Michael Gentile, Site Acquisition
c/o New Cingular Wireless, PCS LLC (AT&T)
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767
Mobile: (508) 844-9813
mgentile@clinellc.com

February 15, 2017

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

RE: Notice of Exempt Modification // Site Number: CT2112
623-627 Honeyspot Road, Stratford, CT 06615 (Site Name: Stratford)
N 41.176875 // W 73.1460222

Dear Ms. Bachman:

New Cingular Wireless, PCS, LLC ("AT&T") currently maintains nine (9) antennas at the 90 foot level of the existing 102 foot monopole tower at 623-627 Honeyspot Road, Stratford, CT 06615. The tower is owned by John and/or Deborah Becker. The property is also owned by John and/or Deborah Becker. AT&T now intends to replace three (3) of its existing antennas with three (3) new for its LTE upgrade. These antennas would be installed at the 90 foot level of the tower. AT&T also intends to install six (6) remote radio units, three (3) on the tower and three (3) in the existing shelter.

The current proposal involves an antenna swap only (three for three); zero antennas will be added.

Please accept this letter as notification pursuant to Regulations of Connecticut State Agencies § 16-50j-73, for construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to John A. Harkins, Mayor for the Town of Stratford, as well as the tower owner and the ground owner, John and/or Deborah Becker.

The planned modifications to the facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2). AT&T was original approved for nine (9) antennas on 6/16/1999; AT&T was further approved for three (3) additional antennas that were never added on 7/18/2011 and approved for various radio units on 6/15/2015.

Attached to accommodate this filing are construction drawings dated 1/16/2017 by ComEx consultants, a structural analysis dated 1/12/2017 by Destek Engineering and an Emissions Analysis Report dated 2/3/2017 by EBI Consulting.

1. The proposed modifications will not result in an increase in the height of the existing structure.

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

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

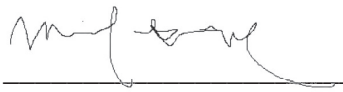
4. The operation of the replacement antennas will not increase radio frequency emissions at the facility to a level at or above the Federal Communications Commission safety standard.

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

6. The existing structure and its foundation can support the proposed loading as shown in the attached structural analysis by Desktek Engineering dated 1/12/2017.

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

Sincerely,



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Raynham, MA 02767
Mobile: (508) 844-9813
mgentile@centerlincommunications.com

Attachments

cc: John A. Harkins, Mayor, Town of Stratford - as elected official
John and/or Deborah Becker - as tower owner
John and/or Deborah Becker - as property owner

EBI Consulting
environmental | engineering | due diligence

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL TO NON-IONIZING EMISSIONS

AT&T Existing Facility

Site ID: CT2112

Stratford
623 Honeyspot Road
Stratford, CT 06616

February 3, 2017

EBI Project Number: 6217000356

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	26.28 %

21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

EBI Consulting
environmental | engineering | due diligence

February 3, 2017

AT&T Mobility – New England
Attn: Cameron Syme, RF Manager
550 Cochituate Road
Suite 550 – 13&14
Framingham, MA 06040

Emissions Analysis for Site: **CT2112 – Stratford**

EBI Consulting was directed to analyze the proposed AT&T facility located at **623 Honeyspot Road, Stratford, CT**, for the purpose of determining whether the emissions from the Proposed AT&T Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of $\mu W/cm^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu W/cm^2$). The general population exposure limits for the 700 and 850 MHz Bands are approximately 467 $\mu W/cm^2$ and 567 $\mu W/cm^2$ respectively. The general population exposure limit for the 1900 MHz (PCS), 2100 MHz (AWS) and 2300 MHz (WCS) bands is 1000 $\mu W/cm^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the proposed AT&T Wireless antenna facility located at **623 Honeyspot Road, Stratford, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since AT&T is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

1) 2 UMTS channels (850 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

2) 2 UMTS channels (1900 MHz (PCS)) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

3) 4 LTE channels (700 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel broadcasting on Antennas 2 & 3 on each sector.

4) 2 GSM channels (850 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.

5) 2 LTE channels (1900 MHz (PCS)) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

6) 2 LTE channels (2300 MHz (WCS)) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel.

7) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

8) For the following calculations the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

9) The antennas used in this modeling are the **Powerwave 7770, KMW AM-X-CD-16-65-00T-RET and the Quintel QS66512-2** for transmission in the 700 MHz, 850 MHz, 1900 MHz (PCS) and 2300 MHz (WCS) frequency bands. This is based on feedback from the carrier with regards to anticipated antenna selection. Maximum gain values for all antennas are listed in the Inventory and Power Data table below. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.

10) The antenna mounting height centerlines of the proposed antennas are **90 feet** above ground level (AGL) for **Sector A**, **90 feet** above ground level (AGL) for **Sector B** and **90 feet** above ground level (AGL) for Sector C.

11) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.

All calculations were done with respect to uncontrolled / general public threshold limits.

AT&T Site Inventory and Power Data by Antenna

Sector:	A	Sector:	B	Sector:	C
Antenna #:	**1**	Antenna #:	**1**	Antenna #:	**1**
Make / Model:	Powerwave 7770	Make / Model:	Powerwave 7770	Make / Model:	Powerwave 7770
Gain:	11.4 / 13.4 dBd	Gain:	11.4 / 13.4 dBd	Gain:	11.4 / 13.4 dBd
Height (AGL):	**90 feet**	Height (AGL):	**90 feet**	Height (AGL):	**90 feet**
Frequency Bands	850 MHz / 1900 MHz (PCS)	Frequency Bands	850 MHz / 1900 MHz (PCS)	Frequency Bands	850 MHz / 1900 MHz (PCS)
Channel Count	4	Channel Count	4	Channel Count	4
Total TX Power(W):	120 Watts	Total TX Power(W):	120 Watts	Total TX Power(W):	120 Watts
ERP (W):	2,140.89	ERP (W):	2,140.89	ERP (W):	2,140.89
Antenna A1 MPE%	**1.41 %**	Antenna B1 MPE%	**1.41 %**	Antenna C1 MPE%	**1.41 %**
Antenna #:	**2**	Antenna #:	**2**	Antenna #:	**2**
Make / Model:	KMW AM-X-CD-16-65-00T-RET	Make / Model:	KMW AM-X-CD-16-65-00T-RET	Make / Model:	KMW AM-X-CD-16-65-00T-RET
Gain:	13.35 dBd	Gain:	13.35 dBd	Gain:	13.35 dBd
Height (AGL):	**90 feet**	Height (AGL):	**90 feet**	Height (AGL):	**90 feet**
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	2	Channel Count	2	Channel Count	2
Total TX Power(W):	120 Watts	Total TX Power(W):	120 Watts	Total TX Power(W):	120 Watts
ERP (W):	2,595.26	ERP (W):	2,595.26	ERP (W):	2,595.26
Antenna A2 MPE%	**2.83 %**	Antenna B2 MPE%	**2.83 %**	Antenna C2 MPE%	**2.83 %**
Antenna #:	**3**	Antenna #:	**3**	Antenna #:	**3**
Make / Model:	Quintel QS66512-2	Make / Model:	Quintel QS66512-2	Make / Model:	Quintel QS66512-2
Gain:	11.35 / 13.85 / 14.85 / 10.85 dBd	Gain:	11.35 / 13.85 / 14.85 / 10.85 dBd	Gain:	11.35 / 13.85 / 14.85 / 10.85 dBd
Height (AGL):	**90 feet**	Height (AGL):	**90 feet**	Height (AGL):	**90 feet**
Frequency Bands	850 MHz / 1900 MHz (PCS) / 2300 MHz (WCS) / 700 MHz	Frequency Bands	850 MHz / 1900 MHz (PCS) / 2300 MHz (WCS) / 700 MHz	Frequency Bands	850 MHz / 1900 MHz (PCS) / 2300 MHz (WCS) / 700 MHz
Channel Count	8	Channel Count	8	Channel Count	8
Total TX Power(W):	420 Watts	Total TX Power(W):	420 Watts	Total TX Power(W):	420 Watts
ERP (W):	8,856.01	ERP (W):	8,856.01	ERP (W):	8,856.01
Antenna A3 MPE%	**5.68 %**	Antenna B3 MPE%	**5.68 %**	Antenna C3 MPE%	**5.68 %**

Site Composite MPE%	
Carrier	**MPE%**
AT&T – Max per sector	**9.92 %**
Verizon Wireless	7.25 %
Clearwire	0.43 %
Sprint	0.40 %
Nextel	2.11 %
MetroPCS	1.91 %
Com-tronics	4.26 %
Site Total MPE %:	**26.28 %**

AT&T Sector A Total:	9.92 %
AT&T Sector B Total:	9.92 %
AT&T Sector C Total:	9.92 %
Site Total:	26.28 %

AT&T Maximum Power Values Per Sector

AT&T _ Frequency Band / Technology Per Sector	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu W/cm^2$)	Frequency (MHz)	Allowable MPE ($\mu W/cm^2$)	Calculated % MPE
AT&T 850 MHz UMTS	2	414.12	90	4.22	850 MHz	567	0.74%
AT&T 1900 MHz (PCS) UMTS	2	656.33	90	6.69	1900 MHz (PCS)	1000	0.67%
AT&T 700 MHz LTE (Antenna 2)	2	1,297.63	90	13.22	700 MHz	467	2.83%
AT&T 850 MHz GSM	2	409.37	90	4.17	850 MHz	567	0.74%
AT&T 1900 MHz (PCS) LTE	2	1,455.97	90	14.84	1900 MHz (PCS)	1000	1.48%
AT&T 2300 MHz (WCS) LTE	2	1,832.95	90	18.68	2300 MHz (WCS)	1000	1.87%
AT&T 700 MHz LTE (Antenna 3)	2	729.71	90	7.44	700 MHz	467	1.59%
						Total:	9.92%

Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general public exposure to RF Emissions.

The anticipated maximum composite contributions from the AT&T facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

AT&T Sector	Power Density Value (%)
Sector A:	9.92 %
Sector B:	9.92 %
Sector C:	9.92 %
AT&T Maximum Total (per sector):	9.92 %
Site Total:	26.28 %
Site Compliance Status:	**COMPLIANT**

The anticipated composite MPE value for this site assuming all carriers present is **26.28 %** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

Date: 01/12/2017

To: Keith Drennan
Com-Ex Consultants, LLC
115 Route 46 – Suite E39
Mountain Lakes, NJ 07046

Subject: Mount Structural Analysis Report

AT&T Designation:	**Site Number:**	CT2112
	Site Name:	Stratford
Site Data:	**623 Honeyspot Road, Stratford, CT 06615**	
	Latitude *41°10'36.7''*, Longitude *-73°08'46.2''*	

Dear Mr. Drennan,

Destek Engineering, LLC is pleased to submit this **"Mount Structural Analysis Report"** to determine the structural capacity of the antenna mount utilized by AT&T at the above referenced site.

The purpose of the analysis is to determine acceptability of the mount stress level for the changes proposed by AT&T. Under the following load case we have determined the mount to have:

Existing + Proposed Equipment **Adequate Capacity (102.5%)**
Note: See Analysis Criteria for loading configuration

The analysis has been performed in accordance with the TIA-222-G Standard and 2016 Connecticut State Building Code.

We at *Destek Engineering, LLC* appreciate the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects please give us a call.

Sincerely,
Destek Engineering, LLC
License No: PEC001429

01-12-2017

Ahmet Colakoglu, PE
Connecticut Professional Engineer
License No: 27057

DESTEK ENGINEERING, LLC
1281 Kennestone Circle, Suite 100, Marietta, GA 30066 - Tel: (770) 693-0835

1) ANALYSIS CRITERIA

The analysis was performed for the existing and proposed appurtenances as specified in the RFDS and/or Construction Drawings, which are included in the Appendix, and per the following loading criteria of Table 1.

Table 1 – Loading and Analysis Criteria

Rad Center	90 ft.
Structure Type	Monopole
Exposure Category	C
Wind Speed	V_{ASD} = 97 mph
Ice Loading	0.75” with 50 mph wind (ASD)
Structure Classification	II
Topographic Factor	Kzt=1.0

2) ANALYSIS PROCEDURE

The analysis is based on the following information:

Table 2 - Documents

Document	Prepared By	Date
Construction Drawings	Com-Ex Consultants	12/14/2016
RFDS	AT&T	11/30/2016
Mount Mapping Report	A3 Tower	12/21/2016

2.1) Analysis Method

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

DESTEK ENGINEERING, LLC
1281 Kennestone Circle, Suite 100, Marietta, GA 30066 - Tel: (770) 693-0835

2.2) Analysis Conditions and Assumptions

1) The mount was built and installed in accordance with the manufacturer's specifications.
2) The mount has been maintained and will be maintained in accordance with the manufacturer's specifications. All structural members and connections of the mount are in good condition and can achieve theoretical strength.
3) The configuration of antennas is as specified in "1) Analysis Criteria".
4) The analysis was performed for the subject mount only. It does not include an evaluation of the other mounts or the tower, which should be analyzed by others.
5) The evaluation does not include any antenna rigging loads. Equipment should not be rigged using the subject antenna mount as the support.
6) The analysis includes a 250 lbf point load for sector frames and 500 lbf point load for platforms to represent live loads.
7) Member sizes per the referenced mount mapping report as provided.

Destek Engineering, LLC must be notified immediately if any of these assumptions are discovered to be incorrect. The results of this analysis may be affected if any of the assumptions are not valid or have been made in error.

3) ANALYSIS RESULTS AND CONCLUSION

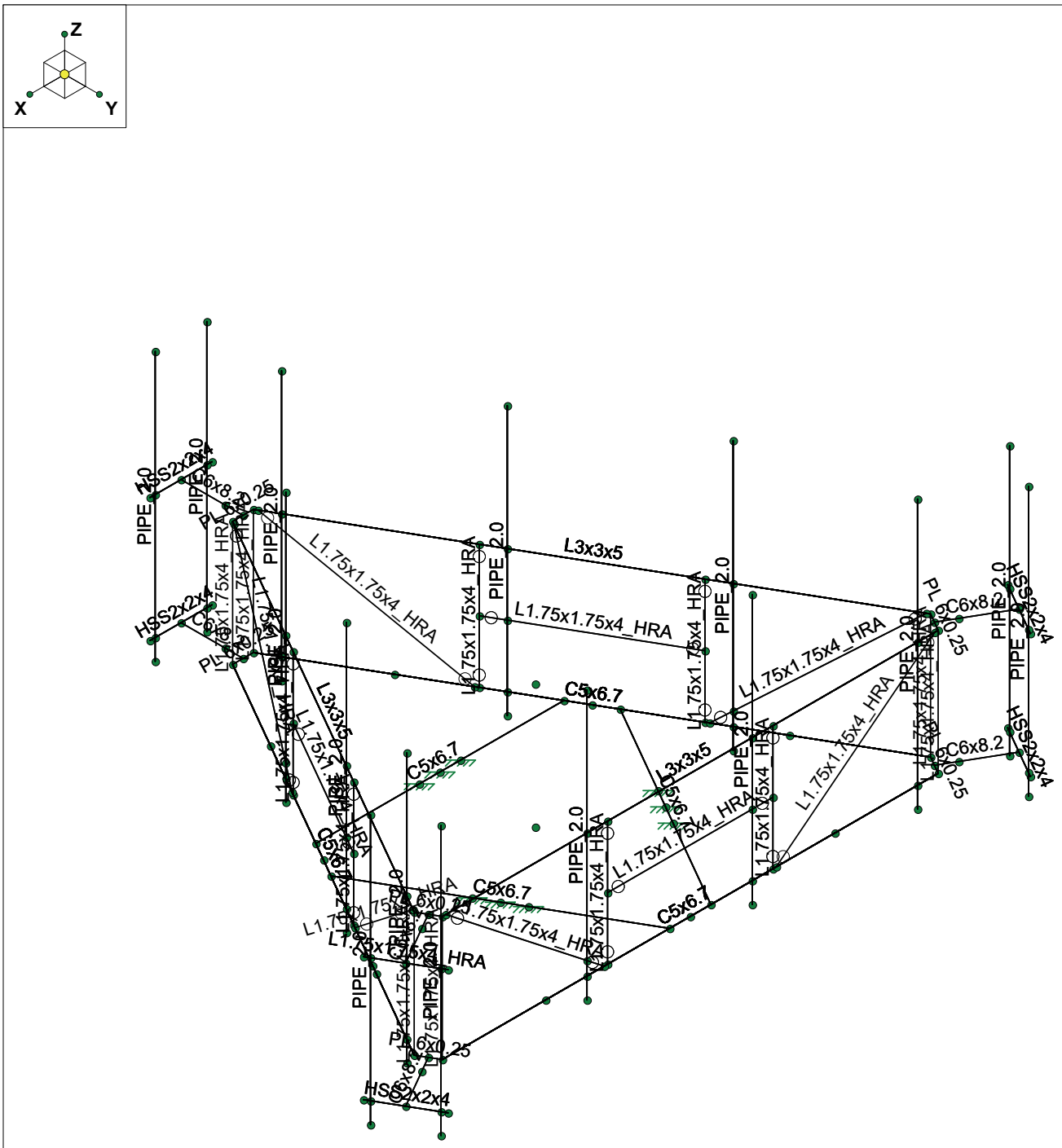
Platform Mounts: The existing platform mounts is found to have **adequate** capacity for the proposed changes by AT&T. For the code specified load combinations and as a maximum, the mount members will be stressed to **102.5%** of its structural capacity, less than the industry wide acceptance level of **105%**.

DESTEK ENGINEERING, LLC
1281 Kennestone Circle, Suite 100, Marietta, GA 30066 - Tel: (770) 693-0835

APPENDIX

CALCULATIONS,
RFDS & CDs

DESTEK ENGINEERING, LLC
1281 Kennestone Circle, Suite 100, Marietta, GA 30066 - Tel: (770) 693-0835



Envelope Only Solution

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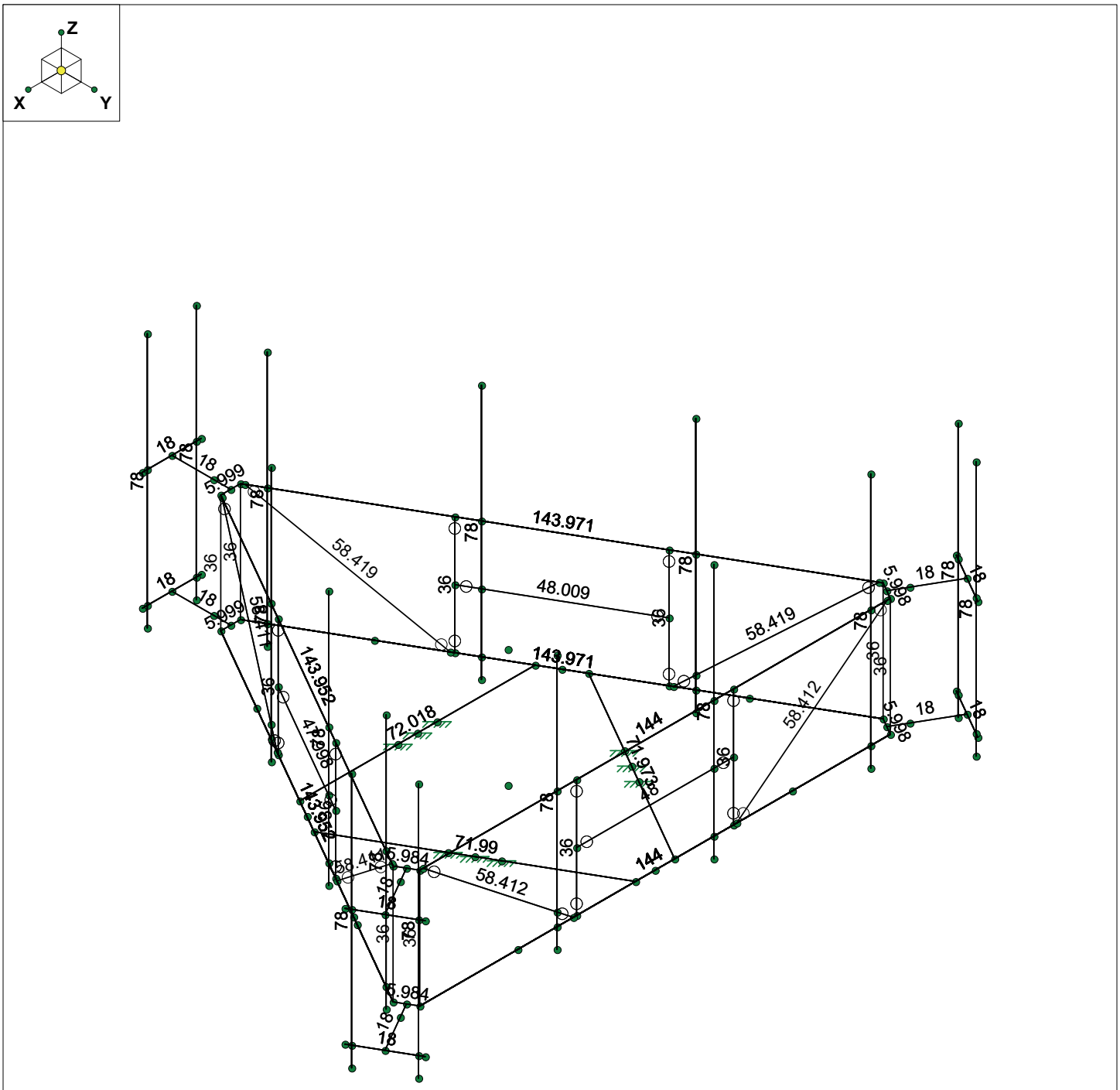
		Jan 12, 2017 at 11:00 AM
		CT2112_G Code.r3d



Member Length (in) Displayed
Envelope Only Solution

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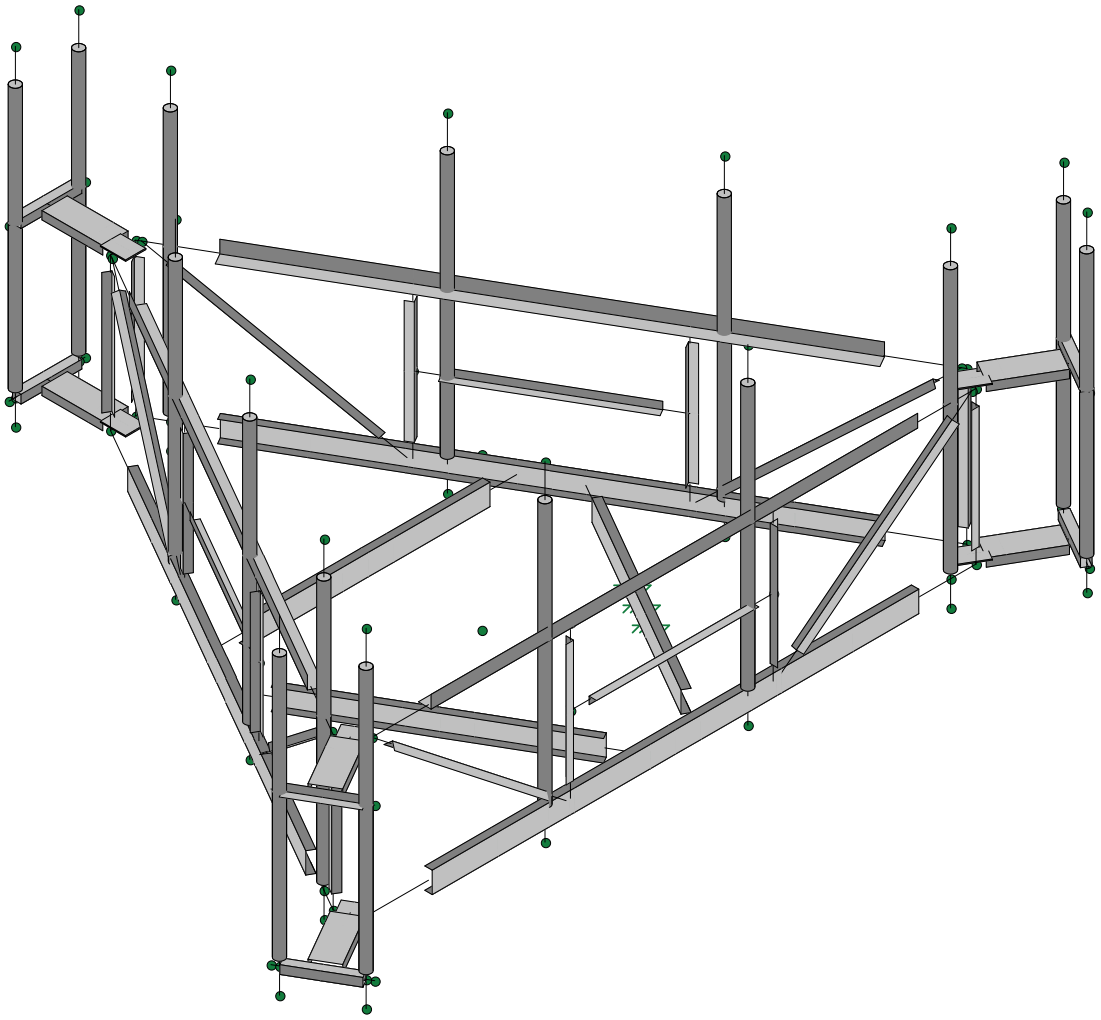

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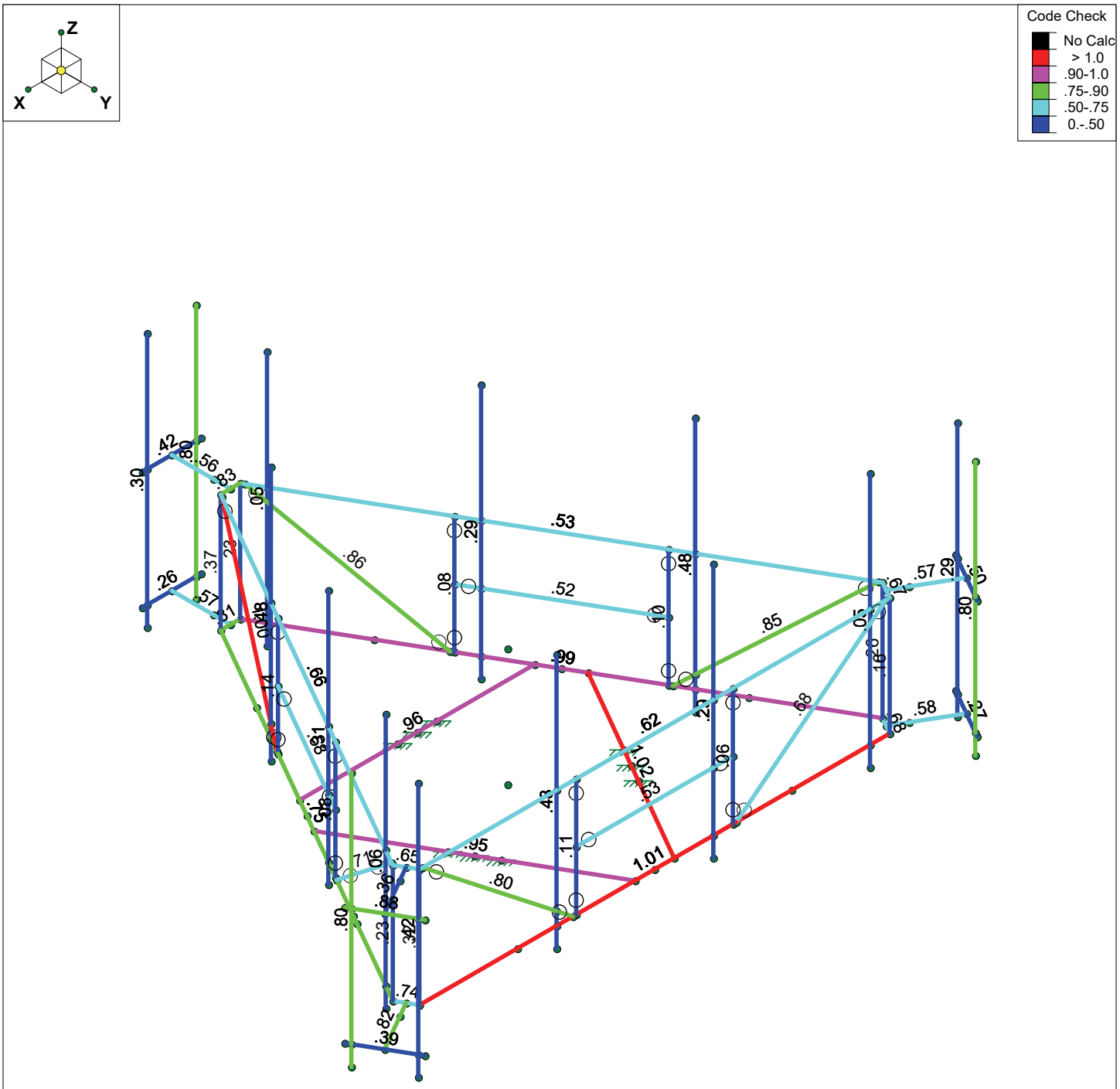

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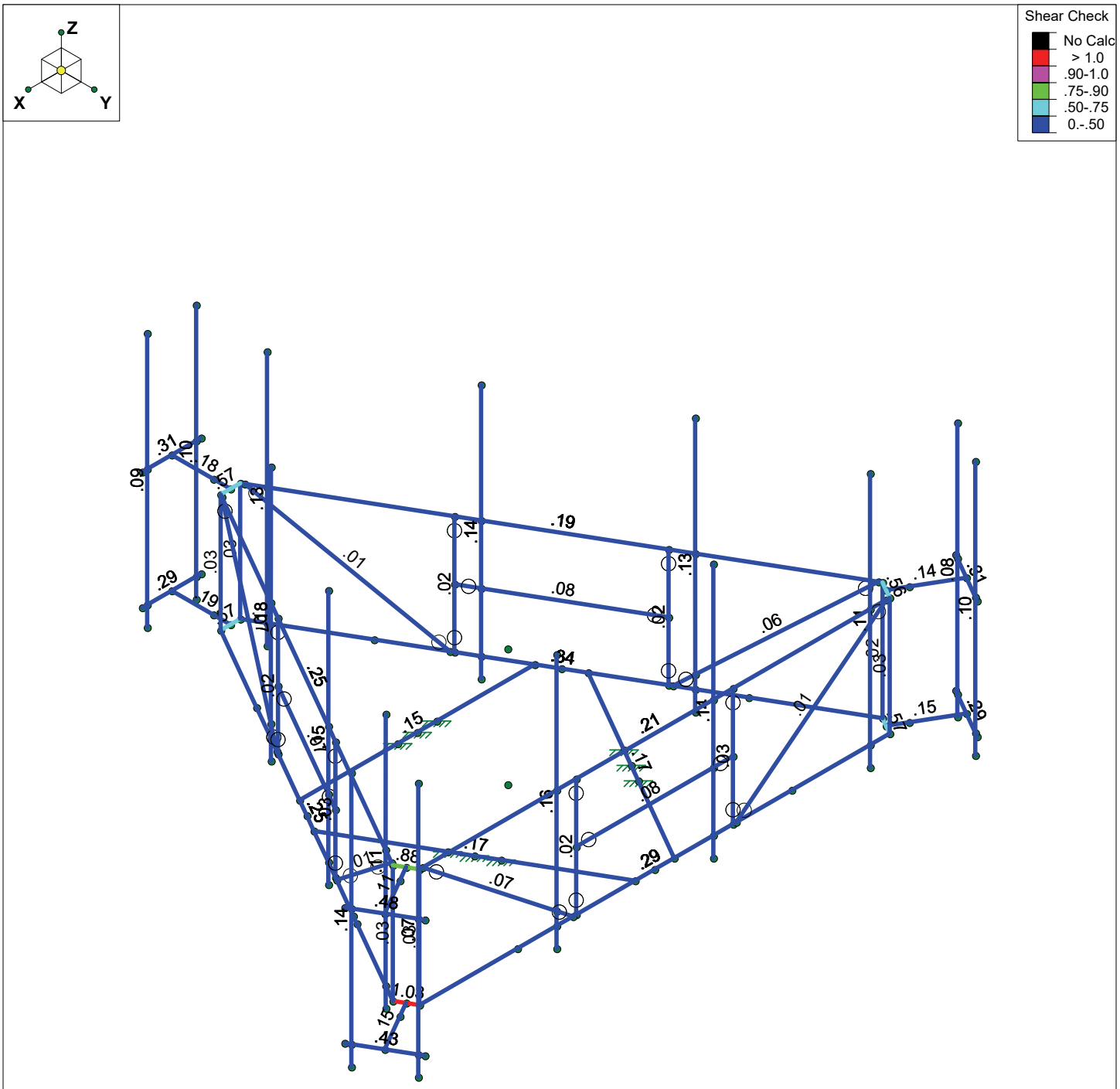

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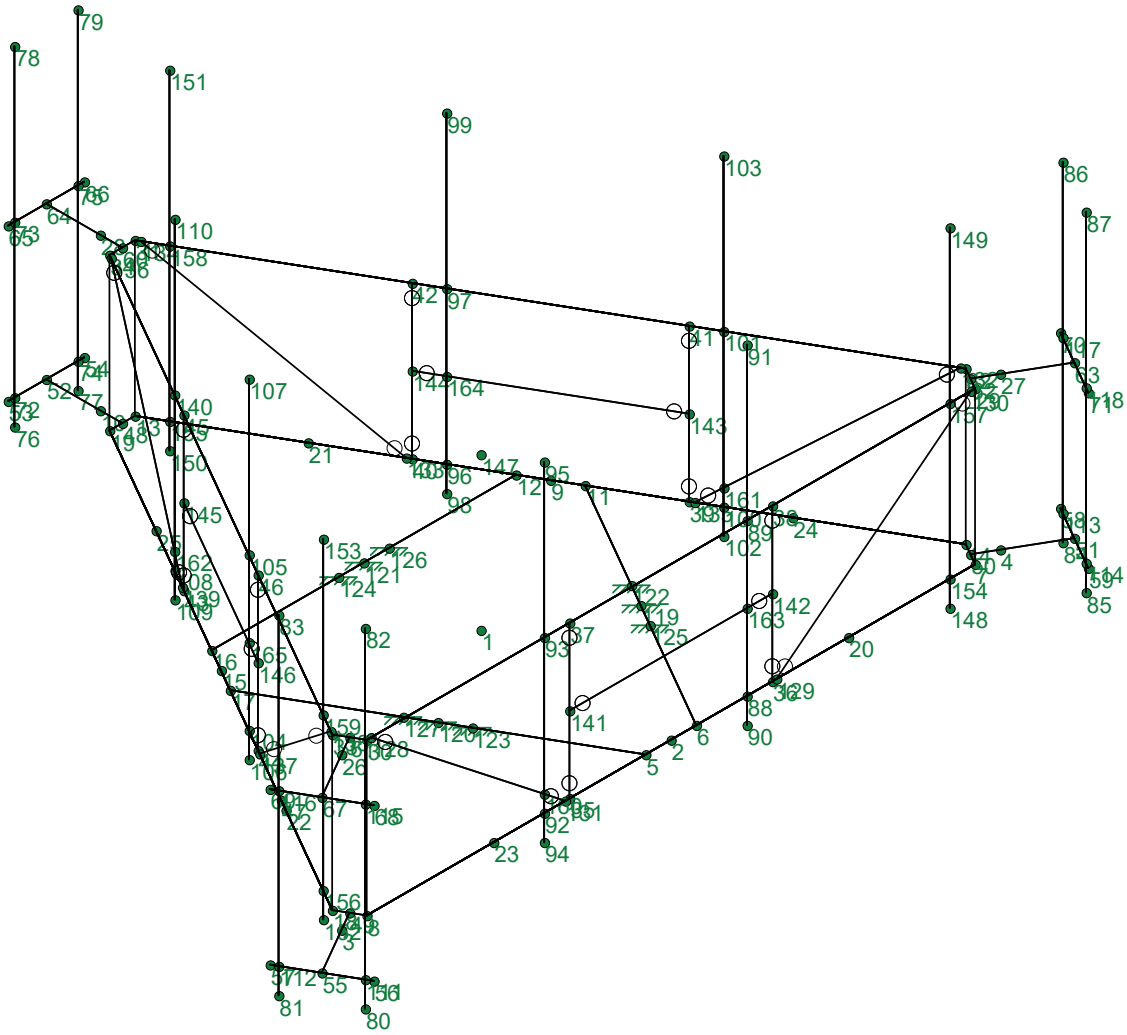

Envelope Only Solution

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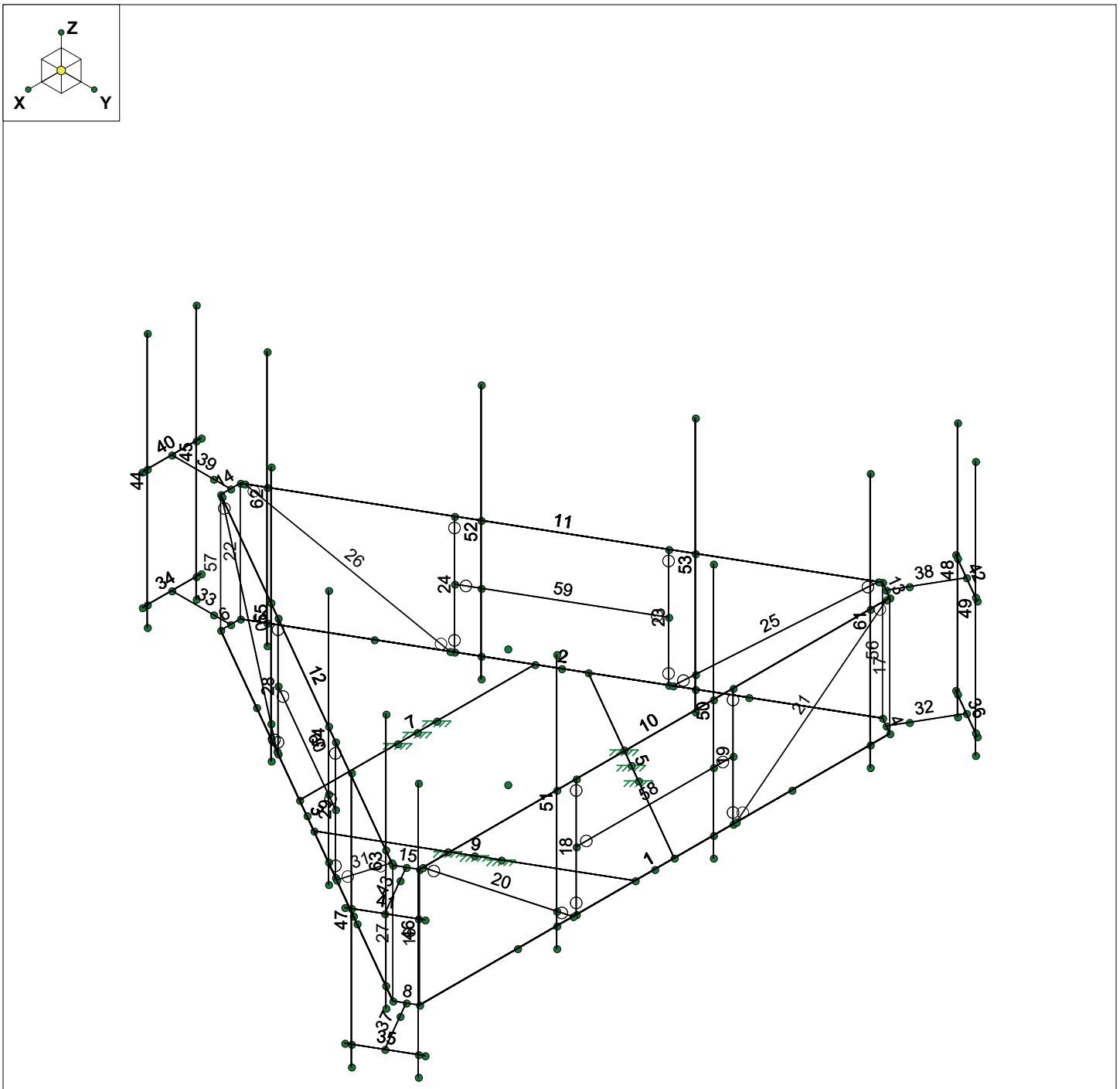

Envelope Only Solution

		SK - 7
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		CT2112_G Code.r3d

Joint Boundary Conditions

	Joint Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot.[k-ft/rad]	Y Rot.[k-ft/rad]	Z Rot.[k-ft/rad]	Footing
1	122	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction	
2	119	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction	
3	125	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction	
4	123	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction	
5	120	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction	
6	127	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction	
7	126	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction	
8	124	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction	
9	121	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction	

Hot Rolled Steel Design Parameters

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
1	1	C5x6.7	144	40	40	40	40					Lateral
2	2	C5x6.7	143.971	40	40	40	40					Lateral
3	3	C5x6.7	143.952	40	40	40	40					Lateral
4	4	PL 6x0.25	5.998									Lateral
5	5	C5x6.7	71.973	30	30	30	30					Lateral
6	6	PL 6x0.25	5.999									Lateral
7	7	C5x6.7	72.018	30	30	30	30					Lateral
8	8	PL 6x0.25	5.984									Lateral
9	9	C5x6.7	71.99	30	30	30	30					Lateral
10	10	L3x3x5	144									Lateral
11	11	L3x3x5	143.971									Lateral
12	12	L3x3x5	143.952									Lateral
13	13	PL 6x0.25	5.998									Lateral
14	14	PL 6x0.25	5.999									Lateral
15	15	PL 6x0.25	5.984									Lateral
16	16	L1.75x1.75x...	36									Lateral
17	17	L1.75x1.75x...	36									Lateral
18	18	L1.75x1.75x...	36									Lateral
19	19	L1.75x1.75x...	36									Lateral
20	20	L1.75x1.75x...	58.412									Lateral
21	21	L1.75x1.75x...	58.412									Lateral
22	22	L1.75x1.75x...	36									Lateral
23	23	L1.75x1.75x...	36									Lateral
24	24	L1.75x1.75x...	36									Lateral
25	25	L1.75x1.75x...	58.419									Lateral
26	26	L1.75x1.75x...	58.419									Lateral
27	27	L1.75x1.75x...	36									Lateral
28	28	L1.75x1.75x...	36									Lateral
29	29	L1.75x1.75x...	36									Lateral
30	30	L1.75x1.75x...	58.411									Lateral
31	31	L1.75x1.75x...	58.411									Lateral
32	32	C6x8.2	18									Lateral
33	33	C6x8.2	18									Lateral
34	34	HSS2x2x4	18									Lateral
35	35	HSS2x2x4	18									Lateral
36	36	HSS2x2x4	18									Lateral
37	37	C6x8.2	18									Lateral
38	38	C6x8.2	18									Lateral
39	39	C6x8.2	18									Lateral
40	40	HSS2x2x4	18									Lateral
41	41	L1.75x1.75x...	18									Lateral
42	42	HSS2x2x4	18									Lateral

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length[in]	Lbyy[in]	Lbzz[in]	Lcomp top[in]	Lcomp bot[in]	L-torq...	Kyy	Kzz	Cb	Function
43	43	C6x8.2	18									Lateral
44	44	PIPE_2.0	78									Lateral
45	45	PIPE_2.0	78									Lateral
46	46	PIPE_2.0	78									Lateral
47	47	PIPE_2.0	78									Lateral
48	48	PIPE_2.0	78									Lateral
49	49	PIPE_2.0	78									Lateral
50	50	PIPE_2.0	78									Lateral
51	51	PIPE_2.0	78									Lateral
52	52	PIPE_2.0	78									Lateral
53	53	PIPE_2.0	78									Lateral
54	54	PIPE_2.0	78									Lateral
55	55	PIPE_2.0	78									Lateral
56	56	L1.75x1.75x...	36									Lateral
57	57	L1.75x1.75x...	36									Lateral
58	58	L1.75x1.75x...	48									Lateral
59	59	L1.75x1.75x...	48.009									Lateral
60	60	L1.75x1.75x...	47.998									Lateral
61	61	PIPE_2.0	78									Lateral
62	62	PIPE_2.0	78									Lateral
63	63	PIPE_2.0	78									Lateral

Envelope AISC 14th(360-10): LRFD Steel Code Checks

	Memb...	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]...		LC	phi*Pnc [lb]	phi*Pnt [l...	phi*Mn y-...	phi*Mn ...	...	Eqn
1	8	PL 6x0.25	.736	5.984	1	1.025	0	y	4	33842.383	48600	.253	6.075	...	H1-...
2	15	PL 6x0.25	.645	0	6	.885	0	y	3	33842.383	48600	.253	6.075	...	H1-...
3	4	PL 6x0.25	.684	5.998	6	.573	0	y	4	33785.701	48600	.253	6.075	...	H1-...
4	14	PL 6x0.25	.827	5.999	2	.571	0	y	4	33778.872	48600	.253	6.075	...	H1-...
5	6	PL 6x0.25	.809	5.999	2	.570	0	y	3	33778.872	48600	.253	6.075	...	H1-...
6	13	PL 6x0.25	.669	5.998	6	.562	0	y	8	33785.701	48600	.253	6.075	...	H1-...
7	41	L1.75x1.7...	.877	9.188	7	.481	9.188	y	2	22747.34	26341.2	.512	1.176	...	H2-1
8	35	HSS2x2x4	.388	9.188	8	.433	9.188	z	9	47265.902	48924	2.603	2.603	...	H3-6
9	2	C5x6.7	.993	65.987	1	.340	80.9...	y	7	44841.687	63828	1.604	8.972	1	H1-...
10	42	HSS2x2x4	.496	16.5	1	.315	9	z	3	47265.902	48924	2.603	2.603	...	H3-6
11	40	HSS2x2x4	.420	16.5	7	.312	9.188	z	8	47265.902	48924	2.603	2.603	...	H1-...
12	34	HSS2x2x4	.258	9.188	9	.293	9.188	z	3	47265.902	48924	2.603	2.603	...	H3-6
13	1	C5x6.7	1.006	78	2	.292	81	y	1	44841.687	63828	1.604	8.972	1	H1-...
14	36	HSS2x2x4	.266	9	4	.289	9	z	4	47265.902	48924	2.603	2.603	...	H3-6
15	12	L3x3x5	.664	0	7	.250	0	z	7	6595.737	57672	2.015	3.683	...	H2-1
16	3	C5x6.7	.753	67.477	1	.247	77.9...	y	1	44841.687	63828	1.604	8.972	1	H1-...
17	10	L3x3x5	.617	42	1	.211	0	z	6	6591.314	57672	2.015	3.777	...	H2-1
18	11	L3x3x5	.530	1.5	7	.185	0	z	1	6593.955	57672	2.015	3.865	...	H2-1
19	33	C6x8.2	.569	18	4	.185	9	z	2	72974.715	77436	2.108	13.932	...	H1-...
20	55	PIPE_2.0	.476	35.75	7	.179	68.25		2	19360.206	32130	1.872	1.872	...	H1-...
21	39	C6x8.2	.564	18	4	.178	9	z	2	72974.715	77436	2.108	13.932	...	H1-...
22	5	C5x6.7	1.016	29.989	2	.172	29.9...	y	2	51788.584	63828	1.604	9.365	1	H1-...
23	9	C5x6.7	.952	42.744	7	.166	29.9...	y	6	51787.759	63828	1.604	9.365	1	H1-...
24	51	PIPE_2.0	.476	35.75	6	.164	68.25		1	19360.206	32130	1.872	1.872	...	H1-...
25	32	C6x8.2	.581	18	8	.153	9	z	6	72974.715	77436	2.108	13.932	...	H1-...
26	37	C6x8.2	.822	18	3	.149	9	z	1	72974.704	77436	2.108	13.932	...	H1-...
27	7	C5x6.7	.960	42.01	1	.148	29.2...	y	9	51786.387	63828	1.604	9.365	1	H1-...
28	54	PIPE_2.0	.315	71.5	1	.147	53.6...		2	19360.206	32130	1.872	1.872	...	H1-...
29	50	PIPE_2.0	.290	71.5	7	.143	36.5...		6	19360.206	32130	1.872	1.872	...	H1-...
30	47	PIPE_2.0	.804	35.75	2	.136	36.5...		7	19360.206	32130	1.872	1.872	...	H1-...
31	38	C6x8.2	.569	18	9	.136	9	z	6	72974.715	77436	2.108	13.932	...	H1-...

Envelope AISC 14th(360-10): LRFD Steel Code Checks (Continued)

	Memb...	Shape	Code Check	Loc[in]	LC	Shear Check	Loc[in]	...	LC	phi*Pnc [lb]	phi*Pnt [l...	phi*Mn y-...	phi*Mn ...	...	Eqn
32	52	PIPE_2.0	.294	71.5	2	.136	71.5		2	19360.206	32130	1.872	1.872	...	H1-...
33	53	PIPE_2.0	.476	35.75	2	.134	36.5...		7	19360.206	32130	1.872	1.872	...	H1-...
34	62	PIPE_2.0	.050	36.563	1	.127	36.5...		7	19360.206	32130	1.872	1.872	...	H1-...
35	43	C6x8.2	.359	0	1	.112	9	z	1	72974.704	77436	2.108	13.932	...	H1-...
36	63	PIPE_2.0	.059	36.563	7	.108	36.5...		6	19360.206	32130	1.872	1.872	...	H1-...
37	61	PIPE_2.0	.054	36.563	1	.105	36.5...		1	19360.206	32130	1.872	1.872	...	H1-...
38	45	PIPE_2.0	.802	35.75	2	.101	36.5...		2	19360.206	32130	1.872	1.872	...	H1-...
39	49	PIPE_2.0	.803	35.75	6	.096	36.5...		6	19360.206	32130	1.872	1.872	...	H1-...
40	44	PIPE_2.0	.295	36.563	3	.093	36.5...		7	19360.206	32130	1.872	1.872	...	H1-...
41	59	L1.75x1.7...	.524	42.508	2	.084	42.5...	z	2	9266.077	26341.2	.512	1.176	...	H2-1
42	58	L1.75x1.7...	.532	42	7	.081	42	z	7	9269.508	26341.2	.512	1.176	...	H2-1
43	48	PIPE_2.0	.291	36.563	4	.081	36.5...		2	19360.206	32130	1.872	1.872	...	H1-...
44	60	L1.75x1.7...	.580	41.998	1	.074	41.9...	z	1	9270.363	26341.2	.512	1.176	...	H2-1
45	46	PIPE_2.0	.424	71.5	4	.072	36.5...		8	19360.206	32130	1.872	1.872	...	H1-...
46	30	L1.75x1.7...	1.004	52.326	7	.071	58.4...	y	2	6259.721	26341.2	.512	1.108	...	H2-1
47	20	L1.75x1.7...	.801	52.328	6	.070	58.4...	y	1	6259.363	26341.2	.512	1.127	...	H2-1
48	25	L1.75x1.7...	.853	52.334	1	.057	58.4...	y	7	6257.926	26341.2	.512	1.121	...	H2-1
49	22	L1.75x1.7...	.229	36	7	.032	36	z	7	14649.265	26341.2	.512	1.176	...	H2-1
50	57	L1.75x1.7...	.365	36	2	.032	36	z	7	14649.265	26341.2	.512	1.176	...	H2-1
51	16	L1.75x1.7...	.316	36	1	.030	36	z	6	14649.265	26341.2	.512	1.176	...	H2-1
52	27	L1.75x1.7...	.230	0	6	.030	36	z	6	14649.265	26341.2	.512	1.176	...	H2-1
53	19	L1.75x1.7...	.063	18	7	.028	18	z	1	14649.265	26341.2	.512	1.176	...	H2-1
54	29	L1.75x1.7...	.076	18	6	.025	18	z	2	14649.265	26341.2	.512	1.176	...	H2-1
55	17	L1.75x1.7...	.164	36	1	.025	36	z	1	14649.265	26341.2	.512	1.176	...	H2-1
56	56	L1.75x1.7...	.262	36	6	.024	36	z	1	14649.265	26341.2	.512	1.176	...	H2-1
57	24	L1.75x1.7...	.079	18	7	.023	18	z	7	14649.265	26341.2	.512	1.176	...	H2-1
58	18	L1.75x1.7...	.114	18	6	.023	36	z	1	14649.265	26341.2	.512	1.176	...	H2-1
59	23	L1.75x1.7...	.103	18	1	.023	0	z	7	14649.265	26341.2	.512	1.176	...	H2-1
60	28	L1.75x1.7...	.141	18	7	.021	36	z	2	14649.265	26341.2	.512	1.176	...	H2-1
61	21	L1.75x1.7...	.682	29.206	6	.012	58.4...	y	1	6259.363	26341.2	.512	1.085	...	H2-1
62	26	L1.75x1.7...	.856	29.818	2	.012	0	y	2	6257.926	26341.2	.512	1.085	...	H2-1
63	31	L1.75x1.7...	.714	30.422	1	.009	58.4...	y	2	6259.721	26341.2	.512	1.085	...	H2-1

Joint Coordinates and Temperatures

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diaphra...
1	1	0	0	0	0	
2	2	0	45	0	0	
3	3	77.983386	45	0	0	
4	4	-78	45	0	0	
5	5	6	45	0	0	
6	6	-6	45	0	0	
7	7	-72	45	0	0	
8	8	72	45	0	0	
9	9	-38.971143	-22.5	0	0	
10	10	0.027747	-90.04806	0	0	
11	11	-41.986681	-17.330761	0	0	
12	12	-35.99779	-27.696152	0	0	
13	13	-2.973364	-84.853829	0	0	
14	14	-74.99889	39.80577	0	0	
15	15	38.971143	-22.5	0	0	
16	16	36.019991	-27.696152	0	0	
17	17	41.995015	-17.345196	0	0	
18	18	74.991969	39.817758	0	0	
19	19	3.026083	-84.853829	0	0	
20	20	-42	45	0	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diaphra...
21	21	-17.984467	-58.873067	0	0	
22	22	59.993354	13.834597	0	0	
23	23	42	45	0	0	
24	24	-59.993341	13.83462	0	0	
25	25	18.023314	-58.873067	0	0	
26	26	77.983386	45	36	0	
27	27	-78	45	36	0	
28	28	0.027747	-90.04806	36	0	
29	29	-72	45	36	0	
30	30	72	45	36	0	
31	31	-2.973364	-84.853829	36	0	
32	32	-74.99889	39.80577	36	0	
33	33	74.991969	39.817758	36	0	
34	34	3.026083	-84.853829	36	0	
35	35	24	45	0	0	
36	36	-24	45	0	0	
37	37	24	45	36	0	
38	38	-24	45	36	0	
39	39	-51.008893	-1.71539	0	0	
40	40	-26.991128	-43.28461	0	0	
41	41	-51.008893	-1.71539	36	0	
42	42	-26.991128	-43.28461	36	0	
43	43	27.021653	-43.28461	0	0	
44	44	51.017222	-1.71539	0	0	
45	45	27.021653	-43.28461	36	0	
46	46	51.017222	-1.71539	36	0	
47	47	58.507214	11.237505	0	0	
48	48	0.027747	-84.853829	0	0	
49	49	73.5	42.401924	0	0	
50	50	-73.499445	42.402885	0	0	
51	51	-89.089824	51.399555	0	0	
52	52	0.027747	-102.853829	0	0	
53	53	9.031593	-102.853829	0	0	
54	54	-8.968407	-102.853829	0	0	
55	55	89.074029	51.426914	0	0	
56	56	84.558232	59.248503	0	0	
57	57	93.558232	43.660046	0	0	
58	58	-93.589825	43.605326	0	0	
59	59	-84.589825	59.193783	0	0	
60	60	0.027747	-84.853829	36	0	
61	61	73.5	42.401924	36	0	
62	62	-73.499445	42.402885	36	0	
63	63	-89.089824	51.399555	36	0	
64	64	0.027747	-102.853829	36	0	
65	65	9.031593	-102.853829	36	0	
66	66	-8.968407	-102.853829	36	0	
67	67	89.074029	51.426914	36	0	
68	68	84.558232	59.248503	36	0	
69	69	93.558232	43.660046	36	0	
70	70	-93.589825	43.605326	36	0	
71	71	-84.589825	59.193783	36	0	
72	72	7.527747	-102.853829	0	0	
73	73	7.527747	-102.853829	36	0	
74	74	-7.472253	-102.853829	0	0	
75	75	-7.472253	-102.853829	36	0	
76	76	7.527747	-102.853829	-6	0	
77	77	-7.472253	-102.853829	-6	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diaphra...
78	78	7.527747	-102.853829	72	0	
79	79	-7.472253	-102.853829	72	0	
80	80	85.310155	57.946134	-6	0	
81	81	92.810155	44.955753	-6	0	
82	82	85.310155	57.946134	72	0	
83	83	92.810155	44.955753	72	0	
84	84	-92.837902	44.907695	-6	0	
85	85	-85.337902	57.898076	-6	0	
86	86	-92.837902	44.907695	72	0	
87	87	-85.337902	57.898076	72	0	
88	88	-18	45	0	0	
89	89	-18	45	36	0	
90	90	-18	45	-6	0	
91	91	-18	45	72	0	
92	92	30	45	0	0	
93	93	30	45	36	0	
94	94	30	45	-6	0	
95	95	30	45	72	0	
96	96	-29.971143	-38.088457	0	0	
97	97	-29.971143	-38.088457	36	0	
98	98	-29.971143	-38.088457	-6	0	
99	99	-29.971143	-38.088457	72	0	
100	100	-53.971143	3.480762	0	0	
101	101	-53.971143	3.480762	36	0	
102	102	-53.971143	3.480762	-6	0	
103	103	-53.971143	3.480762	72	0	
104	104	47.971143	-6.911543	0	0	
105	105	47.971143	-6.911543	36	0	
106	106	47.971143	-6.911543	-6	0	
107	107	47.971143	-6.911543	72	0	
108	108	23.971143	-48.480762	0	0	
109	109	23.971143	-48.480762	-6	0	
110	110	23.971143	-48.480762	72	0	
111	111	85.310155	57.946134	0	0	
112	112	92.810155	44.955753	0	0	
113	113	-92.837902	44.907695	0	0	
114	114	-85.337902	57.898076	0	0	
115	115	85.310155	57.946134	36	0	
116	116	92.810155	44.955753	36	0	
117	117	-92.837902	44.907695	36	0	
118	118	-85.337902	57.898076	36	0	
119	119	-23.986681	13.846154	0	0	
120	120	24	13.823085	0	0	
121	121	0.019991	-27.696152	0	0	
122	122	-26.986681	8.650001	0	0	
123	123	21	19.019238	0	0	
124	124	6.019991	-27.696152	0	0	
125	125	-20.986681	19.042306	0	0	
126	126	-5.980009	-27.696152	0	0	
127	127	27	8.626933	0	0	
128	128	71	45	36	0	
129	129	-25	45	0	0	
130	130	-71	45	36	0	
131	131	25	45	0	0	
132	132	-74.526288	38.987804	36	0	
133	133	-26.490758	-44.150635	0	0	
134	134	-3.473734	-83.987804	36	0	

Joint Coordinates and Temperatures (Continued)

	Label	X [in]	Y [in]	Z [in]	Temp [F]	Detach From Diaphra...
135	135	-51.509263	-0.849365	0	0	
136	136	3.525991	-83.987804	36	0	
137	137	51.517129	-0.849365	0	0	
138	138	74.512883	38.987804	36	0	
139	139	26.521745	-44.150635	0	0	
140	140	24.022206	-48.480762	36	0	
141	141	24	45	18	0	
142	142	-24	45	18	0	
143	143	-51.008893	-1.71539	18	0	
144	144	-26.991128	-43.28461	18	0	
145	145	27.021653	-43.28461	18	0	
146	146	51.017222	-1.71539	18	0	
147	147	0	0	36	0	
148	148	-66	45	-6	0	
149	149	-66	45	72	0	
150	150	-5.971143	-79.657677	-6	0	
151	151	-5.971143	-79.657677	72	0	
152	152	71.971143	34.657677	-6	0	
153	153	71.971143	34.657677	72	0	
154	154	-66	45	0	0	
155	155	-5.975584	-79.657677	0	0	
156	156	72.013345	34.657677	0	0	
157	157	-66	45	36	0	
158	158	-5.975584	-79.657677	36	0	
159	159	72.013345	34.657677	36	0	
160	160	30	45	3.913043	0	
161	161	-54.011114	3.480762	3.913043	0	
162	162	24.022206	-48.480762	3.913043	0	
163	163	-18	45	18	0	
164	164	-29.971143	-38.088457	18	0	
165	165	47.971143	-6.911543	18	0	

Envelope Joint Displacements

	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation...	LC	Y Rotation...	LC	Z Rotation...	LC
1	1	max	0	1	0	1	0	1	0	1	0	1	0	1
2		min	0	1	0	1	0	1	0	1	0	1	0	1
3	2	max	.082	7	.002	1	.063	1	3.754e-3	1	2.019e-3	7	8.8e-3	7
4		min	-.083	2	-.002	6	-.125	6	-7.45e-3	6	-1.909e-3	2	-8.866e-3	2
5	3	max	.083	7	.09	6	.202	2	-1.219e-3	2	1.926e-2	8	1.463e-3	6
6		min	-.085	2	-.089	1	-.379	7	-1.047e-2	9	4.438e-3	1	-6.972e-4	1
7	4	max	.084	7	.091	6	.244	7	1.19e-3	7	1.609e-3	7	8.425e-4	4
8		min	-.084	2	-.093	1	-.383	2	-6.925e-3	4	-1.086e-2	4	1.256e-4	6
9	5	max	.082	7	.045	7	.065	1	3.857e-3	1	2.288e-3	7	4.238e-3	7
10		min	-.083	2	-.046	2	-.129	6	-7.652e-3	6	-1.748e-3	2	-4.358e-3	2
11	6	max	.082	7	.046	2	.063	1	3.652e-3	1	1.964e-3	7	4.283e-3	7
12		min	-.083	2	-.045	7	-.126	6	-7.247e-3	6	-2.28e-3	2	-4.299e-3	2
13	7	max	.084	7	.092	6	.24	7	4.227e-3	1	5.136e-3	7	8.047e-4	4
14		min	-.084	2	-.09	1	-.332	2	-4.137e-3	6	-5.394e-3	2	1.644e-4	6
15	8	max	.083	7	.081	6	.236	2	3.563e-3	1	5.223e-3	7	1.36e-3	6
16		min	-.085	2	-.085	1	-.327	7	-3.821e-3	6	-5.257e-3	2	-6.538e-4	1
17	9	max	.039	1	.065	6	.056	7	3.539e-3	1	3.348e-3	7	8.134e-3	6
18		min	-.039	6	-.066	1	-.119	2	-1.759e-3	6	-6.66e-3	2	-8.222e-3	1
19	10	max	.114	7	.088	6	.269	6	1.311e-2	3	4.565e-4	2	1.481e-3	7
20		min	-.112	2	-.087	1	-.408	1	-2.463e-3	6	-9.352e-4	7	-8.534e-4	2
21	11	max	.075	1	.045	6	.062	7	2.483e-3	3	4.279e-3	7	3.613e-3	2

Envelope Joint Displacements (Continued)

	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation...	LC	Y Rotation...	LC	Z Rotation...	LC
22		min	-.074	6	-.046	1	-.128	2	-1.014e-3	6	-7.926e-3	2	-3.694e-3	7
23	12	max	.002	1	.087	6	.052	7	4.756e-3	1	2.48e-3	7	4.337e-3	6
24		min	-.002	6	-.088	1	-.116	2	-2.661e-3	6	-5.458e-3	2	-4.376e-3	1
25	13	max	.106	7	.09	6	.257	6	5.262e-3	1	4.503e-3	7	1.404e-3	7
26		min	-.108	2	-.091	1	-.348	1	-5.078e-3	6	-4.326e-3	2	-8.11e-4	2
27	14	max	.086	7	.091	6	.227	7	4.627e-3	1	4.264e-3	7	7.645e-4	4
28		min	-.083	2	-.091	1	-.32	2	-4.328e-3	6	-4.586e-3	2	5.568e-5	6
29	15	max	.039	6	.065	6	.055	2	3.807e-3	1	6.395e-3	7	8.029e-3	1
30		min	-.038	1	-.064	1	-.118	7	-1.808e-3	6	-3.242e-3	2	-8.06e-3	6
31	16	max	.002	6	.086	6	.052	2	5.081e-3	1	5.525e-3	7	4.219e-3	1
32		min	-.002	1	-.085	1	-.118	7	-2.639e-3	6	-2.487e-3	2	-4.299e-3	6
33	17	max	.074	6	.045	6	.06	2	2.735e-3	3	7.319e-3	7	3.647e-3	1
34		min	-.073	1	-.044	1	-.124	7	-1.133e-3	6	-4.057e-3	2	-3.625e-3	6
35	18	max	.088	7	.085	6	.225	2	4.31e-3	1	5.216e-3	7	1.379e-3	6
36		min	-.085	2	-.087	1	-.316	7	-4.658e-3	6	-5.187e-3	2	-6.601e-4	1
37	19	max	.106	7	.087	6	.255	6	4.965e-3	1	4.297e-3	7	1.452e-3	7
38		min	-.108	2	-.084	1	-.348	1	-4.819e-3	6	-3.896e-3	2	-8.754e-4	2
39	20	max	.084	7	.074	6	.09	7	1.13e-2	1	4.453e-3	7	1.916e-3	1
40		min	-.084	2	-.069	1	-.176	2	-1.108e-2	6	-4.764e-3	2	-2.095e-3	6
41	21	max	.052	7	.107	6	.128	6	5.411e-3	1	1.112e-2	7	3.192e-3	7
42		min	-.055	2	-.11	1	-.214	1	-5.189e-3	6	-1.085e-2	2	-3.434e-3	2
43	22	max	.111	7	.055	6	.139	2	6.584e-3	1	9.592e-3	7	2.621e-3	6
44		min	-.105	2	-.058	1	-.223	7	-6.873e-3	6	-9.724e-3	2	-2.888e-3	1
45	23	max	.083	7	.052	6	.092	1	8.827e-3	1	4.69e-3	7	2.045e-3	2
46		min	-.084	2	-.061	1	-.182	6	-9.284e-3	6	-4.472e-3	2	-2.181e-3	7
47	24	max	.105	7	.058	6	.143	7	6.264e-3	1	6.941e-3	7	2.837e-3	1
48		min	-.098	2	-.055	1	-.236	2	-6.147e-3	6	-7.457e-3	2	-2.91e-3	6
49	25	max	.04	7	.102	6	.126	6	5.029e-3	1	9.56e-3	7	2.763e-3	7
50		min	-.047	2	-.097	1	-.219	1	-4.528e-3	6	-9.245e-3	2	-2.824e-3	2
51	26	max	.262	7	.261	6	.206	2	-8.202e-4	2	1.828e-2	8	4.125e-3	1
52		min	-.263	2	-.256	1	-.369	7	-9.59e-3	9	2.939e-3	1	-4.355e-3	6
53	27	max	.26	7	.257	6	.238	7	9.477e-4	7	1.035e-3	7	3.253e-3	6
54		min	-.265	2	-.261	1	-.378	2	-6.841e-3	4	-1.073e-2	4	-3.552e-3	1
55	28	max	.297	7	.258	6	.261	6	1.291e-2	3	6.901e-4	2	3.838e-3	2
56		min	-.293	2	-.261	1	-.4	1	-1.666e-3	6	-1.156e-3	7	-4.044e-3	7
57	29	max	.259	7	.277	6	.241	7	4.449e-3	1	5.374e-3	7	3.796e-3	6
58		min	-.264	2	-.283	1	-.332	2	-4.368e-3	6	-5.796e-3	2	-4.066e-3	1
59	30	max	.261	7	.288	6	.238	2	1.814e-3	1	5.203e-3	7	4.806e-3	1
60		min	-.263	2	-.282	1	-.328	7	-2.856e-3	6	-4.762e-3	2	-4.97e-3	6
61	31	max	.319	7	.26	6	.257	6	5.825e-3	1	4.278e-3	7	4.462e-3	2
62		min	-.313	2	-.262	1	-.349	1	-5.486e-3	6	-4.04e-3	2	-4.646e-3	7
63	32	max	.275	7	.266	6	.227	7	3.439e-3	7	5.08e-3	7	3.667e-3	6
64		min	-.281	2	-.271	1	-.319	2	-3.737e-3	2	-5.449e-3	2	-3.909e-3	1
65	33	max	.282	7	.273	6	.225	2	4.491e-3	1	5.814e-3	7	4.462e-3	1
66		min	-.285	2	-.268	1	-.315	7	-4.561e-3	6	-4.942e-3	2	-4.656e-3	6
67	34	max	.319	7	.256	6	.255	6	6.12e-3	1	9.196e-4	6	4.601e-3	2
68		min	-.313	2	-.26	1	-.347	1	-5.626e-3	6	-1.011e-3	1	-4.744e-3	7
69	35	max	.083	7	.075	7	.083	1	9.462e-3	1	3.675e-3	7	1.629e-3	6
70		min	-.084	2	-.08	2	-.165	6	-1.074e-2	6	-2.86e-3	2	-1.89e-3	1
71	36	max	.083	7	.077	2	.076	1	1.526e-2	1	3.12e-3	7	2.192e-3	1
72		min	-.084	2	-.076	7	-.153	6	-1.51e-2	6	-3.764e-3	2	-2.352e-3	6
73	37	max	.261	7	.684	6	.084	1	2.505e-2	1	3.624e-3	7	3.876e-3	1
74		min	-.263	2	-.681	1	-.167	6	-2.525e-2	6	-3.074e-3	2	-3.415e-3	6
75	38	max	.26	7	.596	6	.076	1	1.624e-2	1	3.328e-3	7	5.544e-3	6
76		min	-.264	2	-.606	1	-.151	6	-1.59e-2	6	-3.889e-3	2	-5.683e-3	1
77	39	max	.101	7	.04	6	.098	7	5.09e-3	1	7.317e-3	7	1.311e-3	2
78		min	-.098	2	-.039	1	-.182	2	-5.101e-3	6	-8.822e-3	2	-1.541e-3	7

Envelope Joint Displacements (Continued)

	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation...	LC	Y Rotation...	LC	Z Rotation...	LC
79	40	max	.035	6	.109	6	.066	6	7.322e-3	2	1.409e-2	7	2.072e-3	7
80		min	-.037	1	-.11	1	-.143	1	-6.821e-3	7	-1.37e-2	2	-2.188e-3	2
81	41	max	.574	7	.36	6	.098	7	8.216e-3	1	1.882e-2	7	4.508e-3	7
82		min	-.578	2	-.368	1	-.183	2	-8.491e-3	6	-1.93e-2	2	-4.073e-3	2
83	42	max	.575	7	.32	6	.066	6	7.622e-3	2	1.53e-2	7	4.302e-3	2
84		min	-.567	2	-.323	1	-.143	1	-7.29e-3	7	-1.48e-2	2	-4.447e-3	7
85	43	max	.033	1	.108	6	.064	6	5.663e-3	7	9.809e-3	7	1.602e-3	7
86		min	-.036	6	-.105	1	-.148	3	-4.284e-3	2	-9.119e-3	2	-1.837e-3	2
87	44	max	.093	7	.037	6	.094	2	6.588e-3	1	1.235e-2	7	1.622e-3	2
88		min	-.091	2	-.037	1	-.171	7	-7.083e-3	6	-1.226e-2	2	-1.825e-3	7
89	45	max	.638	7	.321	6	.063	6	1.169e-2	7	2.149e-2	7	3.307e-3	2
90		min	-.636	2	-.327	1	-.149	3	-1.112e-2	2	-2.166e-2	2	-2.838e-3	7
91	46	max	.549	7	.355	6	.095	2	7.128e-3	1	1.326e-2	7	5.342e-3	7
92		min	-.558	2	-.352	1	-.17	7	-7.632e-3	6	-1.335e-2	2	-5.468e-3	2
93	47	max	.11	7	.051	6	.131	2	6.634e-3	1	1.005e-2	7	2.53e-3	6
94		min	-.104	2	-.054	1	-.214	7	-6.944e-3	6	-1.015e-2	2	-2.814e-3	1
95	48	max	.106	7	.088	6	.256	6	1.301e-2	3	2.792e-3	2	1.448e-3	7
96		min	-.108	2	-.087	1	-.352	1	-2.578e-3	6	-3.08e-3	7	-8.438e-4	2
97	49	max	.085	7	.083	6	.228	2	-4.18e-4	2	1.904e-2	8	1.407e-3	6
98		min	-.085	2	-.086	1	-.325	7	-1.073e-2	9	3.365e-3	1	-6.711e-4	1
99	50	max	.085	7	.091	6	.234	7	2.191e-3	7	1.151e-3	7	8.099e-4	4
100		min	-.083	2	-.091	1	-.33	2	-6.909e-3	4	-1.08e-2	8	1.204e-4	6
101	51	max	.082	7	.089	6	.271	7	3.134e-3	1	3.215e-3	7	8.518e-4	4
102		min	-.086	2	-.099	1	-.497	2	-6.108e-3	6	-6.435e-3	2	2.069e-4	6
103	52	max	.133	7	.088	6	.301	6	7.185e-3	3	4.351e-3	7	1.422e-3	7
104		min	-.123	2	-.087	1	-.527	1	-2.665e-3	6	-5.302e-3	2	-7.861e-4	2
105	53	max	.133	7	.084	6	.305	6	5.455e-3	1	4.693e-3	7	1.245e-3	3
106		min	-.123	2	-.076	1	-.525	1	-3.339e-3	6	-5.193e-3	2	-4.085e-4	6
107	54	max	.133	7	.097	6	.297	6	4.266e-3	1	3.126e-3	7	1.282e-3	1
108		min	-.123	2	-.098	1	-.533	1	-2.324e-3	6	-4.074e-3	2	-1.053e-3	6
109	55	max	.077	7	.107	6	.146	2	5.186e-4	1	1.221e-2	9	1.491e-3	6
110		min	-.084	2	-.097	1	-.561	9	-5.648e-3	8	2.353e-3	2	-7.012e-4	1
111	56	max	.069	7	.101	6	.139	2	1.771e-3	1	7.815e-3	9	1.304e-3	8
112		min	-.083	2	-.096	1	-.551	9	-4.301e-3	8	1.564e-5	2	-2.025e-4	2
113	57	max	.086	7	.113	6	.144	2	4.105e-4	1	7.87e-3	9	1.52e-3	6
114		min	-.089	2	-.101	1	-.58	9	-2.673e-3	8	2.055e-3	10	-9.608e-4	1
115	58	max	.087	7	.087	6	.294	7	3.594e-3	1	3.942e-3	7	1.195e-3	8
116		min	-.085	2	-.1	1	-.514	2	-5.108e-3	6	-5.539e-3	2	1.153e-5	2
117	59	max	.08	7	.091	6	.25	7	2.515e-3	1	2.567e-3	7	6.67e-4	6
118		min	-.087	2	-.1	1	-.486	2	-4.321e-3	6	-3.81e-3	2	-4.484e-4	1
119	60	max	.319	7	.258	6	.253	6	1.276e-2	3	2.933e-3	2	4.235e-3	2
120		min	-.313	2	-.261	1	-.349	1	-1.522e-3	6	-3.202e-3	7	-4.417e-3	7
121	61	max	.272	7	.28	6	.231	2	1.038e-5	2	1.746e-2	8	4.418e-3	1
122		min	-.274	2	-.274	1	-.322	7	-9.545e-3	9	1.827e-3	1	-4.62e-3	6
123	62	max	.267	7	.272	6	.232	7	1.807e-3	7	4.087e-4	7	3.527e-3	6
124		min	-.272	2	-.277	1	-.328	2	-6.79e-3	4	-1.061e-2	8	-3.802e-3	1
125	63	max	.244	7	.224	6	.275	7	3.721e-3	1	5.757e-3	7	2.98e-3	6
126		min	-.249	2	-.224	1	-.501	2	-6.694e-3	6	-8.976e-3	2	-3.286e-3	1
127	64	max	.251	7	.258	6	.302	6	9.994e-3	1	3.89e-3	7	3.361e-3	2
128		min	-.249	2	-.261	1	-.528	1	-5.756e-3	6	-4.839e-3	2	-3.577e-3	7
129	65	max	.251	7	.253	6	.305	6	8.394e-3	1	3.911e-3	7	2.643e-3	2
130		min	-.249	2	-.26	1	-.524	1	-6.279e-3	6	-4.415e-3	2	-3.034e-3	7
131	66	max	.251	7	.271	6	.296	6	1.147e-2	1	7.408e-3	7	2.929e-3	2
132		min	-.249	2	-.275	1	-.532	1	-9.527e-3	6	-8.35e-3	2	-2.739e-3	7
133	67	max	.239	7	.216	6	.14	2	-2.114e-3	1	1.863e-2	9	3.767e-3	1
134		min	-.236	2	-.213	1	-.565	9	-8.713e-3	9	4.506e-3	2	-4.265e-3	2
135	68	max	.22	7	.23	6	.139	2	6.019e-3	1	5.258e-3	7	1.769e-3	7

Envelope Joint Displacements (Continued)

	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation...	LC	Y Rotation...	LC	Z Rotation...	LC
136		min	-.212	2	-.226	1	-.551	9	-4.488e-3	6	-6.554e-3	2	-2.119e-3	2
137	69	max	.286	7	.217	6	.152	2	1.046e-2	1	1.657e-2	7	5.209e-3	7
138		min	-.28	2	-.212	1	-.579	9	-8.932e-3	6	-1.843e-2	2	-4.233e-3	2
139	70	max	.264	7	.213	6	.293	7	3.702e-3	1	6.628e-3	7	2.435e-3	7
140		min	-.271	2	-.211	1	-.514	2	-5.217e-3	6	-8.227e-3	2	-2.726e-3	2
141	71	max	.232	7	.24	6	.247	7	8.095e-3	1	9.052e-3	7	3.407e-3	6
142		min	-.238	2	-.24	1	-.483	2	-9.902e-3	6	-1.029e-2	2	-3.289e-3	1
143	72	max	.133	7	.085	6	.304	6	5.455e-3	1	4.693e-3	7	1.245e-3	3
144		min	-.123	2	-.078	1	-.525	1	-3.339e-3	6	-5.193e-3	2	-4.085e-4	6
145	73	max	.251	7	.254	6	.304	6	8.394e-3	1	3.911e-3	7	2.643e-3	2
146		min	-.249	2	-.26	1	-.525	1	-6.279e-3	6	-4.415e-3	2	-3.034e-3	7
147	74	max	.133	7	.095	6	.297	6	4.266e-3	1	3.127e-3	7	1.282e-3	1
148		min	-.123	2	-.097	1	-.532	1	-2.324e-3	6	-4.074e-3	2	-1.053e-3	6
149	75	max	.251	7	.269	6	.297	6	1.147e-2	1	7.408e-3	7	2.929e-3	2
150		min	-.249	2	-.273	1	-.532	1	-9.527e-3	6	-8.35e-3	2	-2.739e-3	7
151	76	max	.105	7	.065	6	.304	6	5.453e-3	1	4.693e-3	7	1.245e-3	3
152		min	-.092	2	-.045	1	-.525	1	-3.337e-3	6	-5.193e-3	2	-4.085e-4	6
153	77	max	.115	7	.082	6	.297	6	4.157e-3	1	2.971e-3	7	1.282e-3	1
154		min	-.1	2	-.072	1	-.532	1	-2.215e-3	6	-3.918e-3	2	-1.053e-3	6
155	78	max	.502	7	.542	6	.304	6	1.063e-2	1	7.849e-3	7	2.643e-3	2
156		min	-.519	2	-.624	1	-.525	1	-8.508e-3	6	-8.353e-3	2	-3.034e-3	7
157	79	max	1.031	7	.977	6	.297	6	2.593e-2	1	2.779e-2	7	2.929e-3	2
158		min	-1.063	2	-1.051	1	-.532	1	-2.398e-2	6	-2.874e-2	2	-2.739e-3	7
159	80	max	.038	7	.077	6	.141	2	1.771e-3	1	7.814e-3	9	1.304e-3	8
160		min	-.084	2	-.085	1	-.553	9	-4.301e-3	8	1.796e-5	2	-2.026e-4	2
161	81	max	.065	7	.101	6	.145	2	3.019e-4	1	7.831e-3	9	1.52e-3	6
162		min	-.103	2	-.099	1	-.577	9	-2.645e-3	8	2.054e-3	10	-9.608e-4	1
163	82	max	.474	7	.501	6	.14	2	9.958e-3	1	7.486e-3	7	1.769e-3	7
164		min	-.513	2	-.552	1	-.553	9	-8.426e-3	6	-8.784e-3	2	-2.119e-3	2
165	83	max	1.39	7	.902	6	.145	2	2.491e-2	1	3.699e-2	7	5.209e-3	7
166		min	-1.453	2	-.952	1	-.578	9	-2.338e-2	6	-3.887e-2	2	-4.233e-3	2
167	84	max	.063	7	.057	6	.29	7	3.592e-3	1	3.942e-3	7	1.195e-3	8
168		min	-.052	2	-.079	1	-.511	2	-5.106e-3	6	-5.539e-3	2	1.156e-5	2
169	85	max	.066	7	.066	6	.253	7	2.359e-3	1	2.458e-3	7	6.67e-4	6
170		min	-.065	2	-.085	1	-.487	2	-4.165e-3	6	-3.7e-3	2	-4.484e-4	1
171	86	max	.61	7	.465	6	.29	7	5.928e-3	1	1.057e-2	7	2.435e-3	7
172		min	-.674	2	-.409	1	-.512	2	-7.445e-3	6	-1.217e-2	2	-2.725e-3	2
173	87	max	.924	7	1.107	6	.252	7	2.848e-2	1	2.35e-2	7	3.407e-3	6
174		min	-.975	2	-1.042	1	-.487	2	-3.03e-2	6	-2.475e-2	2	-3.289e-3	1
175	88	max	.083	7	.075	2	.072	1	1.667e-2	1	2.662e-3	7	1.592e-3	1
176		min	-.083	2	-.074	7	-.144	6	-1.652e-2	6	-3.357e-3	2	-1.66e-3	6
177	89	max	.26	7	.627	6	.072	1	1.762e-2	1	3.445e-3	7	4.641e-3	6
178		min	-.264	2	-.637	1	-.145	6	-1.727e-2	6	-3.763e-3	2	-4.62e-3	1
179	90	max	.067	7	.09	2	.072	1	1.667e-2	1	2.659e-3	7	1.592e-3	1
180		min	-.063	2	-.091	7	-.144	6	-1.652e-2	6	-3.355e-3	2	-1.66e-3	6
181	91	max	.398	7	1.262	6	.072	1	1.813e-2	1	3.945e-3	7	4.641e-3	6
182		min	-.413	2	-1.285	1	-.145	6	-1.778e-2	6	-4.263e-3	2	-4.62e-3	1
183	92	max	.083	7	.071	7	.087	1	1.093e-2	1	4.131e-3	7	7.127e-4	2
184		min	-.084	2	-.078	2	-.173	6	-1.147e-2	6	-3.565e-3	2	-9.526e-4	7
185	93	max	.261	7	.658	6	.086	1	2.611e-2	1	5.065e-3	7	5.813e-3	1
186		min	-.263	2	-.652	1	-.172	6	-2.639e-2	6	-4.745e-3	2	-5.512e-3	6
187	94	max	.058	7	.09	7	.087	1	1.084e-2	1	4.071e-3	7	7.127e-4	2
188		min	-.063	2	-.102	2	-.173	6	-1.138e-2	6	-3.505e-3	2	-9.526e-4	7
189	95	max	.646	7	1.914	6	.086	1	3.825e-2	1	1.308e-2	7	5.813e-3	1
190		min	-.637	2	-1.897	1	-.172	6	-3.853e-2	6	-1.275e-2	2	-5.512e-3	6
191	96	max	.029	6	.105	6	.049	6	8.363e-3	2	1.517e-2	7	1.601e-3	6
192		min	-.03	1	-.106	1	-.124	3	-7.808e-3	7	-1.477e-2	2	-1.702e-3	1

Envelope Joint Displacements (Continued)

	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation...	LC	Y Rotation...	LC	Z Rotation...	LC
193	97	max	.596	7	.328	6	.048	6	8.068e-3	2	1.659e-2	7	3.432e-3	2
194		min	-.587	2	-.331	1	-.125	3	-7.957e-3	7	-1.622e-2	2	-3.408e-3	7
195	98	max	.091	2	.117	2	.049	6	8.363e-3	2	1.516e-2	7	1.601e-3	6
196		min	-.092	7	-.112	7	-.124	3	-7.808e-3	7	-1.477e-2	2	-1.702e-3	1
197	99	max	1.22	7	.555	6	.048	6	8.07e-3	2	1.759e-2	7	3.432e-3	2
198		min	-1.198	2	-.565	1	-.125	3	-7.959e-3	7	-1.722e-2	2	-3.408e-3	7
199	100	max	.106	7	.044	6	.112	7	6.366e-3	1	7.954e-3	7	1.266e-3	1
200		min	-.101	2	-.042	1	-.201	2	-6.516e-3	6	-8.661e-3	2	-1.42e-3	6
201	101	max	.548	7	.355	6	.113	7	1.022e-2	1	1.944e-2	7	5.467e-3	7
202		min	-.554	2	-.364	1	-.201	2	-1.025e-2	6	-1.985e-2	2	-5.209e-3	2
203	102	max	.122	1	.013	2	.112	7	6.306e-3	1	7.861e-3	7	1.266e-3	1
204		min	-.109	6	-.013	7	-.201	2	-6.456e-3	6	-8.568e-3	2	-1.42e-3	6
205	103	max	1.553	7	.928	6	.113	7	1.824e-2	1	3.156e-2	7	5.467e-3	7
206		min	-1.574	2	-.935	1	-.201	2	-1.828e-2	6	-3.198e-2	2	-5.209e-3	2
207	104	max	.091	6	.035	6	.081	2	6.635e-3	1	1.326e-2	7	1.889e-3	2
208		min	-.092	1	-.035	1	-.153	7	-7.158e-3	6	-1.313e-2	2	-2.02e-3	7
209	105	max	.574	7	.358	6	.081	2	7.786e-3	1	1.411e-2	7	4.353e-3	7
210		min	-.583	2	-.355	1	-.154	7	-8.072e-3	6	-1.434e-2	2	-4.334e-3	2
211	106	max	.139	6	.041	7	.081	2	6.63e-3	1	1.326e-2	7	1.889e-3	2
212		min	-.142	1	-.045	2	-.153	7	-7.154e-3	6	-1.312e-2	2	-2.02e-3	7
213	107	max	1.11	7	.676	6	.081	2	8.786e-3	1	1.511e-2	7	4.353e-3	7
214		min	-1.127	2	-.662	1	-.154	7	-9.073e-3	6	-1.534e-2	2	-4.334e-3	2
215	108	max	.031	1	.108	6	.083	6	5.601e-3	7	1.135e-2	7	1.365e-3	7
216		min	-.035	6	-.104	1	-.171	1	-4.814e-3	2	-1.118e-2	2	-1.455e-3	2
217	109	max	.043	2	.088	7	.083	6	5.601e-3	7	1.125e-2	7	1.365e-3	7
218		min	-.05	7	-.078	2	-.171	1	-4.813e-3	2	-1.108e-2	2	-1.455e-3	2
219	110	max	1.769	7	.776	6	.083	6	1.58e-2	1	3.562e-2	7	5.593e-3	2
220		min	-1.763	2	-.802	1	-.171	1	-1.524e-2	6	-3.56e-2	2	-5.274e-3	7
221	111	max	.07	7	.102	6	.141	2	1.771e-3	1	7.815e-3	9	1.304e-3	8
222		min	-.083	2	-.096	1	-.553	9	-4.301e-3	8	1.565e-5	2	-2.026e-4	2
223	112	max	.084	7	.112	6	.145	2	4.105e-4	1	7.87e-3	9	1.52e-3	6
224		min	-.088	2	-.101	1	-.577	9	-2.673e-3	8	2.055e-3	10	-9.608e-4	1
225	113	max	.086	7	.087	6	.29	7	3.594e-3	1	3.942e-3	7	1.195e-3	8
226		min	-.085	2	-.1	1	-.511	2	-5.108e-3	6	-5.539e-3	2	1.156e-5	2
227	114	max	.081	7	.091	6	.253	7	2.515e-3	1	2.567e-3	7	6.67e-4	6
228		min	-.087	2	-.099	1	-.487	2	-4.321e-3	6	-3.81e-3	2	-4.484e-4	1
229	115	max	.223	7	.229	6	.14	2	6.019e-3	1	5.258e-3	7	1.769e-3	7
230		min	-.215	2	-.225	1	-.553	9	-4.488e-3	6	-6.554e-3	2	-2.119e-3	2
231	116	max	.279	7	.215	6	.145	2	1.046e-2	1	1.657e-2	7	5.209e-3	7
232		min	-.274	2	-.211	1	-.577	9	-8.932e-3	6	-1.843e-2	2	-4.233e-3	2
233	117	max	.261	7	.215	6	.29	7	3.702e-3	1	6.628e-3	7	2.435e-3	7
234		min	-.267	2	-.213	1	-.512	2	-5.217e-3	6	-8.227e-3	2	-2.725e-3	2
235	118	max	.234	7	.237	6	.253	7	8.095e-3	1	9.052e-3	7	3.407e-3	6
236		min	-.239	2	-.237	1	-.487	2	-9.902e-3	6	-1.029e-2	2	-3.289e-3	1
237	119	max	0	7	0	6	0	2	0	3	0	6	0	2
238		min	0	2	0	1	0	9	0	6	0	3	0	7
239	120	max	0	7	0	6	0	7	0	1	0	1	0	2
240		min	0	2	0	1	0	4	0	8	0	8	0	7
241	121	max	0	7	0	6	0	1	0	1	0	9	0	1
242		min	0	2	0	1	0	8	0	6	0	2	0	6
243	122	max	0	6	0	6	0	7	0	2	0	7	0	1
244		min	0	1	0	1	0	2	0	7	0	2	0	6
245	123	max	0	7	0	2	0	1	0	1	0	1	0	2
246		min	0	2	0	7	0	6	0	6	0	6	0	7
247	124	max	0	6	0	6	0	2	0	1	0	7	0	6
248		min	0	1	0	1	0	7	0	6	0	2	0	1
249	125	max	0	7	0	7	0	1	0	1	0	6	0	2

Envelope Joint Displacements (Continued)

	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation...	LC	Y Rotation...	LC	Z Rotation...	LC
250		min	0	2	0	2	0	6	0	6	0	1	0	7
251	126	max	0	1	0	6	0	7	0	1	0	7	0	1
252		min	0	6	0	1	0	2	0	6	0	2	0	6
253	127	max	0	1	0	6	0	2	0	7	0	7	0	6
254		min	0	6	0	1	0	7	0	2	0	2	0	1
255	128	max	.261	7	.293	6	.233	2	2.41e-3	1	5.145e-3	7	5.304e-3	1
256		min	-.263	2	-.287	1	-.323	7	-3.431e-3	6	-4.74e-3	2	-5.462e-3	6
257	129	max	.084	7	.077	2	.077	1	1.503e-2	1	3.207e-3	7	2.246e-3	1
258		min	-.084	2	-.075	7	-.154	6	-1.486e-2	6	-3.83e-3	2	-2.417e-3	6
259	130	max	.259	7	.281	6	.236	7	4.81e-3	1	5.346e-3	7	4.149e-3	6
260		min	-.264	2	-.287	1	-.327	2	-4.695e-3	6	-5.701e-3	2	-4.372e-3	1
261	131	max	.083	7	.075	7	.084	1	9.773e-3	1	3.765e-3	7	1.468e-3	6
262		min	-.084	2	-.08	2	-.167	6	-1.091e-2	6	-2.993e-3	2	-1.706e-3	1
263	132	max	.278	7	.268	6	.221	7	3.015e-3	7	5.316e-3	7	3.777e-3	6
264		min	-.284	2	-.273	1	-.313	2	-3.283e-3	2	-5.671e-3	2	-4.021e-3	1
265	133	max	.036	6	.109	6	.069	6	7.124e-3	2	1.392e-2	7	2.228e-3	7
266		min	-.038	1	-.11	1	-.147	1	-6.643e-3	7	-1.354e-2	2	-2.362e-3	2
267	134	max	.323	7	.26	6	.253	6	5.685e-3	1	4.776e-3	7	4.716e-3	2
268		min	-.317	2	-.263	1	-.343	1	-5.421e-3	6	-4.542e-3	2	-4.861e-3	7
269	135	max	.103	7	.041	6	.1	7	5.333e-3	1	7.47e-3	7	1.062e-3	2
270		min	-.099	2	-.039	1	-.186	2	-5.373e-3	6	-8.826e-3	2	-1.282e-3	7
271	136	max	.323	7	.256	6	.25	6	6.048e-3	1	1.252e-3	7	5.037e-3	2
272		min	-.317	2	-.26	1	-.342	1	-5.583e-3	6	-1.245e-3	2	-5.172e-3	7
273	137	max	.095	7	.037	6	.097	2	6.597e-3	1	1.219e-2	7	1.557e-3	2
274		min	-.092	2	-.038	1	-.174	7	-7.078e-3	6	-1.211e-2	2	-1.768e-3	7
275	138	max	.285	7	.275	6	.222	2	4.709e-3	1	5.882e-3	7	4.465e-3	1
276		min	-.289	2	-.27	1	-.312	7	-4.784e-3	6	-5.195e-3	2	-4.729e-3	2
277	139	max	.033	1	.108	6	.067	6	5.664e-3	7	1.012e-2	7	1.576e-3	7
278		min	-.036	6	-.105	1	-.152	1	-4.394e-3	2	-9.528e-3	2	-1.774e-3	2
279	140	max	.618	7	.313	6	.083	6	1.098e-2	7	2.349e-2	7	5.593e-3	2
280		min	-.613	2	-.319	1	-.171	1	-1.057e-2	2	-2.347e-2	2	-5.274e-3	7
281	141	max	.17	7	.371	6	.083	1	1.779e-2	1	4.925e-3	7	9.929e-4	1
282		min	-.173	2	-.37	1	-.166	6	-1.805e-2	6	-4.956e-3	2	-8.929e-4	6
283	142	max	.17	7	.316	6	.076	1	1.607e-2	1	4.901e-3	7	1.596e-3	6
284		min	-.173	2	-.318	1	-.152	6	-1.577e-2	6	-5.008e-3	2	-1.745e-3	1
285	143	max	.343	7	.203	6	.098	7	9.138e-3	1	1.313e-2	7	1.484e-3	7
286		min	-.343	2	-.208	1	-.183	2	-8.865e-3	6	-1.334e-2	2	-1.381e-3	2
287	144	max	.29	7	.214	6	.066	6	6.245e-3	2	1.582e-2	7	1.057e-3	2
288		min	-.286	2	-.218	1	-.143	1	-6.278e-3	7	-1.56e-2	2	-1.188e-3	7
289	145	max	.335	7	.215	6	.064	6	7.046e-3	7	1.745e-2	7	1.24e-3	6
290		min	-.334	2	-.215	1	-.149	3	-6.94e-3	2	-1.723e-2	2	-1.173e-3	1
291	146	max	.324	7	.195	6	.095	2	8.735e-3	1	1.27e-2	7	1.758e-3	7
292		min	-.324	2	-.193	1	-.171	7	-8.839e-3	6	-1.301e-2	2	-1.923e-3	2
293	147	max	0	1	0	1	0	1	0	1	0	1	0	1
294		min	0	1	0	1	0	1	0	1	0	1	0	1
295	148	max	.053	7	.059	6	.209	7	6.032e-3	1	5.129e-3	7	6.447e-4	2
296		min	-.052	2	-.053	1	-.299	2	-5.747e-3	6	-5.348e-3	2	-3.045e-4	7
297	149	max	.461	7	.544	6	.209	7	7.035e-3	1	5.731e-3	7	5.431e-3	6
298		min	-.471	2	-.561	1	-.299	2	-6.746e-3	6	-5.87e-3	2	-5.483e-3	1
299	150	max	.06	7	.062	6	.23	6	5.055e-3	1	6.658e-3	7	1.414e-3	1
300		min	-.066	2	-.064	1	-.32	1	-4.989e-3	6	-6.359e-3	2	-1.083e-3	6
301	151	max	.612	7	.464	6	.23	6	5.684e-3	1	7.518e-3	7	5.561e-3	2
302		min	-.597	2	-.466	1	-.32	1	-5.691e-3	6	-7.258e-3	2	-5.573e-3	7
303	152	max	.058	7	.047	6	.207	2	5.415e-3	1	6.009e-3	7	1.627e-3	7
304		min	-.052	2	-.052	1	-.296	7	-5.794e-3	6	-6.228e-3	2	-1.242e-3	2
305	153	max	.551	7	.513	6	.206	2	6.171e-3	1	6.894e-3	7	5.446e-3	7
306		min	-.563	2	-.499	1	-.295	7	-6.398e-3	6	-7.09e-3	2	-5.58e-3	2

Envelope Joint Displacements (Continued)

	Joint		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation...	LC	Y Rotation...	LC	Z Rotation...	LC
307	154	max	.084	7	.094	6	.209	7	6.034e-3	1	5.132e-3	7	6.447e-4	2
308		min	-.084	2	-.09	1	-.299	2	-5.749e-3	6	-5.35e-3	2	-3.045e-4	7
309	155	max	.1	7	.092	6	.23	6	5.057e-3	1	6.661e-3	7	1.414e-3	1
310		min	-.104	2	-.094	1	-.32	1	-4.992e-3	6	-6.361e-3	2	-1.083e-3	6
311	156	max	.094	7	.082	6	.207	2	5.417e-3	1	6.012e-3	7	1.627e-3	7
312		min	-.089	2	-.085	1	-.296	7	-5.797e-3	6	-6.23e-3	2	-1.242e-3	2
313	157	max	.259	7	.306	6	.209	7	6.534e-3	1	5.23e-3	7	5.431e-3	6
314		min	-.264	2	-.312	1	-.299	2	-6.245e-3	6	-5.37e-3	2	-5.483e-3	1
315	158	max	.346	7	.263	6	.23	6	5.183e-3	1	7.017e-3	7	5.561e-3	2
316		min	-.34	2	-.266	1	-.32	1	-5.19e-3	6	-6.757e-3	2	-5.573e-3	7
317	159	max	.307	7	.287	6	.206	2	5.67e-3	1	6.393e-3	7	5.446e-3	7
318		min	-.312	2	-.281	1	-.295	7	-5.897e-3	6	-6.589e-3	2	-5.58e-3	2
319	160	max	.1	7	.087	6	.087	1	1.153e-2	1	4.412e-3	7	4.827e-4	2
320		min	-.099	2	-.092	1	-.173	6	-1.203e-2	6	-4.037e-3	2	-7.093e-4	7
321	161	max	.137	7	.071	6	.113	7	7.009e-3	1	8.372e-3	7	7.822e-4	1
322		min	-.135	2	-.068	1	-.201	2	-7.007e-3	6	-8.95e-3	2	-9.223e-4	6
323	162	max	.063	7	.124	6	.083	6	5.28e-3	7	1.212e-2	7	6.545e-4	7
324		min	-.068	2	-.124	1	-.171	1	-4.685e-3	2	-1.19e-2	2	-7.883e-4	1
325	163	max	.17	7	.32	6	.072	1	1.725e-2	1	5.075e-3	7	1.437e-3	6
326		min	-.173	2	-.324	1	-.144	6	-1.694e-2	6	-5.106e-3	2	-1.429e-3	1
327	164	max	.293	7	.215	6	.048	6	6.456e-3	2	1.667e-2	7	1.527e-3	2
328		min	-.288	2	-.219	1	-.125	3	-6.561e-3	7	-1.647e-2	2	-1.452e-3	7
329	165	max	.327	7	.195	6	.081	2	9.063e-3	1	1.357e-2	7	9.058e-4	1
330		min	-.329	2	-.192	1	-.153	7	-9.104e-3	6	-1.391e-2	2	-8.343e-4	6

Envelope Joint Reactions

	Joint		X [lb]	LC	Y [lb]	LC	Z [lb]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	122	max	1193.931	1	3485.769	1	2340.864	2	2.427	7	2.913	2	.732	6
2		min	-1247.053	6	-3503.033	6	-1106.427	7	-5.019	2	-1.41	7	-.748	1
3	119	max	18.013	2	10.4	1	21.087	9	0	6	0	3	0	7
4		min	-18.013	7	-10.4	6	8.122	2	0	3	0	6	0	2
5	125	max	2562.227	2	2842.405	2	2291.479	6	4.955	6	1.405	1	.833	7
6		min	-2585.211	7	-2843.642	7	-1076.54	1	-2.443	1	-2.849	6	-.838	2
7	123	max	2599.474	2	2870.701	7	2364.858	6	5.078	6	2.919	6	.828	7
8		min	-2566.933	7	-2853.371	2	-1134.488	1	-2.523	1	-1.45	1	-.841	2
9	120	max	18.013	2	10.4	1	21.11	4	0	8	0	8	0	7
10		min	-18.013	7	-10.4	6	8.131	7	0	1	0	1	0	2
11	127	max	1184.884	6	3389.25	1	2249.543	7	2.339	2	1.359	2	.735	1
12		min	-1151.085	1	-3406.6	6	-1046.842	2	-4.854	7	-2.817	7	-.735	6
13	126	max	3334.129	6	783.846	1	2083.573	2	.006	6	5.202	2	.795	6
14		min	-3299.226	1	-796.243	6	-850.192	7	-.011	1	-2.284	7	-.803	1
15	124	max	3245.89	1	763.513	1	2152.327	7	.006	6	2.35	2	.781	1
16		min	-3272.712	6	-790.599	6	-899.923	2	-.012	1	-5.32	7	-.789	6
17	121	max	0	2	20.8	1	21.093	8	0	6	0	2	0	6
18		min	0	7	-20.8	6	8.124	1	0	1	0	9	0	1
19	Totals:	max	9546.877	2	9228.454	1	10257.075	9						
20		min	-9546.877	7	-9228.454	6	3716.743	2						

Load Combinations

	Description	Solve	PDe..	SR..	BLC	Factor	BLC	Factor	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
1	DEAD LOAD + WIND LOAD (NO ICE) FR...	Yes	Y		1	1.2			3	1.6												
2	DEAD LOAD + WIND LOAD (NO ICE) SIDE	Yes	Y		1	1.2			4	1.6												
3	DEAD LOAD + DEAD LOAD ICE + WIND ...	Yes	Y		1	1.2	2	1	5	1												
4	DEAD LOAD + DEAD LOAD ICE + WIND ...	Yes	Y		1	1.2	2	1	6	1												

Load Combinations (Continued)

	Description	Solve	PDe..	SR..	BLC	Factor	BLC	Factor	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...	B...	Fa...
5	DEAD LOAD + LIVE LOAD	Yes	Y		1	1.2					7	1.6								
6	DEAD LOAD + WIND LOAD (NO ICE) FR...	Yes	Y		1	1.2			3	-1.6										
7	DEAD LOAD + WIND LOAD (NO ICE) SID...	Yes	Y		1	1.2			4	-1.6										
8	DEAD LOAD + DEAD LOAD ICE + WIND ...	Yes	Y		1	1.2	2	1	5	-1										
9	DEAD LOAD + DEAD LOAD ICE + WIND ...	Yes	Y		1	1.2	2	1	6	-1										
10	DL+LL2	Yes	Y		1	1.2					8	1.6								
11	DL+LL3	Yes	Y		1	1.2					9	1.6								

Load Combination Design

	Description	ASIF	CD	ABIF	Service	Hot Rolled	Cold For...	Wood	Concrete	Masonry	Footings	Aluminum	Connecti...
1	DEAD LOA...					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	DEAD LOA...					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	DEAD LOA...					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	DEAD LOA...					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	DEAD LOA...					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	DEAD LOA...					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	DEAD LOA...					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	DEAD LOA...					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	DEAD LOA...					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	DL+LL2					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	DL+LL3					Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Member Distributed Loads (BLC 2 : DEAD LOAD ICE)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
1	46	Z	-8	-8	0	0
2	51	Z	-8	-8	0	0
3	50	Z	-8	-8	0	0
4	49	Z	-8	-8	0	0
5	48	Z	-8	-8	0	0
6	53	Z	-8	-8	0	0
7	52	Z	-8	-8	0	0
8	45	Z	-8	-8	0	0
9	44	Z	-8	-8	0	0
10	55	Z	-8	-8	0	0
11	54	Z	-8	-8	0	0
12	47	Z	-8	-8	0	0
13	1	Z	-15	-15	0	0
14	2	Z	-15	-15	0	0
15	3	Z	-15	-15	0	0
16	7	Z	-15	-15	0	0
17	5	Z	-15	-15	0	0
18	9	Z	-15	-15	0	0
19	10	Z	-8	-8	0	0
20	11	Z	-8	-8	0	0
21	12	Z	-8	-8	0	0
22	16	Z	-5	-5	0	0
23	18	Z	-5	-5	0	0
24	19	Z	-5	-5	0	0
25	17	Z	-5	-5	0	0
26	56	Z	-5	-5	0	0
27	23	Z	-5	-5	0	0
28	24	Z	-5	-5	0	0
29	22	Z	-5	-5	0	0
30	57	Z	-5	-5	0	0

Member Distributed Loads (BLC 2 : DEAD LOAD ICE) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
31	28	Z	-5	-5	0	0
32	29	Z	-5	-5	0	0
33	27	Z	-5	-5	0	0
34	20	Z	-5	-5	0	0
35	21	Z	-5	-5	0	0
36	25	Z	-5	-5	0	0
37	26	Z	-5	-5	0	0
38	30	Z	-5	-5	0	0
39	31	Z	-5	-5	0	0
40	58	Z	-5	-5	0	0
41	59	Z	-5	-5	0	0
42	60	Z	-5	-5	0	0
43	40	Z	-11	-11	0	0
44	34	Z	-11	-11	0	0
45	42	Z	-11	-11	0	0
46	36	Z	-11	-11	0	0
47	41	Z	-11	-11	0	0
48	35	Z	-11	-11	0	0
49	39	Z	-18	-18	0	0
50	33	Z	-18	-18	0	0
51	43	Z	-18	-18	0	0
52	37	Z	-18	-18	0	0
53	38	Z	-18	-18	0	0
54	32	Z	-18	-18	0	0
55	61	Z	-8	-8	0	0
56	52	Z	-8	-8	0	78
57	62	Z	-8	-8	0	0
58	54	Z	-8	-8	0	78
59	63	Z	-8	-8	0	0

Member Distributed Loads (BLC 3 : WIND LOAD (NO ICE) FRONT)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
1	48	PY	-7	-7	0	0
2	53	PY	-7	-7	0	0
3	52	PY	-7	-7	0	0
4	45	PY	-7	-7	0	0
5	44	PY	-7	-7	0	0
6	55	PY	-7	-7	0	0
7	54	PY	-7	-7	0	0
8	47	PY	-7	-7	0	0
9	1	PY	-26	-26	0	0
10	2	PY	-26	-26	0	0
11	3	PY	-26	-26	0	0
12	7	PY	-26	-26	0	0
13	5	PY	-26	-26	0	0
14	9	PY	-26	-26	0	0
15	10	PY	-16	-16	0	0
16	11	PY	-16	-16	0	0
17	12	PY	-16	-16	0	0
18	16	PY	-9	-9	0	0
19	18	PY	-9	-9	0	0
20	19	PY	-9	-9	0	0
21	17	PY	-9	-9	0	0
22	56	PY	-9	-9	0	0
23	23	PY	-9	-9	0	0
24	24	PY	-9	-9	0	0

Member Distributed Loads (BLC 3 : WIND LOAD (NO ICE) FRONT) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
25	22	PY	-9	-9	0	0
26	57	PY	-9	-9	0	0
27	28	PY	-9	-9	0	0
28	29	PY	-9	-9	0	0
29	27	PY	-9	-9	0	0
30	20	PY	-9	-9	0	0
31	21	PY	-9	-9	0	0
32	25	PY	-9	-9	0	0
33	26	PY	-9	-9	0	0
34	30	PY	-9	-9	0	0
35	31	PY	-9	-9	0	0
36	58	PY	-9	-9	0	0
37	59	PY	-9	-9	0	0
38	60	PY	-9	-9	0	0
39	40	PY	-10	-10	0	0
40	34	PY	-10	-10	0	0
41	42	PY	-10	-10	0	0
42	36	PY	-10	-10	0	0
43	41	PY	-10	-10	0	0
44	35	PY	-10	-10	0	0
45	39	PY	-31	-31	0	0
46	33	PY	-31	-31	0	0
47	43	PY	-31	-31	0	0
48	37	PY	-31	-31	0	0
49	38	PY	-31	-31	0	0
50	32	PY	-31	-31	0	0
51	50	PY	-7	-7	0	0
52	61	PY	-7	-7	0	0
53	52	PY	-7	-7	0	78
54	62	PY	-7	-7	0	0
55	54	PY	-7	-7	0	78
56	63	PY	-7	-7	0	0

Member Distributed Loads (BLC 4 : WIND LOAD (NO ICE) SIDE)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
1	46	PX	-7	-7	0	0
2	51	PX	-7	-7	0	0
3	50	PX	-7	-7	0	0
4	49	PX	-7	-7	0	0
5	1	PX	-26	-26	0	0
6	2	PX	-26	-26	0	0
7	3	PX	-26	-26	0	0
8	7	PX	-26	-26	0	0
9	5	PX	-26	-26	0	0
10	9	PX	-26	-26	0	0
11	10	PX	-16	-16	0	0
12	11	PX	-16	-16	0	0
13	12	PX	-16	-16	0	0
14	16	PX	-9	-9	0	0
15	18	PX	-9	-9	0	0
16	19	PX	-9	-9	0	0
17	17	PX	-9	-9	0	0
18	56	PX	-9	-9	0	0
19	23	PX	-9	-9	0	0
20	24	PX	-9	-9	0	0
21	22	PX	-9	-9	0	0

Member Distributed Loads (BLC 4 : WIND LOAD (NO ICE) SIDE) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
22	57	PX	-9	-9	0	0
23	28	PX	-9	-9	0	0
24	29	PX	-9	-9	0	0
25	27	PX	-9	-9	0	0
26	20	PX	-9	-9	0	0
27	21	PX	-9	-9	0	0
28	25	PX	-9	-9	0	0
29	26	PX	-9	-9	0	0
30	30	PX	-9	-9	0	0
31	31	PX	-9	-9	0	0
32	58	PX	-9	-9	0	0
33	59	PX	-9	-9	0	0
34	60	PX	-9	-9	0	0
35	40	PX	-10	-10	0	0
36	34	PX	-10	-10	0	0
37	42	PX	-10	-10	0	0
38	36	PX	-10	-10	0	0
39	41	PX	-10	-10	0	0
40	35	PX	-10	-10	0	0
41	39	PX	-31	-31	0	0
42	33	PX	-31	-31	0	0
43	43	PX	-31	-31	0	0
44	37	PX	-31	-31	0	0
45	38	PX	-31	-31	0	0
46	32	PX	-31	-31	0	0
47	52	PX	-7	-7	0	0
48	54	PX	-7	-7	0	0
49	61	PX	-7	-7	0	0
50	52	PX	-7	-7	0	78
51	62	PX	-7	-7	0	0
52	54	PX	-7	-7	0	78
53	63	PX	-7	-7	0	0

Member Distributed Loads (BLC 5 : WIND LOAD (ICE) FRONT)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
1	48	PY	-4.9	-4.9	0	0
2	53	PY	-4.9	-4.9	0	0
3	52	PY	-4.9	-4.9	0	0
4	45	PY	-4.9	-4.9	0	0
5	44	PY	-4.9	-4.9	0	0
6	55	PY	-4.9	-4.9	0	0
7	54	PY	-4.9	-4.9	0	0
8	47	PY	-4.9	-4.9	0	0
9	1	PY	-9.8	-9.8	0	0
10	2	PY	-9.8	-9.8	0	0
11	3	PY	-9.8	-9.8	0	0
12	7	PY	-10	-10	0	0
13	5	PY	-10	-10	0	0
14	9	PY	-10	-10	0	0
15	10	PY	-7	-7	0	0
16	11	PY	-7	-7	0	0
17	12	PY	-7	-7	0	0
18	16	PY	-5.4	-5.4	0	0
19	18	PY	-5.4	-5.4	0	0
20	19	PY	-5.4	-5.4	0	0
21	17	PY	-5.4	-5.4	0	0

Member Distributed Loads (BLC 5 : WIND LOAD (ICE) FRONT) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
22	56	PY	-5.4	-5.4	0	0
23	23	PY	-5.4	-5.4	0	0
24	24	PY	-5.4	-5.4	0	0
25	22	PY	-5.4	-5.4	0	0
26	57	PY	-5.4	-5.4	0	0
27	28	PY	-5.4	-5.4	0	0
28	29	PY	-5.4	-5.4	0	0
29	27	PY	-5.4	-5.4	0	0
30	20	PY	-5.4	-5.4	0	0
31	21	PY	-5.4	-5.4	0	0
32	25	PY	-5.4	-5.4	0	0
33	26	PY	-5.4	-5.4	0	0
34	30	PY	-5.4	-5.4	0	0
35	31	PY	-5.4	-5.4	0	0
36	58	PY	-5.4	-5.4	0	0
37	59	PY	-5.4	-5.4	0	0
38	60	PY	-5.4	-5.4	0	0
39	40	PY	-6.3	-6.3	0	0
40	34	PY	-6.3	-6.3	0	0
41	42	PY	-6.3	-6.3	0	0
42	36	PY	-6.3	-6.3	0	0
43	41	PY	-6.3	-6.3	0	0
44	35	PY	-6.3	-6.3	0	0
45	39	PY	-10.7	-10.7	0	0
46	33	PY	-10.7	-10.7	0	0
47	43	PY	-10.7	-10.7	0	0
48	37	PY	-10.7	-10.7	0	0
49	38	PY	-10.7	-10.7	0	0
50	32	PY	-10.7	-10.7	0	0
51	50	PY	-4.9	-4.9	0	0
52	61	PY	-4.9	-4.9	0	0
53	52	PY	-4.9	-4.9	0	78
54	62	PY	-4.9	-4.9	0	0
55	54	PY	-4.9	-4.9	0	78
56	63	PY	-4.9	-4.9	0	0

Member Distributed Loads (BLC 6 : WIND LOAD (ICE) SIDE)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
1	46	PX	-4.9	-4.9	0	0
2	51	PX	-4.9	-4.9	0	0
3	50	PX	-4.9	-4.9	0	0
4	49	PX	-4.9	-4.9	0	0
5	1	PX	-9.8	-9.8	0	0
6	2	PX	-9.8	-9.8	0	0
7	3	PX	-9.8	-9.8	0	0
8	7	PX	-10	-10	0	0
9	5	PX	-10	-10	0	0
10	9	PX	-10	-10	0	0
11	10	PX	-7	-7	0	0
12	11	PX	-7	-7	0	0
13	12	PX	-7	-7	0	0
14	16	PX	-5.4	-5.4	0	0
15	18	PX	-5.4	-5.4	0	0
16	19	PX	-5.4	-5.4	0	0
17	17	PX	-5.4	-5.4	0	0
18	56	PX	-5.4	-5.4	0	0

Member Distributed Loads (BLC 6 : WIND LOAD (ICE) SIDE) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
19	23	PX	-5.4	-5.4	0	0
20	24	PX	-5.4	-5.4	0	0
21	22	PX	-5.4	-5.4	0	0
22	57	PX	-5.4	-5.4	0	0
23	28	PX	-5.4	-5.4	0	0
24	29	PX	-5.4	-5.4	0	0
25	27	PX	-5.4	-5.4	0	0
26	20	PX	-5.4	-5.4	0	0
27	21	PX	-5.4	-5.4	0	0
28	25	PX	-5.4	-5.4	0	0
29	26	PX	-5.4	-5.4	0	0
30	30	PX	-5.4	-5.4	0	0
31	31	PX	-5.4	-5.4	0	0
32	58	PX	-5.4	-5.4	0	0
33	59	PX	-5.4	-5.4	0	0
34	60	PX	-5.4	-5.4	0	0
35	40	PX	-6.3	-6.3	0	0
36	34	PX	-6.3	-6.3	0	0
37	42	PX	-6.3	-6.3	0	0
38	36	PX	-6.3	-6.3	0	0
39	41	PX	-6.3	-6.3	0	0
40	35	PX	-6.3	-6.3	0	0
41	39	PX	-10.7	-10.7	0	0
42	33	PX	-10.7	-10.7	0	0
43	43	PX	-10.7	-10.7	0	0
44	37	PX	-10.7	-10.7	0	0
45	38	PX	-10.7	-10.7	0	0
46	32	PX	-10.7	-10.7	0	0
47	52	PX	-4.9	-4.9	0	0
48	54	PX	-4.9	-4.9	0	0
49	61	PX	-4.9	-4.9	0	0
50	52	PX	-4.9	-4.9	0	78
51	62	PX	-4.9	-4.9	0	0
52	54	PX	-4.9	-4.9	0	78
53	63	PX	-4.9	-4.9	0	0

Member Distributed Loads (BLC 10 : BLC 1 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
1	1	Z	-1.372	-5.03	0	14.4
2	1	Z	-5.03	-7.138	14.4	28.8
3	1	Z	-7.138	-5.728	28.8	43.2
4	1	Z	-5.728	-2.439	43.2	57.6
5	1	Z	-2.439	-.243	57.6	72
6	3	Z	-.24	-2.436	71.976	86.371
7	3	Z	-2.436	-5.685	86.371	100.766
8	3	Z	-5.685	-7.126	100.766	115.161
9	3	Z	-7.126	-5.114	115.161	129.557
10	3	Z	-5.114	-1.52	129.557	143.952
11	8	Z	-.102	-.933	0	1.197
12	8	Z	-.933	-1.689	1.197	2.394
13	8	Z	-1.689	-1.704	2.394	3.59
14	8	Z	-1.704	-.961	3.59	4.787
15	8	Z	-.961	-.122	4.787	5.984
16	9	Z	-.339	-3.822	0	14.398
17	9	Z	-3.822	-6.883	14.398	28.796
18	9	Z	-6.883	-6.813	28.796	43.194

Member Distributed Loads (BLC 10 : BLC 1 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
19	9	Z	-6.813	-3.778	43.194	57.592
20	9	Z	-3.778	-.381	57.592	71.99
21	2	Z	-.234	-2.419	71.986	86.383
22	2	Z	-2.419	-5.715	86.383	100.78
23	2	Z	-5.715	-7.147	100.78	115.177
24	2	Z	-7.147	-5.124	115.177	129.574
25	2	Z	-5.124	-1.577	129.574	143.971
26	3	Z	-1.36	-4.998	0	14.395
27	3	Z	-4.998	-7.119	14.395	28.79
28	3	Z	-7.119	-5.741	28.79	43.186
29	3	Z	-5.741	-2.453	43.186	57.581
30	3	Z	-2.453	-.242	57.581	71.976
31	6	Z	-.086	-1.039	0	1.2
32	6	Z	-1.039	-1.754	1.2	2.4
33	6	Z	-1.754	-1.679	2.4	3.6
34	6	Z	-1.679	-.982	3.6	4.8
35	6	Z	-.982	-.163	4.8	5.999
36	7	Z	-.341	-3.804	0	14.404
37	7	Z	-3.804	-6.841	14.404	28.807
38	7	Z	-6.841	-6.832	28.807	43.211
39	7	Z	-6.832	-3.816	43.211	57.614
40	7	Z	-3.816	-.341	57.614	72.018
41	1	Z	-.241	-2.432	72	86.4
42	1	Z	-2.432	-5.694	86.4	100.8
43	1	Z	-5.694	-7.142	100.8	115.2
44	1	Z	-7.142	-5.112	115.2	129.6
45	1	Z	-5.112	-1.54	129.6	144
46	2	Z	-1.355	-5.025	0	14.397
47	2	Z	-5.025	-7.138	14.397	28.794
48	2	Z	-7.138	-5.738	28.794	43.191
49	2	Z	-5.738	-2.453	43.191	57.588
50	2	Z	-2.453	-.244	57.588	71.986
51	4	Z	-.085	-1.008	0	1.2
52	4	Z	-1.008	-1.711	1.2	2.399
53	4	Z	-1.711	-1.635	2.399	3.599
54	4	Z	-1.635	-.934	3.599	4.798
55	4	Z	-.934	-.115	4.798	5.998
56	5	Z	-.34	-3.803	0	14.395
57	5	Z	-3.803	-6.84	14.395	28.789
58	5	Z	-6.84	-6.825	28.789	43.184
59	5	Z	-6.825	-3.808	43.184	57.579
60	5	Z	-3.808	-.34	57.579	71.973

Member Distributed Loads (BLC 11 : BLC 2 Transient Area Loads)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
1	2	Z	-.375	-3.871	71.986	86.383
2	2	Z	-3.871	-9.144	86.383	100.78
3	2	Z	-9.144	-11.435	100.78	115.177
4	2	Z	-11.435	-8.199	115.177	129.574
5	2	Z	-8.199	-2.524	129.574	143.971
6	3	Z	-2.176	-7.997	0	14.395
7	3	Z	-7.997	-11.391	14.395	28.79
8	3	Z	-11.391	-9.186	28.79	43.186
9	3	Z	-9.186	-3.925	43.186	57.581
10	3	Z	-3.925	-.388	57.581	71.976
11	6	Z	-.138	-1.662	0	1.2

Member Distributed Loads (BLC 11 : BLC 2 Transient Area Loads) (Continued)

	Member Label	Direction	Start Magnitude[lb/ft,F]	End Magnitude[lb/ft,F]	Start Location[in,%]	End Location[in,%]
12	6	Z	-1.662	-2.806	1.2	2.4
13	6	Z	-2.806	-2.686	2.4	3.6
14	6	Z	-2.686	-1.571	3.6	4.8
15	6	Z	-1.571	-.261	4.8	5.999
16	7	Z	-.545	-6.086	0	14.404
17	7	Z	-6.086	-10.946	14.404	28.807
18	7	Z	-10.946	-10.931	28.807	43.211
19	7	Z	-10.931	-6.106	43.211	57.614
20	7	Z	-6.106	-.545	57.614	72.018
21	1	Z	-2.195	-8.048	0	14.4
22	1	Z	-8.048	-11.421	14.4	28.8
23	1	Z	-11.421	-9.165	28.8	43.2
24	1	Z	-9.165	-3.902	43.2	57.6
25	1	Z	-3.902	-.388	57.6	72
26	3	Z	-.384	-3.898	71.976	86.371
27	3	Z	-3.898	-9.096	86.371	100.766
28	3	Z	-9.096	-11.402	100.766	115.161
29	3	Z	-11.402	-8.182	115.161	129.557
30	3	Z	-8.182	-2.431	129.557	143.952
31	8	Z	-.163	-1.493	0	1.197
32	8	Z	-1.493	-2.702	1.197	2.394
33	8	Z	-2.702	-2.727	2.394	3.59
34	8	Z	-2.727	-1.537	3.59	4.787
35	8	Z	-1.537	-.195	4.787	5.984
36	9	Z	-.542	-6.115	0	14.398
37	9	Z	-6.115	-11.013	14.398	28.796
38	9	Z	-11.013	-10.902	28.796	43.194
39	9	Z	-10.902	-6.045	43.194	57.592
40	9	Z	-6.045	-.609	57.592	71.99
41	1	Z	-.385	-3.891	72	86.4
42	1	Z	-3.891	-9.11	86.4	100.8
43	1	Z	-9.11	-11.428	100.8	115.2
44	1	Z	-11.428	-8.179	115.2	129.6
45	1	Z	-8.179	-2.464	129.6	144
46	2	Z	-2.168	-8.04	0	14.397
47	2	Z	-8.04	-11.421	14.397	28.794
48	2	Z	-11.421	-9.181	28.794	43.191
49	2	Z	-9.181	-3.925	43.191	57.588
50	2	Z	-3.925	-.39	57.588	71.986
51	4	Z	-.135	-1.613	0	1.2
52	4	Z	-1.613	-2.737	1.2	2.399
53	4	Z	-2.737	-2.616	2.399	3.599
54	4	Z	-2.616	-1.495	3.599	4.798
55	4	Z	-1.495	-.184	4.798	5.998
56	5	Z	-.544	-6.085	0	14.395
57	5	Z	-6.085	-10.945	14.395	28.789
58	5	Z	-10.945	-10.919	28.789	43.184
59	5	Z	-10.919	-6.093	43.184	57.579
60	5	Z	-6.093	-.544	57.579	71.973

Joint Loads and Enforced Displacements (BLC 7 : LIVE LOAD)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/in, lb*s^2*in)]
1	48	L	Z	-500

Joint Loads and Enforced Displacements (BLC 8 : LL2)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/in, lb*s^2*in)]
1	50	L	Z	-500

Joint Loads and Enforced Displacements (BLC 9 : LL3)

	Joint Label	L,D,M	Direction	Magnitude[(lb,k-ft), (in,rad), (lb*s^2/in, lb*s^2*in)]
1	49	L	Z	-500

Member Point Loads (BLC 1 : DEAD LOAD)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	46	Z	-32	%15
2	51	Z	-60	%4
3	50	Z	0	%50
4	49	Z	-175	%4
5	48	Z	-32	%15
6	53	Z	-60	%4
7	52	Z	0	%50
8	45	Z	-175	%4
9	44	Z	-32	%15
10	55	Z	-60	%4
11	54	Z	0	%50
12	47	Z	-175	%4
13	46	Z	-32	%85
14	51	Z	-60	%96
15	50	Z	0	%50
16	49	Z	-175	%96
17	48	Z	-32	%85
18	53	Z	-60	%96
19	52	Z	0	%50
20	45	Z	-175	%96
21	44	Z	-32	%85
22	55	Z	-60	%96
23	54	Z	0	%50
24	47	Z	-175	%96
25	61	Z	0	%50
26	61	Z	0	%50
27	52	Z	0	39
28	52	Z	0	39
29	62	Z	0	%50
30	62	Z	0	%50
31	54	Z	0	39
32	54	Z	0	39
33	63	Z	0	%50
34	63	Z	0	%50

Member Point Loads (BLC 2 : DEAD LOAD ICE)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	46	Z	-95	%15
2	51	Z	-174	%4
3	50	Z	0	%50
4	49	Z	-321	%4
5	48	Z	-95	%15
6	53	Z	-174	%4
7	52	Z	0	%50
8	45	Z	-321	%4
9	44	Z	-95	%15

Member Point Loads (BLC 2 : DEAD LOAD ICE) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
10	55	Z	-174	%4
11	54	Z	0	%50
12	47	Z	-321	%4
13	46	Z	-95	%85
14	51	Z	-174	%96
15	50	Z	0	%50
16	49	Z	-321	%96
17	48	Z	-95	%85
18	53	Z	-174	%96
19	52	Z	0	%50
20	45	Z	-321	%96
21	44	Z	-95	%85
22	55	Z	-174	%96
23	54	Z	0	%50
24	47	Z	-321	%96
25	61	Z	0	%50
26	61	Z	0	%50
27	52	Z	0	39
28	52	Z	0	39
29	62	Z	0	%50
30	62	Z	0	%50
31	54	Z	0	39
32	54	Z	0	39
33	63	Z	0	%50
34	63	Z	0	%50

Member Point Loads (BLC 3 : WIND LOAD (NO ICE) FRONT)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	46	Y	-121	%15
2	51	Y	-203	%4
3	50	Y	0	%50
4	49	Y	-341	%4
5	48	Y	-53	%15
6	53	Y	-126	%4
7	52	Y	0	%50
8	45	Y	-233	%4
9	44	Y	-53	%15
10	55	Y	-126	%4
11	54	Y	0	%50
12	47	Y	-233	%4
13	46	Y	-121	%85
14	51	Y	-203	%96
15	50	Y	0	%50
16	49	Y	-341	%96
17	48	Y	-53	%85
18	53	Y	-126	%96
19	52	Y	0	%50
20	45	Y	-233	%96
21	44	Y	-53	%85
22	55	Y	-126	%96
23	54	Y	0	%50
24	47	Y	-233	%96
25	61	Y	0	%50
26	61	Y	0	%50
27	52	Y	0	39
28	52	Y	0	39

Member Point Loads (BLC 3 : WIND LOAD (NO ICE) FRONT) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
29	62	Y	0	%50
30	62	Y	0	%50
31	54	Y	0	39
32	54	Y	0	39
33	63	Y	0	%50
34	63	Y	0	%50

Member Point Loads (BLC 4 : WIND LOAD (NO ICE) SIDE)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	46	X	-53	%15
2	51	X	-126	%4
3	50	X	0	%50
4	49	X	-233	%4
5	48	X	-121	%15
6	53	X	-203	%4
7	52	X	0	%50
8	45	X	-341	%4
9	44	X	-121	%15
10	55	X	-203	%4
11	54	X	0	%50
12	47	X	-341	%4
13	46	X	-53	%85
14	51	X	-126	%96
15	50	X	0	%50
16	49	X	-233	%96
17	48	X	-121	%85
18	53	X	-203	%96
19	52	X	0	%50
20	45	X	-341	%96
21	44	X	-121	%85
22	55	X	-203	%96
23	54	X	0	%50
24	47	X	-341	%96
25	61	X	0	%50
26	61	X	0	%50
27	52	X	0	39
28	52	X	0	39
29	62	X	0	%50
30	62	X	0	%50
31	54	X	0	39
32	54	X	0	39
33	63	X	0	%50
34	63	X	0	%50

Member Point Loads (BLC 5 : WIND LOAD (ICE) FRONT)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	46	Y	-47	%15
2	51	Y	-73	%4
3	50	Y	0	%50
4	49	Y	-125	%4
5	48	Y	-25	%15
6	53	Y	-51	%4
7	52	Y	0	%50
8	45	Y	-92	%4
9	44	Y	-25	%15
10	55	Y	-51	%4

Member Point Loads (BLC 5 : WIND LOAD (ICE) FRONT) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
11	54	Y	0	%50
12	47	Y	-92	%4
13	46	Y	-47	%85
14	51	Y	-73	%96
15	50	Y	0	%50
16	49	Y	-125	%96
17	48	Y	-25	%85
18	53	Y	-51	%96
19	52	Y	0	%50
20	45	Y	-92	%96
21	44	Y	-25	%85
22	55	Y	-51	%96
23	54	Y	0	%50
24	47	Y	-92	%96
25	61	Y	0	%50
26	61	Y	0	%50
27	52	Y	0	39
28	52	Y	0	39
29	62	Y	0	%50
30	62	Y	0	%50
31	54	Y	0	39
32	54	Y	0	39
33	63	Y	0	%50
34	63	Y	0	%50

Member Point Loads (BLC 6 : WIND LOAD (ICE) SIDE)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
1	46	X	-25	%15
2	51	X	-51	%4
3	50	X	0	%50
4	49	X	-92	%4
5	48	X	-47	%15
6	53	X	-73	%4
7	52	X	0	%50
8	45	X	-125	%4
9	44	X	-47	%15
10	55	X	-73	%4
11	54	X	0	%50
12	47	X	-125	%4
13	46	X	-25	%85
14	51	X	-51	%96
15	50	X	0	%50
16	49	X	-92	%96
17	48	X	-47	%85
18	53	X	-73	%96
19	52	X	0	%50
20	45	X	-125	%96
21	44	X	-47	%85
22	55	X	-73	%96
23	54	X	0	%50
24	47	X	-125	%96
25	61	X	0	%50
26	61	X	0	%50
27	52	X	0	39
28	52	X	0	39
29	62	X	0	%50

Member Point Loads (BLC 6 : WIND LOAD (ICE) SIDE) (Continued)

	Member Label	Direction	Magnitude[lb,k-ft]	Location[in,%]
30	62	X	0	%50
31	54	X	0	39
32	54	X	0	39
33	63	X	0	%50
34	63	X	0	%50

Member Area Loads (BLC 1 : DEAD LOAD)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	18	8	5	17	Z	Two Way	-5
2	19	13	12	16	Z	Two Way	-5
3	6	11	14	7	Z	Two Way	-5

Member Area Loads (BLC 2 : DEAD LOAD ICE)

	Joint A	Joint B	Joint C	Joint D	Direction	Distribution	Magnitude[psf]
1	19	13	12	16	Z	Two Way	-8
2	17	18	8	5	Z	Two Way	-8
3	6	11	14	7	Z	Two Way	-8

Envelope Member Section Deflections

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
1	1	1	max	.085	2	.327	7	.085	1	3.821e-3	6	NC	1	NC	1
2			min	-.083	7	-.236	2	-.081	6	-3.563e-3	1	253.992	7	NC	1
3		2	max	.084	2	.179	6	.071	2	1.038e-2	6	NC	1	NC	3
4			min	-.083	7	-.09	1	-.063	7	-9.88e-3	1	372.12	7	2395.827	2
5		3	max	.083	2	.125	6	.002	6	7.45e-3	6	NC	5	NC	2
6			min	-.082	7	-.063	1	-.002	1	-3.754e-3	1	528.87	7	1643.249	1
7		4	max	.084	2	.165	6	.062	7	1.242e-2	6	NC	1	NC	3
8			min	-.084	7	-.082	1	-.066	2	-1.262e-2	1	375.238	2	1876.332	2
9		5	max	.084	2	.332	2	.09	1	4.137e-3	6	NC	1	NC	1
10			min	-.084	7	-.24	7	-.092	6	-4.227e-3	1	253.591	2	5543.579	2
11	2	1	max	.079	1	.32	2	.067	7	3.673e-3	2	NC	1	NC	1
12			min	-.077	6	-.227	7	-.064	2	-3.256e-3	7	492.294	2	NC	1
13		2	max	.079	1	.219	2	.091	7	7.594e-3	2	NC	11	NC	4
14			min	-.077	6	-.127	7	-.084	2	-7.139e-3	7	754.152	2	1652.604	1
15		3	max	.077	1	.119	2	.002	2	7.064e-3	2	NC	4	NC	3
16			min	-.076	6	-.056	7	-.002	7	-3.324e-3	7	656.672	6	2066.451	7
17		4	max	.077	1	.189	1	.086	6	1.281e-2	2	NC	4	NC	4
18			min	-.077	6	-.106	6	-.091	1	-1.294e-2	7	463.839	6	2434.911	7
19		5	max	.077	1	.348	1	.09	7	3.752e-3	2	NC	2	NC	1
20			min	-.077	6	-.257	6	-.091	2	-3.824e-3	7	312.007	6	5359.942	2
21	3	1	max	.076	6	.348	1	.093	2	3.415e-3	7	NC	2	NC	1
22			min	-.075	1	-.255	6	-.09	7	-3.001e-3	2	307.433	1	5871.14	2
23		2	max	.076	6	.195	1	.08	6	1.131e-2	7	NC	10	NC	3
24			min	-.075	1	-.103	6	-.073	1	-1.079e-2	2	456.834	1	2007.482	7
25		3	max	.075	6	.118	7	.002	7	7.05e-3	7	NC	4	NC	3
26			min	-.075	1	-.055	2	-.002	2	-3.337e-3	2	636.702	6	1983.39	7
27		4	max	.076	6	.205	7	.088	2	1.045e-2	7	NC	10	NC	3
28			min	-.077	1	-.123	2	-.094	7	-1.075e-2	2	812.41	2	1909.875	6
29		5	max	.077	6	.316	7	.068	2	4.125e-3	7	NC	1	NC	1
30			min	-.077	1	-.225	2	-.07	7	-4.29e-3	2	516.852	2	NC	1
31	4	1	max	.081	6	.079	2	.227	7	4.128e-3	7	NC	2	NC	2
32			min	-.079	1	-.081	7	-.32	2	-4.269e-3	2	2148.648	1	325.829	1
33		2	max	.081	6	.079	2	.229	7	3.11e-3	7	NC	2	NC	2

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
34			min	-.079	1	-.081	7	-.324	2	-7.252e-3	2	2905.16	1	382.169	1
35		3	max	.081	6	.079	2	.234	7	2.092e-3	7	NC	3	NC	7
36			min	-.079	1	-.08	7	-.33	2	-1.276e-2	4	2677.411	4	707.316	1
37		4	max	.081	6	.08	2	.238	7	3.396e-3	7	NC	3	NC	6
38			min	-.079	1	-.08	7	-.332	2	-7.567e-3	2	1731.399	4	1369.703	10
39		5	max	.081	6	.08	2	.24	7	4.7e-3	7	NC	1	NC	1
40			min	-.079	1	-.079	7	-.332	2	-4.898e-3	2	1280.441	4	NC	1
41	5	1	max	.002	6	.128	2	.087	6	3.254e-3	7	NC	6	NC	2
42			min	-.002	1	-.062	7	-.088	1	-5.696e-3	2	531.909	1	803.422	1
43		2	max	0	6	.028	2	.041	6	1.302e-3	7	NC	5	NC	4
44			min	0	1	-.014	7	-.042	1	-2.28e-3	2	912.095	1	1656.631	1
45		3	max	0	1	0	1	0	1	0	1	NC	6	NC	1
46			min	0	1	0	1	0	1	0	1	803.196	4	1148.881	7
47		4	max	0	7	.028	6	.046	2	8.366e-4	1	NC	11	NC	1
48			min	0	2	-.014	1	-.046	7	-1.666e-3	6	1031.184	4	4313.901	7
49		5	max	.002	7	.126	6	.095	2	2.093e-3	1	NC	1	NC	1
50			min	-.002	2	-.063	1	-.094	7	-4.169e-3	6	542.66	6	2218.541	2
51	6	1	max	.108	2	.084	1	.255	6	4.819e-3	6	NC	1	NC	1
52			min	-.106	7	-.087	6	-.348	1	-4.965e-3	1	NC	1	NC	1
53		2	max	.108	2	.086	1	.255	6	3.698e-3	6	NC	2	NC	11
54			min	-.106	7	-.087	6	-.35	1	-7.841e-3	1	3907.782	1	1419.11	5
55		3	max	.108	2	.087	1	.256	6	2.579e-3	6	NC	2	6522.652	6
56			min	-.106	7	-.088	6	-.352	1	-1.301e-2	3	1919.906	1	746.479	5
57		4	max	.108	2	.089	1	.256	6	3.828e-3	6	NC	2	NC	10
58			min	-.106	7	-.089	6	-.35	1	-7.987e-3	1	1259.644	1	1370.67	5
59		5	max	.108	2	.091	1	.257	6	5.078e-3	6	NC	2	NC	1
60			min	-.106	7	-.09	6	-.348	1	-5.262e-3	1	935.157	1	3205.526	6
61	7	1	max	.002	1	.118	7	.085	1	2.639e-3	6	NC	1	NC	1
62			min	-.002	6	-.052	2	-.086	6	-5.081e-3	1	425.765	7	2136.505	9
63		2	max	0	1	.026	7	.043	1	1.055e-3	6	NC	11	NC	5
64			min	0	6	-.011	2	-.043	6	-2.032e-3	1	892.469	3	1690.791	6
65		3	max	0	1	0	1	0	1	0	1	5625.407	11	NC	5
66			min	0	1	0	1	0	1	0	1	688.803	3	838.296	6
67		4	max	0	6	.025	2	.044	1	1.065e-3	6	NC	10	NC	5
68			min	0	1	-.011	7	-.044	6	-1.903e-3	1	884.445	3	796.604	7
69		5	max	.002	6	.116	2	.088	1	2.661e-3	6	NC	1	NC	1
70			min	-.002	1	-.052	7	-.087	6	-4.756e-3	1	428.676	2	576.842	7
71	8	1	max	.074	1	.076	7	.236	2	4.624e-3	2	NC	1	NC	1
72			min	-.071	6	-.079	2	-.327	7	-4.745e-3	7	NC	1	517.62	2
73		2	max	.074	1	.077	7	.234	2	-5.441e-5	2	NC	1	6259.217	10
74			min	-.071	6	-.079	2	-.327	7	-1.134e-2	9	3007.301	6	649.953	2
75		3	max	.074	1	.078	7	.228	2	-4.733e-3	2	NC	1	2011.556	5
76			min	-.071	6	-.079	2	-.325	7	-2.129e-2	9	1490.518	6	596.649	1
77		4	max	.074	1	.08	7	.225	2	-4.49e-5	2	NC	1	NC	2
78			min	-.071	6	-.079	2	-.319	7	-1.152e-2	9	987.184	6	297.573	1
79		5	max	.074	1	.081	7	.225	2	4.694e-3	2	NC	1	NC	2
80			min	-.071	6	-.08	2	-.316	7	-4.909e-3	7	739.891	6	239.978	1
81	9	1	max	.002	7	.129	6	.094	7	2.433e-3	1	NC	1	NC	1
82			min	-.002	2	-.065	1	-.095	2	-4.8e-3	6	527.342	6	2077.73	2
83		2	max	0	7	.028	6	.046	7	9.732e-4	1	NC	10	NC	1
84			min	0	2	-.014	1	-.047	2	-1.92e-3	6	993.661	9	4648.067	7
85		3	max	0	1	0	1	0	1	0	1	9957.167	6	NC	1
86			min	0	1	0	1	0	1	0	1	773.854	9	1173.858	7
87		4	max	0	1	.027	7	.041	6	1.212e-3	2	NC	5	NC	4
88			min	0	6	-.013	2	-.041	1	-2.034e-3	7	897.962	1	1773.181	6
89		5	max	.002	1	.124	7	.086	6	3.031e-3	2	NC	4	NC	2
90			min	-.002	6	-.06	2	-.086	1	-5.086e-3	7	530.825	1	840.231	6

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
91	10	1	max	.263	2	.282	1	.238	2	2.856e-3	6	NC	1	NC	1
92			min	-.261	7	-.288	6	-.328	7	-1.814e-3	1	1434.154	9	354.755	7
93		2	max	.263	2	.609	1	.085	1	2.303e-2	6	NC	4	NC	5
94			min	-.261	7	-.617	6	-.172	6	-2.264e-2	1	593.178	6	603.528	7
95		3	max	.263	2	.699	1	.072	1	2.069e-2	6	NC	5	NC	2
96			min	-.26	7	-.693	6	-.145	6	-2.081e-2	1	452.917	6	515.898	1
97		4	max	.264	2	.527	1	.081	1	1.314e-2	6	NC	5	NC	5
98			min	-.26	7	-.519	6	-.163	6	-1.347e-2	1	477.28	2	880.006	1
99		5	max	.264	2	.283	1	.241	7	4.368e-3	6	NC	1	NC	1
100			min	-.259	7	-.277	6	-.332	2	-4.449e-3	1	352.722	2	1567.517	4
101	11	1	max	.226	1	.233	7	.227	7	2.849e-3	2	NC	1	NC	1
102			min	-.225	6	-.239	2	-.319	2	-2.678e-3	7	1686.418	10	1417.627	8
103		2	max	.227	1	.509	7	.127	7	1.848e-2	2	NC	11	NC	11
104			min	-.225	6	-.517	2	-.217	2	-1.823e-2	7	685.833	2	850.489	2
105		3	max	.228	1	.634	7	.066	7	1.92e-2	2	NC	3	NC	8
106			min	-.225	6	-.629	2	-.14	2	-1.927e-2	7	505.391	2	565.861	7
107		4	max	.229	1	.514	7	.107	6	1.373e-2	2	NC	11	NC	3
108			min	-.225	6	-.508	2	-.19	1	-1.398e-2	7	861.225	2	803.466	7
109		5	max	.23	1	.284	7	.257	6	3.741e-3	2	NC	1	NC	1
110			min	-.225	6	-.28	2	-.349	1	-3.807e-3	7	1295.151	3	1649.912	5
111	12	1	max	.222	6	.276	2	.255	6	2.184e-3	1	NC	1	NC	1
112			min	-.223	1	-.282	7	-.347	1	-2.016e-3	6	1601.754	3	1481.302	5
113		2	max	.222	6	.581	2	.107	6	2.237e-2	7	NC	10	NC	10
114			min	-.222	1	-.587	7	-.196	1	-2.215e-2	2	655.808	7	630.785	7
115		3	max	.222	6	.652	2	.062	2	1.897e-2	7	NC	10	NC	10
116			min	-.221	1	-.644	7	-.135	7	-1.916e-2	2	479.399	7	551.39	2
117		4	max	.223	6	.482	2	.123	2	1.137e-2	7	NC	3	NC	8
118			min	-.22	1	-.472	7	-.205	7	-1.176e-2	2	770.324	7	1022.71	2
119		5	max	.223	6	.243	2	.225	2	4.453e-3	7	NC	1	NC	1
120			min	-.219	1	-.236	7	-.315	7	-3.758e-3	2	1541.463	11	1658.069	11
121	13	1	max	.236	6	.247	2	.227	7	6.118e-3	7	NC	1	NC	2
122			min	-.243	1	-.244	7	-.319	2	-6.587e-3	2	324.138	2	278.087	6
123		2	max	.236	6	.242	2	.229	7	3.688e-3	7	NC	4	8038.178	10
124			min	-.243	1	-.239	7	-.323	2	-8.005e-3	2	438.646	2	348.693	6
125		3	max	.236	6	.237	2	.232	7	1.257e-3	7	NC	4	3488.147	10
126			min	-.243	1	-.234	7	-.328	2	-1.258e-2	4	502.513	1	581.258	6
127		4	max	.236	6	.233	2	.238	7	3.193e-3	7	NC	4	NC	11
128			min	-.243	1	-.23	7	-.332	2	-7.449e-3	2	335.54	1	535.209	7
129		5	max	.236	6	.228	2	.241	7	5.13e-3	7	NC	2	NC	1
130			min	-.243	1	-.225	7	-.332	2	-5.474e-3	2	249.782	1	417.518	7
131	14	1	max	.313	2	.26	1	.255	6	5.626e-3	6	NC	1	NC	1
132			min	-.319	7	-.256	6	-.347	1	-6.12e-3	1	NC	1	206.154	2
133		2	max	.313	2	.26	1	.255	6	3.573e-3	6	NC	1	NC	6
134			min	-.319	7	-.257	6	-.349	1	-7.901e-3	1	8288.075	6	263.001	2
135		3	max	.313	2	.261	1	.253	6	1.524e-3	6	NC	2	4298.524	1
136			min	-.319	7	-.258	6	-.349	1	-1.275e-2	3	3740.15	6	432.007	2
137		4	max	.313	2	.262	1	.255	6	3.505e-3	6	NC	2	NC	6
138			min	-.319	7	-.259	6	-.349	1	-7.752e-3	1	2384.761	6	1160.273	7
139		5	max	.313	2	.262	1	.257	6	5.486e-3	6	NC	2	NC	1
140			min	-.319	7	-.26	6	-.349	1	-5.825e-3	1	1710.319	6	2866.955	6
141	15	1	max	.245	1	.228	7	.238	2	4.093e-3	2	NC	2	NC	1
142			min	-.251	6	-.225	2	-.328	7	-5.011e-3	7	207.118	6	463.564	2
143		2	max	.245	1	.234	7	.236	2	-1.747e-4	2	NC	5	NC	1
144			min	-.251	6	-.231	2	-.326	7	-1.076e-2	9	278.758	6	527.505	2
145		3	max	.245	1	.24	7	.231	2	-4.442e-3	2	NC	5	NC	3
146			min	-.251	6	-.238	2	-.322	7	-1.902e-2	9	418.377	6	996.337	2
147		4	max	.245	1	.246	7	.226	2	1.559e-4	2	NC	8	NC	5

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
148			min	-.251	6	-.244	2	-.317	7	-1.084e-2	9	305.096	2	1300.15	6
149		5	max	.245	1	.252	7	.225	2	4.802e-3	2	NC	1	NC	1
150			min	-.251	6	-.251	2	-.315	7	-5.618e-3	7	227.388	2	NC	1
151	16	1	max	.328	7	.263	2	.288	6	4.97e-3	6	NC	2	NC	1
152			min	-.238	2	-.261	7	-.282	1	-4.806e-3	1	248.559	6	NC	1
153		2	max	.328	7	.22	2	.248	6	3.387e-3	6	NC	2	NC	2
154			min	-.238	2	-.217	7	-.248	1	-3.441e-3	1	351.494	6	1457.608	1
155		3	max	.328	7	.177	2	.19	6	2.154e-3	2	NC	2	NC	2
156			min	-.237	2	-.174	7	-.193	1	-2.286e-3	7	567.435	1	1938.454	1
157		4	max	.327	7	.132	2	.129	6	1.121e-3	2	NC	2	NC	1
158			min	-.237	2	-.129	7	-.132	1	-1.544e-3	7	1114.749	7	8876.891	11
159		5	max	.327	7	.085	2	.081	6	6.538e-4	1	NC	1	NC	1
160			min	-.236	2	-.083	7	-.085	1	-1.36e-3	6	NC	1	NC	1
161	17	1	max	.332	2	.259	7	.283	1	4.066e-3	1	NC	1	NC	3
162			min	-.241	7	-.264	2	-.277	6	-3.796e-3	6	725.252	4	256.288	1
163		2	max	.332	2	.214	7	.238	1	2.937e-3	1	NC	2	NC	3
164			min	-.241	7	-.217	2	-.234	6	-2.888e-3	6	974.713	4	341.546	1
165		3	max	.332	2	.172	7	.187	1	1.808e-3	1	NC	1	NC	3
166			min	-.24	7	-.174	2	-.185	6	-1.98e-3	6	1477.161	4	519.233	1
167		4	max	.332	2	.129	7	.135	1	6.797e-4	1	NC	1	NC	3
168			min	-.24	7	-.13	2	-.135	6	-1.072e-3	6	3007.633	4	1086.896	6
169		5	max	.332	2	.084	7	.09	1	-1.644e-4	6	NC	1	NC	1
170			min	-.24	7	-.084	2	-.092	6	-8.047e-4	4	NC	1	NC	1
171	18	1	max	.167	6	.261	7	.681	1	3.415e-3	6	NC	1	NC	1
172			min	-.084	1	-.263	2	-.684	6	-3.876e-3	1	834.935	11	814.597	9
173		2	max	.166	6	.215	7	.528	1	2.154e-3	6	NC	3	NC	2
174			min	-.083	1	-.218	2	-.53	6	-2.434e-3	1	1122.054	11	1133.319	9
175		3	max	.166	6	.17	7	.37	1	8.929e-4	6	NC	3	NC	2
176			min	-.083	1	-.173	2	-.371	6	-9.929e-4	1	1698.936	11	1800.386	9
177		4	max	.166	6	.126	7	.207	1	4.581e-4	7	NC	2	NC	2
178			min	-.083	1	-.129	2	-.205	6	-3.68e-4	6	3378.534	4	3710.549	9
179		5	max	.165	6	.083	7	.08	2	1.89e-3	1	NC	1	NC	1
180			min	-.083	1	-.084	2	-.075	7	-1.629e-3	6	2493.584	4	NC	1
181	19	1	max	.151	6	.264	2	.596	6	5.683e-3	1	NC	8	NC	1
182			min	-.076	1	-.26	7	-.606	1	-5.544e-3	6	88.96	1	312.198	3
183		2	max	.152	6	.219	2	.457	6	3.714e-3	1	NC	8	NC	1
184			min	-.076	1	-.215	7	-.463	1	-3.57e-3	6	118.726	1	423.61	3
185		3	max	.152	6	.173	2	.316	6	1.745e-3	1	NC	8	NC	1
186			min	-.076	1	-.17	7	-.318	1	-1.596e-3	6	178.406	1	650.891	3
187		4	max	.152	6	.128	2	.173	6	5.019e-4	7	NC	8	NC	1
188			min	-.076	1	-.126	7	-.174	1	-3.92e-4	2	357.093	1	1320.444	3
189		5	max	.153	6	.084	2	.077	2	2.352e-3	6	NC	1	NC	1
190			min	-.076	1	-.083	7	-.076	7	-2.192e-3	1	NC	1	NC	1
191	20	1	max	.113	6	.306	6	.294	7	6.068e-3	6	NC	1	NC	1
192			min	-.057	1	-.252	1	-.251	2	-5.167e-3	1	NC	1	208.406	2
193		2	max	.111	6	.29	6	.242	7	7.002e-3	6	NC	5	NC	1
194			min	-.056	1	-.233	1	-.192	2	-6.221e-3	1	1649.931	1	283.931	2
195		3	max	.108	6	.259	6	.182	7	7.936e-3	6	NC	5	NC	1
196			min	-.054	1	-.203	1	-.128	2	-7.274e-3	1	1089.395	1	447.317	2
197		4	max	.106	6	.202	6	.111	7	8.87e-3	6	NC	5	NC	1
198			min	-.053	1	-.153	1	-.059	2	-8.328e-3	1	1148.25	2	993.669	2
199		5	max	.104	6	.145	7	.081	8	7.687e-3	6	NC	1	NC	1
200			min	-.051	1	-.103	2	-.017	1	-6.645e-3	1	648.157	2	NC	1
201	21	1	max	.106	6	.281	6	.345	7	6.482e-3	1	NC	1	NC	1
202			min	-.054	1	-.287	1	-.42	2	-6.254e-3	6	2194.568	5	NC	1
203		2	max	.104	6	.252	6	.284	7	7.474e-3	1	NC	3	NC	8
204			min	-.053	1	-.264	1	-.369	2	-7.244e-3	6	3251.001	5	1183.127	1

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
205		3	max	.101	6	.204	6	.218	7	8.466e-3	1	NC	3	NC	8
206			min	-.052	1	-.217	1	-.305	2	-8.234e-3	6	3205.33	6	842.978	1
207		4	max	.099	6	.128	6	.146	7	9.459e-3	1	NC	3	NC	8
208			min	-.05	1	-.136	1	-.224	2	-9.223e-3	6	4498.709	6	1183.127	1
209		5	max	.097	6	.077	2	.07	7	1.045e-2	1	NC	1	NC	1
210			min	-.049	1	-.075	7	-.131	2	-1.021e-2	6	NC	1	NC	1
211	22	1	max	.349	1	.225	6	.284	7	4.646e-3	7	NC	2	NC	6
212			min	-.257	6	-.23	1	-.28	2	-4.462e-3	2	686.239	1	220.067	1
213		2	max	.349	1	.186	6	.241	7	3.133e-3	7	NC	4	NC	6
214			min	-.257	6	-.189	1	-.238	2	-3.144e-3	2	933.409	1	301.112	1
215		3	max	.348	1	.151	6	.188	7	1.621e-3	7	NC	2	NC	6
216			min	-.257	6	-.153	1	-.186	2	-1.826e-3	2	1384.425	1	441.254	1
217		4	max	.348	1	.115	6	.134	7	5.626e-4	6	NC	2	NC	6
218			min	-.257	6	-.117	1	-.134	2	-9.634e-4	1	2668.457	1	840.116	1
219		5	max	.348	1	.077	6	.09	7	8.11e-4	2	NC	1	NC	1
220			min	-.257	6	-.077	1	-.091	2	-1.404e-3	7	NC	1	NC	1
221	23	1	max	.183	2	.225	6	.578	7	4.073e-3	2	NC	1	NC	1
222			min	-.098	7	-.227	1	-.583	2	-4.508e-3	7	861.988	10	373.552	8
223		2	max	.183	2	.188	6	.46	7	2.727e-3	2	NC	2	NC	3
224			min	-.098	7	-.191	1	-.463	2	-2.996e-3	7	860.001	1	500.587	8
225		3	max	.183	2	.151	6	.338	7	1.381e-3	2	NC	2	NC	5
226			min	-.098	7	-.154	1	-.34	2	-1.484e-3	7	422.348	1	757.586	8
227		4	max	.182	2	.114	6	.213	7	6.16e-4	6	NC	2	NC	3
228			min	-.098	7	-.117	1	-.212	2	-5.113e-4	1	273.94	1	1515.295	8
229		5	max	.182	2	.077	6	.086	7	1.541e-3	7	NC	2	NC	1
230			min	-.098	7	-.078	1	-.082	2	-1.311e-3	2	200.883	1	NC	1
231	24	1	max	.143	1	.228	1	.572	2	4.447e-3	7	NC	3	NC	1
232			min	-.066	6	-.225	6	-.58	7	-4.302e-3	2	73.283	7	161.6	6
233		2	max	.143	1	.192	1	.424	2	2.817e-3	7	NC	3	NC	1
234			min	-.066	6	-.188	6	-.429	7	-2.679e-3	2	97.893	7	215.927	6
235		3	max	.143	1	.154	1	.275	2	1.188e-3	7	NC	3	NC	1
236			min	-.066	6	-.151	6	-.278	7	-1.057e-3	2	147.255	7	326.215	6
237		4	max	.143	1	.116	1	.129	1	5.654e-4	2	NC	1	NC	1
238			min	-.066	6	-.114	6	-.126	7	-4.421e-4	7	294.898	7	652.006	6
239		5	max	.143	1	.077	1	.087	1	2.188e-3	2	NC	1	NC	1
240			min	-.066	6	-.076	6	-.085	6	-2.072e-3	7	NC	1	NC	1
241	25	1	max	.108	1	.409	2	.316	6	4.887e-3	2	NC	1	NC	2
242			min	-.051	6	-.354	7	-.271	1	-4.722e-3	7	NC	1	261.884	1
243		2	max	.106	1	.379	2	.261	6	5.517e-3	2	NC	5	NC	6
244			min	-.05	6	-.32	7	-.207	1	-5.278e-3	7	2155.06	7	361.63	1
245		3	max	.103	1	.334	2	.191	6	6.146e-3	2	NC	5	NC	6
246			min	-.048	6	-.276	7	-.135	1	-5.834e-3	7	1423.167	7	585.275	1
247		4	max	.101	1	.267	2	.106	6	6.776e-3	2	NC	5	NC	2
248			min	-.046	6	-.217	7	-.051	1	-6.389e-3	7	1747.811	7	1379.797	1
249		5	max	.098	1	.185	2	.082	4	5.934e-3	2	NC	1	NC	1
250			min	-.044	6	-.141	7	-.02	7	-4.939e-3	7	NC	1	NC	1
251	26	1	max	.129	2	.284	2	.336	6	6.387e-3	7	NC	1	NC	1
252			min	-.077	7	-.287	7	-.41	1	-6.224e-3	2	1139.322	8	442.197	6
253		2	max	.126	2	.239	2	.276	6	7.474e-3	7	NC	5	NC	4
254			min	-.075	7	-.249	7	-.361	1	-7.314e-3	2	1600.168	8	633.61	6
255		3	max	.123	2	.175	2	.217	6	8.562e-3	7	NC	5	NC	4
256			min	-.073	7	-.188	7	-.304	1	-8.404e-3	2	2550.708	8	787.143	7
257		4	max	.12	2	.102	1	.158	6	9.649e-3	7	NC	5	NC	4
258			min	-.071	7	-.109	6	-.237	1	-9.494e-3	2	5374.12	8	1104.763	7
259		5	max	.117	2	.09	1	.1	6	1.074e-2	7	NC	1	NC	1
260			min	-.069	7	-.087	6	-.162	1	-1.058e-2	2	NC	1	NC	1
261	27	1	max	.315	7	.219	1	.243	2	4.656e-3	6	NC	2	NC	1

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
262			min	-.225	2	-.223	6	-.236	7	-4.462e-3	1	197.805	1	190.6	7
263		2	max	.315	7	.184	1	.205	2	3.43e-3	2	NC	7	NC	1
264			min	-.225	2	-.185	6	-.196	7	-3.26e-3	7	259.304	1	257.96	7
265		3	max	.315	7	.149	1	.16	2	2.353e-3	2	NC	2	NC	1
266			min	-.225	2	-.15	6	-.154	7	-2.482e-3	7	398.101	1	384.189	7
267		4	max	.315	7	.113	1	.112	2	1.276e-3	2	NC	2	NC	2
268			min	-.225	2	-.114	6	-.111	7	-1.704e-3	7	855.464	1	760.265	7
269		5	max	.316	7	.077	1	.068	2	6.601e-4	1	NC	1	NC	1
270			min	-.225	2	-.077	6	-.07	7	-1.379e-3	6	NC	1	NC	1
271	28	1	max	.149	3	.221	1	.648	2	2.838e-3	7	NC	1	NC	1
272			min	-.063	6	-.222	6	-.65	7	-3.307e-3	2	437.221	3	1723.817	10
273		2	max	.149	3	.183	1	.49	2	1.905e-3	1	NC	1	NC	1
274			min	-.063	6	-.185	6	-.49	7	-2.124e-3	6	583.652	3	2332.848	10
275		3	max	.149	3	.146	1	.327	2	1.173e-3	1	NC	1	NC	1
276			min	-.064	6	-.149	6	-.326	7	-1.24e-3	6	877.725	3	3564.402	10
277		4	max	.149	3	.11	1	.159	2	5.512e-4	2	NC	1	NC	1
278			min	-.064	6	-.112	6	-.155	7	-4.916e-4	7	1755.766	3	5071.725	7
279		5	max	.148	3	.075	1	.085	6	1.837e-3	2	NC	1	NC	1
280			min	-.064	6	-.076	6	-.081	1	-1.602e-3	7	NC	1	NC	1
281	29	1	max	.17	7	.222	6	.546	7	5.468e-3	2	NC	3	NC	1
282			min	-.095	2	-.22	1	-.558	2	-5.342e-3	7	96.16	6	301.852	4
283		2	max	.17	7	.185	6	.43	7	3.696e-3	2	NC	3	NC	2
284			min	-.095	2	-.183	1	-.437	2	-3.55e-3	7	128.387	6	410.924	4
285		3	max	.171	7	.149	6	.313	7	1.923e-3	2	NC	3	NC	2
286			min	-.095	2	-.146	1	-.315	2	-1.758e-3	7	193.019	6	432.232	6
287		4	max	.171	7	.112	6	.195	7	5.353e-4	1	NC	3	NC	2
288			min	-.095	2	-.111	1	-.195	2	-4.027e-4	6	386.273	6	286.866	6
289		5	max	.171	7	.076	6	.077	7	1.825e-3	7	NC	1	NC	2
290			min	-.094	2	-.077	1	-.074	2	-1.622e-3	2	NC	1	214.67	1
291	30	1	max	.138	7	.385	1	.296	2	4.933e-3	7	NC	1	NC	1
292			min	-.081	2	-.328	6	-.251	7	-4.692e-3	2	NC	1	249.612	6
293		2	max	.135	7	.344	1	.247	2	6.338e-3	7	NC	3	NC	2
294			min	-.079	2	-.283	6	-.194	7	-6.045e-3	2	1601.493	7	335.887	6
295		3	max	.132	7	.293	1	.182	2	7.743e-3	7	NC	3	NC	2
296			min	-.077	2	-.233	6	-.125	7	-7.398e-3	2	1045.859	7	521.127	6
297		4	max	.129	7	.234	1	.094	4	9.148e-3	7	NC	3	NC	1
298			min	-.075	2	-.181	6	-.039	7	-8.751e-3	2	1275.265	7	1134.105	6
299		5	max	.126	7	.175	1	.078	9	8.159e-3	7	NC	1	NC	1
300			min	-.072	2	-.131	6	-.012	2	-7.135e-3	2	NC	1	NC	1
301	31	1	max	.099	1	.236	7	.27	2	6.146e-3	2	NC	1	NC	1
302			min	-.048	6	-.244	2	-.344	7	-6.319e-3	7	952.897	4	6209.52	7
303		2	max	.097	1	.215	7	.217	2	6.863e-3	2	NC	1	9612.976	7
304			min	-.046	6	-.229	2	-.301	7	-6.911e-3	7	1283.251	4	1486.913	6
305		3	max	.094	1	.183	7	.171	2	7.58e-3	2	NC	1	5612.322	3
306			min	-.045	6	-.197	2	-.258	7	-7.502e-3	7	1946.418	4	1059.426	6
307		4	max	.091	1	.135	7	.137	2	8.297e-3	2	NC	1	7876.943	3
308			min	-.043	6	-.144	2	-.214	7	-8.094e-3	7	3928.425	4	1486.913	6
309		5	max	.089	1	.076	7	.11	2	9.014e-3	2	NC	1	NC	1
310			min	-.041	6	-.074	2	-.171	7	-8.685e-3	7	NC	1	8457.319	2
311	32	1	max	.079	2	.081	6	.33	2	2.34e-3	1	NC	1	NC	1
312			min	-.08	7	-.079	1	-.234	7	-1.989e-3	6	NC	1	NC	1
313		2	max	.079	2	.08	6	.376	2	9.16e-4	1	NC	1	NC	1
314			min	-.08	7	-.082	1	-.243	7	-4.106e-4	6	4747.883	4	1972.117	7
315		3	max	.079	2	.08	6	.422	2	1.168e-3	6	NC	1	NC	1
316			min	-.08	7	-.084	1	-.252	7	-5.08e-4	1	2342.283	4	997.436	7
317		4	max	.079	2	.079	6	.463	2	2.746e-3	6	NC	1	NC	1
318			min	-.08	7	-.087	1	-.261	7	-1.932e-3	1	1548.351	4	661.934	7

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
319		5	max	.079	2	.078	6	.497	2	4.324e-3	6	NC	1	NC	1
320			min	-.08	7	-.089	1	-.271	7	-3.356e-3	1	1157.052	4	486.696	7
321	33	1	max	.087	1	.108	2	.352	1	3.08e-3	7	NC	1	NC	1
322			min	-.088	6	-.106	7	-.256	6	-2.792e-3	2	NC	1	NC	1
323		2	max	.087	1	.112	2	.4	1	1.222e-3	7	NC	2	7723.491	5
324			min	-.088	6	-.113	7	-.267	6	-7.687e-4	2	3601.969	1	1592.826	6
325		3	max	.087	1	.116	2	.448	1	1.255e-3	2	NC	2	4287.705	5
326			min	-.088	6	-.12	7	-.278	6	-6.359e-4	7	1779.546	1	806.173	6
327		4	max	.087	1	.119	2	.491	1	3.278e-3	2	NC	2	4543.597	5
328			min	-.088	6	-.126	7	-.289	6	-2.494e-3	7	1173.963	1	537.862	6
329		5	max	.087	1	.123	2	.527	1	5.302e-3	2	NC	2	NC	1
330			min	-.088	6	-.133	7	-.301	6	-4.351e-3	7	872.508	1	399.288	6
331	34	1	max	.123	2	.084	6	.525	1	3.339e-3	6	NC	1	NC	1
332			min	-.133	7	-.076	1	-.305	6	-5.455e-3	1	998.076	7	233.179	7
333		2	max	.123	2	.086	6	.525	1	3.07e-3	6	NC	1	NC	1
334			min	-.133	7	-.082	1	-.303	6	-6.035e-3	1	1316.448	7	324.358	7
335		3	max	.123	2	.088	6	.527	1	2.665e-3	6	NC	1	NC	9
336			min	-.133	7	-.087	1	-.301	6	-7.183e-3	3	2285.473	7	528.026	7
337		4	max	.123	2	.092	6	.53	1	2.46e-3	6	NC	1	NC	9
338			min	-.133	7	-.093	1	-.298	6	-5.323e-3	1	2411.228	6	655.963	4
339		5	max	.123	2	.097	6	.533	1	2.324e-3	6	NC	1	NC	2
340			min	-.133	7	-.098	1	-.297	6	-4.266e-3	1	1479.304	6	485.792	4
341	35	1	max	.086	1	.069	7	.139	2	-5.136e-4	2	NC	1	NC	2
342			min	-.098	6	-.078	2	-.551	9	-8.559e-3	9	1365.737	4	388.098	1
343		2	max	.086	1	.074	7	.143	2	-1.453e-3	2	NC	1	NC	4
344			min	-.098	6	-.079	2	-.555	9	-1.038e-2	9	2101.306	4	530.263	1
345		3	max	.086	1	.078	7	.146	2	-2.865e-3	2	NC	2	NC	7
346			min	-.098	6	-.079	2	-.561	9	-1.311e-2	9	1559.344	6	829.75	1
347		4	max	.086	1	.083	7	.146	2	-2.618e-3	2	NC	3	NC	7
348			min	-.098	6	-.081	2	-.57	9	-1.006e-2	9	994.833	6	764.353	3
349		5	max	.086	1	.089	7	.144	2	-2.307e-3	10	NC	3	NC	1
350			min	-.098	6	-.085	2	-.58	9	-7.999e-3	9	725.806	6	528.839	3
351	36	1	max	.078	6	.078	2	.294	7	3.144e-3	7	NC	1	NC	1
352			min	-.089	1	-.086	7	-.514	2	-5.256e-3	2	1514.808	9	412.942	7
353		2	max	.078	6	.078	2	.282	7	2.8e-3	7	NC	1	NC	3
354			min	-.089	1	-.083	7	-.505	2	-5.765e-3	2	2606.297	9	557.947	7
355		3	max	.078	6	.079	2	.271	7	2.283e-3	7	NC	1	NC	4
356			min	-.089	1	-.08	7	-.497	2	-6.981e-3	4	6263.971	8	874.054	7
357		4	max	.078	6	.08	2	.259	7	2.018e-3	7	NC	1	NC	3
358			min	-.089	1	-.079	7	-.49	2	-4.892e-3	2	9129.399	4	729.767	8
359		5	max	.078	6	.081	2	.25	7	1.841e-3	7	NC	1	NC	1
360			min	-.089	1	-.078	7	-.486	2	-3.799e-3	2	NC	1	534.995	8
361	37	1	max	.078	7	.074	1	.325	7	4.08e-3	6	NC	1	NC	3
362			min	-.079	2	-.071	6	-.228	2	-3.549e-3	1	NC	1	182.149	1
363		2	max	.078	7	.077	1	.372	7	2.735e-3	6	NC	2	5180.356	11
364			min	-.079	2	-.078	6	-.205	2	-2.014e-3	1	2738.391	6	252.952	1
365		3	max	.078	7	.08	1	.417	7	1.389e-3	6	NC	2	2794.842	11
366			min	-.079	2	-.085	6	-.183	2	-4.777e-4	1	1351.797	6	411.341	1
367		4	max	.078	7	.083	1	.491	9	1.356e-3	3	NC	2	2912.144	11
368			min	-.079	2	-.091	6	-.162	2	4.336e-5	6	893.371	6	938.024	1
369		5	max	.078	7	.086	1	.561	9	2.594e-3	1	NC	2	NC	1
370			min	-.079	2	-.098	6	-.146	2	-1.302e-3	6	666.893	6	NC	1
371	38	1	max	.238	2	.236	6	.328	2	2.479e-3	1	NC	5	NC	2
372			min	-.234	7	-.243	1	-.232	7	-2.145e-3	6	295.914	1	2726.071	1
373		2	max	.238	2	.221	6	.371	2	1.113e-3	1	NC	5	NC	1
374			min	-.234	7	-.227	1	-.238	7	-6.214e-4	6	403.395	1	420.088	2
375		3	max	.238	2	.207	6	.415	2	9.025e-4	6	NC	5	NC	6

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
376			min	-.234	7	-.212	1	-.245	7	-2.527e-4	1	615.135	1	208.706	2
377		4	max	.238	2	.194	6	.458	2	2.426e-3	6	NC	5	NC	6
378			min	-.234	7	-.197	1	-.256	7	-1.618e-3	1	1243.176	1	138.686	2
379		5	max	.238	2	.181	6	.501	2	3.95e-3	6	NC	1	NC	1
380			min	-.234	7	-.183	1	-.275	7	-2.984e-3	1	7925.714	11	103.989	2
381	39	1	max	.261	1	.313	2	.349	1	3.202e-3	7	NC	1	NC	1
382			min	-.258	6	-.319	7	-.253	6	-2.933e-3	2	264.206	7	NC	1
383		2	max	.261	1	.296	2	.393	1	1.429e-3	7	NC	3	8193.686	2
384			min	-.258	6	-.3	7	-.26	6	-9.898e-4	2	363.539	7	408.554	1
385		3	max	.261	1	.279	2	.438	1	9.53e-4	2	NC	3	4473.318	2
386			min	-.258	6	-.283	7	-.268	6	-3.439e-4	7	559.236	7	202.689	1
387		4	max	.261	1	.264	2	.483	1	2.896e-3	2	NC	3	4694.626	2
388			min	-.258	6	-.267	7	-.282	6	-2.117e-3	7	1139.275	7	134.435	1
389		5	max	.261	1	.249	2	.528	1	4.839e-3	2	NC	2	NC	2
390			min	-.258	6	-.251	7	-.302	6	-3.89e-3	7	1367.92	6	100.565	1
391	40	1	max	.249	2	.253	6	.524	1	6.279e-3	6	NC	1	NC	1
392			min	-.251	7	-.26	1	-.305	6	-8.394e-3	1	724.21	9	3572.903	9
393		2	max	.249	2	.255	6	.526	1	6.07e-3	6	NC	1	NC	1
394			min	-.251	7	-.26	1	-.304	6	-9.033e-3	1	1048.996	9	930.725	2
395		3	max	.249	2	.258	6	.528	1	5.757e-3	6	NC	1	NC	1
396			min	-.251	7	-.261	1	-.302	6	-9.993e-3	1	692.056	2	459.373	2
397		4	max	.249	2	.264	6	.531	1	8.017e-3	6	NC	3	NC	1
398			min	-.251	7	-.267	1	-.299	6	-1.088e-2	1	442.404	2	277.655	2
399		5	max	.249	2	.271	6	.532	1	9.527e-3	6	NC	5	NC	1
400			min	-.251	7	-.275	1	-.296	6	-1.147e-2	1	332.068	2	180.375	2
401	41	1	max	.174	1	.219	7	.139	2	6.992e-3	2	NC	1	NC	1
402			min	-.176	6	-.21	2	-.551	9	-5.089e-3	7	404.353	6	NC	1
403		2	max	.174	1	.227	7	.141	2	2.204e-3	2	NC	1	NC	3
404			min	-.176	6	-.221	2	-.557	9	-7.556e-3	9	576.835	6	2836.311	7
405		3	max	.174	1	.24	7	.14	2	-4.986e-3	2	NC	1	NC	3
406			min	-.176	6	-.238	2	-.565	9	-2.04e-2	9	739.526	7	867.753	6
407		4	max	.174	1	.267	7	.139	2	9.255e-3	2	NC	4	NC	3
408			min	-.176	6	-.265	2	-.573	9	-1.365e-2	7	379.828	7	466.337	2
409		5	max	.174	1	.295	7	.152	2	1.886e-2	2	NC	1	NC	3
410			min	-.176	6	-.288	2	-.579	9	-1.643e-2	7	230.309	7	389.831	2
411	42	1	max	.181	6	.263	2	.293	7	6.48e-3	7	NC	1	NC	1
412			min	-.183	1	-.257	7	-.514	2	-8.591e-3	2	480.375	2	3880.989	5
413		2	max	.181	6	.25	2	.284	7	6.016e-3	7	NC	3	NC	2
414			min	-.183	1	-.246	7	-.507	2	-8.98e-3	2	703.243	7	1227.88	6
415		3	max	.181	6	.238	2	.275	7	5.319e-3	7	NC	4	NC	3
416			min	-.183	1	-.234	7	-.501	2	-9.564e-3	2	683.966	1	588.632	6
417		4	max	.181	6	.23	2	.263	7	7.127e-3	7	NC	3	NC	3
418			min	-.183	1	-.226	7	-.494	2	-1.e-2	2	432.164	1	347.989	6
419		5	max	.181	6	.225	2	.247	7	8.334e-3	7	NC	2	NC	2
420			min	-.183	1	-.22	7	-.483	2	-1.029e-2	2	317.102	1	222.262	6
421	43	1	max	.24	7	.244	1	.322	7	5.014e-3	6	NC	4	NC	1
422			min	-.237	2	-.251	6	-.231	2	-4.367e-3	1	238.134	2	NC	1
423		2	max	.24	7	.226	1	.363	7	3.989e-3	6	NC	4	NC	1
424			min	-.237	2	-.231	6	-.21	2	-3.126e-3	1	318.415	2	204.595	9
425		3	max	.24	7	.208	1	.405	7	2.965e-3	6	NC	4	NC	1
426			min	-.238	2	-.212	6	-.187	2	-1.886e-3	1	477.695	2	100.511	9
427		4	max	.24	7	.191	1	.473	9	1.94e-3	6	NC	4	NC	1
428			min	-.238	2	-.193	6	-.163	2	-6.45e-4	1	952.955	2	66.235	9
429		5	max	.24	7	.174	1	.565	9	1.824e-3	8	NC	1	NC	1
430			min	-.238	2	-.175	6	-.14	2	2.958e-4	2	5386.419	5	49.384	9
431	44	1	max	.525	1	.542	6	.502	7	3.034e-3	7	NC	2	NC	1
432			min	-.304	6	-.624	1	-.519	2	-2.643e-3	2	134.699	1	182.721	2

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
433		2	max	.525	1	.376	6	.35	7	3.034e-3	7	NC	8	NC	1
434			min	-.304	6	-.418	1	-.357	2	-2.643e-3	2	209.408	1	294.79	2
435		3	max	.525	1	.235	6	.24	7	2.708e-3	7	5150.286	11	NC	1
436			min	-.304	6	-.236	1	-.237	2	-2.418e-3	2	407.768	1	538.233	2
437		4	max	.525	1	.137	6	.184	7	5.873e-4	7	NC	2	NC	1
438			min	-.304	6	-.138	1	-.177	2	-9.647e-4	4	838.468	1	914.829	2
439		5	max	.525	1	.065	6	.105	7	4.085e-4	6	NC	1	NC	1
440			min	-.304	6	-.045	1	-.092	2	-1.245e-3	3	NC	1	NC	1
441	45	1	max	.532	1	.977	6	1.031	7	2.739e-3	7	NC	7	NC	1
442			min	-.297	6	-1.051	1	-1.063	2	-2.929e-3	2	79.667	1	80.939	2
443		2	max	.532	1	.528	6	.515	7	2.739e-3	7	9052.894	10	NC	1
444			min	-.297	6	-.563	1	-.529	2	-2.929e-3	2	158.671	1	181.696	2
445		3	max	.532	1	.242	6	.231	7	2.462e-3	7	NC	9	NC	1
446			min	-.297	6	-.241	1	-.227	2	-2.655e-3	2	459.573	1	613.801	2
447		4	max	.532	1	.132	6	.163	7	1.276e-3	6	NC	7	NC	1
448			min	-.297	6	-.139	1	-.158	2	-1.483e-3	1	1165.939	1	1339.005	2
449		5	max	.532	1	.082	6	.115	7	1.053e-3	6	NC	1	NC	1
450			min	-.297	6	-.072	1	-.1	2	-1.282e-3	1	NC	1	NC	1
451	46	1	max	.553	9	.501	6	.474	7	2.119e-3	2	NC	7	NC	5
452			min	-.14	2	-.552	1	-.513	2	-1.769e-3	7	167.054	1	179.09	7
453		2	max	.553	9	.338	6	.329	7	2.119e-3	2	NC	7	NC	3
454			min	-.14	2	-.359	1	-.342	2	-1.769e-3	7	285.372	1	268.816	7
455		3	max	.553	9	.216	6	.208	7	1.959e-3	2	NC	7	NC	10
456			min	-.14	2	-.207	1	-.196	2	-1.713e-3	7	558.86	6	461.106	7
457		4	max	.553	9	.151	6	.131	7	9.213e-4	2	NC	2	4060.581	10
458			min	-.14	2	-.128	1	-.105	2	-1.35e-3	7	1052.973	6	846.376	7
459		5	max	.553	9	.077	6	.038	7	2.026e-4	2	NC	1	NC	1
460			min	-.141	2	-.085	1	-.084	2	-1.304e-3	8	NC	1	1855.946	8
461	47	1	max	.578	9	.902	6	1.39	7	4.233e-3	2	NC	9	NC	11
462			min	-.145	2	-.952	1	-1.453	2	-5.209e-3	7	91.366	1	57.782	2
463		2	max	.578	9	.464	6	.695	7	4.233e-3	2	9588.549	11	NC	3
464			min	-.145	2	-.485	1	-.721	2	-5.209e-3	7	202.055	1	123.913	7
465		3	max	.577	9	.191	6	.235	7	3.954e-3	2	NC	4	8374.865	10
466			min	-.145	2	-.183	1	-.224	2	-4.893e-3	7	865.946	6	460.738	7
467		4	max	.577	9	.127	6	.111	7	2.144e-3	2	NC	1	3861.141	10
468			min	-.145	2	-.105	1	-.076	2	-2.837e-3	7	2217.091	8	762.105	9
469		5	max	.577	9	.101	6	.065	7	9.608e-4	1	NC	1	NC	1
470			min	-.145	2	-.099	1	-.103	2	-1.52e-3	6	NC	1	NC	1
471	48	1	max	.512	2	.465	6	.61	7	2.725e-3	2	NC	3	NC	9
472			min	-.29	7	-.409	1	-.674	2	-2.435e-3	7	191.077	6	125.336	2
473		2	max	.512	2	.32	6	.404	7	2.725e-3	2	NC	3	NC	9
474			min	-.29	7	-.294	1	-.437	2	-2.435e-3	7	295.869	6	202.261	2
475		3	max	.512	2	.2	6	.241	7	2.497e-3	2	8938.164	3	NC	1
476			min	-.29	7	-.203	1	-.244	2	-2.302e-3	7	542.199	6	405.325	2
477		4	max	.511	2	.139	6	.142	7	1.015e-3	2	NC	3	NC	5
478			min	-.29	7	-.144	1	-.146	2	-1.441e-3	7	951.432	6	822.689	2
479		5	max	.511	2	.057	6	.063	7	-1.156e-5	2	NC	1	NC	1
480			min	-.29	7	-.079	1	-.052	2	-1.195e-3	8	NC	1	NC	1
481	49	1	max	.487	2	1.107	6	.924	7	3.289e-3	1	NC	5	NC	11
482			min	-.252	7	-1.042	1	-.975	2	-3.407e-3	6	74.913	6	85.722	2
483		2	max	.487	2	.542	6	.484	7	3.289e-3	1	NC	5	NC	11
484			min	-.253	7	-.513	1	-.511	2	-3.407e-3	6	163.73	6	175.096	2
485		3	max	.487	2	.21	6	.209	7	3.052e-3	1	5649.28	7	NC	3
486			min	-.253	7	-.215	1	-.212	2	-3.178e-3	6	540.58	6	532.827	2
487		4	max	.487	2	.128	6	.114	7	1.514e-3	1	NC	3	NC	1
488			min	-.253	7	-.131	1	-.123	2	-1.694e-3	6	1249.375	6	1346.802	2
489		5	max	.487	2	.066	6	.066	7	4.484e-4	1	NC	1	NC	1

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
490			min	-.253	7	-.085	1	-.065	2	-6.67e-4	6	NC	1	NC	1
491	50	1	max	.145	6	.413	2	1.262	6	4.62e-3	1	NC	2	NC	2
492			min	-.072	1	-.398	7	-1.285	1	-4.641e-3	6	902.239	10	57.008	1
493		2	max	.145	6	.33	2	.916	6	4.62e-3	1	NC	2	NC	2
494			min	-.072	1	-.321	7	-.932	1	-4.641e-3	6	1227.935	10	76.841	1
495		3	max	.145	6	.251	2	.575	6	4.089e-3	1	NC	3	NC	2
496			min	-.072	1	-.248	7	-.584	1	-4.107e-3	6	1908.338	10	116.873	1
497		4	max	.144	6	.149	2	.244	6	6.741e-4	1	NC	2	NC	2
498			min	-.072	1	-.145	7	-.247	1	-6.629e-4	6	3271.207	10	236.671	1
499		5	max	.144	6	.063	2	.09	2	1.66e-3	6	NC	1	NC	1
500			min	-.072	1	-.067	7	-.091	7	-1.592e-3	1	NC	1	NC	1
501	51	1	max	.172	6	.637	2	1.914	6	5.512e-3	6	NC	1	NC	9
502			min	-.086	1	-.646	7	-1.897	1	-5.813e-3	1	132.781	7	40.193	6
503		2	max	.172	6	.398	2	1.178	6	5.512e-3	6	NC	1	NC	9
504			min	-.086	1	-.401	7	-1.167	1	-5.813e-3	1	227.836	7	64.738	6
505		3	max	.172	6	.248	2	.582	6	4.986e-3	6	NC	1	NC	9
506			min	-.086	1	-.245	7	-.577	1	-5.245e-3	1	417.196	7	128.091	6
507		4	max	.173	6	.144	2	.213	6	1.564e-3	6	NC	1	NC	9
508			min	-.087	1	-.145	7	-.214	1	-1.558e-3	1	902.869	7	325.295	6
509		5	max	.173	6	.063	2	.09	7	9.526e-4	7	NC	1	NC	1
510			min	-.087	1	-.058	7	-.102	2	-7.127e-4	2	NC	1	NC	1
511	52	1	max	.125	3	1.198	2	.555	6	3.408e-3	7	NC	10	NC	10
512			min	-.048	6	-1.22	7	-.565	1	-3.432e-3	2	59.417	7	134.432	2
513		2	max	.125	3	.863	2	.428	6	3.408e-3	7	NC	5	NC	10
514			min	-.048	6	-.878	7	-.434	1	-3.432e-3	2	80.381	7	184.46	2
515		3	max	.125	3	.538	2	.311	6	3.082e-3	7	NC	5	NC	10
516			min	-.048	6	-.546	7	-.313	1	-3.115e-3	2	122.22	7	292.251	2
517		4	max	.125	3	.213	2	.186	6	8.804e-4	7	NC	5	NC	10
518			min	-.049	6	-.217	7	-.19	1	-9.43e-4	2	251.745	7	545.865	2
519		5	max	.124	3	.092	7	.117	2	1.702e-3	1	NC	1	NC	1
520			min	-.049	6	-.091	2	-.112	7	-1.601e-3	6	NC	1	NC	1
521	53	1	max	.201	2	1.574	2	.928	6	5.209e-3	2	NC	11	NC	5
522			min	-.113	7	-1.553	7	-.935	1	-5.467e-3	7	51.167	2	83.784	1
523		2	max	.201	2	.966	2	.581	6	5.209e-3	2	NC	11	NC	5
524			min	-.113	7	-.953	7	-.589	1	-5.467e-3	7	85.123	2	133.28	1
525		3	max	.201	2	.497	2	.325	6	4.762e-3	2	NC	11	NC	5
526			min	-.113	7	-.492	7	-.334	1	-4.982e-3	7	174.334	2	236.813	1
527		4	max	.201	2	.227	2	.144	6	1.857e-3	2	NC	11	NC	5
528			min	-.113	7	-.226	7	-.144	1	-1.829e-3	7	439.609	2	556.967	1
529		5	max	.201	2	.109	6	.013	2	1.42e-3	6	NC	1	NC	1
530			min	-.112	7	-.122	1	-.013	7	-1.266e-3	1	NC	1	NC	1
531	54	1	max	.154	7	1.127	2	.676	6	4.334e-3	2	NC	5	NC	1
532			min	-.081	2	-1.11	7	-.662	1	-4.353e-3	7	69.383	2	114.072	6
533		2	max	.154	7	.828	2	.5	6	4.334e-3	2	NC	5	NC	1
534			min	-.081	2	-.816	7	-.492	1	-4.353e-3	7	94.46	2	153.684	6
535		3	max	.154	7	.54	2	.333	6	3.744e-3	2	NC	5	NC	1
536			min	-.081	2	-.532	7	-.33	1	-3.753e-3	7	145.012	2	228.879	6
537		4	max	.153	7	.266	2	.153	6	6.728e-4	6	NC	5	NC	3
538			min	-.081	2	-.265	7	-.15	1	-7.181e-4	1	296.05	2	486.018	6
539		5	max	.153	7	.142	1	.041	7	2.02e-3	7	NC	1	NC	1
540			min	-.081	2	-.139	6	-.045	2	-1.889e-3	2	NC	1	NC	1
541	55	1	max	.171	1	1.763	2	.776	6	5.274e-3	7	NC	5	NC	10
542			min	-.083	6	-1.769	7	-.802	1	-5.593e-3	2	42.887	7	107.337	1
543		2	max	.171	1	1.085	2	.488	6	5.274e-3	7	NC	5	NC	10
544			min	-.083	6	-1.09	7	-.504	1	-5.593e-3	2	68.441	7	172.387	7
545		3	max	.171	1	.545	2	.291	6	4.72e-3	7	NC	5	NC	10
546			min	-.083	6	-.549	7	-.296	1	-5.003e-3	2	130.16	7	324.637	7

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
547		4	max	.171	1	.194	2	.171	6	1.319e-3	1	NC	5	NC	10
548			min	-.083	6	-.192	7	-.174	1	-1.24e-3	6	322.421	7	751.008	7
549		5	max	.171	1	.05	7	.088	7	1.455e-3	2	NC	1	NC	1
550			min	-.083	6	-.043	2	-.078	2	-1.365e-3	7	NC	1	NC	1
551	56	1	max	.319	2	.226	1	.239	2	3.909e-3	1	NC	1	NC	1
552			min	-.227	7	-.225	6	-.233	7	-3.667e-3	6	189.841	2	1689.163	11
553		2	max	.319	2	.201	1	.204	2	2.797e-3	1	NC	1	NC	5
554			min	-.227	7	-.198	6	-.199	7	-2.764e-3	6	263.647	2	2015.575	2
555		3	max	.32	2	.165	1	.156	2	1.684e-3	1	NC	1	NC	5
556			min	-.227	7	-.162	6	-.154	7	-1.861e-3	6	409.031	2	2455.717	1
557		4	max	.32	2	.122	1	.106	2	6.483e-4	2	NC	3	NC	2
558			min	-.227	7	-.119	6	-.106	7	-1.088e-3	7	844.016	2	8681.474	11
559		5	max	.32	2	.079	1	.064	2	-5.568e-5	6	NC	1	NC	1
560			min	-.227	7	-.077	6	-.067	7	-7.645e-4	4	NC	1	NC	1
561	57	1	max	.347	1	.222	6	.282	7	4.744e-3	7	NC	8	NC	2
562			min	-.255	6	-.223	1	-.276	2	-4.601e-3	2	209.485	1	841.657	6
563		2	max	.348	1	.18	6	.251	7	3.195e-3	7	NC	8	NC	3
564			min	-.255	6	-.178	1	-.246	2	-3.232e-3	2	288.483	1	1304.292	6
565		3	max	.348	1	.146	6	.196	7	1.646e-3	7	NC	8	NC	3
566			min	-.255	6	-.143	1	-.193	2	-1.863e-3	2	436.329	1	1651.787	7
567		4	max	.348	1	.113	6	.136	7	4.276e-4	6	NC	4	NC	2
568			min	-.255	6	-.111	1	-.135	2	-8.197e-4	1	863.238	1	2971.799	6
569		5	max	.348	1	.076	6	.09	7	8.754e-4	2	NC	1	NC	1
570			min	-.255	6	-.075	1	-.093	2	-1.452e-3	7	NC	1	NC	1
571	58	1	max	.173	2	.371	6	.166	6	1.805e-2	6	NC	1	NC	1
572			min	-.17	7	-.37	1	-.083	1	-1.779e-2	1	1533.489	11	1196.736	9
573		2	max	.173	2	.363	6	.161	6	1.773e-2	6	NC	2	NC	1
574			min	-.17	7	-.363	1	-.08	1	-1.763e-2	1	2082.572	11	1520.006	9
575		3	max	.173	2	.349	6	.153	6	1.741e-2	6	NC	4	NC	1
576			min	-.17	7	-.351	1	-.076	1	-1.748e-2	1	2147.158	7	1442.819	2
577		4	max	.173	2	.33	6	.145	6	1.709e-2	6	NC	3	NC	1
578			min	-.17	7	-.333	1	-.072	1	-1.733e-2	1	1798.331	2	772.964	2
579		5	max	.173	2	.316	6	.152	6	1.577e-2	6	NC	1	NC	1
580			min	-.17	7	-.318	1	-.076	1	-1.607e-2	1	781.351	2	496.818	2
581	59	1	max	.154	1	.338	7	.098	7	1.394e-2	2	NC	1	NC	1
582			min	-.151	6	-.34	2	-.183	2	-1.37e-2	7	1498.193	10	1368.492	10
583		2	max	.154	1	.325	7	.092	7	1.495e-2	2	NC	2	NC	3
584			min	-.151	6	-.326	2	-.174	2	-1.485e-2	7	2030.933	10	1846.488	4
585		3	max	.154	1	.309	7	.081	7	1.597e-2	2	NC	3	NC	3
586			min	-.151	6	-.308	2	-.159	2	-1.6e-2	7	2067.047	1	1782.351	6
587		4	max	.154	1	.29	7	.061	7	1.698e-2	2	NC	2	NC	2
588			min	-.15	6	-.287	2	-.135	2	-1.714e-2	7	2532.425	1	937.714	6
589		5	max	.154	1	.278	7	.066	6	1.663e-2	2	NC	1	NC	2
590			min	-.15	6	-.275	2	-.143	1	-1.684e-2	7	1787.619	5	610.389	6
591	60	1	max	.149	6	.327	2	.064	6	1.863e-2	7	NC	1	NC	1
592			min	-.146	1	-.326	7	-.149	3	-1.84e-2	2	1498.974	5	1165.371	3
593		2	max	.149	6	.332	2	.054	6	1.734e-2	7	NC	1	NC	2
594			min	-.146	1	-.331	7	-.141	3	-1.729e-2	2	2031.509	5	1482.795	3
595		3	max	.149	6	.332	2	.053	2	1.605e-2	7	NC	1	NC	4
596			min	-.146	1	-.329	7	-.132	9	-1.619e-2	2	2178.536	7	2430.216	3
597		4	max	.149	6	.326	2	.068	2	1.476e-2	7	NC	3	NC	1
598			min	-.146	1	-.321	7	-.141	7	-1.508e-2	2	2593.148	11	3355.598	11
599		5	max	.149	6	.315	2	.095	2	1.307e-2	7	NC	2	NC	1
600			min	-.146	1	-.313	7	-.171	7	-1.347e-2	2	1199.796	1	1926.881	11
601	61	1	max	.299	2	.471	2	.544	6	5.483e-3	1	NC	3	NC	2
602			min	-.209	7	-.461	7	-.561	1	-5.431e-3	6	185.893	2	153.6	1
603		2	max	.299	2	.357	2	.413	6	5.483e-3	1	NC	3	NC	2

Envelope Member Section Deflections (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [r...	LC	(n) L/y Ratio	LC	(n) L/z Ratio	LC
604			min	-.209	7	-.35	7	-.424	1	-5.431e-3	6	255.35	2	210.262	1
605		3	max	.299	2	.249	2	.287	6	5.048e-3	1	NC	1	NC	2
606			min	-.209	7	-.244	7	-.293	1	-5.027e-3	6	396.222	2	325.647	1
607		4	max	.299	2	.152	2	.172	6	2.219e-3	1	NC	1	NC	2
608			min	-.209	7	-.15	7	-.172	1	-2.406e-3	6	774.695	2	660.65	1
609		5	max	.299	2	.052	2	.059	6	3.045e-4	7	NC	1	NC	1
610			min	-.209	7	-.053	7	-.053	1	-6.447e-4	2	NC	1	NC	1
611	62	1	max	.32	1	.597	2	.464	6	5.573e-3	7	NC	1	NC	11
612			min	-.23	6	-.612	7	-.466	1	-5.561e-3	2	141.271	7	194.16	6
613		2	max	.32	1	.456	2	.353	6	5.573e-3	7	NC	1	NC	11
614			min	-.23	6	-.466	7	-.355	1	-5.561e-3	2	192.183	7	267.956	6
615		3	max	.32	1	.32	2	.248	6	5.033e-3	7	NC	3	NC	11
616			min	-.23	6	-.325	7	-.25	1	-5.046e-3	2	294.43	7	419.045	1
617		4	max	.32	1	.191	2	.156	6	1.521e-3	7	NC	3	NC	4
618			min	-.23	6	-.191	7	-.159	1	-1.699e-3	2	595.703	7	821.532	1
619		5	max	.32	1	.066	2	.062	6	1.083e-3	6	NC	2	NC	1
620			min	-.23	6	-.06	7	-.064	1	-1.414e-3	1	3846.344	1	NC	1
621	63	1	max	.295	7	.563	2	.513	6	5.58e-3	2	NC	5	NC	2
622			min	-.206	2	-.551	7	-.499	1	-5.446e-3	7	152.718	2	167.511	6
623		2	max	.295	7	.425	2	.388	6	5.58e-3	2	NC	5	NC	2
624			min	-.206	2	-.417	7	-.379	1	-5.446e-3	7	209.208	2	228.592	6
625		3	max	.295	7	.292	2	.269	6	5.218e-3	2	NC	3	NC	2
626			min	-.206	2	-.288	7	-.264	1	-5.128e-3	7	324.445	2	351.046	6
627		4	max	.295	7	.172	2	.159	6	2.869e-3	2	NC	3	NC	2
628			min	-.207	2	-.173	7	-.158	1	-3.059e-3	7	649.829	2	697.883	6
629		5	max	.296	7	.052	2	.047	6	1.242e-3	2	NC	1	NC	1
630			min	-.207	2	-.058	7	-.052	1	-1.627e-3	7	NC	1	NC	1

Envelope Member Section Forces

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
1	1	1	max	621.308	8	211.143	7	104.793	7	.01	1	.183	2	.019	7
2			min	-150.127	1	-435.654	2	-94.583	2	-.011	6	-.221	7	-.206	4
3		2	max	621.308	8	253.617	7	104.756	7	.01	1	.093	7	1.094	2
4			min	-150.127	1	-392.716	2	-94.503	2	-.011	6	-.101	2	-.673	7
5		3	max	3464.876	6	1010.198	2	2748.464	2	.018	7	.13	1	1.074	1
6			min	-1913.378	1	-1035.525	7	-2749.78	7	-.017	2	-.121	6	-2.114	6
7		4	max	453.15	6	369.943	7	86.219	7	.013	6	.065	2	.985	7
8			min	-307.553	1	-269.653	2	-73.295	2	-.013	1	-.064	7	-.737	2
9		5	max	470.101	7	601.193	1	78.169	7	.016	6	.122	1	-.036	1
10			min	-330.129	2	-653.546	6	-64.939	2	-.018	1	-.078	6	-.107	8
11	2	1	max	718.636	1	258.087	6	99.247	2	.009	6	.189	1	.044	6
12			min	-286.951	6	-467.261	1	-87.487	7	-.01	1	-.22	6	-.127	3
13		2	max	772.685	1	300.566	6	126.32	6	.009	6	.113	6	1.221	1
14			min	-341	6	-424.148	1	-118.298	1	-.01	1	-.119	1	-.788	6
15		3	max	3343.097	2	830.839	1	2558.454	1	.014	6	.116	7	.871	7
16			min	-1801.343	7	-871.339	6	-2561.301	6	-.012	1	-.106	2	-1.92	2
17		4	max	702.984	2	472.855	2	117.937	2	.013	2	.083	1	.958	2
18			min	-556.002	7	-375.119	7	-102.085	7	-.013	7	-.08	6	-.709	7
19		5	max	622.686	2	466.252	7	71.944	6	.023	2	.105	6	-.035	6
20			min	-484.264	7	-510.125	2	-60.784	1	-.025	7	-.061	1	-.107	4
21	3	1	max	741.867	7	252.901	2	99.77	1	.013	2	.157	6	.063	2
22			min	-311.837	2	-461.248	7	-90.226	6	-.013	7	-.191	1	-.14	7
23		2	max	795.884	7	295.371	2	124.296	2	.013	2	.103	2	1.184	7
24			min	-365.854	2	-418.155	7	-114.436	7	-.013	7	-.105	7	-.754	2
25		3	max	3197.139	7	872.672	6	2502.589	6	.015	1	.114	2	1.034	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
26			min	-1665.387	2	-894.944	1	-2500.428	1	-.014	6	-.105	7	-2.074	7
27		4	max	658.749	1	455.336	1	102.613	1	.011	7	.085	7	1.032	1
28			min	-548.096	6	-330.779	6	-86.077	6	-.01	2	-.082	2	-.794	6
29		5	max	597.355	1	494.571	2	93.03	2	.021	1	.181	2	-.043	7
30			min	-501.263	6	-592.401	7	-83.427	7	-.023	6	-.126	7	-.209	4
31	4	1	max	354.749	1	606.719	1	945.753	1	.108	4	.112	6	.187	1
32			min	-157.819	6	-241.339	6	-684.686	6	.019	7	-.148	1	-.218	6
33		2	max	354.749	1	606.719	1	944.889	1	.108	4	.026	6	.111	1
34			min	-157.819	6	-241.339	6	-685.55	6	.019	7	-.03	1	-.188	6
35		3	max	354.749	1	606.719	1	943.892	1	.108	4	.117	6	.189	1
36			min	-176.877	2	-381.802	6	-1144.964	6	-.099	9	.031	5	-.204	2
37		4	max	250.704	7	262.941	1	803.049	1	-.025	7	.029	1	.157	1
38			min	-176.877	2	-381.802	6	-1145.952	6	-.105	4	-.026	6	-.128	6
39		5	max	250.704	7	262.941	1	802.19	1	-.025	7	.129	1	.124	1
40			min	-176.877	2	-381.802	6	-1146.811	6	-.105	4	-.17	6	-.08	6
41	5	1	max	3607.705	6	2314.19	2	653.428	6	.008	7	.959	1	.042	6
42			min	-3566.193	1	-1137.689	7	-669.793	1	-.014	2	-.934	6	-.028	1
43		2	max	3634.715	6	2330.74	2	669.023	6	.008	7	.057	6	1.692	7
44			min	-3593.203	1	-1121.139	7	-685.387	1	-.014	2	-.057	1	-3.464	2
45		3	max	4.483	6	10.498	9	7.765	2	0	1	0	2	0	7
46			min	-4.483	1	4.043	2	-7.765	7	0	1	0	7	0	4
47		4	max	3720.222	2	1096.32	1	766.383	7	.01	6	.054	2	1.73	1
48			min	-3732.785	7	-2271.106	6	-770.546	2	-.005	1	-.053	7	-3.442	6
49		5	max	3693.212	2	1112.873	1	719.601	7	.01	6	1.061	7	.073	1
50			min	-3705.775	7	-2254.552	6	-723.764	2	-.005	1	-1.067	2	-.05	6
51	6	1	max	314.432	9	656.025	7	1281.208	7	.108	3	.162	2	.157	6
52			min	-89.201	2	-285.235	2	-1027.617	2	.021	6	-.197	7	-.191	1
53		2	max	314.432	9	656.025	7	1280.342	7	.108	3	.034	2	.13	6
54			min	-89.201	2	-285.235	2	-1028.484	2	.021	6	-.037	7	-.21	1
55		3	max	182.852	2	409.972	7	983.526	7	-.024	6	.131	2	.178	7
56			min	-123.443	7	-524.72	2	-1334.673	2	-.106	3	-.085	7	-.161	2
57		4	max	182.852	2	409.972	7	982.531	7	-.024	6	.038	7	.127	7
58			min	-123.443	7	-524.72	2	-1335.668	2	-.106	3	-.036	2	-.095	2
59		5	max	182.852	2	409.972	7	981.665	7	-.024	6	.161	7	.105	6
60			min	-123.443	7	-524.72	2	-1336.534	2	-.106	3	-.203	2	-.061	1
61	7	1	max	3245.89	1	2106.033	7	658.346	1	.006	6	1.007	6	.034	2
62			min	-3272.712	6	-940.449	2	-666.827	6	-.012	1	-.994	1	-.02	7
63		2	max	3245.89	1	2122.594	7	720.761	1	.006	6	.049	2	1.434	2
64			min	-3272.712	6	-923.889	2	-729.242	6	-.012	1	-.048	7	-3.191	7
65		3	max	0	1	-4.05	2	10.369	6	0	1	0	1	0	7
66			min	0	1	-10.514	9	-10.369	1	0	1	0	6	0	4
67		4	max	3299.226	1	873.945	7	734.568	6	.011	1	.048	7	1.416	7
68			min	-3334.129	6	-2054.309	2	-741.421	1	-.006	6	-.047	2	-3.138	2
69		5	max	3299.226	1	890.518	7	672.152	6	.011	1	1.015	6	.092	7
70			min	-3334.129	6	-2037.736	2	-679.006	1	-.006	6	-1.025	1	-.07	2
71	8	1	max	326.803	2	538.266	6	1166.433	6	.198	4	.125	1	.181	2
72			min	-125.723	7	-198.206	1	-735.523	1	.052	7	-.183	6	-.22	7
73		2	max	326.803	2	538.266	6	1165.577	6	.198	4	.034	1	.127	2
74			min	-125.723	7	-198.206	1	-736.379	1	.052	7	-.037	6	-.207	7
75		3	max	326.803	2	538.266	6	1164.586	6	.198	4	.108	6	.075	1
76			min	-125.723	7	-198.206	1	-737.37	1	.052	7	-.058	1	-.203	6
77		4	max	255.595	1	411.454	6	657.022	6	-.051	7	.04	6	.197	2
78			min	-190.521	6	-475.959	1	-1193.458	1	-.197	4	-.035	1	-.151	7
79		5	max	255.595	1	411.454	6	656.162	6	-.051	7	.121	6	.183	2
80			min	-190.521	6	-475.959	1	-1194.318	1	-.197	4	-.184	1	-.128	7
81	9	1	max	3720.03	7	2327.659	6	713.593	7	.006	1	1.073	2	.046	7
82			min	-3721.292	2	-1171.04	1	-726.886	2	-.011	6	-1.053	7	-.033	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
83		2	max	3747.046	7	2344.232	6	760.386	7	.006	1	.052	7	1.762	1
84			min	-3748.309	2	-1154.467	1	-773.679	2	-.011	6	-.052	2	-3.505	6
85		3	max	4.496	7	10.543	3	7.787	7	0	1	0	7	0	1
86			min	-4.496	2	4.061	6	-7.787	2	0	1	0	2	0	8
87		4	max	3520.138	6	1061.505	2	674.794	1	.012	7	.056	6	1.651	2
88			min	-3488.214	1	-2239.425	7	-674.252	6	-.007	2	-.055	1	-3.367	7
89		5	max	3493.122	6	1078.06	2	659.196	1	.012	7	.945	1	.08	6
90			min	-3461.198	1	-2222.87	7	-658.654	6	-.007	2	-.944	6	-.059	1
91	10	1	max	1476.47	2	689.089	6	1539.086	1	.033	1	.631	1	.625	6
92			min	-1903.098	7	-653.717	1	-2280.755	6	-.032	6	-.632	6	-.726	1
93		2	max	639.543	1	518.642	6	70.969	1	.032	1	.378	6	.766	1
94			min	-2376.146	8	-541.344	1	-31.808	6	-.031	6	-.343	1	-.74	6
95		3	max	706.379	1	125.702	1	144.185	7	.011	6	.115	6	.723	1
96			min	-2509.828	8	-129.703	6	-161.903	2	-.01	1	-.139	1	-.754	6
97		4	max	603.996	1	282.873	1	158.263	6	.013	6	.101	7	.223	1
98			min	-2366.027	8	-284.116	6	-149.773	1	-.013	1	-.083	2	-.193	6
99		5	max	1650.536	7	444.19	1	1545.825	7	.018	6	.382	1	.458	6
100			min	-1815.396	2	-488.506	6	-898.268	2	-.02	1	-.456	6	-.49	1
101	11	1	max	1771.061	1	609.952	2	1722.407	6	.024	7	.621	7	.699	2
102			min	-2227.24	6	-596.388	7	-2447.061	1	-.025	2	-.636	2	-.772	7
103		2	max	377.054	7	490.546	2	77.702	7	.024	7	.327	2	.572	7
104			min	-2289.403	4	-501.195	7	-43.279	2	-.024	2	-.289	7	-.549	2
105		3	max	590.278	7	67.152	7	141.089	6	.01	1	.132	2	.65	7
106			min	-2453.899	4	-71.297	2	-160.834	1	-.009	6	-.156	7	-.684	2
107		4	max	393.422	7	247.628	7	117.492	2	.013	2	.136	2	.21	7
108			min	-2296.905	4	-243.946	2	-111.351	7	-.013	7	-.122	7	-.181	2
109		5	max	1939.222	2	357.782	7	2059.511	2	.026	2	.255	7	.303	1
110			min	-2108.72	7	-420.16	2	-1376.143	7	-.028	7	-.318	2	-.328	7
111	12	1	max	1727.793	7	606.667	7	2199.018	2	.033	2	.544	2	.49	7
112			min	-2178.452	2	-552.02	2	-2925.27	7	-.033	7	-.542	7	-.586	2
113		2	max	531.386	2	446.897	7	67.271	8	.032	2	.335	7	.695	2
114			min	-2337.635	9	-471.9	2	-22.689	1	-.032	7	-.302	2	-.664	7
115		3	max	425.304	2	88.857	2	125.884	1	.013	7	.082	1	.684	2
116			min	-2433.61	9	-92.881	7	-144.497	6	-.012	2	-.104	2	-.714	7
117		4	max	433.39	2	267.463	2	169.943	7	.011	7	.131	1	.312	2
118			min	-2305.877	9	-274.899	7	-160.087	2	-.011	2	-.116	6	-.282	7
119		5	max	1960.102	1	405.106	2	1973.787	1	.019	1	.279	2	.414	7
120			min	-2090.667	6	-433.375	7	-1347.641	6	-.028	6	-.399	7	-.459	2
121	13	1	max	728.591	1	1602.148	1	1034.999	1	.102	9	.114	6	.983	7
122			min	-960.84	6	-1969.077	6	-779.475	6	.027	2	-.148	1	-.942	2
123		2	max	728.591	1	1602.148	1	1034.234	1	.102	9	.017	6	1.06	7
124			min	-960.84	6	-1969.077	6	-780.24	6	.027	2	-.018	1	-.974	2
125		3	max	905.476	7	1602.148	1	1033.469	1	.102	9	.111	1	1.137	7
126			min	-996.708	2	-1969.077	6	-781.005	6	-.102	3	.023	10	-1.006	2
127		4	max	905.476	7	1494.359	2	568.641	1	-.032	6	.029	1	.765	1
128			min	-996.708	2	-1377.365	7	-926.651	6	-.102	3	-.026	6	-.78	6
129		5	max	905.476	7	1494.359	2	567.876	1	-.032	6	.1	1	.615	1
130			min	-996.708	2	-1377.365	7	-927.416	6	-.102	3	-.142	6	-.644	6
131	14	1	max	489.725	6	1773.82	7	1175.484	7	.103	4	.134	2	.797	2
132			min	-705.507	1	-2134.113	2	-927.043	2	.02	7	-.166	7	-.727	7
133		2	max	489.725	6	1773.82	7	1174.718	7	.103	4	.018	2	1.063	2
134			min	-705.507	1	-2134.113	2	-927.809	2	.02	7	-.019	7	-.949	7
135		3	max	702.54	2	2014.672	7	864.198	7	-.032	2	.119	2	.914	7
136			min	-813.644	7	-1900.559	2	-1229.896	2	-.102	9	-.07	7	-.897	2
137		4	max	702.54	2	2014.672	7	863.432	7	-.032	2	.038	7	.662	7
138			min	-813.644	7	-1900.559	2	-1230.661	2	-.102	9	-.035	2	-.66	2
139		5	max	702.54	2	2014.672	7	862.667	7	-.032	2	.146	7	.41	7

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
140			min	-813.644	7	-1900.559	2	-1231.427	2	-.102	9	-.189	2	-.422	2
141	15	1	max	795.37	2	1210.737	2	789.361	6	.167	3	.112	1	.956	1
142			min	-1013.092	7	-1539.544	7	-731.618	1	.037	6	-.126	6	-.886	6
143		2	max	795.37	2	1210.737	2	788.598	6	.167	3	.021	1	1.126	1
144			min	-1013.092	7	-1539.544	7	-732.382	1	.037	6	-.028	6	-1.016	6
145		3	max	795.37	2	1210.737	2	787.834	6	.167	3	.071	6	1.296	1
146			min	-1013.092	7	-1539.544	7	-733.145	1	.037	6	-.07	1	-1.145	6
147		4	max	906.047	1	1843.377	6	695.111	6	-.032	7	.043	6	.554	2
148			min	-1005.166	6	-1767.257	1	-878.315	1	-.171	4	-.041	1	-.599	7
149		5	max	906.047	1	1843.377	6	694.348	6	-.032	7	.129	6	.52	2
150			min	-1005.166	6	-1767.257	1	-879.079	1	-.171	4	-.151	1	-.574	7
151	16	1	max	811.422	1	57.56	7	35.781	6	.003	6	.111	1	.108	9
152			min	-1487.32	6	-38.82	2	-58.374	1	-.003	1	-.106	6	-.044	2
153		2	max	813.911	1	46.76	7	46.581	6	.003	6	.07	1	.064	9
154			min	-1484.83	6	-28.02	2	-69.174	1	-.003	1	-.067	6	-.012	2
155		3	max	816.401	1	35.96	7	57.381	6	.003	6	.023	1	.037	6
156			min	-1482.34	6	-17.22	2	-79.974	1	-.003	1	-.022	6	-.021	1
157		4	max	818.891	1	32.808	6	68.181	6	.003	6	.029	6	.053	6
158			min	-1479.85	6	-14.368	1	-90.774	1	-.003	1	-.03	1	-.059	1
159		5	max	821.381	1	32.808	6	78.981	6	.003	6	.086	6	.075	6
160			min	-1477.361	6	-14.368	1	-101.574	1	-.003	1	-.089	1	-.102	1
161	17	1	max	500.692	2	61.933	6	43.365	1	.002	1	.041	7	.134	6
162			min	-803.98	7	-56.069	1	-43.257	6	-.002	6	-.047	2	-.126	1
163		2	max	503.181	2	61.933	6	54.165	1	.002	1	.017	7	.075	6
164			min	-801.491	7	-56.069	1	-54.057	6	-.002	6	-.02	2	-.07	1
165		3	max	505.671	2	61.933	6	64.965	1	.002	1	0	2	.011	6
166			min	-799.001	7	-56.069	1	-64.857	6	-.002	6	-.004	10	-.015	10
167		4	max	508.161	2	61.933	6	75.765	1	.002	1	.016	2	.058	1
168			min	-796.511	7	-56.069	1	-75.657	6	-.002	6	-.014	7	-.059	6
169		5	max	510.651	2	61.933	6	86.565	1	.002	1	.026	2	.131	1
170			min	-794.021	7	-56.069	1	-86.457	6	-.002	6	-.02	7	-.135	6
171	18	1	max	809.173	6	12.67	1	34.055	6	.002	6	0	1	0	1
172			min	-428.947	1	-10.279	6	-33.155	1	-.003	1	0	1	0	1
173		2	max	811.663	6	12.67	1	23.255	6	.002	6	.01	6	.021	6
174			min	-426.458	1	-10.279	6	-22.355	1	-.003	1	-.008	1	-.021	1
175		3	max	814.153	6	19.411	2	11.696	1	.002	6	.014	6	.036	6
176			min	-423.968	1	-22.007	7	-12.751	6	-.003	1	-.01	1	-.037	1
177		4	max	814.447	6	10.279	6	22.496	1	.002	6	.01	6	.021	6
178			min	-412.56	1	-12.67	1	-23.551	6	-.003	1	-.008	1	-.022	1
179		5	max	816.937	6	10.279	6	33.296	1	.002	6	0	1	0	1
180			min	-410.07	1	-12.67	1	-34.351	6	-.003	1	0	1	0	1
181	19	1	max	328.547	2	5.82	7	8.843	1	.004	1	0	1	0	1
182			min	-651.819	7	-7.01	2	-11.266	6	-.004	6	0	1	0	1
183		2	max	331.037	2	3.79	2	-.466	6	.004	1	.003	1	0	2
184			min	-649.329	7	-4.98	7	-4.147	9	-.004	6	-.005	6	-.002	9
185		3	max	709.87	2	15.78	7	14.958	1	.004	1	.004	2	.006	6
186			min	-1183.422	7	-2.92	1	-12.507	6	-.004	6	-.008	7	-.008	1
187		4	max	712.36	2	4.98	7	4.68	3	.004	1	.002	1	0	2
188			min	-1180.932	7	-3.79	2	-1.707	6	-.004	6	-.004	6	-.002	9
189		5	max	714.85	2	7.01	2	9.093	6	.004	1	0	1	0	1
190			min	-1178.443	7	-5.82	7	-6.642	1	-.004	6	0	1	0	1
191	20	1	max	3685.978	6	37.196	1	35.574	6	.001	1	0	1	0	1
192			min	-2349.311	1	-43.683	6	-42.348	1	-.001	6	0	1	0	1
193		2	max	3688.468	6	27.054	1	25.433	6	.001	1	0	2	.058	6
194			min	-2346.821	1	-29.043	6	-27.707	1	-.001	6	-.012	9	-.058	1
195		3	max	3690.958	6	16.913	1	15.291	6	.001	1	-.001	1	.094	6
196			min	-2344.331	1	-14.402	6	-13.066	1	-.001	6	-.011	9	-.094	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
197		4	max	3693.448	6	21.696	7	9.766	3	.001	1	.011	7	.109	6
198			min	-2341.841	1	-15.49	2	1.575	1	-.001	6	-.01	2	-.109	1
199		5	max	3844.89	6	240.502	6	177.904	1	.005	6	0	1	0	1
200			min	-2273.017	1	-227.543	1	-145.584	6	-.006	1	0	1	0	1
201	21	1	max	3755.743	6	35.047	1	20.938	4	.001	6	0	1	0	1
202			min	-2120.133	1	-35.047	6	-6.949	7	-.001	1	0	1	0	1
203		2	max	3758.232	6	17.524	1	10.469	4	.001	6	.027	1	.027	6
204			min	-2117.643	1	-17.524	6	-3.475	7	-.001	1	-.019	6	-.019	1
205		3	max	3760.722	6	0	1	0	1	.001	6	.036	1	.036	6
206			min	-2115.154	1	0	1	0	1	-.001	1	-.025	6	-.025	1
207		4	max	3763.212	6	17.524	6	3.475	7	.001	6	.027	1	.027	6
208			min	-2112.664	1	-17.524	1	-10.469	4	-.001	1	-.019	6	-.019	1
209		5	max	3765.702	6	35.047	6	6.949	7	.001	6	0	1	0	1
210			min	-2110.174	1	-35.047	1	-20.938	4	-.001	1	0	1	0	1
211	22	1	max	507.019	7	53.17	2	65.371	7	.003	7	.029	6	.155	2
212			min	-834.15	2	-47.307	7	-65.923	2	-.002	2	-.036	1	-.146	7
213		2	max	509.509	7	58.57	2	74.724	7	.003	7	.009	2	.088	2
214			min	-831.66	2	-52.707	7	-75.276	2	-.002	2	-.013	1	-.083	7
215		3	max	511.999	7	63.97	2	84.077	7	.003	7	.002	1	.013	2
216			min	-829.17	2	-58.107	7	-84.629	2	-.002	2	-.004	5	-.015	5
217		4	max	514.489	7	69.37	2	93.43	7	.003	7	.015	7	.068	7
218			min	-826.681	2	-63.507	7	-93.982	2	-.002	2	-.013	2	-.07	2
219		5	max	516.979	7	74.77	2	102.784	7	.003	7	.032	7	.155	7
220			min	-824.191	2	-68.907	7	-103.335	2	-.002	2	-.027	2	-.16	2
221	23	1	max	925.187	1	11.043	7	23.638	2	.003	2	0	1	0	1
222			min	-537.74	6	-8.514	2	-22.951	7	-.003	7	0	1	0	1
223		2	max	927.677	1	13.064	6	15.747	1	.003	2	.007	2	.013	2
224			min	-535.25	6	-10.442	1	-15.276	6	-.003	7	-.005	7	-.014	7
225		3	max	930.167	1	19.795	1	11.315	6	.003	2	.012	2	.029	1
226			min	-532.76	6	-22.417	6	-11.943	1	-.003	7	-.008	7	-.032	6
227		4	max	910.714	1	10.442	1	16.715	6	.003	2	.008	1	.014	1
228			min	-501.742	6	-13.064	6	-17.343	1	-.003	7	-.006	6	-.015	6
229		5	max	913.204	1	8.514	2	22.115	6	.003	2	0	1	0	1
230			min	-499.252	6	-11.043	7	-22.743	1	-.003	7	0	1	0	1
231	24	1	max	546.685	7	8.766	6	5.31	7	.003	7	0	1	0	1
232			min	-892.453	2	-9.721	1	-6.925	2	-.003	2	0	1	0	1
233		2	max	549.175	7	5.663	7	2.428	2	.003	7	.002	7	.002	1
234			min	-889.964	2	-7.564	2	-5.266	9	-.003	2	-.004	3	-.003	6
235		3	max	951.885	7	12.964	2	15.041	7	.003	7	.002	1	.012	2
236			min	-1452.964	2	-11.062	7	-13.378	2	-.003	2	-.007	8	-.012	7
237		4	max	954.375	7	7.564	2	5.69	9	.003	7	.001	7	.002	1
238			min	-1450.474	2	-5.662	7	-4.025	2	-.003	2	-.004	3	-.004	6
239		5	max	956.865	7	9.72	1	5.748	4	.003	7	0	1	0	1
240			min	-1447.984	2	-8.766	6	-3.665	7	-.003	2	0	1	0	1
241	25	1	max	4073.409	1	32.16	7	25.257	1	.001	6	0	1	0	1
242			min	-2773.971	6	-38.452	2	-31.548	6	-.001	1	0	1	0	1
243		2	max	4084.64	1	20.926	7	18.261	2	.001	6	.001	7	.044	2
244			min	-2780.222	6	-22.776	2	-20.718	7	-.001	1	-.012	4	-.044	7
245		3	max	4095.871	1	19.893	6	14.363	2	.001	6	0	7	.071	2
246			min	-2786.474	6	-18.028	1	-12.262	7	-.001	1	-.011	4	-.072	7
247		4	max	4107.102	1	22.293	6	10.465	2	.001	6	.012	6	.087	1
248			min	-2792.725	6	-15.987	1	-3.806	7	-.001	1	-.011	1	-.085	6
249		5	max	4523.333	1	214.218	2	196.899	7	.003	2	0	1	0	1
250			min	-2979.463	6	-201.567	7	-163.667	2	-.005	7	0	1	0	1
251	26	1	max	4888.08	2	27.681	7	21.015	3	.001	2	0	1	0	1
252			min	-3249.975	7	-27.846	2	-7.149	6	-.001	7	0	1	0	1
253		2	max	4896.917	2	13.841	7	10.507	3	.001	2	.029	7	.021	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
254			min	-3253.831	7	-13.923	2	-3.574	6	-.001	7	-.021	2	-.013	6
255		3	max	4905.753	2	0	1	0	1	.001	2	.038	7	.028	1
256			min	-3257.688	7	0	1	0	1	-.001	7	-.027	2	-.017	6
257		4	max	4914.59	2	13.923	2	3.574	6	.001	2	.029	7	.021	1
258			min	-3261.545	7	-13.841	7	-10.507	3	-.001	7	-.021	2	-.013	6
259		5	max	4923.426	2	27.846	2	7.149	6	.001	2	0	1	0	1
260			min	-3265.402	7	-27.681	7	-21.015	3	-.001	7	0	1	0	1
261	27	1	max	640.719	6	57.721	7	63.721	6	.003	6	.028	1	.091	7
262			min	-1105.561	1	-57.169	2	-48.072	1	-.002	1	-.048	6	-.116	2
263		2	max	643.209	6	52.321	7	69.121	6	.003	6	.011	1	.049	7
264			min	-1103.072	1	-51.769	2	-53.472	1	-.002	1	-.024	6	-.067	2
265		3	max	645.698	6	46.921	7	74.521	6	.003	6	.002	7	.006	7
266			min	-1100.582	1	-46.369	2	-58.872	1	-.002	1	-.007	4	-.021	11
267		4	max	648.188	6	43.534	1	79.921	6	.003	6	.02	6	.052	6
268			min	-1098.092	1	-43.156	6	-64.272	1	-.002	1	-.015	1	-.053	1
269		5	max	650.678	6	52.888	1	85.321	6	.003	6	.038	6	.121	6
270			min	-1095.602	1	-52.509	6	-69.672	1	-.002	1	-.025	1	-.114	1
271	28	1	max	1167.718	7	10.208	2	33.886	7	.002	7	0	1	0	1
272			min	-781.406	2	-7.837	7	-33.004	2	-.002	2	0	1	0	1
273		2	max	1170.208	7	15.608	2	24.533	7	.002	7	.01	7	.021	7
274			min	-778.917	2	-13.237	7	-23.651	2	-.002	2	-.008	2	-.022	2
275		3	max	1172.698	7	18.637	7	15.325	2	.002	7	.013	7	.041	7
276			min	-776.427	2	-21.008	2	-16.378	7	-.002	2	-.01	2	-.043	2
277		4	max	1157.177	7	13.237	7	24.678	2	.002	7	.011	7	.022	7
278			min	-749.13	2	-15.608	2	-25.731	7	-.002	2	-.009	2	-.022	2
279		5	max	1159.667	7	7.837	7	34.031	2	.002	7	0	1	0	1
280			min	-746.641	2	-10.208	2	-35.084	7	-.002	2	0	1	0	1
281	29	1	max	517.677	6	8.072	2	4.308	2	.003	2	0	1	0	1
282			min	-847.867	1	-9.09	7	-7.41	7	-.003	7	0	1	0	1
283		2	max	520.167	6	4.803	6	1.943	7	.003	2	.003	2	.002	7
284			min	-845.377	1	-6.398	1	-5.53	4	-.003	7	-.005	7	-.003	2
285		3	max	943.823	6	15.751	1	16.366	2	.003	2	.002	6	.008	1
286			min	-1421.314	1	-14.156	6	-13.251	7	-.003	7	-.007	3	-.01	2
287		4	max	946.312	6	6.398	1	7.012	2	.003	2	.002	2	.003	7
288			min	-1418.824	1	-4.803	6	-3.897	7	-.003	7	-.004	9	-.004	2
289		5	max	948.802	6	9.09	7	5.456	7	.003	2	0	1	0	1
290			min	-1416.334	1	-8.072	2	-2.341	2	-.003	7	0	1	0	1
291	30	1	max	4778.988	7	30.954	2	38.352	7	.002	2	0	1	0	1
292			min	-3483.485	2	-37.884	7	-44.727	2	-.002	7	0	1	0	1
293		2	max	4787.819	7	27.06	2	27.112	7	.002	2	.002	6	.057	7
294			min	-3487.337	2	-29.43	7	-29.049	2	-.002	7	-.012	3	-.057	2
295		3	max	4796.65	7	23.165	2	15.872	7	.002	2	0	6	.097	7
296			min	-3491.189	2	-20.977	7	-13.371	2	-.002	7	-.011	3	-.097	2
297		4	max	4805.482	7	19.271	2	10.503	3	.002	2	.01	2	.121	7
298			min	-3495.041	2	-12.523	7	-1.484	6	-.002	7	-.01	7	-.12	2
299		5	max	5046.936	7	234.194	7	138.908	2	.005	7	0	1	0	1
300			min	-3495.92	2	-219.056	2	-108.192	7	-.006	2	0	1	0	1
301	31	1	max	4204.458	1	27.851	2	21.009	8	0	7	0	1	0	1
302			min	-2545.427	6	-27.679	7	-7.145	1	0	2	0	1	0	1
303		2	max	4215.688	1	13.925	2	10.505	8	0	7	.021	6	.029	7
304			min	-2551.678	6	-13.839	7	-3.572	1	0	2	-.013	1	-.021	2
305		3	max	4226.918	1	0	1	0	1	0	7	.028	6	.038	7
306			min	-2557.928	6	0	1	0	1	0	2	-.017	1	-.027	2
307		4	max	4238.148	1	13.839	7	3.572	1	0	7	.021	6	.029	7
308			min	-2564.179	6	-13.925	2	-10.505	8	0	2	-.013	1	-.021	2
309		5	max	4249.378	1	27.679	7	7.145	1	0	7	0	1	0	1
310			min	-2570.429	6	-27.851	2	-21.009	8	0	2	0	1	0	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
311	32	1	max	693.349	9	335.65	1	-82.065	7	.159	1	.213	4	.2	2
312			min	96.237	2	-204.486	6	-867.9	4	-.176	6	.044	7	-.048	7
313		2	max	691.612	9	321.696	1	-78.406	7	.159	1	.014	7	.129	4
314			min	104.289	2	-190.532	6	-857.49	4	-.176	6	-.11	4	-.021	7
315		3	max	689.875	9	307.727	1	-74.762	7	.159	1	-.015	7	.125	6
316			min	112.341	2	-176.571	6	-845.698	4	-.176	6	-.429	4	-.088	1
317		4	max	688.138	9	293.774	1	-71.102	7	.159	1	-.042	7	.189	6
318			min	120.393	2	-162.617	6	-835.288	4	-.176	6	-.744	4	-.2	1
319		5	max	686.401	9	279.82	1	-67.443	7	.159	1	-.068	7	.247	6
320			min	128.445	2	-148.664	6	-824.878	4	-.176	6	-1.056	4	-.308	1
321	33	1	max	691.684	8	401.209	7	-73.103	6	.207	7	.214	3	.247	7
322			min	119.425	1	-272.262	2	-872.743	3	-.226	2	.045	6	-.104	2
323		2	max	691.684	8	382.609	7	-69.443	6	.207	7	.018	6	.151	1
324			min	119.425	1	-253.662	2	-862.333	3	-.226	2	-.112	3	-.057	6
325		3	max	691.684	8	364.008	7	-65.784	6	.207	7	-.007	6	.125	1
326			min	119.425	1	-235.056	2	-850.49	3	-.226	2	-.433	3	-.081	6
327		4	max	691.684	8	345.408	7	-62.124	6	.207	7	-.031	6	.17	2
328			min	119.425	1	-216.456	2	-840.08	3	-.226	2	-.75	3	-.173	7
329		5	max	691.684	8	326.808	7	-58.464	6	.207	7	-.054	6	.248	2
330			min	119.425	1	-197.856	2	-829.671	3	-.226	2	-1.063	3	-.299	7
331	34	1	max	0	1	0	1	0	1	0	1	0	1	0	1
332			min	0	1	0	1	0	1	0	1	0	1	0	1
333		2	max	11.342	2	331.891	4	740.805	7	.499	4	.103	3	.109	7
334			min	-44.303	9	70.427	7	-631.587	2	.098	7	.019	7	-.128	2
335		3	max	11.342	2	331.891	4	743.117	7	.499	4	.297	7	.082	7
336			min	-44.303	9	70.427	7	-629.275	2	.098	7	-.176	2	-.192	4
337		4	max	284.495	7	8.422	1	467.319	7	.055	6	.265	7	.087	2
338			min	-186.31	2	-372.613	8	-915.283	2	-.569	3	-.293	2	-.151	7
339		5	max	0	1	0	1	0	1	0	1	0	1	0	1
340			min	0	1	0	1	0	1	0	1	0	1	0	1
341	35	1	max	0	1	0	6	.001	1	0	1	0	1	0	1
342			min	0	1	0	7	0	4	0	1	0	1	0	1
343		2	max	79.268	1	-38.575	7	222.397	1	.786	3	.013	1	.091	1
344			min	-117.931	6	-285.553	4	-484.125	6	.173	7	-.175	8	-.077	6
345		3	max	81.866	1	-34.075	7	220.085	1	.786	3	.096	1	.148	3
346			min	-120.529	6	-287.325	4	-486.438	6	.173	7	-.356	8	-.058	6
347		4	max	135.872	2	284.063	4	937.377	3	-.07	2	.169	1	.138	2
348			min	-49.268	7	87.522	7	1.664	6	-.836	9	-.169	6	-.1	7
349		5	max	0	1	0	7	0	4	0	1	0	1	0	1
350			min	0	1	0	6	0	1	0	1	0	1	0	1
351	36	1	max	0	1	0	4	.002	6	0	1	0	1	0	1
352			min	0	1	0	7	0	4	0	1	0	1	0	1
353		2	max	10.699	7	-53.052	1	418.392	6	.504	8	-.017	1	.092	6
354			min	-45.417	2	-332.362	8	-526.902	1	.076	1	-.101	4	-.076	1
355		3	max	265.866	1	370.999	3	858.707	6	.468	9	.093	6	.258	3
356			min	-168.147	6	-86.95	2	-529.214	1	-.573	4	-.215	1	.064	2
357		4	max	263.268	1	370.408	3	856.395	6	.072	7	.238	6	.156	1
358			min	-165.549	6	-.469	6	-408.273	1	-.573	4	-.209	1	-.088	6
359		5	max	0	1	0	6	0	4	0	1	0	1	0	1
360			min	0	1	0	4	-.001	6	0	1	0	1	0	1
361	37	1	max	579.948	4	309.793	6	-427.496	2	.15	6	.395	4	.337	6
362			min	84.851	7	-183.565	1	-1322.188	9	-.172	1	.104	7	-.166	1
363		2	max	578.208	4	295.869	6	-423.836	2	.15	6	.019	2	.223	6
364			min	92.92	7	-169.641	1	-1311.778	9	-.172	1	-.119	9	-.1	1
365		3	max	576.467	4	281.976	6	-419.904	2	.15	6	-.14	2	.115	6
366			min	100.989	7	-155.71	1	-1299.778	9	-.172	1	-.609	9	-.039	1
367		4	max	574.726	4	268.052	6	-416.244	2	.15	6	-.296	2	.093	7

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
368			min	109.058	7	-141.786	1	-1289.368	9	-.172	1	-1.094	9	-.079	2
369		5	max	572.986	4	254.127	6	-412.585	2	.15	6	-.452	2	.114	7
370			min	117.127	7	-127.862	1	-1278.959	9	-.172	1	-1.576	9	-.147	2
371	38	1	max	759.811	7	950.609	1	-76.342	2	.153	1	.203	9	1.426	1
372			min	-1240.867	2	-1085.875	6	-863.793	9	-.17	6	.064	2	-1.57	6
373		2	max	751.759	7	936.655	1	-72.682	2	.153	1	.036	2	1.072	1
374			min	-1232.815	2	-1071.922	6	-853.383	9	-.17	6	-.119	9	-1.165	6
375		3	max	743.706	7	922.869	1	-69.034	2	.153	1	.01	2	.723	1
376			min	-1224.763	2	-1057.648	6	-843.884	9	-.17	6	-.438	9	-.766	6
377		4	max	735.654	7	908.916	1	-65.374	2	.153	1	-.016	2	.495	2
378			min	-1216.711	2	-1043.694	6	-833.474	9	-.17	6	-.752	9	-.498	7
379		5	max	727.602	7	894.962	1	-61.714	2	.153	1	-.04	2	.33	2
380			min	-1208.659	2	-1029.741	6	-823.064	9	-.17	6	-1.063	9	-.286	7
381	39	1	max	747.515	6	1227.376	7	-67.472	1	.198	7	.202	4	2.084	7
382			min	-1228.225	1	-1356.083	2	-868.822	8	-.217	2	.063	7	-2.227	2
383		2	max	747.515	6	1208.776	7	-63.813	1	.198	7	.045	1	1.627	7
384			min	-1228.225	1	-1337.483	2	-858.412	8	-.217	2	-.123	8	-1.722	2
385		3	max	747.515	6	1190.062	7	-59.912	1	.198	7	.022	1	1.177	7
386			min	-1228.225	1	-1318.768	2	-848.897	8	-.217	2	-.443	8	-1.224	2
387		4	max	747.515	6	1171.462	7	-56.252	1	.198	7	0	1	.734	7
388			min	-1228.225	1	-1300.168	2	-838.488	8	-.217	2	-.759	8	-.733	2
389		5	max	747.515	6	1152.862	7	-52.593	1	.198	7	-.02	1	.299	7
390			min	-1228.225	1	-1281.568	2	-828.078	8	-.217	2	-1.072	8	-.249	2
391	40	1	max	0	1	0	1	0	1	0	1	0	1	0	1
392			min	0	1	0	1	0	1	0	1	0	1	0	1
393		2	max	375.858	2	163.231	6	738.39	2	.496	4	.104	9	.128	2
394			min	-345.257	7	-406.423	3	-633.772	7	.085	6	.023	1	-.109	7
395		3	max	375.858	2	169.231	6	740.702	2	.496	4	.312	2	.211	1
396			min	-345.257	7	-408.785	3	-631.46	7	.085	6	-.193	7	-.107	6
397		4	max	806.705	7	821.964	1	470.329	2	.24	1	.705	2	.188	1
398			min	-904.89	2	-572.206	6	-913.628	7	-.614	8	-.734	7	-.124	6
399		5	max	0	1	0	1	0	1	0	1	0	1	0	1
400			min	0	1	0	1	0	1	0	1	0	1	0	1
401	41	1	max	0	1	0	5	.001	1	0	1	0	1	0	1
402			min	0	1	0	2	0	4	0	1	0	1	0	1
403		2	max	261.253	1	329.498	9	376.95	6	.052	4	.104	1	.045	1
404			min	-222.59	6	-62.435	2	-329.24	1	.01	7	-.131	6	-.091	6
405		3	max	263.851	1	331.269	9	375.705	6	.052	4	.069	9	.124	2
406			min	-225.188	6	-66.935	2	-330.485	1	.01	7	-.019	2	-.206	7
407		4	max	583.43	6	834.623	2	447.208	6	.016	7	.253	6	.274	2
408			min	-670.345	1	-1038.34	7	-209.01	1	-.06	4	-.208	1	-.278	7
409		5	max	0	1	.002	7	0	5	0	1	0	1	0	1
410			min	0	1	-.001	6	-.003	1	0	1	0	1	0	1
411	42	1	max	0	1	0	5	.001	6	0	1	0	1	0	1
412			min	0	1	-.001	2	0	4	0	1	0	1	0	1
413		2	max	237.142	6	435.359	2	419.004	1	.505	8	.013	1	.107	1
414			min	-204	1	-201.483	7	-526.171	6	.051	1	-.101	4	-.123	6
415		3	max	689.533	1	522.585	7	858.604	1	.505	8	.322	1	.361	7
416			min	-787.252	6	-767.873	2	-407.255	6	-.595	3	-.461	6	-.514	2
417		4	max	686.935	1	518.085	7	856.292	1	.182	6	.644	1	.166	7
418			min	-784.654	6	-763.373	2	-409.567	6	-.595	3	-.614	6	-.227	2
419		5	max	0	1	.001	6	0	4	0	1	0	1	0	1
420			min	0	1	0	4	-.003	6	0	1	0	1	0	1
421	43	1	max	934.788	2	869.207	6	-50.269	7	.114	6	.338	4	1.482	6
422			min	-1339.23	7	-990.235	1	-321.154	4	-.139	1	.07	7	-1.644	1
423		2	max	926.719	2	855.283	6	-46.609	7	.114	6	.219	4	1.158	6
424			min	-1331.161	7	-976.31	1	-310.744	4	-.139	1	.052	7	-1.276	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
425		3	max	918.65	2	841.029	6	-42.741	7	.114	6	.105	3	.84	6
426			min	-1323.092	7	-962.591	1	-300.019	4	-.139	1	.033	6	-.912	1
427		4	max	910.581	2	827.105	6	-39.081	7	.114	6	.02	7	.528	6
428			min	-1315.023	7	-948.666	1	-289.609	4	-.139	1	-.02	2	-.554	1
429		5	max	902.512	2	813.181	6	-35.422	7	.114	6	.006	7	.341	7
430			min	-1306.954	7	-934.742	1	-279.199	4	-.139	1	-.112	4	-.311	2
431	44	1	max	0	1	.204	6	.178	7	0	1	0	1	0	1
432			min	0	1	-.471	3	-.191	2	0	1	0	1	0	1
433		2	max	153.168	8	103.204	6	193.778	7	0	1	.126	7	.07	1
434			min	45.168	1	-103.258	1	-193.791	2	0	1	-.126	2	-.07	6
435		3	max	686.758	7	362.919	3	184.574	2	.126	7	.153	7	.475	3
436			min	-685.773	2	-36.458	6	-149.333	7	-.087	2	-.197	2	-.128	6
437		4	max	693.526	7	354.956	3	184.574	2	.126	7	.103	2	-.002	1
438			min	-679.005	2	-18.258	6	-149.333	7	-.087	2	-.09	7	-.129	8
439		5	max	0	1	.013	3	.005	2	0	1	0	1	0	1
440			min	0	1	-.003	6	-.005	7	0	1	0	1	0	1
441	45	1	max	0	1	2.188	6	2.411	7	0	1	0	1	0	1
442			min	0	1	-2.405	1	-2.516	2	0	1	0	1	0	1
443		2	max	550.768	8	393.188	6	548.011	7	0	1	.749	7	.528	1
444			min	216.768	1	-393.405	1	-548.116	2	0	1	-.749	2	-.527	6
445		3	max	690.374	2	414.663	3	356.852	2	.107	7	.473	7	.737	1
446			min	-692.053	7	-157.59	6	-263.35	7	-.106	2	-.59	2	-.427	6
447		4	max	697.142	2	406.7	3	356.852	2	.107	7	.05	9	.092	1
448			min	-685.284	7	-139.39	6	-263.35	7	-.106	2	-.01	2	-.185	6
449		5	max	0	1	.979	3	.508	4	0	1	0	1	0	1
450			min	0	1	-.234	6	-.313	7	0	1	0	1	0	1
451	46	1	max	0	1	.192	6	.178	7	0	1	0	1	0	1
452			min	0	1	-.353	3	-.356	4	0	1	0	1	0	1
453		2	max	153.168	3	193.792	6	103.178	7	0	1	.07	7	.126	1
454			min	45.168	7	-193.831	1	-103.211	2	0	1	-.07	2	-.126	6
455		3	max	430.106	6	54.567	1	-30.174	2	.09	6	.182	7	.204	1
456			min	-276.427	1	-118.889	6	-281.003	9	-.054	1	-.167	2	-.151	6
457		4	max	436.874	6	54.567	1	-48.374	2	.09	6	-.058	6	.235	4
458			min	-269.659	1	-118.889	6	-273.04	9	-.054	1	-.424	3	.016	7
459		5	max	0	1	.002	1	0	2	0	1	0	1	0	1
460			min	0	1	-.013	8	-.024	9	0	1	0	1	0	1
461	47	1	max	0	1	2.121	6	3.433	7	0	1	0	1	0	1
462			min	0	1	-2.292	1	-3.642	2	0	1	0	1	0	1
463		2	max	550.768	9	393.121	6	549.033	7	0	1	.75	7	.527	1
464			min	216.768	7	-393.292	1	-549.242	2	0	1	-.751	2	-.527	6
465		3	max	431.128	1	326.045	1	378.218	2	.108	2	1.195	7	.733	1
466			min	-224.07	6	-354.973	6	-599.824	7	-.122	7	-1.172	2	-.665	6
467		4	max	437.896	1	307.845	1	378.218	2	.108	2	.22	7	.218	1
468			min	-217.302	6	-336.773	6	-599.824	7	-.122	7	-.557	2	-.103	6
469		5	max	0	1	.031	1	-.218	10	0	1	0	1	0	1
470			min	0	1	-.71	8	-2.102	9	0	1	0	1	0	1
471	48	1	max	0	1	.306	8	.247	7	0	1	0	1	0	1
472			min	0	1	-.138	1	-.423	4	0	1	0	1	0	1
473		2	max	153.168	4	103.177	6	193.847	7	0	1	.126	7	.07	1
474			min	45.168	6	-103.138	1	-193.888	2	0	1	-.126	2	-.07	6
475		3	max	472.696	1	86.48	1	296.203	4	.089	1	.172	7	.096	1
476			min	-472.735	6	-234.366	8	-70.999	7	-.051	7	-.4	2	-.289	8
477		4	max	479.464	1	68.28	1	296.203	4	.089	1	.106	3	.091	7
478			min	-465.967	6	-226.404	8	-70.999	7	-.051	7	-.009	6	-.036	2
479		5	max	0	1	.004	1	.011	4	0	1	0	1	0	1
480			min	0	1	-.009	8	-.004	7	0	1	0	1	0	1
481	49	1	max	0	1	2.689	6	2.135	7	0	1	0	1	0	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
482			min	0	1	-2.487	1	-2.273	2	0	1	0	1	0	1
483		2	max	550.768	9	548.289	6	393.135	7	0	1	.527	7	.749	1
484			min	216.768	2	-548.087	1	-393.273	2	0	1	-.527	2	-.749	6
485		3	max	631.239	6	195.174	1	386.223	2	.092	1	.479	7	.432	1
486			min	-633.321	1	-402.376	6	-219.226	7	-.088	6	-.688	2	-.691	6
487		4	max	638.007	6	195.174	1	368.023	2	.092	1	.138	7	.119	3
488			min	-626.553	1	-402.376	6	-201.026	7	-.088	6	-.075	2	-.037	6
489		5	max	0	1	.248	1	.71	4	0	1	0	1	0	1
490			min	0	1	-.843	8	-.259	7	0	1	0	1	0	1
491	50	1	max	0	1	.028	4	.11	6	0	1	0	1	0	1
492			min	0	1	-.024	7	-.112	1	0	1	0	1	0	1
493		2	max	19.768	4	18.226	2	18.31	6	0	1	.015	6	.015	7
494			min	6.768	6	-18.224	7	-18.312	1	0	1	-.015	1	-.015	2
495		3	max	787.123	6	284.993	2	33.291	1	.206	1	.039	6	.235	2
496			min	-348.077	1	-366.054	7	-37.078	6	-.207	6	-.039	1	-.295	7
497		4	max	1119.041	6	371.301	2	37.814	6	.195	1	.012	6	.026	6
498			min	-484.605	1	-460.086	7	-47.001	1	-.2	6	-.02	1	-.014	1
499		5	max	0	1	.003	7	.017	1	0	1	0	1	0	1
500			min	0	1	-.005	4	-.017	6	0	1	0	1	0	1
501	51	1	max	0	1	.438	2	1.474	6	0	1	0	1	0	1
502			min	0	1	-.465	9	-1.462	1	0	1	0	1	0	1
503		2	max	265.768	3	220.238	2	326.274	6	0	1	.446	6	.291	7
504			min	78.768	6	-220.252	7	-326.262	1	0	1	-.446	1	-.291	2
505		3	max	579.681	7	132.587	8	225.646	1	.204	6	.795	6	.14	8
506			min	-796.15	2	-54.215	1	-231.939	6	-.22	1	-.796	1	-.054	1
507		4	max	586.449	7	133.634	4	225.646	1	.204	6	.418	6	.048	7
508			min	-789.382	2	-54.215	1	-231.939	6	-.22	1	-.429	1	-.089	2
509		5	max	0	1	.234	9	.401	1	0	1	0	1	0	1
510			min	0	1	-.13	2	-.542	8	0	1	0	1	0	1
511	52	1	max	0	1	.143	4	.062	9	0	1	0	1	0	1
512			min	0	1	-.164	9	-.079	4	0	1	0	1	0	1
513		2	max	32.768	4	36.506	2	36.439	6	0	1	.03	6	.03	7
514			min	6.768	5	-36.508	7	-36.441	1	0	1	-.03	1	-.03	2
515		3	max	942.763	2	139.987	6	328.44	2	.153	6	.222	7	.135	6
516			min	-500.427	7	-100.691	1	-256.38	7	-.159	1	-.273	2	-.105	1
517		4	max	1513.854	2	241.969	2	346.413	2	.148	7	.028	1	.024	6
518			min	-872.538	7	-204.554	7	-264.387	7	-.151	2	-.015	6	-.024	1
519		5	max	0	1	.023	9	.016	4	0	1	0	1	0	1
520			min	0	1	-.02	4	-.008	7	0	1	0	1	0	1
521	53	1	max	0	1	1.197	2	.672	6	0	1	0	1	0	1
522			min	0	1	-1.18	7	-.67	1	0	1	0	1	0	1
523		2	max	265.768	8	325.997	2	220.472	6	0	1	.291	6	.445	7
524			min	78.768	2	-325.98	7	-220.47	1	0	1	-.291	1	-.445	2
525		3	max	800.032	6	181.107	7	34.317	2	.173	2	.327	7	.615	7
526			min	-1030.214	1	-221.894	2	-108.748	3	-.188	7	-.257	2	-.653	2
527		4	max	806.8	6	181.107	7	45.918	6	.173	2	.169	7	.321	7
528			min	-1023.445	1	-221.894	2	-116.711	3	-.188	7	-.202	2	-.293	2
529		5	max	0	3	.291	7	.233	1	0	1	0	8	0	7
530			min	0	2	-.453	4	-.279	8	0	1	0	1	0	4
531	54	1	max	0	1	.137	4	.094	8	0	1	0	1	0	1
532			min	0	1	-.138	9	-.068	3	0	1	0	1	0	1
533		2	max	32.768	3	36.494	2	36.455	6	0	1	.03	6	.03	7
534			min	6.768	7	-36.493	7	-36.453	1	0	1	-.03	1	-.03	2
535		3	max	774.483	1	204.659	1	232.963	6	.228	2	.24	1	.175	1
536			min	-347.067	6	-163.002	6	-298.85	1	-.232	7	-.191	6	-.147	6
537		4	max	1349.017	1	216.565	1	355.101	6	.173	2	.037	2	.013	1
538			min	-730.549	6	-165.939	6	-425.478	1	-.179	7	-.044	7	-.024	6

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
539		5	max	0	1	.022	9	.007	1	0	1	0	1	0	1
540			min	0	1	-.017	4	-.014	8	0	1	0	1	0	1
541	55	1	max	0	1	1.35	2	.543	6	0	1	0	1	0	1
542			min	0	1	-1.351	7	-.621	3	0	1	0	1	0	1
543		2	max	265.768	3	326.15	2	220.343	6	0	1	.291	6	.446	7
544			min	78.768	2	-326.151	7	-220.367	1	0	1	-.291	1	-.446	2
545		3	max	948.302	2	85.339	7	227.52	7	.215	7	.395	2	.522	7
546			min	-1182.524	7	-116.318	2	-159.411	2	-.229	2	-.462	7	-.564	2
547		4	max	955.07	2	85.339	7	227.52	7	.215	7	.136	2	.383	7
548			min	-1175.756	7	-116.318	2	-159.411	2	-.229	2	-.093	7	-.375	2
549		5	max	0	5	.451	9	.344	9	0	1	0	6	0	9
550			min	0	1	-.41	2	-.178	2	0	1	0	9	0	2
551	56	1	max	934.442	6	52.412	2	55.653	1	.002	1	.079	7	.086	6
552			min	-1418.739	1	-44.562	7	-60.643	6	-.002	6	-.084	2	-.07	1
553		2	max	936.932	6	47.012	2	61.053	1	.002	1	.047	7	.038	2
554			min	-1416.249	1	-39.162	7	-66.043	6	-.002	6	-.051	2	-.027	7
555		3	max	939.422	6	41.612	2	66.453	1	.002	1	.017	6	.027	2
556			min	-1413.759	1	-33.762	7	-71.443	6	-.002	6	-.019	1	-.023	7
557		4	max	941.912	6	36.212	2	71.853	1	.002	1	.022	2	.053	1
558			min	-1411.269	1	-28.362	7	-76.843	6	-.002	6	-.023	7	-.056	6
559		5	max	944.401	6	30.812	2	77.253	1	.002	1	.061	2	.09	1
560			min	-1408.78	1	-22.962	7	-82.243	6	-.002	6	-.061	7	-.099	6
561	57	1	max	1271.72	2	55.428	1	60.288	7	.003	7	.113	2	.076	1
562			min	-1749.193	7	-47.057	6	-65.954	2	-.003	2	-.116	7	-.057	6
563		2	max	1274.21	2	46.075	1	69.641	7	.003	7	.073	2	.04	1
564			min	-1746.703	7	-37.704	6	-75.307	2	-.003	2	-.075	7	-.029	6
565		3	max	1276.7	2	36.722	1	78.994	7	.003	7	.025	2	.033	7
566			min	-1744.214	7	-28.351	6	-84.66	2	-.003	2	-.027	7	-.03	2
567		4	max	1279.189	2	27.369	1	88.348	7	.003	7	.029	7	.066	7
568			min	-1741.724	7	-18.998	6	-94.013	2	-.003	2	-.031	2	-.069	2
569		5	max	1281.679	2	30.235	7	97.701	7	.003	7	.093	7	.1	7
570			min	-1739.234	7	-23.594	2	-103.366	2	-.003	2	-.094	2	-.11	2
571	58	1	max	38.703	2	23.499	1	23.786	2	.003	2	0	1	0	1
572			min	-44.25	7	-24.104	6	-30.373	7	-.003	7	0	1	0	1
573		2	max	38.703	2	17.301	7	27.106	2	.003	2	.006	1	.031	2
574			min	-44.25	7	-18.184	2	-27.053	7	-.003	7	-.009	6	-.033	7
575		3	max	38.703	2	17.301	7	30.425	2	.003	2	.013	2	.064	2
576			min	-44.25	7	-18.184	2	-23.734	7	-.003	7	-.014	7	-.063	7
577		4	max	38.703	2	19.096	6	33.745	2	.003	2	.022	2	.1	2
578			min	-44.25	7	-19.701	1	-20.414	7	-.003	7	-.017	7	-.091	7
579		5	max	29.154	7	30.198	1	376.458	2	.003	6	0	1	0	1
580			min	-31.065	2	-17.823	6	-536.493	7	-.003	1	0	1	0	1
581	59	1	max	39.657	1	21.731	1	28.624	6	.002	1	0	1	0	1
582			min	-45.001	6	-21.149	6	-21.87	1	-.002	6	0	1	0	1
583		2	max	45.896	1	18.126	1	25.304	6	.002	1	.011	2	.033	6
584			min	-51.24	6	-17.544	6	-25.19	1	-.002	6	-.008	7	-.031	1
585		3	max	52.135	1	14.521	1	21.983	6	.002	1	.012	2	.061	6
586			min	-57.479	6	-13.939	6	-28.51	1	-.002	6	-.011	7	-.061	1
587		4	max	58.374	1	24.979	7	18.663	6	.002	1	.017	6	.084	6
588			min	-63.718	6	-24.016	2	-31.831	1	-.002	6	-.022	1	-.092	1
589		5	max	25.003	2	15.638	2	565.476	2	.002	2	0	1	0	1
590			min	-23.009	7	-35.253	7	-400.247	7	-.002	7	0	1	0	1
591	60	1	max	37.536	7	30.285	7	24.846	2	.002	6	0	1	0	1
592			min	-42.045	2	-29.953	2	-17.987	7	-.002	1	0	1	0	1
593		2	max	43.771	7	19.484	7	21.527	2	.002	6	.009	1	.034	2
594			min	-48.28	2	-19.153	2	-21.307	7	-.002	1	-.006	6	-.031	7
595		3	max	50.005	7	16.002	6	18.207	2	.002	6	.013	1	.058	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-...	LC	y-y Mome...	LC	z-z Mom...	LC
596			min	-54.514	2	-15.083	1	-24.627	7	-.002	1	-.012	6	-.058	7
597		4	max	56.24	7	19.601	6	14.887	2	.002	6	.013	2	.071	2
598			min	-60.749	2	-18.682	1	-27.946	7	-.002	1	-.019	7	-.079	7
599		5	max	29.522	1	24.207	7	578.364	1	.003	7	0	6	0	6
600			min	-29.972	6	-29.12	2	-421.248	6	-.003	2	0	1	0	1
601	61	1	max	0	1	.036	2	.041	6	0	1	0	1	0	1
602			min	0	1	-.035	7	-.044	3	0	1	0	1	0	1
603		2	max	19.768	3	18.236	2	18.241	6	0	1	.015	6	.015	7
604			min	6.768	2	-18.235	7	-18.243	1	0	1	-.015	1	-.015	2
605		3	max	737.862	1	54.43	7	26.646	1	.169	1	.039	6	.058	7
606			min	-1002.154	6	-59.279	2	-27.964	6	-.156	6	-.037	1	-.062	2
607		4	max	744.63	1	36.23	7	8.446	1	.169	1	.008	6	.02	2
608			min	-995.386	6	-41.079	2	-9.764	6	-.156	6	-.009	1	-.015	7
609		5	max	0	1	.005	7	.006	1	0	1	0	1	0	1
610			min	0	1	-.006	2	-.006	6	0	1	0	1	0	1
611	62	1	max	0	1	.045	2	.035	6	0	1	0	1	0	1
612			min	0	1	-.046	7	-.035	1	0	1	0	1	0	1
613		2	max	19.768	8	18.245	2	18.235	6	0	1	.015	6	.015	7
614			min	6.768	1	-18.246	7	-18.235	1	0	1	-.015	1	-.015	2
615		3	max	785.01	7	14.942	7	62.639	1	.209	7	.066	6	.018	7
616			min	-1039.569	2	-13.83	2	-57.72	6	-.199	2	-.07	1	-.018	2
617		4	max	791.779	7	13.309	1	44.439	1	.209	7	.017	1	.011	6
618			min	-1032.801	2	-11.958	6	-39.52	6	-.199	2	-.013	6	-.013	1
619		5	max	0	1	.007	7	.005	1	0	1	0	1	0	1
620			min	0	1	-.007	2	-.005	6	0	1	0	1	0	1
621	63	1	max	0	1	.044	2	.04	8	0	1	0	1	0	1
622			min	0	1	-.042	7	-.038	1	0	1	0	1	0	1
623		2	max	19.768	3	18.244	2	18.239	6	0	1	.015	6	.015	7
624			min	6.768	7	-18.242	7	-18.238	1	0	1	-.015	1	-.015	2
625		3	max	375.942	2	52.94	7	30.215	2	.173	6	.039	7	.066	7
626			min	-714.64	7	-43.914	2	-37.924	7	-.164	1	-.035	2	-.054	2
627		4	max	382.71	2	34.74	7	30.215	2	.173	6	.014	2	.009	1
628			min	-707.872	7	-25.714	2	-37.924	7	-.164	1	-.022	7	-.012	6
629		5	max	0	2	.006	7	.006	1	0	1	0	1	0	1
630			min	0	7	-.006	2	-.007	8	0	1	0	1	0	1

Envelope Member Section Stresses

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
1	1	1	max	.315	8	.222	7	.094	7	.826	4	.078	7	5.909	2	2.735	7
2			min	-.076	1	-.459	2	-.084	2	-.078	7	-.826	4	-7.155	7	-2.259	2
3		2	max	.315	8	.267	7	.094	7	2.697	7	4.388	2	3.007	7	1.247	2
4			min	-.076	1	-.413	2	-.084	2	-4.388	2	-2.697	7	-3.261	2	-1.149	7
5		3	max	1.759	6	1.063	2	2.454	2	8.478	6	4.306	1	4.191	1	1.49	6
6			min	-.971	1	-1.09	7	-2.455	7	-4.306	1	-8.478	6	-3.898	6	-1.602	1
7		4	max	.23	6	.389	7	.077	7	2.955	2	3.95	7	2.101	2	.789	7
8			min	-.156	1	-.284	2	-.065	2	-3.95	7	-2.955	2	-2.064	7	-.803	2
9		5	max	.239	7	.633	1	.07	7	.427	8	-.143	1	3.929	1	.967	6
10			min	-.168	2	-.688	6	-.058	2	.143	1	-.427	8	-2.53	6	-1.502	1
11	2	1	max	.365	1	.272	6	.089	2	.51	3	.178	6	6.119	1	2.715	6
12			min	-.146	6	-.492	1	-.078	7	-.178	6	-.51	3	-7.1	6	-2.339	1
13		2	max	.392	1	.316	6	.113	6	3.162	6	4.896	1	3.642	6	1.469	1
14			min	-.173	6	-.446	1	-.106	1	-4.896	1	-3.162	6	-3.842	1	-1.392	6
15		3	max	1.697	2	.875	1	2.284	1	7.701	2	3.492	7	3.756	7	1.309	2
16			min	-.914	7	-.917	6	-2.287	6	-3.492	7	-7.701	2	-3.424	2	-1.436	7
17		4	max	.357	2	.498	2	.105	2	2.842	7	3.84	2	2.678	1	.99	6

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
18			min	-.282	7	-.395	7	-.091	7	-3.84	2	-2.842	7	-2.59	6	-1.024	1
19		5	max	.316	2	.491	7	.064	6	.428	4	-.141	6	3.383	6	.753	1
20			min	-.246	7	-.537	2	-.054	1	.141	6	-.428	4	-1.969	1	-1.293	6
21	3	1	max	.377	7	.266	2	.089	1	.563	7	.252	2	5.084	6	2.361	1
22			min	-.158	2	-.486	7	-.081	6	-.252	2	-.563	7	-6.175	1	-1.944	6
23		2	max	.404	7	.311	2	.111	2	3.024	2	4.75	7	3.316	2	1.295	7
24			min	-.186	2	-.44	7	-.102	7	-4.75	7	-3.024	2	-3.388	7	-1.268	2
25		3	max	1.623	7	.919	6	2.234	6	8.319	7	4.148	2	3.695	2	1.3	7
26			min	-.845	2	-.942	1	-2.233	1	-4.148	2	-8.319	7	-3.4	7	-1.413	2
27		4	max	.334	1	.479	1	.092	1	3.184	6	4.137	1	2.763	7	1.007	2
28			min	-.278	6	-.348	6	-.077	6	-4.137	1	-3.184	6	-2.635	2	-1.056	7
29		5	max	.303	1	.521	2	.083	2	.839	4	-.171	7	5.85	2	1.563	7
30			min	-.254	6	-.624	7	-.074	7	.171	7	-.839	4	-4.088	7	-2.237	2
31	4	1	max	.236	1	.607	1	.946	1	1.744	6	1.498	1	21.492	6	28.482	1
32			min	-.105	6	-.241	6	-.685	6	-1.498	1	-1.744	6	-28.482	1	-21.492	6
33		2	max	.236	1	.607	1	.945	1	1.503	6	.891	1	5.056	6	5.803	1
34			min	-.105	6	-.241	6	-.686	6	-.891	1	-1.503	6	-5.803	1	-5.056	6
35		3	max	.236	1	.607	1	.944	1	1.633	2	1.515	1	22.435	6	-5.891	5
36			min	-.118	2	-.382	6	-1.145	6	-1.515	1	-1.633	2	5.891	5	-22.435	6
37		4	max	.167	7	.263	1	.803	1	1.021	6	1.252	1	5.592	1	5.044	6
38			min	-.118	2	-.382	6	-1.146	6	-1.252	1	-1.021	6	-5.044	6	-5.592	1
39		5	max	.167	7	.263	1	.802	1	.64	6	.989	1	24.846	1	32.546	6
40			min	-.118	2	-.382	6	-1.147	6	-.989	1	-.64	6	-32.546	6	-24.846	1
41	5	1	max	1.831	6	2.436	2	.583	6	.113	1	.169	6	30.999	1	11.543	6
42			min	-1.81	1	-1.198	7	-.598	1	-.169	6	-.113	1	-30.193	6	-11.851	1
43		2	max	1.845	6	2.453	2	.597	6	13.892	2	6.785	7	1.855	6	.704	1
44			min	-1.824	1	-1.18	7	-.612	1	-6.785	7	-13.892	2	-1.842	1	-.709	6
45		3	max	.002	6	.011	9	.007	2	.003	4	-.001	7	.021	2	.008	7
46			min	-.002	1	.004	2	-.007	7	.001	7	-.003	4	-.021	7	-.008	2
47		4	max	1.888	2	1.154	1	.684	7	13.804	6	6.939	1	1.734	2	.656	7
48			min	-1.895	7	-2.391	6	-.688	2	-6.939	1	-13.804	6	-1.716	7	-.663	2
49		5	max	1.875	2	1.171	1	.643	7	.199	6	.292	1	34.295	7	13.181	2
50			min	-1.881	7	-2.373	6	-.646	2	-.292	1	-.199	6	-34.479	2	-13.111	7
51	6	1	max	.21	9	.656	7	1.281	7	1.531	1	1.258	6	31.13	2	37.851	7
52			min	-.059	2	-.285	2	-1.028	2	-1.258	6	-1.531	1	-37.851	7	-31.13	2
53		2	max	.21	9	.656	7	1.28	7	1.681	1	1.04	6	6.461	2	7.117	7
54			min	-.059	2	-.285	2	-1.028	2	-1.04	6	-1.681	1	-7.117	7	-6.461	2
55		3	max	.122	2	.41	7	.984	7	1.284	2	1.426	7	25.15	2	16.247	7
56			min	-.082	7	-.525	2	-1.335	2	-1.426	7	-1.284	2	-16.247	7	-25.15	2
57		4	max	.122	2	.41	7	.983	7	.76	2	1.016	7	7.342	7	6.889	2
58			min	-.082	7	-.525	2	-1.336	2	-1.016	7	-.76	2	-6.889	2	-7.342	7
59		5	max	.122	2	.41	7	.982	7	.485	1	.838	6	30.908	7	38.951	2
60			min	-.082	7	-.525	2	-1.337	2	-.838	6	-.485	1	-38.951	2	-30.908	7
61	7	1	max	1.648	1	2.217	7	.588	1	.08	7	.137	2	32.552	6	12.284	1
62			min	-1.661	6	-.99	2	-.595	6	-.137	2	-.08	7	-32.132	1	-12.445	6
63		2	max	1.648	1	2.234	7	.644	1	12.799	7	5.751	2	1.573	2	.596	7
64			min	-1.661	6	-.973	2	-.651	6	-5.751	2	-12.799	7	-1.56	7	-.601	2
65		3	max	0	1	-.004	2	.009	6	.003	4	-.001	7	.028	1	.011	6
66			min	0	1	-.011	9	-.009	1	.001	7	-.003	4	-.028	6	-.011	1
67		4	max	1.675	1	.92	7	.656	6	12.587	2	5.681	7	1.554	7	.585	2
68			min	-1.692	6	-2.162	2	-.662	1	-5.681	7	-12.587	2	-1.531	2	-.594	7
69		5	max	1.675	1	.937	7	.6	6	.279	2	.368	7	32.82	6	12.668	1
70			min	-1.692	6	-2.145	2	-.606	1	-.368	7	-.279	2	-33.135	1	-12.547	6
71	8	1	max	.218	2	.538	6	1.166	6	1.76	7	1.447	2	24.054	1	35.093	6
72			min	-.084	7	-.198	1	-.736	1	-1.447	2	-1.76	7	-35.093	6	-24.054	1
73		2	max	.218	2	.538	6	1.166	6	1.657	7	1.017	2	6.44	1	7.185	6
74			min	-.084	7	-.198	1	-.736	1	-1.017	2	-1.657	7	-7.185	6	-6.44	1

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
75		3	max	.218	2	.538	6	1.165	6	1.627	6	.599	1	20.701	6	11.196	1
76			min	-.084	7	-.198	1	-.737	1	-.599	1	-1.627	6	-11.196	1	-20.701	6
77		4	max	.17	1	.411	6	.657	6	1.211	7	1.576	2	7.609	6	6.806	1
78			min	-.127	6	-.476	1	-1.193	1	-1.576	2	-1.211	7	-6.806	1	-7.609	6
79		5	max	.17	1	.411	6	.656	6	1.023	7	1.464	2	23.324	6	35.381	1
80			min	-.127	6	-.476	1	-1.194	1	-1.464	2	-1.023	7	-35.381	1	-23.324	6
81	9	1	max	1.888	7	2.45	6	.637	7	.133	2	.185	7	34.687	2	13.01	7
82			min	-1.889	2	-1.233	1	-.649	2	-.185	7	-.133	2	-34.032	7	-13.261	2
83		2	max	1.902	7	2.468	6	.679	7	14.059	6	7.066	1	1.697	7	.645	2
84			min	-1.903	2	-1.215	1	-.691	2	-7.066	1	-14.059	6	-1.686	2	-.649	7
85		3	max	.002	7	.011	3	.007	7	.004	8	-.001	1	.021	7	.008	2
86			min	-.002	2	.004	6	-.007	2	.001	1	-.004	8	-.021	2	-.008	7
87		4	max	1.787	6	1.117	2	.602	1	13.505	7	6.62	2	1.805	6	.683	1
88			min	-1.771	1	-2.357	7	-.602	6	-6.62	2	-13.505	7	-1.788	1	-.69	6
89		5	max	1.773	6	1.135	2	.589	1	.238	1	.322	6	30.547	1	11.662	6
90			min	-1.757	1	-2.34	7	-.588	6	-.322	6	-.238	1	-30.504	6	-11.678	1
91	10	1	max	.829	2	.882	6	1.97	1	7.31	1	6.301	6	12.701	1	15.235	6
92			min	-1.069	7	-.837	1	-2.919	6	-6.301	6	-7.31	1	-12.721	6	-15.211	1
93		2	max	.359	1	.664	6	.091	1	7.46	6	7.715	1	7.614	6	8.275	1
94			min	-1.335	8	-.693	1	-.041	6	-7.715	1	-7.46	6	-6.909	1	-9.118	6
95		3	max	.397	1	.161	1	.185	7	7.596	6	7.287	1	2.308	6	3.354	1
96			min	-1.41	8	-.166	6	-.207	2	-7.287	1	-7.596	6	-2.801	1	-2.764	6
97		4	max	.339	1	.362	1	.203	6	1.947	6	2.246	1	2.036	7	2.005	2
98			min	-1.329	8	-.364	6	-.192	1	-2.246	1	-1.947	6	-1.674	2	-2.438	7
99		5	max	.927	7	.569	1	1.979	7	4.941	1	4.613	6	7.698	1	10.989	6
100			min	-1.02	2	-.625	6	-1.15	2	-4.613	6	-4.941	1	-9.176	6	-9.219	1
101	11	1	max	.995	1	.781	2	2.205	6	7.776	7	7.043	2	12.503	7	15.339	2
102			min	-1.251	6	-.763	7	-3.132	1	-7.043	2	-7.776	7	-12.809	2	-14.973	7
103		2	max	.212	7	.628	2	.099	7	5.529	2	5.759	7	6.581	2	6.965	7
104			min	-1.286	4	-.642	7	-.055	2	-5.759	7	-5.529	2	-5.816	7	-7.881	2
105		3	max	.332	7	.086	7	.181	6	6.891	2	6.553	7	2.653	2	3.758	7
106			min	-1.379	4	-.091	2	-.206	1	-6.553	7	-6.891	2	-3.138	7	-3.177	2
107		4	max	.221	7	.317	7	.15	2	1.821	2	2.12	7	2.735	2	2.938	7
108			min	-1.29	4	-.312	2	-.143	7	-2.12	7	-1.821	2	-2.453	7	-3.275	2
109		5	max	1.089	2	.458	7	2.636	2	3.308	7	3.054	1	5.144	7	7.663	2
110			min	-1.185	7	-.538	2	-1.761	7	-3.054	1	-3.308	7	-6.399	2	-6.16	7
111	12	1	max	.971	7	.777	7	2.815	2	5.904	2	4.937	7	10.966	2	13.074	7
112			min	-1.224	2	-.707	2	-3.744	7	-4.937	7	-5.904	2	-10.917	7	-13.132	2
113		2	max	.299	2	.572	7	.086	8	6.687	7	7.001	2	6.754	7	7.294	2
114			min	-1.313	9	-.604	2	-.029	1	-7.001	2	-6.687	7	-6.09	2	-8.089	7
115		3	max	.239	2	.114	2	.161	1	7.194	7	6.889	2	1.655	1	2.502	2
116			min	-1.367	9	-.119	7	-.185	6	-6.889	2	-7.194	7	-2.089	2	-1.981	1
117		4	max	.243	2	.342	2	.218	7	2.839	7	3.139	2	2.641	1	2.791	6
118			min	-1.295	9	-.352	7	-.205	2	-3.139	2	-2.839	7	-2.331	6	-3.163	1
119		5	max	1.101	1	.519	2	2.526	1	4.628	2	4.172	7	5.627	2	9.628	7
120			min	-1.175	6	-.555	7	-1.725	6	-4.172	7	-4.628	2	-8.04	7	-6.738	2
121	13	1	max	.486	1	1.602	1	1.035	1	7.539	2	7.866	7	21.954	6	28.361	1
122			min	-.641	6	-1.969	6	-.779	6	-7.866	7	-7.539	2	-28.361	1	-21.954	6
123		2	max	.486	1	1.602	1	1.034	1	7.793	2	8.482	7	3.245	6	3.541	1
124			min	-.641	6	-1.969	6	-.78	6	-8.482	7	-7.793	2	-3.541	1	-3.245	6
125		3	max	.604	7	1.602	1	1.033	1	8.048	2	9.098	7	21.26	1	-4.323	10
126			min	-.664	2	-1.969	6	-.781	6	-9.098	7	-8.048	2	4.323	10	-21.26	1
127		4	max	.604	7	1.494	2	.569	1	6.243	6	6.118	1	5.624	1	5.03	6
128			min	-.664	2	-1.377	7	-.927	6	-6.118	1	-6.243	6	-5.03	6	-5.624	1
129		5	max	.604	7	1.494	2	.568	1	5.154	6	4.919	1	19.257	1	27.269	6
130			min	-.664	2	-1.377	7	-.927	6	-4.919	1	-5.154	6	-27.269	6	-19.257	1
131	14	1	max	.326	6	1.774	7	1.175	7	5.815	7	6.374	2	25.651	2	31.838	7

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
132			min	-.47	1	-2.134	2	-.927	2	-6.374	2	-5.815	7	-31.838	7	-25.651	2
133		2	max	.326	6	1.774	7	1.175	7	7.588	7	8.508	2	3.397	2	3.64	7
134			min	-.47	1	-2.134	2	-.928	2	-8.508	2	-7.588	7	-3.64	7	-3.397	2
135		3	max	.468	2	2.015	7	.864	7	7.178	2	7.308	7	22.774	2	13.487	7
136			min	-.542	7	-1.901	2	-1.23	2	-7.308	7	-7.178	2	-13.487	7	-22.774	2
137		4	max	.468	2	2.015	7	.863	7	5.278	2	5.294	7	7.241	7	6.748	2
138			min	-.542	7	-1.901	2	-1.231	2	-5.294	7	-5.278	2	-6.748	2	-7.241	7
139		5	max	.468	2	2.015	7	.863	7	3.377	2	3.279	7	27.951	7	36.288	2
140			min	-.542	7	-1.901	2	-1.231	2	-3.279	7	-3.377	2	-36.288	2	-27.951	7
141	15	1	max	.53	2	1.211	2	.789	6	7.087	6	7.651	1	21.565	1	24.211	6
142			min	-.675	7	-1.54	7	-.732	1	-7.651	1	-7.087	6	-24.211	6	-21.565	1
143		2	max	.53	2	1.211	2	.789	6	8.125	6	9.009	1	4.045	1	5.328	6
144			min	-.675	7	-1.54	7	-.732	1	-9.009	1	-8.125	6	-5.328	6	-4.045	1
145		3	max	.53	2	1.211	2	.788	6	9.163	6	10.366	1	13.538	6	13.493	1
146			min	-.675	7	-1.54	7	-.733	1	-10.366	1	-9.163	6	-13.493	1	-13.538	6
147		4	max	.604	1	1.843	6	.695	6	4.79	7	4.435	2	8.193	6	7.934	1
148			min	-.67	6	-1.767	1	-.878	1	-4.435	2	-4.79	7	-7.934	1	-8.193	6
149		5	max	.604	1	1.843	6	.694	6	4.589	7	4.162	2	24.821	6	28.965	1
150			min	-.67	6	-1.767	1	-.879	1	-4.162	2	-4.589	7	-28.965	1	-24.821	6
151	16	1	max	.998	1	.158	7	.098	6	1.685	2	4.148	9	8.177	1	10.045	6
152			min	-1.829	6	-.106	2	-.16	1	-4.148	9	-1.685	2	-7.762	6	-10.583	1
153		2	max	1.001	1	.128	7	.128	6	.476	2	2.456	9	5.137	1	6.32	6
154			min	-1.826	6	-.077	2	-.19	1	-2.456	9	-.476	2	-4.884	6	-6.648	1
155		3	max	1.004	1	.099	7	.157	6	.8	1	1.437	6	1.677	1	2.051	6
156			min	-1.823	6	-.047	2	-.219	1	-1.437	6	-.8	1	-1.585	6	-2.17	1
157		4	max	1.007	1	.09	6	.187	6	2.245	1	2.047	6	2.134	6	2.851	1
158			min	-1.82	6	-.039	1	-.249	1	-2.047	6	-2.245	1	-2.203	1	-2.761	6
159		5	max	1.01	1	.09	6	.217	6	3.909	1	2.876	6	6.273	6	8.417	1
160			min	-1.817	6	-.039	1	-.279	1	-2.876	6	-3.909	1	-6.504	1	-8.118	6
161	17	1	max	.616	2	.17	6	.119	1	4.825	1	5.134	6	2.972	7	4.5	2
162			min	-.989	7	-.154	1	-.119	6	-5.134	6	-4.825	1	-3.478	2	-3.846	7
163		2	max	.619	2	.17	6	.149	1	2.693	1	2.884	6	1.226	7	1.943	2
164			min	-.986	7	-.154	1	-.148	6	-2.884	6	-2.693	1	-1.502	2	-1.587	7
165		3	max	.622	2	.17	6	.178	1	.585	10	.415	6	.054	2	.411	10
166			min	-.983	7	-.154	1	-.178	6	-.415	6	-.585	10	-.317	10	-.07	2
167		4	max	.625	2	.17	6	.208	1	2.274	6	2.232	1	1.19	2	1.302	7
168			min	-.98	7	-.154	1	-.208	6	-2.232	1	-2.274	6	-1.006	7	-1.539	2
169		5	max	.628	2	.17	6	.237	1	5.183	6	5.023	1	1.905	2	1.93	7
170			min	-.977	7	-.154	1	-.237	6	-5.023	1	-5.183	6	-1.491	7	-2.465	2
171	18	1	max	.995	6	.035	1	.093	6	0	1	0	1	0	1	0	1
172			min	-.528	1	-.028	6	-.091	1	0	1	0	1	0	1	0	1
173		2	max	.998	6	.035	1	.064	6	.822	1	.792	6	.715	6	.759	1
174			min	-.525	1	-.028	6	-.061	1	-.792	6	-.822	1	-.587	1	-.925	6
175		3	max	1.001	6	.053	2	.032	1	1.431	1	1.376	6	1.033	6	.989	1
176			min	-.521	1	-.06	7	-.035	6	-1.376	6	-1.431	1	-.765	1	-1.336	6
177		4	max	1.002	6	.028	6	.062	1	.825	1	.798	6	.726	6	.767	1
178			min	-.507	1	-.035	1	-.065	6	-.798	6	-.825	1	-.592	1	-.94	6
179		5	max	1.005	6	.028	6	.091	1	0	1	0	1	0	1	0	1
180			min	-.504	1	-.035	1	-.094	6	0	1	0	1	0	1	0	1
181	19	1	max	.404	2	.016	7	.024	1	0	1	0	1	0	1	0	1
182			min	-.802	7	-.019	2	-.031	6	0	1	0	1	0	1	0	1
183		2	max	.407	2	.01	2	-.001	6	.073	9	.016	2	.248	1	.515	6
184			min	-.799	7	-.014	7	-.011	9	-.016	2	-.073	9	-.398	6	-.32	1
185		3	max	.873	2	.043	7	.041	1	.288	1	.247	6	.257	2	.722	7
186			min	-1.456	7	-.008	1	-.034	6	-.247	6	-.288	1	-.558	7	-.333	2
187		4	max	.876	2	.014	7	.013	3	.074	9	.023	2	.162	1	.405	6
188			min	-1.453	7	-.01	2	-.005	6	-.023	2	-.074	9	-.313	6	-.21	1

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
189		5	max	.879	2	.019	2	.025	6	0	1	0	1	0	1	0	1
190			min	-1.449	7	-.016	7	-.018	1	0	1	0	1	0	1	0	1
191	20	1	max	4.534	6	.102	1	.098	6	0	1	0	1	0	1	0	1
192			min	-2.89	1	-.12	6	-.116	1	0	1	0	1	0	1	0	1
193		2	max	4.537	6	.074	1	.07	6	2.216	1	2.207	6	.063	2	1.109	9
194			min	-2.887	1	-.08	6	-.076	1	-2.207	6	-2.216	1	-.857	9	-.081	2
195		3	max	4.54	6	.046	1	.042	6	3.615	1	3.596	6	-.082	1	1.009	9
196			min	-2.884	1	-.04	6	-.036	1	-3.596	6	-3.615	1	-.78	9	.107	1
197		4	max	4.543	6	.06	7	.027	3	4.196	1	4.167	6	.787	7	.96	2
198			min	-2.88	1	-.042	2	.004	1	-4.167	6	-4.196	1	-.742	2	-1.018	7
199		5	max	4.729	6	.66	6	.488	1	0	1	0	1	0	1	0	1
200			min	-2.796	1	-.624	1	-.399	6	0	1	0	1	0	1	0	1
201	21	1	max	4.62	6	.096	1	.057	4	0	1	0	1	0	1	0	1
202			min	-2.608	1	-.096	6	-.019	7	0	1	0	1	0	1	0	1
203		2	max	4.623	6	.048	1	.029	4	.71	1	1.025	6	1.961	1	1.757	6
204			min	-2.605	1	-.048	6	-.01	7	-1.025	6	-.71	1	-1.358	6	-2.537	1
205		3	max	4.626	6	0	1	0	1	.947	1	1.367	6	2.614	1	2.343	6
206			min	-2.602	1	0	1	0	1	-1.367	6	-.947	1	-1.811	6	-3.383	1
207		4	max	4.629	6	.048	6	.01	7	.71	1	1.025	6	1.961	1	1.757	6
208			min	-2.599	1	-.048	1	-.029	4	-1.025	6	-.71	1	-1.358	6	-2.537	1
209		5	max	4.632	6	.096	6	.019	7	0	1	0	1	0	1	0	1
210			min	-2.596	1	-.096	1	-.057	4	0	1	0	1	0	1	0	1
211	22	1	max	.624	7	.146	2	.179	7	5.614	7	5.941	2	2.138	6	3.44	1
212			min	-1.026	2	-.13	7	-.181	2	-5.941	2	-5.614	7	-2.658	1	-2.767	6
213		2	max	.627	7	.161	2	.205	7	3.171	7	3.368	2	.687	2	1.236	1
214			min	-1.023	2	-.145	7	-.206	2	-3.368	2	-3.171	7	-.955	1	-.889	2
215		3	max	.63	7	.175	2	.231	7	.585	5	.495	2	.174	1	.409	5
216			min	-1.02	2	-.159	7	-.232	2	-.495	2	-.585	5	-.316	5	-.225	1
217		4	max	.633	7	.19	2	.256	7	2.678	2	2.613	7	1.091	7	1.191	2
218			min	-1.017	2	-.174	7	-.258	2	-2.613	7	-2.678	2	-.921	2	-1.412	7
219		5	max	.636	7	.205	2	.282	7	6.151	2	5.956	7	2.332	7	2.53	2
220			min	-1.014	2	-.189	7	-.283	2	-5.956	7	-6.151	2	-1.955	2	-3.018	7
221	23	1	max	1.138	1	.03	7	.065	2	0	1	0	1	0	1	0	1
222			min	-.661	6	-.023	2	-.063	7	0	1	0	1	0	1	0	1
223		2	max	1.141	1	.036	6	.043	1	.541	7	.504	2	.512	2	.5	7
224			min	-.658	6	-.029	1	-.042	6	-.504	2	-.541	7	-.386	7	-.662	2
225		3	max	1.144	1	.054	1	.031	6	1.212	6	1.13	1	.869	2	.801	7
226			min	-.655	6	-.061	6	-.033	1	-1.13	1	-1.212	6	-.619	7	-1.125	2
227		4	max	1.12	1	.029	1	.046	6	.566	6	.525	1	.555	1	.555	6
228			min	-.617	6	-.036	6	-.048	1	-.525	1	-.566	6	-.429	6	-.719	1
229		5	max	1.123	1	.023	2	.061	6	0	1	0	1	0	1	0	1
230			min	-.614	6	-.03	7	-.062	1	0	1	0	1	0	1	0	1
231	24	1	max	.672	7	.024	6	.015	7	0	1	0	1	0	1	0	1
232			min	-1.098	2	-.027	1	-.019	2	0	1	0	1	0	1	0	1
233		2	max	.675	7	.016	7	.007	2	.114	6	.068	1	.14	7	.365	3
234			min	-1.095	2	-.021	2	-.014	9	-.068	1	-.114	6	-.282	3	-.181	7
235		3	max	1.171	7	.036	2	.041	7	.462	7	.472	2	.129	1	.677	8
236			min	-1.787	2	-.03	7	-.037	2	-.472	2	-.462	7	-.523	8	-.167	1
237		4	max	1.174	7	.021	2	.016	9	.135	6	.089	1	.076	7	.349	3
238			min	-1.784	2	-.016	7	-.011	2	-.089	1	-.135	6	-.27	3	-.098	7
239		5	max	1.177	7	.027	1	.016	4	0	1	0	1	0	1	0	1
240			min	-1.781	2	-.024	6	-.01	7	0	1	0	1	0	1	0	1
241	25	1	max	5.01	1	.088	7	.069	1	0	1	0	1	0	1	0	1
242			min	-3.412	6	-.105	2	-.087	6	0	1	0	1	0	1	0	1
243		2	max	5.024	1	.057	7	.05	2	1.7	7	1.678	2	.101	7	1.111	4
244			min	-3.42	6	-.062	2	-.057	7	-1.678	2	-1.7	7	-.858	4	-.13	7
245		3	max	5.038	1	.055	6	.039	2	2.749	7	2.709	2	.026	7	1.077	4

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
246			min	-3.427	6	-.049	1	-.034	7	-2.709	2	-2.749	7	-.832	4	-.034	7
247		4	max	5.052	1	.061	6	.029	2	3.244	6	3.334	1	.876	6	1.087	1
248			min	-3.435	6	-.044	1	-.01	7	-3.334	1	-3.244	6	-.84	1	-1.134	6
249		5	max	5.564	1	.588	2	.54	7	0	1	0	1	0	1	0	1
250			min	-3.665	6	-.553	7	-.449	2	0	1	0	1	0	1	0	1
251	26	1	max	6.012	2	.076	7	.058	3	0	1	0	1	0	1	0	1
252			min	-3.998	7	-.076	2	-.02	6	0	1	0	1	0	1	0	1
253		2	max	6.023	2	.038	7	.029	3	.497	6	.816	1	2.099	7	1.947	2
254			min	-4.002	7	-.038	2	-.01	6	-.816	1	-.497	6	-1.505	2	-2.717	7
255		3	max	6.034	2	0	1	0	1	.662	6	1.088	1	2.799	7	2.596	2
256			min	-4.007	7	0	1	0	1	-1.088	1	-.662	6	-2.006	2	-3.622	7
257		4	max	6.045	2	.038	2	.01	6	.497	6	.816	1	2.099	7	1.947	2
258			min	-4.012	7	-.038	7	-.029	3	-.816	1	-.497	6	-1.505	2	-2.717	7
259		5	max	6.056	2	.076	2	.02	6	0	1	0	1	0	1	0	1
260			min	-4.016	7	-.076	7	-.058	3	0	1	0	1	0	1	0	1
261	27	1	max	.788	6	.158	7	.175	6	4.468	2	3.483	7	2.023	1	4.582	6
262			min	-1.36	1	-.157	2	-.132	1	-3.483	7	-4.468	2	-3.541	6	-2.618	1
263		2	max	.791	6	.144	7	.19	6	2.554	2	1.888	7	.832	1	2.234	6
264			min	-1.357	1	-.142	2	-.147	1	-1.888	7	-2.554	2	-1.726	6	-1.077	1
265		3	max	.794	6	.129	7	.204	6	.806	11	.212	7	.131	7	.638	4
266			min	-1.354	1	-.127	2	-.161	1	-.212	7	-.806	11	-.493	4	-.169	7
267		4	max	.797	6	.119	1	.219	6	2.037	1	1.99	6	1.442	6	1.41	1
268			min	-1.351	1	-.118	6	-.176	1	-1.99	6	-2.037	1	-1.089	1	-1.866	6
269		5	max	.8	6	.145	1	.234	6	4.38	1	4.644	6	2.796	6	2.354	1
270			min	-1.348	1	-.144	6	-.191	1	-4.643	6	-4.38	1	-1.819	1	-3.618	6
271	28	1	max	1.436	7	.028	2	.093	7	0	1	0	1	0	1	0	1
272			min	-.961	2	-.021	7	-.091	2	0	1	0	1	0	1	0	1
273		2	max	1.439	7	.043	2	.067	7	.839	2	.809	7	.726	7	.776	2
274			min	-.958	2	-.036	7	-.065	2	-.809	7	-.839	2	-.6	2	-.94	7
275		3	max	1.442	7	.051	7	.042	2	1.639	2	1.585	7	.972	7	.913	2
276			min	-.955	2	-.058	2	-.045	7	-1.585	7	-1.639	2	-.706	2	-1.258	7
277		4	max	1.423	7	.036	7	.068	2	.86	2	.833	7	.773	7	.828	2
278			min	-.921	2	-.043	2	-.071	7	-.833	7	-.86	2	-.64	2	-1	7
279		5	max	1.426	7	.021	7	.093	2	0	1	0	1	0	1	0	1
280			min	-.918	2	-.028	2	-.096	7	0	1	0	1	0	1	0	1
281	29	1	max	.637	6	.022	2	.012	2	0	1	0	1	0	1	0	1
282			min	-1.043	1	-.025	7	-.02	7	0	1	0	1	0	1	0	1
283		2	max	.64	6	.013	6	.005	7	.117	2	.074	7	.195	2	.459	7
284			min	-1.04	1	-.018	1	-.015	4	-.074	7	-.117	2	-.355	7	-.252	2
285		3	max	1.161	6	.043	1	.045	2	.394	2	.31	1	.165	6	.634	3
286			min	-1.748	1	-.039	6	-.036	7	-.31	1	-.394	2	-.49	3	-.214	6
287		4	max	1.164	6	.018	1	.019	2	.157	2	.114	7	.118	2	.366	9
288			min	-1.745	1	-.013	6	-.011	7	-.114	7	-.157	2	-.283	9	-.153	2
289		5	max	1.167	6	.025	7	.015	7	0	1	0	1	0	1	0	1
290			min	-1.742	1	-.022	2	-.006	2	0	1	0	1	0	1	0	1
291	30	1	max	5.878	7	.085	2	.105	7	0	1	0	1	0	1	0	1
292			min	-4.285	2	-.104	7	-.123	2	0	1	0	1	0	1	0	1
293		2	max	5.889	7	.074	2	.074	7	2.175	2	2.191	7	.134	6	1.138	3
294			min	-4.289	2	-.081	7	-.08	2	-2.191	7	-2.175	2	-.88	3	-.173	6
295		3	max	5.9	7	.064	2	.044	7	3.704	2	3.732	7	-.051	6	1.063	3
296			min	-4.294	2	-.058	7	-.037	2	-3.732	7	-3.704	2	-.822	3	.066	6
297		4	max	5.911	7	.053	2	.029	3	4.587	2	4.624	7	.739	2	.91	7
298			min	-4.299	2	-.034	7	-.004	6	-4.624	7	-4.587	2	-.703	7	-.956	2
299		5	max	6.208	7	.642	7	.381	2	0	1	0	1	0	1	0	1
300			min	-4.3	2	-.601	2	-.297	7	0	1	0	1	0	1	0	1
301	31	1	max	5.172	1	.076	2	.058	8	0	1	0	1	0	1	0	1
302			min	-3.131	6	-.076	7	-.02	1	0	1	0	1	0	1	0	1

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
303		2	max	5.185	1	.038	2	.029	8	.787	2	1.098	7	1.56	6	1.229	1
304			min	-3.139	6	-.038	7	-.01	1	-1.098	7	-.787	2	-.949	1	-2.019	6
305		3	max	5.199	1	0	1	0	1	1.049	2	1.464	7	2.08	6	1.638	1
306			min	-3.146	6	0	1	0	1	-1.464	7	-1.049	2	-1.266	1	-2.692	6
307		4	max	5.213	1	.038	7	.01	1	.787	2	1.098	7	1.56	6	1.229	1
308			min	-3.154	6	-.038	2	-.029	8	-1.098	7	-.787	2	-.949	1	-2.019	6
309		5	max	5.227	1	.076	7	.02	1	0	1	0	1	0	1	0	1
310			min	-3.162	6	-.076	2	-.058	8	0	1	0	1	0	1	0	1
311	32	1	max	.29	9	.28	1	-.062	7	.133	7	.55	2	5.249	4	-.392	7
312			min	.04	2	-.17	6	-.659	4	-.55	2	-.133	7	1.077	7	-1.909	4
313		2	max	.289	9	.268	1	-.06	7	.057	7	.354	4	.337	7	.985	4
314			min	.044	2	-.159	6	-.651	4	-.354	4	-.057	7	-2.708	4	-.122	7
315		3	max	.289	9	.256	1	-.057	7	.241	1	.344	6	-.37	7	3.839	4
316			min	.047	2	-.147	6	-.642	4	-.344	6	-.241	1	-10.557	4	.134	7
317		4	max	.288	9	.245	1	-.054	7	.55	1	.519	6	-1.042	7	6.658	4
318			min	.05	2	-.136	6	-.634	4	-.519	6	-.55	1	-18.309	4	.379	7
319		5	max	.287	9	.233	1	-.051	7	.846	1	.679	6	-1.681	7	9.442	4
320			min	.054	2	-.124	6	-.626	4	-.679	6	-.846	1	-25.965	4	.611	7
321	33	1	max	.289	8	.334	7	-.056	6	.287	2	.678	7	5.255	3	-.4	6
322			min	.05	1	-.227	2	-.663	3	-.678	7	-.287	2	1.1	6	-1.911	3
323		2	max	.289	8	.319	7	-.053	6	.157	6	.414	1	.442	6	.998	3
324			min	.05	1	-.211	2	-.655	3	-.414	1	-.157	6	-2.746	3	-.161	6
325		3	max	.289	8	.303	7	-.05	6	.222	6	.344	1	-.181	6	3.869	3
326			min	.05	1	-.196	2	-.646	3	-.344	1	-.222	6	-10.64	3	.066	6
327		4	max	.289	8	.288	7	-.047	6	.476	7	.469	2	-.771	6	6.704	3
328			min	.05	1	-.18	2	-.638	3	-.469	2	-.476	7	-18.435	3	.28	6
329		5	max	.289	8	.272	7	-.044	6	.823	7	.682	2	-1.327	6	9.504	3
330			min	.05	1	-.165	2	-.63	3	-.682	2	-.823	7	-26.135	3	.483	6
331	34	1	max	0	1	0	1	0	1	0	1	0	1	0	1	0	1
332			min	0	1	0	1	0	1	0	1	0	1	0	1	0	1
333		2	max	.008	2	.547	4	1.222	7	2.061	2	1.747	7	1.651	3	-.308	7
334			min	-.029	9	.116	7	-1.042	2	-1.747	7	-2.061	2	.308	7	-1.651	3
335		3	max	.008	2	.547	4	1.226	7	3.081	4	1.323	7	4.778	7	2.825	2
336			min	-.029	9	.116	7	-1.038	2	-1.323	7	-3.081	4	-2.825	2	-4.778	7
337		4	max	.188	7	.014	1	.771	7	2.428	7	1.398	2	4.254	7	4.714	2
338			min	-.123	2	-.615	8	-1.51	2	-1.398	2	-2.428	7	-4.714	2	-4.254	7
339		5	max	0	1	0	1	0	1	0	1	0	1	0	1	0	1
340			min	0	1	0	1	0	1	0	1	0	1	0	1	0	1
341	35	1	max	0	1	0	6	0	1	0	1	0	1	0	1	0	1
342			min	0	1	0	7	0	4	0	1	0	1	0	1	0	1
343		2	max	.052	1	-.064	7	.367	1	1.239	6	1.458	1	.208	1	2.813	8
344			min	-.078	6	-.471	4	-.799	6	-1.458	1	-1.239	6	-2.813	8	-.208	1
345		3	max	.054	1	-.056	7	.363	1	.93	6	2.373	3	1.541	1	5.714	8
346			min	-.08	6	-.474	4	-.802	6	-2.373	3	-.93	6	-5.714	8	-1.541	1
347		4	max	.09	2	.469	4	1.546	3	1.611	7	2.219	2	2.717	1	2.707	6
348			min	-.033	7	.144	7	.003	6	-2.219	2	-1.611	7	-2.707	6	-2.717	1
349		5	max	0	1	0	7	0	4	0	1	0	1	0	1	0	1
350			min	0	1	0	6	0	1	0	1	0	1	0	1	0	1
351	36	1	max	0	1	0	4	0	6	0	1	0	1	0	1	0	1
352			min	0	1	0	7	0	4	0	1	0	1	0	1	0	1
353		2	max	.007	7	-.088	1	.69	6	1.225	1	1.485	6	-.272	1	1.629	4
354			min	-.03	2	-.548	8	-.869	1	-1.485	6	-1.225	1	-1.629	4	.272	1
355		3	max	.176	1	.612	3	1.416	6	-1.03	2	4.137	3	1.495	6	3.453	1
356			min	-.111	6	-.143	2	-.873	1	-4.137	3	1.03	2	-3.453	1	-1.495	6
357		4	max	.174	1	.611	3	1.413	6	1.421	6	2.5	1	3.827	6	3.351	1
358			min	-.11	6	0	6	-.673	1	-2.5	1	-1.421	6	-3.351	1	-3.827	6
359		5	max	0	1	0	6	0	4	0	1	0	1	0	1	0	1

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
360			min	0	1	0	4	0	6	0	1	0	1	0	1	0	1
361	37	1	max	.243	4	.258	6	-.325	2	.456	1	.925	6	9.705	4	-.926	7
362			min	.036	7	-.153	1	-1.004	9	-.925	6	-.456	1	2.546	7	-3.529	4
363		2	max	.242	4	.247	6	-.322	2	.274	1	.613	6	.456	2	1.067	9
364			min	.039	7	-.141	1	-.996	9	-.613	6	-.274	1	-2.934	9	-.166	2
365		3	max	.241	4	.235	6	-.319	2	.107	1	.315	6	-3.434	2	5.444	9
366			min	.042	7	-.13	1	-.987	9	-.315	6	-.107	1	-14.971	9	1.249	2
367		4	max	.24	4	.223	6	-.316	2	.216	2	.255	7	-7.29	2	9.786	9
368			min	.046	7	-.118	1	-.979	9	-.255	7	-.216	2	-26.911	9	2.651	2
369		5	max	.24	4	.212	6	-.313	2	.405	2	.313	7	-11.112	2	14.092	9
370			min	.049	7	-.107	1	-.971	9	-.313	7	-.405	2	-38.754	9	4.041	2
371	38	1	max	.318	7	.792	1	-.058	2	4.314	6	3.917	1	4.981	9	-.573	2
372			min	-.519	2	-.905	6	-.656	9	-3.917	1	-4.314	6	1.574	2	-1.811	9
373		2	max	.315	7	.781	1	-.055	2	3.202	6	2.945	1	.887	2	1.068	9
374			min	-.516	2	-.893	6	-.648	9	-2.945	1	-3.202	6	-2.938	9	-.323	2
375		3	max	.311	7	.769	1	-.052	2	2.105	6	1.987	1	.234	2	3.915	9
376			min	-.512	2	-.881	6	-.641	9	-1.987	1	-2.105	6	-10.767	9	-.085	2
377		4	max	.308	7	.757	1	-.05	2	1.369	7	1.36	2	-.386	2	6.728	9
378			min	-.509	2	-.87	6	-.633	9	-1.36	2	-1.369	7	-18.502	9	.14	2
379		5	max	.304	7	.746	1	-.047	2	.786	7	.906	2	-.972	2	9.506	9
380			min	-.506	2	-.858	6	-.625	9	-.906	2	-.786	7	-26.141	9	.353	2
381	39	1	max	.313	6	1.023	7	-.051	1	6.121	2	5.727	7	4.977	4	-.568	7
382			min	-.514	1	-1.13	2	-.66	8	-5.727	7	-6.121	2	1.561	7	-1.81	4
383		2	max	.313	6	1.007	7	-.048	1	4.733	2	4.471	7	1.115	1	1.098	8
384			min	-.514	1	-1.115	2	-.652	8	-4.471	7	-4.733	2	-3.019	8	-.405	1
385		3	max	.313	6	.992	7	-.045	1	3.365	2	3.235	7	.545	1	3.962	8
386			min	-.514	1	-1.099	2	-.645	8	-3.235	7	-3.365	2	-10.895	8	-.198	1
387		4	max	.313	6	.976	7	-.043	1	2.015	2	2.018	7	.009	1	6.791	8
388			min	-.514	1	-1.083	2	-.637	8	-2.018	7	-2.015	2	-18.676	8	-.003	1
389		5	max	.313	6	.961	7	-.04	1	.685	2	.821	7	-.493	1	9.586	8
390			min	-.514	1	-1.068	2	-.629	8	-.821	7	-.685	2	-26.361	8	.179	1
391	40	1	max	0	1	0	1	0	1	0	1	0	1	0	1	0	1
392			min	0	1	0	1	0	1	0	1	0	1	0	1	0	1
393		2	max	.249	2	.269	6	1.218	2	1.751	7	2.056	2	1.669	9	-.373	1
394			min	-.229	7	-.67	3	-1.045	7	-2.056	2	-1.751	7	.373	1	-1.669	9
395		3	max	.249	2	.279	6	1.222	2	1.715	6	3.397	1	5.017	2	3.107	7
396			min	-.229	7	-.674	3	-1.042	7	-3.397	1	-1.715	6	-3.107	7	-5.017	2
397		4	max	.534	7	1.356	1	.776	2	1.987	6	3.021	1	11.331	2	11.798	7
398			min	-.599	2	-.944	6	-1.507	7	-3.021	1	-1.987	6	-11.798	7	-11.331	2
399		5	max	0	1	0	1	0	1	0	1	0	1	0	1	0	1
400			min	0	1	0	1	0	1	0	1	0	1	0	1	0	1
401	41	1	max	0	1	0	3	0	1	0	1	0	1	0	1	0	1
402			min	0	1	0	2	0	4	0	1	0	1	0	1	0	1
403		2	max	.321	1	.904	9	1.034	6	3.474	6	1.729	1	7.629	1	12.406	6
404			min	-.274	6	-.171	2	-.903	1	-1.729	1	-3.474	6	-9.586	6	-9.873	1
405		3	max	.325	1	.909	9	1.031	6	7.901	7	4.762	2	5.078	9	1.831	2
406			min	-.277	6	-.184	2	-.906	1	-4.762	2	-7.901	7	-1.415	2	-6.572	9
407		4	max	.718	6	2.289	2	1.227	6	10.65	7	10.51	2	18.551	6	19.746	1
408			min	-.825	1	-2.848	7	-.573	1	-10.51	2	-10.65	7	-15.258	1	-24.007	6
409		5	max	0	1	0	7	0	5	0	1	0	1	0	1	0	1
410			min	0	1	0	6	0	1	0	1	0	1	0	1	0	1
411	42	1	max	0	1	0	5	0	6	0	1	0	1	0	1	0	1
412			min	0	1	0	2	0	4	0	1	0	1	0	1	0	1
413		2	max	.157	6	.718	2	.691	1	1.978	6	1.723	1	.209	1	1.63	4
414			min	-.135	1	-.332	7	-.868	6	-1.723	1	-1.978	6	-1.63	4	-.209	1
415		3	max	.457	1	.862	7	1.416	1	8.254	2	5.801	7	5.174	1	7.405	6
416			min	-.521	6	-1.267	2	-.672	6	-5.801	7	-8.254	2	-7.405	6	-5.174	1

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
417		4	max	.455	1	.855	7	1.412	1	3.642	2	2.666	7	10.339	1	9.865	6
418			min	-.52	6	-1.259	2	-.676	6	-2.666	7	-3.642	2	-9.865	6	-10.339	1
419		5	max	0	1	0	6	0	4	0	1	0	1	0	1	0	1
420			min	0	1	0	4	0	6	0	1	0	1	0	1	0	1
421	43	1	max	.391	2	.724	6	-.038	7	4.519	1	4.072	6	8.308	4	-.624	7
422			min	-.56	7	-.825	1	-.244	4	-4.072	6	-4.519	1	1.716	7	-3.021	4
423		2	max	.388	2	.713	6	-.035	7	3.506	1	3.183	6	5.395	4	-.461	7
424			min	-.557	7	-.814	1	-.236	4	-3.183	6	-3.506	1	1.269	7	-1.962	4
425		3	max	.384	2	.701	6	-.032	7	2.507	1	2.31	6	2.583	3	-.299	6
426			min	-.554	7	-.802	1	-.228	4	-2.31	6	-2.507	1	.822	6	-.939	3
427		4	max	.381	2	.689	6	-.03	7	1.522	1	1.45	6	.48	7	.179	2
428			min	-.55	7	-.791	1	-.22	4	-1.45	6	-1.522	1	-.491	2	-.175	7
429		5	max	.378	2	.678	6	-.027	7	.854	2	.937	7	.137	7	1.005	4
430			min	-.547	7	-.779	1	-.212	4	-.937	7	-.854	2	-2.763	4	-.05	7
431	44	1	max	0	1	0	6	0	7	0	1	0	1	0	1	0	1
432			min	0	1	0	3	0	2	0	1	0	1	0	1	0	1
433		2	max	.15	8	.202	6	.38	7	1.6	6	1.602	1	2.873	7	2.873	2
434			min	.044	1	-.202	1	-.38	2	-1.602	1	-1.6	6	-2.873	2	-2.873	7
435		3	max	.673	7	.712	3	.362	2	2.925	6	10.816	3	3.486	7	4.493	2
436			min	-.672	2	-.071	6	-.293	7	-10.816	3	-2.925	6	-4.493	2	-3.486	7
437		4	max	.68	7	.696	3	.362	2	2.936	8	-.052	1	2.338	2	2.041	7
438			min	-.666	2	-.036	6	-.293	7	.052	1	-2.936	8	-2.041	7	-2.338	2
439		5	max	0	1	0	3	0	2	0	1	0	1	0	1	0	1
440			min	0	1	0	6	0	7	0	1	0	1	0	1	0	1
441	45	1	max	0	1	.004	6	.005	7	0	1	0	1	0	1	0	1
442			min	0	1	-.005	1	-.005	2	0	1	0	1	0	1	0	1
443		2	max	.54	8	.771	6	1.075	7	12.007	6	12.015	1	17.051	7	17.055	2
444			min	.213	1	-.771	1	-1.075	2	-12.015	1	-12.007	6	-17.055	2	-17.051	7
445		3	max	.677	2	.813	3	.7	2	9.715	6	16.796	1	10.781	7	13.439	2
446			min	-.678	7	-.309	6	-.516	7	-16.796	1	-9.715	6	-13.439	2	-10.781	7
447		4	max	.683	2	.797	3	.7	2	4.22	6	2.097	1	1.136	9	.232	2
448			min	-.672	7	-.273	6	-.516	7	-2.097	1	-4.22	6	-.232	2	-1.136	9
449		5	max	0	1	.002	3	0	4	0	1	0	1	0	1	0	1
450			min	0	1	0	6	0	7	0	1	0	1	0	1	0	1
451	46	1	max	0	1	0	6	0	7	0	1	0	1	0	1	0	1
452			min	0	1	0	3	0	4	0	1	0	1	0	1	0	1
453		2	max	.15	3	.38	6	.202	7	2.873	6	2.875	1	1.599	7	1.6	2
454			min	.044	7	-.38	1	-.202	2	-2.875	1	-2.873	6	-1.6	2	-1.599	7
455		3	max	.422	6	.107	1	-.059	2	3.45	6	4.645	1	4.149	7	3.812	2
456			min	-.271	1	-.233	6	-.551	9	-4.645	1	-3.45	6	-3.812	2	-4.149	7
457		4	max	.428	6	.107	1	-.095	2	-.359	7	5.349	4	-1.327	6	9.654	3
458			min	-.264	1	-.233	6	-.535	9	-5.349	4	.359	7	-9.654	3	1.327	6
459		5	max	0	1	0	1	0	2	0	1	0	1	0	1	0	1
460			min	0	1	0	8	0	9	0	1	0	1	0	1	0	1
461	47	1	max	0	1	.004	6	.007	7	0	1	0	1	0	1	0	1
462			min	0	1	-.004	1	-.007	2	0	1	0	1	0	1	0	1
463		2	max	.54	9	.771	6	1.077	7	12.005	6	12.011	1	17.089	7	17.096	2
464			min	.213	7	-.771	1	-1.077	2	-12.011	1	-12.005	6	-17.096	2	-17.089	7
465		3	max	.423	1	.639	1	.742	2	15.155	6	16.693	1	27.205	7	26.693	2
466			min	-.22	6	-.696	6	-1.176	7	-16.693	1	-15.155	6	-26.693	2	-27.205	7
467		4	max	.429	1	.604	1	.742	2	2.355	6	4.963	1	5.006	7	12.696	2
468			min	-.213	6	-.66	6	-1.176	7	-4.963	1	-2.355	6	-12.696	2	-5.006	7
469		5	max	0	1	0	1	0	10	0	1	0	1	0	1	0	1
470			min	0	1	-.001	8	-.004	9	0	1	0	1	0	1	0	1
471	48	1	max	0	1	0	8	0	7	0	1	0	1	0	1	0	1
472			min	0	1	0	1	0	4	0	1	0	1	0	1	0	1
473		2	max	.15	4	.202	6	.38	7	1.599	6	1.597	1	2.875	7	2.877	2

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
474			min	.044	6	-.202	1	-.38	2	-1.597	1	-1.599	6	-2.877	2	-2.875	7
475		3	max	.463	1	.17	1	.581	4	6.587	8	2.177	1	3.915	7	9.108	2
476			min	-.463	6	-.46	8	-.139	7	-2.177	1	-6.587	8	-9.108	2	-3.915	7
477		4	max	.47	1	.134	1	.581	4	.822	2	2.079	7	2.404	3	.215	6
478			min	-.457	6	-.444	8	-.139	7	-2.079	7	-.822	2	-.215	6	-2.404	3
479		5	max	0	1	0	1	0	4	0	1	0	1	0	1	0	1
480			min	0	1	0	8	0	7	0	1	0	1	0	1	0	1
481	49	1	max	0	1	.005	6	.004	7	0	1	0	1	0	1	0	1
482			min	0	1	-.005	1	-.004	2	0	1	0	1	0	1	0	1
483		2	max	.54	9	1.075	6	.771	7	17.061	6	17.054	1	12.005	7	12.011	2
484			min	.213	2	-1.075	1	-.771	2	-17.054	1	-17.061	6	-12.011	2	-12.005	7
485		3	max	.619	6	.383	1	.757	2	15.735	6	9.835	1	10.919	7	15.673	2
486			min	-.621	1	-.789	6	-.43	7	-9.835	1	-15.735	6	-15.673	2	-10.919	7
487		4	max	.625	6	.383	1	.722	2	.843	6	2.701	3	3.143	7	1.716	2
488			min	-.614	1	-.789	6	-.394	7	-2.701	3	-.843	6	-1.716	2	-3.143	7
489		5	max	0	1	0	1	.001	4	0	1	0	1	0	1	0	1
490			min	0	1	-.002	8	0	7	0	1	0	1	0	1	0	1
491	50	1	max	0	1	0	4	0	6	0	1	0	1	0	1	0	1
492			min	0	1	0	7	0	1	0	1	0	1	0	1	0	1
493		2	max	.019	4	.036	2	.036	6	.338	2	.338	7	.341	6	.341	1
494			min	.007	6	-.036	7	-.036	1	-.338	7	-.338	2	-.341	1	-.341	6
495		3	max	.772	6	.559	2	.065	1	6.725	7	5.361	2	.886	6	.89	1
496			min	-.341	1	-.718	7	-.073	6	-5.361	2	-6.725	7	-.89	1	-.886	6
497		4	max	1.097	6	.728	2	.074	6	.326	1	.588	6	.271	6	.454	1
498			min	-.475	1	-.902	7	-.092	1	-.588	6	-.326	1	-.454	1	-.271	6
499		5	max	0	1	0	7	0	1	0	1	0	1	0	1	0	1
500			min	0	1	0	4	0	6	0	1	0	1	0	1	0	1
501	51	1	max	0	1	0	2	.003	6	0	1	0	1	0	1	0	1
502			min	0	1	0	9	-.003	1	0	1	0	1	0	1	0	1
503		2	max	.261	3	.432	2	.64	6	6.62	2	6.621	7	10.152	6	10.151	1
504			min	.077	6	-.432	7	-.64	1	-6.621	7	-6.62	2	-10.151	1	-10.152	6
505		3	max	.568	7	.26	8	.442	1	1.229	1	3.178	8	18.101	6	18.13	1
506			min	-.781	2	-.106	1	-.455	6	-3.178	8	-1.229	1	-18.13	1	-18.101	6
507		4	max	.575	7	.262	4	.442	1	2.034	2	1.102	7	9.517	6	9.779	1
508			min	-.774	2	-.106	1	-.455	6	-1.102	7	-2.034	2	-9.779	1	-9.517	6
509		5	max	0	1	0	9	0	1	0	1	0	1	0	1	0	1
510			min	0	1	0	2	-.001	8	0	1	0	1	0	1	0	1
511	52	1	max	0	1	0	4	0	9	0	1	0	1	0	1	0	1
512			min	0	1	0	9	0	4	0	1	0	1	0	1	0	1
513		2	max	.032	4	.072	2	.071	6	.677	2	.678	7	.675	6	.675	1
514			min	.007	5	-.072	7	-.071	1	-.678	7	-.677	2	-.675	1	-.675	6
515		3	max	.924	2	.274	6	.644	2	2.384	1	3.083	6	5.06	7	6.213	2
516			min	-.491	7	-.197	1	-.503	7	-3.083	6	-2.384	1	-6.213	2	-5.06	7
517		4	max	1.484	2	.474	2	.679	2	.545	1	.539	6	.647	1	.338	6
518			min	-.855	7	-.401	7	-.518	7	-.539	6	-.545	1	-.338	6	-.647	1
519		5	max	0	1	0	9	0	4	0	1	0	1	0	1	0	1
520			min	0	1	0	4	0	7	0	1	0	1	0	1	0	1
521	53	1	max	0	1	.002	2	.001	6	0	1	0	1	0	1	0	1
522			min	0	1	-.002	7	-.001	1	0	1	0	1	0	1	0	1
523		2	max	.261	8	.639	2	.432	6	10.142	2	10.141	7	6.629	6	6.629	1
524			min	.077	2	-.639	7	-.432	1	-10.141	7	-10.142	2	-6.629	1	-6.629	6
525		3	max	.784	6	.355	7	.067	2	14.875	2	14.008	7	7.441	7	5.863	2
526			min	-1.01	1	-.435	2	-.213	3	-14.008	7	-14.875	2	-5.863	2	-7.441	7
527		4	max	.791	6	.355	7	.09	6	6.663	2	7.306	7	3.852	7	4.593	2
528			min	-1.003	1	-.435	2	-.229	3	-7.306	7	-6.663	2	-4.593	2	-3.852	7
529		5	max	0	3	0	7	0	1	0	4	0	7	0	8	0	1
530			min	0	2	0	4	0	8	0	7	0	4	0	1	0	8

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
531	54	1	max	0	1	0	4	0	8	0	1	0	1	0	1	0	1
532			min	0	1	0	9	0	3	0	1	0	1	0	1	0	1
533		2	max	.032	3	.072	2	.071	6	.677	2	.677	7	.676	6	.676	1
534			min	.007	7	-.072	7	-.071	1	-.677	7	-.677	2	-.676	1	-.676	6
535		3	max	.759	1	.401	1	.457	6	3.344	6	3.988	1	5.473	1	4.348	6
536			min	-.34	6	-.32	6	-.586	1	-3.988	1	-3.344	6	-4.348	6	-5.473	1
537		4	max	1.323	1	.425	1	.696	6	.558	6	.289	1	.847	2	.994	7
538			min	-.716	6	-.325	6	-.834	1	-.289	1	-.558	6	-.994	7	-.847	2
539		5	max	0	1	0	9	0	1	0	1	0	1	0	1	0	1
540			min	0	1	0	4	0	8	0	1	0	1	0	1	0	1
541	55	1	max	0	1	.003	2	.001	6	0	1	0	1	0	1	0	1
542			min	0	1	-.003	7	-.001	3	0	1	0	1	0	1	0	1
543		2	max	.261	3	.64	2	.432	6	10.147	2	10.147	7	6.624	6	6.625	1
544			min	.077	2	-.64	7	-.432	1	-10.147	7	-10.147	2	-6.625	1	-6.624	6
545		3	max	.93	2	.167	7	.446	7	12.84	2	11.891	7	9.007	2	10.533	7
546			min	-1.159	7	-.228	2	-.313	2	-11.891	7	-12.84	2	-10.533	7	-9.007	2
547		4	max	.936	2	.167	7	.446	7	8.535	2	8.733	7	3.107	2	2.113	7
548			min	-1.153	7	-.228	2	-.313	2	-8.733	7	-8.535	2	-2.113	7	-3.107	2
549		5	max	0	5	0	9	0	9	0	2	0	9	0	6	0	9
550			min	0	1	0	2	0	2	0	9	0	2	0	9	0	6
551	56	1	max	1.149	6	.144	2	.153	1	2.675	1	3.301	6	5.791	7	7.966	2
552			min	-1.745	1	-.122	7	-.166	6	-3.301	6	-2.675	1	-6.155	2	-7.494	7
553		2	max	1.152	6	.129	2	.167	1	1.052	7	1.473	2	3.446	7	4.826	2
554			min	-1.742	1	-.107	7	-.181	6	-1.473	2	-1.052	7	-3.729	2	-4.459	7
555		3	max	1.156	6	.114	2	.182	1	.875	7	1.019	2	1.213	6	1.818	1
556			min	-1.739	1	-.093	7	-.196	6	-1.019	2	-.875	7	-1.405	1	-1.569	6
557		4	max	1.159	6	.099	2	.197	1	2.143	6	2.036	1	1.584	2	2.206	7
558			min	-1.736	1	-.078	7	-.211	6	-2.036	1	-2.143	6	-1.705	7	-2.05	2
559		5	max	1.162	6	.085	2	.212	1	3.798	6	3.445	1	4.472	2	5.837	7
560			min	-1.733	1	-.063	7	-.226	6	-3.445	1	-3.798	6	-4.511	7	-5.787	2
561	57	1	max	1.564	2	.152	1	.165	7	2.195	6	2.931	1	8.256	2	11.008	7
562			min	-2.152	7	-.129	6	-.181	2	-2.931	1	-2.195	6	-8.506	7	-10.684	2
563		2	max	1.567	2	.126	1	.191	7	1.101	6	1.546	1	5.325	2	7.166	7
564			min	-2.148	7	-.103	6	-.207	2	-1.546	1	-1.101	6	-5.537	7	-6.891	2
565		3	max	1.57	2	.101	1	.217	7	1.149	2	1.271	7	1.821	2	2.582	7
566			min	-2.145	7	-.078	6	-.232	2	-1.271	7	-1.149	2	-1.995	7	-2.356	2
567		4	max	1.573	2	.075	1	.242	7	2.652	2	2.523	7	2.121	7	2.922	2
568			min	-2.142	7	-.052	6	-.258	2	-2.523	7	-2.652	2	-2.258	2	-2.745	7
569		5	max	1.576	2	.083	7	.268	7	4.234	2	3.855	7	6.811	7	8.942	2
570			min	-2.139	7	-.065	2	-.284	2	-3.855	7	-4.234	2	-6.91	2	-8.815	7
571	58	1	max	.048	2	.064	1	.065	2	0	1	0	1	0	1	0	1
572			min	-.054	7	-.066	6	-.083	7	0	1	0	1	0	1	0	1
573		2	max	.048	2	.047	7	.074	2	1.248	7	1.183	2	.469	1	.875	6
574			min	-.054	7	-.05	2	-.074	7	-1.183	2	-1.248	7	-.676	6	-.607	1
575		3	max	.048	2	.047	7	.083	2	2.406	7	2.457	2	.926	2	1.309	7
576			min	-.054	7	-.05	2	-.065	7	-2.457	2	-2.406	7	-1.012	7	-1.198	2
577		4	max	.048	2	.052	6	.093	2	3.474	7	3.82	2	1.647	2	1.63	7
578			min	-.054	7	-.054	1	-.056	7	-3.82	2	-3.474	7	-1.259	7	-2.131	2
579		5	max	.036	7	.083	1	1.033	2	0	1	0	1	0	1	0	1
580			min	-.038	2	-.049	6	-1.472	7	0	1	0	1	0	1	0	1
581	59	1	max	.049	1	.06	1	.079	6	0	1	0	1	0	1	0	1
582			min	-.055	6	-.058	6	-.06	1	0	1	0	1	0	1	0	1
583		2	max	.056	1	.05	1	.069	6	1.179	1	1.256	6	.819	2	.787	7
584			min	-.063	6	-.048	6	-.069	1	-1.256	6	-1.179	1	-.608	7	-1.06	2
585		3	max	.064	1	.04	1	.06	6	2.35	1	2.325	6	.906	2	1.072	7
586			min	-.071	6	-.038	6	-.078	1	-2.325	6	-2.35	1	-.828	7	-1.172	2
587		4	max	.072	1	.069	7	.051	6	3.514	1	3.205	6	1.23	6	2.12	1

Envelope Member Section Stresses (Continued)

	Member	Sec		Axial[ksi]	LC	y Shear[...	LC	z Shear[...	LC	y-Top[ksi]	LC	y-Bot[ksi]	LC	z-Top[ksi]	LC	z-Bot[ksi]	LC
588			min	-.078	6	-.066	2	-.087	1	-3.205	6	-3.514	1	-1.638	1	-1.592	6
589		5	max	.031	2	.043	2	1.551	2	0	1	0	1	0	1	0	1
590			min	-.028	7	-.097	7	-1.098	7	0	1	0	1	0	1	0	1
591	60	1	max	.046	7	.083	7	.068	2	0	1	0	1	0	1	0	1
592			min	-.052	2	-.082	2	-.049	7	0	1	0	1	0	1	0	1
593		2	max	.054	7	.053	7	.059	2	1.208	7	1.295	2	.657	1	.58	6
594			min	-.059	2	-.053	2	-.058	7	-1.295	2	-1.208	7	-.448	6	-.851	1
595		3	max	.062	7	.044	6	.05	2	2.213	7	2.207	2	.956	1	1.14	6
596			min	-.067	2	-.041	1	-.068	7	-2.207	2	-2.213	7	-.881	6	-1.237	1
597		4	max	.069	7	.054	6	.041	2	3.015	7	2.735	2	.951	2	1.789	7
598			min	-.075	2	-.051	1	-.077	7	-2.735	2	-3.015	7	-1.382	7	-1.231	2
599		5	max	.036	1	.066	7	1.586	1	0	1	0	6	0	6	0	1
600			min	-.037	6	-.08	2	-1.155	6	0	6	0	1	0	1	0	6
601	61	1	max	0	1	0	2	0	6	0	1	0	1	0	1	0	1
602			min	0	1	0	7	0	3	0	1	0	1	0	1	0	1
603		2	max	.019	3	.036	2	.036	6	.338	2	.338	7	.338	6	.338	1
604			min	.007	2	-.036	7	-.036	1	-.338	7	-.338	2	-.338	1	-.338	6
605		3	max	.723	1	.107	7	.052	1	1.407	2	1.33	7	.882	6	.847	1
606			min	-.983	6	-.116	2	-.055	6	-1.33	7	-1.407	2	-.847	1	-.882	6
607		4	max	.73	1	.071	7	.017	1	.347	7	.45	2	.184	6	.198	1
608			min	-.976	6	-.081	2	-.019	6	-.45	2	-.347	7	-.198	1	-.184	6
609		5	max	0	1	0	7	0	1	0	1	0	1	0	1	0	1
610			min	0	1	0	2	0	6	0	1	0	1	0	1	0	1
611	62	1	max	0	1	0	2	0	6	0	1	0	1	0	1	0	1
612			min	0	1	0	7	0	1	0	1	0	1	0	1	0	1
613		2	max	.019	8	.036	2	.036	6	.338	2	.338	7	.338	6	.338	1
614			min	.007	1	-.036	7	-.036	1	-.338	7	-.338	2	-.338	1	-.338	6
615		3	max	.77	7	.029	7	.123	1	.402	2	.404	7	1.501	6	1.585	1
616			min	-1.019	2	-.027	2	-.113	6	-.404	7	-.402	2	-1.585	1	-1.501	6
617		4	max	.776	7	.026	1	.087	1	.295	1	.254	6	.396	1	.299	6
618			min	-1.013	2	-.023	6	-.077	6	-.254	6	-.295	1	-.299	6	-.396	1
619		5	max	0	1	0	7	0	1	0	1	0	1	0	1	0	1
620			min	0	1	0	2	0	6	0	1	0	1	0	1	0	1
621	63	1	max	0	1	0	2	0	8	0	1	0	1	0	1	0	1
622			min	0	1	0	7	0	1	0	1	0	1	0	1	0	1
623		2	max	.019	3	.036	2	.036	6	.338	2	.338	7	.338	6	.338	1
624			min	.007	7	-.036	7	-.036	1	-.338	7	-.338	2	-.338	1	-.338	6
625		3	max	.369	2	.104	7	.059	2	1.23	2	1.505	7	.899	7	.798	2
626			min	-.701	7	-.086	2	-.074	7	-1.505	7	-1.23	2	-.798	2	-.899	7
627		4	max	.375	2	.068	7	.059	2	.265	6	.209	1	.32	2	.505	7
628			min	-.694	7	-.05	2	-.074	7	-.209	1	-.265	6	-.505	7	-.32	2
629		5	max	0	2	0	7	0	1	0	1	0	1	0	1	0	1
630			min	0	7	0	2	0	8	0	1	0	1	0	1	0	1

PROJECT INFORMATION

SCOPE OF WORK:
- AT&T ANTENNAS: (3) EXISTING ANTENNAS PER SECTOR FOR 3 SECTORS, FOR A TOTAL OF (9) EXISTING ANTENNAS TO REMAIN.
- AT&T RRUs: (2) NEW RRUs PER SECTOR WITH (3) SECTORS, FOR A TOTAL OF (6) NEW RRUs IN EQUIPMENT SHELTER; (3) EXISTING RRU PER SECTOR TO BE REUSED, FOR A TOTAL OF (9) EXISTING RRUs AT ANTENNA.

SITE ADDRESS:	623 HONEYSPOT ROAD STRATFORD, CT 06615	
LATITUDE:	41.1768811	41° 10' 36.7"N
LONGITUDE:	−73.1461661	−73° 08' 46.20"W
USID:	60398	
TOWER OWNER:	CINGULAR SITES	
TYPE OF SITE:	MONOPOLE/INDOOR EQUIPMENT	
MONOPOLE HEIGHT:	102'−0"±	
RAD CENTER:	90'−0"±	
CURRENT USE:	UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY	
PROPOSED USE:	UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY	

DRAWING INDEX

		REV.
T−1	TITLE SHEET	A
GN−1	GROUNDING & GENERAL NOTES	A
A−1	COMPOUND LAYOUT	A
A−2	EQUIPMENT LAYOUTS	A
A−3	ANTENNA LAYOUTS & ELEVATIONS	A
A−4	DETAILS	A
G−1	GROUNDING, ONE−LINE DIAGRAM & DETAILS	A

APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN, ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AMD MAY IMPOSE CHANGES OR SITE MODIFICATIONS.

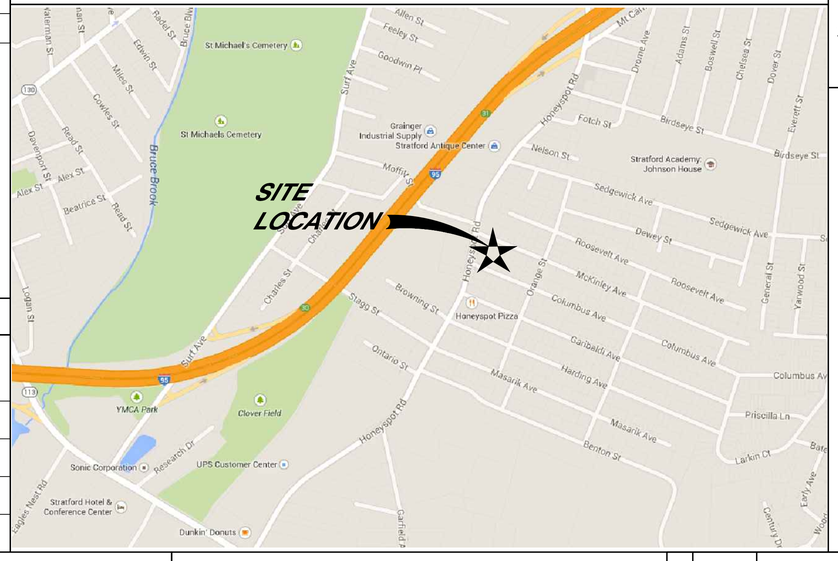
DISCIPLINE:	NAME:	
SITE ACQUISITION:		
CONSTRUCTION MANAGER:		
AT&T PROJECT MANAGER:		

at&t MOBILITY

FA CODE: 10071312
SITE NUMBER: CTU2112
SITE NAME: STRATFORD
PROJECT: LTE 4C & 5C

VICINITY MAP

HEAD EAST ON COCHITUATE RD TOWARD BURR ST (322 FT), TAKE THE RAMP TO I−90 E/MASSPIKE W/SPRINGFIELD/BOSTON (0.6 MI), KEEP LEFT AT THE FORK, FOLLOW SIGNS FOR INTERSTATE 90 W/MASSACHUSETTS TURNPIKE/WORCHESTER/SPRINGFIELD AND MERGE ONTO I−90 W/MASSACHUSETTS TURNPIKE (0.5 MI), MERGE ONTO I−90 W/MASSACHUSETTS TURNPIKE (37.6 MI), TAKE EXIT 9 FOR I−84 TOWARD US−20/HARTFORD/NEW YORK CITY (0.9 MI), CONTINUE ONTO I−84 (40.9 MI), TAKE EXIT 57 ON THE LEFT FOR CT−15 S TOWARD I−91 S/CHARTER OAK BRIDGE/N Y. CITY (0.5 MI), CONTINUE ONTO CT−15 S (0.5 MI), CONTINUE ONTO CT−15 S/US−5 S (0.8 MI), TAKE EXIT 86 TO MERGE ONTO I−91 S TOWARD NEW HAVEN/NEW YORK CITY (36.6 MI), TAKE THE INTERSTATE 95 S EXIT ON THE LEFT TOWARD N.Y. CITY (0.5 MI), MERGE ONTO I−95 S (14.9 MI), TAKE EXIT 31 FOR SOUTH AVE (0.2 MI), CONTINUE ONTO SPADA BLVD (0.1 MI), TURN LEFT ONTO HONEYSPOT RD (0.4 MI), DESTINATION WILL BE ON THE LEFT.



PROJECT TEAM

CLIENT REPRESENTATIVE
COMPANY: EMPIRE TELECOM
ADDRESS: 16 ESQUIRE ROAD, BILLERICA, MA 01821
CONTACT: DAVID COOPER
PHONE: 617−639−4908
EMAIL: dcooper@empiretelecomm.com

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GENERAL NOTES

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY, AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CONNECTICUT ONE CALL SYSTEM, INC. 1-800-922-4455 STOP · CALL BEFORE YOU DIG!

CONNECTICUT LAW REQUIRES TWO WORKING DAYS NOTICE PRIOR TO ANY EARTH MOVING ACTIVITIES BY CALLING 800−922−4455 OR DIAL 811

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SITE NUMBER: CTU2112
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STRATFORD, CT 06615
FAIRFIELD COUNTY

at&t MOBILITY
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
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SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

SEAL:
NICHOLAS D. BARILE
PROFESSIONAL ENGINEER
CT LICENSE NO. 28643

AT&T

DRAWING TITLE: TITLE SHEET

JOB NUMBER	DRAWING NUMBER	REV
16070−EMP	T−1	A

GROUNDING NOTES:

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.

2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.

3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS. TESTS SHALL BE PERFORMED IN ACCORDANCE WITH 25471-000-3PS-EG00-0001, DESIGN & TESTING OF FACILITY GROUNDING FOR CELL SITES.

4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.

5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.

6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED WITH STAINLESS STEEL HARDWARE TO THE BRIDGE AND THE TOWER GROUND BAR.

9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.

11. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

12. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

13. ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF ANSI/TIA 222. FOR TOWERS BEING BUILT TO REV-G OF THE STANDARD, THE WIRE SIZE OF THE BURIED GROUND RING AND CONNECTIONS BETWEEN THE TOWER AND THE BURIED GROUND RING SHALL BE CHANGED FROM 2 AWG TO 2/0 AWG. IN ADDITION, THE MINIMUM LENGTH OF THE GROUND RODS SHALL BE INCREASED FROM EIGHT FEET (8') TO TEN FEET (10').

14. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE ½" OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID TINNED COPPER GROUND WIRE, PER NEC 250.50.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR – EMPIRE TELECOM
   SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   OWNER – AT&T MOBILITY
   OEM – ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR (EMPIRE TELECOM).

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

6. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.

8. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR. ROUTING OF TRENCHING SHALL BE APPROVED BY CONTRACTOR

9. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.

10. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OFF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

11. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

12. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

13. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS UNLESS OTHERWISE SPECIFIED. ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.

14. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy=36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCH UP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.

15. CONSTRUCTION SHALL COMPLY WITH SPECIFICATION 25741-000-3APS-A00Z-00002, "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T MOBILITY SITES."

16. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

17. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK MAY NEED TO BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

18. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

19. SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
    - CONNECTICUT BUILDING CODE: CBC 2016 WITH LOCAL & COUNTY AMENDMENTS
    - NATIONAL ELECTRICAL CODE: NEC 2011 WITH LOCAL & COUNTY AMENDMENTS
    - FIRE/LIFE SAFETY CODE: NFPA-101 2009 WITH LOCAL & COUNTY AMENDMENTS

20. SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
    - AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
    - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, THIRTEENTH EDITION
    - AMERICAN SOCIETY OF TESTING OF MATERIALS, ASTM
    - TELECOMMUNICATIONS INDUSTRY ASSOCIATION (ANSI/TIA-222-G-1), STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
    - TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
    - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, OSHA
    - INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVELY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT
    - TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS

21. FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

22. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS AT THE SITE PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA AND SUBMIT TO THE ENGINEER ANY DISCREPANCIES FROM THE DRAWINGS.

23. INFORMATION SHOWN ON THIS SET OF PLANS TAKEN FROM DRAWINGS PREPARED BY HUDSON DESIGN GROUP, LLC FOR A RECENT UPGRADE DATED 04/18/11. CONTRACTOR TO NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.

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SITE NUMBER: CTU2112
SITE NAME: STRATFORD

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FAIRFIELD COUNTY

at&t MOBILITY
550 COCHITUATE ROAD
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NO.	DATE	REVISIONS	BY	CHK	APP'D
A	12/14/16	ISSUED AS PRELIMINARY	NJM	NDB	NDB

SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

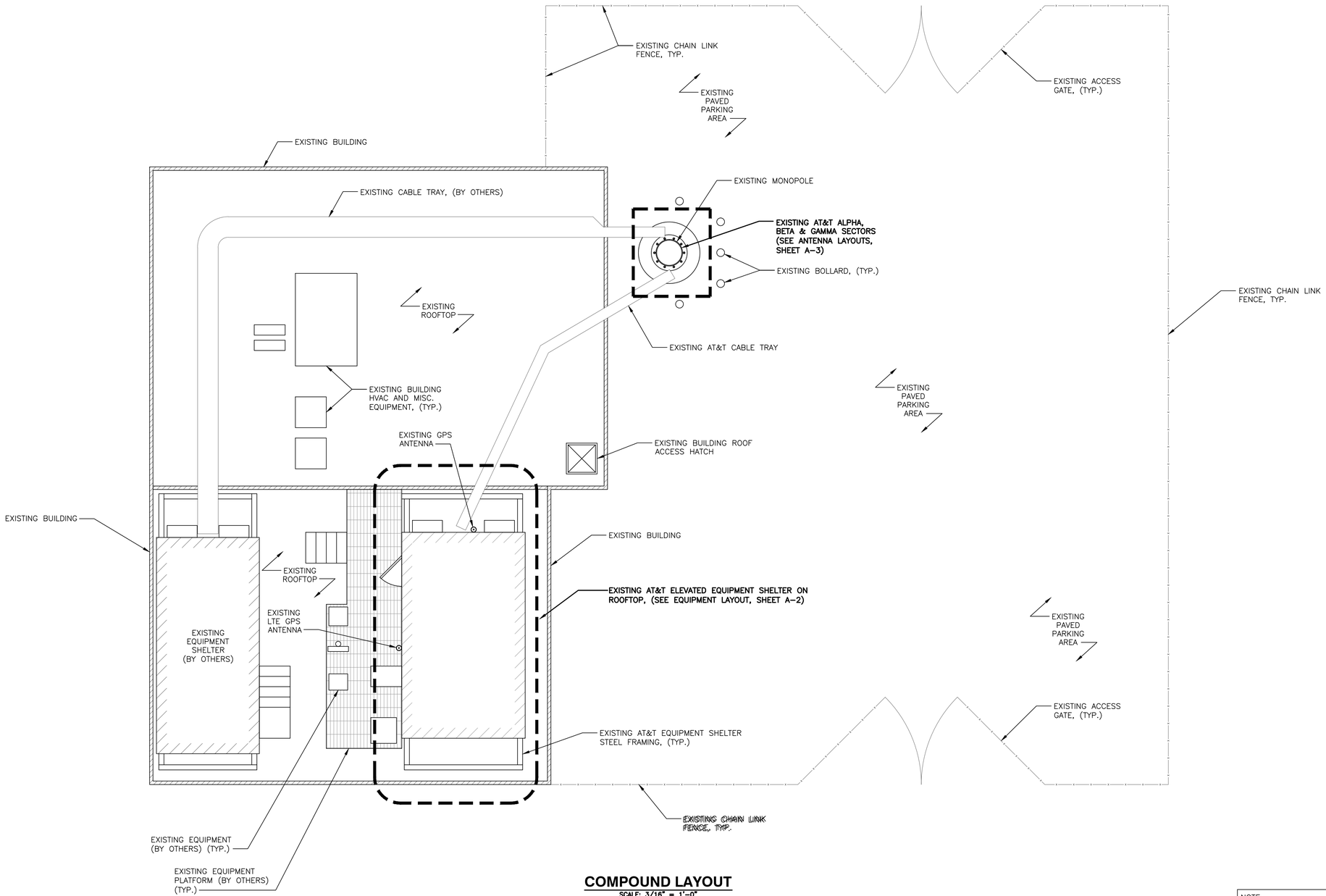
SEAL:

NICHOLAS D. BARILE
PROFESSIONAL ENGINEER
CT LICENSE NO. 28643

AT&T

DRAWING TITLE:
GROUNDING & GENERAL NOTES

JOB NUMBER	DRAWING NUMBER	REV
16070-EMP	GN-1	A



COMPOUND LAYOUT

SCALE: 3/16" = 1'-0"

0 2'-8" 5'-4" 10'-8"

GRAPHIC SCALE: 3/16"=1'-0"

NORTH

NOTE:
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA AND SUBMIT TO THE ENGINEER ANY DISCREPANCIES FROM THE DRAWINGS.

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SEAL:

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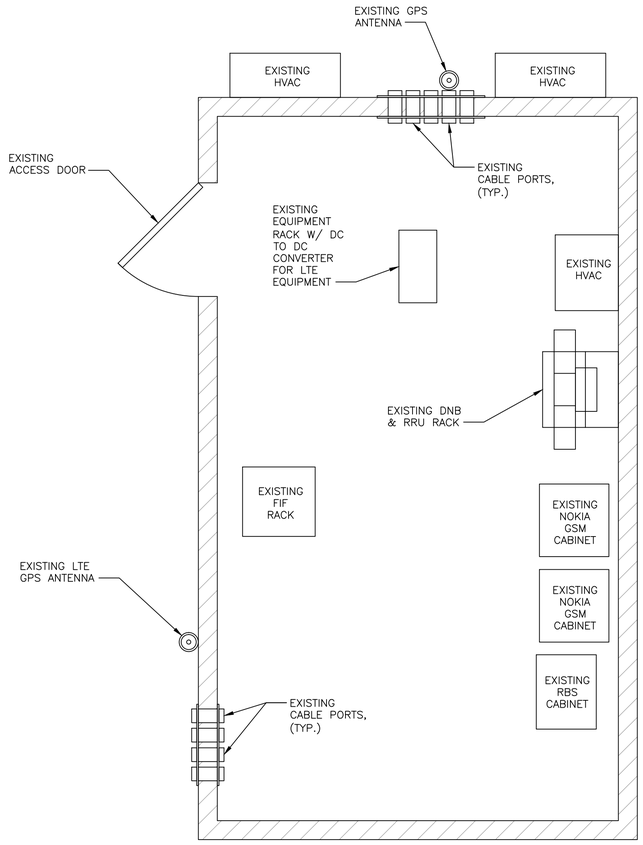
PROFESSIONAL ENGINEER
CT LICENSE NO. 28643

AT&T

DRAWING TITLE:
COMPOUND LAYOUT

JOB NUMBER	DRAWING NUMBER	REV
16070-EMP	A-1	A



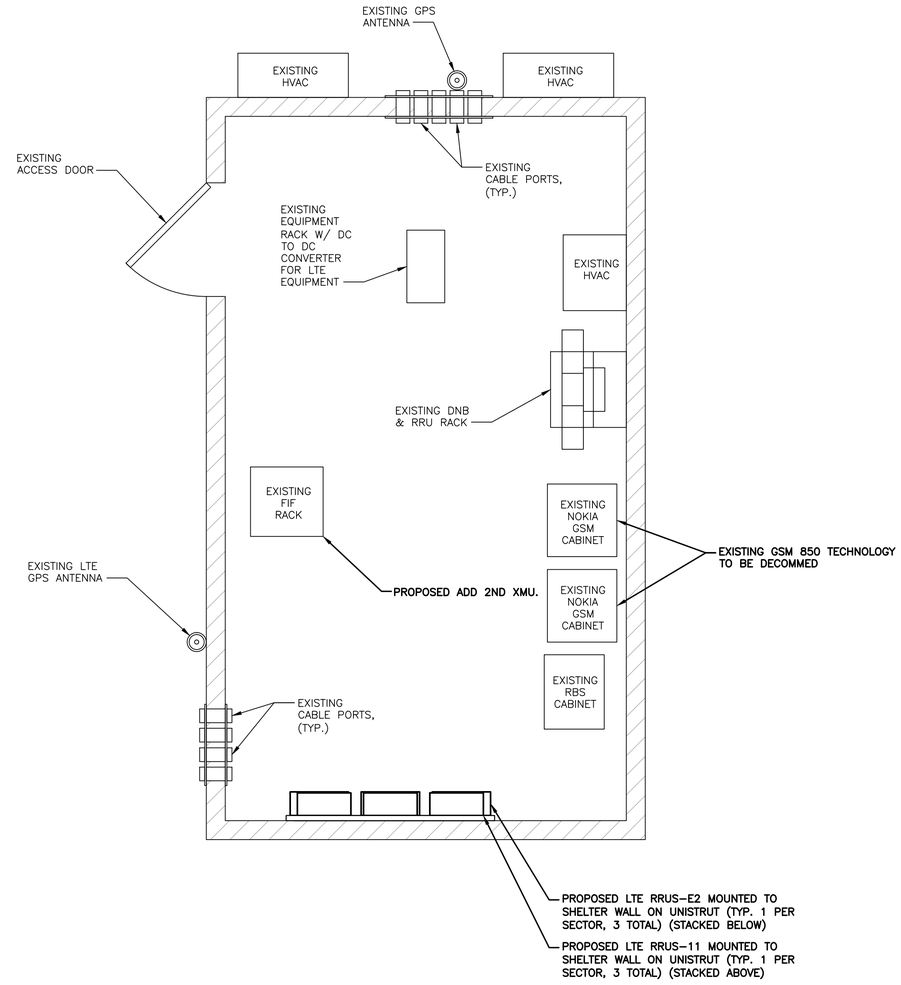
EXISTING EQUIPMENT LAYOUT

SCALE: 1" = 2'-0"

2 0 1 2 4 8

(IN FEET)
1/2 Inch = 1 Foot

NORTH



PROPOSED EQUIPMENT LAYOUT

SCALE: 1" = 2'-0"

2 0 1 2 4 8

(IN FEET)
1/2 Inch = 1 Foot

NORTH

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NO.	DATE	REVISIONS	BY	CHK	APP'D
A	12/14/16	ISSUED AS PRELIMINARY	NJM	NDB	NDB

SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

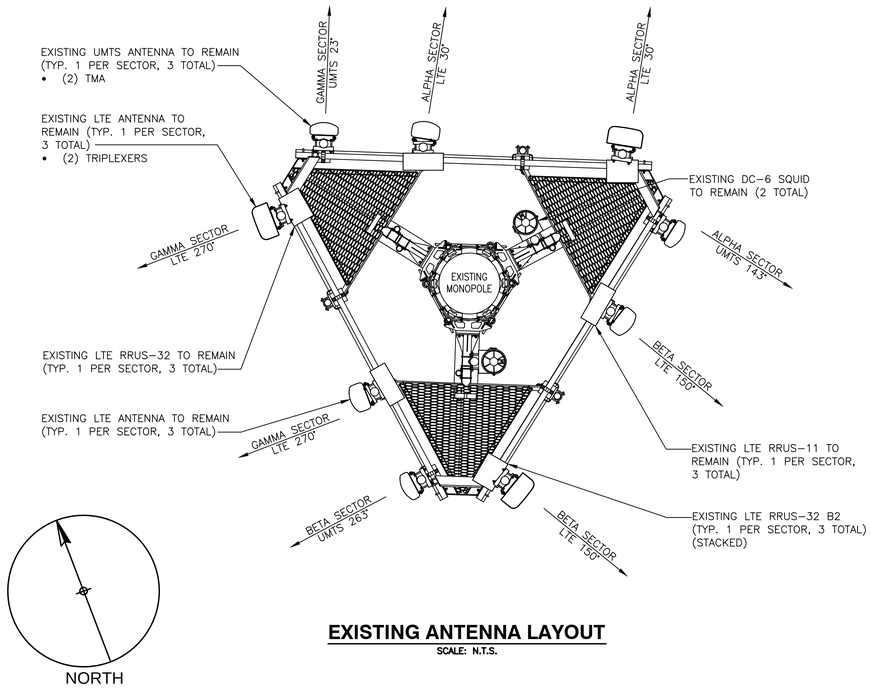
SEAL:

NICHOLAS D. BARILE
PROFESSIONAL ENGINEER
CT LICENSE NO. 28643

AT&T

DRAWING TITLE:
EQUIPMENT LAYOUT

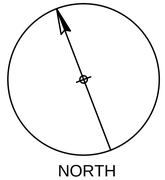
JOB NUMBER	DRAWING NUMBER	REV
16070-EMP	A-2	A



EXISTING ANTENNA LAYOUT

SCALE: N.T.S.

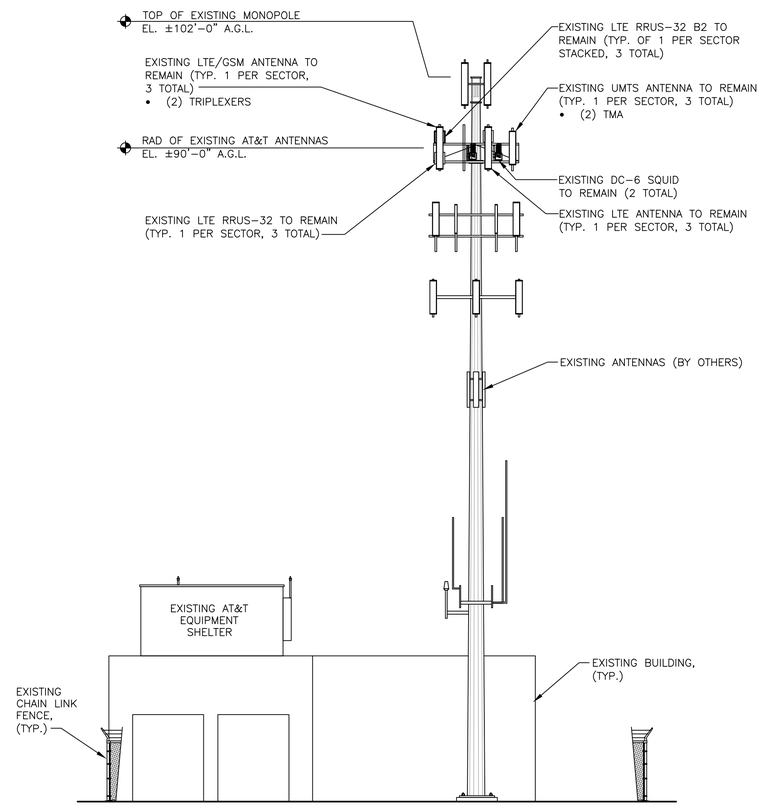
NO NEW WORK PROPOSED



PROPOSED ANTENNA LAYOUT

SCALE: N.T.S.

PROJECT OWNER IS RESPONSIBLE FOR PROVIDING A STRUCTURAL STABILITY ANALYSIS TO DETERMINE THE CAPACITY AND SUITABILITY OF THE EXISTING ANTENNA SUPPORT STRUCTURE TO SAFELY CARRY ALL ADDITIONAL LOADS IMPOSED BY THE PROPOSED EQUIPMENT AS SHOWN HEREIN. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INCORPORATING ANY REQUIRED STRUCTURAL MODIFICATIONS INTO THEIR SCOPE OF WORK.



EXISTING TOWER ELEVATION

SCALE: NTS

COM EX Consultants
115 ROUTE 46
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MOUNTAIN LAKES, NJ 07046
PHONE: 862.209.4300
FAX: 862.209.4301

EMPIRE telecom
16 ESQUIRE ROAD
BILLERICA, MA 01821

SITE NUMBER: CTU2112
SITE NAME: STRATFORD

623 HONEYSPOT ROAD
STRATFORD, CT 06615
FAIRFIELD COUNTY

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550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
A	12/14/16	ISSUED AS PRELIMINARY	NJM	NDB	NDB

SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

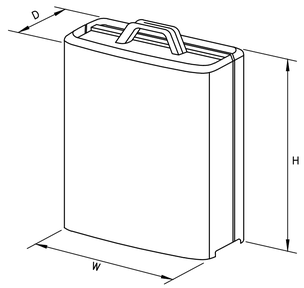
SEAL:

NICHOLAS D. BARILE
PROFESSIONAL ENGINEER
CT LICENSE NO. 28643

AT&T

DRAWING TITLE:
ANTENNA LAYOUTS & ELEVATIONS

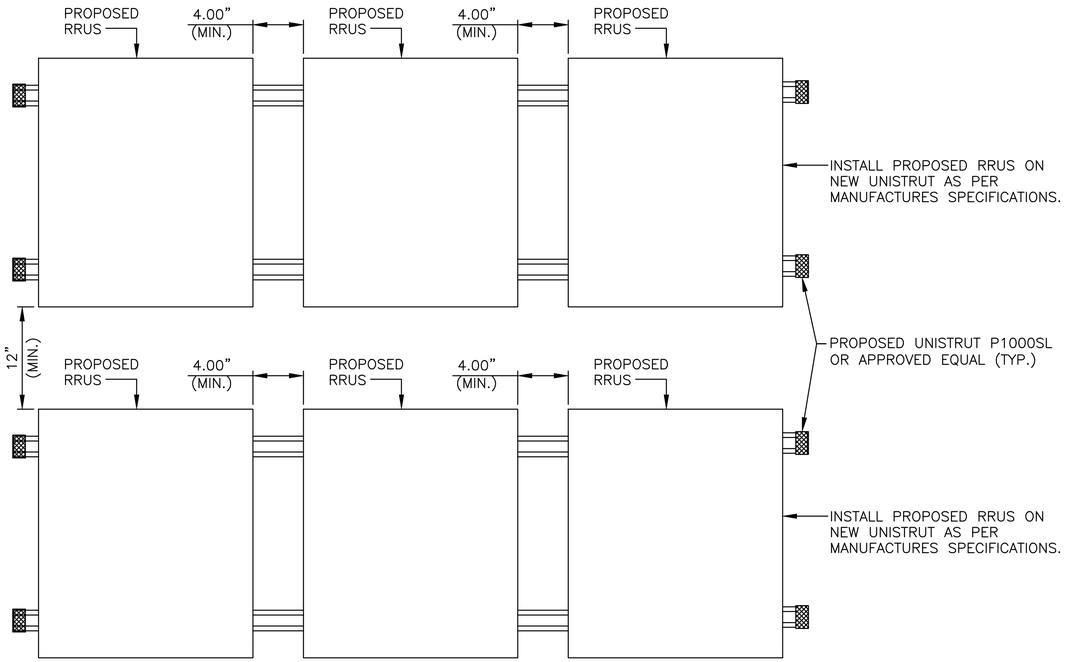
JOB NUMBER	DRAWING NUMBER	REV
16070-EMP	A-3	A



MODEL	L x W x H	WEIGHT
**RRUS–11	19.69" x 16.97" x 7.17"	50.7 LBS
*RRUS–32	29.9"x13.3"x9.5"	77 LBS
*RRUS–32 B2	29.9"x13.3"x9.5"	77 LBS
RRUS–E2	20.4"x18.5"x7.5"	60 LBS

*DENOTES EXISTING.
**DENOTES EXISTING AND PROPOSED

RRUS DETAIL
SCALE: N.T.S.



ELEVATION

RRU MOUNTING DETAIL
SCALE: N.T.S.

NOTES:

1. AT&T SUPPLIES THE RRH. SUBCONTRACTOR SHALL SUPPLY ALL OTHER MATERIALS AND INSTALL ALL MOUNTING HARDWARE. ALU INSTALLS RRH AND MAKES CABLE TERMINATIONS.
2. A SUPPORT FOR A SINGLE RRH SHALL HAVE A MINIMUM OF TWO ANCHORS/FASTENERS FOR EACH UNISTRUT CHANNEL.
3. INSTALL ANCHORS/FASTENERS A MAXIMUM OF 2'–0" ON CENTERS.
   - WOOD STUDS – 1/4"ø LAG BOLT W/ 2" EMBEDMENT IN WOOD.
   - CONCRETE – 1/2"ø HILTI KWIK BOLT III W/ 2–1/4" EMBEDMENT OR EQUIVALENT.
   - THROUGH BOLT – 1/4"ø A36/A307 THREADED ROD W/ NUTS AND WASHERS.
   - MASONRY – 1/2"ø THREADED ROD WITH HILTI HY70 W/5" MINIMUM EMBEDMENT.

   ANCHORS AND UNISTRUT CHANNEL SHALL HAVE HOT–DIPPED GALVANIZED FINISH.
4. MOUNT RRH TO UNISTRUT WITH 3/8"ø UNISTRUT BOLTING HARDWARE AND SPRING NUTS. TYPICAL FOUR PER BRACKET. SUBCONTRACTOR SHALL SUPPLY.
5. NO PAINTING OF THE RRH OR SOLAR SHIELD IS ALLOWED.

EXISTING ANTENNA SCHEDULE

SECTOR	POSITION	MAKE	MODEL	SIZE (INCHES)
ALPHA	A1	POWERWAVE	7770	55"x11"x5"
	A2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	A3	–	–	–
	A4	QUINTEL	QS66512–2	72"x12"x9.6
BETA	B1	POWERWAVE	7770	55"x11"x5"
	B2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	B3	–	–	–
	B4	QUINTEL	QS66512–2	72"x12"x9.6
GAMMA	G1	POWERWAVE	7770	55"x11"x5"
	G2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	G3	–	–	–
	G4	QUINTEL	QS66512–2	72"x12"x9.6

FINAL ANTENNA SCHEDULE

SECTOR	POSITION	MAKE	MODEL	SIZE (INCHES)
ALPHA	A1	POWERWAVE	7770	55"x11"x5"
	A2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	A3	–	–	–
	A4	QUINTEL	QS66512–2	72"x12"x9.6
BETA	B1	POWERWAVE	7770	55"x11"x5"
	B2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	B3	–	–	–
	B4	QUINTEL	QS66512–2	72"x12"x9.6
GAMMA	G1	POWERWAVE	7770	55"x11"x5"
	G2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	G3	–	–	–
	G4	QUINTEL	QS66512–2	72"x12"x9.6

PROPOSED RRU SCHEDULE

SECTOR	MAKE	MODEL	SIZE (INCHES)	ADDITIONAL COMPONENT	SIZE (INCHES)
ALPHA	**ERICSSON**	**RRUS–E2**	**20.4"x18.5"x7.5"**	–	–
	ERICSSON	**RRUS–11**	**19.7"x16.9"x7.2"**	–	–
	ERICSSON	RRUS–32 B2 (EXISTING)	29.9"x13.3"x9.5"		
	ERICSSON	RRUS–11 (EXISTING)	19.7"x16.9"x7.2"		
	ERICSSON	RRUS–32 (EXISTING)	29.9"x13.3"x9.5"		
BETA	**ERICSSON**	**RRUS–E2**	**20.4"x18.5"x7.5"**	–	–
	ERICSSON	**RRUS–11**	**19.7"x16.9"x7.2"**	–	–
	ERICSSON	RRUS–32 B2 (EXISTING)	29.9"x13.3"x9.5"		
	ERICSSON	RRUS–11 (EXISTING)	19.7"x16.9"x7.2"		
	ERICSSON	RRUS–32 (EXISTING)	29.9"x13.3"x9.5"		
GAMMA	**ERICSSON**	**RRUS–E2**	**20.4"x18.5"x7.5"**	–	–
	ERICSSON	**RRUS–11**	**19.7"x16.9"x7.2"**	–	–
	ERICSSON	RRUS–32 B2 (EXISTING)	29.9"x13.3"x9.5"		
	ERICSSON	RRUS–11 (EXISTING)	19.7"x16.9"x7.2"		
	ERICSSON	RRUS–32 (EXISTING)	29.9"x13.3"x9.5"		

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NO.	DATE	REVISIONS	BY	CHK	APP'D
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SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

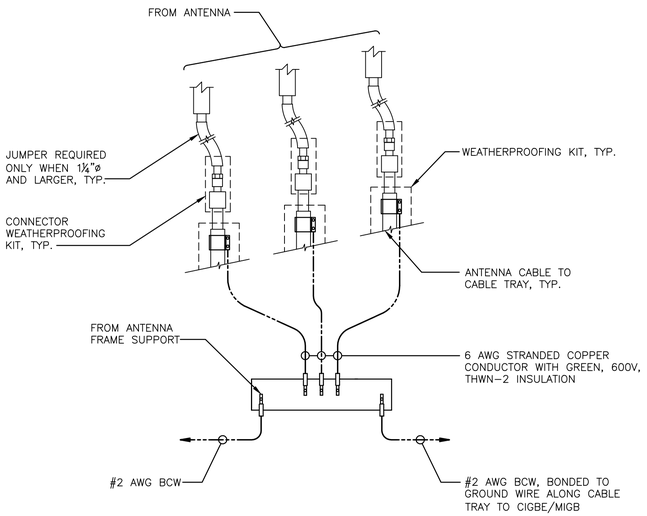
SEAL:

NICHOLAS D. BARILE
PROFESSIONAL ENGINEER
CT LICENSE NO. 28643

AT&T

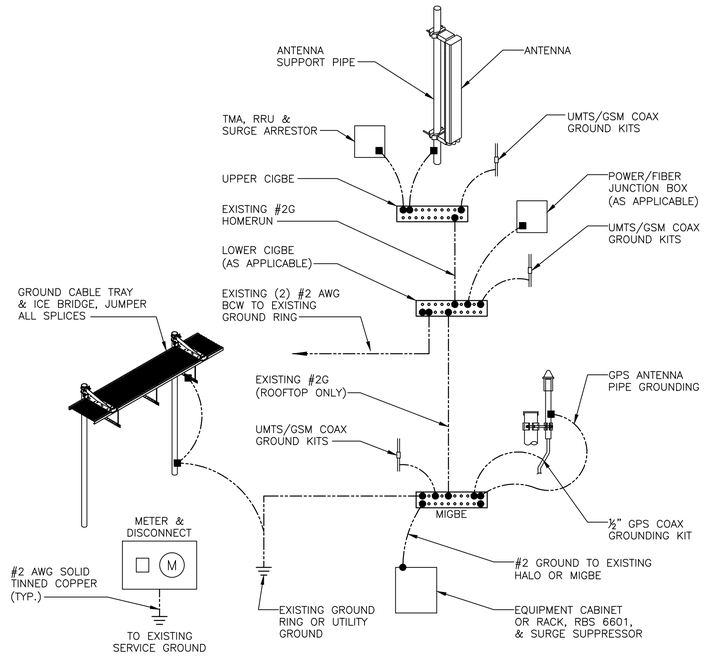
DRAWING TITLE:
DETAILS

JOB NUMBER	DRAWING NUMBER	REV
16070–EMP	A–4	A



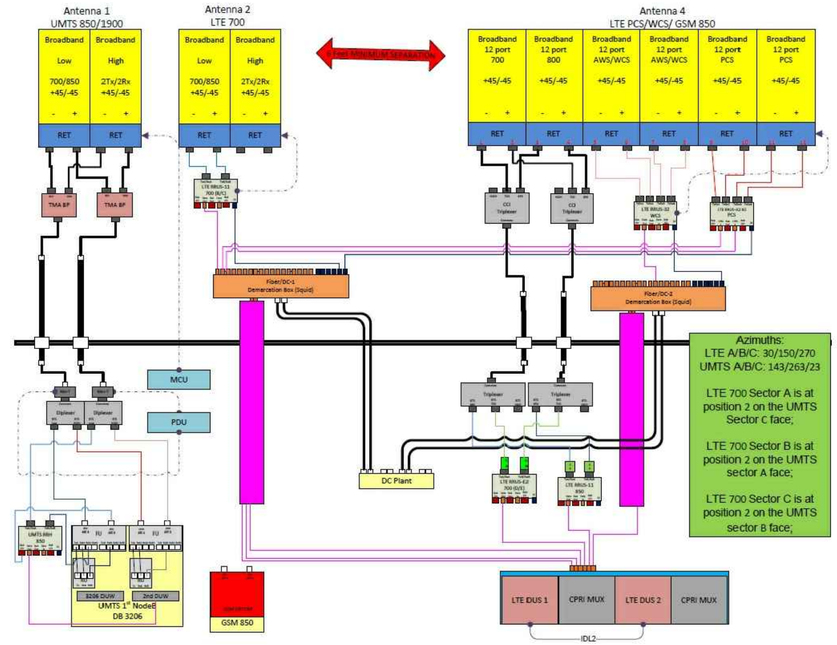
GROUND WIRE TO GROUND BAR CONNECTION DETAIL

SCALE: N.T.S.



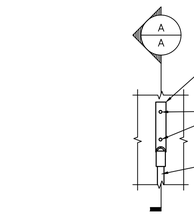
GROUNDING RISER DIAGRAM

SCALE: N.T.S.

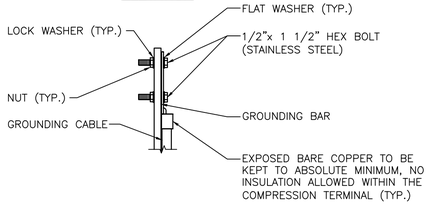


TYPICAL PLUMBING DIAGRAM (PER SECTOR)

SCALE: N.T.S.



ELEVATION



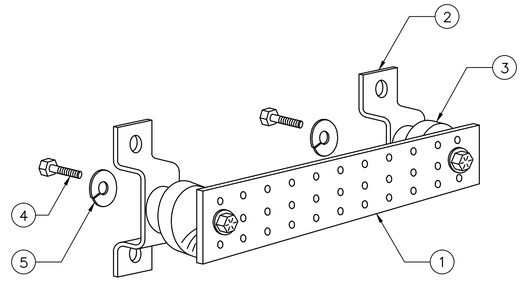
SECTION "A–A"

NOTE:

1. "DOUBLING UP" OR "STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB.

TYPICAL GROUND BAR CONNECTION DETAIL

SCALE: N.T.S.



ITEM NO.	QTY.	DESCRIPTION
1	1	SOLID GROUND BAR (20"x 4"x ¼")
2	2	WALL MOUNTING BRACKET
3	2	INSULATORS
4	4	⅝"–11x1" H.H.C.S.
5	4	⅝" LOCK WASHER

NOTES:

EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION

SECTION "P" – SURGE PRODUCERS
- CABLE ENTRY PORTS (HATCH PLATES) (#2)
- GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
- TELCO GROUND BAR
- COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
- +24V POWER SUPPLY RETURN BAR (#2)
- –48V POWER SUPPLY RETURN BAR (#2)
- RECTIFIER FRAMES

SECTION "A" – SURGE ABSORBERS
- INTERIOR GROUND RING (#2)
- EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2)
- METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)
- BUILDING STEEL (IF AVAILABLE) (#2)

GROUND BAR DETAIL

SCALE: N.T.S.

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SITE NUMBER: CTU2112
SITE NAME: STRATFORD

623 HONEYSPOT ROAD
STRATFORD, CT 06615
FAIRFIELD COUNTY

at&t MOBILITY
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
A	12/14/16	ISSUED AS PRELIMINARY	NJM	NDB	NDB

SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

SEAL:

NICHOLAS D. BARILE
PROFESSIONAL ENGINEER
CT LICENSE NO. 28643

AT&T

DRAWING TITLE:
GROUNDING, ONE-LINE DIAGRAM & DETAILS

JOB NUMBER	DRAWING NUMBER	REV
16070-EMP	G-1	A

PROJECT INFORMATION

SCOPE OF WORK:
- AT&T ANTENNAS: (3) EXISTING ANTENNAS PER SECTOR FOR 3 SECTORS, FOR A TOTAL OF (9) EXISTING ANTENNAS TO REMAIN.
- AT&T RRUs: (2) NEW RRUs PER SECTOR WITH (3) SECTORS, FOR A TOTAL OF (6) NEW RRUs IN EQUIPMENT SHELTER; (3) EXISTING RRU PER SECTOR TO BE REUSED, FOR A TOTAL OF (9) EXISTING RRUs AT ANTENNA.

SITE ADDRESS:	623 HONEYSPOT ROAD STRATFORD, CT 06615	
LATITUDE:	41.1768811	41° 10' 36.7"N
LONGITUDE:	−73.1461661	−73° 08' 46.20"W
USID:	60398	
TOWER OWNER:	CINGULAR SITES	
TYPE OF SITE:	MONOPOLE/INDOOR EQUIPMENT	
MONOPOLE HEIGHT:	102'−0"±	
RAD CENTER:	90'−0"±	
CURRENT USE:	UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY	
PROPOSED USE:	UNMANNED WIRELESS TELECOMMUNICATIONS FACILITY	

DRAWING INDEX

		REV.
T−1	TITLE SHEET	0
GN−1	GROUNDING & GENERAL NOTES	0
A−1	COMPOUND LAYOUT	0
A−2	EQUIPMENT LAYOUTS	0
A−3	ANTENNA LAYOUTS & ELEVATIONS	0
A−4	DETAILS	0
G−1	GROUNDING, ONE−LINE DIAGRAM & DETAILS	0

APPROVALS

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE SUBCONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN, ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AMD MAY IMPOSE CHANGES OR SITE MODIFICATIONS.

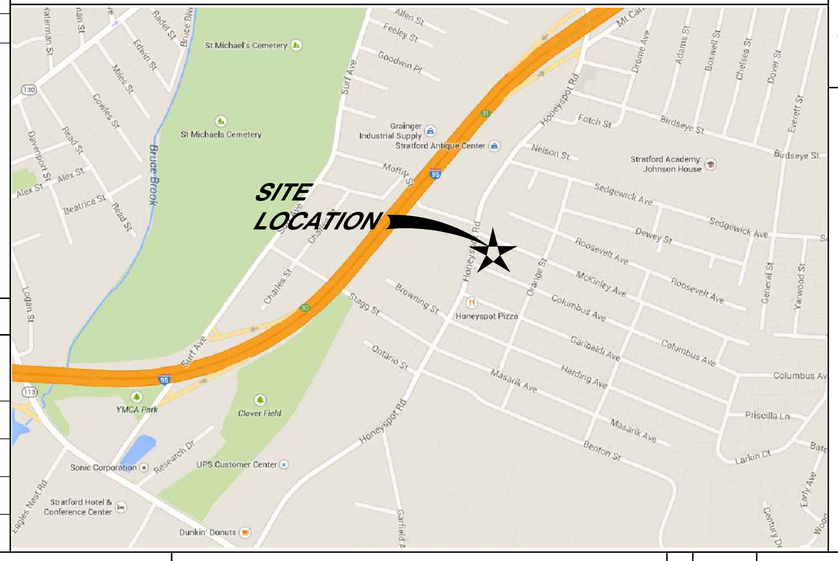
DISCIPLINE:	NAME:	
SITE ACQUISITION:		
CONSTRUCTION MANAGER:		
AT&T PROJECT MANAGER:		

at&t MOBILITY

FA CODE: 10071312
SITE NUMBER: CTU2112
SITE NAME: STRATFORD
PROJECT: LTE 4C & 5C

VICINITY MAP

HEAD EAST ON COCHITUATE RD TOWARD BURR ST (322 FT), TAKE THE RAMP TO I−90 E/MASSPIKE W/SPRINGFIELD/BOSTON (0.6 MI), KEEP LEFT AT THE FORK, FOLLOW SIGNS FOR INTERSTATE 90 W/MASSACHUSETTS TURNPIKE/WORCHESTER/SPRINGFIELD AND MERGE ONTO I−90 W/MASSACHUSETTS TURNPIKE (0.5 MI), MERGE ONTO I−90 W/MASSACHUSETTS TURNPIKE (37.6 MI), TAKE EXIT 9 FOR I−84 TOWARD US−20/HARTFORD/NEW YORK CITY (0.9 MI), CONTINUE ONTO I−84 (40.9 MI), TAKE EXIT 57 ON THE LEFT FOR CT−15 S TOWARD I−91 S/CHARTER OAK BRIDGE/N Y. CITY (0.5 MI), CONTINUE ONTO CT−15 S (0.5 MI), CONTINUE ONTO CT−15 S/US−5 S (0.8 MI), TAKE EXIT 86 TO MERGE ONTO I−91 S TOWARD NEW HAVEN/NEW YORK CITY (36.6 MI), TAKE THE INTERSTATE 95 S EXIT ON THE LEFT TOWARD N.Y. CITY (0.5 MI), MERGE ONTO I−95 S (14.9 MI), TAKE EXIT 31 FOR SOUTH AVE (0.2 MI), CONTINUE ONTO SPADA BLVD (0.1 MI), TURN LEFT ONTO HONEYSPOT RD (0.4 MI), DESTINATION WILL BE ON THE LEFT.



PROJECT TEAM

CLIENT REPRESENTATIVE

COMPANY: EMPIRE TELECOM
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CONTACT: DAVID COOPER
PHONE: 617−639−4908
EMAIL: dcooper@empiretelecomm.com

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EMAIL: nbarile@comexconsultants.com

RF ENGINEER:

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CONTACT: CAMERON SYME
PHONE: 508−596−7146
EMAIL: cs6970@att.com

CONSTRUCTION MANAGEMENT:

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CONTACT: GRZEGORZ "GREG" DORMAN
PHONE: 484−683−1750
EMAIL: gdorman@empiretelecomm.com

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2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.

3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

CONNECTICUT ONE CALL SYSTEM, INC. — STOP · CALL BEFORE YOU DIG! — 1-800-922-4455

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FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	01/16/17	ISSUED AS FINAL	KCD	NDB	NDB

SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

SEAL: STATE OF CONNECTICUT — NICHOLAS D. BARILE — 21641 — REGISTERED PROFESSIONAL ENGINEER — CT PROFESSIONAL ENGINEER

AT&T

DRAWING TITLE: TITLE SHEET

JOB NUMBER	DRAWING NUMBER	REV
16070−EMP	T−1	0

GROUNDING NOTES:

1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.

2. ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.

3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS. TESTS SHALL BE PERFORMED IN ACCORDANCE WITH 25471-000-3PS-EG00-0001, DESIGN & TESTING OF FACILITY GROUNDING FOR CELL SITES.

4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.

5. EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS; 2 AWG STRANDED COPPER FOR OUTDOOR BTS.

6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.

7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.

8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED WITH STAINLESS STEEL HARDWARE TO THE BRIDGE AND THE TOWER GROUND BAR.

9. ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.

10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.

11. METAL CONDUIT AND TRAY SHALL BE GROUNDED AND MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWG COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.

12. GROUND CONDUCTORS USED IN THE FACILITY GROUND AND LIGHTNING PROTECTION SYSTEMS SHALL NOT BE ROUTED THROUGH METALLIC OBJECTS THAT FORM A RING AROUND THE CONDUCTOR, SUCH AS METALLIC CONDUITS, METAL SUPPORT CLIPS OR SLEEVES THROUGH WALLS OR FLOORS. WHEN IT IS REQUIRED TO BE HOUSED IN CONDUIT TO MEET CODE REQUIREMENTS OR LOCAL CONDITIONS, NON-METALLIC MATERIAL SUCH AS PVC PLASTIC CONDUIT SHALL BE USED. WHERE USE OF METAL CONDUIT IS UNAVOIDABLE (E.G., NON-METALLIC CONDUIT PROHIBITED BY LOCAL CODE) THE GROUND CONDUCTOR SHALL BE BONDED TO EACH END OF THE METAL CONDUIT.

13. ALL TOWER GROUNDING SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF ANSI/TIA 222. FOR TOWERS BEING BUILT TO REV-G OF THE STANDARD, THE WIRE SIZE OF THE BURIED GROUND RING AND CONNECTIONS BETWEEN THE TOWER AND THE BURIED GROUND RING SHALL BE CHANGED FROM 2 AWG TO 2/0 AWG. IN ADDITION, THE MINIMUM LENGTH OF THE GROUND RODS SHALL BE INCREASED FROM EIGHT FEET (8') TO TEN FEET (10').

14. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE ½" OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID TINNED COPPER GROUND WIRE, PER NEC 250.50.

GENERAL NOTES:

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:
   - CONTRACTOR – EMPIRE TELECOM
   - SUBCONTRACTOR – GENERAL CONTRACTOR (CONSTRUCTION)
   - OWNER – AT&T MOBILITY
   - OEM – ORIGINAL EQUIPMENT MANUFACTURER

2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR (EMPIRE TELECOM).

3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.

4. DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.

5. UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.

6. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.

7. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.

8. SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY. SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR. ROUTING OF TRENCHING SHALL BE APPROVED BY CONTRACTOR

9. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.

10. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OFF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.

11. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.

12. ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

13. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS UNLESS OTHERWISE SPECIFIED. ALL CONCRETING WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.

14. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy=36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCH UP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.

15. CONSTRUCTION SHALL COMPLY WITH SPECIFICATION 25741-000-3APS-A00Z-00002, "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T MOBILITY SITES."

16. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.

17. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK MAY NEED TO BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.

18. SINCE THE CELL SITE MAY BE ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE REQUIRED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

19. SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.
   - CONNECTICUT BUILDING CODE: CBC 2016 WITH LOCAL & COUNTY AMENDMENTS
   - NATIONAL ELECTRICAL CODE: NEC 2011 WITH LOCAL & COUNTY AMENDMENTS
   - FIRE/LIFE SAFETY CODE: NFPA-101 2009 WITH LOCAL & COUNTY AMENDMENTS

20. SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:
   - AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
   - AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, THIRTEENTH EDITION
   - AMERICAN SOCIETY OF TESTING OF MATERIALS, ASTM
   - TELECOMMUNICATIONS INDUSTRY ASSOCIATION (ANSI/TIA-222-G-1), STRUCTURAL STANDARDS FOR STEEL ANTENNA TOWER AND ANTENNA SUPPORTING STRUCTURES:
   - TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS
   - OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION, OSHA
   - INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVELY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT
   - TELCORDIA GR-1503, COAXIAL CABLE CONNECTIONS

21. FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

22. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES AND EXISTING CONDITIONS AT THE SITE PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA AND SUBMIT TO THE ENGINEER ANY DISCREPANCIES FROM THE DRAWINGS.

23. INFORMATION SHOWN ON THIS SET OF PLANS TAKEN FROM DRAWINGS PREPARED BY HUDSON DESIGN GROUP, LLC FOR A RECENT UPGRADE DATED 04/18/11. CONTRACTOR TO NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO COMMENCEMENT OF CONSTRUCTION.

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FAX: 862.209.4301

EMPIRE telecom
16 ESQUIRE ROAD
BILLERICA, MA 01821

SITE NUMBER: CTU2112
SITE NAME: STRATFORD

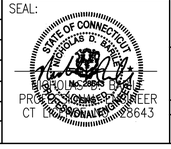
623 HONEYSPOT ROAD
STRATFORD, CT 06615
FAIRFIELD COUNTY

at&t MOBILITY
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	01/16/17	ISSUED AS FINAL	KCD	NDB	NDB

SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

SEAL:



PRINCIPAL ENGINEER
CT LICENSE NO. 23643

AT&T

DRAWING TITLE:
GROUNDING & GENERAL NOTES

JOB NUMBER	DRAWING NUMBER	REV
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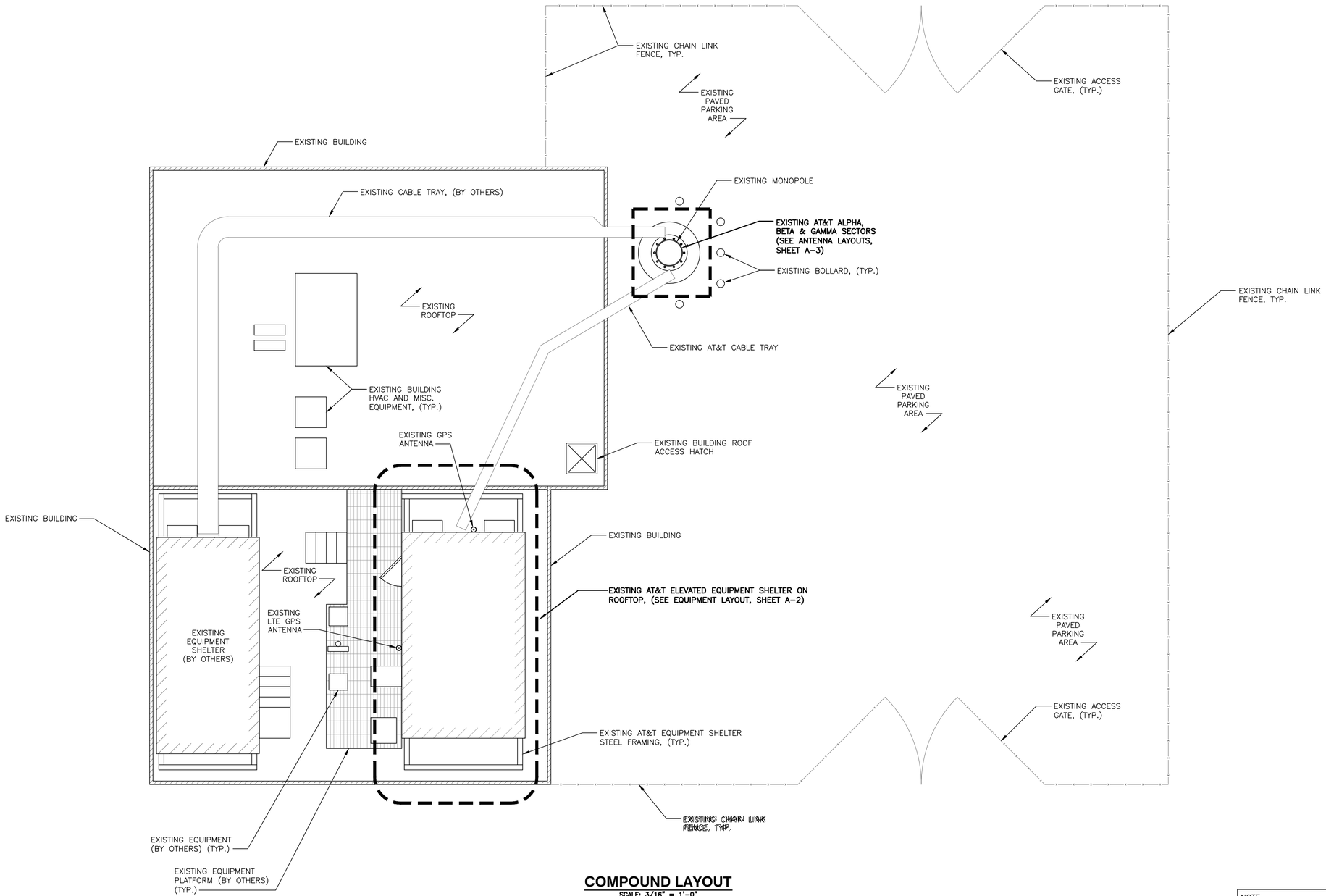

COMPOUND LAYOUT

SCALE: 3/16" = 1'-0"

0 2'-8" 5'-4" 10'-8"

GRAPHIC SCALE: 3/16"=1'-0"

NORTH

NOTE:
CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, ELEVATIONS, ANGLES, AND EXISTING CONDITIONS AT THE SITE PRIOR TO FABRICATION AND/OR INSTALLATION OF ANY WORK IN THE CONTRACT AREA AND SUBMIT TO THE ENGINEER ANY DISCREPANCIES FROM THE DRAWINGS.

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SITE NAME: STRATFORD

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FAIRFIELD COUNTY

at&t MOBILITY
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FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	01/16/17	ISSUED AS FINAL	KCD	NDB	NDB

SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

SEAL:
STATE OF CONNECTICUT
DOUGLAS D. BAKER
LICENSED PROFESSIONAL ENGINEER
SHIELDS MODEL 20885
PROFESSIONAL ENGINEER
CT PROFESSIONAL ENGINEER #23643

AT&T

DRAWING TITLE:
COMPOUND LAYOUT

JOB NUMBER	DRAWING NUMBER	REV
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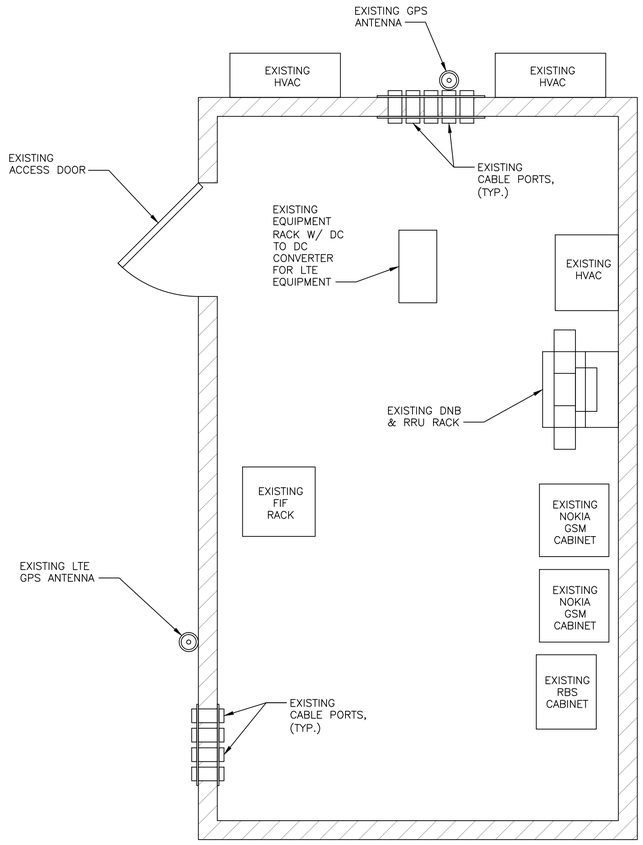
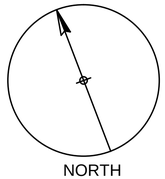


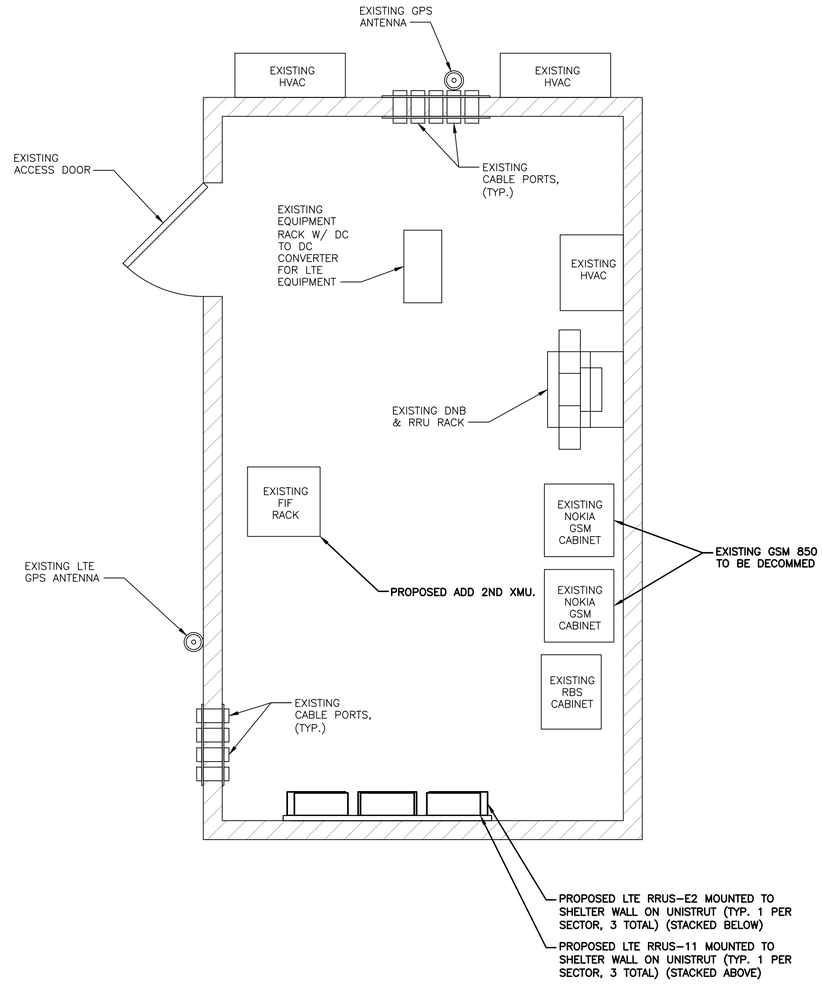
EXISTING EQUIPMENT LAYOUT

SCALE: 1" = 2'-0"

2 0 1 2 4 8

(IN FEET)
1/2 Inch = 1 Foot



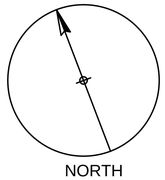


PROPOSED EQUIPMENT LAYOUT

SCALE: 1" = 2'-0"

2 0 1 2 4 8

(IN FEET)
1/2 Inch = 1 Foot



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at&t MOBILITY
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	01/16/17	ISSUED AS FINAL	KCD	NDB	NDB

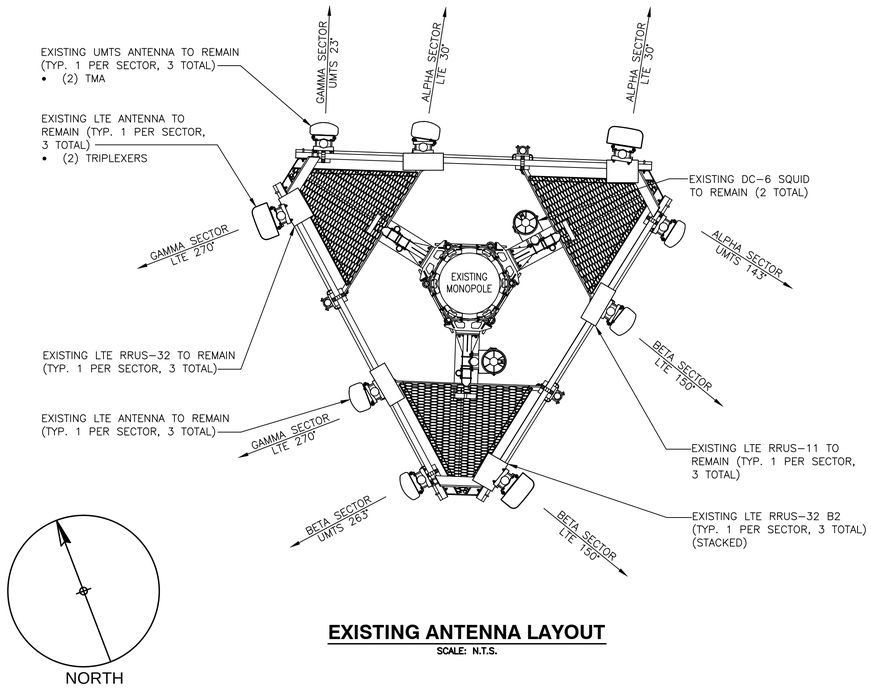
SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

SEAL:
STATE OF CONNECTICUT
NICHOLAS D. BARTELLE
LICENSED
PROFESSIONAL ENGINEER
CT LICENSE NO. 28643

AT&T

DRAWING TITLE:
EQUIPMENT LAYOUT

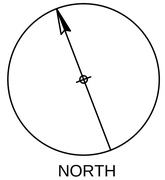
JOB NUMBER	DRAWING NUMBER	REV
16070-EMP	A-2	0



EXISTING ANTENNA LAYOUT

SCALE: N.T.S.

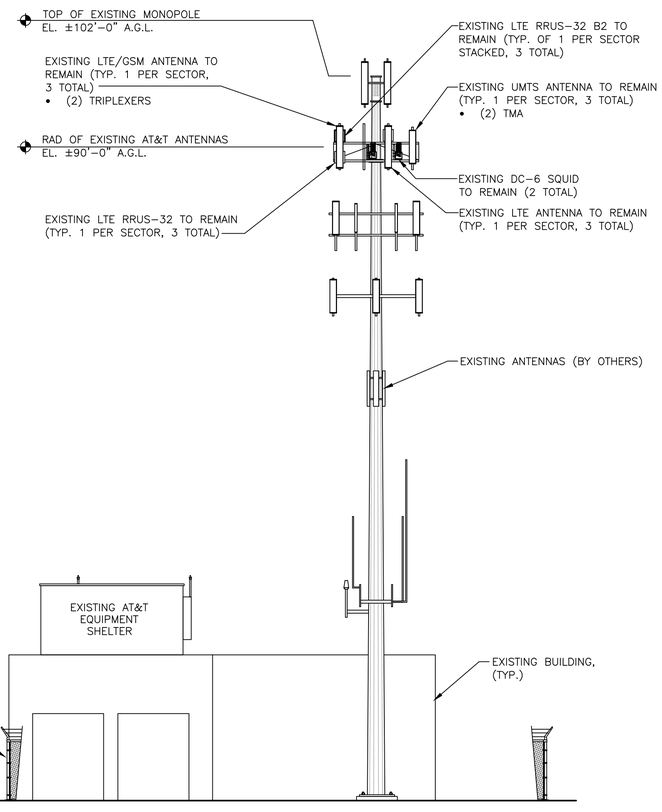
NO NEW WORK PROPOSED



PROPOSED ANTENNA LAYOUT

SCALE: N.T.S.

PROJECT OWNER IS RESPONSIBLE FOR PROVIDING A STRUCTURAL STABILITY ANALYSIS TO DETERMINE THE CAPACITY AND SUITABILITY OF THE EXISTING ANTENNA SUPPORT STRUCTURE TO SAFELY CARRY ALL ADDITIONAL LOADS IMPOSED BY THE PROPOSED EQUIPMENT AS SHOWN HEREIN. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INCORPORATING ANY REQUIRED STRUCTURAL MODIFICATIONS INTO THEIR SCOPE OF WORK.



EXISTING TOWER ELEVATION

SCALE: NTS

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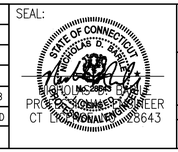
NO.	DATE	REVISIONS	BY	CHK	APP'D
0	01/16/17	ISSUED AS FINAL	KCD	NDB	NDB

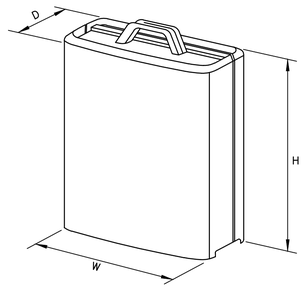
SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

SEAL:


AT&T

DRAWING TITLE:
ANTENNA LAYOUTS & ELEVATIONS

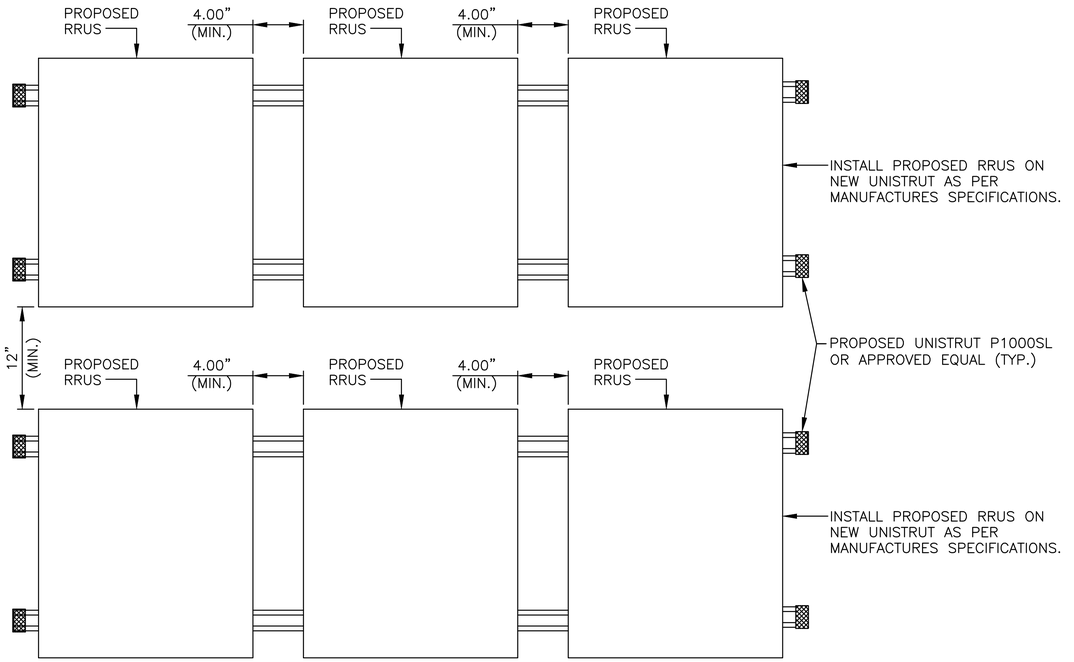
JOB NUMBER	DRAWING NUMBER	REV
16070–EMP	A–3	0



MODEL	L x W x H	WEIGHT
**RRUS–11	19.69" x 16.97" x 7.17"	50.7 LBS
*RRUS–32	29.9"x13.3"x9.5"	77 LBS
*RRUS–32 B2	29.9"x13.3"x9.5"	77 LBS
RRUS–E2	20.4"x18.5"x7.5"	60 LBS

*DENOTES EXISTING.
**DENOTES EXISTING AND PROPOSED

RRUS DETAIL
SCALE: N.T.S.



ELEVATION

RRU MOUNTING DETAIL
SCALE: N.T.S.

NOTES:

1. AT&T SUPPLIES THE RRH. SUBCONTRACTOR SHALL SUPPLY ALL OTHER MATERIALS AND INSTALL ALL MOUNTING HARDWARE. ALU INSTALLS RRH AND MAKES CABLE TERMINATIONS.
2. A SUPPORT FOR A SINGLE RRH SHALL HAVE A MINIMUM OF TWO ANCHORS/FASTENERS FOR EACH UNISTRUT CHANNEL.
3. INSTALL ANCHORS/FASTENERS A MAXIMUM OF 2'–0" ON CENTERS.
   - WOOD STUDS – 1/4"ø LAG BOLT W/ 2" EMBEDMENT IN WOOD.
   - CONCRETE – 1/2"ø HILTI KWIK BOLT III W/ 2–1/4" EMBEDMENT OR EQUIVALENT.
   - THROUGH BOLT – 1/4"ø A36/A307 THREADED ROD W/ NUTS AND WASHERS.
   - MASONRY – 1/2"ø THREADED ROD WITH HILTI HY70 W/5" MINIMUM EMBEDMENT.

   ANCHORS AND UNISTRUT CHANNEL SHALL HAVE HOT–DIPPED GALVANIZED FINISH.
4. MOUNT RRH TO UNISTRUT WITH 3/8"ø UNISTRUT BOLTING HARDWARE AND SPRING NUTS. TYPICAL FOUR PER BRACKET. SUBCONTRACTOR SHALL SUPPLY.
5. NO PAINTING OF THE RRH OR SOLAR SHIELD IS ALLOWED.

EXISTING ANTENNA SCHEDULE

SECTOR	POSITION	MAKE	MODEL	SIZE (INCHES)
ALPHA	A1	POWERWAVE	7770	55"x11"x5"
	A2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	A3	–	–	–
	A4	QUINTEL	QS66512–2	72"x12"x9.6
BETA	B1	POWERWAVE	7770	55"x11"x5"
	B2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	B3	–	–	–
	B4	QUINTEL	QS66512–2	72"x12"x9.6
GAMMA	G1	POWERWAVE	7770	55"x11"x5"
	G2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	G3	–	–	–
	G4	QUINTEL	QS66512–2	72"x12"x9.6

FINAL ANTENNA SCHEDULE

SECTOR	POSITION	MAKE	MODEL	SIZE (INCHES)
ALPHA	A1	POWERWAVE	7770	55"x11"x5"
	A2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	A3	–	–	–
	A4	QUINTEL	QS66512–2	72"x12"x9.6
BETA	B1	POWERWAVE	7770	55"x11"x5"
	B2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	B3	–	–	–
	B4	QUINTEL	QS66512–2	72"x12"x9.6
GAMMA	G1	POWERWAVE	7770	55"x11"x5"
	G2	KMW	AM–X–CD–16–65–00T–RET	72"x11.8"x5.9"
	G3	–	–	–
	G4	QUINTEL	QS66512–2	72"x12"x9.6

PROPOSED RRU SCHEDULE

SECTOR	MAKE	MODEL	SIZE (INCHES)	ADDITIONAL COMPONENT	SIZE (INCHES)
ALPHA	**ERICSSON**	**RRUS–E2**	**20.4"x18.5"x7.5"**	–	–
	ERICSSON	**RRUS–11**	**19.7"x16.9"x7.2"**	–	–
	ERICSSON	RRUS–32 B2 (EXISTING)	29.9"x13.3"x9.5"		
	ERICSSON	RRUS–11 (EXISTING)	19.7"x16.9"x7.2"		
	ERICSSON	RRUS–32 (EXISTING)	29.9"x13.3"x9.5"		
BETA	**ERICSSON**	**RRUS–E2**	**20.4"x18.5"x7.5"**	–	–
	ERICSSON	**RRUS–11**	**19.7"x16.9"x7.2"**	–	–
	ERICSSON	RRUS–32 B2 (EXISTING)	29.9"x13.3"x9.5"		
	ERICSSON	RRUS–11 (EXISTING)	19.7"x16.9"x7.2"		
	ERICSSON	RRUS–32 (EXISTING)	29.9"x13.3"x9.5"		
GAMMA	**ERICSSON**	**RRUS–E2**	**20.4"x18.5"x7.5"**	–	–
	ERICSSON	**RRUS–11**	**19.7"x16.9"x7.2"**	–	–
	ERICSSON	RRUS–32 B2 (EXISTING)	29.9"x13.3"x9.5"		
	ERICSSON	RRUS–11 (EXISTING)	19.7"x16.9"x7.2"		
	ERICSSON	RRUS–32 (EXISTING)	29.9"x13.3"x9.5"		

PROJECT OWNER IS RESPONSIBLE FOR PROVIDING A STRUCTURAL STABILITY ANALYSIS TO DETERMINE THE CAPACITY AND SUITABILITY OF THE EXISTING ANTENNA SUPPORT STRUCTURE TO SAFELY CARRY ALL ADDITIONAL LOADS IMPOSED BY THE PROPOSED EQUIPMENT AS SHOWN HEREIN. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR INCORPORATING ANY REQUIRED STRUCTURAL MODIFICATIONS INTO THEIR SCOPE OF WORK.

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FAX: 862.209.4301

EMPIRE telecom
16 ESQUIRE ROAD
BILLERICA, MA 01821

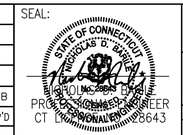
SITE NUMBER: CTU2112
SITE NAME: STRATFORD

623 HONEYSPOT ROAD
STRATFORD, CT 06615
FAIRFIELD COUNTY

at&t MOBILITY
550 COCHITUATE ROAD
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	01/16/17	ISSUED AS FINAL	KCD	NDB	NDB

SCALE: AS SHOWN | DESIGNED BY: NJM | DRAWN BY: TB

SEAL:


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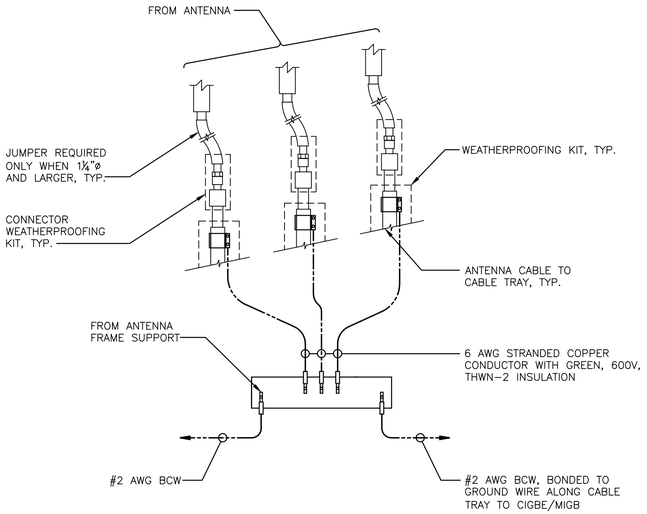
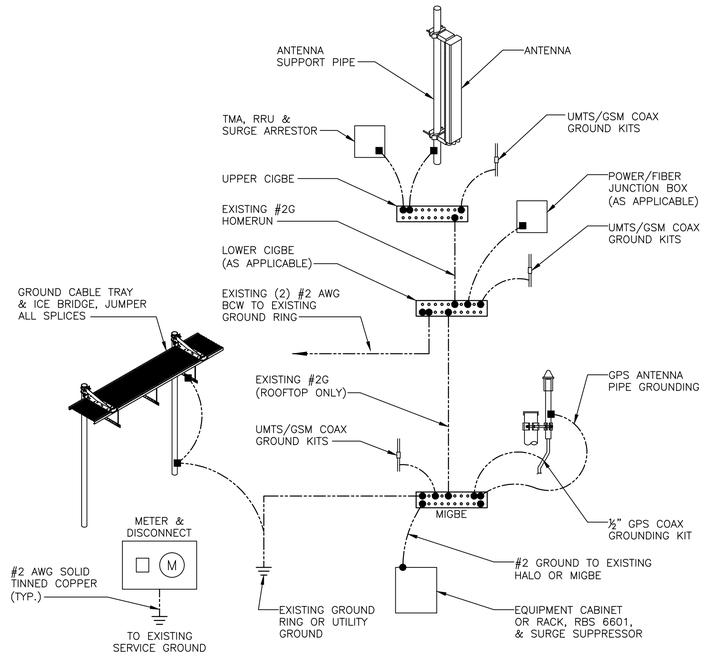
DRAWING TITLE: DETAILS

JOB NUMBER	DRAWING NUMBER	REV
16070–EMP	A–4	0



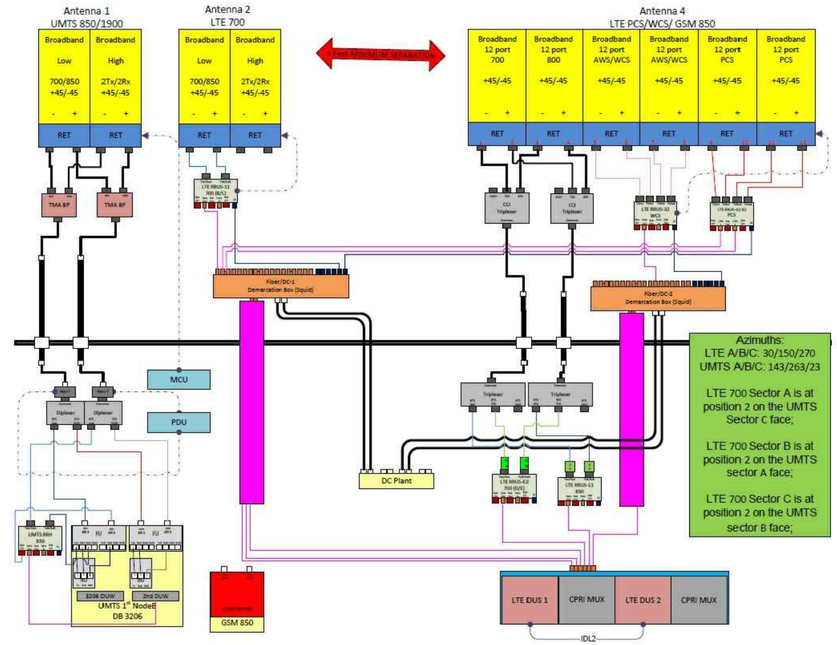
GROUND WIRE TO GROUND BAR CONNECTION DETAIL

SCALE: N.T.S.



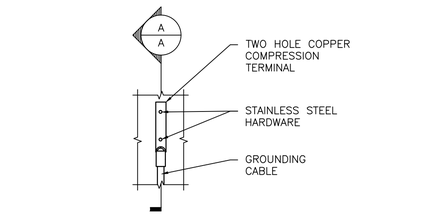
GROUNDING RISER DIAGRAM

SCALE: N.T.S.

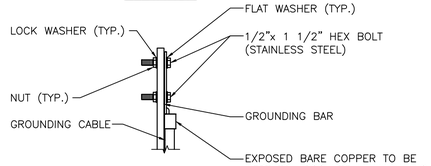


TYPICAL PLUMBING DIAGRAM (PER SECTOR)

SCALE: N.T.S.



ELEVATION



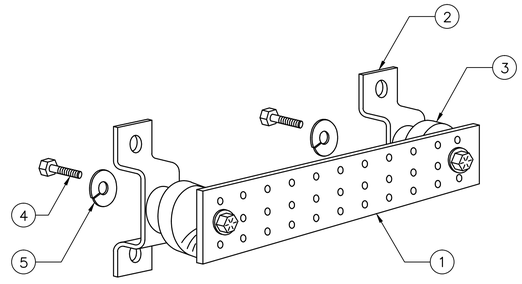
SECTION "A–A"

NOTE:

1. "DOUBLING UP" OR "STACKING" OF CONNECTIONS IS NOT PERMITTED.
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.
3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB.

TYPICAL GROUND BAR CONNECTION DETAIL

SCALE: N.T.S.



ITEM NO.	QTY.	DESCRIPTION
1	1	SOLID GROUND BAR (20"x 4"x ¼")
2	2	WALL MOUNTING BRACKET
3	2	INSULATORS
4	4	⅝"–11x1" H.H.C.S.
5	4	⅝" LOCK WASHER

NOTES:

EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS ORIGIN AND DESTINATION

SECTION "P" – SURGE PRODUCERS
- CABLE ENTRY PORTS (HATCH PLATES) (#2)
- GENERATOR FRAMEWORK (IF AVAILABLE) (#2)
- TELCO GROUND BAR
- COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
- +24V POWER SUPPLY RETURN BAR (#2)
- –48V POWER SUPPLY RETURN BAR (#2)
- RECTIFIER FRAMES

SECTION "A" – SURGE ABSORBERS
- INTERIOR GROUND RING (#2)
- EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2)
- METALLIC COLD WATER PIPE (IF AVAILABLE) (#2)
- BUILDING STEEL (IF AVAILABLE) (#2)

GROUND BAR DETAIL

SCALE: N.T.S.

COM-EX Consultants
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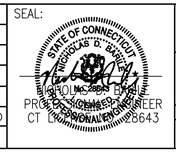

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DRAWING TITLE:
GROUNDING, ONE-LINE DIAGRAM & DETAILS

JOB NUMBER	DRAWING NUMBER	REV
16070-EMP	G-1	0