STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

April 16, 2009

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

RE: **EM-VER-141-090327** – Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 61 Lowell Davis Drive, Thompson, Connecticut.

Dear Attorney Baldwin:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the following conditions:

- The tower shall be modified per the attached drawings of the structural analysis report dated March 23, 2009 and sealed by Robert Semaan, P.E. prior to the antenna swap;
- Post-construction tower and foundation ratings of not more than 100 percent each shall be achieved;
- A signed letter from a Professional Engineer duly licensed in the State of Connecticut shall be submitted to the Council to certify that the modifications have been properly completed and post-construction tower and foundation ratings of not more than 100 percent each have been achieved;
- The proposed coax shall be configured per page 3 of the structural analysis report dated March 23, 2009 and sealed by Robert Semaan; and
- The Council shall be notified in writing that the coax was configured as specified.

The proposed modifications are to be implemented as specified here and in your notice dated March 27, 2009, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73.

CSC
CONNECTICUT SITING COUNCIL

Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/MP/laf

c: The Honorable Larry Groh, First Selectman, Town of Thompson
John E. Mahon, Jr., Zoning Enforcement Officer, Town of Thompson
Charter Communications

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square, New Britain, CT 06051
Phone: (860) 827-2935 Fax: (860) 827-2950
E-Mail: siting.council@ct.gov
www.ct.gov/csc

March 30, 2009

The Honorable Larry Groh
First Selectman
Town of Thompson
Town Office Building
815 Riverside Drive
P. O. Box 899
North Grosvenordale, CT 06255

RE: **EM-VER-141-090327** - Cellco Partnership d/b/a Verizon Wireless notice of intent to modify an existing telecommunications facility located at 61 Lowell Davis Drive, Thompson, Connecticut.

Dear Mr. Groh:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by April 13, 2009.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/laf

Enclosure: Notice of Intent

c: John E. Mahon, Jr., Zoning Enforcement Officer, Town of Thompson

CSC
CONNECTICUT SITING COUNCIL

ROBINSON & COLE LLP

ORIGINAL

KENNETH C. BALDWIN

280 Trumbull Street
Hartford, CT 06103-3597
Main (860) 275-8200
Fax (860) 275-8299
kbaldwin@rc.com
Direct (860) 275-8345

EM-VER-141-090327

March 27, 2009

Via Hand Delivery

S. Derek Phelps
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: **Notice of Exempt Modification – Antenna Swap**
61 Lowell Davis Drive, Thompson, Connecticut

Dear Mr. Phelps:

Cellco Partnership d/b/a Verizon Wireless ("Cellco") currently maintains a wireless telecommunications facility at the above referenced location. The Cellco facility consists of twelve panel antennas at the 235-foot level and a single antenna at the 225-foot level on the existing 250-foot guyed lattice tower. Cellco intends to modify its installation by replacing its twelve antennas at the 235-foot level, with six (6) LPA-80060/6CF and six (6) LPA-185080/8CF antennas. The tower is owned by Charter Communications. Attached behind Tab 1 are the specifications for the proposed replacement antennas.

Please accept this letter as notification pursuant to R.C.S.A. § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Lawrence K. Groh, Jr., First Selectman of the Town of Thompson. Pursuant to a Council directive, a copy of this letter is also being sent to NUMA Tool Company, the owner of the property on which the facility is located.

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

1. The proposed modifications will not result in any increase in the overall height of the existing structure. Cellco's replacement antennas will be located at the same height and location as the existing antennas.

2. The proposed modifications will not require the extension of the site compound.

3. The proposed modifications will not increase noise levels at the facility by six decibels or more.

4. The operation of the replacement antennas will not increase radio frequency (RF) power density levels at the facility to a level at or above the Federal Communications Commission (FCC) adopted safety standard. A cumulative power density table for the facility is included behind Tab 2.

Also attached is a Structural Analysis Report confirming that the tower, with structural modifications, can support Cellco's proposed antenna changes. (See Tab 3).

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

Sincerely,

Kenneth C. Baldwin

Enclosures
Copy to:
Lawrence K. Groh, Jr., Thompson First Selectman
NUMA Tool Company
Sandy M. Carter

Vertically Polarized, Log-Periodic 80° / 14 dBd
806-960 MHz

LPA-80080/6CF __
When ordering replace "__" with connector type.

Mechanical specifications

Length	1800	mm	70.9	in
Width	140	mm	5.5	in
Depth	335	mm	13.2	in
Depth with z-bracket	375	mm	14.8	in
Weight [4]	9.5	kg	21.0	lbs
Wind Area Fore/Aft [6]	0.25	m^2	2.7	ft^2
Wind Area Side [6]	0.61	m^2	6.6	ft^2
Max Wind Survivability [6]	>201	km/hr	>125	mph
Wind Load @ 100 mph (161 km/hr) [6]				
Fore/Aft	415	N	93	lbf
Side	878	N	198	lbf

Antenna consisting of aluminum alloy with brass feedlines covered by a gray, UV safe fiberglass radome. RoHS compliant.

Mounting & Downtilting

Mounting hardware attaches to pipe diameter Ø50-102 mm; Ø2.0-4.0 in. If the lock-down brace is used, the maximum diameter is Ø88.9 mm (3.5 in).

Mechanical downtilt angle 0-22°
Mounting & Downtilt Bracket Kit 21700000

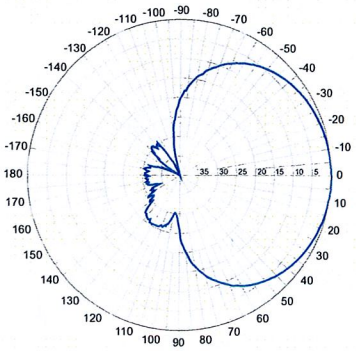
Electrical specifications

Frequency Range	806-960 MHz
Impedance	50Ω
Connector [3]	NE or E-DIN Female 1 port / Center
VSWR [1]	≤ 1.4:1
Polarization	Vertical
Gain [1]	14 dBd
Power Rating [2]	500 W
Half Power Angle [1]	
Horizontal Beamwidth	80°
Vertical Beamwidth	10°
Electrical downtilt [5]	0°
Null fill [1]	10%
Lightning protection	Direct ground

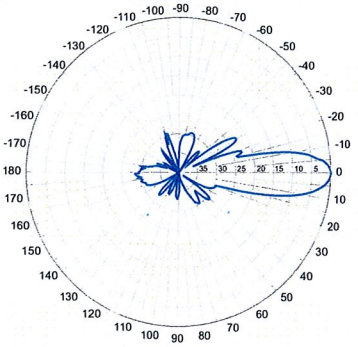
1) Typical values.
2) Power rating limited by connector only.
3) NE indicates an elongated N connector.
E-DIN indicates an elongated DIN connector.
4) Antenna weight does not include brackets.
5) Add'l downtilts may be available. Check website for details.
6) Values reflect installation with all three brackets utilized.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

Radiation-pattern[1]



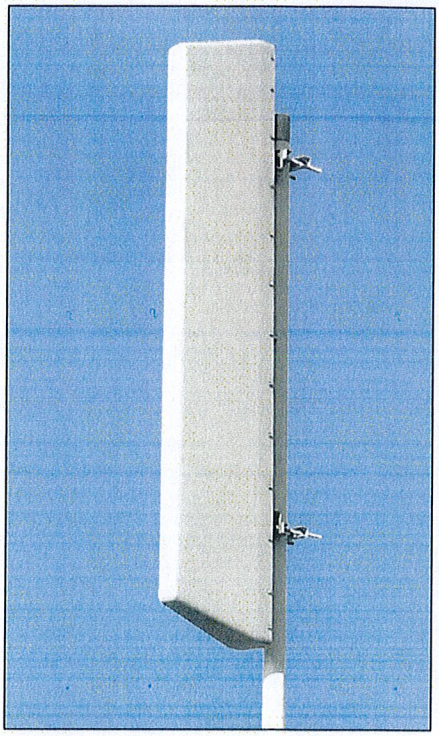
Horizontal



Vertical

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the front-to-back ratio.



Featuring our Exclusive 3T Technology™ Antenna Design:

- True log-periodic design allows for superior front-to-side characteristics to minimize sector overlap.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad bandwidth and superior performance.
- Air as insulation for virtually no internal signal loss.

Warranty:
This antenna is under a five-year limited warranty for repair or replacement.

Revision Date: 08/18/08

806-960 MHz

815.399.0001 • antel@antelinc.com • www.antelinc.com

Amphenol Antel, Inc. The Antenna Technology Company

Vertically Polarized, Log Periodic 80° / 16.5 dBi

LPA-185080/8CF __ 2°

When ordering replace "__" with connector type.

Mechanical specifications

Length	1204 mm	47.4 in
Width	104 mm	4.1 in
Depth	150 mm	5.9 in
Depth with t-bracket	178 mm	7.0 in
4) Weight	3.2 kg	7.0 lbs
Wind Area		
Fore/Aft	0.13 m^2	1.4 ft^2
Side	0.14 m^2	1.6 ft^2
Rated Wind Velocity (Safety factor 2.0)	>658 km/hr	>409 mph
Wind Load @ 100 mph (161 km/hr)		
Fore/Aft	202 N	45.0 lbs
Side	270 N	60.8 lbs

Antenna consisting of aluminum alloy with brass feedlines covered by a UV safe fiberglass radome.

Mounting and Downtilting

Mounting brackets attach to a pipe diameter of Ø50-102 mm (2.0-4.0 in).

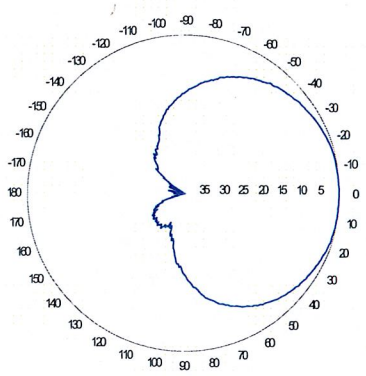
Mounting bracket kit #26799997
Downtilt bracket kit #26799999

The downtil bracket kit includes the mounting bracket kit.

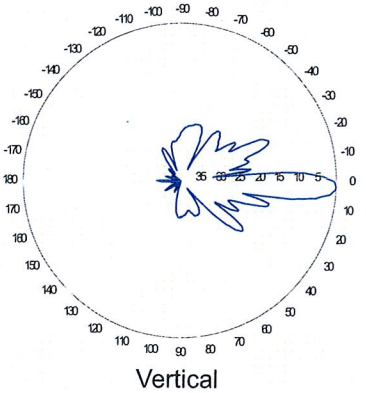
Electrical specifications

	Frequency Range	1850-1990 MHz
	Impedance	50Ω
3)	Connector(s)	NE or E-DIN 1 port / center
1)	VSWR	≤ 1.4:1
	Polarization	Vertical
1)	Gain	16.5 dBi
2)	Power Rating	250 W
1)	Half Power Angle	
	H-Plane	80°
	E-Plane	8°
1)	Electrical Downtilt	2°
1)	Null Fill	10%
	Lightning Protection	Direct Ground

Radiation pattern1)



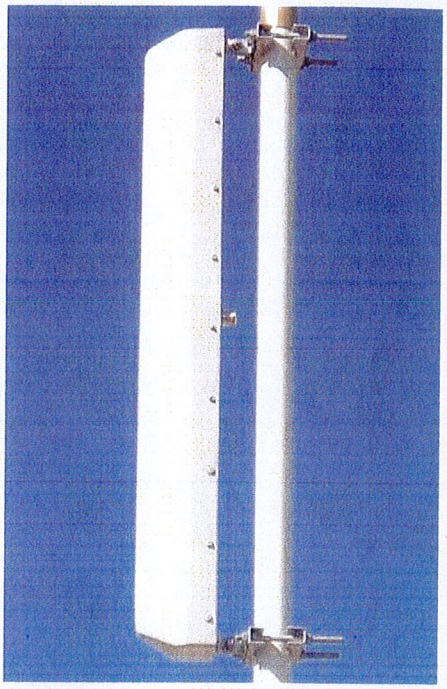
Horizontal



Vertical

Radiation patterns for all antennas are measured with the antenna mounted on a fiberglass pole.

Mounting on a metal pole will typically improve the Front-to-Back ratio.



Amphenol Antel's Exclusive 3T (True Transmission Line Technology) Antenna Design:

- True log-periodic design allows for superior front-to-side characteristics to minimize sector overlap.
- Unique feedline design eliminates the need for conventional solder joints in the signal path.
- A non-collinear system with access to every radiating element for broad band-width and superior performance.
- Air as insulation for virtually no internal signal loss.

This Amphenol Antel antenna is under a five-year limited warranty for repair or replacement.

Antenna available with center-fed connector only.

1) Typical values.
2) Power rating limited by connector only.
3) NE indicates an elongated N connector.
   E-DIN indicates an elongated DIN connector.
4) The antenna weight listed above does not include the bracket weight.

Improvements to mechanical and/or electrical performance of the antenna may be made without notice.

CF Denotes a Center-Fed Connector.

1850-1990 MHz

Amphenol Antel, Inc. The Antenna Technology Company

Amphenol Antel, Inc. 1300 Capital Drive Rockford, Illinois 61109 USA Tel. (815) 399-0001
Toll-Free (888) 417-9562 Fax. (815) 399-0156 antel@antelinc.com www.antelinc.com

Revision Date: 7/12/07

	General	Power	Density					
Site Name: Thompson								
Tower Height: Verizon @ 235 ft								
CARRIER	**# OF CHAN.**	**WATTS ERP**	**HEIGHT**	**CALC. POWER DENS**	**FREQ.**	**MAX. PERMISS. EXP.**	**FRACTION MPE**	**Total**
*AT&T UMTS	1	500	212	0.0040	880	0.5867	0.68%	
*AT&T GSM	4	296	212	0.0095	880	0.5867	1.61%	
*AT&T GSM	2	427	212	0.0068	1900	1.0000	0.68%	
*CONN-2 (Metro Mobile)	1	5130	235	0.0334	875	0.5833	5.73%	
*Verizon	1	200	227	0.0014	880	0.5867	0.24%	
*Nextel	9	100	190	0.0090	851	0.5673	1.58%	
*Paging	1	500	188	0.0051	928	0.6187	0.82%	
*EMS/Town	3	500	172	0.0182	450	0.3000	6.08%	
*Town	1	500	160	0.0070	66	0.2	3.51%	
Verizon	**7**	**322**	**235**	**0.0147**	**1970**	**1.0000**	**1.47%**	
Verizon	**9**	**317**	**235**	**0.0186**	**869**	**0.5793**	**3.21%**	
								25.61%
* Source: Siting Council								

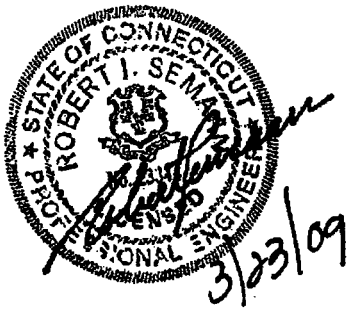
1079 N. 205th Street
Elkhorn, NE 68022
Ph: 402-289-1888
Fax: 402-289-1861

SEMAAN ENGINEERING SOLUTIONS

250 ft Guyed Tower
Modification Package

Prepared for:
KGI
6200 Bridge Point Parkway
Building IV, Suite 520
Austin, TX 78730

Site: 11469
Verizon
Thompson, CT



March 23, 2009
(Revision)

1079 N. 205th Street
Elkhorn, NE 68022
Ph: 402-289-1888
Fax: 402-289-1861

SEMAAN ENGINEERING SOLUTIONS

250 ft Guyed Tower
Modification Package

Prepared for:
KGI
6200 Bridge Point Parkway
Building IV, Suite 520
Austin, TX 78730

Site: 11469
Verizon
Thompson, CT

March 23, 2009
(Revision)

Ms. Michelle Giannascoli
KGI
6200 Bridge Point Parkway
Building IV, Suite 520
Austin, TX 78730

Re: Site Number 11469 – Thompson, CT.

Dear Ms. Giannascoli:

We have completed the structural analysis for the existing Guyed Tower, located at the above referenced site. The purpose of this analysis is to determine that the existing Guyed Tower design is in conformance with the TIA/EIA-222 Rev F standard and local building codes for the proposed antennae loads installation. Refer to the Review and Recommendations section at the end of this report for the analysis results.

Description of Structure:

The structure is a 250 ft Guyed Tower.

Refer to the HighTower Solutions mapping dated January 9, 2008 for a detailed description of the structure.

Method of analysis:

The tower was analyzed using Semaan Engineering Solutions' software suite for communication structures. The structural analysis is performed using the SAPS finite element engine. The method is 3D, non-linear, which accounts for the second order geometric effects due to the displacements. It also treats guys as exact cable elements and therefore is ideal for guyed towers. The analysis was performed in conformance with TIA/EIA-222 Rev F and local building codes for a basic wind speed of 85 mph no ice and 74 mph with 1/2" radial ice (fastest mile). This is in conformance with the IBC 2006: Section 1609.1.1, Exception (4) and Section 3108.4. Wind is applied to the structure, accessories and antennas.

Structure loading:

The following loads were used in the tower analysis:

Elev (ft)	Qty	Antennas	Mounts	Coax	Carrier
204.0	9	DUO1417-8686	(3) PCS frames	(9) 1 1/4	
	9	TMAs			
198.0	1	10' Omni	Sidearm	(1) 7/8	
188.0	1	5' Omni	Sidearm	(1) 1 1/4	
184.5	1	10' Omni	Sidearm	(1) 1 5/8	
184.0	1	10' Omni	Sidearm	(1) 1 5/8	
171.5	1	V Shaped Yagi	Dish Mount	(1) 1/2	
153.0	1	15' Element	Leg Mounted	(1) 1	
78.0	1	4 ft Channel Master Dish	Dish Mount	(1) 1 5/8	

Proposed Loads:

Elev (ft)	Qty	Antennas	Mounts	Coax	Carrier
235.0	6	LPA80080/6CF	Sector Frames	(12) 1 5/8	Verizon
	6	LPA185080/8CF2		(12) 1 5/8	
225.0	1	DB842H65E-XY	Leg Mounted	(2) 1 5/8	

The proposed coax lines must be stacked and distributed so that no more than (15) lines are exposed to the wind on any one face

Results of Analysis:

Refer to the attached Computer Summary sheets for detailed analysis results.

Structure:

The existing tower is not structurally capable of supporting the proposed antennas. The guy wires are overstressed at elevations 59.5 ft, 119.5 ft and 179.5 ft. New larger guy cables will be required at these elevations. Refer to the attached drawings for additional information.

The maximum leg usage is: 104.0% (without mods) and 97.0% (with mods).
The maximum diagonal usage is: 100.0% (without mods) and 97.0% (with mods).
The maximum horizontal usage is: 95.0% (without mods) and 78.0% (with mods).
The maximum guy usage is: 160.0% (without mods) and 100.0% (with mods).

Foundation:

Anchor Radius (Ft)	Design Uplift (kip)	Analysis Uplift (kip)
140.0 ft (new)	N/A	17.73
182.0 ft	N/A	36.72

The foundation has been investigated using the supplied documents and soils report and was found to be structurally inadequate to support the required loads. A new set of inner anchors is required at the 140 ft radius. Refer to the attached drawings for additional information.

Review and Recommendations:

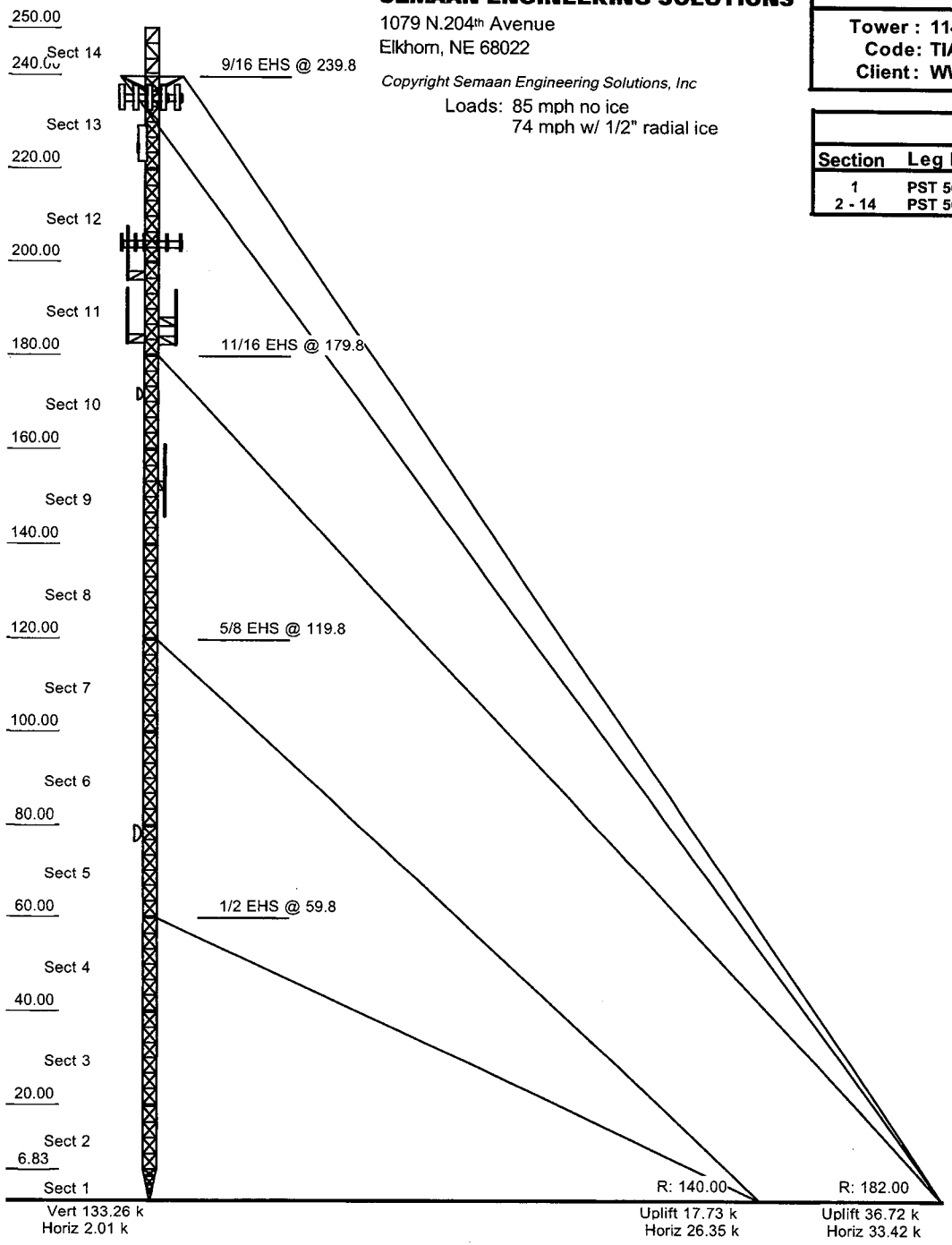
Based on the analysis results, the existing structure (with the proposed modifications installed and approved per the attached drawings) meets the requirements per the TIA/EIA-222 Rev F standards for a basic wind speed of 85 mph no ice and 74 mph with 1/2" radial ice.

Attachments:

1. Drawing S-01, Revision 2, dated 03/23/2009.
2. Drawing S-02, Revision 1, dated 12/19/2008.
3. Drawing S-03, Revision 2, dated 03/23/2009.

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022

Loads: 85 mph no ice
74 mph w/ 1/2" radial ice



Job Information

Tower : 11469_FIX2	Location : Thompson, CT	
Code: TIA/EIA-222 Rev F	Shape : Triangle	Base Width : 3.00 ft
Client : WWWWWWW		

Sections Properties

Section	Leg Members		Diagonal Members	Horizontal Members
1	PST 50ksi	2-1/2" DIA PIPE	SOL 36ksi 3/4" SOLID	CHN 36ksi C6 x 8.2
2 - 14	PST 50ksi	2-1/2" DIA PIPE	SOL 36ksi 3/4" SOLID	SOL 36ksi 5/8" SOLID

Discrete Appurtenance

Elev (ft)	Type	Qty	Description
240.00	Other	1	Torque Arm
235.00	Panel	6	LPA 185080/8CF
235.00	Panel	6	LPA-80080/6CF
235.00	Mounting Frame	3	PCS frames
225.00	Panel	1	RS90-12-00DA
204.00		9	TMAs
204.00	Mounting Frame	3	PCS frames
204.00	Panel	9	DUO1417-8686
198.00	Straight Arm	1	Sidearm
198.00	Whip	1	10' Omni
188.00	Whip	1	5' Omni
188.00	Straight Arm	1	Sidearm
184.50	Straight Arm	1	Sidearm
184.50	Whip	1	10' Omni
184.00	Straight Arm	1	Sidearm
184.00	Whip	1	10' Omni
171.50	Dish	1	V Shaped Yagi
153.00	Whip	1	15' Element
78.00	Dish	1	4 ft Channel Master Dish

Linear Appurtenance

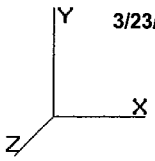
Elev (ft) From	To	Qty	Description
0.000	235.00	12	1 5/8" Coax
0.000	235.00	12	1 5/8" Coax
0.000	225.00	2	1 5/8" Coax
0.000	204.00	5	1 1/4" Coax
0.000	204.00	4	1 1/4" Coax
0.000	200.00	2	7/8" Coax
0.000	198.00	1	7/8" Coax
0.000	188.00	1	1 1/4" Coax
0.000	184.50	1	1 5/8" Coax
0.000	184.00	1	1 5/8" Coax
0.000	171.50	1	1/2" Coax
0.000	153.00	1	1" Coax
0.000	78.000	1	1 5/8" Coax

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Gh : 1.10

Section Forces

LoadCase Normal No Ice — 85.00 mph Wind Normal To Face with No Ice

Allow Stress Inc: 1.333
Dead LF: 1.000
Wind LF: 1.000

Sect Seq	Wind Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Rr	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	Eff Face	
14	245.0	32.80	0.00	6.86	0.00	0.23	2.50	1.00	1.00	0.60	4.10	0.00	0.00	270.6	0.0	369.51	0.00	369.51	1	
13	230.0	32.21	0.00	44.76	0.00	0.75	1.79	1.00	1.00	0.85	38.22	0.00	0.00	1,019.2	0.0	2,416.83	0.00	2,416.83	2	
12	210.0	31.38	0.00	55.00	0.00	0.92	1.95	1.00	1.00	1.00	54.93	0.00	0.00	1,217.7	0.0	3,692.74	0.00	3,692.74	2	
11	190.0	30.50	0.00	56.12	0.00	0.94	1.98	1.00	1.00	1.00	56.12	0.00	0.00	1,357.0	0.0	3,722.76	0.00	3,722.76	1	
10	170.0	29.55	0.75	61.15	0.00	1.00	2.10	1.00	1.00	1.00	61.90	0.00	0.00	1,435.2	0.0	4,221.74	0.00	3,897.43	1	**
9	150.0	28.51	0.00	61.32	0.00	1.00	2.10	1.00	1.00	1.00	61.32	0.00	0.00	1,408.7	0.0	4,035.39	0.00	3,760.51	1	**
8	130.0	27.37	0.00	61.32	0.00	1.00	2.10	1.00	1.00	1.00	61.32	0.00	0.00	1,412.3	0.0	3,873.72	0.00	3,609.86	1	**
7	110.0	26.09	0.75	61.15	0.00	1.00	2.10	1.00	1.00	1.00	61.90	0.00	0.00	1,447.0	0.0	3,727.99	0.00	3,441.61	1	**
6	90.00	24.64	0.00	61.32	0.00	1.00	2.10	1.00	1.00	1.00	61.32	0.00	0.00	1,412.3	0.0	3,487.38	0.00	3,249.84	1	**
5	70.00	22.93	0.00	61.32	0.00	1.00	2.10	1.00	1.00	1.00	61.32	2.97	0.00	1,431.0	0.0	3,245.75	89.83	3,024.67	1	**
4	50.00	20.83	0.75	61.15	0.00	1.00	2.10	1.00	1.00	1.00	61.90	3.30	0.00	1,467.8	0.0	2,976.05	90.67	2,747.43	1	**
3	30.00	18.50	0.00	61.32	0.00	1.00	2.10	1.00	1.00	1.00	61.32	3.30	0.00	1,433.1	0.0	2,618.22	80.52	2,439.88	1	**
2	13.42	18.50	0.00	40.28	0.00	1.00	2.10	1.00	1.00	1.00	40.28	2.17	0.00	939.1	0.0	1,720.07	53.01	1,606.26	1	**
1	3.42	18.50	3.75	20.03	0.00	1.00	2.10	1.00	1.00	1.00	23.78	1.13	0.00	643.2	0.0	1,015.47	27.51	416.79	1	**
														16,894.2	0.0			38,396.11		

** = 2QzGhAg Controls

LoadCase 60 deg No Ice — 85.00 mph Wind at 60 deg From Face with No Ice

Allow Stress Inc: 1.333
Dead LF: 1.000
Wind LF: 1.000

Sect Seq	Wind Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Rr	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	Eff Face	
14	245.0	32.80	0.00	6.86	0.00	0.23	2.50	0.80	1.00	0.60	4.10	0.00	0.00	270.6	0.0	369.51	0.00	369.51	1	
13	230.0	32.21	0.00	44.76	0.00	0.75	1.79	0.80	1.00	0.85	38.22	0.00	0.00	1,019.2	0.0	2,416.83	0.00	2,416.83	2	
12	210.0	31.38	0.00	55.00	0.00	0.92	1.95	0.80	1.00	1.00	54.93	0.00	0.00	1,217.7	0.0	3,692.74	0.00	3,692.74	2	
11	190.0	30.50	0.00	56.12	0.00	0.94	1.98	0.80	1.00	1.00	56.12	0.00	0.00	1,357.0	0.0	3,722.76	0.00	3,722.76	1	
10	170.0	29.55	0.75	61.15	0.00	1.00	2.10	0.80	1.00	1.00	61.75	0.00	0.00	1,435.2	0.0	4,211.51	0.00	3,897.43	1	**
9	150.0	28.51	0.00	61.32	0.00	1.00	2.10	0.80	1.00	1.00	61.32	0.00	0.00	1,408.7	0.0	4,035.39	0.00	3,760.51	1	**
8	130.0	27.37	0.00	61.32	0.00	1.00	2.10	0.80	1.00	1.00	61.32	0.00	0.00	1,412.3	0.0	3,873.72	0.00	3,609.86	1	**
7	110.0	26.09	0.75	61.15	0.00	1.00	2.10	0.80	1.00	1.00	61.75	0.00	0.00	1,447.0	0.0	3,718.96	0.00	3,441.61	1	**
6	90.00	24.64	0.00	61.32	0.00	1.00	2.10	0.80	1.00	1.00	61.32	0.00	0.00	1,412.3	0.0	3,487.38	0.00	3,249.84	1	**
5	70.00	22.93	0.00	61.32	0.00	1.00	2.10	0.80	1.00	1.00	61.32	2.97	0.00	1,431.0	0.0	3,245.75	89.83	3,024.67	1	**
4	50.00	20.83	0.75	61.15	0.00	1.00	2.10	0.80	1.00	1.00	61.75	3.30	0.00	1,467.8	0.0	2,968.83	90.67	2,747.43	1	**
3	30.00	18.50	0.00	61.32	0.00	1.00	2.10	0.80	1.00	1.00	61.32	3.30	0.00	1,433.1	0.0	2,618.22	80.52	2,439.88	1	**
2	13.42	18.50	0.00	40.28	0.00	1.00	2.10	0.80	1.00	1.00	40.28	2.17	0.00	939.1	0.0	1,720.07	53.01	1,606.26	1	**
1	3.42	18.50	3.75	20.03	0.00	1.00	2.10	0.80	1.00	1.00	23.03	1.13	0.00	643.2	0.0	983.44	27.51	416.79	1	**
														16,894.2	0.0			38,396.11		

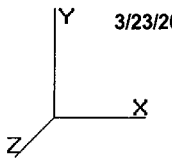
** = 2QzGhAg Controls

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Gh : 1.10

Section Forces

LoadCase 90 deg No Ice

85.00 mph Wind at 90 deg From Face with No Ice

Allow Stress Inc: 1.333
Dead LF: 1.000
Wind LF: 1.000

Sect Seq	Wind Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Rr	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	Eff Face	
14	245.0	32.80	0.00	6.86	0.00	0.23	2.50	0.85	1.00	0.60	4.10	0.00	0.00	270.6	0.0	369.51	0.00	369.51	1	
13	230.0	32.21	0.00	44.76	0.00	0.75	1.79	0.85	1.00	0.85	38.22	0.00	0.00	1,019.2	0.0	2,416.83	0.00	2,416.83	2	
12	210.0	31.38	0.00	55.00	0.00	0.92	1.95	0.85	1.00	1.00	54.93	0.00	0.00	1,217.7	0.0	3,692.74	0.00	3,692.74	2	
11	190.0	30.50	0.00	56.12	0.00	0.94	1.98	0.85	1.00	1.00	56.12	0.00	0.00	1,357.0	0.0	3,722.76	0.00	3,722.76	1	
10	170.0	29.55	0.75	61.15	0.00	1.00	2.10	0.85	1.00	1.00	61.79	0.00	0.00	1,435.2	0.0	4,214.06	0.00	3,897.43	1	**
9	150.0	28.51	0.00	61.32	0.00	1.00	2.10	0.85	1.00	1.00	61.32	0.00	0.00	1,408.7	0.0	4,035.39	0.00	3,760.51	1	**
8	130.0	27.37	0.00	61.32	0.00	1.00	2.10	0.85	1.00	1.00	61.32	0.00	0.00	1,412.3	0.0	3,873.72	0.00	3,609.86	1	**
7	110.0	26.09	0.75	61.15	0.00	1.00	2.10	0.85	1.00	1.00	61.79	0.00	0.00	1,447.0	0.0	3,721.22	0.00	3,441.61	1	**
6	90.00	24.64	0.00	61.32	0.00	1.00	2.10	0.85	1.00	1.00	61.32	0.00	0.00	1,412.3	0.0	3,487.38	0.00	3,249.84	1	**
5	70.00	22.93	0.00	61.32	0.00	1.00	2.10	0.85	1.00	1.00	61.32	2.97	0.00	1,431.0	0.0	3,245.75	89.83	3,024.67	1	**
4	50.00	20.83	0.75	61.15	0.00	1.00	2.10	0.85	1.00	1.00	61.79	3.30	0.00	1,467.8	0.0	2,970.64	90.67	2,747.43	1	**
3	30.00	18.50	0.00	61.32	0.00	1.00	2.10	0.85	1.00	1.00	61.32	3.30	0.00	1,433.1	0.0	2,618.22	80.52	2,439.88	1	**
2	13.42	18.50	0.00	40.28	0.00	1.00	2.10	0.85	1.00	1.00	40.28	2.17	0.00	939.1	0.0	1,720.07	53.01	1,606.26	1	**
1	3.42	18.50	3.75	20.03	0.00	1.00	2.10	0.85	1.00	1.00	23.22	1.13	0.00	643.2	0.0	991.45	27.51	416.79	1	**
														16,894.2	0.0			38,396.11		

** = 2QzGhAg Controls

LoadCase Normal Ice

73.61 mph Wind Normal To Face with Ice

Allow Stress Inc: 1.333
Dead LF: 1.000
Wind LF: 1.000

Sect Seq	Wind Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Rr	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	Eff Face	
14	245.0	24.60	0.00	11.00	3.76	0.37	2.13	1.00	1.00	0.64	7.03	0.00	0.00	387.4	116.7	405.33	0.00	405.33	1	
13	230.0	24.16	0.00	69.68	24.02	1.00	2.10	1.00	1.00	1.00	69.68	0.00	0.00	1,856.2	837.1	3,885.75	0.00	3,186.54	2	**
12	210.0	23.54	0.00	85.47	29.52	1.00	2.10	1.00	1.00	1.00	85.47	0.00	0.00	2,339.5	1,121.8	4,644.13	0.00	3,104.78	2	**
11	190.0	22.87	0.00	88.97	31.89	1.00	2.10	1.00	1.00	1.00	88.97	0.00	0.00	2,739.0	1,382.0	4,697.68	0.00	3,017.26	1	**
10	170.0	22.16	0.75	96.62	34.52	1.00	2.10	1.00	1.00	1.00	97.37	0.00	0.00	2,906.6	1,471.4	4,980.43	0.00	2,922.88	1	**
9	150.0	21.38	0.00	96.79	34.52	1.00	2.10	1.00	1.00	1.00	96.79	0.00	0.00	2,882.2	1,473.6	4,776.94	0.00	2,820.20	1	**
8	130.0	20.52	0.00	96.79	34.52	1.00	2.10	1.00	1.00	1.00	96.79	0.00	0.00	2,892.8	1,480.5	4,585.56	0.00	2,707.22	1	**
7	110.0	19.57	0.75	96.62	34.52	1.00	2.10	1.00	1.00	1.00	97.37	0.00	0.00	2,944.0	1,497.0	4,397.95	0.00	2,581.04	1	**
6	90.00	18.48	0.00	96.79	34.52	1.00	2.10	1.00	1.00	1.00	96.79	0.00	0.00	2,892.8	1,480.5	4,128.23	0.00	2,437.22	1	**
5	70.00	17.20	0.00	96.79	34.52	1.00	2.10	1.00	1.00	1.00	96.79	2.97	1.50	2,938.7	1,507.7	3,842.20	101.40	2,268.35	1	**
4	50.00	15.62	0.75	96.62	34.52	1.00	2.10	1.00	1.00	1.00	97.37	3.30	1.67	2,995.1	1,527.3	3,510.87	102.34	2,060.44	1	**
3	30.00	13.87	0.00	96.79	34.52	1.00	2.10	1.00	1.00	1.00	96.79	3.30	1.67	2,943.9	1,510.8	3,099.35	90.88	1,829.79	1	**
2	13.42	13.87	0.00	63.50	22.60	1.00	2.10	1.00	1.00	1.00	63.50	2.17	1.10	1,930.6	991.5	2,033.23	59.83	1,204.62	1	**
1	3.42	13.87	3.75	31.66	11.63	1.00	2.10	1.00	1.00	1.00	35.41	1.13	0.57	1,225.8	582.6	1,134.00	31.05	312.57	1	**
														33,874.6	16,980.4			30,858.27		

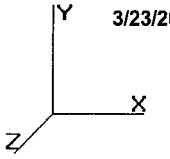
** = 2QzGhAg Controls

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Gh : 1.10

Section Forces

LoadCase 60 deg Ice

73.61 mph Wind at 60 deg From Face with Ice

Allow Stress Inc: 1.333
Dead LF: 1.000
Wind LF: 1.000

Sect Seq	Wind Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Rr	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	Eff Face	
14	245.0	24.60	0.00	11.00	3.76	0.37	2.13	0.80	1.00	0.64	7.03	0.00	0.00	387.4	116.7	405.33	0.00	405.33	1	
13	230.0	24.16	0.00	69.68	24.02	1.00	2.10	0.80	1.00	1.00	69.68	0.00	0.00	1,856.2	837.1	3,885.75	0.00	3,186.54	2	**
12	210.0	23.54	0.00	85.47	29.52	1.00	2.10	0.80	1.00	1.00	85.47	0.00	0.00	2,339.5	1,121.8	4,644.13	0.00	3,104.78	2	**
11	190.0	22.87	0.00	88.97	31.89	1.00	2.10	0.80	1.00	1.00	88.97	0.00	0.00	2,739.0	1,382.0	4,697.68	0.00	3,017.26	1	**
10	170.0	22.16	0.75	96.62	34.52	1.00	2.10	0.80	1.00	1.00	97.22	0.00	0.00	2,906.6	1,471.4	4,972.75	0.00	2,922.88	1	**
9	150.0	21.38	0.00	96.79	34.52	1.00	2.10	0.80	1.00	1.00	96.79	0.00	0.00	2,882.2	1,473.6	4,776.94	0.00	2,820.20	1	**
8	130.0	20.52	0.00	96.79	34.52	1.00	2.10	0.80	1.00	1.00	96.79	0.00	0.00	2,892.8	1,480.5	4,585.56	0.00	2,707.22	1	**
7	110.0	19.57	0.75	96.62	34.52	1.00	2.10	0.80	1.00	1.00	97.22	0.00	0.00	2,944.0	1,497.0	4,391.18	0.00	2,581.04	1	**
6	90.00	18.48	0.00	96.79	34.52	1.00	2.10	0.80	1.00	1.00	96.79	0.00	0.00	2,892.8	1,480.5	4,128.23	0.00	2,437.22	1	**
5	70.00	17.20	0.00	96.79	34.52	1.00	2.10	0.80	1.00	1.00	96.79	2.97	1.50	2,938.7	1,507.7	3,842.20	101.40	2,268.35	1	**
4	50.00	15.62	0.75	96.62	34.52	1.00	2.10	0.80	1.00	1.00	97.22	3.30	1.67	2,995.1	1,527.3	3,505.46	102.34	2,060.44	1	**
3	30.00	13.87	0.00	96.79	34.52	1.00	2.10	0.80	1.00	1.00	96.79	3.30	1.67	2,943.9	1,510.8	3,099.35	90.88	1,829.79	1	**
2	13.42	13.87	0.00	63.50	22.60	1.00	2.10	0.80	1.00	1.00	63.50	2.17	1.10	1,930.6	991.5	2,033.23	59.83	1,204.62	1	**
1	3.42	13.87	3.75	31.66	11.63	1.00	2.10	0.80	1.00	1.00	34.66	1.13	0.57	1,225.8	582.6	1,109.99	31.05	312.57	1	**
														33,874.6	16,980.4			30,858.27		

** = 2QzGhAg Controls

LoadCase 90 deg Ice

73.61 mph Wind at 90 deg From Face with Ice

Allow Stress Inc: 1.333
Dead LF: 1.000
Wind LF: 1.000

Sect Seq	Wind Height (ft)	qz	Total Flat Area (sqft)	Total Round Area (sqft)	Ice Round Area (sqft)	Sol Ratio	Cf	Df	Dr	Rr	Eff Area (sqft)	Linear Area (sqft)	Ice Linear Area (sqft)	Total Weight (lb)	Weight Ice (lb)	Struct Force (lb)	Linear Force (lb)	Total Force (lb)	Eff Face	
14	245.0	24.60	0.00	11.00	3.76	0.37	2.13	0.85	1.00	0.64	7.03	0.00	0.00	387.4	116.7	405.33	0.00	405.33	1	
13	230.0	24.16	0.00	69.68	24.02	1.00	2.10	0.85	1.00	1.00	69.68	0.00	0.00	1,856.2	837.1	3,885.75	0.00	3,186.54	2	**
12	210.0	23.54	0.00	85.47	29.52	1.00	2.10	0.85	1.00	1.00	85.47	0.00	0.00	2,339.5	1,121.8	4,644.13	0.00	3,104.78	2	**
11	190.0	22.87	0.00	88.97	31.89	1.00	2.10	0.85	1.00	1.00	88.97	0.00	0.00	2,739.0	1,382.0	4,697.68	0.00	3,017.26	1	**
10	170.0	22.16	0.75	96.62	34.52	1.00	2.10	0.85	1.00	1.00	97.26	0.00	0.00	2,906.6	1,471.4	4,974.67	0.00	2,922.88	1	**
9	150.0	21.38	0.00	96.79	34.52	1.00	2.10	0.85	1.00	1.00	96.79	0.00	0.00	2,882.2	1,473.6	4,776.94	0.00	2,820.20	1	**
8	130.0	20.52	0.00	96.79	34.52	1.00	2.10	0.85	1.00	1.00	96.79	0.00	0.00	2,892.8	1,480.5	4,585.56	0.00	2,707.22	1	**
7	110.0	19.57	0.75	96.62	34.52	1.00	2.10	0.85	1.00	1.00	97.26	0.00	0.00	2,944.0	1,497.0	4,392.87	0.00	2,581.04	1	**
6	90.00	18.48	0.00	96.79	34.52	1.00	2.10	0.85	1.00	1.00	96.79	0.00	0.00	2,892.8	1,480.5	4,128.23	0.00	2,437.22	1	**
5	70.00	17.20	0.00	96.79	34.52	1.00	2.10	0.85	1.00	1.00	96.79	2.97	1.50	2,938.7	1,507.7	3,842.20	101.40	2,268.35	1	**
4	50.00	15.62	0.75	96.62	34.52	1.00	2.10	0.85	1.00	1.00	97.26	3.30	1.67	2,995.1	1,527.3	3,506.81	102.34	2,060.44	1	**
3	30.00	13.87	0.00	96.79	34.52	1.00	2.10	0.85	1.00	1.00	96.79	3.30	1.67	2,943.9	1,510.8	3,099.35	90.88	1,829.79	1	**
2	13.42	13.87	0.00	63.50	22.60	1.00	2.10	0.85	1.00	1.00	63.50	2.17	1.10	1,930.6	991.5	2,033.23	59.83	1,204.62	1	**
1	3.42	13.87	3.75	31.66	11.63	1.00	2.10	0.85	1.00	1.00	34.85	1.13	0.57	1,225.8	582.6	1,115.99	31.05	312.57	1	**
														33,874.6	16,980.4			30,858.27		

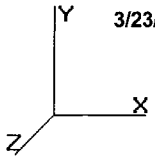
** = 2QzGhAg Controls

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Tower Loading

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	No Ice Weight (lb)	No Ice CaAa (sf)	No Ice CaAa Factor	Ice Weight (lb)	Ice CaAa (sf)	Ice CaAa Factor	Distance From Face (ft)	X Angle (deg)	Vert Ecc (ft)
240.0	Torque Arm	1	500.00	15.000	1.00	1000.00	20.000	1.00	0.000	0.00	0.000
235.0	LPA 185080/8CF	6	7.00	2.828	0.85	25.25	3.295	0.85	0.000	0.00	0.000
235.0	LPA-80080/6CF	6	21.00	9.090	0.71	69.24	9.920	0.71	0.000	0.00	0.000
235.0	PCS frames	3	500.00	15.000	0.67	650.00	20.600	0.67	0.000	0.00	0.000
225.0	RS90-12-00DA	1	36.00	11.467	1.00	101.00	12.394	1.00	0.000	0.00	0.000
204.0	TMAs	9	23.00	0.920	0.67	30.30	1.120	0.67	0.000	0.00	0.000
204.0	PCS frames	3	500.00	15.000	0.67	650.00	20.600	0.67	0.000	0.00	0.000
204.0	DUO1417-8686	9	30.80	6.530	0.82	73.00	7.150	0.82	0.000	0.00	0.000
198.0	Sidearm	1	70.00	5.150	1.00	100.00	7.100	1.00	0.000	0.00	0.000
198.0	10' Omni	1	20.00	3.000	1.00	41.79	4.030	1.00	0.000	0.00	5.000
188.0	5' Omni	1	3.75	0.520	1.00	8.68	1.017	1.00	0.000	0.00	2.500
188.0	Sidearm	1	70.00	5.150	1.00	100.00	7.100	1.00	0.000	0.00	0.000
184.5	Sidearm	1	70.00	5.150	1.00	100.00	7.100	1.00	0.000	0.00	0.000
184.5	10' Omni	1	20.00	3.000	1.00	41.79	4.030	1.00	0.000	0.00	5.000
184.0	Sidearm	1	70.00	5.150	1.00	100.00	7.100	1.00	0.000	0.00	0.000
184.0	10' Omni	1	20.00	3.000	1.00	41.79	4.030	1.00	0.000	0.00	5.000
171.5	V Shaped Yagi	1	32.00	7.600	1.00	111.00	17.930	1.00	0.000	0.00	0.000
153.0	15' Element	1	34.10	7.620	1.00	75.00	15.000	1.00	0.000	0.00	0.000
78.00	4 ft Channel Master Dish	1	188.00	20.910	1.00	277.00	21.790	1.00	0.000	0.00	0.000
	Totals	49	4786.05			7494.69			Number of Appurtenances : 19		

Linear Appurtenance Properties

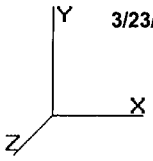
Elev From (ft)	Elev To (ft)	Description	Qty	Width (in)	Weight (lb/ft)	Pct In Wind	Spread On Faces	Bundling Arrangement
0.00	235.0	1 5/8" Coax	12	1.98	1.04	100.00	1,3	Separate
0.00	235.0	1 5/8" Coax	12	1.98	1.04	100.00	2	Separate
0.00	225.0	1 5/8" Coax	2	1.98	1.04	100.00	1	Separate
0.00	204.0	1 1/4" Coax	4	1.55	0.66	100.00	3	Separate
0.00	204.0	1 1/4" Coax	5	1.55	0.66	100.00	1	Separate
0.00	200.0	7/8" Coax	2	1.11	0.52	0.00	Lin App	Separate
0.00	198.0	7/8" Coax	1	1.11	0.52	100.00	3	Separate
0.00	188.0	1 1/4" Coax	1	1.55	0.66	0.00	Lin App	Separate
0.00	184.5	1 5/8" Coax	1	1.98	1.04	100.00	1	Separate
0.00	184.0	1 5/8" Coax	1	1.98	1.04	100.00	1	Separate
0.00	171.5	1/2" Coax	1	0.65	0.16	0.00	Lin App	Separate
0.00	153.0	1" Coax	1	1.11	0.52	0.00	3	Separate
0.00	78.00	1 5/8" Coax	1	1.98	1.04	100.00	Lin App	Separate

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Force/Stress Summary

Section: 1 3600B Bot Elev (ft): 0.00 Height (ft): 6.833

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-49.08	90 deg Ice	1.76	100	100	100	22.3	37.4	63.72	0	0	0.00	0.00	77	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-6.85	Normal Ice	2.057	50	50	50	59.2	23.3	10.31	0	0	0.00	0.00	66	Member X

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	0.00		0	0.00	0	0	0.00	0.00	0	
HORIZ CHN - C6 x 8.2	11.40	Normal Ice	36	69.11	0	0	0.00	0.00	16	Member
DIAG	0.00		0	0.00	0	0	0.00	0.00	0	

Section: 2 3600B2 Bot Elev (ft): 6.83 Height (ft): 13.167

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-48.06	90 deg Ice	3.24	100	100	100	41.1	34.2	58.34	0	0	0.00	0.00	82	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-4.33	90 deg Ice	4.417	46	46	46	117.0	14.3	6.31	0	0	0.00	0.00	68	Member X

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	0.00		0	0.00	0	0	0.00	0.00	0	
HORIZ SOL - 5/8" SOLID	4.75	Normal Ice	36	8.83	0	0	0.00	0.00	53	Member
DIAG	0.00		0	0.00	0	0	0.00	0.00	0	

Section: 3 3600TYPXbraced Bot Elev (ft): 20.00 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-49.08	90 deg Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	84	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-3.90	90 deg Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	62	Member X

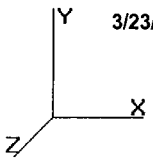
Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	0.00		0	0.00	0	0	0.00	0.00	0	
HORIZ SOL - 5/8" SOLID	4.85	Normal Ice	36	8.83	0	0	0.00	0.00	54	Member
DIAG	0.00		0	0.00	0	0	0.00	0.00	0	

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Force/Stress Summary

Section: 4 3600TYPXbraced Bot Elev (ft): 40.00 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-45.80	Normal Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	78	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-4.98	Normal Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	79	Member X

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	0.00		0	0.00	0	0	0.00	0.00	0	
HORIZ SOL - 5/8" SOLID	4.36	Normal Ice	36	8.83	0	0	0.00	0.00	49	Member
DIAG	0.00		0	0.00	0	0	0.00	0.00	0	

Section: 5 3600TYPXbraced Bot Elev (ft): 60.00 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-45.90	Normal Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	78	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-4.66	Normal No Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	74	Member X

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	0.00		0	0.00	0	0	0.00	0.00	0	
HORIZ SOL - 5/8" SOLID	4.03	Normal Ice	36	8.83	0	0	0.00	0.00	45	Member
DIAG SOL - 3/4" SOLID	0.12	60 deg No Ice	36	12.72	0	0	0.00	0.00	0	Member

Section: 6 3600TYPXbraced Bot Elev (ft): 80.00 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-36.22	Normal Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	62	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-3.63	Normal Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	58	Member X

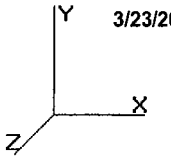
Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	0.00		0	0.00	0	0	0.00	0.00	0	
HORIZ SOL - 5/8" SOLID	3.75	Normal Ice	36	8.83	0	0	0.00	0.00	42	Member
DIAG	0.00		0	0.00	0	0	0.00	0.00	0	

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Force/Stress Summary

Section: 7 3600TYPXbraced Bot Elev (ft): 100.0 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-56.49	Normal Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	97	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-5.09	Normal No Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	81	Member X

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	15.70	60 deg No Ice	50	68.15	0	0	0.00	0.00	23	Member
HORIZ SOL - 5/8" SOLID	4.51	90 deg Ice	36	8.83	0	0	0.00	0.00	51	Member
DIAG SOL - 3/4" SOLID	0.97	60 deg No Ice	36	12.72	0	0	0.00	0.00	7	Member

Section: 8 3600TYPXbraced Bot Elev (ft): 120.0 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-55.47	Normal Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	95	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-5.55	Normal No Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	88	Member X

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	15.76	60 deg No Ice	50	68.15	0	0	0.00	0.00	23	Member
HORIZ SOL - 5/8" SOLID	3.95	60 deg Ice	36	8.83	0	0	0.00	0.00	44	Member
DIAG SOL - 3/4" SOLID	2.11	60 deg No Ice	36	12.72	0	0	0.00	0.00	16	Member

Section: 9 3600TYPXbraced Bot Elev (ft): 140.0 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-33.03	90 deg No Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	56	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-3.52	90 deg Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	56	Member X

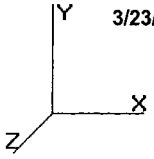
Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG	0.00		0	0.00	0	0	0.00	0.00	0	
HORIZ SOL - 5/8" SOLID	3.40	Normal No Ice	36	8.83	0	0	0.00	0.00	38	Member
DIAG SOL - 3/4" SOLID	0.21	90 deg No Ice	36	12.72	0	0	0.00	0.00	1	Member

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Force/Stress Summary

Section: 10 3600TYPXbraced Bot Elev (ft): 160.0 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-31.63	90 deg No Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	54	Member X
HORIZ	0.00		0.000	0	0	0	0.0	0.0	0.00	0	0	0.00	0.00	0	
DIAG SOL - 3/4" SOLID	-3.15	90 deg Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	50	Member X

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	8.16	60 deg No Ice	50	68.15	0	0	0.00	0.00	11	Member
HORIZ SOL - 5/8" SOLID	3.38	Normal Ice	36	8.83	0	0	0.00	0.00	38	Member
DIAG SOL - 3/4" SOLID	0.72	60 deg No Ice	36	12.72	0	0	0.00	0.00	5	Member

Section: 11 3600TYPXbraced Bot Elev (ft): 180.0 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-42.88	60 deg Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	73	Member X
HORIZ SOL - 5/8" SOLID	-0.88	60 deg No Ice	3.000	92	92	92	169.8	6.9	2.12	0	0	0.00	0.00	41	Member X
DIAG SOL - 3/4" SOLID	-5.37	90 deg Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	85	Member X

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	32.35	Normal No Ice	50	68.15	0	0	0.00	0.00	47	Member
HORIZ SOL - 5/8" SOLID	3.45	Normal Ice	36	8.83	0	0	0.00	0.00	39	Member
DIAG SOL - 3/4" SOLID	4.22	90 deg No Ice	36	12.72	0	0	0.00	0.00	33	Member

Section: 12 3600TYPXbraced Bot Elev (ft): 200.0 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-54.90	60 deg Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	94	Member X
HORIZ SOL - 5/8" SOLID	-1.67	60 deg No Ice	3.000	92	92	92	169.8	6.9	2.12	0	0	0.00	0.00	78	Member X
DIAG SOL - 3/4" SOLID	-4.14	60 deg Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	66	Member X

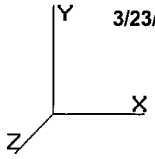
Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	38.17	Normal No Ice	50	68.15	0	0	0.00	0.00	56	Member
HORIZ SOL - 5/8" SOLID	4.35	Normal Ice	36	8.83	0	0	0.00	0.00	49	Member
DIAG SOL - 3/4" SOLID	1.62	Normal No Ice	36	12.72	0	0	0.00	0.00	12	Member

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Force/Stress Summary

Section: 13 3600TYPXbraced Bot Elev (ft): 220.0 Height (ft): 20.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-52.60	60 deg Ice	3.27	100	100	100	41.4	34.2	58.24	0	0	0.00	0.00	90	Member X
HORIZ SOL - 5/8" SOLID	-1.22	60 deg No Ice	3.000	92	92	92	169.8	6.9	2.12	0	0	0.00	0.00	57	Member X
DIAG SOL - 3/4" SOLID	-6.08	60 deg Ice	4.435	46	46	46	117.5	14.2	6.27	0	0	0.00	0.00	97	Member X

Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	33.11	Normal No Ice	50	68.15	0	0	0.00	0.00	48	Member
HORIZ SOL - 5/8" SOLID	3.64	Normal Ice	36	8.83	0	0	0.00	0.00	41	Member
DIAG SOL - 3/4" SOLID	6.02	90 deg Ice	36	12.72	0	0	0.00	0.00	47	Member

Section: 14 3600TYP Bot Elev (ft): 240.0 Height (ft): 10.000

Max Compression Member	Force (kip)	Load Case	Len (ft)	Bracing % X	Y	Z	KL/R	Fa (ksi)	Member Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	-0.81	Normal No Ice	0.20	100	100	100	2.5	39.8	67.77	0	0	0.00	0.00	1	Member X
HORIZ SOL - 5/8" SOLID	-0.41	Normal No Ice	3.000	92	92	92	169.8	6.9	2.12	0	0	0.00	0.00	19	Member X
DIAG SOL - 3/4" SOLID	-0.26	90 deg Ice	4.386	46	46	46	116.2	14.4	6.37	0	0	0.00	0.00	4	Member X

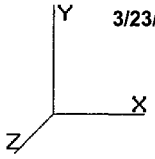
Max Tension Member	Force (kip)	Load Case	Fy (ksi)	Cap (kip)	Num Bolts	Num Holes	Shear Cap (kip)	Bear Cap (kip)	Use %	Controls
LEG PST - 2-1/2" DIA PIP	0.27	Normal No Ice	50	68.15	0	0	0.00	0.00	0	Member
HORIZ SOL - 5/8" SOLID	1.03	60 deg Ice	36	8.83	0	0	0.00	0.00	11	Member
DIAG SOL - 3/4" SOLID	0.18	Normal No Ice	36	12.72	0	0	0.00	0.00	1	Member

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Support Forces Summary

Load Case	Node	FX (kip)	FY (kip)	FZ (kip)	(-) = Uplift (+) = Down
90 deg Ice	A3b	2.30	-4.53	-2.03	
	A3a	-28.65	-35.82	-15.62	
	A3	-1.62	-19.91	17.39	
	A1b	0.91	-0.70	-0.70	
	A1a	-18.51	-14.12	-10.44	
	A1	-0.49	-7.79	11.61	
	1	-1.04	129.09	-0.22	
60 deg Ice	A3b	5.82	-9.42	-4.79	
	A3a	-28.94	-36.72	-16.71	
	A3	-1.24	-9.39	7.42	
	A1b	3.28	-2.54	-2.30	
	A1a	-18.20	-13.87	-10.51	
	A1	-0.36	-2.55	4.01	
	1	-1.16	120.32	-0.67	
Normal Ice	A3b	22.61	-29.81	-14.70	
	A3a	-22.61	-29.81	-14.70	
	A3	0.00	-2.87	1.58	
	A1b	15.39	-12.00	-9.37	
	A1a	-15.39	-12.00	-9.37	
	A1	0.00	-0.15	0.42	
	1	0.00	133.26	-0.89	
90 deg No Ice	A3b	1.17	-2.27	-1.02	
	A3a	-26.92	-34.01	-14.94	
	A3	-0.90	-17.85	15.69	
	A1b	0.32	-0.26	-0.27	
	A1a	-22.91	-17.73	-13.01	
	A1	-0.30	-9.41	13.82	
	1	-1.54	105.73	-0.27	
60 deg No Ice	A3b	3.55	-5.63	-2.77	
	A3a	-26.12	-33.35	-15.09	
	A3	-0.63	-5.61	4.45	
	A1b	1.52	-1.21	-1.08	
	A1a	-20.66	-16.00	-11.93	
	A1	-0.17	-1.23	1.88	
	1	-1.74	87.05	-1.00	
Normal No Ice	A3b	21.91	-28.68	-13.64	
	A3a	-21.91	-28.68	-13.64	
	A3	0.00	-1.38	0.76	
	A1b	19.58	-15.36	-11.66	
	A1a	-19.58	-15.36	-11.66	
	A1	0.00	-0.04	0.13	
	1	0.00	113.90	-1.29	

Max Reactions (kip)

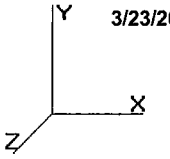
	Base	Anch1	Anch2
Vertical	133.26	-17.73	-36.72
Horizonal	2.01	26.35	33.42

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



Cable Forces Summary

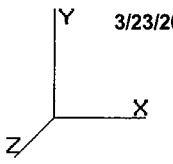
Load Case	Elevation (ft)	Cable	Node 1	Node 2	Allow Tension (kip)	Applied Tension (kip)	Use %
Normal No Ice	59.80	1/2 EHS	A1	25	13.35	0.17	1
		1/2 EHS	A1b	25a	13.35	10.36	77
		1/2 EHS	A1a	25b	13.35	10.36	77
	119.80	5/8 EHS	A1	49	21.20	0.10	0
		5/8 EHS	A1b	49a	21.20	17.54	82
		5/8 EHS	A1a	49b	21.20	17.54	82
	179.80	11/16 EHS	A3	73	25.00	0.29	1
		11/16 EHS	A3b	73a	25.00	20.71	82
		11/16 EHS	A3a	73b	25.00	20.71	82
	239.80	9/16 EHS	A3	T4	16.85	0.89	5
		9/16 EHS	A3a	T4b	16.85	10.63	63
		9/16 EHS	A3b	T4a	16.85	7.83	46
		9/16 EHS	A3b	T4	16.85	10.63	63
		9/16 EHS	A3a	T4a	16.85	7.83	46
		9/16 EHS	A3	T4b	16.85	0.89	5
60 deg No Ice	59.80	1/2 EHS	A1	25	13.35	0.93	6
		1/2 EHS	A1b	25a	13.35	0.92	6
		1/2 EHS	A1a	25b	13.35	11.04	82
	119.80	5/8 EHS	A1	49	21.20	1.48	6
		5/8 EHS	A1b	49a	21.20	1.46	6
		5/8 EHS	A1a	49b	21.20	18.12	85
	179.80	11/16 EHS	A3	73	25.00	2.18	8
		11/16 EHS	A3b	73a	25.00	2.17	8
		11/16 EHS	A3a	73b	25.00	24.22	96
	239.80	9/16 EHS	A3	T4	16.85	3.07	18
		9/16 EHS	A3a	T4b	16.85	10.71	63
		9/16 EHS	A3b	T4a	16.85	2.47	14
		9/16 EHS	A3b	T4	16.85	3.07	18
		9/16 EHS	A3a	T4a	16.85	10.63	63
		9/16 EHS	A3	T4b	16.85	2.44	14
90 deg No Ice	59.80	1/2 EHS	A1	25	13.35	6.12	45
		1/2 EHS	A1b	25a	13.35	0.24	1
		1/2 EHS	A1a	25b	13.35	12.06	90
	119.80	5/8 EHS	A1	49	21.20	10.91	51
		5/8 EHS	A1b	49a	21.20	0.40	1
		5/8 EHS	A1a	49b	21.20	20.16	95
	179.80	11/16 EHS	A3	73	25.00	11.77	47
		11/16 EHS	A3b	73a	25.00	0.72	2
		11/16 EHS	A3a	73b	25.00	25.03	100
	239.80	9/16 EHS	A3	T4	16.85	7.49	44
		9/16 EHS	A3a	T4b	16.85	9.72	57
		9/16 EHS	A3b	T4a	16.85	1.20	7
		9/16 EHS	A3b	T4	16.85	1.32	7
		9/16 EHS	A3a	T4a	16.85	11.71	69
		9/16 EHS	A3	T4b	16.85	5.07	30
Normal Ice	59.80	1/2 EHS	A1	25	13.35	0.49	3
		1/2 EHS	A1b	25a	13.35	8.07	60
		1/2 EHS	A1a	25b	13.35	8.07	60
	119.80	5/8 EHS	A1	49	21.20	0.21	1

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



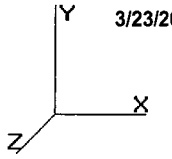
		5/8 EHS	A1b	49a	21.20	14.05	66
		5/8 EHS	A1a	49b	21.20	14.05	66
	179.80	11/16 EHS	A3	73	25.00	0.59	2
		11/16 EHS	A3b	73a	25.00	19.33	77
		11/16 EHS	A3a	73b	25.00	19.33	77
	239.80	9/16 EHS	A3	T4	16.85	1.81	10
		9/16 EHS	A3a	T4b	16.85	11.91	70
		9/16 EHS	A3b	T4a	16.85	9.97	59
		9/16 EHS	A3b	T4	16.85	11.91	70
		9/16 EHS	A3a	T4a	16.85	9.97	59
		9/16 EHS	A3	T4b	16.85	1.81	10
60 deg Ice	59.80	1/2 EHS	A1	25	13.35	2.17	16
		1/2 EHS	A1b	25a	13.35	2.16	16
		1/2 EHS	A1a	25b	13.35	9.77	73
	119.80	5/8 EHS	A1	49	21.20	2.90	13
		5/8 EHS	A1b	49a	21.20	2.88	13
		5/8 EHS	A1a	49b	21.20	15.92	75
	179.80	11/16 EHS	A3	73	25.00	3.81	15
		11/16 EHS	A3b	73a	25.00	3.81	15
		11/16 EHS	A3a	73b	25.00	24.03	96
	239.80	9/16 EHS	A3	T4	16.85	4.89	29
		9/16 EHS	A3a	T4b	16.85	13.35	79
		9/16 EHS	A3b	T4a	16.85	4.32	25
		9/16 EHS	A3b	T4	16.85	4.89	29
		9/16 EHS	A3a	T4a	16.85	13.30	78
		9/16 EHS	A3	T4b	16.85	4.29	25
90 deg Ice	59.80	1/2 EHS	A1	25	13.35	5.15	38
		1/2 EHS	A1b	25a	13.35	0.72	5
		1/2 EHS	A1a	25b	13.35	9.59	71
	119.80	5/8 EHS	A1	49	21.20	9.24	43
		5/8 EHS	A1b	49a	21.20	0.90	4
		5/8 EHS	A1a	49b	21.20	16.44	77
	179.80	11/16 EHS	A3	73	25.00	11.62	46
		11/16 EHS	A3b	73a	25.00	1.40	5
		11/16 EHS	A3a	73b	25.00	23.75	95
	239.80	9/16 EHS	A3	T4	16.85	8.78	52
		9/16 EHS	A3a	T4b	16.85	12.23	72
		9/16 EHS	A3b	T4a	16.85	2.42	14
		9/16 EHS	A3b	T4	16.85	2.59	15
		9/16 EHS	A3a	T4a	16.85	13.50	80
		9/16 EHS	A3	T4b	16.85	7.09	42

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT

Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



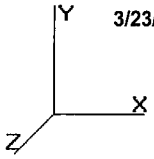
Deflections and Rotations

Load Case	Elevation (ft)	Deflection (ft)	Twist (deg)	Sway (deg)
73.61 mph Wind Normal To Face with Ice	76.53	0.5319	0.0000	0.3871
	153.27	1.2777	0.0006	0.7196
	170.00	1.4641	0.0007	0.5633
	183.47	1.5946	0.0009	0.5936
	186.73	1.6273	0.0007	0.5614
	196.53	1.7121	0.0007	0.4082
	203.47	1.7504	0.0008	0.1948
	223.47	1.7091	0.0006	0.4207
	236.53	1.5757	0.0006	0.7454
	240.00	1.5299	0.0004	0.7615
73.61 mph Wind at 60 deg From Face with Ice	76.53	0.3576	0.3290	0.2078
	153.27	0.7934	0.4039	0.5179
	170.00	0.9325	0.4207	0.4553
	183.47	1.0482	0.4340	0.5464
	186.73	1.0812	0.4355	0.5929
	196.53	1.1750	0.4379	0.4699
	203.47	1.2262	0.4378	0.3190
	223.47	1.2408	0.4374	0.2388
	236.53	1.1492	0.4370	0.5661
	240.00	1.1141	0.4375	0.5572
73.61 mph Wind at 90 deg From Face with Ice	76.53	0.4793	0.4556	0.3605
	153.27	1.1551	0.4555	0.6544
	170.00	1.3230	0.4555	0.5140
	183.47	1.4417	0.4552	0.5145
	186.73	1.4722	0.4552	0.5638
	196.53	1.5527	0.4549	0.3914
	203.47	1.5902	0.4543	0.2402
	223.47	1.5543	0.4528	0.3993
	236.53	1.4271	0.4518	0.7217
	240.00	1.3831	0.4521	0.7258
85.00 mph Wind Normal To Face with No Ice	76.53	0.8464	0.0000	0.5318
	153.27	1.5983	0.0006	0.6032
	170.00	1.7394	0.0007	0.3720
	183.47	1.8215	0.0009	0.3812
	186.73	1.8419	0.0008	0.3453
	196.53	1.8883	0.0007	0.1734
	203.47	1.8974	0.0007	0.0644
	223.47	1.7640	0.0006	0.6839
	236.53	1.5727	0.0006	0.9759
	240.00	1.5135	0.0003	0.9852
85.00 mph Wind at 60 deg From Face with No Ice	76.53	0.4587	0.3807	0.2695
	153.27	0.8897	0.4279	0.4451
	170.00	0.9966	0.4388	0.3133
	183.47	1.0754	0.4475	0.3827
	186.73	1.0988	0.4483	0.4241
	196.53	1.1618	0.4497	0.2784
	203.47	1.1884	0.4495	0.1066
	223.47	1.1207	0.4490	0.4828

SEMAAN ENGINEERING SOLUTIONS
1079 N.204th Avenue
Elkhorn, NE 68022
Phone: 402-289-1888
Fax: 402-289-1861

Site Number: 11469_FIX2
Location: Thompson, CT
Code: TIA/EIA-222 Rev F

3/23/2009 10:10:03 AM



85.00 mph Wind at 90 deg From Face with No Ice

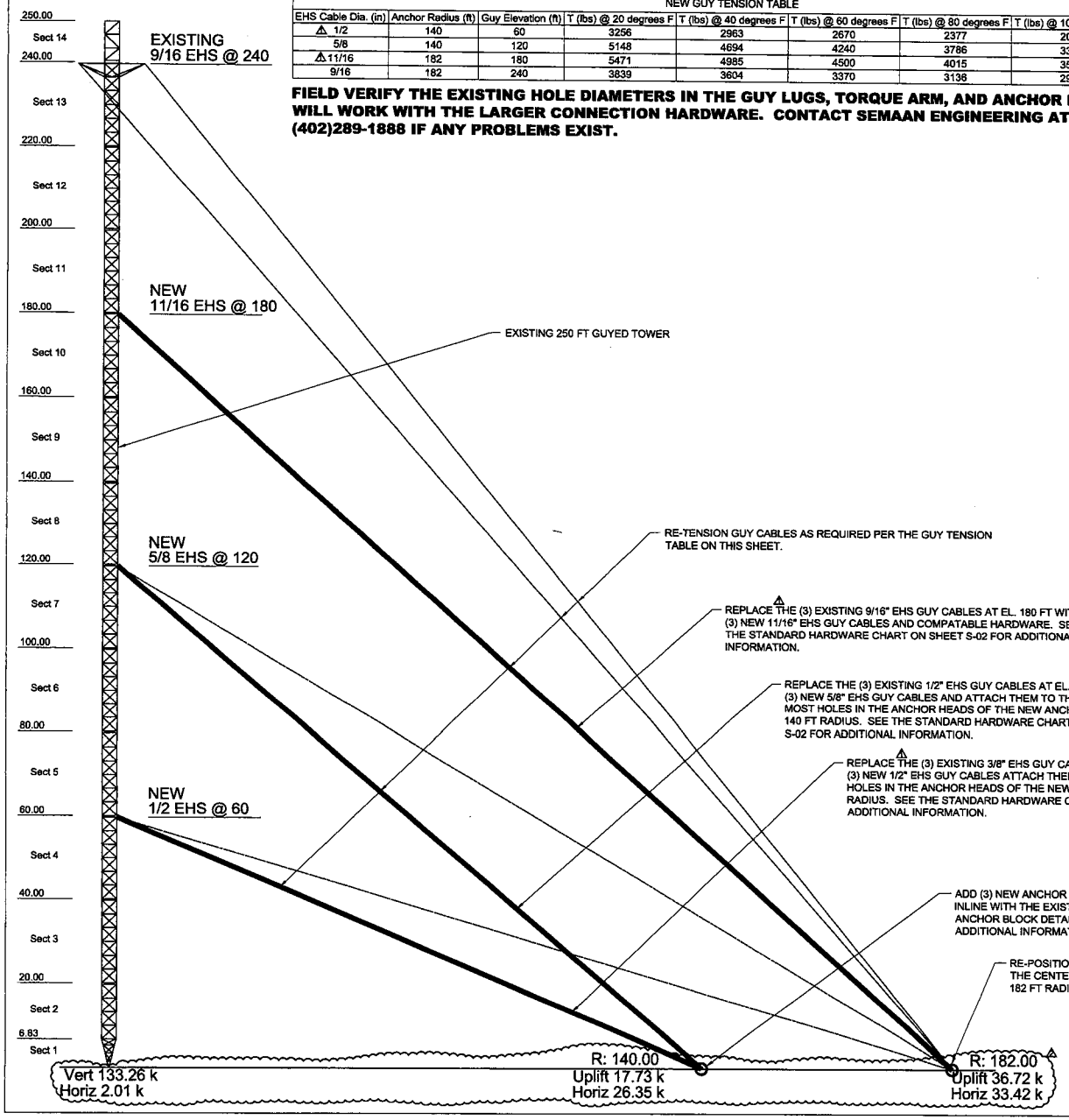
236.53	0.9734	0.4486	0.8020
240.00	0.9241	0.4492	0.7958
76.53	0.7448	0.3833	0.4786
153.27	1.4181	0.3870	0.5509
170.00	1.5444	0.3880	0.3386
183.47	1.6183	0.3885	0.3183
186.73	1.6372	0.3885	0.3657
196.53	1.6809	0.3885	0.1845
203.47	1.6901	0.3880	0.1178
223.47	1.5644	0.3865	0.6501
236.53	1.3808	0.3856	0.9503
240.00	1.3235	0.3857	0.9471
	0.0000	0.0000	0.0000

NEW GUY TENSION TABLE							
EHS Cable Dia. (in)	Anchor Radius (ft)	Guy Elevation (ft)	T (lbs) @ 20 degrees F	T (lbs) @ 40 degrees F	T (lbs) @ 60 degrees F	T (lbs) @ 80 degrees F	T (lbs) @ 100 degrees F
⚠ 1/2	140	60	3256	2963	2670	2377	2084
5/8	140	120	5148	4694	4240	3786	3332
⚠11/16	182	180	5471	4985	4500	4015	3529
9/16	182	240	3839	3604	3370	3136	2901

FIELD VERIFY THE EXISTING HOLE DIAMETERS IN THE GUY LUGS, TORQUE ARM, AND ANCHOR HEAD WILL WORK WITH THE LARGER CONNECTION HARDWARE. CONTACT SEMAAN ENGINEERING AT (402)289-1888 IF ANY PROBLEMS EXIST.

Job Information					
Tower :	11469	Location :	Thompson, CT		
Code:	TIA/EIA-222 Rev F	Shape :	Triangle	Base Width :	3.00 ft
Client :	KGI				

Sections Properties				
Section	Leg Members		Diagonal Members	Horizontal Members
1	PST 50ksi	2-1/2" DIA PIPE	SOL 36ksi 3/4" SOLID	CHN 36ksi C6 x 8.2
2 - 14	PST 50ksi	2-1/2" DIA PIPE	SOL 36ksi 3/4" SOLID	SOL 36ksi 5/8" SOLID



SEE SHEET S-03 NOT NOTES AND SPECIFICATIONS

Semaan Engineering Solutions, LLC

Phone Number: (402)289-1888 Fax Number: (402)289-1861
Address: 1079 N. 205th Street, Omaha, Nebraska 68022

PROJECT NUMBER	DRAWN BY:	DATE:	REFERENCE DRAWING	SITE LOCATION
11469	KRC	07/11/2008	NONE	THOMPSON, CT

REV #	DATE	REVISION DESCRIPTION	BY	CHK
⚠	03/23/2009	REVISED LOADING	TLT	
⚠	12/19/2008	REVISED PROPOSED LOADING	TLT	
0	07/11/2008	ISSUE FOR CONSTRUCTION	TLT	

CLIENT	DRAWING DESCRIPTION	SHEET NUMBER
KGI	GUYED TOWER REINFORCEMENT DRAWINGS	S-01

STANDARD GUY WIRE HARDWARE CHART

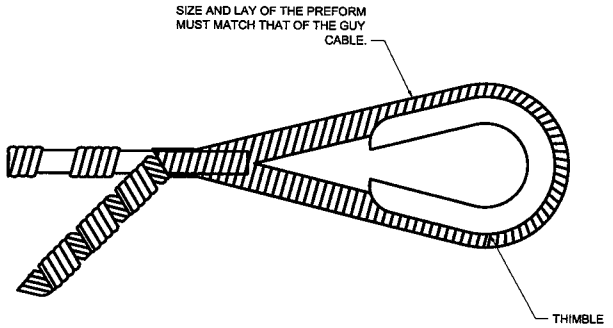
GUY STRAND			CROSBY TURNBUCKLE HG-228 (JAW & JAW) OR HG-227 (JAW & EYE)				DEADEND GRIP	DEADEND SLEEVE	CROSBY THIMBLE (G-414)	CROSBY SCREW PIN ANCHOR SHACKLE (G-209-A)			
SIZE	U.T.S.	W.L.	SIZE	U.T.S.	W.L.	PIN DIA.	SIZE	SIZE	SIZE	SIZE	U.T.S.	W.L.	PIN DIA.
5/16 EHS	11.2	**5.6**	5/8 x 12	17.5	**8.8**	1/2"	5/16"	5/16"	3/8 HVY	1/2"	33.3	**16.6**	5/8"
3/8 EHS	15.4	**7.7**	5/8 x 12	17.5	**8.8**	1/2"	3/8"	3/8"	1/2 HVY	1/2"	33.3	**16.6**	5/8"
7/16 EHS	20.8	**10.4**	3/4 x 12	26.0	**13.0**	5/8"	7/16"	7/16"	1/2 HVY	1/2"	33.3	**16.6**	5/8"
1/2 EHS	26.9	**13.5**	3/4 x 12	26.0	**13.0**	5/8"	1/2"	1/2"	1/2 HVY	1/2"	33.3	**16.6**	5/8"
9/16 EHS	35.0	**17.5**	7/8 x 12	36.0	**18.0**	3/4"	9/16"	9/16"	3/4 HVY	5/8"	50.0	**25.0**	3/4"
5/8 EHS	42.4	**21.2**	1 x 12	50.0	**25.0**	7/8"	5/8"	5/8"	3/4 HVY	5/8"	50.0	**25.0**	3/4"
11/16 EHS	50.0	**25.0**	1 x 12	50.0	**25.0**	7/8"	5/8"	5/8"	3/4 HVY	5/8"	50.0	**25.0**	3/4"
3/4 EHS	58.3	**29.2**	1 1/4 x 18	76.0	**38.0**	1 1/8"	3/4"	3/4"	1 HVY	3/4"	70.0	**35.0**	7/8"
7/8 EHS	79.7	**39.9**	1 1/2 x 18	107.0	**53.5**	1 3/8"	7/8"	7/8"	1 1/8 HVY	7/8"	95.0	**47.5**	1"
1 EHS	104.5	**52.3**	1 1/2 x 18	107.0	**53.5**	1 3/8"	1"	1"	1 1/8 HVY	1"	125.0	**62.5**	1 1/8"
5/8 BS	48.0	**24.0**	1 x 12	50.0	**25.0**	7/8"	5/8"	5/8"	3/4 HVY	5/8"	50.0	**25.0**	3/4"
11/16 BS	58.0	**29.0**	1 1/4 x 18	76.0	**38.0**	1 1/8"	11/16"	11/16"	7/8 HVY	3/4"	70.0	**35.0**	7/8"
3/4 BS	68.0	**34.0**	1 1/4 x 18	76.0	**38.0**	1 1/8"	3/4"	3/4"	1 HVY	3/4"	70.0	**35.0**	7/8"
13/16 BS	80.0	**40.0**	1 1/2 x 18	107.0	**53.5**	1 3/8"	13/16"	13/16"	1 HVY	7/8"	95.0	**47.5**	1"
7/8 BS	92.0	**46.0**	1 1/2 x 18	107.0	**53.5**	1 3/8"	7/8"	7/8"	1 1/8 HVY	7/8"	95.0	**47.5**	1"
15/16 BS	108.0	**54.0**	1 3/4 x 24	140.0	**70.0**	1 5/8"	15/16"	15/16"	1 1/8 HVY	1"	125.0	**62.5**	1 1/8"

NOTE:

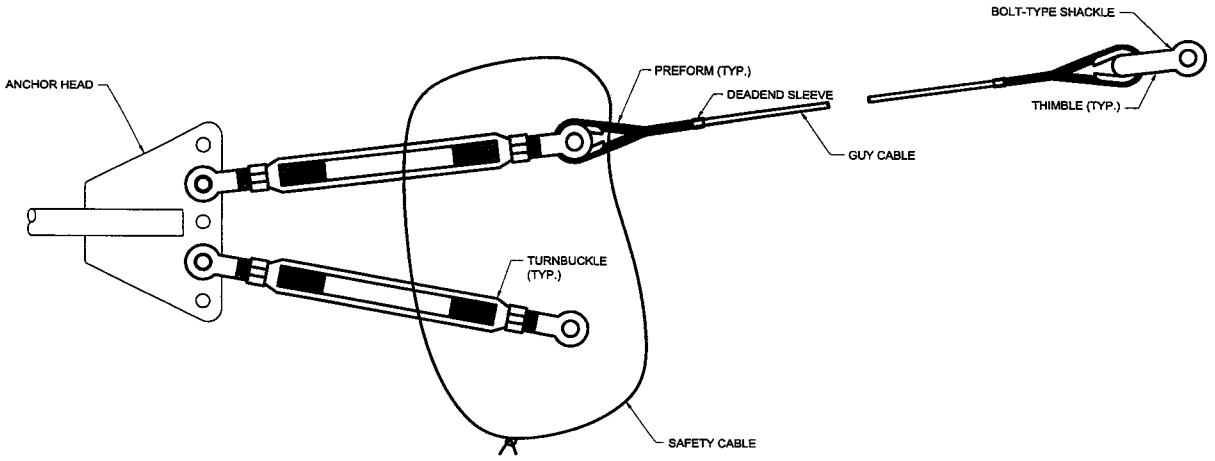
1. THE WORKING LOADS ARE BASED ON A SAFETY FACTOR OF 2.0. FOR TOWERS TALLER THAN 700', A HIGHER SAFETY FACTOR IS REQUIRED BY EIA.
2. ALL EHS AND BRIDGE STRAND HAS A LEFT HAND WIRE LAY.
3. USE (1) 3/8" WIRE ROPE CLIP PER ANCHOR WITH 3/8" EHS GUY STRAND x 15' FOR TURNBUCLE TIE.

THE FOLLOWING CHART IS FOR OTHER TYPES OF SHACKLES AND IS FOR INFORMATION ONLY.

GUY STRAND			CROSBY FORGED SHACKLE (G-209)				CROBY BOLT TYPE SHACKLE (G-2130)			
SIZE	U.T.S.	W.L.	SIZE	U.T.S.	W.L.	PIN DIA.	SIZE	U.T.S.	W.L.	PIN DIA.
5/16 EHS	11.2	**5.6**	1/2"	24	**12**	5/8"	1/2"	24	**12**	5/8"
3/8 EHS	15.4	**7.7**	1/2"	24	**12**	5/8"	1/2"	24	**12**	5/8"
7/16 EHS	20.8	**10.4**	1/2"	24	**12**	5/8"	1/2"	24	**12**	5/8"
1/2 EHS	26.9	**13.5**	5/8"	39	**19.5**	3/4"	5/8"	39	**19.5**	3/4"
9/16 EHS	35.0	**17.5**	5/8"	39	**19.5**	3/4"	5/8"	39	**19.5**	3/4"
5/8 EHS	42.4	**21.2**	3/4"	57	**28.5**	7/8"	3/4"	57	**28.5**	7/8"
3/4 EHS	58.3	**29.2**	7/8"	78	**39**	1"	7/8"	78	**39**	1"
7/8 EHS	79.7	**39.9**	1"	102	**51**	1 1/8"	1"	102	**51**	1 1/8"
1 EHS	104.5	**52.3**	1 1/8"	114	**57**	1 1/4"	1 1/8"	114	**57**	1 1/4"



DEADEND GRIP (PREFORM) DETAIL
NOT TO SCALE



TYPICAL GUY INSTALLATION (NON INSULATED TOWER)
NOT TO SCALE

Semaan Engineering Solutions, LLC
Phone Number: (402)289-1888 Fax Number: (402)289-1861
Address: 1079 N. 205th Street, Omaha, Nebraska 68022

PROJECT NUMBER	DRAWN BY	DATE	REFERENCE DRAWING	SITE LOCATION
11469	KRC	07/11/2008	S-01	THOMPSON, CT

REV #	DATE	REVISION DESCRIPTION	BY	CHK
1	12/19/2008	REVISED PROPOSED LOADING	TLT	
0	07/11/2008	ISSUE FOR CONSTRUCTION	TLT	

CLIENT	DRAWING DESCRIPTION	SHEET NUMBER
KGI	GUYED TOWER REINFORCEMENT DRAWINGS	S-02

NOTES AND SPECIFICATIONS

GENERAL:

1. THE MODIFICATIONS OUTLINED IN THESE DOCUMENTS WERE DESIGNED IN ACCORDANCE WITH THE EIA/TIA REV. F CODE.
2. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS, AND CONDITIONS PRIOR TO FABRICATION. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR THE PROPER FIT AND CLEARANCE IN THE FIELD. CONTACT SEMAAN ENGINEERING IF ANY DISCREPANCIES EXIST. ⚠⚠
3. REFERENCE THE SEMAAN ENGINEERING SOLUTIONS ANALYSIS FOR THIS SITE DATED 03/23/2009 ⚠ FOR THE PROPOSED AND EXISTING LOADS CONSIDERED. THIS DRAWING IS NOT VALID IF LOADS OTHER THAN THOSE CONSIDERED IN THE ANALYSIS ARE ADDED TO OR REMOVED FROM THE STRUCTURE UNLESS APPROVED IN WRITING BY SES, INC.
4. THE PROPOSED LOADS SHALL NOT BE ADDED TO THE STRUCTURE UNTIL ALL MODIFICATIONS ARE MADE AND APPROVED BY THE WELDING INSPECTOR.
5. THIS DRAWING DOES NOT INDICATE THE METHOD OF CONSTRUCTION THE CONTRACTOR SHALL SUPERVISE AND DETECT THE WORK AND HE SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, TECHNIQUES, SEQUENCES AND PROCEDURES.
6. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE ON-SITE SAFETY ASSOCIATED WITH THE WORK TO BE PERFORMED. ALL SAFETY REQUIREMENTS AS DICTATED BY OSHA AND THE LOCAL JURISDICTION'S SHALL BE FOLLOWED.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SAFETY OF ITS OWN PERSONNEL AS WELL AS THE PUBLIC AFFECTED BY THE WORK IN THE VICINITY OF THE JOB SITE.
8. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR THE PROTECTION OF THE PROPERTY IN THE VICINITY OF THE JOB SITE. THE CONTRACTOR SHALL USE THE PRECAUTIONARY MEANS NECESSARY FOR ADEQUATE PROTECTION.

STEEL CONSTRUCTION:

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION, NINTH EDITION, FOR THE DESIGN AND FABRICATION OF STEEL COMPONENTS.
2. ALL PLATE STEEL SHALL CONFORM TO A572-50 UNLESS NOTED OTHERWISE. SHOP DRAWINGS SHALL BE SUBMITTED TO SES FOR APPROVAL PRIOR TO FABRICATION. SHOP DRAWINGS SHALL INCLUDE ALL FABRICATED STEEL ASSEMBLIES INCLUDING MONOPOLE/TOWER EXTENSIONS
3. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123 AND AS FOLLOWS, UNLESS OTHERWISE NOTED.
   A. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION AND WELDING TO THE GREATEST EXTENT POSSIBLE
   B. ALL DINGS, SCRAPES, MARS AND WELDS IN THE GALVANIZED AREA SHALL BE COATED WITH A ZINC-RICH PAINT, APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
   C. IF THE STRUCTURE WAS ORIGINALLY PAINTED, AFTER ZINC-RICH PAINT IS DRY, OVERCOAT WITH AN APPROPRIATE PAINT WITH THE SAME COLOR AS THE EXISTING.
5. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON DRAWINGS.
6. CONNECTIONS SHALL BE CONSTRUCTED AS FOLLOWS:
   A. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES.
   B. ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1 LATEST EDITION.
   C. THE WELDER(S) SHOULD BE QUALIFIED FOR THE METHODS AND POSITIONS TO BE USED AND SHOULD HAVE EXPERIENCE WELDING GALVANIZED MATERIALS.
   D. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC MANUAL OF STEEL CONSTRUCTION, NINTH EDITION.
   E. ALL EXISTING GALVANIZING IN WELD AREAS SHALL GROUND OFF PRIOR TO WELDING.
   F. ALL WELDS SHALL BE INSPECTED VISUALLY. 25% OF WELDS SHALL BE INSPECTED WITH DYE PENETRATE OR MAGNETIC PARTICLE (100% IF REJECTABLE DEFECTS ARE FOUND) TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1 REPAIR ALL WELDS AS NECESSARY.
   G. INSPECTION SHALL BE PERFORMED BY AN AWS CERTIFIED WELD INSPECTOR.
7. ALL BOLTS SHALL BE TIGHTENED TO A "SNUG TIGHT" CONDITION AS DEFINED BY AISC.

SPECIAL INSPECTION:

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH THE IBC 2006, SECTION 1704 AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK.
   a) GUY CABLE TENSIONING
   b) HIGH STRENGTH BOLTS
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER IN ACCORDANCE WITH IBC 2006, 1704. UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT THE SPECIAL INSPECTIONS.

CONCRETE CONSTRUCTION

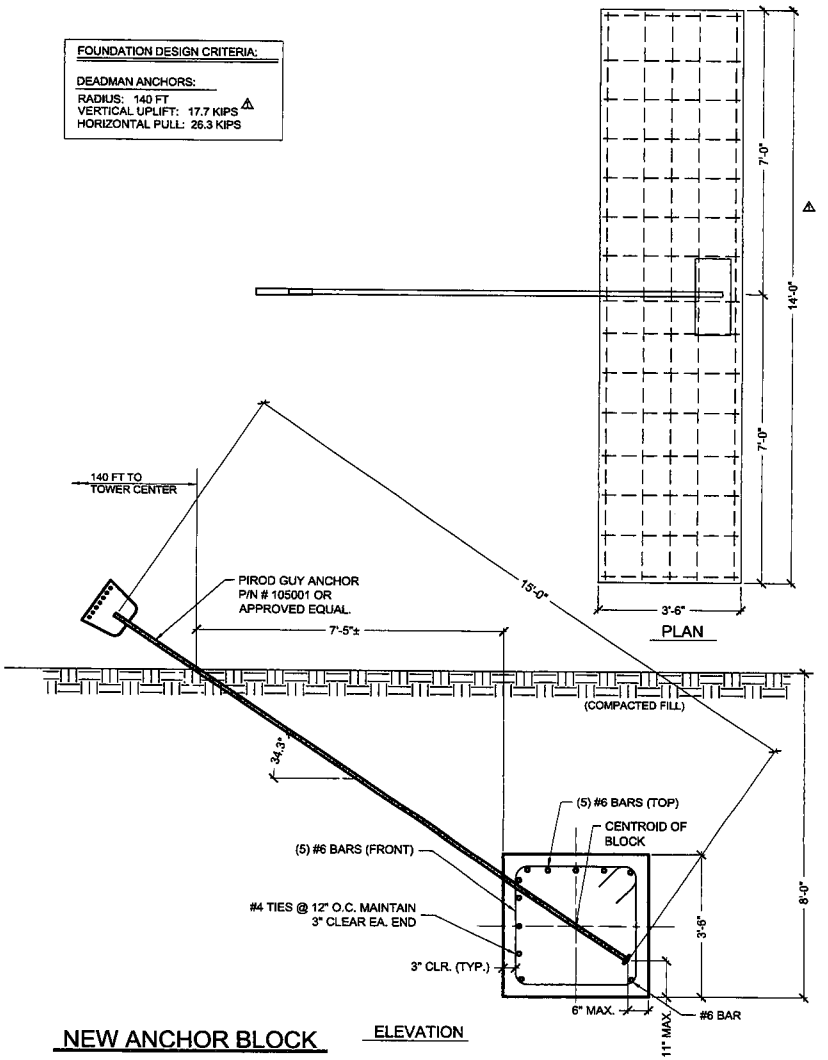
A. ALL CONCRETE SHALL CONFORM TO THE SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS, ACI 301
B. ALL CONCRETE SHALL BE MADE WITH STONE AGGREGATE & SHALL DEVELOP 4000 psi MIN. COMPRESSIVE STRENGTH IN 28 DAYS. CONCRETE MIX DESIGN: 6 1/2 SACKS OF CEMENT MINIMUM PER CUBIC YARD, 3/4" MAXIMUM AGGREGATE.
C. ALL REINFORCING SHALL BE HIGH STRENGTH DEFORMED BARS, GRADE 60, ASTM A615, WITH 60,000 psi MINIMUM YIELD POINT.
D. REINFORCING PROTECTION: CONCRETE POURED AGAINST EARTH.....3"
E. ALL BAR LENGTHS ARE NOT DRAWN TO SCALE. NO SPLICES OF REINFORCEMENT SHALL BE MADE EXCEPT AS DETAILED OR AS AUTHORIZED BY THE STRUCTURAL ENGINEER. LAP SPLICES, WHERE PERMITTED, SHALL BE A MINIMUM OF 40 BAR DIAMETERS UNLESS NOTED.
F. DETAIL BARS IN ACCORDANCE WITH ACI DETAILING MANUAL & ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
G. PROVIDE ALL ACCESSORIES NECESSARY TO SUPPORT REINFORCING AT THE POSITIONS SHOWN ON THE PLANS.
H. BACKFILL AND COMPACT SOIL TO A MINIMUM 95% OF STANDARD PROCTOR DENSITY PER ASTM D 698.THE COMPACTED SOIL SHALL PROVIDE A MINIMUM UNIT WEIGHT OF 120 POUNDS PER CUBIC FOOT FOR THE FILL MATERIAL ON TOP OF THE DEADMAN ANCHORS.
I. ORIENT NEW ANCHORS IN LINE WITH EXISTING ANCHORS.
J. ANCHOR RODS TO PASS THROUGH CENTROID OF BLOCK.

CONTINUOUS STRUCTURE INSPECTION AND MAINTENANCE:

CONTINUOUS ANNUAL INSPECTION OF THE STRUCTURE AND THE ADDED REINFORCING SHALL BE IMPLEMENTED BY THE OWNER. ANY FUTURE CORROSION OR OTHER DETERIORATION OF THE STRUCTURE OR ITS REINFORCING WILL REDUCE ITS CAPACITY TO WITHSTAND THE REQUIRED LOADS. ANY DEFECTS SHALL BE REPAIRED TO ENSURE THE STRUCTURAL INTEGRITY FOR THE LIFE OF THE STRUCTURE.

FOUNDATION DESIGN CRITERIA:

DEADMAN ANCHORS:
RADIUS: 140 FT
VERTICAL UPLIFT: 17.7 KIPS ⚠
HORIZONTAL PULL: 26.3 KIPS



NEW ANCHOR BLOCK ELEVATION

Semaan Engineering Solutions, LLC			
Phone Number: (402)289-1868 Fax Number: (402)289-1861 Address: 1079 N. 205th Street, Omaha, Nebraska 68022			PROJECT NUMBER 11469
DRAWN BY: KRC	DATE: 07/11/2008	REFERENCE DRAWING S-01, S-02	SITE LOCATION THOMPSON, CT

REV #	DATE	REVISION DESCRIPTION	BY	CHK
⚠	03/23/2009	REVISED LOADING	TLT	
⚠	12/19/2008	REVISED PROPOSED LOADING	TLT	
0	07/11/2008	ISSUE FOR CONSTRUCTION	TLT	

CLIENT	DRAWING DESCRIPTION	SHEET NUMBER
KGI	GUYED TOWER REINFORCEMENT DRAWINGS	S-03