

Lutheran Church of The Good Shepherd

Request for Solar Quote (RFQ)



Issued by Olympia Community Solar

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REQUEST FOR QUOTE FOR INSTALLATION OF A SOLAR PROJECT

Summary

Good Shepherd, with the support of Olympia Community Solar, is seeking a quote from a qualified firm to install a commercial solar energy installation in late 2023. Olympia Community Solar is supporting the Church to develop the solar project on the non-profit owned and occupied property.

SITE VISIT

Project partners will host a site visit on November 18th at 9:00 AM PST.

SITE ADDRESS

1601 North St SE, Olympia, WA 98501

PROPOSAL SUBMITTAL

Please submit a proposal in PDF form to the points of contact by 5:00pm on December 16th.

BASIC REQUIREMENTS FOR PROPOSING FIRMS

- Must be registered, or indicate that they will register, with the appropriate Business License divisions in Thurston County and in good standing to be considered for this project.
- Must be a general contractor and must hold an active Contractor Registration with Washington State Department of Labor and Industries.
- Must prove and maintain Workers' Compensation and Employer's Liability insurance.

Site Visits	November 18th at 9:00 AM
Proposals Due	December 16th by 5:00 PM
Firm Selected	December 23rd
Installation Work Start	Q4 2023

PROPOSAL FORMAT AND EVALUATION CRITERIA

Please create project proposals in 8½" x 11" document size using a minimum 12-point font size. Proposals shall not exceed 15 pages, including cover page, cover letter and any appendices and/ or attachments.

I. Cover letter

A. The cover letter shall discuss the highlights, key features and distinguishing points of the Proposal. The cover letter must be prepared and signed by a manager having the authority to make offers and enter into financial agreements on behalf of the firm.

II. Proposing firm profile

A. Detail the proposing firm's size and local organizational structure. Describe the demonstrated experience of the firm in designing and installing commercial solar electric systems. Please note any significant installations by the firm in Thurston County.

III. Qualifications of the project team

A. Identify key personnel for this project including roles, experience, licenses, and certificates (e.g., NABCEP), with corresponding numbers as appropriate. Key personnel should include at a minimum: Owners/Principals; Project Managers; Designers; Installers.

B. Identify any subcontractors the firm plans to use.

IV. Business practices

A. **Work practices:** Address the firm's health and safety record and practices. Identify any communications with the Washington State Department of Labor and Industries and state or federal human rights agencies regarding workplace issues in the last 3 years.

B. **Liability:** Provide information on the level of insurance the firm has and provide copies of certificates.

C. **Workmanship Warranties:** Describe your workmanship warranties.

D. **Wages and Labor Practices:** Provide information about labor practices, including your commitment to providing family wages, benefits, apprenticeships, or mentoring programs.

V. Work quality

A. Explain why the products included in the proposal are appropriate for this project.

B. Provide descriptions of warranties and support that ensure the long-term durability, operation, and maintenance of PV installations. Please describe any system monitoring capabilities or production gauges included. **Please attach the manufacturer's specification sheets and warranty information for each major piece of equipment.** Please indicate the equipment's location of origin.

C. Include a solar production estimate. If the proposal includes modules on multiple different roof orientations, please factor each orientation into your production estimate.

VI. Customer service

A. Describe how the firm plans to handle incident reports (trouble, warranty, service calls, and inquiries). Discuss the firm's typical response time on calls, hours of coverage for customer service calls, and process for providing status reports after an incident is logged.

B. List any complaints received by the Better Business Bureau or the Washington Attorney General's office over the last 3 years.

C. Describe the training the firm provides the host including materials or manuals, customer care books, and/or support for later questions and system performance.



EXHIBIT A

Good Shepherd Lutheran Church

Founded in 1957, the church on the corner of North and Henderson streets has grown and changed over the years. As the building has expanded, so has its outreach, most recently with outdoor Sunday morning worship under the cathedral of evergreens on the church's six acres. Under the current leadership of Pastor Carol Tomer and Pastor Melissa Anderson Trust and a growing staff and newly forming ministry teams, the congregation is moving into its next chapter of ministry, called The Good Courage Journey.

The congregation is an open-hearted, open-minded ELCA congregation. Of particular note is that it has been a Reconciling in Christ congregation since 2009, meaning that it is publicly welcoming of LGBTQ people, as well as being deeply involved in an expansive ministry of justice-making and mercy. This wide-reaching commitment is proclaimed in these words:

"The Lutheran Church of The Good Shepherd welcomes all people: the poor and the rich, the young and the old; people who are single, married, blessed, divorced, separated, partnered or widowed; people of all abilities; people of all sexual orientations and gender identities; people of all nations and ethnic backgrounds. No matter who you are or where you are on life's journey, you are welcome here."

The current ministries of the congregation include a newly debuting contemplative evening service at dusk under the trees on each Thursday in August. This is made possible because Good Shepherd has just been named a Calvin Vital Worship Grant recipient, one of 13 congregations in North America this year. Fridays with Friends will offer intergenerational activities for children, youth, and all ages through the summer. A quilting group (called the Piece Corp) makes and sends around the world (through Lutheran World Relief) over 400 quilts each year. The congregation has a community garden that is used by members and the local community, and its harvests are contributed to the local food banks. The church has been a hub of the community, hosting in its building several other organizations: CIELO (Olympia Latino Comprehensive Educational Center), Scouts, Sunrise Beach School, basketball, soccer, and pickleball groups, theater groups, local music recitals, support groups, the Olympia School District's Transition Academy, as well as the CIELO Food and Hygiene Supply Bank.

Electricity Consumption

Good Shepherd is serviced through a single PSE meter (Rate Schedule Commercial 24).

In 2021 the church consumed about 145 MWhs.

In 2022 the church consumed about 112.2 MWhs. Electric bill attached.

Load Capacity

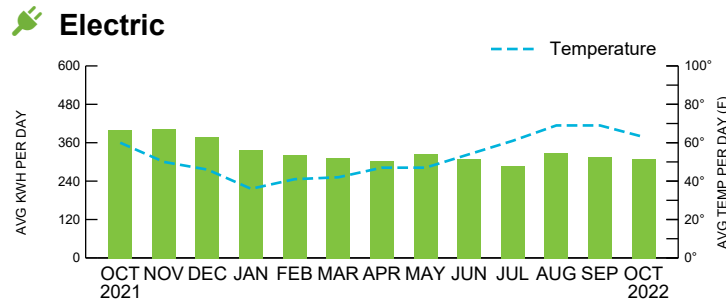
In preparation for this solicitation, the church commissioned a load capacity assessment of their roofs, which confirmed that they are adequate for a solar installation. Load Assessment attached.



Important Information | pse.com | [f](#) [t](#) [v](#) [in](#) [ig](#) [yt](#)

LUTHERAN CHURCH
Serving: 1601 NORTH ST SE, Olympia

Your Usage Information



	Last Year	This Year
Average daily kilowatt hours	397.50	307.50
Average daily cost	\$47.06	\$36.60
Days in billing cycle	32	32
Average temperature	60°F	63°F

Your Account Summary

Previous Charges:	
Amount of Your Last Bill (dated 9/6/2022)	\$ 1,110.09
Payment received 9/26/2022 – Thank you!	-1,110.09
Total Previous Charges	\$ 0.00
Current Charges:	
Electric Charges	\$ 1,171.26
Total Current Charges	\$ 1,171.26
<i>Total includes current and past due charges</i>	
Total	\$ 1,171.26

A bank withdrawal is scheduled for 10/26/2022 for charges due.

Late Payments | A late payment fee of 1% per month will apply to past due charges, if any, and amounts unpaid more than 10 business days after the statement due date. Amounts will be considered delinquent if payment is not received on or before the due date.

Customer service, guaranteed

We stand behind our service, from keeping scheduled appointments to restoring power outages as soon as we can. We'll credit your bill if we fail to meet our service guarantees. pse.com/guarantees.

How to reach us

- For self-service options visit our website at pse.com.
- Email: customer@pse.com
- Customer Service: 1-888-225-5773 | TTY: 1-800-962-9498
- Hours: 7:30 a.m. – 6:30 p.m. M – F | TRS: 1-866-831-5161
- Puget Sound Energy: P.O. Box 91269, Bellevue, WA 98009
- 24 Hour Emergency and Outage line: 1-888-225-5773**



Your Ways to Pay

- pse.com to pay online or to find pay station locations
- Mail this coupon and make check payable to Puget Sound Energy

010231 26700 1 AV 0.452 C017

 LUTHERAN CHURCH
 1601 NORTH ST SE
 TUMWATER WA 98501-3666



\$1,171.26 will be withdrawn from your bank account on 10/26/2022

Serving:
1601 NORTH ST SE, Olympia

Puget Sound Energy
P.O. BOX 91269
Bellevue, WA 98009-9269

Your bill includes charges for electricity and/or natural gas, delivery services, general administration and overhead, metering, taxes, conservation expenses and other items.

Electric Detail Information: 1601 NORTH ST SE, Olympia, CHURCH

Rate Schedule	Meter #	Start Date	End Date	Multiplier	Kilowatt Hours (kWh)	Electric Demand (kW)	Reactive Power (kVAR)	Meter Read Type
		Read	Read					
Commercial 24	P166329693	9/2	10/4	120	9,840	—	—	Actual Read
		661	743					

Your Electric Charge Details (32 days)

	Rate x Unit	=	Charge
9,840 kWh used for service 9/3/2022 - 10/4/2022			
Basic Charge	\$25.95 per month	\$	25.95
Electric Energy Charge (9/3/2022 - 9/30/2022)	0.096940 8,610 kWh		834.65
Electric Energy Charge (10/1/2022 - 10/1/2022)	0.100209 307.44 kWh		30.81
Electric Energy Charge (10/2/2022 - 10/4/2022)	0.101514 922.56 kWh		93.65
Other Electric Charges & Credits			
Electric Cons. Program Charge	0.004827 9,840 kWh		47.50
Power Cost Adjustment	0.005604 9,840 kWh		55.14
Merger Credit	0.000000 9,840 kWh		0.00
Federal Wind Power Credit	-0.001423 9,840 kWh		-14.00
Renewable Energy Credit	-0.000021 9,840 kWh		-0.21
Subtotal			1,073.49
Taxes			
State Utility Tax (\$41.58 included in above charges)	3.873%		
Effect of Olympia City Tax	9.108%	\$1,073.49	97.77
Current Electric Charges		\$	1,171.26

Definitions

Basic Charge — Covers the costs for meters, meter reading, billing and other costs that do not vary with energy use or the number of days covered by the bill.

Multiplier — Converts the amount of electricity used as measured by your meter into kWh.

kWh — Your use of electricity is billed in units called kilowatt hours. It is a unit of energy that equals 1,000 watts of electricity consumed in one hour.

Energy Exchange Credit — Federal Columbia River Benefits supplied by Bonneville Power Administration from low-cost power generated by federal hydroelectric dams.

Other Electric Charges and Credits — Includes the Conservation Program and Power Cost Adjustment (if any) charges, and the Merger, Federal Wind Power, and Renewable Energy credits.

A rate change became effective during this billing period. The listed rate item(s) that changed shows the dates, prices and charges for each portion of the bill period when they were in effect. Copies of the rate schedules are available upon request.

Your electric bill reflects changes in rates that went into effect on October 2, 2022.

Emergency or Power Outage Dial 1-888-225-5773

To report a natural gas or electric emergency or a power outage, 24 hours a day, call **1-888-225-5773**

Para informar sobre emergencias eléctricas, de gas o apagones 24 horas al día, llame al **1-888-225-5773**

若欲報告天然氣或電氣突發事件，或停電事故，每天 24 小時均可致電 **1-888-225-5773**

Чтобы сообщить об аварии, связанной с природным газом или электроэнергией, или о перерыве в подаче электроэнергии, звоните в любое время суток по номеру **1-888-225-5773**

We can translate for other languages. Call **1-888-225-5773**.

Keeping our word.

You will receive a \$50 credit on your PSE bill if we do not keep a set appointment to install new or reconnect existing service or inspect natural gas equipment. Exceptions apply during major storms or significant events beyond our control.

You deserve excellent service.

Every day we aim to give you clear, understandable answers to your questions about bills, credits, deposits and your energy service. If you have a complaint or dispute with your bill or service, please call us at **1-888-225-5773**.

If you are not satisfied with the response, ask to speak with a supervisor. If you are still not satisfied, you may contact the Consumer Affairs section of the Utilities and Transportation Commission at **1-888-333-WUTC (9882)** or complete an online complaint form at **www.utc.wa.gov**.



STRUCTURAL CALCULATIONS

FOR

SOLAR PANEL INSTALLATION

1601 NORTH ST. SE

OLYMPIA WA. 98501

SITE SPECIFIC

VERTICAL

ANALYSIS AND DESIGN

(DO NOT REUSE)

FOR

GOOD SHEPARD CHURCH

PROJECT #2022-0507

BY

MC SQUARED, INC.

WILLIAM A. WITKOP, EIT

REVIEWED BY

JAMES K. FARLEY, PE, SE



10/21/22

SCOPE: CLIENT REQUESTED STRUCTURAL ENGINEERING TO PROVIDE VERTICAL ENGINEERING FOR A SOLAR PANEL INSTALLATION THURSTON COUNTY, WA.

BASIS OF DESIGN IS DRAWINGS PROVIDED BY CLIENT. NO ANALYSIS AND DESIGN OF BRACING, TEMPORARY OR PERMANENT, REQUESTED OR CONDUCTED. ALL BRACING, TEMPORARY AND PERMANENT, SHALL BE RESPONSIBILITY OF CONTRACTOR.

LOADS: 2018 IBC/ASCE 7-16

**VERTICAL: ROOF DL= 15 PSF
SL= Pg = 20 PSF, DESIGN = 25 PSF
SP= 3 PSF (SOLAR PANELS)**

**WIND: 2018 IBC, PER ASCE 7-16, SECTION 26.
RISK CATEGORY II, 103 MPH
EXPOSURE B. SEE ATTACHED WIND
CALCULATIONS.**

APPROX. MEAN ROOF HT = 30'

BASED ON THE ATTACHED CALCULATION PACKAGE,
THE ROOF SUPPORTS OVER THE CLASSROOMS, SANCTUARY,
AND GYMNASIUM HAVE SUFFICIENT CAPACITY
TO ADD SOLAR PANELS IN THESE AREAS.

THE SOLAR PANELS MUST BE CONNECTED
TO THE ROOF WITH A MINIMUM
OF 30 PSF UPLIFT CAPACITY FROM WIND.
SOLAR PANEL SIZE AND LAY OUT PLAN
REQUIRED TO PROVIDE UPLIFT CONNECTION
DESIGN.

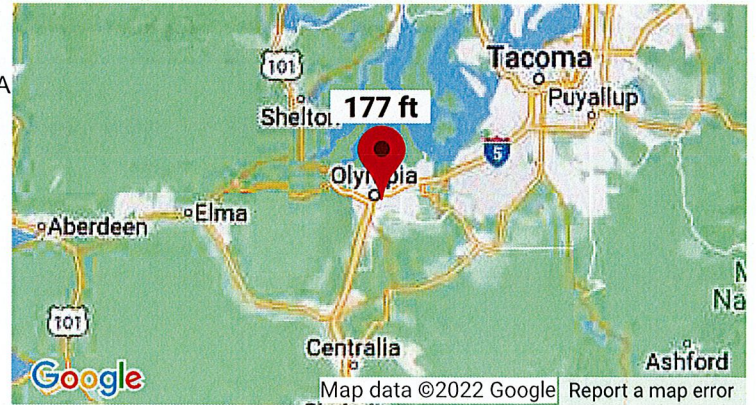
⚠ This is a beta release of the new ATC Hazards by Location website. Please [contact us](#) with feedback.

i The ATC Hazards by Location website will not be updated to support ASCE 7-22. [Find out why.](#)

ATC Hazards by Location

Search Information

Address: 1601 North Street SE, Olympia, WA 98501, USA
Coordinates: 47.0159813, -122.8798548
Elevation: 177 ft
Timestamp: 2022-10-04T16:04:59.743Z
Hazard Type: Wind



ASCE 7-16

MRI 10-Year 66 mph
 MRI 25-Year 72 mph
 MRI 50-Year 77 mph
 MRI 100-Year 82 mph
 Risk Category I 91 mph
 Risk Category II 97 mph
 Risk Category III 103 mph
 Risk Category IV 107 mph

ASCE 7-10

MRI 10-Year 72 mph
 MRI 25-Year 79 mph
 MRI 50-Year 85 mph
 MRI 100-Year 91 mph
 Risk Category I 100 mph
 Risk Category II 110 mph
 Risk Category III-IV 115 mph

ASCE 7-05

ASCE 7-05 Wind Speed 85 mph

The results indicated here DO NOT reflect any state or local amendments to the values or any delineation lines made during the building code adoption process. Users should confirm any output obtained from this tool with the local Authority Having Jurisdiction before proceeding with design.

Please note that the ATC Hazards by Location website will not be updated to support ASCE 7-22. [Find out why.](#)

Disclaimer

Hazard loads are interpolated from data provided in ASCE 7 and rounded up to the nearest whole integer. Per ASCE 7, islands and coastal areas outside the last contour should use the last wind speed contour of the coastal area – in some cases, this website will extrapolate past the last wind speed contour and therefore, provide a wind speed that is slightly higher. NOTE: For queries near wind-borne debris region boundaries, the resulting determination is sensitive to rounding which may affect whether or not it is considered to be within a wind-borne debris region.

Mountainous terrain, gorges, ocean promontories, and special wind regions shall be examined for unusual wind conditions.

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or liability for its accuracy. The material presented in the report should not be used or relied upon for any specific application without competent examination and verification of its accuracy, suitability and applicability by engineers or other licensed professionals. ATC does not intend that the use of this information replace the sound judgment of such competent professionals, having experience and knowledge in the field of practice, nor to substitute for the standard of care required of such professionals in interpreting and applying the results of the report provided by this website. Users of the information from this website assume all liability arising from such use. Use of the output of this website does not imply approval by the governing building code bodies responsible for building code approval and interpretation for the building site described by latitude/longitude location in the report.

RISK CATEGORY III - (ASCE 7-16 TABLE 1.5-1)

WIND SPEED $V = 103$ MPH DESIGN 3-S GUST (ASCE 7-16

EXPOSURE CATEGORY B - (ASCE 26.7.3)

TABLE 26.5-1C)

$K_{zt} = 1.0$ - STRUCTURE NOT BUILT ON A HILL

$P_s = \lambda K_{zt} P_{s30}$ (ASCE 7-16 28.5-1)

MEAN ROOF HEIGHT = $30' = h$

$\theta = 23^\circ$

$\lambda = 1.0$ ASCE

$P_{30} = -26.5$ PSF

$P_s = (1.0)(1.0)(-26.5 \text{ PSF}) = -26.5 \text{ PSF}$

TRUSSES AT 9 FT O.C. $\rightarrow -26.5 \text{ PSF} \times 9 \text{ FT} = -238.5 \text{ PLF}$

SOLAR PANEL CONNECTIONS TO ROOF MUST HAVE A
MINIMUM CAPACITY OF 30 PSF UPLIFT STRENGTH

TRUSSES OVER CLASSROOM ARE SPACED AT
2' O.C. AND HAVE SUFFICIENT REDUNDANCIES
TO SUPPORT THE ADDITIONAL 3 PSF OF
PRESSURE ADDED BY THE SOLAR PANELS

FORCES AT GYM ROOF

DEAD LOAD = 135 PLF

SNOW LOAD = 225 PLF

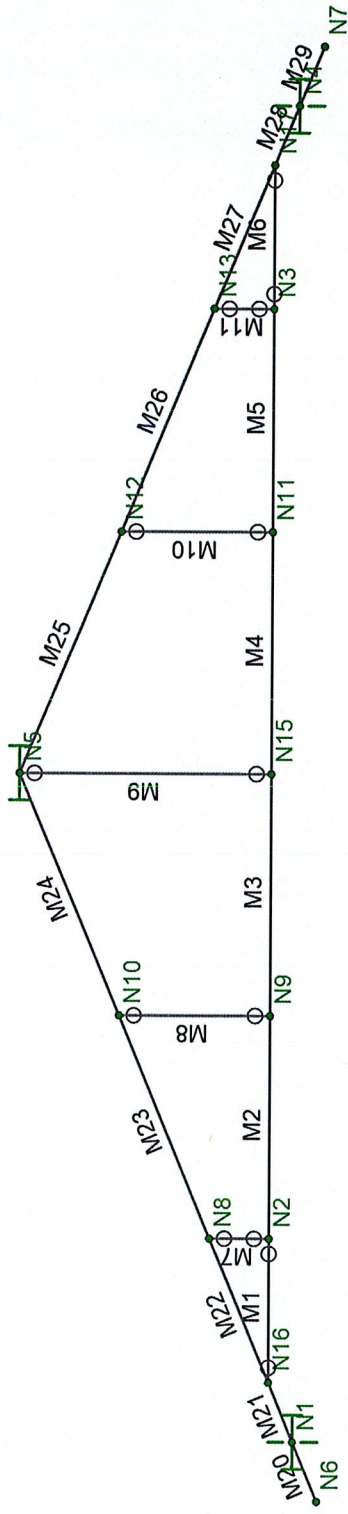
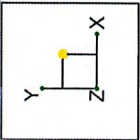
WIND LOAD = -239 PLF (UPLIFT)

SOLAR PANELS = 27 PLF

DL + SL = 360 PLF

$$\frac{SP}{DL+SL} = \frac{27 \text{ PLF}}{360 \text{ PLF}} = 7.5\% > 5\%$$

∴ MORE CALCULATIONS NECESSARY



MC Squared
 Will Witkop
 2022-0507

GOODWIN CHURCH GYM

SK-2

Oct 10, 2022

Truss Analysis

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N1	0	0	0	
2	N2	8.2	1	0	
3	N3	45.7	1	0	
4	N4	53.9	0	0	
5	N5	26.95	11.23	0	
6	N6	-2.4	-1	0	
7	N7	56.3	-1	0	
8	N8	8.2	3.416968	0	
9	N9	17.2	1	0	
10	N10	17.2	7.167223	0	
11	N11	36.7	1	0	
12	N12	36.7	7.167223	0	
13	N13	45.7	3.416968	0	
14	N15	26.95	1	0	
15	N16	2.399673	1	0	
16	N17	51.500327	1	0	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]
1	N11			Reaction	
2	N9			Reaction	
3	N1	Reaction	Reaction	Reaction	Reaction
4	N5			Reaction	Reaction
5	N4		Reaction	Reaction	Reaction

Wood Properties

	Label	Type	Database	Species	Grade	Cm	Ci	Emod	Nu	Therm. Coeff. [10 ⁻⁶ /°F]	Density [k/ft ³]
1	DF	Solid Sawn	Visually Graded	Douglas Fir-Larch	No.1			1	0.3	0.3	0.035
2	SP	Solid Sawn	Visually Graded	Southern Pine	No.1			1	0.3	0.3	0.035
3	HF	Solid Sawn	Visually Graded	Hem-Fir	No.1			1	0.3	0.3	0.035
4	SPF	Solid Sawn	Visually Graded	Spruce-Pine-fir	No.1			1	0.3	0.3	0.035
5	24F-1.8E DF Balanced	Glulam	NDS Table 5A	24F-1.8E DF BAL	na			1	0.3	0.3	0.035
6	24F-1.8E DF Unbalanced	Glulam	NDS Table 5A	24F-1.8E DF UNBAL	na			1	0.3	0.3	0.035
7	24F-1.8E SP Balanced	Glulam	NDS Table 5A	24F-1.8E SP BAL	na			1	0.3	0.3	0.035
8	24F-1.8E SP Unbalanced	Glulam	NDS Table 5A	24F-1.8E SP UNBAL	na			1	0.3	0.3	0.035
9	1.3E-1600F VERSALAM	SCL	Boise Cascade	1.3E-1600F VERSALAM	na			1	0.3	0.3	0.035
10	1.35E LSL SolidStart	SCL	Louisiana Pacific	1.35E LSL SolidStart	na			1	0.3	0.3	0.035
11	1.3E RIGIDLAM LVL	SCL	Roseburg Forest Products	1.3E RIGIDLAM LVL	na			1	0.3	0.3	0.035
12	2.0E DF Parallam PSL	SCL	TrusJoist	2.0E DF Parallam PSL	na			1	0.3	0.3	0.035
13	LVL PRL 1.5E 2250F	Custom	N/A	LVL PRL 1.5E 2250F	na			1	0.3	0.3	0.035
14	LVL_Microlam_1.9E_2600F	Custom	N/A	LVL_Microlam_1.9E_2600F	na			1	0.3	0.3	0.035
15	PSL_Parallam_2.0E_2900F	Custom	N/A	PSL_Parallam_2.0E_2900F	na			1	0.3	0.3	0.035
16	LSL_TimberStrand_1.55E_2325F	Custom	N/A	LSL_TimberStrand_1.55E_2325F	na			1	0.3	0.3	0.035

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [10 ⁻⁶ /°F]	Density [k/ft ³]	Yield [ksi]	Ry	Fu [ksi]	Rt
1	A992	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
2	A36 Gr.36	29000	11154	0.3	0.65	0.49	36	1.5	58	1.2
3	A572 Gr.50	29000	11154	0.3	0.65	0.49	50	1.1	65	1.1
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.B RECT	29000	11154	0.3	0.65	0.527	46	1.4	58	1.3

Hot Rolled Steel Properties (Continued)

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [$10^{-6} \text{ } ^\circ\text{F}^{-1}$]	Density [k/ft ³]	Yield [ksi]	Ry	Fu [ksi]	Rt
6	A500 Gr.C RND	29000	11154	0.3	0.65	0.527	46	1.4	62	1.3
7	A500 Gr.C RECT	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
8	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
9	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
10	A913 Gr.65	29000	11154	0.3	0.65	0.49	65	1.1	80	1.1

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1	HR1	GYMNASIUMBARS	HBrace	BAR	A36 Gr.36	Typical	0.785	0.049	0.049	0.098
2	HR2	HR2	HBrace	BAR	A36 Gr.36	Typical	2.461	0.482	0.482	0.964

Wood Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in ²]	Iyy [in ⁴]	Izz [in ⁴]	J [in ⁴]
1	W1	6.75X9FS	Beam	Glulam Western	24F-1.8E SP Balanced	Typical	60.75	230.66	410.062	498.188
2	W2	6.75X18FS	Beam	Glulam Western	24F-1.8E SP Balanced	Typical	121.5	461.32	3280.5	1410.052

Wood Design Parameters

	Label	Shape	Length [ft]	le-bend top [ft]	Cr	y sway	z sway
1	M2	W1	9	Lbyy			
2	M20	W2	2.6	Lbyy			
3	M21	W2	2.6	Lbyy			
4	M22	W2	6.284	Lbyy			
5	M23	W2	9.75	Lbyy			
6	M24	W2	10.563	Lbyy			
7	M25	W2	10.563	Lbyy			
8	M26	W2	9.75	Lbyy			
9	M27	W2	6.284	Lbyy			
10	M28	W2	2.6	Lbyy			
11	M29	W2	2.6	Lbyy			
12	M3	W1	9.75	Lbyy			
13	M4	W1	9.75	Lbyy			
14	M5	W1	9	Lbyy			

Hot Rolled Steel Design Parameters

	Label	Shape	Length [ft]	Lcomp top [ft]	Channel Conn.	a [ft]	Function
1	M1	HR2	5.8	Lbyy	N/A	N/A	Lateral
2	M6	HR2	5.8	Lbyy	N/A	N/A	Lateral
3	M7	HR1	2.417	Lbyy	N/A	N/A	Lateral
4	M8	HR1	6.167	Lbyy	N/A	N/A	Lateral
5	M10	HR1	6.167	Lbyy	N/A	N/A	Lateral
6	M11	HR1	2.417	Lbyy	N/A	N/A	Lateral
7	M9	HR1	10.23	Lbyy	N/A	N/A	Lateral

Member Distributed Loads (BLC 1 : DL)

	Member Label	Direction	Start Magnitude [k/ft, F, ksf, -ft/ft]	End Magnitude [k/ft, F, ksf, -ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M20	Y	-0.135	-0.135	0	%100
2	M21	Y	-0.135	-0.135	0	%100
3	M22	Y	-0.135	-0.135	0	%100
4	M23	Y	-0.135	-0.135	0	%100

Member Distributed Loads (BLC 1 : DL) (Continued)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, -ft/ft]	End Magnitude [k/ft, F, ksf, -ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
5	M24	Y	-0.135	-0.135	0	%100
6	M25	Y	-0.135	-0.135	0	%100
7	M26	Y	-0.135	-0.135	0	%100
8	M27	Y	-0.135	-0.135	0	%100
9	M28	Y	-0.135	-0.135	0	%100
10	M29	Y	-0.135	-0.135	0	%100

Member Distributed Loads (BLC 2 : SL)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, -ft/ft]	End Magnitude [k/ft, F, ksf, -ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M20	Y	-0.225	-0.225	0	%100
2	M21	Y	-0.225	-0.225	0	%100
3	M22	Y	-0.225	-0.225	0	%100
4	M23	Y	-0.225	-0.225	0	%100
5	M24	Y	-0.225	-0.225	0	%100
6	M25	Y	-0.225	-0.225	0	%100
7	M26	Y	-0.225	-0.225	0	%100
8	M27	Y	-0.225	-0.225	0	%100
9	M28	Y	-0.225	-0.225	0	%100
10	M29	Y	-0.225	-0.225	0	%100

Member Distributed Loads (BLC 3 : SP)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, -ft/ft]	End Magnitude [k/ft, F, ksf, -ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M20	Y	-0.027	-0.027	0	%100
2	M21	Y	-0.027	-0.027	0	%100
3	M22	Y	-0.027	-0.027	0	%100
4	M23	Y	-0.027	-0.027	0	%100
5	M24	Y	-0.027	-0.027	0	%100
6	M25	Y	-0.027	-0.027	0	%100
7	M26	Y	-0.027	-0.027	0	%100
8	M27	Y	-0.027	-0.027	0	%100
9	M28	Y	-0.027	-0.027	0	%100
10	M29	Y	-0.027	-0.027	0	%100

Member Distributed Loads (BLC 4 : WL)

Member	Label	Direction	Start Magnitude [k/ft, F, ksf, -ft/ft]	End Magnitude [k/ft, F, ksf, -ft/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M20	Y	0.238	0.238	0	%100
2	M21	Y	0.238	0.238	0	%100
3	M22	Y	0.238	0.238	0	%100
4	M23	Y	0.238	0.238	0	%100
5	M24	Y	0.238	0.238	0	%100
6	M25	Y	0.238	0.238	0	%100
7	M26	Y	0.238	0.238	0	%100
8	M27	Y	0.238	0.238	0	%100
9	M28	Y	0.238	0.238	0	%100
10	M29	Y	0.238	0.238	0	%100

Basic Load Cases

	BLC Description	Category	Point	Distributed
1	DL	None		10
2	SL	None		10

Basic Load Cases (Continued)

	BLC Description	Category	Point	Distributed
3	SP	None		10
4	WL	None		10
9		None	1	

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor
1	DL	Yes	Y	1	1				
2	DL+SL	Yes	Y	1	1	2	1		
3	DL+.6WL	Yes	Y	1	1	4	0.6		
4	DL+.75(.6)WL+.75SL	Yes	Y	1	1	4	0.45	2	1
5	SP	Yes	Y	3	1				
6	.6DL+.6WL	Yes	Y	1	0.6	4	0.6		
7	DL+SL+SP	Yes	Y	1	1	2	1	3	1

Load Combination Design

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	DL			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	DL+SL	1.15		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	DL+.6WL	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	DL+.75(.6)WL+.75SL	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	SP			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	.6DL+.6WL	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	DL+SL+SP	1.15		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Node Reactions

	LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [k-ft]	MZ [k-ft]
1	1	N11	0	0	0	0	0	0
2	1	N9	0	0	0	0	0	0
3	1	N1	0	4.292	0	0	0	0
4	1	N5	0	0	0	0	0	0
5	1	N4	0	4.292	0	0	0	0
6	1	Totals:	0	8.585	0			
7	1	COG (ft):	X: 26.95	Y: 5.115	Z: 0			
8	2	N11	0	0	0	0	0	0
9	2	N9	0	0	0	0	0	0
10	2	N1	0	11.447	0	0	0	0
11	2	N5	0	0	0	0	0	0
12	2	N4	0	11.447	0	0	0	0
13	2	Totals:	0	22.893	0			
14	2	COG (ft):	X: 26.95	Y: 5.115	Z: 0			
15	3	N11	0	0	0	0	0	0
16	3	N9	0	0	0	0	0	0
17	3	N1	0	-0.258	0	0	0	0
18	3	N5	0	0	0	0	0	0
19	3	N4	0	-0.258	0	0	0	0
20	3	Totals:	0	-0.515	0			
21	3	COG (ft):	X: 26.95	Y: 5.115	Z: 0			
22	4	N11	0	0	0	0	0	0
23	4	N9	0	0	0	0	0	0
24	4	N1	0	8.034	0	0	0	0
25	4	N5	0	0	0	0	0	0
26	4	N4	0	8.034	0	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [k]	Y [k]	Z [k]	MX [k-ft]	MY [-k]	MZ [k-ft]
27	4	Totals:	0	16.068	0			
28	4	COG (ft):	X: 26.95	Y: 5.115	Z: 0			
29	5	N11	0	0	0	0	0	0
30	5	N9	0	0	0	0	0	0
31	5	N1	0	0.858	0	0	0	0
32	5	N5	0	0	0	0	0	0
33	5	N4	0	0.858	0	0	0	0
34	5	Totals:	0	1.717	0			
35	5	COG (ft):	X: 26.95	Y: 5.115	Z: 0			
36	6	N11	0	0	0	0	0	0
37	6	N9	0	0	0	0	0	0
38	6	N1	0	-1.975	0	0	0	0
39	6	N5	0	0	0	0	0	0
40	6	N4	0	-1.975	0	0	0	0
41	6	Totals:	0	-3.949	0			
42	6	COG (ft):	X: 26.95	Y: 5.115	Z: 0			
43	7	N11	0	0	0	0	0	0
44	7	N9	0	0	0	0	0	0
45	7	N1	0	12.305	0	0	0	0
46	7	N5	0	0	0	0	0	0
47	7	N4	0	12.305	0	0	0	0
48	7	Totals:	0	24.61	0			
49	7	COG (ft):	X: 26.95	Y: 5.115	Z: 0			

Node Displacements

	LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
1	1	N1	0	0	0	0	0	-3.182e-3
2	1	N2	0.046	-0.242	0	0	0	-4.616e-4
3	1	N3	0.074	-0.242	0	0	0	4.616e-4
4	1	N4	0.12	0	0	0	0	3.182e-3
5	1	N5	0.06	-0.172	0	0	0	0
6	1	N6	-0.038	0.091	0	0	0	-3.173e-3
7	1	N7	0.158	0.091	0	0	0	3.173e-3
8	1	N8	0.098	-0.242	0	0	0	-1.333e-3
9	1	N9	0.052	-0.258	0	0	0	5.114e-4
10	1	N10	0.101	-0.259	0	0	0	7.533e-4
11	1	N11	0.067	-0.258	0	0	0	-5.114e-4
12	1	N12	0.019	-0.259	0	0	0	-7.533e-4
13	1	N13	0.022	-0.242	0	0	0	1.333e-3
14	1	N15	0.06	-0.176	0	0	0	0
15	1	N16	0.038	-0.091	0	0	0	-2.917e-3
16	1	N17	0.082	-0.091	0	0	0	2.917e-3
17	2	N1	0	0	0	0	0	-8.515e-3
18	2	N2	0.122	-0.649	0	0	0	-1.23e-3
19	2	N3	0.199	-0.649	0	0	0	1.23e-3
20	2	N4	0.321	0	0	0	0	8.515e-3
21	2	N5	0.16	-0.459	0	0	0	0
22	2	N6	-0.102	0.245	0	0	0	-8.491e-3
23	2	N7	0.422	0.245	0	0	0	8.491e-3
24	2	N8	0.262	-0.648	0	0	0	-3.566e-3
25	2	N9	0.14	-0.689	0	0	0	1.367e-3
26	2	N10	0.269	-0.694	0	0	0	2.018e-3
27	2	N11	0.18	-0.689	0	0	0	-1.367e-3
28	2	N12	0.051	-0.694	0	0	0	-2.018e-3
29	2	N13	0.059	-0.648	0	0	0	3.566e-3

Node Displacements (Continued)

	LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
30	2	N15	0.16	-0.47	0	0	0	0
31	2	N16	0.1	-0.243	0	0	0	-7.806e-3
32	2	N17	0.22	-0.243	0	0	0	7.806e-3
33	3	N1	0	0	0	0	0	1.905e-4
34	3	N2	-0.003	0.015	0	0	0	2.77e-5
35	3	N3	-0.004	0.015	0	0	0	-2.77e-5
36	3	N4	-0.007	0	0	0	0	-1.905e-4
37	3	N5	-0.004	0.01	0	0	0	0
38	3	N6	0.002	-0.005	0	0	0	1.9e-4
39	3	N7	-0.009	-0.005	0	0	0	-1.9e-4
40	3	N8	-0.006	0.015	0	0	0	7.983e-5
41	3	N9	-0.003	0.015	0	0	0	-3.065e-5
42	3	N10	-0.006	0.016	0	0	0	-4.506e-5
43	3	N11	-0.004	0.015	0	0	0	3.065e-5
44	3	N12	-0.001	0.016	0	0	0	4.506e-5
45	3	N13	-0.001	0.015	0	0	0	-7.983e-5
46	3	N15	-0.004	0.011	0	0	0	0
47	3	N16	-0.002	0.005	0	0	0	1.746e-4
48	3	N17	-0.005	0.005	0	0	0	-1.746e-4
49	4	N1	0	0	0	0	0	-5.966e-3
50	4	N2	0.085	-0.455	0	0	0	-8.637e-4
51	4	N3	0.139	-0.455	0	0	0	8.637e-4
52	4	N4	0.225	0	0	0	0	5.966e-3
53	4	N5	0.112	-0.322	0	0	0	0
54	4	N6	-0.071	0.171	0	0	0	-5.949e-3
55	4	N7	0.296	0.171	0	0	0	5.949e-3
56	4	N8	0.183	-0.454	0	0	0	-2.499e-3
57	4	N9	0.098	-0.483	0	0	0	9.583e-4
58	4	N10	0.189	-0.486	0	0	0	1.413e-3
59	4	N11	0.126	-0.483	0	0	0	-9.583e-4
60	4	N12	0.036	-0.486	0	0	0	-1.413e-3
61	4	N13	0.041	-0.454	0	0	0	2.499e-3
62	4	N15	0.112	-0.33	0	0	0	0
63	4	N16	0.07	-0.17	0	0	0	-5.47e-3
64	4	N17	0.154	-0.17	0	0	0	5.47e-3
65	5	N1	0	0	0	0	0	-6.353e-4
66	5	N2	0.009	-0.048	0	0	0	-9.233e-5
67	5	N3	0.015	-0.048	0	0	0	9.233e-5
68	5	N4	0.024	0	0	0	0	6.353e-4
69	5	N5	0.012	-0.034	0	0	0	0
70	5	N6	-0.008	0.018	0	0	0	-6.336e-4
71	5	N7	0.032	0.018	0	0	0	6.336e-4
72	5	N8	0.02	-0.048	0	0	0	-2.662e-4
73	5	N9	0.01	-0.051	0	0	0	1.022e-4
74	5	N10	0.02	-0.052	0	0	0	1.503e-4
75	5	N11	0.013	-0.051	0	0	0	-1.022e-4
76	5	N12	0.004	-0.052	0	0	0	-1.503e-4
77	5	N13	0.004	-0.048	0	0	0	2.662e-4
78	5	N15	0.012	-0.035	0	0	0	0
79	5	N16	0.007	-0.018	0	0	0	-5.825e-4
80	5	N17	0.016	-0.018	0	0	0	5.825e-4
81	6	N1	0	0	0	0	0	1.459e-3
82	6	N2	-0.021	0.111	0	0	0	2.124e-4
83	6	N3	-0.034	0.111	0	0	0	-2.124e-4
84	6	N4	-0.055	0	0	0	0	-1.459e-3

Node Displacements (Continued)

	LC	Node Label	X [in]	Y [in]	Z [in]	X Rotation [rad]	Y Rotation [rad]	Z Rotation [rad]
85	6	N5	-0.028	0.079	0	0	0	0
86	6	N6	0.017	-0.042	0	0	0	1.455e-3
87	6	N7	-0.072	-0.042	0	0	0	-1.455e-3
88	6	N8	-0.045	0.111	0	0	0	6.116e-4
89	6	N9	-0.024	0.118	0	0	0	-2.348e-4
90	6	N10	-0.046	0.119	0	0	0	-3.451e-4
91	6	N11	-0.031	0.118	0	0	0	2.348e-4
92	6	N12	-0.009	0.119	0	0	0	3.451e-4
93	6	N13	-0.01	0.111	0	0	0	-6.116e-4
94	6	N15	-0.028	0.081	0	0	0	0
95	6	N16	-0.017	0.042	0	0	0	1.338e-3
96	6	N17	-0.038	0.042	0	0	0	-1.338e-3
97	7	N1	0	0	0	0	0	-9.157e-3
98	7	N2	0.131	-0.698	0	0	0	-1.323e-3
99	7	N3	0.214	-0.698	0	0	0	1.323e-3
100	7	N4	0.345	0	0	0	0	9.157e-3
101	7	N5	0.172	-0.494	0	0	0	0
102	7	N6	-0.11	0.263	0	0	0	-9.131e-3
103	7	N7	0.454	0.263	0	0	0	9.131e-3
104	7	N8	0.282	-0.697	0	0	0	-3.834e-3
105	7	N9	0.151	-0.741	0	0	0	1.47e-3
106	7	N10	0.29	-0.746	0	0	0	2.171e-3
107	7	N11	0.194	-0.741	0	0	0	-1.47e-3
108	7	N12	0.055	-0.746	0	0	0	-2.171e-3
109	7	N13	0.063	-0.697	0	0	0	3.834e-3
110	7	N15	0.172	-0.506	0	0	0	0
111	7	N16	0.108	-0.261	0	0	0	-8.395e-3
112	7	N17	0.237	-0.261	0	0	0	8.395e-3

Member Section Forces

	LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
1	1	M1	1	-6.539	0	0	0	0	0
2			2	-6.539	0	0	0	0	0
3			3	-6.539	0	0	0	0	0
4			4	-6.539	0	0	0	0	0
5			5	-6.539	0	0	0	0	0
6	1	M6	1	-6.539	0	0	0	0	0
7			2	-6.539	0	0	0	0	0
8			3	-6.539	0	0	0	0	0
9			4	-6.539	0	0	0	0	0
10			5	-6.539	0	0	0	0	0
11	1	M7	1	-0.102	0	0	0	0	0
12			2	-0.102	0	0	0	0	0
13			3	-0.102	0	0	0	0	0
14			4	-0.102	0	0	0	0	0
15			5	-0.102	0	0	0	0	0
16	1	M8	1	0.414	0	0	0	0	0
17			2	0.414	0	0	0	0	0
18			3	0.414	0	0	0	0	0
19			4	0.414	0	0	0	0	0
20			5	0.414	0	0	0	0	0
21	1	M10	1	0.414	0	0	0	0	0
22			2	0.414	0	0	0	0	0
23			3	0.414	0	0	0	0	0
24			4	0.414	0	0	0	0	0

Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
25		5	0.414	0	0	0	0	0
26	1	M11	1	-0.102	0	0	0	0
27		2	-0.102	0	0	0	0	0
28		3	-0.102	0	0	0	0	0
29		4	-0.102	0	0	0	0	0
30		5	-0.102	0	0	0	0	0
31	1	M9	1	-0.58	0	0	0	0
32		2	-0.58	0	0	0	0	0
33		3	-0.58	0	0	0	0	0
34		4	-0.58	0	0	0	0	0
35		5	-0.58	0	0	0	0	0
36	1	M2	1	-6.538	0.123	0	0	0
37		2	-6.538	0.123	0	0	0	-0.277
38		3	-6.538	0.123	0	0	0	-0.554
39		4	-6.538	0.123	0	0	0	-0.831
40		5	-6.538	0.123	0	0	0	-1.108
41	1	M20	1	0	0	0	0	0
42		2	-0.034	-0.081	0	0	0	0.027
43		3	-0.067	-0.162	0	0	0	0.106
44		4	-0.101	-0.243	0	0	0	0.238
45		5	-0.135	-0.324	0	0	0	0.422
46	1	M21	1	1.516	3.645	0	0	0.422
47		2	1.482	3.565	0	0	0	-1.921
48		3	1.449	3.484	0	0	0	-4.211
49		4	1.415	3.403	0	0	0	-6.449
50		5	1.381	3.322	0	0	0	-8.634
51	1	M22	1	7.408	0.803	0	0	-8.634
52		2	7.326	0.608	0	0	0	-9.742
53		3	7.245	0.412	0	0	0	-10.543
54		4	7.163	0.216	0	0	0	-11.036
55		5	7.082	0.02	0	0	0	-11.222
56	1	M23	1	7.042	-0.097	0	0	-11.222
57		2	6.915	-0.401	0	0	0	-10.615
58		3	6.789	-0.705	0	0	0	-9.268
59		4	6.662	-1.008	0	0	0	-7.18
60		5	6.536	-1.312	0	0	0	-4.352
61	1	M24	1	6.696	-0.939	0	0	-4.352
62		2	6.558	-1.268	0	0	0	-1.438
63		3	6.421	-1.597	0	0	0	2.345
64		4	6.284	-1.926	0	0	0	6.997
65		5	6.147	-2.255	0	0	0	12.518
66	1	M25	1	6.147	2.255	0	0	12.518
67		2	6.284	1.926	0	0	0	6.997
68		3	6.421	1.597	0	0	0	2.345
69		4	6.558	1.268	0	0	0	-1.438
70		5	6.696	0.939	0	0	0	-4.352
71	1	M26	1	6.536	1.312	0	0	-4.352
72		2	6.662	1.008	0	0	0	-7.18
73		3	6.789	0.705	0	0	0	-9.268
74		4	6.915	0.401	0	0	0	-10.615
75		5	7.042	0.097	0	0	0	-11.222
76	1	M27	1	7.082	-0.02	0	0	-11.222
77		2	7.163	-0.216	0	0	0	-11.036
78		3	7.245	-0.412	0	0	0	-10.543
79		4	7.326	-0.608	0	0	0	-9.742

Member Section Forces (Continued)

	LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
80			5	7.408	-0.803	0	0	0	-8.634
81	1	M28	1	1.381	-3.322	0	0	0	-8.634
82			2	1.415	-3.403	0	0	0	-6.449
83			3	1.449	-3.484	0	0	0	-4.211
84			4	1.482	-3.565	0	0	0	-1.921
85			5	1.516	-3.645	0	0	0	0.422
86	1	M29	1	-0.135	0.324	0	0	0	0.422
87			2	-0.101	0.243	0	0	0	0.238
88			3	-0.067	0.162	0	0	0	0.106
89			4	-0.034	0.081	0	0	0	0.027
90			5	0	0	0	0	0	0
91	1	M3	1	-6.539	-0.282	0	0	0	-1.108
92			2	-6.539	-0.282	0	0	0	-0.42
93			3	-6.539	-0.282	0	0	0	0.269
94			4	-6.539	-0.282	0	0	0	0.957
95			5	-6.539	-0.282	0	0	0	1.646
96	1	M4	1	-6.539	0.282	0	0	0	1.646
97			2	-6.539	0.282	0	0	0	0.957
98			3	-6.539	0.282	0	0	0	0.269
99			4	-6.539	0.282	0	0	0	-0.42
100			5	-6.539	0.282	0	0	0	-1.108
101	1	M5	1	-6.538	-0.123	0	0	0	-1.108
102			2	-6.538	-0.123	0	0	0	-0.831
103			3	-6.538	-0.123	0	0	0	-0.554
104			4	-6.538	-0.123	0	0	0	-0.277
105			5	-6.538	-0.123	0	0	0	0
106	2	M1	1	-17.462	0	0	0	0	0
107			2	-17.462	0	0	0	0	0
108			3	-17.462	0	0	0	0	0
109			4	-17.462	0	0	0	0	0
110			5	-17.462	0	0	0	0	0
111	2	M6	1	-17.462	0	0	0	0	0
112			2	-17.462	0	0	0	0	0
113			3	-17.462	0	0	0	0	0
114			4	-17.462	0	0	0	0	0
115			5	-17.462	0	0	0	0	0
116	2	M7	1	-0.176	0	0	0	0	0
117			2	-0.176	0	0	0	0	0
118			3	-0.176	0	0	0	0	0
119			4	-0.176	0	0	0	0	0
120			5	-0.176	0	0	0	0	0
121	2	M8	1	1.146	0	0	0	0	0
122			2	1.146	0	0	0	0	0
123			3	1.146	0	0	0	0	0
124			4	1.146	0	0	0	0	0
125			5	1.146	0	0	0	0	0
126	2	M10	1	1.146	0	0	0	0	0
127			2	1.146	0	0	0	0	0
128			3	1.146	0	0	0	0	0
129			4	1.146	0	0	0	0	0
130			5	1.146	0	0	0	0	0
131	2	M11	1	-0.176	0	0	0	0	0
132			2	-0.176	0	0	0	0	0
133			3	-0.176	0	0	0	0	0
134			4	-0.176	0	0	0	0	0

Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
135		5	-0.176	0	0	0	0	0
136	2	1	-1.613	0	0	0	0	0
137		2	-1.613	0	0	0	0	0
138		3	-1.613	0	0	0	0	0
139		4	-1.613	0	0	0	0	0
140		5	-1.613	0	0	0	0	0
141	2	1	-17.461	0.329	0	0	0	0
142		2	-17.461	0.329	0	0	0	-0.74
143		3	-17.461	0.329	0	0	0	-1.479
144		4	-17.461	0.329	0	0	0	-2.219
145		5	-17.461	0.329	0	0	0	-2.958
146	2	1	0	-0.002	0	0	0	0
147		2	-0.09	-0.218	0	0	0	0.072
148		3	-0.18	-0.434	0	0	0	0.284
149		4	-0.27	-0.65	0	0	0	0.637
150		5	-0.36	-0.866	0	0	0	1.13
151	2	1	4.043	9.754	0	0	0	1.13
152		2	3.953	9.538	0	0	0	-5.14
153		3	3.863	9.322	0	0	0	-11.268
154		4	3.773	9.106	0	0	0	-17.257
155		5	3.683	8.89	0	0	0	-23.105
156	2	1	19.739	2.15	0	0	0	-23.105
157		2	19.521	1.628	0	0	0	-26.072
158		3	19.304	1.106	0	0	0	-28.22
159		4	19.086	0.584	0	0	0	-29.547
160		5	18.869	0.062	0	0	0	-30.054
161	2	1	18.799	-0.268	0	0	0	-30.054
162		2	18.462	-1.078	0	0	0	-28.414
163		3	18.124	-1.888	0	0	0	-24.799
164		4	17.787	-2.698	0	0	0	-19.21
165		5	17.449	-3.508	0	0	0	-11.647
166	2	1	17.893	-2.519	0	0	0	-11.647
167		2	17.527	-3.396	0	0	0	-3.837
168		3	17.162	-4.274	0	0	0	6.29
169		4	16.796	-5.151	0	0	0	18.734
170		5	16.43	-6.029	0	0	0	33.495
171	2	1	16.43	6.029	0	0	0	33.495
172		2	16.796	5.151	0	0	0	18.734
173		3	17.162	4.274	0	0	0	6.29
174		4	17.527	3.396	0	0	0	-3.837
175		5	17.893	2.519	0	0	0	-11.647
176	2	1	17.449	3.508	0	0	0	-11.647
177		2	17.787	2.698	0	0	0	-19.21
178		3	18.124	1.888	0	0	0	-24.799
179		4	18.462	1.078	0	0	0	-28.414
180		5	18.799	0.268	0	0	0	-30.054
181	2	1	18.869	-0.062	0	0	0	-30.054
182		2	19.086	-0.584	0	0	0	-29.547
183		3	19.304	-1.106	0	0	0	-28.22
184		4	19.521	-1.628	0	0	0	-26.072
185		5	19.739	-2.15	0	0	0	-23.105
186	2	1	3.683	-8.89	0	0	0	-23.105
187		2	3.773	-9.106	0	0	0	-17.257
188		3	3.863	-9.322	0	0	0	-11.268
189		4	3.953	-9.538	0	0	0	-5.14

Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
190		5	4.043	-9.754	0	0	0	1.13
191	2	M29	1	-0.36	0.866	0	0	1.13
192		2	-0.27	0.65	0	0	0	0.637
193		3	-0.18	0.434	0	0	0	0.284
194		4	-0.09	0.218	0	0	0	0.072
195		5	0	0.002	0	0	0	0
196	2	M3	1	-17.464	-0.754	0	0	-2.958
197		2	-17.464	-0.754	0	0	0	-1.12
198		3	-17.464	-0.754	0	0	0	0.719
199		4	-17.464	-0.754	0	0	0	2.557
200		5	-17.464	-0.754	0	0	0	4.395
201	2	M4	1	-17.464	0.754	0	0	4.395
202		2	-17.464	0.754	0	0	0	2.557
203		3	-17.464	0.754	0	0	0	0.719
204		4	-17.464	0.754	0	0	0	-1.12
205		5	-17.464	0.754	0	0	0	-2.958
206	2	M5	1	-17.461	-0.329	0	0	-2.958
207		2	-17.461	-0.329	0	0	0	-2.219
208		3	-17.461	-0.329	0	0	0	-1.479
209		4	-17.461	-0.329	0	0	0	-0.74
210		5	-17.461	-0.329	0	0	0	0
211	3	M1	1	0.392	0	0	0	0
212		2	0.392	0	0	0	0	0
213		3	0.392	0	0	0	0	0
214		4	0.392	0	0	0	0	0
215		5	0.392	0	0	0	0	0
216	3	M6	1	0.392	0	0	0	0
217		2	0.392	0	0	0	0	0
218		3	0.392	0	0	0	0	0
219		4	0.392	0	0	0	0	0
220		5	0.392	0	0	0	0	0
221	3	M7	1	0.007	0	0	0	0
222		2	0.007	0	0	0	0	0
223		3	0.007	0	0	0	0	0
224		4	0.007	0	0	0	0	0
225		5	0.007	0	0	0	0	0
226	3	M8	1	-0.024	0	0	0	0
227		2	-0.024	0	0	0	0	0
228		3	-0.024	0	0	0	0	0
229		4	-0.024	0	0	0	0	0
230		5	-0.024	0	0	0	0	0
231	3	M10	1	-0.024	0	0	0	0
232		2	-0.024	0	0	0	0	0
233		3	-0.024	0	0	0	0	0
234		4	-0.024	0	0	0	0	0
235		5	-0.024	0	0	0	0	0
236	3	M11	1	0.007	0	0	0	0
237		2	0.007	0	0	0	0	0
238		3	0.007	0	0	0	0	0
239		4	0.007	0	0	0	0	0
240		5	0.007	0	0	0	0	0
241	3	M9	1	0.034	0	0	0	0
242		2	0.034	0	0	0	0	0
243		3	0.034	0	0	0	0	0
244		4	0.034	0	0	0	0	0

Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
245		5	0.034	0	0	0	0	0
246	3	1	0.392	-0.007	0	0	0	0
247		2	0.392	-0.007	0	0	0	0.017
248		3	0.392	-0.007	0	0	0	0.033
249		4	0.392	-0.007	0	0	0	0.05
250		5	0.392	-0.007	0	0	0	0.066
251	3	1	0	0	0	0	0	0
252		2	0.002	0.005	0	0	0	-0.002
253		3	0.004	0.01	0	0	0	-0.006
254		4	0.006	0.015	0	0	0	-0.014
255		5	0.008	0.019	0	0	0	-0.025
256	3	1	-0.091	-0.218	0	0	0	-0.025
257		2	-0.089	-0.213	0	0	0	0.115
258		3	-0.087	-0.209	0	0	0	0.252
259		4	-0.085	-0.204	0	0	0	0.386
260		5	-0.083	-0.199	0	0	0	0.517
261	3	1	-0.445	-0.048	0	0	0	0.517
262		2	-0.44	-0.036	0	0	0	0.583
263		3	-0.435	-0.025	0	0	0	0.631
264		4	-0.43	-0.013	0	0	0	0.661
265		5	-0.425	-0.001	0	0	0	0.671
266	3	1	-0.422	0.006	0	0	0	0.671
267		2	-0.415	0.024	0	0	0	0.635
268		3	-0.407	0.042	0	0	0	0.555
269		4	-0.399	0.06	0	0	0	0.43
270		5	-0.392	0.079	0	0	0	0.261
271	3	1	-0.401	0.056	0	0	0	0.261
272		2	-0.393	0.076	0	0	0	0.086
273		3	-0.385	0.096	0	0	0	-0.14
274		4	-0.377	0.115	0	0	0	-0.419
275		5	-0.368	0.135	0	0	0	-0.749
276	3	1	-0.368	-0.135	0	0	0	-0.749
277		2	-0.377	-0.115	0	0	0	-0.419
278		3	-0.385	-0.096	0	0	0	-0.14
279		4	-0.393	-0.076	0	0	0	0.086
280		5	-0.401	-0.056	0	0	0	0.261
281	3	1	-0.392	-0.079	0	0	0	0.261
282		2	-0.399	-0.06	0	0	0	0.43
283		3	-0.407	-0.042	0	0	0	0.555
284		4	-0.415	-0.024	0	0	0	0.635
285		5	-0.422	-0.006	0	0	0	0.671
286	3	1	-0.425	0.001	0	0	0	0.671
287		2	-0.43	0.013	0	0	0	0.661
288		3	-0.435	0.025	0	0	0	0.631
289		4	-0.44	0.036	0	0	0	0.583
290		5	-0.445	0.048	0	0	0	0.517
291	3	1	-0.083	0.199	0	0	0	0.517
292		2	-0.085	0.204	0	0	0	0.386
293		3	-0.087	0.209	0	0	0	0.252
294		4	-0.089	0.213	0	0	0	0.115
295		5	-0.091	0.218	0	0	0	-0.025
296	3	1	0.008	-0.019	0	0	0	-0.025
297		2	0.006	-0.015	0	0	0	-0.014
298		3	0.004	-0.01	0	0	0	-0.006
299		4	0.002	-0.005	0	0	0	-0.002

Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
300		5	0	0	0	0	0	0
301	3	M3	1	0.392	0.017	0	0	0.066
302		2	0.392	0.017	0	0	0	0.025
303		3	0.392	0.017	0	0	0	-0.016
304		4	0.392	0.017	0	0	0	-0.057
305		5	0.392	0.017	0	0	0	-0.099
306	3	M4	1	0.392	-0.017	0	0	-0.099
307		2	0.392	-0.017	0	0	0	-0.057
308		3	0.392	-0.017	0	0	0	-0.016
309		4	0.392	-0.017	0	0	0	0.025
310		5	0.392	-0.017	0	0	0	0.066
311	3	M5	1	0.392	0.007	0	0	0.066
312		2	0.392	0.007	0	0	0	0.05
313		3	0.392	0.007	0	0	0	0.033
314		4	0.392	0.007	0	0	0	0.017
315		5	0.392	0.007	0	0	0	0
316	4	M1	1	-12.248	0	0	0	0
317		2	-12.248	0	0	0	0	0
318		3	-12.248	0	0	0	0	0
319		4	-12.248	0	0	0	0	0
320		5	-12.248	0	0	0	0	0
321	4	M6	1	-12.248	0	0	0	0
322		2	-12.248	0	0	0	0	0
323		3	-12.248	0	0	0	0	0
324		4	-12.248	0	0	0	0	0
325		5	-12.248	0	0	0	0	0
326	4	M7	1	-0.156	0	0	0	0
327		2	-0.156	0	0	0	0	0
328		3	-0.156	0	0	0	0	0
329		4	-0.156	0	0	0	0	0
330		5	-0.156	0	0	0	0	0
331	4	M8	1	0.79	0	0	0	0
332		2	0.79	0	0	0	0	0
333		3	0.79	0	0	0	0	0
334		4	0.79	0	0	0	0	0
335		5	0.79	0	0	0	0	0
336	4	M10	1	0.79	0	0	0	0
337		2	0.79	0	0	0	0	0
338		3	0.79	0	0	0	0	0
339		4	0.79	0	0	0	0	0
340		5	0.79	0	0	0	0	0
341	4	M11	1	-0.156	0	0	0	0
342		2	-0.156	0	0	0	0	0
343		3	-0.156	0	0	0	0	0
344		4	-0.156	0	0	0	0	0
345		5	-0.156	0	0	0	0	0
346	4	M9	1	-1.109	0	0	0	0
347		2	-1.109	0	0	0	0	0
348		3	-1.109	0	0	0	0	0
349		4	-1.109	0	0	0	0	0
350		5	-1.109	0	0	0	0	0
351	4	M2	1	-12.247	0.231	0	0	0
352		2	-12.247	0.231	0	0	0	-0.519
353		3	-12.247	0.231	0	0	0	-1.038
354		4	-12.247	0.231	0	0	0	-1.557

Member Section Forces (Continued)

	LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
355			5	-12.247	0.231	0	0	0	-2.075
356	4	M20	1	0	-0.001	0	0	0	0
357			2	-0.063	-0.153	0	0	0	0.05
358			3	-0.126	-0.304	0	0	0	0.199
359			4	-0.19	-0.456	0	0	0	0.446
360			5	-0.253	-0.608	0	0	0	0.791
361	4	M21	1	2.838	6.835	0	0	0	0.791
362			2	2.775	6.683	0	0	0	-3.602
363			3	2.711	6.532	0	0	0	-7.896
364			4	2.648	6.38	0	0	0	-12.092
365			5	2.585	6.229	0	0	0	-16.189
366	4	M22	1	13.86	1.506	0	0	0	-16.189
367			2	13.707	1.14	0	0	0	-18.268
368			3	13.554	0.774	0	0	0	-19.771
369			4	13.402	0.407	0	0	0	-20.699
370			5	13.249	0.041	0	0	0	-21.05
371	4	M23	1	13.188	-0.185	0	0	0	-21.05
372			2	12.951	-0.754	0	0	0	-19.907
373			3	12.714	-1.322	0	0	0	-17.377
374			4	12.477	-1.891	0	0	0	-13.462
375			5	12.24	-2.459	0	0	0	-8.16
376	4	M24	1	12.546	-1.763	0	0	0	-8.16
377			2	12.289	-2.379	0	0	0	-2.692
378			3	12.032	-2.995	0	0	0	4.402
379			4	11.776	-3.61	0	0	0	13.123
380			5	11.519	-4.226	0	0	0	23.47
381	4	M25	1	11.519	4.226	0	0	0	23.47
382			2	11.776	3.61	0	0	0	13.123
383			3	12.032	2.995	0	0	0	4.402
384			4	12.289	2.379	0	0	0	-2.692
385			5	12.546	1.763	0	0	0	-8.16
386	4	M26	1	12.24	2.459	0	0	0	-8.16
387			2	12.477	1.891	0	0	0	-13.462
388			3	12.714	1.322	0	0	0	-17.377
389			4	12.951	0.754	0	0	0	-19.907
390			5	13.188	0.185	0	0	0	-21.05
391	4	M27	1	13.249	-0.041	0	0	0	-21.05
392			2	13.402	-0.407	0	0	0	-20.699
393			3	13.554	-0.774	0	0	0	-19.771
394			4	13.707	-1.14	0	0	0	-18.268
395			5	13.86	-1.506	0	0	0	-16.189
396	4	M28	1	2.585	-6.229	0	0	0	-16.189
397			2	2.648	-6.38	0	0	0	-12.092
398			3	2.711	-6.532	0	0	0	-7.896
399			4	2.775	-6.683	0	0	0	-3.602
400			5	2.838	-6.835	0	0	0	0.791
401	4	M29	1	-0.253	0.608	0	0	0	0.791
402			2	-0.19	0.456	0	0	0	0.446
403			3	-0.126	0.304	0	0	0	0.199
404			4	-0.063	0.153	0	0	0	0.05
405			5	0	0.001	0	0	0	0
406	4	M3	1	-12.248	-0.529	0	0	0	-2.075
407			2	-12.248	-0.529	0	0	0	-0.786
408			3	-12.248	-0.529	0	0	0	0.504
409			4	-12.248	-0.529	0	0	0	1.793

Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
410		5	-12.248	-0.529	0	0	0	3.083
411	4	1	-12.248	0.529	0	0	0	3.083
412		2	-12.248	0.529	0	0	0	1.793
413		3	-12.248	0.529	0	0	0	0.504
414		4	-12.248	0.529	0	0	0	-0.786
415		5	-12.248	0.529	0	0	0	-2.075
416	4	1	-12.247	-0.231	0	0	0	-2.075
417		2	-12.247	-0.231	0	0	0	-1.557
418		3	-12.247	-0.231	0	0	0	-1.038
419		4	-12.247	-0.231	0	0	0	-0.519
420		5	-12.247	-0.231	0	0	0	0
421	5	1	-1.307	0	0	0	0	0
422		2	-1.307	0	0	0	0	0
423		3	-1.307	0	0	0	0	0
424		4	-1.307	0	0	0	0	0
425		5	-1.307	0	0	0	0	0
426	5	1	-1.307	0	0	0	0	0
427		2	-1.307	0	0	0	0	0
428		3	-1.307	0	0	0	0	0
429		4	-1.307	0	0	0	0	0
430		5	-1.307	0	0	0	0	0
431	5	1	-0.024	0	0	0	0	0
432		2	-0.024	0	0	0	0	0
433		3	-0.024	0	0	0	0	0
434		4	-0.024	0	0	0	0	0
435		5	-0.024	0	0	0	0	0
436	5	1	0.081	0	0	0	0	0
437		2	0.081	0	0	0	0	0
438		3	0.081	0	0	0	0	0
439		4	0.081	0	0	0	0	0
440		5	0.081	0	0	0	0	0
441	5	1	0.081	0	0	0	0	0
442		2	0.081	0	0	0	0	0
443		3	0.081	0	0	0	0	0
444		4	0.081	0	0	0	0	0
445		5	0.081	0	0	0	0	0
446	5	1	-0.024	0	0	0	0	0
447		2	-0.024	0	0	0	0	0
448		3	-0.024	0	0	0	0	0
449		4	-0.024	0	0	0	0	0
450		5	-0.024	0	0	0	0	0
451	5	1	-0.114	0	0	0	0	0
452		2	-0.114	0	0	0	0	0
453		3	-0.114	0	0	0	0	0
454		4	-0.114	0	0	0	0	0
455		5	-0.114	0	0	0	0	0
456	5	1	-1.307	0.025	0	0	0	0
457		2	-1.307	0.025	0	0	0	-0.055
458		3	-1.307	0.025	0	0	0	-0.111
459		4	-1.307	0.025	0	0	0	-0.166
460		5	-1.307	0.025	0	0	0	-0.222
461	5	1	0	0	0	0	0	0
462		2	-0.007	-0.016	0	0	0	0.005
463		3	-0.013	-0.032	0	0	0	0.021
464		4	-0.02	-0.049	0	0	0	0.047

Member Section Forces (Continued)

	LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
465			5	-0.027	-0.065	0	0	0	0.084
466	5	M21	1	0.303	0.728	0	0	0	0.084
467			2	0.296	0.712	0	0	0	-0.384
468			3	0.29	0.696	0	0	0	-0.841
469			4	0.283	0.679	0	0	0	-1.288
470			5	0.276	0.663	0	0	0	-1.724
471	5	M22	1	1.482	0.16	0	0	0	-1.724
472			2	1.466	0.121	0	0	0	-1.945
473			3	1.449	0.082	0	0	0	-2.105
474			4	1.433	0.043	0	0	0	-2.203
475			5	1.417	0.004	0	0	0	-2.24
476	5	M23	1	1.408	-0.019	0	0	0	-2.24
477			2	1.382	-0.08	0	0	0	-2.119
478			3	1.357	-0.141	0	0	0	-1.851
479			4	1.332	-0.201	0	0	0	-1.434
480			5	1.306	-0.262	0	0	0	-0.869
481	5	M24	1	1.338	-0.187	0	0	0	-0.869
482			2	1.31	-0.253	0	0	0	-0.288
483			3	1.283	-0.319	0	0	0	0.468
484			4	1.255	-0.385	0	0	0	1.397
485			5	1.228	-0.451	0	0	0	2.5
486	5	M25	1	1.228	0.451	0	0	0	2.5
487			2	1.255	0.385	0	0	0	1.397
488			3	1.283	0.319	0	0	0	0.468
489			4	1.31	0.253	0	0	0	-0.288
490			5	1.338	0.187	0	0	0	-0.869
491	5	M26	1	1.306	0.262	0	0	0	-0.869
492			2	1.332	0.201	0	0	0	-1.434
493			3	1.357	0.141	0	0	0	-1.851
494			4	1.382	0.08	0	0	0	-2.119
495			5	1.408	0.019	0	0	0	-2.24
496	5	M27	1	1.417	-0.004	0	0	0	-2.24
497			2	1.433	-0.043	0	0	0	-2.203
498			3	1.449	-0.082	0	0	0	-2.105
499			4	1.466	-0.121	0	0	0	-1.945
500			5	1.482	-0.16	0	0	0	-1.724
501	5	M28	1	0.276	-0.663	0	0	0	-1.724
502			2	0.283	-0.679	0	0	0	-1.288
503			3	0.29	-0.696	0	0	0	-0.841
504			4	0.296	-0.712	0	0	0	-0.384
505			5	0.303	-0.728	0	0	0	0.084
506	5	M29	1	-0.027	0.065	0	0	0	0.084
507			2	-0.02	0.049	0	0	0	0.047
508			3	-0.013	0.032	0	0	0	0.021
509			4	-0.007	0.016	0	0	0	0.005
510			5	0	0	0	0	0	0
511	5	M3	1	-1.307	-0.056	0	0	0	-0.222
512			2	-1.307	-0.056	0	0	0	-0.084
513			3	-1.307	-0.056	0	0	0	0.054
514			4	-1.307	-0.056	0	0	0	0.191
515			5	-1.307	-0.056	0	0	0	0.329
516	5	M4	1	-1.307	0.056	0	0	0	0.329
517			2	-1.307	0.056	0	0	0	0.191
518			3	-1.307	0.056	0	0	0	0.054
519			4	-1.307	0.056	0	0	0	-0.084

Member Section Forces (Continued)

	LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
520			5	-1.307	0.056	0	0	0	-0.222
521	5	M5	1	-1.307	-0.025	0	0	0	-0.222
522			2	-1.307	-0.025	0	0	0	-0.166
523			3	-1.307	-0.025	0	0	0	-0.111
524			4	-1.307	-0.025	0	0	0	-0.055
525			5	-1.307	-0.025	0	0	0	0
526	6	M1	1	3.004	0	0	0	0	0
527			2	3.004	0	0	0	0	0
528			3	3.004	0	0	0	0	0
529			4	3.004	0	0	0	0	0
530			5	3.004	0	0	0	0	0
531	6	M6	1	3.004	0	0	0	0	0
532			2	3.004	0	0	0	0	0
533			3	3.004	0	0	0	0	0
534			4	3.004	0	0	0	0	0
535			5	3.004	0	0	0	0	0
536	6	M7	1	0.061	0	0	0	0	0
537			2	0.061	0	0	0	0	0
538			3	0.061	0	0	0	0	0
539			4	0.061	0	0	0	0	0
540			5	0.061	0	0	0	0	0
541	6	M8	1	-0.185	0	0	0	0	0
542			2	-0.185	0	0	0	0	0
543			3	-0.185	0	0	0	0	0
544			4	-0.185	0	0	0	0	0
545			5	-0.185	0	0	0	0	0
546	6	M10	1	-0.185	0	0	0	0	0
547			2	-0.185	0	0	0	0	0
548			3	-0.185	0	0	0	0	0
549			4	-0.185	0	0	0	0	0
550			5	-0.185	0	0	0	0	0
551	6	M11	1	0.061	0	0	0	0	0
552			2	0.061	0	0	0	0	0
553			3	0.061	0	0	0	0	0
554			4	0.061	0	0	0	0	0
555			5	0.061	0	0	0	0	0
556	6	M9	1	0.257	0	0	0	0	0
557			2	0.257	0	0	0	0	0
558			3	0.257	0	0	0	0	0
559			4	0.257	0	0	0	0	0
560			5	0.257	0	0	0	0	0
561	6	M2	1	3.004	-0.057	0	0	0	0
562			2	3.004	-0.057	0	0	0	0.127
563			3	3.004	-0.057	0	0	0	0.255
564			4	3.004	-0.057	0	0	0	0.382
565			5	3.004	-0.057	0	0	0	0.509
566	6	M20	1	0	0	0	0	0	0
567			2	0.016	0.037	0	0	0	-0.012
568			3	0.031	0.074	0	0	0	-0.048
569			4	0.047	0.112	0	0	0	-0.109
570			5	0.062	0.149	0	0	0	-0.194
571	6	M21	1	-0.697	-1.672	0	0	0	-0.194
572			2	-0.682	-1.635	0	0	0	0.881
573			3	-0.666	-1.598	0	0	0	1.931
574			4	-0.651	-1.56	0	0	0	2.958

Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
575		5	-0.635	-1.523	0	0	0	3.96
576	6	1	-3.41	-0.368	0	0	0	3.96
577		2	-3.372	-0.278	0	0	0	4.468
578		3	-3.335	-0.188	0	0	0	4.834
579		4	-3.297	-0.098	0	0	0	5.059
580		5	-3.26	-0.008	0	0	0	5.143
581	6	1	-3.236	0.043	0	0	0	5.143
582		2	-3.178	0.183	0	0	0	4.867
583		3	-3.12	0.323	0	0	0	4.251
584		4	-3.062	0.462	0	0	0	3.294
585		5	-3.003	0.602	0	0	0	1.996
586	6	1	-3.074	0.43	0	0	0	1.996
587		2	-3.011	0.581	0	0	0	0.661
588		3	-2.948	0.733	0	0	0	-1.073
589		4	-2.885	0.884	0	0	0	-3.208
590		5	-2.822	1.035	0	0	0	-5.741
591	6	1	-2.822	-1.035	0	0	0	-5.741
592		2	-2.885	-0.884	0	0	0	-3.208
593		3	-2.948	-0.733	0	0	0	-1.073
594		4	-3.011	-0.581	0	0	0	0.661
595		5	-3.074	-0.43	0	0	0	1.996
596	6	1	-3.003	-0.602	0	0	0	1.996
597		2	-3.062	-0.462	0	0	0	3.294
598		3	-3.12	-0.323	0	0	0	4.251
599		4	-3.178	-0.183	0	0	0	4.867
600		5	-3.236	-0.043	0	0	0	5.143
601	6	1	-3.26	0.008	0	0	0	5.143
602		2	-3.297	0.098	0	0	0	5.059
603		3	-3.335	0.188	0	0	0	4.834
604		4	-3.372	0.278	0	0	0	4.468
605		5	-3.41	0.368	0	0	0	3.96
606	6	1	-0.635	1.523	0	0	0	3.96
607		2	-0.651	1.56	0	0	0	2.958
608		3	-0.666	1.598	0	0	0	1.931
609		4	-0.682	1.635	0	0	0	0.881
610		5	-0.697	1.672	0	0	0	-0.194
611	6	1	0.062	-0.149	0	0	0	-0.194
612		2	0.047	-0.112	0	0	0	-0.109
613		3	0.031	-0.074	0	0	0	-0.048
614		4	0.016	-0.037	0	0	0	-0.012
615		5	0	0	0	0	0	0
616	6	1	3.004	0.13	0	0	0	0.509
617		2	3.004	0.13	0	0	0	0.193
618		3	3.004	0.13	0	0	0	-0.123
619		4	3.004	0.13	0	0	0	-0.44
620		5	3.004	0.13	0	0	0	-0.756
621	6	1	3.004	-0.13	0	0	0	-0.756
622		2	3.004	-0.13	0	0	0	-0.44
623		3	3.004	-0.13	0	0	0	-0.123
624		4	3.004	-0.13	0	0	0	0.193
625		5	3.004	-0.13	0	0	0	0.509
626	6	1	3.004	0.057	0	0	0	0.509
627		2	3.004	0.057	0	0	0	0.382
628		3	3.004	0.057	0	0	0	0.255
629		4	3.004	0.057	0	0	0	0.127

Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
630		5	3.004	0.057	0	0	0	0
631	7	1	-18.775	0	0	0	0	0
632		2	-18.775	0	0	0	0	0
633		3	-18.775	0	0	0	0	0
634		4	-18.775	0	0	0	0	0
635		5	-18.775	0	0	0	0	0
636	7	1	-18.775	0	0	0	0	0
637		2	-18.775	0	0	0	0	0
638		3	-18.775	0	0	0	0	0
639		4	-18.775	0	0	0	0	0
640		5	-18.775	0	0	0	0	0
641	7	1	-0.177	0	0	0	0	0
642		2	-0.177	0	0	0	0	0
643		3	-0.177	0	0	0	0	0
644		4	-0.177	0	0	0	0	0
645		5	-0.177	0	0	0	0	0
646	7	1	1.237	0	0	0	0	0
647		2	1.237	0	0	0	0	0
648		3	1.237	0	0	0	0	0
649		4	1.237	0	0	0	0	0
650		5	1.237	0	0	0	0	0
651	7	1	1.237	0	0	0	0	0
652		2	1.237	0	0	0	0	0
653		3	1.237	0	0	0	0	0
654		4	1.237	0	0	0	0	0
655		5	1.237	0	0	0	0	0
656	7	1	-0.177	0	0	0	0	0
657		2	-0.177	0	0	0	0	0
658		3	-0.177	0	0	0	0	0
659		4	-0.177	0	0	0	0	0
660		5	-0.177	0	0	0	0	0
661	7	1	-1.743	0	0	0	0	0
662		2	-1.743	0	0	0	0	0
663		3	-1.743	0	0	0	0	0
664		4	-1.743	0	0	0	0	0
665		5	-1.743	0	0	0	0	0
666	7	1	-18.773	0.353	0	0	0	0
667		2	-18.773	0.353	0	0	0	-0.795
668		3	-18.773	0.353	0	0	0	-1.59
669		4	-18.773	0.353	0	0	0	-2.385
670		5	-18.773	0.353	0	0	0	-3.181
671	7	1	0	-0.003	0	0	0	0
672		2	-0.097	-0.235	0	0	0	0.077
673		3	-0.193	-0.467	0	0	0	0.306
674		4	-0.29	-0.699	0	0	0	0.685
675		5	-0.387	-0.932	0	0	0	1.215
676	7	1	4.346	10.49	0	0	0	1.215
677		2	4.249	10.258	0	0	0	-5.527
678		3	4.153	10.025	0	0	0	-12.118
679		4	4.056	9.793	0	0	0	-18.559
680		5	3.959	9.561	0	0	0	-24.848
681	7	1	21.217	2.312	0	0	0	-24.848
682		2	20.983	1.751	0	0	0	-28.04
683		3	20.749	1.19	0	0	0	-30.35
684		4	20.515	0.629	0	0	0	-31.778

Member Section Forces (Continued)

LC	Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	Torque[k-ft]	y-y Moment[k-ft]	z-z Moment[k-ft]
685		5	20.282	0.068	0	0	0	-32.325
686	7	1	20.212	-0.289	0	0	0	-32.325
687		2	19.849	-1.16	0	0	0	-30.559
688		3	19.486	-2.031	0	0	0	-26.67
689		4	19.124	-2.901	0	0	0	-20.659
690		5	18.761	-3.772	0	0	0	-12.525
691	7	1	19.24	-2.71	0	0	0	-12.525
692		2	18.847	-3.653	0	0	0	-4.125
693		3	18.454	-4.596	0	0	0	6.766
694		4	18.061	-5.539	0	0	0	20.149
695		5	17.668	-6.483	0	0	0	36.022
696	7	1	17.668	6.483	0	0	0	36.022
697		2	18.061	5.539	0	0	0	20.149
698		3	18.454	4.596	0	0	0	6.766
699		4	18.847	3.653	0	0	0	-4.125
700		5	19.24	2.71	0	0	0	-12.525
701	7	1	18.761	3.772	0	0	0	-12.525
702		2	19.124	2.901	0	0	0	-20.659
703		3	19.486	2.031	0	0	0	-26.67
704		4	19.849	1.16	0	0	0	-30.559
705		5	20.212	0.289	0	0	0	-32.325
706	7	1	20.282	-0.068	0	0	0	-32.325
707		2	20.515	-0.629	0	0	0	-31.778
708		3	20.749	-1.19	0	0	0	-30.35
709		4	20.983	-1.751	0	0	0	-28.04
710		5	21.217	-2.312	0	0	0	-24.848
711	7	1	3.959	-9.561	0	0	0	-24.848
712		2	4.056	-9.793	0	0	0	-18.559
713		3	4.153	-10.025	0	0	0	-12.118
714		4	4.249	-10.258	0	0	0	-5.527
715		5	4.346	-10.49	0	0	0	1.215
716	7	1	-0.387	0.932	0	0	0	1.215
717		2	-0.29	0.699	0	0	0	0.685
718		3	-0.193	0.467	0	0	0	0.306
719		4	-0.097	0.235	0	0	0	0.077
720		5	0	0.003	0	0	0	0
721	7	1	-18.777	-0.811	0	0	0	-3.181
722		2	-18.777	-0.811	0	0	0	-1.204
723		3	-18.777	-0.811	0	0	0	0.773
724		4	-18.777	-0.811	0	0	0	2.749
725		5	-18.777	-0.811	0	0	0	4.726
726	7	1	-18.777	0.811	0	0	0	4.726
727		2	-18.777	0.811	0	0	0	2.749
728		3	-18.777	0.811	0	0	0	0.773
729		4	-18.777	0.811	0	0	0	-1.204
730		5	-18.777	0.811	0	0	0	-3.181
731	7	1	-18.773	-0.353	0	0	0	-3.181
732		2	-18.773	-0.353	0	0	0	-2.385
733		3	-18.773	-0.353	0	0	0	-1.59
734		4	-18.773	-0.353	0	0	0	-0.795
735		5	-18.773	-0.353	0	0	0	0

Maximum Member Section Forces

LC	Member Label	Axial[k]	Loc[ft]	Shear[k]	Loc[ft]	z Shear[k]	Loc[ft]	Torque[k-ft]	Loc[ft]	y-y Moment[k-ft]	Loc[ft]	z-z Moment[k-ft]	Loc[ft]	
1	1	M1	max	-6.539	5.8	0	5.8	0	5.8	0	5.8	0	5.8	
2			min	-6.539	0	0	0	0	0	0	0	0	0	
3	1	M6	max	-6.539	5.8	0	5.8	0	5.8	0	5.8	0	5.8	
4			min	-6.539	0	0	0	0	0	0	0	0	0	
5	1	M7	max	-0.102	2.417	0	2.417	0	2.417	0	2.417	0	2.417	
6			min	-0.102	0	0	0	0	0	0	0	0	0	
7	1	M8	max	0.414	6.167	0	6.167	0	6.167	0	6.167	0	6.167	
8			min	0.414	0	0	0	0	0	0	0	0	0	
9	1	M10	max	0.414	6.167	0	6.167	0	6.167	0	6.167	0	6.167	
10			min	0.414	0	0	0	0	0	0	0	0	0	
11	1	M11	max	-0.102	2.417	0	2.417	0	2.417	0	2.417	0	2.417	
12			min	-0.102	0	0	0	0	0	0	0	0	0	
13	1	M9	max	-0.58	10.23	0	10.23	0	10.23	0	10.23	0	10.23	
14			min	-0.58	0	0	0	0	0	0	0	0	0	
15	1	M2	max	-6.538	9	0.123	9	0	9	0	9	0	0	
16			min	-6.538	0	0.123	0	0	0	0	0	-1.108	9	
17	1	M20	max	0	0	0	0	2.6	0	2.6	0	2.6	0.422	2.6
18			min	-0.135	2.6	-0.324	2.6	0	0	0	0	0	0	
19	1	M21	max	1.516	0	3.645	0	2.6	0	2.6	0	2.6	0.422	0
20			min	1.381	2.6	3.322	2.6	0	0	0	0	-8.634	2.6	
21	1	M22	max	7.408	0	0.803	0	6.284	0	6.284	0	6.284	-8.634	0
22			min	7.082	6.284	0.02	6.284	0	0	0	0	-11.222	6.284	
23	1	M23	max	7.042	0	-0.097	0	9.75	0	9.75	0	9.75	-4.352	9.75
24			min	6.536	9.75	-1.312	9.75	0	0	0	0	-11.222	0	
25	1	M24	max	6.696	0	-0.939	0	10.563	0	10.563	0	10.563	12.518	10.563
26			min	6.147	10.563	-2.255	10.563	0	0	0	0	-4.352	0	
27	1	M25	max	6.696	10.563	2.255	0	10.563	0	10.563	0	10.563	12.518	0
28			min	6.147	0	0.939	10.563	0	0	0	0	-4.352	10.563	
29	1	M26	max	7.042	9.75	1.312	0	9.75	0	9.75	0	9.75	-4.352	0
30			min	6.536	0	0.097	9.75	0	0	0	0	-11.222	9.75	
31	1	M27	max	7.408	6.284	-0.02	0	6.284	0	6.284	0	6.284	-8.634	6.284
32			min	7.082	0	-0.803	6.284	0	0	0	0	-11.222	0	
33	1	M28	max	1.516	2.6	-3.322	0	2.6	0	2.6	0	2.6	0.422	2.6
34			min	1.381	0	-3.645	2.6	0	0	0	0	-8.634	0	
35	1	M29	max	0	2.6	0.324	0	2.6	0	2.6	0	2.6	0.422	0
36			min	-0.135	0	0	2.6	0	0	0	0	0	2.6	
37	1	M3	max	-6.539	9.75	-0.282	9.75	0	9.75	0	9.75	1.646	9.75	
38			min	-6.539	0	-0.282	0	0	0	0	0	-1.108	0	
39	1	M4	max	-6.539	9.75	0.282	9.75	0	9.75	0	9.75	1.646	0	
40			min	-6.539	0	0.282	0	0	0	0	0	-1.108	9.75	
41	1	M5	max	-6.538	9	-0.123	9	0	9	0	9	0	9	
42			min	-6.538	0	-0.123	0	0	0	0	0	-1.108	0	
43	2	M1	max	-17.462	5.8	0	5.8	0	5.8	0	5.8	0	5.8	
44			min	-17.462	0	0	0	0	0	0	0	0	0	
45	2	M6	max	-17.462	5.8	0	5.8	0	5.8	0	5.8	0	5.8	
46			min	-17.462	0	0	0	0	0	0	0	0	0	
47	2	M7	max	-0.176	2.417	0	2.417	0	2.417	0	2.417	0	2.417	
48			min	-0.176	0	0	0	0	0	0	0	0	0	
49	2	M8	max	1.146	6.167	0	6.167	0	6.167	0	6.167	0	6.167	
50			min	1.146	0	0	0	0	0	0	0	0	0	
51	2	M10	max	1.146	6.167	0	6.167	0	6.167	0	6.167	0	6.167	
52			min	1.146	0	0	0	0	0	0	0	0	0	
53	2	M11	max	-0.176	2.417	0	2.417	0	2.417	0	2.417	0	2.417	
54			min	-0.176	0	0	0	0	0	0	0	0	0	
55	2	M9	max	-1.613	10.23	0	10.23	0	10.23	0	10.23	0	10.23	

Maximum Member Section Forces (Continued)

LC	Member Label	Axial[k]	Loc[ft]	y	Shear[k]	Loc[ft]	z	Shear[k]	Loc[ft]	Torque [k-ft]	Loc[ft]	y-y Moment[k-ft]	Loc[ft]	z-z Moment[k-ft]	Loc[ft]
111	3	M25	max	-0.368	0	-0.056	10.563	0	10.563	0	10.563	0	10.563	0.261	10.563
112			min	-0.401	10.563	-0.135	0	0	0	0	0	0	0	-0.749	0
113	3	M26	max	-0.392	0	-0.006	9.75	0	9.75	0	9.75	0	9.75	0.671	9.75
114			min	-0.422	9.75	-0.079	0	0	0	0	0	0	0	0.261	0
115	3	M27	max	-0.425	0	0.048	6.284	0	6.284	0	6.284	0	6.284	0.671	0
116			min	-0.445	6.284	0.001	0	0	0	0	0	0	0	0.517	6.284
117	3	M28	max	-0.083	0	0.218	2.6	0	2.6	0	2.6	0	2.6	0.517	0
118			min	-0.091	2.6	0.199	0	0	0	0	0	0	0	-0.025	2.6
119	3	M29	max	0.008	0	0	2.6	0	2.6	0	2.6	0	2.6	0	2.6
120			min	0	2.6	-0.019	0	0	0	0	0	0	0	-0.025	0
121	3	M3	max	0.392	9.75	0.017	9.75	0	9.75	0	9.75	0	9.75	0.066	0
122			min	0.392	0	0.017	0	0	0	0	0	0	0	-0.099	9.75
123	3	M4	max	0.392	9.75	-0.017	9.75	0	9.75	0	9.75	0	9.75	0.066	9.75
124			min	0.392	0	-0.017	0	0	0	0	0	0	0	-0.099	0
125	3	M5	max	0.392	9	0.007	9	0	9	0	9	0	9	0.066	0
126			min	0.392	0	0.007	0	0	0	0	0	0	0	0	9
127	4	M1	max	-12.248	5.8	0	5.8	0	5.8	0	5.8	0	5.8	0	5.8
128			min	-12.248	0	0	0	0	0	0	0	0	0	0	0
129	4	M6	max	-12.248	5.8	0	5.8	0	5.8	0	5.8	0	5.8	0	5.8
130			min	-12.248	0	0	0	0	0	0	0	0	0	0	0
131	4	M7	max	-0.156	2.417	0	2.417	0	2.417	0	2.417	0	2.417	0	2.417
132			min	-0.156	0	0	0	0	0	0	0	0	0	0	0
133	4	M8	max	0.79	6.167	0	6.167	0	6.167	0	6.167	0	6.167	0	6.167
134			min	0.79	0	0	0	0	0	0	0	0	0	0	0
135	4	M10	max	0.79	6.167	0	6.167	0	6.167	0	6.167	0	6.167	0	6.167
136			min	0.79	0	0	0	0	0	0	0	0	0	0	0
137	4	M11	max	-0.156	2.417	0	2.417	0	2.417	0	2.417	0	2.417	0	2.417
138			min	-0.156	0	0	0	0	0	0	0	0	0	0	0
139	4	M9	max	-1.109	10.23	0	10.23	0	10.23	0	10.23	0	10.23	0	10.23
140			min	-1.109	0	0	0	0	0	0	0	0	0	0	0
141	4	M2	max	-12.247	9	0.231	9	0	9	0	9	0	9	0	0
142			min	-12.247	0	0.231	0	0	0	0	0	0	0	-2.075	9
143	4	M20	max	0	0	-0.001	0	0	2.6	0	2.6	0	2.6	0.791	2.6
144			min	-0.253	2.6	-0.608	2.6	0	0	0	0	0	0	0	0
145	4	M21	max	2.838	0	6.835	0	0	2.6	0	2.6	0	2.6	0.791	0
146			min	2.585	2.6	6.229	2.6	0	0	0	0	0	0	-16.189	2.6
147	4	M22	max	13.86	0	1.506	0	0	6.284	0	6.284	0	6.284	-16.189	0
148			min	13.249	6.284	0.041	6.284	0	0	0	0	0	0	-21.05	6.284
149	4	M23	max	13.188	0	-0.185	0	0	9.75	0	9.75	0	9.75	-8.16	9.75
150			min	12.24	9.75	-2.459	9.75	0	0	0	0	0	0	-21.05	0
151	4	M24	max	12.546	0	-1.763	0	0	10.563	0	10.563	0	10.563	23.47	10.563
152			min	11.519	10.563	-4.226	10.563	0	0	0	0	0	0	-8.16	0
153	4	M25	max	12.546	10.563	4.226	0	0	10.563	0	10.563	0	10.563	23.47	0
154			min	11.519	0	1.763	10.563	0	0	0	0	0	0	-8.16	10.563
155	4	M26	max	13.188	9.75	2.459	0	0	9.75	0	9.75	0	9.75	-8.16	0
156			min	12.24	0	0.185	9.75	0	0	0	0	0	0	-21.05	9.75
157	4	M27	max	13.86	6.284	-0.041	0	0	6.284	0	6.284	0	6.284	-16.189	6.284
158			min	13.249	0	-1.506	6.284	0	0	0	0	0	0	-21.05	0
159	4	M28	max	2.838	2.6	-6.229	0	0	2.6	0	2.6	0	2.6	0.791	2.6
160			min	2.585	0	-6.835	2.6	0	0	0	0	0	0	-16.189	0
161	4	M29	max	0	2.6	0.608	0	0	2.6	0	2.6	0	2.6	0.791	0
162			min	-0.253	0	0.001	2.6	0	0	0	0	0	0	0	2.6
163	4	M3	max	-12.248	9.75	-0.529	9.75	0	9.75	0	9.75	0	9.75	3.083	9.75
164			min	-12.248	0	-0.529	0	0	0	0	0	0	0	-2.075	0
165	4	M4	max	-12.248	9.75	0.529	9.75	0	9.75	0	9.75	0	9.75	3.083	0

Maximum Member Section Forces (Continued)

LC	Member Label		Axial[k]	Loc[ft]	Shear[k]	Loc[ft]	z Shear[k]	Loc[ft]	Torque [k-ft]	Loc[ft]	y-y Moment[k-ft]	Loc[ft]	z-z Moment[k-ft]	Loc[ft]
166		min	-12.248	0	0.529	0	0	0	0	0	0	0	-2.075	9.75
167	4	M5	max	-12.247	9	-0.231	9	0	9	0	9	0	0	9
168		min	-12.247	0	-0.231	0	0	0	0	0	0	0	-2.075	0
169	5	M1	max	-1.307	5.8	0	5.8	0	5.8	0	5.8	0	0	5.8
170		min	-1.307	0	0	0	0	0	0	0	0	0	0	0
171	5	M6	max	-1.307	5.8	0	5.8	0	5.8	0	5.8	0	0	5.8
172		min	-1.307	0	0	0	0	0	0	0	0	0	0	0
173	5	M7	max	-0.024	2.417	0	2.417	0	2.417	0	2.417	0	2.417	0
174		min	-0.024	0	0	0	0	0	0	0	0	0	0	0
175	5	M8	max	0.081	6.167	0	6.167	0	6.167	0	6.167	0	6.167	0
176		min	0.081	0	0	0	0	0	0	0	0	0	0	0
177	5	M10	max	0.081	6.167	0	6.167	0	6.167	0	6.167	0	6.167	0
178		min	0.081	0	0	0	0	0	0	0	0	0	0	0
179	5	M11	max	-0.024	2.417	0	2.417	0	2.417	0	2.417	0	2.417	0
180		min	-0.024	0	0	0	0	0	0	0	0	0	0	0
181	5	M9	max	-0.114	10.23	0	10.23	0	10.23	0	10.23	0	10.23	0
182		min	-0.114	0	0	0	0	0	0	0	0	0	0	0
183	5	M2	max	-1.307	9	0.025	9	0	9	0	9	0	0	0
184		min	-1.307	0	0.025	0	0	0	0	0	0	0	-0.222	9
185	5	M20	max	0	0	0	0	2.6	0	2.6	0	2.6	0.084	2.6
186		min	-0.027	2.6	-0.065	2.6	0	0	0	0	0	0	0	0
187	5	M21	max	0.303	0	0.728	0	0	2.6	0	2.6	0	2.6	0.084
188		min	0.276	2.6	0.663	2.6	0	0	0	0	0	0	-1.724	2.6
189	5	M22	max	1.482	0	0.16	0	0	6.284	0	6.284	0	6.284	-1.724
190		min	1.417	6.284	0.004	6.284	0	0	0	0	0	0	-2.24	6.284
191	5	M23	max	1.408	0	-0.019	0	0	9.75	0	9.75	0	9.75	-0.869
192		min	1.306	9.75	-0.262	9.75	0	0	0	0	0	0	-2.24	0
193	5	M24	max	1.338	0	-0.187	0	0	10.563	0	10.563	0	10.563	2.5
194		min	1.228	10.563	-0.451	10.563	0	0	0	0	0	0	-0.869	0
195	5	M25	max	1.338	10.563	0.451	0	0	10.563	0	10.563	0	10.563	2.5
196		min	1.228	0	0.187	10.563	0	0	0	0	0	0	-0.869	10.563
197	5	M26	max	1.408	9.75	0.262	0	0	9.75	0	9.75	0	9.75	-0.869
198		min	1.306	0	0.019	9.75	0	0	0	0	0	0	-2.24	9.75
199	5	M27	max	1.482	6.284	-0.004	0	0	6.284	0	6.284	0	6.284	-1.724
200		min	1.417	0	-0.16	6.284	0	0	0	0	0	0	-2.24	0
201	5	M28	max	0.303	2.6	-0.663	0	0	2.6	0	2.6	0	2.6	0.084
202		min	0.276	0	-0.728	2.6	0	0	0	0	0	0	-1.724	0
203	5	M29	max	0	2.6	0.065	0	0	2.6	0	2.6	0	2.6	0.084
204		min	-0.027	0	0	2.6	0	0	0	0	0	0	0	2.6
205	5	M3	max	-1.307	9.75	-0.056	9.75	0	9.75	0	9.75	0	9.75	0.329
206		min	-1.307	0	-0.056	0	0	0	0	0	0	0	-0.222	0
207	5	M4	max	-1.307	9.75	0.056	9.75	0	9.75	0	9.75	0	9.75	0.329
208		min	-1.307	0	0.056	0	0	0	0	0	0	0	-0.222	9.75
209	5	M5	max	-1.307	9	-0.025	9	0	9	0	9	0	9	0
210		min	-1.307	0	-0.025	0	0	0	0	0	0	0	-0.222	0
211	6	M1	max	3.004	5.8	0	5.8	0	5.8	0	5.8	0	5.8	0
212		min	3.004	0	0	0	0	0	0	0	0	0	0	0
213	6	M6	max	3.004	5.8	0	5.8	0	5.8	0	5.8	0	5.8	0
214		min	3.004	0	0	0	0	0	0	0	0	0	0	0
215	6	M7	max	0.061	2.417	0	2.417	0	2.417	0	2.417	0	2.417	0
216		min	0.061	0	0	0	0	0	0	0	0	0	0	0
217	6	M8	max	-0.185	6.167	0	6.167	0	6.167	0	6.167	0	6.167	0
218		min	-0.185	0	0	0	0	0	0	0	0	0	0	0
219	6	M10	max	-0.185	6.167	0	6.167	0	6.167	0	6.167	0	6.167	0
220		min	-0.185	0	0	0	0	0	0	0	0	0	0	0

Maximum Member Section Forces (Continued)

LC	Member Label		Axial[k]	Loc[ft]	y Shear[k]	Loc[ft]	z Shear[k]	Loc[ft]	Torque [k-ft]	Loc[ft]	y-y Moment[k-ft]	Loc[ft]	z-z Moment[k-ft]	Loc[ft]	
221	6	M11	max	0.061	2.417	0	2.417	0	2.417	0	2.417	0	2.417	0	2.417
222			min	0.061	0	0	0	0	0	0	0	0	0	0	
223	6	M9	max	0.257	10.23	0	10.23	0	10.23	0	10.23	0	10.23	0	10.23
224			min	0.257	0	0	0	0	0	0	0	0	0	0	
225	6	M2	max	3.004	9	-0.057	9	0	9	0	9	0	9	0.509	9
226			min	3.004	0	-0.057	0	0	0	0	0	0	0	0	0
227	6	M20	max	0.062	2.6	0.149	2.6	0	2.6	0	2.6	0	2.6	0	0
228			min	0	0	0	0	0	0	0	0	0	-0.194	2.6	
229	6	M21	max	-0.635	2.6	-1.523	2.6	0	2.6	0	2.6	0	2.6	3.96	2.6
230			min	-0.697	0	-1.672	0	0	0	0	0	0	-0.194	0	
231	6	M22	max	-3.26	6.284	-0.008	6.284	0	6.284	0	6.284	0	6.284	5.143	6.284
232			min	-3.41	0	-0.368	0	0	0	0	0	0	3.96	0	
233	6	M23	max	-3.003	9.75	0.602	9.75	0	9.75	0	9.75	0	9.75	5.143	0
234			min	-3.236	0	0.043	0	0	0	0	0	0	1.996	9.75	
235	6	M24	max	-2.822	10.563	1.035	10.563	0	10.563	0	10.563	0	10.563	1.996	0
236			min	-3.074	0	0.43	0	0	0	0	0	0	-5.741	10.563	
237	6	M25	max	-2.822	0	-0.43	10.563	0	10.563	0	10.563	0	10.563	1.996	10.563
238			min	-3.074	10.563	-1.035	0	0	0	0	0	0	-5.741	0	
239	6	M26	max	-3.003	0	-0.043	9.75	0	9.75	0	9.75	0	9.75	5.143	9.75
240			min	-3.236	9.75	-0.602	0	0	0	0	0	0	1.996	0	
241	6	M27	max	-3.26	0	0.368	6.284	0	6.284	0	6.284	0	6.284	5.143	0
242			min	-3.41	6.284	0.008	0	0	0	0	0	0	3.96	6.284	
243	6	M28	max	-0.635	0	1.672	2.6	0	2.6	0	2.6	0	2.6	3.96	0
244			min	-0.697	2.6	1.523	0	0	0	0	0	0	-0.194	2.6	
245	6	M29	max	0.062	0	0	2.6	0	2.6	0	2.6	0	2.6	0	2.6
246			min	0	2.6	-0.149	0	0	0	0	0	0	-0.194	0	
247	6	M3	max	3.004	9.75	0.13	9.75	0	9.75	0	9.75	0	9.75	0.509	0
248			min	3.004	0	0.13	0	0	0	0	0	0	-0.756	9.75	
249	6	M4	max	3.004	9.75	-0.13	9.75	0	9.75	0	9.75	0	9.75	0.509	9.75
250			min	3.004	0	-0.13	0	0	0	0	0	0	-0.756	0	
251	6	M5	max	3.004	9	0.057	9	0	9	0	9	0	9	0.509	0
252			min	3.004	0	0.057	0	0	0	0	0	0	0	9	
253	7	M1	max	-18.775	5.8	0	5.8	0	5.8	0	5.8	0	5.8	0	5.8
254			min	-18.775	0	0	0	0	0	0	0	0	0	0	
255	7	M6	max	-18.775	5.8	0	5.8	0	5.8	0	5.8	0	5.8	0	5.8
256			min	-18.775	0	0	0	0	0	0	0	0	0	0	
257	7	M7	max	-0.177	2.417	0	2.417	0	2.417	0	2.417	0	2.417	0	2.417
258			min	-0.177	0	0	0	0	0	0	0	0	0	0	
259	7	M8	max	1.237	6.167	0	6.167	0	6.167	0	6.167	0	6.167	0	6.167
260			min	1.237	0	0	0	0	0	0	0	0	0	0	
261	7	M10	max	1.237	6.167	0	6.167	0	6.167	0	6.167	0	6.167	0	6.167
262			min	1.237	0	0	0	0	0	0	0	0	0	0	
263	7	M11	max	-0.177	2.417	0	2.417	0	2.417	0	2.417	0	2.417	0	2.417
264			min	-0.177	0	0	0	0	0	0	0	0	0	0	
265	7	M9	max	-1.743	10.23	0	10.23	0	10.23	0	10.23	0	10.23	0	10.23
266			min	-1.743	0	0	0	0	0	0	0	0	0	0	
267	7	M2	max	-18.773	9	0.353	9	0	9	0	9	0	9	0	0
268			min	-18.773	0	0.353	0	0	0	0	0	0	-3.181	9	
269	7	M20	max	0	0	-0.003	0	0	2.6	0	2.6	0	2.6	1.215	2.6
270			min	-0.387	2.6	-0.932	2.6	0	0	0	0	0	0	0	
271	7	M21	max	4.346	0	10.49	0	0	2.6	0	2.6	0	2.6	1.215	0
272			min	3.959	2.6	9.561	2.6	0	0	0	0	0	-24.848	2.6	
273	7	M22	max	21.217	0	2.312	0	0	6.284	0	6.284	0	6.284	-24.848	0
274			min	20.282	6.284	0.068	6.284	0	0	0	0	0	-32.325	6.284	
275	7	M23	max	20.212	0	-0.289	0	0	9.75	0	9.75	0	9.75	-12.525	9.75

Maximum Member Section Forces (Continued)

LC Member Label	Axial[k]	Loc[ft]	y	Shear[k]	Loc[ft]	z	Shear[k]	Loc[ft]	Torque [k-ft]	Loc[ft]	y-y Moment[k-ft]	Loc[ft]	z-z Moment[k-ft]	Loc[ft]	
276		min	18.761	9.75	-3.772	9.75	0	0	0	0	0	0	-32.325	0	
277	7	M24	max	19.24	0	-2.71	0	10.563	0	10.563	0	10.563	36.022	10.563	
278			min	17.668	10.563	-6.483	10.563	0	0	0	0	0	-12.525	0	
279	7	M25	max	19.24	10.563	6.483	0	10.563	0	10.563	0	10.563	36.022	0	
280			min	17.668	0	2.71	10.563	0	0	0	0	0	-12.525	10.563	
281	7	M26	max	20.212	9.75	3.772	0	0	9.75	0	9.75	0	9.75	-12.525	0
282			min	18.761	0	0.289	9.75	0	0	0	0	0	-32.325	9.75	
283	7	M27	max	21.217	6.284	-0.068	0	0	6.284	0	6.284	0	6.284	-24.848	6.284
284			min	20.282	0	-2.312	6.284	0	0	0	0	0	-32.325	0	
285	7	M28	max	4.346	2.6	-9.561	0	0	2.6	0	2.6	0	2.6	1.215	2.6
286			min	3.959	0	-10.49	2.6	0	0	0	0	0	-24.848	0	
287	7	M29	max	0	2.6	0.932	0	0	2.6	0	2.6	0	2.6	1.215	0
288			min	-0.387	0	0.003	2.6	0	0	0	0	0	0	2.6	
289	7	M3	max	-18.777	9.75	-0.811	9.75	0	9.75	0	9.75	0	9.75	4.726	9.75
290			min	-18.777	0	-0.811	0	0	0	0	0	0	-3.181	0	
291	7	M4	max	-18.777	9.75	0.811	9.75	0	9.75	0	9.75	0	9.75	4.726	0
292			min	-18.777	0	0.811	0	0	0	0	0	0	-3.181	9.75	
293	7	M5	max	-18.773	9	-0.353	9	0	9	0	9	0	9	0	9
294			min	-18.773	0	-0.353	0	0	0	0	0	0	-3.181	0	

Member Section Stresses

LC Member Label	Sec	Axial[k]	y Shear[k]	z Shear[k]	y top Bending[k]	y bot Bending[k]	z top Bending[k]	z bot Bending[k]
1	1	M1	1	-2.657	0	0	0	0
2			2	-2.657	0	0	0	0
3			3	-2.657	0	0	0	0
4			4	-2.657	0	0	0	0
5			5	-2.657	0	0	0	0
6	1	M6	1	-2.657	0	0	0	0
7			2	-2.657	0	0	0	0
8			3	-2.657	0	0	0	0
9			4	-2.657	0	0	0	0
10			5	-2.657	0	0	0	0
11	1	M7	1	-0.13	0	0	0	0
12			2	-0.13	0	0	0	0
13			3	-0.13	0	0	0	0
14			4	-0.13	0	0	0	0
15			5	-0.13	0	0	0	0
16	1	M8	1	0.528	0	0	0	0
17			2	0.528	0	0	0	0
18			3	0.528	0	0	0	0
19			4	0.528	0	0	0	0
20			5	0.528	0	0	0	0
21	1	M10	1	0.528	0	0	0	0
22			2	0.528	0	0	0	0
23			3	0.528	0	0	0	0
24			4	0.528	0	0	0	0
25			5	0.528	0	0	0	0
26	1	M11	1	-0.13	0	0	0	0
27			2	-0.13	0	0	0	0
28			3	-0.13	0	0	0	0
29			4	-0.13	0	0	0	0
30			5	-0.13	0	0	0	0
31	1	M9	1	-0.738	0	0	0	0
32			2	-0.738	0	0	0	0
33			3	-0.738	0	0	0	0

Member Section Stresses (Continued)

LC	Member Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
34		4	-0.738	0	0	0	0	0	0
35		5	-0.738	0	0	0	0	0	0
36	1	M2	1	-0.108	0.003	0	0	0	0
37		2	-0.108	0.003	0	0.036	-0.036	0	0
38		3	-0.108	0.003	0	0.073	-0.073	0	0
39		4	-0.108	0.003	0	0.109	-0.109	0	0
40		5	-0.108	0.003	0	0.146	-0.146	0	0
41	1	M20	1	0	0	0	0	0	0
42		2	0	-0.001	0	-0.001	0.001	0	0
43		3	-0.001	-0.002	0	-0.003	0.003	0	0
44		4	-0.001	-0.003	0	-0.008	0.008	0	0
45		5	-0.001	-0.004	0	-0.014	0.014	0	0
46	1	M21	1	0.012	0.045	0	-0.014	0.014	0
47		2	0.012	0.044	0	0.063	-0.063	0	0
48		3	0.012	0.043	0	0.139	-0.139	0	0
49		4	0.012	0.042	0	0.212	-0.212	0	0
50		5	0.011	0.041	0	0.284	-0.284	0	0
51	1	M22	1	0.061	0.01	0	0.284	-0.284	0
52		2	0.06	0.008	0	0.321	-0.321	0	0
53		3	0.06	0.005	0	0.347	-0.347	0	0
54		4	0.059	0.003	0	0.363	-0.363	0	0
55		5	0.058	0	0	0.369	-0.369	0	0
56	1	M23	1	0.058	-0.001	0	0.369	-0.369	0
57		2	0.057	-0.005	0	0.349	-0.349	0	0
58		3	0.056	-0.009	0	0.305	-0.305	0	0
59		4	0.055	-0.012	0	0.236	-0.236	0	0
60		5	0.054	-0.016	0	0.143	-0.143	0	0
61	1	M24	1	0.055	-0.012	0	0.143	-0.143	0
62		2	0.054	-0.016	0	0.047	-0.047	0	0
63		3	0.053	-0.02	0	-0.077	0.077	0	0
64		4	0.052	-0.024	0	-0.23	0.23	0	0
65		5	0.051	-0.028	0	-0.412	0.412	0	0
66	1	M25	1	0.051	0.028	0	-0.412	0.412	0
67		2	0.052	0.024	0	-0.23	0.23	0	0
68		3	0.053	0.02	0	-0.077	0.077	0	0
69		4	0.054	0.016	0	0.047	-0.047	0	0
70		5	0.055	0.012	0	0.143	-0.143	0	0
71	1	M26	1	0.054	0.016	0	0.143	-0.143	0
72		2	0.055	0.012	0	0.236	-0.236	0	0
73		3	0.056	0.009	0	0.305	-0.305	0	0
74		4	0.057	0.005	0	0.349	-0.349	0	0
75		5	0.058	0.001	0	0.369	-0.369	0	0
76	1	M27	1	0.058	0	0	0.369	-0.369	0
77		2	0.059	-0.003	0	0.363	-0.363	0	0
78		3	0.06	-0.005	0	0.347	-0.347	0	0
79		4	0.06	-0.008	0	0.321	-0.321	0	0
80		5	0.061	-0.01	0	0.284	-0.284	0	0
81	1	M28	1	0.011	-0.041	0	0.284	-0.284	0
82		2	0.012	-0.042	0	0.212	-0.212	0	0
83		3	0.012	-0.043	0	0.139	-0.139	0	0
84		4	0.012	-0.044	0	0.063	-0.063	0	0
85		5	0.012	-0.045	0	-0.014	0.014	0	0
86	1	M29	1	-0.001	0.004	0	-0.014	0.014	0
87		2	-0.001	0.003	0	-0.008	0.008	0	0
88		3	-0.001	0.002	0	-0.003	0.003	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
89			4	0	0.001	0	-0.001	0.001	0	0
90			5	0	0	0	0	0	0	0
91	1	M3	1	-0.108	-0.007	0	0.146	-0.146	0	0
92			2	-0.108	-0.007	0	0.055	-0.055	0	0
93			3	-0.108	-0.007	0	-0.035	0.035	0	0
94			4	-0.108	-0.007	0	-0.126	0.126	0	0
95			5	-0.108	-0.007	0	-0.217	0.217	0	0
96	1	M4	1	-0.108	0.007	0	-0.217	0.217	0	0
97			2	-0.108	0.007	0	-0.126	0.126	0	0
98			3	-0.108	0.007	0	-0.035	0.035	0	0
99			4	-0.108	0.007	0	0.055	-0.055	0	0
100			5	-0.108	0.007	0	0.146	-0.146	0	0
101	1	M5	1	-0.108	-0.003	0	0.146	-0.146	0	0
102			2	-0.108	-0.003	0	0.109	-0.109	0	0
103			3	-0.108	-0.003	0	0.073	-0.073	0	0
104			4	-0.108	-0.003	0	0.036	-0.036	0	0
105			5	-0.108	-0.003	0	0	0	0	0
106	2	M1	1	-7.097	0	0	0	0	0	0
107			2	-7.097	0	0	0	0	0	0
108			3	-7.097	0	0	0	0	0	0
109			4	-7.097	0	0	0	0	0	0
110			5	-7.097	0	0	0	0	0	0
111	2	M6	1	-7.097	0	0	0	0	0	0
112			2	-7.097	0	0	0	0	0	0
113			3	-7.097	0	0	0	0	0	0
114			4	-7.097	0	0	0	0	0	0
115			5	-7.097	0	0	0	0	0	0
116	2	M7	1	-0.224	0	0	0	0	0	0
117			2	-0.224	0	0	0	0	0	0
118			3	-0.224	0	0	0	0	0	0
119			4	-0.224	0	0	0	0	0	0
120			5	-0.224	0	0	0	0	0	0
121	2	M8	1	1.459	0	0	0	0	0	0
122			2	1.459	0	0	0	0	0	0
123			3	1.459	0	0	0	0	0	0
124			4	1.459	0	0	0	0	0	0
125			5	1.459	0	0	0	0	0	0
126	2	M10	1	1.459	0	0	0	0	0	0
127			2	1.459	0	0	0	0	0	0
128			3	1.459	0	0	0	0	0	0
129			4	1.459	0	0	0	0	0	0
130			5	1.459	0	0	0	0	0	0
131	2	M11	1	-0.224	0	0	0	0	0	0
132			2	-0.224	0	0	0	0	0	0
133			3	-0.224	0	0	0	0	0	0
134			4	-0.224	0	0	0	0	0	0
135			5	-0.224	0	0	0	0	0	0
136	2	M9	1	-2.054	0	0	0	0	0	0
137			2	-2.054	0	0	0	0	0	0
138			3	-2.054	0	0	0	0	0	0
139			4	-2.054	0	0	0	0	0	0
140			5	-2.054	0	0	0	0	0	0
141	2	M2	1	-0.287	0.008	0	0	0	0	0
142			2	-0.287	0.008	0	0.097	-0.097	0	0
143			3	-0.287	0.008	0	0.195	-0.195	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
144			4	-0.287	0.008	0	0.292	-0.292	0	0
145			5	-0.287	0.008	0	0.39	-0.39	0	0
146	2	M20	1	0	0	0	0	0	0	0
147			2	-0.001	-0.003	0	-0.002	0.002	0	0
148			3	-0.001	-0.005	0	-0.009	0.009	0	0
149			4	-0.002	-0.008	0	-0.021	0.021	0	0
150			5	-0.003	-0.011	0	-0.037	0.037	0	0
151	2	M21	1	0.033	0.12	0	-0.037	0.037	0	0
152			2	0.033	0.118	0	0.169	-0.169	0	0
153			3	0.032	0.115	0	0.371	-0.371	0	0
154			4	0.031	0.112	0	0.568	-0.568	0	0
155			5	0.03	0.11	0	0.761	-0.761	0	0
156	2	M22	1	0.162	0.027	0	0.761	-0.761	0	0
157			2	0.161	0.02	0	0.858	-0.858	0	0
158			3	0.159	0.014	0	0.929	-0.929	0	0
159			4	0.157	0.007	0	0.973	-0.973	0	0
160			5	0.155	0.001	0	0.989	-0.989	0	0
161	2	M23	1	0.155	-0.003	0	0.989	-0.989	0	0
162			2	0.152	-0.013	0	0.935	-0.935	0	0
163			3	0.149	-0.023	0	0.816	-0.816	0	0
164			4	0.146	-0.033	0	0.632	-0.632	0	0
165			5	0.144	-0.043	0	0.383	-0.383	0	0
166	2	M24	1	0.147	-0.031	0	0.383	-0.383	0	0
167			2	0.144	-0.042	0	0.126	-0.126	0	0
168			3	0.141	-0.053	0	-0.207	0.207	0	0
169			4	0.138	-0.064	0	-0.617	0.617	0	0
170			5	0.135	-0.074	0	-1.103	1.103	0	0
171	2	M25	1	0.135	0.074	0	-1.103	1.103	0	0
172			2	0.138	0.064	0	-0.617	0.617	0	0
173			3	0.141	0.053	0	-0.207	0.207	0	0
174			4	0.144	0.042	0	0.126	-0.126	0	0
175			5	0.147	0.031	0	0.383	-0.383	0	0
176	2	M26	1	0.144	0.043	0	0.383	-0.383	0	0
177			2	0.146	0.033	0	0.632	-0.632	0	0
178			3	0.149	0.023	0	0.816	-0.816	0	0
179			4	0.152	0.013	0	0.935	-0.935	0	0
180			5	0.155	0.003	0	0.989	-0.989	0	0
181	2	M27	1	0.155	-0.001	0	0.989	-0.989	0	0
182			2	0.157	-0.007	0	0.973	-0.973	0	0
183			3	0.159	-0.014	0	0.929	-0.929	0	0
184			4	0.161	-0.02	0	0.858	-0.858	0	0
185			5	0.162	-0.027	0	0.761	-0.761	0	0
186	2	M28	1	0.03	-0.11	0	0.761	-0.761	0	0
187			2	0.031	-0.112	0	0.568	-0.568	0	0
188			3	0.032	-0.115	0	0.371	-0.371	0	0
189			4	0.033	-0.118	0	0.169	-0.169	0	0
190			5	0.033	-0.12	0	-0.037	0.037	0	0
191	2	M29	1	-0.003	0.011	0	-0.037	0.037	0	0
192			2	-0.002	0.008	0	-0.021	0.021	0	0
193			3	-0.001	0.005	0	-0.009	0.009	0	0
194			4	-0.001	0.003	0	-0.002	0.002	0	0
195			5	0	0	0	0	0	0	0
196	2	M3	1	-0.287	-0.019	0	0.39	-0.39	0	0
197			2	-0.287	-0.019	0	0.147	-0.147	0	0
198			3	-0.287	-0.019	0	-0.095	0.095	0	0

Member Section Stresses (Continued)

LC	Member Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
199		4	-0.287	-0.019	0	-0.337	0.337	0	0
200		5	-0.287	-0.019	0	-0.579	0.579	0	0
201	2	M4	1	-0.287	0.019	0	-0.579	0.579	0
202		2	-0.287	0.019	0	-0.337	0.337	0	0
203		3	-0.287	0.019	0	-0.095	0.095	0	0
204		4	-0.287	0.019	0	0.147	-0.147	0	0
205		5	-0.287	0.019	0	0.39	-0.39	0	0
206	2	M5	1	-0.287	-0.008	0	0.39	-0.39	0
207		2	-0.287	-0.008	0	0.292	-0.292	0	0
208		3	-0.287	-0.008	0	0.195	-0.195	0	0
209		4	-0.287	-0.008	0	0.097	-0.097	0	0
210		5	-0.287	-0.008	0	0	0	0	0
211	3	M1	1	0.159	0	0	0	0	0
212		2	0.159	0	0	0	0	0	0
213		3	0.159	0	0	0	0	0	0
214		4	0.159	0	0	0	0	0	0
215		5	0.159	0	0	0	0	0	0
216	3	M6	1	0.159	0	0	0	0	0
217		2	0.159	0	0	0	0	0	0
218		3	0.159	0	0	0	0	0	0
219		4	0.159	0	0	0	0	0	0
220		5	0.159	0	0	0	0	0	0
221	3	M7	1	0.009	0	0	0	0	0
222		2	0.009	0	0	0	0	0	0
223		3	0.009	0	0	0	0	0	0
224		4	0.009	0	0	0	0	0	0
225		5	0.009	0	0	0	0	0	0
226	3	M8	1	-0.031	0	0	0	0	0
227		2	-0.031	0	0	0	0	0	0
228		3	-0.031	0	0	0	0	0	0
229		4	-0.031	0	0	0	0	0	0
230		5	-0.031	0	0	0	0	0	0
231	3	M10	1	-0.031	0	0	0	0	0
232		2	-0.031	0	0	0	0	0	0
233		3	-0.031	0	0	0	0	0	0
234		4	-0.031	0	0	0	0	0	0
235		5	-0.031	0	0	0	0	0	0
236	3	M11	1	0.009	0	0	0	0	0
237		2	0.009	0	0	0	0	0	0
238		3	0.009	0	0	0	0	0	0
239		4	0.009	0	0	0	0	0	0
240		5	0.009	0	0	0	0	0	0
241	3	M9	1	0.043	0	0	0	0	0
242		2	0.043	0	0	0	0	0	0
243		3	0.043	0	0	0	0	0	0
244		4	0.043	0	0	0	0	0	0
245		5	0.043	0	0	0	0	0	0
246	3	M2	1	0.006	0	0	0	0	0
247		2	0.006	0	0	-0.002	0.002	0	0
248		3	0.006	0	0	-0.004	0.004	0	0
249		4	0.006	0	0	-0.007	0.007	0	0
250		5	0.006	0	0	-0.009	0.009	0	0
251	3	M20	1	0	0	0	0	0	0
252		2	0	0	0	0	0	0	0
253		3	0	0	0	0	0	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
254			4	0	0	0	0	0	0	0
255			5	0	0	0	0.001	-0.001	0	0
256	3	M21	1	-0.001	-0.003	0	0.001	-0.001	0	0
257			2	-0.001	-0.003	0	-0.004	0.004	0	0
258			3	-0.001	-0.003	0	-0.008	0.008	0	0
259			4	-0.001	-0.003	0	-0.013	0.013	0	0
260			5	-0.001	-0.002	0	-0.017	0.017	0	0
261	3	M22	1	-0.004	-0.001	0	-0.017	0.017	0	0
262			2	-0.004	0	0	-0.019	0.019	0	0
263			3	-0.004	0	0	-0.021	0.021	0	0
264			4	-0.004	0	0	-0.022	0.022	0	0
265			5	-0.003	0	0	-0.022	0.022	0	0
266	3	M23	1	-0.003	0	0	-0.022	0.022	0	0
267			2	-0.003	0	0	-0.021	0.021	0	0
268			3	-0.003	0.001	0	-0.018	0.018	0	0
269			4	-0.003	0.001	0	-0.014	0.014	0	0
270			5	-0.003	0.001	0	-0.009	0.009	0	0
271	3	M24	1	-0.003	0.001	0	-0.009	0.009	0	0
272			2	-0.003	0.001	0	-0.003	0.003	0	0
273			3	-0.003	0.001	0	0.005	-0.005	0	0
274			4	-0.003	0.001	0	0.014	-0.014	0	0
275			5	-0.003	0.002	0	0.025	-0.025	0	0
276	3	M25	1	-0.003	-0.002	0	0.025	-0.025	0	0
277			2	-0.003	-0.001	0	0.014	-0.014	0	0
278			3	-0.003	-0.001	0	0.005	-0.005	0	0
279			4	-0.003	-0.001	0	-0.003	0.003	0	0
280			5	-0.003	-0.001	0	-0.009	0.009	0	0
281	3	M26	1	-0.003	-0.001	0	-0.009	0.009	0	0
282			2	-0.003	-0.001	0	-0.014	0.014	0	0
283			3	-0.003	-0.001	0	-0.018	0.018	0	0
284			4	-0.003	0	0	-0.021	0.021	0	0
285			5	-0.003	0	0	-0.022	0.022	0	0
286	3	M27	1	-0.003	0	0	-0.022	0.022	0	0
287			2	-0.004	0	0	-0.022	0.022	0	0
288			3	-0.004	0	0	-0.021	0.021	0	0
289			4	-0.004	0	0	-0.019	0.019	0	0
290			5	-0.004	0.001	0	-0.017	0.017	0	0
291	3	M28	1	-0.001	0.002	0	-0.017	0.017	0	0
292			2	-0.001	0.003	0	-0.013	0.013	0	0
293			3	-0.001	0.003	0	-0.008	0.008	0	0
294			4	-0.001	0.003	0	-0.004	0.004	0	0
295			5	-0.001	0.003	0	0.001	-0.001	0	0
296	3	M29	1	0	0	0	0.001	-0.001	0	0
297			2	0	0	0	0	0	0	0
298			3	0	0	0	0	0	0	0
299			4	0	0	0	0	0	0	0
300			5	0	0	0	0	0	0	0
301	3	M3	1	0.006	0	0	-0.009	0.009	0	0
302			2	0.006	0	0	-0.003	0.003	0	0
303			3	0.006	0	0	0.002	-0.002	0	0
304			4	0.006	0	0	0.008	-0.008	0	0
305			5	0.006	0	0	0.013	-0.013	0	0
306	3	M4	1	0.006	0	0	0.013	-0.013	0	0
307			2	0.006	0	0	0.008	-0.008	0	0
308			3	0.006	0	0	0.002	-0.002	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
309			4	0.006	0	0	-0.003	0.003	0	0
310			5	0.006	0	0	-0.009	0.009	0	0
311	3	M5	1	0.006	0	0	-0.009	0.009	0	0
312			2	0.006	0	0	-0.007	0.007	0	0
313			3	0.006	0	0	-0.004	0.004	0	0
314			4	0.006	0	0	-0.002	0.002	0	0
315			5	0.006	0	0	0	0	0	0
316	4	M1	1	-4.978	0	0	0	0	0	0
317			2	-4.978	0	0	0	0	0	0
318			3	-4.978	0	0	0	0	0	0
319			4	-4.978	0	0	0	0	0	0
320			5	-4.978	0	0	0	0	0	0
321	4	M6	1	-4.978	0	0	0	0	0	0
322			2	-4.978	0	0	0	0	0	0
323			3	-4.978	0	0	0	0	0	0
324			4	-4.978	0	0	0	0	0	0
325			5	-4.978	0	0	0	0	0	0
326	4	M7	1	-0.199	0	0	0	0	0	0
327			2	-0.199	0	0	0	0	0	0
328			3	-0.199	0	0	0	0	0	0
329			4	-0.199	0	0	0	0	0	0
330			5	-0.199	0	0	0	0	0	0
331	4	M8	1	1.006	0	0	0	0	0	0
332			2	1.006	0	0	0	0	0	0
333			3	1.006	0	0	0	0	0	0
334			4	1.006	0	0	0	0	0	0
335			5	1.006	0	0	0	0	0	0
336	4	M10	1	1.006	0	0	0	0	0	0
337			2	1.006	0	0	0	0	0	0
338			3	1.006	0	0	0	0	0	0
339			4	1.006	0	0	0	0	0	0
340			5	1.006	0	0	0	0	0	0
341	4	M11	1	-0.199	0	0	0	0	0	0
342			2	-0.199	0	0	0	0	0	0
343			3	-0.199	0	0	0	0	0	0
344			4	-0.199	0	0	0	0	0	0
345			5	-0.199	0	0	0	0	0	0
346	4	M9	1	-1.412	0	0	0	0	0	0
347			2	-1.412	0	0	0	0	0	0
348			3	-1.412	0	0	0	0	0	0
349			4	-1.412	0	0	0	0	0	0
350			5	-1.412	0	0	0	0	0	0
351	4	M2	1	-0.202	0.006	0	0	0	0	0
352			2	-0.202	0.006	0	0.068	-0.068	0	0
353			3	-0.202	0.006	0	0.137	-0.137	0	0
354			4	-0.202	0.006	0	0.205	-0.205	0	0
355			5	-0.202	0.006	0	0.273	-0.273	0	0
356	4	M20	1	0	0	0	0	0	0	0
357			2	-0.001	-0.002	0	-0.002	0.002	0	0
358			3	-0.001	-0.004	0	-0.007	0.007	0	0
359			4	-0.002	-0.006	0	-0.015	0.015	0	0
360			5	-0.002	-0.008	0	-0.026	0.026	0	0
361	4	M21	1	0.023	0.084	0	-0.026	0.026	0	0
362			2	0.023	0.083	0	0.119	-0.119	0	0
363			3	0.022	0.081	0	0.26	-0.26	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
364			4	0.022	0.079	0	0.398	-0.398	0	0
365			5	0.021	0.077	0	0.533	-0.533	0	0
366	4	M22	1	0.114	0.019	0	0.533	-0.533	0	0
367			2	0.113	0.014	0	0.601	-0.601	0	0
368			3	0.112	0.01	0	0.651	-0.651	0	0
369			4	0.11	0.005	0	0.681	-0.681	0	0
370			5	0.109	0.001	0	0.693	-0.693	0	0
371	4	M23	1	0.109	-0.002	0	0.693	-0.693	0	0
372			2	0.107	-0.009	0	0.655	-0.655	0	0
373			3	0.105	-0.016	0	0.572	-0.572	0	0
374			4	0.103	-0.023	0	0.443	-0.443	0	0
375			5	0.101	-0.03	0	0.269	-0.269	0	0
376	4	M24	1	0.103	-0.022	0	0.269	-0.269	0	0
377			2	0.101	-0.029	0	0.089	-0.089	0	0
378			3	0.099	-0.037	0	-0.145	0.145	0	0
379			4	0.097	-0.045	0	-0.432	0.432	0	0
380			5	0.095	-0.052	0	-0.773	0.773	0	0
381	4	M25	1	0.095	0.052	0	-0.773	0.773	0	0
382			2	0.097	0.045	0	-0.432	0.432	0	0
383			3	0.099	0.037	0	-0.145	0.145	0	0
384			4	0.101	0.029	0	0.089	-0.089	0	0
385			5	0.103	0.022	0	0.269	-0.269	0	0
386	4	M26	1	0.101	0.03	0	0.269	-0.269	0	0
387			2	0.103	0.023	0	0.443	-0.443	0	0
388			3	0.105	0.016	0	0.572	-0.572	0	0
389			4	0.107	0.009	0	0.655	-0.655	0	0
390			5	0.109	0.002	0	0.693	-0.693	0	0
391	4	M27	1	0.109	-0.001	0	0.693	-0.693	0	0
392			2	0.11	-0.005	0	0.681	-0.681	0	0
393			3	0.112	-0.01	0	0.651	-0.651	0	0
394			4	0.113	-0.014	0	0.601	-0.601	0	0
395			5	0.114	-0.019	0	0.533	-0.533	0	0
396	4	M28	1	0.021	-0.077	0	0.533	-0.533	0	0
397			2	0.022	-0.079	0	0.398	-0.398	0	0
398			3	0.022	-0.081	0	0.26	-0.26	0	0
399			4	0.023	-0.083	0	0.119	-0.119	0	0
400			5	0.023	-0.084	0	-0.026	0.026	0	0
401	4	M29	1	-0.002	0.008	0	-0.026	0.026	0	0
402			2	-0.002	0.006	0	-0.015	0.015	0	0
403			3	-0.001	0.004	0	-0.007	0.007	0	0
404			4	-0.001	0.002	0	-0.002	0.002	0	0
405			5	0	0	0	0	0	0	0
406	4	M3	1	-0.202	-0.013	0	0.273	-0.273	0	0
407			2	-0.202	-0.013	0	0.103	-0.103	0	0
408			3	-0.202	-0.013	0	-0.066	0.066	0	0
409			4	-0.202	-0.013	0	-0.236	0.236	0	0
410			5	-0.202	-0.013	0	-0.406	0.406	0	0
411	4	M4	1	-0.202	0.013	0	-0.406	0.406	0	0
412			2	-0.202	0.013	0	-0.236	0.236	0	0
413			3	-0.202	0.013	0	-0.066	0.066	0	0
414			4	-0.202	0.013	0	0.103	-0.103	0	0
415			5	-0.202	0.013	0	0.273	-0.273	0	0
416	4	M5	1	-0.202	-0.006	0	0.273	-0.273	0	0
417			2	-0.202	-0.006	0	0.205	-0.205	0	0
418			3	-0.202	-0.006	0	0.137	-0.137	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
419			4	-0.202	-0.006	0	0.068	-0.068	0	0
420			5	-0.202	-0.006	0	0	0	0	0
421	5	M1	1	-0.531	0	0	0	0	0	0
422			2	-0.531	0	0	0	0	0	0
423			3	-0.531	0	0	0	0	0	0
424			4	-0.531	0	0	0	0	0	0
425			5	-0.531	0	0	0	0	0	0
426	5	M6	1	-0.531	0	0	0	0	0	0
427			2	-0.531	0	0	0	0	0	0
428			3	-0.531	0	0	0	0	0	0
429			4	-0.531	0	0	0	0	0	0
430			5	-0.531	0	0	0	0	0	0
431	5	M7	1	-0.03	0	0	0	0	0	0
432			2	-0.03	0	0	0	0	0	0
433			3	-0.03	0	0	0	0	0	0
434			4	-0.03	0	0	0	0	0	0
435			5	-0.03	0	0	0	0	0	0
436	5	M8	1	0.104	0	0	0	0	0	0
437			2	0.104	0	0	0	0	0	0
438			3	0.104	0	0	0	0	0	0
439			4	0.104	0	0	0	0	0	0
440			5	0.104	0	0	0	0	0	0
441	5	M10	1	0.104	0	0	0	0	0	0
442			2	0.104	0	0	0	0	0	0
443			3	0.104	0	0	0	0	0	0
444			4	0.104	0	0	0	0	0	0
445			5	0.104	0	0	0	0	0	0
446	5	M11	1	-0.03	0	0	0	0	0	0
447			2	-0.03	0	0	0	0	0	0
448			3	-0.03	0	0	0	0	0	0
449			4	-0.03	0	0	0	0	0	0
450			5	-0.03	0	0	0	0	0	0
451	5	M9	1	-0.145	0	0	0	0	0	0
452			2	-0.145	0	0	0	0	0	0
453			3	-0.145	0	0	0	0	0	0
454			4	-0.145	0	0	0	0	0	0
455			5	-0.145	0	0	0	0	0	0
456	5	M2	1	-0.022	0.001	0	0	0	0	0
457			2	-0.022	0.001	0	0.007	-0.007	0	0
458			3	-0.022	0.001	0	0.015	-0.015	0	0
459			4	-0.022	0.001	0	0.022	-0.022	0	0
460			5	-0.022	0.001	0	0.029	-0.029	0	0
461	5	M20	1	0	0	0	0	0	0	0
462			2	0	0	0	0	0	0	0
463			3	0	0	0	-0.001	0.001	0	0
464			4	0	-0.001	0	-0.002	0.002	0	0
465			5	0	-0.001	0	-0.003	0.003	0	0
466	5	M21	1	0.002	0.009	0	-0.003	0.003	0	0
467			2	0.002	0.009	0	0.013	-0.013	0	0
468			3	0.002	0.009	0	0.028	-0.028	0	0
469			4	0.002	0.008	0	0.042	-0.042	0	0
470			5	0.002	0.008	0	0.057	-0.057	0	0
471	5	M22	1	0.012	0.002	0	0.057	-0.057	0	0
472			2	0.012	0.001	0	0.064	-0.064	0	0
473			3	0.012	0.001	0	0.069	-0.069	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
474			4	0.012	0.001	0	0.073	-0.073	0	0
475			5	0.012	0	0	0.074	-0.074	0	0
476	5	M23	1	0.012	0	0	0.074	-0.074	0	0
477			2	0.011	-0.001	0	0.07	-0.07	0	0
478			3	0.011	-0.002	0	0.061	-0.061	0	0
479			4	0.011	-0.002	0	0.047	-0.047	0	0
480			5	0.011	-0.003	0	0.029	-0.029	0	0
481	5	M24	1	0.011	-0.002	0	0.029	-0.029	0	0
482			2	0.011	-0.003	0	0.009	-0.009	0	0
483			3	0.011	-0.004	0	-0.015	0.015	0	0
484			4	0.01	-0.005	0	-0.046	0.046	0	0
485			5	0.01	-0.006	0	-0.082	0.082	0	0
486	5	M25	1	0.01	0.006	0	-0.082	0.082	0	0
487			2	0.01	0.005	0	-0.046	0.046	0	0
488			3	0.011	0.004	0	-0.015	0.015	0	0
489			4	0.011	0.003	0	0.009	-0.009	0	0
490			5	0.011	0.002	0	0.029	-0.029	0	0
491	5	M26	1	0.011	0.003	0	0.029	-0.029	0	0
492			2	0.011	0.002	0	0.047	-0.047	0	0
493			3	0.011	0.002	0	0.061	-0.061	0	0
494			4	0.011	0.001	0	0.07	-0.07	0	0
495			5	0.012	0	0	0.074	-0.074	0	0
496	5	M27	1	0.012	0	0	0.074	-0.074	0	0
497			2	0.012	-0.001	0	0.073	-0.073	0	0
498			3	0.012	-0.001	0	0.069	-0.069	0	0
499			4	0.012	-0.001	0	0.064	-0.064	0	0
500			5	0.012	-0.002	0	0.057	-0.057	0	0
501	5	M28	1	0.002	-0.008	0	0.057	-0.057	0	0
502			2	0.002	-0.008	0	0.042	-0.042	0	0
503			3	0.002	-0.009	0	0.028	-0.028	0	0
504			4	0.002	-0.009	0	0.013	-0.013	0	0
505			5	0.002	-0.009	0	-0.003	0.003	0	0
506	5	M29	1	0	0.001	0	-0.003	0.003	0	0
507			2	0	0.001	0	-0.002	0.002	0	0
508			3	0	0	0	-0.001	0.001	0	0
509			4	0	0	0	0	0	0	0
510			5	0	0	0	0	0	0	0
511	5	M3	1	-0.022	-0.001	0	0.029	-0.029	0	0
512			2	-0.022	-0.001	0	0.011	-0.011	0	0
513			3	-0.022	-0.001	0	-0.007	0.007	0	0
514			4	-0.022	-0.001	0	-0.025	0.025	0	0
515			5	-0.022	-0.001	0	-0.043	0.043	0	0
516	5	M4	1	-0.022	0.001	0	-0.043	0.043	0	0
517			2	-0.022	0.001	0	-0.025	0.025	0	0
518			3	-0.022	0.001	0	-0.007	0.007	0	0
519			4	-0.022	0.001	0	0.011	-0.011	0	0
520			5	-0.022	0.001	0	0.029	-0.029	0	0
521	5	M5	1	-0.022	-0.001	0	0.029	-0.029	0	0
522			2	-0.022	-0.001	0	0.022	-0.022	0	0
523			3	-0.022	-0.001	0	0.015	-0.015	0	0
524			4	-0.022	-0.001	0	0.007	-0.007	0	0
525			5	-0.022	-0.001	0	0	0	0	0
526	6	M1	1	1.221	0	0	0	0	0	0
527			2	1.221	0	0	0	0	0	0
528			3	1.221	0	0	0	0	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
529			4	1.221	0	0	0	0	0	0
530			5	1.221	0	0	0	0	0	0
531	6	M6	1	1.221	0	0	0	0	0	0
532			2	1.221	0	0	0	0	0	0
533			3	1.221	0	0	0	0	0	0
534			4	1.221	0	0	0	0	0	0
535			5	1.221	0	0	0	0	0	0
536	6	M7	1	0.078	0	0	0	0	0	0
537			2	0.078	0	0	0	0	0	0
538			3	0.078	0	0	0	0	0	0
539			4	0.078	0	0	0	0	0	0
540			5	0.078	0	0	0	0	0	0
541	6	M8	1	-0.235	0	0	0	0	0	0
542			2	-0.235	0	0	0	0	0	0
543			3	-0.235	0	0	0	0	0	0
544			4	-0.235	0	0	0	0	0	0
545			5	-0.235	0	0	0	0	0	0
546	6	M10	1	-0.235	0	0	0	0	0	0
547			2	-0.235	0	0	0	0	0	0
548			3	-0.235	0	0	0	0	0	0
549			4	-0.235	0	0	0	0	0	0
550			5	-0.235	0	0	0	0	0	0
551	6	M11	1	0.078	0	0	0	0	0	0
552			2	0.078	0	0	0	0	0	0
553			3	0.078	0	0	0	0	0	0
554			4	0.078	0	0	0	0	0	0
555			5	0.078	0	0	0	0	0	0
556	6	M9	1	0.327	0	0	0	0	0	0
557			2	0.327	0	0	0	0	0	0
558			3	0.327	0	0	0	0	0	0
559			4	0.327	0	0	0	0	0	0
560			5	0.327	0	0	0	0	0	0
561	6	M2	1	0.049	-0.001	0	0	0	0	0
562			2	0.049	-0.001	0	-0.017	0.017	0	0
563			3	0.049	-0.001	0	-0.034	0.034	0	0
564			4	0.049	-0.001	0	-0.05	0.05	0	0
565			5	0.049	-0.001	0	-0.067	0.067	0	0
566	6	M20	1	0	0	0	0	0	0	0
567			2	0	0	0	0	0	0	0
568			3	0	0.001	0	0.002	-0.002	0	0
569			4	0	0.001	0	0.004	-0.004	0	0
570			5	0.001	0.002	0	0.006	-0.006	0	0
571	6	M21	1	-0.006	-0.021	0	0.006	-0.006	0	0
572			2	-0.006	-0.02	0	-0.029	0.029	0	0
573			3	-0.005	-0.02	0	-0.064	0.064	0	0
574			4	-0.005	-0.019	0	-0.097	0.097	0	0
575			5	-0.005	-0.019	0	-0.13	0.13	0	0
576	6	M22	1	-0.028	-0.005	0	-0.13	0.13	0	0
577			2	-0.028	-0.003	0	-0.147	0.147	0	0
578			3	-0.027	-0.002	0	-0.159	0.159	0	0
579			4	-0.027	-0.001	0	-0.167	0.167	0	0
580			5	-0.027	0	0	-0.169	0.169	0	0
581	6	M23	1	-0.027	0.001	0	-0.169	0.169	0	0
582			2	-0.026	0.002	0	-0.16	0.16	0	0
583			3	-0.026	0.004	0	-0.14	0.14	0	0

Member Section Stresses (Continued)

LC	Member Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
584		4	-0.025	0.006	0	-0.108	0.108	0	0
585		5	-0.025	0.007	0	-0.066	0.066	0	0
586	6	M24	1	-0.025	0.005	0	-0.066	0.066	0
587		2	-0.025	0.007	0	-0.022	0.022	0	0
588		3	-0.024	0.009	0	0.035	-0.035	0	0
589		4	-0.024	0.011	0	0.106	-0.106	0	0
590		5	-0.023	0.013	0	0.189	-0.189	0	0
591	6	M25	1	-0.023	-0.013	0	0.189	-0.189	0
592		2	-0.024	-0.011	0	0.106	-0.106	0	0
593		3	-0.024	-0.009	0	0.035	-0.035	0	0
594		4	-0.025	-0.007	0	-0.022	0.022	0	0
595		5	-0.025	-0.005	0	-0.066	0.066	0	0
596	6	M26	1	-0.025	-0.007	0	-0.066	0.066	0
597		2	-0.025	-0.006	0	-0.108	0.108	0	0
598		3	-0.026	-0.004	0	-0.14	0.14	0	0
599		4	-0.026	-0.002	0	-0.16	0.16	0	0
600		5	-0.027	-0.001	0	-0.169	0.169	0	0
601	6	M27	1	-0.027	0	0	-0.169	0.169	0
602		2	-0.027	0.001	0	-0.167	0.167	0	0
603		3	-0.027	0.002	0	-0.159	0.159	0	0
604		4	-0.028	0.003	0	-0.147	0.147	0	0
605		5	-0.028	0.005	0	-0.13	0.13	0	0
606	6	M28	1	-0.005	0.019	0	-0.13	0.13	0
607		2	-0.005	0.019	0	-0.097	0.097	0	0
608		3	-0.005	0.02	0	-0.064	0.064	0	0
609		4	-0.006	0.02	0	-0.029	0.029	0	0
610		5	-0.006	0.021	0	0.006	-0.006	0	0
611	6	M29	1	0.001	-0.002	0	0.006	-0.006	0
612		2	0	-0.001	0	0.004	-0.004	0	0
613		3	0	-0.001	0	0.002	-0.002	0	0
614		4	0	0	0	0	0	0	0
615		5	0	0	0	0	0	0	0
616	6	M3	1	0.049	0.003	0	-0.067	0.067	0
617		2	0.049	0.003	0	-0.025	0.025	0	0
618		3	0.049	0.003	0	0.016	-0.016	0	0
619		4	0.049	0.003	0	0.058	-0.058	0	0
620		5	0.049	0.003	0	0.1	-0.1	0	0
621	6	M4	1	0.049	-0.003	0	0.1	-0.1	0
622		2	0.049	-0.003	0	0.058	-0.058	0	0
623		3	0.049	-0.003	0	0.016	-0.016	0	0
624		4	0.049	-0.003	0	-0.025	0.025	0	0
625		5	0.049	-0.003	0	-0.067	0.067	0	0
626	6	M5	1	0.049	0.001	0	-0.067	0.067	0
627		2	0.049	0.001	0	-0.05	0.05	0	0
628		3	0.049	0.001	0	-0.034	0.034	0	0
629		4	0.049	0.001	0	-0.017	0.017	0	0
630		5	0.049	0.001	0	0	0	0	0
631	7	M1	1	-7.63	0	0	0	0	0
632		2	-7.63	0	0	0	0	0	0
633		3	-7.63	0	0	0	0	0	0
634		4	-7.63	0	0	0	0	0	0
635		5	-7.63	0	0	0	0	0	0
636	7	M6	1	-7.63	0	0	0	0	0
637		2	-7.63	0	0	0	0	0	0
638		3	-7.63	0	0	0	0	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
639			4	-7.63	0	0	0	0	0	0
640			5	-7.63	0	0	0	0	0	0
641	7	M7	1	-0.225	0	0	0	0	0	0
642			2	-0.225	0	0	0	0	0	0
643			3	-0.225	0	0	0	0	0	0
644			4	-0.225	0	0	0	0	0	0
645			5	-0.225	0	0	0	0	0	0
646	7	M8	1	1.575	0	0	0	0	0	0
647			2	1.575	0	0	0	0	0	0
648			3	1.575	0	0	0	0	0	0
649			4	1.575	0	0	0	0	0	0
650			5	1.575	0	0	0	0	0	0
651	7	M10	1	1.575	0	0	0	0	0	0
652			2	1.575	0	0	0	0	0	0
653			3	1.575	0	0	0	0	0	0
654			4	1.575	0	0	0	0	0	0
655			5	1.575	0	0	0	0	0	0
656	7	M11	1	-0.225	0	0	0	0	0	0
657			2	-0.225	0	0	0	0	0	0
658			3	-0.225	0	0	0	0	0	0
659			4	-0.225	0	0	0	0	0	0
660			5	-0.225	0	0	0	0	0	0
661	7	M9	1	-2.219	0	0	0	0	0	0
662			2	-2.219	0	0	0	0	0	0
663			3	-2.219	0	0	0	0	0	0
664			4	-2.219	0	0	0	0	0	0
665			5	-2.219	0	0	0	0	0	0
666	7	M2	1	-0.309	0.009	0	0	0	0	0
667			2	-0.309	0.009	0	0.105	-0.105	0	0
668			3	-0.309	0.009	0	0.209	-0.209	0	0
669			4	-0.309	0.009	0	0.314	-0.314	0	0
670			5	-0.309	0.009	0	0.419	-0.419	0	0
671	7	M20	1	0	0	0	0	0	0	0
672			2	-0.001	-0.003	0	-0.003	0.003	0	0
673			3	-0.002	-0.006	0	-0.01	0.01	0	0
674			4	-0.002	-0.009	0	-0.023	0.023	0	0
675			5	-0.003	-0.012	0	-0.04	0.04	0	0
676	7	M21	1	0.036	0.13	0	-0.04	0.04	0	0
677			2	0.035	0.127	0	0.182	-0.182	0	0
678			3	0.034	0.124	0	0.399	-0.399	0	0
679			4	0.033	0.121	0	0.611	-0.611	0	0
680			5	0.033	0.118	0	0.818	-0.818	0	0
681	7	M22	1	0.175	0.029	0	0.818	-0.818	0	0
682			2	0.173	0.022	0	0.923	-0.923	0	0
683			3	0.171	0.015	0	0.999	-0.999	0	0
684			4	0.169	0.008	0	1.046	-1.046	0	0
685			5	0.167	0.001	0	1.064	-1.064	0	0
686	7	M23	1	0.166	-0.004	0	1.064	-1.064	0	0
687			2	0.163	-0.014	0	1.006	-1.006	0	0
688			3	0.16	-0.025	0	0.878	-0.878	0	0
689			4	0.157	-0.036	0	0.68	-0.68	0	0
690			5	0.154	-0.047	0	0.412	-0.412	0	0
691	7	M24	1	0.158	-0.033	0	0.412	-0.412	0	0
692			2	0.155	-0.045	0	0.136	-0.136	0	0
693			3	0.152	-0.057	0	-0.223	0.223	0	0

Member Section Stresses (Continued)

LC	Member	Label	Sec	Axial[ksi]	y Shear[ksi]	z Shear[ksi]	y top Bending[ksi]	y bot Bending[ksi]	z top Bending[ksi]	z bot Bending[ksi]
694			4	0.149	-0.068	0	-0.663	0.663	0	0
695			5	0.145	-0.08	0	-1.186	1.186	0	0
696	7	M25	1	0.145	0.08	0	-1.186	1.186	0	0
697			2	0.149	0.068	0	-0.663	0.663	0	0
698			3	0.152	0.057	0	-0.223	0.223	0	0
699			4	0.155	0.045	0	0.136	-0.136	0	0
700			5	0.158	0.033	0	0.412	-0.412	0	0
701	7	M26	1	0.154	0.047	0	0.412	-0.412	0	0
702			2	0.157	0.036	0	0.68	-0.68	0	0
703			3	0.16	0.025	0	0.878	-0.878	0	0
704			4	0.163	0.014	0	1.006	-1.006	0	0
705			5	0.166	0.004	0	1.064	-1.064	0	0
706	7	M27	1	0.167	-0.001	0	1.064	-1.064	0	0
707			2	0.169	-0.008	0	1.046	-1.046	0	0
708			3	0.171	-0.015	0	0.999	-0.999	0	0
709			4	0.173	-0.022	0	0.923	-0.923	0	0
710			5	0.175	-0.029	0	0.818	-0.818	0	0
711	7	M28	1	0.033	-0.118	0	0.818	-0.818	0	0
712			2	0.033	-0.121	0	0.611	-0.611	0	0
713			3	0.034	-0.124	0	0.399	-0.399	0	0
714			4	0.035	-0.127	0	0.182	-0.182	0	0
715			5	0.036	-0.13	0	-0.04	0.04	0	0
716	7	M29	1	-0.003	0.012	0	-0.04	0.04	0	0
717			2	-0.002	0.009	0	-0.023	0.023	0	0
718			3	-0.002	0.006	0	-0.01	0.01	0	0
719			4	-0.001	0.003	0	-0.003	0.003	0	0
720			5	0	0	0	0	0	0	0
721	7	M3	1	-0.309	-0.02	0	0.419	-0.419	0	0
722			2	-0.309	-0.02	0	0.159	-0.159	0	0
723			3	-0.309	-0.02	0	-0.102	0.102	0	0
724			4	-0.309	-0.02	0	-0.362	0.362	0	0
725			5	-0.309	-0.02	0	-0.622	0.622	0	0
726	7	M4	1	-0.309	0.02	0	-0.622	0.622	0	0
727			2	-0.309	0.02	0	-0.362	0.362	0	0
728			3	-0.309	0.02	0	-0.102	0.102	0	0
729			4	-0.309	0.02	0	0.159	-0.159	0	0
730			5	-0.309	0.02	0	0.419	-0.419	0	0
731	7	M5	1	-0.309	-0.009	0	0.419	-0.419	0	0
732			2	-0.309	-0.009	0	0.314	-0.314	0	0
733			3	-0.309	-0.009	0	0.209	-0.209	0	0
734			4	-0.309	-0.009	0	0.105	-0.105	0	0
735			5	-0.309	-0.009	0	0	0	0	0

Beam Deflection Checks

Beam	Design Rule	Span	Defl [in]	Ratio	LC	Defl [in]	Ratio	LC	Defl [in]	Ratio	LC	
1	M2	Typical	1	-0.013	8011	1(1)	-0.036	3001	2(1+2)	0	NC	3(1+4)
2	M20	Typical	1	1.388e-17	NC	1(1)	0	NC	2(1+2)	-8.674e-19	NC	3(1+4)
3	M21	Typical	1	0.0009799	NC	1(1)	0.0009456	NC	2(1+2)	-6.686e-5	NC	3(1+4)
4	M22	Typical	1	-0.015	4998	1(1)	-0.04	1867	2(1+2)	0	NC	3(1+4)
5	M23	Typical	1	-0.031	3715	1(1)	-0.084	1388	2(1+2)	0	NC	3(1+4)
6	M24	Typical	1	0.013	9684	1(1)	0.035	3615	2(1+2)	0	NC	3(1+4)
7	M25	Typical	1	0.013	9684	1(1)	0.035	3615	2(1+2)	0	NC	3(1+4)
8	M26	Typical	1	-0.031	3715	1(1)	-0.084	1388	2(1+2)	0	NC	3(1+4)
9	M27	Typical	1	-0.015	4998	1(1)	-0.04	1867	2(1+2)	1.735e-18	NC	3(1+4)
10	M28	Typical	1	1.388e-17	NC	1(1)	4.163e-17	NC	2(1+2)	0	NC	3(1+4)

Beam Deflection Checks (Continued)

Beam	Design Rule	Span	Defl [in]	Ratio	LC	Defl [in]	Ratio	LC	Defl [in]	Ratio	LC	
11	M29	Typical	1	-0.0002798	NC	1(1)	-0.0007493	NC	2(1+2)	1.674e-5	NC	3(1+4)
12	M3	Typical	1	0	NC	1(1)	0.028	4140	2(1+2)	0	NC	3(1+4)
13	M4	Typical	1	0	NC	1(1)	0.028	4140	2(1+2)	0	NC	3(1+4)
14	M5	Typical	1	-0.013	8011	1(1)	-0.036	3001	2(1+2)	0	NC	3(1+4)

AISC 15TH (360-16): ASD Member Steel Code Checks

LC	Member	Shape	UC Max	Loc[ft]	Shear UC	Loc[ft]	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn	
1	1	M1	HR2	0.123	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1b*
2	1	M6	HR2	0.123	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1b*
3	1	M7	GYMNASIUMBARS	0.006	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
4	1	M8	GYMNASIUMBARS	0.308	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1a*
5	1	M10	GYMNASIUMBARS	0.308	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1a*
6	1	M11	GYMNASIUMBARS	0.006	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
7	1	M9	GYMNASIUMBARS	0.034	10.23	0	10.23	0.49	16.931	0.282	0.282	1	H1-1b*
8	2	M1	HR2	0.329	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1a*
9	2	M6	HR2	0.329	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1a*
10	2	M7	GYMNASIUMBARS	0.01	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
11	2	M8	GYMNASIUMBARS	0.85	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1a*
12	2	M10	GYMNASIUMBARS	0.85	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1a*
13	2	M11	GYMNASIUMBARS	0.01	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
14	2	M9	GYMNASIUMBARS	0.095	10.23	0	10.23	0.49	16.931	0.282	0.282	1	H1-1b*
15	3	M1	HR2	0.026	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1b*
16	3	M6	HR2	0.026	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1b*
17	3	M7	GYMNASIUMBARS	0.001	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
18	3	M8	GYMNASIUMBARS	0.001	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1b*
19	3	M10	GYMNASIUMBARS	0.001	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1b*
20	3	M11	GYMNASIUMBARS	0.001	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
21	3	M9	GYMNASIUMBARS	0.069	10.23	0	10.23	0.49	16.931	0.282	0.282	1	H1-1b*
22	4	M1	HR2	0.231	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1a*
23	4	M6	HR2	0.231	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1a*
24	4	M7	GYMNASIUMBARS	0.009	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
25	4	M8	GYMNASIUMBARS	0.587	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1a*
26	4	M10	GYMNASIUMBARS	0.587	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1a*
27	4	M11	GYMNASIUMBARS	0.009	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
28	4	M9	GYMNASIUMBARS	0.066	10.23	0	10.23	0.49	16.931	0.282	0.282	1	H1-1b*
29	5	M1	HR2	0.025	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1b*
30	5	M6	HR2	0.025	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1b*
31	5	M7	GYMNASIUMBARS	0.001	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
32	5	M8	GYMNASIUMBARS	0.06	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1b*
33	5	M10	GYMNASIUMBARS	0.06	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1b*
34	5	M11	GYMNASIUMBARS	0.001	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
35	5	M9	GYMNASIUMBARS	0.007	10.23	0	10.23	0.49	16.931	0.282	0.282	1	H1-1b*
36	6	M1	HR2	0.201	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1a*
37	6	M6	HR2	0.201	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1a*
38	6	M7	GYMNASIUMBARS	0.007	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
39	6	M8	GYMNASIUMBARS	0.011	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1b*
40	6	M10	GYMNASIUMBARS	0.011	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1b*
41	6	M11	GYMNASIUMBARS	0.007	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
42	6	M9	GYMNASIUMBARS	0.524	10.23	0	10.23	0.49	16.931	0.282	0.282	1	H1-1a*
43	7	M1	HR2	0.354	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1a*
44	7	M6	HR2	0.354	5.8	0	5.8	14.948	53.042	1.565	1.565	1	H1-1a*
45	7	M7	GYMNASIUMBARS	0.01	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*
46	7	M8	GYMNASIUMBARS	0.918	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1a*
47	7	M10	GYMNASIUMBARS	0.918	6.167	0	6.167	1.347	16.931	0.282	0.282	1	H1-1a*
48	7	M11	GYMNASIUMBARS	0.01	2.417	0	2.417	8.336	16.931	0.282	0.282	1	H1-1b*



Company : MC Squared
 Designer : Will Witkop
 Job Number : 2022-0507
 Model Name : GOODWIN CHURCH GYM

10/10/2022
 4:30:37 PM
 Checked By : JKF

AISC 15TH (360-16): ASD Member Steel Code Checks (Continued)

LC	Member	Shape	UC Max	Loc[ft]	Shear UC	Loc[ft]	Pnc/om [k]	Pnt/om [k]	Mnyy/om [k-ft]	Mnzz/om [k-ft]	Cb	Eqn
49	7	M9	GYMNASIUMBARS	0.103	10.23	0	10.23	0.49	16.931	0.282	0.282	1 H1-1b*

AWC NDS-18: ASD Member Wood Code Checks

LC	Member	Shape	UC Max	Loc[ft]	Shear UC	Loc[ft]	Dir	Fc' [ksi]	Ft' [ksi]	Fb1' [ksi]	Fb2' [ksi]	Fv' [ksi]	RB	CL	CP	Eqn	
1	1	M2	6.75X9FS	0.159	9	0.01	9	y	1.438	1.1	2.394	1.45	0.3	4.619	0.997	0.899	3.9-1
2	1	M20	6.75X18FS	0.007	2.6	0.013	2.6	y	1.592	1.1	2.396	1.45	0.3	3.511	0.999	0.995	3.9-1
3	1	M21	6.75X18FS	0.119	2.6	0.15	0	y	1.592	1.1	2.396	1.45	0.3	3.511	0.999	0.995	3.9-3
4	1	M22	6.75X18FS	0.156	6.284	0.033	0	y	1.541	1.1	2.391	1.45	0.3	5.458	0.996	0.963	3.9-3
5	1	M23	6.75X18FS	0.157	0	0.054	9.75	y	1.39	1.1	2.385	1.45	0.3	6.799	0.994	0.869	3.9-3
6	1	M24	6.75X18FS	0.175	10.563	0.093	10.563	y	1.327	1.1	2.384	1.45	0.3	7.076	0.993	0.829	3.9-3
7	1	M25	6.75X18FS	0.175	0	0.093	0	y	1.327	1.1	2.384	1.45	0.3	7.076	0.993	0.829	3.9-3
8	1	M26	6.75X18FS	0.157	9.75	0.054	0	y	1.39	1.1	2.385	1.45	0.3	6.799	0.994	0.869	3.9-3
9	1	M27	6.75X18FS	0.156	0	0.033	6.284	y	1.541	1.1	2.391	1.45	0.3	5.458	0.996	0.963	3.9-3
10	1	M28	6.75X18FS	0.119	0	0.15	2.6	y	1.592	1.1	2.396	1.45	0.3	3.511	0.999	0.995	3.9-3
11	1	M29	6.75X18FS	0.007	0	0.013	0	y	1.592	1.1	2.396	1.45	0.3	3.511	0.999	0.995	3.9-1
12	1	M3	6.75X9FS	0.188	9.75	0.023	9.75	y	1.391	1.1	2.393	1.45	0.3	4.807	0.997	0.869	3.9-1
13	1	M4	6.75X9FS	0.188	0	0.023	9.75	y	1.391	1.1	2.393	1.45	0.3	4.807	0.997	0.869	3.9-1
14	1	M5	6.75X9FS	0.159	0	0.01	9	y	1.438	1.1	2.394	1.45	0.3	4.619	0.997	0.899	3.9-1
15	2	M2	6.75X9FS	0.368	9	0.024	9	y	1.607	1.265	2.752	1.667	0.345	4.619	0.997	0.873	3.9-1
16	2	M20	6.75X18FS	0.016	2.6	0.031	2.6	y	1.829	1.265	2.755	1.667	0.345	3.511	0.998	0.994	3.9-1
17	2	M21	6.75X18FS	0.276	2.6	0.349	0	y	1.829	1.265	2.755	1.667	0.345	3.511	0.998	0.994	3.9-3
18	2	M22	6.75X18FS	0.369	6.284	0.077	0	y	1.759	1.265	2.748	1.667	0.345	5.458	0.996	0.956	3.9-3
19	2	M23	6.75X18FS	0.374	0	0.126	9.75	y	1.536	1.265	2.74	1.667	0.345	6.799	0.993	0.835	3.9-3
20	2	M24	6.75X18FS	0.415	10.563	0.216	10.563	y	1.444	1.265	2.739	1.667	0.345	7.076	0.992	0.785	3.9-3
21	2	M25	6.75X18FS	0.415	0	0.216	0	y	1.444	1.265	2.739	1.667	0.345	7.076	0.992	0.785	3.9-3
22	2	M26	6.75X18FS	0.374	9.75	0.126	0	y	1.536	1.265	2.74	1.667	0.345	6.799	0.993	0.835	3.9-3
23	2	M27	6.75X18FS	0.369	0	0.077	6.284	y	1.759	1.265	2.748	1.667	0.345	5.458	0.996	0.956	3.9-3
24	2	M28	6.75X18FS	0.276	0	0.349	2.6	y	1.829	1.265	2.755	1.667	0.345	3.511	0.998	0.994	3.9-3
25	2	M29	6.75X18FS	0.016	0	0.031	0	y	1.829	1.265	2.755	1.667	0.345	3.511	0.998	0.994	3.9-1
26	2	M3	6.75X9FS	0.437	9.75	0.054	9.75	y	1.536	1.265	2.751	1.667	0.345	4.807	0.997	0.835	3.9-1
27	2	M4	6.75X9FS	0.437	0	0.054	9.75	y	1.536	1.265	2.751	1.667	0.345	4.807	0.997	0.835	3.9-1
28	2	M5	6.75X9FS	0.368	0	0.024	9	y	1.607	1.265	2.752	1.667	0.345	4.619	0.997	0.873	3.9-1
29	3	M2	6.75X9FS	0.003	9	0	9	y	2	1.76	3.823	2.32	0.48	4.619	0.996	0.781	3.6.3
30	3	M20	6.75X18FS	0	2.6	0	2.6	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-3
31	3	M21	6.75X18FS	0.005	2.6	0.006	0	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-1
32	3	M22	6.75X18FS	0.008	6.218	0.001	0	y	2.382	1.76	3.816	2.32	0.48	5.458	0.994	0.93	3.9-1
33	3	M23	6.75X18FS	0.008	0	0.002	9.75	y	1.841	1.76	3.8	2.32	0.48	6.799	0.99	0.719	3.9-1
34	3	M24	6.75X18FS	0.008	10.563	0.003	10.563	y	1.663	1.76	3.796	2.32	0.48	7.076	0.989	0.65	3.9-1
35	3	M25	6.75X18FS	0.008	0	0.003	0	y	1.663	1.76	3.796	2.32	0.48	7.076	0.989	0.65	3.9-1
36	3	M26	6.75X18FS	0.008	9.75	0.002	0	y	1.841	1.76	3.8	2.32	0.48	6.799	0.99	0.719	3.9-1
37	3	M27	6.75X18FS	0.008	0.065	0.001	6.284	y	2.382	1.76	3.816	2.32	0.48	5.458	0.994	0.93	3.9-1
38	3	M28	6.75X18FS	0.005	0	0.006	2.6	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-1
39	3	M29	6.75X18FS	0	0	0	0	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-3
40	3	M3	6.75X9FS	0.004	9.75	0.001	9.75	y	1.841	1.76	3.822	2.32	0.48	4.807	0.995	0.719	3.6.3
41	3	M4	6.75X9FS	0.004	9.75	0.001	9.75	y	1.841	1.76	3.822	2.32	0.48	4.807	0.995	0.719	3.6.3
42	3	M5	6.75X9FS	0.003	9	0	9	y	2	1.76	3.823	2.32	0.48	4.619	0.996	0.781	3.6.3
43	4	M2	6.75X9FS	0.186	9	0.012	9	y	2	1.76	3.823	2.32	0.48	4.619	0.996	0.781	3.9-1
44	4	M20	6.75X18FS	0.008	2.6	0.016	2.6	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-1
45	4	M21	6.75X18FS	0.139	2.6	0.176	0	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-3
46	4	M22	6.75X18FS	0.184	6.284	0.039	0	y	2.382	1.76	3.816	2.32	0.48	5.458	0.994	0.93	3.9-3
47	4	M23	6.75X18FS	0.187	0	0.063	9.75	y	1.841	1.76	3.8	2.32	0.48	6.799	0.99	0.719	3.9-3
48	4	M24	6.75X18FS	0.208	10.563	0.109	10.563	y	1.663	1.76	3.796	2.32	0.48	7.076	0.989	0.65	3.9-3
49	4	M25	6.75X18FS	0.208	0	0.109	0	y	1.663	1.76	3.796	2.32	0.48	7.076	0.989	0.65	3.9-3
50	4	M26	6.75X18FS	0.187	9.75	0.063	0	y	1.841	1.76	3.8	2.32	0.48	6.799	0.99	0.719	3.9-3
51	4	M27	6.75X18FS	0.184	0	0.039	6.284	y	2.382	1.76	3.816	2.32	0.48	5.458	0.994	0.93	3.9-3

AWC NDS-18: ASD Member Wood Code Checks (Continued)

LC	Member	Shape	UC Max	Loc[ft]	Shear	UC Loc[ft]	Dir	Fc' [ksi]	Ft' [ksi]	Fb1' [ksi]	Fb2' [ksi]	Fv' [ksi]	RB	CL	CP	Eqn	
52	4	M28	6.75X18FS	0.139	0	0.176	2.6	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-3
53	4	M29	6.75X18FS	0.008	0	0.016	0	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-1
54	4	M3	6.75X9FS	0.22	9.75	0.027	9.75	y	1.841	1.76	3.822	2.32	0.48	4.807	0.995	0.719	3.9-1
55	4	M4	6.75X9FS	0.22	0	0.027	9.75	y	1.841	1.76	3.822	2.32	0.48	4.807	0.995	0.719	3.9-1
56	4	M5	6.75X9FS	0.186	0	0.012	9	y	2	1.76	3.823	2.32	0.48	4.619	0.996	0.781	3.9-1
57	5	M2	6.75X9FS	0.032	9	0.002	9	y	1.438	1.1	2.394	1.45	0.3	4.619	0.997	0.899	3.9-1
58	5	M20	6.75X18FS	0.001	2.6	0.003	2.6	y	1.592	1.1	2.396	1.45	0.3	3.511	0.999	0.995	3.9-1
59	5	M21	6.75X18FS	0.024	2.6	0.03	0	y	1.592	1.1	2.396	1.45	0.3	3.511	0.999	0.995	3.9-3
60	5	M22	6.75X18FS	0.031	6.284	0.007	0	y	1.541	1.1	2.391	1.45	0.3	5.458	0.996	0.963	3.9-3
61	5	M23	6.75X18FS	0.031	0	0.011	9.75	y	1.39	1.1	2.385	1.45	0.3	6.799	0.994	0.869	3.9-3
62	5	M24	6.75X18FS	0.035	10.563	0.019	10.563	y	1.327	1.1	2.384	1.45	0.3	7.076	0.993	0.829	3.9-3
63	5	M25	6.75X18FS	0.035	0	0.019	0	y	1.327	1.1	2.384	1.45	0.3	7.076	0.993	0.829	3.9-3
64	5	M26	6.75X18FS	0.031	9.75	0.011	0	y	1.39	1.1	2.385	1.45	0.3	6.799	0.994	0.869	3.9-3
65	5	M27	6.75X18FS	0.031	0	0.007	6.284	y	1.541	1.1	2.391	1.45	0.3	5.458	0.996	0.963	3.9-3
66	5	M28	6.75X18FS	0.024	0	0.03	2.6	y	1.592	1.1	2.396	1.45	0.3	3.511	0.999	0.995	3.9-3
67	5	M29	6.75X18FS	0.001	0	0.003	0	y	1.592	1.1	2.396	1.45	0.3	3.511	0.999	0.995	3.9-1
68	5	M3	6.75X9FS	0.038	9.75	0.005	9.75	y	1.391	1.1	2.393	1.45	0.3	4.807	0.997	0.869	3.9-1
69	5	M4	6.75X9FS	0.038	0	0.005	9.75	y	1.391	1.1	2.393	1.45	0.3	4.807	0.997	0.869	3.9-1
70	5	M5	6.75X9FS	0.032	0	0.002	9	y	1.438	1.1	2.394	1.45	0.3	4.619	0.997	0.899	3.9-1
71	6	M2	6.75X9FS	0.025	9	0.003	9	y	2	1.76	3.823	2.32	0.48	4.619	0.996	0.781	3.6.3
72	6	M20	6.75X18FS	0.002	2.6	0.004	2.6	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-3
73	6	M21	6.75X18FS	0.037	2.6	0.043	0	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-1
74	6	M22	6.75X18FS	0.059	6.218	0.009	0	y	2.382	1.76	3.816	2.32	0.48	5.458	0.994	0.93	3.9-1
75	6	M23	6.75X18FS	0.059	0	0.015	9.75	y	1.841	1.76	3.8	2.32	0.48	6.799	0.99	0.719	3.9-1
76	6	M24	6.75X18FS	0.062	10.563	0.027	10.563	y	1.663	1.76	3.796	2.32	0.48	7.076	0.989	0.65	3.9-1
77	6	M25	6.75X18FS	0.062	0	0.027	0	y	1.663	1.76	3.796	2.32	0.48	7.076	0.989	0.65	3.9-1
78	6	M26	6.75X18FS	0.059	9.75	0.015	0	y	1.841	1.76	3.8	2.32	0.48	6.799	0.99	0.719	3.9-1
79	6	M27	6.75X18FS	0.059	0.065	0.009	6.284	y	2.382	1.76	3.816	2.32	0.48	5.458	0.994	0.93	3.9-1
80	6	M28	6.75X18FS	0.037	0	0.043	2.6	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-1
81	6	M29	6.75X18FS	0.002	0	0.004	0	y	2.539	1.76	3.831	2.32	0.48	3.511	0.998	0.992	3.9-3
82	6	M3	6.75X9FS	0.027	9.75	0.007	9.75	y	1.841	1.76	3.822	2.32	0.48	4.807	0.995	0.719	3.9-3
83	6	M4	6.75X9FS	0.027	0	0.007	9.75	y	1.841	1.76	3.822	2.32	0.48	4.807	0.995	0.719	3.9-3
84	6	M5	6.75X9FS	0.025	9	0.003	9	y	2	1.76	3.823	2.32	0.48	4.619	0.996	0.781	3.6.3
85	7	M2	6.75X9FS	0.396	9	0.025	9	y	1.607	1.265	2.752	1.667	0.345	4.619	0.997	0.873	3.9-1
86	7	M20	6.75X18FS	0.017	2.6	0.033	2.6	y	1.829	1.265	2.755	1.667	0.345	3.511	0.998	0.994	3.9-1
87	7	M21	6.75X18FS	0.297	2.6	0.375	0	y	1.829	1.265	2.755	1.667	0.345	3.511	0.998	0.994	3.9-3
88	7	M22	6.75X18FS	0.398	6.284	0.083	0	y	1.759	1.265	2.748	1.667	0.345	5.458	0.996	0.956	3.9-3
89	7	M23	6.75X18FS	0.404	0	0.135	9.75	y	1.536	1.265	2.74	1.667	0.345	6.799	0.993	0.835	3.9-3
90	7	M24	6.75X18FS	0.447	10.563	0.232	10.563	y	1.444	1.265	2.739	1.667	0.345	7.076	0.992	0.785	3.9-3
91	7	M25	6.75X18FS	0.447	0	0.232	0	y	1.444	1.265	2.739	1.667	0.345	7.076	0.992	0.785	3.9-3
92	7	M26	6.75X18FS	0.404	9.75	0.135	0	y	1.536	1.265	2.74	1.667	0.345	6.799	0.993	0.835	3.9-3
93	7	M27	6.75X18FS	0.398	0	0.083	6.284	y	1.759	1.265	2.748	1.667	0.345	5.458	0.996	0.956	3.9-3
94	7	M28	6.75X18FS	0.297	0	0.375	2.6	y	1.829	1.265	2.755	1.667	0.345	3.511	0.998	0.994	3.9-3
95	7	M29	6.75X18FS	0.017	0	0.033	0	y	1.829	1.265	2.755	1.667	0.345	3.511	0.998	0.994	3.9-1
96	7	M3	6.75X9FS	0.47	9.75	0.058	9.75	y	1.536	1.265	2.751	1.667	0.345	4.807	0.997	0.835	3.9-1
97	7	M4	6.75X9FS	0.47	0	0.058	9.75	y	1.536	1.265	2.751	1.667	0.345	4.807	0.997	0.835	3.9-1
98	7	M5	6.75X9FS	0.396	0	0.025	9	y	1.607	1.265	2.752	1.667	0.345	4.619	0.997	0.873	3.9-1

Envelope Node Reactions

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [-k-ft]	LC	MZ [k-ft]	LC	
1	N11	max	0	7	0	7	0	7	0	7	0	7	0	7
2		min	0	1	0	1	0	1	0	1	0	1	0	1
3	N9	max	0	7	0	7	0	7	0	7	0	7	0	7
4		min	0	1	0	1	0	1	0	1	0	1	0	1
5	N1	max	0	6	12.305	7	0	7	0	7	0	7	0	7

Envelope Node Reactions (Continued)

Node Label		X [k]	LC	Y [k]	LC	Z [k]	LC	MX [k-ft]	LC	MY [-k]	LC	MZ [k-ft]	LC
6		min	0	2	-1.975	6	0	1	0	0	1	0	1
7	N5	max	0	7	0	7	0	7	0	7	0	7	7
8		min	0	1	0	1	0	1	0	1	0	1	1
9	N4	max	0	7	12.305	7	0	7	0	7	0	7	7
10		min	0	1	-1.975	6	0	1	0	1	0	1	1
11	Totals:	max	0	6	24.61	7	0	7					
12		min	0	2	-3.949	6	0	1					

Envelope Node Displacements

Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
1	N1	max	0	2	0	6	0	7	0	7	0	7	1.459e-3
2		min	0	6	0	7	0	1	0	1	0	7	-9.157e-3
3	N2	max	0.131	7	0.111	6	0	7	0	7	0	7	2.124e-4
4		min	-0.021	6	-0.698	7	0	1	0	1	0	1	-1.323e-3
5	N3	max	0.214	7	0.111	6	0	7	0	7	0	7	1.323e-3
6		min	-0.034	6	-0.698	7	0	1	0	1	0	1	-2.124e-4
7	N4	max	0.345	7	0	6	0	7	0	7	0	7	9.157e-3
8		min	-0.055	6	0	7	0	1	0	1	0	1	-1.459e-3
9	N5	max	0.172	7	0.079	6	0	7	0	7	0	7	0
10		min	-0.028	6	-0.494	7	0	1	0	1	0	1	0
11	N6	max	0.017	6	0.263	7	0	7	0	7	0	7	1.455e-3
12		min	-0.11	7	-0.042	6	0	1	0	1	0	1	-9.131e-3
13	N7	max	0.454	7	0.263	7	0	7	0	7	0	7	9.131e-3
14		min	-0.072	6	-0.042	6	0	1	0	1	0	1	-1.455e-3
15	N8	max	0.282	7	0.111	6	0	7	0	7	0	7	6.116e-4
16		min	-0.045	6	-0.697	7	0	1	0	1	0	1	-3.834e-3
17	N9	max	0.151	7	0.118	6	0	7	0	7	0	7	1.47e-3
18		min	-0.024	6	-0.741	7	0	1	0	1	0	1	-2.348e-4
19	N10	max	0.29	7	0.119	6	0	7	0	7	0	7	2.171e-3
20		min	-0.046	6	-0.746	7	0	1	0	1	0	1	-3.451e-4
21	N11	max	0.194	7	0.118	6	0	7	0	7	0	7	2.348e-4
22		min	-0.031	6	-0.741	7	0	1	0	1	0	1	-1.47e-3
23	N12	max	0.055	7	0.119	6	0	7	0	7	0	7	3.451e-4
24		min	-0.009	6	-0.746	7	0	1	0	1	0	1	-2.171e-3
25	N13	max	0.063	7	0.111	6	0	7	0	7	0	7	3.834e-3
26		min	-0.01	6	-0.697	7	0	1	0	1	0	1	-6.116e-4
27	N15	max	0.172	7	0.081	6	0	7	0	7	0	7	0
28		min	-0.028	6	-0.506	7	0	1	0	1	0	1	0
29	N16	max	0.108	7	0.042	6	0	7	0	7	0	7	1.338e-3
30		min	-0.017	6	-0.261	7	0	1	0	1	0	1	-8.395e-3
31	N17	max	0.237	7	0.042	6	0	7	0	7	0	7	8.395e-3
32		min	-0.038	6	-0.261	7	0	1	0	1	0	1	-1.338e-3

Envelope Node Reactions - Overstrength or Capacity Limit

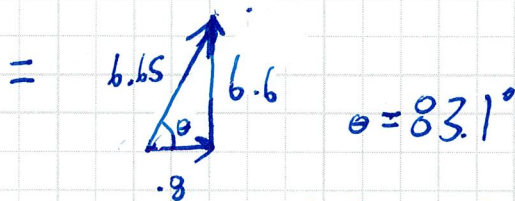
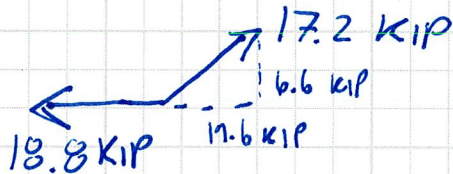
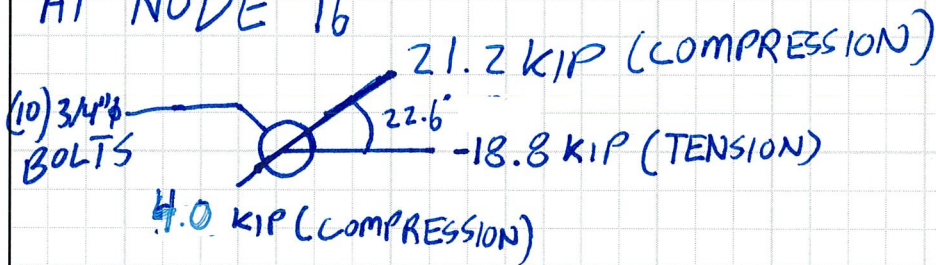
No Data to Print...													
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$$Z'_\theta = \frac{Z'_\parallel Z'_\perp}{Z'_\parallel \sin^2 \theta + Z'_\perp \cos^2 \theta}$$

$$Z'_\parallel = 3340 \text{ LB} \quad (\text{NDS TABLE 12I})$$

$$Z'_\perp = 1890 \text{ LB}$$

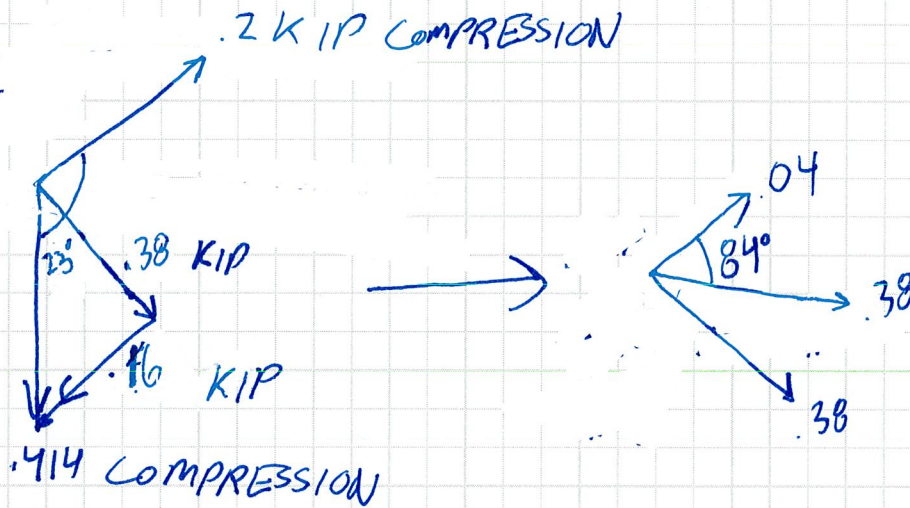
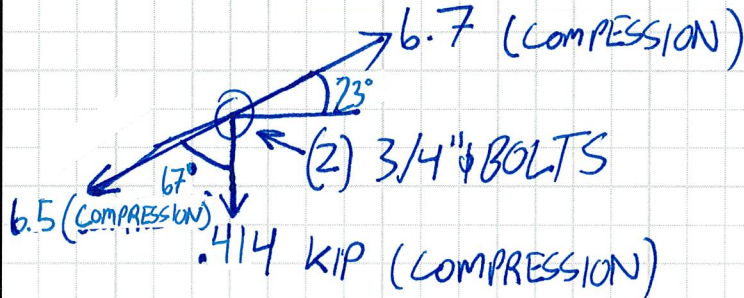
AT NODE 16



$$Z'_\theta = \frac{(3340 \text{ LB})(1890 \text{ LB})}{3340 \text{ LB} (\sin^2 83.1) + 1890 (\cos^2 83.1)} = 1902 \frac{\text{LB}}{\text{BOLT}}$$

$$\times 10 \text{ BOLTS} = 19.02 \text{ KIP} > 6.65 \text{ KIP} \checkmark$$

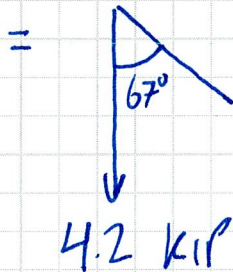
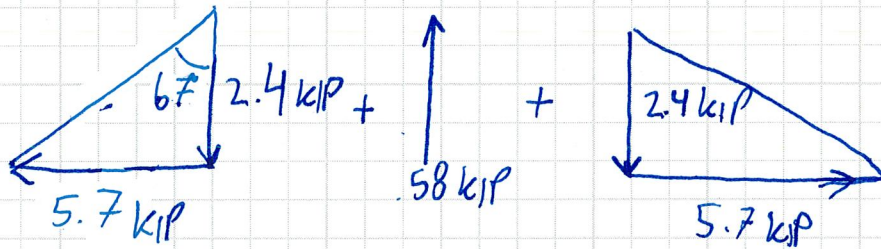
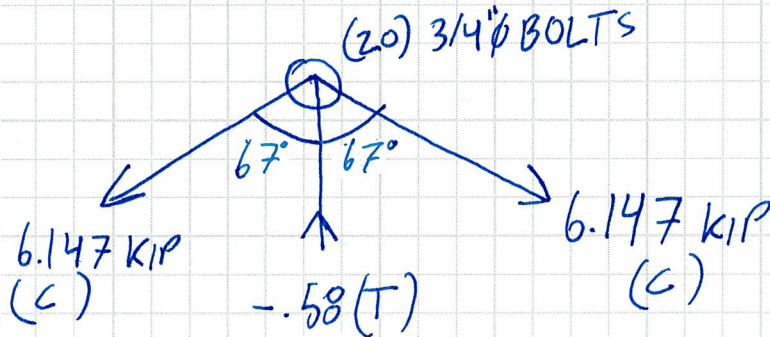
AT NODE 10



$$Z'_0 = \frac{(3340 \text{ LB})(1890 \text{ LB})}{3340(\sin^2 84) + 1890(\cos^2 84)} = 1899 \frac{\text{LB}}{\text{BOLT}}$$

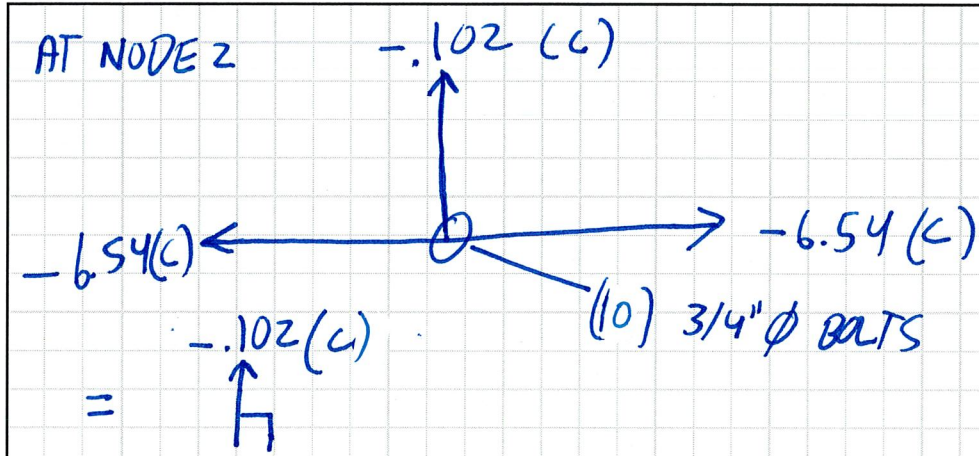
x2 BOLTS = 3.80 KIP > .38 KIP ✓

AT NODE 5



$$Z'_0 = \frac{(3340 \text{ LB})(1890 \text{ LB})}{3340 \text{ LB}(\sin^2 67^\circ) + 1890(\cos^2 67^\circ)} = 2024 \frac{\text{KIP}}{\text{BOLT}}$$

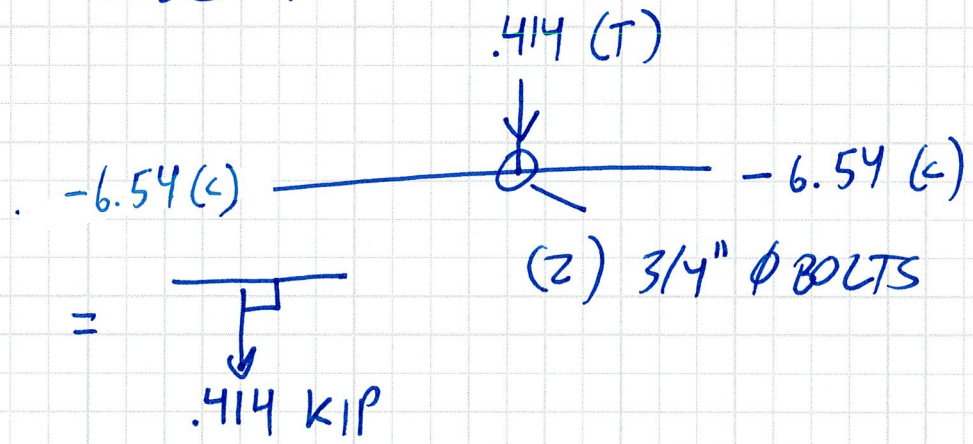
$\times 20 \text{ BOLTS} = 40.5 \text{ KIP} > 4.2 \text{ KIP} \checkmark$



$90^\circ \rightarrow F'_L = 1890 \text{ LB}$

$\times 10 \text{ BOLTS} = 18.9 \text{ KIP} > .102 \text{ KIP} \checkmark$

AT NODE 9



$90^\circ \rightarrow F'_L = 1890 \text{ LB/BOLT}$

$\times 2 \text{ BOLTS} = 3.78 \text{ KIP} > .414 \text{ KIP} \checkmark$

DEFLECTION

- MAXIMUM ALLOWABLE DEFLECTION

$$= \frac{l}{180} = \frac{720 \text{ IN}}{180} = 4 \text{ IN}$$

DEFLECTION AT NODE 15 = .506 IN < 4 IN ✓

Project Title:
 Engineer:
 Project ID:
 Project Descr:

Multiple Simple Beam

File: 2022-0507 Sanctuary Calculations.ec6
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Description :

Wood Beam Design : Beams Parallel to the Backwall

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16

BEAM Size : **5.5x15, GLB, Fully Braced**
 Using Allowable Stress Design with ASCE 7-16 Load Combinations, Major Axis Bending
 Wood Species : DF/DF Wood Grade : 24F-V4
 Fb - Tension 2,400.0 psi Fc - Prll 1,650.0 psi Fv 265.0 psi Ebend- xx 1,800.0 ksi Density 31.210 pcf
 Fb - Compr 1,850.0 psi Fc - Perp 650.0 psi Ft 1,100.0 psi Eminbend - xx 950.0 ksi

Applied Loads

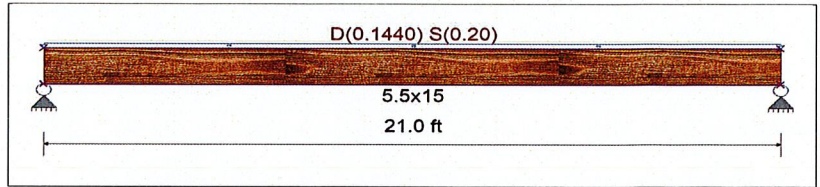
Unif Load: D = 0.0180, S = 0.0250 k/ft, Trib= 8.0 ft

Design Summary

Max fb/Fb Ratio = **0.412** : 1
 fb : Actual : 1,103.30 psi at 10.500 ft in Span # 1
 Fb : Allowable : 2,680.10 psi
 Load Comb : +D+S+H

Max fv/FvRatio = **0.191** : 1
 fv : Actual : 58.23 psi at 19.810 ft in Span # 1
 Fv : Allowable : 304.75 psi
 Load Comb : +D+S+H

Max Reactions (k) D L Lr S W E H
 Left Support 1.51 2.10
 Right Support 1.51 2.10



Max Deflections			
Transient Downward	0.316 in	Total Downward	0.543 in
Ratio	797	Ratio	463
LC: S Only		LC: +D+S+H	
Transient Upward	0.000 in	Total Upward	0.000 in
Ratio	9999	Ratio	9999
LC:		LC:	

Wood Beam Design : Beams perpendicular to the backwall

Calculations per NDS 2018, IBC 2018, CBC 2019, ASCE 7-16

BEAM Size : **8.75x42, GLB, Fully Braced**
 Using Allowable Stress Design with ASCE 7-16 Load Combinations, Major Axis Bending
 Wood Species : DF/DF Wood Grade : 24F-V4
 Fb - Tension 2,400.0 psi Fc - Prll 1,650.0 psi Fv 265.0 psi Ebend- xx 1,800.0 ksi Density 31.210 pcf
 Fb - Compr 1,850.0 psi Fc - Perp 650.0 psi Ft 1,100.0 psi Eminbend - xx 950.0 ksi

Applied Loads

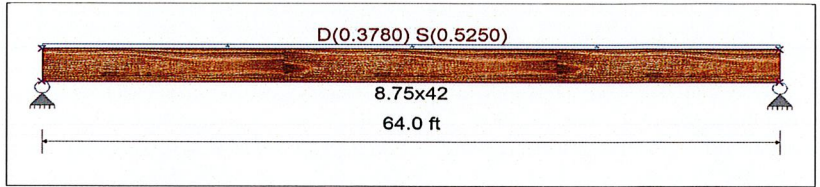
Unif Load: D = 0.0180, S = 0.0250 k/ft, Trib= 21.0 ft

Design Summary

Max fb/Fb Ratio = **1.045** : 1
 fb : Actual : 2,156.67 psi at 32.000 ft in Span # 1
 Fb : Allowable : 2,064.78 psi
 Load Comb : +D+S+H

Max fv/FvRatio = **0.346** : 1
 fv : Actual : 105.36 psi at 0.000 ft in Span # 1
 Fv : Allowable : 304.75 psi
 Load Comb : +D+S+H

Max Reactions (k) D L Lr S W E H
 Left Support 12.10 16.80
 Right Support 12.10 16.80



Max Deflections			
Transient Downward	2.049 in	Total Downward	3.524 in
Ratio	374	Ratio	217
LC: S Only		LC: +D+S+H	
Transient Upward	0.000 in	Total Upward	0.000 in
Ratio	9999	Ratio	9999
LC:		LC:	

< 5% OVER STRESSED

∴ OK TO PUT SOLAR PANELS ON

SANCTUARY.