



**Crown Castle**  
3 Corporate Park Drive, Suite 101  
Clifton Park, NY 12065

July 9, 2021

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

RE: **Notice of Exempt Modification for Verizon:**  
**Crown Site BU: 806371**  
**599 Matianuck Ave. Windsor, CT 06095**  
**Latitude: 41° 49' 16.04"/ Longitude: -72° 40' 36.29"**

Dear Ms. Bachman:

Verizon currently maintains twelve (12) total antennas at the 100-foot centerline on the existing 100-foot monopole tower, located at 599 Matianuck Ave. in Windsor, CT. The property is owned by the Town of Windsor and the tower is owned by Crown Castle. Verizon now intends to remove three (3) antennas, swap one (1) OVP/Raycap, swap three (3) antennas and one (1) hybrid line.

**Tower modifications:**

- Remove three (3) antennas
- Swap one (1) OVP/Raycap
- Swap three (3) antennas
- Swap one (1) hybrid line

**Ground modifications:**

- None

This facility was approved by the Connecticut Siting Council on November 12, 1992, Docket No. 137.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.S.C.A. § 16-50j-73, a copy of this letter is being sent to Town Manager Peter Souza and Town Planner Eric Barz. The Town of Windsor is the property owner and Crown Castle owns the tower.

Additionally:

1. The proposed modifications will not result in an increase in the height of the existing tower
2. The proposed modifications will not require the extension of the site boundary.
3. The proposed modification will not increase noise levels at the facility by six decibels or more, or to levels that exceed state and local criteria.
4. The operation of the replacement antennas will not increase radio frequency emissions at the

**The Foundation for a Wireless World.**

CrownCastle.com

Melanie A. Bachman

Page 2

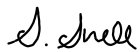
facility to a level at or above the Federal Communication Commission safety standard.

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

6. The existing structure and its foundation can support the proposed loading.

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

Sincerely,



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

Attachments

cc:

Eric Souza, Town Manager      (via email only to Souza@townofwindsorct.com)  
Town of Windsor  
275 Broad Street  
Windsor, CT 06095

Eric Barz, Town Planner      (via email only to barz@townofwindsorct.com)  
Town of Windsor  
275 Broad Street  
Windsor, CT 06095

Crown Castle, Tower Owner

## **Snell, Sarah**

---

**From:** Snell, Sarah  
**Sent:** Friday, July 9, 2021 11:10 AM  
**To:** Souza@townofwindsorct.com  
**Subject:** Crown BU 806371 - 599 Matianuck Ave. -Verizon Wireless Notice of Exempt Modification  
**Attachments:** 806371\_599 Matianuck Ave\_Notice of Exempt Modification\_Verizon\_7.9.2021-Email Copy.pdf

Good Morning,

Attached please find a copy of the Notice of Exempt Modification filing made today, July 9, 2021 to the Connecticut Siting Council concerning the above-referenced address on behalf of Verizon Wireless. The Council has advised that electronic notice is acceptable in light of the pandemic.

Kindly confirm receipt at your earliest convenience and let me know if you have questions or need anything additional.

Regards,

**Sarah Snell**  
Site Acquisition Specialist  
O: 508-621-9146 M: 978-886-1765

**CROWN CASTLE**  
1800 W. Park Drive  
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# Exhibit A

## **Original Facility Approval**

BK



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
New Britain, Connecticut 06051-4225  
Phone: 827-7682

November 13, 1992

David S. Malko, P.E.  
Manager, Engineering & Regulatory Services  
Bell Atlantic Metro Mobile  
20 Alexander Drive  
P.O. Box 5029  
Wallingford, CT 06492

RE: DOCKET NO. 137 - Metro Mobile CTS of Hartford, Inc.,  
Certificate of Environmental Compatibility and Public  
Need for the construction, maintenance, and operation of  
cellular facilities in the Towns of South Windsor and  
Windsor Connecticut.

Dear Mr. Malko:

At a public meeting on November 12, 1992, the Connecticut  
Siting Council (Council) considered and approved the  
construction at the South Windsor site as being in compliance  
with the Council's November 14, 1990, Decision and Order. The  
Council also conditionally approved the construction of the  
Windsor site as complying with the Council's Decision and Order  
provided that a silt fence is removed from the site and grass  
is established along the access drive. The Council will  
revisit the Windsor site in the spring to confirm the  
completion of these activities.

Enclosed please find the staff report concerning the field  
review of these sites.

Please contact me if you have any questions concerning this  
matter.

Very truly yours,

*Joel M. Rinebold* SMH  
Joel M. Rinebold  
Executive Director

JMR/SMH/cp

enclosure

6572E-3



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
New Britain, Connecticut 06051-4225  
Phone: 827-7682

Docket No. 137  
Metro Mobile CTS of Hartford, Inc.  
Cellular Telecommunications Sites  
Windsor and South Windsor  
Staff Report  
November 12, 1992

Metro Mobile CTS of Hartford, Inc. (Metro Mobile) submitted a final construction report to the Connecticut Siting Council (Council) on October 28, 1992, for the Windsor and South Windsor tower sites. Completion of construction and commencement of operation occurred in November 1991 for the Windsor site and July 1992 for the South Windsor site. On November 9, 1992, Fred Cunliffe of the Council's staff visited both sites.

The South Windsor site is set off U.S. Route 5 and adjacent to a stand of pine trees and railroad tracks within a heavy commercialized/industrial area. Since no deficiencies were observed, this site appears to be in compliance with the Council's Development and Management (D&M) Plan; therefore staff recommends final approval of this site.

The Windsor site lies behind the Town's community center and recreation fields. This tower is hidden within a wooded area with only the platform rising above the tree tops. Pine trees have been planted along the site's fence line facing the playing fields. The grass around the site is well established, but a synthetic silt fence still exists along the south side of the site. Most of the access road, which crosses the recreation fields, has been restored adequately, except for evidence of grass seed along the first 100 feet ( $\pm 10'$ ) of the access road. It appears there is some difficulty in establishing grass cover along this entry due to foot and vehicular traffic to and from the recreation fields for maintenance of the fields and the telecommunications site. In fact, lawn pavers that were proposed along the first 100 feet were either abandoned or covered over and approximately the first 20 feet of the entrance has gravel cover, per Town's request, to minimize erosion. This appears to be the only notable deviation from the D&M plan as proposed to the Council.

Metro Mobile contends that all construction including minor changes complies with Council approved Development and Management Plans.

Fred Cunliffe  
Siting Analyst

Bell Atlantic Metro Mobile  
20 Alexander Drive  
P.O. Box 5029  
Wallingford, CT 06492  
203 269-8858

October 28, 1992

Mr. Joel M. Rinebold, Executive Director  
Connecticut Siting Council  
136 Main Street  
Suite 401  
New Britain, CT 06051

Re: Docket No. 137 - Metro Mobile CTS of Hartford, Inc.

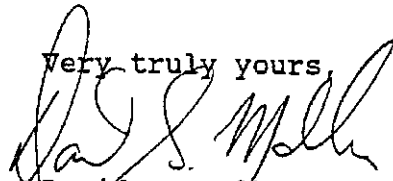
Dear Mr. Rinebold:

This final report for the South Windsor and Windsor (South) sites is submitted in accordance with Section 16-50j-77(B)(4) of the Council's Rules of Practice which requires written notice of completion of construction.

Completion of site construction and commencement of commercial operation occurred in November, 1991 for the Windsor (South) site and July, 1992 for the South Windsor site. Construction of the South Windsor site complied with the respective filed and approved D & M plan without significant modification. In the case of the Windsor (South) site, construction generally complied with the D & M plan with the exception of the minor changes more fully described in my July 12, 1991 letter to you which addressed Mr. Bradshaw Smith's concerns (copy attached). In addition, at the Town's request, the end of the access road was surfaced with gravel to aid in road stability and erosion control.

I apologize for any inconvenience caused by the delay in submitting this report.

Very truly yours,



David S. Malko, P.E.  
Manager, Engineering  
& Regulatory Services

DSM:kd  
Attachment

# METRO MOBILE

The Cellular Phone Company

20 Alexander Drive  
P.O. Box 5029  
Wallingford, CT 06492  
203-269-8858

July 12, 1991

Mr. Joel M. Rinebold  
Connecticut Siting Council  
136 Main Street  
Suite 401  
New Britain, CT 06051

Re: Docket No. 137 - Windsor (South) Cell Site

Dear Mr. Rinebold:

This is in response to Mr. Bradshaw Smith's May 28, 1991, comments concerning deviations from the Development and Management Plan (D&M plan) for the above reference site. The following addresses Mr. Smith's concerns.

One general issue which has contributed to the underlying concerns expressed in Mr. Smith's letter has been that CL&P has not yet installed the underground cable for the site. Early during the construction process it became apparent that CL&P was not going to be able to install the electric service in the desired time frame. At that time Metro Mobile offered to run conduit at Metro Mobile's expense so as not to require the fields to be disturbed again. CL&P, however, insisted on direct burial of its cable which will require further land disturbance at the site. Metro Mobile, therefore, has not fully restored the site, but will do so immediately after CL&P completes its trenching, which is currently scheduled for July 22, 1991.

The following addresses Mr. Smith's specific concerns:

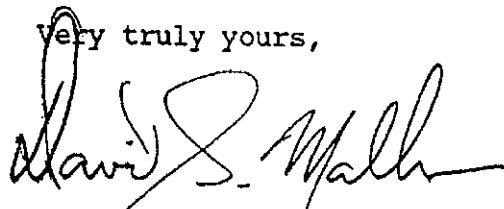
- 1) The temporary access road was built, after consultation with the Town of Windsor, in such a manner that would allow the road to serve as both the temporary construction access and final permanent access in order to disturb the land only once. This road will be restored to the level specified in the D&M plan for the permanent road.
- 2) The culvert is made of corrugated metal pipe as specified in the D&M plan. A plastic culvert end has been placed on the ends of the pipe rather than the metal ends specified. We do not believe this change is significant. As indicated above, the site is not yet fully restored and therefore the grass has not fully taken hold in this area.

- 3) The lawn pavers are made of plastic which is consistent with the D&M plan, in that the site plan specifies "or approved equal". Plastic lawn pavers are equally as strong as concrete and are lighter and much easier to work with. The Town was not opposed to this change.
- 4) The grass has not taken over the lawn pavers due to the site not yet being fully restored and the road still being used quite often for construction related purposes.
- 5) Again, the site is not yet fully constructed so full restoration has not yet taken place.
- 6) The transformer pad was just recently installed within the fenced compound as indicated in the D&M plan.
- 7) The erosion to date has been minimal as Mr. Smith has indicated, and is regularly being monitored by Metro Mobile. Should future erosion take place Metro Mobile will take the necessary and proper actions to control both erosion and sedimentation.

Metro Mobile takes Mr. Smith's concerns seriously and will monitor the site regularly to make sure the site is in compliance with the D&M plan. After full construction has taken place Metro Mobile will restore the site fully and remediate any future erosion which could take place.

I hope this response adequately addresses the Council's and Mr. Smith's concerns.

Very truly yours,



David S. Malko, P.E.  
Manager, Engineering &  
Regulatory Services

DM:jaw



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
New Britain, Connecticut 06051  
Phone: 827-7682

Gloria Dibble Pond  
Chairperson

April 18, 1991

### COMMISSIONERS

Energy/Telecommunications

Peter G. Boucher

Timothy R.E. Keeney

Hazardous Waste/Low-level  
Radioactive Waste

Susan Addis

Judge Nicholas Cioffi

Mr. David S. Malko

Metro Mobile

20 Alexander Drive

P.O. Box 5029

Wallingford, CT 06492

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RE: DOCKET NO. 137 - Metro Mobile CTS of Hartford, Inc.,  
Certificate of Environmental Compatibility and Public  
Need for the construction, maintenance, and operation  
of cellular facilities in the Towns of East Hartford,  
South Windsor, and Windsor Connecticut. South  
Windsor Cell Site: Development and Management Plan

Dear Mr. Malko:

At a meeting of the Connecticut Siting Council (Council)  
on April 18, 1991, the Council considered and approved the  
Development and Management (D&M) Plan for the South  
Windsor telecommunications tower site.

This approval applies only to the South Windsor site.  
Modifications to this D&M plan requires advance Council  
notification and approval. Please notify the Council when  
construction is complete.

Enclosed for your reference is a copy of the staff report  
for this D&M plan.

Very truly yours,

*Gloria Dibble Pond*

Gloria Dibble Pond  
Chairperson

GDP/foc  
enclosure

cc: Parties & Intervenors  
5262E-3



# STATE OF CONNECTICUT

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Docket No. 137  
Metro Mobile CTS of Hartford, Inc.  
Development and Management Plan  
South Windsor Cell Site  
April 18, 1991

On April 8, 1991, Metro Mobile of CTS of Hartford, Inc. (Metro Mobile), submitted a Development and Management (D&M) Plan for the South Windsor cell site to the Connecticut Siting Council (Council). This D&M plan describes construction of a 110-foot monopole, equipment building, and security fence.

Access to this site would be over an existing driveway along the east property line to the rear of the lot. Sedimentation control barriers would be placed along the site's southern boundary. The D&M plan depicts a catch basin and two, 24-foot, four-foot square galleries to be installed just south of the site to control runoff on the lessor's property. Although this was not in the original proposal and because groundwater is three feet below grade, staff agrees with the proposed drainage control measures.

The 110-foot monopole tower has been relocated to the east side of the leased parcel to reduce the fall zone area to adjacent properties. A smaller 14-foot by 40-foot equipment building would be constructed instead of the proposed 20-foot by 40-foot building. The white pine trees located to the north of the site would not be disturbed.

The utilities serving the site would be placed underground approximately 390 feet from Burnham Street to the equipment building. The utility easement has been relocated, at the request of the Connecticut Light and Power and Company, to the west side of the lessor's property and has lessor's approval. The building foundation would be set 3.5 feet deep and the tower foundation approximately would be a 7-foot cube set seven feet deep and would be constructed per manufacturer's specifications to include Electronic Industry Association Standard No. 222. However there is ambiguity in the submittal for wind and ice loading of the tower and Metro Mobile confirms that the tower structure would be constructed for a wind loading of 90 MPH with .5-inch radial ice. The overall height of the tower with antennas would be no higher than 123 feet above ground level.



Docket 137  
D&M Plan - South Windsor  
Staff Report  
Page 2

An eight-foot, chain link fence with security wire and one, 10-foot, two-leaf gate and one, four-foot, one-leaf gate would surround the site and crushed stone to a depth of four inches would be placed with the fenced area. Metro Mobile would repave and/or seed areas disturbed by construction.

All of the Council's orders regarding this D&M plan have been complied with and staff therefore recommends approval of this D&M plan.

Fred Cunliffe  
Siting Analyst

5262E

Date: July 25, 1990

Docket No. 137

Page 1 of 2

LIST OF PARTIES AND INTERVENORS - SERVICE LIST

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party <input checked="" type="checkbox"/>	Metro Mobile CTS of Hartford, Inc. 20 Alexander Drive P. O. Box 5029 Wallingford, CT 06492 Attn: Gary Schulman Vice President Of Northeast Operations	Robinson & Cole One Commercial Plaza Hartford, CT 06103-3597 (203) 275-8200 Attn: Earl W. Phillips
Intervenor <input type="checkbox"/>	Town of East Hartford	Mr. G. Barry Goodberg Asst. Corporation Counsel Town of East Hartford 740 Main Street East Hartford, CT 06108 (203) 289-2781
Party <input type="checkbox"/>  Intervenor <input checked="" type="checkbox"/>	Town of South Windsor	Jean E. Zurbrigen Town Manager Town of South Windsor 1540 Sullivan Avenue South Windsor, CT 06074 (203) 644-2511

Date: July 25, 1990

Docket No. 137

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Party <input type="checkbox"/>  Intervenor <input checked="" type="checkbox"/>	SNET Cellular, Inc.	Peter J. Tyrrell, Esq. SNET Cellular, Inc. 227 Church Street New Haven, CT 06506
Party <input type="checkbox"/>  Intervenor <input type="checkbox"/>		
Party <input type="checkbox"/>  Intervenor <input type="checkbox"/>		

BK



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enclosure

6572E-3



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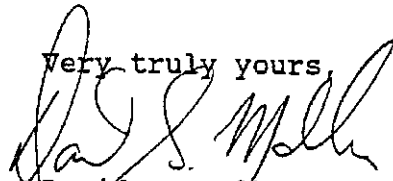
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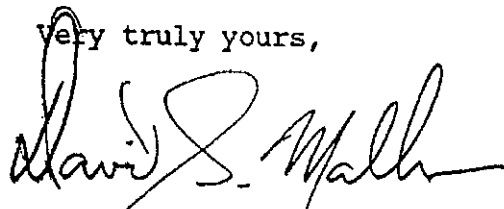
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DM:jaw



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Metro Mobile

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5262E-3





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Access to this site would be over an existing driveway along the east property line to the rear of the lot. Sedimentation control barriers would be placed along the site's southern boundary. The D&M plan depicts a catch basin and two, 24-foot, four-foot square galleries to be installed just south of the site to control runoff on the lessor's property. Although this was not in the original proposal and because groundwater is three feet below grade, staff agrees with the proposed drainage control measures.

The 110-foot monopole tower has been relocated to the east side of the leased parcel to reduce the fall zone area to adjacent properties. A smaller 14-foot by 40-foot equipment building would be constructed instead of the proposed 20-foot by 40-foot building. The white pine trees located to the north of the site would not be disturbed.

The utilities serving the site would be placed underground approximately 390 feet from Burnham Street to the equipment building. The utility easement has been relocated, at the request of the Connecticut Light and Power and Company, to the west side of the lessor's property and has lessor's approval. The building foundation would be set 3.5 feet deep and the tower foundation approximately would be a 7-foot cube set seven feet deep and would be constructed per manufacturer's specifications to include Electronic Industry Association Standard No. 222. However there is ambiguity in the submittal for wind and ice loading of the tower and Metro Mobile confirms that the tower structure would be constructed for a wind loading of 90 MPH with .5-inch radial ice. The overall height of the tower with antennas would be no higher than 123 feet above ground level.

Docket 137  
D&M Plan - South Windsor  
Staff Report  
Page 2

An eight-foot, chain link fence with security wire and one, 10-foot, two-leaf gate and one, four-foot, one-leaf gate would surround the site and crushed stone to a depth of four inches would be placed with the fenced area. Metro Mobile would repave and/or seed areas disturbed by construction.

All of the Council's orders regarding this D&M plan have been complied with and staff therefore recommends approval of this D&M plan.

Fred Cunliffe  
Siting Analyst

5262E

Date: July 25, 1990

Docket No. 137

Page 1 of 2

LIST OF PARTIES AND INTERVENORS - SERVICE LIST

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party <input checked="" type="checkbox"/>	Metro Mobile CTS of Hartford, Inc. 20 Alexander Drive P. O. Box 5029 Wallingford, CT 06492 Attn: Gary Schulman Vice President Of Northeast Operations	Robinson & Cole One Commercial Plaza Hartford, CT 06103-3597 (203) 275-8200 Attn: Earl W. Phillips
Intervenor <input type="checkbox"/>	Town of East Hartford	Mr. G. Barry Goodberg Asst. Corporation Counsel Town of East Hartford 740 Main Street East Hartford, CT 06108 (203) 289-2781
Party <input type="checkbox"/>  Intervenor <input checked="" type="checkbox"/>	Town of South Windsor	Jean E. Zurbrigen Town Manager Town of South Windsor 1540 Sullivan Avenue South Windsor, CT 06074 (203) 644-2511

Date: July 25, 1990

Docket No. 137

Page 2 of 2

LIST OF PARTIES AND INTERVENORS - SERVICE LIST

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party <input type="checkbox"/>  Intervenor <input checked="" type="checkbox"/>	SNET Cellular, Inc.	Peter J. Tyrrell, Esq. SNET Cellular, Inc. 227 Church Street New Haven, CT 06506
Party <input type="checkbox"/>  Intervenor <input type="checkbox"/>		
Party <input type="checkbox"/>  Intervenor <input type="checkbox"/>		



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
New Britain, Connecticut 06051  
Phone : 827-7682

March 12, 1991

Gloria Dibble Pond  
Chairperson

### COMMISSIONERS

Energy/Telecommunications

Peter G. Boucher

Timothy R.E. Keeney

Hazardous Waste/Low-level  
Radioactive Waste

Susan Addis

Judge Nicholas Cioffi

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Executive Director

Stanley J. Modzelesky  
Executive Assistant

Mr. David S. Malko  
Metro Mobile  
20 Alexander Drive  
P.O. Box 5029  
Wallingford, CT 06492

DOCKET NO. 137 - Metro Mobile CTS of Hartford, Inc.,  
Certificate of Environmental Compatibility and Public  
Need for the construction, maintenance, and operation  
of cellular facilities in the Towns of East Hartford,  
South Windsor, and Windsor Connecticut. Windsor  
(South) Cell Site: Development and Management Plan  
Tower Foundation Design

Dear Mr. Malko:

At a meeting of the Connecticut Siting Council (Council)  
on March 11, 1991, the Council considered and approved the  
tower foundation design of the Development and Management  
(D&M) Plan for the Windsor (South) telecommunications  
tower site.

Enclosed for your reference is a copy of the staff report  
for this D&M plan.

This approval applies only to the Windsor (South) site.  
Modifications to this D&M plan requires advance Council  
notification and approval.

Very truly yours,

Gloria Dibble Pond  
Chairperson

GDP/foc  
enclosure

5077E



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
New Britain, Connecticut 06051  
Phone: 827-7682

Docket 137  
Metro Mobile CTS of Hartford, Inc.  
Development and Management Plan  
Tower Foundation Design  
Windsor (South) Site  
March 11, 1991

On March 4, 1991, Metro Mobile CTS of Hartford, Inc. (Metro Mobile) submitted to the Connecticut Siting Council (Council) a tower foundation design pursuant to a Council's condition of approval of the Development and Management Plan for the Windsor (South) cell site.

The tower foundation would be placed on the west side of the site to the rear of the equipment building. A pier footing (caisson) would be drilled to a depth of 70 feet with a six-foot diameter. Construction of the caisson would be performed and inspected by the project geotechnical engineer. Concrete work would be in accordance with "Specifications for Structural Concrete for Buildings", ACI 301-89, including reinforcing steel. A soil boring report indicates no bedrock would be encountered and the ground water level is at 3.5 feet. If water is encountered during the placement of the tower foundation footing the water would be pumped to a 1,000 gallon detention tank and the overflow would be directed through the sedimentation barriers to the south of the site. This foundation design has a wind load of 90 mph with a 1/2 inch radial ice.

All of the Council's orders regarding this D&M plan have been complied with and staff therefore recommends approval of the tower foundation design as planned.

Fred Cunliffe  
Siting Analyst

5077E-4





# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
New Britain, Connecticut 06051  
Phone: 827-7682

February 14, 1991

Gloria Dibble Pond  
Chairperson

### COMMISSIONERS

Energy / Telecommunications

Peter G. Boucher  
Leslie Carothers

Hazardous Waste / Low-level  
Radioactive Waste

Frederick G. Adams  
Bernard R. Sullivan

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Joel M. Rinebold  
Executive Director

Stanley J. Modzelesky  
Executive Assistant

Mr. David S. Malko  
Metro Mobile  
20 Alexander Drive  
P.O. Box 5029  
Wallingford, CT 06492

RE: DOCKET NO. 137 - Metro Mobile CTS of Hartford, Inc.,  
Certificate of Environmental Compatibility and Public  
Need for the construction, maintenance, and operation  
of cellular facilities in the Towns of East Hartford,  
South Windsor, and Windsor Connecticut. Windsor  
(South) Cell Site: Development and Management Plan

Dear Mr. Malko:

At a meeting of the Connecticut Siting Council (Council) on February 11, 1991, the Council considered and approved the Development and Management (D&M) Plan for the Windsor (South) telecommunications tower site with the condition that the tower foundation design would be submitted for Council approval prior to the construction of the tower and tower foundation. All other site construction may proceed.

The Council's approval is contingent upon moving the sedimentation barrier along the south border of the site to the edge of the cleared area and to avoid removing trees of significant size, particularly a tree on the northwest corner of the site. Enclosed for your reference is a copy of the staff report for this D&M plan.

This approval applies only to the Windsor (South) site. Modifications to this D&M plan requires advance Council notification and approval.

Very truly yours,

Gloria Dibble Pond  
Chairperson

GDP/foc  
enclosure

cc: Parties & Intevenors  
5077E



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
New Britain, Connecticut 06051  
Phone: 827-7682

Docket 137

Metro Mobile CTS of Hartford, Inc.  
Development and Management Plan  
Windsor (South) Site  
February 11, 1991

On January 24, 1991, Metro Mobile CTS of Hartford, Inc. (Metro Mobile) submitted to the Connecticut Siting Council (Council) a Development and Management (D&M) Plan for the Windsor (South) cell site. The site includes construction of a 100-foot monopole and 20-foot by 30-foot equipment building.

A temporary access road approximately 550 feet in length and 12 feet wide would be constructed from the edge of the parking lot to the site. The first 160 feet would be filled to raise the grade of the road and moved approximately eight feet south of the permanent easement to allow easier access for construction vehicles. After construction of the site, the temporary access road would be covered with top soil and seeded. The first 160 feet would involve removal of some of the fill, realignment of the access road within the easement, relocation and improvement of a 12-inch culvert, and the installation of lawn pavers. Field observations revealed that the permanent access road would be placed parallel on a slope for approximately 300 feet but tracks from vehicles showed that they have traveled 10 to 15 feet south of the marked easement indicating prudent avoidance of driving along the slope. Although Metro Mobile is aware of this slope no cut and fill would be required to level the access road and the applicant contends it is within safe operating limits for service vehicles.

The D&M plan depicts 330 linear feet of siltation fences and stone and fabric sedimentation barriers would be installed at the beginning of the temporary access road for approximately 240 feet to include protection of a field drain north of the road. The site would be surrounded by staked haybales except for the east side. Because of the close proximity to wetlands staff recommends the south border of sedimentation barriers be moved to the edge of the cleared area. Also, staff recommends that a tree on the northwest corner of the site not be removed as well as other trees of significant size bordering the site. Eleven, six-foot evergreen trees would be planted along the east side of the site providing some shielding to the playing fields. Metro Mobile would stabilize and restore all areas disturbed by construction including the temporary access road with loam and seed except within the fenced area which would have crushed stone throughout at a depth of four-inches.



The equipment building and tower would be placed within a 50-foot by 60-foot leased parcel surrounded by an eight-foot chain link security fence with a 10-foot, two-leaf gate for entry. The equipment building would be a prefabricated, concrete, 20-foot by 30-foot structure used to house telecommunications equipment. The utilities serving the site would be brought in underground along a 655 foot long, 20-foot wide easement from an existing utility pole on the parking lot. The monopole tower would have two cellular platforms, one supporting 12 antennas and the other 4 antennas, at a height of 84 feet and 97 feet, respectively. The overall height of the tower and antennas would be no higher than 113 feet. A soil boring report indicates the ground water level is at 3.5 feet. If water is encountered during the placement of the equipment building and tower foundation footings the water would be pumped to a 1,000 gallon detention tank and the overflow would be directed through the sedimentation barriers to the south of the site.

Although no drawings of the tower foundation have been submitted, Metro Mobile requests consideration of this item at a later date, and approval of the D&M plan as submitted. This would allow for placement of sedimentation barriers, site clearing, construction of the equipment building foundation and building, and a temporary access road to accommodate the lease which requires an accelerated construction schedule so as not to interfere with the use of the playing fields. Construction of the tower foundation and tower would commence only with Council approval.

To date, the Town of Windsor has not formerly approved the D&M plan, but they have not objected to the plan when consulted by Metro Mobile.

Fred Cunliffe  
Siting Analyst

5077E

Date: July 25, 1990

Docket No. 137

Page 1 of 2

LIST OF PARTIES AND INTERVENORS - SERVICE LIST

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party <input checked="" type="checkbox"/>  Intervenor <input type="checkbox"/>	Metro Mobile CTS of Hartford, Inc. 20 Alexander Drive P. O. Box 5029 Wallingford, CT 06492 Attn: Gary Schulman Vice President Of Northeast Operations	Robinson & Cole One Commercial Plaza Hartford, CT 06103-3597 (203) 275-8200 Attn: Earl W. Phillips
Party <input checked="" type="checkbox"/>  Intervenor <input type="checkbox"/>	Town of East Hartford	Mr. G. Barry Goodberg Asst. Corporation Counsel Town of East Hartford 740 Main Street East Hartford, CT 06108 (203) 289-2781
Party <input type="checkbox"/>  Intervenor <input checked="" type="checkbox"/>	Town of South Windsor	Jean E. Zurbrigen Town Manager Town of South Windsor 1540 Sullivan Avenue South Windsor, CT 06074 (203) 644-2511

Date: July 25, 1990

Docket No. 137

Page 2 of 2

LIST OF PARTIES AND INTERVENORS - SERVICE LIST

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party <input type="checkbox"/>  Intervenor <input checked="" type="checkbox"/>	SNET Cellular, Inc.	Peter J. Tyrrell, Esq. SNET Cellular, Inc. 227 Church Street New Haven, CT 06506
Party <input type="checkbox"/>  Intervenor <input type="checkbox"/>		
Party <input type="checkbox"/>  Intervenor <input type="checkbox"/>		


# METRO MOBILE

The Cellular Phone Company

20 Alexander Drive  
P.O. Box 5029  
Wallingford, CT 06492  
203-269-8858

## M E M O R A N D U M

TO: Gary Schulman  
Art Lane  
Dave Malko  
Ron Losefsky  
Marty Rippe  
Howard Polnow

FROM: Jim Walz 

SUBJ: Docket 137 - (Windsor South) Development and  
Management Plan Approval

DATE: February 20, 1991

---

By letter dated February 14, 1991, the Connecticut Siting Council approved the D&M Plan for the Windsor (South) site with the condition that the tower foundation design would be submitted for Council approval prior to the construction of the tower and tower foundation. ALL OTHER SITE CONSTRUCTION MAY PROCEED!!

In addition, THE SEDIMENTATION BARRIER ALONG THE SOUTH BORDER OF THE SITE MUST BE MOVED TO THE EDGE OF THE CLEARED AREA, and DURING CLEARING AVOIDANCE OF REMOVING TREES OF SIGNIFICANT SIZE, PARTICULARLY A TREE ON THE NORTHWEST CORNER OF THE SITE MUST BE EXERCISED!!

JAW



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

136 Main Street, Suite 401  
New Britain, Connecticut 06051  
Phone: 827-7682

Gloria Dibble Pond  
Chairperson

### COMMISSIONERS

Energy / Telecommunications

Peter G. Boucher  
Leslie Carothers

Hazardous Waste / Low-level  
Radioactive Waste

Frederick G. Adams  
Bernard R. Sullivan

### COUNCIL MEMBERS

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Paulann H. Sheets  
William H. Smith  
Colin C. Tait

Joel M. Rinebold  
Executive Director

Stanley J. Modzelesky  
Executive Assistant

November 21, 1990

Mr. Gary Schulman  
Vice President of  
Northeast Operations  
Metro Mobile CTS of  
Hartford, Inc.  
20 Alexander Drive  
P. O. Box 5029  
Wallingford, CT 06492

RE: DOCKET NO. 137 - An application of Metro Mobile CTS of Hartford, Inc., for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of cellular facilities in the Towns of East Hartford, South Windsor, and Windsor, Connecticut.

Dear Mr. Schulman:

By its Decision and Order dated November 14, 1990, the Connecticut Siting Council granted a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of cellular facilities in the Towns of South Windsor and Windsor, Connecticut.

Enclosed are the Council's Certificate, Findings of Fact, Opinion, and Decision and Order.

Very truly yours,

Joel M. Rinebold  
Executive Director

JMR/bw

Enclosures - 3

cc: Earl W. Phillips  
Council Members

4864E-6

DOCKET NO. 137 - An application of Metro Mobile Connecticut  
CTS of Hartford, Inc., for a Certificate of Environmental  
Compatibility and Public Need Siting  
for the construction, maintenance, and Council  
operation of cellular facilities in the Towns  
of East Hartford, South Windsor, and Windsor,  
Connecticut. November 14, 1990

#### FINDINGS OF FACT

1. Metro Mobile of CTS Hartford, Inc., (Metro Mobile) in accordance with the provisions of sections 16-50g to 16-50z of the Connecticut General Statutes (CGS), applied to the Connecticut Siting Council (Council) on May 17, 1990, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, operation, and maintenance of two telecommunications towers and associated equipment to provide increased domestic public cellular radio telecommunications service (cellular service) in the Towns of Windsor, South Windsor, and/or East Hartford, within the Hartford, Connecticut, New England County Metropolitan Area (NECMA). (Record)
2. Public Notice of the application, as required by CGS section 16-50l, was published twice in the Journal Inquirer and Hartford Courant. (Record)
3. The Council and its staff made inspections at the proposed and alternate cell sites in Windsor, South Windsor, and East Hartford, Connecticut, on August 15, 1990. During the field review, Metro Mobile flew balloons at each proposed and alternate cell site to simulate the height of each proposed and alternate tower. (Record)
4. Pursuant to CGS Section 16-50m, the Council, after giving due notice thereof, held a public hearing for the proposed application on August 15, 1990, beginning at 3:30 p.m., and reconvening at 7:00 p.m., in the South Windsor Town Hall Council Chambers, 1540 Sullivan Avenue, South Windsor, Connecticut. (Record)
5. The parties and intervenors to the proceeding are the applicant and the persons and organizations whose names are listed in the Decision and Order, which accompany these Findings of Fact. (Record)
6. The Department of Environmental Protection (DEP) filed written comments with the Council pursuant to CGS Section 16-50j. (Record)

7. Pursuant to CGS 16-501(e), the applicant provided a technical report and consulted with public officials from each town. (Metro Mobile V)
8. In 1981, the Federal Communications Commission (FCC) recognized the public need for technical improvement, wide-area coverage, high quality service, and establishing a competitive market for mobile telephone service. (Metro Mobile I, p.7; Docket 126, Finding of Fact 8)
9. The FCC has exercised its primary jurisdiction in determining need for the provision of cellular service, and the applicant is not required to demonstrate a public need for the service. (Metro Mobile I, p.7)
10. The FCC has determined that for the public interest two licenses would be granted to encourage competition in providing cellular service in each market area. One license is awarded to a wireline company, the other to a non-wireline company. (Metro Mobile I, p.7; Docket 126, Finding of Fact 10)
11. The FCC pre-empts state regulations in determining technical standards and a competitive market structure. (Metro Mobile I, p.8)
12. The FCC rules permit a licensee to modify its system, including the addition of new cell sites without prior approval by the FCC as long as the licensee's authorized service area is not enlarged. The proposed cell sites in this application would not enlarge Metro Mobile's authorized service area. (Metro Mobile I, p.9)
13. Cellular service consists of small overlapping broadcast regions. These regions or cells are limited in size by the location of a potential site within a cellular grid, its availability, its environmental compatibility, and constraints imposed by laws of radio propagation. The system design provides for frequency reuse and handoff capability and must be able to accept orderly system expansion. (Metro Mobile I, tab 11, pp.2,3 & 6; Docket 126, Finding of Fact 12)
14. In selecting a cell site, Metro Mobile found no existing structures of adequate height, structural strength, or space availability in or near the search areas. (Metro Mobile I, Table 11, p.8)
15. The proposed or alternate sites would be sectorized, providing for a maximum call handling capacity by dividing a geographic service area into six areas or

29. The topographic elevation at the proposed site is 60 feet above mean sea level (AMSL). (Metro Mobile I, tab 1, p.6)
30. The proposed East Hartford site is on level terrain within a landscaped area of fruit and evergreen trees that do not exceed 20 feet in height. (Metro Mobile tab 5; DEP letter dated July 10, 1990)
31. The existing zoning of the proposed site is industrial (I-2 zone). Existing adjacent land uses include low density residential development (R-2 zone) to the south and east and industry (I-2 zone) to the north and west. (Transcript, p.133)
32. Utilities to the proposed East Hartford site would come in from Dolores Drive. (Metro Mobile I, tab 1, p.7)
33. Two transmit and six transmit/receive antennas, approximately 13 and 11 feet in length, respectively, would be mounted at the top of the proposed tower for an overall tower height of 113 feet above ground level (AGL). (Metro Mobile I, tab 1, p.8; Metro Mobile III, Q.10)
34. The fall zone of the proposed East Hartford tower would encompass three properties owned by Walter Demusz (Lessor), Burnham Business Park Associates, and Daniel Filimeno. Metro Mobile's equipment building and a small concrete building on the Lessor's property would be the only structures within the fall zone. (Metro Mobile III, Q.7, Attachment 5)
35. At the proposed East Hartford site the tower could be moved to the opposite corner and the building rotated 90 degrees clockwise so that the tower fall zone would only include the lessor's property and Delores Street. (Transcript, p.113)
36. At the proposed East Hartford site there are nine residences within a 1000-foot radius of the proposed tower. The nearest residence is located 620 feet from the proposed tower. (Metro Mobile I, tab 5, p.2)
37. The Town of East Hartford is not in favor of the proposed East Hartford site because of the close proximity of the proposed facility to a low density residential area. (Transcript p.40)
38. An existing 21-inch clay pipe crosses Metro Mobile's leased parcel at the proposed East Hartford site. The Town of East Hartford plans to abandon this drainage pipe. Runoff that previously flowed through this



Windsor, and Windsor proposed and alternate towers. No obstruction marking or lighting would be necessary for any of the proposed or alternate towers. (Metro Mobile I, tabs 1 and 2, p.12, tabs 6 and 7, p.13)

23. There are no known extant populations of federally endangered and threatened species or Connecticut "species of special concern" occurring at the East Hartford, South Windsor, and Windsor proposed and alternate sites. However, DEP records indicate that the federally endangered bald eagle may use large trees to perch during the winter in the vicinity of the Windsor alternate site. The DEP's Wildlife Division notes that "work activity west of the railroad tracks will not seriously effect wintering eagles." (Metro Mobile VI; DEP letters dated May 14 and May 31, 1990.)

#### Proposed East Hartford Tower Site

24. The proposed East Hartford cell site would be located to the rear of 303 Burnham Street, East Hartford. The proposed site is a 60-foot by 60-foot leased parcel within a 2.8 acre parcel owned by Walter Demusz. The large lot is used for manufacturing. The proposed tower would be located approximately 12.5 feet east of Dolores Drive, approximately 605 feet south of Burnham Street, approximately 162 feet west of an abutting property owned by Jene E. Britton, and approximately 12.5 feet north of an abutting property owned by Walter Demusz. (Metro Mobile I, tab 1, p.1, tab 5, p.1; Metro Mobile 3, Q.7, attachment 5)
25. At the proposed East Hartford site a 100-foot, self-supporting monopole tower and 20-foot by 40-foot equipment building would be constructed on the leased parcel. (Metro Mobile I, tab 1, p.1)
26. The preferred access to the proposed East Hartford site would be directly from Dolores Drive, a private road owned by Burnham Business Park Associates, which may be accepted as a public road by the Town of East Hartford. If this access does not become available, an alternate access approximately 600 feet in length could be constructed along an easement on the western property line of Walter Demusz parallel to Dolores Drive extending from Burnham Street to the proposed cell site. (Metro Mobile I, tab 1, p.1; Metro Mobile IV, Q.10)
27. Dolores Drive was approved by the East Hartford Planning and Zoning Commission and was built within the last two years. The Town of East Hartford has yet to accept this road for public use. (Transcript, pp.139-141)

29. The topographic elevation at the proposed site is 60 feet above mean sea level (AMSL). (Metro Mobile I, tab 1, p.6)
30. The proposed East Hartford site is on level terrain within a landscaped area of fruit and evergreen trees that do not exceed 20 feet in height. (Metro Mobile tab 5; DEP letter dated July 10, 1990)
31. The existing zoning of the proposed site is industrial (I-2 zone). Existing adjacent land uses include low density residential development (R-2 zone) to the south and east and industry (I-2 zone) to the north and west. (Transcript, p.133).
32. Utilities to the proposed East Hartford site would come in from Dolores Drive. (Metro Mobile I, tab 1, p.7)
33. Two transmit and six transmit/receive antennas, approximately 13 and 11 feet in length, respectively, would be mounted at the top of the proposed tower for an overall tower height of 113 feet above ground level (AGL). (Metro Mobile I, tab 1, p.8; Metro Mobile III, Q.10)
34. The fall zone of the proposed East Hartford tower would encompass three properties owned by Walter Demusz (Lessor), Burnham Business Park Associates, and Daniel Filimeno. Metro Mobile's equipment building and a small concrete building on the Lessor's property would be the only structures within the fall zone. (Metro Mobile III, Q.7, Attachment 5)
35. At the proposed East Hartford site the tower could be moved to the opposite corner and the building rotated 90 degrees clockwise so that the tower fall zone would only include the lessor's property and Delores Street. (Transcript, p.113)
36. At the proposed East Hartford site there are nine residences within a 1000-foot radius of the proposed tower. The nearest residence is located 620 feet from the proposed tower. (Metro Mobile I, tab 5, p.2)
37. The Town of East Hartford is not in favor of the proposed East Hartford site because of the close proximity of the proposed facility to a low density residential area. (Transcript p.40)
38. An existing 21-inch clay pipe crosses Metro Mobile's leased parcel at the proposed East Hartford site. The Town of East Hartford plans to abandon this drainage pipe. Runoff that previously flowed through this

21-inch pipe would be diverted to a newly installed 24-inch pipe from a catch basin located north of the proposed site on the Lessor's property to a new catch basin on Dolores Drive. Metro Mobile could not identify any existing drainage easements or other rights-of-way associated with the existing 21-inch clay pipe. (Metro Mobile Late File 10)

39. The total estimated costs of construction, to be incurred by Metro Mobile, for the proposed East Hartford site would be:
- |                               |                  |
|-------------------------------|------------------|
| Radio equipment               | \$483,400        |
| Tower and antennas            | \$33,360         |
| Power systems                 | \$12,000         |
| Building costs                | \$68,300         |
| Site preparation/Installation | <u>\$134,000</u> |
| Total                         | \$731,060        |
- (Metro Mobile, tab 1, p.9)

#### Alternate South Windsor Tower Site

40. As an alternate to the proposed East Hartford cell site, Metro Mobile proposes a cell site in South Windsor. The alternate South Windsor cell site would be located to the rear of 190 Burnham Street, South Windsor. The alternate South Windsor site would be a 35-foot by 70-foot leased parcel within a larger 1.04 acre parcel owned by Abraham Glassman. The remainder of the lot is used for industrial purposes. The proposed tower would be located approximately 15 feet east of abutting property owned by the State of Connecticut, approximately 10 feet south of abutting property owned by Meyer Gage Co., Inc., 100 feet west of abutting property owned by Albert B. Meyer, and approximately 382 feet north of Burnham Street. (Metro Mobile I, tab 2, p.1, tab 5, p.10; Metro Mobile III. Q.7, Attachment 5)
41. A 110-foot, self-supporting monopole tower and 20-foot by 40-foot equipment building would be constructed on the alternate South Windsor site. (Metro Mobile I, tab 2, p.1)
42. Access to the alternate South Windsor site would be over an existing driveway along the eastern property boundary on the lessor's property. (Metro Mobile I, tab.2, p.1; Metro Mobile II, Q.7)
43. The topographic elevation at the alternate site is 54 feet AMSL. (Metro Mobile I, tab 2, p.6)
44. The alternate South Windsor tower would be located on relatively level terrain within a partially cleared area

north of the existing parking area. White pine trees approximately 15 inches to 20 inches in diameter border the site to the north. (Metro Mobile I, tab 2, p.6, and DEP letter dated July 10, 1990)

45. The fall zone of the alternate South Windsor tower would encompass seven properties owned by Abraham Glassman (Lessor); Albert B. Meyer; Meyer Gage Co., Inc.; State of Connecticut; Consolidated Rail Corporation; Richard and Bernice A. Tonucci; and Arthur and Agnes Spielman. The north corner of the Lessor's building and Metro Mobile's equipment building would be the only structures within the fall zone. (Metro Mobile III, Q.7, Attachment 5)
46. The existing zoning of the alternate South Windsor site is industrial. Use of surrounding properties is for industry and commercial development. (Metro Mobile I, tab 2, p.6)
47. Utilities would be supplied to the alternate South Windsor site via an underground line along a 340-foot easement from Burnham Street. (Metro Mobile I, tab 5, p.10)
48. Two transmit and six transmit/receive antennas, approximately 13 and 11 feet in length, respectively, would be mounted at the top of the alternate South Windsor tower for an overall height of 123 feet AGL. (Metro Mobile I, tab 2, p.8; Metro Mobile III, Q.10)
49. At the alternate South Windsor site there are nine residences within 1000-feet of the proposed tower. The nearest residence is located 300 feet from the proposed tower. (Metro Mobile I, tab 5, p.11)
50. The Town of South Windsor does not object to the alternate South Windsor tower site; however, concerns related to visibility of the facility and power density emissions were stated. (Transcript pp. 32-37)
51. The estimated costs of construction, to be incurred by Metro Mobile, for the alternate South Windsor site would be:
- |                               |                  |
|-------------------------------|------------------|
| Radio equipment               | \$483,400        |
| Tower and antenna             | \$38,320         |
| Power systems                 | \$12,000         |
| Building costs                | \$68,300         |
| Site preparation/Installation | <u>\$159,000</u> |
| Total                         | \$761,020        |
- (Metro Mobile I, tab 2, p.9)

Proposed East Hartford and Alternate South Windsor Sites

52. The proposed East Hartford or alternate South Windsor site would provide additional cellular traffic handling capacity and provide cellular service along U.S. Routes 5, 6, 44A, and Interstate Routes 91, 291, and 384. The proposed or alternate site would off-load traffic from the existing Hartford and Vernon cell sites, the approved Manchester cell site, and a proposed Windsor cell site. (Metro Mobile I, tab 2, p.22)
53. Fourteen sites were considered and twelve sites were rejected by Metro Mobile for the proposed East Hartford and alternate South Windsor site. Reasons for rejection are:
- a) landowners unwilling to lease or sell land for construction of a cell site,
  - b) conflict with residential subdivision and/or industrial park development, and
  - c) close proximity to residences and wetlands.
- (Metro Mobile I, tab 3)
54. According to the Connecticut Historical Commission, the proposed East Hartford and alternate South Windsor cell sites would have "no impact with respect to historic, architectural, or archaeological resources listed on or eligible for the National or State Register of Historic Plans". (Metro Mobile I, tab 4)
55. With 90 channels operating simultaneously at maximum power, the worst case electromagnetic radio frequency power density level would be 0.1526 milliwatts per square centimeter ( $\text{mW}/\text{cm}^2$ ) at the base of the proposed East Hartford tower and  $0.1239 \text{ mW}/\text{cm}^2$  at the base of the alternate South Windsor tower. The American National Standards Institute (ANSI) Safety Standard for the proposed frequency level 870-880 MHz, as adopted by the State of Connecticut pursuant to DEP regulations, is  $2.92 \text{ mW}/\text{cm}^2$ . (Metro Mobile I, tab 5, pp.2 and 11).

Proposed Windsor Tower Site

56. The proposed Windsor cell site would be located within a 34.43 acre recreation parcel, known as the L.P. Wilson Community Center, 599 Matianuck Avenue, Windsor, Connecticut. The proposed site would be a 50-foot by 60-foot leased parcel and the proposed tower would be located approximately 125 feet west of a soccer field sideline and approximately 285 feet east of the nearest property line. (Metro Mobile I, tab 10, p.1, tab 6, p.1; Metro Mobile III, Q.7, Attachment 5)

57. A proposed 100-foot, self-supporting monopole tower and a 20-foot by 30-foot equipment building would be constructed on the proposed Windsor leased parcel. (Metro Mobile I, tab 6, p.1, tab 10, p.1)
58. The proposed Windsor site access would be along a 20-foot wide by 655-foot long easement from the southwest corner of the Community Center parking lot to the leased parcel between soccer and baseball playing fields. Pre-formed concrete pads (lawn pavers) would be installed, backfilled, and seeded for approximately 100 feet from the parking lot providing a stabilized vegetated accessway. All disturbed areas within the accessway would be loamed and seeded once site construction is complete. (Metro Mobile I, tab 6, p.5 and 7; Metro Mobile III, Q.7, attachment 5)
59. The proposed Windsor site is zoned NZ (Public and Quasi Public Zoning). Land within a quarter mile radius of the proposed Windsor site is zoned for residential and agricultural uses. (Metro Mobile I, tab 6, p.6)
60. The topographic elevation at the proposed Windsor site is 94 feet AMSL. (Metro Mobile I, tab 6, p.6)
61. The proposed Windsor cell site would be within a wooded area with trees standing approximately 40 to 80 feet high. The proposed Windsor site is approximately 30 feet north of an intermittent stream and a wetland borders the site on three sides. The northwest and southwest corners of the leased parcel are approximately 14 and 17 feet, respectively, from the wetland boundaries. (Metro Mobile I, tab p.7; Metro Mobile III, Q.7; Metro Mobile IV, Q.4)
62. The Town of Windsor has an approved option/lease and has secured a Windsor Inland Wetlands and Watercourse permit for the proposed Windsor site. No Army Corps of Engineer permit would be required. (Metro Mobile I, tab 6, p.6 and 7; Metro Mobile II, Q.2, Attach 2; Metro Mobile IV, Q.19)
63. Trees and understory growth would be removed within a 70-foot by 105-foot "clearing limit" area of the proposed Windsor site. No trees of significant size would be removed, but branch pruning might be needed to provide clearance for construction of the proposed tower. (Metro Mobile I, tab 10, p.2, Metro Mobile IV, Qs.3 and 7; Transcript pp.96 and 97)

64. Utilities would be brought into the proposed Windsor site underground along the 20-foot wide utility and access strip from an existing utility pole located on the Community Center property. (Metro Mobile I, tab 6, p.7; Metro Mobile III, Q.7, attachment 5)
65. Metro Mobile would not construct the proposed Windsor site during the Town's soccer season. Routine maintenance would be planned not to interfere with lessor's use of the playing fields. (Transcript pp. 73 and 74)
66. The fall zone of the proposed Windsor tower would be on the lessor's property. Metro Mobile's equipment building would be the only structure within the fall zone. (Metro Mobile III, Q.7, Attachment 5)
67. Two transmit and six transmit/receive antennas, approximately 13 and 11 feet in length, respectively, would be mounted at the top of the proposed Windsor tower for an overall tower height of 113 feet AGL. (Metro Mobile I, tab 6, p.9; Metro Mobile III, Q.10)
68. Approximately 61 residences are located within a 1,000 foot radius of the proposed Windsor tower. The closest residence is approximately 380 feet west of the proposed tower. The L.P. Wilson Community Center is approximately 620 feet northeast of the proposed tower. (Metro Mobile I, tab 10, p.3)
69. The total estimated costs of construction, to be incurred by Metro Mobile, for the proposed Windsor site would be:
- |                               |                  |
|-------------------------------|------------------|
| Radio Equipment               | \$491,600        |
| Tower and Antenna             | \$33,360         |
| Power Systems                 | \$12,000         |
| Building                      | \$68,300         |
| Site Preparation/Installation | <u>\$169,000</u> |
| Total                         | \$774,260        |
- (Metro Mobile I, tab 6, p.10)

#### Alternate Windsor Tower Site

70. As an alternative to the proposed tower site, Metro Mobile proposes an alternate site on a 2.0 acre vacant lot at 280 T East Barber Street, Windsor, Connecticut, owned by Norman Grady and Stanley Cohen. The alternate tower would be 130 feet south of East Barber Street and approximately 130 feet east of abutting property owned by Vincent Sperrn and Salvatore Santangelo. (Metro Mobile I, tab 7, p.1; Metro Mobile III, Q.7, attachment 5)

71. A 130-foot, self-supporting monopole tower and a 14-foot by 40-foot equipment building would be constructed on the leased lot of the alternate Windsor site. (Metro Mobile I, tab 7, p.1)
72. A new gravel driveway approximately 10 feet in length would be constructed from East Barber Street to the gate of the leased parcel and would serve as a vehicle access to the alternate Windsor site. (Metro Mobile III, Q.7, attachment 5)
73. The topographic elevation of the alternate Windsor tower site is 32 feet AMSL. (Metro Mobile I, tab 7, p.6)
74. The alternate site is zoned I-1 (industrial). Other zones surrounding the alternate Windsor site are industrial, residential, and agricultural. Also, the cell site is located within a 100-year flood plain. (Metro Mobile I, tab 7, pp.6 and 7)
75. At the alternate Windsor site, "controlled fill" would be necessary to raise the floor of the proposed equipment building approximately four feet above ground elevation to keep it above the 100-year flood plain. "Controlled fill" would be compacted, free draining soil (typically gravel). (Metro Mobile III Q.7, attachment 5; Metro Mobile IV, Q.23)
76. The alternate Windsor site is within a vacant parcel containing small trees and herbaceous growth. An inland wetland is located on the southern portion of the leased parcel. The wetlands are outside the proposed fenced facility and outside the construction area. No Inland Wetland and Watercourse permit would be necessary to develop this site. (Metro Mobile I, tab 7, p.7)
77. Utility connections to the alternate Windsor site would be from existing utility poles on the south side of East Barber Street. (Metro Mobile I, tab 7, p.1)
78. The fall zone of the alternate Windsor tower would be within the leased parcel. Metro Mobile's equipment building would be the only structure within the fall zone. (Metro Mobile I, tab 7, p.1)
79. The Connecticut River would be approximately 1,320 feet east of the alternate Windsor site. Also, 55 residences would be located within a 1,000-foot radius of the alternate tower with all being located west and north of the cell site. The closest residence would be 220 feet northwest of the alternate tower base. (Metro Mobile I, tab 7, p.7).



80. Two transmit and six transmit/receive antennas, approximately 13 and 11 feet in length, respectively, would be mounted at the top of the alternate Windsor tower for an overall tower height of 143 feet AGL. (Metro Mobile I, tab 7, p.9; Metro Mobile III, Q.10)
81. The total estimated costs of construction, to be incurred by Metro Mobile, for the alternate Windsor site would be:
- |                               |                  |
|-------------------------------|------------------|
| Radio Equipment               | \$491,600        |
| Tower and antenna             | \$39,800         |
| Power systems                 | \$12,000         |
| Building                      | \$68,300         |
| Site preparation/Installation | <u>\$159,000</u> |
| Total                         | \$770,700.       |
- (Metro Mobile I, tab 7, p.10)

#### Proposed and Alternate Windsor Sites

82. Ten sites were considered and eight sites were rejected by Metro Mobile for the proposed and alternate Windsor site. Reasons for rejection are:
- inability to co-exist on an AM transmitting tower,
  - incompatible with existing and future land use by town and private landowners, and
  - close proximity to residences.
- (Metro Mobile I, tab 8)
83. According to the Connecticut Historical Commission, the proposed and alternate Windsor cell sites would have no effect with respect to historic, architectural, or archaeological resources. (Metro Mobile I, tab 9)
84. The proposed or alternate Windsor site would provide additional cellular traffic handling capacity and provide cellular service along U.S. Route 5, and Interstate Routes 84, 91, and 291. The proposed or alternate site would off-load traffic from existing cell sites in Hartford and Windsor, the approved northwest Hartford cell site, and the proposed East Hartford or alternate South Windsor cell site. (Metro Mobile I, tab 6, p.24)
85. Visibility of the proposed Windsor site would be limited due to the heavily wooded area. Approximately 20 feet of the proposed tower would rise above the tree tops. (Metro Mobile I, tab 6, p.7)

86. The alternate Windsor tower would be located in an open area along Interstate 291 and the Connecticut River. Although 60-foot to 80-foot trees would screen the alternate Windsor tower to river traffic, as much as 80 to 100 feet of the alternate tower would be visible to Sharson Park and a boat launch approximately 550 feet east of the alternate site. While some vegetative growth would help shield the tower to homes west of the tower, portions of the tower would be visible to adjacent residences. (Metro Mobile I, tab 10, pp.12 and 13).
87. With 90 channels operating simultaneously at maximum power, the worst case electromagnetic radio frequency power density level would be  $0.1526 \text{ mW/cm}^2$  at the base of the proposed Windsor tower and  $0.0863 \text{ mW/cm}^2$  at the base of the alternate Windsor tower. The ANSI safety standard for the proposed frequency level, 870-880 MHz, as adopted by the State of Connecticut pursuant to DEP regulations is  $2.92 \text{ MW/cm}^2$ . (Metro Mobile I, tab 10, pp.2 and 12)

4767E

DOCKET NO. 137 - An application of Metro Mobile Connecticut  
CTS of Hartford, Inc., for a Certificate of  
Environmental Compatibility and Public Need Siting  
for the construction, maintenance, and Council  
operation of cellular facilities in the Towns  
of East Hartford, South Windsor, and Windsor,  
Connecticut. November 14, 1990

OPINION

On May 17, 1990, Metro Mobile of CTS Hartford, Inc. (Metro Mobile), applied to the Connecticut Siting Council (Council) for a Certificate of Environmental Compatibility and Public Need (Certificate) to construct, operate, and maintain two cellular telecommunications towers and associated equipment in the Towns of East Hartford, South Windsor, and Windsor, Connecticut.

A determination of public need for cellular telephone facilities has been pre-empted by the Federal Communications Commission (FCC). Under Connecticut State law, the Council must balance the need to develop the proposed sites as cellular telecommunications facilities with the need to protect the environment, including public health and safety.

In finding a proposed tower site, an applicant must find a site or suitable tower to share, offering the desired coverage that would not have substantial effect on the environment and adjacent landowners. Because Metro Mobile does not have the power to take land through eminent domain, acquisition of a site requires consent of the property owners to either lease or sell land rights.

The proposed or alternate sites would be added to an existing cellular network grid to help eliminate the overload of calls between adjacent cell sites on the existing system. However, this added capacity to the existing cellular grid would not expand the existing coverage area, as licensed by the FCC.

The proposed East Hartford site would be located within an industrial zoned area approximately 605 feet south of 303 Burnham Street. The proposed East Hartford site is on level terrain with a small plantation of fruit and pine trees. A low-density residential area is adjacent to the site. Metro Mobile would construct a 100-foot monopole tower with six cellular antennas attached to the top adding 13 feet for an overall structure height of 113 feet above ground level (AGL). A fall zone of this tower would encompass three properties and a private road including Metro Mobile's equipment building and a small concrete building owned by the lessor. An access road

from Dolores Drive has been proposed by the applicant, however, the availability is not certain. The Town of East Hartford approved the construction of Dolores Drive but has not accepted the private road for public use. An alternate accessway over 600 feet from Burnham Road has been proposed but this would cause the removal of more trees if constructed. This alternate access would result in unnecessary construction since it would be parallel to Dolores Drive. In addition, the drainage rights and plans to relocate an existing drainage pipe that crosses Metro Mobile's leased parcel to Dolores Drive are provisional because of the uncertain status of Dolores Drive.

The alternate South Windsor site is within an industrially zoned area approximately 382 feet north of 190 Burnham Street. Metro Mobile would construct a 110-foot monopole tower with six cellular antennas attached to the top adding 13 feet for an overall structure height of 123 feet AGL. The fall zone of the alternate tower would encompass seven properties including a railway as well as the applicant's equipment building. However if the tower and building were moved within the leased parcel the number of properties within the fall zone could be reduced to five. Access to the alternate site would be along an existing driveway. The South Windsor alternate site is on level terrain within a previously disturbed area off the edge of a parking lot with some shrub growth. A stand of pine trees are located along the northern boundary of the leased parcel. If approved, we would require the applicant not to disturb these trees as they could provide screening for the alternate facility.

The Town of East Hartford is not in favor of the proposed tower location because of the visibility to a near by residential area. While the proposed East Hartford site is zoned industrial it does abut an area zoned residential and has some uncertainty where the access road would be constructed as well as the potential to impact a plantation of trees. On the other hand, the Town of South Windsor stated that the alternate tower would be consistent with existing landuses. Although the alternate tower is ten feet higher than the proposed tower, there is little difference in elevation relative to mean sea level and the taller tower would not substantially effect visibility or increase the quality of the applicant's service. Furthermore, we believe the alternate tower is more suitable than the proposed tower because it is well within an established commercially developed area, is closer to compatible transportation arteries, has an existing access road, and is partially screened by some mature pine trees. Consequently, the Council will deny the proposed East Hartford site and issue a Certificate for the alternate South Windsor site.

The proposed Windsor tower site would be located within a public/quasi-public zoned area approximately 285 feet east of the nearest property line and approximately 620 feet southwest of the L.P. Wilson Community Center building. The proposed Windsor site is within a wooded area with trees standing 40 to 80 feet high and surrounded on three sides by a wetland and intermittent stream. Metro Mobile would construct a 100-foot monopole tower with six cellular antennas attached to the top adding 13 feet for an overall structure height of 113 feet AGL. The fall zone of the proposed tower would be completely within the lessor's property with Metro Mobile's building the only structure within the fall zone. The fall zone of the tower would not encroach on any of the nearby playing fields. The accessway would be over a recreation area between two playing fields leading to the site at the edge of the wooded area. The substrate of the accessway would be reinforced for the first 100 feet with the remaining area to be rehabilitated to its original grass state after construction.

The alternate Windsor tower would be within an industrially zoned area approximately 130 feet south of East Barber Street. This site is a two acre lot with a south facing slope covered with shrub-scrub vegetation and a wetland on the southern portion of the parcel. The applicant would construct a 130-foot monopole tower with six cellular antennas attached to the top adding 13 feet for an overall structure height of 143 feet AGL. The fall zone would be within the leased parcel and Metro Mobile's equipment building would be the only structure within the fall zone of the tower. Access to the leased parcel would be directly from East Barber Street and no construction or facility boundaries would impact the wetland, however, the alternate Windsor site is within a 100 year flood plain and approximately 1,300 feet east of the Connecticut river. This area of the Connecticut river serves as a wintering habitat for the federally endangered bald eagle.

The proposed and alternate Windsor tower sites are in two different ecological habitats creating their own individual site characteristics. Although the proposed Windsor tower is within a wooded area, most of the trees to be removed are small in diameter and no trees of significant size would be removed. After construction the proposed Windsor tower would remain mostly sheltered to adjacent land uses by the heavily wooded area surrounding the proposed site. Nonetheless, we would require the applicant to plant additional shrubs and trees along the border of the leased parcel facing the playing fields to provide screening for the facility. Also, the blind nature of the access road would help diminish the presence of the facility on town property. Furthermore, we find no substantial

conflict between the use of the recreational fields and the proposed towers. In addition, the Town of Windsor has received an Inland Wetland and Watercourse permit to develop the proposed site and its Town Council and Board of Education have voted to develop this parcel as a cellular site.

The alternate Windsor tower site is within a flood plain. Although there is some industrial and residential development in the immediate area we do not believe it prudent to build in a flood plain. In relation to ground level, the alternate tower would be 30 feet taller than the proposed tower, and because of the low vegetation growth surrounding this tower site it would be more visible than the proposed tower. Therefore the Council will deny the alternate Windsor site and issue a Certificate for the proposed Windsor site.

Electromagnetic radio frequency power densities are a concern to the Council and residents living in the vicinity of any telecommunications tower. In this proceeding, the power density level at the base of the proposed Windsor and alternate South Windsor towers would be 19 and 23 times, respectively, below the American National Standards Institute safety standards for the proposed frequencies.

There are no known existing populations of Connecticut species of special concern or federal endangered or threatened species occurring at the proposed Windsor and alternate South Windsor sites. The construction of the proposed Windsor and alternate South Windsor towers would have no effect on the State's historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places.

Furthermore, the development of these facilities and their access roads are not likely to have any substantial effects on the natural environments of the sites including effects on the quality of the air, water, and ecology of the sites.

Based on its record in this proceeding, the council finds that the effects associated with the construction, operation, and maintenance of a cellular facility and its associated equipment building at the proposed Windsor and alternate South Windsor sites, including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife need not be in conflict either alone or cumulatively with other effects, and are not sufficient reasons to deny the application.

DO 137  
Opinion  
Page 5

The Council will require Metro Mobile to submit a Development and Management (D&M) plan for approval prior to the commencement of any construction or clearing at the proposed Windsor and alternate South Windsor sites. This D&M plan shall include detailed plans of the towers, tower foundations, soil boring reports, equipment buildings, access roads, security fences, erosion and sedimentation control plans consistent with the Connecticut Guidelines of Soil Erosion and Sedimentation Control, and landscaping plans.

4850E

DOCKET NO. 137 - An application of Metro Mobile Connecticut  
CTS of Hartford, Inc., for a Certificate of Siting  
Environmental Compatibility and Public Need Council  
for the construction, maintenance, and operation of cellular facilities in the Towns  
of East Hartford, South Windsor, and Windsor, Connecticut.

November 14, 1990

Decision and Order

Pursuant to the foregoing Findings of Fact and Opinion, the Connecticut Siting Council finds that the effects associated with the construction, operation, and maintenance of two cellular telecommunications towers and associated equipment at the proposed Windsor and alternate South Windsor sites including effects on the natural environment; ecological integrity and balance; public health and safety; scenic, historic, and recreational values; forests and parks; air and water purity; and fish and wildlife need not be in conflict either alone or cumulatively with other effects, are not in conflict with the policies of the State concerning such effects, and are not sufficient reason to deny the application, and therefore directs that a Certificate of Environmental Compatibility and Public Need (Certificate), as provided by section 16-50k of the Connecticut General Statutes (CGS), be issued to Metro Mobile CTS of Hartford, Inc., for the construction, operation, and maintenance of a cellular telecommunications tower, associated equipment, and building at the proposed Windsor site and alternate South Windsor site.

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

1. The facilities shall be constructed in accordance with the State of Connecticut Basic Building Code.
2. The self-supporting monopole towers shall be no taller than necessary to provide the proposed communication service and in no event shall the towers exceed a total height of 123 feet above ground level (AGL) at the alternate South Windsor site and 113 feet AGL at the proposed Windsor site, with antennas and appurtenances.
3. The Certificate holder shall prepare a Development and Management (D&M) Plan, for approval by the Council, for these sites in compliance with sections 16-50j-75 through 16-50j-77 of the Regulations of State Agencies. The D&M plan shall include detailed plans of the towers, tower foundations, soil boring reports, equipment buildings, access roads, security fences, erosion and sedimentation control plans consistent with the Connecticut Guidelines of Soil Erosion and Sedimentation Control, and landscaping plans.



At the alternate South Windsor site the applicant shall relocate the tower on the eastern half the leased parcel to reduce the amount of properties within the fall zone.

All pine trees bordering the alternate South Windsor site shall be flagged and protected from removal during site construction.

At the proposed Windsor site the applicant shall plant additional shrubs and trees along the border of the leased parcel facing the playing fields.

4. The Certificate Holder shall comply with any existing and future radio frequency (RF) standard promulgated by State or federal regulatory agencies. Upon the establishment of any new governmental RF standards, the facilities granted in this Decision and Order shall be brought into compliance with such standards.
5. The Certificate Holder shall provide the Council a recalculated report of electromagnetic radio frequency power density if and when circumstances in operation cause a change in power densities above the levels originally calculated and provided in the application.
6. The Certificate Holder shall permit public or private entities to share space on the proposed towers for fair consideration, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.
7. If the facilities do not initially provide, or permanently cease to provide cellular service following completion of construction, this Decision and Order shall be void, and the tower(s) and all associated equipment shall be dismantled and removed or reapplication for any new use shall be made to the Council before any such new use is made.
8. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the effective date of this Decision and Order or within three years after all appeals to this Decision and Order have been resolved.

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

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

The parties to this proceeding are:

(PARTIES)

Metro Mobile CTS of  
Hartford, Inc.  
20 Alexander Drive  
P.O. Box 5029  
Wallingford, CT. 06492  
Attn: Gary Schulman

Town of East Hartford

(INTEVENORS)

Town of South Windsor

SNET Cellular, Inc.

(ITS REPRESENTATIVES)

Robinson & Cole  
One Commercial Plaza  
Hartford, CT. 06103-3597  
Attn: Earl W. Phillips

Mr. G. Barry Goodberg  
Asst. Corp. Counsel  
Town of East Hartford  
740 Main Street  
East Hartford, CT. 06108

(ITS REPRESENTATIVES)

Jean E. Zurbrigen  
Town Manager  
Town of South Windsor  
1540 Sullivan Avenue  
South Windsor, CT. 06074




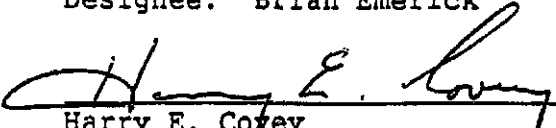
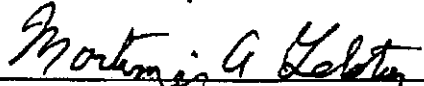
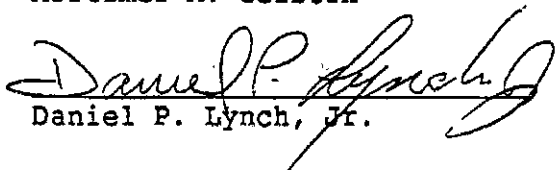
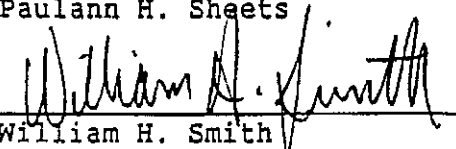
Peter J. Tyrrell, Esq.  
SNET Cellular, Inc.  
227 Church Street  
New Haven, CT 06506

4854E

CERTIFICATION

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case in Docket No. 137 or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut the 14th day of November, 1990.

<u>Council Members</u>	<u>Vote Cast</u>
 Gloria Dibble Pond Chairperson	Yes
 Commissioner Peter Boucher Designee: Mark Marcus	Yes
 Commissioner Leslie Carothers Designee: Brian Emerick	Yes
 Harry E. Coffey	No
 Mortimer A. Gelston	Yes
 Daniel P. Lynch, Jr.	Abstain
Paulann H. Sheets	Absent
 William H. Smith	Yes
Colin C. Tait	Absent

CERTIFICATE  
OF  
ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED

Pursuant to section 16-50k of the General Statutes of Connecticut, as amended, the Connecticut Siting Council hereby issues a Certificate of Environmental Compatibility and Public Need to Metro Mobile CTS of Hartford, Inc., for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance, and operation of cellular facilities in the Towns of South Windsor and Windsor, Connecticut. This Certificate is issued in accordance with and subject to the terms and conditions set forth in the Decision and Order of the Council on November 14, 1990.

By order of the Council,

  
Gloria Dibble Pond, Chairperson

November 14, 1990

# Exhibit B

## Property Card

LP Wilson Community Center

599 MATIANUCK AVE

PARCEL ID: 5420  
OWNER NAME: WINDSOR TOWN OF  
PROPERTY LOCATION: 599 MATIANUCK AVE  
CO-OWNER: C/O CROWN ATLANTIC TAX DEPT  
OWNER ADDRESS: PMB 353 4017 WASHINGTON RD  
CSZ: MCMURRAY, PA 15317  
ACCOUNT NUMBER: 05420.01

OWNER

ASSESSMENT

SALES

LINKS

ADD TO SELECTION

GET ABUTTERS

Wilson Fire House

Matianuck Dunes State Park

# Exhibit C

## **Construction Drawings**





**VERIZON SITE NUMBER:** 469053  
**VERIZON SITE NAME:** WINDSOR SOUTH CT  
**SITE TYPE:** MONOPOLE  
**TOWER HEIGHT:** 100'-0"

**BUSINESS UNIT #:** 806371  
**SITE ADDRESS:** HRT 96 599 MATIANUCK AVE WINDSOR, CT 06095  
**COUNTY:** HARTFORD  
**JURISDICTION:** HARTFORD COUNTY

**VERIZON 16232032**

**verizon**  
 180 WASHINGTON VALLEY ROAD  
 BEDMINSTER, NJ 07921

**CROWN CASTLE**  
 1500 CORPORATE DRIVE  
 CANONSBURG, PA 15317

**INFINIGY**  
 FROM ZERO TO INFINIGY  
 the solutions are endless  
 BELLEVUE, WA 98004

**VERIZON SITE NUMBER:**  
 469053  
**BU #:** 806371  
**HRT 096 943227**

HRT 96 599 MATIANUCK AVE  
 WINDSOR, CT 06095  
 EXISTING 100'-0" MONOPOLE

**ISSUED FOR:**

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	06/21/21	RCD	FINAL	--



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

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

**SITE INFORMATION**

CROWN CASTLE USA INC. HRT 096 943227  
 SITE NAME:  
 SITE ADDRESS: HRT 96 599 MATIANUCK AVE WINDSOR, CT 06095  
 COUNTY: HARTFORD  
 MAP/PARCEL #: VERIFY  
 AREA OF CONSTRUCTION: EXISTING  
 LATITUDE: 41° 49' 16.34" N (41.8212°)  
 LONGITUDE: 72° 40' 36.32" W (-72.6767°)  
 LAT/LONG TYPE: NAD83  
 GROUND ELEVATION: 85.3'  
 CURRENT ZONING: N/A  
 JURISDICTION: HARTFORD COUNTY  
 OCCUPANCY CLASSIFICATION: U  
 TYPE OF CONSTRUCTION: IIB  
 A.D.A. COMPLIANCE: FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION  
 PROPERTY OWNER: TBD  
 TOWER OWNER: CCAIT LLC  
 1500 CORPORATE DRIVE  
 CANONSBURG, PA 15317  
 CARRIER/APPLICANT: VERIZON WIRELESS  
 180 WASHINGTON VALLEY ROAD  
 BEDMINSTER, NJ 07921  
 ELECTRIC PROVIDER: TBD  
 TELCO PROVIDER: TBD

**DRAWING INDEX**

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

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

**APPROVALS**

SIGNATURE	DATE
_____	_____
_____	_____
_____	_____
_____	_____

**CONTRACTOR PMI REQUIREMENTS**

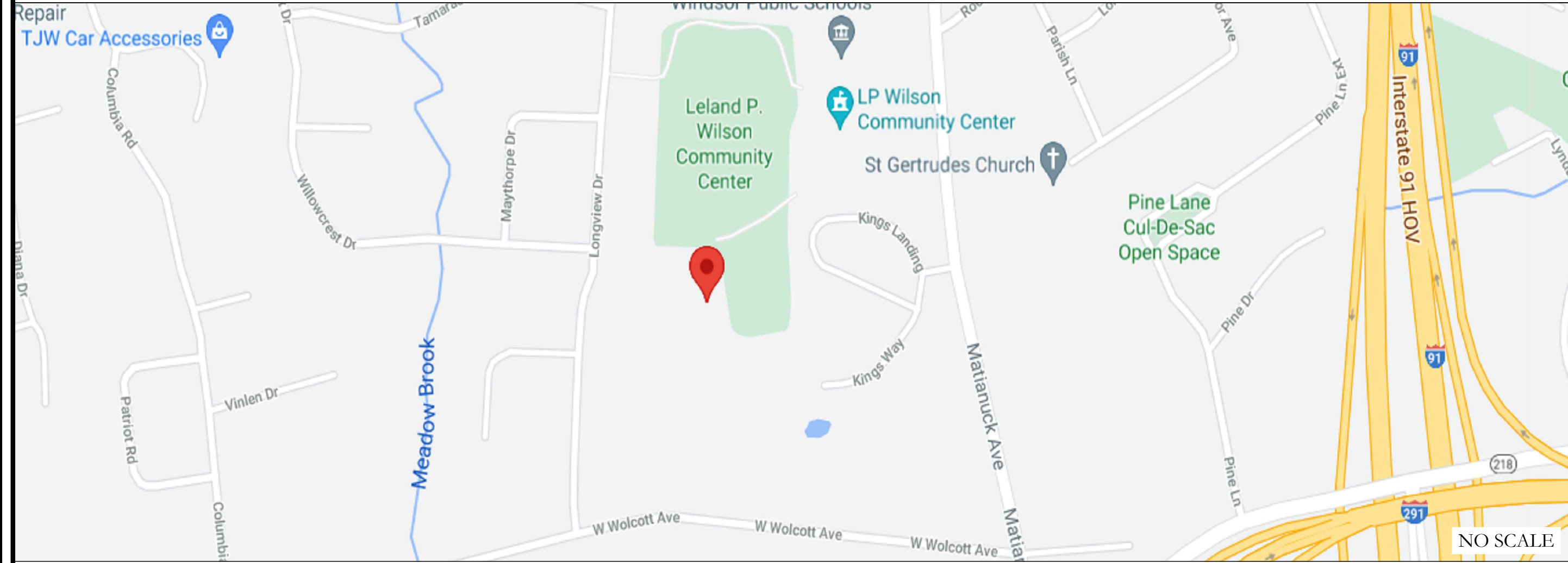
PMI ACCESSED AT <https://pmi.vxwsmart.com>  
 SMART TOOL VENDOR PROJECT NUMBER 6039-Z0001-C  
 VzW LOCATION CODE (PSLC) 469053  
 \*\*\* PMI AND REQUIREMENTS ALSO EMBEDDED IN MOUNT ANALYSIS REPORT

**MOUNT MODIFICATION REQUIRED** N

**VzW APPROVED SMART KIT VENDORS**

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

**LOCATION MAP**



DRIVING DIRECTIONS FROM VERIZON LOCAL OFFICE (180 WASHINGTON VALLEY RD, BEDMINSTER, NJ 07921) DEPART AND HEAD TOWARD WASHINGTON VALLEY RD / COUNTY HWY-620, TURN LEFT ONTO WASHINGTON VALLEY RD / COUNTY HWY-620, BEAR RIGHT ONTO US-206 N / US-202 N / US HIGHWAY 202 206, BEAR RIGHT ONTO US-202 N / US-206 N / US HIGHWAY 202 206, TAKE THE RAMP ON THE RIGHT FOR I-287 N, AT EXIT 41A, HEAD RIGHT ON THE RAMP FOR I-80 EAST TOWARD NEW YORK CITY / SMITH ROAD, KEEP STRAIGHT TO GET ONTO I-95 N / NEW JERSEY TPKE N, KEEP LEFT TO STAY ON I-95 N, AT EXIT 9, HEAD RIGHT ON THE RAMP FOR I-95 NORTH TOWARD NEW HAVEN, AT EXIT 48, HEAD RIGHT ON THE RAMP FOR I-91 NORTH TOWARD HARTFORD, MERGE TOWARD I 91, KEEP STRAIGHT TO GET ONTO I 91, ROAD NAME CHANGES TO I-91 N, AT EXIT 35A-35B, TURN LEFT ONTO CT-218 TOWARD BLOOMFIELD / COTTAGE GROVE RD / L P WILSON CTR / OAK HILL SCHOOL, TURN RIGHT ONTO MATIANUCK AVE, TURN RIGHT ONTO LONGVIEW DR, ARRIVE AT HRT 96 599 MATIANUCK AVE WINDSOR, CT 06095.

**APPLICABLE CODES/REFERENCE DOCUMENTS**

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

CODE TYPE	CODE
BUILDING	2018 CT STATE BUILDING CODE
MECHANICAL	2015 IMC
ELECTRICAL	2017 NEC

**REFERENCE DOCUMENTS:**  
 STRUCTURAL ANALYSIS: BY OTHERS  
 DATED:  
 MOUNT ANALYSIS: MASER CONSULTING CONNECTICUT  
 DATED: APRIL 9, 2021  
 RFDS REVISION: TBD  
 DATED: 03/24/2021  
 ORDER ID: 552708  
 REVISION: 0

**PROJECT DESCRIPTION**

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

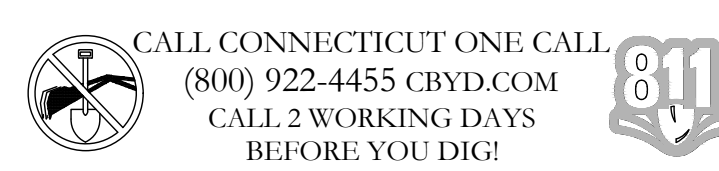
- TOWER SCOPE OF WORK:**
- REMOVE (6) ANTENNAS
  - REMOVE (1) OVP
  - REMOVE (1) HYBRID CABLE
  - INSTALL (3) ANTENNAS
  - INSTALL (1) OVP
  - INSTALL (1) HYBRID CABLE

- GROUND SCOPE OF WORK:**
- N/A

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

**PROJECT TEAM**

A&E FIRM: CROWN CASTLE USA INC.  
 2000 CORPORATE DRIVE  
 CANONSBURG, PA 15317  
 CROWN.AE.APPROVAL@CROWNCastle.COM  
 CROWN CASTLE USA INC. DISTRICT CONTACTS:  
 3 CORPORATE PARK DRIVE, SUITE 101  
 CLIFTON PARK, NY 12065  
 TBD - PROJECT MANAGER  
 --  
 TBD - CONSTRUCTION MANAGER  
 --  
 VERIZON CONTACT: ANDREW LEONE  
 ALEONE@STRUCTURECONSULTING.NET





**CROWN CASTLE USA INC. SITE ACTIVITY REQUIREMENTS:**

- NOTICE TO PROCEED- NO WORK SHALL COMMENCE PRIOR TO CROWN CASTLE USA INC. WRITTEN NOTICE TO PROCEED (NTP) AND THE ISSUANCE OF A PURCHASE ORDER. PRIOR TO ACCESSING/ENTERING THE SITE YOU MUST CONTACT THE CROWN CASTLE USA INC. NOC AT 800-788-7011 & THE CROWN CASTLE USA INC. CONSTRUCTION MANAGER.
- "LOOK UP" - CROWN CASTLE USA INC. SAFETY CLIMB REQUIREMENT: THE INTEGRITY OF THE SAFETY CLIMB AND ALL COMPONENTS OF THE CLIMBING FACILITY SHALL BE CONSIDERED DURING ALL STAGES OF DESIGN, INSTALLATION, AND INSPECTION. TOWER MODIFICATION, MOUNT REINFORCEMENTS, AND/OR EQUIPMENT INSTALLATIONS SHALL NOT COMPROMISE THE INTEGRITY OR FUNCTIONAL USE OF THE SAFETY CLIMB OR ANY COMPONENTS OF THE CLIMBING FACILITY ON THE STRUCTURE. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO: PINCHING OF THE WIRE ROPE, BENDING OF THE WIRE ROPE FROM ITS SUPPORTS, DIRECT CONTACT OR CLOSE PROXIMITY TO THE WIRE ROPE WHICH MAY CAUSE FRICTIONAL WEAR, IMPACT TO THE ANCHORAGE POINTS IN ANY WAY, OR TO IMPEDE/BLOCK ITS INTENDED USE. ANY COMPROMISED SAFETY CLIMB, INCLUDING EXISTING CONDITIONS MUST BE TAGGED OUT AND REPORTED TO YOUR CROWN CASTLE USA INC. POC OR CALL THE NOC TO GENERATE A SAFETY CLIMB MAINTENANCE AND CONTRACTOR NOTICE TICKET.
- PRIOR TO THE START OF CONSTRUCTION, ALL REQUIRED JURISDICTIONAL PERMITS SHALL BE OBTAINED. THIS INCLUDES, BUT IS NOT LIMITED TO, BUILDING, ELECTRICAL, MECHANICAL, FIRE, FLOOD ZONE, ENVIRONMENTAL, AND ZONING. AFTER ONSITE ACTIVITIES AND CONSTRUCTION ARE COMPLETED, ALL REQUIRED PERMITS SHALL BE SATISFIED AND CLOSED OUT ACCORDING TO LOCAL JURISDICTIONAL REQUIREMENTS.
- ALL CONSTRUCTION MEANS AND METHODS; INCLUDING BUT NOT LIMITED TO, ERECTION PLANS, RIGGING PLANS, CLIMBING PLANS, AND RESCUE PLANS SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR RESPONSIBLE FOR THE EXECUTION OF THE WORK CONTAINED HEREIN, AND SHALL MEET ANSI/ASSE A10.48 (LATEST EDITION); FEDERAL, STATE, AND LOCAL REGULATIONS; AND ANY APPLICABLE INDUSTRY CONSENSUS STANDARDS RELATED TO THE CONSTRUCTION ACTIVITIES BEING PERFORMED. ALL RIGGING PLANS SHALL ADHERE TO ANSI/ASSE A10.48 (LATEST EDITION) AND CROWN CASTLE USA INC. STANDARD CED-STD-10253, INCLUDING THE REQUIRED INVOLVEMENT OF A QUALIFIED ENGINEER FOR CLASS IV CONSTRUCTION, TO CERTIFY THE SUPPORTING STRUCTURE(S) IN ACCORDANCE WITH ANSI/TIA-322 (LATEST EDITION).
- ALL SITE WORK TO COMPLY WITH QAS-STD-10068 "INSTALLATION STANDARDS FOR CONSTRUCTION ACTIVITIES ON CROWN CASTLE USA INC. TOWER SITE," CED-STD-10294 "STANDARD FOR INSTALLATION OF MOUNTS AND APPURTENANCES," AND LATEST VERSION OF ANSI/TIA-1019-A-2012 "STANDARD FOR INSTALLATION, ALTERATION, AND MAINTENANCE OF ANTENNA SUPPORTING STRUCTURES AND ANTENNAS." IF THE SPECIFIED EQUIPMENT CAN NOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY CROWN CASTLE USA INC. PRIOR TO PROCEEDING WITH ANY SUCH CHANGE OF INSTALLATION.
- ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS AND ORDINANCES. CONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION.
- ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY CONTRACTOR. EXTREME CAUTION SHOULD BE USED BY THE CONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. CONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING AND EXCAVATION E) CONSTRUCTION SAFETY PROCEDURES.
- ALL SITE WORK SHALL BE AS INDICATED ON THE STAMPED CONSTRUCTION DRAWINGS AND PROJECT SPECIFICATIONS. LATEST APPROVED REVISION.
- CONTRACTOR SHALL KEEP THE SITE FREE FROM ACCUMULATING WASTE MATERIAL, DEBRIS, AND TRASH AT THE COMPLETION OF THE WORK. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF CONTRACTOR, TOWER OWNER, CROWN CASTLE USA INC., AND/OR LOCAL UTILITIES.
- THE CONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION FOR SITE SIGNAGE REQUIRED BY LOCAL JURISDICTION AND SIGNAGE REQUIRED ON INDIVIDUAL PIECES OF EQUIPMENT, ROOMS, AND SHELTERS.
- THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE CARRIER'S EQUIPMENT AND TOWER AREAS.
- THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE, AND STABILIZED TO PREVENT EROSION AS SPECIFIED ON THE CONSTRUCTION DRAWINGS AND/OR PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- CONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- CONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION. TRASH AND DEBRIS SHOULD BE REMOVED FROM SITE ON A DAILY BASIS.
- NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.

**GREENFIELD GROUNDING NOTES:**

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

**GENERAL NOTES:**

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

**CONCRETE, FOUNDATIONS, AND REINFORCING STEEL:**

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

**ELECTRICAL INSTALLATION NOTES:**

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

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

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

**ABBREVIATIONS:**

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

**APWA UNIFORM COLOR CODE:**

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



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BEDMINSTER, NJ 07921



1500 CORPORATE DRIVE  
CANONSBURG, PA 15317

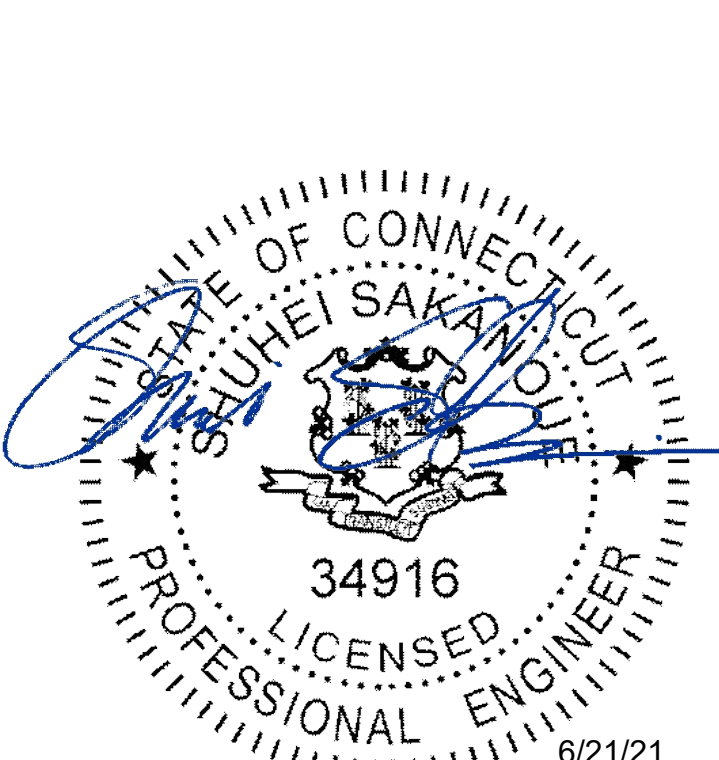


FROM ZERO TO INFINIGY  
the solutions are endless  
BELLEVUE, WA 98004

VERIZON SITE NUMBER:  
**469053**  
BU #: 806371  
HRT 096 943227

HRT 96 599 MATIANUCK AVE  
WINDSOR, CT 06095  
EXISTING 100'-0" MONOPOLE

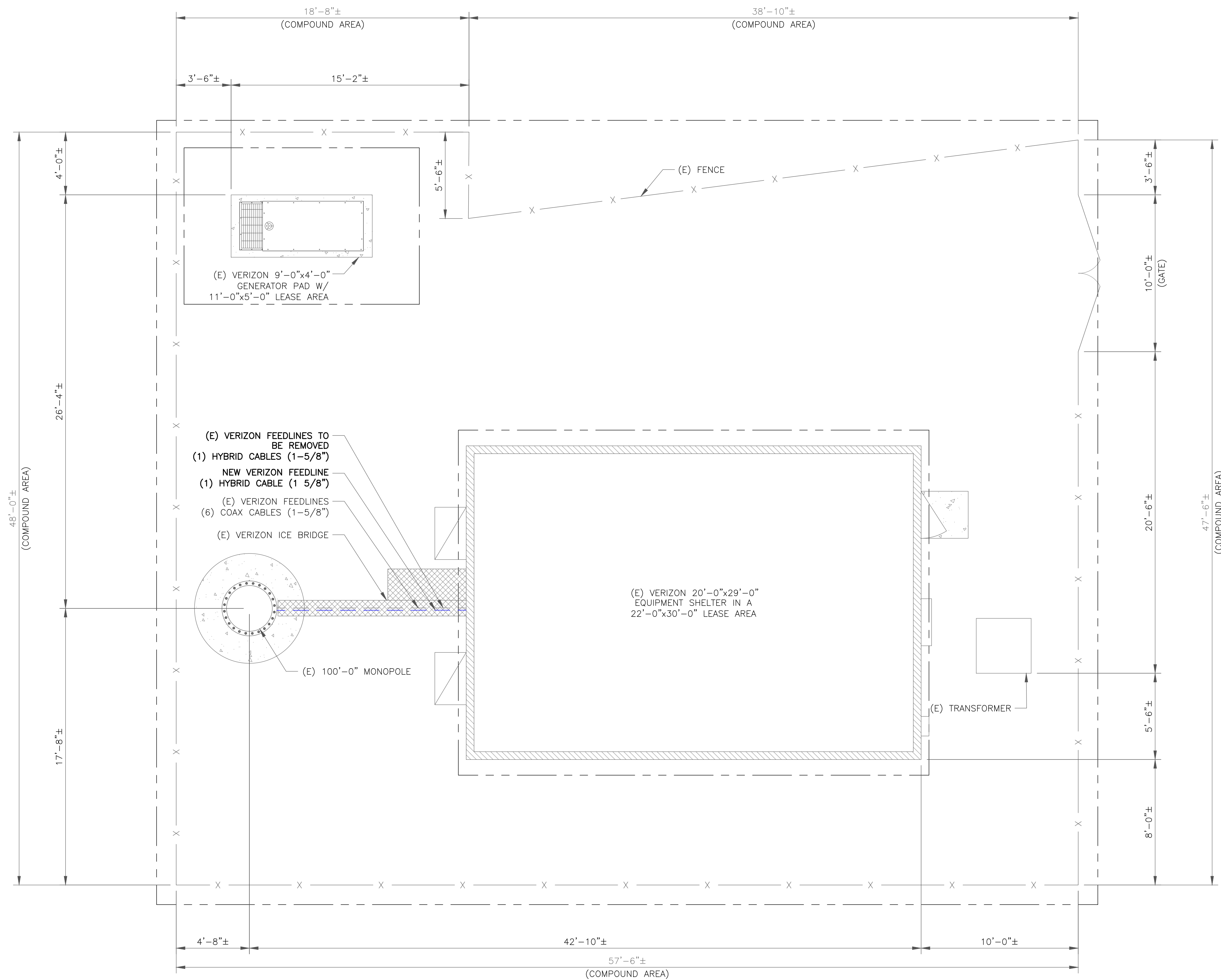
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VERIZON SITE NUMBER:  
469053

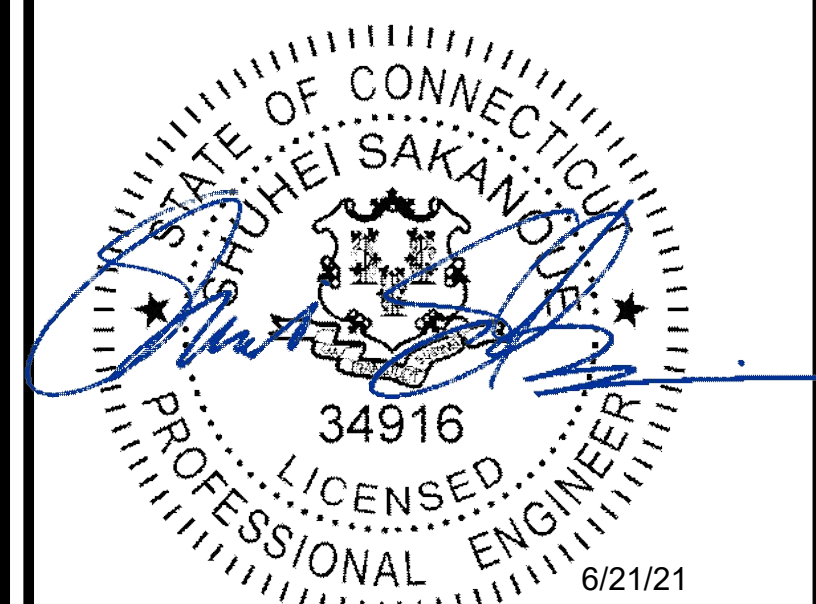
BU #: 806371  
HRT 096 943227

HRT 96 599 MATIANUCK AVE  
WINDSOR, CT 06095

EXISTING 100'-0" MONOPOLE

ISSUED FOR:

REV	DATE	DRWN	DESCRIPTION	DES./QA
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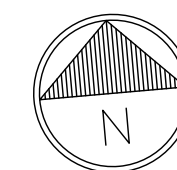
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SHEET NUMBER: REVISION:

C-1

0

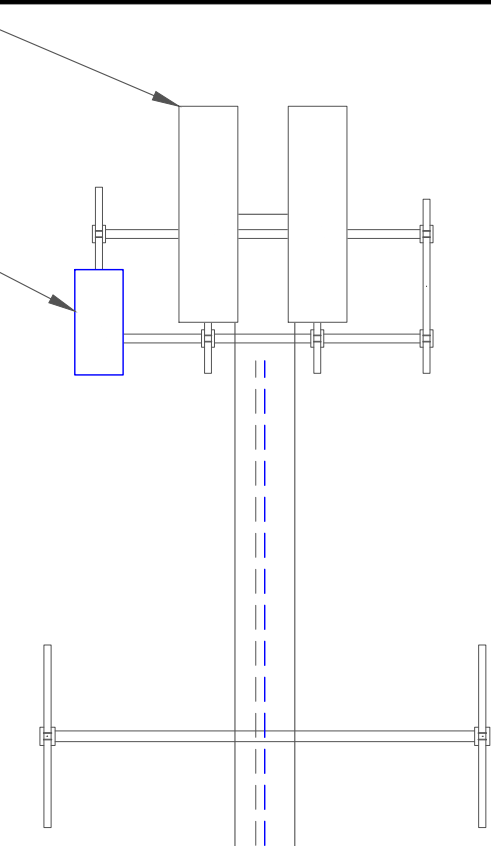
1 SITE PLAN  
SCALE: 1/4"=1'-0" (FULL SIZE)  
1/8"=1'-0" (11x17)





(E) VERIZON EQUIPMENT TO REMAIN  
 (6) COMMSCOPE - NNHH-65B-R4 ANTENNAS  
 (3) SAMSUNG - B2/B66A RRH-BR049 RRHS  
 (3) SAMSUNG - B5/B13 RRH-BR04C RRHS  
 INSTALLED ON EXISTING MOUNTS

NEW VERIZON EQUIPMENT  
 (3) SAMSUNG - MT6407-77A ANTENNAS  
 (1) RAYCAP - RRFDC-3315-PF-48 RAYCAPS  
 INSTALLED ON EXISTING MOUNTS



TIP OF (N) ANTENNA  
 ELEV. = 103'-0"

CENTERLINE OF (E) ANTENNA  
 ELEV. = 100'-0"  
 CENTERLINE OF MOUNT  
 ELEV. = 98'-0"

CENTERLINE OF (N) ANTENNA  
 ELEV. = 97'-0"

CENTERLINE OF ANTENNA MOUNT BY OTHERS  
 ELEV. = 86'-0"

**VERIZON EQUIPMENT**

ANTENNA CL: 100'-0"  
 MOUNT CL: 98'-0"

(E) 100'-0" MONOPOLE

NEW VERIZON FEEDLINE  
 (1) HYBRID CABLE (1 5/8")

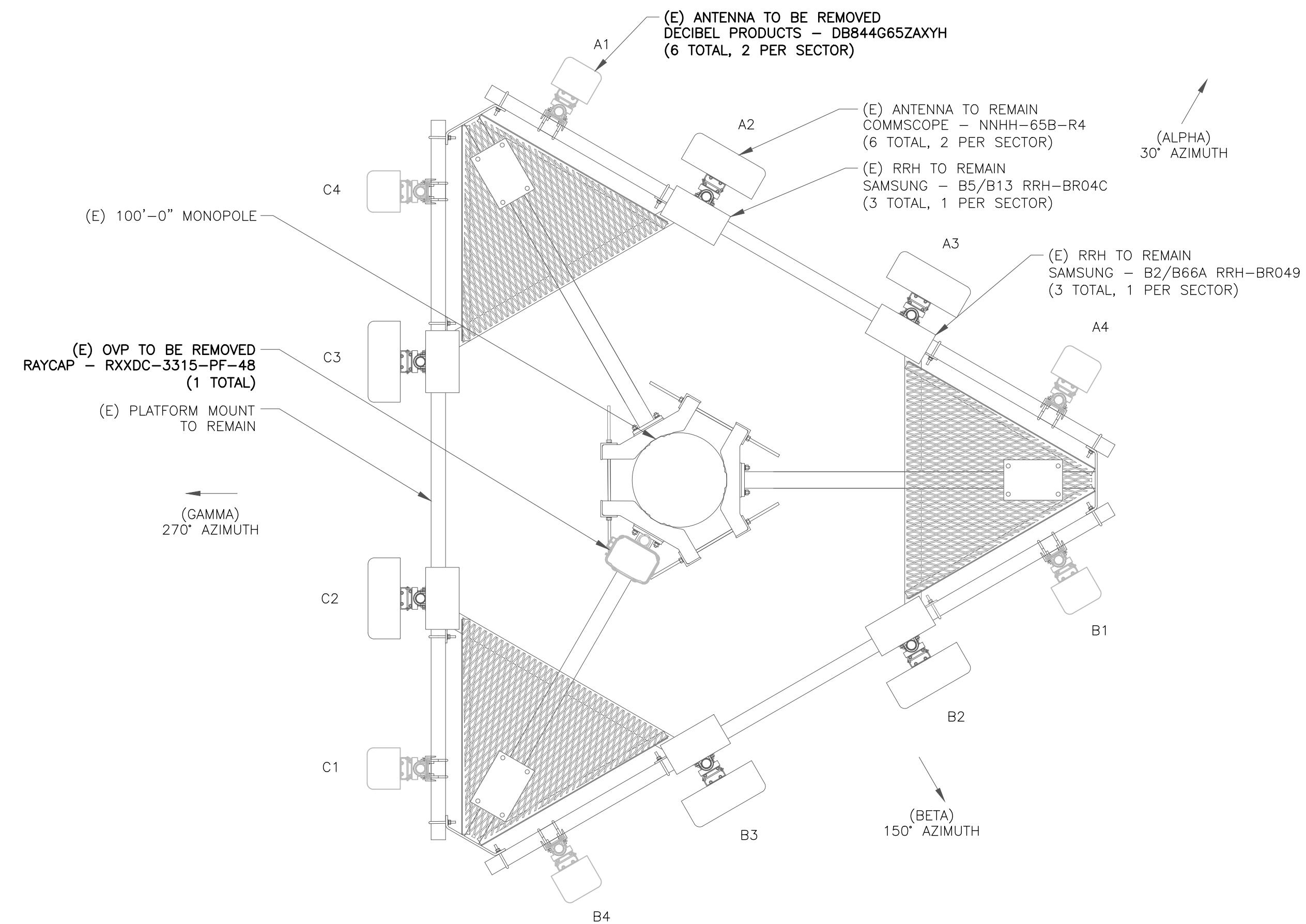
(E) VERIZON FEEDLINES  
 (6) COAX CABLES (1-5/8")

(E) VERIZON 20'-0"x29'-0"  
 EQUIPMENT SHELTER

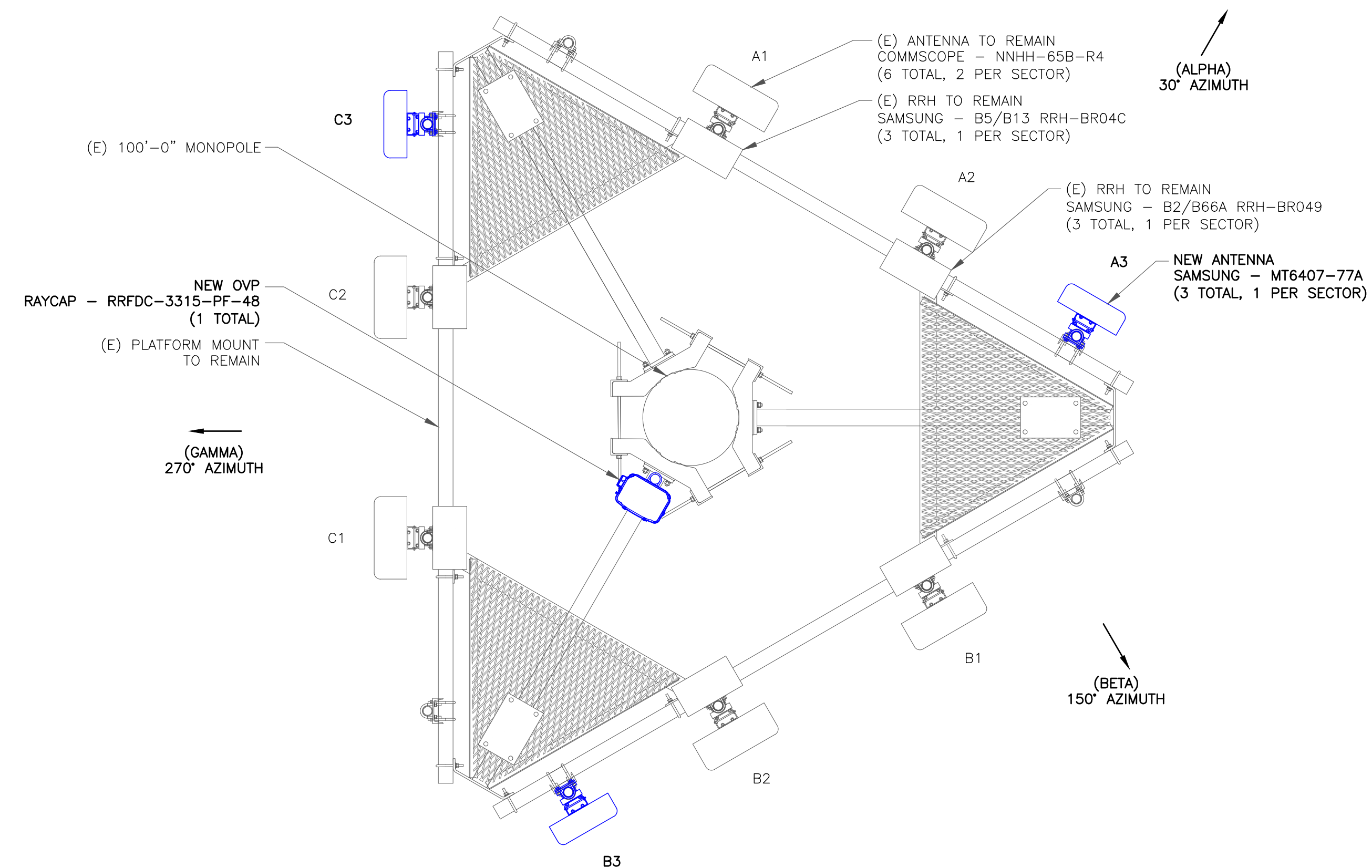
(E) VERIZON GENERATOR

(E) CHAIN-LINK FENCE

1 TOWER ELEVATION  
 SCALE: NOT TO SCALE



2 EXISTING ANTENNA PLAN  
 SCALE: NOT TO SCALE



3 NEW ANTENNA PLAN  
 SCALE: NOT TO SCALE

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BELLEVUE, WA 98004

VERIZON SITE NUMBER:  
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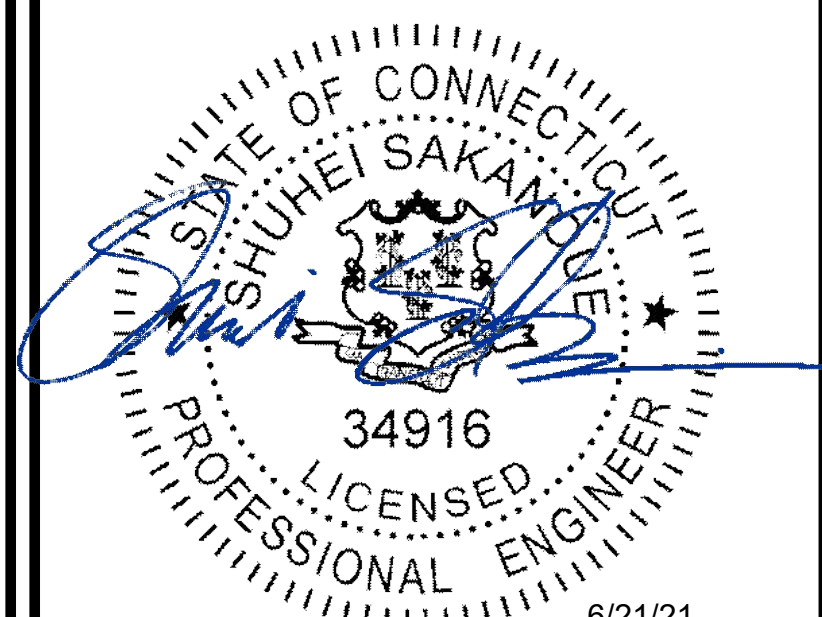
BU #: 806371  
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EXISTING 100'-0" MONOPOLE

**ISSUED FOR:**

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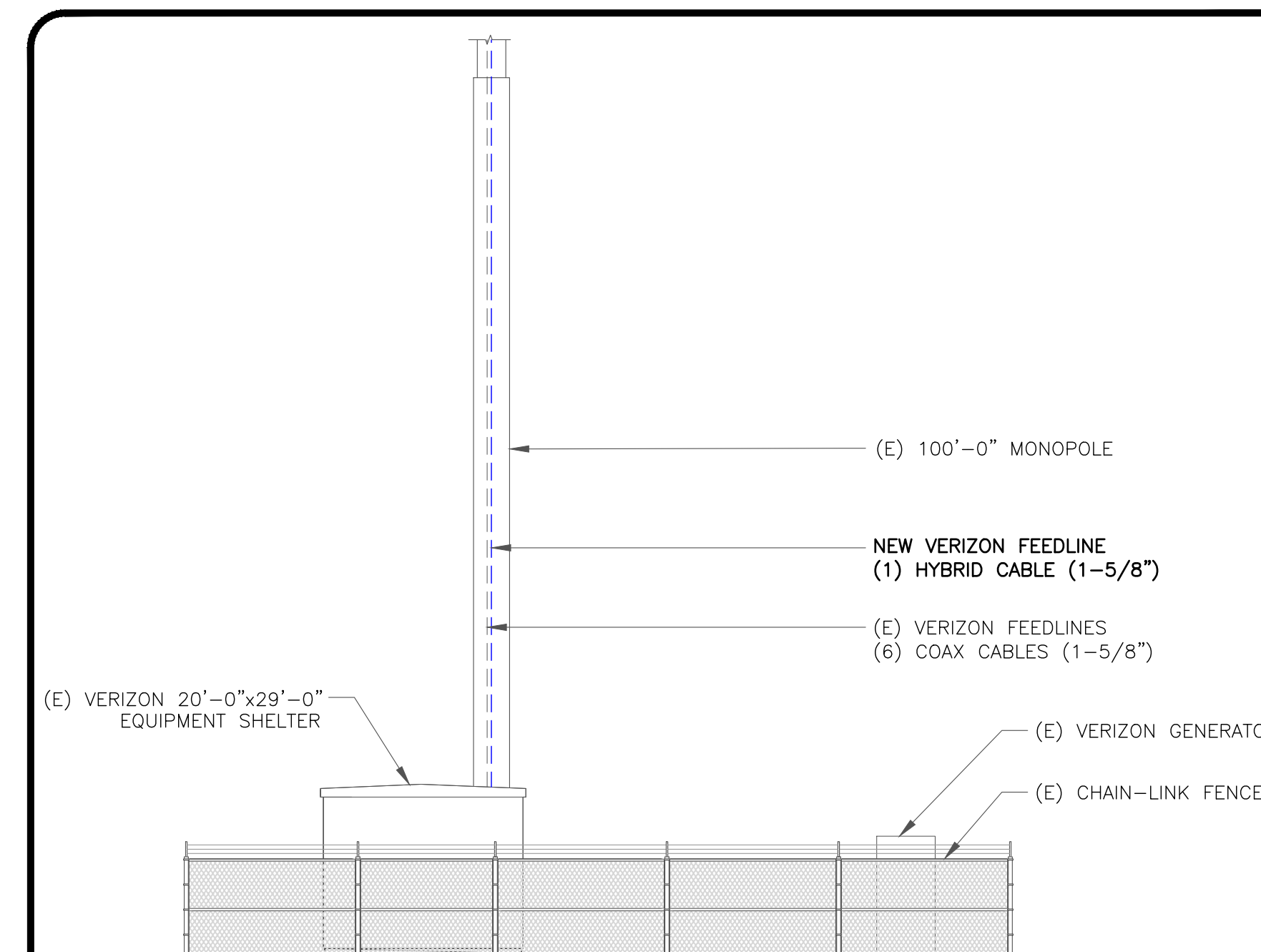
SHEET NUMBER: **C-2** REVISION: **0**



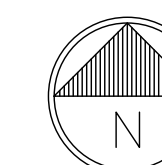
ANTENNA/RRH SCHEDULE									
SECTOR	STATUS	ANTENNA MANUFACTURER	ANTENNA MODEL	ANTENNA CENTERLINE	AZIMUTH	MECHANICAL DOWNTILTS	ELECTRICAL DOWNTILTS	TOWER EQUIPMENT MANUFACTURER	TOWER EQUIPMENT QTY/MODEL
A1	-	-	-	-	-	-	-	-	-
A2	EXISTING	COMMSCOPE	NNHH-65B-R4	100'-0"	30°	0°	2'	SAMSUNG	(1) B5/B13 RRH-BR04C
A3	EXISTING	COMMSCOPE	NNHH-65B-R4	100'-0"	30°	0°	2'	SAMSUNG	(1) B2/B66A RRH-BR049
A4	NEW	SAMSUNG	MT6407-77A	97'-0"	30°	0°	3'	-	-
B1	-	-	-	-	-	-	-	-	-
B2	EXISTING	COMMSCOPE	NNHH-65B-R4	100'-0"	150°	6°	4'/2'/3'	SAMSUNG	(1) B5/B13 RRH-BR04C
B3	EXISTING	COMMSCOPE	NNHH-65B-R4	100'-0"	150°	6°	4'/2'/3'	SAMSUNG	(1) B2/B66A RRH-BR049
B4	NEW	SAMSUNG	MT6407-77A	97'-0"	150°	0°	3'	-	-
C1	-	-	-	-	-	-	-	-	-
C2	EXISTING	COMMSCOPE	NNHH-65B-R4	100'-0"	270°	0°	2'	RAYCAP SAMSUNG	(1) RRFDC-3315-PF-48 (1) B5/B13 RRH-BR04C
C3	EXISTING	COMMSCOPE	NNHH-65B-R4	100'-0"	270°	0°	2'	SAMSUNG	(1) B2/B66A RRH-BR049
C4	NEW	SAMSUNG	MT6407-77A	97'-0"	270°	0°	3'	-	-

1 VERIZON TOWER EQUIPMENT SCHEDULE  
SCALE: NOT TO SCALE

CABLE SCHEDULE				
STATUS	CABLE TYPE	SIZE	LENGTH	QTY
EXISTING	COAX	1-5/8"	150'-0"±	6
NEW	HYBRID	1-5/8"	150'-0"±	1
TOTAL CABLE QTY:				7



2 BASE LEVEL DETAIL  
SCALE: NOT TO SCALE



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BELLEVUE, WA 98004

VERIZON SITE NUMBER:  
**469053**

BU #: **806371**  
HRT **096 943227**

HRT 96 599 MATIANUCK AVE  
WINDSOR, CT 06095

EXISTING 100'-0" MONOPOLE

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STATE OF CONNECTICUT  
SHUHEI SAKANAKI  
34916  
LICENSED PROFESSIONAL ENGINEER  
6/21/21

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VERIZON SITE NUMBER:  
**469053**

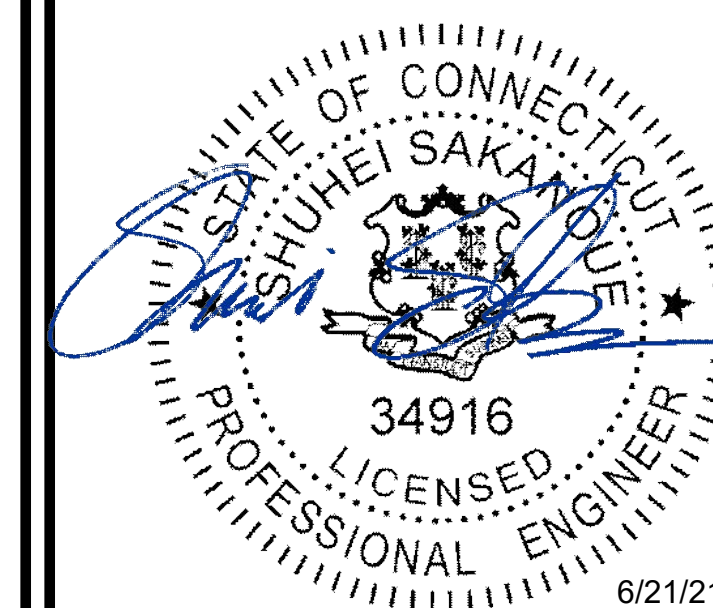
BU #: **806371**  
HRT **096 943227**

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EXISTING 100'-0" MONOPOLE

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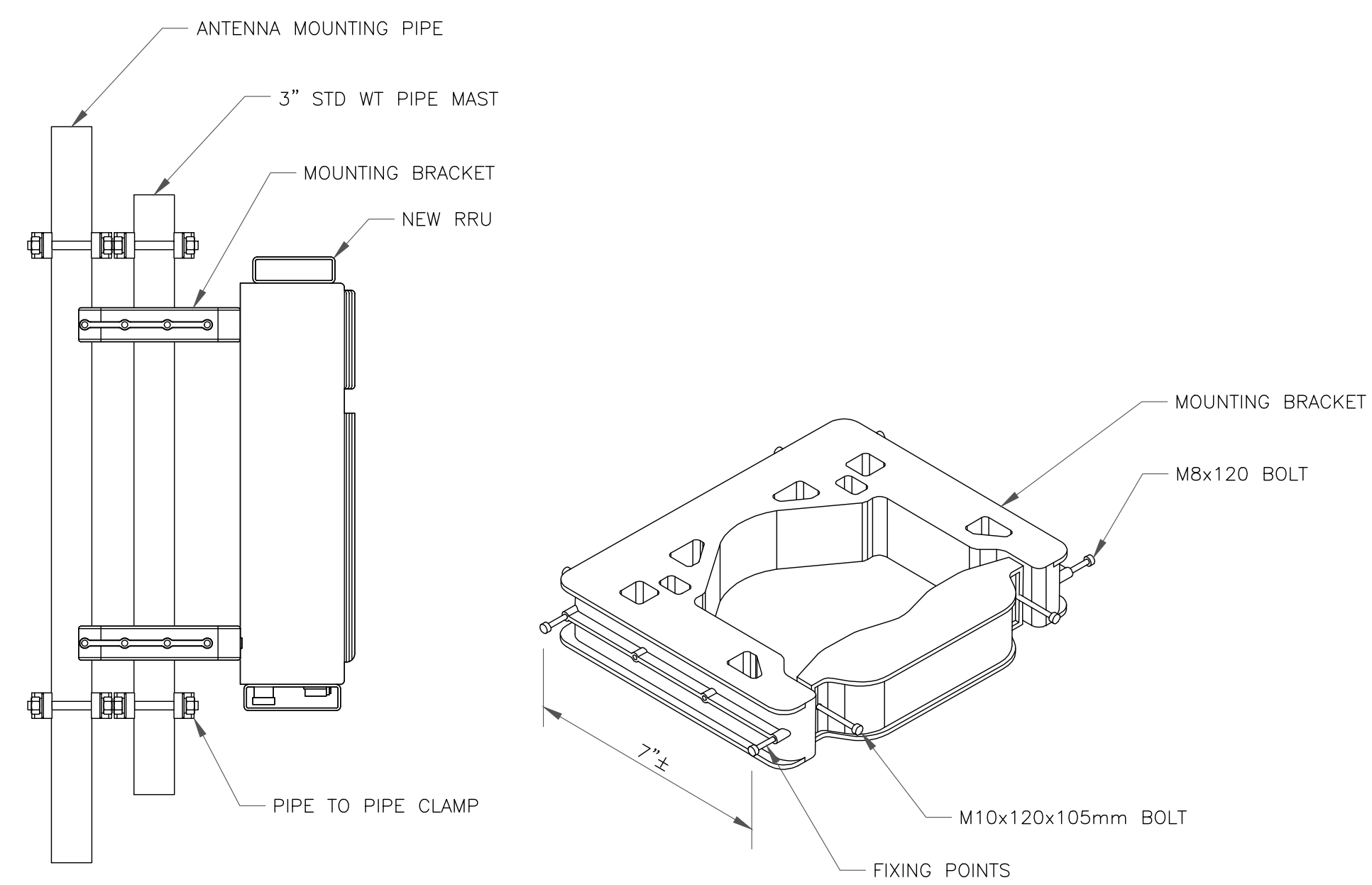
**C-4**

REVISION:

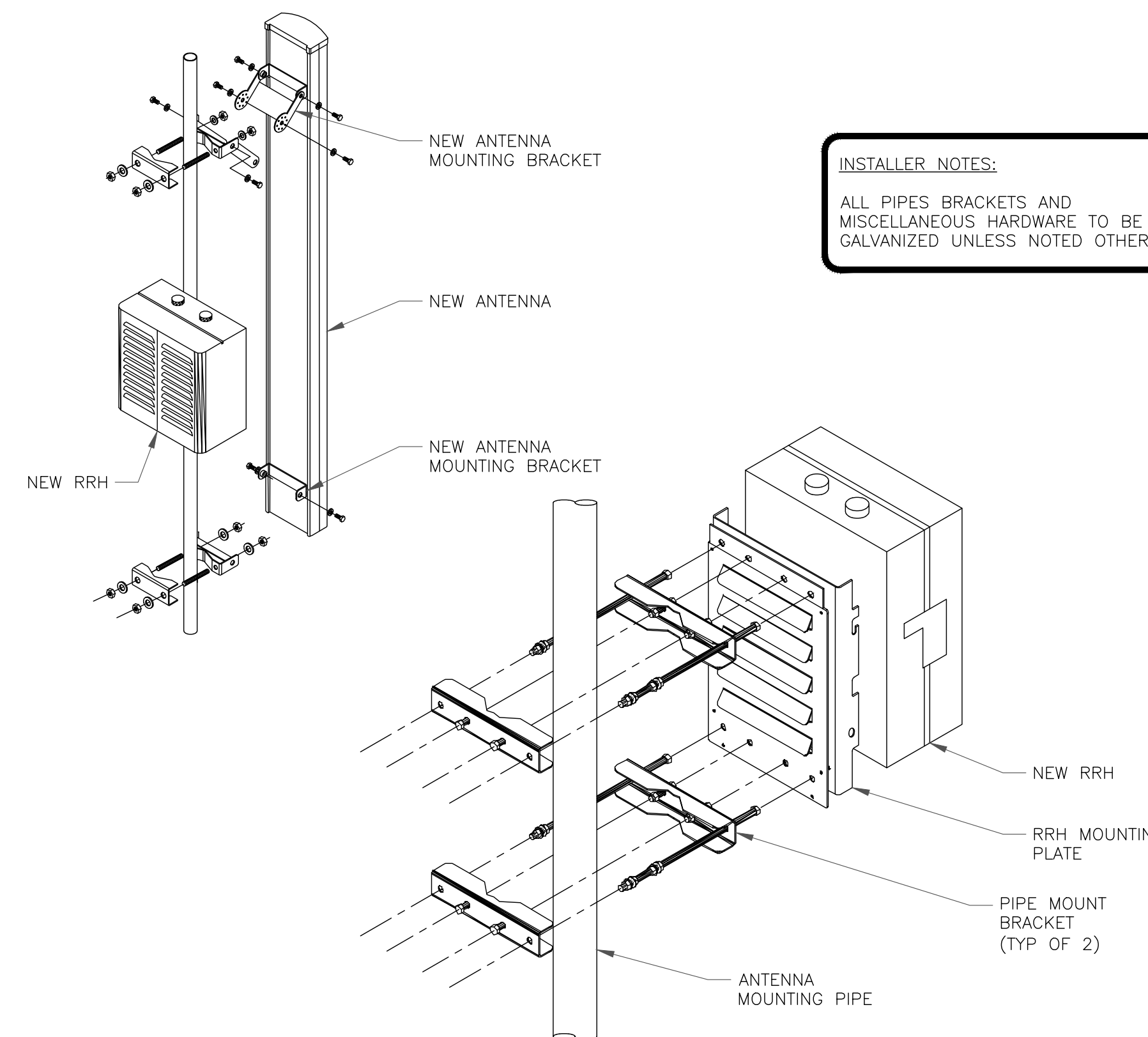
**0**

1 NOT USED  
SCALE: NOT TO SCALE

2 NOT USED  
SCALE: NOT TO SCALE



3 NOKIA - FPKA BRACKET MOUNTING DETAIL  
SCALE: NOT TO SCALE



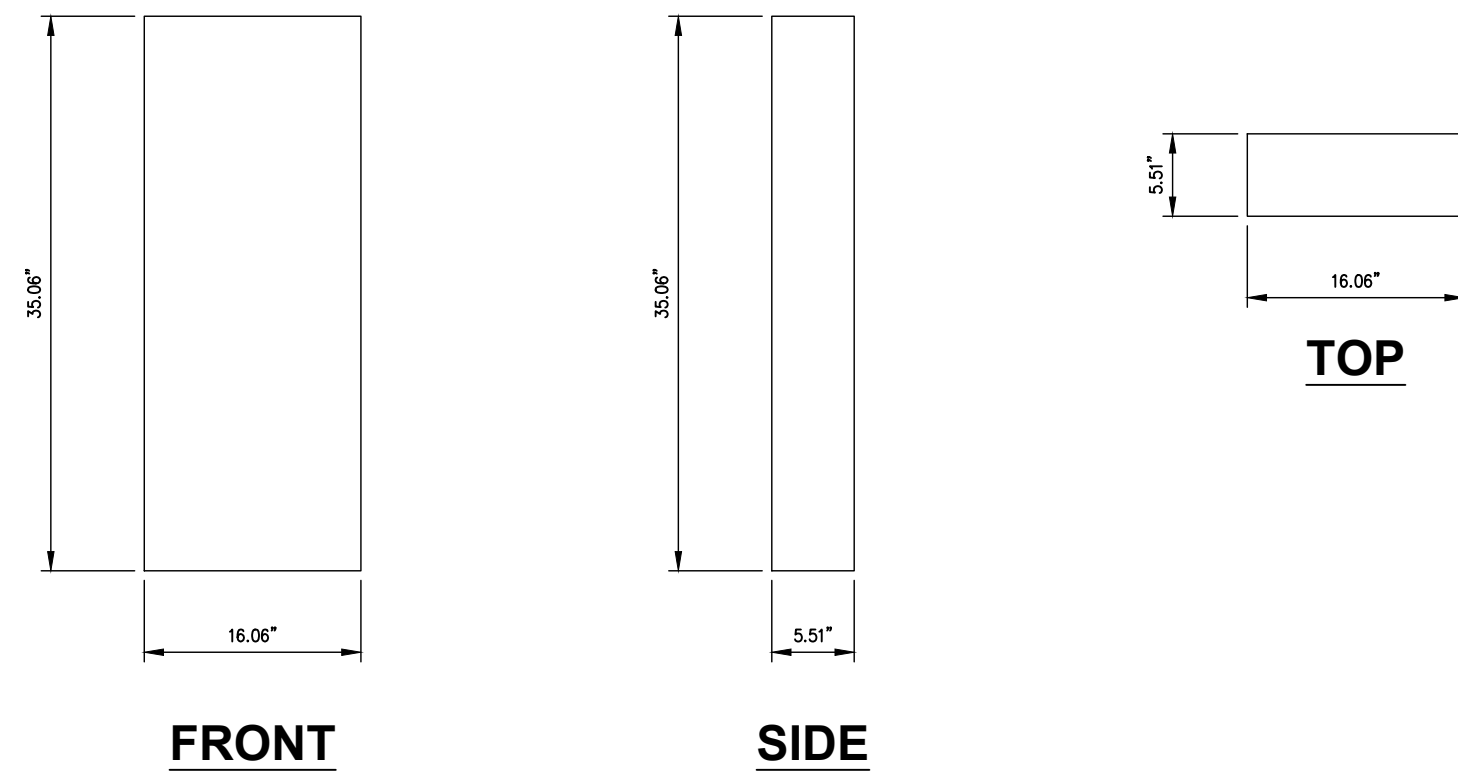
**INSTALLER NOTES:**

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

4 ANTENNA & RRH MOUNTING DETAIL  
SCALE: NOT TO SCALE

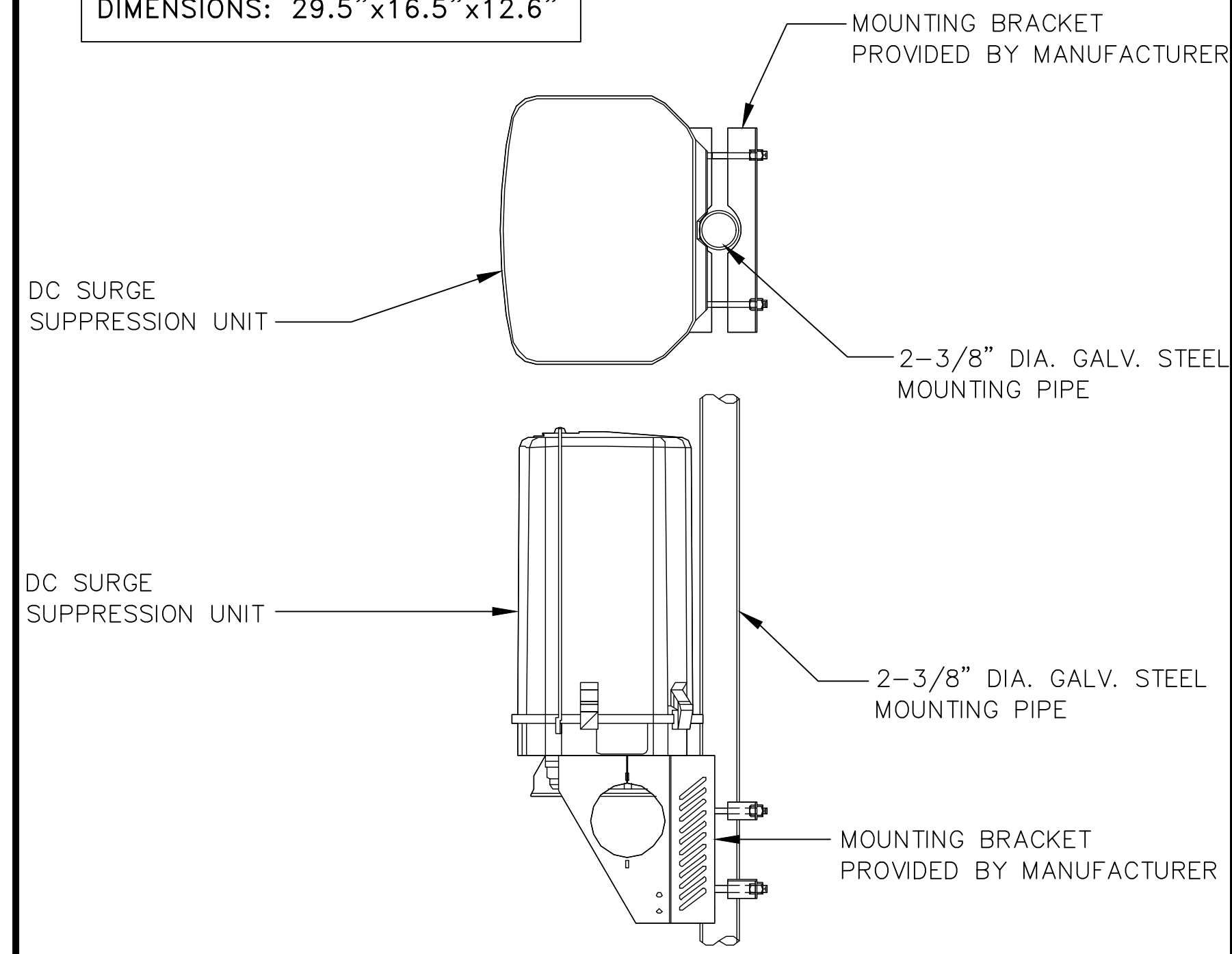
**SAMSUNG PANEL ANTENNA (MT6407-77A)**

DIMENSIONS, HxWxD: 35.06"x16.06"x5.51"  
 WEIGHT, W/O BRACKETS: 81.57 lbs



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

MANUFACTURER: RAYCAP  
 MODEL: RRFDC-3315-PF-48  
 DIMENSIONS: 29.5"x16.5"x12.6"



2 RAYCAP-RRFDC-3315-PF-48 RAYCAP DETAIL  
 SCALE: NOT TO SCALE

3 NOT USED  
 SCALE: NOT TO SCALE

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VERIZON SITE NUMBER:  
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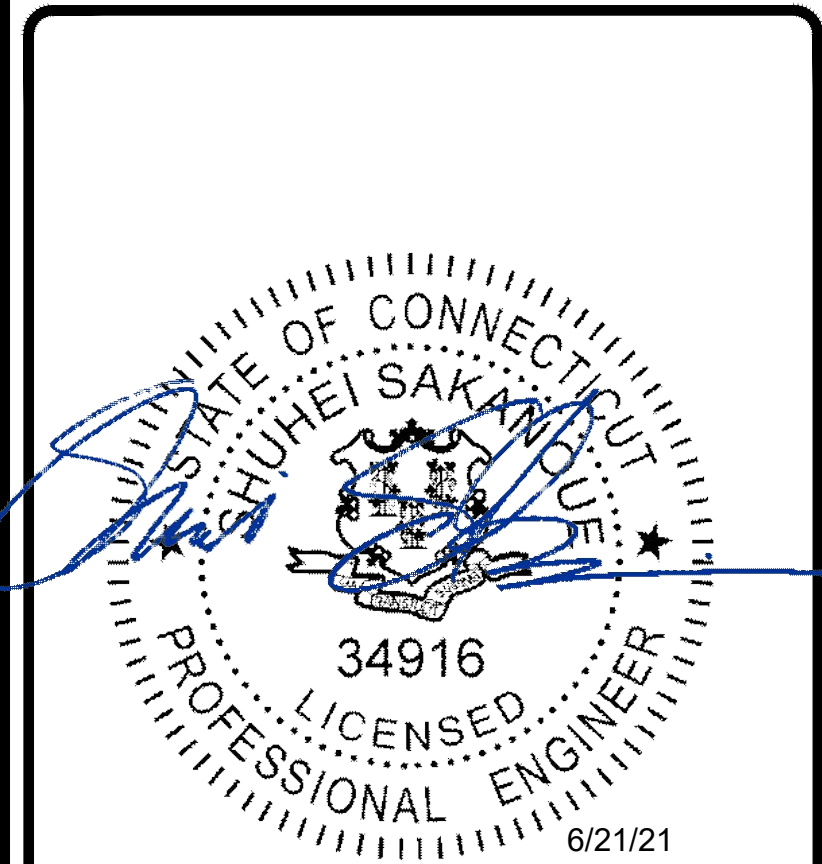
BU #: **806371**  
 HRT **096 943227**

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EXISTING 100'-0" MONOPOLE

**ISSUED FOR:**

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4 NOT USED  
 SCALE: NOT TO SCALE

5 NOT USED  
 SCALE: NOT TO SCALE

6 NOT USED  
 SCALE: NOT TO SCALE



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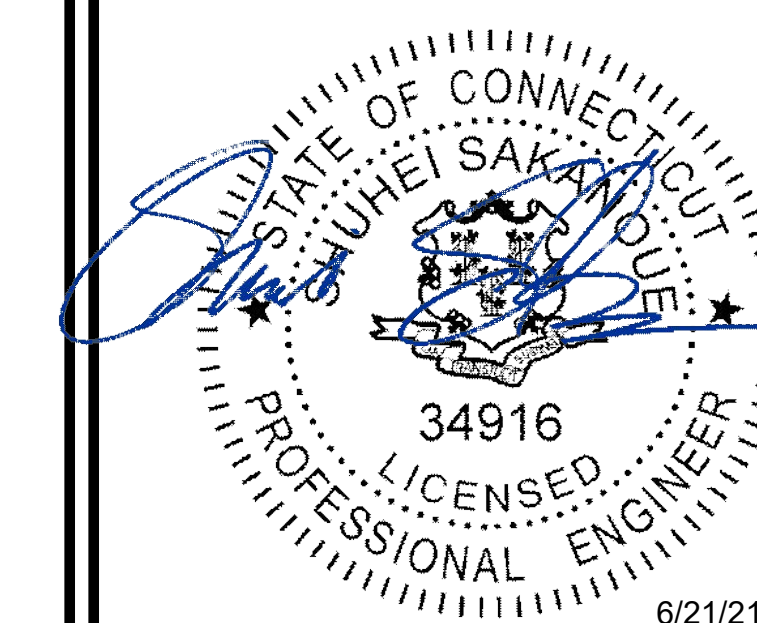
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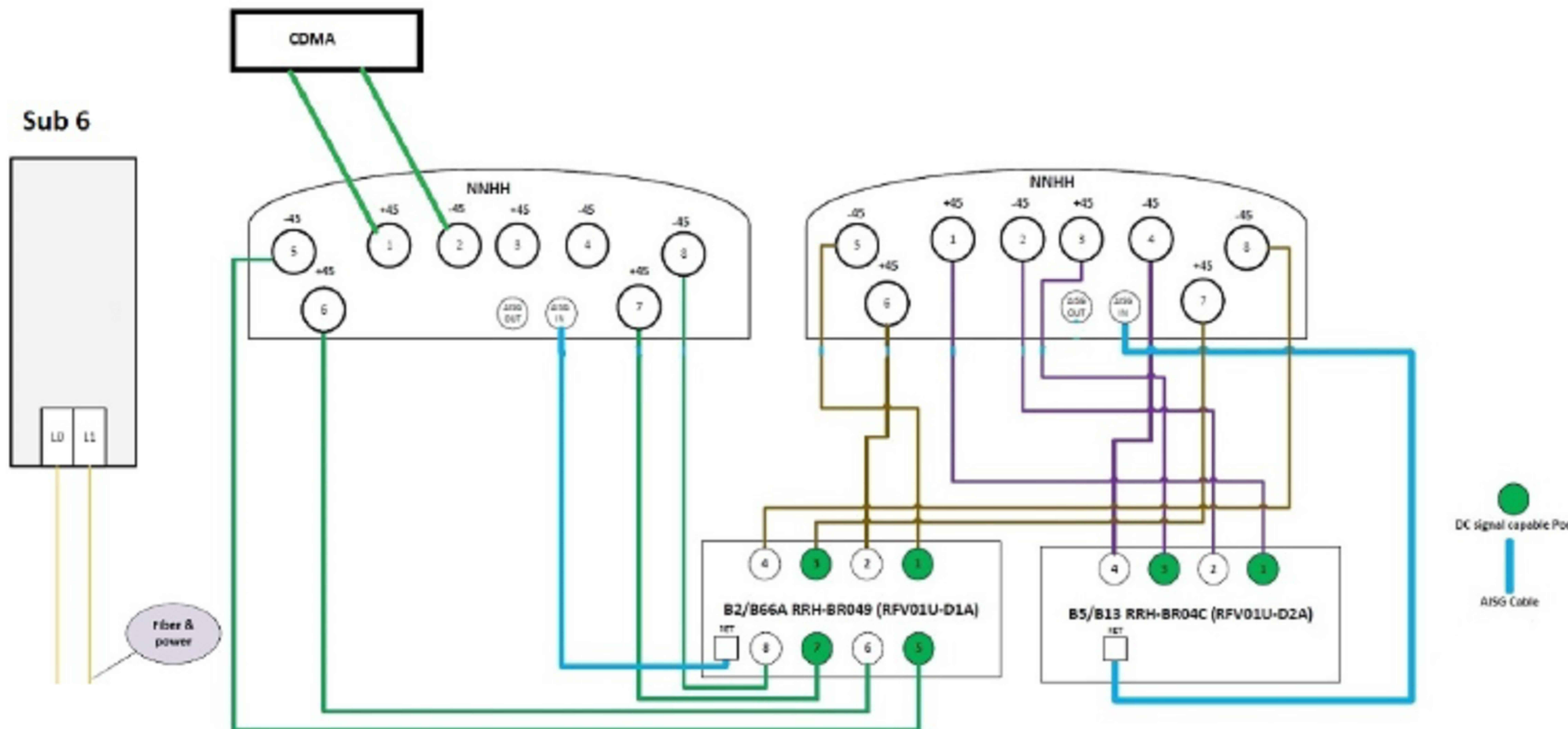


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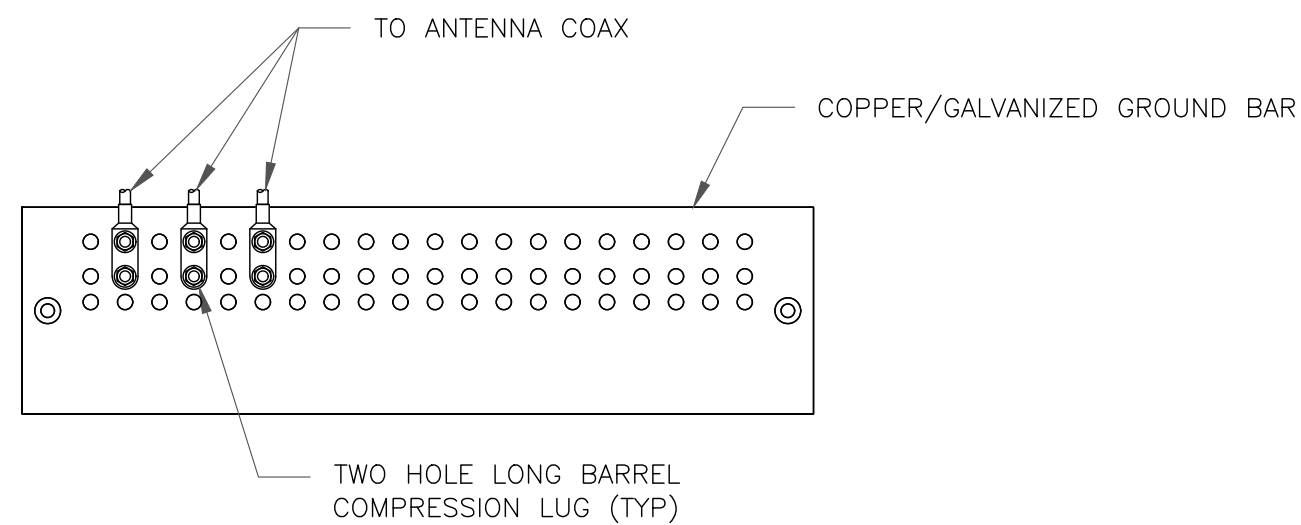
C-6

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1 PLUMBING DIAGRAM  
SCALE: NOT TO SCALE

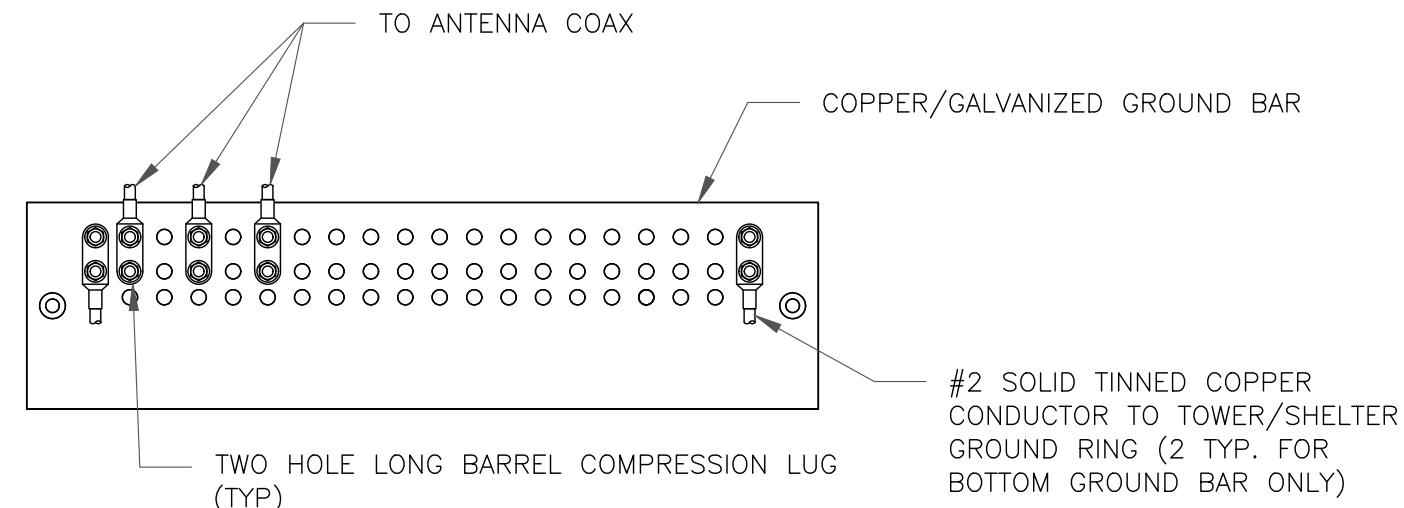




NOTES:

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

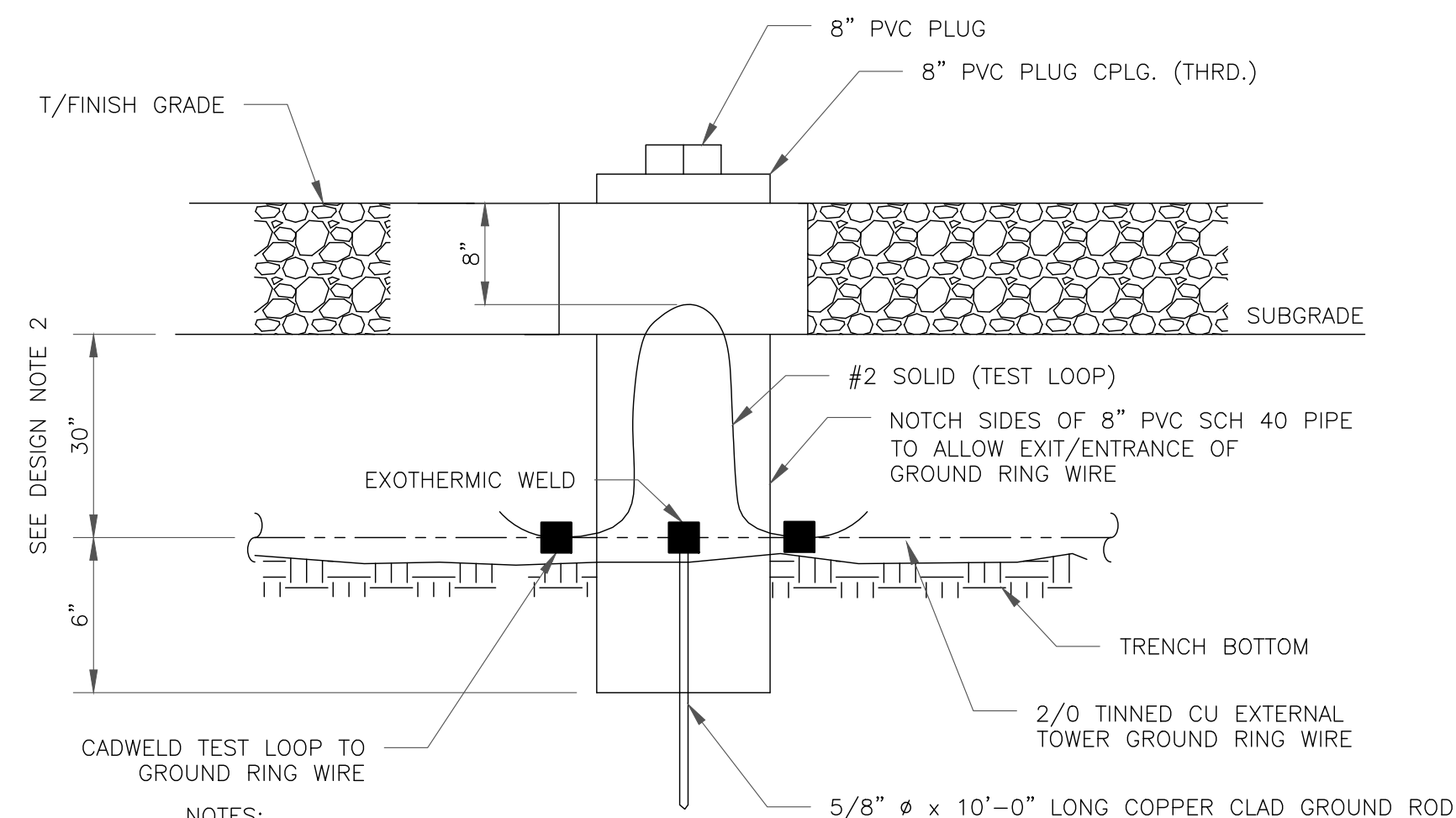
1 ANTENNA SECTOR GROUND BAR DETAIL  
SCALE: NOT TO SCALE



NOTES:

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

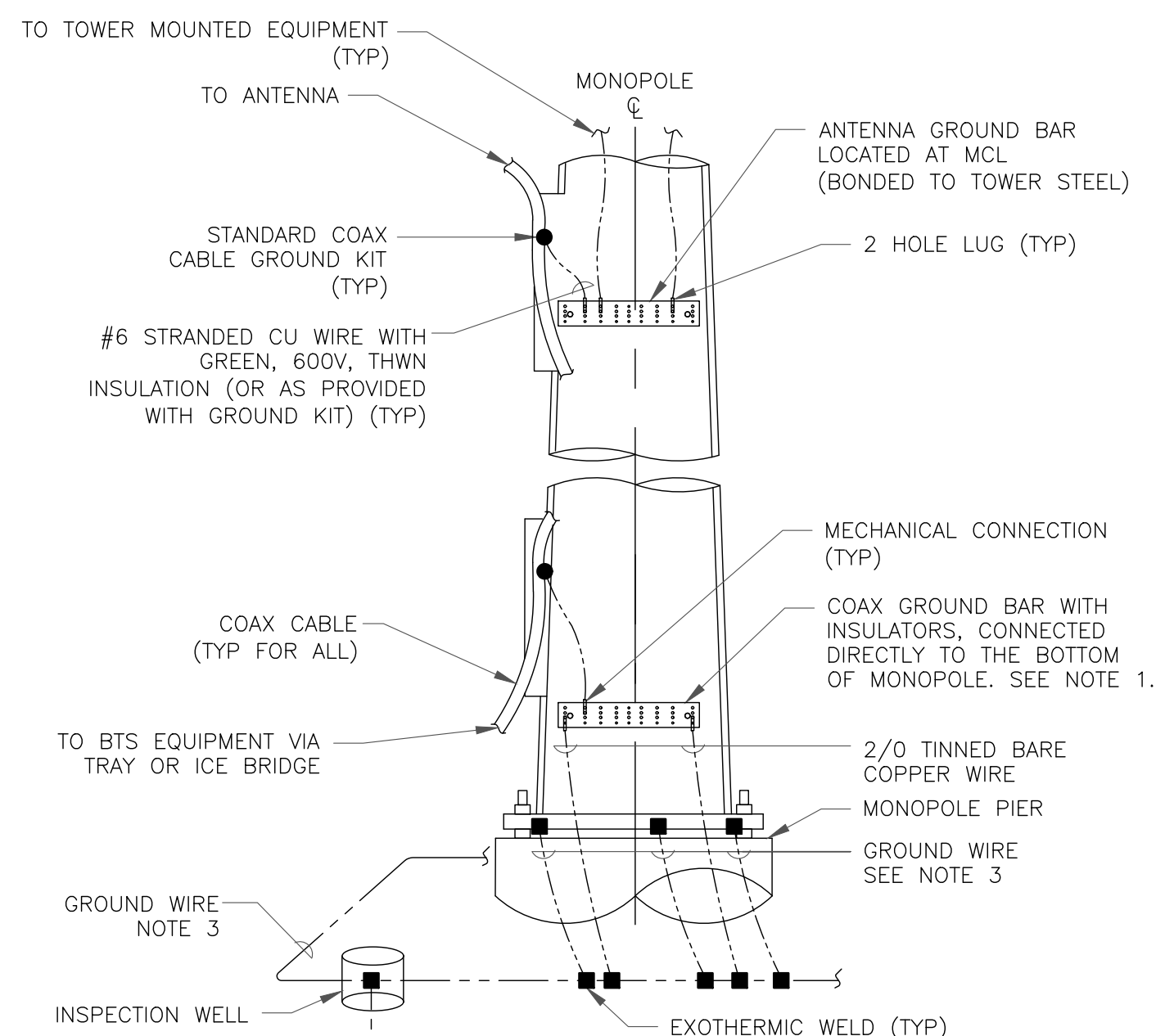
2 TOWER/SHELTER GROUND BAR DETAIL  
SCALE: NOT TO SCALE



NOTES:

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

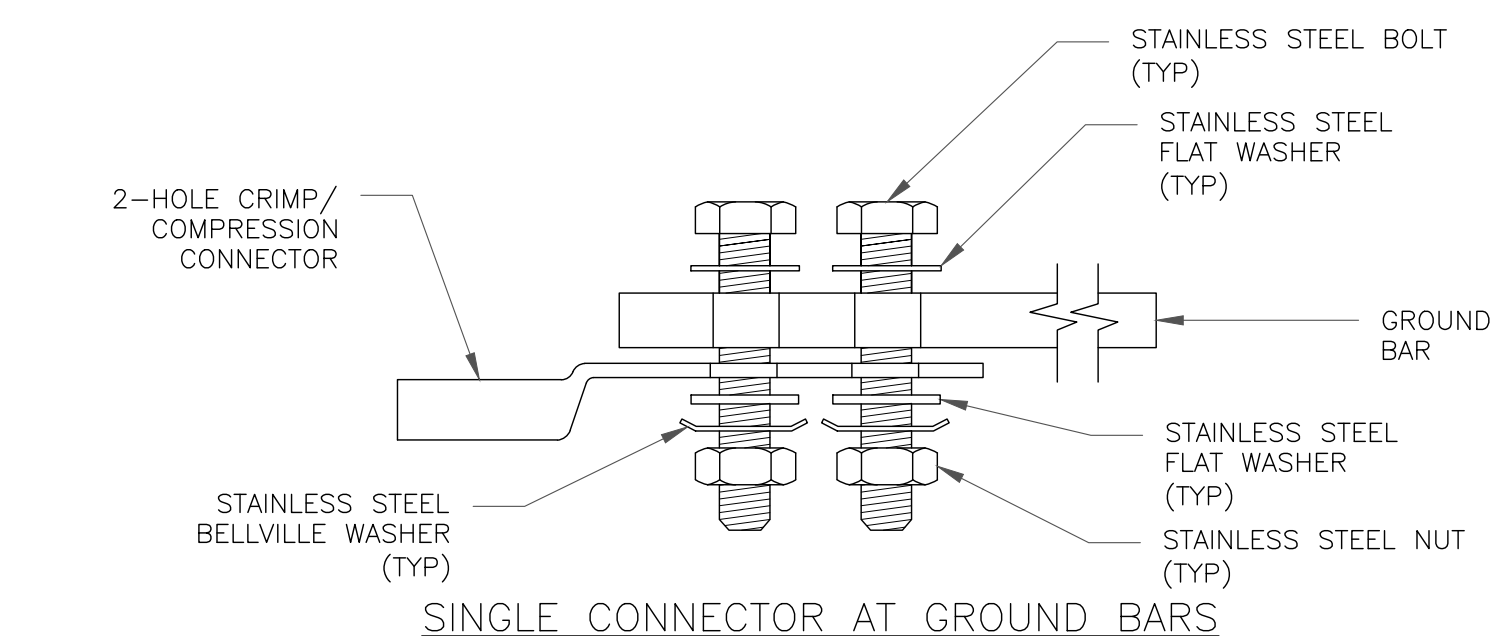
3 INSPECTION WELL DETAIL  
SCALE: NOT TO SCALE



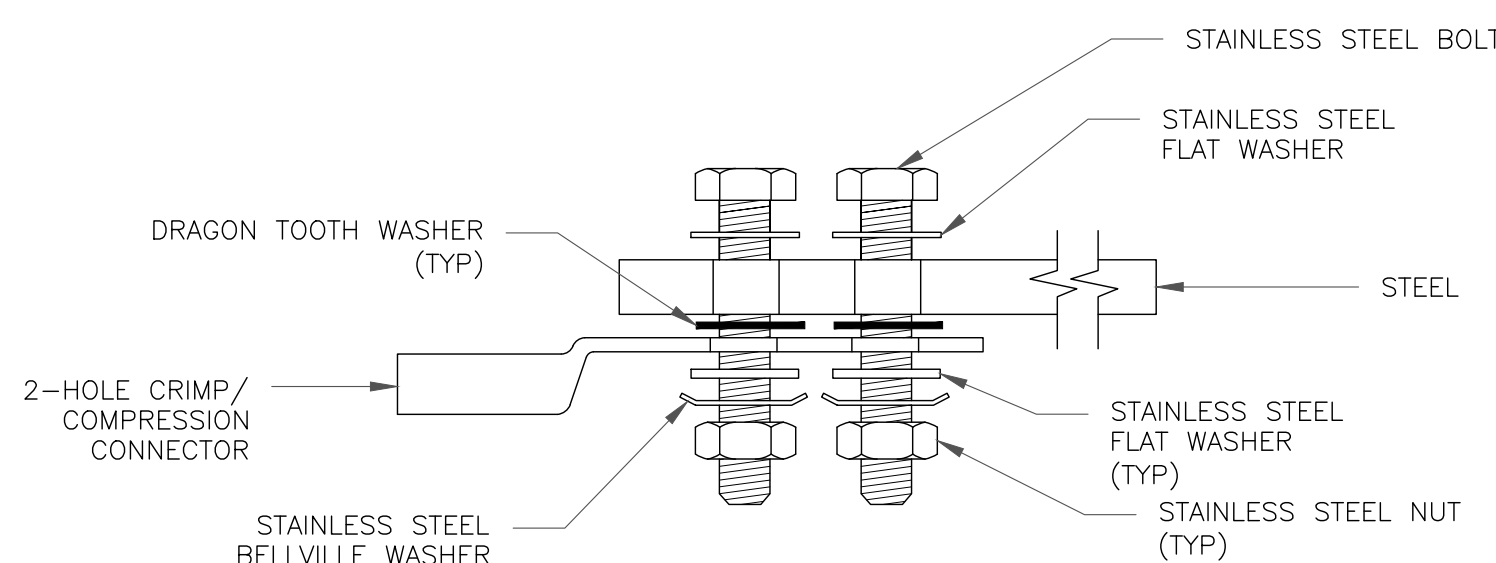
NOTES:

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

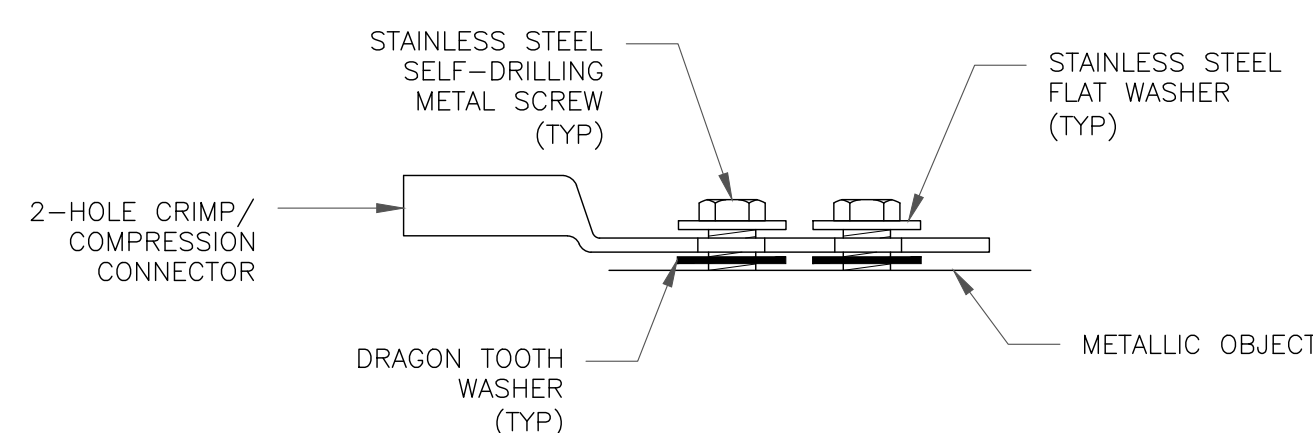
4 TYPICAL ANTENNA CABLE GROUNDING  
SCALE: NOT TO SCALE



SINGLE CONNECTOR AT GROUND BARS

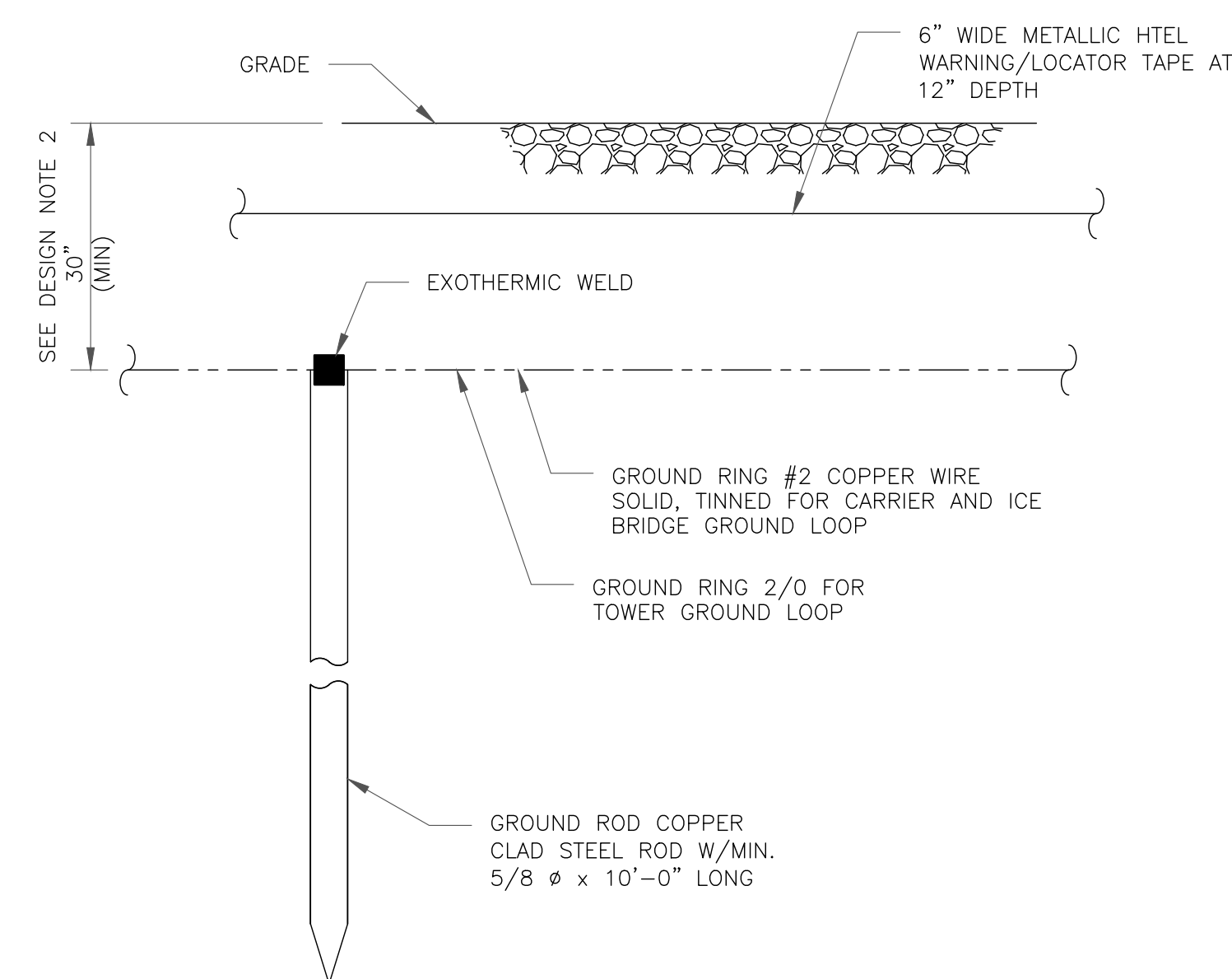


SINGLE CONNECTOR AT STEEL OBJECTS



SINGLE CONNECTOR AT METALLIC/STEEL OBJECTS

5 HARDWARE DETAIL FOR EXTERIOR CONNECTIONS  
SCALE: NOT TO SCALE



NOTES:

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

6 GROUND ROD DETAIL  
SCALE: NOT TO SCALE

**verizon**

180 WASHINGTON VALLEY ROAD  
BEDMINSTER, NJ 07921

**CROWN CASTLE**

1500 CORPORATE DRIVE  
CANONSBURG, PA 15317

**INFINIGY**

FROM ZERO TO INFINIGY  
the solutions are endless

BELLEVUE, WA 98004

VERIZON SITE NUMBER:  
469053

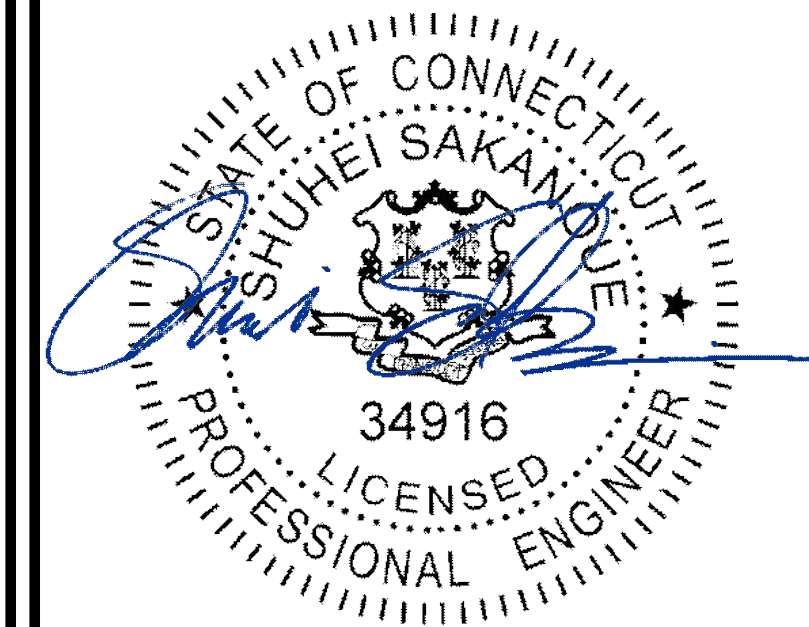
BU #: 806371  
HRT 096 943227

HRT 96 599 MATIANUCK AVE  
WINDSOR, CT 06095

EXISTING 100'-0" MONOPOLE

ISSUED FOR:

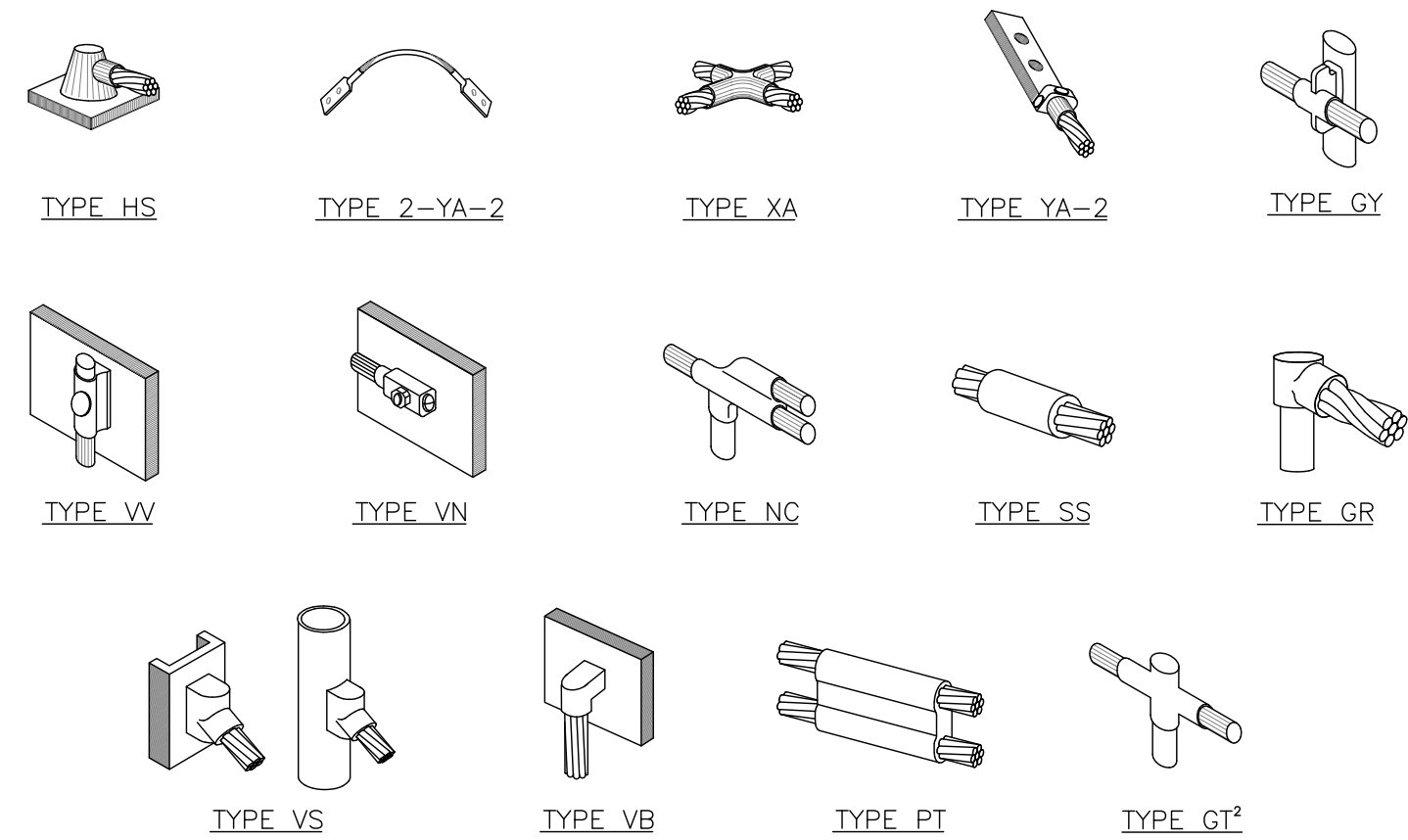
REV	DATE	DRWN	DESCRIPTION	DES./QA
0	06/21/21	RCD	FINAL	-



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

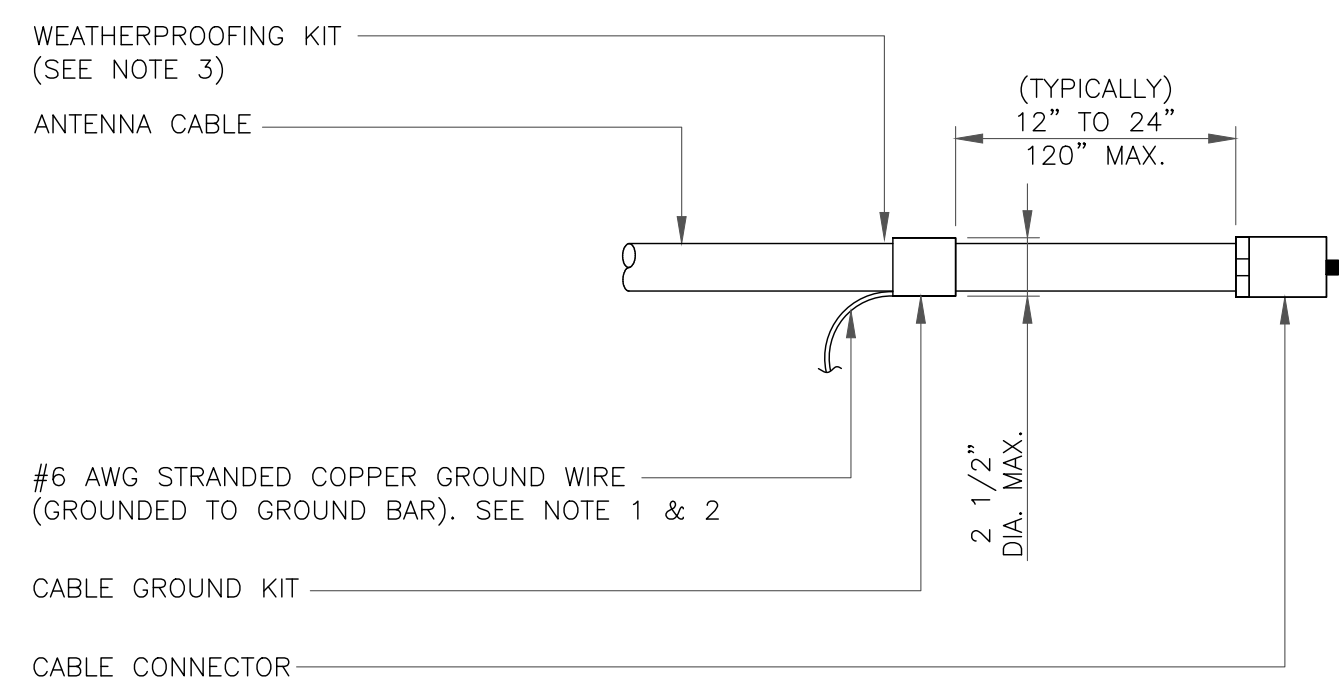




**NOTE:**

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

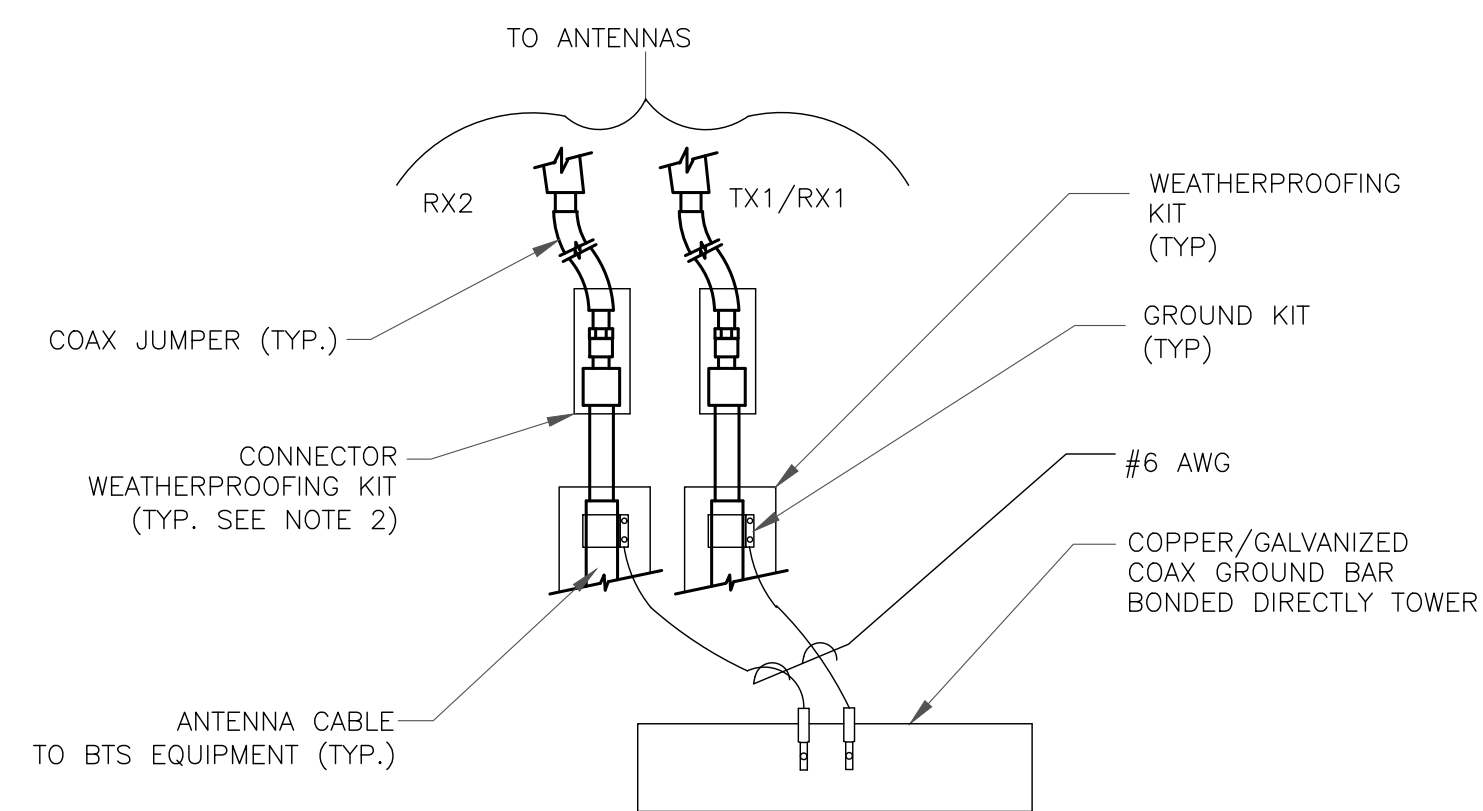
**1 CADWELD GROUNDING CONNECTIONS**  
SCALE: NOT TO SCALE



**NOTES:**

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

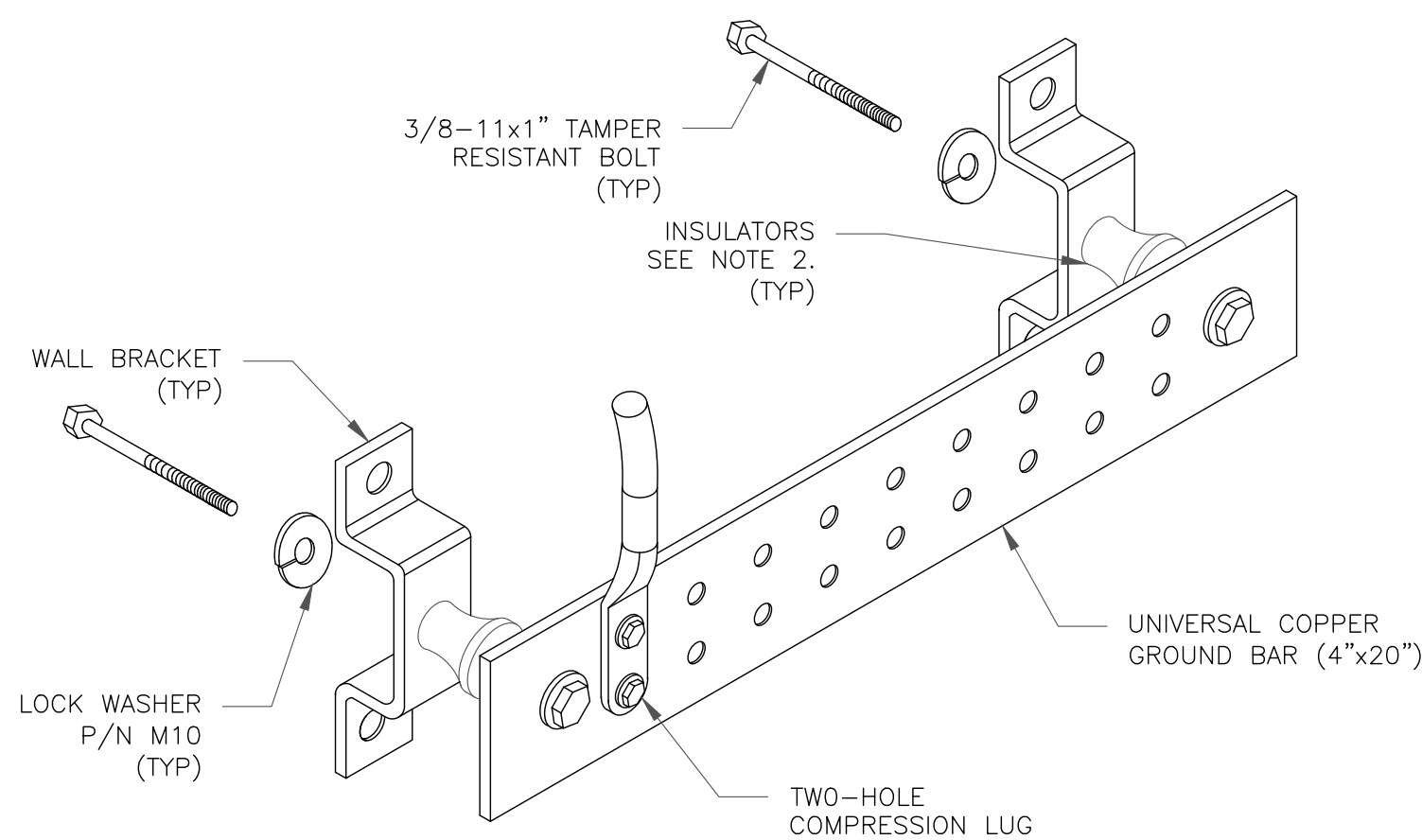
**3 CABLE GROUND KIT CONNECTION**  
SCALE: NOT TO SCALE



**NOTES:**

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

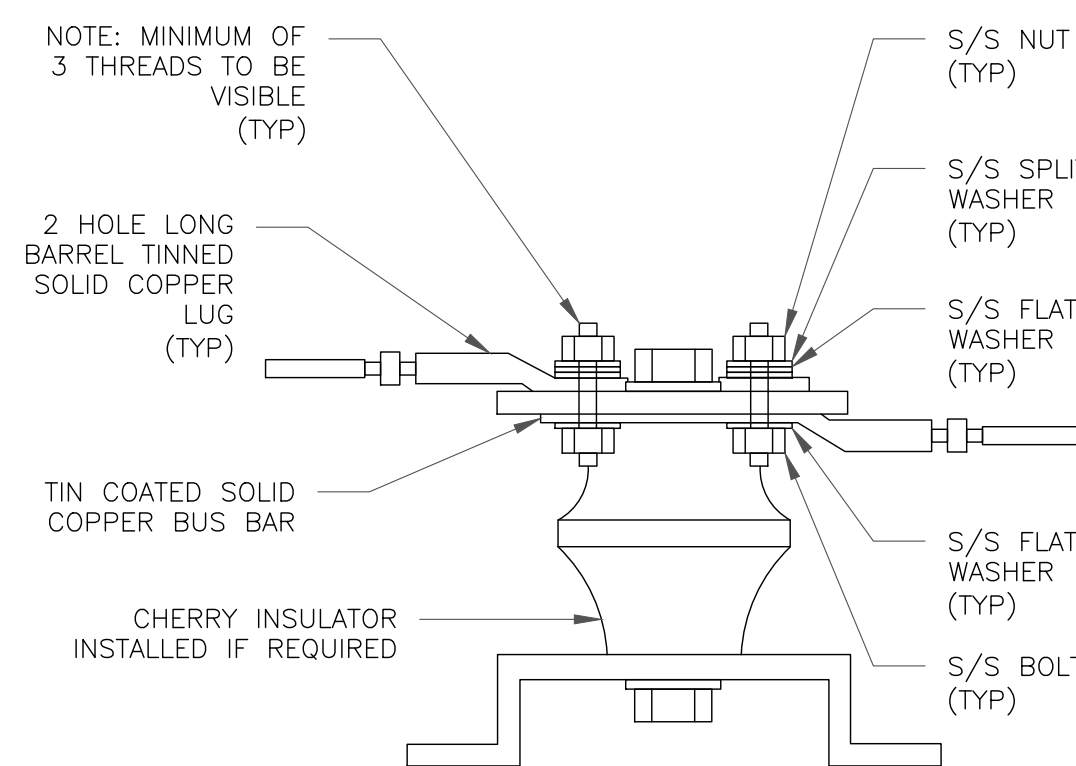
**4 GROUND CABLE CONNECTION**  
SCALE: NOT TO SCALE



**NOTES:**

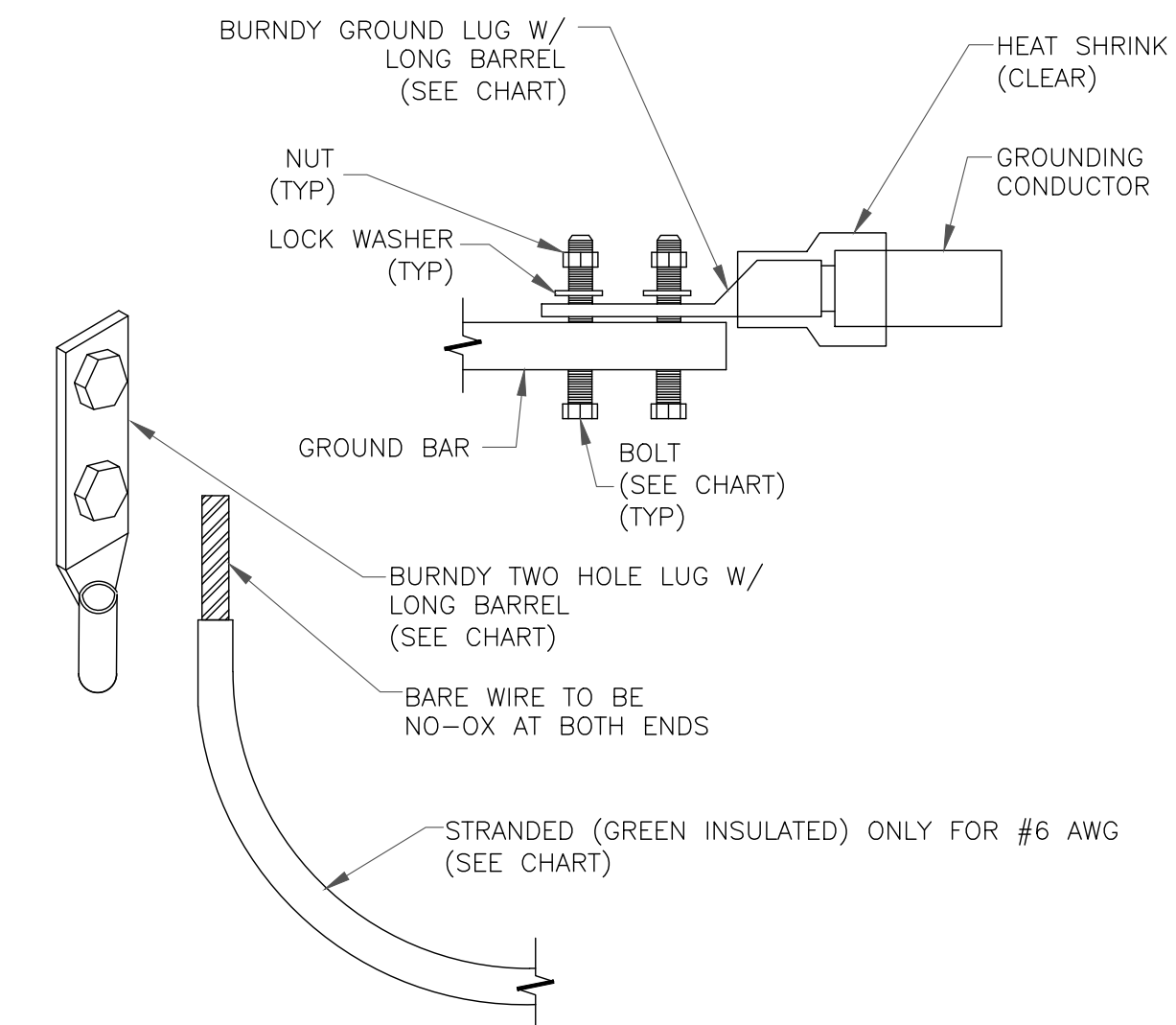
1. DOWN LEAD (HOME RUN) CONDUCTORS ARE NOT TO BE INSTALLED ON CROWN CASTLE USA INC. TOWER, PER THE GROUNDING DOWN CONDUCTOR POLICY QAS-STD-10091. NO MODIFICATION OR DRILLING TO TOWER STEEL IS ALLOWED IN ANY FORM OR FASHION. CAD-WELDING ON THE TOWER AND/OR IN THE AIR ARE NOT PERMITTED.
2. OMIT INSULATOR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

**6 GROUND BAR DETAIL**  
SCALE: NOT TO SCALE



**7 LUG DETAIL**  
SCALE: NOT TO SCALE

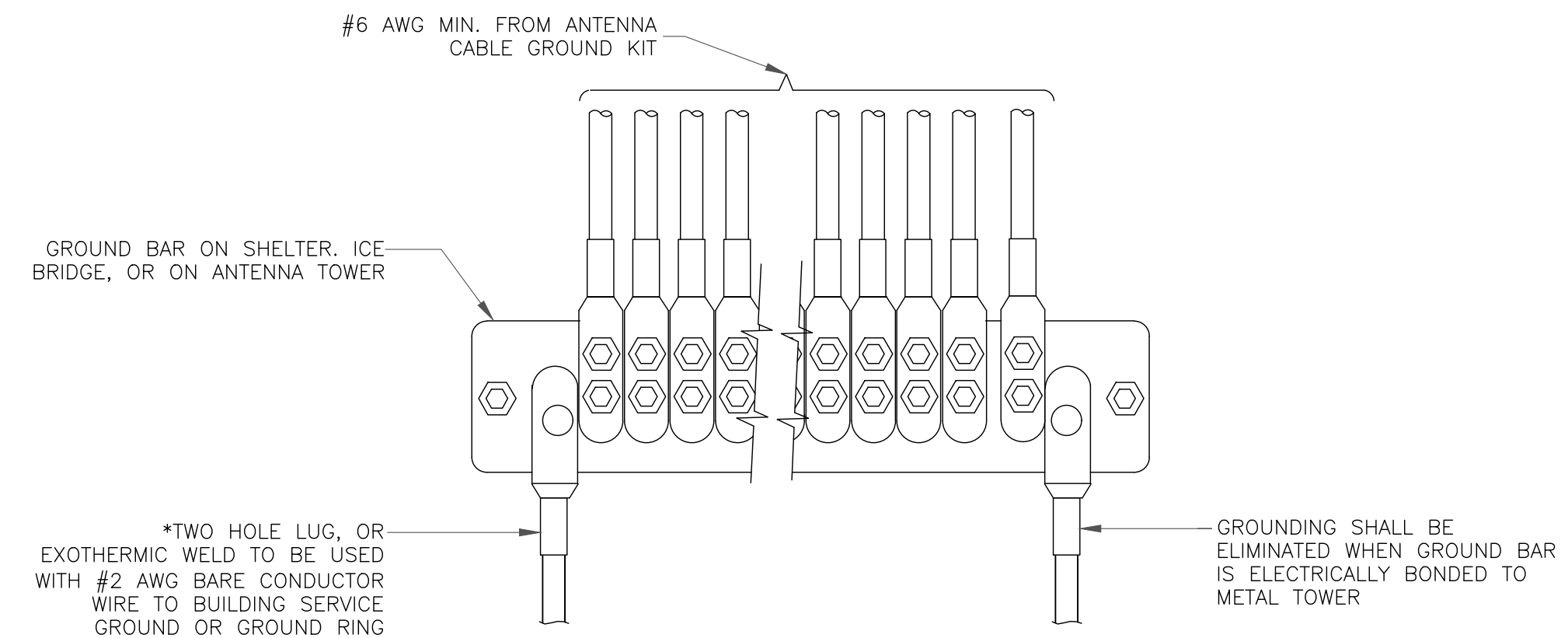
WIRE SIZE	BURNDY LUG	BOLT SIZE
#6 AWG GREEN INSULATED	YA6C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG SOLID TINNED	YA3C-2TC38	3/8" - 16 NC S 2 BOLT
#2 AWG STRANDED	YA2C-2TC38	3/8" - 16 NC S 2 BOLT
#2/0 AWG STRANDED	YA26-2TC38	3/8" - 16 NC S 2 BOLT
#4/0 AWG STRANDED	YA28-2N	1/2" - 16 NC S 2 BOLT



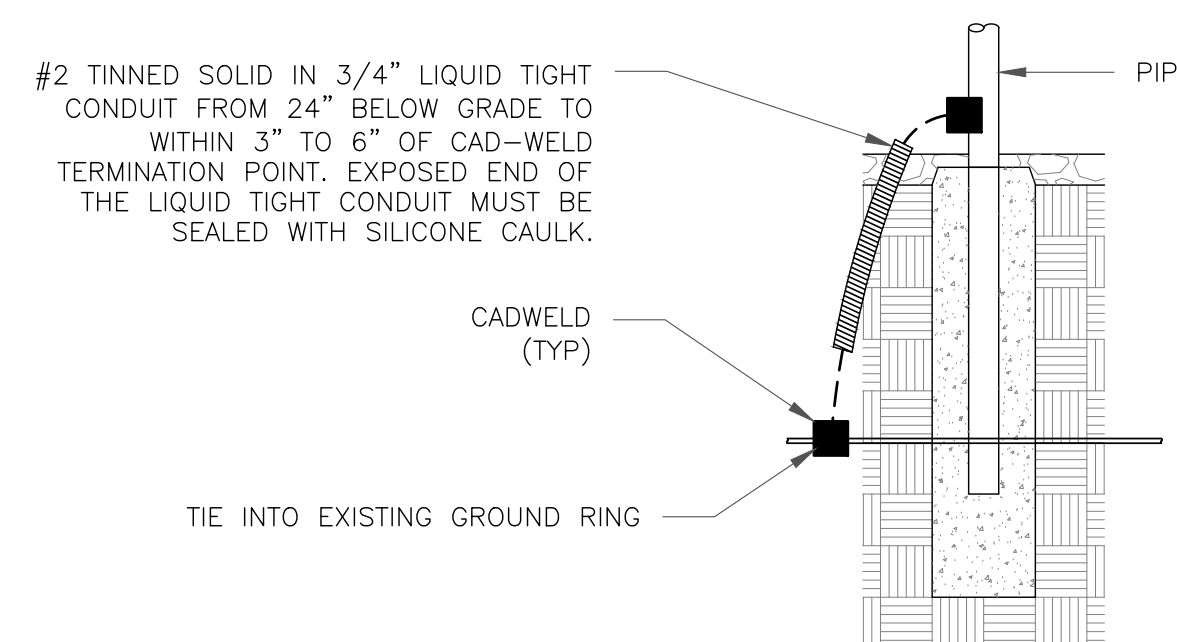
**NOTES:**

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

**2 MECHANICAL LUG CONNECTION**  
SCALE: NOT TO SCALE



**5 GROUNDWIRE INSTALLATION**  
SCALE: NOT TO SCALE



**8 TRANSITIONING GROUND DETAIL**  
SCALE: NOT TO SCALE

**verizon**  
180 WASHINGTON VALLEY ROAD  
BEDMINSTER, NJ 07921

**CROWN CASTLE**  
1500 CORPORATE DRIVE  
CANONSBURG, PA 15317

**INFINIGY**  
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the solutions are endless  
BELLEVUE, WA 98004

VERIZON SITE NUMBER:  
**469053**  
BU #: **806371**  
HRT **096 943227**  
HRT 96 599 MATIANUCK AVE  
WINDSOR, CT 06095  
EXISTING 100'-0" MONOPOLE

**ISSUED FOR:**

REV	DATE	DRWN	DESCRIPTION	DES./QA
0	06/21/21	RCD	FINAL	-

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

# Exhibit D

## **Structural Analysis Report**

Date: **April 29, 2021**



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

**Subject: Structural Analysis Report**

**Carrier Designation:** **Verizon Wireless Co-Locate**  
**Site Number:** 469053  
**Site Name:** Windsor South CT

**Crown Castle Designation:** **BU Number:** 806371  
**Site Name:** HRT 096 943227  
**JDE Job Number:** 644603  
**Work Order Number:** 1957932  
**Order Number:** 552708 Rev. 0

**Engineering Firm Designation:** **TEP Project Number:** 217463.537107

**Site Data:** **HRT 96 599 Matianuck Ave, Windsor, Hartford County, CT 06095**  
**Latitude 41° 49' 16.04", Longitude -72° 40' 36.29"**  
**100 Foot - Monopole Tower**

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

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

LC5: Proposed Equipment Configuration

**Sufficient Capacity - 52.6%**

This analysis utilizes an ultimate 3-second gust wind speed of 125 mph as required by the 2018 Connecticut State Building Code. Applicable Standard references and design criteria are listed in Section 2 - Analysis Criteria.

Structural analysis prepared by: Gautam Sopal, E.I. / RAL

Respectfully submitted by:

Aaron T. Rucker, P.E.



Electronic Copy

04/29/2021

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Table 5 - Tower Component Stresses vs. Capacity

4.1) Recommendations

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tnxTower Output

### 6) APPENDIX B

Base Level Drawing

### 7) APPENDIX C

Additional Calculations

## 1) INTRODUCTION

This tower is a 100-ft monopole tower designed by Valmont. The tower has been modified per reinforcement drawings by Paul J. Ford and Company, dated November 21, 2014.

## 2) ANALYSIS CRITERIA

<b>TIA-222 Revision:</b>	TIA-222-H
<b>Risk Category:</b>	II
<b>Wind Speed:</b>	125 mph
<b>Exposure Category:</b>	B
<b>Topographic Factor:</b>	1.0
<b>Ice Thickness:</b>	2.0 in
<b>Wind Speed with Ice:</b>	50 mph
<b>Service Wind Speed:</b>	60 mph

**Table 1 - Proposed Equipment Configuration**

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
98.0	103.0	1	GPS	GPS_A	7	1-5/8
	100.0	6	Commscope	NNHH-65B-R4 w/ Mount Pipe		
		3	Samsung Telecommunications	RFV01U-D1A		
		3	Samsung Telecommunications	RFV01U-D2A		
	98.0	1	Raycap	RRFDC-3315-PF-48		
		1	Tower Mounts	Platform Mount [LP303-1_KCKR-HR-1]		
97.0	3	Samsung Telecommunications	MT6407-77A w/ Mount Pipe			

**Table 2 - Other Considered Equipment**

Mounting Level (ft)	Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
86.0	86.0	1	Tower Mounts	Platform Mount [LP 601-1]	-	-

## 3) ANALYSIS PROCEDURE

**Table 3 - Documents Provided**

Document	Reference	Source
Geotechnical Report	262194	CCISites
Tower Foundation Drawings	262191	CCISites
Tower Manufacturer Drawings	2562465	CCISites
Tower Reinforcement Drawings	5408647	CCISites
Post-Modification Inspection	5594558	CCISites

### 3.1) Analysis Method

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

tnxTower was used to determine the loads on the modified structure. Additional calculations were performed to determine the stresses in the pole and in the reinforcing elements. These calculations are presented in Appendix C.

### 3.2) Assumptions

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

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

## 4) ANALYSIS RESULTS

**Table 4 - Section Capacity (Summary)<sup>1,2</sup>**

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
100 - 95	Pole	TP15.961x14.76x0.281	Pole	4.3%	Pass
95 - 90	Pole	TP17.162x15.961x0.281	Pole	8.3%	Pass
90 - 85	Pole	TP18.363x17.162x0.281	Pole	12.0%	Pass
85 - 80	Pole	TP19.564x18.363x0.281	Pole	15.7%	Pass
80 - 75	Pole	TP20.765x19.564x0.281	Pole	18.7%	Pass
75 - 70	Pole	TP21.966x20.765x0.281	Pole	21.1%	Pass
70 - 65	Pole	TP23.167x21.966x0.281	Pole	23.2%	Pass
65 - 63.08	Pole	TP23.628x23.167x0.281	Pole	24.0%	Pass
63.08 - 62.83	Pole + Reinf.	TP23.688x23.628x0.5685	Reinf. 2 Tension Rupture	19.2%	Pass
62.83 - 57.83	Pole + Reinf.	TP24.889x23.688x0.5435	Reinf. 2 Tension Rupture	21.0%	Pass
57.83 - 55	Pole + Reinf.	TP26.57x24.889x0.5435	Reinf. 2 Tension Rupture	22.0%	Pass
55 - 50	Pole + Reinf.	TP26.206x25.007x0.594	Reinf. 2 Tension Rupture	21.9%	Pass
50 - 45	Pole + Reinf.	TP27.406x26.206x0.5815	Reinf. 2 Tension Rupture	23.2%	Pass
45 - 40	Pole + Reinf.	TP28.605x27.406x0.569	Reinf. 2 Tension Rupture	24.4%	Pass
40 - 35	Pole + Reinf.	TP29.805x28.605x0.5565	Reinf. 2 Tension Rupture	25.5%	Pass
35 - 32	Pole + Reinf.	TP30.524x29.805x0.5565	Reinf. 2 Tension Rupture	26.2%	Pass
32 - 31.75	Pole + Reinf.	TP30.584x30.524x0.644	Reinf. 1 Tension Rupture	22.8%	Pass
31.75 - 26.75	Pole + Reinf.	TP31.783x30.584x0.619	Reinf. 1 Tension Rupture	23.7%	Pass
26.75 - 21.75	Pole + Reinf.	TP32.983x31.783x0.6065	Reinf. 1 Tension Rupture	24.6%	Pass
21.75 - 16.75	Pole + Reinf.	TP34.182x32.983x0.594	Reinf. 1 Tension Rupture	25.4%	Pass
16.75 - 11.75	Pole + Reinf.	TP35.382x34.182x0.594	Reinf. 1 Tension Rupture	26.2%	Pass
11.75 - 6.75	Pole + Reinf.	TP36.581x35.382x0.5815	Reinf. 1 Tension Rupture	26.9%	Pass
6.75 - 1.75	Pole + Reinf.	TP37.78x36.581x0.569	Reinf. 1 Tension Rupture	27.6%	Pass

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
1.75 - 0	Pole + Reinf.	TP38.2x37.78x0.569	Reinf. 1 Tension Rupture	27.8%	Pass
				Summary	
			Pole	24.0%	Pass
			Reinforcement	27.8%	Pass
			<b>Overall</b>	<b>27.8%</b>	<b>Pass</b>

**Table 5 - Tower Component Stresses vs. Capacity - LC5**

Notes	Component	Elevation (ft)	% Capacity	Pass / Fail
1,2	Anchor Rods	-	24.0	Pass
1,2	Base Plate	-	17.4	Pass
1,2	Base Foundation Soil Interaction	-	52.6	Pass
1,2	Base Foundation Structural	-	32.5	Pass

<b>Structure Rating (max from all components) =</b>	<b>52.6%</b>
---	--------------

Notes:

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

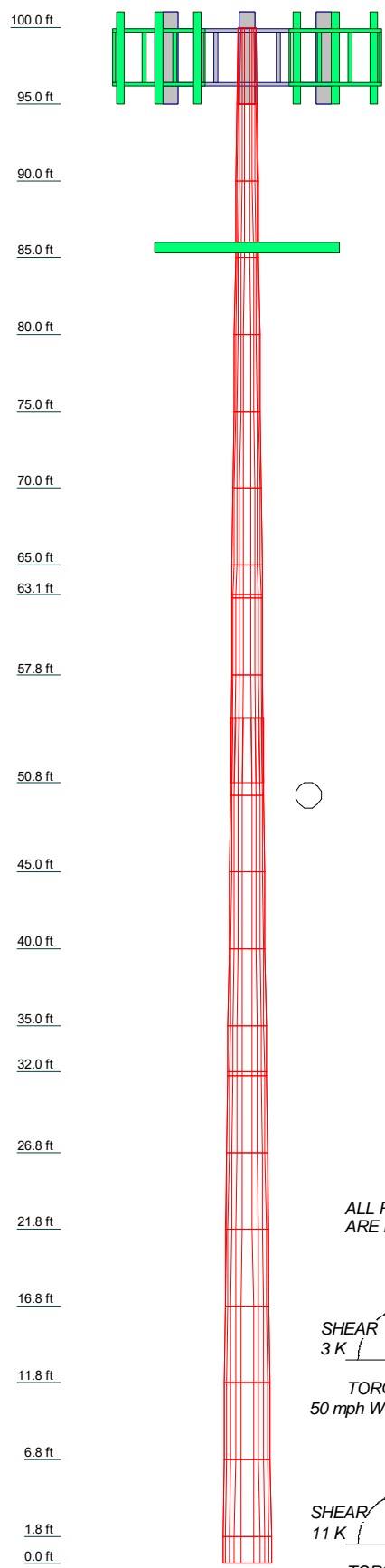
#### 4.1) Recommendations

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

**APPENDIX A**  
**TNXTOWER OUTPUT**



Section	Length (ft)	Number of Sides	Thickness (in)	Socket Length (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	5.00	12	0.28					0.2
2	5.00	12	0.28					0.3
3	5.00	12	0.28					0.3
4	5.00	12	0.28					0.3
5	5.00	12	0.28					0.3
6	5.00	12	0.28					0.3
7	5.00	12	0.28					0.3
8	5.00	12	0.28					0.3
9	5.00	12	0.28					0.3
10	5.00	12	0.28					0.3
11	5.00	12	0.54	4.17	24.89	26.57	A572-65	1.0
12	5.00	12	0.59		24.01	26.21		0.8
13	5.00	12	0.58		26.21	27.41		0.8
14	5.00	12	0.57		27.41	28.61		0.8
15	5.00	12	0.56		28.61	29.80		0.8
16	5.00	12	0.56		29.80	31.00		0.8
17	5.00	12	0.56		31.00	32.20		0.8
18	5.00	12	0.62		32.20	33.40		1.0
19	5.00	12	0.61		33.40	34.60		1.0
20	5.00	12	0.59		34.60	35.80		1.0
21	5.00	12	0.59		35.80	37.00		1.1
22	5.00	12	0.58		37.00	38.20		1.1
23	5.00	12	0.57		38.20	39.40		1.1
24	1.75	12	0.57		39.40	40.60		1.1



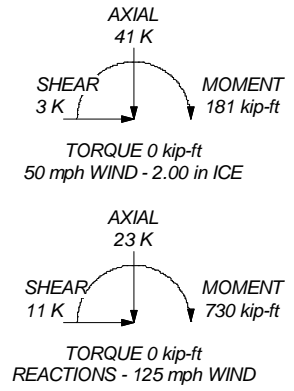
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			


**MATERIAL STRENGTH**

**TOWER DESIGN NOTES**

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for Exposure B to the TIA-222-H Standard.
3. Tower designed for a 125 mph basic wind in accordance with the TIA-222-H Standard.
4. Tower is also designed for a 50 mph basic wind with 2.00 in ice. Ice is considered to increase in thickness with height.
5. Deflections are based upon a 60 mph wind.
6. Tower Risk Category II.
7. Topographic Category 1 with Crest Height of 0.00 ft
8. TOWER RATING: 27.8%

ALL REACTIONS ARE FACTORED



 Tower Engineering Professionals	<b>Tower Engineering Professionals</b>		Job: <b>HRT 096 943227 (BU 806371)</b>		
	326 Tryon Rd.		Project: <b>TEP No. 217463.537107</b>		
	Raleigh, NC 27603		Client: <b>Crown Castle</b>	Drawn by: <b>Dustin T. Smith, P.E.</b>	App'd:
	Phone: (919) 661-6351		Code: <b>TIA-222-H</b>	Date: <b>04/29/21</b>	Scale: <b>NTS</b>
	FAX: (919) 661-6350		Path: <b>C:\Users\dsmith\Desktop\Current Run\806371_1957932_LC5.eri</b>		Dwg No. <b>E-1</b>

<p><b>tnxTower</b></p> <p><i>Tower Engineering Professionals</i> 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<b>Job</b> HRT 096 943227 (BU 806371)	<b>Page</b> 1 of 16
	<b>Project</b> TEP No. 217463.537107	<b>Date</b> 11:22:08 04/29/21
	<b>Client</b> Crown Castle	<b>Designed by</b> Dustin T. Smith, P.E.

## Tower Input Data

The tower is a monopole.

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

The following design criteria apply:

Tower is located in Hartford County, Connecticut.

Tower base elevation above sea level: 87.00 ft.

Basic wind speed of 125 mph.

Risk Category II.

Exposure Category B.

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

Topographic Category: 1.

Crest Height: 0.00 ft.

Nominal ice thickness of 2.00 in.

Ice thickness is considered to increase with height.

Ice density of 56.00 pcf.

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

Deflections calculated using a wind speed of 60 mph.

TOWER RATING: 27.8%.

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

Pressures are calculated at each section.

Stress ratio used in pole design is 1.

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

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

Maximum demand-capacity ratio is: 1.05.

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

## Options

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

<b>tnxTower</b>  <b>Tower Engineering Professionals</b> 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	<b>Job</b> HRT 096 943227 (BU 806371)	<b>Page</b> 2 of 16
	<b>Project</b> TEP No. 217463.537107	<b>Date</b> 11:22:08 04/29/21
	<b>Client</b> Crown Castle	<b>Designed by</b> Dustin T. Smith, P.E.

### Tapered Pole Section Geometry

Section	Elevation ft	Section Length ft	Splice Length ft	Number of Sides	Top Diameter in	Bottom Diameter in	Wall Thickness in	Bend Radius in	Pole Grade
L1	100.00-95.00	5.00	0.00	12	14.76	15.96	0.28	1.12	A572-65 (65 ksi)
L2	95.00-90.00	5.00	0.00	12	15.96	17.16	0.28	1.12	A572-65 (65 ksi)
L3	90.00-85.00	5.00	0.00	12	17.16	18.36	0.28	1.12	A572-65 (65 ksi)
L4	85.00-80.00	5.00	0.00	12	18.36	19.56	0.28	1.12	A572-65 (65 ksi)
L5	80.00-75.00	5.00	0.00	12	19.56	20.77	0.28	1.12	A572-65 (65 ksi)
L6	75.00-70.00	5.00	0.00	12	20.77	21.97	0.28	1.12	A572-65 (65 ksi)
L7	70.00-65.00	5.00	0.00	12	21.97	23.17	0.28	1.12	A572-65 (65 ksi)
L8	65.00-63.08	1.92	0.00	12	23.17	23.63	0.28	1.12	A572-65 (65 ksi)
L9	63.08-62.83	0.25	0.00	12	23.63	23.69	0.57	2.27	A572-65 (65 ksi)
L10	62.83-57.83	5.00	0.00	12	23.69	24.89	0.54	2.17	A572-65 (65 ksi)
L11	57.83-50.83	7.00	4.17	12	24.89	26.57	0.54	2.17	A572-65 (65 ksi)
L12	50.83-50.00	5.00	0.00	12	25.01	26.21	0.59	2.38	A572-65 (65 ksi)
L13	50.00-45.00	5.00	0.00	12	26.21	27.41	0.58	2.33	A572-65 (65 ksi)
L14	45.00-40.00	5.00	0.00	12	27.41	28.61	0.57	2.28	A572-65 (65 ksi)
L15	40.00-35.00	5.00	0.00	12	28.61	29.80	0.56	2.23	A572-65 (65 ksi)
L16	35.00-32.00	3.00	0.00	12	29.80	30.52	0.56	2.23	A572-65 (65 ksi)
L17	32.00-31.75	0.25	0.00	12	30.52	30.58	0.64	2.58	A572-65 (65 ksi)
L18	31.75-26.75	5.00	0.00	12	30.58	31.78	0.62	2.48	A572-65 (65 ksi)
L19	26.75-21.75	5.00	0.00	12	31.78	32.98	0.61	2.43	A572-65 (65 ksi)
L20	21.75-16.75	5.00	0.00	12	32.98	34.18	0.59	2.38	A572-65 (65 ksi)
L21	16.75-11.75	5.00	0.00	12	34.18	35.38	0.59	2.38	A572-65 (65 ksi)
L22	11.75-6.75	5.00	0.00	12	35.38	36.58	0.58	2.33	A572-65 (65 ksi)
L23	6.75-1.75	5.00	0.00	12	36.58	37.78	0.57	2.28	A572-65 (65 ksi)
L24	1.75-0.00	1.75		12	37.78	38.20	0.57	2.28	A572-65 (65 ksi)

### Tapered Pole Properties

Section	Tip Dia. in	Area in <sup>2</sup>	I in <sup>4</sup>	r in	C in	I/C in <sup>3</sup>	J in <sup>4</sup>	It/Q in <sup>2</sup>	w in	w/t
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<b>tnxTower</b>  <b>Tower Engineering Professionals</b> 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	<b>Job</b> HRT 096 943227 (BU 806371)	<b>Page</b> 5 of 16
	<b>Project</b> TEP No. 217463.537107	<b>Date</b> 11:22:08 04/29/21
	<b>Client</b> Crown Castle	<b>Designed by</b> Dustin T. Smith, P.E.

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

Description	Face or Leg	Allow Shield	Exclude From Torque Calculation	Component Type	Placement ft	Total Number	C <sub>AA</sub> ft <sup>2</sup> /ft	Weight plf
HJ7-50A(1-5/8)	B	No	No	Inside Pole	98.00 - 0.00	7	No Ice 1/2" Ice 1" Ice 2" Ice	1.04 1.04 1.04 1.04
****								

**Feed Line/Linear Appurtenances Section Areas**

Tower Section	Tower Elevation ft	Face	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
L1	100.00-95.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.02
		C	0.000	0.000	0.000	0.000	0.00
L2	95.00-90.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.04
		C	0.000	0.000	0.000	0.000	0.00
L3	90.00-85.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.04
		C	0.000	0.000	0.000	0.000	0.00
L4	85.00-80.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.04
		C	0.000	0.000	0.000	0.000	0.00
L5	80.00-75.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.04
		C	0.000	0.000	0.000	0.000	0.00
L6	75.00-70.00	A	0.000	0.000	0.188	0.000	0.00
		B	0.000	0.000	0.000	0.000	0.04
		C	0.000	0.000	0.000	0.000	0.00
L7	70.00-65.00	A	0.000	0.000	0.771	0.000	0.00
		B	0.000	0.000	0.583	0.000	0.04
		C	0.000	0.000	0.583	0.000	0.00
L8	65.00-63.08	A	0.000	0.000	1.992	0.000	0.00
		B	0.000	0.000	1.920	0.000	0.01
		C	0.000	0.000	1.920	0.000	0.00
L9	63.08-62.83	A	0.000	0.000	0.259	0.000	0.00
		B	0.000	0.000	0.250	0.000	0.00
		C	0.000	0.000	0.250	0.000	0.00
L10	62.83-57.83	A	0.000	0.000	5.188	0.000	0.00
		B	0.000	0.000	5.000	0.000	0.04
		C	0.000	0.000	5.000	0.000	0.00
L11	57.83-50.83	A	0.000	0.000	7.259	0.000	0.00
		B	0.000	0.000	6.997	0.000	0.05
		C	0.000	0.000	6.997	0.000	0.00
L12	50.83-50.00	A	0.000	0.000	0.865	0.000	0.00
		B	0.000	0.000	0.833	0.000	0.01
		C	0.000	0.000	0.833	0.000	0.00
L13	50.00-45.00	A	0.000	0.000	5.188	0.000	0.00
		B	0.000	0.000	5.000	0.000	0.04

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	<b>Project</b> TEP No. 217463.537107	<b>Date</b> 11:22:08 04/29/21
	<b>Client</b> Crown Castle	<b>Designed by</b> Dustin T. Smith, P.E.

Tower Section	Tower Elevation ft	Face	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
L14	45.00-40.00	C	0.000	0.000	5.000	0.000	0.00
		A	0.000	0.000	5.188	0.000	0.00
		B	0.000	0.000	5.000	0.000	0.04
L15	40.00-35.00	C	0.000	0.000	5.000	0.000	0.00
		A	0.000	0.000	5.229	0.000	0.00
		B	0.000	0.000	5.042	0.000	0.04
L16	35.00-32.00	C	0.000	0.000	5.042	0.000	0.00
		A	0.000	0.000	3.362	0.000	0.00
		B	0.000	0.000	3.250	0.000	0.02
L17	32.00-31.75	C	0.000	0.000	3.250	0.000	0.00
		A	0.000	0.000	0.280	0.000	0.00
		B	0.000	0.000	0.271	0.000	0.00
L18	31.75-26.75	C	0.000	0.000	0.271	0.000	0.00
		A	0.000	0.000	5.604	0.000	0.00
		B	0.000	0.000	5.417	0.000	0.04
L19	26.75-21.75	C	0.000	0.000	5.417	0.000	0.00
		A	0.000	0.000	5.604	0.000	0.00
		B	0.000	0.000	5.417	0.000	0.04
L20	21.75-16.75	C	0.000	0.000	5.417	0.000	0.00
		A	0.000	0.000	5.604	0.000	0.00
		B	0.000	0.000	5.417	0.000	0.04
L21	16.75-11.75	C	0.000	0.000	5.417	0.000	0.00
		A	0.000	0.000	5.604	0.000	0.00
		B	0.000	0.000	5.417	0.000	0.04
L22	11.75-6.75	C	0.000	0.000	5.417	0.000	0.00
		A	0.000	0.000	5.604	0.000	0.00
		B	0.000	0.000	5.417	0.000	0.04
L23	6.75-1.75	C	0.000	0.000	5.417	0.000	0.00
		A	0.000	0.000	5.604	0.000	0.00
		B	0.000	0.000	5.417	0.000	0.04
L24	1.75-0.00	C	0.000	0.000	5.417	0.000	0.00
		A	0.000	0.000	1.420	0.000	0.00
		B	0.000	0.000	1.354	0.000	0.01
		C	0.000	0.000	1.354	0.000	0.00

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

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
L1	100.00-95.00	A	1.894	0.000	0.000	2.082	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.02
		C		0.000	0.000	0.000	0.000	0.00
L2	95.00-90.00	A	1.885	0.000	0.000	2.072	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.04
		C		0.000	0.000	0.000	0.000	0.00
L3	90.00-85.00	A	1.874	0.000	0.000	2.062	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.04
		C		0.000	0.000	0.000	0.000	0.00
L4	85.00-80.00	A	1.863	0.000	0.000	2.051	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.04
		C		0.000	0.000	0.000	0.000	0.00
L5	80.00-75.00	A	1.851	0.000	0.000	2.039	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.04
		C		0.000	0.000	0.000	0.000	0.00
L6	75.00-70.00	A	1.839	0.000	0.000	2.027	0.000	0.03
		B		0.000	0.000	0.000	0.000	0.04
		C		0.000	0.000	0.000	0.000	0.00

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	<b>Project</b>	TEP No. 217463.537107	<b>Date</b>	11:22:08 04/29/21
	<b>Client</b>	Crown Castle	<b>Designed by</b>	Dustin T. Smith, P.E.

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A <sub>R</sub> ft <sup>2</sup>	A <sub>F</sub> ft <sup>2</sup>	C <sub>AA</sub> In Face ft <sup>2</sup>	C <sub>AA</sub> Out Face ft <sup>2</sup>	Weight K
L7	70.00-65.00	A	1.826	0.000	0.000	2.810	0.000	0.03
		B		0.000	0.000	0.796	0.000	0.05
		C		0.000	0.000	0.796	0.000	0.01
L8	65.00-63.08	A	1.817	0.000	0.000	3.387	0.000	0.04
		B		0.000	0.000	2.618	0.000	0.04
		C		0.000	0.000	2.618	0.000	0.03
L9	63.08-62.83	A	1.813	0.000	0.000	0.441	0.000	0.00
		B		0.000	0.000	0.341	0.000	0.01
		C		0.000	0.000	0.341	0.000	0.00
L10	62.83-57.83	A	1.806	0.000	0.000	8.799	0.000	0.10
		B		0.000	0.000	6.806	0.000	0.11
		C		0.000	0.000	6.806	0.000	0.07
L11	57.83-50.83	A	1.787	0.000	0.000	12.260	0.000	0.14
		B		0.000	0.000	9.497	0.000	0.15
		C		0.000	0.000	9.497	0.000	0.10
L12	50.83-50.00	A	1.774	0.000	0.000	1.460	0.000	0.02
		B		0.000	0.000	1.131	0.000	0.02
		C		0.000	0.000	1.131	0.000	0.01
L13	50.00-45.00	A	1.763	0.000	0.000	8.713	0.000	0.09
		B		0.000	0.000	6.763	0.000	0.11
		C		0.000	0.000	6.763	0.000	0.07
L14	45.00-40.00	A	1.743	0.000	0.000	8.674	0.000	0.09
		B		0.000	0.000	6.743	0.000	0.11
		C		0.000	0.000	6.743	0.000	0.07
L15	40.00-35.00	A	1.722	0.000	0.000	8.673	0.000	0.09
		B		0.000	0.000	6.763	0.000	0.11
		C		0.000	0.000	6.763	0.000	0.07
L16	35.00-32.00	A	1.703	0.000	0.000	5.406	0.000	0.06
		B		0.000	0.000	4.272	0.000	0.07
		C		0.000	0.000	4.272	0.000	0.04
L17	32.00-31.75	A	1.694	0.000	0.000	0.450	0.000	0.00
		B		0.000	0.000	0.356	0.000	0.01
		C		0.000	0.000	0.356	0.000	0.00
L18	31.75-26.75	A	1.680	0.000	0.000	8.963	0.000	0.09
		B		0.000	0.000	7.096	0.000	0.11
		C		0.000	0.000	7.096	0.000	0.07
L19	26.75-21.75	A	1.648	0.000	0.000	8.901	0.000	0.09
		B		0.000	0.000	7.065	0.000	0.11
		C		0.000	0.000	7.065	0.000	0.07
L20	21.75-16.75	A	1.611	0.000	0.000	8.826	0.000	0.09
		B		0.000	0.000	7.027	0.000	0.10
		C		0.000	0.000	7.027	0.000	0.07
L21	16.75-11.75	A	1.563	0.000	0.000	8.730	0.000	0.08
		B		0.000	0.000	6.980	0.000	0.10
		C		0.000	0.000	6.980	0.000	0.07
L22	11.75-6.75	A	1.497	0.000	0.000	8.598	0.000	0.08
		B		0.000	0.000	6.913	0.000	0.10
		C		0.000	0.000	6.913	0.000	0.06
L23	6.75-1.75	A	1.385	0.000	0.000	8.373	0.000	0.07
		B		0.000	0.000	6.801	0.000	0.09
		C		0.000	0.000	6.801	0.000	0.06
L24	1.75-0.00	A	1.182	0.000	0.000	2.129	0.000	0.02
		B		0.000	0.000	1.650	0.000	0.02
		C		0.000	0.000	1.650	0.000	0.01

**Feed Line Center of Pressure**



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	<b>Client</b>	Crown Castle	<b>Designed by</b>	Dustin T. Smith, P.E.

Section	Elevation	CP <sub>x</sub>	CP <sub>z</sub>	CP <sub>x</sub>	CP <sub>z</sub>
	ft	in	in	Ice in	Ice in
L1	100.00-95.00	-0.20	-0.11	-1.19	-0.69
L2	95.00-90.00	-0.20	-0.11	-1.22	-0.70
L3	90.00-85.00	-0.20	-0.11	-1.24	-0.71
L4	85.00-80.00	-0.20	-0.11	-1.26	-0.72
L5	80.00-75.00	-0.20	-0.11	-1.27	-0.73
L6	75.00-70.00	-0.20	-0.11	-1.28	-0.74
L7	70.00-65.00	-0.17	-0.10	-1.12	-0.65
L8	65.00-63.08	-0.08	-0.05	-0.57	-0.33
L9	63.08-62.83	-0.08	-0.05	-0.57	-0.33
L10	62.83-57.83	-0.08	-0.05	-0.58	-0.33
L11	57.83-50.83	-0.08	-0.05	-0.60	-0.35
L12	50.83-50.00	-0.08	-0.05	-0.60	-0.35
L13	50.00-45.00	-0.08	-0.05	-0.61	-0.35
L14	45.00-40.00	-0.09	-0.05	-0.62	-0.36
L15	40.00-35.00	-0.09	-0.05	-0.63	-0.36
L16	35.00-32.00	-0.09	-0.05	-0.62	-0.36
L17	32.00-31.75	-0.09	-0.05	-0.62	-0.36
L18	31.75-26.75	-0.09	-0.05	-0.62	-0.36
L19	26.75-21.75	-0.09	-0.05	-0.63	-0.36
L20	21.75-16.75	-0.09	-0.05	-0.63	-0.37
L21	16.75-11.75	-0.09	-0.05	-0.63	-0.36
L22	11.75-6.75	-0.09	-0.05	-0.62	-0.36
L23	6.75-1.75	-0.10	-0.06	-0.60	-0.35
L24	1.75-0.00	-0.11	-0.07	-0.63	-0.36

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 <sub>a</sub> No Ice	K <sub>a</sub> Ice
L1	13	Safety Line 3/8	95.00 - 100.00	1.0000	1.0000
L2	13	Safety Line 3/8	90.00 - 95.00	1.0000	1.0000
L3	13	Safety Line 3/8	85.00 - 90.00	1.0000	1.0000
L4	13	Safety Line 3/8	80.00 - 85.00	1.0000	1.0000
L5	13	Safety Line 3/8	75.00 - 80.00	1.0000	1.0000
L6	13	Safety Line 3/8	70.00 - 75.00	1.0000	1.0000
L7	9	(Area) CCI-65FP-060100 (H)	65.00 - 65.58	1.0000	1.0000
L7	10	(Area) CCI-65FP-060100 (H)	65.00 - 65.58	1.0000	1.0000
L7	11	(Area) CCI-65FP-060100 (H)	65.00 - 65.58	1.0000	1.0000
L7	13	Safety Line 3/8	65.00 - 70.00	1.0000	1.0000
L8	9	(Area) CCI-65FP-060100 (H)	63.08 - 65.00	1.0000	1.0000
L8	10	(Area) CCI-65FP-060100 (H)	63.08 - 65.00	1.0000	1.0000
L8	11	(Area) CCI-65FP-060100 (H)	63.08 - 65.00	1.0000	1.0000
L8	13	Safety Line 3/8	63.08 - 65.00	1.0000	1.0000
L9	9	(Area) CCI-65FP-060100 (H)	62.83 - 63.08	1.0000	1.0000
L9	10	(Area) CCI-65FP-060100 (H)	62.83 - 63.08	1.0000	1.0000
L9	11	(Area) CCI-65FP-060100 (H)	62.83 - 63.08	1.0000	1.0000
L9	13	Safety Line 3/8	62.83 - 63.08	1.0000	1.0000
L10	9	(Area) CCI-65FP-060100 (H)	57.83 - 62.83	1.0000	1.0000
L10	10	(Area) CCI-65FP-060100 (H)	57.83 - 62.83	1.0000	1.0000
L10	11	(Area) CCI-65FP-060100 (H)	57.83 - 62.83	1.0000	1.0000
L10	13	Safety Line 3/8	57.83 - 62.83	1.0000	1.0000
L11	9	(Area) CCI-65FP-060100 (H)	50.83 - 57.83	1.0000	1.0000

<p><b>tnxTower</b></p> <p><i>Tower Engineering Professionals</i> 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p><b>Job</b></p> <p>HRT 096 943227 (BU 806371)</p>	<p><b>Page</b></p> <p>9 of 16</p>
	<p><b>Project</b></p> <p>TEP No. 217463.537107</p>	<p><b>Date</b></p> <p>11:22:08 04/29/21</p>
	<p><b>Client</b></p> <p>Crown Castle</p>	<p><b>Designed by</b></p> <p>Dustin T. Smith, P.E.</p>

Tower Section	Feed Line Record No.	Description	Feed Line Segment Elev.	$K_a$ No Ice	$K_a$ Ice
L11	10	(Area) CCI-65FP-060100 (H)	50.83 - 57.83	1.0000	1.0000
L11	11	(Area) CCI-65FP-060100 (H)	50.83 - 57.83	1.0000	1.0000
L11	13	Safety Line 3/8	50.83 - 57.83	1.0000	1.0000
L12	9	(Area) CCI-65FP-060100 (H)	50.00 - 50.83	1.0000	1.0000
L12	10	(Area) CCI-65FP-060100 (H)	50.00 - 50.83	1.0000	1.0000
L12	11	(Area) CCI-65FP-060100 (H)	50.00 - 50.83	1.0000	1.0000
L12	13	Safety Line 3/8	50.00 - 50.83	1.0000	1.0000
L13	9	(Area) CCI-65FP-060100 (H)	45.00 - 50.00	1.0000	1.0000
L13	10	(Area) CCI-65FP-060100 (H)	45.00 - 50.00	1.0000	1.0000
L13	11	(Area) CCI-65FP-060100 (H)	45.00 - 50.00	1.0000	1.0000
L13	13	Safety Line 3/8	45.00 - 50.00	1.0000	1.0000
L14	9	(Area) CCI-65FP-060100 (H)	40.00 - 45.00	1.0000	1.0000
L14	10	(Area) CCI-65FP-060100 (H)	40.00 - 45.00	1.0000	1.0000
L14	11	(Area) CCI-65FP-060100 (H)	40.00 - 45.00	1.0000	1.0000
L14	13	Safety Line 3/8	40.00 - 45.00	1.0000	1.0000
L15	5	(Area) CCI-65FP-065125 (H)	35.00 - 35.50	1.0000	1.0000
L15	6	(Area) CCI-65FP-065125 (H)	35.00 - 35.50	1.0000	1.0000
L15	7	(Area) CCI-65FP-065125 (H)	35.00 - 35.50	1.0000	1.0000
L15	9	(Area) CCI-65FP-060100 (H)	35.50 - 40.00	1.0000	1.0000
L15	10	(Area) CCI-65FP-060100 (H)	35.50 - 40.00	1.0000	1.0000
L15	11	(Area) CCI-65FP-060100 (H)	35.50 - 40.00	1.0000	1.0000
L15	13	Safety Line 3/8	35.00 - 40.00	1.0000	1.0000
L16	5	(Area) CCI-65FP-065125 (H)	32.00 - 35.00	1.0000	1.0000
L16	6	(Area) CCI-65FP-065125 (H)	32.00 - 35.00	1.0000	1.0000
L16	7	(Area) CCI-65FP-065125 (H)	32.00 - 35.00	1.0000	1.0000
L16	13	Safety Line 3/8	32.00 - 35.00	1.0000	1.0000
L17	5	(Area) CCI-65FP-065125 (H)	31.75 - 32.00	1.0000	1.0000
L17	6	(Area) CCI-65FP-065125 (H)	31.75 - 32.00	1.0000	1.0000
L17	7	(Area) CCI-65FP-065125 (H)	31.75 - 32.00	1.0000	1.0000
L17	13	Safety Line 3/8	31.75 - 32.00	1.0000	1.0000
L18	5	(Area) CCI-65FP-065125 (H)	26.75 - 31.75	1.0000	1.0000
L18	6	(Area) CCI-65FP-065125 (H)	26.75 - 31.75	1.0000	1.0000
L18	7	(Area) CCI-65FP-065125 (H)	26.75 - 31.75	1.0000	1.0000
L18	13	Safety Line 3/8	26.75 - 31.75	1.0000	1.0000
L19	5	(Area) CCI-65FP-065125 (H)	21.75 - 26.75	1.0000	1.0000
L19	6	(Area) CCI-65FP-065125 (H)	21.75 - 26.75	1.0000	1.0000
L19	7	(Area) CCI-65FP-065125 (H)	21.75 - 26.75	1.0000	1.0000
L19	13	Safety Line 3/8	21.75 - 26.75	1.0000	1.0000
L20	5	(Area) CCI-65FP-065125 (H)	16.75 - 21.75	1.0000	1.0000
L20	6	(Area) CCI-65FP-065125 (H)	16.75 - 21.75	1.0000	1.0000
L20	7	(Area) CCI-65FP-065125 (H)	16.75 - 21.75	1.0000	1.0000
L20	13	Safety Line 3/8	16.75 - 21.75	1.0000	1.0000
L21	5	(Area) CCI-65FP-065125 (H)	11.75 - 16.75	1.0000	1.0000
L21	6	(Area) CCI-65FP-065125 (H)	11.75 - 16.75	1.0000	1.0000
L21	7	(Area) CCI-65FP-065125 (H)	11.75 - 16.75	1.0000	1.0000
L21	13	Safety Line 3/8	11.75 - 16.75	1.0000	1.0000
L22	5	(Area) CCI-65FP-065125 (H)	6.75 - 11.75	1.0000	1.0000
L22	6	(Area) CCI-65FP-065125 (H)	6.75 - 11.75	1.0000	1.0000
L22	7	(Area) CCI-65FP-065125 (H)	6.75 - 11.75	1.0000	1.0000
L22	13	Safety Line 3/8	6.75 - 11.75	1.0000	1.0000
L23	5	(Area) CCI-65FP-065125 (H)	1.75 - 6.75	1.0000	1.0000
L23	6	(Area) CCI-65FP-065125 (H)	1.75 - 6.75	1.0000	1.0000
L23	7	(Area) CCI-65FP-065125 (H)	1.75 - 6.75	1.0000	1.0000
L23	13	Safety Line 3/8	1.75 - 6.75	1.0000	1.0000
L24	5	(Area) CCI-65FP-065125 (H)	0.50 - 1.75	1.0000	1.0000
L24	6	(Area) CCI-65FP-065125 (H)	0.50 - 1.75	1.0000	1.0000
L24	7	(Area) CCI-65FP-065125 (H)	0.50 - 1.75	1.0000	1.0000
L24	13	Safety Line 3/8	0.00 - 1.75	1.0000	1.0000

<b>tnxTower</b>  <b>Tower Engineering Professionals</b> 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350	<b>Job</b> HRT 096 943227 (BU 806371)	<b>Page</b> 10 of 16
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	<b>Client</b> Crown Castle	<b>Designed by</b> Dustin T. Smith, P.E.

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

Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L7	9	(Area) CCI-65FP-060100 (H)	65.00 - 65.58	Auto	0.0938
L7	10	(Area) CCI-65FP-060100 (H)	65.00 - 65.58	Auto	0.0938
L7	11	(Area) CCI-65FP-060100 (H)	65.00 - 65.58	Auto	0.0938
L8	9	(Area) CCI-65FP-060100 (H)	63.08 - 65.00	Auto	0.0804
L8	10	(Area) CCI-65FP-060100 (H)	63.08 - 65.00	Auto	0.0804
L8	11	(Area) CCI-65FP-060100 (H)	63.08 - 65.00	Auto	0.0804
L9	9	(Area) CCI-65FP-060100 (H)	62.83 - 63.08	Auto	0.1972
L9	10	(Area) CCI-65FP-060100 (H)	62.83 - 63.08	Auto	0.1972
L9	11	(Area) CCI-65FP-060100 (H)	62.83 - 63.08	Auto	0.1972
L10	9	(Area) CCI-65FP-060100 (H)	57.83 - 62.83	Auto	0.1579
L10	10	(Area) CCI-65FP-060100 (H)	57.83 - 62.83	Auto	0.1579
L10	11	(Area) CCI-65FP-060100 (H)	57.83 - 62.83	Auto	0.1579
L11	9	(Area) CCI-65FP-060100 (H)	50.83 - 57.83	Auto	0.0935
L11	10	(Area) CCI-65FP-060100 (H)	50.83 - 57.83	Auto	0.0935
L11	11	(Area) CCI-65FP-060100 (H)	50.83 - 57.83	Auto	0.0935
L12	9	(Area) CCI-65FP-060100 (H)	50.00 - 50.83	Auto	0.0992
L12	10	(Area) CCI-65FP-060100 (H)	50.00 - 50.83	Auto	0.0992
L12	11	(Area) CCI-65FP-060100 (H)	50.00 - 50.83	Auto	0.0992
L13	9	(Area) CCI-65FP-060100 (H)	45.00 - 50.00	Auto	0.0624
L13	10	(Area) CCI-65FP-060100 (H)	45.00 - 50.00	Auto	0.0624
L13	11	(Area) CCI-65FP-060100 (H)	45.00 - 50.00	Auto	0.0624
L14	9	(Area) CCI-65FP-060100 (H)	40.00 - 45.00	Auto	0.0084
L14	10	(Area) CCI-65FP-060100 (H)	40.00 - 45.00	Auto	0.0084
L14	11	(Area) CCI-65FP-060100 (H)	40.00 - 45.00	Auto	0.0084
L15	5	(Area) CCI-65FP-065125 (H)	35.00 - 35.50	Auto	0.0031
L15	6	(Area) CCI-65FP-065125 (H)	35.00 - 35.50	Auto	0.0031
L15	7	(Area) CCI-65FP-065125 (H)	35.00 - 35.50	Auto	0.0031
L15	9	(Area) CCI-65FP-060100 (H)	35.50 - 40.00	Auto	0.0000
L15	10	(Area) CCI-65FP-060100 (H)	35.50 - 40.00	Auto	0.0000
L15	11	(Area) CCI-65FP-060100 (H)	35.50 - 40.00	Auto	0.0000
L16	5	(Area) CCI-65FP-065125 (H)	32.00 - 35.00	Auto	0.0000
L16	6	(Area) CCI-65FP-065125 (H)	32.00 - 35.00	Auto	0.0000
L16	7	(Area) CCI-65FP-065125 (H)	32.00 - 35.00	Auto	0.0000
L17	5	(Area) CCI-65FP-065125 (H)	31.75 - 32.00	Auto	0.0058
L17	6	(Area) CCI-65FP-065125 (H)	31.75 - 32.00	Auto	0.0058
L17	7	(Area) CCI-65FP-065125 (H)	31.75 - 32.00	Auto	0.0058
L18	5	(Area) CCI-65FP-065125 (H)	26.75 - 31.75	Auto	0.0000
L18	6	(Area) CCI-65FP-065125 (H)	26.75 - 31.75	Auto	0.0000
L18	7	(Area) CCI-65FP-065125 (H)	26.75 - 31.75	Auto	0.0000
L19	5	(Area) CCI-65FP-065125 (H)	21.75 - 26.75	Auto	0.0000
L19	6	(Area) CCI-65FP-065125 (H)	21.75 - 26.75	Auto	0.0000
L19	7	(Area) CCI-65FP-065125 (H)	21.75 - 26.75	Auto	0.0000
L20	5	(Area) CCI-65FP-065125 (H)	16.75 - 21.75	Auto	0.0000
L20	6	(Area) CCI-65FP-065125 (H)	16.75 - 21.75	Auto	0.0000
L20	7	(Area) CCI-65FP-065125 (H)	16.75 - 21.75	Auto	0.0000
L21	5	(Area) CCI-65FP-065125 (H)	11.75 - 16.75	Auto	0.0000
L21	6	(Area) CCI-65FP-065125 (H)	11.75 - 16.75	Auto	0.0000
L21	7	(Area) CCI-65FP-065125 (H)	11.75 - 16.75	Auto	0.0000
L22	5	(Area) CCI-65FP-065125 (H)	6.75 - 11.75	Auto	0.0000
L22	6	(Area) CCI-65FP-065125 (H)	6.75 - 11.75	Auto	0.0000
L22	7	(Area) CCI-65FP-065125 (H)	6.75 - 11.75	Auto	0.0000
L23	5	(Area) CCI-65FP-065125 (H)	1.75 - 6.75	Auto	0.0000
L23	6	(Area) CCI-65FP-065125 (H)	1.75 - 6.75	Auto	0.0000
L23	7	(Area) CCI-65FP-065125 (H)	1.75 - 6.75	Auto	0.0000

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Tower Section	Attachment Record No.	Description	Attachment Segment Elev.	Ratio Calculation Method	Effective Width Ratio
L24	5	(Area) CCI-65FP-065125 (H)	0.50 - 1.75	Auto	0.0000
L24	6	(Area) CCI-65FP-065125 (H)	0.50 - 1.75	Auto	0.0000
L24	7	(Area) CCI-65FP-065125 (H)	0.50 - 1.75	Auto	0.0000

### Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets:		Azimuth Adjustment	Placement	C <sub>A</sub> A <sub>Front</sub>	C <sub>A</sub> A <sub>Side</sub>	Weight
			Horz Lateral	Vert					
			ft	ft	°	ft	ft <sup>2</sup>	ft <sup>2</sup>	K
***									
(2) NNHH-65B-R4 w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 7.55 1/2" Ice 8.04 1" Ice 8.53 2" Ice 9.56	4.23 4.67 5.12 6.05	0.11 0.20 0.30 0.53
(2) NNHH-65B-R4 w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 7.55 1/2" Ice 8.04 1" Ice 8.53 2" Ice 9.56	4.23 4.67 5.12 6.05	0.11 0.20 0.30 0.53
(2) NNHH-65B-R4 w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 7.55 1/2" Ice 8.04 1" Ice 8.53 2" Ice 9.56	4.23 4.67 5.12 6.05	0.11 0.20 0.30 0.53
MT6407-77A w/ Mount Pipe	A	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 4.91 1/2" Ice 5.26 1" Ice 5.61 2" Ice 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
MT6407-77A w/ Mount Pipe	B	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 4.91 1/2" Ice 5.26 1" Ice 5.61 2" Ice 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
MT6407-77A w/ Mount Pipe	C	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 4.91 1/2" Ice 5.26 1" Ice 5.61 2" Ice 6.36	2.68 3.14 3.62 4.63	0.10 0.14 0.18 0.29
GPS_A	C	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 0.12 1/2" Ice 0.21 1" Ice 0.28 2" Ice 0.44	0.12 0.21 0.28 0.44	0.00 0.00 0.01 0.02
RFV01U-D1A	B	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 1.88 1/2" Ice 2.05 1" Ice 2.22 2" Ice 2.60	1.25 1.39 1.54 1.86	0.08 0.10 0.12 0.18
(2) RFV01U-D1A	C	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 1.88 1/2" Ice 2.05 1" Ice 2.22 2" Ice 2.60	1.25 1.39 1.54 1.86	0.08 0.10 0.12 0.18
(2) RFV01U-D2A	A	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 1.88 1/2" Ice 2.05 1" Ice 2.22 2" Ice 2.60	1.01 1.14 1.28 1.59	0.07 0.09 0.11 0.15
RFV01U-D2A	B	From Centroid-Le g	4.00	0.00	0.00	98.00	No Ice 1.88 1/2" Ice 2.05 1" Ice 2.22 2" Ice 2.60	1.01 1.14 1.28 1.59	0.07 0.09 0.11 0.15
RRFDC-3315-PF-48	A	From	4.00	0.00	0.00	98.00	No Ice 3.36	2.19	0.02

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Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	CAAA Front ft <sup>2</sup>	CAAA Side ft <sup>2</sup>	Weight K
		Centroid-Log	0.00 0.00					
Platform Mount [LP 303-1_KCKR-HR-1]	C	None		0.00	98.00			
						1/2" Ice	3.60	2.39
						1" Ice	3.84	2.61
						2" Ice	4.34	3.05
						No Ice	28.31	28.31
						1/2" Ice	35.69	35.69
						1" Ice	43.11	43.11
						2" Ice	58.21	58.21
****								
Platform Mount [LP 601-1]	C	None		0.00	86.00			
						No Ice	28.50	28.50
						1/2" Ice	31.69	31.69
						1" Ice	34.87	34.87
						2" Ice	41.23	41.23
****								

## 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
27	1.2 Dead+1.0 Wind 0 deg+1.0 Ice
28	1.2 Dead+1.0 Wind 30 deg+1.0 Ice
29	1.2 Dead+1.0 Wind 60 deg+1.0 Ice
30	1.2 Dead+1.0 Wind 90 deg+1.0 Ice
31	1.2 Dead+1.0 Wind 120 deg+1.0 Ice
32	1.2 Dead+1.0 Wind 150 deg+1.0 Ice
33	1.2 Dead+1.0 Wind 180 deg+1.0 Ice
34	1.2 Dead+1.0 Wind 210 deg+1.0 Ice
35	1.2 Dead+1.0 Wind 240 deg+1.0 Ice
36	1.2 Dead+1.0 Wind 270 deg+1.0 Ice

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Comb. No.	Description
37	1.2 Dead+1.0 Wind 300 deg+1.0 Ice
38	1.2 Dead+1.0 Wind 330 deg+1.0 Ice
39	Dead+Wind 0 deg - Service
40	Dead+Wind 30 deg - Service
41	Dead+Wind 60 deg - Service
42	Dead+Wind 90 deg - Service
43	Dead+Wind 120 deg - Service
44	Dead+Wind 150 deg - Service
45	Dead+Wind 180 deg - Service
46	Dead+Wind 210 deg - Service
47	Dead+Wind 240 deg - Service
48	Dead+Wind 270 deg - Service
49	Dead+Wind 300 deg - Service
50	Dead+Wind 330 deg - Service

### Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	100 - 95	4.29	39	0.42	0.00
L2	95 - 90	3.85	39	0.42	0.00
L3	90 - 85	3.42	39	0.40	0.00
L4	85 - 80	3.01	39	0.38	0.00
L5	80 - 75	2.63	39	0.36	0.00
L6	75 - 70	2.27	39	0.32	0.00
L7	70 - 65	1.95	39	0.29	0.00
L8	65 - 63.08	1.67	39	0.25	0.00
L9	63.08 - 62.83	1.57	39	0.24	0.00
L10	62.83 - 57.83	1.55	39	0.24	0.00
L11	57.83 - 50.8333	1.32	39	0.22	0.00
L12	55 - 50	1.19	39	0.21	0.00
L13	50 - 45	0.98	39	0.19	0.00
L14	45 - 40	0.79	39	0.17	0.00
L15	40 - 35	0.62	39	0.15	0.00
L16	35 - 32	0.47	39	0.13	0.00
L17	32 - 31.75	0.39	39	0.12	0.00
L18	31.75 - 26.75	0.39	39	0.12	0.00
L19	26.75 - 21.75	0.27	39	0.10	0.00
L20	21.75 - 16.75	0.18	39	0.08	0.00
L21	16.75 - 11.75	0.11	39	0.06	0.00
L22	11.75 - 6.75	0.05	39	0.04	0.00
L23	6.75 - 1.75	0.02	39	0.02	0.00
L24	1.75 - 0	0.00	39	0.01	0.00

### Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
98.00	(2) NNHH-65B-R4 w/ Mount Pipe	39	4.12	0.42	0.00	32243
86.00	Platform Mount [LP 601-1]	39	3.09	0.39	0.00	12710

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	<b>Project</b> TEP No. 217463.537107	<b>Date</b> 11:22:08 04/29/21
	<b>Client</b> Crown Castle	<b>Designed by</b> Dustin T. Smith, P.E.

### Maximum Tower Deflections - Design Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
L1	100 - 95	19.86	2	1.94	0.00
L2	95 - 90	17.83	2	1.93	0.00
L3	90 - 85	15.84	2	1.86	0.00
L4	85 - 80	13.94	2	1.77	0.00
L5	80 - 75	12.15	2	1.64	0.00
L6	75 - 70	10.50	2	1.50	0.00
L7	70 - 65	9.01	2	1.34	0.00
L8	65 - 63.08	7.70	2	1.17	0.00
L9	63.08 - 62.83	7.25	2	1.10	0.00
L10	62.83 - 57.83	7.19	2	1.10	0.00
L11	57.83 - 50.8333	6.09	2	1.00	0.00
L12	55 - 50	5.51	2	0.95	0.00
L13	50 - 45	4.54	2	0.89	0.00
L14	45 - 40	3.65	2	0.80	0.00
L15	40 - 35	2.86	2	0.70	0.00
L16	35 - 32	2.18	2	0.60	0.00
L17	32 - 31.75	1.82	2	0.55	0.00
L18	31.75 - 26.75	1.79	2	0.54	0.00
L19	26.75 - 21.75	1.27	2	0.46	0.00
L20	21.75 - 16.75	0.84	2	0.37	0.00
L21	16.75 - 11.75	0.49	2	0.28	0.00
L22	11.75 - 6.75	0.24	2	0.20	0.00
L23	6.75 - 1.75	0.08	2	0.11	0.00
L24	1.75 - 0	0.01	2	0.03	0.00

### Critical Deflections and Radius of Curvature - Design Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
98.00	(2) NNHH-65B-R4 w/ Mount Pipe	2	19.04	1.94	0.00	7037
86.00	Platform Mount [LP 601-1]	2	14.31	1.79	0.00	2752

### Compression Checks

### Pole Design Data

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio $\frac{P_u}{\phi P_n}$
L1	100 - 95 (1)	TP15.96x14.76x0.28	5.00	0.00	0.0	14.19	-4.03	829.97	0.005
L2	95 - 90 (2)	TP17.16x15.96x0.28	5.00	0.00	0.0	15.27	-4.37	893.55	0.005
L3	90 - 85 (3)	TP18.36x17.16x0.28	5.00	0.00	0.0	16.36	-6.05	957.12	0.006
L4	85 - 80 (4)	TP19.56x18.36x0.28	5.00	0.00	0.0	17.45	-6.44	1020.69	0.006
L5	80 - 75 (5)	TP20.77x19.56x0.28	5.00	0.00	0.0	18.53	-6.86	1084.26	0.006
L6	75 - 70 (6)	TP21.97x20.77x0.28	5.00	0.00	0.0	19.62	-7.30	1147.83	0.006
L7	70 - 65 (7)	TP23.17x21.97x0.28	5.00	0.00	0.0	20.71	-7.77	1211.41	0.006
L8	65 - 63.08 (8)	TP23.63x23.17x0.28	1.92	0.00	0.0	21.13	-7.96	1235.82	0.006

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	<b>Project</b>	TEP No. 217463.537107	<b>Date</b>	11:22:08 04/29/21
	<b>Client</b>	Crown Castle	<b>Designed by</b>	Dustin T. Smith, P.E.

Section No.	Elevation ft	Size	L ft	L <sub>u</sub> ft	Kl/r	A in <sup>2</sup>	P <sub>u</sub> K	φP <sub>n</sub> K	Ratio
									$\frac{P_u}{\phi P_n}$
L9	63.08 - 62.83 (9)	TP23.69x23.63x0.57	0.25	0.00	0.0	42.32	-8.00	2475.87	0.003
L10	62.83 - 57.83 (10)	TP24.89x23.69x0.54	5.00	0.00	0.0	42.61	-8.85	2492.51	0.004
L11	57.83 - 50.8333 (11)	TP26.57x24.89x0.54	7.00	0.00	0.0	43.80	-9.35	2562.10	0.004
L12	50.8333 - 50 (12)	TP26.21x25.01x0.59	5.00	0.00	0.0	48.99	-11.03	2865.83	0.004
L13	50 - 45 (13)	TP27.41x26.21x0.58	5.00	0.00	0.0	50.23	-12.05	2938.26	0.004
L14	45 - 40 (14)	TP28.61x27.41x0.57	5.00	0.00	0.0	51.37	-13.08	3004.99	0.004
L15	40 - 35 (15)	TP29.8x28.61x0.56	5.00	0.00	0.0	52.41	-14.15	3066.01	0.005
L16	35 - 32 (16)	TP30.52x29.8x0.56	3.00	0.00	0.0	53.70	-14.81	3141.45	0.005
L17	32 - 31.75 (17)	TP30.58x30.52x0.64	0.25	0.00	0.0	62.09	-14.87	3632.05	0.004
L18	31.75 - 26.75 (18)	TP31.78x30.58x0.62	5.00	0.00	0.0	62.12	-16.11	3633.81	0.004
L19	26.75 - 21.75 (19)	TP32.98x31.78x0.61	5.00	0.00	0.0	63.23	-17.38	3698.88	0.005
L20	21.75 - 16.75 (20)	TP34.18x32.98x0.59	5.00	0.00	0.0	64.24	-18.68	3758.24	0.005
L21	16.75 - 11.75 (21)	TP35.38x34.18x0.59	5.00	0.00	0.0	66.54	-20.01	3892.44	0.005
L22	11.75 - 6.75 (22)	TP36.58x35.38x0.58	5.00	0.00	0.0	67.41	-21.36	3943.27	0.005
L23	6.75 - 1.75 (23)	TP37.78x36.58x0.57	5.00	0.00	0.0	68.18	-22.74	3988.39	0.006
L24	1.75 - 0 (24)	TP38.2x37.78x0.57	1.75	0.00	0.0	68.95	-23.24	4033.39	0.006

### Pole Bending Design Data

Section No.	Elevation ft	Size	M <sub>ux</sub>	φM <sub>rx</sub>	Ratio	M <sub>uy</sub>	φM <sub>ry</sub>	Ratio
			kip-ft	kip-ft	$\frac{M_{ux}}{\phi M_{rx}}$	kip-ft	kip-ft	$\frac{M_{uy}}{\phi M_{ry}}$
L1	100 - 95 (1)	TP15.96x14.76x0.28	13.32	330.78	0.040	0.00	330.78	0.000
L2	95 - 90 (2)	TP17.16x15.96x0.28	31.76	383.88	0.083	0.00	383.88	0.000
L3	90 - 85 (3)	TP18.36x17.16x0.28	52.66	440.92	0.119	0.00	440.92	0.000
L4	85 - 80 (4)	TP19.56x18.36x0.28	79.39	501.92	0.158	0.00	501.92	0.000
L5	80 - 75 (5)	TP20.77x19.56x0.28	107.58	566.87	0.190	0.00	566.87	0.000
L6	75 - 70 (6)	TP21.97x20.77x0.28	137.25	635.76	0.216	0.00	635.76	0.000
L7	70 - 65 (7)	TP23.17x21.97x0.28	168.44	708.61	0.238	0.00	708.61	0.000
L8	65 - 63.08 (8)	TP23.63x23.17x0.28	180.84	734.92	0.246	0.00	734.92	0.000
L9	63.08 - 62.83 (9)	TP23.69x23.63x0.57	182.47	1445.47	0.126	0.00	1445.47	0.000
L10	62.83 - 57.83 (10)	TP24.89x23.69x0.54	215.97	1535.74	0.141	0.00	1535.74	0.000
L11	57.83 - 50.8333 (11)	TP26.57x24.89x0.54	235.68	1623.67	0.145	0.00	1623.67	0.000
L12	50.8333 - 50 (12)	TP26.21x25.01x0.59	271.90	1856.05	0.146	0.00	1856.05	0.000
L13	50 - 45 (13)	TP27.41x26.21x0.58	309.86	1995.96	0.155	0.00	1995.96	0.000
L14	45 - 40 (14)	TP28.61x27.41x0.57	349.54	2136.40	0.164	0.00	2136.40	0.000
L15	40 - 35 (15)	TP29.8x28.61x0.56	390.91	2276.83	0.172	0.00	2276.83	0.000
L16	35 - 32 (16)	TP30.52x29.8x0.56	416.55	2391.32	0.174	0.00	2391.32	0.000
L17	32 - 31.75 (17)	TP30.58x30.52x0.64	418.72	2754.28	0.152	0.00	2754.28	0.000
L18	31.75 - 26.75 (18)	TP31.78x30.58x0.62	462.89	2872.93	0.161	0.00	2872.93	0.000
L19	26.75 - 21.75 (19)	TP32.98x31.78x0.61	508.78	3041.47	0.167	0.00	3041.47	0.000



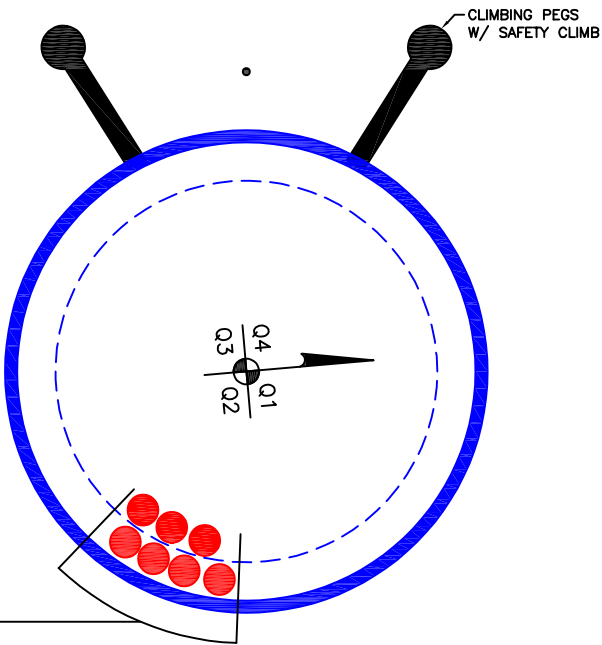
<p><b>tnxTower</b></p> <p><b>Tower Engineering Professionals</b> 326 Tryon Rd. Raleigh, NC 27603 Phone: (919) 661-6351 FAX: (919) 661-6350</p>	<p><b>Job</b></p> <p>HRT 096 943227 (BU 806371)</p>	<p><b>Page</b></p> <p>16 of 16</p>
	<p><b>Project</b></p> <p>TEP No. 217463.537107</p>	<p><b>Date</b></p> <p>11:22:08 04/29/21</p>
	<p><b>Client</b></p> <p>Crown Castle</p>	<p><b>Designed by</b></p> <p>Dustin T. Smith, P.E.</p>

Section No.	Elevation ft	Size	$M_{ux}$ kip-ft	$\phi M_{nx}$ kip-ft	Ratio $\frac{M_{ux}}{\phi M_{nx}}$	$M_{uy}$ kip-ft	$\phi M_{ny}$ kip-ft	Ratio $\frac{M_{uy}}{\phi M_{ny}}$
L20	21.75 - 16.75 (20)	TP34.18x32.98x0.59	556.45	3209.25	0.173	0.00	3209.25	0.000
L21	16.75 - 11.75 (21)	TP35.38x34.18x0.59	605.93	3444.59	0.176	0.00	3444.59	0.000
L22	11.75 - 6.75 (22)	TP36.58x35.38x0.58	657.29	3614.42	0.182	0.00	3614.42	0.000
L23	6.75 - 1.75 (23)	TP37.78x36.58x0.57	710.58	3782.05	0.188	0.00	3782.05	0.000
L24	1.75 - 0 (24)	TP38.2x37.78x0.57	729.69	3868.51	0.189	0.00	3868.51	0.000

### Pole Shear Design Data

Section No.	Elevation ft	Size	Actual $V_u$ K	$\phi V_n$ K	Ratio $\frac{V_u}{\phi V_n}$	Actual $T_u$ kip-ft	$\phi T_n$ kip-ft	Ratio $\frac{T_u}{\phi T_n}$
L1	100 - 95 (1)	TP15.96x14.76x0.28	3.56	248.99	0.014	0.05	343.43	0.000
L2	95 - 90 (2)	TP17.16x15.96x0.28	3.82	268.06	0.014	0.05	398.05	0.000
L3	90 - 85 (3)	TP18.36x17.16x0.28	5.21	287.14	0.018	0.05	456.70	0.000
L4	85 - 80 (4)	TP19.56x18.36x0.28	5.49	306.21	0.018	0.05	519.39	0.000
L5	80 - 75 (5)	TP20.77x19.56x0.28	5.79	325.28	0.018	0.05	586.10	0.000
L6	75 - 70 (6)	TP21.97x20.77x0.28	6.09	344.35	0.018	0.05	656.84	0.000
L7	70 - 65 (7)	TP23.17x21.97x0.28	6.40	363.42	0.018	0.05	731.62	0.000
L8	65 - 63.08 (8)	TP23.63x23.17x0.28	6.52	370.75	0.018	0.05	761.40	0.000
L9	63.08 - 62.83 (9)	TP23.69x23.63x0.57	6.53	742.76	0.009	0.05	1510.54	0.000
L10	62.83 - 57.83 (10)	TP24.89x23.69x0.54	6.87	747.75	0.009	0.05	1601.34	0.000
L11	57.83 - 50.8333 (11)	TP26.57x24.89x0.54	7.06	768.63	0.009	0.05	1692.01	0.000
L12	50.8333 - 50 (12)	TP26.21x25.01x0.59	7.43	859.75	0.009	0.05	1936.97	0.000
L13	50 - 45 (13)	TP27.41x26.21x0.58	7.77	881.48	0.009	0.05	2079.89	0.000
L14	45 - 40 (14)	TP28.61x27.41x0.57	8.11	901.50	0.009	0.05	2223.22	0.000
L15	40 - 35 (15)	TP29.8x28.61x0.56	8.45	919.80	0.009	0.05	2366.42	0.000
L16	35 - 32 (16)	TP30.52x29.8x0.56	8.65	942.43	0.009	0.05	2484.30	0.000
L17	32 - 31.75 (17)	TP30.58x30.52x0.64	8.67	1089.61	0.008	0.05	2869.63	0.000
L18	31.75 - 26.75 (18)	TP31.78x30.58x0.62	9.01	1090.14	0.008	0.05	2988.43	0.000
L19	26.75 - 21.75 (19)	TP32.98x31.78x0.61	9.36	1109.66	0.008	0.05	3160.23	0.000
L20	21.75 - 16.75 (20)	TP34.18x32.98x0.59	9.72	1127.47	0.009	0.05	3331.13	0.000
L21	16.75 - 11.75 (21)	TP35.38x34.18x0.59	10.09	1167.73	0.009	0.05	3573.28	0.000
L22	11.75 - 6.75 (22)	TP36.58x35.38x0.58	10.47	1182.98	0.009	0.05	3746.04	0.000
L23	6.75 - 1.75 (23)	TP37.78x36.58x0.57	10.85	1196.52	0.009	0.05	3916.46	0.000
L24	1.75 - 0 (24)	TP38.2x37.78x0.57	11.00	1210.02	0.009	0.05	4005.32	0.000

**APPENDIX B**  
**BASE LEVEL DRAWING**



(PROPOSED EQUIPMENT CONFIGURATION)  
(7) 1-5/8" TO 98 FT LEVEL

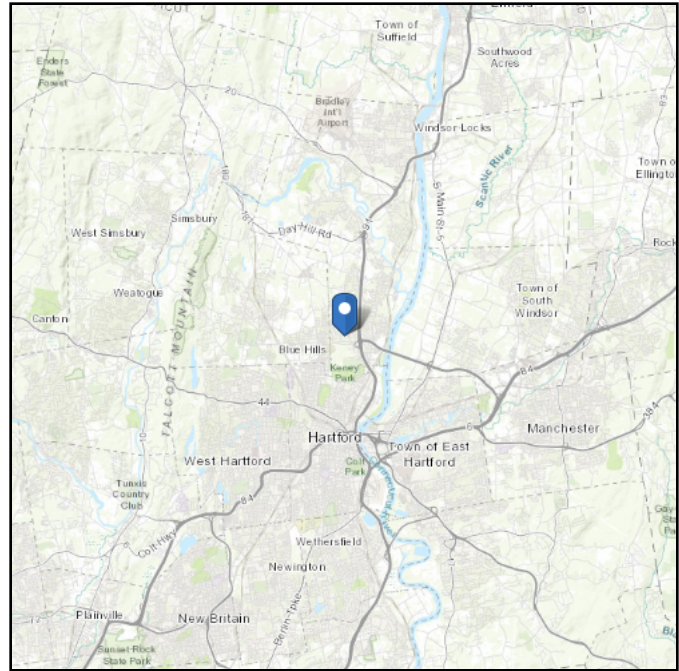
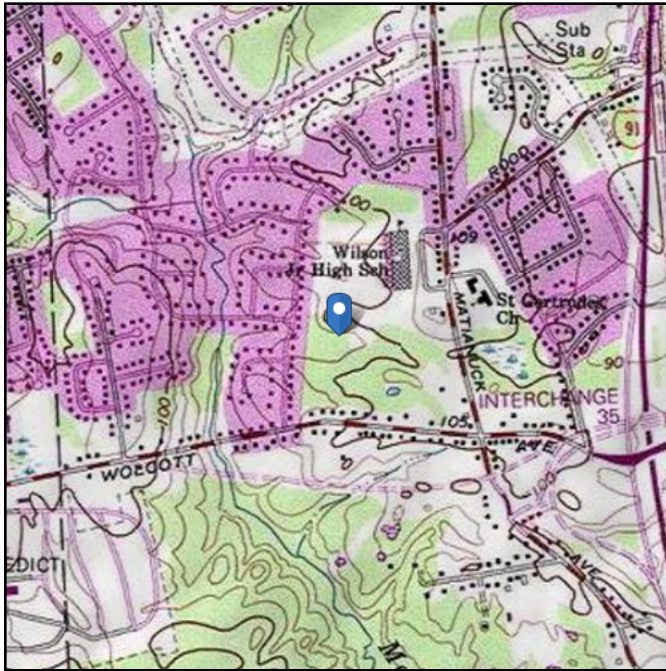
**APPENDIX C**  
**ADDITIONAL CALCULATIONS**

# ASCE 7 Hazards Report

**Address:**  
No Address at This Location

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

**Elevation:** 86.65 ft (NAVD 88)  
**Latitude:** 41.821122  
**Longitude:** -72.676747



## Wind

### Results:

Wind Speed:	122 Vmph
10-year MRI	76 Vmph
25-year MRI	86 Vmph
50-year MRI	92 Vmph
100-year MRI	99 Vmph

Windspeed updated per local jurisdiction requirements

**Data Source:** ASCE/SEI 7-10 Fig. 26.5-1A and Figs. CC-1–CC-4, and Section 26.5.2, incorporating errata of March 12, 2014

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

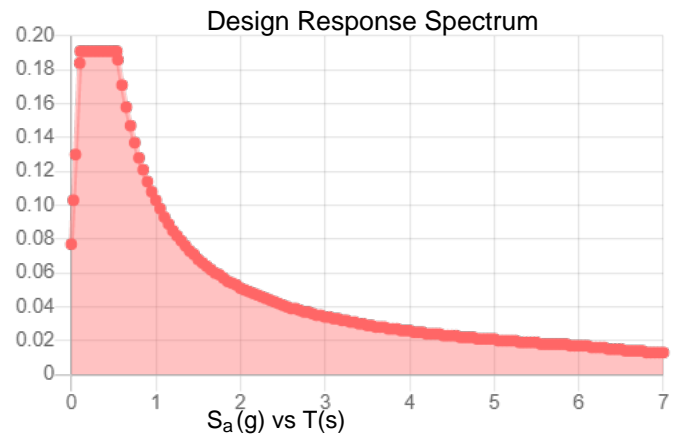
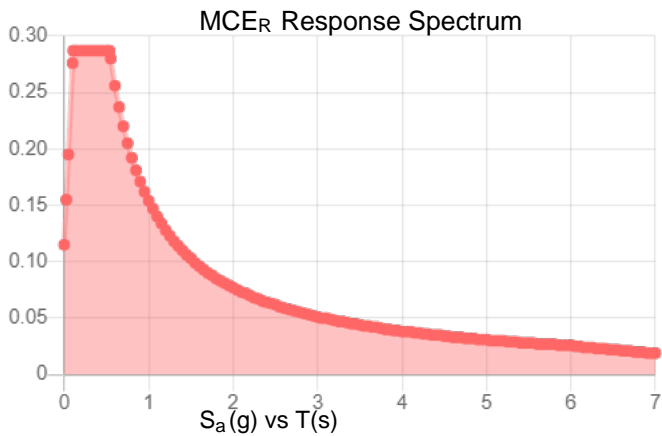
Site is in a hurricane-prone region as defined in ASCE/SEI 7-10 Section 26.2. Glazed openings need not be protected against wind-borne debris.

**Site Soil Class:** D - Stiff Soil

**Results:**

$S_S$ :	0.179	$S_{DS}$ :	0.191
$S_1$ :	0.064	$S_{D1}$ :	0.103
$F_a$ :	1.6	$T_L$ :	6
$F_v$ :	2.4	PGA :	0.09
$S_{MS}$ :	0.287	$PGA_M$ :	0.144
$S_{M1}$ :	0.154	$F_{PGA}$ :	1.6
		$I_e$ :	1

**Seismic Design Category** B



**Data Accessed:**

Wed Apr 28 2021

**Date Source:**

USGS Seismic Design Maps based on ASCE/SEI 7-10, incorporating Supplement 1 and errata of March 31, 2013, and ASCE/SEI 7-10 Table 1.5-2. Additional data for site-specific ground motion procedures in accordance with ASCE/SEI 7-10 Ch. 21 are available from USGS.

## Ice

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**Results:**

Ice Thickness: 1.00 in.

Concurrent Temperature: 5 F

Gust Speed: 50 mph

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

**Date Accessed:** Wed Apr 28 2021

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

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

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

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Site BU: 806371  
Work Order: 1957932



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**Pole Geometry**

	Pole Height Above Base (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Bend Radius (in)	Pole Material
1	100	49.1667	4.1667	12	14.76	26.57	0.281	Auto	A572-65
2	55	55	0	12	25.01	38.2	0.344	Auto	A572-65

**Reinforcement Configuration**

	Bottom Effective Elevation (ft)	Top Effective Elevation (ft)	Type	Model	Number	1	2	3	4	5	6	7	8	9	10	11	12
1	0	32	plate	CCI-AFP-065125	3		x				x				x		
2	32	63.08	plate	CCI-AFP-060100	3		x				x				x		
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

**Reinforcement Details**

	B (in)	H (in)	Gross Area (in <sup>2</sup> )	Pole Face to Centroid (in)	Bottom Termination Type	Bottom Termination Length (in)	Top Termination Type	Top Termination Length (in)	Lu (in)	Net Area (in <sup>2</sup> )	Bolt Hole Size (in)	Reinforcement Material
1	6.5	1.25	8.125	0.625	PC 8.8 - M20 (100)	42	PC 8.8 - M20 (100)	42.000	19.000	6.563	1.1875	A572-65
2	6	1	6	0.5	PC 8.8 - M20 (100)	30	PC 8.8 - M20 (100)	30.000	16.000	4.750	1.1875	A572-65

**Connection Details for Custom Reinforcements**

Reinforcement	End	# Bolts	N or X	Bolt Spacing (in)	Edge Dist (in)	Weld Grade (ksi)	Transverse (Horiz.) Weld Type	Horiz. Weld Length (in)	Horiz. Groove Depth (in)	Horiz. Groove Angle (deg)	Horiz. Fillet Size (in)	Vertical Weld Length (in)	Vertical Fillet Size (in)	Rev H Connection Capacity (kip)
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# TNX Geometry Input

Increment (ft):  [Export to TNX](#)

	Section Height (ft)	Section Length (ft)	Lap Splice Length (ft)	Number of Sides	Top Diameter (in)	Bottom Diameter (in)	Wall Thickness (in)	Tapered Pole Grade	Weight Multiplier
1	100 - 95	5		12	14.760	15.961	0.281	A572-65	1.000
2	95 - 90	5		12	15.961	17.162	0.281	A572-65	1.000
3	90 - 85	5		12	17.162	18.363	0.281	A572-65	1.000
4	85 - 80	5		12	18.363	19.564	0.281	A572-65	1.000
5	80 - 75	5		12	19.564	20.765	0.281	A572-65	1.000
6	75 - 70	5		12	20.765	21.966	0.281	A572-65	1.000
7	70 - 65	5		12	21.966	23.167	0.281	A572-65	1.000
8	65 - 63.08	1.92		12	23.167	23.628	0.281	A572-65	1.000
9	63.08 - 62.83	0.25		12	23.628	23.688	0.5685	A572-65	0.926
10	62.83 - 57.83	5		12	23.688	24.889	0.5435	A572-65	0.946
11	57.83 - 55	6.9967	4.1667	12	24.889	26.570	0.5435	A572-65	0.934
12	55 - 50	5		12	25.007	26.206	0.594	A572-65	0.953
13	50 - 45	5		12	26.206	27.406	0.5815	A572-65	0.956
14	45 - 40	5		12	27.406	28.605	0.569	A572-65	0.960
15	40 - 35	5		12	28.605	29.805	0.5565	A572-65	0.967
16	35 - 32	3		12	29.805	30.524	0.5565	A572-65	0.958
17	32 - 31.75	0.25		12	30.524	30.584	0.644	A572-65	0.933
18	31.75 - 26.75	5		12	30.584	31.783	0.619	A572-65	0.954
19	26.75 - 21.75	5		12	31.783	32.983	0.6065	A572-65	0.958
20	21.75 - 16.75	5		12	32.983	34.182	0.594	A572-65	0.963
21	16.75 - 11.75	5		12	34.182	35.382	0.594	A572-65	0.950
22	11.75 - 6.75	5		12	35.382	36.581	0.5815	A572-65	0.958
23	6.75 - 1.75	5		12	36.581	37.780	0.569	A572-65	0.966
24	1.75 - 0	1.75		12	37.780	38.200	0.569	A572-65	0.962

## TNX Section Forces

Increment (ft):		TNX Output			
	5	Section Height (ft)	P <sub>u</sub> (K)	M <sub>ux</sub> (kip-ft)	V <sub>u</sub> (K)
1	100 - 95	4.03	13.32	3.56	
2	95 - 90	4.37	31.76	3.82	
3	90 - 85	6.05	52.66	5.21	
4	85 - 80	6.44	79.39	5.49	
5	80 - 75	6.86	107.58	5.79	
6	75 - 70	7.30	137.25	6.09	
7	70 - 65	7.77	168.44	6.40	
8	65 - 63.08	7.96	180.84	6.52	
9	63.08 - 62.83	8.00	182.47	6.53	
10	62.83 - 57.83	8.85	215.97	6.87	
11	57.83 - 55	9.35	235.68	7.06	
12	55 - 50	11.03	271.90	7.43	
13	50 - 45	12.05	309.86	7.77	
14	45 - 40	13.08	349.54	8.11	
15	40 - 35	14.15	390.91	8.45	
16	35 - 32	14.81	416.55	8.65	
17	32 - 31.75	14.87	418.72	8.67	
18	31.75 - 26.75	16.11	462.89	9.01	
19	26.75 - 21.75	17.38	508.78	9.36	
20	21.75 - 16.75	18.68	556.45	9.72	
21	16.75 - 11.75	20.01	605.93	10.09	
22	11.75 - 6.75	21.36	657.29	10.47	
23	6.75 - 1.75	22.74	710.57	10.85	
24	1.75 - 0	23.24	729.69	11.00	

## Analysis Results

Elevation (ft)	Component Type	Size	Critical Element	% Capacity	Pass / Fail
100 - 95	Pole	TP15.961x14.76x0.281	Pole	4.3%	Pass
95 - 90	Pole	TP17.162x15.961x0.281	Pole	8.3%	Pass
90 - 85	Pole	TP18.363x17.162x0.281	Pole	12.0%	Pass
85 - 80	Pole	TP19.564x18.363x0.281	Pole	15.7%	Pass
80 - 75	Pole	TP20.765x19.564x0.281	Pole	18.7%	Pass
75 - 70	Pole	TP21.966x20.765x0.281	Pole	21.1%	Pass
70 - 65	Pole	TP23.167x21.966x0.281	Pole	23.2%	Pass
65 - 63.08	Pole	TP23.628x23.167x0.281	Pole	24.0%	Pass
63.08 - 62.83	Pole + Reinf.	TP23.688x23.628x0.5685	Reinf. 2 Tension Rupture	19.2%	Pass
62.83 - 57.83	Pole + Reinf.	TP24.889x23.688x0.5435	Reinf. 2 Tension Rupture	21.0%	Pass
57.83 - 55	Pole + Reinf.	TP26.57x24.889x0.5435	Reinf. 2 Tension Rupture	22.0%	Pass
55 - 50	Pole + Reinf.	TP26.206x25.007x0.594	Reinf. 2 Tension Rupture	21.9%	Pass
50 - 45	Pole + Reinf.	TP27.406x26.206x0.5815	Reinf. 2 Tension Rupture	23.2%	Pass
45 - 40	Pole + Reinf.	TP28.605x27.406x0.569	Reinf. 2 Tension Rupture	24.4%	Pass
40 - 35	Pole + Reinf.	TP29.805x28.605x0.5565	Reinf. 2 Tension Rupture	25.5%	Pass
35 - 32	Pole + Reinf.	TP30.524x29.805x0.5565	Reinf. 2 Tension Rupture	26.2%	Pass
32 - 31.75	Pole + Reinf.	TP30.584x30.524x0.644	Reinf. 1 Tension Rupture	22.8%	Pass
31.75 - 26.75	Pole + Reinf.	TP31.783x30.584x0.619	Reinf. 1 Tension Rupture	23.7%	Pass
26.75 - 21.75	Pole + Reinf.	TP32.983x31.783x0.6065	Reinf. 1 Tension Rupture	24.6%	Pass
21.75 - 16.75	Pole + Reinf.	TP34.182x32.983x0.594	Reinf. 1 Tension Rupture	25.4%	Pass
16.75 - 11.75	Pole + Reinf.	TP35.382x34.182x0.594	Reinf. 1 Tension Rupture	26.2%	Pass
11.75 - 6.75	Pole + Reinf.	TP36.581x35.382x0.5815	Reinf. 1 Tension Rupture	26.9%	Pass
6.75 - 1.75	Pole + Reinf.	TP37.78x36.581x0.569	Reinf. 1 Tension Rupture	27.6%	Pass
1.75 - 0	Pole + Reinf.	TP38.2x37.78x0.569	Reinf. 1 Tension Rupture	27.8%	Pass
				Summary	
			Pole	24.0%	Pass
			Reinforcement	27.8%	Pass
			Overall	27.8%	Pass

## Additional Calculations

Section Elevation (ft)	Moment of Inertia (in <sup>4</sup> )			Area (in <sup>2</sup> )			% Capacity*		
	Pole	Reinf.	Total	Pole	Reinf.	Total	Pole	R1	R2
100 - 95	446	n/a	446	14.17	n/a	14.17	4.3%		
95 - 90	556	n/a	556	15.25	n/a	15.25	8.3%		
90 - 85	684	n/a	684	16.34	n/a	16.34	12.0%		
85 - 80	829	n/a	829	17.42	n/a	17.42	15.7%		
80 - 75	994	n/a	994	18.51	n/a	18.51	18.7%		
75 - 70	1179	n/a	1179	19.59	n/a	19.59	21.1%		
70 - 65	1386	n/a	1386	20.68	n/a	20.68	23.2%		
65 - 63.08	1472	n/a	1472	21.09	n/a	21.09	24.0%		
63.08 - 62.83	1483	1399	2882	21.15	18.00	39.15	12.0%		19.2%
62.83 - 57.83	1723	1536	3259	22.23	18.00	40.23	13.4%		21.0%
57.83 - 55	1870	1616	3486	22.85	18.00	40.85	14.2%		22.0%
55 - 50	2449	1693	4142	28.61	18.00	46.61	13.8%		21.9%
50 - 45	2806	1843	4649	29.93	18.00	47.93	14.6%		23.2%
45 - 40	3196	2000	5196	31.26	18.00	49.26	15.4%		24.4%
40 - 35	3620	2163	5783	32.59	18.00	50.59	16.3%		25.5%
35 - 32	3892	2264	6156	33.38	18.00	51.38	16.8%		26.2%
32 - 31.75	3915	3132	7047	33.45	24.38	57.82	14.8%	22.8%	
31.75 - 26.75	4400	3369	7769	34.78	24.38	59.15	15.7%	23.7%	
26.75 - 21.75	4923	3615	8538	36.10	24.38	60.48	16.5%	24.6%	
21.75 - 16.75	5485	3870	9355	37.43	24.38	61.80	17.3%	25.4%	
16.75 - 11.75	6090	4133	10223	38.75	24.38	63.13	18.0%	26.2%	
11.75 - 6.75	6737	4405	11142	40.08	24.38	64.46	18.8%	26.9%	
6.75 - 1.75	7428	4686	12114	41.41	24.38	65.78	19.6%	27.6%	
1.75 - 0	7680	4786	12467	41.87	24.38	66.25	19.9%	27.8%	

Note: Section capacity checked using 5 degree increments.

Rating per TIA-222-H Section 15.5.

# Monopole Base Plate Connection

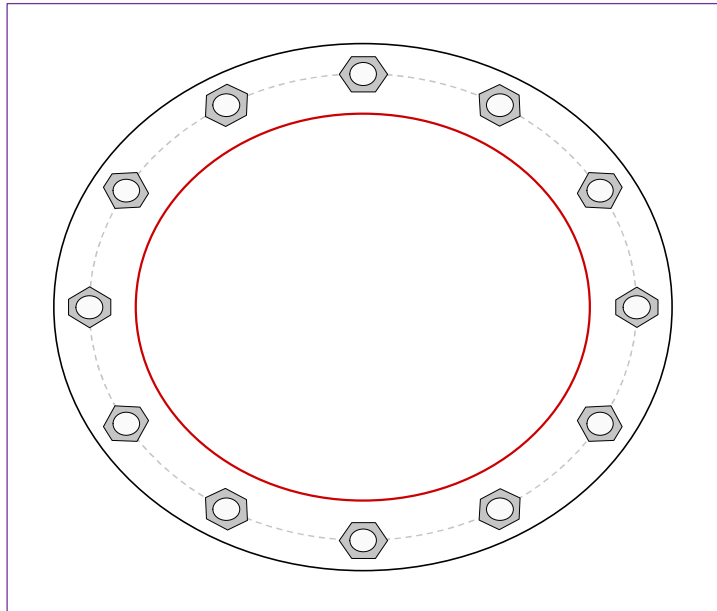


Site Info	
BU #	806371
Site Name	HRT 096 943227
Order #	552708 Rev. 0

Analysis Considerations	
TIA-222 Revision	H
Grout Considered:	No
$l_{ar}$ (in)	1.5

Applied Loads	
Moment (kip-ft)	729.69
Axial Force (kips)	23.24
Shear Force (kips)	11.00

\*TIA-222-H Section 15.5 Applied



## Connection Properties Analysis Results

<b>Anchor Rod Data</b>
(12) 2-1/4" $\varnothing$ bolts (A615-75 N; $F_y=75$ ksi, $F_u=100$ ksi) on 46.05" BC
<b>Base Plate Data</b>
52.05" OD x 2.5" Plate (A572-60; $F_y=60$ ksi, $F_u=75$ ksi)
<b>Stiffener Data</b>
N/A
<b>Pole Data</b>
38.2" x 0.344" 12-sided pole (A572-65; $F_y=65$ ksi, $F_u=80$ ksi)

Anchor Rod Summary		(units of kips, kip-in)
$Pu_t = 61.38$	$\phi Pn_t = 243.75$	Stress Rating
$Vu = 0.92$	$\phi Vn = 149.1$	24.0%
$Mu = n/a$	$\phi Mn = n/a$	Pass
<b>Base Plate Summary</b>		
Max Stress (ksi):	9.86	(Flexural)
Allowable Stress (ksi):	54	
Stress Rating:	17.4%	Pass

# Drilled Pier Foundation



BU #: 806371  
 Site Name: HRT 096 943227  
 Order Number: 552708 Rev. 0

Report File: C:\Users\ashah\Desktop\Work in Progress\00\_Crown SA Reviews\GJS\IP-267118\_L-532338\_8

TIA-222 Revision: H  
 Tower Type: Monopole

Applied Loads		
	Comp.	Uplift
Moment (kip-ft)	730	
Axial Force (kips)	23	
Shear Force (kips)	11	

Material Properties		
Concrete Strength, f <sub>c</sub> :	3	ksi
Rebar Strength, F <sub>y</sub> :	60	ksi
Tie Yield Strength, F <sub>y</sub> t:	60	ksi

Pier Design Data		
Depth	70	ft
Ext. Above Grade	0.25	ft
Pier Section 1		
<i>From 0.25' above grade to 70' below grade</i>		
Pier Diameter	6	ft
Rebar Quantity	24	
Rebar Size	8	
Clear Cover to Ties	3	in
Tie Size	4	
Tie Spacing	12	in

Rebar & Pier Options

Embedded Pole Inputs

Belled Pier Inputs

Analysis Results		
Soil Lateral Check		
	Compression	Uplift
D <sub>v=0</sub> (ft from TOC)	33.90	-
Soil Safety Factor	51.10	-
Max Moment (kip-ft)	920.18	-
Rating*	2.5%	-
Soil Vertical Check		
	Compression	Uplift
Skin Friction (kips)	458.89	-
End Bearing (kips)	0.00	-
Weight of Concrete (kips)	230.44	-
Total Capacity (kips)	458.89	-
Axial (kips)	253.44	-
Rating*	52.6%	-
Reinforced Concrete Flexure		
	Compression	Uplift
Critical Depth (ft from TOC)	32.32	-
Critical Moment (kip-ft)	919.83	-
Critical Moment Capacity	2692.51	-
Rating*	32.5%	-
Reinforced Concrete Shear		
	Compression	Uplift
Critical Depth (ft from TOC)	54.83	-
Critical Shear (kip)	54.21	-
Critical Shear Capacity	373.23	-
Rating*	13.8%	-
Soil Interaction Rating*	52.6%	
Structural Foundation Rating*	32.5%	

\*Rating per TIA-222-H Section 15.5

Check Limitation	
Apply TIA-222-H Section 15.5:	<input checked="" type="checkbox"/>
N/A	<input type="checkbox"/>
Shear Design Options	
Check Shear along Depth of Pier:	<input checked="" type="checkbox"/>
Utilize Shear-Friction Methodology:	<input type="checkbox"/>
Override Critical Depth:	<input type="checkbox"/>

[Go to Soil Calculations](#)

Soil Profile				
Groundwater Depth	10	# of Layers	9	

Layer	Top (ft)	Bottom (ft)	Thickness (ft)	γ <sub>soil</sub> (pcf)	γ <sub>concrete</sub> (pcf)	Cohesion (ksf)	Angle of Friction (degrees)	Calculated Ultimate Skin Friction Comp (ksf)	Calculated Ultimate Skin Friction Uplift (ksf)	Ultimate Skin Friction Comp Override (ksf)	Ultimate Skin Friction Uplift Override (ksf)	Ult. Gross Bearing Capacity (ksf)	SPT Blow Count	Soil Type
1	0	5	5	110	150	0	0	0.000	0.000	0.00	0.00			Cohesionless
2	5	10	5	110	150		30	0.000	0.000	0.48	0.48			Cohesionless
3	10	35	25	53	87.6	0.3		0.165	0.165	0.20	0.20			Cohesive
4	35	40	5	38	87.6		25	0.000	0.000	0.37	0.37			Cohesionless
5	40	50	10	43	87.6		28	0.000	0.000	0.66	0.66			Cohesionless
6	50	55	5	48	87.6		30	0.000	0.000	1.07	1.07			Cohesionless
7	55	65	10	43	87.6		28	0.00	0.00	0.74	0.74			Cohesionless
8	65	69	4	43	87.6		28	0.00	0.00	0.77	0.77			Cohesionless
9	69	70	1	43	87.6		28	0.00	0.00	0.78	0.78	0		Cohesionless

# Exhibit E

## **Mount Analysis**



Maser Consulting Connecticut  
 2000 Midlantic Drive, Suite 100  
 Mt. Laurel, NJ 08054  
 856.797.0412  
 Peter.Albano@colliersengineering.com

## Antenna Mount Analysis Report and PMI Requirements

### Mount Analysis

SMART Tool Project #: 10037944  
 Maser Consulting Connecticut Project #: 21777080A

April 9, 2021

#### Site Information

Site ID: 469053-VZW / WINDSOR SOUTH CT  
 Site Name: WINDSOR SOUTH CT  
 Carrier Name: Verizon Wireless  
 Address: 599 Matianuck Ave.  
 Windsor, Connecticut 06095  
 Hartford County  
 Latitude: 41.821207°  
 Longitude: -72.676756°

#### Structure Information

Tower Type: 100-Ft Monopole  
 Mount Type: 12.50-Ft Platform

FUZE ID # 16232032

#### Analysis Results

Platform: 82.1% Pass

#### **\*\*\*Contractor PMI Requirements:**

**Included at the end of this MA report**

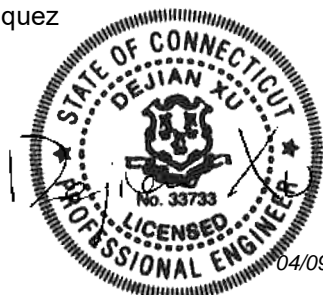
**Available & Submitted via portal at <https://pmi.vzwsmart.com>**

**Contractor - Please Review Specific Site PMI Requirements Upon Award**

**Requirements also Noted on Mount Modification Drawings**

**Requirements may also be Noted on A & E drawings**

Report Prepared By: Abigail Enriquez



04/09/2021



**Executive Summary:**

The objective of this report is to determine the capacity of the antenna support mount at the subject facility for the final wireless telecommunications configuration, per the applicable codes and standards. Any modification listed under Sources of Information was assumed completed and was included in this analysis.

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
Radio Frequency Data Sheet (RFDS)	Verizon RFDS Site ID: 325171, dated September 2, 2020
Mount Mapping Report	Level-Up Towers, Site ID: 469053, dated February 17, 2021

**Analysis Criteria:**

Codes and Standards:	ANSI/TIA-222-H
Wind Parameters:	Basic Wind Speed (Ultimate 3-sec. Gust), $V_{ULT}$ : 117 mph Ice Wind Speed (3-sec. Gust): 50 mph Design Ice Thickness: 1.50 in Risk Category: II Exposure Category: B Topographic Category: 1 Topographic Feature Considered: N/A Topographic Method: N/A Ground Elevation Factor, $K_e$ : 0.997
Seismic Parameters:	$S_s$ : 0.183 $S_1$ : 0.055
Maintenance Parameters:	Wind Speed (3-sec. Gust): 30 mph Maintenance Live Load, $L_v$ : 250 lbs. Maintenance Live Load, $L_m$ : 500 lbs.
Analysis Software:	RISA-3D (V17)

### **Final Loading Configuration:**

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

Mount Elevation (ft)	Equipment Elevation (ft)	Quantity	Manufacturer	Model	Status
96.10	97.10	3	Samsung	MT6407-77A	Added
		6	Commscope	NNHH-65B-R4	Retained
		3	Samsung	B2/B66A RRH-BR049	
		3	Samsung	B5/B13 RRH-BR04C	
		1	Raycap	RRFDC-3315-PF-48	

### **Standard Conditions:**

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

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

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

3. For mount analyses completed from other data sources (including new replacement mounts) and not specifically mapped by Maser Consulting Connecticut, the mounts are assumed to have been properly fabricated, installed and maintained in good condition, twist free and plumb in accordance with its original design and manufacturer's specifications.
4. All member connections are assumed to have been designed to meet or exceed the load carrying capacity of the connected member unless otherwise specified in this report.
5. The mount was checked up to, and including, the bolts that fasten it to the mount collar/attachment and threaded rod connections in collar members if applicable. Local deformation and interaction between the mount collar/attachment and the supporting tower structure are outside the scope of this analysis.
6. All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. Maser Consulting Connecticut is not responsible for the conclusion, opinions, and recommendations made by others based on the information supplied.

7. Structural Steel Grades have been assumed as follows, if applicable, unless otherwise noted in this analysis:
- Channel, Solid Round, Angle, Plate      ASTM A36 (Gr. 36)
  - HSS (Rectangular)                              ASTM 500 (Gr. B-46)
  - Pipe    ASTM A53 (Gr. B-35)
  - Threaded Rod                                      F1554 (Gr. 36)
  - Bolts    ASTM A325

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

**Analysis Results:**

Component	Utilization %	Pass/Fail
<i>antenna pipe</i>	25.7%	<i>Pass</i>
<i>kickers</i>	6.4%	<i>Pass</i>
<i>support rail corner</i>	18.1%	<i>Pass</i>
<i>support rail</i>	20.4%	<i>Pass</i>
<i>face horizontals</i>	13.5%	<i>Pass</i>
<i>grating angles</i>	51.3%	<i>Pass</i>
<i>standoff</i>	14.9%	<i>Pass</i>
<i>cross members</i>	22.3%	<i>Pass</i>
<i>mount connection check</i>	82.1%	<i>Pass</i>
<i>kicker connection check</i>	4.7%	<i>Pass</i>

<b>Structure Rating – (Controlling Utilization of all Components)</b>	<b>82.1%</b>
---	--------------

**Recommendation:**

The existing mount is **SUFFICIENT** for the final loading configuration and do not require modifications.

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

**Attachments:**

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



Mount Azimuth (Degree) for Each Sector			Tower Leg Azimuth (Degree) for Each Sector			Sector B															
Sector A:	20.00	Deg	Leg A:		Deg	Ant <sub>1a</sub>	Worn Label	10.00	8.25	48.00	1 - 1-5/8	99.3333	36.00	8.00	150.00	128					
Sector B:	140.00	Deg	Leg B:		Deg	Ant <sub>1b</sub>															
Sector C:	260.00	Deg	Leg C:		Deg	Ant <sub>1c</sub>															
Sector D:		Deg	Leg D:		Deg	Ant <sub>2a</sub>	Commscope NNH4-65	20.00	8.00	72.00		99.5	34.00	10.00	150.00	131					
Climbing Facility Information						Ant <sub>2b</sub>	Samsung RFV01U-D2A	16.00	10.00	15.50		100.667	20.00	9.00	150.00	131					
						Ant <sub>2c</sub>															
Location:	255.00	Deg	Sector C			Ant <sub>3a</sub>	Commscope NNH4-65	20.00	8.00	72.00		99.5	34.00	10.00	150.00	135					
Climbing Facility	Corrosion Type:	Good condition.				Ant <sub>3b</sub>	Samsung RFV01U-D2A	16.00	10.00	15.50		100.667	20.00	9.00	150.00	139					
	Access:	Climbing path was unobstructed.				Ant <sub>3c</sub>															
	Condition:	Good condition.				Ant <sub>4a</sub>	Worn Label	10.00	8.25	48.00	1 - 1-5/8	99.3333	36.00	8.00	150.00	142					
						Ant <sub>4b</sub>															
						Ant <sub>4c</sub>															
						Ant <sub>5a</sub>															
						Ant <sub>5b</sub>															
						Ant <sub>5c</sub>															
						Ant on Standoff															
						Ant on Standoff															
						Ant on Tower															
						Ant on Tower															
												Sector C									
Ant <sub>1a</sub>	Worn Label	10.00	8.25	48.00	1 - 1-5/8							99.3333	36.00	8.00	270.00	145					
Ant <sub>1b</sub>																					
Ant <sub>1c</sub>																					
Ant <sub>2a</sub>	Commscope NNH4-65	20.00	8.00	72.00								99.5	34.00	10.00	270.00	151					
Ant <sub>2b</sub>	Samsung RFV01U-D2A	16.00	10.00	15.50								100.667	20.00	9.00	270.00	153					
Ant <sub>2c</sub>																					
Ant <sub>3a</sub>	Commscope NNH4-65	20.00	8.00	72.00								99.5	34.00	10.00	270.00	155					
Ant <sub>3b</sub>	Samsung RFV01U-D2A	16.00	10.00	15.50								100.667	20.00	9.00	270.00	158					
Ant <sub>3c</sub>																					
Ant <sub>4a</sub>	Worn Label	10.00	8.25	48.00	1 - 1-5/8	99.3333	36.00	8.00	270.00	160											
Ant <sub>4b</sub>																					
Ant <sub>4c</sub>																					
Ant <sub>5a</sub>																					
Ant <sub>5b</sub>																					
Ant <sub>5c</sub>																					
Ant on Standoff																					
Ant on Standoff																					
Ant on Tower																					
Ant on Tower																					
						Sector D															
						Ant <sub>1a</sub>															
						Ant <sub>1b</sub>															
						Ant <sub>1c</sub>															
						Ant <sub>2a</sub>															
						Ant <sub>2b</sub>															
						Ant <sub>2c</sub>															
						Ant <sub>3a</sub>															
						Ant <sub>3b</sub>															
						Ant <sub>3c</sub>															
Ant <sub>4a</sub>																					
Ant <sub>4b</sub>																					
Ant <sub>4c</sub>																					
Ant <sub>5a</sub>																					
Ant <sub>5b</sub>																					
Ant <sub>5c</sub>																					
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	Loose kicker bolts	77
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.





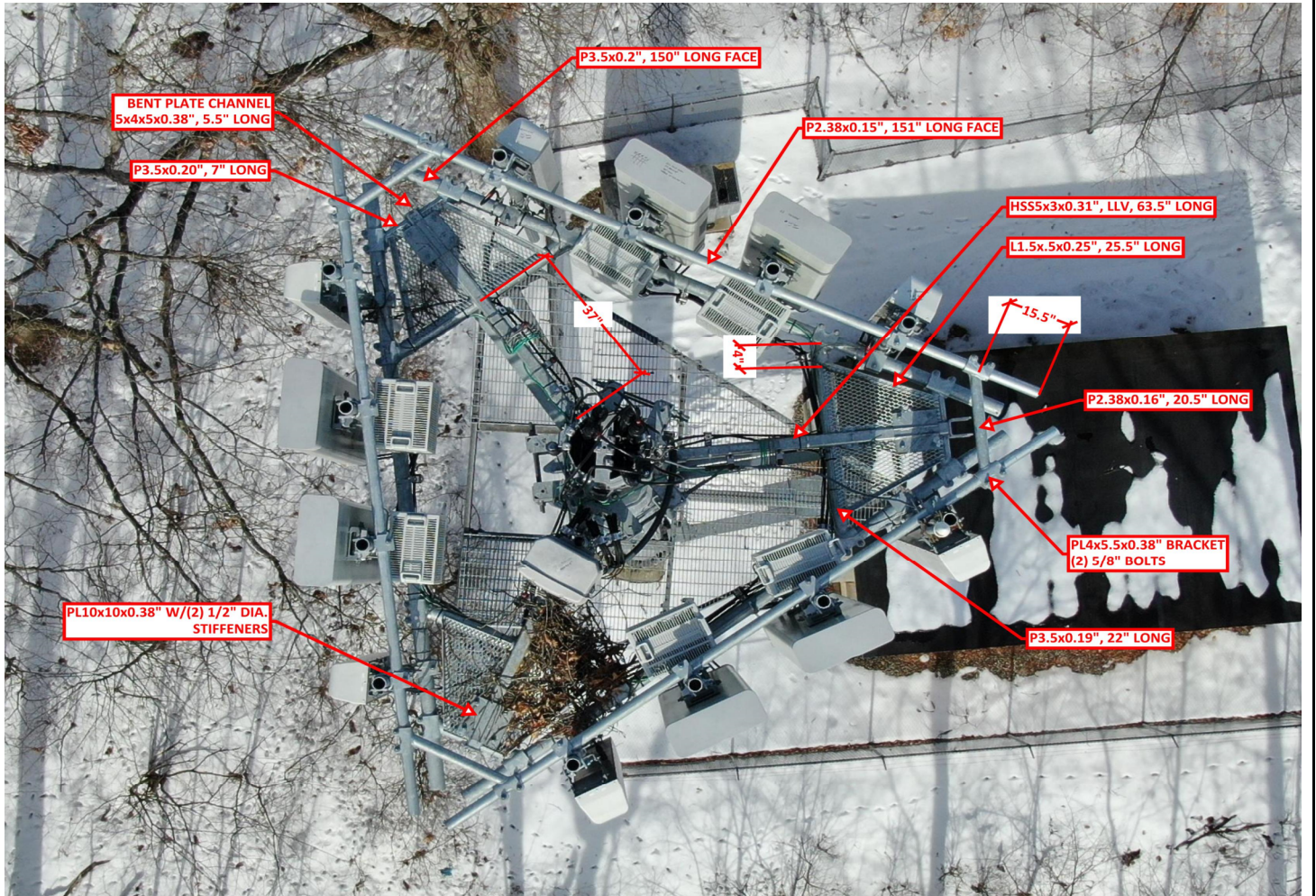
### Antenna Mount Mapping Form (PATENT PENDING)

FCC #

<b>Tower Owner:</b>	Crown Castle	<b>Mapping Date:</b>	2/17/2021
<b>Site Name:</b>	WINDSOR SOUTH CT	<b>Tower Type:</b>	Monopole
<b>Site Number or ID:</b>	469053	<b>Tower Height (Ft.):</b>	102
<b>Mapping Contractor:</b>	Level-Up Towers	<b>Mount Elevation (Ft.):</b>	98.5

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

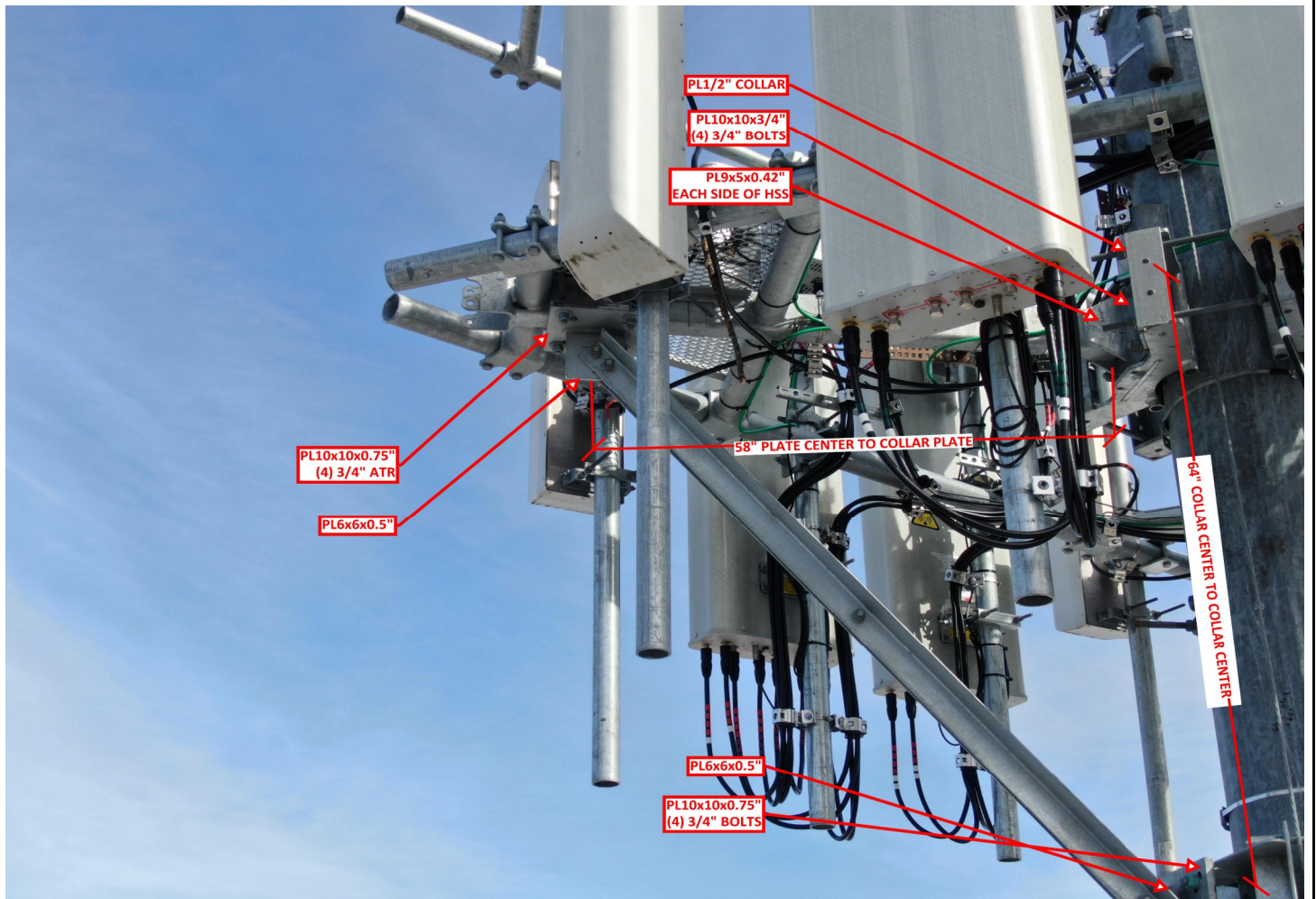
**Please Insert Sketches of the Antenna Mount**

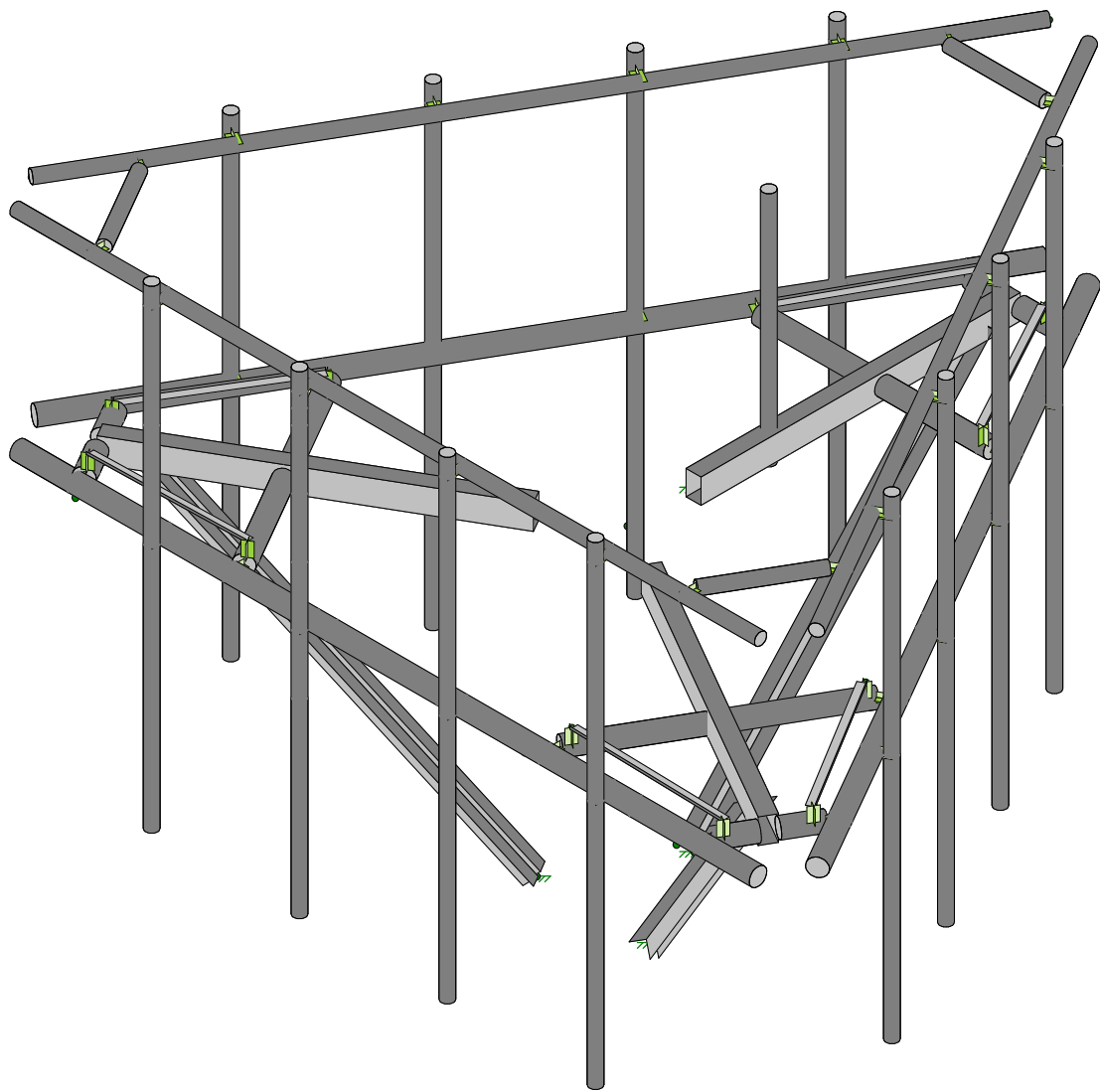
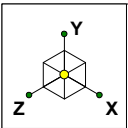












Maser Consulting Connect...	Antenna Mount Analysis	SK - 1
AE		Mar 30, 2021 at 5:03 PM
21777080A		469053-VZW_MT_LO_H_.r3d









**Basic Load Cases (Continued)**

BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed Area(Me...)	Surface(P...
57 Structure Wi (120 De..)	None						92	
58 Structure Wi (150 De..)	None						92	
59 Structure Wi (180 De..)	None						92	
60 Structure Wi (210 De..)	None						92	
61 Structure Wi (240 De..)	None						92	
62 Structure Wi (270 De..)	None						92	
63 Structure Wi (300 De..)	None						92	
64 Structure Wi (330 De..)	None						92	
65 Structure Wm (0 Deg)	None						92	
66 Structure Wm (30 De..)	None						92	
67 Structure Wm (60 De..)	None						92	
68 Structure Wm (90 De..)	None						92	
69 Structure Wm (120 D..)	None						92	
70 Structure Wm (150 D..)	None						92	
71 Structure Wm (180 D..)	None						92	
72 Structure Wm (210 D..)	None						92	
73 Structure Wm (240 D..)	None						92	
74 Structure Wm (270 D..)	None						92	
75 Structure Wm (300 D..)	None						92	
76 Structure Wm (330 D..)	None						92	
77 Lm1	None					1		
78 Lm2	None					1		
79 Lv1	None					1		
80 Lv2	None					1		
81 BLC 39 Transient Are...	None						15	
82 BLC 40 Transient Are...	None						15	

**Load Combinations**

Description	Solve	P...	S...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
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 (0 Deg)	Yes	Y			1	1.2	39	1.2	2	1	40	1	15	1	53	1			
14 1.2D + 1.0Di + 1.0Wi (30 De..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	16	1	54	1			
15 1.2D + 1.0Di + 1.0Wi (60 De..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	17	1	55	1			
16 1.2D + 1.0Di + 1.0Wi (90 De..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	18	1	56	1			
17 1.2D + 1.0Di + 1.0Wi (120 D..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	19	1	57	1			
18 1.2D + 1.0Di + 1.0Wi (150 D..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	20	1	58	1			
19 1.2D + 1.0Di + 1.0Wi (180 D..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	21	1	59	1			
20 1.2D + 1.0Di + 1.0Wi (210 D..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	22	1	60	1			
21 1.2D + 1.0Di + 1.0Wi (240 D..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	23	1	61	1			
22 1.2D + 1.0Di + 1.0Wi (270 D..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	24	1	62	1			
23 1.2D + 1.0Di + 1.0Wi (300 D..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	25	1	63	1			
24 1.2D + 1.0Di + 1.0Wi (330 D..)	Yes	Y			1	1.2	39	1.2	2	1	40	1	26	1	64	1			
25 1.2D + 1.5Lm1 + 1.0Wm (0 ...)	Yes	Y			1	1.2	39	1.2	77	1.5	27	1	65	1					
26 1.2D + 1.5Lm1 + 1.0Wm (30...	Yes	Y			1	1.2	39	1.2	77	1.5	28	1	66	1					







**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
15	N16	3.75	0	4.282652	0	
16	N27	-3.75	3.833333	4.282652	0	
17	N28	-1.25	3.833333	4.282652	0	
18	N29	1.25	3.833333	4.282652	0	
19	N30	3.75	3.833333	4.282652	0	
20	N31	-3.75	-4.166667	4.282652	0	
21	N32	-1.25	-4.166667	4.282652	0	
22	N33	1.25	-4.166667	4.282652	0	
23	N34	3.75	-4.166667	4.282652	0	
24	N117	-0.558348	0	-6.520865	0	
25	N118	-1.816682	0	-4.208367	0	
26	N121	0.558318	0	-6.520865	0	
27	N124	1.816652	0	-4.208367	0	
28	N129	-0.000015	0	-6.520865	0	
29	N130	-0.000015	0	-4.208367	0	
30	N131	-0.000015	0	-1.125032	0	
31	N139A	-0.558348	.25	-6.520865	0	
32	N140A	-1.816682	.25	-4.208367	0	
33	N143A	0.558318	.25	-6.520865	0	
34	N146	1.816652	.25	-4.208367	0	
35	N147A	0.708318	0	-6.520865	0	
36	N148	-0.708348	0	-6.520865	0	
37	N153	1.958318	0	-4.208367	0	
38	N154	-1.958348	0	-4.208367	0	
39	N43	6.291667	3.5	4.032652	0	
40	N44	-6.291667	3.5	4.032652	0	
41	N45	-3.779167	3.5	4.032652	0	
42	N46	4.195833	3.5	4.07	0	
43	N47	0.943333	3.5	4.032652	0	
44	N48	-0.943333	3.5	4.032652	0	
45	N49	-3.75	3.5	4.032652	0	
46	N50	-3.75	3.5	4.282652	0	
47	N51	-1.25	3.5	4.032652	0	
48	N52	-1.25	3.5	4.282652	0	
49	N53	1.25	3.5	4.032652	0	
50	N54	1.25	3.5	4.282652	0	
51	N55	3.75	3.5	4.032652	0	
52	N56	3.75	3.5	4.282652	0	
53	N57	-5	3.5	4.032652	0	
54	N58	5	3.5	4.032652	0	
55	N59	-5	3.5	3.832651	0	
56	N61	5	3.5	3.832651	0	
57	N62	-6.093076	0	2.488213	0	
58	N63	-4.719561	0	0.242216	0	
59	N64	-5.29306	0	4.032652	0	
60	N65	-2.569545	0	3.966151	0	
61	N66	-5.36806	0	3.743976	0	
62	N67	-2.736212	0	3.677476	0	
63	N68	-5.926394	0	2.776915	0	
64	N69	-4.552879	0	0.530917	0	
65	N70	-5.647227	0	3.260446	0	
66	N71A	-3.644545	0	2.104197	0	
67	N72	-0.974298	0	0.562529	0	
68	N73	-5.36806	.25	3.743976	0	
69	N74A	-2.736212	.25	3.677476	0	
70	N75	-5.926394	.25	2.776915	0	
71	N76	-4.552879	.25	0.530917	0	





**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
72	N77	-6.001394	0	2.647011	0	
73	N78	-5.29306	0	3.87388	0	
74	N79	-4.623712	0	0.40823	0	
75	N80	-2.665379	0	3.800163	0	
76	N82	5.293076	0	4.032652	0	
77	N83	2.569545	0	3.966151	0	
78	N84	6.093076	0	2.488213	0	
79	N85	4.719561	0	0.242216	0	
80	N86	5.926409	0	2.776889	0	
81	N87	4.552894	0	0.530891	0	
82	N88	5.368076	0	3.74395	0	
83	N89	2.736227	0	3.67745	0	
84	N90	5.647242	0	3.260419	0	
85	N91	3.644561	0	2.104171	0	
86	N92	0.974313	0	0.562503	0	
87	N93	5.926409	.25	2.776889	0	
88	N94	4.552894	.25	0.530891	0	
89	N95	5.368076	.25	3.74395	0	
90	N96	2.736227	.25	3.67745	0	
91	N97	5.293076	0	3.873854	0	
92	N98	6.001409	0	2.646985	0	
93	N99	2.665394	0	3.800137	0	
94	N100	4.623727	0	0.408204	0	
95	N99A	0.367379	0	-7.428985	0	
96	N100A	6.617379	0	3.396333	0	
97	N102	5.381962	0	1.256529	0	
98	N103	1.394462	0	-5.650024	0	
99	N104	3.020712	0	-2.833276	0	
100	N105	3.964045	0	-1.199375	0	
101	N106	5.367379	0	1.23127	0	
102	N107	5.583885	0	1.10627	0	
103	N108	4.117379	0	-0.933794	0	
104	N109	4.333885	0	-1.058794	0	
105	N110	2.867379	0	-3.098858	0	
106	N111	3.083885	0	-3.223858	0	
107	N112	1.617379	0	-5.263921	0	
108	N113	1.833885	0	-5.388921	0	
109	N114	5.583885	3.833333	1.10627	0	
110	N115	4.333885	3.833333	-1.058794	0	
111	N116	3.083885	3.833333	-3.223858	0	
112	N117A	1.833885	3.833333	-5.388921	0	
113	N118A	5.583885	-4.166667	1.10627	0	
114	N119	4.333885	-4.166667	-1.058794	0	
115	N120	3.083885	-4.166667	-3.223858	0	
116	N121A	1.833885	-4.166667	-5.388921	0	
117	N122	0.346545	3.5	-7.465069	0	
118	N123	6.638212	3.5	3.432417	0	
119	N124A	5.381962	3.5	1.256529	0	
120	N125	3.020712	3.5	-2.833276	0	
121	N126	3.964045	3.5	-1.199375	0	
122	N127	5.367379	3.5	1.23127	0	
123	N128	5.583885	3.5	1.10627	0	
124	N129A	4.117379	3.5	-0.933794	0	
125	N130A	4.333885	3.5	-1.058794	0	
126	N131A	2.867379	3.5	-3.098858	0	
127	N132	3.083885	3.5	-3.223858	0	
128	N133	1.617379	3.5	-5.263921	0	



**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
129	N134	1.833885	3.5	-5.388921	0	
130	N135	5.992379	3.5	2.313801	0	
131	N136	0.992379	3.5	-6.346453	0	
132	N137	5.819174	3.5	2.413801	0	
133	N138	0.819174	3.5	-6.246453	0	
134	N139	-6.617379	0	3.396333	0	
135	N140	-0.367379	0	-7.428985	0	
136	N142	-1.602795	0	-5.28918	0	
137	N143	-5.590295	0	1.617373	0	
138	N144	-3.964045	0	-1.199375	0	
139	N145	-3.020712	0	-2.833276	0	
140	N146A	-1.617379	0	-5.263921	0	
141	N147	-1.833885	0	-5.388921	0	
142	N148A	-2.867379	0	-3.098858	0	
143	N149	-3.083885	0	-3.223858	0	
144	N150	-4.117379	0	-0.933794	0	
145	N151	-4.333885	0	-1.058794	0	
146	N152	-5.367379	0	1.23127	0	
147	N153A	-5.583885	0	1.10627	0	
148	N154A	-1.833885	3.833333	-5.388921	0	
149	N155	-3.083885	3.833333	-3.223858	0	
150	N156	-4.333885	3.833333	-1.058794	0	
151	N157	-5.583885	3.833333	1.10627	0	
152	N158	-1.833885	-4.166667	-5.388921	0	
153	N159	-3.083885	-4.166667	-3.223858	0	
154	N160	-4.333885	-4.166667	-1.058794	0	
155	N161	-5.583885	-4.166667	1.10627	0	
156	N162	-6.638212	3.5	3.432417	0	
157	N163	-0.346545	3.5	-7.465069	0	
158	N164	-1.602795	3.5	-5.28918	0	
159	N165	-3.964045	3.5	-1.199375	0	
160	N166	-3.020712	3.5	-2.833276	0	
161	N167	-1.617379	3.5	-5.263921	0	
162	N168	-1.833885	3.5	-5.388921	0	
163	N169	-2.867379	3.5	-3.098858	0	
164	N170	-3.083885	3.5	-3.223858	0	
165	N171	-4.117379	3.5	-0.933794	0	
166	N172	-4.333885	3.5	-1.058794	0	
167	N173	-5.367379	3.5	1.23127	0	
168	N174	-5.583885	3.5	1.10627	0	
169	N175	-0.992379	3.5	-6.346453	0	
170	N176	-5.992379	3.5	2.313801	0	
171	N177	-0.819174	3.5	-6.246453	0	
172	N178	-5.819174	3.5	2.413801	0	
173	N177A	-0.000015	0	-5.958365	0	
174	N178A	-0.000015	-5.333333	-1.125032	0	
175	N179	-0.974298	-5.333333	0.562529	0	
176	N180	0.974313	-5.333333	0.562503	0	
177	N182	-5.160088	0	2.979196	0	
178	N185	5.160103	0	2.979169	0	
179	N184	-1.25	-1	4.282652	0	
180	N185A	-1.25	3	4.282652	0	
181	N186	-1.25	1	4.282652	0	
182	N187	-3.75	1.75	4.282652	0	
183	N188	-0.000015	0	-2.625032	0	
184	N189	-0.225015	0	-2.625032	0	
185	N190	-0.225015	-5	-2.625032	0	



**Joint Coordinates and Temperatures (Continued)**

	Label	X [ft]	Y [ft]	Z [ft]	Temp [F]	Detach From Diap...
186	N191	-0.225015	3.5	-2.625032	0	
187	N192	-1.25	3.25	4.282652	0	
188	N192A	-1.25	2	4.282652	0	
189	N196	-5.076394	0	4.249158	0	
190	N197	-2.444545	0	4.182658	0	
191	N203	5.076394	0	4.249158	0	
192	N204	2.444545	0	4.182658	0	
193	N201	-2.665379	0	4.032652	0	
194	N202	2.665394	0	4.032652	0	
195	N203A	-0.891682	0	-6.520865	0	
196	N204A	-2.226803	0	-4.208367	0	
197	N205A	0.891682	0	-6.520865	0	
198	N206A	2.226803	0	-4.208367	0	
199	N207	4.757954	0	0.175716	0	
200	N201A	6.138909	0	2.567599	0	
201	N204B	0.845841	0	-6.600264	0	
202	N207A	4.825068	0	0.29196	0	
203	N208	2.159682	0	-4.324625	0	
204	N210	-0.845849	0	-6.60025	0	
205	N213	-6.138917	0	2.567613	0	
206	N216	-2.159689	0	-4.324612	0	
207	N217	-4.825076	0	0.291973	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 horizontals	PIPE 3.0	Beam	Pipe	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
3	support rail	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
4	support rail corner	PIPE 2.0	Beam	Pipe	A53 Gr. B	Typical	1.02	.627	.627	1.25
5	standoff	HSS5X3X5	Beam	Tube	A500 Gr. B 46	Typical	4.1	5.6	12.6	13.1
6	cross members	PIPE 3.0	Beam	Tube	A53 Gr. B	Typical	2.07	2.85	2.85	5.69
7	grating angles	L1.5X.5X4	Beam	Single Angle	A36 Gr.36	Typical	.438	.006	.092	.007
8	kickers	LL3x3x3x3	Beam	Single Angle	A36 Gr.36	Typical	2.18	4.09	1.9	.027
9	TES GA	L2x2x4	Beam	Single Angle	A36 Gr.36	Typical	.944	.346	.346	.021

**Hot Rolled Steel Properties**

	Label	E [ksi]	G [ksi]	Nu	Therm (/1...Density[k/...	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
7	A500 Gr C 46	29000	11154	.3	.65 .49	46	1.5	62	1.2
8	A529 gr 50	29000	11154	.3	.65 .49	50	1.5	65	1.2

**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 horizontals	Beam	Pipe	A53 Gr. B	Typical
2	MP4A	N27	N31			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
3	MP3A	N28	N32			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
4	MP2A	N29	N33			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical



Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
5	MP1A	N30	N34			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
6	M7	N9	N10			RIGID	None	None	RIGID	Typical
7	M8	N11	N12			RIGID	None	None	RIGID	Typical
8	M9	N13	N14			RIGID	None	None	RIGID	Typical
9	M10	N15	N16			RIGID	None	None	RIGID	Typical
10	M53	N148	N129			cross members	Beam	Tube	A53 Gr. B	Typical
11	M54	N154	N130			cross members	Beam	Tube	A53 Gr. B	Typical
12	M65	N129	N147A			cross members	Beam	Tube	A53 Gr. B	Typical
13	M66	N130	N153			cross members	Beam	Tube	A53 Gr. B	Typical
14	M67	N129	N131			standoff	Beam	Tube	A500 Gr. ...	Typical
15	M74	N146	N143A		270	grating angles	Beam	Single Angle	A36 Gr.36	Typical
16	M75	N139A	N140A		270	grating angles	Beam	Single Angle	A36 Gr.36	Typical
17	M93	N146	N124			RIGID	None	None	RIGID	Typical
18	M94	N143A	N121			RIGID	None	None	RIGID	Typical
19	M95	N139A	N117			RIGID	None	None	RIGID	Typical
20	M96	N140A	N118			RIGID	None	None	RIGID	Typical
21	M25	N44	N43			support rail	Beam	Pipe	A53 Gr. B	Typical
22	M26	N49	N50			RIGID	None	None	RIGID	Typical
23	M27	N51	N52			RIGID	None	None	RIGID	Typical
24	M28	N53	N54			RIGID	None	None	RIGID	Typical
25	M29	N55	N56			RIGID	None	None	RIGID	Typical
26	M30	N59	N57			RIGID	None	None	RIGID	Typical
27	M31	N61	N58			RIGID	None	None	RIGID	Typical
28	M34	N78	N70			cross members	Beam	Tube	A53 Gr. B	Typical
29	M35	N80	N71A			cross members	Beam	Tube	A53 Gr. B	Typical
30	M38	N70	N77			cross members	Beam	Tube	A53 Gr. B	Typical
31	M39	N71A	N79			cross members	Beam	Tube	A53 Gr. B	Typical
32	M40	N70	N72			standoff	Beam	Tube	A500 Gr. ...	Typical
33	M41	N76	N75		270	grating angles	Beam	Single Angle	A36 Gr.36	Typical
34	M42	N73	N74A		270	grating angles	Beam	Single Angle	A36 Gr.36	Typical
35	M43	N76	N69		240	RIGID	None	None	RIGID	Typical
36	M44	N75	N68		240	RIGID	None	None	RIGID	Typical
37	M45	N73	N66		240	RIGID	None	None	RIGID	Typical
38	M46	N74A	N67		240	RIGID	None	None	RIGID	Typical
39	M49	N98	N90			cross members	Beam	Tube	A53 Gr. B	Typical
40	M50	N100	N91			cross members	Beam	Tube	A53 Gr. B	Typical
41	M53A	N90	N97			cross members	Beam	Tube	A53 Gr. B	Typical
42	M54A	N91	N99			cross members	Beam	Tube	A53 Gr. B	Typical
43	M55	N90	N92			standoff	Beam	Tube	A500 Gr. ...	Typical
44	M56	N96	N95		270	grating angles	Beam	Single Angle	A36 Gr.36	Typical
45	M57	N93	N94		270	grating angles	Beam	Single Angle	A36 Gr.36	Typical
46	M58	N96	N89		120	RIGID	None	None	RIGID	Typical
47	M59	N95	N88		120	RIGID	None	None	RIGID	Typical
48	M60	N93	N86		120	RIGID	None	None	RIGID	Typical
49	M61A	N94	N87		120	RIGID	None	None	RIGID	Typical
50	M62A	N100A	N99A			face horizontals	Beam	Pipe	A53 Gr. B	Typical
51	MP4C	N114	N118A		240	Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
52	MP3C	N115	N119		240	Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
53	MP2C	N116	N120		240	Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
54	MP1C	N117A	N121A		240	Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
55	M67A	N106	N107			RIGID	None	None	RIGID	Typical
56	M68	N108	N109			RIGID	None	None	RIGID	Typical
57	M69	N110	N111			RIGID	None	None	RIGID	Typical
58	M70	N112	N113			RIGID	None	None	RIGID	Typical
59	M71	N123	N122			support rail	Beam	Pipe	A53 Gr. B	Typical
60	M72	N127	N128			RIGID	None	None	RIGID	Typical
61	M73	N129A	N130A			RIGID	None	None	RIGID	Typical



**Member Primary Data (Continued)**

	Label	I Joint	J Joint	K Joint	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rules
62	M74A	N131A	N132			RIGID	None	None	RIGID	Typical
63	M75A	N133	N134			RIGID	None	None	RIGID	Typical
64	M76	N137	N135			RIGID	None	None	RIGID	Typical
65	M77	N138	N136			RIGID	None	None	RIGID	Typical
66	M78	N140	N139			face horizontals	Beam	Pipe	A53 Gr. B	Typical
67	MP4B	N154A	N158		120	Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
68	MP3B	N155	N159		120	Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
69	MP2B	N156	N160		120	Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
70	MP1B	N157	N161		120	Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
71	M83	N146A	N147			RIGID	None	None	RIGID	Typical
72	M84	N148A	N149			RIGID	None	None	RIGID	Typical
73	M85	N150	N151			RIGID	None	None	RIGID	Typical
74	M86	N152	N153A			RIGID	None	None	RIGID	Typical
75	M87	N163	N162			support rail	Beam	Pipe	A53 Gr. B	Typical
76	M88	N167	N168			RIGID	None	None	RIGID	Typical
77	M89	N169	N170			RIGID	None	None	RIGID	Typical
78	M90	N171	N172			RIGID	None	None	RIGID	Typical
79	M91	N173	N174			RIGID	None	None	RIGID	Typical
80	M92	N177	N175			RIGID	None	None	RIGID	Typical
81	M93A	N178	N176			RIGID	None	None	RIGID	Typical
82	M94A	N59	N178			support rail cor...	Beam	Pipe	A53 Gr. B	Typical
83	M95A	N137	N61			support rail cor...	Beam	Pipe	A53 Gr. B	Typical
84	M96A	N177	N138			support rail cor...	Beam	Pipe	A53 Gr. B	Typical
85	M97	N177A	N178A			kickers	Beam	Single Angle	A36 Gr.36	Typical
86	M98	N182	N179			kickers	Beam	Single Angle	A36 Gr.36	Typical
87	M99	N185	N180			kickers	Beam	Single Angle	A36 Gr.36	Typical
88	M100	N188	N189			RIGID	None	None	RIGID	Typical
89	M101	N191	N190			Antenna Pipe	Column	Pipe	A53 Gr. B	Typical
90	M90A	N64	N78			RIGID	None	None	RIGID	Typical
91	M91A	N201	N80			RIGID	None	None	RIGID	Typical
92	M92A	N202	N99			RIGID	None	None	RIGID	Typical
93	M93B	N82	N97			RIGID	None	None	RIGID	Typical
94	M94B	N201A	N98			RIGID	None	None	RIGID	Typical
95	M95B	N207A	N100			RIGID	None	None	RIGID	Typical
96	M96B	N208	N153			RIGID	None	None	RIGID	Typical
97	M97A	N204B	N147A			RIGID	None	None	RIGID	Typical
98	M98A	N210	N148			RIGID	None	None	RIGID	Typical
99	M99A	N216	N154			RIGID	None	None	RIGID	Typical
100	M100A	N217	N79			RIGID	None	None	RIGID	Typical
101	M101A	N213	N77			RIGID	None	None	RIGID	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	MP4A						Yes	** NA **			None
3	MP3A						Yes	** NA **			None
4	MP2A						Yes	** NA **			None
5	MP1A						Yes	** NA **			None
6	M7						Yes	** NA **			None
7	M8						Yes	** NA **			None
8	M9						Yes	** NA **			None
9	M10						Yes	** NA **			None
10	M53				1.5		Yes				None
11	M54				1.5		Yes				None
12	M65			1.5			Yes	Default			None





**Member Advanced Data (Continued)**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
13	M66			1.5			Yes				None
14	M67						Yes				None
15	M74	OOOOXO	OOOOXO				Yes				None
16	M75	OOOOXO	OOOOXO				Yes				None
17	M93						Yes	** NA **			None
18	M94						Yes	** NA **			None
19	M95						Yes	** NA **			None
20	M96						Yes	** NA **			None
21	M25						Yes				None
22	M26						Yes	** NA **			None
23	M27						Yes	** NA **			None
24	M28						Yes	** NA **			None
25	M29						Yes	** NA **			None
26	M30		OOOOOO				Yes	** NA **			None
27	M31		OOOOOO				Yes	** NA **			None
28	M34				1.5		Yes				None
29	M35				1.5		Yes				None
30	M38			1.5			Yes	Default			None
31	M39			1.5			Yes				None
32	M40						Yes				None
33	M41	OOOOXO	OOOOXO				Yes				None
34	M42	OOOOXO	OOOOXO				Yes				None
35	M43						Yes	** NA **			None
36	M44						Yes	** NA **			None
37	M45						Yes	** NA **			None
38	M46						Yes	** NA **			None
39	M49				1.5		Yes				None
40	M50				1.5		Yes				None
41	M53A			1.5			Yes	Default			None
42	M54A			1.5			Yes				None
43	M55						Yes				None
44	M56	OOOOXO	OOOOXO				Yes				None
45	M57	OOOOXO	OOOOXO				Yes				None
46	M58						Yes	** NA **			None
47	M59						Yes	** NA **			None
48	M60						Yes	** NA **			None
49	M61A						Yes	** NA **			None
50	M62A						Yes				None
51	MP4C						Yes	** NA **			None
52	MP3C						Yes	** NA **			None
53	MP2C						Yes	** NA **			None
54	MP1C						Yes	** NA **			None
55	M67A						Yes	** NA **			None
56	M68						Yes	** NA **			None
57	M69						Yes	** NA **			None
58	M70						Yes	** NA **			None
59	M71						Yes				None
60	M72						Yes	** NA **			None
61	M73						Yes	** NA **			None
62	M74A						Yes	** NA **			None
63	M75A						Yes	** NA **			None
64	M76		OOOOOO				Yes	** NA **			None
65	M77		OOOOOO				Yes	** NA **			None
66	M78						Yes				None
67	MP4B						Yes	** NA **			None
68	MP3B						Yes	** NA **			None
69	MP2B						Yes	** NA **			None



**Member Advanced Data (Continued)**

	Label	I Release	J Release	I Offset[in]	J Offset[in]	T/C Only	Physical	Defl Rat...	Analysis ...	Inactive	Seismic...
70	MP1B						Yes	** NA **			None
71	M83						Yes	** NA **			None
72	M84						Yes	** NA **			None
73	M85						Yes	** NA **			None
74	M86						Yes	** NA **			None
75	M87						Yes				None
76	M88						Yes	** NA **			None
77	M89						Yes	** NA **			None
78	M90						Yes	** NA **			None
79	M91						Yes	** NA **			None
80	M92		OOOOOO				Yes	** NA **			None
81	M93A		OOOOOO				Yes	** NA **			None
82	M94A						Yes				None
83	M95A						Yes				None
84	M96A						Yes				None
85	M97	BenPIN	BenPIN				Yes				None
86	M98	BenPIN	BenPIN				Yes				None
87	M99	BenPIN	BenPIN				Yes				None
88	M100						Yes	** NA **			None
89	M101						Yes	** NA **			None
90	M90A	OOOOOX					Yes	** NA **			None
91	M91A	OOOOOX					Yes	** NA **			None
92	M92A	OOOOOX					Yes	** NA **			None
93	M93B	OOOOOX					Yes	** NA **			None
94	M94B	OOOOOX					Yes	** NA **			None
95	M95B	OOOOOX					Yes	** NA **			None
96	M96B	OOOOOX					Yes	** NA **			None
97	M97A	OOOOOX					Yes	** NA **			None
98	M98A	OOOOOX					Yes	** NA **			None
99	M99A	OOOOOX					Yes	** NA **			None
100	M100A	OOOOOX					Yes	** NA **			None
101	M101A	OOOOOX					Yes	** NA **			None

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	Y	-43.55	1.83
2	MP4A	My	-.022	1.83
3	MP4A	Mz	0	1.83
4	MP4A	Y	-43.55	3.83
5	MP4A	My	-.022	3.83
6	MP4A	Mz	0	3.83
7	MP4B	Y	-43.55	1.83
8	MP4B	My	.011	1.83
9	MP4B	Mz	-.019	1.83
10	MP4B	Y	-43.55	3.83
11	MP4B	My	.011	3.83
12	MP4B	Mz	-.019	3.83
13	MP4C	Y	-43.55	1.83
14	MP4C	My	.011	1.83
15	MP4C	Mz	.019	1.83
16	MP4C	Y	-43.55	3.83
17	MP4C	My	.011	3.83
18	MP4C	Mz	.019	3.83
19	MP2A	Y	-38.7	.83
20	MP2A	My	-.032	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
21	MP2A	Mz	0	.83
22	MP2A	Y	-38.7	4.83
23	MP2A	My	-.032	4.83
24	MP2A	Mz	0	4.83
25	MP2B	Y	-38.7	.83
26	MP2B	My	.016	.83
27	MP2B	Mz	-.028	.83
28	MP2B	Y	-38.7	4.83
29	MP2B	My	.016	4.83
30	MP2B	Mz	-.028	4.83
31	MP2C	Y	-38.7	.83
32	MP2C	My	.016	.83
33	MP2C	Mz	.028	.83
34	MP2C	Y	-38.7	4.83
35	MP2C	My	.016	4.83
36	MP2C	Mz	.028	4.83
37	MP3A	Y	-38.7	.83
38	MP3A	My	-.032	.83
39	MP3A	Mz	0	.83
40	MP3A	Y	-38.7	4.83
41	MP3A	My	-.032	4.83
42	MP3A	Mz	0	4.83
43	MP3B	Y	-38.7	.83
44	MP3B	My	.016	.83
45	MP3B	Mz	-.028	.83
46	MP3B	Y	-38.7	4.83
47	MP3B	My	.016	4.83
48	MP3B	Mz	-.028	4.83
49	MP3C	Y	-38.7	.83
50	MP3C	My	.016	.83
51	MP3C	Mz	.028	.83
52	MP3C	Y	-38.7	4.83
53	MP3C	My	.016	4.83
54	MP3C	Mz	.028	4.83
55	MP3A	Y	-84.4	.58
56	MP3A	My	.063	.58
57	MP3A	Mz	0	.58
58	MP3B	Y	-84.4	.58
59	MP3B	My	-.032	.58
60	MP3B	Mz	.055	.58
61	MP3C	Y	-84.4	.58
62	MP3C	My	-.032	.58
63	MP3C	Mz	-.055	.58
64	MP2A	Y	-70.3	.58
65	MP2A	My	.053	.58
66	MP2A	Mz	0	.58
67	MP2B	Y	-70.3	.58
68	MP2B	My	-.026	.58
69	MP2B	Mz	.046	.58
70	MP2C	Y	-70.3	.58
71	MP2C	My	-.026	.58
72	MP2C	Mz	-.046	.58
73	M101	Y	-26.9	1
74	M101	My	0	1
75	M101	Mz	0	1





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP4A	Y	-54.161	1.83
2	MP4A	My	-.027	1.83
3	MP4A	Mz	0	1.83
4	MP4A	Y	-54.161	3.83
5	MP4A	My	-.027	3.83
6	MP4A	Mz	0	3.83
7	MP4B	Y	-54.161	1.83
8	MP4B	My	.014	1.83
9	MP4B	Mz	-.023	1.83
10	MP4B	Y	-54.161	3.83
11	MP4B	My	.014	3.83
12	MP4B	Mz	-.023	3.83
13	MP4C	Y	-54.161	1.83
14	MP4C	My	.014	1.83
15	MP4C	Mz	.023	1.83
16	MP4C	Y	-54.161	3.83
17	MP4C	My	.014	3.83
18	MP4C	Mz	.023	3.83
19	MP2A	Y	-129.403	.83
20	MP2A	My	-.108	.83
21	MP2A	Mz	0	.83
22	MP2A	Y	-129.403	4.83
23	MP2A	My	-.108	4.83
24	MP2A	Mz	0	4.83
25	MP2B	Y	-129.403	.83
26	MP2B	My	.054	.83
27	MP2B	Mz	-.093	.83
28	MP2B	Y	-129.403	4.83
29	MP2B	My	.054	4.83
30	MP2B	Mz	-.093	4.83
31	MP2C	Y	-129.403	.83
32	MP2C	My	.054	.83
33	MP2C	Mz	.093	.83
34	MP2C	Y	-129.403	4.83
35	MP2C	My	.054	4.83
36	MP2C	Mz	.093	4.83
37	MP3A	Y	-129.403	.83
38	MP3A	My	-.108	.83
39	MP3A	Mz	0	.83
40	MP3A	Y	-129.403	4.83
41	MP3A	My	-.108	4.83
42	MP3A	Mz	0	4.83
43	MP3B	Y	-129.403	.83
44	MP3B	My	.054	.83
45	MP3B	Mz	-.093	.83
46	MP3B	Y	-129.403	4.83
47	MP3B	My	.054	4.83
48	MP3B	Mz	-.093	4.83
49	MP3C	Y	-129.403	.83
50	MP3C	My	.054	.83
51	MP3C	Mz	.093	.83
52	MP3C	Y	-129.403	4.83
53	MP3C	My	.054	4.83
54	MP3C	Mz	.093	4.83
55	MP3A	Y	-68.778	.58
56	MP3A	My	.052	.58
57	MP3A	Mz	0	.58



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP3B	Y	-68.778	.58
59	MP3B	My	-.026	.58
60	MP3B	Mz	.045	.58
61	MP3C	Y	-68.778	.58
62	MP3C	My	-.026	.58
63	MP3C	Mz	-.045	.58
64	MP2A	Y	-62.072	.58
65	MP2A	My	.047	.58
66	MP2A	Mz	0	.58
67	MP2B	Y	-62.072	.58
68	MP2B	My	-.023	.58
69	MP2B	Mz	.04	.58
70	MP2C	Y	-62.072	.58
71	MP2C	My	-.023	.58
72	MP2C	Mz	-.04	.58
73	M101	Y	-84.243	1
74	M101	My	0	1
75	M101	Mz	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	0	1.83
2	MP4A	Z	-68.58	1.83
3	MP4A	Mx	0	1.83
4	MP4A	X	0	3.83
5	MP4A	Z	-68.58	3.83
6	MP4A	Mx	0	3.83
7	MP4B	X	0	1.83
8	MP4B	Z	-37.282	1.83
9	MP4B	Mx	.016	1.83
10	MP4B	X	0	3.83
11	MP4B	Z	-37.282	3.83
12	MP4B	Mx	.016	3.83
13	MP4C	X	0	1.83
14	MP4C	Z	-37.282	1.83
15	MP4C	Mx	-.016	1.83
16	MP4C	X	0	3.83
17	MP4C	Z	-37.282	3.83
18	MP4C	Mx	-.016	3.83
19	MP2A	X	0	.83
20	MP2A	Z	-179.037	.83
21	MP2A	Mx	0	.83
22	MP2A	X	0	4.83
23	MP2A	Z	-179.037	4.83
24	MP2A	Mx	0	4.83
25	MP2B	X	0	.83
26	MP2B	Z	-107.685	.83
27	MP2B	Mx	.078	.83
28	MP2B	X	0	4.83
29	MP2B	Z	-107.685	4.83
30	MP2B	Mx	.078	4.83
31	MP2C	X	0	.83
32	MP2C	Z	-107.685	.83
33	MP2C	Mx	-.078	.83
34	MP2C	X	0	4.83
35	MP2C	Z	-107.685	4.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
36	MP2C	Mx	-.078	4.83
37	MP3A	X	0	.83
38	MP3A	Z	-179.037	.83
39	MP3A	Mx	0	.83
40	MP3A	X	0	4.83
41	MP3A	Z	-179.037	4.83
42	MP3A	Mx	0	4.83
43	MP3B	X	0	.83
44	MP3B	Z	-107.685	.83
45	MP3B	Mx	.078	.83
46	MP3B	X	0	4.83
47	MP3B	Z	-107.685	4.83
48	MP3B	Mx	.078	4.83
49	MP3C	X	0	.83
50	MP3C	Z	-107.685	.83
51	MP3C	Mx	-.078	.83
52	MP3C	X	0	4.83
53	MP3C	Z	-107.685	4.83
54	MP3C	Mx	-.078	4.83
55	MP3A	X	0	.58
56	MP3A	Z	-54.572	.58
57	MP3A	Mx	0	.58
58	MP3B	X	0	.58
59	MP3B	Z	-41.002	.58
60	MP3B	Mx	-.027	.58
61	MP3C	X	0	.58
62	MP3C	Z	-41.002	.58
63	MP3C	Mx	.027	.58
64	MP2A	X	0	.58
65	MP2A	Z	-54.572	.58
66	MP2A	Mx	0	.58
67	MP2B	X	0	.58
68	MP2B	Z	-35.804	.58
69	MP2B	Mx	-.023	.58
70	MP2C	X	0	.58
71	MP2C	Z	-35.804	.58
72	MP2C	Mx	.023	.58
73	M101	X	0	1
74	M101	Z	-66.563	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	29.074	1.83
2	MP4A	Z	-50.357	1.83
3	MP4A	Mx	-.015	1.83
4	MP4A	X	29.074	3.83
5	MP4A	Z	-50.357	3.83
6	MP4A	Mx	-.015	3.83
7	MP4B	X	13.424	1.83
8	MP4B	Z	-23.252	1.83
9	MP4B	Mx	.013	1.83
10	MP4B	X	13.424	3.83
11	MP4B	Z	-23.252	3.83
12	MP4B	Mx	.013	3.83
13	MP4C	X	29.074	1.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
14	MP4C	Z	-50.357	1.83
15	MP4C	Mx	-.015	1.83
16	MP4C	X	29.074	3.83
17	MP4C	Z	-50.357	3.83
18	MP4C	Mx	-.015	3.83
19	MP2A	X	77.627	.83
20	MP2A	Z	-134.453	.83
21	MP2A	Mx	-.065	.83
22	MP2A	X	77.627	4.83
23	MP2A	Z	-134.453	4.83
24	MP2A	Mx	-.065	4.83
25	MP2B	X	41.95	.83
26	MP2B	Z	-72.66	.83
27	MP2B	Mx	.07	.83
28	MP2B	X	41.95	4.83
29	MP2B	Z	-72.66	4.83
30	MP2B	Mx	.07	4.83
31	MP2C	X	77.627	.83
32	MP2C	Z	-134.453	.83
33	MP2C	Mx	-.065	.83
34	MP2C	X	77.627	4.83
35	MP2C	Z	-134.453	4.83
36	MP2C	Mx	-.065	4.83
37	MP3A	X	77.627	.83
38	MP3A	Z	-134.453	.83
39	MP3A	Mx	-.065	.83
40	MP3A	X	77.627	4.83
41	MP3A	Z	-134.453	4.83
42	MP3A	Mx	-.065	4.83
43	MP3B	X	41.95	.83
44	MP3B	Z	-72.66	.83
45	MP3B	Mx	.07	.83
46	MP3B	X	41.95	4.83
47	MP3B	Z	-72.66	4.83
48	MP3B	Mx	.07	4.83
49	MP3C	X	77.627	.83
50	MP3C	Z	-134.453	.83
51	MP3C	Mx	-.065	.83
52	MP3C	X	77.627	4.83
53	MP3C	Z	-134.453	4.83
54	MP3C	Mx	-.065	4.83
55	MP3A	X	25.024	.58
56	MP3A	Z	-43.343	.58
57	MP3A	Mx	.019	.58
58	MP3B	X	18.239	.58
59	MP3B	Z	-31.591	.58
60	MP3B	Mx	-.027	.58
61	MP3C	X	25.024	.58
62	MP3C	Z	-43.343	.58
63	MP3C	Mx	.019	.58
64	MP2A	X	24.158	.58
65	MP2A	Z	-41.843	.58
66	MP2A	Mx	.018	.58
67	MP2B	X	14.774	.58
68	MP2B	Z	-25.589	.58
69	MP2B	Mx	-.022	.58
70	MP2C	X	24.158	.58



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
71	MP2C	Z	-41.843	.58
72	MP2C	Mx	.018	.58
73	M101	X	26.887	1
74	M101	Z	-46.569	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	32.287	1.83
2	MP4A	Z	-18.641	1.83
3	MP4A	Mx	-.016	1.83
4	MP4A	X	32.287	3.83
5	MP4A	Z	-18.641	3.83
6	MP4A	Mx	-.016	3.83
7	MP4B	X	32.287	1.83
8	MP4B	Z	-18.641	1.83
9	MP4B	Mx	.016	1.83
10	MP4B	X	32.287	3.83
11	MP4B	Z	-18.641	3.83
12	MP4B	Mx	.016	3.83
13	MP4C	X	59.392	1.83
14	MP4C	Z	-34.29	1.83
15	MP4C	Mx	0	1.83
16	MP4C	X	59.392	3.83
17	MP4C	Z	-34.29	3.83
18	MP4C	Mx	0	3.83
19	MP2A	X	93.258	.83
20	MP2A	Z	-53.842	.83
21	MP2A	Mx	-.078	.83
22	MP2A	X	93.258	4.83
23	MP2A	Z	-53.842	4.83
24	MP2A	Mx	-.078	4.83
25	MP2B	X	93.258	.83
26	MP2B	Z	-53.842	.83
27	MP2B	Mx	.078	.83
28	MP2B	X	93.258	4.83
29	MP2B	Z	-53.842	4.83
30	MP2B	Mx	.078	4.83
31	MP2C	X	155.051	.83
32	MP2C	Z	-89.519	.83
33	MP2C	Mx	0	.83
34	MP2C	X	155.051	4.83
35	MP2C	Z	-89.519	4.83
36	MP2C	Mx	0	4.83
37	MP3A	X	93.258	.83
38	MP3A	Z	-53.842	.83
39	MP3A	Mx	-.078	.83
40	MP3A	X	93.258	4.83
41	MP3A	Z	-53.842	4.83
42	MP3A	Mx	-.078	4.83
43	MP3B	X	93.258	.83
44	MP3B	Z	-53.842	.83
45	MP3B	Mx	.078	.83
46	MP3B	X	93.258	4.83
47	MP3B	Z	-53.842	4.83
48	MP3B	Mx	.078	4.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
49	MP3C	X	155.051	.83
50	MP3C	Z	-89.519	.83
51	MP3C	Mx	0	.83
52	MP3C	X	155.051	4.83
53	MP3C	Z	-89.519	4.83
54	MP3C	Mx	0	4.83
55	MP3A	X	35.509	.58
56	MP3A	Z	-20.501	.58
57	MP3A	Mx	.027	.58
58	MP3B	X	35.509	.58
59	MP3B	Z	-20.501	.58
60	MP3B	Mx	-.027	.58
61	MP3C	X	47.261	.58
62	MP3C	Z	-27.286	.58
63	MP3C	Mx	0	.58
64	MP2A	X	31.007	.58
65	MP2A	Z	-17.902	.58
66	MP2A	Mx	.023	.58
67	MP2B	X	31.007	.58
68	MP2B	Z	-17.902	.58
69	MP2B	Mx	-.023	.58
70	MP2C	X	47.261	.58
71	MP2C	Z	-27.286	.58
72	MP2C	Mx	0	.58
73	M101	X	41.031	1
74	M101	Z	-23.689	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	26.849	1.83
2	MP4A	Z	0	1.83
3	MP4A	Mx	-.013	1.83
4	MP4A	X	26.849	3.83
5	MP4A	Z	0	3.83
6	MP4A	Mx	-.013	3.83
7	MP4B	X	58.147	1.83
8	MP4B	Z	0	1.83
9	MP4B	Mx	.015	1.83
10	MP4B	X	58.147	3.83
11	MP4B	Z	0	3.83
12	MP4B	Mx	.015	3.83
13	MP4C	X	58.147	1.83
14	MP4C	Z	0	1.83
15	MP4C	Mx	.015	1.83
16	MP4C	X	58.147	3.83
17	MP4C	Z	0	3.83
18	MP4C	Mx	.015	3.83
19	MP2A	X	83.901	.83
20	MP2A	Z	0	.83
21	MP2A	Mx	-.07	.83
22	MP2A	X	83.901	4.83
23	MP2A	Z	0	4.83
24	MP2A	Mx	-.07	4.83
25	MP2B	X	155.253	.83
26	MP2B	Z	0	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27	MP2B	Mx	.065	.83
28	MP2B	X	155.253	4.83
29	MP2B	Z	0	4.83
30	MP2B	Mx	.065	4.83
31	MP2C	X	155.253	.83
32	MP2C	Z	0	.83
33	MP2C	Mx	.065	.83
34	MP2C	X	155.253	4.83
35	MP2C	Z	0	4.83
36	MP2C	Mx	.065	4.83
37	MP3A	X	83.901	.83
38	MP3A	Z	0	.83
39	MP3A	Mx	-.07	.83
40	MP3A	X	83.901	4.83
41	MP3A	Z	0	4.83
42	MP3A	Mx	-.07	4.83
43	MP3B	X	155.253	.83
44	MP3B	Z	0	.83
45	MP3B	Mx	.065	.83
46	MP3B	X	155.253	4.83
47	MP3B	Z	0	4.83
48	MP3B	Mx	.065	4.83
49	MP3C	X	155.253	.83
50	MP3C	Z	0	.83
51	MP3C	Mx	.065	.83
52	MP3C	X	155.253	4.83
53	MP3C	Z	0	4.83
54	MP3C	Mx	.065	4.83
55	MP3A	X	36.479	.58
56	MP3A	Z	0	.58
57	MP3A	Mx	.027	.58
58	MP3B	X	50.049	.58
59	MP3B	Z	0	.58
60	MP3B	Mx	-.019	.58
61	MP3C	X	50.049	.58
62	MP3C	Z	0	.58
63	MP3C	Mx	-.019	.58
64	MP2A	X	29.548	.58
65	MP2A	Z	0	.58
66	MP2A	Mx	.022	.58
67	MP2B	X	48.316	.58
68	MP2B	Z	0	.58
69	MP2B	Mx	-.018	.58
70	MP2C	X	48.316	.58
71	MP2C	Z	0	.58
72	MP2C	Mx	-.018	.58
73	M101	X	53.773	1
74	M101	Z	0	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	32.287	1.83
2	MP4A	Z	18.641	1.83
3	MP4A	Mx	-.016	1.83
4	MP4A	X	32.287	3.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
5	MP4A	Z	18.641	3.83
6	MP4A	Mx	-.016	3.83
7	MP4B	X	59.392	1.83
8	MP4B	Z	34.29	1.83
9	MP4B	Mx	0	1.83
10	MP4B	X	59.392	3.83
11	MP4B	Z	34.29	3.83
12	MP4B	Mx	0	3.83
13	MP4C	X	32.287	1.83
14	MP4C	Z	18.641	1.83
15	MP4C	Mx	.016	1.83
16	MP4C	X	32.287	3.83
17	MP4C	Z	18.641	3.83
18	MP4C	Mx	.016	3.83
19	MP2A	X	93.258	.83
20	MP2A	Z	53.842	.83
21	MP2A	Mx	-.078	.83
22	MP2A	X	93.258	4.83
23	MP2A	Z	53.842	4.83
24	MP2A	Mx	-.078	4.83
25	MP2B	X	155.051	.83
26	MP2B	Z	89.519	.83
27	MP2B	Mx	0	.83
28	MP2B	X	155.051	4.83
29	MP2B	Z	89.519	4.83
30	MP2B	Mx	0	4.83
31	MP2C	X	93.258	.83
32	MP2C	Z	53.842	.83
33	MP2C	Mx	.078	.83
34	MP2C	X	93.258	4.83
35	MP2C	Z	53.842	4.83
36	MP2C	Mx	.078	4.83
37	MP3A	X	93.258	.83
38	MP3A	Z	53.842	.83
39	MP3A	Mx	-.078	.83
40	MP3A	X	93.258	4.83
41	MP3A	Z	53.842	4.83
42	MP3A	Mx	-.078	4.83
43	MP3B	X	155.051	.83
44	MP3B	Z	89.519	.83
45	MP3B	Mx	0	.83
46	MP3B	X	155.051	4.83
47	MP3B	Z	89.519	4.83
48	MP3B	Mx	0	4.83
49	MP3C	X	93.258	.83
50	MP3C	Z	53.842	.83
51	MP3C	Mx	.078	.83
52	MP3C	X	93.258	4.83
53	MP3C	Z	53.842	4.83
54	MP3C	Mx	.078	4.83
55	MP3A	X	35.509	.58
56	MP3A	Z	20.501	.58
57	MP3A	Mx	.027	.58
58	MP3B	X	47.261	.58
59	MP3B	Z	27.286	.58
60	MP3B	Mx	0	.58
61	MP3C	X	35.509	.58





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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
62	MP3C	Z	20.501	.58
63	MP3C	Mx	-.027	.58
64	MP2A	X	31.007	.58
65	MP2A	Z	17.902	.58
66	MP2A	Mx	.023	.58
67	MP2B	X	47.261	.58
68	MP2B	Z	27.286	.58
69	MP2B	Mx	0	.58
70	MP2C	X	31.007	.58
71	MP2C	Z	17.902	.58
72	MP2C	Mx	-.023	.58
73	M101	X	57.645	1
74	M101	Z	33.281	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	29.074	1.83
2	MP4A	Z	50.357	1.83
3	MP4A	Mx	-.015	1.83
4	MP4A	X	29.074	3.83
5	MP4A	Z	50.357	3.83
6	MP4A	Mx	-.015	3.83
7	MP4B	X	29.074	1.83
8	MP4B	Z	50.357	1.83
9	MP4B	Mx	-.015	1.83
10	MP4B	X	29.074	3.83
11	MP4B	Z	50.357	3.83
12	MP4B	Mx	-.015	3.83
13	MP4C	X	13.424	1.83
14	MP4C	Z	23.252	1.83
15	MP4C	Mx	.013	1.83
16	MP4C	X	13.424	3.83
17	MP4C	Z	23.252	3.83
18	MP4C	Mx	.013	3.83
19	MP2A	X	77.627	.83
20	MP2A	Z	134.453	.83
21	MP2A	Mx	-.065	.83
22	MP2A	X	77.627	4.83
23	MP2A	Z	134.453	4.83
24	MP2A	Mx	-.065	4.83
25	MP2B	X	77.627	.83
26	MP2B	Z	134.453	.83
27	MP2B	Mx	-.065	.83
28	MP2B	X	77.627	4.83
29	MP2B	Z	134.453	4.83
30	MP2B	Mx	-.065	4.83
31	MP2C	X	41.95	.83
32	MP2C	Z	72.66	.83
33	MP2C	Mx	.07	.83
34	MP2C	X	41.95	4.83
35	MP2C	Z	72.66	4.83
36	MP2C	Mx	.07	4.83
37	MP3A	X	77.627	.83
38	MP3A	Z	134.453	.83
39	MP3A	Mx	-.065	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP3A	X	77.627	4.83
41	MP3A	Z	134.453	4.83
42	MP3A	Mx	-.065	4.83
43	MP3B	X	77.627	.83
44	MP3B	Z	134.453	.83
45	MP3B	Mx	-.065	.83
46	MP3B	X	77.627	4.83
47	MP3B	Z	134.453	4.83
48	MP3B	Mx	-.065	4.83
49	MP3C	X	41.95	.83
50	MP3C	Z	72.66	.83
51	MP3C	Mx	.07	.83
52	MP3C	X	41.95	4.83
53	MP3C	Z	72.66	4.83
54	MP3C	Mx	.07	4.83
55	MP3A	X	25.024	.58
56	MP3A	Z	43.343	.58
57	MP3A	Mx	.019	.58
58	MP3B	X	25.024	.58
59	MP3B	Z	43.343	.58
60	MP3B	Mx	.019	.58
61	MP3C	X	18.239	.58
62	MP3C	Z	31.591	.58
63	MP3C	Mx	-.027	.58
64	MP2A	X	24.158	.58
65	MP2A	Z	41.843	.58
66	MP2A	Mx	.018	.58
67	MP2B	X	24.158	.58
68	MP2B	Z	41.843	.58
69	MP2B	Mx	.018	.58
70	MP2C	X	14.774	.58
71	MP2C	Z	25.589	.58
72	MP2C	Mx	-.022	.58
73	M101	X	36.479	1
74	M101	Z	63.183	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	0	1.83
2	MP4A	Z	68.58	1.83
3	MP4A	Mx	0	1.83
4	MP4A	X	0	3.83
5	MP4A	Z	68.58	3.83
6	MP4A	Mx	0	3.83
7	MP4B	X	0	1.83
8	MP4B	Z	37.282	1.83
9	MP4B	Mx	-.016	1.83
10	MP4B	X	0	3.83
11	MP4B	Z	37.282	3.83
12	MP4B	Mx	-.016	3.83
13	MP4C	X	0	1.83
14	MP4C	Z	37.282	1.83
15	MP4C	Mx	.016	1.83
16	MP4C	X	0	3.83
17	MP4C	Z	37.282	3.83



Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP4C	Mx	.016	3.83
19	MP2A	X	0	.83
20	MP2A	Z	179.037	.83
21	MP2A	Mx	0	.83
22	MP2A	X	0	4.83
23	MP2A	Z	179.037	4.83
24	MP2A	Mx	0	4.83
25	MP2B	X	0	.83
26	MP2B	Z	107.685	.83
27	MP2B	Mx	-.078	.83
28	MP2B	X	0	4.83
29	MP2B	Z	107.685	4.83
30	MP2B	Mx	-.078	4.83
31	MP2C	X	0	.83
32	MP2C	Z	107.685	.83
33	MP2C	Mx	.078	.83
34	MP2C	X	0	4.83
35	MP2C	Z	107.685	4.83
36	MP2C	Mx	.078	4.83
37	MP3A	X	0	.83
38	MP3A	Z	179.037	.83
39	MP3A	Mx	0	.83
40	MP3A	X	0	4.83
41	MP3A	Z	179.037	4.83
42	MP3A	Mx	0	4.83
43	MP3B	X	0	.83
44	MP3B	Z	107.685	.83
45	MP3B	Mx	-.078	.83
46	MP3B	X	0	4.83
47	MP3B	Z	107.685	4.83
48	MP3B	Mx	-.078	4.83
49	MP3C	X	0	.83
50	MP3C	Z	107.685	.83
51	MP3C	Mx	.078	.83
52	MP3C	X	0	4.83
53	MP3C	Z	107.685	4.83
54	MP3C	Mx	.078	4.83
55	MP3A	X	0	.58
56	MP3A	Z	54.572	.58
57	MP3A	Mx	0	.58
58	MP3B	X	0	.58
59	MP3B	Z	41.002	.58
60	MP3B	Mx	.027	.58
61	MP3C	X	0	.58
62	MP3C	Z	41.002	.58
63	MP3C	Mx	-.027	.58
64	MP2A	X	0	.58
65	MP2A	Z	54.572	.58
66	MP2A	Mx	0	.58
67	MP2B	X	0	.58
68	MP2B	Z	35.804	.58
69	MP2B	Mx	.023	.58
70	MP2C	X	0	.58
71	MP2C	Z	35.804	.58
72	MP2C	Mx	-.023	.58
73	M101	X	0	1
74	M101	Z	66.563	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	-29.074	1.83
2	MP4A	Z	50.357	1.83
3	MP4A	Mx	.015	1.83
4	MP4A	X	-29.074	3.83
5	MP4A	Z	50.357	3.83
6	MP4A	Mx	.015	3.83
7	MP4B	X	-13.424	1.83
8	MP4B	Z	23.252	1.83
9	MP4B	Mx	-.013	1.83
10	MP4B	X	-13.424	3.83
11	MP4B	Z	23.252	3.83
12	MP4B	Mx	-.013	3.83
13	MP4C	X	-29.074	1.83
14	MP4C	Z	50.357	1.83
15	MP4C	Mx	.015	1.83
16	MP4C	X	-29.074	3.83
17	MP4C	Z	50.357	3.83
18	MP4C	Mx	.015	3.83
19	MP2A	X	-77.627	.83
20	MP2A	Z	134.453	.83
21	MP2A	Mx	.065	.83
22	MP2A	X	-77.627	4.83
23	MP2A	Z	134.453	4.83
24	MP2A	Mx	.065	4.83
25	MP2B	X	-41.95	.83
26	MP2B	Z	72.66	.83
27	MP2B	Mx	-.07	.83
28	MP2B	X	-41.95	4.83
29	MP2B	Z	72.66	4.83
30	MP2B	Mx	-.07	4.83
31	MP2C	X	-77.627	.83
32	MP2C	Z	134.453	.83
33	MP2C	Mx	.065	.83
34	MP2C	X	-77.627	4.83
35	MP2C	Z	134.453	4.83
36	MP2C	Mx	.065	4.83
37	MP3A	X	-77.627	.83
38	MP3A	Z	134.453	.83
39	MP3A	Mx	.065	.83
40	MP3A	X	-77.627	4.83
41	MP3A	Z	134.453	4.83
42	MP3A	Mx	.065	4.83
43	MP3B	X	-41.95	.83
44	MP3B	Z	72.66	.83
45	MP3B	Mx	-.07	.83
46	MP3B	X	-41.95	4.83
47	MP3B	Z	72.66	4.83
48	MP3B	Mx	-.07	4.83
49	MP3C	X	-77.627	.83
50	MP3C	Z	134.453	.83
51	MP3C	Mx	.065	.83
52	MP3C	X	-77.627	4.83





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
31	MP2C	X	-155.051	.83
32	MP2C	Z	89.519	.83
33	MP2C	Mx	0	.83
34	MP2C	X	-155.051	4.83
35	MP2C	Z	89.519	4.83
36	MP2C	Mx	0	4.83
37	MP3A	X	-93.258	.83
38	MP3A	Z	53.842	.83
39	MP3A	Mx	.078	.83
40	MP3A	X	-93.258	4.83
41	MP3A	Z	53.842	4.83
42	MP3A	Mx	.078	4.83
43	MP3B	X	-93.258	.83
44	MP3B	Z	53.842	.83
45	MP3B	Mx	-.078	.83
46	MP3B	X	-93.258	4.83
47	MP3B	Z	53.842	4.83
48	MP3B	Mx	-.078	4.83
49	MP3C	X	-155.051	.83
50	MP3C	Z	89.519	.83
51	MP3C	Mx	0	.83
52	MP3C	X	-155.051	4.83
53	MP3C	Z	89.519	4.83
54	MP3C	Mx	0	4.83
55	MP3A	X	-35.509	.58
56	MP3A	Z	20.501	.58
57	MP3A	Mx	-.027	.58
58	MP3B	X	-35.509	.58
59	MP3B	Z	20.501	.58
60	MP3B	Mx	.027	.58
61	MP3C	X	-47.261	.58
62	MP3C	Z	27.286	.58
63	MP3C	Mx	0	.58
64	MP2A	X	-31.007	.58
65	MP2A	Z	17.902	.58
66	MP2A	Mx	-.023	.58
67	MP2B	X	-31.007	.58
68	MP2B	Z	17.902	.58
69	MP2B	Mx	.023	.58
70	MP2C	X	-47.261	.58
71	MP2C	Z	27.286	.58
72	MP2C	Mx	0	.58
73	M101	X	-41.031	1
74	M101	Z	23.689	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	-26.849	1.83
2	MP4A	Z	0	1.83
3	MP4A	Mx	.013	1.83
4	MP4A	X	-26.849	3.83
5	MP4A	Z	0	3.83
6	MP4A	Mx	.013	3.83
7	MP4B	X	-58.147	1.83
8	MP4B	Z	0	1.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP4B	Mx	-.015	1.83
10	MP4B	X	-58.147	3.83
11	MP4B	Z	0	3.83
12	MP4B	Mx	-.015	3.83
13	MP4C	X	-58.147	1.83
14	MP4C	Z	0	1.83
15	MP4C	Mx	-.015	1.83
16	MP4C	X	-58.147	3.83
17	MP4C	Z	0	3.83
18	MP4C	Mx	-.015	3.83
19	MP2A	X	-83.901	.83
20	MP2A	Z	0	.83
21	MP2A	Mx	.07	.83
22	MP2A	X	-83.901	4.83
23	MP2A	Z	0	4.83
24	MP2A	Mx	.07	4.83
25	MP2B	X	-155.253	.83
26	MP2B	Z	0	.83
27	MP2B	Mx	-.065	.83
28	MP2B	X	-155.253	4.83
29	MP2B	Z	0	4.83
30	MP2B	Mx	-.065	4.83
31	MP2C	X	-155.253	.83
32	MP2C	Z	0	.83
33	MP2C	Mx	-.065	.83
34	MP2C	X	-155.253	4.83
35	MP2C	Z	0	4.83
36	MP2C	Mx	-.065	4.83
37	MP3A	X	-83.901	.83
38	MP3A	Z	0	.83
39	MP3A	Mx	.07	.83
40	MP3A	X	-83.901	4.83
41	MP3A	Z	0	4.83
42	MP3A	Mx	.07	4.83
43	MP3B	X	-155.253	.83
44	MP3B	Z	0	.83
45	MP3B	Mx	-.065	.83
46	MP3B	X	-155.253	4.83
47	MP3B	Z	0	4.83
48	MP3B	Mx	-.065	4.83
49	MP3C	X	-155.253	.83
50	MP3C	Z	0	.83
51	MP3C	Mx	-.065	.83
52	MP3C	X	-155.253	4.83
53	MP3C	Z	0	4.83
54	MP3C	Mx	-.065	4.83
55	MP3A	X	-36.479	.58
56	MP3A	Z	0	.58
57	MP3A	Mx	-.027	.58
58	MP3B	X	-50.049	.58
59	MP3B	Z	0	.58
60	MP3B	Mx	.019	.58
61	MP3C	X	-50.049	.58
62	MP3C	Z	0	.58
63	MP3C	Mx	.019	.58
64	MP2A	X	-29.548	.58
65	MP2A	Z	0	.58



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
66	MP2A	Mx	-.022	.58
67	MP2B	X	-48.316	.58
68	MP2B	Z	0	.58
69	MP2B	Mx	.018	.58
70	MP2C	X	-48.316	.58
71	MP2C	Z	0	.58
72	MP2C	Mx	.018	.58
73	M101	X	-53.773	1
74	M101	Z	0	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	-32.287	1.83
2	MP4A	Z	-18.641	1.83
3	MP4A	Mx	.016	1.83
4	MP4A	X	-32.287	3.83
5	MP4A	Z	-18.641	3.83
6	MP4A	Mx	.016	3.83
7	MP4B	X	-59.392	1.83
8	MP4B	Z	-34.29	1.83
9	MP4B	Mx	0	1.83
10	MP4B	X	-59.392	3.83
11	MP4B	Z	-34.29	3.83
12	MP4B	Mx	0	3.83
13	MP4C	X	-32.287	1.83
14	MP4C	Z	-18.641	1.83
15	MP4C	Mx	-.016	1.83
16	MP4C	X	-32.287	3.83
17	MP4C	Z	-18.641	3.83
18	MP4C	Mx	-.016	3.83
19	MP2A	X	-93.258	.83
20	MP2A	Z	-53.842	.83
21	MP2A	Mx	.078	.83
22	MP2A	X	-93.258	4.83
23	MP2A	Z	-53.842	4.83
24	MP2A	Mx	.078	4.83
25	MP2B	X	-155.051	.83
26	MP2B	Z	-89.519	.83
27	MP2B	Mx	0	.83
28	MP2B	X	-155.051	4.83
29	MP2B	Z	-89.519	4.83
30	MP2B	Mx	0	4.83
31	MP2C	X	-93.258	.83
32	MP2C	Z	-53.842	.83
33	MP2C	Mx	-.078	.83
34	MP2C	X	-93.258	4.83
35	MP2C	Z	-53.842	4.83
36	MP2C	Mx	-.078	4.83
37	MP3A	X	-93.258	.83
38	MP3A	Z	-53.842	.83
39	MP3A	Mx	.078	.83
40	MP3A	X	-93.258	4.83
41	MP3A	Z	-53.842	4.83
42	MP3A	Mx	.078	4.83
43	MP3B	X	-155.051	.83





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
44	MP3B	Z	-89.519	.83
45	MP3B	Mx	0	.83
46	MP3B	X	-155.051	4.83
47	MP3B	Z	-89.519	4.83
48	MP3B	Mx	0	4.83
49	MP3C	X	-93.258	.83
50	MP3C	Z	-53.842	.83
51	MP3C	Mx	-.078	.83
52	MP3C	X	-93.258	4.83
53	MP3C	Z	-53.842	4.83
54	MP3C	Mx	-.078	4.83
55	MP3A	X	-35.509	.58
56	MP3A	Z	-20.501	.58
57	MP3A	Mx	-.027	.58
58	MP3B	X	-47.261	.58
59	MP3B	Z	-27.286	.58
60	MP3B	Mx	0	.58
61	MP3C	X	-35.509	.58
62	MP3C	Z	-20.501	.58
63	MP3C	Mx	.027	.58
64	MP2A	X	-31.007	.58
65	MP2A	Z	-17.902	.58
66	MP2A	Mx	-.023	.58
67	MP2B	X	-47.261	.58
68	MP2B	Z	-27.286	.58
69	MP2B	Mx	0	.58
70	MP2C	X	-31.007	.58
71	MP2C	Z	-17.902	.58
72	MP2C	Mx	.023	.58
73	M101	X	-57.645	1
74	M101	Z	-33.281	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	-29.074	1.83
2	MP4A	Z	-50.357	1.83
3	MP4A	Mx	.015	1.83
4	MP4A	X	-29.074	3.83
5	MP4A	Z	-50.357	3.83
6	MP4A	Mx	.015	3.83
7	MP4B	X	-29.074	1.83
8	MP4B	Z	-50.357	1.83
9	MP4B	Mx	.015	1.83
10	MP4B	X	-29.074	3.83
11	MP4B	Z	-50.357	3.83
12	MP4B	Mx	.015	3.83
13	MP4C	X	-13.424	1.83
14	MP4C	Z	-23.252	1.83
15	MP4C	Mx	-.013	1.83
16	MP4C	X	-13.424	3.83
17	MP4C	Z	-23.252	3.83
18	MP4C	Mx	-.013	3.83
19	MP2A	X	-77.627	.83
20	MP2A	Z	-134.453	.83
21	MP2A	Mx	.065	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
22	MP2A	X	-77.627	4.83
23	MP2A	Z	-134.453	4.83
24	MP2A	Mx	.065	4.83
25	MP2B	X	-77.627	.83
26	MP2B	Z	-134.453	.83
27	MP2B	Mx	.065	.83
28	MP2B	X	-77.627	4.83
29	MP2B	Z	-134.453	4.83
30	MP2B	Mx	.065	4.83
31	MP2C	X	-41.95	.83
32	MP2C	Z	-72.66	.83
33	MP2C	Mx	-.07	.83
34	MP2C	X	-41.95	4.83
35	MP2C	Z	-72.66	4.83
36	MP2C	Mx	-.07	4.83
37	MP3A	X	-77.627	.83
38	MP3A	Z	-134.453	.83
39	MP3A	Mx	.065	.83
40	MP3A	X	-77.627	4.83
41	MP3A	Z	-134.453	4.83
42	MP3A	Mx	.065	4.83
43	MP3B	X	-77.627	.83
44	MP3B	Z	-134.453	.83
45	MP3B	Mx	.065	.83
46	MP3B	X	-77.627	4.83
47	MP3B	Z	-134.453	4.83
48	MP3B	Mx	.065	4.83
49	MP3C	X	-41.95	.83
50	MP3C	Z	-72.66	.83
51	MP3C	Mx	-.07	.83
52	MP3C	X	-41.95	4.83
53	MP3C	Z	-72.66	4.83
54	MP3C	Mx	-.07	4.83
55	MP3A	X	-25.024	.58
56	MP3A	Z	-43.343	.58
57	MP3A	Mx	-.019	.58
58	MP3B	X	-25.024	.58
59	MP3B	Z	-43.343	.58
60	MP3B	Mx	-.019	.58
61	MP3C	X	-18.239	.58
62	MP3C	Z	-31.591	.58
63	MP3C	Mx	.027	.58
64	MP2A	X	-24.158	.58
65	MP2A	Z	-41.843	.58
66	MP2A	Mx	-.018	.58
67	MP2B	X	-24.158	.58
68	MP2B	Z	-41.843	.58
69	MP2B	Mx	-.018	.58
70	MP2C	X	-14.774	.58
71	MP2C	Z	-25.589	.58
72	MP2C	Mx	.022	.58
73	M101	X	-36.479	1
74	M101	Z	-63.183	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
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**Member Point Loads (BLC 15 : Antenna Wi (0 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	0	1.83
2	MP4A	Z	-14.908	1.83
3	MP4A	Mx	0	1.83
4	MP4A	X	0	3.83
5	MP4A	Z	-14.908	3.83
6	MP4A	Mx	0	3.83
7	MP4B	X	0	1.83
8	MP4B	Z	-8.671	1.83
9	MP4B	Mx	.004	1.83
10	MP4B	X	0	3.83
11	MP4B	Z	-8.671	3.83
12	MP4B	Mx	.004	3.83
13	MP4C	X	0	1.83
14	MP4C	Z	-8.671	1.83
15	MP4C	Mx	-.004	1.83
16	MP4C	X	0	3.83
17	MP4C	Z	-8.671	3.83
18	MP4C	Mx	-.004	3.83
19	MP2A	X	0	.83
20	MP2A	Z	-36.457	.83
21	MP2A	Mx	0	.83
22	MP2A	X	0	4.83
23	MP2A	Z	-36.457	4.83
24	MP2A	Mx	0	4.83
25	MP2B	X	0	.83
26	MP2B	Z	-23.006	.83
27	MP2B	Mx	.017	.83
28	MP2B	X	0	4.83
29	MP2B	Z	-23.006	4.83
30	MP2B	Mx	.017	4.83
31	MP2C	X	0	.83
32	MP2C	Z	-23.006	.83
33	MP2C	Mx	-.017	.83
34	MP2C	X	0	4.83
35	MP2C	Z	-23.006	4.83
36	MP2C	Mx	-.017	4.83
37	MP3A	X	0	.83
38	MP3A	Z	-36.457	.83
39	MP3A	Mx	0	.83
40	MP3A	X	0	4.83
41	MP3A	Z	-36.457	4.83
42	MP3A	Mx	0	4.83
43	MP3B	X	0	.83
44	MP3B	Z	-23.006	.83
45	MP3B	Mx	.017	.83
46	MP3B	X	0	4.83
47	MP3B	Z	-23.006	4.83
48	MP3B	Mx	.017	4.83
49	MP3C	X	0	.83
50	MP3C	Z	-23.006	.83
51	MP3C	Mx	-.017	.83
52	MP3C	X	0	4.83
53	MP3C	Z	-23.006	4.83
54	MP3C	Mx	-.017	4.83
55	MP3A	X	0	.58
56	MP3A	Z	-12.877	.58
57	MP3A	Mx	0	.58



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP3B	X	0	.58
59	MP3B	Z	-10.054	.58
60	MP3B	Mx	-.007	.58
61	MP3C	X	0	.58
62	MP3C	Z	-10.054	.58
63	MP3C	Mx	.007	.58
64	MP2A	X	0	.58
65	MP2A	Z	-12.877	.58
66	MP2A	Mx	0	.58
67	MP2B	X	0	.58
68	MP2B	Z	-8.981	.58
69	MP2B	Mx	-.006	.58
70	MP2C	X	0	.58
71	MP2C	Z	-8.981	.58
72	MP2C	Mx	.006	.58
73	M101	X	0	1
74	M101	Z	-15.332	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	6.414	1.83
2	MP4A	Z	-11.11	1.83
3	MP4A	Mx	-.003	1.83
4	MP4A	X	6.414	3.83
5	MP4A	Z	-11.11	3.83
6	MP4A	Mx	-.003	3.83
7	MP4B	X	3.296	1.83
8	MP4B	Z	-5.709	1.83
9	MP4B	Mx	.003	1.83
10	MP4B	X	3.296	3.83
11	MP4B	Z	-5.709	3.83
12	MP4B	Mx	.003	3.83
13	MP4C	X	6.414	1.83
14	MP4C	Z	-11.11	1.83
15	MP4C	Mx	-.003	1.83
16	MP4C	X	6.414	3.83
17	MP4C	Z	-11.11	3.83
18	MP4C	Mx	-.003	3.83
19	MP2A	X	15.987	.83
20	MP2A	Z	-27.69	.83
21	MP2A	Mx	-.013	.83
22	MP2A	X	15.987	4.83
23	MP2A	Z	-27.69	4.83
24	MP2A	Mx	-.013	4.83
25	MP2B	X	9.261	.83
26	MP2B	Z	-16.041	.83
27	MP2B	Mx	.015	.83
28	MP2B	X	9.261	4.83
29	MP2B	Z	-16.041	4.83
30	MP2B	Mx	.015	4.83
31	MP2C	X	15.987	.83
32	MP2C	Z	-27.69	.83
33	MP2C	Mx	-.013	.83
34	MP2C	X	15.987	4.83
35	MP2C	Z	-27.69	4.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
36	MP2C	Mx	-0.13	4.83
37	MP3A	X	15.987	.83
38	MP3A	Z	-27.69	.83
39	MP3A	Mx	-0.13	.83
40	MP3A	X	15.987	4.83
41	MP3A	Z	-27.69	4.83
42	MP3A	Mx	-0.13	4.83
43	MP3B	X	9.261	.83
44	MP3B	Z	-16.041	.83
45	MP3B	Mx	.015	.83
46	MP3B	X	9.261	4.83
47	MP3B	Z	-16.041	4.83
48	MP3B	Mx	.015	4.83
49	MP3C	X	15.987	.83
50	MP3C	Z	-27.69	.83
51	MP3C	Mx	-0.13	.83
52	MP3C	X	15.987	4.83
53	MP3C	Z	-27.69	4.83
54	MP3C	Mx	-0.13	4.83
55	MP3A	X	5.968	.58
56	MP3A	Z	-10.337	.58
57	MP3A	Mx	.004	.58
58	MP3B	X	4.557	.58
59	MP3B	Z	-7.892	.58
60	MP3B	Mx	-.007	.58
61	MP3C	X	5.968	.58
62	MP3C	Z	-10.337	.58
63	MP3C	Mx	.004	.58
64	MP2A	X	5.789	.58
65	MP2A	Z	-10.027	.58
66	MP2A	Mx	.004	.58
67	MP2B	X	3.841	.58
68	MP2B	Z	-6.654	.58
69	MP2B	Mx	-.006	.58
70	MP2C	X	5.789	.58
71	MP2C	Z	-10.027	.58
72	MP2C	Mx	.004	.58
73	M101	X	6.38	1
74	M101	Z	-11.051	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	7.509	1.83
2	MP4A	Z	-4.336	1.83
3	MP4A	Mx	-.004	1.83
4	MP4A	X	7.509	3.83
5	MP4A	Z	-4.336	3.83
6	MP4A	Mx	-.004	3.83
7	MP4B	X	7.509	1.83
8	MP4B	Z	-4.336	1.83
9	MP4B	Mx	.004	1.83
10	MP4B	X	7.509	3.83
11	MP4B	Z	-4.336	3.83
12	MP4B	Mx	.004	3.83
13	MP4C	X	12.911	1.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
14	MP4C	Z	-7.454	1.83
15	MP4C	Mx	0	1.83
16	MP4C	X	12.911	3.83
17	MP4C	Z	-7.454	3.83
18	MP4C	Mx	0	3.83
19	MP2A	X	19.924	.83
20	MP2A	Z	-11.503	.83
21	MP2A	Mx	-.017	.83
22	MP2A	X	19.924	4.83
23	MP2A	Z	-11.503	4.83
24	MP2A	Mx	-.017	4.83
25	MP2B	X	19.924	.83
26	MP2B	Z	-11.503	.83
27	MP2B	Mx	.017	.83
28	MP2B	X	19.924	4.83
29	MP2B	Z	-11.503	4.83
30	MP2B	Mx	.017	4.83
31	MP2C	X	31.572	.83
32	MP2C	Z	-18.228	.83
33	MP2C	Mx	0	.83
34	MP2C	X	31.572	4.83
35	MP2C	Z	-18.228	4.83
36	MP2C	Mx	0	4.83
37	MP3A	X	19.924	.83
38	MP3A	Z	-11.503	.83
39	MP3A	Mx	-.017	.83
40	MP3A	X	19.924	4.83
41	MP3A	Z	-11.503	4.83
42	MP3A	Mx	-.017	4.83
43	MP3B	X	19.924	.83
44	MP3B	Z	-11.503	.83
45	MP3B	Mx	.017	.83
46	MP3B	X	19.924	4.83
47	MP3B	Z	-11.503	4.83
48	MP3B	Mx	.017	4.83
49	MP3C	X	31.572	.83
50	MP3C	Z	-18.228	.83
51	MP3C	Mx	0	.83
52	MP3C	X	31.572	4.83
53	MP3C	Z	-18.228	4.83
54	MP3C	Mx	0	4.83
55	MP3A	X	8.707	.58
56	MP3A	Z	-5.027	.58
57	MP3A	Mx	.007	.58
58	MP3B	X	8.707	.58
59	MP3B	Z	-5.027	.58
60	MP3B	Mx	-.007	.58
61	MP3C	X	11.151	.58
62	MP3C	Z	-6.438	.58
63	MP3C	Mx	0	.58
64	MP2A	X	7.778	.58
65	MP2A	Z	-4.491	.58
66	MP2A	Mx	.006	.58
67	MP2B	X	7.778	.58
68	MP2B	Z	-4.491	.58
69	MP2B	Mx	-.006	.58
70	MP2C	X	11.151	.58



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
71	MP2C	Z	-6.438	.58
72	MP2C	Mx	0	.58
73	M101	X	9.938	1
74	M101	Z	-5.738	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	6.592	1.83
2	MP4A	Z	0	1.83
3	MP4A	Mx	-.003	1.83
4	MP4A	X	6.592	3.83
5	MP4A	Z	0	3.83
6	MP4A	Mx	-.003	3.83
7	MP4B	X	12.829	1.83
8	MP4B	Z	0	1.83
9	MP4B	Mx	.003	1.83
10	MP4B	X	12.829	3.83
11	MP4B	Z	0	3.83
12	MP4B	Mx	.003	3.83
13	MP4C	X	12.829	1.83
14	MP4C	Z	0	1.83
15	MP4C	Mx	.003	1.83
16	MP4C	X	12.829	3.83
17	MP4C	Z	0	3.83
18	MP4C	Mx	.003	3.83
19	MP2A	X	18.523	.83
20	MP2A	Z	0	.83
21	MP2A	Mx	-.015	.83
22	MP2A	X	18.523	4.83
23	MP2A	Z	0	4.83
24	MP2A	Mx	-.015	4.83
25	MP2B	X	31.973	.83
26	MP2B	Z	0	.83
27	MP2B	Mx	.013	.83
28	MP2B	X	31.973	4.83
29	MP2B	Z	0	4.83
30	MP2B	Mx	.013	4.83
31	MP2C	X	31.973	.83
32	MP2C	Z	0	.83
33	MP2C	Mx	.013	.83
34	MP2C	X	31.973	4.83
35	MP2C	Z	0	4.83
36	MP2C	Mx	.013	4.83
37	MP3A	X	18.523	.83
38	MP3A	Z	0	.83
39	MP3A	Mx	-.015	.83
40	MP3A	X	18.523	4.83
41	MP3A	Z	0	4.83
42	MP3A	Mx	-.015	4.83
43	MP3B	X	31.973	.83
44	MP3B	Z	0	.83
45	MP3B	Mx	.013	.83
46	MP3B	X	31.973	4.83
47	MP3B	Z	0	4.83
48	MP3B	Mx	.013	4.83





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
49	MP3C	X	31.973	.83
50	MP3C	Z	0	.83
51	MP3C	Mx	.013	.83
52	MP3C	X	31.973	4.83
53	MP3C	Z	0	4.83
54	MP3C	Mx	.013	4.83
55	MP3A	X	9.113	.58
56	MP3A	Z	0	.58
57	MP3A	Mx	.007	.58
58	MP3B	X	11.936	.58
59	MP3B	Z	0	.58
60	MP3B	Mx	-.004	.58
61	MP3C	X	11.936	.58
62	MP3C	Z	0	.58
63	MP3C	Mx	-.004	.58
64	MP2A	X	7.683	.58
65	MP2A	Z	0	.58
66	MP2A	Mx	.006	.58
67	MP2B	X	11.578	.58
68	MP2B	Z	0	.58
69	MP2B	Mx	-.004	.58
70	MP2C	X	11.578	.58
71	MP2C	Z	0	.58
72	MP2C	Mx	-.004	.58
73	M101	X	12.761	1
74	M101	Z	0	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	7.509	1.83
2	MP4A	Z	4.336	1.83
3	MP4A	Mx	-.004	1.83
4	MP4A	X	7.509	3.83
5	MP4A	Z	4.336	3.83
6	MP4A	Mx	-.004	3.83
7	MP4B	X	12.911	1.83
8	MP4B	Z	7.454	1.83
9	MP4B	Mx	0	1.83
10	MP4B	X	12.911	3.83
11	MP4B	Z	7.454	3.83
12	MP4B	Mx	0	3.83
13	MP4C	X	7.509	1.83
14	MP4C	Z	4.336	1.83
15	MP4C	Mx	.004	1.83
16	MP4C	X	7.509	3.83
17	MP4C	Z	4.336	3.83
18	MP4C	Mx	.004	3.83
19	MP2A	X	19.924	.83
20	MP2A	Z	11.503	.83
21	MP2A	Mx	-.017	.83
22	MP2A	X	19.924	4.83
23	MP2A	Z	11.503	4.83
24	MP2A	Mx	-.017	4.83
25	MP2B	X	31.572	.83
26	MP2B	Z	18.228	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27	MP2B	Mx	0	.83
28	MP2B	X	31.572	4.83
29	MP2B	Z	18.228	4.83
30	MP2B	Mx	0	4.83
31	MP2C	X	19.924	.83
32	MP2C	Z	11.503	.83
33	MP2C	Mx	.017	.83
34	MP2C	X	19.924	4.83
35	MP2C	Z	11.503	4.83
36	MP2C	Mx	.017	4.83
37	MP3A	X	19.924	.83
38	MP3A	Z	11.503	.83
39	MP3A	Mx	-.017	.83
40	MP3A	X	19.924	4.83
41	MP3A	Z	11.503	4.83
42	MP3A	Mx	-.017	4.83
43	MP3B	X	31.572	.83
44	MP3B	Z	18.228	.83
45	MP3B	Mx	0	.83
46	MP3B	X	31.572	4.83
47	MP3B	Z	18.228	4.83
48	MP3B	Mx	0	4.83
49	MP3C	X	19.924	.83
50	MP3C	Z	11.503	.83
51	MP3C	Mx	.017	.83
52	MP3C	X	19.924	4.83
53	MP3C	Z	11.503	4.83
54	MP3C	Mx	.017	4.83
55	MP3A	X	8.707	.58
56	MP3A	Z	5.027	.58
57	MP3A	Mx	.007	.58
58	MP3B	X	11.151	.58
59	MP3B	Z	6.438	.58
60	MP3B	Mx	0	.58
61	MP3C	X	8.707	.58
62	MP3C	Z	5.027	.58
63	MP3C	Mx	-.007	.58
64	MP2A	X	7.778	.58
65	MP2A	Z	4.491	.58
66	MP2A	Mx	.006	.58
67	MP2B	X	11.151	.58
68	MP2B	Z	6.438	.58
69	MP2B	Mx	0	.58
70	MP2C	X	7.778	.58
71	MP2C	Z	4.491	.58
72	MP2C	Mx	-.006	.58
73	M101	X	13.278	1
74	M101	Z	7.666	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	6.414	1.83
2	MP4A	Z	11.11	1.83
3	MP4A	Mx	-.003	1.83
4	MP4A	X	6.414	3.83



Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
5	MP4A	Z	11.11	3.83
6	MP4A	Mx	-.003	3.83
7	MP4B	X	6.414	1.83
8	MP4B	Z	11.11	1.83
9	MP4B	Mx	-.003	1.83
10	MP4B	X	6.414	3.83
11	MP4B	Z	11.11	3.83
12	MP4B	Mx	-.003	3.83
13	MP4C	X	3.296	1.83
14	MP4C	Z	5.709	1.83
15	MP4C	Mx	.003	1.83
16	MP4C	X	3.296	3.83
17	MP4C	Z	5.709	3.83
18	MP4C	Mx	.003	3.83
19	MP2A	X	15.987	.83
20	MP2A	Z	27.69	.83
21	MP2A	Mx	-.013	.83
22	MP2A	X	15.987	4.83
23	MP2A	Z	27.69	4.83
24	MP2A	Mx	-.013	4.83
25	MP2B	X	15.987	.83
26	MP2B	Z	27.69	.83
27	MP2B	Mx	-.013	.83
28	MP2B	X	15.987	4.83
29	MP2B	Z	27.69	4.83
30	MP2B	Mx	-.013	4.83
31	MP2C	X	9.261	.83
32	MP2C	Z	16.041	.83
33	MP2C	Mx	.015	.83
34	MP2C	X	9.261	4.83
35	MP2C	Z	16.041	4.83
36	MP2C	Mx	.015	4.83
37	MP3A	X	15.987	.83
38	MP3A	Z	27.69	.83
39	MP3A	Mx	-.013	.83
40	MP3A	X	15.987	4.83
41	MP3A	Z	27.69	4.83
42	MP3A	Mx	-.013	4.83
43	MP3B	X	15.987	.83
44	MP3B	Z	27.69	.83
45	MP3B	Mx	-.013	.83
46	MP3B	X	15.987	4.83
47	MP3B	Z	27.69	4.83
48	MP3B	Mx	-.013	4.83
49	MP3C	X	9.261	.83
50	MP3C	Z	16.041	.83
51	MP3C	Mx	.015	.83
52	MP3C	X	9.261	4.83
53	MP3C	Z	16.041	4.83
54	MP3C	Mx	.015	4.83
55	MP3A	X	5.968	.58
56	MP3A	Z	10.337	.58
57	MP3A	Mx	.004	.58
58	MP3B	X	5.968	.58
59	MP3B	Z	10.337	.58
60	MP3B	Mx	.004	.58
61	MP3C	X	4.557	.58



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
62	MP3C	Z	7.892	.58
63	MP3C	Mx	-.007	.58
64	MP2A	X	5.789	.58
65	MP2A	Z	10.027	.58
66	MP2A	Mx	.004	.58
67	MP2B	X	5.789	.58
68	MP2B	Z	10.027	.58
69	MP2B	Mx	.004	.58
70	MP2C	X	3.841	.58
71	MP2C	Z	6.654	.58
72	MP2C	Mx	-.006	.58
73	M101	X	8.308	1
74	M101	Z	14.391	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	0	1.83
2	MP4A	Z	14.908	1.83
3	MP4A	Mx	0	1.83
4	MP4A	X	0	3.83
5	MP4A	Z	14.908	3.83
6	MP4A	Mx	0	3.83
7	MP4B	X	0	1.83
8	MP4B	Z	8.671	1.83
9	MP4B	Mx	-.004	1.83
10	MP4B	X	0	3.83
11	MP4B	Z	8.671	3.83
12	MP4B	Mx	-.004	3.83
13	MP4C	X	0	1.83
14	MP4C	Z	8.671	1.83
15	MP4C	Mx	.004	1.83
16	MP4C	X	0	3.83
17	MP4C	Z	8.671	3.83
18	MP4C	Mx	.004	3.83
19	MP2A	X	0	.83
20	MP2A	Z	36.457	.83
21	MP2A	Mx	0	.83
22	MP2A	X	0	4.83
23	MP2A	Z	36.457	4.83
24	MP2A	Mx	0	4.83
25	MP2B	X	0	.83
26	MP2B	Z	23.006	.83
27	MP2B	Mx	-.017	.83
28	MP2B	X	0	4.83
29	MP2B	Z	23.006	4.83
30	MP2B	Mx	-.017	4.83
31	MP2C	X	0	.83
32	MP2C	Z	23.006	.83
33	MP2C	Mx	.017	.83
34	MP2C	X	0	4.83
35	MP2C	Z	23.006	4.83
36	MP2C	Mx	.017	4.83
37	MP3A	X	0	.83
38	MP3A	Z	36.457	.83
39	MP3A	Mx	0	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
40	MP3A	X	0	4.83
41	MP3A	Z	36.457	4.83
42	MP3A	Mx	0	4.83
43	MP3B	X	0	.83
44	MP3B	Z	23.006	.83
45	MP3B	Mx	-.017	.83
46	MP3B	X	0	4.83
47	MP3B	Z	23.006	4.83
48	MP3B	Mx	-.017	4.83
49	MP3C	X	0	.83
50	MP3C	Z	23.006	.83
51	MP3C	Mx	.017	.83
52	MP3C	X	0	4.83
53	MP3C	Z	23.006	4.83
54	MP3C	Mx	.017	4.83
55	MP3A	X	0	.58
56	MP3A	Z	12.877	.58
57	MP3A	Mx	0	.58
58	MP3B	X	0	.58
59	MP3B	Z	10.054	.58
60	MP3B	Mx	.007	.58
61	MP3C	X	0	.58
62	MP3C	Z	10.054	.58
63	MP3C	Mx	-.007	.58
64	MP2A	X	0	.58
65	MP2A	Z	12.877	.58
66	MP2A	Mx	0	.58
67	MP2B	X	0	.58
68	MP2B	Z	8.981	.58
69	MP2B	Mx	.006	.58
70	MP2C	X	0	.58
71	MP2C	Z	8.981	.58
72	MP2C	Mx	-.006	.58
73	M101	X	0	1
74	M101	Z	15.332	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP4A	X	-6.414	1.83
2	MP4A	Z	11.11	1.83
3	MP4A	Mx	.003	1.83
4	MP4A	X	-6.414	3.83
5	MP4A	Z	11.11	3.83
6	MP4A	Mx	.003	3.83
7	MP4B	X	-3.296	1.83
8	MP4B	Z	5.709	1.83
9	MP4B	Mx	-.003	1.83
10	MP4B	X	-3.296	3.83
11	MP4B	Z	5.709	3.83
12	MP4B	Mx	-.003	3.83
13	MP4C	X	-6.414	1.83
14	MP4C	Z	11.11	1.83
15	MP4C	Mx	.003	1.83
16	MP4C	X	-6.414	3.83
17	MP4C	Z	11.11	3.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
18	MP4C	Mx	.003	3.83
19	MP2A	X	-15.987	.83
20	MP2A	Z	27.69	.83
21	MP2A	Mx	.013	.83
22	MP2A	X	-15.987	4.83
23	MP2A	Z	27.69	4.83
24	MP2A	Mx	.013	4.83
25	MP2B	X	-9.261	.83
26	MP2B	Z	16.041	.83
27	MP2B	Mx	-.015	.83
28	MP2B	X	-9.261	4.83
29	MP2B	Z	16.041	4.83
30	MP2B	Mx	-.015	4.83
31	MP2C	X	-15.987	.83
32	MP2C	Z	27.69	.83
33	MP2C	Mx	.013	.83
34	MP2C	X	-15.987	4.83
35	MP2C	Z	27.69	4.83
36	MP2C	Mx	.013	4.83
37	MP3A	X	-15.987	.83
38	MP3A	Z	27.69	.83
39	MP3A	Mx	.013	.83
40	MP3A	X	-15.987	4.83
41	MP3A	Z	27.69	4.83
42	MP3A	Mx	.013	4.83
43	MP3B	X	-9.261	.83
44	MP3B	Z	16.041	.83
45	MP3B	Mx	-.015	.83
46	MP3B	X	-9.261	4.83
47	MP3B	Z	16.041	4.83
48	MP3B	Mx	-.015	4.83
49	MP3C	X	-15.987	.83
50	MP3C	Z	27.69	.83
51	MP3C	Mx	.013	.83
52	MP3C	X	-15.987	4.83
53	MP3C	Z	27.69	4.83
54	MP3C	Mx	.013	4.83
55	MP3A	X	-5.968	.58
56	MP3A	Z	10.337	.58
57	MP3A	Mx	-.004	.58
58	MP3B	X	-4.557	.58
59	MP3B	Z	7.892	.58
60	MP3B	Mx	.007	.58
61	MP3C	X	-5.968	.58
62	MP3C	Z	10.337	.58
63	MP3C	Mx	-.004	.58
64	MP2A	X	-5.789	.58
65	MP2A	Z	10.027	.58
66	MP2A	Mx	-.004	.58
67	MP2B	X	-3.841	.58
68	MP2B	Z	6.654	.58
69	MP2B	Mx	.006	.58
70	MP2C	X	-5.789	.58
71	MP2C	Z	10.027	.58
72	MP2C	Mx	-.004	.58
73	M101	X	-6.38	1
74	M101	Z	11.051	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	-7.509	1.83
2	MP4A	Z	4.336	1.83
3	MP4A	Mx	.004	1.83
4	MP4A	X	-7.509	3.83
5	MP4A	Z	4.336	3.83
6	MP4A	Mx	.004	3.83
7	MP4B	X	-7.509	1.83
8	MP4B	Z	4.336	1.83
9	MP4B	Mx	-.004	1.83
10	MP4B	X	-7.509	3.83
11	MP4B	Z	4.336	3.83
12	MP4B	Mx	-.004	3.83
13	MP4C	X	-12.911	1.83
14	MP4C	Z	7.454	1.83
15	MP4C	Mx	0	1.83
16	MP4C	X	-12.911	3.83
17	MP4C	Z	7.454	3.83
18	MP4C	Mx	0	3.83
19	MP2A	X	-19.924	.83
20	MP2A	Z	11.503	.83
21	MP2A	Mx	.017	.83
22	MP2A	X	-19.924	4.83
23	MP2A	Z	11.503	4.83
24	MP2A	Mx	.017	4.83
25	MP2B	X	-19.924	.83
26	MP2B	Z	11.503	.83
27	MP2B	Mx	-.017	.83
28	MP2B	X	-19.924	4.83
29	MP2B	Z	11.503	4.83
30	MP2B	Mx	-.017	4.83
31	MP2C	X	-31.572	.83
32	MP2C	Z	18.228	.83
33	MP2C	Mx	0	.83
34	MP2C	X	-31.572	4.83
35	MP2C	Z	18.228	4.83
36	MP2C	Mx	0	4.83
37	MP3A	X	-19.924	.83
38	MP3A	Z	11.503	.83
39	MP3A	Mx	.017	.83
40	MP3A	X	-19.924	4.83
41	MP3A	Z	11.503	4.83
42	MP3A	Mx	.017	4.83
43	MP3B	X	-19.924	.83
44	MP3B	Z	11.503	.83
45	MP3B	Mx	-.017	.83
46	MP3B	X	-19.924	4.83
47	MP3B	Z	11.503	4.83
48	MP3B	Mx	-.017	4.83
49	MP3C	X	-31.572	.83
50	MP3C	Z	18.228	.83
51	MP3C	Mx	0	.83
52	MP3C	X	-31.572	4.83





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
53	MP3C	Z	18.228	4.83
54	MP3C	Mx	0	4.83
55	MP3A	X	-8.707	.58
56	MP3A	Z	5.027	.58
57	MP3A	Mx	-.007	.58
58	MP3B	X	-8.707	.58
59	MP3B	Z	5.027	.58
60	MP3B	Mx	.007	.58
61	MP3C	X	-11.151	.58
62	MP3C	Z	6.438	.58
63	MP3C	Mx	0	.58
64	MP2A	X	-7.778	.58
65	MP2A	Z	4.491	.58
66	MP2A	Mx	-.006	.58
67	MP2B	X	-7.778	.58
68	MP2B	Z	4.491	.58
69	MP2B	Mx	.006	.58
70	MP2C	X	-11.151	.58
71	MP2C	Z	6.438	.58
72	MP2C	Mx	0	.58
73	M101	X	-9.938	1
74	M101	Z	5.738	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	-6.592	1.83
2	MP4A	Z	0	1.83
3	MP4A	Mx	.003	1.83
4	MP4A	X	-6.592	3.83
5	MP4A	Z	0	3.83
6	MP4A	Mx	.003	3.83
7	MP4B	X	-12.829	1.83
8	MP4B	Z	0	1.83
9	MP4B	Mx	-.003	1.83
10	MP4B	X	-12.829	3.83
11	MP4B	Z	0	3.83
12	MP4B	Mx	-.003	3.83
13	MP4C	X	-12.829	1.83
14	MP4C	Z	0	1.83
15	MP4C	Mx	-.003	1.83
16	MP4C	X	-12.829	3.83
17	MP4C	Z	0	3.83
18	MP4C	Mx	-.003	3.83
19	MP2A	X	-18.523	.83
20	MP2A	Z	0	.83
21	MP2A	Mx	.015	.83
22	MP2A	X	-18.523	4.83
23	MP2A	Z	0	4.83
24	MP2A	Mx	.015	4.83
25	MP2B	X	-31.973	.83
26	MP2B	Z	0	.83
27	MP2B	Mx	-.013	.83
28	MP2B	X	-31.973	4.83
29	MP2B	Z	0	4.83
30	MP2B	Mx	-.013	4.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
31	MP2C	X	-31.973	.83
32	MP2C	Z	0	.83
33	MP2C	Mx	-.013	.83
34	MP2C	X	-31.973	4.83
35	MP2C	Z	0	4.83
36	MP2C	Mx	-.013	4.83
37	MP3A	X	-18.523	.83
38	MP3A	Z	0	.83
39	MP3A	Mx	.015	.83
40	MP3A	X	-18.523	4.83
41	MP3A	Z	0	4.83
42	MP3A	Mx	.015	4.83
43	MP3B	X	-31.973	.83
44	MP3B	Z	0	.83
45	MP3B	Mx	-.013	.83
46	MP3B	X	-31.973	4.83
47	MP3B	Z	0	4.83
48	MP3B	Mx	-.013	4.83
49	MP3C	X	-31.973	.83
50	MP3C	Z	0	.83
51	MP3C	Mx	-.013	.83
52	MP3C	X	-31.973	4.83
53	MP3C	Z	0	4.83
54	MP3C	Mx	-.013	4.83
55	MP3A	X	-9.113	.58
56	MP3A	Z	0	.58
57	MP3A	Mx	-.007	.58
58	MP3B	X	-11.936	.58
59	MP3B	Z	0	.58
60	MP3B	Mx	.004	.58
61	MP3C	X	-11.936	.58
62	MP3C	Z	0	.58
63	MP3C	Mx	.004	.58
64	MP2A	X	-7.683	.58
65	MP2A	Z	0	.58
66	MP2A	Mx	-.006	.58
67	MP2B	X	-11.578	.58
68	MP2B	Z	0	.58
69	MP2B	Mx	.004	.58
70	MP2C	X	-11.578	.58
71	MP2C	Z	0	.58
72	MP2C	Mx	.004	.58
73	M101	X	-12.761	1
74	M101	Z	0	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	-7.509	1.83
2	MP4A	Z	-4.336	1.83
3	MP4A	Mx	.004	1.83
4	MP4A	X	-7.509	3.83
5	MP4A	Z	-4.336	3.83
6	MP4A	Mx	.004	3.83
7	MP4B	X	-12.911	1.83
8	MP4B	Z	-7.454	1.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
9	MP4B	Mx	0	1.83
10	MP4B	X	-12.911	3.83
11	MP4B	Z	-7.454	3.83
12	MP4B	Mx	0	3.83
13	MP4C	X	-7.509	1.83
14	MP4C	Z	-4.336	1.83
15	MP4C	Mx	-.004	1.83
16	MP4C	X	-7.509	3.83
17	MP4C	Z	-4.336	3.83
18	MP4C	Mx	-.004	3.83
19	MP2A	X	-19.924	.83
20	MP2A	Z	-11.503	.83
21	MP2A	Mx	.017	.83
22	MP2A	X	-19.924	4.83
23	MP2A	Z	-11.503	4.83
24	MP2A	Mx	.017	4.83
25	MP2B	X	-31.572	.83
26	MP2B	Z	-18.228	.83
27	MP2B	Mx	0	.83
28	MP2B	X	-31.572	4.83
29	MP2B	Z	-18.228	4.83
30	MP2B	Mx	0	4.83
31	MP2C	X	-19.924	.83
32	MP2C	Z	-11.503	.83
33	MP2C	Mx	-.017	.83
34	MP2C	X	-19.924	4.83
35	MP2C	Z	-11.503	4.83
36	MP2C	Mx	-.017	4.83
37	MP3A	X	-19.924	.83
38	MP3A	Z	-11.503	.83
39	MP3A	Mx	.017	.83
40	MP3A	X	-19.924	4.83
41	MP3A	Z	-11.503	4.83
42	MP3A	Mx	.017	4.83
43	MP3B	X	-31.572	.83
44	MP3B	Z	-18.228	.83
45	MP3B	Mx	0	.83
46	MP3B	X	-31.572	4.83
47	MP3B	Z	-18.228	4.83
48	MP3B	Mx	0	4.83
49	MP3C	X	-19.924	.83
50	MP3C	Z	-11.503	.83
51	MP3C	Mx	-.017	.83
52	MP3C	X	-19.924	4.83
53	MP3C	Z	-11.503	4.83
54	MP3C	Mx	-.017	4.83
55	MP3A	X	-8.707	.58
56	MP3A	Z	-5.027	.58
57	MP3A	Mx	-.007	.58
58	MP3B	X	-11.151	.58
59	MP3B	Z	-6.438	.58
60	MP3B	Mx	0	.58
61	MP3C	X	-8.707	.58
62	MP3C	Z	-5.027	.58
63	MP3C	Mx	.007	.58
64	MP2A	X	-7.778	.58
65	MP2A	Z	-4.491	.58



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
66	MP2A	Mx	-0.006	.58
67	MP2B	X	-11.151	.58
68	MP2B	Z	-6.438	.58
69	MP2B	Mx	0	.58
70	MP2C	X	-7.778	.58
71	MP2C	Z	-4.491	.58
72	MP2C	Mx	.006	.58
73	M101	X	-13.278	1
74	M101	Z	-7.666	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	-6.414	1.83
2	MP4A	Z	-11.11	1.83
3	MP4A	Mx	.003	1.83
4	MP4A	X	-6.414	3.83
5	MP4A	Z	-11.11	3.83
6	MP4A	Mx	.003	3.83
7	MP4B	X	-6.414	1.83
8	MP4B	Z	-11.11	1.83
9	MP4B	Mx	.003	1.83
10	MP4B	X	-6.414	3.83
11	MP4B	Z	-11.11	3.83
12	MP4B	Mx	.003	3.83
13	MP4C	X	-3.296	1.83
14	MP4C	Z	-5.709	1.83
15	MP4C	Mx	-.003	1.83
16	MP4C	X	-3.296	3.83
17	MP4C	Z	-5.709	3.83
18	MP4C	Mx	-.003	3.83
19	MP2A	X	-15.987	.83
20	MP2A	Z	-27.69	.83
21	MP2A	Mx	.013	.83
22	MP2A	X	-15.987	4.83
23	MP2A	Z	-27.69	4.83
24	MP2A	Mx	.013	4.83
25	MP2B	X	-15.987	.83
26	MP2B	Z	-27.69	.83
27	MP2B	Mx	.013	.83
28	MP2B	X	-15.987	4.83
29	MP2B	Z	-27.69	4.83
30	MP2B	Mx	.013	4.83
31	MP2C	X	-9.261	.83
32	MP2C	Z	-16.041	.83
33	MP2C	Mx	-.015	.83
34	MP2C	X	-9.261	4.83
35	MP2C	Z	-16.041	4.83
36	MP2C	Mx	-.015	4.83
37	MP3A	X	-15.987	.83
38	MP3A	Z	-27.69	.83
39	MP3A	Mx	.013	.83
40	MP3A	X	-15.987	4.83
41	MP3A	Z	-27.69	4.83
42	MP3A	Mx	.013	4.83
43	MP3B	X	-15.987	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
44	MP3B	Z	-27.69	.83
45	MP3B	Mx	.013	.83
46	MP3B	X	-15.987	4.83
47	MP3B	Z	-27.69	4.83
48	MP3B	Mx	.013	4.83
49	MP3C	X	-9.261	.83
50	MP3C	Z	-16.041	.83
51	MP3C	Mx	-.015	.83
52	MP3C	X	-9.261	4.83
53	MP3C	Z	-16.041	4.83
54	MP3C	Mx	-.015	4.83
55	MP3A	X	-5.968	.58
56	MP3A	Z	-10.337	.58
57	MP3A	Mx	-.004	.58
58	MP3B	X	-5.968	.58
59	MP3B	Z	-10.337	.58
60	MP3B	Mx	-.004	.58
61	MP3C	X	-4.557	.58
62	MP3C	Z	-7.892	.58
63	MP3C	Mx	.007	.58
64	MP2A	X	-5.789	.58
65	MP2A	Z	-10.027	.58
66	MP2A	Mx	-.004	.58
67	MP2B	X	-5.789	.58
68	MP2B	Z	-10.027	.58
69	MP2B	Mx	-.004	.58
70	MP2C	X	-3.841	.58
71	MP2C	Z	-6.654	.58
72	MP2C	Mx	.006	.58
73	M101	X	-8.308	1
74	M101	Z	-14.391	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	0	1.83
2	MP4A	Z	-4.509	1.83
3	MP4A	Mx	0	1.83
4	MP4A	X	0	3.83
5	MP4A	Z	-4.509	3.83
6	MP4A	Mx	0	3.83
7	MP4B	X	0	1.83
8	MP4B	Z	-2.451	1.83
9	MP4B	Mx	.001	1.83
10	MP4B	X	0	3.83
11	MP4B	Z	-2.451	3.83
12	MP4B	Mx	.001	3.83
13	MP4C	X	0	1.83
14	MP4C	Z	-2.451	1.83
15	MP4C	Mx	-.001	1.83
16	MP4C	X	0	3.83
17	MP4C	Z	-2.451	3.83
18	MP4C	Mx	-.001	3.83
19	MP2A	X	0	.83
20	MP2A	Z	-11.771	.83
21	MP2A	Mx	0	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
22	MP2A	X	0	4.83
23	MP2A	Z	-11.771	4.83
24	MP2A	Mx	0	4.83
25	MP2B	X	0	.83
26	MP2B	Z	-7.08	.83
27	MP2B	Mx	.005	.83
28	MP2B	X	0	4.83
29	MP2B	Z	-7.08	4.83
30	MP2B	Mx	.005	4.83
31	MP2C	X	0	.83
32	MP2C	Z	-7.08	.83
33	MP2C	Mx	-.005	.83
34	MP2C	X	0	4.83
35	MP2C	Z	-7.08	4.83
36	MP2C	Mx	-.005	4.83
37	MP3A	X	0	.83
38	MP3A	Z	-11.771	.83
39	MP3A	Mx	0	.83
40	MP3A	X	0	4.83
41	MP3A	Z	-11.771	4.83
42	MP3A	Mx	0	4.83
43	MP3B	X	0	.83
44	MP3B	Z	-7.08	.83
45	MP3B	Mx	.005	.83
46	MP3B	X	0	4.83
47	MP3B	Z	-7.08	4.83
48	MP3B	Mx	.005	4.83
49	MP3C	X	0	.83
50	MP3C	Z	-7.08	.83
51	MP3C	Mx	-.005	.83
52	MP3C	X	0	4.83
53	MP3C	Z	-7.08	4.83
54	MP3C	Mx	-.005	4.83
55	MP3A	X	0	.58
56	MP3A	Z	-3.588	.58
57	MP3A	Mx	0	.58
58	MP3B	X	0	.58
59	MP3B	Z	-2.696	.58
60	MP3B	Mx	-.002	.58
61	MP3C	X	0	.58
62	MP3C	Z	-2.696	.58
63	MP3C	Mx	.002	.58
64	MP2A	X	0	.58
65	MP2A	Z	-3.588	.58
66	MP2A	Mx	0	.58
67	MP2B	X	0	.58
68	MP2B	Z	-2.354	.58
69	MP2B	Mx	-.002	.58
70	MP2C	X	0	.58
71	MP2C	Z	-2.354	.58
72	MP2C	Mx	.002	.58
73	M101	X	0	1
74	M101	Z	-4.376	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
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Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	1.911	1.83
2	MP4A	Z	-3.311	1.83
3	MP4A	Mx	-.000956	1.83
4	MP4A	X	1.911	3.83
5	MP4A	Z	-3.311	3.83
6	MP4A	Mx	-.000956	3.83
7	MP4B	X	.883	1.83
8	MP4B	Z	-1.529	1.83
9	MP4B	Mx	.000883	1.83
10	MP4B	X	.883	3.83
11	MP4B	Z	-1.529	3.83
12	MP4B	Mx	.000883	3.83
13	MP4C	X	1.911	1.83
14	MP4C	Z	-3.311	1.83
15	MP4C	Mx	-.000956	1.83
16	MP4C	X	1.911	3.83
17	MP4C	Z	-3.311	3.83
18	MP4C	Mx	-.000956	3.83
19	MP2A	X	5.104	.83
20	MP2A	Z	-8.84	.83
21	MP2A	Mx	-.004	.83
22	MP2A	X	5.104	4.83
23	MP2A	Z	-8.84	4.83
24	MP2A	Mx	-.004	4.83
25	MP2B	X	2.758	.83
26	MP2B	Z	-4.777	.83
27	MP2B	Mx	.005	.83
28	MP2B	X	2.758	4.83
29	MP2B	Z	-4.777	4.83
30	MP2B	Mx	.005	4.83
31	MP2C	X	5.104	.83
32	MP2C	Z	-8.84	.83
33	MP2C	Mx	-.004	.83
34	MP2C	X	5.104	4.83
35	MP2C	Z	-8.84	4.83
36	MP2C	Mx	-.004	4.83
37	MP3A	X	5.104	.83
38	MP3A	Z	-8.84	.83
39	MP3A	Mx	-.004	.83
40	MP3A	X	5.104	4.83
41	MP3A	Z	-8.84	4.83
42	MP3A	Mx	-.004	4.83
43	MP3B	X	2.758	.83
44	MP3B	Z	-4.777	.83
45	MP3B	Mx	.005	.83
46	MP3B	X	2.758	4.83
47	MP3B	Z	-4.777	4.83
48	MP3B	Mx	.005	4.83
49	MP3C	X	5.104	.83
50	MP3C	Z	-8.84	.83
51	MP3C	Mx	-.004	.83
52	MP3C	X	5.104	4.83
53	MP3C	Z	-8.84	4.83
54	MP3C	Mx	-.004	4.83
55	MP3A	X	1.645	.58
56	MP3A	Z	-2.85	.58
57	MP3A	Mx	.001	.58





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
58	MP3B	X	1.199	.58
59	MP3B	Z	-2.077	.58
60	MP3B	Mx	-.002	.58
61	MP3C	X	1.645	.58
62	MP3C	Z	-2.85	.58
63	MP3C	Mx	.001	.58
64	MP2A	X	1.588	.58
65	MP2A	Z	-2.751	.58
66	MP2A	Mx	.001	.58
67	MP2B	X	.971	.58
68	MP2B	Z	-1.682	.58
69	MP2B	Mx	-.001	.58
70	MP2C	X	1.588	.58
71	MP2C	Z	-2.751	.58
72	MP2C	Mx	.001	.58
73	M101	X	1.768	1
74	M101	Z	-3.062	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	2.123	1.83
2	MP4A	Z	-1.226	1.83
3	MP4A	Mx	-.001	1.83
4	MP4A	X	2.123	3.83
5	MP4A	Z	-1.226	3.83
6	MP4A	Mx	-.001	3.83
7	MP4B	X	2.123	1.83
8	MP4B	Z	-1.226	1.83
9	MP4B	Mx	.001	1.83
10	MP4B	X	2.123	3.83
11	MP4B	Z	-1.226	3.83
12	MP4B	Mx	.001	3.83
13	MP4C	X	3.905	1.83
14	MP4C	Z	-2.254	1.83
15	MP4C	Mx	0	1.83
16	MP4C	X	3.905	3.83
17	MP4C	Z	-2.254	3.83
18	MP4C	Mx	0	3.83
19	MP2A	X	6.131	.83
20	MP2A	Z	-3.54	.83
21	MP2A	Mx	-.005	.83
22	MP2A	X	6.131	4.83
23	MP2A	Z	-3.54	4.83
24	MP2A	Mx	-.005	4.83
25	MP2B	X	6.131	.83
26	MP2B	Z	-3.54	.83
27	MP2B	Mx	.005	.83
28	MP2B	X	6.131	4.83
29	MP2B	Z	-3.54	4.83
30	MP2B	Mx	.005	4.83
31	MP2C	X	10.194	.83
32	MP2C	Z	-5.886	.83
33	MP2C	Mx	0	.83
34	MP2C	X	10.194	4.83
35	MP2C	Z	-5.886	4.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
36	MP2C	Mx	0	4.83
37	MP3A	X	6.131	.83
38	MP3A	Z	-3.54	.83
39	MP3A	Mx	-.005	.83
40	MP3A	X	6.131	4.83
41	MP3A	Z	-3.54	4.83
42	MP3A	Mx	-.005	4.83
43	MP3B	X	6.131	.83
44	MP3B	Z	-3.54	.83
45	MP3B	Mx	.005	.83
46	MP3B	X	6.131	4.83
47	MP3B	Z	-3.54	4.83
48	MP3B	Mx	.005	4.83
49	MP3C	X	10.194	.83
50	MP3C	Z	-5.886	.83
51	MP3C	Mx	0	.83
52	MP3C	X	10.194	4.83
53	MP3C	Z	-5.886	4.83
54	MP3C	Mx	0	4.83
55	MP3A	X	2.335	.58
56	MP3A	Z	-1.348	.58
57	MP3A	Mx	.002	.58
58	MP3B	X	2.335	.58
59	MP3B	Z	-1.348	.58
60	MP3B	Mx	-.002	.58
61	MP3C	X	3.107	.58
62	MP3C	Z	-1.794	.58
63	MP3C	Mx	0	.58
64	MP2A	X	2.039	.58
65	MP2A	Z	-1.177	.58
66	MP2A	Mx	.002	.58
67	MP2B	X	2.039	.58
68	MP2B	Z	-1.177	.58
69	MP2B	Mx	-.002	.58
70	MP2C	X	3.107	.58
71	MP2C	Z	-1.794	.58
72	MP2C	Mx	0	.58
73	M101	X	2.698	1
74	M101	Z	-1.557	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	1.765	1.83
2	MP4A	Z	0	1.83
3	MP4A	Mx	-.000882	1.83
4	MP4A	X	1.765	3.83
5	MP4A	Z	0	3.83
6	MP4A	Mx	-.000882	3.83
7	MP4B	X	3.823	1.83
8	MP4B	Z	0	1.83
9	MP4B	Mx	.000956	1.83
10	MP4B	X	3.823	3.83
11	MP4B	Z	0	3.83
12	MP4B	Mx	.000956	3.83
13	MP4C	X	3.823	1.83



Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
14	MP4C	Z	0	1.83
15	MP4C	Mx	.000956	1.83
16	MP4C	X	3.823	3.83
17	MP4C	Z	0	3.83
18	MP4C	Mx	.000956	3.83
19	MP2A	X	5.516	.83
20	MP2A	Z	0	.83
21	MP2A	Mx	-.005	.83
22	MP2A	X	5.516	4.83
23	MP2A	Z	0	4.83
24	MP2A	Mx	-.005	4.83
25	MP2B	X	10.207	.83
26	MP2B	Z	0	.83
27	MP2B	Mx	.004	.83
28	MP2B	X	10.207	4.83
29	MP2B	Z	0	4.83
30	MP2B	Mx	.004	4.83
31	MP2C	X	10.207	.83
32	MP2C	Z	0	.83
33	MP2C	Mx	.004	.83
34	MP2C	X	10.207	4.83
35	MP2C	Z	0	4.83
36	MP2C	Mx	.004	4.83
37	MP3A	X	5.516	.83
38	MP3A	Z	0	.83
39	MP3A	Mx	-.005	.83
40	MP3A	X	5.516	4.83
41	MP3A	Z	0	4.83
42	MP3A	Mx	-.005	4.83
43	MP3B	X	10.207	.83
44	MP3B	Z	0	.83
45	MP3B	Mx	.004	.83
46	MP3B	X	10.207	4.83
47	MP3B	Z	0	4.83
48	MP3B	Mx	.004	4.83
49	MP3C	X	10.207	.83
50	MP3C	Z	0	.83
51	MP3C	Mx	.004	.83
52	MP3C	X	10.207	4.83
53	MP3C	Z	0	4.83
54	MP3C	Mx	.004	4.83
55	MP3A	X	2.398	.58
56	MP3A	Z	0	.58
57	MP3A	Mx	.002	.58
58	MP3B	X	3.291	.58
59	MP3B	Z	0	.58
60	MP3B	Mx	-.001	.58
61	MP3C	X	3.291	.58
62	MP3C	Z	0	.58
63	MP3C	Mx	-.001	.58
64	MP2A	X	1.943	.58
65	MP2A	Z	0	.58
66	MP2A	Mx	.001	.58
67	MP2B	X	3.177	.58
68	MP2B	Z	0	.58
69	MP2B	Mx	-.001	.58
70	MP2C	X	3.177	.58



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
71	MP2C	Z	0	.58
72	MP2C	Mx	-.001	.58
73	M101	X	3.535	1
74	M101	Z	0	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	2.123	1.83
2	MP4A	Z	1.226	1.83
3	MP4A	Mx	-.001	1.83
4	MP4A	X	2.123	3.83
5	MP4A	Z	1.226	3.83
6	MP4A	Mx	-.001	3.83
7	MP4B	X	3.905	1.83
8	MP4B	Z	2.254	1.83
9	MP4B	Mx	0	1.83
10	MP4B	X	3.905	3.83
11	MP4B	Z	2.254	3.83
12	MP4B	Mx	0	3.83
13	MP4C	X	2.123	1.83
14	MP4C	Z	1.226	1.83
15	MP4C	Mx	.001	1.83
16	MP4C	X	2.123	3.83
17	MP4C	Z	1.226	3.83
18	MP4C	Mx	.001	3.83
19	MP2A	X	6.131	.83
20	MP2A	Z	3.54	.83
21	MP2A	Mx	-.005	.83
22	MP2A	X	6.131	4.83
23	MP2A	Z	3.54	4.83
24	MP2A	Mx	-.005	4.83
25	MP2B	X	10.194	.83
26	MP2B	Z	5.886	.83
27	MP2B	Mx	0	.83
28	MP2B	X	10.194	4.83
29	MP2B	Z	5.886	4.83
30	MP2B	Mx	0	4.83
31	MP2C	X	6.131	.83
32	MP2C	Z	3.54	.83
33	MP2C	Mx	.005	.83
34	MP2C	X	6.131	4.83
35	MP2C	Z	3.54	4.83
36	MP2C	Mx	.005	4.83
37	MP3A	X	6.131	.83
38	MP3A	Z	3.54	.83
39	MP3A	Mx	-.005	.83
40	MP3A	X	6.131	4.83
41	MP3A	Z	3.54	4.83
42	MP3A	Mx	-.005	4.83
43	MP3B	X	10.194	.83
44	MP3B	Z	5.886	.83
45	MP3B	Mx	0	.83
46	MP3B	X	10.194	4.83
47	MP3B	Z	5.886	4.83
48	MP3B	Mx	0	4.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
49	MP3C	X	6.131	.83
50	MP3C	Z	3.54	.83
51	MP3C	Mx	.005	.83
52	MP3C	X	6.131	4.83
53	MP3C	Z	3.54	4.83
54	MP3C	Mx	.005	4.83
55	MP3A	X	2.335	.58
56	MP3A	Z	1.348	.58
57	MP3A	Mx	.002	.58
58	MP3B	X	3.107	.58
59	MP3B	Z	1.794	.58
60	MP3B	Mx	0	.58
61	MP3C	X	2.335	.58
62	MP3C	Z	1.348	.58
63	MP3C	Mx	-.002	.58
64	MP2A	X	2.039	.58
65	MP2A	Z	1.177	.58
66	MP2A	Mx	.002	.58
67	MP2B	X	3.107	.58
68	MP2B	Z	1.794	.58
69	MP2B	Mx	0	.58
70	MP2C	X	2.039	.58
71	MP2C	Z	1.177	.58
72	MP2C	Mx	-.002	.58
73	M101	X	3.79	1
74	M101	Z	2.188	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	1.911	1.83
2	MP4A	Z	3.311	1.83
3	MP4A	Mx	-.000956	1.83
4	MP4A	X	1.911	3.83
5	MP4A	Z	3.311	3.83
6	MP4A	Mx	-.000956	3.83
7	MP4B	X	1.911	1.83
8	MP4B	Z	3.311	1.83
9	MP4B	Mx	-.000956	1.83
10	MP4B	X	1.911	3.83
11	MP4B	Z	3.311	3.83
12	MP4B	Mx	-.000956	3.83
13	MP4C	X	.883	1.83
14	MP4C	Z	1.529	1.83
15	MP4C	Mx	.000883	1.83
16	MP4C	X	.883	3.83
17	MP4C	Z	1.529	3.83
18	MP4C	Mx	.000883	3.83
19	MP2A	X	5.104	.83
20	MP2A	Z	8.84	.83
21	MP2A	Mx	-.004	.83
22	MP2A	X	5.104	4.83
23	MP2A	Z	8.84	4.83
24	MP2A	Mx	-.004	4.83
25	MP2B	X	5.104	.83
26	MP2B	Z	8.84	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
27	MP2B	Mx	-0.04	.83
28	MP2B	X	5.104	4.83
29	MP2B	Z	8.84	4.83
30	MP2B	Mx	-0.04	4.83
31	MP2C	X	2.758	.83
32	MP2C	Z	4.777	.83
33	MP2C	Mx	.005	.83
34	MP2C	X	2.758	4.83
35	MP2C	Z	4.777	4.83
36	MP2C	Mx	.005	4.83
37	MP3A	X	5.104	.83
38	MP3A	Z	8.84	.83
39	MP3A	Mx	-0.04	.83
40	MP3A	X	5.104	4.83
41	MP3A	Z	8.84	4.83
42	MP3A	Mx	-0.04	4.83
43	MP3B	X	5.104	.83
44	MP3B	Z	8.84	.83
45	MP3B	Mx	-0.04	.83
46	MP3B	X	5.104	4.83
47	MP3B	Z	8.84	4.83
48	MP3B	Mx	-0.04	4.83
49	MP3C	X	2.758	.83
50	MP3C	Z	4.777	.83
51	MP3C	Mx	.005	.83
52	MP3C	X	2.758	4.83
53	MP3C	Z	4.777	4.83
54	MP3C	Mx	.005	4.83
55	MP3A	X	1.645	.58
56	MP3A	Z	2.85	.58
57	MP3A	Mx	.001	.58
58	MP3B	X	1.645	.58
59	MP3B	Z	2.85	.58
60	MP3B	Mx	.001	.58
61	MP3C	X	1.199	.58
62	MP3C	Z	2.077	.58
63	MP3C	Mx	-0.002	.58
64	MP2A	X	1.588	.58
65	MP2A	Z	2.751	.58
66	MP2A	Mx	.001	.58
67	MP2B	X	1.588	.58
68	MP2B	Z	2.751	.58
69	MP2B	Mx	.001	.58
70	MP2C	X	.971	.58
71	MP2C	Z	1.682	.58
72	MP2C	Mx	-0.001	.58
73	M101	X	2.398	1
74	M101	Z	4.154	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	0	1.83
2	MP4A	Z	4.509	1.83
3	MP4A	Mx	0	1.83
4	MP4A	X	0	3.83



Company : Maser Consulting Connecticut  
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 Job Number : 21777080A  
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**Member Point Loads (BLC 33 : Antenna Wm (180 Deg)) (Continued)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
5	MP4A	Z	4.509	3.83
6	MP4A	Mx	0	3.83
7	MP4B	X	0	1.83
8	MP4B	Z	2.451	1.83
9	MP4B	Mx	-.001	1.83
10	MP4B	X	0	3.83
11	MP4B	Z	2.451	3.83
12	MP4B	Mx	-.001	3.83
13	MP4C	X	0	1.83
14	MP4C	Z	2.451	1.83
15	MP4C	Mx	.001	1.83
16	MP4C	X	0	3.83
17	MP4C	Z	2.451	3.83
18	MP4C	Mx	.001	3.83
19	MP2A	X	0	.83
20	MP2A	Z	11.771	.83
21	MP2A	Mx	0	.83
22	MP2A	X	0	4.83
23	MP2A	Z	11.771	4.83
24	MP2A	Mx	0	4.83
25	MP2B	X	0	.83
26	MP2B	Z	7.08	.83
27	MP2B	Mx	-.005	.83
28	MP2B	X	0	4.83
29	MP2B	Z	7.08	4.83
30	MP2B	Mx	-.005	4.83
31	MP2C	X	0	.83
32	MP2C	Z	7.08	.83
33	MP2C	Mx	.005	.83
34	MP2C	X	0	4.83
35	MP2C	Z	7.08	4.83
36	MP2C	Mx	.005	4.83
37	MP3A	X	0	.83
38	MP3A	Z	11.771	.83
39	MP3A	Mx	0	.83
40	MP3A	X	0	4.83
41	MP3A	Z	11.771	4.83
42	MP3A	Mx	0	4.83
43	MP3B	X	0	.83
44	MP3B	Z	7.08	.83
45	MP3B	Mx	-.005	.83
46	MP3B	X	0	4.83
47	MP3B	Z	7.08	4.83
48	MP3B	Mx	-.005	4.83
49	MP3C	X	0	.83
50	MP3C	Z	7.08	.83
51	MP3C	Mx	.005	.83
52	MP3C	X	0	4.83
53	MP3C	Z	7.08	4.83
54	MP3C	Mx	.005	4.83
55	MP3A	X	0	.58
56	MP3A	Z	3.588	.58
57	MP3A	Mx	0	.58
58	MP3B	X	0	.58
59	MP3B	Z	2.696	.58
60	MP3B	Mx	.002	.58
61	MP3C	X	0	.58





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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
62	MP3C	Z	2.696	.58
63	MP3C	Mx	-0.002	.58
64	MP2A	X	0	.58
65	MP2A	Z	3.588	.58
66	MP2A	Mx	0	.58
67	MP2B	X	0	.58
68	MP2B	Z	2.354	.58
69	MP2B	Mx	.002	.58
70	MP2C	X	0	.58
71	MP2C	Z	2.354	.58
72	MP2C	Mx	-0.002	.58
73	M101	X	0	1
74	M101	Z	4.376	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
1	MP4A	X	-1.911	1.83
2	MP4A	Z	3.311	1.83
3	MP4A	Mx	.000956	1.83
4	MP4A	X	-1.911	3.83
5	MP4A	Z	3.311	3.83
6	MP4A	Mx	.000956	3.83
7	MP4B	X	-.883	1.83
8	MP4B	Z	1.529	1.83
9	MP4B	Mx	-.000883	1.83
10	MP4B	X	-.883	3.83
11	MP4B	Z	1.529	3.83
12	MP4B	Mx	-.000883	3.83
13	MP4C	X	-1.911	1.83
14	MP4C	Z	3.311	1.83
15	MP4C	Mx	.000956	1.83
16	MP4C	X	-1.911	3.83
17	MP4C	Z	3.311	3.83
18	MP4C	Mx	.000956	3.83
19	MP2A	X	-5.104	.83
20	MP2A	Z	8.84	.83
21	MP2A	Mx	.004	.83
22	MP2A	X	-5.104	4.83
23	MP2A	Z	8.84	4.83
24	MP2A	Mx	.004	4.83
25	MP2B	X	-2.758	.83
26	MP2B	Z	4.777	.83
27	MP2B	Mx	-.005	.83
28	MP2B	X	-2.758	4.83
29	MP2B	Z	4.777	4.83
30	MP2B	Mx	-.005	4.83
31	MP2C	X	-5.104	.83
32	MP2C	Z	8.84	.83
33	MP2C	Mx	.004	.83
34	MP2C	X	-5.104	4.83
35	MP2C	Z	8.84	4.83
36	MP2C	Mx	.004	4.83
37	MP3A	X	-5.104	.83
38	MP3A	Z	8.84	.83
39	MP3A	Mx	.004	.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
40	MP3A	X	-5.104	4.83
41	MP3A	Z	8.84	4.83
42	MP3A	Mx	.004	4.83
43	MP3B	X	-2.758	.83
44	MP3B	Z	4.777	.83
45	MP3B	Mx	-.005	.83
46	MP3B	X	-2.758	4.83
47	MP3B	Z	4.777	4.83
48	MP3B	Mx	-.005	4.83
49	MP3C	X	-5.104	.83
50	MP3C	Z	8.84	.83
51	MP3C	Mx	.004	.83
52	MP3C	X	-5.104	4.83
53	MP3C	Z	8.84	4.83
54	MP3C	Mx	.004	4.83
55	MP3A	X	-1.645	.58
56	MP3A	Z	2.85	.58
57	MP3A	Mx	-.001	.58
58	MP3B	X	-1.199	.58
59	MP3B	Z	2.077	.58
60	MP3B	Mx	.002	.58
61	MP3C	X	-1.645	.58
62	MP3C	Z	2.85	.58
63	MP3C	Mx	-.001	.58
64	MP2A	X	-1.588	.58
65	MP2A	Z	2.751	.58
66	MP2A	Mx	-.001	.58
67	MP2B	X	-.971	.58
68	MP2B	Z	1.682	.58
69	MP2B	Mx	.001	.58
70	MP2C	X	-1.588	.58
71	MP2C	Z	2.751	.58
72	MP2C	Mx	-.001	.58
73	M101	X	-1.768	1
74	M101	Z	3.062	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	-2.123	1.83
2	MP4A	Z	1.226	1.83
3	MP4A	Mx	.001	1.83
4	MP4A	X	-2.123	3.83
5	MP4A	Z	1.226	3.83
6	MP4A	Mx	.001	3.83
7	MP4B	X	-2.123	1.83
8	MP4B	Z	1.226	1.83
9	MP4B	Mx	-.001	1.83
10	MP4B	X	-2.123	3.83
11	MP4B	Z	1.226	3.83
12	MP4B	Mx	-.001	3.83
13	MP4C	X	-3.905	1.83
14	MP4C	Z	2.254	1.83
15	MP4C	Mx	0	1.83
16	MP4C	X	-3.905	3.83
17	MP4C	Z	2.254	3.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
18	MP4C	Mx	0	3.83
19	MP2A	X	-6.131	.83
20	MP2A	Z	3.54	.83
21	MP2A	Mx	.005	.83
22	MP2A	X	-6.131	4.83
23	MP2A	Z	3.54	4.83
24	MP2A	Mx	.005	4.83
25	MP2B	X	-6.131	.83
26	MP2B	Z	3.54	.83
27	MP2B	Mx	-.005	.83
28	MP2B	X	-6.131	4.83
29	MP2B	Z	3.54	4.83
30	MP2B	Mx	-.005	4.83
31	MP2C	X	-10.194	.83
32	MP2C	Z	5.886	.83
33	MP2C	Mx	0	.83
34	MP2C	X	-10.194	4.83
35	MP2C	Z	5.886	4.83
36	MP2C	Mx	0	4.83
37	MP3A	X	-6.131	.83
38	MP3A	Z	3.54	.83
39	MP3A	Mx	.005	.83
40	MP3A	X	-6.131	4.83
41	MP3A	Z	3.54	4.83
42	MP3A	Mx	.005	4.83
43	MP3B	X	-6.131	.83
44	MP3B	Z	3.54	.83
45	MP3B	Mx	-.005	.83
46	MP3B	X	-6.131	4.83
47	MP3B	Z	3.54	4.83
48	MP3B	Mx	-.005	4.83
49	MP3C	X	-10.194	.83
50	MP3C	Z	5.886	.83
51	MP3C	Mx	0	.83
52	MP3C	X	-10.194	4.83
53	MP3C	Z	5.886	4.83
54	MP3C	Mx	0	4.83
55	MP3A	X	-2.335	.58
56	MP3A	Z	1.348	.58
57	MP3A	Mx	-.002	.58
58	MP3B	X	-2.335	.58
59	MP3B	Z	1.348	.58
60	MP3B	Mx	.002	.58
61	MP3C	X	-3.107	.58
62	MP3C	Z	1.794	.58
63	MP3C	Mx	0	.58
64	MP2A	X	-2.039	.58
65	MP2A	Z	1.177	.58
66	MP2A	Mx	-.002	.58
67	MP2B	X	-2.039	.58
68	MP2B	Z	1.177	.58
69	MP2B	Mx	.002	.58
70	MP2C	X	-3.107	.58
71	MP2C	Z	1.794	.58
72	MP2C	Mx	0	.58
73	M101	X	-2.698	1
74	M101	Z	1.557	1



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft. %]
1	MP4A	X	-1.765	1.83
2	MP4A	Z	0	1.83
3	MP4A	Mx	.000882	1.83
4	MP4A	X	-1.765	3.83
5	MP4A	Z	0	3.83
6	MP4A	Mx	.000882	3.83
7	MP4B	X	-3.823	1.83
8	MP4B	Z	0	1.83
9	MP4B	Mx	-.000956	1.83
10	MP4B	X	-3.823	3.83
11	MP4B	Z	0	3.83
12	MP4B	Mx	-.000956	3.83
13	MP4C	X	-3.823	1.83
14	MP4C	Z	0	1.83
15	MP4C	Mx	-.000956	1.83
16	MP4C	X	-3.823	3.83
17	MP4C	Z	0	3.83
18	MP4C	Mx	-.000956	3.83
19	MP2A	X	-5.516	.83
20	MP2A	Z	0	.83
21	MP2A	Mx	.005	.83
22	MP2A	X	-5.516	4.83
23	MP2A	Z	0	4.83
24	MP2A	Mx	.005	4.83
25	MP2B	X	-10.207	.83
26	MP2B	Z	0	.83
27	MP2B	Mx	-.004	.83
28	MP2B	X	-10.207	4.83
29	MP2B	Z	0	4.83
30	MP2B	Mx	-.004	4.83
31	MP2C	X	-10.207	.83
32	MP2C	Z	0	.83
33	MP2C	Mx	-.004	.83
34	MP2C	X	-10.207	4.83
35	MP2C	Z	0	4.83
36	MP2C	Mx	-.004	4.83
37	MP3A	X	-5.516	.83
38	MP3A	Z	0	.83
39	MP3A	Mx	.005	.83
40	MP3A	X	-5.516	4.83
41	MP3A	Z	0	4.83
42	MP3A	Mx	.005	4.83
43	MP3B	X	-10.207	.83
44	MP3B	Z	0	.83
45	MP3B	Mx	-.004	.83
46	MP3B	X	-10.207	4.83
47	MP3B	Z	0	4.83
48	MP3B	Mx	-.004	4.83
49	MP3C	X	-10.207	.83
50	MP3C	Z	0	.83
51	MP3C	Mx	-.004	.83
52	MP3C	X	-10.207	4.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
53	MP3C	Z	0	4.83
54	MP3C	Mx	-.004	4.83
55	MP3A	X	-2.398	.58
56	MP3A	Z	0	.58
57	MP3A	Mx	-.002	.58
58	MP3B	X	-3.291	.58
59	MP3B	Z	0	.58
60	MP3B	Mx	.001	.58
61	MP3C	X	-3.291	.58
62	MP3C	Z	0	.58
63	MP3C	Mx	.001	.58
64	MP2A	X	-1.943	.58
65	MP2A	Z	0	.58
66	MP2A	Mx	-.001	.58
67	MP2B	X	-3.177	.58
68	MP2B	Z	0	.58
69	MP2B	Mx	.001	.58
70	MP2C	X	-3.177	.58
71	MP2C	Z	0	.58
72	MP2C	Mx	.001	.58
73	M101	X	-3.535	1
74	M101	Z	0	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft,%]
1	MP4A	X	-2.123	1.83
2	MP4A	Z	-1.226	1.83
3	MP4A	Mx	.001	1.83
4	MP4A	X	-2.123	3.83
5	MP4A	Z	-1.226	3.83
6	MP4A	Mx	.001	3.83
7	MP4B	X	-3.905	1.83
8	MP4B	Z	-2.254	1.83
9	MP4B	Mx	0	1.83
10	MP4B	X	-3.905	3.83
11	MP4B	Z	-2.254	3.83
12	MP4B	Mx	0	3.83
13	MP4C	X	-2.123	1.83
14	MP4C	Z	-1.226	1.83
15	MP4C	Mx	-.001	1.83
16	MP4C	X	-2.123	3.83
17	MP4C	Z	-1.226	3.83
18	MP4C	Mx	-.001	3.83
19	MP2A	X	-6.131	.83
20	MP2A	Z	-3.54	.83
21	MP2A	Mx	.005	.83
22	MP2A	X	-6.131	4.83
23	MP2A	Z	-3.54	4.83
24	MP2A	Mx	.005	4.83
25	MP2B	X	-10.194	.83
26	MP2B	Z	-5.886	.83
27	MP2B	Mx	0	.83
28	MP2B	X	-10.194	4.83
29	MP2B	Z	-5.886	4.83
30	MP2B	Mx	0	4.83



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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
31	MP2C	X	-6.131	.83
32	MP2C	Z	-3.54	.83
33	MP2C	Mx	-.005	.83
34	MP2C	X	-6.131	4.83
35	MP2C	Z	-3.54	4.83
36	MP2C	Mx	-.005	4.83
37	MP3A	X	-6.131	.83
38	MP3A	Z	-3.54	.83
39	MP3A	Mx	.005	.83
40	MP3A	X	-6.131	4.83
41	MP3A	Z	-3.54	4.83
42	MP3A	Mx	.005	4.83
43	MP3B	X	-10.194	.83
44	MP3B	Z	-5.886	.83
45	MP3B	Mx	0	.83
46	MP3B	X	-10.194	4.83
47	MP3B	Z	-5.886	4.83
48	MP3B	Mx	0	4.83
49	MP3C	X	-6.131	.83
50	MP3C	Z	-3.54	.83
51	MP3C	Mx	-.005	.83
52	MP3C	X	-6.131	4.83
53	MP3C	Z	-3.54	4.83
54	MP3C	Mx	-.005	4.83
55	MP3A	X	-2.335	.58
56	MP3A	Z	-1.348	.58
57	MP3A	Mx	-.002	.58
58	MP3B	X	-3.107	.58
59	MP3B	Z	-1.794	.58
60	MP3B	Mx	0	.58
61	MP3C	X	-2.335	.58
62	MP3C	Z	-1.348	.58
63	MP3C	Mx	.002	.58
64	MP2A	X	-2.039	.58
65	MP2A	Z	-1.177	.58
66	MP2A	Mx	-.002	.58
67	MP2B	X	-3.107	.58
68	MP2B	Z	-1.794	.58
69	MP2B	Mx	0	.58
70	MP2C	X	-2.039	.58
71	MP2C	Z	-1.177	.58
72	MP2C	Mx	.002	.58
73	M101	X	-3.79	1
74	M101	Z	-2.188	1
75	M101	Mx	0	1

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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	MP4A	X	-1.911	1.83
2	MP4A	Z	-3.311	1.83
3	MP4A	Mx	.000956	1.83
4	MP4A	X	-1.911	3.83
5	MP4A	Z	-3.311	3.83
6	MP4A	Mx	.000956	3.83
7	MP4B	X	-1.911	1.83
8	MP4B	Z	-3.311	1.83



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

	Member Label	Direction	Magnitude[lb,k-ft]	Location[ft,%]
9	MP4B	Mx	.000956	1.83
10	MP4B	X	-1.911	3.83
11	MP4B	Z	-3.311	3.83
12	MP4B	Mx	.000956	3.83
13	MP4C	X	-.883	1.83
14	MP4C	Z	-1.529	1.83
15	MP4C	Mx	-.000883	1.83
16	MP4C	X	-.883	3.83
17	MP4C	Z	-1.529	3.83
18	MP4C	Mx	-.000883	3.83
19	MP2A	X	-5.104	.83
20	MP2A	Z	-8.84	.83
21	MP2A	Mx	.004	.83
22	MP2A	X	-5.104	4.83
23	MP2A	Z	-8.84	4.83
24	MP2A	Mx	.004	4.83
25	MP2B	X	-5.104	.83
26	MP2B	Z	-8.84	.83
27	MP2B	Mx	.004	.83
28	MP2B	X	-5.104	4.83
29	MP2B	Z	-8.84	4.83
30	MP2B	Mx	.004	4.83
31	MP2C	X	-2.758	.83
32	MP2C	Z	-4.777	.83
33	MP2C	Mx	-.005	.83
34	MP2C	X	-2.758	4.83
35	MP2C	Z	-4.777	4.83
36	MP2C	Mx	-.005	4.83
37	MP3A	X	-5.104	.83
38	MP3A	Z	-8.84	.83
39	MP3A	Mx	.004	.83
40	MP3A	X	-5.104	4.83
41	MP3A	Z	-8.84	4.83
42	MP3A	Mx	.004	4.83
43	MP3B	X	-5.104	.83
44	MP3B	Z	-8.84	.83
45	MP3B	Mx	.004	.83
46	MP3B	X	-5.104	4.83
47	MP3B	Z	-8.84	4.83
48	MP3B	Mx	.004	4.83
49	MP3C	X	-2.758	.83
50	MP3C	Z	-4.777	.83
51	MP3C	Mx	-.005	.83
52	MP3C	X	-2.758	4.83
53	MP3C	Z	-4.777	4.83
54	MP3C	Mx	-.005	4.83
55	MP3A	X	-1.645	.58
56	MP3A	Z	-2.85	.58
57	MP3A	Mx	-.001	.58
58	MP3B	X	-1.645	.58
59	MP3B	Z	-2.85	.58
60	MP3B	Mx	-.001	.58
61	MP3C	X	-1.199	.58
62	MP3C	Z	-2.077	.58
63	MP3C	Mx	.002	.58
64	MP2A	X	-1.588	.58
65	MP2A	Z	-2.751	.58





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

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
66	MP2A	Mx	-.001	.58
67	MP2B	X	-1.588	.58
68	MP2B	Z	-2.751	.58
69	MP2B	Mx	-.001	.58
70	MP2C	X	-.971	.58
71	MP2C	Z	-1.682	.58
72	MP2C	Mx	.001	.58
73	M101	X	-2.398	1
74	M101	Z	-4.154	1
75	M101	Mx	0	1

**Member Point Loads (BLC 77 : Lm1)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M1	Y	-500	%40

**Member Point Loads (BLC 78 : Lm2)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M1	Y	-500	%60

**Member Point Loads (BLC 79 : Lv1)**

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

**Member Point Loads (BLC 80 : Lv2)**

	Member Label	Direction	Magnitude[lb.k-ft]	Location[ft.%]
1	M1	Y	-250	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
1	M1	Y	-10.542	-10.542	0	%100
2	MP4A	Y	-8.247	-8.247	0	%100
3	MP3A	Y	-8.247	-8.247	0	%100
4	MP2A	Y	-8.247	-8.247	0	%100
5	MP1A	Y	-8.247	-8.247	0	%100
6	M53	Y	-10.542	-10.542	0	%100
7	M54	Y	-10.542	-10.542	0	%100
8	M65	Y	-10.542	-10.542	0	%100
9	M66	Y	-10.542	-10.542	0	%100
10	M67	Y	-15.295	-15.295	0	%100
11	M74	Y	-9.172	-9.172	0	%100
12	M75	Y	-9.172	-9.172	0	%100
13	M25	Y	-8.247	-8.247	0	%100
14	M34	Y	-10.542	-10.542	0	%100
15	M35	Y	-10.542	-10.542	0	%100
16	M38	Y	-10.542	-10.542	0	%100
17	M39	Y	-10.542	-10.542	0	%100
18	M40	Y	-15.295	-15.295	0	%100
19	M41	Y	-9.172	-9.172	0	%100
20	M42	Y	-9.172	-9.172	0	%100
21	M49	Y	-10.542	-10.542	0	%100
22	M50	Y	-10.542	-10.542	0	%100
23	M53A	Y	-10.542	-10.542	0	%100
24	M54A	Y	-10.542	-10.542	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.%,]
25	M55	Y	-15.295	-15.295	0	%100
26	M56	Y	-9.172	-9.172	0	%100
27	M57	Y	-9.172	-9.172	0	%100
28	M62A	Y	-10.542	-10.542	0	%100
29	MP4C	Y	-8.247	-8.247	0	%100
30	MP3C	Y	-8.247	-8.247	0	%100
31	MP2C	Y	-8.247	-8.247	0	%100
32	MP1C	Y	-8.247	-8.247	0	%100
33	M71	Y	-8.247	-8.247	0	%100
34	M78	Y	-10.542	-10.542	0	%100
35	MP4B	Y	-8.247	-8.247	0	%100
36	MP3B	Y	-8.247	-8.247	0	%100
37	MP2B	Y	-8.247	-8.247	0	%100
38	MP1B	Y	-8.247	-8.247	0	%100
39	M87	Y	-8.247	-8.247	0	%100
40	M94A	Y	-8.247	-8.247	0	%100
41	M95A	Y	-8.247	-8.247	0	%100
42	M96A	Y	-8.247	-8.247	0	%100
43	M97	Y	-16.405	-16.405	0	%100
44	M98	Y	-16.405	-16.405	0	%100
45	M99	Y	-16.405	-16.405	0	%100
46	M101	Y	-8.247	-8.247	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	-10.214	-10.214	0	%100
3	MP4A	X	0	0	0	%100
4	MP4A	Z	-6.931	-6.931	0	%100
5	MP3A	X	0	0	0	%100
6	MP3A	Z	-6.931	-6.931	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	-6.931	-6.931	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	-6.931	-6.931	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	-5.958	-5.958	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	-6.755	-6.755	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	-5.958	-5.958	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	-6.755	-6.755	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	0	0	0	%100
22	M74	Z	-1.881	-1.881	0	%100
23	M75	X	0	0	0	%100
24	M75	Z	-1.881	-1.881	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	-6.931	-6.931	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	-1.49	-1.49	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	-1.689	-1.689	0	%100
31	M38	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
32	M38	Z	-1.49	-1.49	0 %100
33	M39	X	0	0	0 %100
34	M39	Z	-1.689	-1.689	0 %100
35	M40	X	0	0	0 %100
36	M40	Z	-9.263	-9.263	0 %100
37	M41	X	0	0	0 %100
38	M41	Z	-2.242	-2.242	0 %100
39	M42	X	0	0	0 %100
40	M42	Z	-8.23	-8.23	0 %100
41	M49	X	0	0	0 %100
42	M49	Z	-1.49	-1.49	0 %100
43	M50	X	0	0	0 %100
44	M50	Z	-1.689	-1.689	0 %100
45	M53A	X	0	0	0 %100
46	M53A	Z	-1.49	-1.49	0 %100
47	M54A	X	0	0	0 %100
48	M54A	Z	-1.689	-1.689	0 %100
49	M55	X	0	0	0 %100
50	M55	Z	-9.263	-9.263	0 %100
51	M56	X	0	0	0 %100
52	M56	Z	-8.23	-8.23	0 %100
53	M57	X	0	0	0 %100
54	M57	Z	-2.242	-2.242	0 %100
55	M62A	X	0	0	0 %100
56	M62A	Z	-2.554	-2.554	0 %100
57	MP4C	X	0	0	0 %100
58	MP4C	Z	-6.931	-6.931	0 %100
59	MP3C	X	0	0	0 %100
60	MP3C	Z	-6.931	-6.931	0 %100
61	MP2C	X	0	0	0 %100
62	MP2C	Z	-6.931	-6.931	0 %100
63	MP1C	X	0	0	0 %100
64	MP1C	Z	-6.931	-6.931	0 %100
65	M71	X	0	0	0 %100
66	M71	Z	-1.733	-1.733	0 %100
67	M78	X	0	0	0 %100
68	M78	Z	-2.554	-2.554	0 %100
69	MP4B	X	0	0	0 %100
70	MP4B	Z	-6.931	-6.931	0 %100
71	MP3B	X	0	0	0 %100
72	MP3B	Z	-6.931	-6.931	0 %100
73	MP2B	X	0	0	0 %100
74	MP2B	Z	-6.931	-6.931	0 %100
75	MP1B	X	0	0	0 %100
76	MP1B	Z	-6.931	-6.931	0 %100
77	M87	X	0	0	0 %100
78	M87	Z	-1.733	-1.733	0 %100
79	M94A	X	0	0	0 %100
80	M94A	Z	-1.196	-1.196	0 %100
81	M95A	X	0	0	0 %100
82	M95A	Z	-1.196	-1.196	0 %100
83	M96A	X	0	0	0 %100
84	M96A	Z	-4.785	-4.785	0 %100
85	M97	X	0	0	0 %100
86	M97	Z	-13.775	-13.775	0 %100
87	M98	X	0	0	0 %100
88	M98	Z	-14.387	-14.387	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
89	M99	X	0	0	0	%100
90	M99	Z	-14.387	-14.387	0	%100
91	M101	X	0	0	0	%100
92	M101	Z	-6.316	-6.316	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	3.83	3.83	0	%100
2	M1	Z	-6.634	-6.634	0	%100
3	MP4A	X	3.465	3.465	0	%100
4	MP4A	Z	-6.002	-6.002	0	%100
5	MP3A	X	3.465	3.465	0	%100
6	MP3A	Z	-6.002	-6.002	0	%100
7	MP2A	X	3.465	3.465	0	%100
8	MP2A	Z	-6.002	-6.002	0	%100
9	MP1A	X	3.465	3.465	0	%100
10	MP1A	Z	-6.002	-6.002	0	%100
11	M53	X	2.234	2.234	0	%100
12	M53	Z	-3.87	-3.87	0	%100
13	M54	X	2.533	2.533	0	%100
14	M54	Z	-4.388	-4.388	0	%100
15	M65	X	2.234	2.234	0	%100
16	M65	Z	-3.87	-3.87	0	%100
17	M66	X	2.533	2.533	0	%100
18	M66	Z	-4.388	-4.388	0	%100
19	M67	X	1.544	1.544	0	%100
20	M67	Z	-2.674	-2.674	0	%100
21	M74	X	2.997	2.997	0	%100
22	M74	Z	-5.191	-5.191	0	%100
23	M75	X	.003	.003	0	%100
24	M75	Z	-.005	-.005	0	%100
25	M25	X	2.599	2.599	0	%100
26	M25	Z	-4.502	-4.502	0	%100
27	M34	X	2.234	2.234	0	%100
28	M34	Z	-3.87	-3.87	0	%100
29	M35	X	2.533	2.533	0	%100
30	M35	Z	-4.388	-4.388	0	%100
31	M38	X	2.234	2.234	0	%100
32	M38	Z	-3.87	-3.87	0	%100
33	M39	X	2.533	2.533	0	%100
34	M39	Z	-4.388	-4.388	0	%100
35	M40	X	1.544	1.544	0	%100
36	M40	Z	-2.674	-2.674	0	%100
37	M41	X	.003	.003	0	%100
38	M41	Z	-.005	-.005	0	%100
39	M42	X	2.997	2.997	0	%100
40	M42	Z	-5.191	-5.191	0	%100
41	M49	X	0	0	0	%100
42	M49	Z	0	0	0	%100
43	M50	X	0	0	0	%100
44	M50	Z	0	0	0	%100
45	M53A	X	0	0	0	%100
46	M53A	Z	0	0	0	%100
47	M54A	X	0	0	0	%100
48	M54A	Z	0	0	0	%100
49	M55	X	6.175	6.175	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
50	M55	Z	-10.696	-10.696	0 %100
51	M56	X	3.177	3.177	0 %100
52	M56	Z	-5.503	-5.503	0 %100
53	M57	X	3.177	3.177	0 %100
54	M57	Z	-5.503	-5.503	0 %100
55	M62A	X	3.83	3.83	0 %100
56	M62A	Z	-6.634	-6.634	0 %100
57	MP4C	X	3.465	3.465	0 %100
58	MP4C	Z	-6.002	-6.002	0 %100
59	MP3C	X	3.465	3.465	0 %100
60	MP3C	Z	-6.002	-6.002	0 %100
61	MP2C	X	3.465	3.465	0 %100
62	MP2C	Z	-6.002	-6.002	0 %100
63	MP1C	X	3.465	3.465	0 %100
64	MP1C	Z	-6.002	-6.002	0 %100
65	M71	X	2.599	2.599	0 %100
66	M71	Z	-4.502	-4.502	0 %100
67	M78	X	0	0	0 %100
68	M78	Z	0	0	0 %100
69	MP4B	X	3.465	3.465	0 %100
70	MP4B	Z	-6.002	-6.002	0 %100
71	MP3B	X	3.465	3.465	0 %100
72	MP3B	Z	-6.002	-6.002	0 %100
73	MP2B	X	3.465	3.465	0 %100
74	MP2B	Z	-6.002	-6.002	0 %100
75	MP1B	X	3.465	3.465	0 %100
76	MP1B	Z	-6.002	-6.002	0 %100
77	M87	X	0	0	0 %100
78	M87	Z	0	0	0 %100
79	M94A	X	1.794	1.794	0 %100
80	M94A	Z	-3.108	-3.108	0 %100
81	M95A	X	0	0	0 %100
82	M95A	Z	0	0	0 %100
83	M96A	X	1.794	1.794	0 %100
84	M96A	Z	-3.108	-3.108	0 %100
85	M97	X	6.99	6.99	0 %100
86	M97	Z	-12.106	-12.106	0 %100
87	M98	X	6.99	6.99	0 %100
88	M98	Z	-12.106	-12.106	0 %100
89	M99	X	7.296	7.296	0 %100
90	M99	Z	-12.637	-12.637	0 %100
91	M101	X	3.158	3.158	0 %100
92	M101	Z	-5.47	-5.47	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	2.211	2.211	0 %100
2	M1	Z	-1.277	-1.277	0 %100
3	MP4A	X	6.002	6.002	0 %100
4	MP4A	Z	-3.465	-3.465	0 %100
5	MP3A	X	6.002	6.002	0 %100
6	MP3A	Z	-3.465	-3.465	0 %100
7	MP2A	X	6.002	6.002	0 %100
8	MP2A	Z	-3.465	-3.465	0 %100
9	MP1A	X	6.002	6.002	0 %100
10	MP1A	Z	-3.465	-3.465	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, %]
11	M53	X	1.29	1.29	0 %100
12	M53	Z	-745	-745	0 %100
13	M54	X	1.463	1.463	0 %100
14	M54	Z	-844	-844	0 %100
15	M65	X	1.29	1.29	0 %100
16	M65	Z	-745	-745	0 %100
17	M66	X	1.463	1.463	0 %100
18	M66	Z	-844	-844	0 %100
19	M67	X	8.022	8.022	0 %100
20	M67	Z	-4.631	-4.631	0 %100
21	M74	X	7.128	7.128	0 %100
22	M74	Z	-4.115	-4.115	0 %100
23	M75	X	1.941	1.941	0 %100
24	M75	Z	-1.121	-1.121	0 %100
25	M25	X	1.501	1.501	0 %100
26	M25	Z	-866	-866	0 %100
27	M34	X	5.16	5.16	0 %100
28	M34	Z	-2.979	-2.979	0 %100
29	M35	X	5.85	5.85	0 %100
30	M35	Z	-3.378	-3.378	0 %100
31	M38	X	5.16	5.16	0 %100
32	M38	Z	-2.979	-2.979	0 %100
33	M39	X	5.85	5.85	0 %100
34	M39	Z	-3.378	-3.378	0 %100
35	M40	X	0	0	0 %100
36	M40	Z	0	0	0 %100
37	M41	X	1.629	1.629	0 %100
38	M41	Z	-941	-941	0 %100
39	M42	X	1.629	1.629	0 %100
40	M42	Z	-941	-941	0 %100
41	M49	X	1.29	1.29	0 %100
42	M49	Z	-745	-745	0 %100
43	M50	X	1.463	1.463	0 %100
44	M50	Z	-844	-844	0 %100
45	M53A	X	1.29	1.29	0 %100
46	M53A	Z	-745	-745	0 %100
47	M54A	X	1.463	1.463	0 %100
48	M54A	Z	-844	-844	0 %100
49	M55	X	8.022	8.022	0 %100
50	M55	Z	-4.631	-4.631	0 %100
51	M56	X	1.941	1.941	0 %100
52	M56	Z	-1.121	-1.121	0 %100
53	M57	X	7.128	7.128	0 %100
54	M57	Z	-4.115	-4.115	0 %100
55	M62A	X	8.846	8.846	0 %100
56	M62A	Z	-5.107	-5.107	0 %100
57	MP4C	X	6.002	6.002	0 %100
58	MP4C	Z	-3.465	-3.465	0 %100
59	MP3C	X	6.002	6.002	0 %100
60	MP3C	Z	-3.465	-3.465	0 %100
61	MP2C	X	6.002	6.002	0 %100
62	MP2C	Z	-3.465	-3.465	0 %100
63	MP1C	X	6.002	6.002	0 %100
64	MP1C	Z	-3.465	-3.465	0 %100
65	M71	X	6.002	6.002	0 %100
66	M71	Z	-3.465	-3.465	0 %100
67	M78	X	2.211	2.211	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.%,]
68	M78	Z	-1.277	-1.277	0	%100
69	MP4B	X	6.002	6.002	0	%100
70	MP4B	Z	-3.465	-3.465	0	%100
71	MP3B	X	6.002	6.002	0	%100
72	MP3B	Z	-3.465	-3.465	0	%100
73	MP2B	X	6.002	6.002	0	%100
74	MP2B	Z	-3.465	-3.465	0	%100
75	MP1B	X	6.002	6.002	0	%100
76	MP1B	Z	-3.465	-3.465	0	%100
77	M87	X	1.501	1.501	0	%100
78	M87	Z	-0.866	-0.866	0	%100
79	M94A	X	4.144	4.144	0	%100
80	M94A	Z	-2.392	-2.392	0	%100
81	M95A	X	1.036	1.036	0	%100
82	M95A	Z	-0.598	-0.598	0	%100
83	M96A	X	1.036	1.036	0	%100
84	M96A	Z	-0.598	-0.598	0	%100
85	M97	X	12.46	12.46	0	%100
86	M97	Z	-7.194	-7.194	0	%100
87	M98	X	11.93	11.93	0	%100
88	M98	Z	-6.888	-6.888	0	%100
89	M99	X	12.46	12.46	0	%100
90	M99	Z	-7.194	-7.194	0	%100
91	M101	X	5.47	5.47	0	%100
92	M101	Z	-3.158	-3.158	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	MP4A	X	6.931	6.931	0	%100
4	MP4A	Z	0	0	0	%100
5	MP3A	X	6.931	6.931	0	%100
6	MP3A	Z	0	0	0	%100
7	MP2A	X	6.931	6.931	0	%100
8	MP2A	Z	0	0	0	%100
9	MP1A	X	6.931	6.931	0	%100
10	MP1A	Z	0	0	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	0	0	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	0	0	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	0	0	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	0	0	0	%100
19	M67	X	12.35	12.35	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	6.354	6.354	0	%100
22	M74	Z	0	0	0	%100
23	M75	X	6.354	6.354	0	%100
24	M75	Z	0	0	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	0	0	0	%100
27	M34	X	4.469	4.469	0	%100
28	M34	Z	0	0	0	%100





Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

**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, %]
29	M35	X	5.066	5.066	0 %100
30	M35	Z	0	0	0 %100
31	M38	X	4.469	4.469	0 %100
32	M38	Z	0	0	0 %100
33	M39	X	5.066	5.066	0 %100
34	M39	Z	0	0	0 %100
35	M40	X	3.088	3.088	0 %100
36	M40	Z	0	0	0 %100
37	M41	X	5.994	5.994	0 %100
38	M41	Z	0	0	0 %100
39	M42	X	.005	.005	0 %100
40	M42	Z	0	0	0 %100
41	M49	X	4.469	4.469	0 %100
42	M49	Z	0	0	0 %100
43	M50	X	5.066	5.066	0 %100
44	M50	Z	0	0	0 %100
45	M53A	X	4.469	4.469	0 %100
46	M53A	Z	0	0	0 %100
47	M54A	X	5.066	5.066	0 %100
48	M54A	Z	0	0	0 %100
49	M55	X	3.088	3.088	0 %100
50	M55	Z	0	0	0 %100
51	M56	X	.005	.005	0 %100
52	M56	Z	0	0	0 %100
53	M57	X	5.994	5.994	0 %100
54	M57	Z	0	0	0 %100
55	M62A	X	7.661	7.661	0 %100
56	M62A	Z	0	0	0 %100
57	MP4C	X	6.931	6.931	0 %100
58	MP4C	Z	0	0	0 %100
59	MP3C	X	6.931	6.931	0 %100
60	MP3C	Z	0	0	0 %100
61	MP2C	X	6.931	6.931	0 %100
62	MP2C	Z	0	0	0 %100
63	MP1C	X	6.931	6.931	0 %100
64	MP1C	Z	0	0	0 %100
65	M71	X	5.198	5.198	0 %100
66	M71	Z	0	0	0 %100
67	M78	X	7.661	7.661	0 %100
68	M78	Z	0	0	0 %100
69	MP4B	X	6.931	6.931	0 %100
70	MP4B	Z	0	0	0 %100
71	MP3B	X	6.931	6.931	0 %100
72	MP3B	Z	0	0	0 %100
73	MP2B	X	6.931	6.931	0 %100
74	MP2B	Z	0	0	0 %100
75	MP1B	X	6.931	6.931	0 %100
76	MP1B	Z	0	0	0 %100
77	M87	X	5.198	5.198	0 %100
78	M87	Z	0	0	0 %100
79	M94A	X	3.588	3.588	0 %100
80	M94A	Z	0	0	0 %100
81	M95A	X	3.588	3.588	0 %100
82	M95A	Z	0	0	0 %100
83	M96A	X	0	0	0 %100
84	M96A	Z	0	0	0 %100
85	M97	X	14.591	14.591	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
86	M97	Z	0	0	0	%100
87	M98	X	13.979	13.979	0	%100
88	M98	Z	0	0	0	%100
89	M99	X	13.979	13.979	0	%100
90	M99	Z	0	0	0	%100
91	M101	X	6.316	6.316	0	%100
92	M101	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	2.211	2.211	0	%100
2	M1	Z	1.277	1.277	0	%100
3	MP4A	X	6.002	6.002	0	%100
4	MP4A	Z	3.465	3.465	0	%100
5	MP3A	X	6.002	6.002	0	%100
6	MP3A	Z	3.465	3.465	0	%100
7	MP2A	X	6.002	6.002	0	%100
8	MP2A	Z	3.465	3.465	0	%100
9	MP1A	X	6.002	6.002	0	%100
10	MP1A	Z	3.465	3.465	0	%100
11	M53	X	1.29	1.29	0	%100
12	M53	Z	.745	.745	0	%100
13	M54	X	1.463	1.463	0	%100
14	M54	Z	.844	.844	0	%100
15	M65	X	1.29	1.29	0	%100
16	M65	Z	.745	.745	0	%100
17	M66	X	1.463	1.463	0	%100
18	M66	Z	.844	.844	0	%100
19	M67	X	8.022	8.022	0	%100
20	M67	Z	4.631	4.631	0	%100
21	M74	X	1.941	1.941	0	%100
22	M74	Z	1.121	1.121	0	%100
23	M75	X	7.128	7.128	0	%100
24	M75	Z	4.115	4.115	0	%100
25	M25	X	1.501	1.501	0	%100
26	M25	Z	.866	.866	0	%100
27	M34	X	1.29	1.29	0	%100
28	M34	Z	.745	.745	0	%100
29	M35	X	1.463	1.463	0	%100
30	M35	Z	.844	.844	0	%100
31	M38	X	1.29	1.29	0	%100
32	M38	Z	.745	.745	0	%100
33	M39	X	1.463	1.463	0	%100
34	M39	Z	.844	.844	0	%100
35	M40	X	8.022	8.022	0	%100
36	M40	Z	4.631	4.631	0	%100
37	M41	X	7.128	7.128	0	%100
38	M41	Z	4.115	4.115	0	%100
39	M42	X	1.941	1.941	0	%100
40	M42	Z	1.121	1.121	0	%100
41	M49	X	5.16	5.16	0	%100
42	M49	Z	2.979	2.979	0	%100
43	M50	X	5.85	5.85	0	%100
44	M50	Z	3.378	3.378	0	%100
45	M53A	X	5.16	5.16	0	%100
46	M53A	Z	2.979	2.979	0	%100





Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
8	MP2A	Z	6.002	6.002	0	%100
9	MP1A	X	3.465	3.465	0	%100
10	MP1A	Z	6.002	6.002	0	%100
11	M53	X	2.234	2.234	0	%100
12	M53	Z	3.87	3.87	0	%100
13	M54	X	2.533	2.533	0	%100
14	M54	Z	4.388	4.388	0	%100
15	M65	X	2.234	2.234	0	%100
16	M65	Z	3.87	3.87	0	%100
17	M66	X	2.533	2.533	0	%100
18	M66	Z	4.388	4.388	0	%100
19	M67	X	1.544	1.544	0	%100
20	M67	Z	2.674	2.674	0	%100
21	M74	X	.003	.003	0	%100
22	M74	Z	.005	.005	0	%100
23	M75	X	2.997	2.997	0	%100
24	M75	Z	5.191	5.191	0	%100
25	M25	X	2.599	2.599	0	%100
26	M25	Z	4.502	4.502	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	0	0	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	0	0	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	0	0	0	%100
35	M40	X	6.175	6.175	0	%100
36	M40	Z	10.696	10.696	0	%100
37	M41	X	3.177	3.177	0	%100
38	M41	Z	5.503	5.503	0	%100
39	M42	X	3.177	3.177	0	%100
40	M42	Z	5.503	5.503	0	%100
41	M49	X	2.234	2.234	0	%100
42	M49	Z	3.87	3.87	0	%100
43	M50	X	2.533	2.533	0	%100
44	M50	Z	4.388	4.388	0	%100
45	M53A	X	2.234	2.234	0	%100
46	M53A	Z	3.87	3.87	0	%100
47	M54A	X	2.533	2.533	0	%100
48	M54A	Z	4.388	4.388	0	%100
49	M55	X	1.544	1.544	0	%100
50	M55	Z	2.674	2.674	0	%100
51	M56	X	2.997	2.997	0	%100
52	M56	Z	5.191	5.191	0	%100
53	M57	X	.003	.003	0	%100
54	M57	Z	.005	.005	0	%100
55	M62A	X	0	0	0	%100
56	M62A	Z	0	0	0	%100
57	MP4C	X	3.465	3.465	0	%100
58	MP4C	Z	6.002	6.002	0	%100
59	MP3C	X	3.465	3.465	0	%100
60	MP3C	Z	6.002	6.002	0	%100
61	MP2C	X	3.465	3.465	0	%100
62	MP2C	Z	6.002	6.002	0	%100
63	MP1C	X	3.465	3.465	0	%100
64	MP1C	Z	6.002	6.002	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
65	M71	X	0	0	0	%100
66	M71	Z	0	0	0	%100
67	M78	X	3.83	3.83	0	%100
68	M78	Z	6.634	6.634	0	%100
69	MP4B	X	3.465	3.465	0	%100
70	MP4B	Z	6.002	6.002	0	%100
71	MP3B	X	3.465	3.465	0	%100
72	MP3B	Z	6.002	6.002	0	%100
73	MP2B	X	3.465	3.465	0	%100
74	MP2B	Z	6.002	6.002	0	%100
75	MP1B	X	3.465	3.465	0	%100
76	MP1B	Z	6.002	6.002	0	%100
77	M87	X	2.599	2.599	0	%100
78	M87	Z	4.502	4.502	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	1.794	1.794	0	%100
82	M95A	Z	3.108	3.108	0	%100
83	M96A	X	1.794	1.794	0	%100
84	M96A	Z	3.108	3.108	0	%100
85	M97	X	6.99	6.99	0	%100
86	M97	Z	12.106	12.106	0	%100
87	M98	X	7.296	7.296	0	%100
88	M98	Z	12.637	12.637	0	%100
89	M99	X	6.99	6.99	0	%100
90	M99	Z	12.106	12.106	0	%100
91	M101	X	3.158	3.158	0	%100
92	M101	Z	5.47	5.47	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	0	0	0	%100
2	M1	Z	10.214	10.214	0	%100
3	MP4A	X	0	0	0	%100
4	MP4A	Z	6.931	6.931	0	%100
5	MP3A	X	0	0	0	%100
6	MP3A	Z	6.931	6.931	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	6.931	6.931	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	6.931	6.931	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	5.958	5.958	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	6.755	6.755	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	5.958	5.958	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	6.755	6.755	0	%100
19	M67	X	0	0	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	0	0	0	%100
22	M74	Z	1.881	1.881	0	%100
23	M75	X	0	0	0	%100
24	M75	Z	1.881	1.881	0	%100
25	M25	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
26	M25	Z	6.931	6.931	0 %100
27	M34	X	0	0	0 %100
28	M34	Z	1.49	1.49	0 %100
29	M35	X	0	0	0 %100
30	M35	Z	1.689	1.689	0 %100
31	M38	X	0	0	0 %100
32	M38	Z	1.49	1.49	0 %100
33	M39	X	0	0	0 %100
34	M39	Z	1.689	1.689	0 %100
35	M40	X	0	0	0 %100
36	M40	Z	9.263	9.263	0 %100
37	M41	X	0	0	0 %100
38	M41	Z	2.242	2.242	0 %100
39	M42	X	0	0	0 %100
40	M42	Z	8.23	8.23	0 %100
41	M49	X	0	0	0 %100
42	M49	Z	1.49	1.49	0 %100
43	M50	X	0	0	0 %100
44	M50	Z	1.689	1.689	0 %100
45	M53A	X	0	0	0 %100
46	M53A	Z	1.49	1.49	0 %100
47	M54A	X	0	0	0 %100
48	M54A	Z	1.689	1.689	0 %100
49	M55	X	0	0	0 %100
50	M55	Z	9.263	9.263	0 %100
51	M56	X	0	0	0 %100
52	M56	Z	8.23	8.23	0 %100
53	M57	X	0	0	0 %100
54	M57	Z	2.242	2.242	0 %100
55	M62A	X	0	0	0 %100
56	M62A	Z	2.554	2.554	0 %100
57	MP4C	X	0	0	0 %100
58	MP4C	Z	6.931	6.931	0 %100
59	MP3C	X	0	0	0 %100
60	MP3C	Z	6.931	6.931	0 %100
61	MP2C	X	0	0	0 %100
62	MP2C	Z	6.931	6.931	0 %100
63	MP1C	X	0	0	0 %100
64	MP1C	Z	6.931	6.931	0 %100
65	M71	X	0	0	0 %100
66	M71	Z	1.733	1.733	0 %100
67	M78	X	0	0	0 %100
68	M78	Z	2.554	2.554	0 %100
69	MP4B	X	0	0	0 %100
70	MP4B	Z	6.931	6.931	0 %100
71	MP3B	X	0	0	0 %100
72	MP3B	Z	6.931	6.931	0 %100
73	MP2B	X	0	0	0 %100
74	MP2B	Z	6.931	6.931	0 %100
75	MP1B	X	0	0	0 %100
76	MP1B	Z	6.931	6.931	0 %100
77	M87	X	0	0	0 %100
78	M87	Z	1.733	1.733	0 %100
79	M94A	X	0	0	0 %100
80	M94A	Z	1.196	1.196	0 %100
81	M95A	X	0	0	0 %100
82	M95A	Z	1.196	1.196	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
83	M96A	X	0	0	0	%100
84	M96A	Z	4.785	4.785	0	%100
85	M97	X	0	0	0	%100
86	M97	Z	13.775	13.775	0	%100
87	M98	X	0	0	0	%100
88	M98	Z	14.387	14.387	0	%100
89	M99	X	0	0	0	%100
90	M99	Z	14.387	14.387	0	%100
91	M101	X	0	0	0	%100
92	M101	Z	6.316	6.316	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	-3.83	-3.83	0	%100
2	M1	Z	6.634	6.634	0	%100
3	MP4A	X	-3.465	-3.465	0	%100
4	MP4A	Z	6.002	6.002	0	%100
5	MP3A	X	-3.465	-3.465	0	%100
6	MP3A	Z	6.002	6.002	0	%100
7	MP2A	X	-3.465	-3.465	0	%100
8	MP2A	Z	6.002	6.002	0	%100
9	MP1A	X	-3.465	-3.465	0	%100
10	MP1A	Z	6.002	6.002	0	%100
11	M53	X	-2.234	-2.234	0	%100
12	M53	Z	3.87	3.87	0	%100
13	M54	X	-2.533	-2.533	0	%100
14	M54	Z	4.388	4.388	0	%100
15	M65	X	-2.234	-2.234	0	%100
16	M65	Z	3.87	3.87	0	%100
17	M66	X	-2.533	-2.533	0	%100
18	M66	Z	4.388	4.388	0	%100
19	M67	X	-1.544	-1.544	0	%100
20	M67	Z	2.674	2.674	0	%100
21	M74	X	-2.997	-2.997	0	%100
22	M74	Z	5.191	5.191	0	%100
23	M75	X	-.003	-.003	0	%100
24	M75	Z	.005	.005	0	%100
25	M25	X	-2.599	-2.599	0	%100
26	M25	Z	4.502	4.502	0	%100
27	M34	X	-2.234	-2.234	0	%100
28	M34	Z	3.87	3.87	0	%100
29	M35	X	-2.533	-2.533	0	%100
30	M35	Z	4.388	4.388	0	%100
31	M38	X	-2.234	-2.234	0	%100
32	M38	Z	3.87	3.87	0	%100
33	M39	X	-2.533	-2.533	0	%100
34	M39	Z	4.388	4.388	0	%100
35	M40	X	-1.544	-1.544	0	%100
36	M40	Z	2.674	2.674	0	%100
37	M41	X	-.003	-.003	0	%100
38	M41	Z	.005	.005	0	%100
39	M42	X	-2.997	-2.997	0	%100
40	M42	Z	5.191	5.191	0	%100
41	M49	X	0	0	0	%100
42	M49	Z	0	0	0	%100
43	M50	X	0	0	0	%100





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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
44	M50	Z	0	0	0	%100
45	M53A	X	0	0	0	%100
46	M53A	Z	0	0	0	%100
47	M54A	X	0	0	0	%100
48	M54A	Z	0	0	0	%100
49	M55	X	-6.175	-6.175	0	%100
50	M55	Z	10.696	10.696	0	%100
51	M56	X	-3.177	-3.177	0	%100
52	M56	Z	5.503	5.503	0	%100
53	M57	X	-3.177	-3.177	0	%100
54	M57	Z	5.503	5.503	0	%100
55	M62A	X	-3.83	-3.83	0	%100
56	M62A	Z	6.634	6.634	0	%100
57	MP4C	X	-3.465	-3.465	0	%100
58	MP4C	Z	6.002	6.002	0	%100
59	MP3C	X	-3.465	-3.465	0	%100
60	MP3C	Z	6.002	6.002	0	%100
61	MP2C	X	-3.465	-3.465	0	%100
62	MP2C	Z	6.002	6.002	0	%100
63	MP1C	X	-3.465	-3.465	0	%100
64	MP1C	Z	6.002	6.002	0	%100
65	M71	X	-2.599	-2.599	0	%100
66	M71	Z	4.502	4.502	0	%100
67	M78	X	0	0	0	%100
68	M78	Z	0	0	0	%100
69	MP4B	X	-3.465	-3.465	0	%100
70	MP4B	Z	6.002	6.002	0	%100
71	MP3B	X	-3.465	-3.465	0	%100
72	MP3B	Z	6.002	6.002	0	%100
73	MP2B	X	-3.465	-3.465	0	%100
74	MP2B	Z	6.002	6.002	0	%100
75	MP1B	X	-3.465	-3.465	0	%100
76	MP1B	Z	6.002	6.002	0	%100
77	M87	X	0	0	0	%100
78	M87	Z	0	0	0	%100
79	M94A	X	-1.794	-1.794	0	%100
80	M94A	Z	3.108	3.108	0	%100
81	M95A	X	0	0	0	%100
82	M95A	Z	0	0	0	%100
83	M96A	X	-1.794	-1.794	0	%100
84	M96A	Z	3.108	3.108	0	%100
85	M97	X	-6.99	-6.99	0	%100
86	M97	Z	12.106	12.106	0	%100
87	M98	X	-6.99	-6.99	0	%100
88	M98	Z	12.106	12.106	0	%100
89	M99	X	-7.296	-7.296	0	%100
90	M99	Z	12.637	12.637	0	%100
91	M101	X	-3.158	-3.158	0	%100
92	M101	Z	5.47	5.47	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	-2.211	-2.211	0	%100
2	M1	Z	1.277	1.277	0	%100
3	MP4A	X	-6.002	-6.002	0	%100
4	MP4A	Z	3.465	3.465	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
5	MP3A	X	-6.002	-6.002	0 %100
6	MP3A	Z	3.465	3.465	0 %100
7	MP2A	X	-6.002	-6.002	0 %100
8	MP2A	Z	3.465	3.465	0 %100
9	MP1A	X	-6.002	-6.002	0 %100
10	MP1A	Z	3.465	3.465	0 %100
11	M53	X	-1.29	-1.29	0 %100
12	M53	Z	.745	.745	0 %100
13	M54	X	-1.463	-1.463	0 %100
14	M54	Z	.844	.844	0 %100
15	M65	X	-1.29	-1.29	0 %100
16	M65	Z	.745	.745	0 %100
17	M66	X	-1.463	-1.463	0 %100
18	M66	Z	.844	.844	0 %100
19	M67	X	-8.022	-8.022	0 %100
20	M67	Z	4.631	4.631	0 %100
21	M74	X	-7.128	-7.128	0 %100
22	M74	Z	4.115	4.115	0 %100
23	M75	X	-1.941	-1.941	0 %100
24	M75	Z	1.121	1.121	0 %100
25	M25	X	-1.501	-1.501	0 %100
26	M25	Z	.866	.866	0 %100
27	M34	X	-5.16	-5.16	0 %100
28	M34	Z	2.979	2.979	0 %100
29	M35	X	-5.85	-5.85	0 %100
30	M35	Z	3.378	3.378	0 %100
31	M38	X	-5.16	-5.16	0 %100
32	M38	Z	2.979	2.979	0 %100
33	M39	X	-5.85	-5.85	0 %100
34	M39	Z	3.378	3.378	0 %100
35	M40	X	0	0	0 %100
36	M40	Z	0	0	0 %100
37	M41	X	-1.629	-1.629	0 %100
38	M41	Z	.941	.941	0 %100
39	M42	X	-1.629	-1.629	0 %100
40	M42	Z	.941	.941	0 %100
41	M49	X	-1.29	-1.29	0 %100
42	M49	Z	.745	.745	0 %100
43	M50	X	-1.463	-1.463	0 %100
44	M50	Z	.844	.844	0 %100
45	M53A	X	-1.29	-1.29	0 %100
46	M53A	Z	.745	.745	0 %100
47	M54A	X	-1.463	-1.463	0 %100
48	M54A	Z	.844	.844	0 %100
49	M55	X	-8.022	-8.022	0 %100
50	M55	Z	4.631	4.631	0 %100
51	M56	X	-1.941	-1.941	0 %100
52	M56	Z	1.121	1.121	0 %100
53	M57	X	-7.128	-7.128	0 %100
54	M57	Z	4.115	4.115	0 %100
55	M62A	X	-8.846	-8.846	0 %100
56	M62A	Z	5.107	5.107	0 %100
57	MP4C	X	-6.002	-6.002	0 %100
58	MP4C	Z	3.465	3.465	0 %100
59	MP3C	X	-6.002	-6.002	0 %100
60	MP3C	Z	3.465	3.465	0 %100
61	MP2C	X	-6.002	-6.002	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
62	MP2C	Z	3.465	3.465	0	%100
63	MP1C	X	-6.002	-6.002	0	%100
64	MP1C	Z	3.465	3.465	0	%100
65	M71	X	-6.002	-6.002	0	%100
66	M71	Z	3.465	3.465	0	%100
67	M78	X	-2.211	-2.211	0	%100
68	M78	Z	1.277	1.277	0	%100
69	MP4B	X	-6.002	-6.002	0	%100
70	MP4B	Z	3.465	3.465	0	%100
71	MP3B	X	-6.002	-6.002	0	%100
72	MP3B	Z	3.465	3.465	0	%100
73	MP2B	X	-6.002	-6.002	0	%100
74	MP2B	Z	3.465	3.465	0	%100
75	MP1B	X	-6.002	-6.002	0	%100
76	MP1B	Z	3.465	3.465	0	%100
77	M87	X	-1.501	-1.501	0	%100
78	M87	Z	.866	.866	0	%100
79	M94A	X	-4.144	-4.144	0	%100
80	M94A	Z	2.392	2.392	0	%100
81	M95A	X	-1.036	-1.036	0	%100
82	M95A	Z	.598	.598	0	%100
83	M96A	X	-1.036	-1.036	0	%100
84	M96A	Z	.598	.598	0	%100
85	M97	X	-12.46	-12.46	0	%100
86	M97	Z	7.194	7.194	0	%100
87	M98	X	-11.93	-11.93	0	%100
88	M98	Z	6.888	6.888	0	%100
89	M99	X	-12.46	-12.46	0	%100
90	M99	Z	7.194	7.194	0	%100
91	M101	X	-5.47	-5.47	0	%100
92	M101	Z	3.158	3.158	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	0	0	0	%100
2	M1	Z	0	0	0	%100
3	MP4A	X	-6.931	-6.931	0	%100
4	MP4A	Z	0	0	0	%100
5	MP3A	X	-6.931	-6.931	0	%100
6	MP3A	Z	0	0	0	%100
7	MP2A	X	-6.931	-6.931	0	%100
8	MP2A	Z	0	0	0	%100
9	MP1A	X	-6.931	-6.931	0	%100
10	MP1A	Z	0	0	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	0	0	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	0	0	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	0	0	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	0	0	0	%100
19	M67	X	-12.35	-12.35	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	-6.354	-6.354	0	%100
22	M74	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
23	M75	X	-6.354	-6.354	0 %100
24	M75	Z	0	0	0 %100
25	M25	X	0	0	0 %100
26	M25	Z	0	0	0 %100
27	M34	X	-4.469	-4.469	0 %100
28	M34	Z	0	0	0 %100
29	M35	X	-5.066	-5.066	0 %100
30	M35	Z	0	0	0 %100
31	M38	X	-4.469	-4.469	0 %100
32	M38	Z	0	0	0 %100
33	M39	X	-5.066	-5.066	0 %100
34	M39	Z	0	0	0 %100
35	M40	X	-3.088	-3.088	0 %100
36	M40	Z	0	0	0 %100
37	M41	X	-5.994	-5.994	0 %100
38	M41	Z	0	0	0 %100
39	M42	X	-.005	-.005	0 %100
40	M42	Z	0	0	0 %100
41	M49	X	-4.469	-4.469	0 %100
42	M49	Z	0	0	0 %100
43	M50	X	-5.066	-5.066	0 %100
44	M50	Z	0	0	0 %100
45	M53A	X	-4.469	-4.469	0 %100
46	M53A	Z	0	0	0 %100
47	M54A	X	-5.066	-5.066	0 %100
48	M54A	Z	0	0	0 %100
49	M55	X	-3.088	-3.088	0 %100
50	M55	Z	0	0	0 %100
51	M56	X	-.005	-.005	0 %100
52	M56	Z	0	0	0 %100
53	M57	X	-5.994	-5.994	0 %100
54	M57	Z	0	0	0 %100
55	M62A	X	-7.661	-7.661	0 %100
56	M62A	Z	0	0	0 %100
57	MP4C	X	-6.931	-6.931	0 %100
58	MP4C	Z	0	0	0 %100
59	MP3C	X	-6.931	-6.931	0 %100
60	MP3C	Z	0	0	0 %100
61	MP2C	X	-6.931	-6.931	0 %100
62	MP2C	Z	0	0	0 %100
63	MP1C	X	-6.931	-6.931	0 %100
64	MP1C	Z	0	0	0 %100
65	M71	X	-5.198	-5.198	0 %100
66	M71	Z	0	0	0 %100
67	M78	X	-7.661	-7.661	0 %100
68	M78	Z	0	0	0 %100
69	MP4B	X	-6.931	-6.931	0 %100
70	MP4B	Z	0	0	0 %100
71	MP3B	X	-6.931	-6.931	0 %100
72	MP3B	Z	0	0	0 %100
73	MP2B	X	-6.931	-6.931	0 %100
74	MP2B	Z	0	0	0 %100
75	MP1B	X	-6.931	-6.931	0 %100
76	MP1B	Z	0	0	0 %100
77	M87	X	-5.198	-5.198	0 %100
78	M87	Z	0	0	0 %100
79	M94A	X	-3.588	-3.588	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
80	M94A	Z	0	0	0	%100
81	M95A	X	-3.588	-3.588	0	%100
82	M95A	Z	0	0	0	%100
83	M96A	X	0	0	0	%100
84	M96A	Z	0	0	0	%100
85	M97	X	-14.591	-14.591	0	%100
86	M97	Z	0	0	0	%100
87	M98	X	-13.979	-13.979	0	%100
88	M98	Z	0	0	0	%100
89	M99	X	-13.979	-13.979	0	%100
90	M99	Z	0	0	0	%100
91	M101	X	-6.316	-6.316	0	%100
92	M101	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	-2.211	-2.211	0	%100
2	M1	Z	-1.277	-1.277	0	%100
3	MP4A	X	-6.002	-6.002	0	%100
4	MP4A	Z	-3.465	-3.465	0	%100
5	MP3A	X	-6.002	-6.002	0	%100
6	MP3A	Z	-3.465	-3.465	0	%100
7	MP2A	X	-6.002	-6.002	0	%100
8	MP2A	Z	-3.465	-3.465	0	%100
9	MP1A	X	-6.002	-6.002	0	%100
10	MP1A	Z	-3.465	-3.465	0	%100
11	M53	X	-1.29	-1.29	0	%100
12	M53	Z	-.745	-.745	0	%100
13	M54	X	-1.463	-1.463	0	%100
14	M54	Z	-.844	-.844	0	%100
15	M65	X	-1.29	-1.29	0	%100
16	M65	Z	-.745	-.745	0	%100
17	M66	X	-1.463	-1.463	0	%100
18	M66	Z	-.844	-.844	0	%100
19	M67	X	-8.022	-8.022	0	%100
20	M67	Z	-4.631	-4.631	0	%100
21	M74	X	-1.941	-1.941	0	%100
22	M74	Z	-1.121	-1.121	0	%100
23	M75	X	-7.128	-7.128	0	%100
24	M75	Z	-4.115	-4.115	0	%100
25	M25	X	-1.501	-1.501	0	%100
26	M25	Z	-.866	-.866	0	%100
27	M34	X	-1.29	-1.29	0	%100
28	M34	Z	-.745	-.745	0	%100
29	M35	X	-1.463	-1.463	0	%100
30	M35	Z	-.844	-.844	0	%100
31	M38	X	-1.29	-1.29	0	%100
32	M38	Z	-.745	-.745	0	%100
33	M39	X	-1.463	-1.463	0	%100
34	M39	Z	-.844	-.844	0	%100
35	M40	X	-8.022	-8.022	0	%100
36	M40	Z	-4.631	-4.631	0	%100
37	M41	X	-7.128	-7.128	0	%100
38	M41	Z	-4.115	-4.115	0	%100
39	M42	X	-1.941	-1.941	0	%100
40	M42	Z	-1.121	-1.121	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
41	M49	X	-5.16	-5.16	0	%100
42	M49	Z	-2.979	-2.979	0	%100
43	M50	X	-5.85	-5.85	0	%100
44	M50	Z	-3.378	-3.378	0	%100
45	M53A	X	-5.16	-5.16	0	%100
46	M53A	Z	-2.979	-2.979	0	%100
47	M54A	X	-5.85	-5.85	0	%100
48	M54A	Z	-3.378	-3.378	0	%100
49	M55	X	0	0	0	%100
50	M55	Z	0	0	0	%100
51	M56	X	-1.629	-1.629	0	%100
52	M56	Z	-.941	-.941	0	%100
53	M57	X	-1.629	-1.629	0	%100
54	M57	Z	-.941	-.941	0	%100
55	M62A	X	-2.211	-2.211	0	%100
56	M62A	Z	-1.277	-1.277	0	%100
57	MP4C	X	-6.002	-6.002	0	%100
58	MP4C	Z	-3.465	-3.465	0	%100
59	MP3C	X	-6.002	-6.002	0	%100
60	MP3C	Z	-3.465	-3.465	0	%100
61	MP2C	X	-6.002	-6.002	0	%100
62	MP2C	Z	-3.465	-3.465	0	%100
63	MP1C	X	-6.002	-6.002	0	%100
64	MP1C	Z	-3.465	-3.465	0	%100
65	M71	X	-1.501	-1.501	0	%100
66	M71	Z	-.866	-.866	0	%100
67	M78	X	-8.846	-8.846	0	%100
68	M78	Z	-5.107	-5.107	0	%100
69	MP4B	X	-6.002	-6.002	0	%100
70	MP4B	Z	-3.465	-3.465	0	%100
71	MP3B	X	-6.002	-6.002	0	%100
72	MP3B	Z	-3.465	-3.465	0	%100
73	MP2B	X	-6.002	-6.002	0	%100
74	MP2B	Z	-3.465	-3.465	0	%100
75	MP1B	X	-6.002	-6.002	0	%100
76	MP1B	Z	-3.465	-3.465	0	%100
77	M87	X	-6.002	-6.002	0	%100
78	M87	Z	-3.465	-3.465	0	%100
79	M94A	X	-1.036	-1.036	0	%100
80	M94A	Z	-.598	-.598	0	%100
81	M95A	X	-4.144	-4.144	0	%100
82	M95A	Z	-2.392	-2.392	0	%100
83	M96A	X	-1.036	-1.036	0	%100
84	M96A	Z	-.598	-.598	0	%100
85	M97	X	-12.46	-12.46	0	%100
86	M97	Z	-7.194	-7.194	0	%100
87	M98	X	-12.46	-12.46	0	%100
88	M98	Z	-7.194	-7.194	0	%100
89	M99	X	-11.93	-11.93	0	%100
90	M99	Z	-6.888	-6.888	0	%100
91	M101	X	-5.47	-5.47	0	%100
92	M101	Z	-3.158	-3.158	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	-3.83	-3.83	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
2	M1	Z	-6.634	-6.634	0 %100
3	MP4A	X	-3.465	-3.465	0 %100
4	MP4A	Z	-6.002	-6.002	0 %100
5	MP3A	X	-3.465	-3.465	0 %100
6	MP3A	Z	-6.002	-6.002	0 %100
7	MP2A	X	-3.465	-3.465	0 %100
8	MP2A	Z	-6.002	-6.002	0 %100
9	MP1A	X	-3.465	-3.465	0 %100
10	MP1A	Z	-6.002	-6.002	0 %100
11	M53	X	-2.234	-2.234	0 %100
12	M53	Z	-3.87	-3.87	0 %100
13	M54	X	-2.533	-2.533	0 %100
14	M54	Z	-4.388	-4.388	0 %100
15	M65	X	-2.234	-2.234	0 %100
16	M65	Z	-3.87	-3.87	0 %100
17	M66	X	-2.533	-2.533	0 %100
18	M66	Z	-4.388	-4.388	0 %100
19	M67	X	-1.544	-1.544	0 %100
20	M67	Z	-2.674	-2.674	0 %100
21	M74	X	-0.003	-0.003	0 %100
22	M74	Z	-0.005	-0.005	0 %100
23	M75	X	-2.997	-2.997	0 %100
24	M75	Z	-5.191	-5.191	0 %100
25	M25	X	-2.599	-2.599	0 %100
26	M25	Z	-4.502	-4.502	0 %100
27	M34	X	0	0	0 %100
28	M34	Z	0	0	0 %100
29	M35	X	0	0	0 %100
30	M35	Z	0	0	0 %100
31	M38	X	0	0	0 %100
32	M38	Z	0	0	0 %100
33	M39	X	0	0	0 %100
34	M39	Z	0	0	0 %100
35	M40	X	-6.175	-6.175	0 %100
36	M40	Z	-10.696	-10.696	0 %100
37	M41	X	-3.177	-3.177	0 %100
38	M41	Z	-5.503	-5.503	0 %100
39	M42	X	-3.177	-3.177	0 %100
40	M42	Z	-5.503	-5.503	0 %100
41	M49	X	-2.234	-2.234	0 %100
42	M49	Z	-3.87	-3.87	0 %100
43	M50	X	-2.533	-2.533	0 %100
44	M50	Z	-4.388	-4.388	0 %100
45	M53A	X	-2.234	-2.234	0 %100
46	M53A	Z	-3.87	-3.87	0 %100
47	M54A	X	-2.533	-2.533	0 %100
48	M54A	Z	-4.388	-4.388	0 %100
49	M55	X	-1.544	-1.544	0 %100
50	M55	Z	-2.674	-2.674	0 %100
51	M56	X	-2.997	-2.997	0 %100
52	M56	Z	-5.191	-5.191	0 %100
53	M57	X	-0.003	-0.003	0 %100
54	M57	Z	-0.005	-0.005	0 %100
55	M62A	X	0	0	0 %100
56	M62A	Z	0	0	0 %100
57	MP4C	X	-3.465	-3.465	0 %100
58	MP4C	Z	-6.002	-6.002	0 %100





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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
59	MP3C	X	-3.465	-3.465	0	%100
60	MP3C	Z	-6.002	-6.002	0	%100
61	MP2C	X	-3.465	-3.465	0	%100
62	MP2C	Z	-6.002	-6.002	0	%100
63	MP1C	X	-3.465	-3.465	0	%100
64	MP1C	Z	-6.002	-6.002	0	%100
65	M71	X	0	0	0	%100
66	M71	Z	0	0	0	%100
67	M78	X	-3.83	-3.83	0	%100
68	M78	Z	-6.634	-6.634	0	%100
69	MP4B	X	-3.465	-3.465	0	%100
70	MP4B	Z	-6.002	-6.002	0	%100
71	MP3B	X	-3.465	-3.465	0	%100
72	MP3B	Z	-6.002	-6.002	0	%100
73	MP2B	X	-3.465	-3.465	0	%100
74	MP2B	Z	-6.002	-6.002	0	%100
75	MP1B	X	-3.465	-3.465	0	%100
76	MP1B	Z	-6.002	-6.002	0	%100
77	M87	X	-2.599	-2.599	0	%100
78	M87	Z	-4.502	-4.502	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	-1.794	-1.794	0	%100
82	M95A	Z	-3.108	-3.108	0	%100
83	M96A	X	-1.794	-1.794	0	%100
84	M96A	Z	-3.108	-3.108	0	%100
85	M97	X	-6.99	-6.99	0	%100
86	M97	Z	-12.106	-12.106	0	%100
87	M98	X	-7.296	-7.296	0	%100
88	M98	Z	-12.637	-12.637	0	%100
89	M99	X	-6.99	-6.99	0	%100
90	M99	Z	-12.106	-12.106	0	%100
91	M101	X	-3.158	-3.158	0	%100
92	M101	Z	-5.47	-5.47	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	-3.645	-3.645	0	%100
3	MP4A	X	0	0	0	%100
4	MP4A	Z	-3.045	-3.045	0	%100
5	MP3A	X	0	0	0	%100
6	MP3A	Z	-3.045	-3.045	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	-3.045	-3.045	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	-3.045	-3.045	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	-2.128	-2.128	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	-2.421	-2.421	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	-2.128	-2.128	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	-2.421	-2.421	0	%100
19	M67	X	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
20	M67	Z	0	0	0	%100
21	M74	X	0	0	0	%100
22	M74	Z	-.633	-.633	0	%100
23	M75	X	0	0	0	%100
24	M75	Z	-.633	-.633	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	-3.045	-3.045	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	-.532	-.532	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	-.605	-.605	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	-.532	-.532	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	-.605	-.605	0	%100
35	M40	X	0	0	0	%100
36	M40	Z	-2.888	-2.888	0	%100
37	M41	X	0	0	0	%100
38	M41	Z	-.754	-.754	0	%100
39	M42	X	0	0	0	%100
40	M42	Z	-2.77	-2.77	0	%100
41	M49	X	0	0	0	%100
42	M49	Z	-.532	-.532	0	%100
43	M50	X	0	0	0	%100
44	M50	Z	-.605	-.605	0	%100
45	M53A	X	0	0	0	%100
46	M53A	Z	-.532	-.532	0	%100
47	M54A	X	0	0	0	%100
48	M54A	Z	-.605	-.605	0	%100
49	M55	X	0	0	0	%100
50	M55	Z	-2.888	-2.888	0	%100
51	M56	X	0	0	0	%100
52	M56	Z	-2.77	-2.77	0	%100
53	M57	X	0	0	0	%100
54	M57	Z	-.754	-.754	0	%100
55	M62A	X	0	0	0	%100
56	M62A	Z	-.911	-.911	0	%100
57	MP4C	X	0	0	0	%100
58	MP4C	Z	-3.045	-3.045	0	%100
59	MP3C	X	0	0	0	%100
60	MP3C	Z	-3.045	-3.045	0	%100
61	MP2C	X	0	0	0	%100
62	MP2C	Z	-3.045	-3.045	0	%100
63	MP1C	X	0	0	0	%100
64	MP1C	Z	-3.045	-3.045	0	%100
65	M71	X	0	0	0	%100
66	M71	Z	-.761	-.761	0	%100
67	M78	X	0	0	0	%100
68	M78	Z	-.911	-.911	0	%100
69	MP4B	X	0	0	0	%100
70	MP4B	Z	-3.045	-3.045	0	%100
71	MP3B	X	0	0	0	%100
72	MP3B	Z	-3.045	-3.045	0	%100
73	MP2B	X	0	0	0	%100
74	MP2B	Z	-3.045	-3.045	0	%100
75	MP1B	X	0	0	0	%100
76	MP1B	Z	-3.045	-3.045	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
77	M87	X	0	0	0	%100
78	M87	Z	-761	-761	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	-506	-506	0	%100
81	M95A	X	0	0	0	%100
82	M95A	Z	-506	-506	0	%100
83	M96A	X	0	0	0	%100
84	M96A	Z	-2.023	-2.023	0	%100
85	M97	X	0	0	0	%100
86	M97	Z	-3.493	-3.493	0	%100
87	M98	X	0	0	0	%100
88	M98	Z	-4.206	-4.206	0	%100
89	M99	X	0	0	0	%100
90	M99	Z	-4.206	-4.206	0	%100
91	M101	X	0	0	0	%100
92	M101	Z	-2.583	-2.583	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	1.367	1.367	0	%100
2	M1	Z	-2.367	-2.367	0	%100
3	MP4A	X	1.523	1.523	0	%100
4	MP4A	Z	-2.637	-2.637	0	%100
5	MP3A	X	1.523	1.523	0	%100
6	MP3A	Z	-2.637	-2.637	0	%100
7	MP2A	X	1.523	1.523	0	%100
8	MP2A	Z	-2.637	-2.637	0	%100
9	MP1A	X	1.523	1.523	0	%100
10	MP1A	Z	-2.637	-2.637	0	%100
11	M53	X	.798	.798	0	%100
12	M53	Z	-1.382	-1.382	0	%100
13	M54	X	.908	.908	0	%100
14	M54	Z	-1.573	-1.573	0	%100
15	M65	X	.798	.798	0	%100
16	M65	Z	-1.382	-1.382	0	%100
17	M66	X	.908	.908	0	%100
18	M66	Z	-1.573	-1.573	0	%100
19	M67	X	.481	.481	0	%100
20	M67	Z	-.834	-.834	0	%100
21	M74	X	1.009	1.009	0	%100
22	M74	Z	-1.747	-1.747	0	%100
23	M75	X	.000884	.000884	0	%100
24	M75	Z	-.002	-.002	0	%100
25	M25	X	1.142	1.142	0	%100
26	M25	Z	-1.978	-1.978	0	%100
27	M34	X	.798	.798	0	%100
28	M34	Z	-1.382	-1.382	0	%100
29	M35	X	.908	.908	0	%100
30	M35	Z	-1.573	-1.573	0	%100
31	M38	X	.798	.798	0	%100
32	M38	Z	-1.382	-1.382	0	%100
33	M39	X	.908	.908	0	%100
34	M39	Z	-1.573	-1.573	0	%100
35	M40	X	.481	.481	0	%100
36	M40	Z	-.834	-.834	0	%100
37	M41	X	.000884	.000884	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....]	End Magnitude[lb/ft.F...]	Start Location[ft.%]	End Location[ft.%]
38	M41	Z	-0.002	-0.002	0	%100
39	M42	X	1.009	1.009	0	%100
40	M42	Z	-1.747	-1.747	0	%100
41	M49	X	0	0	0	%100
42	M49	Z	0	0	0	%100
43	M50	X	0	0	0	%100
44	M50	Z	0	0	0	%100
45	M53A	X	0	0	0	%100
46	M53A	Z	0	0	0	%100
47	M54A	X	0	0	0	%100
48	M54A	Z	0	0	0	%100
49	M55	X	1.925	1.925	0	%100
50	M55	Z	-3.334	-3.334	0	%100
51	M56	X	1.069	1.069	0	%100
52	M56	Z	-1.852	-1.852	0	%100
53	M57	X	1.069	1.069	0	%100
54	M57	Z	-1.852	-1.852	0	%100
55	M62A	X	1.367	1.367	0	%100
56	M62A	Z	-2.367	-2.367	0	%100
57	MP4C	X	1.523	1.523	0	%100
58	MP4C	Z	-2.637	-2.637	0	%100
59	MP3C	X	1.523	1.523	0	%100
60	MP3C	Z	-2.637	-2.637	0	%100
61	MP2C	X	1.523	1.523	0	%100
62	MP2C	Z	-2.637	-2.637	0	%100
63	MP1C	X	1.523	1.523	0	%100
64	MP1C	Z	-2.637	-2.637	0	%100
65	M71	X	1.142	1.142	0	%100
66	M71	Z	-1.978	-1.978	0	%100
67	M78	X	0	0	0	%100
68	M78	Z	0	0	0	%100
69	MP4B	X	1.523	1.523	0	%100
70	MP4B	Z	-2.637	-2.637	0	%100
71	MP3B	X	1.523	1.523	0	%100
72	MP3B	Z	-2.637	-2.637	0	%100
73	MP2B	X	1.523	1.523	0	%100
74	MP2B	Z	-2.637	-2.637	0	%100
75	MP1B	X	1.523	1.523	0	%100
76	MP1B	Z	-2.637	-2.637	0	%100
77	M87	X	0	0	0	%100
78	M87	Z	0	0	0	%100
79	M94A	X	.759	.759	0	%100
80	M94A	Z	-1.314	-1.314	0	%100
81	M95A	X	0	0	0	%100
82	M95A	Z	0	0	0	%100
83	M96A	X	.759	.759	0	%100
84	M96A	Z	-1.314	-1.314	0	%100
85	M97	X	1.865	1.865	0	%100
86	M97	Z	-3.231	-3.231	0	%100
87	M98	X	1.865	1.865	0	%100
88	M98	Z	-3.231	-3.231	0	%100
89	M99	X	2.222	2.222	0	%100
90	M99	Z	-3.849	-3.849	0	%100
91	M101	X	1.291	1.291	0	%100
92	M101	Z	-2.237	-2.237	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	.789	.789	0 %100
2	M1	Z	-.456	-.456	0 %100
3	MP4A	X	2.637	2.637	0 %100
4	MP4A	Z	-1.523	-1.523	0 %100
5	MP3A	X	2.637	2.637	0 %100
6	MP3A	Z	-1.523	-1.523	0 %100
7	MP2A	X	2.637	2.637	0 %100
8	MP2A	Z	-1.523	-1.523	0 %100
9	MP1A	X	2.637	2.637	0 %100
10	MP1A	Z	-1.523	-1.523	0 %100
11	M53	X	.461	.461	0 %100
12	M53	Z	-.266	-.266	0 %100
13	M54	X	.524	.524	0 %100
14	M54	Z	-.303	-.303	0 %100
15	M65	X	.461	.461	0 %100
16	M65	Z	-.266	-.266	0 %100
17	M66	X	.524	.524	0 %100
18	M66	Z	-.303	-.303	0 %100
19	M67	X	2.501	2.501	0 %100
20	M67	Z	-1.444	-1.444	0 %100
21	M74	X	2.399	2.399	0 %100
22	M74	Z	-1.385	-1.385	0 %100
23	M75	X	.653	.653	0 %100
24	M75	Z	-.377	-.377	0 %100
25	M25	X	.659	.659	0 %100
26	M25	Z	-.381	-.381	0 %100
27	M34	X	1.843	1.843	0 %100
28	M34	Z	-1.064	-1.064	0 %100
29	M35	X	2.097	2.097	0 %100
30	M35	Z	-1.211	-1.211	0 %100
31	M38	X	1.843	1.843	0 %100
32	M38	Z	-1.064	-1.064	0 %100
33	M39	X	2.097	2.097	0 %100
34	M39	Z	-1.211	-1.211	0 %100
35	M40	X	0	0	0 %100
36	M40	Z	0	0	0 %100
37	M41	X	.548	.548	0 %100
38	M41	Z	-.317	-.317	0 %100
39	M42	X	.548	.548	0 %100
40	M42	Z	-.317	-.317	0 %100
41	M49	X	.461	.461	0 %100
42	M49	Z	-.266	-.266	0 %100
43	M50	X	.524	.524	0 %100
44	M50	Z	-.303	-.303	0 %100
45	M53A	X	.461	.461	0 %100
46	M53A	Z	-.266	-.266	0 %100
47	M54A	X	.524	.524	0 %100
48	M54A	Z	-.303	-.303	0 %100
49	M55	X	2.501	2.501	0 %100
50	M55	Z	-1.444	-1.444	0 %100
51	M56	X	.653	.653	0 %100
52	M56	Z	-.377	-.377	0 %100
53	M57	X	2.399	2.399	0 %100
54	M57	Z	-1.385	-1.385	0 %100
55	M62A	X	3.156	3.156	0 %100
56	M62A	Z	-1.822	-1.822	0 %100
57	MP4C	X	2.637	2.637	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
58	MP4C	Z	-1.523	-1.523	0	%100
59	MP3C	X	2.637	2.637	0	%100
60	MP3C	Z	-1.523	-1.523	0	%100
61	MP2C	X	2.637	2.637	0	%100
62	MP2C	Z	-1.523	-1.523	0	%100
63	MP1C	X	2.637	2.637	0	%100
64	MP1C	Z	-1.523	-1.523	0	%100
65	M71	X	2.637	2.637	0	%100
66	M71	Z	-1.523	-1.523	0	%100
67	M78	X	.789	.789	0	%100
68	M78	Z	-.456	-.456	0	%100
69	MP4B	X	2.637	2.637	0	%100
70	MP4B	Z	-1.523	-1.523	0	%100
71	MP3B	X	2.637	2.637	0	%100
72	MP3B	Z	-1.523	-1.523	0	%100
73	MP2B	X	2.637	2.637	0	%100
74	MP2B	Z	-1.523	-1.523	0	%100
75	MP1B	X	2.637	2.637	0	%100
76	MP1B	Z	-1.523	-1.523	0	%100
77	M87	X	.659	.659	0	%100
78	M87	Z	-.381	-.381	0	%100
79	M94A	X	1.752	1.752	0	%100
80	M94A	Z	-1.012	-1.012	0	%100
81	M95A	X	.438	.438	0	%100
82	M95A	Z	-.253	-.253	0	%100
83	M96A	X	.438	.438	0	%100
84	M96A	Z	-.253	-.253	0	%100
85	M97	X	3.643	3.643	0	%100
86	M97	Z	-2.103	-2.103	0	%100
87	M98	X	3.025	3.025	0	%100
88	M98	Z	-1.746	-1.746	0	%100
89	M99	X	3.643	3.643	0	%100
90	M99	Z	-2.103	-2.103	0	%100
91	M101	X	2.237	2.237	0	%100
92	M101	Z	-1.291	-1.291	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	MP4A	X	3.045	3.045	0	%100
4	MP4A	Z	0	0	0	%100
5	MP3A	X	3.045	3.045	0	%100
6	MP3A	Z	0	0	0	%100
7	MP2A	X	3.045	3.045	0	%100
8	MP2A	Z	0	0	0	%100
9	MP1A	X	3.045	3.045	0	%100
10	MP1A	Z	0	0	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	0	0	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	0	0	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	0	0	0	%100
17	M66	X	0	0	0	%100
18	M66	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, %]
19	M67	X	3.85	3.85	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	2.138	2.138	0	%100
22	M74	Z	0	0	0	%100
23	M75	X	2.138	2.138	0	%100
24	M75	Z	0	0	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	0	0	0	%100
27	M34	X	1.596	1.596	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	1.816	1.816	0	%100
30	M35	Z	0	0	0	%100
31	M38	X	1.596	1.596	0	%100
32	M38	Z	0	0	0	%100
33	M39	X	1.816	1.816	0	%100
34	M39	Z	0	0	0	%100
35	M40	X	.963	.963	0	%100
36	M40	Z	0	0	0	%100
37	M41	X	2.017	2.017	0	%100
38	M41	Z	0	0	0	%100
39	M42	X	.002	.002	0	%100
40	M42	Z	0	0	0	%100
41	M49	X	1.596	1.596	0	%100
42	M49	Z	0	0	0	%100
43	M50	X	1.816	1.816	0	%100
44	M50	Z	0	0	0	%100
45	M53A	X	1.596	1.596	0	%100
46	M53A	Z	0	0	0	%100
47	M54A	X	1.816	1.816	0	%100
48	M54A	Z	0	0	0	%100
49	M55	X	.963	.963	0	%100
50	M55	Z	0	0	0	%100
51	M56	X	.002	.002	0	%100
52	M56	Z	0	0	0	%100
53	M57	X	2.017	2.017	0	%100
54	M57	Z	0	0	0	%100
55	M62A	X	2.733	2.733	0	%100
56	M62A	Z	0	0	0	%100
57	MP4C	X	3.045	3.045	0	%100
58	MP4C	Z	0	0	0	%100
59	MP3C	X	3.045	3.045	0	%100
60	MP3C	Z	0	0	0	%100
61	MP2C	X	3.045	3.045	0	%100
62	MP2C	Z	0	0	0	%100
63	MP1C	X	3.045	3.045	0	%100
64	MP1C	Z	0	0	0	%100
65	M71	X	2.284	2.284	0	%100
66	M71	Z	0	0	0	%100
67	M78	X	2.733	2.733	0	%100
68	M78	Z	0	0	0	%100
69	MP4B	X	3.045	3.045	0	%100
70	MP4B	Z	0	0	0	%100
71	MP3B	X	3.045	3.045	0	%100
72	MP3B	Z	0	0	0	%100
73	MP2B	X	3.045	3.045	0	%100
74	MP2B	Z	0	0	0	%100
75	MP1B	X	3.045	3.045	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.%,]
76	MP1B	Z	0	0	0	%100
77	M87	X	2.284	2.284	0	%100
78	M87	Z	0	0	0	%100
79	M94A	X	1.518	1.518	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	1.518	1.518	0	%100
82	M95A	Z	0	0	0	%100
83	M96A	X	0	0	0	%100
84	M96A	Z	0	0	0	%100
85	M97	X	4.444	4.444	0	%100
86	M97	Z	0	0	0	%100
87	M98	X	3.731	3.731	0	%100
88	M98	Z	0	0	0	%100
89	M99	X	3.731	3.731	0	%100
90	M99	Z	0	0	0	%100
91	M101	X	2.583	2.583	0	%100
92	M101	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	.789	.789	0	%100
2	M1	Z	.456	.456	0	%100
3	MP4A	X	2.637	2.637	0	%100
4	MP4A	Z	1.523	1.523	0	%100
5	MP3A	X	2.637	2.637	0	%100
6	MP3A	Z	1.523	1.523	0	%100
7	MP2A	X	2.637	2.637	0	%100
8	MP2A	Z	1.523	1.523	0	%100
9	MP1A	X	2.637	2.637	0	%100
10	MP1A	Z	1.523	1.523	0	%100
11	M53	X	.461	.461	0	%100
12	M53	Z	.266	.266	0	%100
13	M54	X	.524	.524	0	%100
14	M54	Z	.303	.303	0	%100
15	M65	X	.461	.461	0	%100
16	M65	Z	.266	.266	0	%100
17	M66	X	.524	.524	0	%100
18	M66	Z	.303	.303	0	%100
19	M67	X	2.501	2.501	0	%100
20	M67	Z	1.444	1.444	0	%100
21	M74	X	.653	.653	0	%100
22	M74	Z	.377	.377	0	%100
23	M75	X	2.399	2.399	0	%100
24	M75	Z	1.385	1.385	0	%100
25	M25	X	.659	.659	0	%100
26	M25	Z	.381	.381	0	%100
27	M34	X	.461	.461	0	%100
28	M34	Z	.266	.266	0	%100
29	M35	X	.524	.524	0	%100
30	M35	Z	.303	.303	0	%100
31	M38	X	.461	.461	0	%100
32	M38	Z	.266	.266	0	%100
33	M39	X	.524	.524	0	%100
34	M39	Z	.303	.303	0	%100
35	M40	X	2.501	2.501	0	%100
36	M40	Z	1.444	1.444	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
37	M41	X	2.399	2.399	0	%100
38	M41	Z	1.385	1.385	0	%100
39	M42	X	.653	.653	0	%100
40	M42	Z	.377	.377	0	%100
41	M49	X	1.843	1.843	0	%100
42	M49	Z	1.064	1.064	0	%100
43	M50	X	2.097	2.097	0	%100
44	M50	Z	1.211	1.211	0	%100
45	M53A	X	1.843	1.843	0	%100
46	M53A	Z	1.064	1.064	0	%100
47	M54A	X	2.097	2.097	0	%100
48	M54A	Z	1.211	1.211	0	%100
49	M55	X	0	0	0	%100
50	M55	Z	0	0	0	%100
51	M56	X	.548	.548	0	%100
52	M56	Z	.317	.317	0	%100
53	M57	X	.548	.548	0	%100
54	M57	Z	.317	.317	0	%100
55	M62A	X	.789	.789	0	%100
56	M62A	Z	.456	.456	0	%100
57	MP4C	X	2.637	2.637	0	%100
58	MP4C	Z	1.523	1.523	0	%100
59	MP3C	X	2.637	2.637	0	%100
60	MP3C	Z	1.523	1.523	0	%100
61	MP2C	X	2.637	2.637	0	%100
62	MP2C	Z	1.523	1.523	0	%100
63	MP1C	X	2.637	2.637	0	%100
64	MP1C	Z	1.523	1.523	0	%100
65	M71	X	.659	.659	0	%100
66	M71	Z	.381	.381	0	%100
67	M78	X	3.156	3.156	0	%100
68	M78	Z	1.822	1.822	0	%100
69	MP4B	X	2.637	2.637	0	%100
70	MP4B	Z	1.523	1.523	0	%100
71	MP3B	X	2.637	2.637	0	%100
72	MP3B	Z	1.523	1.523	0	%100
73	MP2B	X	2.637	2.637	0	%100
74	MP2B	Z	1.523	1.523	0	%100
75	MP1B	X	2.637	2.637	0	%100
76	MP1B	Z	1.523	1.523	0	%100
77	M87	X	2.637	2.637	0	%100
78	M87	Z	1.523	1.523	0	%100
79	M94A	X	.438	.438	0	%100
80	M94A	Z	.253	.253	0	%100
81	M95A	X	1.752	1.752	0	%100
82	M95A	Z	1.012	1.012	0	%100
83	M96A	X	.438	.438	0	%100
84	M96A	Z	.253	.253	0	%100
85	M97	X	3.643	3.643	0	%100
86	M97	Z	2.103	2.103	0	%100
87	M98	X	3.643	3.643	0	%100
88	M98	Z	2.103	2.103	0	%100
89	M99	X	3.025	3.025	0	%100
90	M99	Z	1.746	1.746	0	%100
91	M101	X	2.237	2.237	0	%100
92	M101	Z	1.291	1.291	0	%100



Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

**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	1.367	1.367	0 %100
2	M1	Z	2.367	2.367	0 %100
3	MP4A	X	1.523	1.523	0 %100
4	MP4A	Z	2.637	2.637	0 %100
5	MP3A	X	1.523	1.523	0 %100
6	MP3A	Z	2.637	2.637	0 %100
7	MP2A	X	1.523	1.523	0 %100
8	MP2A	Z	2.637	2.637	0 %100
9	MP1A	X	1.523	1.523	0 %100
10	MP1A	Z	2.637	2.637	0 %100
11	M53	X	.798	.798	0 %100
12	M53	Z	1.382	1.382	0 %100
13	M54	X	.908	.908	0 %100
14	M54	Z	1.573	1.573	0 %100
15	M65	X	.798	.798	0 %100
16	M65	Z	1.382	1.382	0 %100
17	M66	X	.908	.908	0 %100
18	M66	Z	1.573	1.573	0 %100
19	M67	X	.481	.481	0 %100
20	M67	Z	.834	.834	0 %100
21	M74	X	.000884	.000884	0 %100
22	M74	Z	.002	.002	0 %100
23	M75	X	1.009	1.009	0 %100
24	M75	Z	1.747	1.747	0 %100
25	M25	X	1.142	1.142	0 %100
26	M25	Z	1.978	1.978	0 %100
27	M34	X	0	0	0 %100
28	M34	Z	0	0	0 %100
29	M35	X	0	0	0 %100
30	M35	Z	0	0	0 %100
31	M38	X	0	0	0 %100
32	M38	Z	0	0	0 %100
33	M39	X	0	0	0 %100
34	M39	Z	0	0	0 %100
35	M40	X	1.925	1.925	0 %100
36	M40	Z	3.334	3.334	0 %100
37	M41	X	1.069	1.069	0 %100
38	M41	Z	1.852	1.852	0 %100
39	M42	X	1.069	1.069	0 %100
40	M42	Z	1.852	1.852	0 %100
41	M49	X	.798	.798	0 %100
42	M49	Z	1.382	1.382	0 %100
43	M50	X	.908	.908	0 %100
44	M50	Z	1.573	1.573	0 %100
45	M53A	X	.798	.798	0 %100
46	M53A	Z	1.382	1.382	0 %100
47	M54A	X	.908	.908	0 %100
48	M54A	Z	1.573	1.573	0 %100
49	M55	X	.481	.481	0 %100
50	M55	Z	.834	.834	0 %100
51	M56	X	1.009	1.009	0 %100
52	M56	Z	1.747	1.747	0 %100
53	M57	X	.000884	.000884	0 %100
54	M57	Z	.002	.002	0 %100
55	M62A	X	0	0	0 %100
56	M62A	Z	0	0	0 %100
57	MP4C	X	1.523	1.523	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
58	MP4C	Z	2.637	2.637	0	%100
59	MP3C	X	1.523	1.523	0	%100
60	MP3C	Z	2.637	2.637	0	%100
61	MP2C	X	1.523	1.523	0	%100
62	MP2C	Z	2.637	2.637	0	%100
63	MP1C	X	1.523	1.523	0	%100
64	MP1C	Z	2.637	2.637	0	%100
65	M71	X	0	0	0	%100
66	M71	Z	0	0	0	%100
67	M78	X	1.367	1.367	0	%100
68	M78	Z	2.367	2.367	0	%100
69	MP4B	X	1.523	1.523	0	%100
70	MP4B	Z	2.637	2.637	0	%100
71	MP3B	X	1.523	1.523	0	%100
72	MP3B	Z	2.637	2.637	0	%100
73	MP2B	X	1.523	1.523	0	%100
74	MP2B	Z	2.637	2.637	0	%100
75	MP1B	X	1.523	1.523	0	%100
76	MP1B	Z	2.637	2.637	0	%100
77	M87	X	1.142	1.142	0	%100
78	M87	Z	1.978	1.978	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	.759	.759	0	%100
82	M95A	Z	1.314	1.314	0	%100
83	M96A	X	.759	.759	0	%100
84	M96A	Z	1.314	1.314	0	%100
85	M97	X	1.865	1.865	0	%100
86	M97	Z	3.231	3.231	0	%100
87	M98	X	2.222	2.222	0	%100
88	M98	Z	3.849	3.849	0	%100
89	M99	X	1.865	1.865	0	%100
90	M99	Z	3.231	3.231	0	%100
91	M101	X	1.291	1.291	0	%100
92	M101	Z	2.237	2.237	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	3.645	3.645	0	%100
3	MP4A	X	0	0	0	%100
4	MP4A	Z	3.045	3.045	0	%100
5	MP3A	X	0	0	0	%100
6	MP3A	Z	3.045	3.045	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	3.045	3.045	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	3.045	3.045	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	2.128	2.128	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	2.421	2.421	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	2.128	2.128	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	2.421	2.421	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
19	M67	X	0	0	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	0	0	0	%100
22	M74	Z	.633	.633	0	%100
23	M75	X	0	0	0	%100
24	M75	Z	.633	.633	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	3.045	3.045	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	.532	.532	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	.605	.605	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	.532	.532	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	.605	.605	0	%100
35	M40	X	0	0	0	%100
36	M40	Z	2.888	2.888	0	%100
37	M41	X	0	0	0	%100
38	M41	Z	.754	.754	0	%100
39	M42	X	0	0	0	%100
40	M42	Z	2.77	2.77	0	%100
41	M49	X	0	0	0	%100
42	M49	Z	.532	.532	0	%100
43	M50	X	0	0	0	%100
44	M50	Z	.605	.605	0	%100
45	M53A	X	0	0	0	%100
46	M53A	Z	.532	.532	0	%100
47	M54A	X	0	0	0	%100
48	M54A	Z	.605	.605	0	%100
49	M55	X	0	0	0	%100
50	M55	Z	2.888	2.888	0	%100
51	M56	X	0	0	0	%100
52	M56	Z	2.77	2.77	0	%100
53	M57	X	0	0	0	%100
54	M57	Z	.754	.754	0	%100
55	M62A	X	0	0	0	%100
56	M62A	Z	.911	.911	0	%100
57	MP4C	X	0	0	0	%100
58	MP4C	Z	3.045	3.045	0	%100
59	MP3C	X	0	0	0	%100
60	MP3C	Z	3.045	3.045	0	%100
61	MP2C	X	0	0	0	%100
62	MP2C	Z	3.045	3.045	0	%100
63	MP1C	X	0	0	0	%100
64	MP1C	Z	3.045	3.045	0	%100
65	M71	X	0	0	0	%100
66	M71	Z	.761	.761	0	%100
67	M78	X	0	0	0	%100
68	M78	Z	.911	.911	0	%100
69	MP4B	X	0	0	0	%100
70	MP4B	Z	3.045	3.045	0	%100
71	MP3B	X	0	0	0	%100
72	MP3B	Z	3.045	3.045	0	%100
73	MP2B	X	0	0	0	%100
74	MP2B	Z	3.045	3.045	0	%100
75	MP1B	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
76	MP1B	Z	3.045	3.045	0	%100
77	M87	X	0	0	0	%100
78	M87	Z	.761	.761	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	.506	.506	0	%100
81	M95A	X	0	0	0	%100
82	M95A	Z	.506	.506	0	%100
83	M96A	X	0	0	0	%100
84	M96A	Z	2.023	2.023	0	%100
85	M97	X	0	0	0	%100
86	M97	Z	3.493	3.493	0	%100
87	M98	X	0	0	0	%100
88	M98	Z	4.206	4.206	0	%100
89	M99	X	0	0	0	%100
90	M99	Z	4.206	4.206	0	%100
91	M101	X	0	0	0	%100
92	M101	Z	2.583	2.583	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	-1.367	-1.367	0	%100
2	M1	Z	2.367	2.367	0	%100
3	MP4A	X	-1.523	-1.523	0	%100
4	MP4A	Z	2.637	2.637	0	%100
5	MP3A	X	-1.523	-1.523	0	%100
6	MP3A	Z	2.637	2.637	0	%100
7	MP2A	X	-1.523	-1.523	0	%100
8	MP2A	Z	2.637	2.637	0	%100
9	MP1A	X	-1.523	-1.523	0	%100
10	MP1A	Z	2.637	2.637	0	%100
11	M53	X	-.798	-.798	0	%100
12	M53	Z	1.382	1.382	0	%100
13	M54	X	-.908	-.908	0	%100
14	M54	Z	1.573	1.573	0	%100
15	M65	X	-.798	-.798	0	%100
16	M65	Z	1.382	1.382	0	%100
17	M66	X	-.908	-.908	0	%100
18	M66	Z	1.573	1.573	0	%100
19	M67	X	-.481	-.481	0	%100
20	M67	Z	.834	.834	0	%100
21	M74	X	-1.009	-1.009	0	%100
22	M74	Z	1.747	1.747	0	%100
23	M75	X	-.000884	-.000884	0	%100
24	M75	Z	.002	.002	0	%100
25	M25	X	-1.142	-1.142	0	%100
26	M25	Z	1.978	1.978	0	%100
27	M34	X	-.798	-.798	0	%100
28	M34	Z	1.382	1.382	0	%100
29	M35	X	-.908	-.908	0	%100
30	M35	Z	1.573	1.573	0	%100
31	M38	X	-.798	-.798	0	%100
32	M38	Z	1.382	1.382	0	%100
33	M39	X	-.908	-.908	0	%100
34	M39	Z	1.573	1.573	0	%100
35	M40	X	-.481	-.481	0	%100
36	M40	Z	.834	.834	0	%100



Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

**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.-%]
37	M41	X	-0.00884	-0.00884	0 %100
38	M41	Z	.002	.002	0 %100
39	M42	X	-1.009	-1.009	0 %100
40	M42	Z	1.747	1.747	0 %100
41	M49	X	0	0	0 %100
42	M49	Z	0	0	0 %100
43	M50	X	0	0	0 %100
44	M50	Z	0	0	0 %100
45	M53A	X	0	0	0 %100
46	M53A	Z	0	0	0 %100
47	M54A	X	0	0	0 %100
48	M54A	Z	0	0	0 %100
49	M55	X	-1.925	-1.925	0 %100
50	M55	Z	3.334	3.334	0 %100
51	M56	X	-1.069	-1.069	0 %100
52	M56	Z	1.852	1.852	0 %100
53	M57	X	-1.069	-1.069	0 %100
54	M57	Z	1.852	1.852	0 %100
55	M62A	X	-1.367	-1.367	0 %100
56	M62A	Z	2.367	2.367	0 %100
57	MP4C	X	-1.523	-1.523	0 %100
58	MP4C	Z	2.637	2.637	0 %100
59	MP3C	X	-1.523	-1.523	0 %100
60	MP3C	Z	2.637	2.637	0 %100
61	MP2C	X	-1.523	-1.523	0 %100
62	MP2C	Z	2.637	2.637	0 %100
63	MP1C	X	-1.523	-1.523	0 %100
64	MP1C	Z	2.637	2.637	0 %100
65	M71	X	-1.142	-1.142	0 %100
66	M71	Z	1.978	1.978	0 %100
67	M78	X	0	0	0 %100
68	M78	Z	0	0	0 %100
69	MP4B	X	-1.523	-1.523	0 %100
70	MP4B	Z	2.637	2.637	0 %100
71	MP3B	X	-1.523	-1.523	0 %100
72	MP3B	Z	2.637	2.637	0 %100
73	MP2B	X	-1.523	-1.523	0 %100
74	MP2B	Z	2.637	2.637	0 %100
75	MP1B	X	-1.523	-1.523	0 %100
76	MP1B	Z	2.637	2.637	0 %100
77	M87	X	0	0	0 %100
78	M87	Z	0	0	0 %100
79	M94A	X	-0.759	-0.759	0 %100
80	M94A	Z	1.314	1.314	0 %100
81	M95A	X	0	0	0 %100
82	M95A	Z	0	0	0 %100
83	M96A	X	-0.759	-0.759	0 %100
84	M96A	Z	1.314	1.314	0 %100
85	M97	X	-1.865	-1.865	0 %100
86	M97	Z	3.231	3.231	0 %100
87	M98	X	-1.865	-1.865	0 %100
88	M98	Z	3.231	3.231	0 %100
89	M99	X	-2.222	-2.222	0 %100
90	M99	Z	3.849	3.849	0 %100
91	M101	X	-1.291	-1.291	0 %100
92	M101	Z	2.237	2.237	0 %100





Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

**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	-789	-789	0 %100
2	M1	Z	456	456	0 %100
3	MP4A	X	-2.637	-2.637	0 %100
4	MP4A	Z	1.523	1.523	0 %100
5	MP3A	X	-2.637	-2.637	0 %100
6	MP3A	Z	1.523	1.523	0 %100
7	MP2A	X	-2.637	-2.637	0 %100
8	MP2A	Z	1.523	1.523	0 %100
9	MP1A	X	-2.637	-2.637	0 %100
10	MP1A	Z	1.523	1.523	0 %100
11	M53	X	-461	-461	0 %100
12	M53	Z	.266	.266	0 %100
13	M54	X	-.524	-.524	0 %100
14	M54	Z	.303	.303	0 %100
15	M65	X	-461	-461	0 %100
16	M65	Z	.266	.266	0 %100
17	M66	X	-.524	-.524	0 %100
18	M66	Z	.303	.303	0 %100
19	M67	X	-2.501	-2.501	0 %100
20	M67	Z	1.444	1.444	0 %100
21	M74	X	-2.399	-2.399	0 %100
22	M74	Z	1.385	1.385	0 %100
23	M75	X	-.653	-.653	0 %100
24	M75	Z	.377	.377	0 %100
25	M25	X	-.659	-.659	0 %100
26	M25	Z	.381	.381	0 %100
27	M34	X	-1.843	-1.843	0 %100
28	M34	Z	1.064	1.064	0 %100
29	M35	X	-2.097	-2.097	0 %100
30	M35	Z	1.211	1.211	0 %100
31	M38	X	-1.843	-1.843	0 %100
32	M38	Z	1.064	1.064	0 %100
33	M39	X	-2.097	-2.097	0 %100
34	M39	Z	1.211	1.211	0 %100
35	M40	X	0	0	0 %100
36	M40	Z	0	0	0 %100
37	M41	X	-.548	-.548	0 %100
38	M41	Z	.317	.317	0 %100
39	M42	X	-.548	-.548	0 %100
40	M42	Z	.317	.317	0 %100
41	M49	X	-461	-461	0 %100
42	M49	Z	.266	.266	0 %100
43	M50	X	-.524	-.524	0 %100
44	M50	Z	.303	.303	0 %100
45	M53A	X	-461	-461	0 %100
46	M53A	Z	.266	.266	0 %100
47	M54A	X	-.524	-.524	0 %100
48	M54A	Z	.303	.303	0 %100
49	M55	X	-2.501	-2.501	0 %100
50	M55	Z	1.444	1.444	0 %100
51	M56	X	-.653	-.653	0 %100
52	M56	Z	.377	.377	0 %100
53	M57	X	-2.399	-2.399	0 %100
54	M57	Z	1.385	1.385	0 %100
55	M62A	X	-3.156	-3.156	0 %100
56	M62A	Z	1.822	1.822	0 %100
57	MP4C	X	-2.637	-2.637	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
58	MP4C	Z	1.523	1.523	0	%100
59	MP3C	X	-2.637	-2.637	0	%100
60	MP3C	Z	1.523	1.523	0	%100
61	MP2C	X	-2.637	-2.637	0	%100
62	MP2C	Z	1.523	1.523	0	%100
63	MP1C	X	-2.637	-2.637	0	%100
64	MP1C	Z	1.523	1.523	0	%100
65	M71	X	-2.637	-2.637	0	%100
66	M71	Z	1.523	1.523	0	%100
67	M78	X	-0.789	-0.789	0	%100
68	M78	Z	0.456	0.456	0	%100
69	MP4B	X	-2.637	-2.637	0	%100
70	MP4B	Z	1.523	1.523	0	%100
71	MP3B	X	-2.637	-2.637	0	%100
72	MP3B	Z	1.523	1.523	0	%100
73	MP2B	X	-2.637	-2.637	0	%100
74	MP2B	Z	1.523	1.523	0	%100
75	MP1B	X	-2.637	-2.637	0	%100
76	MP1B	Z	1.523	1.523	0	%100
77	M87	X	-0.659	-0.659	0	%100
78	M87	Z	0.381	0.381	0	%100
79	M94A	X	-1.752	-1.752	0	%100
80	M94A	Z	1.012	1.012	0	%100
81	M95A	X	-0.438	-0.438	0	%100
82	M95A	Z	0.253	0.253	0	%100
83	M96A	X	-0.438	-0.438	0	%100
84	M96A	Z	0.253	0.253	0	%100
85	M97	X	-3.643	-3.643	0	%100
86	M97	Z	2.103	2.103	0	%100
87	M98	X	-3.025	-3.025	0	%100
88	M98	Z	1.746	1.746	0	%100
89	M99	X	-3.643	-3.643	0	%100
90	M99	Z	2.103	2.103	0	%100
91	M101	X	-2.237	-2.237	0	%100
92	M101	Z	1.291	1.291	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	MP4A	X	-3.045	-3.045	0	%100
4	MP4A	Z	0	0	0	%100
5	MP3A	X	-3.045	-3.045	0	%100
6	MP3A	Z	0	0	0	%100
7	MP2A	X	-3.045	-3.045	0	%100
8	MP2A	Z	0	0	0	%100
9	MP1A	X	-3.045	-3.045	0	%100
10	MP1A	Z	0	0	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	0	0	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	0	0	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	0	0	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	0	0	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
19	M67	X	-3.85	-3.85	0 %100
20	M67	Z	0	0	0 %100
21	M74	X	-2.138	-2.138	0 %100
22	M74	Z	0	0	0 %100
23	M75	X	-2.138	-2.138	0 %100
24	M75	Z	0	0	0 %100
25	M25	X	0	0	0 %100
26	M25	Z	0	0	0 %100
27	M34	X	-1.596	-1.596	0 %100
28	M34	Z	0	0	0 %100
29	M35	X	-1.816	-1.816	0 %100
30	M35	Z	0	0	0 %100
31	M38	X	-1.596	-1.596	0 %100
32	M38	Z	0	0	0 %100
33	M39	X	-1.816	-1.816	0 %100
34	M39	Z	0	0	0 %100
35	M40	X	-0.963	-0.963	0 %100
36	M40	Z	0	0	0 %100
37	M41	X	-2.017	-2.017	0 %100
38	M41	Z	0	0	0 %100
39	M42	X	-0.002	-0.002	0 %100
40	M42	Z	0	0	0 %100
41	M49	X	-1.596	-1.596	0 %100
42	M49	Z	0	0	0 %100
43	M50	X	-1.816	-1.816	0 %100
44	M50	Z	0	0	0 %100
45	M53A	X	-1.596	-1.596	0 %100
46	M53A	Z	0	0	0 %100
47	M54A	X	-1.816	-1.816	0 %100
48	M54A	Z	0	0	0 %100
49	M55	X	-0.963	-0.963	0 %100
50	M55	Z	0	0	0 %100
51	M56	X	-0.002	-0.002	0 %100
52	M56	Z	0	0	0 %100
53	M57	X	-2.017	-2.017	0 %100
54	M57	Z	0	0	0 %100
55	M62A	X	-2.733	-2.733	0 %100
56	M62A	Z	0	0	0 %100
57	MP4C	X	-3.045	-3.045	0 %100
58	MP4C	Z	0	0	0 %100
59	MP3C	X	-3.045	-3.045	0 %100
60	MP3C	Z	0	0	0 %100
61	MP2C	X	-3.045	-3.045	0 %100
62	MP2C	Z	0	0	0 %100
63	MP1C	X	-3.045	-3.045	0 %100
64	MP1C	Z	0	0	0 %100
65	M71	X	-2.284	-2.284	0 %100
66	M71	Z	0	0	0 %100
67	M78	X	-2.733	-2.733	0 %100
68	M78	Z	0	0	0 %100
69	MP4B	X	-3.045	-3.045	0 %100
70	MP4B	Z	0	0	0 %100
71	MP3B	X	-3.045	-3.045	0 %100
72	MP3B	Z	0	0	0 %100
73	MP2B	X	-3.045	-3.045	0 %100
74	MP2B	Z	0	0	0 %100
75	MP1B	X	-3.045	-3.045	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
76	MP1B	Z	0	0	0	%100
77	M87	X	-2.284	-2.284	0	%100
78	M87	Z	0	0	0	%100
79	M94A	X	-1.518	-1.518	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	-1.518	-1.518	0	%100
82	M95A	Z	0	0	0	%100
83	M96A	X	0	0	0	%100
84	M96A	Z	0	0	0	%100
85	M97	X	-4.444	-4.444	0	%100
86	M97	Z	0	0	0	%100
87	M98	X	-3.731	-3.731	0	%100
88	M98	Z	0	0	0	%100
89	M99	X	-3.731	-3.731	0	%100
90	M99	Z	0	0	0	%100
91	M101	X	-2.583	-2.583	0	%100
92	M101	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	-0.789	-0.789	0	%100
2	M1	Z	-0.456	-0.456	0	%100
3	MP4A	X	-2.637	-2.637	0	%100
4	MP4A	Z	-1.523	-1.523	0	%100
5	MP3A	X	-2.637	-2.637	0	%100
6	MP3A	Z	-1.523	-1.523	0	%100
7	MP2A	X	-2.637	-2.637	0	%100
8	MP2A	Z	-1.523	-1.523	0	%100
9	MP1A	X	-2.637	-2.637	0	%100
10	MP1A	Z	-1.523	-1.523	0	%100
11	M53	X	-0.461	-0.461	0	%100
12	M53	Z	-0.266	-0.266	0	%100
13	M54	X	-0.524	-0.524	0	%100
14	M54	Z	-0.303	-0.303	0	%100
15	M65	X	-0.461	-0.461	0	%100
16	M65	Z	-0.266	-0.266	0	%100
17	M66	X	-0.524	-0.524	0	%100
18	M66	Z	-0.303	-0.303	0	%100
19	M67	X	-2.501	-2.501	0	%100
20	M67	Z	-1.444	-1.444	0	%100
21	M74	X	-0.653	-0.653	0	%100
22	M74	Z	-0.377	-0.377	0	%100
23	M75	X	-2.399	-2.399	0	%100
24	M75	Z	-1.385	-1.385	0	%100
25	M25	X	-0.659	-0.659	0	%100
26	M25	Z	-0.381	-0.381	0	%100
27	M34	X	-0.461	-0.461	0	%100
28	M34	Z	-0.266	-0.266	0	%100
29	M35	X	-0.524	-0.524	0	%100
30	M35	Z	-0.303	-0.303	0	%100
31	M38	X	-0.461	-0.461	0	%100
32	M38	Z	-0.266	-0.266	0	%100
33	M39	X	-0.524	-0.524	0	%100
34	M39	Z	-0.303	-0.303	0	%100
35	M40	X	-2.501	-2.501	0	%100
36	M40	Z	-1.444	-1.444	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
37	M41	X	-2.399	-2.399	0 %100
38	M41	Z	-1.385	-1.385	0 %100
39	M42	X	-.653	-.653	0 %100
40	M42	Z	-.377	-.377	0 %100
41	M49	X	-1.843	-1.843	0 %100
42	M49	Z	-1.064	-1.064	0 %100
43	M50	X	-2.097	-2.097	0 %100
44	M50	Z	-1.211	-1.211	0 %100
45	M53A	X	-1.843	-1.843	0 %100
46	M53A	Z	-1.064	-1.064	0 %100
47	M54A	X	-2.097	-2.097	0 %100
48	M54A	Z	-1.211	-1.211	0 %100
49	M55	X	0	0	0 %100
50	M55	Z	0	0	0 %100
51	M56	X	-.548	-.548	0 %100
52	M56	Z	-.317	-.317	0 %100
53	M57	X	-.548	-.548	0 %100
54	M57	Z	-.317	-.317	0 %100
55	M62A	X	-.789	-.789	0 %100
56	M62A	Z	-.456	-.456	0 %100
57	MP4C	X	-2.637	-2.637	0 %100
58	MP4C	Z	-1.523	-1.523	0 %100
59	MP3C	X	-2.637	-2.637	0 %100
60	MP3C	Z	-1.523	-1.523	0 %100
61	MP2C	X	-2.637	-2.637	0 %100
62	MP2C	Z	-1.523	-1.523	0 %100
63	MP1C	X	-2.637	-2.637	0 %100
64	MP1C	Z	-1.523	-1.523	0 %100
65	M71	X	-.659	-.659	0 %100
66	M71	Z	-.381	-.381	0 %100
67	M78	X	-3.156	-3.156	0 %100
68	M78	Z	-1.822	-1.822	0 %100
69	MP4B	X	-2.637	-2.637	0 %100
70	MP4B	Z	-1.523	-1.523	0 %100
71	MP3B	X	-2.637	-2.637	0 %100
72	MP3B	Z	-1.523	-1.523	0 %100
73	MP2B	X	-2.637	-2.637	0 %100
74	MP2B	Z	-1.523	-1.523	0 %100
75	MP1B	X	-2.637	-2.637	0 %100
76	MP1B	Z	-1.523	-1.523	0 %100
77	M87	X	-2.637	-2.637	0 %100
78	M87	Z	-1.523	-1.523	0 %100
79	M94A	X	-.438	-.438	0 %100
80	M94A	Z	-.253	-.253	0 %100
81	M95A	X	-1.752	-1.752	0 %100
82	M95A	Z	-1.012	-1.012	0 %100
83	M96A	X	-.438	-.438	0 %100
84	M96A	Z	-.253	-.253	0 %100
85	M97	X	-3.643	-3.643	0 %100
86	M97	Z	-2.103	-2.103	0 %100
87	M98	X	-3.643	-3.643	0 %100
88	M98	Z	-2.103	-2.103	0 %100
89	M99	X	-3.025	-3.025	0 %100
90	M99	Z	-1.746	-1.746	0 %100
91	M101	X	-2.237	-2.237	0 %100
92	M101	Z	-1.291	-1.291	0 %100



Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

**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	-1.367	-1.367	0 %100
2	M1	Z	-2.367	-2.367	0 %100
3	MP4A	X	-1.523	-1.523	0 %100
4	MP4A	Z	-2.637	-2.637	0 %100
5	MP3A	X	-1.523	-1.523	0 %100
6	MP3A	Z	-2.637	-2.637	0 %100
7	MP2A	X	-1.523	-1.523	0 %100
8	MP2A	Z	-2.637	-2.637	0 %100
9	MP1A	X	-1.523	-1.523	0 %100
10	MP1A	Z	-2.637	-2.637	0 %100
11	M53	X	-0.798	-0.798	0 %100
12	M53	Z	-1.382	-1.382	0 %100
13	M54	X	-0.908	-0.908	0 %100
14	M54	Z	-1.573	-1.573	0 %100
15	M65	X	-0.798	-0.798	0 %100
16	M65	Z	-1.382	-1.382	0 %100
17	M66	X	-0.908	-0.908	0 %100
18	M66	Z	-1.573	-1.573	0 %100
19	M67	X	-0.481	-0.481	0 %100
20	M67	Z	-0.834	-0.834	0 %100
21	M74	X	-0.00884	-0.00884	0 %100
22	M74	Z	-0.002	-0.002	0 %100
23	M75	X	-1.009	-1.009	0 %100
24	M75	Z	-1.747	-1.747	0 %100
25	M25	X	-1.142	-1.142	0 %100
26	M25	Z	-1.978	-1.978	0 %100
27	M34	X	0	0	0 %100
28	M34	Z	0	0	0 %100
29	M35	X	0	0	0 %100
30	M35	Z	0	0	0 %100
31	M38	X	0	0	0 %100
32	M38	Z	0	0	0 %100
33	M39	X	0	0	0 %100
34	M39	Z	0	0	0 %100
35	M40	X	-1.925	-1.925	0 %100
36	M40	Z	-3.334	-3.334	0 %100
37	M41	X	-1.069	-1.069	0 %100
38	M41	Z	-1.852	-1.852	0 %100
39	M42	X	-1.069	-1.069	0 %100
40	M42	Z	-1.852	-1.852	0 %100
41	M49	X	-0.798	-0.798	0 %100
42	M49	Z	-1.382	-1.382	0 %100
43	M50	X	-0.908	-0.908	0 %100
44	M50	Z	-1.573	-1.573	0 %100
45	M53A	X	-0.798	-0.798	0 %100
46	M53A	Z	-1.382	-1.382	0 %100
47	M54A	X	-0.908	-0.908	0 %100
48	M54A	Z	-1.573	-1.573	0 %100
49	M55	X	-0.481	-0.481	0 %100
50	M55	Z	-0.834	-0.834	0 %100
51	M56	X	-1.009	-1.009	0 %100
52	M56	Z	-1.747	-1.747	0 %100
53	M57	X	-0.00884	-0.00884	0 %100
54	M57	Z	-0.002	-0.002	0 %100
55	M62A	X	0	0	0 %100
56	M62A	Z	0	0	0 %100
57	MP4C	X	-1.523	-1.523	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
58	MP4C	Z	-2.637	-2.637	0	%100
59	MP3C	X	-1.523	-1.523	0	%100
60	MP3C	Z	-2.637	-2.637	0	%100
61	MP2C	X	-1.523	-1.523	0	%100
62	MP2C	Z	-2.637	-2.637	0	%100
63	MP1C	X	-1.523	-1.523	0	%100
64	MP1C	Z	-2.637	-2.637	0	%100
65	M71	X	0	0	0	%100
66	M71	Z	0	0	0	%100
67	M78	X	-1.367	-1.367	0	%100
68	M78	Z	-2.367	-2.367	0	%100
69	MP4B	X	-1.523	-1.523	0	%100
70	MP4B	Z	-2.637	-2.637	0	%100
71	MP3B	X	-1.523	-1.523	0	%100
72	MP3B	Z	-2.637	-2.637	0	%100
73	MP2B	X	-1.523	-1.523	0	%100
74	MP2B	Z	-2.637	-2.637	0	%100
75	MP1B	X	-1.523	-1.523	0	%100
76	MP1B	Z	-2.637	-2.637	0	%100
77	M87	X	-1.142	-1.142	0	%100
78	M87	Z	-1.978	-1.978	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	-.759	-.759	0	%100
82	M95A	Z	-1.314	-1.314	0	%100
83	M96A	X	-.759	-.759	0	%100
84	M96A	Z	-1.314	-1.314	0	%100
85	M97	X	-1.865	-1.865	0	%100
86	M97	Z	-3.231	-3.231	0	%100
87	M98	X	-2.222	-2.222	0	%100
88	M98	Z	-3.849	-3.849	0	%100
89	M99	X	-1.865	-1.865	0	%100
90	M99	Z	-3.231	-3.231	0	%100
91	M101	X	-1.291	-1.291	0	%100
92	M101	Z	-2.237	-2.237	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M1	X	0	0	0	%100
2	M1	Z	-.672	-.672	0	%100
3	MP4A	X	0	0	0	%100
4	MP4A	Z	-.456	-.456	0	%100
5	MP3A	X	0	0	0	%100
6	MP3A	Z	-.456	-.456	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	-.456	-.456	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	-.456	-.456	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	-.392	-.392	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	-.444	-.444	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	-.392	-.392	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	-.444	-.444	0	%100





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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft.%,]	End Location[ft.%,]
19	M67	X	0	0	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	0	0	0	%100
22	M74	Z	-.124	-.124	0	%100
23	M75	X	0	0	0	%100
24	M75	Z	-.124	-.124	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	-.456	-.456	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	-.098	-.098	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	-.111	-.111	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	-.098	-.098	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	-.111	-.111	0	%100
35	M40	X	0	0	0	%100
36	M40	Z	-.609	-.609	0	%100
37	M41	X	0	0	0	%100
38	M41	Z	-.147	-.147	0	%100
39	M42	X	0	0	0	%100
40	M42	Z	-.541	-.541	0	%100
41	M49	X	0	0	0	%100
42	M49	Z	-.098	-.098	0	%100
43	M50	X	0	0	0	%100
44	M50	Z	-.111	-.111	0	%100
45	M53A	X	0	0	0	%100
46	M53A	Z	-.098	-.098	0	%100
47	M54A	X	0	0	0	%100
48	M54A	Z	-.111	-.111	0	%100
49	M55	X	0	0	0	%100
50	M55	Z	-.609	-.609	0	%100
51	M56	X	0	0	0	%100
52	M56	Z	-.541	-.541	0	%100
53	M57	X	0	0	0	%100
54	M57	Z	-.147	-.147	0	%100
55	M62A	X	0	0	0	%100
56	M62A	Z	-.168	-.168	0	%100
57	MP4C	X	0	0	0	%100
58	MP4C	Z	-.456	-.456	0	%100
59	MP3C	X	0	0	0	%100
60	MP3C	Z	-.456	-.456	0	%100
61	MP2C	X	0	0	0	%100
62	MP2C	Z	-.456	-.456	0	%100
63	MP1C	X	0	0	0	%100
64	MP1C	Z	-.456	-.456	0	%100
65	M71	X	0	0	0	%100
66	M71	Z	-.114	-.114	0	%100
67	M78	X	0	0	0	%100
68	M78	Z	-.168	-.168	0	%100
69	MP4B	X	0	0	0	%100
70	MP4B	Z	-.456	-.456	0	%100
71	MP3B	X	0	0	0	%100
72	MP3B	Z	-.456	-.456	0	%100
73	MP2B	X	0	0	0	%100
74	MP2B	Z	-.456	-.456	0	%100
75	MP1B	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
76	MP1B	Z	-.456	-.456	0	%100
77	M87	X	0	0	0	%100
78	M87	Z	-.114	-.114	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	-.079	-.079	0	%100
81	M95A	X	0	0	0	%100
82	M95A	Z	-.079	-.079	0	%100
83	M96A	X	0	0	0	%100
84	M96A	Z	-.315	-.315	0	%100
85	M97	X	0	0	0	%100
86	M97	Z	-.906	-.906	0	%100
87	M98	X	0	0	0	%100
88	M98	Z	-.946	-.946	0	%100
89	M99	X	0	0	0	%100
90	M99	Z	-.946	-.946	0	%100
91	M101	X	0	0	0	%100
92	M101	Z	-.415	-.415	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	.252	.252	0	%100
2	M1	Z	-.436	-.436	0	%100
3	MP4A	X	.228	.228	0	%100
4	MP4A	Z	-.395	-.395	0	%100
5	MP3A	X	.228	.228	0	%100
6	MP3A	Z	-.395	-.395	0	%100
7	MP2A	X	.228	.228	0	%100
8	MP2A	Z	-.395	-.395	0	%100
9	MP1A	X	.228	.228	0	%100
10	MP1A	Z	-.395	-.395	0	%100
11	M53	X	.147	.147	0	%100
12	M53	Z	-.254	-.254	0	%100
13	M54	X	.167	.167	0	%100
14	M54	Z	-.288	-.288	0	%100
15	M65	X	.147	.147	0	%100
16	M65	Z	-.254	-.254	0	%100
17	M66	X	.167	.167	0	%100
18	M66	Z	-.288	-.288	0	%100
19	M67	X	.101	.101	0	%100
20	M67	Z	-.176	-.176	0	%100
21	M74	X	.197	.197	0	%100
22	M74	Z	-.341	-.341	0	%100
23	M75	X	.000173	.000173	0	%100
24	M75	Z	-.000299	-.000299	0	%100
25	M25	X	.171	.171	0	%100
26	M25	Z	-.296	-.296	0	%100
27	M34	X	.147	.147	0	%100
28	M34	Z	-.254	-.254	0	%100
29	M35	X	.167	.167	0	%100
30	M35	Z	-.288	-.288	0	%100
31	M38	X	.147	.147	0	%100
32	M38	Z	-.254	-.254	0	%100
33	M39	X	.167	.167	0	%100
34	M39	Z	-.288	-.288	0	%100
35	M40	X	.101	.101	0	%100
36	M40	Z	-.176	-.176	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.%]
37	M41	X	.000173	.000173	0	%100
38	M41	Z	-.000299	-.000299	0	%100
39	M42	X	.197	.197	0	%100
40	M42	Z	-.341	-.341	0	%100
41	M49	X	0	0	0	%100
42	M49	Z	0	0	0	%100
43	M50	X	0	0	0	%100
44	M50	Z	0	0	0	%100
45	M53A	X	0	0	0	%100
46	M53A	Z	0	0	0	%100
47	M54A	X	0	0	0	%100
48	M54A	Z	0	0	0	%100
49	M55	X	.406	.406	0	%100
50	M55	Z	-.703	-.703	0	%100
51	M56	X	.209	.209	0	%100
52	M56	Z	-.362	-.362	0	%100
53	M57	X	.209	.209	0	%100
54	M57	Z	-.362	-.362	0	%100
55	M62A	X	.252	.252	0	%100
56	M62A	Z	-.436	-.436	0	%100
57	MP4C	X	.228	.228	0	%100
58	MP4C	Z	-.395	-.395	0	%100
59	MP3C	X	.228	.228	0	%100
60	MP3C	Z	-.395	-.395	0	%100
61	MP2C	X	.228	.228	0	%100
62	MP2C	Z	-.395	-.395	0	%100
63	MP1C	X	.228	.228	0	%100
64	MP1C	Z	-.395	-.395	0	%100
65	M71	X	.171	.171	0	%100
66	M71	Z	-.296	-.296	0	%100
67	M78	X	0	0	0	%100
68	M78	Z	0	0	0	%100
69	MP4B	X	.228	.228	0	%100
70	MP4B	Z	-.395	-.395	0	%100
71	MP3B	X	.228	.228	0	%100
72	MP3B	Z	-.395	-.395	0	%100
73	MP2B	X	.228	.228	0	%100
74	MP2B	Z	-.395	-.395	0	%100
75	MP1B	X	.228	.228	0	%100
76	MP1B	Z	-.395	-.395	0	%100
77	M87	X	0	0	0	%100
78	M87	Z	0	0	0	%100
79	M94A	X	.118	.118	0	%100
80	M94A	Z	-.204	-.204	0	%100
81	M95A	X	0	0	0	%100
82	M95A	Z	0	0	0	%100
83	M96A	X	.118	.118	0	%100
84	M96A	Z	-.204	-.204	0	%100
85	M97	X	.46	.46	0	%100
86	M97	Z	-.796	-.796	0	%100
87	M98	X	.46	.46	0	%100
88	M98	Z	-.796	-.796	0	%100
89	M99	X	.48	.48	0	%100
90	M99	Z	-.831	-.831	0	%100
91	M101	X	.208	.208	0	%100
92	M101	Z	-.36	-.36	0	%100



Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

**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	.145	.145	0 %100
2	M1	Z	-.084	-.084	0 %100
3	MP4A	X	.395	.395	0 %100
4	MP4A	Z	-.228	-.228	0 %100
5	MP3A	X	.395	.395	0 %100
6	MP3A	Z	-.228	-.228	0 %100
7	MP2A	X	.395	.395	0 %100
8	MP2A	Z	-.228	-.228	0 %100
9	MP1A	X	.395	.395	0 %100
10	MP1A	Z	-.228	-.228	0 %100
11	M53	X	.085	.085	0 %100
12	M53	Z	-.049	-.049	0 %100
13	M54	X	.096	.096	0 %100
14	M54	Z	-.056	-.056	0 %100
15	M65	X	.085	.085	0 %100
16	M65	Z	-.049	-.049	0 %100
17	M66	X	.096	.096	0 %100
18	M66	Z	-.056	-.056	0 %100
19	M67	X	.527	.527	0 %100
20	M67	Z	-.304	-.304	0 %100
21	M74	X	.469	.469	0 %100
22	M74	Z	-.271	-.271	0 %100
23	M75	X	.128	.128	0 %100
24	M75	Z	-.074	-.074	0 %100
25	M25	X	.099	.099	0 %100
26	M25	Z	-.057	-.057	0 %100
27	M34	X	.339	.339	0 %100
28	M34	Z	-.196	-.196	0 %100
29	M35	X	.385	.385	0 %100
30	M35	Z	-.222	-.222	0 %100
31	M38	X	.339	.339	0 %100
32	M38	Z	-.196	-.196	0 %100
33	M39	X	.385	.385	0 %100
34	M39	Z	-.222	-.222	0 %100
35	M40	X	0	0	0 %100
36	M40	Z	0	0	0 %100
37	M41	X	.107	.107	0 %100
38	M41	Z	-.062	-.062	0 %100
39	M42	X	.107	.107	0 %100
40	M42	Z	-.062	-.062	0 %100
41	M49	X	.085	.085	0 %100
42	M49	Z	-.049	-.049	0 %100
43	M50	X	.096	.096	0 %100
44	M50	Z	-.056	-.056	0 %100
45	M53A	X	.085	.085	0 %100
46	M53A	Z	-.049	-.049	0 %100
47	M54A	X	.096	.096	0 %100
48	M54A	Z	-.056	-.056	0 %100
49	M55	X	.527	.527	0 %100
50	M55	Z	-.304	-.304	0 %100
51	M56	X	.128	.128	0 %100
52	M56	Z	-.074	-.074	0 %100
53	M57	X	.469	.469	0 %100
54	M57	Z	-.271	-.271	0 %100
55	M62A	X	.582	.582	0 %100
56	M62A	Z	-.336	-.336	0 %100
57	MP4C	X	.395	.395	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
58	MP4C	Z	-.228	-.228	0	%100
59	MP3C	X	.395	.395	0	%100
60	MP3C	Z	-.228	-.228	0	%100
61	MP2C	X	.395	.395	0	%100
62	MP2C	Z	-.228	-.228	0	%100
63	MP1C	X	.395	.395	0	%100
64	MP1C	Z	-.228	-.228	0	%100
65	M71	X	.395	.395	0	%100
66	M71	Z	-.228	-.228	0	%100
67	M78	X	.145	.145	0	%100
68	M78	Z	-.084	-.084	0	%100
69	MP4B	X	.395	.395	0	%100
70	MP4B	Z	-.228	-.228	0	%100
71	MP3B	X	.395	.395	0	%100
72	MP3B	Z	-.228	-.228	0	%100
73	MP2B	X	.395	.395	0	%100
74	MP2B	Z	-.228	-.228	0	%100
75	MP1B	X	.395	.395	0	%100
76	MP1B	Z	-.228	-.228	0	%100
77	M87	X	.099	.099	0	%100
78	M87	Z	-.057	-.057	0	%100
79	M94A	X	.272	.272	0	%100
80	M94A	Z	-.157	-.157	0	%100
81	M95A	X	.068	.068	0	%100
82	M95A	Z	-.039	-.039	0	%100
83	M96A	X	.068	.068	0	%100
84	M96A	Z	-.039	-.039	0	%100
85	M97	X	.819	.819	0	%100
86	M97	Z	-.473	-.473	0	%100
87	M98	X	.784	.784	0	%100
88	M98	Z	-.453	-.453	0	%100
89	M99	X	.819	.819	0	%100
90	M99	Z	-.473	-.473	0	%100
91	M101	X	.36	.36	0	%100
92	M101	Z	-.208	-.208	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	MP4A	X	.456	.456	0	%100
4	MP4A	Z	0	0	0	%100
5	MP3A	X	.456	.456	0	%100
6	MP3A	Z	0	0	0	%100
7	MP2A	X	.456	.456	0	%100
8	MP2A	Z	0	0	0	%100
9	MP1A	X	.456	.456	0	%100
10	MP1A	Z	0	0	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	0	0	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	0	0	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	0	0	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
19	M67	X	.812	.812	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	.418	.418	0	%100
22	M74	Z	0	0	0	%100
23	M75	X	.418	.418	0	%100
24	M75	Z	0	0	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	0	0	0	%100
27	M34	X	.294	.294	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	.333	.333	0	%100
30	M35	Z	0	0	0	%100
31	M38	X	.294	.294	0	%100
32	M38	Z	0	0	0	%100
33	M39	X	.333	.333	0	%100
34	M39	Z	0	0	0	%100
35	M40	X	.203	.203	0	%100
36	M40	Z	0	0	0	%100
37	M41	X	.394	.394	0	%100
38	M41	Z	0	0	0	%100
39	M42	X	.000345	.000345	0	%100
40	M42	Z	0	0	0	%100
41	M49	X	.294	.294	0	%100
42	M49	Z	0	0	0	%100
43	M50	X	.333	.333	0	%100
44	M50	Z	0	0	0	%100
45	M53A	X	.294	.294	0	%100
46	M53A	Z	0	0	0	%100
47	M54A	X	.333	.333	0	%100
48	M54A	Z	0	0	0	%100
49	M55	X	.203	.203	0	%100
50	M55	Z	0	0	0	%100
51	M56	X	.000345	.000345	0	%100
52	M56	Z	0	0	0	%100
53	M57	X	.394	.394	0	%100
54	M57	Z	0	0	0	%100
55	M62A	X	.504	.504	0	%100
56	M62A	Z	0	0	0	%100
57	MP4C	X	.456	.456	0	%100
58	MP4C	Z	0	0	0	%100
59	MP3C	X	.456	.456	0	%100
60	MP3C	Z	0	0	0	%100
61	MP2C	X	.456	.456	0	%100
62	MP2C	Z	0	0	0	%100
63	MP1C	X	.456	.456	0	%100
64	MP1C	Z	0	0	0	%100
65	M71	X	.342	.342	0	%100
66	M71	Z	0	0	0	%100
67	M78	X	.504	.504	0	%100
68	M78	Z	0	0	0	%100
69	MP4B	X	.456	.456	0	%100
70	MP4B	Z	0	0	0	%100
71	MP3B	X	.456	.456	0	%100
72	MP3B	Z	0	0	0	%100
73	MP2B	X	.456	.456	0	%100
74	MP2B	Z	0	0	0	%100
75	MP1B	X	.456	.456	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
76	MP1B	Z	0	0	0	%100
77	M87	X	.342	.342	0	%100
78	M87	Z	0	0	0	%100
79	M94A	X	.236	.236	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	.236	.236	0	%100
82	M95A	Z	0	0	0	%100
83	M96A	X	0	0	0	%100
84	M96A	Z	0	0	0	%100
85	M97	X	.959	.959	0	%100
86	M97	Z	0	0	0	%100
87	M98	X	.919	.919	0	%100
88	M98	Z	0	0	0	%100
89	M99	X	.919	.919	0	%100
90	M99	Z	0	0	0	%100
91	M101	X	.415	.415	0	%100
92	M101	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	.145	.145	0	%100
2	M1	Z	.084	.084	0	%100
3	MP4A	X	.395	.395	0	%100
4	MP4A	Z	.228	.228	0	%100
5	MP3A	X	.395	.395	0	%100
6	MP3A	Z	.228	.228	0	%100
7	MP2A	X	.395	.395	0	%100
8	MP2A	Z	.228	.228	0	%100
9	MP1A	X	.395	.395	0	%100
10	MP1A	Z	.228	.228	0	%100
11	M53	X	.085	.085	0	%100
12	M53	Z	.049	.049	0	%100
13	M54	X	.096	.096	0	%100
14	M54	Z	.056	.056	0	%100
15	M65	X	.085	.085	0	%100
16	M65	Z	.049	.049	0	%100
17	M66	X	.096	.096	0	%100
18	M66	Z	.056	.056	0	%100
19	M67	X	.527	.527	0	%100
20	M67	Z	.304	.304	0	%100
21	M74	X	.128	.128	0	%100
22	M74	Z	.074	.074	0	%100
23	M75	X	.469	.469	0	%100
24	M75	Z	.271	.271	0	%100
25	M25	X	.099	.099	0	%100
26	M25	Z	.057	.057	0	%100
27	M34	X	.085	.085	0	%100
28	M34	Z	.049	.049	0	%100
29	M35	X	.096	.096	0	%100
30	M35	Z	.056	.056	0	%100
31	M38	X	.085	.085	0	%100
32	M38	Z	.049	.049	0	%100
33	M39	X	.096	.096	0	%100
34	M39	Z	.056	.056	0	%100
35	M40	X	.527	.527	0	%100
36	M40	Z	.304	.304	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.%]
37	M41	X	.469	.469	0	%100
38	M41	Z	.271	.271	0	%100
39	M42	X	.128	.128	0	%100
40	M42	Z	.074	.074	0	%100
41	M49	X	.339	.339	0	%100
42	M49	Z	.196	.196	0	%100
43	M50	X	.385	.385	0	%100
44	M50	Z	.222	.222	0	%100
45	M53A	X	.339	.339	0	%100
46	M53A	Z	.196	.196	0	%100
47	M54A	X	.385	.385	0	%100
48	M54A	Z	.222	.222	0	%100
49	M55	X	0	0	0	%100
50	M55	Z	0	0	0	%100
51	M56	X	.107	.107	0	%100
52	M56	Z	.062	.062	0	%100
53	M57	X	.107	.107	0	%100
54	M57	Z	.062	.062	0	%100
55	M62A	X	.145	.145	0	%100
56	M62A	Z	.084	.084	0	%100
57	MP4C	X	.395	.395	0	%100
58	MP4C	Z	.228	.228	0	%100
59	MP3C	X	.395	.395	0	%100
60	MP3C	Z	.228	.228	0	%100
61	MP2C	X	.395	.395	0	%100
62	MP2C	Z	.228	.228	0	%100
63	MP1C	X	.395	.395	0	%100
64	MP1C	Z	.228	.228	0	%100
65	M71	X	.099	.099	0	%100
66	M71	Z	.057	.057	0	%100
67	M78	X	.582	.582	0	%100
68	M78	Z	.336	.336	0	%100
69	MP4B	X	.395	.395	0	%100
70	MP4B	Z	.228	.228	0	%100
71	MP3B	X	.395	.395	0	%100
72	MP3B	Z	.228	.228	0	%100
73	MP2B	X	.395	.395	0	%100
74	MP2B	Z	.228	.228	0	%100
75	MP1B	X	.395	.395	0	%100
76	MP1B	Z	.228	.228	0	%100
77	M87	X	.395	.395	0	%100
78	M87	Z	.228	.228	0	%100
79	M94A	X	.068	.068	0	%100
80	M94A	Z	.039	.039	0	%100
81	M95A	X	.272	.272	0	%100
82	M95A	Z	.157	.157	0	%100
83	M96A	X	.068	.068	0	%100
84	M96A	Z	.039	.039	0	%100
85	M97	X	.819	.819	0	%100
86	M97	Z	.473	.473	0	%100
87	M98	X	.819	.819	0	%100
88	M98	Z	.473	.473	0	%100
89	M99	X	.784	.784	0	%100
90	M99	Z	.453	.453	0	%100
91	M101	X	.36	.36	0	%100
92	M101	Z	.208	.208	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]
1	M1	X	.252	.252	0 %100
2	M1	Z	.436	.436	0 %100
3	MP4A	X	.228	.228	0 %100
4	MP4A	Z	.395	.395	0 %100
5	MP3A	X	.228	.228	0 %100
6	MP3A	Z	.395	.395	0 %100
7	MP2A	X	.228	.228	0 %100
8	MP2A	Z	.395	.395	0 %100
9	MP1A	X	.228	.228	0 %100
10	MP1A	Z	.395	.395	0 %100
11	M53	X	.147	.147	0 %100
12	M53	Z	.254	.254	0 %100
13	M54	X	.167	.167	0 %100
14	M54	Z	.288	.288	0 %100
15	M65	X	.147	.147	0 %100
16	M65	Z	.254	.254	0 %100
17	M66	X	.167	.167	0 %100
18	M66	Z	.288	.288	0 %100
19	M67	X	.101	.101	0 %100
20	M67	Z	.176	.176	0 %100
21	M74	X	.000173	.000173	0 %100
22	M74	Z	.000299	.000299	0 %100
23	M75	X	.197	.197	0 %100
24	M75	Z	.341	.341	0 %100
25	M25	X	.171	.171	0 %100
26	M25	Z	.296	.296	0 %100
27	M34	X	0	0	0 %100
28	M34	Z	0	0	0 %100
29	M35	X	0	0	0 %100
30	M35	Z	0	0	0 %100
31	M38	X	0	0	0 %100
32	M38	Z	0	0	0 %100
33	M39	X	0	0	0 %100
34	M39	Z	0	0	0 %100
35	M40	X	.406	.406	0 %100
36	M40	Z	.703	.703	0 %100
37	M41	X	.209	.209	0 %100
38	M41	Z	.362	.362	0 %100
39	M42	X	.209	.209	0 %100
40	M42	Z	.362	.362	0 %100
41	M49	X	.147	.147	0 %100
42	M49	Z	.254	.254	0 %100
43	M50	X	.167	.167	0 %100
44	M50	Z	.288	.288	0 %100
45	M53A	X	.147	.147	0 %100
46	M53A	Z	.254	.254	0 %100
47	M54A	X	.167	.167	0 %100
48	M54A	Z	.288	.288	0 %100
49	M55	X	.101	.101	0 %100
50	M55	Z	.176	.176	0 %100
51	M56	X	.197	.197	0 %100
52	M56	Z	.341	.341	0 %100
53	M57	X	.000173	.000173	0 %100
54	M57	Z	.000299	.000299	0 %100
55	M62A	X	0	0	0 %100
56	M62A	Z	0	0	0 %100
57	MP4C	X	.228	.228	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
58	MP4C	Z	.395	.395	0	%100
59	MP3C	X	.228	.228	0	%100
60	MP3C	Z	.395	.395	0	%100
61	MP2C	X	.228	.228	0	%100
62	MP2C	Z	.395	.395	0	%100
63	MP1C	X	.228	.228	0	%100
64	MP1C	Z	.395	.395	0	%100
65	M71	X	0	0	0	%100
66	M71	Z	0	0	0	%100
67	M78	X	.252	.252	0	%100
68	M78	Z	.436	.436	0	%100
69	MP4B	X	.228	.228	0	%100
70	MP4B	Z	.395	.395	0	%100
71	MP3B	X	.228	.228	0	%100
72	MP3B	Z	.395	.395	0	%100
73	MP2B	X	.228	.228	0	%100
74	MP2B	Z	.395	.395	0	%100
75	MP1B	X	.228	.228	0	%100
76	MP1B	Z	.395	.395	0	%100
77	M87	X	.171	.171	0	%100
78	M87	Z	.296	.296	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	.118	.118	0	%100
82	M95A	Z	.204	.204	0	%100
83	M96A	X	.118	.118	0	%100
84	M96A	Z	.204	.204	0	%100
85	M97	X	.46	.46	0	%100
86	M97	Z	.796	.796	0	%100
87	M98	X	.48	.48	0	%100
88	M98	Z	.831	.831	0	%100
89	M99	X	.46	.46	0	%100
90	M99	Z	.796	.796	0	%100
91	M101	X	.208	.208	0	%100
92	M101	Z	.36	.36	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	.672	.672	0	%100
3	MP4A	X	0	0	0	%100
4	MP4A	Z	.456	.456	0	%100
5	MP3A	X	0	0	0	%100
6	MP3A	Z	.456	.456	0	%100
7	MP2A	X	0	0	0	%100
8	MP2A	Z	.456	.456	0	%100
9	MP1A	X	0	0	0	%100
10	MP1A	Z	.456	.456	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	.392	.392	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	.444	.444	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	.392	.392	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	.444	.444	0	%100



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

Member Label	Direction	Start Magnitude[lb/ft,...	End Magnitude[lb/ft,F...	Start Location[ft, %]	End Location[ft, %]	
19	M67	X	0	0	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	0	0	0	%100
22	M74	Z	.124	.124	0	%100
23	M75	X	0	0	0	%100
24	M75	Z	.124	.124	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	.456	.456	0	%100
27	M34	X	0	0	0	%100
28	M34	Z	.098	.098	0	%100
29	M35	X	0	0	0	%100
30	M35	Z	.111	.111	0	%100
31	M38	X	0	0	0	%100
32	M38	Z	.098	.098	0	%100
33	M39	X	0	0	0	%100
34	M39	Z	.111	.111	0	%100
35	M40	X	0	0	0	%100
36	M40	Z	.609	.609	0	%100
37	M41	X	0	0	0	%100
38	M41	Z	.147	.147	0	%100
39	M42	X	0	0	0	%100
40	M42	Z	.541	.541	0	%100
41	M49	X	0	0	0	%100
42	M49	Z	.098	.098	0	%100
43	M50	X	0	0	0	%100
44	M50	Z	.111	.111	0	%100
45	M53A	X	0	0	0	%100
46	M53A	Z	.098	.098	0	%100
47	M54A	X	0	0	0	%100
48	M54A	Z	.111	.111	0	%100
49	M55	X	0	0	0	%100
50	M55	Z	.609	.609	0	%100
51	M56	X	0	0	0	%100
52	M56	Z	.541	.541	0	%100
53	M57	X	0	0	0	%100
54	M57	Z	.147	.147	0	%100
55	M62A	X	0	0	0	%100
56	M62A	Z	.168	.168	0	%100
57	MP4C	X	0	0	0	%100
58	MP4C	Z	.456	.456	0	%100
59	MP3C	X	0	0	0	%100
60	MP3C	Z	.456	.456	0	%100
61	MP2C	X	0	0	0	%100
62	MP2C	Z	.456	.456	0	%100
63	MP1C	X	0	0	0	%100
64	MP1C	Z	.456	.456	0	%100
65	M71	X	0	0	0	%100
66	M71	Z	.114	.114	0	%100
67	M78	X	0	0	0	%100
68	M78	Z	.168	.168	0	%100
69	MP4B	X	0	0	0	%100
70	MP4B	Z	.456	.456	0	%100
71	MP3B	X	0	0	0	%100
72	MP3B	Z	.456	.456	0	%100
73	MP2B	X	0	0	0	%100
74	MP2B	Z	.456	.456	0	%100
75	MP1B	X	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
76	MP1B	Z	.456	.456	0	%100
77	M87	X	0	0	0	%100
78	M87	Z	.114	.114	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	.079	.079	0	%100
81	M95A	X	0	0	0	%100
82	M95A	Z	.079	.079	0	%100
83	M96A	X	0	0	0	%100
84	M96A	Z	.315	.315	0	%100
85	M97	X	0	0	0	%100
86	M97	Z	.906	.906	0	%100
87	M98	X	0	0	0	%100
88	M98	Z	.946	.946	0	%100
89	M99	X	0	0	0	%100
90	M99	Z	.946	.946	0	%100
91	M101	X	0	0	0	%100
92	M101	Z	.415	.415	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	-.252	-.252	0	%100
2	M1	Z	.436	.436	0	%100
3	MP4A	X	-.228	-.228	0	%100
4	MP4A	Z	.395	.395	0	%100
5	MP3A	X	-.228	-.228	0	%100
6	MP3A	Z	.395	.395	0	%100
7	MP2A	X	-.228	-.228	0	%100
8	MP2A	Z	.395	.395	0	%100
9	MP1A	X	-.228	-.228	0	%100
10	MP1A	Z	.395	.395	0	%100
11	M53	X	-.147	-.147	0	%100
12	M53	Z	.254	.254	0	%100
13	M54	X	-.167	-.167	0	%100
14	M54	Z	.288	.288	0	%100
15	M65	X	-.147	-.147	0	%100
16	M65	Z	.254	.254	0	%100
17	M66	X	-.167	-.167	0	%100
18	M66	Z	.288	.288	0	%100
19	M67	X	-.101	-.101	0	%100
20	M67	Z	.176	.176	0	%100
21	M74	X	-.197	-.197	0	%100
22	M74	Z	.341	.341	0	%100
23	M75	X	-.000173	-.000173	0	%100
24	M75	Z	.000299	.000299	0	%100
25	M25	X	-.171	-.171	0	%100
26	M25	Z	.296	.296	0	%100
27	M34	X	-.147	-.147	0	%100
28	M34	Z	.254	.254	0	%100
29	M35	X	-.167	-.167	0	%100
30	M35	Z	.288	.288	0	%100
31	M38	X	-.147	-.147	0	%100
32	M38	Z	.254	.254	0	%100
33	M39	X	-.167	-.167	0	%100
34	M39	Z	.288	.288	0	%100
35	M40	X	-.101	-.101	0	%100
36	M40	Z	.176	.176	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.%]
37	M41	X	-.000173	-.000173	0 %100
38	M41	Z	.000299	.000299	0 %100
39	M42	X	-.197	-.197	0 %100
40	M42	Z	.341	.341	0 %100
41	M49	X	0	0	0 %100
42	M49	Z	0	0	0 %100
43	M50	X	0	0	0 %100
44	M50	Z	0	0	0 %100
45	M53A	X	0	0	0 %100
46	M53A	Z	0	0	0 %100
47	M54A	X	0	0	0 %100
48	M54A	Z	0	0	0 %100
49	M55	X	-.406	-.406	0 %100
50	M55	Z	.703	.703	0 %100
51	M56	X	-.209	-.209	0 %100
52	M56	Z	.362	.362	0 %100
53	M57	X	-.209	-.209	0 %100
54	M57	Z	.362	.362	0 %100
55	M62A	X	-.252	-.252	0 %100
56	M62A	Z	.436	.436	0 %100
57	MP4C	X	-.228	-.228	0 %100
58	MP4C	Z	.395	.395	0 %100
59	MP3C	X	-.228	-.228	0 %100
60	MP3C	Z	.395	.395	0 %100
61	MP2C	X	-.228	-.228	0 %100
62	MP2C	Z	.395	.395	0 %100
63	MP1C	X	-.228	-.228	0 %100
64	MP1C	Z	.395	.395	0 %100
65	M71	X	-.171	-.171	0 %100
66	M71	Z	.296	.296	0 %100
67	M78	X	0	0	0 %100
68	M78	Z	0	0	0 %100
69	MP4B	X	-.228	-.228	0 %100
70	MP4B	Z	.395	.395	0 %100
71	MP3B	X	-.228	-.228	0 %100
72	MP3B	Z	.395	.395	0 %100
73	MP2B	X	-.228	-.228	0 %100
74	MP2B	Z	.395	.395	0 %100
75	MP1B	X	-.228	-.228	0 %100
76	MP1B	Z	.395	.395	0 %100
77	M87	X	0	0	0 %100
78	M87	Z	0	0	0 %100
79	M94A	X	-.118	-.118	0 %100
80	M94A	Z	.204	.204	0 %100
81	M95A	X	0	0	0 %100
82	M95A	Z	0	0	0 %100
83	M96A	X	-.118	-.118	0 %100
84	M96A	Z	.204	.204	0 %100
85	M97	X	-.46	-.46	0 %100
86	M97	Z	.796	.796	0 %100
87	M98	X	-.46	-.46	0 %100
88	M98	Z	.796	.796	0 %100
89	M99	X	-.48	-.48	0 %100
90	M99	Z	.831	.831	0 %100
91	M101	X	-.208	-.208	0 %100
92	M101	Z	.36	.36	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	-.145	-.145	0 %100
2	M1	Z	.084	.084	0 %100
3	MP4A	X	-.395	-.395	0 %100
4	MP4A	Z	.228	.228	0 %100
5	MP3A	X	-.395	-.395	0 %100
6	MP3A	Z	.228	.228	0 %100
7	MP2A	X	-.395	-.395	0 %100
8	MP2A	Z	.228	.228	0 %100
9	MP1A	X	-.395	-.395	0 %100
10	MP1A	Z	.228	.228	0 %100
11	M53	X	-.085	-.085	0 %100
12	M53	Z	.049	.049	0 %100
13	M54	X	-.096	-.096	0 %100
14	M54	Z	.056	.056	0 %100
15	M65	X	-.085	-.085	0 %100
16	M65	Z	.049	.049	0 %100
17	M66	X	-.096	-.096	0 %100
18	M66	Z	.056	.056	0 %100
19	M67	X	-.527	-.527	0 %100
20	M67	Z	.304	.304	0 %100
21	M74	X	-.469	-.469	0 %100
22	M74	Z	.271	.271	0 %100
23	M75	X	-.128	-.128	0 %100
24	M75	Z	.074	.074	0 %100
25	M25	X	-.099	-.099	0 %100
26	M25	Z	.057	.057	0 %100
27	M34	X	-.339	-.339	0 %100
28	M34	Z	.196	.196	0 %100
29	M35	X	-.385	-.385	0 %100
30	M35	Z	.222	.222	0 %100
31	M38	X	-.339	-.339	0 %100
32	M38	Z	.196	.196	0 %100
33	M39	X	-.385	-.385	0 %100
34	M39	Z	.222	.222	0 %100
35	M40	X	0	0	0 %100
36	M40	Z	0	0	0 %100
37	M41	X	-.107	-.107	0 %100
38	M41	Z	.062	.062	0 %100
39	M42	X	-.107	-.107	0 %100
40	M42	Z	.062	.062	0 %100
41	M49	X	-.085	-.085	0 %100
42	M49	Z	.049	.049	0 %100
43	M50	X	-.096	-.096	0 %100
44	M50	Z	.056	.056	0 %100
45	M53A	X	-.085	-.085	0 %100
46	M53A	Z	.049	.049	0 %100
47	M54A	X	-.096	-.096	0 %100
48	M54A	Z	.056	.056	0 %100
49	M55	X	-.527	-.527	0 %100
50	M55	Z	.304	.304	0 %100
51	M56	X	-.128	-.128	0 %100
52	M56	Z	.074	.074	0 %100
53	M57	X	-.469	-.469	0 %100
54	M57	Z	.271	.271	0 %100
55	M62A	X	-.582	-.582	0 %100
56	M62A	Z	.336	.336	0 %100
57	MP4C	X	-.395	-.395	0 %100





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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
58	MP4C	Z	.228	.228	0	%100
59	MP3C	X	-.395	-.395	0	%100
60	MP3C	Z	.228	.228	0	%100
61	MP2C	X	-.395	-.395	0	%100
62	MP2C	Z	.228	.228	0	%100
63	MP1C	X	-.395	-.395	0	%100
64	MP1C	Z	.228	.228	0	%100
65	M71	X	-.395	-.395	0	%100
66	M71	Z	.228	.228	0	%100
67	M78	X	-.145	-.145	0	%100
68	M78	Z	.084	.084	0	%100
69	MP4B	X	-.395	-.395	0	%100
70	MP4B	Z	.228	.228	0	%100
71	MP3B	X	-.395	-.395	0	%100
72	MP3B	Z	.228	.228	0	%100
73	MP2B	X	-.395	-.395	0	%100
74	MP2B	Z	.228	.228	0	%100
75	MP1B	X	-.395	-.395	0	%100
76	MP1B	Z	.228	.228	0	%100
77	M87	X	-.099	-.099	0	%100
78	M87	Z	.057	.057	0	%100
79	M94A	X	-.272	-.272	0	%100
80	M94A	Z	.157	.157	0	%100
81	M95A	X	-.068	-.068	0	%100
82	M95A	Z	.039	.039	0	%100
83	M96A	X	-.068	-.068	0	%100
84	M96A	Z	.039	.039	0	%100
85	M97	X	-.819	-.819	0	%100
86	M97	Z	.473	.473	0	%100
87	M98	X	-.784	-.784	0	%100
88	M98	Z	.453	.453	0	%100
89	M99	X	-.819	-.819	0	%100
90	M99	Z	.473	.473	0	%100
91	M101	X	-.36	-.36	0	%100
92	M101	Z	.208	.208	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	MP4A	X	-.456	-.456	0	%100
4	MP4A	Z	0	0	0	%100
5	MP3A	X	-.456	-.456	0	%100
6	MP3A	Z	0	0	0	%100
7	MP2A	X	-.456	-.456	0	%100
8	MP2A	Z	0	0	0	%100
9	MP1A	X	-.456	-.456	0	%100
10	MP1A	Z	0	0	0	%100
11	M53	X	0	0	0	%100
12	M53	Z	0	0	0	%100
13	M54	X	0	0	0	%100
14	M54	Z	0	0	0	%100
15	M65	X	0	0	0	%100
16	M65	Z	0	0	0	%100
17	M66	X	0	0	0	%100
18	M66	Z	0	0	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
19	M67	X	- .812	- .812	0	%100
20	M67	Z	0	0	0	%100
21	M74	X	- .418	- .418	0	%100
22	M74	Z	0	0	0	%100
23	M75	X	- .418	- .418	0	%100
24	M75	Z	0	0	0	%100
25	M25	X	0	0	0	%100
26	M25	Z	0	0	0	%100
27	M34	X	- .294	- .294	0	%100
28	M34	Z	0	0	0	%100
29	M35	X	- .333	- .333	0	%100
30	M35	Z	0	0	0	%100
31	M38	X	- .294	- .294	0	%100
32	M38	Z	0	0	0	%100
33	M39	X	- .333	- .333	0	%100
34	M39	Z	0	0	0	%100
35	M40	X	- .203	- .203	0	%100
36	M40	Z	0	0	0	%100
37	M41	X	- .394	- .394	0	%100
38	M41	Z	0	0	0	%100
39	M42	X	- .000345	- .000345	0	%100
40	M42	Z	0	0	0	%100
41	M49	X	- .294	- .294	0	%100
42	M49	Z	0	0	0	%100
43	M50	X	- .333	- .333	0	%100
44	M50	Z	0	0	0	%100
45	M53A	X	- .294	- .294	0	%100
46	M53A	Z	0	0	0	%100
47	M54A	X	- .333	- .333	0	%100
48	M54A	Z	0	0	0	%100
49	M55	X	- .203	- .203	0	%100
50	M55	Z	0	0	0	%100
51	M56	X	- .000345	- .000345	0	%100
52	M56	Z	0	0	0	%100
53	M57	X	- .394	- .394	0	%100
54	M57	Z	0	0	0	%100
55	M62A	X	- .504	- .504	0	%100
56	M62A	Z	0	0	0	%100
57	MP4C	X	- .456	- .456	0	%100
58	MP4C	Z	0	0	0	%100
59	MP3C	X	- .456	- .456	0	%100
60	MP3C	Z	0	0	0	%100
61	MP2C	X	- .456	- .456	0	%100
62	MP2C	Z	0	0	0	%100
63	MP1C	X	- .456	- .456	0	%100
64	MP1C	Z	0	0	0	%100
65	M71	X	- .342	- .342	0	%100
66	M71	Z	0	0	0	%100
67	M78	X	- .504	- .504	0	%100
68	M78	Z	0	0	0	%100
69	MP4B	X	- .456	- .456	0	%100
70	MP4B	Z	0	0	0	%100
71	MP3B	X	- .456	- .456	0	%100
72	MP3B	Z	0	0	0	%100
73	MP2B	X	- .456	- .456	0	%100
74	MP2B	Z	0	0	0	%100
75	MP1B	X	- .456	- .456	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
76	MP1B	Z	0	0	0	%100
77	M87	X	-.342	-.342	0	%100
78	M87	Z	0	0	0	%100
79	M94A	X	-.236	-.236	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	-.236	-.236	0	%100
82	M95A	Z	0	0	0	%100
83	M96A	X	0	0	0	%100
84	M96A	Z	0	0	0	%100
85	M97	X	-.959	-.959	0	%100
86	M97	Z	0	0	0	%100
87	M98	X	-.919	-.919	0	%100
88	M98	Z	0	0	0	%100
89	M99	X	-.919	-.919	0	%100
90	M99	Z	0	0	0	%100
91	M101	X	-.415	-.415	0	%100
92	M101	Z	0	0	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M1	X	-.145	-.145	0	%100
2	M1	Z	-.084	-.084	0	%100
3	MP4A	X	-.395	-.395	0	%100
4	MP4A	Z	-.228	-.228	0	%100
5	MP3A	X	-.395	-.395	0	%100
6	MP3A	Z	-.228	-.228	0	%100
7	MP2A	X	-.395	-.395	0	%100
8	MP2A	Z	-.228	-.228	0	%100
9	MP1A	X	-.395	-.395	0	%100
10	MP1A	Z	-.228	-.228	0	%100
11	M53	X	-.085	-.085	0	%100
12	M53	Z	-.049	-.049	0	%100
13	M54	X	-.096	-.096	0	%100
14	M54	Z	-.056	-.056	0	%100
15	M65	X	-.085	-.085	0	%100
16	M65	Z	-.049	-.049	0	%100
17	M66	X	-.096	-.096	0	%100
18	M66	Z	-.056	-.056	0	%100
19	M67	X	-.527	-.527	0	%100
20	M67	Z	-.304	-.304	0	%100
21	M74	X	-.128	-.128	0	%100
22	M74	Z	-.074	-.074	0	%100
23	M75	X	-.469	-.469	0	%100
24	M75	Z	-.271	-.271	0	%100
25	M25	X	-.099	-.099	0	%100
26	M25	Z	-.057	-.057	0	%100
27	M34	X	-.085	-.085	0	%100
28	M34	Z	-.049	-.049	0	%100
29	M35	X	-.096	-.096	0	%100
30	M35	Z	-.056	-.056	0	%100
31	M38	X	-.085	-.085	0	%100
32	M38	Z	-.049	-.049	0	%100
33	M39	X	-.096	-.096	0	%100
34	M39	Z	-.056	-.056	0	%100
35	M40	X	-.527	-.527	0	%100
36	M40	Z	-.304	-.304	0	%100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
37	M41	X	-.469	-.469	0	%100
38	M41	Z	-.271	-.271	0	%100
39	M42	X	-.128	-.128	0	%100
40	M42	Z	-.074	-.074	0	%100
41	M49	X	-.339	-.339	0	%100
42	M49	Z	-.196	-.196	0	%100
43	M50	X	-.385	-.385	0	%100
44	M50	Z	-.222	-.222	0	%100
45	M53A	X	-.339	-.339	0	%100
46	M53A	Z	-.196	-.196	0	%100
47	M54A	X	-.385	-.385	0	%100
48	M54A	Z	-.222	-.222	0	%100
49	M55	X	0	0	0	%100
50	M55	Z	0	0	0	%100
51	M56	X	-.107	-.107	0	%100
52	M56	Z	-.062	-.062	0	%100
53	M57	X	-.107	-.107	0	%100
54	M57	Z	-.062	-.062	0	%100
55	M62A	X	-.145	-.145	0	%100
56	M62A	Z	-.084	-.084	0	%100
57	MP4C	X	-.395	-.395	0	%100
58	MP4C	Z	-.228	-.228	0	%100
59	MP3C	X	-.395	-.395	0	%100
60	MP3C	Z	-.228	-.228	0	%100
61	MP2C	X	-.395	-.395	0	%100
62	MP2C	Z	-.228	-.228	0	%100
63	MP1C	X	-.395	-.395	0	%100
64	MP1C	Z	-.228	-.228	0	%100
65	M71	X	-.099	-.099	0	%100
66	M71	Z	-.057	-.057	0	%100
67	M78	X	-.582	-.582	0	%100
68	M78	Z	-.336	-.336	0	%100
69	MP4B	X	-.395	-.395	0	%100
70	MP4B	Z	-.228	-.228	0	%100
71	MP3B	X	-.395	-.395	0	%100
72	MP3B	Z	-.228	-.228	0	%100
73	MP2B	X	-.395	-.395	0	%100
74	MP2B	Z	-.228	-.228	0	%100
75	MP1B	X	-.395	-.395	0	%100
76	MP1B	Z	-.228	-.228	0	%100
77	M87	X	-.395	-.395	0	%100
78	M87	Z	-.228	-.228	0	%100
79	M94A	X	-.068	-.068	0	%100
80	M94A	Z	-.039	-.039	0	%100
81	M95A	X	-.272	-.272	0	%100
82	M95A	Z	-.157	-.157	0	%100
83	M96A	X	-.068	-.068	0	%100
84	M96A	Z	-.039	-.039	0	%100
85	M97	X	-.819	-.819	0	%100
86	M97	Z	-.473	-.473	0	%100
87	M98	X	-.819	-.819	0	%100
88	M98	Z	-.473	-.473	0	%100
89	M99	X	-.784	-.784	0	%100
90	M99	Z	-.453	-.453	0	%100
91	M101	X	-.36	-.36	0	%100
92	M101	Z	-.208	-.208	0	%100



Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

**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	- .252	- .252	0 %100
2	M1	Z	- .436	- .436	0 %100
3	MP4A	X	- .228	- .228	0 %100
4	MP4A	Z	- .395	- .395	0 %100
5	MP3A	X	- .228	- .228	0 %100
6	MP3A	Z	- .395	- .395	0 %100
7	MP2A	X	- .228	- .228	0 %100
8	MP2A	Z	- .395	- .395	0 %100
9	MP1A	X	- .228	- .228	0 %100
10	MP1A	Z	- .395	- .395	0 %100
11	M53	X	- .147	- .147	0 %100
12	M53	Z	- .254	- .254	0 %100
13	M54	X	- .167	- .167	0 %100
14	M54	Z	- .288	- .288	0 %100
15	M65	X	- .147	- .147	0 %100
16	M65	Z	- .254	- .254	0 %100
17	M66	X	- .167	- .167	0 %100
18	M66	Z	- .288	- .288	0 %100
19	M67	X	- .101	- .101	0 %100
20	M67	Z	- .176	- .176	0 %100
21	M74	X	- .000173	- .000173	0 %100
22	M74	Z	- .000299	- .000299	0 %100
23	M75	X	- .197	- .197	0 %100
24	M75	Z	- .341	- .341	0 %100
25	M25	X	- .171	- .171	0 %100
26	M25	Z	- .296	- .296	0 %100
27	M34	X	0	0	0 %100
28	M34	Z	0	0	0 %100
29	M35	X	0	0	0 %100
30	M35	Z	0	0	0 %100
31	M38	X	0	0	0 %100
32	M38	Z	0	0	0 %100
33	M39	X	0	0	0 %100
34	M39	Z	0	0	0 %100
35	M40	X	- .406	- .406	0 %100
36	M40	Z	- .703	- .703	0 %100
37	M41	X	- .209	- .209	0 %100
38	M41	Z	- .362	- .362	0 %100
39	M42	X	- .209	- .209	0 %100
40	M42	Z	- .362	- .362	0 %100
41	M49	X	- .147	- .147	0 %100
42	M49	Z	- .254	- .254	0 %100
43	M50	X	- .167	- .167	0 %100
44	M50	Z	- .288	- .288	0 %100
45	M53A	X	- .147	- .147	0 %100
46	M53A	Z	- .254	- .254	0 %100
47	M54A	X	- .167	- .167	0 %100
48	M54A	Z	- .288	- .288	0 %100
49	M55	X	- .101	- .101	0 %100
50	M55	Z	- .176	- .176	0 %100
51	M56	X	- .197	- .197	0 %100
52	M56	Z	- .341	- .341	0 %100
53	M57	X	- .000173	- .000173	0 %100
54	M57	Z	- .000299	- .000299	0 %100
55	M62A	X	0	0	0 %100
56	M62A	Z	0	0	0 %100
57	MP4C	X	- .228	- .228	0 %100



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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
58	MP4C	Z	-.395	-.395	0	%100
59	MP3C	X	-.228	-.228	0	%100
60	MP3C	Z	-.395	-.395	0	%100
61	MP2C	X	-.228	-.228	0	%100
62	MP2C	Z	-.395	-.395	0	%100
63	MP1C	X	-.228	-.228	0	%100
64	MP1C	Z	-.395	-.395	0	%100
65	M71	X	0	0	0	%100
66	M71	Z	0	0	0	%100
67	M78	X	-.252	-.252	0	%100
68	M78	Z	-.436	-.436	0	%100
69	MP4B	X	-.228	-.228	0	%100
70	MP4B	Z	-.395	-.395	0	%100
71	MP3B	X	-.228	-.228	0	%100
72	MP3B	Z	-.395	-.395	0	%100
73	MP2B	X	-.228	-.228	0	%100
74	MP2B	Z	-.395	-.395	0	%100
75	MP1B	X	-.228	-.228	0	%100
76	MP1B	Z	-.395	-.395	0	%100
77	M87	X	-.171	-.171	0	%100
78	M87	Z	-.296	-.296	0	%100
79	M94A	X	0	0	0	%100
80	M94A	Z	0	0	0	%100
81	M95A	X	-.118	-.118	0	%100
82	M95A	Z	-.204	-.204	0	%100
83	M96A	X	-.118	-.118	0	%100
84	M96A	Z	-.204	-.204	0	%100
85	M97	X	-.46	-.46	0	%100
86	M97	Z	-.796	-.796	0	%100
87	M98	X	-.48	-.48	0	%100
88	M98	Z	-.831	-.831	0	%100
89	M99	X	-.46	-.46	0	%100
90	M99	Z	-.796	-.796	0	%100
91	M101	X	-.208	-.208	0	%100
92	M101	Z	-.36	-.36	0	%100

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
1	M41	Y	-4.095	-4.837	0	1.316
2	M41	Y	-4.837	-5.58	1.316	2.633
3	M42	Y	-4.693	-6.456	0	.878
4	M42	Y	-6.456	-6.126	.878	1.755
5	M42	Y	-6.126	-3.703	1.755	2.633
6	M74	Y	-4.095	-4.837	0	1.316
7	M74	Y	-4.837	-5.58	1.316	2.633
8	M75	Y	-4.693	-6.456	0	.878
9	M75	Y	-6.456	-6.126	.878	1.755
10	M75	Y	-6.126	-3.703	1.755	2.633
11	M56	Y	-4.095	-4.837	0	1.316
12	M56	Y	-4.837	-5.58	1.316	2.633
13	M57	Y	-4.693	-6.456	0	.878
14	M57	Y	-6.456	-6.126	.878	1.755
15	M57	Y	-6.126	-3.703	1.755	2.633

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

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%,]	End Location[ft.%,]
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**Member Distributed Loads (BLC 82 : BLC 40 Transient Area Loads) (Continued)**

	Member Label	Direction	Start Magnitude[lb/ft....	End Magnitude[lb/ft.F...	Start Location[ft.%]	End Location[ft.%]
1	M41	Y	-13.104	-15.48	0	1.316
2	M41	Y	-15.48	-17.856	1.316	2.633
3	M42	Y	-15.018	-20.66	0	.878
4	M42	Y	-20.66	-19.603	.878	1.755
5	M42	Y	-19.603	-11.849	1.755	2.633
6	M74	Y	-13.104	-15.48	0	1.316
7	M74	Y	-15.48	-17.856	1.316	2.633
8	M75	Y	-15.018	-20.66	0	.878
9	M75	Y	-20.66	-19.603	.878	1.755
10	M75	Y	-19.603	-11.849	1.755	2.633
11	M56	Y	-13.104	-15.48	0	1.316
12	M56	Y	-15.48	-17.856	1.316	2.633
13	M57	Y	-15.018	-20.66	0	.878
14	M57	Y	-20.66	-19.603	.878	1.755
15	M57	Y	-19.603	-11.849	1.755	2.633

**Member Area Loads (BLC 39 : Structure D)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N74A	N73	N75	N76	Y	Two Way	-.005
2	N140A	N139A	N143A	N146	Y	Two Way	-.005
3	N94	N93	N95	N96	Y	Two Way	-.005

**Member Area Loads (BLC 40 : Structure Di)**

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[ksf]
1	N74A	N73	N75	N76	Y	Two Way	-.016
2	N140A	N139A	N143A	N146	Y	Two Way	-.016
3	N94	N93	N95	N96	Y	Two Way	-.016

**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	N131	max 1117.522	10	1019.923	19	2437.089	1	1.431	13	1.901	4	-.007	29
2		min -1118.016	4	278.375	25	-1556.774	7	.401	43	-1.908	10	-.104	23
3	N72	max 2009.193	9	844.125	15	905.418	1	-.161	6	1.817	12	-.332	11
4		min -1241.451	3	281.062	9	-1338.602	7	-.905	36	-1.811	6	-1.064	17
5	N92	max 1253.998	11	847.397	23	804.286	1	-.094	8	1.804	8	1.145	21
6		min -2018.049	5	208.181	50	-1242.951	7	-.841	38	-1.814	2	.268	50
7	N178A	max 51.886	10	1945.88	13	-266.463	7	0	51	0	12	0	6
8		min -51.891	4	271.364	7	-1668.555	13	0	1	0	6	0	12
9	N179	max -254.353	3	1928.279	21	827.188	22	0	10	0	28	0	28
10		min -1431.199	21	301.424	3	144.407	4	0	28	0	10	0	10
11	N180	max 1427.815	17	1923.965	17	825.206	16	0	4	0	4	0	4
12		min 252.556	11	299.12	11	143.39	10	0	46	0	46	0	46
13	Totals:	max 3724.156	10	8173.775	20	3736.892	1						
14		min -3724.159	4	3084.059	2	-3736.897	7						

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

Member	Shape	Code Check	Loc[ft]	LC	Shear C...Lo...	Dir	LC	phi*Pn...	phi*...	phi*...	phi*...	Eqn	
1	M1	PIPE_3.0	.135	4.948	35	.063	8....	18	28250....	65205	5.749	5.749	...H1-...
2	MP4A	PIPE_2.0	.257	3.833	10	.142	3....	8	14916....	32130	1.872	1.872	...H1-...
3	MP3A	PIPE_2.0	.251	3.833	12	.083	3....	9	14916....	32130	1.872	1.872	...H1-...
4	MP2A	PIPE_2.0	.257	3.833	2	.088	3....	6	14916....	32130	1.872	1.872	...H1-...
5	MP1A	PIPE_2.0	.240	3.833	4	.132	.333	7	14916....	32130	1.872	1.872	...H1-...





Company : Maser Consulting Connecticut  
 Designer : AE  
 Job Number : 21777080A  
 Model Name : Antenna Mount Analysis

Apr 7, 2021  
 8:15 AM  
 Checked By: DX

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

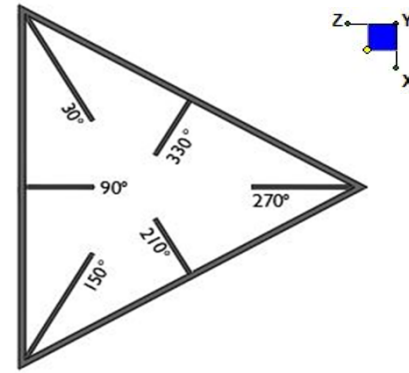
Member	Shape	Code Check	Loc[ft]	LC	Shear C...	Lo...	Dir	LC	phi*Pn...	phi*...	phi*...	phi*...	Eqn
6	M53	PIPE 3.0	.122	.583	13	.112	.583	18	65086...	65205	5.749	5.749	H1-...
7	M54	PIPE 3.0	.223	1.833	17	.044	.134	19	64042...	65205	5.749	5.749	H1-...
8	M65	PIPE 3.0	.114	0	13	.121	0	19	65086...	65205	5.749	5.749	H1-...
9	M66	PIPE 3.0	.223	0	22	.071	1.7	20	64042...	65205	5.749	5.749	H1-...
10	M67	HSS5X3X5	.149	5.396	10	.047	3....	4	138073...	1697...	15.456	22.149	H1-...
11	M74	L1.5X.5X4	.459	1.371	16	.028	2....	16	1090.8...	14175	.065	.44	H2-1
12	M75	L1.5X.5X4	.510	1.289	22	.028	0	22	1090.8...	14175	.065	.435	H2-1
13	M25	PIPE 2.0	.192	11.273	4	.104	2....	8	6212.3...	32130	1.872	1.872	H1-...
14	M34	PIPE 3.0	.124	.583	21	.112	.583	15	65086...	65205	5.749	5.749	H1-...
15	M35	PIPE 3.0	.219	1.833	13	.044	.134	15	64042...	65205	5.749	5.749	H1-...
16	M38	PIPE 3.0	.115	0	21	.118	0	15	65086...	65205	5.749	5.749	H1-...
17	M39	PIPE 3.0	.217	0	18	.068	1.7	15	64042...	65205	5.749	5.749	H1-...
18	M40	HSS5X3X5	.141	5.396	12	.046	5....	36	138073...	1697...	15.456	22.149	H1-...
19	M41	L1.5X.5X4	.458	1.371	24	.027	2....	24	1090.8...	14175	.065	.44	H2-1
20	M42	L1.5X.5X4	.513	1.289	18	.028	0	18	1090.8...	14175	.065	.433	H2-1
21	M49	PIPE 3.0	.123	.583	17	.111	.583	23	65086...	65205	5.749	5.749	H1-...
22	M50	PIPE 3.0	.220	1.833	21	.047	.134	47	64042...	65205	5.749	5.749	H1-...
23	M53A	PIPE 3.0	.115	0	17	.120	0	23	65086...	65205	5.749	5.749	H1-...
24	M54A	PIPE 3.0	.217	0	14	.069	1.7	24	64042...	65205	5.749	5.749	H1-...
25	M55	HSS5X3X5	.141	5.396	2	.045	5....	8	138073...	1697...	15.456	22.149	H1-...
26	M56	L1.5X.5X4	.460	1.371	20	.027	2....	20	1090.8...	14175	.065	.438	H2-1
27	M57	L1.5X.5X4	.510	1.289	14	.028	0	14	1090.8...	14175	.065	.436	H2-1
28	M62A	PIPE 3.0	.101	7.552	23	.050	8....	20	28250...	65205	5.749	5.749	H1-...
29	MP4C	PIPE 2.0	.249	3.833	6	.138	3....	4	14916...	32130	1.872	1.872	H1-...
30	MP3C	PIPE 2.0	.241	3.833	8	.085	3....	5	14916...	32130	1.872	1.872	H1-...
31	MP2C	PIPE 2.0	.243	3.833	11	.084	3....	2	14916...	32130	1.872	1.872	H1-...
32	MP1C	PIPE 2.0	.226	3.833	12	.125	.333	3	14916...	32130	1.872	1.872	H1-...
33	M71	PIPE 2.0	.193	1.311	7	.111	2....	4	6212.3...	32130	1.872	1.872	H1-...
34	M78	PIPE 3.0	.110	4.948	15	.048	3....	18	28250...	65205	5.749	5.749	H1-...
35	MP4B	PIPE 2.0	.255	3.833	2	.134	3....	12	14916...	32130	1.872	1.872	H1-...
36	MP3B	PIPE 2.0	.237	3.833	4	.081	3....	1	14916...	32130	1.872	1.872	H1-...
37	MP2B	PIPE 2.0	.250	3.833	7	.088	3....	10	14916...	32130	1.872	1.872	H1-...
38	MP1B	PIPE 2.0	.234	3.833	8	.125	.333	11	14916...	32130	1.872	1.872	H1-...
39	M87	PIPE 2.0	.204	11.273	8	.108	9....	10	6212.3...	32130	1.872	1.872	H1-...
40	M94A	PIPE 2.0	.181	1.638	8	.038	1....	12	31112...	32130	1.872	1.872	H1-...
41	M95A	PIPE 2.0	.172	1.638	4	.039	1....	8	31112...	32130	1.872	1.872	H1-...
42	M96A	PIPE 2.0	.167	1.638	12	.038	1....	4	31112...	32130	1.872	1.872	H1-...
43	M97	LL3x3x3x3	.064	3.599	23	.004	7....	24	45009...	70632	5.543	3.71	H1-...
44	M98	LL3x3x3x3	.063	3.599	23	.004	7....	20	45009...	70632	5.543	3.71	H1-...
45	M99	LL3x3x3x3	.063	3.599	15	.004	0	16	45009...	70632	5.543	3.71	H1-...
46	M101	PIPE 2.0	.119	3.5	12	.010	3.5	12	26521...	32130	1.872	1.872	H1-...



## I. Mount-to-Tower Connection Check

### RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
N131	270
N92	150
N72	30



TYPICAL PLATFORM

### Tower Connection Bolt Checks

Any moment resistance?:

Bolt Quantity per Reaction:

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

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

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength (kips):

Required Shear Strength (kips):

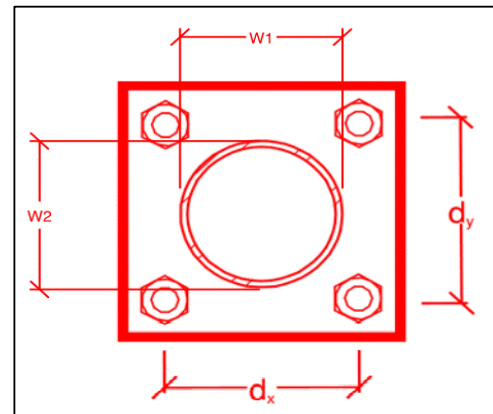
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
6
6
A325N
0.75
8.4
2.8
29.8
17.9
7.0%*
3.9%



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

### Tower Connection Plate and Weld Check

Connecting Standoff Member Shape:

Plate Width (in):

Plate Height (in):

W1 (in):

W2 (in):

Fy (ksi, plate):

$t_{plate}$  (in):

Weld Size (1/16 in):

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

Required Weld Strength (kip/in):

Plate Bending Capacity:

Weld Capacity:

Rect
10
10
36
0.75
3
4.18
3.43
33.6%
82.1%

### Unique Weld Check

Weld Pattern:	(2) Vertical Fillet Welds
L1 (in):	0.75
L2 (in):	9

### Max Plate Bending Strengths

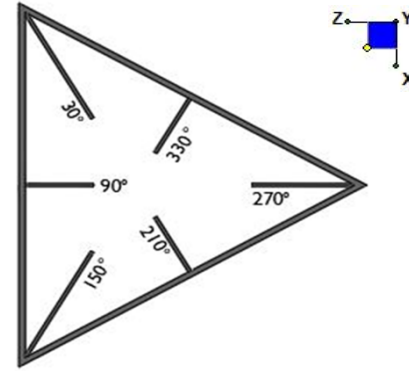
$M_{u_{xx}}$ (kip-in) :	3.3
$\Phi \cdot M_{n_{xx}}$ (kip-in) :	45.6
$M_{u_{yy}}$ (kip-in) :	12.0
$\Phi \cdot M_{n_{yy}}$ (kip-in) :	45.6



## I. Mount-to-Tower Connection Check

### RISA Model Data

Nodes (labeled per RISA)	Orientation (per graphic of typical platform)
n178a	270
n180	150
n179	30



TYPICAL PLATFORM

### Tower Connection Bolt Checks

Any moment resistance?:

Bolt Quantity per Reaction:

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

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

Bolt Type:

Bolt Diameter (in):

Required Tensile Strength (kips):

Required Shear Strength (kips):

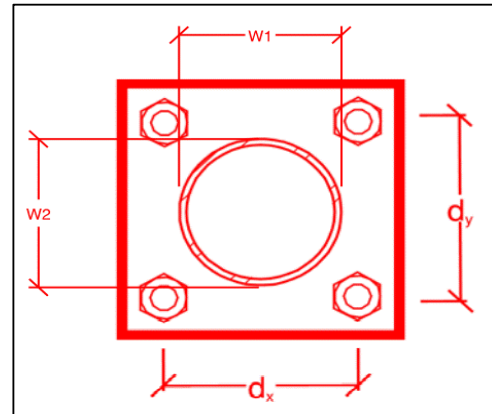
Tensile Strength / bolt (kips):

Shear Strength / bolt (kips):

Tensile Capacity Overall:

Shear Capacity Overall:

yes
4
6
6
A325N
0.75
1.7
1.9
29.8
17.9
1.4%*
2.7%



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

### Tower Connection Plate and Weld Check

Weld Size (1/16 in):

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

Required Weld Strength (kip/in):

Weld Capacity:

3
4.18
0.20
4.7%

### Max Plate Bending Strengths

$Mu_{xx}$ (kip-in) :	#N/A
$\Phi * Mn_{xx}$ (kip-in) :	45.6
$\Phi * Mn_{yy}$ (kip-in) :	45.6

## Mount Desktop – Post Modification Inspection (PMI) Report Requirements

### Documents & Photos Required from Contractor – **Passing Mount Analysis**

---

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

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

#### **Base Requirements:**


















- Any special photos outside of the standard requirements will be indicated on the passing MA
- Verification that loading is as communicated in the Passing Mount Analysis. NOTE If loading is different than what is conveyed contact Maser Consulting Connecticut immediately.
- Each photo should be time and date stamped
- Photos should be high resolution and submitted in a Zip File and should be organized in the file structure as depicted in Schedule A attached.
- Contractor shall ensure that the safety climb wire rope is supported and not adversely impacted by the install of the modification components. This may involve the install of wire rope guides, or other items to protect the wire rope.
- The photos in the file structure should be uploaded to <https://pmi.vzsmart.com> as depicted on the drawings

#### **Photo Requirements:**

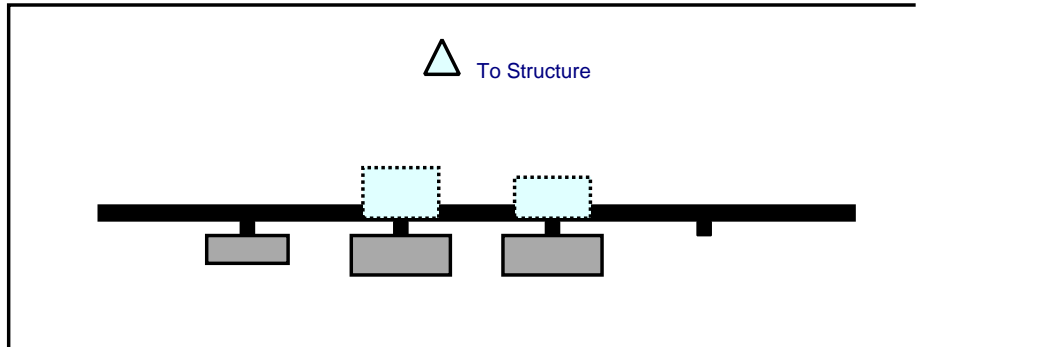
- Base and “During Installation Photos”
  - Base pictures include
    - Photo of Gate Signs showing the tower owner, site name, and number
    - Photo of carrier shelter showing the carrier site name and number if available
    - Photos of the galvanizing compound and/or paint used (if applicable), clearly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



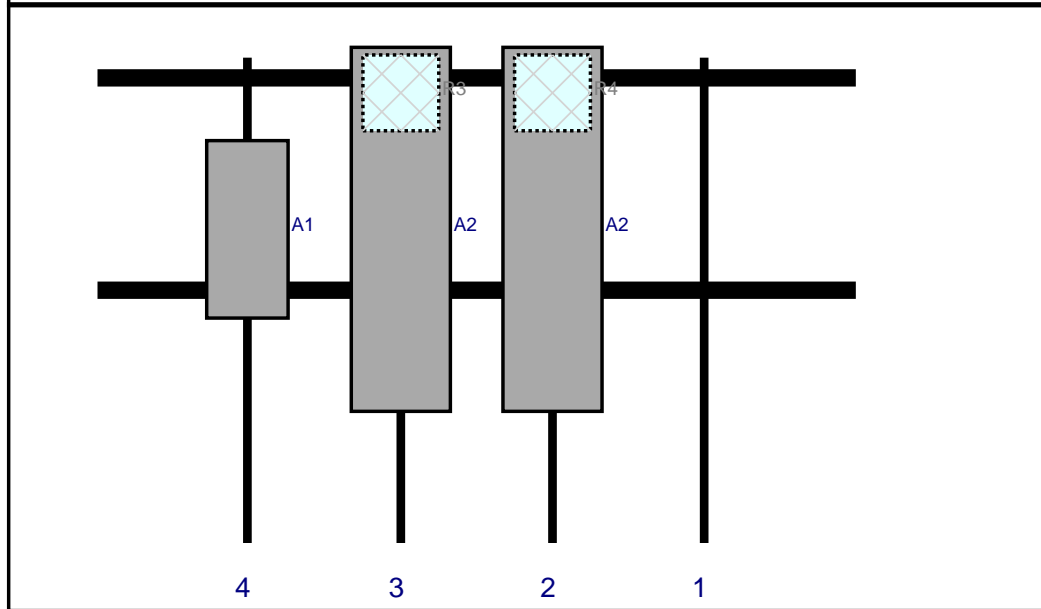
**Schedule A – Photo & Document File Structure**

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

Plan View



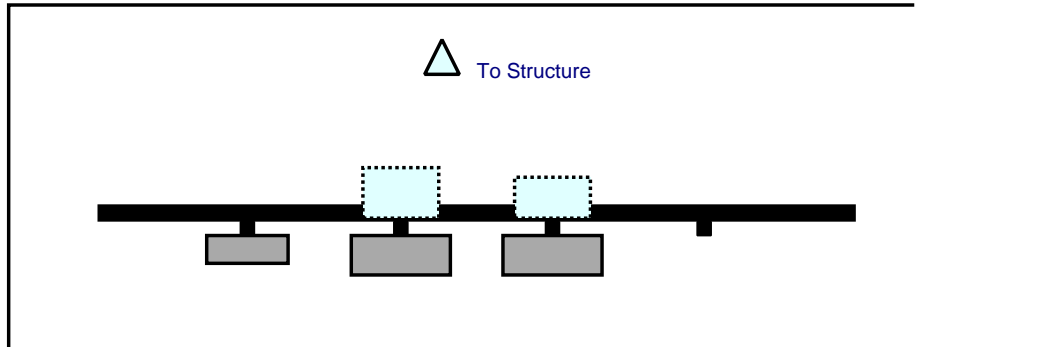
Front View  
Looking at Structure



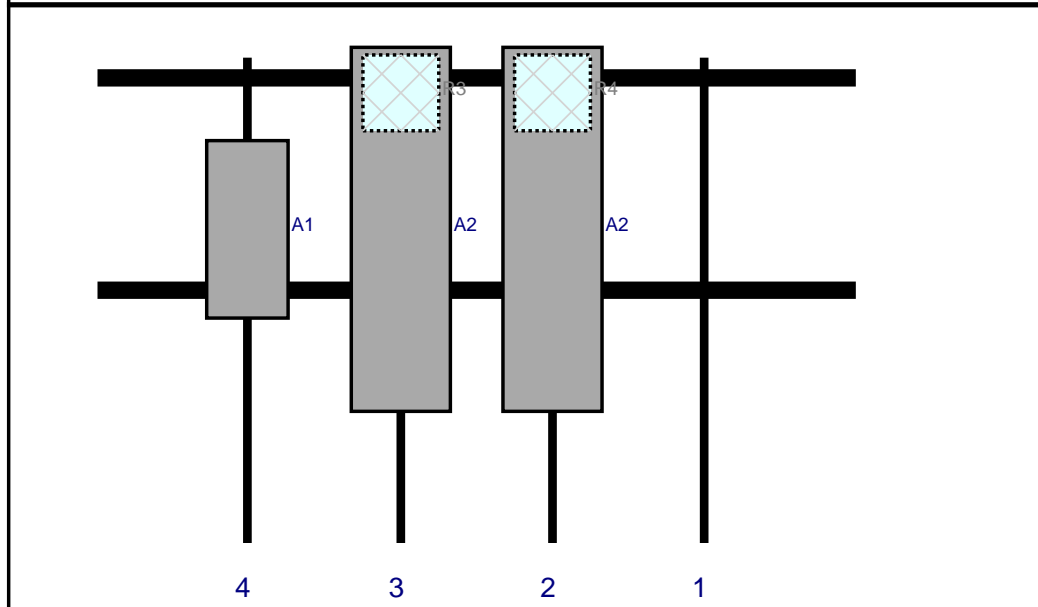
Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	NNHH-65B-R4	72	19.6	90	2	a	Front	33.96	0	Retained	02/17/2021
R4	B5/B13 RRH-BR04C	15	15	90	2	a	Behind	6.96	0	Retained	02/17/2021
A2	NNHH-65B-R4	72	19.6	60	3	a	Front	33.96	0	Retained	02/17/2021
R3	B2/B66A RRH-BR049	15	15	60	3	a	Behind	6.96	0	Retained	02/17/2021
A1	MT6407-77A	35.1	16.1	29.65	4	a	Front	33.96	0	Added	



Plan View

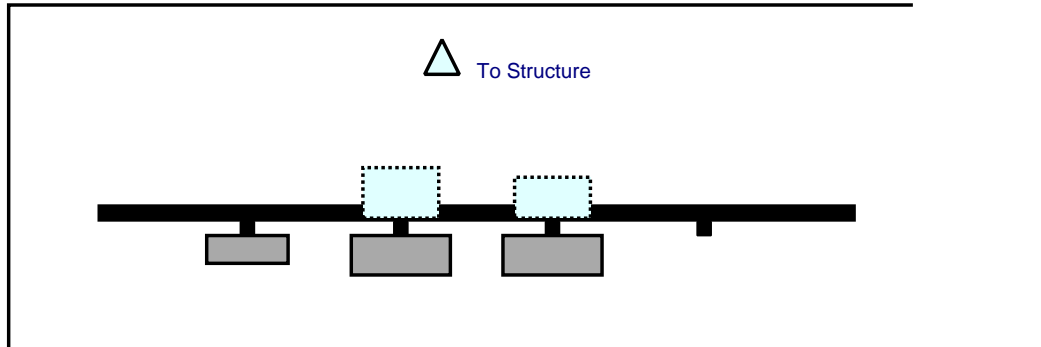


Front View  
Looking at Structure

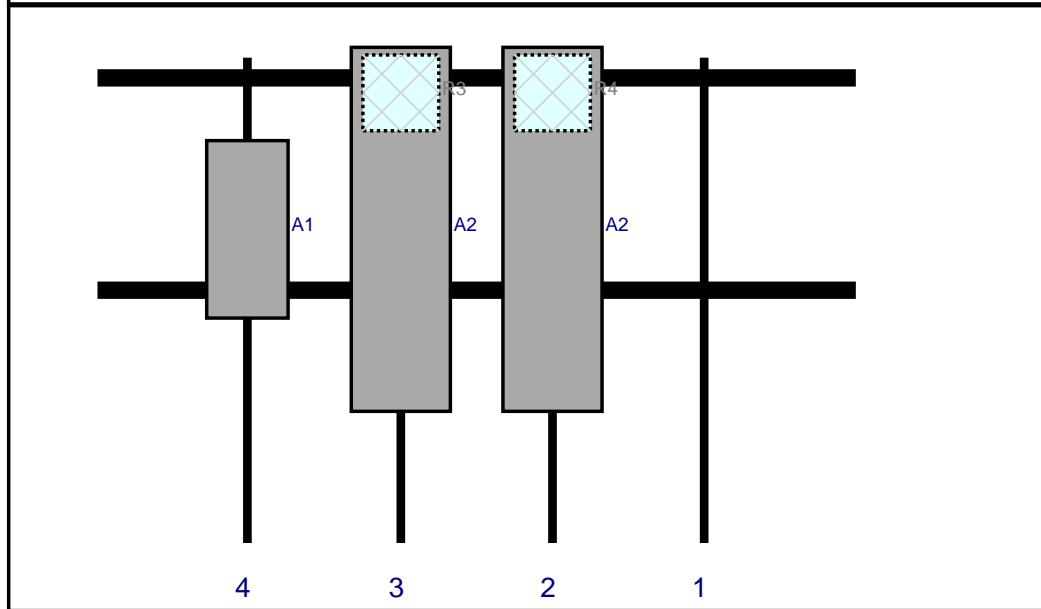


Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	NNHH-65B-R4	72	19.6	90	2	a	Front	33.96	0	Retained	02/17/2021
R4	B5/B13 RRH-BR04C	15	15	90	2	a	Behind	6.96	0	Retained	02/17/2021
A2	NNHH-65B-R4	72	19.6	60	3	a	Front	33.96	0	Retained	02/17/2021
R3	B2/B66A RRH-BR049	15	15	60	3	a	Behind	6.96	0	Retained	02/17/2021
A1	MT6407-77A	35.1	16.1	29.65	4	a	Front	33.96	0	Added	

Plan View



Front View  
Looking at Structure



Ref#	Model	Height (in)	Width (in)	H Dist Frm L.	Pipe #	Pipe Pos V	Ant Pos	C. Ant Frm T.	Ant H Off	Status	Validation
A2	NNHH-65B-R4	72	19.6	90	2	a	Front	33.96	0	Retained	02/17/2021
R4	B5/B13 RRH-BR04C	15	15	90	2	a	Behind	6.96	0	Retained	02/17/2021
A2	NNHH-65B-R4	72	19.6	60	3	a	Front	33.96	0	Retained	02/17/2021
R3	B2/B66A RRH-BR049	15	15	60	3	a	Behind	6.96	0	Retained	02/17/2021
A1	MT6407-77A	35.1	16.1	29.65	4	a	Front	33.96	0	Added	

<b><u>Subject</u></b>		TIA-222-H Usage
<b><u>Site Information</u></b>	Site ID:	469053-VZW / WINDSOR SOUTH CT
	Site Name:	WINDSOR SOUTH CT
	Carrier Name:	Verizon Wireless
	Address:	599 Matianuck Ave. Windsor, Connecticut 06095 Hartford County
	Latitude:	41.821207°
	Longitude:	-72.676756°
<b><u>Structure Information</u></b>	Tower Type:	102.00-Ft Monopole
	Mount Type:	12.50-Ft Platform

To Whom It May Concern,

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

The 2015 International Building Code states that, in Section 3108, telecommunication towers shall be designed and constructed in accordance with the provisions of TIA-222. The TIA-222-H is the latest revision of the TIA-222 Standard, effective as of January 01, 2018.

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

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

Sincerely,

Dejian Xu, PE  
Technical Specialist



# Exhibit F

## **Power Density/RF Emissions Report**

Site Name: **WINDSOR SOUTH CT**  
 Cumulative Power Density

Operator	Operating Frequency	Number of Trans.	ERP Per Trans.	Total ERP	Distance to Target	Calculated Power Density
	(MHz)		(watts)	(watts)	(feet)	(mW/cm <sup>2</sup> )
VZW 700	751	4	612	2448	97	0.0094
VZW Cellular	869	4	731	2923	97	0.0112
VZW PCS	1975	4	1238	4953	97	0.0189
VZW AWS	2120	4	1169	4676	97	0.0179
VZW CBAND	3730.08	4	6531	26125	97	0.0999

**Total Percentage of Maximum Permissible Exposure**

\*Guidelines adopted by the FCC on August 1, 1996, 47 CFR Part 1 based on NCRP Report 86, 1986 and generally on ANSI/IE

\*\*Calculation includes a -10 dB Off Beam Antenna Pattern Adjustment pursuant to Attachments B and C of the Siting Council's

MHz = Megahertz

mW/cm<sup>2</sup> = milliwatts per square centimeter

ERP = Effective Radiated Power

Absolute worst case maximum values used.

Maximum Permissible Exposure*	Fraction of MPE
(mW/cm <sup>2</sup> )	(%)
0.5007	1.87%
0.5793	1.93%
1.0000	1.89%
1.0000	1.79%
1.0000	9.99%
	17.46%

IEEE C95.1-1992

November 10, 2015 Memorandum for Exempt Modification filings