z	031	5.5
75	MP-11	Z	031	5.5
76	MP-12	Z	045	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	076	.25
2	MP-1	X	037	2
3	MP-2	X	038	2.25
4	MP-2	X	08	2
5	MP-3	X	039	.5
6	MP-3	X	039	.5

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
7	MP-4	X	076	.25
8	MP-4	X	034	2
9	MP-5	X	098	.25
10	MP-5	X	03	2
11	MP-6	X	024	2.25
12	MP-6	X	052	2
13	MP-7	X	031	.5
14	MP-7	X	031	.5
15	MP-8	X	098	.25
16	MP-8	X	025	2
17	MP-9	X	054	.25
18	MP-9	X	043	2
19	MP-10	X	053	2.25
20	MP-11	X	048	.5
21	MP-11	X	048	.5
22	MP-12	X	054	.25
23	MP-12	X	043	2
24	MP-1	X	076	5.5
25	MP-2	X	038	4.25
26	MP-3	X	039	5.5
27	MP-3	X	039	5.5
28	MP-4	X	076	5.5
29	MP-5	X	098	5.5
30	MP-6	X	024	4.25
31	MP-7	X	031	5.5
32	MP-7	X	031	5.5
33	MP-8	X	098	5.5
34	MP-9	X	054	5.5
35	MP-10	X	053	4.25
36	MP-11	X	048	5.5
37	MP-11	X	048	5.5
38	MP-12	X	054	5.5
39	MP-1	Z	076	.25
40	MP-1	Z	037	2
41	MP-2	Z	038	2.25
42	MP-2	Z	08	2
43	MP-3	Z	039	.5
44	MP-3	Z	039	.5
45	MP-4	Z	076	.25
46	MP-4	Z	034	2
47	MP-5	<u>Z</u>	098	.25
48	MP-5	<u>Z</u>	03	2
49	MP-6	<u>Z</u>	024	2.25
50	MP-6	Z	052	2
51	MP-7	<u>Z</u>	031	.5
52	MP-7	Z	031	.5
53	MP-8	Z	098	.25
54	MP-8	Z	025	2
55	MP-9	<u>Z</u>	054	.25
56	MP-9	<u>Z</u>	043	2
57	MP-10	Z	053	2.25
58	MP-11	<u>Z</u>	048	.5
59	MP-11	Z	048	.5
60	MP-12	<u>Z</u>	054	.25
61	MP-12	Z	043	2
62	MP-1	Z	076	5.5
63	MP-2	Z	038	4.25

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

	Member Label	Direction	Magnitude[k.k-ft]	Location[ft,%]
64	MP-3	Z	039	5.5
65	MP-3	Z	039	5.5
66	MP-4	Z	076	5.5
67	MP-5	Z	098	5.5
68	MP-6	Z	024	4.25
69	MP-7	Z	031	5.5
70	MP-7	Z	031	5.5
71	MP-8	Z	098	5.5
72	MP-9	Z	054	5.5
73	MP-10	Z	053	4.25
74	MP-11	Z	048	5.5
75	MP-11	Z	048	5.5
76	MP-12	Z	054	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	063	.25
2	MP-1	X	023	2
3	MP-2	X	021	2.25
4	MP-2	X	045	2
5	MP-3	X	024	.5
6	MP-3	X	024	.5
7	MP-4	X	063	.25
8	MP-4	X	02	2
9	MP-5	X	063	.25
10	MP-5	X	023	2
11	MP-6	X	021	2.25
12	MP-6	X	045	2
13	MP-7	X	024	.5
14	MP-7	X	024	.5
15	MP-8	X	063	.25
16	MP-8	X	02	2
17	MP-9	X	036	.25
18	MP-9	X	031	2
19	MP-10	X	039	2.25
20	MP-11	X	035	.5
21	MP-11	X	035	.5
22	MP-12	X	036	.25
23	MP-12	X	031	2
24	MP-1	X	063	5.5
25	MP-2	X	021	4.25
26	MP-3	X	024	5.5
27	MP-3	X	024	5.5
28	MP-4	X	063	5.5
29	MP-5	Х	063	5.5
30	MP-6	X	021	4.25
31	MP-7	X	024	5.5
32	MP-7	X	024	5.5
33	MP-8	X	063	5.5
34	MP-9	X	036	5.5
35	MP-10	X	039	4.25
36	MP-11	X	035	5.5
37	MP-11	X	035	5.5
38	MP-12	X	036	5.5
39	MP-1	Z	109	.25
40	MP-1	Z	041	2

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Company Designer Job Number Model Name

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
41	MP-2	Z	037	2.25
42	MP-2	Z	078	2
43	MP-3	Z	042	.5
44	MP-3	Z	042	.5
45	MP-4	Z	109	.25
46	MP-4	Z	035	2
47	MP-5	Z	109	.25
48	MP-5	Z	041	2
49	MP-6	Z	037	2.25
50	MP-6	Z	078	2
51	MP-7	Z	042	.5
52	MP-7	Z	042	.5
53	MP-8	Z	109	.25
54	MP-8	Z	035	2
55	MP-9	Z	062	.25
56	MP-9	Z	054	2
57	MP-10	Z	068	2.25
58	MP-11	Z	06	.5
59	MP-11	Z	06	.5
60	MP-12	Z	062	.25
61	MP-12	Z	054	2
62	MP-1	Z	109	5.5
63	MP-2	Z	037	4.25
64	MP-3	Z	042	5.5
65	MP-3	Z	042	5.5
66	MP-4	Z	109	5.5
67	MP-5	Z	109	5.5
68	MP-6	Z	037	4.25
69	MP-7	Z	042	5.5
70	MP-7	Z	042	5.5
71	MP-8	Z	109	5.5
72	MP-9	Z	062	5.5
73	MP-10	Z	068	4.25
74	MP-11	Z	06	5.5
75	MP-11	Z	06	5.5
76	MP-12	Z	062	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	144	.25
2	MP-1	Z	042	2
3	MP-2	Z	031	2.25
4	MP-2	Z	067	2
5	MP-3	Z	042	.5
6	MP-3	Z	042	.5
7	MP-4	Z	144	.25
8	MP-4	Z	034	2
9	MP-5	Z	09	.25
10	MP-5	Z	057	2
11	MP-6	Z	066	2.25
12	MP-6	Z	137	2
13	MP-7	Z	062	.5
14	MP-7	Z	062	.5
15	MP-8	Z	09	.25
16	MP-8	Z	055	2
17	MP-9	Z	09	.25



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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
18	MP-9	Z	057	2
19	MP-10	Z	066	2.25
20	MP-11	Z	062	.5
21	MP-11	Z	062	.5
22	MP-12	Z	09	.25
23	MP-12	Z	055	2
24	MP-1	Z	144	5.5
25	MP-2	Z	031	4.25
26	MP-3	Z	042	5.5
27	MP-3	Z	042	5.5
28	MP-4	Z	144	5.5
29	MP-5	Z	09	5.5
30	MP-6	Z	066	4.25
31	MP-7	Z	062	5.5
32	MP-7	Z	062	5.5
33	MP-8	Z	09	5.5
34	MP-9	Z	09	5.5
35	MP-10	Z	066	4.25
36	MP-11	Z	062	5.5
37	MP-11	Z	062	5.5
38	MP-12	Z	09	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.063	.25
2	MP-1	X	.023	2
3	MP-2	X	.021	2.25
4	MP-2	X	.045	2
5	MP-3	X	.024	.5
6	MP-3	X	.024	.5
7	MP-4	X	.063	.25
8	MP-4	X	.02	2
9	MP-5	X	.036	.25
10	MP-5	X	.031	2
11	MP-6	X	.039	2.25
12	MP-6	X	.08	2
13	MP-7	X	.035	.5
14	MP-7	X	.035	.5
15	MP-8	X	.036	.25
16	MP-8	X	.031	2
17	MP-9	X	.063	.25
18	MP-9	X	.023	2
19	MP-10	X	.021	2.25
20	MP-11	X	.024	.5
21	MP-11	X	.024	.5
22	MP-12	X	.063	.25
23	MP-12	X	.02	2
24	MP-1	X	.063	5.5
25	MP-2	X	.021	4.25
26	MP-3	X	.024	5.5
27	MP-3	X	.024	5.5
28	MP-4	X	.063	5.5
29	MP-5	X	.036	5.5
30	MP-6	X	.039	4.25
31	MP-7	X	.035	5.5
32	MP-7	X	.035	5.5

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Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW
TEP No. 25661.584643
Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
33	MP-8	X	.036	5.5
34	MP-9	X	.063	5.5
35	MP-10	X	.021	4.25
36	MP-11	X	.024	5.5
37	MP-11	X	.024	5.5
38	MP-12	X	.063	5.5
39	MP-1	Z	109	.25
40	MP-1	Z	041	2
41	MP-2	Z	037	2.25
42	MP-2	Z	078	2
43	MP-3	Z	042	.5
44	MP-3	Z	042	.5
45	MP-4	Z	109	.25
46	MP-4	Z	035	2
47	MP-5	Z	062	.25
48	MP-5	Z	054	2
49	MP-6	Z	068	2.25
50	MP-6	Z	139	2
51	MP-7	Z	06	.5
52	MP-7	Z	06	.5
53	MP-8	Z	062	.25
54	MP-8	Z	054	2
55	MP-9	Z	109	.25
56	MP-9	Z	041	2
57	MP-10	Z	037	2.25
58	MP-11	Z	042	.5
59	MP-11	Z	042	.5
60	MP-12	Z	109	.25
61	MP-12	Z	035	2
62	MP-1	Z	109	5.5
63	MP-2	Z	037	4.25
64	MP-3	Z	042	5.5
65	MP-3	Z	042	5.5
66	MP-4	Z	109	5.5
67	MP-5	Z	062	5.5
68	MP-6	Z	068	4.25
69	MP-7	Z	06	5.5
70	MP-7	Z	06	5.5
71	MP-8	Z	062	5.5
72	MP-9	Z	109	5.5
73	MP-10	7	037	4.25
74	MP-11	Z	042	5.5
75	MP-11	Z	042	5.5
76	MP-12	Z	109	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.076	.25
2	MP-1	Χ	.037	2
3	MP-2	X	.038	2.25
4	MP-2	Χ	.08	2
5	MP-3	X	.039	.5
6	MP-3	Χ	.039	.5
7	MP-4	Χ	.076	.25
8	MP-4	Χ	.034	2
9	MP-5	X	.054	.25

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
10	MP-5	X	.043	2
11	MP-6	X	.053	2.25
12	MP-6	X	.109	2
13	MP-7	X	.048	.5
14	MP-7	X	.048	.5
15	MP-8	X	.054	.25
16	MP-8	X	.043	2
17	MP-9	X	.098	.25
18	MP-9	X	.03	2
19	MP-10	X	.024	2.25
20	MP-11	X	.031	.5
21	MP-11	X	.031	.5
22	MP-12	X	.098	.25
23	MP-12	X	.025	2
24	MP-1	X	.076	5.5
25	MP-2	X	.038	4.25
26	MP-3	X	.039	5.5
	MP-3	X	.039	
27	MP-4	X		5.5
28	MP-4 MP-5	X	.076 .054	5.5 5.5
		X		
30	MP-6		.053	4.25
31	MP-7	X	.048	5.5
32	MP-7	X	.048	5.5
33	MP-8	X	.054	5.5
34	MP-9	X	.098	5.5
35	MP-10	X	.024	4.25
36	MP-11	X	.031	5.5
37	MP-11	X	.031	5.5
38	MP-12	X	.098	5.5
39	MP-1	Z	076	.25
40	MP-1	Z	037	2
41	MP-2	Z	038	2.25
42	MP-2	Z	08	2
43	MP-3	Z	039	.5
44	MP-3	Z	039	.5
45	MP-4	Z	076	.25
46	MP-4	Z	034	2
47	MP-5	Z	054	.25
48	MP-5	Z	043	2
49	MP-6	Z	053	2.25
50	MP-6	Z	109	2
51	MP-7	Z	048	.5
52	MP-7	Z	048	.5
53	MP-8	Z	054	.25
54	MP-8	Z	043	2
55	MP-9	Z	098	.25
56	MP-9	Z	03	2
57	MP-10	Z	024	2.25
58	MP-11	Z	031	.5
59	MP-11	Z	031	.5
60	MP-12	Z	098	.25
61	MP-12	Z	025	2
62	MP-1	Z	025	5.5
63	MP-2	Z	038	4.25
64	MP-3	Z Z	039	4.25 5.5
65	MP-3	Z	039	5.5 5.5
66	MP-4	Z	076	5.5

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
67	MP-5	Z	Magnitude[k,k-ft] 054	5.5
68	MP-6	Z	053	4.25
69	MP-7	Z	048	5.5
70	MP-7	Z	048	5.5
71	MP-8	Z	054	5.5
72	MP-9	Z	098	5.5
73	MP-10	Z	024	4.25
74	MP-11	Z	031	5.5
75	MP-11	Z	031	5.5
76	MP-12	Z	098	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.078	.25
2	MP-1	X	.05	2
3	MP-2	X	.057	2.25
4	MP-2	X	.118	2
5	MP-3	X	.054	.5
6	MP-3	X	.054	.5
7	MP-4	X	.078	.25
8	MP-4	X	.048	2
9	MP-5	X	.078	.25
10	MP-5	X	.05	2
11	MP-6	X	.057	2.25
12	MP-6	X	.118	2
13	MP-7	X	.054	.5
14	MP-7	X	.054	.5
15	MP-8	X	.078	.25
16	MP-8	X	.048	2
17	MP-9	X	.124	.25
18	MP-9	X	.036	2
19	MP-10	X	.027	2.25
20	MP-11	X	.036	.5
21	MP-11	X	.036	.5
22	MP-12	X	.124	.25
23	MP-12	X	.029	2
24	MP-1	X	.078	5.5
25	MP-2	X	.057	4.25
26	MP-3	X	.054	5.5
27	MP-3	X	.054	5.5
28	MP-4	X	.078	5.5
29	MP-5	X	.078	5.5
30	MP-6	X	.057	4.25
31	MP-7	X	.054	5.5
32	MP-7	X	.054	5.5
33	MP-8	X	.078	5.5
34	MP-9	X	.124	5.5
35	MP-10	X	.027	4.25
36	MP-11	X	.036	5.5
37	MP-11	X	.036	5.5
38	MP-12	X	.124	5.5
39	MP-1	Z	045	.25
40	MP-1	Z	045	2
41	MP-2	Z	033	2.25
42	MP-2	Z	068	2.25
43	MP-3	Z	031	.5

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: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
44	MP-3	Z	031	.5
45	MP-4	Z	045	.25
46	MP-4	Z	028	2
47	MP-5	Z	045	.25
48	MP-5	Z	029	2
49	MP-6	Z	033	2.25
50	MP-6	Z	068	2
51	MP-7	Z	031	.5
52	MP-7	Z	031	.5
53	MP-8	Z	045	.25
54	MP-8	Z	028	2
55	MP-9	Z	072	.25
56	MP-9	Z	021	2
57	MP-10	Z	015	2.25
58	MP-11	Z	021	.5
59	MP-11	Z	021	.5
60	MP-12	Z	072	.25
61	MP-12	Z	017	2
62	MP-1	Z	045	5.5
63	MP-2	Z	033	4.25
64	MP-3	Z	031	5.5
65	MP-3	Z	031	5.5
66	MP-4	Z	045	5.5
67	MP-5	Z	045	5.5
68	MP-6	Z	033	4.25
69	MP-7	Z	031	5.5
70	MP-7	Z	031	5.5
71	MP-8	Z	045	5.5
72	MP-9	Z	072	5.5
73	MP-10	Z	015	4.25
74	MP-11	Z	021	5.5
75	MP-11	Z	021	5.5
76	MP-12	Z	072	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.072	.25
2	MP-1	X	.063	2
3	MP-2	X	.078	2.25
4	MP-2	X	.16	2
5	MP-3	X	.069	.5
6	MP-3	X	.069	.5
7	MP-4	X	.072	.25
8	MP-4	X	.063	2
9	MP-5	X	.126	.25
10	MP-5	X	.047	2
11	MP-6	X	.043	2.25
12	MP-6	X	.09	2
13	MP-7	X	.048	.5
14	MP-7	X	.048	.5
15	MP-8	X	.126	.25
16	MP-8	X	.041	2
17	MP-9	X	.126	.25
18	MP-9	X	.047	2
19	MP-10	X	.043	2.25
20	MP-11	X	.048	.5

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Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW TEP No. 25661.584643 Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
21	MP-11	X	.048	.5
22	MP-12	X	.126	.25
23	MP-12	X	.041	2
24	MP-1	X	.072	5.5
25	MP-2	X	.078	4.25
26	MP-3	X	.069	5.5
27	MP-3	X	.069	5.5
28	MP-4	X	.072	5.5
29	MP-5	X	.126	5.5
30	MP-6	X	.043	4.25
31	MP-7	X	.048	5.5
32	MP-7	X	.048	5.5
33	MP-8	X	.126	5.5
34	MP-9	X	.126	5.5
35	MP-10	X	.043	4.25
36	MP-11	X	.048	5.5
37	MP-11	X	.048	5.5
38	MP-12	X	.126	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.078	.25
2	MP-1	X	.05	2
3	MP-2	X	.057	2.25
4	MP-2	X	.118	2
5	MP-3	X	.054	.5
6	MP-3	X	.054	.5
7	MP-4	X	.078	.25
8	MP-4	X	.048	2
9	MP-5	X	.124	.25
10	MP-5	X	.036	2
11	MP-6	X	.027	2.25
12	MP-6	X	.058	2
13	MP-7	X	.036	.5
14	MP-7	X	.036	.5
15	MP-8	X	.124	.25
16	MP-8	X	.029	2
17	MP-9	X	.078	.25
18	MP-9	X	.05	2
19	MP-10	X	.057	2.25
20	MP-11	X	.054	.5
21	MP-11	X	.054	.5
22	MP-12	X	.078	.25
23	MP-12	X	.048	2
24	MP-1	X	.078	5.5
25	MP-2	X	.057	4.25
26	MP-3	X	.054	5.5
27	MP-3	X	.054	5.5
28	MP-4	X	.078	5.5
29	MP-5	X	.124	5.5
30	MP-6	X	.027	4.25
31	MP-7	X	.036	5.5
32	MP-7	X	.036	5.5
33	MP-8	X	.124	5.5
34	MP-9	X	.078	5.5
35	MP-10	X	.057	4.25
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## Member Point Loads (BLC 11 : 210 Wind - No Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
36	MP-11	X	.054	5.5
37	MP-11	X	.054	5.5
38	MP-12	X	.078	5.5
39	MP-1	Z	.045	.25
40	MP-1	Z	.029	2
41	MP-2	Z	.033	2.25
42	MP-2	Z	.068	2
43	MP-3	Z	.031	.5
44	MP-3	Z	.031	.5
45	MP-4	Z	.045	.25
46	MP-4	Z	.028	2
47	MP-5	Z	.072	.25
48	MP-5	Z	.021	2
49	MP-6	Z	.015	2.25
50	MP-6	Z	.033	2
51	MP-7	Z	.021	.5
52	MP-7	Z	.021	.5
53	MP-8	Z	.072	.25
54	MP-8	Z	.017	2
55	MP-9	Z	.045	.25
56	MP-9	Z	.029	2
57	MP-10	Z	.033	2.25
58	MP-11	Z	.031	.5
59	MP-11	Z	.031	.5
60	MP-12	Z	.045	.25
61	MP-12	Z	.028	2
62	MP-1	Z	.045	5.5
63	MP-2	Z	.033	4.25
64	MP-3	Z	.031	5.5
65	MP-3	Z	.031	5.5
66	MP-4	Z	.045	5.5
67	MP-5	Z	.072	5.5
68	MP-6	Z	.015	4.25
69	MP-7	Z	.021	5.5
70	MP-7	Z	.021	5.5
71	MP-8	Z	.072	5.5
72	MP-9	Z	.045	5.5
73	MP-10	Z	.033	4.25
74	MP-11	Z	.031	5.5
75	MP-11	Z	.031	5.5
76	MP-12	Z	.045	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.076	.25
2	MP-1	X	.037	2
3	MP-2	X	.038	2.25
4	MP-2	X	.08	2
5	MP-3	X	.039	.5
6	MP-3	X	.039	.5
7	MP-4	X	.076	.25
8	MP-4	X	.034	2
9	MP-5	X	.098	.25
10	MP-5	X	.03	2
11	MP-6	X	.024	2.25
12	MP-6	X	.052	2

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Company Designer Job Number Model Name Tower Engineering Professionals, Inc. SCW
TEP No. 25661.584643
Plymouth/RT 6 (BU 826768)

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

13         MP-7         X         .031         .5           15         MP-8         X         .098         .25           16         MP-8         X         .098         .25           17         MP-9         X         .054         .25           18         MP-9         X         .053         .225           19         MP-10         X         .053         .225           20         MP-11         X         .048         .5           21         MP-11         X         .048         .5           21         MP-12         X         .054         .25           23         MP-12         X         .043         2           24         MP-1         X         .043         2           25         MP-1         X         .043         2           24         MP-1         X         .076         5.5           25         MP-2         X         .038         4.25           26         MP-3         X         .039         5.5           27         MP-3         X         .039         5.5           28         MP-4         X		Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
15         MP-8         X         .098         .25           17         MP-8         X         .054         .25           18         MP-9         X         .054         .25           19         MP-10         X         .053         2.25           20         MP-11         X         .048         .5           21         MP-11         X         .048         .5           21         MP-11         X         .048         .5           22         MP-12         X         .054         .25           23         MP-12         X         .043         2           24         MP-1         X         .076         .5.5           25         MP-2         X         .038         4.25           26         MP-3         X         .039         5.5           27         MP-3         X         .039         5.5           28         MP-4         X         .076         5.5           29         MP-5         X         .098         5.5           30         MP-6         X         .024         4.25           31         MP-7         X	13	MP-7	X		
16         MP-9         X         .025         2           18         MP-9         X         .043         2           19         MP-10         X         .043         2           20         MP-11         X         .048         .5           20         MP-11         X         .048         .5           21         MP-11         X         .048         .5           22         MP-12         X         .054         .25           23         MP-12         X         .043         2           24         MP-1         X         .076         .5.5           26         MP-2         X         .038         4.25           26         MP-3         X         .039         .5.5           26         MP-3         X         .039         .5.5           27         MP-3         X         .039         .5.5           28         MP-4         X         .076         .5.5           29         MP-5         X         .098         .5.5           30         MP-6         X         .024         4.25           31         MP-7         X	14		X	.031	.5
17         MP-9         X         0,54         2.5           19         MP-10         X         0,53         2.2           20         MP-11         X         0,48         5           21         MP-11         X         0,48         5           21         MP-12         X         0,48         5           22         MP-12         X         0,43         2           23         MP-12         X         0,43         2           24         MP-1         X         0,43         2           24         MP-1         X         0,43         2           24         MP-1         X         0,043         2           24         MP-3         X         0,038         4,25           26         MP-3         X         0,039         5,5           27         MP-3         X         0,039         5,5           28         MP-3         X         0,039         5,5           29         MP-5         X         0,98         5,5           30         MP-6         X         0,024         4,28           31         MP-7         X	15				.25
18         MP-9         X         043         2           20         MP-10         X         053         2.25           20         MP-11         X         048         .5           21         MP-11         X         048         .5           22         MP-12         X         .043         .25           23         MP-12         X         .043         .2           24         MP-1         X         .043         .2           24         MP-1         X         .043         .2           24         MP-1         X         .043         .2           25         MP-2         X         .038         .4.25           25         MP-3         X         .038         .5.5           27         MP-3         X         .039         .5.5           29         MP-5         X         .098         .5.5           30         MP-6         X         .024         .4.25           31         MP-7         X         .031         .5.5           32         MP-7         X         .031         .5.5           33         MP-8         X					
19					
20	18		X	.043	
21         MP-11         X         .048         .5           23         MP-12         X         .054         .25           24         MP-1         X         .043         2           24         MP-1         X         .076         5.5           25         MP-2         X         .038         4.25           26         MP-3         X         .039         5.5           26         MP-3         X         .039         5.5           28         MP-4         X         .076         5.5           29         MP-5         X         .098         5.5           30         MP-6         X         .024         4.25           31         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           34         MP-8         X         .098         5.5           34         MP-9         X         .054         5.5           34         MP-9         X         .054         5.5           34         MP-10         X         .053         4.25           36         MP-11         X	19	MP-10		.053	
22         MP-12         X         .043         2           24         MP-1         X         .076         5.5           25         MP-2         X         .038         4.25           26         MP-3         X         .039         5.5           27         MP-3         X         .039         5.5           28         MP-4         X         .076         5.5           29         MP-5         X         .098         5.5           29         MP-6         X         .024         4.25           31         MP-7         X         .031         5.5           31         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           33         MP-8         X         .098         5.5           34         MP-9         X         .054         5.5           35         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           38         MP-11         X	20	MP-11		.048	
23         MP-12         X         .043         2           24         MP-1         X         .076         5.5           25         MP-2         X         .038         4.25           26         MP-3         X         .039         5.5           27         MP-3         X         .039         5.5           28         MP-4         X         .076         5.5           29         MP-5         X         .098         5.5           30         MP-6         X         .024         4.25           31         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           34         MP-9         X         .054         5.5           34         MP-9         X         .054         5.5           36         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           38         MP-12         X		MP-11	X	.048	.5
24         MP-1         X         .076         5.5           25         MP-2         X         .038         4.25           26         MP-3         X         .039         5.5           27         MP-3         X         .039         5.5           28         MP-4         X         .076         5.5           29         MP-5         X         .098         5.5           30         MP-6         X         .024         4.25           31         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           33         MP-8         X         .098         5.5           34         MP-99         X         .054         5.5           35         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z <td>22</td> <td>MP-12</td> <td>X</td> <td>.054</td> <td>.25</td>	22	MP-12	X	.054	.25
25         MP-2         X         .038         4.25           26         MP-3         X         .039         5.5           27         MP-3         X         .039         5.5           28         MP-4         X         .076         5.5           29         MP-5         X         .098         5.5           30         MP-6         X         .024         4.25           31         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           34         MP-9         X         .098         5.5           35         MP-10         X         .054         5.5           36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25 <trr>         42         MP-3         Z</trr>	23	MP-12		.043	2
26         MP-3         X         .039         5.5           28         MP-4         X         .076         5.5           29         MP-5         X         .098         5.5           30         MP-6         X         .024         4.25           31         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           33         MP-8         X         .098         5.5           34         MP-9         X         .054         5.5           35         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .076         .25           41         MP-2         Z         .038         2.25           42         MP-2         Z         .038         2.25           43         MP-3         Z         .039         .5           45         MP-4         Z	24		X	.076	5.5
27         MP-3         X         0.039         5.5           28         MP-4         X         .076         5.5           29         MP-5         X         .098         5.5           30         MP-6         X         .024         4.25           31         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           34         MP-9         X         .054         5.5           34         MP-9         X         .054         5.5           36         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .076         .25           41         MP-2         Z         .038         2.25           41         MP-2         Z         .039         .5           44         MP-3         Z	25	MP-2		.038	4.25
28         MP-5         X         .096         5.5           30         MP-6         X         .098         5.5           31         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           33         MP-8         X         .098         5.5           34         MP-9         X         .054         5.5           35         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           43         MP-3         Z         .039         .5           45         MP-4         Z         .039         .5           45         MP-4         Z         .039         .5           45         MP-4         Z	26	MP-3	X	.039	5.5
29         MP-6         X         .098         5.5           30         MP-6         X         .024         4.25           31         MP-7         X         .031         5.5           32         MP-7         X         .031         5.5           33         MP-8         X         .098         5.5           34         MP-9         X         .054         5.5           35         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           38         MP-11         X         .048         5.5           39         MP-1         Z         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           42         MP-2         Z         .08         2           43         MP-3         Z         .039         .5           44         MP-3         Z	27	MP-3	X	.039	5.5
30	28	MP-4	X	.076	5.5
30	29	MP-5	X	.098	5.5
31         MP-7         X         031         5.5           32         MP-7         X         031         5.5           33         MP-8         X         098         5.5           34         MP-9         X         0.54         5.5           35         MP-10         X         0.53         4.25           36         MP-11         X         0.48         5.5           37         MP-11         X         0.48         5.5           38         MP-12         X         0.54         5.5           39         MP-1         Z         0.76         .25           40         MP-1         Z         0.076         .25           41         MP-2         Z         0.38         2.225           42         MP-3         Z         0.03         2           44         MP-3         Z         0.09         .5           44         MP-3         Z         0.09         .5           44         MP-3         Z         0.09         .5           45         MP-4         Z         0.076         .25           46         MP-4         Z		MP-6	X		4.25
32         MP-8         X         .098         .5.5           34         MP-9         X         .054         5.5           35         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           42         MP-2         Z         .038         2.25           43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .038         .25           48         MP-5         Z         .03         2           49         MP-6         Z	31	MP-7	X		
33         MP-8         X         .098         5.5           34         MP-9         X         .054         5.5           35         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           42         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .034         2           47         MP-5         Z <t< td=""><td></td><td>MP-7</td><td>X</td><td></td><td>5.5</td></t<>		MP-7	X		5.5
34         MP-9         X         .054         5.5           35         MP-10         X         .053         4.25           36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           42         MP-2         Z         .08         2           43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-5         Z         .03         2           49         MP-6         Z         .024         2.25           50         MP-8         Z <td< td=""><td></td><td>MP-8</td><td>X</td><td>.098</td><td>5.5</td></td<>		MP-8	X	.098	5.5
36         MP-11         X         .048         5.5           37         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           42         MP-2         Z         .08         2           43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-5         Z         .098         .25           49         MP-6         Z         .024         2.25           50         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z	34	MP-9		.054	5.5
37         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           41         MP-2         Z         .08         2           43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .098         .25           47         MP-5         Z         .098         .25           48         MP-5         Z         .098         .25           49         MP-6         Z         .024         2.25           50         MP-6         Z         .024         2.25           51         MP-7         Z         .031         .5           52         MP-7         Z <t< td=""><td>35</td><td>MP-10</td><td>X</td><td>.053</td><td>4.25</td></t<>	35	MP-10	X	.053	4.25
37         MP-11         X         .048         5.5           38         MP-12         X         .054         5.5           39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           41         MP-2         Z         .08         2           43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .098         .25           47         MP-5         Z         .098         .25           48         MP-5         Z         .098         .25           49         MP-6         Z         .024         2.25           50         MP-6         Z         .024         2.25           51         MP-7         Z         .031         .5           52         MP-7         Z <t< td=""><td>36</td><td>MP-11</td><td>X</td><td>.048</td><td>5.5</td></t<>	36	MP-11	X	.048	5.5
39         MP-1         Z         .076         .25           40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           42         MP-2         Z         .08         2           43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-5         Z         .098         .25           49         MP-6         Z         .024         2.25           50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .098 </td <td></td> <td>MP-11</td> <td>X</td> <td></td> <td></td>		MP-11	X		
40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           42         MP-2         Z         .08         2           43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-6         Z         .098         .25           49         MP-6         Z         .024         2.25           50         MP-6         Z         .024         2.25           50         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .025         2           54         MP-8         Z         .025         2           55         MP-9         Z         .054 <td>38</td> <td></td> <td></td> <td>.054</td> <td></td>	38			.054	
40         MP-1         Z         .037         2           41         MP-2         Z         .038         2.25           42         MP-2         Z         .08         2           43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-6         Z         .098         .25           49         MP-6         Z         .024         2.25           50         MP-6         Z         .024         2.25           50         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .025         2           54         MP-8         Z         .025         2           55         MP-9         Z         .054 <td></td> <td>MP-1</td> <td></td> <td></td> <td></td>		MP-1			
42         MP-2         Z         .08         2           43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-5         Z         .03         2           49         MP-6         Z         .024         2.25           50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053	40	MP-1	Z	.037	2
43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-5         Z         .098         .25           49         MP-6         Z         .024         2.25           50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .025         2           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048<	41	MP-2	Z	.038	2.25
43         MP-3         Z         .039         .5           44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-5         Z         .098         .25           49         MP-6         Z         .024         2.25           50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .025         2           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048<	42	MP-2	Z	.08	2
44         MP-3         Z         .039         .5           45         MP-4         Z         .076         .25           46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-5         Z         .098         .25           48         MP-6         Z         .024         2.25           50         MP-6         Z         .052         2           50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .04	43	MP-3	Z	.039	
46         MP-4         Z         .034         2           477         MP-5         Z         .098         .25           48         MP-6         Z         .03         2           49         MP-6         Z         .024         2.25           50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .053         2.25           58         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .034         2           62         MP-1         Z	44	MP-3	Z		
46         MP-4         Z         .034         2           47         MP-5         Z         .098         .25           48         MP-6         Z         .03         2           49         MP-6         Z         .024         2.25           50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .053         2.25           58         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .038         4.25           64         MP-3         Z <t< td=""><td>45</td><td>MP-4</td><td>Z</td><td>.076</td><td>.25</td></t<>	45	MP-4	Z	.076	.25
48         MP-5         Z         03         2           49         MP-6         Z         .024         2.25           50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .054         .25           63         MP-12         Z         .054         .5           63         MP-2         Z         .038         4.25           64         MP-3         Z	46	MP-4	Z	.034	
48         MP-5         Z         03         2           49         MP-6         Z         .024         2.25           50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .054         .25           63         MP-12         Z         .054         .5           63         MP-2         Z         .038         4.25           64         MP-3         Z	47	MP-5	Z	.098	.25
50         MP-6         Z         .052         2           51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .054         .25           61         MP-12         Z         .054         .25           63         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         <	48	MP-5	Z	.03	2
51         MP-7         Z         .031         .5           52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           66         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         <	49	MP-6	Z	.024	2.25
52         MP-7         Z         .031         .5           53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           66         MP-4         Z         .076         5.5           68         MP-6         Z         .098         5.5	50	MP-6	Z	.052	2
53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25	51	MP-7	Z	.031	.5
53         MP-8         Z         .098         .25           54         MP-8         Z         .025         2           55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25		MP-7	Z		
55         MP-9         Z         .054         .25           56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25					.25
56         MP-9         Z         .043         2           57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25					
57         MP-10         Z         .053         2.25           58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25	55	MP-9		.054	.25
58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25	56	MP-9	Z	.043	
58         MP-11         Z         .048         .5           59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25	57	MP-10	Z	.053	2.25
59         MP-11         Z         .048         .5           60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25		MP-11	Z		.5
60         MP-12         Z         .054         .25           61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25			Z		.5
61         MP-12         Z         .043         2           62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25		MP-12	Z		.25
62         MP-1         Z         .076         5.5           63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25		MP-12			2
63         MP-2         Z         .038         4.25           64         MP-3         Z         .039         5.5           65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25					5.5
65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25	63	MP-2	Z	.038	4.25
65         MP-3         Z         .039         5.5           66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25		MP-3			
66         MP-4         Z         .076         5.5           67         MP-5         Z         .098         5.5           68         MP-6         Z         .024         4.25		MP-3			
67 MP-5 Z .098 5.5 68 MP-6 Z .024 4.25		MP-4			
68 MP-6 Z .024 4.25		MP-5	Z		
69 MP-7 Z .031 5.5		MP-6			4.25
		MP-7	Z		

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
70	MP-7	Z	.031	5.5
71	MP-8	Z	.098	5.5
72	MP-9	Z	.054	5.5
73	MP-10	Z	.053	4.25
74	MP-11	Z	.048	5.5
75	MP-11	Z	.048	5.5
76	MP-12	7	054	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.063	.25
2	MP-1	X	.023	2
3	MP-2	X	.021	2.25
4	MP-2	X	.045	2
5	MP-3	X	.024	.5
6	MP-3	X	.024	.5
7	MP-4	X	.063	.25
8	MP-4	X	.02	2
9	MP-5	X	.063	.25
10	MP-5	X	.023	2
11	MP-6	X	.021	2.25
12	MP-6	X	.045	2
13	MP-7	X	.024	.5
14	MP-7	X	.024	.5
15	MP-8	X	.063	.25
16	MP-8	X	.02	2
17	MP-9	X	.036	.25
18	MP-9	X	.031	2
19	MP-10	X	.039	2.25
20	MP-11	X	.035	.5
21	MP-11	X	.035	.5
22	MP-12	X	.036	.25
23	MP-12	X	.031	2
24	MP-1	X	.063	5.5
25	MP-2	X	.021	4.25
26	MP-3	X	.024	5.5
27	MP-3	X	.024	5.5
28	MP-4	X	.063	5.5
29	MP-5	X	.063	5.5
30	MP-6	X	.021	4.25
31	MP-7	X	.024	5.5
32	MP-7	X	.024	5.5
33	MP-8	X	.063	5.5
34	MP-9	X	.036	5.5
35	MP-10	X	.039	4.25
36	MP-11	X	.035	5.5
37	MP-11	X	.035	5.5
38	MP-12	X	.036	5.5
39	MP-1	Z	.109	.25
40	MP-1	Z	.041	2
41	MP-2	Z	.037	2.25
42	MP-2	Z	.078	2
43	MP-3	Z	.042	.5
44	MP-3	Z	.042	.5
45	MP-4	Z	.109	.25
46	MP-4	Z	.035	2

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
47	MP-5	Z	.109	.25
48	MP-5	Z	.041	2
49	MP-6	Z	.037	2.25
50	MP-6	Z	.078	2
51	MP-7	Z	.042	.5
52	MP-7	Z	.042	.5
53	MP-8	Z	.109	.25
54	MP-8	Z	.035	2
55	MP-9	Z	.062	.25
56	MP-9	Z	.054	2
57	MP-10	Z	.068	2.25
58	MP-11	Z	.06	.5
59	MP-11	Z	.06	.5
60	MP-12	Z	.062	.25
61	MP-12	Z	.054	2
62	MP-1	Z	.109	5.5
63	MP-2	Z	.037	4.25
64	MP-3	Z	.042	5.5
65	MP-3	Z	.042	5.5
66	MP-4	Z	.109	5.5
67	MP-5	Z	.109	5.5
68	MP-6	Z	.037	4.25
69	MP-7	Z	.042	5.5
70	MP-7	Z	.042	5.5
71	MP-8	Z	.109	5.5
72	MP-9	Z	.062	5.5
73	MP-10	Z	.068	4.25
74	MP-11	Z	.06	5.5
75	MP-11	Z	.06	5.5
76	MP-12	Z	.062	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.144	.25
2	MP-1	Z	.042	2
3	MP-2	Z	.031	2.25
4	MP-2	Z	.067	2
5	MP-3	Z	.042	.5
6	MP-3	Z	.042	.5
7	MP-4	Z	.144	.25
8	MP-4	Z	.034	2
9	MP-5	Z	.09	.25
10	MP-5	Z	.057	2
11	MP-6	Z	.066	2.25
12	MP-6	Z	.137	2
13	MP-7	Z	.062	.5
14	MP-7	Z	.062	.5
15	MP-8	Z	.09	.25
16	MP-8	Z	.055	2
17	MP-9	Z	.09	.25
18	MP-9	Z	.057	2
19	MP-10	Z	.066	2.25
20	MP-11	Z	.062	.5
21	MP-11	Z	.062	.5
22	MP-12	Z	.09	.25
23	MP-12	Z	.055	2

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
24	MP-1	Z	.144	5.5
25	MP-2	Z	.031	4.25
26	MP-3	Z	.042	5.5
27	MP-3	Z	.042	5.5
28	MP-4	Z	.144	5.5
29	MP-5	Z	.09	5.5
30	MP-6	Z	.066	4.25
31	MP-7	Z	.062	5.5
32	MP-7	Z	.062	5.5
33	MP-8	Z	.09	5.5
34	MP-9	Z	.09	5.5
35	MP-10	Z	.066	4.25
36	MP-11	Z	.062	5.5
37	MP-11	Z	.062	5.5
38	MP-12	Z	.09	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	063	.25
2	MP-1	X	023	2
3	MP-2	X	021	2.25
4	MP-2	X	045	2
5	MP-3	X	024	.5
6	MP-3	X	024	.5
7	MP-4	X	063	.25
8	MP-4	X	02	2
9	MP-5	X	036	.25
10	MP-5	X	031	2
11	MP-6	X	039	2.25
12	MP-6	X	08	2
13	MP-7	X	035	.5
14	MP-7	X	035	.5
15	MP-8	X	036	.25
16	MP-8	X	031	2
17	MP-9	X	063	.25
18	MP-9	X	023	2
19	MP-10	X	021	2.25
20	MP-11	X	024	.5
21	MP-11	X	024	.5
22	MP-12	X	063	.25
23	MP-12	X	02	2
24	MP-1	X	063	5.5
25	MP-2	X	021	4.25
26	MP-3	X	024	5.5
27	MP-3	X	024	5.5
28	MP-4	X	063	5.5
29	MP-5	X	036	5.5
30	MP-6	X	039	4.25
31	MP-7	X	035	5.5
32	MP-7	X	035	5.5
33	MP-8	X	036	5.5
34	MP-9	X	063	5.5
35	MP-10	X	021	4.25
36	MP-11	X	024	5.5
37	MP-11	X	024	5.5
38	MP-12	X	063	5.5
	12			

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
39	MP-1	Z	.109	.25
40	MP-1	Z	.041	2
41	MP-2 MP-2	Z	.037	2.25
42		<u>Z</u> Z	.078	2
43	MP-3	Z	.042	.5
	MP-3	Z	.042	.5 .25
45	MP-4 MP-4	Z	.109 .035	.25
46				
47	MP-5	Z	.062	.25
48	MP-5	Z	.054	2
49	MP-6	Z	.068	2.25
50	MP-6	Z	.139	2
51	MP-7	Z	.06	.5
52	MP-7	Z	.06	.5
53	MP-8		.062	.25
54	MP-8	Z	.054	2
55	MP-9	Z	.109	.25
56	MP-9	Z	.041	2
57	MP-10	Z	.037	2.25
58	MP-11	Z	.042	.5
59	MP-11	Z	.042	.5
60	MP-12	Z	.109	.25
61	MP-12	Z	.035	2
62	MP-1	Z	.109	5.5
63	MP-2	Z	.037	4.25
64	MP-3	Z	.042	5.5
65	MP-3	Z	.042	5.5
66	MP-4	Z	.109	5.5
67 68	MP-5	Z	.062	5.5
	MP-6		.068	4.25
69	MP-7	Z	.06	5.5
70	MP-7	Z	.06	5.5
71	MP-8	Z	.062	5.5
72	MP-9	Z	.109	5.5
73	MP-10	Z	.037	4.25
74	MP-11	Z	.042	5.5
75	MP-11	Z	.042	5.5
76	MP-12	Z	.109	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	L X	076	.25
2	MP-1	Χ	037	2
3	MP-2	X	038	2.25
4	MP-2	X	08	2
5	MP-3	X	039	.5
6	MP-3	X	039	.5
7	MP-4	X	076	.25
8	MP-4	X	034	2
9	MP-5	X	054	.25
10	MP-5	X	043	2
11	MP-6	X	053	2.25
12	MP-6	X	109	2
13	MP-7	X	048	.5
14	MP-7	X	048	.5
15	MP-8	X	054	.25

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
16	MP-8	X	043	2
17	MP-9	X	098	.25
18	MP-9	X	03	2
19	MP-10	X	024	2.25
20	MP-11	X	031	.5
21	MP-11	X	031	.5
22	MP-12	X	098	.25
23	MP-12	X	025	2
24	MP-1	X	076	5.5
25	MP-2	X	038	4.25
26	MP-3	X	039	5.5
27	MP-3	X	039	5.5
28	MP-4	X	076	5.5
29	MP-5	X	054	5.5
30	MP-6	X	053	4.25
31	MP-7	X	048	5.5
32	MP-7	X	048	5.5
33	MP-8	X	054	5.5
34	MP-9	X	098	5.5
35	MP-10	X	024	4.25
36	MP-11	X	031	5.5
37	MP-11	X	031	5.5
38	MP-12	X	098	5.5
39	MP-1	Z	.076	.25
40	MP-1	Z	.037	2
41	MP-2	Z	.038	2.25
42	MP-2	Z	.08	2
43	MP-3	Z	.039	.5
44	MP-3	Z	.039	.5
45	MP-4	Z	.076	.25
46	MP-4	Z	.034	2
47	MP-5	Z	.054	.25
48	MP-5	Z	.043	2
49	MP-6	Z	.053	2.25
50	MP-6	Z	.109	2
51	MP-7	Z	.048	.5
52	MP-7	Z	.048	.5
53	MP-8	Z	.054	.25
54	MP-8	Z	.043	2
55	MP-9	Z	.098	.25
56	MP-9	Z	.03	2
57	MP-10	Z	.024	2.25
58	MP-11	Z	.031	.5
59	MP-11	Z	.031	.5
60	MP-12	Z	.098	.25
61	MP-12	Z	.025	2
62	MP-1	Z	.076	5.5
63	MP-2	Z	.038	4.25
64	MP-3	Z	.039	5.5
65	MP-3	Z	.039	5.5
66	MP-4	Z	.076	5.5
67	MP-5	Z	.054	5.5
68	MP-6	Z	.053	4.25
69	MP-7	Z	.048	5.5
70	MP-7	Z	.048	5.5
71	MP-8	Z	.054	5.5
72	MP-9	Z	.098	5.5

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Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW
TEP No. 25661.584643
Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
73	MP-10	Z	.024	4.25
74	MP-11	Z	.031	5.5
75	MP-11	Z	.031	5.5
76	MP-12	Z	.098	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	078	.25
2	MP-1	X	05	2
3	MP-2	X	057	2.25
4	MP-2	X	118	2
5	MP-3	X	054	.5
6	MP-3	X	054	.5
7	MP-4	X	078	.25
8	MP-4	X	048	2
9	MP-5	X	078	.25
10	MP-5	X	05	2
11	MP-6	X	057	2.25
12	MP-6	X	118	2
13	MP-7	X	054	.5
14	MP-7	X	054	.5
15	MP-8	X	078	.25
16	MP-8	X	048	2
17	MP-9	X	124	.25
18	MP-9	X	036	2
19	MP-10	X	027	2.25
20	MP-11	X	036	.5
21	MP-11	X	036	.5
22	MP-12	X	124	.25
23	MP-12	X	029	2
24	MP-1	X	078	5.5
25	MP-2	X	057	4.25
26	MP-3	X	054	5.5
27	MP-3	X	054	5.5
28	MP-4	X	078	5.5
29	MP-5	X	078	5.5
30	MP-6	X	057	4.25
31	MP-7	X	054	5.5
32	MP-7	X	054	5.5
33	MP-8	X	078	5.5
34	MP-9	X	124	5.5
35	MP-10	X	027	4.25
36	MP-11	X	036	5.5
37	MP-11	X	036	5.5
38	MP-12	X	124	5.5
39	MP-1	Z	.045	.25
40	MP-1	Z	.029	2
41	MP-2	Z	.033	2.25
42	MP-2	Z	.068	2
43	MP-3	Z	.031	.5
44	MP-3	Z	.031	.5
45	MP-4	Z	.045	.25
46	MP-4	Z	.028	2
47	MP-5	Z	.045	.25
48	MP-5	Z	.029	2
49	MP-6	Z	.033	2.25

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
50	MP-6	Z	.068	2
51	MP-7	Z	.031	.5
52	MP-7	Z	.031	.5
53	MP-8	Z	.045	.25
54	MP-8	Z	.028	2
55	MP-9	Z	.072	.25
56	MP-9	Z	.021	2
57	MP-10	Z	.015	2.25
58	MP-11	Z	.021	.5
59	MP-11	Z	.021	.5
60	MP-12	Z	.072	.25
61	MP-12	Z	.017	2
62	MP-1	Z	.045	5.5
63	MP-2	Z	.033	4.25
64	MP-3	Z	.031	5.5
65	MP-3	Z	.031	5.5
66	MP-4	Z	.045	5.5
67	MP-5	Z	.045	5.5
68	MP-6	Z	.033	4.25
69	MP-7	Z	.031	5.5
70	MP-7	Z	.031	5.5
71	MP-8	Z	.045	5.5
72	MP-9	Z	.072	5.5
73	MP-10	Z	.015	4.25
74	MP-11	Z	.021	5.5
75	MP-11	Z	.021	5.5
76	MP-12	Z	.072	5.5

## Member Point Loads (BLC 18 : Ice Weight)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Υ	097	.25
2	MP-1	Υ	076	2
3	MP-2	Y	059	2.25
4	MP-2	Υ	143	2
5	MP-3	Υ	101	.5
6	MP-3	Υ	101	.5
7	MP-4	Y	097	.25
8	MP-4	Υ	069	2
9	MP-5	Y	097	.25
10	MP-5	Υ	076	2
11	MP-6	Y	059	2.25
12	MP-6	Y	143	2
13	MP-7	Y	101	.5
14	MP-7	Υ	101	.5
15	MP-8	Y	097	.25
16	MP-8	Υ	069	2
17	MP-9	Y	097	.25
18	MP-9	Υ	076	2
19	MP-10	Y	059	2.25
20	MP-11	Y	101	.5
21	MP-11	Y	101	.5
22	MP-12	Υ	097	.25
23	MP-12	Y	069	2
24	MP-1	Υ	097	5.5
25	MP-2	Υ	059	4.25
26	MP-3	Υ	101	5.5

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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#### Member Point Loads (BLC 18 : Ice Weight) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
27	MP-3	Υ	101	5.5
28	MP-4	Υ	097	5.5
29	MP-5	Υ	097	5.5
30	MP-6	Υ	059	4.25
31	MP-7	Υ	101	5.5
32	MP-7	Υ	101	5.5
33	MP-8	Υ	097	5.5
34	MP-9	Υ	097	5.5
35	MP-10	Υ	059	4.25
36	MP-11	Υ	101	5.5
37	MP-11	Y	101	5.5
38	MP-12	Υ	097	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	019	.25
2	MP-1	X	016	2
3	MP-2	X	018	2.25
4	MP-2	X	036	2
5	MP-3	X	016	.5
6	MP-3	X	016	.5
7	MP-4	X	019	.25
8	MP-4	X	016	2
9	MP-5	X	019	.25
10	MP-5	X	016	2
11	MP-6	X	018	2.25
12	MP-6	X	036	2
13	MP-7	X	016	.5
14	MP-7	X	016	.5
15	MP-8	X	019	.25
16	MP-8	X	016	2
17	MP-9	X	019	.25
18	MP-9	X	016	2
19	MP-10	X	018	2.25
20	MP-11	X	016	.5
21	MP-11	X	016	.5
22	MP-12	X	019	.25
23	MP-12	X	016	2
24	MP-1	X	019	5.5
25	MP-2	X	018	4.25
26	MP-3	X	016	5.5
27	MP-3	X	016	5.5
28	MP-4	X	019	5.5
29	MP-5	X	019	5.5
30	MP-6	X	018	4.25
31	MP-7	X	016	5.5
32	MP-7	X	016	5.5
33	MP-8	X	019	5.5
34	MP-9	X	019	5.5
35	MP-10	X	018	4.25
36	MP-11	X	016	5.5
37	MP-11	X	016	5.5
38	MP-12	X	019	5.5

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

Member Labe	el Direction	Magnitude[k,k-ft]	Location[ft,%]
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## Member Point Loads (BLC 20 : 30 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	02	.25
2	MP-1	X	013	2
3	MP-2	X	014	2.25
4	MP-2	X	028	2
5	MP-3	X	012	.5
6	MP-3	X	012	.5
7	MP-4	X	02	.25
8	MP-4	X	013	2
9	MP-5	X	028	.25
10	MP-5	X	01	2
11	MP-6	X	008	2.25
12	MP-6	X	015	2
13	MP-7	X	009	.5
14	MP-7	X	009	.5
15	MP-8	X	028	.25
16	MP-8	X	009	2
17	MP-9	X	02	.25
18	MP-9	X	02	2
19	MP-10	X	013	2.25
20		X		<u>2.25</u> .5
21	MP-11 MP-11	X	012 012	<u>.5</u> .5
22	MP-12	X	02	5 .25
23	MP-12	X	02	<u></u> 2
		X		5.5
24	MP-1		02	
25	MP-2	X	014	4.25
26	MP-3	X	012	5.5
27	MP-3	X	012	5.5
28	MP-4	X	02	5.5
29	MP-5	X	028	5.5
30	MP-6	X	008	4.25
31	MP-7	X	009	5.5
32	MP-7	X	009	5.5
33	MP-8	X	028	5.5
34	MP-9	X	02	5.5
35	MP-10	X	014	4.25
36	MP-11	X	012	5.5
37	MP-11	X	012	5.5
38	MP-12	X	02	5.5
39	MP-1	<u>Z</u>	011	.25
40	MP-1	<u>Z</u>	008	2
41	MP-2	<u>Z</u>	008	2.25
42	MP-2	Z	016	2
43	MP-3	<u>Z</u>	007	.5
44	MP-3	Z	007	.5
45	MP-4	Z	011	.25
46	MP-4	Z	007	2
47	MP-5	Z	016	.25
48	MP-5	Z	006	2
49	MP-6	Z	004	2.25
50	MP-6	Z	009	2
51	MP-7	Z	005	.5
52	MP-7	Z	005	.5
53	MP-8	<u>Z</u>	016	.25
54	MP-8	Z	005	2
55	MP-9	Z	011	.25
56	MP-9	Z	008	2
57	MP-10	Z	008	2.25

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Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW TEP No. 25661.584643 Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
58	MP-11	Z	007	.5
59	MP-11	Z	007	.5
60	MP-12	Z	011	.25
61	MP-12	Z	007	2
62	MP-1	Z	011	5.5
63	MP-2	Z	008	4.25
64	MP-3	Z	007	5.5
65	MP-3	Z	007	5.5
66	MP-4	Z	011	5.5
67	MP-5	Z	016	5.5
68	MP-6	Z	004	4.25
69	MP-7	Z	005	5.5
70	MP-7	Z	005	5.5
71	MP-8	Z	016	5.5
72	MP-9	Z	011	5.5
73	MP-10	Z	008	4.25
74	MP-11	Z	007	5.5
75	MP-11	Z	007	5.5
76	MP-12	Z	011	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Χ	018	.25
2	MP-1	Χ	01	2
3	MP-2	Χ	01	2.25
4	MP-2	Χ	019	2
5	MP-3	Χ	009	.5
6	MP-3	Χ	009	.5
7	MP-4	X	018	.25
8	MP-4	Χ	009	2
9	MP-5	X	022	.25
10	MP-5	Χ	009	2
11	MP-6	Χ	007	2.25
12	MP-6	Χ	013	2
13	MP-7	X	008	.5
14	MP-7	Χ	008	.5
15	MP-8	X	022	.25
16	MP-8	Χ	008	2
17	MP-9	Χ	014	.25
18	MP-9	X	011	2
19	MP-10	X	012	2.25
20	MP-11	X	011	.5
21	MP-11	X	011	.5
22	MP-12	Χ	014	.25
23	MP-12	Χ	011	2
24	MP-1	Χ	018	5.5
25	MP-2	X	01	4.25
26	MP-3	X	009	5.5
27	MP-3	X	009	5.5
28	MP-4	X	018	5.5
29	MP-5	X	022	5.5
30	MP-6	X	007	4.25
31	MP-7	X	008	5.5
32	MP-7	X	008	5.5
33	MP-8	X	022	5.5
34	MP-9	X	014	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
35	MP-10	X	012	4.25
36	MP-11	X	011	5.5
37	MP-11	X	011	5.5
38	MP-12	X	014	5.5
39	MP-1	Z	018	.25
40	MP-1	Z	01	2
41	MP-2	Z	01	2.25
42	MP-2	Z	019	2
43	MP-3	Z	009	.5
44	MP-3	Z	009	.5
45	MP-4	Z	018	.25
46	MP-4	Z	009	2
47	MP-5	Z	022	.25
48	MP-5	Z	009	2
49	MP-6	Z	007	2.25
50	MP-6	Z	013	2
51	MP-7	Z	008	.5
52	MP-7	Z	008	.5
53	MP-8	Z	022	.25
54	MP-8	Z	008	2
55	MP-9	Z	014	.25
56	MP-9	Z	011	2
57	MP-10	Z	012	2.25
58	MP-11	Z	011	.5
59	MP-11	Z	011	.5
60	MP-12	Z	014	.25
61	MP-12	Z	011	2
62	MP-1	Z	018	5.5
63	MP-2	Z	01	4.25
64	MP-3	Z	009	5.5
65	MP-3	Z	009	5.5
66	MP-4	Z	018	5.5
67	MP-5	Z	022	5.5
68	MP-6	Z	007	4.25
69	MP-7	Z	008	5.5
70	MP-7	Z	008	5.5
71	MP-8	Z	022	5.5
72	MP-9	Z	014	5.5
73	MP-10	Z	012	4.25
74	MP-11	Z	011	5.5
75	MP-11	Z	011	5.5
76	MP-12	Z	014	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	014	.25
2	MP-1	X	007	2
3	MP-2	X	006	2.25
4	MP-2	X	011	2
5	MP-3	X	006	.5
6	MP-3	X	006	.5
7	MP-4	X	014	.25
8	MP-4	X	006	2
9	MP-5	X	014	.25
10	MP-5	X	007	2
11	MP-6	X	006	2.25

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
12	MP-6	X	011	2
13	MP-7	X	006	.5
14	MP-7	X	006	.5
15	MP-8	X	014	.25
16	MP-8	X	006	2
17	MP-9	X	01	.25
18	MP-9	X	008	2
19	MP-10	X	009	2.25
20	MP-11	X	008	.5
21	MP-11	X	008	.5
22	MP-12	X	01	.25
23	MP-12	X	008	2
24	MP-1	X	014	5.5
25	MP-2	X	006	4.25
26	MP-3	X	006	5.5
27	MP-3	X	006	5.5
28	MP-4	X	014	5.5
29	MP-5	X	014	5.5
30	MP-6	X	006	4.25
31	MP-7	X	006	5.5
32	MP-7	X	006	5.5
33	MP-8	X	014	5.5
34	MP-9	X	01	5.5
35	MP-10	X	009	4.25
36	MP-11	X	008	5.5
37	MP-11	X	008	5.5
38	MP-12	X	01	5.5
39	MP-1	Z	025	.25
40	MP-1	Z	011	2
41	MP-2	Z	01	2.25
42	MP-2	Z	019	2
43	MP-3	Z	01	.5
44	MP-3	Z	01	.5
45	MP-4	Z	025	.25
46	MP-4	Z	01	2
47	MP-5	Z	025	.25
48	MP-5	Z	011	2
49	MP-6	Z	01	2.25
50	MP-6	Z	019	2
51	MP-7	Z	01	.5
52	MP-7	Z	01	.5
53	MP-8	Z	025	.25
54	MP-8	Z	01	2
55	MP-9	Z	017	.25
56	MP-9	Z	014	2
57	MP-10	Z	016	2.25
58	MP-11	Z	014	.5
59	MP-11	Z	014	.5
60	MP-12	Z	017	.25
61	MP-12	Z	014	2
62	MP-1	Z	025	5.5
63	MP-2	Z	01	4.25
64	MP-3	Z	01	5.5
65	MP-3	Z	01	5.5
66	MP-4	7	025	5.5
67	MP-5	Z	025	5.5
68	MP-6	Z	01	4.25
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## Member Point Loads (BLC 22 : 60 Wind - Ice) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
69	MP-7	Z	01	5.5
70	MP-7	Z	01	5.5
71	MP-8	Z	025	5.5
72	MP-9	Z	017	5.5
73	MP-10	Z	016	4.25
74	MP-11	Z	014	5.5
75	MP-11	Z	014	5.5
76	MP-12	Z	017	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	032	.25
2	MP-1	Z	012	2
3	MP-2	Z	009	2.25
4	MP-2	Z	018	2
5	MP-3	Z	011	.5
6	MP-3	Z	011	.5
7	MP-4	Z	032	.25
8	MP-4	Z	01	2
9	MP-5	Z	032	.25
10	MP-5	Z	012	2
11	MP-6	Z	009	2.25
12	MP-6	Z	018	2
13	MP-7	Z	011	.5
14	MP-7	Z	011	.5
15	MP-8	Z	032	.25
16	MP-8	Z	01	2
17	MP-9	Z	032	.25
18	MP-9	Z	012	2
19	MP-10	Z	009	2.25
20	MP-11	Z	011	.5
21	MP-11	Z	011	.5
22	MP-12	Z	032	.25
23	MP-12	Z	01	2
24	MP-1	Z	032	5.5
25	MP-2	Z	009	4.25
26	MP-3	Z	011	5.5
27	MP-3	Z	011	5.5
28	MP-4	Z	032	5.5
29	MP-5	Z	032	5.5
30	MP-6	Z	009	4.25
31	MP-7	Z	011	5.5
32	MP-7	Z	011	5.5
33	MP-8	Z	032	5.5
34	MP-9	Z	032	5.5
35	MP-10	Z	009	4.25
36	MP-11	Z	011	5.5
37	MP-11	Z	011	5.5
38	MP-12	Z	032	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.014	.25
2	MP-1	X	.007	2
3	MP-2	X	.006	2.25
4	MP-2	X	011	2

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Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW
TEP No. 25661.584643
Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
5	MP-3	X	.006	.5
6	MP-3	X	.006	.5
7	MP-4	X	.014	.25
8	MP-4	X	.006	2
9	MP-5	X	.01	.25
10	MP-5	X	.008	2
11	MP-6	X	.009	2.25
12	MP-6	X	.018	2
13	MP-7	X	.008	.5
14	MP-7	X	.008	.5
15	MP-8	X	.01	.25
16	MP-8	X	.008	2
17	MP-9	X	.014	.25
18	MP-9	X	.007	2
19	MP-10	X	.006	2.25
20	MP-11	X	.006	.5
21	MP-11	X	.006	.5
22	MP-12	X	.014	.25
23	MP-12	X	.006	2
24	MP-1	X	.014	5.5
25	MP-2	X	.006	4.25
26	MP-3	X	.006	5.5
27	MP-3	X	.006	5.5
28	MP-4	X	.014	5.5
29	MP-5	X	.01	5.5
30	MP-6	X	.009	4.25
31	MP-7	X	.008	5.5
32	MP-7	X	.008	5.5
33	MP-8	X	.01	5.5
34	MP-9	X	.014	5.5
35	MP-10	X	.006	4.25
36	MP-11	X	.006	5.5
37	MP-11	X	.006	5.5
38	MP-12	X	.014	5.5
39	MP-1	Z	025	.25
40	MP-1	Z	011	2
41	MP-2	Z	01	2.25
42	MP-2	Z	019	2
43	MP-3	Z	01	.5
44	MP-3	Z	01	.5
45	MP-4	Z	025	.25
46	MP-4	Z	01	2
47	MP-5	Z	017	.25
48	MP-5	Z	014	2
49	MP-6	Z	016	2.25
50	MP-6	Z	032	2
51	MP-7	Z	014	.5
52	MP-7	Z	014	.5
53	MP-8	Z	017	.25
54	MP-8	Z	014	2
55	MP-9	Z	025	.25
56	MP-9	Z	011	2
57	MP-10	Z	01	2.25
58	MP-11	Z	01	.5
59	MP-11	Z	01	.5
60	MP-12	Z	025	.25
61	MP-12	Z	01	2

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: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
62	MP-1	Z	025	5.5
63	MP-2	Z	01	4.25
64	MP-3	Z	01	5.5
65	MP-3	Z	01	5.5
66	MP-4	Z	025	5.5
67	MP-5	Z	017	5.5
68	MP-6	Z	016	4.25
69	MP-7	Z	014	5.5
70	MP-7	Z	014	5.5
71	MP-8	Z	017	5.5
72	MP-9	Z	025	5.5
73	MP-10	Z	01	4.25
74	MP-11	Z	01	5.5
75	MP-11	Z	01	5.5
76	MP-12	Z	025	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.018	.25
2	MP-1	X	.01	2
3	MP-2	X	.01	2.25
4	MP-2	X	.019	2
5	MP-3	X	.009	.5
6	MP-3	X	.009	.5
7	MP-4	X	.018	.25
8	MP-4	X	.009	2
9	MP-5	X	.014	.25
10	MP-5	X	.011	2
11	MP-6	X	.012	2.25
12	MP-6	X	.025	2
13	MP-7	X	.011	.5
14	MP-7	X	.011	.5
15	MP-8	X	.014	.25
16	MP-8	X	.011	2
17	MP-9	X	.022	.25
18	MP-9	X	.009	2
19	MP-10	X	.007	2.25
20	MP-11	X	.008	.5
21	MP-11	X	.008	.5
22	MP-12	X	.022	.25
23	MP-12	X	.008	2
24	MP-1	X	.018	5.5
25	MP-2	X	.01	4.25
26	MP-3	X	.009	5.5
27	MP-3	X	.009	5.5
28	MP-4	X	.018	5.5
29	MP-5	X	.014	5.5
30	MP-6	X	.012	4.25
31	MP-7	X	.011	5.5
32	MP-7	X	.011	5.5
33	MP-8	X	.014	5.5
34	MP-9	X	.022	5.5
35	MP-10	X	.007	4.25
36	MP-11	X	.008	5.5
37	MP-11	X	.008	5.5
38	MP-12	X	.022	5.5

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
39	MP-1	Z	018	.25
40	MP-1	Z	01	2
41	MP-2	Z	01	2.25
42	MP-2	Z	019	2
43	MP-3	Z	009	.5
44	MP-3	Z	009	.5
45	MP-4	Z	018	.25
46	MP-4	Z	009	2
47	MP-5	Z	014	.25
48	MP-5	Z	011	2
49	MP-6	Z	012	2.25
50	MP-6	Z	025	2
51	MP-7	Z	011	.5
52	MP-7	Z	011	.5
53	MP-8	Z	014	.25
54	MP-8	Z	011	2
55	MP-9	Z	022	.25
56	MP-9	Z	009	2
57	MP-10	Z	007	2.25
58	MP-11	Z	008	.5
59	MP-11	Z	008	.5
60	MP-12	Z	022	.25
61	MP-12	Z	008	2
62	MP-1	Z	018	5.5
63	MP-2	Z	01	4.25
64	MP-3	Z	009	5.5
65	MP-3	Z	009	5.5
66	MP-4	Z	018	5.5
67	MP-5	Z	014	5.5
68	MP-6	Z	012	4.25
69	MP-7	Z	011	5.5
70	MP-7	Z	011	5.5
71	MP-8	Z	014	5.5
72	MP-9	Z	022	5.5
73	MP-10	Z	007	4.25
74	MP-11	Z	008	5.5
75	MP-11	Z	008	5.5
76	MP-12	Z	022	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.02	.25
2	MP-1	X	.013	2
3	MP-2	X	.014	2.25
4	MP-2	X	.028	2
5	MP-3	X	.012	.5
6	MP-3	X	.012	.5
7	MP-4	X	.02	.25
8	MP-4	X	.013	2
9	MP-5	X	.02	.25
10	MP-5	X	.013	2
11	MP-6	X	.014	2.25
12	MP-6	X	.028	2
13	MP-7	X	.012	.5
14	MP-7	X	.012	.5
15	MP-8	X	.02	.25

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
16	MP-8	X	.013	2
17	MP-9	X	.028	.25
18	MP-9	X	.01	2
19	MP-10	X	.008	2.25
20	MP-11	X	.009	.5
21	MP-11	X	.009	.5
22	MP-12	X	.028	.25
23	MP-12	X	.009	2
24	MP-1	X	.02	5.5
25	MP-2	X	.014	4.25
26	MP-3	X	.012	5.5
27	MP-3	X	.012	5.5
28	MP-4	X	.02	5.5
29	MP-5	X	.02	5.5
30	MP-6	X	.014	4.25
31	MP-7	X	.012	5.5
32	MP-7	X	.012	5.5
33	MP-8	X	.02	5.5
34	MP-9	X	.028	5.5
35	MP-10	X	.028	4.25
36	MP-11	X	.008	5.5
		X		
37	MP-11 MP-12	X	.009 .028	5.5 5.5
39	MP-1	Z	011	.25
40	MP-1	Z	008	2
41	MP-2	Z	008	2.25
42	MP-2	Z	016	2
43	MP-3	Z	007	.5
44	MP-3	Z	007	.5
45	MP-4	Z	011	.25
46	MP-4	Z	007	2
47	MP-5	Z	011	.25
48	MP-5	Z	008	2
49	MP-6	Z	008	2.25
50	MP-6	Z	016	2
51	MP-7	Z	007	.5
52	MP-7	Z	007	.5
53	MP-8	Z	011	.25
54	MP-8	Z	007	2
55	MP-9	Z	016	.25
56	MP-9	Z	006	2
57	MP-10	Z	004	2.25
58	MP-11	Z	005	.5
59	MP-11	Z	005	.5
60	MP-12	Z	016	.25
61	MP-12	Z	005	2
62	MP-1	Z	011	5.5
63	MP-2	Z	008	4.25
64	MP-3	Z	007	5.5
65	MP-3	Z	007	5.5
66	MP-4	Z	011	5.5
67	MP-5	Z	011	5.5
68	MP-6	Z	008	4.25
69	MP-7	Z	007	5.5
70	MP-7	Z	007	5.5
71	MP-8	Z	011	5.5
72	MP-9	Z	016	5.5
12	IVII		.010	0.0

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
73	MP-10	Z	004	4.25
74	MP-11	Z	005	5.5
75	MP-11	Z	005	5.5
76	MP-12	Z	016	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.019	.25
2	MP-1	X	.016	2
3	MP-2	X	.018	2.25
4	MP-2	X	.036	2
5	MP-3	X	.016	.5
6	MP-3	X	.016	.5
7	MP-4	Χ	.019	.25
8	MP-4	Χ	.016	2
9	MP-5	X	.019	.25
10	MP-5	X	.016	2
11	MP-6	X	.018	2.25
12	MP-6	X	.036	2
13	MP-7	Χ	.016	.5
14	MP-7	Χ	.016	.5
15	MP-8	Х	.019	.25
16	MP-8	X	.016	2
17	MP-9	X	.019	.25
18	MP-9	X	.016	2
19	MP-10	Χ	.018	2.25
20	MP-11	Χ	.016	.5
21	MP-11	X	.016	.5
22	MP-12	Χ	.019	.25
23	MP-12	X	.016	2
24	MP-1	X	.019	5.5
25	MP-2	X	.018	4.25
26	MP-3	X	.016	5.5
27	MP-3	X	.016	5.5
28	MP-4	X	.019	5.5
29	MP-5	X	.019	5.5
30	MP-6	X	.018	4.25
31	MP-7	X	.016	5.5
32	MP-7	X	.016	5.5
33	MP-8	X	.019	5.5
34	MP-9	X	.019	5.5
35	MP-10	X	.018	4.25
36	MP-11	X	.016	5.5
37	MP-11	X	.016	5.5
38	MP-12	X	.019	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.02	.25
2	MP-1	X	.013	2
3	MP-2	X	.014	2.25
4	MP-2	X	.028	2
5	MP-3	Χ	.012	.5
6	MP-3	Χ	.012	.5
7	MP-4	X	.02	.25
8	MP-4	X	.013	2

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
9	MP-5	X	.028	.25
10	MP-5	X	.01	2
11	MP-6	X	.008	2.25
12	MP-6	X	.015	2
13	MP-7	X	.009	.5
14	MP-7	X	.009	.5
15	MP-8	X	.028	.25
16	MP-8	X	.009	2
17	MP-9	X	.02	.25
18	MP-9	X	.013	2
19	MP-10	X	.013	2.25
20	MP-11	X	.012	.5
21	MP-11	X	.012	.5
22	MP-12	X	.02	.25
	MP-12	X		
23	MP-1	X	.013	<u>2</u> 5.5
			.02	
25	MP-2	X	.014	4.25
26	MP-3	X	.012	5.5
27	MP-3	X	.012	5.5
28	MP-4	X	.02	5.5
29	MP-5	X	.028	5.5
30	MP-6	X	.008	4.25
31	MP-7	X	.009	5.5
32	MP-7	X	.009	5.5
33	MP-8	X	.028	5.5
34	MP-9	X	.02	5.5
35	MP-10	X	.014	4.25
36	MP-11	X	.012	5.5
37	MP-11	X	.012	5.5
38	MP-12	X	.02	5.5
39	MP-1	<u>Z</u>	.011	.25
40	MP-1	Z	.008	2
41	MP-2	Z	.008	2.25
42	MP-2	<u>Z</u>	.016	2
43	MP-3	<u>Z</u>	.007	.5
44	MP-3	Z	.007	.5
45	MP-4	Z	.011	.25
46	MP-4	Z	.007	2
47	MP-5	Z	.016	.25
48	MP-5	<u>Z</u>	.006	2
49	MP-6	<u>Z</u>	.004	2.25
50	MP-6	<u>Z</u>	.009	2
51	MP-7	<u>Z</u>	.005	.5
52	MP-7	Z	.005	.5
53	MP-8	Z	.016	.25
54	MP-8	Z	.005	2
55	MP-9	Z	.011	.25
56	MP-9	Z	.008	2
57	MP-10	Z	.008	2.25
58	MP-11	Z	.007	.5
59	MP-11	Z	.007	.5
60	MP-12	Z	.011	.25
61	MP-12	Z	.007	2
62	MP-1	Z	.011	5.5
63	MP-2	Z	.008	4.25
64	MP-3	Z	.007	5.5
65	MP-3	Z	.007	5.5

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
66	MP-4	Z	.011	5.5
67	MP-5	Z	.016	5.5
68	MP-6	Z	.004	4.25
69	MP-7	Z	.005	5.5
70	MP-7	Z	.005	5.5
71	MP-8	Z	.016	5.5
72	MP-9	Z	.011	5.5
73	MP-10	Z	.008	4.25
74	MP-11	Z	.007	5.5
75	MP-11	Z	.007	5.5
76	MP-12	Z	.011	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.018	.25
2	MP-1	X	.01	2
3	MP-2	X	.01	2.25
4	MP-2	X	.019	2
5	MP-3	X	.009	.5
6	MP-3	X	.009	.5
7	MP-4	X	.018	.25
8	MP-4	X	.009	2
9	MP-5	X	.022	.25
10	MP-5	X	.009	2
11	MP-6	X	.007	2.25
12	MP-6	X	.013	2
13	MP-7	X	.008	.5
14	MP-7	X	.008	.5
15	MP-8	X	.022	.25
16	MP-8	X	.008	2
17	MP-9	X	.014	.25
18	MP-9	X	.011	2
19	MP-10	X	.012	2.25
20	MP-11	X	.011	.5
21	MP-11	X	.011	.5
22	MP-12	X	.014	.25
23	MP-12	X	.011	2
24	MP-1	X	.018	5.5
25	MP-2	X	.01	4.25
26	MP-3	X	.009	5.5
27	MP-3	X	.009	5.5
28	MP-4	X	.018	5.5
29	MP-5	X	.022	5.5
30	MP-6	X	.007	4.25
31	MP-7	X	.008	5.5
32	MP-7	X	.008	5.5
33	MP-8	X	.022	5.5
34	MP-9	X	.014	5.5
35	MP-10	X	.012	4.25
36	MP-11	X	.011	5.5
37	MP-11	X	.011	5.5
38	MP-12	X	.014	5.5
39	MP-1	Z	.018	.25
40	MP-1	Z	.01	2
41	MP-2	Z	.01	2.25
42	MP-2	Z	.019	2

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
43	MP-3	Z	.009	.5
44	MP-3	Z	.009	.5
45	MP-4	Z	.018	.25
46	MP-4	Z	.009	2
47	MP-5	Z	.022	.25
48	MP-5	Z	.009	2
49	MP-6	Z	.007	2.25
50	MP-6	Z	.013	2
51	MP-7	Z	.008	.5
52	MP-7	Z	.008	.5
53	MP-8	Z	.022	.25
54	MP-8	Z	.008	2
55	MP-9	Z	.014	.25
56	MP-9	Z	.011	2
57	MP-10	Z	.012	2.25
58	MP-11	Z	.011	.5
59	MP-11	Z	.011	.5
60	MP-12	Z	.014	.25
61	MP-12	Z	.011	2
62	MP-1	Z	.018	5.5
63	MP-2	Z	.01	4.25
64	MP-3	Z	.009	5.5
65	MP-3	Z	.009	5.5
66	MP-4	Z	.018	5.5
67	MP-5	Z	.022	5.5
68	MP-6	Z	.007	4.25
69	MP-7	Z	.008	5.5
70	MP-7	Z	.008	5.5
71	MP-8	Z	.022	5.5
72	MP-9	Z	.014	5.5
73	MP-10	Z	.012	4.25
74	MP-11	Z	.011	5.5
75	MP-11	Z	.011	5.5
76	MP-12	Z	.014	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	.014	.25
2	MP-1	Χ	.007	2
3	MP-2	X	.006	2.25
4	MP-2	X	.011	2
5	MP-3	X	.006	.5
6	MP-3	X	.006	.5
7	MP-4	X	.014	.25
8	MP-4	Χ	.006	2
9	MP-5	X	.014	.25
10	MP-5	X	.007	2
11	MP-6	Χ	.006	2.25
12	MP-6	X	.011	2
13	MP-7	X	.006	.5
14	MP-7	X	.006	.5
15	MP-8	X	.014	.25
16	MP-8	X	.006	2
17	MP-9	X	.01	.25
18	MP-9	X	.008	2
19	MP-10	X	.009	2.25

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft.%]
20	MP-11	X	.008	.5
21	MP-11	X	.008	.5
22	MP-12	X	.01	.25
23	MP-12	X	.008	2
24	MP-1	X	.014	5.5
25	MP-2	X	.006	4.25
26	MP-3	X	.006	5.5
27	MP-3	X	.006	5.5
28	MP-4	X	.014	5.5
29	MP-5	X	.014	5.5
30	MP-6	X	.006	4.25
31	MP-7	X	.006	5.5
32	MP-7	X	.006	5.5
33	MP-8	X	.014	5.5
34	MP-9	X	.01	5.5
35	MP-10	X	.009	4.25
36	MP-11	X	.008	5.5
37	MP-11	X	.008	5.5
38	MP-12	X	.01	5.5
39	MP-1	Z	.025	.25
40	MP-1	<u>Z</u>	.011	2
41	MP-2	<u>Z</u>	.01	2.25
42	MP-2	Z	.019	2
43	MP-3	Z	.01	.5
44	MP-3	Z	.01	.5
45	MP-4	<u>Z</u>	.025	.25
46	MP-4	Z	.01	2
47	MP-5	<u>Z</u>	.025	.25
48	MP-5	<u>Z</u>	.011	2
49	MP-6	Z	.01	2.25
50	MP-6	Z	.019	2
51	MP-7	<u>Z</u>	.01	.5
52	MP-7	Z	.01	.5
53	MP-8	<u>Z</u>	.025	.25
54	MP-8	<u>Z</u> Z	.01	2
55	MP-9			.25
56	MP-9	Z	.014	2
57	MP-10 MP-11	Z Z	.016	2.25
58 59	MP-11 MP-11	<u>Z</u> Z	.014 .014	. <u>5</u> .5
60	MP-11 MP-12	Z	.014	.5 .25
61	MP-12 MP-12	Z	.017	.25
62	MP-12 MP-1	Z Z	.014	5.5
63	MP-2	Z	.025	4.25
64	MP-3	Z	.01	5.5
65	MP-3	Z	.01	5.5
66	MP-4	Z	.025	5.5
67	MP-5	Z	.025	5.5
68	MP-6	Z	.025	4.25
69	MP-7	Z	.01	5.5
70	MP-7	Z	.01	5.5
71	MP-8	Z	.01	5.5
72	MP-9	Z	.017	5.5
73	MP-10	Z	.016	4.25
74	MP-11	Z	.014	5.5
75	MP-11	Z	.014	5.5
76	MP-12	Z	.017	5.5
, ,	1911 12		.017	0.0

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: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	.032	.25
2	MP-1	Z	.012	2
3	MP-2	Z	.009	2.25
4	MP-2	Z	.018	2
5	MP-3	Z	.011	.5
6	MP-3	Z	.011	.5
7	MP-4	Z	.032	.25
8	MP-4	Z	.01	2
9	MP-5	Z	.032	.25
10	MP-5	Z	.012	2
11	MP-6	Z	.009	2.25
12	MP-6	Z	.018	2
13	MP-7	Z	.011	.5
14	MP-7	Z	.011	.5
15	MP-8	Z	.032	.25
16	MP-8	Z	.01	2
17	MP-9	Z	.032	.25
18	MP-9	Z	.012	2
19	MP-10	Z	.009	2.25
20	MP-11	Z	.011	.5
21	MP-11	Z	.011	.5
22	MP-12	Z	.032	.25
23	MP-12	Z	.01	2
24	MP-1	Z	.032	5.5
25	MP-2	Z	.009	4.25
26	MP-3	Z	.011	5.5
27	MP-3	Z	.011	5.5
28	MP-4	Z	.032	5.5
29	MP-5	Z	.032	5.5
30	MP-6	Z	.009	4.25
31	MP-7	Z	.011	5.5
32	MP-7	Z	.011	5.5
33	MP-8	Z	.032	5.5
34	MP-9	Z	.032	5.5
35	MP-10	Z	.009	4.25
36	MP-11	Z	.011	5.5
37	MP-11	Z	.011	5.5
38	MP-12	Z	.032	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	014	.25
2	MP-1	X	007	2
3	MP-2	X	006	2.25
4	MP-2	X	011	2
5	MP-3	X	006	.5
6	MP-3	X	006	.5
7	MP-4	X	014	.25
8	MP-4	X	006	2
9	MP-5	X	01	.25
10	MP-5	X	008	2
11	MP-6	X	009	2.25
12	MP-6	X	018	2
13	MP-7	X	008	.5
14	MP-7	X	008	.5
15	MP-8	X	01	.25

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Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW
TEP No. 25661.584643
Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
16	MP-8	X	008	2
17	MP-9	X	014	.25
18	MP-9	X	007	2
19	MP-10	X	006	2.25
20	MP-11	X	006	.5
21	MP-11	X	006	.5
22	MP-12	X	014	.25
23	MP-12	X	006	2
24	MP-1	X	014	5.5
25	MP-2	X	006	4.25
26	MP-3	X	006	5.5
27	MP-3	X	006	5.5
28	MP-4	X	014	5.5
29	MP-5	X	01	5.5
30	MP-6	X	009	4.25
31	MP-7	X	008	5.5
32	MP-7	X	008	5.5
33	MP-8	X	01	5.5
34	MP-9	X	014	5.5
35	MP-10	X	006	4.25
36	MP-11	X	006	5.5
37	MP-11	X	006	5.5
38	MP-12	X	014	5.5
39	MP-1	Z	.025	.25
40	MP-1	Z	.011	2
41	MP-2		.01	2.25
42	MP-2	Z Z	.019	2
43	MP-3	Z	.01	.5
44	MP-3	Z	.01	.5
45	MP-4	Z	.025	.25
46	MP-4	7	.01	2
47	MP-5	Z	.017	.25
48	MP-5	Z	.014	2
49	MP-6	Z	.016	2.25
50	MP-6	Z	.032	2
51	MP-7	Z	.014	.5
52	MP-7	Z	.014	.5
53	MP-8	Z	.017	.25
54	MP-8	Z	.014	2
55	MP-9	Z	.025	.25
56	MP-9	Z	.011	2
57	MP-10	Z	.01	2.25
58	MP-11	Z	.01	.5
59	MP-11	Z	.01	.5
60	MP-12	Z	.025	.25
61	MP-12	Z	.01	2
62	MP-1	Z	.025	5.5
63	MP-2	Z	.01	4.25
64	MP-3	Z	.01	5.5
65	MP-3	Z	.01	5.5
66	MP-4	Z	.025	5.5
67	MP-5	Z	.017	5.5
68	MP-6	Z	.016	4.25
69	MP-7	Z	.014	5.5
70	MP-7	Z	.014	5.5
71	MP-8	Z	.017	5.5
72	MP-9	Z	.025	5.5
12	IVII -9		.020	J.J

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
73	MP-10	Z	.01	4.25
74	MP-11	Z	.01	5.5
75	MP-11	Z	.01	5.5
76	MP-12	7	.025	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	018	.25
2	MP-1	X	01	2
3	MP-2	X	01	2.25
4	MP-2	X	019	2
5	MP-3	X	009	.5
6	MP-3	X	009	.5
7	MP-4	X	018	.25
8	MP-4	X	009	2
9	MP-5	X	014	.25
10	MP-5	X	011	2
11	MP-6	X	012	2.25
12	MP-6	X	025	2
13	MP-7	X	011	.5
14	MP-7	X	011	.5
15	MP-8	X	014	.25
16	MP-8	X	011	2
17	MP-9	X	022	.25
18	MP-9	X	009	2
19	MP-10	X	007	2.25
20	MP-11	Х	008	.5
21	MP-11	X	008	.5
22	MP-12	X	022	.25
23	MP-12	X	008	2
24	MP-1	X	018	5.5
25	MP-2	X	01	4.25
26	MP-3	X	009	5.5
27	MP-3	X	009	5.5
28	MP-4	X	018	5.5
29	MP-5	X	014	5.5
30	MP-6	X	012	4.25
31	MP-7	X	011	5.5
32	MP-7	X	011	5.5
33	MP-8	X	014	5.5
34	MP-9	X	022	5.5
35	MP-10	X	007	4.25
36	MP-11	X	008	5.5
37	MP-11	X	008	5.5
38	MP-12	X	022	5.5
39	MP-1	Z	.018	.25
40	MP-1	Z	.01	2
41	MP-2	Z	.01	2.25
42	MP-2	Z	.019	2
43	MP-3	Z	.009	.5
44	MP-3	Z	.009	.5
45	MP-4	Z	.018	.25
46	MP-4	Z	.009	2
47	MP-5	Z	.014	.25
48	MP-5	Z	.011	2
49	MP-6	Z	.012	2.25
	0	_ <del>_</del>		

RISA-3D Version 17.0.4 [C:\...\...\...\RISA-3D\Modifications.r3d]

Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
50	MP-6	Z	.025	2
51	MP-7	Z	.011	.5
52	MP-7	Z	.011	.5
53	MP-8	Z	.014	.25
54	MP-8	Z	.011	2
55	MP-9	Z	.022	.25
56	MP-9	Z	.009	2
57	MP-10	Z	.007	2.25
58	MP-11	Z	.008	.5
59	MP-11	Z	.008	.5
60	MP-12	Z	.022	.25
61	MP-12	Z	.008	2
62	MP-1	Z	.018	5.5
63	MP-2	Z	.01	4.25
64	MP-3	Z	.009	5.5
65	MP-3	Z	.009	5.5
66	MP-4	Z	.018	5.5
67	MP-5	Z	.014	5.5
68	MP-6	Z	.012	4.25
69	MP-7	Z	.011	5.5
70	MP-7	Z	.011	5.5
71	MP-8	Z	.014	5.5
72	MP-9	Z	.022	5.5
73	MP-10	Z	.007	4.25
74	MP-11	Z	.008	5.5
75	MP-11	Z	.008	5.5
76	MP-12	Z	.022	5.5

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

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	X	02	.25
2	MP-1	X	013	2
3	MP-2	X	014	2.25
4	MP-2	X	028	2
5	MP-3	X	012	.5
6	MP-3	X	012	.5
7	MP-4	X	02	.25
8	MP-4	X	013	2
9	MP-5	X	02	.25
10	MP-5	X	013	2
11	MP-6	X	014	2.25
12	MP-6	X	028	2
13	MP-7	X	012	.5
14	MP-7	X	012	.5
15	MP-8	X	02	.25
16	MP-8	X	013	2
17	MP-9	X	028	.25
18	MP-9	X	01	2
19	MP-10	X	008	2.25
20	MP-11	X	009	.5
21	MP-11	X	009	.5
22	MP-12	X	028	.25
23	MP-12	X	009	2
24	MP-1	X	02	5.5
25	MP-2	X	014	4.25
26	MP-3	Х	012	5.5
	-	-		

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: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

27		Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
29	27	MP-3	X	012	
30	28	MP-4	X	02	5.5
31	29	MP-5	X	02	5.5
32	30	MP-6	X	014	4.25
33	31	MP-7	X		5.5
34         MP-9         X        028         5.5           36         MP-10         X        009         5.5           37         MP-11         X        009         5.5           38         MP-12         X        028         5.5           39         MP-1         Z         .011         .25           40         MP-1         Z         .008         2           41         MP-2         Z         .008         2           41         MP-2         Z         .006         2           42         MP-3         Z         .007         .5           44         MP-3         Z         .007         .5           48         MP-4         Z         .011         .25           48         MP-5         Z         .008         2           50         MP-6         Z         .		MP-7			5.5
34         MP-9         X        028         5.5           36         MP-10         X        009         5.5           37         MP-11         X        009         5.5           38         MP-12         X        028         5.5           39         MP-1         Z         .011         .25           40         MP-1         Z         .008         2           41         MP-2         Z         .008         2           41         MP-2         Z         .006         2           42         MP-3         Z         .007         .5           44         MP-3         Z         .007         .5           48         MP-4         Z         .011         .25           48         MP-5         Z         .008         2           50         MP-6         Z         .	33	MP-8	X	02	5.5
35	34	MP-9	X	028	5.5
36	35	MP-10	X		4.25
38			X		
38					
MP-1					
40         MP-1         Z         .008         2           41         MP-2         Z         .008         2.25           42         MP-2         Z         .016         2           43         MP-3         Z         .007         .5           44         MP-3         Z         .007         .5           45         MP-4         Z         .011         .25           46         MP-4         Z         .007         2           47         MP-5         Z         .011         .25           48         MP-5         Z         .008         2           49         MP-6         Z         .008         2           50         MP-6         Z         .008         2           50         MP-6         Z         .007         .5           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .011         .25           55         MP-9         Z         .006					
41         MP-2         Z         .008         2.25           42         MP-2         Z         .016         2           43         MP-3         Z         .007         .5           44         MP-3         Z         .007         .5           45         MP-4         Z         .001         .25           46         MP-4         Z         .007         2           47         MP-5         Z         .011         .25           48         MP-5         Z         .011         .25           49         MP-6         Z         .008         2.25           50         MP-6         Z         .008         2.25           50         MP-7         Z         .007         .5           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .0				.008	
42         MP-3         Z         .007         .5           44         MP-3         Z         .007         .5           45         MP-4         Z         .011         .25           46         MP-4         Z         .007         2           47         MP-5         Z         .011         .25           48         MP-5         Z         .008         2.25           50         MP-6         Z         .008         2.25           50         MP-6         Z         .006         2           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         .5           55         MP-9         Z         .007         2           56         MP-9         Z         .006         2           57         MP-10         Z         .006         2           59         MP-11         Z         .005         .5           59         MP-11         Z         .005<		MP-2	Z		
MP-3	42	MP-2	Z	.016	
44         MP-3         Z         .007         .5           45         MP-4         Z         .011         .25           46         MP-4         Z         .007         2           47         MP-5         Z         .011         .25           48         MP-5         Z         .008         2           49         MP-6         Z         .008         2.25           50         MP-6         Z         .006         2           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .00					.5
45         MP-4         Z         .001         .25           46         MP-4         Z         .007         2           47         MP-5         Z         .011         .25           48         MP-5         Z         .008         2           49         MP-6         Z         .008         2.25           50         MP-6         Z         .016         2           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .					
46         MP-4         Z         .007         2           47         MP-5         Z         .011         .25           48         MP-5         Z         .008         2           49         MP-6         Z         .008         2.25           50         MP-6         Z         .016         2           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .006         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .00					
47         MP-5         Z         .011         .25           48         MP-5         Z         .008         2           49         MP-6         Z         .008         2.25           50         MP-6         Z         .016         2           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .				007	
48         MP-5         Z         .008         2           49         MP-6         Z         .008         2.25           50         MP-6         Z         .016         2           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         .2           62         MP-1         Z         .001         .5.5           63         MP-1         Z <td< td=""><td></td><td></td><td></td><td>011</td><td>25</td></td<>				011	25
49         MP-6         Z         .008         2.25           50         MP-6         Z         .016         2           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .005         2           62         MP-1         Z         .005         2           64         MP-3         Z         .008         4.25           64         MP-3         Z         .0					
50         MP-6         Z         .016         2           51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         .5           62         MP-1         Z         .005         .2           62         MP-1         Z         .001         .5.5           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z <td< td=""><td></td><td></td><td></td><td></td><td></td></td<>					
51         MP-7         Z         .007         .5           52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .005         2           63         MP-12         Z         .001         .5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         <					
52         MP-7         Z         .007         .5           53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .001         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z					5
53         MP-8         Z         .011         .25           54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .005         2           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-3         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z	52				
54         MP-8         Z         .007         2           55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .011         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z					25
55         MP-9         Z         .016         .25           56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .011         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           72         MP-9         Z					
56         MP-9         Z         .006         2           57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .011         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-3         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z					
57         MP-10         Z         .004         2.25           58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .011         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z		MP-9			
58         MP-11         Z         .005         .5           59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .011         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z					
59         MP-11         Z         .005         .5           60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .011         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z	58		7	005	5
60         MP-12         Z         .016         .25           61         MP-12         Z         .005         2           62         MP-1         Z         .011         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5	59				5
61         MP-12         Z         .005         2           62         MP-1         Z         .011         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5	60	MP-12			25
62         MP-1         Z         .011         5.5           63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5					
63         MP-2         Z         .008         4.25           64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5					5.5
64         MP-3         Z         .007         5.5           65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5					
65         MP-3         Z         .007         5.5           66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5					
66         MP-4         Z         .011         5.5           67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5					
67         MP-5         Z         .011         5.5           68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5		MP-4			
68         MP-6         Z         .008         4.25           69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5					
69         MP-7         Z         .007         5.5           70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5				.008	4.25
70         MP-7         Z         .007         5.5           71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5	69	MP-7			
71         MP-8         Z         .011         5.5           72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5					
72         MP-9         Z         .016         5.5           73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5					
73         MP-10         Z         .004         4.25           74         MP-11         Z         .005         5.5           75         MP-11         Z         .005         5.5					
74 MP-11 Z .005 5.5 75 MP-11 Z .005 5.5					
75 MP-11 Z .005 5.5					

#### Member Point Loads (BLC 37 : Seismic Load X)

	Member Label	Direction	Magnitude[k.k-ft]	Location[ft,%]
- 1	MP-1	X	011	.25
2	MP-1	X	084	2
3	MP-2	Х	041	2.25

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## Member Point Loads (BLC 37 : Seismic Load X) (Continued)

	Member Label	Direction	Magnitude[k.k-ft]	Location[ft.%]
4	MP-2	X	044	2
5	MP-3	X	02	.5
6	MP-3	X	02	.5
7	MP-4	X	011	.25
8	MP-4	X	07	2
9	MP-5	X	011	.25
10	MP-5	X	084	2
11	MP-6	X	041	2.25
12	MP-6	X	044	2
13	MP-7	X	02	.5
14	MP-7	X	02	.5
15	MP-8	X	011	.25
16	MP-8	X	07	2
17	MP-9	X	011	.25
18	MP-9	X	084	2
19	MP-10	X	041	2.25
20	MP-11	X	02	.5
21	MP-11	X	02	.5
22	MP-12	X	011	.25
23	MP-12	X	07	2
24	MP-1	X	011	5.5
25	MP-2	X	041	4.25
26	MP-3	X	02	5.5
27	MP-3	X	02	5.5
28	MP-4	X	011	5.5
29	MP-5	X	011	5.5
30	MP-6	X	041	4.25
31	MP-7	X	02	5.5
32	MP-7	X	02	5.5
33	MP-8	X	011	5.5
34	MP-9	X	011	5.5
35	MP-10	X	041	4.25
36	MP-11	X	02	5.5
37	MP-11	X	02	5.5
38	MP-12	X	011	5.5

#### Member Point Loads (BLC 38 : Seismic Load Z)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
1	MP-1	Z	011	.25
2	MP-1	Z	084	2
3	MP-2	Z	041	2.25
4	MP-2	Z	044	2
5	MP-3	Z	02	.5
6	MP-3	Z	02	.5
7	MP-4	Z	011	.25
8	MP-4	Z	07	2
9	MP-5	Z	011	.25
10	MP-5	Z	084	2
11	MP-6	Z	041	2.25
12	MP-6	Z	044	2
13	MP-7	Z	02	.5
14	MP-7	Z	02	.5
15	MP-8	Z	011	.25
16	MP-8	Z	07	2
17	MP-9	Z	011	.25
18	MP-9	Z	084	2

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## Member Point Loads (BLC 38 : Seismic Load Z) (Continued)

	Member Label	Direction	Magnitude[k,k-ft]	Location[ft,%]
19	MP-10	Z	041	2.25
20	MP-11	Z	02	.5
21	MP-11	Z	02	.5
22	MP-12	Z	011	.25
23	MP-12	Z	07	2
24	MP-1	Z	011	5.5
25	MP-2	Z	041	4.25
26	MP-3	Z	02	5.5
27	MP-3	Z	02	5.5
28	MP-4	Z	011	5.5
29	MP-5	Z	011	5.5
30	MP-6	Z	041	4.25
31	MP-7	Z	02	5.5
32	MP-7	Z	02	5.5
33	MP-8	Z	011	5.5
34	MP-9	Z	011	5.5
35	MP-10	Z	041	4.25
36	MP-11	Z	02	5.5
37	MP-11	Z	02	5.5
38	MP-12	Z	011	5.5

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	01	01	0	%100
2	FFTH-3	X	005	005	0	%100
3	FFTH-2	X	005	005	0	%100
4	SA-1	X	013	013	0	%100
5	SA-2	X	013	013	0	%100
6	SA-3	X	0	0	0	%100
7	CP-1	X	01	01	0	%100
8	CP-2	X	01	01	0	%100
9	CP-3	X	02	02	0	%100
10	SA-3B	X	0	0	0	%100
11	SA-2B	X	012	012	0	%100
12	SA-1B	X	012	012	0	%100
13	GSI-1	X	0	0	0	%100
14	GSI-2	X	0	0	0	%100
15	GSI-3	X	007	007	0	%100
16	GSI-4	X	007	007	0	%100
17	GSI-5	X	007	007	0	%100
18	GSI-6	X	007	007	0	%100
19	MP-1	X	008	008	0	%100
20	MP-2	X	008	008	0	%100
21	MP-3	X	008	008	0	%100
22	MP-4	X	008	008	0	%100
23	MP-9	X	008	008	0	%100
24	MP-10	X	008	008	0	%100
25	MP-11	X	008	008	0	%100
26	MP-12	X	008	008	0	%100
27	MP-5	X	008	008	0	%100
28	MP-6	X	008	008	0	%100
29	MP-7	X	008	008	0	%100
30	MP-8	X	008	008	0	%100
31	SFS-1	X	014	014	0	%100
32	SFS-2	Χ	014	014	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
33	SFS-3	X	014	014	0	%100
34	SFS-4	X	014	014	0	%100
35	SFS-5	X	014	014	0	%100
36	SFS-6	X	014	014	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	. End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	008	008	0	%100
2	FFTH-3	X	007	007	0	%100
3	FFTH-2	X	0	0	0	%100
4	SA-1	X	006	006	0	%100
5	SA-2	X	013	013	0	%100
6	SA-3	Х	004	004	0	%100
7	CP-1	Х	0	0	0	%100
8	CP-2	Х	015	015	0	%100
9	CP-3	X	015	015	0	%100
10	SA-3B	X	004	004	0	%100
11	SA-2B	X	012	012	0	%100
12	SA-1B	Х	006	006	0	%100
13	GSI-1	Х	002	002	0	%100
14	GSI-2	Х	002	002	0	%100
15	GSI-3	Х	003	003	0	%100
16	GSI-4	Х	003	003	0	%100
17	GSI-5	Х	007	007	0	%100
18	GSI-6	Х	007	007	0	%100
19	MP-1	Х	007	007	0	%100
20	MP-2	X	007	007	0	%100
21	MP-3	X	007	007	0	%100
22	MP-4	X	007	007	0	%100
23	MP-9	X	007	007	0	%100
24	MP-10	X	007	007	0	%100
25	MP-11	X	007	007	0	%100
26	MP-12	Х	007	007	0	%100
27	MP-5	Х	007	007	0	%100
28	MP-6	X	007	007	0	%100
29	MP-7	X	007	007	0	%100
30	MP-8	X	007	007	0	%100
31	SFS-1	Х	012	012	0	%100
32	SFS-2	Х	012	012	0	%100
33	SFS-3	Х	012	012	0	%100
34	SFS-4	Х	012	012	0	%100
35	SFS-5	Х	012	012	0	%100
36	SFS-6	Х	012	012	0	%100
37	FFTH-1	Z	004	004	0	%100
38	FFTH-3	Z	004	004	0	%100
39	FFTH-2	Z	0	0	0	%100
40	SA-1	Z	003	003	0	%100
41	SA-2	Z	006	006	0	%100
42	SA-3	Z	004	004	0	%100
43	CP-1	Z	0	0	0	%100
44	CP-2	Z	009	009	0	%100
45	CP-3	Z	009	009	0	%100
46	SA-3B	Z	004	004	0	%100
47	SA-2B	Z	006	006	0	%100
48	SA-1B	Z	003	003	0	%100
49	GSI-1	Z	002	002	0	%100
	2.2				-	



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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft.F	. Start Location[ft,%]	End Location[ft,%]
50	GSI-2	Z	002	002	0	%100
51	GSI-3	Z	002	002	0	%100
52	GSI-4	Z	002	002	0	%100
53	GSI-5	Z	003	003	0	%100
54	GSI-6	Z	003	003	0	%100
55	MP-1	Z	004	004	0	%100
56	MP-2	Z	004	004	0	%100
57	MP-3	Z	004	004	0	%100
58	MP-4	Z	004	004	0	%100
59	MP-9	Z	004	004	0	%100
60	MP-10	Z	004	004	0	%100
61	MP-11	Z	004	004	0	%100
62	MP-12	Z	004	004	0	%100
63	MP-5	Z	004	004	0	%100
64	MP-6	Z	004	004	0	%100
65	MP-7	Z	004	004	0	%100
66	MP-8	Z	004	004	0	%100
67	SFS-1	Z	007	007	0	%100
68	SFS-2	Z	007	007	0	%100
69	SFS-3	Z	007	007	0	%100
70	SFS-4	Z	007	007	0	%100
71	SFS-5	Z	007	007	0	%100
72	SFS-6	Z	007	007	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
_ 1	FFTH-1	X	005	005	0	%100
2	FFTH-3	X	007	007	0	%100
3	FFTH-2	X	002	002	0	%100
4	SA-1	X	003	003	0	%100
5	SA-2	X	01	01	0	%100
6	SA-3	X	005	005	0	%100
7	CP-1	X	004	004	0	%100
8	CP-2	X	014	014	0	%100
9	CP-3	X	01	01	0	%100
10	SA-3B	X	005	005	0	%100
11	SA-2B	X	009	009	0	%100
12	SA-1B	X	002	002	0	%100
13	GSI-1	X	003	003	0	%100
14	GSI-2	X	003	003	0	%100
15	GSI-3	X	001	001	0	%100
16	GSI-4	X	001	001	0	%100
17	GSI-5	X	005	005	0	%100
18	GSI-6	X	005	005	0	%100
19	MP-1	X	006	006	0	%100
20	MP-2	X	006	006	0	%100
21	MP-3	X	006	006	0	%100
22	MP-4	X	006	006	0	%100
23	MP-9	X	006	006	0	%100
24	MP-10	X	006	006	0	%100
25	MP-11	Х	006	006	0	%100
26	MP-12	Х	006	006	0	%100
27	MP-5	Х	006	006	0	%100
28	MP-6	X	006	006	0	%100
29	MP-7	Х	006	006	0	%100
30	MP-8	Χ	006	006	0	%100

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

31	Member Label	Direction		End Magnitude[k/ft,F		End Location[ft,%]
32	SFS-1 SFS-2	X	01 01	01 01	0	%100 %100
33	SFS-3	X	01	01	0	%100 %100
34	SFS-4	X	01	01	0	%100 %100
35	SFS-5	X	01	01	0	%100 %100
36	SFS-6	X	01	01	0	%100 %100
37	FFTH-1	Z	005	005	0	%100 %100
38	FFTH-3	Z	007	007	0	%100 %100
39	FFTH-2	7	002	002	0	%100 %100
40	SA-1	Z	002	002	0	%100 %100
41	SA-2	Z	009	009	0	%100 %100
42	SA-3	Z	008	008	0	%100 %100
43	CP-1	Z	004	004	0	%100
44	CP-2	Z	014	014	0	%100
45	CP-3	Z	01	01	0	%100
46	SA-3B	Z	007	007	0	%100
47	SA-2B	Z	008	008	0	%100
48	SA-1B	Z	002	002	Ö	%100
49	GSI-1		004	004	0	%100
50	GSI-2	Z	004	004	0	%100
51	GSI-3	Z	001	001	0	%100
52	GSI-4	Z	001	001	0	%100
53	GSI-5	Z	004	004	0	%100
54	GSI-6	Z	004	004	0	%100
55	MP-1	Z	006	006	0	%100
56	MP-2	Z	006	006	0	%100
57	MP-3	Z	006	006	0	%100
58	MP-4	Z	006	006	0	%100
59	MP-9	Z	006	006	0	%100
60	MP-10	Z	006	006	0	%100
61	MP-11	Z	006	006	0	%100
62	MP-12	Z	006	006	0	%100
63	MP-5	Z	006	006	0	%100
64	MP-6	Z	006	006	0	%100
65	MP-7	Z	006	006	0	%100
66	MP-8	Z	006	006	0	%100
67	SFS-1	Z	01	01	0	%100
68	SFS-2	Z	01	01	0	%100
69	SFS-3	Z	01	01	0	%100
70	SFS-4	Z	01	01	0	%100
71	SFS-5	Z	01	01	0	%100
72	SFS-6	Z	01	01	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	003	003	0	%100
2	FFTH-3	X	005	005	0	%100
3	FFTH-2	Χ	002	002	0	%100
4	SA-1	Χ	0	0	0	%100
5	SA-2	X	006	006	0	%100
6	SA-3	Χ	004	004	0	%100
7	CP-1	X	005	005	0	%100
8	CP-2	Х	01	01	0	%100
9	CP-3	X	005	005	0	%100
10	SA-3B	X	004	004	0	%100
11	SA-2B	X	006	006	0	%100

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

	Member Label	Direction		. End Magnitude[k/ft.F		End Location[ft,%]
12	SA-1B	X	0	0	0	%100
13	GSI-1	X	002	002	0	%100
14	GSI-2	X	002	002	0	%100
15	GSI-3	X	0	0	0	%100
16	GSI-4	Х	0	0	0	%100
17	GSI-5	X	003	003	0	%100
18	GSI-6	X	003	003	0	%100
19	MP-1	X	004	004	0	%100
20	MP-2	X	004	004	0	%100
21	MP-3	X	004	004	0	%100
22	MP-4	X	004	004	0	%100
23	MP-9	X	004	004	0	%100
24	MP-10	X	004	004	0	%100
25	MP-11	X	004	004	0	%100
26	MP-12	X	004	004	0	%100
27	MP-5	X	004	004	0	%100
28	MP-6	X	004	004	0	%100
29	MP-7	X	004	004	0	%100
30	MP-8	X	004	004	0	%100
31	SFS-1	X	007	007	0	%100
32	SFS-2	Х	007	007	0	%100
33	SFS-3	X	007	007	0	%100
34	SFS-4	X	007	007	0	%100
35	SFS-5	Х	007	007	0	%100
36	SFS-6	X	007	007	0	%100
37	FFTH-1	Z	004	004	0	%100
38	FFTH-3	Z	009	009	0	%100
39	FFTH-2	Z	004	004	0	%100
40	SA-1	Z	0	0	0	%100
41	SA-2	Z	009	009	0	%100
42	SA-3		012	012	0	%100
43	CP-1	Z	009	009	0	%100
44	CP-2	Z	017	017	Ŏ	%100
45	CP-3	Z	009	009	0	%100
46	SA-3B	Z	011	011	0	%100
47	SA-2B	Z	009	009	0	%100
48	SA-1B	Z	0	0	0	%100
49	GSI-1	Z	006	006	0	%100
50	GSI-2	Z	006	006	0	%100 %100
51	GSI-3	Z	0	0	0	%100 %100
52	GSI-4	7	0	0	0	%100 %100
53	GSI-5	Z	005	005	0	%100 %100
54	GSI-6	Z	005	005	0	%100 %100
55	MP-1	Z	007	007	0	%100 %100
56	MP-2	Z	007	007	0	%100 %100
57	MP-3	Z	007	007	0	%100 %100
58	MP-4	Z	007	007	0	%100 %100
59	MP-9	Z	007	007	0	%100 %100
60	MP-10	Z	007	007	0	%100 %100
61	MP-10 MP-11	Z	007	007	0	%100 %100
62	MP-11 MP-12	Z	007	007	0	%100 %100
63	MP-5	<u>Z</u> Z	007	007	0	%100 %100
64	MP-6		007	007	0	%100
65	MP-7	Z	007	007	0	%100
66	MP-8	Z	007	007	0	%100
67	SFS-1	Z	012	012	0	%100
68	SFS-2	Z	012	012	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	Start Location[ft,%]	End Location[ft,%]
69	SFS-3	Z	012	012	0	%100
70	SFS-4	Z	012	012	0	%100
71	SFS-5	Z	012	012	0	%100
72	SFS-6	Z	012	012	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	Z	0	0	0	%100
2	FFTH-3	Z	009	009	0	%100
3	FFTH-2	Z	009	009	0	%100
4	SA-1	Z	006	006	0	%100
5	SA-2	Z	006	006	0	%100
6	SA-3	Z	016	016	0	%100
7	CP-1	Z	017	017	0	%100
8	CP-2	Z	017	017	0	%100
9	CP-3	Z	0	0	0	%100
10	SA-3B	Z	014	014	0	%100
11	SA-2B	Z	006	006	0	%100
12	SA-1B	Z	006	006	0	%100
13	GSI-1	Z	008	008	0	%100
14	GSI-2	Z	008	008	0	%100
15	GSI-3	Z	003	003	0	%100
16	GSI-4	Z	003	003	0	%100
17	GSI-5	Z	003	003	0	%100
18	GSI-6	Z	003	003	0	%100
19	MP-1	Z	008	008	0	%100
20	MP-2	Z	008	008	0	%100
21	MP-3	Z	008	008	0	%100
22	MP-4	Z	008	008	0	%100
23	MP-9	Z	008	008	0	%100
24	MP-10	Z	008	008	0	%100
25	MP-11	Z	008	008	0	%100
26	MP-12	Z	008	008	0	%100
27	MP-5	Z	008	008	0	%100
28	MP-6	Z	008	008	0	%100
29	MP-7	Z	008	008	0	%100
30	MP-8	Z	008	008	0	%100
31	SFS-1	Z	014	014	0	%100
32	SFS-2	Z	014	014	0	%100
33	SFS-3	Z	014	014	0	%100
34	SFS-4	Z	014	014	0	%100
35	SFS-5	Z	014	014	0	%100
36	SFS-6	Z	014	014	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	.003	.003	0	%100
2	FFTH-3	X	.002	.002	0	%100
3	FFTH-2	X	.005	.005	0	%100
4	SA-1	X	.006	.006	0	%100
5	SA-2	Х	0	0	0	%100
6	SA-3	Х	.004	.004	0	%100
7	CP-1	X	.01	.01	0	%100
8	CP-2	X	.005	.005	0	%100
9	CP-3	X	.005	.005	0	%100
10	SA-3B	Χ	.004	.004	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	. End Magnitude[k/ft.F	Start Location[ft,%]	End Location[ft,%]
11	SA-2B	X	0	0	0	%100
12	SA-1B	X	.006	.006	0	%100
13	GSI-1	X	.002	.002	0	%100
14	GSI-2	X	.002	.002	0	%100
15	GSI-3	X	.003	.003	0	%100
16	GSI-4	X	.003	.003	Ů Ů	%100
17	GSI-5	X	0	0	0	%100
18	GSI-6	X	0	0	0	%100 %100
19	MP-1	X	.004	.004	0	%100 %100
20	MP-2	X	.004	.004	0	%100 %100
21	MP-3	X	.004	.004	0	%100 %100
	MP-4	x			0	
22		X	.004	.004		%100
23	MP-9		.004	.004	0	%100
24	MP-10	X	.004	.004	0	%100
25	MP-11	X	.004	.004	0	%100
26	MP-12	X	.004	.004	0	%100
27	MP-5	X	.004	.004	0	%100
28	MP-6	X	.004	.004	0	%100
29	MP-7	X	.004	.004	0	%100
30	MP-8	X	.004	.004	0	%100
31	SFS-1	X	.007	.007	0	%100
32	SFS-2	X	.007	.007	0	%100
33	SFS-3	X	.007	.007	0	%100
34	SFS-4	X	.007	.007	0	%100
35	SFS-5	X	.007	.007	0	%100
36	SFS-6	X	.007	.007	0	%100
37	FFTH-1	Z	004	004	0	%100
38	FFTH-3	Z	004	004	0	%100
39	FFTH-2	Z	009	009	0	%100
40	SA-1	Z	009	009	Ö	%100
41	SA-2	Z	0	0	0	%100
42	SA-3	Z	012	012	0	%100 %100
43	CP-1	Z	017	012	0	%100 %100
44	CP-2	7	009	009	0	%100 %100
45	CP-3	Z	009	009	0	%100 %100
46	SA-3B	Z	011	011	0	%100 %100
47	SA-3B SA-2B	Z	011	011	0	%100 %100
		7			0	
48	SA-1B		009	009		%100
49	<u>GSI-1</u>	Z	006	006	0	%100
50	GSI-2	Z	006	006	0	%100
51	GSI-3	Z	005	005	0	%100
52	GSI-4	Z	005	005	0	%100
53	GSI-5	Z	0	0	0	%100
54	GSI-6	Z	0	0	0	%100
_55	MP-1	Z	007	007	0	%100
56	MP-2	Z	007	007	0	%100
57	MP-3	Z	007	007	0	%100
58	MP-4	Z	007	007	0	%100
59	MP-9	Z	007	007	0	%100
60	MP-10	Z	007	007	0	%100
61	MP-11	Z	007	007	0	%100
62	MP-12	Z	007	007	0	%100
63	MP-5	Z	007	007	0	%100
64	MP-6	Z	007	007	0	%100
65	MP-7	Z	007	007	0	%100
66	MP-8	Z	007	007	0	%100
67	SFS-1	Z	012	012	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude(k/ft.F	. Start Location[ft,%]	End Location[ft,%]
68	SFS-2	Z	012	012	0	%100
69	SFS-3	Z	012	012	0	%100
70	SFS-4	Z	012	012	0	%100
71	SFS-5	Z	012	012	0	%100
72	SFS-6	Z	012	012	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	.005	.005	0	%100
2	FFTH-3	Χ	.002	.002	0	%100
3	FFTH-2	Χ	.007	.007	0	%100
4	SA-1	Χ	.01	.01	0	%100
5	SA-2	Χ	.003	.003	0	%100
6	SA-3	X	.005	.005	0	%100
7	CP-1	X	.014	.014	0	%100
8	CP-2	Χ	.004	.004	0	%100
9	CP-3	Χ	.01	.01	0	%100
10	SA-3B	Χ	.005	.005	0	%100
11	SA-2B	Χ	.002	.002	0	%100
12	SA-1B	Χ	.009	.009	0	%100
13	GSI-1	X	.003	.003	0	%100
14	GSI-2	X	.003	.003	0	%100
15	GSI-3	X	.005	.005	0	%100
16	GSI-4	X	.005	.005	0	%100
17	GSI-5	Х	.001	.001	0	%100
18	GSI-6	Х	.001	.001	0	%100
19	MP-1	X	.006	.006	0	%100
20	MP-2	X	.006	.006	0	%100
21	MP-3	Х	.006	.006	0	%100
22	MP-4	X	.006	.006	0	%100
23	MP-9	X	.006	.006	0	%100
24	MP-10	X	.006	.006	0	%100
25	MP-11	X	.006	.006	0	%100
26	MP-12	X	.006	.006	0	%100
27	MP-5	X	.006	.006	0	%100
28	MP-6	X	.006	.006	0	%100
29	MP-7	X	.006	.006	0	%100
30	MP-8	X	.006	.006	0	%100
31	SFS-1	X	.01	.01	0	%100
32	SFS-2	X	.01	.01	0	%100
33	SFS-3	X	.01	.01	0	%100
34	SFS-4	X	.01	.01	0	%100
35	SFS-5	X	.01	.01	0	%100
36	SFS-6	X	.01	.01	Ö	%100
37	FFTH-1	Ž	005	005	0	%100
38	FFTH-3	Z	002	002	Ö	%100
39	FFTH-2	Z	007	007	0	%100
40	SA-1	Z	009	009	0	%100
41	SA-2	 Z	002	002	0	%100
42	SA-3	Z	008	008	0	%100
43	CP-1	<u></u>	014	014	0	%100
44	CP-2	Z	004	004	0	%100
45	CP-3	Z Z	01	01	0	%100 %100
46	SA-3B	<u>Z</u>	007	007	0	%100 %100
47	SA-2B	Z Z	002	002	0	%100 %100
48	SA-1B	7	008	008	0	%100 %100
40	OV-1D		000	000	U	/0100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
49	GSI-1	Z	004	004	0	%100
50	GSI-2	Z	004	004	0	%100
51	GSI-3	Z	004	004	0	%100
52	GSI-4	Z	004	004	0	%100
53	GSI-5	Z	001	001	0	%100
54	GSI-6	Z	001	001	0	%100
55	MP-1	Z	006	006	0	%100
56	MP-2	Z	006	006	0	%100
57	MP-3	Z	006	006	0	%100
58	MP-4	Z	006	006	0	%100
59	MP-9	Z	006	006	0	%100
60	MP-10	Z	006	006	0	%100
61	MP-11	Z	006	006	0	%100
62	MP-12	Z	006	006	0	%100
63	MP-5	Z	006	006	0	%100
64	MP-6	Z	006	006	0	%100
65	MP-7	Z	006	006	0	%100
66	MP-8	Z	006	006	0	%100
67	SFS-1	Z	01	01	0	%100
68	SFS-2	Z	01	01	0	%100
69	SFS-3	Z	01	01	0	%100
70	SFS-4	Z	01	01	0	%100
71	SFS-5	Z	01	01	0	%100
72	SFS-6	Z	01	01	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	.008	.008	0	%100
2	FFTH-3	X	0	0	0	%100
3	FFTH-2	X	.007	.007	0	%100
4	SA-1	X	.013	.013	0	%100
5	SA-2	X	.006	.006	0	%100
6	SA-3	X	.004	.004	0	%100
7	CP-1	X	.015	.015	0	%100
8	CP-2	X	0	0	0	%100
9	CP-3	X	.015	.015	0	%100
10	SA-3B	X	.004	.004	0	%100
11	SA-2B	X	.006	.006	0	%100
12	SA-1B	X	.012	.012	0	%100
13	GSI-1	X	.002	.002	0	%100
14	GSI-2	X	.002	.002	0	%100
15	GSI-3	X	.007	.007	0	%100
16	GSI-4	X	.007	.007	0	%100
17	GSI-5	X	.003	.003	0	%100
18	GSI-6	X	.003	.003	0	%100
19	MP-1	X	.007	.007	0	%100
20	MP-2	X	.007	.007	0	%100
21	MP-3	X	.007	.007	0	%100
22	MP-4	X	.007	.007	0	%100
23	MP-9	X	.007	.007	0	%100
24	MP-10	X	.007	.007	0	%100
25	MP-11	X	.007	.007	0	%100
26	MP-12	X	.007	.007	0	%100
27	MP-5	X	.007	.007	0	%100
28	MP-6	X	.007	.007	0	%100
29	MP-7	X	.007	.007	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
30	MP-8	X	.007	.007	0	%100
31	SFS-1	X	.012	.012	0	%100
32	SFS-2	Χ	.012	.012	0	%100
33	SFS-3	X	.012	.012	0	%100
34	SFS-4	Χ	.012	.012	0	%100
35	SFS-5	X	.012	.012	0	%100
36	SFS-6	Χ	.012	.012	0	%100
37	FFTH-1	Z	004	004	0	%100
38	FFTH-3	Z	0	0	0	%100
39	FFTH-2	Z	004	004	0	%100
40	SA-1	Z	006	006	0	%100
41	SA-2	Z	003	003	0	%100
42	SA-3	Z	004	004	0	%100
43	CP-1	Z	009	009	0	%100
44	CP-2	Z	0	0	0	%100
45	CP-3	Z	009	009	0	%100
46	SA-3B	Z	004	004	0	%100
47	SA-2B	Z	003	003	0	%100
48	SA-1B	Z	006	006	0	%100
49	GSI-1	Z	002	002	0	%100
50	GSI-2	Z	002	002	0	%100
51	GSI-3	Z	003	003	0	%100
52	GSI-4	Z	003	003	0	%100
53	GSI-5	Z	002	002	0	%100
54	GSI-6	Z	002	002	0	%100
55	MP-1	Z	004	004	0	%100
56	MP-2	Z	004	004	0	%100
57	MP-3	Z	004	004	0	%100
58	MP-4	Z	004	004	0	%100
59	MP-9	Z	004	004	0	%100
60	MP-10	Z	004	004	0	%100
61	MP-11	Z	004	004	0	%100
62	MP-12	Z	004	004	0	%100
63	MP-5	Z	004	004	0	%100
64	MP-6	Z	004	004	0	%100
65	MP-7	Z	004	004	0	%100
66	MP-8	Z	004	004	0	%100
67	SFS-1	Z	007	007	0	%100
68	SFS-2	Z	007	007	0	%100
69	SFS-3	Z	007	007	0	%100
70	SFS-4	Z	007	007	0	%100
71	SFS-5	Z	007	007	0	%100
72	SFS-6	Z	007	007	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	.01	.01	0	%100
2	FFTH-3	Χ	.005	.005	0	%100
3	FFTH-2	Χ	.005	.005	0	%100
4	SA-1	Χ	.013	.013	0	%100
5	SA-2	Χ	.013	.013	0	%100
6	SA-3	Χ	0	0	0	%100
7	CP-1	X	.01	.01	0	%100
8	CP-2	Χ	.01	.01	0	%100
9	CP-3	X	.02	.02	0	%100
10	SA-3B	Χ	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
11	SA-2B	Χ	.012	.012	0	%100
12	SA-1B	Χ	.012	.012	0	%100
13	GSI-1	X	0	0	0	%100
14	GSI-2	X	0	0	0	%100
15	GSI-3	X	.007	.007	0	%100
16	GSI-4	Χ	.007	.007	0	%100
17	GSI-5	X	.007	.007	0	%100
18	GSI-6	Χ	.007	.007	0	%100
19	MP-1	X	.008	.008	0	%100
20	MP-2	X	.008	.008	0	%100
21	MP-3	X	.008	.008	0	%100
22	MP-4	Χ	.008	.008	0	%100
23	MP-9	Χ	.008	.008	0	%100
24	MP-10	Χ	.008	.008	0	%100
25	MP-11	Χ	.008	.008	0	%100
26	MP-12	X	.008	.008	0	%100
27	MP-5	X	.008	.008	0	%100
28	MP-6	X	.008	.008	0	%100
29	MP-7	X	.008	.008	0	%100
30	MP-8	X	.008	.008	0	%100
31	SFS-1	Χ	.014	.014	0	%100
32	SFS-2	Χ	.014	.014	0	%100
33	SFS-3	Χ	.014	.014	0	%100
34	SFS-4	X	.014	.014	0	%100
35	SFS-5	X	.014	.014	0	%100
36	SFS-6	X	.014	.014	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	.008	.008	0	%100
2	FFTH-3	X	.007	.007	0	%100
3	FFTH-2	X	0	0	0	%100
4	SA-1	X	.006	.006	0	%100
5	SA-2	X	.013	.013	0	%100
6	SA-3	X	.004	.004	0	%100
7	CP-1	X	0	0	0	%100
8	CP-2	X	.015	.015	0	%100
9	CP-3	X	.015	.015	0	%100
10	SA-3B	X	.004	.004	0	%100
11	SA-2B	X	.012	.012	0	%100
12	SA-1B	X	.006	.006	0	%100
13	GSI-1	X	.002	.002	0	%100
14	GSI-2	X	.002	.002	0	%100
15	GSI-3	X	.003	.003	0	%100
16	GSI-4	X	.003	.003	0	%100
17	GSI-5	X	.007	.007	0	%100
18	GSI-6	X	.007	.007	0	%100
19	MP-1	X	.007	.007	0	%100
20	MP-2	X	.007	.007	0	%100
21	MP-3	X	.007	.007	0	%100
22	MP-4	X	.007	.007	0	%100
23	MP-9	X	.007	.007	0	%100
24	MP-10	X	.007	.007	0	%100
25	MP-11	X	.007	.007	0	%100
26	MP-12	X	.007	.007	0	%100
27	MP-5	X	.007	.007	0	%100

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Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW TEP No. 25661.584643 Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction		End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft.%]
28	MP-6	X	.007	.007	0	%100
29	MP-7	X	.007	.007	0	%100
30	MP-8	X	.007	.007	0	%100
31	SFS-1	X	.012	.012	0	%100
32	SFS-2	X	.012	.012	0	%100
33	SFS-3	X	.012	.012	0	%100
34	SFS-4	X	.012	.012	0	%100
35	SFS-5	X	.012	.012	0	%100
36	SFS-6	X	.012	.012	0	%100
37	FFTH-1	Z	.004	.004	0	%100
38	FFTH-3	Z	.004	.004	0	%100
39	FFTH-2	Z	0	0	0	%100
40	SA-1	Z	.003	.003	0	%100
41	SA-2	Z	.006	.006	0	%100
42	SA-3	Z	.004	.004	0	%100
43	CP-1	Z	0	0	0	%100
44	CP-2	Z	.009	.009	0	%100
45	CP-3	Z	.009	.009	0	%100
46	SA-3B	Z	.004	.004	Ö	%100
47	SA-2B	Z	.006	.006	0	%100
48	SA-1B	Z	.003	.003	Ö	%100
49	GSI-1	Z	.002	.002	0	%100
50	GSI-2	Z	.002	.002	0	%100
51	GSI-3	Z	.002	.002	0	%100
52	GSI-4	Z	.002	.002	Ö	%100
53	GSI-5	Z	.003	.003	0	%100
54	GSI-6	Z	.003	.003	Ů.	%100
55	MP-1	Z	.004	.004	0	%100
56	MP-2	Z	.004	.004	0	%100
57	MP-3	Z	.004	.004	0	%100
58	MP-4	Z	.004	.004	0	%100
59	MP-9	Z	.004	.004	0	%100 %100
60	MP-10	Z	.004	.004	0	%100 %100
61	MP-11	Z	.004	.004	0	%100
62	MP-12	Z	.004	.004	Ö	%100
63	MP-5	Z	.004	.004	0	%100
64	MP-6	Z	.004	.004	0	%100
65	MP-7	Z	.004	.004	0	%100
66	MP-8	Z	.004	.004	0	%100 %100
67	SFS-1	Z	.007	.007	0	%100
68	SFS-2	Z	.007	.007	0	%100 %100
69	SFS-3	Z	.007	.007	0	%100 %100
70	SFS-4	Z	.007	.007	0	%100 %100
71	SFS-5	Z	.007	.007	0	%100 %100
72	SFS-6	Z	.007	.007	0	%100 %100
16	01 0-0	_	.007	.007	U	/0100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	Χ	.005	.005	0	%100
2	FFTH-3	X	.007	.007	0	%100
3	FFTH-2	Х	.002	.002	0	%100
4	SA-1	X	.003	.003	0	%100
5	SA-2	Х	.01	.01	0	%100
6	SA-3	Χ	.005	.005	0	%100
7	CP-1	X	.004	.004	0	%100
8	CP-2	Χ	.014	.014	0	%100
						,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,

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

	Member Label	Direction		End Magnitude[k/ft,F,.		End Location[ft,%]
9	CP-3	X	.01	.01	0	%100
10	SA-3B	X	.005	.005	0	%100
11	SA-2B	X	.009	.009	0	%100
12	SA-1B	X	.002	.002	0	%100
13	GSI-1	X	.003	.003	0	%100
14	GSI-2	X	.003	.003	0	%100
15	GSI-3	X	.001	.001	0	%100
16	GSI-4	X	.001	.001	0	%100
17	GSI-5	X	.005	.005	0	%100
18	GSI-6	X	.005	.005	0	%100
19	MP-1	X	.006	.006	0	%100
20	MP-2	X	.006	.006	0	%100
21	MP-3	X	.006	.006	0	%100
22	MP-4	X	.006	.006	0	%100
23	MP-9	Х	.006	.006	0	%100
24	MP-10	X	.006	.006	0	%100
25	MP-11	Х	.006	.006	0	%100
26	MP-12	Х	.006	.006	0	%100
27	MP-5	Х	.006	.006	0	%100
28	MP-6	Х	.006	.006	0	%100
29	MP-7	Х	.006	.006	0	%100
30	MP-8	X	.006	.006	0	%100
31	SFS-1	Х	.01	.01	0	%100
32	SFS-2	X	.01	.01	0	%100
33	SFS-3	X	.01	.01	0	%100
34	SFS-4	X	.01	.01	Ů,	%100
35	SFS-5	X	.01	.01	0	%100
36	SFS-6	X	.01	.01	Ö	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-3	Z	.007	.007	Ö	%100
39	FFTH-2	Z	.002	.002	0	%100
40	SA-1	Z	.002	.002	0	%100 %100
41	SA-2	Z	.009	.009	0	%100
42	SA-3	Z	.008	.008	0	%100 %100
43	CP-1	Z	.004	.004	0	%100
44	CP-2	Z	.014	.014	0	%100
45	CP-3	Z	.01	.01	0	%100
46	SA-3B	Z	.007	.007	0	%100
47	SA-2B	Z	.008	.008	0	%100 %100
48	SA-1B	7	.002	.002	0	%100 %100
49	GSI-1	Z	.004	.004	0	%100 %100
50	GSI-2	Z	.004	.004	0	%100 %100
51	GSI-3	Z	.001	.001	0	%100 %100
52	GSI-4	Z	.001	.001	0	%100 %100
53	GSI-5	Z	.004	.004	0	%100 %100
54	GSI-6	Z	.004	.004	0	%100 %100
55	MP-1	Z	.006	.004	0	%100 %100
56	MP-2	Z	.006	.006	0	%100 %100
57	MP-3	<u> </u>	.006	.006	0	%100 %100
58	MP-4	Z	.006	.006	0	%100 %100
59	MP-9	Z	.006	.006	0	%100 %100
60	MP-10	Z	.006	.006	0	%100 %100
61	MP-11	Z	.006	.006	0	%100 %100
62	MP-12	Z	.006	.006	0	%100 %100
63	MP-5	Z	.006	.006	0	%100 %100
64	MP-6	Z	.006	.006	0	%100 %100
	MP-7	Z			0	
65	IVIP-/	<u> </u>	.006	.006		%100

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Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW
TEP No. 25661.584643
Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft.F	. Start Location[ft,%]	End Location[ft,%]
66	MP-8	Z	.006	.006	0	%100
67	SFS-1	Z	.01	.01	0	%100
68	SFS-2	Z	.01	.01	0	%100
69	SFS-3	Z	.01	.01	0	%100
70	SFS-4	Z	.01	.01	0	%100
71	SFS-5	Z	.01	.01	0	%100
72	SFS-6	Z	.01	.01	0	%100

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

	Member Label	Direction		End Magnitude[k/ft,F,		End Location[ft,%]
1	FFTH-1	X	.003	.003	0	%100
2	FFTH-3	X	.005	.005	0	%100
3	FFTH-2	X	.002	.002	0	%100
4	SA-1	X	0	0	0	%100
5	SA-2	X	.006	.006	0	%100
6	<u>SA-3</u>	X	.004	.004	0	%100
7	<u>CP-1</u>	X	.005	.005	0	%100
8	CP-2	X	.01	.01	0	%100
9	CP-3	X	.005	.005	0	%100
10	SA-3B	X	.004	.004	0	%100
11	SA-2B	X	.006	.006	0	%100
12	SA-1B	X	0	0	0	%100
13	GSI-1	X	.002	.002	0	%100
14	GSI-2	X	.002	.002	0	%100
15	GSI-3	X	0	0	0	%100
16	GSI-4	X	0	0	0	%100
17	GSI-5	X	.003	.003	0	%100
18	GSI-6	X	.003	.003	0	%100
19	MP-1	X	.004	.004	0	%100
20	MP-2	X	.004	.004	0	%100
21	MP-3	X	.004	.004	0	%100
22	MP-4	X	.004	.004	0	%100
23	MP-9	X	.004	.004	0	%100
24	MP-10	X	.004	.004	0	%100
25	MP-11	X	.004	.004	0	%100
26	MP-12	X	.004	.004	0	%100
27	MP-5	X	.004	.004	0	%100
28	MP-6	X	.004	.004	0	%100
29	MP-7	X	.004	.004	0	%100
30	MP-8	X	.004	.004	0	%100
31	SFS-1	X	.007	.007	0	%100
32	SFS-2	X	.007	.007	0	%100
33	SFS-3	X	.007	.007	0	%100
34	SFS-4	X	.007	.007	0	%100
35	SFS-5	X	.007	.007	0	%100
36	SFS-6	X	.007	.007	0	%100
37	FFTH-1	Z	.004	.004	0	%100 %100
38	FFTH-3		.009	.009	0	%100
39	FFTH-2	<u>Z</u>	.004	.004	0	%100
40	SA-1	_	0	0	0	%100
41	SA-2	Z	.009	.009	0	%100
42	SA-3	Z	.012	.012	0	%100
43	CP-1	Z	.009	.009	0	%100
44	CP-2		.017	.017	0	%100
45	CP-3	Z	.009	.009	0	%100
46	SA-3B	Z	.011	.011	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
47	SA-2B	Z	.009	.009	0	%100
48	SA-1B	Z	0	0	0	%100
49	GSI-1	Z	.006	.006	0	%100
50	GSI-2	Z	.006	.006	0	%100
51	GSI-3	Z	0	0	0	%100
52	GSI-4	Z	0	0	0	%100
53	GSI-5	Z	.005	.005	0	%100
54	GSI-6	Z	.005	.005	0	%100
55	MP-1	Z	.007	.007	0	%100
56	MP-2	Z	.007	.007	0	%100
57	MP-3	Z	.007	.007	0	%100
58	MP-4	Z	.007	.007	0	%100
59	MP-9	Z	.007	.007	0	%100
60	MP-10	Z	.007	.007	0	%100
61	MP-11	Z	.007	.007	0	%100
62	MP-12	Z	.007	.007	0	%100
63	MP-5	Z	.007	.007	0	%100
64	MP-6	Z	.007	.007	0	%100
65	MP-7	Z	.007	.007	0	%100
66	MP-8	Z	.007	.007	0	%100
67	SFS-1	Z	.012	.012	0	%100
68	SFS-2	Z	.012	.012	0	%100
69	SFS-3	Z	.012	.012	0	%100
70	SFS-4	Z	.012	.012	0	%100
71	SFS-5	Z	.012	.012	0	%100
72	SFS-6	Z	.012	.012	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	Z	0	0	0	%100
2	FFTH-3	Z	.009	.009	0	%100
3	FFTH-2	Z	.009	.009	0	%100
4	SA-1	Z	.006	.006	0	%100
5	SA-2	Z	.006	.006	0	%100
6	SA-3	Z	.016	.016	0	%100
7	CP-1	Z	.017	.017	0	%100
8	CP-2	Z	.017	.017	0	%100
9	CP-3	Z	0	0	0	%100
10	SA-3B	Z	.014	.014	0	%100
11	SA-2B	Z	.006	.006	0	%100
12	SA-1B	Z	.006	.006	0	%100
13	GSI-1	Z	.008	.008	0	%100
14	GSI-2	Z	.008	.008	0	%100
15	GSI-3	Z	.003	.003	0	%100
16	GSI-4	Z	.003	.003	0	%100
17	GSI-5	Z	.003	.003	0	%100
18	GSI-6	Z	.003	.003	0	%100
19	MP-1	Z	.008	.008	0	%100
20	MP-2	Z	.008	.008	0	%100
21	MP-3	Z	.008	.008	0	%100
22	MP-4	Z	.008	.008	0	%100
23	MP-9	Z	.008	.008	0	%100
24	MP-10	Z	.008	.008	0	%100
25	MP-11	Z	.008	.008	0	%100
26	MP-12	Z	.008	.008	0	%100
27	MP-5	Z	.008	.008	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
28	MP-6	Z	.008	.008	0	%100
29	MP-7	Z	.008	.008	0	%100
30	MP-8	Z	.008	.008	0	%100
31	SFS-1	Z	.014	.014	0	%100
32	SFS-2	Z	.014	.014	0	%100
33	SFS-3	Z	.014	.014	0	%100
34	SFS-4	Z	.014	.014	0	%100
35	SFS-5	Z	.014	.014	0	%100
36	SFS-6	Z	.014	.014	0	%100

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

	Member Label	Direction		End Magnitude[k/ft,F,		End Location[ft,%
1	FFTH-1	X	003	003	0	%100
2	FFTH-3	X	002	002	0	%100
3	FFTH-2	X	005	005	0	%100
4	SA-1	X	006	006	0	%100
5	SA-2	X	0	0	0	%100
6	SA-3	X	004	004	0	%100
7	CP-1	X	01	01	0	%100
8	CP-2	X	005	005	0	%100
9	CP-3	X	005	005	0	%100
10	SA-3B	X	004	004	0	%100
11	SA-2B	X	0	0	0	%100
12	SA-1B	X	006	006	0	%100
13	GSI-1	X	002	002	0	%100
14	GSI-2	X	002	002	0	%100
15	GSI-3	X	003	003	0	%100
16	GSI-4	X	003	003	0	%100
17	GSI-5	X	0	0	0	%100
18	GSI-6	X	0	0	0	%100
19	MP-1	X	004	004	0	%100
20	MP-2	X	004	004	0	%100
21	MP-3	X	004	004	0	%100
22	MP-4	X	004	004	0	%100
23	MP-9	X	004	004	0	%100
24	MP-10	X	004	004	0	%100
25	MP-11	X	004	004	0	%100
26	MP-12	X	004	004	0	%100
27	MP-5	X	004	004	0	%100
28	MP-6	X	004	004	0	%100
29	MP-7	X	004	004	0	%100
30	MP-8	X	004	004	0	%100
31	SFS-1	X	007	007	0	%100
32	SFS-2	X	007	007	0	%100
33	SFS-3	X	007	007	0	%100
34	SFS-4	X	007	007	0	%100
35	SFS-5	X	007	007	0	%100
36	SFS-6	X	007	007	0	%100
37	FFTH-1	Z	.004	.004	0	%100
38	FFTH-3	Z	.004	.004	0	%100
39	FFTH-2	Z	.009	.009	0	%100
40	SA-1	Z	.009	.009	0	%100
41	SA-2	Z	0	0	0	%100
42	SA-3	Z	.012	.012	0	%100
43	CP-1	Z	.017	.017	0	%100
44	CP-2	7	.009	.009	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
45	CP-3	Z	.009	.009	0	%100
46	SA-3B	Z	.011	.011	0	%100
47	SA-2B	Z	0	0	0	%100
48	SA-1B	Z	.009	.009	0	%100
49	GSI-1	Z	.006	.006	0	%100
50	GSI-2	Z	.006	.006	0	%100
51	GSI-3	Z	.005	.005	0	%100
52	GSI-4	Z	.005	.005	0	%100
53	GSI-5	Z	0	0	0	%100
54	GSI-6	Z	0	0	0	%100
55	MP-1	Z	.007	.007	0	%100
56	MP-2	Z	.007	.007	0	%100
57	MP-3	Z	.007	.007	0	%100
58	MP-4	Z	.007	.007	0	%100
59	MP-9	Z	.007	.007	0	%100
60	MP-10	Z	.007	.007	0	%100
61	MP-11	Z	.007	.007	0	%100
62	MP-12	Z	.007	.007	0	%100
63	MP-5	Z	.007	.007	0	%100
64	MP-6	Z	.007	.007	0	%100
65	MP-7	Z	.007	.007	0	%100
66	MP-8	Z	.007	.007	0	%100
67	SFS-1	Z	.012	.012	0	%100
68	SFS-2	Z	.012	.012	0	%100
69	SFS-3	Z	.012	.012	0	%100
70	SFS-4	Z	.012	.012	0	%100
71	SFS-5	Z	.012	.012	0	%100
72	SFS-6	Z	.012	.012	0	%100

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

	Member Label	Direction	Start Magnitudally/ft	End Magnitude[k/ft,F,	Start Location[ft 9/1	End Location[ft.%]
1	FFTH-1	X	005	005	. Start Location[11, 76]	%100
2	FFTH-3	X	002	002	0	%100 %100
3	FFTH-2	X	002	002	0	%100 %100
		x			0	
4	SA-1	X	01	01	0	%100 %100
_ 5	SA-2		003	003		%100
6	SA-3	X	005	005	0	%100
7	CP-1	X	014	014	0	%100
8	CP-2	X	004	004	0	%100
9	CP-3	X	01	01	0	%100
10	SA-3B	X	005	005	0	%100
11	SA-2B	X	002	002	0	%100
12	SA-1B	X	009	009	0	%100
13	GSI-1	X	003	003	0	%100
14	GSI-2	X	003	003	0	%100
15	GSI-3	X	005	005	0	%100
16	GSI-4	X	005	005	0	%100
17	GSI-5	X	001	001	0	%100
18	GSI-6	Х	001	001	0	%100
19	MP-1	Х	006	006	0	%100
20	MP-2	X	006	006	0	%100
21	MP-3	X	006	006	0	%100
22	MP-4	X	006	006	0	%100
23	MP-9	X	006	006	0	%100
24	MP-10	X	006	006	0	%100
25	MP-11	X	006	006	0	%100

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Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW TEP No. 25661.584643 Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction		End Magnitude[k/ft.F	Start Location[ft.%]	End Location[ft.%]
26	MP-12	X	006	006	0	%100
27	MP-5	X	006	006	0	%100
28	MP-6	X	006	006	0	%100
29	MP-7	X	006	006	0	%100
30	MP-8	X	006	006	0	%100
31	SFS-1	X	01	01	0	%100
32	SFS-2	X	01	01	0	%100
33	SFS-3	X	01	01	0	%100
34	SFS-4	X	01	01	0	%100
35	SFS-5	X	01	01	0	%100
36	SFS-6	X	01	01	0	%100
37	FFTH-1	Z	.005	.005	0	%100
38	FFTH-3	Z	.002	.002	0	%100
39	FFTH-2	Z	.007	.007	0	%100
40	SA-1	Z	.009	.009	0	%100
41	SA-2	Z	.002	.002	0	%100
42	SA-3	Z	.008	.008	0	%100
43	CP-1	Z	.014	.014	0	%100
44	CP-2	Z	.004	.004	0	%100
45	CP-3	Z	.01	.01	0	%100
46	SA-3B	Z	.007	.007	0	%100
47	SA-2B	Z	.002	.002	0	%100
48	SA-1B	Z	.008	.008	0	%100
49	GSI-1	Z	.004	.004	0	%100
50	GSI-2	Z	.004	.004	Ö	%100
51	GSI-3	Z	.004	.004	0	%100
52	GSI-4	Z	.004	.004	Ö	%100
53	GSI-5	Z	.001	.001	0	%100
54	GSI-6	Z	.001	.001	Ö	%100
55	MP-1	Z	.006	.006	0	%100
56	MP-2	Z	.006	.006	0	%100
57	MP-3	Z	.006	.006	0	%100
58	MP-4	Z	.006	.006	0	%100
59	MP-9	Z	.006	.006	0	%100
60	MP-10	Z	.006	.006	0	%100
61	MP-11	Z	.006	.006	0	%100
62	MP-12	Z	.006	.006	0	%100 %100
63	MP-5	Z	.006	.006	0	%100 %100
64	MP-6	Z	.006	.006	0	%100 %100
65	MP-7	Z	.006	.006	0	%100 %100
66	MP-8	Z	.006	.006	0	%100 %100
67	SFS-1	Z	.01	.01	0	%100 %100
68	SFS-2	Z	.01	.01	0	%100 %100
69	SFS-3	Z	.01	.01	0	%100 %100
70	SFS-4	Z	.01	.01	0	%100 %100
71	SFS-5	Z	.01	.01	0	%100 %100
72	SFS-6	Z	.01	.01	0	%100 %100
12	<u> </u>		.01	.01	U	76100

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

		Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
	1	FFTH-1	X	008	008	0	%100
	2	FFTH-3	X	0	0	0	%100
	3	FFTH-2	X	007	007	0	%100
	4	SA-1	X	013	013	0	%100
	5	SA-2	X	006	006	0	%100
	6	SA-3	X	004	004	0	%100
Ī	5 6		X X			0	

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

	Member Label	Direction		End Magnitude[k/ft,F,		End Location[ft,%]
7 8	CP-1 CP-2	X	015 0	015 0	0	%100 %100
9	CP-3	X	015	015	0	%100
10	SA-3B	X	004	004		%100
11	SA-2B	X	006	006	0	%100
12	SA-1B	X	012	012	0	%100
13	GSI-1	X	002	002	0	%100
14	GSI-2	X	002	002	0	%100
15	GSI-3	X	007	007	0	%100
16	GSI-4	X	007	007	0	%100
17	GSI-5	X	003	003	0	%100
18	GSI-6	X	003	003	0	%100
19	MP-1	X	007	007	0	%100
20	MP-2	X	007	007	0	%100
21	MP-3	X	007	007	0	%100
22	MP-4	X	007	007	0	%100
23	MP-9	X	007	007	0	%100
24	MP-10	X	007	007	0	%100
25	MP-11	X	007	007	0	%100
26	MP-12	X	007	007	0	%100
27	MP-5	X	007	007	0	%100
28	MP-6	X	007	007	0	%100
29	MP-7	X	007	007	0	%100
30	MP-8	X	007	007	0	%100
31	SFS-1	X	012	012	0	%100
32	SFS-2	X	012	012	0	%100
33	SFS-3	X	012	012	0	%100
34	SFS-4	X	012	012	0	%100
35	SFS-5	X	012	012	0	%100
36	SFS-6	X	012	012	0	%100
37	FFTH-1	Z	.004	.004	0	%100
38	FFTH-3	Z	0	0	0	%100
39	FFTH-2	Z	.004	.004	0	%100
40	SA-1	Z	.006	.006	0	%100
41	SA-2	Z	.003	.003	0	%100
42	SA-3	Z	.004	.004	0	%100
43	CP-1	Z	.009	.009	0	%100
44	CP-2	Z	0	0	0	%100
45	CP-3	Z	.009	.009	0	%100
46	SA-3B	Z	.004	.004	0	%100
47	SA-2B	Z	.003	.003	0	%100
48	SA-1B	Z	.006	.006	0	%100
49	GSI-1	Z	.002	.002	0	%100
50	GSI-2	Z	.002	.002	0	%100
51	GSI-3	Z	.003	.003	0	%100
52	GSI-4	Z	.003	.003	0	%100
53	GSI-5	Z	.002	.002	0	%100
54	GSI-6	Z	.002	.002	0	%100
55	MP-1	Z	.004	.004	0	%100
56	MP-2	Z	.004	.004	0	%100
57	MP-3	Z	.004	.004	0	%100
58	MP-4	Z	.004	.004	0	%100
59	MP-9	Z	.004	.004	0	%100
60	MP-10	Z	.004	.004	0	%100
61	MP-11	Z	.004	.004	0	%100
62	MP-12	Z	.004	.004	0	%100 %100
63	MP-5	Z	.004	.004	0	%100 %100
_00	IVII U		00-	.007	<u> </u>	/0100

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Company Designer Job Number Model Name

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	. Start Location[ft.%]	End Location[ft,%]
64	MP-6	Z	.004	.004	0	%100
65	MP-7	Z	.004	.004	0	%100
66	MP-8	Z	.004	.004	0	%100
67	SFS-1	Z	.007	.007	0	%100
68	SFS-2	Z	.007	.007	0	%100
69	SFS-3	Z	.007	.007	0	%100
70	SFS-4	Z	.007	.007	0	%100
71	SFS-5	Z	.007	.007	0	%100
72	SFS-6	Z	.007	.007	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	Υ	011	011	0	%100
2	FFTH-3	Υ	011	011	0	%100
3	FFTH-2	Υ	011	011	0	%100
4	SA-1	Υ	009	009	0	%100
5	SA-2	Υ	009	009	0	%100
6	SA-3	Υ	009	009	0	%100
7	CP-1	Υ	012	012	0	%100
8	CP-2	Υ	012	012	0	%100
9	CP-3	Υ	012	012	0	%100
10	SA-3B	Υ	009	009	0	%100
11	SA-2B	Υ	009	009	0	%100
12	SA-1B	Υ	009	009	0	%100
13	GSI-1	Υ	006	006	0	%100
14	GSI-2	Υ	006	006	0	%100
15	GSI-3	Υ	006	006	0	%100
16	GSI-4	Υ	006	006	0	%100
17	GSI-5	Υ	006	006	0	%100
18	GSI-6	Υ	006	006	0	%100
19	MP-1	Υ	009	009	0	%100
20	MP-2	Υ	009	009	0	%100
21	MP-3	Υ	009	009	0	%100
22	MP-4	Υ	009	009	0	%100
23	MP-9	Υ	009	009	0	%100
24	MP-10	Υ	009	009	0	%100
25	MP-11	Υ	009	009	0	%100
26	MP-12	Υ	009	009	0	%100
27	MP-5	Υ	009	009	0	%100
28	MP-6	Υ	009	009	0	%100
29	MP-7	Υ	009	009	0	%100
30	MP-8	Υ	009	009	0	%100
31	SFS-1	Υ	007	007	0	%100
32	SFS-2	Υ	007	007	0	%100
33	SFS-3	Υ	007	007	0	%100
34	SFS-4	Υ	007	007	0	%100
35	SFS-5	Υ	007	007	0	%100
36	SFS-6	Υ	007	007	0	%100

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

		Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	Start Location[ft,%]	End Location[ft,%]
	1	FFTH-1	X	004	004	0	%100
	2	FFTH-3	X	003	003	0	%100
	3	FFTH-2	Χ	003	003	0	%100
П	4	SA-1	Χ	005	005	0	%100
	5	SA-2	Χ	005	005	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft.F	. Start Location[ft,%]	End Location[ft,%]
6	SA-3	X	004	004	0	%100
7	CP-1	X	007	007	0	%100
8	CP-2	X	007	007	0	%100
9	CP-3	X	007	007	0	%100
10	SA-3B	Χ	004	004	0	%100
11	SA-2B	X	005	005	0	%100
12	SA-1B	Χ	005	005	0	%100
13	GSI-1	Χ	003	003	0	%100
14	GSI-2	X	003	003	0	%100
15	GSI-3	X	004	004	0	%100
16	GSI-4	X	004	004	0	%100
17	GSI-5	X	004	004	0	%100
18	GSI-6	X	004	004	0	%100
19	MP-1	Χ	003	003	0	%100
20	MP-2	Χ	003	003	0	%100
21	MP-3	Χ	003	003	0	%100
22	MP-4	X	003	003	0	%100
23	MP-9	Χ	003	003	0	%100
24	MP-10	Χ	003	003	0	%100
25	MP-11	Χ	003	003	0	%100
26	MP-12	Χ	003	003	0	%100
27	MP-5	Χ	003	003	0	%100
28	MP-6	Χ	003	003	0	%100
29	MP-7	X	003	003	0	%100
30	MP-8	X	003	003	0	%100
31	SFS-1	Χ	004	004	0	%100
32	SFS-2	Χ	004	004	0	%100
33	SFS-3	Χ	004	004	0	%100
34	SFS-4	Χ	004	004	0	%100
35	SFS-5	Χ	004	004	0	%100
36	SFS-6	X	004	004	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	003	003	0	%100
2	FFTH-3	X	002	002	0	%100
3	FFTH-2	X	0	0	0	%100
4	SA-1	X	002	002	0	%100
5	SA-2	X	004	004	0	%100
6	SA-3	X	002	002	0	%100
7	CP-1	X	0	0	0	%100
8	CP-2	X	005	005	0	%100
9	CP-3	X	005	005	0	%100
10	SA-3B	X	002	002	0	%100
11	SA-2B	X	004	004	0	%100
12	SA-1B	X	002	002	0	%100
13	GSI-1	X	001	001	0	%100
14	GSI-2	X	001	001	0	%100
15	GSI-3	X	002	002	0	%100
16	GSI-4	X	002	002	0	%100
17	GSI-5	X	003	003	0	%100
18	GSI-6	X	003	003	0	%100
19	MP-1	X	002	002	0	%100
20	MP-2	X	002	002	0	%100
21	MP-3	X	002	002	0	%100
22	MP-4	X	002	002	0	%100

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

23	Member Label MP-9	Direction X	Start Magnitude[k/ft,	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%] %100
24	MP-10	X	002	002	0	%100 %100
25	MP-11	Ŷ	002	002	0	%100 %100
26	MP-12	x	002	002	0	%100 %100
27	MP-5	X	002	002	0	%100 %100
28	MP-6	X	002	002	0	%100 %100
29	MP-7	X	002	002	0	%100 %100
30	MP-8	X	002	002	0	%100 %100
31	SFS-1	X	004	004	0	%100 %100
32	SFS-2	X	004	004	0	%100 %100
33	SFS-3	X	004	004	0	%100 %100
34	SFS-4	X	004	004	0	%100 %100
35	SFS-5	X	004	004	0	%100
36	SFS-6	X	004	004	0	%100
37	FFTH-1	Ž	002	002	0	%100
38	FFTH-3	Z	002	002	0	%100
39	FFTH-2	Z	0	0	0	%100
40	SA-1	7	001	001	0	%100
41	SA-2	Z	002	002	0	%100
42	SA-3	Z	001	001	0	%100
43	CP-1	Z	0	0	0	%100
44	CP-2	Z	003	003	0	%100
45	CP-3	Z	003	003	0	%100
46	SA-3B	7	001	001	0	%100
47	SA-2B	Z	002	002	0	%100
48	SA-1B	Z	001	001	0	%100
49	GSI-1	Z	000942	000942	0	%100
50	GSI-2	Z	000942	000942	0	%100
51	GSI-3	Z	000842	000842	0	%100
52	GSI-4	Z	000842	000842	0	%100
53	GSI-5	Z	002	002	0	%100
54	GSI-6	Z	002	002	0	%100
55	MP-1	Z	001	001	0	%100
56	MP-2	Z	001	001	0	%100
57	MP-3	Z	001	001	0	%100
58	MP-4	Z	001	001	0	%100
59	MP-9	Z	001	001	0	%100
60	MP-10	Z	001	001	0	%100
61	MP-11	Z	001	001	0	%100
62	MP-12	Z	001	001	0	%100
63	MP-5	Z	001	001	0	%100
64	MP-6	Z	001	001	0	%100
65	MP-7	Z	001	001	0	%100
66	MP-8	Z	001	001	0	%100
67	SFS-1	Z	002	002	0	%100
68	SFS-2	Z	002	002	0	%100
69	SFS-3	Z	002	002	0	%100
70	SFS-4	Z	002	002	0	%100
71	SFS-5	Z	002	002	0	%100
72	SFS-6	Z	002	002	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F,	Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	002	002	0	%100
2	FFTH-3	X	002	002	0	%100
3	FFTH-2	X	000574	000574	0	%100

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

4	Member Label	Direction		End Magnitude[k/ft,F		End Location[ft,%]
4	SA-1	X	000883	000883	0	%100
5	SA-2	X	003	003	0	%100
6	SA-3	X	002	002	0	%100
7	<u>CP-1</u>	X	001	001	0	%100
8	CP-2	X	005	005	0	%100
9	CP-3	X	004	004	0	%100
10	SA-3B	X	002	002	0	%100
11	SA-2B	X	003	003	0	%100
12	SA-1B	X	000856	000856	0	%100
13	GSI-1	X	002	002	0	%100
14	GSI-2	X	002	002	0	%100
15	GSI-3	X	000674	000674	0	%100
16	GSI-4	X	000674	000674	0	%100
17	GSI-5	X	003	003	0	%100
18	GSI-6	X	003	003	0	%100
19	MP-1	X	002	002	0	%100
20	MP-2	X	002	002	0	%100
21	MP-3	X	002	002	0	%100
22	MP-4	X	002	002	0	%100
23	MP-9	X	002	002	0	%100
24	MP-10	X	002	002	0	%100
25	MP-11	X	002	002	0	%100
26	MP-12	X	002	002	0	%100
27	MP-5	X	002	002	0	%100
28	MP-6	X	002	002	0	%100
29	MP-7	X	002	002	0	%100
30	MP-8	X	002	002	0	%100
31	SFS-1	X	003	003	0	%100
32	SFS-2	X	003	003	0	%100
33	SFS-3	X	003	003	0	%100
34	SFS-4	X	003	003	0	%100
35	SFS-5	X	003	003	0	%100
36	SFS-6	Х	003	003	0	%100
37	FFTH-1	Z	002	002	0	%100
38	FFTH-3	Z	003	003	0	%100
39	FFTH-2	Z	000693	000693	0	%100
40	SA-1	Z	000801	000801	0	%100
41	SA-2	Z	003	003	0	%100
42	SA-3	Z	002	002	0	%100
43	CP-1	Z	001	001	0	%100
44	CP-2	Z	005	005	0	%100
45	CP-3	Z	003	003	0	%100
46	SA-3B	Z	002	002	0	%100
47	SA-2B	Z	003	003	0	%100
48	SA-1B	Z	000783	000783	0	%100
49	GSI-1	Z	002	002	0	%100
50	GSI-2	Z	002	002	0	%100
51	GSI-3	Z	000617	000617	0	%100 %100
52	GSI-4	7	000617	000617	0	%100 %100
53	GSI-5	Z	002	002	0	%100 %100
54	GSI-6	Z	002	002	0	%100 %100
55	MP-1	Z	002	002	0	%100 %100
56	MP-2	Z	002	002	0	%100 %100
57	MP-3	Z	002	002	0	%100 %100
58	MP-4	Z	002	002	0	%100 %100
59	MP-9	Z	002	002	0	%100 %100
60	MP-10	Z	002	002	0	%100 %100
UU	IVIP-1U		002	002	U	76100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft.F	. Start Location[ft,%]	End Location[ft,%]
61	MP-11	Z	002	002	0	%100
62	MP-12	Z	002	002	0	%100
63	MP-5	Z	002	002	0	%100
64	MP-6	Z	002	002	0	%100
65	MP-7	Z	002	002	0	%100
66	MP-8	Z	002	002	0	%100
67	SFS-1	Z	003	003	0	%100
68	SFS-2	Z	003	003	0	%100
69	SFS-3	Z	003	003	0	%100
70	SFS-4	Z	003	003	0	%100
71	SFS-5	Z	003	003	0	%100
72	SFS-6	Z	003	003	0	%100

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

	Member Label	Direction		. End Magnitude[k/ft,F,	Start Location[ft %]	End Location[ft,%]
1	FFTH-1	X	001	001	0	%100
2	FFTH-3	X	002	002	Ö	%100
3	FFTH-2	X	000785	000785	0	%100
4	SA-1	X	0	0	0	%100
5	SA-2	X	002	002	0	%100
6	SA-3	X	002	002	0	%100
7	CP-1	X	002	002	0	%100
8	CP-2	Х	004	004	0	%100
9	CP-3	X	002	002	0	%100
10	SA-3B	Х	002	002	0	%100
11	SA-2B	X	002	002	0	%100
12	SA-1B	X	0	0	0	%100
13	GSI-1	X	001	001	0	%100
14	GSI-2	X	001	001	0	%100
15	GSI-3	X	0	0	0	%100
16	GSI-4	X	0	0	0	%100
17	GSI-5	X	002	002	0	%100
18	GSI-6	X	002	002	0	%100
19	MP-1	X	001	001	0	%100
20	MP-2	X	001	001	0	%100
21	MP-3	X	001	001	0	%100
22	MP-4	X	001	001	0	%100
23	MP-9	X	001	001	0	%100
24	MP-10	X	001	001	0	%100
25	MP-11	X	001	001	0	%100
26	MP-12	X	001	001	0	%100
27	MP-5	X	001	001	0	%100
28	MP-6	X	001	001	0	%100
29	MP-7	X	001	001	0	%100
30	MP-8	X	001	001	0	%100
31	SFS-1	X	002	002	0	%100
32	SFS-2	X	002	002	0	%100
33	SFS-3	X	002	002	0	%100
34	SFS-4	X	002	002	0	%100
35	SFS-5	X	002	002	0	%100
36	SFS-6	X	002	002	0	%100
37	FFTH-1	Z	002	002	0	%100
38	FFTH-3	Z	003	003	0	%100
39	FFTH-2	Z	002	002	0	%100
40	SA-1	Z	0	0	0	%100
41	SA-2	Z	003	003	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft.F	. Start Location[ft,%]	End Location[ft,%]
42	SA-3	Z	004	004	0	%100
43	CP-1	Z	003	003	0	%100
44	CP-2	Z	006	006	0	%100
45	CP-3	Z	003	003	0	%100
46	SA-3B	Z	004	004	0	%100
47	SA-2B	Z	003	003	0	%100
48	SA-1B	Z	0	0	0	%100
49	GSI-1	Z	003	003	0	%100
50	GSI-2	Z	003	003	0	%100
51	GSI-3	Z	0	0	0	%100
52	GSI-4	Z	0	0	0	%100
53	GSI-5	Z	003	003	0	%100
54	GSI-6	Z	003	003	0	%100
55	MP-1	Z	002	002	0	%100
56	MP-2	Z	002	002	0	%100
57	MP-3	Z	002	002	0	%100
58	MP-4	Z	002	002	0	%100
59	MP-9	Z	002	002	0	%100
60	MP-10	Z	002	002	0	%100
61	MP-11	Z	002	002	0	%100
62	MP-12	Z	002	002	0	%100
63	MP-5	Z	002	002	0	%100
64	MP-6	Z	002	002	0	%100
65	MP-7	Z	002	002	0	%100
66	MP-8	Z	002	002	0	%100
67	SFS-1	Z	004	004	0	%100
68	SFS-2	Z	004	004	0	%100
69	SFS-3	Z	004	004	0	%100
70	SFS-4	Z	004	004	0	%100
71	SFS-5	Z	004	004	0	%100
72	SFS-6	Z	004	004	0	%100

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

		1	<del>o i co irmia nec</del>			
	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1 1	FFTH-1	Z	0	0	0	%100
2	FFTH-3	Z	003	003	0	%100
3	FFTH-2	Z	003	003	0	%100
4	SA-1	Z	002	002	0	%100
5	SA-2	Z	002	002	0	%100
6	SA-3	Z	005	005	0	%100
7	CP-1	Z	006	006	0	%100
8	CP-2	Z	006	006	0	%100
9	CP-3	Z	0	0	0	%100
10	SA-3B	Z	005	005	0	%100
11	SA-2B	Z	002	002	0	%100
12	SA-1B	Z	002	002	0	%100
13	GSI-1	Z	004	004	0	%100
14	GSI-2	Z	004	004	0	%100
15	GSI-3	Z	002	002	0	%100
16	GSI-4	Z	002	002	0	%100
17	GSI-5	Z	002	002	0	%100
18	GSI-6	Z	002	002	0	%100
19	MP-1	Z	003	003	0	%100
20	MP-2	Z	003	003	0	%100
21	MP-3	Z	003	003	0	%100
22	MP-4	Z	003	003	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft.F	. Start Location[ft,%]	End Location[ft,%]
23	MP-9	Z	003	003	0	%100
24	MP-10	Z	003	003	0	%100
25	MP-11	Z	003	003	0	%100
26	MP-12	Z	003	003	0	%100
27	MP-5	Z	003	003	0	%100
28	MP-6	Z	003	003	0	%100
29	MP-7	Z	003	003	0	%100
30	MP-8	Z	003	003	0	%100
31	SFS-1	Z	005	005	0	%100
32	SFS-2	Z	005	005	0	%100
33	SFS-3	Z	005	005	0	%100
34	SFS-4	Z	005	005	0	%100
35	SFS-5	Z	005	005	0	%100
36	SFS-6	Z	005	005	0	%100

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

1	Member Label FFTH-1	Direction X	Start Magnitude[k/ft,	End Magnitude[k/ft,F	Start Location[ft,%]	End Location[ft,%] %100
2	FFTH-3	X	.000785	.000785	0	%100
3	FFTH-2	X	.002	.002	0	%100
4	SA-1	X	.002	.002	0	%100
5	SA-2	X	0	0	0	%100
6	SA-3	X	.002	.002	0	%100
7	CP-1	Х	.004	.004	0	%100
8	CP-2	X	.002	.002	0	%100
9	CP-3	X	.002	.002	0	%100
10	SA-3B	X	.002	.002	0	%100
11	SA-2B	X	0	0	0	%100
12	SA-1B	X	.002	.002	0	%100
13	GSI-1	X	.001	.001	0	%100
14	GSI-2	X	.001	.001	0	%100
15	GSI-3	X	.002	.002	0	%100
16	GSI-4	X	.002	.002	0	%100
17	GSI-5	X	0	0	0	%100
18	GSI-6	X	0	0	0	%100
19	MP-1	X	.001	.001	0	%100
20	MP-2	X	.001	.001	0	%100
21	MP-3	X	.001	.001	0	%100
22	MP-4	X	.001	.001	0	%100
23	MP-9	X	.001	.001	0	%100
24	MP-10	X	.001	.001	0	%100
25	MP-11	X	.001	.001	0	%100
26	MP-12	X	.001	.001	0	%100
27	MP-5	X	.001	.001	0	%100
28	MP-6	X	.001	.001	0	%100
29	MP-7	X	.001	.001	0	%100
30	MP-8	X	.001	.001	0	%100
31	SFS-1	X	.002	.002	0	%100
32	SFS-2	X	.002	.002	0	%100
33	SFS-3	X	.002	.002	0	%100
34	SFS-4	X	.002	.002	0	%100
35	SFS-5	X	.002	.002	0	%100
36	SFS-6	X	.002	.002	0	%100
37	FFTH-1	Z	002	002	0	%100
38	FFTH-3	Z	002	002	0	%100
39	FFTH-2	Z	003	003	0	%100

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

	Member Label	Direction		End Magnitude[k/ft.F	. Start Location[ft,%]	
40	SA-1	Z	003	003	0	%100
41	SA-2	Z	0	0	0	%100
42	SA-3	Z	004	004	0	%100
43	CP-1	Z	006	006	0	%100
44	CP-2	Z	003	003	0	%100
45	CP-3	Z	003	003	0	%100
46	SA-3B	Z	004	004	0	%100
47	SA-2B	Z	0	0	0	%100
48	SA-1B	Z	003	003	0	%100
49	GSI-1	Z	003	003	0	%100
50	GSI-2	Z	003	003	0	%100
51	GSI-3	Z	003	003	0	%100
52	GSI-4	Z	003	003	0	%100
53	GSI-5	Z	0	0	0	%100
54	GSI-6	Z	0	0	0	%100
55	MP-1	Z	002	002	0	%100
56	MP-2	Z	002	002	0	%100
57	MP-3	Z	002	002	0	%100
58	MP-4	Z	002	002	0	%100
59	MP-9	Z	002	002	0	%100
60	MP-10	Z	002	002	0	%100
61	MP-11	Z	002	002	0	%100
62	MP-12	Z	002	002	0	%100
63	MP-5	Z	002	002	0	%100
64	MP-6	Z	002	002	0	%100
65	MP-7	Z	002	002	0	%100
66	MP-8	Z	002	002	0	%100
67	SFS-1	Z	004	004	0	%100
68	SFS-2	Z	004	004	0	%100
69	SFS-3	Z	004	004	0	%100
70	SFS-4	Z	004	004	0	%100
71	SFS-5	Z	004	004	0	%100
72	SFS-6	Z	004	004	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	.002	.002	0	%100
2	FFTH-3	X	.000574	.000574	0	%100
3	FFTH-2	X	.002	.002	0	%100
4	SA-1	X	.003	.003	0	%100
5	SA-2	X	.000883	.000883	0	%100
6	SA-3	X	.002	.002	0	%100
7	CP-1	X	.005	.005	0	%100
8	CP-2	X	.001	.001	0	%100
9	CP-3	X	.004	.004	0	%100
10	SA-3B	X	.002	.002	0	%100
11	SA-2B	X	.000856	.000856	0	%100
12	SA-1B	X	.003	.003	0	%100
13	GSI-1	X	.002	.002	0	%100
14	GSI-2	X	.002	.002	0	%100
15	GSI-3	X	.003	.003	0	%100
16	GSI-4	X	.003	.003	0	%100
17	GSI-5	X	.000674	.000674	0	%100
18	GSI-6	X	.000674	.000674	0	%100
19	MP-1	X	.002	.002	0	%100
20	MP-2	Х	.002	.002	0	%100
	·		·	·	·	· · · · · · · · · · · · · · · · · · ·

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

21	Member Label MP-3	Direction X	Start Magnitude[k/ft	End Magnitude[k/ft,F	Start Location[ft,%]	End Location[ft,%] %100
22	MP-4	X	.002	.002	0	%100 %100
23	MP-9	X	.002	.002	0	%100 %100
24	MP-10	X	.002	.002	0	%100 %100
25	MP-11	X	.002	.002	0	%100
26	MP-12	X	.002	.002	0	%100
27	MP-5	X	.002	.002	0	%100
28	MP-6	X	.002	.002	0	%100
29	MP-7	X	.002	.002	0	%100
30	MP-8	X	.002	.002	0	%100
31	SFS-1	X	.003	.003	0	%100
32	SFS-2	X	.003	.003	0	%100
33	SFS-3	X	.003	.003	0	%100
34	SFS-4	Х	.003	.003	0	%100
35	SFS-5	X	.003	.003	0	%100
36	SFS-6	X	.003	.003	0	%100
37	FFTH-1	Z	002	002	0	%100
38	FFTH-3	Z	000693	000693	0	%100
39	FFTH-2	Z	003	003	0	%100
40	SA-1	Z	003	003	0	%100
41	SA-2	Z	000801	000801	0	%100
42	SA-3	Z	002	002	0	%100
43	CP-1	Z	005	005	0	%100
44	CP-2	Z	001	001	0	%100
45	CP-3	Z	003	003	0	%100
46	SA-3B	Z	002	002	0	%100
47	SA-2B	Z	000783	000783	0	%100
48	SA-1B	Z	003	003	0	%100
49	GSI-1	Z	002	002	0	%100
50	GSI-2	Z	002	002	0	%100
51	GSI-3	Z	002	002	0	%100
52	GSI-4	Z	002	002	0	%100
53	GSI-5	Z	000617	000617	0	%100
54	GSI-6	Z	000617	000617	0	%100
55	MP-1	Z	002	002	0	%100
56	MP-2	Z	002	002	0	%100
57	MP-3 MP-4	Z Z	002	002	0	%100
58	MP-4 MP-9		002	002	0	%100 %100
59	MP-9 MP-10	Z	002 002	002 002	0	%100 %100
60	MP-10 MP-11	Z	002 002	002 002	0	%100 %100
62	MP-11 MP-12	Z	002	002	0	%100 %100
63	MP-5	Z	002	002	0	%100 %100
64	MP-6	Z	002	002	0	%100 %100
65	MP-6 MP-7	Z	002	002	0	%100 %100
66	MP-8	Z	002	002	0	%100 %100
67	SFS-1	Z	002	002	0	%100 %100
68	SFS-2	7	003	003	0	%100 %100
69	SFS-3	Z	003	003	0	%100 %100
70	SFS-4	Z	003	003	0	%100 %100
71	SFS-5	Z	003	003	0	%100 %100
72	SFS-6	7	003	003	0	%100 %100
12	SFS-0		003	003	U	76 I U U

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F	Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	Χ	.003	.003	0	%100

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

2 FF1H-3 X 0.0 0.0 0.0 %100  3 FFTH-2 X 0.002 0.02 0.0	_	Member Label	Direction		End Magnitude[k/ft.F		End Location[ft,%]
4   SA-1   X   .004   .004   0   %100	2	FFTH-3	X	0	0	0	%100
SA-2							
6         SA-3         X         .002         .0         %100           7         CP-1         X         .005         .005         .0         %100           8         CP-2         X         .0         .0         .0         .9         .100           10         SA-3B         X         .002         .002         .0         .9         .100           11         SA-2B         X         .002         .002         .0         .9         .100           12         SA-1B         X         .004         .004         .0         .9         .100           12         SA-1B         X         .004         .004         .0         .9         .100           14         GSI-2         X         .001         .001         .0         .9         .100           15         GSI-3         X         .001         .001         .0         .9         .100           15         GSI-3         X         .003         .003         .0         .9         .100           16         GSI-4         X         .003         .002         .0         .9         .100         .9         .100         .9							
The content of the							
R							
9							
10							
11							
12							%100
13		SA-2B			.002	0	%100
14         GSI-2         X         .001         .001         0         %:100           16         GSI-4         X         .003         .003         0         %:100           17         GSI-5         X         .002         .002         0         %:100           18         GSI-6         X         .002         .002         0         %:100           19         MP-1         X         .002         .002         0         %:100           20         MP-2         X         .002         .002         0         %:100           21         MP-3         X         .002         .002         0         %:100           21         MP-3         X         .002         .002         0         %:100           22         MP-4         X         .002         .002         0         %:100           24         MP-10         X         .002         .002         0         %:100           25         MP-11         X         .002         .002         0         %:100           26         MP-12         X         .002         .002         0         %:100           28         MP-6	12	SA-1B	X	.004	.004	0	%100
15	13	GSI-1	X	.001	.001	0	%100
16	14	GSI-2		.001	.001	0	%100
17	15	GSI-3	Х	.003	.003	0	%100
18	16	GSI-4	Х	.003	.003	0	%100
19	17	GSI-5	Х	.002	.002	0	%100
19	18	GSI-6	Х	.002	.002	0	%100
20							
21							
22							
23         MP-9         X         .002         .002         0         %100           24         MP-10         X         .002         .002         0         %5100           25         MP-11         X         .002         .002         0         %5100           26         MP-12         X         .002         .002         0         %5100           27         MP-5         X         .002         .002         0         %5100           28         MP-6         X         .002         .002         0         %5100           29         MP-7         X         .002         .002         0         %5100           30         MP-8         X         .002         .002         0         %5100           31         SFS-1         X         .004         .004         0         %5100           32         SFS-1         X         .004         .004         0         %5100           34         SFS-3         X         .004         .004         0         %5100           34         SFS-4         X         .004         .004         0         %5100           35         SFS-6							
24         MP-10         X         .002         .002         0         %100           25         MP-11         X         .002         .002         0         %100           26         MP-12         X         .002         .002         0         %100           27         MP-5         X         .002         .002         0         %100           28         MP-6         X         .002         .002         0         %100           29         MP-7         X         .002         .002         0         %100           30         MP-8         X         .002         .002         0         %100           31         SFS-1         X         .004         .004         0         %100           32         SFS-2         X         .004         .004         0         %100           33         SFS-3         X         .004         .004         0         %100           34         SFS-4         X         .004         .004         0         %100           35         SFS-5         X         .004         .004         0         %100           36         SFS-6							
25							
26         MP-12         X         .002         .002         0         %1100           27         MP-5         X         .002         .002         0         %1100           28         MP-6         X         .002         .002         0         %100           29         MP-7         X         .002         .002         0         %1100           30         MP-8         X         .002         .002         0         %1100           31         SFS-1         X         .004         .004         0         %100           32         SFS-2         X         .004         .004         0         %100           33         SFS-3         X         .004         .004         0         %100           34         SFS-4         X         .004         .004         0         %100           35         SFS-5         X         .004         .004         0         %100           36         SFS-6         X         .004         .004         0         %100           37         FFTH-1         Z         .002         .002         0         %100           38         FFTH-2 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
27         MP-5         X         .002         .002         0         %100           28         MP-6         X         .002         .002         0         %100           29         MP-7         X         .002         .002         0         %100           30         MP-8         X         .002         .002         0         %100           31         SFS-1         X         .004         .004         0         %100           32         SFS-2         X         .004         .004         0         %100           33         SFS-3         X         .004         .004         0         %100           34         SFS-4         X         .004         .004         0         %100           35         SFS-5         X         .004         .004         0         %100           36         SFS-6         X         .004         .004         0         %100           37         FFTH-1         Z         .002         .002         0         %100           39         FFTH-2         Z         .002         .002         0         %100           40         SA-1							
28         MP-6         X         .002         .002         0         %1100           39         MP-7         X         .002         .002         0         %1100           30         MP-8         X         .002         .002         0         %100           31         SFS-1         X         .004         .004         0         %100           32         SFS-2         X         .004         .004         0         %100           33         SFS-3         X         .004         .004         0         %100           34         SFS-4         X         .004         .004         0         %100           35         SFS-5         X         .004         .004         0         %100           36         SFS-6         X         .004         .004         0         %100           37         FFTH-1         Z        002        002         0         %100           38         FFTH-2         Z        002        002         0         %100           40         SA-1         Z        002        002         0         %100           41         SA-2<		MP-5					
Text							
30							
SFS-1							
32         SFS-2         X         .004         .004         0         %100           33         SFS-3         X         .004         .004         0         %100           34         SFS-4         X         .004         .004         0         %100           35         SFS-5         X         .004         .004         0         %100           36         SFS-6         X         .004         .004         0         %100           37         FFTH-1         Z         .002         .002         0         %100           38         FFTH-3         Z         0         0         0         %100           39         FFTH-2         Z        002        002         0         %100           40         SA-1         Z        002        002         0         %100           41         SA-2         Z        001        001         0         %100           42         SA-3         Z        001        001         0         %100           43         CP-1         Z        003        003         0         %100           44         CP-2 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
SFS-3							
34         SFS-4         X         .004         .004         0         %:100           35         SFS-5         X         .004         .004         0         %:100           36         SFS-6         X         .004         .004         0         %:100           37         FFTH-1         Z        002        002         0         %:100           38         FFTH-3         Z         0         0         0         %:100           40         SA-1         Z        002        002         0         %:100           40         SA-1         Z        002        002         0         %:100           41         SA-2         Z        001        001         0         %:100           42         SA-3         Z        001        001         0         %:100           43         CP-1         Z        003        003         0         %:100           44         CP-2         Z         0         0         0         %:100           44         CP-3         Z        003        003         0         %:100           45         CP							
35							
36         SFS-6         X         .004         .004         0         %100           37         FFTH-1         Z        002        002         0         %100           38         FFTH-3         Z         0         0         0         %100           39         FFTH-2         Z        002        002         0         %100           40         SA-1         Z        002        002         0         %100           41         SA-2         Z        001        001         0         %100           42         SA-3         Z        001        001         0         %100           43         CP-1         Z        003        003         0         %100           44         CP-2         Z         0         0         0         %100           45         CP-3         Z        003        003         0         %100           46         SA-3B         Z        001        001         0         %100           47         SA-2B         Z        001        001         0         %100           48         SA-1B <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
37         FFTH-1         Z        002        002         0         %100           38         FFTH-3         Z         0         0         0         %100           39         FFTH-2         Z         2        002        002         0         %100           40         SA-1         Z        002        002         0         %100           41         SA-2         Z        001        001         0         %100           42         SA-3         Z        001        001         0         %100           43         CP-1         Z        003        003         0         %100           44         CP-2         Z         0         0         0         %100           44         CP-2         Z         0         0         0         %100           45         CP-3         Z        003        003         0         %100           46         SA-3B         Z        001        001         0         %100           47         SA-2B         Z        001        001         0         %100           49							
38         FFTH-3         Z         0         0         %100           39         FFTH-2         Z        002        002         0         %100           40         SA-1         Z        002        002         0         %100           41         SA-2         Z        001        001         0         %100           42         SA-3         Z        001        001         0         %100           43         CP-1         Z        003        003         0         %100           44         CP-2         Z         0         0         0         %100           45         CP-3         Z        003        003         0         %100           45         CP-3         Z        003        003         0         %100           46         SA-3B         Z        001        001         0         %100           47         SA-2B         Z        001        001         0         %100           48         SA-1B         Z        002        002         0         %100           49         GSI-1         Z <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
39         FFTH-2         Z        002        002         0         %100           40         SA-1         Z        002        002         0         %100           41         SA-2         Z        001        001         0         %100           42         SA-3         Z        001        001         0         %100           43         CP-1         Z        003        003         0         %100           44         CP-2         Z         D         0         0         %100           45         CP-3         Z        003        003         0         %100           45         CP-3         Z        001        001         0         %100           46         SA-3B         Z        001        001         0         %100           47         SA-2B         Z        001        001         0         %100           48         SA-1B         Z        002        002         0         %100           49         GSI-1         Z        00942        00942         0         %100           50         <							
40         SA-1         Z        002        002         0         %:100           41         SA-2         Z        001        001         0         %:100           42         SA-3         Z        001        001         0         %:100           43         CP-1         Z        003        003         0         %:100           44         CP-2         Z         0         0         0         %:100           45         CP-3         Z        003        003         0         %:100           46         SA-3B         Z        001        001         0         %:100           47         SA-2B         Z        001        001         0         %:100           47         SA-2B         Z        001        001         0         %:100           49         GSI-1         Z        002        002         0         %:100           49         GSI-1         Z        00942        00942         0         %:100           50         GSI-2         Z        00942        00942         0         %:100           5							
41         SA-2         Z        001         0         %100           42         SA-3         Z        001        001         0         %100           43         CP-1         Z        003        003         0         %100           44         CP-2         Z         0         0         0         %100           45         CP-3         Z        003        003         0         %100           46         SA-3B         Z        001        001         0         %100           47         SA-2B         Z        001        001         0         %100           48         SA-1B         Z        002        002         0         %100           49         GSI-1         Z        00942        00942         0         %100           50         GSI-2         Z        000942         0         %100           51         GSI-3         Z        002        002         0         %100           52         GSI-4         Z        002        002         0         %100           53         GSI-5         Z         <							
42         SA-3         Z        001        001         0         %100           43         CP-1         Z        003        003         0         %100           44         CP-2         Z         0         0         0         %100           45         CP-3         Z        003        003         0         %100           46         SA-3B         Z        001        001         0         %100           47         SA-2B         Z        001        001         0         %100           48         SA-1B         Z        002        002         0         %100           49         GSI-1         Z        00942        00942         0         %100           50         GSI-2         Z        00942        00942         0         %100           51         GSI-3         Z        002        002         0         %100           52         GSI-4         Z        002        002         0         %100           53         GSI-5         Z        00842        00842         0         %100           54							
43         CP-1         Z        003        003         0         %:100           44         CP-2         Z         0         0         0         %:100           45         CP-3         Z        003        003         0         %:100           46         SA-3B         Z        001        001         0         %:100           47         SA-2B         Z        001        001         0         %:100           48         SA-1B         Z        002        002         0         %:100           49         GSI-1         Z        0024        00942         0         %:100           50         GSI-2         Z        00942        00942         0         %:100           51         GSI-3         Z        002        002         0         %:100           52         GSI-4         Z        002        002         0         %:100           53         GSI-5         Z        00842        00042         0         %:100           54         GSI-6         Z        001        001         0         %:100							
44         CP-2         Z         0         0         %100           45         CP-3         Z        003        003         0         %100           46         SA.3B         Z        001        001         0         %100           47         SA.2B         Z        001        001         0         %100           48         SA.1B         Z        002        002         0         %100           49         GSI-1         Z        00942        00942         0         %100           50         GSI-2         Z        00942        00942         0         %100           51         GSI-3         Z        002        002         0         %100           52         GSI-4         Z        002        002         0         %100           53         GSI-5         Z        00842        000842         0         %100           54         GSI-6         Z        001        001         0         %100           55         MP-1         Z        001        001         0         %100           56         MP-2							
45         CP-3         Z        003        003         0         %100           46         SA-3B         Z        001        001         0         %100           47         SA-2B         Z        001        001         0         %100           48         SA-1B         Z        002        002         0         %100           49         GSI-1         Z        00942        00942         0         %100           50         GSI-2         Z        00942        00942         0         %100           51         GSI-3         Z        002        002         0         %100           52         GSI-4         Z        002        002         0         %100           53         GSI-5         Z        00842        00842         0         %100           54         GSI-6         Z        00842        00842         0         %100           55         MP-1         Z        001        001         0         %100           56         MP-2         Z        001        001         0         %100							
46         SA-3B         Z        001        001         0         %:100           47         SA-2B         Z        001        001         0         %:100           48         SA-1B         Z        002        002         0         %:100           49         GSI-1         Z        000942        000942         0         %:100           50         GSI-2         Z        000942        000942         0         %:100           51         GSI-3         Z        002        002         0         %:100           52         GSI-4         Z        002        002         0         %:100           53         GSI-5         Z        000842        000842         0         %:100           54         GSI-6         Z        001        001         0         %:100           55         MP-1         Z        001        001         0         %:100           56         MP-2         Z        001        001         0         %:100           57         MP-3         Z        001        001         0         %:100  <							
47         SA-2B         Z        001        001         0         %100           48         SA-1B         Z        002        002         0         %100           49         GSI-1         Z        00942        00942         0         %100           50         GSI-2         Z        00942         0         %100           51         GSI-3         Z        002        002         0         %100           52         GSI-4         Z        002        002         0         %100           53         GSI-5         Z        000842         0         %100           54         GSI-6         Z        000842        000842         0         %100           55         MP-1         Z        001        001         0         %100           56         MP-2         Z        001        001         0         %100           57         MP-3         Z        001        001         0         %100							
48         SA-1B         Z        002        002         0         %:100           49         GSI-1         Z        000942        000942         0         %:100           50         GSI-2         Z        000942         0         %:100           51         GSI-3         Z        002        002         0         %:100           52         GSI-4         Z        002        002         0         %:100           53         GSI-5         Z        00842        00842         0         %:100           54         GSI-6         Z        000842        000842         0         %:100           55         MP-1         Z        001        001         0         %:100           56         MP-2         Z        001        001         0         %:100           57         MP-3         Z        001        001         0         %:100							
49         GSI-1         Z         -,000942         -,000942         0         %:100           50         GSI-2         Z         -,000942         -,000942         0         %:100           51         GSI-3         Z         -,002         -,002         0         %:100           52         GSI-4         Z         -,002         -,002         0         %:100           53         GSI-5         Z         -,000842         -,000842         0         %:100           54         GSI-6         Z         -,000842         -,000842         0         %:100           55         MP-1         Z         -,001         -,001         0         %:100           56         MP-2         Z         -,001         -,001         0         %:100           57         MP-3         Z         -,001         -,001         0         %:100							
50         GSI-2         Z        000942        000942         0         %100           51         GSI-3         Z        002        002         0         %100           52         GSI-4         Z        002        002         0         %100           53         GSI-5         Z        000842         0         %100           54         GSI-6         Z        000842        000842         0         %100           55         MP-1         Z        001        001         0         %100           56         MP-2         Z        001        001         0         %100           57         MP-3         Z        001        001         0         %100							
51         GSI-3         Z        002        002         0         %100           52         GSI-4         Z        002        002         0         %100           53         GSI-5         Z        00842        00842         0         %100           54         GSI-6         Z        000842        000842         0         %100           55         MP-1         Z        001        001         0         %100           56         MP-2         Z        001        001         0         %100           57         MP-3         Z        001         0         %100							
52         GSI-4         Z        002        002         0         %100           53         GSI-5         Z        000842        000842         0         %100           54         GSI-6         Z        000842         0         %100           55         MP-1         Z        001        001         0         %100           56         MP-2         Z        001        001         0         %100           57         MP-3         Z        001        001         0         %100							
53         GSI-5         Z        000842        000842         0         %100           54         GSI-6         Z        000842        000842         0         %100           55         MP-1         Z        001        001         0         %100           56         MP-2         Z        001        001         0         %100           57         MP-3         Z        001        001         0         %100							
54         GSI-6         Z        000842        000842         0         %100           55         MP-1         Z        001        001         0         %100           56         MP-2         Z        001        001         0         %100           57         MP-3         Z        001         0         %100							
55         MP-1         Z        001        001         0         %100           56         MP-2         Z        001        001         0         %100           57         MP-3         Z        001        001         0         %100							
56         MP-2         Z        001        001         0         %100           57         MP-3         Z        001        001         0         %100							
57 MP-3 Z001001 0 %100							
58 MP-4 Z001001 0 %100							
	58	MP-4	Z	001	001	0	<u>%1</u> 00

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
59	MP-9	Z	001	001	0	%100
60	MP-10	Z	001	001	0	%100
61	MP-11	Z	001	001	0	%100
62	MP-12	Z	001	001	0	%100
63	MP-5	Z	001	001	0	%100
64	MP-6	Z	001	001	0	%100
65	MP-7	Z	001	001	0	%100
66	MP-8	Z	001	001	0	%100
67	SFS-1	Ζ	002	002	0	%100
68	SFS-2	Z	002	002	0	%100
69	SFS-3	Z	002	002	0	%100
70	SFS-4	Z	002	002	0	%100
71	SFS-5	Z	002	002	0	%100
72	SFS-6	Z	002	002	0	%100

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

	Member Label	Direction		End Magnitude[k/ft,F,	Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	.004	.004	0	%100
2	FFTH-3	X	.003	.003	0	%100
3	FFTH-2	X	.003	.003	0	%100
4	SA-1	X	.005	.005	0	%100
5	SA-2	X	.005	.005	0	%100
6	SA-3	X	.004	.004	0	%100
7	CP-1	X	.007	.007	0	%100
8	CP-2	X	.007	.007	0	%100
9	CP-3	X	.007	.007	0	%100
10	SA-3B	X	.004	.004	0	%100
11	SA-2B	X	.005	.005	0	%100
12	SA-1B	X	.005	.005	0	%100
13	GSI-1	X	.003	.003	0	%100
14	GSI-2	X	.003	.003	0	%100
15	GSI-3	X	.004	.004	0	%100
16	GSI-4	X	.004	.004	0	%100
17	GSI-5	X	.004	.004	0	%100
18	GSI-6	X	.004	.004	0	%100
19	MP-1	X	.003	.003	0	%100
20	MP-2	X	.003	.003	0	%100
21	MP-3	X	.003	.003	0	%100
22	MP-4	X	.003	.003	0	%100
23	MP-9	X	.003	.003	0	%100
24	MP-10	X	.003	.003	0	%100
25	MP-11	X	.003	.003	0	%100
26	MP-12	X	.003	.003	0	%100
27	MP-5	X	.003	.003	0	%100
28	MP-6	X	.003	.003	0	%100
29	MP-7	X	.003	.003	0	%100
30	MP-8	X	.003	.003	0	%100
31	SFS-1	X	.004	.004	0	%100
32	SFS-2	X	.004	.004	0	%100
33	SFS-3	X	.004	.004	0	%100
34	SFS-4	X	.004	.004	0	%100
35	SFS-5	X	.004	.004	0	%100
36	SFS-6	X	.004	.004	0	%100

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

Member Label	Direction	Start Magnitude[k/ft, End Magnitude[k/ft,F, Start Location[ft,%	End Location[ft,%]
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### Member Distributed Loads (BLC 28 : 210 Wind - Ice) (Continued)

1	Member Label	Direction		End Magnitude[k/ft,F,		End Location[ft,%]
2	FFTH-1 FFTH-3	X	.003	.003	0	%100 %100
3	FFTH-2	x	0	0	0	%100 %100
4	SA-1	x	.002	.002	0	%100 %100
	SA-1 SA-2	x	.002	.002	0	
<u>5</u>	SA-2 SA-3	X	.004	.002	0	%100
7	<u>SA-3</u> CP-1	X			0	%100
8	CP-1 CP-2	X	0	0	0	%100
			.005	.005		%100
9	CP-3	X	.005	.005	0	%100
10	SA-3B		.002	.002	0	%100
11	SA-2B	X	.004	.004	0	%100
12	SA-1B	X	.002	.002	0	%100
13	GSI-1	X	.001	.001	0	%100
14	GSI-2	X	.001	.001	0	%100
15	GSI-3	X	.002	.002	0	%100
16	GSI-4	X	.002	.002	0	%100
17	GSI-5	X	.003	.003	0	%100
18	GSI-6	X	.003	.003	0	%100
19	MP-1	X	.002	.002	0	%100
20	MP-2	X	.002	.002	0	%100
21	MP-3	X	.002	.002	0	%100
22	MP-4	X	.002	.002	0	%100
23	MP-9	X	.002	.002	0	%100
24	MP-10	X	.002	.002	0	%100
25	MP-11	X	.002	.002	0	%100
26	MP-12	X	.002	.002	0	%100
27	MP-5	X	.002	.002	0	%100
28	MP-6	X	.002	.002	0	%100
29	MP-7	X	.002	.002	0	%100
30	MP-8	X	.002	.002	0	%100
31	SFS-1	X	.004	.004	0	%100
32	SFS-2	X	.004	.004	0	%100
33	SFS-3	X	.004	.004	0	%100
34	SFS-4	X	.004	.004	0	%100
35	SFS-5	X	.004	.004	0	%100
36	SFS-6	X	.004	.004	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-3	7	.002	.002	0	%100
39	FFTH-2	Z	0	0	Ö	%100
40	SA-1	Z	.001	.001	Ŏ	%100
41	SA-2	Z	.002	.002	0	%100
42	SA-3	Z	.001	.001	0	%100
43	CP-1	Z	0	0	0	%100
44	CP-2	Z	.003	.003	0	%100
45	CP-3	Z	.003	.003	0	%100
46	SA-3B	Z	.001	.001	0	%100 %100
47	SA-2B	Z	.002	.002	0	%100 %100
48	SA-1B	Z	.002	.002	0	%100 %100
49	GSI-1	<u>Z</u>	.000942	.000942	0	%100 %100
50	GSI-2	Z	.000942	.000942	0	%100 %100
51	GSI-3	Z	.000842	.000342	0	%100 %100
52	GSI-4	Z	.000842	.000842	0	%100 %100
53	GSI-4 GSI-5	Z	.002	.000842	0	%100 %100
54	GSI-6	Z	.002	.002	0	%100 %100
55	MP-1	Z	.002	.002	0	%100 %100
	MP-1 MP-2		.001	.001	0	%100 %100
56		Z Z	.001	.001	0	
57	MP-3		1 .001	.001	U	%100

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Company Designer Job Number Model Name

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
58	MP-4	Z	.001	.001	0	%100
59	MP-9	Z	.001	.001	0	%100
60	MP-10	Z	.001	.001	0	%100
61	MP-11	Z	.001	.001	0	%100
62	MP-12	Z	.001	.001	0	%100
63	MP-5	Z	.001	.001	0	%100
64	MP-6	Z	.001	.001	0	%100
65	MP-7	Z	.001	.001	0	%100
66	MP-8	Z	.001	.001	0	%100
67	SFS-1	Z	.002	.002	0	%100
68	SFS-2	Z	.002	.002	0	%100
69	SFS-3	Z	.002	.002	0	%100
70	SFS-4	Z	.002	.002	0	%100
71	SFS-5	Z	.002	.002	0	%100
72	SFS-6	Z	.002	.002	0	%100

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

	Member Label	Direction		End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	.002	.002	0	%100
2	FFTH-3	X	.002	.002	0	%100
3	FFTH-2	X	.000574	.000574	0	%100
4	SA-1	X	.000883	.000883	0	%100
5	SA-2	X	.003	.003	0	%100
6	SA-3	X	.002	.002	0	%100
7	CP-1	X	.001	.001	0	%100
8	CP-2	X	.005	.005	0	%100
9	CP-3	X	.004	.004	0	%100
10	SA-3B	X	.002	.002	0	%100
11	SA-2B	X	.003	.003	0	%100
12	SA-1B	X	.000856	.000856	0	%100
13	GSI-1	X	.002	.002	0	%100
14	GSI-2	X	.002	.002	0	%100
15	GSI-3	X	.000674	.000674	0	%100
16	GSI-4	Χ	.000674	.000674	0	%100
17	GSI-5	Χ	.003	.003	0	%100
18	GSI-6	X	.003	.003	0	%100
19	MP-1	X	.002	.002	0	%100
20	MP-2	X	.002	.002	0	%100
21	MP-3	X	.002	.002	0	%100
22	MP-4	Х	.002	.002	0	%100
23	MP-9	Х	.002	.002	0	%100
24	MP-10	X	.002	.002	0	%100
25	MP-11	X	.002	.002	0	%100
26	MP-12	X	.002	.002	0	%100
27	MP-5	X	.002	.002	0	%100
28	MP-6	Х	.002	.002	0	%100
29	MP-7	Х	.002	.002	0	%100
30	MP-8	Х	.002	.002	0	%100
31	SFS-1	Х	.003	.003	0	%100
32	SFS-2	X	.003	.003	0	%100
33	SFS-3	X	.003	.003	0	%100
34	SFS-4	X	.003	.003	0	%100
35	SFS-5	X	.003	.003	0	%100
36	SFS-6	X	.003	.003	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-3	7	.003	.003	0	%100
	111110	_		.000		70100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
39	FFTH-2	Z	.000693	.000693	0	%100
40	SA-1	Z	.000801	.000801	0	%100
41	SA-2	Z	.003	.003	0	%100
42	SA-3	Z	.002	.002	0	%100
43	CP-1	Z	.001	.001	0	%100
44	CP-2	Z	.005	.005	0	%100
45	CP-3	Z	.003	.003	0	%100
46	SA-3B	Z	.002	.002	0	%100
47	SA-2B	Z	.003	.003	0	%100
48	SA-1B	Z	.000783	.000783	0	%100
49	GSI-1	Z	.002	.002	0	%100
50	GSI-2	Z	.002	.002	0	%100
51	GSI-3	Z	.000617	.000617	0	%100
52	GSI-4	Z	.000617	.000617	0	%100
53	GSI-5	Z	.002	.002	0	%100
54	GSI-6	Z	.002	.002	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	MP-9	Z	.002	.002	0	%100
60	MP-10	Z	.002	.002	0	%100
61	MP-11	Z	.002	.002	0	%100
62	MP-12	Z	.002	.002	0	%100
63	MP-5	Z	.002	.002	0	%100
64	MP-6	Z	.002	.002	Ö	%100
65	MP-7	Z	.002	.002	0	%100
66	MP-8	Z	.002	.002	0	%100
67	SFS-1	Z	.003	.003	0	%100
68	SFS-2	Z	.003	.003	0	%100
69	SFS-3	Z	.003	.003	0	%100
70	SFS-4	Z	.003	.003	0	%100
71	SFS-5	Z	.003	.003	0	%100
72	SFS-6	Z	.003	.003	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	.001	.001	0	%100
2	FFTH-3	X	.002	.002	0	%100
3	FFTH-2	X	.000785	.000785	0	%100
4	SA-1	X	0	0	0	%100
5	SA-2	X	.002	.002	0	%100
6	SA-3	X	.002	.002	0	%100
7	CP-1	X	.002	.002	0	%100
8	CP-2	X	.004	.004	0	%100
9	CP-3	X	.002	.002	0	%100
10	SA-3B	X	.002	.002	0	%100
11	SA-2B	X	.002	.002	0	%100
12	SA-1B	X	0	0	0	%100
13	GSI-1	X	.001	.001	0	%100
14	GSI-2	X	.001	.001	0	%100
15	GSI-3	X	0	0	0	%100
16	GSI-4	X	0	0	0	%100
17	GSI-5	X	.002	.002	0	%100
18	GSI-6	X	.002	.002	0	%100
19	MP-1	X	.001	.001	0	%100

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Company Designer Job Number Model Name

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

	Member Label	Direction	Start Magnitude[k/ft	. End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
20	MP-2	X	.001	.001	0	%100
21	MP-3	X	.001	.001	0	%100
22	MP-4	X	.001	.001	0	%100
23	MP-9	X	.001	.001	0	%100
24	MP-10	X	.001	.001	0	%100
25	MP-11	X	.001	.001	0	%100
26	MP-12	X	.001	.001	0	%100
27	MP-5	X	.001	.001	0	%100
28	MP-6	Х	.001	.001	0	%100
29	MP-7	Х	.001	.001	0	%100
30	MP-8	Х	.001	.001	0	%100
31	SFS-1	Х	.002	.002	0	%100
32	SFS-2	X	.002	.002	0	%100
33	SFS-3	X	.002	.002	0	%100
34	SFS-4	X	.002	.002	0	%100
35	SFS-5	Х	.002	.002	0	%100
36	SFS-6	Х	.002	.002	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-3	Z	.003	.003	0	%100
39	FFTH-2	Z	.002	.002	0	%100
40	SA-1	Z	0	0	0	%100
41	SA-2	Z	.003	.003	0	%100
42	SA-3	Z	.004	.004	0	%100
43	CP-1	Z	.003	.003	0	%100
44	CP-2	Z	.006	.006	0	%100
45	CP-3	Z	.003	.003	0	%100
46	SA-3B	Z	.004	.004	0	%100
47	SA-2B	Z	.003	.003	0	%100
48	SA-1B	Z	0	0	0	%100
49	GSI-1	Z	.003	.003	0	%100
50	GSI-2	Z	.003	.003	0	%100
51	GSI-3	Z	0	0	0	%100
52	GSI-4	Z	0	0	0	%100
53	GSI-5	Z	.003	.003	0	%100
54	GSI-6	Z	.003	.003	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	MP-9	Z	.002	.002	0	%100
60	MP-10	Z	.002	.002	0	%100
61	MP-11	Z	.002	.002	0	%100
62	MP-12	Z	.002	.002	0	%100
63	MP-5	Z	.002	.002	0	%100
64	MP-6	Z	.002	.002	0	%100
65	MP-7	Z	.002	.002	0	%100
66	MP-8	Z	.002	.002	0	%100
67	SFS-1	Z	.004	.004	0	%100
68	SFS-2	Z	.004	.004	0	%100
69	SFS-3	Z	.004	.004	0	%100
70	SFS-4	Z	.004	.004	0	%100
71	SFS-5	Z	.004	.004	0	%100
72	SFS-6	Z	.004	.004	0	%100

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

Member Label Start Magnitude[k/ft,... End Magnitude[k/ft,F,... Start Location[ft,%] End Location[ft,%]

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	Z	0	0	0 -	%100
2	FFTH-3	Z	.003	.003	0	%100
3	FFTH-2	Z	.003	.003	0	%100
4	SA-1	Z	.002	.002	0	%100
5	SA-2	Z	.002	.002	0	%100
6	SA-3	Z	.005	.005	0	%100
7	CP-1	Z	.006	.006	0	%100
8	CP-2	Z	.006	.006	0	%100
9	CP-3	Z	0	0	0	%100
10	SA-3B	Z	.005	.005	0	%100
11	SA-2B	Z	.002	.002	0	%100
12	SA-1B	Z	.002	.002	0	%100
13	GSI-1	Z	.004	.004	0	%100
14	GSI-2	Z	.004	.004	0	%100
15	GSI-3	Z	.002	.002	0	%100
16	GSI-4	Z	.002	.002	0	%100
17	GSI-5	Z	.002	.002	0	%100
18	GSI-6	Z	.002	.002	0	%100
19	MP-1	Z	.003	.003	0	%100
20	MP-2	Z	.003	.003	0	%100
21	MP-3	Z	.003	.003	0	%100
22	MP-4	Z	.003	.003	0	%100
23	MP-9	Z	.003	.003	0	%100
24	MP-10	Z	.003	.003	0	%100
25	MP-11	Z	.003	.003	0	%100
26	MP-12	Z	.003	.003	0	%100
27	MP-5	Z	.003	.003	0	%100
28	MP-6	Z	.003	.003	0	%100
29	MP-7	Z	.003	.003	0	%100
30	MP-8	Z	.003	.003	0	%100
31	SFS-1	Z	.005	.005	0	%100
32	SFS-2	Z	.005	.005	0	%100
33	SFS-3	Z	.005	.005	0	%100
34	SFS-4	Z	.005	.005	Ö	%100
35	SFS-5	Z	.005	.005	0	%100
36	SFS-6	Z	.005	.005	0	%100

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]
1	FFTH-1	X	001	001	0	%100
2	FFTH-3	X	000785	000785	0	%100
3	FFTH-2	X	002	002	0	%100
4	SA-1	X	002	002	0	%100
5	SA-2	X	0	0	0	%100
6	SA-3	X	002	002	0	%100
7	CP-1	X	004	004	0	%100
8	CP-2	X	002	002	0	%100
9	CP-3	X	002	002	0	%100
10	SA-3B	X	002	002	0	%100
11	SA-2B	X	0	0	0	%100
12	SA-1B	X	002	002	0	%100
13	GSI-1	X	001	001	0	%100
14	GSI-2	X	001	001	0	%100
15	GSI-3	X	002	002	0	%100
16	GSI-4	X	002	002	0	%100
17	GSI-5	X	0	0	0	%100

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Company Designer Job Number Model Name

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

	Member Label	Direction	Start Magnitude[k/ft	. End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
18	GSI-6	X	0	0	0	%100
19	MP-1	X	001	001	0	%100
20	MP-2	X	001	001	0	%100
21	MP-3	X	001	001	0	%100
22	MP-4	X	001	001	0	%100
23	MP-9	Х	001	001	0	%100
24	MP-10	X	001	001	0	%100
25	MP-11	X	001	001	0	%100
26	MP-12	X	001	001	0	%100
27	MP-5	X	001	001	0	%100
28	MP-6	X	001	001	0	%100
29	MP-7	X	001	001	0	%100
30	MP-8	X	001	001	0	%100
31	SFS-1	X	002	002	0	%100
32	SFS-2	X	002	002	0	%100
33	SFS-3	X	002	002	0	%100
34	SFS-4	X	002	002	0	%100
35	SFS-5	X	002	002	0	%100
36	SFS-6	X	002	002	Ö	%100
37	FFTH-1	Ž	.002	.002	0	%100
38	FFTH-3	Z	.002	.002	Ö	%100
39	FFTH-2	Z	.003	.003	0	%100
40	SA-1	Z	.003	.003	0	%100
41	SA-2	Z	0	0	0	%100
42	SA-3	7	.004	.004	Ö	%100
43	CP-1	7	.006	.006	0	%100
44	CP-2	Z	.003	.003	Ö	%100
45	CP-3	Z	.003	.003	0	%100
46	SA-3B	Z	.004	.004	Ů.	%100
47	SA-2B	Z	0	0	0	%100
48	SA-1B	Z	.003	.003	0	%100
49	GSI-1	Z	.003	.003	0	%100
50	GSI-2	Z	.003	.003	0	%100
51	GSI-3	7	.003	.003	0	%100
52	GSI-4	7	.003	.003	0	%100
53	GSI-5	Z	0	0	0	%100
54	GSI-6	Z	0	0	0	%100
55	MP-1	Z	.002	.002	0	%100
56	MP-2	Z	.002	.002	0	%100
57	MP-3	Z	.002	.002	0	%100
58	MP-4	Z	.002	.002	0	%100
59	MP-9	Z	.002	.002	0	%100
60	MP-10	Z	.002	.002	0	%100
61	MP-11	Z	.002	.002	0	%100
62	MP-12	7	.002	.002	0	%100 %100
63	MP-5	Z	.002	.002	0	%100
64	MP-6	Z	.002	.002	0	%100
65	MP-7	Z	.002	.002	0	%100
66	MP-8	Z	.002	.002	0	%100
67	SFS-1	Z	.004	.004	0	%100
68	SFS-2	Z	.004	.004	0	%100 %100
69	SFS-3	7	.004	.004	0	%100 %100
70	SFS-4	Z	.004	.004	0	%100 %100
71	SFS-5	Z	.004	.004	0	%100 %100
72	SFS-6	7	.004	.004	0	%100 %100
12	515-6		.004	.004	U	%100



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

FFTH-1		Member Label	Direction		End Magnitude[k/ft,F,		End Location[ft,%]
SA-1							
SA-1							
5         SA-2         X         -00028         -000883         0         %-100           7         CP-1         X         -002         -002         0         %-100           7         CP-1         X         -001         -005         0         %-100           9         CP-3         X         -001         -004         0         %-100           10         SA-3B         X         -002         -002         0         %-1100           11         SA-2B         X         -003         -002         0         %-1100           12         SA-1B         X         -003         -003         0         %-100           13         GSI-1         X         -002         -002         0         %-100           14         GSI-2         X         -002         -002         0         %-100           14         GSI-3         X         -003         -003         0         %-100           15         GSI-3         X         -003         -003         0         %-100           16         GSI-4         X         -003         -003         0         %-100           17							
6         SA-3         X        002        002         0         %100           8         CP-2         X        001        001         0         %100           9         CP-3         X        001        001         0         %100           10         SA-3B         X        002        002         0         %100           11         SA-2B         X        003        003         0         %100           12         SA-1B         X        002        002         0         %100           13         GSI-1         X        002        002         0         %100           14         GSI-2         X        002        002         0         %100           15         GSI-3         X        003        003         0         %100           16         GSI-4         X        003        003         0         %100           17         GSI-5         X        000674        000674         0         %100           18         GSI-6         X        0002        002         0         %100           20 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
T							
8         CP-2         X        001        001         0         %100           10         SA-3B         X        002        002         0         %100           11         SA-2B         X        000856         0         %100           12         SA-1B         X        003        003         0         %100           13         GSI-1         X        002        002         0         %100           14         GSI-2         X        002        002         0         %100           15         GSI-3         X        003        003         0         %100           15         GSI-3         X        003        003         0         %100           17         GSI-5         X        000674        000674         0         %100           18         GSI-6         X        000674        000674         0         %100           19         MP-1         X        002        002         0         %100           20         MP-2         X        002        002         0         %100           21 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>							
QF-3							
10							
11							
12							
13							
14         GSI-2         X        002        002         0         %100           15         GSI-3         X        003        003         0         %100           16         GSI-4         X        003        003         0         %100           17         GSI-5         X        000674        000674         0         %100           18         GSI-6         X        000674        002         %100           19         MP-1         X        002        002         0         %100           20         MP-1         X        002        002         0         %100           21         MP-3         X        002        002         0         %100           21         MP-3         X        002        002         0         %100           22         MP-4         X        002        002         0         %100           24         MP-10         X        002        002         0         %100           25         MP-11         X        002        002         0         %100           26         MP							
15							
16         GSI-4         X        003        00674         0         %:100           17         GSI-5         X        000674        000674         0         %:100           18         GSI-6         X        0002        002         0         %:100           19         MP-1         X        002        002         0         %:100           20         MP-2         X        002        002         0         %:100           21         MP-3         X        002        002         0         %:100           21         MP-3         X        002        002         0         %:100           23         MP-9         X        002        002         0         %:100           24         MP-10         X        002        002         0         %:100           25         MP-11         X        002        002         0         %:100           26         MP-12         X        002        002         0         %:100           28         MP-6         X        002        002         0         %:100							
17         GSI-5         X         -,000674         -,000674         0         %100           18         GSI-6         X         -,000674         -,000674         0         %6100           20         MP-1         X         -,002         -,002         0         %6100           20         MP-2         X         -,002         -,002         0         %6100           21         MP-3         X         -,002         -,002         0         %6100           22         MP-4         X         -,002         -,002         0         %6100           23         MP-9         X         -,002         -,002         0         %6100           24         MP-10         X         -,002         -,002         0         %6100           25         MP-11         X         -,002         -,002         0         %6100           25         MP-11         X         -,002         -,002         0         %6100           28         MP-5         X         -,002         -,002         0         %6100           29         MP-7         X         -,002         -,002         0         %6100							
18         GSI-6         X         -,000674         -,000674         0         %100           19         MP-1         X         -,002         -,002         0         %5100           20         MP-2         X         -,002         -,002         0         %5100           21         MP-3         X         -,002         -,002         0         %5100           22         MP-4         X         -,002         -,002         0         %5100           23         MP-9         X         -,002         -,002         0         %5100           24         MP-10         X         -,002         -,002         0         %5100           25         MP-11         X         -,002         -,002         0         %5100           26         MP-12         X         -,002         -,002         0         %5100           26         MP-12         X         -,002         -,002         0         %5100           28         MP-6         X         -,002         -,002         0         %5100           30         MP-8         X         -,002         -,002         0         %5100           <							
19 MP-1 X							
20							
21         MP-3         X        002        002         0         %100           22         MP-4         X        002        002         0         %100           23         MP-9         X        002        002         0         %100           24         MP-10         X        002        002         0         %100           25         MP-11         X        002        002         0         %100           26         MP-12         X        002        002         0         %100           26         MP-12         X        002        002         0         %100           27         MP-5         X        002        002         0         %100           28         MP-6         X        002        002         0         %100           29         MP-7         X        002        002         0         %100           30         MP-8         X        002        002         0         %100           31         SFS-1         X        003        003         0         %100           32							
22         MP-4         X        002        002         0         %100           23         MP-9         X        002        002         0         %100           24         MP-10         X        002        002         0         %100           25         MP-11         X        002        002         0         %100           26         MP-12         X        002        002         0         %100           27         MP-5         X        002        002         0         %100           28         MP-6         X        002        002         0         %100           30         MP-8         X        002        002         0         %100           31         SFS-1         X        003        003         0         %100           32         SFS-2         X        003        003         0         %100           33         SFS-3         X        003        003         0         %100           34         SFS-4         X        003        003         0         %100           35							
23							
24         MP-10         X        002        002         0         %100           25         MP-11         X        002        002         0         %100           26         MP-12         X        002        002         0         %100           27         MP-5         X        002        002         0         %100           28         MP-6         X        002        002         0         %100           30         MP-8         X        002        002         0         %100           31         SFS-1         X        003        003         0         %100           32         SFS-2         X        003        003         0         %100           33         SFS-3         X        003        003         0         %100           34         SFS-4         X        003        003         0         %100           35         SFS-5         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           37							
25         MP-11         X        002        002         0         %100           26         MP-12         X        002        002         0         %100           27         MP-5         X        002        002         0         %100           28         MP-6         X        002        002         0         %100           29         MP-7         X        002        002         0         %100           30         MP-8         X        002        002         0         %100           31         SFS-1         X        003        003        003         0         %100           32         SFS-2         X        003        003        003         0         %100           34         SFS-4         X        003        003         0         %100           35         SFS-5         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           37         FFTH-1         Z         .002         .002         0         %100 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
26         MP-12         X        002        002         0         %100           27         MP-5         X        002        002         0         %100           28         MP-6         X        002         .002         0         %100           29         MP-7         X        002        002         0         %100           30         MP-8         X        002        002         0         %100           31         SFS-1         X        003        003         0         %100           32         SFS-2         X        003        003         0         %100           33         SFS-3         X        003        003         0         %100           35         SFS-4         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           38         FFTH-1         Z         .002         .002         0         %100           39         FFTH-2         Z         .003         .003         0         %100           40							
27         MP-5         X        002        002         0         %100           28         MP-6         X        002        002         0         %100           29         MP-7         X        002        002         0         %100           30         MP-8         X        002        002         0         %100           31         SFS-1         X        003        003         0         %100           32         SFS-2         X        003        003         0         %100           33         SFS-3         X        003        003         0         %100           34         SFS-4         X        003        003         0         %100           35         SFS-5         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           37         FFTH-1         Z         .002         .002         0         %100           39         FFTH-2         Z         .003         .003         0         %100           40							
28         MP-6         X        002        002         0         %100           29         MP-7         X        002        002         0         %100           30         MP-8         X        002        002         0         %100           31         SFS-1         X        003        003         0         %100           32         SFS-2         X        003        003         0         %100           34         SFS-3         X        003        003         0         %100           35         SFS-4         X        003        003         0         %100           35         SFS-5         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           37         FFTH-1         Z         .002         .002         0         %100           38         FFTH-3         Z         .00693         .00693         0         %100           40         SA-1         Z         .003         .003         0         %100           41							
29         MP-7         X        002        002         0         %100           30         MP-8         X        002        002         0         %100           31         SFS-1         X        003        003         0         %100           32         SFS-2         X        003        003         0         %100           33         SFS-3         X        003        003         0         %100           34         SFS-4         X        003        003         0         %100           35         SFS-5         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           38         FFTH-1         Z         .002         .002         0         %100           39         FFTH-2         Z         .003         .003         0         %100           40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .003         .003         0         %100           42         <							
30         MP-8         X        002        003         0         %100           31         SFS-1         X        003        003         0         %100           32         SFS-2         X        003        003         0         %100           33         SFS-3         X        003        003         0         %100           34         SFS-4         X        003        003         0         %100           35         SFS-5         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           37         FFTH-1         Z         .002         .002         0         %100           38         FFTH-3         Z         .000693         .00693         0         %100           40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .003         .003         0         %100           42         SA-3         Z         .002         .002         0         %100           43							
SFS-1							
32         SFS-2         X        003        003         0         %100           33         SFS-3         X        003        003         0         %100           34         SFS-4         X        003        003         0         %100           35         SFS-5         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           37         FFTH-1         Z         .002         .002         0         %100           38         FFTH-3         Z         .000693         .003         0         %100           39         FFTH-2         Z         .003         .003         0         %100           40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .000801         .00801         0         %100           42         SA-3         Z         .002         .002         0         %100           44         CP-2         Z         .001         .001         0         %100           45							
33         SFS-3         X        003        003         0         %100           34         SFS-4         X        003        003         0         %100           35         SFS-5         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           37         FFTH-1         Z         .002         .002         0         %100           38         FFTH-3         Z         .000693         .00693         0         %100           40         SA-1         Z         .003         .003         0         %100           40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .000801         .00801         0         %100           42         SA-3         Z         .002         .002         0         %100           43         CP-1         Z         .005         .005         0         %100           45         CP-3         Z         .001         .001         0         %100           45         <							
34         SFS-4         X        003        003         0         %100           35         SFS-5         X        003        003         0         %100           36         SFS-6         X        003        003         0         %100           37         FFTH-1         Z         .002         .002         0         %100           38         FFTH-3         Z         .000693         .00693         0         %100           40         SA-1         Z         .003         .003         0         %100           40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .000801         .00801         0         %100           42         SA-3         Z         .002         .002         0         %100           43         CP-1         Z         .005         .005         0         %100           44         CP-2         Z         .001         .001         0         %100           45         CP-3         Z         .003         .003         0         %100           45							
SFS-5							
36         SFS-6         X        003        003         0         %100           37         FFTH-1         Z         .002         .002         0         %100           38         FFTH-3         Z         .000693         0         %100           39         FFTH-2         Z         .003         .003         0         %100           40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .000801         .00801         0         %100           42         SA-3         Z         .002         .002         0         %100           43         CP-1         Z         .005         .005         0         %100           44         CP-2         Z         .001         .001         0         %100           45         CP-3         Z         .003         .003         0         %100           46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .00783         0         %100           49         GSI-1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
37         FFTH-1         Z         .002         .002         0         %100           38         FFTH-3         Z         .000693         .00693         0         %100           39         FFTH-2         Z         .003         .003         0         %100           40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .000801         .00801         0         %100           42         SA-3         Z         .002         .002         0         %100           43         CP-1         Z         .005         .005         0         %100           44         CP-2         Z         .001         .001         0         %100           45         CP-3         Z         .003         .003         0         %100           45         CP-3         Z         .002         .002         0         %100           47         SA-2B         Z         .002         .002         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1							
38         FFTH-3         Z         .000693         .000693         0         %100           39         FFTH-2         Z         .003         .003         0         %100           40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .000801         .000801         0         %100           42         SA-3         Z         .002         .002         0         %100           44         CP-1         Z         .005         .005         0         %100           45         CP-3         Z         .003         .003         0         %100           45         CP-3         Z         .002         .002         0         %100           46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .000783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         <							
39         FFTH-2         Z         .003         .003         0         %100           40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .000801         .00801         0         %100           42         SA-3         Z         .002         .002         0         %100           43         CP-1         Z         .005         .005         0         %100           44         CP-2         Z         .001         .001         0         %100           45         CP-3         Z         .003         .003         0         %100           46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .00783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3<							
40         SA-1         Z         .003         .003         0         %100           41         SA-2         Z         .000801         .00801         0         %100           42         SA-3         Z         .002         .002         0         %100           43         CP-1         Z         .005         .005         0         %100           44         CP-2         Z         .001         .001         0         %100           45         CP-3         Z         .003         .003         .0         %100           46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .00783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4<							
41         SA-2         Z         .000801         .000801         0         %100           42         SA-3         Z         .002         .002         0         %100           43         CP-1         Z         .005         .005         0         %100           44         CP-2         Z         .001         .001         0         %100           45         CP-3         Z         .003         .003         0         %100           46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .00783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5							
42         SA-3         Z         .002         .002         0         %100           43         CP-1         Z         .005         .005         0         %100           44         CP-2         Z         .001         .001         0         %100           45         CP-3         Z         .003         .003         0         %100           46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .000783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .00617         .00617         0         %100           54         GSI-6							
43         CP-1         Z         .005         .005         0         %100           44         CP-2         Z         .001         .001         0         %100           45         CP-3         Z         .003         .003         0         %100           46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .00783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         <							
44         CP-2         Z         .001         .001         0         %100           45         CP-3         Z         .003         .003         0         %100           46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .000783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56							
45         CP-3         Z         .003         .003         0         %100           46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .000783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100							
46         SA-3B         Z         .002         .002         0         %100           47         SA-2B         Z         .000783         .000783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100			_				
47         SA-2B         Z         .000783         .000783         0         %100           48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100							
48         SA-1B         Z         .003         .003         0         %100           49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100							
49         GSI-1         Z         .002         .002         0         %100           50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100							
50         GSI-2         Z         .002         .002         0         %100           51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100							
51         GSI-3         Z         .002         .002         0         %100           52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100							
52         GSI-4         Z         .002         .002         0         %100           53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100							
53         GSI-5         Z         .000617         .000617         0         %100           54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100							
54         GSI-6         Z         .000617         .000617         0         %100           55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100							
55         MP-1         Z         .002         .002         0         %100           56         MP-2         Z         .002         .002         0         %100	53	GSI-5		.000617	.000617	0	%100
56 MP-2 Z .002 .002 0 %100							
56 MP-2 Z .002 .002 0 %100	55		Z				%100
[67] MD 2 7 002 002 0 9/100	56						%100
107   IVIF-0   Z   .002   .002   0   %100	57	MP-3	Z	.002	.002	0	%100

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Company :
Designer :
Job Number :
Model Name :

: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft.F	. Start Location[ft,%]	End Location[ft,%]
58	MP-4	Z	.002	.002	0	%100
59	MP-9	Z	.002	.002	0	%100
60	MP-10	Z	.002	.002	0	%100
61	MP-11	Z	.002	.002	0	%100
62	MP-12	Z	.002	.002	0	%100
63	MP-5	Z	.002	.002	0	%100
64	MP-6	Z	.002	.002	0	%100
65	MP-7	Z	.002	.002	0	%100
66	MP-8	Z	.002	.002	0	%100
67	SFS-1	Z	.003	.003	0	%100
68	SFS-2	Z	.003	.003	0	%100
69	SFS-3	Z	.003	.003	0	%100
70	SFS-4	Z	.003	.003	0	%100
71	SFS-5	Z	.003	.003	0	%100
72	SFS-6	Z	.003	.003	0	%100

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

4	Member Label FFTH-1	Direction X	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	Start Location[ft,%]	End Location[ft,%] %100
2	FFTH-3	X	003	003	0	%100 %100
3	FFTH-2	X	002	002	0	%100 %100
4	SA-1	X	004	002	0	%100 %100
5	SA-2	X	002	004	0	%100 %100
6	SA-3	X	002	002	0	%100 %100
7	CP-1	X	005	005	0	%100 %100
8	CP-2	X	0	0	0	%100
9	CP-3	X	005	005	0	%100
10	SA-3B	X	002	002	0	%100
11	SA-2B	X	002	002	0	%100
12	SA-1B	X	004	004	0	%100
13	GSI-1	X	001	001	0	%100
14	GSI-2	X	001	001	0	%100
15	GSI-3	X	003	003	0	%100
16	GSI-4	Х	003	003	0	%100
17	GSI-5	X	002	002	0	%100
18	GSI-6	X	002	002	0	%100
19	MP-1	X	002	002	0	%100
20	MP-2	Х	002	002	0	%100
21	MP-3	X	002	002	0	%100
22	MP-4	Χ	002	002	0	%100
23	MP-9	X	002	002	0	%100
24	MP-10	Χ	002	002	0	%100
25	MP-11	X	002	002	0	%100
26	MP-12	Χ	002	002	0	%100
27	MP-5	X	002	002	0	%100
28	MP-6	Χ	002	002	0	%100
29	MP-7	X	002	002	0	%100
30	MP-8	Χ	002	002	0	%100
31	SFS-1	Χ	004	004	0	%100
32	SFS-2	Χ	004	004	0	%100
33	SFS-3	Χ	004	004	0	%100
34	SFS-4	Χ	004	004	0	%100
35	SFS-5	Χ	004	004	0	%100
36	SFS-6	Χ	004	004	0	%100
37	FFTH-1	Z	.002	.002	0	%100
38	FFTH-3	Z	0	0	0	%100

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: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

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

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
39	FFTH-2	Z	.002	.002	0	%100
40	SA-1	Z	.002	.002	0	%100
41	SA-2	Z	.001	.001	0	%100
42	SA-3	Z	.001	.001	0	%100
43	CP-1	Z	.003	.003	0	%100
44	CP-2	Z	0	0	0	%100
45	CP-3	Z	.003	.003	0	%100
46	SA-3B	Z	.001	.001	0	%100
47	SA-2B	Z	.001	.001	0	%100
48	SA-1B	Z	.002	.002	0	%100
49	GSI-1	Z	.000942	.000942	0	%100
50	GSI-2	Z	.000942	.000942	0	%100
51	GSI-3	Z	.002	.002	0	%100
52	GSI-4	Z	.002	.002	0	%100
53	GSI-5	Z	.000842	.000842	0	%100
54	GSI-6	Z	.000842	.000842	0	%100
55	MP-1	Z	.001	.001	0	%100
56	MP-2	Z	.001	.001	0	%100
57	MP-3	Z	.001	.001	0	%100
58	MP-4	Z	.001	.001	0	%100
59	MP-9	Z	.001	.001	0	%100
60	MP-10	Z	.001	.001	0	%100
61	MP-11	Z	.001	.001	0	%100
62	MP-12	Z	.001	.001	0	%100
63	MP-5	Z	.001	.001	0	%100
64	MP-6	Z	.001	.001	0	%100
65	MP-7	Z	.001	.001	0	%100
66	MP-8	Z	.001	.001	0	%100
67	SFS-1	Z	.002	.002	0	%100
68	SFS-2	Z	.002	.002	0	%100
69	SFS-3	Z	.002	.002	0	%100
70	SFS-4	Z	.002	.002	0	%100
71	SFS-5	Z	.002	.002	0	%100
72	SFS-6	Z	.002	.002	0	%100

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

IVICIII	Wieniber Distributed Loads (BLC 33 : BLC 1 Transient Area Loads)									
	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	. Start Location[ft,%]	End Location[ft,%]				
1	FFTH-3	Υ	024	024	5.523	7.977				
2	GSI-3	Υ	015	015	.917	2.917				
3	GSI-4	Υ	015	015	.141	2.141				
4	FFTH-1	Υ	011	011	2.206	3.206				
5	FFTH-3	Υ	011	011	2.206	3.206				
6	GSI-1	Υ	011	011	1.39	2.39				
7	GSI-4	Υ	011	011	.669	1.669				
8	SA-2	Υ	021	021	1	3.116				
9	CP-1	Υ	003	003	0	1				
10	FFTH-1	Υ	003	005	0	1.35				
11	FFTH-1	Υ	005	007	1.35	2.7				
12	FFTH-3	Υ	003	005	0	1.35				
13	FFTH-3	Υ	005	007	1.35	2.7				
14	SA-2	Υ	014	01	2.625	3.937				
15	SA-2	Υ	01	006	3.937	5.25				
16	FFTH-1	Υ	024	024	5.523	7.977				
17	GSI-1	Υ	015	015	.917	2.917				
18	GSI-2	Υ	015	015	.141	2.141				
19	FFTH-1	Υ	011	011	10.294	11.294				

RISA-3D Version 17.0.4 [C:\...\...\...\...\...\RISA-3D\Modifications.r3d]

Company Designer Job Number Model Name

Tower Engineering Professionals, Inc. SCW TEP No. 25661.584643 Plymouth/RT 6 (BU 826768)

Aug 13, 2021 8:02 AM Checked By: PHX

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

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	Start Location[ft.%]	End Location[ft,%]
20	FFTH-2	Υ	011	011	10.294	11.294
21	GSI-2	Υ	011	011	.669	1.669
22	GSI-5	Υ	011	011	1.39	2.39
23	SA-1	Υ	021	021	1	3.116
24	CP-2	Υ	003	003	0	1
25	FFTH-1	Υ	007	005	10.8	12.15
26	FFTH-1	Υ	005	003	12.15	13.5
27	FFTH-2	Υ	007	005	10.8	12.15
28	FFTH-2	Υ	005	003	12.15	13.5
29	SA-1	Υ	014	01	2.625	3.937
30	SA-1	Υ	01	006	3.937	5.25
31	FFTH-2	Y	024	024	5.523	7.977
32	GSI-5	Υ	015	015	.917	2.917
33	GSI-6	Υ	015	015	.141	2.141
34	CP-3	Υ	003	003	0	1
35	FFTH-2	Υ	003	005	0	1.35
36	FFTH-2	Υ	005	007	1.35	2.7
37	FFTH-3	Υ	007	005	10.8	12.15
38	FFTH-3	Υ	005	003	12.15	13.5
39	SA-3	Υ	014	01	2.625	3.937
40	SA-3	Υ	01	006	3.937	5.25
41	FFTH-2	Υ	011	011	2.206	3.206
42	FFTH-3	Υ	011	011	10.294	11.294
43	GSI-3	Υ	011	011	1.39	2.39
44	GSI-6	Υ	011	011	.669	1.669
45	SA-3	Υ	021	021	1	3.116

#### Member Distributed Loads (BLC 40 : BLC 18 Transient Area Loads)

	Member Label	Direction	Start Magnitude[k/ft,	End Magnitude[k/ft,F,	Start Location[ft,%]	End Location[ft,%]
1	FFTH-3	Υ	016	016	5.523	7.977
2	GSI-3	Υ	01	01	.917	2.917
3	GSI-4	Υ	01	01	.141	2.141
4	FFTH-1	Υ	007	007	2.206	3.206
5	FFTH-3	Υ	007	007	2.206	3.206
6	GSI-1	Υ	007	007	1.39	2.39
7	GSI-4	Υ	007	007	.669	1.669
8	SA-2	Υ	014	014	1	3.116
9	CP-1	Υ	002	002	0	1
10	FFTH-1	Υ	002	003	0	1.35
11	FFTH-1	Υ	003	005	1.35	2.7
12	FFTH-3	Υ	002	003	0	1.35
13	FFTH-3	Υ	003	005	1.35	2.7
14	SA-2	Υ	009	007	2.625	3.937
15	SA-2	Υ	007	004	3.937	5.25
16	FFTH-1	Υ	016	016	5.523	7.977
17	GSI-1	Υ	01	01	.917	2.917
18	GSI-2	Υ	01	01	.141	2.141
19	FFTH-1	Υ	007	007	10.294	11.294
20	FFTH-2	Υ	007	007	10.294	11.294
21	GSI-2	Υ	007	007	.669	1.669
22	GSI-5	Υ	007	007	1.39	2.39
23	SA-1	Υ	014	014	1	3.116
24	CP-2	Υ	002	002	0	1
25	FFTH-1	Υ	005	003	10.8	12.15
26	FFTH-1	Υ	003	002	12.15	13.5
27	FFTH-2	Υ	005	003	10.8	12.15

RISA-3D Version 17.0.4 [C:\...\...\...\...\RISA-3D\Modifications.r3d]



: Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

Aug 13, 2021 8:02 AM Checked By: PHX

#### Member Distributed Loads (BLC 40 : BLC 18 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[k/ft	End Magnitude[k/ft,F	. Start Location[ft,%]	End Location[ft,%]
28	FFTH-2	Υ	003	002	12.15	13.5
29	SA-1	Υ	009	007	2.625	3.937
30	SA-1	Υ	007	004	3.937	5.25
31	FFTH-2	Υ	016	016	5.523	7.977
32	GSI-5	Υ	01	01	.917	2.917
33	GSI-6	Υ	01	01	.141	2.141
34	CP-3	Υ	002	002	0	1
35	FFTH-2	Υ	002	003	0	1.35
36	FFTH-2	Υ	003	005	1.35	2.7
37	FFTH-3	Υ	005	003	10.8	12.15
38	FFTH-3	Υ	003	002	12.15	13.5
39	SA-3	Υ	009	007	2.625	3.937
40	SA-3	Υ	007	004	3.937	5.25
41	FFTH-2	Υ	007	007	2.206	3.206
42	FFTH-3	Υ	007	007	10.294	11.294
43	GSI-3	Υ	007	007	1.39	2.39
44	GSI-6	Υ	007	007	.669	1.669
45	SA-3	Υ	014	014	1	3.116

#### Member Area Loads (BLC 1 : Dead)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N46A	N52	N51	N45A	Υ	Two Way	012
2	N60A	N63	N62A	N61A	Υ	Two Way	012
3	N61A	N8	N7	N62A	Υ	Two Way	012
4	N50	N44A	N43	N49	Υ	Two Way	012
5	N56	N61	N60	N59	Υ	Two Way	012
6	N59	N10	N12	N60	Υ	Two Way	012
7	N54	N53	N47A	N48	Υ	Two Way	012
8	N9	N11	N67	N66	Υ	Two Way	012
9	N66	N65	N68	N67	Y	Two Way	012

#### Member Area Loads (BLC 18 : Ice Weight)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N46A	N52	N51	N45A	Υ	Two Way	008
2	N60A	N63	N62A	N61A	Υ	Two Way	008
3	N61A	N8	N7	N62A	Υ	Two Way	008
4	N50	N44A	N43	N49	Υ	Two Way	008
5	N56	N61	N60	N59	Υ	Two Way	008
6	N59	N10	N12	N60	Υ	Two Way	008
7	N54	N53	N47A	N48	Υ	Two Way	008
8	N9	N11	N67	N66	Y	Two Way	008
9	N66	N65	N68	N67	Y	Two Way	008

#### Envelope Joint Reactions

1 SA3 max 1.846 2 .576 42 .627 6 0 98 .869 6 -135 2 min -3.586 26 .152 2 -659 30 0 1 -925 30 -2.405	10 34
	34
3   SA2   max   1.83   33   .572   47   1.665   7   2.132   39   1.069   11   1.231	39
4 min -1.022 9 .156 7 -3.089 31 .085 15 -1.071 3 .049	15
5 SA1 max 1.9 19 .566 34 3.066 2109 5 1.186 17 1.218	45
6 min -1.067   11   .122   10   -1.646   13   -2.11   45   -1.216   25   .052	5
7 K2 max153 10 2.744 47 1.767 47 0 23 0 11 0	24
8 min -1.01 34 .391 7 .318 7 0 15 0 19 0	16

Company Designer Job Number Model Name : Tower Engineering Professionals, Inc. : SCW : TEP No. 25661.584643 : Plymouth/RT 6 (BU 826768)

Aug 13, 2021 8:02 AM Checked By: PHX

#### Envelope Joint Reactions (Continued)

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
9	K3	max	022	59	2.542	37	291	13	Ó	5	Ó	17	Ò	27
10		min	823	34	.356	13	-1.697	36	0	29	0	25	0	3
11	K1	max	2.052	42	2.77	42	.076	14	0	6	0	6	0	10
12		min	.319	2	.324	2	58	55	0	30	0	30	0	18
13	Totals:	max	4.623	18	9.458	42	4.572	6						П
14		min	-4 623	10	2 596	83	-4 572	30						

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

	Member	Shape	Code Check		LC	ShearLoc[ft]	Dir	LC			phi*Mn	phi*MnCb Eqn
1	GSI-2	L2.5x1.5x4	.600	3.058	25	.040 0	Z	25	15.421	30.683	.461	1.597 1. H2-1
2	SA-1B	HSS3X3X5	.379	0	48	.090 2	У	45	59.456	92.61	7.613	7.613 1 H1-1b
3	SA-2B	HSS3X3X5	.377	0	43	.090 2	v	39	59.456	92.61	7.613	7.613 1H1-1b
4	FFTH-2	PIPE 3.0	.368	9.422	45	.147 13.5		30	55.457	65.205	5.749	5.749 1H1-1b
5	FFTH-1	PIPE 3.0	.365	4.078	39	.147 13.5		27	55.457	65.205	5.749	5.749 1H1-1b
6	CP-3	PL 6x5/8	.362	.5	43	.495 0	٧	31	119.83	121.5	1.582	15.188 1 H1-1b
7	SA-3B	HSS3X3X5	.357	0	46	.087 2	ý	34	59.456	92.61	7.613	7.613 1 H1-1b
8	FFTH-3	PIPE 3.0	.351	9.422	34	.129 0		22	55.457	65.205	5.749	5.749 1 H1-1b
9	CP-2	PL 6x5/8	.351	.5	38	.525 1	٧	32	119.83	121.5	1.582	15.188 1 H1-1b
10	CP-1	PL 6x5/8	.343	.5	49	.521 1	^	26	119.83	121.5	1.582	15.188 1 H1-1b
11	MP-5	PIPE 2.0	.340	3.719	27	.022 3.719	,	27	15.275	32.13	1.872	1.872 1 H1-1b
12	MP-1	PIPE 2.0	.340	3.719	22	.022 3.719		22	15.275	32.13	1.872	1.872 1 H1-1b
13	MP-9	PIPE 2.0	.340	3.719	33	.022 3.719		33	15.275	32.13	1.872	1.872 1 H1-1b
14	MP-4	PIPE 2.0	.332	3.719	30	.022 3.719		30	15.275	32.13	1.872	1.872 1 H1-1b
15	MP-12	PIPE 2.0	.332	3.719	25	.022 3.719		25	15.275	32.13	1.872	1.872 1 H1-1b
16	MP-8	PIPE 2.0	.332	3.719	19	.022 3.719		19	15.275	32.13	1.872	1.872 1 H1-1b
17	SFS-3	L2.5x2.5x3	.275	3.062	46	.011 0	Ζ	24	9.122	29.192	.873	1.531 1 H2-1
18	SFS-6	L2.5x2.5x3	.274	3.062	38	.011 6	٧	27	9.122	29.192	.873	1.531 1 H2-1
19	SFS-2	L2.5x2.5x3	.274	3.062	43	.012 0	V	33	9.122	29.192	.873	1.531 1 H2-1
20	SFS-1	L2.5x2.5x3	.272	3.062	41	.012 0	Z	19	9.122	29.192	.873	1.531 1 H2-1
21	MP-7	PIPE 2.0	.271	3.719	31	.018 3.719		31	15.275	32.13	1.872	1.872 1 H1-1b
22	MP-3	PIPE 2.0	.271	3.719	26	.018 3.719		26	15.275	32.13	1.872	1.872 1 H1-1b
23	MP-11	PIPE 2.0	.271	3.719	21	.018 3.719		21	15.275	32.13	1.872	1.872 1 H1-1b
24	SFS-4	L2.5x2.5x3	.270	3.062	48	.011 6	^	22	9.122	29.192	.873	1.531 1 H2-1
25	SA-1	HSS3X3X5	.257	1.422	40	.085 .875	< '	45	43.163	92.61	7.613	7.613 1 H1-1b
26	SA-3	HSS3X3X5	.247	1.422	45	.078 .875	٧	48	43.163	92.61	7.613	7.613 1 H1-1b
27	MP-2	PIPE 2.0	.244	3.719	26	.028 3.719	,	26	15.275	32.13	1.872	1.872 2 H1-1b
28	MP-6	PIPE 2.0	.244	3.719	31	.028 3.719		31	15.275	32.13	1.872	1.872 2 H1-1b
29	SA-2	HSS3X3X5	.241	1.422	34	.085 .875	٧	26	43.163	92.61	7.613	7.613 1 H1-1b
30	SFS-5	L2.5x2.5x3	.239	3.062	36	.011 6	Z	30	9.122	29.192	.873	1.531 1 H2-1
31	GSI-5	L2.5x1.5x4	.143	1.688	47	.030 3.058	Z	33	15.421	30.683	.461	1.575 1 H2-1
32	GSI-1	L2.5x1.5x4	.142	1.688	42	.034 3.058	Z	27	15.421	30.683	.461	1.575 1 H2-1
33	GSI-4	L2.5x1.5x4	.141	1.37	37	.033 0	Z	19	15.421	30.683	.461	1.575 1 H2-1
34	GSI-6	L2.5x1.5x4	.140	1.37	48	.033 0	Z	30	15.421	30.683	.461	1.575 1 H2-1
35	GSI-3	L2.5x1.5x4	.137	1.688	36	.032 3.058	Z	22	15.421	30.683	.461	1.575 1 H2-1
36	MP-10	PIPE 2.0	.094	3.719	21	.011 3.719		21	15.275	32.13	1.872	1.872 1 H1-1b

# APPENDIX D ADDITIONAL CALCULATIONS



## Plymouth/RT 6 (BU 826768)

**TEP No.** 25661.584643

 Analysis By:
 SCW
 8/13/2021

 Checked By:
 PHX
 8/13/2021

## **Moment Bolt Group - Support Arm**

Code Revisions: ANSI/TIA-222-H

Bolt Type: Headed Bolts

## **Connection Inputs:**

#### **Bolt Size:** 0.625 in 4 # Bolts: **Plate Width:** 6.0 in **Plate Height:** 6.0 in 4.0 **Bolt H Gap:** in **Bolt V Gap:** 4.0 in Plate T: 0.75 in N/A Slip Member Ø: in **A325N Bolt Grade:**

## **Capacities:**

Bolt Capacity=	19.2%	PASS*
Plate Capacity=	12.9%	PASS*

\*Value Adjusted per TIA-H Section 15.5

## **Bolt Properties:**

Fy <sub>bolt</sub> :	92.0	ksi
Fu <sub>bolt</sub> :	120.0	ksi
r:	2.8	in
J:	32.0	in <sup>4</sup> /in <sup>2</sup>
A <sub>bolt</sub> :	0.3	in <sup>2</sup>
A <sub>bolt, Net Tensile</sub> :	0.2	in <sup>2</sup>
Pretension:	19.0	kips

#### **Member Properties:**

Member Shape:	Flat	
Plate Fy:	36.0	ksi
Plate Fu:	58.0	ksi
Member Height:	3.0	in
Member Width:	3.0	in



#### Plymouth/RT 6 (BU 826768)

**TEP No.** 25661.584643

 Analysis By:
 SCW
 8/13/2021

 Checked By:
 PHX
 8/13/2021

## **Moment Bolt Group - Support Connections**

Code Revisions: ANSI/TIA-222-H

Bolt Type: Threaded Rods

### **Connection Inputs:**

### **Capacities:**

**Bolt Capacity=** 

**Bolt Size:** 0.5 in 2 # Bolts: N/A **Plate Width:** in **Plate Height:** N/A in 4.0 **Bolt H Gap:** in **Bolt V Gap:** 0 in Plate T: N/A in Slip Member Ø: N/A in **A36 Bolt Grade:** 

\*Value Adjusted per TIA-H Section 15.5

PASS\*

54.9%

#### **Bolt Properties:**

Fy<sub>bolt</sub>: 36.0 ksi Fu<sub>bolt</sub>: 58.0 ksi 2.0 r: in in<sup>4</sup>/in<sup>2</sup> J: 8.0  $in^2$ A<sub>bolt</sub>: 0.2  $in^2$ A<sub>bolt, Net Tensile</sub>: 0.1 **Pretension:** 5.8 kips

# APPENDIX E MOUNT MODIFICATION DESIGN DRAWINGS (MDD)

## **MOUNT DESIGN DRAWINGS**

SITE NAME:

## PLYMOUTH/RT 6

**CROWN CASTLE BU NUMBER:** 

826768

**SITE ADDRESS:** 

# 171 TOWN HILL ROAD PLYMOUTH, CT 06786 (LITCHFIELD COUNTY) N 41°40'06.20", W 73°01'11.84"

INDEM OF SHEETS

#### **MODIFICATION PROVISIONS**

THE MODIFICATIONS DEPICTED ON THESE DRAWINGS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE MOUNT MODIFICATION ANALYSIS REPORT COMPLETED BY TEP, JOB NO.: 25661.584643 DATED AUGUST 13, 2021 (REV 0).

ATTENTION ALL CONTRACTORS, ANYTIME YOU ACCESS A CROWN SITE FOR ANY REASON YOU ARE TO CALL THE CROWN NOC UPON ARRIVAL AND DEPARTURE, DAILY AT 800-788-7011.

QUALIFIED ENGINEERING SERVICES ARE AVAILABLE FROM TEP TO ASSIST CONTRACTORS IN CLASS IV RIGGING PLAN REVIEWS. FOR REQUESTED QUALIFIED ENGINEERING SERVICES, CONTACT TEP FOR QUOTE AT RIGGING@TEPGROUP.NET

## **SAFETY CLIMB: 'LOOK UP'**



THE INTEGRITY OF THE WIRE ROPE SAFETY CLIMB SYSTEM SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. MOUNT REINFORCEMENTS AND EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF ANY WIRE ROPE SAFETY CLIMB ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING 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, OR IMPACT TO THE ANCHORAGE POINTS IN ANY WAY. ANY COMPROMISED SAFETY CLIMB MUST BE REPORTED TO YOUR CROWN POC FOR RESOLUTION, INCLUDING EXISTING CONDITIONS.

INDEX OF SHEETS				
SHEET TITLE	REV			
TITLE SHEET	0			
PROJECT NOTES	0			
MOUNT MODIFICATION SCHEDULE	0			
	TITLE SHEET PROJECT NOTES			

## **PROJECT INFORMATION**

TOWER HEIGHT: 169.0-FT
MOUNT ELEVATION: 142.0-FT
MOUNT WIDTH/TYPE: 13.5-FT/PLATFORM

JDE JOB NO.: 669335

ORDER NO.: 570318 REV. 0

DESIGN BUILDING CODE: 2018 CONNECTICUT STATE BUILDING

DESIGN STANDARD: TIA-222-H

#### **PROJECT TEAM**

#### **CCI MODIFICATION PROJECT MANAGER:**

NAME CROWN CASTLE
CONTACT DARCY TARR
PHONE (704) 405-6589
FMAIL DARCY TARR@CROW

MAIL DARCY.TARR@CROWNCASTLE.COM

#### **ENGINEERING FIRM PROJECT MANAGER:**

NAME TOWER ENGINEERING PROFESSIONALS, INC. CONTACT RYAN W. TSCHETTER, P.E.

PHONE (480) 750–9063

RWTSCHETTER@TEPGROUP.NET

PLANS PREPARED FOR:

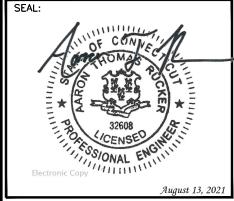
## CROWN CASTLE

6325 ARDREY KELL ROAD, SUITE 600 CHARLOTTE, NC 28277

PLANS PREPARED BY:



326 TRYON ROAD RALEIGH, NC 27603 OFFICE: (919) 661-6351 www.tepgroup.net



O 08-13-21 MODIFICATION DRAWINGS
REV DATE ISSUED FOR:

DRAWN BY: SCW CHECKED BY: PH

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

REVISION:

TEP#: 25661.58464

## **GENERAL NOTES:**

- 1. THE CONTRACT DOCUMENTS ARE THE PROPERTY OF CROWN CASTLE (CROWN). THEY ARE PROVIDED TO THE GC AND ITS LOWER TIER CONTRACTORS AND MATERIAL SUPPLIERS FOR THE LIMITED PURPOSE OF USE IN COMPLETING THE WORK FOR THIS SITE, AND SHALL BE KEPT IN STRICT CONFIDENCE AND NOT DISCLOSED TO ANY THIRD PARTIES. THE CONTRACT DOCUMENTS SHALL NOT BE USED FOR ANY OTHER PURPOSE WHATSOEVER WITHOUT THE PRIOR WRITTEN CONSENT OF CROWN.
- 2. DETAIL DRAWINGS, INCLUDING NOTES AND TABLES, SHALL GOVERN OVER GENERAL NOTES AND TYPICAL DETAILS. CONTACT THE CROWN POINT OF CONTACT (POC) AND ENGINEER OF RECORD (EOR) FOR CLARIFICATION AS NEEDED.
- 3. DO NOT SCALE DRAWINGS.
- 4. ANY WORK PERFORMED WITHOUT A PREFABRICATION MAPPING IS DONE AT THE RISK OF THE GC AND/OR FABRICATOR. ALL DIMENSIONS OF EXISTING STRUCTURAL ELEMENTS ARE ASSUMED BASED ON THE AVAILABLE DOCUMENTATION AND ARE PRELIMINARY UNTIL FIELD-VERIFIED BY THE GC, UNLESS NOTED OTHERWISE (UNO). WHERE DISCREPANCIES ARE FOUND, GC SHALL CONTACT THE CROWN POC AND EOR THROUGH RFI.
- 5. FOR THIS ANALYSIS AND MODIFICATION, THE MOUNT HAS BEEN ASSUMED TO BE IN GOOD CONDITION WITHOUT ANY STRUCTURAL DEFECTS, UNO. IF THE GC DISCOVERS ANY INDICATION OF AN EXISTING STRUCTURAL DEFECT, CONTACT THE CROWN POC AND EOR IMMEDIATELY.
- 6. 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 GC RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN STANDARD CED-STD-10253, "RIGGING PROGRAM", INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH THE ANSI/TIA-322 (LATEST EDITION).
- 7. THE STRUCTURAL INTEGRITY OF THE MODIFICATION DESIGN EXTENDS TO THE COMPLETE CONDITION ONLY. THE GC MUST BE COGNIZANT THAT THE REMOVAL OF ANY STRUCTURAL COMPONENT OF AN EXISTING TOWER HAS THE POTENTIAL TO CAUSE THE PARTIAL OR COMPLETE COLLAPSE OF THE STRUCTURE. ALL NECESSARY PRECAUTIONS MUST BE TAKEN TO ENSURE STRUCTURAL INTEGRITY, INCLUDING, BUT NOT LIMITED TO, ENGINEERING ASSESSMENT OF CONSTRUCTION STRESSES WITH INSTALLATION MAXIMUM WIND SPEED AND/OR TEMPORARY BRACING AND SHORING.
- 8. AERIAL AND UNDERGROUND UTILITIES AND FACILITIES MAY OR MAY NOT BE SHOWN ON THE DRAWINGS. THE GC SHALL TAKE EVERY PRECAUTION TO PRESERVE AND PROTECT THESE ITEMS, WHICH MAY INCLUDE AERIAL OR UNDERGROUND POWER LINES, TELEPHONE LINES, WATER LINES, SEWER LINES, CABLE TELEVISION FACILITIES, PIPELINES, STRUCTURES AND OTHER PUBLIC AND PRIVATE IMPROVEMENTS WITHIN OR ADJACENT TO THE WORK AREA. THE RESPONSIBILITY FOR DETERMINING THE ACTUAL ON—SITE LOCATION OF THESE ITEMS SHALL REST EXCLUSIVELY WITH THE GC.
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- 13. ALL EXPOSES STRUCTURAL STEEL AS THE RESULT OF THIS SCOPE OF WORK INCLUDING BUT NOT LIMITED TO: FIELD DRILLED HOLES, AND SHAFT INTERIORS (WERE ACCESSIBLE), SHALL BE CLEANED AND TWO (2) COATS COLD GALVANIZING SHALL BE APPLIED BY BRUSH IN ACCORDANCE WITH ENG-STD-10149, "TOWER PROTECTIVE COATINGS GUIDELINES".
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- 20. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT BE AT LEAST FLUSH WITH THE FACE OF THE NUT. IT IS NOT PERMITTED FOR THE BOLT END TO BE BELOW THE FACE OF THE NUT AFTER TIGHTENING IS COMPLETED.

PLANS PREPARED FOR:

## **CROWN CASTLE**

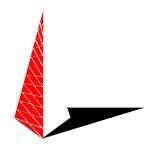
6325 ARDREY KELL ROAD, SUITE 600 CHARLOTTE, NC 28277

PROJECT INFORMATION:

## PLYMOUTH/RT 6 BU #: 826768 CARRIER: VERIZON

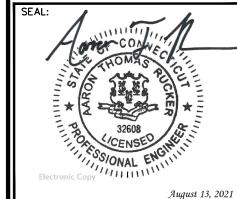
171 TOWN HILL ROAD PLYMOUTH, CT 06786 (LITCHFIELD COUNTY)

PLANS PREPARED BY:



#### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603 OFFICE: (919) 661-6351 www.tepgroup.net



August 15, 2021

REV	DATE	ISSUED FOR:
0	08-13-21	MODIFICATION DRAWINGS

DRAWN BY: SCW CHECKED BY: PH

SHEET TITLE:

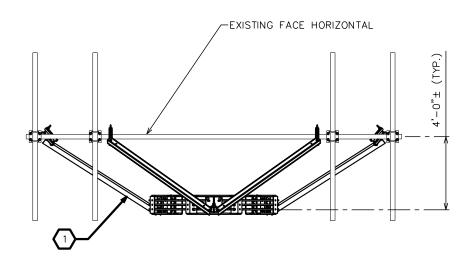
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SHEET NUMBER:

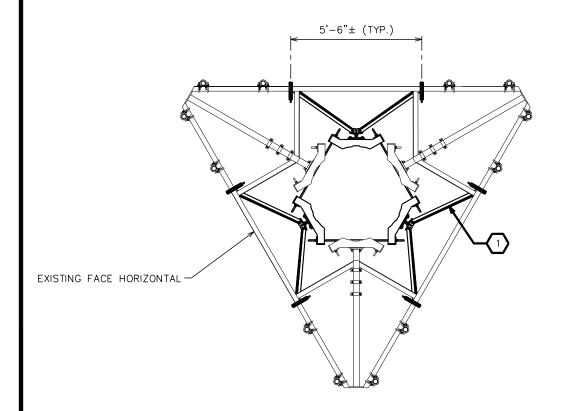
N-1

REVISION:

TEP#: 25661.584643



## **ELEVATION VIEW**



## **PLAN VIEW**

## MODIFICATION SCHEDULE

NO.	MODIFICATION DESCRIPTION	ELEVATION (FT.)	SHEET
	ADD SITE PRO 1 PRK-SFS-L REINFORCEMENT KIT.	142	S-1

## **NOTES:**

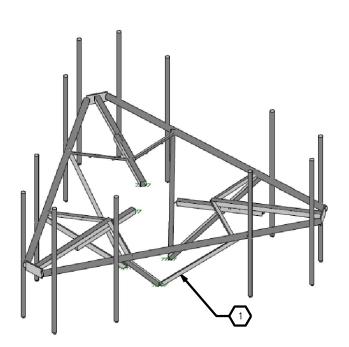
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- 2. PROPER FIT-UP OF THE PROPOSED MODIFICATIONS MAY REQUIRE FIELD CUTTING/TRIMMING. CONTACT EOR FOR APPROVAL UNO.

## **BILL OF MATERIALS**

MANUFACTURER	PART NUMBER	QUANTITY	NOTES
SITE PRO 1	PRK-SFS-L	1	1,2

## NOTES:

- 1. CONTRACTOR MAY SUBSTITUTE EQUIVALENT PARTS WITH EOR APPROVAL.
- 2. UNO, CONNECTION HARDWARE IS INCLUDED WITH REINFORCEMENT KITS.



**ISOMETRIC VIEW** 

PLANS PREPARED FOR:

## **CROWN CASTLE**

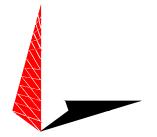
6325 ARDREY KELL ROAD, SUITE 600 CHARLOTTE, NC 28277

PROJECT INFORMATION:

## PLYMOUTH/RT 6 BU #: 826768 CARRIER: VERIZON

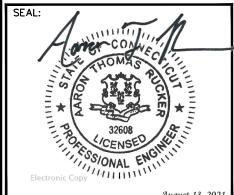
171 TOWN HILL ROAD PLYMOUTH, CT 06786 (LITCHFIELD COUNTY)

PLANS PREPARED BY:



#### **TOWER ENGINEERING PROFESSIONALS**

326 TRYON ROAD RALEIGH, NC 27603 OFFICE: (919) 661-6351 www.tepgroup.net



August 15, 2021

0	08-13-21	MODIFICATION DRAWINGS
REV	DATE	ISSUED FOR:

DRAWN BY: SCW CHECKED BY: PHX

SHEET TITLE:

MOUNT MODIFICATION SCHEDULE

SHEET NUMBER:

REVISION:

TEP#: 25661.58464.

**S-1** 

## **MOUNT DESIGN DRAWINGS**

SITE NAME:

## PLYMOUTH/RT 6

**CROWN CASTLE BU NUMBER:** 

826768

**SITE ADDRESS:** 

# 171 TOWN HILL ROAD PLYMOUTH, CT 06786 (LITCHFIELD COUNTY) N 41°40'06.20", W 73°01'11.84"

INDEM OF SHEETS

#### **MODIFICATION PROVISIONS**

THE MODIFICATIONS DEPICTED ON THESE DRAWINGS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE MOUNT MODIFICATION ANALYSIS REPORT COMPLETED BY TEP, JOB NO.: 25661.584643 DATED AUGUST 13, 2021 (REV 0).

ATTENTION ALL CONTRACTORS, ANYTIME YOU ACCESS A CROWN SITE FOR ANY REASON YOU ARE TO CALL THE CROWN NOC UPON ARRIVAL AND DEPARTURE, DAILY AT 800-788-7011.

QUALIFIED ENGINEERING SERVICES ARE AVAILABLE FROM TEP TO ASSIST CONTRACTORS IN CLASS IV RIGGING PLAN REVIEWS. FOR REQUESTED QUALIFIED ENGINEERING SERVICES, CONTACT TEP FOR QUOTE AT RIGGING@TEPGROUP.NET

## **SAFETY CLIMB: 'LOOK UP'**



THE INTEGRITY OF THE WIRE ROPE SAFETY CLIMB SYSTEM SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. MOUNT REINFORCEMENTS AND EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF ANY WIRE ROPE SAFETY CLIMB ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING 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, OR IMPACT TO THE ANCHORAGE POINTS IN ANY WAY. ANY COMPROMISED SAFETY CLIMB MUST BE REPORTED TO YOUR CROWN POC FOR RESOLUTION, INCLUDING EXISTING CONDITIONS.

INDEX OF SHEETS				
SHEET TITLE	REV			
TITLE SHEET	0			
PROJECT NOTES	0			
MOUNT MODIFICATION SCHEDULE	0			
	TITLE SHEET PROJECT NOTES			

## **PROJECT INFORMATION**

TOWER HEIGHT: 169.0-FT
MOUNT ELEVATION: 142.0-FT
MOUNT WIDTH/TYPE: 13.5-FT/PLATFORM

JDE JOB NO.: 669335

ORDER NO.: 570318 REV. 0

DESIGN BUILDING CODE: 2018 CONNECTICUT STATE BUILDING

DESIGN STANDARD: TIA-222-H

#### **PROJECT TEAM**

#### **CCI MODIFICATION PROJECT MANAGER:**

NAME CROWN CASTLE
CONTACT DARCY TARR
PHONE (704) 405-6589
FMAIL DARCY TARR@CROW

MAIL DARCY.TARR@CROWNCASTLE.COM

#### **ENGINEERING FIRM PROJECT MANAGER:**

NAME TOWER ENGINEERING PROFESSIONALS, INC. CONTACT RYAN W. TSCHETTER, P.E.

PHONE (480) 750–9063

RWTSCHETTER@TEPGROUP.NET

PLANS PREPARED FOR:

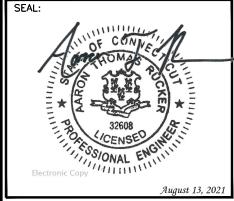
## CROWN CASTLE

6325 ARDREY KELL ROAD, SUITE 600 CHARLOTTE, NC 28277

PLANS PREPARED BY:



326 TRYON ROAD RALEIGH, NC 27603 OFFICE: (919) 661-6351 www.tepgroup.net



O 08-13-21 MODIFICATION DRAWINGS
REV DATE ISSUED FOR:

DRAWN BY: SCW CHECKED BY: PH

SHEET TITLE:

TITLE SHEET

SHEET NUMBER:

REVISION:

TEP#: 25661.58464

## **GENERAL NOTES:**

- 1. THE CONTRACT DOCUMENTS ARE THE PROPERTY OF CROWN CASTLE (CROWN). THEY ARE PROVIDED TO THE GC AND ITS LOWER TIER CONTRACTORS AND MATERIAL SUPPLIERS FOR THE LIMITED PURPOSE OF USE IN COMPLETING THE WORK FOR THIS SITE, AND SHALL BE KEPT IN STRICT CONFIDENCE AND NOT DISCLOSED TO ANY THIRD PARTIES. THE CONTRACT DOCUMENTS SHALL NOT BE USED FOR ANY OTHER PURPOSE WHATSOEVER WITHOUT THE PRIOR WRITTEN CONSENT OF CROWN.
- 2. DETAIL DRAWINGS, INCLUDING NOTES AND TABLES, SHALL GOVERN OVER GENERAL NOTES AND TYPICAL DETAILS. CONTACT THE CROWN POINT OF CONTACT (POC) AND ENGINEER OF RECORD (EOR) FOR CLARIFICATION AS NEEDED.
- 3. DO NOT SCALE DRAWINGS.
- 4. ANY WORK PERFORMED WITHOUT A PREFABRICATION MAPPING IS DONE AT THE RISK OF THE GC AND/OR FABRICATOR. ALL DIMENSIONS OF EXISTING STRUCTURAL ELEMENTS ARE ASSUMED BASED ON THE AVAILABLE DOCUMENTATION AND ARE PRELIMINARY UNTIL FIELD-VERIFIED BY THE GC, UNLESS NOTED OTHERWISE (UNO). WHERE DISCREPANCIES ARE FOUND, GC SHALL CONTACT THE CROWN POC AND EOR THROUGH RFI.
- 5. FOR THIS ANALYSIS AND MODIFICATION, THE MOUNT HAS BEEN ASSUMED TO BE IN GOOD CONDITION WITHOUT ANY STRUCTURAL DEFECTS, UNO. IF THE GC DISCOVERS ANY INDICATION OF AN EXISTING STRUCTURAL DEFECT, CONTACT THE CROWN POC AND EOR IMMEDIATELY.
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PLANS PREPARED FOR:

## **CROWN CASTLE**

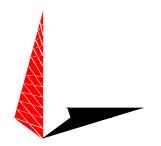
6325 ARDREY KELL ROAD, SUITE 600 CHARLOTTE, NC 28277

PROJECT INFORMATION:

## PLYMOUTH/RT 6 BU #: 826768 CARRIER: VERIZON

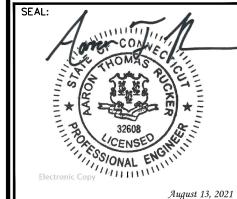
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PLANS PREPARED BY:



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August 15, 2021

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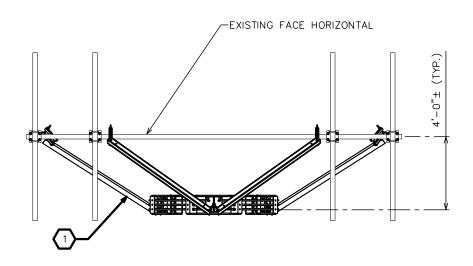
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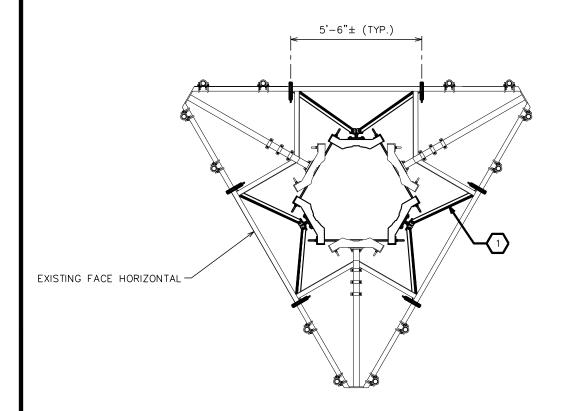
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REVISION:

TEP#: 25661.584643



## **ELEVATION VIEW**



## **PLAN VIEW**

## MODIFICATION SCHEDULE

NO.	MODIFICATION DESCRIPTION	ELEVATION (FT.)	SHEET
	ADD SITE PRO 1 PRK-SFS-L REINFORCEMENT KIT.	142	S-1

## **NOTES:**

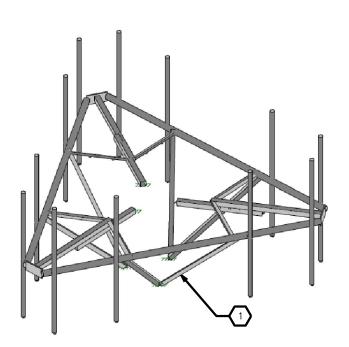
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## **BILL OF MATERIALS**

MANUFACTURER	PART NUMBER	QUANTITY	NOTES
SITE PRO 1	PRK-SFS-L	1	1,2

## NOTES:

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**ISOMETRIC VIEW** 

PLANS PREPARED FOR:

## **CROWN CASTLE**

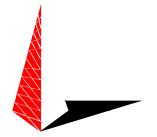
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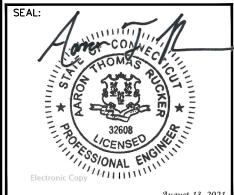
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DRAWN BY: SCW CHECKED BY: PHX

SHEET TITLE:

MOUNT MODIFICATION SCHEDULE

SHEET NUMBER:

REVISION:

TEP#: 25661.58464.

**S-1** 

# Exhibit F

**Power Density/RF Emissions Report** 

Site Name: PLYMOUTH CT
Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density
	(MHz)		(watts)	(watts)	(feet)	(mW/cm^2)
VZW 700	751	4	697	2787	142	0.0050
VZW CDMA	877.26	2	408	817	142	0.0015
VZW Cellular	874	4	826	3303	142	0.0059
VZW PCS	1975	4	1544	6176	142	0.0110
VZW AWS	2120	4	2318	9270	142	0.0165
VZW CBAND	3730.08	4	6531	26125	142	0.0466
			•			

## **Total Percentage of Maximum Permissible Exposure**

MHz = Megahertz mW/cm^2 = milliwatts per square centimeter ERP = Effective Radiated Power

Absolute worst case maximum values used.

<sup>\*</sup>Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/
\*\*Calculation includes a -10 dB Off Beam Antenna Pattern Adjustment pursuant to Attachments B and C of the Siting Council

Maximum Permissible Exposure*	Fraction of MPE
(mW/cm^2)	(%)
0.5007	0.99%
0.5848	0.25%
0.5827	1.01%
1.0000	1.10%
1.0000	1.65%
1.0000	4.66%
	9.67%

IEEE C95.1-1992

l's November 10, 2015 Memorandum for Exempt Modification filings