Twin Falls Archway Project
Ad Hoc Citizens Advisory Committee
Agenda

Thursday, June 28, 2018, 8:45 AM

203 Main Avenue East
Twin Falls, ID 83301

SPECIAL MEETING

Members: Greg Middlekauff, Jeanette Roe, John Kapeleris, Leonard Anderson, Micah Campbell, Nikki Boyd, Paula Brown Sinclair, Rex Lytle, Tony Prater, Ruth Pierce, Melissa Crane
Facilitator: Kathy Markus
Staff: Mitch Humble, Lisa Strickland

1) Confirmation of Quorum/Call Meeting to Order
2) Consent Calendar
   a) Approval of minutes from the following meeting: 05-03-18

      Purpose: **ACTION ITEM**
3) Items for Discussion
   a) Update on Location
   b) Update on Engineering
   c) Unpdate on Funding
   d) Sign Up for Events
   e) Flyer Amendment
4) General Input/Announcements - Public/Staff
5) Upcoming Meeting(s)
   a) August 2, 2018
6) Adjournment

Any person(s) needing special accommodations to participate in the above-noticed meeting could contact Kathy Markus (208) 735-7222 at least two working days before the meeting. Si desea esta información en español, llame Leila Sanchez (208) 735-7287.

Twin Falls Archway Project
Ad Hoc Citizens Advisory Committee
Minutes

Thursday, May 3, 2018, 8:45 AM

203 Main Ave E
Twin Falls, ID 83301

SPECIAL MEETING

Members: Greg Middlekauff, Jeanette Roe, John Kapeleris, Leonard Anderson, Micah Campbell, Nikki Boyd, Paula Brown Sinclair, Rex Lytle, Tony Prater, Ruth Pierce, Melissa Crane
Facilitator: Kathy Markus
Staff: Lisa Strickland

1) **Confirmation of Quorum/Call Meeting to Order**
IT Director Markus called the meeting to order and confirmed a quorum.

2) **Consent Calendar**

a) Approval of minutes from the following meeting(s): 04-05-18
Members Present: Prater, Lytle, Sinclair, Anderson, Roe, Pierce

Motion:
Member Pierce made a motion to approve the consent calendar, as presented. Member Anderson seconded the motion.
Unanimously Approved

3) **Items for Discussion**

a) **Fundraising Update**
Member Anderson provided a brochure highlighting this project for fund raising purposes. The brochure highlights the archway and identifies how donations can be made. He made an update on other donations from John Deere, Kiwanis and a few others.
Member Pierce stated she has done three presentations to the rotary board and they are reviewing the request to make a decision. She would like to receive a donation large enough for the rotary to have a bubble on the recognition sign.
Member Prater stated that Jensen Jewelers has made a donation.
IT Director Markus stated she has contacted Rise n Shine and stated that the do a shoe live at Noon it is a 3 minute interview and there is a spot open from May 14, 2018 forward. She also provided a list of different upcoming events and explained if the committee wants to do a booth at one of these events she will have to know in advance and there will have to be volunteers from the committee to sit at the booth.
Member Pierce suggested Western Days and the Band Concerts would be a good place to have a booth.
IT Director Markust explained she will work on getting information about the Western Days and send out information for members to sign up for times to sit at the booth.

b) Engineering Documents

Rex explained that the costs are up from when it was originally designed, a single beam was presented but now it has two beams and engineered steel supports for the sign construction. This would be approximately 300,000.00 as well as the fact that it is going over a city street will increase the cost. The structure being much more significant is the only thing that he can think of that was not included in the original cost estimate. On the message center a different matrix could be used reducing the cost.

Member Anderson asked if there were in-kind builders, electrical or excavators would that reduce the cost.

IT Director Markus explained that she doesn't have an itemized list so she couldn't say what the in-kind may have on the cost.

Member Sinclair asked if the bid could ask for cost itemization as well as alternative.

IT Director Markus stated she would have to look into the details for a bid request.

4) General Input/Announcements - Public/Staff

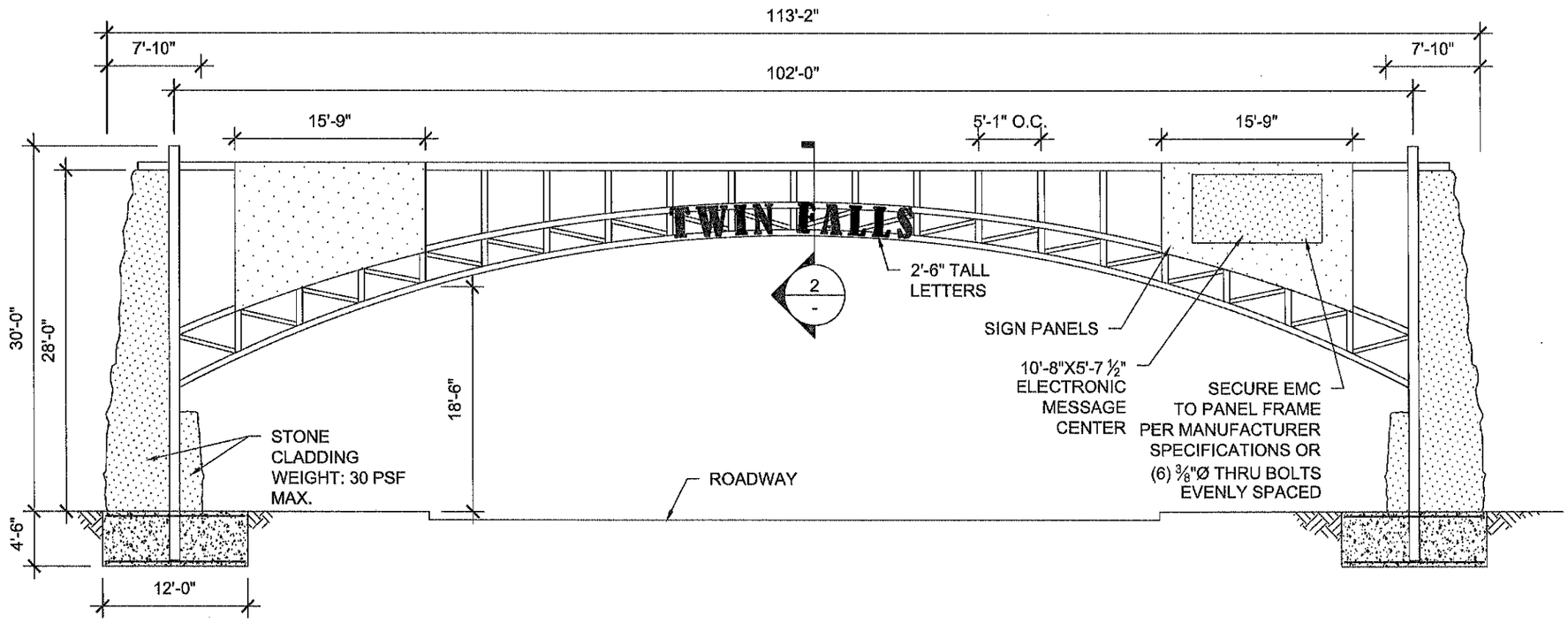
5) Upcoming Meeting(s)

a) June 7, 2018 at 8:45 am

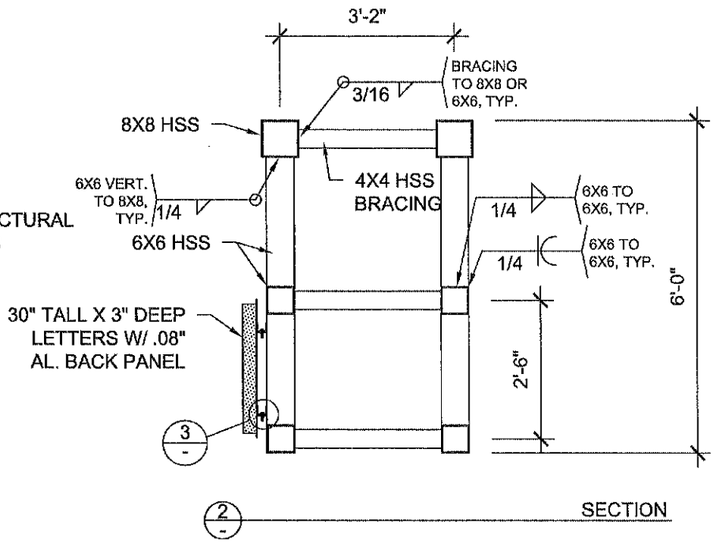
6) Adjournment

_____

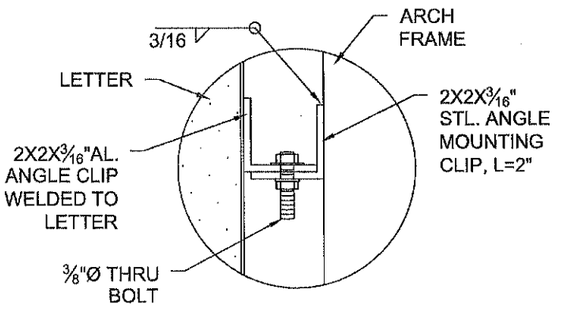
Lisa A. Strickland, Administrative Assistant



1 FRONT ELEVATION



2 SECTION



USE (3) MIN. MOUNTING CLIPS/BOLTS PER LETTER, (2) MIN. FOR LETTER "I" OK

3 TYP. LETTER CONNECTION

GENERAL NOTES

1. DESIGN CODE AND LOADS: AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS
2. WIND VELOCITY: 120 MPH EXPOSURE C
3. CONCRETE 3000 PSI MIN.
4. SQ./RECT. HSS STEEL ASTM A500 GR.B, Fy= 46 KSI MIN. OR CORTEN TUBE STEEL ASTM A847, Fy= 50 KSI MIN. ALSO OK
5. ANGLE STEEL ASTM A36
6. BOLT STEEL ASTM A307
   ALL BOLTS TO BE HOT DIPPED GALVANIZED
7. WELD Fexx: 70 KSI MIN.
8. REINFORCING BAR (REBAR) STEEL ASTM A615 GR. 60 KIS
9. PROVIDE 3" CONCRETE COVER MIN. FOR REBAR
10. PROVIDE PROTECTION AGAINST DISSIMILAR METALS USING ANTI-CORROSIVE PAINT OR NEOPRENE GASKETS.
11. VERTICAL SOIL BEARING PER IBC CLASS 4 (2000 PSF)
12. ALL EXISTING ELEMENTS AND DIMENSIONS TO BE VERIFIED IN FIELD.
13. ALL DIMENSIONS TO BE VERIFIED PRIOR TO FABRICATION.
14. SPECIAL INSPECTION REQUIRED FOR ALL FIELD WELDS.

APR 24 2018

SULLAWAY ENGINEERING
10815 RANCHO BERNARDO ROAD, SUITE 260
SAN DIEGO, CA 92127
(858) 312-5150
www.sullawayeng.com

TWIN FALLS
ARCHWAY
TWIN FALLS, ID

CLIENT:
LYTLE SIGNS INC.

PROJECT NUMBER:
15975

DATE: 04-04-2018

SCALE: NO SCALE

DRAWN BY: JS

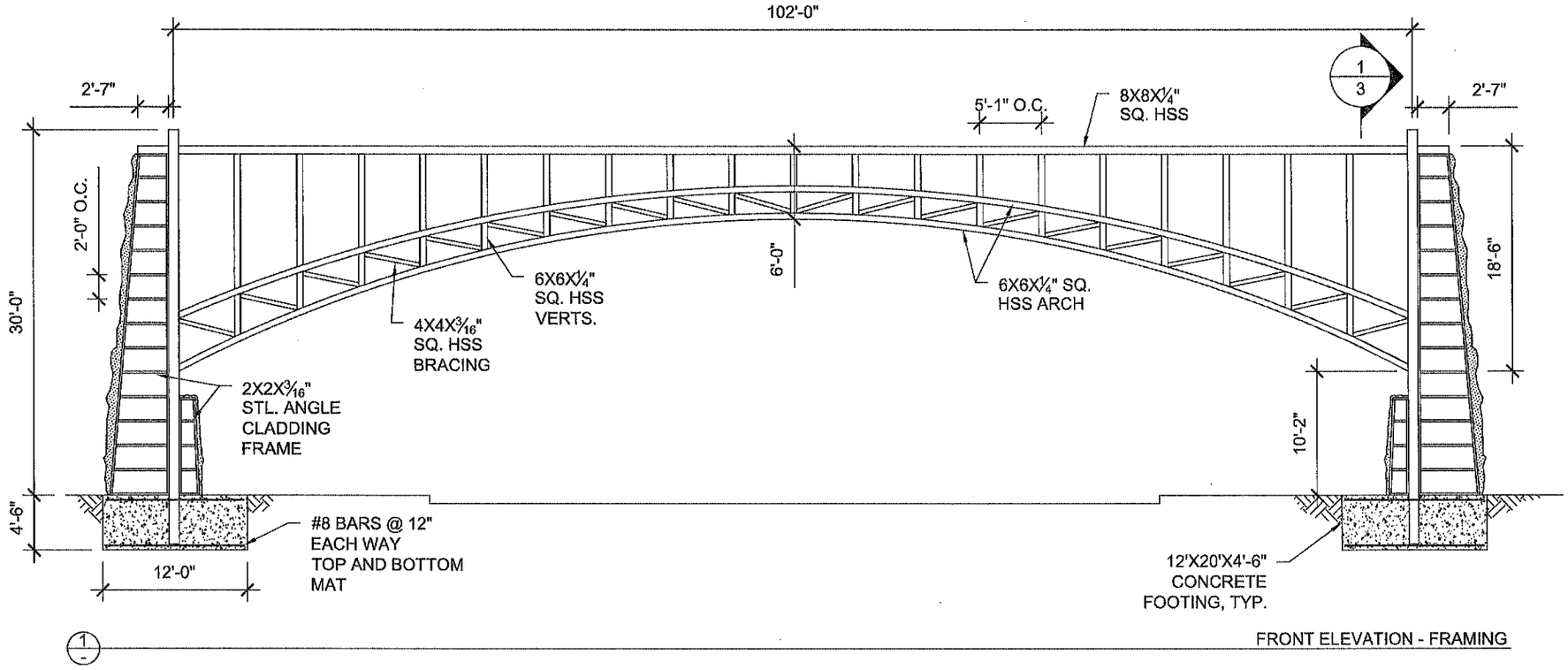
DESIGNED BY: JS

REVISIONS:

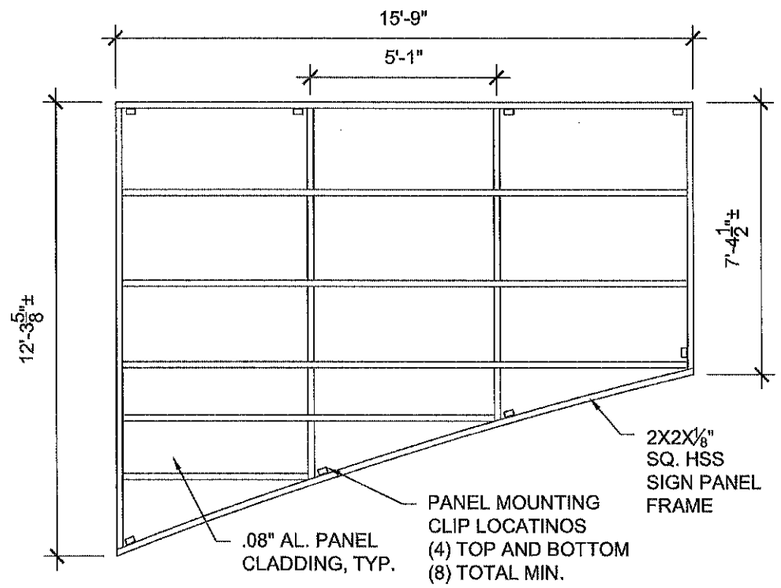
NO.	DATE
1	4-17-18 - REVISED FRAME SPAN TO END IN COLUMN BRACING, NOT COLUMN VERTICALS
2	
3	
4	
5	

PROFESSIONAL ENGINEER LICENSED 14208 STATE OF IDAHO MICHAEL F SULLAWAY

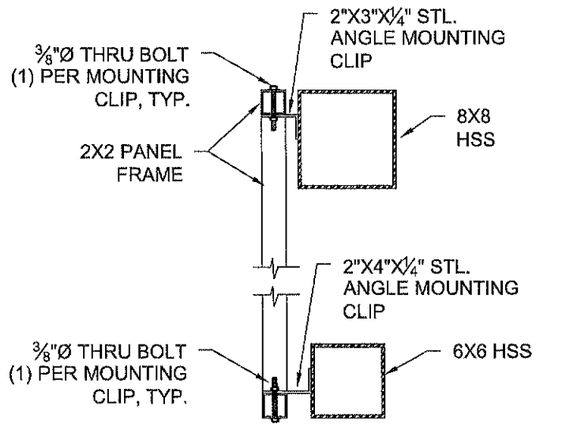
SHEET:
1 of 25



1 FRONT ELEVATION - FRAMING



2 TYP. SIGN PANEL FRAME



3 TYP. PANEL FRAME TO ARCH CONNECTION

APR 24 2018

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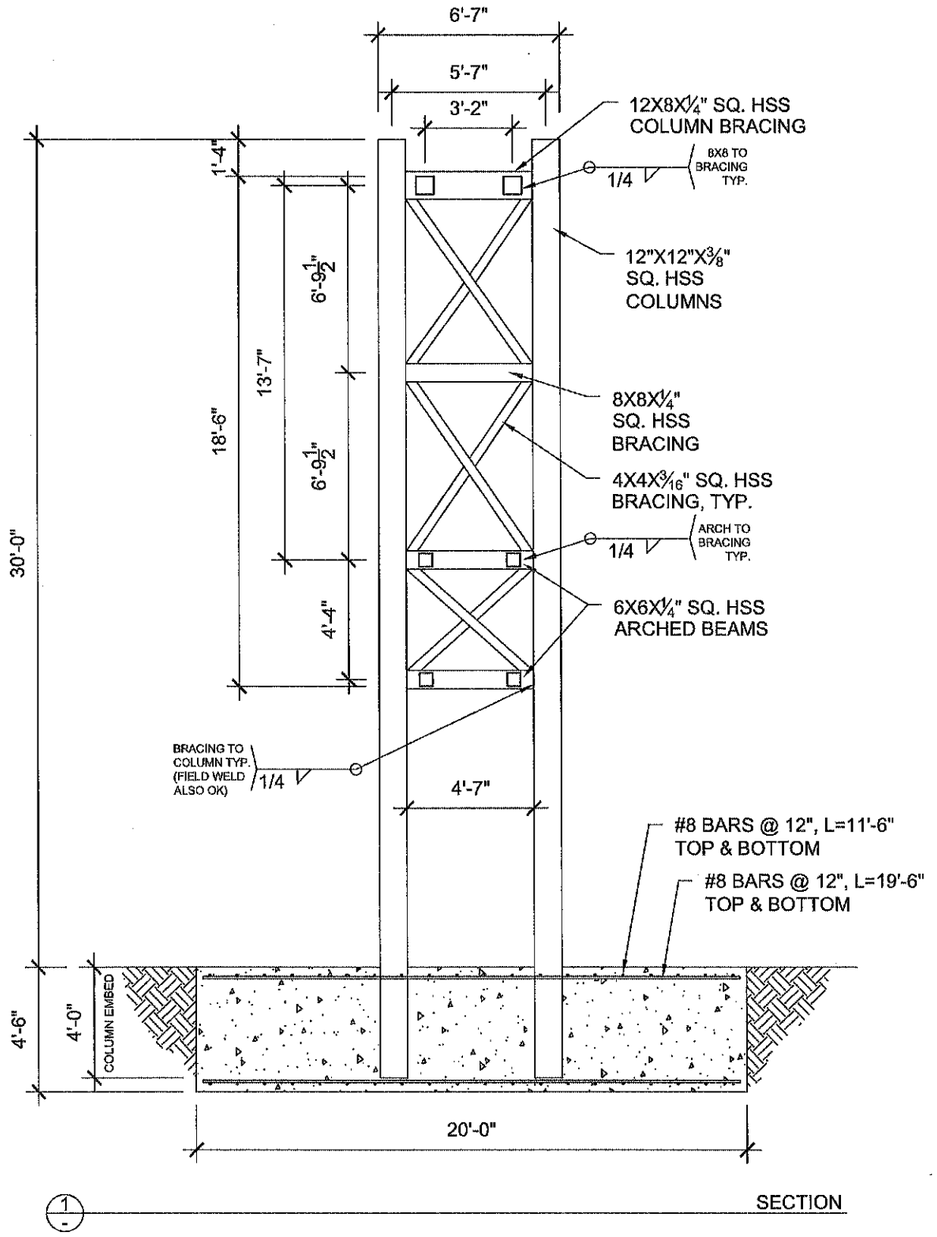
SHEET:
2 of 25



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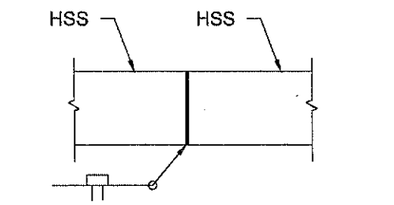
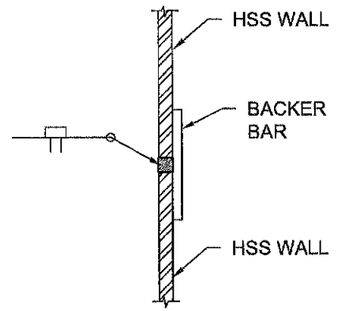


2 SPLICE WELD



3 SPLICE WELD

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SHEET:
3 of 25

SULLAWAY ENGINEERING
10815 Rancho Bernardo RD., SD, CA 92127
projectmanager@sullawayeng.com
Phone: 858-312-5150 Fax: 858-777-3534

PROJECT: Twin Falls - Archway DATE: 3/9/2018
PROJ. NO.: 15975 ENGINEER: JS
CLIENT: Lytle Signs, Inc.

Applied Wind Loads Per AASHTO LRFD Specifications for Structural Supports for Highway signs

Pz= 0.00256*Kz*Kd*G*V^2*Cd eq. 3.8.1-1
Kz= 1.0 (Sec. 3.8.4)
Kd= 0.85 (Table 3.8.5.1)
G= 1.14 (Sec. 3.8.6)
V= 120 mph
Cd truss= 1.25 (Table 3.8.7-1)
Pz truss= 44.65 PSF
Cd panel= 1.15 (Table 3.8.7-1)
Pz panel= 41.08 PSF

Fatigue Loading (Ch. 11)

Galloping: N/A
Natural Wind Gust: Pnw=5.2*Cd*If (eq. 11.7.1.2-1)
Importance factor If= 1.00 (sec. 11.6)
Pnw truss= 6.50 PSF
Pnw Panel= 5.98 PSF

Truck Induced Gust: Ptg=18.8*Cd*(Vt/ 65 mph)^2*If (eq. C11.7.1.3-1)
Importance factor If= 1.00 (sec. 11.6) Vt= 25 mph
Ptg truss= 3.48 PSF
Ptg Panel= 3.20 PSF

Check 3/8" Thru Bolt securing panel frame to mounting clips

Trib. Area= .5(5.25 ft)(12.167 ft) = 32 ft^2
wind force= (32 ft^2)(41 psf)= 1312 lbs
dead load= 1.25(10 psf)(32 ft^2)= 400 lbs

T per anchor= .400 k
T capacity= .75(45 ksi)(.11 in^2)= 3.71 k OK
V per anchor= 1.31 k
V capacity= .75(27 ksi)(.11 in^2)= 2.22 k OK

Fatigue load= (32 ft^2)(6 psf)= 192 lbs
A bolt= .11 in^2
Bolt Stress= .192 k/.11 in^2 = 1.75 ksi < 7 ksi Threshold OK

Check 2"x4"x1/4" Mounting clip for panel frames, L= 3"

Bolt Bearing= 1.31 k
ΦRn= 2.4*D*t*Fu = 2.4(.375 in)(.25")(60 ksi) = 13.5 k OK

Angle Leg Mu= (.400 k)(3")= 1.20 k-in
Z= .25(3")(.25")^2= .047 in^3
ϕM= ϕfyZ= (.9)(36 ksi)(.047 in^3)= 1.52 k-in OK

Check 3/8" Thru Bolt securing EMC to Panel frame - (3) top and bottom - (6) total min.

EMC Area= (5.667 ft)(10.667 ft) = 61 ft^2
wind force= (61 ft^2)(41 psf)= 2501 lbs
dead load= 1.25(10 psf)(61 ft^2)= 763 lbs

T per anchor= .763 k/6 = .127 k
T capacity= .75(45 ksi)(.11 in^2)= 3.71 k OK
V per anchor= 2.501 k/6 = .417 k
V capacity= .75(27 ksi)(.11 in^2)= 2.22 k OK

Fatigue load= (11 ft^2)(6 psf)= 66 lbs
A bolt= .11 in^2
Bolt Stress= .066 k/.11 in^2 = 0.60 ksi < 7 ksi Threshold OK

Check 3/8" Thru Bolt securing letters to mounting clips - (3) per letter min. - (2) OK for letter "I"

Area per letter= (2.50 ft)(2.50 ft) = 6.25 ft^2
wind force= (6.25 ft^2)(41 psf)= 256 lbs
dead load= 1.25(10 psf)(6.25 ft^2)= 78 lbs

T per anchor= .078 k/3 = .026 k
T capacity= .75(45 ksi)(.11 in^2)= 3.71 k OK
V per anchor= .256 k/3 = .085 k
V capacity= .75(27 ksi)(.11 in^2)= 2.22 k OK

Fatigue load= (6.25 ft^2)(6 psf)/3= 13 lbs
A bolt= .11 in^2
Bolt Stress= .013 k/.11 in^2 = 0.12 ksi < 7 ksi Threshold OK

SULLAWAY ENGINEERING
P.O. Box 28789, SD, CA 92198
mikesullaway@gmail.com
Phone: 858-312-5150 Fax: 858-777-3534

PROJECT: Twin Falls Archway DATE: 4/16/18
PROJ. NO.: 15975 ENGINEER: JS
CLIENT: Lytle Signs

Version 3.0

Longitude Direction units; pounds, feet unless noted otherwise

applied shear at grade v= **30** kip unfactored load Z per RISA Report
applied moment at grade m= **622** kip-ft unfactored load Mx per RISA Report
depth of soil above footing h_s= **0** ft
allowable soil bearing p= **2.0** ksf
(use a factor of 1.33 for wind or seismic)

Spread Footing Design

moment m= 757.0 k-ft at base of footing
Footing size (ft) b= **12.00** L= **20.0** h= **4.50** S= 800.2
Footing Weight= 162.0 k signage weight= **40.0** k soil 0.00 total= 202.00
Overturning; M_o= 2020 M_o>1.5M 2.6684 ok
soil pressure; max= 1.795 ksf ok
forces on concrete pad; V= 157.8 k V_r= 252 k (=1.6V)
M= 789 k-ft M_r= 1262 k-ft

Check Slab;

ϕ= 0.9 f_y= 60 ksi f_c= 2.5 ksi 150 lbs/ft3

Flexure A_s= **7.00** d= 50.0 in
$\phi M_n=\phi A_s f_y(d-a/2)$= 18641 k-in = 1553 k-ft $M_r<\phi M_n$ ok
$a=A_s f_y/0.85 f_c b$= 1.373 in

Check minimum $A_{smin}=2\sqrt{f_c}bd/f_y$ = 18 200bd/fy= 24.00 or $1.333A_s$= 9.33 in^2
Use A_s= 9.33 in^2

Shear; $\phi V_n=\phi 2\sqrt{f_c}bd$ ϕV_c= 540.0 ϕ= 0.75 $V_r<\phi V_n$ ok

SULLAWAY ENGINEERING
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mikesullaway@gmail.com
Phone: 858-312-5150 Fax: 858-777-3534

PROJECT: Twin Falls Archway
PROJ. NO.: 15975
CLIENT: Lytle Signs
DATE: 4/16/18
ENGINEER: JS

Version 3.0

Transverse Direction units; pounds, feet unless noted otherwise

applied shear at grade	v= **19** kip	unfactored load	X per RISA Report
applied moment at grade	m= **96** kip-ft	unfactored load	Mz per RISA Report
depth of soil above footing	h_s= **0** ft		
allowable soil bearing	p= **2.0** ksf		

(use a factor of 1.33 for wind or seismic)

Spread Footing Design

moment m= 181.5 k-ft at base of footing

Footing size (ft) b= **20.00** L= **12.0** h= **4.50** S= 480.1

Footing Weight= 162.0 k signage weight= **40.0** k soil 0.00 total= 202.00

Overturning; M_c= 1212 M_c>1.5M 6.6777 ok

soil pressure; max= 1.220 ksf ok

forces on concrete pad; V= 123.7 k V_r= 198 k (=1.6V)

M= 371 k-ft M_r= 594 k-ft

Check Slab;

ϕ= 0.9 f_y= 60 ksi f_c= 2.5 ksi 150 lbs/ft3

Flexure A_s= **4.00** d= 50.0 in

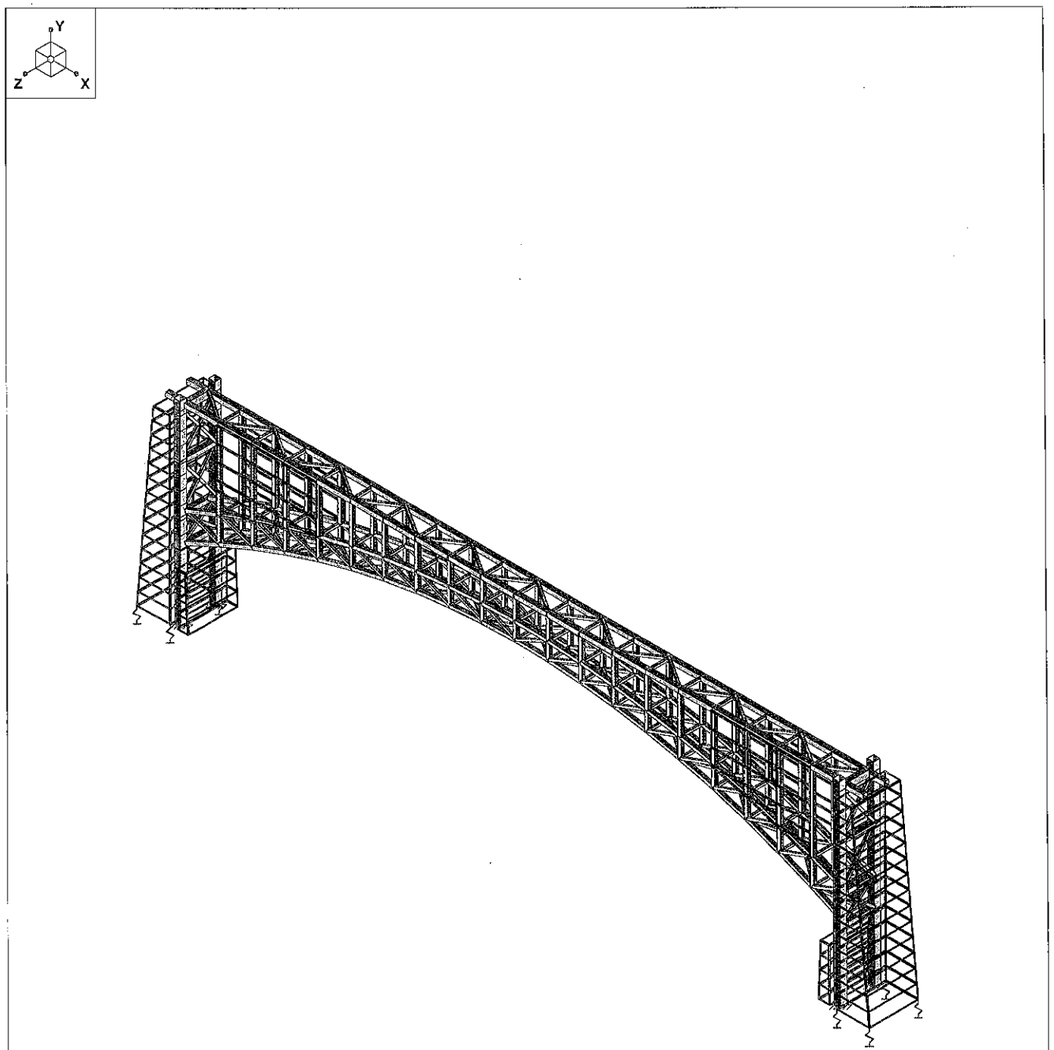
$\phi M_n=\phi A_s f_y(d-a/2)$= 10749 k-in = 895.8 k-ft $M_r<\phi M_n$ ok

$a=A_s f_y/0.85 f_c b$= 0.471 in

Check minimum $A_{smin}=2\sqrt{f_c}bd/f_y$ = 30 200bd/fy= 40.00 or $1.333A_s$= 5.33 in^2

Use A_s= 5.33 in^2

Shear; $\phi V_n=\phi 2\sqrt{f_c}bd$ ϕV_c= 900.0 ϕ= 0.75 $V_r<\phi V_n$ ok



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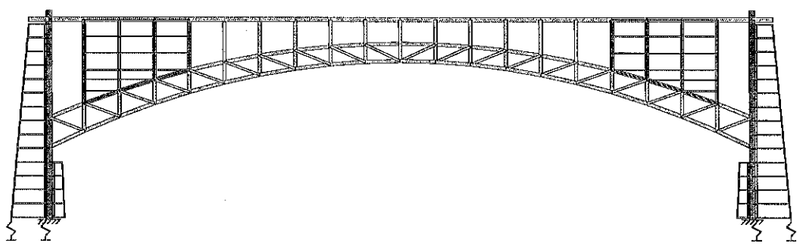

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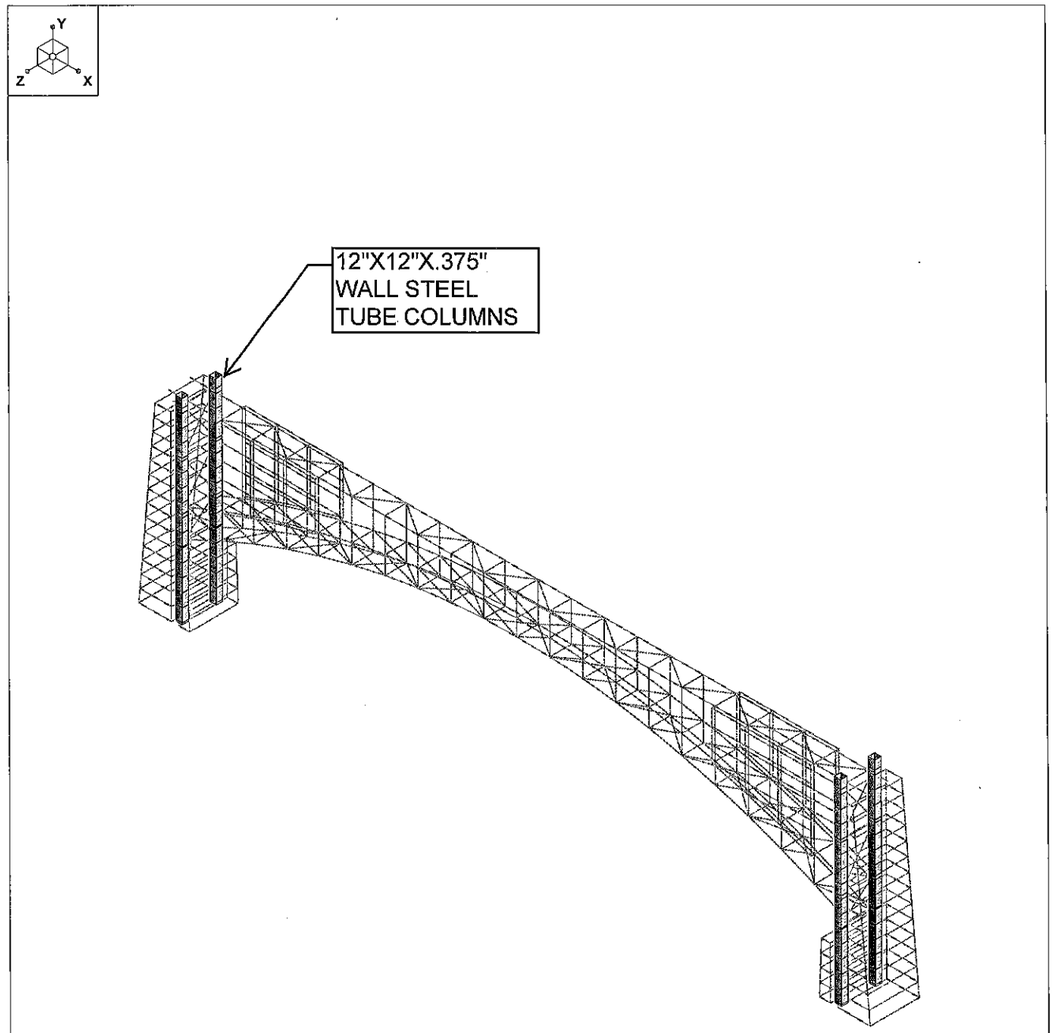

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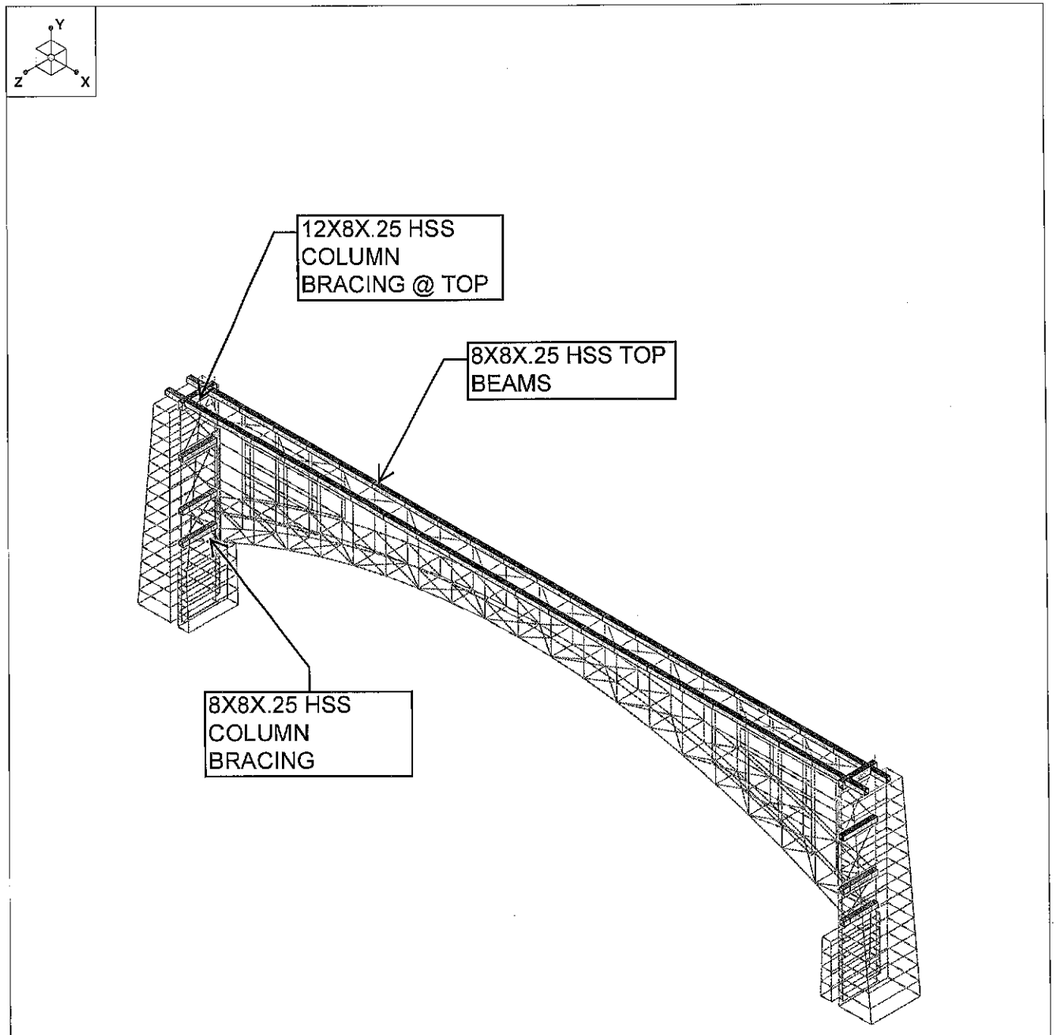

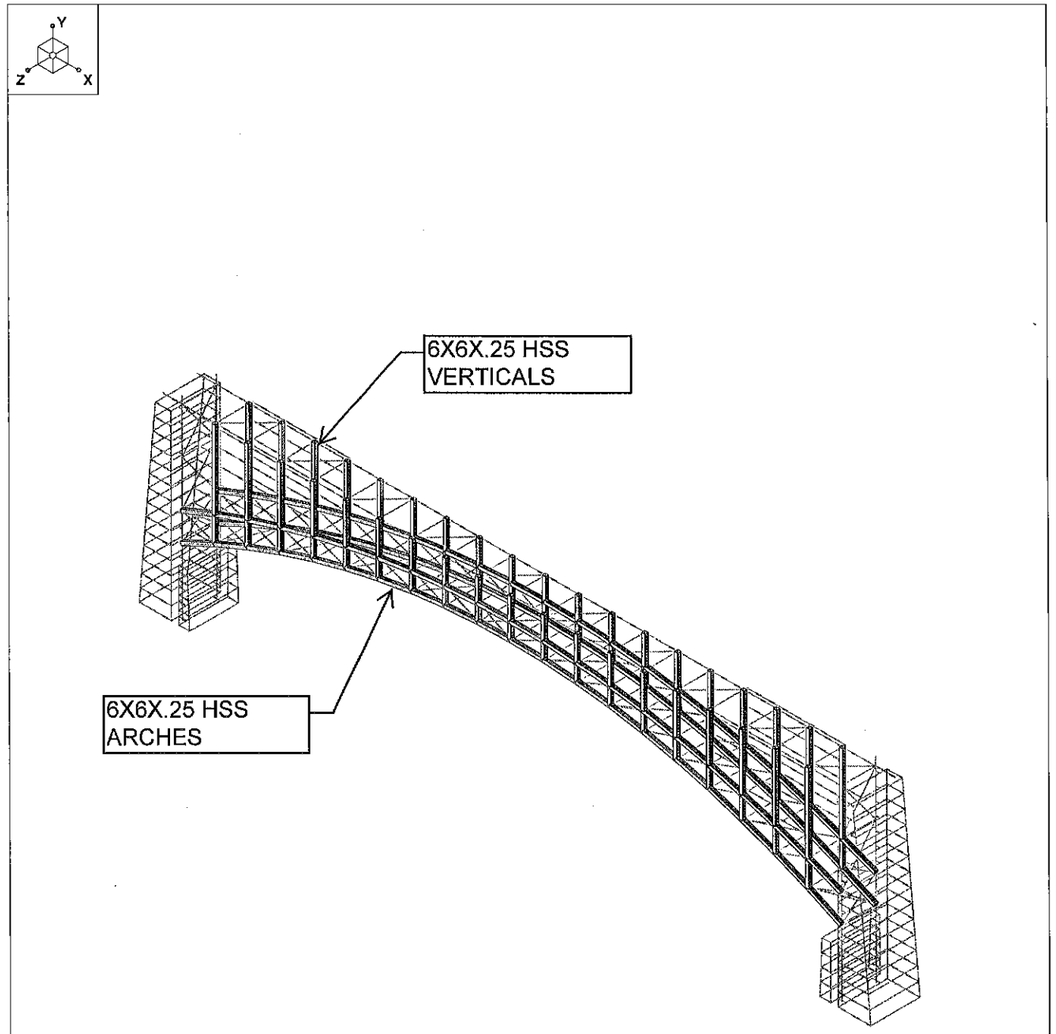

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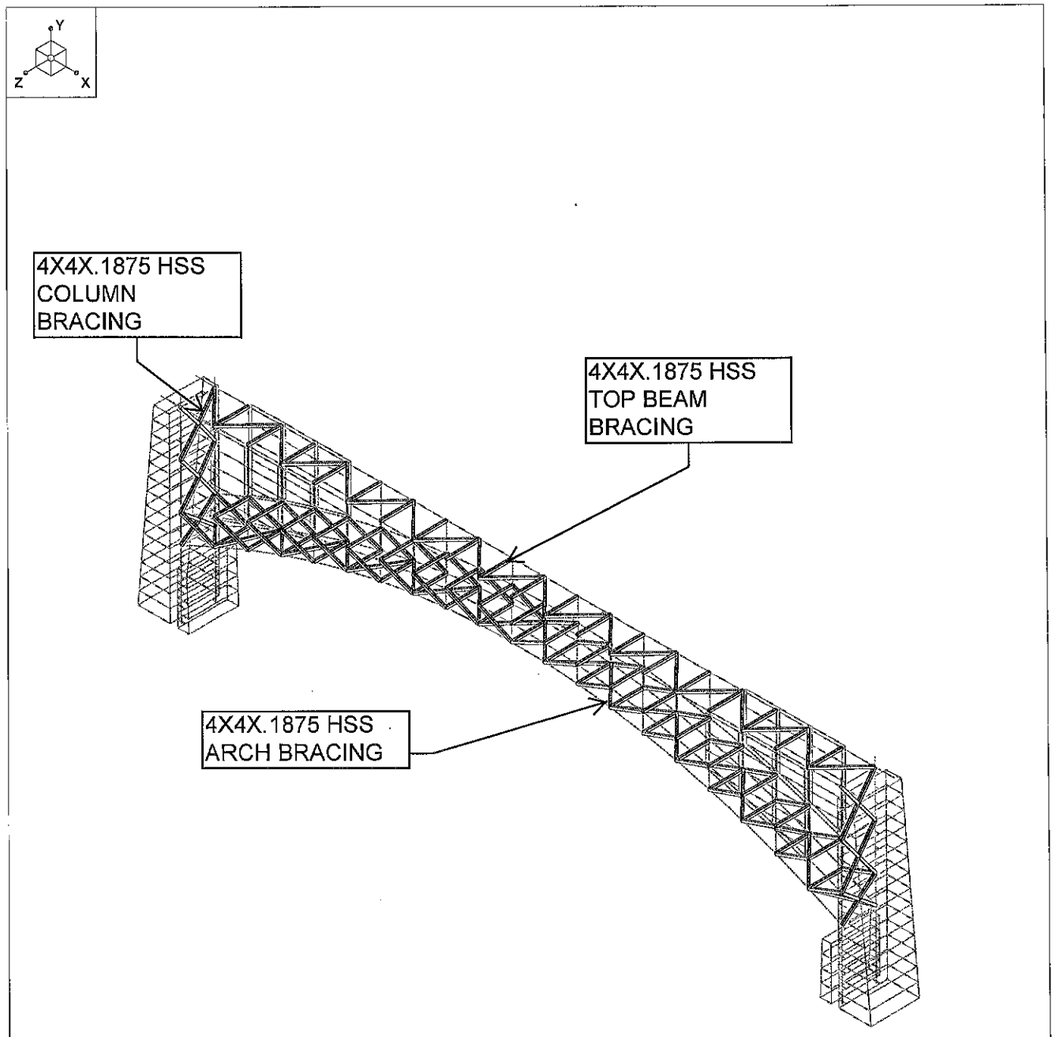

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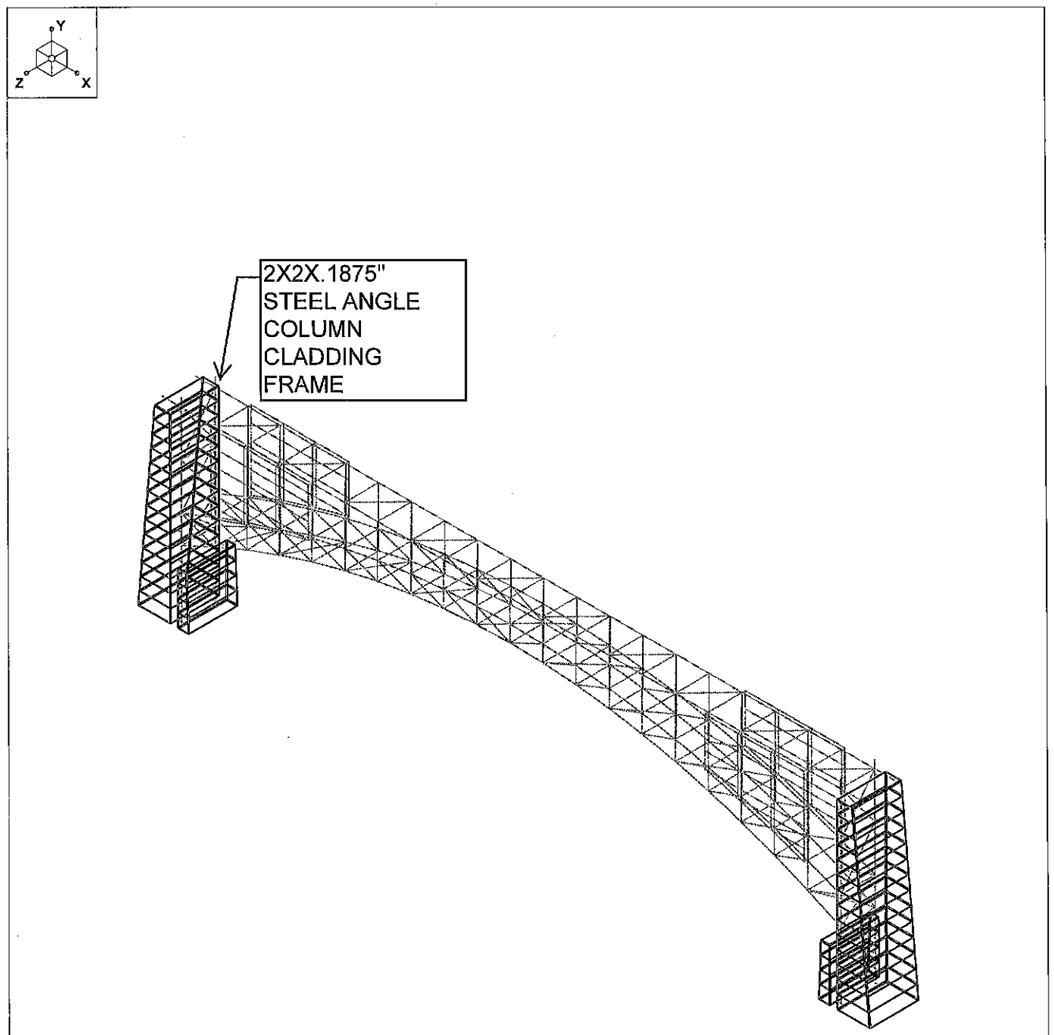

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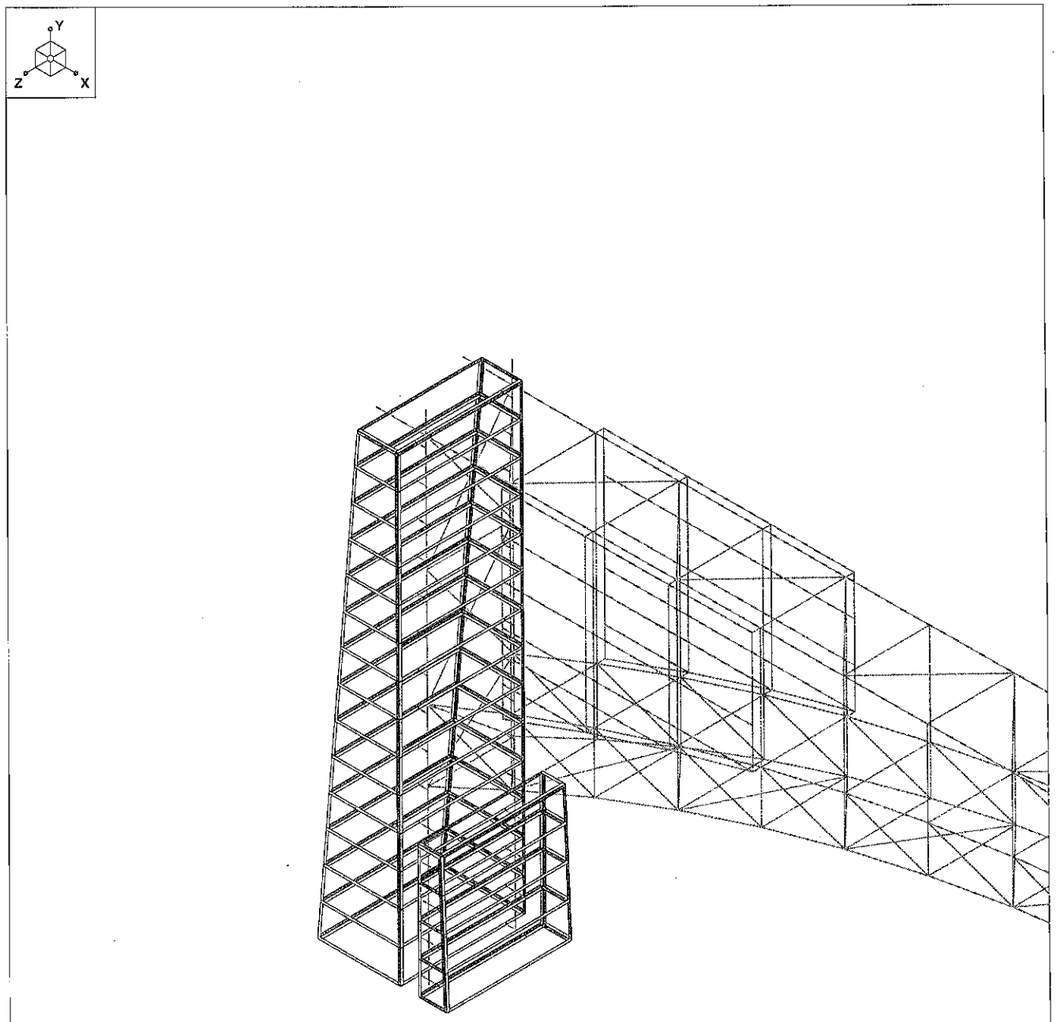

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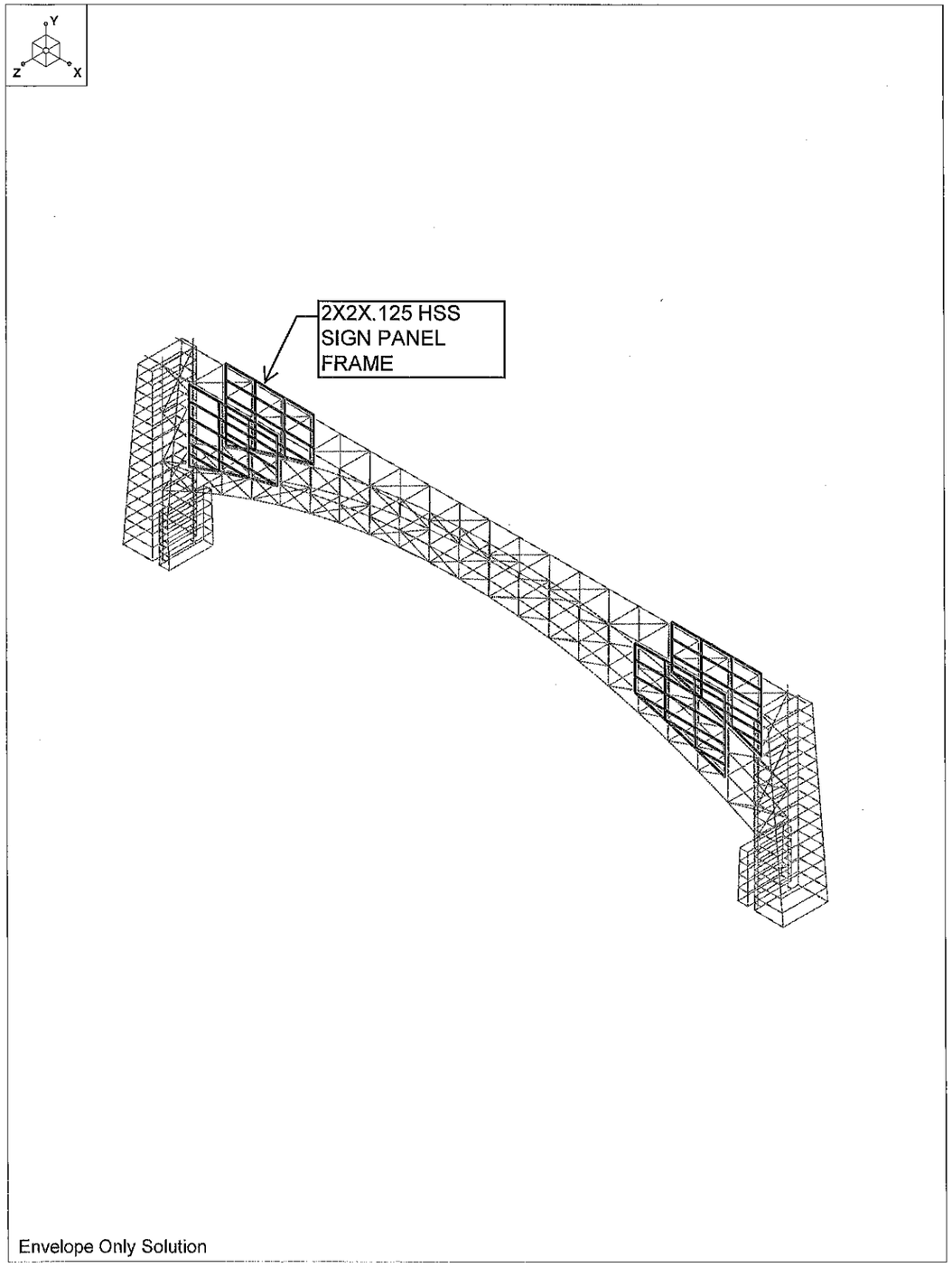

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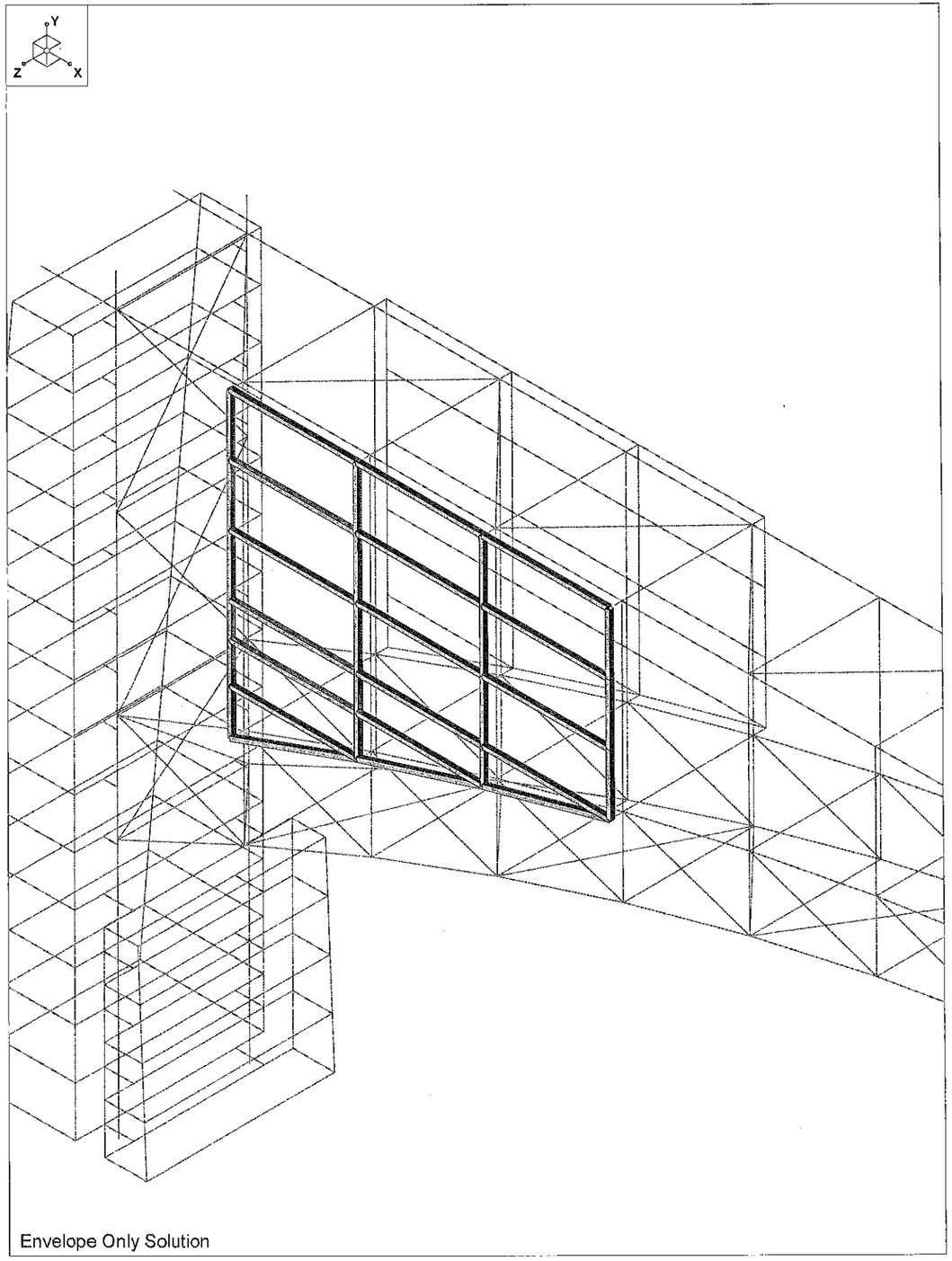

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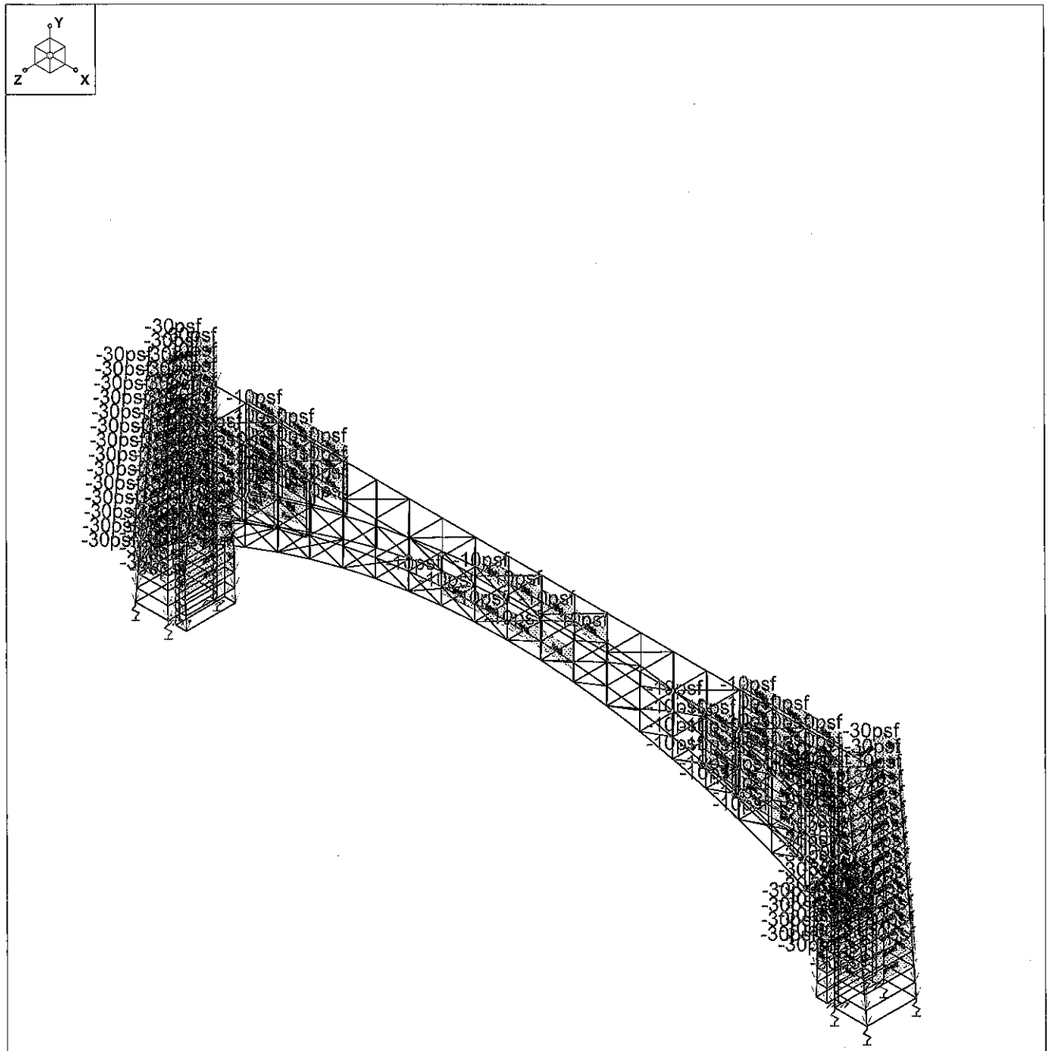
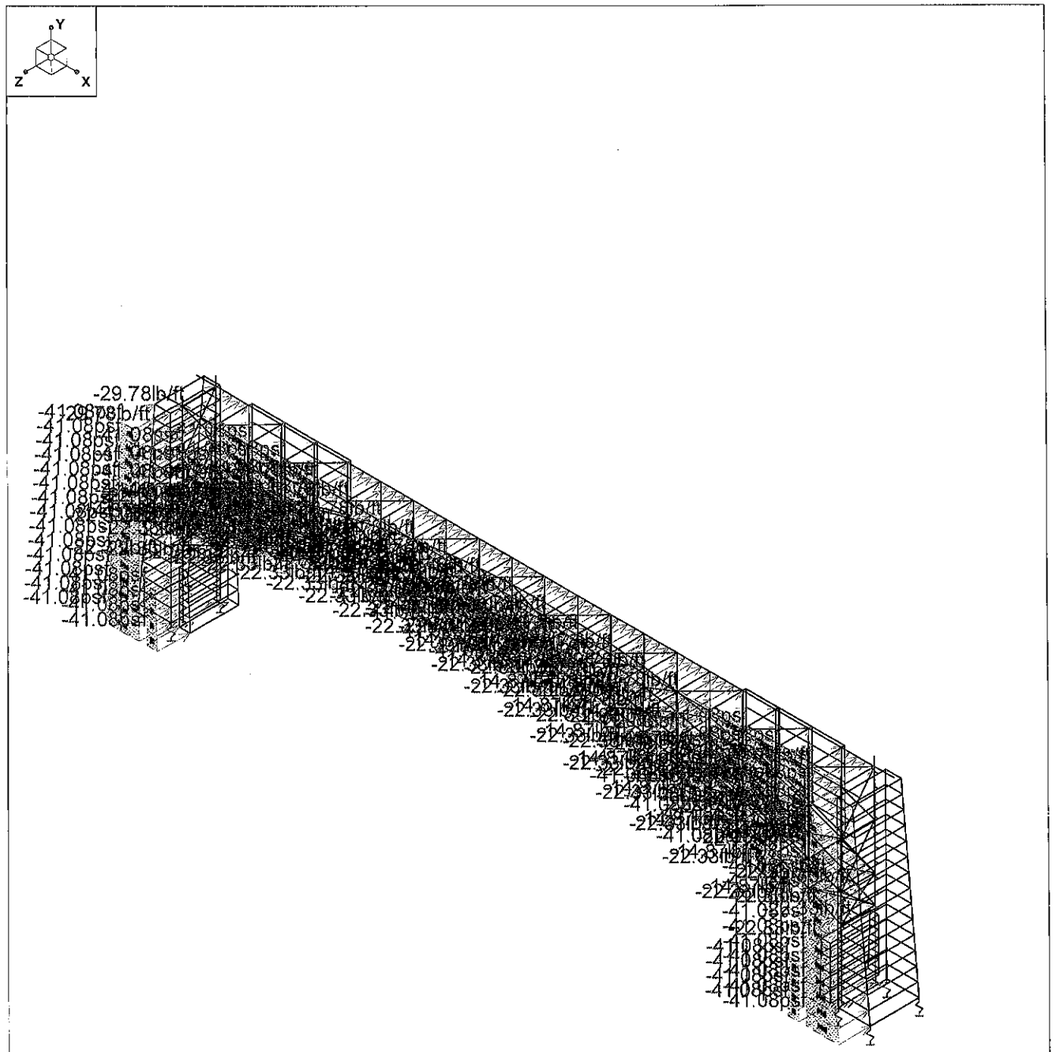
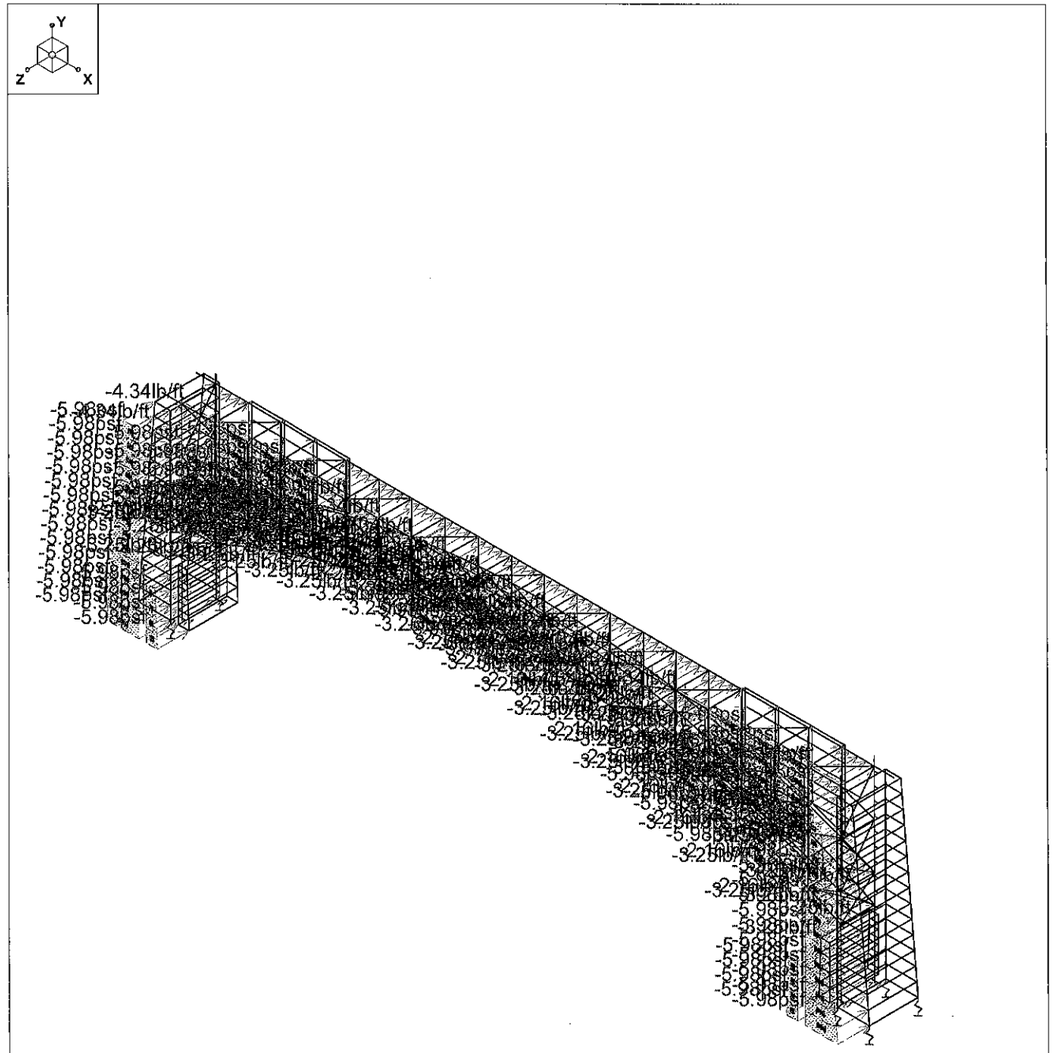


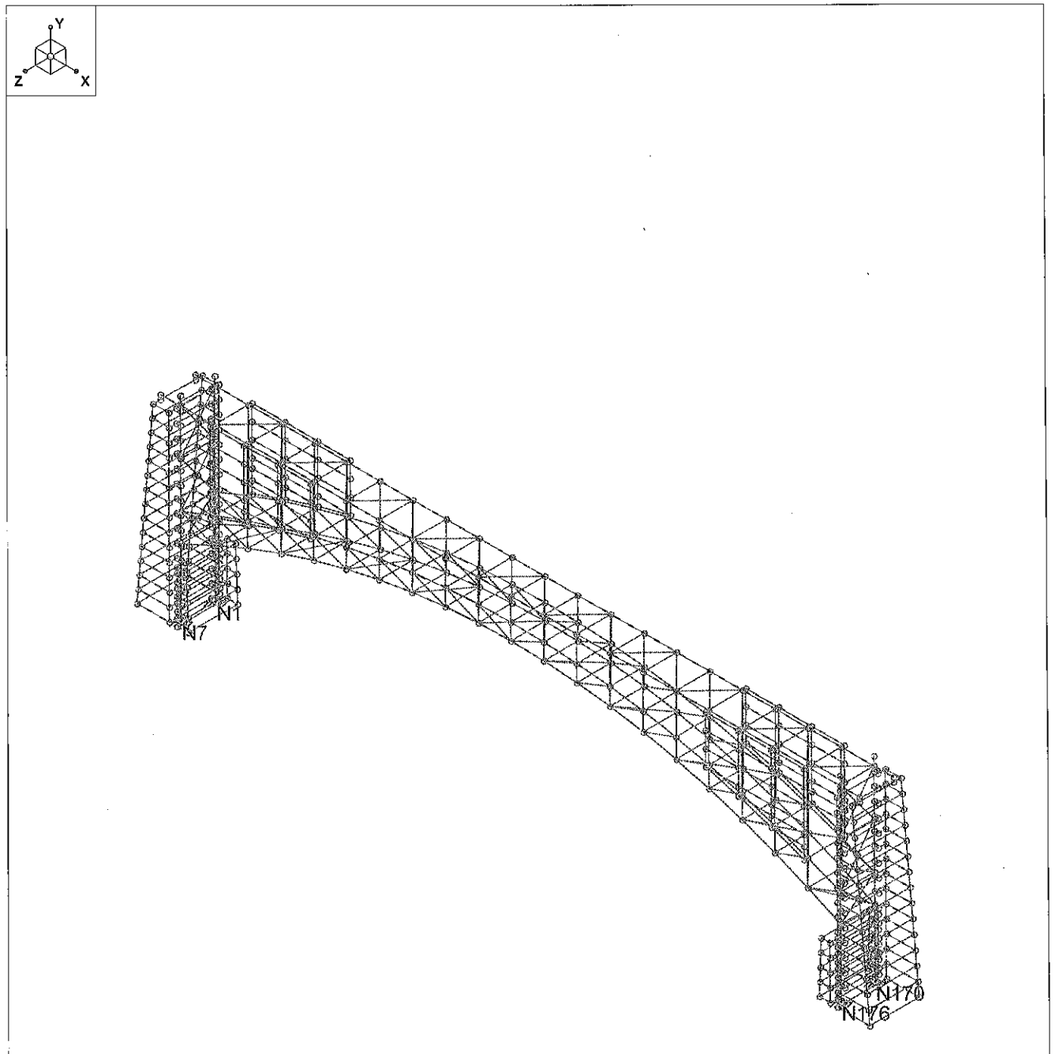
Loads: BLC 1, D
Envelope Only Solution



Loads: BLC 2, W
Envelope Only Solution



Loads: BLC 3, F
Envelope Only Solution



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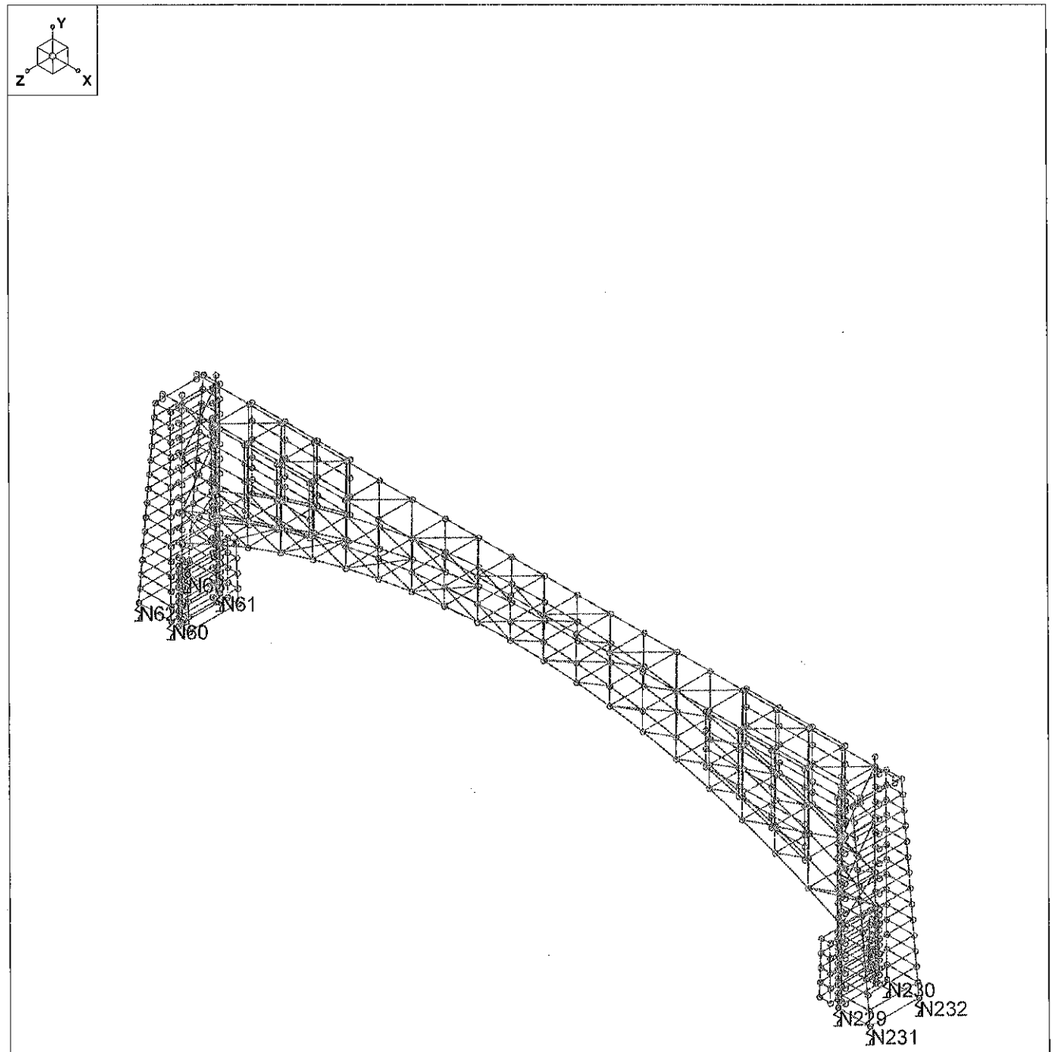

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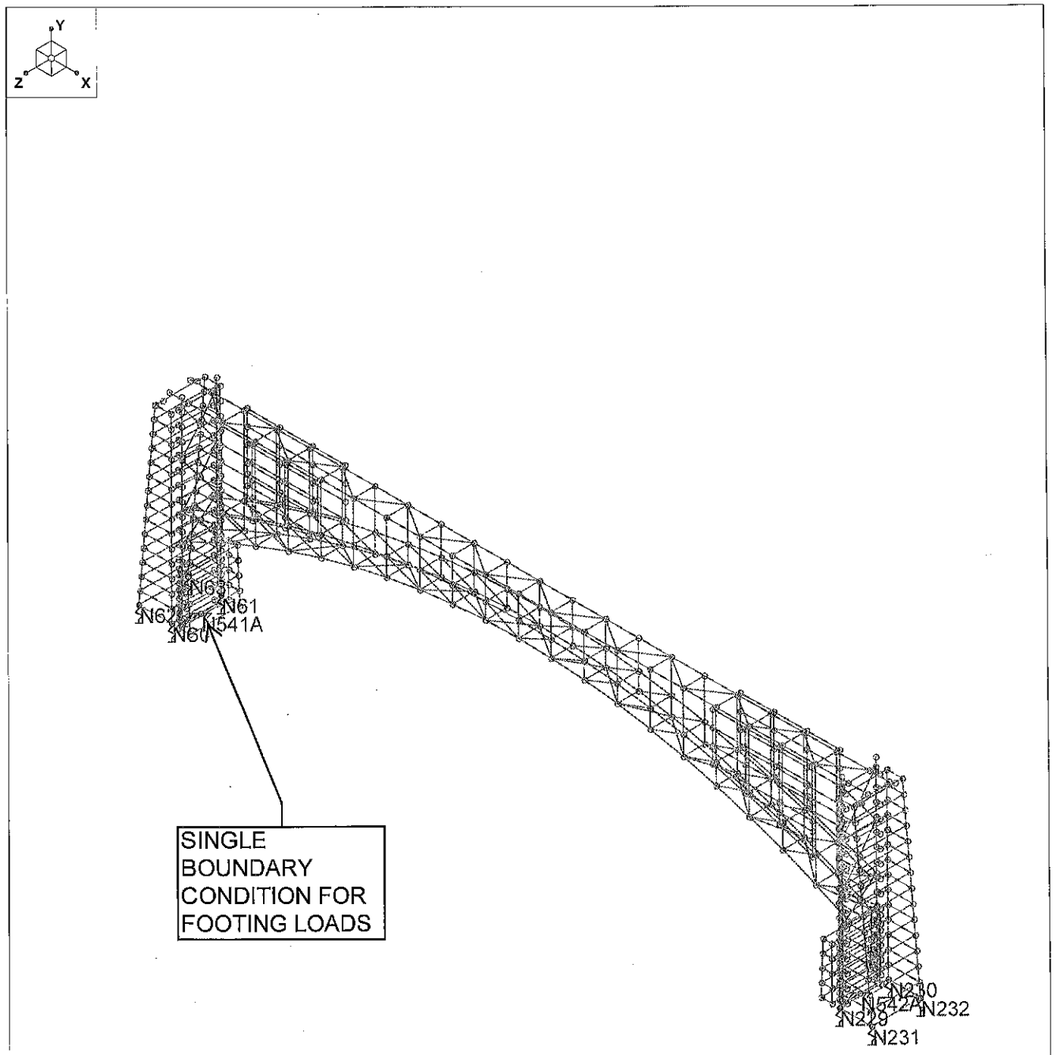


Envelope Only Solution

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (1E...	Density[k/ft...	Yield[ksi]	Ry	Fu[ksi]	Rt
1	A992	29000	11154	.3	.65	.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	.3	.65	.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	.3	.65	.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	.3	.65	.527	42	1.4	58	1.3
5	A500 Gr.B Rect	29000	11154	.3	.65	.527	46	1.4	58	1.3
6	A53 Gr.B	29000	11154	.3	.65	.49	35	1.6	60	1.2
7	A1085	29000	11154	.3	.65	.49	50	1.4	65	1.3

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design R...	A [in2]	Iyy [in4]	Izz [in4]	J [in4]
1	8X8X.25 HSS	HSS8x8x4	Beam	SquareTube	A500 Gr.B Rect	Typical	7.1	70.7	70.7	111
2	6X6X.25 HSS	HSS6x6x4	Beam	SquareTube	A500 Gr.B Rect	Typical	5.24	28.6	28.6	45.6
3	4X4X.1875 HSS	HSS4x4x3	Beam	SquareTube	A500 Gr.B Rect	Typical	2.58	6.21	6.21	10
4	12X12X.375 TUBE	HSS12x12x6	Beam	SquareTube	A500 Gr.B Rect	Typical	16	357	357	561
5	L2X2X.1875	L2x2x3	Beam	Single Angle	A36 Gr.36	Typical	.722	.271	.271	.009
6	2X2X.188 HSS	HSS2x2x3	Beam	SquareTube	A500 Gr.B Rect	Typical	1.19	.641	.641	1.09
7	12X8X.25 HSS	HSS12x8x4	Beam	SquareTube	A500 Gr.B Rect	Typical	8.96	98.8	184	202

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
1	D	DL		-1					180	
2	W	WL						200	104	
3	F	None						200	104	
4	BLC 1 Transient Ar...	None						690		
5	BLC 2 Transient Ar...	None						417		
6	BLC 3 Transient Ar...	None						417		

Load Combinations

	Description	So...	PDelta	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	D	Yes	Y		1	1																		
2	W	Yes	Y		2	1																		
3	F	Yes	Y		3	1																		
4	1.25D	Yes	Y		1	1.25																		
5	1.1D+1.0W	Yes	Y		1	1.1	2	1																
6	0.9D+1.0W	Yes	Y		1	.9	2	1																
7	1.0D+1.0F	Yes	Y		1	1	3	1																

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N7	max	9.385	4	19.433	4	15.313	5	87.944	2	-.529	1	37.703	2
2		min	-6.456	2	-85.862	2	.316	1	-.27	4	-19.587	5	-47.691	4
3	N1	max	14.78	5	100.044	5	14.351	2	87.445	5	.769	4	-5.503	3
4		min	.966	3	12.038	3	-.395	4	.14	1	-19.132	2	-80.416	5
5	N170	max	-.966	3	100.034	5	14.351	2	87.446	5	19.132	2	80.417	5
6		min	-14.78	5	12.038	3	-.395	4	.14	1	-.768	4	5.503	3
7	N176	max	6.456	2	19.446	4	15.313	5	87.944	2	19.588	5	47.69	4
8		min	-9.385	4	-85.863	2	.316	1	-.27	4	.53	1	-37.703	2
9	N62	max	0	1	5.006	4	0	1	0	1	0	1	0	1
10		min	0	1	0	2	0	1	0	1	0	1	0	1
11	N63	max	0	1	5.679	5	0	1	0	1	0	1	0	1
12		min	0	1	.176	3	0	1	0	1	0	1	0	1
13	N60	max	0	1	.612	4	0	1	0	1	0	1	0	1

Envelope Joint Reactions (Continued)

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
14		min	0	1	0	2	0	1	0	1	0	1	0	1
15	N61	max	0	1	2.493	5	0	1	0	1	0	1	0	1
16		min	0	1	.285	3	0	1	0	1	0	1	0	1
17	N230	max	0	1	2.493	5	0	1	0	1	0	1	0	1
18		min	0	1	.285	3	0	1	0	1	0	1	0	1
19	N232	max	0	1	5.685	5	0	1	0	1	0	1	0	1
20		min	0	1	.176	3	0	1	0	1	0	1	0	1
21	N231	max	0	1	4.997	4	0	1	0	1	0	1	0	1
22		min	0	1	0	2	0	1	0	1	0	1	0	1
23	N229	max	0	1	.612	4	0	1	0	1	0	1	0	1
24		min	0	1	0	2	0	1	0	1	0	1	0	1
25	Totals:	max	0	5	100.282	4	58.553	6						
26		min	0	3	0	3	0	4						

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
1	M1	HSS12x12x6	.827	0	5	.173	0	z	5	662.3...	662.4	223.27	223.27	...	H1-1b
2	M2	HSS12x12x6	.000	0	4	.000	0	y	5	661.8...	662.4	223.27	223.27	1	H1-1b
3	M3	HSS12x12x6	.428	0	5	.177	0	z	5	661.4...	662.4	223.27	223.27	...	H1-1b
4	M4	HSS12x12x6	.072	0	5	.041	0	y	2	661.7...	662.4	223.27	223.27	...	H1-1b
5	M5	HSS12x12x6	.041	0	5	.043	0	y	5	662.35	662.4	223.27	223.27	...	H1-1b
6	M6	HSS12x12x6	.628	0	2	.180	0	y	5	662.3...	662.4	223.27	223.27	...	H1-1b
7	M7	HSS12x12x6	.000	0	4	.000	0	y	5	661.8...	662.4	223.27	223.27	1	H1-1b
8	M8	HSS12x12x6	.274	0	2	.111	0	y	2	661.4...	662.4	223.27	223.27	...	H1-1b
9	M9	HSS12x12x6	.062	0	2	.043	0	y	5	661.7...	662.4	223.27	223.27	...	H1-1b
10	M10	HSS12x12x6	.036	0	2	.043	0	y	2	662.35	662.4	223.27	223.27	...	H1-1b
11	M11	HSS12x8x4	.153	0	5	.097	0	y	5	326.7...	370.9...	73.797	116.951	...	H1-1b
12	M12	HSS8x8x4	.261	0	5	.218	0	z	5	293.6...	293.94	66.288	66.288	...	H1-1b
13	M13	HSS8x8x4	.532	0	5	.492	0	z	5	293.6...	293.94	66.288	66.288	...	H1-1b
14	M14	HSS8x8x4	.078	63.5	5	.048	0	y	5	286.0...	293.94	66.288	66.288	...	H1-1b
15	M15	HSS4x4x3	.082	53...	5	.004	0	z	2	98.733	106.8...	12.662	12.662	...	H1-1b
16	M16	HSS4x4x3	.078	53...	5	.003	53...	y	5	98.733	106.8...	12.662	12.662	...	H1-1b
17	M17	HSS4x4x3	.243	41...	2	.015	0	y	2	101.9...	106.8...	12.662	12.662	...	H1-1a
18	M18	HSS4x4x3	.410	41...	2	.045	0	y	5	101.9...	106.8...	12.662	12.662	...	H1-1a
19	M19	HSS4x4x3	.079	53...	2	.010	0	y	5	98.733	106.8...	12.662	12.662	...	H1-1b
20	M20	HSS4x4x3	.076	53...	2	.009	0	y	5	98.733	106.8...	12.662	12.662	...	H1-1b
21	M21	HSS4x4x3	.105	0	5	.008	0	y	2	98.733	106.8...	12.662	12.662	...	H1-...
22	M22	HSS4x4x3	.103	0	5	.006	0	z	5	98.733	106.8...	12.662	12.662	...	H1-...
23	M23	HSS4x4x3	.125	0	5	.009	0	y	5	98.733	106.8...	12.662	12.662	...	H1-...
24	M24	HSS4x4x3	.123	0	5	.003	53...	y	5	98.733	106.8...	12.662	12.662	...	H1-...
25	M25	HSS4x4x3	.456	0	5	.029	0	y	2	101.9...	106.8...	12.662	12.662	...	H1-1a
26	M26	HSS4x4x3	.257	0	5	.019	41...	y	5	101.9...	106.8...	12.662	12.662	...	H1-1a
27	M29	HSS12x12x6	.600	0	2	.182	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
28	M30	HSS12x12x6	.791	0	5	.175	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
29	M31	HSS12x12x6	.409	0	2	.180	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
30	M32	HSS12x12x6	.231	0	2	.181	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
31	M33	HSS12x12x6	.247	24	2	.182	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
32	M34	HSS12x12x6	.420	24	2	.189	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
33	M35	HSS12x12x6	.534	0	5	.173	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
34	M36	HSS12x12x6	.286	0	5	.173	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
35	M37	HSS12x12x6	.363	24	5	.173	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
36	M38	HSS12x12x6	.619	24	5	.177	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
37	M49	L2x2x3	.471	13...	5	.064	0	z	5	21.904	23.393	.558	1.239	...	H2-1
38	M50	L2x2x3	.453	0	5	.022	0	y	5	6.121	23.393	.558	1.196	...	H2-1
39	M51	L2x2x3	.585	0	5	.075	0	y	5	21.904	23.393	.558	1.239	...	H2-1
40	M52	L2x2x3	.556	13...	4	.080	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
41	M53	L2x2x3	.420	0	5	.019	0	z	5	6.121	23.393	.558	1.197	...	H2-1
42	M54	L2x2x3	.697	0	5	.094	0	z	5	21.904	23.393	.558	1.239	...	H2-1

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
43	M55	L2x2x3	.560	13...	4	.074	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
44	M56	L2x2x3	.372	0	5	.017	0	z	5	6.121	23.393	.558	1.197	...	H2-1
45	M57	L2x2x3	.576	0	5	.076	0	z	5	21.904	23.393	.558	1.239	...	H2-1
46	M58	L2x2x3	.651	13...	5	.075	13...	z	5	21.904	23.393	.558	1.239	...	H2-1
47	M59	L2x2x3	.244	0	5	.011	0	z	5	6.121	23.393	.558	1.197	...	H2-1
48	M60	L2x2x3	.482	0	4	.061	0	z	4	21.904	23.393	.558	1.239	...	H2-1
49	M61	L2x2x3	.856	13...	5	.085	13...	z	5	21.904	23.393	.558	1.239	...	H2-1
50	M62	L2x2x3	.041	0	5	.002	0	z	5	6.121	23.393	.558	1.203	...	H2-1
51	M63	L2x2x3	.588	0	2	.066	0	z	2	21.904	23.393	.558	1.239	...	H2-1
52	M64	L2x2x3	.306	16	4	.056	0	y	4	21.399	23.393	.558	1.239	...	H2-1
53	M65	L2x2x3	.396	16	5	.058	0	z	5	21.399	23.393	.558	1.239	...	H2-1
54	M66	L2x2x3	.211	0	4	.023	24...	y	5	19.138	23.393	.558	1.239	...	H2-1
55	M67	L2x2x3	.292	0	5	.022	0	z	4	19.138	23.393	.558	1.239	...	H2-1
56	M68	L2x2x3	.705	0	5	.033	0	z	5	2.981	23.393	.558	1.094	...	H2-1
57	M69	L2x2x3	.354	0	5	.019	0	y	5	2.981	23.393	.558	1.088	...	H2-1
58	M70	L2x2x3	.207	20	4	.028	0	z	4	20.354	23.393	.558	1.239	...	H2-1
59	M71	L2x2x3	.219	0	5	.036	0	y	5	20.354	23.393	.558	1.239	...	H2-1
60	M72	L2x2x3	.285	24	2	.027	24	z	2	19.145	23.393	.558	1.239	...	H2-1
61	M73	L2x2x3	.218	0	5	.023	0	y	4	19.145	23.393	.558	1.239	...	H2-1
62	M74	L2x2x3	.233	24	4	.028	0	z	5	19.145	23.393	.558	1.239	...	H2-1
63	M75	L2x2x3	.259	24	5	.030	0	z	5	19.145	23.393	.558	1.239	...	H2-1
64	M76	L2x2x3	.382	0	5	.034	0	y	5	19.145	23.393	.558	1.239	...	H2-1
65	M77	L2x2x3	.216	0	4	.023	0	z	4	19.145	23.393	.558	1.239	...	H2-1
66	M78	L2x2x3	.279	24	5	.026	0	z	4	19.145	23.393	.558	1.239	...	H2-1
67	M79	L2x2x3	.322	24	5	.023	0	z	5	19.145	23.393	.558	1.239	...	H2-1
68	M80	L2x2x3	.222	0	4	.024	0	y	4	19.138	23.393	.558	1.239	...	H2-1
69	M81	L2x2x3	.223	24...	4	.026	0	z	4	19.138	23.393	.558	1.239	...	H2-1
70	M82	L2x2x3	.349	24...	4	.038	0	y	4	19.138	23.393	.558	1.239	...	H2-1
71	M83	L2x2x3	.341	0	5	.030	.25	z	5	19.138	23.393	.558	1.239	...	H2-1
72	M84	L2x2x3	.298	0	5	.032	2.5...	z	5	19.138	23.393	.558	1.239	...	H2-1
73	M85	L2x2x3	.464	24...	5	.050	.25	z	5	19.138	23.393	.558	1.239	...	H2-1
74	M86	L2x2x3	.517	0	4	.062	0	z	4	21.155	23.393	.558	1.239	...	H2-1
75	M87	L2x2x3	.545	18	4	.063	0	z	4	20.899	23.393	.558	1.239	...	H2-1
76	M88	L2x2x3	.426	19	4	.050	0	z	4	20.632	23.393	.558	1.239	...	H2-1
77	M89	L2x2x3	.426	19	4	.050	0	y	4	20.632	23.393	.558	1.239	...	H2-1
78	M90	L2x2x3	.553	18	5	.063	0	y	4	20.899	23.393	.558	1.239	...	H2-1
79	M91	L2x2x3	.553	17	5	.062	0	y	4	21.155	23.393	.558	1.239	...	H2-1
80	M92	L2x2x3	.742	0	5	.036	0	y	5	2.981	23.393	.558	1.12	...	H2-1
81	M93	L2x2x3	.722	0	5	.035	0	y	5	2.981	23.393	.558	1.113	...	H2-1
82	M94	L2x2x3	.672	0	5	.034	0	y	5	2.981	23.393	.558	1.109	...	H2-1
83	M95	L2x2x3	.625	13...	5	.088	13...	y	5	21.904	23.393	.558	1.239	...	H2-1
84	M96	L2x2x3	.037	0	5	.002	0	y	5	6.121	23.393	.558	1.2	...	H2-1
85	M97	L2x2x3	.670	0	2	.072	0	y	2	21.904	23.393	.558	1.239	...	H2-1
86	M100	L2x2x3	.504	0	5	.027	60	z	5	6.856	23.393	.558	1.147	...	H2-1
87	M101	L2x2x3	.355	91	5	.016	0	z	5	2.981	23.393	.558	1.124	...	H2-1
88	M102	L2x2x3	.383	0	2	.032	0	z	6	6.856	23.393	.558	1.136	...	H2-1
89	M103	HSS12x12x6	.641	2	5	.178	0	y	2	662.3...	662.4	223.27	223.27	...	H1-1b
90	M104	HSS12x12x6	.433	2	2	.186	0	y	5	662.3...	662.4	223.27	223.27	...	H1-1b
91	M105	HSS12x12x6	.255	0	5	.177	0	z	5	661.2...	662.4	223.27	223.27	...	H1-1b
92	M106	HSS12x12x6	.087	0	5	.179	0	z	5	662.3...	662.4	223.27	223.27	...	H1-...
93	M107	HSS12x12x6	.168	0	2	.113	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
94	M108	HSS12x12x6	.065	0	5	.116	0	y	2	662.3...	662.4	223.27	223.27	...	H1-1b
95	M109	HSS12x12x6	.060	0	5	.042	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
96	M110	HSS12x12x6	.052	0	2	.044	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
97	M111	HSS12x12x6	.049	0	5	.043	0	y	2	661.2...	662.4	223.27	223.27	...	H1-...
98	M112	HSS12x12x6	.048	0	5	.044	0	z	2	661.6...	662.4	223.27	223.27	...	H1-...
99	M113	HSS12x12x6	.041	0	2	.045	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
100	M114	HSS12x12x6	.031	0	2	.046	0	y	5	661.6...	662.4	223.27	223.27	...	H1-1b
101	M115	HSS12x12x6	.036	0	5	.043	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
102	M116	HSS12x12x6	.032	0	2	.043	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
103	M117	HSS12x12x6	.029	24	5	.044	0	z	5	661.2...	662.4	223.27	223.27	...	H1-1b
104	M118	HSS12x12x6	.052	24	5	.045	0	z	5	661.2...	662.4	223.27	223.27	...	H1-1b
105	M119	HSS12x12x6	.025	24	2	.043	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
106	M120	HSS12x12x6	.043	24	2	.044	0	z	2	661.2...	662.4	223.27	223.27	...	H1-1b
107	M121	HSS12x12x6	.060	8	5	.045	0	y	2	662.2...	662.4	223.27	223.27	...	H1-1b
108	M122	HSS12x12x6	.049	8	2	.047	0	z	5	662.2...	662.4	223.27	223.27	...	H1-1b
109	M123	L2x2x3	.420	0	2	.021	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
110	M124	L2x2x3	.190	63.5	2	.011	0	y	5	6.121	23.393	.558	1.195	...	H2-1
111	M125	L2x2x3	.545	13...	5	.030	0	y	2	21.904	23.393	.558	1.239	...	H2-1
112	M128	L2x2x3	.658	13...	5	.076	0	y	5	21.904	23.393	.558	1.239	...	H2-1
113	M129	L2x2x3	.267	0	5	.015	0	y	5	6.121	23.393	.558	1.194	...	H2-1
114	M130	L2x2x3	.649	13...	5	.057	0	y	5	21.904	23.393	.558	1.239	...	H2-1
115	M133	L2x2x3	.829	13...	5	.098	0	y	5	21.904	23.393	.558	1.239	...	H2-1
116	M134	L2x2x3	.290	0	5	.015	0	y	5	6.121	23.393	.558	1.192	...	H2-1
117	M135	L2x2x3	.670	13...	5	.074	0	y	5	21.904	23.393	.558	1.239	...	H2-1
118	M138	L2x2x3	.718	13...	2	.083	0	y	5	21.904	23.393	.558	1.239	...	H2-1
119	M139	L2x2x3	.259	0	5	.012	0	y	5	6.121	23.393	.558	1.186	...	H2-1
120	M140	L2x2x3	.635	0	5	.073	0	y	5	21.904	23.393	.558	1.239	...	H2-1
121	M143	L2x2x3	.421	13...	5	.048	0	y	2	21.904	23.393	.558	1.239	...	H2-1
122	M144	L2x2x3	.167	0	5	.006	0	y	5	6.121	23.393	.558	1.151	...	H2-1
123	M145	L2x2x3	.553	13...	5	.056	0	y	5	21.904	23.393	.558	1.239	...	H2-1
124	M148	L2x2x3	.404	13...	5	.038	13...	y	4	21.904	23.393	.558	1.239	1	H2-1
125	M149	L2x2x3	.083	0	5	.002	0	z	5	6.121	23.393	.558	1.143	...	H2-1
126	M150	L2x2x3	.453	13...	5	.040	0	y	5	21.904	23.393	.558	1.239	...	H2-1
127	M153	L2x2x3	.360	13...	5	.046	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
128	M154	L2x2x3	.069	0	5	.002	0	y	5	6.121	23.393	.558	1.238	...	H2-1
129	M155	L2x2x3	.441	13...	5	.046	0	y	4	21.904	23.393	.558	1.239	...	H2-1
130	M158	L2x2x3	.336	13...	4	.047	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
131	M159	L2x2x3	.075	0	5	.002	0	y	5	6.121	23.393	.558	1.231	...	H2-1
132	M160	L2x2x3	.441	13...	5	.048	0	y	5	21.904	23.393	.558	1.239	...	H2-1
133	M163	L2x2x3	.335	13...	4	.047	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
134	M164	L2x2x3	.060	0	5	.003	0	y	5	6.121	23.393	.558	1.22	...	H2-1
135	M165	L2x2x3	.436	13...	5	.055	0	y	5	21.904	23.393	.558	1.239	...	H2-1
136	M168	L2x2x3	.335	13...	4	.047	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
137	M169	L2x2x3	.053	0	5	.003	0	y	5	6.121	23.393	.558	1.219	...	H2-1
138	M170	L2x2x3	.442	0	5	.059	0	y	5	21.904	23.393	.558	1.239	...	H2-1
139	M173	L2x2x3	.344	13...	4	.051	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
140	M174	L2x2x3	.048	0	5	.003	0	y	5	6.121	23.393	.558	1.227	...	H2-1
141	M175	L2x2x3	.486	0	5	.065	0	y	5	21.904	23.393	.558	1.239	...	H2-1
142	M178	L2x2x3	.348	13...	4	.051	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
143	M179	L2x2x3	.038	0	5	.003	0	y	5	6.121	23.393	.558	1.239	...	H2-1
144	M180	L2x2x3	.509	0	5	.069	0	y	5	21.904	23.393	.558	1.239	...	H2-1
145	M183	L2x2x3	.355	13...	4	.055	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
146	M184	L2x2x3	.026	0	5	.003	0	y	5	6.121	23.393	.558	1.226	...	H2-1
147	M185	L2x2x3	.520	0	5	.075	0	y	5	21.904	23.393	.558	1.239	...	H2-1
148	M188	L2x2x3	.490	13...	4	.076	0	y	4	21.904	23.393	.558	1.239	...	H2-1
149	M189	L2x2x3	.208	0	4	.019	0	z	5	6.121	23.393	.558	1.205	...	H2-1
150	M190	L2x2x3	.736	0	5	.096	0	y	5	21.904	23.393	.558	1.239	...	H2-1
151	M193	L2x2x3	.627	0	4	.033	0	y	4	21.904	23.393	.558	1.239	...	H2-1
152	M194	L2x2x3	.511	33...	4	.032	63.5	y	4	6.121	23.393	.558	1.032	...	H2-1
153	M195	L2x2x3	.657	13...	4	.038	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
154	M196	L2x2x3	.386	0	4	.047	0	y	4	17.459	23.393	.558	1.239	...	H2-1
155	M197	L2x2x3	.543	0	5	.052	0	z	5	17.459	23.393	.558	1.239	...	H2-1
156	M198	L2x2x3	.657	0	5	.027	0	y	5	19.112	23.393	.558	1.239	...	H2-1
157	M199	L2x2x3	.569	24...	4	.026	0	z	4	19.112	23.393	.558	1.239	...	H2-1
158	M200	L2x2x3	.542	0	5	.036	0	z	5	19.145	23.393	.558	1.239	...	H2-1
159	M201	L2x2x3	.344	0	2	.017	0	y	2	19.145	23.393	.558	1.239	...	H2-1
160	M202	L2x2x3	.269	0	5	.021	0	y	2	19.145	23.393	.558	1.239	...	H2-1

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
161	M203	L2x2x3	.271	24	5	.021	0	y	2	19.145	23.393	.558	1.239	...	H2-1
162	M204	L2x2x3	.206	24	2	.018	0	y	2	19.145	23.393	.558	1.239	...	H2-1
163	M205	L2x2x3	.195	0	4	.018	0	y	4	19.145	23.393	.558	1.239	...	H2-1
164	M206	L2x2x3	.189	0	5	.020	0	z	5	19.145	23.393	.558	1.239	...	H2-1
165	M207	L2x2x3	.180	0	4	.018	0	y	4	19.145	23.393	.558	1.239	...	H2-1
166	M208	L2x2x3	.190	24	4	.018	0	y	4	19.145	23.393	.558	1.239	...	H2-1
167	M209	L2x2x3	.196	0	4	.018	0	y	4	19.145	23.393	.558	1.239	...	H2-1
168	M210	L2x2x3	.232	24	4	.020	0	y	4	19.145	23.393	.558	1.239	...	H2-1
169	M211	L2x2x3	.255	24	4	.023	0	y	4	19.145	23.393	.558	1.239	...	H2-1
170	M212	L2x2x3	.294	24	4	.025	0	y	4	19.145	23.393	.558	1.239	...	H2-1
171	M213	L2x2x3	.387	24	4	.028	0	y	4	19.145	23.393	.558	1.239	...	H2-1
172	M216	L2x2x3	.527	0	2	.039	0	y	2	19.145	23.393	.558	1.239	...	H2-1
173	M217	L2x2x3	.344	0	5	.028	0	z	5	19.145	23.393	.558	1.239	...	H2-1
174	M218	L2x2x3	.280	0	5	.028	0	z	5	19.145	23.393	.558	1.239	...	H2-1
175	M219	L2x2x3	.255	24	5	.028	0	z	5	19.145	23.393	.558	1.239	...	H2-1
176	M220	L2x2x3	.269	24	5	.027	0	z	5	19.145	23.393	.558	1.239	...	H2-1
177	M221	L2x2x3	.279	24	5	.026	0	z	5	19.145	23.393	.558	1.239	...	H2-1
178	M222	L2x2x3	.284	24	5	.024	24	y	2	19.145	23.393	.558	1.239	...	H2-1
179	M223	L2x2x3	.287	24	5	.025	0	z	5	19.145	23.393	.558	1.239	...	H2-1
180	M224	L2x2x3	.294	24	5	.027	0	z	5	19.145	23.393	.558	1.239	...	H2-1
181	M225	L2x2x3	.297	24	5	.028	.5	z	5	19.145	23.393	.558	1.239	...	H2-1
182	M226	L2x2x3	.317	24	5	.027	0	z	5	19.145	23.393	.558	1.239	...	H2-1
183	M227	L2x2x3	.347	24	5	.032	0	z	5	19.145	23.393	.558	1.239	...	H2-1
184	M228	L2x2x3	.385	24	5	.033	0	z	5	19.145	23.393	.558	1.239	...	H2-1
185	M229	L2x2x3	.504	24	5	.040	0	z	5	19.145	23.393	.558	1.239	...	H2-1
186	M230	L2x2x3	.688	0	5	.026	.502	y	5	19.112	23.393	.558	1.239	...	H2-1
187	M231	L2x2x3	.645	0	5	.029	24...	z	5	19.112	23.393	.558	1.239	...	H2-1
188	M232	L2x2x3	.623	0	5	.031	0	y	5	19.112	23.393	.558	1.239	...	H2-1
189	M233	L2x2x3	.569	0	5	.031	4.5...	y	5	19.112	23.393	.558	1.239	...	H2-1
190	M234	L2x2x3	.488	0	5	.027	.251	y	5	19.112	23.393	.558	1.239	...	H2-1
191	M235	L2x2x3	.432	0	5	.025	0	y	5	19.112	23.393	.558	1.239	...	H2-1
192	M236	L2x2x3	.397	0	5	.024	0	y	5	19.112	23.393	.558	1.239	...	H2-1
193	M237	L2x2x3	.373	0	5	.024	2.5...	y	5	19.112	23.393	.558	1.239	...	H2-1
194	M238	L2x2x3	.350	0	5	.024	0	y	5	19.112	23.393	.558	1.239	...	H2-1
195	M239	L2x2x3	.338	0	5	.024	0	y	5	19.112	23.393	.558	1.239	...	H2-1
196	M240	L2x2x3	.316	0	5	.024	0	y	5	19.112	23.393	.558	1.239	...	H2-1
197	M241	L2x2x3	.299	0	5	.022	0	y	5	19.112	23.393	.558	1.239	...	H2-1
198	M242	L2x2x3	.458	24...	5	.052	.502	y	4	19.112	23.393	.558	1.239	...	H2-1
199	M243	L2x2x3	.555	24...	4	.021	.753	z	4	19.112	23.393	.558	1.239	...	H2-1
200	M244	L2x2x3	.521	24...	4	.021	0	z	5	19.112	23.393	.558	1.239	...	H2-1
201	M245	L2x2x3	.498	0	4	.022	0	z	4	19.112	23.393	.558	1.239	...	H2-1
202	M246	L2x2x3	.463	0	4	.023	1.2...	z	4	19.112	23.393	.558	1.239	...	H2-1
203	M247	L2x2x3	.418	0	4	.023	24...	z	5	19.112	23.393	.558	1.239	...	H2-1
204	M248	L2x2x3	.371	0	4	.024	24...	z	5	19.112	23.393	.558	1.239	...	H2-1
205	M249	L2x2x3	.337	0	4	.025	24...	z	5	19.112	23.393	.558	1.239	...	H2-1
206	M250	L2x2x3	.309	0	4	.025	24...	z	5	19.112	23.393	.558	1.239	...	H2-1
207	M251	L2x2x3	.284	0	4	.024	24...	z	5	19.112	23.393	.558	1.239	...	H2-1
208	M252	L2x2x3	.263	0	4	.026	0	y	5	19.112	23.393	.558	1.239	...	H2-1
209	M253	L2x2x3	.246	0	4	.026	0	y	5	19.112	23.393	.558	1.239	...	H2-1
210	M254	L2x2x3	.334	24...	5	.032	0	y	5	19.112	23.393	.558	1.239	...	H2-1
211	M255	L2x2x3	.472	24...	4	.051	0	z	4	19.112	23.393	.558	1.239	...	H2-1
212	M256	L2x2x3	.634	0	4	.031	0	z	4	2.981	23.393	.558	1.002	...	H2-1
213	M257	L2x2x3	.626	0	4	.031	0	z	5	2.981	23.393	.558	1.01	...	H2-1
214	M258	L2x2x3	.626	0	4	.031	0	z	5	2.981	23.393	.558	1.009	...	H2-1
215	M259	L2x2x3	.628	0	4	.031	0	z	4	2.981	23.393	.558	.997	...	H2-1
216	M260	L2x2x3	.630	0	4	.031	0	z	4	2.981	23.393	.558	.978	...	H2-1
217	M261	L2x2x3	.634	91	4	.031	91	z	4	2.981	23.393	.558	.978	...	H2-1
218	M262	L2x2x3	.634	91	4	.031	91	z	4	2.981	23.393	.558	.976	...	H2-1
219	M263	L2x2x3	.635	91	4	.031	91	z	4	2.981	23.393	.558	.976	...	H2-1

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
220	M264	L2x2x3	.636	91	4	.031	91	z	4	2.981	23.393	.558	.976	...	H2-1
221	M265	L2x2x3	.638	91	4	.031	91	z	4	2.981	23.393	.558	.976	...	H2-1
222	M266	L2x2x3	.636	91	4	.031	91	z	4	2.981	23.393	.558	.975	...	H2-1
223	M267	L2x2x3	.637	0	4	.031	0	z	4	2.981	23.393	.558	.974	...	H2-1
224	M268	L2x2x3	.674	0	4	.034	0	z	4	2.981	23.393	.558	1.002	...	H2-1
225	M269	L2x2x3	.571	0	4	.046	0	z	4	16.667	23.393	.558	1.239	...	H2-1
226	M270	L2x2x3	.576	0	4	.046	0	z	4	15.858	23.393	.558	1.239	...	H2-1
227	M271	L2x2x3	.543	0	4	.044	0	z	4	15.036	23.393	.558	1.239	...	H2-1
228	M272	L2x2x3	.460	0	4	.031	0	z	4	14.208	23.393	.558	1.239	...	H2-1
229	M273	L2x2x3	.446	0	4	.030	0	z	4	13.381	23.393	.558	1.239	...	H2-1
230	M274	L2x2x3	.427	0	4	.028	0	z	4	12.558	23.393	.558	1.239	...	H2-1
231	M275	L2x2x3	.404	0	4	.027	0	z	4	11.746	23.393	.558	1.239	...	H2-1
232	M276	L2x2x3	.361	0	4	.024	0	z	4	10.949	23.393	.558	1.239	...	H2-1
233	M277	L2x2x3	.342	0	4	.033	48...	z	5	10.171	23.393	.558	1.239	...	H2-1
234	M278	L2x2x3	.321	51...	5	.040	51...	z	5	9.417	23.393	.558	1.229	...	H2-1
235	M279	L2x2x3	.401	53...	5	.044	53...	z	5	8.669	23.393	.558	1.213	...	H2-1
236	M280	L2x2x3	.397	55...	5	.044	55...	z	5	7.992	23.393	.558	1.201	...	H2-1
237	M281	L2x2x3	.453	0	5	.039	57...	z	5	7.392	23.393	.558	1.181	...	H2-1
238	M282	L2x2x3	.685	0	5	.058	0	y	5	16.667	23.393	.558	1.239	...	H2-1
239	M283	L2x2x3	.678	0	5	.056	0	y	5	15.858	23.393	.558	1.239	...	H2-1
240	M284	L2x2x3	.617	0	5	.053	0	y	5	15.036	23.393	.558	1.239	...	H2-1
241	M285	L2x2x3	.548	0	5	.040	0	y	5	14.208	23.393	.558	1.239	...	H2-1
242	M286	L2x2x3	.507	0	5	.039	0	y	5	13.381	23.393	.558	1.239	...	H2-1
243	M287	L2x2x3	.464	0	5	.036	0	y	5	12.558	23.393	.558	1.239	...	H2-1
244	M288	L2x2x3	.421	0	5	.034	0	y	5	11.746	23.393	.558	1.239	...	H2-1
245	M289	L2x2x3	.384	0	5	.032	0	y	5	10.949	23.393	.558	1.239	...	H2-1
246	M290	L2x2x3	.406	0	2	.042	0	z	6	10.171	23.393	.558	1.192	...	H2-1
247	M291	L2x2x3	.445	0	2	.045	0	z	6	9.417	23.393	.558	1.2	...	H2-1
248	M292	L2x2x3	.494	0	2	.047	0	z	2	8.669	23.393	.558	1.2	...	H2-1
249	M293	L2x2x3	.536	0	2	.048	0	z	2	7.992	23.393	.558	1.193	...	H2-1
250	M294	L2x2x3	.584	0	2	.047	0	z	6	7.392	23.393	.558	1.183	...	H2-1
251	M295	HSS12x12x6	.827	0	5	.173	0	z	5	662.3...	662.4	223.27	223.27	...	H1-1b
252	M296	HSS12x12x6	.000	0	4	.000	0	y	5	661.8...	662.4	223.27	223.27	1	H1-1b
253	M297	HSS12x12x6	.428	0	5	.177	0	z	5	661.4...	662.4	223.27	223.27	...	H1-1b
254	M298	HSS12x12x6	.072	0	5	.041	0	y	2	661.7...	662.4	223.27	223.27	...	H1-1b
255	M299	HSS12x12x6	.041	0	5	.043	0	y	5	662.35	662.4	223.27	223.27	...	H1-1b
256	M300	HSS12x12x6	.628	0	2	.180	0	y	5	662.3...	662.4	223.27	223.27	...	H1-1b
257	M301	HSS12x12x6	.000	0	4	.000	0	y	5	661.8...	662.4	223.27	223.27	1	H1-1b
258	M302	HSS12x12x6	.274	0	2	.111	0	y	2	661.4...	662.4	223.27	223.27	...	H1-1b
259	M303	HSS12x12x6	.062	0	2	.043	0	y	5	661.7...	662.4	223.27	223.27	...	H1-1b
260	M304	HSS12x12x6	.036	0	2	.043	0	y	2	662.35	662.4	223.27	223.27	...	H1-1b
261	M305	HSS12x8x4	.153	0	5	.097	0	y	5	326.7...	370.9...	73.797	116.951	...	H1-1b
262	M306	HSS8x8x4	.261	0	5	.218	0	z	5	293.6...	293.94	66.288	66.288	...	H1-1b
263	M307	HSS8x8x4	.532	0	5	.492	0	z	5	293.6...	293.94	66.288	66.288	...	H1-1b
264	M308	HSS8x8x4	.078	63.5	5	.048	0	y	5	286.0...	293.94	66.288	66.288	...	H1-1b
265	M309	HSS4x4x3	.082	53...	5	.004	0	z	2	98.733	106.8...	12.662	12.662	...	H1-1b
266	M310	HSS4x4x3	.078	53...	5	.003	53...	y	5	98.733	106.8...	12.662	12.662	...	H1-1b
267	M311	HSS4x4x3	.243	41...	2	.015	0	y	2	101.9...	106.8...	12.662	12.662	...	H1-1a
268	M312	HSS4x4x3	.410	41...	2	.045	0	y	5	101.9...	106.8...	12.662	12.662	...	H1-1a
269	M313	HSS4x4x3	.079	53...	2	.010	0	y	5	98.733	106.8...	12.662	12.662	...	H1-1b
270	M314	HSS4x4x3	.076	53...	2	.009	0	y	5	98.733	106.8...	12.662	12.662	...	H1-1b
271	M315	HSS4x4x3	.105	0	5	.008	0	y	2	98.733	106.8...	12.662	12.662	...	H1-...
272	M316	HSS4x4x3	.103	0	5	.006	0	z	5	98.733	106.8...	12.662	12.662	...	H1-...
273	M317	HSS4x4x3	.125	0	5	.009	0	y	5	98.733	106.8...	12.662	12.662	...	H1-...
274	M318	HSS4x4x3	.123	0	5	.003	53...	y	5	98.733	106.8...	12.662	12.662	...	H1-...
275	M319	HSS4x4x3	.456	0	5	.029	0	y	2	101.9...	106.8...	12.662	12.662	...	H1-1a
276	M320	HSS4x4x3	.257	0	5	.019	41...	y	5	101.9...	106.8...	12.662	12.662	...	H1-1a
277	M323	HSS12x12x6	.600	0	2	.182	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
278	M324	HSS12x12x6	.791	0	5	.175	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
279	M325	HSS12x12x6	.409	0	2	.180	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
280	M326	HSS12x12x6	.231	0	2	.181	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
281	M327	HSS12x12x6	.247	24	2	.182	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
282	M328	HSS12x12x6	.420	24	2	.189	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
283	M329	HSS12x12x6	.534	0	5	.173	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
284	M330	HSS12x12x6	.286	0	5	.173	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
285	M331	HSS12x12x6	.363	24	5	.173	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
286	M332	HSS12x12x6	.619	24	5	.177	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
287	M343	L2x2x3	.471	13...	5	.064	0	y	5	21.904	23.393	.558	1.239	...	H2-1
288	M344	L2x2x3	.453	0	5	.022	0	z	5	6.121	23.393	.558	1.196	...	H2-1
289	M345	L2x2x3	.585	0	5	.075	0	z	5	21.904	23.393	.558	1.239	...	H2-1
290	M346	L2x2x3	.556	13...	4	.080	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
291	M347	L2x2x3	.420	0	5	.019	0	y	5	6.121	23.393	.558	1.197	...	H2-1
292	M348	L2x2x3	.697	0	5	.094	0	y	5	21.904	23.393	.558	1.239	...	H2-1
293	M349	L2x2x3	.560	13...	4	.074	13...	y	4	21.904	23.393	.558	1.239	...	H2-1
294	M350	L2x2x3	.372	0	5	.017	0	y	5	6.121	23.393	.558	1.197	...	H2-1
295	M351	L2x2x3	.576	0	5	.076	0	y	5	21.904	23.393	.558	1.239	...	H2-1
296	M352	L2x2x3	.651	13...	5	.075	13...	y	5	21.904	23.393	.558	1.239	...	H2-1
297	M353	L2x2x3	.244	0	5	.011	0	y	5	6.121	23.393	.558	1.197	...	H2-1
298	M354	L2x2x3	.482	0	4	.061	0	y	4	21.904	23.393	.558	1.239	...	H2-1
299	M355	L2x2x3	.856	13...	5	.085	13...	y	5	21.904	23.393	.558	1.239	...	H2-1
300	M356	L2x2x3	.041	0	5	.002	0	y	5	6.121	23.393	.558	1.203	...	H2-1
301	M357	L2x2x3	.588	0	2	.066	0	y	2	21.904	23.393	.558	1.239	...	H2-1
302	M358	L2x2x3	.306	16	4	.056	0	z	4	21.399	23.393	.558	1.239	...	H2-1
303	M359	L2x2x3	.396	16	5	.058	0	y	5	21.399	23.393	.558	1.239	...	H2-1
304	M360	L2x2x3	.211	0	4	.023	24...	z	5	19.138	23.393	.558	1.239	...	H2-1
305	M361	L2x2x3	.292	0	5	.022	0	y	4	19.138	23.393	.558	1.239	...	H2-1
306	M362	L2x2x3	.705	0	5	.033	0	y	5	2.981	23.393	.558	1.094	...	H2-1
307	M363	L2x2x3	.354	0	5	.019	0	z	5	2.981	23.393	.558	1.088	...	H2-1
308	M364	L2x2x3	.207	20	4	.028	0	y	4	20.354	23.393	.558	1.239	...	H2-1
309	M365	L2x2x3	.219	0	5	.036	0	z	5	20.354	23.393	.558	1.239	...	H2-1
310	M366	L2x2x3	.285	24	2	.027	24	y	2	19.145	23.393	.558	1.239	...	H2-1
311	M367	L2x2x3	.218	0	5	.023	0	z	4	19.145	23.393	.558	1.239	...	H2-1
312	M368	L2x2x3	.233	24	4	.028	0	y	5	19.145	23.393	.558	1.239	...	H2-1
313	M369	L2x2x3	.259	24	5	.030	0	y	5	19.145	23.393	.558	1.239	...	H2-1
314	M370	L2x2x3	.382	0	5	.034	0	z	5	19.145	23.393	.558	1.239	...	H2-1
315	M371	L2x2x3	.216	0	4	.023	0	y	4	19.145	23.393	.558	1.239	...	H2-1
316	M372	L2x2x3	.279	24	5	.026	0	y	4	19.145	23.393	.558	1.239	...	H2-1
317	M373	L2x2x3	.322	24	5	.023	0	y	5	19.145	23.393	.558	1.239	...	H2-1
318	M374	L2x2x3	.222	0	4	.024	25	z	4	19.138	23.393	.558	1.239	...	H2-1
319	M375	L2x2x3	.223	24...	4	.026	0	y	4	19.138	23.393	.558	1.239	...	H2-1
320	M376	L2x2x3	.349	24...	4	.038	0	z	4	19.138	23.393	.558	1.239	...	H2-1
321	M377	L2x2x3	.341	0	5	.030	0	y	5	19.138	23.393	.558	1.239	...	H2-1
322	M378	L2x2x3	.298	0	5	.032	.751	y	5	19.138	23.393	.558	1.239	...	H2-1
323	M379	L2x2x3	.464	24...	5	.050	1.5...	y	5	19.138	23.393	.558	1.239	...	H2-1
324	M380	L2x2x3	.517	0	4	.062	0	y	4	21.155	23.393	.558	1.239	...	H2-1
325	M381	L2x2x3	.545	18	4	.063	0	y	4	20.899	23.393	.558	1.239	...	H2-1
326	M382	L2x2x3	.426	19	4	.050	0	y	4	20.632	23.393	.558	1.239	...	H2-1
327	M383	L2x2x3	.426	19	4	.050	0	z	4	20.632	23.393	.558	1.239	...	H2-1
328	M384	L2x2x3	.553	18	5	.063	0	z	4	20.899	23.393	.558	1.239	...	H2-1
329	M385	L2x2x3	.553	17	5	.062	0	z	4	21.155	23.393	.558	1.239	...	H2-1
330	M386	L2x2x3	.742	0	5	.036	0	z	5	2.981	23.393	.558	1.12	...	H2-1
331	M387	L2x2x3	.722	0	5	.035	0	z	5	2.981	23.393	.558	1.113	...	H2-1
332	M388	L2x2x3	.672	0	5	.034	0	z	5	2.981	23.393	.558	1.109	...	H2-1
333	M389	L2x2x3	.626	13...	5	.088	13...	z	5	21.904	23.393	.558	1.239	...	H2-1
334	M390	L2x2x3	.037	0	5	.002	0	z	5	6.121	23.393	.558	1.2	...	H2-1
335	M391	L2x2x3	.670	0	2	.072	0	z	2	21.904	23.393	.558	1.239	...	H2-1
336	M394	L2x2x3	.504	0	5	.027	60	y	5	6.856	23.393	.558	1.147	...	H2-1
337	M395	L2x2x3	.355	91	5	.016	0	y	5	2.981	23.393	.558	1.124	...	H2-1

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
338	M396	L2x2x3	.383	0	2	.032	0	y	6	6.856	23.393	.558	1.136	...	H2-1
339	M397	HSS12x12x6	.641	2	5	.178	0	y	2	662.3...	662.4	223.27	223.27	...	H1-1b
340	M398	HSS12x12x6	.433	2	2	.186	0	y	5	662.3...	662.4	223.27	223.27	...	H1-1b
341	M399	HSS12x12x6	.255	0	5	.177	0	z	5	661.2...	662.4	223.27	223.27	...	H1-1b
342	M400	HSS12x12x6	.087	0	5	.179	0	z	5	662.3...	662.4	223.27	223.27	...	H1-...
343	M401	HSS12x12x6	.168	0	2	.113	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
344	M402	HSS12x12x6	.065	0	5	.116	0	y	2	662.3...	662.4	223.27	223.27	...	H1-1b
345	M403	HSS12x12x6	.060	0	5	.042	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
346	M404	HSS12x12x6	.052	0	2	.044	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
347	M405	HSS12x12x6	.049	0	5	.043	0	y	2	661.2...	662.4	223.27	223.27	...	H1-...
348	M406	HSS12x12x6	.048	0	5	.044	0	z	2	661.6...	662.4	223.27	223.27	...	H1-...
349	M407	HSS12x12x6	.041	0	2	.045	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
350	M408	HSS12x12x6	.031	0	2	.046	0	y	5	661.6...	662.4	223.27	223.27	...	H1-1b
351	M409	HSS12x12x6	.036	0	5	.043	0	y	5	661.2...	662.4	223.27	223.27	...	H1-1b
352	M410	HSS12x12x6	.032	0	2	.043	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
353	M411	HSS12x12x6	.029	24	5	.044	0	z	5	661.2...	662.4	223.27	223.27	...	H1-1b
354	M412	HSS12x12x6	.052	24	5	.045	0	z	5	661.2...	662.4	223.27	223.27	...	H1-1b
355	M413	HSS12x12x6	.025	24	2	.043	0	y	2	661.2...	662.4	223.27	223.27	...	H1-1b
356	M414	HSS12x12x6	.043	24	2	.044	0	z	2	661.2...	662.4	223.27	223.27	...	H1-1b
357	M415	HSS12x12x6	.060	8	5	.045	0	y	2	662.2...	662.4	223.27	223.27	...	H1-1b
358	M416	HSS12x12x6	.049	8	2	.047	0	z	5	662.2...	662.4	223.27	223.27	...	H1-1b
359	M417	L2x2x3	.420	0	2	.021	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
360	M418	L2x2x3	.190	63.5	2	.011	0	z	5	6.121	23.393	.558	1.195	...	H2-1
361	M419	L2x2x3	.545	13...	5	.030	0	z	2	21.904	23.393	.558	1.239	...	H2-1
362	M422	L2x2x3	.658	13...	5	.076	0	z	5	21.904	23.393	.558	1.239	...	H2-1
363	M423	L2x2x3	.267	0	5	.015	0	z	5	6.121	23.393	.558	1.194	...	H2-1
364	M424	L2x2x3	.649	13...	5	.057	0	z	5	21.904	23.393	.558	1.239	...	H2-1
365	M427	L2x2x3	.829	13...	5	.098	0	z	5	21.904	23.393	.558	1.239	...	H2-1
366	M428	L2x2x3	.290	0	5	.015	0	z	5	6.121	23.393	.558	1.192	...	H2-1
367	M429	L2x2x3	.670	13...	5	.074	0	z	5	21.904	23.393	.558	1.239	...	H2-1
368	M432	L2x2x3	.718	13...	2	.083	0	z	5	21.904	23.393	.558	1.239	...	H2-1
369	M433	L2x2x3	.259	0	5	.012	0	z	5	6.121	23.393	.558	1.186	...	H2-1
370	M434	L2x2x3	.635	0	5	.073	0	z	5	21.904	23.393	.558	1.239	...	H2-1
371	M437	L2x2x3	.421	13...	5	.048	0	z	2	21.904	23.393	.558	1.239	...	H2-1
372	M438	L2x2x3	.167	0	5	.006	0	z	5	6.121	23.393	.558	1.151	...	H2-1
373	M439	L2x2x3	.553	13...	5	.056	0	z	5	21.904	23.393	.558	1.239	...	H2-1
374	M442	L2x2x3	.404	13...	5	.038	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
375	M443	L2x2x3	.083	0	5	.002	0	y	5	6.121	23.393	.558	1.143	...	H2-1
376	M444	L2x2x3	.453	13...	5	.040	0	z	5	21.904	23.393	.558	1.239	...	H2-1
377	M447	L2x2x3	.360	13...	5	.046	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
378	M448	L2x2x3	.069	0	5	.002	0	z	5	6.121	23.393	.558	1.238	...	H2-1
379	M449	L2x2x3	.441	13...	5	.046	0	z	4	21.904	23.393	.558	1.239	...	H2-1
380	M452	L2x2x3	.336	13...	4	.047	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
381	M453	L2x2x3	.075	0	5	.002	0	z	5	6.121	23.393	.558	1.231	...	H2-1
382	M454	L2x2x3	.441	13...	5	.048	0	z	5	21.904	23.393	.558	1.239	...	H2-1
383	M457	L2x2x3	.335	13...	4	.047	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
384	M458	L2x2x3	.060	0	5	.003	0	z	5	6.121	23.393	.558	1.22	...	H2-1
385	M459	L2x2x3	.436	13...	5	.054	0	z	5	21.904	23.393	.558	1.239	...	H2-1
386	M462	L2x2x3	.336	13...	4	.047	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
387	M463	L2x2x3	.053	0	5	.003	0	z	5	6.121	23.393	.558	1.219	...	H2-1
388	M464	L2x2x3	.442	0	5	.059	0	z	5	21.904	23.393	.558	1.239	...	H2-1
389	M467	L2x2x3	.344	13...	4	.051	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
390	M468	L2x2x3	.048	0	5	.003	0	z	5	6.121	23.393	.558	1.227	...	H2-1
391	M469	L2x2x3	.486	0	5	.065	0	z	5	21.904	23.393	.558	1.239	...	H2-1
392	M472	L2x2x3	.348	13...	4	.051	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
393	M473	L2x2x3	.038	0	5	.003	0	z	5	6.121	23.393	.558	1.239	...	H2-1
394	M474	L2x2x3	.510	0	5	.069	0	z	5	21.904	23.393	.558	1.239	...	H2-1
395	M477	L2x2x3	.356	13...	4	.055	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
396	M478	L2x2x3	.026	0	5	.003	0	z	5	6.121	23.393	.558	1.226	...	H2-1

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
397	M479	L2x2x3	.519	0	5	.075	0	z	5	21.904	23.393	.558	1.239	...	H2-1
398	M482	L2x2x3	.492	13...	4	.075	0	z	4	21.904	23.393	.558	1.239	...	H2-1
399	M483	L2x2x3	.208	63.5	4	.019	63.5	y	4	6.121	23.393	.558	1.204	...	H2-1
400	M484	L2x2x3	.735	0	5	.097	0	z	5	21.904	23.393	.558	1.239	...	H2-1
401	M487	L2x2x3	.657	0	4	.038	0	z	4	21.904	23.393	.558	1.239	...	H2-1
402	M488	L2x2x3	.511	30...	4	.032	0	z	4	6.121	23.393	.558	1.032	...	H2-1
403	M489	L2x2x3	.627	13...	4	.033	13...	z	4	21.904	23.393	.558	1.239	...	H2-1
404	M490	L2x2x3	.389	0	4	.049	0	z	4	17.459	23.393	.558	1.239	...	H2-1
405	M491	L2x2x3	.540	0	5	.049	0	y	5	17.459	23.393	.558	1.239	...	H2-1
406	M492	L2x2x3	.658	0	5	.027	.251	z	5	19.112	23.393	.558	1.239	...	H2-1
407	M493	L2x2x3	.568	24...	4	.026	0	y	4	19.112	23.393	.558	1.239	...	H2-1
408	M494	L2x2x3	.542	0	5	.036	0	y	5	19.145	23.393	.558	1.239	...	H2-1
409	M495	L2x2x3	.344	0	2	.017	0	z	2	19.145	23.393	.558	1.239	...	H2-1
410	M496	L2x2x3	.269	0	5	.021	0	z	2	19.145	23.393	.558	1.239	...	H2-1
411	M497	L2x2x3	.271	24	5	.021	0	z	2	19.145	23.393	.558	1.239	...	H2-1
412	M498	L2x2x3	.206	24	2	.018	0	z	2	19.145	23.393	.558	1.239	...	H2-1
413	M499	L2x2x3	.195	0	4	.018	0	z	4	19.145	23.393	.558	1.239	...	H2-1
414	M500	L2x2x3	.189	0	5	.020	0	y	5	19.145	23.393	.558	1.239	...	H2-1
415	M501	L2x2x3	.180	0	4	.018	0	z	4	19.145	23.393	.558	1.239	...	H2-1
416	M502	L2x2x3	.190	24	4	.018	0	z	4	19.145	23.393	.558	1.239	...	H2-1
417	M503	L2x2x3	.196	0	4	.018	0	z	4	19.145	23.393	.558	1.239	...	H2-1
418	M504	L2x2x3	.232	24	4	.020	0	z	4	19.145	23.393	.558	1.239	...	H2-1
419	M505	L2x2x3	.256	24	4	.023	0	z	4	19.145	23.393	.558	1.239	...	H2-1
420	M506	L2x2x3	.292	24	4	.025	0	z	4	19.145	23.393	.558	1.239	...	H2-1
421	M507	L2x2x3	.385	24	4	.028	0	z	4	19.145	23.393	.558	1.239	...	H2-1
422	M510	L2x2x3	.527	0	2	.039	0	z	2	19.145	23.393	.558	1.239	...	H2-1
423	M511	L2x2x3	.344	0	5	.028	0	y	5	19.145	23.393	.558	1.239	...	H2-1
424	M512	L2x2x3	.280	0	5	.028	0	y	5	19.145	23.393	.558	1.239	...	H2-1
425	M513	L2x2x3	.254	24	5	.028	0	y	5	19.145	23.393	.558	1.239	...	H2-1
426	M514	L2x2x3	.269	24	5	.027	0	y	5	19.145	23.393	.558	1.239	...	H2-1
427	M515	L2x2x3	.279	24	5	.026	0	y	5	19.145	23.393	.558	1.239	...	H2-1
428	M516	L2x2x3	.284	24	5	.024	24	z	2	19.145	23.393	.558	1.239	...	H2-1
429	M517	L2x2x3	.287	24	5	.025	0	y	5	19.145	23.393	.558	1.239	...	H2-1
430	M518	L2x2x3	.294	24	5	.027	0	y	5	19.145	23.393	.558	1.239	...	H2-1
431	M519	L2x2x3	.297	24	5	.028	0	y	5	19.145	23.393	.558	1.239	...	H2-1
432	M520	L2x2x3	.317	24	5	.027	1.25	y	5	19.145	23.393	.558	1.239	...	H2-1
433	M521	L2x2x3	.346	24	5	.032	0	y	5	19.145	23.393	.558	1.239	...	H2-1
434	M522	L2x2x3	.386	24	5	.033	0	y	5	19.145	23.393	.558	1.239	...	H2-1
435	M523	L2x2x3	.506	24	5	.040	0	y	5	19.145	23.393	.558	1.239	...	H2-1
436	M524	L2x2x3	.688	0	5	.026	1.5...	z	5	19.112	23.393	.558	1.239	...	H2-1
437	M525	L2x2x3	.645	0	5	.029	24...	y	5	19.112	23.393	.558	1.239	...	H2-1
438	M526	L2x2x3	.624	0	5	.031	0	z	5	19.112	23.393	.558	1.239	...	H2-1
439	M527	L2x2x3	.569	0	5	.031	3.0...	z	5	19.112	23.393	.558	1.239	...	H2-1
440	M528	L2x2x3	.488	0	5	.027	0	z	5	19.112	23.393	.558	1.239	...	H2-1
441	M529	L2x2x3	.432	0	5	.025	0	z	5	19.112	23.393	.558	1.239	...	H2-1
442	M530	L2x2x3	.398	0	5	.024	0	z	5	19.112	23.393	.558	1.239	...	H2-1
443	M531	L2x2x3	.373	0	5	.024	0	z	5	19.112	23.393	.558	1.239	...	H2-1
444	M532	L2x2x3	.350	0	5	.024	.251	z	5	19.112	23.393	.558	1.239	...	H2-1
445	M533	L2x2x3	.339	0	5	.024	.753	z	5	19.112	23.393	.558	1.239	...	H2-1
446	M534	L2x2x3	.317	0	5	.024	0	z	5	19.112	23.393	.558	1.239	...	H2-1
447	M535	L2x2x3	.298	0	5	.022	0	z	5	19.112	23.393	.558	1.239	...	H2-1
448	M536	L2x2x3	.479	24...	5	.051	0	z	4	19.112	23.393	.558	1.239	...	H2-1
449	M537	L2x2x3	.554	24...	4	.021	1.5...	y	4	19.112	23.393	.558	1.239	...	H2-1
450	M538	L2x2x3	.520	24...	4	.021	0	y	5	19.112	23.393	.558	1.239	...	H2-1
451	M539	L2x2x3	.498	0	4	.022	0	y	4	19.112	23.393	.558	1.239	...	H2-1
452	M540	L2x2x3	.463	0	4	.023	0	y	4	19.112	23.393	.558	1.239	...	H2-1
453	M541	L2x2x3	.417	0	4	.023	24...	y	5	19.112	23.393	.558	1.239	...	H2-1
454	M542	L2x2x3	.370	0	4	.024	24...	y	5	19.112	23.393	.558	1.239	...	H2-1
455	M543	L2x2x3	.336	0	4	.025	24...	y	5	19.112	23.393	.558	1.239	...	H2-1

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
456	M544	L2x2x3	.309	0	4	.025	24...	y	5	19.112	23.393	.558	1.239	...	H2-1
457	M545	L2x2x3	.284	0	4	.024	24...	y	5	19.112	23.393	.558	1.239	...	H2-1
458	M546	L2x2x3	.262	0	4	.026	0	z	5	19.112	23.393	.558	1.239	...	H2-1
459	M547	L2x2x3	.246	0	4	.026	0	z	5	19.112	23.393	.558	1.239	...	H2-1
460	M548	L2x2x3	.328	24...	5	.031	0	z	5	19.112	23.393	.558	1.239	...	H2-1
461	M549	L2x2x3	.447	24...	4	.052	1.0...	y	4	19.112	23.393	.558	1.239	...	H2-1
462	M550	L2x2x3	.634	0	4	.031	0	y	4	2.981	23.393	.558	1.002	...	H2-1
463	M551	L2x2x3	.626	0	4	.031	0	y	5	2.981	23.393	.558	1.01	...	H2-1
464	M552	L2x2x3	.626	0	4	.031	0	y	5	2.981	23.393	.558	1.009	...	H2-1
465	M553	L2x2x3	.628	0	4	.031	0	y	4	2.981	23.393	.558	.997	...	H2-1
466	M554	L2x2x3	.630	91	4	.031	91	y	4	2.981	23.393	.558	.978	...	H2-1
467	M555	L2x2x3	.634	91	4	.031	91	y	4	2.981	23.393	.558	.978	...	H2-1
468	M556	L2x2x3	.634	91	4	.031	91	y	4	2.981	23.393	.558	.976	...	H2-1
469	M557	L2x2x3	.635	91	4	.031	91	y	4	2.981	23.393	.558	.976	...	H2-1
470	M558	L2x2x3	.636	91	4	.031	91	y	4	2.981	23.393	.558	.976	...	H2-1
471	M559	L2x2x3	.638	91	4	.031	91	y	4	2.981	23.393	.558	.976	...	H2-1
472	M560	L2x2x3	.636	91	4	.031	0	y	4	2.981	23.393	.558	.975	...	H2-1
473	M561	L2x2x3	.637	91	4	.031	91	y	4	2.981	23.393	.558	.974	...	H2-1
474	M562	L2x2x3	.674	91	4	.034	91	y	4	2.981	23.393	.558	1.002	...	H2-1
475	M563	L2x2x3	.569	0	4	.046	0	y	4	16.667	23.393	.558	1.239	...	H2-1
476	M564	L2x2x3	.576	0	4	.046	0	y	4	15.858	23.393	.558	1.239	...	H2-1
477	M565	L2x2x3	.544	0	4	.044	0	y	4	15.036	23.393	.558	1.239	...	H2-1
478	M566	L2x2x3	.461	0	4	.031	0	y	4	14.208	23.393	.558	1.239	...	H2-1
479	M567	L2x2x3	.447	0	4	.030	0	y	4	13.381	23.393	.558	1.239	...	H2-1
480	M568	L2x2x3	.428	0	4	.028	0	y	4	12.558	23.393	.558	1.239	...	H2-1
481	M569	L2x2x3	.405	0	4	.027	0	y	4	11.746	23.393	.558	1.239	...	H2-1
482	M570	L2x2x3	.362	0	4	.024	0	y	4	10.949	23.393	.558	1.239	...	H2-1
483	M571	L2x2x3	.342	0	4	.033	48...	y	5	10.171	23.393	.558	1.239	...	H2-1
484	M572	L2x2x3	.321	51...	5	.040	51...	y	5	9.417	23.393	.558	1.229	...	H2-1
485	M573	L2x2x3	.401	53...	5	.044	53...	y	5	8.669	23.393	.558	1.213	...	H2-1
486	M574	L2x2x3	.397	55...	5	.043	55...	y	5	7.992	23.393	.558	1.201	...	H2-1
487	M575	L2x2x3	.453	0	5	.039	57...	y	5	7.392	23.393	.558	1.181	...	H2-1
488	M576	L2x2x3	.687	0	5	.058	0	z	5	16.667	23.393	.558	1.239	...	H2-1
489	M577	L2x2x3	.678	0	5	.056	0	z	5	15.858	23.393	.558	1.239	...	H2-1
490	M578	L2x2x3	.616	0	5	.053	0	z	5	15.036	23.393	.558	1.239	...	H2-1
491	M579	L2x2x3	.547	0	5	.040	0	z	5	14.208	23.393	.558	1.239	...	H2-1
492	M580	L2x2x3	.506	0	5	.038	0	z	5	13.381	23.393	.558	1.239	...	H2-1
493	M581	L2x2x3	.463	0	5	.036	0	z	5	12.558	23.393	.558	1.239	...	H2-1
494	M582	L2x2x3	.420	0	5	.034	0	z	5	11.746	23.393	.558	1.239	...	H2-1
495	M583	L2x2x3	.384	0	5	.032	0	z	5	10.949	23.393	.558	1.239	...	H2-1
496	M584	L2x2x3	.406	0	2	.042	0	y	6	10.171	23.393	.558	1.192	...	H2-1
497	M585	L2x2x3	.445	0	2	.045	0	y	6	9.417	23.393	.558	1.2	...	H2-1
498	M586	L2x2x3	.494	0	2	.047	0	y	2	8.669	23.393	.558	1.2	...	H2-1
499	M587	L2x2x3	.536	0	2	.048	0	y	2	7.992	23.393	.558	1.193	...	H2-1
500	M588	L2x2x3	.584	0	2	.047	0	y	6	7.392	23.393	.558	1.183	...	H2-1
501	M591	HSS6x6x4	.116	0	5	.032	66.3	z	2	205.4	216.9	38.64	38.64	...	H1-...
502	M592	HSS6x6x4	.038	0	4	.032	65...	z	5	205.8	216.9	38.64	38.64	...	H1-1b
503	M593	HSS6x6x4	.033	0	2	.027	64...	z	2	206.1	216.9	38.64	38.64	...	H1-1b
504	M594	HSS6x6x4	.058	0	5	.029	63...	y	5	206.4	216.9	38.64	38.64	...	H1-1b
505	M595	HSS6x6x4	.076	0	5	.031	62...	y	5	206.6	216.9	38.64	38.64	...	H1-1b
506	M596	HSS6x6x4	.094	0	5	.027	62...	y	5	206.8	216.9	38.64	38.64	...	H1-1b
507	M597	HSS6x6x4	.120	0	5	.025	61...	y	5	207.0	216.9	38.64	38.64	...	H1-1b
508	M598	HSS6x6x4	.131	14...	5	.014	0	y	2	207.0	216.9	38.64	38.64	...	H1-1b
509	M599	HSS6x6x4	.259	0	5	.010	61...	y	5	207.1	216.9	38.64	38.64	...	H1-1a
510	M601	HSS6x6x4	.116	0	5	.032	66.3	z	2	205.4	216.9	38.64	38.64	...	H1-...
511	M602	HSS6x6x4	.038	0	4	.032	65...	z	5	205.8	216.9	38.64	38.64	...	H1-1b
512	M603	HSS6x6x4	.033	0	2	.027	64...	z	2	206.1	216.9	38.64	38.64	...	H1-1b
513	M604	HSS6x6x4	.058	0	5	.029	63...	y	5	206.4	216.9	38.64	38.64	...	H1-1b
514	M605	HSS6x6x4	.076	0	5	.031	62...	y	5	206.6	216.9	38.64	38.64	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
515	M606	HSS6x6x4	.094	0	5	.027	62...	y	5	206.8..	216.9..	38.64	38.64	...	H1-1b
516	M607	HSS6x6x4	.120	0	5	.025	61...	y	5	207.0..	216.9..	38.64	38.64	...	H1-1b
517	M608	HSS6x6x4	.131	14...	5	.014	0	y	2	207.0..	216.9..	38.64	38.64	...	H1-1b
518	M608A	HSS6x6x4	.259	0	5	.010	61...	y	5	207.1..	216.9..	38.64	38.64	...	H1-1a
519	M611	HSS6x6x4	.068	0	4	.034	0	z	5	205.4..	216.9..	38.64	38.64	...	H1-...
520	M612	HSS6x6x4	.040	0	4	.032	65...	z	5	205.8..	216.9..	38.64	38.64	...	H1-1b
521	M613	HSS6x6x4	.072	0	5	.028	0	y	5	206.1..	216.9..	38.64	38.64	...	H1-...
522	M614	HSS6x6x4	.059	0	2	.032	0	y	5	206.4..	216.9..	38.64	38.64	...	H1-...
523	M615	HSS6x6x4	.096	0	2	.031	0	y	5	206.6..	216.9..	38.64	38.64	...	H1-...
524	M616	HSS6x6x4	.102	0	2	.029	0	y	5	206.8..	216.9..	38.64	38.64	...	H1-...
525	M617	HSS6x6x4	.138	0	2	.024	0	y	5	207.0..	216.9..	38.64	38.64	...	H1-...
526	M618	HSS6x6x4	.150	0	2	.015	0	y	5	207.0..	216.9..	38.64	38.64	...	H1-...
527	M619	HSS6x6x4	.179	0	2	.009	0	y	5	207.1..	216.9..	38.64	38.64	...	H1-...
528	M620	HSS6x6x4	.068	0	4	.034	0	z	5	205.4..	216.9..	38.64	38.64	...	H1-...
529	M621	HSS6x6x4	.040	0	4	.032	65...	z	5	205.8..	216.9..	38.64	38.64	...	H1-1b
530	M622	HSS6x6x4	.072	0	5	.028	0	y	5	206.1..	216.9..	38.64	38.64	...	H1-...
531	M623	HSS6x6x4	.059	0	2	.032	0	y	5	206.4..	216.9..	38.64	38.64	...	H1-...
532	M624	HSS6x6x4	.096	0	2	.031	0	y	5	206.6..	216.9..	38.64	38.64	...	H1-...
533	M625	HSS6x6x4	.102	0	2	.029	0	y	5	206.8..	216.9..	38.64	38.64	...	H1-...
534	M626	HSS6x6x4	.138	0	2	.024	0	y	5	207.0..	216.9..	38.64	38.64	...	H1-...
535	M627	HSS6x6x4	.150	0	2	.015	0	y	5	207.0..	216.9..	38.64	38.64	...	H1-...
536	M628	HSS6x6x4	.179	0	2	.009	0	y	5	207.1..	216.9..	38.64	38.64	...	H1-...
537	M631	HSS4x4x3	.167	0	5	.048	0	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
538	M632	HSS4x4x3	.124	40	5	.044	0	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
539	M633	HSS4x4x3	.076	0	2	.035	0	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
540	M634	HSS4x4x3	.042	40	5	.033	0	z	5	102.1..	106.8..	12.662	12.662	...	H1-1b
541	M635	HSS4x4x3	.057	0	2	.032	0	z	2	102.1..	106.8..	12.662	12.662	...	H1-1b
542	M636	HSS4x4x3	.077	40	5	.034	40	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
543	M637	HSS4x4x3	.084	0	5	.034	40	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
544	M638	HSS4x4x3	.079	40	2	.028	0	y	2	102.1..	106.8..	12.662	12.662	...	H1-1b
545	M639	HSS4x4x3	.052	40	5	.017	40	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
546	M640	HSS4x4x3	.027	0	5	.006	0	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
547	M641	HSS4x4x3	.052	40	5	.017	40	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
548	M642	HSS4x4x3	.079	40	2	.028	0	y	2	102.1..	106.8..	12.662	12.662	...	H1-1b
549	M643	HSS4x4x3	.084	0	5	.034	40	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
550	M644	HSS4x4x3	.077	40	5	.034	40	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
551	M645	HSS4x4x3	.057	0	2	.032	0	z	2	102.1..	106.8..	12.662	12.662	...	H1-1b
552	M646	HSS4x4x3	.042	40	5	.033	0	z	5	102.1..	106.8..	12.662	12.662	...	H1-1b
553	M647	HSS4x4x3	.076	0	2	.035	0	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
554	M648	HSS4x4x3	.124	40	5	.044	0	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
555	M649	HSS4x4x3	.167	0	5	.048	0	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
556	M650	HSS8x8x4	.104	61.2	2	.036	0	z	2	286.5..	293.94	66.288	66.288	...	H1-1b
557	M651	HSS8x8x4	.125	61.2	2	.047	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1b
558	M652	HSS8x8x4	.164	0	5	.050	0	y	2	286.5..	293.94	66.288	66.288	...	H1-...
559	M653	HSS8x8x4	.197	0	5	.052	0	y	2	286.5..	293.94	66.288	66.288	...	H1-...
560	M654	HSS8x8x4	.322	61.2	2	.048	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1a
561	M655	HSS8x8x4	.316	61.2	2	.045	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1a
562	M656	HSS8x8x4	.335	61.2	5	.033	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1a
563	M657	HSS8x8x4	.325	0	5	.021	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1a
564	M658	HSS8x8x4	.346	61.2	5	.008	0	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
565	M659	HSS8x8x4	.346	0	5	.008	61.2	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
566	M660	HSS8x8x4	.325	61.2	5	.021	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1a
567	M661	HSS8x8x4	.335	0	5	.033	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1a
568	M662	HSS8x8x4	.316	0	2	.045	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1a
569	M663	HSS8x8x4	.322	0	2	.048	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1a
570	M664	HSS8x8x4	.197	0	5	.052	0	y	2	286.5..	293.94	66.288	66.288	...	H1-...
571	M665	HSS8x8x4	.164	0	5	.050	0	y	2	286.5..	293.94	66.288	66.288	...	H1-...
572	M666	HSS8x8x4	.125	0	2	.047	0	y	2	286.5..	293.94	66.288	66.288	...	H1-1b
573	M667	HSS8x8x4	.104	0	2	.036	0	z	2	286.5..	293.94	66.288	66.288	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
574	M669	HSS8x8x4	.109	61.2	5	.043	0	y	5	286.5..	293.94	66.288	66.288	...	H1-1b
575	M670	HSS8x8x4	.156	61.2	5	.051	0	y	5	286.5..	293.94	66.288	66.288	...	H1-1b
576	M671	HSS8x8x4	.144	61.2	5	.060	0	y	5	286.5..	293.94	66.288	66.288	...	H1-1b
577	M672	HSS8x8x4	.311	61.2	5	.059	0	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
578	M673	HSS8x8x4	.314	61.2	6	.060	0	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
579	M674	HSS8x8x4	.340	61.2	5	.052	0	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
580	M675	HSS8x8x4	.328	61.2	5	.044	0	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
581	M676	HSS8x8x4	.312	61.2	2	.025	0	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
582	M677	HSS8x8x4	.288	61.2	2	.007	0	z	5	286.5..	293.94	66.288	66.288	...	H1-1a
583	M678	HSS8x8x4	.288	0	2	.007	61.2	z	5	286.5..	293.94	66.288	66.288	...	H1-1a
584	M679	HSS8x8x4	.312	0	2	.025	61.2	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
585	M680	HSS8x8x4	.328	0	5	.044	61.2	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
586	M681	HSS8x8x4	.340	0	5	.052	61.2	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
587	M682	HSS8x8x4	.314	0	6	.060	61.2	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
588	M683	HSS8x8x4	.311	0	5	.059	61.2	y	5	286.5..	293.94	66.288	66.288	...	H1-1a
589	M684	HSS8x8x4	.144	0	5	.060	61.2	y	5	286.5..	293.94	66.288	66.288	...	H1-1b
590	M685	HSS8x8x4	.156	0	5	.051	61.2	y	5	286.5..	293.94	66.288	66.288	...	H1-1b
591	M686	HSS8x8x4	.109	0	5	.043	61.2	y	5	286.5..	293.94	66.288	66.288	...	H1-1b
592	M688	HSS6x6x4	.122	0	5	.044	0	z	2	205.9..	216.9..	38.64	38.64	...	H1-1b
593	M689	HSS6x6x4	.100	64...	5	.037	0	y	5	206.2..	216.9..	38.64	38.64	...	H1-1b
594	M690	HSS6x6x4	.100	63...	5	.037	0	y	5	206.4..	216.9..	38.64	38.64	...	H1-1b
595	M691	HSS6x6x4	.125	62...	5	.045	0	y	5	206.6..	216.9..	38.64	38.64	...	H1-1b
596	M692	HSS6x6x4	.136	62...	5	.046	0	y	5	206.8..	216.9..	38.64	38.64	...	H1-1b
597	M693	HSS6x6x4	.142	61...	5	.041	0	y	5	206.9..	216.9..	38.64	38.64	...	H1-1b
598	M694	HSS6x6x4	.131	61...	5	.034	0	y	5	207.0..	216.9..	38.64	38.64	...	H1-1b
599	M695	HSS6x6x4	.108	61...	5	.018	0	y	5	207.1..	216.9..	38.64	38.64	...	H1-1b
600	M696	HSS6x6x4	.086	61...	2	.007	61...	y	5	207.1..	216.9..	38.64	38.64	...	H1-1b
601	M697	HSS6x6x4	.122	0	5	.044	0	z	2	205.9..	216.9..	38.64	38.64	...	H1-1b
602	M698	HSS6x6x4	.100	64...	5	.037	0	y	5	206.2..	216.9..	38.64	38.64	...	H1-1b
603	M699	HSS6x6x4	.100	63...	5	.037	0	y	5	206.4..	216.9..	38.64	38.64	...	H1-1b
604	M700	HSS6x6x4	.125	62...	5	.045	0	y	5	206.6..	216.9..	38.64	38.64	...	H1-1b
605	M701	HSS6x6x4	.136	62...	5	.046	0	y	5	206.8..	216.9..	38.64	38.64	...	H1-1b
606	M702	HSS6x6x4	.142	61...	5	.041	0	y	5	206.9..	216.9..	38.64	38.64	...	H1-1b
607	M703	HSS6x6x4	.131	61...	5	.034	0	y	5	207.0..	216.9..	38.64	38.64	...	H1-1b
608	M704	HSS6x6x4	.108	61...	5	.018	0	y	5	207.1..	216.9..	38.64	38.64	...	H1-1b
609	M705	HSS6x6x4	.086	61...	2	.007	61...	y	5	207.1..	216.9..	38.64	38.64	...	H1-1b
610	M708	HSS6x6x4	.096	64...	2	.043	0	z	2	205.9..	216.9..	38.64	38.64	...	H1-1b
611	M709	HSS6x6x4	.091	64...	2	.035	0	z	5	206.2..	216.9..	38.64	38.64	...	H1-1b
612	M710	HSS6x6x4	.080	0	5	.028	0	y	2	206.4..	216.9..	38.64	38.64	...	H1-...
613	M711	HSS6x6x4	.119	0	5	.036	0	y	2	206.6..	216.9..	38.64	38.64	...	H1-...
614	M712	HSS6x6x4	.131	0	5	.037	0	z	5	206.8..	216.9..	38.64	38.64	...	H1-...
615	M713	HSS6x6x4	.141	0	5	.033	0	y	2	206.9..	216.9..	38.64	38.64	...	H1-...
616	M714	HSS6x6x4	.145	0	5	.026	0	z	5	207.0..	216.9..	38.64	38.64	...	H1-...
617	M715	HSS6x6x4	.146	0	5	.015	0	z	2	207.1..	216.9..	38.64	38.64	...	H1-...
618	M716	HSS6x6x4	.135	0	5	.010	0	y	5	207.1..	216.9..	38.64	38.64	...	H1-...
619	M717	HSS6x6x4	.096	64...	2	.043	0	z	2	205.9..	216.9..	38.64	38.64	...	H1-1b
620	M718	HSS6x6x4	.091	64...	2	.035	0	z	5	206.2..	216.9..	38.64	38.64	...	H1-1b
621	M719	HSS6x6x4	.080	0	5	.028	0	y	2	206.4..	216.9..	38.64	38.64	...	H1-...
622	M720	HSS6x6x4	.119	0	5	.036	0	y	2	206.6..	216.9..	38.64	38.64	...	H1-...
623	M721	HSS6x6x4	.131	0	5	.037	0	z	5	206.8..	216.9..	38.64	38.64	...	H1-...
624	M722	HSS6x6x4	.141	0	5	.033	0	y	2	206.9..	216.9..	38.64	38.64	...	H1-...
625	M723	HSS6x6x4	.145	0	5	.026	0	z	5	207.0..	216.9..	38.64	38.64	...	H1-...
626	M724	HSS6x6x4	.146	0	5	.015	0	z	2	207.1..	216.9..	38.64	38.64	...	H1-...
627	M725	HSS6x6x4	.135	0	5	.010	0	y	5	207.1..	216.9..	38.64	38.64	...	H1-...
628	M728	HSS4x4x3	.109	0	5	.039	0	z	5	102.1..	106.8..	12.662	12.662	...	H1-1b
629	M729	HSS4x4x3	.149	40	5	.035	0	z	5	102.1..	106.8..	12.662	12.662	...	H1-1b
630	M730	HSS4x4x3	.151	0	5	.038	40	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
631	M731	HSS4x4x3	.173	40	5	.034	40	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b
632	M732	HSS4x4x3	.115	0	5	.029	40	y	5	102.1..	106.8..	12.662	12.662	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
633	M733	HSS4x4x3	.107	40	5	.028	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
634	M734	HSS4x4x3	.106	0	5	.025	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
635	M735	HSS4x4x3	.100	40	2	.022	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
636	M736	HSS4x4x3	.079	40	5	.024	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
637	M737	HSS4x4x3	.016	40	2	.004	0	y	2	102.1...	106.8...	12.662	12.662	...	H1-1b
638	M738	HSS4x4x3	.079	40	5	.024	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
639	M739	HSS4x4x3	.100	40	2	.022	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
640	M740	HSS4x4x3	.106	0	5	.025	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
641	M741	HSS4x4x3	.107	40	5	.028	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
642	M742	HSS4x4x3	.115	0	5	.029	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
643	M743	HSS4x4x3	.173	40	5	.034	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
644	M744	HSS4x4x3	.151	0	5	.038	40	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
645	M745	HSS4x4x3	.149	40	5	.035	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
646	M746	HSS4x4x3	.109	0	5	.039	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
647	M748	HSS4x4x3	.136	0	5	.009	0	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
648	M749	HSS4x4x3	.176	0	5	.012	0	y	2	91.99	106.8...	12.662	12.662	...	H1-...
649	M750	HSS4x4x3	.129	0	5	.018	0	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
650	M751	HSS4x4x3	.124	0	2	.015	0	y	2	91.99	106.8...	12.662	12.662	...	H1-1b
651	M752	HSS4x4x3	.096	0	5	.018	0	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
652	M753	HSS4x4x3	.085	0	2	.013	0	y	2	91.99	106.8...	12.662	12.662	...	H1-1b
653	M754	HSS4x4x3	.073	0	5	.015	0	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
654	M755	HSS4x4x3	.060	0	5	.009	0	y	2	91.99	106.8...	12.662	12.662	...	H1-1b
655	M756	HSS4x4x3	.035	73...	5	.006	0	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
656	M757	HSS4x4x3	.035	0	5	.006	73...	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
657	M758	HSS4x4x3	.060	73...	5	.009	0	y	2	91.99	106.8...	12.662	12.662	...	H1-1b
658	M759	HSS4x4x3	.073	73...	5	.015	73...	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
659	M760	HSS4x4x3	.085	73...	2	.013	0	y	2	91.99	106.8...	12.662	12.662	...	H1-1b
660	M761	HSS4x4x3	.096	73...	5	.018	73...	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
661	M762	HSS4x4x3	.124	73...	2	.015	0	y	2	91.99	106.8...	12.662	12.662	...	H1-1b
662	M763	HSS4x4x3	.129	73...	5	.018	73...	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
663	M764	HSS4x4x3	.176	0	5	.012	0	y	2	91.99	106.8...	12.662	12.662	...	H1-...
664	M765	HSS4x4x3	.136	73...	5	.009	73...	y	5	91.99	106.8...	12.662	12.662	...	H1-1b
665	M768	HSS4x4x3	.102	77...	2	.012	0	y	2	90.334	106.8...	12.662	12.662	...	H1-1b
666	M769	HSS4x4x3	.105	0	5	.012	0	y	5	90.698	106.8...	12.662	12.662	...	H1-...
667	M770	HSS4x4x3	.056	0	5	.008	75...	y	5	91.018	106.8...	12.662	12.662	...	H1-1b
668	M771	HSS4x4x3	.063	0	2	.007	0	z	2	91.293	106.8...	12.662	12.662	...	H1-1b
669	M772	HSS4x4x3	.066	0	5	.010	0	y	5	91.523	106.8...	12.662	12.662	...	H1-1b
670	M773	HSS4x4x3	.069	0	2	.008	0	y	2	91.707	106.8...	12.662	12.662	...	H1-1b
671	M774	HSS4x4x3	.073	0	5	.010	0	y	5	91.846	106.8...	12.662	12.662	...	H1-1b
672	M775	HSS4x4x3	.059	0	2	.005	73...	y	5	91.938	106.8...	12.662	12.662	...	H1-1b
673	M776	HSS4x4x3	.037	0	5	.004	73...	y	4	91.984	106.8...	12.662	12.662	...	H1-1b
674	M777	HSS4x4x3	.037	73...	5	.004	0	y	4	91.984	106.8...	12.662	12.662	...	H1-1b
675	M778	HSS4x4x3	.059	73...	2	.005	0	y	5	91.938	106.8...	12.662	12.662	...	H1-1b
676	M779	HSS4x4x3	.073	73...	5	.010	73...	y	5	91.846	106.8...	12.662	12.662	...	H1-1b
677	M780	HSS4x4x3	.069	73...	2	.008	0	y	2	91.707	106.8...	12.662	12.662	...	H1-1b
678	M781	HSS4x4x3	.066	74...	5	.010	74...	y	5	91.523	106.8...	12.662	12.662	...	H1-1b
679	M782	HSS4x4x3	.063	74...	2	.007	0	z	2	91.293	106.8...	12.662	12.662	...	H1-1b
680	M783	HSS4x4x3	.056	75...	5	.008	0	y	5	91.018	106.8...	12.662	12.662	...	H1-1b
681	M784	HSS4x4x3	.105	76...	5	.012	76...	y	5	90.698	106.8...	12.662	12.662	...	H1-...
682	M785	HSS4x4x3	.102	0	2	.012	0	y	2	90.334	106.8...	12.662	12.662	...	H1-1b
683	M787	HSS4x4x3	.379	0	5	.074	0	z	2	102.1...	106.8...	12.662	12.662	...	H1-1b
684	M788	HSS4x4x3	.353	0	5	.077	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
685	M789	HSS4x4x3	.271	0	5	.072	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
686	M790	HSS4x4x3	.273	40	5	.075	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
687	M791	HSS4x4x3	.264	40	5	.066	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
688	M792	HSS4x4x3	.265	40	5	.060	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
689	M793	HSS4x4x3	.249	40	5	.050	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
690	M794	HSS4x4x3	.208	0	2	.037	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
691	M795	HSS4x4x3	.134	40	5	.020	0	z	2	102.1...	106.8...	12.662	12.662	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
692	M796	HSS4x4x3	.010	0	5	.003	0	y	5	102.1...	106.8...	12.662	12.662	...	H1-1b
693	M797	HSS4x4x3	.134	40	5	.020	0	z	2	102.1...	106.8...	12.662	12.662	...	H1-1b
694	M798	HSS4x4x3	.208	0	2	.037	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
695	M799	HSS4x4x3	.249	40	5	.050	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
696	M800	HSS4x4x3	.265	40	5	.060	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
697	M801	HSS4x4x3	.264	40	5	.066	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
698	M802	HSS4x4x3	.273	40	5	.075	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
699	M803	HSS4x4x3	.271	0	5	.072	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
700	M804	HSS4x4x3	.353	0	5	.077	0	z	5	102.1...	106.8...	12.662	12.662	...	H1-1b
701	M805	HSS4x4x3	.379	0	5	.074	0	z	2	102.1...	106.8...	12.662	12.662	...	H1-1b
702	M806	HSS6x6x4	.075	0	5	.026	0	z	5	210.9...	216.9...	38.64	38.64	...	H1-1b
703	M807	HSS6x6x4	.061	0	2	.025	0	y	2	167.0...	216.9...	38.64	38.64	...	H1-1b
704	M808	HSS6x6x4	.080	0	5	.020	0	y	5	210.9...	216.9...	38.64	38.64	...	H1-1b
705	M809	HSS6x6x4	.098	0	5	.030	0	y	5	167.0...	216.9...	38.64	38.64	...	H1-1b
706	M810	HSS6x6x4	.065	0	5	.024	0	z	2	211.8...	216.9...	38.64	38.64	...	H1-1b
707	M811	HSS6x6x4	.109	0	2	.035	0	y	2	179.53	216.9...	38.64	38.64	...	H1-1b
708	M812	HSS6x6x4	.060	0	2	.026	0	z	2	211.8...	216.9...	38.64	38.64	...	H1-1b
709	M813	HSS6x6x4	.169	0	5	.040	0	y	5	179.53	216.9...	38.64	38.64	...	H1-1b
710	M814	HSS6x6x4	.071	0	5	.023	0	y	5	212.5...	216.9...	38.64	38.64	...	H1-1b
711	M815	HSS6x6x4	.142	0	2	.044	0	y	2	189.5...	216.9...	38.64	38.64	...	H1-1b
712	M816	HSS6x6x4	.064	40...	5	.020	0	z	5	212.5...	216.9...	38.64	38.64	...	H1-1b
713	M817	HSS6x6x4	.211	0	5	.055	0	y	5	189.5...	216.9...	38.64	38.64	...	H1-1b
714	M818	HSS6x6x4	.060	37...	2	.033	0	y	5	213.1...	216.9...	38.64	38.64	...	H1-1b
715	M819	HSS6x6x4	.148	0	2	.054	0	y	2	197.1...	216.9...	38.64	38.64	...	H1-1b
716	M820	HSS6x6x4	.081	37...	5	.035	0	y	2	213.1...	216.9...	38.64	38.64	...	H1-1b
717	M821	HSS6x6x4	.234	0	5	.069	0	y	5	197.1...	216.9...	38.64	38.64	...	H1-1b
718	M822	HSS6x6x4	.067	35.5	2	.035	0	y	2	213.5...	216.9...	38.64	38.64	...	H1-1b
719	M823	HSS6x6x4	.161	0	2	.059	0	y	2	202.7...	216.9...	38.64	38.64	...	H1-1b
720	M824	HSS6x6x4	.081	35.5	5	.034	0	y	5	213.5...	216.9...	38.64	38.64	...	H1-1b
721	M825	HSS6x6x4	.248	0	5	.079	0	y	5	202.7...	216.9...	38.64	38.64	...	H1-1b
722	M826	HSS6x6x4	.069	33...	2	.036	0	y	2	213.9...	216.9...	38.64	38.64	...	H1-1b
723	M827	HSS6x6x4	.164	0	2	.064	0	y	2	206.7...	216.9...	38.64	38.64	...	H1-1b
724	M828	HSS6x6x4	.094	33...	5	.042	0	y	5	213.9...	216.9...	38.64	38.64	...	H1-1b
725	M829	HSS6x6x4	.262	0	5	.088	0	y	5	206.7...	216.9...	38.64	38.64	...	H1-1b
726	M830	HSS6x6x4	.078	31...	2	.039	0	y	2	214.2...	216.9...	38.64	38.64	...	H1-1b
727	M831	HSS6x6x4	.164	0	2	.064	0	y	2	209.4...	216.9...	38.64	38.64	...	H1-1b
728	M832	HSS6x6x4	.097	31...	5	.040	0	y	5	214.2...	216.9...	38.64	38.64	...	H1-1b
729	M833	HSS6x6x4	.247	0	5	.089	0	y	5	209.4...	216.9...	38.64	38.64	...	H1-1b
730	M834	HSS6x6x4	.071	30...	2	.032	0	y	2	214.4...	216.9...	38.64	38.64	...	H1-1b
731	M835	HSS6x6x4	.135	0	2	.052	0	y	2	211.08	216.9...	38.64	38.64	...	H1-1b
732	M836	HSS6x6x4	.095	30...	5	.038	0	y	5	214.4...	216.9...	38.64	38.64	...	H1-1b
733	M837	HSS6x6x4	.206	0	5	.075	0	y	5	211.08	216.9...	38.64	38.64	...	H1-1b
734	M838	HSS6x6x4	.063	30...	2	.026	0	y	2	214.5...	216.9...	38.64	38.64	...	H1-1b
735	M839	HSS6x6x4	.079	0	2	.027	0	y	2	211.9...	216.9...	38.64	38.64	...	H1-1b
736	M840	HSS6x6x4	.067	30...	5	.027	0	y	5	214.5...	216.9...	38.64	38.64	...	H1-1b
737	M841	HSS6x6x4	.114	0	5	.040	0	y	5	211.9...	216.9...	38.64	38.64	...	H1-1b
738	M842	HSS6x6x4	.016	30	5	.006	0	z	5	214.5...	216.9...	38.64	38.64	...	H1-1b
739	M843	HSS6x6x4	.006	31...	5	.001	42	z	2	212.2...	216.9...	38.64	38.64	...	H1-1b
740	M844	HSS6x6x4	.016	30	5	.007	0	z	5	214.5...	216.9...	38.64	38.64	1	H1-1b
741	M845	HSS6x6x4	.007	0	2	.002	42	z	2	212.2...	216.9...	38.64	38.64	...	H1-1b
742	M846	HSS6x6x4	.063	30...	2	.026	0	y	2	214.5...	216.9...	38.64	38.64	...	H1-1b
743	M847	HSS6x6x4	.079	0	2	.027	0	y	2	211.9...	216.9...	38.64	38.64	...	H1-1b
744	M848	HSS6x6x4	.067	30...	5	.027	0	y	5	214.5...	216.9...	38.64	38.64	...	H1-1b
745	M849	HSS6x6x4	.114	0	5	.040	0	y	5	211.9...	216.9...	38.64	38.64	...	H1-1b
746	M850	HSS6x6x4	.071	30...	2	.032	0	y	2	214.4...	216.9...	38.64	38.64	...	H1-1b
747	M851	HSS6x6x4	.135	0	2	.052	0	y	2	211.08	216.9...	38.64	38.64	...	H1-1b
748	M852	HSS6x6x4	.095	30...	5	.038	0	y	5	214.4...	216.9...	38.64	38.64	...	H1-1b
749	M853	HSS6x6x4	.206	0	5	.075	0	y	5	211.08	216.9...	38.64	38.64	...	H1-1b
750	M854	HSS6x6x4	.078	31...	2	.039	0	y	2	214.2...	216.9...	38.64	38.64	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
751	M855	HSS6x6x4	.164	0	2	.064	0	y	2	209.4...	216.9...	38.64	38.64	...	H1-1b
752	M856	HSS6x6x4	.097	31...	5	.040	0	y	5	214.2...	216.9...	38.64	38.64	...	H1-1b
753	M857	HSS6x6x4	.247	0	5	.089	0	y	5	209.4...	216.9...	38.64	38.64	...	H1-1b
754	M858	HSS6x6x4	.069	33...	2	.036	0	y	2	213.9...	216.9...	38.64	38.64	...	H1-1b
755	M859	HSS6x6x4	.164	0	2	.064	0	y	2	206.7...	216.9...	38.64	38.64	...	H1-1b
756	M860	HSS6x6x4	.094	33...	5	.042	0	y	5	213.9...	216.9...	38.64	38.64	...	H1-1b
757	M861	HSS6x6x4	.262	0	5	.088	0	y	5	206.7...	216.9...	38.64	38.64	...	H1-1b
758	M862	HSS6x6x4	.067	35.5	2	.035	0	y	2	213.5...	216.9...	38.64	38.64	...	H1-1b
759	M863	HSS6x6x4	.161	0	2	.059	0	y	2	202.7...	216.9...	38.64	38.64	...	H1-1b
760	M864	HSS6x6x4	.081	35.5	5	.034	0	y	5	213.5...	216.9...	38.64	38.64	...	H1-1b
761	M865	HSS6x6x4	.248	0	5	.079	0	y	5	202.7...	216.9...	38.64	38.64	...	H1-1b
762	M866	HSS6x6x4	.060	37...	2	.033	0	y	5	213.1...	216.9...	38.64	38.64	...	H1-1b
763	M867	HSS6x6x4	.148	0	2	.054	0	y	2	197.1...	216.9...	38.64	38.64	...	H1-1b
764	M868	HSS6x6x4	.081	37...	5	.035	0	y	2	213.1...	216.9...	38.64	38.64	...	H1-1b
765	M869	HSS6x6x4	.234	0	5	.069	0	y	5	197.1...	216.9...	38.64	38.64	...	H1-1b
766	M870	HSS6x6x4	.071	0	5	.023	0	y	5	212.5...	216.9...	38.64	38.64	...	H1-1b
767	M871	HSS6x6x4	.142	0	2	.044	0	y	2	189.5...	216.9...	38.64	38.64	...	H1-1b
768	M872	HSS6x6x4	.064	40...	5	.020	0	z	5	212.5...	216.9...	38.64	38.64	...	H1-1b
769	M873	HSS6x6x4	.211	0	5	.055	0	y	5	189.5...	216.9...	38.64	38.64	...	H1-1b
770	M874	HSS6x6x4	.065	0	5	.024	0	z	2	211.8...	216.9...	38.64	38.64	...	H1-1b
771	M875	HSS6x6x4	.109	0	2	.035	0	y	2	179.53	216.9...	38.64	38.64	...	H1-1b
772	M876	HSS6x6x4	.060	0	2	.026	0	z	2	211.8...	216.9...	38.64	38.64	...	H1-1b
773	M877	HSS6x6x4	.169	0	5	.040	0	y	5	179.53	216.9...	38.64	38.64	...	H1-1b
774	M878	HSS6x6x4	.075	0	5	.026	0	z	5	210.9...	216.9...	38.64	38.64	...	H1-1b
775	M879	HSS6x6x4	.061	0	2	.025	0	y	2	167.0...	216.9...	38.64	38.64	...	H1-1b
776	M880	HSS6x6x4	.080	0	5	.020	0	y	5	210.9...	216.9...	38.64	38.64	...	H1-1b
777	M881	HSS6x6x4	.098	0	5	.030	0	y	5	167.0...	216.9...	38.64	38.64	...	H1-1b
778	M883	HSS4x4x3	.052	65...	5	.013	0	z	5	94.867	106.8...	12.662	12.662	...	H1-1b
779	M884	HSS4x4x3	.043	43...	5	.011	0	z	5	94.953	106.8...	12.662	12.662	...	H1-1b
780	M885	HSS4x4x3	.042	64...	5	.013	0	z	5	94.987	106.8...	12.662	12.662	...	H1-1b
781	M886	HSS4x4x3	.040	27...	2	.012	0	z	2	94.971	106.8...	12.662	12.662	...	H1-1b
782	M887	HSS4x4x3	.045	59...	2	.014	0	z	5	94.904	106.8...	12.662	12.662	...	H1-1b
783	M888	HSS4x4x3	.046	65...	5	.011	0	z	2	94.783	106.8...	12.662	12.662	...	H1-1b
784	M889	HSS4x4x3	.048	52...	2	.009	0	y	5	94.599	106.8...	12.662	12.662	...	H1-1b
785	M890	HSS4x4x3	.048	37...	2	.006	0	z	2	94.344	106.8...	12.662	12.662	...	H1-1b
786	M891	HSS4x4x3	.054	0	2	.009	67...	z	2	94.005	106.8...	12.662	12.662	...	H1-...
787	M892	HSS4x4x3	.054	0	2	.009	0	z	2	94.005	106.8...	12.662	12.662	...	H1-...
788	M893	HSS4x4x3	.048	29...	2	.006	66...	z	2	94.344	106.8...	12.662	12.662	...	H1-1b
789	M894	HSS4x4x3	.048	13...	2	.009	65...	y	5	94.599	106.8...	12.662	12.662	...	H1-1b
790	M895	HSS4x4x3	.046	0	5	.011	65...	z	2	94.783	106.8...	12.662	12.662	...	H1-1b
791	M896	HSS4x4x3	.045	5.42	2	.014	65...	z	5	94.904	106.8...	12.662	12.662	...	H1-1b
792	M897	HSS4x4x3	.040	37...	2	.012	64...	z	2	94.971	106.8...	12.662	12.662	...	H1-1b
793	M898	HSS4x4x3	.042	0	5	.013	64...	z	5	94.987	106.8...	12.662	12.662	...	H1-1b
794	M899	HSS4x4x3	.043	20...	5	.011	64...	z	5	94.953	106.8...	12.662	12.662	...	H1-1b
795	M900	HSS4x4x3	.052	0	5	.013	65...	z	5	94.867	106.8...	12.662	12.662	...	H1-1b
796	M903	HSS4x4x3	.070	65...	5	.012	0	z	5	94.867	106.8...	12.662	12.662	...	H1-1b
797	M904	HSS4x4x3	.055	0	5	.010	0	z	2	94.953	106.8...	12.662	12.662	...	H1-1b
798	M905	HSS4x4x3	.048	64...	5	.013	0	y	5	94.987	106.8...	12.662	12.662	...	H1-1b
799	M906	HSS4x4x3	.058	0	5	.013	0	y	5	94.971	106.8...	12.662	12.662	...	H1-1b
800	M907	HSS4x4x3	.057	65...	5	.014	0	y	5	94.904	106.8...	12.662	12.662	...	H1-1b
801	M908	HSS4x4x3	.058	65...	5	.011	0	z	2	94.783	106.8...	12.662	12.662	...	H1-1b
802	M909	HSS4x4x3	.056	0	5	.009	0	y	5	94.599	106.8...	12.662	12.662	...	H1-1b
803	M910	HSS4x4x3	.053	40...	5	.006	0	z	2	94.344	106.8...	12.662	12.662	...	H1-1b
804	M911	HSS4x4x3	.053	26...	5	.008	67...	z	2	94.005	106.8...	12.662	12.662	...	H1-1b
805	M912	HSS4x4x3	.053	40...	5	.008	0	z	2	94.005	106.8...	12.662	12.662	...	H1-1b
806	M913	HSS4x4x3	.053	26...	5	.006	66...	z	2	94.344	106.8...	12.662	12.662	...	H1-1b
807	M914	HSS4x4x3	.056	65...	5	.009	65...	y	5	94.599	106.8...	12.662	12.662	...	H1-1b
808	M915	HSS4x4x3	.058	0	5	.011	65...	z	2	94.783	106.8...	12.662	12.662	...	H1-1b
809	M916	HSS4x4x3	.057	0	5	.014	65...	y	5	94.904	106.8...	12.662	12.662	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
810	M917	HSS4x4x3	.058	64...	5	.013	64...	y	5	94.971	106.8...	12.662	12.662	...	H1-1b
811	M918	HSS4x4x3	.048	0	5	.013	64...	y	5	94.987	106.8...	12.662	12.662	...	H1-1b
812	M919	HSS4x4x3	.055	64...	5	.010	64...	z	2	94.953	106.8...	12.662	12.662	...	H1-1b
813	M920	HSS4x4x3	.070	0	5	.012	65...	z	5	94.867	106.8...	12.662	12.662	...	H1-1b
814	M930	HSS2x2x3	.387	0	2	.038	0	z	6	46.437	49.266	2.75	2.75	...	H1-1b
815	M931	HSS2x2x3	.175	0	5	.014	0	z	2	30.861	49.266	2.75	2.75	...	H1-...
816	M932	HSS2x2x3	.245	61.2	5	.016	0	z	5	30.861	49.266	2.75	2.75	...	H1-1a
817	M933	HSS2x2x3	.336	61.2	5	.017	0	z	5	30.861	49.266	2.75	2.75	...	H1-1a
818	M934	HSS2x2x3	.252	0	2	.079	0	z	5	44.238	49.266	2.75	2.75	...	H1-1b
819	M935	HSS2x2x3	.086	0	5	.016	0	z	2	29.089	49.266	2.75	2.75	...	H1-1b
820	M936	HSS2x2x3	.132	0	5	.014	0	z	5	29.473	49.266	2.75	2.75	...	H1-...
821	M937	HSS2x2x3	.131	0	5	.011	0	z	2	29.812	49.266	2.75	2.75	...	H1-...
822	M938	HSS2x2x3	.631	0	5	.129	0	z	5	47.049	49.266	2.75	2.75	...	H1-1b
823	M939	HSS2x2x3	.549	0	5	.129	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
824	M940	HSS2x2x3	.169	0	5	.038	0	z	2	47.049	49.266	2.75	2.75	...	H1-1b
825	M941	HSS2x2x3	.223	16...	2	.056	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
826	M942	HSS2x2x3	.277	0	2	.048	0	y	2	44.238	49.266	2.75	2.75	...	H1-1b
827	M943	HSS2x2x3	.354	29...	2	.042	0	z	6	44.238	49.266	2.75	2.75	...	H1-1b
828	M944	HSS2x2x3	.103	61.2	5	.077	61.2	z	5	30.861	49.266	2.75	2.75	...	H1-1b
829	M945	HSS2x2x3	.225	16...	2	.056	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
830	M946	HSS2x2x3	.079	61.2	2	.029	61.2	z	2	30.861	49.266	2.75	2.75	...	H1-1b
831	M947	HSS2x2x3	.086	61.2	5	.092	61.2	z	5	30.861	49.266	2.75	2.75	...	H1-1b
832	M948	HSS2x2x3	.379	29...	2	.054	0	z	5	44.238	49.266	2.75	2.75	...	H1-1b
833	M949	HSS2x2x3	.083	28...	5	.051	53...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
834	M950	HSS2x2x3	.127	61.2	2	.028	53...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
835	M951	HSS2x2x3	.088	61.2	2	.066	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
836	M952	HSS2x2x3	.292	0	2	.029	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
837	M953	HSS2x2x3	.580	29...	2	.080	29...	z	2	44.238	49.266	2.75	2.75	...	H1-1b
838	M954	HSS2x2x3	.410	0	2	.060	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
839	M955	HSS2x2x3	.721	29...	2	.086	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
840	M956	HSS2x2x3	.348	0	2	.057	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
841	M957	HSS2x2x3	.560	29...	2	.095	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
842	M958	HSS2x2x3	.174	29...	2	.033	0	y	2	44.238	49.266	2.75	2.75	...	H1-1b
843	M959	HSS2x2x3	.200	29...	5	.088	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
844	M960	HSS2x2x3	.100	0	2	.046	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
845	M961	HSS2x2x3	.147	61.2	2	.056	51	z	5	30.861	49.266	2.75	2.75	...	H1-1b
846	M962	HSS2x2x3	.143	61.2	2	.021	51...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
847	M963	HSS2x2x3	.124	0	2	.015	51	z	2	30.861	49.266	2.75	2.75	...	H1-1b
848	M964	HSS2x2x3	.122	61.2	2	.056	51	z	5	30.861	49.266	2.75	2.75	...	H1-1b
849	M965	HSS2x2x3	.118	0	2	.070	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
850	M974	HSS2x2x3	.388	0	5	.036	0	z	2	46.437	49.266	2.75	2.75	...	H1-1b
851	M975	HSS2x2x3	.099	0	5	.014	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
852	M976	HSS2x2x3	.142	0	5	.016	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
853	M977	HSS2x2x3	.137	0	5	.017	0	z	2	30.861	49.266	2.75	2.75	...	H1-1b
854	M978	HSS2x2x3	.289	0	5	.076	0	z	2	44.238	49.266	2.75	2.75	...	H1-1b
855	M979	HSS2x2x3	.085	0	5	.016	0	z	2	29.089	49.266	2.75	2.75	...	H1-1b
856	M980	HSS2x2x3	.071	0	5	.014	0	z	5	29.473	49.266	2.75	2.75	...	H1-1b
857	M981	HSS2x2x3	.064	0	5	.011	0	z	2	29.812	49.266	2.75	2.75	...	H1-1b
858	M982	HSS2x2x3	.605	0	5	.124	0	z	5	47.049	49.266	2.75	2.75	...	H1-1b
859	M983	HSS2x2x3	.537	0	5	.124	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
860	M984	HSS2x2x3	.146	0	5	.037	0	z	5	47.049	49.266	2.75	2.75	...	H1-1b
861	M985	HSS2x2x3	.218	16...	5	.054	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
862	M986	HSS2x2x3	.311	0	5	.053	0	y	5	44.238	49.266	2.75	2.75	...	H1-1b
863	M987	HSS2x2x3	.372	29...	5	.038	0	z	5	44.238	49.266	2.75	2.75	...	H1-1b
864	M988	HSS2x2x3	.098	61.2	5	.073	61.2	z	5	30.861	49.266	2.75	2.75	...	H1-1b
865	M989	HSS2x2x3	.223	16...	5	.052	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
866	M990	HSS2x2x3	.088	61.2	5	.029	61.2	z	2	30.861	49.266	2.75	2.75	...	H1-1b
867	M991	HSS2x2x3	.081	61.2	2	.087	61.2	z	5	30.861	49.266	2.75	2.75	...	H1-1b
868	M992	HSS2x2x3	.393	29...	5	.051	0	z	5	44.238	49.266	2.75	2.75	...	H1-1b

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

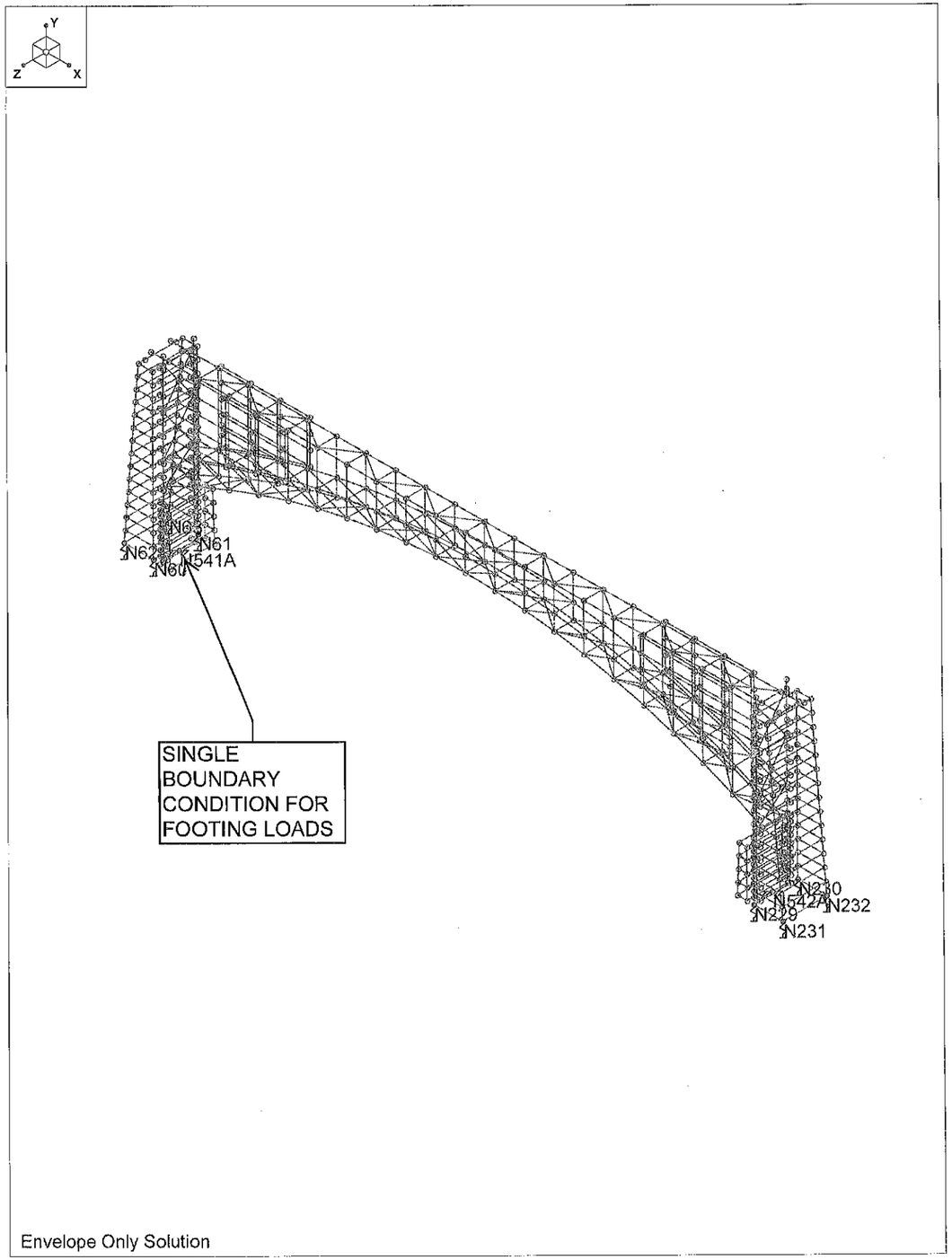
	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
869	M993	HSS2x2x3	.083	33...	5	.050	53...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
870	M994	HSS2x2x3	.124	61.2	5	.026	53...	z	2	30.861	49.266	2.75	2.75	...	H1-1b
871	M995	HSS2x2x3	.108	0	5	.064	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
872	M996	HSS2x2x3	.315	0	5	.027	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
873	M997	HSS2x2x3	.612	29...	5	.077	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
874	M998	HSS2x2x3	.436	0	5	.056	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
875	M999	HSS2x2x3	.763	29...	5	.082	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
876	M1000	HSS2x2x3	.380	0	5	.060	0	y	5	44.238	49.266	2.75	2.75	...	H1-1b
877	M1001	HSS2x2x3	.596	29...	5	.093	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
878	M1002	HSS2x2x3	.183	29...	5	.035	0	y	5	44.238	49.266	2.75	2.75	...	H1-1b
879	M1003	HSS2x2x3	.227	29...	5	.086	29...	z	2	44.238	49.266	2.75	2.75	...	H1-1b
880	M1004	HSS2x2x3	.166	0	5	.045	0	y	5	30.861	49.266	2.75	2.75	...	H1-1b
881	M1005	HSS2x2x3	.163	61.2	5	.054	51	z	5	30.861	49.266	2.75	2.75	...	H1-1b
882	M1006	HSS2x2x3	.183	0	5	.022	0	y	5	30.861	49.266	2.75	2.75	...	H1-1b
883	M1007	HSS2x2x3	.187	0	5	.016	0	y	5	30.861	49.266	2.75	2.75	...	H1-1b
884	M1008	HSS2x2x3	.181	0	5	.054	51	z	5	30.861	49.266	2.75	2.75	...	H1-1b
885	M1009	HSS2x2x3	.180	0	5	.068	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
886	M1018	HSS2x2x3	.387	0	2	.038	0	z	6	46.437	49.266	2.75	2.75	...	H1-1b
887	M1019	HSS2x2x3	.174	0	5	.014	0	z	2	30.861	49.266	2.75	2.75	...	H1-...
888	M1020	HSS2x2x3	.245	61.2	5	.016	0	z	5	30.861	49.266	2.75	2.75	...	H1-1a
889	M1021	HSS2x2x3	.336	61.2	5	.017	0	z	5	30.861	49.266	2.75	2.75	...	H1-1a
890	M1022	HSS2x2x3	.252	0	2	.079	0	z	5	44.238	49.266	2.75	2.75	...	H1-1b
891	M1023	HSS2x2x3	.086	0	5	.016	0	z	2	29.089	49.266	2.75	2.75	...	H1-1b
892	M1024	HSS2x2x3	.132	0	5	.014	0	z	5	29.473	49.266	2.75	2.75	...	H1-...
893	M1025	HSS2x2x3	.131	0	5	.011	0	z	2	29.812	49.266	2.75	2.75	...	H1-...
894	M1026	HSS2x2x3	.631	0	5	.129	0	z	5	47.049	49.266	2.75	2.75	...	H1-1b
895	M1027	HSS2x2x3	.549	0	5	.129	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
896	M1028	HSS2x2x3	.169	0	5	.038	0	z	2	47.049	49.266	2.75	2.75	...	H1-1b
897	M1029	HSS2x2x3	.223	16...	2	.056	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
898	M1030	HSS2x2x3	.277	0	2	.048	0	y	2	44.238	49.266	2.75	2.75	...	H1-1b
899	M1031	HSS2x2x3	.354	29...	2	.042	0	z	6	44.238	49.266	2.75	2.75	...	H1-1b
900	M1032	HSS2x2x3	.103	61.2	5	.077	61.2	z	5	30.861	49.266	2.75	2.75	...	H1-1b
901	M1033	HSS2x2x3	.225	16...	2	.056	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
902	M1034	HSS2x2x3	.079	61.2	2	.029	61.2	z	2	30.861	49.266	2.75	2.75	...	H1-1b
903	M1035	HSS2x2x3	.086	61.2	5	.092	61.2	z	5	30.861	49.266	2.75	2.75	...	H1-1b
904	M1036	HSS2x2x3	.379	29...	2	.054	0	z	5	44.238	49.266	2.75	2.75	...	H1-1b
905	M1037	HSS2x2x3	.083	28...	5	.051	54...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
906	M1038	HSS2x2x3	.127	61.2	2	.028	54...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
907	M1039	HSS2x2x3	.088	61.2	2	.066	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
908	M1040	HSS2x2x3	.292	0	2	.029	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
909	M1041	HSS2x2x3	.580	29...	2	.080	29...	z	2	44.238	49.266	2.75	2.75	...	H1-1b
910	M1042	HSS2x2x3	.410	0	2	.060	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
911	M1043	HSS2x2x3	.721	29...	2	.086	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
912	M1044	HSS2x2x3	.348	0	2	.057	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
913	M1045	HSS2x2x3	.560	29...	2	.095	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
914	M1046	HSS2x2x3	.174	29...	2	.033	0	y	2	44.238	49.266	2.75	2.75	...	H1-1b
915	M1047	HSS2x2x3	.200	29...	5	.088	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
916	M1048	HSS2x2x3	.100	0	2	.046	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
917	M1049	HSS2x2x3	.147	61.2	2	.056	51	z	5	30.861	49.266	2.75	2.75	...	H1-1b
918	M1050	HSS2x2x3	.143	61.2	2	.021	51...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
919	M1051	HSS2x2x3	.124	0	2	.015	51	z	2	30.861	49.266	2.75	2.75	...	H1-1b
920	M1052	HSS2x2x3	.122	61.2	2	.056	51...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
921	M1053	HSS2x2x3	.118	0	2	.070	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
922	M1062	HSS2x2x3	.388	0	5	.036	0	z	2	46.437	49.266	2.75	2.75	...	H1-1b
923	M1063	HSS2x2x3	.099	0	5	.014	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
924	M1064	HSS2x2x3	.142	0	5	.016	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
925	M1065	HSS2x2x3	.137	0	5	.017	0	z	2	30.861	49.266	2.75	2.75	...	H1-1b
926	M1066	HSS2x2x3	.289	0	5	.076	0	z	2	44.238	49.266	2.75	2.75	...	H1-1b
927	M1067	HSS2x2x3	.085	0	5	.016	0	z	2	29.089	49.266	2.75	2.75	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
928	M1068	HSS2x2x3	.071	0	5	.014	0	z	5	29.473	49.266	2.75	2.75	...	H1-1b
929	M1069	HSS2x2x3	.064	0	5	.011	0	z	2	29.812	49.266	2.75	2.75	...	H1-1b
930	M1070	HSS2x2x3	.605	0	5	.124	0	z	5	47.049	49.266	2.75	2.75	...	H1-1b
931	M1071	HSS2x2x3	.537	0	5	.124	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
932	M1072	HSS2x2x3	.146	0	5	.037	0	z	5	47.049	49.266	2.75	2.75	...	H1-1b
933	M1073	HSS2x2x3	.218	16...	5	.054	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
934	M1074	HSS2x2x3	.311	0	5	.053	0	y	5	44.238	49.266	2.75	2.75	...	H1-1b
935	M1075	HSS2x2x3	.372	29...	5	.038	0	z	5	44.238	49.266	2.75	2.75	...	H1-1b
936	M1076	HSS2x2x3	.098	61.2	5	.073	61.2	z	5	30.861	49.266	2.75	2.75	...	H1-1b
937	M1077	HSS2x2x3	.223	16...	5	.052	0	z	5	47.592	49.266	2.75	2.75	...	H1-1b
938	M1078	HSS2x2x3	.088	61.2	5	.029	61.2	z	2	30.861	49.266	2.75	2.75	...	H1-1b
939	M1079	HSS2x2x3	.081	61.2	2	.087	61.2	z	5	30.861	49.266	2.75	2.75	...	H1-1b
940	M1080	HSS2x2x3	.393	29...	5	.051	0	z	5	44.238	49.266	2.75	2.75	...	H1-1b
941	M1081	HSS2x2x3	.083	33...	5	.050	54...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
942	M1082	HSS2x2x3	.124	61.2	5	.026	54...	z	2	30.861	49.266	2.75	2.75	...	H1-1b
943	M1083	HSS2x2x3	.108	0	5	.064	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
944	M1084	HSS2x2x3	.315	0	5	.027	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
945	M1085	HSS2x2x3	.612	29...	5	.077	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
946	M1086	HSS2x2x3	.436	0	5	.056	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
947	M1087	HSS2x2x3	.763	29...	5	.082	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
948	M1088	HSS2x2x3	.380	0	5	.060	0	y	5	44.238	49.266	2.75	2.75	...	H1-1b
949	M1089	HSS2x2x3	.596	29...	5	.093	29...	z	5	44.238	49.266	2.75	2.75	...	H1-1b
950	M1090	HSS2x2x3	.183	29...	5	.035	0	y	5	44.238	49.266	2.75	2.75	...	H1-1b
951	M1091	HSS2x2x3	.227	29...	5	.086	29...	z	2	44.238	49.266	2.75	2.75	...	H1-1b
952	M1092	HSS2x2x3	.166	0	5	.045	0	y	5	30.861	49.266	2.75	2.75	...	H1-1b
953	M1093	HSS2x2x3	.163	61.2	5	.054	51	z	5	30.861	49.266	2.75	2.75	...	H1-1b
954	M1094	HSS2x2x3	.183	0	5	.022	0	y	5	30.861	49.266	2.75	2.75	...	H1-1b
955	M1095	HSS2x2x3	.187	0	5	.016	0	y	5	30.861	49.266	2.75	2.75	...	H1-1b
956	M1096	HSS2x2x3	.181	0	5	.054	51...	z	5	30.861	49.266	2.75	2.75	...	H1-1b
957	M1097	HSS2x2x3	.180	0	5	.068	0	z	5	30.861	49.266	2.75	2.75	...	H1-1b
958	M1088A	HSS8x8x4	.409	0	5	.141	0	z	5	290.78	293.94	66.288	66.288	...	H1-1b
959	M1089A	HSS8x8x4	.133	0	5	.033	0	y	2	290.78	293.94	66.288	66.288	...	H1-1b
960	M1090A	HSS12x8x4	.064	40	5	.033	0	y	2	324.1...	370.9...	73.797	116.951	...	H1-1b
961	M1091A	HSS8x8x4	.409	0	5	.141	0	z	5	290.78	293.94	66.288	66.288	...	H1-1b
962	M1092A	HSS8x8x4	.133	0	5	.033	0	y	2	290.78	293.94	66.288	66.288	...	H1-1b
963	M1093A	HSS12x8x4	.064	40	5	.033	0	y	2	324.1...	370.9...	73.797	116.951	...	H1-1b
964	M1094B	HSS8x8x4	.500	11...	5	.286	0	z	4	293.6...	293.94	66.288	66.288	...	H1-1b
965	M1095B	HSS8x8x4	.161	11...	2	.132	0	z	4	293.6...	293.94	66.288	66.288	...	H1-1b
966	M1096B	HSS12x8x4	.154	0	5	.072	0	y	2	326.7...	370.9...	73.797	116.951	...	H1-1b
967	M1097B	HSS8x8x4	.500	11...	5	.286	0	z	4	293.6...	293.94	66.288	66.288	...	H1-1b
968	M1098	HSS8x8x4	.161	11...	2	.132	0	z	4	293.6...	293.94	66.288	66.288	...	H1-1b
969	M1099	HSS12x8x4	.154	0	5	.072	0	y	2	326.7...	370.9...	73.797	116.951	...	H1-1b
970	M1086A	HSS8x8x4	.004	0	5	.001	0	y	4	291.3...	293.94	66.288	66.288	...	H1-1b
971	M1087A	HSS8x8x4	.004	0	5	.001	0	y	4	291.3...	293.94	66.288	66.288	...	H1-1b
972	M1088B	HSS8x8x4	.004	0	5	.001	0	y	4	291.3...	293.94	66.288	66.288	...	H1-1b
973	M1089B	HSS8x8x4	.004	0	5	.001	0	y	4	291.3...	293.94	66.288	66.288	...	H1-1b
974	M1090B	HSS8x8x4	.190	0	5	.042	0	z	5	286.5...	293.94	66.288	66.288	...	H1-1b
975	M1091B	HSS8x8x4	.152	0	2	.044	0	z	5	286.5...	293.94	66.288	66.288	...	H1-1b
976	M1092B	HSS6x6x4	.177	0	5	.045	0	z	2	205.6...	216.9...	38.64	38.64	...	H1-1b
977	M1093B	HSS6x6x4	.172	0	2	.046	0	z	5	205.6...	216.9...	38.64	38.64	...	H1-1b
978	M1094C	HSS6x6x4	.338	0	5	.037	0	y	5	205.0...	216.9...	38.64	38.64	...	H1-1b
979	M1095C	HSS6x6x4	.224	0	4	.027	0	z	2	205.0...	216.9...	38.64	38.64	...	H1-1b
980	M1096C	HSS4x4x3	.246	73...	5	.012	73...	y	5	91.99	106.8...	12.662	12.662	...	H1-1a
981	M1097C	HSS4x4x3	.227	78...	5	.025	78...	y	5	89.925	106.8...	12.662	12.662	...	H1-1b
982	M1098A	HSS8x8x4	.190	0	5	.042	0	z	5	286.5...	293.94	66.288	66.288	...	H1-1b
983	M1099A	HSS8x8x4	.152	0	2	.044	0	z	5	286.5...	293.94	66.288	66.288	...	H1-1b
984	M1100	HSS6x6x4	.177	0	5	.045	0	z	2	205.6...	216.9...	38.64	38.64	...	H1-1b
985	M1101	HSS6x6x4	.172	0	2	.046	0	z	5	205.6...	216.9...	38.64	38.64	...	H1-1b
986	M1102	HSS6x6x4	.338	0	5	.037	0	y	5	205.0...	216.9...	38.64	38.64	...	H1-1b

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

	Member	Shape	Code Check	Lo...	LC	Shear ...	Lo...	...	...	phi*P...	phi*P...	phi*Mn...	phi*Mn...	...	Eqn
987	M1103	HSS6x6x4	.224	0	4	.027	0	z	2	205.0..	216.9...	38.64	38.64	...	H1-1b
988	M1104	HSS4x4x3	.227	78...	5	.025	78...	y	5	89.925	106.8...	12.662	12.662	...	H1-1b
989	M1105	HSS4x4x3	.246	73...	5	.012	73...	y	5	91.99	106.8...	12.662	12.662	...	H1-1a
990	M1106	HSS4x4x3	.051	0	5	.026	0	z	5	94.724	106.8...	12.662	12.662	...	H1-1b
991	M1107	HSS4x4x3	.065	0	4	.025	0	z	2	94.724	106.8...	12.662	12.662	...	H1-1b
992	M1108	HSS4x4x3	.051	65...	5	.026	65...	z	5	94.724	106.8...	12.662	12.662	...	H1-1b
993	M1109	HSS4x4x3	.065	65...	4	.025	65...	z	2	94.724	106.8...	12.662	12.662	...	H1-1b



Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Joint	Point	Distributed	Area(Me...	Surface(...
1	D	DL		-1					180	
2	W	WL						200	104	
3	F	None						200	104	
4	BLC 1 Transient Ar...	None						690		
5	BLC 2 Transient Ar...	None						417		
6	BLC 3 Transient Ar...	None						417		

Load Combinations

	Description	So...	PDelta	S...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...	BLC	Fac...
1	D	Yes	Y		1	1																		
2	W	Yes	Y		2	1																		
3	F	Yes	Y		3	1																		
4	1.25D	Yes	Y		1	1.25																		
5	1.1D+1.0W	Yes	Y		1	1.1	2	1																
6	0.9D+1.0W	Yes	Y		1	.9	2	1																
7	1.0D+1.0F	Yes	Y		1	1	3	1																

Envelope Joint Reactions

	Joint		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [k-ft]	LC	MZ [k-ft]	LC
1	N62	max	0	1	5.006	4	0	1	0	1	0	1	0	1
2		min	0	1	0	2	0	1	0	1	0	1	0	1
3	N63	max	0	1	5.679	5	0	1	0	1	0	1	0	1
4		min	0	1	.176	3	0	1	0	1	0	1	0	1
5	N60	max	0	1	.612	4	0	1	0	1	0	1	0	1
6		min	0	1	0	2	0	1	0	1	0	1	0	1
7	N61	max	0	1	2.493	5	0	1	0	1	0	1	0	1
8		min	0	1	.285	3	0	1	0	1	0	1	0	1
9	N230	max	0	1	2.493	5	0	1	0	1	0	1	0	1
10		min	0	1	.285	3	0	1	0	1	0	1	0	1
11	N232	max	0	1	5.685	5	0	1	0	1	0	1	0	1
12		min	0	1	.176	3	0	1	0	1	0	1	0	1
13	N231	max	0	1	4.997	4	0	1	0	1	0	1	0	1
14		min	0	1	0	2	0	1	0	1	0	1	0	1
15	N229	max	0	1	.612	4	0	1	0	1	0	1	0	1
16		min	0	1	0	2	0	1	0	1	0	1	0	1
17	N541A	max	18.849	4	38.915	4	29.276	2	621.216	2	-.081	1	-.003	3
18		min	.038	3	-3.169	2	0	4	.026	1	-73.076	5	-95.704	4
19	N542A	max	-.038	3	38.914	4	29.277	5	621.214	2	73.081	5	95.705	4
20		min	-18.849	4	-3.169	2	0	1	-.033	4	.085	1	.003	3
21	Totals:	max	0	2	100.282	4	58.553	2						
22		min	0	4	0	3	0	4						

Member	Collected	Pledged		Possible Funding Sources
		43000	43000	City of Twin Falls
Sinclair		30000	30000	Seagraves Foundation
Pierce		20000	20000	Twin Falls County
Lytle		10000	10000	First Federal
	10000		10000	Idaho Central Credit Union
Mitch		10000	10000	Western Days Committee
	4872		4872	Sinclair, Paula Brown - Stock Donation
	2500		2500	Jensen Jewlers
	1500		1500	Wills, In Memory Of
		1000	1000	Aamco Transmissions
	1000		1000	Boyd, Jim & Nikki
		1000	1000	John Deer
		1000	1000	K&T Steel Corp.
	1000		1000	Newberry, Dave & Donna
	1000		1000	Premier Auto Group
	1000		1000	Stotz Equipment
Markus		1000	1000	Title One
	500		500	CapEd
	500		500	LeForgee, Rex & Cheryl
	500		500	Middlekauff Automotive Group
	300		300	Anderson, Leonard & Alice
	300		300	Ataraxis Accountinig & Advisory Services
	300		300	Gem State Welders Supply
	250		250	Library Foundation
	250		250	Magic Valley Arts Council
Boyd		250	250	Magic Valley Relators
	250		250	Munoz, Gerardo "In Memory of Guillermo Munoz Loving
	250		250	Sinclair, Paula Brown - Jean Art Award
	250		250	Twin Falls Education Foundation
Kapeleris		250	250	Xavier school
	200		200	Archway Brick Purchases - Missing Donator
	200		200	Heinrich, Linda
	999		999	Lytle, Rex & Emmie
	200		200	Lytle, Ray & Flo
	150		150	Brick for TF Community
	150		150	Mason Trophies
	150		150	Watt, Willie & Kristene
	125		125	Glenda Thompson
	101		101	Humphries , Andrew
	100		100	Brick from Senior Center
	100		100	Birrell, Shane "Shane J Birrell, Sasha E Birrell"
	100		100	Bolton, Jeanette & Brian
	100		100	Bud & Mary Touchette
	100		100	Eaton, Curtis & Mardo
	100		100	Fairbanks, Kelly and Mary

		100	100 Flowers, Gus & Lou
		100	100 Fraser, Donn & Anna
		100	100 Gem State Paper & Supply
		100	100 Holmstead Howe, PLLC
		100	100 Long, Eric
		100	100 Markus, Dave and Kathy
		100	100 Philipp, George
		100	100 Ricks, James "James T. Ricks, Wathc the Signs to be inforn
		100	100 Sabala, Ray & Arlene
		100	100 Smallwood, Eric
		100	100 Wilkinson, Brad
		100	100 Wills, Brad & Lucy
		50	50 Ruth Pierce
		12	12 Western Days Misc Cash
			0 Complete Crane - Service
			0 Lytle Signs - Service
			0 Petruzzelli Electric - Electrical
Anderson			0 Rob Green
			0 Tractor Company - Groundwork
Anderson	Email - bounced back		60 Hours to Fight Hunger
Anderson	Email		Agri Service
Sinclair			Albertsons Foundation
Anderson	Mailed		American Cancer Society
Anderson			American Legion Family
Lytle			Bey, Bob & Betty
Anderson	Mailed		Boy Scouts of America Snake River Council
Greg?			Boys and Girls Club of Magic Valley
Kapeleris			Cactus Petes
Prater			Canyon Crest Dining & Event Center
Anderson	Email		Canyon Gate Dental
Crane			Canyon Park, LLC
Anderson	Contacted		Capstone
Ruth			CH2M HILL
Crane			Chamber Leads Group
Anderson	No Answer		Chobani
Anderson	Email		Clear Springs Foods Inc
Roe			Clif Bar
Pierce			Confidential
Anderson	Email		Cooper Norman
Markus			Crafts in the Country
Sinclair	Declined		CSI Foundation (Maybe marketing dollars after it is built)
Pierce			D L Evans Bank-Main St Branch
Pierce			DL Evans Foundation
Ruth			Doug Vollmer
Sinclair			Education Foundation
Boyd			EHM Engineers
Anderson	Contacted		Farmers National Bank

Crane		Festival of Giving
Sinclair		First Federal Foundation
Sinclair		Florence Gardner Trust
Roe		Fred Meyers
Crane		Friends of the NRA
Boyd	letter of interest	Girl Scout Silver Sage Council
Sinclair	letter of intent	Glanbia Foundation
Lytle		Gloria - Janzio Mexican Resturaunt
Sinclair	Declined	Grace Smith-Keveran & Kenneth A Keveran Foundation
Crane		Habitat for Humanity
Anderson	Email	Harvest Festival (Delta Epsilon Chi)
Crane		Hilex Poly Co., LLC
Markus		Home Depot
Markus		Idaho Community Foundation
Crane		Idaho Dairymen's Association
Crane		Idaho Farm Bureau Federation
Roe	no	Idaho Power Company
Pierce		Independent Meat Co
Anderson	Contacted	INL (Idaho National Laboratory
Roe		Integrated Technologies
Anderson	Email	Intermountain Gas Co.
Pierce		Jaker's Bar & Grill
Anderson	Contacted	Kapstone (Longview Fiber)
Crane		KickBack Rewards Systems - Loyalty Mrk & Gift Card
Anderson	Mailed	Kids Count Too Inc
Anderson	Maybe 1000	Kiwanis Club of Twin Falls
Crane		KMVT
Crane		Lions Club
Markus		Lowes
Rex		Lytle Signs
Crane		Magic Valley Air Show
Anderson	Email	Magic Valley Builders Association
Markus	No	Magic Valley Electric
Lytle		Magic Valley Mall
Crane		Magic Valley Symphony Orchestra
Boyd		MagicFest - Lance Clow
Anderson	Mailed	Make a Wish Foundation
		Mark & Debby Brady
Sinclair		Maurice Bowers Trust
Pratter	Maybe	McDonald's of Twin Falls - Blue Lakes Blvd N
Kapeleris		MelQualie
Pierce		Middlekauff Foundation
Anderson	Email	National Letter Carrier's
Anderson	Email	National Police Week
Anderson	Email	Northwest Farm Credit Services
Prater		Oasis Stop 'N Go, LLC Administration
Prater	Presented	Optimist Club Twin Falls

Crane		Our Talent Our Strength
Anderson	Email	Paint Magic
Sinclair		Paul G. Allen Family Foundation
Crane		Perrine Bridge Festival
Markus	Will Donate Electrical - Get Esti	Petruzzelli Electric
Anderson	Contacted	Pioneer FCU
Anderson		Pioneer FCU
Sinclair	Grant Applications	PMT Foundation
Anderson	Email	Ray Neilsen
Nikki	Presented	Realtor's association
Crane		Relay For Life
	Not Now Maybe October	Rob Green
Lytle		Roger - Retired owner of Boat Dealership in Burley
Ruth	Presented	Rotary Evening Group
Sinclair	Declined	Rotary Foundation - Death by Chocolate
Sinclair		Rotary Foundation - Ice Cream Fun Day
Anderson		Rotary Morning Group
Sinclair	Submitted	Rotary's Death by Chocolate - Lunch Group
Anderson	Mailed	Safe Harbor
Markus		Simplot
Anderson	Mailed	South Central Community Action Partnership 733-9351?
Boyd		Southern Idaho Tourism
Markus	NO	St Lukes Foundation
Roe		St Luke's Magic Valley Medical Center
		Standlee Associates
Pierce		Stanley Associates, Inc.
		Starr Corp.
Anderson	Email	Stone House & Co / Catering By Karen
Anderson	Contacted	The Land Group
Pierce		TitleFact Inc
Anderson	Email	Travelers' Oasis Truck Plaza
Roe		Twin Falls Canal Co
Boyd		Twin Falls Chamber of Commerce
Humble	Contacted	Twin Falls County Fair and Rodeo
Anderson	Email	Twin Falls County Farm Bureau Federation
Anderson	Email	Twin Falls County Farm Bureau Federation
Anderson	Email - bounced back	Twin Falls County Tree Board (Arbor Day)
Anderson	Email	Twin Falls Flea Market
Boyd		Twin Falls Municipal Band
Anderson	No -Maybee Comittees	Twin Falls School District
Roe		Twin Falls Senior Center
Anderson	Mailed	United Way of South Central Idaho
Anderson	Mailed	Valley House Homeless Shelter
Markus		Vintage Vixens
Anderson	Mailed	Voices Against Violence
Kapeleris		WalMart
Anderson	Email -bounced back	Western Magic Valley Realtors (March 7)

Pierce			Western Waste Services
Pratter			Winco
Lytle			Woodbury Corporation
Lytle			Woodbury Corporation
Lytle			Woodbury Corporation
Lytle			Woodbury Corporation
Anderson	Mailed		YMCA - Twin Falls
Boyd			Zions Bank
Boyd			Zions Bank

	30659	117500	148159
		148159	Total Pledged/Collected
		151841	**Remaining to 300,000**

Expenses	
-4975	Engineering
-50	Fees for Beer Fest
-500	Fee to Twin Falls Community Foundation
-38.68	Fees to Square
-500	Prize money awarded
-12.38	Square Fees from Western Days
-6076.06	

Volunteer	Date	Time	Event
John and Leonard	7/6/2018	Set up by 3:45 -Event 1 Hr	Downtown Commons Ribbon Cutting
	7/11/2018	Set up by 5:30 - Event 6-9 (no cars after 4:30)	Twin Falls Tonight
	7/18/2018	Set up by 5:30 - Event 6-9 (no cars after 4:30)	Twin Falls Tonight
	7/25/2018	Set up by 5:30 - Event 6-9 (no cars after 4:30)	Twin Falls Tonight
	7/27/2018	both set up by 12 to 5 booth set up 5-8 pm	Art In the Park
	7/27/2018	5pm-8pm	Art In the Park
	7/28/2018	Booth set up by 9 am	Art In the Park
	7/28/2018	9 am - 12 pm	Art In the Park
	7/28/2018	12pm - 3 pm	Art In the Park
	7/28/2018	3pm - 6 pm	Art In the Park
	7/28/2018	6 pm booth take down	Art In the Park
	8/1/2018	Set up by 5:30 - Event 6-9 (no cars after 4:30)	Twin Falls Tonight
Melissa	8/4/2018	Set up at 11	Magic Valley Beer Festival
Melissa	8/4/2018	1 pm to 3 pm	Magic Valley Beer Festival
	8/4/2018	3 pm - 6 pm	Magic Valley Beer Festival
	8/4/2018	Take Down at 6 pm	Magic Valley Beer Festival
	8/8/2018	Set up by 5:30 - Event 6-9 (no cars after 4:30)	Twin Falls Tonight
	8/15/2018	Set up by 5:30 - Event 6-9 (no cars after 4:30)	Twin Falls Tonight

Archway Project - Become a Partner

For years, the City of Twin Falls allowed non-profit organizations to advertise events, community fundraisers and special announcements on banners stretched across Shoshone Street. In the fall of 2016 the City terminated this practice for reasons of safety and cost, but expressed an interest in providing an alternative solution. Citizens proposed an electronic message center option to be displayed on an archway spanning Shoshone Street at City Park. A citizen sub-committee was created consisting of representatives from the community, City Council and the County Commission. Design concepts were submitted along with information regarding cost estimates for the project. The design concept pictured above has been approved by City Council.

The estimated cost for the project is approximately $300,000.00. In addition to funds from the City of Twin Falls we are looking for community partnerships in helping provide funding for this project. Businesses, individuals and families that want to support the project are welcome to contribute.

The Sign Will Be Used For

A WIDE VARIETY OF NON-COMMERCIAL MESSAGES expected to include important information from Twin Falls City & County, CSI and schools, emergency and public safety notices like "Amber Alerts," community events and non-profit activities of many kinds.

A recognition monument will be placed at the site to acknowledge donations. As a thank you and recognition for your donations between $100-$250 a brick including your name or message will be placed at the base of the monument. With a donation greater than $250 your name, organization or business name, will be displayed on the monument.

Billing Information

*Name:*_____

*Address:*_____ *City:*_____ *St:*_____ *Zip:*_____

Payment Method: *Cash $*_____ *Credit $*_____ *Check $*_____ *(check #: _____)*

_____ *Circle* _____ *Tile* _____ *Brick*

Name/Message to Be Engraved

Each individual brick is priced at $100 minimum, including sales tax. This includes the brick, the engraving, and installation.

If you prefer to remain anonymous, please check here _____.

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

15 Characters and spaces-All Uppercase Letters

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

15 Characters and spaces-All Uppercase Letters

___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

15 Characters and spaces-All Uppercase Letters

Donations Can Also Be Made To:

Twin Falls Community Foundation IRS 501(c)(3)
P.O. Box 5632 Twin Falls, ID 83303-5632
http:www.twinfallscommunityfoundation.com