

THIS LEASE IS THE PROPERTY OF:

Woodbury County, Iowa
620 Douglas Street, Suite 104
Sioux City, Iowa 51101

AND THE PROPERTY OF:

Customer Support Manager, State of Iowa,
Motorola Solutions
1303 E. Algonquin Road
Schaumburg, IL 60196
ATTN: Dave Gordon
Phone: 319-377-6686

and

Law Department
Motorola Solutions, Inc.
500 W, Monroe St. 43rd Floor
Chicago, IL 60661
ATTN: Rich Heller
Phone: (847) 576-1817
Fax: (312) 559-5694

C/O Starcomm Public Safety Board
P.O. Box 447
Sioux City, Iowa 51102
ATTN: Glenn Sedivy
Phone: (712) 279-6959
Fax: (712) 279-6157

SITE LEASE AGREEMENT

THIS SITE LEASE AGREEMENT (hereinafter called "Lease"), is made and entered into as of this 7th day of March, 2017, by and between Woodbury County, Iowa, whose address is 620 Douglas Street, Suite 104, Sioux City, Iowa 51101 under the direction of the Starcomm Public Safety Board, whose address is P.O. Box 447 Sioux City, Iowa 51102 hereinafter called "Lessor", and Motorola Solutions, Inc. having an address of 500 W. Monroe St., Chicago, IL 60661, hereinafter called "Lessee".

In consideration of the covenants and agreements hereinafter set forth, the parties hereto agree as follows:

1. Leased Premises. Lessor is the owner of that certain real property described below (the "Property"). Lessor hereby Lease to the Lessee, for the period, at the rental, and upon the terms and conditions hereinafter set forth, certain portions of the Property, tower, and a portion of the interior space on the ground (the "Premises") located on the Property within Woodbury County, Iowa.

2. Communications Equipment Upgrade and Installation. A detailed list of Communications Equipment to be installed and upgraded by the Lessee at the Property and a detailed Site Plan is hereby attached as **Exhibit A** and incorporated herein as if fully set forth in this Agreement. A Structural Analysis of the communications tower is hereby attached as **Exhibit B** and incorporated herein as if fully set forth in this Agreement.

"Communications Equipment" shall be defined as: a communications facility including (without limitation) antennae and radios (including microwave antennae and radios); equipment cabinets; backup

power sources (including batteries, generators and fuel storage tanks); and other associated equipment, fixtures, wiring, and cabling.

Lessee shall cause the Communications Equipment to be fully installed and upgraded on the Property by June 16, 2017. All costs associated with the installation of Communications Equipment and upgrading of the existing system shall be borne by the Lessee. The Communications Equipment shall service the Public Safety communication needs of the area.

The location of the above tower and equipment is:

Site Address: 4 miles East, 4.5 miles South of Merville, Iowa, @ 2028 Jasper Avenue

Latitude: 42-24-37.3N **Longitude:** 095-59-58.3

3. Access. Lessor also grant to Lessee, the State of Iowa, and their respective employees, contractors, agents, representatives, and assigns, access to the Property and Premises described in paragraph one (1) above, seven days a week, 24 hours a day, throughout the term of this Lease, provided that, prior to Lessee or Lessee's contractors climbing the tower for antenna access, Lessee will give Lessor no less than 12 hours prior notice. To allow this access to climb the tower or Fenced Compound, Lessor will give Lessee a key to the lock on the Compound. Each time the Lessee's employee(s) access the location all the Lessee's employees will notify the Facility Manager, in writing, in person or if necessary over the phone by calling (712) 279-6960. These employees will be subject to criminal background checks, except in emergency situations and when otherwise agreed upon by Lessor in writing. Security access to the sites compound will be provided by the Starcomm Director or Facility Manager. Each employee of Lessee who climbs the tower will have in their possession a card showing that they have completed the Qualified Climber/Rescue course offered through Comtrain or similar program approved by Lessor. Each employee of Lessee will follow all OSHA regulations while climbing any portion of the tower including wearing all required safety harnesses and will use the safety climbing cable while on the tower. There will never be fewer than 2 certified climbers on the site during any type of climbing on the tower.

4. Initial Term and Commencement Date of Lease . The "Initial Term" of this Lease shall be for a period of Thirteen (13) years. The "Commencement Date" for the Initial Term of this Lease begins upon the start of installation of the Communications Equipment as described in Paragraph 1, in and about the Premises and expiring on the date which is thirteen (13) years thereafter. Lessee shall provide written notification to the Parties of the date when installation shall commence. In any event the commencement date shall be no later than April 1, 2017.

5. Renewal Terms. Lessor hereby grant to Lessee the right, privilege and option to extend this Lease for four (4) additional "Renewal Terms" of Five (5) years, each with the consent and written approval from Lessor, from the end of the Initial Term, under the same terms, covenants and conditions as herein contained, provided that Lessee is not in default of any of the terms, covenants or conditions of this Lease at the conclusion of the Initial Term or any prior Renewal Term, respectively. This Lease shall automatically terminate unless Lessee gives written notice of the desire to extend or renew the Lease at least one hundred eighty (180) days prior to the end of the applicable term and obtains Lessor' consent to each requested extension.

6. Termination.

a. Both Lessor and Lessee shall have the right to terminate this Lease for cause, in the event the other party defaults on any material provision of this Lease, and in the event that such default is not cured within thirty (30) days after written notice thereof is provided to the other party. Said curative period

shall be extended another thirty (30) days provided defaulting party has shown a good faith effort to cure default. Notwithstanding the foregoing, the curative period for any monetary default is thirty (30) days from receipt of written notice and the curative period for lapse in insurance coverage is ten (10) days from the receipt of written notice

b. The parties agree that in the event that federal or state law requires the installation of back up power sources or supplies that the terms of this Lease will require an amendment to be negotiated between the parties. No additional equipment shall be placed upon the Premises by Lessee without the written consent of Lessor. Notwithstanding the foregoing, Lessee may install upgraded Communications Equipment to replace existing Communications Equipment without the written consent of Lessor. However, a detailed list of replaced items must be promptly provided to the Lessor.

c. This Lease may be terminated without further liability as set forth below:

1) by either party in the event the other party defaults on any material provision of this Lease, and in the event that such default is not cured within thirty (30) days after written notice thereof is provided to the other party. Said curative period shall be extended another thirty (30) days provided defaulting party has shown a good faith effort to cure default. Notwithstanding the foregoing, the curative period for any monetary default is thirty (30) days from receipt of written notice and the curative period for lapse in insurance coverage is ten (10) days from the receipt of written notice; or

2) by Lessee if it does not obtain or maintain any license, permit or other approval necessary for the construction and operation of Lessee's facilities; or

3) by Lessee if Lessee is unable to occupy and utilize the tower site due to an action of the FCC, including without limitation, a take-back of channels, a change in frequencies, or a change in licensed coverage area; or

4) by Lessee if Lessee determines that the tower site is not appropriate for its operations for economic or technological reasons, including, without limitation, signal interference; or

5) by Lessor if the Lessor determine the tower site is no longer suitable to be used by Lessor for their operation and the Lessor choose to remove the building; or

6) by Lessor after the expiration of the initial term of this Lease upon providing Lessee with written notice. Such notice, if given by Lessor, must be given not less than three hundred sixty-five (365) days prior to the date therein specified (this time is given for Lessee to find a new site, get zoning approval, construct a new site and move Lessee's shelter and antennas); or

7.) by Lessor at any time upon occurrence of a Separation Event, as that term is defined in 14(f), by giving at least thirty (30) days' notice in writing to the Lessee.

8) by the parties mutual agreement.

d. In the event of termination or expiration of this Lease, Lessee shall have a reasonable period of time (not exceeding ninety (90) days from the effective date of termination unless a longer time is allowed elsewhere in this Lease) to remove all Communications Equipment from the Premises, however all improvements to the tower and/or ancillary structures shall be left in place and in good repair by the Lessee. Upon expiration of this Lease, Lessee shall restore the Premises to reasonably good condition and repair, subject to ordinary wear and tear on the Premises, which is specifically excepted. Failure of Lessee to remove its Communications Equipment at the expiration or termination of this Lease may result

in Lessor removing the equipment and payment of all charges occasioned by such removal will be the responsibility of the Lessee.

7. Initial Term Rent .

a. Lessee shall pay Woodbury County, Iowa, administrator of funds of Starcomm Public Safety Board Ten Dollars (\$10) and other good and valuable consideration as full consideration for the initial Term and all Renewal Terms of this Lease. Unless otherwise specified in this Lease, each party shall bear its own costs.

8. Use and Non-Interference of Premises. Lessee shall have the right to use the Property and Premises for the purpose of installing, removing, replacing, modifying, repairing, maintaining, and operating a communications facility including (without limitation) antennae and radios (including microwave antennae and radios); equipment cabinets; backup power sources (including batteries, generators and fuel storage tanks); and other associated equipment, fixtures, wiring, and cabling (collectively the "Communications Equipment"). The parties acknowledge that (a) the Communications Equipment will be owned by Lessee, the State of Iowa, or their respective assignee and (b) the Communications Equipment will be used for emergency services, public safety and other governmental purposes, including the Iowa State Patrol and other Iowa state agencies, and any federal, state, county, municipality or other governmental body, including any department or agency thereof. Lessee shall not do or permit any activities upon the Premises, which would cause interference to Lessor or with Lessor's principle use of the Premises as a Lattice Tower in Woodbury County, Iowa. The Lessee will be allowed to install its Communications Equipment inside and outside the communications tower house. This is not an exclusive lease of the premises. Lessor retains the right to lease additional space to other Tenants provided that the additional Tenants' equipment does not interfere with the activities and transmission signals of the Lessee. Additionally, Lessor will continue to use the premises for their own business or public safety purposes. Lessor affirmatively covenants that except for acts of God, neither Lessor nor its employees, agents, representatives, invitees, other tenants or licensees shall cause or allow others to cause interruption of electrical power or interruption of telephone service to the Communication Equipment.

9. Insurance and Indemnification.

Unless self-insured, at all times during the term of this Lease, Lessee shall at its expense carry and maintain for the mutual benefit of the Lessor:

a. Commercial General liability insurance against the claims for personal injury, death or property damage occurring in or about the Leased Premises or resulting from the installation, operation or maintenance of the Lessee's Communications Equipment on the Leased Premises, such insurance to be in the amount of \$1,000,000.00 for personal injuries and deaths resulting from any one accident and for property damage in any one accident, and an aggregate coverage in the amount of \$3,000,000.00 with Lessor included as additional insureds.

b. A Standard Workmen's Compensation and Employer's Liability Insurance Policy in the amount equal to the limit of liability and in a form prescribed by the laws of the state in which the Leased Premises is located.

c. Any contract workers contracted by Lessee shall also carry similar insurance as set forth in a. and b. above.

10. Damage or Destruction. If the Premises are damaged, destroyed by fire, winds, flood, or other natural or manmade cause, Lessor shall have the option to repair or replace the Premises at their sole

expense, or to terminate this Lease effective on the date of such damage or destruction. Notwithstanding the foregoing, for purposes of implementing the ninety (90) day period specified in 6(d), the ninety (90) day period shall commence upon the later of (i) the Lessor having notified the Lessee of a decision not to repair or replace the Premises or (ii) sixty (60) days having passed without Lessor having notified Lessee of a decision to repair or replace the Premises (unless the Lessor have begun repair or replacement activities). In the event Lessor elect to terminate this Lease, Lessee shall have no further obligations hereunder. Lessor shall have up to sixty (60) days to decide on whether to repair or replace the Premises. Failure by Lessor to notify Lessee within sixty (60) days of Lessor' decision to repair or replace the Premises shall be deemed an election by Lessor to terminate this Lease, unless the Lessor have begun repair or replacement activities. If Lessor elect to repair or replace the Premises, Lessee shall have the option of either abating the rent due until such repair or replacement is completed and the Premises are restored to a condition that the Lessee can resume full operations at the Premises; or until Lessee begins operating a mobile telecommunication base station on the Premises. Lessee may immediately erect on an unused portion of the Property a temporary communications facility. In the event such repairs or restoration are not commenced within thirty (30) days or completed within ninety (90) days, Lessee may elect to terminate this Lease by so notifying Lessor in writing, The option to operate a mobile telecommunications base station on the Premises is subject to the Lessee obtaining all required State and local permits and obtaining verbal consent of the Starcomm Public Safety Board, said consent shall not be unreasonably withheld. Said verbal consent will be confirmed electronically or in writing by the Starcomm Public Safety Board within twenty-four (24) hours. If there is a condemnation of the Premises, then this Lease will terminate upon transfer of title to the condemning authority, without further liability to either party except for Lessor's obligation to reimburse Lessee for any prepaid fees. Lessee is entitled to pursue a separate condemnation award from the condemning authority. Lessor shall notify Lessee in writing within ten (10) days after it receives notice of any actual or contemplated condemnation proceedings.

11. Taxes. Lessor shall pay and be responsible for all taxes on the Premises, and Lessee shall pay and be responsible for all taxes due on Lessee's equipment and fixtures installed on the Premises.

12. Notices. Any notices required or permitted to be given hereunder shall be given in writing, and shall be deemed to have been given only upon receipt after mailing by certified or registered first class mail, postage prepaid, return receipt requested, or sending by reliable overnight courier and addressed to the parties as follows:

Lessor: Woodbury County, Iowa
Board of Supervisors
620 Douglas Street, Suite 104
Sioux City, Iowa 51101
Phone: 712-279-6525

Starcomm Public Safety Board
P.O. Box 447
Sioux City, Iowa 51102
ATTN: Glenn Sedivy
Phone: (712) 279-6959
Fax: (712) 279-6157

Lessee: Customer Support Manager, State of Iowa,
Motorola Solutions
1303 E. Algonquin Road
Schaumburg, IL 60196
ATTN: Dave Gordon
Phone: 319-377-6686

Law Department
Motorola Solutions, Inc.
500 W. Monroe St., 43rd Floor
Chicago, IL 60661
ATTN: Rich Heller
Phone: (847) 576-1817

13. Hazardous Materials. At no time during the term hereof shall the Lessee store, place, leave or deposit at the Tower or the Premises any substance or material which, if known to be present on or at such property, would require cleanup, removal or some other remedial action under any federal, state or local law, including statutes, regulations, ordinances, codes, rules and other governmental restrictions and requirements relating to the discharge of air pollutants, water pollutants, processed waste water, solid wastes, or otherwise relating to environmental hazardous substances, including but not limited to the Federal Solid Waste Disposal Act, the Federal Clean Air Act, the Federal Clean Water Act, the Federal Resource Conservation and Recovery Act of 1976, the Federal Comprehensive Environmental Response, Compensation, and Liability Act of 1980, and all acts amendatory thereto, regulations of the Environmental Protection Agency, regulations of the Nuclear Regulatory Agency, and regulation of any State Department of Natural Resources or State Environmental Protection Agency now or at any time hereinafter in effect. The Lessee agrees to and does hereby indemnify and save the Lessor and owners harmless from any and all claims, demands, suits, actions, recoveries, judgments, costs and expenses relating in any way to Lessee's violation of this Section, and this indemnification obligation shall survive the expiration or termination of this Lease. Lessor acknowledge and agree that Lessee shall have no liability or responsibility whatsoever for any environmental violations or issues, at the tower or premises, existing prior to the date of Lessee's occupancy or otherwise not caused by Lessee. Lessor represents and warrants that it has no knowledge of any pre-existing environmental contamination on or about the Property or any substance, or chemical, or waste on the Property that is identified in any applicable state, federal, or local law or regulation as being hazardous, toxic, or dangerous. Lessor shall not introduce or allow any other tenant or licensee to introduce any such substance or chemical or waste onto, near or adjacent to the Property in violation of applicable law.

14. Miscellaneous Provisions.

a. Lessor warrant that (i) Lessor are the owners of the tower and owners and/or lessees of the tower site property; (ii) that Lessor have full right, power, and authority to execute this agreement and if necessary have obtained all necessary consents to sublease the Premises; (iii) that Lessor will not have unsupervised access to the Communication Equipment on the Premises; (iv) that the Property: (a) abuts a public right-of-way over which practical access is possible, or (b) is accessible over easements appurtenant to such site; and (v) that to the best of Lessor's knowledge making of this Lease and the performance thereof will not violate any zoning or other laws, ordinances, restrictive covenants or the provision of any mortgage, lease or other agreements under which Lessor is bound and which restricts itself in any way with respect to the use or disposition of the Property. Lessor covenant that Lessee, in paying Rent and performing the

covenants by Lessee herein made, shall and may peacefully and quietly have, hold, and enjoy the Leased Premises.

b. Lessee may, at its expense, make such improvements to the Property and Premises as it deems necessary for the operation of the Communication Equipment with prior written approval of the Lessor. Lessee shall obtain all necessary governmental and regulatory approvals required for Lessee's occupation and use of the Premises, including but not limited to zoning changes, and shall be responsible for the cost of obtaining such approvals. Lessor shall cooperate with Lessee in obtaining such approvals.

c. The provisions of this Lease shall bind and inure to the benefit of the parties hereto and their heirs, legal representatives, successors and assigns. References to Lessee herein shall include Lessee's transferees, successors, and assigns. References to Lessor herein shall include Lessor's transferees, successors, and assigns.

d. This Lease and the attached exhibits contain the entire agreement of the parties with respect to its subject matter and supersede any prior oral or written agreements.

e. This Lease may be amended in writing only, signed by all the parties in interest at the time of such amendment.

f. Lessee may assign this Lease to the State of Iowa or any of its departments, agencies or designees, or to any of Lessee's affiliates without the prior consent of Lessor. In addition, in the event Lessee separates one or more of its businesses (each a "Separated Business"), whether by way of a sale, establishment of a joint venture, spin-off or otherwise (each a "Separation Event"), Lessee may, without the prior written consent of Lessor and at no additional cost to Lessee, assign this Lease such that it will continue to benefit the Separated Business and its affiliates following the Separation Event. In the event of such a permitted transfer, Lessee shall provide written notice to Lessor of the Separation Event within thirty days of the completion of the Separation Event. This Lease shall continue as a direct lease between Lessor and any permitted transferee, and the original Lessee shall be released from any and all future liability hereunder. Lessee shall notify Lessor in writing of the name and address of any assignee. This Lease may be assigned by Lessor without the consent of Lessee provided that the assignee shall occupy and use the Premises subject to this Lease. Lessor shall notify Lessees in writing of the name and address of any assignee.

g. No waiver by either party of any provision herein shall be deemed a waiver of any other provision or of any prior or subsequent breach of any provision herein.

h. If any term or provision of this Lease is held to be invalid or unenforceable, such invalidity or unenforceability shall not be construed to affect any other provision of this Lease and the remaining provisions shall be enforceable in accordance with their terms.

i. This agreement shall be governed by and construed in accordance with the laws of the State of IOWA, without regard to its conflicts of law principles.

j. If Lessee does not vacate the Premises in accordance with the Lease terms upon valid termination of this Lease, such holding over shall be treated as creating a month to month tenancy. This holdover will not be approved for more than ninety (90) days. Rent during the holdover will be 150% of the current rent. Further, if Lessee does not vacate the Premises as required, Lessee's Communications Equipment may be removed by Lessor at Lessee's expense. Any bill for removal of Lessee's equipment by Lessor shall be paid in full within thirty (30) days of mailing.

k. Lessee may make, with prior approval from Lessor, reasonable alterations, additions, or improvements to the Premises necessary for its antennas, communication shelter, power cables and telephone cables, so long as the structural integrity of the Premises is not affected. Lessee will bear the total cost of such alterations, additions or improvements, including regular maintenance, and the cost of removal and returning the Premises to the condition it was at the time of entering into the Lease (subject to the terms of paragraph 6(d) of this Lease).

l. Lessee shall be solely responsible for maintenance of its Communications Equipment, and shall arrange for maintenance under separate contract for all such maintenance services. Lessee shall not expect or ask Lessor to do any special site maintenance for Lessee's antennas or shelter, unless Lessee enters into a separate maintenance contract with Lessor, which contract will be separate from the terms of this Lease (i.e.: in the event that some minor snow plowing is requested for Lessee's access to their shelter, Lessee will separately contract for that service under a separate document).

m. Lessee will bear any and all costs associated with temporary relocation of Lessee's equipment, if required, during repairs or painting of Lessor' building. Lessor will give Lessee at least thirty (30) days advance notice of scheduled repairs or painting of Lessor' building or tower which may affect Lessee's operation, so that Lessee can pre-plan for providing high-quality communications to Lessee's customers during any temporary relocation required by Lessor' repair or painting activities. Lessor are not required to provide notice of routine repairs, such as replacement of tower lights, which do not affect Lessee's operation. Lessor will provide Lessee notice of emergency repairs with at least twelve (12) hours prior notice unless it is impossible or impractical to do so and then the Lessee shall be provided with as much prior notice as possible under the emergency circumstances.

n. To the extent permitted by law, Lessee shall indemnify and hold Lessor harmless against all expenses, liabilities and claims of every kind, including reasonable attorney fees, to the extent arising from the negligent or wrongful acts or omissions of Lessee or anyone for whose acts Lessee may be liable and made necessary by or on behalf of any person or entity arising out of:

- 1) A failure by Lessee to perform any of the terms and conditions of this Lease; or
- 2) Any injury or damage happening on or about the Leased Premises which is caused in whole or in part by Lessee's use of the Premises, any act or omission of Lessee or anyone for whose acts Lessee may be liable; or
- 3) Any injury or damage to any employee, agent, or customer of Lessee or Lessor on or about the Leased Premises which is caused in whole or in part by Lessee's use of the Premises, any act or omission of Lessee or anyone for whose acts Lessee may be liable; or
- 4) Failure of Lessee to comply with any applicable laws or governmental authority; or
- 5) Any action brought by a third party for damages as a result of an injury caused by Lessee or action or inaction of the Lessee.

15. Approval. The parties agree that this Lease shall not be binding on either party unless and until it is fully executed by both parties. If this Lease is signed by only one party, it shall merely constitute an offer to lease.

16. Utilities. Lessee shall be entitled to install any utilities and services required for the Communication Equipment. Lessor shall provide Lessee with such reasonable assistance as is necessary to enable Lessee to arrange for such utilities and services, including signing any easement or other instrument reasonably

required by the utility company. Lessor represents that utilities required for Lessee's use of the Premises are available, and Lessee shall not be required to pay any share of such utilities and services as are used for the Communication Equipment. All electricity and any other utility services used by Lessee to operate the Communications Equipment will be paid by Lessor.

17. Compliance with Laws. The Parties shall comply with all applicable local, state, and federal government laws, codes and regulations, including without limitation FAA, FCC, NEPA, occupational health and safety, environmental, and electromagnetic (EME) requirements, and applicable requirements of the Americans with Disabilities Act.

18. Short Form Lease. The parties will, at any time upon the request of either one, promptly execute duplicate originals of an instrument, in recordable form, which will constitute a short form of this Lease setting forth a description of the premises, the term of this Lease and any portions hereof, excepting the rent and cost provisions.

19. Contingency for Due Diligence. Lessee shall have until the Commencement Date to conduct a due diligence examination of all factors affecting the Property and to satisfy itself in its sole discretion that the Property is suitable for Lessee's intended use. Lessor shall furnish Lessee with the legal description, coordinates, address or location and real estate tax numbers, if available, for the Property as well as copies of any title policies or searches, surveys or site drawings (including those dealing with utility or access easements), any Prime Lease or Ground Lease, including all amendments, current users of the Property and all broadcast frequencies and any studies dealing with structural, RF, engineering or environmental, NEPA or EME matters, as well as other documentation reasonably requested by Lessee. Lessor shall also allow Lessee's personnel or its contractors to visit and investigate the Property and perform structural, engineering and environmental evaluations and tests. Lessor shall use its best efforts to obtain from the holder of any mortgage or deed of trust ("Mortgagee") a non-disturbance agreement in a form provided by or otherwise acceptable to Lessee. In the event Lessee is not satisfied with the Property or Lessee does not receive non-disturbance agreements from all Mortgagees Lessee shall have the right to terminate this Lease by so notifying Lessor in writing on or before the Commencement Date, in which event all funds paid by Lessee shall be returned to Lessee.

23. Brokers. Lessor and Lessee each represents to the other that he, she, or it did not deal with any broker or other person who may be entitled to a commission as a result of the transaction contemplated by this Lease, and Lessor and Lessee hereby agree to indemnify and hold the other harmless from a breach of the foregoing representation.

24. Counterparts: Facsimile Signatures. This Lease may be executed in one or more counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same instrument. In addition, a true and correct facsimile copy or computer image of this Agreement shall be treated as and shall have the same effect as an original signed copy of this document.

25. Waiver of Lessor's Lien Rights. Lessor agrees that it does not have any lien rights in Lessee's personal property or the Communications Equipment.

26. Mutual Waiver of Consequential Damages and Limitation of Liability. NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THIS LEASE, ALTHOUGH THE PARTIES ACKNOWLEDGE THE POSSIBILITY OF SUCH LOSSES OR DAMAGES, EACH PARTY AGREES THAT THE OTHER PARTY WILL NOT BE LIABLE FOR ANY COMMERCIAL LOSS; INCONVENIENCE; LOSS OF USE, TIME, DATA, GOOD WILL, REVENUES, PROFITS OR SAVINGS; OR OTHER SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO OR ARISING FROM THIS LEASE, AND EXCEPT FOR PERSONAL

INJURY, DEATH, OR DAMAGE TO TANGIBLE PROPERTY, EACH PARTY'S TOTAL LIABILITY, WHETHER FOR BREACH OF CONTRACT, WARRANTY, NEGLIGENCE, STRICT LIABILITY IN TORT, INDEMNIFICATION, OR OTHERWISE, WILL BE LIMITED TO THE DIRECT DAMAGES RECOVERABLE UNDER LAW, BUT NOT TO EXCEED \$3,000,000.00. This limitation of liability provision survives the expiration or termination of this Lease and applies to the fullest extent permitted by law, notwithstanding any contrary provision.

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IN WITNESS WHEREOF the parties have executed this Agreement as of the date first above written.

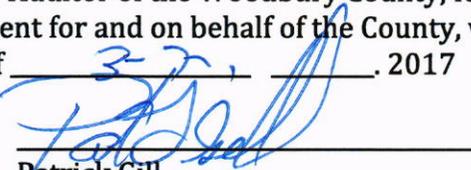
WOODBURY COUNTY, IOWA

By 

Matthew Ung
Chairperson

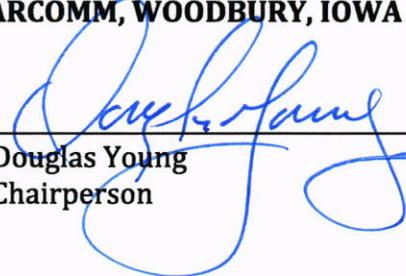
Certification of County Auditor:

I, Patrick Gill, certify that I am the County Auditor of the Woodbury County, Iowa and that Matthew Ung, who executed this Agreement for and on behalf of the County, was duly authorized and empowered to do so as of 3/7, 2017



Patrick Gill
Woodbury County Auditor

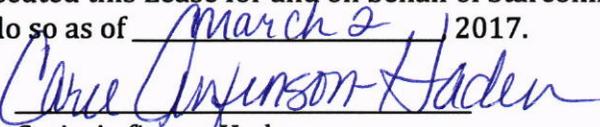
STARCOMM, WOODBURY, IOWA

By 

Douglas Young
Chairperson

Certification of Starcomm:

I, Carrie Anfinson-Haden, certify that I am the Administrative Secretary for Starcomm and that Chairperson Douglas Young, who executed this Lease for and on behalf of Starcomm, was duly authorized and empowered to do so as of March 2, 2017.



Carie Anfinson-Haden,
Administrative Secretary for Starcomm

EXHIBIT A

DESCRIPTION OF PROPERTY AND EQUIPMENT TO BE INSTALLED

This exhibit provides the address, location, and general description of the property subject to the Lease.

Legal Description:

The site is known as "AT&T" consists of a self supporting tower, communications shelter, and backup generator. Additional antennas are planned for this tower resulting in tower strengthening work as documented in the loading analysis report (ISICS-09AT&T Tower SA). With the exception of the antennas to be mounted on the tower, all new equipment is to be installed inside the equipment shelter.



Address or Location:

AT&T Tower Site
2028 Jasper Ave
4.5 mi SE of Merville, IA

Coordinates:

42-24-37N / 95-59-58.3W

Equipment to be installed on the tower:

- 21ft Omni directional antenna (SC412-HF2LDF) @ 350 feet
- 6ft parabolic dish (SB6-W60AC) @ 140 feet
- 4ft parabolic dish (SB4-W60AD) @ 115 feet
- 6ft parabolic dish (SB6-W60AC) @ 115 feet

Equipment to be installed inside the shelter:

- Replace site LAN switches with 48 ports to add Geo-Prime Site Capability
- Redundant voting comparators with FDMA/TDMA (DDM) capability
- Redundant Site Controller
- 3 Base Radios to existing Expansion Radio Rack
- Coriant MPLS router
- Additional DC rectifiers to existing Eltek chassis to increase output capacity
- Additional battery strings to increase runtime



Mr. Patrick Botimer
Structural Design Engineer IV
Armor Tower, Inc
9 North Main St., 2nd Floor, Cortland NY 13045

August 24, 2016

Re: Structural Review of an Existing 365-ft Lattice Steel Tower
Woodbury County Site #9 (a.k.a. Merville, IA)
Site Name: AT&T / FCC ASR #1016908 ; Lat. N 42° 24' 37", Long. W 95° 59' 58"
Location: County Road L13 Jasper Ave. in Woodbury County IA

Dear Mr. Botimer,

Communication Structures Engineering, Inc. (CSEI) has completed a structural review of the existing 365-ft tower located at this Woodbury County Site #9, also known as Merville, IA. In accordance with your request, we have performed a structural analysis of this tower to check its capability to support the existing tower, antenna, and equipment loads as well as the loads from the proposed equipment additions. A description of the existing tower and a summary of the loads considered and the results of our review follow.

EXISTING TOWER INFORMATION & HISTORY

The 365-ft self-supported tower at this site was originally built in 1962 for AT&T Long Lines as a microwave repeater structure on AT&T's Fargo to Omaha Radio Relay Route. The tower was designed to initially support six Western Electric KS15676 Horn Antennas on the top platforms. In 1967, 1968, 1983, 1985, & 1987 this tower structure was modified & strengthened by AT&T to accommodate the addition of various AT&T antennas. The tower foundation was also strengthened in 1967 and 1983. AT&T Corporation sold this tower and site in 2000. All of the original horn antennas have now been removed from the tower, but several horn antenna appurtenances are still mounted on the tower. Several customer antennas & lines have been added to the tower since it was sold by AT&T in 2000.

CSEI utilized the original 1962 tower design drawings and 1967, 1968, 1983, 1985, 1987 tower strengthening drawings from our archives to conduct our structural review. The original 1962 geotechnical information & foundation drawings from our archives as well as the 1967 and 1983 foundation strengthening drawings were used to evaluate the existing foundation capacity. We also utilized the antenna inventory and tower photos, provided to us by Armor Tower, Inc to determine the existing equipment loads. The new proposed "State of Iowa" antenna additions were taken from the spreadsheet "StateofIowaSiteListBook9f" provided to us. A site visit or condition survey of this tower was not a part of CSEI's scope of work. We have assumed that the tower has been maintained in good physical condition.

DESIGN CRITERIA

The specific loading criteria that we utilized were those prescribed by the "2009 International Building Code" & "ANSI/TIA-222-G", "Structural Standard for Antenna Supporting Structures". Per this Code & Design Standard criteria, the wind speed that we utilized for the review of this structure was the "3 second gust wind speed" of 90-mph applicable to Woodbury County, IA. The tower was analyzed as a Class III Structure. Please see the next page titled, "DESIGN CRITERIA", for a complete listing of all equipment items.

STRUCTURAL ANALYSIS PROCEDURE

The referenced design criteria combined with wind tunnel test data from tests conducted on AT&T tower framing and tower platforms, were utilized to determine the applicable loads for this structure. A frame analysis was then performed utilizing the stated wind loads and a computer model of the tower framing modeled on Power Line Systems Inc. "PLS Tower" Program. The load carrying frame members of this structure were then reviewed to check their compliance with the 2009 IBC & ANSI/TIA-222-G.

RESULTS OF STRUCTURAL ANALYSIS

Existing Steel Tower: As a result of this structural analysis, we determined that tower strengthening will be required to enable this steel structure to support the current antennas & lines in compliance with the referenced design criteria. The specific tower members that will require strengthening work are depicted on the attached Drawing TS-1. All other tower structural members were found to have maximum stress levels that were less than the allowable stresses permitted by referenced specifications. Consequently, if the tower members designated on Drawing TS-1 are properly strengthened, this structure will be capable of supporting the itemized loading.

Existing Tower Foundation: The existing tower foundation was found to be adequate to support the existing and proposed tower & equipment loads. No strengthening of the foundation will be necessary.

If any co-location customers add any future additional antennas or equipment to this tower, this structure should be re-analyzed at that time.

CSEI would be happy to respond to any questions regarding this structural analysis.

Sincerely,

James E. Boltz, P.E. (IA P.E.14331)

Attachments:

- 1.) Design Criteria for tower at Woodbury County Site #9 (a.k.a. Merville, IA)
- 2.) CSEI Drawing TS-1, Tower Strengthening Woodbury County Site #9
- 3.) Structural Calculations for tower at Woodbury County Site #9 (a.k.a. Merville, IA)



DESIGN CRITERIA

8/24/16

Woodbury County Site #9. Site Name: AT&T / FCC ASR #1016908

LOCATION: C.R L13 Jasper Ave. Woodbury County IA

Latitude N 42° 24' 37", Longitude W 95° 59' 58"

DESIGN STANDARDS

**ANSI/TIA/EIA-222-G-2, 90 MPH (3-Second Gust Wind Speed) for Woodbury County
Structure Class III; Exposure 'C' ; Topographic Category 1**

In addition to the loads from the existing tower framing and standard platforms the loads from the following antennas and their associated transmission lines were considered in the analysis.

EXISTING ANTENNA CONFIGURATION (Used for Structural Analysis)

| Location | Elevation (mount ht +/-) | Item (Type) | Qty | Dim's (approx.) | Mount type | Qty of Feed Lines | Size of Feed Lines |
|---------------------------------------------------------|-----------------------------|-----------------------------------------------|-----|---------------------------------|------------------------------|----------------------|-----------------------|
| Upper Platform 365-ft Elevation | 368-ft | 6-ft yagi | 1 | std. 6-ft yagi | braced pipe | 1 | 7/8" coax |
| | 369-ft | omni 8 double bay dipole | 1 | 2.5" dia x 20-ft | braced pipe | 1 | 7/8" coax |
| | 370-ft | omni 4 bay dipole | 1 | 2.5" dia x 25-ft | tri-pod | 1 | 7/8" coax |
| | 370-ft | omni (bogner style) | 1 | 3" dia. x 12-ft | tri-pod | 1 | 1-1/4" coax |
| | 368-ft | omni small 4-ft | 1 | 2" dia x 4-ft | handrail mt. | 1 | 3/8" coax |
| | 370-ft | omni 4 bay dipole | 1 | 2.5" dia x 25-ft | tri-pod | none | none dead |
| | 370-ft | omni | 1 | 2.5" dia x 20-ft | tri-pod | 1 | 7/8" coax |
| | 370-ft | omni (bogner style) w/ amplifier (12"x12") | 1 | 3" dia. x 12-ft | tri-pod | 2 | 7/8" & 1/2" coax |
| | 370-ft | omni 4 bay dipole | 1 | 2.5" dia x 25-ft | tri-pod | 1 | 7/8" coax |
| | 378-ft | Strobe on std mast | 1 | 4" x 13-ft mast | beam mast | 1 | 1/2" Power |
| Lower Platform 350-ft Elevation | 363-ft | omni 4 bay dipole | 1 | 2.5" dia x 15-ft | Inverted from Pltfm above | 1 | 7/8" coax |
| | 360-ft | omni | 1 | 3" dia x 8-ft | tri-pod /gate bm | 1 | 7/8" coax |
| | 358-ft | 4-ft parabolic / RFS | 1 | standard dish (no radome) | pipe to leg | 1 | 1/2" coax |
| N & W face | 325'-300' | saddle mounts R.I.P. | 2 | standard saddle w/ milkstool | Gabriel TH-10 (removed) | none | none |
| C Leg | 302-ft | omni small 5-ft | 1 | 2" dia x 5-ft | 2' x 4' boom | 1 | 1/2" coax |
| S & W Face | 250-ft | orig. O.B. light pltfms | 2 | Std on 2 faces | - | none | none |
| A & C Leg | 223-ft | Strobe lights | 2 | Std. | - | 2 | 1/2" Power |
| C & D Leg | 200-ft | (2) large corner pltfms | 2 | Horns Removed | KS15676 (removed) | none | none |
| D Leg | 170-ft | 8-ft parabolic / RFS | 1 | standard dish (with radome) | pipe to leg | 1 | EW-52 |
| South Face | 150'-125' | saddle mount R.I.P. | 1 | standard saddle w/ milkstool | Gabriel TH-10 (Removed) | none | none |
| D Leg | 149-ft | 8-ft parabolic / RFS | 1 | standard dish (with radome) | pipe to leg | 1 | EW-52 |
| D Leg | 138-ft | 6-ft parabolic / RFS | 1 | standard dish (with radome) | pipe to leg | 1 | EW-52 |
| E & S Face | 125-ft | orig. O.B. light pltfms | 2 | std on 2 faces | - | none | none |
| C Leg | 119-ft | 6-ft parabolic / RFS | 1 | Standard dish (no radome) | pipe to leg | 1 | EW-52 |
| C Leg | 108-ft | omni | 1 | 3" dia. x 9-ft | small 2-ft boom | 1 | 1/2" coax |
| D Leg | 103-ft | 4-ft yagi | 1 | std. 4-ft yagi | pipe to leg | 1 | 1/2 "coax |
| D Leg | 54-ft | 2-ft yagi | 1 | std. 2-ft yagi | pipe to leg | 1 | 3/8" coax |
| D Leg | 44-ft | 2-ft parabolic | 1 | standard dish (with radome) | pipe to leg | 1 | 1/2" Assumed |

See next page for New Loading now Proposed



Communication Structures Engineering, Inc.

DESIGN CRITERIA

(Continued)

Supplementary Waveguide & Access Ladders

These are added ladders (the main climbing ladder is already included in standard tower loads)

| Location | Elevation (mount ht +/-) | Item (Type) | Qty | Dim's (approx.) | Comment |
|--------------------------------|----------------------------------------------|---------------------------------|-----|------------------------------------------------------------------|-------------------------------------------|
| Near Middle of West Tower Face | From Grade @ 0-ft to Upper Platform @ 365-ft | 28" wide waveguide ladder | 1 | 28" wide ladder (2.5" angle rails) x 365-ft 2" cross memb. @ 48" | (11 total lines supported on this ladder) |
| | | 18" wide waveguide ladder) | 1 | 28" wide ladder (2.5" angle rails) x 365-ft 2" cross memb. @ 48" | (8 total lines supported on this ladder) |
| | | 12" wide access climbing ladder | 1 | 2" bars with .75" rungs @ 12" | (No lines supported on this ladder) |

NEW (PROPOSED) ANTENNA CONFIGURATION (Used for Structural Analysis)

State of Iowa Proposed Antennas

| Location | Elevation (mount ht +/-) | Item (Type) | Qty | Dim's (approx.) | Mount type | Qty of Feed Lines | Size of Feed Lines |
|---------------------------------|--------------------------|------------------------------------|-----|------------------------------------------------|-----------------------|-------------------|--------------------------------|
| Main Antenna Platform | 350-ft+/- | Sinclair Technologies SC412-HF2LDF | 1 | Omni stick 5" dia x 21-ft (approx 80 lbs) | braced pipe or tripod | 1 | 7/8" |
| West tower leg AZ = 287 deg. | 140-ft | 6-ft Parabolic / RFS SB6-W60AC | 1 | High Perf. Dish with Radome (75" dia x 22"+/-) | pipe to leg | 1 | CNT-400 (.405" O.D.) Commscope |
| West tower leg AZ = 287 deg. | 115-ft | 4-ft Parabolic / RFS SB4-W60AD | 1 | High Perf. Dish with Radome (50" dia x 15"+/-) | pipe to leg | 1 | CNT-400 (.405" O.D.) Commscope |
| East tower leg AZ = 104 deg. | 115-ft | 6-ft Parabolic / RFS SB6-W60AC | 1 | High Perf. dish with Radome (75" dia x 22"+/-) | pipe to leg | 1 | CNT-400 (.405" O.D.) Commscope |



Communication Structures Engineering, Inc.



COMMUNICATION STRUCTURES ENGINEERING, INC.
5579-B Chamblee Dunwoody Rd. /Suite 517
Dunwoody, GA 30338 (770) 951-8080

STRUCTURAL CALCULATIONS

FOR

365-ft Self-Supported Tower

Woodbury County Site#9

Site Name: AT&T / FCC ASR #1016908

Issue Date: August 24, 2016

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| Design Criteria | 1 TO 2 |
| Computer Model | 3 |
| Analysis Results Summary | 4 |
| Tower Summary Output | 5 TO 28 |
| Foundation Review | 29 |

DESIGN CRITERIA

Woodbury County Site #9. Site Name: AT&T / FCC ASR #1016908
LOCATION: C.R L13 Jasper Ave. Woodbury County IA
Latitude N 42° 24' 37", Longitude W 95° 59' 58"

DESIGN STANDARDS

ANSI/TIA/EIA-222-G-2, 90 MPH (3-Second Gust Wind Speed) for Woodbury County
Structure Class III; Exposure 'C' ; Topographic Category 1

In addition to the loads from the existing tower framing and standard platforms the loads from the following antennas and their associated transmission lines were considered in the analysis.

EXISTING ANTENNA CONFIGURATION (Used for Structural Analysis)

| Location | Elevation (mount ht +/-) | Item (Type) | Qty | Dim's (approx.) | Mount type | Qty of Feed Lines | Size of Feed Lines |
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| Upper Platform 365-ft Elevation | 368-ft | 6-ft yagi | 1 | std. 6-ft yagi | braced pipe | 1 | 7/8" coax |
| | 369-ft | omni 8 double bay dipole | 1 | 2.5" dia x 20-ft | braced pipe | 1 | 7/8" coax |
| | 370-ft | omni 4 bay dipole | 1 | 2.5" dia x 25-ft | tri-pod | 1 | 7/8" coax |
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| | 370-ft | omni 4 bay dipole | 1 | 2.5" dia x 25-ft | tri-pod | none | none dead |
| | 370-ft | omni | 1 | 2.5" dia x 20-ft | tri-pod | 1 | 7/8" coax |
| | 370-ft | omni (bogner style) w/ amplifier (12"x12") | 1 | 3" dia. x 12-ft | tri-pod | 2 | 7/8" & 1/2" coax |
| | 370-ft | omni 4 bay dipole | 1 | 2.5" dia x 25-ft | tri-pod | 1 | 7/8" coax |
| | 378-ft | Strobe on std mast | 1 | 4" x 13-ft mast | beam mast | 1 | 1/2" Power |
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| N & W face | 325'-300' | saddle mounts R.I.P. | 2 | standard saddle w/ milkstool | Gabriel TH-10 (removed) | none | none |
| C Leg | 302-ft | omni small 5-ft | 1 | 2" dia x 5-ft | 2' x 4' boom | 1 | 1/2" coax |
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| D Leg | 103-ft | 4-ft yagi | 1 | std. 4-ft yagi | pipe to leg | 1 | 1/2" coax |
| D Leg | 54-ft | 2-ft yagi | 1 | std. 2-ft yagi | pipe to leg | 1 | 3/8" coax |
| D Leg | 44-ft | 2-ft parabolic | 1 | standard dish (with radome) | pipe to leg | 1 | 1/2" Assumed |

See next page for New Loading now Proposed

DESIGN CRITERIA

(Continued)

Supplementary Waveguide & Access Ladders

These are added ladders (the main climbing ladder is already included in standard tower loads)

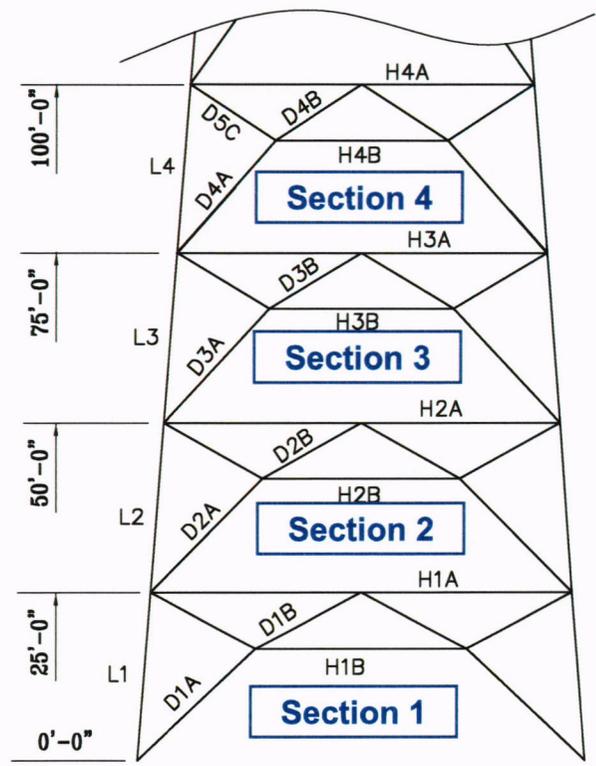
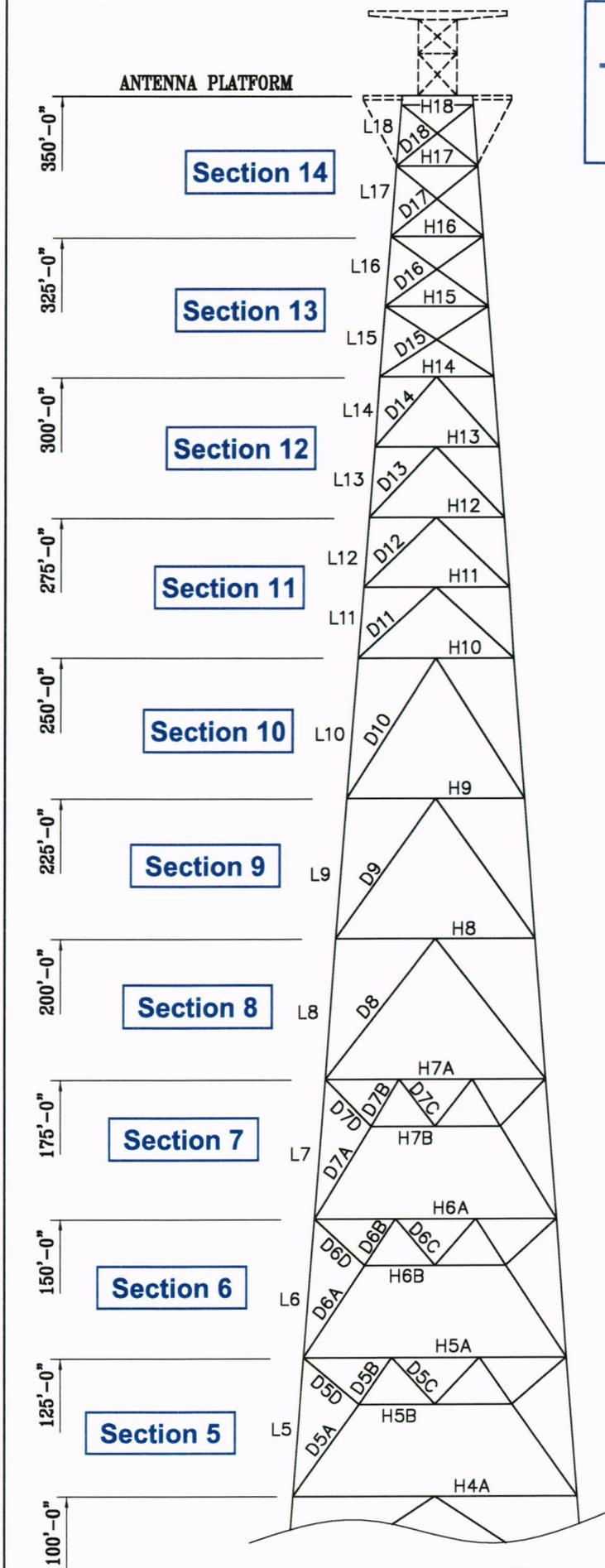
| Location | Elevation (mount ht +/-) | Item (Type) | Qty | Dim's (approx.) | Comment |
|--------------------------------|----------------------------------------------|---------------------------------|-----|------------------------------------------------------------------|-------------------------------------------|
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| | | 12" wide access climbing ladder | 1 | 2" bars with .75" rungs @ 12" | (No lines supported on this ladder) |

NEW (PROPOSED) ANTENNA CONFIGURATION (Used for Structural Analysis)

State of Iowa Proposed Antennas

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| Main Antenna Platform | 350-ft+/- | Sinclair Technologies SC412-HF2LDF | 1 | Omni stick 5" dia x 21-ft (approx 80 lbs) | braced pipe or tripod | 1 | 7/8" |
| West tower leg AZ = 287 deg. | 140-ft | 6-ft Parabolic / RFS SB6-W60AC | 1 | High Perf. Dish with Radome (75" dia x 22"+/-) | pipe to leg | 1 | CNT-400 (.405" O.D.) Commscope |
| West tower leg AZ = 287 deg. | 115-ft | 4-ft Parabolic / RFS SB4-W60AD | 1 | High Perf. Dish with Radome (50" dia x 15"+/-) | pipe to leg | 1 | CNT-400 (.405" O.D.) Commscope |
| East tower leg AZ = 104 deg. | 115-ft | 6-ft Parabolic / RFS SB6-W60AC | 1 | High Perf. dish with Radome (75" dia x 22"+/-) | pipe to leg | 1 | CNT-400 (.405" O.D.) Commscope |

MOVILLE IA TOWER ANALYSIS MODEL 365-FT TYPE A2 TOWER



ANALYSIS RESULTS SUMMARY

Tower Component Stresses vs. Capacity

| Section No. <i>(see Analysis Model for section locations)</i> | Elevation (ft) | Percent Capacity Used | | |
|----------------------------------------------------------------------|--------------------|-----------------------|---------------|---------------|
| | | Leg | Diagonal | Horizontal |
| 1 | 0'-0" to 25'-0" | 80.3% | 91.9% | 71.9% |
| 2 | 25'-0" to 50'-0" | 77.7% | 137.7% | 59.5% |
| 3 | 50'-0" to 75'-0" | 74.7% | 125.3% | 94.3% |
| 4 | 75'-0" to 100'-0" | 71.7% | 132.7% | 54.6% |
| 5 | 100'-0" to 125'-0" | 65.2% | 224.5% | 103.8% |
| 6 | 125'-0" to 150'-0" | 70.2% | 157.1% | 96.7% |
| 7 | 150'-0" to 175'-0" | 71.6% | 90.7% | 65.1% |
| 8 | 175'-0" to 200'-0" | 66.2% | 63.4% | 29.2% |
| 9 | 200'-0" to 225'-0" | 63.1% | 76.1% | 66.3% |
| 10 | 225'-0" to 250'-0" | 59.2% | 70.6% | 49.4% |
| 11 | 250'-0" to 275'-0" | 61.5% | 65.9% | 42.5% |
| 12 | 275'-0" to 300'-0" | 51.6% | 62.8% | 31.3% |
| 13 | 300'-0" to 325'-0" | 41.9% | 48.9% | 14.1% |
| 14 | 325'-0" to 350'-0" | 31.0% | 87.2% | 10.0% |

TOWER FOUNDATION

Foundation Uplift Loads (with Load factor) from Current Analysis = **549 kips uplift**

Foundation Down Load (with Load factor) from Current Analysis = **736 kips uplift**

Factored Uplift Loads / Foundation Capacity

Uplift 549 K / 639K = 86% of capacity

UN-factored Downward Loads / Foundation Capacity

Downward 2.99 KSF / 3.5 KSF = 85% of capacity

Foundation is adequate for the proposed loading

Results above indicate:

- The tower steel framing not sufficient to support the proposed loading.
- The tower foundation is sufficient to support the proposed loading.



 *
 * TOWER - Analysis and Design - Copyright Power Line Systems, Inc. 1986-2006 *
 *

Project Name : MOVILLE, IA
 Project Notes: Woodbury County Site #9, AT&T / FCC ASR #1016908
 Project File : c:\csei\analysis\analysis\2016\moville ia 07292016\moville ia 07302016 finall.tow
 Date run : 8:32:33 PM Monday, August 22, 2016
 Licensed to : Communication Structures Engineering Inc.

The model has 0 warnings.

Maximum element usage is 224.44% for Angle "g25X" in load case "LOAD 4" NG

Structure Height Summary (used for calculating wind/ice adjust with height):

Structure height above ground 350.00 (ft)
 Elevation of structure bottom for wind height adjustment: 0.00 (ft)
 Structure height for structure gust response factor: 350.00 (ft)
 Structure gust response factor, Gh: 0.8500
 Mean wind conversion factor, m: 0.6000
 Wind direction probability factor, Kd, for structures: 0.85, for appurtenances: 0.85
 Guy installation temperature: 32.00 (deg F)
 Tower Type: Rectangular Latticed

ANSI/TIA 222-G Load Options:

Structure Class 3
 Exposure Category C Open terrain
 Topographic Category 1 (Kzt always 1.0)
 Spectral Response SDS 0.000
 Spectral Response SD1 0.000

EIA Rev. G Load Cases:

| Load Case Description | Dead Load Factor | Wind Load Factor | Strength Factor | Load Case Type | Basic Wind Speed (mph) | Wind Dir. (Deg) | Mean Wind Start Elevation (ft) | Mean Wind Stop Elevation (ft) | Ice Thick. (in) | Ice Density (lbs/ft^3) | Ice Temperature (deg F) | Point Loads | Joint Displ. |
|-----------------------|------------------|------------------|-----------------|----------------|------------------------|-----------------|--------------------------------|-------------------------------|-----------------|------------------------|-------------------------|-------------|--------------|
| LOAD 1 | 1.2000 | 1.6000 | 1.0000 | Regular | 90.000 | 0 | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.0 | 12 loads | |
| LOAD 2 | 0.9000 | 1.6000 | 1.0000 | Regular | 90.000 | 0 | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.0 | 12 loads | |
| LOAD 3 | 1.2000 | 1.6000 | 1.0000 | Regular | 90.000 | 45 | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.0 | 8 loads | |
| LOAD 4 | 0.9000 | 1.6000 | 1.0000 | Regular | 90.000 | 45 | 0.00 | 0.00 | 0.0000 | 0.0000 | 0.0 | 8 loads | |
| LOAD 5 | 1.2000 | 1.0000 | 1.0000 | Regular | 50.000 | 0 | 0.00 | 0.00 | 0.7500 | 56.0000 | 10.0 | 12 loads | |
| LOAD 6 | 1.2000 | 1.0000 | 1.0000 | Regular | 50.000 | 45 | 0.00 | 0.00 | 0.7500 | 56.0000 | 10.0 | 8 loads | |

EIA Sections Information:

| Section Label | Top Z (ft) | Bottom Z (ft) | Joint Count | Member Count | Top Width (ft) | Bottom Width (ft) | Gross Area (ft^2) | Face Adjust Factor | Af Face Adjust Factor | Ar Face Adjust Factor | Dead Load Factor |
|---------------|------------|---------------|-------------|--------------|----------------|-------------------|-------------------|--------------------|-----------------------|-----------------------|------------------|
| 1 | 350.000 | 325.000 | 12 | 42 | 12.50 | 16.25 | 359.38 | 1.2000 | 1.0000 | 1.300 | |
| 2 | 325.000 | 300.000 | 16 | 43 | 16.25 | 20.00 | 453.13 | 1.2000 | 1.0000 | 1.300 | |
| 3 | 300.000 | 275.000 | 24 | 50 | 20.00 | 23.75 | 546.88 | 1.3900 | 1.0000 | 1.340 | |
| 4 | 275.000 | 250.000 | 24 | 50 | 23.75 | 27.50 | 640.62 | 1.2400 | 1.0000 | 1.500 | |
| 5 | 250.000 | 225.000 | 16 | 25 | 27.50 | 31.25 | 734.38 | 1.2100 | 1.0000 | 1.450 | |
| 6 | 225.000 | 200.000 | 16 | 25 | 31.25 | 35.00 | 828.12 | 1.1900 | 1.0000 | 1.410 | |
| 7 | 200.000 | 175.000 | 20 | 24 | 35.00 | 38.75 | 921.87 | 1.3500 | 1.0000 | 1.460 | |
| 8 | 175.000 | 150.000 | 36 | 56 | 38.75 | 42.50 | 1015.63 | 1.2700 | 1.0000 | 1.500 | |
| 9 | 150.000 | 125.000 | 36 | 56 | 42.50 | 46.25 | 1109.38 | 1.2100 | 1.0000 | 1.500 | |
| 10 | 125.000 | 100.000 | 32 | 52 | 47.50 | 50.00 | 1218.75 | 1.5100 | 1.0000 | 1.600 | |
| 11 | 100.000 | 75.000 | 24 | 36 | 50.00 | 53.75 | 1296.88 | 1.4000 | 1.0000 | 1.500 | |
| 12 | 75.000 | 50.000 | 24 | 36 | 53.75 | 57.50 | 1390.63 | 1.4000 | 1.0000 | 1.500 | |
| 13 | 50.000 | 25.000 | 24 | 36 | 57.50 | 61.25 | 1484.38 | 1.4000 | 1.0000 | 1.500 | |
| 14 | 25.000 | 0.000 | 20 | 28 | 61.25 | 65.00 | 1578.13 | 1.4000 | 1.0000 | 1.500 | |

Equipment Library:

| Equipment Property Label | Stock Number | Weight (lbs) | Wind Area (ft^2) | Ice Area (ft^2) | Shape or EIA Antenna Type | Drag Coef. | Diameter (ft) | Height (ft) |
|--------------------------|--------------|--------------|------------------|-----------------|---------------------------|------------|---------------|-------------|
| ANTENNA PLATFORM | | 8000.0 | 30.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| MILK STOOL | | 1500.0 | 10.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA UPPER PLATFORM | | 300.0 | 31.50 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA LOWER PLATFORM | | 50.0 | 11.25 | 0.00 | | 1.00 | 0.00 | 0.00 |
| SM AT 325 FT | | 200.0 | 15.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| SM AT 300 FT | | 500.0 | 30.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA AT 302 FT | | 20.0 | 2.50 | 0.00 | | 1.00 | 0.00 | 0.00 |
| CP AT 200 FT | | 1000.0 | 50.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA AT 170 FT | | 350.0 | 15.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| SM AT 150 FT | | 200.0 | 15.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| SM AT 125 FT | | 500.0 | 30.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA AT 149 FT | | 350.0 | 15.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA AT 138 FT | | 200.0 | 10.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA AT 119 FT | | 200.0 | 10.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA AT 108 FT | | 10.0 | 2.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA AT 103 FT | | 10.0 | 2.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA AT 54 FT | | 10.0 | 2.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| DA AT 44 FT | | 25.0 | 2.50 | 0.00 | | 1.00 | 0.00 | 0.00 |
| SOI AT 350 FT | | 6.0 | 30.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| SOI AT 140 FT | | 200.0 | 10.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| SOI AT 115-1 | | 100.0 | 5.00 | 0.00 | | 1.00 | 0.00 | 0.00 |
| SOI AT 115-2 | | 200.0 | 10.00 | 0.00 | | 1.00 | 0.00 | 0.00 |

Equipment Connectivity:

| Equipment Attach | | Equipment EIA Antenna | |
|------------------|---------|-----------------------|-------|
| Label | Label | Property Orientation | Angle |
| | | Set | (deg) |
| AP-1 | 67P | ANTENNA PLATFORM | 0.00 |
| AP-2 | 67X | ANTENNA PLATFORM | 0.00 |
| AP-3 | 67XY | ANTENNA PLATFORM | 0.00 |
| AP-4 | 67Y | ANTENNA PLATFORM | 0.00 |
| MS-1 | 66P | MILK STOOL | 0.00 |
| MS-2 | 66X | MILK STOOL | 0.00 |
| MS-3 | 66XY | MILK STOOL | 0.00 |
| MS-4 | 66Y | MILK STOOL | 0.00 |
| MS-5 | 65P | MILK STOOL | 0.00 |
| MS-6 | 65X | MILK STOOL | 0.00 |
| MS-7 | 65XY | MILK STOOL | 0.00 |
| MS-8 | 65Y | MILK STOOL | 0.00 |
| DA-1 | 67P DA | UPPER PLATFORM | 0.00 |
| DA-2 | 67X DA | UPPER PLATFORM | 0.00 |
| DA-3 | 67XY DA | UPPER PLATFORM | 0.00 |
| DA-4 | 67Y DA | UPPER PLATFORM | 0.00 |
| DA-5 | 67P DA | LOWER PLATFORM | 0.00 |
| DA-6 | 67X DA | LOWER PLATFORM | 0.00 |
| DA-7 | 67XY DA | LOWER PLATFORM | 0.00 |
| DA-8 | 67Y DA | LOWER PLATFORM | 0.00 |
| SM-1 | 65P | SM AT 325 FT | 0.00 |
| SM-2 | 65X | SM AT 325 FT | 0.00 |
| SM-3 | 65XY | SM AT 325 FT | 0.00 |
| SM-4 | 65Y | SM AT 325 FT | 0.00 |
| SM-5 | 61P | SM AT 300 FT | 0.00 |
| SM-6 | 61X | SM AT 300 FT | 0.00 |
| SM-7 | 61XY | SM AT 300 FT | 0.00 |
| SM-8 | 61Y | SM AT 300 FT | 0.00 |
| DA-9 | 61P | DA AT 302 FT | 0.00 |
| DA-10 | 61X | DA AT 302 FT | 0.00 |
| DA-11 | 61XY | DA AT 302 FT | 0.00 |
| DA-12 | 61Y | DA AT 302 FT | 0.00 |
| CP-1 | 43P | CP AT 200 FT | 0.00 |
| CP-2 | 43X | CP AT 200 FT | 0.00 |
| CP-3 | 43XY | CP AT 200 FT | 0.00 |
| CP-4 | 43Y | CP AT 200 FT | 0.00 |
| DA-13 | 36P | DA AT 170 FT | 0.00 |
| DA-14 | 36X | DA AT 170 FT | 0.00 |
| DA-15 | 36XY | DA AT 170 FT | 0.00 |
| DA-16 | 36Y | DA AT 170 FT | 0.00 |
| SM-9 | 29P | SM AT 150 FT | 0.00 |
| SM-10 | 29X | SM AT 150 FT | 0.00 |
| SM-11 | 29XY | SM AT 150 FT | 0.00 |
| SM-12 | 29Y | SM AT 150 FT | 0.00 |
| SM-13 | 22P | SM AT 125 FT | 0.00 |
| SM-14 | 22X | SM AT 125 FT | 0.00 |
| SM-15 | 22XY | SM AT 125 FT | 0.00 |
| SM-16 | 22Y | SM AT 125 FT | 0.00 |
| DA-17 | 29P | DA AT 149 FT | 0.00 |

| | | | |
|-------|------|---------------|------|
| DA-18 | 29X | DA AT 149 FT | 0.00 |
| DA-19 | 29XY | DA AT 149 FT | 0.00 |
| DA-20 | 29Y | DA AT 149 FT | 0.00 |
| DA-21 | 32P | DA AT 138 FT | 0.00 |
| DA-22 | 32X | DA AT 138 FT | 0.00 |
| DA-23 | 32XY | DA AT 138 FT | 0.00 |
| DA-24 | 32Y | DA AT 138 FT | 0.00 |
| DA-25 | 22P | DA AT 119 FT | 0.00 |
| DA-26 | 22X | DA AT 119 FT | 0.00 |
| DA-27 | 22XY | DA AT 119 FT | 0.00 |
| DA-28 | 22Y | DA AT 119 FT | 0.00 |
| DA-29 | 17P | DA AT 108 FT | 0.00 |
| DA-30 | 17X | DA AT 108 FT | 0.00 |
| DA-31 | 17XY | DA AT 108 FT | 0.00 |
| DA-32 | 17Y | DA AT 108 FT | 0.00 |
| DA-33 | 17P | DA AT 103 FT | 0.00 |
| DA-34 | 17X | DA AT 103 FT | 0.00 |
| DA-35 | 17XY | DA AT 103 FT | 0.00 |
| DA-36 | 17Y | DA AT 103 FT | 0.00 |
| DA-37 | 8P | DA AT 54 FT | 0.00 |
| DA-38 | 8X | DA AT 54 FT | 0.00 |
| DA-39 | 8XY | DA AT 54 FT | 0.00 |
| DA-40 | 8Y | DA AT 54 FT | 0.00 |
| DA-41 | 8P | DA AT 44 FT | 0.00 |
| DA-42 | 8X | DA AT 44 FT | 0.00 |
| DA-43 | 8XY | DA AT 44 FT | 0.00 |
| DA-44 | 8Y | DA AT 44 FT | 0.00 |
| S-1 | 67P | SOI AT 350 FT | 0.00 |
| S-2 | 67X | SOI AT 350 FT | 0.00 |
| S-3 | 67XY | SOI AT 350 FT | 0.00 |
| S-4 | 67Y | SOI AT 350 FT | 0.00 |
| S-5 | 32P | SOI AT 140 FT | 0.00 |
| S-6 | 32X | SOI AT 140 FT | 0.00 |
| S-7 | 32XY | SOI AT 140 FT | 0.00 |
| S-8 | 32Y | SOI AT 140 FT | 0.00 |
| S-9 | 25P | SOI AT 115-1 | 0.00 |
| S-10 | 25X | SOI AT 115-1 | 0.00 |
| S-11 | 25XY | SOI AT 115-1 | 0.00 |
| S-12 | 25Y | SOI AT 115-1 | 0.00 |
| S-13 | 25P | SOI AT 115-2 | 0.00 |
| S-14 | 25X | SOI AT 115-2 | 0.00 |
| S-15 | 25XY | SOI AT 115-2 | 0.00 |
| S-16 | 25Y | SOI AT 115-2 | 0.00 |

Linear Appurtenances:

| Description | From (ft) | To (ft) | Quantity | Shape | Width or Perimeter | Unit | In | Include in | |
|-----------------|--------------|------------|----------|-------|--------------------|--------------------|----------|------------|-----|
| | | | | | Diameter (in) | Weight (lbs/ft) | Face | Wind Load | |
| | | | | | (in) | (in) | (lbs/ft) | Zone | |
| CLIMBING LADDER | 0 | 350 | 1 | Flat | 6 | 20 | 10 | Yes | Yes |
| ITEM 1 | 5 | 350 | 1 | Round | 1.09 | 0 | 0.33 | Yes | Yes |
| ITEM 2 | 5 | 350 | 1 | Round | 1.09 | 0 | 0.33 | Yes | Yes |
| ITEM 3 | 5 | 350 | 1 | Round | 1.09 | 0 | 0.33 | Yes | Yes |
| ITEM 4 | 5 | 350 | 1 | Round | 1.55 | 0 | 0.66 | Yes | Yes |

| | | | | | | | | | |
|-------|-------------------|--------|-------|------|-------|------|---------|------|---------|
| AP-1 | ANTENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | 1361.77 | 0.00 | 9600.00 |
| AP-2 | ANTENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | 1361.77 | 0.00 | 9600.00 |
| AP-3 | ANTENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | 1361.77 | 0.00 | 9600.00 |
| AP-4 | ANTENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | 1361.77 | 0.00 | 9600.00 |
| MS-1 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 0.00 | 450.46 | 0.00 | 1800.00 |
| MS-2 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 0.00 | 450.46 | 0.00 | 1800.00 |
| MS-3 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 0.00 | 450.46 | 0.00 | 1800.00 |
| MS-4 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 0.00 | 450.46 | 0.00 | 1800.00 |
| MS-5 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 0.00 | 446.89 | 0.00 | 1800.00 |
| MS-6 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 0.00 | 446.89 | 0.00 | 1800.00 |
| MS-7 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 0.00 | 446.89 | 0.00 | 1800.00 |
| MS-8 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 0.00 | 446.89 | 0.00 | 1800.00 |
| DA-1 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 0.00 | 1429.85 | 0.00 | 360.00 |
| DA-2 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 0.00 | 1429.85 | 0.00 | 360.00 |
| DA-3 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 0.00 | 1429.85 | 0.00 | 360.00 |
| DA-4 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 0.00 | 1429.85 | 0.00 | 360.00 |
| DA-5 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 0.00 | 510.66 | 0.00 | 60.00 |
| DA-6 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 0.00 | 510.66 | 0.00 | 60.00 |
| DA-7 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 0.00 | 510.66 | 0.00 | 60.00 |
| DA-8 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 0.00 | 510.66 | 0.00 | 60.00 |
| SM-1 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 0.00 | 670.34 | 0.00 | 240.00 |
| SM-2 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 0.00 | 670.34 | 0.00 | 240.00 |
| SM-3 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 0.00 | 670.34 | 0.00 | 240.00 |
| SM-4 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 0.00 | 670.34 | 0.00 | 240.00 |
| SM-5 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 0.00 | 1318.28 | 0.00 | 600.00 |
| SM-6 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 0.00 | 1318.28 | 0.00 | 600.00 |
| SM-7 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 0.00 | 1318.28 | 0.00 | 600.00 |
| SM-8 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 0.00 | 1318.28 | 0.00 | 600.00 |
| DA-9 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 0.00 | 109.86 | 0.00 | 24.00 |
| DA-10 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 0.00 | 109.86 | 0.00 | 24.00 |
| DA-11 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 0.00 | 109.86 | 0.00 | 24.00 |
| DA-12 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 0.00 | 109.86 | 0.00 | 24.00 |
| CP-1 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 0.00 | 2017.37 | 0.00 | 1200.00 |
| CP-2 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 0.00 | 2017.37 | 0.00 | 1200.00 |
| CP-3 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 0.00 | 2017.37 | 0.00 | 1200.00 |
| CP-4 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 0.00 | 2017.37 | 0.00 | 1200.00 |
| DA-13 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 0.00 | 588.43 | 0.00 | 420.00 |
| DA-14 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 0.00 | 588.43 | 0.00 | 420.00 |
| DA-15 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 0.00 | 588.43 | 0.00 | 420.00 |
| DA-16 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 0.00 | 588.43 | 0.00 | 420.00 |
| SM-9 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 240.00 |
| SM-10 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 240.00 |
| SM-11 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 240.00 |
| SM-12 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 240.00 |
| SM-13 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 0.00 | 1096.39 | 0.00 | 600.00 |
| SM-14 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 0.00 | 1096.39 | 0.00 | 600.00 |
| SM-15 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 0.00 | 1096.39 | 0.00 | 600.00 |
| SM-16 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 0.00 | 1096.39 | 0.00 | 600.00 |
| DA-17 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 420.00 |
| DA-18 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 420.00 |
| DA-19 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 420.00 |
| DA-20 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 420.00 |
| DA-21 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | 375.22 | 0.00 | 240.00 |
| DA-22 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | 375.22 | 0.00 | 240.00 |

| | | | | | | | | | | | | | | | | | | | | | | |
|-------|---------------|--------|-------|------|-------|------|--|--|--|--|--|--|--|--|--|--|--|--|--|---------|------|--------|
| DA-23 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 375.22 | 0.00 | 240.00 |
| DA-24 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 375.22 | 0.00 | 240.00 |
| DA-25 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 365.46 | 0.00 | 240.00 |
| DA-26 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 365.46 | 0.00 | 240.00 |
| DA-27 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 365.46 | 0.00 | 240.00 |
| DA-28 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 365.46 | 0.00 | 240.00 |
| DA-29 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 69.74 | 0.00 | 12.00 |
| DA-30 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 69.74 | 0.00 | 12.00 |
| DA-31 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 69.74 | 0.00 | 12.00 |
| DA-32 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 69.74 | 0.00 | 12.00 |
| DA-33 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 69.74 | 0.00 | 12.00 |
| DA-34 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 69.74 | 0.00 | 12.00 |
| DA-35 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 69.74 | 0.00 | 12.00 |
| DA-36 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 69.74 | 0.00 | 12.00 |
| DA-37 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 60.27 | 0.00 | 12.00 |
| DA-38 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 60.27 | 0.00 | 12.00 |
| DA-39 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 60.27 | 0.00 | 12.00 |
| DA-40 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 0.00 | | | | | | | | | | | | | | 60.27 | 0.00 | 12.00 |
| DA-41 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 0.00 | | | | | | | | | | | | | | 75.34 | 0.00 | 30.00 |
| DA-42 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 0.00 | | | | | | | | | | | | | | 75.34 | 0.00 | 30.00 |
| DA-43 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 0.00 | | | | | | | | | | | | | | 75.34 | 0.00 | 30.00 |
| DA-44 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 0.00 | | | | | | | | | | | | | | 75.34 | 0.00 | 30.00 |
| S-1 | SOI AT 350 FT | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | | | | | | | | | | | | | | 1361.77 | 0.00 | 7.20 |
| S-2 | SOI AT 350 FT | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | | | | | | | | | | | | | | 1361.77 | 0.00 | 7.20 |
| S-3 | SOI AT 350 FT | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | | | | | | | | | | | | | | 1361.77 | 0.00 | 7.20 |
| S-4 | SOI AT 350 FT | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | | | | | | | | | | | | | | 1361.77 | 0.00 | 7.20 |
| S-5 | SOI AT 140 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 375.22 | 0.00 | 240.00 |
| S-6 | SOI AT 140 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 375.22 | 0.00 | 240.00 |
| S-7 | SOI AT 140 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 375.22 | 0.00 | 240.00 |
| S-8 | SOI AT 140 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 375.22 | 0.00 | 240.00 |
| S-9 | SOI AT 115-1 | 116.67 | 36.02 | 0.00 | 5.00 | 0.00 | | | | | | | | | | | | | | 180.10 | 0.00 | 120.00 |
| S-10 | SOI AT 115-1 | 116.67 | 36.02 | 0.00 | 5.00 | 0.00 | | | | | | | | | | | | | | 180.10 | 0.00 | 120.00 |
| S-11 | SOI AT 115-1 | 116.67 | 36.02 | 0.00 | 5.00 | 0.00 | | | | | | | | | | | | | | 180.10 | 0.00 | 120.00 |
| S-12 | SOI AT 115-1 | 116.67 | 36.02 | 0.00 | 5.00 | 0.00 | | | | | | | | | | | | | | 180.10 | 0.00 | 120.00 |
| S-13 | SOI AT 115-2 | 116.67 | 36.02 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 360.19 | 0.00 | 240.00 |
| S-14 | SOI AT 115-2 | 116.67 | 36.02 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 360.19 | 0.00 | 240.00 |
| S-15 | SOI AT 115-2 | 116.67 | 36.02 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 360.19 | 0.00 | 240.00 |
| S-16 | SOI AT 115-2 | 116.67 | 36.02 | 0.00 | 10.00 | 0.00 | | | | | | | | | | | | | | 360.19 | 0.00 | 240.00 |

EIA Section Load Case Information for "LOAD 1":

Note: qzGh (adjusted wind pressure) includes: Velocity Pressure Coefficient (Kz), Topographic Factor (Kzt), Gust Effect Factor (Gh), Wind Direction Probability Factor (Kd), Wind Importance Factor (Table 2-3), Wind Load Factor (from Loads/EIA Loads)
Face RR is the minimum round reduction factor for all round angles and appurtenances in the section

| Section Label | Z of Top (ft) | Z of Bottom (ft) | Ave. Elev. Above Gnd. (ft) | qzGh (psf) | Ice Thick. (in) | Face AF (ft^2) | Face AR (ft^2) | Face RR*AR (ft^2) | Face AG (ft^2) | Face e | Face DF | Face DR | Face RR | Face CF | Face AE (ft^2) | Face WF (lbs) | NotF AAF (ft^2) | NotF CAF | NotF AAR (ft^2) | NotF CAR | NotF AAR*CAR (ft^2) | NotF WA (lbs) | Total Wind (lbs) | Total Weight (lbs) |
|---------------|---------------|------------------|----------------------------|------------|-----------------|----------------|----------------|-------------------|----------------|--------|---------|---------|---------|---------|----------------|---------------|-----------------|----------|-----------------|----------|---------------------|---------------|------------------|--------------------|
| 1 | 350.00 | 325.00 | 337.50 | 45.05 | 0.00 | 83.56 | 0.00 | 0.00 | 359.4 | 0.23 | 1.00 | 1.00 | 0.46 | 2.84 | 83.6 | 10707 | 38.75 | 2.00 | 17.06 | 0.62 | 20.48 | 4413 | 15120 | 12227 |
| 2 | 325.00 | 300.00 | 312.50 | 44.32 | 0.00 | 68.06 | 0.00 | 0.00 | 453.1 | 0.15 | 1.00 | 1.00 | 0.43 | 3.20 | 68.1 | 9665 | 38.75 | 2.00 | 17.13 | 0.63 | 20.55 | 4346 | 14011 | 12455 |
| 3 | 300.00 | 275.00 | 287.50 | 43.55 | 0.00 | 71.72 | 0.00 | 0.00 | 546.9 | 0.13 | 1.00 | 1.00 | 0.43 | 3.30 | 71.7 | 10292 | 38.75 | 2.00 | 17.85 | 0.63 | 21.42 | 4308 | 14600 | 13169 |
| 4 | 275.00 | 250.00 | 262.50 | 42.72 | 0.00 | 72.74 | 0.00 | 0.00 | 640.6 | 0.11 | 1.00 | 1.00 | 0.42 | 3.38 | 72.7 | 10510 | 38.75 | 2.00 | 17.85 | 0.64 | 21.42 | 4226 | 14736 | 17055 |
| 5 | 250.00 | 225.00 | 237.50 | 41.83 | 0.00 | 70.86 | 0.00 | 0.00 | 734.4 | 0.10 | 1.00 | 1.00 | 0.39 | 3.47 | 70.9 | 10281 | 38.75 | 2.00 | 17.85 | 0.65 | 21.42 | 4138 | 14419 | 16032 |
| 6 | 225.00 | 200.00 | 212.50 | 40.87 | 0.00 | 73.26 | 0.00 | 0.00 | 828.1 | 0.09 | 1.00 | 1.00 | 0.39 | 3.51 | 73.3 | 10506 | 38.75 | 2.00 | 19.30 | 0.65 | 23.16 | 4113 | 14620 | 17949 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----|--------|--------|--------|-------|------|--------|------|------|--------|------|------|------|------|------|-------|-------|-------|------|-------|------|-------|------|-------|-------|
| 7 | 200.00 | 175.00 | 187.50 | 39.80 | 0.00 | 86.85 | 0.00 | 0.00 | 921.9 | 0.09 | 1.00 | 1.00 | 0.39 | 3.48 | 86.8 | 12028 | 38.75 | 2.00 | 19.42 | 0.66 | 23.31 | 4013 | 16041 | 20677 |
| 8 | 175.00 | 150.00 | 162.50 | 38.62 | 0.00 | 104.31 | 0.00 | 0.00 | 1015.6 | 0.10 | 1.00 | 1.00 | 0.40 | 3.44 | 104.3 | 13843 | 38.75 | 2.00 | 21.68 | 0.67 | 26.01 | 3998 | 17841 | 26112 |
| 9 | 150.00 | 125.00 | 137.50 | 37.29 | 0.00 | 114.68 | 0.00 | 0.00 | 1109.4 | 0.10 | 1.00 | 1.00 | 0.40 | 3.43 | 114.7 | 14679 | 38.75 | 2.00 | 26.71 | 0.68 | 32.05 | 4085 | 18764 | 27007 |
| 10 | 125.00 | 100.00 | 112.50 | 35.74 | 0.00 | 139.97 | 0.00 | 0.00 | 1218.8 | 0.11 | 1.00 | 1.00 | 0.40 | 3.38 | 140.0 | 16886 | 38.75 | 2.00 | 31.47 | 0.70 | 37.77 | 4120 | 21007 | 33518 |
| 11 | 100.00 | 75.00 | 87.50 | 33.90 | 0.00 | 172.13 | 0.00 | 0.00 | 1296.9 | 0.13 | 1.00 | 1.00 | 0.41 | 3.29 | 172.1 | 19184 | 38.75 | 2.00 | 33.79 | 0.72 | 40.55 | 4002 | 23186 | 32245 |
| 12 | 75.00 | 50.00 | 62.50 | 31.58 | 0.00 | 180.20 | 0.00 | 0.00 | 1390.6 | 0.13 | 1.00 | 1.00 | 0.41 | 3.30 | 180.2 | 18797 | 38.75 | 2.00 | 33.87 | 0.74 | 40.64 | 3731 | 22528 | 33510 |
| 13 | 50.00 | 25.00 | 37.50 | 28.36 | 0.00 | 192.36 | 0.00 | 0.00 | 1484.4 | 0.13 | 1.00 | 1.00 | 0.41 | 3.30 | 192.4 | 18019 | 38.75 | 2.00 | 34.89 | 0.78 | 41.86 | 3386 | 21405 | 39193 |
| 14 | 25.00 | 0.00 | 12.50 | 23.42 | 0.00 | 179.31 | 0.00 | 0.00 | 1578.1 | 0.11 | 1.00 | 1.00 | 0.40 | 3.38 | 179.3 | 14198 | 33.50 | 2.00 | 28.06 | 0.86 | 33.67 | 2358 | 16556 | 35064 |

Concentrated Loads for Load Case "LOAD 2":

| Joint Label | Force X-Dir (lbs) | Force Y-Dir (lbs) | Force Vertical (lbs) | Moment X-Axis (ft-lbs) | Moment Y-Axis (ft-lbs) | Moment Z-Axis (ft-lbs) | Load Comment |
|-------------|-------------------|-------------------|----------------------|------------------------|------------------------|------------------------|--------------|
| 67P | 1010 | 0 | 3150 | 0 | 0 | 0 | |
| 67X | 1010 | 0 | 3150 | 0 | 0 | 0 | |
| 67XY | 1010 | 0 | 3150 | 0 | 0 | 0 | |
| 67Y | 1010 | 0 | 3150 | 0 | 0 | 0 | |
| 67P | 0 | 0 | 2424 | 0 | 0 | 0 | |
| 67X | 0 | 0 | 2424 | 0 | 0 | 0 | |
| 67XY | 0 | 0 | -2424 | 0 | 0 | 0 | |
| 67Y | 0 | 0 | -2424 | 0 | 0 | 0 | |
| 67P | 0 | 0 | 2424 | 0 | 0 | 0 | |
| 67X | 0 | 0 | 2424 | 0 | 0 | 0 | |
| 67XY | 0 | 0 | -2424 | 0 | 0 | 0 | |
| 67Y | 0 | 0 | -2424 | 0 | 0 | 0 | |

Equipment Load Case Information for "LOAD 2":

| Equipment Label | Equipment Property Set | Elevation Above Ground (ft) | qsCh (psf) | Ice Thick. (in) | Total Wind Area (ft^2) | Wind Incidence Angle (deg) | 222-G CA | 222-G CS | 222-G CM | Antenna Aerial Load (lbs) | Antenna Side Load (lbs) | Antenna Moment (ft-lbs) | Long. Load (lbs) | Trans. Load (lbs) | Vert. Load (lbs) |
|-----------------|------------------------|-----------------------------|------------|-----------------|------------------------|----------------------------|----------|----------|----------|---------------------------|-------------------------|-------------------------|------------------|-------------------|------------------|
| AP-1 | ANTENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | | | | | | | 1361.77 | 0.00 | 7200.00 |
| AP-2 | ANTENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | | | | | | | 1361.77 | 0.00 | 7200.00 |
| AP-3 | ANTENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | | | | | | | 1361.77 | 0.00 | 7200.00 |
| AP-4 | ANTENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 0.00 | | | | | | | 1361.77 | 0.00 | 7200.00 |
| MS-1 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 0.00 | | | | | | | 450.46 | 0.00 | 1350.00 |
| MS-2 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 0.00 | | | | | | | 450.46 | 0.00 | 1350.00 |
| MS-3 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 0.00 | | | | | | | 450.46 | 0.00 | 1350.00 |
| MS-4 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 0.00 | | | | | | | 450.46 | 0.00 | 1350.00 |
| MS-5 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 0.00 | | | | | | | 446.89 | 0.00 | 1350.00 |
| MS-6 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 0.00 | | | | | | | 446.89 | 0.00 | 1350.00 |
| MS-7 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 0.00 | | | | | | | 446.89 | 0.00 | 1350.00 |
| MS-8 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 0.00 | | | | | | | 446.89 | 0.00 | 1350.00 |
| DA-1 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 0.00 | | | | | | | 1429.85 | 0.00 | 270.00 |
| DA-2 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 0.00 | | | | | | | 1429.85 | 0.00 | 270.00 |
| DA-3 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 0.00 | | | | | | | 1429.85 | 0.00 | 270.00 |
| DA-4 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 0.00 | | | | | | | 1429.85 | 0.00 | 270.00 |
| DA-5 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 0.00 | | | | | | | 510.66 | 0.00 | 45.00 |
| DA-6 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 0.00 | | | | | | | 510.66 | 0.00 | 45.00 |
| DA-7 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 0.00 | | | | | | | 510.66 | 0.00 | 45.00 |
| DA-8 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 0.00 | | | | | | | 510.66 | 0.00 | 45.00 |

| | | | | | | | | | |
|-------|--------------|--------|-------|------|-------|------|---------|------|--------|
| SM-1 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 0.00 | 670.34 | 0.00 | 180.00 |
| SM-2 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 0.00 | 670.34 | 0.00 | 180.00 |
| SM-3 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 0.00 | 670.34 | 0.00 | 180.00 |
| SM-4 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 0.00 | 670.34 | 0.00 | 180.00 |
| SM-5 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 0.00 | 1318.28 | 0.00 | 450.00 |
| SM-6 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 0.00 | 1318.28 | 0.00 | 450.00 |
| SM-7 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 0.00 | 1318.28 | 0.00 | 450.00 |
| SM-8 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 0.00 | 1318.28 | 0.00 | 450.00 |
| DA-9 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 0.00 | 109.86 | 0.00 | 18.00 |
| DA-10 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 0.00 | 109.86 | 0.00 | 18.00 |
| DA-11 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 0.00 | 109.86 | 0.00 | 18.00 |
| DA-12 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 0.00 | 109.86 | 0.00 | 18.00 |
| CP-1 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 0.00 | 2017.37 | 0.00 | 900.00 |
| CP-2 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 0.00 | 2017.37 | 0.00 | 900.00 |
| CP-3 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 0.00 | 2017.37 | 0.00 | 900.00 |
| CP-4 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 0.00 | 2017.37 | 0.00 | 900.00 |
| DA-13 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 0.00 | 588.43 | 0.00 | 315.00 |
| DA-14 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 0.00 | 588.43 | 0.00 | 315.00 |
| DA-15 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 0.00 | 588.43 | 0.00 | 315.00 |
| DA-16 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 0.00 | 588.43 | 0.00 | 315.00 |
| SM-9 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 180.00 |
| SM-10 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 180.00 |
| SM-11 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 180.00 |
| SM-12 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 180.00 |
| SM-13 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 0.00 | 1096.39 | 0.00 | 450.00 |
| SM-14 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 0.00 | 1096.39 | 0.00 | 450.00 |
| SM-15 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 0.00 | 1096.39 | 0.00 | 450.00 |
| SM-16 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 0.00 | 1096.39 | 0.00 | 450.00 |
| DA-17 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 315.00 |
| DA-18 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 315.00 |
| DA-19 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 315.00 |
| DA-20 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 0.00 | 569.64 | 0.00 | 315.00 |
| DA-21 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | 375.22 | 0.00 | 180.00 |
| DA-22 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | 375.22 | 0.00 | 180.00 |
| DA-23 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | 375.22 | 0.00 | 180.00 |
| DA-24 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 0.00 | 375.22 | 0.00 | 180.00 |
| DA-25 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 0.00 | 365.46 | 0.00 | 180.00 |
| DA-26 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 0.00 | 365.46 | 0.00 | 180.00 |
| DA-27 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 0.00 | 365.46 | 0.00 | 180.00 |
| DA-28 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 0.00 | 365.46 | 0.00 | 180.00 |
| DA-29 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | 69.74 | 0.00 | 9.00 |
| DA-30 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | 69.74 | 0.00 | 9.00 |
| DA-31 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | 69.74 | 0.00 | 9.00 |
| DA-32 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | 69.74 | 0.00 | 9.00 |
| DA-33 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | 69.74 | 0.00 | 9.00 |
| DA-34 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | 69.74 | 0.00 | 9.00 |
| DA-35 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | 69.74 | 0.00 | 9.00 |
| DA-36 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 0.00 | 69.74 | 0.00 | 9.00 |
| DA-37 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 0.00 | 60.27 | 0.00 | 9.00 |
| DA-38 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 0.00 | 60.27 | 0.00 | 9.00 |
| DA-39 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 0.00 | 60.27 | 0.00 | 9.00 |
| DA-40 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 0.00 | 60.27 | 0.00 | 9.00 |
| DA-41 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 0.00 | 75.34 | 0.00 | 22.50 |
| DA-42 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 0.00 | 75.34 | 0.00 | 22.50 |
| DA-43 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 0.00 | 75.34 | 0.00 | 22.50 |

67P 0 0 2424 0 0 0
 67X 0 0 -2424 0 0 0

Equipment Load Case Information for "LOAD 3":

| Equipment Label | Equipment Property Set | Elevation Above Ground (ft) | qzGh (psf) | Ice Thick. (in) | Total Wind Area (ft^2) | Wind Incidence Angle (deg) | 222-G CA | 222-G CS | 222-G CM | Antenna Axial Load (lbs) | Antenna Side Load (lbs) | Antenna Moment (ft-lbs) | Long. Load (lbs) | Trans. Load (lbs) | Vert. Load (lbs) |
|-----------------|------------------------|-----------------------------|------------|-----------------|------------------------|----------------------------|----------|----------|----------|--------------------------|-------------------------|-------------------------|------------------|-------------------|------------------|
| AP-1 | ANTIENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | 962.91 | 962.91 | 9600.00 |
| AP-2 | ANTIENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | 962.91 | 962.91 | 9600.00 |
| AP-3 | ANTIENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | 962.91 | 962.91 | 9600.00 |
| AP-4 | ANTIENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | 962.91 | 962.91 | 9600.00 |
| MS-1 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 315.00 | | | | | | | 318.52 | 318.52 | 1800.00 |
| MS-2 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 315.00 | | | | | | | 318.52 | 318.52 | 1800.00 |
| MS-3 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 315.00 | | | | | | | 318.52 | 318.52 | 1800.00 |
| MS-4 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 315.00 | | | | | | | 318.52 | 318.52 | 1800.00 |
| MS-5 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 315.00 | | | | | | | 316.00 | 316.00 | 1800.00 |
| MS-6 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 315.00 | | | | | | | 316.00 | 316.00 | 1800.00 |
| MS-7 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 315.00 | | | | | | | 316.00 | 316.00 | 1800.00 |
| MS-8 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 315.00 | | | | | | | 316.00 | 316.00 | 1800.00 |
| DA-1 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 315.00 | | | | | | | 1011.06 | 1011.06 | 360.00 |
| DA-2 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 315.00 | | | | | | | 1011.06 | 1011.06 | 360.00 |
| DA-3 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 315.00 | | | | | | | 1011.06 | 1011.06 | 360.00 |
| DA-4 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 315.00 | | | | | | | 1011.06 | 1011.06 | 360.00 |
| DA-5 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 315.00 | | | | | | | 361.09 | 361.09 | 60.00 |
| DA-6 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 315.00 | | | | | | | 361.09 | 361.09 | 60.00 |
| DA-7 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 315.00 | | | | | | | 361.09 | 361.09 | 60.00 |
| DA-8 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 315.00 | | | | | | | 361.09 | 361.09 | 60.00 |
| SM-1 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 315.00 | | | | | | | 474.00 | 474.00 | 240.00 |
| SM-2 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 315.00 | | | | | | | 474.00 | 474.00 | 240.00 |
| SM-3 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 315.00 | | | | | | | 474.00 | 474.00 | 240.00 |
| SM-4 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 315.00 | | | | | | | 474.00 | 474.00 | 240.00 |
| SM-5 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 315.00 | | | | | | | 932.17 | 932.17 | 600.00 |
| SM-6 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 315.00 | | | | | | | 932.17 | 932.17 | 600.00 |
| SM-7 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 315.00 | | | | | | | 932.17 | 932.17 | 600.00 |
| SM-8 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 315.00 | | | | | | | 932.17 | 932.17 | 600.00 |
| DA-9 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 315.00 | | | | | | | 77.68 | 77.68 | 24.00 |
| DA-10 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 315.00 | | | | | | | 77.68 | 77.68 | 24.00 |
| DA-11 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 315.00 | | | | | | | 77.68 | 77.68 | 24.00 |
| DA-12 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 315.00 | | | | | | | 77.68 | 77.68 | 24.00 |
| CP-1 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 315.00 | | | | | | | 1426.49 | 1426.49 | 1200.00 |
| CP-2 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 315.00 | | | | | | | 1426.49 | 1426.49 | 1200.00 |
| CP-3 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 315.00 | | | | | | | 1426.49 | 1426.49 | 1200.00 |
| CP-4 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 315.00 | | | | | | | 1426.49 | 1426.49 | 1200.00 |
| DA-13 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 315.00 | | | | | | | 416.09 | 416.09 | 420.00 |
| DA-14 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 315.00 | | | | | | | 416.09 | 416.09 | 420.00 |
| DA-15 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 315.00 | | | | | | | 416.09 | 416.09 | 420.00 |
| DA-16 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 315.00 | | | | | | | 416.09 | 416.09 | 420.00 |
| SM-9 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | | | | | | | 402.80 | 402.80 | 240.00 |
| SM-10 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | | | | | | | 402.80 | 402.80 | 240.00 |
| SM-11 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | | | | | | | 402.80 | 402.80 | 240.00 |
| SM-12 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | | | | | | | 402.80 | 402.80 | 240.00 |
| SM-13 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 315.00 | | | | | | | 775.26 | 775.26 | 600.00 |

| Label | Top (ft) | Bottom (ft) | Above Gnd. (ft) | Gnd. (psf) | Thick. (in) | AF (ft^2) | AR (ft^2) | RR*AR (ft^2) | AG (ft^2) | e | DF | DR | RR | CF | AE (ft^2) | WF (lbs) | AAF (ft^2) | CAF | AAR (ft^2) | CAR | AAR*CAR (ft^2) | WA (lbs) | Wind (lbs) | Weight (lbs) |
|-------|----------|-------------|-----------------|------------|-------------|-----------|-----------|--------------|-----------|------|------|------|------|------|-----------|----------|------------|------|------------|------|----------------|----------|------------|--------------|
| 1 | 350.00 | 325.00 | 337.50 | 45.05 | 0.00 | 83.56 | 0.00 | 0.00 | 359.4 | 0.23 | 1.17 | 1.17 | 0.46 | 2.84 | 98.1 | 12574 | 38.75 | 2.00 | 17.06 | 0.62 | 20.48 | 4413 | 16987 | 12227 |
| 2 | 325.00 | 300.00 | 312.50 | 44.32 | 0.00 | 68.06 | 0.00 | 0.00 | 453.1 | 0.15 | 1.11 | 1.11 | 0.43 | 3.20 | 75.7 | 10754 | 38.75 | 2.00 | 17.13 | 0.63 | 20.55 | 4346 | 15100 | 12455 |
| 3 | 300.00 | 275.00 | 287.50 | 43.55 | 0.00 | 71.72 | 0.00 | 0.00 | 546.9 | 0.13 | 1.10 | 1.10 | 0.43 | 3.30 | 78.8 | 11304 | 38.75 | 2.00 | 17.85 | 0.63 | 21.42 | 4308 | 15612 | 13169 |
| 4 | 275.00 | 250.00 | 262.50 | 42.72 | 0.00 | 72.74 | 0.00 | 0.00 | 640.6 | 0.11 | 1.09 | 1.09 | 0.42 | 3.38 | 78.9 | 11405 | 38.75 | 2.00 | 17.85 | 0.64 | 21.42 | 4226 | 15631 | 17055 |
| 5 | 250.00 | 225.00 | 237.50 | 41.83 | 0.00 | 70.86 | 0.00 | 0.00 | 734.4 | 0.10 | 1.07 | 1.07 | 0.39 | 3.47 | 76.0 | 11025 | 38.75 | 2.00 | 17.85 | 0.65 | 21.42 | 4138 | 15163 | 16032 |
| 6 | 225.00 | 200.00 | 212.50 | 40.87 | 0.00 | 73.26 | 0.00 | 0.00 | 828.1 | 0.09 | 1.07 | 1.07 | 0.39 | 3.51 | 78.1 | 11204 | 38.75 | 2.00 | 19.30 | 0.65 | 23.16 | 4113 | 15317 | 17949 |
| 7 | 200.00 | 175.00 | 187.50 | 39.80 | 0.00 | 86.85 | 0.00 | 0.00 | 921.9 | 0.09 | 1.07 | 1.07 | 0.39 | 3.48 | 93.0 | 12878 | 38.75 | 2.00 | 19.42 | 0.66 | 23.31 | 4013 | 16891 | 20677 |
| 8 | 175.00 | 150.00 | 162.50 | 38.62 | 0.00 | 104.31 | 0.00 | 0.00 | 1015.6 | 0.10 | 1.08 | 1.08 | 0.40 | 3.44 | 112.3 | 14910 | 38.75 | 2.00 | 21.68 | 0.67 | 26.01 | 3998 | 18907 | 26112 |
| 9 | 150.00 | 125.00 | 137.50 | 37.29 | 0.00 | 114.68 | 0.00 | 0.00 | 1109.4 | 0.10 | 1.08 | 1.08 | 0.40 | 3.43 | 123.6 | 15817 | 38.75 | 2.00 | 26.71 | 0.68 | 32.05 | 4085 | 19902 | 27007 |
| 10 | 125.00 | 100.00 | 112.50 | 35.74 | 0.00 | 139.97 | 0.00 | 0.00 | 1218.8 | 0.11 | 1.09 | 1.09 | 0.40 | 3.38 | 152.0 | 18341 | 38.75 | 2.00 | 31.47 | 0.70 | 37.77 | 4120 | 22461 | 33518 |
| 11 | 100.00 | 75.00 | 87.50 | 33.90 | 0.00 | 172.13 | 0.00 | 0.00 | 1296.9 | 0.13 | 1.10 | 1.10 | 0.41 | 3.29 | 189.3 | 21094 | 38.75 | 2.00 | 33.79 | 0.72 | 40.55 | 4002 | 25096 | 32245 |
| 12 | 75.00 | 50.00 | 62.50 | 31.58 | 0.00 | 180.20 | 0.00 | 0.00 | 1390.6 | 0.13 | 1.10 | 1.10 | 0.41 | 3.30 | 197.7 | 20624 | 38.75 | 2.00 | 33.87 | 0.74 | 40.64 | 3731 | 24355 | 33510 |
| 13 | 50.00 | 25.00 | 37.50 | 28.36 | 0.00 | 192.36 | 0.00 | 0.00 | 1484.4 | 0.13 | 1.10 | 1.10 | 0.41 | 3.30 | 211.1 | 19771 | 38.75 | 2.00 | 34.89 | 0.78 | 41.86 | 3386 | 23156 | 39193 |
| 14 | 25.00 | 0.00 | 12.50 | 23.42 | 0.00 | 179.31 | 0.00 | 0.00 | 1578.1 | 0.11 | 1.09 | 1.09 | 0.40 | 3.38 | 194.6 | 15408 | 33.50 | 2.00 | 28.06 | 0.86 | 33.67 | 2358 | 17766 | 35064 |

Concentrated Loads for Load Case "LOAD 4":

| Joint Label | Force X-Dir (lbs) | Force Y-Dir (lbs) | Force Vertical (lbs) | Moment X-Axis (ft-lbs) | Moment Y-Axis (ft-lbs) | Moment Z-Axis (ft-lbs) | Load Comment |
|-------------|-------------------|-------------------|----------------------|------------------------|------------------------|------------------------|--------------|
| 67P | 1010 | 0 | 3150 | 0 | 0 | 0 | |
| 67X | 1010 | 0 | 3150 | 0 | 0 | 0 | |
| 67XY | 1010 | 0 | 3150 | 0 | 0 | 0 | |
| 67Y | 1010 | 0 | 3150 | 0 | 0 | 0 | |
| 67P | 0 | 0 | 2424 | 0 | 0 | 0 | |
| 67X | 0 | 0 | -2424 | 0 | 0 | 0 | |
| 67P | 0 | 0 | 2424 | 0 | 0 | 0 | |
| 67X | 0 | 0 | -2424 | 0 | 0 | 0 | |

Equipment Load Case Information for "LOAD 4":

| Equipment Label | Equipment Property Set | Elevation Above Ground (ft) | qsGh (psf) | Ice Thick. (in) | Total Wind Area (ft^2) | Wind Incidence Angle (deg) | 222-G CA | 222-G CS | 222-G CM | Antenna Aerial Load (lbs) | Antenna Side Load (lbs) | Antenna Moment (ft-lbs) | Long. Load (lbs) | Trans. Load (lbs) | Vert. Load (lbs) |
|-----------------|------------------------|-----------------------------|------------|-----------------|------------------------|----------------------------|----------|----------|----------|---------------------------|-------------------------|-------------------------|------------------|-------------------|------------------|
| AP-1 | ANTIENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | 962.91 | 962.91 | 7200.00 |
| AP-2 | ANTIENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | 962.91 | 962.91 | 7200.00 |
| AP-3 | ANTIENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | 962.91 | 962.91 | 7200.00 |
| AP-4 | ANTIENNA PLATFORM | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | 962.91 | 962.91 | 7200.00 |
| MS-1 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 315.00 | | | | | | | 318.52 | 318.52 | 1350.00 |
| MS-2 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 315.00 | | | | | | | 318.52 | 318.52 | 1350.00 |
| MS-3 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 315.00 | | | | | | | 318.52 | 318.52 | 1350.00 |
| MS-4 | MILK STOOL | 337.50 | 45.05 | 0.00 | 10.00 | 315.00 | | | | | | | 318.52 | 318.52 | 1350.00 |
| MS-5 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 315.00 | | | | | | | 316.00 | 316.00 | 1350.00 |
| MS-6 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 315.00 | | | | | | | 316.00 | 316.00 | 1350.00 |
| MS-7 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 315.00 | | | | | | | 316.00 | 316.00 | 1350.00 |
| MS-8 | MILK STOOL | 325.00 | 44.69 | 0.00 | 10.00 | 315.00 | | | | | | | 316.00 | 316.00 | 1350.00 |
| DA-1 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 315.00 | | | | | | | 1011.06 | 1011.06 | 270.00 |
| DA-2 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 315.00 | | | | | | | 1011.06 | 1011.06 | 270.00 |
| DA-3 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 315.00 | | | | | | | 1011.06 | 1011.06 | 270.00 |

| | | | | | | | | | |
|-------|-------------------|--------|-------|------|-------|--------|---------|---------|--------|
| DA-4 | DA UPPER PLATFORM | 350.00 | 45.39 | 0.00 | 31.50 | 315.00 | 1011.06 | 1011.06 | 270.00 |
| DA-5 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 315.00 | 361.09 | 361.09 | 45.00 |
| DA-6 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 315.00 | 361.09 | 361.09 | 45.00 |
| DA-7 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 315.00 | 361.09 | 361.09 | 45.00 |
| DA-8 | DA LOWER PLATFORM | 350.00 | 45.39 | 0.00 | 11.25 | 315.00 | 361.09 | 361.09 | 45.00 |
| SM-1 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 315.00 | 474.00 | 474.00 | 180.00 |
| SM-2 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 315.00 | 474.00 | 474.00 | 180.00 |
| SM-3 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 315.00 | 474.00 | 474.00 | 180.00 |
| SM-4 | SM AT 325 FT | 325.00 | 44.69 | 0.00 | 15.00 | 315.00 | 474.00 | 474.00 | 180.00 |
| SM-5 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 315.00 | 932.17 | 932.17 | 450.00 |
| SM-6 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 315.00 | 932.17 | 932.17 | 450.00 |
| SM-7 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 315.00 | 932.17 | 932.17 | 450.00 |
| SM-8 | SM AT 300 FT | 300.00 | 43.94 | 0.00 | 30.00 | 315.00 | 932.17 | 932.17 | 450.00 |
| DA-9 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 315.00 | 77.68 | 77.68 | 18.00 |
| DA-10 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 315.00 | 77.68 | 77.68 | 18.00 |
| DA-11 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 315.00 | 77.68 | 77.68 | 18.00 |
| DA-12 | DA AT 302 FT | 300.00 | 43.94 | 0.00 | 2.50 | 315.00 | 77.68 | 77.68 | 18.00 |
| CP-1 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 315.00 | 1426.49 | 1426.49 | 900.00 |
| CP-2 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 315.00 | 1426.49 | 1426.49 | 900.00 |
| CP-3 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 315.00 | 1426.49 | 1426.49 | 900.00 |
| CP-4 | CP AT 200 FT | 200.00 | 40.35 | 0.00 | 50.00 | 315.00 | 1426.49 | 1426.49 | 900.00 |
| DA-13 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 315.00 | 416.09 | 416.09 | 315.00 |
| DA-14 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 315.00 | 416.09 | 416.09 | 315.00 |
| DA-15 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 315.00 | 416.09 | 416.09 | 315.00 |
| DA-16 | DA AT 170 FT | 175.00 | 39.23 | 0.00 | 15.00 | 315.00 | 416.09 | 416.09 | 315.00 |
| SM-9 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | 402.80 | 402.80 | 180.00 |
| SM-10 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | 402.80 | 402.80 | 180.00 |
| SM-11 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | 402.80 | 402.80 | 180.00 |
| SM-12 | SM AT 150 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | 402.80 | 402.80 | 180.00 |
| SM-13 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 315.00 | 775.26 | 775.26 | 450.00 |
| SM-14 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 315.00 | 775.26 | 775.26 | 450.00 |
| SM-15 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 315.00 | 775.26 | 775.26 | 450.00 |
| SM-16 | SM AT 125 FT | 125.00 | 36.55 | 0.00 | 30.00 | 315.00 | 775.26 | 775.26 | 450.00 |
| DA-17 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | 402.80 | 402.80 | 315.00 |
| DA-18 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | 402.80 | 402.80 | 315.00 |
| DA-19 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | 402.80 | 402.80 | 315.00 |
| DA-20 | DA AT 149 FT | 150.00 | 37.98 | 0.00 | 15.00 | 315.00 | 402.80 | 402.80 | 315.00 |
| DA-21 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 315.00 | 265.32 | 265.32 | 180.00 |
| DA-22 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 315.00 | 265.32 | 265.32 | 180.00 |
| DA-23 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 315.00 | 265.32 | 265.32 | 180.00 |
| DA-24 | DA AT 138 FT | 141.67 | 37.52 | 0.00 | 10.00 | 315.00 | 265.32 | 265.32 | 180.00 |
| DA-25 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 315.00 | 258.42 | 258.42 | 180.00 |
| DA-26 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 315.00 | 258.42 | 258.42 | 180.00 |
| DA-27 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 315.00 | 258.42 | 258.42 | 180.00 |
| DA-28 | DA AT 119 FT | 125.00 | 36.55 | 0.00 | 10.00 | 315.00 | 258.42 | 258.42 | 180.00 |
| DA-29 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 315.00 | 49.31 | 49.31 | 9.00 |
| DA-30 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 315.00 | 49.31 | 49.31 | 9.00 |
| DA-31 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 315.00 | 49.31 | 49.31 | 9.00 |
| DA-32 | DA AT 108 FT | 100.00 | 34.87 | 0.00 | 2.00 | 315.00 | 49.31 | 49.31 | 9.00 |
| DA-33 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 315.00 | 49.31 | 49.31 | 9.00 |
| DA-34 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 315.00 | 49.31 | 49.31 | 9.00 |
| DA-35 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 315.00 | 49.31 | 49.31 | 9.00 |
| DA-36 | DA AT 103 FT | 100.00 | 34.87 | 0.00 | 2.00 | 315.00 | 49.31 | 49.31 | 9.00 |
| DA-37 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 315.00 | 42.62 | 42.62 | 9.00 |
| DA-38 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 315.00 | 42.62 | 42.62 | 9.00 |

| | | | | | | | | | | | | | | | | | | | | | |
|-------|---------------|--------|-------|------|-------|--------|--|--|--|--|--|--|--|--|--|--|--|--|--------|--------|--------|
| DA-39 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 315.00 | | | | | | | | | | | | | 42.62 | 42.62 | 9.00 |
| DA-40 | DA AT 54 FT | 50.00 | 30.13 | 0.00 | 2.00 | 315.00 | | | | | | | | | | | | | 42.62 | 42.62 | 9.00 |
| DA-41 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 315.00 | | | | | | | | | | | | | 53.27 | 53.27 | 22.50 |
| DA-42 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 315.00 | | | | | | | | | | | | | 53.27 | 53.27 | 22.50 |
| DA-43 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 315.00 | | | | | | | | | | | | | 53.27 | 53.27 | 22.50 |
| DA-44 | DA AT 44 FT | 50.00 | 30.13 | 0.00 | 2.50 | 315.00 | | | | | | | | | | | | | 53.27 | 53.27 | 22.50 |
| S-1 | SOI AT 350 FT | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | | | | | | | 962.91 | 962.91 | 5.40 |
| S-2 | SOI AT 350 FT | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | | | | | | | 962.91 | 962.91 | 5.40 |
| S-3 | SOI AT 350 FT | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | | | | | | | 962.91 | 962.91 | 5.40 |
| S-4 | SOI AT 350 FT | 350.00 | 45.39 | 0.00 | 30.00 | 315.00 | | | | | | | | | | | | | 962.91 | 962.91 | 5.40 |
| S-5 | SOI AT 140 FT | 141.67 | 37.52 | 0.00 | 10.00 | 315.00 | | | | | | | | | | | | | 265.32 | 265.32 | 180.00 |
| S-6 | SOI AT 140 FT | 141.67 | 37.52 | 0.00 | 10.00 | 315.00 | | | | | | | | | | | | | 265.32 | 265.32 | 180.00 |
| S-7 | SOI AT 140 FT | 141.67 | 37.52 | 0.00 | 10.00 | 315.00 | | | | | | | | | | | | | 265.32 | 265.32 | 180.00 |
| S-8 | SOI AT 140 FT | 141.67 | 37.52 | 0.00 | 10.00 | 315.00 | | | | | | | | | | | | | 265.32 | 265.32 | 180.00 |
| S-9 | SOI AT 115-1 | 116.67 | 36.02 | 0.00 | 5.00 | 315.00 | | | | | | | | | | | | | 127.35 | 127.35 | 90.00 |
| S-10 | SOI AT 115-1 | 116.67 | 36.02 | 0.00 | 5.00 | 315.00 | | | | | | | | | | | | | 127.35 | 127.35 | 90.00 |
| S-11 | SOI AT 115-1 | 116.67 | 36.02 | 0.00 | 5.00 | 315.00 | | | | | | | | | | | | | 127.35 | 127.35 | 90.00 |
| S-12 | SOI AT 115-1 | 116.67 | 36.02 | 0.00 | 5.00 | 315.00 | | | | | | | | | | | | | 127.35 | 127.35 | 90.00 |
| S-13 | SOI AT 115-2 | 116.67 | 36.02 | 0.00 | 10.00 | 315.00 | | | | | | | | | | | | | 254.69 | 254.69 | 180.00 |
| S-14 | SOI AT 115-2 | 116.67 | 36.02 | 0.00 | 10.00 | 315.00 | | | | | | | | | | | | | 254.69 | 254.69 | 180.00 |
| S-15 | SOI AT 115-2 | 116.67 | 36.02 | 0.00 | 10.00 | 315.00 | | | | | | | | | | | | | 254.69 | 254.69 | 180.00 |
| S-16 | SOI AT 115-2 | 116.67 | 36.02 | 0.00 | 10.00 | 315.00 | | | | | | | | | | | | | 254.69 | 254.69 | 180.00 |

EIA Section Load Case Information for "LOAD 4":

Note: qzGh (adjusted wind pressure) includes: Velocity Pressure Coefficient (Kz), Topographic Factor (Kzt), Gust Effect Factor (Gh), Wind Direction Probability Factor (Kd), Wind Importance Factor (Table 2-3), Wind Load Factor (from Loads/EIA Loads)
Face RR is the minimum round reduction factor for all round angles and appurtenances in the section

| Section Label | Z of Top (ft) | Z of Bottom (ft) | Ave. Elev. Above Gnd. (ft) | Elev. (ft) | qzGh (psf) | Ice Thick. (in) | Face AF (ft^2) | Face AR (ft^2) | Face RR*AR (ft^2) | Face AG (ft^2) | Face e | Face DF | Face DR | Face RR | Face CF | Face AE (ft^2) | Face WF (lbs) | NotF AAF (ft^2) | NotF CAF | NotF AAR (ft^2) | NotF CAR | NotF AAR*CAR (ft^2) | NotF WA (lbs) | NotF Wind (lbs) | Total Weight (lbs) |
|---------------|---------------|------------------|----------------------------|------------|------------|-----------------|----------------|----------------|-------------------|----------------|--------|---------|---------|---------|---------|----------------|---------------|-----------------|----------|-----------------|----------|---------------------|---------------|-----------------|--------------------|
| 1 | 350.00 | 325.00 | 337.50 | 45.05 | 0.00 | 83.56 | 0.00 | 0.00 | 359.4 | 0.23 | 1.17 | 1.17 | 0.46 | 2.84 | 98.1 | 12574 | 38.75 | 2.00 | 17.06 | 0.62 | 20.48 | 4413 | 16987 | 9170 | |
| 2 | 325.00 | 300.00 | 312.50 | 44.32 | 0.00 | 68.06 | 0.00 | 0.00 | 453.1 | 0.15 | 1.11 | 1.11 | 0.43 | 3.20 | 75.7 | 10754 | 38.75 | 2.00 | 17.13 | 0.63 | 20.55 | 4346 | 15100 | 9341 | |
| 3 | 300.00 | 275.00 | 287.50 | 43.55 | 0.00 | 71.72 | 0.00 | 0.00 | 546.9 | 0.13 | 1.10 | 1.10 | 0.43 | 3.30 | 78.8 | 11304 | 38.75 | 2.00 | 17.85 | 0.63 | 21.42 | 4308 | 15612 | 9876 | |
| 4 | 275.00 | 250.00 | 262.50 | 42.72 | 0.00 | 72.74 | 0.00 | 0.00 | 640.6 | 0.11 | 1.09 | 1.09 | 0.42 | 3.38 | 78.9 | 11405 | 38.75 | 2.00 | 17.85 | 0.64 | 21.42 | 4226 | 15631 | 12791 | |
| 5 | 250.00 | 225.00 | 237.50 | 41.83 | 0.00 | 70.86 | 0.00 | 0.00 | 734.4 | 0.10 | 1.07 | 1.07 | 0.39 | 3.47 | 76.0 | 11025 | 38.75 | 2.00 | 17.85 | 0.65 | 21.42 | 4138 | 15163 | 12024 | |
| 6 | 225.00 | 200.00 | 212.50 | 40.87 | 0.00 | 73.26 | 0.00 | 0.00 | 828.1 | 0.09 | 1.07 | 1.07 | 0.39 | 3.51 | 78.1 | 11204 | 38.75 | 2.00 | 19.30 | 0.65 | 23.16 | 4113 | 15317 | 13461 | |
| 7 | 200.00 | 175.00 | 187.50 | 39.80 | 0.00 | 86.85 | 0.00 | 0.00 | 921.9 | 0.09 | 1.07 | 1.07 | 0.39 | 3.48 | 93.0 | 12878 | 38.75 | 2.00 | 19.42 | 0.66 | 23.31 | 4013 | 16891 | 15508 | |
| 8 | 175.00 | 150.00 | 162.50 | 38.62 | 0.00 | 104.31 | 0.00 | 0.00 | 1015.6 | 0.10 | 1.08 | 1.08 | 0.40 | 3.44 | 112.3 | 14910 | 38.75 | 2.00 | 21.68 | 0.67 | 26.01 | 3998 | 18907 | 19584 | |
| 9 | 150.00 | 125.00 | 137.50 | 37.29 | 0.00 | 114.68 | 0.00 | 0.00 | 1109.4 | 0.10 | 1.08 | 1.08 | 0.40 | 3.43 | 123.6 | 15817 | 38.75 | 2.00 | 26.71 | 0.68 | 32.05 | 4085 | 19902 | 20255 | |
| 10 | 125.00 | 100.00 | 112.50 | 35.74 | 0.00 | 139.97 | 0.00 | 0.00 | 1218.8 | 0.11 | 1.09 | 1.09 | 0.40 | 3.38 | 152.0 | 18341 | 38.75 | 2.00 | 31.47 | 0.70 | 37.77 | 4120 | 22461 | 25138 | |
| 11 | 100.00 | 75.00 | 87.50 | 33.90 | 0.00 | 172.13 | 0.00 | 0.00 | 1296.9 | 0.13 | 1.10 | 1.10 | 0.41 | 3.29 | 189.3 | 21094 | 38.75 | 2.00 | 33.79 | 0.72 | 40.55 | 4002 | 25096 | 24184 | |
| 12 | 75.00 | 50.00 | 62.50 | 31.58 | 0.00 | 180.20 | 0.00 | 0.00 | 1390.6 | 0.13 | 1.10 | 1.10 | 0.41 | 3.30 | 197.7 | 20624 | 38.75 | 2.00 | 33.87 | 0.74 | 40.64 | 3731 | 24355 | 25133 | |
| 13 | 50.00 | 25.00 | 37.50 | 28.36 | 0.00 | 192.36 | 0.00 | 0.00 | 1484.4 | 0.13 | 1.10 | 1.10 | 0.41 | 3.30 | 211.1 | 19771 | 38.75 | 2.00 | 34.89 | 0.78 | 41.86 | 3386 | 23156 | 29395 | |
| 14 | 25.00 | 0.00 | 12.50 | 23.42 | 0.00 | 179.31 | 0.00 | 0.00 | 1578.1 | 0.11 | 1.09 | 1.09 | 0.40 | 3.38 | 194.6 | 15408 | 33.50 | 2.00 | 28.06 | 0.86 | 33.67 | 2358 | 17766 | 26298 | |

Concentrated Loads for Load Case "LOAD 5":

| Joint Label | Force X-Dir (lbs) | Force Y-Dir (lbs) | Force Vertical (lbs) | Moment X-Axis (ft-lbs) | Moment Y-Axis (ft-lbs) | Moment Z-Axis (ft-lbs) | Load Comment |
|-------------|-------------------|-------------------|----------------------|------------------------|------------------------|------------------------|--------------|
| 67P | 1010 | 0 | 4200 | 0 | 0 | 0 | |

| | | | | | | |
|------|------|---|-------|---|---|---|
| 67X | 1010 | 0 | 4200 | 0 | 0 | 0 |
| 67XY | 1010 | 0 | 4200 | 0 | 0 | 0 |
| 67Y | 1010 | 0 | 4200 | 0 | 0 | 0 |
| 67P | 0 | 0 | 2424 | 0 | 0 | 0 |
| 67X | 0 | 0 | 2424 | 0 | 0 | 0 |
| 67XY | 0 | 0 | -2424 | 0 | 0 | 0 |
| 67Y | 0 | 0 | -2424 | 0 | 0 | 0 |
| 67P | 0 | 0 | 2424 | 0 | 0 | 0 |
| 67X | 0 | 0 | 2424 | 0 | 0 | 0 |
| 67XY | 0 | 0 | -2424 | 0 | 0 | 0 |
| 67Y | 0 | 0 | -2424 | 0 | 0 | 0 |

Equipment Load Case Information for "LOAD 5":

| Equipment Label | Equipment Property Set | Elevation Above Ground (ft) | qsGh (psf) | Ice Thick. (in) | Total Wind Area (ft^2) | Wind Incidence Angle (deg) | 222-G CA | 222-G CS | 222-G CM | Antenna Axial Load (lbs) | Antenna Side Load (lbs) | Antenna Moment (ft-lbs) | Long. Load (lbs) | Trans. Load (lbs) | Vert. Load (lbs) |
|-----------------|------------------------|-----------------------------|------------|-----------------|------------------------|----------------------------|----------|----------|----------|--------------------------|-------------------------|-------------------------|------------------|-------------------|------------------|
| AP-1 | ANTIENNA PLATFORM | 350.00 | 7.61 | 2.37 | 30.00 | 0.00 | | | | | | | 228.42 | 0.00 | 9600.00 |
| AP-2 | ANTIENNA PLATFORM | 350.00 | 7.61 | 2.37 | 30.00 | 0.00 | | | | | | | 228.42 | 0.00 | 9600.00 |
| AP-3 | ANTIENNA PLATFORM | 350.00 | 7.61 | 2.37 | 30.00 | 0.00 | | | | | | | 228.42 | 0.00 | 9600.00 |
| AP-4 | ANTIENNA PLATFORM | 350.00 | 7.61 | 2.37 | 30.00 | 0.00 | | | | | | | 228.42 | 0.00 | 9600.00 |
| MS-1 | MILK STOOL | 337.50 | 7.56 | 2.37 | 10.00 | 0.00 | | | | | | | 75.56 | 0.00 | 1800.00 |
| MS-2 | MILK STOOL | 337.50 | 7.56 | 2.37 | 10.00 | 0.00 | | | | | | | 75.56 | 0.00 | 1800.00 |
| MS-3 | MILK STOOL | 337.50 | 7.56 | 2.37 | 10.00 | 0.00 | | | | | | | 75.56 | 0.00 | 1800.00 |
| MS-4 | MILK STOOL | 337.50 | 7.56 | 2.37 | 10.00 | 0.00 | | | | | | | 75.56 | 0.00 | 1800.00 |
| MS-5 | MILK STOOL | 325.00 | 7.50 | 2.36 | 10.00 | 0.00 | | | | | | | 74.96 | 0.00 | 1800.00 |
| MS-6 | MILK STOOL | 325.00 | 7.50 | 2.36 | 10.00 | 0.00 | | | | | | | 74.96 | 0.00 | 1800.00 |
| MS-7 | MILK STOOL | 325.00 | 7.50 | 2.36 | 10.00 | 0.00 | | | | | | | 74.96 | 0.00 | 1800.00 |
| MS-8 | MILK STOOL | 325.00 | 7.50 | 2.36 | 10.00 | 0.00 | | | | | | | 74.96 | 0.00 | 1800.00 |
| DA-1 | DA UPPER PLATFORM | 350.00 | 7.61 | 2.37 | 31.50 | 0.00 | | | | | | | 239.84 | 0.00 | 360.00 |
| DA-2 | DA UPPER PLATFORM | 350.00 | 7.61 | 2.37 | 31.50 | 0.00 | | | | | | | 239.84 | 0.00 | 360.00 |
| DA-3 | DA UPPER PLATFORM | 350.00 | 7.61 | 2.37 | 31.50 | 0.00 | | | | | | | 239.84 | 0.00 | 360.00 |
| DA-4 | DA UPPER PLATFORM | 350.00 | 7.61 | 2.37 | 31.50 | 0.00 | | | | | | | 239.84 | 0.00 | 360.00 |
| DA-5 | DA LOWER PLATFORM | 350.00 | 7.61 | 2.37 | 11.25 | 0.00 | | | | | | | 85.66 | 0.00 | 60.00 |
| DA-6 | DA LOWER PLATFORM | 350.00 | 7.61 | 2.37 | 11.25 | 0.00 | | | | | | | 85.66 | 0.00 | 60.00 |
| DA-7 | DA LOWER PLATFORM | 350.00 | 7.61 | 2.37 | 11.25 | 0.00 | | | | | | | 85.66 | 0.00 | 60.00 |
| DA-8 | DA LOWER PLATFORM | 350.00 | 7.61 | 2.37 | 11.25 | 0.00 | | | | | | | 85.66 | 0.00 | 60.00 |
| SM-1 | SM AT 325 FT | 325.00 | 7.50 | 2.36 | 15.00 | 0.00 | | | | | | | 112.44 | 0.00 | 240.00 |
| SM-2 | SM AT 325 FT | 325.00 | 7.50 | 2.36 | 15.00 | 0.00 | | | | | | | 112.44 | 0.00 | 240.00 |
| SM-3 | SM AT 325 FT | 325.00 | 7.50 | 2.36 | 15.00 | 0.00 | | | | | | | 112.44 | 0.00 | 240.00 |
| SM-4 | SM AT 325 FT | 325.00 | 7.50 | 2.36 | 15.00 | 0.00 | | | | | | | 112.44 | 0.00 | 240.00 |
| SM-5 | SM AT 300 FT | 300.00 | 7.37 | 2.34 | 30.00 | 0.00 | | | | | | | 221.13 | 0.00 | 600.00 |
| SM-6 | SM AT 300 FT | 300.00 | 7.37 | 2.34 | 30.00 | 0.00 | | | | | | | 221.13 | 0.00 | 600.00 |
| SM-7 | SM AT 300 FT | 300.00 | 7.37 | 2.34 | 30.00 | 0.00 | | | | | | | 221.13 | 0.00 | 600.00 |
| SM-8 | SM AT 300 FT | 300.00 | 7.37 | 2.34 | 30.00 | 0.00 | | | | | | | 221.13 | 0.00 | 600.00 |
| DA-9 | DA AT 302 FT | 300.00 | 7.37 | 2.34 | 2.50 | 0.00 | | | | | | | 18.43 | 0.00 | 24.00 |
| DA-10 | DA AT 302 FT | 300.00 | 7.37 | 2.34 | 2.50 | 0.00 | | | | | | | 18.43 | 0.00 | 24.00 |
| DA-11 | DA AT 302 FT | 300.00 | 7.37 | 2.34 | 2.50 | 0.00 | | | | | | | 18.43 | 0.00 | 24.00 |
| DA-12 | DA AT 302 FT | 300.00 | 7.37 | 2.34 | 2.50 | 0.00 | | | | | | | 18.43 | 0.00 | 24.00 |
| CP-1 | CP AT 200 FT | 200.00 | 6.77 | 2.25 | 50.00 | 0.00 | | | | | | | 338.39 | 0.00 | 1200.00 |
| CP-2 | CP AT 200 FT | 200.00 | 6.77 | 2.25 | 50.00 | 0.00 | | | | | | | 338.39 | 0.00 | 1200.00 |
| CP-3 | CP AT 200 FT | 200.00 | 6.77 | 2.25 | 50.00 | 0.00 | | | | | | | 338.39 | 0.00 | 1200.00 |
| CP-4 | CP AT 200 FT | 200.00 | 6.77 | 2.25 | 50.00 | 0.00 | | | | | | | 338.39 | 0.00 | 1200.00 |

| | | | | | | | | | |
|-------|---------------|--------|------|------|-------|------|--------|------|--------|
| DA-13 | DA AT 170 FT | 175.00 | 6.58 | 2.22 | 15.00 | 0.00 | 98.70 | 0.00 | 420.00 |
| DA-14 | DA AT 170 FT | 175.00 | 6.58 | 2.22 | 15.00 | 0.00 | 98.70 | 0.00 | 420.00 |
| DA-15 | DA AT 170 FT | 175.00 | 6.58 | 2.22 | 15.00 | 0.00 | 98.70 | 0.00 | 420.00 |
| DA-16 | DA AT 170 FT | 175.00 | 6.58 | 2.22 | 15.00 | 0.00 | 98.70 | 0.00 | 420.00 |
| SM-9 | SM AT 150 FT | 150.00 | 6.37 | 2.18 | 15.00 | 0.00 | 95.55 | 0.00 | 240.00 |
| SM-10 | SM AT 150 FT | 150.00 | 6.37 | 2.18 | 15.00 | 0.00 | 95.55 | 0.00 | 240.00 |
| SM-11 | SM AT 150 FT | 150.00 | 6.37 | 2.18 | 15.00 | 0.00 | 95.55 | 0.00 | 240.00 |
| SM-12 | SM AT 150 FT | 150.00 | 6.37 | 2.18 | 15.00 | 0.00 | 95.55 | 0.00 | 240.00 |
| SM-13 | SM AT 125 FT | 125.00 | 6.13 | 2.14 | 30.00 | 0.00 | 183.91 | 0.00 | 600.00 |
| SM-14 | SM AT 125 FT | 125.00 | 6.13 | 2.14 | 30.00 | 0.00 | 183.91 | 0.00 | 600.00 |
| SM-15 | SM AT 125 FT | 125.00 | 6.13 | 2.14 | 30.00 | 0.00 | 183.91 | 0.00 | 600.00 |
| SM-16 | SM AT 125 FT | 125.00 | 6.13 | 2.14 | 30.00 | 0.00 | 183.91 | 0.00 | 600.00 |
| DA-17 | DA AT 149 FT | 150.00 | 6.37 | 2.18 | 15.00 | 0.00 | 95.55 | 0.00 | 420.00 |
| DA-18 | DA AT 149 FT | 150.00 | 6.37 | 2.18 | 15.00 | 0.00 | 95.55 | 0.00 | 420.00 |
| DA-19 | DA AT 149 FT | 150.00 | 6.37 | 2.18 | 15.00 | 0.00 | 95.55 | 0.00 | 420.00 |
| DA-20 | DA AT 149 FT | 150.00 | 6.37 | 2.18 | 15.00 | 0.00 | 95.55 | 0.00 | 420.00 |
| DA-21 | DA AT 138 FT | 141.67 | 6.29 | 2.17 | 10.00 | 0.00 | 62.94 | 0.00 | 240.00 |
| DA-22 | DA AT 138 FT | 141.67 | 6.29 | 2.17 | 10.00 | 0.00 | 62.94 | 0.00 | 240.00 |
| DA-23 | DA AT 138 FT | 141.67 | 6.29 | 2.17 | 10.00 | 0.00 | 62.94 | 0.00 | 240.00 |
| DA-24 | DA AT 138 FT | 141.67 | 6.29 | 2.17 | 10.00 | 0.00 | 62.94 | 0.00 | 240.00 |
| DA-25 | DA AT 119 FT | 125.00 | 6.13 | 2.14 | 10.00 | 0.00 | 61.30 | 0.00 | 240.00 |
| DA-26 | DA AT 119 FT | 125.00 | 6.13 | 2.14 | 10.00 | 0.00 | 61.30 | 0.00 | 240.00 |
| DA-27 | DA AT 119 FT | 125.00 | 6.13 | 2.14 | 10.00 | 0.00 | 61.30 | 0.00 | 240.00 |
| DA-28 | DA AT 119 FT | 125.00 | 6.13 | 2.14 | 10.00 | 0.00 | 61.30 | 0.00 | 240.00 |
| DA-29 | DA AT 108 FT | 100.00 | 5.85 | 2.09 | 2.00 | 0.00 | 11.70 | 0.00 | 12.00 |
| DA-30 | DA AT 108 FT | 100.00 | 5.85 | 2.09 | 2.00 | 0.00 | 11.70 | 0.00 | 12.00 |
| DA-31 | DA AT 108 FT | 100.00 | 5.85 | 2.09 | 2.00 | 0.00 | 11.70 | 0.00 | 12.00 |
| DA-32 | DA AT 108 FT | 100.00 | 5.85 | 2.09 | 2.00 | 0.00 | 11.70 | 0.00 | 12.00 |
| DA-33 | DA AT 103 FT | 100.00 | 5.85 | 2.09 | 2.00 | 0.00 | 11.70 | 0.00 | 12.00 |
| DA-34 | DA AT 103 FT | 100.00 | 5.85 | 2.09 | 2.00 | 0.00 | 11.70 | 0.00 | 12.00 |
| DA-35 | DA AT 103 FT | 100.00 | 5.85 | 2.09 | 2.00 | 0.00 | 11.70 | 0.00 | 12.00 |
| DA-36 | DA AT 103 FT | 100.00 | 5.85 | 2.09 | 2.00 | 0.00 | 11.70 | 0.00 | 12.00 |
| DA-37 | DA AT 54 FT | 50.00 | 5.05 | 1.95 | 2.00 | 0.00 | 10.11 | 0.00 | 12.00 |
| DA-38 | DA AT 54 FT | 50.00 | 5.05 | 1.95 | 2.00 | 0.00 | 10.11 | 0.00 | 12.00 |
| DA-39 | DA AT 54 FT | 50.00 | 5.05 | 1.95 | 2.00 | 0.00 | 10.11 | 0.00 | 12.00 |
| DA-40 | DA AT 54 FT | 50.00 | 5.05 | 1.95 | 2.00 | 0.00 | 10.11 | 0.00 | 12.00 |
| DA-41 | DA AT 44 FT | 50.00 | 5.05 | 1.95 | 2.50 | 0.00 | 12.64 | 0.00 | 30.00 |
| DA-42 | DA AT 44 FT | 50.00 | 5.05 | 1.95 | 2.50 | 0.00 | 12.64 | 0.00 | 30.00 |
| DA-43 | DA AT 44 FT | 50.00 | 5.05 | 1.95 | 2.50 | 0.00 | 12.64 | 0.00 | 30.00 |
| DA-44 | DA AT 44 FT | 50.00 | 5.05 | 1.95 | 2.50 | 0.00 | 12.64 | 0.00 | 30.00 |
| S-1 | SOI AT 350 FT | 350.00 | 7.61 | 2.37 | 30.00 | 0.00 | 228.42 | 0.00 | 7.20 |
| S-2 | SOI AT 350 FT | 350.00 | 7.61 | 2.37 | 30.00 | 0.00 | 228.42 | 0.00 | 7.20 |
| S-3 | SOI AT 350 FT | 350.00 | 7.61 | 2.37 | 30.00 | 0.00 | 228.42 | 0.00 | 7.20 |
| S-4 | SOI AT 350 FT | 350.00 | 7.61 | 2.37 | 30.00 | 0.00 | 228.42 | 0.00 | 7.20 |
| S-5 | SOI AT 140 FT | 141.67 | 6.29 | 2.17 | 10.00 | 0.00 | 62.94 | 0.00 | 240.00 |
| S-6 | SOI AT 140 FT | 141.67 | 6.29 | 2.17 | 10.00 | 0.00 | 62.94 | 0.00 | 240.00 |
| S-7 | SOI AT 140 FT | 141.67 | 6.29 | 2.17 | 10.00 | 0.00 | 62.94 | 0.00 | 240.00 |
| S-8 | SOI AT 140 FT | 141.67 | 6.29 | 2.17 | 10.00 | 0.00 | 62.94 | 0.00 | 240.00 |
| S-9 | SOI AT 115-1 | 116.67 | 6.04 | 2.13 | 5.00 | 0.00 | 30.21 | 0.00 | 120.00 |
| S-10 | SOI AT 115-1 | 116.67 | 6.04 | 2.13 | 5.00 | 0.00 | 30.21 | 0.00 | 120.00 |
| S-11 | SOI AT 115-1 | 116.67 | 6.04 | 2.13 | 5.00 | 0.00 | 30.21 | 0.00 | 120.00 |
| S-12 | SOI AT 115-1 | 116.67 | 6.04 | 2.13 | 5.00 | 0.00 | 30.21 | 0.00 | 120.00 |
| S-13 | SOI AT 115-2 | 116.67 | 6.04 | 2.13 | 10.00 | 0.00 | 60.42 | 0.00 | 240.00 |
| S-14 | SOI AT 115-2 | 116.67 | 6.04 | 2.13 | 10.00 | 0.00 | 60.42 | 0.00 | 240.00 |
| S-15 | SOI AT 115-2 | 116.67 | 6.04 | 2.13 | 10.00 | 0.00 | 60.42 | 0.00 | 240.00 |

S-16 SOI AT 115-2 116.67 6.04 2.13 10.00 0.00 60.42 0.00 240.00

EIA Section Load Case Information for "LOAD 5":

Note: qzGh (adjusted wind pressure) includes: Velocity Pressure Coefficient (Kz), Topographic Factor (Kzt), Gust Effect Factor (Gh), Wind Direction Probability Factor (Kd), Wind Importance Factor (Table 2-3), Wind Load Factor (from Loads/EIA Loads)
Face RR is the minimum round reduction factor for all round angles and appurtenances in the section

| Section Label | Z of Top (ft) | Z of Bottom (ft) | Ave. Elev. Above Gnd. (ft) | qzGh (psf) | Ice Thick. (in) | Face AF (ft^2) | Face AR (ft^2) | Face RR*AR (ft^2) | Face AG (ft^2) | Face e | Face DF | Face DR | Face RR | Face CF | Face AE (ft^2) | Face WF (lbs) | NotF AAF (ft^2) | NotF CAF (ft^2) | NotF AAR (ft^2) | NotF CAR (ft^2) | NotF AAR*CAR (ft^2) | NotF WA (lbs) | Total Wind (lbs) | Total Weight (lbs) |
|---------------|---------------|------------------|----------------------------|------------|-----------------|----------------|----------------|-------------------|----------------|--------|---------|---------|---------|---------|----------------|---------------|-----------------|-----------------|-----------------|-----------------|---------------------|---------------|------------------|--------------------|
| 1 | 350.00 | 325.00 | 337.50 | 7.56 | 2.37 | 83.56 | 66.93 | 43.14 | 359.4 | 0.42 | 1.00 | 1.00 | 0.64 | 2.23 | 126.7 | 2136 | 23.01 | 2.00 | 119.66 | 1.20 | 143.60 | 1433 | 3568 | 34347 |
| 2 | 325.00 | 300.00 | 312.50 | 7.43 | 2.35 | 68.06 | 69.09 | 41.44 | 453.1 | 0.30 | 1.00 | 1.00 | 0.60 | 2.58 | 109.5 | 2101 | 23.75 | 2.00 | 123.24 | 1.20 | 147.89 | 1453 | 3553 | 31482 |
| 3 | 300.00 | 275.00 | 287.50 | 7.31 | 2.33 | 71.72 | 63.52 | 37.12 | 546.9 | 0.25 | 1.00 | 1.00 | 0.58 | 2.79 | 108.8 | 2215 | 23.75 | 2.00 | 128.44 | 1.20 | 154.13 | 1473 | 3688 | 32002 |
| 4 | 275.00 | 250.00 | 262.50 | 7.17 | 2.31 | 72.74 | 67.85 | 39.23 | 640.6 | 0.22 | 1.00 | 1.00 | 0.58 | 2.90 | 112.0 | 2325 | 23.75 | 2.00 | 127.44 | 1.20 | 152.92 | 1436 | 3762 | 37464 |
| 5 | 250.00 | 225.00 | 237.50 | 7.02 | 2.28 | 70.86 | 53.53 | 30.50 | 734.4 | 0.17 | 1.00 | 1.00 | 0.57 | 3.12 | 101.4 | 2216 | 23.75 | 2.00 | 126.35 | 1.20 | 151.61 | 1397 | 3613 | 33374 |
| 6 | 225.00 | 200.00 | 212.50 | 6.85 | 2.26 | 73.26 | 55.13 | 31.32 | 828.1 | 0.16 | 1.00 | 1.00 | 0.57 | 3.18 | 104.6 | 2281 | 23.75 | 2.00 | 136.98 | 1.20 | 164.38 | 1452 | 3733 | 36192 |
| 7 | 200.00 | 175.00 | 187.50 | 6.68 | 2.23 | 86.85 | 56.66 | 32.19 | 921.9 | 0.16 | 1.00 | 1.00 | 0.57 | 3.18 | 119.0 | 2526 | 23.75 | 2.00 | 136.54 | 1.20 | 163.85 | 1411 | 3937 | 36780 |
| 8 | 175.00 | 150.00 | 162.50 | 6.48 | 2.20 | 104.31 | 79.90 | 45.66 | 1015.6 | 0.18 | 1.00 | 1.00 | 0.57 | 3.06 | 150.0 | 2974 | 23.75 | 2.00 | 141.52 | 1.20 | 169.83 | 1408 | 4382 | 45984 |
| 9 | 150.00 | 125.00 | 137.50 | 6.25 | 2.16 | 114.68 | 93.00 | 53.23 | 1109.4 | 0.19 | 1.00 | 1.00 | 0.57 | 3.04 | 167.9 | 3188 | 23.75 | 2.00 | 156.90 | 1.20 | 188.28 | 1475 | 4663 | 47685 |
| 10 | 125.00 | 100.00 | 112.50 | 6.00 | 2.12 | 139.97 | 90.65 | 51.91 | 1218.8 | 0.19 | 1.00 | 1.00 | 0.57 | 3.03 | 191.9 | 3482 | 23.75 | 2.00 | 176.67 | 1.20 | 212.00 | 1556 | 5038 | 54763 |
| 11 | 100.00 | 75.00 | 87.50 | 5.69 | 2.07 | 172.13 | 97.33 | 56.05 | 1296.9 | 0.21 | 1.00 | 1.00 | 0.58 | 2.95 | 228.2 | 3824 | 23.75 | 2.00 | 188.82 | 1.20 | 226.58 | 1559 | 5383 | 53470 |
| 12 | 75.00 | 50.00 | 62.50 | 5.30 | 2.00 | 180.20 | 97.76 | 56.16 | 1390.6 | 0.20 | 1.00 | 1.00 | 0.57 | 2.98 | 236.4 | 3732 | 23.75 | 2.00 | 184.57 | 1.20 | 221.48 | 1425 | 5157 | 54541 |
| 13 | 50.00 | 25.00 | 37.50 | 4.76 | 1.90 | 192.36 | 96.42 | 55.30 | 1484.4 | 0.19 | 1.00 | 1.00 | 0.57 | 3.00 | 247.7 | 3539 | 23.75 | 2.00 | 185.68 | 1.20 | 222.81 | 1286 | 4825 | 60062 |
| 14 | 25.00 | 0.00 | 12.50 | 3.93 | 1.70 | 179.31 | 71.16 | 40.45 | 1578.1 | 0.16 | 1.00 | 1.00 | 0.57 | 3.16 | 219.8 | 2732 | 20.50 | 2.00 | 137.81 | 1.20 | 165.37 | 811 | 3542 | 49747 |

Concentrated Loads for Load Case "LOAD 6":

| Joint Label | Force X-Dir (lbs) | Force Y-Dir (lbs) | Force Vertical (lbs) | Moment X-Axis (ft-lbs) | Moment Y-Axis (ft-lbs) | Moment Z-Axis (ft-lbs) | Load Comment |
|-------------|-------------------|-------------------|----------------------|------------------------|------------------------|------------------------|--------------|
| 67P | 1010 | 0 | 4200 | 0 | 0 | 0 | |
| 67X | 1010 | 0 | 4200 | 0 | 0 | 0 | |
| 67XY | 1010 | 0 | 4200 | 0 | 0 | 0 | |
| 67Y | 1010 | 0 | 4200 | 0 | 0 | 0 | |
| 67P | 0 | 0 | 2424 | 0 | 0 | 0 | |
| 67X | 0 | 0 | -2424 | 0 | 0 | 0 | |
| 67P | 0 | 0 | 2424 | 0 | 0 | 0 | |
| 67X | 0 | 0 | -2424 | 0 | 0 | 0 | |

Equipment Load Case Information for "LOAD 6":

| Equipment Label | Equipment Property Set | Elevation Above Ground (ft) | qzGh (psf) | Ice Thick. (in) | Total Wind Area (ft^2) | Wind Incidence Angle (deg) | 222-G CA | 222-G CS | 222-G CM | Antenna Load EFM (lbs) | Antenna Side Load FSM (lbs) | Antenna Moment MM (ft-lbs) | Long. Load (lbs) | Trans. Load (lbs) | Vert. Load (lbs) |
|-----------------|------------------------|-----------------------------|------------|-----------------|------------------------|----------------------------|----------|----------|----------|------------------------|-----------------------------|----------------------------|------------------|-------------------|------------------|
| AP-1 | ANTIENNA PLATFORM | 350.00 | 7.61 | 2.37 | 30.00 | 315.00 | | | | | | | 161.52 | 161.52 | 9600.00 |
| AP-2 | ANTIENNA PLATFORM | 350.00 | 7.61 | 2.37 | 30.00 | 315.00 | | | | | | | 161.52 | 161.52 | 9600.00 |
| AP-3 | ANTIENNA PLATFORM | 350.00 | 7.61 | 2.37 | 30.00 | 315.00 | | | | | | | 161.52 | 161.52 | 9600.00 |
| AP-4 | ANTIENNA PLATFORM | 350.00 | 7.61 | 2.37 | 30.00 | 315.00 | | | | | | | 161.52 | 161.52 | 9600.00 |

| | | | | | | | | | |
|-------|-------------------|--------|------|------|-------|--------|--------|--------|---------|
| MS-1 | MILK STOOL | 337.50 | 7.56 | 2.37 | 10.00 | 315.00 | 53.43 | 53.43 | 1800.00 |
| MS-2 | MILK STOOL | 337.50 | 7.56 | 2.37 | 10.00 | 315.00 | 53.43 | 53.43 | 1800.00 |
| MS-3 | MILK STOOL | 337.50 | 7.56 | 2.37 | 10.00 | 315.00 | 53.43 | 53.43 | 1800.00 |
| MS-4 | MILK STOOL | 337.50 | 7.56 | 2.37 | 10.00 | 315.00 | 53.43 | 53.43 | 1800.00 |
| MS-5 | MILK STOOL | 325.00 | 7.50 | 2.36 | 10.00 | 315.00 | 53.01 | 53.01 | 1800.00 |
| MS-6 | MILK STOOL | 325.00 | 7.50 | 2.36 | 10.00 | 315.00 | 53.01 | 53.01 | 1800.00 |
| MS-7 | MILK STOOL | 325.00 | 7.50 | 2.36 | 10.00 | 315.00 | 53.01 | 53.01 | 1800.00 |
| MS-8 | MILK STOOL | 325.00 | 7.50 | 2.36 | 10.00 | 315.00 | 53.01 | 53.01 | 1800.00 |
| DA-1 | DA UPPER PLATFORM | 350.00 | 7.61 | 2.37 | 31.50 | 315.00 | 169.60 | 169.60 | 360.00 |
| DA-2 | DA UPPER PLATFORM | 350.00 | 7.61 | 2.37 | 31.50 | 315.00 | 169.60 | 169.60 | 360.00 |
| DA-3 | DA UPPER PLATFORM | 350.00 | 7.61 | 2.37 | 31.50 | 315.00 | 169.60 | 169.60 | 360.00 |
| DA-4 | DA UPPER PLATFORM | 350.00 | 7.61 | 2.37 | 31.50 | 315.00 | 169.60 | 169.60 | 360.00 |
| DA-5 | DA LOWER PLATFORM | 350.00 | 7.61 | 2.37 | 11.25 | 315.00 | 60.57 | 60.57 | 60.00 |
| DA-6 | DA LOWER PLATFORM | 350.00 | 7.61 | 2.37 | 11.25 | 315.00 | 60.57 | 60.57 | 60.00 |
| DA-7 | DA LOWER PLATFORM | 350.00 | 7.61 | 2.37 | 11.25 | 315.00 | 60.57 | 60.57 | 60.00 |
| DA-8 | DA LOWER PLATFORM | 350.00 | 7.61 | 2.37 | 11.25 | 315.00 | 60.57 | 60.57 | 60.00 |
| SM-1 | SM AT 325 FT | 325.00 | 7.50 | 2.36 | 15.00 | 315.00 | 79.51 | 79.51 | 240.00 |
| SM-2 | SM AT 325 FT | 325.00 | 7.50 | 2.36 | 15.00 | 315.00 | 79.51 | 79.51 | 240.00 |
| SM-3 | SM AT 325 FT | 325.00 | 7.50 | 2.36 | 15.00 | 315.00 | 79.51 | 79.51 | 240.00 |
| SM-4 | SM AT 325 FT | 325.00 | 7.50 | 2.36 | 15.00 | 315.00 | 79.51 | 79.51 | 240.00 |
| SM-5 | SM AT 300 FT | 300.00 | 7.37 | 2.34 | 30.00 | 315.00 | 156.36 | 156.36 | 600.00 |
| SM-6 | SM AT 300 FT | 300.00 | 7.37 | 2.34 | 30.00 | 315.00 | 156.36 | 156.36 | 600.00 |
| SM-7 | SM AT 300 FT | 300.00 | 7.37 | 2.34 | 30.00 | 315.00 | 156.36 | 156.36 | 600.00 |
| SM-8 | SM AT 300 FT | 300.00 | 7.37 | 2.34 | 30.00 | 315.00 | 156.36 | 156.36 | 600.00 |
| DA-9 | DA AT 302 FT | 300.00 | 7.37 | 2.34 | 2.50 | 315.00 | 13.03 | 13.03 | 24.00 |
| DA-10 | DA AT 302 FT | 300.00 | 7.37 | 2.34 | 2.50 | 315.00 | 13.03 | 13.03 | 24.00 |
| DA-11 | DA AT 302 FT | 300.00 | 7.37 | 2.34 | 2.50 | 315.00 | 13.03 | 13.03 | 24.00 |
| DA-12 | DA AT 302 FT | 300.00 | 7.37 | 2.34 | 2.50 | 315.00 | 13.03 | 13.03 | 24.00 |
| CP-1 | CP AT 200 FT | 200.00 | 6.77 | 2.25 | 50.00 | 315.00 | 239.28 | 239.28 | 1200.00 |
| CP-2 | CP AT 200 FT | 200.00 | 6.77 | 2.25 | 50.00 | 315.00 | 239.28 | 239.28 | 1200.00 |
| CP-3 | CP AT 200 FT | 200.00 | 6.77 | 2.25 | 50.00 | 315.00 | 239.28 | 239.28 | 1200.00 |
| CP-4 | CP AT 200 FT | 200.00 | 6.77 | 2.25 | 50.00 | 315.00 | 239.28 | 239.28 | 1200.00 |
| DA-13 | DA AT 170 FT | 175.00 | 6.58 | 2.22 | 15.00 | 315.00 | 69.79 | 69.79 | 420.00 |
| DA-14 | DA AT 170 FT | 175.00 | 6.58 | 2.22 | 15.00 | 315.00 | 69.79 | 69.79 | 420.00 |
| DA-15 | DA AT 170 FT | 175.00 | 6.58 | 2.22 | 15.00 | 315.00 | 69.79 | 69.79 | 420.00 |
| DA-16 | DA AT 170 FT | 175.00 | 6.58 | 2.22 | 15.00 | 315.00 | 69.79 | 69.79 | 420.00 |
| SM-9 | SM AT 150 FT | 150.00 | 6.37 | 2.18 | 15.00 | 315.00 | 67.57 | 67.57 | 240.00 |
| SM-10 | SM AT 150 FT | 150.00 | 6.37 | 2.18 | 15.00 | 315.00 | 67.57 | 67.57 | 240.00 |
| SM-11 | SM AT 150 FT | 150.00 | 6.37 | 2.18 | 15.00 | 315.00 | 67.57 | 67.57 | 240.00 |
| SM-12 | SM AT 150 FT | 150.00 | 6.37 | 2.18 | 15.00 | 315.00 | 67.57 | 67.57 | 240.00 |
| SM-13 | SM AT 125 FT | 125.00 | 6.13 | 2.14 | 30.00 | 315.00 | 130.04 | 130.04 | 600.00 |
| SM-14 | SM AT 125 FT | 125.00 | 6.13 | 2.14 | 30.00 | 315.00 | 130.04 | 130.04 | 600.00 |
| SM-15 | SM AT 125 FT | 125.00 | 6.13 | 2.14 | 30.00 | 315.00 | 130.04 | 130.04 | 600.00 |
| SM-16 | SM AT 125 FT | 125.00 | 6.13 | 2.14 | 30.00 | 315.00 | 130.04 | 130.04 | 600.00 |
| DA-17 | DA AT 149 FT | 150.00 | 6.37 | 2.18 | 15.00 | 315.00 | 67.57 | 67.57 | 420.00 |
| DA-18 | DA AT 149 FT | 150.00 | 6.37 | 2.18 | 15.00 | 315.00 | 67.57 | 67.57 | 420.00 |
| DA-19 | DA AT 149 FT | 150.00 | 6.37 | 2.18 | 15.00 | 315.00 | 67.57 | 67.57 | 420.00 |
| DA-20 | DA AT 149 FT | 150.00 | 6.37 | 2.18 | 15.00 | 315.00 | 67.57 | 67.57 | 420.00 |
| DA-21 | DA AT 138 FT | 141.67 | 6.29 | 2.17 | 10.00 | 315.00 | 44.50 | 44.50 | 240.00 |
| DA-22 | DA AT 138 FT | 141.67 | 6.29 | 2.17 | 10.00 | 315.00 | 44.50 | 44.50 | 240.00 |
| DA-23 | DA AT 138 FT | 141.67 | 6.29 | 2.17 | 10.00 | 315.00 | 44.50 | 44.50 | 240.00 |
| DA-24 | DA AT 138 FT | 141.67 | 6.29 | 2.17 | 10.00 | 315.00 | 44.50 | 44.50 | 240.00 |
| DA-25 | DA AT 119 FT | 125.00 | 6.13 | 2.14 | 10.00 | 315.00 | 43.35 | 43.35 | 240.00 |
| DA-26 | DA AT 119 FT | 125.00 | 6.13 | 2.14 | 10.00 | 315.00 | 43.35 | 43.35 | 240.00 |
| DA-27 | DA AT 119 FT | 125.00 | 6.13 | 2.14 | 10.00 | 315.00 | 43.35 | 43.35 | 240.00 |

| | | | | | | | | | | | | | | | | | | | | | | |
|-------|---------------|--------|------|------|-------|--------|--|--|--|--|--|--|--|--|--|--|--|--|--|--------|--------|--------|
| DA-28 | DA AT 119 FT | 125.00 | 6.13 | 2.14 | 10.00 | 315.00 | | | | | | | | | | | | | | 43.35 | 43.35 | 240.00 |
| DA-29 | DA AT 108 FT | 100.00 | 5.85 | 2.09 | 2.00 | 315.00 | | | | | | | | | | | | | | 8.27 | 8.27 | 12.00 |
| DA-30 | DA AT 108 FT | 100.00 | 5.85 | 2.09 | 2.00 | 315.00 | | | | | | | | | | | | | | 8.27 | 8.27 | 12.00 |
| DA-31 | DA AT 108 FT | 100.00 | 5.85 | 2.09 | 2.00 | 315.00 | | | | | | | | | | | | | | 8.27 | 8.27 | 12.00 |
| DA-32 | DA AT 108 FT | 100.00 | 5.85 | 2.09 | 2.00 | 315.00 | | | | | | | | | | | | | | 8.27 | 8.27 | 12.00 |
| DA-33 | DA AT 103 FT | 100.00 | 5.85 | 2.09 | 2.00 | 315.00 | | | | | | | | | | | | | | 8.27 | 8.27 | 12.00 |
| DA-34 | DA AT 103 FT | 100.00 | 5.85 | 2.09 | 2.00 | 315.00 | | | | | | | | | | | | | | 8.27 | 8.27 | 12.00 |
| DA-35 | DA AT 103 FT | 100.00 | 5.85 | 2.09 | 2.00 | 315.00 | | | | | | | | | | | | | | 8.27 | 8.27 | 12.00 |
| DA-36 | DA AT 103 FT | 100.00 | 5.85 | 2.09 | 2.00 | 315.00 | | | | | | | | | | | | | | 8.27 | 8.27 | 12.00 |
| DA-37 | DA AT 54 FT | 50.00 | 5.05 | 1.95 | 2.00 | 315.00 | | | | | | | | | | | | | | 7.15 | 7.15 | 12.00 |
| DA-38 | DA AT 54 FT | 50.00 | 5.05 | 1.95 | 2.00 | 315.00 | | | | | | | | | | | | | | 7.15 | 7.15 | 12.00 |
| DA-39 | DA AT 54 FT | 50.00 | 5.05 | 1.95 | 2.00 | 315.00 | | | | | | | | | | | | | | 7.15 | 7.15 | 12.00 |
| DA-40 | DA AT 54 FT | 50.00 | 5.05 | 1.95 | 2.00 | 315.00 | | | | | | | | | | | | | | 7.15 | 7.15 | 12.00 |
| DA-41 | DA AT 44 FT | 50.00 | 5.05 | 1.95 | 2.50 | 315.00 | | | | | | | | | | | | | | 8.94 | 8.94 | 30.00 |
| DA-42 | DA AT 44 FT | 50.00 | 5.05 | 1.95 | 2.50 | 315.00 | | | | | | | | | | | | | | 8.94 | 8.94 | 30.00 |
| DA-43 | DA AT 44 FT | 50.00 | 5.05 | 1.95 | 2.50 | 315.00 | | | | | | | | | | | | | | 8.94 | 8.94 | 30.00 |
| DA-44 | DA AT 44 FT | 50.00 | 5.05 | 1.95 | 2.50 | 315.00 | | | | | | | | | | | | | | 8.94 | 8.94 | 30.00 |
| S-1 | SOI AT 350 FT | 350.00 | 7.61 | 2.37 | 30.00 | 315.00 | | | | | | | | | | | | | | 161.52 | 161.52 | 7.20 |
| S-2 | SOI AT 350 FT | 350.00 | 7.61 | 2.37 | 30.00 | 315.00 | | | | | | | | | | | | | | 161.52 | 161.52 | 7.20 |
| S-3 | SOI AT 350 FT | 350.00 | 7.61 | 2.37 | 30.00 | 315.00 | | | | | | | | | | | | | | 161.52 | 161.52 | 7.20 |
| S-4 | SOI AT 350 FT | 350.00 | 7.61 | 2.37 | 30.00 | 315.00 | | | | | | | | | | | | | | 161.52 | 161.52 | 7.20 |
| S-5 | SOI AT 140 FT | 141.67 | 6.29 | 2.17 | 10.00 | 315.00 | | | | | | | | | | | | | | 44.50 | 44.50 | 240.00 |
| S-6 | SOI AT 140 FT | 141.67 | 6.29 | 2.17 | 10.00 | 315.00 | | | | | | | | | | | | | | 44.50 | 44.50 | 240.00 |
| S-7 | SOI AT 140 FT | 141.67 | 6.29 | 2.17 | 10.00 | 315.00 | | | | | | | | | | | | | | 44.50 | 44.50 | 240.00 |
| S-8 | SOI AT 140 FT | 141.67 | 6.29 | 2.17 | 10.00 | 315.00 | | | | | | | | | | | | | | 44.50 | 44.50 | 240.00 |
| S-9 | SOI AT 115-1 | 116.67 | 6.04 | 2.13 | 5.00 | 315.00 | | | | | | | | | | | | | | 21.36 | 21.36 | 120.00 |
| S-10 | SOI AT 115-1 | 116.67 | 6.04 | 2.13 | 5.00 | 315.00 | | | | | | | | | | | | | | 21.36 | 21.36 | 120.00 |
| S-11 | SOI AT 115-1 | 116.67 | 6.04 | 2.13 | 5.00 | 315.00 | | | | | | | | | | | | | | 21.36 | 21.36 | 120.00 |
| S-12 | SOI AT 115-1 | 116.67 | 6.04 | 2.13 | 5.00 | 315.00 | | | | | | | | | | | | | | 21.36 | 21.36 | 120.00 |
| S-13 | SOI AT 115-2 | 116.67 | 6.04 | 2.13 | 10.00 | 315.00 | | | | | | | | | | | | | | 42.72 | 42.72 | 240.00 |
| S-14 | SOI AT 115-2 | 116.67 | 6.04 | 2.13 | 10.00 | 315.00 | | | | | | | | | | | | | | 42.72 | 42.72 | 240.00 |
| S-15 | SOI AT 115-2 | 116.67 | 6.04 | 2.13 | 10.00 | 315.00 | | | | | | | | | | | | | | 42.72 | 42.72 | 240.00 |
| S-16 | SOI AT 115-2 | 116.67 | 6.04 | 2.13 | 10.00 | 315.00 | | | | | | | | | | | | | | 42.72 | 42.72 | 240.00 |

EIA Section Load Case Information for "LOAD 6":

Note: qzCh (adjusted wind pressure) includes: Velocity Pressure Coefficient (Kz), Topographic Factor (Kzt), Gust Effect Factor (Gf), Wind Direction Probability Factor (Kd), Wind Importance Factor (Table 2-3), Wind Load Factor (from Loads/EIA Loads)
Face RR is the minimum round reduction factor for all round angles and appurtenances in the section

| Section Label | Z of Top (ft) | Z of Bottom (ft) | Ave. Elev. Above Gnd. (ft) | qzCh (psf) | Ice Thick. (in) | Face AF (ft^2) | Face RR (ft^2) | Face RR*AR (ft^2) | Face AG (ft^2) | Face e (ft^2) | Face DF (ft^2) | Face DR (ft^2) | Face RR (ft^2) | Face CF (ft^2) | Face AE (ft^2) | Face WF (lbs) | NotF AAF (ft^2) | NotF CAF (ft^2) | NotF AAR (ft^2) | NotF CAR (ft^2) | NotF AAR*CAR (ft^2) | NotF WA (lbs) | Total Wind (lbs) | Total Weight (lbs) |
|---------------|---------------|------------------|----------------------------|------------|-----------------|----------------|----------------|-------------------|----------------|---------------|----------------|----------------|----------------|----------------|----------------|---------------|-----------------|-----------------|-----------------|-----------------|---------------------|---------------|------------------|--------------------|
| 1 | 350.00 | 325.00 | 337.50 | 7.56 | 2.37 | 83.56 | 66.93 | 43.14 | 359.4 | 0.42 | 1.20 | 1.20 | 0.64 | 2.23 | 152.0 | 2563 | 23.01 | 2.00 | 119.66 | 1.20 | 143.60 | 1433 | 3995 | 34347 |
| 2 | 325.00 | 300.00 | 312.50 | 7.43 | 2.35 | 68.06 | 69.09 | 41.44 | 453.1 | 0.30 | 1.20 | 1.20 | 0.60 | 2.58 | 131.4 | 2521 | 23.75 | 2.00 | 123.24 | 1.20 | 147.89 | 1453 | 3974 | 31482 |
| 3 | 300.00 | 275.00 | 287.50 | 7.31 | 2.33 | 71.72 | 63.52 | 37.12 | 546.9 | 0.25 | 1.19 | 1.19 | 0.58 | 2.79 | 129.0 | 2626 | 23.75 | 2.00 | 128.44 | 1.20 | 154.13 | 1473 | 4098 | 32002 |
| 4 | 275.00 | 250.00 | 262.50 | 7.17 | 2.31 | 72.74 | 67.85 | 39.23 | 640.6 | 0.22 | 1.16 | 1.16 | 0.58 | 2.90 | 130.4 | 2708 | 23.75 | 2.00 | 127.44 | 1.20 | 152.92 | 1436 | 4145 | 37464 |
| 5 | 250.00 | 225.00 | 237.50 | 7.02 | 2.28 | 70.86 | 53.53 | 30.50 | 734.4 | 0.17 | 1.13 | 1.13 | 0.57 | 3.12 | 114.2 | 2497 | 23.75 | 2.00 | 126.35 | 1.20 | 151.61 | 1397 | 3895 | 33374 |
| 6 | 225.00 | 200.00 | 212.50 | 6.85 | 2.26 | 73.26 | 55.13 | 31.32 | 828.1 | 0.16 | 1.12 | 1.12 | 0.57 | 3.18 | 116.7 | 2546 | 23.75 | 2.00 | 136.98 | 1.20 | 164.38 | 1452 | 3998 | 36192 |
| 7 | 200.00 | 175.00 | 187.50 | 6.68 | 2.23 | 86.85 | 56.66 | 32.19 | 921.9 | 0.16 | 1.12 | 1.12 | 0.57 | 3.18 | 132.9 | 2821 | 23.75 | 2.00 | 136.54 | 1.20 | 163.85 | 1411 | 4232 | 36780 |
| 8 | 175.00 | 150.00 | 162.50 | 6.48 | 2.20 | 104.31 | 79.90 | 45.66 | 1015.6 | 0.18 | 1.14 | 1.14 | 0.57 | 3.06 | 170.4 | 3379 | 23.75 | 2.00 | 141.52 | 1.20 | 169.83 | 1408 | 4787 | 45984 |
| 9 | 150.00 | 125.00 | 137.50 | 6.25 | 2.16 | 114.68 | 93.00 | 53.23 | 1109.4 | 0.19 | 1.14 | 1.14 | 0.57 | 3.04 | 191.5 | 3636 | 23.75 | 2.00 | 156.90 | 1.20 | 188.28 | 1475 | 5110 | 47685 |
| 10 | 125.00 | 100.00 | 112.50 | 6.00 | 2.12 | 139.97 | 90.65 | 51.91 | 1218.8 | 0.19 | 1.14 | 1.14 | 0.57 | 3.03 | 219.1 | 3976 | 23.75 | 2.00 | 176.67 | 1.20 | 212.00 | 1556 | 5532 | 54763 |
| 11 | 100.00 | 75.00 | 87.50 | 5.69 | 2.07 | 172.13 | 97.33 | 56.05 | 1296.9 | 0.21 | 1.16 | 1.16 | 0.58 | 2.95 | 263.7 | 4420 | 23.75 | 2.00 | 188.82 | 1.20 | 226.58 | 1559 | 5978 | 53470 |

| | | | | | | | | | | | | | | | | | | | | | | | | |
|----|-------|-------|-------|------|------|--------|-------|-------|--------|------|------|------|------|------|-------|------|-------|------|--------|------|--------|------|------|-------|
| 12 | 75.00 | 50.00 | 62.50 | 5.30 | 2.00 | 180.20 | 97.76 | 56.16 | 1390.6 | 0.20 | 1.15 | 1.15 | 0.57 | 2.98 | 271.8 | 4292 | 23.75 | 2.00 | 184.57 | 1.20 | 221.48 | 1425 | 5717 | 54541 |
| 13 | 50.00 | 25.00 | 37.50 | 4.76 | 1.90 | 192.36 | 96.42 | 55.30 | 1484.4 | 0.19 | 1.15 | 1.15 | 0.57 | 3.00 | 283.8 | 4056 | 23.75 | 2.00 | 185.68 | 1.20 | 222.81 | 1286 | 5342 | 60062 |
| 14 | 25.00 | 0.00 | 12.50 | 3.93 | 1.70 | 179.31 | 71.16 | 40.45 | 1578.1 | 0.16 | 1.12 | 1.12 | 0.57 | 3.16 | 245.9 | 3057 | 20.50 | 2.00 | 137.81 | 1.20 | 165.37 | 811 | 3868 | 49747 |

*** Analysis Results:

Summary of Joint Support Reactions For All Load Cases:

| Load Case | Joint Label | Long. Force (kips) | Tran. Force (kips) | Vert. Force (kips) | Shear Force (kips) | Tran. Moment (ft-k) | Long. Moment (ft-k) | Vert. Moment (ft-k) | Bending Moment (ft-k) | Found. Usage % |
|-----------|-------------|--------------------|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|-----------------------|----------------|
| LOAD 1 | 1P | -87.63 | -42.93 | 533.52 | 97.58 | -17.27 | -30.94 | -91.46 | 35.43 | 0.00 |
| LOAD 1 | 1X | -87.63 | 42.93 | 533.52 | 97.58 | 17.27 | -30.94 | 91.46 | 35.43 | 0.00 |
| LOAD 1 | 1XY | -65.66 | -20.96 | -319.98 | 68.93 | -14.39 | -33.83 | 91.55 | 36.76 | 0.00 |
| LOAD 1 | 1Y | -65.66 | 20.96 | -319.98 | 68.93 | 14.39 | -33.83 | -91.55 | 36.76 | 0.00 |
| LOAD 2 | 1P | -84.89 | -40.18 | 506.83 | 93.92 | -16.91 | -31.30 | -91.47 | 35.58 | 0.00 |
| LOAD 2 | 1X | -84.89 | 40.18 | 506.83 | 93.92 | 16.91 | -31.30 | 91.47 | 35.58 | 0.00 |
| LOAD 2 | 1XY | -68.41 | -23.71 | -346.67 | 72.40 | -14.75 | -33.47 | 91.54 | 36.57 | 0.00 |
| LOAD 2 | 1Y | -68.41 | 23.71 | -346.67 | 72.40 | 14.75 | -33.47 | -91.54 | 36.57 | 0.00 |
| LOAD 3 | 1P | -91.73 | -91.50 | 735.85 | 129.56 | 10.97 | -11.17 | -0.58 | 15.66 | 0.00 |
| LOAD 3 | 1X | -45.42 | -21.66 | 117.18 | 50.32 | 37.68 | -34.82 | 137.63 | 51.30 | 0.00 |
| LOAD 3 | 1XY | -69.76 | -69.53 | -522.31 | 98.49 | 13.85 | -14.05 | 0.68 | 19.73 | 0.00 |
| LOAD 3 | 1Y | -23.45 | -43.63 | 96.36 | 49.53 | 34.80 | -37.70 | -137.73 | 51.31 | 0.00 |
| LOAD 4 | 1P | -88.98 | -88.75 | 709.16 | 125.68 | 11.33 | -11.53 | -0.59 | 16.16 | 0.00 |
| LOAD 4 | 1X | -42.67 | -24.41 | 90.48 | 49.16 | 37.32 | -35.18 | 137.64 | 51.29 | 0.00 |
| LOAD 4 | 1XY | -72.51 | -72.27 | -549.00 | 102.37 | 13.49 | -13.69 | 0.67 | 19.22 | 0.00 |
| LOAD 4 | 1Y | -26.20 | -40.88 | 69.67 | 48.56 | 35.16 | -37.34 | -137.71 | 51.29 | 0.00 |
| LOAD 5 | 1P | -35.58 | -25.32 | 279.86 | 43.67 | -5.72 | -5.23 | -20.78 | 7.75 | 0.00 |
| LOAD 5 | 1X | -35.58 | 25.32 | 279.86 | 43.67 | 5.72 | -5.23 | 20.78 | 7.75 | 0.00 |
| LOAD 5 | 1XY | -0.70 | 9.57 | 69.52 | 9.59 | -1.56 | -9.39 | 20.88 | 9.52 | 0.00 |
| LOAD 5 | 1Y | -0.70 | -9.57 | 69.52 | 9.59 | 1.56 | -9.39 | -20.88 | 9.52 | 0.00 |
| LOAD 6 | 1P | -36.97 | -36.74 | 328.60 | 52.12 | 0.68 | -0.87 | -0.31 | 1.10 | 0.00 |
| LOAD 6 | 1X | -26.23 | 10.45 | 185.10 | 28.23 | 10.51 | -6.36 | 32.05 | 12.28 | 0.00 |
| LOAD 6 | 1XY | -2.08 | -1.85 | 20.78 | 2.79 | 4.84 | -5.03 | 0.41 | 6.98 | 0.00 |
| LOAD 6 | 1Y | 8.66 | -24.44 | 164.28 | 25.92 | 6.35 | -10.52 | -32.15 | 12.29 | 0.00 |

Group Summary (Compression Portion):

| Group Label | Group Desc. | Angle Type | Angle Size | Steel Strength (ksi) | Max Usage % | Max Use % | Comp. In Control Member | Comp. Force (kips) | Comp. Control Load Case | L/R Comp. Capacity (kips) | Conn. Shear Capacity (kips) | Conn. Bearing Capacity (kips) | RLX | RLY | RLZ | L/R Length (ft) | Curve No. | No. Bolts | Of Comp. |
|-------------|-------------|------------|----------------------------|----------------------|-------------|-----------|-------------------------|--------------------|-------------------------|---------------------------|-----------------------------|-------------------------------|-------|-------|-------|-----------------|-----------|-----------|----------|
| L1 | LEG | BUS | 8X8X3/4+2L8X4X3/4 | 33.0 | 80.26 | 80.26 | g154X | -665.005 | LOAD 3 | 828.561 | 0.000 | 0.000 | 0.167 | 0.167 | 0.167 | 16.79 | 25.140 | 1 | 0 |
| L2 | LEG | BUS | 8X8X3/4+2L8X4X1/2+L4X4X5/8 | 33.0 | 77.68 | 77.68 | g140X | -601.237 | LOAD 3 | 774.007 | 0.000 | 0.000 | 0.333 | 0.333 | 0.333 | 33.49 | 25.140 | 1 | 0 |
| L3 | LEG | BUS | 8X8X5/8+2L8X4X1/2+L4X4X5/8 | 33.0 | 74.66 | 74.66 | g128X | -540.295 | LOAD 3 | 723.644 | 0.000 | 0.000 | 0.333 | 0.333 | 0.333 | 33.49 | 25.140 | 1 | 0 |
| L4 | LEG | BUS | 8X8X1/2+2L8X4X1/2+L4X4X5/8 | 33.0 | 71.66 | 71.66 | g416X | -481.084 | LOAD 3 | 671.312 | 0.000 | 0.000 | 0.333 | 0.333 | 0.333 | 33.49 | 25.140 | 1 | 0 |
| L5 | LEG | BUS | 8X8X1.125+2PL6X3/8 | 33.0 | 65.20 | 65.20 | g1X | -376.174 | LOAD 3 | 576.974 | 0.000 | 0.000 | 0.220 | 0.220 | 0.220 | 42.55 | 25.140 | 1 | 0 |
| L6 | LEG | SAE | 8X8X1.125 | 33.0 | 70.19 | 70.19 | g57X | -331.656 | LOAD 3 | 472.490 | 0.000 | 0.000 | 0.167 | 0.167 | 0.167 | 32.30 | 25.140 | 1 | 0 |
| L7 | LEG | SAE | 8X8X1.125 | 33.0 | 71.64 | 71.64 | g113X | -291.413 | LOAD 3 | 406.760 | 0.000 | 0.000 | 0.333 | 0.333 | 0.333 | 64.40 | 25.140 | 1 | 0 |
| L8 | LEG | SAE | 8X8X1 | 33.0 | 66.27 | 66.27 | g169X | -280.723 | LOAD 3 | 423.631 | 0.000 | 0.000 | 0.167 | 0.167 | 0.167 | 32.30 | 25.140 | 1 | 0 |
| L9 | LEG | SAE | 8X8X0.875 | 33.0 | 63.06 | 63.06 | g194X | -235.770 | LOAD 3 | 373.882 | 0.000 | 0.000 | 0.167 | 0.167 | 0.167 | 32.09 | 25.140 | 1 | 0 |
| L10 | LEG | SAE | 8X8X0.75 | 33.0 | 59.22 | 59.22 | g219X | -191.566 | LOAD 3 | 323.499 | 0.000 | 0.000 | 0.167 | 0.167 | 0.167 | 31.89 | 25.140 | 1 | 0 |

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|----------------|------|--------|--------|-------|----------|--------|---------|-------|-------|-------|-------|-------|--------|--------|---|------|
| L11 | LEG | SAE | 6X6X0.875 | 33.0 | 61.48 | 61.48 | g244X | -168.967 | LOAD 3 | 274.851 | 0.000 | 0.000 | 0.250 | 0.250 | 0.250 | 32.23 | 12.570 | 1 | 0 |
| L12 | LEG | SAE | 6X6X0.875 | 33.0 | 52.97 | 52.97 | g269X | -145.593 | LOAD 3 | 274.851 | 0.000 | 0.000 | 0.250 | 0.250 | 0.250 | 32.23 | 12.570 | 1 | 0 |
| L13 | LEG | SAE | 6X6X0.75 | 33.0 | 51.57 | 51.57 | g294X | -122.953 | LOAD 3 | 238.411 | 0.000 | 0.000 | 0.250 | 0.250 | 0.250 | 32.23 | 12.570 | 1 | 0 |
| L14 | LEG | SAE | 6X6X0.75 | 33.0 | 48.11 | 48.11 | g319X | -98.675 | LOAD 3 | 205.121 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 64.46 | 12.570 | 1 | 0 |
| L15 | LEG | SAE | 6X6X0.625 | 33.0 | 41.90 | 41.90 | g344X | -84.217 | LOAD 3 | 201.011 | 0.000 | 0.000 | 0.250 | 0.250 | 0.250 | 31.96 | 12.570 | 1 | 0 |
| L16 | LEG | SAE | 6X6X0.625 | 33.0 | 37.29 | 37.29 | g362X | -64.648 | LOAD 3 | 173.383 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 63.92 | 12.570 | 1 | 0 |
| L17 | LEG | SAE | 6X6X0.5 | 33.0 | 30.92 | 30.92 | g380X | -43.360 | LOAD 3 | 140.219 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 63.92 | 12.570 | 1 | 0 |
| L18 | LEG | SAE | 6X6X0.5 | 33.0 | 17.72 | 17.72 | g398X | -24.852 | LOAD 3 | 140.219 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 63.92 | 12.570 | 1 | 0 |
| D1A | DIA | DAS | 5X3.5X0.375 | 36.0 | 91.89 | 91.89 | g156P | -68.106 | LOAD 1 | 74.120 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 141.26 | 24.015 | 5 | 0 |
| D1B | DIA | DAL | 5X3.5X0.4375 | 36.0 | 88.47 | 88.47 | g160P | -75.022 | LOAD 1 | 84.803 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 | 142.31 | 17.433 | 5 | 0 |
| D1C | DIA | DAL | 4X3X0.3125 | 33.0 | 22.52 | 22.52 | g163P | -20.153 | LOAD 2 | 89.490 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 82.36 | 17.433 | 1 | 0 |
| D2A | DIA | DAS | 4X3.5X0.3125 | 36.0 | 137.73 | 137.73 | g143P | -67.933 | LOAD 1 | 49.323 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 150.67 | 23.353 | 5 | 0 NG |
| D2B | DIA | DAL | 4X3.5X0.375 | 36.0 | 98.14 | 98.14 | g146P | -73.618 | LOAD 1 | 75.015 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 127.81 | 16.616 | 5 | 0 |
| D2C | DIA | DAL | 3.5X3X0.25 | 33.0 | 57.16 | 57.16 | g150P | -19.812 | LOAD 2 | 34.659 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 149.92 | 16.616 | 5 | 0 |
| D3A | DIA | DAS | 4X3.5X0.3125 | 36.0 | 125.32 | 125.32 | g131P | -64.627 | LOAD 1 | 51.570 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 146.52 | 22.710 | 5 | 0 NG |
| D3B | DIA | DAL | 4X3.5X0.3125 | 36.0 | 103.49 | 103.49 | g134P | -68.872 | LOAD 1 | 66.552 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 122.42 | 15.812 | 5 | 0 |
| D3C | DIA | DAL | 3.5X2.5X0.25 | 33.0 | 73.77 | 73.77 | g139P | -18.462 | LOAD 2 | 25.026 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 174.07 | 15.811 | 5 | 0 |
| D4A | DIA | DAS | 4X3X0.3125 | 36.0 | 132.69 | 132.69 | g420P | -61.743 | LOAD 1 | 46.530 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 149.42 | 22.089 | 5 | 0 NG |
| D4B | DIA | DAL | 4X3X0.5 | 36.0 | 76.45 | 76.45 | g429P | -64.440 | LOAD 1 | 84.291 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 135.55 | 15.023 | 5 | 0 |
| D4C | DIA | DAL | 3.5X2.5X0.25 | 33.0 | 62.70 | 62.70 | g436P | -17.063 | LOAD 2 | 27.212 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 165.39 | 15.023 | 5 | 0 |
| D5A | DIA | DAS | 4X3X0.3125 | 36.0 | 104.26 | 104.26 | g2X | -71.564 | LOAD 3 | 68.641 | 0.000 | 0.000 | 0.333 | 0.900 | 0.330 | 113.62 | 20.304 | 1 | 0 NG |
| D5B | DIA | DAL | 3X2.5X0.3125 | 36.0 | 99.69 | 99.69 | g13P | -44.483 | LOAD 1 | 44.621 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 | 129.76 | 10.132 | 5 | 0 |
| D5C | DIA | DAL | 3.5X3X0.375 | 36.0 | 69.54 | 69.54 | g22Y | -46.133 | LOAD 2 | 66.344 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 | 124.97 | 11.351 | 5 | 0 |
| D5D | DIA | DAL | 2.5X2X0.25 | 33.0 | 224.44 | 224.44 | g25X | -45.858 | LOAD 4 | 20.432 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 163.86 | 12.768 | 5 | 0 NG |
| D6A | DIA | DAS | 4X3X0.3125 | 36.0 | 100.04 | 100.04 | g65P | -61.411 | LOAD 1 | 61.389 | 0.000 | 0.000 | 0.333 | 1.000 | 0.333 | 123.35 | 19.839 | 5 | 0 |
| D6B | DIA | DAL | 3.5X2.5X0.25 | 36.0 | 80.50 | 80.50 | g69P | -40.070 | LOAD 1 | 49.777 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 | 109.25 | 9.924 | 1 | 0 |
| D6C | DIA | DAL | 3.5X3X0.3125 | 36.0 | 69.99 | 69.99 | g77Y | -41.379 | LOAD 2 | 59.122 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 | 119.50 | 10.954 | 1 | 0 |
| D6D | DIA | DAL | 2.5X2X0.25 | 33.0 | 157.06 | 157.06 | g85X | -34.795 | LOAD 3 | 22.154 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 155.88 | 12.146 | 5 | 0 NG |
| D7A | DIA | DAS | 4X3X0.3125 | 36.0 | 90.65 | 90.65 | g117P | -57.132 | LOAD 1 | 63.025 | 0.000 | 0.000 | 0.333 | 1.000 | 0.333 | 120.66 | 19.406 | 5 | 0 |
| D7B | DIA | DAL | 3.5X2.5X0.25 | 36.0 | 72.00 | 72.00 | g125P | -36.846 | LOAD 1 | 51.176 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 | 106.82 | 9.703 | 1 | 0 |
| D7C | DIA | DAL | 3.5X3X0.3125 | 36.0 | 59.45 | 59.45 | g133Y | -37.059 | LOAD 2 | 62.340 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 | 115.21 | 10.561 | 1 | 0 |
| D7D | DIA | DAE | 2.5X2.5X0.25 | 36.0 | 65.27 | 65.27 | g137X | -24.618 | LOAD 3 | 37.714 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 116.56 | 11.559 | 1 | 0 |
| D8 | DIA | DAS | 4X3X0.375 | 36.0 | 63.43 | 63.43 | g174X | -37.202 | LOAD 1 | 58.652 | 0.000 | 0.000 | 0.333 | 0.667 | 0.333 | 144.04 | 31.684 | 5 | 0 |
| D9 | DIA | DAS | 3.5X3X0.3125 | 36.0 | 76.14 | 76.14 | g198P | -33.515 | LOAD 1 | 44.018 | 0.000 | 0.000 | 0.333 | 0.667 | 0.333 | 147.42 | 30.574 | 5 | 0 |
| D10 | DIA | DAS | 3.5X3X0.3125 | 36.0 | 70.62 | 70.62 | g223P | -32.831 | LOAD 1 | 46.488 | 0.000 | 0.000 | 0.333 | 0.667 | 0.333 | 142.44 | 29.541 | 5 | 0 |
| D11 | DIA | DAS | 3.5X2.5X0.25 | 36.0 | 65.86 | 65.86 | g248P | -20.569 | LOAD 1 | 31.230 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 151.89 | 18.606 | 5 | 0 |
| D12 | DIA | DAS | 3.5X2.5X0.25 | 36.0 | 64.57 | 64.57 | g273P | -21.404 | LOAD 1 | 33.149 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 146.32 | 17.925 | 5 | 0 |
| D13 | DIA | DAS | 3X2.5X0.25 | 36.0 | 62.53 | 62.53 | g298P | -19.654 | LOAD 1 | 31.431 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 142.90 | 17.267 | 5 | 0 |
| D14 | DIA | DAS | 3X2.5X0.25 | 36.0 | 62.72 | 62.72 | g323P | -20.912 | LOAD 1 | 33.340 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 137.68 | 16.636 | 5 | 0 |
| D15 | DIA | DAL | 3X2X0.25 | 36.0 | 48.89 | 48.89 | g348P | -12.389 | LOAD 1 | 25.339 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 153.63 | 22.815 | 5 | 0 |
| D16 | DIA | DAL | 3X2.5X0.25 | 36.0 | 38.23 | 38.23 | g366P | -13.105 | LOAD 1 | 34.278 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 135.07 | 21.273 | 5 | 0 |
| D17 | DIA | SAS | 3.5X3X0.25 | 33.0 | 87.21 | 87.21 | g384P | -10.391 | LOAD 1 | 11.915 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 188.17 | 19.789 | 5 | 0 |
| D18 | DIA | SAE | 3.5X3.5X0.25 | 33.0 | 58.76 | 58.76 | g402X | -10.015 | LOAD 1 | 17.045 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 158.87 | 18.376 | 5 | 0 |
| H1A | HOR | DAL | 5X3.5X0.375 | 33.0 | 71.87 | 71.87 | g165Y | -60.528 | LOAD 2 | 84.218 | 0.000 | 0.000 | 0.250 | 0.500 | 0.250 | 125.86 | 30.625 | 4 | 0 |
| H2A | HOR | DAL | 4X3X0.3125 | 33.0 | 59.47 | 59.47 | g152Y | -59.093 | LOAD 2 | 99.373 | 0.000 | 0.000 | 0.250 | 0.250 | 0.250 | 67.91 | 28.750 | 1 | 0 |
| H3A | HOR | DAL | 3.5X3X0.3125 | 33.0 | 94.28 | 94.28 | g136Y | -54.436 | LOAD 2 | 57.738 | 0.000 | 0.000 | 0.250 | 0.500 | 0.250 | 119.44 | 26.875 | 1 | 0 |
| H4A | HOR | DAL | 3.5X3X0.3125 | 33.0 | 54.59 | 54.59 | g444Y | -50.139 | LOAD 2 | 91.841 | 0.000 | 0.000 | 0.250 | 0.250 | 0.250 | 68.18 | 25.000 | 1 | 0 |
| H5A | HOR | DAL | 3.5X3X0.3125 | 33.0 | 83.09 | 83.09 | g33Y | -67.848 | LOAD 4 | 81.662 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 84.16 | 15.430 | 1 | 0 |
| H5B | HOR | DAS | 4X3.5X0.3125 | 36.0 | 103.76 | 103.76 | g48X | -55.289 | LOAD 4 | 53.284 | 0.000 | 0.000 | 0.950 | 1.500 | 0.950 | 143.53 | 13.472 | 5 | 0 |
| H6A | HOR | DAL | 3.5X3X0.3125 | 33.0 | 55.43 | 55.43 | g89Y | -47.756 | LOAD 4 | 86.163 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 77.27 | 14.167 | 1 | 0 |
| H6B | HOR | DAS | 4X3X0.3125 | 36.0 | 96.71 | 96.71 | g105X | -40.377 | LOAD 3 | 41.751 | 0.000 | 0.000 | 0.950 | 1.500 | 0.950 | 159.83 | 12.436 | 5 | 0 |
| H7A | HOR | DAE | 3X3X0.3125 | 33.0 | 64.51 | 64.51 | g149Y | -37.645 | LOAD 2 | 58.356 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 110.71 | 12.917 | 1 | 0 |
| H7B | HOR | DAS | 3.5X3X0.3125 | 36.0 | 65.04 | 65.04 | g159X | -27.546 | LOAD 3 | 42.355 | 0.000 | 0.000 | 1.000 | 1.500 | 1.000 | 151.01 | 11.389 | 5 | 0 |
| H8 | HOR | DAL | 3.5X2.5X0.3125 | 33.0 | 29.28 | 29.28 | g181Y | -19.889 | LOAD 2 | 67.924 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 95.45 | 17.500 | 1 | 0 |
| H9 | HOR | DAL | 3X2.5X0.25 | 33.0 | 66.31 | 66.31 | g206Y | -16.392 | LOAD 2 | 24.718 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 165.93 | 15.625 | 5 | 0 |

| | | | | | | | | | | | | | | | | | | | |
|-----|-----|-----|--------------|------|-------|-------|--------|---------|--------|---------|-------|-------|-------|-------|-------|--------|--------|---|---|
| H10 | HOR | DAL | 3X2.5X0.25 | 33.0 | 49.84 | 49.84 | g231Y | -15.138 | LOAD 2 | 30.372 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 146.02 | 13.750 | 5 | 0 |
| H11 | HOR | DAE | 2.5X2.5X0.25 | 33.0 | 42.51 | 42.51 | g257Y | -13.787 | LOAD 2 | 32.436 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 129.20 | 12.813 | 5 | 0 |
| H12 | HOR | DAE | 2.5X2.5X0.25 | 33.0 | 37.65 | 37.65 | g281Y | -13.323 | LOAD 2 | 35.384 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 119.75 | 11.875 | 1 | 0 |
| H13 | HOR | DAE | 2.5X2.5X0.25 | 33.0 | 31.25 | 31.25 | g306Y | -12.281 | LOAD 2 | 39.299 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 110.29 | 10.938 | 1 | 0 |
| H14 | HOR | DAL | 3X2.5X0.25 | 33.0 | 30.04 | 30.04 | g331XY | -10.992 | LOAD 2 | 36.589 | 0.000 | 0.000 | 1.000 | 1.000 | 1.000 | 126.98 | 10.000 | 5 | 0 |
| H15 | HOR | DAL | 3X2.5X0.25 | 33.0 | 14.10 | 14.10 | g356Y | -2.728 | LOAD 2 | 19.341 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 192.48 | 18.125 | 5 | 0 |
| H16 | HOR | DAL | 3X2.5X0.25 | 33.0 | 5.59 | 3.85 | g370Y | -1.797 | LOAD 2 | 46.732 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 103.17 | 16.250 | 1 | 0 |
| H17 | HOR | DAL | 3.5X3X0.3125 | 33.0 | 3.14 | 1.57 | g388Y | -0.840 | LOAD 2 | 53.446 | 0.000 | 0.000 | 0.500 | 1.000 | 0.500 | 127.78 | 14.375 | 5 | 0 |
| H18 | HOR | CHN | C15 x 33.9 | 33.0 | 0.20 | 0.20 | g406Y | -0.414 | LOAD 2 | 212.207 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 82.96 | 12.500 | 1 | 0 |
| R1 | RUD | SAE | 3X3X0.25 | 33.0 | 20.16 | 20.16 | g235Y | -1.688 | LOAD 3 | 8.375 | 0.000 | 0.000 | 0.500 | 0.500 | 0.500 | 197.08 | 19.445 | 4 | 0 |

Group Summary (Tension Portion):

| Group Label | Group Desc. | Angle Type | Angle Size | Steel Strength (ksi) | Max Usage % | Max Tension Use In Control % | Tension Force Member | Tension Control | Net Tens. Section Capacity (kips) | Conn. Shear Capacity (kips) | Tens. Bearing Capacity (kips) | Conn. Rupture Capacity (kips) | Tens. Member (ft) | No. Of Bolts Tens. | No. Of Holes | Hole Diameter (in) |
|-------------|-------------|------------|----------------------------|----------------------|-------------|------------------------------|----------------------|-----------------|-----------------------------------|-----------------------------|-------------------------------|-------------------------------|-------------------|--------------------|--------------|--------------------|
| L1 | LEG | BUS | 8X8X3/4+2L8X4X3/4 | 33.0 | 80.26 | 58.54 | g154Y 491.675 | LOAD 4 | 839.915 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L2 | LEG | BUS | 8X8X3/4+2L8X4X1/2+L4X4X5/8 | 33.0 | 77.68 | 54.45 | g140Y 444.907 | LOAD 4 | 817.046 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L3 | LEG | BUS | 8X8X5/8+2L8X4X1/2+L4X4X5/8 | 33.0 | 74.66 | 52.27 | g128Y 399.248 | LOAD 4 | 763.883 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L4 | LEG | BUS | 8X8X1/2+2L8X4X1/2+L4X4X5/8 | 33.0 | 71.66 | 49.91 | g416Y 353.662 | LOAD 4 | 708.641 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L5 | LEG | BUS | 8X8X1.125+2PL6X3/8 | 33.0 | 65.20 | 41.98 | g1Y 264.310 | LOAD 4 | 629.639 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L6 | LEG | SAE | 8X8X1.125 | 33.0 | 70.19 | 48.03 | g57Y 238.639 | LOAD 4 | 496.880 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L7 | LEG | SAE | 8X8X1.125 | 33.0 | 71.64 | 43.24 | g113Y 214.847 | LOAD 4 | 496.880 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L8 | LEG | SAE | 8X8X1 | 33.0 | 66.27 | 46.41 | g169Y 206.763 | LOAD 4 | 445.499 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L9 | LEG | SAE | 8X8X0.875 | 33.0 | 63.06 | 43.63 | g194Y 171.448 | LOAD 4 | 392.930 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L10 | LEG | SAE | 8X8X0.75 | 33.0 | 59.22 | 39.43 | g219Y 133.986 | LOAD 4 | 339.767 | 0.000 | 0.000 | 0.000 | 25.140 | 0 | 0.000 | 0 |
| L11 | LEG | SAE | 6X6X0.875 | 33.0 | 61.48 | 40.02 | g244Y 115.641 | LOAD 4 | 288.981 | 0.000 | 0.000 | 0.000 | 12.570 | 0 | 0.000 | 0 |
| L12 | LEG | SAE | 6X6X0.875 | 33.0 | 52.97 | 33.12 | g269Y 95.715 | LOAD 4 | 288.981 | 0.000 | 0.000 | 0.000 | 12.570 | 0 | 0.000 | 0 |
| L13 | LEG | SAE | 6X6X0.75 | 33.0 | 51.57 | 30.41 | g294Y 76.221 | LOAD 4 | 250.668 | 0.000 | 0.000 | 0.000 | 12.570 | 0 | 0.000 | 0 |
| L14 | LEG | SAE | 6X6X0.75 | 33.0 | 48.11 | 22.00 | g319Y 55.159 | LOAD 4 | 250.668 | 0.000 | 0.000 | 0.000 | 12.570 | 0 | 0.000 | 0 |
| L15 | LEG | SAE | 6X6X0.625 | 33.0 | 41.90 | 22.07 | g344Y 46.609 | LOAD 4 | 211.167 | 0.000 | 0.000 | 0.000 | 12.570 | 0 | 0.000 | 0 |
| L16 | LEG | SAE | 6X6X0.625 | 33.0 | 37.29 | 13.56 | g362Y 28.643 | LOAD 4 | 211.167 | 0.000 | 0.000 | 0.000 | 12.570 | 0 | 0.000 | 0 |
| L17 | LEG | SAE | 6X6X0.5 | 33.0 | 30.92 | 7.57 | g380Y 12.923 | LOAD 4 | 170.775 | 0.000 | 0.000 | 0.000 | 12.570 | 0 | 0.000 | 0 |
| L18 | LEG | SAE | 6X6X0.5 | 33.0 | 17.72 | 0.02 | g398XY 0.028 | LOAD 2 | 170.775 | 0.000 | 0.000 | 0.000 | 12.570 | 0 | 0.000 | 0 |
| D1A | DIA | DAS | 5X3.5X0.375 | 36.0 | 91.89 | 30.35 | g156Y 59.884 | LOAD 2 | 197.316 | 0.000 | 0.000 | 0.000 | 24.015 | 0 | 0.000 | 0 |
| D1B | DIA | DAL | 5X3.5X0.4375 | 36.0 | 88.47 | 30.17 | g160Y 68.907 | LOAD 2 | 228.420 | 0.000 | 0.000 | 0.000 | 17.433 | 0 | 0.000 | 0 |
| D1C | DIA | DAL | 4X3X0.3125 | 33.0 | 22.52 | 16.74 | g163Y 20.785 | LOAD 1 | 124.146 | 0.000 | 0.000 | 0.000 | 17.433 | 0 | 0.000 | 0 |
| D2A | DIA | DAS | 4X3.5X0.3125 | 36.0 | 137.73 | 41.72 | g143Y 60.695 | LOAD 2 | 145.476 | 0.000 | 0.000 | 0.000 | 23.353 | 0 | 0.000 | 0 NG |
| D2B | DIA | DAL | 4X3.5X0.375 | 36.0 | 98.14 | 39.53 | g146Y 68.396 | LOAD 2 | 173.016 | 0.000 | 0.000 | 0.000 | 16.616 | 0 | 0.000 | 0 |
| D2C | DIA | DAL | 3.5X3X0.25 | 33.0 | 57.16 | 22.00 | g150Y 20.450 | LOAD 1 | 92.961 | 0.000 | 0.000 | 0.000 | 16.616 | 0 | 0.000 | 0 |
| D3A | DIA | DAS | 4X3.5X0.3125 | 36.0 | 125.32 | 40.15 | g131Y 58.403 | LOAD 2 | 145.476 | 0.000 | 0.000 | 0.000 | 22.710 | 0 | 0.000 | 0 NG |
| D3B | DIA | DAL | 4X3.5X0.3125 | 36.0 | 103.49 | 44.25 | g134Y 64.373 | LOAD 2 | 145.476 | 0.000 | 0.000 | 0.000 | 15.812 | 0 | 0.000 | 0 |
| D3C | DIA | DAL | 3.5X2.5X0.25 | 33.0 | 73.77 | 22.15 | g139Y 18.942 | LOAD 1 | 85.536 | 0.000 | 0.000 | 0.000 | 15.811 | 0 | 0.000 | 0 |
| D4A | DIA | DAS | 4X3X0.3125 | 36.0 | 132.69 | 41.57 | g420Y 56.300 | LOAD 2 | 135.432 | 0.000 | 0.000 | 0.000 | 22.089 | 0 | 0.000 | 0 NG |
| D4B | DIA | DAL | 4X3X0.5 | 36.0 | 76.45 | 28.83 | g429Y 60.717 | LOAD 2 | 210.600 | 0.000 | 0.000 | 0.000 | 15.023 | 0 | 0.000 | 0 |
| D4C | DIA | DAL | 3.5X2.5X0.25 | 33.0 | 62.70 | 20.63 | g436Y 17.642 | LOAD 1 | 85.536 | 0.000 | 0.000 | 0.000 | 15.023 | 0 | 0.000 | 0 |
| D5A | DIA | DAS | 4X3X0.3125 | 36.0 | 104.26 | 48.06 | g2Y 65.086 | LOAD 4 | 135.432 | 0.000 | 0.000 | 0.000 | 20.304 | 0 | 0.000 | 0 NG |
| D5B | DIA | DAL | 3X2.5X0.3125 | 36.0 | 99.69 | 37.68 | g13Y 39.559 | LOAD 2 | 104.976 | 0.000 | 0.000 | 0.000 | 10.132 | 0 | 0.000 | 0 |
| D5C | DIA | DAL | 3.5X3X0.375 | 36.0 | 69.54 | 31.86 | g22P 47.375 | LOAD 1 | 148.716 | 0.000 | 0.000 | 0.000 | 11.351 | 0 | 0.000 | 0 |
| D5D | DIA | DAL | 2.5X2X0.25 | 33.0 | 224.44 | 75.38 | g25Y 47.683 | LOAD 3 | 63.261 | 0.000 | 0.000 | 0.000 | 12.768 | 0 | 0.000 | 0 NG |
| D6A | DIA | DAS | 4X3X0.3125 | 36.0 | 100.04 | 40.15 | g65Y 54.371 | LOAD 2 | 135.432 | 0.000 | 0.000 | 0.000 | 19.839 | 0 | 0.000 | 0 |
| D6B | DIA | DAL | 3.5X2.5X0.25 | 36.0 | 80.50 | 38.81 | g69Y 36.217 | LOAD 2 | 93.312 | 0.000 | 0.000 | 0.000 | 9.924 | 0 | 0.000 | 0 |

| | | | | | | | | | | | | | | | | | |
|------------|------------|------------|---------------------|-------------|---------------|--------------|-------------|---------------|---------------|----------------|--------------|--------------|--------------|---------------|----------|--------------|-------------|
| D6C | DIA | DAL | 3.5X3X0.3125 | 36.0 | 69.99 | 33.69 | g77P | 42.238 | LOAD 1 | 125.388 | 0.000 | 0.000 | 0.000 | 10.954 | 0 | 0.000 | 0 |
| D6D | DIA | DAL | 2.5X2X0.25 | 33.0 | 157.06 | 52.76 | g85Y | 33.377 | LOAD 4 | 63.261 | 0.000 | 0.000 | 0.000 | 12.146 | 0 | 0.000 | 0 NG |
| D7A | DIA | DAS | 4X3X0.3125 | 36.0 | 90.65 | 35.77 | g117Y | 48.448 | LOAD 2 | 135.432 | 0.000 | 0.000 | 0.000 | 19.406 | 0 | 0.000 | 0 |
| D7B | DIA | DAL | 3.5X2.5X0.25 | 36.0 | 72.00 | 34.87 | g125Y | 32.536 | LOAD 2 | 93.312 | 0.000 | 0.000 | 0.000 | 9.703 | 0 | 0.000 | 0 |
| D7C | DIA | DAL | 3.5X3X0.3125 | 36.0 | 59.45 | 30.19 | g133P | 37.857 | LOAD 1 | 125.388 | 0.000 | 0.000 | 0.000 | 10.561 | 0 | 0.000 | 0 |
| D7D | DIA | DAE | 2.5X2.5X0.25 | 36.0 | 65.27 | 27.38 | g137Y | 21.116 | LOAD 4 | 77.112 | 0.000 | 0.000 | 0.000 | 11.559 | 0 | 0.000 | 0 |
| D8 | DIA | DAS | 4X3X0.375 | 36.0 | 63.43 | 21.62 | g174XY | 34.811 | LOAD 2 | 161.028 | 0.000 | 0.000 | 0.000 | 31.684 | 0 | 0.000 | 0 |
| D9 | DIA | DAS | 3.5X3X0.3125 | 36.0 | 76.14 | 24.92 | g198Y | 31.243 | LOAD 2 | 125.388 | 0.000 | 0.000 | 0.000 | 30.574 | 0 | 0.000 | 0 |
| D10 | DIA | DAS | 3.5X3X0.3125 | 36.0 | 70.62 | 24.77 | g223Y | 31.060 | LOAD 2 | 125.388 | 0.000 | 0.000 | 0.000 | 29.541 | 0 | 0.000 | 0 |
| D11 | DIA | DAS | 3.5X2.5X0.25 | 36.0 | 65.86 | 21.05 | g248Y | 19.644 | LOAD 2 | 93.312 | 0.000 | 0.000 | 0.000 | 18.606 | 0 | 0.000 | 0 |
| D12 | DIA | DAS | 3.5X2.5X0.25 | 36.0 | 64.57 | 21.24 | g273Y | 19.824 | LOAD 2 | 93.312 | 0.000 | 0.000 | 0.000 | 17.925 | 0 | 0.000 | 0 |
| D13 | DIA | DAS | 3X2.5X0.25 | 36.0 | 62.53 | 22.29 | g298Y | 18.991 | LOAD 2 | 85.212 | 0.000 | 0.000 | 0.000 | 17.267 | 0 | 0.000 | 0 |
| D14 | DIA | DAS | 3X2.5X0.25 | 36.0 | 62.72 | 22.73 | g323Y | 19.367 | LOAD 2 | 85.212 | 0.000 | 0.000 | 0.000 | 16.636 | 0 | 0.000 | 0 |
| D15 | DIA | DAL | 3X2X0.25 | 36.0 | 48.89 | 13.01 | g348Y | 10.032 | LOAD 2 | 77.112 | 0.000 | 0.000 | 0.000 | 22.815 | 0 | 0.000 | 0 |
| D16 | DIA | DAL | 3X2.5X0.25 | 36.0 | 38.23 | 12.14 | g366Y | 10.341 | LOAD 2 | 85.212 | 0.000 | 0.000 | 0.000 | 21.273 | 0 | 0.000 | 0 |
| D17 | DIA | SAS | 3.5X3X0.25 | 33.0 | 87.21 | 17.33 | g384Y | 8.027 | LOAD 2 | 46.332 | 0.000 | 0.000 | 0.000 | 19.789 | 0 | 0.000 | 0 |
| D18 | DIA | SAE | 3.5X3.5X0.25 | 33.0 | 58.76 | 14.32 | g402XY | 7.187 | LOAD 2 | 50.193 | 0.000 | 0.000 | 0.000 | 18.376 | 0 | 0.000 | 0 |
| H1A | HOR | DAL | 5X3.5X0.375 | 33.0 | 71.87 | 35.26 | g165P | 63.775 | LOAD 1 | 180.873 | 0.000 | 0.000 | 0.000 | 30.625 | 0 | 0.000 | 0 |
| H2A | HOR | DAL | 4X3X0.3125 | 33.0 | 59.47 | 49.58 | g152P | 61.555 | LOAD 1 | 124.146 | 0.000 | 0.000 | 0.000 | 28.750 | 0 | 0.000 | 0 |
| H3A | HOR | DAL | 3.5X3X0.3125 | 33.0 | 94.28 | 49.20 | g136P | 56.554 | LOAD 1 | 114.939 | 0.000 | 0.000 | 0.000 | 26.875 | 0 | 0.000 | 0 |
| H4A | HOR | DAL | 3.5X3X0.3125 | 33.0 | 54.59 | 45.31 | g444P | 52.078 | LOAD 1 | 114.939 | 0.000 | 0.000 | 0.000 | 25.000 | 0 | 0.000 | 0 |
| H5A | HOR | DAL | 3.5X3X0.3125 | 33.0 | 83.09 | 60.25 | g33X | 69.247 | LOAD 3 | 114.939 | 0.000 | 0.000 | 0.000 | 15.430 | 0 | 0.000 | 0 |
| H5B | HOR | DAS | 4X3.5X0.3125 | 36.0 | 103.76 | 38.34 | g48Y | 55.779 | LOAD 3 | 145.476 | 0.000 | 0.000 | 0.000 | 13.472 | 0 | 0.000 | 0 |
| H6A | HOR | DAL | 3.5X3X0.3125 | 33.0 | 55.43 | 45.36 | g89X | 52.131 | LOAD 3 | 114.939 | 0.000 | 0.000 | 0.000 | 14.167 | 0 | 0.000 | 0 |
| H6B | HOR | DAS | 4X3X0.3125 | 36.0 | 96.71 | 27.58 | g105Y | 37.348 | LOAD 4 | 135.432 | 0.000 | 0.000 | 0.000 | 12.436 | 0 | 0.000 | 0 |
| H7A | HOR | DAE | 3X3X0.3125 | 33.0 | 64.51 | 38.82 | g149P | 40.932 | LOAD 1 | 105.435 | 0.000 | 0.000 | 0.000 | 12.917 | 0 | 0.000 | 0 |
| H7B | HOR | DAS | 3.5X3X0.3125 | 36.0 | 65.04 | 18.25 | g159Y | 22.880 | LOAD 4 | 125.388 | 0.000 | 0.000 | 0.000 | 11.389 | 0 | 0.000 | 0 |
| H8 | HOR | DAL | 3.5X2.5X0.3125 | 33.0 | 29.28 | 19.55 | g181P | 20.610 | LOAD 1 | 105.435 | 0.000 | 0.000 | 0.000 | 17.500 | 0 | 0.000 | 0 |
| H9 | HOR | DAL | 3X2.5X0.25 | 33.0 | 66.31 | 21.68 | g206P | 16.937 | LOAD 1 | 78.111 | 0.000 | 0.000 | 0.000 | 15.625 | 0 | 0.000 | 0 |
| H10 | HOR | DAL | 3X2.5X0.25 | 33.0 | 49.84 | 19.91 | g231P | 15.551 | LOAD 1 | 78.111 | 0.000 | 0.000 | 0.000 | 13.750 | 0 | 0.000 | 0 |
| H11 | HOR | DAE | 2.5X2.5X0.25 | 33.0 | 42.51 | 20.85 | g257P | 14.741 | LOAD 1 | 70.686 | 0.000 | 0.000 | 0.000 | 12.813 | 0 | 0.000 | 0 |
| H12 | HOR | DAE | 2.5X2.5X0.25 | 33.0 | 37.65 | 19.21 | g281P | 13.577 | LOAD 1 | 70.686 | 0.000 | 0.000 | 0.000 | 11.875 | 0 | 0.000 | 0 |
| H13 | HOR | DAE | 2.5X2.5X0.25 | 33.0 | 31.25 | 18.59 | g306P | 13.137 | LOAD 1 | 70.686 | 0.000 | 0.000 | 0.000 | 10.938 | 0 | 0.000 | 0 |
| H14 | HOR | DAL | 3X2.5X0.25 | 33.0 | 30.04 | 16.14 | g331P | 12.608 | LOAD 1 | 78.111 | 0.000 | 0.000 | 0.000 | 10.000 | 0 | 0.000 | 0 |
| H15 | HOR | DAL | 3X2.5X0.25 | 33.0 | 14.10 | 7.25 | g356P | 5.665 | LOAD 1 | 78.111 | 0.000 | 0.000 | 0.000 | 18.125 | 0 | 0.000 | 0 |
| H16 | HOR | DAL | 3X2.5X0.25 | 33.0 | 5.59 | 5.59 | g370P | 4.370 | LOAD 1 | 78.111 | 0.000 | 0.000 | 0.000 | 16.250 | 0 | 0.000 | 0 |
| H17 | HOR | DAL | 3.5X3X0.3125 | 33.0 | 3.14 | 3.14 | g388P | 3.606 | LOAD 1 | 114.939 | 0.000 | 0.000 | 0.000 | 14.375 | 0 | 0.000 | 0 |
| H18 | HOR | CHN | C15 x 33.9 | 33.0 | 0.20 | 0.20 | g406P | 0.606 | LOAD 1 | 295.812 | 0.000 | 0.000 | 0.000 | 12.500 | 0 | 0.000 | 0 |
| R1 | RUD | SAE | 3X3X0.25 | 33.0 | 20.16 | 4.26 | g210X | 1.821 | LOAD 4 | 42.768 | 0.000 | 0.000 | 0.000 | 22.097 | 0 | 0.000 | 0 |

*** End of Report



Foundation Loads from Analysis Run

MAXIMUM DOWNWARD LOAD = 736 K
MAXIMUM UPWARD LOAD = 549 K

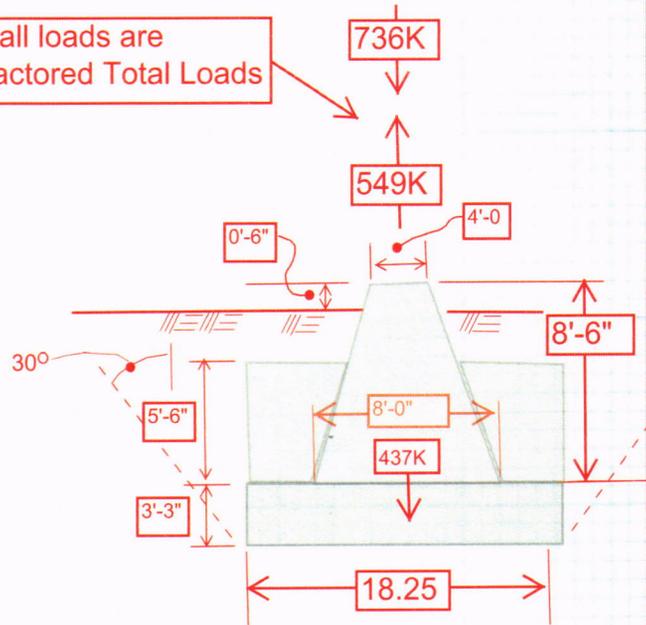
all loads are Factored Total Loads

ANCHOR BOLT CHECK

$23.86 \text{ in}^2 \times .75 \times .75 \times 58 \text{ KSI} = 778 \text{ K O.K.}$
70%

REBAR CHECK (Piers)

$18.8 \text{ in}^2 \times (.85) 40 = 639.2 \text{ K} > 549 \text{ K O.K.}$
86%



UPLIFT CHECK

Concrete

$18.25^2 \times 8.75 = 2914 \text{ ft}^3 \quad \times .15 = \dots\dots\dots 437.1 \text{ K}$

Wt of SOIL

$[31.2^2 + (31.2' \times 18.25') + 18.25'^2] 11.0/3 = 6878 \text{ ft}^3$
 $(6878 \text{ ft}^3 - 2914 \text{ ft}^3) \times .11 = \dots\dots\dots 436 \text{ K}$

$437.1 (.9) + 436 (.75) = 720 \text{ K} > 549 \text{ K O.K.}$

DOWNWARD LOAD SOIL CHECK (Allow Stress Method)

$437 \text{ K} + (18.25^2 \times 2.50 \times .10) + 735 \text{ K} (.65) = 998 \text{ K}$
 $998 / 18.25^2 = 2.99 \text{ KSF} < 3.5 \text{ KSF Allowable per orig Geotech report}$
O.K. 85%