

January 24, 2024

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

Re: **Notice of Exempt Modification – Facility Modification
5 Perryridge Road, Greenwich, Connecticut**

Dear Attorney Bachman:

Cellco Partnership d/b/a Verizon Wireless (“Cellco”) currently maintains a wireless telecommunications facility at the above-referenced address (the “Property”). Cellco’s facility consists of antennas and remote radio heads attached to a tower at Greenwich Hospital. Equipment associated with the facility is located on the ground adjacent to the tower. The tower was approved by the Town of Greenwich (“Town”) in February of 2002. Cellco’s shared use of the tower was approved by the Siting Council (“Council”) in October of 2002 (TS-VER-057-020919). A copy of the Town’s tower approval and the Council’s TS-VER-057-020919 approval are included in Attachment 1.

Cellco now proposes to modify its existing facility by installing six (6) interference mitigation filters (“Filters”) on its existing antenna platform and mounting assemblies. The specification sheet for the new Filters is included in Attachment 2.

Please accept this letter as notification pursuant to R.C.S.A. § 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 Greenwich’s Chief Elected Official and Land Use Officer. A copy of this letter is being sent to the owner of the Property.

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

1. The proposed modifications will not result in an increase in the height of the existing tower. The Filters will be installed on Cellco’s existing antenna mounting assembly.

Melanie A. Bachman, Esq.

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2. The proposed modifications will not involve any change to ground-mounted equipment and, therefore, will not require the extension of the site boundary.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.

4. The installation of Cellco's new Filters will not result in a change to radio frequency (RF) emissions from the facility. Therefore, no new RF emissions information is included in this filing.

5. The proposed modifications will not cause a change or alteration in the physical or environmental characteristics of the site.

6. According to the attached Structural Analysis Report ("SA") and Post Modification Antenna Mount Analysis Report ("MA"), the existing tower, foundation and antenna mounting assembly, with certain modifications, can support Cellco's proposed modifications. A copy of the SA and MA are included in Attachment 3.

A copy of the parcel map and Property owner information is included in Attachment 4. A Certificate of Mailing verifying that this filing was sent to municipal officials and the property owner is included in Attachment 5.

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

Sincerely,



Kenneth C. Baldwin

Enclosures

Copy to:

Fred Camillo, First Selectman
Patrick LaRow, Director of Planning and Zoning
Greenwich Hospital, Property Owner
Aleksy Tyurin, Verizon Wireless

ATTACHMENT 1



TOWN OF GREENWICH

Planning and Zoning Commission

Diane W. Fox
Town Planner/Zoning Enforcement Coordinator

Lawrence I. Bradley
Joseph R. Poenza
Katie Blankley
Matthew N. Steinberg
Mary K. Young

CERTIFIED MAIL

February 19, 2002

Mr. Bruce Cohen, Esquire
Fogarty, Cohen, Selby & Nemiroff
88 Field Point Road
Greenwich, CT 06830

RE: Application FSP #2233 & SES 01-12 as submitted by Bruce Cohen, authorized agent for record owner Greenwich Hospital, for a final site plan/special permit and SES to replace the Town's emergency services communication equipment from the rooftop of the Hospital's old Main Building to a new freestanding 164 foot monopole located on the west side of the proposed Watson Pavilion per Section 6-15, 6-17, 6-113, and 6-140.1 of the Building Zone Regulations on property located at 5 Perryridge Road and Lake Avenue in the H-1 zone as shown on site plan last revised 1/14/02 and Zoning Location Survey dated 10/15/01 both by Redniss and Mead and plans by SBRA last revised 1/9/02 and plans by Spiegel Zamecnick & Shaw dated 1/4/02.

Dear Mr. Cohen:

The Planning and Zoning Commission at a Public Hearing held on February 12, 2002, considered the above referenced application and took the following action:

Upon a motion made by Mr. LeBien and seconded by Mr. Maitland, the following resolution was unanimously adopted. (Voting on this item: Messrs. LeBien, Heimbuch, and Maitland, and Mesdames Colombo and Stone).

Whereas the Commission held a public meeting on January 29, 2002 and February 12, 2002, and took all testimony required by law; and

Whereas the commission notes that under the original 1995 hospital plan the Town's emergency communication equipment was to be relocated from the old Main Building (to be demolished) to the South Wing building and therefore would not require any monopole; however the new Hospital's plan is to also demolish the South Wing building; and

Whereas Greenwich Hospital (hereinafter, the "applicant") requested approval to relocate the existing Town of Greenwich emergency communication systems, currently located on the roof of the old Main Building, to a free-standing monopole, proposed at grade on the west side of the proposed Watson Pavilion immediately adjacent to the north side of the existing staff parking garage next to the elevator as seen on the Zoning Location Survey prepared by Redniss and Mead, dated 10/15/01, as a result of Phase II of the Hospital's modernization project, which the Commission is currently reviewing under Site Plan #2227, which includes demolishing the Old Main Building and the South Building and replacing it with the proposed Watson Pavilion; and

Whereas the Commission notes that the applicant represented to the Commission that they did explore alternative sites and options for relocation such as the roof of the new Watson Pavilion or the existing Helmsley Building, they determined that neither were feasible because they are not capable of housing this type of equipment under today's seismic building codes and in addition both buildings are approximately 60 feet too short to achieve the required transmission/reception clearances; other sites on the Hospital campus were explored but were found to be ineffectually screened or posed construction difficulties; and therefore the Hospital is proposing to build and own the monopole and allow the town's communication system to be located thereon; the Commission notes that the Hospital has represented that up to 5 other carriers could be placed on this monopole; and

Whereas the Town existing emergency communication tower/structure was erected on the roof of the "Old Main Building" in 1993 and currently provides communication for the Town's police, fire, and ambulance service and the hospital site is the central hub of this line-of-sight network that is used to transmit and receive information via microwave from the other hubs located at the Bruce Golf Course, the Greenwich Police Station at 11 Bruce Place, and Butternut Hollow Road and unforeseen tree growth has prevented the line of sight network to Butternut Hollow Road to operate sufficiently and therefore the transmissions to Butternut Hollow will be re-routed through Bruce Golf Course and from there to Butternut Hollow Road; and

Whereas the absolute height of the existing Town emergency communication tower on the rooftop is 116 feet above ground level (elevation 285.76) and with the equipment extends to an elevation of 310'.5" and the monopole will be a galvanized steel pole of 164 +/- feet above ground level (elevation 295'6"), which will protrude 64 feet above the existing and proposed buildings (top elevation 237') but will be screened below that from the east by the new Watson Pavilion and from the south by the existing staff parking garage, however no screening from the north or west is possible given the exposed location. The monopole will be 6 feet in diameter at its base and will taper to approximately 2.5 feet at its peak and will be constructed as an 18-sided polygon; and

Whereas the monopole will be approximately 8 to 9 feet higher than the elevation of the existing equipment, which is required in order to continue the "line of sight" network between the Hospital, the Greenwich Police Station, and the Bruce Golf Course; and

Whereas the Commission notes that the applicant has described the equipment to be placed on the monopole as consisting of Antenna #1 (Town Public Safety Trunked Radio System (Six 800 MHz frequencies with six transmitters combined into one antenna), Antenna #2 (Town Public Safety Mutual Aid Radio System (Five 800 MHz frequencies with two transmitters combined into one antenna), Antenna #3, 4, & 5 (Town Public Safety Microwave Radio System (Three 17,000 or 18,000 MHz frequencies with three transmitters and three individual antennas), Antenna #6 (CMED Radio System (One UHF frequency with one transmitter into one antenna), Antenna #7 (Town Fire Department Paging System (One VHF frequency with one transmitter into one antenna) and Antenna #8 (Town State Police Hotline System (One Low Band frequency with one transmitter into one antenna); and

Whereas Antennas #1, 2, 6, 7, and 8 consist of equipment housed within pipe like structures that range from 10 - 20 feet in height and Antennas #3, 4, and 5, will be three new 4 foot in diameter microwave dishes, which will replace the three 6 foot microwave dishes and one 2 foot dish, which currently comprise this part of the system; and

Whereas a 20 x 20 foot concrete pad will be constructed to anchor the tower, as shown on the Site Plan, Sheet T-1 (Redniss & Mead) last dated 1/14/02 and Sheet ST-001 (Redniss & Mead) dated 1/3/02 with a substantial amount underground so that only 9 x 9 feet, or 81 square feet will be exposed on the surface an additional concrete pad of 23 x 13 feet, or 286 square feet, will house an emergency generator used for the equipment on the tower in the event of a power outage and these pads will be separated by a 2.5 to 3 foot pervious strip and a continuous 8 feet high green chain link fence with green slats will enclose both concrete pads, which together will have a combined length running north to south of 34 feet exposed on the ground, and

Whereas the existing retaining wall that currently runs through the location of the concrete pads will be a rebuilt concrete retaining wall 4 feet in height on a portion of the north and the east side of the fence, and

Whereas the accompanying equipment for the radio systems will be housed in a portion of an existing, underutilized storage room of approximately 22 x 30 foot in the Staff Garage, as shown on Sheet T-1, dated 1/14/02, which is approximately 143 lineal feet from the concrete pad used to anchor the monopole. This space of approximately 10 x 20 feet will be created through the construction of a dividing wall with two means of egress; and

Whereas the Commission notes that the power density calculations shown in a report prepared by Langone Associates, a consultant for the Town Police Department, dated January 28, 2002, were represented as compliant by the applicant with the standards determined by the Federal Government and outlined in the 1996 Telecommunications Act; and

Whereas the Commission notes that the information submitted regarding the safety of the monopole as outlined in the structural analysis reports, prepared by Spiegel, Zamencik & Shah,

Inc (Structural Engineers), dated December 19, 2001 and January 10, 2002, state that in the event of a structural failure the monopole is designed to collapse in segments onto itself and the applicant has stated that if this does occur the monopole will not hit any structures because the top segment of the monopole is shorter than the nearest structures which include the staff parking garage setback 35 feet and the proposed Watson Pavilion setback 45 feet, which the applicant has represented are compliant with all applicable Building Codes; however, the location of scattered debris from the equipment on the pole (if the pole should collapse) has yet to be addressed, and

Whereas in addition to this equipment, the hospital also leases space on the roof of the Old Main Building to the FBI (radio), Sub-Carrier/Paging Facilities, Verizon (wireless carrier) for 5 panel antennas and associated equipment, and Voicestream (wireless carrier) for 6 panel antennas. It has already been arranged that the FBI and Sub-Carrier/Paging Facilities will be relocated to the roof of the Helmsley Building; and

Whereas the applicant has stated that the monopole will have the capacity to accommodate up to 5 wireless carriers and if this occurs an additional secure equipment room could be created adjacent to the 22 x 30 foot portion and the Connecticut Siting Council has final jurisdiction over the approval of these potential facilities although the Commissions' comments or conditions of approval would be a factor in their evaluation and consideration in hearing the application and regulating it under the rules and terms of the Telecommunications act of 1996; and

Whereas the Connecticut Siting Council has stated that the Commission has sole jurisdiction over the approval of this monopole because the tower is for municipal use and/or supports municipal communication systems; and

Whereas additional equipment on the roof of the "Old Main Building" which will be relocated to the monopole include equipment for the American Red Cross, the FBI, and Southwest Connecticut Medical Emergency Dispatch (CMED) and Fairfield County Hotline, which are regional agencies that coordinate emergency ambulance services response radio dispatch services; and the Commission finds that the town's emergency communication system is critical to the health, safety and welfare of the town's residents and there are no other alternative locations for the town's equipment within the required area for service and therefore the Commission finds that the monopole may be constructed for these safety reasons and this approval to construct a monopole is unique because of the town's emergency communication and safety needs; and

Whereas, the Commission finds that this application meets the criteria set forth in Sections 6-13, 6-15, 6-17, 6-113, 6-140.1 and that microwave towers and dishes are a permitted use in this zone per Section 6-113(d)(3) of the Town of Greenwich Building Zone Regulations (BZR); and

THEREFORE BE IT RESOLVED that Application FSP #2233 & SES 01-12 as submitted by Bruce Cohen, authorized agent for record owner Greenwich Hospital, for a final site plan/special permit and SES to replace the Town's emergency services communication equipment from the rooftop of the Hospital's old Main Building to a new freestanding 164 foot monopole located on the west side of the proposed Watson Pavilion per Section 6-15, 6-17, 6-113, and 6-140.1 of the

Building Zone Regulations on property located at 5 Perryridge Road and Lake Avenue in the H-1 zone as shown on site plan last revised 1/14/02 and Zoning Location Survey dated 10/15/01 both by Redniss and Mead and plans by SBRA last revised 1/9/02 and plans by Spiegel Zamecnick & Shaw dated 1/4/02 is hereby approved with modifications.

Sincerely,



Katie Blankley, Planner II

Prior to the issuance of a Building Permit the following conditions must be met:

- 1) Three copies of a final site plan must be submitted to P&Z staff for sign-off. These plans must be signed and sealed by a registered CT Engineer and include detailed designs for the pole and equipment and Soil and Erosion Controls as described in Condition #4.
- 2) Resolution on whether or not any lease agreements between the Hospital and the Town will require review by the Town Law Department.
- 3) The final site plan should include what type of grounding equipment is needed to provide protection from lightning.
- 4) Three sets of a construction Phasing Plan should be submitted showing soil and erosion controls, any stockpile areas, the area which will be fenced in for construction, and any re-routing of traffic and parking that may be necessary.
- 5) The applicant shall secure approval from the Zoning Board of Appeals for the special exception approval needed for the height of the monopole. Reference to this approval shall be noted on the final plans.
- 6) A note should be added to the final plans that any additional carriers to be placed on the monopole will need Planning and Zoning Approval prior to making any applications to the Connecticut Siting Council.
- 7) A note should be added to the final plans that any changes to the Town equipment or design of the collapsible monopole should return to Planning and Zoning for approval.
- 8) The monopole should be painted a non-reflective color, which should be shown or noted on the final plan.
- 9) A statement should be submitted as to the scope of the area of debris that could potentially come off the monopole in the event that there is a structural failure.



STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

October 8, 2002

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

RE: **TS-VER-057-020919** - Cellco Partnership d/b/a Verizon Wireless request for an order to approve tower sharing at a telecommunications facility at the Greenwich Hospital, 5 Perryridge Road, Greenwich, Connecticut.

Dear Attorney Baldwin:

At a public meeting held October 7, 2002, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.


This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated September 19, 2002.

Thank you for your attention and cooperation.

Very truly yours,


Mortimer A. Gelston
Chairman

MAG/laf

c: Honorable Lolly H. Prince, First Selectman, Town of Greenwich
Diane Fox, Town Planner, Town of Greenwich

ATTACHMENT 2

KA-6030

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The KA-6030 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.6MHz guardband the KA-6030 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the KA-6030 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.



FEATURES

- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available

TECHNICAL SPECIFICATIONS

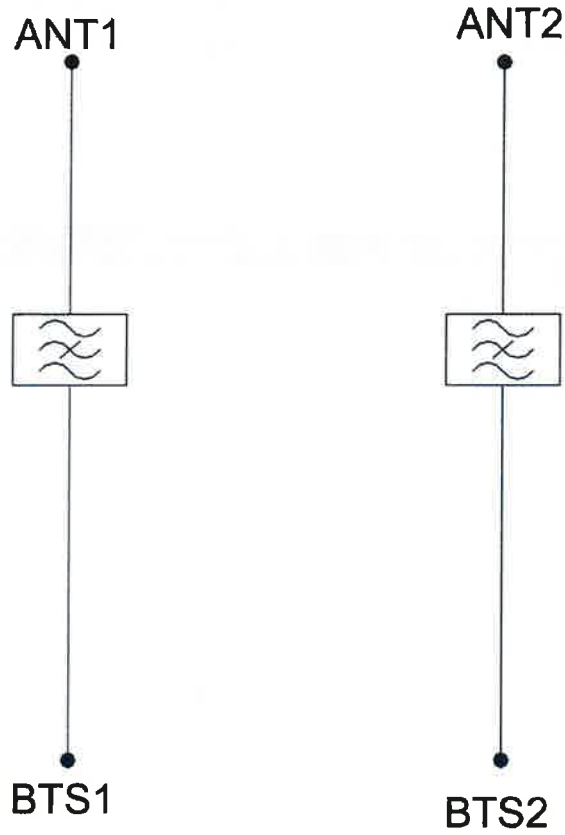
BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	
ELECTRICAL		
Impedance	50Ohms	
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm	
DC / AISG		
Passband	0 - 13MHz	
Insertion loss	0.3dB maximum	
Return loss	15dB minimum	
Input voltage range	± 33V	
DC current rating	2A continuous, 4A peak	
Compliance	3GPP TS 25.461	
ENVIRONMENTAL		
For further details of environmental compliance, please contact Kaelus.		
Temperature range	-20°C to +60°C -4°F to +140°F	
Ingress protection	IP67	
Altitude	2600m 8530ft	
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.	
MTBF	>1,000,000 hours	
Compliance	ETSI EN 300 019 class 4.1H, RoHS, NEBS GR-487-CORE	

MECHANICAL	
Dimensions H x D x W	269 x 277 x 80mm 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)
Weight	8.0 kg 17.6 lbs (no bracket)
Finish	Powder coated, light grey (RAL7035)
Connectors	RF: 4.3-10 (F) x 4
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.

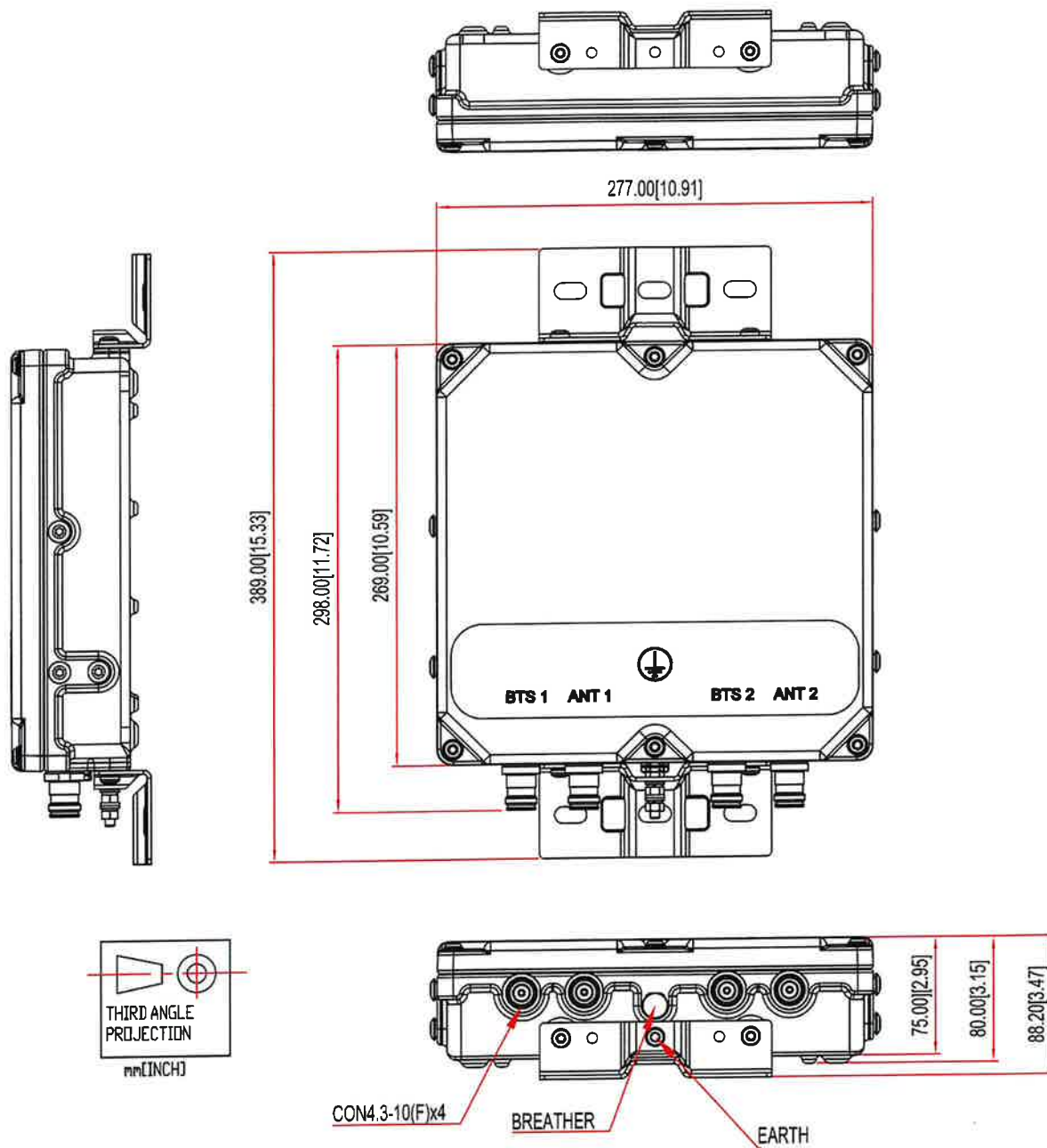
ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
KA-6030-2032	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM



ATTACHMENT 3

Structural Analysis Report

164-ft Existing EEl Monopole

*Proposed Verizon
Equipment Upgrade*

Site Ref: Greenwich

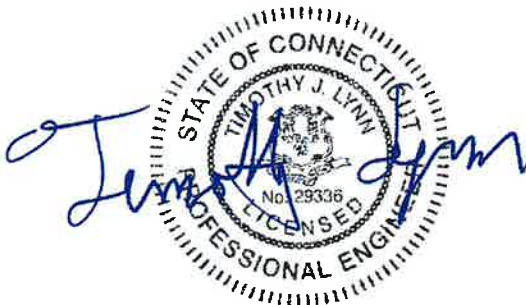
*5 Perryridge Road
Greenwich, CT*

Centek Project No. 22027.15

~~*Date: December 7, 2022*~~

Rev 2: October 12, 2023

Max Stress Ratio = 62%



Prepared for:
*Verizon Wireless
20 Alexander Drive
Wallingford, CT 06492*

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Introduction

The purpose of this report is to summarize the results of the non-linear, P- Δ structural analysis of the equipment upgrade proposed by Verizon on the existing monopole (tower) owned and operated by Greenwich Hospital located in Greenwich, Connecticut.

The host tower is a 164-ft tall, five-section, eighteen sided, tapered monopole, originally designed and manufactured by Engineered Endeavors Incorporated (EEI); project no. 11030 dated August 21, 2002. The tower geometry, structure member sizes and foundation system information were obtained from the original manufacturers design documents.

Antenna and appurtenance information were obtained a previous structural analysis report prepared by Centek job no. 22140.00 dated November 3, 2022 and information from Verizon.

The tower is made up of five (5) tapered vertical sections consisting of A572-65 pole sections. The bottom four (4) vertical tower sections are slip joint connected while the top section is flange connected. The diameter of the pole (flat-flat) is 47.0-in at the top and 76.0-in at the base.

Antenna and Appurtenance Summary

The existing, proposed and future loads considered in this analysis consist of the following:

- TOWN (EXISTING):
Antennas: Four (4) 12-ft Omni-directional whip antennas, one (1) Sinclair SC229-SFXLDF Omni-directional whip antenna, two (2) Sinclair SC479-HF1LDF Omni-directional whip antennas, one (1) Bird 432E-83I-01-T tower top amplifier and one (1) camera mounted on a PiROD 13-ft low profile platform with an elevation of 164-ft above grade level.
Coax Cables: Two (2) 1/2" \varnothing , two (2) 7/8" \varnothing , six (6) 1-1/4" \varnothing and one (1) 1-5/8" \varnothing coax cables running on the inside of the existing tower.
- TOWN (EXISTING):
Antennas: Two (2) 4-ft Dishes and one (1) 2-ft Dish mounted on three 4'x4" pipes with a RAD center elevation of 160-ft above grade level.
Coax Cables: Three (3) 1-1/4" \varnothing coax cables running on the inside of the existing tower.
- T-MOBILE (EXISTING):
Antennas: Three (3) Ericsson AIR32 panel antennas, three (3) RFS APXVAARR24_43 panel antennas, three (3) Ericsson AIR6449 panel antennas, three (3) Ericsson 4449 remote radio units, three (3) Ericsson 4415 remote radio units, three (3) Commscope SDX1926Q-43 diplexers and three (3) TMAs mounted on a platform w/ handrail with a RAD center elevation of 144-ft above grade level.
Cables: Six (6) 1-5/8" \varnothing coax cables and six (6) 6x12 fiber cables running on the inside of the existing tower.

- **AT&T (EXISTING/RESERVED):**
Antennas: Three (3) CCI DMP65R-BU6D panel antennas, three (3) Quintel QD6616-7 panel antennas, three (3) Ericsson AIR6419 panel antennas, three (3) Ericsson AIR6449 panel antennas, three (3) Ericsson RRUS-32-B2 remote radio heads, three (3) Ericsson RRUS-32-B66 remote radio heads, three (3) Ericsson B14 4478 remote radio heads, three (3) Ericsson 4449 B5/B12 remote radio heads and one (1) Raycap DC9 surge arrestor mounted on a 16-ft low profile platform with a RAD center elevation of 134-ft above grade level. Three (3) Ericsson RRUS-32 remote radio heads and two (2) Raycap DC6-48-60-18-8F surge arrestor mounted to one (1) universal ring mount with a RAD center elevation of 138-ft above grade level.
Cables: Six (6) 1-5/8" Ø coax cables, three (3) fiber cables and seven (7) dc control cables running on the inside of the existing tower.
- **EVERSOURCE ENERGY (EXISTING):**
Antennas: Two (2) Decibel DB586-Y omni-directional whips (one upright and one inverted), one (1) Telewave ANT150F2 omni-directional whip, one (1) Comprod 531-70HD dipole, one (1) Comprod 872F-70-2 dipole (120.5-ft rad center), one (1) Comprod 871F-70-2 dipole and one (1) tower top amplifier mounted on a PiROD 13-ft low profile platform with an elevation of 114-ft above grade level.
Coax Cables: Two (2) 1-5/8" Ø, four (4) 7/8" Ø and one (1) 1/2" Ø coax cables running on the inside of the existing tower.
- **DISH (RESERVED):**
Antennas: Three (3) Commscope FFVW-65B-R2 panel antennas, three (3) TA08025-B604 RRHs, three (3) TA08025-B605 RRHs and one (1) Raycap RD1DC-9181-PF-48 main distribution box mounted on a 8-ft platform with a RAD center elevation of 99-ft above grade level.
Coax Cables: One (1) 1-5/8" Ø hybrid cable running inside the monopole.
- **UNKNOWN (EXISTING):**
Antennas: Three GPS antennas mounted on three (3) standoffs with a RAD center elevation of 50-ft above grade level.
Coax Cables: Three (3) 7/8" Ø coax cables running on the exterior of the existing tower.
- **VERIZON (EXISTING TO REMAIN):**
Antennas: Six (6) Decibel DB844H65E-XY panel antennas, three (3) Samsung 64T64R MMUs, six (6) Quintel QS6656-5D panel antennas, three (3) Samsung B2/B66 remote radio heads, three (3) Samsung B5/B13 remote radio heads, three (3) Samsung CBRS remote radio heads and two (2) Raycap RC2DC-3315-PF-48 main distribution boxes mounted on a 18-ft low profile platform with a RAD center elevation of 124-ft above grade level.
Coax Cables: Twelve (12) 1-5/8" Ø coax cables and two (2) 1-5/8" Ø fiber cables running inside the monopole.
- **VERIZON (PROPOSED):**
Antennas: Six (6) Kaelus KA-6030 filters mounted on a 18-ft low profile platform with a RAD center elevation of 124-ft above grade level.
Mount Modifications: Install mount modifications per the mount analysis report prepared by Colliers dated September 19, 2023.

Primary Assumptions Used in the Analysis

- The tower structure's theoretical capacity not including any assessment of the condition of the tower.
- The tower carries the horizontal and vertical loads due to the weight of antennas, ice load and wind.
- Tower is properly installed and maintained.
- Tower is in plumb condition.
- Tower loading for antennas and mounts as listed in this report.
- All bolts are appropriately tightened providing the necessary connection continuity.
- All welds are fabricated with ER-70S-6 electrodes.
- All members are assumed to be as specified in the original tower design documents or reinforcement drawings.
- All members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
- All member protective coatings are in good condition.
- All tower members were properly designed, detailed, fabricated, installed and have been properly maintained since erection.
- Any deviation from the analyzed antenna loading will require a new analysis for verification of structural adequacy.
- All coax cables to be installed as indicated in this report.
- **The Verizon antenna mount information was taken from the mount analysis report and modification drawings prepared by Colliers Engineering job no. 23777246 dated September 19, 2023**

Analysis

The existing tower was analyzed using a comprehensive computer program entitled *tnxTower*. The program analyzes the tower, considering the worst case loading condition. The tower is considered as loaded by concentric forces along the tower, and the model assumes that the tower members are subjected to bending, axial, and shear forces.

The existing tower was analyzed for the controlling basic wind speed (3-second gust) with no ice and the applicable wind and ice combination to determine stresses in members as per guidelines of TIA-222-H entitled “Structural Standard for Antenna Support Structures, Antennas and Small Wind Turbine Support Structures”, the American Institute of Steel Construction (AISC) and the Manual of Steel Construction; Load and Resistance Factor Design (LRFD).

The controlling wind speed is determined by evaluating the local available wind speed data as provided in Appendix N of the CSBC¹ and the wind speed data available in the TIA-222-H Standard.

Tower Loading

Tower loading was determined by the basic wind speed as applied to projected surface areas with modification factors per TIA-222-H, gravity loads of the tower structure and its components, and the application of 1.0” radial ice on the tower structure and its components.

Load Cases:	<u>Load Case 1</u> ; 130 mph (Risk Cat III) wind speed w/ no ice plus gravity load – used in calculation of tower stresses and rotation.	<i>[Appendix P of the 2018 CT Building Code]</i>
	<u>Load Case 2</u> ; 50 mph wind speed w/ 1.00” radial ice plus gravity load – used in calculation of tower stresses.	<i>[Annex B of TIA-222-H]</i>

¹ The 2021 International Building Code as amended by the 2022 Connecticut State Building Code (CSBC).

Tower Capacity

- Calculated stresses were found to be within allowable limits.

Tower Section	Elevation	Stress Ratio (percentage of capacity)	Result
Pole Shaft (L5)	1.50'-39.88'	50.3%	PASS

Foundation and Anchors

The existing foundation consists of a 9.0 Ø x 28.0-ft long reinforced concrete caisson. The sub-grade conditions used in the analysis of the existing foundation were obtained from the aforementioned EEI design report; project no. 11030 dated August 21, 2002. The base of the tower is connected to the foundation by means of (30) 2.25"Ø, ASTM A615-75 anchor bolts embedded approximately 7-ft into the concrete foundation structure.

- The tower base reactions developed from the governing Load Case were used in the verification of the foundation and its anchors:

Location	Vector	Proposed Reactions
Base	Shear	62 kips
	Compression	102 kips
	Moment	6739 kip-ft

- The foundation was found to be within allowable limits.

Foundation	Design Limit	Proposed Loading	Result
(1) Reinforced Concrete Caisson	Moment Capacity	62.5%	PASS
	Lateral Deflection	0.11 in.	PASS

- The flange bolts and plate were found to be within allowable limits.

Tower Component	Design Limit	Stress Ratio (percentage of capacity)	Result
Flange Bolts	Tension	44.0%	PASS
Flange Plate	Bending	35.6%	PASS

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Structural Analysis – 164-ft EEI Monopole
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- The anchor bolts and base plate were found to be within allowable limits.

Tower Component	Design Limit	Stress Ratio (percentage of capacity)	Result
Anchor Bolts	Combined Axial and Bending	39.0%	PASS
Base Plate	Bending	62.0%	PASS

Conclusion

This analysis shows that the subject tower **is adequate** to support the proposed equipment configuration.

The analysis is based, in part, on the information provided to this office by Verizon. If the existing conditions are different than the information in this report, Centek Engineering, Inc. must be contacted for resolution of any potential issues.

Please feel free to call with any questions or comments.

Respectfully Submitted by:



Timothy J. Lynn, PE
Structural Engineer



CEN TEK Engineering, Inc.
Structural Analysis – 164-ft EEI Monopole
Verizon – Greenwich
Greenwich, CT
Rev 2 ~ October 12, 2023

Standard Conditions for Furnishing of
Professional Engineering Services on
Existing Structures

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessarily limited to:

- Information supplied by the client regarding the structure itself, its foundations, the soil conditions, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from the field and/or drawings in the possession of Centek Engineering, Inc. or generated by field inspections or measurements of the structure.
- It is the responsibility of the client to ensure that the information provided to Centek Engineering, Inc. and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an uncorroded condition and have not deteriorated. It is therefore assumed that its capacity has not significantly changed from the “as new” condition.
- All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest revision of ANSI/ASCE10 & ANSI/EIA-222
- All services performed, results obtained, and recommendations made are in accordance with generally accepted engineering principles and practices. Centek Engineering, Inc. is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

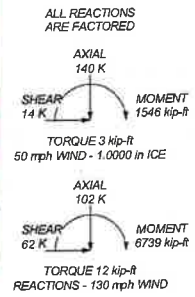
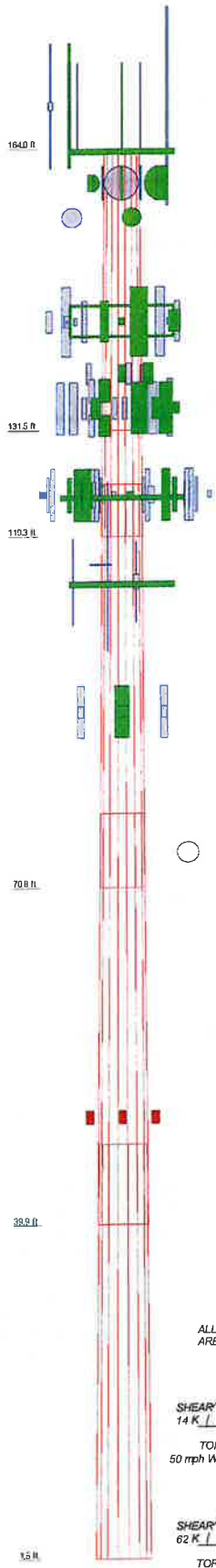
GENERAL DESCRIPTION OF STRUCTURAL ANALYSIS PROGRAM

tnxTower, is an integrated structural analysis and design software package for Designed specifically for the telecommunications industry, tnxTower, formerly ERITower, automates much of the tower analysis and design required by the TIA/EIA 222 Standard.

tnxTower Features:

- tnxTower can analyze and design 3- and 4-sided guyed towers, 3- and 4-sided self-supporting towers and either round or tapered ground mounted poles with or without guys.
- The program analyzes towers using the TIA-222-H standard or any of the previous TIA/EIA standards back to RS-222 (1959). Steel design is checked using the AISC ASD or the AISC LRFD specifications.
- Linear and non-linear (P-delta) analyses can be used in determining displacements and forces in the structure. Wind pressures and forces are automatically calculated.
- Extensive graphics plots include material take-off, shear-moment, leg compression, displacement, twist, feed line, guy anchor and stress plots.
- tnxTower contains unique features such as True Cable behavior, hog rod take-up, foundation stiffness and much more.

Section	1	2	3	4	5	6	7	8	9
Length (ft)	27.50	12.21	46.50	47.33	47.33	47.33	47.33	47.33	47.33
Number of Ribs	10	10	18	18	18	18	18	18	18
Thickness (in)	0.1375	0.3750	0.4375	0.4375	0.5625	0.5625	0.5625	0.5625	0.5625
Splice Length (ft)	67.0000	6.0000	9.4300	9.2500	9.2500	9.2500	9.2500	9.2500	9.2500
Top Dia (in)	53.4200	53.4200	54.6666	66.4613	66.4613	66.4613	66.4613	66.4613	66.4613
Bottom Dia (in)	53.4200	56.1400	62.9700	69.6900	69.6900	69.6900	69.6900	69.6900	69.6900
Grade	A572/50	A572/50	A572/50	A572/50	A572/50	A572/50	A572/50	A572/50	A572/50
Weight (K)	5.5	2.7	12.9	13.5	13.5	13.5	13.5	13.5	13.5



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
12 x 3" Dia Oms (Town Existing)	164	814 4478 (ATI Existing)	134
12 x 3" Dia Oms (Town Existing)	164	814 4478 (ATI Existing)	134
12 x 3" Dia Oms (Town Existing)	164	814 4478 (ATI Existing)	134
12 x 3" Dia Oms (Town Existing)	164	DOV (ATI Existing)	134
Camera (Town Existing)	164	EE1 16 R Low Profile Platform (ATI Existing)	134
SC479 HF LDF (Town Existing)	164	DMFGR BUD (ATI Existing)	134
7x7x4 432 B3H D1T (Town Existing)	164	OD6618-7 (ATI Existing)	134
SC290-5FXLDF (Town Existing)	164	ARR849 (ATI Existing)	134
SC479 HF LDF (Town Existing)	164	ARR849 (ATI Existing)	134
Low Profile Platform (Town Existing)	164	DHFGR BUD (ATI Existing)	134
4x4" Pipe Mount (Town Existing)	160	(2) OS655-30 (Verizon Existing)	124
4x4" Pipe Mount (Town Existing)	160	8162R MMU (Verizon Existing)	124
4x4" Pipe Mount (Town Existing)	160	8084H 60E-JY (Verizon Existing)	124
4 FT DSH (Town Existing)	160	08440 B5C-JY (Verizon Existing)	124
4 FT DSH (Town Existing)	160	(2) OS655-30 (Verizon Existing)	124
2 FT DSH (Town Existing)	160	64162R MMU (Verizon Existing)	124
A-Ani 250-2-C (Clearview Existing)	154	06648 60E-JY (Verizon Existing)	124
A-Ani 250-2-C (Clearview Existing)	154	02086A RRH (Verizon Existing)	124
AIR02 (T-Mobile Existing)	144	62606A RRH (Verizon Existing)	124
AIR649 (T-Mobile Existing)	144	85403 RRH (Verizon Existing)	124
APXVAAR024-3 (T-Mobile Existing)	144	85513 RRH (Verizon Existing)	124
AIR02 (T-Mobile Existing)	144	85513 RRH (Verizon Existing)	124
IRanko 448B 811 B12 (T-Mobile Existing)	144	85513 RRH (Verizon Existing)	124
IRanko 448B 811 B12 (T-Mobile Existing)	144	85513 RRH (Verizon Existing)	124
IRanko 448B 811 B12 (T-Mobile Existing)	144	85513 RRH (Verizon Existing)	124
TMA 17P40" (T-Mobile Existing)	144	CBRS Antenna RRH (Verizon Existing)	124
TMA 17P40" (T-Mobile Existing)	144	CBRS Antenna RRH (Verizon Existing)	124
TMA 17P40" (T-Mobile Existing)	144	CBRS Antenna RRH (Verizon Existing)	124
4415 B25 (T-Mobile Existing)	144	RC20C-3015-PF-48 (Verizon Existing)	124
4415 B25 (T-Mobile Existing)	144	RC20C-3015-PF-48 (Verizon Existing)	124
4415 B25 (T-Mobile Existing)	144	(2) KA-6000 (Verizon Proposed)	124
SDX 102G0-4 (T-Mobile Existing)	144	(2) KA-6000 (Verizon Proposed)	124
SDX 102G0-4 (T-Mobile Existing)	144	(2) KA-6000 (Verizon Proposed)	124
EE1 16 R Platform w/ Handrail (T-Mobile Existing)	144	EE1 16 R Standard Platform (Verizon Existing)	134
ARR849 (T-Mobile Existing)	144	L20 Platform (Base 00) (Verizon Proposed)	124
APXVAAR024-3 (T-Mobile Existing)	144	08440 B5C-JY (Verizon Existing)	124
AIR02 (T-Mobile Existing)	144	8162R MMU (Verizon Existing)	124
AIR849 (T-Mobile Existing)	144	08440 B5C-JY (Verizon Existing)	124
APXVAAR024-3 (T-Mobile Existing)	144	8162R MMU (Verizon Existing)	124
DOV-48-60-18-8F Surge Anemter (ATI Existing)	138	8162R MMU (Verizon Existing)	124
DOV-48-60-18-8F Surge Anemter (ATI Existing)	138	8162R MMU (Verizon Existing)	124
RRJ5-32 (ATI Existing)	138	651-70-4 (EverSource Existing)	114
RRJ5-32 (ATI Existing)	138	08366 Y (EverSource Existing)	114
RRJ5-32 (ATI Existing)	138	08366 Y (EverSource Existing)	114
OD66 16-7 (ATI Existing)	134	AH1 150F2 (EverSource Existing)	114
ARR849 (ATI Existing)	134	Tower Top Amplifier (EverSource Existing)	114
ARR849 (ATI Existing)	134	FFVA 62B R2 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
ARR849 (ATI Existing)	134	TA00025-81604 (Dish Reserve)	99
RRJ5-32 (ATI Existing)	134	RD 10C-9191-PF-48 (Dish Reserve)	99
RRJ5-32 (ATI Existing)	134	RD 10C-9191-PF-48 (Dish Reserve)	99
RRJ5-32 (ATI Existing)	134	RD 10C-9191-PF-48 (Dish Reserve)	99
RRJ5-32 (ATI Existing)	134	RD 10C-9191-PF-48 (Dish Reserve)	99
RRJ5-32 (ATI Existing)	134	FFVA 62B R2 (Dish Reserve)	99
RRJ5-32 (ATI Existing)	134	FFVA 62B R2 (Dish Reserve)	99
RRJ5-32 (ATI Existing)	134	FFVA 62B R2 (Dish Reserve)	99
RRJ5-32 (ATI Existing)	134	GPS	51.5
RRJ5-32 (ATI Existing)	134	GPS	51.5
RRJ5-32 (ATI Existing)	134	GPS	51.5

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572 50	60 ksi	80 ksi			

TOWER DESIGN NOTES

- Tower designed for Exposure C to the TIA-222-H Standard.
- Tower designed for a 130 mph basic wind in accordance with the TIA-222-H Standard.
- Tower is also designed for a 50 mph basic wind with 1.00 in ice. Ice is considered to increase in thickness with height.
- Deflections are based upon a 60 mph wind.
- Tower Risk Category III.
- Topographic Category 1 with Crest Height of 0.00 ft.
- Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards.
- Welds are fabricated with ER-70S-6 electrodes.
- TOWER RATING: 50.3%

Centek Engineering Inc.
 63-2 North Branford Rd.
 Branford, CT 06405
 Phone: (203) 488-0580
 FAX: (203) 488-8587

22027.15 - Greenwich
 Project: 164' EEI Monopole - 5 Perryridge Rd., Greenwich, CT
 Client: Verizon Wireless
 Drawn by: T.J.L.
 Date: 10/12/23
 Scale: NTS
 Dwg No.: E-1

tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Job 22027.15 - Greenwich	Page 1 of 27
	Project 164' EEI Monopole - 5 Perryridge Rd., Greenwich, CT	Date 14:46:07 10/12/23
	Client Verizon Wireless	Designed by TJL

Tower Input Data

The tower is a monopole.

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

The following design criteria apply:

Tower base elevation above sea level: 1.50 ft.

Basic wind speed of 130 mph.

Risk Category III.

Exposure Category C.

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

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 1.0000 in.

Ice thickness is considered to increase with height.

Ice density of 56 pcf.

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

Temperature drop of 50 °F.

Deflections calculated using a wind speed of 60 mph.

Tower members are "hot dipped" galvanized in accordance with ASTM A123 and ASTM A153 Standards..

Welds are fabricated with ER-70S-6 electrodes..

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

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

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

Options

<ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section Secondary Horizontal Braces Leg Use Diamond Inner Bracing (4 Sided) SR Members Have Cut Ends SR Members Are Concentric 	<ul style="list-style-type: none"> Distribute Leg Loads As Uniform Assume Legs Pinned √ Assume Rigid Index Plate Use Clear Spans For Wind Area Use Clear Spans For KL/r Retension Guys To Initial Tension Bypass Mast Stability Checks Use Azimuth Dish Coefficients √ Project Wind Area of Appurt. Autocalc Torque Arm Areas Add IBC .6D+W Combination √ Sort Capacity Reports By Component Triangulate Diamond Inner Bracing Treat Feed Line Bundles As Cylinder Ignore KL/ry For 60 Deg. Angle Legs 	<ul style="list-style-type: none"> Use ASCE 10 X-Brace Ly Rules Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feed Line Torque Include Angle Block Shear Check Use TIA-222-H Bracing Resist. Exemption Use TIA-222-H Tension Splice Exemption <li style="text-align: center;">Poles Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets Pole Without Linear Attachments Pole With Shroud Or No Appurtenances Outside and Inside Corner Radii Are Known
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Tapered Pole Section Geometry

tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0380 FAX: (203) 488-8587	Job 22027.15 - Greenwich	Page 2 of 27
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	Client Verizon Wireless	Designed by TJL

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	164.00-131.50	32.50	0.00	18	47.0000	53.4200	0.3125	1.2500	A572-65 (65 ksi)
L2	131.50-119.29	12.21	6.00	18	53.4200	56.1500	0.3750	1.5000	A572-65 (65 ksi)
L3	119.29-78.79	46.50	8.42	18	54.0585	62.9700	0.4375	1.7500	A572-65 (65 ksi)
L4	78.79-39.88	47.33	9.25	18	60.4813	69.6600	0.5625	2.2500	A572-65 (65 ksi)
L5	39.88-1.50	47.63		18	66.7412	76.0000	0.5625	2.2500	A572-65 (65 ksi)

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	It/Q ² in ²	w in	w/t
L1	47.6768	46.3082	12752.5270	16.5741	23.8760	534.1149	25521.8341	23.1585	7.7220	24.71
	54.1959	52.6760	18769.9004	18.8532	27.1374	691.6627	37564.4987	26.3430	8.8519	28.326
L2	54.1862	63.1368	22444.4518	18.8310	27.1374	827.0684	44918.4365	31.5744	8.7419	23.312
	56.9584	66.3862	26091.2194	19.8001	28.5242	914.7047	52216.7704	33.1994	9.2224	24.593
L3	55.9925	74.4594	27047.4669	19.0354	27.4617	984.9157	54130.5236	37.2368	8.7443	19.987
	63.8739	86.8342	42898.2727	22.1990	31.9888	1341.0421	85852.9920	43.4253	10.3127	23.572
L4	62.9857	106.9776	48524.0652	21.2712	30.7245	1579.3269	97111.9796	53.4990	9.6547	17.164
	70.6478	123.3649	74413.8720	24.5296	35.3873	2102.8424	148925.659	61.6942	11.2702	20.036
L5	69.5098	118.1537	65376.3617	23.4934	33.9045	1928.2498	130838.747	59.0881	10.7564	19.123
	77.0856	134.6842	96834.1984	26.7803	38.6080	2508.1382	193795.813	67.3549	12.3860	22.02

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals	Double Angle Stitch Bolt Spacing Redundants
ft	ft ²	in					in	in	in
L1 164.00-131.50				1	1	1			
L2 131.50-119.29				1	1	1			
L3 119.29-78.79				1	1	1			
L4 78.79-39.88				1	1	1			
L5 39.88-1.50				1	1	1			

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
7/8	B	No	Surface Ar (CaAa)	51.50 - 4.50	3	3	0.000 0.000	1.1100		0.54
HYBRIFLEX 1-5/8"	B	No	Surface Ar	144.00 -	3	3	0.000	1.9800		1.90

tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Job 22027.15 - Greenwich	Page 3 of 27
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	Client Verizon Wireless	Designed by TJL

Description	Sector	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	Number Per Row	Start/End Position	Width or Diameter in	Perimeter in	Weight plf
(T-Mobile - Existing)			(CaAa)	7.50			0.000			

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number		C _A A _A ft ² /ft	Weight plf
1/2 (Town Existing)	A	No	No	Inside Pole	164.00 - 4.50	1	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.25 0.25 0.25
1 1/4 (Town Existing)	A	No	No	Inside Pole	164.00 - 4.50	6	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.66 0.66 0.66
1 5/8 (T-Mobile Existing)	B	No	No	Inside Pole	144.00 - 4.50	6	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	1.04 1.04 1.04
1 5/8 (AT&T Existing)	A	No	No	Inside Pole	134.00 - 11.50	6	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	1.04 1.04 1.04
1 5/8 (Verizon Existing)	C	No	No	Inside Pole	124.00 - 7.50	12	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	1.04 1.04 1.04
RG6-Fiber (AT&T Existing)	A	No	No	Inside Pole	134.00 - 11.50	3	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.00 0.00 0.00
#8 AWG Copper Wire (AT&T Existing)	A	No	No	Inside Pole	134.00 - 11.50	7	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.00 0.00 0.00
HYBRIFLEX 1-5/8" (Verizon Existing)	C	No	No	Inside Pole	124.00 - 7.50	2	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	1.90 1.90 1.90
7/8 (Eversource Existing)	C	No	No	Inside Pole	114.00 - 1.50	2	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.54 0.54 0.54
1 5/8 (Eversource Existing)	C	No	No	Inside Pole	114.00 - 1.50	2	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	1.04 1.04 1.04
1/2 (Eversource Existing)	C	No	No	Inside Pole	114.00 - 1.50	1	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.25 0.25 0.25
HYBRIFLEX 1-5/8" (T-Mobile - Existing)	B	No	No	Inside Pole	144.00 - 7.50	3	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	1.90 1.90 1.90
1 5/8 (Town Existing)	A	No	No	Inside Pole	164.00 - 4.50	1	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	1.04 1.04 1.04
7/8 (Town Existing)	A	No	No	Inside Pole	164.00 - 4.50	2	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.54 0.54 0.54
1/2 (Town Existing)	A	No	No	Inside Pole	164.00 - 4.50	1	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.25 0.25 0.25
7/8 (Eversource Existing)	C	No	No	Inside Pole	114.00 - 1.50	2	No Ice 1/2" Ice 1" Ice	0.00 0.00 0.00	0.54 0.54 0.54
HYBRIFLEX 1-5/8"	C	No	No	Inside Pole	99.00 - 1.50	1	No Ice 1" Ice	0.00 0.00	1.90 0.54

tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Job 22027.15 - Greenwich	Page 4 of 27
	Project 164' EEI Monopole - 5 Perryridge Rd., Greenwich, CT	Date 14:46:07 10/12/23
	Client Verizon Wireless	Designed by T.J.L.

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C _{AA} ft ² /ft	Weight plf
(Dish Reserved)						1/2" Ice	0.00	1.90
						1" Ice	0.00	1.90

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L1	164.00-131.50	A	0.000	0.000	0.000	0.000	0.23
		B	0.000	0.000	7.425	0.000	0.22
		C	0.000	0.000	0.000	0.000	0.00
L2	131.50-119.29	A	0.000	0.000	0.000	0.000	0.16
		B	0.000	0.000	7.253	0.000	0.22
		C	0.000	0.000	0.000	0.000	0.08
L3	119.29-78.79	A	0.000	0.000	0.000	0.000	0.52
		B	0.000	0.000	24.057	0.000	0.71
		C	0.000	0.000	0.000	0.000	0.86
L4	78.79-39.88	A	0.000	0.000	0.000	0.000	0.50
		B	0.000	0.000	26.982	0.000	0.71
		C	0.000	0.000	0.000	0.000	0.88
L5	39.88-1.50	A	0.000	0.000	0.000	0.000	0.41
		B	0.000	0.000	31.015	0.000	0.65
		C	0.000	0.000	0.000	0.000	0.77

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _{AA} In Face ft ²	C _{AA} Out Face ft ²	Weight K
L1	164.00-131.50	A	1.336	0.000	0.000	0.000	0.000	0.23
		B		0.000	0.000	13.455	0.000	0.35
		C		0.000	0.000	0.000	0.000	0.00
L2	131.50-119.29	A	1.314	0.000	0.000	0.000	0.000	0.16
		B		0.000	0.000	13.077	0.000	0.34
		C		0.000	0.000	0.000	0.000	0.08
L3	119.29-78.79	A	1.283	0.000	0.000	0.000	0.000	0.52
		B		0.000	0.000	43.377	0.000	1.12
		C		0.000	0.000	0.000	0.000	0.86
L4	78.79-39.88	A	1.219	0.000	0.000	0.000	0.000	0.50
		B		0.000	0.000	49.939	0.000	1.16
		C		0.000	0.000	0.000	0.000	0.88
L5	39.88-1.50	A	1.099	0.000	0.000	0.000	0.000	0.41
		B		0.000	0.000	59.426	0.000	1.15
		C		0.000	0.000	0.000	0.000	0.77

Feed Line Center of Pressure

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Section	Elevation ft	CP _x	CP _z	CP _x	CP _z
		in	in	Ice in	Ice in
L1	164.00-131.50	1.6105	-0.9298	1.6188	-0.9346
L2	131.50-119.29	3.6734	-2.1208	3.5256	-2.0355
L3	119.29-78.79	3.7047	-2.1389	3.5864	-2.0706
L4	78.79-39.88	4.2990	-2.4820	4.2499	-2.4537
L5	39.88-1.50	4.8795	-2.8172	4.9357	-2.8496

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

Shielding Factor Ka

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	K _a No Ice	K _a Ice
L1	17	HYBRIFLEX 1-5/8"	131.50 - 144.00	1.0000	1.0000
L2	17	HYBRIFLEX 1-5/8"	119.29 - 131.50	1.0000	1.0000
L3	17	HYBRIFLEX 1-5/8"	78.79 - 119.29	1.0000	1.0000
L4	8	7/8	39.88 - 51.50	1.0000	1.0000
L4	17	HYBRIFLEX 1-5/8"	39.88 - 78.79	1.0000	1.0000
L5	8	7/8	4.50 - 39.88	1.0000	1.0000
L5	17	HYBRIFLEX 1-5/8"	7.50 - 39.88	1.0000	1.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment °	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K
			Horz ft	Vert ft					
4'x4" Pipe Mount (Town Existing)	A	From Face	0.50	0.0000	160.00	No Ice	1.06	1.06	0.04
			0.00			1/2" Ice	1.58	1.58	0.06
			0.00			1" Ice	1.84	1.84	0.07
4'x4" Pipe Mount (Town Existing)	B	From Face	0.50	0.0000	160.00	No Ice	1.06	1.06	0.04
			0.00			1/2" Ice	1.58	1.58	0.06
			0.00			1" Ice	1.84	1.84	0.07
4'x4" Pipe Mount (Town Existing)	C	From Face	0.50	0.0000	160.00	No Ice	1.06	1.06	0.04
			0.00			1/2" Ice	1.58	1.58	0.06
			0.00			1" Ice	1.84	1.84	0.07
12' x 3" Dia Omni (Town Existing)	A	From Face	4.00	0.0000	164.00	No Ice	3.60	3.60	0.04
			0.00			1/2" Ice	4.83	4.83	0.06
			5.00			1" Ice	6.08	6.08	0.09
12' x 3" Dia Omni (Town Existing)	B	From Face	4.00	0.0000	164.00	No Ice	3.60	3.60	0.04
			-6.00			1/2" Ice	4.83	4.83	0.06
			5.00			1" Ice	6.08	6.08	0.09
12' x 3" Dia Omni	C	From Face	4.00	0.0000	164.00	No Ice	3.60	3.60	0.04

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	Client	Verizon Wireless	Designed by	TJL

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight	
			Horz	Vert						
			ft	ft	°	ft	ft ²	ft ²	K	
(Town Existing)			6.00			1/2" Ice	4.83	4.83	0.06	
			5.00			1" Ice	6.08	6.08	0.09	
12' x 3" Dia Omni	C	From Face	4.00		0.0000	164.00	No Ice	3.60	3.60	0.04
(Town Existing)			0.00				1/2" Ice	4.83	4.83	0.06
			5.00				1" Ice	6.08	6.08	0.09
Camera	B	From Face	4.00		0.0000	164.00	No Ice	3.00	3.00	0.10
(Town Existing)			-6.00				1/2" Ice	4.00	4.00	0.15
			2.00				1" Ice	5.00	5.00	0.20
SC479-HF1LDF	A	From Face	4.00		0.0000	164.00	No Ice	4.39	4.39	0.03
(Town Existing)			-6.00				1/2" Ice	6.54	6.54	0.07
			5.00				1" Ice	8.04	8.04	0.11
TX/RX 432E-83I-01T	A	From Face	4.00		0.0000	164.00	No Ice	1.20	0.75	0.03
(Town Existing)			-6.00				1/2" Ice	1.34	0.86	0.04
			5.00				1" Ice	1.48	0.98	0.05
SC229-SFXLDF	B	From Face	4.00		0.0000	164.00	No Ice	6.67	6.67	0.03
(Town Existing)			0.00				1/2" Ice	9.02	9.02	0.08
			5.00				1" Ice	11.39	11.39	0.14
SC479-HF1LDF	C	From Face	4.00		0.0000	164.00	No Ice	4.39	4.39	0.03
(Town Existing)			6.00				1/2" Ice	6.54	6.54	0.07
			5.00				1" Ice	8.04	8.04	0.11
Low Profile Platform	C	None			0.0000	164.00	No Ice	15.70	15.70	1.30
(Town Existing)							1/2" Ice	20.10	20.10	1.76
							1" Ice	24.50	24.50	2.23
AIR6449	A	From Face	4.00		0.0000	144.00	No Ice	4.05	2.74	0.10
(T-Mobile Existing)			-6.00				1/2" Ice	4.32	2.97	0.13
			0.00				1" Ice	4.59	3.20	0.17
APXVAARR24-43	A	From Face	4.00		0.0000	144.00	No Ice	20.24	8.89	0.15
(T-Mobile Existing)			-2.00				1/2" Ice	20.89	9.49	0.27
			0.00				1" Ice	21.54	10.09	0.39
AIR32	A	From Face	4.00		0.0000	144.00	No Ice	6.51	4.71	0.13
(T-Mobile Existing)			2.00				1/2" Ice	6.89	5.07	0.18
			0.00				1" Ice	7.27	5.43	0.23
AIR6449	B	From Face	4.00		0.0000	144.00	No Ice	4.05	2.74	0.10
(T-Mobile Existing)			-6.00				1/2" Ice	4.32	2.97	0.13
			0.00				1" Ice	4.59	3.20	0.17
APXVAARR24-43	B	From Face	4.00		0.0000	144.00	No Ice	20.24	8.89	0.15
(T-Mobile Existing)			-2.00				1/2" Ice	20.89	9.49	0.27
			0.00				1" Ice	21.54	10.09	0.39
AIR32	B	From Face	4.00		0.0000	144.00	No Ice	6.51	4.71	0.13
(T-Mobile Existing)			2.00				1/2" Ice	6.89	5.07	0.18
			0.00				1" Ice	7.27	5.43	0.23
AIR6449	C	From Face	4.00		0.0000	144.00	No Ice	4.05	2.74	0.10
(T-Mobile Existing)			-6.00				1/2" Ice	4.32	2.97	0.13
			0.00				1" Ice	4.59	3.20	0.17
APXVAARR24-43	C	From Face	4.00		0.0000	144.00	No Ice	20.24	8.89	0.15
(T-Mobile Existing)			-2.00				1/2" Ice	20.89	9.49	0.27
			0.00				1" Ice	21.54	10.09	0.39
AIR32	C	From Face	4.00		0.0000	144.00	No Ice	6.51	4.71	0.13
(T-Mobile Existing)			2.00				1/2" Ice	6.89	5.07	0.18
			0.00				1" Ice	7.27	5.43	0.23
Radio 4449 B71 B12	A	From Face	4.00		0.0000	144.00	No Ice	1.64	1.29	0.07
(T-Mobile Existing)			-2.00				1/2" Ice	1.80	1.44	0.09
			0.00				1" Ice	1.97	1.59	0.11
Radio 4449 B71 B12	B	From Face	4.00		0.0000	144.00	No Ice	1.64	1.29	0.07
(T-Mobile Existing)			-2.00				1/2" Ice	1.80	1.44	0.09
			0.00				1" Ice	1.97	1.59	0.11
Radio 4449 B71 B12	C	From Face	4.00		0.0000	144.00	No Ice	1.64	1.29	0.07

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert	Azimuth Adjustment	Placement	C _A A _A Front	C _A A _A Side	Weight	
			ft ft ft	°	ft	ft ²	ft ²	K	
(T-Mobile Existing)			-2.00			1/2" Ice	1.80	1.44	0.09
			0.00			1" Ice	1.97	1.59	0.11
TMA 10"x8"x3"	A	From Face	4.00	0.0000	144.00	No Ice	0.67	0.26	0.02
(T-Mobile Existing)			0.00			1/2" Ice	0.77	0.33	0.02
			0.00			1" Ice	0.88	0.41	0.03
TMA 10"x8"x3"	B	From Face	4.00	0.0000	144.00	No Ice	0.67	0.26	0.02
(T-Mobile Existing)			0.00			1/2" Ice	0.77	0.33	0.02
			0.00			1" Ice	0.88	0.41	0.03
TMA 10"x8"x3"	C	From Face	4.00	0.0000	144.00	No Ice	0.67	0.26	0.02
(T-Mobile Existing)			0.00			1/2" Ice	0.77	0.33	0.02
			0.00			1" Ice	0.88	0.41	0.03
4415 B25	A	From Face	4.00	0.0000	144.00	No Ice	1.84	0.82	0.05
(T-Mobile Existing)			-2.00			1/2" Ice	2.01	0.94	0.06
			0.00			1" Ice	2.19	1.07	0.08
4415 B25	B	From Face	4.00	0.0000	144.00	No Ice	1.84	0.82	0.05
(T-Mobile Existing)			-2.00			1/2" Ice	2.01	0.94	0.06
			0.00			1" Ice	2.19	1.07	0.08
4415 B25	C	From Face	4.00	0.0000	144.00	No Ice	1.84	0.82	0.05
(T-Mobile Existing)			-2.00			1/2" Ice	2.01	0.94	0.06
			0.00			1" Ice	2.19	1.07	0.08
SDX1926Q-43	A	From Face	4.00	0.0000	144.00	No Ice	0.24	0.10	0.03
(T-Mobile Existing)			-2.00			1/2" Ice	0.31	0.14	0.03
			0.00			1" Ice	0.38	0.19	0.04
SDX1926Q-43	B	From Face	4.00	0.0000	144.00	No Ice	0.24	0.10	0.03
(T-Mobile Existing)			-2.00			1/2" Ice	0.31	0.14	0.03
			0.00			1" Ice	0.38	0.19	0.04
SDX1926Q-43	C	From Face	4.00	0.0000	144.00	No Ice	0.24	0.10	0.03
(T-Mobile Existing)			-2.00			1/2" Ice	0.31	0.14	0.03
			0.00			1" Ice	0.38	0.19	0.04
EEI 16-ft Platform w/ Handrail	C	None		0.0000	144.00	No Ice	26.00	26.00	2.30
(T-Mobile Existing)						1/2" Ice	32.00	32.00	2.75
						1" Ice	38.00	38.00	3.20
DC6-48-60-18-8F Surge Arrestor	B	From Face	0.50	0.0000	138.00	No Ice	1.91	1.91	0.03
(AT&T Existing)			0.00			1/2" Ice	2.10	2.10	0.05
			0.00			1" Ice	2.29	2.29	0.07
DC6-48-60-18-8F Surge Arrestor	C	From Face	0.50	0.0000	138.00	No Ice	1.91	1.91	0.03
(AT&T Existing)			0.00			1/2" Ice	2.10	2.10	0.05
			0.00			1" Ice	2.29	2.29	0.07
RRUS-32	A	From Face	0.50	0.0000	138.00	No Ice	3.31	2.42	0.08
(AT&T Existing)			-3.00			1/2" Ice	3.56	2.64	0.10
			0.00			1" Ice	3.81	2.86	0.14
RRUS-32	B	From Face	0.50	0.0000	138.00	No Ice	3.31	2.42	0.08
(AT&T Existing)			-3.00			1/2" Ice	3.56	2.64	0.10
			0.00			1" Ice	3.81	2.86	0.14
RRUS-32	C	From Face	0.50	0.0000	138.00	No Ice	3.31	2.42	0.08
(AT&T Existing)			-3.00			1/2" Ice	3.56	2.64	0.10
			0.00			1" Ice	3.81	2.86	0.14
Valmont Uni-Tri Bracket (AT&T Existing)	C	None		0.0000	138.00	No Ice	1.75	1.75	0.29
						1/2" Ice	1.94	1.94	0.31
						1" Ice	2.13	2.13	0.32
DMP65R-BU6D (AT&T Existing)	A	From Face	3.00	0.0000	134.00	No Ice	12.71	5.62	0.10
			-5.00			1/2" Ice	13.21	6.07	0.17
			0.00			1" Ice	13.71	6.53	0.25
QD6616-7 (AT&T Existing)	A	From Face	3.00	0.0000	134.00	No Ice	13.58	6.80	0.13
			-2.00			1/2" Ice	14.08	7.27	0.21
			0.00			1" Ice	14.60	7.72	0.30
AIR6419	A	From Face	3.00	0.0000	134.00	No Ice	4.17	2.02	0.06

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	Client		Verizon Wireless		Designed by	TJL

Description	Face or Leg	Offset Type	Offsets: Horz Lateral	Azimuth Adjustment	Placement	C _A A ₁ Front	C _A A ₂ Side	Weight	
									ft
(AT&T Existing)			2.00			1/2" Ice	4.44	2.23	0.09
			2.00			1" Ice	4.71	2.44	0.12
AIR6449	A	From Face	3.00	0.0000	134.00	No Ice	4.05	2.74	0.10
(AT&T Existing)			2.00			1/2" Ice	4.32	2.97	0.13
			-2.00			1" Ice	4.59	3.20	0.17
DMP65R-BU6D	B	From Face	3.00	0.0000	134.00	No Ice	12.71	5.62	0.10
(AT&T Existing)			-5.00			1/2" Ice	13.21	6.07	0.17
			0.00			1" Ice	13.71	6.53	0.25
QD6616-7	B	From Face	3.00	0.0000	134.00	No Ice	13.58	6.80	0.13
(AT&T Existing)			-2.00			1/2" Ice	14.08	7.27	0.21
			0.00			1" Ice	14.60	7.72	0.30
AIR6419	B	From Face	3.00	0.0000	134.00	No Ice	4.17	2.02	0.06
(AT&T Existing)			2.00			1/2" Ice	4.44	2.23	0.09
			2.00			1" Ice	4.71	2.44	0.12
AIR6449	B	From Face	3.00	0.0000	134.00	No Ice	4.05	2.74	0.10
(AT&T Existing)			2.00			1/2" Ice	4.32	2.97	0.13
			-2.00			1" Ice	4.59	3.20	0.17
DMP65R-BU6D	C	From Face	3.00	0.0000	134.00	No Ice	12.71	5.62	0.10
(AT&T Existing)			-5.00			1/2" Ice	13.21	6.07	0.17
			0.00			1" Ice	13.71	6.53	0.25
QD6616-7	C	From Face	3.00	0.0000	134.00	No Ice	13.58	6.80	0.13
(AT&T Existing)			-2.00			1/2" Ice	14.08	7.27	0.21
			0.00			1" Ice	14.60	7.72	0.30
AIR6419	C	From Face	3.00	0.0000	134.00	No Ice	4.17	2.02	0.06
(AT&T Existing)			2.00			1/2" Ice	4.44	2.23	0.09
			2.00			1" Ice	4.71	2.44	0.12
AIR6449	C	From Face	3.00	0.0000	134.00	No Ice	4.05	2.74	0.10
(AT&T Existing)			2.00			1/2" Ice	4.32	2.97	0.13
			-2.00			1" Ice	4.59	3.20	0.17
4449 B5/B12	A	From Face	0.50	0.0000	134.00	No Ice	1.97	1.41	0.07
(AT&T Existing)			3.00			1/2" Ice	2.14	1.56	0.09
			0.00			1" Ice	2.33	1.73	0.11
4449 B5/B12	B	From Face	0.50	0.0000	134.00	No Ice	1.97	1.41	0.07
(AT&T Existing)			3.00			1/2" Ice	2.14	1.56	0.09
			0.00			1" Ice	2.33	1.73	0.11
4449 B5/B12	C	From Face	0.50	0.0000	134.00	No Ice	1.97	1.41	0.07
(AT&T Existing)			3.00			1/2" Ice	2.14	1.56	0.09
			0.00			1" Ice	2.33	1.73	0.11
RRUS-32	A	From Face	0.50	0.0000	134.00	No Ice	3.31	2.42	0.08
(AT&T Existing)			3.00			1/2" Ice	3.56	2.64	0.10
			0.00			1" Ice	3.81	2.86	0.14
RRUS-32	B	From Face	0.50	0.0000	134.00	No Ice	3.31	2.42	0.08
(AT&T Existing)			3.00			1/2" Ice	3.56	2.64	0.10
			0.00			1" Ice	3.81	2.86	0.14
RRUS-32	C	From Face	0.50	0.0000	134.00	No Ice	3.31	2.42	0.08
(AT&T Existing)			3.00			1/2" Ice	3.56	2.64	0.10
			0.00			1" Ice	3.81	2.86	0.14
RRUS-32	A	From Face	0.50	0.0000	134.00	No Ice	3.31	2.42	0.08
(AT&T Existing)			-4.00			1/2" Ice	3.56	2.64	0.10
			0.00			1" Ice	3.81	2.86	0.14
RRUS-32	B	From Face	0.50	0.0000	134.00	No Ice	3.31	2.42	0.08
(AT&T Existing)			-4.00			1/2" Ice	3.56	2.64	0.10
			0.00			1" Ice	3.81	2.86	0.14
RRUS-32	C	From Face	0.50	0.0000	134.00	No Ice	3.31	2.42	0.08
(AT&T Existing)			-4.00			1/2" Ice	3.56	2.64	0.10
			0.00			1" Ice	3.81	2.86	0.14
B14 4478	A	From Face	0.50	0.0000	134.00	No Ice	1.84	1.06	0.06

tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Job	22027.15 - Greenwich	Page	9 of 27	
	Project	164' EEI Monopole - 5 Perryridge Rd., Greenwich, CT		Date	14:46:07 10/12/23
	Client	Verizon Wireless		Designed by	TJL

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz Lateral	Vert					
(AT&T Existing)			-6.00			1/2" Ice	2.01	1.20	0.08
			0.00			1" Ice	2.19	1.34	0.09
B14 4478	B	From Face	0.50	0.0000	134.00	No Ice	1.84	1.06	0.06
(AT&T Existing)			-6.00			1/2" Ice	2.01	1.20	0.08
			0.00			1" Ice	2.19	1.34	0.09
B14 4478	C	From Face	0.50	0.0000	134.00	No Ice	1.84	1.06	0.06
(AT&T Existing)			-6.00			1/2" Ice	2.01	1.20	0.08
			0.00			1" Ice	2.19	1.34	0.09
DC9	C	From Face	0.50	0.0000	134.00	No Ice	1.91	1.91	0.02
(AT&T Existing)			0.00			1/2" Ice	2.10	2.10	0.04
			0.00			1" Ice	2.29	2.29	0.06
EEI 16-ft Low Profile Platform	C	None		0.0000	134.00	No Ice	21.00	21.00	2.00
(AT&T Existing)						1/2" Ice	26.00	26.00	2.40
						1" Ice	31.00	31.00	2.80
DB844H65E-XY	A	From Face	4.00	0.0000	124.00	No Ice	2.87	3.98	0.01
(Verizon Existing)			-6.00			1/2" Ice	3.18	4.29	0.04
			0.00			1" Ice	3.49	4.61	0.07
(2) QS6656-5D	A	From Face	4.00	0.0000	124.00	No Ice	8.13	6.80	0.10
(Verizon Existing)			0.00			1/2" Ice	8.59	7.27	0.16
			0.00			1" Ice	9.05	7.72	0.22
64T65R MMU	A	From Face	4.00	0.0000	124.00	No Ice	4.71	1.84	0.08
(Verizon Existing)			4.00			1/2" Ice	5.00	2.06	0.11
			0.00			1" Ice	5.29	2.29	0.14
DB844H65E-XY	A	From Face	4.00	0.0000	124.00	No Ice	2.87	3.98	0.01
(Verizon Existing)			6.00			1/2" Ice	3.18	4.29	0.04
			0.00			1" Ice	3.49	4.61	0.07
DB844H65E-XY	B	From Face	4.00	0.0000	124.00	No Ice	2.87	3.98	0.01
(Verizon Existing)			-6.00			1/2" Ice	3.18	4.29	0.04
			0.00			1" Ice	3.49	4.61	0.07
(2) QS6656-5D	B	From Face	4.00	0.0000	124.00	No Ice	8.13	6.80	0.10
(Verizon Existing)			0.00			1/2" Ice	8.59	7.27	0.16
			0.00			1" Ice	9.05	7.72	0.22
64T65R MMU	B	From Face	4.00	0.0000	124.00	No Ice	4.71	1.84	0.08
(Verizon Existing)			4.00			1/2" Ice	5.00	2.06	0.11
			0.00			1" Ice	5.29	2.29	0.14
DB844H65E-XY	B	From Face	4.00	0.0000	124.00	No Ice	2.87	3.98	0.01
(Verizon Existing)			6.00			1/2" Ice	3.18	4.29	0.04
			0.00			1" Ice	3.49	4.61	0.07
DB844H65E-XY	C	From Face	4.00	0.0000	124.00	No Ice	2.87	3.98	0.01
(Verizon Existing)			-6.00			1/2" Ice	3.18	4.29	0.04
			0.00			1" Ice	3.49	4.61	0.07
(2) QS6656-5D	C	From Face	4.00	0.0000	124.00	No Ice	8.13	6.80	0.10
(Verizon Existing)			0.00			1/2" Ice	8.59	7.27	0.16
			0.00			1" Ice	9.05	7.72	0.22
64T65R MMU	C	From Face	4.00	0.0000	124.00	No Ice	4.71	1.84	0.08
(Verizon Existing)			4.00			1/2" Ice	5.00	2.06	0.11
			0.00			1" Ice	5.29	2.29	0.14
DB844H65E-XY	C	From Face	4.00	0.0000	124.00	No Ice	2.87	3.98	0.01
(Verizon Existing)			6.00			1/2" Ice	3.18	4.29	0.04
			0.00			1" Ice	3.49	4.61	0.07
B2/B66A RRH	A	From Face	4.00	0.0000	124.00	No Ice	2.54	1.61	0.06
(Verizon Existing)			4.00			1/2" Ice	2.75	1.79	0.08
			0.00			1" Ice	2.97	1.98	0.10
B2/B66A RRH	B	From Face	4.00	0.0000	124.00	No Ice	2.54	1.61	0.06
(Verizon Existing)			4.00			1/2" Ice	2.75	1.79	0.08
			0.00			1" Ice	2.97	1.98	0.10
B2/B66A RRH	C	From Face	4.00	0.0000	124.00	No Ice	2.54	1.61	0.06

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	Project	164' EEI Monopole - 5 Perryridge Rd., Greenwich, CT		Date	14:46:07 10/12/23
	Client	Verizon Wireless		Designed by	TJL

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight
			Horz	Vert					
			ft	ft		ft	ft ²	ft ²	K
(Verizon Existing)			4.00			1/2" Ice	2.75	1.79	0.08
			0.00			1" Ice	2.97	1.98	0.10
B5/B13 RRH	A	From Face	4.00	0.0000	124.00	No Ice	1.87	1.02	0.07
(Verizon Existing)			4.00			1/2" Ice	2.03	1.15	0.09
			0.00			1" Ice	2.21	1.29	0.11
B5/B13 RRH	B	From Face	4.00	0.0000	124.00	No Ice	1.87	1.02	0.07
(Verizon Existing)			4.00			1/2" Ice	2.03	1.15	0.09
			0.00			1" Ice	2.21	1.29	0.11
B5/B13 RRH	C	From Face	4.00	0.0000	124.00	No Ice	1.87	1.02	0.07
(Verizon Existing)			4.00			1/2" Ice	2.03	1.15	0.09
			0.00			1" Ice	2.21	1.29	0.11
CBRS Antenna/RRH	A	From Face	4.00	0.0000	124.00	No Ice	1.72	1.17	0.03
(Verizon Existing)			4.00			1/2" Ice	1.93	1.44	0.05
			0.00			1" Ice	2.14	1.71	0.07
CBRS Antenna/RRH	B	From Face	4.00	0.0000	124.00	No Ice	1.72	1.17	0.03
(Verizon Existing)			4.00			1/2" Ice	1.93	1.44	0.05
			0.00			1" Ice	2.14	1.71	0.07
CBRS Antenna/RRH	C	From Face	4.00	0.0000	124.00	No Ice	1.72	1.17	0.03
(Verizon Existing)			4.00			1/2" Ice	1.93	1.44	0.05
			0.00			1" Ice	2.14	1.71	0.07
RC2DC-3315-PF-48	A	From Face	1.00	0.0000	124.00	No Ice	3.01	1.96	0.03
(Verizon Existing)			1.00			1/2" Ice	3.23	2.15	0.05
			0.00			1" Ice	3.46	2.35	0.08
RC2DC-3315-PF-48	B	From Face	1.00	0.0000	124.00	No Ice	3.01	1.96	0.03
(Verizon Existing)			1.00			1/2" Ice	3.23	2.15	0.05
			0.00			1" Ice	3.46	2.35	0.08
(2) KA-6030	A	From Face	4.00	0.0000	124.00	No Ice	0.96	0.29	0.02
(Verizon Proposed)			4.00			1/2" Ice	1.09	0.36	0.03
			0.00			1" Ice	1.22	0.45	0.04
(2) KA-6030	B	From Face	4.00	0.0000	124.00	No Ice	0.96	0.29	0.02
(Verizon Proposed)			4.00			1/2" Ice	1.09	0.36	0.03
			0.00			1" Ice	1.22	0.45	0.04
(2) KA-6030	C	From Face	4.00	0.0000	124.00	No Ice	0.96	0.29	0.02
(Verizon Proposed)			4.00			1/2" Ice	1.09	0.36	0.03
			0.00			1" Ice	1.22	0.45	0.04
EEI 18-ft Standard Platform	C	None		0.0000	124.00	No Ice	30.00	30.00	1.60
(Verizon Existing)						1/2" Ice	35.00	35.00	2.00
						1" Ice	40.00	40.00	2.40
L3x3 Platform Brace (x3)	C	None		0.0000	124.00	No Ice	5.00	5.00	0.25
(Verizon Proposed)						1/2" Ice	7.00	7.00	0.35
						1" Ice	9.00	9.00	0.45
531-70HD	A	From Face	3.00	0.0000	114.00	No Ice	6.00	6.00	0.04
(Eversource Existing)			-2.00			1/2" Ice	6.90	6.90	0.05
			0.00			1" Ice	7.80	7.80	0.06
DB586-Y	B	From Face	3.00	0.0000	114.00	No Ice	1.01	1.01	0.01
(Eversource Existing)			-6.00			1/2" Ice	1.28	1.28	0.02
			2.50			1" Ice	1.56	1.56	0.03
DB586-Y	B	From Face	3.00	0.0000	114.00	No Ice	1.01	1.01	0.01
(Eversource Existing)			-6.00			1/2" Ice	1.28	1.28	0.02
			-2.50			1" Ice	1.56	1.56	0.03
ANT150F2	B	From Face	3.00	0.0000	114.00	No Ice	1.30	1.30	0.02
(Eversource Existing)			2.00			1/2" Ice	1.60	1.60	0.02
			2.50			1" Ice	1.90	1.90	0.03
Tower Top Amplifier	B	From Face	3.00	0.0000	114.00	No Ice	2.67	1.03	0.04
(Eversource Existing)			-6.00			1/2" Ice	2.87	1.17	0.06
			0.00			1" Ice	3.08	1.32	0.08
872F-70-2	A	From Face	3.00	0.0000	116.00	No Ice	3.60	3.60	0.02

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	Project	164' EEI Monopole - 5 Perryridge Rd., Greenwich, CT	Date	14:46:07 10/12/23
	Client	Verizon Wireless	Designed by	TJL

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C _{AA} Front	C _{AA} Side	Weight	
			Horz Lateral Vert	ft ft ft						°
(Eversource Existing)				6.00					0.04	
				4.50					0.07	
871F-70	A	From Face		3.00	0.0000	114.00	No Ice	2.40	2.40	0.01
(Eversource Existing)				6.00			1/2" Ice	3.20	3.20	0.03
				-3.00			1" Ice	4.00	4.00	0.04
2 Std. 5' Horz Pipe	A	From Face		0.50	0.0000	116.00	No Ice	0.49	0.49	0.02
(Eversource Existing)				0.00			1/2" Ice	1.00	1.00	0.12
				0.00			1" Ice	1.32	1.32	0.23
2 Std. 5' Horz Pipe	A	From Face		0.50	0.0000	114.00	No Ice	0.49	0.49	0.02
(Eversource Existing)				0.00			1/2" Ice	1.00	1.00	0.12
				0.00			1" Ice	1.32	1.32	0.23
Low Profile Platform	C	None			0.0000	114.00	No Ice	15.70	15.70	1.30
							1/2" Ice	20.10	20.10	1.76
							1" Ice	24.50	24.50	2.23
GPS	A	From Face		1.50	0.0000	51.50	No Ice	1.00	1.00	0.01
				0.00			1/2" Ice	1.50	1.50	0.01
				0.00			1" Ice	2.00	2.00	0.02
GPS	B	From Face		1.50	0.0000	51.50	No Ice	1.00	1.00	0.01
				0.00			1/2" Ice	1.50	1.50	0.01
				0.00			1" Ice	2.00	2.00	0.02
GPS	C	From Face		1.50	0.0000	51.50	No Ice	1.00	1.00	0.01
				0.00			1/2" Ice	1.50	1.50	0.01
				0.00			1" Ice	2.00	2.00	0.02
FFVV-65B-R2	A	From Face		3.00	0.0000	99.00	No Ice	12.27	5.72	0.08
(Dish Reserved)				0.00			1/2" Ice	12.76	6.18	0.15
				0.00			1" Ice	13.26	6.64	0.23
FFVV-65B-R2	B	From Face		3.00	0.0000	99.00	No Ice	12.27	5.72	0.08
(Dish Reserved)				0.00			1/2" Ice	12.76	6.18	0.15
				0.00			1" Ice	13.26	6.64	0.23
FFVV-65B-R2	C	From Face		3.00	0.0000	99.00	No Ice	12.27	5.72	0.08
(Dish Reserved)				0.00			1/2" Ice	12.76	6.18	0.15
				0.00			1" Ice	13.26	6.64	0.23
TA08025-B604	A	From Face		3.00	0.0000	99.00	No Ice	1.98	1.04	0.07
(Dish Reserved)				0.00			1/2" Ice	2.15	1.18	0.08
				0.00			1" Ice	2.33	1.32	0.10
TA08025-B604	B	From Face		3.00	0.0000	99.00	No Ice	1.98	1.04	0.07
(Dish Reserved)				0.00			1/2" Ice	2.15	1.18	0.08
				0.00			1" Ice	2.33	1.32	0.10
TA08025-B604	C	From Face		3.00	0.0000	99.00	No Ice	1.98	1.04	0.07
(Dish Reserved)				0.00			1/2" Ice	2.15	1.18	0.08
				0.00			1" Ice	2.33	1.32	0.10
TA08025-B605	A	From Face		3.00	0.0000	99.00	No Ice	1.98	1.20	0.08
(Dish Reserved)				0.00			1/2" Ice	2.15	1.34	0.09
				0.00			1" Ice	2.33	1.49	0.11
TA08025-B605	B	From Face		3.00	0.0000	99.00	No Ice	1.98	1.20	0.08
(Dish Reserved)				0.00			1/2" Ice	2.15	1.34	0.09
				0.00			1" Ice	2.33	1.49	0.11
TA08025-B605	C	From Face		3.00	0.0000	99.00	No Ice	1.98	1.20	0.08
(Dish Reserved)				0.00			1/2" Ice	2.15	1.34	0.09
				0.00			1" Ice	2.33	1.49	0.11
RD1DC-9181-PF-48	A	From Face		3.00	0.0000	99.00	No Ice	1.87	1.07	0.02
(Dish Reserved)				0.00			1/2" Ice	2.04	1.20	0.04
				0.00			1" Ice	2.21	1.35	0.06
MC-PK8-DSH	A	From Face		3.00	0.0000	99.00	No Ice	15.00	15.00	1.80
(Dish Reserved)				0.00			1/2" Ice	21.00	21.00	2.40
				0.00			1" Ice	27.00	27.00	3.00

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	Client Verizon Wireless	Designed by TJL

Dishes

Description	Face or Leg	Dish Type	Offset Type	Offsets:		Azimuth Adjustment	3 dB Beam Width	Elevation	Outside Diameter	Aperture Area	Weight
				Horz Lateral	Vert						
				ft	ft	°	°	ft	ft	ft ²	K
4 FT DISH (Town Existing)	A	Paraboloid w/Shroud (HP)	From Leg	1.00	0.00	Worst		160.00	4.00	No Ice	0.17
				0.00	0.00					1/2" Ice	0.24
				0.00	0.00					1" Ice	0.30
4 FT DISH (Town Existing)	B	Paraboloid w/Shroud (HP)	From Leg	1.00	0.00	Worst		160.00	4.00	No Ice	0.17
				0.00	0.00					1/2" Ice	0.24
				0.00	0.00					1" Ice	0.30
2 FT DISH (Town Existing)	C	Paraboloid w/Shroud (HP)	From Leg	1.00	0.00	Worst		160.00	2.00	No Ice	0.03
				0.00	0.00					1/2" Ice	0.04
				0.00	0.00					1" Ice	0.06
A-Ant-23G-2-C (Clearwire Existing)	A	Paraboloid w/Radome	From Face	3.10	-2.52	Worst		154.00	2.17	No Ice	0.03
				2.00	2.00					1/2" Ice	0.05
				2.00	2.00					1" Ice	0.07
A-Ant-23G-2-C (Clearwire Existing)	C	Paraboloid w/Radome	From Face	3.80	-1.24	Worst		154.00	2.17	No Ice	0.03
				2.00	2.00					1/2" Ice	0.05
				2.00	2.00					1" Ice	0.07

Tower Pressures - No Ice

$G_H = 1.100$

Section Elevation	z	K _Z	q _z	A _G	F _a	A _F	A _R	A _{leg}	Leg %	C _A A _A In Face	C _A A _A Out Face
ft	ft		psf	ft ²	c	ft ²	ft ²	ft ²		ft ²	ft ²
L1 164.00-131.50	147.50	1.374	56	137.953	A	0.000	137.953	137.953	100.00	0.000	0.000
					B	0.000	137.953			7.425	0.000
					C	0.000	137.953			0.000	0.000
L2 131.50-119.29	125.34	1.327	55	56.545	A	0.000	56.545	56.545	100.00	0.000	0.000
					B	0.000	56.545			7.253	0.000
					C	0.000	56.545			0.000	0.000
L3 119.29-78.79	98.81	1.262	52	202.275	A	0.000	202.275	202.275	100.00	0.000	0.000
					B	0.000	202.275			24.057	0.000
					C	0.000	202.275			0.000	0.000
L4 78.79-39.88	59.30	1.134	46	216.653	A	0.000	216.653	216.653	100.00	0.000	0.000
					B	0.000	216.653			26.982	0.000
					C	0.000	216.653			0.000	0.000
L5 39.88-1.50	21.06	0.912	38	234.431	A	0.000	234.431	234.431	100.00	0.000	0.000
					B	0.000	234.431			31.015	0.000
					C	0.000	234.431			0.000	0.000

Tower Pressure - With Ice

$G_H = 1.100$

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	Client Verizon Wireless	Designed by TJL

Section Elevation ft	z ft	K_z	q_z psf	t_z in	A_G ft ²	F a c e	A_F ft ²	A_R ft ²	A_{leg} ft ²	Leg %	C_{AA} In Face ft ²	C_{AA} Out Face ft ²
L1 164.00-131.50	147.50	1.374	8	1.3357	145.188	A	0.000	145.188	145.188	100.00	0.000	0.000
						B	0.000	145.188		100.00	13.455	0.000
						C	0.000	145.188		100.00	0.000	0.000
L2 131.50-119.29	125.34	1.327	8	1.3142	59.219	A	0.000	59.219	59.219	100.00	0.000	0.000
						B	0.000	59.219		100.00	13.077	0.000
						C	0.000	59.219		100.00	0.000	0.000
L3 119.29-78.79	98.81	1.262	8	1.2833	211.145	A	0.000	211.145	211.145	100.00	0.000	0.000
						B	0.000	211.145		100.00	43.377	0.000
						C	0.000	211.145		100.00	0.000	0.000
L4 78.79-39.88	59.30	1.134	7	1.2194	224.976	A	0.000	224.976	224.976	100.00	0.000	0.000
						B	0.000	224.976		100.00	49.939	0.000
						C	0.000	224.976		100.00	0.000	0.000
L5 39.88-1.50	21.06	0.912	6	1.0995	242.231	A	0.000	242.231	242.231	100.00	0.000	0.000
						B	0.000	242.231		100.00	59.426	0.000
						C	0.000	242.231		100.00	0.000	0.000

Tower Pressure - Service

$G_H = 1.100$

Section Elevation ft	z ft	K_z	q_z psf	A_G ft ²	F a c e	A_F ft ²	A_R ft ²	A_{leg} ft ²	Leg %	C_{AA} In Face ft ²	C_{AA} Out Face ft ²
L1 164.00-131.50	147.50	1.374	11	137.953	A	0.000	137.953	137.953	100.00	0.000	0.000
					B	0.000	137.953		100.00	7.425	0.000
					C	0.000	137.953		100.00	0.000	0.000
L2 131.50-119.29	125.34	1.327	10	56.545	A	0.000	56.545	56.545	100.00	0.000	0.000
					B	0.000	56.545		100.00	7.253	0.000
					C	0.000	56.545		100.00	0.000	0.000
L3 119.29-78.79	98.81	1.262	10	202.275	A	0.000	202.275	202.275	100.00	0.000	0.000
					B	0.000	202.275		100.00	24.057	0.000
					C	0.000	202.275		100.00	0.000	0.000
L4 78.79-39.88	59.30	1.134	9	216.653	A	0.000	216.653	216.653	100.00	0.000	0.000
					B	0.000	216.653		100.00	26.982	0.000
					C	0.000	216.653		100.00	0.000	0.000
L5 39.88-1.50	21.06	0.912	7	234.431	A	0.000	234.431	234.431	100.00	0.000	0.000
					B	0.000	234.431		100.00	31.015	0.000
					C	0.000	234.431		100.00	0.000	0.000

Tower Forces - No Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	F a c e	e	C_F	q_z psf	D_F	D_R	A_E ft ²	F K	w plf	Ctrl. Face
L1 164.00-131.50	0.45	5.47	A	1	0.73	56	1	1	137.953	6.25	192.35	C
			B	1	0.73		1	1	137.953			
			C	1	0.73		1	1	137.953			
L2 131.50-119.29	0.45	2.69	A	1	0.73	55	1	1	56.545	2.48	202.86	C
			B	1	0.73		1	1	56.545			

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Section Elevation ft	Add Weight K	Self Weight K	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
L3 119.29-78.79	2.09	12.76	C	1	0.73	52	1	1	56.545	8.42	207.82	C
			A	1	0.73		1	1	202.275			
			B	1	0.73		1	1	202.275			
			C	1	0.73		1	1	202.275			
L4 78.79-39.88	2.09	18.55	A	1	0.73	46	1	1	216.653	8.08	207.63	C
			B	1	0.73		1	1	216.653			
			C	1	0.73		1	1	216.653			
L5 39.88-1.50	1.83	20.49	A	1	0.73	38	1	1	234.431	7.08	184.48	C
			B	1	0.73		1	1	234.431			
			C	1	0.73		1	1	234.431			
Sum Weight:	6.90	59.96						OTM	2643.93 kip-ft	32.30		

Tower Forces - No Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
L1 164.00-131.50	0.45	5.47	A	1	0.73	56	1	1	137.953	6.25	192.35	C
			B	1	0.73		1	1	137.953			
			C	1	0.73		1	1	137.953			
L2 131.50-119.29	0.45	2.69	A	1	0.73	55	1	1	56.545	2.48	202.86	C
			B	1	0.73		1	1	56.545			
			C	1	0.73		1	1	56.545			
L3 119.29-78.79	2.09	12.76	A	1	0.73	52	1	1	202.275	8.42	207.82	C
			B	1	0.73		1	1	202.275			
			C	1	0.73		1	1	202.275			
L4 78.79-39.88	2.09	18.55	A	1	0.73	46	1	1	216.653	8.08	207.63	C
			B	1	0.73		1	1	216.653			
			C	1	0.73		1	1	216.653			
L5 39.88-1.50	1.83	20.49	A	1	0.73	38	1	1	234.431	7.08	184.48	C
			B	1	0.73		1	1	234.431			
			C	1	0.73		1	1	234.431			
Sum Weight:	6.90	59.96						OTM	2643.93 kip-ft	32.30		

Tower Forces - No Ice - Wind 90 To Face

Section Elevation ft	Add Weight K	Self Weight K	F a c e	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
L1 164.00-131.50	0.45	5.47	A	1	0.73	56	1	1	137.953	6.25	192.35	C
			B	1	0.73		1	1	137.953			
			C	1	0.73		1	1	137.953			
L2 131.50-119.29	0.45	2.69	A	1	0.73	55	1	1	56.545	2.53	207.05	B
			B	1	0.745		1	1	56.545			
			C	1	0.73		1	1	56.545			

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Section Elevation ft	Add Weight K	Self Weight K	Face	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
L3 119.29-78.79	2.09	12.76	A	1	0.73	52	1	1	202.275	8.42	207.82	C
			B	1	0.73		1	1	202.275			
			C	1	0.73		1	1	202.275			
L4 78.79-39.88	2.09	18.55	A	1	0.73	46	1	1	216.653	8.08	207.63	C
			B	1	0.73		1	1	216.653			
			C	1	0.73		1	1	216.653			
L5 39.88-1.50	1.83	20.49	A	1	0.73	38	1	1	234.431	7.08	184.48	C
			B	1	0.73		1	1	234.431			
			C	1	0.73		1	1	234.431			
Sum Weight:	6.90	59.96						OTM	2650.27 kip-ft	32.35		

Tower Forces - With Ice - Wind Normal To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
L1 164.00-131.50	0.58	8.24	A	1	1.2	8	1	1	145.188	1.60	49.23	C
			B	1	1.2		1	1	145.188			
			C	1	1.2		1	1	145.188			
L2 131.50-119.29	0.57	3.80	A	1	1.2	8	1	1	59.219	0.63	51.66	C
			B	1	1.2		1	1	59.219			
			C	1	1.2		1	1	59.219			
L3 119.29-78.79	2.49	16.63	A	1	1.2	8	1	1	210.937	2.13	52.70	C
			B	1	1.2		1	1	210.937			
			C	1	1.2		1	1	210.937			
L4 78.79-39.88	2.54	22.48	A	1	1.2	7	1	1	224.561	2.04	52.33	C
			B	1	1.2		1	1	224.561			
			C	1	1.2		1	1	224.561			
L5 39.88-1.50	2.33	24.31	A	1	1.2	6	1	1	241.464	1.77	46.20	C
			B	1	1.2		1	1	241.464			
			C	1	1.2		1	1	241.464			
Sum Weight:	8.51	75.46						OTM	671.78 kip-ft	8.17		

Tower Forces - With Ice - Wind 60 To Face

Section Elevation ft	Add Weight K	Self Weight K	Face	e	C _F	q _z psf	D _F	D _R	A _E ft ²	F K	w plf	Ctrl. Face
L1 164.00-131.50	0.58	8.24	A	1	1.2	8	1	1	145.188	1.60	49.23	C
			B	1	1.2		1	1	145.188			
			C	1	1.2		1	1	145.188			
L2 131.50-119.29	0.57	3.80	A	1	1.2	8	1	1	59.219	0.63	51.66	C
			B	1	1.2		1	1	59.219			
			C	1	1.2		1	1	59.219			
L3	2.49	16.63	A	1	1.2	8	1	1	210.937	2.13	52.70	C

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Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K				psf			ft ²	K	plf	
119.29-78.79			B	1	1.2		1	1	210.937			
			C	1	1.2		1	1	210.937			
L4	2.54	22.48	A	1	1.2	7	1	1	224.561	2.04	52.33	C
78.79-39.88			B	1	1.2		1	1	224.561			
			C	1	1.2		1	1	224.561			
L5 39.88-1.50	2.33	24.31	A	1	1.2	6	1	1	241.464	1.77	46.20	C
			B	1	1.2		1	1	241.464			
			C	1	1.2		1	1	241.464			
Sum Weight:	8.51	75.46						OTM	671.78 kip-ft	8.17		

Tower Forces - With Ice - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K				psf			ft ²	K	plf	
L1	0.58	8.24	A	1	1.2	8	1	1	145.188	1.60	49.23	C
164.00-131.50			B	1	1.2		1	1	145.188			
			C	1	1.2		1	1	145.188			
L2	0.57	3.80	A	1	1.2	8	1	1	59.219	0.63	51.66	C
131.50-119.29			B	1	1.2		1	1	59.219			
			C	1	1.2		1	1	59.219			
L3	2.49	16.63	A	1	1.2	8	1	1	210.937	2.13	52.70	C
119.29-78.79			B	1	1.2		1	1	210.937			
			C	1	1.2		1	1	210.937			
L4	2.54	22.48	A	1	1.2	7	1	1	224.561	2.04	52.33	C
78.79-39.88			B	1	1.2		1	1	224.561			
			C	1	1.2		1	1	224.561			
L5 39.88-1.50	2.33	24.31	A	1	1.2	6	1	1	241.464	1.77	46.20	C
			B	1	1.2		1	1	241.464			
			C	1	1.2		1	1	241.464			
Sum Weight:	8.51	75.46						OTM	671.78 kip-ft	8.17		

Tower Forces - Service - Wind Normal To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K				psf			ft ²	K	plf	
L1	0.45	5.47	A	1	0.73	11	1	1	137.953	1.19	36.66	C
164.00-131.50			B	1	0.73		1	1	137.953			
			C	1	0.73		1	1	137.953			
L2	0.45	2.69	A	1	0.73	10	1	1	56.545	0.47	38.66	C
131.50-119.29			B	1	0.73		1	1	56.545			
			C	1	0.73		1	1	56.545			
L3	2.09	12.76	A	1	0.73	10	1	1	202.275	1.60	39.61	C
119.29-78.79			B	1	0.73		1	1	202.275			

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Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K				psf			ft ²	K	plf	
L4 78.79-39.88	2.09	18.55	C	1	0.73	9	1	1	202.275	1.54	39.57	C
			A	1	0.73		1	1	216.653			
			B	1	0.73		1	1	216.653			
L5 39.88-1.50	1.83	20.49	C	1	0.73	7	1	1	216.653	1.35	35.16	C
			A	1	0.73		1	1	234.431			
			B	1	0.73		1	1	234.431			
Sum Weight:	6.90	59.96	C	1	0.73		1	1	234.431	6.16		
								OTM	503.92			
									kip-ft			

Tower Forces - Service - Wind 60 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K				psf			ft ²	K	plf	
L1 164.00-131.50	0.45	5.47	A	1	0.73	11	1	1	137.953	1.19	36.66	C
			B	1	0.73		1	1	137.953			
			C	1	0.73		1	1	137.953			
L2 131.50-119.29	0.45	2.69	A	1	0.73	10	1	1	56.545	0.47	38.66	C
			B	1	0.73		1	1	56.545			
			C	1	0.73		1	1	56.545			
L3 119.29-78.79	2.09	12.76	A	1	0.73	10	1	1	202.275	1.60	39.61	C
			B	1	0.73		1	1	202.275			
			C	1	0.73		1	1	202.275			
L4 78.79-39.88	2.09	18.55	A	1	0.73	9	1	1	216.653	1.54	39.57	C
			B	1	0.73		1	1	216.653			
			C	1	0.73		1	1	216.653			
L5 39.88-1.50	1.83	20.49	A	1	0.73	7	1	1	234.431	1.35	35.16	C
			B	1	0.73		1	1	234.431			
			C	1	0.73		1	1	234.431			
Sum Weight:	6.90	59.96						OTM	503.92	6.16		
									kip-ft			

Tower Forces - Service - Wind 90 To Face

Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K				psf			ft ²	K	plf	
L1 164.00-131.50	0.45	5.47	A	1	0.73	11	1	1	137.953	1.19	36.66	C
			B	1	0.73		1	1	137.953			
			C	1	0.73		1	1	137.953			
L2 131.50-119.29	0.45	2.69	A	1	0.73	10	1	1	56.545	0.48	39.46	B
			B	1	0.745		1	1	56.545			
			C	1	0.73		1	1	56.545			
L3 119.29-78.79	2.09	12.76	A	1	0.73	10	1	1	202.275	1.60	39.61	C
			B	1	0.73		1	1	202.275			
			C	1	0.73		1	1	202.275			

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Section Elevation	Add Weight	Self Weight	F a c e	e	C _F	q _z	D _F	D _R	A _E	F	w	Ctrl. Face
ft	K	K				psf			ft ²	K	plf	
L4 78.79-39.88	2.09	18.55	A B C	1 1 1	0.73 0.73 0.73	9	1 1 1	1 1 1	216.653 216.653 216.653	1.54	39.57	C
L5 39.88-1.50	1.83	20.49	A B C	1 1 1	0.73 0.73 0.73	7	1 1 1	1 1 1	234.431 234.431 234.431	1.35	35.16	C
Sum Weight:	6.90	59.96						OTM	505.13 kip-ft	6.17		

Force Totals

Load Case	Vertical Forces	Sum of Forces	Sum of Forces	Sum of Overturning Moments, M _x	Sum of Overturning Moments, M _z	Sum of Torques
	K	X K	Z K	kip-ft	kip-ft	kip-ft
Leg Weight	59.96					
Bracing Weight	0.00					
Total Member Self-Weight	59.96					
Total Weight	85.14					
Wind 0 deg - No Ice		0.01	-62.00	-6600.64	6.43	-9.11
Wind 30 deg - No Ice		31.08	-53.70	-5717.68	-3298.10	-11.77
Wind 60 deg - No Ice		53.82	-31.01	-3304.71	-5717.01	-11.27
Wind 90 deg - No Ice		62.14	-0.01	-8.28	-6602.14	-7.76
Wind 120 deg - No Ice		53.81	30.99	3288.33	-5716.33	-2.16
Wind 150 deg - No Ice		31.09	53.74	5707.29	-3300.11	4.01
Wind 180 deg - No Ice		-0.01	62.00	6585.43	7.78	9.11
Wind 210 deg - No Ice		-31.08	53.70	5702.47	3312.31	11.77
Wind 240 deg - No Ice		-53.82	31.01	3289.50	5731.22	11.27
Wind 270 deg - No Ice		-62.14	0.01	-6.93	6616.35	7.76
Wind 300 deg - No Ice		-53.81	-30.99	-3303.54	5730.55	2.16
Wind 330 deg - No Ice		-31.09	-53.74	-5722.50	3314.32	-4.01
Member Ice	15.50					
Total Weight Ice	120.82			-16.94	13.59	
Wind 0 deg - Ice		0.00	-14.23	-1495.61	13.50	-2.70
Wind 30 deg - Ice		7.13	-12.33	-1297.55	-727.15	-3.37
Wind 60 deg - Ice		12.35	-7.12	-756.35	-1269.31	-3.14
Wind 90 deg - Ice		14.25	-0.00	-17.03	-1467.73	-2.07
Wind 120 deg - Ice		12.34	7.11	722.32	-1269.22	-0.44
Wind 150 deg - Ice		7.13	12.32	1263.59	-726.99	1.30
Wind 180 deg - Ice		-0.00	14.23	1461.74	13.68	2.70
Wind 210 deg - Ice		-7.13	12.33	1263.68	754.32	3.37
Wind 240 deg - Ice		-12.35	7.12	722.48	1296.49	3.14
Wind 270 deg - Ice		-14.25	0.00	-16.85	1494.90	2.07
Wind 300 deg - Ice		-12.34	-7.11	-756.20	1296.40	0.44
Wind 330 deg - Ice		-7.13	-12.32	-1297.46	754.17	-1.30
Total Weight	85.14			-7.61	7.11	
Wind 0 deg - Service		0.00	-11.84	-1267.24	9.00	-1.85
Wind 30 deg - Service		5.94	-10.26	-1098.39	-622.93	-2.31
Wind 60 deg - Service		10.28	-5.92	-636.95	-1085.50	-2.15
Wind 90 deg - Service		11.87	-0.00	-6.57	-1254.76	-1.41
Wind 120 deg - Service		10.28	5.92	623.85	-1085.37	-0.30
Wind 150 deg - Service		5.94	10.26	1086.43	-623.31	0.90
Wind 180 deg - Service		-0.00	11.84	1254.36	9.26	1.85
Wind 210 deg - Service		-5.94	10.26	1085.51	641.18	2.31

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Load Case	Vertical Forces K	Sum of Forces X K	Sum of Forces Z K	Sum of Overturning Moments, M_x kip-ft	Sum of Overturning Moments, M_z kip-ft	Sum of Torques kip-ft
Wind 240 deg - Service		-10.28	5.92	624.07	1103.75	2.15
Wind 270 deg - Service		-11.87	0.00	-6.31	1273.02	1.41
Wind 300 deg - Service		-10.28	-5.92	-636.73	1103.62	0.30
Wind 330 deg - Service		-5.94	-10.26	-1099.31	641.57	-0.90

Load Combinations

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

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Comb. No.	Description
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

Maximum Member Forces

Section No.	Elevation ft	Component Type	Condition	Gov. Load Comb.	Axial K	Major Axis Moment kip-ft	Minor Axis Moment kip-ft
L1	164 - 131.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-33.23	1.52	1.05
			Max. Mx	20	-19.35	387.61	1.25
			Max. My	2	-19.35	0.70	387.53
			Max. Vy	20	-25.06	387.61	1.25
			Max. Vx	2	-25.04	0.70	387.53
			Max. Torque	2			3.93
L2	131.5 - 119.29	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-35.76	1.34	1.21
			Max. Mx	20	-21.23	547.12	1.40
			Max. My	2	-21.23	0.71	547.08
			Max. Vy	20	-26.35	547.12	1.40
			Max. Vx	2	-26.33	0.71	547.08
			Max. Torque	2			2.68
L3	119.29 - 78.79	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-73.74	19.62	16.39
			Max. Mx	20	-46.06	2048.67	8.38
			Max. My	2	-46.07	10.31	2042.03
			Max. Vy	20	-46.11	2048.67	8.38
			Max. Vx	2	-45.97	10.31	2042.03
			Max. Torque	5			11.70
L4	78.79 - 39.88	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-101.93	18.06	17.51
			Max. Mx	20	-69.42	3957.50	8.54
			Max. My	2	-69.42	9.43	3946.65
			Max. Vy	20	-54.13	3957.50	8.54
			Max. Vx	2	-54.00	9.43	3946.65
			Max. Torque	5			11.70
L5	39.88 - 1.5	Pole	Max Tension	1	0.00	0.00	0.00
			Max. Compression	26	-140.19	15.53	18.97
			Max. Mx	20	-102.14	6739.49	8.68
			Max. My	2	-102.14	8.09	6723.58
			Max. Vy	20	-62.18	6739.49	8.68
			Max. Vx	2	-62.04	8.09	6723.58
			Max. Torque	5			11.70

Maximum Reactions

Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
Pole	Max. Vert	26	140.19	0.00	0.00
	Max. H _x	20	102.17	62.14	-0.01
	Max. H _z	2	102.17	-0.01	62.00
	Max. M _x	2	6723.58	-0.01	62.00
	Max. M _z	8	6721.95	-62.14	0.01

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Location	Condition	Gov. Load Comb.	Vertical K	Horizontal, X K	Horizontal, Z K
	Max. Torsion	5	11.70	-31.08	53.70
	Min. Vert	17	76.62	31.08	-53.70
	Min. H _x	8	102.17	-62.14	0.01
	Min. H _z	14	102.17	0.01	-62.00
	Min. M _x	14	-6704.85	0.01	-62.00
	Min. M _z	20	-6739.49	62.14	-0.01
	Min. Torsion	17	-11.70	31.08	-53.70

Tower Mast Reaction Summary

Load Combination	Vertical K	Shear _x K	Shear _z K	Overturning Moment, M _x kip-ft	Overturning Moment, M _z kip-ft	Torque kip-ft
Dead Only	85.14	0.00	0.00	-7.61	7.11	0.00
1.2 Dead+1.0 Wind 0 deg - No Ice	102.17	0.01	-62.00	-6723.58	8.09	-9.03
0.9 Dead+1.0 Wind 0 deg - No Ice	76.62	0.01	-62.00	-6690.11	5.85	-9.05
1.2 Dead+1.0 Wind 30 deg - No Ice	102.17	31.08	-53.70	-5824.38	-3357.18	-11.68
0.9 Dead+1.0 Wind 30 deg - No Ice	76.62	31.08	-53.70	-5795.08	-3343.84	-11.70
1.2 Dead+1.0 Wind 60 deg - No Ice	102.17	53.82	-31.01	-3367.05	-5820.55	-11.20
0.9 Dead+1.0 Wind 60 deg - No Ice	76.62	53.82	-31.01	-3349.12	-5795.80	-11.21
1.2 Dead+1.0 Wind 90 deg - No Ice	102.17	62.14	-0.01	-10.04	-6721.95	-7.72
0.9 Dead+1.0 Wind 90 deg - No Ice	76.62	62.14	-0.01	-7.65	-6693.03	-7.73
1.2 Dead+1.0 Wind 120 deg - No Ice	102.17	53.81	30.99	3347.16	-5819.86	-2.17
0.9 Dead+1.0 Wind 120 deg - No Ice	76.62	53.81	30.99	3334.00	-5795.12	-2.17
1.2 Dead+1.0 Wind 150 deg - No Ice	102.17	31.09	53.74	5810.57	-3359.23	3.96
0.9 Dead+1.0 Wind 150 deg - No Ice	76.62	31.09	53.74	5786.01	-3345.88	3.97
1.2 Dead+1.0 Wind 180 deg - No Ice	102.17	-0.01	62.00	6704.85	9.45	9.02
0.9 Dead+1.0 Wind 180 deg - No Ice	76.62	-0.01	62.00	6676.16	7.21	9.04
1.2 Dead+1.0 Wind 210 deg - No Ice	102.17	-31.08	53.70	5805.66	3374.72	11.68
0.9 Dead+1.0 Wind 210 deg - No Ice	76.62	-31.08	53.70	5781.13	3356.90	11.70
1.2 Dead+1.0 Wind 240 deg - No Ice	102.17	-53.82	31.01	3348.34	5838.09	11.20
0.9 Dead+1.0 Wind 240 deg - No Ice	76.62	-53.82	31.01	3335.18	5808.86	11.22
1.2 Dead+1.0 Wind 270 deg - No Ice	102.17	-62.14	0.01	-8.68	6739.49	7.72
0.9 Dead+1.0 Wind 270 deg - No Ice	76.62	-62.14	0.01	-6.30	6706.09	7.73
1.2 Dead+1.0 Wind 300 deg - No Ice	102.17	-53.81	-30.99	-3365.88	5837.41	2.17
0.9 Dead+1.0 Wind 300 deg - No Ice	76.62	-53.81	-30.99	-3347.95	5808.18	2.17

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Load Combination	Vertical K	Shear _x K	Shear _y K	Overturning Moment, M _x kip-ft	Overturning Moment, M _y kip-ft	Torque kip-ft
No Ice						
1.2 Dead+1.0 Wind 330 deg -	102.17	-31.09	-53.74	-5829.30	3376.77	-3.96
No Ice						
0.9 Dead+1.0 Wind 330 deg -	76.62	-31.09	-53.74	-5799.97	3358.94	-3.97
No Ice						
1.2 Dead+1.0 Ice+1.0 Temp	140.19	-0.00	-0.00	-18.97	15.53	0.00
1.2 Dead+1.0 Wind 0 deg+1.0	140.19	0.00	-14.23	-1539.97	15.67	-2.68
Ice+1.0 Temp						
1.2 Dead+1.0 Wind 30 deg+1.0	140.19	7.13	-12.33	-1336.27	-746.05	-3.35
Ice+1.0 Temp						
1.2 Dead+1.0 Wind 60 deg+1.0	140.19	12.35	-7.12	-779.67	-1303.64	-3.12
Ice+1.0 Temp						
1.2 Dead+1.0 Wind 90 deg+1.0	140.19	14.25	-0.00	-19.31	-1507.70	-2.06
Ice+1.0 Temp						
1.2 Dead+1.0 Wind 120	140.19	12.34	7.11	741.07	-1303.55	-0.44
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 150	140.19	7.13	12.32	1297.74	-745.89	1.29
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 180	140.19	-0.00	14.23	1501.53	15.85	2.68
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 210	140.19	-7.13	12.33	1297.83	777.56	3.35
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 240	140.19	-12.35	7.12	741.23	1335.16	3.12
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 270	140.19	-14.25	0.00	-19.13	1539.22	2.06
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 300	140.19	-12.34	-7.11	-779.52	1335.06	0.44
deg+1.0 Ice+1.0 Temp						
1.2 Dead+1.0 Wind 330	140.19	-7.13	-12.32	-1336.18	777.41	-1.29
deg+1.0 Ice+1.0 Temp						
Dead+Wind 0 deg - Service	85.14	0.00	-11.84	-1288.00	7.15	-1.84
Dead+Wind 30 deg - Service	85.14	5.94	-10.26	-1116.55	-634.51	-2.30
Dead+Wind 60 deg - Service	85.14	10.28	-5.92	-648.00	-1104.21	-2.14
Dead+Wind 90 deg - Service	85.14	11.87	-0.00	-7.90	-1276.08	-1.41
Dead+Wind 120 deg - Service	85.14	10.28	5.92	632.23	-1104.08	-0.30
Dead+Wind 150 deg - Service	85.14	5.94	10.26	1101.93	-634.90	0.89
Dead+Wind 180 deg - Service	85.14	-0.00	11.84	1272.45	7.41	1.84
Dead+Wind 210 deg - Service	85.14	-5.94	10.26	1101.00	649.08	2.30
Dead+Wind 240 deg - Service	85.14	-10.28	5.92	632.45	1118.78	2.14
Dead+Wind 270 deg - Service	85.14	-11.87	0.00	-7.65	1290.65	1.41
Dead+Wind 300 deg - Service	85.14	-10.28	-5.92	-647.78	1118.65	0.30
Dead+Wind 330 deg - Service	85.14	-5.94	-10.26	-1117.48	649.47	-0.89

Solution Summary

Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
1	0.00	-85.14	0.00	0.00	85.14	0.00	0.000%
2	0.01	-102.17	-62.00	-0.01	102.17	62.00	0.000%
3	0.01	-76.62	-62.00	-0.01	76.62	62.00	0.000%
4	31.08	-102.17	-53.70	-31.08	102.17	53.70	0.000%
5	31.08	-76.62	-53.70	-31.08	76.62	53.70	0.000%
6	53.82	-102.17	-31.01	-53.82	102.17	31.01	0.000%
7	53.82	-76.62	-31.01	-53.82	76.62	31.01	0.000%
8	62.14	-102.17	-0.01	-62.14	102.17	0.01	0.000%
9	62.14	-76.62	-0.01	-62.14	76.62	0.01	0.000%
10	53.81	-102.17	30.99	-53.81	102.17	-30.99	0.000%

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Load Comb.	Sum of Applied Forces			Sum of Reactions			% Error
	PX K	PY K	PZ K	PX K	PY K	PZ K	
11	53.81	-76.62	30.99	-53.81	76.62	-30.99	0.000%
12	31.09	-102.17	53.74	-31.09	102.17	-53.74	0.000%
13	31.09	-76.62	53.74	-31.09	76.62	-53.74	0.000%
14	-0.01	-102.17	62.00	0.01	102.17	-62.00	0.000%
15	-0.01	-76.62	62.00	0.01	76.62	-62.00	0.000%
16	-31.08	-102.17	53.70	31.08	102.17	-53.70	0.000%
17	-31.08	-76.62	53.70	31.08	76.62	-53.70	0.000%
18	-53.82	-102.17	31.01	53.82	102.17	-31.01	0.000%
19	-53.82	-76.62	31.01	53.82	76.62	-31.01	0.000%
20	-62.14	-102.17	0.01	62.14	102.17	-0.01	0.000%
21	-62.14	-76.62	0.01	62.14	76.62	-0.01	0.000%
22	-53.81	-102.17	-30.99	53.81	102.17	30.99	0.000%
23	-53.81	-76.62	-30.99	53.81	76.62	30.99	0.000%
24	-31.09	-102.17	-53.74	31.09	102.17	53.74	0.000%
25	-31.09	-76.62	-53.74	31.09	76.62	53.74	0.000%
26	0.00	-140.19	0.00	0.00	140.19	0.00	0.000%
27	0.00	-140.19	-14.23	-0.00	140.19	14.23	0.000%
28	7.13	-140.19	-12.33	-7.13	140.19	12.33	0.000%
29	12.35	-140.19	-7.12	-12.35	140.19	7.12	0.000%
30	14.25	-140.19	-0.00	-14.25	140.19	0.00	0.000%
31	12.34	-140.19	7.11	-12.34	140.19	-7.11	0.000%
32	7.13	-140.19	12.32	-7.13	140.19	-12.32	0.000%
33	-0.00	-140.19	14.23	0.00	140.19	-14.23	0.000%
34	-7.13	-140.19	12.33	7.13	140.19	-12.33	0.000%
35	-12.35	-140.19	7.12	12.35	140.19	-7.12	0.000%
36	-14.25	-140.19	0.00	14.25	140.19	-0.00	0.000%
37	-12.34	-140.19	-7.11	12.34	140.19	7.11	0.000%
38	-7.13	-140.19	-12.32	7.13	140.19	12.32	0.000%
39	0.00	-85.14	-11.84	-0.00	85.14	11.84	0.000%
40	5.94	-85.14	-10.26	-5.94	85.14	10.26	0.000%
41	10.28	-85.14	-5.92	-10.28	85.14	5.92	0.000%
42	11.87	-85.14	-0.00	-11.87	85.14	0.00	0.000%
43	10.28	-85.14	5.92	-10.28	85.14	-5.92	0.000%
44	5.94	-85.14	10.26	-5.94	85.14	-10.26	0.000%
45	-0.00	-85.14	11.84	0.00	85.14	-11.84	0.000%
46	-5.94	-85.14	10.26	5.94	85.14	-10.26	0.000%
47	-10.28	-85.14	5.92	10.28	85.14	-5.92	0.000%
48	-11.87	-85.14	0.00	11.87	85.14	-0.00	0.000%
49	-10.28	-85.14	-5.92	10.28	85.14	5.92	0.000%
50	-5.94	-85.14	-10.26	5.94	85.14	10.26	0.000%

Non-Linear Convergence Results

Load Combination	Converged?	Number of Cycles	Displacement Tolerance	Force Tolerance
1	Yes	4	0.00000001	0.00000001
2	Yes	4	0.00000001	0.00041276
3	Yes	4	0.00000001	0.00027002
4	Yes	5	0.00000001	0.00002681
5	Yes	4	0.00000001	0.00081406
6	Yes	5	0.00000001	0.00003679
7	Yes	5	0.00000001	0.00001772
8	Yes	4	0.00000001	0.00034189
9	Yes	4	0.00000001	0.00022294
10	Yes	5	0.00000001	0.00002930
11	Yes	4	0.00000001	0.00089178

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12	Yes	5	0.00000001	0.00002850
13	Yes	4	0.00000001	0.00086702
14	Yes	4	0.00000001	0.00041129
15	Yes	4	0.00000001	0.00026936
16	Yes	5	0.00000001	0.00003715
17	Yes	5	0.00000001	0.00001790
18	Yes	5	0.00000001	0.00002687
19	Yes	4	0.00000001	0.00081572
20	Yes	4	0.00000001	0.00034315
21	Yes	4	0.00000001	0.00022350
22	Yes	5	0.00000001	0.00003167
23	Yes	4	0.00000001	0.00096081
24	Yes	5	0.00000001	0.00003290
25	Yes	4	0.00000001	0.00099901
26	Yes	4	0.00000001	0.00002176
27	Yes	4	0.00000001	0.00078116
28	Yes	4	0.00000001	0.00079706
29	Yes	4	0.00000001	0.00079125
30	Yes	4	0.00000001	0.00075209
31	Yes	4	0.00000001	0.00076899
32	Yes	4	0.00000001	0.00076838
33	Yes	4	0.00000001	0.00075171
34	Yes	4	0.00000001	0.00079114
35	Yes	4	0.00000001	0.00079729
36	Yes	4	0.00000001	0.00078140
37	Yes	4	0.00000001	0.00081452
38	Yes	4	0.00000001	0.00081487
39	Yes	4	0.00000001	0.00002074
40	Yes	4	0.00000001	0.00002452
41	Yes	4	0.00000001	0.00003069
42	Yes	4	0.00000001	0.00001666
43	Yes	4	0.00000001	0.00001915
44	Yes	4	0.00000001	0.00001923
45	Yes	4	0.00000001	0.00002035
46	Yes	4	0.00000001	0.00003204
47	Yes	4	0.00000001	0.00002349
48	Yes	4	0.00000001	0.00001699
49	Yes	4	0.00000001	0.00002131
50	Yes	4	0.00000001	0.00002444

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	164 - 131.5	7.661	49	0.3485	0.0020
L2	131.5 - 119.29	5.324	49	0.3325	0.0015
L3	125.29 - 78.79	4.896	49	0.3257	0.0015
L4	87.21 - 39.88	2.534	49	0.2524	0.0009
L5	49.13 - 1.5	0.858	49	0.1554	0.0004

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft

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Elevation	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
164.00	12' x 3" Dia Omni	49	7.661	0.3485	0.0020	375600
160.00	4 FT DISH	49	7.369	0.3474	0.0019	375600
156.00	A-Ant-23G-2-C	49	7.078	0.3463	0.0019	234751
144.00	AIR6449	49	6.209	0.3415	0.0017	93900
138.00	DC6-48-60-18-8F Surge Arrestor	49	5.781	0.3379	0.0016	72231
134.00	DMP65R-BU6D	49	5.499	0.3348	0.0016	62503
124.00	DB844H65E-XY	49	4.808	0.3241	0.0015	44301
116.00	872F-70-2	49	4.275	0.3121	0.0014	38954
114.00	531-70HD	49	4.144	0.3087	0.0014	37817
99.00	FFVV-65B-R2	49	3.209	0.2790	0.0011	31011
51.50	GPS	49	0.934	0.1621	0.0005	15293

Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	164 - 131.5	39.753	22	1.8053	0.0098
L2	131.5 - 119.29	27.642	22	1.7243	0.0078
L3	125.29 - 78.79	25.422	22	1.6890	0.0076
L4	87.21 - 39.88	13.176	20	1.3100	0.0048
L5	49.13 - 1.5	4.470	20	0.8086	0.0023

Critical Deflections and Radius of Curvature - Design Wind

Elevation	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
164.00	12' x 3" Dia Omni	22	39.753	1.8053	0.0098	73629
160.00	4 FT DISH	22	38.240	1.8002	0.0095	73629
156.00	A-Ant-23G-2-C	22	36.729	1.7946	0.0092	46018
144.00	AIR6449	22	32.229	1.7708	0.0084	18406
138.00	DC6-48-60-18-8F Surge Arrestor	22	30.010	1.7520	0.0081	14158
134.00	DMP65R-BU6D	22	28.548	1.7360	0.0079	12245
124.00	DB844H65E-XY	22	24.967	1.6805	0.0075	8538
116.00	872F-70-2	20	22.200	1.6186	0.0071	7511
114.00	531-70HD	20	21.524	1.6010	0.0069	7301
99.00	FFVV-65B-R2	20	16.676	1.4476	0.0058	6032
51.50	GPS	20	4.863	0.8437	0.0024	2945

Compression Checks

Pole Design Data

tnxTower Centek Engineering Inc. 63-2 North Branford Rd. Branford, CT 06405 Phone: (203) 488-0580 FAX: (203) 488-8587	Job 22027.15 - Greenwich	Page 26 of 27
	Project 164' EEI Monopole - 5 Perryridge Rd., Greenwich, CT	Date 14:46:07 10/12/23
	Client Verizon Wireless	Designed by TJL

Section No.	Elevation ft	Size	L ft	L _u ft	Kl/r	A in ²	P _u K	φP _u K	Ratio P _u φP _u
L1	164 - 131.5 (1)	TP53.42x47x0.3125	32.50	162.50	103.4	52.6760	-19.35	1112.38	0.017
L2	131.5 - 119.29 (2)	TP56.15x53.42x0.375	12.21	162.50	100.9	64.7894	-21.22	1437.35	0.015
L3	119.29 - 78.79 (3)	TP62.97x54.0585x0.4375	46.50	162.50	90.2	84.5934	-46.06	2284.89	0.020
L4	78.79 - 39.88 (4)	TP69.66x60.4813x0.5625	47.33	162.50	81.6	120.162 0	-69.42	3732.12	0.019
L5	39.88 - 1.5 (5)	TP76x66.7412x0.5625	47.63	162.50	72.8	134.684 0	-102.14	4759.96	0.021

Pole Bending Design Data

Section No.	Elevation ft	Size	M _{ux} kip-ft	φM _{ux} kip-ft	Ratio M _{ux} φM _{ux}	M _{uy} kip-ft	φM _{uy} kip-ft	Ratio M _{uy} φM _{uy}
L1	164 - 131.5 (1)	TP53.42x47x0.3125	388.21	3478.16	0.112	0.00	3478.16	0.000
L2	131.5 - 119.29 (2)	TP56.15x53.42x0.375	547.79	4715.67	0.116	0.00	4715.67	0.000
L3	119.29 - 78.79 (3)	TP62.97x54.0585x0.4375	2050.39	7005.47	0.293	0.00	7005.47	0.000
L4	78.79 - 39.88 (4)	TP69.66x60.4813x0.5625	3957.91	11587.92	0.342	0.00	11587.92	0.000
L5	39.88 - 1.5 (5)	TP76x66.7412x0.5625	6739.50	14008.00	0.481	0.00	14008.00	0.000

Pole Shear Design Data

Section No.	Elevation ft	Size	Actual V _u K	φV _u K	Ratio V _u φV _u	Actual T _u kip-ft	φT _u kip-ft	Ratio T _u φT _u
L1	164 - 131.5 (1)	TP53.42x47x0.3125	25.07	924.46	0.027	1.54	4299.57	0.000
L2	131.5 - 119.29 (2)	TP56.15x53.42x0.375	26.37	1137.05	0.023	2.44	5420.35	0.000
L3	119.29 - 78.79 (3)	TP62.97x54.0585x0.4375	46.07	1484.61	0.031	2.17	7920.37	0.000
L4	78.79 - 39.88 (4)	TP69.66x60.4813x0.5625	54.09	2108.85	0.026	2.17	12429.83	0.000
L5	39.88 - 1.5 (5)	TP76x66.7412x0.5625	62.18	2363.71	0.026	7.72	15615.67	0.000

Pole Interaction Design Data

Section No.	Elevation ft	Ratio P _u φP _u	Ratio M _{ux} φM _{ux}	Ratio M _{uy} φM _{uy}	Ratio V _u φV _u	Ratio T _u φT _u	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
L1	164 - 131.5 (1)	0.017	0.112	0.000	0.027	0.000	0.130 ✓	1.000	4.8.2 ✓
L2	131.5 - 119.29	0.015	0.116	0.000	0.023	0.000	0.131	1.000	4.8.2 ✓

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Section No.	Elevation ft	Ratio	Ratio	Ratio	Ratio	Ratio	Comb. Stress Ratio	Allow. Stress Ratio	Criteria
		ϕP_u	ϕM_{ux}	ϕM_{uy}	ϕV_u	ϕT_u			
	(2)						✓		
L3	119.29 - 78.79 (3)	0.020	0.293	0.000	0.031	0.000	0.314	1.000	4.8.2 ✓
L4	78.79 - 39.88 (4)	0.019	0.342	0.000	0.026	0.000	0.361	1.000	4.8.2 ✓
L5	39.88 - 1.5 (5)	0.021	0.481	0.000	0.026	0.000	0.503	1.000	4.8.2 ✓

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	ϕP_{allow} K	% Capacity	Pass Fail
L1	164 - 131.5	Pole	TP53.42x47x0.3125	1	-19.35	1112.38	13.0	Pass
L2	131.5 - 119.29	Pole	TP56.15x53.42x0.375	2	-21.22	1437.35	13.1	Pass
L3	119.29 - 78.79	Pole	TP62.97x54.0585x0.4375	3	-46.06	2284.89	31.4	Pass
L4	78.79 - 39.88	Pole	TP69.66x60.4813x0.5625	4	-69.42	3732.12	36.1	Pass
L5	39.88 - 1.5	Pole	TP76x66.7412x0.5625	5	-102.14	4759.96	50.3	Pass
Summary								
Pole (L5)							50.3	Pass
RATING =							50.3	Pass

Flange Bolt and Flange Plate Analysis:**Input Data:**Tower Reactions:

Overturing Moment =	OM := 389-ft-kips	(Input From InxTower)
Shear Force =	Shear := 26-kips	(Input From InxTower)
Axial Force =	Axial := 34-kips	(Input From InxTower)

Flange Bolt Data:

Use ASTM A325

Number of Flange Bolts =	N := 12	(User Input)
Diameter of Bolt Circle =	D_{bc} := 58-in	(User Input)
Bolt Minimum Tensile Strength =	F_{ub} := 120-ksi	(User Input)
Bolt Modulus =	E := 29000-ksi	(User Input)
Diameter of Flange Bolts =	D := 1.00-in	(User Input)
Threads per Inch =	n := 8	(User Input)

Flange Plate Data:

Use ASTM A36

Plate Yield Strength =	F_{ybp} := 36-ksi	(User Input)
Flange Plate Thickness =	t_{bp} := 1.0-in	(User Input)
Flange Plate Diameter =	D_{bp} := 61.0-in	(User Input)
Outer Pole Diameter =	D_{pole} := 53.42-in	(User Input)

Geometric Layout Data:

Distance from Bolts to Centroid of Pole:

Radius of Bolt Circle =: $R_{bc} := \frac{D_{bc}}{2} = 29\text{-in}$

Distance to Bolts = $i := 1..N$

$$d_i := \begin{cases} \theta \leftarrow 2\pi \cdot \left(\frac{i}{N}\right) \\ d \leftarrow R_{bc} \cdot \sin(\theta) \end{cases}$$

$d_1 = 14.50\text{-in}$	$d_7 = -14.50\text{-in}$
$d_2 = 25.11\text{-in}$	$d_8 = -25.11\text{-in}$
$d_3 = 29.00\text{-in}$	$d_9 = -29.00\text{-in}$
$d_4 = 25.11\text{-in}$	$d_{10} = -25.11\text{-in}$
$d_5 = 14.50\text{-in}$	$d_{11} = -14.50\text{-in}$
$d_6 = 0.00\text{-in}$	$d_{12} = -0.00\text{-in}$

Critical Distances For Bending in Plate:

Outer Pole Radius = $R_{pole} := \frac{D_{pole}}{2} = 26.71\text{-in}$

Moment Arms of Bolts about Neutral Axis = $MA_i := \text{if}(d_i \geq R_{pole}, d_i - R_{pole}, 0\text{in})$

$MA_1 = 0.00\text{-in}$	$MA_7 = 0.00\text{-in}$
$MA_2 = 0.00\text{-in}$	$MA_8 = 0.00\text{-in}$
$MA_3 = 2.29\text{-in}$	$MA_9 = 0.00\text{-in}$
$MA_4 = 0.00\text{-in}$	$MA_{10} = 0.00\text{-in}$
$MA_5 = 0.00\text{-in}$	$MA_{11} = 0.00\text{-in}$
$MA_6 = 0.00\text{-in}$	$MA_{12} = 0.00\text{-in}$

Effective Width of Flangeplate for Bending = $B_{eff} := .8 \cdot 2 \cdot \sqrt{\left(\frac{D_{bp}}{2}\right)^2 - \left(\frac{D_{pole}}{2}\right)^2} = 23.6\text{ in}$

Flange Bolt Analysis:

Calculated Flange Bolt Properties:

Polar Moment of Inertia =

$$I_p := \sum_i (d_i)^2 = 5.046 \times 10^3 \cdot \text{in}^2$$

Gross Area of Bolt =

$$A_g := \frac{\pi}{4} \cdot D^2 = 0.785 \cdot \text{in}^2$$

Net Area of Bolt =

$$A_n := \frac{\pi}{4} \cdot \left(D - \frac{0.9743 \cdot \text{in}}{n} \right)^2 = 0.606 \cdot \text{in}^2$$

Net Diameter =

$$D_n := \frac{2 \cdot \sqrt{A_n}}{\sqrt{\pi}} = 0.878 \cdot \text{in}$$

Radius of Gyration of Bolt =

$$r := \frac{D_n}{4} = 0.22 \cdot \text{in}$$

Section Modulus of Bolt =

$$S_x := \frac{\pi \cdot D_n^3}{32} = 0.066 \cdot \text{in}^3$$

Check Flange Bolt Tension Force:

Maximum Tensile Force =

$$T_{\text{Max}} := OM \cdot \frac{R_{bc}}{I_p} - \frac{\text{Axial}}{N} = 24 \cdot \text{kips}$$

Maximum Shear Force =

$$V_{\text{Max}} := \frac{\text{Shear}}{N} = 2.2 \cdot \text{kips}$$

Design Tensile Strength =

$$\Phi R_{nt} := (0.75 \cdot F_{ub} \cdot A_n) = 54.5 \cdot \text{kips}$$

Bolt Tension % of Capacity =

$$\frac{T_{\text{Max}}}{\Phi R_{nt}} = 44.01 \cdot \%$$

Condition1 =

$$\text{Condition1} := \text{if} \left(\frac{T_{\text{Max}}}{\Phi R_{nt}} \leq 1.00, \text{"OK"}, \text{"Overstressed"} \right)$$

Condition1 = "OK"

Design Shear Strength =

$$\Phi R_{nv} := (0.625 \cdot F_{ub} \cdot 0.8 \cdot A_g) = 47.1 \cdot \text{kips}$$

Condition2 =

$$\text{Condition2} := \text{if} \left[\left(\frac{V_{\text{Max}}}{\Phi R_{nv}} \right)^2 + \left(\frac{T_{\text{Max}}}{\Phi R_{nt}} \right)^2 \leq 1.00, \text{"OK"}, \text{"Overstressed"} \right]$$

Condition2 = "OK"

Flange Plate Analysis:

Force from Bolts =

$$C_i := \frac{OM \cdot d_i}{I_p} + \frac{Axial}{N}$$

$C_1 = 16.2$ -kips

$C_7 = -10.6$ -kips

$C_2 = 26.1$ -kips

$C_8 = -20.4$ -kips

$C_3 = 29.7$ -kips

$C_9 = -24.0$ -kips

$C_4 = 26.1$ -kips

$C_{10} = -20.4$ -kips

$C_5 = 16.2$ -kips

$C_{11} = -10.6$ -kips

$C_6 = 2.8$ -kips

$C_{12} = 2.8$ -kips

Maximum Bending Stress in Plate =

$$f_{bp} := \sum_i \frac{4 \cdot C_i \cdot MA_i}{(B_{eff} \cdot t_{bp})^2} = 11.5 \text{ ksi}$$

Allowable Bending Stress in Plate =

$F_{bp} := 0.9 \cdot F_y = 32.4 \text{ ksi}$

Plate Bending Stress % of Capacity =

$\frac{f_{bp}}{F_{bp}} = 35.6\%$

Condition3 =

Condition3 := if $\left(\frac{f_{bp}}{F_{bp}} < 1.00, \text{"Ok"}, \text{"Overstressed"} \right)$

Condition3 = "Ok"

Anchor Bolt and Base Plate Analysis:**Input Data:**Tower Reactions:

Overturning Moment =	$M_U := 6739\text{-ft-kips}$	(Input From tnxTower)
Shear Force =	Shear := 62-kips	(Input From tnxTower)
Axial Force =	$R_U := 102\text{-kips}$	(Input From tnxTower)

Anchor Bolt Data:

ASTMA615 Grade 75

Number of Anchor Bolts =	$N := 30$	(User Input)
Diameter of Bolt Circle =	$D_{BC} := 86\text{-in}$	(User Input)
Bolt Ultimate Strength =	$F_U := 100\text{-ksi}$	(User Input)
Bolt Yield Strength =	$F_Y := 75\text{-ksi}$	(User Input)
Bolt Modulus =	$E := 29000\text{-ksi}$	(User Input)
Diameter of Anchor Bolts =	$D := 2.25\text{-in}$	(User Input)
Threads per Inch =	$n := 4.5$	(User Input)
Top of Concrete to Bot Leveling Nut =	$l_{ar} := 2\text{-in}$	(User Input)
Anchor Rod Force Correction Factor =	$\eta_c = 1$	Table 2-1 Addendum 3

Base Plate Data:

ASTMA572 Grade 60

Plate Yield Strength =	$F_{yf} := 60\text{-ksi}$	(User Input)
Base Plate Thickness =	$t_{TP} := 3.0\text{-in}$	(User Input)
Base Plate Diameter =	$D_{OD} := 92.0\text{-in}$	(User Input)
Outer Pole Diameter =	$D_T := 76.0\text{-in}$	(User Input)
Pole Wall Thickness =	$t_T := 0.5625\text{-in}$	(User Input)
Pole Design Yield Strength =	$F_{yp} := 65\text{-ksi}$	(User Input)

Anchor Bolt Analysis:

Gross Area of Bolt =	$A_g := \frac{\pi}{4} \cdot D^2 = 3.976 \cdot \text{in}^2$	
Net Area of Bolt =	$A_n := \frac{\pi}{4} \cdot \left(D - \frac{0.9743 \cdot \text{in}}{n} \right)^2 = 3.248 \cdot \text{in}^2$	
Tensile Root Diameter =	$d_{rt} := D - \frac{0.9743 \cdot \text{in}}{n} = 2.033 \cdot \text{in}$	
Plastic Section Modulus =	$Z := \frac{d_{rt}^3}{6} = 1.401 \cdot \text{in}^3$	
Maximum Anchor Rod Force =	$P_{ut} := \frac{n_c \cdot \pi \cdot M_u}{N \cdot D_{BC}} - \frac{R_u}{N} = 95.1 \cdot \text{kips}$	
Maximum Anchor Rod Force =	$P_{uc} := \frac{n_c \cdot \pi \cdot M_u}{N \cdot D_{BC}} + \frac{R_u}{N} = 101.9 \cdot \text{kips}$	
Maximum Shear Force =	$V_u := \frac{\text{Shear}}{N} = 2.1 \cdot \text{kips}$	
	$\Phi_t := 0.75 \quad \Phi_v := 0.75 \quad \Phi_c := 1.0$	
Design Tensile Strength =	$\Phi R_{nt} := \Phi_t \cdot F_u \cdot A_n = 243.576 \cdot \text{k}$	
Design Compression Strength =	$\Phi R_{nc} := \Phi_c \cdot F_y \cdot A_n = 243.576 \cdot \text{k}$	
Design Shear Rupture Strength =	$\Phi R_{nv} := \Phi_v \cdot 0.5 \cdot F_u \cdot A_g = 149.103 \cdot \text{k}$	
Design Shear Yield Strength =	$\Phi R_{nvc} := \Phi_c \cdot 0.6 \cdot F_y \cdot \frac{A_n}{2} = 73.073 \cdot \text{k}$	
Bolt % of Capacity =	$\left[\left(\frac{P_{ut}}{\Phi R_{nt}} \right)^2 + \left(\frac{V_u}{\Phi R_{nv}} \right)^2 \right] \cdot 100 = 15.3$	$\frac{P_{ut}}{\Phi R_{nt}} = 0.39$
Condition1 =	Condition1 := if $\left[\left(\frac{P_{ut}}{\Phi R_{nt}} \right)^2 + \left(\frac{V_u}{\Phi R_{nv}} \right)^2 \right] \leq 1.00$, "OK", "Overstressed"	
	Condition1 = "OK"	
Bolt % of Capacity =	$\left[\left(\frac{P_{uc}}{\Phi R_{nc}} \right)^2 + \left(\frac{V_u}{\Phi R_{nvc}} \right)^2 \right] \cdot 100 = 17.6$	
Condition2 =	Condition2 := if $\left[\left(\frac{P_{uc}}{\Phi R_{nc}} \right)^2 + \left(\frac{V_u}{\Phi R_{nvc}} \right)^2 \right] \leq 1.00$, "OK", "Overstressed"	
	Condition2 = "OK"	

Base Plate Analysis:

Strength Resistance Factor for Yielding due to Bending =

$$\phi_b := 0.9$$

Strength Resistance Factor for Yielding due to Shear =

$$\phi_v := 1.0$$

Outside Fillet Horizontal Leg Dimension =

$$w_1 := 0.25 \text{ in}$$

Effective Pole Outside Diameter =

$$D_e := D_T + w_1 = 76.25 \text{ in}$$

Effective Base Plate Outside Diameter =

$$D_{oe} := \begin{cases} D_{OD} & \text{if } D_{OD} \leq (D_{BC} + 6 \cdot t_{TP}) \\ (D_{BC} + 6 \cdot t_{TP}) & \text{otherwise} \end{cases} = 92 \text{ in}$$

Half-Angle Between Radial Lines Extending from Pole
 Centerline Through Midpoints Between Adjacent Anchor
 Rods =

$$\theta_1 := \frac{\pi}{N} = 0.105$$

Angle Defining Limiting Effective Base Plate Width
 Based on Plate Thickness =

$$\theta_2 := \arcsin\left(\frac{12 \cdot t_{TP}}{D_{BC}}\right) = 0.432$$

Angle Defining Limiting Effective Base Plate Width
 Based on Distance Between Anchor Rod Bolt Circle and
 Effective Pole Outside Diameter =

$$\theta_3 := \arccos\left(\frac{D_{BC} + D_e}{2 \cdot D_{BC}}\right) = 0.338$$

Governing Angle Defining Effective Base Plate Width
 Resisting Bending =

$$\theta := \min(\theta_1, \theta_2, \theta_3) = 0.105$$

Effective Moment Arm of Anchor Rod Force =

$$x := 0.5 \cdot (D_{BC} - D_e) = 4.875 \text{ in}$$

Effective Base Plate Width Resisting Bending from
 Transverse Bend Line =

$$B_{et} := D_{BC} \cdot \sin(\theta) = 8.989 \text{ in}$$

Effective Base Plate Width Resisting Bending from
 Radial Bend Lines =

$$B_{er} := (D_{oe} - D_e) \cdot \sin(\theta) = 1.646 \text{ in}$$

Total Effective Base Plate Width Resisting Bending =

$$B_{eff} := B_{et} + B_{er} = 10.636 \text{ in}$$

Required Base Plate Thickness =

$$t_{TP,Req} := \sqrt{\frac{4 \cdot P_{uc} \cdot x}{\phi_b \cdot F_{yf} \cdot B_{eff}}} = 1.86 \text{ in}$$

Plate Bending Stress % of Capacity =

$$\frac{t_{TP,Req}}{t_{TP}} = 62.0 \%$$

Condition2 =

$$\text{Condition3} := \text{if}\left(\frac{t_{TP,Req}}{t_{TP}} < 1.00, \text{"Ok"}, \text{"Overstressed"}\right)$$

Condition3 = "Ok"

Required Base Plate Thickness =

$$t_{TP,Req} := \frac{\phi_b \cdot t_T \cdot F_{yp}}{\phi_v \cdot 0.6 \cdot F_{yf}} = 0.914 \text{ in}$$

Plate Bending Stress % of Capacity =

$$\frac{t_{TP,Req}}{t_{TP}} = 30.5 \%$$

Condition2 =

$$\text{Condition4} := \text{if}\left(\frac{t_{TP,Req}}{t_{TP}} < 1.00, \text{"Ok"}, \text{"Overstressed"}\right)$$

Condition4 = "Ok"

Caisson Foundation:

Input Data:

Shear Force =	S := 62k	USER INPUT-FROM Inx Tower
Overturning Moment =	M := 6739ft-k	USER INPUT-FROM Inx Tower
Applied Axial Load =	A1 := 102k	USER INPUT-FROM Inx Tower
Bending Moment =	Mu := 7075ft-k	USER INPUT-FROM LPILE
Moment Capacity =	Mn := 12372ft-k	USER INPUT-FROM LPILE
Foundation Diameter =	d := 9.0ft	USER INPUT
Overall Length of Caisson =	L _c := 28.0ft	USER INPUT
Depth From Top of Caisson to Grade =	L _{pag} := 1.0ft	USER INPUT
Number of Rebar =	n := 33	USER INPUT
Area of Rebar =	A _r := 1.560in ²	USER INPUT
Rebar Yield Strength =	f _y := 60ksi	USER INPUT
Concrete Comp Strength =	f _c := 3ksi	USER INPUT

Check Moment Capacity:

Factor of Safety =	$FS := \frac{0.9 \cdot Mn}{Mu} = 1.6$
Factor of Safety Required =	FS _{reqd} := 1
	FOSCheck := if(FS ≥ FS _{reqd} , "OK", "NO GOOD")
	FOSCheck = "OK"

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LPILE Plus for Windows, Version 5.0 (5.0.47)

Analysis of Individual Piles and Drilled Shafts
Subjected to Lateral Loading Using the p-y Method

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TJL
Centek Engineering

Files Used for Analysis

Path to file locations: J:\Jobs\2202700.WI\15_Greenwich CT\05_Structural\Tower
Analysis\Backup Documentation\Rev (2)\Foundation\
Name of input data file: Greenwich Hospital Caisson Analysis.lpd
Name of output file: Greenwich Hospital Caisson Analysis.lpo
Name of plot output file: Greenwich Hospital Caisson Analysis.lpp
Name of runtime file: Greenwich Hospital Caisson Analysis.lpr

Time and Date of Analysis

Date: October 12, 2023 Time: 14:51:25

Problem Title

22027.15 - Greenwich

Program Options

Units Used in Computations - US Customary Units: Inches, Pounds

Basic Program Options:

Analysis Type 3:

- Computation of Nonlinear Bending Stiffness and Ultimate Bending Moment Capacity with Pile Response Computed Using Nonlinear EI

Computation Options:

- Only internally-generated p-y curves used in analysis
- Analysis does not use p-y multipliers (individual pile or shaft action only)
- Analysis assumes no shear resistance at pile tip
- Analysis for fixed-length pile or shaft only
- Analysis includes computation of foundation stiffness matrix elements
- Output pile response for full length of pile
- Analysis assumes no soil movements acting on pile
- No additional p-y curves to be computed at user-specified depths

Solution Control Parameters:

- Number of pile increments = 100
- Maximum number of iterations allowed = 100
- Deflection tolerance for convergence = 1.0000E-04 in
- Maximum allowable deflection = 1.0000E+02 in

Printing Options:

- Values of pile-head deflection, bending moment, shear force, and soil reaction are printed for full length of pile.
- Printing Increment (spacing of output points) = 8

Pile Structural Properties and Geometry

- Pile Length = 336.00 in
- Depth of ground surface below top of pile = 12.00 in
- Slope angle of ground surface = 0.00 deg.

Structural properties of pile defined using 2 points

Point No.	Point Depth in	Pile Diameter in	Moment of Inertia in**4	Pile Area Sq.in	Modulus of Elasticity lbs/Sq.in
1	0.0000	108.00000	6678285.	9160.9000	3600000.
2	336.0000	108.00000	6678285.	9160.9000	3600000.

Please note that because this analysis makes computations of ultimate moment capacity and pile response using nonlinear bending stiffness that the above values of moment of inertia and modulus of are not used for any computations other than total stress due to combined axial loading and bending.

Soil and Rock Layering Information

The soil profile is modelled using 4 layers

Layer 1 is sand, p-y criteria by Reese et al., 1974
 Distance from top of pile to top of layer = 12.000 in
 Distance from top of pile to bottom of layer = 48.000 in
 p-y subgrade modulus k for top of soil layer = 20.000 lbs/in**3
 p-y subgrade modulus k for bottom of layer = 20.000 lbs/in**3

Layer 2 is sand, p-y criteria by Reese et al., 1974
 Distance from top of pile to top of layer = 48.000 in
 Distance from top of pile to bottom of layer = 72.000 in
 p-y subgrade modulus k for top of soil layer = 90.000 lbs/in**3
 p-y subgrade modulus k for bottom of layer = 90.000 lbs/in**3

Layer 3 is sand, p-y criteria by Reese et al., 1974
 Distance from top of pile to top of layer = 72.000 in
 Distance from top of pile to bottom of layer = 132.000 in
 p-y subgrade modulus k for top of soil layer = 150.000 lbs/in**3
 p-y subgrade modulus k for bottom of layer = 150.000 lbs/in**3

Layer 4 is sand, p-y criteria by Reese et al., 1974
 Distance from top of pile to top of layer = 132.000 in
 Distance from top of pile to bottom of layer = 360.000 in
 p-y subgrade modulus k for top of soil layer = 250.000 lbs/in**3
 p-y subgrade modulus k for bottom of layer = 250.000 lbs/in**3

(Depth of lowest layer extends 24.00 in below pile tip)

Effective Unit Weight of Soil vs. Depth

Effective unit weight of soil with depth defined using 8 points

Point No.	Depth X in	Eff. Unit Weight lbs/in**3
1	12.00	0.05800
2	48.00	0.05800
3	48.00	0.06900
4	72.00	0.06900
5	72.00	0.06900
6	132.00	0.06900
7	132.00	0.07500

8 360.00 0.07500

Shear Strength of Soils

Shear strength parameters with depth defined using 8 points

Point No.	Depth X in	Cohesion c lbs/in**2	Angle of Friction Deg.	E50 or k_rm	RQD %
1	12.000	0.00000	20.00	-----	-----
2	48.000	0.00000	20.00	-----	-----
3	48.000	0.00000	30.00	-----	-----
4	72.000	0.00000	30.00	-----	-----
5	72.000	0.00000	35.00	-----	-----
6	132.000	0.00000	35.00	-----	-----
7	132.000	0.00000	42.00	-----	-----
8	360.000	0.00000	42.00	-----	-----

Notes:

- (1) Cohesion = uniaxial compressive strength for rock materials.
- (2) Values of E50 are reported for clay strata.
- (3) Default values will be generated for E50 when input values are 0.
- (4) RQD and k_rm are reported only for weak rock strata.

Loading Type

Static loading criteria was used for computation of p-y curves.

Pile-head Loading and Pile-head Fixity Conditions

Number of loads specified = 2

Load Case Number 1

Pile-head boundary conditions are Shear and Moment (BC Type 1)
Shear force at pile head = 62000.000 lbs
Bending moment at pile head = 80868000.000 in-lbs

Axial load at pile head = 102000.000 lbs

Non-zero moment at pile head for this load case indicates the pile-head may rotate under the applied pile-head loading, but is not a free-head (zero moment) condition.

Load Case Number 2

Pile-head boundary conditions are Shear and Moment (BC Type 1)

Shear force at pile head = 12000.000 lbs

Bending moment at pile head = 15480000.000 in-lbs

Axial load at pile head = 85140.000 lbs

Non-zero moment at pile head for this load case indicates the pile-head may rotate under the applied pile-head loading, but is not a free-head (zero moment) condition.

Computations of Nominal Moment Capacity and Nonlinear Bending Stiffness

Number of sections = 1

Pile Section No. 1

The sectional shape is a circular drilled shaft (bored pile).

Outside Diameter = 108.0000 in

Material Properties:

Compressive Strength of Concrete = 3.000 kip/in**2

Yield Stress of Reinforcement = 60. kip/in**2

Modulus of Elasticity of Reinforcement = 29000. kip/in**2

Number of Reinforcing Bars = 33

Area of Single Bar = 1.56000 in**2

Number of Rows of Reinforcing Bars = 33

Area of Steel = 51.480 in**2

Area of Shaft = 9160.884 in**2

Percentage of Steel Reinforcement = 0.562 percent

Cover Thickness (edge to bar center) = 4.000 in

Unfactored Axial Squash Load Capacity = 26317.78 kip

Distribution and Area of Steel Reinforcement

Row	Area of	Distance to
-----	---------	-------------

Number	Reinforcement in**2	Centroidal Axis in
1	1.560	49.943
2	1.560	49.491
3	1.560	48.591
4	1.560	47.250
5	1.560	45.482
6	1.560	43.301
7	1.560	40.729
8	1.560	37.787
9	1.560	34.504
10	1.560	30.908
11	1.560	27.032
12	1.560	22.911
13	1.560	18.583
14	1.560	14.087
15	1.560	9.463
16	1.560	4.753
17	1.560	0.000
18	1.560	-4.753
19	1.560	-9.463
20	1.560	-14.087
21	1.560	-18.583
22	1.560	-22.911
23	1.560	-27.032
24	1.560	-30.908
25	1.560	-34.504
26	1.560	-37.787
27	1.560	-40.729
28	1.560	-43.301
29	1.560	-45.482
30	1.560	-47.250
31	1.560	-48.591
32	1.560	-49.491
33	1.560	-49.943

Axial Thrust Force = 85140.00 lbs

Bending Max. Steel Moment Stress in-lbs psi	Bending Stiffness lb-in2	Bending Curvature rad/in	Maximum Strain in/in	Neutral Axis Position inches	Max. Concrete Stress psi
11414515. 809.04595 22713391.	2.282903E+13	5.000000E-07	0.00002993	59.85290569	91.98837562
	2.271339E+13	0.00000100	0.00005705	57.05467182	173.78739

1536.94312						
33889270.	2.259285E+13	0.00000150	0.00008415	56.09678203	254.08948	
2263.74648						
44949928.	2.247496E+13	0.00000200	0.00011131	55.65581721	333.23434	
2992.75268						
55888619.	2.235545E+13	0.00000250	0.00013842	55.36843032	410.82655	
3720.10530						
55888619.	1.862954E+13	0.00000300	0.00008521	28.40226477	253.22762	
6572.07589						
55888619.	1.596818E+13	0.00000350	0.00009743	27.83803850	288.29155	
7724.69084						
55888619.	1.397215E+13	0.00000400	0.00010967	27.41845518	323.12798	
8876.88977						
55888619.	1.241969E+13	0.00000450	0.00012193	27.09531552	357.73613	
10028.67071						
55888619.	1.117772E+13	0.00000500	0.00013450	26.90093154	393.00210	
11171.15314						
55888619.	1.016157E+13	0.00000550	0.00014673	26.67747027	426.96406	
12323.91052						
55888619.	9.314770E+12	0.00000600	0.00015896	26.49385267	460.70100	
13476.21549						
55888619.	8.598249E+12	0.00000650	0.00017122	26.34089917	494.21213	
14628.06518						
55888619.	7.984088E+12	0.00000700	0.00018348	26.21205658	527.49671	
15779.45601						
55888619.	7.451816E+12	0.00000750	0.00019577	26.10251302	560.55387	
16930.38573						
55888619.	6.986077E+12	0.00000800	0.00020807	26.00866681	593.38289	
18080.85043						
55888619.	6.575132E+12	0.00000850	0.00022039	25.92776281	625.98300	
19230.84642						
55888619.	6.209847E+12	0.00000900	0.00023272	25.85765415	658.35332	
20380.37104						
55888619.	5.883013E+12	0.00000950	0.00024507	25.79664785	690.49304	
21529.42112						
55888619.	5.588862E+12	0.00001000	0.00025743	25.74339205	722.40137	
22677.99272						
55888619.	5.322726E+12	0.00001050	0.00026982	25.69679242	754.07752	
23826.08195						
55888619.	5.080784E+12	0.00001100	0.00028222	25.65594774	785.52053	
24973.68673						
55888619.	4.859880E+12	0.00001150	0.00029463	25.62012094	816.72962	
26120.80255						
55888619.	4.657385E+12	0.00001200	0.00030706	25.58869725	847.70402	
27267.42506						
55888619.	4.471090E+12	0.00001250	0.00031951	25.56115204	878.44264	
28413.55291						
55888619.	4.299125E+12	0.00001300	0.00033198	25.53705400	908.94484	
29559.17998						
55888619.	4.139898E+12	0.00001350	0.00034447	25.51602656	939.20960	
30704.30377						

56969296. 31848.92136	4.069235E+12	0.00001400	0.00035697	25.49774784	969.23597
58880227. 32993.02689	4.060705E+12	0.00001450	0.00036949	25.48194748	999.02322
60788967. 34136.61755	4.052598E+12	0.00001500	0.00038203	25.46838409	1028.57033
62695498. 35279.69007	4.044871E+12	0.00001550	0.00039458	25.45684844	1057.87632
64599820. 36422.23839	4.037489E+12	0.00001600	0.00040715	25.44716352	1086.94044
66501907. 37564.26055	4.030419E+12	0.00001650	0.00041975	25.43916517	1115.76156
68401750. 38705.75142	4.023632E+12	0.00001700	0.00043236	25.43271500	1144.33881
70299333. 39846.70734	4.017105E+12	0.00001750	0.00044498	25.42768747	1172.67118
72194645. 40987.12357	4.010814E+12	0.00001800	0.00045763	25.42397314	1200.75774
74087667. 42126.99651	4.004739E+12	0.00001850	0.00047030	25.42147225	1228.59745
75978389. 43266.32126	3.998863E+12	0.00001900	0.00048298	25.42009789	1256.18934
77866800. 44405.09249	3.993169E+12	0.00001950	0.00049569	25.41977280	1283.53248
81636599. 46680.96216	3.982273E+12	0.00002050	0.00052115	25.42198402	1337.46795
85396958. 48954.56630	3.971952E+12	0.00002150	0.00054669	25.42762309	1390.39574
89147753. 51225.86712	3.962122E+12	0.00002250	0.00057232	25.43629092	1442.30730
92888848. 53494.82704	3.952717E+12	0.00002350	0.00059802	25.44765598	1493.19382
96620113. 55761.40578	3.943678E+12	0.00002450	0.00062381	25.46144468	1543.04636
1.003414E+08 58025.56149	3.934957E+12	0.00002550	0.00064967	25.47742850	1591.85579
1.040171E+08 60000.00000	3.925174E+12	0.00002650	0.00067555	25.49239844	1639.46229
1.069256E+08 60000.00000	3.888205E+12	0.00002750	0.00069978	25.44651979	1682.84018
1.093590E+08 60000.00000	3.837158E+12	0.00002850	0.00072297	25.36753410	1723.30396
1.114813E+08 60000.00000	3.779027E+12	0.00002950	0.00074548	25.27050143	1761.59249
1.135610E+08 60000.00000	3.723312E+12	0.00003050	0.00076860	25.20000011	1800.02423
1.151075E+08 60000.00000	3.654208E+12	0.00003150	0.00079152	25.12756437	1837.15950
1.166772E+08 60000.00000	3.590069E+12	0.00003250	0.00081246	24.99884731	1870.14560
1.180482E+08	3.523825E+12	0.00003350	0.00083284	24.86087984	1901.44954

60000.00000						
1.193782E+08	3.460237E+12	0.00003450	0.00085314	24.72869629	1931.89727	
60000.00000						
1.205338E+08	3.395318E+12	0.00003550	0.00087291	24.58901006	1960.80984	
60000.00000						
1.216859E+08	3.333860E+12	0.00003650	0.00089272	24.45810431	1989.09064	
60000.00000						
1.226731E+08	3.271284E+12	0.00003750	0.00091199	24.31973773	2015.89556	
60000.00000						
1.236459E+08	3.211582E+12	0.00003850	0.00093126	24.18849403	2042.04072	
60000.00000						
1.245664E+08	3.153579E+12	0.00003950	0.00095037	24.06002158	2067.32014	
60000.00000						
1.253799E+08	3.095799E+12	0.00004050	0.00096912	23.92878109	2091.46163	
60000.00000						
1.261905E+08	3.040735E+12	0.00004150	0.00098790	23.80473429	2115.03071	
60000.00000						
1.269757E+08	2.987663E+12	0.00004250	0.00100662	23.68511313	2137.90201	
60000.00000						
1.276473E+08	2.934421E+12	0.00004350	0.00102490	23.56093758	2159.61690	
60000.00000						
1.283163E+08	2.883513E+12	0.00004450	0.00104322	23.44310921	2180.78495	
60000.00000						
1.288288E+08	2.831402E+12	0.00004550	0.00106470	23.39999861	2205.03779	
60000.00000						
1.297031E+08	2.789315E+12	0.00004650	0.00108424	23.31695741	2226.29019	
60000.00000						
1.302367E+08	2.741825E+12	0.00004750	0.00110152	23.18996233	2244.41460	
60000.00000						
1.307681E+08	2.696249E+12	0.00004850	0.00111884	23.06885415	2262.05026	
60000.00000						
1.312974E+08	2.652472E+12	0.00004950	0.00113619	22.95328528	2279.19462	
60000.00000						
1.318245E+08	2.610386E+12	0.00005050	0.00115357	22.84293061	2295.84481	
60000.00000						
1.322889E+08	2.568717E+12	0.00005150	0.00117062	22.73054820	2311.65382	
60000.00000						
1.327137E+08	2.527881E+12	0.00005250	0.00118749	22.61878699	2326.77622	
60000.00000						
1.331366E+08	2.488535E+12	0.00005350	0.00120438	22.51177007	2341.43032	
60000.00000						
1.335575E+08	2.450596E+12	0.00005450	0.00122130	22.40923673	2355.61332	
60000.00000						
1.339764E+08	2.413990E+12	0.00005550	0.00123826	22.31095201	2369.32272	
60000.00000						
1.343934E+08	2.378644E+12	0.00005650	0.00125524	22.21669060	2382.55567	
60000.00000						
1.347368E+08	2.343248E+12	0.00005750	0.00127178	22.11789411	2394.93668	
60000.00000						
1.350693E+08	2.308877E+12	0.00005850	0.00128828	22.02193648	2406.81869	
60000.00000						

1.354001E+08 60000.00000	2.275632E+12	0.00005950	0.00130482	21.92969638	2418.24809
1.360561E+08 60000.00000	2.212294E+12	0.00006150	0.00133797	21.75564784	2439.73858
1.367504E+08 60000.00000	2.153550E+12	0.00006350	0.00137160	21.60000032	2459.59723
1.373625E+08 60000.00000	2.097137E+12	0.00006550	0.00141164	21.55180424	2480.85294
1.378436E+08 60000.00000	2.042128E+12	0.00006750	0.00144276	21.37415081	2495.21909
1.383188E+08 60000.00000	1.990198E+12	0.00006950	0.00147398	21.20832270	2507.95924
1.387878E+08 60000.00000	1.941089E+12	0.00007150	0.00150531	21.05335432	2519.05495
1.392292E+08 60000.00000	1.894275E+12	0.00007350	0.00153654	20.90530282	2528.42168
1.395826E+08 60000.00000	1.848776E+12	0.00007550	0.00156701	20.75514954	2535.92939
1.399305E+08 60000.00000	1.805554E+12	0.00007750	0.00159760	20.61415011	2541.85742
1.402726E+08 60000.00000	1.764435E+12	0.00007950	0.00162829	20.48163182	2546.18767
1.406090E+08 60000.00000	1.725264E+12	0.00008150	0.00165910	20.35699922	2548.90170
1.409396E+08 60000.00000	1.687899E+12	0.00008350	0.00169001	20.23969871	2549.98048
1.412334E+08 60000.00000	1.651853E+12	0.00008550	0.00172074	20.12566835	2545.71304
1.414698E+08 60000.00000	1.616798E+12	0.00008750	0.00175090	20.01032156	2540.73877
1.417038E+08 60000.00000	1.583283E+12	0.00008950	0.00178117	19.90137345	2543.80284
1.417038E+08 60000.00000	1.548675E+12	0.00009150	0.00181170	19.79999882	2547.09008
1.417490E+08 60000.00000	1.516032E+12	0.00009350	0.00185130	19.79999882	2549.59126
1.425162E+08 60000.00000	1.492316E+12	0.00009550	0.00188723	19.76158100	2548.24129
1.427224E+08 60000.00000	1.463820E+12	0.00009750	0.00191666	19.65807241	2544.02608
1.429272E+08 60000.00000	1.436454E+12	0.00009950	0.00194618	19.55961710	2539.79530
1.431231E+08 60000.00000	1.410080E+12	0.00010150	0.00197565	19.46451563	2540.18705
1.432673E+08 60000.00000	1.384225E+12	0.00010350	0.00200422	19.36447030	2543.63871
1.434102E+08 60000.00000	1.359339E+12	0.00010550	0.00203288	19.26901156	2546.35517
1.435519E+08 60000.00000	1.335367E+12	0.00010750	0.00206162	19.17789155	2548.32690
1.436923E+08	1.312259E+12	0.00010950	0.00209045	19.09088498	2549.54420

60000.00000						
1.438315E+08	1.289968E+12	0.00011150	0.00211937	19.00778264	2549.99714	
60000.00000						
1.439670E+08	1.268432E+12	0.00011350	0.00214849	18.92940205	2546.77557	
60000.00000						
1.441016E+08	1.247633E+12	0.00011550	0.00217768	18.85436243	2543.23380	
60000.00000						
1.442354E+08	1.227535E+12	0.00011750	0.00220693	18.78239661	2539.68134	
60000.00000						
1.443684E+08	1.208104E+12	0.00011950	0.00223625	18.71335655	2536.11804	
60000.00000						
1.445008E+08	1.189307E+12	0.00012150	0.00226562	18.64710706	2536.18781	
60000.00000						
1.446228E+08	1.171035E+12	0.00012350	0.00229482	18.58155924	2539.76734	
60000.00000						
1.447143E+08	1.153102E+12	0.00012550	0.00232332	18.51251596	2542.69333	
60000.00000						
1.448052E+08	1.135727E+12	0.00012750	0.00235188	18.44609267	2545.13571	
60000.00000						
1.448955E+08	1.118884E+12	0.00012950	0.00238049	18.38217992	2547.08927	
60000.00000						
1.449851E+08	1.102548E+12	0.00013150	0.00240917	18.32066506	2548.54847	
60000.00000						
1.450740E+08	1.086697E+12	0.00013350	0.00243790	18.26144511	2549.50775	
60000.00000						
1.451623E+08	1.071309E+12	0.00013550	0.00246670	18.20442349	2549.96142	
60000.00000						
1.452487E+08	1.056354E+12	0.00013750	0.00249564	18.15011519	2548.23956	
60000.00000						
1.453338E+08	1.041820E+12	0.00013950	0.00252468	18.09804708	2545.35645	
60000.00000						
1.455127E+08	1.014026E+12	0.00014350	0.00258300	18.00000054	2539.54654	
60000.00000						
1.466286E+08	9.940921E+11	0.00014750	0.00265500	18.00000054	2531.33751	
60000.00000						
1.476109E+08	9.743296E+11	0.00015150	0.00272700	18.00000054	2536.11274	
60000.00000						
1.476109E+08	9.492664E+11	0.00015550	0.00279509	17.97488219	2543.16971	
60000.00000						
1.476109E+08	9.254604E+11	0.00015950	0.00285269	17.88519770	2546.65913	
60000.00000						
1.476109E+08	9.028191E+11	0.00016350	0.00290931	17.79391998	2548.84949	
60000.00000						
1.476109E+08	8.812593E+11	0.00016750	0.00296611	17.70810753	2549.90291	
60000.00000						
1.476109E+08	8.607051E+11	0.00017150	0.00302446	17.63532096	2547.20173	
60000.00000						
1.476109E+08	8.410879E+11	0.00017550	0.00308348	17.56969911	2542.53159	
60000.00000						
1.476109E+08	8.223450E+11	0.00017950	0.00314263	17.50766927	2537.84044	
60000.00000						

1.476109E+08 60000.00000	8.044192E+11	0.00018350	0.00320189	17.44900936	2533.12786
1.476109E+08 60000.00000	7.872583E+11	0.00018750	0.00326129	17.39352626	2528.39311
1.476109E+08 60000.00000	7.708143E+11	0.00019150	0.00332081	17.34103006	2523.63589
1.476109E+08 60000.00000	7.550431E+11	0.00019550	0.00338046	17.29135662	2520.44254
1.476109E+08 60000.00000	7.399044E+11	0.00019950	0.00344142	17.25020939	2527.24043
1.476109E+08 60000.00000	7.253608E+11	0.00020350	0.00350293	17.21341699	2533.29357
1.476109E+08 60000.00000	7.113780E+11	0.00020750	0.00356463	17.17891949	2538.45136
1.476109E+08 60000.00000	6.979240E+11	0.00021150	0.00362608	17.14460546	2542.61952
1.476109E+08 60000.00000	6.849695E+11	0.00021550	0.00368577	17.10335201	2545.63077
1.476109E+08 60000.00000	6.724872E+11	0.00021950	0.00374562	17.06431943	2547.87154
1.476109E+08 60000.00000	6.604516E+11	0.00022350	0.00380563	17.02741116	2549.32349

Unfactored (Nominal) Moment Capacity at Concrete Strain of 0.003 = 147610.93014 in-kip

Axial Thrust Force = 102000.00 lbs

Bending Max. Steel Moment Stress in-lbs psi	Bending Stiffness lb-in ²	Bending Curvature rad/in	Maximum Strain in/in	Neutral Axis Position inches	Max. Concrete Stress psi
11415961. 825.65545	2.283192E+13	5.000000E-07	0.00003050	60.99838811	93.75901675
22709595. 1552.75768	2.270959E+13	0.00000100	0.00005760	57.60000139	175.44501
33889413. 2280.58816	2.259294E+13	0.00000150	0.00008473	56.48394710	255.82465
44945747. 3007.49830	2.247287E+13	0.00000200	0.00011182	55.91005200	334.72717
55888049. 3737.18552	2.235522E+13	0.00000250	0.00013901	55.60401946	412.52515
55888049. 6509.48271	1.862935E+13	0.00000300	0.00008737	29.12172657	259.67438

55888049.	1.596801E+13	0.00000350	0.00009988	28.53742880	295.54619
7653.70272					
55888049.	1.397201E+13	0.00000400	0.00011213	28.03168219	330.34130
8805.75543					
55888049.	1.241957E+13	0.00000450	0.00012439	27.64153665	364.90797
9957.38885					
55888049.	1.117761E+13	0.00000500	0.00013666	27.33233052	399.24545
11108.60028					
55888049.	1.016146E+13	0.00000550	0.00014895	27.08200318	433.35296
12259.38752					
55888049.	9.314675E+12	0.00000600	0.00016164	26.94043082	468.33251
13398.51089					
55888049.	8.598161E+12	0.00000650	0.00017390	26.75407416	501.79954
14550.18169					
55888049.	7.984007E+12	0.00000700	0.00018618	26.59660810	535.03982
15701.39205					
55888049.	7.451740E+12	0.00000750	0.00019847	26.46226805	568.05252
16852.13901					
55888049.	6.986006E+12	0.00000800	0.00021077	26.34672815	600.83677
18002.42020					
55888049.	6.575065E+12	0.00000850	0.00022310	26.24668926	633.39189
19152.23105					
55888049.	6.209783E+12	0.00000900	0.00023544	26.15957648	665.71697
20301.56932					
55888049.	5.882952E+12	0.00000950	0.00024779	26.08336204	697.81120
21450.43135					
55888049.	5.588805E+12	0.00001000	0.00026016	26.01642698	729.67388
22598.81259					
55888049.	5.322671E+12	0.00001050	0.00027255	25.95745164	761.30401
23746.71121					
55888049.	5.080732E+12	0.00001100	0.00028496	25.90536422	792.70082
24894.12288					
55888049.	4.859830E+12	0.00001150	0.00029738	25.85927635	823.86344
26041.04422					
55888049.	4.657337E+12	0.00001200	0.00030982	25.81845099	854.79109
27187.47076					
55888049.	4.471044E+12	0.00001250	0.00032228	25.78226048	885.48270
28333.40110					
55888049.	4.299081E+12	0.00001300	0.00033475	25.75018662	915.93762
29478.82899					
55888049.	4.139855E+12	0.00001350	0.00034724	25.72177881	946.15485
30623.75176					
57470698.	4.105050E+12	0.00001400	0.00035975	25.69665402	976.13351
31768.16545					
59380939.	4.095237E+12	0.00001450	0.00037228	25.67448074	1005.87265
32912.06666					
61288981.	4.085932E+12	0.00001500	0.00038482	25.65497249	1035.37135
34055.45159					
63194824.	4.077085E+12	0.00001550	0.00039739	25.63788468	1064.62884
35198.31429					
65098434.	4.068652E+12	0.00001600	0.00040997	25.62299198	1093.64392

36340.65399					
66999810.	4.060595E+12	0.00001650	0.00042257	25.61010772	1122.41580
37482.46455					
68898943.	4.052879E+12	0.00001700	0.00043518	25.59906453	1150.94359
38623.74110					
70795802.	4.045474E+12	0.00001750	0.00044782	25.58970791	1179.22610
39764.48197					
72690396.	4.038355E+12	0.00001800	0.00046047	25.58191234	1207.26266
40904.67931					
74582688.	4.031497E+12	0.00001850	0.00047315	25.57555228	1235.05195
42044.33257					
76472671.	4.024877E+12	0.00001900	0.00048584	25.57052475	1262.59309
43183.43606					
78360335.	4.018479E+12	0.00001950	0.00049855	25.56673640	1289.88512
44321.98458					
82128647.	4.006275E+12	0.00002050	0.00052403	25.56254572	1343.71774
46597.39823					
85887480.	3.994766E+12	0.00002150	0.00054959	25.56238800	1396.54116
48870.54038					
89636721.	3.983854E+12	0.00002250	0.00057523	25.56578690	1448.34698
51141.37099					
93376231.	3.973457E+12	0.00002350	0.00060095	25.57234329	1499.12629
53409.85263					
97105898.	3.963506E+12	0.00002450	0.00062675	25.58173209	1548.87035
55675.94157					
1.008256E+08	3.953944E+12	0.00002550	0.00065264	25.59367329	1597.56977
57939.59847					
1.045103E+08	3.943785E+12	0.00002650	0.00067855	25.60582370	1645.11020
60000.00000					
1.074500E+08	3.907272E+12	0.00002750	0.00070288	25.55911142	1688.51738
60000.00000					
1.098930E+08	3.855894E+12	0.00002850	0.00072611	25.47759265	1728.91910
60000.00000					
1.120249E+08	3.797453E+12	0.00002950	0.00074866	25.37819105	1767.14594
60000.00000					
1.139123E+08	3.734829E+12	0.00003050	0.00077064	25.26702207	1803.51156
60000.00000					
1.158936E+08	3.679162E+12	0.00003150	0.00079380	25.20000011	1840.95386
60000.00000					
1.172451E+08	3.607541E+12	0.00003250	0.00081609	25.11050874	1876.03416
60000.00000					
1.186263E+08	3.541084E+12	0.00003350	0.00083652	24.97069377	1907.27934
60000.00000					
1.199664E+08	3.477287E+12	0.00003450	0.00085687	24.83680111	1937.66674
60000.00000					
1.211211E+08	3.411861E+12	0.00003550	0.00087665	24.69443375	1966.46191
60000.00000					
1.222723E+08	3.349925E+12	0.00003650	0.00089648	24.56100136	1994.62446
60000.00000					
1.232692E+08	3.287180E+12	0.00003750	0.00091580	24.42124110	2021.36782
60000.00000					

1.242411E+08 60000.00000	3.227042E+12	0.00003850	0.00093508	24.28767997	2047.39418
1.251709E+08 60000.00000	3.168883E+12	0.00003950	0.00095424	24.15801018	2072.60905
1.259836E+08 60000.00000	3.110706E+12	0.00004050	0.00097300	24.02463573	2096.63156
1.267934E+08 60000.00000	3.055262E+12	0.00004150	0.00099179	23.89855796	2120.08060
1.275874E+08 60000.00000	3.002057E+12	0.00004250	0.00101056	23.77797443	2142.88355
1.282582E+08 60000.00000	2.948465E+12	0.00004350	0.00102886	23.65191275	2164.47826
1.289265E+08 60000.00000	2.897224E+12	0.00004450	0.00104719	23.53228194	2185.52508
1.295921E+08 60000.00000	2.848177E+12	0.00004550	0.00106555	23.41867000	2206.02117
1.302336E+08 60000.00000	2.800722E+12	0.00004650	0.00108810	23.39999861	2230.60863
1.308647E+08 60000.00000	2.755046E+12	0.00004750	0.00110611	23.28662807	2249.40010
1.313953E+08 60000.00000	2.709181E+12	0.00004850	0.00112344	23.16379791	2266.90296
1.319238E+08 60000.00000	2.665127E+12	0.00004950	0.00114081	23.04658109	2283.91362
1.324501E+08 60000.00000	2.622774E+12	0.00005050	0.00115820	22.93464607	2300.42908
1.329237E+08 60000.00000	2.581042E+12	0.00005150	0.00117533	22.82186776	2316.16059
1.333477E+08 60000.00000	2.539956E+12	0.00005250	0.00119220	22.70860344	2331.14843
1.337698E+08 60000.00000	2.500370E+12	0.00005350	0.00120911	22.60013813	2345.66685
1.341900E+08 60000.00000	2.462201E+12	0.00005450	0.00122604	22.49621755	2359.71350
1.346081E+08 60000.00000	2.425371E+12	0.00005550	0.00124301	22.39659387	2373.28539
1.350243E+08 60000.00000	2.389810E+12	0.00005650	0.00126001	22.30104822	2386.38008
1.353761E+08 60000.00000	2.354367E+12	0.00005750	0.00127662	22.20206827	2398.67279
1.357079E+08 60000.00000	2.319793E+12	0.00005850	0.00129313	22.10487145	2410.41652
1.360379E+08 60000.00000	2.286351E+12	0.00005950	0.00130968	22.01143724	2421.70680
1.366924E+08 60000.00000	2.222641E+12	0.00006150	0.00134286	21.83513242	2442.91666
1.373395E+08 60000.00000	2.162827E+12	0.00006350	0.00137616	21.67182130	2462.28143
1.386452E+08 60000.00000	2.116721E+12	0.00006550	0.00141480	21.60000032	2482.48043
1.386452E+08	2.054003E+12	0.00006750	0.00144863	21.46117669	2497.89714

60000.00000						
1.389698E+08	1.999565E+12	0.00006950	0.00147988	21.29330474	2510.31371	
60000.00000						
1.394373E+08	1.950172E+12	0.00007150	0.00151125	21.13642126	2521.08122	
60000.00000						
1.398863E+08	1.903215E+12	0.00007350	0.00154261	20.98788375	2530.14433	
60000.00000						
1.402382E+08	1.857459E+12	0.00007550	0.00157311	20.83594412	2537.32028	
60000.00000						
1.405844E+08	1.813993E+12	0.00007750	0.00160373	20.69326454	2542.91205	
60000.00000						
1.409250E+08	1.772642E+12	0.00007950	0.00163445	20.55916589	2546.90133	
60000.00000						
1.412598E+08	1.733250E+12	0.00008150	0.00166529	20.43303663	2549.26942	
60000.00000						
1.415882E+08	1.695667E+12	0.00008350	0.00169625	20.31432635	2549.69449	
60000.00000						
1.418878E+08	1.659507E+12	0.00008550	0.00172712	20.20019943	2544.59528	
60000.00000						
1.421234E+08	1.624267E+12	0.00008750	0.00175731	20.08351690	2540.60439	
60000.00000						
1.423563E+08	1.590573E+12	0.00008950	0.00178761	19.97329742	2544.76198	
60000.00000						
1.425867E+08	1.558325E+12	0.00009150	0.00181803	19.86914188	2547.72425	
60000.00000						
1.425867E+08	1.524992E+12	0.00009350	0.00185130	19.79999882	2549.59126	
60000.00000						
1.428175E+08	1.495471E+12	0.00009550	0.00189090	19.79999882	2547.59774	
60000.00000						
1.433815E+08	1.470580E+12	0.00009750	0.00192476	19.74108464	2542.60639	
60000.00000						
1.435856E+08	1.443071E+12	0.00009950	0.00195432	19.64141268	2538.36772	
60000.00000						
1.437881E+08	1.416632E+12	0.00010150	0.00198398	19.54656869	2541.74672	
60000.00000						
1.439335E+08	1.390662E+12	0.00010350	0.00201263	19.44570905	2544.89259	
60000.00000						
1.440758E+08	1.365647E+12	0.00010550	0.00204133	19.34910446	2547.29186	
60000.00000						
1.442167E+08	1.341551E+12	0.00010750	0.00207012	19.25689012	2548.94187	
60000.00000						
1.443564E+08	1.318323E+12	0.00010950	0.00209899	19.16884071	2549.83279	
60000.00000						
1.444938E+08	1.295909E+12	0.00011150	0.00212799	19.08515579	2548.79139	
60000.00000						
1.446286E+08	1.274261E+12	0.00011350	0.00215716	19.00581926	2545.25420	
60000.00000						
1.447627E+08	1.253357E+12	0.00011550	0.00218639	18.92975932	2541.70630	
60000.00000						
1.448960E+08	1.233157E+12	0.00011750	0.00221568	18.85681182	2538.14762	
60000.00000						

1.450285E+08 60000.00000	1.213627E+12	0.00011950	0.00224503	18.78683192	2534.57791
1.451602E+08 60000.00000	1.194734E+12	0.00012150	0.00227444	18.71967477	2538.15588
1.452901E+08 60000.00000	1.176438E+12	0.00012350	0.00230389	18.65499598	2541.49675
1.453811E+08 60000.00000	1.158415E+12	0.00012550	0.00233242	18.58503860	2544.14717
1.454715E+08 60000.00000	1.140953E+12	0.00012750	0.00236101	18.51773983	2546.31112
1.455613E+08 60000.00000	1.124025E+12	0.00012950	0.00238966	18.45298058	2547.98312
1.456503E+08 60000.00000	1.107607E+12	0.00013150	0.00241837	18.39065140	2549.15766
1.457388E+08 60000.00000	1.091676E+12	0.00013350	0.00244714	18.33064932	2549.82904
1.458261E+08 60000.00000	1.076208E+12	0.00013550	0.00247600	18.27306443	2549.47453
1.459113E+08 60000.00000	1.061173E+12	0.00013750	0.00250502	18.21835059	2546.59383
1.459961E+08 60000.00000	1.046567E+12	0.00013950	0.00253408	18.16547781	2543.70647
1.461648E+08 60000.00000	1.018570E+12	0.00014350	0.00259232	18.06495291	2537.91163
1.466286E+08 60000.00000	9.940921E+11	0.00014750	0.00265500	18.00000054	2531.33751
1.476109E+08 60000.00000	9.743296E+11	0.00015150	0.00272700	18.00000054	2536.11274
1.484654E+08 60000.00000	9.547614E+11	0.00015550	0.00279900	18.00000054	2543.79153
1.484654E+08 60000.00000	9.308175E+11	0.00015950	0.00286745	17.97772425	2548.12970
1.484654E+08 60000.00000	9.080452E+11	0.00016350	0.00292420	17.88500780	2549.63012
1.484654E+08 60000.00000	8.863606E+11	0.00016750	0.00298149	17.79992920	2549.05568
1.484654E+08 60000.00000	8.656874E+11	0.00017150	0.00304051	17.72893542	2544.38560
1.484654E+08 60000.00000	8.459567E+11	0.00017550	0.00309966	17.66186839	2539.69426
1.484654E+08 60000.00000	8.271053E+11	0.00017950	0.00315893	17.59847707	2534.98131
1.484654E+08 60000.00000	8.090757E+11	0.00018350	0.00321832	17.53854257	2530.24604
1.484654E+08 60000.00000	7.918154E+11	0.00018750	0.00327785	17.48185569	2525.48807
1.484654E+08 60000.00000	7.752762E+11	0.00019150	0.00333751	17.42822653	2520.70693
1.484654E+08 60000.00000	7.594138E+11	0.00019550	0.00339772	17.37962168	2526.00396
1.484654E+08	7.441874E+11	0.00019950	0.00345924	17.33956236	2532.23530

60000.00000	1.484654E+08	7.295597E+11	0.00020350	0.00352095	17.30197495	2537.57177
60000.00000	1.484654E+08	7.154959E+11	0.00020750	0.00358285	17.26675326	2541.99117
60000.00000	1.484654E+08	7.019640E+11	0.00021150	0.00364495	17.23379427	2545.46962
60000.00000	1.484654E+08	6.889345E+11	0.00021550	0.00370536	17.19426280	2547.81157
60000.00000	1.484654E+08	6.763799E+11	0.00021950	0.00376541	17.15448672	2549.29150
60000.00000	1.484654E+08	6.642747E+11	0.00022350	0.00382563	17.11689287	2549.96051

Unfactored (Nominal) Moment Capacity at Concrete Strain of 0.003 = 148465.39377 in-kip

 Computed Values of Load Distribution and Deflection
 for Lateral Loading for Load Case Number 1

Pile-head boundary conditions are Shear and Moment (Pile-head Condition Type 1)
 Specified shear force at pile head = 62000.000 lbs
 Specified moment at pile head = 80868000.000 in-lbs
 Specified axial load at pile head = 102000.000 lbs

Depth Es*h X F/L in	Deflect. y in	Moment M lbs-in	Shear V lbs	Slope S Rad.	Total Stress lbs/in**2	Flx. Rig. EI lbs-in**2	Soil Res. p lbs/in
0.000 0.000	0.911803	8.09E+07	62000.	-0.006167	665.026	4.01E+12	0.000
26.880 999.936	0.753369	8.25E+07	60249.	-0.005619	678.562	4.00E+12	-224.202
53.760 5434.605	0.609823	8.41E+07	47953.	-0.005060	690.776	4.00E+12	-986.353
80.640 14974.	0.481448	8.49E+07	7525.620	-0.004491	697.506	4.00E+12	-2145.546
107.520 29849.	0.368390	8.42E+07	-65584.	-0.003922	691.859	4.00E+12	-3272.614
134.400 65683.	0.270503	8.11E+07	-1.68E+05	-0.003365	667.186	4.01E+12	-5287.948
161.280 93392.	0.187182	7.46E+07	-3.15E+05	-0.002842	614.600	4.03E+12	-5202.761

188.160	0.117179	6.44E+07	-4.41E+05	-0.002379	531.938	4.07E+12	-4044.464
1.16E+05							
215.040	0.057880	5.13E+07	-5.28E+05	-0.002119	425.865	2.24E+13	-2386.708
1.39E+05							
241.920	0.001680	3.65E+07	-5.63E+05	-0.002066	306.172	2.26E+13	-80.547
1.61E+05							
268.800	-0.053352	2.17E+07	-5.26E+05	-0.002032	186.338	2.27E+13	2917.028
1.84E+05							
295.680	-0.107688	9.00E+06	-4.00E+05	-0.002014	83.880	2.28E+13	6611.532
2.06E+05							
322.560	-0.161727	1.14E+06	-1.64E+05	-0.002008	20.388	2.28E+13	11016.
2.29E+05							

Please note that because this analysis makes computations of ultimate moment capacity and pile response using nonlinear bending stiffness that the above values of total stress due to combined axial stress and bending may not be representative of actual conditions.

Output Verification:

Computed forces and moments are within specified convergence limits.

Output Summary for Load Case No. 1:

Pile-head deflection	=	0.91180344 in
Computed slope at pile head	=	-0.00616714
Maximum bending moment	=	84899678. lbs-in
Maximum shear force	=	-562925.13613 lbs
Depth of maximum bending moment	=	84.00000000 in
Depth of maximum shear force	=	241.92000 in
Number of iterations	=	45
Number of zero deflection points	=	1

 Computed Values of Load Distribution and Deflection
 for Lateral Loading for Load Case Number 2

Pile-head boundary conditions are Shear and Moment (Pile-head Condition Type 1)
 Specified shear force at pile head = 12000.000 lbs
 Specified moment at pile head = 15480000.000 in-lbs
 Specified axial load at pile head = 85140.000 lbs

Depth	Deflect.	Moment	Shear	Slope	Total	Flx. Rig.	Soil Res.
Es*h					Stress	EI	p
X	y	M	V	S			

F/L	in	in	lbs-in	lbs	Rad.	lbs/in**2	lbs-in**2	lbs/in
0.000 0.000	0.110538		1.55E+07	12000.	-0.000538	134.464	2.28E+13	0.000
26.880 999.936	0.096334		1.58E+07	11778.	-0.000519	137.073	2.28E+13	-28.669
53.760 9842.069	0.082632		1.61E+07	9616.377	-0.000500	139.502	2.28E+13	-242.044
80.640 25793.	0.069440		1.63E+07	-13.640	-0.000481	140.716	2.28E+13	-533.048
107.520 39340.	0.056763		1.60E+07	-16325.	-0.000462	139.015	2.28E+13	-664.606
134.400 70813.	0.044594		1.54E+07	-35292.	-0.000443	133.476	2.28E+13	-939.838
161.280 93392.	0.032911		1.41E+07	-60539.	-0.000426	123.058	2.28E+13	-914.781
188.160 1.16E+05	0.021673		1.21E+07	-83192.	-0.000411	107.362	2.28E+13	-748.045
215.040 1.39E+05	0.010817		9.65E+06	-99533.	-0.000398	87.360	2.28E+13	-446.044
241.920 1.61E+05	0.000266		6.87E+06	-1.06E+05	-0.000388	64.815	2.28E+13	-12.754
268.800 1.84E+05	-0.010068		4.08E+06	-99046.	-0.000382	42.257	2.28E+13	550.461
295.680 2.06E+05	-0.020272		1.69E+06	-75212.	-0.000378	22.979	2.28E+13	1244.578
322.560 2.29E+05	-0.030419		2.15E+05	-30934.	-0.000377	11.035	2.28E+13	2072.024

Please note that because this analysis makes computations of ultimate moment capacity and pile response using nonlinear bending stiffness that the above values of total stress due to combined axial stress and bending may not be representative of actual conditions.

Output Verification:

Computed forces and moments are within specified convergence limits.

Output Summary for Load Case No. 2:

Pile-head deflection	=	0.11053824 in
Computed slope at pile head	=	-0.00053762
Maximum bending moment	=	16253252. lbs-in
Maximum shear force	=	-105986.21044 lbs
Depth of maximum bending moment	=	80.64000000 in
Depth of maximum shear force	=	241.92000 in
Number of iterations	=	5

Number of zero deflection points = 1

 Summary of Pile Response(s)

Definition of Symbols for Pile-Head Loading Conditions:

Type 1 = Shear and Moment, y = pile-head displacment in
 Type 2 = Shear and Slope, M = Pile-head Moment lbs-in
 Type 3 = Shear and Rot. Stiffness, V = Pile-head Shear Force lbs
 Type 4 = Deflection and Moment, S = Pile-head Slope, radians
 Type 5 = Deflection and Slope, R = Rot. Stiffness of Pile-head in-lbs/rad

Load Type	Pile-Head Condition 1	Pile-Head Condition 2	Axial Load lbs	Pile-Head Deflection in	Maximum Moment in-lbs	Maximum Shear lbs
1	V= 62000.	M= 8.09E+07	102000.	0.9118034	8.4900E+07	-562925.
1	V= 12000.	M= 1.55E+07	85140.0000	0.1105382	1.6253E+07	-105986.

 Computed Pile-head Stiffness Matrix Members
 K22, K23, K32, K33 for Superstructure

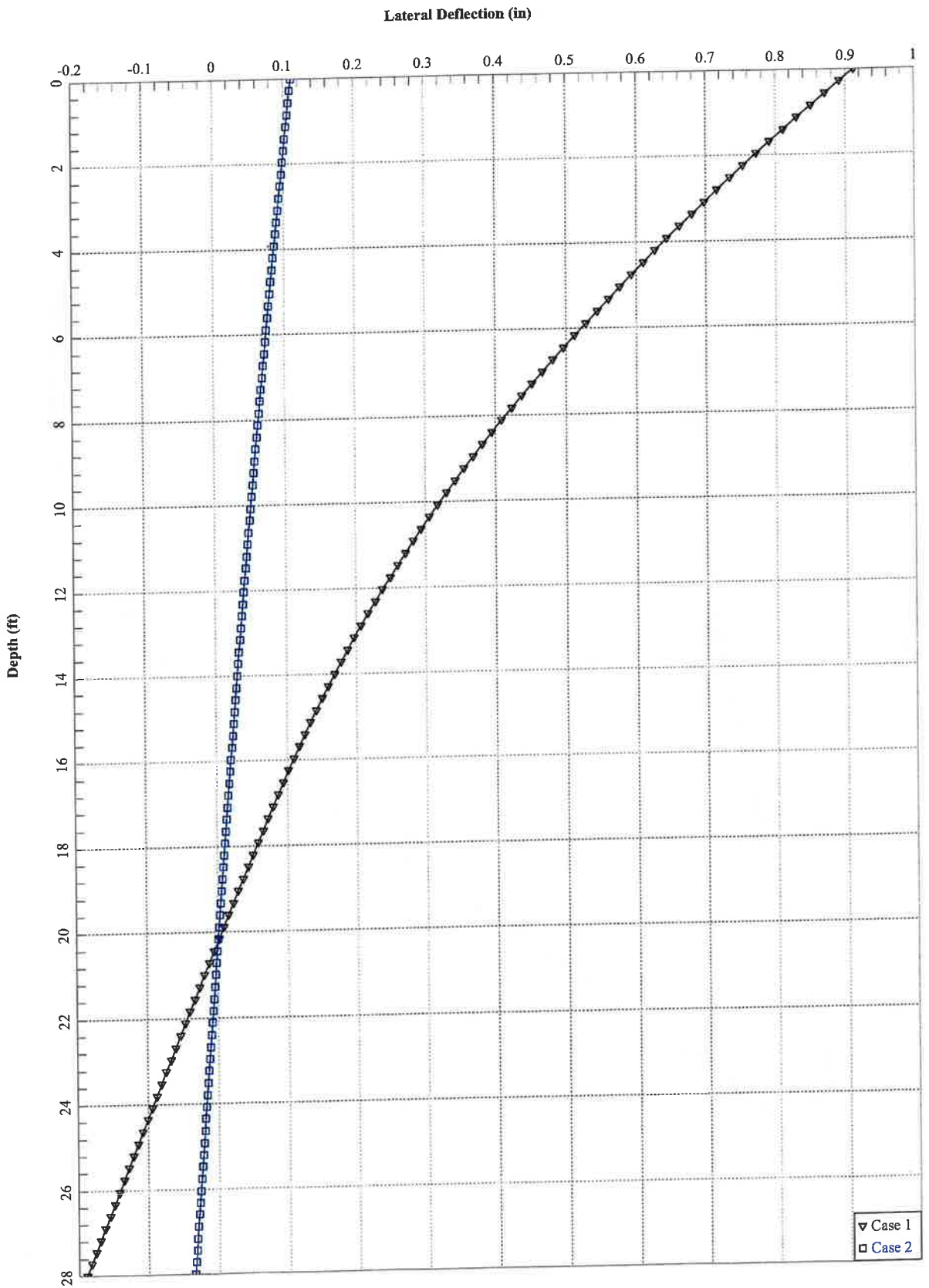
Top y in	Shear React. lbs	Mom. React. in-lbs	K22 lbs/in	K32 in-lbs/in
0.00160192	6200.00009	1239496.	3870353.	7.737557E+08
0.00482226	18663.85973	3731253.	3870353.	7.737557E+08
0.00764311	29581.51779	5913896.	3870353.	7.737557E+08
0.00964453	37327.71946	7462506.	3870353.	7.737557E+08
0.01119695	43336.14027	8663702.	3870353.	7.737557E+08
0.01246537	48245.37752	9645150.	3870353.	7.737557E+08
0.01353780	52396.07848	10474952.	3870353.	7.737557E+08
0.01446679	55991.57919	11193760.	3870353.	7.737557E+08
0.01528638	59163.03559	11827765.	3870311.	7.737455E+08
0.01601996	62000.00000	12394827.	3870172.	7.737115E+08

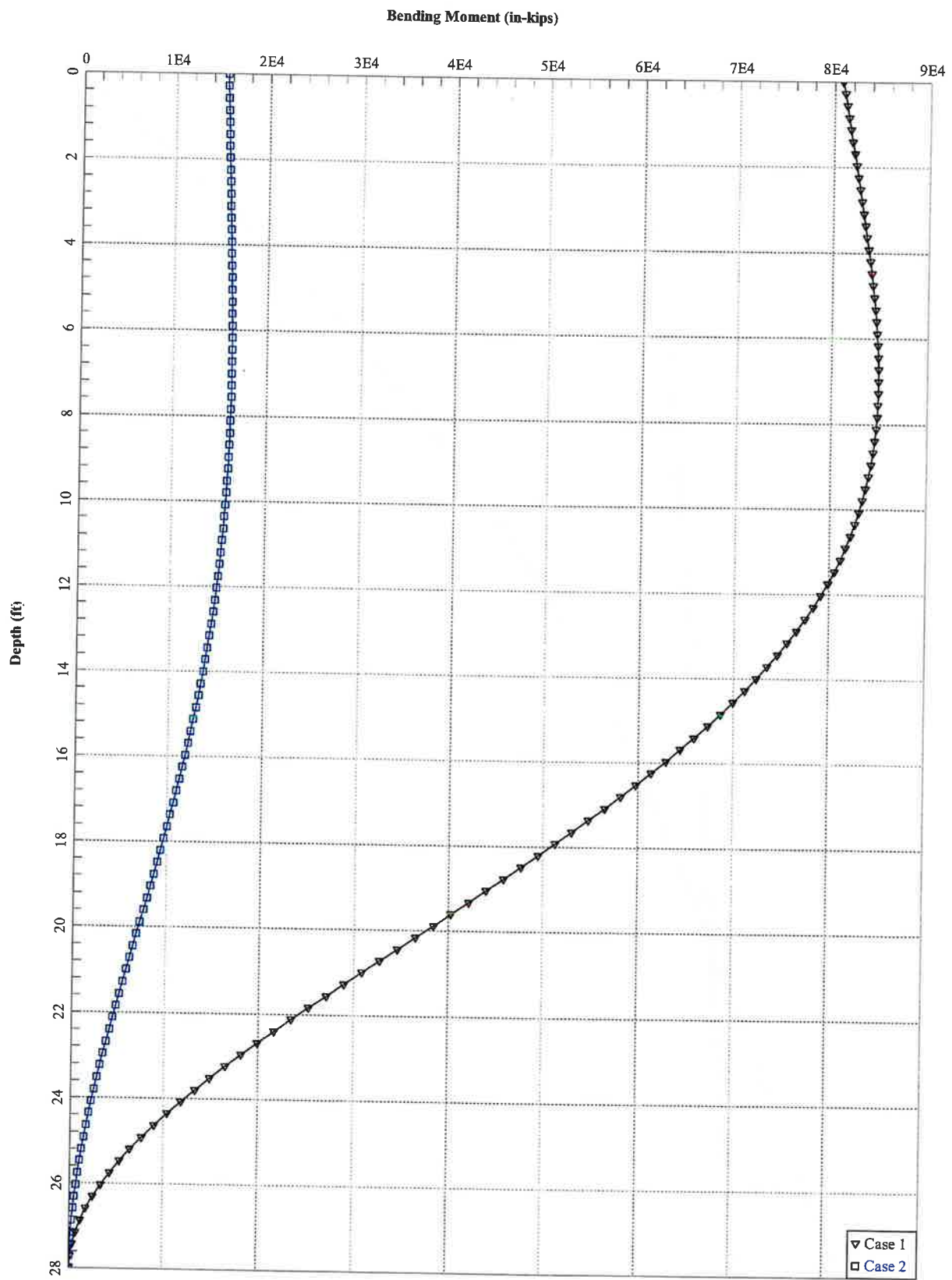
Top Rota. rad	Shear React. lbs	Mom. React. in-lbs	K23 lbs/rad	K33 in-lbs/rad
0.00004302	33289.93277	8086800.	7.737557E+08	1.879610E+11
0.00012985	100224.13615	24343694.	7.718602E+08	1.874791E+11
0.00020647	158882.72359	38583842.	7.695211E+08	1.868742E+11

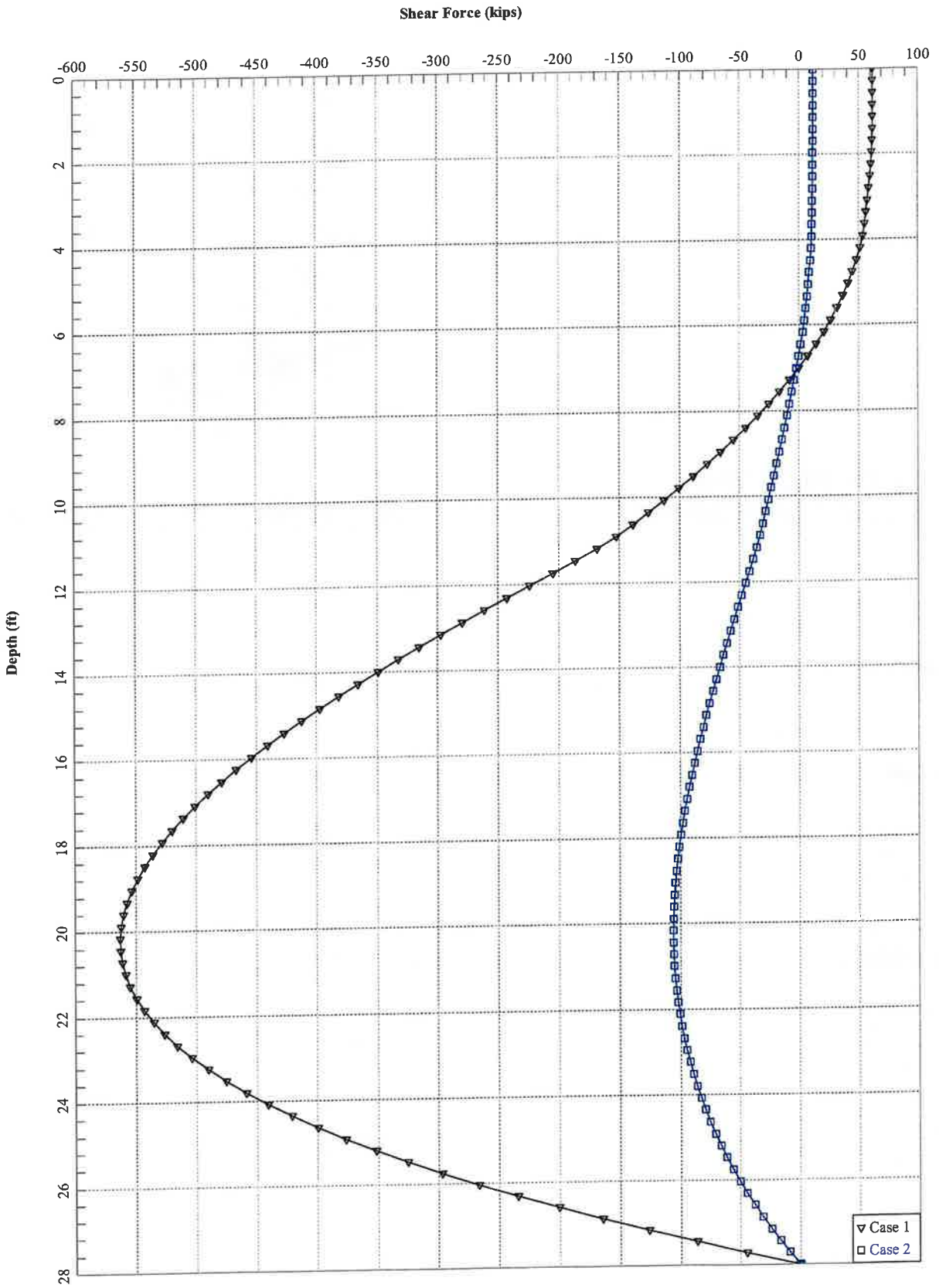
0.00026116	200517.72240	48687387.	7.678076E+08	1.864301E+11
0.00030376	232821.70112	56524306.	7.664624E+08	1.860813E+11
0.00035682	259326.45438	62927535.	7.267622E+08	1.763544E+11
0.00078573	286880.11095	68341388.	3.651130E+08	8.697824E+10
0.00097050	311039.02458	73031081.	3.204930E+08	7.525084E+10
0.00111804	332892.97244	77167683.	2.977480E+08	6.902076E+10
0.00123552	352371.36506	80868000.	2.852010E+08	6.545264E+10

K22 = abs(Shear Reaction/Top y)
K23 = abs(Shear Reaction/Top Rotation)
K32 = abs(Moment Reaction/Top y)
K33 = abs(Moment Reaction/Top Rotation)

The analysis ended normally.







KA-6030

TWIN BANDSTOP 900MHZ INTERFERENCE MITIGATION FILTER

The KA-6030 is ideal for co-located 700, 850 and 900 networks. Utilising a 2.6MHz guardband the KA-6030 provides rejection of the 900 UL band while passing 700/850 UL and DL bands. Capable of being used in an outdoor environment the KA-6030 contains two identical bandstop filters, suitable for 2x2 MIMO configuration, offering excellent insertion loss, group delay and rejection.

FEATURES

- Passes full 700 and 850 bands
- Low insertion loss
- Rejection of 900MHz uplink
- DC/AISG pass
- Twin unit
- Dual twin mounting available



TECHNICAL SPECIFICATIONS

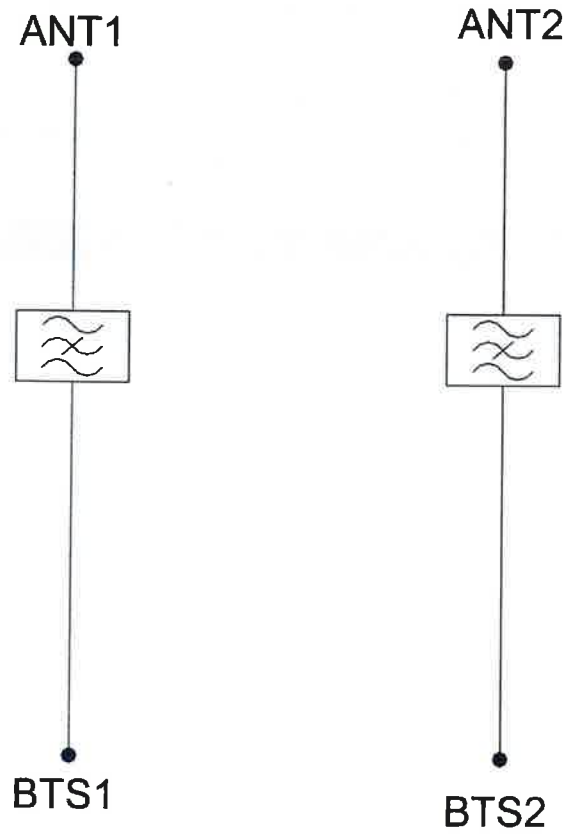
BAND NAME	700 PATH / 850 UPLINK PATH	850 DOWNLINK PATH
Passband	698 - 849MHz	869 - 891.5MHz
Insertion loss	0.1dB typical / 0.3dB maximum	0.5dB typical, 1.45dB maximum
Return loss	24dB typical, 18dB minimum	
Maximum input power (Per Port)	100W average	200W average and 66W per 5MHz
Rejection	53dB minimum @ 894.1 - 896.5MHz	
ELECTRICAL		
Impedance	50Ohms	
Intermodulation products	-160dBc maximum in UL Band (assuming 20MHz Signal), with 2 x 43dBm carriers -153dBc maximum with 2 x 43dBm	
DC / AISG		
Passband	0 - 13MHz	
Insertion loss	0.3dB maximum	
Return loss	15dB minimum	
Input voltage range	± 33V	
DC current rating	2A continuous, 4A peak	
Compliance	3GPP TS 25.461	
ENVIRONMENTAL		
For further details of environmental compliance, please contact Kaelus.		
Temperature range	-20°C to +60°C -4°F to +140°F	
Ingress protection	IP67	
Altitude	2600m 8530ft	
Lightning protection	RF port: ±5kA maximum (8/20us), IEC 61000-4-5 – Unit must be terminated with some lightning protection circuits.	
MTBF	>1,000,000 hours	
Compliance	ETSI EN 300 019 class 4,1H, RoHS, NEBS GR-487-CORE	

MECHANICAL	
Dimensions H x D x W	269 x 277 x 80mm 10.60 x 10.90 x 3.15in (Excluding brackets and connectors)
Weight	8,0 kg 17.6 lbs (no bracket)
Finish	Powder coated, light grey (RAL7035)
Connectors	RF: 4.3-10 (F) x 4
Mounting	Optional pole/wall bracket supplied with two metal clamps 45-178mm diameter poles or custom bracket. See ordering information.

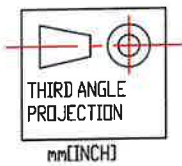
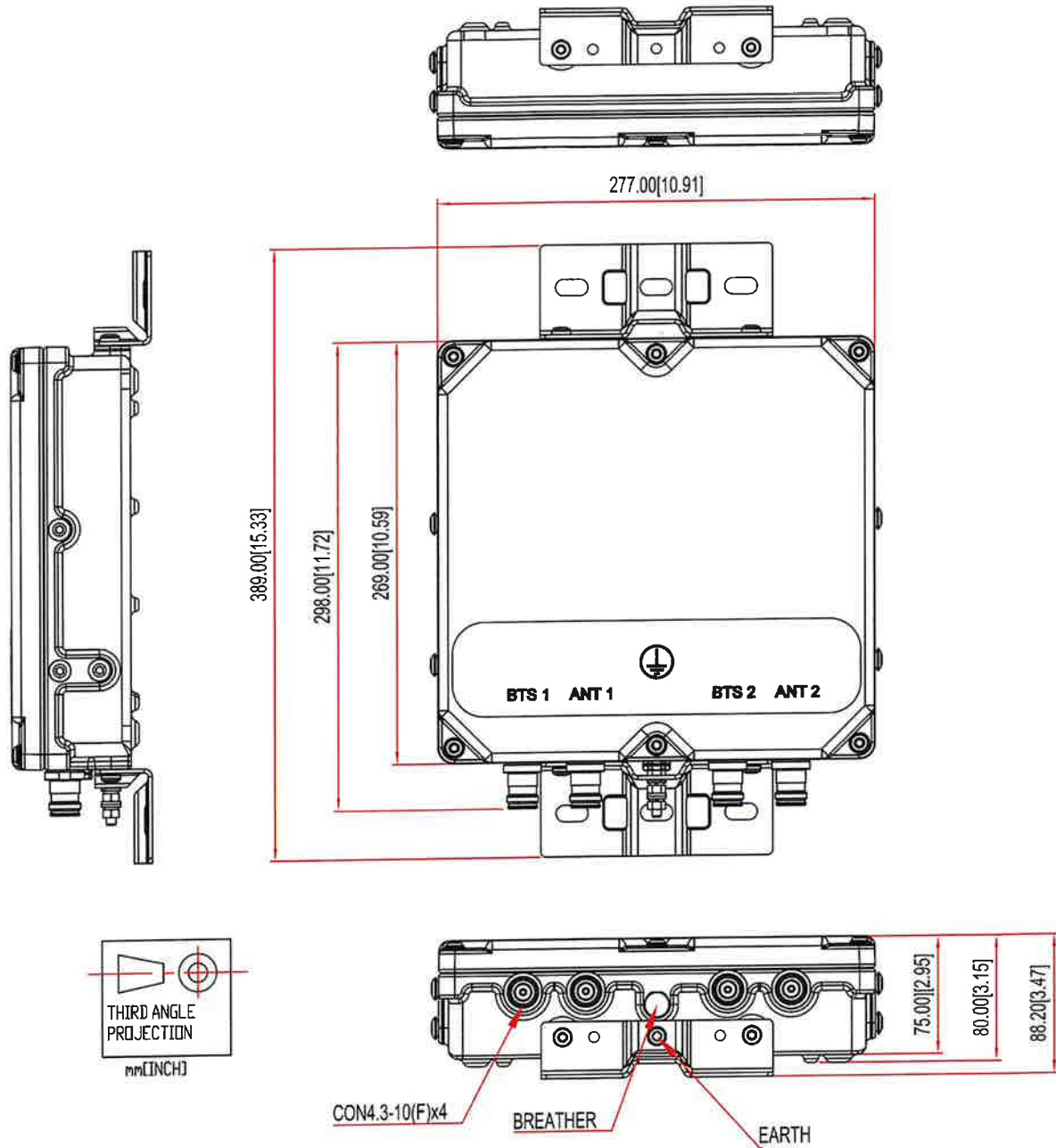
ORDERING INFORMATION

PART NUMBER	CONFIGURATION	OPTIONAL FEATURES	CONNECTORS
KA-6030-2032	TWIN, 2 in / 2 out	DC/AISG PASS	4.3-10 (F)

ELECTRICAL BLOCK DIAGRAM



MECHANICAL BLOCK DIAGRAM





Colliers Engineering & Design CT, PC
1055 Washington Boulevard
Stamford, CT 06901
203.324.0800
peter.albano@collierseng.com

Post-Modification Antenna Mount Analysis Report and PMI Requirements

Mount Fix

SMART Tool Project #: 10209799
Colliers Engineering & Design CT, PC Project #: 23777246

September 19, 2023

Site Information

Site ID: 5000104933-VZW / Greenwich CT
Site Name: Greenwich CT
Carrier Name: Verizon Wireless
Address: 5 Perryridge Rd Greenwich Hospital
Greenwich, Connecticut 06830
Fairfield County
Latitude: 41.033936°
Longitude: -73.630832°

Structure Information

Tower Type: 163-Ft Monopole
Mount Type: 18.00-Ft Platform

FUZE ID # 16992096

Analysis Results

Platform: 97.6% Pass w/ Modifications*

*Antennas and equipment to be installed in compliance with PMI Requirements of this mount analysis.

***Contractor PMI Requirements:

Included at the end of this MA report
Available & Submitted via portal at <https://pmi.vzwsmart.com>
For additional questions and support, please reach out to:
pmisupport@colliersengineering.com

Report Prepared By: Cody Sherman



Executive Summary:

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

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

Sources of Information:

Document Type	Remarks
<i>Radio Frequency Data Sheet (RFDS)</i>	<i>Verizon RFDS, Site ID: 323976, dated February 05, 2021</i>
<i>Final Loading Configuration</i>	<i>Filter Add Scope Provided by Verizon Wireless</i>
<i>Mount Modification Drawing</i>	<i>Colliers Engineering & Design CT, PC Project #: 23777246, Dated September 19, 2023</i>
<i>Post Modification Inspection Report</i>	<i>Colliers Engineering & Design, Project #: 20777290 dated June 16, 2023</i>

Analysis Criteria:

Codes and Standards:	ANSI/TIA-222-H 2022 Connecticut State Building Code (CSBC), Effective October 1, 2022
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), V_{ULT} : 120 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.00 in Risk Category: II Exposure Category: B Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, K_e : 0.995
Seismic Parameters:	S_s : 0.274 g S_1 : 0.059 g
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Load, L_v : 250 lbs. Maintenance Load, L_m : 500 lbs.
Analysis Software:	RISA-3D (V17)

Final Loading Configuration:

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
123.00	124.00	6	Andrew	DB844H65E-XY	Retained
		6	Quintel	QS6656-5	
		3	Samsung	XXDWMM-12.5-65	
		3	Samsung	B5/B13 RRH-BR04C	
		3	Samsung	B2/B66A RRH-BR04	
		3	Samsung	VZS01	
		2	Raycap	RRFDC-3315-PF-48	
		6	KAelus	KA-6030	Added

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

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

Standard Conditions:

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

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped in accordance with the NSTD-446 Standard, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.

6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Colliers Engineering & Design CT, PC is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.
7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
 - o Channel, Solid Round, Angle, Plate ASTM A36 (Gr. 36)
 - o HSS (Rectangular) ASTM 500 (Gr. B-46)
 - o Pipe ASTM A53 (Gr. B-35)
 - o Threaded Rod F1554 (Gr. 36)
 - o Bolts ASTM A325
8. Any mount modifications listed under Sources of Information are assumed to have been installed per the design specifications.

Discrepancies between in-field conditions and the assumptions listed above may render this analysis invalid unless explicitly approved by Colliers Engineering & Design CT, PC.

Analysis Results:

Component	Utilization %	Pass/Fail
Face Horizontal	31.0 %	Pass
Standoff Horizontal	46.0 %	Pass
Antenna Pipe	55.0 %	Pass
Grating Support	10.0 %	Pass
Proposed Kicker	12.0 %	Pass
Mount Connection	97.6 %	Pass

Structure Rating – (Controlling Utilization of all Components)	97.6%
---	--------------

Mount Steel (EPA)a per ANSI/TIA-222-H Section 2.6.11.2:

Ice Thickness (In)	Mount Pipes Excluded		Mount Pipes Included	
	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)	Front (EPA)a (Sq. Ft.)	Side (EPA)a (Sq. Ft.)
0	26.9	26.9	45.2	45.2
0.5	34.0	34.0	60.0	60.0
1	40.4	40.4	74.0	74.0

Notes:

- (EPA)a values listed above may be used in the absence of more precise information
- (EPA)a values in the table above include 3 sector(s).
- Ka factors included in (EPA)a calculations

Requirements:

The existing mounts will be **SUFFICIENT** for the final loading configuration (attachment 2) after the modifications detailed in attachment 3 are successfully completed.

N/A

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

Attachments:

1. **Contractor Required PMI Report Deliverables**
2. Antenna Placement Diagrams
3. Mount Modification Drawings
4. Mount Photos
5. Mount Mapping Report (for reference only)
6. Analysis Calculations

Mount Desktop – Post Modification Inspection (PMI) Report Requirements

Documents & Photos Required from Contractor – Mount Modification

Electronic pdf version of this can be downloaded at <https://pmi.vzwsmart.com>
For additional questions and support, please reach out to pmisupport@colliersengineering.com

MDG #: 5000104933

SMART Project #: 10209799

Fuze Project ID: 16992096

Purpose – to upload the proper documentation to the SMART Tool in order to allow the SMART Tool engineering vendor to complete the required Mount Desktop review of the Post Modification Inspection Report.

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

Base Requirements:

- If installation of the modification will cause damage to the structure, the climbing facility, or safety climb if present or any installed system, SMART Tool vendor to be notified prior to install. Any special photos outside of the standard requirements will be indicated on the drawings.
- Provide “as built drawings” showing contractor’s name, preparer’s signature, and date. Any deviations from the drawings (proposed modification) shall be shown. NOTE: If loading is different than what is conveyed in the post-modification passing mount analysis (MA) contact the SMART Tool vendor immediately.
- Each photo shall be time and date stamped.
- Photos should be high resolution.
- Contractor shall ensure that the safety climb wire rope is not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope. If there is conflict, contact the SMART Tool engineer for recommendations.
- The PMI can be accessed at the following portal: <https://pmi.vzwsmart.com>

Photo Requirements:

- Photos taken at ground level
 - Photo of Gate Signs showing the tower owner, site name, and number.
 - Overall tower structure after installation of the modifications.
 - Photos of the mount after installation of the modifications; if the mounts are at different rad elevations, pictures must be provided for all elevations that the modifications were installed
- Photos taken at Mount Elevation
 - Photos showing the safety climb wire rope above and below the mount prior to modification.
 - Photos showing the climbing facility and safety climb if present.

- Photos showing each individual sector after installation of modifications. Each entire sector must be in one photo to show the interconnection of members.
 - These photos shall also certify that the placement and geometry of the equipment on the mount is as depicted in the antenna placement diagram in this form.
- Photos that show the model number of each antenna and piece of equipment installed per sector.
- Photos of each installed modification per the modification drawings; pictures shall also include connection hardware (U-bolts, bolts, nuts, all-threaded rods, etc.)
- Photos showing the distances (relative distance between collars) of the installed modifications from the appropriate reference locations shown in the modification drawings.
- Photos showing the installed modifications onto the tower (i.e. ring/collar mounts, tie-backs, V-bracing kits, etc.); if the existing mount elevation needs to be changed according to the modification drawings, an elevation measurement shall be provided before the elevation change.

Material Certification:

- Materials utilized must be as per specification on the drawings or the equivalent as validated by the SMART Tool vendor.
 - If the materials are as specified on the drawings
 - The contractor shall provide the packing list, or the materials certifications for the materials utilized to perform the mount modification
 - Commscope, Metrosite, Perfect Vision, Sabre, and Site Pro have all agreed to support Verizon vendors with the necessary material certifications
 - If seeking permission to use an equivalent
 - It is required that the SMART Tool engineering vendor approval of such is included in the contractor submission package. There may be an additional charge for approval if the equivalent submission doesn't meet specifications as prescribed in the drawings.

All hardware has been properly installed, and the existing hardware was inspected.

The material utilized was as specified on the SMART Tool engineering vendor Mount Modification Drawings and included in the material certification folder is a packing list or invoice for these materials.

OR

The material utilized was approved by a SMART Tool engineering vendor as an "equivalent" and this approval is included as part of the contractor submission.

Antenna & Equipment Placement and Geometry Confirmation:

The contractor certifies that the photos support and the equipment on the mount is as depicted on the sketch and table included in this form and with the mount analysis provided.

OR

The contractor notes that the equipment on the mount is not in accordance with the sketch and has noted the differences below and provided photo documentation of any alterations.

Comments:

Was the mount modification completed in conjunction with the equipment change / installation?

Yes No

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

Issue:

N/A

Response:

Special Instruction Confirmation:

The contractor has read and acknowledges the above special instructions.

Comments:

Contractor certifies that the climbing facility / safety climb was not damaged prior to starting work:

Yes No

Contractor certifies no new damage created during the current installation:

Yes No

Contractor to certify the condition of the safety climb and verify no damage when leaving the site:

Safety Climb in Good Condition

Safety Climb Damaged

Comments:

--

Certifying Individual:

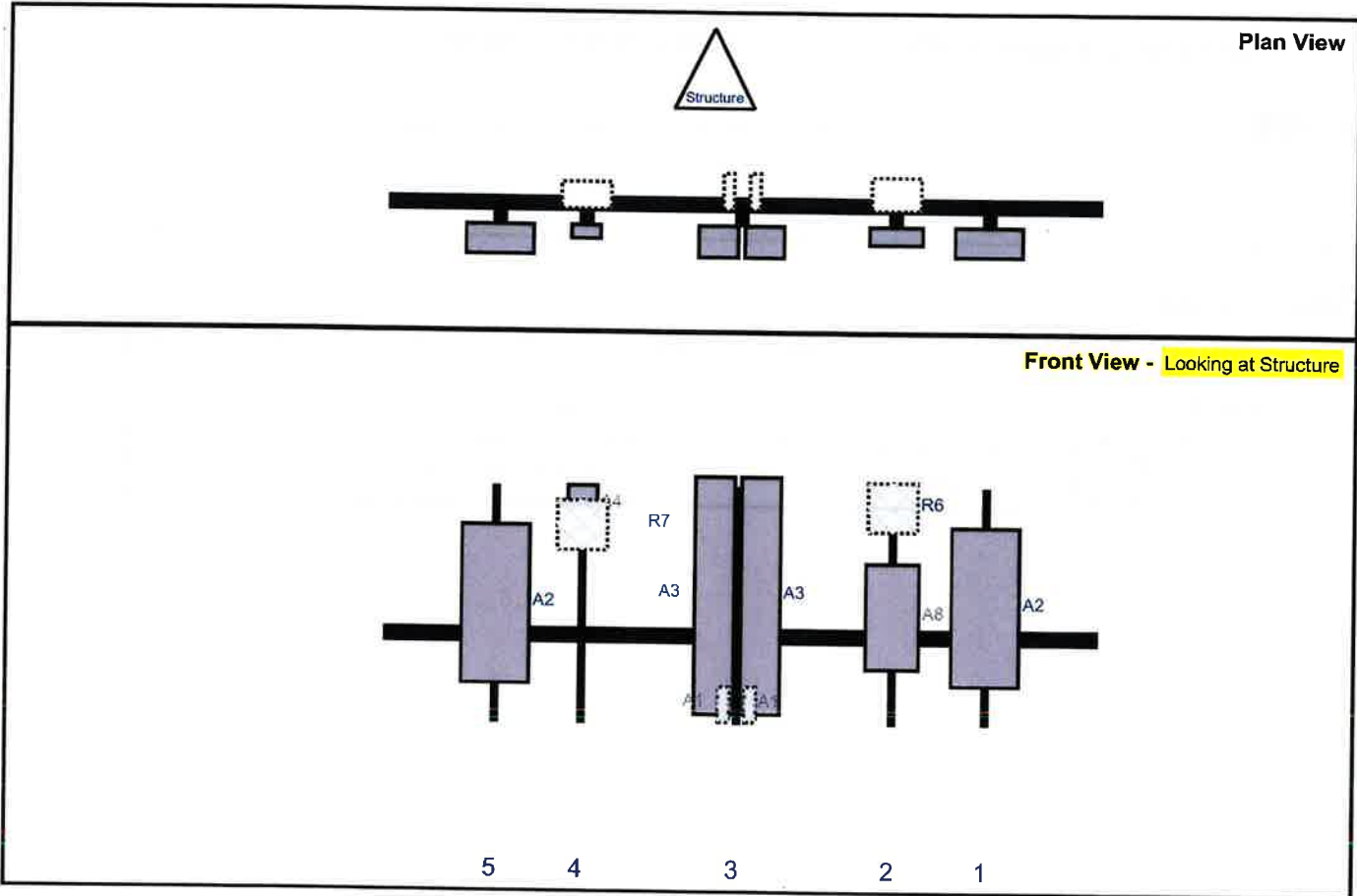
Company:

Employee Name:

Contact Phone:

Email:

Date:



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	DB844H65E-XY	48	20.5	182	1	a	Front	36	0	Retained	01/28/2022
A8	VZS01	32.1	16.1	154	2	b	Front	39	0	Retained	01/28/2022
R6	B5/B13 RRH-BR04C	15	15	154	2	a	Behind	6	0	Retained	01/28/2022
A3	QS6656-5	72	12	107	3	a	Front	33	7	Retained	01/28/2022
A3	QS6656-5	72	12	107	3	b	Front	33	-7	Retained	01/28/2022
A1	KA-6030	10.6	3.2	107	3	a	Behind	66	4	Added	
A1	KA-6030	10.6	3.2	107	3	b	Behind	66	-4	Added	
A4	XXDWMM-12.5-65	12.3	8.7	60	4	a	Front	6	0	Retained	01/28/2022
R7	B2/B66A RRH-BR04	15	15	60	4	a	Behind	12	0	Retained	01/28/2022
A2	DB844H65E-XY	48	20.5	34	5	a	Front	36	0	Retained	01/28/2022
M44	RRFDC-3315-PF-48	19.1	15.7		Member					Retained	01/28/2022
M46	RRFDC-3315-PF-48	19.1	15.7		Member					Retained	01/28/2022

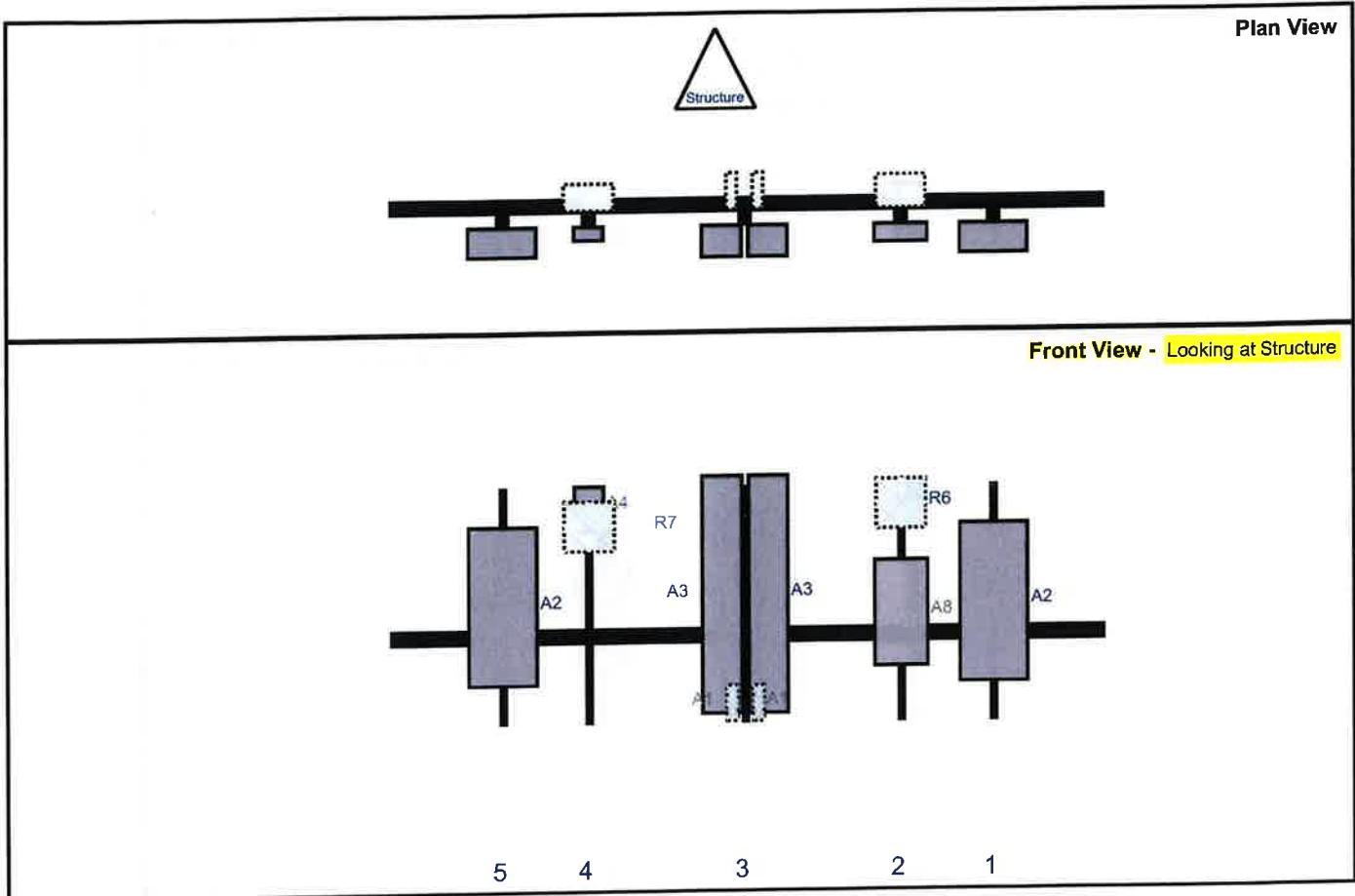
Sector: **B**
 Structure Type: Monopole
 Mount Elev: 123.00

10209799

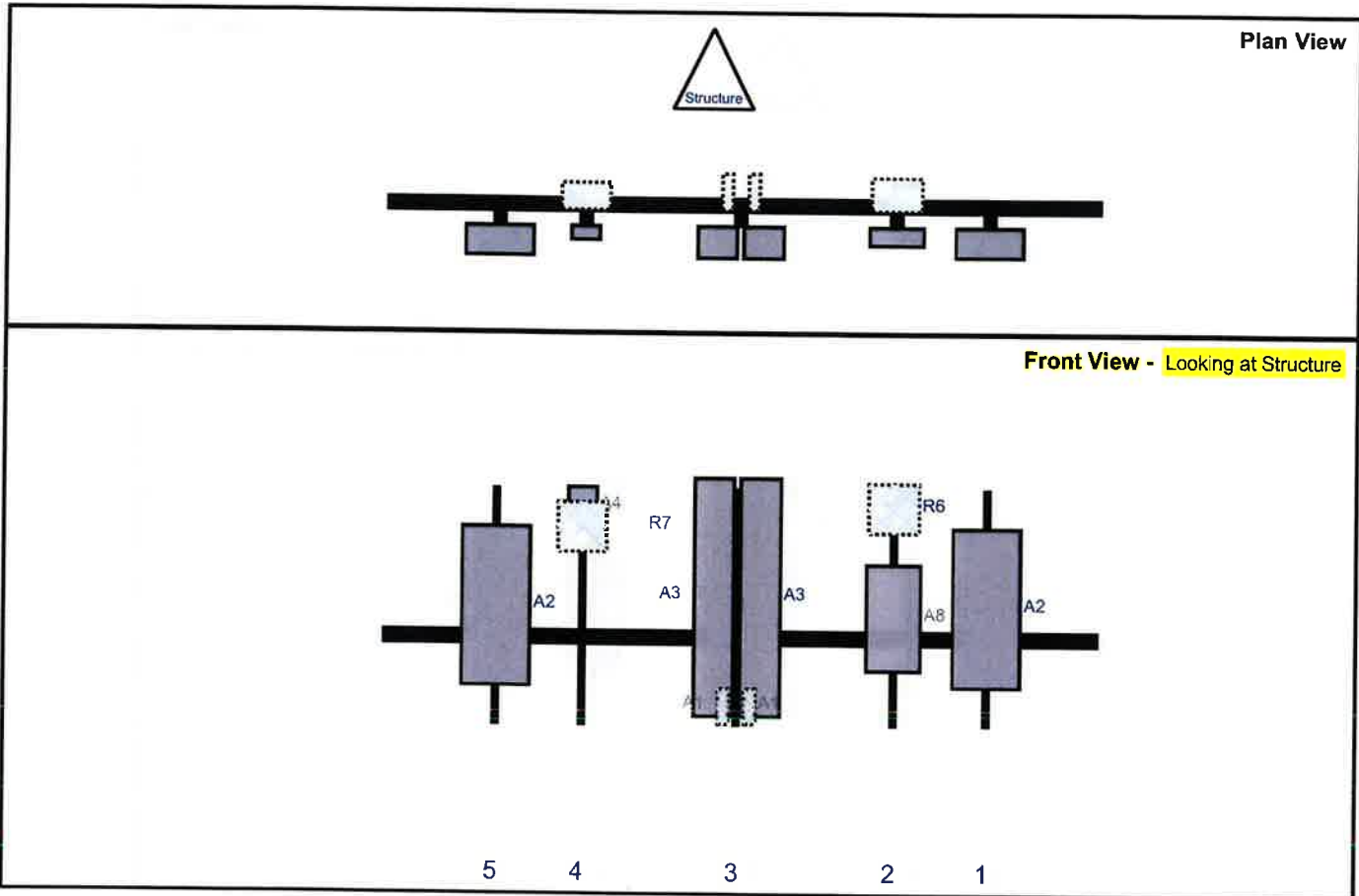
9/18/2023



Page: 2



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	DB844H65E-XY	48	20.5	182	1	a	Front	36	0	Retained	01/28/2022
A8	VZS01	32.1	16.1	154	2	a	Front	39	0	Retained	01/28/2022
R6	B5/B13 RRH-BR04C	15	15	154	2	a	Behind	6	0	Retained	01/28/2022
A3	QS6656-5	72	12	107	3	a	Front	33	7	Retained	01/28/2022
A3	QS6656-5	72	12	107	3	b	Front	33	-7	Retained	01/28/2022
A1	KA-6030	10.6	3.2	107	3	a	Behind	66	4	Added	
A1	KA-6030	10.6	3.2	107	3	b	Behind	66	-4	Added	
A4	XXDWMM-12.5-65	12.3	8.7	60	4	a	Front	6	0	Retained	01/28/2022
R7	B2/B66A RRH-BR04	15	15	60	4	a	Behind	12	0	Retained	01/28/2022
A2	DB844H65E-XY	48	20.5	34	5	a	Front	36	0	Retained	01/28/2022



Ref#	Model	Height (in)	Width (in)	H Dist Fm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Fm T.	Ant H Off	Status	Validation
A2	DB844H65E-XY	48	20.5	182	1	a	Front	36	0	Retained	01/28/2022
A8	VZS01	32.1	16.1	154	2	a	Front	39	0	Retained	01/28/2022
R6	B5/B13 RRH-BR04C	15	15	154	2	a	Behind	6	0	Retained	01/28/2022
A3	QS6656-5	72	12	107	3	a	Front	33	7	Retained	01/28/2022
A3	QS6656-5	72	12	107	3	b	Front	33	-7	Retained	01/28/2022
A1	KA-6030	10.6	3.2	107	3	a	Behind	66	4	Added	
A1	KA-6030	10.6	3.2	107	3	b	Behind	66	-4	Added	
A4	XXDWMM-12.5-65	12.3	8.7	60	4	a	Front	6	0	Retained	01/28/2022
R7	B2/B66A RRH-BR04	15	15	60	4	a	Behind	12	0	Retained	01/28/2022
A2	DB844H65E-XY	48	20.5	34	5	a	Front	36	0	Retained	01/28/2022



MOUNT MODIFICATION DRAWINGS
EXISTING 18.00' PLATFORM

TOWER OWNER: GREENWICH HOSPITAL ASSOCIATION
TOWER OWNER SITE NUMBER: UNKNOWN

CARRIER SITE NAME: GREENWICH CT
CARRIER SITE NUMBER: 5000104933
FUZE ID: 16992096

5 PERRYRIDGE RD GREENWICH HOSPITAL
GREENWICH, CT 06830
FAIRFIELD COUNTY

LATITUDE: 41.03393600° N
LONGITUDE: 73.63083200° W



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Tel: 203.261.8888 Fax: 203.261.8889



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DATE	DESCRIPTION	BY	CHK

COURT NO. 19-CV-00001-00001-00001

THE STATE OF CONNECTICUT
DEPARTMENT OF CONSTRUCTION
OFFICE OF THE REGISTERED PROFESSIONAL ENGINEERS
FAIRFIELD COUNTY

SITE NAME:

GREENWICH CT
5000104933
5 PERRYRIDGE RD
GREENWICH HOSPITAL
GREENWICH, CT 06830
FAIRFIELD COUNTY



1000 Main Street, Suite 200
Wallingford, CT 06495
Tel: 203.261.8888 Fax: 203.261.8889

TITLE SHEET

ST-1

SHEET INDEX

SHEET	DESCRIPTION
ST-1	TITLE SHEET
SC-1	BILL OF MATERIALS
SG-1	GENERAL NOTE
SCF-1	CLIMBING FACILITY DETAIL
SM-1	MODIFICATION DETAILS
SM-2	MOUNT PHOTOS
	SPECIFICATION SHEETS

PROJECT INFORMATION

APPLICANT/LESSEE
COMPANY: VERIZON WIRELESS
CLIENT REPRESENTATIVE
COMPANY: VERIZON WIRELESS
PROJECT MANAGER
COLLIERS ENGINEERING & DESIGN
PETER ALBANO
PHONE: 854.777.9412
E-MAIL: PETER.ALBANO@COLLIERSENG.COM

CONTRACTOR PMI REQUIREMENTS
PMI LOCATION: HTTPS://PMI.VZW9SMART.COM
SMART TOOL PROJECT #: 1006979
ANALYSIS DATE: 9/19/2023
PMI REQUIREMENTS EMBEDDED WITHIN MOUNT MODIFICATION REPORT

DESIGN CRITERIA

WIND LOADS
BASIC WIND SPEED (3 SECOND GUST), V = 120 MPH
EXPOSURE CATEGORY B
TOPOGRAPHIC CATEGORY: 1 N/A
TOPOGRAPHIC CORRECTION: N/A
MEAN SEA LEVEL ELEVATION (MSL) = 142.08'
ICE LOADS
ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
ICE THICKNESS = 1.00 IN
SEISMIC LOADS
SEISMIC DESIGN CATEGORY B
SHORT TERM HCBR GROUND MOTION, S_s = 274
LONG TERM HCBR GROUND MOTION, S_l = 059

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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION.

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
	VZWSMART					
6			PROPOSED 84" LONG, L302316			
12			12" LONG, 5/8" DIA, F1554-36 HDG THREADED ROD		26	156
6			2 1/2" LONG, 5/8" DIA, A325N BOLT			
			5/8" HDG USR PLAT WASHER			
			5/8" HDG LOCK WASHER			
			5/8" HDG HEX NUT			

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
6			PROPOSED 84" LONG, L302316	GALVANIZED. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET SGH-1.		
12			12" LONG, 5/8" DIA, F1554-36 HDG THREADED ROD	GALVANIZED.	26	156
6			2 1/2" LONG, 5/8" DIA, A325N BOLT	GALVANIZED.		
			5/8" HDG USR PLAT WASHER	GALVANIZED.		
			5/8" HDG LOCK WASHER	GALVANIZED.		
			5/8" HDG HEX NUT	GALVANIZED.		

SECTION 3 - REQUIRED SAFETY CLIMB PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
2	PERFECT VISION	H42-0001-06	STANDOFF CLAMP BRACKET	OR FOR APPROVED EQUIVALENT		
2	PERFECT VISION	PA-CMX-CG-80	WIRE ROPE GUIDE	OR FOR APPROVED EQUIVALENT		
				TOTAL:		156

NOTES

- THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
- ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

VZWSMART KITS - APPROVED VENDORS

<p>COMMSCOPE CONTACT: SALVADOR ANGUIANO PHONE: (817) 304-7492 EMAIL: SALVADOR.ANGUIANO@COMMSCOPE.COM WEBSITE: WWW.COMMSCOPE.COM</p> <p>METROSITE FABRICATORS, LLC CONTACT: KENT BUREY PHONE: (206) 332-0943 (O) (206) 980-9766 (F) EMAIL: KENT@METROSITELLC.COM WEBSITE: METROSITEFABRICATORS.COM</p>	<p>PERFECTVISION CONTACT: WIRELESS SALES PHONE: (844) 887-8723 EMAIL: WWW.PERFECTVISION.COM WEBSITE: WIRELESSSALES@PERFECTVISION.COM</p> <p>SABRE INDUSTRIES, INC. CONTACT: ANGIE WELCH PHONE: (866) 408-6937 EMAIL: AWELCH@SABREINDUSTRIES.COM WEBSITE: WWW.SABREINDUSTRIES.COM</p>	<p>SITE PRO 1 CONTACT: PAULA BOSWELL PHONE: (772) 316-4643 EMAIL: PAULA.BOSWELL@VALMONT.COM WEBSITE: WWW.SITEPRO1.COM</p> <p>NEWAVE CONTACT: NEWAVE SALES TEAM PHONE: (971) 239-4762 EMAIL: SALES@NEWAVETC.COM WEBSITE: WWW.NEWAVETC.COM</p>	<p>BETTER METAL, LLC CONTACT: DAVID STANSEBERRY PHONE: (615) 335-0992 (O) (615) 611-2330 (F) EMAIL: DL@BETTERMETAL.COM WEBSITE: WWW.BETTERMETAL.COM</p>
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GREENAWICH CT
 5000104933
 5 PERRYBRIDGE RD
 GREENAWICH HOSPITAL
 GREENAWICH, CT 06830
 FAIRFIELD COUNTY

SITE NAME
 GREENAWICH CT
 5000104933
 5 PERRYBRIDGE RD
 GREENAWICH HOSPITAL
 GREENAWICH, CT 06830
 FAIRFIELD COUNTY

BILL OF MATERIALS
 SBOH-1

GENERAL NOTES

1. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H. MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODES.
2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURES AS A RESULT OF THE CONTRACTOR'S WORK OR FROM CONTRACTOR'S ERRORS TO THE SATISFACTION OF THE OWNER.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK. ORDERING MATERIAL AND PREPARING OF SHOP DRAWINGS AND SUBMITTALS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
4. IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
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 GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK. CONTAINED HEREIN AND SHALL MEET ANS/ISA-332 LATEST EDITION, OSHA, AND GENERAL INDUSTRY STANDARDS. ALL RISERS SHALL BE REQUIRED TO BE INSULATED (LATEST EDITION) AND SHALL BE REQUIRED TO BE MAINTAINED BY A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INITIALS, MAINTAINING, AND APPLICABLE SAFETY CODES.
8. WORK SHALL ONLY BE PERFORMED DURING CALM WINDY DAYS (WINDS LESS THAN 15 MPH). THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURE IS FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED DURING CONSTRUCTION SHALL REMAIN THE CONTRACTOR'S PROPERTY AFTER THEIR USE.
9. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF TIA-222-H AND TIA-222-H SUPPLEMENTAL AND ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANS/ISA-332.
10. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER EXISTING PERMITS. ALL EXISTING STONE, REBAR, BRACING, AND SURROUNDING GRADE SHALL BE REPAIRED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
11. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
12. DO NOT SCALE DRAWINGS.
13. DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE.
14. ALL MATERIAL UTILIZED FOR THE PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO, ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
15. THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

STRUCTURAL STEEL

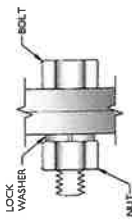
1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING PUBLICATIONS EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
 - a. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
 - b. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS
 - c. AISC CODE OF STANDARD PRACTICE
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:
 - CHANNELS, ANGLES, PLATES, ETC. ASTM A36 (GR 36)
 - STEEL PIPE ASTM A53 (GR 35)
 - BOLTS ASTM A325
 - NUTS ASTM A325
 - LOCK WASHERS ASTM A303
3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED BY WRITING FROM THE ENGINEER. ANY SUBSTITUTIONS SHALL BE SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATE OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 - a. SUBMIT SHOP DRAWINGS TO
 - 1. PROVIDE COLLIER ENGINEERING & DESIGN PROJECT # AND COLLIER ENGINEERING & DESIGN PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL.
 - 2. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
 - 3. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
 - 4. ALL NEW STEEL SHALL BE HOT DIPPED GALVANIZED FOR RUL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
 - 5. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2. REQUIREMENTS.
 - 6. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
 - 7. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
 - 8. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS 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.
 - 9. GALVANIZED ASTM A325 BOLTS SHALL NOT BE REUSED.
 - 10. ALL NEW STEEL SHALL BE HOT DIPPED GALVANIZED FOR RUL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
 - 11. ALL EXISTING PAINTED/GALVANIZED SURFACES DAMAGED DURING REBAR CLEAN, REPAIRED BY COLD GALVANIZED ZINC COATE, OR FOR APPROVED EQUAL, AND REPAIRED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
 - 12. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

BOLT SCHEDULE (IN.)

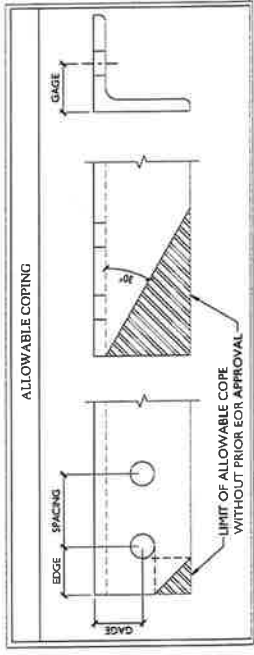
BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 1 1/16	7/8	1 1/2
5/8	1 1/16	1 1/16 x 7/8	1 1/8	1 7/8
3/4	1 3/16	1 3/16 x 1	1 1/4	2 1/4
7/8	1 5/16	1 5/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

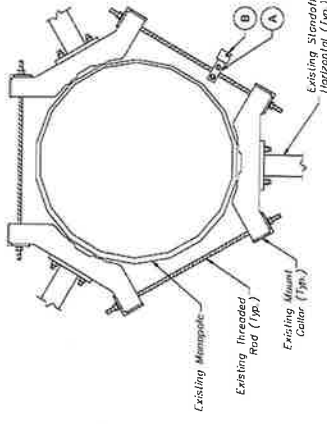
WORKABLE GAGES (IN.)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



- NOTES:**
1. ALL DIMENSIONS REPRESENTED IN THE DRAWINGS ARE TO FACE UNLESS OTHERWISE NOTED. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
 2. THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS SHALL BE VERIFIED AS THEY VARY FROM THE AISC MINIMUM REQUIREMENTS.
 3. SHORT SLOT HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS.
 4. MATCH EXISTING GLASS FINISH APPLICABLE UNLESS MINIMUM EDGE DISTANCES ARE COMPROMISED.

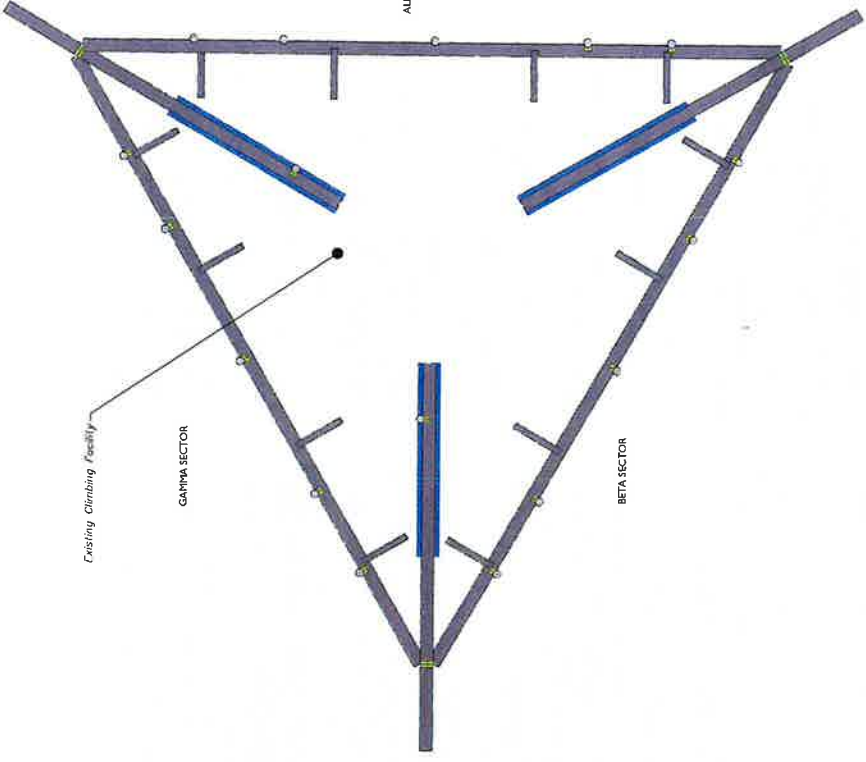




ITEM #	QTY	PART NUMBER	DESCRIPTIONS
A	1	PV-SCRB-RKU	ROUTING BRACKET (PERFECT VISION OR EOR APPROVED EQ)
B	1	PV-CHK-CG-80	WIRE ROPE COLLAR (PERFECT VISION OR EOR APPROVED EQ)

2 PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW
SCALE: N.T.S.

NOTE: CONTRACTOR SHALL ENSURE THAT WIRE ROPE GUIDE DOES NOT PUSH THE WIRE ROPE OUTSIDE OF THE VERTICAL PLANE OF THE SAFETY CLIMB. CONTRACTOR WITH PHOTOS OF SAFETY CLIMB AND COLLAR FOR FURTHER DIRECTION IF NEEDED.



1 CLIMBING FACILITY LOCATION
SCALE: N.T.S.

STRUCTURAL NOTES:

- PER THE MOUNT MAPPING COMPLETED BY TOWER ENGINEERING PROFESSIONALS ON 1/02/22/2020, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (123'-0") ARE IN GOOD CONDITION. COLLIERS ENGINEERING & DESIGN DOES NOT WARRANT THIS INFORMATION.
- INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.



Existing Safety Climb
Existing Climbing Facility

CLIMBING FACILITY PHOTO

LEGEND:

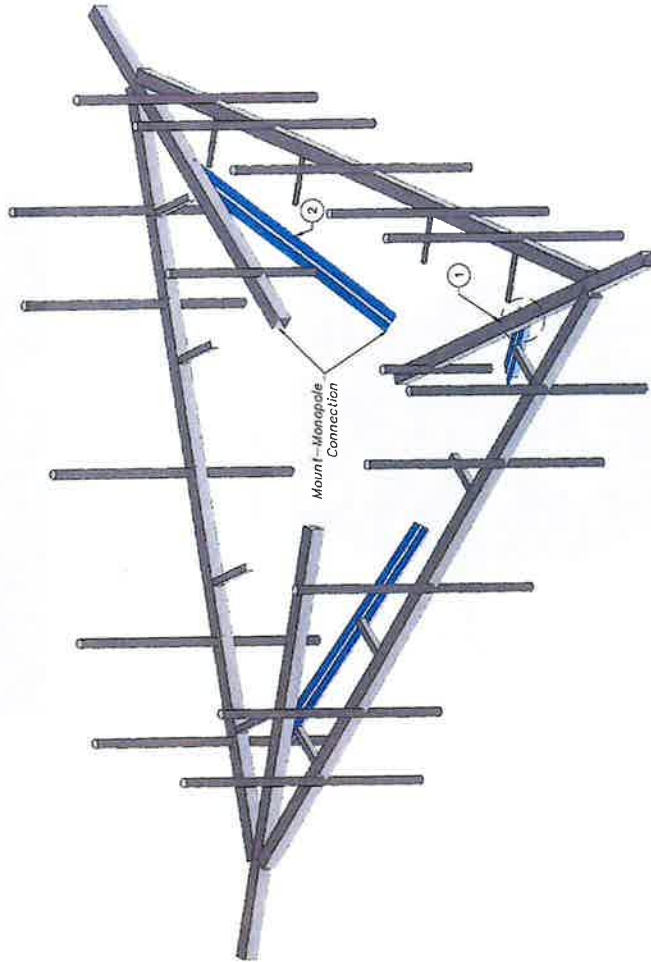
- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE

NO.	ELEVATION	QUANTITY	DESCRIPTION	NOTES
1	123'-0"	3	RELOCATE EXISTING BRACKET CONNECTING KICKER AND STANDOFF HORIZONTAL	RELOCATE EXISTING BRACKET WELDMENTS, RECONNECT TO STANDOFF HORIZONTAL WITH NEW GALVANIZED CONNECTION HARDWARE. DO NOT REUSE EXISTING HARDWARE.
2		6	PROPOSED BY LONG, L3x3x3/16 BRACING	RELOCATE EXISTING BRACKET ANGLES WITH NEW 8" LONG L3x3x3/16 ANGLES. CONNECT TO THE RELOCATED BRACKET WELDMENTS AND COLLAR WITH NEW GALVANIZED CONNECTION HARDWARE. DO NOT REUSE EXISTING CONNECTION HARDWARE. CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TRIM AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET 750-1.

GENERAL NOTES

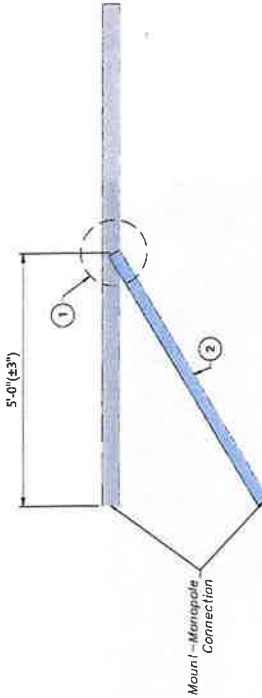
- A. CONTRACTOR SHALL VERIFY THAT NEW & EXISTING STEEL IS FREE OF CORROSION. VISIBLE MINOR CORROSION SHALL BE WIRE BRUSHED CLEAN AND TREATED WITH COLD GALVANIZATION. REPORT ANY CORROSION TO THE ARCHITECT IMMEDIATELY.
- B. THREADED ROD NEW CONNECTION HARDWARE SHALL BE TRIMMED TO EXTEND NO MORE THAN 3" BEYOND THE LOCK NUT. TREAT ALL CUT ENDS WITH (2) COATS OF COLD GALVANIZATION (ZINC KOTE, OR FOR APPROVED EQUAL).
- C. MOUNT NUMBERS NOT SHOWN FOR CLARITY U.N.O.



PROPOSED ISOMETRIC VIEW

SCALE: INT.S.

1



PROPOSED SIDE ELEVATION VIEW (TYP. ALL SECTORS)

SCALE: INT.S.

2



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NO.	ALL SHEETS	DATE	DESCRIPTION
1		11/11/2016	ISSUED FOR PERMIT
2			
3			
4			
5			
6			
7			
8			
9			
10			

CONTRACT NUMBER: 16CA-0004-0016

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SITE NAME:
GREENWICH CT
5000D04933
5 PERRYBRIDGE RD
GREENWICH HOSPITAL
GREENWICH, CT 06830
FAIRFIELD COUNTY



MODIFICATION DETAILS

SS-1

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Engineering
& Design
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PROJECT NO. 10116		DATE: 02/17/12	
NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR PERMIT	02/17/12	JK
2	REVISED		
3	REVISED		
4	REVISED		
5	REVISED		
6	REVISED		
7	REVISED		
8	REVISED		
9	REVISED		
10	REVISED		

COLLIERIA ENGINEERING & DESIGN
CT 06001

REGISTRATION OF PROFESSIONAL ENGINEER
NUMBER: 14120
EXPIRES: 12/31/2012
STATE: CT
CATEGORY: ELECTRICAL

SITE NAME:
GREENWICH CT
5000104933
5 PERRYBRIDGE RD
GREENWICH HOSPITAL
GREENWICH, CT 06830
FAIRFIELD COUNTY

Calliera
Engineering
& Design
1000 Washington Boulevard
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Phone: (203) 612-0000
Fax: (203) 612-0001
www.callieraengineering.com

MOUNT PHOTOS

SS-2



MOUNT PHOTO 1



MOUNT PHOTO 2



MOUNT PHOTO 3



MOUNT PHOTO 4

VZW
SMART TOOL[®]
Vendor



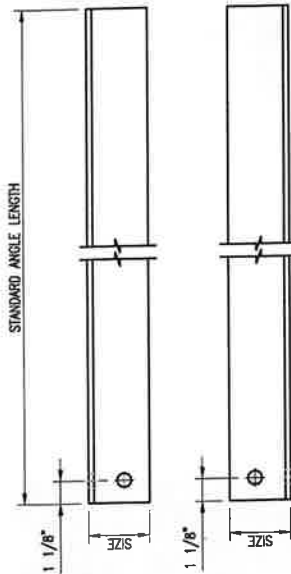
FOR REFERENCE
ONLY

OWNER: BT	CHECKED BY: HMA/VW
REV	DESCRIPTION
DATE	BY: JL 09/04/21
DATE	
DATE	
DATE	
SHEET TITLE:	

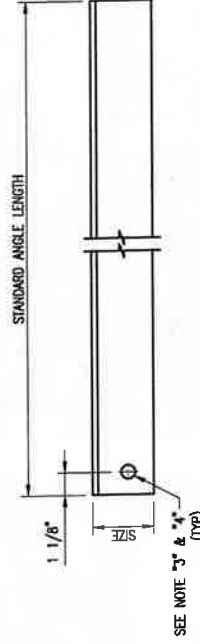
VZWSMART
STANDARD ANGLE

SHEET NUMBER
VZWSMART-ANGLE

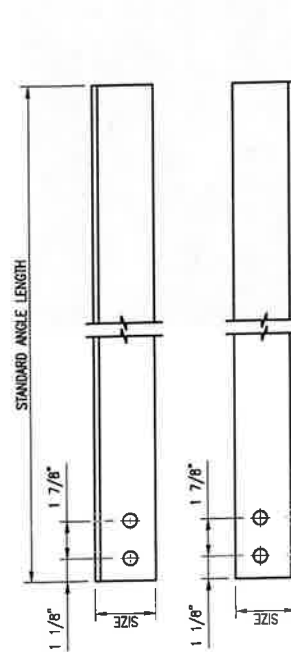
REV #:
0



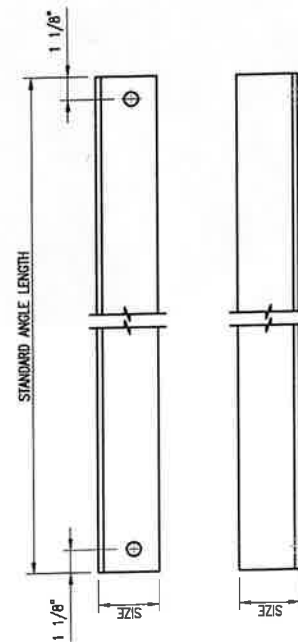
HOLE STYLE "B"



HOLE STYLE "D"



HOLE STYLE "A"



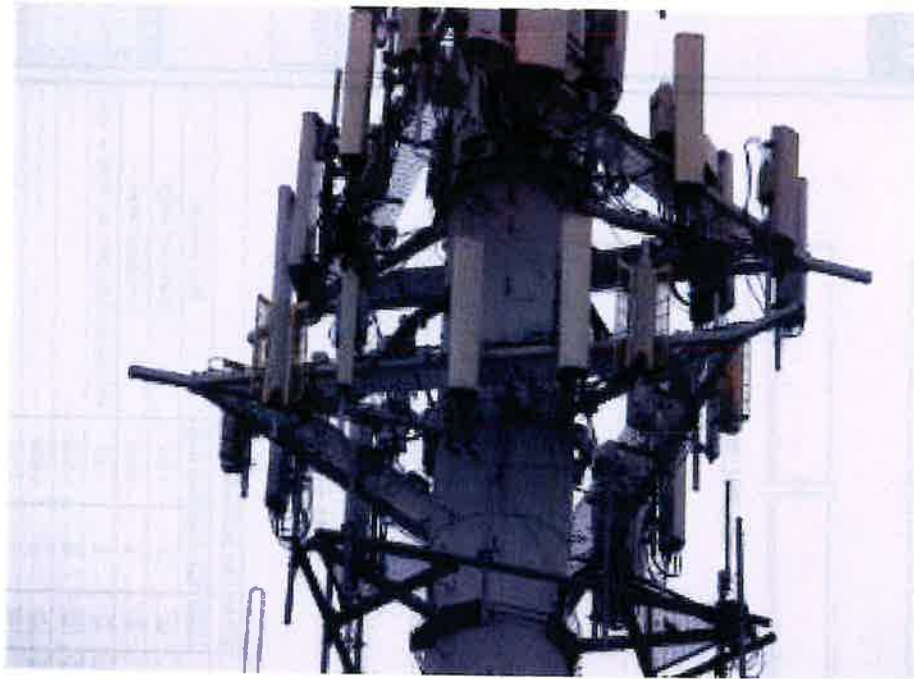
HOLE STYLE "C"

VZWSMART Standard Angle

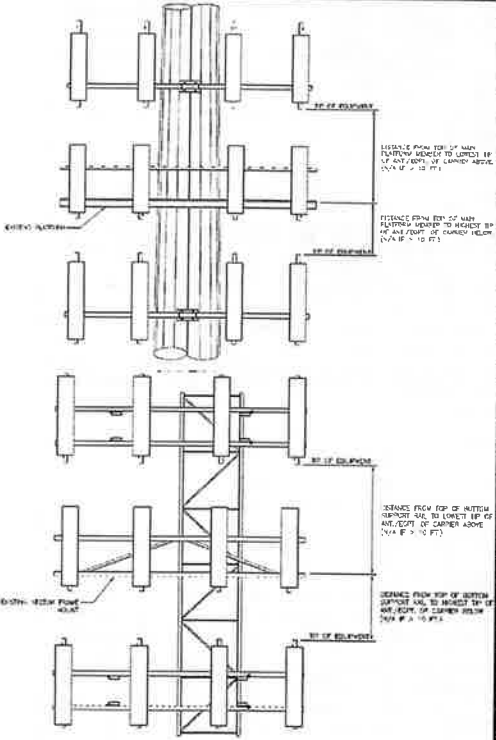
VZWSMART Number	Size	Length	Hole Style	Hole Gage	Also Used In:
A-PLK2-01	L 3" X 3" X 1/4"	96"	A	1-3/4"	VZWSMART-PLK2
A-PLK5-01	L 3" X 3" X 3/16"	96"	B	1-3/4"	VZWSMART-PLK5
A-SPK3-01	L 2-1/2" X 2-1/2" X 1/4"	96"	C	1-3/4"	VZWSMART-SPK3, -SPK3-SL, -PLK6, & -PLK8
A-L25X25X4X120	L 2-1/2" X 2-1/2" X 1/4"	120"	D	1-5/16"	
A-L25X25X4X240	L 2-1/2" X 2-1/2" X 1/4"	240"	D	1-5/16"	
A-L30X30X4X120	L 3" X 3" X 1/4"	120"	D	1-1/2"	
A-L30X30X4X240	L 3" X 3" X 1/4"	240"	D	1-1/2"	
A-L40X40X4X120	L 4" X 4" X 1/4"	120"	D	2"	
A-L40X40X4X240	L 4" X 4" X 1/4"	240"	D	2"	
A-L50X50X6X120	L 5" X 5" X 3/8"	120"	D	2-1/2"	
A-L50X50X6X120	L 5" X 5" X 3/8"	120"	D	2-1/2"	

NOTE:
APPROVED SMART KIT VENDORS ARE ALLOWED TO SUBSTITUTE AT THEIR DISCRETION ANGLES LISTED ON THIS PAGE FOR CUSTOM LENGTH COMPONENTS OF MATCHING SIZE. SUBSTITUTIONS SHALL MEET THE ORIGINAL STRUCTURAL INTENT.

- NOTES:
- ALL ANGLE GRADE A36 OR BETTER
 - HOT-DIPPED GALVANIZED PER ASTM A123.
 - ALL HOLES ARE 11/16" DIA UNO.
 - HOLES MAY OR MAY NOT BE PRESENT, DEPEND UPON MANUFACTURE DISCRETION.
 - ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINGA OR ZINC COAT PER ASTM A760 AND MANUFACTURER'S RECOMMENDATIONS.



Mount Azimuth (Degree) for Each Sector				Tower Leg Azimuth (Degree) for Each Sector				Sector B									
Sector A:	50.00	Deg	Leg A:		Deg	Ant _{1a}											
Sector B:	170.00	Deg	Leg B:		Deg	Ant _{1b}	DB844H65E-XY	6.25	9.00	48.00	(1) 1.625	123.438	40.00	6.50	158.00	63-64	
Sector C:	290.00	Deg	Leg C:		Deg	Ant _{1c}											
Sector D:		Deg	Leg D:		Deg	Ant _{2a}	B4 RRH 2x60-4R	10.60	5.70	36.60		125.333	18.00	8.00		89-90	
Climbing Facility Information						Ant _{2b}	SBNHH-1D65B	12.00	7.50	73.00	Fed by Raycaps	124.333	30.00	9.00	148.00	65-66	
Location:	300.00	Deg	N/A			Ant _{2c}											
Climbing Facility	Corrosion Type:		Good condition.			Ant _{3a}	B13 RRH 4x30	12.50	7.75	21.00		126.104	8.00	8.00		93	
	Access:		Climbing path was unobstructed.			Ant _{3b}	SBNHH-1D65B	12.00	7.50	73.00	Fed by Raycaps	124.271	30.00	9.00	158.00	67-68	
	Condition:		Good condition.			Ant _{3c}											
						Ant _{4a}	B25 RRH 4x30	12.25	8.50	21.50		125.271	18.00	8.00		94-95	
						Ant _{4b}	MGD3-800T0	6.50	3.75	52.50	None	123.938	34.00	7.00	154.00	69-70	
						Ant _{4c}											
						Ant _{5a}											
						Ant _{5b}	DB844H65E-XY	6.25	9.00	48.00	(1) 1.625	123.438	40.00	6.50	156.00	71-72	
						Ant _{5c}											
						Ant on Standoff											
						Ant on Standoff											
						Ant on Tower											
						Ant on Tower											
Sector C																	
						Ant _{1a}											
						Ant _{1b}	DB844H65E-XY	6.25	9.00	48.00	(1) 1.625	123.438	40.00	6.50	272.00	73-74	
						Ant _{1c}											
						Ant _{2a}	B4 RRH 2x60-4R	10.60	5.70	36.60		125.333	18.00	8.00		96-97	
						Ant _{2b}	SBNHH-1D65B	12.00	7.50	73.00	Fed by Raycaps	124.333	30.00	9.00	265.00	75-76	
						Ant _{2c}											
						Ant _{3a}	B13 RRH 4x30	12.50	7.75	21.00		126.104	8.00	8.00		98-99	
						Ant _{3b}	SBNHH-1D65B	12.00	7.50	73.00	Fed by Raycaps	124.271	30.00	9.00	264.00	77-78	
						Ant _{3c}											
						Ant _{4a}	B25 RRH 4x30	12.25	8.50	21.50		125.271	18.00	8.00		100-101	
						Ant _{4b}	MGD3-800T0	6.50	3.75	52.50	None	123.938	34.00	7.00	271.00	79-80	
						Ant _{4c}											
						Ant _{5a}											
						Ant _{5b}	DB844H65E-XY	6.25	9.00	48.00	(1) 1.625	123.438	40.00	6.50	267.00	81-82	
						Ant _{5c}											
						Ant on Standoff	RRFDC-3315-PF-48(M	15.73	10.30	28.93	(1) Hybrid 1.5	126	0.00	5.15		106-107	
						Ant on Standoff											
						Ant on Tower											
						Ant on Tower											
Sector D																	
						Ant _{1a}											
						Ant _{1b}											
						Ant _{1c}											
						Ant _{2a}											
						Ant _{2b}											
						Ant _{2c}											
						Ant _{3a}											
						Ant _{3b}											
						Ant _{3c}											
						Ant _{4a}											
						Ant _{4b}											
						Ant _{4c}											
						Ant _{5a}											
						Ant _{5b}											
						Ant _{5c}											
						Ant on Standoff											
						Ant on Standoff											
						Ant on Tower											
						Ant on Tower											



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

1		
2		
3		
4		
5		
6		
7		
8		

Mapping Notes

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

Standard Conditions

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



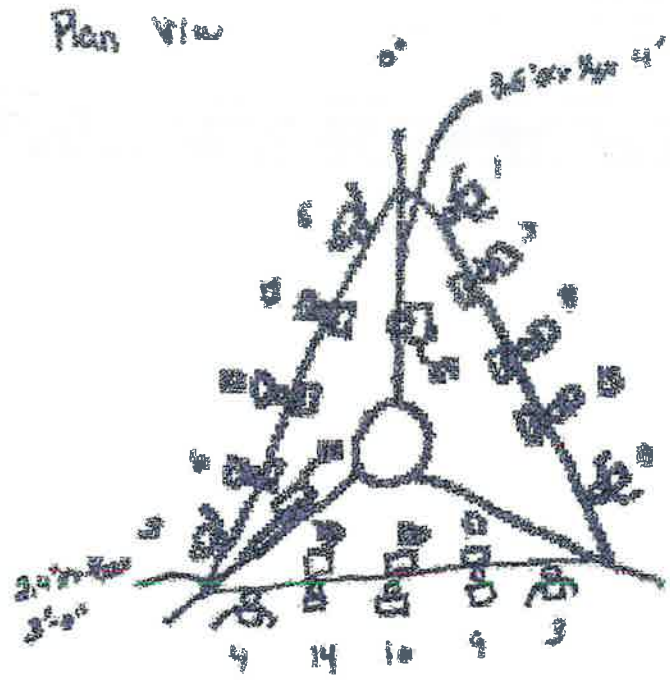
Antenna Mount Mapping Form (PATENT PENDING)

FCC #
N/A

Tower Owner:	Unknown	Mapping Date:	10/22/2020
Site Name:	Greenwich CT	Tower Type:	Monopole
Site Number or ID:	468466	Tower Height (Ft.):	163
Mapping Contractor:	TEP	Mount Elevation (Ft.):	123

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

Please Insert Sketches of the Antenna Mount



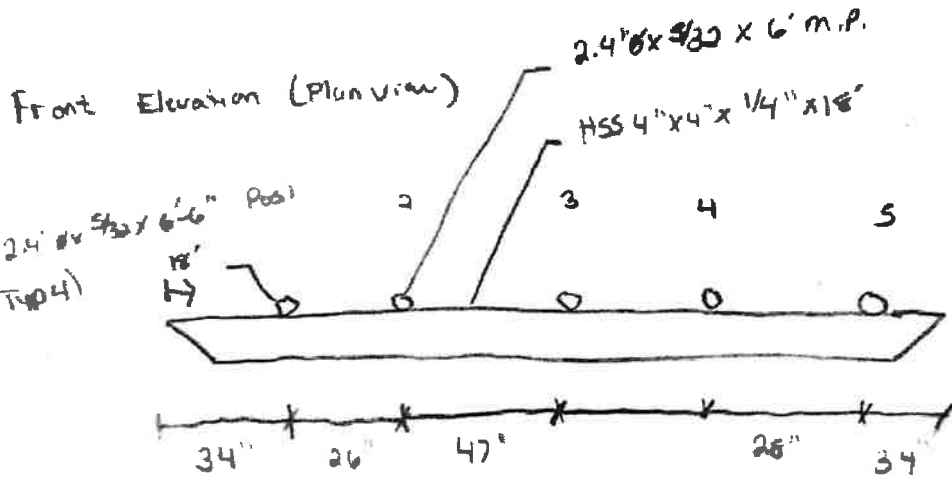
- 1-6 Amplifier POB
- 7-12 Com-Deck
- 13-15 Unknown

- E1 84
- E2 85
- E3 86
- E4 Ray of

Dist to Nth (24) = 16'
Dist to East (12) = 9'

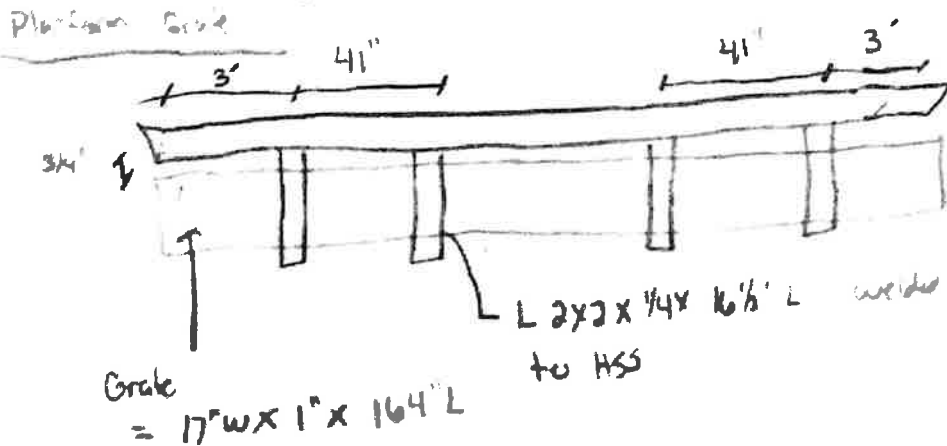
Vert Run = 15'

Ant 124'
 m.p. 123'
 w3rc - 29"



m.p. con 1, 3-5 = PL 8" x 7" x 1/4" w/
 (a) 1/2" U-Bolts to m.p. = 6 1/2" C-C V
 (b) 1/2" Sq. U-Bolts 5 1/2" C-C H

m.p. con 2 =
 PL 10" x 7" x 3/8" w/
 (a) 1/2" U-Bolts to m.p. = 5" C-C V
 (b) 1/2" Sq U-Bolts to HSS = 5 1/4" C-C H



Generalization CT

4 9/16" dia. Conduit

7/16" dia. = 163'-0"

15/16" dia. = 183'

Ant. dia. = 124'

Comp:

(a) FR 7/8"

(b) Mbd 14 U272

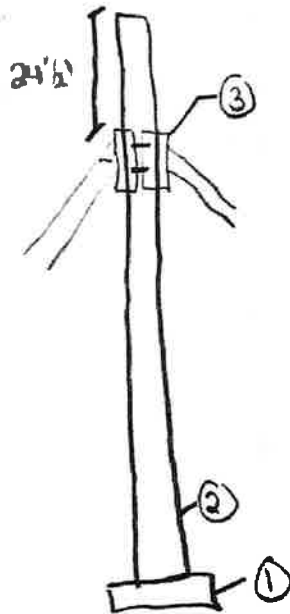
Eq Room - 10' wide - 160'

Safety Az = 300°

3/8" dia 7-strand

12' - start

Details

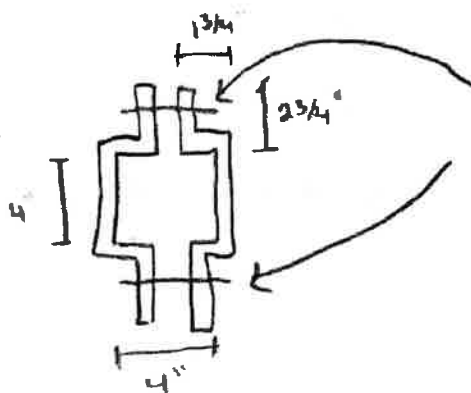


① PL 10" T x 6" X x 1/2" TH w/ (H) 3/4" ⌀ Bolts
3" C-C H, 8" C-C V

② HSS 4" x 4" x 1/4" x 10' Long

③

BPL 9" Long



(2) 1/2" ⌀ T.R, 6" C-C, 1" ME
(Top & Bottom)

Ant	B vert		H
Pos 1	40"	45'4	6'6
Pos 2	30"	46"	9"
Pos 3	30"	45'4	9"
Pos 4	34'	45'4	7"
Pos 5	40	45'4	6'6
E1	18	—	8
E2	8	—	8
E3	18	—	8
E4	See Plan view	—	—

Cover

6) FH 15/8 cut @ top

Pos 1 & 5 = (1) FH 15/8 each

Pos 2 & 3 = (2) Hybrid shared

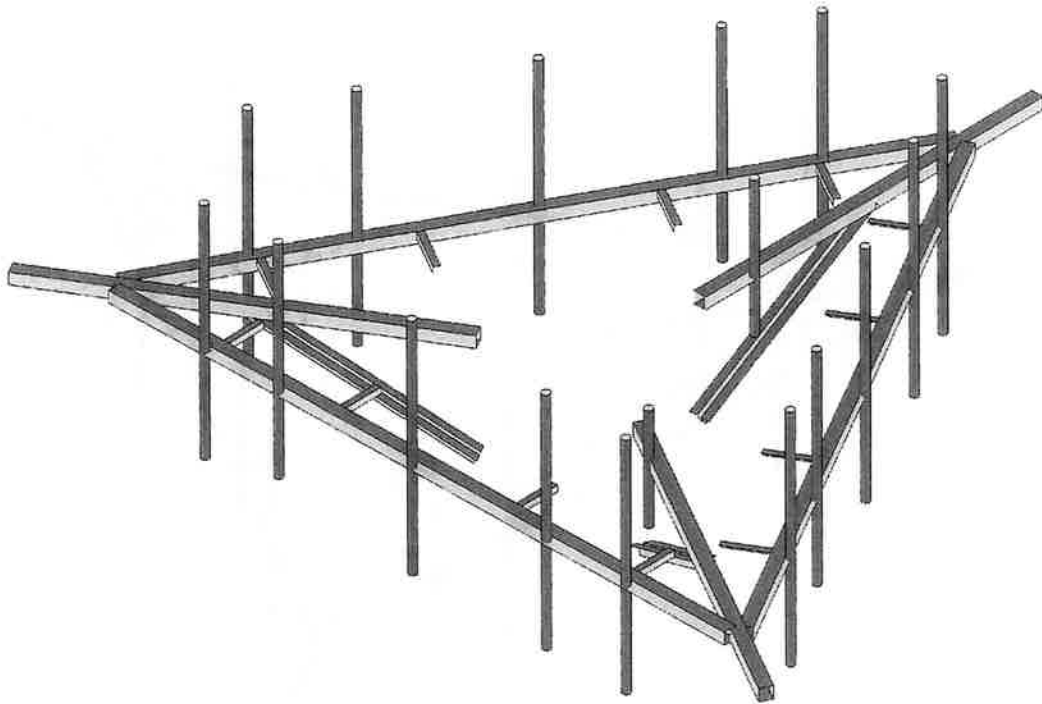
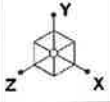
Pos 4 = No cover

Antenna Dim

6'4 W x 9" D x 48"
20'6 (wings)

12" W x 7'6 D x 73" T

6'6" W x 3'3/4 x 52'6" T



Envelope Only Solution

Colliers Engineering & Des..

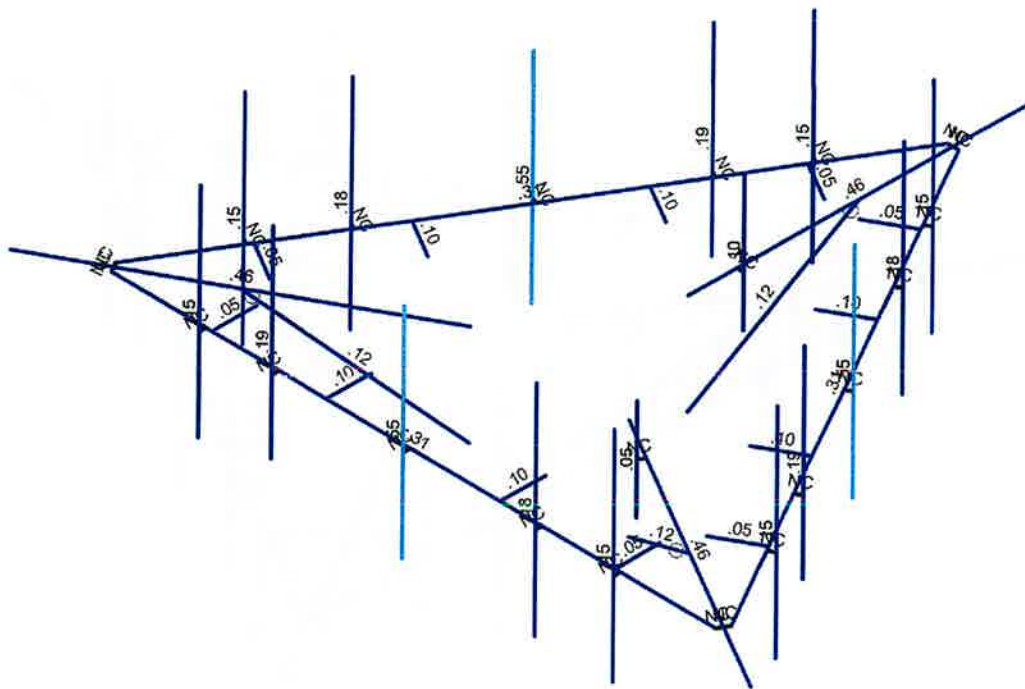
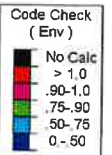
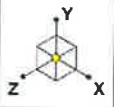
Project No. 10209799

5000104933-VZW_MT_LO_H

SK - 1

Sept 18, 2023 at 1:25 PM

5000104933-VZW_MT_LO_H.r3d



Member Code Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & Des...

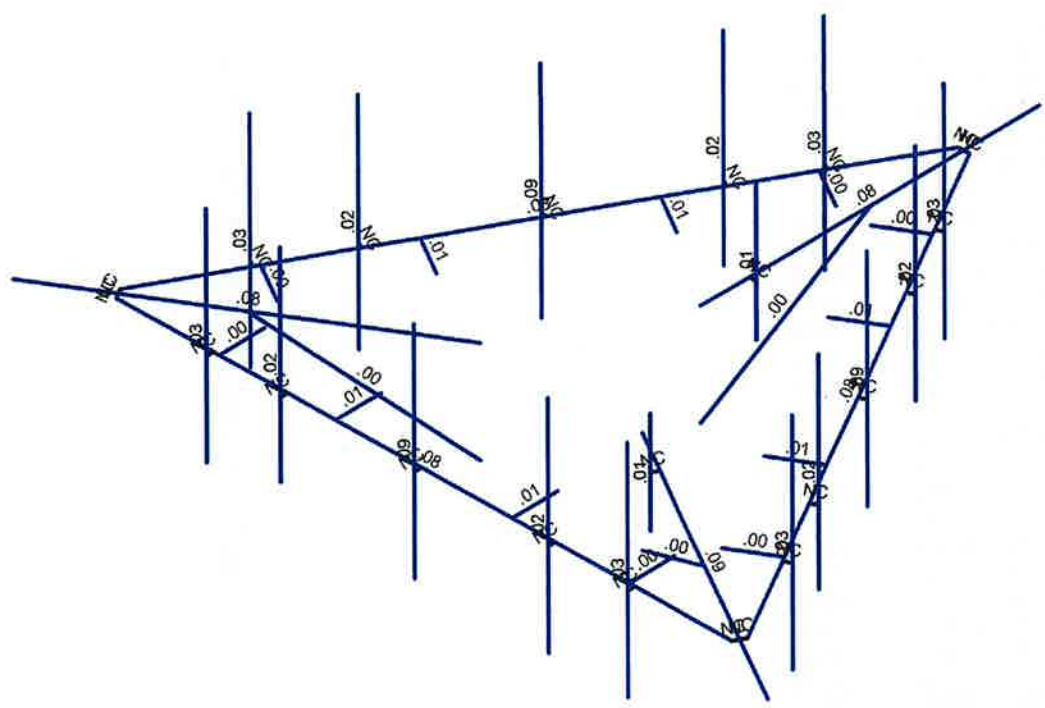
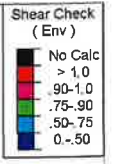
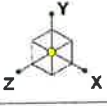
5000104933-VZW_MT_LO_H

SK - 2

Sept 18, 2023 at 1:27 PM

Project No. 10209799

5000104933-VZW_MT_LO_H.r3d



Member Shear Checks Displayed (Enveloped)
Envelope Only Solution

Colliers Engineering & Des...	5000104933-VZW_MT_LO_H	SK - 3
Project No. 10209799		Sept 18, 2023 at 1:30 PM
		5000104933-VZW_MT_LO_H.r3d



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10209799
 Model Name : 5000104933-VZW_MT_LO_H

Sept 18, 2023
 1:30 PM
 Checked By: _____

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
1	Antenna D	None					159		
2	Antenna Di	None					159		
3	Antenna Wo (0 Deg)	None					159		
4	Antenna Wo (30 Deg)	None					159		
5	Antenna Wo (60 Deg)	None					159		
6	Antenna Wo (90 Deg)	None					159		
7	Antenna Wo (120 Deg)	None					159		
8	Antenna Wo (150 Deg)	None					159		
9	Antenna Wo (180 Deg)	None					159		
10	Antenna Wo (210 Deg)	None					159		
11	Antenna Wo (240 Deg)	None					159		
12	Antenna Wo (270 Deg)	None					159		
13	Antenna Wo (300 Deg)	None					159		
14	Antenna Wo (330 Deg)	None					159		
15	Antenna Wi (0 Deg)	None					159		
16	Antenna Wi (30 Deg)	None					159		
17	Antenna Wi (60 Deg)	None					159		
18	Antenna Wi (90 Deg)	None					159		
19	Antenna Wi (120 Deg)	None					159		
20	Antenna Wi (150 Deg)	None					159		
21	Antenna Wi (180 Deg)	None					159		
22	Antenna Wi (210 Deg)	None					159		
23	Antenna Wi (240 Deg)	None					159		
24	Antenna Wi (270 Deg)	None					159		
25	Antenna Wi (300 Deg)	None					159		
26	Antenna Wi (330 Deg)	None					159		
27	Antenna Wm (0 Deg)	None					159		
28	Antenna Wm (30 Deg)	None					159		
29	Antenna Wm (60 Deg)	None					159		
30	Antenna Wm (90 Deg)	None					159		
31	Antenna Wm (120 Deg)	None					159		
32	Antenna Wm (150 Deg)	None					159		
33	Antenna Wm (180 Deg)	None					159		
34	Antenna Wm (210 Deg)	None					159		
35	Antenna Wm (240 Deg)	None					159		
36	Antenna Wm (270 Deg)	None					159		
37	Antenna Wm (300 Deg)	None					159		
38	Antenna Wm (330 Deg)	None					159		
39	Structure D	None		-1					3
40	Structure Di	None						38	3
41	Structure Wo (0 Deg)	None						76	
42	Structure Wo (30 Deg)	None						76	
43	Structure Wo (60 Deg)	None						76	
44	Structure Wo (90 Deg)	None						76	
45	Structure Wo (120 D...	None						76	
46	Structure Wo (150 D...	None						76	
47	Structure Wo (180 D...	None						76	
48	Structure Wo (210 D...	None						76	
49	Structure Wo (240 D...	None						76	
50	Structure Wo (270 D...	None						76	
51	Structure Wo (300 D...	None						76	
52	Structure Wo (330 D...	None						76	
53	Structure Wi (0 Deg)	None						76	



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10209799
 Model Name : 5000104933-VZW_MT_LO_H

Sept 18, 2023
 1:30 PM
 Checked By: _____

Basic Load Cases (Continued)

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...	Surface(P...
54 Structure Wi (30 Deg)	None						76	
55 Structure Wi (60 Deg)	None						76	
56 Structure Wi (90 Deg)	None						76	
57 Structure Wi (120 De..	None						76	
58 Structure Wi (150 De..	None						76	
59 Structure Wi (180 De..	None						76	
60 Structure Wi (210 De..	None						76	
61 Structure Wi (240 De..	None						76	
62 Structure Wi (270 De..	None						76	
63 Structure Wi (300 De..	None						76	
64 Structure Wi (330 De..	None						76	
65 Structure Wm (0 Deg)	None						76	
66 Structure Wm (30 De..	None						76	
67 Structure Wm (60 De..	None						76	
68 Structure Wm (90 De..	None						76	
69 Structure Wm (120 D..	None						76	
70 Structure Wm (150 D..	None						76	
71 Structure Wm (180 D..	None						76	
72 Structure Wm (210 D..	None						76	
73 Structure Wm (240 D..	None						76	
74 Structure Wm (270 D..	None						76	
75 Structure Wm (300 D..	None						76	
76 Structure Wm (330 D..	None						76	
77 Lm1	None					1		
78 Lm2	None					1		
79 Lv1	None					1		
80 Lv2	None					1		
81 Antenna Ev	None					159		
82 Antenna Eh (0 Deg)	None					106		
83 Antenna Eh (90 Deg)	None					106		
84 Structure Ev	ELY							3
85 Structure Eh (0 Deg)	ELZ			-03				3
86 Structure Eh (90 Deg)	ELX	.03						3
87 BLC 39 Transient Are..	None						12	
88 BLC 40 Transient Are..	None						33	
89 BLC 84 Transient Are..	None							
90 BLC 85 Transient Are..	None						33	
91 BLC 86 Transient Are..	None						33	

Load Combinations

Description	Sol...	PDe..	S...	BLCFa..	BLCFa..	BLCFa..	BLCFa..	BLCFa..	BLCFa..	BLCFa..	BLCFa..	BLCFa..	BLCFa..	BLCFa..	
1 1.2D+1.0Wo (0 Deg)	Yes	Y		1	1.2	39	1.2	3	1	41	1				
2 1.2D+1.0Wo (30 Deg)	Yes	Y		1	1.2	39	1.2	4	1	42	1				
3 1.2D+1.0Wo (60 Deg)	Yes	Y		1	1.2	39	1.2	5	1	43	1				
4 1.2D+1.0Wo (90 Deg)	Yes	Y		1	1.2	39	1.2	6	1	44	1				
5 1.2D+1.0Wo (120 Deg)	Yes	Y		1	1.2	39	1.2	7	1	45	1				
6 1.2D+1.0Wo (150 Deg)	Yes	Y		1	1.2	39	1.2	8	1	46	1				
7 1.2D+1.0Wo (180 Deg)	Yes	Y		1	1.2	39	1.2	9	1	47	1				
8 1.2D+1.0Wo (210 Deg)	Yes	Y		1	1.2	39	1.2	10	1	48	1				
9 1.2D+1.0Wo (240 Deg)	Yes	Y		1	1.2	39	1.2	11	1	49	1				
10 1.2D+1.0Wo (270 Deg)	Yes	Y		1	1.2	39	1.2	12	1	50	1				
11 1.2D+1.0Wo (300 Deg)	Yes	Y		1	1.2	39	1.2	13	1	51	1				
12 1.2D+1.0Wo (330 Deg)	Yes	Y		1	1.2	39	1.2	14	1	52	1				
13 1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	15	1	53	1
14 1.2D + 1.0Di + 1.0Wi (...)	Yes	Y		1	1.2	39	1.2	2	1	40	1	16	1	54	1



Load Combinations (Continued)

Description	Sol...	PDe...	S...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	BLCFa...	
15	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	17	1	55	1
16	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	18	1	56	1
17	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	19	1	57	1
18	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	20	1	58	1
19	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	21	1	59	1
20	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	22	1	60	1
21	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	23	1	61	1
22	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	24	1	62	1
23	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	25	1	63	1
24	1.2D + 1.0Di + 1.0Wi (...)	Yes	Y	1	1.2	39	1.2	2	1	40	1	26	1	64	1
25	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	27	1	65	1		
26	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	28	1	66	1		
27	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	29	1	67	1		
28	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	30	1	68	1		
29	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	31	1	69	1		
30	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	32	1	70	1		
31	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	33	1	71	1		
32	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	34	1	72	1		
33	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	35	1	73	1		
34	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	36	1	74	1		
35	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	37	1	75	1		
36	1.2D + 1.5Lm1 + 1.0...	Yes	Y	1	1.2	39	1.2	77	1.5	38	1	76	1		
37	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	27	1	65	1		
38	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	28	1	66	1		
39	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	29	1	67	1		
40	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	30	1	68	1		
41	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	31	1	69	1		
42	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	32	1	70	1		
43	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	33	1	71	1		
44	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	34	1	72	1		
45	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	35	1	73	1		
46	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	36	1	74	1		
47	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	37	1	75	1		
48	1.2D + 1.5Lm2 + 1.0...	Yes	Y	1	1.2	39	1.2	78	1.5	38	1	76	1		
49	1.2D + 1.5Lv1	Yes	Y	1	1.2	39	1.2	79	1.5						
50	1.2D + 1.5Lv2	Yes	Y	1	1.2	39	1.2	80	1.5						
51	1.4D	Yes	Y	1	1.4	39	1.4								
52	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	1	83	ELZ 1 ELX
53	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	.866	83	.5 ELZ .866ELX .5
54	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	.5	83	.866ELZ .5 ELX .866
55	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82		83	1 ELZ ELX 1
56	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	.866ELZ -.5 ELX .866
57	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	.5 ELZ -.866ELX .5
58	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-1	83	ELZ -1 ELX
59	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-.866	83	-.5 ELZ -.866ELX -.5
60	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	-.5	83	-.866ELZ -.5 ELX -.866
61	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82		83	-1 ELZ ELX -1
62	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	.5	83	-.866ELZ .5 ELX -.866
63	1.2D + 1.0Ev + 1.0Eh (...)	Yes	Y	1	1.2	39	1.2	81	1	ELY	1	82	.866	83	-.5 ELZ .866ELX -.5
64	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	1	83	ELZ 1 ELX
65	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	.866	83	.5 ELZ .866ELX .5
66	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	.5	83	.866ELZ .5 ELX .866
67	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82		83	1 ELZ ELX 1
68	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	.866ELZ -.5 ELX .866
69	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	.5 ELZ -.866ELX .5
70	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	-1	83	ELZ -1 ELX
71	0.9D - 1.0Ev + 1.0Eh (...)	Yes	Y	1	.9	39	.9	81	-1	ELY	-1	82	-.866	83	-.5 ELZ -.866ELX -.5



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Load Combinations (Continued)

	Description	Sol.	PDe.	S	BLCFa	BLCFa	BLCFa	BLCFa	BLCFa	BLCFa	BLCFa	BLCFa	BLCFa	BLCFa	BLCFa					
72	0.9D - 1.0Ev + 1.0Eh (.Yes	Y			1	.9	39	.9	81	-1	ELY	-1	82	-.5	83	-.866ELZ	-.5	ELX	-.866	
73	0.9D - 1.0Ev + 1.0Eh (.Yes	Y			1	.9	39	.9	81	-1	ELY	-1	82		83	-.1	ELZ		ELX	-.1
74	0.9D - 1.0Ev + 1.0Eh (.Yes	Y			1	.9	39	.9	81	-1	ELY	-1	82	.5	83	-.866ELZ	.5	ELX	-.866	
75	0.9D - 1.0Ev + 1.0Eh (.Yes	Y			1	.9	39	.9	81	-1	ELY	-1	82	.866	83	-.5	ELZ	.866	ELX	-.5

Joint Coordinates and Temperatures

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
1	N1	0	0	0	0	
2	N2	9	0	5.392083	0	
3	N3	-9	0	5.392083	0	
4	N4	0	0	-2.74027	0	
5	N5	0	0	-12.74027	0	
6	N6	-6.166667	0	5.392083	0	
7	N7	-6.166667	0	5.600417	0	
8	N8	-6.166667	3.770833	5.600417	0	
9	N9	-6.166667	-2.729167	5.600417	0	
10	N10	-4	0	5.392083	0	
11	N11	-4	0	5.600417	0	
12	N12	-4	3.833333	5.600417	0	
13	N13	-4	-2.166667	5.600417	0	
14	N14	-0.083333	0	5.392083	0	
15	N15	-0.083333	0	5.600417	0	
16	N16	-0.083333	3.770833	5.600417	0	
17	N17	-0.083333	-2.729167	5.600417	0	
18	N18	3.833333	0	5.392083	0	
19	N19	3.833333	0	5.600417	0	
20	N20	3.833333	3.770833	5.600417	0	
21	N21	3.833333	-2.729167	5.600417	0	
22	N22	6.166667	0	5.392083	0	
23	N23	6.166667	0	5.600417	0	
24	N24	6.166667	3.770833	5.600417	0	
25	N25	6.166667	-2.729167	5.600417	0	
26	N26	0	0	-10.49027	0	
27	N27	0.169681	0	-10.49027	0	
28	N28	9.169681	0	5.098187	0	
29	N29	7.753014	0	2.644448	0	
30	N30	7.933436	0	2.540282	0	
31	N31	7.933436	3.770833	2.540282	0	
32	N32	7.933436	-2.729167	2.540282	0	
33	N33	6.669681	0	0.76806	0	
34	N34	6.850103	0	0.663893	0	
35	N35	6.850103	3.833333	0.663893	0	
36	N36	6.850103	-2.166667	0.663893	0	
37	N37	4.711348	0	-2.623873	0	
38	N38	4.89177	0	-2.72804	0	
39	N39	4.89177	3.770833	-2.72804	0	
40	N40	4.89177	-2.729167	-2.72804	0	
41	N41	2.753014	0	-6.015806	0	
42	N42	2.933436	0	-6.119972	0	
43	N43	2.933436	3.770833	-6.119972	0	
44	N44	2.933436	-2.729167	-6.119972	0	
45	N45	1.586348	0	-8.036532	0	
46	N46	1.76677	0	-8.140698	0	
47	N47	1.76677	3.770833	-8.140698	0	
48	N48	1.76677	-2.729167	-8.140698	0	



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Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
49	N49	-9.169681	0	5.098187	0	
50	N50	-0.169681	0	-10.49027	0	
51	N51	-1.586348	0	-8.036532	0	
52	N52	-1.76677	0	-8.140698	0	
53	N53	-1.76677	3.770833	-8.140698	0	
54	N54	-1.76677	-2.729167	-8.140698	0	
55	N55	-2.669681	0	-6.160143	0	
56	N56	-2.850103	0	-6.26431	0	
57	N57	-2.850103	3.833333	-6.26431	0	
58	N58	-2.850103	-2.166667	-6.26431	0	
59	N59	-4.628014	0	-2.76821	0	
60	N60	-4.808436	0	-2.872377	0	
61	N61	-4.808436	3.770833	-2.872377	0	
62	N62	-4.808436	-2.729167	-2.872377	0	
63	N63	-6.586348	0	0.623722	0	
64	N64	-6.76677	0	0.519556	0	
65	N65	-6.76677	3.770833	0.519556	0	
66	N66	-6.76677	-2.729167	0.519556	0	
67	N67	-7.753014	0	2.644448	0	
68	N68	-7.933436	0	2.540282	0	
69	N69	-7.933436	3.770833	2.540282	0	
70	N70	-7.933436	-2.729167	2.540282	0	
71	N71	-2.373144	0	1.370135	0	
72	N72	-11.033398	0	6.370135	0	
73	N73	-9.084841	0	5.245135	0	
74	N76	2.373144	0	1.370135	0	
75	N77	11.033398	0	6.370135	0	
76	N78	9.084841	0	5.245135	0	
77	N77A	0	0	-4.156937	0	
78	N78A	0.208333	0	-4.156937	0	
79	N79	0.208333	2.5	-4.156937	0	
80	N80	0.208333	-1.5	-4.156937	0	
81	N81	3.600013	0	2.078469	0	
82	N82	3.495846	0	2.25889	0	
83	N83	3.495846	1.5	2.25889	0	
84	N84	3.495846	-1.5	2.25889	0	
85	N85	6	0	5.392083	0	
86	N86	6	0	4.05875	0	
87	N87	2.583333	0	5.392083	0	
88	N88	2.583333	0	4.05875	0	
89	N89	-6	0	5.392083	0	
90	N90	-6	0	4.05875	0	
91	N91	-2.583333	0	5.392083	0	
92	N92	-2.583333	0	4.05875	0	
93	N93	1.669681	0	-7.892194	0	
94	N94	0.514981	0	-7.225527	0	
95	N95	3.378014	0	-4.933274	0	
96	N96	2.223314	0	-4.266607	0	
97	N97	7.669681	0	2.500111	0	
98	N98	6.514981	0	3.166777	0	
99	N99	5.961348	0	-0.458809	0	
100	N100	4.806647	0	0.207857	0	
101	N101	-7.669681	0	2.500111	0	
102	N102	-6.514981	0	3.166777	0	
103	N103	-5.961348	0	-0.458809	0	
104	N104	-4.806647	0	0.207857	0	
105	N105	-1.669681	0	-7.892194	0	



Joint Coordinates and Temperatures (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
106	N106	-0.514981	0	-7.225527	0	
107	N107	-3.378014	0	-4.933274	0	
108	N108	-2.223314	0	-4.266607	0	
109	N109	0	0	-7.74027	0	
110	N110	0	-3	-2.74027	0	
111	N112	-2.373144	-3	1.370135	0	
112	N114	2.373144	-3	1.370135	0	
113	N115	-4.97122	0	2.870135	0	
114	N116	4.97122	0	2.870135	0	
115	N115A	-6.703271	0	3.870135	0	
116	N116A	6.703271	0	3.870135	0	

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design ...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	Antenna Pipe	PIPE 2.0	Column	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
2	Face Horizontal	HSS4X4X4	Beam	SquareTube	A500 Gr. B ...	Typical	3.37	7.8	7.8	12.8
3	Standoff Horizontal	HSS4X4X4	Beam	SquareTube	A500 Gr. B ...	Typical	3.37	7.8	7.8	12.8
4	Grating Support	L2x2x4	Beam	Single Angle	A36 Gr.36	Typical	.944	.346	.346	.021
5	Kicker Kit	LL3x3x3x6	Beam	Double Angle (3/8...	A36 Gr.36	Typical	2.18	4.97	1.9	.027

Hot Rolled Steel Properties

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

Member Primary Data

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
1	M1	N3	N2			Face Horizontal	Beam	SquareTube	A500 Gr. ...	Typical
2	M2	N4	N5			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
3	M3	N7	N6			RIGID	None	None	RIGID	Typical
4	MP5A	N8	N9			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
5	M5	N11	N10			RIGID	None	None	RIGID	Typical
6	MP4A	N12	N13			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
7	M7	N15	N14			RIGID	None	None	RIGID	Typical
8	MP3A	N16	N17			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
9	M9	N19	N18			RIGID	None	None	RIGID	Typical
10	MP2A	N20	N21			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
11	M11	N23	N22			RIGID	None	None	RIGID	Typical
12	MP1A	N24	N25			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
13	M13	N28	N27			Face Horizontal	Beam	SquareTube	A500 Gr. ...	Typical
14	M14	N30	N29			RIGID	None	None	RIGID	Typical
15	MP5C	N31	N32			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
16	M16	N34	N33			RIGID	None	None	RIGID	Typical
17	MP4C	N35	N36			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
18	M18	N38	N37			RIGID	None	None	RIGID	Typical
19	MP3C	N39	N40			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
20	M20	N42	N41			RIGID	None	None	RIGID	Typical
21	MP2C	N43	N44			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical



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Member Primary Data (Continued)

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
22	M22	N46	N45			RIGID	None	None	RIGID	Typical
23	MP1C	N47	N48			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
24	M24	N50	N49			Face Horizontal	Beam	SquareTube	A500 Gr. ...	Typical
25	M25	N52	N51			RIGID	None	None	RIGID	Typical
26	MP5B	N53	N54			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
27	M27	N56	N55			RIGID	None	None	RIGID	Typical
28	MP4B	N57	N58			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
29	M29	N60	N59			RIGID	None	None	RIGID	Typical
30	MP3B	N61	N62			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
31	M31	N64	N63			RIGID	None	None	RIGID	Typical
32	MP2B	N65	N66			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
33	M33	N68	N67			RIGID	None	None	RIGID	Typical
34	MP1B	N69	N70			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
35	M35	N50	N26			RIGID	None	None	RIGID	Typical
36	M36	N27	N26			RIGID	None	None	RIGID	Typical
37	M37	N71	N72			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
38	M38	N3	N73			RIGID	None	None	RIGID	Typical
39	M39	N49	N73			RIGID	None	None	RIGID	Typical
40	M40	N76	N77			Standoff Horiz...	Beam	SquareTube	A500 Gr. ...	Typical
41	M41	N28	N78			RIGID	None	None	RIGID	Typical
42	M42	N2	N78			RIGID	None	None	RIGID	Typical
43	M43	N77A	N78A			RIGID	None	None	RIGID	Typical
44	M44	N79	N80			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
45	M45	N81	N82			RIGID	None	None	RIGID	Typical
46	M46	N83	N84			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
47	M47	N85	N86	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
48	M48	N87	N88	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
49	M49	N89	N90	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
50	M50	N91	N92	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
51	M51	N93	N94	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
52	M52	N95	N96	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
53	M53	N97	N98	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
54	M54	N99	N100	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
55	M55	N101	N102	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
56	M56	N103	N104	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
57	M57	N105	N106	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
58	M58	N107	N108	180		Grating Support	Beam	Single Angle	A36 Gr.36	Typical
59	M59	N109	N110			Kicker Kit	Beam	Double Angle (...)	A36 Gr.36	Typical
60	M60	N115A	N112			Kicker Kit	Beam	Double Angle (...)	A36 Gr.36	Typical
61	M61	N116A	N114			Kicker Kit	Beam	Double Angle (...)	A36 Gr.36	Typical

Member Advanced Data

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
1	M1						Yes				None
2	M2						Yes				None
3	M3						Yes	** NA **			None
4	MP5A						Yes	** NA **			None
5	M5						Yes	** NA **			None
6	MP4A						Yes	** NA **			None
7	M7						Yes	** NA **			None
8	MP3A						Yes	** NA **			None
9	M9						Yes	** NA **			None
10	MP2A						Yes	** NA **			None
11	M11						Yes	** NA **			None
12	MP1A						Yes	** NA **			None



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
4	MP3A	Y	-8.8	6
5	MP3A	My	.009	6
6	MP3A	Mz	-.002	6
7	MP3B	Y	-8.8	5
8	MP3B	My	-.004	5
9	MP3B	Mz	.008	5
10	MP3B	Y	-8.8	6
11	MP3B	My	-.004	6
12	MP3B	Mz	.008	6
13	MP3C	Y	-8.8	5
14	MP3C	My	-.006	5
15	MP3C	Mz	-.007	5
16	MP3C	Y	-8.8	6
17	MP3C	My	-.006	6
18	MP3C	Mz	-.007	6
19	MP3A	Y	-8.8	5
20	MP3A	My	.006	5
21	MP3A	Mz	-.007	5
22	MP3A	Y	-8.8	6
23	MP3A	My	.006	6
24	MP3A	Mz	-.007	6
25	MP3B	Y	-8.8	5
26	MP3B	My	.001	5
27	MP3B	Mz	.009	5
28	MP3B	Y	-8.8	6
29	MP3B	My	.001	6
30	MP3B	Mz	.009	6
31	MP3C	Y	-8.8	5
32	MP3C	My	-.009	5
33	MP3C	Mz	-.002	5
34	MP3C	Y	-8.8	6
35	MP3C	My	-.009	6
36	MP3C	Mz	-.002	6
37	MP1A	Y	-10	1.5
38	MP1A	My	-.004	1.5
39	MP1A	Mz	.003	1.5
40	MP1A	Y	-10	4.5
41	MP1A	My	-.004	4.5
42	MP1A	Mz	.003	4.5
43	MP1B	Y	-10	1.5
44	MP1B	My	0	1.5
45	MP1B	Mz	-.005	1.5
46	MP1B	Y	-10	4.5
47	MP1B	My	0	4.5
48	MP1B	Mz	-.005	4.5
49	MP1C	Y	-10	1.5
50	MP1C	My	.004	1.5
51	MP1C	Mz	.003	1.5
52	MP1C	Y	-10	4.5
53	MP1C	My	.004	4.5
54	MP1C	Mz	.003	4.5
55	MP5A	Y	-10	1.5
56	MP5A	My	-.004	1.5
57	MP5A	Mz	.003	1.5
58	MP5A	Y	-10	4.5
59	MP5A	My	-.004	4.5
60	MP5A	Mz	.003	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
61	MP5B	Y	-10	1.5
62	MP5B	My	0	1.5
63	MP5B	Mz	-.005	1.5
64	MP5B	Y	-10	4.5
65	MP5B	Mv	0	4.5
66	MP5B	Mz	-.005	4.5
67	MP5C	Y	-10	1.5
68	MP5C	My	.004	1.5
69	MP5C	Mz	.003	1.5
70	MP5C	Y	-10	4.5
71	MP5C	My	.004	4.5
72	MP5C	Mz	.003	4.5
73	MP3A	Y	-32.5	.25
74	MP3A	My	-.005	.25
75	MP3A	Mz	.025	.25
76	MP3A	Y	-32.5	5.25
77	MP3A	My	-.005	5.25
78	MP3A	Mz	.025	5.25
79	MP3B	Y	-32.5	.25
80	MP3B	My	-.016	.25
81	MP3B	Mz	-.019	.25
82	MP3B	Y	-32.5	5.25
83	MP3B	My	-.016	5.25
84	MP3B	Mz	-.019	5.25
85	MP3C	Y	-32.5	.25
86	MP3C	My	.024	.25
87	MP3C	Mz	-.008	.25
88	MP3C	Y	-32.5	5.25
89	MP3C	My	.024	5.25
90	MP3C	Mz	-.008	5.25
91	MP3A	Y	-32.5	.25
92	MP3A	My	-.024	.25
93	MP3A	Mz	-.008	.25
94	MP3A	Y	-32.5	5.25
95	MP3A	My	-.024	5.25
96	MP3A	Mz	-.008	5.25
97	MP3B	Y	-32.5	.25
98	MP3B	My	.021	.25
99	MP3B	Mz	-.013	.25
100	MP3B	Y	-32.5	5.25
101	MP3B	My	.021	5.25
102	MP3B	Mz	-.013	5.25
103	MP3C	Y	-32.5	.25
104	MP3C	My	.005	.25
105	MP3C	Mz	.025	.25
106	MP3C	Y	-32.5	5.25
107	MP3C	My	.005	5.25
108	MP3C	Mz	.025	5.25
109	MP4A	Y	-23.1	.5
110	MP4A	My	-.02	.5
111	MP4A	Mz	.012	.5
112	MP4B	Y	-23.1	.5
113	MP4B	My	.004	.5
114	MP4B	Mz	-.023	.5
115	MP4C	Y	-23.1	.5
116	MP4C	My	.02	.5
117	MP4C	Mz	.012	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
118	MP2A	Y	-84.4	.5
119	MP2A	My	.037	.5
120	MP2A	Mz	-.021	.5
121	MP2B	Y	-84.4	.5
122	MP2B	My	-.007	.5
123	MP2B	Mz	.042	.5
124	MP2C	Y	-84.4	.5
125	MP2C	My	-.037	.5
126	MP2C	Mz	-.021	.5
127	MP4A	Y	-70.3	1
128	MP4A	My	.061	1
129	MP4A	Mz	-.035	1
130	MP4B	Y	-70.3	1
131	MP4B	My	-.012	1
132	MP4B	Mz	.069	1
133	MP4C	Y	-70.3	1
134	MP4C	My	-.061	1
135	MP4C	Mz	-.035	1
136	MP2B	Y	-43.55	2.5
137	MP2B	My	.004	2.5
138	MP2B	Mz	-.021	2.5
139	MP2B	Y	-43.55	4
140	MP2B	My	.004	4
141	MP2B	Mz	-.021	4
142	MP2C	Y	-43.55	2.5
143	MP2C	My	.019	2.5
144	MP2C	Mz	.011	2.5
145	MP2C	Y	-43.55	4
146	MP2C	My	.019	4
147	MP2C	Mz	.011	4
148	MP2A	Y	-43.55	2.5
149	MP2A	My	-.019	2.5
150	MP2A	Mz	.011	2.5
151	MP2A	Y	-43.55	4
152	MP2A	My	-.019	4
153	MP2A	Mz	.011	4
154	M44	Y	-26.9	.5
155	M44	My	0	.5
156	M44	Mz	0	.5
157	M46	Y	-26.9	.5
158	M46	My	0	.5
159	M46	Mz	0	.5

Member Point Loads (BLC 2 : Antenna Di)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Y	-8.551	5
2	MP3A	My	.009	5
3	MP3A	Mz	-.002	5
4	MP3A	Y	-8.551	6
5	MP3A	My	.009	6
6	MP3A	Mz	-.002	6
7	MP3B	Y	-8.551	5
8	MP3B	My	-.004	5
9	MP3B	Mz	.008	5
10	MP3B	Y	-8.551	6
11	MP3B	My	-.004	6



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
12	MP3B	Mz	.008	6
13	MP3C	Y	-8.551	5
14	MP3C	My	-.006	5
15	MP3C	Mz	-.007	5
16	MP3C	Y	-8.551	6
17	MP3C	Mv	-.006	6
18	MP3C	Mz	-.007	6
19	MP3A	Y	-8.551	5
20	MP3A	My	.006	5
21	MP3A	Mz	-.007	5
22	MP3A	Y	-8.551	6
23	MP3A	Mv	.006	6
24	MP3A	Mz	-.007	6
25	MP3B	Y	-8.551	5
26	MP3B	My	.001	5
27	MP3B	Mz	.009	5
28	MP3B	Y	-8.551	6
29	MP3B	Mv	.001	6
30	MP3B	Mz	.009	6
31	MP3C	Y	-8.551	5
32	MP3C	My	-.009	5
33	MP3C	Mz	-.002	5
34	MP3C	Y	-8.551	6
35	MP3C	Mv	-.009	6
36	MP3C	Mz	-.002	6
37	MP1A	Y	-64.395	1.5
38	MP1A	My	-.028	1.5
39	MP1A	Mz	.016	1.5
40	MP1A	Y	-64.395	4.5
41	MP1A	Mv	-.028	4.5
42	MP1A	Mz	.016	4.5
43	MP1B	Y	-64.395	1.5
44	MP1B	My	0	1.5
45	MP1B	Mz	-.032	1.5
46	MP1B	Y	-64.395	4.5
47	MP1B	Mv	0	4.5
48	MP1B	Mz	-.032	4.5
49	MP1C	Y	-64.395	1.5
50	MP1C	My	.028	1.5
51	MP1C	Mz	.016	1.5
52	MP1C	Y	-64.395	4.5
53	MP1C	Mv	.028	4.5
54	MP1C	Mz	.016	4.5
55	MP5A	Y	-64.395	1.5
56	MP5A	My	-.028	1.5
57	MP5A	Mz	.016	1.5
58	MP5A	Y	-64.395	4.5
59	MP5A	Mv	-.028	4.5
60	MP5A	Mz	.016	4.5
61	MP5B	Y	-64.395	1.5
62	MP5B	My	0	1.5
63	MP5B	Mz	-.032	1.5
64	MP5B	Y	-64.395	4.5
65	MP5B	Mv	0	4.5
66	MP5B	Mz	-.032	4.5
67	MP5C	Y	-64.395	1.5
68	MP5C	My	.028	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
69	MP5C	Mz	.016	1.5
70	MP5C	Y	-64.395	4.5
71	MP5C	My	.028	4.5
72	MP5C	Mz	.016	4.5
73	MP3A	Y	-68.045	.25
74	MP3A	My	-.01	.25
75	MP3A	Mz	.051	.25
76	MP3A	Y	-68.045	5.25
77	MP3A	My	-.01	5.25
78	MP3A	Mz	.051	5.25
79	MP3B	Y	-68.045	.25
80	MP3B	My	-.033	.25
81	MP3B	Mz	-.04	.25
82	MP3B	Y	-68.045	5.25
83	MP3B	My	-.033	5.25
84	MP3B	Mz	-.04	5.25
85	MP3C	Y	-68.045	.25
86	MP3C	My	.049	.25
87	MP3C	Mz	-.017	.25
88	MP3C	Y	-68.045	5.25
89	MP3C	My	.049	5.25
90	MP3C	Mz	-.017	5.25
91	MP3A	Y	-68.045	.25
92	MP3A	My	-.049	.25
93	MP3A	Mz	-.017	.25
94	MP3A	Y	-68.045	5.25
95	MP3A	My	-.049	5.25
96	MP3A	Mz	-.017	5.25
97	MP3B	Y	-68.045	.25
98	MP3B	My	.045	.25
99	MP3B	Mz	-.027	.25
100	MP3B	Y	-68.045	5.25
101	MP3B	My	.045	5.25
102	MP3B	Mz	-.027	5.25
103	MP3C	Y	-68.045	.25
104	MP3C	My	.01	.25
105	MP3C	Mz	.051	.25
106	MP3C	Y	-68.045	5.25
107	MP3C	My	.01	5.25
108	MP3C	Mz	.051	5.25
109	MP4A	Y	-17.971	.5
110	MP4A	My	-.016	.5
111	MP4A	Mz	.009	.5
112	MP4B	Y	-17.971	.5
113	MP4B	My	.003	.5
114	MP4B	Mz	-.018	.5
115	MP4C	Y	-17.971	.5
116	MP4C	My	.016	.5
117	MP4C	Mz	.009	.5
118	MP2A	Y	-44.312	.5
119	MP2A	My	.019	.5
120	MP2A	Mz	-.011	.5
121	MP2B	Y	-44.312	.5
122	MP2B	My	-.004	.5
123	MP2B	Mz	.022	.5
124	MP2C	Y	-44.312	.5
125	MP2C	My	-.019	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
126	MP2C	Mz	-.011	.5
127	MP4A	Y	-39.847	1
128	MP4A	My	.035	1
129	MP4A	Mz	-.02	1
130	MP4B	Y	-39.847	1
131	MP4B	My	-.007	1
132	MP4B	Mz	.039	1
133	MP4C	Y	-39.847	1
134	MP4C	My	-.035	1
135	MP4C	Mz	-.02	1
136	MP2B	Y	-32.56	2.5
137	MP2B	My	.003	2.5
138	MP2B	Mz	-.016	2.5
139	MP2B	Y	-32.56	4
140	MP2B	My	.003	4
141	MP2B	Mz	-.016	4
142	MP2C	Y	-32.56	2.5
143	MP2C	My	.014	2.5
144	MP2C	Mz	.008	2.5
145	MP2C	Y	-32.56	4
146	MP2C	My	.014	4
147	MP2C	Mz	.008	4
148	MP2A	Y	-32.56	2.5
149	MP2A	My	-.014	2.5
150	MP2A	Mz	.008	2.5
151	MP2A	Y	-32.56	4
152	MP2A	My	-.014	4
153	MP2A	Mz	.008	4
154	M44	Y	-54.573	.5
155	M44	My	0	.5
156	M44	Mz	0	.5
157	M46	Y	-54.573	.5
158	M46	My	0	.5
159	M46	Mz	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	5
2	MP3A	Z	-15.792	5
3	MP3A	Mx	.003	5
4	MP3A	X	0	6
5	MP3A	Z	-15.792	6
6	MP3A	Mx	.003	6
7	MP3B	X	0	5
8	MP3B	Z	-15.826	5
9	MP3B	Mx	-.015	5
10	MP3B	X	0	6
11	MP3B	Z	-15.826	6
12	MP3B	Mx	-.015	6
13	MP3C	X	0	5
14	MP3C	Z	-15.792	5
15	MP3C	Mx	.012	5
16	MP3C	X	0	6
17	MP3C	Z	-15.792	6
18	MP3C	Mx	.012	6
19	MP3A	X	0	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
20	MP3A	Z	-15.792	5
21	MP3A	Mx	.012	5
22	MP3A	X	0	6
23	MP3A	Z	-15.792	6
24	MP3A	Mx	.012	6
25	MP3B	X	0	5
26	MP3B	Z	-15.826	5
27	MP3B	Mx	-.017	5
28	MP3B	X	0	6
29	MP3B	Z	-15.826	6
30	MP3B	Mx	-.017	6
31	MP3C	X	0	5
32	MP3C	Z	-15.792	5
33	MP3C	Mx	.003	5
34	MP3C	X	0	6
35	MP3C	Z	-15.792	6
36	MP3C	Mx	.003	6
37	MP1A	X	0	1.5
38	MP1A	Z	-88.222	1.5
39	MP1A	Mx	-.022	1.5
40	MP1A	X	0	4.5
41	MP1A	Z	-88.222	4.5
42	MP1A	Mx	-.022	4.5
43	MP1B	X	0	1.5
44	MP1B	Z	-65.387	1.5
45	MP1B	Mx	.033	1.5
46	MP1B	X	0	4.5
47	MP1B	Z	-65.387	4.5
48	MP1B	Mx	.033	4.5
49	MP1C	X	0	1.5
50	MP1C	Z	-88.222	1.5
51	MP1C	Mx	-.022	1.5
52	MP1C	X	0	4.5
53	MP1C	Z	-88.222	4.5
54	MP1C	Mx	-.022	4.5
55	MP5A	X	0	1.5
56	MP5A	Z	-88.222	1.5
57	MP5A	Mx	-.022	1.5
58	MP5A	X	0	4.5
59	MP5A	Z	-88.222	4.5
60	MP5A	Mx	-.022	4.5
61	MP5B	X	0	1.5
62	MP5B	Z	-65.387	1.5
63	MP5B	Mx	.033	1.5
64	MP5B	X	0	4.5
65	MP5B	Z	-65.387	4.5
66	MP5B	Mx	.033	4.5
67	MP5C	X	0	1.5
68	MP5C	Z	-88.222	1.5
69	MP5C	Mx	-.022	1.5
70	MP5C	X	0	4.5
71	MP5C	Z	-88.222	4.5
72	MP5C	Mx	-.022	4.5
73	MP3A	X	0	.25
74	MP3A	Z	-128.176	.25
75	MP3A	Mx	-.097	.25
76	MP3A	X	0	5.25



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
77	MP3A	Z	-128.176	5.25
78	MP3A	Mx	-.097	5.25
79	MP3B	X	0	.25
80	MP3B	Z	-112.438	.25
81	MP3B	Mx	.067	.25
82	MP3B	X	0	5.25
83	MP3B	Z	-112.438	5.25
84	MP3B	Mx	.067	5.25
85	MP3C	X	0	.25
86	MP3C	Z	-128.176	.25
87	MP3C	Mx	.033	.25
88	MP3C	X	0	5.25
89	MP3C	Z	-128.176	5.25
90	MP3C	Mx	.033	5.25
91	MP3A	X	0	.25
92	MP3A	Z	-128.176	.25
93	MP3A	Mx	.033	.25
94	MP3A	X	0	5.25
95	MP3A	Z	-128.176	5.25
96	MP3A	Mx	.033	5.25
97	MP3B	X	0	.25
98	MP3B	Z	-112.438	.25
99	MP3B	Mx	.044	.25
100	MP3B	X	0	5.25
101	MP3B	Z	-112.438	5.25
102	MP3B	Mx	.044	5.25
103	MP3C	X	0	.25
104	MP3C	Z	-128.176	.25
105	MP3C	Mx	-.097	.25
106	MP3C	X	0	5.25
107	MP3C	Z	-128.176	5.25
108	MP3C	Mx	-.097	5.25
109	MP4A	X	0	.5
110	MP4A	Z	-25.539	.5
111	MP4A	Mx	-.013	.5
112	MP4B	X	0	.5
113	MP4B	Z	-14.827	.5
114	MP4B	Mx	.015	.5
115	MP4C	X	0	.5
116	MP4C	Z	-25.539	.5
117	MP4C	Mx	-.013	.5
118	MP2A	X	0	.5
119	MP2A	Z	-46.766	.5
120	MP2A	Mx	.012	.5
121	MP2B	X	0	.5
122	MP2B	Z	-34.697	.5
123	MP2B	Mx	-.017	.5
124	MP2C	X	0	.5
125	MP2C	Z	-46.766	.5
126	MP2C	Mx	.012	.5
127	MP4A	X	0	1
128	MP4A	Z	-45.205	1
129	MP4A	Mx	.023	1
130	MP4B	X	0	1
131	MP4B	Z	-28.639	1
132	MP4B	Mx	-.028	1
133	MP4C	X	0	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
134	MP4C	Z	-45.205	1
135	MP4C	Mx	.023	1
136	MP2B	X	0	2.5
137	MP2B	Z	-28.485	2.5
138	MP2B	Mx	.014	2.5
139	MP2B	X	0	4
140	MP2B	Z	-28.485	4
141	MP2B	Mx	.014	4
142	MP2C	X	0	2.5
143	MP2C	Z	-59.806	2.5
144	MP2C	Mx	-.015	2.5
145	MP2C	X	0	4
146	MP2C	Z	-59.806	4
147	MP2C	Mx	-.015	4
148	MP2A	X	0	2.5
149	MP2A	Z	-59.806	2.5
150	MP2A	Mx	-.015	2.5
151	MP2A	X	0	4
152	MP2A	Z	-59.806	4
153	MP2A	Mx	-.015	4
154	M44	X	0	.5
155	M44	Z	-60.578	.5
156	M44	Mx	0	.5
157	M46	X	0	.5
158	M46	Z	-60.578	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	7.908	5
2	MP3A	Z	-13.697	5
3	MP3A	Mx	.011	5
4	MP3A	X	7.908	6
5	MP3A	Z	-13.697	6
6	MP3A	Mx	.011	6
7	MP3B	X	7.911	5
8	MP3B	Z	-13.702	5
9	MP3B	Mx	-.017	5
10	MP3B	X	7.911	6
11	MP3B	Z	-13.702	6
12	MP3B	Mx	-.017	6
13	MP3C	X	7.89	5
14	MP3C	Z	-13.666	5
15	MP3C	Mx	.005	5
16	MP3C	X	7.89	6
17	MP3C	Z	-13.666	6
18	MP3C	Mx	.005	6
19	MP3A	X	7.908	5
20	MP3A	Z	-13.697	5
21	MP3A	Mx	.016	5
22	MP3A	X	7.908	6
23	MP3A	Z	-13.697	6
24	MP3A	Mx	.016	6
25	MP3B	X	7.911	5
26	MP3B	Z	-13.702	5
27	MP3B	Mx	-.013	5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
28	MP3B	X	7.911	6
29	MP3B	Z	-13.702	6
30	MP3B	Mx	-.013	6
31	MP3C	X	7.89	5
32	MP3C	Z	-13.666	5
33	MP3C	Mx	-.005	5
34	MP3C	X	7.89	6
35	MP3C	Z	-13.666	6
36	MP3C	Mx	-.005	6
37	MP1A	X	36.499	1.5
38	MP1A	Z	-63.219	1.5
39	MP1A	Mx	-.032	1.5
40	MP1A	X	36.499	4.5
41	MP1A	Z	-63.219	4.5
42	MP1A	Mx	-.032	4.5
43	MP1B	X	36.499	1.5
44	MP1B	Z	-63.219	1.5
45	MP1B	Mx	.032	1.5
46	MP1B	X	36.499	4.5
47	MP1B	Z	-63.219	4.5
48	MP1B	Mx	.032	4.5
49	MP1C	X	47.917	1.5
50	MP1C	Z	-82.995	1.5
51	MP1C	Mx	0	1.5
52	MP1C	X	47.917	4.5
53	MP1C	Z	-82.995	4.5
54	MP1C	Mx	0	4.5
55	MP5A	X	36.499	1.5
56	MP5A	Z	-63.219	1.5
57	MP5A	Mx	-.032	1.5
58	MP5A	X	36.499	4.5
59	MP5A	Z	-63.219	4.5
60	MP5A	Mx	-.032	4.5
61	MP5B	X	36.499	1.5
62	MP5B	Z	-63.219	1.5
63	MP5B	Mx	.032	1.5
64	MP5B	X	36.499	4.5
65	MP5B	Z	-63.219	4.5
66	MP5B	Mx	.032	4.5
67	MP5C	X	47.917	1.5
68	MP5C	Z	-82.995	1.5
69	MP5C	Mx	0	1.5
70	MP5C	X	47.917	4.5
71	MP5C	Z	-82.995	4.5
72	MP5C	Mx	0	4.5
73	MP3A	X	58.622	.25
74	MP3A	Z	-101.537	.25
75	MP3A	Mx	-.085	.25
76	MP3A	X	58.622	5.25
77	MP3A	Z	-101.537	5.25
78	MP3A	Mx	-.085	5.25
79	MP3B	X	57.168	.25
80	MP3B	Z	-99.018	.25
81	MP3B	Mx	.031	.25
82	MP3B	X	57.168	5.25
83	MP3B	Z	-99.018	5.25
84	MP3B	Mx	.031	5.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
85	MP3C	X	66.821	.25
86	MP3C	Z	-115.737	.25
87	MP3C	Mx	.078	.25
88	MP3C	X	66.821	5.25
89	MP3C	Z	-115.737	5.25
90	MP3C	Mx	.078	5.25
91	MP3A	X	58.622	.25
92	MP3A	Z	-101.537	.25
93	MP3A	Mx	-.017	.25
94	MP3A	X	58.622	5.25
95	MP3A	Z	-101.537	5.25
96	MP3A	Mx	-.017	5.25
97	MP3B	X	57.168	.25
98	MP3B	Z	-99.018	.25
99	MP3B	Mx	.077	.25
100	MP3B	X	57.168	5.25
101	MP3B	Z	-99.018	5.25
102	MP3B	Mx	.077	5.25
103	MP3C	X	66.821	.25
104	MP3C	Z	-115.737	.25
105	MP3C	Mx	-.078	.25
106	MP3C	X	66.821	5.25
107	MP3C	Z	-115.737	5.25
108	MP3C	Mx	-.078	5.25
109	MP4A	X	9.049	.5
110	MP4A	Z	-15.674	.5
111	MP4A	Mx	-.016	.5
112	MP4B	X	8.059	.5
113	MP4B	Z	-13.959	.5
114	MP4B	Mx	.015	.5
115	MP4C	X	14.63	.5
116	MP4C	Z	-25.34	.5
117	MP4C	Mx	0	.5
118	MP2A	X	19.191	.5
119	MP2A	Z	-33.241	.5
120	MP2A	Mx	.017	.5
121	MP2B	X	18.076	.5
122	MP2B	Z	-31.309	.5
123	MP2B	Mx	-.017	.5
124	MP2C	X	25.479	.5
125	MP2C	Z	-44.131	.5
126	MP2C	Mx	0	.5
127	MP4A	X	16.849	1
128	MP4A	Z	-29.183	1
129	MP4A	Mx	.029	1
130	MP4B	X	15.318	1
131	MP4B	Z	-26.532	1
132	MP4B	Mx	-.029	1
133	MP4C	X	25.479	1
134	MP4C	Z	-44.131	1
135	MP4C	Mx	0	1
136	MP2B	X	16.131	2.5
137	MP2B	Z	-27.94	2.5
138	MP2B	Mx	.015	2.5
139	MP2B	X	16.131	4
140	MP2B	Z	-27.94	4
141	MP2B	Mx	.015	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
142	MP2C	X	35.342	2.5
143	MP2C	Z	-61.214	2.5
144	MP2C	Mx	0	2.5
145	MP2C	X	35.342	4
146	MP2C	Z	-61.214	4
147	MP2C	Mx	0	4
148	MP2A	X	19.025	2.5
149	MP2A	Z	-32.953	2.5
150	MP2A	Mx	-.016	2.5
151	MP2A	X	19.025	4
152	MP2A	Z	-32.953	4
153	MP2A	Mx	-.016	4
154	M44	X	26.687	.5
155	M44	Z	-46.224	.5
156	M44	Mx	0	.5
157	M46	X	26.687	.5
158	M46	Z	-46.224	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	13.707	5
2	MP3A	Z	-7.914	5
3	MP3A	Mx	.016	5
4	MP3A	X	13.707	6
5	MP3A	Z	-7.914	6
6	MP3A	Mx	.016	6
7	MP3B	X	13.683	5
8	MP3B	Z	-7.9	5
9	MP3B	Mx	-.014	5
10	MP3B	X	13.683	6
11	MP3B	Z	-7.9	6
12	MP3B	Mx	-.014	6
13	MP3C	X	13.676	5
14	MP3C	Z	-7.896	5
15	MP3C	Mx	-.003	5
16	MP3C	X	13.676	6
17	MP3C	Z	-7.896	6
18	MP3C	Mx	-.003	6
19	MP3A	X	13.707	5
20	MP3A	Z	-7.914	5
21	MP3A	Mx	.016	5
22	MP3A	X	13.707	6
23	MP3A	Z	-7.914	6
24	MP3A	Mx	.016	6
25	MP3B	X	13.683	5
26	MP3B	Z	-7.9	5
27	MP3B	Mx	-.006	5
28	MP3B	X	13.683	6
29	MP3B	Z	-7.9	6
30	MP3B	Mx	-.006	6
31	MP3C	X	13.676	5
32	MP3C	Z	-7.896	5
33	MP3C	Mx	-.012	5
34	MP3C	X	13.676	6
35	MP3C	Z	-7.896	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
36	MP3C	Mx	-.012	6
37	MP1A	X	56.627	1.5
38	MP1A	Z	-32.693	1.5
39	MP1A	Mx	-.033	1.5
40	MP1A	X	56.627	4.5
41	MP1A	Z	-32.693	4.5
42	MP1A	Mx	-.033	4.5
43	MP1B	X	76.403	1.5
44	MP1B	Z	-44.111	1.5
45	MP1B	Mx	.022	1.5
46	MP1B	X	76.403	4.5
47	MP1B	Z	-44.111	4.5
48	MP1B	Mx	.022	4.5
49	MP1C	X	76.403	1.5
50	MP1C	Z	-44.111	1.5
51	MP1C	Mx	.022	1.5
52	MP1C	X	76.403	4.5
53	MP1C	Z	-44.111	4.5
54	MP1C	Mx	.022	4.5
55	MP5A	X	56.627	1.5
56	MP5A	Z	-32.693	1.5
57	MP5A	Mx	-.033	1.5
58	MP5A	X	56.627	4.5
59	MP5A	Z	-32.693	4.5
60	MP5A	Mx	-.033	4.5
61	MP5B	X	76.403	1.5
62	MP5B	Z	-44.111	1.5
63	MP5B	Mx	.022	1.5
64	MP5B	X	76.403	4.5
65	MP5B	Z	-44.111	4.5
66	MP5B	Mx	.022	4.5
67	MP5C	X	76.403	1.5
68	MP5C	Z	-44.111	1.5
69	MP5C	Mx	.022	1.5
70	MP5C	X	76.403	4.5
71	MP5C	Z	-44.111	4.5
72	MP5C	Mx	.022	4.5
73	MP3A	X	96.803	.25
74	MP3A	Z	-55.889	.25
75	MP3A	Mx	-.056	.25
76	MP3A	X	96.803	5.25
77	MP3A	Z	-55.889	5.25
78	MP3A	Mx	-.056	5.25
79	MP3B	X	107.914	.25
80	MP3B	Z	-62.304	.25
81	MP3B	Mx	-.016	.25
82	MP3B	X	107.914	5.25
83	MP3B	Z	-62.304	5.25
84	MP3B	Mx	-.016	5.25
85	MP3C	X	111.003	.25
86	MP3C	Z	-64.088	.25
87	MP3C	Mx	.097	.25
88	MP3C	X	111.003	5.25
89	MP3C	Z	-64.088	5.25
90	MP3C	Mx	.097	5.25
91	MP3A	X	96.803	.25
92	MP3A	Z	-55.889	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
93	MP3A	Mx	-.056	.25
94	MP3A	X	96.803	5.25
95	MP3A	Z	-55.889	5.25
96	MP3A	Mx	-.056	5.25
97	MP3B	X	107.914	.25
98	MP3B	Z	-62.304	.25
99	MP3B	Mx	.096	.25
100	MP3B	X	107.914	5.25
101	MP3B	Z	-62.304	5.25
102	MP3B	Mx	.096	5.25
103	MP3C	X	111.003	.25
104	MP3C	Z	-64.088	.25
105	MP3C	Mx	-.033	.25
106	MP3C	X	111.003	5.25
107	MP3C	Z	-64.088	5.25
108	MP3C	Mx	-.033	5.25
109	MP4A	X	12.452	.5
110	MP4A	Z	-7.189	.5
111	MP4A	Mx	-.014	.5
112	MP4B	X	20.015	.5
113	MP4B	Z	-11.555	.5
114	MP4B	Mx	.015	.5
115	MP4C	X	22.118	.5
116	MP4C	Z	-12.77	.5
117	MP4C	Mx	.013	.5
118	MP2A	X	29.61	.5
119	MP2A	Z	-17.096	.5
120	MP2A	Mx	.017	.5
121	MP2B	X	38.131	.5
122	MP2B	Z	-22.015	.5
123	MP2B	Mx	-.014	.5
124	MP2C	X	40.501	.5
125	MP2C	Z	-23.383	.5
126	MP2C	Mx	-.012	.5
127	MP4A	X	24.201	1
128	MP4A	Z	-13.972	1
129	MP4A	Mx	.028	1
130	MP4B	X	35.896	1
131	MP4B	Z	-20.725	1
132	MP4B	Mx	-.027	1
133	MP4C	X	39.148	1
134	MP4C	Z	-22.602	1
135	MP4C	Mx	-.023	1
136	MP2B	X	45.645	2.5
137	MP2B	Z	-26.353	2.5
138	MP2B	Mx	.017	2.5
139	MP2B	X	45.645	4
140	MP2B	Z	-26.353	4
141	MP2B	Mx	.017	4
142	MP2C	X	51.794	2.5
143	MP2C	Z	-29.903	2.5
144	MP2C	Mx	.015	2.5
145	MP2C	X	51.794	4
146	MP2C	Z	-29.903	4
147	MP2C	Mx	.015	4
148	MP2A	X	23.532	2.5
149	MP2A	Z	-13.586	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
150	MP2A	Mx	-.014	2.5
151	MP2A	X	23.532	4
152	MP2A	Z	-13.586	4
153	MP2A	Mx	-.014	4
154	M44	X	52.462	.5
155	M44	Z	-30.289	.5
156	M44	Mx	0	.5
157	M46	X	52.462	.5
158	M46	Z	-30.289	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	15.815	5
2	MP3A	Z	0	5
3	MP3A	Mx	.016	5
4	MP3A	X	15.815	6
5	MP3A	Z	0	6
6	MP3A	Mx	.016	6
7	MP3B	X	15.782	5
8	MP3B	Z	0	5
9	MP3B	Mx	-.008	5
10	MP3B	X	15.782	6
11	MP3B	Z	0	6
12	MP3B	Mx	-.008	6
13	MP3C	X	15.815	5
14	MP3C	Z	0	5
15	MP3C	Mx	-.011	5
16	MP3C	X	15.815	6
17	MP3C	Z	0	6
18	MP3C	Mx	-.011	6
19	MP3A	X	15.815	5
20	MP3A	Z	0	5
21	MP3A	Mx	.011	5
22	MP3A	X	15.815	6
23	MP3A	Z	0	6
24	MP3A	Mx	.011	6
25	MP3B	X	15.782	5
26	MP3B	Z	0	5
27	MP3B	Mx	.002	5
28	MP3B	X	15.782	6
29	MP3B	Z	0	6
30	MP3B	Mx	.002	6
31	MP3C	X	15.815	5
32	MP3C	Z	0	5
33	MP3C	Mx	-.016	5
34	MP3C	X	15.815	6
35	MP3C	Z	0	6
36	MP3C	Mx	-.016	6
37	MP1A	X	72.999	1.5
38	MP1A	Z	0	1.5
39	MP1A	Mx	-.032	1.5
40	MP1A	X	72.999	4.5
41	MP1A	Z	0	4.5
42	MP1A	Mx	-.032	4.5
43	MP1B	X	95.834	1.5



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(fft.%)
44	MP1B	Z	0	1.5
45	MP1B	Mx	0	1.5
46	MP1B	X	95.834	4.5
47	MP1B	Z	0	4.5
48	MP1B	Mx	0	4.5
49	MP1C	X	72.999	1.5
50	MP1C	Z	0	1.5
51	MP1C	Mx	.032	1.5
52	MP1C	X	72.999	4.5
53	MP1C	Z	0	4.5
54	MP1C	Mx	.032	4.5
55	MP5A	X	72.999	1.5
56	MP5A	Z	0	1.5
57	MP5A	Mx	-.032	1.5
58	MP5A	X	72.999	4.5
59	MP5A	Z	0	4.5
60	MP5A	Mx	-.032	4.5
61	MP5A	X	95.834	1.5
62	MP5B	Z	0	1.5
63	MP5B	Mx	0	1.5
64	MP5B	X	95.834	4.5
65	MP5B	Z	0	4.5
66	MP5B	Mx	0	4.5
67	MP5C	X	72.999	1.5
68	MP5C	Z	0	1.5
69	MP5C	Mx	.032	1.5
70	MP5C	X	72.999	4.5
71	MP5C	Z	0	4.5
72	MP5C	Mx	.032	4.5
73	MP3A	X	117.244	.25
74	MP3A	Z	0	.25
75	MP3A	Mx	-.017	.25
76	MP3A	X	117.244	5.25
77	MP3A	Z	0	5.25
78	MP3A	Mx	-.017	5.25
79	MP3B	X	132.982	.25
80	MP3B	Z	0	.25
81	MP3B	Mx	-.065	.25
82	MP3B	X	132.982	5.25
83	MP3B	Z	0	5.25
84	MP3B	Mx	-.065	5.25
85	MP3C	X	117.244	.25
86	MP3C	Z	0	.25
87	MP3C	Mx	.085	.25
88	MP3C	X	117.244	5.25
89	MP3C	Z	0	5.25
90	MP3C	Mx	.085	5.25
91	MP3A	X	117.244	.25
92	MP3A	Z	0	.25
93	MP3A	Mx	-.085	.25
94	MP3A	X	117.244	5.25
95	MP3A	Z	0	5.25
96	MP3A	Mx	-.085	5.25
97	MP3B	X	132.982	.25
98	MP3B	Z	0	.25
99	MP3B	Mx	.088	.25
100	MP3B	X	132.982	5.25



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
101	MP3B	Z	0	5.25
102	MP3B	Mx	.088	5.25
103	MP3C	X	117.244	.25
104	MP3C	Z	0	.25
105	MP3C	Mx	.017	.25
106	MP3C	X	117.244	5.25
107	MP3C	Z	0	5.25
108	MP3C	Mx	.017	5.25
109	MP4A	X	18.098	.5
110	MP4A	Z	0	.5
111	MP4A	Mx	-.016	.5
112	MP4B	X	28.811	.5
113	MP4B	Z	0	.5
114	MP4B	Mx	.005	.5
115	MP4C	X	18.098	.5
116	MP4C	Z	0	.5
117	MP4C	Mx	.016	.5
118	MP2A	X	38.383	.5
119	MP2A	Z	0	.5
120	MP2A	Mx	.017	.5
121	MP2B	X	50.452	.5
122	MP2B	Z	0	.5
123	MP2B	Mx	-.004	.5
124	MP2C	X	38.383	.5
125	MP2C	Z	0	.5
126	MP2C	Mx	-.017	.5
127	MP4A	X	33.698	1
128	MP4A	Z	0	1
129	MP4A	Mx	.029	1
130	MP4B	X	50.264	1
131	MP4B	Z	0	1
132	MP4B	Mx	-.009	1
133	MP4C	X	33.698	1
134	MP4C	Z	0	1
135	MP4C	Mx	-.029	1
136	MP2B	X	69.372	2.5
137	MP2B	Z	0	2.5
138	MP2B	Mx	.006	2.5
139	MP2B	X	69.372	4
140	MP2B	Z	0	4
141	MP2B	Mx	.006	4
142	MP2C	X	38.051	2.5
143	MP2C	Z	0	2.5
144	MP2C	Mx	.016	2.5
145	MP2C	X	38.051	4
146	MP2C	Z	0	4
147	MP2C	Mx	.016	4
148	MP2A	X	38.051	2.5
149	MP2A	Z	0	2.5
150	MP2A	Mx	-.016	2.5
151	MP2A	X	38.051	4
152	MP2A	Z	0	4
153	MP2A	Mx	-.016	4
154	M44	X	74.986	.5
155	M44	Z	0	.5
156	M44	Mx	0	.5
157	M46	X	74.986	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
158	M46	Z	0	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	13.676	5
2	MP3A	Z	7.896	5
3	MP3A	Mx	.012	5
4	MP3A	X	13.676	6
5	MP3A	Z	7.896	6
6	MP3A	Mx	.012	6
7	MP3B	X	13.671	5
8	MP3B	Z	7.893	5
9	MP3B	Mx	.000455	5
10	MP3B	X	13.671	6
11	MP3B	Z	7.893	6
12	MP3B	Mx	.000455	6
13	MP3C	X	13.707	5
14	MP3C	Z	7.914	5
15	MP3C	Mx	-.016	5
16	MP3C	X	13.707	6
17	MP3C	Z	7.914	6
18	MP3C	Mx	-.016	6
19	MP3A	X	13.676	5
20	MP3A	Z	7.896	5
21	MP3A	Mx	.003	5
22	MP3A	X	13.676	6
23	MP3A	Z	7.896	6
24	MP3A	Mx	.003	6
25	MP3B	X	13.671	5
26	MP3B	Z	7.893	5
27	MP3B	Mx	.01	5
28	MP3B	X	13.671	6
29	MP3B	Z	7.893	6
30	MP3B	Mx	.01	6
31	MP3C	X	13.707	5
32	MP3C	Z	7.914	5
33	MP3C	Mx	-.016	5
34	MP3C	X	13.707	6
35	MP3C	Z	7.914	6
36	MP3C	Mx	-.016	6
37	MP1A	X	76.403	1.5
38	MP1A	Z	44.111	1.5
39	MP1A	Mx	-.022	1.5
40	MP1A	X	76.403	4.5
41	MP1A	Z	44.111	4.5
42	MP1A	Mx	-.022	4.5
43	MP1B	X	76.403	1.5
44	MP1B	Z	44.111	1.5
45	MP1B	Mx	-.022	1.5
46	MP1B	X	76.403	4.5
47	MP1B	Z	44.111	4.5
48	MP1B	Mx	-.022	4.5
49	MP1C	X	56.627	1.5
50	MP1C	Z	32.693	1.5
51	MP1C	Mx	.033	1.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
52	MP1C	X	56.627	4.5
53	MP1C	Z	32.693	4.5
54	MP1C	Mx	.033	4.5
55	MP5A	X	76.403	1.5
56	MP5A	Z	44.111	1.5
57	MP5A	Mx	-.022	1.5
58	MP5A	X	76.403	4.5
59	MP5A	Z	44.111	4.5
60	MP5A	Mx	-.022	4.5
61	MP5B	X	76.403	1.5
62	MP5B	Z	44.111	1.5
63	MP5B	Mx	-.022	1.5
64	MP5B	X	76.403	4.5
65	MP5B	Z	44.111	4.5
66	MP5B	Mx	-.022	4.5
67	MP5C	X	56.627	1.5
68	MP5C	Z	32.693	1.5
69	MP5C	Mx	.033	1.5
70	MP5C	X	56.627	4.5
71	MP5C	Z	32.693	4.5
72	MP5C	Mx	.033	4.5
73	MP3A	X	111.003	.25
74	MP3A	Z	64.088	.25
75	MP3A	Mx	.033	.25
76	MP3A	X	111.003	5.25
77	MP3A	Z	64.088	5.25
78	MP3A	Mx	.033	5.25
79	MP3B	X	113.522	.25
80	MP3B	Z	65.542	.25
81	MP3B	Mx	-.094	.25
82	MP3B	X	113.522	5.25
83	MP3B	Z	65.542	5.25
84	MP3B	Mx	-.094	5.25
85	MP3C	X	96.803	.25
86	MP3C	Z	55.889	.25
87	MP3C	Mx	.056	.25
88	MP3C	X	96.803	5.25
89	MP3C	Z	55.889	5.25
90	MP3C	Mx	.056	5.25
91	MP3A	X	111.003	.25
92	MP3A	Z	64.088	.25
93	MP3A	Mx	-.097	.25
94	MP3A	X	111.003	5.25
95	MP3A	Z	64.088	5.25
96	MP3A	Mx	-.097	5.25
97	MP3B	X	113.522	.25
98	MP3B	Z	65.542	.25
99	MP3B	Mx	.049	.25
100	MP3B	X	113.522	5.25
101	MP3B	Z	65.542	5.25
102	MP3B	Mx	.049	5.25
103	MP3C	X	96.803	.25
104	MP3C	Z	55.889	.25
105	MP3C	Mx	.056	.25
106	MP3C	X	96.803	5.25
107	MP3C	Z	55.889	5.25
108	MP3C	Mx	.056	5.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
109	MP4A	X	22.118	.5
110	MP4A	Z	12.77	.5
111	MP4A	Mx	-.013	.5
112	MP4B	X	23.832	.5
113	MP4B	Z	13.759	.5
114	MP4B	Mx	-.009	.5
115	MP4C	X	12.452	.5
116	MP4C	Z	7.189	.5
117	MP4C	Mx	.014	.5
118	MP2A	X	40.501	.5
119	MP2A	Z	23.383	.5
120	MP2A	Mx	.012	.5
121	MP2B	X	42.432	.5
122	MP2B	Z	24.498	.5
123	MP2B	Mx	.008	.5
124	MP2C	X	29.61	.5
125	MP2C	Z	17.096	.5
126	MP2C	Mx	-.017	.5
127	MP4A	X	39.148	1
128	MP4A	Z	22.602	1
129	MP4A	Mx	.023	1
130	MP4B	X	41.8	1
131	MP4B	Z	24.133	1
132	MP4B	Mx	.017	1
133	MP4C	X	24.201	1
134	MP4C	Z	13.972	1
135	MP4C	Mx	-.028	1
136	MP2B	X	56.806	2.5
137	MP2B	Z	32.797	2.5
138	MP2B	Mx	-.011	2.5
139	MP2B	X	56.806	4
140	MP2B	Z	32.797	4
141	MP2B	Mx	-.011	4
142	MP2C	X	23.532	2.5
143	MP2C	Z	13.586	2.5
144	MP2C	Mx	.014	2.5
145	MP2C	X	23.532	4
146	MP2C	Z	13.586	4
147	MP2C	Mx	.014	4
148	MP2A	X	51.794	2.5
149	MP2A	Z	29.903	2.5
150	MP2A	Mx	-.015	2.5
151	MP2A	X	51.794	4
152	MP2A	Z	29.903	4
153	MP2A	Mx	-.015	4
154	M44	X	71.179	.5
155	M44	Z	41.095	.5
156	M44	Mx	0	.5
157	M46	X	71.179	.5
158	M46	Z	41.095	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	7.89	5
2	MP3A	Z	13.666	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
3	MP3A	Mx	.005	5
4	MP3A	X	7.89	6
5	MP3A	Z	13.666	6
6	MP3A	Mx	.005	6
7	MP3B	X	7.904	5
8	MP3B	Z	13.69	5
9	MP3B	Mx	.009	5
10	MP3B	X	7.904	6
11	MP3B	Z	13.69	6
12	MP3B	Mx	.009	6
13	MP3C	X	7.908	5
14	MP3C	Z	13.697	5
15	MP3C	Mx	-.016	5
16	MP3C	X	7.908	6
17	MP3C	Z	13.697	6
18	MP3C	Mx	-.016	6
19	MP3A	X	7.89	5
20	MP3A	Z	13.666	5
21	MP3A	Mx	-.005	5
22	MP3A	X	7.89	6
23	MP3A	Z	13.666	6
24	MP3A	Mx	-.005	6
25	MP3B	X	7.904	5
26	MP3B	Z	13.69	5
27	MP3B	Mx	.015	5
28	MP3B	X	7.904	6
29	MP3B	Z	13.69	6
30	MP3B	Mx	.015	6
31	MP3C	X	7.908	5
32	MP3C	Z	13.697	5
33	MP3C	Mx	-.011	5
34	MP3C	X	7.908	6
35	MP3C	Z	13.697	6
36	MP3C	Mx	-.011	6
37	MP1A	X	47.917	1.5
38	MP1A	Z	82.995	1.5
39	MP1A	Mx	0	1.5
40	MP1A	X	47.917	4.5
41	MP1A	Z	82.995	4.5
42	MP1A	Mx	0	4.5
43	MP1B	X	36.499	1.5
44	MP1B	Z	63.219	1.5
45	MP1B	Mx	-.032	1.5
46	MP1B	X	36.499	4.5
47	MP1B	Z	63.219	4.5
48	MP1B	Mx	-.032	4.5
49	MP1C	X	36.499	1.5
50	MP1C	Z	63.219	1.5
51	MP1C	Mx	.032	1.5
52	MP1C	X	36.499	4.5
53	MP1C	Z	63.219	4.5
54	MP1C	Mx	.032	4.5
55	MP5A	X	47.917	1.5
56	MP5A	Z	82.995	1.5
57	MP5A	Mx	0	1.5
58	MP5A	X	47.917	4.5
59	MP5A	Z	82.995	4.5



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
60	MP5A	Mx	0	4.5
61	MP5B	X	36.499	1.5
62	MP5B	Z	63.219	1.5
63	MP5B	Mx	-.032	1.5
64	MP5B	X	36.499	4.5
65	MP5B	Z	63.219	4.5
66	MP5B	Mx	-.032	4.5
67	MP5C	X	36.499	1.5
68	MP5C	Z	63.219	1.5
69	MP5C	Mx	.032	1.5
70	MP5C	X	36.499	4.5
71	MP5C	Z	63.219	4.5
72	MP5C	Mx	.032	4.5
73	MP3A	X	66.821	.25
74	MP3A	Z	115.737	.25
75	MP3A	Mx	.078	.25
76	MP3A	X	66.821	5.25
77	MP3A	Z	115.737	5.25
78	MP3A	Mx	.078	5.25
79	MP3B	X	60.406	.25
80	MP3B	Z	104.626	.25
81	MP3B	Mx	-.092	.25
82	MP3B	X	60.406	5.25
83	MP3B	Z	104.626	5.25
84	MP3B	Mx	-.092	5.25
85	MP3C	X	58.622	.25
86	MP3C	Z	101.537	.25
87	MP3C	Mx	.017	.25
88	MP3C	X	58.622	5.25
89	MP3C	Z	101.537	5.25
90	MP3C	Mx	.017	5.25
91	MP3A	X	66.821	.25
92	MP3A	Z	115.737	.25
93	MP3A	Mx	-.078	.25
94	MP3A	X	66.821	5.25
95	MP3A	Z	115.737	5.25
96	MP3A	Mx	-.078	5.25
97	MP3B	X	60.406	.25
98	MP3B	Z	104.626	.25
99	MP3B	Mx	-.000974	.25
100	MP3B	X	60.406	5.25
101	MP3B	Z	104.626	5.25
102	MP3B	Mx	-.000974	5.25
103	MP3C	X	58.622	.25
104	MP3C	Z	101.537	.25
105	MP3C	Mx	.085	.25
106	MP3C	X	58.622	5.25
107	MP3C	Z	101.537	5.25
108	MP3C	Mx	.085	5.25
109	MP4A	X	14.63	.5
110	MP4A	Z	25.34	.5
111	MP4A	Mx	0	.5
112	MP4B	X	10.263	.5
113	MP4B	Z	17.777	.5
114	MP4B	Mx	-.016	.5
115	MP4C	X	9.049	.5
116	MP4C	Z	15.674	.5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
117	MP4C	Mx	.016
118	MP2A	X	25.479
119	MP2A	Z	44.131
120	MP2A	Mx	0
121	MP2B	X	20.559
122	MP2B	Z	35.61
123	MP2B	Mx	.016
124	MP2C	X	19.191
125	MP2C	Z	33.241
126	MP2C	Mx	-.017
127	MP4A	X	25.479
128	MP4A	Z	44.131
129	MP4A	Mx	0
130	MP4B	X	18.727
131	MP4B	Z	32.435
132	MP4B	Mx	.029
133	MP4C	X	16.849
134	MP4C	Z	29.183
135	MP4C	Mx	-.029
136	MP2B	X	22.575
137	MP2B	Z	39.102
138	MP2B	Mx	-.017
139	MP2B	X	22.575
140	MP2B	Z	39.102
141	MP2B	Mx	-.017
142	MP2C	X	19.025
143	MP2C	Z	32.953
144	MP2C	Mx	.016
145	MP2C	X	19.025
146	MP2C	Z	32.953
147	MP2C	Mx	.016
148	MP2A	X	35.342
149	MP2A	Z	61.214
150	MP2A	Mx	0
151	MP2A	X	35.342
152	MP2A	Z	61.214
153	MP2A	Mx	0
154	M44	X	37.493
155	M44	Z	64.94
156	M44	Mx	0
157	M46	X	37.493
158	M46	Z	64.94
159	M46	Mx	0

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0
2	MP3A	Z	15.792
3	MP3A	Mx	-.003
4	MP3A	X	0
5	MP3A	Z	15.792
6	MP3A	Mx	-.003
7	MP3B	X	0
8	MP3B	Z	15.826
9	MP3B	Mx	.015
10	MP3B	X	0



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
11	MP3B	Z	15.826	6
12	MP3B	Mx	.015	6
13	MP3C	X	0	5
14	MP3C	Z	15.792	5
15	MP3C	Mx	-.012	5
16	MP3C	X	0	6
17	MP3C	Z	15.792	6
18	MP3C	Mx	-.012	6
19	MP3A	X	0	5
20	MP3A	Z	15.792	5
21	MP3A	Mx	-.012	5
22	MP3A	X	0	6
23	MP3A	Z	15.792	6
24	MP3A	Mx	-.012	6
25	MP3B	X	0	5
26	MP3B	Z	15.826	5
27	MP3B	Mx	.017	5
28	MP3B	X	0	6
29	MP3B	Z	15.826	6
30	MP3B	Mx	.017	6
31	MP3C	X	0	5
32	MP3C	Z	15.792	5
33	MP3C	Mx	-.003	5
34	MP3C	X	0	6
35	MP3C	Z	15.792	6
36	MP3C	Mx	-.003	6
37	MP1A	X	0	1.5
38	MP1A	Z	88.222	1.5
39	MP1A	Mx	.022	1.5
40	MP1A	X	0	4.5
41	MP1A	Z	88.222	4.5
42	MP1A	Mx	.022	4.5
43	MP1B	X	0	1.5
44	MP1B	Z	65.387	1.5
45	MP1B	Mx	-.033	1.5
46	MP1B	X	0	4.5
47	MP1B	Z	65.387	4.5
48	MP1B	Mx	-.033	4.5
49	MP1C	X	0	1.5
50	MP1C	Z	88.222	1.5
51	MP1C	Mx	.022	1.5
52	MP1C	X	0	4.5
53	MP1C	Z	88.222	4.5
54	MP1C	Mx	.022	4.5
55	MP5A	X	0	1.5
56	MP5A	Z	88.222	1.5
57	MP5A	Mx	.022	1.5
58	MP5A	X	0	4.5
59	MP5A	Z	88.222	4.5
60	MP5A	Mx	.022	4.5
61	MP5B	X	0	1.5
62	MP5B	Z	65.387	1.5
63	MP5B	Mx	-.033	1.5
64	MP5B	X	0	4.5
65	MP5B	Z	65.387	4.5
66	MP5B	Mx	-.033	4.5
67	MP5C	X	0	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
68	MP5C	Z	88.222	1.5
69	MP5C	Mx	.022	1.5
70	MP5C	X	0	4.5
71	MP5C	Z	88.222	4.5
72	MP5C	Mx	.022	4.5
73	MP3A	X	0	.25
74	MP3A	Z	128.176	.25
75	MP3A	Mx	.097	.25
76	MP3A	X	0	5.25
77	MP3A	Z	128.176	5.25
78	MP3A	Mx	.097	5.25
79	MP3B	X	0	.25
80	MP3B	Z	112.438	.25
81	MP3B	Mx	-.067	.25
82	MP3B	X	0	5.25
83	MP3B	Z	112.438	5.25
84	MP3B	Mx	-.067	5.25
85	MP3C	X	0	.25
86	MP3C	Z	128.176	.25
87	MP3C	Mx	-.033	.25
88	MP3C	X	0	5.25
89	MP3C	Z	128.176	5.25
90	MP3C	Mx	-.033	5.25
91	MP3A	X	0	.25
92	MP3A	Z	128.176	.25
93	MP3A	Mx	-.033	.25
94	MP3A	X	0	5.25
95	MP3A	Z	128.176	5.25
96	MP3A	Mx	-.033	5.25
97	MP3B	X	0	.25
98	MP3B	Z	112.438	.25
99	MP3B	Mx	-.044	.25
100	MP3B	X	0	5.25
101	MP3B	Z	112.438	5.25
102	MP3B	Mx	-.044	5.25
103	MP3C	X	0	.25
104	MP3C	Z	128.176	.25
105	MP3C	Mx	.097	.25
106	MP3C	X	0	5.25
107	MP3C	Z	128.176	5.25
108	MP3C	Mx	.097	5.25
109	MP4A	X	0	.5
110	MP4A	Z	25.539	.5
111	MP4A	Mx	.013	.5
112	MP4B	X	0	.5
113	MP4B	Z	14.827	.5
114	MP4B	Mx	-.015	.5
115	MP4C	X	0	.5
116	MP4C	Z	25.539	.5
117	MP4C	Mx	.013	.5
118	MP2A	X	0	.5
119	MP2A	Z	46.766	.5
120	MP2A	Mx	-.012	.5
121	MP2B	X	0	.5
122	MP2B	Z	34.697	.5
123	MP2B	Mx	.017	.5
124	MP2C	X	0	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
125	MP2C	Z	46.766	.5
126	MP2C	Mx	-.012	.5
127	MP4A	X	0	1
128	MP4A	Z	45.205	1
129	MP4A	Mx	-.023	1
130	MP4B	X	0	1
131	MP4B	Z	28.639	1
132	MP4B	Mx	.028	1
133	MP4C	X	0	1
134	MP4C	Z	45.205	1
135	MP4C	Mx	-.023	1
136	MP2B	X	0	2.5
137	MP2B	Z	28.485	2.5
138	MP2B	Mx	-.014	2.5
139	MP2B	X	0	4
140	MP2B	Z	28.485	4
141	MP2B	Mx	-.014	4
142	MP2C	X	0	2.5
143	MP2C	Z	59.806	2.5
144	MP2C	Mx	.015	2.5
145	MP2C	X	0	4
146	MP2C	Z	59.806	4
147	MP2C	Mx	.015	4
148	MP2A	X	0	2.5
149	MP2A	Z	59.806	2.5
150	MP2A	Mx	.015	2.5
151	MP2A	X	0	4
152	MP2A	Z	59.806	4
153	MP2A	Mx	.015	4
154	M44	X	0	.5
155	M44	Z	60.578	.5
156	M44	Mx	0	.5
157	M46	X	0	.5
158	M46	Z	60.578	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-7.908	5
2	MP3A	Z	13.697	5
3	MP3A	Mx	-.011	5
4	MP3A	X	-7.908	6
5	MP3A	Z	13.697	6
6	MP3A	Mx	-.011	6
7	MP3B	X	-7.911	5
8	MP3B	Z	13.702	5
9	MP3B	Mx	.017	5
10	MP3B	X	-7.911	6
11	MP3B	Z	13.702	6
12	MP3B	Mx	.017	6
13	MP3C	X	-7.89	5
14	MP3C	Z	13.666	5
15	MP3C	Mx	-.005	5
16	MP3C	X	-7.89	6
17	MP3C	Z	13.666	6
18	MP3C	Mx	-.005	6



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
19	MP3A	X	-7.908	5
20	MP3A	Z	13.697	5
21	MP3A	Mx	-.016	5
22	MP3A	X	-7.908	6
23	MP3A	Z	13.697	6
24	MP3A	Mx	-.016	6
25	MP3B	X	-7.911	5
26	MP3B	Z	13.702	5
27	MP3B	Mx	.013	5
28	MP3B	X	-7.911	6
29	MP3B	Z	13.702	6
30	MP3B	Mx	.013	6
31	MP3C	X	-7.89	5
32	MP3C	Z	13.666	5
33	MP3C	Mx	.005	5
34	MP3C	X	-7.89	6
35	MP3C	Z	13.666	6
36	MP3C	Mx	.005	6
37	MP1A	X	-36.499	1.5
38	MP1A	Z	63.219	1.5
39	MP1A	Mx	.032	1.5
40	MP1A	X	-36.499	4.5
41	MP1A	Z	63.219	4.5
42	MP1A	Mx	.032	4.5
43	MP1B	X	-36.499	1.5
44	MP1B	Z	63.219	1.5
45	MP1B	Mx	-.032	1.5
46	MP1B	X	-36.499	4.5
47	MP1B	Z	63.219	4.5
48	MP1B	Mx	-.032	4.5
49	MP1C	X	-47.917	1.5
50	MP1C	Z	82.995	1.5
51	MP1C	Mx	0	1.5
52	MP1C	X	-47.917	4.5
53	MP1C	Z	82.995	4.5
54	MP1C	Mx	0	4.5
55	MP5A	X	-36.499	1.5
56	MP5A	Z	63.219	1.5
57	MP5A	Mx	.032	1.5
58	MP5A	X	-36.499	4.5
59	MP5A	Z	63.219	4.5
60	MP5A	Mx	.032	4.5
61	MP5B	X	-36.499	1.5
62	MP5B	Z	63.219	1.5
63	MP5B	Mx	-.032	1.5
64	MP5B	X	-36.499	4.5
65	MP5B	Z	63.219	4.5
66	MP5B	Mx	-.032	4.5
67	MP5C	X	-47.917	1.5
68	MP5C	Z	82.995	1.5
69	MP5C	Mx	0	1.5
70	MP5C	X	-47.917	4.5
71	MP5C	Z	82.995	4.5
72	MP5C	Mx	0	4.5
73	MP3A	X	-58.622	.25
74	MP3A	Z	101.537	.25
75	MP3A	Mx	.085	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
76	MP3A	X	-58.622	5.25
77	MP3A	Z	101.537	5.25
78	MP3A	Mx	.085	5.25
79	MP3B	X	-57.168	.25
80	MP3B	Z	99.018	.25
81	MP3B	Mx	-.031	.25
82	MP3B	X	-57.168	5.25
83	MP3B	Z	99.018	5.25
84	MP3B	Mx	-.031	5.25
85	MP3C	X	-66.821	.25
86	MP3C	Z	115.737	.25
87	MP3C	Mx	-.078	.25
88	MP3C	X	-66.821	5.25
89	MP3C	Z	115.737	5.25
90	MP3C	Mx	-.078	5.25
91	MP3A	X	-58.622	.25
92	MP3A	Z	101.537	.25
93	MP3A	Mx	.017	.25
94	MP3A	X	-58.622	5.25
95	MP3A	Z	101.537	5.25
96	MP3A	Mx	.017	5.25
97	MP3B	X	-57.168	.25
98	MP3B	Z	99.018	.25
99	MP3B	Mx	-.077	.25
100	MP3B	X	-57.168	5.25
101	MP3B	Z	99.018	5.25
102	MP3B	Mx	-.077	5.25
103	MP3C	X	-66.821	.25
104	MP3C	Z	115.737	.25
105	MP3C	Mx	.078	.25
106	MP3C	X	-66.821	5.25
107	MP3C	Z	115.737	5.25
108	MP3C	Mx	.078	5.25
109	MP4A	X	-9.049	.5
110	MP4A	Z	15.674	.5
111	MP4A	Mx	.016	.5
112	MP4B	X	-8.059	.5
113	MP4B	Z	13.959	.5
114	MP4B	Mx	-.015	.5
115	MP4C	X	-14.63	.5
116	MP4C	Z	25.34	.5
117	MP4C	Mx	0	.5
118	MP2A	X	-19.191	.5
119	MP2A	Z	33.241	.5
120	MP2A	Mx	-.017	.5
121	MP2B	X	-18.076	.5
122	MP2B	Z	31.309	.5
123	MP2B	Mx	.017	.5
124	MP2C	X	-25.479	.5
125	MP2C	Z	44.131	.5
126	MP2C	Mx	0	.5
127	MP4A	X	-16.849	1
128	MP4A	Z	29.183	1
129	MP4A	Mx	-.029	1
130	MP4B	X	-15.318	1
131	MP4B	Z	26.532	1
132	MP4B	Mx	.029	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
133	MP4C	X	-25.479	1
134	MP4C	Z	44.131	1
135	MP4C	Mx	0	1
136	MP2B	X	-16.131	2.5
137	MP2B	Z	27.94	2.5
138	MP2B	Mx	-.015	2.5
139	MP2B	X	-16.131	4
140	MP2B	Z	27.94	4
141	MP2B	Mx	-.015	4
142	MP2C	X	-35.342	2.5
143	MP2C	Z	61.214	2.5
144	MP2C	Mx	0	2.5
145	MP2C	X	-35.342	4
146	MP2C	Z	61.214	4
147	MP2C	Mx	0	4
148	MP2A	X	-19.025	2.5
149	MP2A	Z	32.953	2.5
150	MP2A	Mx	.016	2.5
151	MP2A	X	-19.025	4
152	MP2A	Z	32.953	4
153	MP2A	Mx	.016	4
154	M44	X	-26.687	.5
155	M44	Z	46.224	.5
156	M44	Mx	0	.5
157	M46	X	-26.687	.5
158	M46	Z	46.224	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-13.707	5
2	MP3A	Z	7.914	5
3	MP3A	Mx	-.016	5
4	MP3A	X	-13.707	6
5	MP3A	Z	7.914	6
6	MP3A	Mx	-.016	6
7	MP3B	X	-13.683	5
8	MP3B	Z	7.9	5
9	MP3B	Mx	.014	5
10	MP3B	X	-13.683	6
11	MP3B	Z	7.9	6
12	MP3B	Mx	.014	6
13	MP3C	X	-13.676	5
14	MP3C	Z	7.896	5
15	MP3C	Mx	.003	5
16	MP3C	X	-13.676	6
17	MP3C	Z	7.896	6
18	MP3C	Mx	.003	6
19	MP3A	X	-13.707	5
20	MP3A	Z	7.914	5
21	MP3A	Mx	-.016	5
22	MP3A	X	-13.707	6
23	MP3A	Z	7.914	6
24	MP3A	Mx	-.016	6
25	MP3B	X	-13.683	5
26	MP3B	Z	7.9	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27	MP3B	Mx	.006	5
28	MP3B	X	-13.683	6
29	MP3B	Z	7.9	6
30	MP3B	Mx	.006	6
31	MP3C	X	-13.676	5
32	MP3C	Z	7.896	5
33	MP3C	Mx	.012	5
34	MP3C	X	-13.676	6
35	MP3C	Z	7.896	6
36	MP3C	Mx	.012	6
37	MP1A	X	-56.627	1.5
38	MP1A	Z	32.693	1.5
39	MP1A	Mx	.033	1.5
40	MP1A	X	-56.627	4.5
41	MP1A	Z	32.693	4.5
42	MP1A	Mx	.033	4.5
43	MP1B	X	-76.403	1.5
44	MP1B	Z	44.111	1.5
45	MP1B	Mx	-.022	1.5
46	MP1B	X	-76.403	4.5
47	MP1B	Z	44.111	4.5
48	MP1B	Mx	-.022	4.5
49	MP1C	X	-76.403	1.5
50	MP1C	Z	44.111	1.5
51	MP1C	Mx	-.022	1.5
52	MP1C	X	-76.403	4.5
53	MP1C	Z	44.111	4.5
54	MP1C	Mx	-.022	4.5
55	MP5A	X	-56.627	1.5
56	MP5A	Z	32.693	1.5
57	MP5A	Mx	.033	1.5
58	MP5A	X	-56.627	4.5
59	MP5A	Z	32.693	4.5
60	MP5A	Mx	.033	4.5
61	MP5B	X	-76.403	1.5
62	MP5B	Z	44.111	1.5
63	MP5B	Mx	-.022	1.5
64	MP5B	X	-76.403	4.5
65	MP5B	Z	44.111	4.5
66	MP5B	Mx	-.022	4.5
67	MP5C	X	-76.403	1.5
68	MP5C	Z	44.111	1.5
69	MP5C	Mx	-.022	1.5
70	MP5C	X	-76.403	4.5
71	MP5C	Z	44.111	4.5
72	MP5C	Mx	-.022	4.5
73	MP3A	X	-96.803	.25
74	MP3A	Z	55.889	.25
75	MP3A	Mx	.056	.25
76	MP3A	X	-96.803	5.25
77	MP3A	Z	55.889	5.25
78	MP3A	Mx	.056	5.25
79	MP3B	X	-107.914	.25
80	MP3B	Z	62.304	.25
81	MP3B	Mx	.016	.25
82	MP3B	X	-107.914	5.25
83	MP3B	Z	62.304	5.25



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
84	MP3B	Mx	5.25
85	MP3C	X	.25
86	MP3C	Z	.25
87	MP3C	Mx	.25
88	MP3C	X	5.25
89	MP3C	Z	5.25
90	MP3C	Mx	5.25
91	MP3A	X	.25
92	MP3A	Z	.25
93	MP3A	Mx	.25
94	MP3A	X	5.25
95	MP3A	Z	5.25
96	MP3A	Mx	5.25
97	MP3B	X	.25
98	MP3B	Z	.25
99	MP3B	Mx	.25
100	MP3B	X	5.25
101	MP3B	Z	5.25
102	MP3B	Mx	5.25
103	MP3C	X	.25
104	MP3C	Z	.25
105	MP3C	Mx	.25
106	MP3C	X	5.25
107	MP3C	Z	5.25
108	MP3C	Mx	5.25
109	MP4A	X	.5
110	MP4A	Z	.5
111	MP4A	Mx	.5
112	MP4B	X	.5
113	MP4B	Z	.5
114	MP4B	Mx	.5
115	MP4C	X	.5
116	MP4C	Z	.5
117	MP4C	Mx	.5
118	MP2A	X	.5
119	MP2A	Z	.5
120	MP2A	Mx	.5
121	MP2B	X	.5
122	MP2B	Z	.5
123	MP2B	Mx	.5
124	MP2C	X	.5
125	MP2C	Z	.5
126	MP2C	Mx	.5
127	MP4A	X	1
128	MP4A	Z	1
129	MP4A	Mx	1
130	MP4B	X	1
131	MP4B	Z	1
132	MP4B	Mx	1
133	MP4C	X	1
134	MP4C	Z	1
135	MP4C	Mx	1
136	MP2B	X	2.5
137	MP2B	Z	2.5
138	MP2B	Mx	2.5
139	MP2B	X	4
140	MP2B	Z	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
141	MP2B	Mx	-.017	4
142	MP2C	X	-51.794	2.5
143	MP2C	Z	29.903	2.5
144	MP2C	Mx	-.015	2.5
145	MP2C	X	-51.794	4
146	MP2C	Z	29.903	4
147	MP2C	Mx	-.015	4
148	MP2A	X	-23.532	2.5
149	MP2A	Z	13.586	2.5
150	MP2A	Mx	.014	2.5
151	MP2A	X	-23.532	4
152	MP2A	Z	13.586	4
153	MP2A	Mx	.014	4
154	M44	X	-52.462	.5
155	M44	Z	30.289	.5
156	M44	Mx	0	.5
157	M46	X	-52.462	.5
158	M46	Z	30.289	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-15.815	5
2	MP3A	Z	0	5
3	MP3A	Mx	-.016	5
4	MP3A	X	-15.815	6
5	MP3A	Z	0	6
6	MP3A	Mx	-.016	6
7	MP3B	X	-15.782	5
8	MP3B	Z	0	5
9	MP3B	Mx	.008	5
10	MP3B	X	-15.782	6
11	MP3B	Z	0	6
12	MP3B	Mx	.008	6
13	MP3C	X	-15.815	5
14	MP3C	Z	0	5
15	MP3C	Mx	.011	5
16	MP3C	X	-15.815	6
17	MP3C	Z	0	6
18	MP3C	Mx	.011	6
19	MP3A	X	-15.815	5
20	MP3A	Z	0	5
21	MP3A	Mx	-.011	5
22	MP3A	X	-15.815	6
23	MP3A	Z	0	6
24	MP3A	Mx	-.011	6
25	MP3B	X	-15.782	5
26	MP3B	Z	0	5
27	MP3B	Mx	-.002	5
28	MP3B	X	-15.782	6
29	MP3B	Z	0	6
30	MP3B	Mx	-.002	6
31	MP3C	X	-15.815	5
32	MP3C	Z	0	5
33	MP3C	Mx	.016	5
34	MP3C	X	-15.815	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
35	MP3C	Z	0	6
36	MP3C	Mx	.016	6
37	MP1A	X	-72.999	1.5
38	MP1A	Z	0	1.5
39	MP1A	Mx	.032	1.5
40	MP1A	X	-72.999	4.5
41	MP1A	Z	0	4.5
42	MP1A	Mx	.032	4.5
43	MP1B	X	-95.834	1.5
44	MP1B	Z	0	1.5
45	MP1B	Mx	0	1.5
46	MP1B	X	-95.834	4.5
47	MP1B	Z	0	4.5
48	MP1B	Mx	0	4.5
49	MP1C	X	-72.999	1.5
50	MP1C	Z	0	1.5
51	MP1C	Mx	-.032	1.5
52	MP1C	X	-72.999	4.5
53	MP1C	Z	0	4.5
54	MP1C	Mx	-.032	4.5
55	MP5A	X	-72.999	1.5
56	MP5A	Z	0	1.5
57	MP5A	Mx	.032	1.5
58	MP5A	X	-72.999	4.5
59	MP5A	Z	0	4.5
60	MP5A	Mx	.032	4.5
61	MP5B	X	-95.834	1.5
62	MP5B	Z	0	1.5
63	MP5B	Mx	0	1.5
64	MP5B	X	-95.834	4.5
65	MP5B	Z	0	4.5
66	MP5B	Mx	0	4.5
67	MP5C	X	-72.999	1.5
68	MP5C	Z	0	1.5
69	MP5C	Mx	-.032	1.5
70	MP5C	X	-72.999	4.5
71	MP5C	Z	0	4.5
72	MP5C	Mx	-.032	4.5
73	MP3A	X	-117.244	.25
74	MP3A	Z	0	.25
75	MP3A	Mx	.017	.25
76	MP3A	X	-117.244	5.25
77	MP3A	Z	0	5.25
78	MP3A	Mx	.017	5.25
79	MP3B	X	-132.982	.25
80	MP3B	Z	0	.25
81	MP3B	Mx	.065	.25
82	MP3B	X	-132.982	5.25
83	MP3B	Z	0	5.25
84	MP3B	Mx	.065	5.25
85	MP3C	X	-117.244	.25
86	MP3C	Z	0	.25
87	MP3C	Mx	-.085	.25
88	MP3C	X	-117.244	5.25
89	MP3C	Z	0	5.25
90	MP3C	Mx	-.085	5.25
91	MP3A	X	-117.244	.25



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
92	MP3A	Z	0	.25
93	MP3A	Mx	.085	.25
94	MP3A	X	-117.244	5.25
95	MP3A	Z	0	5.25
96	MP3A	Mx	.085	5.25
97	MP3B	X	-132.982	.25
98	MP3B	Z	0	.25
99	MP3B	Mx	-.088	.25
100	MP3B	X	-132.982	5.25
101	MP3B	Z	0	5.25
102	MP3B	Mx	-.088	5.25
103	MP3C	X	-117.244	.25
104	MP3C	Z	0	.25
105	MP3C	Mx	-.017	.25
106	MP3C	X	-117.244	5.25
107	MP3C	Z	0	5.25
108	MP3C	Mx	-.017	5.25
109	MP4A	X	-18.098	.5
110	MP4A	Z	0	.5
111	MP4A	Mx	.016	.5
112	MP4B	X	-28.811	.5
113	MP4B	Z	0	.5
114	MP4B	Mx	-.005	.5
115	MP4C	X	-18.098	.5
116	MP4C	Z	0	.5
117	MP4C	Mx	-.016	.5
118	MP2A	X	-38.383	.5
119	MP2A	Z	0	.5
120	MP2A	Mx	-.017	.5
121	MP2B	X	-50.452	.5
122	MP2B	Z	0	.5
123	MP2B	Mx	.004	.5
124	MP2C	X	-38.383	.5
125	MP2C	Z	0	.5
126	MP2C	Mx	.017	.5
127	MP4A	X	-33.698	1
128	MP4A	Z	0	1
129	MP4A	Mx	-.029	1
130	MP4B	X	-50.264	1
131	MP4B	Z	0	1
132	MP4B	Mx	.009	1
133	MP4C	X	-33.698	1
134	MP4C	Z	0	1
135	MP4C	Mx	.029	1
136	MP2B	X	-69.372	2.5
137	MP2B	Z	0	2.5
138	MP2B	Mx	-.006	2.5
139	MP2B	X	-69.372	4
140	MP2B	Z	0	4
141	MP2B	Mx	-.006	4
142	MP2C	X	-38.051	2.5
143	MP2C	Z	0	2.5
144	MP2C	Mx	-.016	2.5
145	MP2C	X	-38.051	4
146	MP2C	Z	0	4
147	MP2C	Mx	-.016	4
148	MP2A	X	-38.051	2.5



Company : Colliers Engineering & Design
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Member Point Loads (BLC 12 : Antenna Wo (270 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
149	MP2A	Z	0	2.5
150	MP2A	Mx	.016	2.5
151	MP2A	X	-38.051	4
152	MP2A	Z	0	4
153	MP2A	Mx	.016	4
154	M44	X	-74.986	.5
155	M44	Z	0	.5
156	M44	Mx	0	.5
157	M46	X	-74.986	.5
158	M46	Z	0	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-13.676	5
2	MP3A	Z	-7.896	5
3	MP3A	Mx	-.012	5
4	MP3A	X	-13.676	6
5	MP3A	Z	-7.896	6
6	MP3A	Mx	-.012	6
7	MP3B	X	-13.671	5
8	MP3B	Z	-7.893	5
9	MP3B	Mx	-.000455	5
10	MP3B	X	-13.671	6
11	MP3B	Z	-7.893	6
12	MP3B	Mx	-.000455	6
13	MP3C	X	-13.707	5
14	MP3C	Z	-7.914	5
15	MP3C	Mx	.016	5
16	MP3C	X	-13.707	6
17	MP3C	Z	-7.914	6
18	MP3C	Mx	.016	6
19	MP3A	X	-13.676	5
20	MP3A	Z	-7.896	5
21	MP3A	Mx	-.003	5
22	MP3A	X	-13.676	6
23	MP3A	Z	-7.896	6
24	MP3A	Mx	-.003	6
25	MP3B	X	-13.671	5
26	MP3B	Z	-7.893	5
27	MP3B	Mx	-.01	5
28	MP3B	X	-13.671	6
29	MP3B	Z	-7.893	6
30	MP3B	Mx	-.01	6
31	MP3C	X	-13.707	5
32	MP3C	Z	-7.914	5
33	MP3C	Mx	.016	5
34	MP3C	X	-13.707	6
35	MP3C	Z	-7.914	6
36	MP3C	Mx	.016	6
37	MP1A	X	-76.403	1.5
38	MP1A	Z	-44.111	1.5
39	MP1A	Mx	.022	1.5
40	MP1A	X	-76.403	4.5
41	MP1A	Z	-44.111	4.5
42	MP1A	Mx	.022	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
43	MP1B	X	-76.403	1.5
44	MP1B	Z	-44.111	1.5
45	MP1B	Mx	.022	1.5
46	MP1B	X	-76.403	4.5
47	MP1B	Z	-44.111	4.5
48	MP1B	Mx	.022	4.5
49	MP1C	X	-56.627	1.5
50	MP1C	Z	-32.693	1.5
51	MP1C	Mx	-.033	1.5
52	MP1C	X	-56.627	4.5
53	MP1C	Z	-32.693	4.5
54	MP1C	Mx	-.033	4.5
55	MP5A	X	-76.403	1.5
56	MP5A	Z	-44.111	1.5
57	MP5A	Mx	.022	1.5
58	MP5A	X	-76.403	4.5
59	MP5A	Z	-44.111	4.5
60	MP5A	Mx	.022	4.5
61	MP5B	X	-76.403	1.5
62	MP5B	Z	-44.111	1.5
63	MP5B	Mx	.022	1.5
64	MP5B	X	-76.403	4.5
65	MP5B	Z	-44.111	4.5
66	MP5B	Mx	.022	4.5
67	MP5C	X	-56.627	1.5
68	MP5C	Z	-32.693	1.5
69	MP5C	Mx	-.033	1.5
70	MP5C	X	-56.627	4.5
71	MP5C	Z	-32.693	4.5
72	MP5C	Mx	-.033	4.5
73	MP3A	X	-111.003	.25
74	MP3A	Z	-64.088	.25
75	MP3A	Mx	-.033	.25
76	MP3A	X	-111.003	5.25
77	MP3A	Z	-64.088	5.25
78	MP3A	Mx	-.033	5.25
79	MP3B	X	-113.522	.25
80	MP3B	Z	-65.542	.25
81	MP3B	Mx	.094	.25
82	MP3B	X	-113.522	5.25
83	MP3B	Z	-65.542	5.25
84	MP3B	Mx	.094	5.25
85	MP3C	X	-96.803	.25
86	MP3C	Z	-55.889	.25
87	MP3C	Mx	-.056	.25
88	MP3C	X	-96.803	5.25
89	MP3C	Z	-55.889	5.25
90	MP3C	Mx	-.056	5.25
91	MP3A	X	-111.003	.25
92	MP3A	Z	-64.088	.25
93	MP3A	Mx	.097	.25
94	MP3A	X	-111.003	5.25
95	MP3A	Z	-64.088	5.25
96	MP3A	Mx	.097	5.25
97	MP3B	X	-113.522	.25
98	MP3B	Z	-65.542	.25
99	MP3B	Mx	-.049	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
100	MP3B	X	-113.522	5.25
101	MP3B	Z	-65.542	5.25
102	MP3B	Mx	-.049	5.25
103	MP3C	X	-96.803	.25
104	MP3C	Z	-55.889	.25
105	MP3C	Mx	-.056	.25
106	MP3C	X	-96.803	5.25
107	MP3C	Z	-55.889	5.25
108	MP3C	Mx	-.056	5.25
109	MP4A	X	-22.118	.5
110	MP4A	Z	-12.77	.5
111	MP4A	Mx	.013	.5
112	MP4B	X	-23.832	.5
113	MP4B	Z	-13.759	.5
114	MP4B	Mx	.009	.5
115	MP4C	X	-12.452	.5
116	MP4C	Z	-7.189	.5
117	MP4C	Mx	-.014	.5
118	MP2A	X	-40.501	.5
119	MP2A	Z	-23.383	.5
120	MP2A	Mx	-.012	.5
121	MP2B	X	-42.432	.5
122	MP2B	Z	-24.498	.5
123	MP2B	Mx	-.008	.5
124	MP2C	X	-29.61	.5
125	MP2C	Z	-17.096	.5
126	MP2C	Mx	.017	.5
127	MP4A	X	-39.148	1
128	MP4A	Z	-22.602	1
129	MP4A	Mx	-.023	1
130	MP4B	X	-41.8	1
131	MP4B	Z	-24.133	1
132	MP4B	Mx	-.017	1
133	MP4C	X	-24.201	1
134	MP4C	Z	-13.972	1
135	MP4C	Mx	.028	1
136	MP2B	X	-56.806	2.5
137	MP2B	Z	-32.797	2.5
138	MP2B	Mx	.011	2.5
139	MP2B	X	-56.806	4
140	MP2B	Z	-32.797	4
141	MP2B	Mx	.011	4
142	MP2C	X	-23.532	2.5
143	MP2C	Z	-13.586	2.5
144	MP2C	Mx	-.014	2.5
145	MP2C	X	-23.532	4
146	MP2C	Z	-13.586	4
147	MP2C	Mx	.014	4
148	MP2A	X	-51.794	2.5
149	MP2A	Z	-29.903	2.5
150	MP2A	Mx	.015	2.5
151	MP2A	X	-51.794	4
152	MP2A	Z	-29.903	4
153	MP2A	Mx	.015	4
154	M44	X	-71.179	.5
155	M44	Z	-41.095	.5
156	M44	Mx	0	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
157	M46	X	-71.179	.5
158	M46	Z	-41.095	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-7.89	5
2	MP3A	Z	-13.666	5
3	MP3A	Mx	-.005	5
4	MP3A	X	-7.89	6
5	MP3A	Z	-13.666	6
6	MP3A	Mx	-.005	6
7	MP3B	X	-7.904	5
8	MP3B	Z	-13.69	5
9	MP3B	Mx	-.009	5
10	MP3B	X	-7.904	6
11	MP3B	Z	-13.69	6
12	MP3B	Mx	-.009	6
13	MP3C	X	-7.908	5
14	MP3C	Z	-13.697	5
15	MP3C	Mx	.016	5
16	MP3C	X	-7.908	6
17	MP3C	Z	-13.697	6
18	MP3C	Mx	.016	6
19	MP3A	X	-7.89	5
20	MP3A	Z	-13.666	5
21	MP3A	Mx	.005	5
22	MP3A	X	-7.89	6
23	MP3A	Z	-13.666	6
24	MP3A	Mx	.005	6
25	MP3B	X	-7.904	5
26	MP3B	Z	-13.69	5
27	MP3B	Mx	-.015	5
28	MP3B	X	-7.904	6
29	MP3B	Z	-13.69	6
30	MP3B	Mx	-.015	6
31	MP3C	X	-7.908	5
32	MP3C	Z	-13.697	5
33	MP3C	Mx	.011	5
34	MP3C	X	-7.908	6
35	MP3C	Z	-13.697	6
36	MP3C	Mx	.011	6
37	MP1A	X	-47.917	1.5
38	MP1A	Z	-82.995	1.5
39	MP1A	Mx	0	1.5
40	MP1A	X	-47.917	4.5
41	MP1A	Z	-82.995	4.5
42	MP1A	Mx	0	4.5
43	MP1B	X	-36.499	1.5
44	MP1B	Z	-63.219	1.5
45	MP1B	Mx	.032	1.5
46	MP1B	X	-36.499	4.5
47	MP1B	Z	-63.219	4.5
48	MP1B	Mx	.032	4.5
49	MP1C	X	-36.499	1.5
50	MP1C	Z	-63.219	1.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
51	MP1C	Mx	-.032	1.5
52	MP1C	X	-36.499	4.5
53	MP1C	Z	-63.219	4.5
54	MP1C	Mx	-.032	4.5
55	MP5A	X	-47.917	1.5
56	MP5A	Z	-82.995	1.5
57	MP5A	Mx	0	1.5
58	MP5A	X	-47.917	4.5
59	MP5A	Z	-82.995	4.5
60	MP5A	Mx	0	4.5
61	MP5B	X	-36.499	1.5
62	MP5B	Z	-63.219	1.5
63	MP5B	Mx	.032	1.5
64	MP5B	X	-36.499	4.5
65	MP5B	Z	-63.219	4.5
66	MP5B	Mx	.032	4.5
67	MP5C	X	-36.499	1.5
68	MP5C	Z	-63.219	1.5
69	MP5C	Mx	-.032	1.5
70	MP5C	X	-36.499	4.5
71	MP5C	Z	-63.219	4.5
72	MP5C	Mx	-.032	4.5
73	MP3A	X	-66.821	.25
74	MP3A	Z	-115.737	.25
75	MP3A	Mx	-.078	.25
76	MP3A	X	-66.821	5.25
77	MP3A	Z	-115.737	5.25
78	MP3A	Mx	-.078	5.25
79	MP3B	X	-60.406	.25
80	MP3B	Z	-104.626	.25
81	MP3B	Mx	.092	.25
82	MP3B	X	-60.406	5.25
83	MP3B	Z	-104.626	5.25
84	MP3B	Mx	.092	5.25
85	MP3C	X	-58.622	.25
86	MP3C	Z	-101.537	.25
87	MP3C	Mx	-.017	.25
88	MP3C	X	-58.622	5.25
89	MP3C	Z	-101.537	5.25
90	MP3C	Mx	-.017	5.25
91	MP3A	X	-66.821	.25
92	MP3A	Z	-115.737	.25
93	MP3A	Mx	.078	.25
94	MP3A	X	-66.821	5.25
95	MP3A	Z	-115.737	5.25
96	MP3A	Mx	.078	5.25
97	MP3B	X	-60.406	.25
98	MP3B	Z	-104.626	.25
99	MP3B	Mx	.000974	.25
100	MP3B	X	-60.406	5.25
101	MP3B	Z	-104.626	5.25
102	MP3B	Mx	.000974	5.25
103	MP3C	X	-58.622	.25
104	MP3C	Z	-101.537	.25
105	MP3C	Mx	-.085	.25
106	MP3C	X	-58.622	5.25
107	MP3C	Z	-101.537	5.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
108	MP3C	Mx	-.085	5.25
109	MP4A	X	-14.63	.5
110	MP4A	Z	-25.34	.5
111	MP4A	Mx	0	.5
112	MP4B	X	-10.263	.5
113	MP4B	Z	-17.777	.5
114	MP4B	Mx	.016	.5
115	MP4C	X	-9.049	.5
116	MP4C	Z	-15.674	.5
117	MP4C	Mx	-.016	.5
118	MP2A	X	-25.479	.5
119	MP2A	Z	-44.131	.5
120	MP2A	Mx	0	.5
121	MP2B	X	-20.559	.5
122	MP2B	Z	-35.61	.5
123	MP2B	Mx	-.016	.5
124	MP2C	X	-19.191	.5
125	MP2C	Z	-33.241	.5
126	MP2C	Mx	.017	.5
127	MP4A	X	-25.479	1
128	MP4A	Z	-44.131	1
129	MP4A	Mx	0	1
130	MP4B	X	-18.727	1
131	MP4B	Z	-32.435	1
132	MP4B	Mx	-.029	1
133	MP4C	X	-16.849	1
134	MP4C	Z	-29.183	1
135	MP4C	Mx	.029	1
136	MP2B	X	-22.575	2.5
137	MP2B	Z	-39.102	2.5
138	MP2B	Mx	.017	2.5
139	MP2B	X	-22.575	4
140	MP2B	Z	-39.102	4
141	MP2B	Mx	.017	4
142	MP2C	X	-19.025	2.5
143	MP2C	Z	-32.953	2.5
144	MP2C	Mx	-.016	2.5
145	MP2C	X	-19.025	4
146	MP2C	Z	-32.953	4
147	MP2C	Mx	-.016	4
148	MP2A	X	-35.342	2.5
149	MP2A	Z	-61.214	2.5
150	MP2A	Mx	0	2.5
151	MP2A	X	-35.342	4
152	MP2A	Z	-61.214	4
153	MP2A	Mx	0	4
154	M44	X	-37.493	.5
155	M44	Z	-64.94	.5
156	M44	Mx	0	.5
157	M46	X	-37.493	.5
158	M46	Z	-64.94	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP3A	X	0	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
2	MP3A	Z	-1.862	5
3	MP3A	Mx	.000393	5
4	MP3A	X	0	6
5	MP3A	Z	-1.862	6
6	MP3A	Mx	.000393	6
7	MP3B	X	0	5
8	MP3B	Z	-3.434	5
9	MP3B	Mx	-.003	5
10	MP3B	X	0	6
11	MP3B	Z	-3.434	6
12	MP3B	Mx	-.003	6
13	MP3C	X	0	5
14	MP3C	Z	-1.862	5
15	MP3C	Mx	.001	5
16	MP3C	X	0	6
17	MP3C	Z	-1.862	6
18	MP3C	Mx	.001	6
19	MP3A	X	0	5
20	MP3A	Z	-1.862	5
21	MP3A	Mx	.001	5
22	MP3A	X	0	6
23	MP3A	Z	-1.862	6
24	MP3A	Mx	.001	6
25	MP3B	X	0	5
26	MP3B	Z	-3.434	5
27	MP3B	Mx	-.004	5
28	MP3B	X	0	6
29	MP3B	Z	-3.434	6
30	MP3B	Mx	-.004	6
31	MP3C	X	0	5
32	MP3C	Z	-1.862	5
33	MP3C	Mx	.000393	5
34	MP3C	X	0	6
35	MP3C	Z	-1.862	6
36	MP3C	Mx	.000393	6
37	MP1A	X	0	1.5
38	MP1A	Z	-22.484	1.5
39	MP1A	Mx	-.006	1.5
40	MP1A	X	0	4.5
41	MP1A	Z	-22.484	4.5
42	MP1A	Mx	-.006	4.5
43	MP1B	X	0	1.5
44	MP1B	Z	-13.011	1.5
45	MP1D	Mx	.007	1.5
46	MP1B	X	0	4.5
47	MP1B	Z	-13.011	4.5
48	MP1B	Mx	.007	4.5
49	MP1C	X	0	1.5
50	MP1C	Z	-22.484	1.5
51	MP1C	Mx	-.006	1.5
52	MP1C	X	0	4.5
53	MP1C	Z	-22.484	4.5
54	MP1C	Mx	-.006	4.5
55	MP5A	X	0	1.5
56	MP5A	Z	-22.484	1.5
57	MP5A	Mx	-.006	1.5
58	MP5A	X	0	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
59	MP5A	Z	-22.484	4.5
60	MP5A	Mx	-.006	4.5
61	MP5B	X	0	1.5
62	MP5B	Z	-13.011	1.5
63	MP5B	Mx	.007	1.5
64	MP5B	X	0	4.5
65	MP5B	Z	-13.011	4.5
66	MP5B	Mx	.007	4.5
67	MP5C	X	0	1.5
68	MP5C	Z	-22.484	1.5
69	MP5C	Mx	-.006	1.5
70	MP5C	X	0	4.5
71	MP5C	Z	-22.484	4.5
72	MP5C	Mx	-.006	4.5
73	MP3A	X	0	.25
74	MP3A	Z	-24.599	.25
75	MP3A	Mx	-.019	.25
76	MP3A	X	0	5.25
77	MP3A	Z	-24.599	5.25
78	MP3A	Mx	-.019	5.25
79	MP3B	X	0	.25
80	MP3B	Z	-21.81	.25
81	MP3B	Mx	.013	.25
82	MP3B	X	0	5.25
83	MP3B	Z	-21.81	5.25
84	MP3B	Mx	.013	5.25
85	MP3C	X	0	.25
86	MP3C	Z	-24.599	.25
87	MP3C	Mx	.006	.25
88	MP3C	X	0	5.25
89	MP3C	Z	-24.599	5.25
90	MP3C	Mx	.006	5.25
91	MP3A	X	0	.25
92	MP3A	Z	-24.599	.25
93	MP3A	Mx	.006	.25
94	MP3A	X	0	5.25
95	MP3A	Z	-24.599	5.25
96	MP3A	Mx	.006	5.25
97	MP3B	X	0	.25
98	MP3B	Z	-21.81	.25
99	MP3B	Mx	.009	.25
100	MP3B	X	0	5.25
101	MP3B	Z	-21.81	5.25
102	MP3B	Mx	.009	5.25
103	MP3C	X	0	.25
104	MP3C	Z	-24.599	.25
105	MP3C	Mx	-.019	.25
106	MP3C	X	0	5.25
107	MP3C	Z	-24.599	5.25
108	MP3C	Mx	-.019	5.25
109	MP4A	X	0	.5
110	MP4A	Z	-5.834	.5
111	MP4A	Mx	-.003	.5
112	MP4B	X	0	.5
113	MP4B	Z	-3.734	.5
114	MP4B	Mx	.004	.5
115	MP4C	X	0	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
116	MP4C	Z	-5.834	.5
117	MP4C	Mx	-.003	.5
118	MP2A	X	0	.5
119	MP2A	Z	-11.774	.5
120	MP2A	Mx	.003	.5
121	MP2B	X	0	.5
122	MP2B	Z	-8.978	.5
123	MP2B	Mx	-.004	.5
124	MP2C	X	0	.5
125	MP2C	Z	-11.774	.5
126	MP2C	Mx	.003	.5
127	MP4A	X	0	1
128	MP4A	Z	-11.405	1
129	MP4A	Mx	.006	1
130	MP4B	X	0	1
131	MP4B	Z	-7.547	1
132	MP4B	Mx	-.007	1
133	MP4C	X	0	1
134	MP4C	Z	-11.405	1
135	MP4C	Mx	.006	1
136	MP2B	X	0	2.5
137	MP2B	Z	-6.079	2.5
138	MP2B	Mx	.003	2.5
139	MP2B	X	0	4
140	MP2B	Z	-6.079	4
141	MP2B	Mx	.003	4
142	MP2C	X	0	2.5
143	MP2C	Z	-11.875	2.5
144	MP2C	Mx	-.003	2.5
145	MP2C	X	0	4
146	MP2C	Z	-11.875	4
147	MP2C	Mx	-.003	4
148	MP2A	X	0	2.5
149	MP2A	Z	-11.875	2.5
150	MP2A	Mx	-.003	2.5
151	MP2A	X	0	4
152	MP2A	Z	-11.875	4
153	MP2A	Mx	-.003	4
154	M44	X	0	.5
155	M44	Z	-12.601	.5
156	M44	Mx	0	.5
157	M46	X	0	.5
158	M46	Z	-12.601	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	1.477	5
2	MP3A	Z	-2.558	5
3	MP3A	Mx	.002	5
4	MP3A	X	1.477	6
5	MP3A	Z	-2.558	6
6	MP3A	Mx	.002	6
7	MP3B	X	1.622	5
8	MP3B	Z	-2.81	5
9	MP3B	Mx	-.003	5



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
10	MP3B	X	1.622	6
11	MP3B	Z	-2.81	6
12	MP3B	Mx	-.003	6
13	MP3C	X	.658	5
14	MP3C	Z	-1.139	5
15	MP3C	Mx	.000438	5
16	MP3C	X	.658	6
17	MP3C	Z	-1.139	6
18	MP3C	Mx	.000438	6
19	MP3A	X	1.477	5
20	MP3A	Z	-2.558	5
21	MP3A	Mx	.003	5
22	MP3A	X	1.477	6
23	MP3A	Z	-2.558	6
24	MP3A	Mx	.003	6
25	MP3B	X	1.622	5
26	MP3B	Z	-2.81	5
27	MP3B	Mx	-.003	5
28	MP3B	X	1.622	6
29	MP3B	Z	-2.81	6
30	MP3B	Mx	-.003	6
31	MP3C	X	.658	5
32	MP3C	Z	-1.139	5
33	MP3C	Mx	-.000439	5
34	MP3C	X	.658	6
35	MP3C	Z	-1.139	6
36	MP3C	Mx	-.000439	6
37	MP1A	X	8.084	1.5
38	MP1A	Z	-14.002	1.5
39	MP1A	Mx	-.007	1.5
40	MP1A	X	8.084	4.5
41	MP1A	Z	-14.002	4.5
42	MP1A	Mx	-.007	4.5
43	MP1B	X	8.084	1.5
44	MP1B	Z	-14.002	1.5
45	MP1B	Mx	.007	1.5
46	MP1B	X	8.084	4.5
47	MP1B	Z	-14.002	4.5
48	MP1B	Mx	.007	4.5
49	MP1C	X	12.821	1.5
50	MP1C	Z	-22.206	1.5
51	MP1C	Mx	0	1.5
52	MP1C	X	12.821	4.5
53	MP1C	Z	-22.206	4.5
54	MP1C	Mx	0	4.5
55	MP5A	X	8.084	1.5
56	MP5A	Z	-14.002	1.5
57	MP5A	Mx	-.007	1.5
58	MP5A	X	8.084	4.5
59	MP5A	Z	-14.002	4.5
60	MP5A	Mx	-.007	4.5
61	MP5B	X	8.084	1.5
62	MP5B	Z	-14.002	1.5
63	MP5B	Mx	.007	1.5
64	MP5B	X	8.084	4.5
65	MP5B	Z	-14.002	4.5
66	MP5B	Mx	.007	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
67	MP5C	X	12.821	1.5
68	MP5C	Z	-22.206	1.5
69	MP5C	Mx	0	1.5
70	MP5C	X	12.821	4.5
71	MP5C	Z	-22.206	4.5
72	MP5C	Mx	0	4.5
73	MP3A	X	11.331	.25
74	MP3A	Z	-19.626	.25
75	MP3A	Mx	-.016	.25
76	MP3A	X	11.331	5.25
77	MP3A	Z	-19.626	5.25
78	MP3A	Mx	-.016	5.25
79	MP3B	X	11.073	.25
80	MP3B	Z	-19.179	.25
81	MP3B	Mx	.006	.25
82	MP3B	X	11.073	5.25
83	MP3B	Z	-19.179	5.25
84	MP3B	Mx	.006	5.25
85	MP3C	X	12.784	.25
86	MP3C	Z	-22.143	.25
87	MP3C	Mx	.015	.25
88	MP3C	X	12.784	5.25
89	MP3C	Z	-22.143	5.25
90	MP3C	Mx	.015	5.25
91	MP3A	X	11.331	.25
92	MP3A	Z	-19.626	.25
93	MP3A	Mx	-.003	.25
94	MP3A	X	11.331	5.25
95	MP3A	Z	-19.626	5.25
96	MP3A	Mx	-.003	5.25
97	MP3B	X	11.073	.25
98	MP3B	Z	-19.179	.25
99	MP3B	Mx	.015	.25
100	MP3B	X	11.073	5.25
101	MP3B	Z	-19.179	5.25
102	MP3B	Mx	.015	5.25
103	MP3C	X	12.784	.25
104	MP3C	Z	-22.143	.25
105	MP3C	Mx	-.015	.25
106	MP3C	X	12.784	5.25
107	MP3C	Z	-22.143	5.25
108	MP3C	Mx	-.015	5.25
109	MP4A	X	2.188	.5
110	MP4A	Z	-3.789	.5
111	MP4A	Mx	-.004	.5
112	MP4B	X	1.994	.5
113	MP4B	Z	-3.453	.5
114	MP1B	Mx	.004	.5
115	MP4C	X	3.282	.5
116	MP4C	Z	-5.684	.5
117	MP4C	Mx	0	.5
118	MP2A	X	4.916	.5
119	MP2A	Z	-8.515	.5
120	MP2A	Mx	.004	.5
121	MP2B	X	4.658	.5
122	MP2B	Z	-8.068	.5
123	MP2B	Mx	-.004	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
124	MP2C	X	6.373	.5
125	MP2C	Z	-11.038	.5
126	MP2C	Mx	0	.5
127	MP4A	X	4.363	1
128	MP4A	Z	-7.556	1
129	MP4A	Mx	.008	1
130	MP4B	X	4.006	1
131	MP4B	Z	-6.939	1
132	MP4B	Mx	-.008	1
133	MP4C	X	6.373	1
134	MP4C	Z	-11.038	1
135	MP4C	Mx	0	1
136	MP2B	X	3.389	2.5
137	MP2B	Z	-5.87	2.5
138	MP2B	Mx	.003	2.5
139	MP2B	X	3.389	4
140	MP2B	Z	-5.87	4
141	MP2B	Mx	.003	4
142	MP2C	X	6.944	2.5
143	MP2C	Z	-12.028	2.5
144	MP2C	Mx	0	2.5
145	MP2C	X	6.944	4
146	MP2C	Z	-12.028	4
147	MP2C	Mx	0	4
148	MP2A	X	3.925	2.5
149	MP2A	Z	-6.798	2.5
150	MP2A	Mx	-.003	2.5
151	MP2A	X	3.925	4
152	MP2A	Z	-6.798	4
153	MP2A	Mx	-.003	4
154	M44	X	5.633	.5
155	M44	Z	-9.756	.5
156	M44	Mx	0	.5
157	M46	X	5.633	.5
158	M46	Z	-9.756	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	3.031	5
2	MP3A	Z	-1.75	5
3	MP3A	Mx	.004	5
4	MP3A	X	3.031	6
5	MP3A	Z	-1.75	6
6	MP3A	Mx	.004	6
7	MP3B	X	1.921	5
8	MP3B	Z	-1.109	5
9	MP3B	Mx	-.002	5
10	MP3B	X	1.921	6
11	MP3B	Z	-1.109	6
12	MP3B	Mx	-.002	6
13	MP3C	X	1.612	5
14	MP3C	Z	-.931	5
15	MP3C	Mx	-.000393	5
16	MP3C	X	1.612	6
17	MP3C	Z	-.931	6



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP3C	Mx	-0.00393
19	MP3A	X	3.031
20	MP3A	Z	-1.75
21	MP3A	Mx	.004
22	MP3A	X	3.031
23	MP3A	Z	-1.75
24	MP3A	Mx	.004
25	MP3B	X	1.921
26	MP3B	Z	-1.109
27	MP3B	Mx	-0.00859
28	MP3B	X	1.921
29	MP3B	Z	-1.109
30	MP3B	Mx	-0.00859
31	MP3C	X	1.612
32	MP3C	Z	-.931
33	MP3C	Mx	-.001
34	MP3C	X	1.612
35	MP3C	Z	-.931
36	MP3C	Mx	-.001
37	MP1A	X	11.268
38	MP1A	Z	-6.506
39	MP1A	Mx	-.007
40	MP1A	X	11.268
41	MP1A	Z	-6.506
42	MP1A	Mx	-.007
43	MP1B	X	19.472
44	MP1B	Z	-11.242
45	MP1B	Mx	.006
46	MP1B	X	19.472
47	MP1B	Z	-11.242
48	MP1B	Mx	.006
49	MP1C	X	19.472
50	MP1C	Z	-11.242
51	MP1C	Mx	.006
52	MP1C	X	19.472
53	MP1C	Z	-11.242
54	MP1C	Mx	.006
55	MP5A	X	11.268
56	MP5A	Z	-6.506
57	MP5A	Mx	-.007
58	MP5A	X	11.268
59	MP5A	Z	-6.506
60	MP5A	Mx	-.007
61	MP5B	X	19.472
62	MP5B	Z	-11.242
63	MP5B	Mx	.006
64	MP5B	X	19.472
65	MP5B	Z	-11.242
66	MP5B	Mx	.006
67	MP5C	X	19.472
68	MP5C	Z	-11.242
69	MP5C	Mx	.006
70	MP5C	X	19.472
71	MP5C	Z	-11.242
72	MP5C	Mx	.006
73	MP3A	X	18.787
74	MP3A	Z	-10.847



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
75	MP3A	Mx	-.011	.25
76	MP3A	X	18.787	5.25
77	MP3A	Z	-10.847	5.25
78	MP3A	Mx	-.011	5.25
79	MP3B	X	20.756	.25
80	MP3B	Z	-11.984	.25
81	MP3B	Mx	-.003	.25
82	MP3B	X	20.756	5.25
83	MP3B	Z	-11.984	5.25
84	MP3B	Mx	-.003	5.25
85	MP3C	X	21.304	.25
86	MP3C	Z	-12.3	.25
87	MP3C	Mx	.019	.25
88	MP3C	X	21.304	5.25
89	MP3C	Z	-12.3	5.25
90	MP3C	Mx	.019	5.25
91	MP3A	X	18.787	.25
92	MP3A	Z	-10.847	.25
93	MP3A	Mx	-.011	.25
94	MP3A	X	18.787	5.25
95	MP3A	Z	-10.847	5.25
96	MP3A	Mx	-.011	5.25
97	MP3B	X	20.756	.25
98	MP3B	Z	-11.984	.25
99	MP3B	Mx	.018	.25
100	MP3B	X	20.756	5.25
101	MP3B	Z	-11.984	5.25
102	MP3B	Mx	.018	5.25
103	MP3C	X	21.304	.25
104	MP3C	Z	-12.3	.25
105	MP3C	Mx	-.006	.25
106	MP3C	X	21.304	5.25
107	MP3C	Z	-12.3	5.25
108	MP3C	Mx	-.006	5.25
109	MP4A	X	3.157	.5
110	MP4A	Z	-1.823	.5
111	MP4A	Mx	-.004	.5
112	MP4B	X	4.64	.5
113	MP4B	Z	-2.679	.5
114	MP4B	Mx	.003	.5
115	MP4C	X	5.052	.5
116	MP4C	Z	-2.917	.5
117	MP4C	Mx	.003	.5
118	MP2A	X	7.674	.5
119	MP2A	Z	-4.431	.5
120	MP2A	Mx	.004	.5
121	MP2B	X	9.648	.5
122	MP2B	Z	-5.57	.5
123	MP2B	Mx	-.004	.5
124	MP2C	X	10.197	.5
125	MP2C	Z	-5.887	.5
126	MP2C	Mx	-.003	.5
127	MP4A	X	6.396	1
128	MP4A	Z	-3.693	1
129	MP4A	Mx	.007	1
130	MP4B	X	9.12	1
131	MP4B	Z	-5.265	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
132	MP4B	Mx	-.007	1
133	MP4C	X	9.877	1
134	MP4C	Z	-5.703	1
135	MP4C	Mx	-.006	1
136	MP2B	X	9.146	2.5
137	MP2B	Z	-5.281	2.5
138	MP2B	Mx	.003	2.5
139	MP2B	X	9.146	4
140	MP2B	Z	-5.281	4
141	MP2B	Mx	.003	4
142	MP2C	X	10.284	2.5
143	MP2C	Z	-5.938	2.5
144	MP2C	Mx	.003	2.5
145	MP2C	X	10.284	4
146	MP2C	Z	-5.938	4
147	MP2C	Mx	.003	4
148	MP2A	X	5.054	2.5
149	MP2A	Z	-2.918	2.5
150	MP2A	Mx	-.003	2.5
151	MP2A	X	5.054	4
152	MP2A	Z	-2.918	4
153	MP2A	Mx	-.003	4
154	M44	X	10.913	.5
155	M44	Z	-6.301	.5
156	M44	Mx	0	.5
157	M46	X	10.913	.5
158	M46	Z	-6.301	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	2.954	5
2	MP3A	Z	0	5
3	MP3A	Mx	.003	5
4	MP3A	X	2.954	6
5	MP3A	Z	0	6
6	MP3A	Mx	.003	6
7	MP3B	X	1.381	5
8	MP3B	Z	0	5
9	MP3B	Mx	-.000693	5
10	MP3B	X	1.381	6
11	MP3B	Z	0	6
12	MP3B	Mx	-.000693	6
13	MP3C	X	2.954	5
14	MP3C	Z	0	5
15	MP3C	Mx	-.002	5
16	MP3C	X	2.954	6
17	MP3C	Z	0	6
18	MP3C	Mx	-.002	6
19	MP3A	X	2.954	5
20	MP3A	Z	0	5
21	MP3A	Mx	.002	5
22	MP3A	X	2.954	6
23	MP3A	Z	0	6
24	MP3A	Mx	.002	6
25	MP3B	X	1.381	5



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
26	MP3B	Z	0	5
27	MP3B	Mx	.000214	5
28	MP3B	X	1.381	6
29	MP3B	Z	0	6
30	MP3B	Mx	.000214	6
31	MP3C	X	2.954	5
32	MP3C	Z	0	5
33	MP3C	Mx	-.003	5
34	MP3C	X	2.954	6
35	MP3C	Z	0	6
36	MP3C	Mx	-.003	6
37	MP1A	X	16.169	1.5
38	MP1A	Z	0	1.5
39	MP1A	Mx	-.007	1.5
40	MP1A	X	16.169	4.5
41	MP1A	Z	0	4.5
42	MP1A	Mx	-.007	4.5
43	MP1B	X	25.641	1.5
44	MP1B	Z	0	1.5
45	MP1B	Mx	0	1.5
46	MP1B	X	25.641	4.5
47	MP1B	Z	0	4.5
48	MP1B	Mx	0	4.5
49	MP1C	X	16.169	1.5
50	MP1C	Z	0	1.5
51	MP1C	Mx	.007	1.5
52	MP1C	X	16.169	4.5
53	MP1C	Z	0	4.5
54	MP1C	Mx	.007	4.5
55	MP5A	X	16.169	1.5
56	MP5A	Z	0	1.5
57	MP5A	Mx	-.007	1.5
58	MP5A	X	16.169	4.5
59	MP5A	Z	0	4.5
60	MP5A	Mx	-.007	4.5
61	MP5B	X	25.641	1.5
62	MP5B	Z	0	1.5
63	MP5B	Mx	0	1.5
64	MP5B	X	25.641	4.5
65	MP5B	Z	0	4.5
66	MP5B	Mx	0	4.5
67	MP5C	X	16.169	1.5
68	MP5C	Z	0	1.5
69	MP5C	Mx	.007	1.5
70	MP5C	X	16.169	4.5
71	MP5C	Z	0	4.5
72	MP5C	Mx	.007	4.5
73	MP3A	X	22.662	.25
74	MP3A	Z	0	.25
75	MP3A	Mx	-.003	.25
76	MP3A	X	22.662	5.25
77	MP3A	Z	0	5.25
78	MP3A	Mx	-.003	5.25
79	MP3B	X	25.451	.25
80	MP3B	Z	0	.25
81	MP3B	Mx	-.012	.25
82	MP3B	X	25.451	5.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
83	MP3B	Z	0	5.25
84	MP3B	Mx	-.012	5.25
85	MP3C	X	22.662	.25
86	MP3C	Z	0	.25
87	MP3C	Mx	.016	.25
88	MP3C	X	22.662	5.25
89	MP3C	Z	0	5.25
90	MP3C	Mx	.016	5.25
91	MP3A	X	22.662	.25
92	MP3A	Z	0	.25
93	MP3A	Mx	-.016	.25
94	MP3A	X	22.662	5.25
95	MP3A	Z	0	5.25
96	MP3A	Mx	-.016	5.25
97	MP3B	X	25.451	.25
98	MP3B	Z	0	.25
99	MP3B	Mx	.017	.25
100	MP3B	X	25.451	5.25
101	MP3B	Z	0	5.25
102	MP3B	Mx	.017	5.25
103	MP3C	X	22.662	.25
104	MP3C	Z	0	.25
105	MP3C	Mx	.003	.25
106	MP3C	X	22.662	5.25
107	MP3C	Z	0	5.25
108	MP3C	Mx	.003	5.25
109	MP4A	X	4.375	.5
110	MP4A	Z	0	.5
111	MP4A	Mx	-.004	.5
112	MP4B	X	6.475	.5
113	MP4B	Z	0	.5
114	MP4B	Mx	.001	.5
115	MP4C	X	4.375	.5
116	MP4C	Z	0	.5
117	MP4C	Mx	.004	.5
118	MP2A	X	9.832	.5
119	MP2A	Z	0	.5
120	MP2A	Mx	.004	.5
121	MP2B	X	12.628	.5
122	MP2B	Z	0	.5
123	MP2B	Mx	-.001	.5
124	MP2C	X	9.832	.5
125	MP2C	Z	0	.5
126	MP2C	Mx	-.004	.5
127	MP4A	X	8.725	1
128	MP4A	Z	0	1
129	MP4A	Mx	.008	1
130	MP1B	X	12.583	1
131	MP4B	Z	0	1
132	MP4B	Mx	-.002	1
133	MP4C	X	8.725	1
134	MP4C	Z	0	1
135	MP4C	Mx	-.008	1
136	MP2B	X	13.646	2.5
137	MP2B	Z	0	2.5
138	MP2B	Mx	.001	2.5
139	MP2B	X	13.646	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
140	MP2B	Z	0	4
141	MP2B	Mx	.001	4
142	MP2C	X	7.849	2.5
143	MP2C	Z	0	2.5
144	MP2C	Mx	.003	2.5
145	MP2C	X	7.849	4
146	MP2C	Z	0	4
147	MP2C	Mx	.003	4
148	MP2A	X	7.849	2.5
149	MP2A	Z	0	2.5
150	MP2A	Mx	-.003	2.5
151	MP2A	X	7.849	4
152	MP2A	Z	0	4
153	MP2A	Mx	-.003	4
154	M44	X	15.274	.5
155	M44	Z	0	.5
156	M44	Mx	0	.5
157	M46	X	15.274	.5
158	M46	Z	0	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	1.612	5
2	MP3A	Z	.931	5
3	MP3A	Mx	.001	5
4	MP3A	X	1.612	6
5	MP3A	Z	.931	6
6	MP3A	Mx	.001	6
7	MP3B	X	1.361	5
8	MP3B	Z	.786	5
9	MP3B	Mx	4.5e-5	5
10	MP3B	X	1.361	6
11	MP3B	Z	.786	6
12	MP3B	Mx	4.5e-5	6
13	MP3C	X	3.031	5
14	MP3C	Z	1.75	5
15	MP3C	Mx	-.004	5
16	MP3C	X	3.031	6
17	MP3C	Z	1.75	6
18	MP3C	Mx	-.004	6
19	MP3A	X	1.612	5
20	MP3A	Z	.931	5
21	MP3A	Mx	.000393	5
22	MP3A	X	1.612	6
23	MP3A	Z	.931	6
24	MP3A	Mx	.000393	6
25	MP3B	X	1.361	5
26	MP3B	Z	.786	5
27	MP3B	Mx	.001	5
28	MP3B	X	1.361	6
29	MP3B	Z	.786	6
30	MP3B	Mx	.001	6
31	MP3C	X	3.031	5
32	MP3C	Z	1.75	5
33	MP3C	Mx	-.004	5



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft,%)
34	MP3C	X	3.031	6
35	MP3C	Z	1.75	6
36	MP3C	Mx	-0.04	6
37	MP1A	X	19.472	1.5
38	MP1A	Z	11.242	1.5
39	MP1A	Mx	-0.06	1.5
40	MP1A	X	19.472	4.5
41	MP1A	Z	11.242	4.5
42	MP1A	Mx	-0.06	4.5
43	MP1B	X	19.472	1.5
44	MP1B	Z	11.242	1.5
45	MP1B	Mx	-0.06	1.5
46	MP1B	X	19.472	4.5
47	MP1B	Z	11.242	4.5
48	MP1B	Mx	-0.06	4.5
49	MP1C	X	11.268	1.5
50	MP1C	Z	6.506	1.5
51	MP1C	Mx	.007	1.5
52	MP1C	X	11.268	4.5
53	MP1C	Z	6.506	4.5
54	MP1C	Mx	.007	4.5
55	MP5A	X	19.472	1.5
56	MP5A	Z	11.242	1.5
57	MP5A	Mx	-0.06	1.5
58	MP5A	X	19.472	4.5
59	MP5A	Z	11.242	4.5
60	MP5A	Mx	-0.06	4.5
61	MP5B	X	19.472	1.5
62	MP5B	Z	11.242	1.5
63	MP5B	Mx	-0.06	1.5
64	MP5B	X	19.472	4.5
65	MP5B	Z	11.242	4.5
66	MP5B	Mx	-0.06	4.5
67	MP5C	X	11.268	1.5
68	MP5C	Z	6.506	1.5
69	MP5C	Mx	.007	1.5
70	MP5C	X	11.268	4.5
71	MP5C	Z	6.506	4.5
72	MP5C	Mx	.007	4.5
73	MP3A	X	21.304	.25
74	MP3A	Z	12.3	.25
75	MP3A	Mx	.006	.25
76	MP3A	X	21.304	5.25
77	MP3A	Z	12.3	5.25
78	MP3A	Mx	.006	5.25
79	MP3B	X	21.75	.25
80	MP3B	Z	12.557	.25
81	MP3B	Mx	-.018	.25
82	MP3B	X	21.75	5.25
83	MP3B	Z	12.557	5.25
84	MP3B	Mx	-.018	5.25
85	MP3C	X	18.787	.25
86	MP3C	Z	10.847	.25
87	MP3C	Mx	.011	.25
88	MP3C	X	18.787	5.25
89	MP3C	Z	10.847	5.25
90	MP3C	Mx	.011	5.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
91	MP3A	X	21.304	.25
92	MP3A	Z	12.3	.25
93	MP3A	Mx	-.019	.25
94	MP3A	X	21.304	5.25
95	MP3A	Z	12.3	5.25
96	MP3A	Mx	-.019	5.25
97	MP3B	X	21.75	.25
98	MP3B	Z	12.557	.25
99	MP3B	Mx	.009	.25
100	MP3B	X	21.75	5.25
101	MP3B	Z	12.557	5.25
102	MP3B	Mx	.009	5.25
103	MP3C	X	18.787	.25
104	MP3C	Z	10.847	.25
105	MP3C	Mx	.011	.25
106	MP3C	X	18.787	5.25
107	MP3C	Z	10.847	5.25
108	MP3C	Mx	.011	5.25
109	MP4A	X	5.052	.5
110	MP4A	Z	2.917	.5
111	MP4A	Mx	-.003	.5
112	MP4B	X	5.388	.5
113	MP4B	Z	3.111	.5
114	MP4B	Mx	-.002	.5
115	MP4C	X	3.157	.5
116	MP4C	Z	1.823	.5
117	MP4C	Mx	.004	.5
118	MP2A	X	10.197	.5
119	MP2A	Z	5.887	.5
120	MP2A	Mx	.003	.5
121	MP2B	X	10.644	.5
122	MP2B	Z	6.145	.5
123	MP2B	Mx	.002	.5
124	MP2C	X	7.674	.5
125	MP2C	Z	4.431	.5
126	MP2C	Mx	-.004	.5
127	MP4A	X	9.877	1
128	MP4A	Z	5.703	1
129	MP4A	Mx	.006	1
130	MP4B	X	10.495	1
131	MP4B	Z	6.059	1
132	MP4B	Mx	.004	1
133	MP4C	X	6.396	1
134	MP4C	Z	3.693	1
135	MP4C	Mx	-.007	1
136	MP2B	X	11.212	2.5
137	MP2B	Z	6.473	2.5
138	MP2B	Mx	-.002	2.5
139	MP2B	X	11.212	4
140	MP2B	Z	6.473	4
141	MP2B	Mx	-.002	4
142	MP2C	X	5.054	2.5
143	MP2C	Z	2.918	2.5
144	MP2C	Mx	.003	2.5
145	MP2C	X	5.054	4
146	MP2C	Z	2.918	4
147	MP2C	Mx	.003	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
148	MP2A	X	10.284	2.5
149	MP2A	Z	5.938	2.5
150	MP2A	Mx	-.003	2.5
151	MP2A	X	10.284	4
152	MP2A	Z	5.938	4
153	MP2A	Mx	-.003	4
154	M44	X	14.385	.5
155	M44	Z	8.305	.5
156	M44	Mx	0	.5
157	M46	X	14.385	.5
158	M46	Z	8.305	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.658	5
2	MP3A	Z	1.139	5
3	MP3A	Mx	.000439	5
4	MP3A	X	.658	6
5	MP3A	Z	1.139	6
6	MP3A	Mx	.000439	6
7	MP3B	X	1.299	5
8	MP3B	Z	2.25	5
9	MP3B	Mx	.001	5
10	MP3B	X	1.299	6
11	MP3B	Z	2.25	6
12	MP3B	Mx	.001	6
13	MP3C	X	1.477	5
14	MP3C	Z	2.558	5
15	MP3C	Mx	-.003	5
16	MP3C	X	1.477	6
17	MP3C	Z	2.558	6
18	MP3C	Mx	-.003	6
19	MP3A	X	.658	5
20	MP3A	Z	1.139	5
21	MP3A	Mx	-.000438	5
22	MP3A	X	.658	6
23	MP3A	Z	1.139	6
24	MP3A	Mx	-.000438	6
25	MP3B	X	1.299	5
26	MP3B	Z	2.25	5
27	MP3B	Mx	.003	5
28	MP3B	X	1.299	6
29	MP3B	Z	2.25	6
30	MP3B	Mx	.003	6
31	MP3C	X	1.477	5
32	MP3C	Z	2.558	5
33	MP3C	Mx	-.002	5
34	MP3C	X	1.477	6
35	MP3C	Z	2.558	6
36	MP3C	Mx	-.002	6
37	MP1A	X	12.821	1.5
38	MP1A	Z	22.206	1.5
39	MP1A	Mx	0	1.5
40	MP1A	X	12.821	4.5
41	MP1A	Z	22.206	4.5



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
42	MP1A	Mx	0	4.5
43	MP1B	X	8.084	1.5
44	MP1B	Z	14.002	1.5
45	MP1B	Mx	-.007	1.5
46	MP1B	X	8.084	4.5
47	MP1B	Z	14.002	4.5
48	MP1B	Mx	-.007	4.5
49	MP1C	X	8.084	1.5
50	MP1C	Z	14.002	1.5
51	MP1C	Mx	.007	1.5
52	MP1C	X	8.084	4.5
53	MP1C	Z	14.002	4.5
54	MP1C	Mx	.007	4.5
55	MP5A	X	12.821	1.5
56	MP5A	Z	22.206	1.5
57	MP5A	Mx	0	1.5
58	MP5A	X	12.821	4.5
59	MP5A	Z	22.206	4.5
60	MP5A	Mx	0	4.5
61	MP5B	X	8.084	1.5
62	MP5B	Z	14.002	1.5
63	MP5B	Mx	-.007	1.5
64	MP5B	X	8.084	4.5
65	MP5B	Z	14.002	4.5
66	MP5B	Mx	-.007	4.5
67	MP5C	X	8.084	1.5
68	MP5C	Z	14.002	1.5
69	MP5C	Mx	.007	1.5
70	MP5C	X	8.084	4.5
71	MP5C	Z	14.002	4.5
72	MP5C	Mx	.007	4.5
73	MP3A	X	12.784	.25
74	MP3A	Z	22.143	.25
75	MP3A	Mx	.015	.25
76	MP3A	X	12.784	5.25
77	MP3A	Z	22.143	5.25
78	MP3A	Mx	.015	5.25
79	MP3B	X	11.647	.25
80	MP3B	Z	20.173	.25
81	MP3B	Mx	-.018	.25
82	MP3B	X	11.647	5.25
83	MP3B	Z	20.173	5.25
84	MP3B	Mx	-.018	5.25
85	MP3C	X	11.331	.25
86	MP3C	Z	19.626	.25
87	MP3C	Mx	.003	.25
88	MP3C	X	11.331	5.25
89	MP3C	Z	19.626	5.25
90	MP3C	Mx	.003	5.25
91	MP3A	X	12.784	.25
92	MP3A	Z	22.143	.25
93	MP3A	Mx	-.015	.25
94	MP3A	X	12.784	5.25
95	MP3A	Z	22.143	5.25
96	MP3A	Mx	-.015	5.25
97	MP3B	X	11.647	.25
98	MP3B	Z	20.173	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
99	MP3B	Mx	-0.00188	.25
100	MP3B	X	11.647	5.25
101	MP3B	Z	20.173	5.25
102	MP3B	Mx	-0.00188	5.25
103	MP3C	X	11.331	.25
104	MP3C	Z	19.626	.25
105	MP3C	Mx	.016	.25
106	MP3C	X	11.331	5.25
107	MP3C	Z	19.626	5.25
108	MP3C	Mx	.016	5.25
109	MP4A	X	3.282	.5
110	MP4A	Z	5.684	.5
111	MP4A	Mx	0	.5
112	MP4B	X	2.426	.5
113	MP4B	Z	4.201	.5
114	MP4B	Mx	-.004	.5
115	MP4C	X	2.188	.5
116	MP4C	Z	3.789	.5
117	MP4C	Mx	.004	.5
118	MP2A	X	6.373	.5
119	MP2A	Z	11.038	.5
120	MP2A	Mx	0	.5
121	MP2B	X	5.233	.5
122	MP2B	Z	9.064	.5
123	MP2B	Mx	.004	.5
124	MP2C	X	4.916	.5
125	MP2C	Z	8.515	.5
126	MP2C	Mx	-.004	.5
127	MP4A	X	6.373	1
128	MP4A	Z	11.038	1
129	MP4A	Mx	0	1
130	MP4B	X	4.8	1
131	MP4B	Z	8.314	1
132	MP4B	Mx	.007	1
133	MP4C	X	4.363	1
134	MP4C	Z	7.556	1
135	MP4C	Mx	-.008	1
136	MP2B	X	4.582	2.5
137	MP2B	Z	7.935	2.5
138	MP2B	Mx	-.004	2.5
139	MP2B	X	4.582	4
140	MP2B	Z	7.935	4
141	MP2B	Mx	-.004	4
142	MP2C	X	3.925	2.5
143	MP2C	Z	6.798	2.5
144	MP2C	Mx	.003	2.5
145	MP2C	X	3.925	4
146	MP2C	Z	6.798	4
147	MP2C	Mx	.003	4
148	MP2A	X	6.944	2.5
149	MP2A	Z	12.028	2.5
150	MP2A	Mx	0	2.5
151	MP2A	X	6.944	4
152	MP2A	Z	12.028	4
153	MP2A	Mx	0	4
154	M44	X	7.637	.5
155	M44	Z	13.228	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
156	M44	Mx	0	.5
157	M46	X	7.637	.5
158	M46	Z	13.228	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	5
2	MP3A	Z	1.862	5
3	MP3A	Mx	-.000393	5
4	MP3A	X	0	6
5	MP3A	Z	1.862	6
6	MP3A	Mx	-.000393	6
7	MP3B	X	0	5
8	MP3B	Z	3.434	5
9	MP3B	Mx	.003	5
10	MP3B	X	0	6
11	MP3B	Z	3.434	6
12	MP3B	Mx	.003	6
13	MP3C	X	0	5
14	MP3C	Z	1.862	5
15	MP3C	Mx	-.001	5
16	MP3C	X	0	6
17	MP3C	Z	1.862	6
18	MP3C	Mx	-.001	6
19	MP3A	X	0	5
20	MP3A	Z	1.862	5
21	MP3A	Mx	-.001	5
22	MP3A	X	0	6
23	MP3A	Z	1.862	6
24	MP3A	Mx	-.001	6
25	MP3B	X	0	5
26	MP3B	Z	3.434	5
27	MP3B	Mx	.004	5
28	MP3B	X	0	6
29	MP3B	Z	3.434	6
30	MP3B	Mx	.004	6
31	MP3C	X	0	5
32	MP3C	Z	1.862	5
33	MP3C	Mx	-.000393	5
34	MP3C	X	0	6
35	MP3C	Z	1.862	6
36	MP3C	Mx	-.000393	6
37	MP1A	X	0	1.5
38	MP1A	Z	22.484	1.5
39	MP1A	Mx	.006	1.5
40	MP1A	X	0	4.5
41	MP1A	Z	22.484	4.5
42	MP1A	Mx	.006	4.5
43	MP1B	X	0	1.5
44	MP1B	Z	13.011	1.5
45	MP1B	Mx	-.007	1.5
46	MP1B	X	0	4.5
47	MP1B	Z	13.011	4.5
48	MP1B	Mx	-.007	4.5
49	MP1C	X	0	1.5



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft. %)
50	MP1C	Z	22.484	1.5
51	MP1C	Mx	.006	1.5
52	MP1C	X	0	4.5
53	MP1C	Z	22.484	4.5
54	MP1C	Mx	.006	4.5
55	MP5A	X	0	1.5
56	MP5A	Z	22.484	1.5
57	MP5A	Mx	.006	1.5
58	MP5A	X	0	4.5
59	MP5A	Z	22.484	4.5
60	MP5A	Mx	.006	4.5
61	MP5B	X	0	1.5
62	MP5B	Z	13.011	1.5
63	MP5B	Mx	-.007	1.5
64	MP5B	X	0	4.5
65	MP5B	Z	13.011	4.5
66	MP5B	Mx	-.007	4.5
67	MP5C	X	0	1.5
68	MP5C	Z	22.484	1.5
69	MP5C	Mx	.006	1.5
70	MP5C	X	0	4.5
71	MP5C	Z	22.484	4.5
72	MP5C	Mx	.006	4.5
73	MP3A	X	0	.25
74	MP3A	Z	24.599	.25
75	MP3A	Mx	.019	.25
76	MP3A	X	0	5.25
77	MP3A	Z	24.599	5.25
78	MP3A	Mx	.019	5.25
79	MP3B	X	0	.25
80	MP3B	Z	21.81	.25
81	MP3B	Mx	-.013	.25
82	MP3B	X	0	5.25
83	MP3B	Z	21.81	5.25
84	MP3B	Mx	-.013	5.25
85	MP3C	X	0	.25
86	MP3C	Z	24.599	.25
87	MP3C	Mx	-.006	.25
88	MP3C	X	0	5.25
89	MP3C	Z	24.599	5.25
90	MP3C	Mx	-.006	5.25
91	MP3A	X	0	.25
92	MP3A	Z	24.599	.25
93	MP3A	Mx	-.006	.25
94	MP3A	X	0	5.25
95	MP3A	Z	24.599	5.25
96	MP3A	Mx	-.006	5.25
97	MP3B	X	0	.25
98	MP3B	Z	21.81	.25
99	MP3B	Mx	-.009	.25
100	MP3B	X	0	5.25
101	MP3B	Z	21.81	5.25
102	MP3B	Mx	-.009	5.25
103	MP3C	X	0	.25
104	MP3C	Z	24.599	.25
105	MP3C	Mx	.019	.25
106	MP3C	X	0	5.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
107	MP3C	Z	24.599	5.25
108	MP3C	Mx	.019	5.25
109	MP4A	X	0	.5
110	MP4A	Z	5.834	.5
111	MP4A	Mx	.003	.5
112	MP4B	X	0	.5
113	MP4B	Z	3.734	.5
114	MP4B	Mx	-.004	.5
115	MP4C	X	0	.5
116	MP4C	Z	5.834	.5
117	MP4C	Mx	.003	.5
118	MP2A	X	0	.5
119	MP2A	Z	11.774	.5
120	MP2A	Mx	-.003	.5
121	MP2B	X	0	.5
122	MP2B	Z	8.978	.5
123	MP2B	Mx	.004	.5
124	MP2C	X	0	.5
125	MP2C	Z	11.774	.5
126	MP2C	Mx	-.003	.5
127	MP4A	X	0	1
128	MP4A	Z	11.405	1
129	MP4A	Mx	-.006	1
130	MP4B	X	0	1
131	MP4B	Z	7.547	1
132	MP4B	Mx	.007	1
133	MP4C	X	0	1
134	MP4C	Z	11.405	1
135	MP4C	Mx	-.006	1
136	MP2B	X	0	2.5
137	MP2B	Z	6.079	2.5
138	MP2B	Mx	-.003	2.5
139	MP2B	X	0	4
140	MP2B	Z	6.079	4
141	MP2B	Mx	-.003	4
142	MP2C	X	0	2.5
143	MP2C	Z	11.875	2.5
144	MP2C	Mx	.003	2.5
145	MP2C	X	0	4
146	MP2C	Z	11.875	4
147	MP2C	Mx	.003	4
148	MP2A	X	0	2.5
149	MP2A	Z	11.875	2.5
150	MP2A	Mx	.003	2.5
151	MP2A	X	0	4
152	MP2A	Z	11.875	4
153	MP2A	Mx	.003	4
154	M44	X	0	.5
155	M44	Z	12.601	.5
156	M44	Mx	0	.5
157	M46	X	0	.5
158	M46	Z	12.601	.5
159	M46	Mx	0	.5

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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
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Member Point Loads (BLC 22 : Antenna Wi (210 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-1.477	5
2	MP3A	Z	2.558	5
3	MP3A	Mx	-0.002	5
4	MP3A	X	-1.477	6
5	MP3A	Z	2.558	6
6	MP3A	Mx	-0.002	6
7	MP3B	X	-1.622	5
8	MP3B	Z	2.81	5
9	MP3B	Mx	.003	5
10	MP3B	X	-1.622	6
11	MP3B	Z	2.81	6
12	MP3B	Mx	.003	6
13	MP3C	X	-.658	5
14	MP3C	Z	1.139	5
15	MP3C	Mx	-.000438	5
16	MP3C	X	-.658	6
17	MP3C	Z	1.139	6
18	MP3C	Mx	-.000438	6
19	MP3A	X	-1.477	5
20	MP3A	Z	2.558	5
21	MP3A	Mx	-.003	5
22	MP3A	X	-1.477	6
23	MP3A	Z	2.558	6
24	MP3A	Mx	-.003	6
25	MP3B	X	-1.622	5
26	MP3B	Z	2.81	5
27	MP3B	Mx	.003	5
28	MP3B	X	-1.622	6
29	MP3B	Z	2.81	6
30	MP3B	Mx	.003	6
31	MP3C	X	-.658	5
32	MP3C	Z	1.139	5
33	MP3C	Mx	.000439	5
34	MP3C	X	-.658	6
35	MP3C	Z	1.139	6
36	MP3C	Mx	.000439	6
37	MP1A	X	-8.084	1.5
38	MP1A	Z	14.002	1.5
39	MP1A	Mx	.007	1.5
40	MP1A	X	-8.084	4.5
41	MP1A	Z	14.002	4.5
42	MP1A	Mx	.007	4.5
43	MP1B	X	-8.084	1.5
44	MP1B	Z	14.002	1.5
45	MP1B	Mx	-.007	1.5
46	MP1B	X	-8.084	4.5
47	MP1B	Z	14.002	4.5
48	MP1B	Mx	-.007	4.5
49	MP1C	X	-12.821	1.5
50	MP1C	Z	22.206	1.5
51	MP1C	Mx	0	1.5
52	MP1C	X	-12.821	4.5
53	MP1C	Z	22.206	4.5
54	MP1C	Mx	0	4.5
55	MP5A	X	-8.084	1.5
56	MP5A	Z	14.002	1.5
57	MP5A	Mx	.007	1.5



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
58	MP5A	X	-8.084	4.5
59	MP5A	Z	14.002	4.5
60	MP5A	Mx	.007	4.5
61	MP5B	X	-8.084	1.5
62	MP5B	Z	14.002	1.5
63	MP5B	Mx	-.007	1.5
64	MP5B	X	-8.084	4.5
65	MP5B	Z	14.002	4.5
66	MP5B	Mx	-.007	4.5
67	MP5C	X	-12.821	1.5
68	MP5C	Z	22.206	1.5
69	MP5C	Mx	0	1.5
70	MP5C	X	-12.821	4.5
71	MP5C	Z	22.206	4.5
72	MP5C	Mx	0	4.5
73	MP3A	X	-11.331	.25
74	MP3A	Z	19.626	.25
75	MP3A	Mx	.016	.25
76	MP3A	X	-11.331	5.25
77	MP3A	Z	19.626	5.25
78	MP3A	Mx	.016	5.25
79	MP3B	X	-11.073	.25
80	MP3B	Z	19.179	.25
81	MP3B	Mx	-.006	.25
82	MP3B	X	-11.073	5.25
83	MP3B	Z	19.179	5.25
84	MP3B	Mx	-.006	5.25
85	MP3C	X	-12.784	.25
86	MP3C	Z	22.143	.25
87	MP3C	Mx	-.015	.25
88	MP3C	X	-12.784	5.25
89	MP3C	Z	22.143	5.25
90	MP3C	Mx	-.015	5.25
91	MP3A	X	-11.331	.25
92	MP3A	Z	19.626	.25
93	MP3A	Mx	.003	.25
94	MP3A	X	-11.331	5.25
95	MP3A	Z	19.626	5.25
96	MP3A	Mx	.003	5.25
97	MP3B	X	-11.073	.25
98	MP3B	Z	19.179	.25
99	MP3B	Mx	-.015	.25
100	MP3B	X	-11.073	5.25
101	MP3B	Z	19.179	5.25
102	MP3B	Mx	-.015	5.25
103	MP3C	X	-12.784	.25
104	MP3C	Z	22.143	.25
105	MP3C	Mx	.015	.25
106	MP3C	X	-12.784	5.25
107	MP3C	Z	22.143	5.25
108	MP3C	Mx	.015	5.25
109	MP4A	X	-2.188	.5
110	MP4A	Z	3.789	.5
111	MP4A	Mx	.004	.5
112	MP4B	X	-1.994	.5
113	MP4B	Z	3.453	.5
114	MP4B	Mx	-.004	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
115	MP4C	X	-3.282	.5
116	MP4C	Z	5.684	.5
117	MP4C	Mx	0	.5
118	MP2A	X	-4.916	.5
119	MP2A	Z	8.515	.5
120	MP2A	Mx	-.004	.5
121	MP2B	X	-4.658	.5
122	MP2B	Z	8.068	.5
123	MP2B	Mx	.004	.5
124	MP2C	X	-6.373	.5
125	MP2C	Z	11.038	.5
126	MP2C	Mx	0	.5
127	MP4A	X	-4.363	1
128	MP4A	Z	7.556	1
129	MP4A	Mx	-.008	1
130	MP4B	X	-4.006	1
131	MP4B	Z	6.939	1
132	MP4B	Mx	.008	1
133	MP4C	X	-6.373	1
134	MP4C	Z	11.038	1
135	MP4C	Mx	0	1
136	MP2B	X	-3.389	2.5
137	MP2B	Z	5.87	2.5
138	MP2B	Mx	-.003	2.5
139	MP2B	X	-3.389	4
140	MP2B	Z	5.87	4
141	MP2B	Mx	-.003	4
142	MP2C	X	-6.944	2.5
143	MP2C	Z	12.028	2.5
144	MP2C	Mx	0	2.5
145	MP2C	X	-6.944	4
146	MP2C	Z	12.028	4
147	MP2C	Mx	0	4
148	MP2A	X	-3.925	2.5
149	MP2A	Z	6.798	2.5
150	MP2A	Mx	.003	2.5
151	MP2A	X	-3.925	4
152	MP2A	Z	6.798	4
153	MP2A	Mx	.003	4
154	M44	X	-5.633	.5
155	M44	Z	9.756	.5
156	M44	Mx	0	.5
157	M46	X	-5.633	.5
158	M46	Z	9.756	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-3.031	5
2	MP3A	Z	1.75	5
3	MP3A	Mx	-.004	5
4	MP3A	X	-3.031	6
5	MP3A	Z	1.75	6
6	MP3A	Mx	-.004	6
7	MP3B	X	-1.921	5
8	MP3B	Z	1.109	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP3B	Mx	.002	5
10	MP3B	X	-1.921	6
11	MP3B	Z	1.109	6
12	MP3B	Mx	.002	6
13	MP3C	X	-1.612	5
14	MP3C	Z	.931	5
15	MP3C	Mx	.000393	5
16	MP3C	X	-1.612	6
17	MP3C	Z	.931	6
18	MP3C	Mx	.000393	6
19	MP3A	X	-3.031	5
20	MP3A	Z	1.75	5
21	MP3A	Mx	-.004	5
22	MP3A	X	-3.031	6
23	MP3A	Z	1.75	6
24	MP3A	Mx	-.004	6
25	MP3B	X	-1.921	5
26	MP3B	Z	1.109	5
27	MP3B	Mx	.000859	5
28	MP3B	X	-1.921	6
29	MP3B	Z	1.109	6
30	MP3B	Mx	.000859	6
31	MP3C	X	-1.612	5
32	MP3C	Z	.931	5
33	MP3C	Mx	.001	5
34	MP3C	X	-1.612	6
35	MP3C	Z	.931	6
36	MP3C	Mx	.001	6
37	MP1A	X	-11.268	1.5
38	MP1A	Z	6.506	1.5
39	MP1A	Mx	.007	1.5
40	MP1A	X	-11.268	4.5
41	MP1A	Z	6.506	4.5
42	MP1A	Mx	.007	4.5
43	MP1B	X	-19.472	1.5
44	MP1B	Z	11.242	1.5
45	MP1B	Mx	-.006	1.5
46	MP1B	X	-19.472	4.5
47	MP1B	Z	11.242	4.5
48	MP1B	Mx	-.006	4.5
49	MP1C	X	-19.472	1.5
50	MP1C	Z	11.242	1.5
51	MP1C	Mx	-.006	1.5
52	MP1C	X	-19.472	4.5
53	MP1C	Z	11.242	4.5
54	MP1C	Mx	-.006	4.5
55	MP5A	X	-11.268	1.5
56	MP5A	Z	6.506	1.5
57	MP5A	Mx	.007	1.5
58	MP5A	X	-11.268	4.5
59	MP5A	Z	6.506	4.5
60	MP5A	Mx	.007	4.5
61	MP5B	X	-19.472	1.5
62	MP5B	Z	11.242	1.5
63	MP5B	Mx	-.006	1.5
64	MP5B	X	-19.472	4.5
65	MP5B	Z	11.242	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
66	MP5B	Mx	-.006	4.5
67	MP5C	X	-19.472	1.5
68	MP5C	Z	11.242	1.5
69	MP5C	Mx	-.006	1.5
70	MP5C	X	-19.472	4.5
71	MP5C	Z	11.242	4.5
72	MP5C	Mx	-.006	4.5
73	MP3A	X	-18.787	.25
74	MP3A	Z	10.847	.25
75	MP3A	Mx	.011	.25
76	MP3A	X	-18.787	5.25
77	MP3A	Z	10.847	5.25
78	MP3A	Mx	.011	5.25
79	MP3B	X	-20.756	.25
80	MP3B	Z	11.984	.25
81	MP3B	Mx	.003	.25
82	MP3B	X	-20.756	5.25
83	MP3B	Z	11.984	5.25
84	MP3B	Mx	.003	5.25
85	MP3C	X	-21.304	.25
86	MP3C	Z	12.3	.25
87	MP3C	Mx	-.019	.25
88	MP3C	X	-21.304	5.25
89	MP3C	Z	12.3	5.25
90	MP3C	Mx	-.019	5.25
91	MP3A	X	-18.787	.25
92	MP3A	Z	10.847	.25
93	MP3A	Mx	.011	.25
94	MP3A	X	-18.787	5.25
95	MP3A	Z	10.847	5.25
96	MP3A	Mx	.011	5.25
97	MP3B	X	-20.756	.25
98	MP3B	Z	11.984	.25
99	MP3B	Mx	-.018	.25
100	MP3B	X	-20.756	5.25
101	MP3B	Z	11.984	5.25
102	MP3B	Mx	-.018	5.25
103	MP3C	X	-21.304	.25
104	MP3C	Z	12.3	.25
105	MP3C	Mx	.006	.25
106	MP3C	X	-21.304	5.25
107	MP3C	Z	12.3	5.25
108	MP3C	Mx	.006	5.25
109	MP4A	X	-3.157	.5
110	MP4A	Z	1.823	.5
111	MP4A	Mx	.004	.5
112	MP4B	X	-4.64	.5
113	MP4B	Z	2.679	.5
114	MP4B	Mx	-.003	.5
115	MP4C	X	-5.052	.5
116	MP4C	Z	2.917	.5
117	MP4C	Mx	-.003	.5
118	MP2A	X	-7.674	.5
119	MP2A	Z	4.431	.5
120	MP2A	Mx	-.004	.5
121	MP2B	X	-9.648	.5
122	MP2B	Z	5.57	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
123	MP2B	Mx	.004	.5
124	MP2C	X	-10.197	.5
125	MP2C	Z	5.887	.5
126	MP2C	Mx	.003	.5
127	MP4A	X	-6.396	1
128	MP4A	Z	3.693	1
129	MP4A	Mx	-.007	1
130	MP4B	X	-9.12	1
131	MP4B	Z	5.265	1
132	MP4B	Mx	.007	1
133	MP4C	X	-9.877	1
134	MP4C	Z	5.703	1
135	MP4C	Mx	.006	1
136	MP2B	X	-9.146	2.5
137	MP2B	Z	5.281	2.5
138	MP2B	Mx	-.003	2.5
139	MP2B	X	-9.146	4
140	MP2B	Z	5.281	4
141	MP2B	Mx	-.003	4
142	MP2C	X	-10.284	2.5
143	MP2C	Z	5.938	2.5
144	MP2C	Mx	-.003	2.5
145	MP2C	X	-10.284	4
146	MP2C	Z	5.938	4
147	MP2C	Mx	-.003	4
148	MP2A	X	-5.054	2.5
149	MP2A	Z	2.918	2.5
150	MP2A	Mx	.003	2.5
151	MP2A	X	-5.054	4
152	MP2A	Z	2.918	4
153	MP2A	Mx	.003	4
154	M44	X	-10.913	.5
155	M44	Z	6.301	.5
156	M44	Mx	0	.5
157	M46	X	-10.913	.5
158	M46	Z	6.301	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-2.954	5
2	MP3A	Z	0	5
3	MP3A	Mx	-.003	5
4	MP3A	X	-2.954	6
5	MP3A	Z	0	6
6	MP3A	Mx	-.003	6
7	MP3B	X	-1.381	5
8	MP3B	Z	0	5
9	MP3B	Mx	.000693	5
10	MP3B	X	-1.381	6
11	MP3B	Z	0	6
12	MP3B	Mx	.000693	6
13	MP3C	X	-2.954	5
14	MP3C	Z	0	5
15	MP3C	Mx	.002	5
16	MP3C	X	-2.954	6



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
17	MP3C	Z	0	6
18	MP3C	Mx	.002	6
19	MP3A	X	-2.954	5
20	MP3A	Z	0	5
21	MP3A	Mx	-.002	5
22	MP3A	X	-2.954	6
23	MP3A	Z	0	6
24	MP3A	Mx	-.002	6
25	MP3B	X	-1.381	5
26	MP3B	Z	0	5
27	MP3B	Mx	-.000214	5
28	MP3B	X	-1.381	6
29	MP3B	Z	0	6
30	MP3B	Mx	-.000214	6
31	MP3C	X	-2.954	5
32	MP3C	Z	0	5
33	MP3C	Mx	.003	5
34	MP3C	X	-2.954	6
35	MP3C	Z	0	6
36	MP3C	Mx	.003	6
37	MP1A	X	-16.169	1.5
38	MP1A	Z	0	1.5
39	MP1A	Mx	.007	1.5
40	MP1A	X	-16.169	4.5
41	MP1A	Z	0	4.5
42	MP1A	Mx	.007	4.5
43	MP1B	X	-25.641	1.5
44	MP1B	Z	0	1.5
45	MP1B	Mx	0	1.5
46	MP1B	X	-25.641	4.5
47	MP1B	Z	0	4.5
48	MP1B	Mx	0	4.5
49	MP1C	X	-16.169	1.5
50	MP1C	Z	0	1.5
51	MP1C	Mx	-.007	1.5
52	MP1C	X	-16.169	4.5
53	MP1C	Z	0	4.5
54	MP1C	Mx	-.007	4.5
55	MP5A	X	-16.169	1.5
56	MP5A	Z	0	1.5
57	MP5A	Mx	.007	1.5
58	MP5A	X	-16.169	4.5
59	MP5A	Z	0	4.5
60	MP5A	Mx	.007	4.5
61	MP5B	X	-25.641	1.5
62	MP5B	Z	0	1.5
63	MP5B	Mx	0	1.5
64	MP5B	X	-25.641	4.5
65	MP5B	Z	0	4.5
66	MP5B	Mx	0	4.5
67	MP5C	X	-16.169	1.5
68	MP5C	Z	0	1.5
69	MP5C	Mx	-.007	1.5
70	MP5C	X	-16.169	4.5
71	MP5C	Z	0	4.5
72	MP5C	Mx	-.007	4.5
73	MP3A	X	-22.662	.25



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
74	MP3A	Z	0	.25
75	MP3A	Mx	.003	.25
76	MP3A	X	-22.662	5.25
77	MP3A	Z	0	5.25
78	MP3A	Mx	.003	5.25
79	MP3B	X	-25.451	.25
80	MP3B	Z	0	.25
81	MP3B	Mx	.012	.25
82	MP3B	X	-25.451	5.25
83	MP3B	Z	0	5.25
84	MP3B	Mx	.012	5.25
85	MP3C	X	-22.662	.25
86	MP3C	Z	0	.25
87	MP3C	Mx	-.016	.25
88	MP3C	X	-22.662	5.25
89	MP3C	Z	0	5.25
90	MP3C	Mx	-.016	5.25
91	MP3A	X	-22.662	.25
92	MP3A	Z	0	.25
93	MP3A	Mx	.016	.25
94	MP3A	X	-22.662	5.25
95	MP3A	Z	0	5.25
96	MP3A	Mx	.016	5.25
97	MP3B	X	-25.451	.25
98	MP3B	Z	0	.25
99	MP3B	Mx	-.017	.25
100	MP3B	X	-25.451	5.25
101	MP3B	Z	0	5.25
102	MP3B	Mx	-.017	5.25
103	MP3C	X	-22.662	.25
104	MP3C	Z	0	.25
105	MP3C	Mx	-.003	.25
106	MP3C	X	-22.662	5.25
107	MP3C	Z	0	5.25
108	MP3C	Mx	-.003	5.25
109	MP4A	X	-4.375	.5
110	MP4A	Z	0	.5
111	MP4A	Mx	.004	.5
112	MP4B	X	-6.475	.5
113	MP4B	Z	0	.5
114	MP4B	Mx	-.001	.5
115	MP4C	X	-4.375	.5
116	MP4C	Z	0	.5
117	MP4C	Mx	-.004	.5
118	MP2A	X	-9.832	.5
119	MP2A	Z	0	.5
120	MP2A	Mx	-.004	.5
121	MP2B	X	-12.628	.5
122	MP2B	Z	0	.5
123	MP2B	Mx	.001	.5
124	MP2C	X	-9.832	.5
125	MP2C	Z	0	.5
126	MP2C	Mx	.004	.5
127	MP4A	X	-8.725	1
128	MP4A	Z	0	1
129	MP4A	Mx	-.008	1
130	MP4B	X	-12.583	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
131	MP4B	Z	0	1
132	MP4B	Mx	.002	1
133	MP4C	X	-8.725	1
134	MP4C	Z	0	1
135	MP4C	Mx	.008	1
136	MP2B	X	-13.646	2.5
137	MP2B	Z	0	2.5
138	MP2B	Mx	-.001	2.5
139	MP2B	X	-13.646	4
140	MP2B	Z	0	4
141	MP2B	Mx	-.001	4
142	MP2C	X	-7.849	2.5
143	MP2C	Z	0	2.5
144	MP2C	Mx	-.003	2.5
145	MP2C	X	-7.849	4
146	MP2C	Z	0	4
147	MP2C	Mx	-.003	4
148	MP2A	X	-7.849	2.5
149	MP2A	Z	0	2.5
150	MP2A	Mx	.003	2.5
151	MP2A	X	-7.849	4
152	MP2A	Z	0	4
153	MP2A	Mx	.003	4
154	M44	X	-15.274	.5
155	M44	Z	0	.5
156	M44	Mx	0	.5
157	M46	X	-15.274	.5
158	M46	Z	0	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-1.612	5
2	MP3A	Z	-.931	5
3	MP3A	Mx	-.001	5
4	MP3A	X	-1.612	6
5	MP3A	Z	-.931	6
6	MP3A	Mx	-.001	6
7	MP3B	X	-1.361	5
8	MP3B	Z	-.786	5
9	MP3B	Mx	-4.5e-5	5
10	MP3B	X	-1.361	6
11	MP3B	Z	-.786	6
12	MP3B	Mx	-4.5e-5	6
13	MP3C	X	-3.031	5
14	MP3C	Z	-1.75	5
15	MP3C	Mx	.004	5
16	MP3C	X	-3.031	6
17	MP3C	Z	-1.75	6
18	MP3C	Mx	.004	6
19	MP3A	X	-1.612	5
20	MP3A	Z	-.931	5
21	MP3A	Mx	-.000393	5
22	MP3A	X	-1.612	6
23	MP3A	Z	-.931	6
24	MP3A	Mx	-.000393	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP3B	X	-1.361	5
26	MP3B	Z	-.786	5
27	MP3B	Mx	-.001	5
28	MP3B	X	-1.361	6
29	MP3B	Z	-.786	6
30	MP3B	Mx	-.001	6
31	MP3C	X	-3.031	5
32	MP3C	Z	-1.75	5
33	MP3C	Mx	.004	5
34	MP3C	X	-3.031	6
35	MP3C	Z	-1.75	6
36	MP3C	Mx	.004	6
37	MP1A	X	-19.472	1.5
38	MP1A	Z	-11.242	1.5
39	MP1A	Mx	.006	1.5
40	MP1A	X	-19.472	4.5
41	MP1A	Z	-11.242	4.5
42	MP1A	Mx	.006	4.5
43	MP1B	X	-19.472	1.5
44	MP1B	Z	-11.242	1.5
45	MP1B	Mx	.006	1.5
46	MP1B	X	-19.472	4.5
47	MP1B	Z	-11.242	4.5
48	MP1B	Mx	.006	4.5
49	MP1C	X	-11.268	1.5
50	MP1C	Z	-6.506	1.5
51	MP1C	Mx	-.007	1.5
52	MP1C	X	-11.268	4.5
53	MP1C	Z	-6.506	4.5
54	MP1C	Mx	-.007	4.5
55	MP5A	X	-19.472	1.5
56	MP5A	Z	-11.242	1.5
57	MP5A	Mx	.006	1.5
58	MP5A	X	-19.472	4.5
59	MP5A	Z	-11.242	4.5
60	MP5A	Mx	.006	4.5
61	MP5B	X	-19.472	1.5
62	MP5B	Z	-11.242	1.5
63	MP5B	Mx	.006	1.5
64	MP5B	X	-19.472	4.5
65	MP5B	Z	-11.242	4.5
66	MP5B	Mx	.006	4.5
67	MP5C	X	-11.268	1.5
68	MP5C	Z	-6.506	1.5
69	MP5C	Mx	-.007	1.5
70	MP5C	X	-11.268	4.5
71	MP5C	Z	-6.506	4.5
72	MP5C	Mx	-.007	4.5
73	MP3A	X	-21.304	.25
74	MP3A	Z	-12.3	.25
75	MP3A	Mx	-.006	.25
76	MP3A	X	-21.304	5.25
77	MP3A	Z	-12.3	5.25
78	MP3A	Mx	-.006	5.25
79	MP3B	X	-21.75	.25
80	MP3B	Z	-12.557	.25
81	MP3B	Mx	.018	.25



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
82	MP3B	X	-21.75	5.25
83	MP3B	Z	-12.557	5.25
84	MP3B	Mx	.018	5.25
85	MP3C	X	-18.787	.25
86	MP3C	Z	-10.847	.25
87	MP3C	Mx	-.011	.25
88	MP3C	X	-18.787	5.25
89	MP3C	Z	-10.847	5.25
90	MP3C	Mx	-.011	5.25
91	MP3A	X	-21.304	.25
92	MP3A	Z	-12.3	.25
93	MP3A	Mx	.019	.25
94	MP3A	X	-21.304	5.25
95	MP3A	Z	-12.3	5.25
96	MP3A	Mx	.019	5.25
97	MP3B	X	-21.75	.25
98	MP3B	Z	-12.557	.25
99	MP3B	Mx	-.009	.25
100	MP3B	X	-21.75	5.25
101	MP3B	Z	-12.557	5.25
102	MP3B	Mx	-.009	5.25
103	MP3C	X	-18.787	.25
104	MP3C	Z	-10.847	.25
105	MP3C	Mx	-.011	.25
106	MP3C	X	-18.787	5.25
107	MP3C	Z	-10.847	5.25
108	MP3C	Mx	-.011	5.25
109	MP4A	X	-5.052	.5
110	MP4A	Z	-2.917	.5
111	MP4A	Mx	.003	.5
112	MP4B	X	-5.388	.5
113	MP4B	Z	-3.111	.5
114	MP4B	Mx	.002	.5
115	MP4C	X	-3.157	.5
116	MP4C	Z	-1.823	.5
117	MP4C	Mx	-.004	.5
118	MP2A	X	-10.197	.5
119	MP2A	Z	-5.887	.5
120	MP2A	Mx	-.003	.5
121	MP2B	X	-10.644	.5
122	MP2B	Z	-6.145	.5
123	MP2B	Mx	-.002	.5
124	MP2C	X	-7.674	.5
125	MP2C	Z	-4.431	.5
126	MP2C	Mx	.004	.5
127	MP4A	X	-9.877	1
128	MP4A	Z	-5.703	1
129	MP4A	Mx	-.006	1
130	MP4B	X	-10.495	1
131	MP4B	Z	-6.059	1
132	MP4B	Mx	-.004	1
133	MP4C	X	-6.396	1
134	MP4C	Z	-3.693	1
135	MP4C	Mx	.007	1
136	MP2B	X	-11.212	2.5
137	MP2B	Z	-6.473	2.5
138	MP2B	Mx	.002	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
139	MP2B	X	-11.212	4
140	MP2B	Z	-6.473	4
141	MP2B	Mx	.002	4
142	MP2C	X	-5.054	2.5
143	MP2C	Z	-2.918	2.5
144	MP2C	Mx	-.003	2.5
145	MP2C	X	-5.054	4
146	MP2C	Z	-2.918	4
147	MP2C	Mx	-.003	4
148	MP2A	X	-10.284	2.5
149	MP2A	Z	-5.938	2.5
150	MP2A	Mx	.003	2.5
151	MP2A	X	-10.284	4
152	MP2A	Z	-5.938	4
153	MP2A	Mx	.003	4
154	M44	X	-14.385	.5
155	M44	Z	-8.305	.5
156	M44	Mx	0	.5
157	M46	X	-14.385	.5
158	M46	Z	-8.305	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-.658	5
2	MP3A	Z	-1.139	5
3	MP3A	Mx	-.000439	5
4	MP3A	X	-.658	6
5	MP3A	Z	-1.139	6
6	MP3A	Mx	-.000439	6
7	MP3B	X	-1.299	5
8	MP3B	Z	-2.25	5
9	MP3B	Mx	-.001	5
10	MP3B	X	-1.299	6
11	MP3B	Z	-2.25	6
12	MP3B	Mx	-.001	6
13	MP3C	X	-1.477	5
14	MP3C	Z	-2.558	5
15	MP3C	Mx	.003	5
16	MP3C	X	-1.477	6
17	MP3C	Z	-2.558	6
18	MP3C	Mx	.003	6
19	MP3A	X	-.658	5
20	MP3A	Z	-1.139	5
21	MP3A	Mx	.000438	5
22	MP3A	X	-.658	6
23	MP3A	Z	-1.139	6
24	MP3A	Mx	.000438	6
25	MP3B	X	-1.299	5
26	MP3B	Z	-2.25	5
27	MP3B	Mx	-.003	5
28	MP3B	X	-1.299	6
29	MP3B	Z	-2.25	6
30	MP3B	Mx	-.003	6
31	MP3C	X	-1.477	5
32	MP3C	Z	-2.558	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
33	MP3C	Mx	.002	5
34	MP3C	X	-1.477	6
35	MP3C	Z	-2.558	6
36	MP3C	Mx	.002	6
37	MP1A	X	-12.821	1.5
38	MP1A	Z	-22.206	1.5
39	MP1A	Mx	0	1.5
40	MP1A	X	-12.821	4.5
41	MP1A	Z	-22.206	4.5
42	MP1A	Mx	0	4.5
43	MP1B	X	-8.084	1.5
44	MP1B	Z	-14.002	1.5
45	MP1B	Mx	.007	1.5
46	MP1B	X	-8.084	4.5
47	MP1B	Z	-14.002	4.5
48	MP1B	Mx	.007	4.5
49	MP1C	X	-8.084	1.5
50	MP1C	Z	-14.002	1.5
51	MP1C	Mx	-.007	1.5
52	MP1C	X	-8.084	4.5
53	MP1C	Z	-14.002	4.5
54	MP1C	Mx	-.007	4.5
55	MP5A	X	-12.821	1.5
56	MP5A	Z	-22.206	1.5
57	MP5A	Mx	0	1.5
58	MP5A	X	-12.821	4.5
59	MP5A	Z	-22.206	4.5
60	MP5A	Mx	0	4.5
61	MP5B	X	-8.084	1.5
62	MP5B	Z	-14.002	1.5
63	MP5B	Mx	.007	1.5
64	MP5B	X	-8.084	4.5
65	MP5B	Z	-14.002	4.5
66	MP5B	Mx	.007	4.5
67	MP5C	X	-8.084	1.5
68	MP5C	Z	-14.002	1.5
69	MP5C	Mx	-.007	1.5
70	MP5C	X	-8.084	4.5
71	MP5C	Z	-14.002	4.5
72	MP5C	Mx	-.007	4.5
73	MP3A	X	-12.784	.25
74	MP3A	Z	-22.143	.25
75	MP3A	Mx	-.015	.25
76	MP3A	X	-12.784	5.25
77	MP3A	Z	-22.143	5.25
78	MP3A	Mx	-.015	5.25
79	MP3B	X	-11.647	.25
80	MP3B	Z	-20.173	.25
81	MP3B	Mx	.018	.25
82	MP3B	X	-11.647	5.25
83	MP3B	Z	-20.173	5.25
84	MP3B	Mx	.018	5.25
85	MP3C	X	-11.331	.25
86	MP3C	Z	-19.626	.25
87	MP3C	Mx	-.003	.25
88	MP3C	X	-11.331	5.25
89	MP3C	Z	-19.626	5.25



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
90	MP3C	Mx	-.003	5.25
91	MP3A	X	-12.784	.25
92	MP3A	Z	-22.143	.25
93	MP3A	Mx	.015	.25
94	MP3A	X	-12.784	5.25
95	MP3A	Z	-22.143	5.25
96	MP3A	Mx	.015	5.25
97	MP3B	X	-11.647	.25
98	MP3B	Z	-20.173	.25
99	MP3B	Mx	.000188	.25
100	MP3B	X	-11.647	5.25
101	MP3B	Z	-20.173	5.25
102	MP3B	Mx	.000188	5.25
103	MP3C	X	-11.331	.25
104	MP3C	Z	-19.626	.25
105	MP3C	Mx	-.016	.25
106	MP3C	X	-11.331	5.25
107	MP3C	Z	-19.626	5.25
108	MP3C	Mx	-.016	5.25
109	MP4A	X	-3.282	.5
110	MP4A	Z	-5.684	.5
111	MP4A	Mx	0	.5
112	MP4B	X	-2.426	.5
113	MP4B	Z	-4.201	.5
114	MP4B	Mx	.004	.5
115	MP4C	X	-2.188	.5
116	MP4C	Z	-3.789	.5
117	MP4C	Mx	-.004	.5
118	MP2A	X	-6.373	.5
119	MP2A	Z	-11.038	.5
120	MP2A	Mx	0	.5
121	MP2B	X	-5.233	.5
122	MP2B	Z	-9.064	.5
123	MP2B	Mx	-.004	.5
124	MP2C	X	-4.916	.5
125	MP2C	Z	-8.515	.5
126	MP2C	Mx	.004	.5
127	MP4A	X	-6.373	1
128	MP4A	Z	-11.038	1
129	MP4A	Mx	0	1
130	MP4B	X	-4.8	1
131	MP4B	Z	-8.314	1
132	MP4B	Mx	-.007	1
133	MP4C	X	-4.363	1
134	MP4C	Z	-7.556	1
135	MP4C	Mx	.008	1
136	MP2B	X	-4.582	2.5
137	MP2B	Z	-7.935	2.5
138	MP2B	Mx	.004	2.5
139	MP2B	X	-4.582	4
140	MP2B	Z	-7.935	4
141	MP2B	Mx	.004	4
142	MP2C	X	-3.925	2.5
143	MP2C	Z	-6.798	2.5
144	MP2C	Mx	-.003	2.5
145	MP2C	X	-3.925	4
146	MP2C	Z	-6.798	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
147	MP2C	Mx	-0.003	4
148	MP2A	X	-6.944	2.5
149	MP2A	Z	-12.028	2.5
150	MP2A	Mx	0	2.5
151	MP2A	X	-6.944	4
152	MP2A	Z	-12.028	4
153	MP2A	Mx	0	4
154	M44	X	-7.637	.5
155	M44	Z	-13.228	.5
156	M44	Mx	0	.5
157	M46	X	-7.637	.5
158	M46	Z	-13.228	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	5
2	MP3A	Z	-.987	5
3	MP3A	Mx	.000209	5
4	MP3A	X	0	6
5	MP3A	Z	-.987	6
6	MP3A	Mx	.000209	6
7	MP3B	X	0	5
8	MP3B	Z	-.989	5
9	MP3B	Mx	-.000917	5
10	MP3B	X	0	6
11	MP3B	Z	-.989	6
12	MP3B	Mx	-.000917	6
13	MP3C	X	0	5
14	MP3C	Z	-.987	5
15	MP3C	Mx	.000778	5
16	MP3C	X	0	6
17	MP3C	Z	-.987	6
18	MP3C	Mx	.000778	6
19	MP3A	X	0	5
20	MP3A	Z	-.987	5
21	MP3A	Mx	.000778	5
22	MP3A	X	0	6
23	MP3A	Z	-.987	6
24	MP3A	Mx	.000778	6
25	MP3B	X	0	5
26	MP3B	Z	-.989	5
27	MP3B	Mx	-.001	5
28	MP3B	X	0	6
29	MP3B	Z	-.989	6
30	MP3B	Mx	-.001	6
31	MP3C	X	0	5
32	MP3C	Z	-.987	5
33	MP3C	Mx	.000209	5
34	MP3C	X	0	6
35	MP3C	Z	-.987	6
36	MP3C	Mx	.000209	6
37	MP1A	X	0	1.5
38	MP1A	Z	-5.514	1.5
39	MP1A	Mx	-.001	1.5
40	MP1A	X	0	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
41	MP1A	Z	-5.514	4.5
42	MP1A	Mx	-.001	4.5
43	MP1B	X	0	1.5
44	MP1B	Z	-4.087	1.5
45	MP1B	Mx	.002	1.5
46	MP1B	X	0	4.5
47	MP1B	Z	-4.087	4.5
48	MP1B	Mx	.002	4.5
49	MP1C	X	0	1.5
50	MP1C	Z	-5.514	1.5
51	MP1C	Mx	-.001	1.5
52	MP1C	X	0	4.5
53	MP1C	Z	-5.514	4.5
54	MP1C	Mx	-.001	4.5
55	MP5A	X	0	1.5
56	MP5A	Z	-5.514	1.5
57	MP5A	Mx	-.001	1.5
58	MP5A	X	0	4.5
59	MP5A	Z	-5.514	4.5
60	MP5A	Mx	-.001	4.5
61	MP5B	X	0	1.5
62	MP5B	Z	-4.087	1.5
63	MP5B	Mx	.002	1.5
64	MP5B	X	0	4.5
65	MP5B	Z	-4.087	4.5
66	MP5B	Mx	.002	4.5
67	MP5C	X	0	1.5
68	MP5C	Z	-5.514	1.5
69	MP5C	Mx	-.001	1.5
70	MP5C	X	0	4.5
71	MP5C	Z	-5.514	4.5
72	MP5C	Mx	-.001	4.5
73	MP3A	X	0	.25
74	MP3A	Z	-8.011	.25
75	MP3A	Mx	-.006	.25
76	MP3A	X	0	5.25
77	MP3A	Z	-8.011	5.25
78	MP3A	Mx	-.006	5.25
79	MP3B	X	0	.25
80	MP3B	Z	-7.027	.25
81	MP3B	Mx	.004	.25
82	MP3B	X	0	5.25
83	MP3B	Z	-7.027	5.25
84	MP3B	Mx	.004	5.25
85	MP3C	X	0	.25
86	MP3C	Z	-8.011	.25
87	MP3C	Mx	.002	.25
88	MP3C	X	0	5.25
89	MP3C	Z	-8.011	5.25
90	MP3C	Mx	.002	5.25
91	MP3A	X	0	.25
92	MP3A	Z	-8.011	.25
93	MP3A	Mx	.002	.25
94	MP3A	X	0	5.25
95	MP3A	Z	-8.011	5.25
96	MP3A	Mx	.002	5.25
97	MP3B	X	0	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
98	MP3B	Z	-7.027	.25
99	MP3B	Mx	.003	.25
100	MP3B	X	0	5.25
101	MP3B	Z	-7.027	5.25
102	MP3B	Mx	.003	5.25
103	MP3C	X	0	.25
104	MP3C	Z	-8.011	.25
105	MP3C	Mx	-.006	.25
106	MP3C	X	0	5.25
107	MP3C	Z	-8.011	5.25
108	MP3C	Mx	-.006	5.25
109	MP4A	X	0	.5
110	MP4A	Z	-1.596	.5
111	MP4A	Mx	-.000798	.5
112	MP4B	X	0	.5
113	MP4B	Z	-.927	.5
114	MP4B	Mx	.000913	.5
115	MP4C	X	0	.5
116	MP4C	Z	-1.596	.5
117	MP4C	Mx	-.000798	.5
118	MP2A	X	0	.5
119	MP2A	Z	-2.923	.5
120	MP2A	Mx	.000731	.5
121	MP2B	X	0	.5
122	MP2B	Z	-2.169	.5
123	MP2B	Mx	-.001	.5
124	MP2C	X	0	.5
125	MP2C	Z	-2.923	.5
126	MP2C	Mx	.000731	.5
127	MP4A	X	0	1
128	MP4A	Z	-2.825	1
129	MP4A	Mx	.001	1
130	MP4B	X	0	1
131	MP4B	Z	-1.79	1
132	MP4B	Mx	-.002	1
133	MP4C	X	0	1
134	MP4C	Z	-2.825	1
135	MP4C	Mx	.001	1
136	MP2B	X	0	2.5
137	MP2B	Z	-1.78	2.5
138	MP2B	Mx	.000876	2.5
139	MP2B	X	0	4
140	MP2B	Z	-1.78	4
141	MP2B	Mx	.000876	4
142	MP2C	X	0	2.5
143	MP2C	Z	-3.738	2.5
144	MP2C	Mx	-.000934	2.5
145	MP2C	X	0	4
146	MP2C	Z	-3.738	4
147	MP2C	Mx	-.000934	4
148	MP2A	X	0	2.5
149	MP2A	Z	-3.738	2.5
150	MP2A	Mx	-.000934	2.5
151	MP2A	X	0	4
152	MP2A	Z	-3.738	4
153	MP2A	Mx	-.000934	4
154	M44	X	0	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
155	M44	Z	-3.786	.5
156	M44	Mx	0	.5
157	M46	X	0	.5
158	M46	Z	-3.786	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.494	5
2	MP3A	Z	-.856	5
3	MP3A	Mx	.000691	5
4	MP3A	X	.494	6
5	MP3A	Z	-.856	6
6	MP3A	Mx	.000691	6
7	MP3B	X	.494	5
8	MP3B	Z	-.856	5
9	MP3B	Mx	-.001	5
10	MP3B	X	.494	6
11	MP3B	Z	-.856	6
12	MP3B	Mx	-.001	6
13	MP3C	X	.493	5
14	MP3C	Z	-.854	5
15	MP3C	Mx	.000329	5
16	MP3C	X	.493	6
17	MP3C	Z	-.854	6
18	MP3C	Mx	.000329	6
19	MP3A	X	.494	5
20	MP3A	Z	-.856	5
21	MP3A	Mx	.001	5
22	MP3A	X	.494	6
23	MP3A	Z	-.856	6
24	MP3A	Mx	.001	6
25	MP3B	X	.494	5
26	MP3B	Z	-.856	5
27	MP3B	Mx	-.000816	5
28	MP3B	X	.494	6
29	MP3B	Z	-.856	6
30	MP3B	Mx	-.000816	6
31	MP3C	X	.493	5
32	MP3C	Z	-.854	5
33	MP3C	Mx	-.000329	5
34	MP3C	X	.493	6
35	MP3C	Z	-.854	6
36	MP3C	Mx	-.000329	6
37	MP1A	X	2.281	1.5
38	MP1A	Z	-3.951	1.5
39	MP1A	Mx	-.002	1.5
40	MP1A	X	2.281	4.5
41	MP1A	Z	-3.951	4.5
42	MP1A	Mx	-.002	4.5
43	MP1B	X	2.281	1.5
44	MP1B	Z	-3.951	1.5
45	MP1B	Mx	.002	1.5
46	MP1B	X	2.281	4.5
47	MP1B	Z	-3.951	4.5
48	MP1B	Mx	.002	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
49	MP1C	X	2.995	1.5
50	MP1C	Z	-5.187	1.5
51	MP1C	Mx	0	1.5
52	MP1C	X	2.995	4.5
53	MP1C	Z	-5.187	4.5
54	MP1C	Mx	0	4.5
55	MP5A	X	2.281	1.5
56	MP5A	Z	-3.951	1.5
57	MP5A	Mx	-.002	1.5
58	MP5A	X	2.281	4.5
59	MP5A	Z	-3.951	4.5
60	MP5A	Mx	-.002	4.5
61	MP5B	X	2.281	1.5
62	MP5B	Z	-3.951	1.5
63	MP5B	Mx	.002	1.5
64	MP5B	X	2.281	4.5
65	MP5B	Z	-3.951	4.5
66	MP5B	Mx	.002	4.5
67	MP5C	X	2.995	1.5
68	MP5C	Z	-5.187	1.5
69	MP5C	Mx	0	1.5
70	MP5C	X	2.995	4.5
71	MP5C	Z	-5.187	4.5
72	MP5C	Mx	0	4.5
73	MP3A	X	3.664	.25
74	MP3A	Z	-6.346	.25
75	MP3A	Mx	-.005	.25
76	MP3A	X	3.664	5.25
77	MP3A	Z	-6.346	5.25
78	MP3A	Mx	-.005	5.25
79	MP3B	X	3.573	.25
80	MP3B	Z	-6.189	.25
81	MP3B	Mx	.002	.25
82	MP3B	X	3.573	5.25
83	MP3B	Z	-6.189	5.25
84	MP3B	Mx	.002	5.25
85	MP3C	X	4.176	.25
86	MP3C	Z	-7.234	.25
87	MP3C	Mx	.005	.25
88	MP3C	X	4.176	5.25
89	MP3C	Z	-7.234	5.25
90	MP3C	Mx	.005	5.25
91	MP3A	X	3.664	.25
92	MP3A	Z	-6.346	.25
93	MP3A	Mx	-.001	.25
94	MP3A	X	3.664	5.25
95	MP3A	Z	-6.346	5.25
96	MP3A	Mx	-.001	5.25
97	MP3B	X	3.573	.25
98	MP3B	Z	-6.189	.25
99	MP3B	Mx	.005	.25
100	MP3B	X	3.573	5.25
101	MP3B	Z	-6.189	5.25
102	MP3B	Mx	.005	5.25
103	MP3C	X	4.176	.25
104	MP3C	Z	-7.234	.25
105	MP3C	Mx	-.005	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
106	MP3C	X	4.176	5.25
107	MP3C	Z	-7.234	5.25
108	MP3C	Mx	-.005	5.25
109	MP4A	X	.566	.5
110	MP4A	Z	-.98	.5
111	MP4A	Mx	-.00098	.5
112	MP4B	X	.504	.5
113	MP4B	Z	-.872	.5
114	MP4B	Mx	.000946	.5
115	MP4C	X	.914	.5
116	MP4C	Z	-1.584	.5
117	MP4C	Mx	0	.5
118	MP2A	X	1.199	.5
119	MP2A	Z	-2.078	.5
120	MP2A	Mx	.001	.5
121	MP2B	X	1.13	.5
122	MP2B	Z	-1.957	.5
123	MP2B	Mx	-.001	.5
124	MP2C	X	1.592	.5
125	MP2C	Z	-2.758	.5
126	MP2C	Mx	0	.5
127	MP4A	X	1.053	1
128	MP4A	Z	-1.824	1
129	MP4A	Mx	.002	1
130	MP4B	X	.957	1
131	MP4B	Z	-1.658	1
132	MP4B	Mx	-.002	1
133	MP4C	X	1.592	1
134	MP4C	Z	-2.758	1
135	MP4C	Mx	0	1
136	MP2B	X	1.008	2.5
137	MP2B	Z	-1.746	2.5
138	MP2B	Mx	.000947	2.5
139	MP2B	X	1.008	4
140	MP2B	Z	-1.746	4
141	MP2B	Mx	.000947	4
142	MP2C	X	2.209	2.5
143	MP2C	Z	-3.826	2.5
144	MP2C	Mx	0	2.5
145	MP2C	X	2.209	4
146	MP2C	Z	-3.826	4
147	MP2C	Mx	0	4
148	MP2A	X	1.189	2.5
149	MP2A	Z	-2.06	2.5
150	MP2A	Mx	-.001	2.5
151	MP2A	X	1.189	4
152	MP2A	Z	-2.06	4
153	MP2A	Mx	-.001	4
154	M44	X	1.668	.5
155	M44	Z	-2.889	.5
156	M44	Mx	0	.5
157	M46	X	1.668	.5
158	M46	Z	-2.889	.5
159	M46	Mx	0	.5

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



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.857	5
2	MP3A	Z	-.495	5
3	MP3A	Mx	.00099	5
4	MP3A	X	.857	6
5	MP3A	Z	-.495	6
6	MP3A	Mx	.00099	6
7	MP3B	X	.855	5
8	MP3B	Z	-.494	5
9	MP3B	Mx	-.000887	5
10	MP3B	X	.855	6
11	MP3B	Z	-.494	6
12	MP3B	Mx	-.000887	6
13	MP3C	X	.855	5
14	MP3C	Z	-.494	5
15	MP3C	Mx	-.000208	5
16	MP3C	X	.855	6
17	MP3C	Z	-.494	6
18	MP3C	Mx	-.000208	6
19	MP3A	X	.857	5
20	MP3A	Z	-.495	5
21	MP3A	Mx	.00099	5
22	MP3A	X	.857	6
23	MP3A	Z	-.495	6
24	MP3A	Mx	.00099	6
25	MP3B	X	.855	5
26	MP3B	Z	-.494	5
27	MP3B	Mx	-.000383	5
28	MP3B	X	.855	6
29	MP3B	Z	-.494	6
30	MP3B	Mx	-.000383	6
31	MP3C	X	.855	5
32	MP3C	Z	-.494	5
33	MP3C	Mx	-.000779	5
34	MP3C	X	.855	6
35	MP3C	Z	-.494	6
36	MP3C	Mx	-.000779	6
37	MP1A	X	3.539	1.5
38	MP1A	Z	-2.043	1.5
39	MP1A	Mx	-.002	1.5
40	MP1A	X	3.539	4.5
41	MP1A	Z	-2.043	4.5
42	MP1A	Mx	-.002	4.5
43	MP1B	X	4.775	1.5
44	MP1B	Z	-2.757	1.5
45	MP1B	Mx	.001	1.5
46	MP1B	X	4.775	4.5
47	MP1B	Z	-2.757	4.5
48	MP1B	Mx	.001	4.5
49	MP1C	X	4.775	1.5
50	MP1C	Z	-2.757	1.5
51	MP1C	Mx	.001	1.5
52	MP1C	X	4.775	4.5
53	MP1C	Z	-2.757	4.5
54	MP1C	Mx	.001	4.5
55	MP5A	X	3.539	1.5
56	MP5A	Z	-2.043	1.5
57	MP5A	Mx	-.002	1.5



Company : Colliers Engineering & Design
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Member Point Loads (BLC 29 : Antenna Wm (60 Deg)) (Continued)

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
58	MP5A	X	3.539	4.5
59	MP5A	Z	-2.043	4.5
60	MP5A	Mx	-.002	4.5
61	MP5B	X	4.775	1.5
62	MP5B	Z	-2.757	1.5
63	MP5B	Mx	.001	1.5
64	MP5B	X	4.775	4.5
65	MP5B	Z	-2.757	4.5
66	MP5B	Mx	.001	4.5
67	MP5C	X	4.775	1.5
68	MP5C	Z	-2.757	1.5
69	MP5C	Mx	.001	1.5
70	MP5C	X	4.775	4.5
71	MP5C	Z	-2.757	4.5
72	MP5C	Mx	.001	4.5
73	MP3A	X	6.05	.25
74	MP3A	Z	-3.493	.25
75	MP3A	Mx	-.003	.25
76	MP3A	X	6.05	5.25
77	MP3A	Z	-3.493	5.25
78	MP3A	Mx	-.003	5.25
79	MP3B	X	6.745	.25
80	MP3B	Z	-3.894	.25
81	MP3B	Mx	-.000977	.25
82	MP3B	X	6.745	5.25
83	MP3B	Z	-3.894	5.25
84	MP3B	Mx	-.000977	5.25
85	MP3C	X	6.938	.25
86	MP3C	Z	-4.005	.25
87	MP3C	Mx	.006	.25
88	MP3C	X	6.938	5.25
89	MP3C	Z	-4.005	5.25
90	MP3C	Mx	.006	5.25
91	MP3A	X	6.05	.25
92	MP3A	Z	-3.493	.25
93	MP3A	Mx	-.003	.25
94	MP3A	X	6.05	5.25
95	MP3A	Z	-3.493	5.25
96	MP3A	Mx	-.003	5.25
97	MP3B	X	6.745	.25
98	MP3B	Z	-3.894	.25
99	MP3B	Mx	.006	.25
100	MP3B	X	6.745	5.25
101	MP3B	Z	-3.894	5.25
102	MP3B	Mx	.006	5.25
103	MP3C	X	6.938	.25
104	MP3C	Z	-4.005	.25
105	MP3C	Mx	-.002	.25
106	MP3C	X	6.938	5.25
107	MP3C	Z	-4.005	5.25
108	MP3C	Mx	-.002	5.25
109	MP4A	X	.778	.5
110	MP4A	Z	-.449	.5
111	MP4A	Mx	-.000898	.5
112	MP4B	X	1.251	.5
113	MP4B	Z	-.722	.5
114	MP4B	Mx	.000928	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
115	MP4C	X	1.382	.5
116	MP4C	Z	- .798	.5
117	MP4C	Mx	.000798	.5
118	MP2A	X	1.851	.5
119	MP2A	Z	-1.068	.5
120	MP2A	Mx	.001	.5
121	MP2B	X	2.383	.5
122	MP2B	Z	-1.376	.5
123	MP2B	Mx	-.000884	.5
124	MP2C	X	2.531	.5
125	MP2C	Z	-1.461	.5
126	MP2C	Mx	-.000731	.5
127	MP4A	X	1.513	1
128	MP4A	Z	-.873	1
129	MP4A	Mx	.002	1
130	MP4B	X	2.244	1
131	MP4B	Z	-1.295	1
132	MP4B	Mx	-.002	1
133	MP4C	X	2.447	1
134	MP4C	Z	-1.413	1
135	MP4C	Mx	-.001	1
136	MP2B	X	2.853	2.5
137	MP2B	Z	-1.647	2.5
138	MP2B	Mx	.001	2.5
139	MP2B	X	2.853	4
140	MP2B	Z	-1.647	4
141	MP2B	Mx	.001	4
142	MP2C	X	3.237	2.5
143	MP2C	Z	-1.869	2.5
144	MP2C	Mx	.000934	2.5
145	MP2C	X	3.237	4
146	MP2C	Z	-1.869	4
147	MP2C	Mx	.000934	4
148	MP2A	X	1.471	2.5
149	MP2A	Z	-.849	2.5
150	MP2A	Mx	-.000849	2.5
151	MP2A	X	1.471	4
152	MP2A	Z	-.849	4
153	MP2A	Mx	-.000849	4
154	M44	X	3.279	.5
155	M44	Z	-1.893	.5
156	M44	Mx	0	.5
157	M46	X	3.279	.5
158	M46	Z	-1.893	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	.988	5
2	MP3A	Z	0	5
3	MP3A	Mx	.001	5
4	MP3A	X	.988	6
5	MP3A	Z	0	6
6	MP3A	Mx	.001	6
7	MP3B	X	.986	5
8	MP3B	Z	0	5



Company : Colliers Engineering & Design
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Member Point Loads (BLC 30 : Antenna Wm (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP3B	Mx	-.000495	5
10	MP3B	X	.986	6
11	MP3B	Z	0	6
12	MP3B	Mx	-.000495	6
13	MP3C	X	.988	5
14	MP3C	Z	0	5
15	MP3C	Mx	-.000691	5
16	MP3C	X	.988	6
17	MP3C	Z	0	6
18	MP3C	Mx	-.000691	6
19	MP3A	X	.988	5
20	MP3A	Z	0	5
21	MP3A	Mx	.000691	5
22	MP3A	X	.988	6
23	MP3A	Z	0	6
24	MP3A	Mx	.000691	6
25	MP3B	X	.986	5
26	MP3B	Z	0	5
27	MP3B	Mx	.000152	5
28	MP3B	X	.986	6
29	MP3B	Z	0	6
30	MP3B	Mx	.000152	6
31	MP3C	X	.988	5
32	MP3C	Z	0	5
33	MP3C	Mx	-.001	5
34	MP3C	X	.988	6
35	MP3C	Z	0	6
36	MP3C	Mx	-.001	6
37	MP1A	X	4.562	1.5
38	MP1A	Z	0	1.5
39	MP1A	Mx	-.002	1.5
40	MP1A	X	4.562	4.5
41	MP1A	Z	0	4.5
42	MP1A	Mx	-.002	4.5
43	MP1B	X	5.99	1.5
44	MP1B	Z	0	1.5
45	MP1B	Mx	0	1.5
46	MP1B	X	5.99	4.5
47	MP1B	Z	0	4.5
48	MP1B	Mx	0	4.5
49	MP1C	X	4.562	1.5
50	MP1C	Z	0	1.5
51	MP1C	Mx	.002	1.5
52	MP1C	X	4.562	4.5
53	MP1C	Z	0	4.5
54	MP1C	Mx	.002	4.5
55	MP5A	X	4.562	1.5
56	MP5A	Z	0	1.5
57	MP5A	Mx	-.002	1.5
58	MP5A	X	4.562	4.5
59	MP5A	Z	0	4.5
60	MP5A	Mx	-.002	4.5
61	MP5B	X	5.99	1.5
62	MP5B	Z	0	1.5
63	MP5B	Mx	0	1.5
64	MP5B	X	5.99	4.5
65	MP5B	Z	0	4.5



Company : Colliers Engineering & Design
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Member Point Loads (BLC 30 : Antenna Wm (90 Deg)) (Continued)

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
66	MP5B	Mx	0	4.5
67	MP5C	X	4.562	1.5
68	MP5C	Z	0	1.5
69	MP5C	Mx	.002	1.5
70	MP5C	X	4.562	4.5
71	MP5C	Z	0	4.5
72	MP5C	Mx	.002	4.5
73	MP3A	X	7.328	.25
74	MP3A	Z	0	.25
75	MP3A	Mx	-.001	.25
76	MP3A	X	7.328	5.25
77	MP3A	Z	0	5.25
78	MP3A	Mx	-.001	5.25
79	MP3B	X	8.311	.25
80	MP3B	Z	0	.25
81	MP3B	Mx	-.004	.25
82	MP3B	X	8.311	5.25
83	MP3B	Z	0	5.25
84	MP3B	Mx	-.004	5.25
85	MP3C	X	7.328	.25
86	MP3C	Z	0	.25
87	MP3C	Mx	.005	.25
88	MP3C	X	7.328	5.25
89	MP3C	Z	0	5.25
90	MP3C	Mx	.005	5.25
91	MP3A	X	7.328	.25
92	MP3A	Z	0	.25
93	MP3A	Mx	-.005	.25
94	MP3A	X	7.328	5.25
95	MP3A	Z	0	5.25
96	MP3A	Mx	-.005	5.25
97	MP3B	X	8.311	.25
98	MP3B	Z	0	.25
99	MP3B	Mx	.005	.25
100	MP3B	X	8.311	5.25
101	MP3B	Z	0	5.25
102	MP3B	Mx	.005	5.25
103	MP3C	X	7.328	.25
104	MP3C	Z	0	.25
105	MP3C	Mx	.001	.25
106	MP3C	X	7.328	5.25
107	MP3C	Z	0	5.25
108	MP3C	Mx	.001	5.25
109	MP4A	X	1.131	.5
110	MP4A	Z	0	.5
111	MP4A	Mx	-.000979	.5
112	MP4B	X	1.801	.5
113	MP4B	Z	0	.5
114	MP4B	Mx	.000313	.5
115	MP4C	X	1.131	.5
116	MP4C	Z	0	.5
117	MP4C	Mx	.000979	.5
118	MP2A	X	2.399	.5
119	MP2A	Z	0	.5
120	MP2A	Mx	.001	.5
121	MP2B	X	3.153	.5
122	MP2B	Z	0	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
123	MP2B	Mx	-.000274	.5
124	MP2C	X	2.399	.5
125	MP2C	Z	0	.5
126	MP2C	Mx	-.001	.5
127	MP4A	X	2.106	1
128	MP4A	Z	0	1
129	MP4A	Mx	.002	1
130	MP4B	X	3.142	1
131	MP4B	Z	0	1
132	MP4B	Mx	-.000546	1
133	MP4C	X	2.106	1
134	MP4C	Z	0	1
135	MP4C	Mx	-.002	1
136	MP2B	X	4.336	2.5
137	MP2B	Z	0	2.5
138	MP2B	Mx	.000376	2.5
139	MP2B	X	4.336	4
140	MP2B	Z	0	4
141	MP2B	Mx	.000376	4
142	MP2C	X	2.378	2.5
143	MP2C	Z	0	2.5
144	MP2C	Mx	.001	2.5
145	MP2C	X	2.378	4
146	MP2C	Z	0	4
147	MP2C	Mx	.001	4
148	MP2A	X	2.378	2.5
149	MP2A	Z	0	2.5
150	MP2A	Mx	-.001	2.5
151	MP2A	X	2.378	4
152	MP2A	Z	0	4
153	MP2A	Mx	-.001	4
154	M44	X	4.687	.5
155	M44	Z	0	.5
156	M44	Mx	0	.5
157	M46	X	4.687	.5
158	M46	Z	0	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.855	5
2	MP3A	Z	.494	5
3	MP3A	Mx	.000779	5
4	MP3A	X	.855	6
5	MP3A	Z	.494	6
6	MP3A	Mx	.000779	6
7	MP3B	X	.854	5
8	MP3B	Z	.493	5
9	MP3B	Mx	2.8e-5	5
10	MP3B	X	.854	6
11	MP3B	Z	.493	6
12	MP3B	Mx	2.8e-5	6
13	MP3C	X	.857	5
14	MP3C	Z	.495	5
15	MP3C	Mx	-.00099	5
16	MP3C	X	.857	6



Company : Colliers Engineering & Design
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Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
17	MP3C	Z	.495	6
18	MP3C	Mx	-.00099	6
19	MP3A	X	.855	5
20	MP3A	Z	.494	5
21	MP3A	Mx	.000208	5
22	MP3A	X	.855	6
23	MP3A	Z	.494	6
24	MP3A	Mx	.000208	6
25	MP3B	X	.854	5
26	MP3B	Z	.493	5
27	MP3B	Mx	.000646	5
28	MP3B	X	.854	6
29	MP3B	Z	.493	6
30	MP3B	Mx	.000646	6
31	MP3C	X	.857	5
32	MP3C	Z	.495	5
33	MP3C	Mx	-.00099	5
34	MP3C	X	.857	6
35	MP3C	Z	.495	6
36	MP3C	Mx	-.00099	6
37	MP1A	X	4.775	1.5
38	MP1A	Z	2.757	1.5
39	MP1A	Mx	-.001	1.5
40	MP1A	X	4.775	4.5
41	MP1A	Z	2.757	4.5
42	MP1A	Mx	-.001	4.5
43	MP1B	X	4.775	1.5
44	MP1B	Z	2.757	1.5
45	MP1B	Mx	-.001	1.5
46	MP1B	X	4.775	4.5
47	MP1B	Z	2.757	4.5
48	MP1B	Mx	-.001	4.5
49	MP1C	X	3.539	1.5
50	MP1C	Z	2.043	1.5
51	MP1C	Mx	.002	1.5
52	MP1C	X	3.539	4.5
53	MP1C	Z	2.043	4.5
54	MP1C	Mx	.002	4.5
55	MP5A	X	4.775	1.5
56	MP5A	Z	2.757	1.5
57	MP5A	Mx	-.001	1.5
58	MP5A	X	4.775	4.5
59	MP5A	Z	2.757	4.5
60	MP5A	Mx	-.001	4.5
61	MP5B	X	4.775	1.5
62	MP5B	Z	2.757	1.5
63	MP5B	Mx	-.001	1.5
64	MP5B	X	4.775	4.5
65	MP5B	Z	2.757	4.5
66	MP5B	Mx	-.001	4.5
67	MP5C	X	3.539	1.5
68	MP5C	Z	2.043	1.5
69	MP5C	Mx	.002	1.5
70	MP5C	X	3.539	4.5
71	MP5C	Z	2.043	4.5
72	MP5C	Mx	.002	4.5
73	MP3A	X	6.938	.25



Company : Colliers Engineering & Design
 Designer :
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Member Point Loads (BLC 31 : Antenna Wm (120 Deg)) (Continued)

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
74	MP3A	Z	4.005	.25
75	MP3A	Mx	.002	.25
76	MP3A	X	6.938	5.25
77	MP3A	Z	4.005	5.25
78	MP3A	Mx	.002	5.25
79	MP3B	X	7.095	.25
80	MP3B	Z	4.096	.25
81	MP3B	Mx	-.006	.25
82	MP3B	X	7.095	5.25
83	MP3B	Z	4.096	5.25
84	MP3B	Mx	-.006	5.25
85	MP3C	X	6.05	.25
86	MP3C	Z	3.493	.25
87	MP3C	Mx	.003	.25
88	MP3C	X	6.05	5.25
89	MP3C	Z	3.493	5.25
90	MP3C	Mx	.003	5.25
91	MP3A	X	6.938	.25
92	MP3A	Z	4.005	.25
93	MP3A	Mx	-.006	.25
94	MP3A	X	6.938	5.25
95	MP3A	Z	4.005	5.25
96	MP3A	Mx	-.006	5.25
97	MP3B	X	7.095	.25
98	MP3B	Z	4.096	.25
99	MP3B	Mx	.003	.25
100	MP3B	X	7.095	5.25
101	MP3B	Z	4.096	5.25
102	MP3B	Mx	.003	5.25
103	MP3C	X	6.05	.25
104	MP3C	Z	3.493	.25
105	MP3C	Mx	.003	.25
106	MP3C	X	6.05	5.25
107	MP3C	Z	3.493	5.25
108	MP3C	Mx	.003	5.25
109	MP4A	X	1.382	.5
110	MP4A	Z	.798	.5
111	MP4A	Mx	-.000798	.5
112	MP4B	X	1.49	.5
113	MP4B	Z	.86	.5
114	MP4B	Mx	-.000588	.5
115	MP4C	X	.778	.5
116	MP4C	Z	.449	.5
117	MP4C	Mx	.000898	.5
118	MP2A	X	2.531	.5
119	MP2A	Z	1.461	.5
120	MP2A	Mx	.000731	.5
121	MP2B	X	2.652	.5
122	MP2B	Z	1.531	.5
123	MP2B	Mx	.000524	.5
124	MP2C	X	1.851	.5
125	MP2C	Z	1.068	.5
126	MP2C	Mx	-.001	.5
127	MP4A	X	2.447	1
128	MP4A	Z	1.413	1
129	MP4A	Mx	.001	1
130	MP4B	X	2.612	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
131	MP4B	Z	1.508	1
132	MP4B	Mx	.001	1
133	MP4C	X	1.513	1
134	MP4C	Z	.873	1
135	MP4C	Mx	-.002	1
136	MP2B	X	3.55	2.5
137	MP2B	Z	2.05	2.5
138	MP2B	Mx	-.000701	2.5
139	MP2B	X	3.55	4
140	MP2B	Z	2.05	4
141	MP2B	Mx	-.000701	4
142	MP2C	X	1.471	2.5
143	MP2C	Z	.849	2.5
144	MP2C	Mx	.000849	2.5
145	MP2C	X	1.471	4
146	MP2C	Z	.849	4
147	MP2C	Mx	.000849	4
148	MP2A	X	3.237	2.5
149	MP2A	Z	1.869	2.5
150	MP2A	Mx	-.000934	2.5
151	MP2A	X	3.237	4
152	MP2A	Z	1.869	4
153	MP2A	Mx	-.000934	4
154	M44	X	4.449	.5
155	M44	Z	2.568	.5
156	M44	Mx	0	.5
157	M46	X	4.449	.5
158	M46	Z	2.568	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.493	5
2	MP3A	Z	.854	5
3	MP3A	Mx	.000329	5
4	MP3A	X	.493	6
5	MP3A	Z	.854	6
6	MP3A	Mx	.000329	6
7	MP3B	X	.494	5
8	MP3B	Z	.856	5
9	MP3B	Mx	.000546	5
10	MP3B	X	.494	6
11	MP3B	Z	.856	6
12	MP3B	Mx	.000546	6
13	MP3C	X	.494	5
14	MP3C	Z	.856	5
15	MP3C	Mx	-.001	5
16	MP3C	X	.494	6
17	MP3C	Z	.856	6
18	MP3C	Mx	-.001	6
19	MP3A	X	.493	5
20	MP3A	Z	.854	5
21	MP3A	Mx	-.000329	5
22	MP3A	X	.493	6
23	MP3A	Z	.854	6
24	MP3A	Mx	-.000329	6



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
25	MP3B	X	.494	5
26	MP3B	Z	.856	5
27	MP3B	Mx	.000969	5
28	MP3B	X	.494	6
29	MP3B	Z	.856	6
30	MP3B	Mx	.000969	6
31	MP3C	X	.494	5
32	MP3C	Z	.856	5
33	MP3C	Mx	-.000691	5
34	MP3C	X	.494	6
35	MP3C	Z	.856	6
36	MP3C	Mx	-.000691	6
37	MP1A	X	2.995	1.5
38	MP1A	Z	5.187	1.5
39	MP1A	Mx	0	1.5
40	MP1A	X	2.995	4.5
41	MP1A	Z	5.187	4.5
42	MP1A	Mx	0	4.5
43	MP1B	X	2.281	1.5
44	MP1B	Z	3.951	1.5
45	MP1B	Mx	-.002	1.5
46	MP1B	X	2.281	4.5
47	MP1B	Z	3.951	4.5
48	MP1B	Mx	-.002	4.5
49	MP1C	X	2.281	1.5
50	MP1C	Z	3.951	1.5
51	MP1C	Mx	.002	1.5
52	MP1C	X	2.281	4.5
53	MP1C	Z	3.951	4.5
54	MP1C	Mx	.002	4.5
55	MP5A	X	2.995	1.5
56	MP5A	Z	5.187	1.5
57	MP5A	Mx	0	1.5
58	MP5A	X	2.995	4.5
59	MP5A	Z	5.187	4.5
60	MP5A	Mx	0	4.5
61	MP5B	X	2.281	1.5
62	MP5B	Z	3.951	1.5
63	MP5B	Mx	-.002	1.5
64	MP5B	X	2.281	4.5
65	MP5B	Z	3.951	4.5
66	MP5B	Mx	-.002	4.5
67	MP5C	X	2.281	1.5
68	MP5C	Z	3.951	1.5
69	MP5C	Mx	.002	1.5
70	MP5C	X	2.281	4.5
71	MP5C	Z	3.951	4.5
72	MP5C	Mx	.002	4.5
73	MP3A	X	4.176	.25
74	MP3A	Z	7.234	.25
75	MP3A	Mx	.005	.25
76	MP3A	X	4.176	5.25
77	MP3A	Z	7.234	5.25
78	MP3A	Mx	.005	5.25
79	MP3B	X	3.775	.25
80	MP3B	Z	6.539	.25
81	MP3B	Mx	-.006	.25



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]	
82	MP3B	X	3.775	5.25
83	MP3B	Z	6.539	5.25
84	MP3B	Mx	-.006	5.25
85	MP3C	X	3.664	.25
86	MP3C	Z	6.346	.25
87	MP3C	Mx	.001	.25
88	MP3C	X	3.664	5.25
89	MP3C	Z	6.346	5.25
90	MP3C	Mx	.001	5.25
91	MP3A	X	4.176	.25
92	MP3A	Z	7.234	.25
93	MP3A	Mx	-.005	.25
94	MP3A	X	4.176	5.25
95	MP3A	Z	7.234	5.25
96	MP3A	Mx	-.005	5.25
97	MP3B	X	3.775	.25
98	MP3B	Z	6.539	.25
99	MP3B	Mx	-6.1e-5	.25
100	MP3B	X	3.775	5.25
101	MP3B	Z	6.539	5.25
102	MP3B	Mx	-6.1e-5	5.25
103	MP3C	X	3.664	.25
104	MP3C	Z	6.346	.25
105	MP3C	Mx	.005	.25
106	MP3C	X	3.664	5.25
107	MP3C	Z	6.346	5.25
108	MP3C	Mx	.005	5.25
109	MP4A	X	.914	.5
110	MP4A	Z	1.584	.5
111	MP4A	Mx	0	.5
112	MP4B	X	.641	.5
113	MP4B	Z	1.111	.5
114	MP4B	Mx	-.000983	.5
115	MP4C	X	.566	.5
116	MP4C	Z	.98	.5
117	MP4C	Mx	.00098	.5
118	MP2A	X	1.592	.5
119	MP2A	Z	2.758	.5
120	MP2A	Mx	0	.5
121	MP2B	X	1.285	.5
122	MP2B	Z	2.226	.5
123	MP2B	Mx	.000985	.5
124	MP2C	X	1.199	.5
125	MP2C	Z	2.078	.5
126	MP2C	Mx	-.001	.5
127	MP4A	X	1.592	1
128	MP4A	Z	2.758	1
129	MP4A	Mx	0	1
130	MP4B	X	1.17	1
131	MP4B	Z	2.027	1
132	MP4B	Mx	.002	1
133	MP4C	X	1.053	1
134	MP4C	Z	1.824	1
135	MP4C	Mx	-.002	1
136	MP2B	X	1.411	2.5
137	MP2B	Z	2.444	2.5
138	MP2B	Mx	-.001	2.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
139	MP2B	X	1.411	4
140	MP2B	Z	2.444	4
141	MP2B	Mx	-.001	4
142	MP2C	X	1.189	2.5
143	MP2C	Z	2.06	2.5
144	MP2C	Mx	.001	2.5
145	MP2C	X	1.189	4
146	MP2C	Z	2.06	4
147	MP2C	Mx	.001	4
148	MP2A	X	2.209	2.5
149	MP2A	Z	3.826	2.5
150	MP2A	Mx	0	2.5
151	MP2A	X	2.209	4
152	MP2A	Z	3.826	4
153	MP2A	Mx	0	4
154	M44	X	2.343	.5
155	M44	Z	4.059	.5
156	M44	Mx	0	.5
157	M46	X	2.343	.5
158	M46	Z	4.059	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	0	5
2	MP3A	Z	.987	5
3	MP3A	Mx	-.000209	5
4	MP3A	X	0	6
5	MP3A	Z	.987	6
6	MP3A	Mx	-.000209	6
7	MP3B	X	0	5
8	MP3B	Z	.989	5
9	MP3B	Mx	.000917	5
10	MP3B	X	0	6
11	MP3B	Z	.989	6
12	MP3B	Mx	.000917	6
13	MP3C	X	0	5
14	MP3C	Z	.987	5
15	MP3C	Mx	-.000778	5
16	MP3C	X	0	6
17	MP3C	Z	.987	6
18	MP3C	Mx	-.000778	6
19	MP3A	X	0	5
20	MP3A	Z	.987	5
21	MP3A	Mx	-.000778	5
22	MP3A	X	0	6
23	MP3A	Z	.987	6
24	MP3A	Mx	-.000778	6
25	MP3B	X	0	5
26	MP3B	Z	.989	5
27	MP3B	Mx	.001	5
28	MP3B	X	0	6
29	MP3B	Z	.989	6
30	MP3B	Mx	.001	6
31	MP3C	X	0	5
32	MP3C	Z	.987	5



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
33	MP3C	Mx	5
34	MP3C	X	6
35	MP3C	Z	6
36	MP3C	Mx	6
37	MP1A	X	1.5
38	MP1A	Z	1.5
39	MP1A	Mx	1.5
40	MP1A	X	4.5
41	MP1A	Z	4.5
42	MP1A	Mx	4.5
43	MP1B	X	1.5
44	MP1B	Z	1.5
45	MP1B	Mx	1.5
46	MP1B	X	4.5
47	MP1B	Z	4.5
48	MP1B	Mx	4.5
49	MP1C	X	1.5
50	MP1C	Z	1.5
51	MP1C	Mx	1.5
52	MP1C	X	4.5
53	MP1C	Z	4.5
54	MP1C	Mx	4.5
55	MP5A	X	1.5
56	MP5A	Z	1.5
57	MP5A	Mx	1.5
58	MP5A	X	4.5
59	MP5A	Z	4.5
60	MP5A	Mx	4.5
61	MP5B	X	1.5
62	MP5B	Z	1.5
63	MP5B	Mx	1.5
64	MP5B	X	4.5
65	MP5B	Z	4.5
66	MP5B	Mx	4.5
67	MP5C	X	1.5
68	MP5C	Z	1.5
69	MP5C	Mx	1.5
70	MP5C	X	4.5
71	MP5C	Z	4.5
72	MP5C	Mx	4.5
73	MP3A	X	.25
74	MP3A	Z	.25
75	MP3A	Mx	.25
76	MP3A	X	5.25
77	MP3A	Z	5.25
78	MP3A	Mx	5.25
79	MP3B	X	.25
80	MP3B	Z	.25
81	MP3B	Mx	.25
82	MP3B	X	5.25
83	MP3B	Z	5.25
84	MP3B	Mx	5.25
85	MP3C	X	.25
86	MP3C	Z	.25
87	MP3C	Mx	.25
88	MP3C	X	5.25
89	MP3C	Z	5.25



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft.%)
90	MP3C	Mx	-0.02	5.25
91	MP3A	X	0	.25
92	MP3A	Z	8.011	.25
93	MP3A	Mx	-0.02	.25
94	MP3A	X	0	5.25
95	MP3A	Z	8.011	5.25
96	MP3A	Mx	-0.02	5.25
97	MP3B	X	0	.25
98	MP3B	Z	7.027	.25
99	MP3B	Mx	-0.03	.25
100	MP3B	X	0	5.25
101	MP3B	Z	7.027	5.25
102	MP3B	Mx	-0.03	5.25
103	MP3C	X	0	.25
104	MP3C	Z	8.011	.25
105	MP3C	Mx	.006	.25
106	MP3C	X	0	5.25
107	MP3C	Z	8.011	5.25
108	MP3C	Mx	.006	5.25
109	MP4A	X	0	.5
110	MP4A	Z	1.596	.5
111	MP4A	Mx	.000798	.5
112	MP4B	X	0	.5
113	MP4B	Z	.927	.5
114	MP4B	Mx	-0.000913	.5
115	MP4C	X	0	.5
116	MP4C	Z	1.596	.5
117	MP4C	Mx	.000798	.5
118	MP2A	X	0	.5
119	MP2A	Z	2.923	.5
120	MP2A	Mx	-0.000731	.5
121	MP2B	X	0	.5
122	MP2B	Z	2.169	.5
123	MP2B	Mx	.001	.5
124	MP2C	X	0	.5
125	MP2C	Z	2.923	.5
126	MP2C	Mx	-0.000731	.5
127	MP4A	X	0	1
128	MP4A	Z	2.825	1
129	MP4A	Mx	-0.001	1
130	MP4B	X	0	1
131	MP4B	Z	1.79	1
132	MP4B	Mx	.002	1
133	MP4C	X	0	1
134	MP4C	Z	2.825	1
135	MP4C	Mx	-0.001	1
136	MP2B	X	0	2.5
137	MP2B	Z	1.78	2.5
138	MP2B	Mx	-0.000876	2.5
139	MP2B	X	0	4
140	MP2B	Z	1.78	4
141	MP2B	Mx	-0.000876	4
142	MP2C	X	0	2.5
143	MP2C	Z	3.738	2.5
144	MP2C	Mx	.000934	2.5
145	MP2C	X	0	4
146	MP2C	Z	3.738	4



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
147	MP2C	Mx	.000934	4
148	MP2A	X	0	2.5
149	MP2A	Z	3.738	2.5
150	MP2A	Mx	.000934	2.5
151	MP2A	X	0	4
152	MP2A	Z	3.738	4
153	MP2A	Mx	.000934	4
154	M44	X	0	.5
155	M44	Z	3.786	.5
156	M44	Mx	0	.5
157	M46	X	0	.5
158	M46	Z	3.786	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-.494	5
2	MP3A	Z	.856	5
3	MP3A	Mx	-.000691	5
4	MP3A	X	-.494	6
5	MP3A	Z	.856	6
6	MP3A	Mx	-.000691	6
7	MP3B	X	-.494	5
8	MP3B	Z	.856	5
9	MP3B	Mx	.001	5
10	MP3B	X	-.494	6
11	MP3B	Z	.856	6
12	MP3B	Mx	.001	6
13	MP3C	X	-.493	5
14	MP3C	Z	.854	5
15	MP3C	Mx	-.000329	5
16	MP3C	X	-.493	6
17	MP3C	Z	.854	6
18	MP3C	Mx	-.000329	6
19	MP3A	X	-.494	5
20	MP3A	Z	.856	5
21	MP3A	Mx	-.001	5
22	MP3A	X	-.494	6
23	MP3A	Z	.856	6
24	MP3A	Mx	-.001	6
25	MP3B	X	-.494	5
26	MP3B	Z	.856	5
27	MP3B	Mx	.000816	5
28	MP3B	X	-.494	6
29	MP3B	Z	.856	6
30	MP3B	Mx	.000816	6
31	MP3C	X	-.493	5
32	MP3C	Z	.854	5
33	MP3C	Mx	.000329	5
34	MP3C	X	-.493	6
35	MP3C	Z	.854	6
36	MP3C	Mx	.000329	6
37	MP1A	X	-2.281	1.5
38	MP1A	Z	3.951	1.5
39	MP1A	Mx	.002	1.5
40	MP1A	X	-2.281	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
41	MP1A	Z	3.951	4.5
42	MP1A	Mx	.002	4.5
43	MP1B	X	-2.281	1.5
44	MP1B	Z	3.951	1.5
45	MP1B	Mx	-.002	1.5
46	MP1B	X	-2.281	4.5
47	MP1B	Z	3.951	4.5
48	MP1B	Mx	-.002	4.5
49	MP1C	X	-2.995	1.5
50	MP1C	Z	5.187	1.5
51	MP1C	Mx	0	1.5
52	MP1C	X	-2.995	4.5
53	MP1C	Z	5.187	4.5
54	MP1C	Mx	0	4.5
55	MP5A	X	-2.281	1.5
56	MP5A	Z	3.951	1.5
57	MP5A	Mx	.002	1.5
58	MP5A	X	-2.281	4.5
59	MP5A	Z	3.951	4.5
60	MP5A	Mx	.002	4.5
61	MP5B	X	-2.281	1.5
62	MP5B	Z	3.951	1.5
63	MP5B	Mx	-.002	1.5
64	MP5B	X	-2.281	4.5
65	MP5B	Z	3.951	4.5
66	MP5B	Mx	-.002	4.5
67	MP5C	X	-2.995	1.5
68	MP5C	Z	5.187	1.5
69	MP5C	Mx	0	1.5
70	MP5C	X	-2.995	4.5
71	MP5C	Z	5.187	4.5
72	MP5C	Mx	0	4.5
73	MP3A	X	-3.664	.25
74	MP3A	Z	6.346	.25
75	MP3A	Mx	.005	.25
76	MP3A	X	-3.664	5.25
77	MP3A	Z	6.346	5.25
78	MP3A	Mx	.005	5.25
79	MP3B	X	-3.573	.25
80	MP3B	Z	6.189	.25
81	MP3B	Mx	-.002	.25
82	MP3B	X	-3.573	5.25
83	MP3B	Z	6.189	5.25
84	MP3B	Mx	-.002	5.25
85	MP3C	X	-4.176	.25
86	MP3C	Z	7.234	.25
87	MP3C	Mx	-.005	.25
88	MP3C	X	-4.176	5.25
89	MP3C	Z	7.234	5.25
90	MP3C	Mx	-.005	5.25
91	MP3A	X	-3.664	.25
92	MP3A	Z	6.346	.25
93	MP3A	Mx	.001	.25
94	MP3A	X	-3.664	5.25
95	MP3A	Z	6.346	5.25
96	MP3A	Mx	.001	5.25
97	MP3B	X	-3.573	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
98	MP3B	Z	6.189	.25
99	MP3B	Mx	-.005	.25
100	MP3B	X	-3.573	5.25
101	MP3B	Z	6.189	5.25
102	MP3B	Mx	-.005	5.25
103	MP3C	X	-4.176	.25
104	MP3C	Z	7.234	.25
105	MP3C	Mx	.005	.25
106	MP3C	X	-4.176	5.25
107	MP3C	Z	7.234	5.25
108	MP3C	Mx	.005	5.25
109	MP4A	X	-.566	.5
110	MP4A	Z	.98	.5
111	MP4A	Mx	.00098	.5
112	MP4B	X	-.504	.5
113	MP4B	Z	.872	.5
114	MP4B	Mx	-.000946	.5
115	MP4C	X	-.914	.5
116	MP4C	Z	1.584	.5
117	MP4C	Mx	0	.5
118	MP2A	X	-1.199	.5
119	MP2A	Z	2.078	.5
120	MP2A	Mx	-.001	.5
121	MP2B	X	-1.13	.5
122	MP2B	Z	1.957	.5
123	MP2B	Mx	.001	.5
124	MP2C	X	-1.592	.5
125	MP2C	Z	2.758	.5
126	MP2C	Mx	0	.5
127	MP4A	X	-1.053	1
128	MP4A	Z	1.824	1
129	MP4A	Mx	-.002	1
130	MP4B	X	-.957	1
131	MP4B	Z	1.658	1
132	MP4B	Mx	.002	1
133	MP4C	X	-1.592	1
134	MP4C	Z	2.758	1
135	MP4C	Mx	0	1
136	MP2B	X	-1.008	2.5
137	MP2B	Z	1.746	2.5
138	MP2B	Mx	-.000947	2.5
139	MP2B	X	-1.008	4
140	MP2B	Z	1.746	4
141	MP2B	Mx	-.000947	4
142	MP2C	X	-2.209	2.5
143	MP2C	Z	3.826	2.5
144	MP2C	Mx	0	2.5
145	MP2C	X	2.209	4
146	MP2C	Z	3.826	4
147	MP2C	Mx	0	4
148	MP2A	X	-1.189	2.5
149	MP2A	Z	2.06	2.5
150	MP2A	Mx	.001	2.5
151	MP2A	X	-1.189	4
152	MP2A	Z	2.06	4
153	MP2A	Mx	.001	4
154	M44	X	-1.668	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
155	M44	Z	2.889	.5
156	M44	Mx	0	.5
157	M46	X	-1.668	.5
158	M46	Z	2.889	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-.857	5
2	MP3A	Z	.495	5
3	MP3A	Mx	-.00099	5
4	MP3A	X	-.857	6
5	MP3A	Z	.495	6
6	MP3A	Mx	-.00099	6
7	MP3B	X	-.855	5
8	MP3B	Z	.494	5
9	MP3B	Mx	.000887	5
10	MP3B	X	-.855	6
11	MP3B	Z	.494	6
12	MP3B	Mx	.000887	6
13	MP3C	X	-.855	5
14	MP3C	Z	.494	5
15	MP3C	Mx	.000208	5
16	MP3C	X	-.855	6
17	MP3C	Z	.494	6
18	MP3C	Mx	.000208	6
19	MP3A	X	-.857	5
20	MP3A	Z	.495	5
21	MP3A	Mx	-.00099	5
22	MP3A	X	-.857	6
23	MP3A	Z	.495	6
24	MP3A	Mx	-.00099	6
25	MP3B	X	-.855	5
26	MP3B	Z	.494	5
27	MP3B	Mx	.000383	5
28	MP3B	X	-.855	6
29	MP3B	Z	.494	6
30	MP3B	Mx	.000383	6
31	MP3C	X	-.855	5
32	MP3C	Z	.494	5
33	MP3C	Mx	.000779	5
34	MP3C	X	-.855	6
35	MP3C	Z	.494	6
36	MP3C	Mx	.000779	6
37	MP1A	X	-3.539	1.5
38	MP1A	Z	2.043	1.5
39	MP1A	Mx	.002	1.5
40	MP1A	X	-3.539	4.5
41	MP1A	Z	2.043	4.5
42	MP1A	Mx	.002	4.5
43	MP1B	X	-4.775	1.5
44	MP1B	Z	2.757	1.5
45	MP1B	Mx	-.001	1.5
46	MP1B	X	-4.775	4.5
47	MP1B	Z	2.757	4.5
48	MP1B	Mx	-.001	4.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
49	MP1C	X	-4.775	1.5
50	MP1C	Z	2.757	1.5
51	MP1C	Mx	-.001	1.5
52	MP1C	X	-4.775	4.5
53	MP1C	Z	2.757	4.5
54	MP1C	Mx	-.001	4.5
55	MP5A	X	-3.539	1.5
56	MP5A	Z	2.043	1.5
57	MP5A	Mx	.002	1.5
58	MP5A	X	-3.539	4.5
59	MP5A	Z	2.043	4.5
60	MP5A	Mx	.002	4.5
61	MP5B	X	-4.775	1.5
62	MP5B	Z	2.757	1.5
63	MP5B	Mx	-.001	1.5
64	MP5B	X	-4.775	4.5
65	MP5B	Z	2.757	4.5
66	MP5B	Mx	-.001	4.5
67	MP5C	X	-4.775	1.5
68	MP5C	Z	2.757	1.5
69	MP5C	Mx	-.001	1.5
70	MP5C	X	-4.775	4.5
71	MP5C	Z	2.757	4.5
72	MP5C	Mx	-.001	4.5
73	MP3A	X	-6.05	.25
74	MP3A	Z	3.493	.25
75	MP3A	Mx	.003	.25
76	MP3A	X	-6.05	5.25
77	MP3A	Z	3.493	5.25
78	MP3A	Mx	.003	5.25
79	MP3B	X	-6.745	.25
80	MP3B	Z	3.894	.25
81	MP3B	Mx	.000977	.25
82	MP3B	X	-6.745	5.25
83	MP3B	Z	3.894	5.25
84	MP3B	Mx	.000977	5.25
85	MP3C	X	-6.938	.25
86	MP3C	Z	4.005	.25
87	MP3C	Mx	-.006	.25
88	MP3C	X	-6.938	5.25
89	MP3C	Z	4.005	5.25
90	MP3C	Mx	-.006	5.25
91	MP3A	X	-6.05	.25
92	MP3A	Z	3.493	.25
93	MP3A	Mx	.003	.25
94	MP3A	X	-6.05	5.25
95	MP3A	Z	3.493	5.25
96	MP3A	Mx	.003	5.25
97	MP3B	X	-6.745	.25
98	MP3B	Z	3.894	.25
99	MP3B	Mx	-.006	.25
100	MP3B	X	-6.745	5.25
101	MP3B	Z	3.894	5.25
102	MP3B	Mx	-.006	5.25
103	MP3C	X	-6.938	.25
104	MP3C	Z	4.005	.25
105	MP3C	Mx	.002	.25



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

	Member Label	Direction	Magnitude(lb.k.ft)	Location(ft.%)
106	MP3C	X	-6.938	5.25
107	MP3C	Z	4.005	5.25
108	MP3C	Mx	.002	5.25
109	MP4A	X	-.778	.5
110	MP4A	Z	.449	.5
111	MP4A	Mx	.000898	.5
112	MP4B	X	-1.251	.5
113	MP4B	Z	.722	.5
114	MP4B	Mx	-.000928	.5
115	MP4C	X	-1.382	.5
116	MP4C	Z	.798	.5
117	MP4C	Mx	-.000798	.5
118	MP2A	X	-1.851	.5
119	MP2A	Z	1.068	.5
120	MP2A	Mx	-.001	.5
121	MP2B	X	-2.383	.5
122	MP2B	Z	1.376	.5
123	MP2B	Mx	.000884	.5
124	MP2C	X	-2.531	.5
125	MP2C	Z	1.461	.5
126	MP2C	Mx	.000731	.5
127	MP4A	X	-1.513	1
128	MP4A	Z	.873	1
129	MP4A	Mx	-.002	1
130	MP4B	X	-2.244	1
131	MP4B	Z	1.295	1
132	MP4B	Mx	.002	1
133	MP4C	X	-2.447	1
134	MP4C	Z	1.413	1
135	MP4C	Mx	.001	1
136	MP2B	X	-2.853	2.5
137	MP2B	Z	1.647	2.5
138	MP2B	Mx	-.001	2.5
139	MP2B	X	-2.853	4
140	MP2B	Z	1.647	4
141	MP2B	Mx	-.001	4
142	MP2C	X	-3.237	2.5
143	MP2C	Z	1.869	2.5
144	MP2C	Mx	-.000934	2.5
145	MP2C	X	-3.237	4
146	MP2C	Z	1.869	4
147	MP2C	Mx	-.000934	4
148	MP2A	X	-1.471	2.5
149	MP2A	Z	.849	2.5
150	MP2A	Mx	.000849	2.5
151	MP2A	X	-1.471	4
152	MP2A	Z	.849	4
153	MP2A	Mx	.000849	4
154	M44	X	-3.279	.5
155	M44	Z	1.893	.5
156	M44	Mx	0	.5
157	M46	X	-3.279	.5
158	M46	Z	1.893	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude(lb.k.ft)	Location(ft.%)



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
58	MP5A	X	-4.562	4.5
59	MP5A	Z	0	4.5
60	MP5A	Mx	.002	4.5
61	MP5B	X	-5.99	1.5
62	MP5B	Z	0	1.5
63	MP5B	Mx	0	1.5
64	MP5B	X	-5.99	4.5
65	MP5B	Z	0	4.5
66	MP5B	Mx	0	4.5
67	MP5C	X	-4.562	1.5
68	MP5C	Z	0	1.5
69	MP5C	Mx	-.002	1.5
70	MP5C	X	-4.562	4.5
71	MP5C	Z	0	4.5
72	MP5C	Mx	-.002	4.5
73	MP3A	X	-7.328	.25
74	MP3A	Z	0	.25
75	MP3A	Mx	.001	.25
76	MP3A	X	-7.328	5.25
77	MP3A	Z	0	5.25
78	MP3A	Mx	.001	5.25
79	MP3B	X	-8.311	.25
80	MP3B	Z	0	.25
81	MP3B	Mx	.004	.25
82	MP3B	X	-8.311	5.25
83	MP3B	Z	0	5.25
84	MP3B	Mx	.004	5.25
85	MP3C	X	-7.328	.25
86	MP3C	Z	0	.25
87	MP3C	Mx	-.005	.25
88	MP3C	X	-7.328	5.25
89	MP3C	Z	0	5.25
90	MP3C	Mx	-.005	5.25
91	MP3A	X	-7.328	.25
92	MP3A	Z	0	.25
93	MP3A	Mx	.005	.25
94	MP3A	X	-7.328	5.25
95	MP3A	Z	0	5.25
96	MP3A	Mx	.005	5.25
97	MP3B	X	-8.311	.25
98	MP3B	Z	0	.25
99	MP3B	Mx	-.005	.25
100	MP3B	X	-8.311	5.25
101	MP3B	Z	0	5.25
102	MP3B	Mx	-.005	5.25
103	MP3C	X	-7.328	.25
104	MP3C	Z	0	.25
105	MP3C	Mx	-.001	.25
106	MP3C	X	-7.328	5.25
107	MP3C	Z	0	5.25
108	MP3C	Mx	-.001	5.25
109	MP4A	X	-1.131	.5
110	MP4A	Z	0	.5
111	MP4A	Mx	.000979	.5
112	MP4B	X	-1.801	.5
113	MP4B	Z	0	.5
114	MP4B	Mx	-.000313	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
115	MP4C	X	-1.131	.5
116	MP4C	Z	0	.5
117	MP4C	Mx	-0.00979	.5
118	MP2A	X	-2.399	.5
119	MP2A	Z	0	.5
120	MP2A	Mx	-.001	.5
121	MP2B	X	-3.153	.5
122	MP2B	Z	0	.5
123	MP2B	Mx	.000274	.5
124	MP2C	X	-2.399	.5
125	MP2C	Z	0	.5
126	MP2C	Mx	.001	.5
127	MP4A	X	-2.106	1
128	MP4A	Z	0	1
129	MP4A	Mx	-.002	1
130	MP4B	X	-3.142	1
131	MP4B	Z	0	1
132	MP4B	Mx	.000546	1
133	MP4C	X	-2.106	1
134	MP4C	Z	0	1
135	MP4C	Mx	.002	1
136	MP2B	X	-4.336	2.5
137	MP2B	Z	0	2.5
138	MP2B	Mx	-.000376	2.5
139	MP2B	X	-4.336	4
140	MP2B	Z	0	4
141	MP2B	Mx	-.000376	4
142	MP2C	X	-2.378	2.5
143	MP2C	Z	0	2.5
144	MP2C	Mx	-.001	2.5
145	MP2C	X	-2.378	4
146	MP2C	Z	0	4
147	MP2C	Mx	-.001	4
148	MP2A	X	-2.378	2.5
149	MP2A	Z	0	2.5
150	MP2A	Mx	.001	2.5
151	MP2A	X	-2.378	4
152	MP2A	Z	0	4
153	MP2A	Mx	.001	4
154	M44	X	-4.687	.5
155	M44	Z	0	.5
156	M44	Mx	0	.5
157	M46	X	-4.687	.5
158	M46	Z	0	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	X	-.855	5
2	MP3A	Z	-.494	5
3	MP3A	Mx	-0.00779	5
4	MP3A	X	-.855	6
5	MP3A	Z	-.494	6
6	MP3A	Mx	-0.00779	6
7	MP3B	X	-.854	5
8	MP3B	Z	-.493	5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
9	MP3B	Mx	-2.8e-5	5
10	MP3B	X	- .854	6
11	MP3B	Z	- .493	6
12	MP3B	Mx	-2.8e-5	6
13	MP3C	X	- .857	5
14	MP3C	Z	- .495	5
15	MP3C	Mx	.00099	5
16	MP3C	X	- .857	6
17	MP3C	Z	- .495	6
18	MP3C	Mx	.00099	6
19	MP3A	X	- .855	5
20	MP3A	Z	- .494	5
21	MP3A	Mx	- .000208	5
22	MP3A	X	- .855	6
23	MP3A	Z	- .494	6
24	MP3A	Mx	- .000208	6
25	MP3B	X	- .854	5
26	MP3B	Z	- .493	5
27	MP3B	Mx	- .000646	5
28	MP3B	X	- .854	6
29	MP3B	Z	- .493	6
30	MP3B	Mx	- .000646	6
31	MP3C	X	- .857	5
32	MP3C	Z	- .495	5
33	MP3C	Mx	.00099	5
34	MP3C	X	- .857	6
35	MP3C	Z	- .495	6
36	MP3C	Mx	.00099	6
37	MP1A	X	-4.775	1.5
38	MP1A	Z	-2.757	1.5
39	MP1A	Mx	.001	1.5
40	MP1A	X	-4.775	4.5
41	MP1A	Z	-2.757	4.5
42	MP1A	Mx	.001	4.5
43	MP1B	X	-4.775	1.5
44	MP1B	Z	-2.757	1.5
45	MP1B	Mx	.001	1.5
46	MP1B	X	-4.775	4.5
47	MP1B	Z	-2.757	4.5
48	MP1B	Mx	.001	4.5
49	MP1C	X	-3.539	1.5
50	MP1C	Z	-2.043	1.5
51	MP1C	Mx	-.002	1.5
52	MP1C	X	-3.539	4.5
53	MP1C	Z	-2.043	4.5
54	MP1C	Mx	-.002	4.5
55	MP5A	X	-4.775	1.5
56	MP5A	Z	-2.757	1.5
57	MP5A	Mx	.001	1.5
58	MP5A	X	-4.775	4.5
59	MP5A	Z	-2.757	4.5
60	MP5A	Mx	.001	4.5
61	MP5B	X	-4.775	1.5
62	MP5B	Z	-2.757	1.5
63	MP5B	Mx	.001	1.5
64	MP5B	X	-4.775	4.5
65	MP5B	Z	-2.757	4.5



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

	Member Label	Direction	Magnitude(lb.k-ft)	Location(ft. %)
66	MP5B	Mx	.001	4.5
67	MP5C	X	-3.539	1.5
68	MP5C	Z	-2.043	1.5
69	MP5C	Mx	-.002	1.5
70	MP5C	X	-3.539	4.5
71	MP5C	Z	-2.043	4.5
72	MP5C	Mx	-.002	4.5
73	MP3A	X	-6.938	.25
74	MP3A	Z	-4.005	.25
75	MP3A	Mx	-.002	.25
76	MP3A	X	-6.938	5.25
77	MP3A	Z	-4.005	5.25
78	MP3A	Mx	-.002	5.25
79	MP3B	X	-7.095	.25
80	MP3B	Z	-4.096	.25
81	MP3B	Mx	.006	.25
82	MP3B	X	-7.095	5.25
83	MP3B	Z	-4.096	5.25
84	MP3B	Mx	.006	5.25
85	MP3C	X	-6.05	.25
86	MP3C	Z	-3.493	.25
87	MP3C	Mx	-.003	.25
88	MP3C	X	-6.05	5.25
89	MP3C	Z	-3.493	5.25
90	MP3C	Mx	-.003	5.25
91	MP3A	X	-6.938	.25
92	MP3A	Z	-4.005	.25
93	MP3A	Mx	.006	.25
94	MP3A	X	-6.938	5.25
95	MP3A	Z	-4.005	5.25
96	MP3A	Mx	.006	5.25
97	MP3B	X	-7.095	.25
98	MP3B	Z	-4.096	.25
99	MP3B	Mx	-.003	.25
100	MP3B	X	-7.095	5.25
101	MP3B	Z	-4.096	5.25
102	MP3B	Mx	-.003	5.25
103	MP3C	X	-6.05	.25
104	MP3C	Z	-3.493	.25
105	MP3C	Mx	-.003	.25
106	MP3C	X	-6.05	5.25
107	MP3C	Z	-3.493	5.25
108	MP3C	Mx	-.003	5.25
109	MP4A	X	-1.382	.5
110	MP4A	Z	-.798	.5
111	MP4A	Mx	.000798	.5
112	MP4B	X	-1.49	.5
113	MP4B	Z	-.86	.5
114	MP4B	Mx	.000588	.5
115	MP4C	X	-.778	.5
116	MP4C	Z	-.449	.5
117	MP4C	Mx	-.000898	.5
118	MP2A	X	-2.531	.5
119	MP2A	Z	-1.461	.5
120	MP2A	Mx	-.000731	.5
121	MP2B	X	-2.652	.5
122	MP2B	Z	-1.531	.5



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
123	MP2B	Mx	-.000524	.5
124	MP2C	X	-1.851	.5
125	MP2C	Z	-1.068	.5
126	MP2C	Mx	.001	.5
127	MP4A	X	-2.447	1
128	MP4A	Z	-1.413	1
129	MP4A	Mx	-.001	1
130	MP4B	X	-2.612	1
131	MP4B	Z	-1.508	1
132	MP4B	Mx	-.001	1
133	MP4C	X	-1.513	1
134	MP4C	Z	-.873	1
135	MP4C	Mx	.002	1
136	MP2B	X	-3.55	2.5
137	MP2B	Z	-2.05	2.5
138	MP2B	Mx	.000701	2.5
139	MP2B	X	-3.55	4
140	MP2B	Z	-2.05	4
141	MP2B	Mx	.000701	4
142	MP2C	X	-1.471	2.5
143	MP2C	Z	-.849	2.5
144	MP2C	Mx	-.000849	2.5
145	MP2C	X	-1.471	4
146	MP2C	Z	-.849	4
147	MP2C	Mx	-.000849	4
148	MP2A	X	-3.237	2.5
149	MP2A	Z	-1.869	2.5
150	MP2A	Mx	.000934	2.5
151	MP2A	X	-3.237	4
152	MP2A	Z	-1.869	4
153	MP2A	Mx	.000934	4
154	M44	X	-4.449	.5
155	M44	Z	-2.568	.5
156	M44	Mx	0	.5
157	M46	X	-4.449	.5
158	M46	Z	-2.568	.5
159	M46	Mx	0	.5

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	-.493	5
2	MP3A	Z	-.854	5
3	MP3A	Mx	-.000329	5
4	MP3A	X	-.493	6
5	MP3A	Z	-.854	6
6	MP3A	Mx	-.000329	6
7	MP3B	X	-.494	5
8	MP3B	Z	-.856	5
9	MP3B	Mx	-.000546	5
10	MP3B	X	-.494	6
11	MP3B	Z	-.856	6
12	MP3B	Mx	-.000546	6
13	MP3C	X	-.494	5
14	MP3C	Z	-.856	5
15	MP3C	Mx	.001	5
16	MP3C	X	-.494	6



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

Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]	
17	MP3C	Z	- .856	6
18	MP3C	Mx	.001	6
19	MP3A	X	- .493	5
20	MP3A	Z	- .854	5
21	MP3A	Mx	.000329	5
22	MP3A	X	- .493	6
23	MP3A	Z	- .854	6
24	MP3A	Mx	.000329	6
25	MP3B	X	- .494	5
26	MP3B	Z	- .856	5
27	MP3B	Mx	-.000969	5
28	MP3B	X	- .494	6
29	MP3B	Z	- .856	6
30	MP3B	Mx	-.000969	6
31	MP3C	X	- .494	5
32	MP3C	Z	- .856	5
33	MP3C	Mx	.000691	5
34	MP3C	X	- .494	6
35	MP3C	Z	- .856	6
36	MP3C	Mx	.000691	6
37	MP1A	X	-2.995	1.5
38	MP1A	Z	-5.187	1.5
39	MP1A	Mx	0	1.5
40	MP1A	X	-2.995	4.5
41	MP1A	Z	-5.187	4.5
42	MP1A	Mx	0	4.5
43	MP1B	X	-2.281	1.5
44	MP1B	Z	-3.951	1.5
45	MP1B	Mx	.002	1.5
46	MP1B	X	-2.281	4.5
47	MP1B	Z	-3.951	4.5
48	MP1B	Mx	.002	4.5
49	MP1C	X	-2.281	1.5
50	MP1C	Z	-3.951	1.5
51	MP1C	Mx	-.002	1.5
52	MP1C	X	-2.281	4.5
53	MP1C	Z	-3.951	4.5
54	MP1C	Mx	-.002	4.5
55	MP5A	X	-2.995	1.5
56	MP5A	Z	-5.187	1.5
57	MP5A	Mx	0	1.5
58	MP5A	X	-2.995	4.5
59	MP5A	Z	-5.187	4.5
60	MP5A	Mx	0	4.5
61	MP5B	X	-2.281	1.5
62	MP5B	Z	-3.951	1.5
63	MP5B	Mx	.002	1.5
64	MP5B	X	-2.281	4.5
65	MP5B	Z	-3.951	4.5
66	MP5B	Mx	.002	4.5
67	MP5C	X	-2.281	1.5
68	MP5C	Z	-3.951	1.5
69	MP5C	Mx	-.002	1.5
70	MP5C	X	-2.281	4.5
71	MP5C	Z	-3.951	4.5
72	MP5C	Mx	-.002	4.5
73	MP3A	X	-4.176	.25



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
74	MP3A	Z	-7.234	.25
75	MP3A	Mx	-.005	.25
76	MP3A	X	-4.176	5.25
77	MP3A	Z	-7.234	5.25
78	MP3A	Mx	-.005	5.25
79	MP3B	X	-3.775	.25
80	MP3B	Z	-6.539	.25
81	MP3B	Mx	.006	.25
82	MP3B	X	-3.775	5.25
83	MP3B	Z	-6.539	5.25
84	MP3B	Mx	.006	5.25
85	MP3C	X	-3.664	.25
86	MP3C	Z	-6.346	.25
87	MP3C	Mx	-.001	.25
88	MP3C	X	-3.664	5.25
89	MP3C	Z	-6.346	5.25
90	MP3C	Mx	-.001	5.25
91	MP3A	X	-4.176	.25
92	MP3A	Z	-7.234	.25
93	MP3A	Mx	.005	.25
94	MP3A	X	-4.176	5.25
95	MP3A	Z	-7.234	5.25
96	MP3A	Mx	.005	5.25
97	MP3B	X	-3.775	.25
98	MP3B	Z	-6.539	.25
99	MP3B	Mx	6.1e-5	.25
100	MP3B	X	-3.775	5.25
101	MP3B	Z	-6.539	5.25
102	MP3B	Mx	6.1e-5	5.25
103	MP3C	X	-3.664	.25
104	MP3C	Z	-6.346	.25
105	MP3C	Mx	-.005	.25
106	MP3C	X	-3.664	5.25
107	MP3C	Z	-6.346	5.25
108	MP3C	Mx	-.005	5.25
109	MP4A	X	-.914	.5
110	MP4A	Z	-1.584	.5
111	MP4A	Mx	0	.5
112	MP4B	X	-.641	.5
113	MP4B	Z	-1.111	.5
114	MP4B	Mx	.000983	.5
115	MP4C	X	-.566	.5
116	MP4C	Z	-.98	.5
117	MP4C	Mx	-.00098	.5
118	MP2A	X	-1.592	.5
119	MP2A	Z	-2.758	.5
120	MP2A	Mx	0	.5
121	MP2B	X	-1.285	.5
122	MP2B	Z	-2.226	.5
123	MP2B	Mx	-.000985	.5
124	MP2C	X	-1.199	.5
125	MP2C	Z	-2.078	.5
126	MP2C	Mx	.001	.5
127	MP4A	X	-1.592	1
128	MP4A	Z	-2.758	1
129	MP4A	Mx	0	1
130	MP4B	X	-1.17	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
131	MP4B	Z	-2.027	1
132	MP4B	Mx	-.002	1
133	MP4C	X	-1.053	1
134	MP4C	Z	-1.824	1
135	MP4C	Mx	.002	1
136	MP2B	X	-1.411	2.5
137	MP2B	Z	-2.444	2.5
138	MP2B	Mx	.001	2.5
139	MP2B	X	-1.411	4
140	MP2B	Z	-2.444	4
141	MP2B	Mx	.001	4
142	MP2C	X	-1.189	2.5
143	MP2C	Z	-2.06	2.5
144	MP2C	Mx	-.001	2.5
145	MP2C	X	-1.189	4
146	MP2C	Z	-2.06	4
147	MP2C	Mx	-.001	4
148	MP2A	X	-2.209	2.5
149	MP2A	Z	-3.826	2.5
150	MP2A	Mx	0	2.5
151	MP2A	X	-2.209	4
152	MP2A	Z	-3.826	4
153	MP2A	Mx	0	4
154	M44	X	-2.343	.5
155	M44	Z	-4.059	.5
156	M44	Mx	0	.5
157	M46	X	-2.343	.5
158	M46	Z	-4.059	.5
159	M46	Mx	0	.5

Member Point Loads (BLC 77 : Lm1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M9	Y	-500	%100

Member Point Loads (BLC 78 : Lm2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M7	Y	-500	%100

Member Point Loads (BLC 79 : Lv1)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M1	Y	-250	0

Member Point Loads (BLC 80 : Lv2)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	M1	Y	-250	%50

Member Point Loads (BLC 81 : Antenna Ev)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP3A	Y	0	5
2	MP3A	My	0	5
3	MP3A	Mz	0	5
4	MP3A	Y	0	6
5	MP3A	My	0	6
6	MP3A	Mz	0	6



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Member Point Loads (BLC 81 : Antenna Ev) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
7	MP3B	Y	0	5
8	MP3B	My	0	5
9	MP3B	Mz	0	5
10	MP3B	Y	0	6
11	MP3B	Mv	0	6
12	MP3B	Mz	0	6
13	MP3C	Y	0	5
14	MP3C	My	0	5
15	MP3C	Mz	0	5
16	MP3C	Y	0	6
17	MP3C	Mv	0	6
18	MP3C	Mz	0	6
19	MP3A	Y	0	5
20	MP3A	My	0	5
21	MP3A	Mz	0	5
22	MP3A	Y	0	6
23	MP3A	Mv	0	6
24	MP3A	Mz	0	6
25	MP3B	Y	0	5
26	MP3B	My	0	5
27	MP3B	Mz	0	5
28	MP3B	Y	0	6
29	MP3B	Mv	0	6
30	MP3B	Mz	0	6
31	MP3C	Y	0	5
32	MP3C	My	0	5
33	MP3C	Mz	0	5
34	MP3C	Y	0	6
35	MP3C	Mv	0	6
36	MP3C	Mz	0	6
37	MP1A	Y	0	1.5
38	MP1A	My	0	1.5
39	MP1A	Mz	0	1.5
40	MP1A	Y	0	4.5
41	MP1A	Mv	0	4.5
42	MP1A	Mz	0	4.5
43	MP1B	Y	0	1.5
44	MP1B	My	0	1.5
45	MP1B	Mz	0	1.5
46	MP1B	Y	0	4.5
47	MP1B	Mv	0	4.5
48	MP1B	Mz	0	4.5
49	MP1C	Y	0	1.5
50	MP1C	My	0	1.5
51	MP1C	Mz	0	1.5
52	MP1C	Y	0	4.5
53	MP1C	Mv	0	4.5
54	MP1C	Mz	0	4.5
55	MP5A	Y	0	1.5
56	MP5A	My	0	1.5
57	MP5A	Mz	0	1.5
58	MP5A	Y	0	4.5
59	MP5A	My	0	4.5
60	MP5A	Mz	0	4.5
61	MP5B	Y	0	1.5
62	MP5B	My	0	1.5
63	MP5B	Mz	0	1.5



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Member Point Loads (BLC 81 : Antenna Ev) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
64	MP5B	Y	0	4.5
65	MP5B	My	0	4.5
66	MP5B	Mz	0	4.5
67	MP5C	Y	0	1.5
68	MP5C	My	0	1.5
69	MP5C	Mz	0	1.5
70	MP5C	Y	0	4.5
71	MP5C	Mv	0	4.5
72	MP5C	Mz	0	4.5
73	MP3A	Y	0	.25
74	MP3A	My	0	.25
75	MP3A	Mz	0	.25
76	MP3A	Y	0	5.25
77	MP3A	Mv	0	5.25
78	MP3A	Mz	0	5.25
79	MP3B	Y	0	.25
80	MP3B	My	0	.25
81	MP3B	Mz	0	.25
82	MP3B	Y	0	5.25
83	MP3B	Mv	0	5.25
84	MP3B	Mz	0	5.25
85	MP3C	Y	0	.25
86	MP3C	My	0	.25
87	MP3C	Mz	0	.25
88	MP3C	Y	0	5.25
89	MP3C	Mv	0	5.25
90	MP3C	Mz	0	5.25
91	MP3A	Y	0	.25
92	MP3A	Mv	0	.25
93	MP3A	Mz	0	.25
94	MP3A	Y	0	5.25
95	MP3A	Mv	0	5.25
96	MP3A	Mz	0	5.25
97	MP3B	Y	0	.25
98	MP3B	Mv	0	.25
99	MP3B	Mz	0	.25
100	MP3B	Y	0	5.25
101	MP3B	Mv	0	5.25
102	MP3B	Mz	0	5.25
103	MP3C	Y	0	.25
104	MP3C	My	0	.25
105	MP3C	Mz	0	.25
106	MP3C	Y	0	5.25
107	MP3C	Mv	0	5.25
108	MP3C	Mz	0	5.25
109	MP4A	Y	0	.5
110	MP4A	My	0	.5
111	MP4A	Mz	0	.5
112	MP4B	Y	0	.5
113	MP4B	Mv	0	.5
114	MP4B	Mz	0	.5
115	MP4C	Y	0	.5
116	MP4C	My	0	.5
117	MP4C	Mz	0	.5
118	MP2A	Y	0	.5
119	MP2A	Mv	0	.5
120	MP2A	Mz	0	.5



Member Point Loads (BLC 81 : Antenna Ev) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
121	MP2B	Y	0	.5
122	MP2B	My	0	.5
123	MP2B	Mz	0	.5
124	MP2C	Y	0	.5
125	MP2C	Mv	0	.5
126	MP2C	Mz	0	.5
127	MP4A	Y	0	1
128	MP4A	My	0	1
129	MP4A	Mz	0	1
130	MP4B	Y	0	1
131	MP4B	Mv	0	1
132	MP4B	Mz	0	1
133	MP4C	Y	0	1
134	MP4C	My	0	1
135	MP4C	Mz	0	1
136	MP2B	Y	0	2.5
137	MP2B	My	0	2.5
138	MP2B	Mz	0	2.5
139	MP2B	Y	0	4
140	MP2B	My	0	4
141	MP2B	Mz	0	4
142	MP2C	Y	0	2.5
143	MP2C	My	0	2.5
144	MP2C	Mz	0	2.5
145	MP2C	Y	0	4
146	MP2C	My	0	4
147	MP2C	Mz	0	4
148	MP2A	Y	0	2.5
149	MP2A	Mv	0	2.5
150	MP2A	Mz	0	2.5
151	MP2A	Y	0	4
152	MP2A	My	0	4
153	MP2A	Mz	0	4
154	M44	Y	0	.5
155	M44	Mv	0	.5
156	M44	Mz	0	.5
157	M46	Y	0	.5
158	M46	My	0	.5
159	M46	Mz	0	.5

Member Point Loads (BLC 82 : Antenna Eh (0 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	Z	-.264	5
2	MP3A	Mx	5.6e-5	5
3	MP3A	Z	-.264	6
4	MP3A	Mx	5.6e-5	6
5	MP3B	Z	-.264	5
6	MP3B	Mx	-.000245	5
7	MP3B	Z	-.264	6
8	MP3B	Mx	-.000245	6
9	MP3C	Z	-.264	5
10	MP3C	Mx	.000208	5
11	MP3C	Z	-.264	6
12	MP3C	Mx	.000208	6
13	MP3A	Z	-.264	5
14	MP3A	Mx	.000208	5



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Member Point Loads (BLC 82 : Antenna Eh (0 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
72	MP3C	Mx	-.000736	5.25
73	MP4A	Z	-.693	.5
74	MP4A	Mx	-.000347	.5
75	MP4B	Z	-.693	.5
76	MP4B	Mx	.000682	.5
77	MP4C	Z	-.693	.5
78	MP4C	Mx	-.000347	.5
79	MP2A	Z	-2.532	.5
80	MP2A	Mx	.000633	.5
81	MP2B	Z	-2.532	.5
82	MP2B	Mx	-.001	.5
83	MP2C	Z	-2.532	.5
84	MP2C	Mx	.000633	.5
85	MP4A	Z	-2.109	1
86	MP4A	Mx	.001	1
87	MP4B	Z	-2.109	1
88	MP4B	Mx	-.002	1
89	MP4C	Z	-2.109	1
90	MP4C	Mx	.001	1
91	MP2B	Z	-1.306	2.5
92	MP2B	Mx	.000643	2.5
93	MP2B	Z	-1.306	4
94	MP2B	Mx	.000643	4
95	MP2C	Z	-1.306	2.5
96	MP2C	Mx	-.000327	2.5
97	MP2C	Z	-1.306	4
98	MP2C	Mx	-.000327	4
99	MP2A	Z	-1.306	2.5
100	MP2A	Mx	-.000327	2.5
101	MP2A	Z	-1.306	4
102	MP2A	Mx	-.000327	4
103	M44	Z	-.807	.5
104	M44	Mx	0	.5
105	M46	Z	-.807	.5
106	M46	Mx	0	.5

Member Point Loads (BLC 83 : Antenna Eh (90 Deg))

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP3A	X	.264	5
2	MP3A	Mx	.000273	5
3	MP3A	X	.264	6
4	MP3A	Mx	.000273	6
5	MP3B	X	.264	5
6	MP3B	Mx	-.000133	5
7	MP3B	X	.264	6
8	MP3B	Mx	-.000133	6
9	MP3C	X	.264	5
10	MP3C	Mx	-.000185	5
11	MP3C	X	.264	6
12	MP3C	Mx	-.000185	6
13	MP3A	X	.264	5
14	MP3A	Mx	.000185	5
15	MP3A	X	.264	6
16	MP3A	Mx	.000185	6
17	MP3B	X	.264	5
18	MP3B	Mx	4.1e-5	5



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Member Point Loads (BLC 83 : Antenna Eh (90 Deg)) (Continued)

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
76	MP4B	Mx	.00012	.5
77	MP4C	X	.693	.5
78	MP4C	Mx	.0006	.5
79	MP2A	X	2.532	.5
80	MP2A	Mx	.001	.5
81	MP2B	X	2.532	.5
82	MP2B	Mx	-.00022	.5
83	MP2C	X	2.532	.5
84	MP2C	Mx	-.001	.5
85	MP4A	X	2.109	1
86	MP4A	Mx	.002	1
87	MP4B	X	2.109	1
88	MP4B	Mx	-.000366	1
89	MP4C	X	2.109	1
90	MP4C	Mx	-.002	1
91	MP2B	X	1.306	2.5
92	MP2B	Mx	.000113	2.5
93	MP2B	X	1.306	4
94	MP2B	Mx	.000113	4
95	MP2C	X	1.306	2.5
96	MP2C	Mx	.000566	2.5
97	MP2C	X	1.306	4
98	MP2C	Mx	.000566	4
99	MP2A	X	1.306	2.5
100	MP2A	Mx	-.000566	2.5
101	MP2A	X	1.306	4
102	MP2A	Mx	-.000566	4
103	M44	X	.807	.5
104	M44	Mx	0	.5
105	M46	X	.807	.5
106	M46	Mx	0	.5

Member Distributed Loads (BLC 40 : Structure Di)

	Member Label	Direction	Start Magnitude[lb.ft.F...]	End Magnitude[lb.ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	Y	-9.472	-9.472	0	%100
2	M2	Y	-9.472	-9.472	0	%100
3	MP5A	Y	-4.899	-4.899	0	%100
4	MP4A	Y	-4.899	-4.899	0	%100
5	MP3A	Y	-4.899	-4.899	0	%100
6	MP2A	Y	-4.899	-4.899	0	%100
7	MP1A	Y	-4.899	-4.899	0	%100
8	M13	Y	-9.472	-9.472	0	%100
9	MP5C	Y	-4.899	-4.899	0	%100
10	MP4C	Y	-4.899	-4.899	0	%100
11	MP3C	Y	-4.899	-4.899	0	%100
12	MP2C	Y	-4.899	-4.899	0	%100
13	MP1C	Y	-4.899	-4.899	0	%100
14	M24	Y	-9.472	-9.472	0	%100
15	MP5B	Y	-4.899	-4.899	0	%100
16	MP4B	Y	-4.899	-4.899	0	%100
17	MP3B	Y	-4.899	-4.899	0	%100
18	MP2B	Y	-4.899	-4.899	0	%100
19	MP1B	Y	-4.899	-4.899	0	%100
20	M37	Y	-9.472	-9.472	0	%100
21	M40	Y	-9.472	-9.472	0	%100



Member Distributed Loads (BLC 40 : Structure Di) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
22	M44	Y	-4.899	-4.899	0	%100
23	M46	Y	-4.899	-4.899	0	%100
24	M47	Y	-5.531	-5.531	0	%100
25	M48	Y	-5.531	-5.531	0	%100
26	M49	Y	-5.531	-5.531	0	%100
27	M50	Y	-5.531	-5.531	0	%100
28	M51	Y	-5.531	-5.531	0	%100
29	M52	Y	-5.531	-5.531	0	%100
30	M53	Y	-5.531	-5.531	0	%100
31	M54	Y	-5.531	-5.531	0	%100
32	M55	Y	-5.531	-5.531	0	%100
33	M56	Y	-5.531	-5.531	0	%100
34	M57	Y	-5.531	-5.531	0	%100
35	M58	Y	-5.531	-5.531	0	%100
36	M59	Y	-9.951	-9.951	0	%100
37	M60	Y	-9.951	-9.951	0	%100
38	M61	Y	-9.951	-9.951	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	-13.698	-13.698	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	0	0	0	%100
6	MP5A	Z	-7.808	-7.808	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	-7.808	-7.808	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	-7.808	-7.808	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	-7.808	-7.808	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	-7.808	-7.808	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	-3.425	-3.425	0	%100
17	MP5C	X	0	0	0	%100
18	MP5C	Z	-7.808	-7.808	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	-7.808	-7.808	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	-7.808	-7.808	0	%100
23	MP2C	X	0	0	0	%100
24	MP2C	Z	-7.808	-7.808	0	%100
25	MP1C	X	0	0	0	%100
26	MP1C	Z	-7.808	-7.808	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-3.425	-3.425	0	%100
29	MP5B	X	0	0	0	%100
30	MP5B	Z	-7.808	-7.808	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	-7.808	-7.808	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	-7.808	-7.808	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	-7.808	-7.808	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
37	MP1B	X	0	0	0	%100
38	MP1B	Z	-7.808	-7.808	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	-10.274	-10.274	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	-10.274	-10.274	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	-7.116	-7.116	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	-6.385	-6.385	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	0	0	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	0	0	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	0	0	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	-5.89	-5.89	0	%100
57	M52	X	0	0	0	%100
58	M52	Z	-5.89	-5.89	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	-5.89	-5.89	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	-5.89	-5.89	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	-5.89	-5.89	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	-5.89	-5.89	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	-5.89	-5.89	0	%100
69	M58	X	0	0	0	%100
70	M58	Z	-5.89	-5.89	0	%100
71	M59	X	0	0	0	%100
72	M59	Z	-6.768	-6.768	0	%100
73	M60	X	0	0	0	%100
74	M60	Z	-13.676	-13.676	0	%100
75	M61	X	0	0	0	%100
76	M61	Z	-13.676	-13.676	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	5.137	5.137	0	%100
2	M1	Z	-8.897	-8.897	0	%100
3	M2	X	1.712	1.712	0	%100
4	M2	Z	-2.966	-2.966	0	%100
5	MP5A	X	3.904	3.904	0	%100
6	MP5A	Z	-6.762	-6.762	0	%100
7	MP4A	X	3.904	3.904	0	%100
8	MP4A	Z	-6.762	-6.762	0	%100
9	MP3A	X	3.904	3.904	0	%100
10	MP3A	Z	-6.762	-6.762	0	%100
11	MP2A	X	3.904	3.904	0	%100
12	MP2A	Z	-6.762	-6.762	0	%100
13	MP1A	X	3.904	3.904	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.F.]	Start Location[ft.%]	End Location[ft.%]
14	MP1A	Z	-6.762	-6.762	0	%100
15	M13	X	5.137	5.137	0	%100
16	M13	Z	-8.897	-8.897	0	%100
17	MP5C	X	3.904	3.904	0	%100
18	MP5C	Z	-6.762	-6.762	0	%100
19	MP4C	X	3.904	3.904	0	%100
20	MP4C	Z	-6.762	-6.762	0	%100
21	MP3C	X	3.904	3.904	0	%100
22	MP3C	Z	-6.762	-6.762	0	%100
23	MP2C	X	3.904	3.904	0	%100
24	MP2C	Z	-6.762	-6.762	0	%100
25	MP1C	X	3.904	3.904	0	%100
26	MP1C	Z	-6.762	-6.762	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	3.904	3.904	0	%100
30	MP5B	Z	-6.762	-6.762	0	%100
31	MP4B	X	3.904	3.904	0	%100
32	MP4B	Z	-6.762	-6.762	0	%100
33	MP3B	X	3.904	3.904	0	%100
34	MP3B	Z	-6.762	-6.762	0	%100
35	MP2B	X	3.904	3.904	0	%100
36	MP2B	Z	-6.762	-6.762	0	%100
37	MP1B	X	3.904	3.904	0	%100
38	MP1B	Z	-6.762	-6.762	0	%100
39	M37	X	1.712	1.712	0	%100
40	M37	Z	-2.966	-2.966	0	%100
41	M40	X	6.849	6.849	0	%100
42	M40	Z	-11.863	-11.863	0	%100
43	M44	X	3.558	3.558	0	%100
44	M44	Z	-6.162	-6.162	0	%100
45	M46	X	3.192	3.192	0	%100
46	M46	Z	-5.53	-5.53	0	%100
47	M47	X	.982	.982	0	%100
48	M47	Z	-1.7	-1.7	0	%100
49	M48	X	.982	.982	0	%100
50	M48	Z	-1.7	-1.7	0	%100
51	M49	X	.982	.982	0	%100
52	M49	Z	-1.7	-1.7	0	%100
53	M50	X	.982	.982	0	%100
54	M50	Z	-1.7	-1.7	0	%100
55	M51	X	.982	.982	0	%100
56	M51	Z	-1.7	-1.7	0	%100
57	M52	X	.982	.982	0	%100
58	M52	Z	-1.7	-1.7	0	%100
59	M53	X	.982	.982	0	%100
60	M53	Z	-1.7	-1.7	0	%100
61	M54	X	.982	.982	0	%100
62	M54	Z	-1.7	-1.7	0	%100
63	M55	X	3.927	3.927	0	%100
64	M55	Z	-6.802	-6.802	0	%100
65	M56	X	3.927	3.927	0	%100
66	M56	Z	-6.802	-6.802	0	%100
67	M57	X	3.927	3.927	0	%100
68	M57	Z	-6.802	-6.802	0	%100
69	M58	X	3.927	3.927	0	%100
70	M58	Z	-6.802	-6.802	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
71	M59	X	4.535	4.535	0	%100
72	M59	Z	-7.855	-7.855	0	%100
73	M60	X	4.535	4.535	0	%100
74	M60	Z	-7.855	-7.855	0	%100
75	M61	X	7.989	7.989	0	%100
76	M61	Z	-13.838	-13.838	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	2.966	2.966	0	%100
2	M1	Z	-1.712	-1.712	0	%100
3	M2	X	8.897	8.897	0	%100
4	M2	Z	-5.137	-5.137	0	%100
5	MP5A	X	6.762	6.762	0	%100
6	MP5A	Z	-3.904	-3.904	0	%100
7	MP4A	X	6.762	6.762	0	%100
8	MP4A	Z	-3.904	-3.904	0	%100
9	MP3A	X	6.762	6.762	0	%100
10	MP3A	Z	-3.904	-3.904	0	%100
11	MP2A	X	6.762	6.762	0	%100
12	MP2A	Z	-3.904	-3.904	0	%100
13	MP1A	X	6.762	6.762	0	%100
14	MP1A	Z	-3.904	-3.904	0	%100
15	M13	X	11.863	11.863	0	%100
16	M13	Z	-6.849	-6.849	0	%100
17	MP5C	X	6.762	6.762	0	%100
18	MP5C	Z	-3.904	-3.904	0	%100
19	MP4C	X	6.762	6.762	0	%100
20	MP4C	Z	-3.904	-3.904	0	%100
21	MP3C	X	6.762	6.762	0	%100
22	MP3C	Z	-3.904	-3.904	0	%100
23	MP2C	X	6.762	6.762	0	%100
24	MP2C	Z	-3.904	-3.904	0	%100
25	MP1C	X	6.762	6.762	0	%100
26	MP1C	Z	-3.904	-3.904	0	%100
27	M24	X	2.966	2.966	0	%100
28	M24	Z	-1.712	-1.712	0	%100
29	MP5B	X	6.762	6.762	0	%100
30	MP5B	Z	-3.904	-3.904	0	%100
31	MP4B	X	6.762	6.762	0	%100
32	MP4B	Z	-3.904	-3.904	0	%100
33	MP3B	X	6.762	6.762	0	%100
34	MP3B	Z	-3.904	-3.904	0	%100
35	MP2B	X	6.762	6.762	0	%100
36	MP2B	Z	-3.904	-3.904	0	%100
37	MP1B	X	6.762	6.762	0	%100
38	MP1B	Z	-3.904	-3.904	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	8.897	8.897	0	%100
42	M40	Z	-5.137	-5.137	0	%100
43	M44	X	6.162	6.162	0	%100
44	M44	Z	-3.558	-3.558	0	%100
45	M46	X	5.53	5.53	0	%100
46	M46	Z	-3.192	-3.192	0	%100
47	M47	X	5.101	5.101	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
48	M47	Z	-2.945	-2.945	0	%100
49	M48	X	5.101	5.101	0	%100
50	M48	Z	-2.945	-2.945	0	%100
51	M49	X	5.101	5.101	0	%100
52	M49	Z	-2.945	-2.945	0	%100
53	M50	X	5.101	5.101	0	%100
54	M50	Z	-2.945	-2.945	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	0	0	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	5.101	5.101	0	%100
64	M55	Z	-2.945	-2.945	0	%100
65	M56	X	5.101	5.101	0	%100
66	M56	Z	-2.945	-2.945	0	%100
67	M57	X	5.101	5.101	0	%100
68	M57	Z	-2.945	-2.945	0	%100
69	M58	X	5.101	5.101	0	%100
70	M58	Z	-2.945	-2.945	0	%100
71	M59	X	11.844	11.844	0	%100
72	M59	Z	-6.838	-6.838	0	%100
73	M60	X	5.861	5.861	0	%100
74	M60	Z	-3.384	-3.384	0	%100
75	M61	X	11.844	11.844	0	%100
76	M61	Z	-6.838	-6.838	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	13.698	13.698	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	7.808	7.808	0	%100
6	MP5A	Z	0	0	0	%100
7	MP4A	X	7.808	7.808	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	7.808	7.808	0	%100
10	MP3A	Z	0	0	0	%100
11	MP2A	X	7.808	7.808	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	7.808	7.808	0	%100
14	MP1A	Z	0	0	0	%100
15	M13	X	10.274	10.274	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	7.808	7.808	0	%100
18	MP5C	Z	0	0	0	%100
19	MP4C	X	7.808	7.808	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	7.808	7.808	0	%100
22	MP3C	Z	0	0	0	%100
23	MP2C	X	7.808	7.808	0	%100
24	MP2C	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
25	MP1C	X	7.808	7.808	0	%100
26	MP1C	Z	0	0	0	%100
27	M24	X	10.274	10.274	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	7.808	7.808	0	%100
30	MP5B	Z	0	0	0	%100
31	MP4B	X	7.808	7.808	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	7.808	7.808	0	%100
34	MP3B	Z	0	0	0	%100
35	MP2B	X	7.808	7.808	0	%100
36	MP2B	Z	0	0	0	%100
37	MP1B	X	7.808	7.808	0	%100
38	MP1B	Z	0	0	0	%100
39	M37	X	3.425	3.425	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	3.425	3.425	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	7.116	7.116	0	%100
44	M44	Z	0	0	0	%100
45	M46	X	6.385	6.385	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	7.854	7.854	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	7.854	7.854	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	7.854	7.854	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	7.854	7.854	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	1.963	1.963	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	1.963	1.963	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	1.963	1.963	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	1.963	1.963	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	1.963	1.963	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	1.963	1.963	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	1.963	1.963	0	%100
68	M57	Z	0	0	0	%100
69	M58	X	1.963	1.963	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	15.979	15.979	0	%100
72	M59	Z	0	0	0	%100
73	M60	X	9.071	9.071	0	%100
74	M60	Z	0	0	0	%100
75	M61	X	9.071	9.071	0	%100
76	M61	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	2.966	2.966	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
2	M1	Z	1.712	1.712	0	%100
3	M2	X	8.897	8.897	0	%100
4	M2	Z	5.137	5.137	0	%100
5	MP5A	X	6.762	6.762	0	%100
6	MP5A	Z	3.904	3.904	0	%100
7	MP4A	X	6.762	6.762	0	%100
8	MP4A	Z	3.904	3.904	0	%100
9	MP3A	X	6.762	6.762	0	%100
10	MP3A	Z	3.904	3.904	0	%100
11	MP2A	X	6.762	6.762	0	%100
12	MP2A	Z	3.904	3.904	0	%100
13	MP1A	X	6.762	6.762	0	%100
14	MP1A	Z	3.904	3.904	0	%100
15	M13	X	2.966	2.966	0	%100
16	M13	Z	1.712	1.712	0	%100
17	MP5C	X	6.762	6.762	0	%100
18	MP5C	Z	3.904	3.904	0	%100
19	MP4C	X	6.762	6.762	0	%100
20	MP4C	Z	3.904	3.904	0	%100
21	MP3C	X	6.762	6.762	0	%100
22	MP3C	Z	3.904	3.904	0	%100
23	MP2C	X	6.762	6.762	0	%100
24	MP2C	Z	3.904	3.904	0	%100
25	MP1C	X	6.762	6.762	0	%100
26	MP1C	Z	3.904	3.904	0	%100
27	M24	X	11.863	11.863	0	%100
28	M24	Z	6.849	6.849	0	%100
29	MP5B	X	6.762	6.762	0	%100
30	MP5B	Z	3.904	3.904	0	%100
31	MP4B	X	6.762	6.762	0	%100
32	MP4B	Z	3.904	3.904	0	%100
33	MP3B	X	6.762	6.762	0	%100
34	MP3B	Z	3.904	3.904	0	%100
35	MP2B	X	6.762	6.762	0	%100
36	MP2B	Z	3.904	3.904	0	%100
37	MP1B	X	6.762	6.762	0	%100
38	MP1B	Z	3.904	3.904	0	%100
39	M37	X	8.897	8.897	0	%100
40	M37	Z	5.137	5.137	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	6.162	6.162	0	%100
44	M44	Z	3.558	3.558	0	%100
45	M46	X	5.53	5.53	0	%100
46	M46	Z	3.192	3.192	0	%100
47	M47	X	5.101	5.101	0	%100
48	M47	Z	2.945	2.945	0	%100
49	M48	X	5.101	5.101	0	%100
50	M48	Z	2.945	2.945	0	%100
51	M49	X	5.101	5.101	0	%100
52	M49	Z	2.945	2.945	0	%100
53	M50	X	5.101	5.101	0	%100
54	M50	Z	2.945	2.945	0	%100
55	M51	X	5.101	5.101	0	%100
56	M51	Z	2.945	2.945	0	%100
57	M52	X	5.101	5.101	0	%100
58	M52	Z	2.945	2.945	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
59	M53	X	5.101	5.101	0	%100
60	M53	Z	2.945	2.945	0	%100
61	M54	X	5.101	5.101	0	%100
62	M54	Z	2.945	2.945	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	0	0	0	%100
69	M58	X	0	0	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	11.844	11.844	0	%100
72	M59	Z	6.838	6.838	0	%100
73	M60	X	11.844	11.844	0	%100
74	M60	Z	6.838	6.838	0	%100
75	M61	X	5.861	5.861	0	%100
76	M61	Z	3.384	3.384	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	5.137	5.137	0	%100
2	M1	Z	8.897	8.897	0	%100
3	M2	X	1.712	1.712	0	%100
4	M2	Z	2.966	2.966	0	%100
5	MP5A	X	3.904	3.904	0	%100
6	MP5A	Z	6.762	6.762	0	%100
7	MP4A	X	3.904	3.904	0	%100
8	MP4A	Z	6.762	6.762	0	%100
9	MP3A	X	3.904	3.904	0	%100
10	MP3A	Z	6.762	6.762	0	%100
11	MP2A	X	3.904	3.904	0	%100
12	MP2A	Z	6.762	6.762	0	%100
13	MP1A	X	3.904	3.904	0	%100
14	MP1A	Z	6.762	6.762	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	3.904	3.904	0	%100
18	MP5C	Z	6.762	6.762	0	%100
19	MP4C	X	3.904	3.904	0	%100
20	MP4C	Z	6.762	6.762	0	%100
21	MP3C	X	3.904	3.904	0	%100
22	MP3C	Z	6.762	6.762	0	%100
23	MP2C	X	3.904	3.904	0	%100
24	MP2C	Z	6.762	6.762	0	%100
25	MP1C	X	3.904	3.904	0	%100
26	MP1C	Z	6.762	6.762	0	%100
27	M24	X	5.137	5.137	0	%100
28	M24	Z	8.897	8.897	0	%100
29	MP5B	X	3.904	3.904	0	%100
30	MP5B	Z	6.762	6.762	0	%100
31	MP4B	X	3.904	3.904	0	%100
32	MP4B	Z	6.762	6.762	0	%100
33	MP3B	X	3.904	3.904	0	%100
34	MP3B	Z	6.762	6.762	0	%100
35	MP2B	X	3.904	3.904	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.]	Start Location[ft.%]	End Location[ft.%]
36	MP2B	Z	6.762	6.762	0	%100
37	MP1B	X	3.904	3.904	0	%100
38	MP1B	Z	6.762	6.762	0	%100
39	M37	X	6.849	6.849	0	%100
40	M37	Z	11.863	11.863	0	%100
41	M40	X	1.712	1.712	0	%100
42	M40	Z	2.966	2.966	0	%100
43	M44	X	3.558	3.558	0	%100
44	M44	Z	6.162	6.162	0	%100
45	M46	X	3.192	3.192	0	%100
46	M46	Z	5.53	5.53	0	%100
47	M47	X	.982	.982	0	%100
48	M47	Z	1.7	1.7	0	%100
49	M48	X	.982	.982	0	%100
50	M48	Z	1.7	1.7	0	%100
51	M49	X	.982	.982	0	%100
52	M49	Z	1.7	1.7	0	%100
53	M50	X	.982	.982	0	%100
54	M50	Z	1.7	1.7	0	%100
55	M51	X	3.927	3.927	0	%100
56	M51	Z	6.802	6.802	0	%100
57	M52	X	3.927	3.927	0	%100
58	M52	Z	6.802	6.802	0	%100
59	M53	X	3.927	3.927	0	%100
60	M53	Z	6.802	6.802	0	%100
61	M54	X	3.927	3.927	0	%100
62	M54	Z	6.802	6.802	0	%100
63	M55	X	.982	.982	0	%100
64	M55	Z	1.7	1.7	0	%100
65	M56	X	.982	.982	0	%100
66	M56	Z	1.7	1.7	0	%100
67	M57	X	.982	.982	0	%100
68	M57	Z	1.7	1.7	0	%100
69	M58	X	.982	.982	0	%100
70	M58	Z	1.7	1.7	0	%100
71	M59	X	4.535	4.535	0	%100
72	M59	Z	7.855	7.855	0	%100
73	M60	X	7.989	7.989	0	%100
74	M60	Z	13.838	13.838	0	%100
75	M61	X	4.535	4.535	0	%100
76	M61	Z	7.855	7.855	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.]	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	13.698	13.698	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	0	0	0	%100
6	MP5A	Z	7.808	7.808	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	7.808	7.808	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	7.808	7.808	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	7.808	7.808	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
13	MP1A	X	0	0	0	%100
14	MP1A	Z	7.808	7.808	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	3.425	3.425	0	%100
17	MP5C	X	0	0	0	%100
18	MP5C	Z	7.808	7.808	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	7.808	7.808	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	7.808	7.808	0	%100
23	MP2C	X	0	0	0	%100
24	MP2C	Z	7.808	7.808	0	%100
25	MP1C	X	0	0	0	%100
26	MP1C	Z	7.808	7.808	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	3.425	3.425	0	%100
29	MP5B	X	0	0	0	%100
30	MP5B	Z	7.808	7.808	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	7.808	7.808	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	7.808	7.808	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	7.808	7.808	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	7.808	7.808	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	10.274	10.274	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	10.274	10.274	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	7.116	7.116	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	6.385	6.385	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	0	0	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	0	0	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	0	0	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	5.89	5.89	0	%100
57	M52	X	0	0	0	%100
58	M52	Z	5.89	5.89	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	5.89	5.89	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	5.89	5.89	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	5.89	5.89	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	5.89	5.89	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	5.89	5.89	0	%100
69	M58	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
70	M58	Z	5.89	5.89	0	%100
71	M59	X	0	0	0	%100
72	M59	Z	6.768	6.768	0	%100
73	M60	X	0	0	0	%100
74	M60	Z	13.676	13.676	0	%100
75	M61	X	0	0	0	%100
76	M61	Z	13.676	13.676	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-5.137	-5.137	0	%100
2	M1	Z	8.897	8.897	0	%100
3	M2	X	-1.712	-1.712	0	%100
4	M2	Z	2.966	2.966	0	%100
5	MP5A	X	-3.904	-3.904	0	%100
6	MP5A	Z	6.762	6.762	0	%100
7	MP4A	X	-3.904	-3.904	0	%100
8	MP4A	Z	6.762	6.762	0	%100
9	MP3A	X	-3.904	-3.904	0	%100
10	MP3A	Z	6.762	6.762	0	%100
11	MP2A	X	-3.904	-3.904	0	%100
12	MP2A	Z	6.762	6.762	0	%100
13	MP1A	X	-3.904	-3.904	0	%100
14	MP1A	Z	6.762	6.762	0	%100
15	M13	X	-5.137	-5.137	0	%100
16	M13	Z	8.897	8.897	0	%100
17	MP5C	X	-3.904	-3.904	0	%100
18	MP5C	Z	6.762	6.762	0	%100
19	MP4C	X	-3.904	-3.904	0	%100
20	MP4C	Z	6.762	6.762	0	%100
21	MP3C	X	-3.904	-3.904	0	%100
22	MP3C	Z	6.762	6.762	0	%100
23	MP2C	X	-3.904	-3.904	0	%100
24	MP2C	Z	6.762	6.762	0	%100
25	MP1C	X	-3.904	-3.904	0	%100
26	MP1C	Z	6.762	6.762	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	-3.904	-3.904	0	%100
30	MP5B	Z	6.762	6.762	0	%100
31	MP4B	X	-3.904	-3.904	0	%100
32	MP4B	Z	6.762	6.762	0	%100
33	MP3B	X	-3.904	-3.904	0	%100
34	MP3B	Z	6.762	6.762	0	%100
35	MP2B	X	-3.904	-3.904	0	%100
36	MP2B	Z	6.762	6.762	0	%100
37	MP1B	X	-3.904	-3.904	0	%100
38	MP1B	Z	6.762	6.762	0	%100
39	M37	X	-1.712	-1.712	0	%100
40	M37	Z	2.966	2.966	0	%100
41	M40	X	-6.849	-6.849	0	%100
42	M40	Z	11.863	11.863	0	%100
43	M44	X	-3.558	-3.558	0	%100
44	M44	Z	6.162	6.162	0	%100
45	M46	X	-3.192	-3.192	0	%100
46	M46	Z	5.53	5.53	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
47	M47	X	-.982	-.982	0	%100
48	M47	Z	1.7	1.7	0	%100
49	M48	X	-.982	-.982	0	%100
50	M48	Z	1.7	1.7	0	%100
51	M49	X	-.982	-.982	0	%100
52	M49	Z	1.7	1.7	0	%100
53	M50	X	-.982	-.982	0	%100
54	M50	Z	1.7	1.7	0	%100
55	M51	X	-.982	-.982	0	%100
56	M51	Z	1.7	1.7	0	%100
57	M52	X	-.982	-.982	0	%100
58	M52	Z	1.7	1.7	0	%100
59	M53	X	-.982	-.982	0	%100
60	M53	Z	1.7	1.7	0	%100
61	M54	X	-.982	-.982	0	%100
62	M54	Z	1.7	1.7	0	%100
63	M55	X	-3.927	-3.927	0	%100
64	M55	Z	6.802	6.802	0	%100
65	M56	X	-3.927	-3.927	0	%100
66	M56	Z	6.802	6.802	0	%100
67	M57	X	-3.927	-3.927	0	%100
68	M57	Z	6.802	6.802	0	%100
69	M58	X	-3.927	-3.927	0	%100
70	M58	Z	6.802	6.802	0	%100
71	M59	X	-4.535	-4.535	0	%100
72	M59	Z	7.855	7.855	0	%100
73	M60	X	-4.535	-4.535	0	%100
74	M60	Z	7.855	7.855	0	%100
75	M61	X	-7.989	-7.989	0	%100
76	M61	Z	13.838	13.838	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-2.966	-2.966	0	%100
2	M1	Z	1.712	1.712	0	%100
3	M2	X	-8.897	-8.897	0	%100
4	M2	Z	5.137	5.137	0	%100
5	MP5A	X	-6.762	-6.762	0	%100
6	MP5A	Z	3.904	3.904	0	%100
7	MP4A	X	-6.762	-6.762	0	%100
8	MP4A	Z	3.904	3.904	0	%100
9	MP3A	X	-6.762	-6.762	0	%100
10	MP3A	Z	3.904	3.904	0	%100
11	MP2A	X	-6.762	-6.762	0	%100
12	MP2A	Z	3.904	3.904	0	%100
13	MP1A	X	-6.762	-6.762	0	%100
14	MP1A	Z	3.904	3.904	0	%100
15	M13	X	-11.863	-11.863	0	%100
16	M13	Z	6.849	6.849	0	%100
17	MP5C	X	-6.762	-6.762	0	%100
18	MP5C	Z	3.904	3.904	0	%100
19	MP4C	X	-6.762	-6.762	0	%100
20	MP4C	Z	3.904	3.904	0	%100
21	MP3C	X	-6.762	-6.762	0	%100
22	MP3C	Z	3.904	3.904	0	%100
23	MP2C	X	-6.762	-6.762	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
24	MP2C	Z	3.904	3.904	0	%100
25	MP1C	X	-6.762	-6.762	0	%100
26	MP1C	Z	3.904	3.904	0	%100
27	M24	X	-2.966	-2.966	0	%100
28	M24	Z	1.712	1.712	0	%100
29	MP5B	X	-6.762	-6.762	0	%100
30	MP5B	Z	3.904	3.904	0	%100
31	MP4B	X	-6.762	-6.762	0	%100
32	MP4B	Z	3.904	3.904	0	%100
33	MP3B	X	-6.762	-6.762	0	%100
34	MP3B	Z	3.904	3.904	0	%100
35	MP2B	X	-6.762	-6.762	0	%100
36	MP2B	Z	3.904	3.904	0	%100
37	MP1B	X	-6.762	-6.762	0	%100
38	MP1B	Z	3.904	3.904	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	-8.897	-8.897	0	%100
42	M40	Z	5.137	5.137	0	%100
43	M44	X	-6.162	-6.162	0	%100
44	M44	Z	3.558	3.558	0	%100
45	M46	X	-5.53	-5.53	0	%100
46	M46	Z	3.192	3.192	0	%100
47	M47	X	-5.101	-5.101	0	%100
48	M47	Z	2.945	2.945	0	%100
49	M48	X	-5.101	-5.101	0	%100
50	M48	Z	2.945	2.945	0	%100
51	M49	X	-5.101	-5.101	0	%100
52	M49	Z	2.945	2.945	0	%100
53	M50	X	-5.101	-5.101	0	%100
54	M50	Z	2.945	2.945	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	0	0	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	-5.101	-5.101	0	%100
64	M55	Z	2.945	2.945	0	%100
65	M56	X	-5.101	-5.101	0	%100
66	M56	Z	2.945	2.945	0	%100
67	M57	X	-5.101	-5.101	0	%100
68	M57	Z	2.945	2.945	0	%100
69	M58	X	-5.101	-5.101	0	%100
70	M58	Z	2.945	2.945	0	%100
71	M59	X	-11.844	-11.844	0	%100
72	M59	Z	6.838	6.838	0	%100
73	M60	X	-5.861	-5.861	0	%100
74	M60	Z	3.384	3.384	0	%100
75	M61	X	-11.844	-11.844	0	%100
76	M61	Z	6.838	6.838	0	%100

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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft,%]	End Location[ft,%]
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Member Distributed Loads (BLC 50 : Structure Wo (270 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-13.698	-13.698	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	-7.808	-7.808	0	%100
6	MP5A	Z	0	0	0	%100
7	MP4A	X	-7.808	-7.808	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	-7.808	-7.808	0	%100
10	MP3A	Z	0	0	0	%100
11	MP2A	X	-7.808	-7.808	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	-7.808	-7.808	0	%100
14	MP1A	Z	0	0	0	%100
15	M13	X	-10.274	-10.274	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	-7.808	-7.808	0	%100
18	MP5C	Z	0	0	0	%100
19	MP4C	X	-7.808	-7.808	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	-7.808	-7.808	0	%100
22	MP3C	Z	0	0	0	%100
23	MP2C	X	-7.808	-7.808	0	%100
24	MP2C	Z	0	0	0	%100
25	MP1C	X	-7.808	-7.808	0	%100
26	MP1C	Z	0	0	0	%100
27	M24	X	-10.274	-10.274	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	-7.808	-7.808	0	%100
30	MP5B	Z	0	0	0	%100
31	MP4B	X	-7.808	-7.808	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	-7.808	-7.808	0	%100
34	MP3B	Z	0	0	0	%100
35	MP2B	X	-7.808	-7.808	0	%100
36	MP2B	Z	0	0	0	%100
37	MP1B	X	-7.808	-7.808	0	%100
38	MP1B	Z	0	0	0	%100
39	M37	X	-3.425	-3.425	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	-3.425	-3.425	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	-7.116	-7.116	0	%100
44	M44	Z	0	0	0	%100
45	M46	X	-6.385	-6.385	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	-7.854	-7.854	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	-7.854	-7.854	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	-7.854	-7.854	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	-7.854	-7.854	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	-1.963	-1.963	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	-1.963	-1.963	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
58	M52	Z	0	0	0	%100
59	M53	X	-1.963	-1.963	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	-1.963	-1.963	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	-1.963	-1.963	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	-1.963	-1.963	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	-1.963	-1.963	0	%100
68	M57	Z	0	0	0	%100
69	M58	X	-1.963	-1.963	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	-15.979	-15.979	0	%100
72	M59	Z	0	0	0	%100
73	M60	X	-9.071	-9.071	0	%100
74	M60	Z	0	0	0	%100
75	M61	X	-9.071	-9.071	0	%100
76	M61	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-2.966	-2.966	0	%100
2	M1	Z	-1.712	-1.712	0	%100
3	M2	X	-8.897	-8.897	0	%100
4	M2	Z	-5.137	-5.137	0	%100
5	MP5A	X	-6.762	-6.762	0	%100
6	MP5A	Z	-3.904	-3.904	0	%100
7	MP4A	X	-6.762	-6.762	0	%100
8	MP4A	Z	-3.904	-3.904	0	%100
9	MP3A	X	-6.762	-6.762	0	%100
10	MP3A	Z	-3.904	-3.904	0	%100
11	MP2A	X	-6.762	-6.762	0	%100
12	MP2A	Z	-3.904	-3.904	0	%100
13	MP1A	X	-6.762	-6.762	0	%100
14	MP1A	Z	-3.904	-3.904	0	%100
15	M13	X	-2.966	-2.966	0	%100
16	M13	Z	-1.712	-1.712	0	%100
17	MP5C	X	-6.762	-6.762	0	%100
18	MP5C	Z	-3.904	-3.904	0	%100
19	MP4C	X	-6.762	-6.762	0	%100
20	MP4C	Z	-3.904	-3.904	0	%100
21	MP3C	X	-6.762	-6.762	0	%100
22	MP3C	Z	-3.904	-3.904	0	%100
23	MP2C	X	-6.762	-6.762	0	%100
24	MP2C	Z	-3.904	-3.904	0	%100
25	MP1C	X	-6.762	-6.762	0	%100
26	MP1C	Z	-3.904	-3.904	0	%100
27	M24	X	-11.863	-11.863	0	%100
28	M24	Z	-6.849	-6.849	0	%100
29	MP5B	X	-6.762	-6.762	0	%100
30	MP5B	Z	-3.904	-3.904	0	%100
31	MP4B	X	-6.762	-6.762	0	%100
32	MP4B	Z	-3.904	-3.904	0	%100
33	MP3B	X	-6.762	-6.762	0	%100
34	MP3B	Z	-3.904	-3.904	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
35	MP2B	X	-6.762	-6.762	0	%100
36	MP2B	Z	-3.904	-3.904	0	%100
37	MP1B	X	-6.762	-6.762	0	%100
38	MP1B	Z	-3.904	-3.904	0	%100
39	M37	X	-8.897	-8.897	0	%100
40	M37	Z	-5.137	-5.137	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	-6.162	-6.162	0	%100
44	M44	Z	-3.558	-3.558	0	%100
45	M46	X	-5.53	-5.53	0	%100
46	M46	Z	-3.192	-3.192	0	%100
47	M47	X	-5.101	-5.101	0	%100
48	M47	Z	-2.945	-2.945	0	%100
49	M48	X	-5.101	-5.101	0	%100
50	M48	Z	-2.945	-2.945	0	%100
51	M49	X	-5.101	-5.101	0	%100
52	M49	Z	-2.945	-2.945	0	%100
53	M50	X	-5.101	-5.101	0	%100
54	M50	Z	-2.945	-2.945	0	%100
55	M51	X	-5.101	-5.101	0	%100
56	M51	Z	-2.945	-2.945	0	%100
57	M52	X	-5.101	-5.101	0	%100
58	M52	Z	-2.945	-2.945	0	%100
59	M53	X	-5.101	-5.101	0	%100
60	M53	Z	-2.945	-2.945	0	%100
61	M54	X	-5.101	-5.101	0	%100
62	M54	Z	-2.945	-2.945	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	0	0	0	%100
69	M58	X	0	0	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	-11.844	-11.844	0	%100
72	M59	Z	-6.838	-6.838	0	%100
73	M60	X	-11.844	-11.844	0	%100
74	M60	Z	-6.838	-6.838	0	%100
75	M61	X	-5.861	-5.861	0	%100
76	M61	Z	-3.384	-3.384	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-5.137	-5.137	0	%100
2	M1	Z	-8.897	-8.897	0	%100
3	M2	X	-1.712	-1.712	0	%100
4	M2	Z	-2.966	-2.966	0	%100
5	MP5A	X	-3.904	-3.904	0	%100
6	MP5A	Z	-6.762	-6.762	0	%100
7	MP4A	X	-3.904	-3.904	0	%100
8	MP4A	Z	-6.762	-6.762	0	%100
9	MP3A	X	-3.904	-3.904	0	%100
10	MP3A	Z	-6.762	-6.762	0	%100
11	MP2A	X	-3.904	-3.904	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
12	MP2A	Z	-6.762	-6.762	0	%100
13	MP1A	X	-3.904	-3.904	0	%100
14	MP1A	Z	-6.762	-6.762	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	-3.904	-3.904	0	%100
18	MP5C	Z	-6.762	-6.762	0	%100
19	MP4C	X	-3.904	-3.904	0	%100
20	MP4C	Z	-6.762	-6.762	0	%100
21	MP3C	X	-3.904	-3.904	0	%100
22	MP3C	Z	-6.762	-6.762	0	%100
23	MP2C	X	-3.904	-3.904	0	%100
24	MP2C	Z	-6.762	-6.762	0	%100
25	MP1C	X	-3.904	-3.904	0	%100
26	MP1C	Z	-6.762	-6.762	0	%100
27	M24	X	-5.137	-5.137	0	%100
28	M24	Z	-8.897	-8.897	0	%100
29	MP5B	X	-3.904	-3.904	0	%100
30	MP5B	Z	-6.762	-6.762	0	%100
31	MP4B	X	-3.904	-3.904	0	%100
32	MP4B	Z	-6.762	-6.762	0	%100
33	MP3B	X	-3.904	-3.904	0	%100
34	MP3B	Z	-6.762	-6.762	0	%100
35	MP2B	X	-3.904	-3.904	0	%100
36	MP2B	Z	-6.762	-6.762	0	%100
37	MP1B	X	-3.904	-3.904	0	%100
38	MP1B	Z	-6.762	-6.762	0	%100
39	M37	X	-6.849	-6.849	0	%100
40	M37	Z	-11.863	-11.863	0	%100
41	M40	X	-1.712	-1.712	0	%100
42	M40	Z	-2.966	-2.966	0	%100
43	M44	X	-3.558	-3.558	0	%100
44	M44	Z	-6.162	-6.162	0	%100
45	M46	X	-3.192	-3.192	0	%100
46	M46	Z	-5.53	-5.53	0	%100
47	M47	X	-982	-982	0	%100
48	M47	Z	-1.7	-1.7	0	%100
49	M48	X	-982	-982	0	%100
50	M48	Z	-1.7	-1.7	0	%100
51	M49	X	-982	-982	0	%100
52	M49	Z	-1.7	-1.7	0	%100
53	M50	X	-982	-982	0	%100
54	M50	Z	-1.7	-1.7	0	%100
55	M51	X	-3.927	-3.927	0	%100
56	M51	Z	-6.802	-6.802	0	%100
57	M52	X	-3.927	-3.927	0	%100
58	M52	Z	-6.802	-6.802	0	%100
59	M53	X	-3.927	-3.927	0	%100
60	M53	Z	-6.802	-6.802	0	%100
61	M54	X	-3.927	-3.927	0	%100
62	M54	Z	-6.802	-6.802	0	%100
63	M55	X	-982	-982	0	%100
64	M55	Z	-1.7	-1.7	0	%100
65	M56	X	-982	-982	0	%100
66	M56	Z	-1.7	-1.7	0	%100
67	M57	X	-982	-982	0	%100
68	M57	Z	-1.7	-1.7	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
69	M58	X	-0.982	-0.982	0	%100
70	M58	Z	-1.7	-1.7	0	%100
71	M59	X	-4.535	-4.535	0	%100
72	M59	Z	-7.855	-7.855	0	%100
73	M60	X	-7.989	-7.989	0	%100
74	M60	Z	-13.838	-13.838	0	%100
75	M61	X	-4.535	-4.535	0	%100
76	M61	Z	-7.855	-7.855	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	-3.68	-3.68	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	0	0	0	%100
6	MP5A	Z	-2.658	-2.658	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	-2.658	-2.658	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	-2.658	-2.658	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	-2.658	-2.658	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	-2.658	-2.658	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	-0.92	-0.92	0	%100
17	MP5C	X	0	0	0	%100
18	MP5C	Z	-2.658	-2.658	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	-2.658	-2.658	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	-2.658	-2.658	0	%100
23	MP2C	X	0	0	0	%100
24	MP2C	Z	-2.658	-2.658	0	%100
25	MP1C	X	0	0	0	%100
26	MP1C	Z	-2.658	-2.658	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-0.92	-0.92	0	%100
29	MP5B	X	0	0	0	%100
30	MP5B	Z	-2.658	-2.658	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	-2.658	-2.658	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	-2.658	-2.658	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	-2.658	-2.658	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	-2.658	-2.658	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	-2.76	-2.76	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	-2.76	-2.76	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	-2.442	-2.442	0	%100
45	M46	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
46	M46	Z	-2.188	-2.188	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	0	0	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	0	0	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	0	0	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	-1.674	-1.674	0	%100
57	M52	X	0	0	0	%100
58	M52	Z	-1.674	-1.674	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	-1.674	-1.674	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	-1.674	-1.674	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	-1.674	-1.674	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	-1.674	-1.674	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	-1.674	-1.674	0	%100
69	M58	X	0	0	0	%100
70	M58	Z	-1.674	-1.674	0	%100
71	M59	X	0	0	0	%100
72	M59	Z	-1.52	-1.52	0	%100
73	M60	X	0	0	0	%100
74	M60	Z	-3.437	-3.437	0	%100
75	M61	X	0	0	0	%100
76	M61	Z	-3.437	-3.437	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	X	1.38	1.38	0	%100
2	M1	Z	-2.39	-2.39	0	%100
3	M2	X	.46	.46	0	%100
4	M2	Z	-.797	-.797	0	%100
5	MP5A	X	1.329	1.329	0	%100
6	MP5A	Z	-2.302	-2.302	0	%100
7	MP4A	X	1.329	1.329	0	%100
8	MP4A	Z	-2.302	-2.302	0	%100
9	MP3A	X	1.329	1.329	0	%100
10	MP3A	Z	-2.302	-2.302	0	%100
11	MP2A	X	1.329	1.329	0	%100
12	MP2A	Z	-2.302	-2.302	0	%100
13	MP1A	X	1.329	1.329	0	%100
14	MP1A	Z	-2.302	-2.302	0	%100
15	M13	X	1.38	1.38	0	%100
16	M13	Z	-2.39	-2.39	0	%100
17	MP5C	X	1.329	1.329	0	%100
18	MP5C	Z	-2.302	-2.302	0	%100
19	MP4C	X	1.329	1.329	0	%100
20	MP4C	Z	-2.302	-2.302	0	%100
21	MP3C	X	1.329	1.329	0	%100
22	MP3C	Z	-2.302	-2.302	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
23	MP2C	X	1.329	1.329	0	%100
24	MP2C	Z	-2.302	-2.302	0	%100
25	MP1C	X	1.329	1.329	0	%100
26	MP1C	Z	-2.302	-2.302	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	1.329	1.329	0	%100
30	MP5B	Z	-2.302	-2.302	0	%100
31	MP4B	X	1.329	1.329	0	%100
32	MP4B	Z	-2.302	-2.302	0	%100
33	MP3B	X	1.329	1.329	0	%100
34	MP3B	Z	-2.302	-2.302	0	%100
35	MP2B	X	1.329	1.329	0	%100
36	MP2B	Z	-2.302	-2.302	0	%100
37	MP1B	X	1.329	1.329	0	%100
38	MP1B	Z	-2.302	-2.302	0	%100
39	M37	X	.46	.46	0	%100
40	M37	Z	-.797	-.797	0	%100
41	M40	X	1.84	1.84	0	%100
42	M40	Z	-3.187	-3.187	0	%100
43	M44	X	1.221	1.221	0	%100
44	M44	Z	-2.115	-2.115	0	%100
45	M46	X	1.094	1.094	0	%100
46	M46	Z	-1.895	-1.895	0	%100
47	M47	X	.279	.279	0	%100
48	M47	Z	-.483	-.483	0	%100
49	M48	X	.279	.279	0	%100
50	M48	Z	-.483	-.483	0	%100
51	M49	X	.279	.279	0	%100
52	M49	Z	-.483	-.483	0	%100
53	M50	X	.279	.279	0	%100
54	M50	Z	-.483	-.483	0	%100
55	M51	X	.279	.279	0	%100
56	M51	Z	-.483	-.483	0	%100
57	M52	X	.279	.279	0	%100
58	M52	Z	-.483	-.483	0	%100
59	M53	X	.279	.279	0	%100
60	M53	Z	-.483	-.483	0	%100
61	M54	X	.279	.279	0	%100
62	M54	Z	-.483	-.483	0	%100
63	M55	X	1.116	1.116	0	%100
64	M55	Z	-1.933	-1.933	0	%100
65	M56	X	1.116	1.116	0	%100
66	M56	Z	-1.933	-1.933	0	%100
67	M57	X	1.116	1.116	0	%100
68	M57	Z	-1.933	-1.933	0	%100
69	M58	X	1.116	1.116	0	%100
70	M58	Z	-1.933	-1.933	0	%100
71	M59	X	1.079	1.079	0	%100
72	M59	Z	-1.87	-1.87	0	%100
73	M60	X	1.079	1.079	0	%100
74	M60	Z	-1.87	-1.87	0	%100
75	M61	X	2.038	2.038	0	%100
76	M61	Z	-3.53	-3.53	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft.	End Magnitude[lb/ft.F.	Start Location[ft.%]	End Location[ft.%]
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Member Distributed Loads (BLC 55 : Structure Wi (60 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
58	M52	Z	0	0	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	1.45	1.45	0	%100
64	M55	Z	-837	-837	0	%100
65	M56	X	1.45	1.45	0	%100
66	M56	Z	-837	-837	0	%100
67	M57	X	1.45	1.45	0	%100
68	M57	Z	-837	-837	0	%100
69	M58	X	1.45	1.45	0	%100
70	M58	Z	-837	-837	0	%100
71	M59	X	2.977	2.977	0	%100
72	M59	Z	-1.719	-1.719	0	%100
73	M60	X	1.316	1.316	0	%100
74	M60	Z	-76	-76	0	%100
75	M61	X	2.977	2.977	0	%100
76	M61	Z	-1.719	-1.719	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	3.68	3.68	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	2.658	2.658	0	%100
6	MP5A	Z	0	0	0	%100
7	MP4A	X	2.658	2.658	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	2.658	2.658	0	%100
10	MP3A	Z	0	0	0	%100
11	MP2A	X	2.658	2.658	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	2.658	2.658	0	%100
14	MP1A	Z	0	0	0	%100
15	M13	X	2.76	2.76	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	2.658	2.658	0	%100
18	MP5C	Z	0	0	0	%100
19	MP4C	X	2.658	2.658	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	2.658	2.658	0	%100
22	MP3C	Z	0	0	0	%100
23	MP2C	X	2.658	2.658	0	%100
24	MP2C	Z	0	0	0	%100
25	MP1C	X	2.658	2.658	0	%100
26	MP1C	Z	0	0	0	%100
27	M24	X	2.76	2.76	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	2.658	2.658	0	%100
30	MP5B	Z	0	0	0	%100
31	MP4B	X	2.658	2.658	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	2.658	2.658	0	%100
34	MP3B	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
35	MP2B	X	2.658	2.658	0	%100
36	MP2B	Z	0	0	0	%100
37	MP1B	X	2.658	2.658	0	%100
38	MP1B	Z	0	0	0	%100
39	M37	X	.92	.92	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	.92	.92	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	2.442	2.442	0	%100
44	M44	Z	0	0	0	%100
45	M46	X	2.188	2.188	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	2.232	2.232	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	2.232	2.232	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	2.232	2.232	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	2.232	2.232	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	.558	.558	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	.558	.558	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	.558	.558	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	.558	.558	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	.558	.558	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	.558	.558	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	.558	.558	0	%100
68	M57	Z	0	0	0	%100
69	M58	X	.558	.558	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	4.076	4.076	0	%100
72	M59	Z	0	0	0	%100
73	M60	X	2.159	2.159	0	%100
74	M60	Z	0	0	0	%100
75	M61	X	2.159	2.159	0	%100
76	M61	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.797	.797	0	%100
2	M1	Z	.46	.46	0	%100
3	M2	X	2.39	2.39	0	%100
4	M2	Z	1.38	1.38	0	%100
5	MP5A	X	2.302	2.302	0	%100
6	MP5A	Z	1.329	1.329	0	%100
7	MP4A	X	2.302	2.302	0	%100
8	MP4A	Z	1.329	1.329	0	%100
9	MP3A	X	2.302	2.302	0	%100
10	MP3A	Z	1.329	1.329	0	%100
11	MP2A	X	2.302	2.302	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F....]	Start Location[ft.%]	End Location[ft.%]
12	MP2A	Z	1.329	1.329	0	%100
13	MP1A	X	2.302	2.302	0	%100
14	MP1A	Z	1.329	1.329	0	%100
15	M13	X	.797	.797	0	%100
16	M13	Z	.46	.46	0	%100
17	MP5C	X	2.302	2.302	0	%100
18	MP5C	Z	1.329	1.329	0	%100
19	MP4C	X	2.302	2.302	0	%100
20	MP4C	Z	1.329	1.329	0	%100
21	MP3C	X	2.302	2.302	0	%100
22	MP3C	Z	1.329	1.329	0	%100
23	MP2C	X	2.302	2.302	0	%100
24	MP2C	Z	1.329	1.329	0	%100
25	MP1C	X	2.302	2.302	0	%100
26	MP1C	Z	1.329	1.329	0	%100
27	M24	X	3.187	3.187	0	%100
28	M24	Z	1.84	1.84	0	%100
29	MP5B	X	2.302	2.302	0	%100
30	MP5B	Z	1.329	1.329	0	%100
31	MP4B	X	2.302	2.302	0	%100
32	MP4B	Z	1.329	1.329	0	%100
33	MP3B	X	2.302	2.302	0	%100
34	MP3B	Z	1.329	1.329	0	%100
35	MP2B	X	2.302	2.302	0	%100
36	MP2B	Z	1.329	1.329	0	%100
37	MP1B	X	2.302	2.302	0	%100
38	MP1B	Z	1.329	1.329	0	%100
39	M37	X	2.39	2.39	0	%100
40	M37	Z	1.38	1.38	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	2.115	2.115	0	%100
44	M44	Z	1.221	1.221	0	%100
45	M46	X	1.895	1.895	0	%100
46	M46	Z	1.094	1.094	0	%100
47	M47	X	1.45	1.45	0	%100
48	M47	Z	.837	.837	0	%100
49	M48	X	1.45	1.45	0	%100
50	M48	Z	.837	.837	0	%100
51	M49	X	1.45	1.45	0	%100
52	M49	Z	.837	.837	0	%100
53	M50	X	1.45	1.45	0	%100
54	M50	Z	.837	.837	0	%100
55	M51	X	1.45	1.45	0	%100
56	M51	Z	.837	.837	0	%100
57	M52	X	1.45	1.45	0	%100
58	M52	Z	.837	.837	0	%100
59	M53	X	1.45	1.45	0	%100
60	M53	Z	.837	.837	0	%100
61	M54	X	1.45	1.45	0	%100
62	M54	Z	.837	.837	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
69	M58	X	0	0	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	2.977	2.977	0	%100
72	M59	Z	1.719	1.719	0	%100
73	M60	X	2.977	2.977	0	%100
74	M60	Z	1.719	1.719	0	%100
75	M61	X	1.316	1.316	0	%100
76	M61	Z	.76	.76	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	1.38	1.38	0	%100
2	M1	Z	2.39	2.39	0	%100
3	M2	X	.46	.46	0	%100
4	M2	Z	.797	.797	0	%100
5	MP5A	X	1.329	1.329	0	%100
6	MP5A	Z	2.302	2.302	0	%100
7	MP4A	X	1.329	1.329	0	%100
8	MP4A	Z	2.302	2.302	0	%100
9	MP3A	X	1.329	1.329	0	%100
10	MP3A	Z	2.302	2.302	0	%100
11	MP2A	X	1.329	1.329	0	%100
12	MP2A	Z	2.302	2.302	0	%100
13	MP1A	X	1.329	1.329	0	%100
14	MP1A	Z	2.302	2.302	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	1.329	1.329	0	%100
18	MP5C	Z	2.302	2.302	0	%100
19	MP4C	X	1.329	1.329	0	%100
20	MP4C	Z	2.302	2.302	0	%100
21	MP3C	X	1.329	1.329	0	%100
22	MP3C	Z	2.302	2.302	0	%100
23	MP2C	X	1.329	1.329	0	%100
24	MP2C	Z	2.302	2.302	0	%100
25	MP1C	X	1.329	1.329	0	%100
26	MP1C	Z	2.302	2.302	0	%100
27	M24	X	1.38	1.38	0	%100
28	M24	Z	2.39	2.39	0	%100
29	MP5B	X	1.329	1.329	0	%100
30	MP5B	Z	2.302	2.302	0	%100
31	MP4B	X	1.329	1.329	0	%100
32	MP4B	Z	2.302	2.302	0	%100
33	MP3B	X	1.329	1.329	0	%100
34	MP3B	Z	2.302	2.302	0	%100
35	MP2B	X	1.329	1.329	0	%100
36	MP2B	Z	2.302	2.302	0	%100
37	MP1B	X	1.329	1.329	0	%100
38	MP1B	Z	2.302	2.302	0	%100
39	M37	X	1.84	1.84	0	%100
40	M37	Z	3.187	3.187	0	%100
41	M40	X	.46	.46	0	%100
42	M40	Z	.797	.797	0	%100
43	M44	X	1.221	1.221	0	%100
44	M44	Z	2.115	2.115	0	%100
45	M46	X	1.094	1.094	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
46	M46	Z	1.895	1.895	0	%100
47	M47	X	.279	.279	0	%100
48	M47	Z	.483	.483	0	%100
49	M48	X	.279	.279	0	%100
50	M48	Z	.483	.483	0	%100
51	M49	X	.279	.279	0	%100
52	M49	Z	.483	.483	0	%100
53	M50	X	.279	.279	0	%100
54	M50	Z	.483	.483	0	%100
55	M51	X	1.116	1.116	0	%100
56	M51	Z	1.933	1.933	0	%100
57	M52	X	1.116	1.116	0	%100
58	M52	Z	1.933	1.933	0	%100
59	M53	X	1.116	1.116	0	%100
60	M53	Z	1.933	1.933	0	%100
61	M54	X	1.116	1.116	0	%100
62	M54	Z	1.933	1.933	0	%100
63	M55	X	.279	.279	0	%100
64	M55	Z	.483	.483	0	%100
65	M56	X	.279	.279	0	%100
66	M56	Z	.483	.483	0	%100
67	M57	X	.279	.279	0	%100
68	M57	Z	.483	.483	0	%100
69	M58	X	.279	.279	0	%100
70	M58	Z	.483	.483	0	%100
71	M59	X	1.079	1.079	0	%100
72	M59	Z	1.87	1.87	0	%100
73	M60	X	2.038	2.038	0	%100
74	M60	Z	3.53	3.53	0	%100
75	M61	X	1.079	1.079	0	%100
76	M61	Z	1.87	1.87	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	3.68	3.68	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	0	0	0	%100
6	MP5A	Z	2.658	2.658	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	2.658	2.658	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	2.658	2.658	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	2.658	2.658	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	2.658	2.658	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	.92	.92	0	%100
17	MP5C	X	0	0	0	%100
18	MP5C	Z	2.658	2.658	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	2.658	2.658	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	2.658	2.658	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.]	Start Location[ft.%]	End Location[ft.%]
23	MP2C	X	0	0	%100
24	MP2C	Z	2.658	2.658	%100
25	MP1C	X	0	0	%100
26	MP1C	Z	2.658	2.658	%100
27	M24	X	0	0	%100
28	M24	Z	.92	.92	%100
29	MP5B	X	0	0	%100
30	MP5B	Z	2.658	2.658	%100
31	MP4B	X	0	0	%100
32	MP4B	Z	2.658	2.658	%100
33	MP3B	X	0	0	%100
34	MP3B	Z	2.658	2.658	%100
35	MP2B	X	0	0	%100
36	MP2B	Z	2.658	2.658	%100
37	MP1B	X	0	0	%100
38	MP1B	Z	2.658	2.658	%100
39	M37	X	0	0	%100
40	M37	Z	2.76	2.76	%100
41	M40	X	0	0	%100
42	M40	Z	2.76	2.76	%100
43	M44	X	0	0	%100
44	M44	Z	2.442	2.442	%100
45	M46	X	0	0	%100
46	M46	Z	2.188	2.188	%100
47	M47	X	0	0	%100
48	M47	Z	0	0	%100
49	M48	X	0	0	%100
50	M48	Z	0	0	%100
51	M49	X	0	0	%100
52	M49	Z	0	0	%100
53	M50	X	0	0	%100
54	M50	Z	0	0	%100
55	M51	X	0	0	%100
56	M51	Z	1.674	1.674	%100
57	M52	X	0	0	%100
58	M52	Z	1.674	1.674	%100
59	M53	X	0	0	%100
60	M53	Z	1.674	1.674	%100
61	M54	X	0	0	%100
62	M54	Z	1.674	1.674	%100
63	M55	X	0	0	%100
64	M55	Z	1.674	1.674	%100
65	M56	X	0	0	%100
66	M56	Z	1.674	1.674	%100
67	M57	X	0	0	%100
68	M57	Z	1.674	1.674	%100
69	M58	X	0	0	%100
70	M58	Z	1.674	1.674	%100
71	M59	X	0	0	%100
72	M59	Z	1.52	1.52	%100
73	M60	X	0	0	%100
74	M60	Z	3.437	3.437	%100
75	M61	X	0	0	%100
76	M61	Z	3.437	3.437	%100

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



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-1.38	-1.38	0	%100
2	M1	Z	2.39	2.39	0	%100
3	M2	X	-.46	-.46	0	%100
4	M2	Z	.797	.797	0	%100
5	MP5A	X	-1.329	-1.329	0	%100
6	MP5A	Z	2.302	2.302	0	%100
7	MP4A	X	-1.329	-1.329	0	%100
8	MP4A	Z	2.302	2.302	0	%100
9	MP3A	X	-1.329	-1.329	0	%100
10	MP3A	Z	2.302	2.302	0	%100
11	MP2A	X	-1.329	-1.329	0	%100
12	MP2A	Z	2.302	2.302	0	%100
13	MP1A	X	-1.329	-1.329	0	%100
14	MP1A	Z	2.302	2.302	0	%100
15	M13	X	-1.38	-1.38	0	%100
16	M13	Z	2.39	2.39	0	%100
17	MP5C	X	-1.329	-1.329	0	%100
18	MP5C	Z	2.302	2.302	0	%100
19	MP4C	X	-1.329	-1.329	0	%100
20	MP4C	Z	2.302	2.302	0	%100
21	MP3C	X	-1.329	-1.329	0	%100
22	MP3C	Z	2.302	2.302	0	%100
23	MP2C	X	-1.329	-1.329	0	%100
24	MP2C	Z	2.302	2.302	0	%100
25	MP1C	X	-1.329	-1.329	0	%100
26	MP1C	Z	2.302	2.302	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	-1.329	-1.329	0	%100
30	MP5B	Z	2.302	2.302	0	%100
31	MP4B	X	-1.329	-1.329	0	%100
32	MP4B	Z	2.302	2.302	0	%100
33	MP3B	X	-1.329	-1.329	0	%100
34	MP3B	Z	2.302	2.302	0	%100
35	MP2B	X	-1.329	-1.329	0	%100
36	MP2B	Z	2.302	2.302	0	%100
37	MP1B	X	-1.329	-1.329	0	%100
38	MP1B	Z	2.302	2.302	0	%100
39	M37	X	-.46	-.46	0	%100
40	M37	Z	.797	.797	0	%100
41	M40	X	-1.84	-1.84	0	%100
42	M40	Z	3.187	3.187	0	%100
43	M44	X	-1.221	-1.221	0	%100
44	M44	Z	2.115	2.115	0	%100
45	M46	X	-1.094	-1.094	0	%100
46	M46	Z	1.895	1.895	0	%100
47	M47	X	-.279	-.279	0	%100
48	M47	Z	.483	.483	0	%100
49	M48	X	-.279	-.279	0	%100
50	M48	Z	.483	.483	0	%100
51	M49	X	-.279	-.279	0	%100
52	M49	Z	.483	.483	0	%100
53	M50	X	-.279	-.279	0	%100
54	M50	Z	.483	.483	0	%100
55	M51	X	-.279	-.279	0	%100
56	M51	Z	.483	.483	0	%100
57	M52	X	-.279	-.279	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
58	M52	Z	.483	.483	0	%100
59	M53	X	-.279	-.279	0	%100
60	M53	Z	.483	.483	0	%100
61	M54	X	-.279	-.279	0	%100
62	M54	Z	.483	.483	0	%100
63	M55	X	-1.116	-1.116	0	%100
64	M55	Z	1.933	1.933	0	%100
65	M56	X	-1.116	-1.116	0	%100
66	M56	Z	1.933	1.933	0	%100
67	M57	X	-1.116	-1.116	0	%100
68	M57	Z	1.933	1.933	0	%100
69	M58	X	-1.116	-1.116	0	%100
70	M58	Z	1.933	1.933	0	%100
71	M59	X	-1.079	-1.079	0	%100
72	M59	Z	1.87	1.87	0	%100
73	M60	X	-1.079	-1.079	0	%100
74	M60	Z	1.87	1.87	0	%100
75	M61	X	-2.038	-2.038	0	%100
76	M61	Z	3.53	3.53	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-.797	-.797	0	%100
2	M1	Z	.46	.46	0	%100
3	M2	X	-2.39	-2.39	0	%100
4	M2	Z	1.38	1.38	0	%100
5	MP5A	X	-2.302	-2.302	0	%100
6	MP5A	Z	1.329	1.329	0	%100
7	MP4A	X	-2.302	-2.302	0	%100
8	MP4A	Z	1.329	1.329	0	%100
9	MP3A	X	-2.302	-2.302	0	%100
10	MP3A	Z	1.329	1.329	0	%100
11	MP2A	X	-2.302	-2.302	0	%100
12	MP2A	Z	1.329	1.329	0	%100
13	MP1A	X	-2.302	-2.302	0	%100
14	MP1A	Z	1.329	1.329	0	%100
15	M13	X	-3.187	-3.187	0	%100
16	M13	Z	1.84	1.84	0	%100
17	MP5C	X	-2.302	-2.302	0	%100
18	MP5C	Z	1.329	1.329	0	%100
19	MP4C	X	-2.302	-2.302	0	%100
20	MP4C	Z	1.329	1.329	0	%100
21	MP3C	X	-2.302	-2.302	0	%100
22	MP3C	Z	1.329	1.329	0	%100
23	MP2C	X	-2.302	-2.302	0	%100
24	MP2C	Z	1.329	1.329	0	%100
25	MP1C	X	-2.302	-2.302	0	%100
26	MP1C	Z	1.329	1.329	0	%100
27	M24	X	-.797	-.797	0	%100
28	M24	Z	.46	.46	0	%100
29	MP5B	X	-2.302	-2.302	0	%100
30	MP5B	Z	1.329	1.329	0	%100
31	MP4B	X	-2.302	-2.302	0	%100
32	MP4B	Z	1.329	1.329	0	%100
33	MP3B	X	-2.302	-2.302	0	%100
34	MP3B	Z	1.329	1.329	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
35	MP2B	X	-2.302	-2.302	0	%100
36	MP2B	Z	1.329	1.329	0	%100
37	MP1B	X	-2.302	-2.302	0	%100
38	MP1B	Z	1.329	1.329	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	-2.39	-2.39	0	%100
42	M40	Z	1.38	1.38	0	%100
43	M44	X	-2.115	-2.115	0	%100
44	M44	Z	1.221	1.221	0	%100
45	M46	X	-1.895	-1.895	0	%100
46	M46	Z	1.094	1.094	0	%100
47	M47	X	-1.45	-1.45	0	%100
48	M47	Z	.837	.837	0	%100
49	M48	X	-1.45	-1.45	0	%100
50	M48	Z	.837	.837	0	%100
51	M49	X	-1.45	-1.45	0	%100
52	M49	Z	.837	.837	0	%100
53	M50	X	-1.45	-1.45	0	%100
54	M50	Z	.837	.837	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	0	0	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	-1.45	-1.45	0	%100
64	M55	Z	.837	.837	0	%100
65	M56	X	-1.45	-1.45	0	%100
66	M56	Z	.837	.837	0	%100
67	M57	X	-1.45	-1.45	0	%100
68	M57	Z	.837	.837	0	%100
69	M58	X	-1.45	-1.45	0	%100
70	M58	Z	.837	.837	0	%100
71	M59	X	-2.977	-2.977	0	%100
72	M59	Z	1.719	1.719	0	%100
73	M60	X	-1.316	-1.316	0	%100
74	M60	Z	.76	.76	0	%100
75	M61	X	-2.977	-2.977	0	%100
76	M61	Z	1.719	1.719	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-3.68	-3.68	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	-2.658	-2.658	0	%100
6	MP5A	Z	0	0	0	%100
7	MP4A	X	-2.658	-2.658	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	-2.658	-2.658	0	%100
10	MP3A	Z	0	0	0	%100
11	MP2A	X	-2.658	-2.658	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft.]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
12	MP2A	Z	0	0	0	%100
13	MP1A	X	-2.658	-2.658	0	%100
14	MP1A	Z	0	0	0	%100
15	M13	X	-2.76	-2.76	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	-2.658	-2.658	0	%100
18	MP5C	Z	0	0	0	%100
19	MP4C	X	-2.658	-2.658	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	-2.658	-2.658	0	%100
22	MP3C	Z	0	0	0	%100
23	MP2C	X	-2.658	-2.658	0	%100
24	MP2C	Z	0	0	0	%100
25	MP1C	X	-2.658	-2.658	0	%100
26	MP1C	Z	0	0	0	%100
27	M24	X	-2.76	-2.76	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	-2.658	-2.658	0	%100
30	MP5B	Z	0	0	0	%100
31	MP4B	X	-2.658	-2.658	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	-2.658	-2.658	0	%100
34	MP3B	Z	0	0	0	%100
36	MP2B	X	-2.658	-2.658	0	%100
36	MP2B	Z	0	0	0	%100
37	MP1B	X	-2.658	-2.658	0	%100
38	MP1B	Z	0	0	0	%100
39	M37	X	-.92	-.92	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	-.92	-.92	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	-2.442	-2.442	0	%100
44	M44	Z	0	0	0	%100
45	M46	X	-2.188	-2.188	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	-2.232	-2.232	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	-2.232	-2.232	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	-2.232	-2.232	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	-2.232	-2.232	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	-.558	-.558	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	-.558	-.558	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	.558	-.558	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	-.558	-.558	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	-.558	-.558	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	-.558	-.558	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	-.558	-.558	0	%100
68	M57	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
69	M58	X	-558	-558	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	-4.076	-4.076	0	%100
72	M59	Z	0	0	0	%100
73	M60	X	-2.159	-2.159	0	%100
74	M60	Z	0	0	0	%100
75	M61	X	-2.159	-2.159	0	%100
76	M61	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-797	-797	0	%100
2	M1	Z	-46	-46	0	%100
3	M2	X	-2.39	-2.39	0	%100
4	M2	Z	-1.38	-1.38	0	%100
5	MP5A	X	-2.302	-2.302	0	%100
6	MP5A	Z	-1.329	-1.329	0	%100
7	MP4A	X	-2.302	-2.302	0	%100
8	MP4A	Z	-1.329	-1.329	0	%100
9	MP3A	X	-2.302	-2.302	0	%100
10	MP3A	Z	-1.329	-1.329	0	%100
11	MP2A	X	-2.302	-2.302	0	%100
12	MP2A	Z	-1.329	-1.329	0	%100
13	MP1A	X	-2.302	-2.302	0	%100
14	MP1A	Z	-1.329	-1.329	0	%100
15	M13	X	-797	-797	0	%100
16	M13	Z	-46	-46	0	%100
17	MP5C	X	-2.302	-2.302	0	%100
18	MP5C	Z	-1.329	-1.329	0	%100
19	MP4C	X	-2.302	-2.302	0	%100
20	MP4C	Z	-1.329	-1.329	0	%100
21	MP3C	X	-2.302	-2.302	0	%100
22	MP3C	Z	-1.329	-1.329	0	%100
23	MP2C	X	-2.302	-2.302	0	%100
24	MP2C	Z	-1.329	-1.329	0	%100
25	MP1C	X	-2.302	-2.302	0	%100
26	MP1C	Z	-1.329	-1.329	0	%100
27	M24	X	-3.187	-3.187	0	%100
28	M24	Z	-1.84	-1.84	0	%100
29	MP5B	X	-2.302	-2.302	0	%100
30	MP5B	Z	-1.329	-1.329	0	%100
31	MP4B	X	-2.302	-2.302	0	%100
32	MP4B	Z	-1.329	-1.329	0	%100
33	MP3B	X	-2.302	-2.302	0	%100
34	MP3B	Z	-1.329	-1.329	0	%100
35	MP2B	X	-2.302	-2.302	0	%100
36	MP2B	Z	-1.329	-1.329	0	%100
37	MP1B	X	-2.302	-2.302	0	%100
38	MP1B	Z	-1.329	-1.329	0	%100
39	M37	X	-2.39	-2.39	0	%100
40	M37	Z	-1.38	-1.38	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	-2.115	-2.115	0	%100
44	M44	Z	-1.221	-1.221	0	%100
45	M46	X	-1.895	-1.895	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
46	M46	Z	-1.094	-1.094	0	%100
47	M47	X	-1.45	-1.45	0	%100
48	M47	Z	-.837	-.837	0	%100
49	M48	X	-1.45	-1.45	0	%100
50	M48	Z	-.837	-.837	0	%100
51	M49	X	-1.45	-1.45	0	%100
52	M49	Z	-.837	-.837	0	%100
53	M50	X	-1.45	-1.45	0	%100
54	M50	Z	-.837	-.837	0	%100
55	M51	X	-1.45	-1.45	0	%100
56	M51	Z	-.837	-.837	0	%100
57	M52	X	-1.45	-1.45	0	%100
58	M52	Z	-.837	-.837	0	%100
59	M53	X	-1.45	-1.45	0	%100
60	M53	Z	-.837	-.837	0	%100
61	M54	X	-1.45	-1.45	0	%100
62	M54	Z	-.837	-.837	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	0	0	0	%100
69	M58	X	0	0	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	-2.977	-2.977	0	%100
72	M59	Z	-1.719	-1.719	0	%100
73	M60	X	-2.977	-2.977	0	%100
74	M60	Z	-1.719	-1.719	0	%100
75	M61	X	-1.316	-1.316	0	%100
76	M61	Z	-.76	-.76	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-1.38	-1.38	0	%100
2	M1	Z	-2.39	-2.39	0	%100
3	M2	X	-.46	-.46	0	%100
4	M2	Z	-.797	-.797	0	%100
5	MP5A	X	-1.329	-1.329	0	%100
6	MP5A	Z	-2.302	-2.302	0	%100
7	MP4A	X	-1.329	-1.329	0	%100
8	MP4A	Z	-2.302	-2.302	0	%100
9	MP3A	X	-1.329	-1.329	0	%100
10	MP3A	Z	-2.302	-2.302	0	%100
11	MP2A	X	-1.329	-1.329	0	%100
12	MP2A	Z	-2.302	-2.302	0	%100
13	MP1A	X	-1.329	-1.329	0	%100
14	MP1A	Z	-2.302	-2.302	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	-1.329	-1.329	0	%100
18	MP5C	Z	-2.302	-2.302	0	%100
19	MP4C	X	-1.329	-1.329	0	%100
20	MP4C	Z	-2.302	-2.302	0	%100
21	MP3C	X	-1.329	-1.329	0	%100
22	MP3C	Z	-2.302	-2.302	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location(ft.%)	End Location(ft.%)
23	MP2C	X	-1.329	-1.329	0	%100
24	MP2C	Z	-2.302	-2.302	0	%100
25	MP1C	X	-1.329	-1.329	0	%100
26	MP1C	Z	-2.302	-2.302	0	%100
27	M24	X	-1.38	-1.38	0	%100
28	M24	Z	-2.39	-2.39	0	%100
29	MP5B	X	-1.329	-1.329	0	%100
30	MP5B	Z	-2.302	-2.302	0	%100
31	MP4B	X	-1.329	-1.329	0	%100
32	MP4B	Z	-2.302	-2.302	0	%100
33	MP3B	X	-1.329	-1.329	0	%100
34	MP3B	Z	-2.302	-2.302	0	%100
35	MP2B	X	-1.329	-1.329	0	%100
36	MP2B	Z	-2.302	-2.302	0	%100
37	MP1B	X	-1.329	-1.329	0	%100
38	MP1B	Z	-2.302	-2.302	0	%100
39	M37	X	-1.84	-1.84	0	%100
40	M37	Z	-3.187	-3.187	0	%100
41	M40	X	-.46	-.46	0	%100
42	M40	Z	-.797	-.797	0	%100
43	M44	X	-1.221	-1.221	0	%100
44	M44	Z	-2.115	-2.115	0	%100
45	M46	X	-1.094	-1.094	0	%100
46	M46	Z	-1.895	-1.895	0	%100
47	M47	X	-.279	-.279	0	%100
48	M47	Z	-.483	-.483	0	%100
49	M48	X	-.279	-.279	0	%100
50	M48	Z	-.483	-.483	0	%100
51	M49	X	-.279	-.279	0	%100
52	M49	Z	-.483	-.483	0	%100
53	M50	X	-.279	-.279	0	%100
54	M50	Z	-.483	-.483	0	%100
55	M51	X	-1.116	-1.116	0	%100
56	M51	Z	-1.933	-1.933	0	%100
57	M52	X	-1.116	-1.116	0	%100
58	M52	Z	-1.933	-1.933	0	%100
59	M53	X	-1.116	-1.116	0	%100
60	M53	Z	-1.933	-1.933	0	%100
61	M54	X	-1.116	-1.116	0	%100
62	M54	Z	-1.933	-1.933	0	%100
63	M55	X	-.279	-.279	0	%100
64	M55	Z	-.483	-.483	0	%100
65	M56	X	-.279	-.279	0	%100
66	M56	Z	-.483	-.483	0	%100
67	M57	X	-.279	-.279	0	%100
68	M57	Z	-.483	-.483	0	%100
69	M58	X	-.279	-.279	0	%100
70	M58	Z	-.483	-.483	0	%100
71	M59	X	-1.079	-1.079	0	%100
72	M59	Z	-1.87	-1.87	0	%100
73	M60	X	-2.038	-2.038	0	%100
74	M60	Z	-3.53	-3.53	0	%100
75	M61	X	-1.079	-1.079	0	%100
76	M61	Z	-1.87	-1.87	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location(ft.%)	End Location(ft.%)
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Member Distributed Loads (BLC 65 : Structure Wm (0 Deg)) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	-.856	-.856	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	0	0	0	%100
6	MP5A	Z	-.488	-.488	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	-.488	-.488	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	-.488	-.488	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	-.488	-.488	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	-.488	-.488	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	-.214	-.214	0	%100
17	MP5C	X	0	0	0	%100
18	MP5C	Z	-.488	-.488	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	-.488	-.488	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	-.488	-.488	0	%100
23	MP2C	X	0	0	0	%100
24	MP2C	Z	-.488	-.488	0	%100
25	MP1C	X	0	0	0	%100
26	MP1C	Z	-.488	-.488	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	-.214	-.214	0	%100
29	MP5B	X	0	0	0	%100
30	MP5B	Z	-.488	-.488	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	-.488	-.488	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	-.488	-.488	0	%100
35	MP2B	X	0	0	0	%100
36	MP2B	Z	-.488	-.488	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	-.488	-.488	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	-.642	-.642	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	-.642	-.642	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	-.445	-.445	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	-.399	-.399	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	0	0	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	0	0	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	0	0	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	-.368	-.368	0	%100
57	M52	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
58	M52	Z	-.368	-.368	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	-.368	-.368	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	-.368	-.368	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	-.368	-.368	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	-.368	-.368	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	-.368	-.368	0	%100
69	M58	X	0	0	0	%100
70	M58	Z	-.368	-.368	0	%100
71	M59	X	0	0	0	%100
72	M59	Z	-.423	-.423	0	%100
73	M60	X	0	0	0	%100
74	M60	Z	-.855	-.855	0	%100
75	M61	X	0	0	0	%100
76	M61	Z	-.855	-.855	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.321	.321	0	%100
2	M1	Z	-.556	-.556	0	%100
3	M2	X	.107	.107	0	%100
4	M2	Z	-.185	-.185	0	%100
5	MP5A	X	.244	.244	0	%100
6	MP5A	Z	-.423	-.423	0	%100
7	MP4A	X	.244	.244	0	%100
8	MP4A	Z	-.423	-.423	0	%100
9	MP3A	X	.244	.244	0	%100
10	MP3A	Z	-.423	-.423	0	%100
11	MP2A	X	.244	.244	0	%100
12	MP2A	Z	-.423	-.423	0	%100
13	MP1A	X	.244	.244	0	%100
14	MP1A	Z	-.423	-.423	0	%100
15	M13	X	.321	.321	0	%100
16	M13	Z	-.556	-.556	0	%100
17	MP5C	X	.244	.244	0	%100
18	MP5C	Z	-.423	-.423	0	%100
19	MP4C	X	.244	.244	0	%100
20	MP4C	Z	-.423	-.423	0	%100
21	MP3C	X	.244	.244	0	%100
22	MP3C	Z	-.423	-.423	0	%100
23	MP2C	X	.244	.244	0	%100
24	MP2C	Z	-.423	-.423	0	%100
25	MP1C	X	.244	.244	0	%100
26	MP1C	Z	-.423	-.423	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	.244	.244	0	%100
30	MP5B	Z	-.423	-.423	0	%100
31	MP4B	X	.244	.244	0	%100
32	MP4B	Z	-.423	-.423	0	%100
33	MP3B	X	.244	.244	0	%100
34	MP3B	Z	-.423	-.423	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
35	MP2B	X	.244	.244	0	%100
36	MP2B	Z	-.423	-.423	0	%100
37	MP1B	X	.244	.244	0	%100
38	MP1B	Z	-.423	-.423	0	%100
39	M37	X	.107	.107	0	%100
40	M37	Z	-.185	-.185	0	%100
41	M40	X	.428	.428	0	%100
42	M40	Z	-.741	-.741	0	%100
43	M44	X	.222	.222	0	%100
44	M44	Z	-.385	-.385	0	%100
45	M46	X	.2	.2	0	%100
46	M46	Z	-.346	-.346	0	%100
47	M47	X	.061	.061	0	%100
48	M47	Z	-.106	-.106	0	%100
49	M48	X	.061	.061	0	%100
50	M48	Z	-.106	-.106	0	%100
51	M49	X	.061	.061	0	%100
52	M49	Z	-.106	-.106	0	%100
53	M50	X	.061	.061	0	%100
54	M50	Z	-.106	-.106	0	%100
55	M51	X	.061	.061	0	%100
56	M51	Z	-.106	-.106	0	%100
57	M52	X	.061	.061	0	%100
58	M52	Z	-.106	-.106	0	%100
59	M53	X	.061	.061	0	%100
60	M53	Z	-.106	-.106	0	%100
61	M54	X	.061	.061	0	%100
62	M54	Z	-.106	-.106	0	%100
63	M55	X	.245	.245	0	%100
64	M55	Z	-.425	-.425	0	%100
65	M56	X	.245	.245	0	%100
66	M56	Z	-.425	-.425	0	%100
67	M57	X	.245	.245	0	%100
68	M57	Z	-.425	-.425	0	%100
69	M58	X	.245	.245	0	%100
70	M58	Z	-.425	-.425	0	%100
71	M59	X	.283	.283	0	%100
72	M59	Z	-.491	-.491	0	%100
73	M60	X	.283	.283	0	%100
74	M60	Z	-.491	-.491	0	%100
75	M61	X	.499	.499	0	%100
76	M61	Z	-.865	-.865	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.185	.185	0	%100
2	M1	Z	-.107	-.107	0	%100
3	M2	X	.556	.556	0	%100
4	M2	Z	-.321	-.321	0	%100
5	MP5A	X	.423	.423	0	%100
6	MP5A	Z	-.244	-.244	0	%100
7	MP4A	X	.423	.423	0	%100
8	MP4A	Z	-.244	-.244	0	%100
9	MP3A	X	.423	.423	0	%100
10	MP3A	Z	-.244	-.244	0	%100
11	MP2A	X	.423	.423	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
12	MP2A	Z	-.244	-.244	0	%100
13	MP1A	X	.423	.423	0	%100
14	MP1A	Z	-.244	-.244	0	%100
15	M13	X	.741	.741	0	%100
16	M13	Z	-.428	-.428	0	%100
17	MP5C	X	.423	.423	0	%100
18	MP5C	Z	-.244	-.244	0	%100
19	MP4C	X	.423	.423	0	%100
20	MP4C	Z	-.244	-.244	0	%100
21	MP3C	X	.423	.423	0	%100
22	MP3C	Z	-.244	-.244	0	%100
23	MP2C	X	.423	.423	0	%100
24	MP2C	Z	-.244	-.244	0	%100
25	MP1C	X	.423	.423	0	%100
26	MP1C	Z	-.244	-.244	0	%100
27	M24	X	.185	.185	0	%100
28	M24	Z	-.107	-.107	0	%100
29	MP5B	X	.423	.423	0	%100
30	MP5B	Z	-.244	-.244	0	%100
31	MP4B	X	.423	.423	0	%100
32	MP4B	Z	-.244	-.244	0	%100
33	MP3B	X	.423	.423	0	%100
34	MP3B	Z	-.244	-.244	0	%100
35	MP2B	X	.423	.423	0	%100
36	MP2B	Z	-.244	-.244	0	%100
37	MP1B	X	.423	.423	0	%100
38	MP1B	Z	-.244	-.244	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	.556	.556	0	%100
42	M40	Z	-.321	-.321	0	%100
43	M44	X	.385	.385	0	%100
44	M44	Z	-.222	-.222	0	%100
45	M46	X	.346	.346	0	%100
46	M46	Z	-.2	-.2	0	%100
47	M47	X	.319	.319	0	%100
48	M47	Z	-.184	-.184	0	%100
49	M48	X	.319	.319	0	%100
50	M48	Z	-.184	-.184	0	%100
51	M49	X	.319	.319	0	%100
52	M49	Z	-.184	-.184	0	%100
53	M50	X	.319	.319	0	%100
54	M50	Z	-.184	-.184	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	0	0	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	.319	.319	0	%100
64	M55	Z	-.184	-.184	0	%100
65	M56	X	.319	.319	0	%100
66	M56	Z	-.184	-.184	0	%100
67	M57	X	.319	.319	0	%100
68	M57	Z	-.184	-.184	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
69	M58	X	.319	.319	0	%100
70	M58	Z	-.184	-.184	0	%100
71	M59	X	.74	.74	0	%100
72	M59	Z	-.427	-.427	0	%100
73	M60	X	.366	.366	0	%100
74	M60	Z	-.211	-.211	0	%100
75	M61	X	.74	.74	0	%100
76	M61	Z	-.427	-.427	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	.856	.856	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	.488	.488	0	%100
6	MP5A	Z	0	0	0	%100
7	MP4A	X	.488	.488	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	.488	.488	0	%100
10	MP3A	Z	0	0	0	%100
11	MP2A	X	.488	.488	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	.488	.488	0	%100
14	MP1A	Z	0	0	0	%100
15	M13	X	.642	.642	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	.488	.488	0	%100
18	MP5C	Z	0	0	0	%100
19	MP4C	X	.488	.488	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	.488	.488	0	%100
22	MP3C	Z	0	0	0	%100
23	MP2C	X	.488	.488	0	%100
24	MP2C	Z	0	0	0	%100
25	MP1C	X	.488	.488	0	%100
26	MP1C	Z	0	0	0	%100
27	M24	X	.642	.642	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	.488	.488	0	%100
30	MP5B	Z	0	0	0	%100
31	MP4B	X	.488	.488	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	.488	.488	0	%100
34	MP3B	Z	0	0	0	%100
35	MP2B	X	.488	.488	0	%100
36	MP2B	Z	0	0	0	%100
37	MP1B	X	.488	.488	0	%100
38	MP1B	Z	0	0	0	%100
39	M37	X	.214	.214	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	.214	.214	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	.445	.445	0	%100
44	M44	Z	0	0	0	%100
45	M46	X	.399	.399	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
46	M46	Z	0	0	0	%100
47	M47	X	.491	.491	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	.491	.491	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	.491	.491	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	.491	.491	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	.123	.123	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	.123	.123	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	.123	.123	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	.123	.123	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	.123	.123	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	.123	.123	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	.123	.123	0	%100
68	M57	Z	0	0	0	%100
69	M58	X	.123	.123	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	.999	.999	0	%100
72	M59	Z	0	0	0	%100
73	M60	X	.567	.567	0	%100
74	M60	Z	0	0	0	%100
75	M61	X	.567	.567	0	%100
76	M61	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.185	.185	0	%100
2	M1	Z	.107	.107	0	%100
3	M2	X	.556	.556	0	%100
4	M2	Z	.321	.321	0	%100
5	MP5A	X	.423	.423	0	%100
6	MP5A	Z	.244	.244	0	%100
7	MP4A	X	.423	.423	0	%100
8	MP4A	Z	.244	.244	0	%100
9	MP3A	X	.423	.423	0	%100
10	MP3A	Z	.244	.244	0	%100
11	MP2A	X	.423	.423	0	%100
12	MP2A	Z	.244	.244	0	%100
13	MP1A	X	.423	.423	0	%100
14	MP1A	Z	.244	.244	0	%100
15	M13	X	.185	.185	0	%100
16	M13	Z	.107	.107	0	%100
17	MP5C	X	.423	.423	0	%100
18	MP5C	Z	.244	.244	0	%100
19	MP4C	X	.423	.423	0	%100
20	MP4C	Z	.244	.244	0	%100
21	MP3C	X	.423	.423	0	%100
22	MP3C	Z	.244	.244	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
23	MP2C	X	.423	.423	0 %100
24	MP2C	Z	.244	.244	0 %100
25	MP1C	X	.423	.423	0 %100
26	MP1C	Z	.244	.244	0 %100
27	M24	X	.741	.741	0 %100
28	M24	Z	.428	.428	0 %100
29	MP5B	X	.423	.423	0 %100
30	MP5B	Z	.244	.244	0 %100
31	MP4B	X	.423	.423	0 %100
32	MP4B	Z	.244	.244	0 %100
33	MP3B	X	.423	.423	0 %100
34	MP3B	Z	.244	.244	0 %100
35	MP2B	X	.423	.423	0 %100
36	MP2B	Z	.244	.244	0 %100
37	MP1B	X	.423	.423	0 %100
38	MP1B	Z	.244	.244	0 %100
39	M37	X	.556	.556	0 %100
40	M37	Z	.321	.321	0 %100
41	M40	X	0	0	0 %100
42	M40	Z	0	0	0 %100
43	M44	X	.385	.385	0 %100
44	M44	Z	.222	.222	0 %100
45	M46	X	.346	.346	0 %100
46	M46	Z	.2	.2	0 %100
47	M47	X	.319	.319	0 %100
48	M47	Z	.184	.184	0 %100
49	M48	X	.319	.319	0 %100
50	M48	Z	.184	.184	0 %100
51	M49	X	.319	.319	0 %100
52	M49	Z	.184	.184	0 %100
53	M50	X	.319	.319	0 %100
54	M50	Z	.184	.184	0 %100
55	M51	X	.319	.319	0 %100
56	M51	Z	.184	.184	0 %100
57	M52	X	.319	.319	0 %100
58	M52	Z	.184	.184	0 %100
59	M53	X	.319	.319	0 %100
60	M53	Z	.184	.184	0 %100
61	M54	X	.319	.319	0 %100
62	M54	Z	.184	.184	0 %100
63	M55	X	0	0	0 %100
64	M55	Z	0	0	0 %100
65	M56	X	0	0	0 %100
66	M56	Z	0	0	0 %100
67	M57	X	0	0	0 %100
68	M57	Z	0	0	0 %100
69	M58	X	0	0	0 %100
70	M58	Z	0	0	0 %100
71	M59	X	.74	.74	0 %100
72	M59	Z	.427	.427	0 %100
73	M60	X	.74	.74	0 %100
74	M60	Z	.427	.427	0 %100
75	M61	X	.366	.366	0 %100
76	M61	Z	.211	.211	0 %100

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



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.321	.321	0	%100
2	M1	Z	.556	.556	0	%100
3	M2	X	.107	.107	0	%100
4	M2	Z	.185	.185	0	%100
5	MP5A	X	.244	.244	0	%100
6	MP5A	Z	.423	.423	0	%100
7	MP4A	X	.244	.244	0	%100
8	MP4A	Z	.423	.423	0	%100
9	MP3A	X	.244	.244	0	%100
10	MP3A	Z	.423	.423	0	%100
11	MP2A	X	.244	.244	0	%100
12	MP2A	Z	.423	.423	0	%100
13	MP1A	X	.244	.244	0	%100
14	MP1A	Z	.423	.423	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	.244	.244	0	%100
18	MP5C	Z	.423	.423	0	%100
19	MP4C	X	.244	.244	0	%100
20	MP4C	Z	.423	.423	0	%100
21	MP3C	X	.244	.244	0	%100
22	MP3C	Z	.423	.423	0	%100
23	MP2C	X	.244	.244	0	%100
24	MP2C	Z	.423	.423	0	%100
25	MP1C	X	.244	.244	0	%100
26	MP1C	Z	.423	.423	0	%100
27	M24	X	.321	.321	0	%100
28	M24	Z	.556	.556	0	%100
29	MP5B	X	.244	.244	0	%100
30	MP5B	Z	.423	.423	0	%100
31	MP4B	X	.244	.244	0	%100
32	MP4B	Z	.423	.423	0	%100
33	MP3B	X	.244	.244	0	%100
34	MP3B	Z	.423	.423	0	%100
35	MP2B	X	.244	.244	0	%100
36	MP2B	Z	.423	.423	0	%100
37	MP1B	X	.244	.244	0	%100
38	MP1B	Z	.423	.423	0	%100
39	M37	X	.428	.428	0	%100
40	M37	Z	.741	.741	0	%100
41	M40	X	.107	.107	0	%100
42	M40	Z	.185	.185	0	%100
43	M44	X	.222	.222	0	%100
44	M44	Z	.385	.385	0	%100
45	M46	X	.2	.2	0	%100
46	M46	Z	.346	.346	0	%100
47	M47	X	.061	.061	0	%100
48	M47	Z	.106	.106	0	%100
49	M48	X	.061	.061	0	%100
50	M48	Z	.106	.106	0	%100
51	M49	X	.061	.061	0	%100
52	M49	Z	.106	.106	0	%100
53	M50	X	.061	.061	0	%100
54	M50	Z	.106	.106	0	%100
55	M51	X	.245	.245	0	%100
56	M51	Z	.425	.425	0	%100
57	M52	X	.245	.245	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
58	M52	Z	.425	.425	0	%100
59	M53	X	.245	.245	0	%100
60	M53	Z	.425	.425	0	%100
61	M54	X	.245	.245	0	%100
62	M54	Z	.425	.425	0	%100
63	M55	X	.061	.061	0	%100
64	M55	Z	.106	.106	0	%100
65	M56	X	.061	.061	0	%100
66	M56	Z	.106	.106	0	%100
67	M57	X	.061	.061	0	%100
68	M57	Z	.106	.106	0	%100
69	M58	X	.061	.061	0	%100
70	M58	Z	.106	.106	0	%100
71	M59	X	.283	.283	0	%100
72	M59	Z	.491	.491	0	%100
73	M60	X	.499	.499	0	%100
74	M60	Z	.865	.865	0	%100
75	M61	X	.283	.283	0	%100
76	M61	Z	.491	.491	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	.856	.856	0	%100
3	M2	X	0	0	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	0	0	0	%100
6	MP5A	Z	.488	.488	0	%100
7	MP4A	X	0	0	0	%100
8	MP4A	Z	.488	.488	0	%100
9	MP3A	X	0	0	0	%100
10	MP3A	Z	.488	.488	0	%100
11	MP2A	X	0	0	0	%100
12	MP2A	Z	.488	.488	0	%100
13	MP1A	X	0	0	0	%100
14	MP1A	Z	.488	.488	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	.214	.214	0	%100
17	MP5C	X	0	0	0	%100
18	MP5C	Z	.488	.488	0	%100
19	MP4C	X	0	0	0	%100
20	MP4C	Z	.488	.488	0	%100
21	MP3C	X	0	0	0	%100
22	MP3C	Z	.488	.488	0	%100
23	MP2C	X	0	0	0	%100
24	MP2C	Z	.488	.488	0	%100
25	MP1C	X	0	0	0	%100
26	MP1C	Z	.488	.488	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	.214	.214	0	%100
29	MP5B	X	0	0	0	%100
30	MP5B	Z	.488	.488	0	%100
31	MP4B	X	0	0	0	%100
32	MP4B	Z	.488	.488	0	%100
33	MP3B	X	0	0	0	%100
34	MP3B	Z	.488	.488	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
35	MP2B	X	0	0	0	%100
36	MP2B	Z	.488	.488	0	%100
37	MP1B	X	0	0	0	%100
38	MP1B	Z	.488	.488	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	.642	.642	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	.642	.642	0	%100
43	M44	X	0	0	0	%100
44	M44	Z	.445	.445	0	%100
45	M46	X	0	0	0	%100
46	M46	Z	.399	.399	0	%100
47	M47	X	0	0	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	0	0	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	0	0	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	0	0	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	.368	.368	0	%100
57	M52	X	0	0	0	%100
58	M52	Z	.368	.368	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	.368	.368	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	.368	.368	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	.368	.368	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	.368	.368	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	.368	.368	0	%100
69	M58	X	0	0	0	%100
70	M58	Z	.368	.368	0	%100
71	M59	X	0	0	0	%100
72	M59	Z	.423	.423	0	%100
73	M60	X	0	0	0	%100
74	M60	Z	.855	.855	0	%100
75	M61	X	0	0	0	%100
76	M61	Z	.855	.855	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-.321	-.321	0	%100
2	M1	Z	.556	.556	0	%100
3	M2	X	-.107	-.107	0	%100
4	M2	Z	.185	.185	0	%100
5	MP5A	X	-.244	-.244	0	%100
6	MP5A	Z	.423	.423	0	%100
7	MP4A	X	-.244	-.244	0	%100
8	MP4A	Z	.423	.423	0	%100
9	MP3A	X	-.244	-.244	0	%100
10	MP3A	Z	.423	.423	0	%100
11	MP2A	X	-.244	-.244	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
12	MP2A	Z	.423	.423	0	%100
13	MP1A	X	-.244	-.244	0	%100
14	MP1A	Z	.423	.423	0	%100
15	M13	X	-.321	-.321	0	%100
16	M13	Z	.556	.556	0	%100
17	MP5C	X	-.244	-.244	0	%100
18	MP5C	Z	.423	.423	0	%100
19	MP4C	X	-.244	-.244	0	%100
20	MP4C	Z	.423	.423	0	%100
21	MP3C	X	-.244	-.244	0	%100
22	MP3C	Z	.423	.423	0	%100
23	MP2C	X	-.244	-.244	0	%100
24	MP2C	Z	.423	.423	0	%100
25	MP1C	X	-.244	-.244	0	%100
26	MP1C	Z	.423	.423	0	%100
27	M24	X	0	0	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	-.244	-.244	0	%100
30	MP5B	Z	.423	.423	0	%100
31	MP4B	X	-.244	-.244	0	%100
32	MP4B	Z	.423	.423	0	%100
33	MP3B	X	-.244	-.244	0	%100
34	MP3B	Z	.423	.423	0	%100
35	MP2B	X	-.244	-.244	0	%100
36	MP2B	Z	.423	.423	0	%100
37	MP1B	X	-.244	-.244	0	%100
38	MP1B	Z	.423	.423	0	%100
39	M37	X	-.107	-.107	0	%100
40	M37	Z	.185	.185	0	%100
41	M40	X	-.428	-.428	0	%100
42	M40	Z	.741	.741	0	%100
43	M44	X	-.222	-.222	0	%100
44	M44	Z	.385	.385	0	%100
45	M46	X	-.2	-.2	0	%100
46	M46	Z	.346	.346	0	%100
47	M47	X	-.061	-.061	0	%100
48	M47	Z	.106	.106	0	%100
49	M48	X	-.061	-.061	0	%100
50	M48	Z	.106	.106	0	%100
51	M49	X	-.061	-.061	0	%100
52	M49	Z	.106	.106	0	%100
53	M50	X	-.061	-.061	0	%100
54	M50	Z	.106	.106	0	%100
55	M51	X	-.061	-.061	0	%100
56	M51	Z	.106	.106	0	%100
57	M52	X	-.061	-.061	0	%100
58	M52	Z	.106	.106	0	%100
59	M53	X	-.061	-.061	0	%100
60	M53	Z	.106	.106	0	%100
61	M54	X	-.061	-.061	0	%100
62	M54	Z	.106	.106	0	%100
63	M55	X	-.245	-.245	0	%100
64	M55	Z	.425	.425	0	%100
65	M56	X	-.245	-.245	0	%100
66	M56	Z	.425	.425	0	%100
67	M57	X	-.245	-.245	0	%100
68	M57	Z	.425	.425	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
69	M58	X	-.245	-.245	0	%100
70	M58	Z	.425	.425	0	%100
71	M59	X	-.283	-.283	0	%100
72	M59	Z	.491	.491	0	%100
73	M60	X	-.283	-.283	0	%100
74	M60	Z	.491	.491	0	%100
75	M61	X	-.499	-.499	0	%100
76	M61	Z	.865	.865	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-.185	-.185	0	%100
2	M1	Z	.107	.107	0	%100
3	M2	X	-.556	-.556	0	%100
4	M2	Z	.321	.321	0	%100
5	MP5A	X	-.423	-.423	0	%100
6	MP5A	Z	.244	.244	0	%100
7	MP4A	X	-.423	-.423	0	%100
8	MP4A	Z	.244	.244	0	%100
9	MP3A	X	-.423	-.423	0	%100
10	MP3A	Z	.244	.244	0	%100
11	MP2A	X	-.423	-.423	0	%100
12	MP2A	Z	.244	.244	0	%100
13	MP1A	X	-.423	-.423	0	%100
14	MP1A	Z	.244	.244	0	%100
15	M13	X	-.741	-.741	0	%100
16	M13	Z	.428	.428	0	%100
17	MP5C	X	-.423	-.423	0	%100
18	MP5C	Z	.244	.244	0	%100
19	MP4C	X	-.423	-.423	0	%100
20	MP4C	Z	.244	.244	0	%100
21	MP3C	X	-.423	-.423	0	%100
22	MP3C	Z	.244	.244	0	%100
23	MP2C	X	-.423	-.423	0	%100
24	MP2C	Z	.244	.244	0	%100
25	MP1C	X	-.423	-.423	0	%100
26	MP1C	Z	.244	.244	0	%100
27	M24	X	-.185	-.185	0	%100
28	M24	Z	.107	.107	0	%100
29	MP5B	X	-.423	-.423	0	%100
30	MP5B	Z	.244	.244	0	%100
31	MP4B	X	-.423	-.423	0	%100
32	MP4B	Z	.244	.244	0	%100
33	MP3B	X	-.423	-.423	0	%100
34	MP3B	Z	.244	.244	0	%100
35	MP2B	X	-.423	-.423	0	%100
36	MP2B	Z	.244	.244	0	%100
37	MP1B	X	-.423	-.423	0	%100
38	MP1B	Z	.244	.244	0	%100
39	M37	X	0	0	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	-.556	-.556	0	%100
42	M40	Z	.321	.321	0	%100
43	M44	X	-.385	-.385	0	%100
44	M44	Z	.222	.222	0	%100
45	M46	X	-.346	-.346	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
46	M46	Z	.2	.2	0	%100
47	M47	X	-.319	-.319	0	%100
48	M47	Z	.184	.184	0	%100
49	M48	X	-.319	-.319	0	%100
50	M48	Z	.184	.184	0	%100
51	M49	X	-.319	-.319	0	%100
52	M49	Z	.184	.184	0	%100
53	M50	X	-.319	-.319	0	%100
54	M50	Z	.184	.184	0	%100
55	M51	X	0	0	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	0	0	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	0	0	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	0	0	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	-.319	-.319	0	%100
64	M55	Z	.184	.184	0	%100
65	M56	X	-.319	-.319	0	%100
66	M56	Z	.184	.184	0	%100
67	M57	X	-.319	-.319	0	%100
68	M57	Z	.184	.184	0	%100
69	M58	X	-.319	-.319	0	%100
70	M58	Z	.184	.184	0	%100
71	M59	X	-.74	-.74	0	%100
72	M59	Z	.427	.427	0	%100
73	M60	X	-.366	-.366	0	%100
74	M60	Z	.211	.211	0	%100
75	M61	X	-.74	-.74	0	%100
76	M61	Z	.427	.427	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	M2	X	-.856	-.856	0	%100
4	M2	Z	0	0	0	%100
5	MP5A	X	-.488	-.488	0	%100
6	MP5A	Z	0	0	0	%100
7	MP4A	X	-.488	-.488	0	%100
8	MP4A	Z	0	0	0	%100
9	MP3A	X	-.488	-.488	0	%100
10	MP3A	Z	0	0	0	%100
11	MP2A	X	-.488	-.488	0	%100
12	MP2A	Z	0	0	0	%100
13	MP1A	X	-.488	-.488	0	%100
14	MP1A	Z	0	0	0	%100
15	M13	X	-.642	-.642	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	-.488	-.488	0	%100
18	MP5C	Z	0	0	0	%100
19	MP4C	X	-.488	-.488	0	%100
20	MP4C	Z	0	0	0	%100
21	MP3C	X	-.488	-.488	0	%100
22	MP3C	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
23	MP2C	X	-488	-488	0	%100
24	MP2C	Z	0	0	0	%100
25	MP1C	X	-488	-488	0	%100
26	MP1C	Z	0	0	0	%100
27	M24	X	-642	-642	0	%100
28	M24	Z	0	0	0	%100
29	MP5B	X	-488	-488	0	%100
30	MP5B	Z	0	0	0	%100
31	MP4B	X	-488	-488	0	%100
32	MP4B	Z	0	0	0	%100
33	MP3B	X	-488	-488	0	%100
34	MP3B	Z	0	0	0	%100
35	MP2B	X	-488	-488	0	%100
36	MP2B	Z	0	0	0	%100
37	MP1B	X	-488	-488	0	%100
38	MP1B	Z	0	0	0	%100
39	M37	X	-214	-214	0	%100
40	M37	Z	0	0	0	%100
41	M40	X	-214	-214	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	-445	-445	0	%100
44	M44	Z	0	0	0	%100
45	M46	X	-399	-399	0	%100
46	M46	Z	0	0	0	%100
47	M47	X	-491	-491	0	%100
48	M47	Z	0	0	0	%100
49	M48	X	-491	-491	0	%100
50	M48	Z	0	0	0	%100
51	M49	X	-491	-491	0	%100
52	M49	Z	0	0	0	%100
53	M50	X	-491	-491	0	%100
54	M50	Z	0	0	0	%100
55	M51	X	-123	-123	0	%100
56	M51	Z	0	0	0	%100
57	M52	X	-123	-123	0	%100
58	M52	Z	0	0	0	%100
59	M53	X	-123	-123	0	%100
60	M53	Z	0	0	0	%100
61	M54	X	-123	-123	0	%100
62	M54	Z	0	0	0	%100
63	M55	X	-123	-123	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	-123	-123	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	-123	-123	0	%100
68	M57	Z	0	0	0	%100
69	M58	X	-123	-123	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	-999	-999	0	%100
72	M59	Z	0	0	0	%100
73	M60	X	-567	-567	0	%100
74	M60	Z	0	0	0	%100
75	M61	X	-567	-567	0	%100
76	M61	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]



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

	Member Label	Direction	Start Magnitude[lb/ft...	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-185	-185	0	%100
2	M1	Z	-107	-107	0	%100
3	M2	X	-556	-556	0	%100
4	M2	Z	-321	-321	0	%100
5	MP5A	X	-423	-423	0	%100
6	MP5A	Z	-244	-244	0	%100
7	MP4A	X	-423	-423	0	%100
8	MP4A	Z	-244	-244	0	%100
9	MP3A	X	-423	-423	0	%100
10	MP3A	Z	-244	-244	0	%100
11	MP2A	X	-423	-423	0	%100
12	MP2A	Z	-244	-244	0	%100
13	MP1A	X	-423	-423	0	%100
14	MP1A	Z	-244	-244	0	%100
15	M13	X	-185	-185	0	%100
16	M13	Z	-107	-107	0	%100
17	MP5C	X	-423	-423	0	%100
18	MP5C	Z	-244	-244	0	%100
19	MP4C	X	-423	-423	0	%100
20	MP4C	Z	-244	-244	0	%100
21	MP3C	X	-423	-423	0	%100
22	MP3C	Z	-244	-244	0	%100
23	MP2C	X	-423	-423	0	%100
24	MP2C	Z	-244	-244	0	%100
25	MP1C	X	-423	-423	0	%100
26	MP1C	Z	-244	-244	0	%100
27	M24	X	-741	-741	0	%100
28	M24	Z	-428	-428	0	%100
29	MP5B	X	-423	-423	0	%100
30	MP5B	Z	-244	-244	0	%100
31	MP4B	X	-423	-423	0	%100
32	MP4B	Z	-244	-244	0	%100
33	MP3B	X	-423	-423	0	%100
34	MP3B	Z	-244	-244	0	%100
35	MP2B	X	-423	-423	0	%100
36	MP2B	Z	-244	-244	0	%100
37	MP1B	X	-423	-423	0	%100
38	MP1B	Z	-244	-244	0	%100
39	M37	X	-556	-556	0	%100
40	M37	Z	-321	-321	0	%100
41	M40	X	0	0	0	%100
42	M40	Z	0	0	0	%100
43	M44	X	-385	-385	0	%100
44	M44	Z	-222	-222	0	%100
45	M46	X	-346	-346	0	%100
46	M46	Z	-.2	-.2	0	%100
47	M47	X	-319	-319	0	%100
48	M47	Z	-184	-184	0	%100
49	M48	X	-319	-319	0	%100
50	M48	Z	-184	-184	0	%100
51	M49	X	-319	-319	0	%100
52	M49	Z	-184	-184	0	%100
53	M50	X	-319	-319	0	%100
54	M50	Z	-184	-184	0	%100
55	M51	X	-319	-319	0	%100
56	M51	Z	-184	-184	0	%100
57	M52	X	-319	-319	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
58	M52	Z	-.184	-.184	0	%100
59	M53	X	-.319	-.319	0	%100
60	M53	Z	-.184	-.184	0	%100
61	M54	X	-.319	-.319	0	%100
62	M54	Z	-.184	-.184	0	%100
63	M55	X	0	0	0	%100
64	M55	Z	0	0	0	%100
65	M56	X	0	0	0	%100
66	M56	Z	0	0	0	%100
67	M57	X	0	0	0	%100
68	M57	Z	0	0	0	%100
69	M58	X	0	0	0	%100
70	M58	Z	0	0	0	%100
71	M59	X	-.74	-.74	0	%100
72	M59	Z	-.427	-.427	0	%100
73	M60	X	-.74	-.74	0	%100
74	M60	Z	-.427	-.427	0	%100
75	M61	X	-.366	-.366	0	%100
76	M61	Z	-.211	-.211	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-.321	-.321	0	%100
2	M1	Z	-.556	-.556	0	%100
3	M2	X	-.107	-.107	0	%100
4	M2	Z	-.185	-.185	0	%100
5	MP5A	X	-.244	-.244	0	%100
6	MP5A	Z	-.423	-.423	0	%100
7	MP4A	X	-.244	-.244	0	%100
8	MP4A	Z	-.423	-.423	0	%100
9	MP3A	X	-.244	-.244	0	%100
10	MP3A	Z	-.423	-.423	0	%100
11	MP2A	X	-.244	-.244	0	%100
12	MP2A	Z	-.423	-.423	0	%100
13	MP1A	X	-.244	-.244	0	%100
14	MP1A	Z	-.423	-.423	0	%100
15	M13	X	0	0	0	%100
16	M13	Z	0	0	0	%100
17	MP5C	X	-.244	-.244	0	%100
18	MP5C	Z	-.423	-.423	0	%100
19	MP4C	X	-.244	-.244	0	%100
20	MP4C	Z	-.423	-.423	0	%100
21	MP3C	X	-.244	-.244	0	%100
22	MP3C	Z	-.423	-.423	0	%100
23	MP2C	X	-.244	-.244	0	%100
24	MP2C	Z	-.423	-.423	0	%100
25	MP1C	X	-.244	-.244	0	%100
26	MP1C	Z	-.423	-.423	0	%100
27	M24	X	-.321	-.321	0	%100
28	M24	Z	-.556	-.556	0	%100
29	MP5B	X	-.244	-.244	0	%100
30	MP5B	Z	-.423	-.423	0	%100
31	MP4B	X	-.244	-.244	0	%100
32	MP4B	Z	-.423	-.423	0	%100
33	MP3B	X	-.244	-.244	0	%100
34	MP3B	Z	-.423	-.423	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
35	MP2B	X	-.244	-.244	0	%100
36	MP2B	Z	-.423	-.423	0	%100
37	MP1B	X	-.244	-.244	0	%100
38	MP1B	Z	-.423	-.423	0	%100
39	M37	X	-.428	-.428	0	%100
40	M37	Z	-.741	-.741	0	%100
41	M40	X	-.107	-.107	0	%100
42	M40	Z	-.185	-.185	0	%100
43	M44	X	-.222	-.222	0	%100
44	M44	Z	-.385	-.385	0	%100
45	M46	X	-.2	-.2	0	%100
46	M46	Z	-.346	-.346	0	%100
47	M47	X	-.061	-.061	0	%100
48	M47	Z	-.106	-.106	0	%100
49	M48	X	-.061	-.061	0	%100
50	M48	Z	-.106	-.106	0	%100
51	M49	X	-.061	-.061	0	%100
52	M49	Z	-.106	-.106	0	%100
53	M50	X	-.061	-.061	0	%100
54	M50	Z	-.106	-.106	0	%100
55	M51	X	-.245	-.245	0	%100
56	M51	Z	-.425	-.425	0	%100
57	M52	X	-.245	-.245	0	%100
58	M52	Z	-.425	-.425	0	%100
59	M53	X	-.245	-.245	0	%100
60	M53	Z	-.425	-.425	0	%100
61	M54	X	-.245	-.245	0	%100
62	M54	Z	-.425	-.425	0	%100
63	M55	X	-.061	-.061	0	%100
64	M55	Z	-.106	-.106	0	%100
65	M56	X	-.061	-.061	0	%100
66	M56	Z	-.106	-.106	0	%100
67	M57	X	-.061	-.061	0	%100
68	M57	Z	-.106	-.106	0	%100
69	M58	X	-.061	-.061	0	%100
70	M58	Z	-.106	-.106	0	%100
71	M59	X	-.283	-.283	0	%100
72	M59	Z	-.491	-.491	0	%100
73	M60	X	-.499	-.499	0	%100
74	M60	Z	-.865	-.865	0	%100
75	M61	X	-.283	-.283	0	%100
76	M61	Z	-.491	-.491	0	%100

Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M47	Y	-15.375	-15.375	0	1.333
2	M48	Y	-38.625	-38.625	6.106e-16	1.333
3	M49	Y	-15.375	-15.375	0	1.333
4	M50	Y	-38.625	-38.625	6.106e-16	1.333
5	M55	Y	-15.375	-15.375	6.384e-15	1.333
6	M56	Y	-38.625	-38.625	4.666e-13	1.333
7	M57	Y	-15.375	-15.375	0	1.333
8	M58	Y	-38.625	-38.625	8.332e-13	1.333
9	M51	Y	-15.375	-15.375	0	1.333
10	M52	Y	-38.625	-38.625	1.07e-12	1.333
11	M53	Y	-15.375	-15.375	0	1.333



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Member Distributed Loads (BLC 87 : BLC 39 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
12	M54	Y	-38.625	-38.625	4.685e-14	1.333

Member Distributed Loads (BLC 88 : BLC 40 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	Y	-.263	-3.424	1.8	4.2
2	M1	Y	-3.424	-7.114	4.2	6.6
3	M1	Y	-7.114	-9.224	6.6	9
4	M1	Y	-9.224	-8.694	9	11.4
5	M1	Y	-8.694	-5.004	11.4	13.8
6	M1	Y	-5.004	-.263	13.8	16.2
7	M5	Y	-36.408	-36.408	0	.208
8	M47	Y	-8.533	-8.533	0	1.333
9	M48	Y	-18.211	-18.211	4.996e-16	1.333
10	M49	Y	-8.533	-8.533	0	1.333
11	M50	Y	-18.211	-18.211	4.996e-16	1.333
12	M24	Y	-.263	-3.424	1.8	4.2
13	M24	Y	-3.424	-7.114	4.2	6.6
14	M24	Y	-7.114	-9.224	6.6	9
15	M24	Y	-9.224	-8.694	9	11.4
16	M24	Y	-8.694	-5.004	11.4	13.8
17	M24	Y	-5.004	-.263	13.8	16.2
18	M27	Y	-36.408	-36.408	0	.208
19	M55	Y	-8.533	-8.533	6.384e-15	1.333
20	M56	Y	-18.211	-18.211	3.729e-13	1.333
21	M57	Y	-8.533	-8.533	0	1.333
22	M58	Y	-18.211	-18.211	9.618e-13	1.333
23	M13	Y	-.263	-3.424	1.8	4.2
24	M13	Y	-3.424	-7.114	4.2	6.6
25	M13	Y	-7.114	-9.224	6.6	9
26	M13	Y	-9.224	-8.694	9	11.4
27	M13	Y	-8.694	-5.004	11.4	13.8
28	M13	Y	-5.004	-.263	13.8	16.2
29	M16	Y	-36.408	-36.408	0	.208
30	M51	Y	-8.533	-8.533	0	1.333
31	M52	Y	-18.211	-18.211	1.012e-12	1.333
32	M53	Y	-8.533	-8.533	0	1.333
33	M54	Y	-18.211	-18.211	2.557e-13	1.333

Member Distributed Loads (BLC 90 : BLC 85 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	Z	-.004	-.053	1.8	4.2
2	M1	Z	-.053	-.111	4.2	6.6
3	M1	Z	-.111	-.144	6.6	9
4	M1	Z	-.144	-.136	9	11.4
5	M1	Z	-.136	-.078	11.4	13.8
6	M1	Z	-.078	-.004	13.8	16.2
7	M5	Z	-.569	-.569	0	.208
8	M47	Z	-.133	-.133	0	1.333
9	M48	Z	-.284	-.284	4.996e-16	1.333
10	M49	Z	-.133	-.133	0	1.333
11	M50	Z	-.284	-.284	4.996e-16	1.333
12	M24	Z	-.004	-.053	1.8	4.2
13	M24	Z	-.053	-.111	4.2	6.6
14	M24	Z	-.111	-.144	6.6	9
15	M24	Z	-.144	-.136	9	11.4
16	M24	Z	-.136	-.078	11.4	13.8



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10209799
 Model Name : 5000104933-VZW_MT_LO_H

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Member Distributed Loads (BLC 90 : BLC 85 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
17	M24	Z	-.078	-.004	13.8	16.2
18	M27	Z	-.569	-.569	0	.208
19	M55	Z	-.133	-.133	6.384e-15	1.333
20	M56	Z	-.284	-.284	3.729e-13	1.333
21	M57	Z	-.133	-.133	0	1.333
22	M58	Z	-.284	-.284	9.618e-13	1.333
23	M13	Z	-.004	-.053	1.8	4.2
24	M13	Z	-.053	-.111	4.2	6.6
25	M13	Z	-.111	-.144	6.6	9
26	M13	Z	-.144	-.136	9	11.4
27	M13	Z	-.136	-.078	11.4	13.8
28	M13	Z	-.078	-.004	13.8	16.2
29	M16	Z	-.569	-.569	0	.208
30	M51	Z	-.133	-.133	0	1.333
31	M52	Z	-.284	-.284	1.012e-12	1.333
32	M53	Z	-.133	-.133	0	1.333
33	M54	Z	-.284	-.284	2.557e-13	1.333

Member Distributed Loads (BLC 91 : BLC 86 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.004	.053	1.8	4.2
2	M1	X	.053	.111	4.2	6.6
3	M1	X	.111	.144	6.6	9
4	M1	X	.144	.136	9	11.4
5	M1	X	.136	.078	11.4	13.8
6	M1	X	.078	.004	13.8	16.2
7	M5	X	.569	.569	0	.208
8	M47	X	.133	.133	0	1.333
9	M48	X	.284	.284	4.996e-16	1.333
10	M49	X	.133	.133	0	1.333
11	M50	X	.284	.284	4.996e-16	1.333
12	M24	X	.004	.053	1.8	4.2
13	M24	X	.053	.111	4.2	6.6
14	M24	X	.111	.144	6.6	9
15	M24	X	.144	.136	9	11.4
16	M24	X	.136	.078	11.4	13.8
17	M24	X	.078	.004	13.8	16.2
18	M27	X	.569	.569	0	.208
19	M55	X	.133	.133	6.384e-15	1.333
20	M56	X	.284	.284	3.729e-13	1.333
21	M57	X	.133	.133	0	1.333
22	M58	X	.284	.284	9.618e-13	1.333
23	M13	X	.004	.053	1.8	4.2
24	M13	X	.053	.111	4.2	6.6
25	M13	X	.111	.144	6.6	9
26	M13	X	.144	.136	9	11.4
27	M13	X	.136	.078	11.4	13.8
28	M13	X	.078	.004	13.8	16.2
29	M16	X	.569	.569	0	.208
30	M51	X	.133	.133	0	1.333
31	M52	X	.284	.284	1.012e-12	1.333
32	M53	X	.133	.133	0	1.333
33	M54	X	.284	.284	2.557e-13	1.333



Company : Colliers Engineering & Design
 Designer :
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 Model Name : 5000104933-VZW_MT_LO_H

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Member Area Loads (BLC 39 : Structure D)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N90	N86	N85	N89	Y	A-B	-.009
2	N102	N106	N105	N101	Y	A-B	-.009
3	N94	N98	N97	N93	Y	A-B	-.009

Member Area Loads (BLC 40 : Structure Di)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N90	N86	N85	N89	Y	Two Way	-.01
2	N102	N106	N105	N101	Y	Two Way	-.01
3	N94	N98	N97	N93	Y	Two Way	-.01

Member Area Loads (BLC 84 : Structure Ev)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N90	N86	N85	N89	Y	Two Way	0
2	N102	N106	N105	N101	Y	Two Way	0
3	N94	N98	N97	N93	Y	Two Way	0

Member Area Loads (BLC 85 : Structure Eh (0 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N90	N86	N85	N89	Z	Two Way	-.000156
2	N102	N106	N105	N101	Z	Two Way	-.000156
3	N94	N98	N97	N93	Z	Two Way	-.000156

Member Area Loads (BLC 86 : Structure Eh (90 Deg))

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N90	N86	N85	N89	X	Two Way	.000156
2	N102	N106	N105	N101	X	Two Way	.000156
3	N94	N98	N97	N93	X	Two Way	.000156

Envelope Joint Reactions

Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC	
1	N4	max	892.587	10	109.506	7	4435.404	1	.095	8	2.403	4	.576	4
		min	-891.855	4	-80.415	1	-1593.957	7	-.015	2	-2.406	10	-.507	10
3	N71	max	3696.536	9	45.875	4	744.814	3	.37	12	2.328	12	.263	49
		min	-1251.095	3	-235.64	49	-2159.435	9	-.412	42	-2.331	6	-.222	12
5	N76	max	1398.96	11	96.705	11	917.816	12	.345	2	2.407	8	.251	1
		min	-3862.119	5	-75.841	5	-2338.557	6	-.482	44	-2.411	2	-.279	31
7	N110	max	41.979	10	2924.746	13	-1662.132	70	0	75	0	75	0	75
		min	-42.011	4	1016.162	70	-4781.387	13	0	1	0	1	0	1
9	N112	max	-1434.576	66	2903.172	21	2373.053	21	0	75	0	75	0	75
		min	-4109.413	21	1012.788	66	828.254	66	0	1	0	1	0	1
11	N114	max	4135.971	17	2921.252	17	2387.402	17	0	75	0	75	0	75
		min	1440.117	74	1016.624	74	831.451	74	0	1	0	1	0	1
13	Totals:	max	5011.976	10	8422.69	13	4996.964	1						
		min	-5011.975	4	3058.183	70	-4996.964	7						
14														

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

Member	Shape	Code C...	Loc[ft]	LC	Shear	Loc[ft]	Dir	LC	phi*Pnc [l...	phi*Pnt [lb]	phi*Mn y...	phi*Mn z...	Cb	Eqn
1	MP3C	PIPE 2.0	.550	3.724	2	.093	3.724	11	19360.206	32130	1.872	1.872	1...	H1-1b
2	MP3A	PIPE 2.0	.550	3.724	6	.093	3.724	3	19360.206	32130	1.872	1.872	1...	H1-1b
3	MP3B	PIPE 2.0	.547	3.724	10	.093	3.724	7	19360.206	32130	1.872	1.872	1...	H1-1b
4	M37	HSS4X4X4	.463	7.708	24	.083	5	y 23	86930.091	127386	14.774	14.774	2...	H1-1b



Company : Colliers Engineering & Design
 Designer :
 Job Number : Project No. 10209799
 Model Name : 5000104933-VZW_MT_LO_H

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

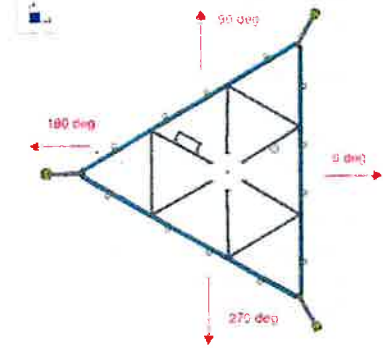
Member	Shape	Code C...	Loc(ft)	LC Shear ...	Loc(ft)	Dir	LC	phi*Pnc [L...]	phi*Pnt [lb]	phi*Mn y...	phi*Mn z...	Cb	Eqn		
5	M2	HSS4X4X4	.462	7.708	16	.082	5	y	16	86930.091	127386	14.774	14.774	2...	H1-1b
6	M40	HSS4X4X4	.462	7.708	20	.093	5	y	32	86930.091	127386	14.774	14.774	2...	H1-1b
7	M1	HSS4X4X4	.309	18	6	.076	0	z	7	37768.257	127386	14.774	14.774	1...	H1-1b
8	M24	HSS4X4X4	.308	18	10	.078	0	z	11	37768.257	127386	14.774	14.774	1...	H1-1b
9	M13	HSS4X4X4	.307	18	2	.076	0	z	3	37768.257	127386	14.774	14.774	1.5	H1-1b
10	MP4A	PIPE 2.0	.193	3.813	12	.017	3.813	2	20866.733	32130	1.872	1.872	1...	H1-1b	
11	MP4C	PIPE 2.0	.193	3.813	8	.017	3.813	10	20866.733	32130	1.872	1.872	1...	H1-1b	
12	MP4B	PIPE 2.0	.191	3.813	4	.017	3.813	6	20866.733	32130	1.872	1.872	1...	H1-1b	
13	MP2C	PIPE 2.0	.182	3.724	8	.017	3.792	9	19360.206	32130	1.872	1.872	1...	H1-1b	
14	MP2A	PIPE 2.0	.182	3.724	12	.017	3.792	1	19360.206	32130	1.872	1.872	1...	H1-1b	
15	MP2B	PIPE 2.0	.180	3.724	4	.018	3.792	3	19360.206	32130	1.872	1.872	1...	H1-1b	
16	MP5A	PIPE 2.0	.147	3.724	6	.030	3.724	2	19360.206	32130	1.872	1.872	2...	H1-1b	
17	MP5B	PIPE 2.0	.147	3.724	10	.030	3.724	6	19360.206	32130	1.872	1.872	2...	H1-1b	
18	MP5C	PIPE 2.0	.147	3.724	2	.030	3.724	10	19360.206	32130	1.872	1.872	2...	H1-1b	
19	MP1C	PIPE 2.0	.147	3.724	2	.030	3.724	4	19360.206	32130	1.872	1.872	2...	H1-1b	
20	MP1A	PIPE 2.0	.147	3.724	6	.030	3.724	8	19360.206	32130	1.872	1.872	2...	H1-1b	
21	MP1B	PIPE 2.0	.147	3.724	10	.030	3.724	12	19360.206	32130	1.872	1.872	2...	H1-1b	
22	M59	LL3x3x3x6	.121	5.831	13	.002	0	y	24	46168.04	70632	6.362	3.751	1	H1-1b*
23	M61	LL3x3x3x6	.121	5.831	17	.002	5.831	y	18	46168.04	70632	6.362	3.751	1	H1-1b*
24	M60	LL3x3x3x6	.120	5.831	21	.002	5.831	y	22	46168.04	70632	6.362	3.751	1	H1-1b*
25	M44	PIPE 2.0	.101	2.5	5	.010	2.5	5	26521.424	32130	1.872	1.872	2...	H1-1b	
26	M48	L2x2x4	.098	0	22	.010	0	y	21	27953.551	30585.6	.691	1.577	2...	H2-1
27	M50	L2x2x4	.098	0	22	.010	0	y	21	27953.551	30585.6	.691	1.577	2...	H2-1
28	M58	L2x2x4	.098	0	14	.010	0	y	13	27953.551	30585.6	.691	1.577	2...	H2-1
29	M56	L2x2x4	.098	0	14	.010	0	y	21	27953.551	30585.6	.691	1.577	2...	H2-1
30	M52	L2x2x4	.098	0	18	.010	0	y	17	27953.551	30585.6	.691	1.577	2...	H2-1
31	M54	L2x2x4	.098	0	18	.010	0	y	17	27953.551	30585.6	.691	1.577	2...	H2-1
32	M49	L2x2x4	.049	0	22	.005	0	y	21	27953.551	30585.6	.691	1.577	2...	H2-1
33	M47	L2x2x4	.049	0	22	.005	0	y	21	27953.551	30585.6	.691	1.577	2...	H2-1
34	M57	L2x2x4	.049	0	14	.005	0	y	13	27953.551	30585.6	.691	1.577	2...	H2-1
35	M55	L2x2x4	.049	0	14	.005	0	y	21	27953.551	30585.6	.691	1.577	2...	H2-1
36	M51	L2x2x4	.049	0	18	.005	0	y	13	27953.551	30585.6	.691	1.577	2...	H2-1
37	M53	L2x2x4	.049	0	18	.005	0	y	17	27953.551	30585.6	.691	1.577	2...	H2-1
38	M46	PIPE 2.0	.048	1.5	5	.010	1.5	5	28843.414	32130	1.872	1.872	1...	H1-1b	

I. Mount-to-Tower Connection Check

Custom Orientation Required

Yes

Nodes (labeled per Risa)	Orientation (per graphic of typical platform)
N76	60
N4	180
N71	300



Tower Connection Bolt Checks

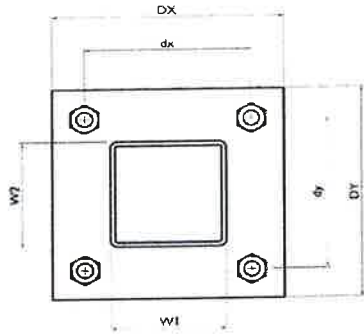
Yes

Bolt Orientation

Parallel

Bolt Quantity per Reaction:
 d_x (in) (*Delta X of typ. bolt config. sketch*) :
 d_y (in) (*Delta Y of typ. bolt config. sketch*) :
 Bolt Type:
 Bolt Diameter (in):
 Required Tensile Strength / bolt (kips):
 Required Shear Strength / bolt (kips):
 Tensile Capacity / bolt (kips):
 Shear Capacity / bolt (kips):
 Bolt Overall Utilization:

4
3
8
A307
0.75
5.2
0.5
14.9
8.9
34.9%

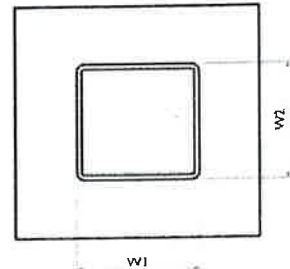


Tower Connection Baseplate Checks

Yes

Connecting Standoff Member Shape:
 Weld Stiffener Configuration:
 Plate Width, D_x (in):
 Plate Height, D_y (in):
 $W1$ (in):
 $W2$ (in):
 Member Thickness (in):
 Stiffener location a_1 (in):
 Stiffener location b_1 (in):
 Stiffener location a_2 (in):
 Stiffener location b_2 (in):
 F_y (ksi, plate):
 Plate Thickness (in):
 Length of Yield Line, L_y (in):
 Bolt Eccentricity, e (in):
 M_u (kip-in):
 $\Phi * M_n$ (kip-in):
 Plate Bending Utilization:

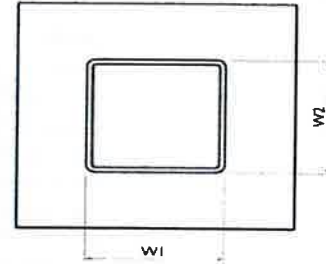
Rect Tube	No Stiffeners
6	
10	
4	
4	
0.25	
36	
0.5	
4.90	
1.86	
9.69	
9.92	
97.6%	



Tower Connection Weld Checks

Weld Shape:
 Weld Stiffener Configuration:
 Stiffener Notch Length, n (in):
 Weld Size (1/16 in):
 W1 (in):
 W2 (in):
 Weld Total Length (in):
 Z_x (in³/in):
 Z_y (in³/in):
 J_p (in⁴/in):
 c_x (in)
 c_y (in)
 Required combined strength (kip/in):
 Weld Capacity (kip/in):
 Weld Utilization:

Yes
Rectangle
None
3
4
4
16.00
21.33
21.33
85.33
2.25
2.25
1.02
4.18
24.4%





MOUNT MODIFICATION DRAWINGS
EXISTING 18.00' PLATFORM

TOWER OWNER: GREENWICH HOSPITAL ASSOCIATION
TOWER OWNER SITE NUMBER: UNKNOWN

CARRIER SITE NAME: GREENWICH CT
CARRIER SITE NUMBER: 5000104933
FUZE ID: 16992096

5 PERRYBRIDGE RD GREENWICH HOSPITAL
GREENWICH, CT 06830
FAIRFIELD COUNTY

LATITUDE: 41.03393600° N
LONGITUDE: 73.63083200° W



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811
Call before you dig
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DATE: 2023.06.14 12:48:20-0400

NO.	DATE	DESCRIPTION	BY
1	2023.06.14	ISSUED FOR PERMIT	PK
2			
3			
4			
5			
6			
7			
8			
9			
10			

Seal

SHEET	DESCRIPTION
ST-1	TITLE SHEET
100M-1	BILL OF MATERIALS
100N-1	GENERAL NOTES
100P-1	CLIMBING FACILITY DETAIL
100Q-1	MODIFICATION DETAILS
100R-1	MOUNT PHOTO
100S-1	SPECIFICATION SHEETS

PROJECT INFORMATION	
APPLICANT/LESSEE	VERIZON WIRELESS
COMPANY	VERIZON WIRELESS
CLIENT REPRESENTATIVE	PETER ALBANO
COMPANY	VERIZON WIRELESS
PROJECT MANAGER	PETER ALBANO
COMPANY	COLLIERS ENGINEERING & DESIGN
CONTACT	PETER ALBANO
PHONE	860.234.1234
EMAIL	PETER.ALBANO@COLLIERSENG.COM
CONTRACTOR PMI REQUIREMENTS	
PMI LOCATION	HTT://PMI.VZPPHART.COM
SMART TOOL PROJECT #	1029799
VZV HOC #	5000104933
ANALYSIS DATE	9/19/2023
PMI REQUIREMENTS EXCEEDED WITH IN MOUNT MODIFICATION REPORT	

DESIGN CRITERIA	
WIND LOADS	BASIC WIND SPEED (1 SECOND GUST), V = 130 MPH
	EXPOSURE CATEGORY: B
	TOPOGRAPHIC CATEGORY: 1
	TOPOGRAPHIC CONSIDERED: N/A
	TOPOGRAPHIC METHOD: N/A
	MEAN BASE ELEVATION (APSL) = 142.08'
ICE LOADS	ICE WIND SPEED (3 SECOND GUST), V = 50 MPH
	ICE THICKNESS = 1.00 IN
SEISMIC LOADS	SEISMIC DESIGN CATEGORY: B
	SHORT TERM PEAK GROUND MOTION, S ₁ = .274
	LONG TERM PEAK GROUND MOTION, S ₁ = .091

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NOTE: DO NOT SCALE DRAWINGS FOR CONSTRUCTION

BILL OF MATERIALS

SECTION 1 - VZWSMART KITS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
	VZWSMART					

SECTION 2 - OTHER REQUIRED PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
6	*	L3x2x3/16	PROPOSED 6" LONG, L3x2x3/16			
12	*		1/2" LONG, 5/8" DIA. F155-5.6 HDG THREADED ROD	GALVANIZED, CONTRACTOR TO VERIFY THE LENGTH REQUIRED AND TIGHT AS NECESSARY IN ACCORDANCE WITH THE STRUCTURAL STEEL NOTES ON SHEET SGN-1.	26	156
6	*		2 1/2" LONG, 5/8" DIA. A325N BOLT	GALVANIZED.	*	*
	*		5/8" HDG USS FLAT WASHER	GALVANIZED.	*	*
	*		5/8" HDG LOCK WASHER	GALVANIZED.	*	*
	*		5/8" HDG HEX NUT	GALVANIZED.	*	*

SECTION 3 - REQUIRED SAFETY CLIMB PARTS

QUANTITY	MANUFACTURER	PART NUMBER	DESCRIPTION	NOTES	UNIT WEIGHT (LBS)	WEIGHT (LBS)
2	PERFECT VISION	142-0501-06	STANDOFF CLAMP BRACKET	OR EOR APPROVED EQUIVALENT		
2	PERFECT VISION	PV-CRX-CG-80	WIRE ROPE GUIDE	OR EOR APPROVED EQUIVALENT		
			TOTAL			156

NOTES:

- THE MANUFACTURERS LISTED ARE THE APPROVED VENDORS FOR THE VZW MOUNT KITS. EACH MANUFACTURER WILL BE AWARE OF WHICH KITS HAVE BEEN THROUGH THE VZW APPROVAL PROCESS AND THEY ARE IN TURN APPROVED TO SELL. PLEASE NOTE THAT THE MATERIAL UTILIZED ON THE MOUNT MODIFICATIONS WILL BE REVIEWED AS A PART OF THE DESKTOP PMI COMPLETED BY THE SMART TOOL VENDOR. IT WILL BE REQUIRED THAT THE VZW KITS SPECIFIED ARE UTILIZED IN THE MODIFICATIONS.
- ALL MATERIALS REQUIRED FOR THE DESIGNED MODIFICATIONS BUT NOT LISTED IN THIS SHEET ARE ASSUMED TO BE PROVIDED BY THE CONTRACTOR.

VZWSMART KITS - APPROVED VENDORS

COMPANY	CONTACT	PHONE	EMAIL	WEBSITE
COMMSCOPE	SALVADOR ANGLIANO	(872) 394-7492	SALVADOR.ANGLIANO@COMMSCOPE.COM	WWW.COMMSCOPE.COM
METROSTE FABRICATORS, LLC	KENT RAMEY	(506) 334-7044 (OL) (784) 982-9788 (F)	KENT@METROSTE.LLC	METROSTE.FABRICATORS.COM
PERFECTVISION	WIRELESS SALES	(844) 881-4773	WWW.PERFECTVISION.COM	WWW.PERFECTVISION.COM
SABRE INDUSTRIES, INC.	ANGE WELCH	(844) 438-4937	ANGE@SABREINDUSTRIES.COM	WWW.SABREINDUSTRIES.COM
SITE PRO 1	PAULA BOSWELL	(717) 238-9841	PAULA.BOSWELL@VALPHONT.COM	WWW.SITEPRO1.COM
NEWAVE	NEWAVE SALES TEAM	(717) 239-4762	SALES@NEWAVETC.COM	WWW.NEWAVETC.COM
BETTER METAL, LLC	DANIS STAMBERY	(617) 335-0995 (OL) (617) 631-2520 (F)	DANIS@BETTERMETAL.COM	WWW.BETTERMETAL.COM



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 1000 Main Street, Suite 100
 Wallingford, CT 06495
 Phone: (203) 261-1000
 Fax: (203) 261-1001
 Email: info@collierseng.com



FOR THE CITY OF WALLINGFORD, CONNECTICUT
 811
 WALLINGFORD, CT 06495
 PHONE: (203) 261-1000
 FAX: (203) 261-1001
 EMAIL: info@collierseng.com

NO.	DATE	BY	DESCRIPTION
1	01/11/2023	AS	ISSUED FOR PERMITS



THIS DOCUMENT IS THE PROPERTY OF COLLIER ENGINEERING & DESIGN. IT IS TO BE USED ONLY FOR THE PROJECT AND FOR THE PROJECT ONLY. IT IS NOT TO BE REPRODUCED OR COPIED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF COLLIER ENGINEERING & DESIGN.

SITE NAME:
 GREENWICH CT
 5000404933
 5 PERRYBRIDGE RD
 GREENWICH HOSPITAL
 GREENWICH, CT 06830
 FAIRFIELD COUNTY

CONTACT:
 DANIS STAMBERY
 (617) 335-0995 (OL) (617) 631-2520 (F)
 D@BETTERMETAL.COM
 WWW.BETTERMETAL.COM

BILL OF MATERIALS
 S80M-1

GENERAL NOTES

1. THESE MODIFICATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE TELECOMMUNICATIONS INDUSTRY STANDARD TIA-222-H (MATERIALS AND SERVICES PROVIDED BY THE CONTRACTOR SHALL CONFORM TO THE ABOVE MENTIONED CODE).
2. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO PREVENT DAMAGE TO EXISTING STRUCTURES. ANY DAMAGE TO EXISTING STRUCTURE AS A RESULT OF THE CONTRACTORS WORK OR FROM DAMAGE DUE TO OTHER CAUSES SHALL BE REPAIRED AT THE CONTRACTORS EXPENSE TO THE SATISFACTION OF THE OWNER.
3. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS BEFORE BEGINNING WORK. CHANGING INTERNAL ANCHORS OR SHOP DRAWINGS SHALL BE APPROVED BY THE ARCHITECT IMMEDIATELY AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. IF THE CONTRACTOR DISCOVERS ANY EXISTING CONDITIONS THAT ARE NOT REPRESENTED ON THESE DRAWINGS, OR ANY CONDITIONS THAT WOULD INTERFERE WITH THE INSTALLATION OF THE MODIFICATIONS, NOTIFY THE ENGINEER IMMEDIATELY.
4. IT IS ASSUMED THAT ANY STRUCTURAL MODIFICATION WORK SPECIFIED ON THESE PLANS WILL BE ACCOMPLISHED BY KNOWLEDGEABLE WORKMEN WITH TOWER CONSTRUCTION EXPERIENCE.
5. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION METHODS, MEANS, TECHNIQUES, SEQUENCES, AND PROCEDURES.
6. ALL CONSTRUCTION MEANS AND METHODS, INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RECLE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN AND SHALL MEET ANSI-TIA-222 (LATEST EDITION), OSHA, AND GENERAL INDUSTRY TIA-222 (LATEST EDITION) INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION.
7. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR INSTALLING, MAINTAINING, AND SUPERVISING ALL SAFETY PROGRAMS IN ACCORDANCE WITH APPLICABLE SAFETY CODES.
8. WORK SHALL ONLY BE PERFORMED DURING CALM DRY CLIMATE (WINDS LESS THAN 15 MPH) AND THE TEMPERATURE ON THE DRAWING IS STRUCTURALLY SOUND AND IN THE COMPLETED FORM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRENGTH AND STABILITY OF THE STRUCTURE DURING ERECTION. CONTRACTOR SHALL PROVIDE TEMPORARY SUPPORT, SHORING, BRACING AND ANY OTHER STRUCTURAL SYSTEMS AS REQUIRED TO RESIST ALL FORCES THAT MAY OCCUR DURING HANDLING AND ERECTION UNTIL THE STRUCTURES ARE FULLY COMPLETED. TEMPORARY SUPPORTS, BRACING AND OTHER STRUCTURAL SYSTEMS REQUIRED FOR ERECTION SHALL BE REPAIRED OR REPLACED BY THE CONTRACTORS PROPERTY AFTER THEIR USE.
9. ALL INSTALLATIONS PERFORMED ON THIS STRUCTURE SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLATION, ALTERATION AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, ANSITIA-322.
10. CONTRACTOR SHALL SECURE SITE BACK TO EXISTING CONDITION UNDER SUPERVISION OF OWNER. ALL FENCE, STONE, GEO-FABRIC, GROUNDING, AND SURROUNDING GRADE SHALL BE REPLACED AND REPAIRED AS REQUIRED TO ACHIEVE OWNER APPROVAL. POSITIVE DRAINAGE AWAY FROM TOWER SITE SHALL BE MAINTAINED.
11. CONNECTIONS BETWEEN ITEMS SUPPORTED BY THE STRUCTURE AND THE STRUCTURE NOT SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. SUCH CONNECTIONS SHALL BE DESIGNED, COORDINATED AND INSPECTED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF THE PROJECT. SUBMIT SIGNED AND SEALED CALCULATIONS DURING SHOP DRAWING REVIEW.
12. DO NOT SCALE DRAWINGS
13. DO NOT USE THESE DRAWINGS FOR ANY OTHER SITE
14. ALL MATERIAL UTILIZED FOR THIS PROJECT MUST BE NEW AND FREE OF ANY DEFECTS. ANY MATERIAL SUBSTITUTIONS, INCLUDING BUT NOT LIMITED TO, ALTERED SIZE AND/OR STRENGTHS, MUST BE APPROVED BY THE OWNER AND ENGINEER IN WRITING.
15. THE MOUNT UNDER NO CIRCUMSTANCES SHOULD BE USED AS A TIE OFF POINT.

STRUCTURAL STEEL

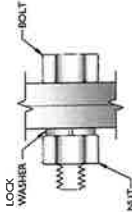
1. DESIGN, DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING REFERENCES EXCEPT AS SPECIFICALLY INDICATED IN THE CONTRACT DOCUMENTS.
 - a. AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION (15TH EDITION)
 - b. SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A307 BOLTS
 - c. AISC CODE OF STANDARD PRACTICE
2. STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING UNLESS OTHERWISE SHOWN:
 - CHANNELS, ANGLES, PLATES, ETC. ASTM A36 (GR 36)
 - STEEL PIPE ASTM A53 (GR 35)
 - BOLTS ASTM A325
 - NUTS ASTM A563
 - LOCK WASHERS LOCKING STRUCTURAL GRADE
3. ALL SUBSTITUTIONS PROPOSED BY THE CONTRACTOR SHALL BE APPROVED BY THE ARCHITECT IMMEDIATELY AND THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER FOR VERIFYING THE SUBSTITUTION IS SUITABLE FOR USE AND MEETS ORIGINAL DESIGN CRITERIA. DIFFERENCES FROM THE ORIGINAL DESIGN, INCLUDING MAINTENANCE, REPAIR AND REPLACEMENT, SHALL BE NOTED. ESTIMATES OF COSTS/CREDITS ASSOCIATED WITH THE SUBSTITUTION (INCLUDING RE-DESIGN COSTS AND COSTS TO SUB-CONTRACTORS) SHALL BE PROVIDED TO THE ENGINEER. CONTRACTOR SHALL PROVIDE ADDITIONAL DOCUMENTATION AND/OR SPECIFICATIONS TO THE ENGINEER AS REQUESTED.
4. PROVIDE STRUCTURAL STEEL SHOP DRAWINGS TO ENGINEER FOR APPROVAL PRIOR TO FABRICATION.
 - a. SUBMIT SHOP DRAWINGS TO PETER.LABIANO@COLLIERSENG.COM
 - b. PROVIDE COLLIERS ENGINEERING & DESIGN PROJECT # AND COLLIERS ENGINEERING & DESIGN PROJECT ENGINEER CONTACT IN THE BODY OF THE EMAIL
5. DRILL NO HOLES IN ANY NEW OR EXISTING STRUCTURAL STEEL MEMBERS OTHER THAN THOSE SHOWN ON STRUCTURAL DRAWINGS WITHOUT THE APPROVAL OF THE ENGINEER OF RECORD.
6. GALVANIZED ASTM A325 BOLTS SHALL NOT BE RELIEVED.
7. ALL NEW STEEL SHALL BE HOT DIP GALVANIZED FOR RUL WEATHER PROTECTION. IN ADDITION ALL NEW STEEL SHALL BE PAINTED TO MATCH EXISTING STEEL. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
8. ALL BOLT ASSEMBLIES FOR STRUCTURAL MEMBERS REPRESENTED IN THIS DRAWING REQUIRE LOCKING DEVICES TO BE INSTALLED IN ACCORDANCE WITH TIA-222-H SECTION 4.9.2 REQUIREMENTS.
9. WHERE CONNECTIONS ARE NOT FULLY DETAILED ON THESE DRAWINGS, FABRICATOR SHALL DESIGN CONNECTIONS TO RESIST LOADS AND FORCES WHERE SHOWN ON DRAWINGS AND AS OUTLINED IN SPECIFICATIONS.
10. FOR MEMBERS BEING REPLACED, PROVIDE NEW BOLTS AND MATCH EXISTING SIZE AND GRADE. MAINTAIN AISC REQUIREMENTS FOR MINIMUM BOLT DISTANCE AND SPACING.
11. ALL PROPOSED AND/OR REPLACED BOLTS SHALL BE OF SUFFICIENT LENGTH SUCH THAT THE END OF THE BOLT IS 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.
12. GALVANIZED ASTM A325 BOLTS SHALL NOT BE RELIEVED.
13. ALL NEW STEEL SHALL BE HOT DIP GALVANIZED FOR RUL WEATHER PROTECTION. CONTRACTOR SHALL OBTAIN WRITTEN PERMISSION TO PROTECT STEEL BY ANY OTHER MEANS.
14. ALL EXISTING PAINTED GALVANIZED SURFACES DAMAGED DURING REBAR INCLUDING AREAS UNDER STIFFENER PLATES SHALL BE WIRE BRUSHED CLEAN, REPAIRED BY COLD GALVANIZING (ZINC COATE OR EOR APPROVED EQUAL), AND REPAINTED TO MATCH THE EXISTING FINISH (IF APPLICABLE).
15. ALL HOLES IN STEEL MEMBERS SHALL BE SIZED 1/16" LARGER THAN THE BOLT DIAMETER. STANDARD HOLES SHALL BE USED UNLESS NOTED OTHERWISE.

BOLT SCHEDULE (IN.)

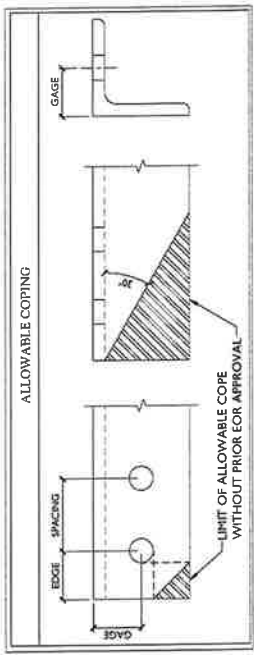
BOLT DIAMETER	STANDARD HOLE	SHORT SLOT	MIN. EDGE DISTANCE	SPACING
1/2	9/16	9/16 x 1 1/16	7/8	1 1/2
5/8	1 1/16	1 1/16 x 7/8	1 1/8	1 7/8
3/4	1 3/16	1 3/16 x 1	1 1/4	2 1/4
7/8	1 5/16	1 5/16 x 1 1/8	1 1/2	2 5/8
1	1 1/16	1 1/16 x 1 5/16	1 3/4	3

WORKABLE GAGES (IN.)

LEG	GAGE
4	2 1/2
3 1/2	2
3	1 3/4
2 1/2	1 3/8
2	1 1/8



- NOTES:**
1. ALL DIMENSIONS REPRESENTED IN THE DRAWINGS ARE TO FACE UNLESS OTHERWISE NOTED. CONTRACTORS SHALL VERIFY EXISTING CONDITIONS IN FIELD AND NOTIFY ENGINEER IF DISTANCES ARE LESS THAN THOSE PROVIDED.
 2. THE DIMENSIONS PROVIDED ARE MINIMUM REQUIREMENTS. ACTUAL DIMENSIONS OF PROPOSED MEMBERS SHALL BE VERIFIED AND MUST VARY FROM THE AGC MINIMUM REQUIREMENTS.
 3. SLOTTED HOLES SHALL ONLY BE USED WHEN DEPICTED IN THE DRAWINGS.
 4. MATCH EXISTING GAGES WHERE APPLICABLE UNLESS MINIMUM GAGE DISTANCES ARE COMPROMISED.



Colliers Engineering & Design
www.colliersengineering.com

verizon

811
FOR EXISTING PROPOSED PROJECTS NUMBER 1917

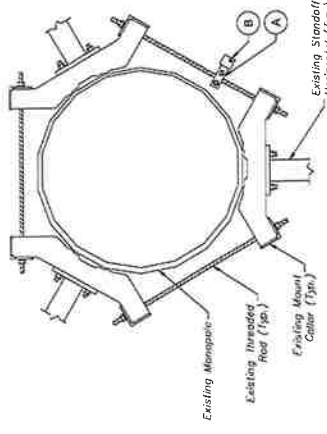
NO.	REVISION	DATE	BY	CHK	APP
1	ISSUED FOR PERMIT	11/17/16			

Seal
Professional Engineer
No. 2015001917
11/17/16

SITE NAME:
GREENWICH CT
5000104933
5 PERRYBRIDGE RD
GREENWICH HOSPITAL
GREENWICH, CT 06830
FAIRFIELD COUNTY

Colliers Engineering & Design
Peter Labiano, P.E.
1000 West Main Street
Fairfield, CT 06424
Phone: 203.232.0000
Fax: 203.232.0001
www.colliersengineering.com

GENERAL NOTES
SCN-1



ITEM #	QTY	PART NUMBER	DESCRIPTIONS
A	1	PV-SCRB-RM-U	ROUTING BRACKET (PERFECT VISION OR FOR APPROVED EQ.)
B	1	PV-CRM-CG-80	WIRE ROPE GUIDE (PERFECT VISION OR FOR APPROVED EQ.)

2 PROPOSED WIRE ROPE GUIDE ATTACHMENT - PLAN VIEW
 SCALE: N.T.S.

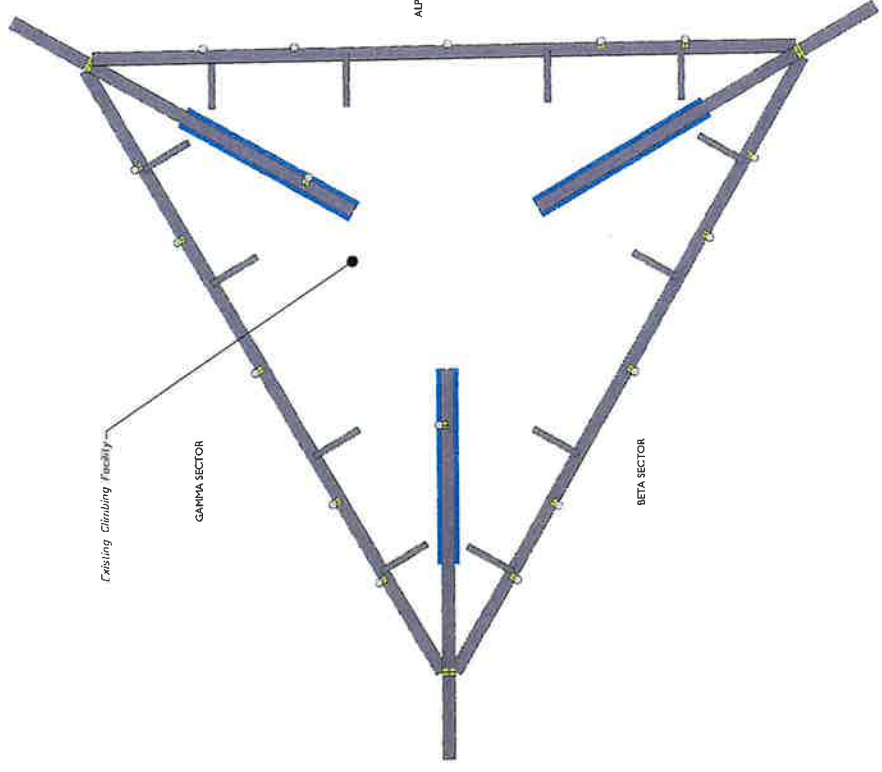
NOTE: CONTRACTOR SHALL ENSURE THAT WIRE ROPE GUIDE DOES NOT PUSH THE WIRE ROPE OUTSIDE OF THE VERTICAL PLANE OF THE SAFETY CLIMB. CONTRACTOR WITH PHOTOS OF SAFETY CLIMB AND COLLAR FOR FURTHER DIRECTION IF NEEDED.



Existing Safety Cable

Existing Climbing Facility

CLIMBING FACILITY PHOTO



1 CLIMBING FACILITY LOCATION
 SCALE: N.T.S.

- STRUCTURAL NOTES:**
- PER THE MOUNT MAPPING COMPLETED BY TOWER ENGINEERING PROFESSIONALS ON 10/22/2020, THE SAFETY CLIMB AND CLIMBING FACILITIES UP TO THE VERIZON MOUNT ELEVATION (123'-0") ARE IN GOOD CONDITION. COLLIER'S ENGINEERING & DESIGN DOES NOT WARRANT THIS INFORMATION.
 - INSTALL SHALL NOT CAUSE HARM TO THE STRUCTURE, CLIMBING FACILITY, SAFETY CLIMB, OR ANY SYSTEM INSTALLED ON THE STRUCTURE. TIMELY NOTICE AND DOCUMENTATION SHALL BE PROVIDED BY CONTRACTORS TO THE EOR (OF STRUCTURAL DESIGN) IF AN OBSTRUCTION WAS REQUIRED TO MEET THE RF SYSTEM DESIGN REQUIREMENTS AND PERFORMANCES.

LEGEND:

- PROPOSED
- RELOCATED
- EXISTING

MOUNT MODIFICATION SCHEDULE			NOTES
NO.	ELEVATION	QUANTITY	DESCRIPTION
1	131'-0"	3	RELOCATE EXISTING BRACKET CONNECTING KICKER AND STANDOFF HORIZONTAL
2		6	PROPOSED 64" LONG, L3x2x1/16 BRACING

GENERAL NOTES:

- CONTRACTOR SHALL VERIFY THAT NEW & EXISTING STEEL IS FREE OF CORROSION. VISIBLE MINOR CORROSION SHALL BE WIRE BRUSHED CLEAN AND TREATED WITH COLD GALVANIZATION. REPORT ANY SIGNIFICANT CORROSION TO ICA.
- THREADED RODS FOR NEW CONNECTION HARDWARE SHALL BE TRIMMED TO EXTEND NO MORE THAN 3" BEYOND THE LOCK NUT. TREAT ALL CUT ENDS WITH (2) COATS OF COLD GALVANIZATION (ZINC KOTE OR EQUIVALENT).
- IF ANY CORROSION IS DETECTED, NOTIFY ICA IMMEDIATELY.
- IF MOUNT MEMBERS NOT SHOWN FOR CLARITY (U.A.O.).

Colliers Engineering & Design
www.colliersengineering.com

1000 North Main Street, Suite 100
Greenwich, CT 06830
Tel: 203-261-1000
Fax: 203-261-1001

PROJECT NO. 222222
DATE: 11/22/22
DRAWN BY: JLD
CHECKED BY: JLD
DATE: 11/22/22

811
Call Before You Dig
1-800-4-A-DIG
www.811.com

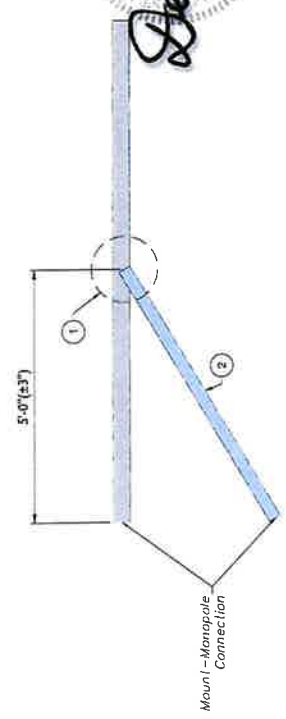
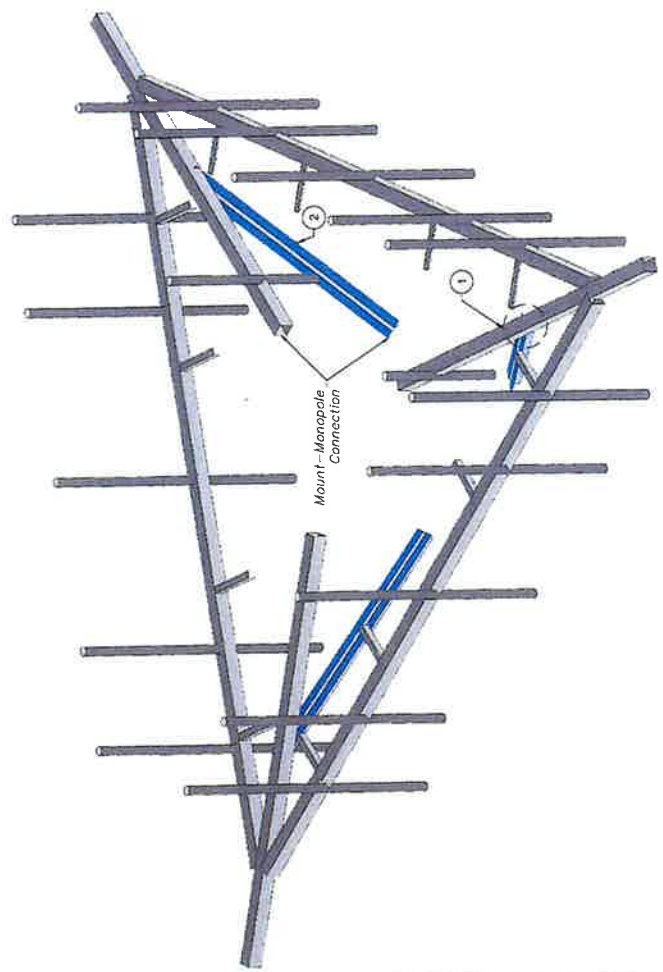
Seal of the State of Connecticut
OFFICE OF THE REGISTERED PROFESSIONAL ENGINEER
STATE OF CONNECTICUT
No. 2022-000136-0001
Date: 11/22/22
Exp. 11/22/25

Seal of Seiff

SITE NAME:
GREENWICH CT
5000104933
5 PERRYBRIDGE RD
GREENWICH HOSPITAL
GREENWICH, CT 06830
FAIRFIELD COUNTY

Colliers Engineering & Design
1000 North Main Street, Suite 100
Greenwich, CT 06830
Tel: 203-261-1000
Fax: 203-261-1001

MODIFICATION DETAILS
SS-1





MOUNT PHOTO 1



MOUNT PHOTO 2



MOUNT PHOTO 3



MOUNT PHOTO 4

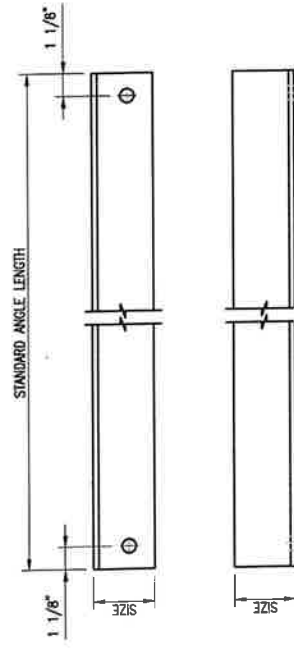
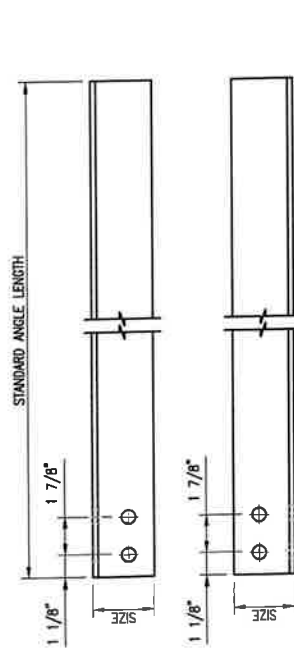
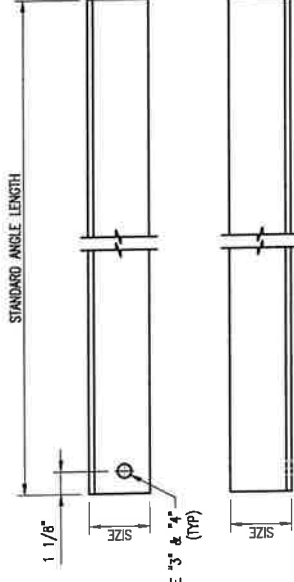
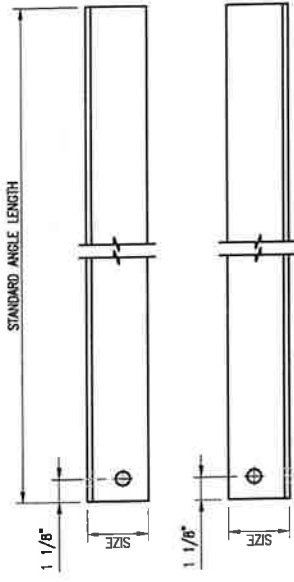
 <p>Engineering & Design www.calliersengineering.com</p> <p><small>Calliers Engineering & Design is an Equal Opportunity Employer. All qualified applicants will be considered for employment without regard to race, color, religion, sex, age, national origin, disability, or any other characteristic protected by law. Calliers Engineering & Design is an Equal Opportunity Employer.</small></p>			 <p>811 Call before you dig For more information call 1-800-4-A-DIGIT or visit us online at 811.org</p>	<table border="1"> <tr> <td>PROJECT NO.</td> <td>DATE</td> </tr> <tr> <td>DRAWN BY</td> <td>CHECKED BY</td> </tr> <tr> <td>DATE</td> <td>DATE</td> </tr> <tr> <td>SCALE</td> <td>SCALE</td> </tr> <tr> <td>BY</td> <td>DATE</td> </tr> </table>	PROJECT NO.	DATE	DRAWN BY	CHECKED BY	DATE	DATE	SCALE	SCALE	BY	DATE	 <p>DAVID S. GIFF PROFESSIONAL ENGINEER No. 2003-00113 12-08-11-04-000</p>	<p>STATE OF CONNECTICUT DEPARTMENT OF CONSTRUCTION REGISTERED PROFESSIONAL ENGINEER No. 2003-00113 12-08-11-04-000</p>	<p>SITE NAME: GREENWICH CT 5000104933 5 PERRYBRIDGE RD GREENWICH HOSPITAL GREENWICH, CT 06830 FAIRFIELD COUNTY</p>	 <p>Calliers Engineering & Design 1075 Westinghouse Dr. Greenwich, CT 06830 Call: 203-629-1100 Fax: 203-629-1101</p>	<p>MOUNT PHOTOS</p>	<p>SS-2</p>
PROJECT NO.	DATE																			
DRAWN BY	CHECKED BY																			
DATE	DATE																			
SCALE	SCALE																			
BY	DATE																			

FOR REFERENCE
 ONLY

DATE: _____
 DRAWN BY: BT
 CHECKED BY: MM/WR
 REVISION: _____
 DATE: _____
 TITLE: 09/24/21

VZWSMART
 STANDARD ANGLE

SHEET NUMBER: _____
 REV #:
 VZWSMART-ANGLE 0



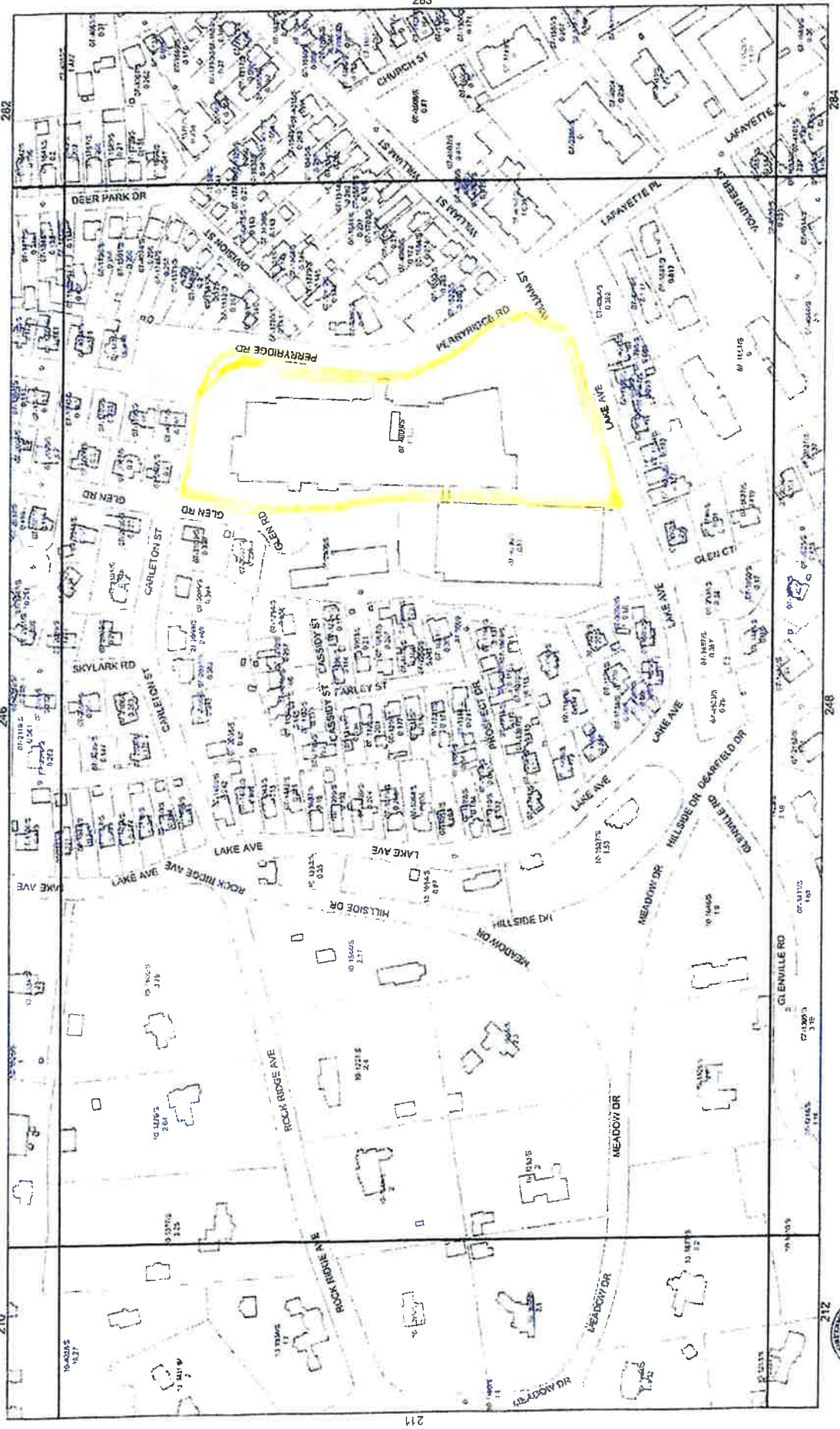
VZWSMART Standard Angle

VZWSMART Number	Size	Length	Hole Style	Hole Gauge	Also Used In:
A-PLK2-01	L 3" X 3" X 1/4"	96"	A	1-3/4"	VZWSMART-PLK2
A-PLK5-01	L 3" X 3" X 3/16"	96"	B	1-3/4"	VZWSMART-PLK5
A-SFK3-01	L 2-1/2" X 2-1/2" X 1/4"	96"	C	1-3/8"	VZWSMART-SFK3, -SFK3-SL, -PLK6, & -PLK8
A-L25X25X4X120	L 2-1/2" X 2-1/2" X 1/4"	120"	D	1-5/16"	
A-L25X25X4X240	L 2-1/2" X 2-1/2" X 1/4"	240"	D	1-5/16"	
A-L30X30X4X120	L 3" X 3" X 1/4"	120"	D	1-1/2"	
A-L30X30X4X240	L 3" X 3" X 1/4"	240"	D	1-1/2"	
A-L40X40X4X120	L 4" X 4" X 1/4"	120"	D	2"	
A-L40X40X4X240	L 4" X 4" X 1/4"	240"	D	2"	
A-L50X30X6X120	L 5" X 3" X 3/8"	120"	D	2-1/2"	
A-L50X30X6X120	L 5" X 5" X 3/8"	120"	D	2-1/2"	

NOTE:
 APPROVED SMART KIT VENDORS ARE ALLOWED TO SUBSTITUTE AT THEIR DISCRETION ANGLES LISTED ON THIS PAGE FOR CUSTOM LENGTH COMPONENTS OF MATCHING SIZE. SUBSTITUTIONS SHALL MEET THE ORIGINAL STRUCTURAL INTENT.

- NOTES:**
1. ALL ANGLE GRADE A36 OR BETTER.
 2. ALL HOT-DIPPED GALVANIZED PER ASTM A123.
 3. ALL HOLES ARE 11/16" DIA UNO.
 4. HOLES MAY OR MAY NOT BE PRESENT. DEPEND UPON MANUFACTURE DISCRETION.
 5. ALL FIELD CUT AND DRILLED SURFACES SHALL BE REPAIRED WITH A MINIMUM OF TWO COATS OF ZINCA OR ZINC COE PER ASTM A780 AND MANUFACTURER'S RECOMMENDATIONS.

ATTACHMENT 4



TOWN OF GREENWICH TAX MAP 247 VOL 3

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OWNERSHIP

Printed 07/18/2018 card No. 1 of 2

TRANSFER OF OWNERSHIP

GREENWICH HOSPITAL
 C/O NANCY FRITZ FACILITIES MGMT
 5 PERRYRIDGE ROAD
 GREENWICH, CT 06830

Parcel Number: 07-4009/S
 Parent Parcel Number:
 Property Address: PERRYRIDGE ROAD 0005
 Neighborhood: WEST PUTNAK
 Property Class: Exempt Commercial
 TAXING DISTRICT INFORMATION
 Jurisdiction: S7 Greenwich, CT
 Area: 001
 Corporation: 057
 District: 07
 Section & Plat: 167
 Routing Number: 6578R000C

Site Description
 Topography:

Public Utilities:
 Sewer, Electric
 Street or Road:
 Neighborhood:
 Zoning:
 Legal Acres:

1 Primary Commercial
 H-1 Hospital Zone
 7.3274

Date: 01/06/2012 GREENWICH HOSPITAL ASSOCIATION THE \$0
 07/03/1950 NA \$0

Book/Pg: 6265, 4
 Sk/Pg: 2051, 54

EXEMPT

VALUATION RECORD

Assessment Year	2006 List	2007 List	2010 Reval	2013 Prelim	2013 Final	2016 List	2017 List
Reason for Change	L 11876300	11876300	11846300	13938000	13938000	13938000	13938000
VALUATION	B 255669200	257342000	276895100	355986700	355986700	355986700	355986700
Markets	T 267545500	269218300	288741400	369924700	369924700	369924700	369924700
VALUATION	L 8313410	8313410	8292410	9756600	9756600	9756600	9756600
70% Assessed	B 178968440	180139400	193826570	249190690	249190690	249190690	249190690
	T 187281850	188452810	202118980	258947290	258947290	258947290	258947290

LAND DATA AND CALCULATIONS

Rating	Measured	Table	Prod. Factor	Base Rate	Adjusted Rate	Extended Value	Influence Factor	Value
-or-	-or-	-or-	-or-	58.22	58.22	18588000.0	-25%	13938000
Soil ID	Acres	Table	Depth Factor	Rate	Rate	Value	Factor	Value
Actual	Effective	Effective	Square Feet	58.22	58.22	18588000.0	-25%	13938000
Frontage	Depth	Depth						
319187.38								

Reason for Change: 10-01/2006 10/01/2007 10/01/2013 10/01/2015 10/01/2016 10/01/2017

VALUATION: 11876300, 11876300, 11846300, 13938000, 13938000, 13938000, 13938000

Markets: B 255669200, 257342000, 276895100, 355986700, 355986700, 355986700, 355986700

VALUATION: L 8313410, 8313410, 8292410, 9756600, 9756600, 9756600, 9756600

70% Assessed: B 178968440, 180139400, 193826570, 249190690, 249190690, 249190690, 249190690

T 187281850, 188452810, 202118980, 258947290, 258947290, 258947290, 258947290

Public Utilities: Sewer, Electric

Street or Road:

Neighborhood:

Zoning: 1 Primary Commercial

Legal Acres: 7.3274


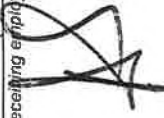
Supplemental Cards: TRUE TAX VALUE 13938000

TOTAL LAND VALUE 13938000

ATTACHMENT 5

Certificate of Mailing — Firm



Name and Address of Sender	TOTAL NO. of Pieces Listed by Sender	TOTAL NO. of Pieces Received at Post Office™	Affix Stamp Here Postmark with Date of Receipt.		
Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103	3	3			
Postmaster, per (name of receiving employee) 					
USPS® Tracking Number Firm-specific Identifier	Address (Name, Street, City, State, and ZIP Code™)	Postage	Fee	Special Handling	Parcel Airlift
1.	Fred Camillo, First Selectman Town of Greenwich 101 Field Point Road Greenwich, CT 06830				
2.	Patrick LaRow, AICP, Director of Planning and Zoning Town of Greenwich 101 Field Point Road Greenwich, CT 06830				
3.	Greenwich Hospital c/o Nancy Fritz Facilities Management 5 Perryridge Road Greenwich, CT 06830				
4.					
5.					
6.					

