SUBMITTAL REVIEW

PROJECT Guntersville Phase 2 Park Facility Improvements

PROJECT NO. 37106-05

SUBMITTAL NO. SUB-020R1 – RCP Shelters

- [x] REVIEWED/NO EXCEPTIONS TAKEN
- [ ] REJECTED
- [ ] REVIEWED/EXCEPTIONS NOTED
- [ ] REVISE AND RESUBMIT
- [ ] NOT SUBJECT TO REVIEW

Review of this submittal is expressly limited as provided in the Contract Documents and are only to determine general conformance with information given in the Contract Documents and compatibility with the design concept for the completed project as a functioning whole as indicated in the Contract Documents. Corrections or comments made for this review do not relieve the Contractor from compliance with the Contract Documents. Contractor is, and Engineer/Architect is NOT, responsible for all matters relating to confirmation/correlation of dimensions at the jobsite, fabrication, shipping, handling, storage, assembly, installation, construction (including all safety aspects of performing the work), and for coordinating the Work.

Barge Design Solutions, Inc.

BY: Carl Barker, Bob Martin DATE: 12/21/2023

NOTES:

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Barge Design Solutions, Inc.

BY: Carl Barker, Bob Martin DATE: 12/21/2023

NOTES:

LAMBERT CONTRACTING
SITE PREPARATION AND UTILITY CONTRACTORS

Letter of Transmittal

TO: Barge Design Solutions
Garett Younanian
200 Clinton Ave Suite 800
Huntsville, AL 35801

Date:	December 13, 2023
Attention:	Garett Younanian
Reference:	Guntersville Park Improvements P.2
Project No:	
Transmittal No:	20 R1

ITEM(S) SUBMITTED INCLUDE:

- [x] Shop Drawings
- [ ] Purchase Order
- [ ] Product Data
- [ ] Pay Request
- [x] Engineered Calculations

COPIES	DATE	NO.	DESCRIPTION
		20.	Submittal No.20 Rev.1
			RCP Shelters

SHOP DRAWING/SUBMITTAL REVIEW

Lambert Contracting, LLC. has reviewed the attached submittal in detail for conformance with the drawings and specifications and is believed to be correctunless specificallynoted otherwise.

By: Daniel Robinson Date:12/13/23

LAMBERT CONTRACTING, LLC.

THESE ITEMS ARE TRANSMITTED AS INDICATED BELOW:

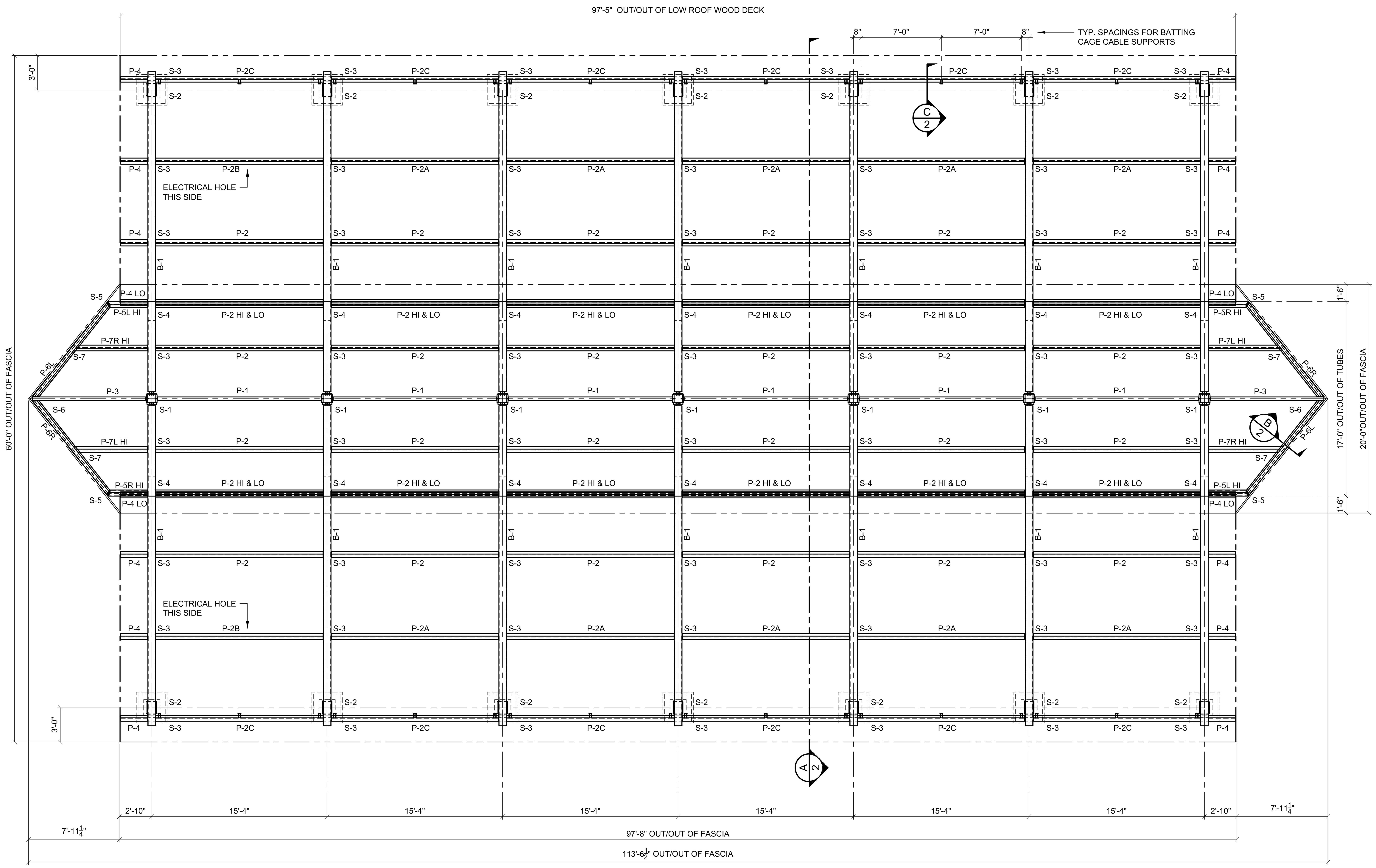
- [x] For Approval
- [x] Approved as submitted
- [x] Resubmit
- ___ copies for approval
- [ ] For your use
- [ ] Approved as noted
- [ ] Submit
- ___ copies for distribution
- [ ] As requested
- [ ] Returned for corrections
- [ ] Return
- ___ corrected prints
- [ ] For review & comment
- [ ] ___
- [ ] FOR BIDS DUE ___
- [ ] PRINTS RETURNED AFTER LOAN TO US

REMARKS: Included are the requested calculations.

Copy To: ___

Signed: Daniel Robinson
Project Manager
drobinson@lambert-contracting.com

If enclosues are not as shown, kindly notify us at once.



ROOF FRAMING PLAN

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

CONTRACT NOTE:
Reference accepted proposal and/or executed contract for identification of items furnished. Any item not specifically included shall be provided by owner, installer or others. Some items are specifically noted as N.I.C. (not in contract).

SOLID TIMBER SPECIFICATIONS
2 x 4 Nailer ----------- #1 SYP, S4S, KD, Seal
2 x 6 Fascia ---------- #1 AYC, S4S, KD, Seal.
2 x 8 Roof Deck ----- #1 SYP, T&G, S/L, CM, EV1S, KD, Seal.
Deck furnished in specified lengths (S/L), not precision end trimmed (PET), field cutting required.

ROOF UNDERLAYMENT SPECIFICATIONS:
ONE LAYER OF SYNTHETIC UNDERLAYMENT.
SYNTHETIC UNDERLAYMENT TO CONFORM TO ASTM D226 TYPE II OR ASTM D4869 TYPE IV.
ATTACH UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATIONS
OR BUILDING CODE REQUIREMENTS, WHICHEVER IS MORE STRINGENT.

STEEL & HARDWARE SHOP NOTES:
1. All steel plate to be ASTM A572 Grade 50.
2. Steel tubes to be ASTM A500 Grade C.
3. All welding is to be done in accordance with latest AWS standards. If welds are not specified, all welds are to develop full strength of all component parts.
4. All bolts to be ASTM F3125 Grade A325 Type 1. Exception: All bolts smaller than 1/2"Ø to be A307A. Anchor bolts as noted.
5. All nuts to be ASTM A563DH except as noted. At F1554 Gr. 36 anchor bolts and A307A bolts, nuts to be ASTM A563A.
6. All fabricated steel to be powder coated; color selected by owner.
7. Hardware (bolts, nuts, washers, etc.) to be hot-dipped galvanized (HDG). Shop to verify hole tolerances and tolerances of threaded parts for compatibility of the galvanized parts only.

ERECTION NOTES:
All steel members must be properly braced until the complete structural system has been constructed. Correction of minor misfits and a reasonable amount of reaming or alignment with drift pins will be considered a legitimate expense of erection.

In the event of error, defect in materials, and/or workmanship of shop work which prevents proper assembling and fitting up of parts by the moderate use of drift pins, or reaming, immediately report to the seller and obtain seller's approval of the method of correction.

Predrill wood for screws and nails if necessary to avoid splitting.

Bolts to be snug tight. Torque measurement is not required.

NOTE: This building has been designed as a free standing, open structure. If walls are to be added, or if the building is to adjoin another structure, or if other modifications are to be made, the structure must be re-engineered prior to these modifications (by others).

DESIGN CRITERIA:
2006 International Building Code w/ Amendments
Type of Construction: Type III-B
Occupancy Classification: Assembly A-3
Building Occupancy Category II
Mean Roof Height = 23'-0"
Building Area = 6,030 ft^2
Building Volume = 134,850 ft^3
No. of Occupants = 120 (50 ft^2 gross)

ROOF DL

Metal Roofing	1.2 psf
Underlayment	0.1
Diaphragm Sheathing	1.5 psf
2" Nom. T&G Deck	4.4
Misc.	1.8
Total =	9 psf + weight of framing

FLOOR LL
L = 100 psf

ROOF LL
L_r = 20 psf @ purlins and T&G deck
L_r = 13.5 psf @ columns
L_r = 12.0 psf @ main beams between columns
Lr has been reduced at columns and main beams in accordance with Section 1607.11.2 of the 2006 IBC

ROOF SL
P_g = 10 psf (Ground Snow)
$P_f = 0.7*P_g*C_e*C_t*I_S$
$C_e = 1.0$, $C_t = 1.2$, $I_S = 1.0$
P_f = 8.4 psf
$P_s = P_f*C_s$
6:12 pitch: $C_s = 1.0$, P_s = 8.4 psf

WIND LOAD
V_{asd} = 90 mph (3 sec. gust)
Exposure 'D', Open Building w/ $GC_{pi} = 0$, $I_W = 1.0$
Component & Cladding Ultimate Wind Pressures: See ROOF PLAN on Sheet #2

SEISMIC
$I_E = 1.0$
$S_S = 0.307$, $S_1 = 0.104$
Site Class C
$S_{DS} = 0.245$, $S_{D1} = 0.118$
Seismic Design Category C
Equivalent Lateral Force Procedure
Cantilevered Column Systems - Steel ordinary cantilever column system
R = 1.25, $C_S = 0.196$, $\rho = 1.0$, V = 32,200#

CONNECTION INDEX

CONN. NO.	SHT. NO.
S-1	5
S-2	5
S-3	5
S-4	5
S-5	5
S-6	5
S-7	5

DESIGN CERTIFICATION FOR:
BUILDING SIZE: 60' x 114'
BUILDING LOCATION: GUNTERSVILLE, AL

THIS CERTIFICATION OF DRAWINGS IS FOR THE ONE BUILDING ONLY AT THE SITE LISTED ABOVE. IT IS VALID ONLY IF THE MATERIALS SHOWN ON THESE DRAWINGS ARE FURNISHED BY RCP SHELTERS, INC. AND ONLY IF MATERIALS ARE PAID FOR IN FULL.

IF MODIFICATION IS MADE WITHOUT EXPRESSED WRITTEN CONSENT OF RCP SHELTERS, INC., OR IF PAYMENT IS NOT MADE IN FULL, THEN CERTIFICATION BECOMES NULL & VOID.

ALABAMA LICENSED No. 31562 PROFESSIONAL ENGINEER DANIEL P. SEYMOUR
12/7/23

TS-G60114-2T-RE-06-TG
GUNTERSVILLE PARK
GUNTERSVILLE, AL

RCP SHELTERS, INC.
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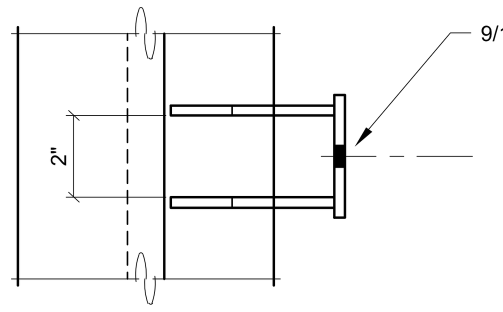
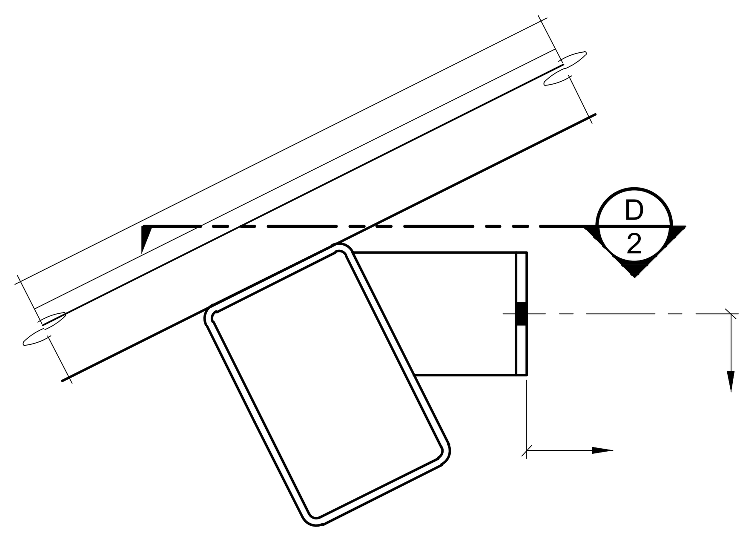
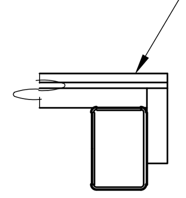
PROJ. NO.:	23-199-A	
DRAWN:	JCS	11-28-23
CHK'D:	DPP	12-1-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14836R1	
EEC JOB NO.:	14836 R	
SHEET NO.:	1 OF 10	



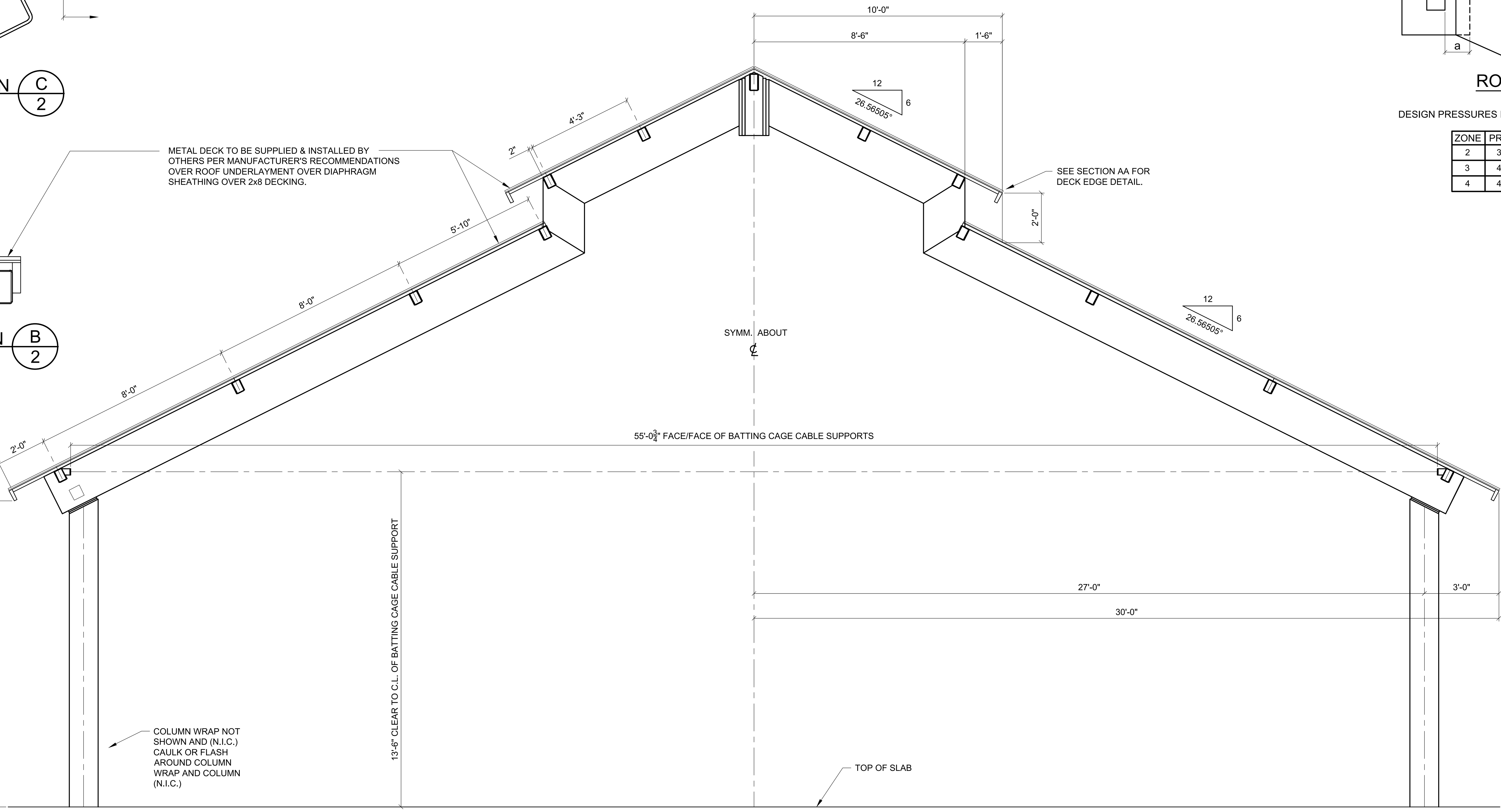
SECTION D/2



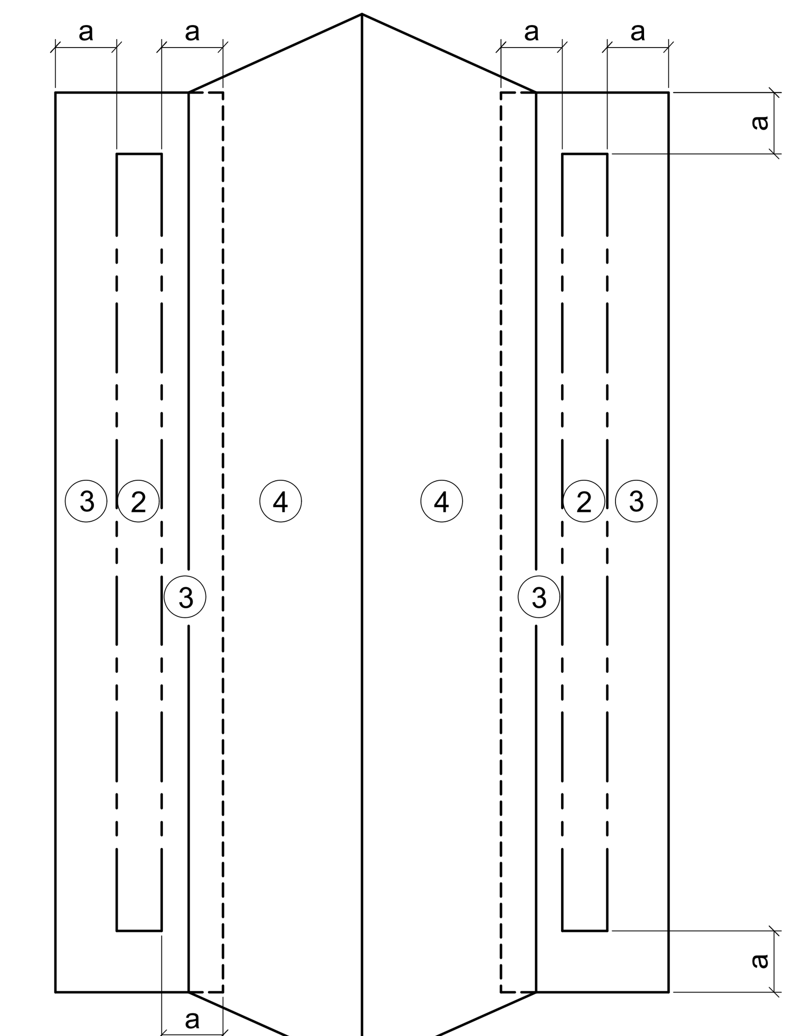
SECTION C/2



SECTION B/2



SECTION A/2
SCALE: 3/8" = 1'-0"



ROOF PLAN
a = 6'-0"
DESIGN PRESSURES FOR COMPONENTS & CLADDING

ZONE	PRESSURE	SUCTION
2	31.2 PSF	23.8 PSF
3	40.6 PSF	30.6 PSF
4	43.2 PSF	32.6 PSF

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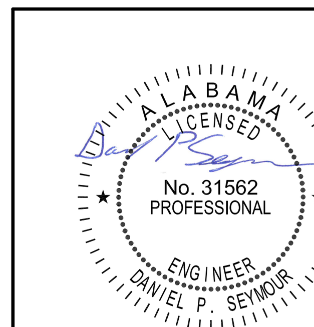
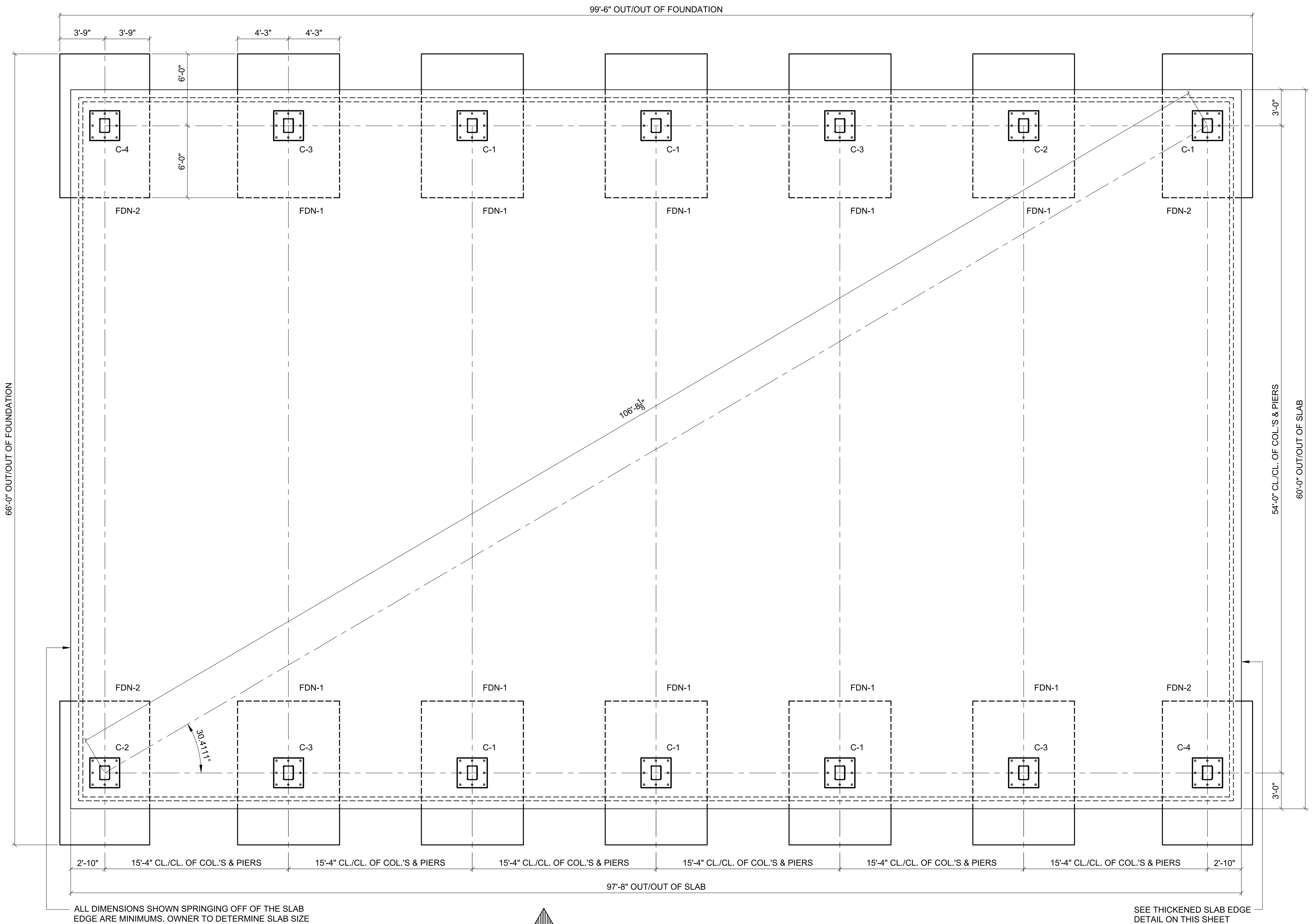
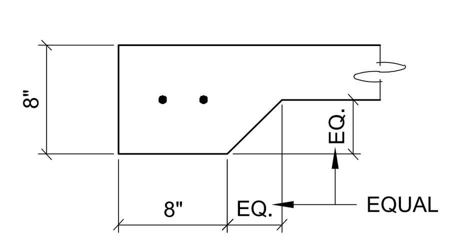


PROJ. NO.: 23-199-A
DRAWN: JCS 11-28-23
CHK'D: DPP 12-1-23
REV 1:
REV 2:
REV 3:
REV 4:
SHOP DWG NO.: 14836R2
EEC JOB NO.: 14836 R
SHEET NO.: 2 OF



FOUNDATION PLAN

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



THICKENED SLAB EDGE DETAIL

CONCRETE NOTES:

1. Remove all organic material and topsoil from slab area. Verify suitability of subgrade. Footings are to bear on undisturbed, natural soil or engineered fill. Both are to be compacted to 95% Proctor density.
2. Prepare slab with min. 8" compacted sand, gravel, or crushed rock.
3. Concrete slab to be 4" thick. Reinforce slab with 6x6-w1.4xw1.4 welded wire fabric at mid-depth. Lap splices 8". Alt.: Fiber mesh admixture (min. 1.5#/c.y., fibrillated polypropylene).
4. Edge of slab to be thickened to min. 8" deep x 8" wide reinforced with 2-#4 continuous rebars. Lap splices min. 24".
5. In locations subject to frost, install isolation joint, max. 1/8" wide, around column piers using diamond or circular layout. Wire mesh shall be interrupted at isolation joints.
6. Install crack control joints (3/16" wide x 1" deep) at 8' to 12' o.c.
7. Concrete slabs in open areas are to be sloped for drainage from center to edge and away from columns. Surface is to be lightly broomed or have a wood troweled finish.
8. Concrete slabs in enclosed areas are to have positive drainage to floor drains and have a troweled finish.
9. Concrete slab, foundation, re-bar, wire mesh, leveling nuts, grout & anchor bolts (if required) are N.I.C.
10. All concrete reinforcing steel to be grade 60, deformed bars.
11. F'_c of concrete to be 4000 psi @ 28 days for foundation. F'_c of concrete to be 3500 psi @ 28 days for slab, air-entrained. (1)
12. All concrete work to be in accordance w/ latest ACI code.
13. Assumed allowable soil bearing pressures: 2500 psf vertical bearing (per Geotech Report), 150 pcf passive lateral bearing. It is the Owner's responsibility to verify that the allowable soil bearing values at the site meet or exceed these assumed values. If the actual values are lower than the assumed values, the foundations must be redesigned (N.I.C.).
14. Leveling nuts have been shown under column base plate. Adjust leveling nuts as required to ensure all column bases are at the same elevation. Fill void between column base plate and top of foundation with non-shrink grout.
15. Grout shall be non-shrink, non-metallic, factory pre-mixed grout in accordance with ASTM C1107 with F'_c of not less than 9,000 psi.
16. Reinforcement shall be securely held in place while placing concrete. If required, additional bars, stirrups or chairs shall be provided to furnish support for bars.

ELECTRICAL CONDUIT NOTE:

If electrical access is required; install conduit in foundation and align with access hole in column base plate. Coordinate with electrical contractor.

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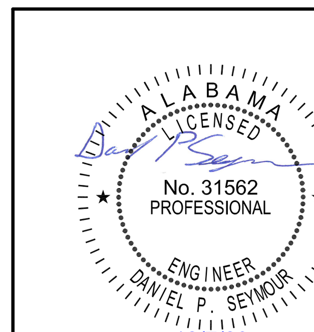

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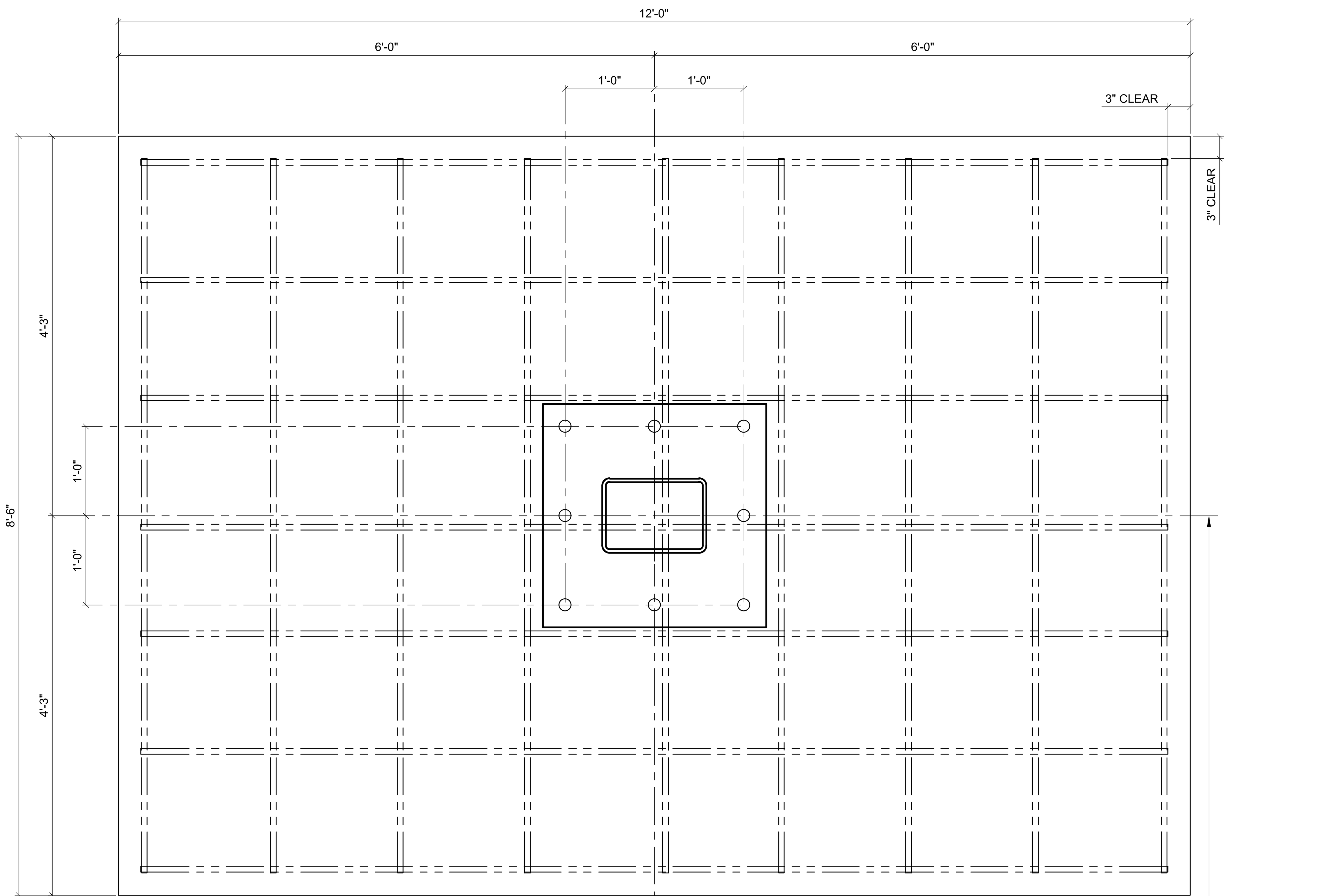
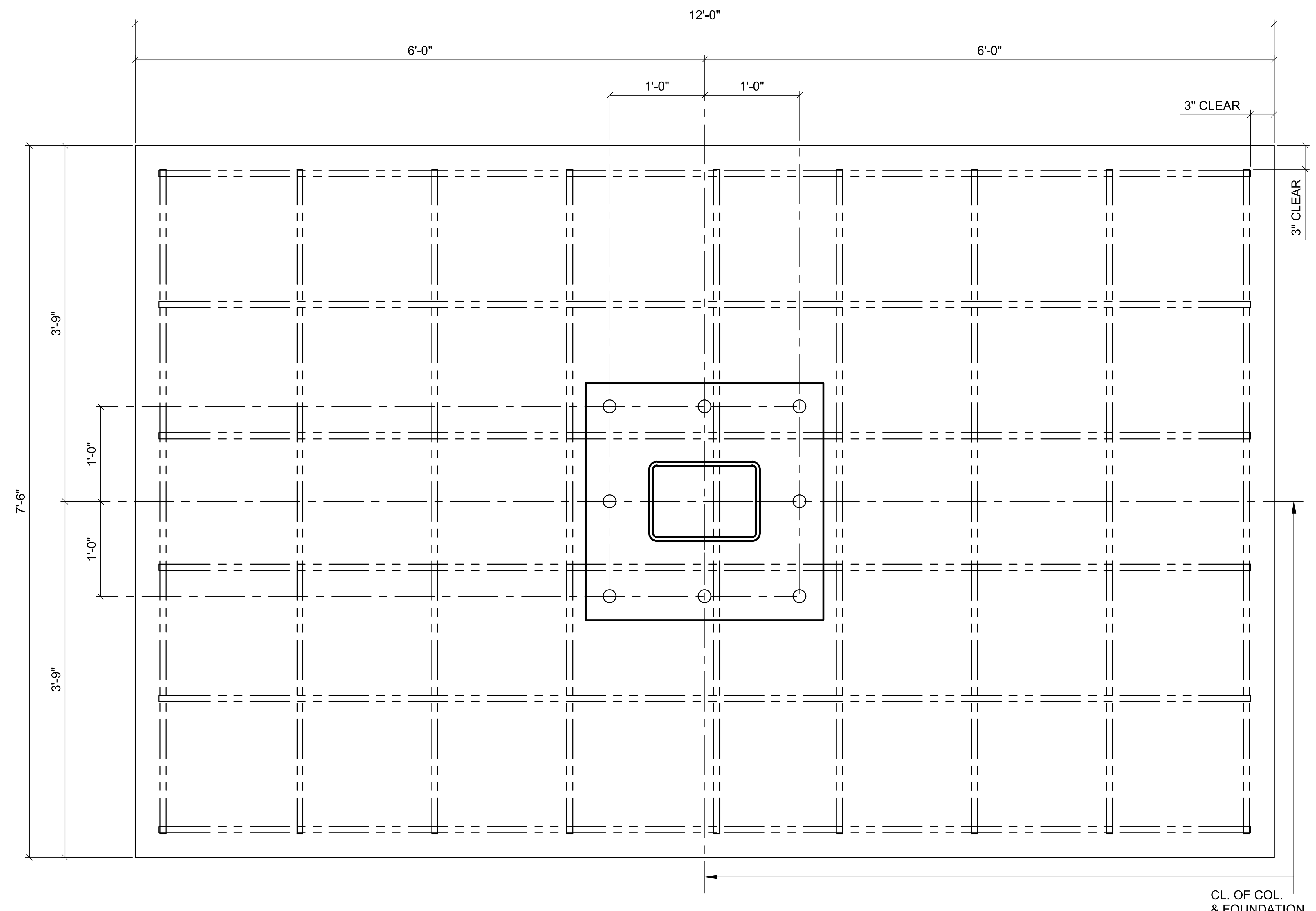
DRAWN:	JCS	11-28-23
CHK'D:	DPP	12-1-23
REV 1:	DPS	12-7-23
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14836R3	
EEC JOB NO.:	14836 R	
SHEET NO.:	3 OF	



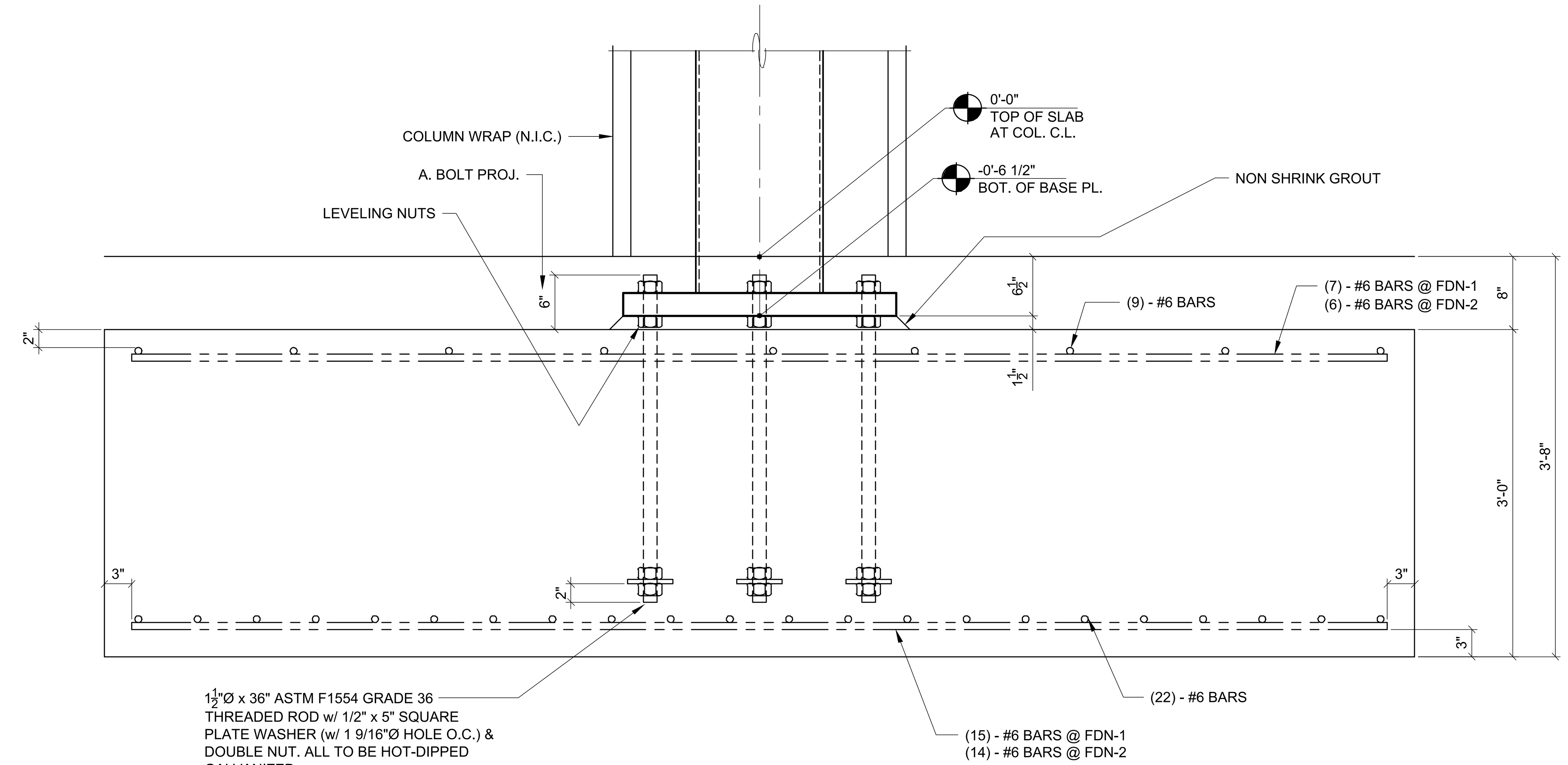
PLAN @ FDN-1

COLUMN WRAP & REBARS AT BOTTOM OF FOOTING NOT SHOWN



PLAN @ FDN-2

COLUMN WRAP & REBARS AT BOTTOM OF FOOTING NOT SHOWN



COLUMN FOUNDATION DETAIL

COLUMN BASE REACTIONS @ FDN-1:

$V_{DL+3/4(Lr+WL)}$ = 23,000# (INCLUDES 2,700# COLUMN WRAP WEIGHT)

$V_{0.6*DL+WL\ UPLIFT}$ = -1,250#

$V_{DL+3/4(Lr+WL)}$ = 14,700#

$M_{O.T.\ DL+3/4(Lr+WL)}$ = 186,500#-ft

COLUMN BASE REACTIONS @ FDN-2:

$V_{DL+3/4(Lr+WL)}$ = 19,500# (INCLUDES 2,700# COLUMN WRAP WEIGHT)

$V_{0.6*DL+WL\ UPLIFT}$ = -1,200#

$V_{DL+3/4(Lr+WL)}$ = 13,000#

$M_{O.T.\ DL+3/4(Lr+WL)}$ = 165,000#-ft

ALABAMA LICENSED No. 31562 PROFESSIONAL ENGINEER DANIEL P. SEYMOUR
12/7/23

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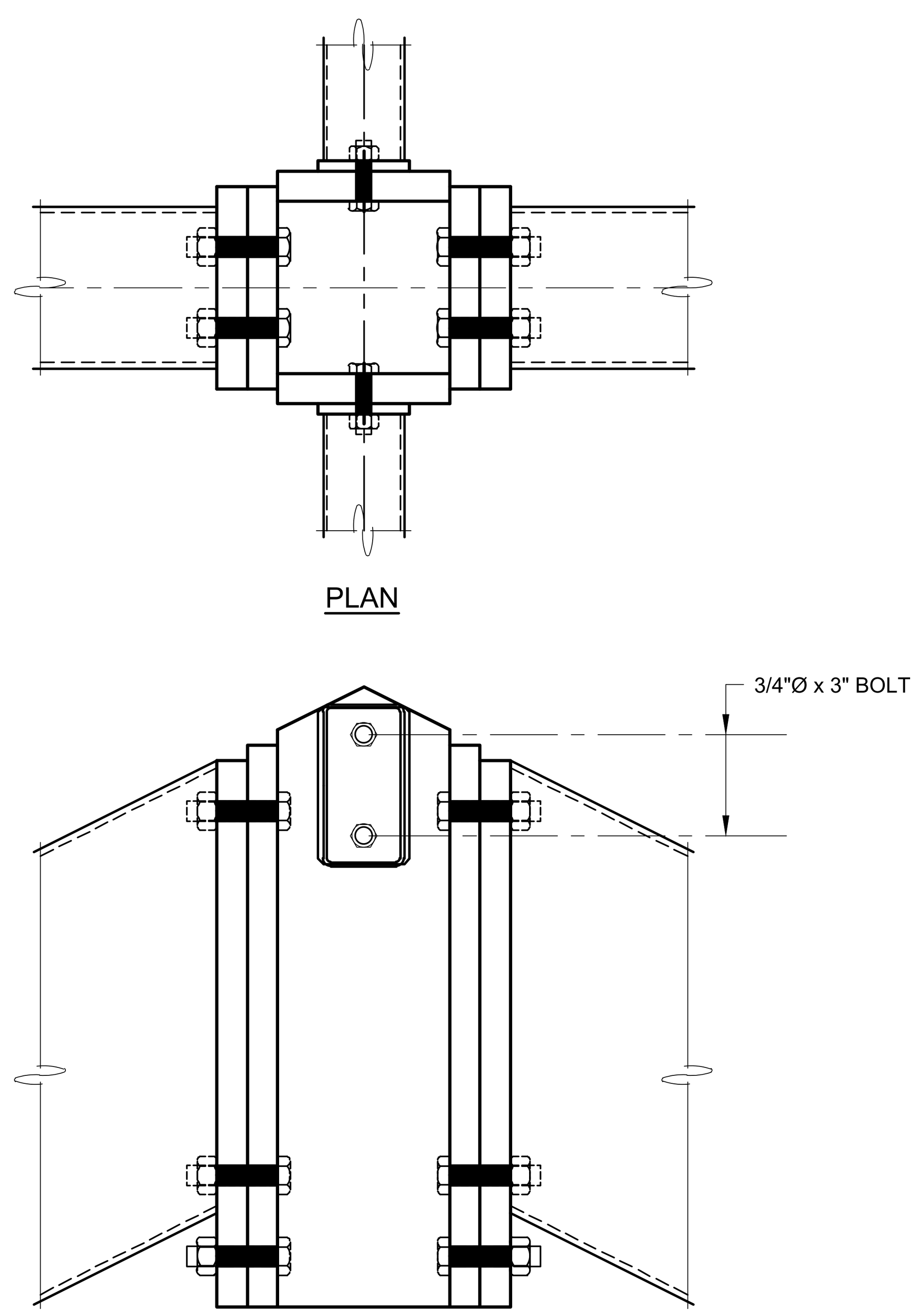
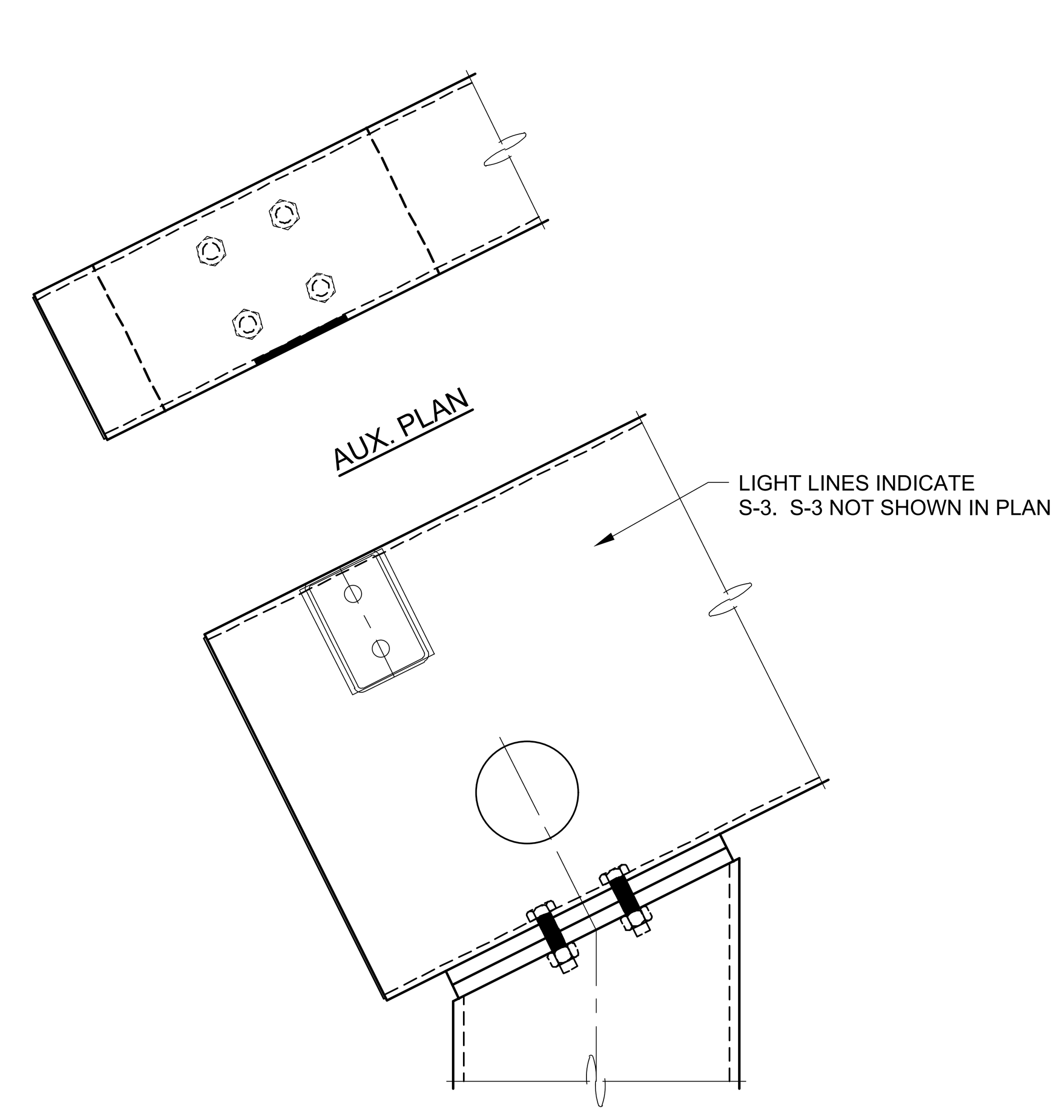
SHEET NO.:	4 OF	



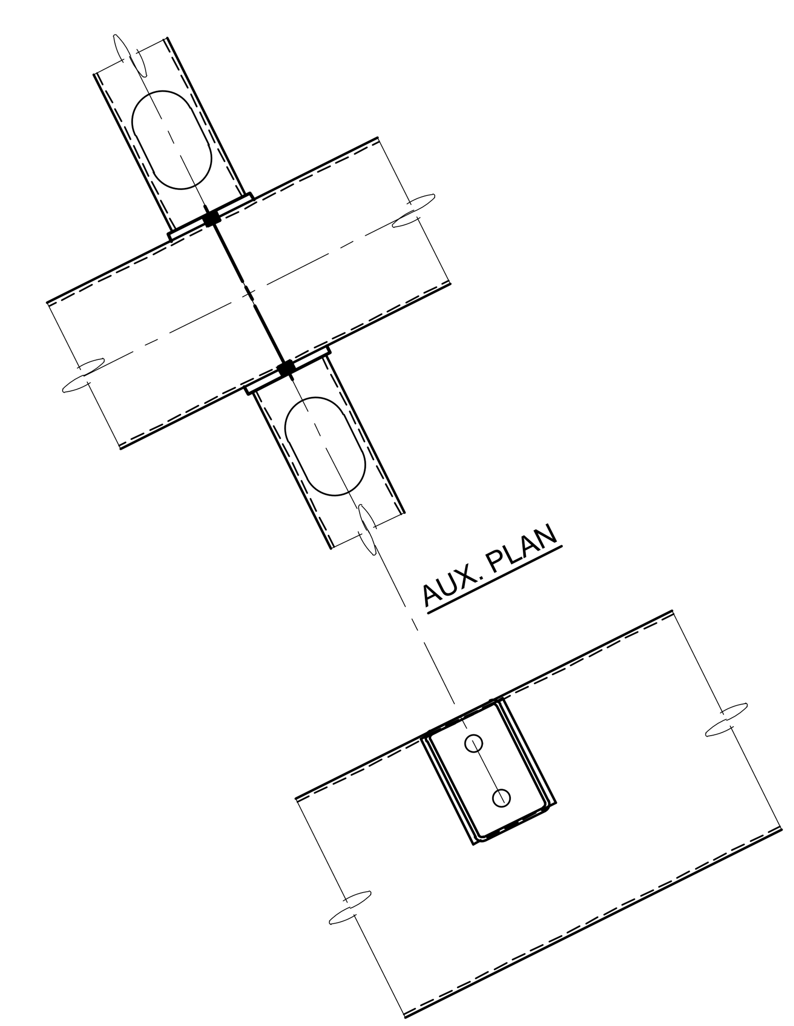
CONN S-1 7-req'd.

1 - MK-100 WELDED ASSEMBLY
4 - 3/4"Ø x 3" BOLT (WITHOUT NUT)
8 - 1"Ø x 4 1/2" BOLT (WITHOUT NUT)
4 - 1"Ø x 4 1/2" BOLT
4 - 1"Ø HEX NUT



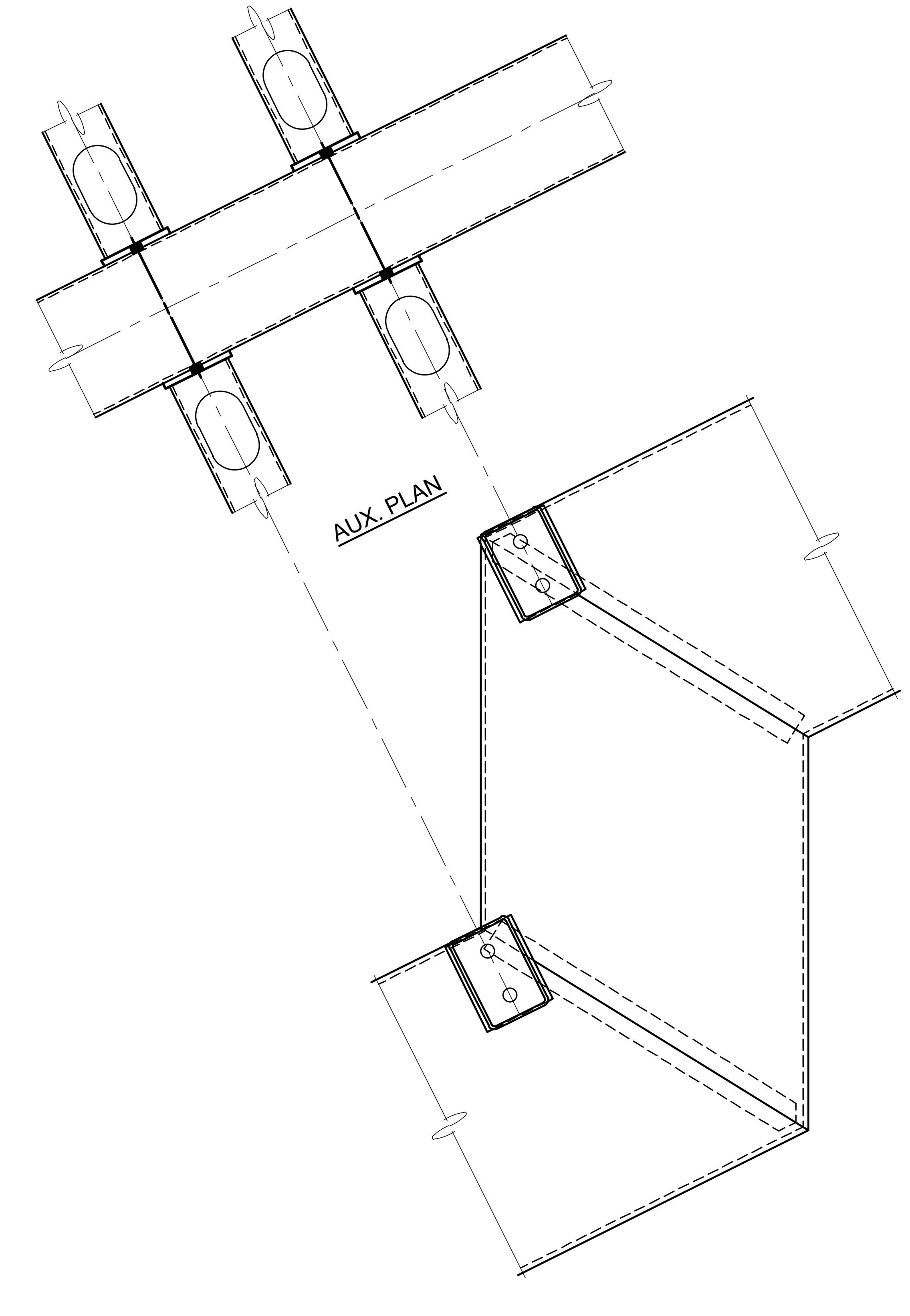
CONN S-2 14-req'd.

1 - CPA-3 5 1/2" SQUARE COVERPLATE ASSEMBLY
4 - 3/4"Ø x 3" BOLT (WITHOUT NUT)



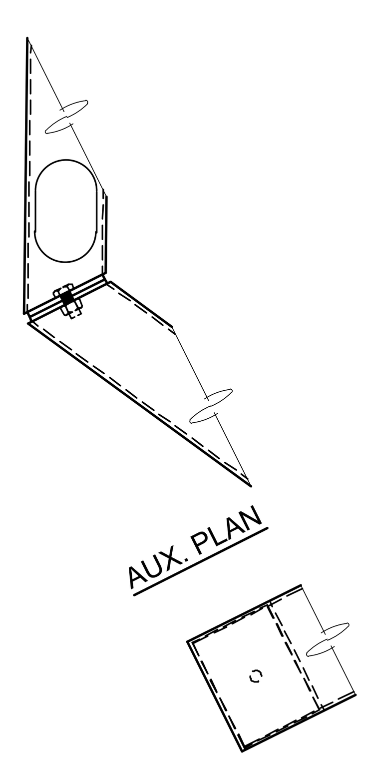
CONN S-3 56-req'd.

2 - 3/4"Ø x 10" BOLT
2 - 3/4"Ø HEX NUT



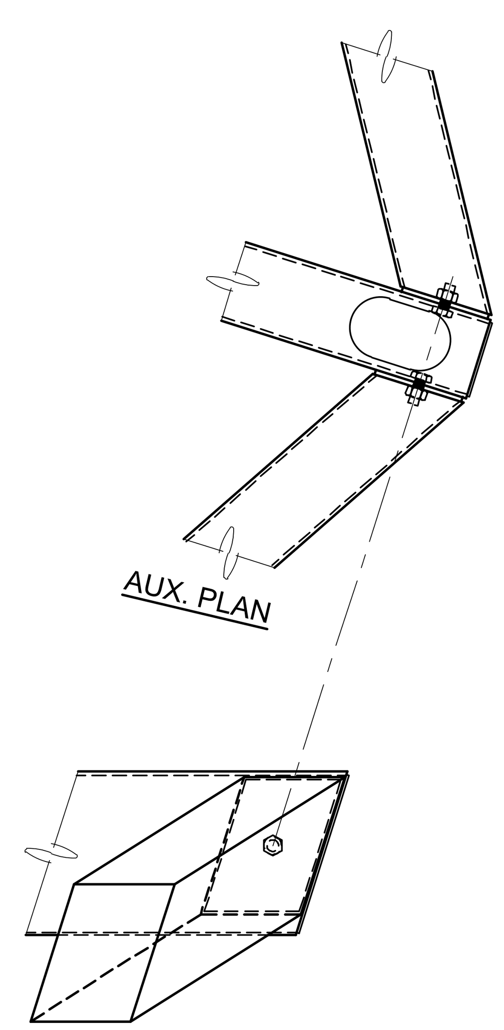
CONN S-4 14-req'd.

4 - 3/4"Ø x 10" BOLT
4 - 3/4"Ø HEX NUT



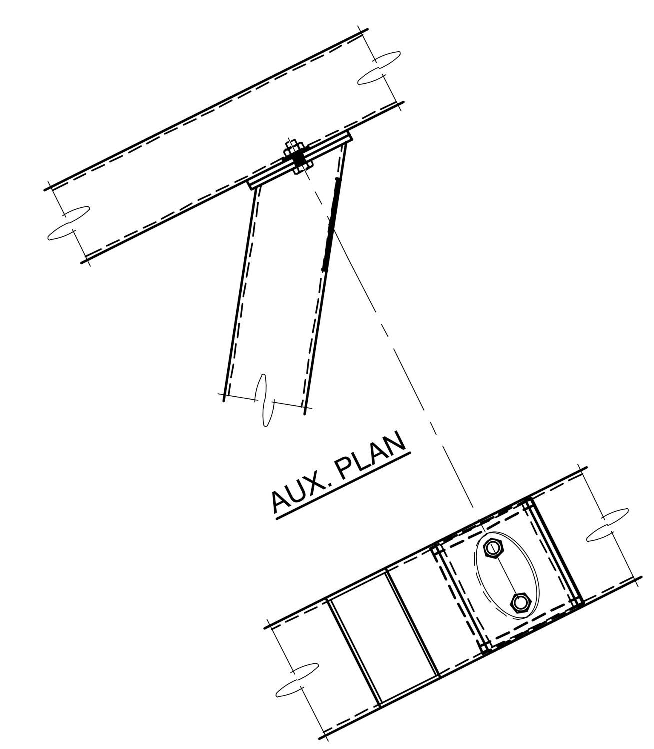
CONN S-5 4-req'd.

1 - 1/2"Ø x 1 1/4" BOLT (WITHOUT NUT)



CONN S-6 2-req'd.

2 - 1/2"Ø x 1 1/4" BOLT (WITHOUT NUT)

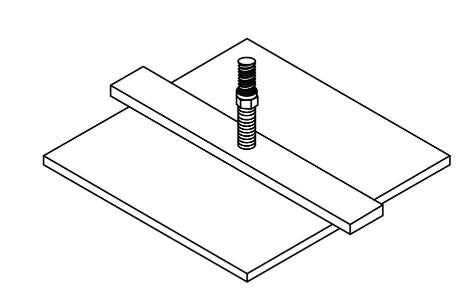


CONN S-7 4-req'd.

1 - CPA-2 5" SQUARE COVERPLATE ASSEMBLY
2 - 1/2"Ø x 1 1/4" BOLT (WITHOUT NUT)

ERECTOR NOTES:

1. BEFORE ATTACHING COVERPLATE ASSEMBLY, MAKE SURE THAT THE NUBS ON THE BACKER PLATE FACE THE COVER PLATE.
2. LOCK NUT IS PRESET IN SHOP, BUT CAN BE RE-ADJUSTED IN FIELD TO PROVIDE THE NECESSARY TENSION IN SPRING TO OBTAIN ADEQUATE FRICTION BETWEEN PLATE & BEAM FOR ERECTION.
3. PLACE COVERPLATE ASSEMBLIES ON TUBES CAREFULLY SO AS TO NOT SCRATCH THE PAINT ON TUBE.
4. ERECTION OF COVERPLATE ASSEMBLY:
   A. PUT ONE END OF BACKER PLATE THRU ACCESS HOLE AND BEHIND TUBE WALL.
   B. SHIFT ASSEMBLY TO ONE SIDE ONLY ACCESS HOLE SO THAT THE OTHER END OF THE BACKER PLATE CAN SLIDE THRU THE ACCESS HOLE AND BEHIND TUBE WALL. SUGGEST HOLDING A THIN PIECE OF CARDBOARD OR SIMILAR MATERIAL AGAINST TUBE TO PROTECT FROM SCRATCHING WHILE SLIDING COVERPLATE BACK AND FORTH INTO POSITION.
   C. POSITION ASSEMBLY SO THAT IT IS PARALLEL WITH TUBE AND NUBS ON BACKER PLATE SIT INSIDE THE ACCESS HOLE W/ BACKER PLATE ORIENTED AS NEAR VERTICAL AS POSSIBLE.
5. CAULK ALL AROUND COVERPLATE WITH A BEAD OF CLEAR SILICONE CAULK AFTER COVERPLATE IS PROPERLY POSITIONED.

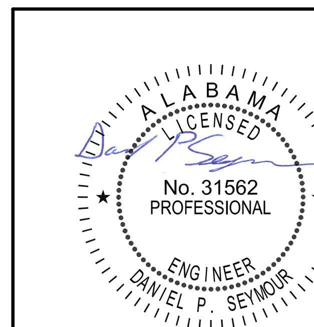


COVERPLATE ASSEMBLY
CPA-2 & CPA-3

HARDWARE PARTS LIST

QUANTITY	LOOSE OR ATTACH	HARDWARE DESCRIPTION	PART NO.	REMARKS
16	L	1/2"Ø x 1 1/4" BOLT	H325G 050 0125	
16	A	1/2"Ø HEX NUT	HN325G 050-13	
84	L	3/4"Ø x 3" BOLT	H325G 075 0300	
168	L	3/4"Ø x 10" BOLT	H325G 075 1000	
84	A	3/4"Ø HEX NUT	HN325G 075-10	
168	L	3/4"Ø HEX NUT	HN325G 075-10	
84	L	1"Ø x 4 1/2" BOLT	H325G 100 0450	
56	A	1"Ø HEX NUT	HN325G 100-8	
28	L	1"Ø HEX NUT	HN325G 100-8	
4	L	5" SQ. COVERPLATE ASSEMBLY	CPA-2	
14	L	5 1/2" SQ. COVERPLATE ASSEMBLY	CPA-3	
5840	L	1/4"-20 x 2 3/4" THREAD CUTTING SCREW	HTCSF 025 0275	#1
·	L	10d HDG CASING NAIL (0.128"ø x 3")	·	N.I.C., HDG
·	L	16d SINKER NAIL (0.148"ø x 3 1/4")	·	N.I.C.
112	L	1 1/2"Ø x 36" (F1554 GR. 36) THREADED ROD	·	N.I.C., HDG
112	L	1/2" x 5" SQ. WASHER	·	N.I.C., HDG
448	L	1 1/2"Ø HEX NUT A563A (ANCHOR & LEVELING)	·	N.I.C., HDG

HARDWARE NOTES:
1. ALTERNATE FASTENERS ALLOWED. SEE TYPICAL WOOD DECK ATTACHMENT NOTE ON SHOP DRAWINGS.



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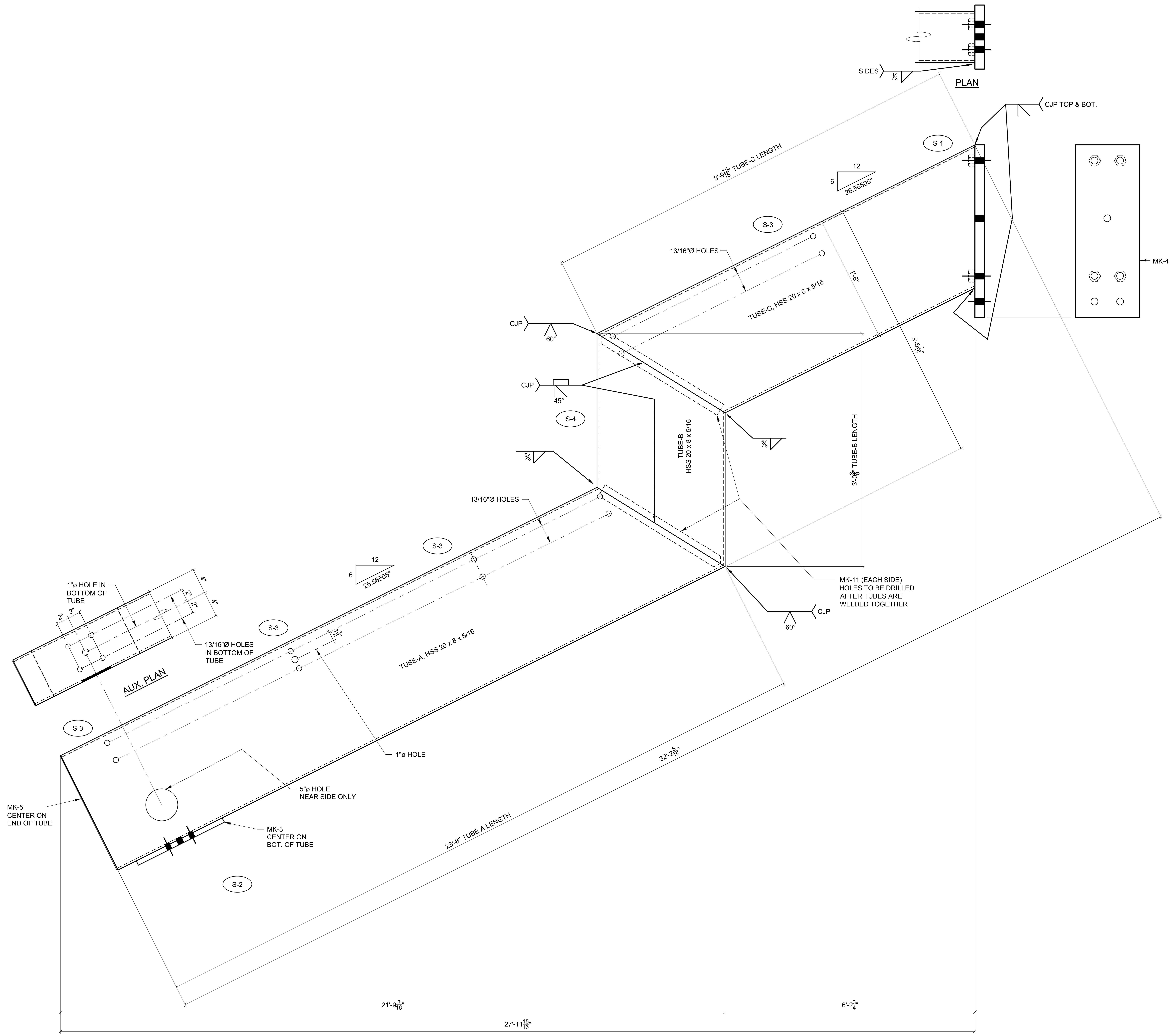
www.rcpshelters.com E-mail - info@rcpshelters.com

PROJ. NO.: 23-199-A

DRAWN:	JCS	11-28-23
CHK'D:	DPP	12-1-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:		14836R5
EEC JOB NO.:		14836 R

SHEET NO.: 5 OF



BEAM B-1 14-req'd.

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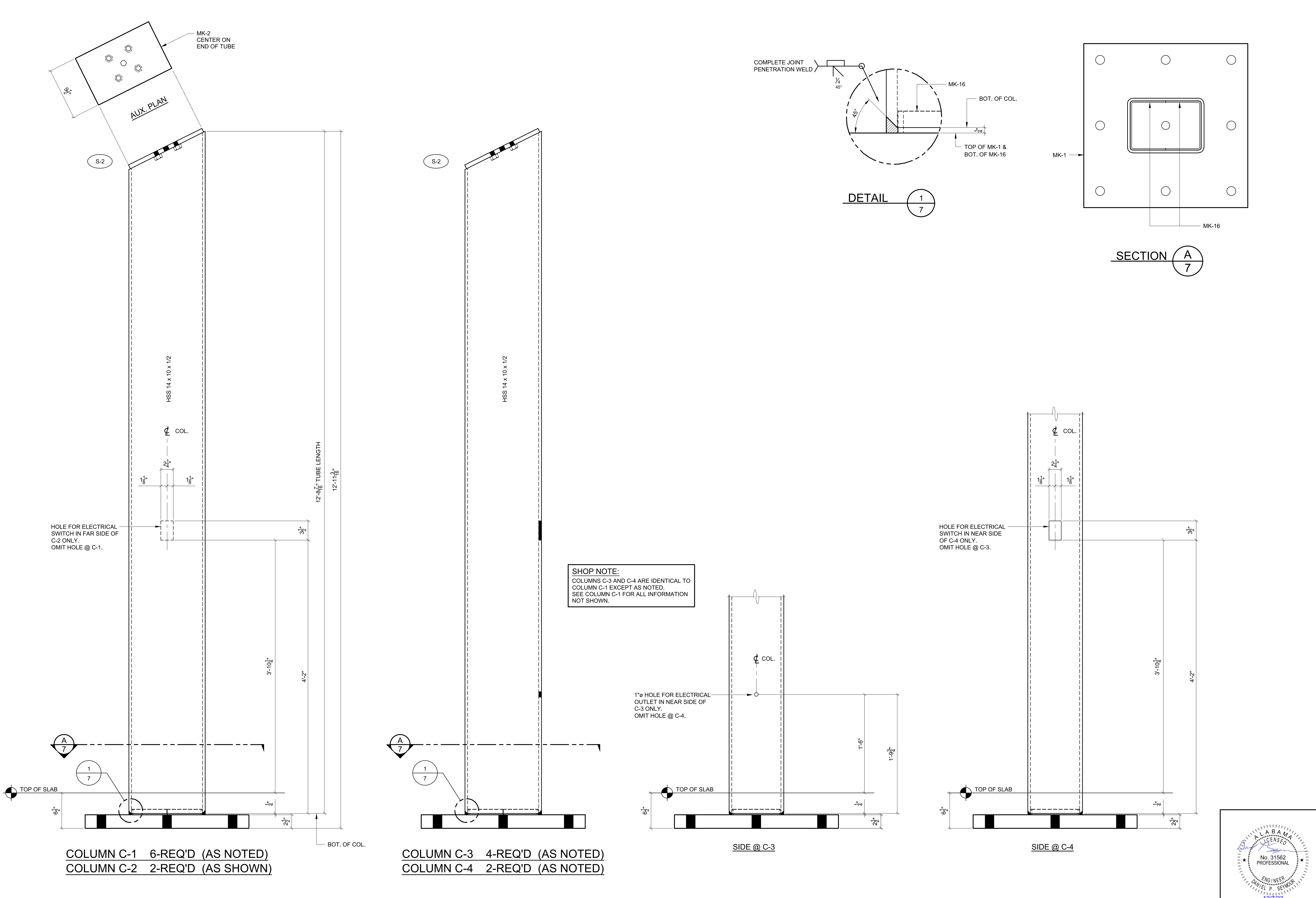
PROJ. NO.:	23-199-A	
DRAWN:	JCS	11-28-23
CHK'D:	DPP	12-1-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14836R6	
EEC JOB NO.:	14836 R	
SHEET NO.:	6 OF	

ALABAMA LICENSED No. 31562 PROFESSIONAL ENGINEER DANIEL P. SEYMOUR
12/7/23



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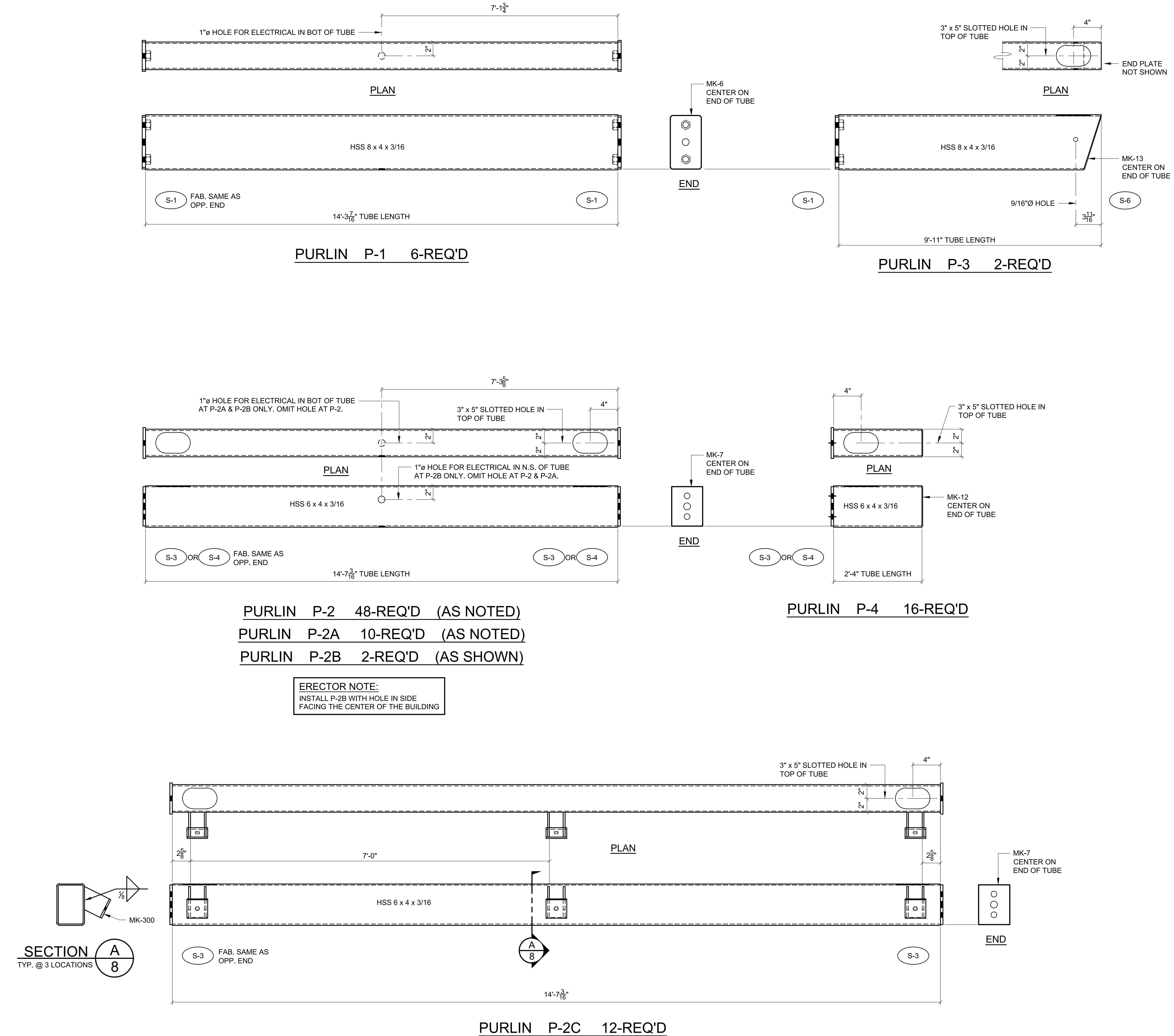
PROJ. NO.:	23-199-A	
DRAWN:	JCS	11-28-23
CHK'D:	DPP	12-1-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14836R7	
EEC JOB NO.:	14836 R	
SHEET NO.:	7 OF	



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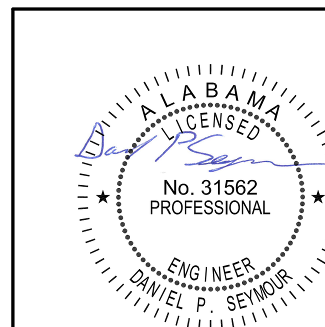

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CHK'D:	DPP	12-1-23
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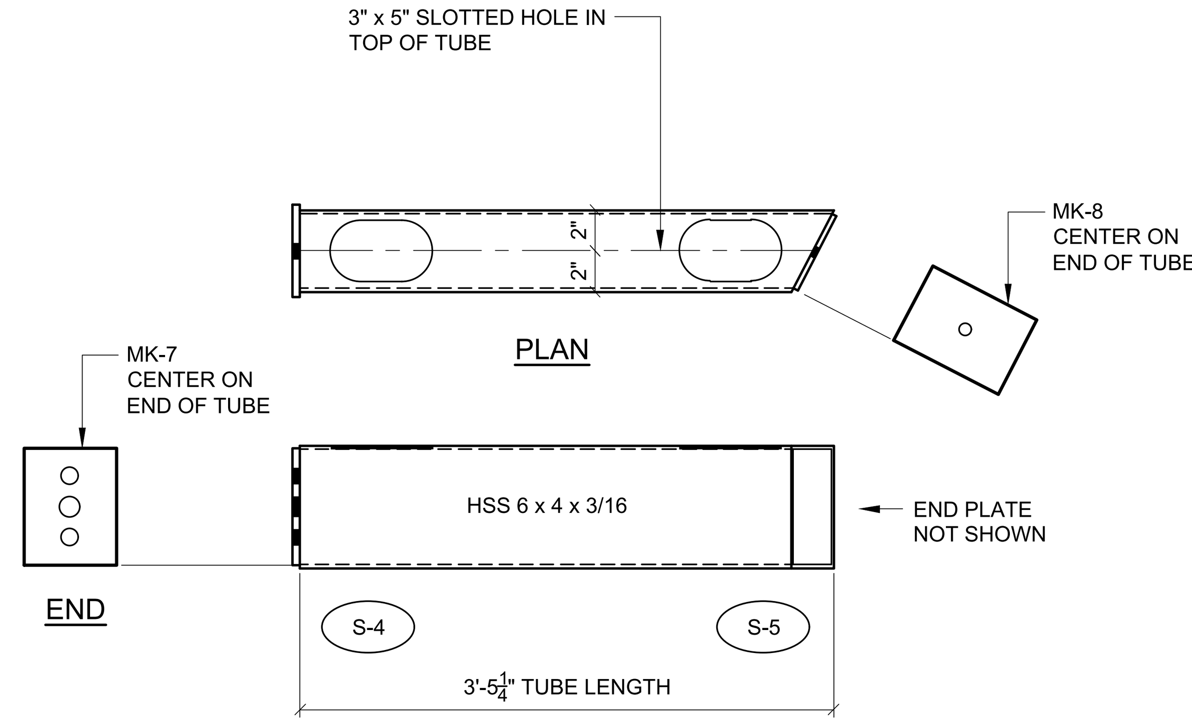
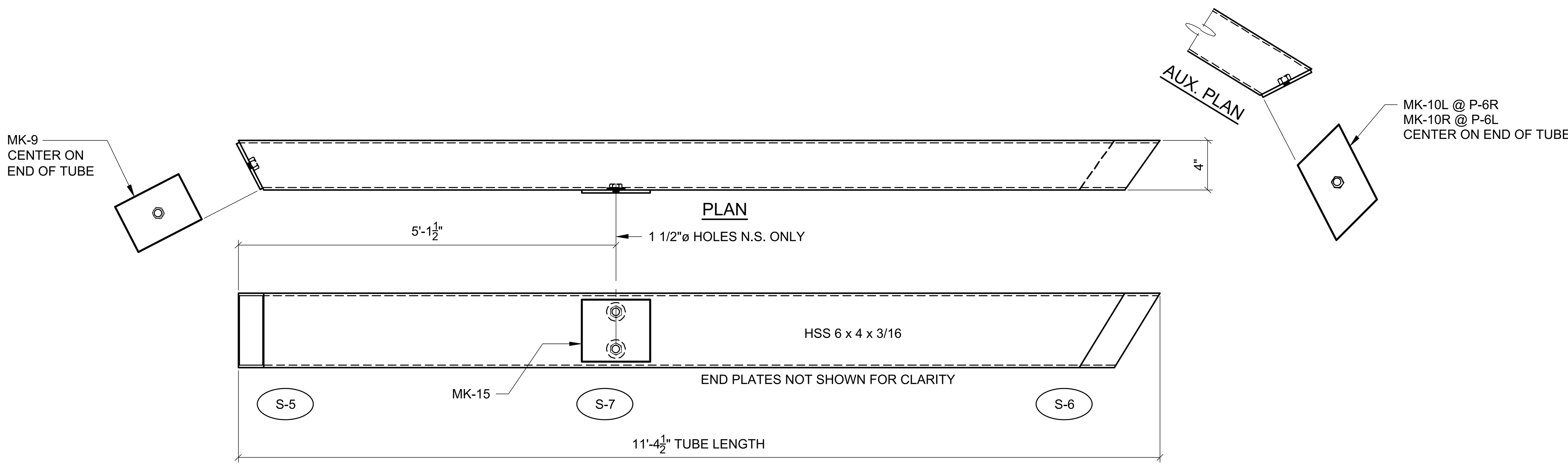
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14836R8	
EEC JOB NO.:	14836 R	
SHEET NO.:	8 OF	



PURLIN P-5R 2-REQ'D (AS SHOWN)
PURLIN P-5L 2-REQ'D (OPPOSITE)



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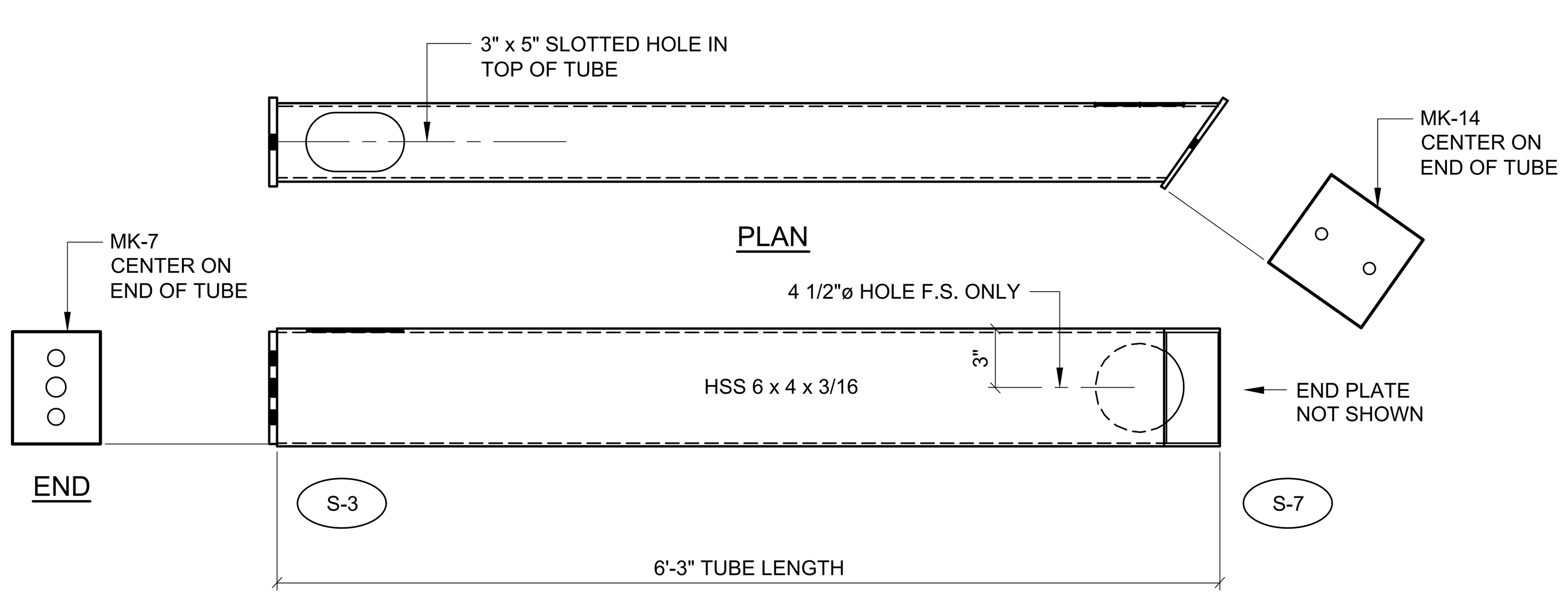
PURLIN P-6L 2-REQ'D (OPPOSITE)



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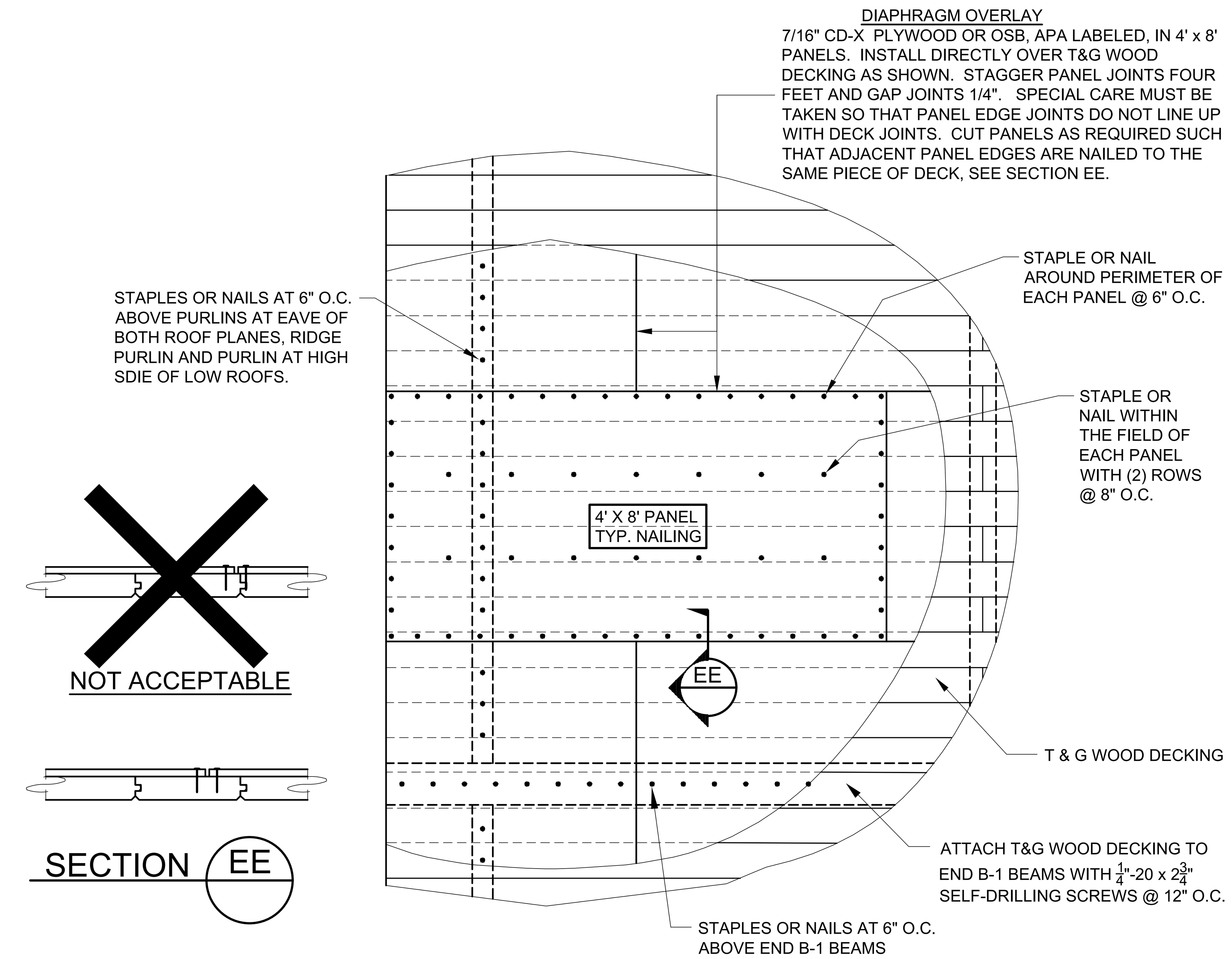
PURLIN P-7L 2-REQ'D (OPPOSITE)



ROOF DIAPHRAGM DETAIL (N.I.C. BY OTHERS)

GENERAL NOTES REGARDING ROOF DIAPHRAGM:

1. T&G DECKING SHALL BE INSTALLED PER SUPPLIER'S SPECIFICATIONS USING COMMON OR RING SHANK NAILS.
2. INSTALL DIAPHRAGM PANELS (PLYWOOD/OSB) (NOT FURNISHED BY RCP) DIRECTLY OVER T&G WOOD DECK. STAGGER JOINTS APPROXIMATELY 4 FT. PROVIDE 1/4" GAP AT ALL JOINTS.
3. STAPLES SHALL BE 16 GAUGE x 1 1/2" WITH 7/16" MIN. O.D. CROWN.
4. STAPLES SHALL BE INSTALLED WITH THEIR CROWNS PARALLEL TO THE LONG DIMENSION OF THE FRAMING MEMBERS.
5. NAILS SHALL BE 0.131"Ø x 1 1/2".
6. PROTECT SHEATHING WITH ROOF UNDERLAYMENT IMMEDIATELY AFTER INSTALLATION.

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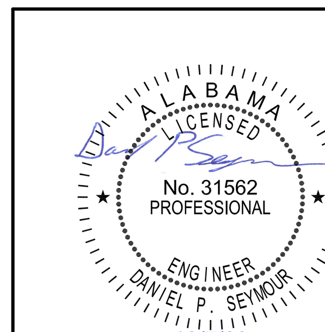
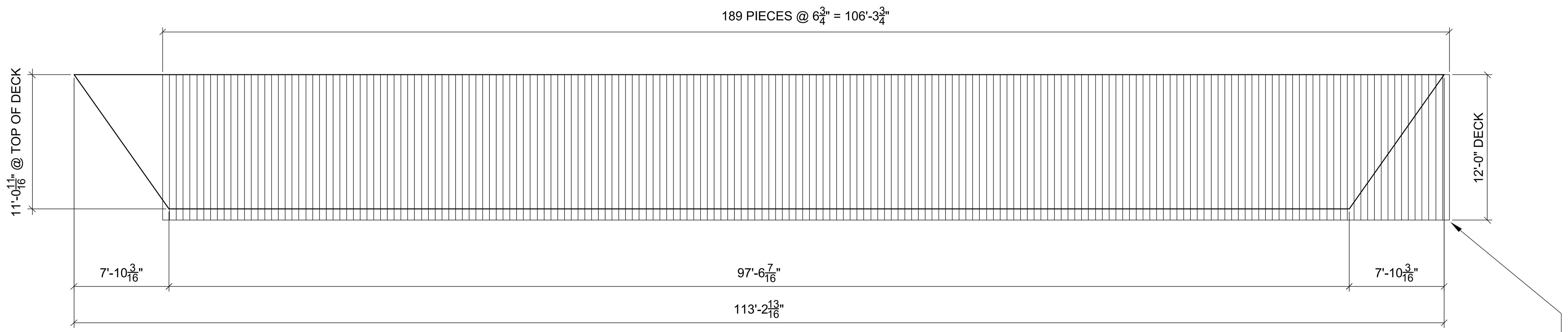


PROJ. NO.:	23-199-A	
DRAWN:	JCS	11-28-23
CHK'D:	DPP	12-1-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14836R9	
EEC JOB NO.:	14836 R	
SHEET NO.:	9 OF	

UNLOADING, HANDLING & STORAGE OF DECKING

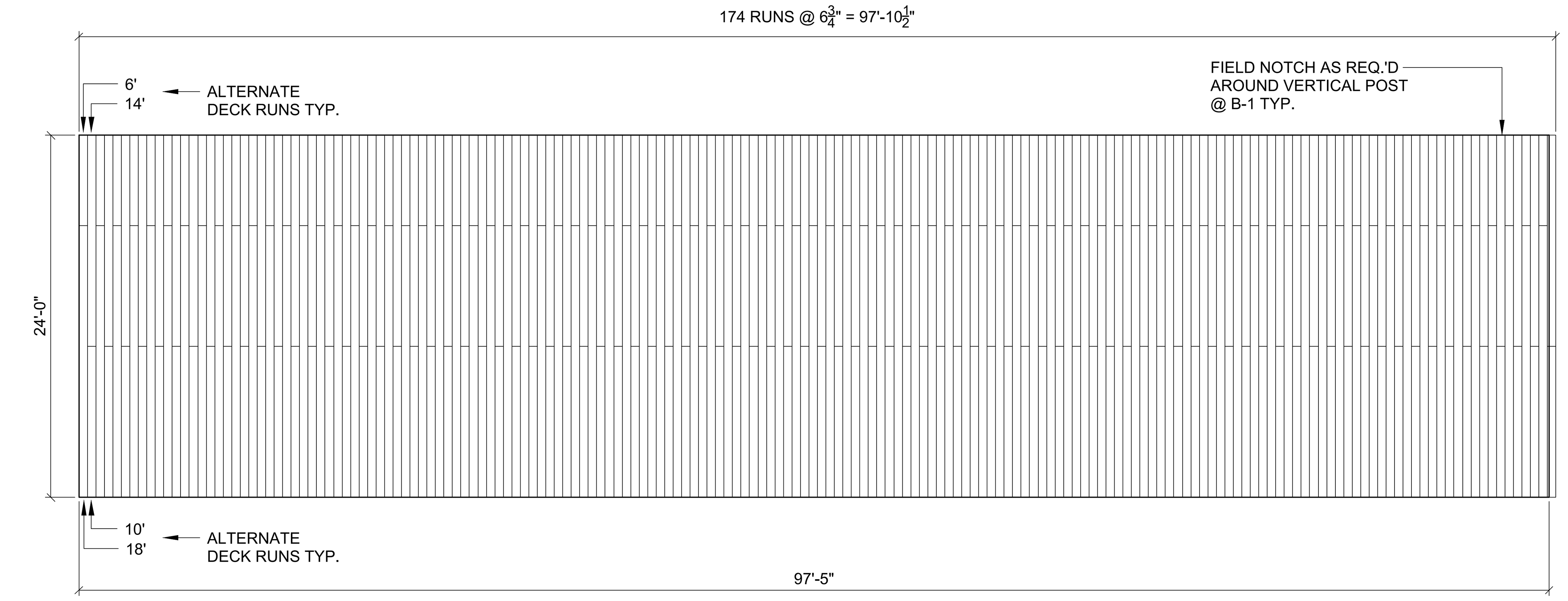
DECKING WILL BE DELIVERED IN BANDED BUNDLES, WEIGHING APPROXIMATELY TWO TONS. BUNDLES SHOULD REMAIN BANDED UNTIL DECK IS TO BE INSTALLED. A FORKLIFT OR SMALL CRANE WILL BE REQUIRED FOR UNLOADING. BE SURE TO USE NON-MARRING SLINGS. IF STORED TEMPORARILY, DECK SHOULD BE PLACED ON BLOCKS & LEVELED, WELL OFF OF THE GROUND. IF WOOD DECKING IS WET &/OR STAINED, CONTACT RCP SHELTERS AND DO NOT INSTALL DECK.

IT IS THE ERECTORS RESPONSIBILITY TO TALLY THE DECKING UPON ARRIVAL. NOTIFY "RCP SHELTERS" AT ONCE OF ANY SHORTAGES.



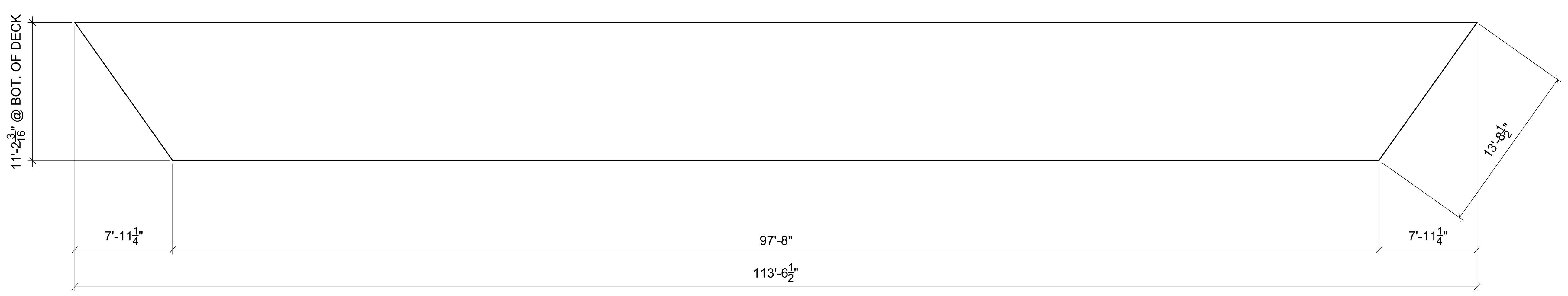
TRUE HIGH WOOD ROOF DECK PLAN 2-req'd.

SCALE: 1/8" = 1'-0"



TRUE LOW WOOD ROOF DECK PLAN 2-req'd.

SCALE: 1/8" = 1'-0"



TRUE HIGH METAL ROOF DECK PLAN 2-req'd.

SCALE: 1/8" = 1'-0"

METAL DECK SUPPLIER NOTE:
STANDING SEAM METAL ROOF PLANS HAVE BEEN FIGURED FLUSH WITH EXTERIOR FACE OF FASCIA. INSTALLER OF ROOF PANELS TO DETERMINE NECESSARY OVERHANG IF REQUIRED AND ADD LENGTH TO THE ROOF PANELS AS REQUIRED.

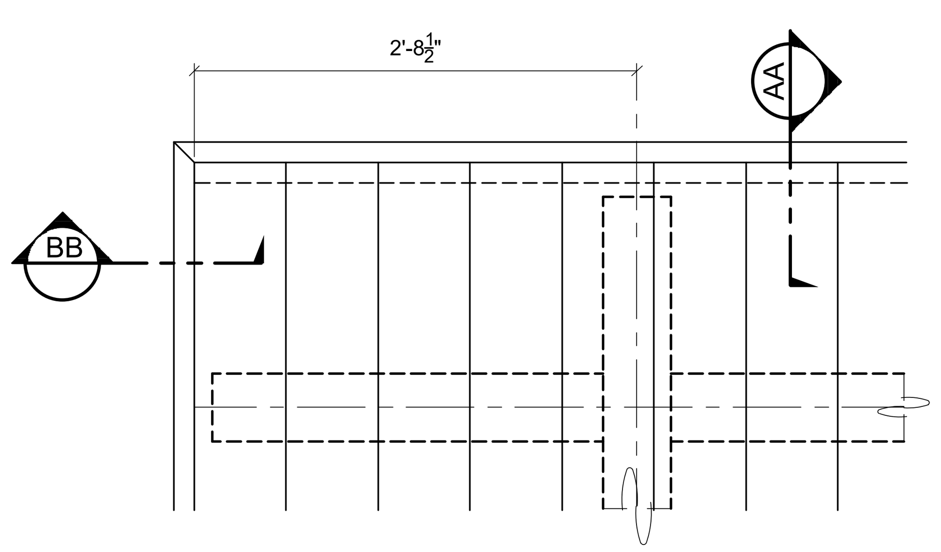
METAL DECK NOTE:
METAL DECK SUPPLIER TO DETERMINE ALL OVERHANGS, REQUIRED FLASHING & ROOFING CAPS.

TRUE LOW METAL ROOF DECK PLAN 2-req'd.

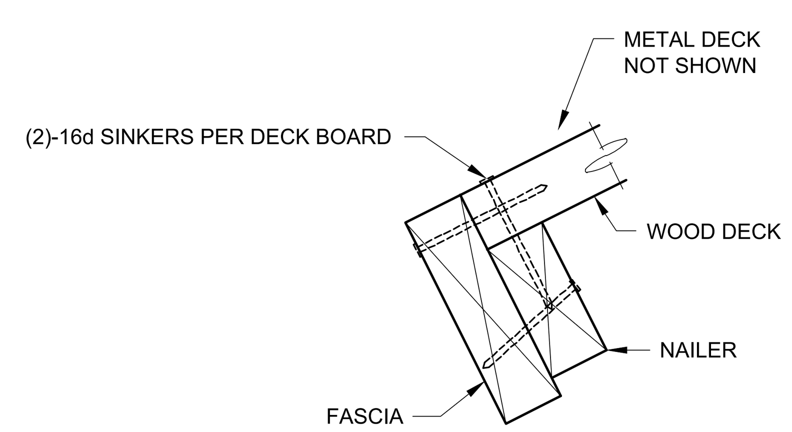
SCALE: 1/8" = 1'-0"

TYPICAL DECK LAY-UP

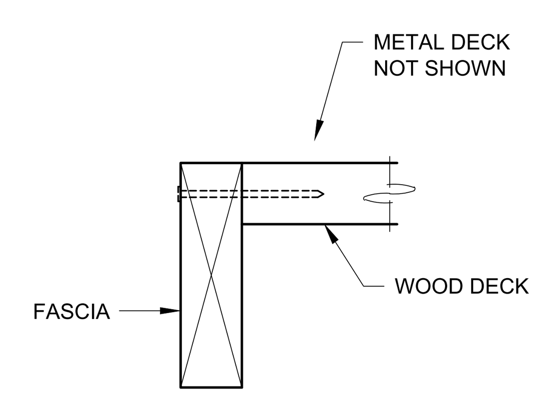
1. START LAYING DECK AT RAKE W/ TONGUES OUT.
2. DRIVE COURSES TIGHT W/ BLOCKING.
3. ATTACH DECKING PER DETAILS ON THIS SHEET.
4. SNAP CHALK LINE AT BUILDING EAVE & CUT DECKING STRAIGHT AND SQUARE.
5. DECKING IS FURNISHED IN SPECIFIED LENGTHS.



DECK PLAN AT CORNERS



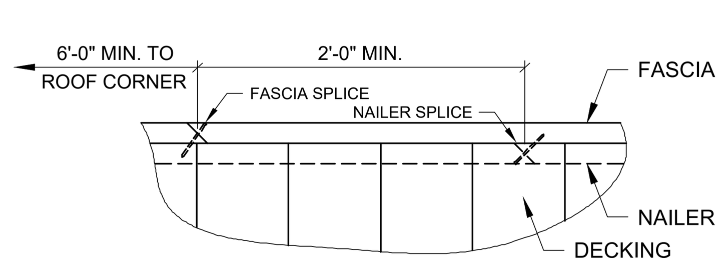
SECTION AA



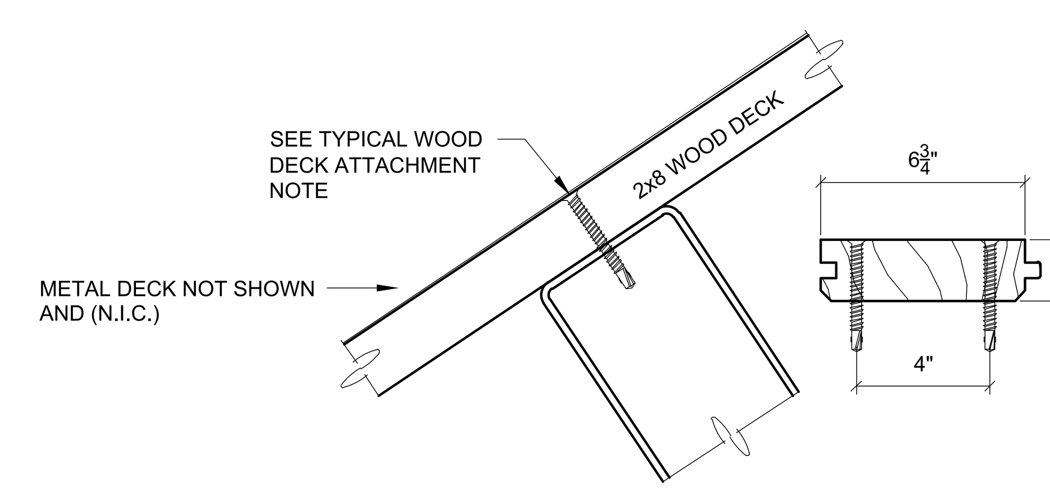
SECTION BB

FASCIA NOTES:
1. ALL FASCIA CORNERS AND SPLICES ARE TO BE MITERED.
2. SEE DETAIL A FOR SPLICE DETAIL, IF SPLICE IS REQUIRED.
3. ATTACH FASCIA WITH 10d HDG CASING NAILS:
   a. TO 2x4 NAILER - 24" O.C.
   b. TO ENDS OF ROOF DECKING - 1 NAIL PER DECK BOARD
   c. AT CORNERS - 2 NAILS EACH DIRECTION
   d. OTHER LOCATIONS - 24" O.C. TO ROOF DECKING

2 x 4 NAILER (IF SPLICE REQ'D)
A. MITER ALL SPLICES
B. NAIL SPLICES TOGETHER WITH (2) 10d HDG CASING NAILS, DRIVE NAILS AT AN ANGLE TO AVOID PUNCHING THRU FASCIA.

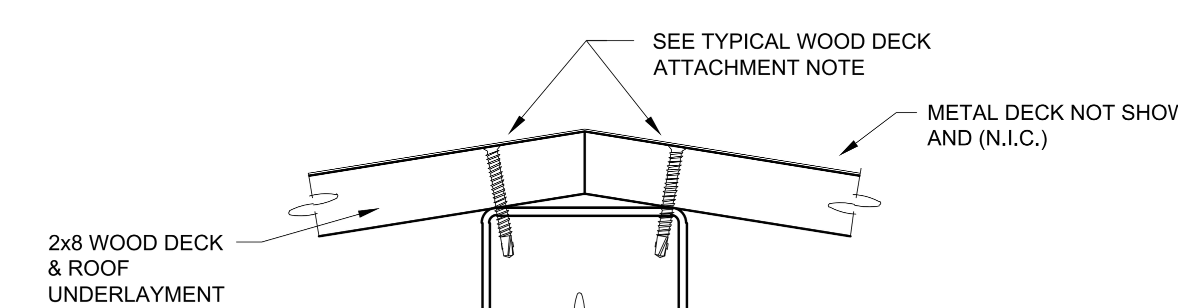


DETAIL A



DECK ATTACHMENT DETAIL @ BEAM

TYPICAL WOOD DECK ATTACHMENT NOTE
ATTACH EACH PIECE OF DECK TO EACH SUPPORT WITH (2) ¼"-20 x 2¾" SELF-DRILLING SCREWS. DRILL PILOT HOLES AS REQ'D.
ALTERNATE FASTENERS ALLOWED:
1. HILTI X-U 52 (2" LONG) FASTENERS.
2. RAMSET 1514 (2" LONG) FASTENERS.
FASTENERS MUST BE INSTALLED WITH A MANUFACTURER APPROVED FASTENING TOOL.
FASTENERS MUST PENETRATE TOP WALL OF TUBES.



DECK ATTACHMENT @ RIDGE BEAM

SECTION AT RIDGE BEAM

THE ACTUAL ROOF PITCH MAY VARY FROM THIS GENERAL DETAIL.

ALABAMA LICENSED No. 31562 PROFESSIONAL ENGINEER DANIEL P. SEYMOUR
12/7/23

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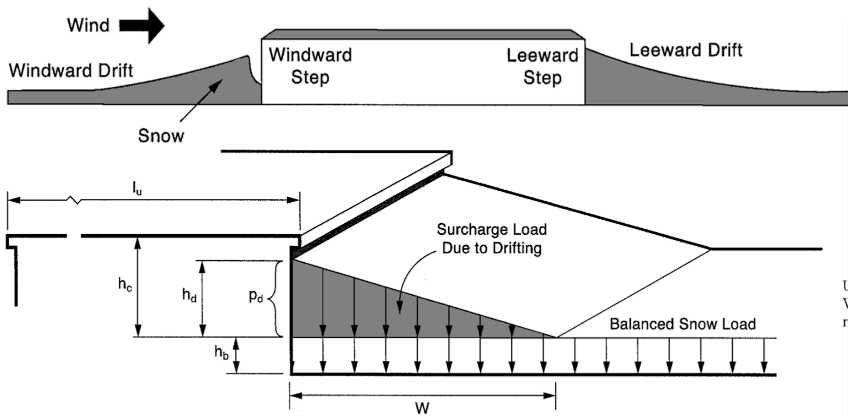
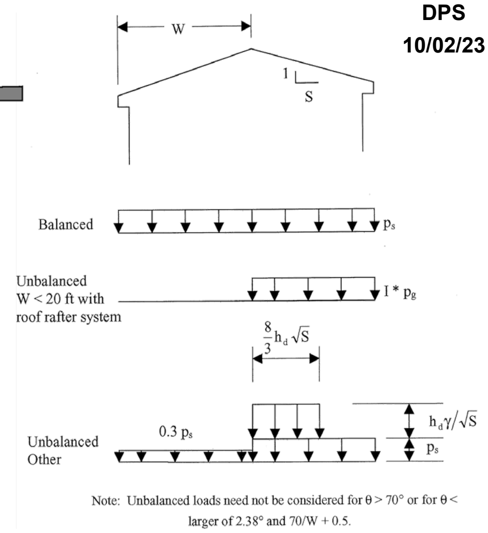
PROJ. NO.:	23-199-A	
DRAWN:	JCS	11-28-23
CHK'D:	DPP	12-1-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14836R10	
EEC JOB NO.:	14836 R	
SHEET NO.:	10 OF 10	

ASCE 7-05 SNOW DRIFTING





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UNBALANCED SL

input GROUND SNOW	**Pg =**	**10**	(psf)	
input IMPORTANCE FACTOR	**I =**	**1.0**		(ASCE 7-05 Table 7-4)
input EXPOSURE FACTOR	**Ce =**	**1.0**		(ASCE 7-05 Table 7-2)
input THERMAL FACTOR	**Ct =**	**1.2**		(ASCE 7-05 Table 7-3)
input LOW ROOF PITCH	**Pitch =**	**6**		
input LEN.OF HIGH ROOF FOR LEEWARD DRIFT	**lu =**		(ft)	(HIGH ROOF LENGTH UPWIND OF LEEWARD DRIFT)
input LEN.OF LOW ROOF FOR WINDWARD DRIFT	**lu =**		(ft)	(LOW ROOF LENGTH UPWIND OF WINDWARD DRIFT)
input DIFFERENTIAL HEIGHT	**hr =**		(ft)	
input ROOF SURFACE TYPE		**TYPICAL**		
LOW ROOF SLOPE	**RS =**	26.57	(deg)	

****

input LEN. OF HIGH ROOF (EAVE TO RIDGE)	**W =**	**30**	(ft)	**(FOR UNBALANCED SNOW & SLIDING SNOW)**
	hd =	1.326	(ft)	**(FOR UNBALANCED SNOW)**
	S =	2		
	Low Slope Roof Angle =	2.83	(deg)	
				(HIP & GABLE ROOFS ONLY)
FLAT LOW ROOF SNOW Pf=0.7(Ce)Ct(I)Pg		**8.4**	(psf)	Pf(min.)=(I)Pg for Pg<=20 OR Pf(min.)=20(I) for Pg>20 when Roof Slope<=2.83
SLOPE ROOF SNOW Ps=Cs(Pf)		**8.40**	(psf)	
	Cs =	**1.000**		(See ASCE 7-05 Figure 7-2)
HEIGHT OF BASE SNOW				
hb=Ps/D		0.549	(ft)	
D=.13(Pg)+14 < 30		15.3	(pcf)	
hc=hr-hb		-0.549	(ft)	

****

"LEEWARD SNOW DRIFT"

HEIGHT OF SNOW DRIFT			WIDTH OF SNOW DRIFT				
0.43*(lu)^1/3*(Pg+10)^1/4-1.5=hd	hd =	0.000	(ft)	w =	0.00	(ft)	**w = 4*(0.43*(lu)^1/3*(Pg+10)^1/4-1.5)^2/(hc)**
(if lu <= 25 THEN lu=25)	lu =	25	(ft)				
(if hc<0.2(hb) then hd=0)							
(also hd<=(hc))	hc =	-0.549		hd =	0.00		

****

"WINDWARD SNOW DRIFT"

HEIGHT OF SNOW DRIFT			WIDTH OF SNOW DRIFT				
(0.43*(lu)^1/3*(Pg+10)^1/4-1.5)*0.75=hd	hd =	0.000	(ft)	w =	0.00	(ft)	**w = 4*((0.43*(lu)^1/3*(Pg+10)^1/4-1.5)*0.75)^2/(hc)**
(if lu <= 25 THEN lu=25)	lu =	25	(ft)				
(if hc<0.2(hb) then hd=0)							
(also hd<=(hc))	hc =	-0.549		hd =	0.00		

****

MAXIMUM INTENSITY

	Pb =	**8.4**	psf	
	Pd =	**0.0**	psf	hd = 0.00
		----------------		wd = **0.00**
Pm=D(hb+hd) BASE + DRIFT:	Pm =	**8.4**	psf	
	Sliding Snow =	**0.0**	psf	w = **15 (ft)**

****

UNBALANCED SNOW LOAD	**WS**	**LS**		
	0.3*Ps = **2.5 psf**	Ps = **8.4 psf**		
		hd*D/S^0.5 = **14.3 psf**	Length = 8/3*hd*S^0.5 =	**5.00** ft

OPEN BUILDING WIND PRESSURE FROM ASCE 7-05 (MWFRS)
(Gable Roof with 7.5º[θ[45º)
(0.25 [h/L [1.0)
$P = q_h * G * C_N$

Wind Flow	**CLEAR**		
Wind Speed	**90**	mph	
Mean Roof Height (h)	**19.5**	ft	
Roof Length (L)	**60**	ft	
Importance	**1.00**	------------->	
Roof Pitch	**6**		
Exposure Factor	**D**		
Kzt	**1.00**	Refer to 6.5.7	
Kd	**0.85**	Table 6-4	
Kz	**1.08**	**h/L =**	**0.33**
G	**0.85**		

Category	Non-Hurricane Prone Regions and Hurricane Prone Regions with V = 85-100 mph and Alaska	Hurricane Prone Regions with V > 100 mph
I	0.87	0.77
II	1.00	1.00
III	1.15	1.15
IV	1.15	1.15

MAIN ROOF

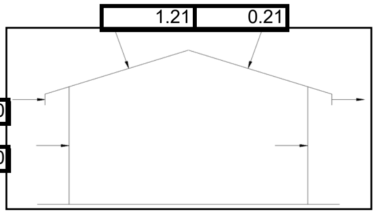
qz = **19.04** psf   qz = 0.00256(Kz)Kzt(Kd)I(V)^2
Roof Angle = 26.5651 Degrees

C_N

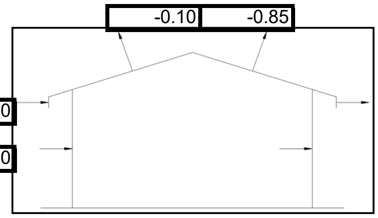
PERPENDICULAR TO THE RIDGE

1.21 | 0.21   -0.10 | -0.85

1.00   -0.80 | 1.00   -0.80
1.80   -1.80 | 1.80   -1.80



CASE 'A'

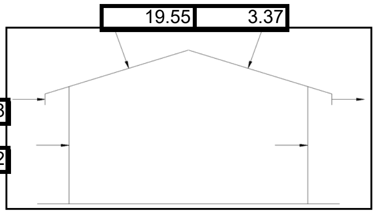


CASE 'B'

PRESSURES (psf)

19.55 | 3.37   -1.62 | -13.82

16.18   -12.94 | 16.18   -12.94
29.12   -29.12 | 29.12   -29.12



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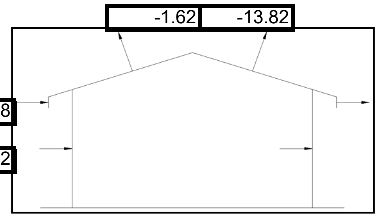
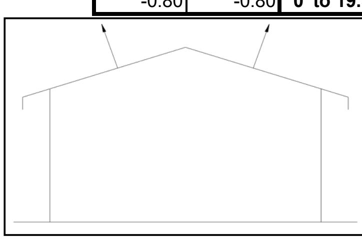


CASE 'B'

C_N

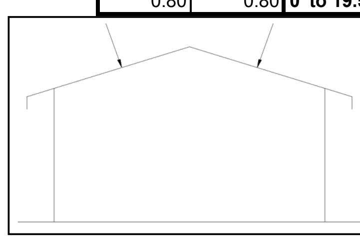
PARALLEL TO THE RIDGE

		Horz. Dist. From Windward Edge
-0.30	-0.30	> 39'
-0.60	-0.60	19.5' to 39'
-0.80	-0.80	0' to 19.5'



CASE 'A'

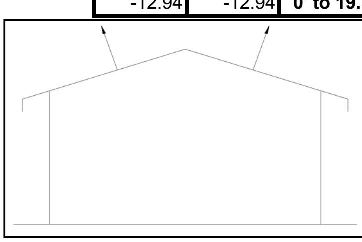
		Horz. Dist. From Windward Edge
0.30	0.30	> 39'
0.50	0.50	9.5' to 39'
0.80	0.80	0' to 19.5'



CASE 'B'

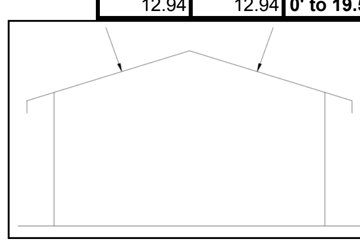
PRESSURES (psf)

		Horz. Dist. From Windward Edge
-4.85	-4.85	> 39'
-9.71	-9.71	19.5' to 39'
-12.94	-12.94	0' to 19.5'



CASE 'A'

		Horz. Dist. From Windward Edge
4.85	4.85	> 39'
8.09	8.09	9.5' to 39'
12.94	12.94	0' to 19.5'



CASE 'B'

OPEN BUILDING WIND PRESSURE FROM ASCE 7-05 (MWFRS)
(Gable Roof with 7.5º ≤ θ ≤ 45º)
(0.25 ≤ h/L ≤ 1.0)
$P = q_h*G*C_N$

Wind Flow	**CLEAR**	
Wind Speed	**90**	mph
Mean Roof Height (h)	**28.5**	ft
Roof Length (L)	**28.5**	ft
Importance	**1.00**	------------->
Roof Pitch	**6**	
Exposure Factor	**D**	
Kzt	**1.00**	Refer to 6.5.7
Kd	**0.85**	Table 6-4
Kz	**1.15**	
G	**0.85**	

Category	Non-Hurricane Prone Regions and Hurricane Prone Regions with V = 85-100 mph and Alaska	Hurricane Prone Regions with V > 100 mph
I	0.87	0.77
II	1.00	1.00
III	1.15	1.15
IV	1.15	1.15

h/L = **1.00**

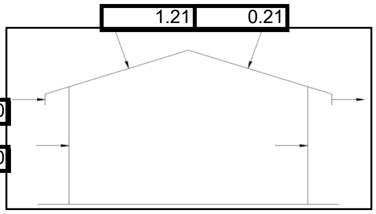
HIGH ROOF

qz = **20.27** psf qz = 0.00256(Kz)Kzt(Kd)I(V)^2
Roof Angle = 26.5651 Degrees

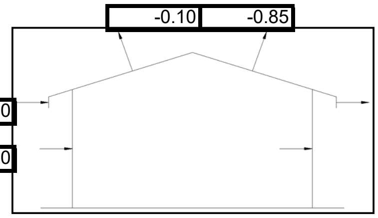
C_N

PERPENDICULAR TO THE RIDGE

Case 'A': roof 1.21 | 0.21; windward wall 1.00, 1.80; leeward wall -0.80, -1.80



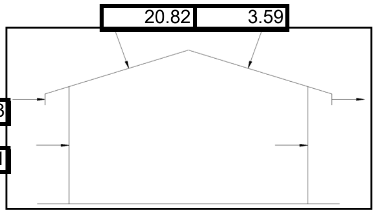
Case 'B': roof -0.10 | -0.85; windward wall 1.00, 1.80; leeward wall -0.80, -1.80



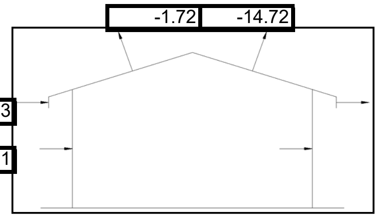
CASE 'A' **CASE 'B'**

PRESSURES (psf)

Case 'A': roof 20.82 | 3.59; windward wall 17.23, 31.01; leeward wall -13.78, -31.01



Case 'B': roof -1.72 | -14.72; windward wall 17.23, 31.01; leeward wall -13.78, -31.01

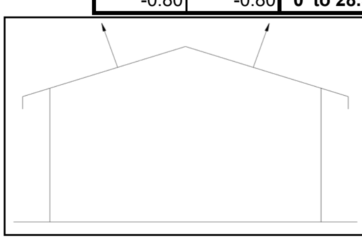


CASE 'A' **CASE 'B'**

C_N

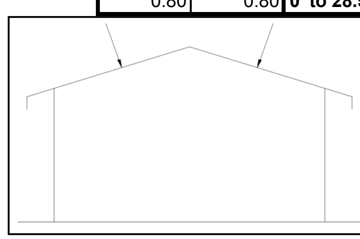
PARALLEL TO THE RIDGE

		Horz. Dist. From Windward Edge
-0.30	-0.30	> 57'
-0.60	-0.60	28.5' to 57'
-0.80	-0.80	0' to 28.5'



CASE 'A'

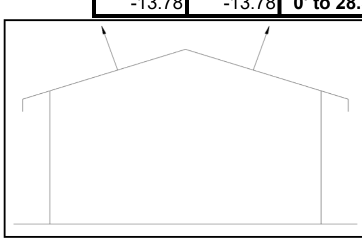
		Horz. Dist. From Windward Edge
0.30	0.30	> 57'
0.50	0.50	28.5' to 57'
0.80	0.80	0' to 28.5'



CASE 'B'

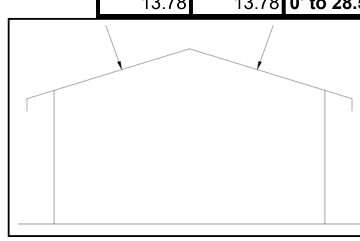
PRESSURES (psf)

		Horz. Dist. From Windward Edge
-5.17	-5.17	> 57'
-10.34	-10.34	28.5' to 57'
-13.78	-13.78	0' to 28.5'



CASE 'A'

		Horz. Dist. From Windward Edge
5.17	5.17	> 57'
8.61	8.61	28.5' to 57'
13.78	13.78	0' to 28.5'



CASE 'B'

OPEN BUILDING COMPONENT & CLADDING PRESSURE FROM ASCE 7-05

(Pitched Roof with θ[45°)
(0.25 [h/L [1.0)
$P = q_h*G*C_N$

Wind Flow	**CLEAR**	
Wind Speed	**90**	mph
Mean Roof Height (h)	**19.5**	ft
Roof Length (L)	**60**	ft
Importance	**1.00**	------------->
Roof Pitch	**6**	
Exposure Factor	**D**	
Kzt	**1.00**	Refer to 6.5.7
Kd	**0.85**	Table 6-4
Kz	**1.08**	
G	**0.85**	

Category	Non-Hurricane Prone Regions and Hurricane Prone Regions with V = 85-100 mph and Alaska	Hurricane Prone Regions with V > 100 mph
I	0.87	0.77
II	1.00	1.00
III	1.15	1.15
IV	1.15	1.15

h/L = 0.33

MAIN ROOF

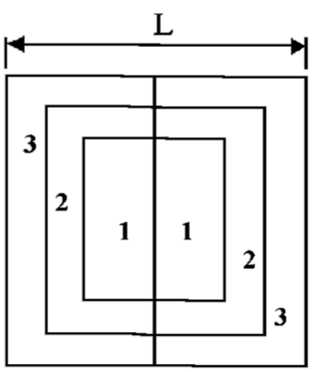
qz = **19.04** psf qz = 0.00256(Kz)Kzt(Kd)I(V)^2
Roof Angle = 26.5651 Degrees

C_N

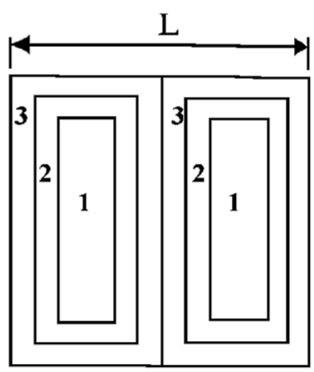
Effective Wind Area	Zone 3	Zone 3	Zone 2	Zone 2	Zone 1	Zone 1
[a^2	2.51	-1.89	1.93	-1.47	1.25	-0.95
> a^2, [$(4.0)a^2$	1.93	-1.47	1.93	-1.47	1.25	-0.95
> $(4.0)a^2$	1.25	-0.95	1.25	-0.95	1.25	-0.95

Pressure (psf)

Effective Wind Area	Zone 3	Zone 3	Zone 2	Zone 2	Zone 1	Zone 1
[a^2	40.6	-30.6	31.2	-23.8	20.3	-15.3
> a^2, [$(4.0)a^2$	31.2	-23.8	31.2	-23.8	20.3	-15.3
> $(4.0)a^2$	20.3	-15.3	20.3	-15.3	20.3	-15.3



$\theta < 10°$



$\theta \geq 10°$

OPEN BUILDING COMPONENT & CLADDING PRESSURE FROM ASCE 7-05

(Pitched Roof with θ[45º)
(0.25 [h/L [1.0)
$P = q_h*G*C_N$

Wind Flow	**CLEAR**	
Wind Speed	**90**	mph
Mean Roof Height (h)	**28.5**	ft
Roof Length (L)	**28.5**	ft
Importance	**1.00**	------------->
Roof Pitch	**6**	
Exposure Factor	**D**	
Kzt	**1.00**	Refer to 6.5.7
Kd	**0.85**	Table 6-4
Kz	**1.15**	
G	**0.85**	

Category	Non-Hurricane Prone Regions and Hurricane Prone Regions with V = 85-100 mph and Alaska	Hurricane Prone Regions with V > 100 mph
I	0.87	0.77
II	1.00	1.00
III	1.15	1.15
IV	1.15	1.15

h/L = 1.00

HIGH ROOF

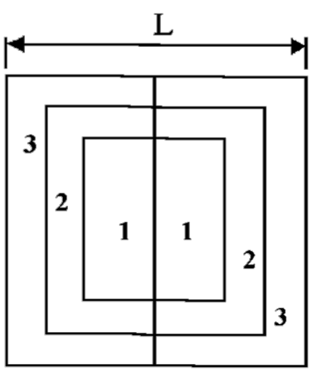
qz = **20.27** psf qz = 0.00256(Kz)Kzt(Kd)I(V)^2
Roof Angle = 26.5651 Degrees

C_N

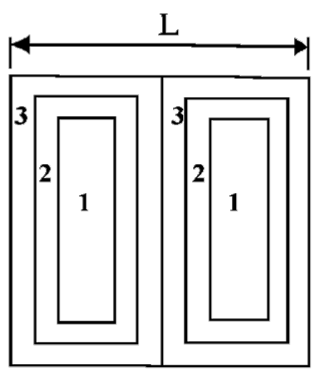
Effective Wind Area	Zone 3	Zone 3	Zone 2	Zone 2	Zone 1	Zone 1
[a^2	2.51	-1.89	1.93	-1.47	1.25	-0.95
> a^2, [$(4.0)a^2$	1.93	-1.47	1.93	-1.47	1.25	-0.95
> $(4.0)a^2$	1.25	-0.95	1.25	-0.95	1.25	-0.95

Pressure (psf)

Effective Wind Area	Zone 3	Zone 3	Zone 2	Zone 2	Zone 1	Zone 1
[a^2	43.2	-32.6	33.3	-25.3	21.6	-16.3
> a^2, [$(4.0)a^2$	33.3	-25.3	33.3	-25.3	21.6	-16.3
> $(4.0)a^2$	21.6	-16.3	21.6	-16.3	21.6	-16.3



$\theta < 10°$



$\theta \geq 10°$

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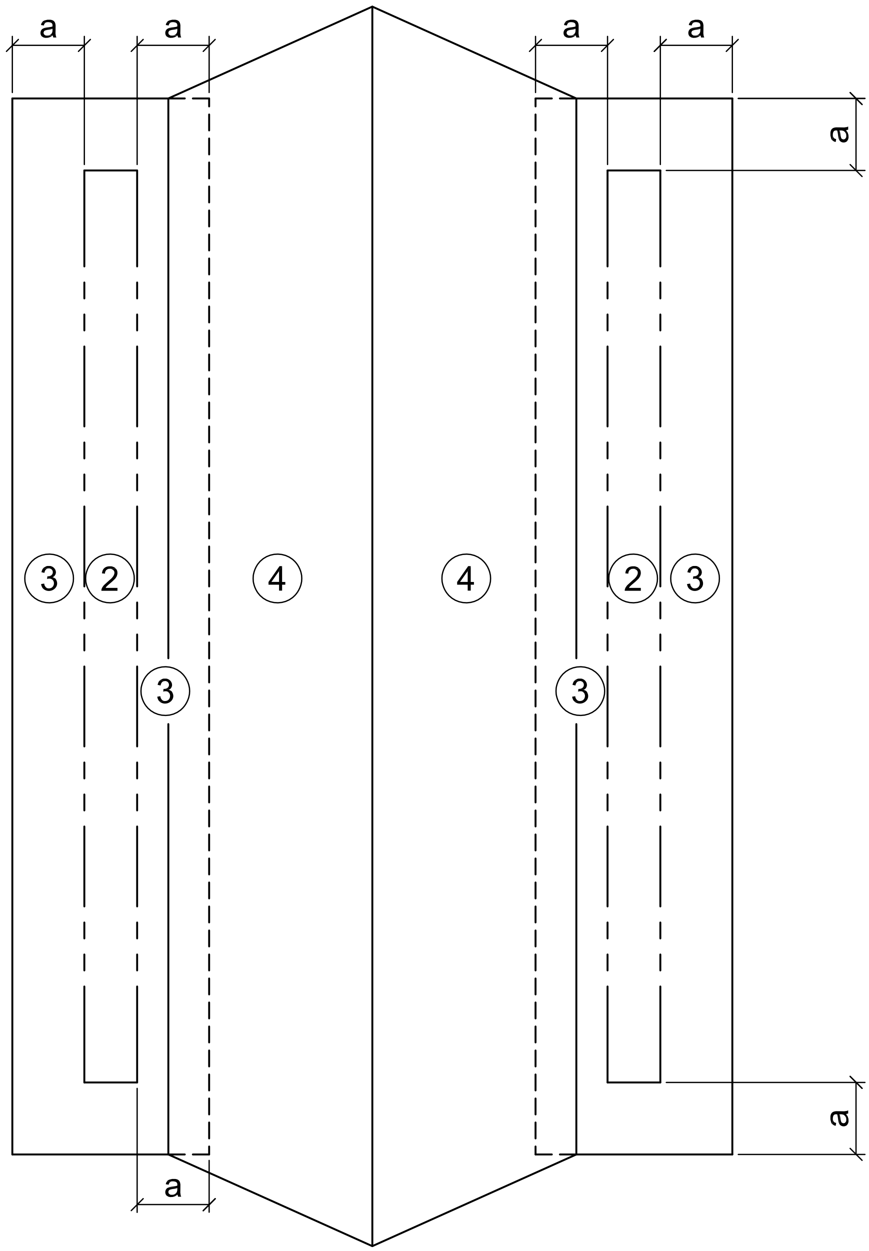
		of
Job No. 14836 R	Ckd.	Init. DPS
Cad	Rev.	Date 10-2-23



ROOF PLAN

a = 6'-0"

DESIGN PRESSURES FOR COMPONENTS & CLADDING

ZONE	PRESSURE	SUCTION
2	31.2 PSF	23.8 PSF
3	40.6 PSF	30.6 PSF
4	43.2 PSF	32.6 PSF

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			of
	Job No. 14836 R	Ckd.	Init. DPS
	Client No.	Rev.	Date 10/4/2023

ASCE 7-16 (Section 28.3.5)

Horizontal Wind Loads on Open or Partially Enclosed Buildings with Transverse Frames & Pitched Roofs

q_h = **15.98** psf

A_S = **165.58** ft^2

A_E = **1264.77** ft^2

n = **7**

B = **56.690** ft

$(GC_{pf})_{5E}$ = 0.61 $\quad$ A_{5E} = **183.02** ft^2

$(GC_{pf})_5$ = 0.4 $\quad$ A_5 = **1081.75** ft^2

$(GC_{pf})_{6E}$ = -0.43

$(GC_{pf})_6$ = -0.29

$(GC_{pf})_{windward}$ = 0.430

$(GC_{pf})_{leeward}$ = -0.310

ϕ = 0.131 $\quad$ $\phi = A_S / A_E$

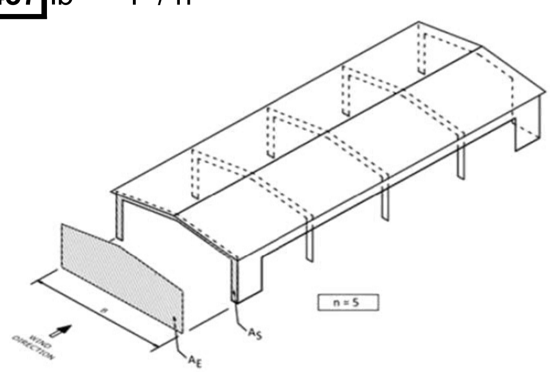
K_B = 1.233 $\quad$ $K_B = 1.8 - 0.01 * B \geq 0.8$

K_S = 0.924 $\quad$ $K_S = 0.60 + 0.073 * (n - 3) + 1.25 * \phi^{1.8}$

p = 13.49 psf $\quad$ $p = q_h * [(GC_{pf})_{windward} - (GC_{pf})_{leeward}] * K_B * K_S$

F = 17059 lb $\quad$ $F = p * A_E$

Force per frame = $\boxed{\textbf{2437}}$ lb $\quad$ F / n



Notation

B = Width of the building perpendicular to the ridge, in ft (m)
A_S = Effective solid area of the end wall, i.e., the projected area of any portion of the end wall that would be exposed to the wind
A_E = Total end wall area for an equivalent enclosed building
n = Number of frames but shall not be taken as less than $n = 3$

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

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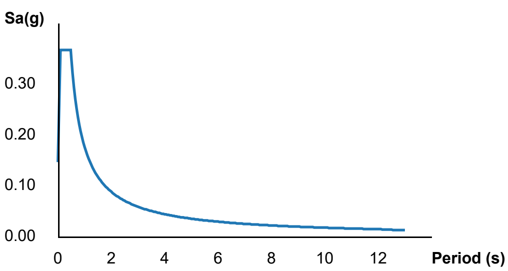
ℹ The ATC Hazards by Location website will not be updated to support ASCE 7-22. Find out why.

ATC Hazards by Location

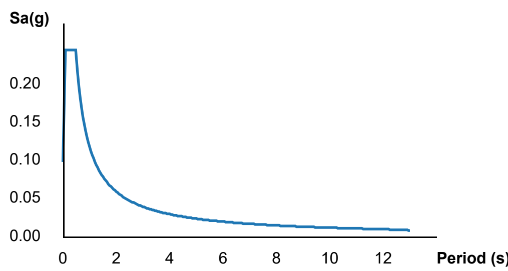
Search Information

Coordinates:	34.3533, -86.3159
Elevation:	604 ft
Timestamp:	2023-10-04T18:21:25.028Z
Hazard Type:	Seismic
Reference Document:	ASCE7-05
Risk Category:	II
Site Class:	C

MCER Horizontal Response Spectrum



Design Horizontal Response Spectrum



Basic Parameters

Name	Value	Description
S_S	0.307	MCE_R ground motion (period=0.2s)
S_1	0.104	MCE_R ground motion (period=1.0s)
S_{MS}	0.368	Site-modified spectral acceleration value
S_{M1}	0.177	Site-modified spectral acceleration value
S_{DS}	0.245	Numeric seismic design value at 0.2s SA
S_{D1}	0.118	Numeric seismic design value at 1.0s SA

▾Additional Information

Name	Value	Description
SDC	B	Seismic design category
F_a	1.2	Site amplification factor at 0.2s
F_v	1.696	Site amplification factor at 1.0s
T_L	12	Long-period transition period (s)

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 provided by the U.S. Geological Survey Seismic Design Web Services.

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Table 4E (Cont.) Reference Design Values for Visually Graded Decking[1,2]

(Tabulated design values are for normal load duration and dry service conditions, unless specified otherwise. See NDS 4.3 for a comprehensive description of design value adjustment factors.)

USE WITH TABLE 4E ADJUSTMENT FACTORS

Species and commercial grade	Size classification	Design values in pounds per square inch (psi)					Specific Gravity[3]	Grading Rules Agency
		Bending		Compression perpendicular to grain	Modulus of Elasticity			
		Single Member F_b	Repetitive Member $(F_b)(C_r)$	$F_{c\perp}$	E	E_{min}	G	
NORTHERN WHITE CEDAR								
Select	2"-4" thick	—	1,100	—	800,000	290,000	0.31	NELMA
Commercial	4"-12"wide	—	950	—	700,000	260,000		
PONDEROSA PINE								
Select	2"-4" thick	1,200	1,400	535	1,300,000	470,000	0.43	NLGA
Commercial	4"& wider	1,000	1,150	535	1,100,000	400,000		
RED PINE								
Select	2"-4" thick	1,150	1,350	440	1,300,000	470,000	0.44	NLGA
Commercial	4"& wider	975	1,100	440	1,200,000	440,000		
REDWOOD								
Select	2" thick	1,450	1,700	—	1,100,000	400,000	0.37	RIS
Commercial	6"& wider	1,200	1,350	—	1,000,000	370,000	0.37	
Deck Heart	2" thick	400	450	420	900,000	330,000	0.37	
and	4" wide							
Deck Common	2" thick	700	800	420	900,000	330,000	0.37	
	6" wide							
SITKA SPRUCE								
Select Dex	2"-4" thick	1,300	1,500	435	1,500,000	550,000	0.43	WCLIB
Commercial Dex	6"-8"wide	1,100	1,250	435	1,300,000	470,000		
SOUTHERN PINE		(Surfaced dry – Used in dry service conditions — 19% or less moisture content)						
Dense Standard		2,000	2,300	660	1,800,000	660,000		
Dense Select	2"-4" thick	1,650	1,900	660	1,600,000	580,000		
Select		1,400	1,650	565	1,600,000	580,000	0.55	SPIB
Dense Commercial	2" & wider	1,650	1,900	660	1,600,000	580,000		
Commercial		1,400	1,650	565	1,600,000	580,000		
SOUTHERN PINE		(Surfaced Green – Used in any service condition)						
Dense Standard		1,600	1,800	440	1,600,000	580,000		
Dense Select	2-1/2"-4" thick	1,350	1,500	440	1,400,000	510,000		
Select		1,150	1,300	375	1,400,000	510,000	0.55	SPIB
Dense Commercial	2" & wider	1,350	1,500	440	1,400,000	510,000		
Commercial		1,150	1,300	375	1,400,000	510,000		
SPRUCE-PINE-FIR								
Select	2"-4" thick	1,200	1,400	425	1,500,000	550,000	0.42	NLGA
Commercial	4"& wider	1,000	1,150	425	1,300,000	470,000		
SPRUCE-PINE-FIR (SOUTH)								
Selected	2"-4" thick	1,150	1,350	335	1,400,000	510,000	0.36	NELMA WWPA
Commercial	4"-12"wide	950	1,100	335	1,200,000	440,000		
WESTERN CEDARS								
Select Dex	2"-4" thick	1,250	1,450	425	1,100,000	400,000	0.36	WCLIB
Commercial Dex	6"-8"wide	1,050	1,200	425	1,000,000	370,000		
Selected	2"-4" thick	1,250	1,450	425	1,100,000	400,000	0.36	WWPA
Commercial	4"-12"wide	1,050	1,200	425	1,000,000	370,000		
WESTERN CEDARS (NORTH)								
Select	2"-4" thick	1,200	1,400	425	1,100,000	400,000	0.35	NLGA
Commercial	4"& wider	1,050	1,200	425	1,000,000	370,000		

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Table 4E Adjustment Factors

Wet Service Factor, C_M

When decking is used where moisture content will exceed 19% for an extended time period, design values shall be multiplied by the appropriate wet service factors from the following table (for surfaced dry Southern Pine decking use tabulated surfaced green design values for wet service conditions without further adjustment):

Wet Service Factors, C_M

F_b	$F_{c\perp}$	E and E_{min}
0.85*	0.67	0.9

* when $(F_b)(C_F) \le 1{,}150$ psi, $C_M = 1.0$

Flat Use Factor, C_{fu}

Tabulated bending design values, F_b, for decking have already been adjusted for flatwise usage (load applied to wide face).

Size Factor, C_F

Bending design values for all species of decking except Redwood are based on 4" thick decking. When 2" thick or 3" thick decking is used, the bending design values, F_b, for all species except Redwood shall be multiplied by the following size factors:

Size Factors, C_F

Thickness	C_F
2"	1.10
3"	1.04

Repetitive Member Factor, C_r

Tabulated bending design values for repetitive member uses, $(F_b)(C_r)$, for decking have already been multiplied by the repetitive member factor, C_r.

4

REFERENCE DESIGN VALUES

Nom. 2x8 T+G WOOD DECKING

t = 1 7/16"   E = 1,600 ksi

C_F = 1.1 F_b = 1,650 psi

T.A. = 21.3 ft^2

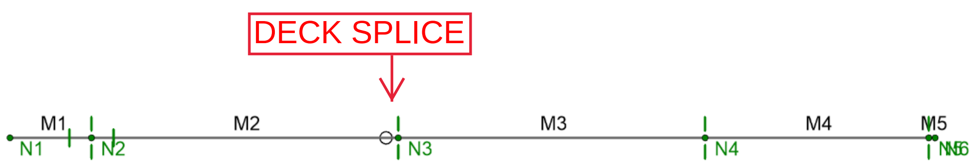
w_D = 9 * 0.894= 8.050 plf

w_{Lr} = 20 * 0.894^2 = 18.0 plf

w_W = 19.55 plf

$w_{W\ C+C\ D}$ = 40.6 plf

$w_{W\ C+C\ UP}$ = -30.6 plf



2.125 ft.   8.0 ft.   8.0 ft.   5.833 ft. 0.167 ft.

M_{D+Lr} = 1,983 #-in

f_b = 480 psi

F_b' = 1650*1.25*1.1 = 2269 psi OK

$M_{D+C\&C\ WL}$ = 2,672 #-in

f_b = 647 psi

F_b' = 1650*1.6*1.1 = 2904 psi OK

$\Delta_{0.5D+Lr}$ = 0.323" - L/297 < L/120 OK

Δ_{Lr} = 0.258" - L/349 < L/180 OK

$\Delta_{0.7W\ C+C\ D}$ = 0.275" - L/396 < L/180 OK

EEC	T&G Decking - LOW-1	SK-1
DPS		Oct 02, 2023 at 02:10 PM
14836 R		14836 T+G DECK - LOW-1.r3d

Model Settings

Number of Reported Sections	3
Number of Internal Sections	100
Member Area Load Mesh Size (in^2)	144
Consider Shear Deformation	No
Consider Torsional Warping	Yes
Approximate Mesh Size (in)	24
Transfer Forces Between Intersecting Wood Walls	Yes
Increase Wood Wall Nailing Capacity for Wind Loads	Yes
Include P-Delta for Walls	Yes
Optimize Masonry and Wood Walls	Yes
Maximum Number of Iterations	3
Single	No
Multiple (Optimum)	Yes
Maximum	No

Global Axis corresponding to vertical direction	Y
Convert Existing Data	Yes
Default Global Plane for z-axis	XZ
Plate Local Axis Orientation	Global

Hot Rolled Steel	None
Stiffness Adjustment	Yes (Iterative)
Notional Annex	None
Connections	None
Cold Formed Steel	None
Stiffness Adjustment	Yes (Iterative)
Wood	AF&PA NDS-05/08: ASD
Temperature	< 100F
Concrete	None
Masonry	None
Aluminum	None
Structure Type	Building
Stiffness Adjustment	Yes (Iterative)
Stainless	None
Stiffness Adjustment	Yes (Iterative)

Compression Stress Block	Rectangular Stress Block
Analyze using Cracked Sections	Yes
Leave room for horizontal rebar splices (2*d bar spacing)	Yes
List forces which were ignored for design in the Detail Report	Yes

Column Min Steel	1
Column Max Steel	8
Rebar Material Spec	ASTM A615
Warn if beam-column framing arrangement is not understood	No
Number of Shear Regions	4
Region 2 & 3 Spacing Increase Increment (in)	4

Code	None
Base Elevation (ft)	
Include the weight of the structure in base shear calcs	Yes

Model Settings (Continued)

T Z (sec)	
T X (sec)	
C_tZ	0.02
C_tX	0.02
R Z	1.25
R X	1.25

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N1	-33.541	0	0	
2	N2	-31.416	0	0	
3	N3	-23.416	0	0	
4	N4	-15.416	0	0	
5	N5	-9.583	0	0	
6	N6	-9.416	0	0	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]
1	N2	Reaction	Reaction	Reaction	Reaction
2	N3		Reaction	Reaction	
3	N4		Reaction	Reaction	
4	N5		Reaction	Reaction	

Wood Properties

	Label	Type	Database	Species	Grade	Cm	Ci	Emod	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]
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	2x8 T+G Deck	Custom	N/A	T+G DECK	na			1	0.3	0.3	0.035

Custom Wood Properties

	Label	Fb	Ft	Fv	Fc	E	E05	Type	Cf
1	LVL_PRL_1.5E_2250F	2.25	1.5	0.22	1.95	1500	0.5	SCL	
2	LVL_PRL_2.0E_2900F	2.9	1.9	0.285	2.75	2000	0.5	SCL	
3	LVL_Microllam_1.9E_2600F	2.6	1.555	0.285	2.51	1900	0.5	SCL	
4	PSL_Parallam_2.0E_2900F	2.9	2.025	0.29	2.9	2000	0.5	SCL	
5	PSL_Parallam_1.8E	2.4	1.755	0.18	2.5	1800	0.5	SCL	
6	LSL_TimberStrand_1.55E_2325F	2.325	1.07	0.31	2.05	1550	0.5	SCL	
7	LSL_TimberStrand_1.3E_1700F	1.7	1.075	0.4	1.4	1300	0.5	SCL	
8	T+G DECK	1.65	0.8	0.175	1.5	1600	580	Visually Graded	1.1

Wood Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Wood Decking	1.4375X12FS	Beam	None	2x8 T+G Deck	Typical	17.25	2.97	207	10.985

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N1	N2	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
2	M2	N2	N3	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
3	M3	N3	N4	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
4	M4	N4	N5	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
5	M5	N5	N6	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical

Member Advanced Data

	Label	J Release	Physical	Deflection Ratio Options	Seismic DR
1	M1		Yes	OX	None
2	M2	OOOOXO	Yes	Default	None
3	M3		Yes	Default	None
4	M4		Yes	Default	None
5	M5		Yes	Default	None

Wood Design Parameters

	Label	Shape	Length [ft]	le-bend top [ft]	Cr	y sway	z sway
1	M1	Wood Decking	2.125	Lbyy	Yes		
2	M2	Wood Decking	8	Lbyy	Yes		
3	M3	Wood Decking	8	Lbyy	Yes		
4	M4	Wood Decking	5.833	Lbyy	Yes		
5	M5	Wood Decking	0.167	Lbyy	Yes		

Member Distributed Loads (BLC 1 : D)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-8.05	-8.05	0	%100
2	M2	Y	-8.05	-8.05	0	%100
3	M3	Y	-8.05	-8.05	0	%100
4	M4	Y	-8.05	-8.05	0	%100
5	M5	Y	-8.05	-8.05	0	%100

Member Distributed Loads (BLC 2 : Lr)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-16	-16	0	%100
2	M2	Y	-16	-16	0	%100
3	M3	Y	-16	-16	0	%100
4	M4	Y	-16	-16	0	%100
5	M5	Y	-16	-16	0	%100

Member Distributed Loads (BLC 4 : W Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-19.55	-19.55	0	%100
2	M2	Y	-19.55	-19.55	0	%100
3	M3	Y	-19.55	-19.55	0	%100
4	M4	Y	-19.55	-19.55	0	%100
5	M5	Y	-19.55	-19.55	0	%100

Member Distributed Loads (BLC 5 : W C+C Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-40.6	-40.6	0	%100
2	M2	Y	-40.6	-40.6	0	%100
3	M3	Y	-40.6	-40.6	0	%100
4	M4	Y	-40.6	-40.6	0	%100
5	M5	Y	-40.6	-40.6	0	%100

Member Distributed Loads (BLC 6 : W C+C UP)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	30.6	30.6	0	%100
2	M2	Y	30.6	30.6	0	%100
3	M3	Y	30.6	30.6	0	%100
4	M4	Y	30.6	30.6	0	%100
5	M5	Y	30.6	30.6	0	%100

Basic Load Cases

	BLC Description	Category	Distributed
1	D	DL	5
2	Lr	RLL	5
4	W Down	WL	5
5	W C+C Down	WL+Z	5
6	W C+C UP	WL-Z	5

Load Combinations

	Description	Solve	BLC	Factor	BLC	Factor	BLC	Factor
1	D	Yes	DL	1				
2	D+Lr	Yes	DL	1	RLL	1		
3	D+W Down	Yes	DL	1			WL	0.6
4	D+3/4(Lr+W Down)	Yes	DL	1	RLL	0.75	WL	0.45
5	D+W C+C Down	Yes	DL	1			WL+Z	0.6
6	0.6D (5.5 psf)+W C+C UP	Yes	DL	0.471			WL-Z	0.6
7	1/2D+Lr	Yes	DL	0.5	RLL	1		
8	Lr	Yes			RLL	1		
9	0.7W C+C DOWN	Yes			WL+Z	0.42		

Load Combination Design

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	D	0.9		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	D+Lr	1.25		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	D+W Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	D+3/4(Lr+W Down)	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	D+W C+C Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	0.6D (5.5 psf)+W C+C UP	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	1/2D+Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	0.7W C+C DOWN	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
1	1	N2	0	51.578	0	0	0	0
2	2		0	154.094	0	0	0	0
3	3		0	126.735	0	0	0	0
4	4		0	184.832	0	0	0	0
5	5		0	207.658	0	0	0	0
6	6		0	-93.343	0	0	0	0
7	7		0	128.305	0	0	0	0
8	8		0	102.516	0	0	0	0
9	9		0	109.256	0	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
10	1	N3	0	55.671	0	0	0	0
11	2		0	166.321	0	0	0	0
12	3		0	136.791	0	0	0	0
13	4		0	199.499	0	0	0	0
14	5		0	224.136	0	0	0	0
15	6		0	-100.75	0	0	0	0
16	7		0	138.486	0	0	0	0
17	8		0	110.65	0	0	0	0
18	9		0	117.926	0	0	0	0
19	1	N4	0	70.972	0	0	0	0
20	2		0	212.034	0	0	0	0
21	3		0	174.388	0	0	0	0
22	4		0	254.33	0	0	0	0
23	5		0	285.738	0	0	0	0
24	6		0	-128.441	0	0	0	0
25	7		0	176.548	0	0	0	0
26	8		0	141.062	0	0	0	0
27	9		0	150.337	0	0	0	0
28	1	N5	0	15.985	0	0	0	0
29	2		0	47.758	0	0	0	0
30	3		0	39.278	0	0	0	0
31	4		0	57.284	0	0	0	0
32	5		0	64.359	0	0	0	0
33	6		0	-28.929	0	0	0	0
34	7		0	39.765	0	0	0	0
35	8		0	31.772	0	0	0	0
36	9		0	33.861	0	0	0	0
37	1	Totals:	0	194.206	0			
38	2		0	580.206	0			
39	3		0	477.193	0			
40	4		0	695.946	0			
41	5		0	781.891	0			
42	6		0	-351.464	0			
43	7		0	483.103	0			
44	8		0	386	0			
45	9		0	411.38	0			
46	1	COG (ft):	X: -21.479	Y: 0	Z: 0			
47	2		X: -21.479	Y: 0	Z: 0			
48	3		X: -21.479	Y: 0	Z: 0			
49	4		X: -21.478	Y: 0	Z: 0			
50	5		X: -21.478	Y: 0	Z: 0			
51	6		X: -21.478	Y: 0	Z: 0			
52	7		X: -21.478	Y: 0	Z: 0			
53	8		X: -21.479	Y: 0	Z: 0			
54	9		X: -21.478	Y: 0	Z: 0			

Maximum Member Section Forces

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
1	1	M1	max	0	2.125	0	2.125	17.106	2.125	0	2.125	0.218	2.125	0	2.125
2			min	0	0	0	0	0	0	0	0	0	0	0	0
3	2	M1	max	0	2.125	0	2.125	51.106	2.125	0	2.125	0.652	2.125	0	2.125
4			min	0	0	0	0	0	0	0	0	0	0	0	0
5	3	M1	max	0	2.125	0	2.125	42.033	2.125	0	2.125	0.536	2.125	0	2.125
6			min	0	0	0	0	0	0	0	0	0	0	0	0
7	4	M1	max	0	2.125	0	2.125	61.301	2.125	0	2.125	0.782	2.125	0	2.125

Maximum Member Section Forces (Continued)

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
8			min	0	0	0	0	0	0	0	0	0	0	0	0
9	5	M1	max	0	2.125	0	2.125	68.871	2.125	0	2.125	0.878	2.125	0	2.125
10			min	0	0	0	0	0	0	0	0	0	0	0	0
11	6	M1	max	0	2.125	0	2.125	0	0	0	2.125	0	0	0	2.125
12			min	0	0	0	0	-30.958	2.125	0	0	-0.395	2.125	0	0
13	7	M1	max	0	2.125	0	2.125	42.553	2.125	0	2.125	0.543	2.125	0	2.125
14			min	0	0	0	0	0	0	0	0	0	0	0	0
15	8	M1	max	0	2.125	0	2.125	34	2.125	0	2.125	0.434	2.125	0	2.125
16			min	0	0	0	0	0	0	0	0	0	0	0	0
17	9	M1	max	0	2.125	0	2.125	36.236	2.125	0	2.125	0.462	2.125	0	2.125
18			min	0	0	0	0	0	0	0	0	0	0	0	0
19	1	M2	max	0	8	0	8	29.928	8	0	8	0.218	0	0	8
20			min	0	0	0	0	-34.472	0	0	0	-0.668	4.245	0	0
21	2	M2	max	0	8	0	8	89.412	8	0	8	0.652	0	0	8
22			min	0	0	0	0	-102.988	0	0	0	-1.994	4.245	0	0
23	3	M2	max	0	8	0	8	73.538	8	0	8	0.536	0	0	8
24			min	0	0	0	0	-84.702	0	0	0	-1.64	4.245	0	0
25	4	M2	max	0	8	0	8	107.248	8	0	8	0.782	0	0	8
26			min	0	0	0	0	-123.532	0	0	0	-2.392	4.245	0	0
27	5	M2	max	0	8	0	8	120.493	8	0	8	0.878	0	0	8
28			min	0	0	0	0	-138.787	0	0	0	-2.688	4.245	0	0
29	6	M2	max	0	8	0	8	62.385	0	0	8	1.208	4.245	0	8
30			min	0	0	0	0	-54.162	8	0	0	-0.395	0	0	0
31	7	M2	max	0	8	0	8	74.448	8	0	8	0.543	0	0	8
32			min	0	0	0	0	-85.752	0	0	0	-1.661	4.245	0	0
33	8	M2	max	0	8	0	8	59.484	8	0	8	0.434	0	0	8
34			min	0	0	0	0	-68.516	0	0	0	-1.327	4.245	0	0
35	9	M2	max	0	8	0	8	63.395	8	0	8	0.462	0	0	8
36			min	0	0	0	0	-73.021	0	0	0	-1.414	4.245	0	0
37	1	M3	max	0	8	0	8	38.657	8	0	8	0.62	8	0	8
38			min	0	0	0	0	-25.743	0	0	0	-0.494	3.184	0	0
39	2	M3	max	0	8	0	8	115.491	8	0	8	1.852	8	0	8
40			min	0	0	0	0	-76.909	0	0	0	-1.476	3.184	0	0
41	3	M3	max	0	8	0	8	94.986	8	0	8	1.523	8	0	8
42			min	0	0	0	0	-63.254	0	0	0	-1.214	3.184	0	0
43	4	M3	max	0	8	0	8	138.529	8	0	8	2.221	8	0	8
44			min	0	0	0	0	-92.251	0	0	0	-1.77	3.184	0	0
45	5	M3	max	0	8	0	8	155.637	8	0	8	2.496	8	0	8
46			min	0	0	0	0	-103.643	0	0	0	-1.989	3.184	0	0
47	6	M3	max	0	8	0	8	46.588	0	0	8	0.894	3.184	0	8
48			min	0	0	0	0	-69.96	8	0	0	-1.122	8	0	0
49	7	M3	max	0	8	0	8	96.163	8	0	8	1.542	8	0	8
50			min	0	0	0	0	-64.037	0	0	0	-1.229	3.184	0	0
51	8	M3	max	0	8	0	8	76.834	8	0	8	1.232	8	0	8
52			min	0	0	0	0	-51.166	0	0	0	-0.982	3.184	0	0
53	9	M3	max	0	8	0	8	81.886	8	0	8	1.313	8	0	8
54			min	0	0	0	0	-54.53	0	0	0	-1.046	3.184	0	0
55	1	M4	max	0	5.833	0	5.833	14.641	5.833	0	5.833	0.62	0	0	5.833
56			min	0	0	0	0	-32.315	0	0	0	-0.158	3.988	0	0
57	2	M4	max	0	5.833	0	5.833	43.741	5.833	0	5.833	1.852	0	0	5.833
58			min	0	0	0	0	-96.542	0	0	0	-0.473	3.988	0	0
59	3	M4	max	0	5.833	0	5.833	35.975	5.833	0	5.833	1.523	0	0	5.833
60			min	0	0	0	0	-79.402	0	0	0	-0.389	3.988	0	0
61	4	M4	max	0	5.833	0	5.833	52.467	5.833	0	5.833	2.221	0	0	5.833
62			min	0	0	0	0	-115.801	0	0	0	-0.568	3.988	0	0

Maximum Member Section Forces (Continued)

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
63	5	M4	max	0	5.833	0	5.833	58.946	5.833	0	5.833	2.496	0	0	5.833
64			min	0	0	0	0	-130.101	0	0	0	-0.638	3.988	0	0
65	6	M4	max	0	5.833	0	5.833	58.481	0	0	5.833	0.287	3.988	0	5.833
66			min	0	0	0	0	-26.497	5.833	0	0	-1.122	0	0	0
67	7	M4	max	0	5.833	0	5.833	36.421	5.833	0	5.833	1.542	0	0	5.833
68			min	0	0	0	0	-80.385	0	0	0	-0.394	3.988	0	0
69	8	M4	max	0	5.833	0	5.833	29.1	5.833	0	5.833	1.232	0	0	5.833
70			min	0	0	0	0	-64.228	0	0	0	-0.315	3.988	0	0
71	9	M4	max	0	5.833	0	5.833	31.014	5.833	0	5.833	1.313	0	0	5.833
72			min	0	0	0	0	-68.451	0	0	0	-0.336	3.988	0	0
73	1	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.001	0	0	0.167
74			min	0	0	0	0	-1.344	0	0	0	0	0.167	0	0
75	2	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.004	0	0	0.167
76			min	0	0	0	0	-4.016	0	0	0	0	0.167	0	0
77	3	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.003	0	0	0.167
78			min	0	0	0	0	-3.303	0	0	0	0	0.167	0	0
79	4	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.005	0	0	0.167
80			min	0	0	0	0	-4.818	0	0	0	0	0.167	0	0
81	5	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.005	0	0	0.167
82			min	0	0	0	0	-5.412	0	0	0	0	0.167	0	0
83	6	M5	max	0	0.167	0	0.167	2.433	0	0	0.167	0	0.167	0	0.167
84			min	0	0	0	0	0	0.167	0	0	-0.002	0	0	0
85	7	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.003	0	0	0.167
86			min	0	0	0	0	-3.344	0	0	0	0	0.167	0	0
87	8	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.003	0	0	0.167
88			min	0	0	0	0	-2.672	0	0	0	0	0.167	0	0
89	9	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.003	0	0	0.167
90			min	0	0	0	0	-2.848	0	0	0	0	0.167	0	0

Member Section Deflections - Service

	LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y' Ratio	(n) L/z' Ratio
1	7	M1	1	0	0	-0.218	0	NC	116
2			2	0	0	-0.112	0	NC	228
3			3	0	0	0	0	NC	NC
4	8	M1	1	0	0	-0.174	0	NC	146
5			2	0	0	-0.089	0	NC	285
6			3	0	0	0	0	NC	NC
7	9	M1	1	0	0	-0.186	0	NC	137
8			2	0	0	-0.095	0	NC	267
9			3	0	0	0	0	NC	NC
10	7	M2	1	0	0	0	0	NC	NC
11			2	0	0	0.323	0	NC	297
12			3	0	0	0	0	NC	NC
13	8	M2	1	0	0	0	0	NC	NC
14			2	0	0	0.258	0	NC	372
15			3	0	0	0	0	NC	NC
16	9	M2	1	0	0	0	0	NC	NC
17			2	0	0	0.275	0	NC	349
18			3	0	0	0	0	NC	NC
19	7	M3	1	0	0	0	0	NC	NC
20			2	0	0	0.201	0	NC	476
21			3	0	0	0	0	NC	NC
22	8	M3	1	0	0	0	0	NC	NC
23			2	0	0	0.161	0	NC	596
24			3	0	0	0	0	NC	NC

Member Section Deflections - Service (Continued)

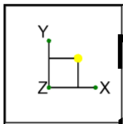
	LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y' Ratio	(n) L/z' Ratio
25	9	M3	1	0	0	0	0	NC	NC
26			2	0	0	0.172	0	NC	559
27			3	0	0	0	0	NC	NC
28	7	M4	1	0	0	0	0	NC	NC
29			2	0	0	0.01	0	NC	6878
30			3	0	0	0	0	NC	NC
31	8	M4	1	0	0	0	0	NC	NC
32			2	0	0	0.008	0	NC	8608
33			3	0	0	0	0	NC	NC
34	9	M4	1	0	0	0	0	NC	NC
35			2	0	0	0.009	0	NC	8077
36			3	0	0	0	0	NC	NC
37	7	M5	1	0	0	0	0	NC	NC
38			2	0	0	-0.001	0	NC	1645
39			3	0	0	-0.002	0	NC	822
40	8	M5	1	0	0	0	0	NC	NC
41			2	0	0	-0.001	0	NC	2059
42			3	0	0	-0.002	0	NC	1029
43	9	M5	1	0	0	0	0	NC	NC
44			2	0	0	-0.001	0	NC	1932
45			3	0	0	-0.002	0	NC	966

AF&PA NDS-05/08: 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	M1	1.4375X12FS	0.027	2.125	0.009	2.125	z	1.04	0.792	1.593	1.96	0.158	12.169	0.975	0.7	3.9-3
2	2			0.058	2.125	0.02	2.125	z	1.196	1.1	2.176	2.723	0.219	12.169	0.959	0.58	3.9-3
3	3			0.037	2.125	0.013	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
4	4			0.054	2.125	0.019	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
5	5			0.061	2.125	0.021	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
6	6			0.027	2.125	0.01	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
7	7			0.048	2.125	0.017	2.125	z	1.196	1.1	2.176	2.723	0.219	12.169	0.959	0.58	3.9-3
8	8			0.039	2.125	0.014	2.125	z	1.196	1.1	2.176	2.723	0.219	12.169	0.959	0.58	3.9-3
9	9			0.032	2.125	0.011	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
10	1	M2	1.4375X12FS	0.082	4.245	0.019	0	z	0.106	0.792	1.131	1.96	0.158	23.611	0.692	0.071	3.9-3
11	2			0.177	4.245	0.041	0	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
12	3			0.114	4.245	0.026	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
13	4			0.166	4.245	0.038	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
14	5			0.187	4.245	0.043	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
15	6			0.084	4.245	0.019	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
16	7			0.148	4.245	0.034	0	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
17	8			0.118	4.245	0.027	0	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
18	9			0.098	4.245	0.023	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
19	1	M3	1.4375X12FS	0.077	8	0.021	8	z	0.106	0.792	1.131	1.96	0.158	23.611	0.692	0.071	3.9-3
20	2			0.165	8	0.046	8	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
21	3			0.106	8	0.029	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
22	4			0.154	8	0.043	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
23	5			0.173	8	0.048	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
24	6			0.078	8	0.022	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
25	7			0.137	8	0.038	8	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
26	8			0.11	8	0.031	8	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
27	9			0.091	8	0.025	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
28	1	M4	1.4375X12FS	0.077	0	0.018	0	z	0.197	0.792	1.37	1.96	0.158	20.161	0.839	0.132	3.9-3
29	2			0.165	0	0.038	0	z	0.198	1.1	1.556	2.723	0.219	20.161	0.686	0.096	3.9-3
30	3			0.106	0	0.025	0	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3
31	4			0.154	0	0.036	0	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3

AF&PA NDS-05/08: 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
32	5			0.173	0	0.04	0	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3
33	6			0.078	0	0.018	0	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3
34	7			0.137	0	0.032	0	z	0.198	1.1	1.556	2.723	0.219	20.161	0.686	0.096	3.9-3
35	8			0.11	0	0.026	0	z	0.198	1.1	1.556	2.723	0.219	20.161	0.686	0.096	3.9-3
36	9			0.091	0	0.021	0	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3
37	1	M5	1.4375X12FS	0	0	0.001	0	z	1.483	0.792	1.631	1.96	0.158	3.411	0.999	0.999	3.9-3
38	2			0	0	0.002	0	z	2.059	1.1	2.264	2.723	0.219	3.411	0.998	0.998	3.9-3
39	3			0	0	0.001	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3
40	4			0	0	0.001	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3
41	5			0	0	0.002	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3
42	6			0	0	0.001	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3
43	7			0	0	0.001	0	z	2.059	1.1	2.264	2.723	0.219	3.411	0.998	0.998	3.9-3
44	8			0	0	0.001	0	z	2.059	1.1	2.264	2.723	0.219	3.411	0.998	0.998	3.9-3
45	9			0	0	0.001	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3



Nom. 2x8 T+G WOOD DECKING

t = 1 7/16" E = 1,600 ksi

$C_F = 1.1$ F_b = 1,650 psi

T.A. = 21.3 ft^2

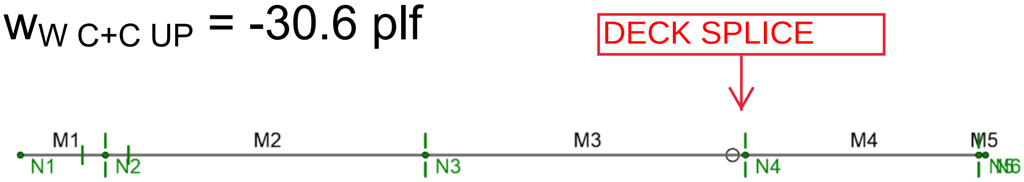
$w_D = 9 * 0.894 = 8.05$ plf

$w_{Lr} = 20 * 0.894^2 = 18.0$ plf

$w_W = 19.55$ plf

$w_{W\ C+C\ D} = 40.6$ plf

$w_{W\ C+C\ UP} = -30.6$ plf



2.125 ft.   8.0 ft.   8.0 ft.   5.833 ft. 0.167 ft.

M_{D+Lr} = 2,146 #-in

f_b = 520 psi

F_b' = 1650*1.25*1.1 = 2269 psi <u>OK</u>

$M_{D+C\&C\ WL}$ = 2,892 #-in

f_b = 700 psi

F_b' = 1650*1.6*1.1 = 2904 psi <u>OK</u>

$\Delta_{0.5D+Lr}$ = 0.172" - L/559 < L/120 <u>OK</u>

Δ_{Lr} = 0.137" - L/699 < L/180 <u>OK</u>

$\Delta_{0.7W\ C+C\ D}$ = 0.149" - L/656 < L/180 <u>OK</u>

RISA	EEC	T&G Decking - LOW-2	SK-2
	DPS		Oct 02, 2023 at 02:25 PM
	14836 R		14836 T+G DECK - LOW-2...

Model Settings

Number of Reported Sections	3
Number of Internal Sections	100
Member Area Load Mesh Size (in^2)	144
Consider Shear Deformation	No
Consider Torsional Warping	Yes
Approximate Mesh Size (in)	24
Transfer Forces Between Intersecting Wood Walls	Yes
Increase Wood Wall Nailing Capacity for Wind Loads	Yes
Include P-Delta for Walls	Yes
Optimize Masonry and Wood Walls	Yes
Maximum Number of Iterations	3
Single	No
Multiple (Optimum)	Yes
Maximum	No

Global Axis corresponding to vertical direction	Y
Convert Existing Data	Yes
Default Global Plane for z-axis	XZ
Plate Local Axis Orientation	Global

Hot Rolled Steel	None
Stiffness Adjustment	Yes (Iterative)
Notional Annex	None
Connections	None
Cold Formed Steel	None
Stiffness Adjustment	Yes (Iterative)
Wood	AF&PA NDS-05/08: ASD
Temperature	< 100F
Concrete	None
Masonry	None
Aluminum	None
Structure Type	Building
Stiffness Adjustment	Yes (Iterative)
Stainless	None
Stiffness Adjustment	Yes (Iterative)

Compression Stress Block	Rectangular Stress Block
Analyze using Cracked Sections	Yes
Leave room for horizontal rebar splices (2*d bar spacing)	Yes
List forces which were ignored for design in the Detail Report	Yes

Column Min Steel	1
Column Max Steel	8
Rebar Material Spec	ASTM A615
Warn if beam-column framing arrangement is not understood	No
Number of Shear Regions	4
Region 2 & 3 Spacing Increase Increment (in)	4

Code	None
Base Elevation (ft)	
Include the weight of the structure in base shear calcs	Yes

Model Settings (Continued)

T Z (sec)	
T X (sec)	
C_tZ	0.02
C_tX	0.02
R Z	1.25
R X	1.25

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N1	-33.541	0	0	
2	N2	-31.416	0	0	
3	N3	-23.416	0	0	
4	N4	-15.416	0	0	
5	N5	-9.583	0	0	
6	N6	-9.416	0	0	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]
1	N2	Reaction	Reaction	Reaction	Reaction
2	N3		Reaction	Reaction	
3	N4		Reaction	Reaction	
4	N5		Reaction	Reaction	

Wood Properties

	Label	Type	Database	Species	Grade	Cm	Ci	Emod	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]
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	2x8 T+G Deck	Custom	N/A	T+G DECK	na			1	0.3	0.3	0.035

Custom Wood Properties

	Label	Fb	Ft	Fv	Fc	E	E05	Type	Cf
1	LVL_PRL_1.5E_2250F	2.25	1.5	0.22	1.95	1500	0.5	SCL	
2	LVL_PRL_2.0E_2900F	2.9	1.9	0.285	2.75	2000	0.5	SCL	
3	LVL_Microllam_1.9E_2600F	2.6	1.555	0.285	2.51	1900	0.5	SCL	
4	PSL_Parallam_2.0E_2900F	2.9	2.025	0.29	2.9	2000	0.5	SCL	
5	PSL_Parallam_1.8E	2.4	1.755	0.18	2.5	1800	0.5	SCL	
6	LSL_TimberStrand_1.55E_2325F	2.325	1.07	0.31	2.05	1550	0.5	SCL	
7	LSL_TimberStrand_1.3E_1700F	1.7	1.075	0.4	1.4	1300	0.5	SCL	
8	T+G DECK	1.65	0.8	0.175	1.5	1600	580	Visually Graded	1.1

Wood Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Wood Decking	1.4375X12FS	Beam	None	2x8 T+G Deck	Typical	17.25	2.97	207	10.985

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N1	N2	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
2	M2	N2	N3	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
3	M3	N3	N4	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
4	M4	N4	N5	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
5	M5	N5	N6	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical

Member Advanced Data

	Label	J Release	Physical	Deflection Ratio Options	Seismic DR
1	M1		Yes	OX	None
2	M2		Yes	Default	None
3	M3	OOOOXO	Yes	Default	None
4	M4		Yes	Default	None
5	M5		Yes	Default	None

Wood Design Parameters

	Label	Shape	Length [ft]	le-bend top [ft]	Cr	y sway	z sway
1	M1	Wood Decking	2.125	Lbyy	Yes		
2	M2	Wood Decking	8	Lbyy	Yes		
3	M3	Wood Decking	8	Lbyy	Yes		
4	M4	Wood Decking	5.833	Lbyy	Yes		
5	M5	Wood Decking	0.167	Lbyy	Yes		

Member Distributed Loads (BLC 1 : D)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-8.05	-8.05	0	%100
2	M2	Y	-8.05	-8.05	0	%100
3	M3	Y	-8.05	-8.05	0	%100
4	M4	Y	-8.05	-8.05	0	%100
5	M5	Y	-8.05	-8.05	0	%100

Member Distributed Loads (BLC 2 : Lr)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-16	-16	0	%100
2	M2	Y	-16	-16	0	%100
3	M3	Y	-16	-16	0	%100
4	M4	Y	-16	-16	0	%100
5	M5	Y	-16	-16	0	%100

Member Distributed Loads (BLC 4 : W Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-19.55	-19.55	0	%100
2	M2	Y	-19.55	-19.55	0	%100
3	M3	Y	-19.55	-19.55	0	%100
4	M4	Y	-19.55	-19.55	0	%100
5	M5	Y	-19.55	-19.55	0	%100

Member Distributed Loads (BLC 5 : W C+C Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-40.6	-40.6	0	%100
2	M2	Y	-40.6	-40.6	0	%100
3	M3	Y	-40.6	-40.6	0	%100
4	M4	Y	-40.6	-40.6	0	%100
5	M5	Y	-40.6	-40.6	0	%100

Member Distributed Loads (BLC 6 : W C+C UP)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	30.6	30.6	0	%100
2	M2	Y	30.6	30.6	0	%100
3	M3	Y	30.6	30.6	0	%100
4	M4	Y	30.6	30.6	0	%100
5	M5	Y	30.6	30.6	0	%100

Basic Load Cases

	BLC Description	Category	Distributed
1	D	DL	5
2	Lr	RLL	5
4	W Down	WL	5
5	W C+C Down	WL+Z	5
6	W C+C UP	WL-Z	5

Load Combinations

	Description	Solve	BLC	Factor	BLC	Factor	BLC	Factor
1	D	Yes	DL	1				
2	D+Lr	Yes	DL	1	RLL	1		
3	D+W Down	Yes	DL	1			WL	0.6
4	D+3/4(Lr+W Down)	Yes	DL	1	RLL	0.75	WL	0.45
5	D+W C+C Down	Yes	DL	1			WL+Z	0.6
6	0.6D (5.5 psf)+W C+C UP	Yes	DL	0.471			WL-Z	0.6
7	1/2D+Lr	Yes	DL	0.5	RLL	1		
8	Lr	Yes			RLL	1		
9	0.7W C+C DOWN	Yes			WL+Z	0.42		

Load Combination Design

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	D	0.9		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	D+Lr	1.25		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	D+W Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	D+3/4(Lr+W Down)	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	D+W C+C Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	0.6D (5.5 psf)+W C+C UP	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	1/2D+Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	0.7W C+C DOWN	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
1	1	N2	0	44.096	0	0	0	0
2	2		0	131.741	0	0	0	0
3	3		0	108.351	0	0	0	0
4	4		0	158.02	0	0	0	0
5	5		0	177.535	0	0	0	0
6	6		0	-79.803	0	0	0	0
7	7		0	109.693	0	0	0	0
8	8		0	87.645	0	0	0	0
9	9		0	93.407	0	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
10	1	N3	0	77.092	0	0	0	0
11	2		0	230.319	0	0	0	0
12	3		0	189.426	0	0	0	0
13	4		0	276.263	0	0	0	0
14	5		0	310.38	0	0	0	0
15	6		0	-139.517	0	0	0	0
16	7		0	191.773	0	0	0	0
17	8		0	153.227	0	0	0	0
18	9		0	163.301	0	0	0	0
19	1	N4	0	48.177	0	0	0	0
20	2		0	143.931	0	0	0	0
21	3		0	118.377	0	0	0	0
22	4		0	172.643	0	0	0	0
23	5		0	193.963	0	0	0	0
24	6		0	-87.187	0	0	0	0
25	7		0	119.843	0	0	0	0
26	8		0	95.755	0	0	0	0
27	9		0	102.051	0	0	0	0
28	1	N5	0	24.841	0	0	0	0
29	2		0	74.216	0	0	0	0
30	3		0	61.039	0	0	0	0
31	4		0	89.02	0	0	0	0
32	5		0	100.014	0	0	0	0
33	6		0	-44.957	0	0	0	0
34	7		0	61.795	0	0	0	0
35	8		0	49.374	0	0	0	0
36	9		0	52.621	0	0	0	0
37	1	Totals:	0	194.206	0			
38	2		0	580.206	0			
39	3		0	477.193	0			
40	4		0	695.946	0			
41	5		0	781.891	0			
42	6		0	-351.464	0			
43	7		0	483.103	0			
44	8		0	386	0			
45	9		0	411.38	0			
46	1	COG (ft):	X: -21.479	Y: 0	Z: 0			
47	2		X: -21.479	Y: 0	Z: 0			
48	3		X: -21.478	Y: 0	Z: 0			
49	4		X: -21.478	Y: 0	Z: 0			
50	5		X: -21.478	Y: 0	Z: 0			
51	6		X: -21.478	Y: 0	Z: 0			
52	7		X: -21.479	Y: 0	Z: 0			
53	8		X: -21.479	Y: 0	Z: 0			
54	9		X: -21.479	Y: 0	Z: 0			

Maximum Member Section Forces

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
1	1	M1	max	0	2.125	0	2.125	17.106	2.125	0	2.125	0.218	2.125	0	2.125
2			min	0	0	0	0	0	0	0	0	0	0	0	0
3	2	M1	max	0	2.125	0	2.125	51.106	2.125	0	2.125	0.652	2.125	0	2.125
4			min	0	0	0	0	0	0	0	0	0	0	0	0
5	3	M1	max	0	2.125	0	2.125	42.033	2.125	0	2.125	0.536	2.125	0	2.125
6			min	0	0	0	0	0	0	0	0	0	0	0	0
7	4	M1	max	0	2.125	0	2.125	61.301	2.125	0	2.125	0.782	2.125	0	2.125

Maximum Member Section Forces (Continued)

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
8			min	0	0	0	0	0	0	0	0	0	0	0	0
9	5	M1	max	0	2.125	0	2.125	68.871	2.125	0	2.125	0.878	2.125	0	2.125
10			min	0	0	0	0	0	0	0	0	0	0	0	0
11	6	M1	max	0	2.125	0	2.125	0	0	0	2.125	0	0	0	2.125
12			min	0	0	0	0	-30.958	2.125	0	0	-0.395	2.125	0	0
13	7	M1	max	0	2.125	0	2.125	42.553	2.125	0	2.125	0.543	2.125	0	2.125
14			min	0	0	0	0	0	0	0	0	0	0	0	0
15	8	M1	max	0	2.125	0	2.125	34	2.125	0	2.125	0.434	2.125	0	2.125
16			min	0	0	0	0	0	0	0	0	0	0	0	0
17	9	M1	max	0	2.125	0	2.125	36.236	2.125	0	2.125	0.462	2.125	0	2.125
18			min	0	0	0	0	0	0	0	0	0	0	0	0
19	1	M2	max	0	8	0	8	37.41	8	0	8	0.718	8	0	8
20			min	0	0	0	0	-26.99	0	0	0	-0.325	3.347	0	0
21	2	M2	max	0	8	0	8	111.766	8	0	8	2.146	8	0	8
22			min	0	0	0	0	-80.634	0	0	0	-0.97	3.347	0	0
23	3	M2	max	0	8	0	8	91.922	8	0	8	1.765	8	0	8
24			min	0	0	0	0	-66.318	0	0	0	-0.798	3.347	0	0
25	4	M2	max	0	8	0	8	134.061	8	0	8	2.574	8	0	8
26			min	0	0	0	0	-96.719	0	0	0	-1.164	3.347	0	0
27	5	M2	max	0	8	0	8	150.616	8	0	8	2.892	8	0	8
28			min	0	0	0	0	-108.664	0	0	0	-1.308	3.347	0	0
29	6	M2	max	0	8	0	8	48.845	0	0	8	0.588	3.347	0	8
30			min	0	0	0	0	-67.703	8	0	0	-1.3	8	0	0
31	7	M2	max	0	8	0	8	93.061	8	0	8	1.787	8	0	8
32			min	0	0	0	0	-67.139	0	0	0	-0.808	3.347	0	0
33	8	M2	max	0	8	0	8	74.355	8	0	8	1.428	8	0	8
34			min	0	0	0	0	-53.645	0	0	0	-0.646	3.347	0	0
35	9	M2	max	0	8	0	8	79.244	8	0	8	1.521	8	0	8
36			min	0	0	0	0	-57.172	0	0	0	-0.688	3.347	0	0
37	1	M3	max	0	8	0	8	24.718	8	0	8	0.718	0	0	8
38			min	0	0	0	0	-39.682	0	0	0	-0.455	4.898	0	0
39	2	M3	max	0	8	0	8	73.847	8	0	8	2.146	0	0	8
40			min	0	0	0	0	-118.553	0	0	0	-1.36	4.898	0	0
41	3	M3	max	0	8	0	8	60.736	8	0	8	1.765	0	0	8
42			min	0	0	0	0	-97.504	0	0	0	-1.119	4.898	0	0
43	4	M3	max	0	8	0	8	88.578	8	0	8	2.574	0	0	8
44			min	0	0	0	0	-142.202	0	0	0	-1.632	4.898	0	0
45	5	M3	max	0	8	0	8	99.517	8	0	8	2.892	0	0	8
46			min	0	0	0	0	-159.763	0	0	0	-1.833	4.898	0	0
47	6	M3	max	0	8	0	8	71.814	0	0	8	0.824	4.898	0	8
48			min	0	0	0	0	-44.733	8	0	0	-1.3	0	0	0
49	7	M3	max	0	8	0	8	61.488	8	0	8	1.787	0	0	8
50			min	0	0	0	0	-98.712	0	0	0	-1.133	4.898	0	0
51	8	M3	max	0	8	0	8	49.129	8	0	8	1.428	0	0	8
52			min	0	0	0	0	-78.871	0	0	0	-0.905	4.898	0	0
53	9	M3	max	0	8	0	8	52.359	8	0	8	1.521	0	0	8
54			min	0	0	0	0	-84.057	0	0	0	-0.965	4.898	0	0
55	1	M4	max	0	5.833	0	5.833	23.497	5.833	0	5.833	0.001	5.833	0	5.833
56			min	0	0	0	0	-23.459	0	0	0	-0.41	2.916	0	0
57	2	M4	max	0	5.833	0	5.833	70.199	5.833	0	5.833	0.004	5.833	0	5.833
58			min	0	0	0	0	-70.084	0	0	0	-1.225	2.916	0	0
59	3	M4	max	0	5.833	0	5.833	57.736	5.833	0	5.833	0.003	5.833	0	5.833
60			min	0	0	0	0	-57.641	0	0	0	-1.008	2.916	0	0
61	4	M4	max	0	5.833	0	5.833	84.203	5.833	0	5.833	0.005	5.833	0	5.833
62			min	0	0	0	0	-84.065	0	0	0	-1.47	2.916	0	0

Maximum Member Section Forces (Continued)

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
63	5	M4	max	0	5.833	0	5.833	94.601	5.833	0	5.833	0.005	5.833	0	5.833
64			min	0	0	0	0	-94.446	0	0	0	-1.651	2.916	0	0
65	6	M4	max	0	5.833	0	5.833	42.454	0	0	5.833	0.742	2.916	0	5.833
66			min	0	0	0	0	-42.524	5.833	0	0	-0.002	5.833	0	0
67	7	M4	max	0	5.833	0	5.833	58.451	5.833	0	5.833	0.003	5.833	0	5.833
68			min	0	0	0	0	-58.355	0	0	0	-1.02	2.916	0	0
69	8	M4	max	0	5.833	0	5.833	46.702	5.833	0	5.833	0.003	5.833	0	5.833
70			min	0	0	0	0	-46.626	0	0	0	-0.815	2.916	0	0
71	9	M4	max	0	5.833	0	5.833	49.773	5.833	0	5.833	0.003	5.833	0	5.833
72			min	0	0	0	0	-49.691	0	0	0	-0.869	2.916	0	0
73	1	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.001	0	0	0.167
74			min	0	0	0	0	-1.344	0	0	0	0	0.167	0	0
75	2	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.004	0	0	0.167
76			min	0	0	0	0	-4.016	0	0	0	0	0.167	0	0
77	3	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.003	0	0	0.167
78			min	0	0	0	0	-3.303	0	0	0	0	0.167	0	0
79	4	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.005	0	0	0.167
80			min	0	0	0	0	-4.818	0	0	0	0	0.167	0	0
81	5	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.005	0	0	0.167
82			min	0	0	0	0	-5.412	0	0	0	0	0.167	0	0
83	6	M5	max	0	0.167	0	0.167	2.433	0	0	0.167	0	0.167	0	0.167
84			min	0	0	0	0	0	0.167	0	0	-0.002	0	0	0
85	7	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.003	0	0	0.167
86			min	0	0	0	0	-3.344	0	0	0	0	0.167	0	0
87	8	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.003	0	0	0.167
88			min	0	0	0	0	-2.672	0	0	0	0	0.167	0	0
89	9	M5	max	0	0.167	0	0.167	0	0.167	0	0.167	0.003	0	0	0.167
90			min	0	0	0	0	-2.848	0	0	0	0	0.167	0	0

Member Section Deflections - Service

	LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y' Ratio	(n) L/z' Ratio
1	7	M1	1	0	0	-0.065	0	NC	392
2			2	0	0	-0.035	0	NC	724
3			3	0	0	0	0	NC	NC
4	8	M1	1	0	0	-0.052	0	NC	491
5			2	0	0	-0.028	0	NC	907
6			3	0	0	0	0	NC	NC
7	9	M1	1	0	0	-0.055	0	NC	461
8			2	0	0	-0.03	0	NC	851
9			3	0	0	0	0	NC	NC
10	7	M2	1	0	0	0	0	NC	NC
11			2	0	0	0.106	0	NC	905
12			3	0	0	0	0	NC	NC
13	8	M2	1	0	0	0	0	NC	NC
14			2	0	0	0.085	0	NC	1133
15			3	0	0	0	0	NC	NC
16	9	M2	1	0	0	0	0	NC	NC
17			2	0	0	0.09	0	NC	1063
18			3	0	0	0	0	NC	NC
19	7	M3	1	0	0	0	0	NC	NC
20			2	0	0	0.172	0	NC	559
21			3	0	0	0	0	NC	NC
22	8	M3	1	0	0	0	0	NC	NC
23			2	0	0	0.137	0	NC	699
24			3	0	0	0	0	NC	NC

Member Section Deflections - Service (Continued)

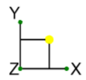
	LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y' Ratio	(n) L/z' Ratio
25	9	M3	1	0	0	0	0	NC	NC
26			2	0	0	0.146	0	NC	656
27			3	0	0	0	0	NC	NC
28	7	M4	1	0	0	0	0	NC	NC
29			2	0	0	0.11	0	NC	639
30			3	0	0	0	0	NC	NC
31	8	M4	1	0	0	0	0	NC	NC
32			2	0	0	0.088	0	NC	799
33			3	0	0	0	0	NC	NC
34	9	M4	1	0	0	0	0	NC	NC
35			2	0	0	0.093	0	NC	750
36			3	0	0	0	0	NC	NC
37	7	M5	1	0	0	0	0	NC	NC
38			2	0	0	-0.005	0	NC	400
39			3	0	0	-0.01	0	NC	200
40	8	M5	1	0	0	0	0	NC	NC
41			2	0	0	-0.004	0	NC	500
42			3	0	0	-0.008	0	NC	250
43	9	M5	1	0	0	0	0	NC	NC
44			2	0	0	-0.004	0	NC	469
45			3	0	0	-0.009	0	NC	234

AF&PA NDS-05/08: 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	M1	1.4375X12FS	0.027	2.125	0.009	2.125	z	1.04	0.792	1.593	1.96	0.158	12.169	0.975	0.7	3.9-3
2	2			0.058	2.125	0.02	2.125	z	1.196	1.1	2.176	2.723	0.219	12.169	0.959	0.58	3.9-3
3	3			0.037	2.125	0.013	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
4	4			0.054	2.125	0.019	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
5	5			0.061	2.125	0.021	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
6	6			0.027	2.125	0.01	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
7	7			0.048	2.125	0.017	2.125	z	1.196	1.1	2.176	2.723	0.219	12.169	0.959	0.58	3.9-3
8	8			0.039	2.125	0.014	2.125	z	1.196	1.1	2.176	2.723	0.219	12.169	0.959	0.58	3.9-3
9	9			0.032	2.125	0.011	2.125	z	1.284	1.408	2.72	3.485	0.28	12.169	0.937	0.486	3.9-3
10	1	M2	1.4375X12FS	0.089	8	0.021	8	z	0.106	0.792	1.131	1.96	0.158	23.611	0.692	0.071	3.9-3
11	2			0.191	8	0.044	8	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
12	3			0.123	8	0.029	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
13	4			0.179	8	0.042	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
14	5			0.201	8	0.047	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
15	6			0.09	8	0.021	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
16	7			0.159	8	0.037	8	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
17	8			0.127	8	0.03	8	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
18	9			0.106	8	0.025	8	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
19	1	M3	1.4375X12FS	0.089	0	0.022	0	z	0.106	0.792	1.131	1.96	0.158	23.611	0.692	0.071	3.9-3
20	2			0.191	0	0.047	0	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
21	3			0.123	0	0.03	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
22	4			0.179	0	0.044	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
23	5			0.201	0	0.05	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
24	6			0.09	0	0.022	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
25	7			0.159	0	0.039	0	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
26	8			0.127	0	0.031	0	z	0.107	1.1	1.192	2.723	0.219	23.611	0.525	0.052	3.9-3
27	9			0.106	0	0.026	0	z	0.107	1.408	1.214	3.485	0.28	23.611	0.418	0.04	3.9-3
28	1	M4	1.4375X12FS	0.051	2.917	0.013	5.833	z	0.197	0.792	1.37	1.96	0.158	20.161	0.839	0.132	3.9-3
29	2			0.109	2.917	0.028	5.833	z	0.198	1.1	1.556	2.723	0.219	20.161	0.686	0.096	3.9-3
30	3			0.07	2.917	0.018	5.833	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3
31	4			0.102	2.917	0.026	5.833	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3

AF&PA NDS-05/08: 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
32	5			0.115	2.917	0.029	5.833	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3
33	6			0.052	2.917	0.013	5.833	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3
34	7			0.091	2.917	0.023	5.833	z	0.198	1.1	1.556	2.723	0.219	20.161	0.686	0.096	3.9-3
35	8			0.072	2.917	0.019	5.833	z	0.198	1.1	1.556	2.723	0.219	20.161	0.686	0.096	3.9-3
36	9			0.06	2.917	0.015	5.833	z	0.199	1.408	1.623	3.485	0.28	20.161	0.559	0.076	3.9-3
37	1	M5	1.4375X12FS	0	0	0.001	0	z	1.483	0.792	1.631	1.96	0.158	3.411	0.999	0.999	3.9-3
38	2			0	0	0.002	0	z	2.059	1.1	2.264	2.723	0.219	3.411	0.998	0.998	3.9-3
39	3			0	0	0.001	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3
40	4			0	0	0.001	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3
41	5			0	0	0.002	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3
42	6			0	0	0.001	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3
43	7			0	0	0.001	0	z	2.059	1.1	2.264	2.723	0.219	3.411	0.998	0.998	3.9-3
44	8			0	0	0.001	0	z	2.059	1.1	2.264	2.723	0.219	3.411	0.998	0.998	3.9-3
45	9			0	0	0.001	0	z	2.634	1.408	2.897	3.485	0.28	3.411	0.997	0.998	3.9-3



Nom. 2x8 T+G WOOD DECKING

$t = 1\ 7/16"$ $E = 1{,}600$ ksi

$C_F = 1.1$ $F_b = 1{,}650$ psi

T.A. = 8.6 ft^2

$w_D = 9 * 0.894 = 8.05$ plf

$w_{Lr} = 20 * 0.894^2 = 18.0$ plf

$w_W = 20.82$ plf

$w_{W\ C+C\ D} = 43.2$ plf

$w_{W\ C+C\ UP} = -32.6$ plf

1.843 ft. 4.25 ft. 5.087 ft.

$M_{D+Lr} = 694$ #-in

$f_b = 168$ psi

$F_b' = 1650*1.25*1.1 = 2269$ psi OK

$M_{D+C\&C\ WL} = 980$ #-in

$f_b = 237$ psi

$F_b' = 1650*1.6*1.1 = 2904$ psi OK

$\Delta_{0.5D+Lr} = 0.035" - L/1735 < L/120$ OK

$\Delta_{Lr} = 0.028" - L/2171 < L/180$ OK

$\Delta_{0.7W\ C+C\ D} = 0.032" - L/1915 < L/180$ OK

RISA	EEC	T&G Decking - HIGH	SK-3
	DPS		Oct 02, 2023 at 02:41 PM
	14836 R		14836 T+G DECK - HIGH.r3d

Model Settings

Number of Reported Sections	3
Number of Internal Sections	100
Member Area Load Mesh Size (in^2)	144
Consider Shear Deformation	No
Consider Torsional Warping	Yes
Approximate Mesh Size (in)	24
Transfer Forces Between Intersecting Wood Walls	Yes
Increase Wood Wall Nailing Capacity for Wind Loads	Yes
Include P-Delta for Walls	Yes
Optimize Masonry and Wood Walls	Yes
Maximum Number of Iterations	3
Single	No
Multiple (Optimum)	Yes
Maximum	No

Global Axis corresponding to vertical direction	Y
Convert Existing Data	Yes
Default Global Plane for z-axis	XZ
Plate Local Axis Orientation	Global

Hot Rolled Steel	None
Stiffness Adjustment	Yes (Iterative)
Notional Annex	None
Connections	None
Cold Formed Steel	None
Stiffness Adjustment	Yes (Iterative)
Wood	AF&PA NDS-05/08: ASD
Temperature	< 100F
Concrete	None
Masonry	None
Aluminum	None
Structure Type	Building
Stiffness Adjustment	Yes (Iterative)
Stainless	None
Stiffness Adjustment	Yes (Iterative)

Compression Stress Block	Rectangular Stress Block
Analyze using Cracked Sections	Yes
Leave room for horizontal rebar splices (2*d bar spacing)	Yes
List forces which were ignored for design in the Detail Report	Yes

Column Min Steel	1
Column Max Steel	8
Rebar Material Spec	ASTM A615
Warn if beam-column framing arrangement is not understood	No
Number of Shear Regions	4
Region 2 & 3 Spacing Increase Increment (in)	4

Code	None
Base Elevation (ft)	
Include the weight of the structure in base shear calcs	Yes

Model Settings (Continued)

T Z (sec)	
T X (sec)	
C_t Z	0.02
C_t X	0.02
R Z	1.25
R X	1.25

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N1	-11.18	0	0	
2	N2	-9.337	0	0	
3	N3	-5.087	0	0	
4	N4	0	0	0	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]
1	N2	Reaction	Reaction	Reaction	Reaction
2	N3		Reaction	Reaction	
3	N4		Reaction	Reaction	

Wood Properties

	Label	Type	Database	Species	Grade	Cm	Ci	Emod	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]
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	2x8 T+G Deck	Custom	N/A	T+G DECK	na			1	0.3	0.3	0.035

Custom Wood Properties

	Label	Fb	Ft	Fv	Fc	E	E05	Type	Cf
1	LVL_PRL_1.5E_2250F	2.25	1.5	0.22	1.95	1500	0.5	SCL	
2	LVL_PRL_2.0E_2900F	2.9	1.9	0.285	2.75	2000	0.5	SCL	
3	LVL_Microllam_1.9E_2600F	2.6	1.555	0.285	2.51	1900	0.5	SCL	
4	PSL_Parallam_2.0E_2900F	2.9	2.025	0.29	2.9	2000	0.5	SCL	
5	PSL_Parallam_1.8E	2.4	1.755	0.18	2.5	1800	0.5	SCL	
6	LSL_TimberStrand_1.55E_2325F	2.325	1.07	0.31	2.05	1550	0.5	SCL	
7	LSL_TimberStrand_1.3E_1700F	1.7	1.075	0.4	1.4	1300	0.5	SCL	
8	T+G DECK	1.65	0.8	0.175	1.5	1600	580	Visually Graded	1.1

Wood Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Wood Decking	1.4375X12FS	Beam	None	2x8 T+G Deck	Typical	17.25	2.97	207	10.985

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N1	N2	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
2	M2	N2	N3	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
3	M3	N3	N4	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical

Member Advanced Data

	Label	Physical	Deflection Ratio Options	Seismic DR
1	M1	Yes	OX	None
2	M2	Yes	Default	None
3	M3	Yes	Default	None

Wood Design Parameters

	Label	Shape	Length [ft]	le-bend top [ft]	Cr	y sway	z sway
1	M1	Wood Decking	1.843	Lbyy	Yes		
2	M2	Wood Decking	4.25	Lbyy	Yes		
3	M3	Wood Decking	5.087	Lbyy	Yes		

Member Distributed Loads (BLC 1 : D)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-8.05	-8.05	0	%100
2	M2	Y	-8.05	-8.05	0	%100
3	M3	Y	-8.05	-8.05	0	%100

Member Distributed Loads (BLC 2 : Lr)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-16	-16	0	%100
2	M2	Y	-16	-16	0	%100
3	M3	Y	-16	-16	0	%100

Member Distributed Loads (BLC 3 : UNB S)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-6.72	-6.72	0	%100
2	M2	Y	-6.72	-6.72	0	3.74
3	M2	Y	-18.16	-18.16	3.74	%100
4	M3	Y	-18.16	-18.16	0	%100

Member Distributed Loads (BLC 4 : W Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-20.82	-20.82	0	%100
2	M2	Y	-20.82	-20.82	0	%100
3	M3	Y	-20.82	-20.82	0	%100

Member Distributed Loads (BLC 5 : W C+C Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-43.2	-43.2	0	%100
2	M2	Y	-43.2	-43.2	0	%100
3	M3	Y	-43.2	-43.2	0	%100

Member Distributed Loads (BLC 6 : W C+C UP)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	32.6	32.6	0	%100
2	M2	Y	32.6	32.6	0	%100

Member Distributed Loads (BLC 6 : W C+C UP) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
3	M3	Y	32.6	32.6	0	%100

Basic Load Cases

	BLC Description	Category	Distributed
1	D	DL	3
2	Lr	RLL	3
3	UNB S	OL1	4
4	W Down	WL	3
5	W C+C Down	WL+Z	3
6	W C+C UP	WL-Z	3

Load Combinations

	Description	Solve	BLC	Factor	BLC	Factor	BLC	Factor
1	D	Yes	DL	1				
2	D+Lr	Yes	DL	1	RLL	1		
3	D+UNB S	Yes	DL	1	OL1	1		
4	D+W Down	Yes	DL	1			WL	0.6
5	D+3/4(Lr+W Down)	Yes	DL	1	RLL	0.75	WL	0.45
6	D+W C+C Down	Yes	DL	1			WL+Z	0.6
7	0.6D (5.5 psf)+W C+C UP	Yes	DL	0.471			WL-Z	0.6
8	1/2D+Lr	Yes	DL	0.5	RLL	1		
9	Lr	Yes			RLL	1		
10	0.7W C+C DOWN	Yes			WL+Z	0.42		

Load Combination Design

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	D	0.9		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	D+Lr	1.25		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	D+UNB S	1.15		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	D+W Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	D+3/4(Lr+W Down)	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	D+W C+C Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	0.6D (5.5 psf)+W C+C UP	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	1/2D+Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	0.7W C+C DOWN	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
1	1	N2	0	30.607	0	0	0	0
2	2		0	91.44	0	0	0	0
3	3		0	51.622	0	0	0	0
4	4		0	78.102	0	0	0	0
5	5		0	111.853	0	0	0	0
6	6		0	129.156	0	0	0	0
7	7		0	-59.953	0	0	0	0
8	8		0	76.136	0	0	0	0
9	9		0	60.833	0	0	0	0
10	10		0	68.985	0	0	0	0
11	1	N3	0	42.721	0	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
12	2		0	127.631	0	0	0	0
13	3		0	121.931	0	0	0	0
14	4		0	109.015	0	0	0	0
15	5		0	156.124	0	0	0	0
16	6		0	180.276	0	0	0	0
17	7		0	-83.682	0	0	0	0
18	8		0	106.271	0	0	0	0
19	9		0	84.911	0	0	0	0
20	10		0	96.289	0	0	0	0
21	1	N4	0	16.672	0	0	0	0
22	2		0	49.808	0	0	0	0
23	3		0	55.606	0	0	0	0
24	4		0	42.543	0	0	0	0
25	5		0	60.927	0	0	0	0
26	6		0	70.352	0	0	0	0
27	7		0	-32.657	0	0	0	0
28	8		0	41.472	0	0	0	0
29	9		0	33.136	0	0	0	0
30	10		0	37.577	0	0	0	0
31	1	Totals:	0	89.999	0			
32	2		0	268.879	0			
33	3		0	229.158	0			
34	4		0	229.66	0			
35	5		0	328.904	0			
36	6		0	379.785	0			
37	7		0	-176.291	0			
38	8		0	223.879	0			
39	9		0	178.88	0			
40	10		0	202.85	0			
41	1	COG (ft):	X: -5.59	Y: 0	Z: 0			
42	2		X: -5.59	Y: 0	Z: 0			
43	3		X: -4.81	Y: 0	Z: 0			
44	4		X: -5.59	Y: 0	Z: 0			
45	5		X: -5.59	Y: 0	Z: 0			
46	6		X: -5.59	Y: 0	Z: 0			
47	7		X: -5.59	Y: 0	Z: 0			
48	8		X: -5.59	Y: 0	Z: 0			
49	9		X: -5.59	Y: 0	Z: 0			
50	10		X: -5.59	Y: 0	Z: 0			

Maximum Member Section Forces

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
1	1	M1	max	0	1.843	0	1.843	14.836	1.843	0	1.843	0.164	1.843	0	1.843
2			min	0	0	0	0	0	0	0	0	0	0	0	0
3	2	M1	max	0	1.843	0	1.843	44.324	1.843	0	1.843	0.49	1.843	0	1.843
4			min	0	0	0	0	0	0	0	0	0	0	0	0
5	3	M1	max	0	1.843	0	1.843	27.221	1.843	0	1.843	0.301	1.843	0	1.843
6			min	0	0	0	0	0	0	0	0	0	0	0	0
7	4	M1	max	0	1.843	0	1.843	37.859	1.843	0	1.843	0.419	1.843	0	1.843
8			min	0	0	0	0	0	0	0	0	0	0	0	0
9	5	M1	max	0	1.843	0	1.843	54.219	1.843	0	1.843	0.6	1.843	0	1.843
10			min	0	0	0	0	0	0	0	0	0	0	0	0
11	6	M1	max	0	1.843	0	1.843	62.607	1.843	0	1.843	0.692	1.843	0	1.843
12			min	0	0	0	0	0	0	0	0	0	0	0	0
13	7	M1	max	0	1.843	0	1.843	0	0	0	1.843	0	0	0	1.843

Maximum Member Section Forces (Continued)

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
14			min	0	0	0	0	-29.061	1.843	0	0	-0.321	1.843	0	0
15	8	M1	max	0	1.843	0	1.843	36.906	1.843	0	1.843	0.408	1.843	0	1.843
16			min	0	0	0	0	0	0	0	0	0	0	0	0
17	9	M1	max	0	1.843	0	1.843	29.488	1.843	0	1.843	0.326	1.843	0	1.843
18			min	0	0	0	0	0	0	0	0	0	0	0	0
19	10	M1	max	0	1.843	0	1.843	33.439	1.843	0	1.843	0.37	1.843	0	1.843
20			min	0	0	0	0	0	0	0	0	0	0	0	0
21	1	M2	max	0	4.25	0	4.25	18.442	4.25	0	4.25	0.232	4.25	0	4.25
22			min	0	0	0	0	-15.771	0	0	0	-0.021	1.952	0	0
23	2	M2	max	0	4.25	0	4.25	55.097	4.25	0	4.25	0.694	4.25	0	4.25
24			min	0	0	0	0	-47.116	0	0	0	-0.064	1.952	0	0
25	3	M2	max	0	4.25	0	4.25	44.206	4.25	0	4.25	0.675	4.25	0	4.25
26			min	0	0	0	0	-24.401	0	0	0	0.059	1.648	0	0
27	4	M2	max	0	4.25	0	4.25	47.06	4.25	0	4.25	0.592	4.25	0	4.25
28			min	0	0	0	0	-40.243	0	0	0	-0.054	1.952	0	0
29	5	M2	max	0	4.25	0	4.25	67.397	4.25	0	4.25	0.849	4.25	0	4.25
30			min	0	0	0	0	-57.634	0	0	0	-0.078	1.952	0	0
31	6	M2	max	0	4.25	0	4.25	77.823	4.25	0	4.25	0.98	4.25	0	4.25
32			min	0	0	0	0	-66.55	0	0	0	-0.09	1.952	0	0
33	7	M2	max	0	4.25	0	4.25	30.892	0	0	4.25	0.042	1.952	0	4.25
34			min	0	0	0	0	-36.124	4.25	0	0	-0.455	4.25	0	0
35	8	M2	max	0	4.25	0	4.25	45.876	4.25	0	4.25	0.578	4.25	0	4.25
36			min	0	0	0	0	-39.23	0	0	0	-0.053	1.952	0	0
37	9	M2	max	0	4.25	0	4.25	36.655	4.25	0	4.25	0.461	4.25	0	4.25
38			min	0	0	0	0	-31.345	0	0	0	-0.042	1.952	0	0
39	10	M2	max	0	4.25	0	4.25	41.567	4.25	0	4.25	0.523	4.25	0	4.25
40			min	0	0	0	0	-35.545	0	0	0	-0.048	1.952	0	0
41	1	M3	max	0	5.087	0	5.087	16.672	5.087	0	5.087	0.232	0	0	5.087
42			min	0	0	0	0	-24.279	0	0	0	-0.207	3.011	0	0
43	2	M3	max	0	5.087	0	5.087	49.808	5.087	0	5.087	0.694	0	0	5.087
44			min	0	0	0	0	-72.534	0	0	0	-0.619	3.011	0	0
45	3	M3	max	0	5.087	0	5.087	55.606	5.087	0	5.087	0.675	0	0	5.087
46			min	0	0	0	0	-77.725	0	0	0	-0.708	2.959	0	0
47	4	M3	max	0	5.087	0	5.087	42.543	5.087	0	5.087	0.592	0	0	5.087
48			min	0	0	0	0	-61.954	0	0	0	-0.529	3.011	0	0
49	5	M3	max	0	5.087	0	5.087	60.927	5.087	0	5.087	0.849	0	0	5.087
50			min	0	0	0	0	-88.727	0	0	0	-0.757	3.011	0	0
51	6	M3	max	0	5.087	0	5.087	70.352	5.087	0	5.087	0.98	0	0	5.087
52			min	0	0	0	0	-102.453	0	0	0	-0.874	3.011	0	0
53	7	M3	max	0	5.087	0	5.087	47.557	0	0	5.087	0.406	3.011	0	5.087
54			min	0	0	0	0	-32.657	5.087	0	0	-0.455	0	0	0
55	8	M3	max	0	5.087	0	5.087	41.472	5.087	0	5.087	0.578	0	0	5.087
56			min	0	0	0	0	-60.395	0	0	0	-0.515	3.011	0	0
57	9	M3	max	0	5.087	0	5.087	33.136	5.087	0	5.087	0.461	0	0	5.087
58			min	0	0	0	0	-48.256	0	0	0	-0.412	3.011	0	0
59	10	M3	max	0	5.087	0	5.087	37.577	5.087	0	5.087	0.523	0	0	5.087
60			min	0	0	0	0	-54.722	0	0	0	-0.467	3.011	0	0

Member Section Deflections - Service

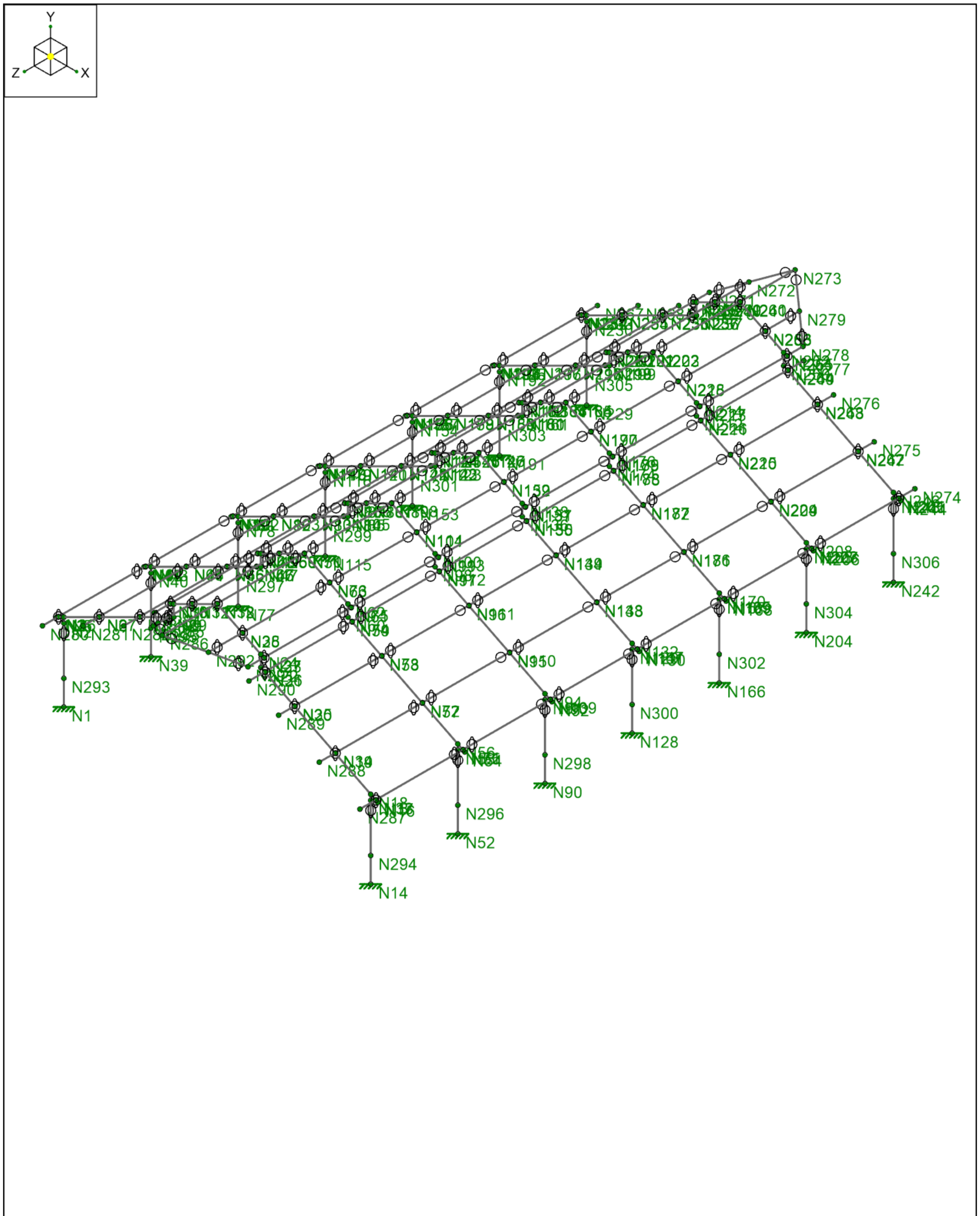
	LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y' Ratio	(n) L/z' Ratio
1	8	M1	1	0	0	0.023	0	NC	973
2			2	0	0	0.01	0	NC	2251
3			3	0	0	0	0	NC	NC
4	9	M1	1	0	0	0.018	0	NC	1218
5			2	0	0	0.008	0	NC	2817

Member Section Deflections - Service (Continued)

	LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y' Ratio	(n) L/z' Ratio
6			3	0	0	0	0	NC	NC
7	10	M1	1	0	0	0.021	0	NC	1074
8			2	0	0	0.009	0	NC	2484
9			3	0	0	0	0	NC	NC
10	8	M2	1	0	0	0	0	NC	NC
11			2	0	0	-0.003	0	NC	NC
12			3	0	0	0	0	NC	NC
13	9	M2	1	0	0	0	0	NC	NC
14			2	0	0	-0.002	0	NC	NC
15			3	0	0	0	0	NC	NC
16	10	M2	1	0	0	0	0	NC	NC
17			2	0	0	-0.003	0	NC	NC
18			3	0	0	0	0	NC	NC
19	8	M3	1	0	0	0	0	NC	NC
20			2	0	0	0.035	0	NC	1735
21			3	0	0	0	0	NC	NC
22	9	M3	1	0	0	0	0	NC	NC
23			2	0	0	0.028	0	NC	2171
24			3	0	0	0	0	NC	NC
25	10	M3	1	0	0	0	0	NC	NC
26			2	0	0	0.032	0	NC	1915
27			3	0	0	0	0	NC	NC

AF&PA NDS-05/08: 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	M1	1.4375X12FS	0.02	1.843	0.008	1.843	z	1.168	0.792	1.6	1.96	0.158	11.333	0.98	0.787	3.9-3
2	2			0.044	1.843	0.018	1.843	z	1.414	1.1	2.195	2.723	0.219	11.333	0.967	0.685	3.9-3
3	3			0.029	1.843	0.012	1.843	z	1.354	1.012	2.027	2.505	0.201	11.333	0.971	0.714	3.9-3
4	4			0.029	1.843	0.012	1.843	z	1.57	1.408	2.763	3.485	0.28	11.333	0.951	0.595	3.9-3
5	5			0.042	1.843	0.017	1.843	z	1.57	1.408	2.763	3.485	0.28	11.333	0.951	0.595	3.9-3
6	6			0.048	1.843	0.019	1.843	z	1.57	1.408	2.763	3.485	0.28	11.333	0.951	0.595	3.9-3
7	7			0.022	1.843	0.009	1.843	z	1.57	1.408	2.763	3.485	0.28	11.333	0.951	0.595	3.9-3
8	8			0.036	1.843	0.015	1.843	z	1.414	1.1	2.195	2.723	0.219	11.333	0.967	0.685	3.9-3
9	9			0.029	1.843	0.012	1.843	z	1.414	1.1	2.195	2.723	0.219	11.333	0.967	0.685	3.9-3
10	10			0.026	1.843	0.01	1.843	z	1.57	1.408	2.763	3.485	0.28	11.333	0.951	0.595	3.9-3
11	1	M2	1.4375X12FS	0.029	4.25	0.01	4.25	z	0.359	0.792	1.503	1.96	0.158	17.209	0.92	0.242	3.9-3
12	2			0.062	4.25	0.022	4.25	z	0.366	1.1	1.892	2.723	0.219	17.209	0.834	0.177	3.9-3
13	3			0.065	4.25	0.019	4.25	z	0.364	1.012	1.801	2.505	0.201	17.209	0.863	0.192	3.9-3
14	4			0.041	4.25	0.015	4.25	z	0.37	1.408	2.096	3.485	0.28	17.209	0.722	0.14	3.9-3
15	5			0.059	4.25	0.021	4.25	z	0.37	1.408	2.096	3.485	0.28	17.209	0.722	0.14	3.9-3
16	6			0.068	4.25	0.024	4.25	z	0.37	1.408	2.096	3.485	0.28	17.209	0.722	0.14	3.9-3
17	7			0.032	4.25	0.011	4.25	z	0.37	1.408	2.096	3.485	0.28	17.209	0.722	0.14	3.9-3
18	8			0.051	4.25	0.018	4.25	z	0.366	1.1	1.892	2.723	0.219	17.209	0.834	0.177	3.9-3
19	9			0.041	4.25	0.015	4.25	z	0.366	1.1	1.892	2.723	0.219	17.209	0.834	0.177	3.9-3
20	10			0.036	4.25	0.013	4.25	z	0.37	1.408	2.096	3.485	0.28	17.209	0.722	0.14	3.9-3
21	1	M3	1.4375X12FS	0.029	0	0.013	0	z	0.256	0.792	1.441	1.96	0.158	18.828	0.882	0.172	3.9-3
22	2			0.062	0	0.029	0	z	0.259	1.1	1.714	2.723	0.219	18.828	0.755	0.126	3.9-3
23	3			0.068	2.959	0.034	0	z	0.258	1.012	1.658	2.505	0.201	18.828	0.794	0.136	3.9-3
24	4			0.041	0	0.019	0	z	0.261	1.408	1.824	3.485	0.28	18.828	0.628	0.099	3.9-3
25	5			0.059	0	0.028	0	z	0.261	1.408	1.824	3.485	0.28	18.828	0.628	0.099	3.9-3
26	6			0.068	0	0.032	0	z	0.261	1.408	1.824	3.485	0.28	18.828	0.628	0.099	3.9-3
27	7			0.032	0	0.015	0	z	0.261	1.408	1.824	3.485	0.28	18.828	0.628	0.099	3.9-3
28	8			0.051	0	0.024	0	z	0.259	1.1	1.714	2.723	0.219	18.828	0.755	0.126	3.9-3
29	9			0.041	0	0.019	0	z	0.259	1.1	1.714	2.723	0.219	18.828	0.755	0.126	3.9-3
30	10			0.036	0	0.017	0	z	0.261	1.408	1.824	3.485	0.28	18.828	0.628	0.099	3.9-3



RISA A NEMETSCHEK COMPANY	EEC	TS-G60114-2T-RE-06-TG	SK-1
	DPS		Dec 07, 2023 at 01:27 PM
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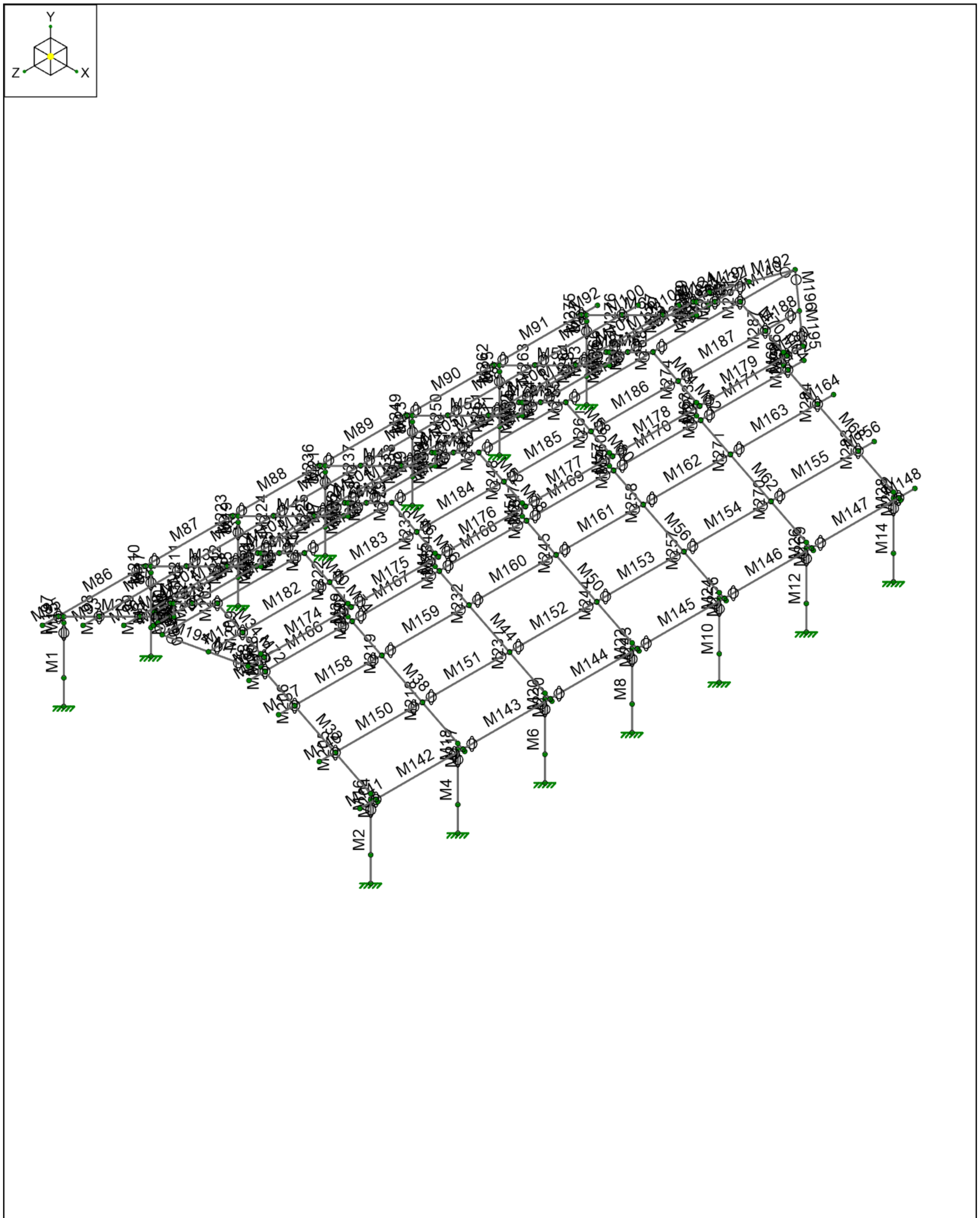

	EEC	TS-G60114-2T-RE-06-TG	SK-2
	DPS		Dec 07, 2023 at 01:28 PM
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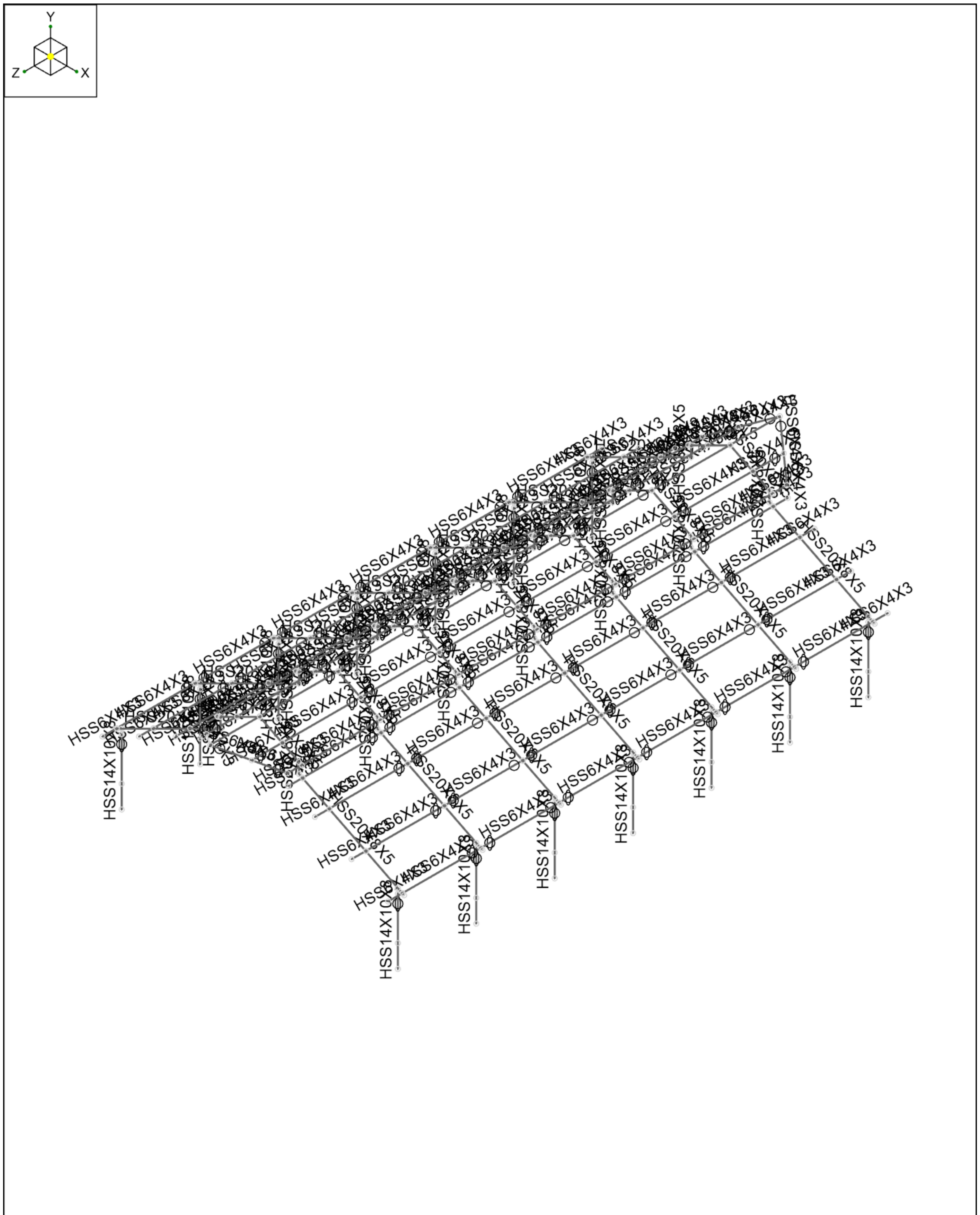
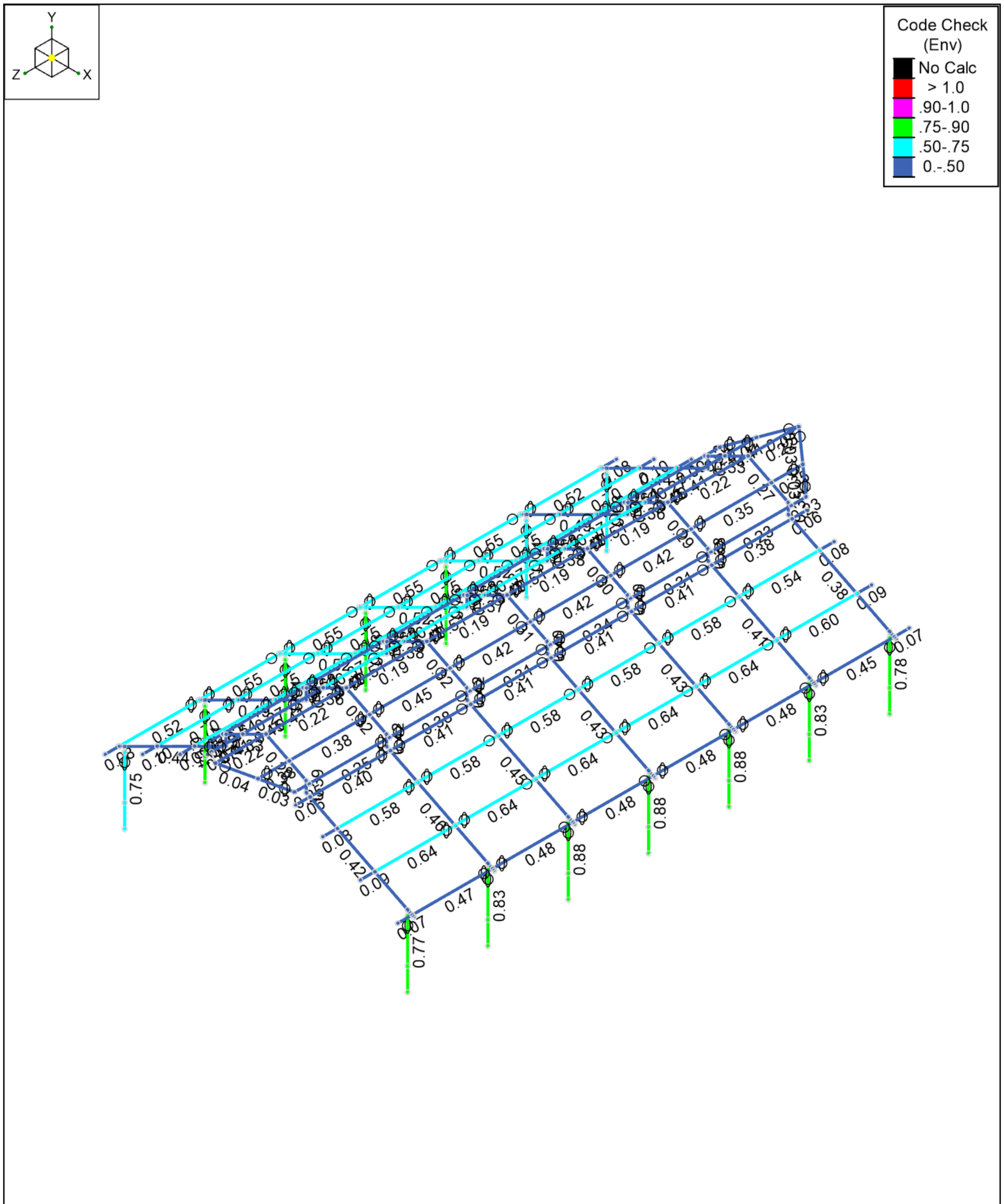


RISA	EEC	TS-G60114-2T-RE-06-TG	SK-3
	DPS		Dec 07, 2023 at 01:31 PM
	14836 R		14836 TS-G60114-2T-RE-06…



Member Code Checks Displayed (Enveloped)

RISA	EEC	TS-G60114-2T-RE-06-TG	SK-4
	DPS		Dec 07, 2023 at 01:31 PM
	14836 R		14836 TS-G60114-2T-RE-06...

Model Settings

Number of Reported Sections	3
Number of Internal Sections	100
Member Area Load Mesh Size (in^2)	144
Consider Shear Deformation	Yes
Consider Torsional Warping	Yes
Approximate Mesh Size (in)	24
Transfer Forces Between Intersecting Wood Walls	Yes
Increase Wood Wall Nailing Capacity for Wind Loads	Yes
Include P-Delta for Walls	Yes
Optimize Masonry and Wood Walls	Yes
Maximum Number of Iterations	3
Single	No
Multiple (Optimum)	Yes
Maximum	No

Global Axis corresponding to vertical direction	Y
Convert Existing Data	Yes
Default Global Plane for z-axis	XZ
Plate Local Axis Orientation	Global

Hot Rolled Steel	AISC 13th (360-05): ASD
Stiffness Adjustment	Yes (Iterative)
Notional Annex	None
Connections	AISC 13th (360-05): ASD
Cold Formed Steel	None
Stiffness Adjustment	Yes (Iterative)
Wood	None
Temperature	< 100F
Concrete	ACI 318-05
Masonry	None
Aluminum	None
Structure Type	Building
Stiffness Adjustment	Yes (Iterative)
Stainless	None
Stiffness Adjustment	Yes (Iterative)

Analysis Methodology	Exact Integration Method
Parme Beta Factor	0.65

Compression Stress Block	Rectangular Stress Block
Analyze using Cracked Sections	Yes
Leave room for horizontal rebar splices (2*d bar spacing)	Yes
List forces which were ignored for design in the Detail Report	Yes

Column Min Steel	1
Column Max Steel	8
Rebar Material Spec	ASTM A615
Warn if beam-column framing arrangement is not understood	No
Number of Shear Regions	4
Region 2 & 3 Spacing Increase Increment (in)	4

Code	ASCE 7-05

Model Settings (Continued)

Occupancy Cat	I or II
Drift Cat	Other
Base Elevation (ft)	
Include the weight of the structure in base shear calcs	Yes
S_1 (g)	0.104
SD_1 (g)	0.118
SD_S (g)	0.245
T_L (sec)	12
T Z (sec)	
T X (sec)	
C_tZ	0.02
C_tX	0.02
C_tExp. Z	0.75
C_tExp. X	0.75
R Z	1.25
R X	1.25
Ω_0Z	1.25
Ω_0X	1.25
C_dZ	1.25
C_dX	1.25
ρ Z	1
ρ X	1

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N1	-27	-13.7	0	
2	N2	-27	-0.932	0	
3	N3	-28.225	-0.613	0	
4	N4	-27.934	-0.467	0	
5	N5	-27	0	0	
6	N6	-20.779	3.111	0	
7	N7	-13.623	6.688	0	
8	N8	-8.406	9.297	0	
9	N9	-7.667	9.667	0	
10	N10	-8.239	11.38	0	
11	N11	-7.667	11.667	0	
12	N12	-4.438	13.281	0	
13	N13	0	15.5	0	
14	N14	27	-13.7	0	
15	N15	27	-0.932	0	
16	N16	28.225	-0.613	0	
17	N17	27.934	-0.467	0	
18	N18	27	0	0	
19	N19	20.779	3.111	0	
20	N20	13.623	6.688	0	
21	N21	8.406	9.297	0	
22	N22	7.667	9.667	0	
23	N23	8.239	11.38	0	
24	N24	7.667	11.667	0	
25	N25	4.438	13.281	0	
26	N26	-27.934	-0.379	0	
27	N27	-20.779	3.199	0	
28	N28	-13.623	6.776	0	
29	N29	-8.406	9.385	0	
30	N30	-8.239	11.468	0	
31	N31	-4.438	13.369	0	
32	N32	0	15.588	0	
33	N33	27.934	-0.379	0	
34	N34	20.779	3.199	0	
35	N35	13.623	6.776	0	
36	N36	8.406	9.385	0	
37	N37	8.239	11.468	0	
38	N38	4.438	13.369	0	
39	N39	-27	-13.7	-15.333	
40	N40	-27	-0.932	-15.333	
41	N41	-28.225	-0.613	-15.333	
42	N42	-27.934	-0.467	-15.333	
43	N43	-27	0	-15.333	
44	N44	-20.779	3.111	-15.333	
45	N45	-13.623	6.688	-15.333	
46	N46	-8.406	9.297	-15.333	
47	N47	-7.667	9.667	-15.333	
48	N48	-8.239	11.38	-15.333	
49	N49	-7.667	11.667	-15.333	
50	N50	-4.438	13.281	-15.333	
51	N51	0	15.5	-15.333	
52	N52	27	-13.7	-15.333	
53	N53	27	-0.932	-15.333	
54	N54	28.225	-0.613	-15.333	
55	N55	27.934	-0.467	-15.333	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
56	N56	27	0	-15.333	
57	N57	20.779	3.111	-15.333	
58	N58	13.623	6.688	-15.333	
59	N59	8.406	9.297	-15.333	
60	N60	7.667	9.667	-15.333	
61	N61	8.239	11.38	-15.333	
62	N62	7.667	11.667	-15.333	
63	N63	4.438	13.281	-15.333	
64	N64	-27.934	-0.379	-15.333	
65	N65	-20.779	3.199	-15.333	
66	N66	-13.623	6.776	-15.333	
67	N67	-8.406	9.385	-15.333	
68	N68	-8.239	11.468	-15.333	
69	N69	-4.438	13.369	-15.333	
70	N70	0	15.588	-15.333	
71	N71	27.934	-0.379	-15.333	
72	N72	20.779	3.199	-15.333	
73	N73	13.623	6.776	-15.333	
74	N74	8.406	9.385	-15.333	
75	N75	8.239	11.468	-15.333	
76	N76	4.438	13.369	-15.333	
77	N77	-27	-13.7	-30.667	
78	N78	-27	-0.932	-30.667	
79	N79	-28.225	-0.613	-30.667	
80	N80	-27.934	-0.467	-30.667	
81	N81	-27	0	-30.667	
82	N82	-20.779	3.111	-30.667	
83	N83	-13.623	6.688	-30.667	
84	N84	-8.406	9.297	-30.667	
85	N85	-7.667	9.667	-30.667	
86	N86	-8.239	11.38	-30.667	
87	N87	-7.667	11.667	-30.667	
88	N88	-4.438	13.281	-30.667	
89	N89	0	15.5	-30.667	
90	N90	27	-13.7	-30.667	
91	N91	27	-0.932	-30.667	
92	N92	28.225	-0.613	-30.667	
93	N93	27.934	-0.467	-30.667	
94	N94	27	0	-30.667	
95	N95	20.779	3.111	-30.667	
96	N96	13.623	6.688	-30.667	
97	N97	8.406	9.297	-30.667	
98	N98	7.667	9.667	-30.667	
99	N99	8.239	11.38	-30.667	
100	N100	7.667	11.667	-30.667	
101	N101	4.438	13.281	-30.667	
102	N102	-27.934	-0.379	-30.667	
103	N103	-20.779	3.199	-30.667	
104	N104	-13.623	6.776	-30.667	
105	N105	-8.406	9.385	-30.667	
106	N106	-8.239	11.468	-30.667	
107	N107	-4.438	13.369	-30.667	
108	N108	0	15.588	-30.667	
109	N109	27.934	-0.379	-30.667	
110	N110	20.779	3.199	-30.667	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
111	N111	13.623	6.776	-30.667	
112	N112	8.406	9.385	-30.667	
113	N113	8.239	11.468	-30.667	
114	N114	4.438	13.369	-30.667	
115	N115	-27	-13.7	-46	
116	N116	-27	-0.932	-46	
117	N117	-28.225	-0.613	-46	
118	N118	-27.934	-0.467	-46	
119	N119	-27	0	-46	
120	N120	-20.779	3.111	-46	
121	N121	-13.623	6.688	-46	
122	N122	-8.406	9.297	-46	
123	N123	-7.667	9.667	-46	
124	N124	-8.239	11.38	-46	
125	N125	-7.667	11.667	-46	
126	N126	-4.438	13.281	-46	
127	N127	0	15.5	-46	
128	N128	27	-13.7	-46	
129	N129	27	-0.932	-46	
130	N130	28.225	-0.613	-46	
131	N131	27.934	-0.467	-46	
132	N132	27	0	-46	
133	N133	20.779	3.111	-46	
134	N134	13.623	6.688	-46	
135	N135	8.406	9.297	-46	
136	N136	7.667	9.667	-46	
137	N137	8.239	11.38	-46	
138	N138	7.667	11.667	-46	
139	N139	4.438	13.281	-46	
140	N140	-27.934	-0.379	-46	
141	N141	-20.779	3.199	-46	
142	N142	-13.623	6.776	-46	
143	N143	-8.406	9.385	-46	
144	N144	-8.239	11.468	-46	
145	N145	-4.438	13.369	-46	
146	N146	0	15.588	-46	
147	N147	27.934	-0.379	-46	
148	N148	20.779	3.199	-46	
149	N149	13.623	6.776	-46	
150	N150	8.406	9.385	-46	
151	N151	8.239	11.468	-46	
152	N152	4.438	13.369	-46	
153	N153	-27	-13.7	-61.333	
154	N154	-27	-0.932	-61.333	
155	N155	-28.225	-0.613	-61.333	
156	N156	-27.934	-0.467	-61.333	
157	N157	-27	0	-61.333	
158	N158	-20.779	3.111	-61.333	
159	N159	-13.623	6.688	-61.333	
160	N160	-8.406	9.297	-61.333	
161	N161	-7.667	9.667	-61.333	
162	N162	-8.239	11.38	-61.333	
163	N163	-7.667	11.667	-61.333	
164	N164	-4.438	13.281	-61.333	
165	N165	0	15.5	-61.333	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
166	N166	27	-13.7	-61.333	
167	N167	27	-0.932	-61.333	
168	N168	28.225	-0.613	-61.333	
169	N169	27.934	-0.467	-61.333	
170	N170	27	0	-61.333	
171	N171	20.779	3.111	-61.333	
172	N172	13.623	6.688	-61.333	
173	N173	8.406	9.297	-61.333	
174	N174	7.667	9.667	-61.333	
175	N175	8.239	11.38	-61.333	
176	N176	7.667	11.667	-61.333	
177	N177	4.438	13.281	-61.333	
178	N178	-27.934	-0.379	-61.333	
179	N179	-20.779	3.199	-61.333	
180	N180	-13.623	6.776	-61.333	
181	N181	-8.406	9.385	-61.333	
182	N182	-8.239	11.468	-61.333	
183	N183	-4.438	13.369	-61.333	
184	N184	0	15.588	-61.333	
185	N185	27.934	-0.379	-61.333	
186	N186	20.779	3.199	-61.333	
187	N187	13.623	6.776	-61.333	
188	N188	8.406	9.385	-61.333	
189	N189	8.239	11.468	-61.333	
190	N190	4.438	13.369	-61.333	
191	N191	-27	-13.7	-76.667	
192	N192	-27	-0.932	-76.667	
193	N193	-28.225	-0.613	-76.667	
194	N194	-27.934	-0.467	-76.667	
195	N195	-27	0	-76.667	
196	N196	-20.779	3.111	-76.667	
197	N197	-13.623	6.688	-76.667	
198	N198	-8.406	9.297	-76.667	
199	N199	-7.667	9.667	-76.667	
200	N200	-8.239	11.38	-76.667	
201	N201	-7.667	11.667	-76.667	
202	N202	-4.438	13.281	-76.667	
203	N203	0	15.5	-76.667	
204	N204	27	-13.7	-76.667	
205	N205	27	-0.932	-76.667	
206	N206	28.225	-0.613	-76.667	
207	N207	27.934	-0.467	-76.667	
208	N208	27	0	-76.667	
209	N209	20.779	3.111	-76.667	
210	N210	13.623	6.688	-76.667	
211	N211	8.406	9.297	-76.667	
212	N212	7.667	9.667	-76.667	
213	N213	8.239	11.38	-76.667	
214	N214	7.667	11.667	-76.667	
215	N215	4.438	13.281	-76.667	
216	N216	-27.934	-0.379	-76.667	
217	N217	-20.779	3.199	-76.667	
218	N218	-13.623	6.776	-76.667	
219	N219	-8.406	9.385	-76.667	
220	N220	-8.239	11.468	-76.667	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
221	N221	-4.438	13.369	-76.667	
222	N222	0	15.588	-76.667	
223	N223	27.934	-0.379	-76.667	
224	N224	20.779	3.199	-76.667	
225	N225	13.623	6.776	-76.667	
226	N226	8.406	9.385	-76.667	
227	N227	8.239	11.468	-76.667	
228	N228	4.438	13.369	-76.667	
229	N229	-27	-13.7	-92	
230	N230	-27	-0.932	-92	
231	N231	-28.225	-0.613	-92	
232	N232	-27.934	-0.467	-92	
233	N233	-27	0	-92	
234	N234	-20.779	3.111	-92	
235	N235	-13.623	6.688	-92	
236	N236	-8.406	9.297	-92	
237	N237	-7.667	9.667	-92	
238	N238	-8.239	11.38	-92	
239	N239	-7.667	11.667	-92	
240	N240	-4.438	13.281	-92	
241	N241	0	15.5	-92	
242	N242	27	-13.7	-92	
243	N243	27	-0.932	-92	
244	N244	28.225	-0.613	-92	
245	N245	27.934	-0.467	-92	
246	N246	27	0	-92	
247	N247	20.779	3.111	-92	
248	N248	13.623	6.688	-92	
249	N249	8.406	9.297	-92	
250	N250	7.667	9.667	-92	
251	N251	8.239	11.38	-92	
252	N252	7.667	11.667	-92	
253	N253	4.438	13.281	-92	
254	N254	-27.934	-0.379	-92	
255	N255	-20.779	3.199	-92	
256	N256	-13.623	6.776	-92	
257	N257	-8.406	9.385	-92	
258	N258	-8.239	11.468	-92	
259	N259	-4.438	13.369	-92	
260	N260	0	15.588	-92	
261	N261	27.934	-0.379	-92	
262	N262	20.779	3.199	-92	
263	N263	13.623	6.776	-92	
264	N264	8.406	9.385	-92	
265	N265	8.239	11.468	-92	
266	N266	4.438	13.369	-92	
267	N267	-27.934	-0.379	-94.833	
268	N268	-20.779	3.199	-94.833	
269	N269	-13.623	6.776	-94.833	
270	N270	-8.406	9.385	-94.833	
271	N271	-8.239	11.468	-94.833	
272	N272	-4.438	13.369	-98	
273	N273	0	15.588	-101.691	
274	N274	27.934	-0.379	-94.833	
275	N275	20.779	3.199	-94.833	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
276	N276	13.623	6.776	-94.833	
277	N277	8.406	9.385	-94.833	
278	N278	8.239	11.468	-94.833	
279	N279	4.438	13.369	-98	
280	N280	-27.934	-0.379	2.833	
281	N281	-20.779	3.199	2.833	
282	N282	-13.623	6.776	2.833	
283	N283	-8.406	9.385	2.833	
284	N284	-8.239	11.468	2.833	
285	N285	-4.438	13.369	5.997	
286	N286	0	15.588	9.691	
287	N287	27.934	-0.379	2.833	
288	N288	20.779	3.199	2.833	
289	N289	13.623	6.776	2.833	
290	N290	8.406	9.385	2.833	
291	N291	8.239	11.468	2.833	
292	N292	4.438	13.369	5.997	
293	N293	-27	-9.325	0	
294	N294	27	-9.325	0	
295	N295	-27	-9.325	-15.333	
296	N296	27	-9.325	-15.333	
297	N297	-27	-9.325	-30.667	
298	N298	27	-9.325	-30.667	
299	N299	-27	-9.325	-46	
300	N300	27	-9.325	-46	
301	N301	-27	-9.325	-61.333	
302	N302	27	-9.325	-61.333	
303	N303	-27	-9.325	-76.667	
304	N304	27	-9.325	-76.667	
305	N305	-27	-9.325	-92	
306	N306	27	-9.325	-92	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]	Y Rot [k-ft/rad]	Z Rot [k-ft/rad]
1	N1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N14	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N39	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N52	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N77	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N90	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
7	N115	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
8	N128	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
9	N153	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
10	N166	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
11	N191	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
12	N204	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
13	N229	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
14	N242	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	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

Hot Rolled Steel Properties (Continued)

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
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.C Rect	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
8	A500 Gr.C (Zero)	29000	11154	0.3	0.65	0	50	1.4	62	1.3

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	COLUMN	HSS14X10X8	Column	Tube	A500 Gr.C Rect	Typical	20.9	341	573	685
2	Rafter	HSS20X8X5	Beam	Tube	A500 Gr.C Rect	Typical	15.7	189	786	496
3	Post	HSS20X8X5	Column	Tube	A500 Gr.C Rect	Typical	15.7	189	786	496
4	P-1	HSS6X4X3	Beam	Tube	A500 Gr.C Rect	Typical	3.28	8.76	16.4	18.2
5	P-2	HSS6X4X3	Beam	Tube	A500 Gr.C Rect	Typical	3.28	8.76	16.4	18.2
6	P-3	HSS8X4X3	Beam	Tube	A500 Gr.C Rect	Typical	3.98	11.3	33.1	27.2
7	Rafter2	HSS6X4X3	Beam	Tube	A500 Gr.C (Zero)	Typical	3.28	8.76	16.4	18.2
8	Link1	HSS20X8X5	None	None	A500 Gr.C (Zero)	Typical	15.7	189	786	496
9	Link2	HSS6X4X3	None	None	A500 Gr.C (Zero)	Typical	3.28	8.76	16.4	18.2
10	Link3	HSS6X4X3	None	None	A500 Gr.C (Zero)	Typical	3.28	8.76	16.4	18.2
11	Link4	HSS6X4X3	None	None	A500 Gr.C (Zero)	Typical	3.28	8.76	16.4	18.2

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N1	N2		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
2	M2	N14	N15		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
3	M3	N39	N40		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
4	M4	N52	N53		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
5	M5	N77	N78		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
6	M6	N90	N91		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
7	M7	N115	N116		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
8	M8	N128	N129		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
9	M9	N153	N154		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
10	M10	N166	N167		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
11	M11	N191	N192		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
12	M12	N204	N205		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
13	M13	N229	N230		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
14	M14	N242	N243		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
15	M15	N2	N5		Link1	None	None	A500 Gr.C (Zero)	Typical
16	M16	N15	N18		Link1	None	None	A500 Gr.C (Zero)	Typical
17	M17	N40	N43		Link1	None	None	A500 Gr.C (Zero)	Typical
18	M18	N53	N56		Link1	None	None	A500 Gr.C (Zero)	Typical
19	M19	N78	N81		Link1	None	None	A500 Gr.C (Zero)	Typical
20	M20	N91	N94		Link1	None	None	A500 Gr.C (Zero)	Typical
21	M21	N116	N119		Link1	None	None	A500 Gr.C (Zero)	Typical
22	M22	N129	N132		Link1	None	None	A500 Gr.C (Zero)	Typical
23	M23	N154	N157		Link1	None	None	A500 Gr.C (Zero)	Typical
24	M24	N167	N170		Link1	None	None	A500 Gr.C (Zero)	Typical
25	M25	N192	N195		Link1	None	None	A500 Gr.C (Zero)	Typical
26	M26	N205	N208		Link1	None	None	A500 Gr.C (Zero)	Typical
27	M27	N230	N233		Link1	None	None	A500 Gr.C (Zero)	Typical
28	M28	N243	N246		Link1	None	None	A500 Gr.C (Zero)	Typical
29	M29	N3	N9		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
30	M30	N9	N11		Post	Column	Tube	A500 Gr.C Rect	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
31	M31	N11	N13		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
32	M32	N16	N22		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
33	M33	N22	N24		Post	Column	Tube	A500 Gr.C Rect	Typical
34	M34	N24	N13		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
35	M35	N41	N47		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
36	M36	N47	N49		Post	Column	Tube	A500 Gr.C Rect	Typical
37	M37	N49	N51		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
38	M38	N54	N60		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
39	M39	N60	N62		Post	Column	Tube	A500 Gr.C Rect	Typical
40	M40	N62	N51		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
41	M41	N79	N85		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
42	M42	N85	N87		Post	Column	Tube	A500 Gr.C Rect	Typical
43	M43	N87	N89		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
44	M44	N92	N98		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
45	M45	N98	N100		Post	Column	Tube	A500 Gr.C Rect	Typical
46	M46	N100	N89		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
47	M47	N117	N123		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
48	M48	N123	N125		Post	Column	Tube	A500 Gr.C Rect	Typical
49	M49	N125	N127		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
50	M50	N130	N136		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
51	M51	N136	N138		Post	Column	Tube	A500 Gr.C Rect	Typical
52	M52	N138	N127		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
53	M53	N155	N161		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
54	M54	N161	N163		Post	Column	Tube	A500 Gr.C Rect	Typical
55	M55	N163	N165		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
56	M56	N168	N174		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
57	M57	N174	N176		Post	Column	Tube	A500 Gr.C Rect	Typical
58	M58	N176	N165		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
59	M59	N193	N199		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
60	M60	N199	N201		Post	Column	Tube	A500 Gr.C Rect	Typical
61	M61	N201	N203		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
62	M62	N206	N212		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
63	M63	N212	N214		Post	Column	Tube	A500 Gr.C Rect	Typical
64	M64	N214	N203		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
65	M65	N231	N237		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
66	M66	N237	N239		Post	Column	Tube	A500 Gr.C Rect	Typical
67	M67	N239	N241		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
68	M68	N244	N250		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
69	M69	N250	N252		Post	Column	Tube	A500 Gr.C Rect	Typical
70	M70	N252	N241		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
71	M71	N10	N11		Link1	None	None	A500 Gr.C (Zero)	Typical
72	M72	N23	N24		Link1	None	None	A500 Gr.C (Zero)	Typical
73	M73	N48	N49		Link1	None	None	A500 Gr.C (Zero)	Typical
74	M74	N61	N62		Link1	None	None	A500 Gr.C (Zero)	Typical
75	M75	N86	N87		Link1	None	None	A500 Gr.C (Zero)	Typical
76	M76	N99	N100		Link1	None	None	A500 Gr.C (Zero)	Typical
77	M77	N124	N125		Link1	None	None	A500 Gr.C (Zero)	Typical
78	M78	N137	N138		Link1	None	None	A500 Gr.C (Zero)	Typical
79	M79	N162	N163		Link1	None	None	A500 Gr.C (Zero)	Typical
80	M80	N175	N176		Link1	None	None	A500 Gr.C (Zero)	Typical
81	M81	N200	N201		Link1	None	None	A500 Gr.C (Zero)	Typical
82	M82	N213	N214		Link1	None	None	A500 Gr.C (Zero)	Typical
83	M83	N238	N239		Link1	None	None	A500 Gr.C (Zero)	Typical
84	M84	N251	N252		Link1	None	None	A500 Gr.C (Zero)	Typical
85	M85	N280	N26	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
86	M86	N26	N64	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
87	M87	N64	N102	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
88	M88	N102	N140	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
89	M89	N140	N178	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
90	M90	N178	N216	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
91	M91	N216	N254	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
92	M92	N254	N267	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
93	M93	N281	N27	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
94	M94	N27	N65	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
95	M95	N65	N103	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
96	M96	N103	N141	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
97	M97	N141	N179	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
98	M98	N179	N217	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
99	M99	N217	N255	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
100	M100	N255	N268	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
101	M101	N282	N28	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
102	M102	N28	N66	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
103	M103	N66	N104	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
104	M104	N104	N142	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
105	M105	N142	N180	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
106	M106	N180	N218	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
107	M107	N218	N256	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
108	M108	N256	N269	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
109	M109	N283	N29	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
110	M110	N29	N67	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
111	M111	N67	N105	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
112	M112	N105	N143	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
113	M113	N143	N181	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
114	M114	N181	N219	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
115	M115	N219	N257	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
116	M116	N257	N270	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
117	M117	N284	N30	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
118	M118	N30	N68	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
119	M119	N68	N106	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
120	M120	N106	N144	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
121	M121	N144	N182	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
122	M122	N182	N220	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
123	M123	N220	N258	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
124	M124	N258	N271	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
125	M125	N285	N31	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
126	M126	N31	N69	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
127	M127	N69	N107	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
128	M128	N107	N145	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
129	M129	N145	N183	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
130	M130	N183	N221	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
131	M131	N221	N259	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
132	M132	N259	N272	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
133	M133	N286	N32		P-3	Beam	Tube	A500 Gr.C Rect	Typical
134	M134	N32	N70		P-3	Beam	Tube	A500 Gr.C Rect	Typical
135	M135	N70	N108		P-3	Beam	Tube	A500 Gr.C Rect	Typical
136	M136	N108	N146		P-3	Beam	Tube	A500 Gr.C Rect	Typical
137	M137	N146	N184		P-3	Beam	Tube	A500 Gr.C Rect	Typical
138	M138	N184	N222		P-3	Beam	Tube	A500 Gr.C Rect	Typical
139	M139	N222	N260		P-3	Beam	Tube	A500 Gr.C Rect	Typical
140	M140	N260	N273		P-3	Beam	Tube	A500 Gr.C Rect	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
141	M141	N287	N33	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
142	M142	N33	N71	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
143	M143	N71	N109	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
144	M144	N109	N147	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
145	M145	N147	N185	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
146	M146	N185	N223	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
147	M147	N223	N261	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
148	M148	N261	N274	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
149	M149	N288	N34	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
150	M150	N34	N72	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
151	M151	N72	N110	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
152	M152	N110	N148	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
153	M153	N148	N186	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
154	M154	N186	N224	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
155	M155	N224	N262	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
156	M156	N262	N275	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
157	M157	N289	N35	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
158	M158	N35	N73	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
159	M159	N73	N111	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
160	M160	N111	N149	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
161	M161	N149	N187	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
162	M162	N187	N225	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
163	M163	N225	N263	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
164	M164	N263	N276	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
165	M165	N290	N36	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
166	M166	N36	N74	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
167	M167	N74	N112	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
168	M168	N112	N150	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
169	M169	N150	N188	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
170	M170	N188	N226	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
171	M171	N226	N264	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
172	M172	N264	N277	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
173	M173	N291	N37	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
174	M174	N37	N75	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
175	M175	N75	N113	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
176	M176	N113	N151	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
177	M177	N151	N189	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
178	M178	N189	N227	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
179	M179	N227	N265	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
180	M180	N265	N278	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
181	M181	N292	N38	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
182	M182	N38	N76	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
183	M183	N76	N114	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
184	M184	N114	N152	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
185	M185	N152	N190	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
186	M186	N190	N228	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
187	M187	N228	N266	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
188	M188	N266	N279	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
189	M189	N284	N285		Rafter2	Beam	Tube	A500 Gr.C (Zero)	Typical
190	M190	N285	N286		Rafter2	Beam	Tube	A500 Gr.C (Zero)	Typical
191	M191	N271	N272		Rafter2	Beam	Tube	A500 Gr.C (Zero)	Typical
192	M192	N272	N273		Rafter2	Beam	Tube	A500 Gr.C (Zero)	Typical
193	M193	N291	N292		Rafter2	Beam	Tube	A500 Gr.C (Zero)	Typical
194	M194	N292	N286		Rafter2	Beam	Tube	A500 Gr.C (Zero)	Typical
195	M195	N278	N279		Rafter2	Beam	Tube	A500 Gr.C (Zero)	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
196	M196	N279	N273		Rafter2	Beam	Tube	A500 Gr.C (Zero)	Typical
197	M197	N4	N26		Link2	None	None	A500 Gr.C (Zero)	Typical
198	M198	N6	N27		Link3	None	None	A500 Gr.C (Zero)	Typical
199	M199	N7	N28		Link3	None	None	A500 Gr.C (Zero)	Typical
200	M200	N8	N29		Link2	None	None	A500 Gr.C (Zero)	Typical
201	M201	N10	N30		Link4	None	None	A500 Gr.C (Zero)	Typical
202	M202	N12	N31		Link4	None	None	A500 Gr.C (Zero)	Typical
203	M203	N13	N32		Link4	None	None	A500 Gr.C (Zero)	Typical
204	M204	N17	N33		Link2	None	None	A500 Gr.C (Zero)	Typical
205	M205	N19	N34		Link3	None	None	A500 Gr.C (Zero)	Typical
206	M206	N20	N35		Link3	None	None	A500 Gr.C (Zero)	Typical
207	M207	N21	N36		Link2	None	None	A500 Gr.C (Zero)	Typical
208	M208	N23	N37		Link4	None	None	A500 Gr.C (Zero)	Typical
209	M209	N25	N38		Link4	None	None	A500 Gr.C (Zero)	Typical
210	M210	N42	N64		Link2	None	None	A500 Gr.C (Zero)	Typical
211	M211	N44	N65		Link3	None	None	A500 Gr.C (Zero)	Typical
212	M212	N45	N66		Link3	None	None	A500 Gr.C (Zero)	Typical
213	M213	N46	N67		Link2	None	None	A500 Gr.C (Zero)	Typical
214	M214	N48	N68		Link4	None	None	A500 Gr.C (Zero)	Typical
215	M215	N50	N69		Link4	None	None	A500 Gr.C (Zero)	Typical
216	M216	N51	N70		Link4	None	None	A500 Gr.C (Zero)	Typical
217	M217	N55	N71		Link2	None	None	A500 Gr.C (Zero)	Typical
218	M218	N57	N72		Link3	None	None	A500 Gr.C (Zero)	Typical
219	M219	N58	N73		Link3	None	None	A500 Gr.C (Zero)	Typical
220	M220	N59	N74		Link2	None	None	A500 Gr.C (Zero)	Typical
221	M221	N61	N75		Link4	None	None	A500 Gr.C (Zero)	Typical
222	M222	N63	N76		Link4	None	None	A500 Gr.C (Zero)	Typical
223	M223	N80	N102		Link2	None	None	A500 Gr.C (Zero)	Typical
224	M224	N82	N103		Link3	None	None	A500 Gr.C (Zero)	Typical
225	M225	N83	N104		Link3	None	None	A500 Gr.C (Zero)	Typical
226	M226	N84	N105		Link2	None	None	A500 Gr.C (Zero)	Typical
227	M227	N86	N106		Link4	None	None	A500 Gr.C (Zero)	Typical
228	M228	N88	N107		Link4	None	None	A500 Gr.C (Zero)	Typical
229	M229	N89	N108		Link4	None	None	A500 Gr.C (Zero)	Typical
230	M230	N93	N109		Link2	None	None	A500 Gr.C (Zero)	Typical
231	M231	N95	N110		Link3	None	None	A500 Gr.C (Zero)	Typical
232	M232	N96	N111		Link3	None	None	A500 Gr.C (Zero)	Typical
233	M233	N97	N112		Link2	None	None	A500 Gr.C (Zero)	Typical
234	M234	N99	N113		Link4	None	None	A500 Gr.C (Zero)	Typical
235	M235	N101	N114		Link4	None	None	A500 Gr.C (Zero)	Typical
236	M236	N118	N140		Link2	None	None	A500 Gr.C (Zero)	Typical
237	M237	N120	N141		Link3	None	None	A500 Gr.C (Zero)	Typical
238	M238	N121	N142		Link3	None	None	A500 Gr.C (Zero)	Typical
239	M239	N122	N143		Link2	None	None	A500 Gr.C (Zero)	Typical
240	M240	N124	N144		Link4	None	None	A500 Gr.C (Zero)	Typical
241	M241	N126	N145		Link4	None	None	A500 Gr.C (Zero)	Typical
242	M242	N127	N146		Link4	None	None	A500 Gr.C (Zero)	Typical
243	M243	N131	N147		Link2	None	None	A500 Gr.C (Zero)	Typical
244	M244	N133	N148		Link3	None	None	A500 Gr.C (Zero)	Typical
245	M245	N134	N149		Link3	None	None	A500 Gr.C (Zero)	Typical
246	M246	N135	N150		Link2	None	None	A500 Gr.C (Zero)	Typical
247	M247	N137	N151		Link4	None	None	A500 Gr.C (Zero)	Typical
248	M248	N139	N152		Link4	None	None	A500 Gr.C (Zero)	Typical
249	M249	N156	N178		Link2	None	None	A500 Gr.C (Zero)	Typical
250	M250	N158	N179		Link3	None	None	A500 Gr.C (Zero)	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
251	M251	N159	N180		Link3	None	None	A500 Gr.C (Zero)	Typical
252	M252	N160	N181		Link2	None	None	A500 Gr.C (Zero)	Typical
253	M253	N162	N182		Link4	None	None	A500 Gr.C (Zero)	Typical
254	M254	N164	N183		Link4	None	None	A500 Gr.C (Zero)	Typical
255	M255	N165	N184		Link4	None	None	A500 Gr.C (Zero)	Typical
256	M256	N169	N185		Link2	None	None	A500 Gr.C (Zero)	Typical
257	M257	N171	N186		Link3	None	None	A500 Gr.C (Zero)	Typical
258	M258	N172	N187		Link3	None	None	A500 Gr.C (Zero)	Typical
259	M259	N173	N188		Link2	None	None	A500 Gr.C (Zero)	Typical
260	M260	N175	N189		Link4	None	None	A500 Gr.C (Zero)	Typical
261	M261	N177	N190		Link4	None	None	A500 Gr.C (Zero)	Typical
262	M262	N194	N216		Link2	None	None	A500 Gr.C (Zero)	Typical
263	M263	N196	N217		Link3	None	None	A500 Gr.C (Zero)	Typical
264	M264	N197	N218		Link3	None	None	A500 Gr.C (Zero)	Typical
265	M265	N198	N219		Link2	None	None	A500 Gr.C (Zero)	Typical
266	M266	N200	N220		Link4	None	None	A500 Gr.C (Zero)	Typical
267	M267	N202	N221		Link4	None	None	A500 Gr.C (Zero)	Typical
268	M268	N203	N222		Link4	None	None	A500 Gr.C (Zero)	Typical
269	M269	N207	N223		Link2	None	None	A500 Gr.C (Zero)	Typical
270	M270	N209	N224		Link3	None	None	A500 Gr.C (Zero)	Typical
271	M271	N210	N225		Link3	None	None	A500 Gr.C (Zero)	Typical
272	M272	N211	N226		Link2	None	None	A500 Gr.C (Zero)	Typical
273	M273	N213	N227		Link4	None	None	A500 Gr.C (Zero)	Typical
274	M274	N215	N228		Link4	None	None	A500 Gr.C (Zero)	Typical
275	M275	N232	N254		Link2	None	None	A500 Gr.C (Zero)	Typical
276	M276	N234	N255		Link3	None	None	A500 Gr.C (Zero)	Typical
277	M277	N235	N256		Link3	None	None	A500 Gr.C (Zero)	Typical
278	M278	N236	N257		Link2	None	None	A500 Gr.C (Zero)	Typical
279	M279	N238	N258		Link4	None	None	A500 Gr.C (Zero)	Typical
280	M280	N240	N259		Link4	None	None	A500 Gr.C (Zero)	Typical
281	M281	N241	N260		Link4	None	None	A500 Gr.C (Zero)	Typical
282	M282	N245	N261		Link2	None	None	A500 Gr.C (Zero)	Typical
283	M283	N247	N262		Link3	None	None	A500 Gr.C (Zero)	Typical
284	M284	N248	N263		Link3	None	None	A500 Gr.C (Zero)	Typical
285	M285	N249	N264		Link2	None	None	A500 Gr.C (Zero)	Typical
286	M286	N251	N265		Link4	None	None	A500 Gr.C (Zero)	Typical
287	M287	N253	N266		Link4	None	None	A500 Gr.C (Zero)	Typical

Member Advanced Data

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
1	M1		OOOXOX	Yes	** NA **		None
2	M2		OOOXOX	Yes	** NA **		None
3	M3		OOOXOX	Yes	** NA **		None
4	M4		OOOXOX	Yes	** NA **		None
5	M5		OOOXOX	Yes	** NA **		None
6	M6		OOOXOX	Yes	** NA **		None
7	M7		OOOXOX	Yes	** NA **		None
8	M8		OOOXOX	Yes	** NA **		None
9	M9		OOOXOX	Yes	** NA **		None
10	M10		OOOXOX	Yes	** NA **		None
11	M11		OOOXOX	Yes	** NA **		None
12	M12		OOOXOX	Yes	** NA **		None
13	M13		OOOXOX	Yes	** NA **		None
14	M14		OOOXOX	Yes	** NA **		None
15	M15			Yes	** NA **	Exclude	None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
16	M16			Yes	** NA **	Exclude	None
17	M17			Yes	** NA **	Exclude	None
18	M18			Yes	** NA **	Exclude	None
19	M19			Yes	** NA **	Exclude	None
20	M20			Yes	** NA **	Exclude	None
21	M21			Yes	** NA **	Exclude	None
22	M22			Yes	** NA **	Exclude	None
23	M23			Yes	** NA **	Exclude	None
24	M24			Yes	** NA **	Exclude	None
25	M25			Yes	** NA **	Exclude	None
26	M26			Yes	** NA **	Exclude	None
27	M27			Yes	** NA **	Exclude	None
28	M28			Yes	** NA **	Exclude	None
29	M29			Yes	N/A		None
30	M30			Yes	** NA **		None
31	M31			Yes	N/A		None
32	M32			Yes	N/A		None
33	M33			Yes	** NA **		None
34	M34			Yes	N/A		None
35	M35			Yes	N/A		None
36	M36			Yes	** NA **		None
37	M37			Yes	N/A		None
38	M38			Yes	N/A		None
39	M39			Yes	** NA **		None
40	M40			Yes	N/A		None
41	M41			Yes	N/A		None
42	M42			Yes	** NA **		None
43	M43			Yes	N/A		None
44	M44			Yes	Default		None
45	M45			Yes	** NA **		None
46	M46			Yes	N/A		None
47	M47			Yes	N/A		None
48	M48			Yes	** NA **		None
49	M49			Yes	N/A		None
50	M50			Yes	N/A		None
51	M51			Yes	** NA **		None
52	M52			Yes	N/A		None
53	M53			Yes	N/A		None
54	M54			Yes	** NA **		None
55	M55			Yes	N/A		None
56	M56			Yes	N/A		None
57	M57			Yes	** NA **		None
58	M58			Yes	N/A		None
59	M59			Yes	N/A		None
60	M60			Yes	** NA **		None
61	M61			Yes	N/A		None
62	M62			Yes	N/A		None
63	M63			Yes	** NA **		None
64	M64			Yes	N/A		None
65	M65			Yes	N/A		None
66	M66			Yes	** NA **		None
67	M67			Yes	N/A		None
68	M68			Yes	N/A		None
69	M69			Yes	** NA **		None
70	M70			Yes	N/A		None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
71	M71			Yes	** NA **	Exclude	None
72	M72			Yes	** NA **	Exclude	None
73	M73			Yes	** NA **	Exclude	None
74	M74			Yes	** NA **	Exclude	None
75	M75			Yes	** NA **	Exclude	None
76	M76			Yes	** NA **	Exclude	None
77	M77			Yes	** NA **	Exclude	None
78	M78			Yes	** NA **	Exclude	None
79	M79			Yes	** NA **	Exclude	None
80	M80			Yes	** NA **	Exclude	None
81	M81			Yes	** NA **	Exclude	None
82	M82			Yes	** NA **	Exclude	None
83	M83			Yes	** NA **	Exclude	None
84	M84			Yes	** NA **	Exclude	None
85	M85			Yes	N/A		None
86	M86		AllPIN	Yes	Default		None
87	M87	AllPIN	BenPIN	Yes	Default		None
88	M88	AllPIN	BenPIN	Yes	Default		None
89	M89	AllPIN	BenPIN	Yes	Default		None
90	M90	AllPIN	BenPIN	Yes	Default		None
91	M91	AllPIN		Yes	Default		None
92	M92			Yes	N/A		None
93	M93			Yes	N/A		None
94	M94		AllPIN	Yes	N/A		None
95	M95	AllPIN	BenPIN	Yes	N/A		None
96	M96	AllPIN	BenPIN	Yes	N/A		None
97	M97	AllPIN	BenPIN	Yes	N/A		None
98	M98	AllPIN	BenPIN	Yes	N/A		None
99	M99	AllPIN		Yes	N/A		None
100	M100			Yes	N/A		None
101	M101			Yes	N/A		None
102	M102		AllPIN	Yes	N/A		None
103	M103	AllPIN	BenPIN	Yes	N/A		None
104	M104	AllPIN	BenPIN	Yes	N/A		None
105	M105	AllPIN	BenPIN	Yes	N/A		None
106	M106	AllPIN	BenPIN	Yes	N/A		None
107	M107	AllPIN		Yes	N/A		None
108	M108			Yes	N/A		None
109	M109			Yes	N/A		None
110	M110		AllPIN	Yes	N/A		None
111	M111	AllPIN	BenPIN	Yes	N/A		None
112	M112	AllPIN	BenPIN	Yes	N/A		None
113	M113	AllPIN	BenPIN	Yes	N/A		None
114	M114	AllPIN	BenPIN	Yes	N/A		None
115	M115	AllPIN		Yes	N/A		None
116	M116			Yes	N/A		None
117	M117			Yes	N/A		None
118	M118		AllPIN	Yes	N/A		None
119	M119	AllPIN	BenPIN	Yes	N/A		None
120	M120	AllPIN	BenPIN	Yes	N/A		None
121	M121	AllPIN	BenPIN	Yes	N/A		None
122	M122	AllPIN	BenPIN	Yes	N/A		None
123	M123	AllPIN		Yes	N/A		None
124	M124			Yes	N/A		None
125	M125	AllPIN		Yes	Default		None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
126	M126		AllPIN	Yes	N/A		None
127	M127	AllPIN	BenPIN	Yes	N/A		None
128	M128	AllPIN	BenPIN	Yes	N/A		None
129	M129	AllPIN	BenPIN	Yes	N/A		None
130	M130	AllPIN	BenPIN	Yes	N/A		None
131	M131	AllPIN		Yes	N/A		None
132	M132		AllPIN	Yes	Default		None
133	M133			Yes	N/A		None
134	M134		AllPIN	Yes	N/A		None
135	M135	AllPIN	BenPIN	Yes	N/A		None
136	M136	AllPIN	BenPIN	Yes	N/A		None
137	M137	AllPIN	BenPIN	Yes	N/A		None
138	M138	AllPIN	BenPIN	Yes	N/A		None
139	M139	AllPIN		Yes	N/A		None
140	M140			Yes	N/A		None
141	M141			Yes	N/A		None
142	M142		AllPIN	Yes	N/A		None
143	M143	AllPIN	BenPIN	Yes	N/A		None
144	M144	AllPIN	BenPIN	Yes	N/A		None
145	M145	AllPIN	BenPIN	Yes	N/A		None
146	M146	AllPIN	BenPIN	Yes	N/A		None
147	M147	AllPIN		Yes	N/A		None
148	M148			Yes	N/A		None
149	M149			Yes	N/A		None
150	M150		AllPIN	Yes	N/A		None
151	M151	AllPIN	BenPIN	Yes	N/A		None
152	M152	AllPIN	BenPIN	Yes	N/A		None
153	M153	AllPIN	BenPIN	Yes	N/A		None
154	M154	AllPIN	BenPIN	Yes	N/A		None
155	M155	AllPIN		Yes	N/A		None
156	M156			Yes	N/A		None
157	M157			Yes	N/A		None
158	M158		AllPIN	Yes	N/A		None
159	M159	AllPIN	BenPIN	Yes	N/A		None
160	M160	AllPIN	BenPIN	Yes	N/A		None
161	M161	AllPIN	BenPIN	Yes	N/A		None
162	M162	AllPIN	BenPIN	Yes	N/A		None
163	M163	AllPIN		Yes	N/A		None
164	M164			Yes	N/A		None
165	M165			Yes	N/A		None
166	M166		AllPIN	Yes	N/A		None
167	M167	AllPIN	BenPIN	Yes	N/A		None
168	M168	AllPIN	BenPIN	Yes	N/A		None
169	M169	AllPIN	BenPIN	Yes	N/A		None
170	M170	AllPIN	BenPIN	Yes	N/A		None
171	M171	AllPIN		Yes	N/A		None
172	M172			Yes	N/A		None
173	M173			Yes	N/A		None
174	M174		AllPIN	Yes	N/A		None
175	M175	AllPIN	BenPIN	Yes	N/A		None
176	M176	AllPIN	BenPIN	Yes	N/A		None
177	M177	AllPIN	BenPIN	Yes	N/A		None
178	M178	AllPIN	BenPIN	Yes	N/A		None
179	M179	AllPIN		Yes	N/A		None
180	M180			Yes	N/A		None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
181	M181	AllPIN		Yes	Default		None
182	M182		AllPIN	Yes	N/A		None
183	M183	AllPIN	BenPIN	Yes	N/A		None
184	M184	AllPIN	BenPIN	Yes	N/A		None
185	M185	AllPIN	BenPIN	Yes	N/A		None
186	M186	AllPIN	BenPIN	Yes	N/A		None
187	M187	AllPIN		Yes	N/A		None
188	M188		AllPIN	Yes	Default		None
189	M189	AllPIN		Yes	N/A		None
190	M190		BenPIN	Yes	N/A		None
191	M191	AllPIN		Yes	N/A		None
192	M192		BenPIN	Yes	N/A		None
193	M193	AllPIN		Yes	N/A		None
194	M194		BenPIN	Yes	N/A		None
195	M195	AllPIN		Yes	N/A		None
196	M196		BenPIN	Yes	N/A		None
197	M197		OOOXXO	Yes	** NA **	Exclude	None
198	M198		OOOXXO	Yes	** NA **	Exclude	None
199	M199		OOOXXO	Yes	** NA **	Exclude	None
200	M200		OOOXXO	Yes	** NA **	Exclude	None
201	M201		OOOXXO	Yes	** NA **	Exclude	None
202	M202		OOOXXO	Yes	** NA **	Exclude	None
203	M203		OOOXXO	Yes	** NA **	Exclude	None
204	M204		OOOXXO	Yes	** NA **	Exclude	None
205	M205		OOOXXO	Yes	** NA **	Exclude	None
206	M206		OOOXXO	Yes	** NA **	Exclude	None
207	M207		OOOXXO	Yes	** NA **	Exclude	None
208	M208		OOOXXO	Yes	** NA **	Exclude	None
209	M209		OOOXXO	Yes	** NA **	Exclude	None
210	M210			Yes	** NA **	Exclude	None
211	M211			Yes	** NA **	Exclude	None
212	M212			Yes	** NA **	Exclude	None
213	M213			Yes	** NA **	Exclude	None
214	M214			Yes	** NA **	Exclude	None
215	M215			Yes	** NA **	Exclude	None
216	M216			Yes	** NA **	Exclude	None
217	M217			Yes	** NA **	Exclude	None
218	M218			Yes	** NA **	Exclude	None
219	M219			Yes	** NA **	Exclude	None
220	M220			Yes	** NA **	Exclude	None
221	M221			Yes	** NA **	Exclude	None
222	M222			Yes	** NA **	Exclude	None
223	M223			Yes	** NA **	Exclude	None
224	M224			Yes	** NA **	Exclude	None
225	M225			Yes	** NA **	Exclude	None
226	M226			Yes	** NA **	Exclude	None
227	M227			Yes	** NA **	Exclude	None
228	M228			Yes	** NA **	Exclude	None
229	M229			Yes	** NA **	Exclude	None
230	M230			Yes	** NA **	Exclude	None
231	M231			Yes	** NA **	Exclude	None
232	M232			Yes	** NA **	Exclude	None
233	M233			Yes	** NA **	Exclude	None
234	M234			Yes	** NA **	Exclude	None
235	M235			Yes	** NA **	Exclude	None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
236	M236			Yes	** NA **	Exclude	None
237	M237			Yes	** NA **	Exclude	None
238	M238			Yes	** NA **	Exclude	None
239	M239			Yes	** NA **	Exclude	None
240	M240			Yes	** NA **	Exclude	None
241	M241			Yes	** NA **	Exclude	None
242	M242			Yes	** NA **	Exclude	None
243	M243			Yes	** NA **	Exclude	None
244	M244			Yes	** NA **	Exclude	None
245	M245			Yes	** NA **	Exclude	None
246	M246			Yes	** NA **	Exclude	None
247	M247			Yes	** NA **	Exclude	None
248	M248			Yes	** NA **	Exclude	None
249	M249			Yes	** NA **	Exclude	None
250	M250			Yes	** NA **	Exclude	None
251	M251			Yes	** NA **	Exclude	None
252	M252			Yes	** NA **	Exclude	None
253	M253			Yes	** NA **	Exclude	None
254	M254			Yes	** NA **	Exclude	None
255	M255			Yes	** NA **	Exclude	None
256	M256			Yes	** NA **	Exclude	None
257	M257			Yes	** NA **	Exclude	None
258	M258			Yes	** NA **	Exclude	None
259	M259			Yes	** NA **	Exclude	None
260	M260			Yes	** NA **	Exclude	None
261	M261			Yes	** NA **	Exclude	None
262	M262			Yes	** NA **	Exclude	None
263	M263			Yes	** NA **	Exclude	None
264	M264			Yes	** NA **	Exclude	None
265	M265			Yes	** NA **	Exclude	None
266	M266			Yes	** NA **	Exclude	None
267	M267			Yes	** NA **	Exclude	None
268	M268			Yes	** NA **	Exclude	None
269	M269			Yes	** NA **	Exclude	None
270	M270			Yes	** NA **	Exclude	None
271	M271			Yes	** NA **	Exclude	None
272	M272			Yes	** NA **	Exclude	None
273	M273			Yes	** NA **	Exclude	None
274	M274			Yes	** NA **	Exclude	None
275	M275		OOOXXO	Yes	** NA **	Exclude	None
276	M276		OOOXXO	Yes	** NA **	Exclude	None
277	M277		OOOXXO	Yes	** NA **	Exclude	None
278	M278		OOOXXO	Yes	** NA **	Exclude	None
279	M279		OOOXXO	Yes	** NA **	Exclude	None
280	M280		OOOXXO	Yes	** NA **	Exclude	None
281	M281		OOOXXO	Yes	** NA **	Exclude	None
282	M282		OOOXXO	Yes	** NA **	Exclude	None
283	M283		OOOXXO	Yes	** NA **	Exclude	None
284	M284		OOOXXO	Yes	** NA **	Exclude	None
285	M285		OOOXXO	Yes	** NA **	Exclude	None
286	M286		OOOXXO	Yes	** NA **	Exclude	None
287	M287		OOOXXO	Yes	** NA **	Exclude	None

Hot Rolled Steel Design Parameters

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	K y-y	K z-z	Channel Conn.	a [ft]	Function
1	M1	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
2	M2	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
3	M3	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
4	M4	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
5	M5	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
6	M6	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
7	M7	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
8	M8	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
9	M9	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
10	M10	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
11	M11	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
12	M12	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
13	M13	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
14	M14	COLUMN	12.768			Lbyy	2.1	2.1	N/A	N/A	Lateral
15	M15	Link1	0.932			Lbyy			N/A	N/A	Gravity
16	M16	Link1	0.932			Lbyy			N/A	N/A	Gravity
17	M17	Link1	0.932			Lbyy			N/A	N/A	Gravity
18	M18	Link1	0.932			Lbyy			N/A	N/A	Gravity
19	M19	Link1	0.932			Lbyy			N/A	N/A	Gravity
20	M20	Link1	0.932			Lbyy			N/A	N/A	Gravity
21	M21	Link1	0.932			Lbyy			N/A	N/A	Gravity
22	M22	Link1	0.932			Lbyy			N/A	N/A	Gravity
23	M23	Link1	0.932			Lbyy			N/A	N/A	Gravity
24	M24	Link1	0.932			Lbyy			N/A	N/A	Gravity
25	M25	Link1	0.932			Lbyy			N/A	N/A	Gravity
26	M26	Link1	0.932			Lbyy			N/A	N/A	Gravity
27	M27	Link1	0.932			Lbyy			N/A	N/A	Gravity
28	M28	Link1	0.932			Lbyy			N/A	N/A	Gravity
29	M29	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
30	M30	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
31	M31	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
32	M32	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
33	M33	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
34	M34	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
35	M35	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
36	M36	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
37	M37	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
38	M38	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
39	M39	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
40	M40	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
41	M41	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
42	M42	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
43	M43	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
44	M44	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
45	M45	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
46	M46	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
47	M47	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
48	M48	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
49	M49	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
50	M50	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
51	M51	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
52	M52	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
53	M53	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
54	M54	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
55	M55	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	K y-y	K z-z	Channel Conn.	a [ft]	Function
56	M56	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
57	M57	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
58	M58	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
59	M59	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
60	M60	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
61	M61	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
62	M62	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
63	M63	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
64	M64	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
65	M65	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
66	M66	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
67	M67	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
68	M68	Rafter	22.985	8	67.1	Lbyy			N/A	N/A	Gravity
69	M69	Post	2		67.1	Lbyy	2.1		N/A	N/A	Gravity
70	M70	Rafter	8.572	5.1	67.1	Lbyy			N/A	N/A	Gravity
71	M71	Link1	0.64			Lbyy			N/A	N/A	Gravity
72	M72	Link1	0.64			Lbyy			N/A	N/A	Gravity
73	M73	Link1	0.64			Lbyy			N/A	N/A	Gravity
74	M74	Link1	0.64			Lbyy			N/A	N/A	Gravity
75	M75	Link1	0.64			Lbyy			N/A	N/A	Gravity
76	M76	Link1	0.64			Lbyy			N/A	N/A	Gravity
77	M77	Link1	0.64			Lbyy			N/A	N/A	Gravity
78	M78	Link1	0.64			Lbyy			N/A	N/A	Gravity
79	M79	Link1	0.64			Lbyy			N/A	N/A	Gravity
80	M80	Link1	0.64			Lbyy			N/A	N/A	Gravity
81	M81	Link1	0.64			Lbyy			N/A	N/A	Gravity
82	M82	Link1	0.64			Lbyy			N/A	N/A	Gravity
83	M83	Link1	0.64			Lbyy			N/A	N/A	Gravity
84	M84	Link1	0.64			Lbyy			N/A	N/A	Gravity
85	M85	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
86	M86	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
87	M87	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
88	M88	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
89	M89	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
90	M90	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
91	M91	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
92	M92	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
93	M93	P-2	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
94	M94	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
95	M95	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
96	M96	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
97	M97	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
98	M98	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
99	M99	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
100	M100	P-2	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
101	M101	P-2	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
102	M102	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
103	M103	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
104	M104	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
105	M105	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
106	M106	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
107	M107	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
108	M108	P-2	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
109	M109	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
110	M110	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	K y-y	K z-z	Channel Conn.	a [ft]	Function
111	M111	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
112	M112	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
113	M113	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
114	M114	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
115	M115	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
116	M116	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
117	M117	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
118	M118	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
119	M119	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
120	M120	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
121	M121	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
122	M122	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
123	M123	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
124	M124	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
125	M125	P-1	5.997	0.6		Lbyy		2.1	N/A	N/A	Gravity
126	M126	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
127	M127	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
128	M128	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
129	M129	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
130	M130	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
131	M131	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
132	M132	P-1	6	0.6		Lbyy		2.1	N/A	N/A	Gravity
133	M133	P-3	9.691	0.6		Lbyy		2.1	N/A	N/A	Gravity
134	M134	P-3	15.333	0.6		Lbyy			N/A	N/A	Gravity
135	M135	P-3	15.334	0.6		Lbyy			N/A	N/A	Gravity
136	M136	P-3	15.333	0.6		Lbyy			N/A	N/A	Gravity
137	M137	P-3	15.333	0.6		Lbyy			N/A	N/A	Gravity
138	M138	P-3	15.334	0.6		Lbyy			N/A	N/A	Gravity
139	M139	P-3	15.333	0.6		Lbyy			N/A	N/A	Gravity
140	M140	P-3	9.691	0.6		Lbyy		2.1	N/A	N/A	Gravity
141	M141	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
142	M142	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
143	M143	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
144	M144	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
145	M145	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
146	M146	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
147	M147	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
148	M148	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
149	M149	P-2	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
150	M150	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
151	M151	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
152	M152	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
153	M153	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
154	M154	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
155	M155	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
156	M156	P-2	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
157	M157	P-2	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
158	M158	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
159	M159	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
160	M160	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
161	M161	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
162	M162	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
163	M163	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
164	M164	P-2	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
165	M165	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	K y-y	K z-z	Channel Conn.	a [ft]	Function
166	M166	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
167	M167	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
168	M168	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
169	M169	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
170	M170	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
171	M171	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
172	M172	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
173	M173	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
174	M174	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
175	M175	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
176	M176	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
177	M177	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
178	M178	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
179	M179	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
180	M180	P-1	2.833	0.6		Lbyy		2.1	N/A	N/A	Gravity
181	M181	P-1	5.997	0.6		Lbyy		2.1	N/A	N/A	Gravity
182	M182	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
183	M183	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
184	M184	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
185	M185	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
186	M186	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
187	M187	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
188	M188	P-1	6	0.6		Lbyy		2.1	N/A	N/A	Gravity
189	M189	Rafter2	5.298	0.6		Lbyy			N/A	N/A	Gravity
190	M190	Rafter2	6.186	0.6		Lbyy			N/A	N/A	Gravity
191	M191	Rafter2	5.3	0.6		Lbyy			N/A	N/A	Gravity
192	M192	Rafter2	6.184	0.6		Lbyy			N/A	N/A	Gravity
193	M193	Rafter2	5.298	0.6		Lbyy			N/A	N/A	Gravity
194	M194	Rafter2	6.186	0.6		Lbyy			N/A	N/A	Gravity
195	M195	Rafter2	5.3	0.6		Lbyy			N/A	N/A	Gravity
196	M196	Rafter2	6.184	0.6		Lbyy			N/A	N/A	Gravity
197	M197	Link2	0.088			Lbyy			N/A	N/A	Gravity
198	M198	Link3	0.088			Lbyy			N/A	N/A	Gravity
199	M199	Link3	0.088			Lbyy			N/A	N/A	Gravity
200	M200	Link2	0.088			Lbyy			N/A	N/A	Gravity
201	M201	Link4	0.088			Lbyy			N/A	N/A	Gravity
202	M202	Link4	0.088			Lbyy			N/A	N/A	Gravity
203	M203	Link4	0.088			Lbyy			N/A	N/A	Gravity
204	M204	Link2	0.088			Lbyy			N/A	N/A	Gravity
205	M205	Link3	0.088			Lbyy			N/A	N/A	Gravity
206	M206	Link3	0.088			Lbyy			N/A	N/A	Gravity
207	M207	Link2	0.088			Lbyy			N/A	N/A	Gravity
208	M208	Link4	0.088			Lbyy			N/A	N/A	Gravity
209	M209	Link4	0.088			Lbyy			N/A	N/A	Gravity
210	M210	Link2	0.088			Lbyy			N/A	N/A	Gravity
211	M211	Link3	0.088			Lbyy			N/A	N/A	Gravity
212	M212	Link3	0.088			Lbyy			N/A	N/A	Gravity
213	M213	Link2	0.088			Lbyy			N/A	N/A	Gravity
214	M214	Link4	0.088			Lbyy			N/A	N/A	Gravity
215	M215	Link4	0.088			Lbyy			N/A	N/A	Gravity
216	M216	Link4	0.088			Lbyy			N/A	N/A	Gravity
217	M217	Link2	0.088			Lbyy			N/A	N/A	Gravity
218	M218	Link3	0.088			Lbyy			N/A	N/A	Gravity
219	M219	Link3	0.088			Lbyy			N/A	N/A	Gravity
220	M220	Link2	0.088			Lbyy			N/A	N/A	Gravity

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	K y-y	K z-z	Channel Conn.	a [ft]	Function
221	M221	Link4	0.088			Lbyy			N/A	N/A	Gravity
222	M222	Link4	0.088			Lbyy			N/A	N/A	Gravity
223	M223	Link2	0.088			Lbyy			N/A	N/A	Gravity
224	M224	Link3	0.088			Lbyy			N/A	N/A	Gravity
225	M225	Link3	0.088			Lbyy			N/A	N/A	Gravity
226	M226	Link2	0.088			Lbyy			N/A	N/A	Gravity
227	M227	Link4	0.088			Lbyy			N/A	N/A	Gravity
228	M228	Link4	0.088			Lbyy			N/A	N/A	Gravity
229	M229	Link4	0.088			Lbyy			N/A	N/A	Gravity
230	M230	Link2	0.088			Lbyy			N/A	N/A	Gravity
231	M231	Link3	0.088			Lbyy			N/A	N/A	Gravity
232	M232	Link3	0.088			Lbyy			N/A	N/A	Gravity
233	M233	Link2	0.088			Lbyy			N/A	N/A	Gravity
234	M234	Link4	0.088			Lbyy			N/A	N/A	Gravity
235	M235	Link4	0.088			Lbyy			N/A	N/A	Gravity
236	M236	Link2	0.088			Lbyy			N/A	N/A	Gravity
237	M237	Link3	0.088			Lbyy			N/A	N/A	Gravity
238	M238	Link3	0.088			Lbyy			N/A	N/A	Gravity
239	M239	Link2	0.088			Lbyy			N/A	N/A	Gravity
240	M240	Link4	0.088			Lbyy			N/A	N/A	Gravity
241	M241	Link4	0.088			Lbyy			N/A	N/A	Gravity
242	M242	Link4	0.088			Lbyy			N/A	N/A	Gravity
243	M243	Link2	0.088			Lbyy			N/A	N/A	Gravity
244	M244	Link3	0.088			Lbyy			N/A	N/A	Gravity
245	M245	Link3	0.088			Lbyy			N/A	N/A	Gravity
246	M246	Link2	0.088			Lbyy			N/A	N/A	Gravity
247	M247	Link4	0.088			Lbyy			N/A	N/A	Gravity
248	M248	Link4	0.088			Lbyy			N/A	N/A	Gravity
249	M249	Link2	0.088			Lbyy			N/A	N/A	Gravity
250	M250	Link3	0.088			Lbyy			N/A	N/A	Gravity
251	M251	Link3	0.088			Lbyy			N/A	N/A	Gravity
252	M252	Link2	0.088			Lbyy			N/A	N/A	Gravity
253	M253	Link4	0.088			Lbyy			N/A	N/A	Gravity
254	M254	Link4	0.088			Lbyy			N/A	N/A	Gravity
255	M255	Link4	0.088			Lbyy			N/A	N/A	Gravity
256	M256	Link2	0.088			Lbyy			N/A	N/A	Gravity
257	M257	Link3	0.088			Lbyy			N/A	N/A	Gravity
258	M258	Link3	0.088			Lbyy			N/A	N/A	Gravity
259	M259	Link2	0.088			Lbyy			N/A	N/A	Gravity
260	M260	Link4	0.088			Lbyy			N/A	N/A	Gravity
261	M261	Link4	0.088			Lbyy			N/A	N/A	Gravity
262	M262	Link2	0.088			Lbyy			N/A	N/A	Gravity
263	M263	Link3	0.088			Lbyy			N/A	N/A	Gravity
264	M264	Link3	0.088			Lbyy			N/A	N/A	Gravity
265	M265	Link2	0.088			Lbyy			N/A	N/A	Gravity
266	M266	Link4	0.088			Lbyy			N/A	N/A	Gravity
267	M267	Link4	0.088			Lbyy			N/A	N/A	Gravity
268	M268	Link4	0.088			Lbyy			N/A	N/A	Gravity
269	M269	Link2	0.088			Lbyy			N/A	N/A	Gravity
270	M270	Link3	0.088			Lbyy			N/A	N/A	Gravity
271	M271	Link3	0.088			Lbyy			N/A	N/A	Gravity
272	M272	Link2	0.088			Lbyy			N/A	N/A	Gravity
273	M273	Link4	0.088			Lbyy			N/A	N/A	Gravity
274	M274	Link4	0.088			Lbyy			N/A	N/A	Gravity
275	M275	Link2	0.088			Lbyy			N/A	N/A	Gravity

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	K y-y	K z-z	Channel Conn.	a [ft]	Function
276	M276	Link3	0.088			Lbyy			N/A	N/A	Gravity
277	M277	Link3	0.088			Lbyy			N/A	N/A	Gravity
278	M278	Link2	0.088			Lbyy			N/A	N/A	Gravity
279	M279	Link4	0.088			Lbyy			N/A	N/A	Gravity
280	M280	Link4	0.088			Lbyy			N/A	N/A	Gravity
281	M281	Link4	0.088			Lbyy			N/A	N/A	Gravity
282	M282	Link2	0.088			Lbyy			N/A	N/A	Gravity
283	M283	Link3	0.088			Lbyy			N/A	N/A	Gravity
284	M284	Link3	0.088			Lbyy			N/A	N/A	Gravity
285	M285	Link2	0.088			Lbyy			N/A	N/A	Gravity
286	M286	Link4	0.088			Lbyy			N/A	N/A	Gravity
287	M287	Link4	0.088			Lbyy			N/A	N/A	Gravity

Member RISAConnection Properties

	Label	Shape	Start Conn	End Conn	Start Release	End Release
1	M1	HSS14X10X8	BP-2	None	Fixed	Fixed
2	M2	HSS14X10X8	BP-2	None	Fixed	Fixed
3	M3	HSS14X10X8	BP-1	None	Fixed	Fixed
4	M4	HSS14X10X8	BP-1	None	Fixed	Fixed
5	M5	HSS14X10X8	BP-1	None	Fixed	Fixed
6	M6	HSS14X10X8	BP-1	None	Fixed	Fixed
7	M7	HSS14X10X8	BP-1	None	Fixed	Fixed
8	M8	HSS14X10X8	BP-1	None	Fixed	Fixed
9	M9	HSS14X10X8	BP-1	None	Fixed	Fixed
10	M10	HSS14X10X8	BP-1	None	Fixed	Fixed
11	M11	HSS14X10X8	BP-1	None	Fixed	Fixed
12	M12	HSS14X10X8	BP-1	None	Fixed	Fixed
13	M13	HSS14X10X8	BP-2	None	Fixed	Fixed
14	M14	HSS14X10X8	BP-2	None	Fixed	Fixed
15	M15	HSS20X8X5	None	None	Fixed	Fixed
16	M16	HSS20X8X5	None	None	Fixed	Fixed
17	M17	HSS20X8X5	None	None	Fixed	Fixed
18	M18	HSS20X8X5	None	None	Fixed	Fixed
19	M19	HSS20X8X5	None	None	Fixed	Fixed
20	M20	HSS20X8X5	None	None	Fixed	Fixed
21	M21	HSS20X8X5	None	None	Fixed	Fixed
22	M22	HSS20X8X5	None	None	Fixed	Fixed
23	M23	HSS20X8X5	None	None	Fixed	Fixed
24	M24	HSS20X8X5	None	None	Fixed	Fixed
25	M25	HSS20X8X5	None	None	Fixed	Fixed
26	M26	HSS20X8X5	None	None	Fixed	Fixed
27	M27	HSS20X8X5	None	None	Fixed	Fixed
28	M28	HSS20X8X5	None	None	Fixed	Fixed
29	M29	HSS20X8X5	None	None	Fixed	Fixed
30	M30	HSS20X8X5	None	None	Fixed	Fixed
31	M31	HSS20X8X5	None	None	Fixed	Fixed
32	M32	HSS20X8X5	None	None	Fixed	Fixed
33	M33	HSS20X8X5	None	None	Fixed	Fixed
34	M34	HSS20X8X5	None	None	Fixed	Fixed
35	M35	HSS20X8X5	None	None	Fixed	Fixed
36	M36	HSS20X8X5	None	None	Fixed	Fixed
37	M37	HSS20X8X5	None	None	Fixed	Fixed
38	M38	HSS20X8X5	None	None	Fixed	Fixed
39	M39	HSS20X8X5	None	None	Fixed	Fixed
40	M40	HSS20X8X5	None	None	Fixed	Fixed

Member RISAConnection Properties (Continued)

	Label	Shape	Start Conn	End Conn	Start Release	End Release
41	M41	HSS20X8X5	None	None	Fixed	Fixed
42	M42	HSS20X8X5	None	None	Fixed	Fixed
43	M43	HSS20X8X5	None	None	Fixed	Fixed
44	M44	HSS20X8X5	None	None	Fixed	Fixed
45	M45	HSS20X8X5	None	None	Fixed	Fixed
46	M46	HSS20X8X5	None	None	Fixed	Fixed
47	M47	HSS20X8X5	None	None	Fixed	Fixed
48	M48	HSS20X8X5	None	None	Fixed	Fixed
49	M49	HSS20X8X5	None	None	Fixed	Fixed
50	M50	HSS20X8X5	None	None	Fixed	Fixed
51	M51	HSS20X8X5	None	None	Fixed	Fixed
52	M52	HSS20X8X5	None	None	Fixed	Fixed
53	M53	HSS20X8X5	None	None	Fixed	Fixed
54	M54	HSS20X8X5	None	None	Fixed	Fixed
55	M55	HSS20X8X5	None	None	Fixed	Fixed
56	M56	HSS20X8X5	None	None	Fixed	Fixed
57	M57	HSS20X8X5	None	None	Fixed	Fixed
58	M58	HSS20X8X5	None	None	Fixed	Fixed
59	M59	HSS20X8X5	None	None	Fixed	Fixed
60	M60	HSS20X8X5	None	None	Fixed	Fixed
61	M61	HSS20X8X5	None	None	Fixed	Fixed
62	M62	HSS20X8X5	None	None	Fixed	Fixed
63	M63	HSS20X8X5	None	None	Fixed	Fixed
64	M64	HSS20X8X5	None	None	Fixed	Fixed
65	M65	HSS20X8X5	None	None	Fixed	Fixed
66	M66	HSS20X8X5	None	None	Fixed	Fixed
67	M67	HSS20X8X5	None	None	Fixed	Fixed
68	M68	HSS20X8X5	None	None	Fixed	Fixed
69	M69	HSS20X8X5	None	None	Fixed	Fixed
70	M70	HSS20X8X5	None	None	Fixed	Fixed
71	M71	HSS20X8X5	None	None	Fixed	Fixed
72	M72	HSS20X8X5	None	None	Fixed	Fixed
73	M73	HSS20X8X5	None	None	Fixed	Fixed
74	M74	HSS20X8X5	None	None	Fixed	Fixed
75	M75	HSS20X8X5	None	None	Fixed	Fixed
76	M76	HSS20X8X5	None	None	Fixed	Fixed
77	M77	HSS20X8X5	None	None	Fixed	Fixed
78	M78	HSS20X8X5	None	None	Fixed	Fixed
79	M79	HSS20X8X5	None	None	Fixed	Fixed
80	M80	HSS20X8X5	None	None	Fixed	Fixed
81	M81	HSS20X8X5	None	None	Fixed	Fixed
82	M82	HSS20X8X5	None	None	Fixed	Fixed
83	M83	HSS20X8X5	None	None	Fixed	Fixed
84	M84	HSS20X8X5	None	None	Fixed	Fixed
85	M85	HSS6X4X3	None	None	Fixed	Fixed
86	M86	HSS6X4X3	None	None	Fixed	Pinned
87	M87	HSS6X4X3	None	None	Pinned	Pinned
88	M88	HSS6X4X3	None	None	Pinned	Pinned
89	M89	HSS6X4X3	None	None	Pinned	Pinned
90	M90	HSS6X4X3	None	None	Pinned	Pinned
91	M91	HSS6X4X3	None	None	Pinned	Fixed
92	M92	HSS6X4X3	None	None	Fixed	Fixed
93	M93	HSS6X4X3	None	None	Fixed	Fixed
94	M94	HSS6X4X3	None	None	Fixed	Pinned
95	M95	HSS6X4X3	None	None	Pinned	Pinned

Member RISAConnection Properties (Continued)

	Label	Shape	Start Conn	End Conn	Start Release	End Release
96	M96	HSS6X4X3	None	None	Pinned	Pinned
97	M97	HSS6X4X3	None	None	Pinned	Pinned
98	M98	HSS6X4X3	None	None	Pinned	Pinned
99	M99	HSS6X4X3	None	None	Pinned	Fixed
100	M100	HSS6X4X3	None	None	Fixed	Fixed
101	M101	HSS6X4X3	None	None	Fixed	Fixed
102	M102	HSS6X4X3	None	None	Fixed	Pinned
103	M103	HSS6X4X3	None	None	Pinned	Pinned
104	M104	HSS6X4X3	None	None	Pinned	Pinned
105	M105	HSS6X4X3	None	None	Pinned	Pinned
106	M106	HSS6X4X3	None	None	Pinned	Pinned
107	M107	HSS6X4X3	None	None	Pinned	Fixed
108	M108	HSS6X4X3	None	None	Fixed	Fixed
109	M109	HSS6X4X3	None	None	Fixed	Fixed
110	M110	HSS6X4X3	None	None	Fixed	Pinned
111	M111	HSS6X4X3	None	None	Pinned	Pinned
112	M112	HSS6X4X3	None	None	Pinned	Pinned
113	M113	HSS6X4X3	None	None	Pinned	Pinned
114	M114	HSS6X4X3	None	None	Pinned	Pinned
115	M115	HSS6X4X3	None	None	Pinned	Fixed
116	M116	HSS6X4X3	None	None	Fixed	Fixed
117	M117	HSS6X4X3	None	None	Fixed	Fixed
118	M118	HSS6X4X3	None	None	Fixed	Pinned
119	M119	HSS6X4X3	None	None	Pinned	Pinned
120	M120	HSS6X4X3	None	None	Pinned	Pinned
121	M121	HSS6X4X3	None	None	Pinned	Pinned
122	M122	HSS6X4X3	None	None	Pinned	Pinned
123	M123	HSS6X4X3	None	None	Pinned	Fixed
124	M124	HSS6X4X3	None	None	Fixed	Fixed
125	M125	HSS6X4X3	None	None	Pinned	Fixed
126	M126	HSS6X4X3	None	None	Fixed	Pinned
127	M127	HSS6X4X3	None	None	Pinned	Pinned
128	M128	HSS6X4X3	None	None	Pinned	Pinned
129	M129	HSS6X4X3	None	None	Pinned	Pinned
130	M130	HSS6X4X3	None	None	Pinned	Pinned
131	M131	HSS6X4X3	None	None	Pinned	Fixed
132	M132	HSS6X4X3	None	None	Fixed	Pinned
133	M133	HSS8X4X3	None	None	Fixed	Fixed
134	M134	HSS8X4X3	None	None	Fixed	Pinned
135	M135	HSS8X4X3	None	None	Pinned	Pinned
136	M136	HSS8X4X3	None	None	Pinned	Pinned
137	M137	HSS8X4X3	None	None	Pinned	Pinned
138	M138	HSS8X4X3	None	None	Pinned	Pinned
139	M139	HSS8X4X3	None	None	Pinned	Fixed
140	M140	HSS8X4X3	None	None	Fixed	Fixed
141	M141	HSS6X4X3	None	None	Fixed	Fixed
142	M142	HSS6X4X3	None	None	Fixed	Pinned
143	M143	HSS6X4X3	None	None	Pinned	Pinned
144	M144	HSS6X4X3	None	None	Pinned	Pinned
145	M145	HSS6X4X3	None	None	Pinned	Pinned
146	M146	HSS6X4X3	None	None	Pinned	Pinned
147	M147	HSS6X4X3	None	None	Pinned	Fixed
148	M148	HSS6X4X3	None	None	Fixed	Fixed
149	M149	HSS6X4X3	None	None	Fixed	Fixed
150	M150	HSS6X4X3	None	None	Fixed	Pinned

Member RISAConnection Properties (Continued)

	Label	Shape	Start Conn	End Conn	Start Release	End Release
151	M151	HSS6X4X3	None	None	Pinned	Pinned
152	M152	HSS6X4X3	None	None	Pinned	Pinned
153	M153	HSS6X4X3	None	None	Pinned	Pinned
154	M154	HSS6X4X3	None	None	Pinned	Pinned
155	M155	HSS6X4X3	None	None	Pinned	Fixed
156	M156	HSS6X4X3	None	None	Fixed	Fixed
157	M157	HSS6X4X3	None	None	Fixed	Fixed
158	M158	HSS6X4X3	None	None	Fixed	Pinned
159	M159	HSS6X4X3	None	None	Pinned	Pinned
160	M160	HSS6X4X3	None	None	Pinned	Pinned
161	M161	HSS6X4X3	None	None	Pinned	Pinned
162	M162	HSS6X4X3	None	None	Pinned	Pinned
163	M163	HSS6X4X3	None	None	Pinned	Fixed
164	M164	HSS6X4X3	None	None	Fixed	Fixed
165	M165	HSS6X4X3	None	None	Fixed	Fixed
166	M166	HSS6X4X3	None	None	Fixed	Pinned
167	M167	HSS6X4X3	None	None	Pinned	Pinned
168	M168	HSS6X4X3	None	None	Pinned	Pinned
169	M169	HSS6X4X3	None	None	Pinned	Pinned
170	M170	HSS6X4X3	None	None	Pinned	Pinned
171	M171	HSS6X4X3	None	None	Pinned	Fixed
172	M172	HSS6X4X3	None	None	Fixed	Fixed
173	M173	HSS6X4X3	None	None	Fixed	Fixed
174	M174	HSS6X4X3	None	None	Fixed	Pinned
175	M175	HSS6X4X3	None	None	Pinned	Pinned
176	M176	HSS6X4X3	None	None	Pinned	Pinned
177	M177	HSS6X4X3	None	None	Pinned	Pinned
178	M178	HSS6X4X3	None	None	Pinned	Pinned
179	M179	HSS6X4X3	None	None	Pinned	Fixed
180	M180	HSS6X4X3	None	None	Fixed	Fixed
181	M181	HSS6X4X3	None	None	Pinned	Fixed
182	M182	HSS6X4X3	None	None	Fixed	Pinned
183	M183	HSS6X4X3	None	None	Pinned	Pinned
184	M184	HSS6X4X3	None	None	Pinned	Pinned
185	M185	HSS6X4X3	None	None	Pinned	Pinned
186	M186	HSS6X4X3	None	None	Pinned	Pinned
187	M187	HSS6X4X3	None	None	Pinned	Fixed
188	M188	HSS6X4X3	None	None	Fixed	Pinned
189	M189	HSS6X4X3	None	None	Pinned	Fixed
190	M190	HSS6X4X3	None	None	Fixed	Pinned
191	M191	HSS6X4X3	None	None	Pinned	Fixed
192	M192	HSS6X4X3	None	None	Fixed	Pinned
193	M193	HSS6X4X3	None	None	Pinned	Fixed
194	M194	HSS6X4X3	None	None	Fixed	Pinned
195	M195	HSS6X4X3	None	None	Pinned	Fixed
196	M196	HSS6X4X3	None	None	Fixed	Pinned
197	M197	HSS6X4X3	None	None	Fixed	Pinned
198	M198	HSS6X4X3	None	None	Fixed	Pinned
199	M199	HSS6X4X3	None	None	Fixed	Pinned
200	M200	HSS6X4X3	None	None	Fixed	Pinned
201	M201	HSS6X4X3	None	None	Fixed	Pinned
202	M202	HSS6X4X3	None	None	Fixed	Pinned
203	M203	HSS6X4X3	None	None	Fixed	Pinned
204	M204	HSS6X4X3	None	None	Fixed	Pinned
205	M205	HSS6X4X3	None	None	Fixed	Pinned

Member RISAConnection Properties (Continued)

	Label	Shape	Start Conn	End Conn	Start Release	End Release
206	M206	HSS6X4X3	None	None	Fixed	Pinned
207	M207	HSS6X4X3	None	None	Fixed	Pinned
208	M208	HSS6X4X3	None	None	Fixed	Pinned
209	M209	HSS6X4X3	None	None	Fixed	Pinned
210	M210	HSS6X4X3	None	None	Fixed	Fixed
211	M211	HSS6X4X3	None	None	Fixed	Fixed
212	M212	HSS6X4X3	None	None	Fixed	Fixed
213	M213	HSS6X4X3	None	None	Fixed	Fixed
214	M214	HSS6X4X3	None	None	Fixed	Fixed
215	M215	HSS6X4X3	None	None	Fixed	Fixed
216	M216	HSS6X4X3	None	None	Fixed	Fixed
217	M217	HSS6X4X3	None	None	Fixed	Fixed
218	M218	HSS6X4X3	None	None	Fixed	Fixed
219	M219	HSS6X4X3	None	None	Fixed	Fixed
220	M220	HSS6X4X3	None	None	Fixed	Fixed
221	M221	HSS6X4X3	None	None	Fixed	Fixed
222	M222	HSS6X4X3	None	None	Fixed	Fixed
223	M223	HSS6X4X3	None	None	Fixed	Fixed
224	M224	HSS6X4X3	None	None	Fixed	Fixed
225	M225	HSS6X4X3	None	None	Fixed	Fixed
226	M226	HSS6X4X3	None	None	Fixed	Fixed
227	M227	HSS6X4X3	None	None	Fixed	Fixed
228	M228	HSS6X4X3	None	None	Fixed	Fixed
229	M229	HSS6X4X3	None	None	Fixed	Fixed
230	M230	HSS6X4X3	None	None	Fixed	Fixed
231	M231	HSS6X4X3	None	None	Fixed	Fixed
232	M232	HSS6X4X3	None	None	Fixed	Fixed
233	M233	HSS6X4X3	None	None	Fixed	Fixed
234	M234	HSS6X4X3	None	None	Fixed	Fixed
235	M235	HSS6X4X3	None	None	Fixed	Fixed
236	M236	HSS6X4X3	None	None	Fixed	Fixed
237	M237	HSS6X4X3	None	None	Fixed	Fixed
238	M238	HSS6X4X3	None	None	Fixed	Fixed
239	M239	HSS6X4X3	None	None	Fixed	Fixed
240	M240	HSS6X4X3	None	None	Fixed	Fixed
241	M241	HSS6X4X3	None	None	Fixed	Fixed
242	M242	HSS6X4X3	None	None	Fixed	Fixed
243	M243	HSS6X4X3	None	None	Fixed	Fixed
244	M244	HSS6X4X3	None	None	Fixed	Fixed
245	M245	HSS6X4X3	None	None	Fixed	Fixed
246	M246	HSS6X4X3	None	None	Fixed	Fixed
247	M247	HSS6X4X3	None	None	Fixed	Fixed
248	M248	HSS6X4X3	None	None	Fixed	Fixed
249	M249	HSS6X4X3	None	None	Fixed	Fixed
250	M250	HSS6X4X3	None	None	Fixed	Fixed
251	M251	HSS6X4X3	None	None	Fixed	Fixed
252	M252	HSS6X4X3	None	None	Fixed	Fixed
253	M253	HSS6X4X3	None	None	Fixed	Fixed
254	M254	HSS6X4X3	None	None	Fixed	Fixed
255	M255	HSS6X4X3	None	None	Fixed	Fixed
256	M256	HSS6X4X3	None	None	Fixed	Fixed
257	M257	HSS6X4X3	None	None	Fixed	Fixed
258	M258	HSS6X4X3	None	None	Fixed	Fixed
259	M259	HSS6X4X3	None	None	Fixed	Fixed
260	M260	HSS6X4X3	None	None	Fixed	Fixed

Member RISAConnection Properties (Continued)

	Label	Shape	Start Conn	End Conn	Start Release	End Release
261	M261	HSS6X4X3	None	None	Fixed	Fixed
262	M262	HSS6X4X3	None	None	Fixed	Fixed
263	M263	HSS6X4X3	None	None	Fixed	Fixed
264	M264	HSS6X4X3	None	None	Fixed	Fixed
265	M265	HSS6X4X3	None	None	Fixed	Fixed
266	M266	HSS6X4X3	None	None	Fixed	Fixed
267	M267	HSS6X4X3	None	None	Fixed	Fixed
268	M268	HSS6X4X3	None	None	Fixed	Fixed
269	M269	HSS6X4X3	None	None	Fixed	Fixed
270	M270	HSS6X4X3	None	None	Fixed	Fixed
271	M271	HSS6X4X3	None	None	Fixed	Fixed
272	M272	HSS6X4X3	None	None	Fixed	Fixed
273	M273	HSS6X4X3	None	None	Fixed	Fixed
274	M274	HSS6X4X3	None	None	Fixed	Fixed
275	M275	HSS6X4X3	None	None	Fixed	Pinned
276	M276	HSS6X4X3	None	None	Fixed	Pinned
277	M277	HSS6X4X3	None	None	Fixed	Pinned
278	M278	HSS6X4X3	None	None	Fixed	Pinned
279	M279	HSS6X4X3	None	None	Fixed	Pinned
280	M280	HSS6X4X3	None	None	Fixed	Pinned
281	M281	HSS6X4X3	None	None	Fixed	Pinned
282	M282	HSS6X4X3	None	None	Fixed	Pinned
283	M283	HSS6X4X3	None	None	Fixed	Pinned
284	M284	HSS6X4X3	None	None	Fixed	Pinned
285	M285	HSS6X4X3	None	None	Fixed	Pinned
286	M286	HSS6X4X3	None	None	Fixed	Pinned
287	M287	HSS6X4X3	None	None	Fixed	Pinned

Connection Design Rules

	Label	Conn Type	Type	Beam Conn	Col/Girder Conn	Eccentricity
1	Col/Bm Clip Angle	Shear	Column/Beam Clip Double Angle Shear	Welded	Bolted	1.5
2	Col/Bm Shear Tab	Shear	Column/Beam Shear Tab Shear	Bolted	N/A	3
3	Girder/Bm Clip Angle	Shear	Girder/Beam Clip Single Angle Shear	Welded	Bolted	N/A
4	Girder/Bm Shear Tab	Shear	Girder/Beam Shear Tab Shear	Bolted	N/A	N/A
5	Flange Plate Moment	Moment	Column/Beam Flange Plate Moment	Bolted	N/A	N/A
6	End-Plate Moment	Moment	Column/Beam Extended End-Plate Moment	N/A	N/A	N/A
7	Col Shear Splice	Shear	Column Shear Tab Splice	N/A	N/A	N/A
8	Col Moment Splice	Moment	Column Moment Plate Splice	N/A	N/A	N/A
9	Diagonal Brace	Brace	Diagonal Vertical Brace	N/A	N/A	N/A
10	Chevron Brace	Brace	Chevron Vertical Brace	N/A	N/A	N/A
11	BP-1	Baseplate	Single Column Baseplate	N/A	N/A	N/A
12	BP-2	Baseplate	Single Column Baseplate	N/A	N/A	N/A

Node Loads and Enforced Displacements (BLC 1 : D)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	-20.2
2	N273	L	Y	-20.2

Node Loads and Enforced Displacements (BLC 2 : Lr Left)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	-25.8
2	N273	L	Y	-25.8

Node Loads and Enforced Displacements (BLC 3 : Lr Right)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	-25.8
2	N273	L	Y	-25.8

Node Loads and Enforced Displacements (BLC 4 : W LAT1)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	-32
2	N273	L	Y	-32
3	N286	L	X	11.1
4	N273	L	X	11.1

Node Loads and Enforced Displacements (BLC 5 : W LAT2)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	21.2
2	N273	L	Y	21.2
3	N286	L	X	8.4
4	N273	L	X	8.4

Node Loads and Enforced Displacements (BLC 6 : E +X)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	X	5.1
2	N273	L	X	5.1

Node Loads and Enforced Displacements (BLC 7 : E +Z)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Z	5.1
2	N273	L	Z	5.1

Node Loads and Enforced Displacements (BLC 8 : UNB S)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	-19
2	N273	L	Y	-19

Node Loads and Enforced Displacements (BLC 9 : W Down)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	-36
2	N273	L	Y	-13

Node Loads and Enforced Displacements (BLC 10 : W Up)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	36
2	N273	L	Y	13

Node Loads and Enforced Displacements (BLC 12 : E +Z)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N5	L	Z	-1655
2	N18	L	Z	-1655
3	N43	L	Z	-1655
4	N56	L	Z	-1655
5	N81	L	Z	-1655
6	N94	L	Z	-1655
7	N119	L	Z	-1655
8	N132	L	Z	-1655
9	N157	L	Z	-1655
10	N170	L	Z	-1655
11	N195	L	Z	-1655
12	N208	L	Z	-1655
13	N233	L	Z	-1655
14	N246	L	Z	-1655

Node Loads and Enforced Displacements (BLC 13 : W Down)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	-36
2	N273	L	Y	-13
3	N5	L	Z	-943
4	N18	L	Z	-943
5	N43	L	Z	-943
6	N56	L	Z	-943
7	N81	L	Z	-943
8	N94	L	Z	-943
9	N119	L	Z	-943
10	N132	L	Z	-943
11	N157	L	Z	-943
12	N170	L	Z	-943
13	N195	L	Z	-943
14	N208	L	Z	-943
15	N233	L	Z	-943
16	N246	L	Z	-943

Node Loads and Enforced Displacements (BLC 14 : W Up)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N286	L	Y	36
2	N273	L	Y	13
3	N5	L	Z	-943
4	N18	L	Z	-943
5	N43	L	Z	-943
6	N56	L	Z	-943
7	N81	L	Z	-943
8	N94	L	Z	-943
9	N119	L	Z	-943
10	N132	L	Z	-943
11	N157	L	Z	-943
12	N170	L	Z	-943
13	N195	L	Z	-943
14	N208	L	Z	-943
15	N233	L	Z	-943
16	N246	L	Z	-943

Member Distributed Loads (BLC 1 : D)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M85	PY	-54.2	-54.2	0	%100
2	M86	PY	-54.2	-54.2	0	%100
3	M87	PY	-54.2	-54.2	0	%100
4	M88	PY	-54.2	-54.2	0	%100
5	M89	PY	-54.2	-54.2	0	%100
6	M90	PY	-54.2	-54.2	0	%100
7	M91	PY	-54.2	-54.2	0	%100
8	M92	PY	-54.2	-54.2	0	%100
9	M93	PY	-74	-74	0	%100
10	M94	PY	-74	-74	0	%100
11	M95	PY	-74	-74	0	%100
12	M96	PY	-74	-74	0	%100
13	M97	PY	-74	-74	0	%100
14	M98	PY	-74	-74	0	%100
15	M99	PY	-74	-74	0	%100
16	M100	PY	-74	-74	0	%100
17	M101	PY	-66.6	-66.6	0	%100
18	M102	PY	-66.6	-66.6	0	%100
19	M103	PY	-66.6	-66.6	0	%100
20	M104	PY	-66.6	-66.6	0	%100
21	M105	PY	-66.6	-66.6	0	%100
22	M106	PY	-66.6	-66.6	0	%100
23	M107	PY	-66.6	-66.6	0	%100
24	M108	PY	-66.6	-66.6	0	%100
25	M109	PY	-45.6	-45.6	0	%100
26	M110	PY	-45.6	-45.6	0	%100
27	M111	PY	-45.6	-45.6	0	%100
28	M112	PY	-45.6	-45.6	0	%100
29	M113	PY	-45.6	-45.6	0	%100
30	M114	PY	-45.6	-45.6	0	%100
31	M115	PY	-45.6	-45.6	0	%100
32	M116	PY	-45.6	-45.6	0	%100
33	M117	PY	-34.2	-34.2	0	%100
34	M118	PY	-34.2	-34.2	0	%100
35	M119	PY	-34.2	-34.2	0	%100
36	M120	PY	-34.2	-34.2	0	%100
37	M121	PY	-34.2	-34.2	0	%100
38	M122	PY	-34.2	-34.2	0	%100
39	M123	PY	-34.2	-34.2	0	%100
40	M124	PY	-34.2	-34.2	0	%100
41	M125	PY	-26	-47.8	0	3.16
42	M125	PY	-47.8	-47.8	3.16	%100
43	M126	PY	-47.8	-47.8	0	%100
44	M127	PY	-47.8	-47.8	0	%100
45	M128	PY	-47.8	-47.8	0	%100
46	M129	PY	-47.8	-47.8	0	%100
47	M130	PY	-47.8	-47.8	0	%100
48	M131	PY	-47.8	-47.8	0	%100
49	M132	PY	-47.8	-47.8	0	2.837
50	M132	PY	-47.8	-26	2.837	%100
51	M133	PY	0	-37.7	0	3.69
52	M133	PY	-37.7	-37.3	3.69	6.86
53	M133	PY	-37.3	-37.3	6.86	%100
54	M134	PY	-37.3	-37.3	0	%100
55	M135	PY	-37.3	-37.3	0	%100

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

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
56	M136	PY	-37.3	-37.3	0	%100
57	M137	PY	-37.3	-37.3	0	%100
58	M138	PY	-37.3	-37.3	0	%100
59	M139	PY	-37.3	-37.3	0	%100
60	M140	PY	-37.3	-37.3	0	2.831
61	M140	PY	-37.3	-37.7	2.831	6.001
62	M140	PY	-37.7	0	6.001	%100
63	M141	PY	-54.2	-54.2	0	%100
64	M142	PY	-54.2	-54.2	0	%100
65	M143	PY	-54.2	-54.2	0	%100
66	M144	PY	-54.2	-54.2	0	%100
67	M145	PY	-54.2	-54.2	0	%100
68	M146	PY	-54.2	-54.2	0	%100
69	M147	PY	-54.2	-54.2	0	%100
70	M148	PY	-54.2	-54.2	0	%100
71	M149	PY	-74	-74	0	%100
72	M150	PY	-74	-74	0	%100
73	M151	PY	-74	-74	0	%100
74	M152	PY	-74	-74	0	%100
75	M153	PY	-74	-74	0	%100
76	M154	PY	-74	-74	0	%100
77	M155	PY	-74	-74	0	%100
78	M156	PY	-74	-74	0	%100
79	M157	PY	-66.6	-66.6	0	%100
80	M158	PY	-66.6	-66.6	0	%100
81	M159	PY	-66.6	-66.6	0	%100
82	M160	PY	-66.6	-66.6	0	%100
83	M161	PY	-66.6	-66.6	0	%100
84	M162	PY	-66.6	-66.6	0	%100
85	M163	PY	-66.6	-66.6	0	%100
86	M164	PY	-66.6	-66.6	0	%100
87	M165	PY	-45.6	-45.6	0	%100
88	M166	PY	-45.6	-45.6	0	%100
89	M167	PY	-45.6	-45.6	0	%100
90	M168	PY	-45.6	-45.6	0	%100
91	M169	PY	-45.6	-45.6	0	%100
92	M170	PY	-45.6	-45.6	0	%100
93	M171	PY	-45.6	-45.6	0	%100
94	M172	PY	-45.6	-45.6	0	%100
95	M173	PY	-34.2	-34.2	0	%100
96	M174	PY	-34.2	-34.2	0	%100
97	M175	PY	-34.2	-34.2	0	%100
98	M176	PY	-34.2	-34.2	0	%100
99	M177	PY	-34.2	-34.2	0	%100
100	M178	PY	-34.2	-34.2	0	%100
101	M179	PY	-34.2	-34.2	0	%100
102	M180	PY	-34.2	-34.2	0	%100
103	M181	PY	-26	-47.8	0	3.16
104	M181	PY	-47.8	-47.8	3.16	%100
105	M182	PY	-47.8	-47.8	0	%100
106	M183	PY	-47.8	-47.8	0	%100
107	M184	PY	-47.8	-47.8	0	%100
108	M185	PY	-47.8	-47.8	0	%100
109	M186	PY	-47.8	-47.8	0	%100
110	M187	PY	-47.8	-47.8	0	%100

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

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
111	M188	PY	-47.8	-47.8	0	2.837
112	M188	PY	-47.8	-26	2.837	%100
113	M189	PY	-22	-11.3	0	%100
114	M190	PY	-27.9	-11.3	0	%100
115	M191	PY	-22	-11.3	0	%100
116	M192	PY	-27.9	-11.3	0	%100
117	M193	PY	-22	-11.3	0	%100
118	M194	PY	-27.9	-11.3	0	%100
119	M195	PY	-22	-11.3	0	%100
120	M196	PY	-27.9	-11.3	0	%100

Member Distributed Loads (BLC 2 : Lr Left)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M85	PY	-107.8	-107.8	0	%100
2	M86	PY	-107.8	-107.8	0	%100
3	M87	PY	-107.8	-107.8	0	%100
4	M88	PY	-107.8	-107.8	0	%100
5	M89	PY	-107.8	-107.8	0	%100
6	M90	PY	-107.8	-107.8	0	%100
7	M91	PY	-107.8	-107.8	0	%100
8	M92	PY	-107.8	-107.8	0	%100
9	M93	PY	-146.942	-146.942	0	%100
10	M94	PY	-147	-147	0	%100
11	M95	PY	-147	-147	0	%100
12	M96	PY	-147	-147	0	%100
13	M97	PY	-147	-147	0	%100
14	M98	PY	-147	-147	0	%100
15	M99	PY	-147	-147	0	%100
16	M100	PY	-147	-147	0	%100
17	M101	PY	-132.4	-132.4	0	%100
18	M102	PY	-132.4	-132.4	0	%100
19	M103	PY	-132.4	-132.4	0	%100
20	M104	PY	-132.4	-132.4	0	%100
21	M105	PY	-132.4	-132.4	0	%100
22	M106	PY	-132.4	-132.4	0	%100
23	M107	PY	-132.4	-132.4	0	%100
24	M108	PY	-132.4	-132.4	0	%100
25	M109	PY	-90.7	-90.7	0	%100
26	M110	PY	-90.7	-90.7	0	%100
27	M111	PY	-90.7	-90.7	0	%100
28	M112	PY	-90.7	-90.7	0	%100
29	M113	PY	-90.7	-90.7	0	%100
30	M114	PY	-90.7	-90.7	0	%100
31	M115	PY	-90.7	-90.7	0	%100
32	M116	PY	-90.7	-90.7	0	%100
33	M117	PY	-68	-68	0	%100
34	M118	PY	-68	-68	0	%100
35	M119	PY	-68	-68	0	%100
36	M120	PY	-68	-68	0	%100
37	M121	PY	-68	-68	0	%100
38	M122	PY	-68	-68	0	%100
39	M123	PY	-68	-68	0	%100
40	M124	PY	-68	-68	0	%100
41	M125	PY	-51.6	-94.9	0	3.16
42	M125	PY	-94.9	-94.9	3.16	%100

Member Distributed Loads (BLC 2 : Lr Left) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
43	M126	PY	-94.9	-94.9	0	%100
44	M127	PY	-94.9	-94.9	0	%100
45	M128	PY	-94.9	-94.9	0	%100
46	M129	PY	-94.9	-94.9	0	%100
47	M130	PY	-94.9	-94.9	0	%100
48	M131	PY	-94.9	-94.9	0	%100
49	M132	PY	-94.9	-94.9	0	2.837
50	M132	PY	-94.9	-51.6	2.837	%100
51	M133	PY	0	-37.4	0	3.69
52	M133	PY	-37.4	-37.05	3.69	6.86
53	M133	PY	-37.05	-37.05	6.86	%100
54	M134	PY	-37.05	-37.05	0	%100
55	M135	PY	-37.05	-37.05	0	%100
56	M136	PY	-37.05	-37.05	0	%100
57	M137	PY	-37.05	-37.05	0	%100
58	M138	PY	-37.05	-37.05	0	%100
59	M139	PY	-37.05	-37.05	0	%100
60	M140	PY	-37.05	-37.05	0	2.831
61	M140	PY	-37.05	-37.4	2.831	6.001
62	M140	PY	-37.4	0	6.001	%100
63	M189	PY	-43.7	-22.5	0	%100
64	M190	PY	-55.5	-22.5	0	%100
65	M191	PY	-43.7	-22.5	0	%100
66	M192	PY	-55.5	-22.5	0	%100

Member Distributed Loads (BLC 3 : Lr Right)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M133	PY	0	-37.4	0	3.69
2	M133	PY	-37.4	-37.05	3.69	6.86
3	M133	PY	-37.05	-37.05	6.86	%100
4	M134	PY	-37.05	-37.05	0	%100
5	M135	PY	-37.05	-37.05	0	%100
6	M136	PY	-37.05	-37.05	0	%100
7	M137	PY	-37.05	-37.05	0	%100
8	M138	PY	-37.05	-37.05	0	%100
9	M139	PY	-37.05	-37.05	0	%100
10	M140	PY	-37.05	-37.05	0	2.831
11	M140	PY	-37.05	-37.4	2.831	6.001
12	M140	PY	-37.4	0	6.001	%100
13	M141	PY	-107.8	-107.8	0	%100
14	M142	PY	-107.8	-107.8	0	%100
15	M143	PY	-107.8	-107.8	0	%100
16	M144	PY	-107.8	-107.8	0	%100
17	M145	PY	-107.8	-107.8	0	%100
18	M146	PY	-107.8	-107.8	0	%100
19	M147	PY	-107.8	-107.8	0	%100
20	M148	PY	-107.8	-107.8	0	%100
21	M149	PY	-147	-147	0	%100
22	M150	PY	-147	-147	0	%100
23	M151	PY	-147	-147	0	%100
24	M152	PY	-147	-147	0	%100
25	M153	PY	-147	-147	0	%100
26	M154	PY	-147	-147	0	%100
27	M155	PY	-147	-147	0	%100
28	M156	PY	-147	-147	0	%100

Member Distributed Loads (BLC 3 : Lr Right) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
29	M157	PY	-132.4	-132.4	0	%100
30	M158	PY	-132.4	-132.4	0	%100
31	M159	PY	-132.4	-132.4	0	%100
32	M160	PY	-132.4	-132.4	0	%100
33	M161	PY	-132.4	-132.4	0	%100
34	M162	PY	-132.4	-132.4	0	%100
35	M163	PY	-132.4	-132.4	0	%100
36	M164	PY	-132.4	-132.4	0	%100
37	M165	PY	-90.7	-90.7	0	%100
38	M166	PY	-90.7	-90.7	0	%100
39	M167	PY	-90.7	-90.7	0	%100
40	M168	PY	-90.7	-90.7	0	%100
41	M169	PY	-90.7	-90.7	0	%100
42	M170	PY	-90.7	-90.7	0	%100
43	M171	PY	-90.7	-90.7	0	%100
44	M172	PY	-90.7	-90.7	0	%100
45	M173	PY	-68	-68	0	%100
46	M174	PY	-68	-68	0	%100
47	M175	PY	-68	-68	0	%100
48	M176	PY	-68	-68	0	%100
49	M177	PY	-68	-68	0	%100
50	M178	PY	-68	-68	0	%100
51	M179	PY	-68	-68	0	%100
52	M180	PY	-68	-68	0	%100
53	M181	PY	-51.6	-94.8	0	3.16
54	M181	PY	-94.8	-94.8	3.16	%100
55	M182	PY	-94.8	-94.8	0	%100
56	M183	PY	-94.8	-94.8	0	%100
57	M184	PY	-94.8	-94.8	0	%100
58	M185	PY	-94.8	-94.8	0	%100
59	M186	PY	-94.8	-94.8	0	%100
60	M187	PY	-94.8	-94.8	0	%100
61	M188	PY	-94.8	-94.8	0	2.837
62	M188	PY	-94.8	-51.6	2.837	%100
63	M193	PY	-43.7	-22.5	0	%100
64	M194	PY	-55.5	-22.5	0	%100
65	M195	PY	-43.7	-22.5	0	%100
66	M196	PY	-55.5	-22.5	0	%100

Member Distributed Loads (BLC 4 : W LAT1)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	X	68.6	68.6	0.542	4.375
2	M2	X	68.6	68.6	0.542	4.375
3	M3	X	68.6	68.6	0.542	4.375
4	M4	X	68.6	68.6	0.542	4.375
5	M5	X	68.6	68.6	0.542	4.375
6	M6	X	68.6	68.6	0.542	4.375
7	M7	X	68.6	68.6	0.542	4.375
8	M8	X	68.6	68.6	0.542	4.375
9	M9	X	68.6	68.6	0.542	4.375
10	M10	X	68.6	68.6	0.542	4.375
11	M11	X	68.6	68.6	0.542	4.375
12	M12	X	68.6	68.6	0.542	4.375
13	M13	X	68.6	68.6	0.542	4.375
14	M14	X	68.6	68.6	0.542	4.375

Member Distributed Loads (BLC 4 : W LAT1) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
15	M1	X	24.3	24.3	4.375	%100
16	M2	X	24.3	24.3	4.375	%100
17	M3	X	24.3	24.3	4.375	%100
18	M4	X	24.3	24.3	4.375	%100
19	M5	X	24.3	24.3	4.375	%100
20	M6	X	24.3	24.3	4.375	%100
21	M7	X	24.3	24.3	4.375	%100
22	M8	X	24.3	24.3	4.375	%100
23	M9	X	24.3	24.3	4.375	%100
24	M10	X	24.3	24.3	4.375	%100
25	M11	X	24.3	24.3	4.375	%100
26	M12	X	24.3	24.3	4.375	%100
27	M13	X	24.3	24.3	4.375	%100
28	M14	X	24.3	24.3	4.375	%100
29	M30	X	24.3	24.3	0	%100
30	M33	X	24.3	24.3	0	%100
31	M37	X	24.3	24.3	0	%100
32	M39	X	24.3	24.3	0	%100
33	M43	X	24.3	24.3	0	%100
34	M45	X	24.3	24.3	0	%100
35	M49	X	24.3	24.3	0	%100
36	M51	X	24.3	24.3	0	%100
37	M55	X	24.3	24.3	0	%100
38	M57	X	24.3	24.3	0	%100
39	M61	X	24.3	24.3	0	%100
40	M63	X	24.3	24.3	0	%100
41	M67	X	24.3	24.3	0	%100
42	M69	X	24.3	24.3	0	%100
43	M85	X	6.6	6.6	0	%100
44	M86	X	6.6	6.6	0	%100
45	M87	X	6.6	6.6	0	%100
46	M88	X	6.6	6.6	0	%100
47	M89	X	6.6	6.6	0	%100
48	M90	X	6.6	6.6	0	%100
49	M91	X	6.6	6.6	0	%100
50	M92	X	6.6	6.6	0	%100
51	M141	X	5.3	5.3	0	%100
52	M142	X	5.3	5.3	0	%100
53	M143	X	5.3	5.3	0	%100
54	M144	X	5.3	5.3	0	%100
55	M145	X	5.3	5.3	0	%100
56	M146	X	5.3	5.3	0	%100
57	M147	X	5.3	5.3	0	%100
58	M148	X	5.3	5.3	0	%100
59	M117	X	7.1	7.1	0	%100
60	M118	X	7.1	7.1	0	%100
61	M119	X	7.1	7.1	0	%100
62	M120	X	7.1	7.1	0	%100
63	M121	X	7.1	7.1	0	%100
64	M122	X	7.1	7.1	0	%100
65	M123	X	7.1	7.1	0	%100
66	M124	X	7.1	7.1	0	%100
67	M173	X	5.6	5.6	0	%100
68	M174	X	5.6	5.6	0	%100
69	M175	X	5.6	5.6	0	%100

Member Distributed Loads (BLC 4 : W LAT1) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
70	M176	X	5.6	5.6	0	%100
71	M177	X	5.6	5.6	0	%100
72	M178	X	5.6	5.6	0	%100
73	M179	X	5.6	5.6	0	%100
74	M180	X	5.6	5.6	0	%100
75	M189	X	8.6	8.6	0	%100
76	M190	X	8.6	8.6	0	%100
77	M191	X	8.6	8.6	0	%100
78	M192	X	8.6	8.6	0	%100
79	M193	X	6.9	6.9	0	%100
80	M194	X	6.9	6.9	0	%100
81	M195	X	6.9	6.9	0	%100
82	M196	X	6.9	6.9	0	%100
83	M85	y	-117.8	-117.8	0	%100
84	M86	y	-117.8	-117.8	0	%100
85	M87	y	-117.8	-117.8	0	%100
86	M88	y	-117.8	-117.8	0	%100
87	M89	y	-117.8	-117.8	0	%100
88	M90	y	-117.8	-117.8	0	%100
89	M91	y	-117.8	-117.8	0	%100
90	M92	y	-117.8	-117.8	0	%100
91	M93	y	-160.7	-160.7	0	%100
92	M94	y	-160.7	-160.7	0	%100
93	M95	y	-160.7	-160.7	0	%100
94	M96	y	-160.7	-160.7	0	%100
95	M97	y	-160.7	-160.7	0	%100
96	M98	y	-160.7	-160.7	0	%100
97	M99	y	-160.7	-160.7	0	%100
98	M100	y	-160.7	-160.7	0	%100
99	M101	y	-144.7	-144.7	0	%100
100	M102	y	-144.7	-144.7	0	%100
101	M103	y	-144.7	-144.7	0	%100
102	M104	y	-144.7	-144.7	0	%100
103	M105	y	-144.7	-144.7	0	%100
104	M106	y	-144.7	-144.7	0	%100
105	M107	y	-144.7	-144.7	0	%100
106	M108	y	-144.7	-144.7	0	%100
107	M109	y	-99.1	-99.1	0	%100
108	M110	y	-99.1	-99.1	0	%100
109	M111	y	-99.1	-99.1	0	%100
110	M112	y	-99.1	-99.1	0	%100
111	M113	y	-99.1	-99.1	0	%100
112	M114	y	-99.1	-99.1	0	%100
113	M115	y	-99.1	-99.1	0	%100
114	M116	y	-99.1	-99.1	0	%100
115	M117	y	-79.2	-79.2	0	%100
116	M118	y	-79.2	-79.2	0	%100
117	M119	y	-79.2	-79.2	0	%100
118	M120	y	-79.2	-79.2	0	%100
119	M121	y	-79.2	-79.2	0	%100
120	M122	y	-79.2	-79.2	0	%100
121	M123	y	-79.2	-79.2	0	%100
122	M124	y	-79.2	-79.2	0	%100
123	M125	y	-60.1	-110.5	0	3.16
124	M125	y	-110.5	-110.5	3.16	%100

Member Distributed Loads (BLC 4 : W LAT1) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
125	M126	y	-110.5	-110.5	0	%100
126	M127	y	-110.5	-110.5	0	%100
127	M128	y	-110.5	-110.5	0	%100
128	M129	y	-110.5	-110.5	0	%100
129	M130	y	-110.5	-110.5	0	%100
130	M131	y	-110.5	-110.5	0	%100
131	M132	y	-110.5	-110.5	0	2.837
132	M132	y	-110.5	-60.1	2.837	%100
133	M133	PY	0	-45.6	0	3.69
134	M133	PY	-45.6	-45.2	3.69	6.86
135	M133	PY	-45.2	-45.2	6.86	%100
136	M134	PY	-45.2	-45.2	0	%100
137	M135	PY	-45.2	-45.2	0	%100
138	M136	PY	-45.2	-45.2	0	%100
139	M137	PY	-45.2	-45.2	0	%100
140	M138	PY	-45.2	-45.2	0	%100
141	M139	PY	-45.2	-45.2	0	%100
142	M140	PY	-45.2	-45.2	0	2.831
143	M140	PY	-45.2	-45.6	2.831	6.001
144	M140	PY	-45.6	0	6.001	%100
145	M133	PX	0	16.1	0	3.69
146	M133	PX	16.1	16	3.69	6.86
147	M133	PX	16	16	6.86	%100
148	M134	PX	16	16	0	%100
149	M135	PX	16	16	0	%100
150	M136	PX	16	16	0	%100
151	M137	PX	16	16	0	%100
152	M138	PX	16	16	0	%100
153	M139	PX	16	16	0	%100
154	M140	PX	16	16	0	2.831
155	M140	PX	16	16.1	2.831	6.001
156	M140	PX	16.1	0	6.001	%100
157	M141	y	-20.3	-20.3	0	%100
158	M142	y	-20.3	-20.3	0	%100
159	M143	y	-20.3	-20.3	0	%100
160	M144	y	-20.3	-20.3	0	%100
161	M145	y	-20.3	-20.3	0	%100
162	M146	y	-20.3	-20.3	0	%100
163	M147	y	-20.3	-20.3	0	%100
164	M148	y	-20.3	-20.3	0	%100
165	M149	y	-27.3	-27.3	0	%100
166	M150	y	-27.3	-27.3	0	%100
167	M151	y	-27.3	-27.3	0	%100
168	M152	y	-27.3	-27.3	0	%100
169	M153	y	-27.3	-27.3	0	%100
170	M154	y	-27.3	-27.3	0	%100
171	M155	y	-27.3	-27.3	0	%100
172	M156	y	-27.3	-27.3	0	%100
173	M157	y	-25	-25	0	%100
174	M158	y	-25	-25	0	%100
175	M159	y	-25	-25	0	%100
176	M160	y	-25	-25	0	%100
177	M161	y	-25	-25	0	%100
178	M162	y	-25	-25	0	%100
179	M163	y	-25	-25	0	%100

Member Distributed Loads (BLC 4 : W LAT1) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
180	M164	y	-25	-25	0	%100
181	M165	y	-17.1	-17.1	0	%100
182	M166	y	-17.1	-17.1	0	%100
183	M167	y	-17.1	-17.1	0	%100
184	M168	y	-17.1	-17.1	0	%100
185	M169	y	-17.1	-17.1	0	%100
186	M170	y	-17.1	-17.1	0	%100
187	M171	y	-17.1	-17.1	0	%100
188	M172	y	-17.1	-17.1	0	%100
189	M173	y	-13.7	-13.7	0	%100
190	M174	y	-13.7	-13.7	0	%100
191	M175	y	-13.7	-13.7	0	%100
192	M176	y	-13.7	-13.7	0	%100
193	M177	y	-13.7	-13.7	0	%100
194	M178	y	-13.7	-13.7	0	%100
195	M179	y	-13.7	-13.7	0	%100
196	M180	y	-13.7	-13.7	0	%100
197	M181	y	-11.1	-19	0	3.16
198	M181	y	-19	-19	3.16	%100
199	M182	y	-19	-19	0	%100
200	M183	y	-19	-19	0	%100
201	M184	y	-19	-19	0	%100
202	M185	y	-19	-19	0	%100
203	M186	y	-19	-19	0	%100
204	M187	y	-19	-19	0	%100
205	M188	y	-19	-19	0	2.837
206	M188	y	-19	-11.1	2.837	%100
207	M189	PY	-45.4	-23.5	0	%100
208	M190	PY	-57.7	-23.5	0	%100
209	M191	PY	-45.4	-23.5	0	%100
210	M192	PY	-57.7	-23.5	0	%100
211	M193	PY	-7.8	-4.1	0	%100
212	M194	PY	-9.9	-4.1	0	%100
213	M195	PY	-7.8	-4.1	0	%100
214	M196	PY	-9.9	-4.1	0	%100
215	M189	X	16.1	16.1	0	%100
216	M190	X	19	19	0	%100
217	M191	X	16.1	16.1	0	%100
218	M192	X	19	19	0	%100
219	M193	X	-2.8	-2.8	0	%100
220	M194	X	-3.3	-3.3	0	%100
221	M195	X	-2.8	-2.8	0	%100
222	M196	X	-3.3	-3.3	0	%100

Member Distributed Loads (BLC 5 : W LAT2)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	X	68.6	68.6	0.542	4.375
2	M2	X	68.6	68.6	0.542	4.375
3	M3	X	68.6	68.6	0.542	4.375
4	M4	X	68.6	68.6	0.542	4.375
5	M5	X	68.6	68.6	0.542	4.375
6	M6	X	68.6	68.6	0.542	4.375
7	M7	X	68.6	68.6	0.542	4.375
8	M8	X	68.6	68.6	0.542	4.375
9	M9	X	68.6	68.6	0.542	4.375

Member Distributed Loads (BLC 5 : W LAT2) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
10	M10	X	68.6	68.6	0.542	4.375
11	M11	X	68.6	68.6	0.542	4.375
12	M12	X	68.6	68.6	0.542	4.375
13	M13	X	68.6	68.6	0.542	4.375
14	M14	X	68.6	68.6	0.542	4.375
15	M1	X	24.3	24.3	4.375	%100
16	M2	X	24.3	24.3	4.375	%100
17	M3	X	24.3	24.3	4.375	%100
18	M4	X	24.3	24.3	4.375	%100
19	M5	X	24.3	24.3	4.375	%100
20	M6	X	24.3	24.3	4.375	%100
21	M7	X	24.3	24.3	4.375	%100
22	M8	X	24.3	24.3	4.375	%100
23	M9	X	24.3	24.3	4.375	%100
24	M10	X	24.3	24.3	4.375	%100
25	M11	X	24.3	24.3	4.375	%100
26	M12	X	24.3	24.3	4.375	%100
27	M13	X	24.3	24.3	4.375	%100
28	M14	X	24.3	24.3	4.375	%100
29	M30	X	24.3	24.3	0	%100
30	M33	X	24.3	24.3	0	%100
31	M37	X	24.3	24.3	0	%100
32	M39	X	24.3	24.3	0	%100
33	M43	X	24.3	24.3	0	%100
34	M45	X	24.3	24.3	0	%100
35	M49	X	24.3	24.3	0	%100
36	M51	X	24.3	24.3	0	%100
37	M55	X	24.3	24.3	0	%100
38	M57	X	24.3	24.3	0	%100
39	M61	X	24.3	24.3	0	%100
40	M63	X	24.3	24.3	0	%100
41	M67	X	24.3	24.3	0	%100
42	M69	X	24.3	24.3	0	%100
43	M85	X	6.6	6.6	0	%100
44	M86	X	6.6	6.6	0	%100
45	M87	X	6.6	6.6	0	%100
46	M88	X	6.6	6.6	0	%100
47	M89	X	6.6	6.6	0	%100
48	M90	X	6.6	6.6	0	%100
49	M91	X	6.6	6.6	0	%100
50	M92	X	6.6	6.6	0	%100
51	M141	X	5.3	5.3	0	%100
52	M142	X	5.3	5.3	0	%100
53	M143	X	5.3	5.3	0	%100
54	M144	X	5.3	5.3	0	%100
55	M145	X	5.3	5.3	0	%100
56	M146	X	5.3	5.3	0	%100
57	M147	X	5.3	5.3	0	%100
58	M148	X	5.3	5.3	0	%100
59	M117	X	7.1	7.1	0	%100
60	M118	X	7.1	7.1	0	%100
61	M119	X	7.1	7.1	0	%100
62	M120	X	7.1	7.1	0	%100
63	M121	X	7.1	7.1	0	%100
64	M122	X	7.1	7.1	0	%100

Member Distributed Loads (BLC 5 : W LAT2) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
65	M123	X	7.1	7.1	0	%100
66	M124	X	7.1	7.1	0	%100
67	M173	X	5.6	5.6	0	%100
68	M174	X	5.6	5.6	0	%100
69	M175	X	5.6	5.6	0	%100
70	M176	X	5.6	5.6	0	%100
71	M177	X	5.6	5.6	0	%100
72	M178	X	5.6	5.6	0	%100
73	M179	X	5.6	5.6	0	%100
74	M180	X	5.6	5.6	0	%100
75	M189	X	8.6	8.6	0	%100
76	M190	X	8.6	8.6	0	%100
77	M191	X	8.6	8.6	0	%100
78	M192	X	8.6	8.6	0	%100
79	M193	X	6.9	6.9	0	%100
80	M194	X	6.9	6.9	0	%100
81	M195	X	6.9	6.9	0	%100
82	M196	X	6.9	6.9	0	%100
83	M85	y	9.8	9.8	0	%100
84	M86	y	9.8	9.8	0	%100
85	M87	y	9.8	9.8	0	%100
86	M88	y	9.8	9.8	0	%100
87	M89	y	9.8	9.8	0	%100
88	M90	y	9.8	9.8	0	%100
89	M91	y	9.8	9.8	0	%100
90	M92	y	9.8	9.8	0	%100
91	M93	y	13.3	13.3	0	%100
92	M94	y	13.3	13.3	0	%100
93	M95	y	13.3	13.3	0	%100
94	M96	y	13.3	13.3	0	%100
95	M97	y	13.3	13.3	0	%100
96	M98	y	13.3	13.3	0	%100
97	M99	y	13.3	13.3	0	%100
98	M100	y	13.3	13.3	0	%100
99	M101	y	12	12	0	%100
100	M102	y	12	12	0	%100
101	M103	y	12	12	0	%100
102	M104	y	12	12	0	%100
103	M105	y	12	12	0	%100
104	M106	y	12	12	0	%100
105	M107	y	12	12	0	%100
106	M108	y	12	12	0	%100
107	M109	y	8.2	8.2	0	%100
108	M110	y	8.2	8.2	0	%100
109	M111	y	8.2	8.2	0	%100
110	M112	y	8.2	8.2	0	%100
111	M113	y	8.2	8.2	0	%100
112	M114	y	8.2	8.2	0	%100
113	M115	y	8.2	8.2	0	%100
114	M116	y	8.2	8.2	0	%100
115	M117	y	6.5	6.5	0	%100
116	M118	y	6.5	6.5	0	%100
117	M119	y	6.5	6.5	0	%100
118	M120	y	6.5	6.5	0	%100
119	M121	y	6.5	6.5	0	%100

Member Distributed Loads (BLC 5 : W LAT2) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
120	M122	y	6.5	6.5	0	%100
121	M123	y	6.5	6.5	0	%100
122	M124	y	6.5	6.5	0	%100
123	M125	y	5	9.1	0	3.16
124	M125	y	9.1	9.1	3.16	%100
125	M126	y	9.1	9.1	0	%100
126	M127	y	9.1	9.1	0	%100
127	M128	y	9.1	9.1	0	%100
128	M129	y	9.1	9.1	0	%100
129	M130	y	9.1	9.1	0	%100
130	M131	y	9.1	9.1	0	%100
131	M132	y	9.1	9.1	0	2.837
132	M132	y	9.1	5	2.837	%100
133	M133	PY	0	30.7	0	3.69
134	M133	PY	30.7	30.4	3.69	6.86
135	M133	PY	30.4	30.4	6.86	%100
136	M134	PY	30.4	30.4	0	%100
137	M135	PY	30.4	30.4	0	%100
138	M136	PY	30.4	30.4	0	%100
139	M137	PY	30.4	30.4	0	%100
140	M138	PY	30.4	30.4	0	%100
141	M139	PY	30.4	30.4	0	%100
142	M140	PY	30.4	30.4	0	2.831
143	M140	PY	30.4	30.7	2.831	6.001
144	M140	PY	30.7	0	6.001	%100
145	M133	PX	0	12.2	0	3.69
146	M133	PX	12.2	12	3.69	6.86
147	M133	PX	12	12	6.86	%100
148	M134	PX	12	12	0	%100
149	M135	PX	12	12	0	%100
150	M136	PX	12	12	0	%100
151	M137	PX	12	12	0	%100
152	M138	PX	12	12	0	%100
153	M139	PX	12	12	0	%100
154	M140	PX	12	12	0	2.831
155	M140	PX	12	12.2	2.831	6.001
156	M140	PX	12.2	0	6.001	%100
157	M141	y	83.3	83.3	0	%100
158	M142	y	83.3	83.3	0	%100
159	M143	y	83.3	83.3	0	%100
160	M144	y	83.3	83.3	0	%100
161	M145	y	83.3	83.3	0	%100
162	M146	y	83.3	83.3	0	%100
163	M147	y	83.3	83.3	0	%100
164	M148	y	83.3	83.3	0	%100
165	M149	y	113.6	113.6	0	%100
166	M150	y	113.6	113.6	0	%100
167	M151	y	113.6	113.6	0	%100
168	M152	y	113.6	113.6	0	%100
169	M153	y	113.6	113.6	0	%100
170	M154	y	113.6	113.6	0	%100
171	M155	y	113.6	113.6	0	%100
172	M156	y	113.6	113.6	0	%100
173	M157	y	102.3	102.3	0	%100
174	M158	y	102.3	102.3	0	%100

Member Distributed Loads (BLC 5 : W LAT2) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
175	M159	y	102.3	102.3	0	%100
176	M160	y	102.3	102.3	0	%100
177	M161	y	102.3	102.3	0	%100
178	M162	y	102.3	102.3	0	%100
179	M163	y	102.3	102.3	0	%100
180	M164	y	102.3	102.3	0	%100
181	M165	y	70.1	70.1	0	%100
182	M166	y	70.1	70.1	0	%100
183	M167	y	70.1	70.1	0	%100
184	M168	y	70.1	70.1	0	%100
185	M169	y	70.1	70.1	0	%100
186	M170	y	70.1	70.1	0	%100
187	M171	y	70.1	70.1	0	%100
188	M172	y	70.1	70.1	0	%100
189	M173	y	56	56	0	%100
190	M174	y	56	56	0	%100
191	M175	y	56	56	0	%100
192	M176	y	56	56	0	%100
193	M177	y	56	56	0	%100
194	M178	y	56	56	0	%100
195	M179	y	56	56	0	%100
196	M180	y	56	56	0	%100
197	M181	y	38	78.1	0	3.16
198	M181	y	78.1	78.1	3.16	%100
199	M182	y	78.1	78.1	0	%100
200	M183	y	78.1	78.1	0	%100
201	M184	y	78.1	78.1	0	%100
202	M185	y	78.1	78.1	0	%100
203	M186	y	78.1	78.1	0	%100
204	M187	y	78.1	78.1	0	%100
205	M188	y	78.1	78.1	0	2.837
206	M188	y	78.1	38	2.837	%100
207	M189	PY	3.7	1.9	0	%100
208	M190	PY	4.8	1.9	0	%100
209	M191	PY	3.7	1.9	0	%100
210	M192	PY	4.8	1.9	0	%100
211	M193	PY	32	16.6	0	%100
212	M194	PY	40.8	16.6	0	%100
213	M195	PY	32	16.6	0	%100
214	M196	PY	40.8	16.6	0	%100
215	M189	X	-1.3	-1.3	0	%100
216	M190	X	-1.6	-1.6	0	%100
217	M191	X	-1.3	-1.3	0	%100
218	M192	X	-1.6	-1.6	0	%100
219	M193	X	11.4	11.4	0	%100
220	M194	X	13.4	13.4	0	%100
221	M195	X	11.4	11.4	0	%100
222	M196	X	13.4	13.4	0	%100

Member Distributed Loads (BLC 6 : E +X)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M85	X	10.634	10.634	0	%100
2	M86	X	10.634	10.634	0	%100
3	M87	X	10.634	10.634	0	%100
4	M88	X	10.634	10.634	0	%100

Member Distributed Loads (BLC 6 : E +X) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
5	M89	X	10.634	10.634	0	%100
6	M90	X	10.634	10.634	0	%100
7	M91	X	10.634	10.634	0	%100
8	M92	X	10.634	10.634	0	%100
9	M93	X	14.49	14.49	0	%100
10	M94	X	14.49	14.49	0	%100
11	M95	X	14.49	14.49	0	%100
12	M96	X	14.49	14.49	0	%100
13	M97	X	14.49	14.49	0	%100
14	M98	X	14.49	14.49	0	%100
15	M99	X	14.49	14.49	0	%100
16	M100	X	14.49	14.49	0	%100
17	M101	X	13.054	13.054	0	%100
18	M102	X	13.054	13.054	0	%100
19	M103	X	13.054	13.054	0	%100
20	M104	X	13.054	13.054	0	%100
21	M105	X	13.054	13.054	0	%100
22	M106	X	13.054	13.054	0	%100
23	M107	X	13.054	13.054	0	%100
24	M108	X	13.054	13.054	0	%100
25	M109	X	8.946	8.946	0	%100
26	M110	X	8.946	8.946	0	%100
27	M111	X	8.946	8.946	0	%100
28	M112	X	8.946	8.946	0	%100
29	M113	X	8.946	8.946	0	%100
30	M114	X	8.946	8.946	0	%100
31	M115	X	8.946	8.946	0	%100
32	M116	X	8.946	8.946	0	%100
33	M117	X	6.703	6.703	0	%100
34	M118	X	6.703	6.703	0	%100
35	M119	X	6.703	6.703	0	%100
36	M120	X	6.703	6.703	0	%100
37	M121	X	6.703	6.703	0	%100
38	M122	X	6.703	6.703	0	%100
39	M123	X	6.703	6.703	0	%100
40	M124	X	6.703	6.703	0	%100
41	M125	X	5.09	9.349	0	3.16
42	M125	X	9.349	9.349	3.16	%100
43	M126	X	9.349	9.349	0	%100
44	M127	X	9.349	9.349	0	%100
45	M128	X	9.349	9.349	0	%100
46	M129	X	9.349	9.349	0	%100
47	M130	X	9.349	9.349	0	%100
48	M131	X	9.349	9.349	0	%100
49	M132	X	9.349	9.349	0	2.837
50	M132	X	9.349	5.09	2.837	%100
51	M133	X	0	7.384	0	3.69
52	M133	X	7.384	7.308	3.69	6.86
53	M133	X	7.308	7.308	6.86	%100
54	M134	X	7.308	7.308	0	%100
55	M135	X	7.308	7.308	0	%100
56	M136	X	7.308	7.308	0	%100
57	M137	X	7.308	7.308	0	%100
58	M138	X	7.308	7.308	0	%100
59	M139	X	7.308	7.308	0	%100

Member Distributed Loads (BLC 6 : E +X) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
60	M140	X	7.308	7.308	0	2.831
61	M140	X	7.308	7.384	2.831	6.001
62	M140	X	7.384	0	6.001	%100
63	M141	X	10.634	10.634	0	%100
64	M142	X	10.634	10.634	0	%100
65	M143	X	10.634	10.634	0	%100
66	M144	X	10.634	10.634	0	%100
67	M145	X	10.634	10.634	0	%100
68	M146	X	10.634	10.634	0	%100
69	M147	X	10.634	10.634	0	%100
70	M148	X	10.634	10.634	0	%100
71	M149	X	14.49	14.49	0	%100
72	M150	X	14.49	14.49	0	%100
73	M151	X	14.49	14.49	0	%100
74	M152	X	14.49	14.49	0	%100
75	M153	X	14.49	14.49	0	%100
76	M154	X	14.49	14.49	0	%100
77	M155	X	14.49	14.49	0	%100
78	M156	X	14.49	14.49	0	%100
79	M157	X	13.054	13.054	0	%100
80	M158	X	13.054	13.054	0	%100
81	M159	X	13.054	13.054	0	%100
82	M160	X	13.054	13.054	0	%100
83	M161	X	13.054	13.054	0	%100
84	M162	X	13.054	13.054	0	%100
85	M163	X	13.054	13.054	0	%100
86	M164	X	13.054	13.054	0	%100
87	M165	X	8.946	8.946	0	%100
88	M166	X	8.946	8.946	0	%100
89	M167	X	8.946	8.946	0	%100
90	M168	X	8.946	8.946	0	%100
91	M169	X	8.946	8.946	0	%100
92	M170	X	8.946	8.946	0	%100
93	M171	X	8.946	8.946	0	%100
94	M172	X	8.946	8.946	0	%100
95	M173	X	6.703	6.703	0	%100
96	M174	X	6.703	6.703	0	%100
97	M175	X	6.703	6.703	0	%100
98	M176	X	6.703	6.703	0	%100
99	M177	X	6.703	6.703	0	%100
100	M178	X	6.703	6.703	0	%100
101	M179	X	6.703	6.703	0	%100
102	M180	X	6.703	6.703	0	%100
103	M181	X	5.09	9.349	0	3.16
104	M181	X	9.349	9.349	3.16	%100
105	M182	X	9.349	9.349	0	%100
106	M183	X	9.349	9.349	0	%100
107	M184	X	9.349	9.349	0	%100
108	M185	X	9.349	9.349	0	%100
109	M186	X	9.349	9.349	0	%100
110	M187	X	9.349	9.349	0	%100
111	M188	X	9.349	9.349	0	2.837
112	M188	X	9.349	5.09	2.837	%100
113	M189	X	4.309	2.218	0	%100
114	M190	X	5.468	2.218	0	%100

Member Distributed Loads (BLC 6 : E +X) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
115	M191	X	4.309	2.218	0	%100
116	M192	X	5.468	2.218	0	%100
117	M193	X	4.309	2.218	0	%100
118	M194	X	5.468	2.218	0	%100
119	M195	X	4.309	2.218	0	%100
120	M196	X	5.468	2.218	0	%100

Member Distributed Loads (BLC 7 : E +Z)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M85	Z	10.634	10.634	0	%100
2	M86	Z	10.634	10.634	0	%100
3	M87	Z	10.634	10.634	0	%100
4	M88	Z	10.634	10.634	0	%100
5	M89	Z	10.634	10.634	0	%100
6	M90	Z	10.634	10.634	0	%100
7	M91	Z	10.634	10.634	0	%100
8	M92	Z	10.634	10.634	0	%100
9	M93	Z	14.49	14.49	0	%100
10	M94	Z	14.49	14.49	0	%100
11	M95	Z	14.49	14.49	0	%100
12	M96	Z	14.49	14.49	0	%100
13	M97	Z	14.49	14.49	0	%100
14	M98	Z	14.49	14.49	0	%100
15	M99	Z	14.49	14.49	0	%100
16	M100	Z	14.49	14.49	0	%100
17	M101	Z	13.054	13.054	0	%100
18	M102	Z	13.054	13.054	0	%100
19	M103	Z	13.054	13.054	0	%100
20	M104	Z	13.054	13.054	0	%100
21	M105	Z	13.054	13.054	0	%100
22	M106	Z	13.054	13.054	0	%100
23	M107	Z	13.054	13.054	0	%100
24	M108	Z	13.054	13.054	0	%100
25	M109	Z	8.946	8.946	0	%100
26	M110	Z	8.946	8.946	0	%100
27	M111	Z	8.946	8.946	0	%100
28	M112	Z	8.946	8.946	0	%100
29	M113	Z	8.946	8.946	0	%100
30	M114	Z	8.946	8.946	0	%100
31	M115	Z	8.946	8.946	0	%100
32	M116	Z	8.946	8.946	0	%100
33	M117	Z	6.704	6.704	0	%100
34	M118	Z	6.704	6.704	0	%100
35	M119	Z	6.704	6.704	0	%100
36	M120	Z	6.704	6.704	0	%100
37	M121	Z	6.704	6.704	0	%100
38	M122	Z	6.704	6.704	0	%100
39	M123	Z	6.704	6.704	0	%100
40	M124	Z	6.704	6.704	0	%100
41	M125	Z	5.09	9.35	0	3.16
42	M125	Z	9.35	9.35	3.16	%100
43	M126	Z	9.35	9.35	0	%100
44	M127	Z	9.35	9.35	0	%100
45	M128	Z	9.35	9.35	0	%100
46	M129	Z	9.35	9.35	0	%100

Member Distributed Loads (BLC 7 : E +Z) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
47	M130	Z	9.35	9.35	0	%100
48	M131	Z	9.35	9.35	0	%100
49	M132	Z	9.35	9.35	0	2.837
50	M132	Z	9.35	5.09	2.837	%100
51	M133	Z	0	7.384	0	3.69
52	M133	Z	7.384	7.308	3.69	6.86
53	M133	Z	7.308	7.308	6.86	%100
54	M134	Z	7.308	7.308	0	%100
55	M135	Z	7.308	7.308	0	%100
56	M136	Z	7.308	7.308	0	%100
57	M137	Z	7.308	7.308	0	%100
58	M138	Z	7.308	7.308	0	%100
59	M139	Z	7.308	7.308	0	%100
60	M140	Z	7.308	7.308	0	2.831
61	M140	Z	7.308	7.384	2.831	6.001
62	M140	Z	7.384	0	6.001	%100
63	M141	Z	10.634	10.634	0	%100
64	M142	Z	10.634	10.634	0	%100
65	M143	Z	10.634	10.634	0	%100
66	M144	Z	10.634	10.634	0	%100
67	M145	Z	10.634	10.634	0	%100
68	M146	Z	10.634	10.634	0	%100
69	M147	Z	10.634	10.634	0	%100
70	M148	Z	10.634	10.634	0	%100
71	M149	Z	14.49	14.49	0	%100
72	M150	Z	14.49	14.49	0	%100
73	M151	Z	14.49	14.49	0	%100
74	M152	Z	14.49	14.49	0	%100
75	M153	Z	14.49	14.49	0	%100
76	M154	Z	14.49	14.49	0	%100
77	M155	Z	14.49	14.49	0	%100
78	M156	Z	14.49	14.49	0	%100
79	M157	Z	13.054	13.054	0	%100
80	M158	Z	13.054	13.054	0	%100
81	M159	Z	13.054	13.054	0	%100
82	M160	Z	13.054	13.054	0	%100
83	M161	Z	13.054	13.054	0	%100
84	M162	Z	13.054	13.054	0	%100
85	M163	Z	13.054	13.054	0	%100
86	M164	Z	13.054	13.054	0	%100
87	M165	Z	8.946	8.946	0	%100
88	M166	Z	8.946	8.946	0	%100
89	M167	Z	8.946	8.946	0	%100
90	M168	Z	8.946	8.946	0	%100
91	M169	Z	8.946	8.946	0	%100
92	M170	Z	8.946	8.946	0	%100
93	M171	Z	8.946	8.946	0	%100
94	M172	Z	8.946	8.946	0	%100
95	M173	Z	6.704	6.704	0	%100
96	M174	Z	6.704	6.704	0	%100
97	M175	Z	6.704	6.704	0	%100
98	M176	Z	6.704	6.704	0	%100
99	M177	Z	6.704	6.704	0	%100
100	M178	Z	6.704	6.704	0	%100
101	M179	Z	6.704	6.704	0	%100

Member Distributed Loads (BLC 7 : E +Z) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
102	M180	Z	6.704	6.704	0	%100
103	M181	Z	5.09	9.35	0	3.16
104	M181	Z	9.35	9.35	3.16	%100
105	M182	Z	9.35	9.35	0	%100
106	M183	Z	9.35	9.35	0	%100
107	M184	Z	9.35	9.35	0	%100
108	M185	Z	9.35	9.35	0	%100
109	M186	Z	9.35	9.35	0	%100
110	M187	Z	9.35	9.35	0	%100
111	M188	Z	9.35	9.35	0	2.837
112	M188	Z	9.35	5.09	2.837	%100
113	M189	Z	4.31	2.218	0	%100
114	M190	Z	5.468	2.218	0	%100
115	M191	Z	4.31	2.218	0	%100
116	M192	Z	5.468	2.218	0	%100
117	M193	Z	4.31	2.218	0	%100
118	M194	Z	5.468	2.218	0	%100
119	M195	Z	4.31	2.218	0	%100
120	M196	Z	5.468	2.218	0	%100

Member Distributed Loads (BLC 8 : UNB S)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M133	PY	0	-26.7	0	3.69
2	M133	PY	-26.7	-27.9	3.69	6.86
3	M133	PY	-27.9	-27.9	6.86	%100
4	M134	PY	-27.9	-27.9	0	%100
5	M135	PY	-27.9	-27.9	0	%100
6	M136	PY	-27.9	-27.9	0	%100
7	M137	PY	-27.9	-27.9	0	%100
8	M138	PY	-27.9	-27.9	0	%100
9	M139	PY	-27.9	-27.9	0	%100
10	M140	PY	-27.9	-27.9	0	2.831
11	M140	PY	-27.9	-26.7	2.831	6.001
12	M140	PY	-26.7	0	6.001	%100
13	M173	PY	5.1	5.1	0	%100
14	M174	PY	5.1	5.1	0	%100
15	M175	PY	5.1	5.1	0	%100
16	M176	PY	5.1	5.1	0	%100
17	M177	PY	5.1	5.1	0	%100
18	M178	PY	5.1	5.1	0	%100
19	M179	PY	5.1	5.1	0	%100
20	M180	PY	5.1	5.1	0	%100
21	M181	PY	-36.9	-48.7	0	3.16
22	M181	PY	-48.7	-48.7	3.16	%100
23	M182	PY	-48.7	-48.7	0	%100
24	M183	PY	-48.7	-48.7	0	%100
25	M184	PY	-48.7	-48.7	0	%100
26	M185	PY	-48.7	-48.7	0	%100
27	M186	PY	-48.7	-48.7	0	%100
28	M187	PY	-48.7	-48.7	0	%100
29	M188	PY	-48.7	-48.7	0	2.837
30	M188	PY	-48.7	-36.9	2.837	%100
31	M193	PY	0	0	0	%100
32	M194	PY	-16.2	-39.6	0	%100
33	M195	PY	0	0	0	%100

Member Distributed Loads (BLC 8 : UNB S) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
34	M196	PY	-16.2	-39.6	0	%100

Member Distributed Loads (BLC 9 : W Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Z	-39.6	-39.6	0.542	4.375
2	M2	Z	-39.6	-39.6	0.542	4.375
3	M3	Z	-39.6	-39.6	0.542	4.375
4	M4	Z	-39.6	-39.6	0.542	4.375
5	M5	Z	-39.6	-39.6	0.542	4.375
6	M6	Z	-39.6	-39.6	0.542	4.375
7	M7	Z	-39.6	-39.6	0.542	4.375
8	M8	Z	-39.6	-39.6	0.542	4.375
9	M9	Z	-39.6	-39.6	0.542	4.375
10	M10	Z	-39.6	-39.6	0.542	4.375
11	M11	Z	-39.6	-39.6	0.542	4.375
12	M12	Z	-39.6	-39.6	0.542	4.375
13	M13	Z	-39.6	-39.6	0.542	4.375
14	M14	Z	-39.6	-39.6	0.542	4.375
15	M1	Z	-17.2	-17.2	4.375	%100
16	M2	Z	-17.2	-17.2	4.375	%100
17	M3	Z	-17.2	-17.2	4.375	%100
18	M4	Z	-17.2	-17.2	4.375	%100
19	M5	Z	-17.2	-17.2	4.375	%100
20	M6	Z	-17.2	-17.2	4.375	%100
21	M7	Z	-17.2	-17.2	4.375	%100
22	M8	Z	-17.2	-17.2	4.375	%100
23	M9	Z	-17.2	-17.2	4.375	%100
24	M10	Z	-17.2	-17.2	4.375	%100
25	M11	Z	-17.2	-17.2	4.375	%100
26	M12	Z	-17.2	-17.2	4.375	%100
27	M13	Z	-17.2	-17.2	4.375	%100
28	M14	Z	-17.2	-17.2	4.375	%100
29	M29	Z	-26.9	-26.9	0	%100
30	M30	Z	-26.9	-26.9	0	%100
31	M31	Z	-26.9	-26.9	0	%100
32	M32	Z	-26.9	-26.9	0	%100
33	M33	Z	-26.9	-26.9	0	%100
34	M34	Z	-26.9	-26.9	0	%100
35	M35	Z	-26.9	-26.9	0	%100
36	M36	Z	-26.9	-26.9	0	%100
37	M37	Z	-26.9	-26.9	0	%100
38	M38	Z	-26.9	-26.9	0	%100
39	M39	Z	-26.9	-26.9	0	%100
40	M40	Z	-26.9	-26.9	0	%100
41	M41	Z	-26.9	-26.9	0	%100
42	M42	Z	-26.9	-26.9	0	%100
43	M43	Z	-26.9	-26.9	0	%100
44	M44	Z	-26.9	-26.9	0	%100
45	M45	Z	-26.9	-26.9	0	%100
46	M46	Z	-26.9	-26.9	0	%100
47	M47	Z	-26.9	-26.9	0	%100
48	M48	Z	-26.9	-26.9	0	%100
49	M49	Z	-26.9	-26.9	0	%100
50	M50	Z	-26.9	-26.9	0	%100
51	M51	Z	-26.9	-26.9	0	%100

Member Distributed Loads (BLC 9 : W Down) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
52	M52	Z	-26.9	-26.9	0	%100
53	M53	Z	-26.9	-26.9	0	%100
54	M54	Z	-26.9	-26.9	0	%100
55	M55	Z	-26.9	-26.9	0	%100
56	M56	Z	-26.9	-26.9	0	%100
57	M57	Z	-26.9	-26.9	0	%100
58	M58	Z	-26.9	-26.9	0	%100
59	M59	Z	-26.9	-26.9	0	%100
60	M60	Z	-26.9	-26.9	0	%100
61	M61	Z	-26.9	-26.9	0	%100
62	M62	Z	-26.9	-26.9	0	%100
63	M63	Z	-26.9	-26.9	0	%100
64	M64	Z	-26.9	-26.9	0	%100
65	M65	Z	-26.9	-26.9	0	%100
66	M66	Z	-26.9	-26.9	0	%100
67	M67	Z	-26.9	-26.9	0	%100
68	M68	Z	-26.9	-26.9	0	%100
69	M69	Z	-26.9	-26.9	0	%100
70	M70	Z	-26.9	-26.9	0	%100
71	M85	y	-78	-78	0	%100
72	M86	y	-78	-78	0	%100
73	M87	y	-78	-78	0	1.333
74	M87	y	-48.8	-48.8	1.333	%100
75	M88	y	-48.8	-48.8	0	5.5
76	M88	y	-29.2	-29.2	5.5	%100
77	M89	y	-29.2	-29.2	0	%100
78	M90	y	-29.2	-29.2	0	%100
79	M91	y	-29.2	-29.2	0	%100
80	M92	y	-29.2	-29.2	0	%100
81	M93	y	-106.4	-106.4	0	%100
82	M94	y	-106.4	-106.4	0	%100
83	M95	y	-106.4	-106.4	0	1.333
84	M95	y	-66.5	-66.5	1.333	%100
85	M96	y	-66.5	-66.5	0	5.5
86	M96	y	-39.9	-39.9	5.5	%100
87	M97	y	-39.9	-39.9	0	%100
88	M98	y	-39.9	-39.9	0	%100
89	M99	y	-39.9	-39.9	0	%100
90	M100	y	-39.9	-39.9	0	%100
91	M101	y	-95.8	-95.8	0	%100
92	M102	y	-95.8	-95.8	0	%100
93	M103	y	-95.8	-95.8	0	1.333
94	M103	y	-59.9	-59.9	1.333	%100
95	M104	y	-59.9	-59.9	0	5.5
96	M104	y	-35.9	-35.9	5.5	%100
97	M105	y	-35.9	-35.9	0	%100
98	M106	y	-35.9	-35.9	0	%100
99	M107	y	-35.9	-35.9	0	%100
100	M108	y	-35.9	-35.9	0	%100
101	M109	y	-65.6	-65.6	0	%100
102	M110	y	-65.6	-65.6	0	%100
103	M111	y	-65.6	-65.6	0	1.333
104	M111	y	-41	-41	1.333	%100
105	M112	y	-41	-41	0	5.5
106	M112	y	-24.6	-24.6	5.5	%100

Member Distributed Loads (BLC 9 : W Down) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
107	M113	y	-24.6	-24.6	0	%100
108	M114	y	-24.6	-24.6	0	%100
109	M115	y	-24.6	-24.6	0	%100
110	M116	y	-24.6	-24.6	0	%100
111	M117	y	-52.4	-52.4	0	%100
112	M118	y	-52.4	-52.4	0	%100
113	M119	y	-52.4	-52.4	0	10.333
114	M119	y	-32.7	-32.7	10.333	%100
115	M120	y	-32.7	-32.7	0	%100
116	M121	y	-32.7	-32.7	0	8.167
117	M121	y	-19.7	-19.7	8.167	%100
118	M122	y	-19.7	-19.7	0	%100
119	M123	y	-19.7	-19.7	0	%100
120	M124	y	-19.7	-19.7	0	%100
121	M125	y	-39.7	-73.1	0	3.16
122	M125	y	-73.1	-73.1	3.16	%100
123	M126	y	-73.1	-73.1	0	%100
124	M127	y	-73.1	-73.1	0	10.333
125	M127	y	-45.7	-45.7	10.333	%100
126	M128	y	-45.7	-45.7	0	%100
127	M129	y	-45.7	-45.7	0	8.167
128	M129	y	-27.4	-27.4	8.167	%100
129	M130	y	-27.4	-27.4	0	%100
130	M131	y	-27.4	-27.4	0	%100
131	M132	y	-27.4	-27.4	0	2.837
132	M132	y	-27.4	-16	2.837	%100
133	M133	PY	0	-51.5	0	3.69
134	M133	PY	-51.5	-51	3.69	6.86
135	M133	PY	-51	-51	6.86	%100
136	M134	PY	-51	-51	0	%100
137	M135	PY	-51	-51	0	10.333
138	M135	PY	-31.9	-31.9	10.333	%100
139	M136	PY	-31.9	-31.9	0	%100
140	M137	PY	-31.9	-31.9	0	8.167
141	M137	PY	-19.1	-19.1	8.167	%100
142	M138	PY	-19.1	-19.1	0	%100
143	M139	PY	-19.1	-19.1	0	%100
144	M140	PY	-19.1	-19.1	0	2.831
145	M140	PY	-19.1	-19.3	2.831	6.001
146	M140	PY	-19.3	0	6.001	%100
147	M141	y	-78	-78	0	%100
148	M142	y	-78	-78	0	%100
149	M143	y	-78	-78	0	1.333
150	M143	y	-48.8	-48.8	1.333	%100
151	M144	y	-48.8	-48.8	0	5.5
152	M144	y	-29.2	-29.2	5.5	%100
153	M145	y	-29.2	-29.2	0	%100
154	M146	y	-29.2	-29.2	0	%100
155	M147	y	-29.2	-29.2	0	%100
156	M148	y	-29.2	-29.2	0	%100
157	M149	y	-106.4	-106.4	0	%100
158	M150	y	-106.4	-106.4	0	%100
159	M151	y	-106.4	-106.4	0	1.333
160	M151	y	-66.5	-66.5	1.333	%100
161	M152	y	-66.5	-66.5	0	5.5

Member Distributed Loads (BLC 9 : W Down) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
162	M152	y	-39.9	-39.9	5.5	%100
163	M153	y	-39.9	-39.9	0	%100
164	M154	y	-39.9	-39.9	0	%100
165	M155	y	-39.9	-39.9	0	%100
166	M156	y	-39.9	-39.9	0	%100
167	M157	y	-95.8	-95.8	0	%100
168	M158	y	-95.8	-95.8	0	%100
169	M159	y	-95.8	-95.8	0	1.333
170	M159	y	-59.9	-59.9	1.333	%100
171	M160	y	-59.9	-59.9	0	5.5
172	M160	y	-35.9	-35.9	5.5	%100
173	M161	y	-35.9	-35.9	0	%100
174	M162	y	-35.9	-35.9	0	%100
175	M163	y	-35.9	-35.9	0	%100
176	M164	y	-35.9	-35.9	0	%100
177	M165	y	-65.6	-65.6	0	%100
178	M166	y	-65.6	-65.6	0	%100
179	M167	y	-65.6	-65.6	0	1.333
180	M167	y	-41	-41	1.333	%100
181	M168	y	-41	-41	0	5.5
182	M168	y	-24.6	-24.6	5.5	%100
183	M169	y	-24.6	-24.6	0	%100
184	M170	y	-24.6	-24.6	0	%100
185	M171	y	-24.6	-24.6	0	%100
186	M172	y	-24.6	-24.6	0	%100
187	M173	y	-52.4	-52.4	0	%100
188	M174	y	-52.4	-52.4	0	%100
189	M175	y	-52.4	-52.4	0	%100
190	M175	y	-32.7	-32.7	0	%100
191	M176	y	-32.7	-32.7	0	%100
192	M177	y	-32.7	-32.7	0	%100
193	M177	y	-19.7	-19.7	0	%100
194	M178	y	-19.7	-19.7	0	%100
195	M179	y	-19.7	-19.7	0	%100
196	M180	y	-19.7	-19.7	0	%100
197	M181	y	-39.7	-73.1	0	3.16
198	M181	y	-73.1	-73.1	3.16	%100
199	M182	y	-73.1	-73.1	0	%100
200	M183	y	-73.1	-73.1	0	10.333
201	M183	y	-45.7	-45.7	10.333	%100
202	M184	y	-45.7	-45.7	0	%100
203	M185	y	-45.7	-45.7	0	8.167
204	M185	y	-27.4	-27.4	8.167	%100
205	M186	y	-27.4	-27.4	0	%100
206	M187	y	-27.4	-27.4	0	%100
207	M188	y	-27.4	-27.4	0	2.837
208	M188	y	-27.4	-16	2.837	%100
209	M189	PY	-30	-15.6	0	%100
210	M190	PY	-38.2	-15.6	0	%100
211	M191	PY	-11.3	-5.8	0	%100
212	M192	PY	-14.3	-5.8	0	%100
213	M193	PY	-30	-15.6	0	%100
214	M194	PY	-38.2	-15.6	0	%100
215	M195	PY	-11.3	-5.8	0	%100
216	M196	PY	-14.3	-5.8	0	%100

Member Distributed Loads (BLC 9 : W Down) (Continued)

Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]

Member Distributed Loads (BLC 10 : W Up)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Z	-39.6	-39.6	0.542	4.375
2	M2	Z	-39.6	-39.6	0.542	4.375
3	M3	Z	-39.6	-39.6	0.542	4.375
4	M4	Z	-39.6	-39.6	0.542	4.375
5	M5	Z	-39.6	-39.6	0.542	4.375
6	M6	Z	-39.6	-39.6	0.542	4.375
7	M7	Z	-39.6	-39.6	0.542	4.375
8	M8	Z	-39.6	-39.6	0.542	4.375
9	M9	Z	-39.6	-39.6	0.542	4.375
10	M10	Z	-39.6	-39.6	0.542	4.375
11	M11	Z	-39.6	-39.6	0.542	4.375
12	M12	Z	-39.6	-39.6	0.542	4.375
13	M13	Z	-39.6	-39.6	0.542	4.375
14	M14	Z	-39.6	-39.6	0.542	4.375
15	M1	Z	-17.2	-17.2	4.375	%100
16	M2	Z	-17.2	-17.2	4.375	%100
17	M3	Z	-17.2	-17.2	4.375	%100
18	M4	Z	-17.2	-17.2	4.375	%100
19	M5	Z	-17.2	-17.2	4.375	%100
20	M6	Z	-17.2	-17.2	4.375	%100
21	M7	Z	-17.2	-17.2	4.375	%100
22	M8	Z	-17.2	-17.2	4.375	%100
23	M9	Z	-17.2	-17.2	4.375	%100
24	M10	Z	-17.2	-17.2	4.375	%100
25	M11	Z	-17.2	-17.2	4.375	%100
26	M12	Z	-17.2	-17.2	4.375	%100
27	M13	Z	-17.2	-17.2	4.375	%100
28	M14	Z	-17.2	-17.2	4.375	%100
29	M29	Z	-26.9	-26.9	0	%100
30	M30	Z	-26.9	-26.9	0	%100
31	M31	Z	-26.9	-26.9	0	%100
32	M32	Z	-26.9	-26.9	0	%100
33	M33	Z	-26.9	-26.9	0	%100
34	M34	Z	-26.9	-26.9	0	%100
35	M35	Z	-26.9	-26.9	0	%100
36	M36	Z	-26.9	-26.9	0	%100
37	M37	Z	-26.9	-26.9	0	%100
38	M38	Z	-26.9	-26.9	0	%100
39	M39	Z	-26.9	-26.9	0	%100
40	M40	Z	-26.9	-26.9	0	%100
41	M41	Z	-26.9	-26.9	0	%100
42	M42	Z	-26.9	-26.9	0	%100
43	M43	Z	-26.9	-26.9	0	%100
44	M44	Z	-26.9	-26.9	0	%100
45	M45	Z	-26.9	-26.9	0	%100
46	M46	Z	-26.9	-26.9	0	%100
47	M47	Z	-26.9	-26.9	0	%100
48	M48	Z	-26.9	-26.9	0	%100
49	M49	Z	-26.9	-26.9	0	%100
50	M50	Z	-26.9	-26.9	0	%100
51	M51	Z	-26.9	-26.9	0	%100
52	M52	Z	-26.9	-26.9	0	%100
53	M53	Z	-26.9	-26.9	0	%100
54	M54	Z	-26.9	-26.9	0	%100
55	M55	Z	-26.9	-26.9	0	%100

Member Distributed Loads (BLC 10 : W Up) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
56	M56	Z	-26.9	-26.9	0	%100
57	M57	Z	-26.9	-26.9	0	%100
58	M58	Z	-26.9	-26.9	0	%100
59	M59	Z	-26.9	-26.9	0	%100
60	M60	Z	-26.9	-26.9	0	%100
61	M61	Z	-26.9	-26.9	0	%100
62	M62	Z	-26.9	-26.9	0	%100
63	M63	Z	-26.9	-26.9	0	%100
64	M64	Z	-26.9	-26.9	0	%100
65	M65	Z	-26.9	-26.9	0	%100
66	M66	Z	-26.9	-26.9	0	%100
67	M67	Z	-26.9	-26.9	0	%100
68	M68	Z	-26.9	-26.9	0	%100
69	M69	Z	-26.9	-26.9	0	%100
70	M70	Z	-26.9	-26.9	0	%100
71	M85	y	78	78	0	%100
72	M86	y	78	78	0	%100
73	M87	y	78	78	0	1.333
74	M87	y	58.5	58.5	1.333	%100
75	M88	y	58.5	58.5	0	5.5
76	M88	y	29.2	29.2	5.5	%100
77	M89	y	29.2	29.2	0	%100
78	M90	y	29.2	29.2	0	%100
79	M91	y	29.2	29.2	0	%100
80	M92	y	29.2	29.2	0	%100
81	M93	y	106.4	106.4	0	%100
82	M94	y	106.4	106.4	0	%100
83	M95	y	106.4	106.4	0	1.333
84	M95	y	79.8	79.8	1.333	%100
85	M96	y	79.8	79.8	0	5.5
86	M96	y	39.9	39.9	5.5	%100
87	M97	y	39.9	39.9	0	%100
88	M98	y	39.9	39.9	0	%100
89	M99	y	39.9	39.9	0	%100
90	M100	y	39.9	39.9	0	%100
91	M101	y	95.8	95.8	0	%100
92	M102	y	95.8	95.8	0	%100
93	M103	y	95.8	95.8	0	1.333
94	M103	y	71.9	71.9	1.333	%100
95	M104	y	71.9	71.9	0	5.5
96	M104	y	35.9	35.9	5.5	%100
97	M105	y	35.9	35.9	0	%100
98	M106	y	35.9	35.9	0	%100
99	M107	y	35.9	35.9	0	%100
100	M108	y	35.9	35.9	0	%100
101	M109	y	65.6	65.6	0	%100
102	M110	y	65.6	65.6	0	%100
103	M111	y	65.6	65.6	0	1.333
104	M111	y	49.2	49.2	1.333	%100
105	M112	y	49.2	49.2	0	5.5
106	M112	y	24.6	24.6	5.5	%100
107	M113	y	24.6	24.6	0	%100
108	M114	y	24.6	24.6	0	%100
109	M115	y	24.6	24.6	0	%100
110	M116	y	24.6	24.6	0	%100

Member Distributed Loads (BLC 10 : W Up) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
111	M117	y	52.4	52.4	0	%100
112	M118	y	52.4	52.4	0	%100
113	M119	y	52.4	52.4	0	10.333
114	M119	y	39.3	39.3	10.333	%100
115	M120	y	39.3	39.3	0	%100
116	M121	y	39.3	39.3	0	8.167
117	M121	y	19.7	19.7	8.167	%100
118	M122	y	19.7	19.7	0	%100
119	M123	y	19.7	19.7	0	%100
120	M124	y	19.7	19.7	0	%100
121	M125	y	39.7	73.1	0	3.16
122	M125	y	73.1	73.1	3.16	%100
123	M126	y	73.1	73.1	0	%100
124	M127	y	73.1	73.1	0	10.333
125	M127	y	54.9	54.9	10.333	%100
126	M128	y	54.9	54.9	0	%100
127	M129	y	54.9	54.9	0	8.167
128	M129	y	27.4	27.4	8.167	%100
129	M130	y	27.4	27.4	0	%100
130	M131	y	27.4	27.4	0	%100
131	M132	y	27.4	27.4	0	2.837
132	M132	y	27.4	16	2.837	%100
133	M133	PY	0	51.5	0	3.69
134	M133	PY	51.5	51	3.69	6.86
135	M133	PY	51	51	6.86	%100
136	M134	PY	51	51	0	%100
137	M135	PY	51	51	0	10.333
138	M135	PY	38.3	38.3	10.333	%100
139	M136	PY	38.3	38.3	0	%100
140	M137	PY	38.3	38.3	0	8.167
141	M137	PY	19.1	19.1	8.167	%100
142	M138	PY	19.1	19.1	0	%100
143	M139	PY	19.1	19.1	0	%100
144	M140	PY	19.1	19.1	0	2.831
145	M140	PY	19.1	19.3	2.831	6.001
146	M140	PY	19.3	0	6.001	%100
147	M141	y	78	78	0	%100
148	M142	y	78	78	0	%100
149	M143	y	78	78	0	1.333
150	M143	y	58.5	58.5	1.333	%100
151	M144	y	58.5	58.5	0	5.5
152	M144	y	29.2	29.2	5.5	%100
153	M145	y	29.2	29.2	0	%100
154	M146	y	29.2	29.2	0	%100
155	M147	y	29.2	29.2	0	%100
156	M148	y	29.2	29.2	0	%100
157	M149	y	106.4	106.4	0	%100
158	M150	y	106.4	106.4	0	%100
159	M151	y	106.4	106.4	0	1.333
160	M151	y	79.8	79.8	1.333	%100
161	M152	y	79.8	79.8	0	5.5
162	M152	y	39.9	39.9	5.5	%100
163	M153	y	39.9	39.9	0	%100
164	M154	y	39.9	39.9	0	%100
165	M155	y	39.9	39.9	0	%100

Member Distributed Loads (BLC 10 : W Up) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
166	M156	y	39.9	39.9	0	%100
167	M157	y	95.8	95.8	0	%100
168	M158	y	95.8	95.8	0	%100
169	M159	y	95.8	95.8	0	1.333
170	M159	y	71.9	71.9	1.333	%100
171	M160	y	71.9	71.9	0	5.5
172	M160	y	35.9	35.9	5.5	%100
173	M161	y	35.9	35.9	0	%100
174	M162	y	35.9	35.9	0	%100
175	M163	y	35.9	35.9	0	%100
176	M164	y	35.9	35.9	0	%100
177	M165	y	65.6	65.6	0	%100
178	M166	y	65.6	65.6	0	%100
179	M167	y	65.6	65.6	0	1.333
180	M167	y	49.2	49.2	1.333	%100
181	M168	y	49.2	49.2	0	5.5
182	M168	y	24.6	24.6	5.5	%100
183	M169	y	24.6	24.6	0	%100
184	M170	y	24.6	24.6	0	%100
185	M171	y	24.6	24.6	0	%100
186	M172	y	24.6	24.6	0	%100
187	M173	y	52.4	52.4	0	%100
188	M174	y	52.4	52.4	0	%100
189	M175	y	52.4	52.4	0	%100
190	M175	y	39.3	39.3	0	%100
191	M176	y	39.3	39.3	0	%100
192	M177	y	39.3	39.3	0	%100
193	M177	y	19.7	19.7	0	%100
194	M178	y	19.7	19.7	0	%100
195	M179	y	19.7	19.7	0	%100
196	M180	y	19.7	19.7	0	%100
197	M181	y	39.7	73.1	0	3.16
198	M181	y	73.1	73.1	3.16	%100
199	M182	y	73.1	73.1	0	%100
200	M183	y	73.1	73.1	0	10.333
201	M183	y	54.9	54.9	10.333	%100
202	M184	y	54.9	54.9	0	%100
203	M185	y	54.9	54.9	0	8.167
204	M185	y	27.4	27.4	8.167	%100
205	M186	y	27.4	27.4	0	%100
206	M187	y	27.4	27.4	0	%100
207	M188	y	27.4	27.4	0	2.837
208	M188	y	27.4	16	2.837	%100
209	M189	PY	30	15.6	0	%100
210	M190	PY	38.2	15.6	0	%100
211	M191	PY	11.3	5.8	0	%100
212	M192	PY	14.3	5.8	0	%100
213	M193	PY	30	15.6	0	%100
214	M194	PY	38.2	15.6	0	%100
215	M195	PY	11.3	5.8	0	%100
216	M196	PY	14.3	5.8	0	%100

Member Distributed Loads (BLC 12 : E +Z)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M29	X	65.7	65.7	0	%100
2	M32	X	-65.7	-65.7	0	%100
3	M65	X	-65.7	-65.7	0	%100
4	M68	X	65.7	65.7	0	%100
5	M68	X	65.7	65.7	0	%100
6	M1	Z	-14.9	-14.9	0	%100
7	M2	Z	-14.9	-14.9	0	%100
8	M3	Z	-14.9	-14.9	0	%100
9	M4	Z	-14.9	-14.9	0	%100
10	M5	Z	-14.9	-14.9	0	%100
11	M6	Z	-14.9	-14.9	0	%100
12	M7	Z	-14.9	-14.9	0	%100
13	M8	Z	-14.9	-14.9	0	%100
14	M9	Z	-14.9	-14.9	0	%100
15	M10	Z	-14.9	-14.9	0	%100
16	M11	Z	-14.9	-14.9	0	%100
17	M12	Z	-14.9	-14.9	0	%100
18	M13	Z	-14.9	-14.9	0	%100
19	M14	Z	-14.9	-14.9	0	%100

Member Distributed Loads (BLC 13 : W Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Z	-39.6	-39.6	0.542	4.375
2	M2	Z	-39.6	-39.6	0.542	4.375
3	M3	Z	-39.6	-39.6	0.542	4.375
4	M4	Z	-39.6	-39.6	0.542	4.375
5	M5	Z	-39.6	-39.6	0.542	4.375
6	M6	Z	-39.6	-39.6	0.542	4.375
7	M7	Z	-39.6	-39.6	0.542	4.375
8	M8	Z	-39.6	-39.6	0.542	4.375
9	M9	Z	-39.6	-39.6	0.542	4.375
10	M10	Z	-39.6	-39.6	0.542	4.375
11	M11	Z	-39.6	-39.6	0.542	4.375
12	M12	Z	-39.6	-39.6	0.542	4.375
13	M13	Z	-39.6	-39.6	0.542	4.375
14	M14	Z	-39.6	-39.6	0.542	4.375
15	M1	Z	-17.2	-17.2	4.375	%100
16	M2	Z	-17.2	-17.2	4.375	%100
17	M3	Z	-17.2	-17.2	4.375	%100
18	M4	Z	-17.2	-17.2	4.375	%100
19	M5	Z	-17.2	-17.2	4.375	%100
20	M6	Z	-17.2	-17.2	4.375	%100
21	M7	Z	-17.2	-17.2	4.375	%100
22	M8	Z	-17.2	-17.2	4.375	%100
23	M9	Z	-17.2	-17.2	4.375	%100
24	M10	Z	-17.2	-17.2	4.375	%100
25	M11	Z	-17.2	-17.2	4.375	%100
26	M12	Z	-17.2	-17.2	4.375	%100
27	M13	Z	-17.2	-17.2	4.375	%100
28	M14	Z	-17.2	-17.2	4.375	%100
29	M85	y	-78	-78	0	%100
30	M86	y	-78	-78	0	%100
31	M87	y	-78	-78	0	1.333
32	M87	y	-48.8	-48.8	1.333	%100

Member Distributed Loads (BLC 13 : W Down) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
33	M88	y	-48.8	-48.8	0	5.5
34	M88	y	-29.2	-29.2	5.5	%100
35	M89	y	-29.2	-29.2	0	%100
36	M90	y	-29.2	-29.2	0	%100
37	M91	y	-29.2	-29.2	0	%100
38	M92	y	-29.2	-29.2	0	%100
39	M93	y	-106.4	-106.4	0	%100
40	M94	y	-106.4	-106.4	0	%100
41	M95	y	-106.4	-106.4	0	1.333
42	M95	y	-66.5	-66.5	1.333	%100
43	M96	y	-66.5	-66.5	0	5.5
44	M96	y	-39.9	-39.9	5.5	%100
45	M97	y	-39.9	-39.9	0	%100
46	M98	y	-39.9	-39.9	0	%100
47	M99	y	-39.9	-39.9	0	%100
48	M100	y	-39.9	-39.9	0	%100
49	M101	y	-95.8	-95.8	0	%100
50	M102	y	-95.8	-95.8	0	%100
51	M103	y	-95.8	-95.8	0	1.333
52	M103	y	-59.9	-59.9	1.333	%100
53	M104	y	-59.9	-59.9	0	5.5
54	M104	y	-35.9	-35.9	5.5	%100
55	M105	y	-35.9	-35.9	0	%100
56	M106	y	-35.9	-35.9	0	%100
57	M107	y	-35.9	-35.9	0	%100
58	M108	y	-35.9	-35.9	0	%100
59	M109	y	-65.6	-65.6	0	%100
60	M110	y	-65.6	-65.6	0	%100
61	M111	y	-65.6	-65.6	0	1.333
62	M111	y	-41	-41	1.333	%100
63	M112	y	-41	-41	0	5.5
64	M112	y	-24.6	-24.6	5.5	%100
65	M113	y	-24.6	-24.6	0	%100
66	M114	y	-24.6	-24.6	0	%100
67	M115	y	-24.6	-24.6	0	%100
68	M116	y	-24.6	-24.6	0	%100
69	M117	y	-52.4	-52.4	0	%100
70	M118	y	-52.4	-52.4	0	%100
71	M119	y	-52.4	-52.4	0	10.333
72	M119	y	-32.7	-32.7	10.333	%100
73	M120	y	-32.7	-32.7	0	%100
74	M121	y	-32.7	-32.7	0	8.167
75	M121	y	-19.7	-19.7	8.167	%100
76	M122	y	-19.7	-19.7	0	%100
77	M123	y	-19.7	-19.7	0	%100
78	M124	y	-19.7	-19.7	0	%100
79	M125	y	-39.7	-73.1	0	3.16
80	M125	y	-73.1	-73.1	3.16	%100
81	M126	y	-73.1	-73.1	0	%100
82	M127	y	-73.1	-73.1	0	10.333
83	M127	y	-45.7	-45.7	10.333	%100
84	M128	y	-45.7	-45.7	0	%100
85	M129	y	-45.7	-45.7	0	8.167
86	M129	y	-27.4	-27.4	8.167	%100
87	M130	y	-27.4	-27.4	0	%100

Member Distributed Loads (BLC 13 : W Down) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
88	M131	y	-27.4	-27.4	0	%100
89	M132	y	-27.4	-27.4	0	2.837
90	M132	y	-27.4	-16	2.837	%100
91	M133	PY	0	-51.5	0	3.69
92	M133	PY	-51.5	-51	3.69	6.86
93	M133	PY	-51	-51	6.86	%100
94	M134	PY	-51	-51	0	%100
95	M135	PY	-51	-51	0	10.333
96	M135	PY	-31.9	-31.9	10.333	%100
97	M136	PY	-31.9	-31.9	0	%100
98	M137	PY	-31.9	-31.9	0	8.167
99	M137	PY	-19.1	-19.1	8.167	%100
100	M138	PY	-19.1	-19.1	0	%100
101	M139	PY	-19.1	-19.1	0	%100
102	M140	PY	-19.1	-19.1	0	2.831
103	M140	PY	-19.1	-19.3	2.831	6.001
104	M140	PY	-19.3	0	6.001	%100
105	M141	y	-78	-78	0	%100
106	M142	y	-78	-78	0	%100
107	M143	y	-78	-78	0	1.333
108	M143	y	-48.8	-48.8	1.333	%100
109	M144	y	-48.8	-48.8	0	5.5
110	M144	y	-29.2	-29.2	5.5	%100
111	M145	y	-29.2	-29.2	0	%100
112	M146	y	-29.2	-29.2	0	%100
113	M147	y	-29.2	-29.2	0	%100
114	M148	y	-29.2	-29.2	0	%100
115	M149	y	-106.4	-106.4	0	%100
116	M150	y	-106.4	-106.4	0	%100
117	M151	y	-106.4	-106.4	0	1.333
118	M151	y	-66.5	-66.5	1.333	%100
119	M152	y	-66.5	-66.5	0	5.5
120	M152	y	-39.9	-39.9	5.5	%100
121	M153	y	-39.9	-39.9	0	%100
122	M154	y	-39.9	-39.9	0	%100
123	M155	y	-39.9	-39.9	0	%100
124	M156	y	-39.9	-39.9	0	%100
125	M157	y	-95.8	-95.8	0	%100
126	M158	y	-95.8	-95.8	0	%100
127	M159	y	-95.8	-95.8	0	1.333
128	M159	y	-59.9	-59.9	1.333	%100
129	M160	y	-59.9	-59.9	0	5.5
130	M160	y	-35.9	-35.9	5.5	%100
131	M161	y	-35.9	-35.9	0	%100
132	M162	y	-35.9	-35.9	0	%100
133	M163	y	-35.9	-35.9	0	%100
134	M164	y	-35.9	-35.9	0	%100
135	M165	y	-65.6	-65.6	0	%100
136	M166	y	-65.6	-65.6	0	%100
137	M167	y	-65.6	-65.6	0	1.333
138	M167	y	-41	-41	1.333	%100
139	M168	y	-41	-41	0	5.5
140	M168	y	-24.6	-24.6	5.5	%100
141	M169	y	-24.6	-24.6	0	%100
142	M170	y	-24.6	-24.6	0	%100

Member Distributed Loads (BLC 13 : W Down) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
143	M171	y	-24.6	-24.6	0	%100
144	M172	y	-24.6	-24.6	0	%100
145	M173	y	-52.4	-52.4	0	%100
146	M174	y	-52.4	-52.4	0	%100
147	M175	y	-52.4	-52.4	0	%100
148	M175	y	-32.7	-32.7	0	%100
149	M176	y	-32.7	-32.7	0	%100
150	M177	y	-32.7	-32.7	0	%100
151	M177	y	-19.7	-19.7	0	%100
152	M178	y	-19.7	-19.7	0	%100
153	M179	y	-19.7	-19.7	0	%100
154	M180	y	-19.7	-19.7	0	%100
155	M181	y	-39.7	-73.1	0	3.16
156	M181	y	-73.1	-73.1	3.16	%100
157	M182	y	-73.1	-73.1	0	%100
158	M183	y	-73.1	-73.1	0	10.333
159	M183	y	-45.7	-45.7	10.333	%100
160	M184	y	-45.7	-45.7	0	%100
161	M185	y	-45.7	-45.7	0	8.167
162	M185	y	-27.4	-27.4	8.167	%100
163	M186	y	-27.4	-27.4	0	%100
164	M187	y	-27.4	-27.4	0	%100
165	M188	y	-27.4	-27.4	0	2.837
166	M188	y	-27.4	-16	2.837	%100
167	M189	PY	-30	-15.6	0	%100
168	M190	PY	-38.2	-15.6	0	%100
169	M191	PY	-11.3	-5.8	0	%100
170	M192	PY	-14.3	-5.8	0	%100
171	M193	PY	-30	-15.6	0	%100
172	M194	PY	-38.2	-15.6	0	%100
173	M195	PY	-11.3	-5.8	0	%100
174	M196	PY	-14.3	-5.8	0	%100
175	M29	X	36	36	0	%100
176	M32	X	-36	-36	0	%100
177	M65	X	-36	-36	0	%100
178	M68	X	36	36	0	%100

Member Distributed Loads (BLC 14 : W Up)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Z	-39.6	-39.6	0.542	4.375
2	M2	Z	-39.6	-39.6	0.542	4.375
3	M3	Z	-39.6	-39.6	0.542	4.375
4	M4	Z	-39.6	-39.6	0.542	4.375
5	M5	Z	-39.6	-39.6	0.542	4.375
6	M6	Z	-39.6	-39.6	0.542	4.375
7	M7	Z	-39.6	-39.6	0.542	4.375
8	M8	Z	-39.6	-39.6	0.542	4.375
9	M9	Z	-39.6	-39.6	0.542	4.375
10	M10	Z	-39.6	-39.6	0.542	4.375
11	M11	Z	-39.6	-39.6	0.542	4.375
12	M12	Z	-39.6	-39.6	0.542	4.375
13	M13	Z	-39.6	-39.6	0.542	4.375
14	M14	Z	-39.6	-39.6	0.542	4.375
15	M1	Z	-17.2	-17.2	4.375	%100
16	M2	Z	-17.2	-17.2	4.375	%100

Member Distributed Loads (BLC 14 : W Up) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
17	M3	Z	-17.2	-17.2	4.375	%100
18	M4	Z	-17.2	-17.2	4.375	%100
19	M5	Z	-17.2	-17.2	4.375	%100
20	M6	Z	-17.2	-17.2	4.375	%100
21	M7	Z	-17.2	-17.2	4.375	%100
22	M8	Z	-17.2	-17.2	4.375	%100
23	M9	Z	-17.2	-17.2	4.375	%100
24	M10	Z	-17.2	-17.2	4.375	%100
25	M11	Z	-17.2	-17.2	4.375	%100
26	M12	Z	-17.2	-17.2	4.375	%100
27	M13	Z	-17.2	-17.2	4.375	%100
28	M14	Z	-17.2	-17.2	4.375	%100
29	M85	y	78	78	0	%100
30	M86	y	78	78	0	%100
31	M87	y	78	78	0	1.333
32	M87	y	58.5	58.5	1.333	%100
33	M88	y	58.5	58.5	0	5.5
34	M88	y	29.2	29.2	5.5	%100
35	M89	y	29.2	29.2	0	%100
36	M90	y	29.2	29.2	0	%100
37	M91	y	29.2	29.2	0	%100
38	M92	y	29.2	29.2	0	%100
39	M93	y	106.4	106.4	0	%100
40	M94	y	106.4	106.4	0	%100
41	M95	y	106.4	106.4	0	1.333
42	M95	y	79.8	79.8	1.333	%100
43	M96	y	79.8	79.8	0	5.5
44	M96	y	39.9	39.9	5.5	%100
45	M97	y	39.9	39.9	0	%100
46	M98	y	39.9	39.9	0	%100
47	M99	y	39.9	39.9	0	%100
48	M100	y	39.9	39.9	0	%100
49	M101	y	95.8	95.8	0	%100
50	M102	y	95.8	95.8	0	%100
51	M103	y	95.8	95.8	0	1.333
52	M103	y	71.9	71.9	1.333	%100
53	M104	y	71.9	71.9	0	5.5
54	M104	y	35.9	35.9	5.5	%100
55	M105	y	35.9	35.9	0	%100
56	M106	y	35.9	35.9	0	%100
57	M107	y	35.9	35.9	0	%100
58	M108	y	35.9	35.9	0	%100
59	M109	y	65.6	65.6	0	%100
60	M110	y	65.6	65.6	0	%100
61	M111	y	65.6	65.6	0	1.333
62	M111	y	49.2	49.2	1.333	%100
63	M112	y	49.2	49.2	0	5.5
64	M112	y	24.6	24.6	5.5	%100
65	M113	y	24.6	24.6	0	%100
66	M114	y	24.6	24.6	0	%100
67	M115	y	24.6	24.6	0	%100
68	M116	y	24.6	24.6	0	%100
69	M117	y	52.4	52.4	0	%100
70	M118	y	52.4	52.4	0	%100
71	M119	y	52.4	52.4	0	10.333

Member Distributed Loads (BLC 14 : W Up) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
72	M119	y	39.3	39.3	10.333	%100
73	M120	y	39.3	39.3	0	%100
74	M121	y	39.3	39.3	0	8.167
75	M121	y	19.7	19.7	8.167	%100
76	M122	y	19.7	19.7	0	%100
77	M123	y	19.7	19.7	0	%100
78	M124	y	19.7	19.7	0	%100
79	M125	y	39.7	73.1	0	3.16
80	M125	y	73.1	73.1	3.16	%100
81	M126	y	73.1	73.1	0	%100
82	M127	y	73.1	73.1	0	10.333
83	M127	y	54.9	54.9	10.333	%100
84	M128	y	54.9	54.9	0	%100
85	M129	y	54.9	54.9	0	8.167
86	M129	y	27.4	27.4	8.167	%100
87	M130	y	27.4	27.4	0	%100
88	M131	y	27.4	27.4	0	%100
89	M132	y	27.4	27.4	0	2.837
90	M132	y	27.4	16	2.837	%100
91	M133	PY	0	51.5	0	3.69
92	M133	PY	51.5	51	3.69	6.86
93	M133	PY	51	51	6.86	%100
94	M134	PY	51	51	0	%100
95	M135	PY	51	51	0	10.333
96	M135	PY	38.3	38.3	10.333	%100
97	M136	PY	38.3	38.3	0	%100
98	M137	PY	38.3	38.3	0	8.167
99	M137	PY	19.1	19.1	8.167	%100
100	M138	PY	19.1	19.1	0	%100
101	M139	PY	19.1	19.1	0	%100
102	M140	PY	19.1	19.1	0	2.831
103	M140	PY	19.1	19.3	2.831	6.001
104	M140	PY	19.3	0	6.001	%100
105	M141	y	78	78	0	%100
106	M142	y	78	78	0	%100
107	M143	y	78	78	0	1.333
108	M143	y	58.5	58.5	1.333	%100
109	M144	y	58.5	58.5	0	5.5
110	M144	y	29.2	29.2	5.5	%100
111	M145	y	29.2	29.2	0	%100
112	M146	y	29.2	29.2	0	%100
113	M147	y	29.2	29.2	0	%100
114	M148	y	29.2	29.2	0	%100
115	M149	y	106.4	106.4	0	%100
116	M150	y	106.4	106.4	0	%100
117	M151	y	106.4	106.4	0	1.333
118	M151	y	79.8	79.8	1.333	%100
119	M152	y	79.8	79.8	0	5.5
120	M152	y	39.9	39.9	5.5	%100
121	M153	y	39.9	39.9	0	%100
122	M154	y	39.9	39.9	0	%100
123	M155	y	39.9	39.9	0	%100
124	M156	y	39.9	39.9	0	%100
125	M157	y	95.8	95.8	0	%100
126	M158	y	95.8	95.8	0	%100

Member Distributed Loads (BLC 14 : W Up) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
127	M159	y	95.8	95.8	0	1.333
128	M159	y	71.9	71.9	1.333	%100
129	M160	y	71.9	71.9	0	5.5
130	M160	y	35.9	35.9	5.5	%100
131	M161	y	35.9	35.9	0	%100
132	M162	y	35.9	35.9	0	%100
133	M163	y	35.9	35.9	0	%100
134	M164	y	35.9	35.9	0	%100
135	M165	y	65.6	65.6	0	%100
136	M166	y	65.6	65.6	0	%100
137	M167	y	65.6	65.6	0	1.333
138	M167	y	49.2	49.2	1.333	%100
139	M168	y	49.2	49.2	0	5.5
140	M168	y	24.6	24.6	5.5	%100
141	M169	y	24.6	24.6	0	%100
142	M170	y	24.6	24.6	0	%100
143	M171	y	24.6	24.6	0	%100
144	M172	y	24.6	24.6	0	%100
145	M173	y	52.4	52.4	0	%100
146	M174	y	52.4	52.4	0	%100
147	M175	y	52.4	52.4	0	%100
148	M175	y	39.3	39.3	0	%100
149	M176	y	39.3	39.3	0	%100
150	M177	y	39.3	39.3	0	%100
151	M177	y	19.7	19.7	0	%100
152	M178	y	19.7	19.7	0	%100
153	M179	y	19.7	19.7	0	%100
154	M180	y	19.7	19.7	0	%100
155	M181	y	39.7	73.1	0	3.16
156	M181	y	73.1	73.1	3.16	%100
157	M182	y	73.1	73.1	0	%100
158	M183	y	73.1	73.1	0	10.333
159	M183	y	54.9	54.9	10.333	%100
160	M184	y	54.9	54.9	0	%100
161	M185	y	54.9	54.9	0	8.167
162	M185	y	27.4	27.4	8.167	%100
163	M186	y	27.4	27.4	0	%100
164	M187	y	27.4	27.4	0	%100
165	M188	y	27.4	27.4	0	2.837
166	M188	y	27.4	16	2.837	%100
167	M189	PY	30	15.6	0	%100
168	M190	PY	38.2	15.6	0	%100
169	M191	PY	11.3	5.8	0	%100
170	M192	PY	14.3	5.8	0	%100
171	M193	PY	30	15.6	0	%100
172	M194	PY	38.2	15.6	0	%100
173	M195	PY	11.3	5.8	0	%100
174	M196	PY	14.3	5.8	0	%100
175	M29	X	36	36	0	%100
176	M32	X	-36	-36	0	%100
177	M65	X	-36	-36	0	%100
178	M68	X	36	36	0	%100

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Nodal	Distributed
1	D	DL		-1		2	120
2	Lr Left	RLL				2	66
3	Lr Right	RLL				2	66
4	W LAT1	WL+X				4	222
5	W LAT2	WL-X				4	222
6	E +X	ELX	0.196			2	120
7	E +Z	None			0.196	2	120
8	UNB S	OL1				2	34
9	W Down	None				2	216
10	W Up	None				2	216
12	E +Z	ELZ				14	19
13	W Down	WL+Z				16	178
14	W Up	WL-Z				16	178

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	D	Yes	Y	DL	1						
2	D+Lr (20)	Yes	Y	DL	1	RLL	1				
3	D+Lr Right	Yes	Y	DL	1	2		3	1		
4	D+UNB S	Yes	Y	DL	1	2	0.125	3	0.42	OL1	1
5	D+W LAT1	Yes	Y	DL	1			WL+X	1		
6	D+W Down	Yes	Y	DL	1			WL+Z	1		
7	D+3/4(Lr (20)+W LAT1)	Yes	Y	DL	1	RLL	0.75	WL+X	0.75		
8	D+3/4(Lr (20)+W Down)	Yes	Y	DL	1	RLL	0.75	WL+Z	0.75		
9	D+Lr (13.5)	Yes	Y	DL	1	RLL	0.675				
10	D+3/4(Lr (13.5)+W LAT1)	Yes	Y	DL	1	RLL	0.506	WL+X	0.75		
11	D+3/4(Lr (13.5)+W Down)	Yes	Y	DL	1	RLL	0.506	WL+Z	0.75		
12	D+Lr (12)	Yes	Y	DL	1	RLL	0.6				
13	D+3/4(Lr (12)+W LAT1)	Yes	Y	DL	1	RLL	0.45	WL+X	0.75		
14	D+3/4(Lr (12)+W Down)	Yes	Y	DL	1	RLL	0.45	WL+Z	0.75		
15	0.6D (5.5 psf)+W Lat1	Yes	Y	DL	0.6	RLL	-0.05	WL+X	1		
16	0.6D (5.5 psf)+W Lat2	Yes	Y	DL	0.6	RLL	-0.05	WL-X	1		
17	0.6D (5.5 psf)+W UP	Yes	Y	DL	0.6	RLL	-0.05	WL-Z	1		
18	D+0.7E +X	Yes	Y	DL	1	Sds*DL	0.14			Rho*ELX	0.7
19	D+3/4(S+0.7E +X)	Yes	Y	DL	1	Sds*DL	0.105	RLL	0.315	Rho*ELX	0.525
20	0.6D (5.5 psf)-0.7E +X	Yes	Y	DL	0.6	Sds*DL	-0.14	RLL	-0.047	Rho*ELX	0.7
21	D+0.7E +Z	Yes	Y	DL	1	Sds*DL	0.14			Rho*ELZ	0.7
22	D+3/4(S+0.7E +Z)	Yes	Y	DL	1	Sds*DL	0.105	RLL	0.315	Rho*ELZ	0.525
23	0.6D (5.5 psf)-0.7E +Z	Yes	Y	DL	0.6	Sds*DL	-0.14	RLL	-0.047	Rho*ELZ	0.7
24	D+Omega*0.7E +X	Yes	Y	DL	1	Sds*DL	0.14			Om*ELX	0.7
25	D+3/4(S+Omega*0.7E +X)	Yes	Y	DL	1	Sds*DL	0.105	RLL	0.315	Om*ELX	0.525
26	0.6D (5.5 psf)-Omega*0.7E +X	Yes	Y	DL	0.6	Sds*DL	-0.14	RLL	-0.047	Om*ELX	0.7
27	D+Omega*0.7E +Z	Yes	Y	DL	1	Sds*DL	0.14			Om*ELZ	0.7
28	D+3/4(S+Omega*0.7E +Z)	Yes	Y	DL	1	Sds*DL	0.105	RLL	0.315	Om*ELZ	0.525
29	0.6D (5.5 psf)-Omega*0.7E +Z	Yes	Y	DL	0.6	Sds*DL	-0.14	RLL	-0.047	Om*ELZ	0.7
30	LRFD										
31	1.4D	Yes	Y	DL	1.4						
32	1.2D+1.6Lr (20)	Yes	Y	DL	1.2	RLL	1.6				
33	1.2D+1.6Lr Right	Yes	Y	DL	1.2	2		3	1.6		
34	1.2D+1.6UNB S	Yes	Y	DL	1.2	2	0.2	3	0.672	OL1	1.6
35	1.2D+1.6W LAT1	Yes	Y	DL	1.2			WL+X	1.6		
36	1.2D+1.6W Down	Yes	Y	DL	1.2			WL+Z	1.6		
37	1.2D+1.6Lr (20)+0.8W LAT1	Yes	Y	DL	1.2	RLL	1.6	WL+X	0.8		
38	1.2D+1.6Lr (20)+0.8W Down	Yes	Y	DL	1.2	RLL	1.6	WL+Z	0.8		

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
39	1.2D+0.5Lr (20)+1.6W LAT1	Yes	Y	DL	1.2	RLL	0.5	WL+X	1.6		
40	1.2D+0.5Lr (20)+1.6W Down	Yes	Y	DL	1.2	RLL	0.5	WL+Z	1.6		
41	1.2D+1.6Lr (13.5)	Yes	Y	DL	1.2	RLL	1.08				
42	1.2D+1.6Lr (13.5)+0.8W LAT1	Yes	Y	DL	1.2	RLL	1.08	WL+X	1.6		
43	1.2D+1.6Lr (13.5)+0.8W Down	Yes	Y	DL	1.2	RLL	1.08	WL+Z	1.6		
44	1.2D+0.5Lr (13.5)+1.6W LAT1	Yes	Y	DL	1.2	RLL	0.338	WL+X	1.6		
45	1.2D+0.5Lr (13.5)+1.6W Down	Yes	Y	DL	1.2	RLL	0.338	WL+Z	1.6		
46	1.2D+1.6Lr (12)	Yes	Y	DL	1.2	RLL	0.96				
47	1.2D+1.6Lr (12)+0.8W LAT1	Yes	Y	DL	1.2	RLL	0.96	WL+X	1.6		
48	1.2D+1.6Lr (12)+0.8W Down	Yes	Y	DL	1.2	RLL	0.96	WL+Z	1.6		
49	1.2D+0.5Lr (12)+1.6W LAT1	Yes	Y	DL	1.2	RLL	0.3	WL+X	1.6		
50	1.2D+0.5Lr (12)+1.6W Down	Yes	Y	DL	1.2	RLL	0.3	WL+Z	1.6		
51	0.9D (5.5 psf)+1.6W Lat1	Yes	Y	DL	0.9	RLL	-0.075	WL+X	1.6		
52	0.9D (5.5 psf)+1.6W Lat2	Yes	Y	DL	0.9	RLL	-0.075	WL-X	1.6		
53	0.9D (5.5 psf)+1.6W UP	Yes	Y	DL	0.9	RLL	-0.075	WL-Z	1.6		
54	1.2D+1.0E +X	Yes	Y	DL	1.2	Sds*DL	0.2			Rho*ELX	1
55	1.2D+0.2S+1.0E +X	Yes	Y	DL	1.2	Sds*DL	0.2	RLL	0.084	Rho*ELX	1
56	0.9D (5.5 psf)-1.0E +X	Yes	Y	DL	0.9	Sds*DL	-0.2	RLL	-0.07	Rho*ELX	1
57	1.2D+1.0E +Z	Yes	Y	DL	1.2	Sds*DL	0.2			Rho*ELZ	1
58	1.2D+0.2S+1.0E +Z	Yes	Y	DL	1.2	Sds*DL	0.2	RLL	0.084	Rho*ELZ	1
59	0.9D (5.5 psf)-1.0E +Z	Yes	Y	DL	0.9	Sds*DL	-0.2	RLL	-0.07	Rho*ELZ	1
60	1.2D+Omega*1.0E +X	Yes	Y	DL	1.2	Sds*DL	0.2			Om*ELX	1
61	1.2D+0.2S+Omega*1.0E +X	Yes	Y	DL	1.2	Sds*DL	0.2	RLL	0.084	Om*ELX	1
62	0.9D (5.5 psf)-Omega*1.0E +X	Yes	Y	DL	0.9	Sds*DL	-0.2	RLL	-0.07	Om*ELX	1
63	1.2D+Omega*1.0E +Z	Yes	Y	DL	1.2	Sds*DL	0.2			Om*ELZ	1
64	1.2D+0.2S+Omega*1.0E +Z	Yes	Y	DL	1.2	Sds*DL	0.2	RLL	0.084	Om*ELZ	1
65	0.9D (5.5 psf)-Omega*1.0E +Z	Yes	Y	DL	0.9	Sds*DL	-0.2	RLL	-0.07	Om*ELZ	1

Load Combination Design

	Description	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	D	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	D+Lr (20)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	D+Lr Right	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	D+UNB S	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	D+W LAT1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	D+W Down	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	D+3/4(Lr (20)+W LAT1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	D+3/4(Lr (20)+W Down)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	D+Lr (13.5)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	D+3/4(Lr (13.5)+W LAT1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	D+3/4(Lr (13.5)+W Down)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	D+Lr (12)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	D+3/4(Lr (12)+W LAT1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	D+3/4(Lr (12)+W Down)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	0.6D (5.5 psf)+W Lat1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	0.6D (5.5 psf)+W Lat2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17	0.6D (5.5 psf)+W UP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	D+0.7E +X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	D+3/4(S+0.7E +X)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20	0.6D (5.5 psf)-0.7E +X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21	D+0.7E +Z	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22	D+3/4(S+0.7E +Z)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
23	0.6D (5.5 psf)-0.7E +Z	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
24	D+Omega*0.7E +X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
25	D+3/4(S+Omega*0.7E +X)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Load Combination Design (Continued)

	Description	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
26	0.6D (5.5 psf)-Omega*0.7E +X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
27	D+Omega*0.7E +Z	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
28	D+3/4(S+Omega*0.7E +Z)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
29	0.6D (5.5 psf)-Omega*0.7E +Z	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
30	LRFD									
31	1.4D									
32	1.2D+1.6Lr (20)									
33	1.2D+1.6Lr Right									
34	1.2D+1.6UNB S									
35	1.2D+1.6W LAT1									
36	1.2D+1.6W Down									
37	1.2D+1.6Lr (20)+0.8W LAT1									
38	1.2D+1.6Lr (20)+0.8W Down									
39	1.2D+0.5Lr (20)+1.6W LAT1									
40	1.2D+0.5Lr (20)+1.6W Down									
41	1.2D+1.6Lr (13.5)									
42	1.2D+1.6Lr (13.5)+0.8W LAT1									
43	1.2D+1.6Lr (13.5)+0.8W Down									
44	1.2D+0.5Lr (13.5)+1.6W LAT1									
45	1.2D+0.5Lr (13.5)+1.6W Down									
46	1.2D+1.6Lr (12)									
47	1.2D+1.6Lr (12)+0.8W LAT1									
48	1.2D+1.6Lr (12)+0.8W Down									
49	1.2D+0.5Lr (12)+1.6W LAT1									
50	1.2D+0.5Lr (12)+1.6W Down									
51	0.9D (5.5 psf)+1.6W Lat1									
52	0.9D (5.5 psf)+1.6W Lat2									
53	0.9D (5.5 psf)+1.6W UP									
54	1.2D+1.0E +X									
55	1.2D+0.2S+1.0E +X									
56	0.9D (5.5 psf)-1.0E +X									
57	1.2D+1.0E +Z									
58	1.2D+0.2S+1.0E +Z									
59	0.9D (5.5 psf)-1.0E +Z									
60	1.2D+Omega*1.0E +X									
61	1.2D+0.2S+Omega*1.0E +X									
62	0.9D (5.5 psf)-Omega*1.0E +X									
63	1.2D+Omega*1.0E +Z									
64	1.2D+0.2S+Omega*1.0E +Z									
65	0.9D (5.5 psf)-Omega*1.0E +Z									

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
0	1	N1	5347.664	8077.577	-0.764	-0.043	0	-825.257
1	2		11767.835	16448.483	-2.065	-0.116	0	-1830.801
2	3		8546.222	10291.147	-1.309	-0.074	0	-1321.682
3	4		7888.609	10403.938	-1.42	-0.08	0	-1220.114
4	5		6064.784	13933.531	-0.107	-0.008	0	-984.71
5	6		8644.933	13625.974	1235.095	179.534	0	-1341.269
6	7		10724.197	18750.465	-1.245	-0.071	0	-1704.974
7	8		12660.767	18515.761	927.515	137.739	0	-1973.694
8	9		9668.154	13727.895	-1.643	-0.092	0	-1500.17
9	10		9141.303	16706.814	-0.929	-0.053	0	-1455.243
10	11		11077.296	16473.76	927.299	136.523	0	-1723.413
11	12		9185.436	13100.073	-1.545	-0.087	0	-1424.401

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
12	13		8779.061	16237.785	-0.856	-0.049	0	-1398.231
13	14		10714.911	16005.101	927.252	136.254	0	-1666.273
14	15		3574.927	10281.608	0.263	0.013	0	-596.283
15	16		-1303.67	1784.148	0.653	0.038	0	157.146
16	17		-1015.01	-1151.002	1243.782	174.339	0	155.294
17	18		4423.323	8039.812	-0.599	-0.035	0	-692.929
18	19		6664.792	10686.979	-1.051	-0.06	0	-1038.888
19	20		1609.443	3859.451	-0.18	-0.011	0	-257.734
20	21		5103.081	8336.846	1293.045	205.133	0	-787.695
21	22		7173.199	10908.206	969.973	155.378	0	-1109.988
22	23		2291.587	4159.299	1292.302	202.367	0	-352.397
23	31		7479.817	11308.59	-1.07	-0.06	0	-1153.252
24	32		16637.892	23086.398	-3	-0.168	0	-2583.757
25	33		11503.578	13233.582	-1.79	-0.101	0	-1775.825
26	34		10455.495	13414.809	-1.966	-0.111	0	-1614.207
27	35		7530.553	19060.546	0.134	0.005	0	-1236.001
28	36		11657.524	18571.25	1975.788	285.324	0	-1805.395
29	37		17247.004	27773.58	-2.472	-0.14	0	-2720.917
30	38		19312.328	27523.947	989.253	146.526	0	-3007.182
31	39		10741.276	23248.937	-0.516	-0.032	0	-1737.834
32	40		14870.071	22755.453	1976.493	288.251	0	-2308.763
33	41		13291.654	18733.496	-2.324	-0.13	0	-2058.673
34	42		14489.38	28107.592	-1.27	-0.074	0	-2326.855
35	43		18620.169	27609.046	1977.358	291.902	0	-2899.554
36	44		9698.953	21891.887	-0.306	-0.02	0	-1574.642
37	45		13827.192	21399.797	1976.264	287.253	0	-2145.079
38	46		12522.205	17728.989	-2.168	-0.122	0	-1938.309
39	47		13711.792	27102.342	-1.114	-0.065	0	-2204.372
40	48		17842.183	26604.864	1977.175	291.12	0	-2776.707
41	49		9454.744	21573.569	-0.257	-0.017	0	-1536.446
42	50		13582.843	21081.795	1976.21	287.032	0	-2106.766
43	51		5427.57	16007.499	0.459	0.023	0	-908.609
44	52		-2373.345	2411.629	1.084	0.063	0	295.471
45	53		-1910.047	-2284.324	1989.993	278.725	0	292.161
46	54		5083.938	9637.888	-0.681	-0.04	0	-797.868
47	55		5616.761	10341.321	-0.791	-0.046	0	-880.314
48	56		2508.727	5835.621	-0.286	-0.017	0	-400.328
49	57		6056.671	10064.189	1846.587	291.092	0	-933.181
50	58		6589.094	10767.146	1846.731	291.561	0	-1015.643
51	59		3483.383	6264.192	1846.019	288.878	0	-535.554
52	1	N14	-5347.664	8077.577	-0.764	-0.043	0	825.257
53	2		-11767.835	16448.409	-2.065	-0.116	0	1830.801
54	3		-8540.144	14234.218	-1.522	-0.085	0	1325.792
55	4		-7887.389	11680.539	-1.478	-0.084	0	1221.432
56	5		-11043.718	12069.961	-1.91	-0.11	0	1667.483
57	6		-8644.406	13625.711	1235.228	179.557	0	1341.186
58	7		-14458.405	17347.325	-2.597	-0.148	0	2218.626
59	8		-12660.376	18515.504	927.604	137.755	0	1973.633
60	9		-9668.154	13727.845	-1.643	-0.092	0	1500.17
61	10		-12875.504	15305.907	-2.281	-0.13	0	1968.247
62	11		-11076.903	16473.522	927.385	136.538	0	1723.352
63	12		-9185.436	13100.028	-1.545	-0.087	0	1424.401
64	13		-12513.26	14837.387	-2.208	-0.126	0	1911.086
65	14		-10714.518	16004.868	927.337	136.269	0	1666.212
66	15		-8553.852	8422.619	-1.541	-0.089	0	1277.57

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
67	16		-2818.25	446.746	-0.942	-0.052	0	389.037
68	17		1014.378	-1150.701	1243.647	174.315	0	-155.197
69	18		-6641.301	8669.471	-0.982	-0.055	0	1015.093
70	19		-8328.279	11157.34	-1.338	-0.075	0	1281.24
71	20		-3827.415	4492.641	-0.563	-0.031	0	578.446
72	21		-5103.069	8336.84	1292.665	205.064	0	787.694
73	22		-7173.19	10908.177	969.687	155.325	0	1109.986
74	23		-2291.575	4159.296	1291.929	202.3	0	352.395
75	31		-7479.817	11308.59	-1.07	-0.06	0	1153.252
76	32		-16637.892	23086.278	-3	-0.168	0	2583.757
77	33		-11493.824	19544.771	-2.13	-0.119	0	1781.091
78	34		-10453.534	15458.205	-2.06	-0.116	0	1615.893
79	35		-15496.842	16082.835	-2.752	-0.158	0	2327.131
80	36		-11656.678	18570.83	1975.996	285.361	0	1805.263
81	37		-21230.147	26277.918	-3.914	-0.222	0	3268.418
82	38		-19311.909	27523.614	989.324	146.54	0	3007.116
83	39		-18707.585	20265.26	-3.402	-0.195	0	2830.74
84	40		-14869.231	22754.992	1976.71	288.289	0	2308.632
85	41		-13291.654	18733.415	-2.324	-0.13	0	2058.673
86	42		-22455.711	25116.908	-4.154	-0.237	0	3421.818
87	43		-18619.335	27608.538	1977.586	291.942	0	2899.423
88	44		-17665.255	18910.151	-3.191	-0.183	0	2666.973
89	45		-13826.35	21399.349	1976.477	287.291	0	2144.948
90	46		-12522.205	17728.917	-2.168	-0.122	0	1938.309
91	47		-21678.119	24113.115	-3.998	-0.228	0	3298.91
92	48		-17841.348	26604.365	1977.401	291.16	0	2776.576
93	49		-17421.045	18592.287	-3.142	-0.18	0	2628.642
94	50		-13582	21081.351	1976.423	287.07	0	2106.635
95	51		-13393.851	13033.651	-2.427	-0.14	0	1998.489
96	52		-4221.725	272.203	-1.468	-0.082	0	578.272
97	53		1909.035	-2283.844	1989.777	278.687	0	-292.007
98	54		-8252.474	10539.847	-1.228	-0.068	0	1257.091
99	55		-8785.299	11242.679	-1.338	-0.074	0	1339.772
100	56		-5677.259	6740.464	-0.833	-0.046	0	858.369
101	57		-6056.653	10064.179	1846.05	290.995	0	933.179
102	58		-6589.076	10767.13	1846.194	291.464	0	1015.64
103	59		-3483.365	6264.187	1845.488	288.782	0	535.551
104	1	N39	5731.043	9095.39	-0.081	-0.006	0	-885.287
105	2		12707.257	19067.587	-0.245	-0.016	0	-1982.006
106	3		9199.31	11415.48	-0.136	-0.01	0	-1424.229
107	4		8164.53	11448.529	-0.14	-0.01	0	-1264.066
108	5		6161.799	16379.265	0.436	0.023	0	-1002.166
109	6		9308.222	14996.818	1233.794	179.564	0	-1446.1
110	7		11313.181	22040.058	0.185	0.008	0	-1802.625
111	8		13676.931	21001.805	925.641	137.78	0	-2137.29
112	9		10424.522	15826.664	-0.192	-0.013	0	-1620.832
113	10		9591.999	19605.789	0.224	0.01	0	-1529.716
114	11		11954.19	18568.128	925.838	136.562	0	-1863.64
115	12		9899.888	15078.753	-0.18	-0.012	0	-1538.143
116	13		9198.21	19047.103	0.233	0.011	0	-1467.458
117	14		11560.047	18009.583	925.883	136.293	0	-1801.212
118	15		3486.812	12240.309	0.475	0.026	0	-583.776
119	16		-1388.297	2123.515	0.284	0.018	0	170.182
120	17		-508.031	-1192.377	1243.784	174.337	0	77.724
121	18		4679.851	9077.805	-0.001	-0.002	0	-733.25

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
122	19		7126.062	12224.56	-0.073	-0.006	0	-1111.905
123	20		1659.394	4345.004	0.045	0.001	0	-265.538
124	21		5950.314	9425.154	1291.297	205.132	0	-919.436
125	22		8079.674	12484.612	968.236	155.387	0	-1252.164
126	23		2928.436	4693.323	1291.595	202.374	0	-450.561
127	31		8015.542	12733.562	-0.114	-0.008	0	-1236.911
128	32		17979.358	26870.122	-0.36	-0.024	0	-2798.504
129	33		12390.256	14625.043	-0.186	-0.013	0	-1914.307
130	34		10741.471	14678.97	-0.193	-0.014	0	-1659.622
131	35		7527.701	22566.773	0.728	0.039	0	-1238.217
132	36		12559.433	20356.101	1974.339	285.375	0	-1947.174
133	37		18365.029	32699.432	0.054	-0.001	0	-2903.772
134	38		20885.807	31592.354	988.164	146.623	0	-3260.272
135	39		11015.816	27555.808	0.647	0.034	0	-1785.178
136	40		16051.413	25343.338	1973.823	288.298	0	-2496.101
137	41		14342.453	21684.608	-0.276	-0.018	0	-2225.398
138	42		15089.922	33343.067	0.553	0.028	0	-2428.196
139	43		20130.292	31128.616	1973.209	291.943	0	-3141.446
140	44		9883.253	25939.362	0.673	0.035	0	-1607.223
141	45		14917.547	23727.447	1973.999	287.302	0	-2317.499
142	46		13506.398	20487.942	-0.256	-0.017	0	-2094.139
143	47		14244.503	32145.705	0.573	0.029	0	-2294.393
144	48		19283.856	29931.652	1973.338	291.162	0	-3007.157
145	49		9617.929	25560.196	0.679	0.036	0	-1565.584
146	50		14651.93	23348.419	1974.038	287.081	0	-2275.711
147	51		5265.881	19088.377	0.764	0.041	0	-885.279
148	52		-2528.82	2901.556	0.458	0.03	0	319.408
149	53		-1119.176	-2403.755	1990.071	278.723	0	171.177
150	54		5360.921	10887.977	0.017	-0.001	0	-841.168
151	55		5939.339	11726.006	0.003	-0.002	0	-930.801
152	56		2594.751	6568.298	0.061	0.002	0	-413.734
153	57		7174.808	11384.846	1844.904	291.102	0	-1106.336
154	58		7753.481	12222.709	1844.836	291.57	0	-1196.168
155	59		4407.531	7065.985	1845.156	288.892	0	-677.963
156	1	N52	-5731.043	9095.39	-0.081	-0.006	0	885.287
157	2		-12707.257	19067.343	-0.245	-0.016	0	1982.005
158	3		-9205.393	16746.738	-0.191	-0.013	0	1432.561
159	4		-8165.753	13107.809	-0.148	-0.011	0	1266.287
160	5		-11801.583	13428.991	-0.376	-0.026	0	1787.229
161	6		-9189.446	15015.727	1233.891	179.587	0	1427.674
162	7		-15543.007	19821.87	-0.424	-0.029	0	2393.268
163	8		-13587.845	21015.991	925.71	137.795	0	2123.398
164	9		-10424.522	15826.499	-0.192	-0.013	0	1620.832
165	10		-13821.834	17389.845	-0.385	-0.026	0	2119.59
166	11		-11865.106	18582.294	925.905	136.577	0	1849.778
167	12		-9899.888	15078.606	-0.18	-0.012	0	1538.143
168	13		-13428.047	16831.67	-0.376	-0.026	0	2057.155
169	14		-11470.964	18023.744	925.949	136.308	0	1787.357
170	15		-9126.608	9294.536	-0.336	-0.023	0	1367.148
171	16		-3238.131	-36.85	-0.428	-0.025	0	453.171
172	17		369.135	-1213.618	1243.686	174.314	0	-56.473
173	18		-7178.141	9736.911	-0.167	-0.01	0	1099.111
174	19		-8999.776	12716.654	-0.198	-0.012	0	1387.262
175	20		-4157.69	5008.162	-0.122	-0.007	0	629.562
176	21		-5950.326	9425.161	1290.918	205.063	0	919.437

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
177	22		-8079.683	12484.539	967.951	155.335	0	1252.166
178	23		-2928.448	4693.341	1291.223	202.307	0	450.563
179	31		-8015.542	12733.562	-0.114	-0.008	0	1236.911
180	32		-17979.358	26869.73	-0.36	-0.024	0	2798.504
181	33		-12400.017	23158.356	-0.273	-0.018	0	1925.727
182	34		-10743.436	17334.939	-0.205	-0.015	0	1662.588
183	35		-16551.365	17850.261	-0.57	-0.039	0	2492.842
184	36		-12369.392	20386.212	1974.491	285.411	0	1917.745
185	37		-22876.855	30334.261	-0.595	-0.04	0	3533.341
186	38		-20790.784	31607.243	988.223	146.636	0	3245.468
187	39		-20039.454	22833.355	-0.651	-0.045	0	3041.925
188	40		-15861.368	25373.539	1973.983	288.335	0	2466.593
189	41		-14342.453	21684.342	-0.276	-0.018	0	2225.398
190	42		-24113.531	28613.617	-0.745	-0.051	0	3687.391
191	43		-19940.242	31158.927	1973.377	291.982	0	3111.845
192	44		-18906.9	21218.844	-0.625	-0.043	0	2863.283
193	45		-14727.503	23757.619	1974.156	287.339	0	2288.017
194	46		-13506.398	20487.706	-0.256	-0.017	0	2094.138
195	47		-23268.118	27417.712	-0.726	-0.05	0	3553.083
196	48		-19093.807	29961.94	1973.505	291.201	0	2977.576
197	49		-18641.577	20840.13	-0.619	-0.043	0	2821.483
198	50		-14461.887	23378.583	1974.194	287.118	0	2246.235
199	51		-14289.556	14375.663	-0.534	-0.037	0	2138.475
200	52		-4873.466	-554.622	-0.681	-0.04	0	677.788
201	53		896.941	-2437.721	1989.914	278.685	0	-137.184
202	54		-8929.91	11832.357	-0.221	-0.013	0	1362.552
203	55		-9508.327	12669.675	-0.235	-0.014	0	1452.494
204	56		-6163.745	7515.994	-0.177	-0.01	0	933.618
205	57		-7174.825	11384.856	1844.368	291.005	0	1106.338
206	58		-7753.498	12222.698	1844.3	291.473	0	1196.171
207	59		-4407.548	7066.012	1844.626	288.796	0	677.966
208	1	N77	5977.167	9350.219	0.065	0.003	0	-923.533
209	2		13372.758	19743.365	0.157	0.007	0	-2087.184
210	3		9655.928	11823.685	0.116	0.005	0	-1495.512
211	4		8621.608	11877.781	0.129	0.006	0	-1335.387
212	5		6543.308	16894.274	0.359	0.021	0	-1062.053
213	6		8789.519	13714.931	1237.131	179.65	0	-1363.819
214	7		11979.089	22806.198	0.356	0.02	0	-1908.23
215	8		13653.792	20418.478	927.271	137.836	0	-2132.457
216	9		10951.71	16365.596	0.127	0.006	0	-1703.694
217	10		10153.011	20269.005	0.333	0.019	0	-1618.318
218	11		11831.686	17882.605	927.556	136.617	0	-1843.309
219	12		10395.441	15586.11	0.12	0.005	0	-1615.933
220	13		9735.313	19686.7	0.328	0.019	0	-1552.204
221	14		11414.879	17300.601	927.621	136.348	0	-1777.365
222	15		3745.219	12631.966	0.328	0.02	0	-624.063
223	16		-1506.462	2078.614	0.121	0.01	0	188.31
224	17		57.324	42.032	1241.125	174.284	0	-8.78
225	18		4901.009	9326.864	0.099	0.005	0	-767.596
226	19		7483.718	12607.736	0.12	0.005	0	-1167.753
227	20		1745.036	4454.677	0.064	0.003	0	-278.74
228	21		6183.969	9670.931	1290.947	205.135	0	-955.766
229	22		8445.869	12864.596	967.832	155.391	0	-1309.398
230	23		3027.969	4800.941	1291.509	202.379	0	-465.923
231	31		8359.387	13090.308	0.091	0.004	0	-1290.247

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
232	32		18939.261	27849.304	0.225	0.01	0	-2949.672
233	33		13018.648	15176.059	0.158	0.007	0	-2012.062
234	34		11370.946	15263.763	0.181	0.008	0	-1757.499
235	35		8035.488	23288.515	0.548	0.033	0	-1317.632
236	36		11636.106	18203.898	1979.787	285.511	0	-1801.677
237	37		19439.015	33887.219	0.461	0.025	0	-3073.772
238	38		21226.734	31340.945	989.344	146.679	0	-3312.982
239	39		11733.718	28488.463	0.595	0.035	0	-1898.054
240	40		15324.089	23400.335	1979.027	288.435	0	-2380.186
241	41		15082.824	22444.871	0.177	0.008	0	-2341.354
242	42		16055.229	34520.462	0.649	0.037	0	-2580.911
243	43		19633.339	29428.194	1978.117	292.081	0	-3060.717
244	44		10532.761	26803.674	0.58	0.034	0	-1709.168
245	45		14126.488	21716.69	1979.279	287.438	0	-2191.931
246	46		14196.515	21197.693	0.166	0.007	0	-2202.084
247	47		15158.29	33272.457	0.638	0.037	0	-2438.773
248	48		18738.971	28181.051	1978.308	291.301	0	-2919.07
249	49		10251.439	26408.478	0.576	0.034	0	-1664.978
250	50		13845.947	21321.761	1979.337	287.218	0	-2147.887
251	51		5666.208	19701.8	0.521	0.031	0	-947.66
252	52		-2730.394	2816.503	0.19	0.016	0	350.319
253	53		-227.621	-441.808	1985.839	278.638	0	34.855
254	54		5619.263	11185.379	0.127	0.006	0	-881.15
255	55		6231.967	12058.785	0.134	0.006	0	-976.128
256	56		2726.323	6734.676	0.094	0.004	0	-434.01
257	57		7451.986	11678.425	1844.594	291.108	0	-1149.279
258	58		8064.709	12551.45	1844.469	291.576	0	-1244.429
259	59		4559.046	7229.517	1845.058	288.899	0	-701.338
260	1	N90	-5977.167	9350.219	0.065	0.003	0	923.533
261	2		-13372.758	19743.116	0.157	0.007	0	2087.183
262	3		-9655.922	17269.015	0.107	0.005	0	1503.438
263	4		-8621.605	13582.966	0.132	0.006	0	1337.594
264	5		-12399.628	13942.766	0.016	-0.004	0	1880.93
265	6		-8640.515	13738.168	1237.222	179.673	0	1340.729
266	7		-16371.334	20586.217	0.098	0.001	0	2524.442
267	8		-13542.036	20435.988	927.336	137.852	0	2115.039
268	9		-10951.71	16365.427	0.127	0.006	0	1703.694
269	10		-14545.254	18051.621	0.075	0	0	2233.676
270	11		-11719.932	17900.069	927.62	136.632	0	1825.93
271	12		-10395.441	15585.96	0.12	0.005	0	1615.933
272	13		-14127.555	17469.908	0.07	0	0	2167.365
273	14		-11303.125	17318.055	927.684	136.363	0	1759.994
274	15		-9601.535	9685.604	-0.015	-0.005	0	1441.082
275	16		-3293.512	-75.57	-0.181	-0.013	0	461.636
276	17		-216.595	18.065	1241.029	174.26	0	33.175
277	18		-7466.381	10015	0.036	0.001	0	1143.969
278	19		-9407.747	13121.379	0.072	0.003	0	1451.07
279	20		-4310.407	5147.218	0.001	0	0	653.152
280	21		-6183.969	9670.931	1290.568	205.066	0	955.766
281	22		-8445.869	12864.518	967.548	155.339	0	1309.398
282	23		-3027.969	4800.953	1291.137	202.312	0	465.923
283	31		-8359.387	13090.308	0.091	0.004	0	1290.247
284	32		-18939.261	27848.905	0.225	0.01	0	2949.671
285	33		-13018.641	23892.093	0.144	0.006	0	2022.701
286	34		-11370.942	17993.265	0.185	0.008	0	1760.396

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
287	35		-17405.597	18570.583	0	-0.007	0	2626.216
288	36		-11397.702	18240.889	1979.929	285.547	0	1764.803
289	37		-24124.076	31520.259	0.187	0.005	0	3730.578
290	38		-21107.529	31359.383	989.402	146.693	0	3294.414
291	39		-21103.832	23763.655	0.046	-0.005	0	3208.994
292	40		-15085.682	23437.483	1979.176	288.472	0	2343.209
293	41		-15082.824	22444.6	0.177	0.008	0	2341.353
294	42		-25425.35	29787.552	0.1	-0.003	0	3894.57
295	43		-19394.929	29465.531	1978.275	292.121	0	3023.619
296	44		-19902.873	22081.106	0.031	-0.006	0	3019.346
297	45		-13888.082	21753.787	1979.425	287.475	0	2154.987
298	46		-14196.515	21197.453	0.166	0.007	0	2202.084
299	47		-24528.409	28541.235	0.089	-0.003	0	3751.871
300	48		-18500.562	28218.349	1978.464	291.34	0	2881.997
301	49		-19621.55	21686.433	0.027	-0.006	0	2974.977
302	50		-13607.541	21358.845	1979.482	287.254	0	2110.951
303	51		-15036.313	14988.216	-0.027	-0.008	0	2254.671
304	52		-4949.563	-629.729	-0.292	-0.02	0	689.409
305	53		-27.213	-480.132	1985.687	278.6	0	4.167
306	54		-9284.08	12171.471	0.036	0.001	0	1417.467
307	55		-9896.784	13044.096	0.043	0.002	0	1512.779
308	56		-6391.139	7724.375	0.003	0	0	968.725
309	57		-7451.986	11678.425	1844.059	291.011	0	1149.279
310	58		-8064.71	12551.429	1843.934	291.479	0	1244.429
311	59		-4559.046	7229.534	1844.528	288.803	0	701.338
312	1	N115	5977.026	9350.013	-0.001	0	0	-923.511
313	2		13372.434	19742.845	-0.001	0.001	0	-2087.132
314	3		9655.686	11823.409	-0.001	0.001	0	-1495.474
315	4		8621.405	11877.504	-0.001	0	0	-1335.355
316	5		6543.16	16893.84	0.028	0.006	0	-1062.029
317	6		8119.365	12537.217	1239.72	179.702	0	-1258.398
318	7		11978.817	22805.592	0.02	0.006	0	-1908.186
319	8		13142.772	19534.968	928.698	137.865	0	-2050.873
320	9		10951.44	16365.175	-0.001	0.001	0	-1703.651
321	10		10152.776	20268.471	0.021	0.005	0	-1618.28
322	11		11323.821	16999.144	928.984	136.646	0	-1762.669
323	12		10395.184	15585.713	-0.001	0.001	0	-1615.893
324	13		9735.087	19686.184	0.021	0.005	0	-1552.168
325	14		10907.728	16417.152	929.049	136.376	0	-1696.938
326	15		3745.128	12631.624	0.029	0.006	0	-624.049
327	16		-1506.404	2078.601	0.029	0.005	0	188.301
328	17		825.052	1623.573	1237.745	174.217	0	-126.565
329	18		4900.893	9326.66	0	0	0	-767.578
330	19		7483.533	12607.431	-0.001	0	0	-1167.724
331	20		1744.994	4454.584	0	0	0	-278.734
332	21		6183.825	9670.719	1290.908	205.134	0	-955.744
333	22		8445.664	12864.285	967.762	155.389	0	-1309.366
334	23		3027.898	4800.839	1291.5	202.379	0	-465.912
335	31		8359.189	13090.019	-0.001	0	0	-1290.217
336	32		18938.784	27848.548	-0.002	0.001	0	-2949.596
337	33		13018.311	15175.696	-0.001	0.001	0	-2012.009
338	34		11370.668	15263.397	-0.001	0.001	0	-1757.455
339	35		8035.298	23287.896	0.045	0.01	0	-1317.602
340	36		10569.169	16319.59	1983.913	285.595	0	-1634.617
341	37		19438.551	33886.289	0.021	0.006	0	-3073.698

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
342	38		20682.124	30398.24	990.242	146.696	0	-3226.124
343	39		11733.439	28487.691	0.045	0.01	0	-1898.009
344	40		14248.986	21515.933	1983.178	288.52	0	-2210.67
345	41		15082.438	22444.275	-0.002	0.001	0	-2341.293
346	42		16054.858	34519.517	0.045	0.011	0	-2580.851
347	43		18548.484	27543.69	1982.301	292.167	0	-2888.276
348	44		10532.51	26802.952	0.045	0.01	0	-1709.128
349	45		13054.057	19832.318	1983.418	287.523	0	-2023.217
350	46		14196.151	21197.135	-0.002	0.001	0	-2202.027
351	47		15157.937	33271.547	0.045	0.011	0	-2438.717
352	48		17656.159	26296.568	1982.485	291.387	0	-2747.241
353	49		10251.194	26407.767	0.045	0.01	0	-1664.939
354	50		12774.138	19437.396	1983.474	287.302	0	-1979.36
355	51		5666.068	19701.263	0.046	0.01	0	-947.638
356	52		-2730.295	2816.493	0.046	0.009	0	350.304
357	53		999.959	2088.673	1980.44	278.531	0	-153.353
358	54		5619.127	11185.134	0	0	0	-881.129
359	55		6231.813	12058.512	0	0	0	-976.104
360	56		2726.257	6734.535	0	0	0	-434
361	57		7451.809	11678.167	1844.55	291.107	0	-1149.251
362	58		8064.515	12551.165	1844.419	291.575	0	-1244.399
363	59		4558.94	7229.363	1845.042	288.899	0	-701.321
364	1	N128	-5977.026	9350.013	-0.001	0	0	923.511
365	2		-13372.434	19742.596	-0.001	0.001	0	2087.132
366	3		-9655.686	17268.558	-0.001	0.001	0	1503.4
367	4		-8621.405	13582.632	-0.001	0	0	1337.562
368	5		-12399.315	13942.415	-0.03	-0.005	0	1880.881
369	6		-8042.093	12549.229	1239.838	179.726	0	1246.436
370	7		-16370.933	20585.667	-0.024	-0.003	0	2524.378
371	8		-13084.821	19543.932	928.779	137.881	0	2041.848
372	9		-10951.44	16365.006	-0.001	0.001	0	1703.651
373	10		-14544.892	18051.147	-0.023	-0.003	0	2233.618
374	11		-11265.869	17008.115	929.063	136.662	0	1753.663
375	12		-10395.184	15585.563	-0.001	0.001	0	1615.892
376	13		-14127.203	17469.451	-0.023	-0.003	0	2167.309
377	14		-10849.776	16426.125	929.127	136.392	0	1687.937
378	15		-9601.282	9685.35	-0.03	-0.005	0	1441.043
379	16		-3293.451	-75.507	-0.029	-0.005	0	461.627
380	17		-907.273	1611.168	1237.624	174.193	0	139.177
381	18		-7466.206	10014.777	-0.001	0	0	1143.942
382	19		-9407.518	13121.059	-0.001	0	0	1451.034
383	20		-4310.307	5147.107	-0.001	0	0	653.137
384	21		-6183.825	9670.719	1290.531	205.065	0	955.744
385	22		-8445.664	12864.206	967.479	155.336	0	1309.366
386	23		-3027.898	4800.851	1291.13	202.312	0	465.912
387	31		-8359.189	13090.019	-0.001	0	0	1290.217
388	32		-18938.784	27848.148	-0.002	0.001	0	2949.595
389	33		-13018.311	23891.441	-0.002	0.001	0	2022.648
390	34		-11370.668	17992.809	-0.002	0.001	0	1760.354
391	35		-17405.146	18570.102	-0.048	-0.008	0	2626.145
392	36		-10445.534	16338.715	1984.097	285.631	0	1615.514
393	37		-24123.474	31519.389	-0.026	-0.003	0	3730.482
394	38		-20620.31	30407.589	990.312	146.709	0	3216.5
395	39		-21103.287	23763.014	-0.049	-0.008	0	3208.908
396	40		-14125.353	21535.075	1983.37	288.558	0	2191.514

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
397	41		-15082.438	22444.005	-0.002	0.001	0	2341.293
398	42		-25424.706	29786.729	-0.049	-0.007	0	3894.468
399	43		-18424.855	27562.855	1982.502	292.207	0	2869.058
400	44		-19902.358	22080.516	-0.049	-0.008	0	3019.265
401	45		-12930.423	19851.454	1983.607	287.56	0	2004.079
402	46		-14196.151	21196.895	-0.002	0.001	0	2202.026
403	47		-24527.785	28540.448	-0.049	-0.007	0	3751.772
404	48		-17532.529	26315.728	1982.684	291.426	0	2728.037
405	49		-19621.042	21685.855	-0.049	-0.008	0	2974.897
406	50		-12650.504	19456.531	1983.662	287.339	0	1960.226
407	51		-15035.915	14987.82	-0.048	-0.008	0	2254.609
408	52		-4949.474	-629.617	-0.046	-0.008	0	689.396
409	53		-1131.514	2068.837	1980.247	278.492	0	173.526
410	54		-9283.86	12171.199	-0.001	0	0	1417.433
411	55		-9896.546	13043.796	-0.001	0	0	1512.742
412	56		-6390.99	7724.209	-0.001	0	0	968.702
413	57		-7451.809	11678.167	1844.019	291.01	0	1149.251
414	58		-8064.515	12551.143	1843.886	291.477	0	1244.399
415	59		-4558.94	7229.381	1844.516	288.803	0	701.321
416	1	N153	5977.166	9350.219	-0.066	-0.002	0	-923.533
417	2		13372.758	19743.365	-0.16	-0.005	0	-2087.184
418	3		9655.928	11823.685	-0.117	-0.004	0	-1495.512
419	4		8621.608	11877.781	-0.131	-0.005	0	-1335.387
420	5		6543.308	16894.274	-0.303	-0.008	0	-1062.053
421	6		7688.458	12086.607	1240.591	179.716	0	-1191.093
422	7		11979.089	22806.198	-0.314	-0.009	0	-1908.23
423	8		12814.721	19197.278	929.091	137.868	0	-1999.023
424	9		10951.71	16365.596	-0.129	-0.004	0	-1703.694
425	10		10153.011	20269.005	-0.291	-0.008	0	-1618.318
426	11		10997.58	16661.385	929.395	136.65	0	-1711.323
427	12		10395.441	15586.11	-0.122	-0.004	0	-1615.933
428	13		9735.313	19686.7	-0.286	-0.008	0	-1552.204
429	14		10581.896	16079.377	929.464	136.381	0	-1645.707
430	15		3745.219	12631.966	-0.271	-0.007	0	-624.063
431	16		-1506.462	2078.614	-0.064	0.001	0	188.31
432	17		1459.456	2301.224	1236.269	174.188	0	-224.03
433	18		4901.009	9326.864	-0.1	-0.004	0	-767.596
434	19		7483.718	12607.736	-0.12	-0.004	0	-1167.753
435	20		1745.036	4454.677	-0.064	-0.003	0	-278.74
436	21		6183.972	9670.932	1290.794	205.129	0	-955.767
437	22		8445.873	12864.598	967.627	155.383	0	-1309.399
438	23		3027.97	4800.942	1291.427	202.376	0	-465.923
439	31		8359.387	13090.308	-0.092	-0.003	0	-1290.247
440	32		18939.261	27849.304	-0.229	-0.008	0	-2949.672
441	33		13018.648	15176.059	-0.16	-0.006	0	-2012.062
442	34		11370.946	15263.763	-0.183	-0.007	0	-1757.499
443	35		8035.488	23288.515	-0.458	-0.012	0	-1317.632
444	36		9882.796	15598.545	1985.32	285.617	0	-1527.798
445	37		19439.015	33887.219	-0.419	-0.012	0	-3073.772
446	38		20332.603	30038.319	990.371	146.692	0	-3170.907
447	39		11733.718	28488.463	-0.505	-0.014	0	-1898.054
448	40		13557.915	20795.033	1984.559	288.541	0	-2102.535
449	41		15082.824	22444.871	-0.18	-0.006	0	-2341.354
450	42		16055.229	34520.462	-0.56	-0.015	0	-2580.911
451	43		17851.787	26822.953	1983.651	292.187	0	-2778.57

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
452	44		10532.761	26803.674	-0.489	-0.013	0	-1709.168
453	45		12364.524	19111.372	1984.806	287.544	0	-1915.513
454	46		14196.515	21197.693	-0.168	-0.006	0	-2202.084
455	47		15158.29	33272.457	-0.548	-0.015	0	-2438.773
456	48		16960.642	25575.798	1983.841	291.407	0	-2637.865
457	49		10251.439	26408.478	-0.486	-0.013	0	-1664.978
458	50		12084.963	18716.439	1984.864	287.323	0	-1871.756
459	51		5666.208	19701.8	-0.43	-0.012	0	-947.66
460	52		-2730.394	2816.503	-0.099	0.001	0	350.319
461	53		2014.411	3172.901	1978.086	278.485	0	-309.129
462	54		5619.263	11185.379	-0.127	-0.005	0	-881.15
463	55		6231.967	12058.785	-0.135	-0.005	0	-976.128
464	56		2726.323	6734.676	-0.094	-0.004	0	-434.01
465	57		7451.989	11678.426	1844.407	291.101	0	-1149.279
466	58		8064.713	12551.451	1844.266	291.568	0	-1244.43
467	59		4559.048	7229.517	1844.936	288.894	0	-701.338
468	1	N166	-5977.166	9350.219	-0.066	-0.002	0	923.533
469	2		-13372.758	19743.116	-0.16	-0.005	0	2087.183
470	3		-9655.922	17269.015	-0.108	-0.004	0	1503.438
471	4		-8621.605	13582.966	-0.134	-0.005	0	1337.594
472	5		-12399.628	13942.766	-0.076	-0.006	0	1880.93
473	6		-7588.982	12102.046	1240.702	179.739	0	1175.7
474	7		-16371.334	20586.217	-0.145	-0.007	0	2524.442
475	8		-12740.11	19208.865	929.168	137.884	0	1987.407
476	9		-10951.71	16365.427	-0.129	-0.004	0	1703.694
477	10		-14545.254	18051.621	-0.121	-0.006	0	2233.676
478	11		-10922.971	16672.962	929.47	136.666	0	1699.732
479	12		-10395.441	15585.96	-0.122	-0.004	0	1615.933
480	13		-14127.555	17469.908	-0.116	-0.006	0	2167.365
481	14		-10507.287	16090.951	929.538	136.396	0	1634.122
482	15		-9601.535	9685.604	-0.044	-0.005	0	1441.082
483	16		-3293.512	-75.57	0.124	0.002	0	461.636
484	17		-1575.132	2283.712	1236.158	174.164	0	241.782
485	18		-7466.381	10015	-0.037	-0.001	0	1143.969
486	19		-9407.747	13121.379	-0.074	-0.002	0	1451.07
487	20		-4310.407	5147.218	-0.002	0	0	653.152
488	21		-6183.972	9670.933	1290.422	205.06	0	955.767
489	22		-8445.873	12864.52	967.35	155.331	0	1309.399
490	23		-3027.97	4800.954	1291.063	202.308	0	465.923
491	31		-8359.387	13090.308	-0.092	-0.003	0	1290.247
492	32		-18939.261	27848.905	-0.229	-0.008	0	2949.671
493	33		-13018.641	23892.093	-0.147	-0.005	0	2022.701
494	34		-11370.942	17993.265	-0.188	-0.007	0	1760.396
495	35		-17405.597	18570.583	-0.095	-0.008	0	2626.216
496	36		-9723.637	15623.124	1985.493	285.653	0	1503.216
497	37		-24124.076	31520.259	-0.237	-0.01	0	3730.578
498	38		-20253.018	30050.468	990.438	146.706	0	3158.519
499	39		-21103.832	23763.656	-0.142	-0.01	0	3208.994
500	40		-13398.752	20819.675	1984.739	288.579	0	2077.883
501	41		-15082.824	22444.6	-0.18	-0.006	0	2341.353
502	42		-25425.349	29787.552	-0.197	-0.012	0	3894.57
503	43		-17692.619	26847.672	1983.841	292.227	0	2753.838
504	44		-19902.873	22081.106	-0.127	-0.009	0	3019.346
505	45		-12205.362	19135.992	1984.983	287.581	0	1890.883
506	46		-14196.515	21197.453	-0.168	-0.006	0	2202.084

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
507	47		-24528.409	28541.235	-0.186	-0.011	0	3751.871
508	48		-16801.475	25600.5	1984.029	291.446	0	2613.149
509	49		-19621.55	21686.433	-0.123	-0.009	0	2974.977
510	50		-11925.802	18741.055	1985.041	287.36	0	1847.132
511	51		-15036.313	14988.216	-0.067	-0.007	0	2254.671
512	52		-4949.563	-629.729	0.201	0.003	0	689.409
513	53		-2199.492	3144.9	1977.909	278.447	0	337.526
514	54		-9284.08	12171.471	-0.038	-0.001	0	1417.467
515	55		-9896.784	13044.096	-0.046	-0.001	0	1512.779
516	56		-6391.139	7724.375	-0.005	0	0	968.725
517	57		-7451.989	11678.426	1843.885	291.004	0	1149.279
518	58		-8064.713	12551.431	1843.743	291.471	0	1244.43
519	59		-4559.048	7229.535	1844.42	288.798	0	701.338
520	1	N191	5730.98	9095.334	0.081	0.006	0	-885.277
521	2		12707.089	19067.432	0.244	0.018	0	-1981.979
522	3		9199.195	11415.386	0.136	0.011	0	-1424.211
523	4		8164.42	11448.435	0.14	0.011	0	-1264.049
524	5		6161.369	16378.99	-0.38	-0.01	0	-1002.099
525	6		7084.267	11537.829	1241.859	179.743	0	-1096.91
526	7		11312.764	22039.763	-0.143	0.003	0	-1802.559
527	8		11980.816	18404.98	930.698	137.911	0	-1867.494
528	9		10424.388	15826.541	0.192	0.014	0	-1620.812
529	10		9591.608	19605.518	-0.182	0	0	-1529.654
530	11		10268.919	15972.343	930.757	136.686	0	-1596.866
531	12		9899.763	15078.637	0.179	0.013	0	-1538.123
532	13		9197.825	19046.838	-0.191	-0.001	0	-1467.397
533	14		9877.22	15414.023	930.77	136.415	0	-1535.122
534	15		3486.415	12240.062	-0.419	-0.013	0	-583.714
535	16		-1388.603	2123.354	-0.229	-0.008	0	170.229
536	17		1715.655	2486.431	1235.81	174.178	0	-263.404
537	18		4679.791	9077.75	0.001	0.002	0	-733.24
538	19		7125.969	12224.474	0.073	0.007	0	-1111.89
539	20		1659.369	4344.98	-0.044	-0.001	0	-265.535
540	21		5907.963	9390.041	1291.519	205.145	0	-912.861
541	22		8046.236	12457.004	968.535	155.407	0	-1246.949
542	23		2888.903	4660.341	1291.72	202.38	0	-444.465
543	31		8015.454	12733.484	0.114	0.009	0	-1236.897
544	32		17979.117	26869.895	0.36	0.027	0	-2798.467
545	33		12390.098	14624.914	0.186	0.015	0	-1914.282
546	34		10741.321	14678.841	0.193	0.015	0	-1659.598
547	35		7527.041	22566.356	-0.639	-0.019	0	-1238.115
548	36		9019.389	14823.212	1987.06	285.653	0	-1393.671
549	37		18364.494	32699.03	-0.01	0.014	0	-2903.687
550	38		19079.442	28822.65	992.249	146.75	0	-2973.27
551	39		11015.103	27555.34	-0.558	-0.013	0	-1785.067
552	40		12483.68	19808.129	1986.904	288.594	0	-1934.788
553	41		14342.267	21684.433	0.275	0.02	0	-2225.369
554	42		15089.148	33342.54	-0.464	-0.006	0	-2428.074
555	43		16529.184	25590.401	1986.716	292.261	0	-2570.784
556	44		9882.557	25938.911	-0.584	-0.015	0	-1607.114
557	45		11358.949	18193.056	1986.952	287.592	0	-1758.753
558	46		13506.224	20487.779	0.256	0.019	0	-2094.111
559	47		14243.741	32145.191	-0.483	-0.007	0	-2294.274
560	48		15689.773	24394.092	1986.756	291.476	0	-2438.457
561	49		9617.237	25559.748	-0.59	-0.015	0	-1565.476

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
562	50		11095.439	17814.201	1986.964	287.37	0	-1717.559
563	51		5265.248	19087.985	-0.675	-0.022	0	-885.18
564	52		-2529.306	2901.301	-0.371	-0.013	0	319.483
565	53		2436.815	3482.507	1977.317	278.468	0	-374.02
566	54		5360.85	10887.911	-0.017	0.002	0	-841.157
567	55		5939.26	11725.932	-0.003	0.003	0	-930.788
568	56		2594.712	6568.262	-0.06	-0.001	0	-413.728
569	57		7116.306	11336.193	1845.169	291.117	0	-1097.283
570	58		7694.496	12173.689	1845.13	291.587	0	-1187.033
571	59		4351.262	7019.023	1845.329	288.901	0	-669.289
572	1	N204	-5730.98	9095.334	0.081	0.006	0	885.277
573	2		-12707.089	19067.198	0.244	0.018	0	1981.979
574	3		-9205.281	16746.634	0.19	0.014	0	1432.543
575	4		-8165.643	13107.709	0.147	0.012	0	1266.27
576	5		-11801.774	13429.057	0.32	0.017	0	1787.258
577	6		-7084.275	11537.827	1242.005	179.767	0	1096.911
578	7		-15543.055	19821.84	0.381	0.023	0	2393.275
579	8		-11980.825	18404.801	930.796	137.928	0	1867.495
580	9		-10424.388	15826.383	0.192	0.014	0	1620.811
581	10		-13821.909	17389.836	0.342	0.02	0	2119.601
582	11		-10268.927	15972.222	930.852	136.702	0	1596.867
583	12		-9899.763	15078.497	0.179	0.013	0	1538.123
584	13		-13428.128	16831.666	0.333	0.019	0	2057.167
585	14		-9877.228	15413.915	930.864	136.431	0	1535.123
586	15		-9126.83	9294.629	0.28	0.013	0	1367.183
587	16		-3238.453	-36.673	0.373	0.015	0	453.22
588	17		-1715.654	2486.441	1235.661	174.154	0	263.403
589	18		-7178.07	9736.851	0.166	0.011	0	1099.1
590	19		-8999.675	12716.567	0.197	0.013	0	1387.246
591	20		-4157.654	5008.131	0.121	0.007	0	629.556
592	21		-5912.2	9392.277	1291.16	205.076	0	913.517
593	22		-8049.406	12458.611	968.269	155.355	0	1247.442
594	23		-2893.14	4662.583	1291.37	202.313	0	445.117
595	31		-8015.454	12733.484	0.114	0.009	0	1236.897
596	32		-17979.117	26869.522	0.36	0.027	0	2798.466
597	33		-12399.864	23158.213	0.273	0.019	0	1925.704
598	34		-10743.287	17334.802	0.204	0.016	0	1662.564
599	35		-16551.697	17850.389	0.48	0.024	0	2492.894
600	36		-9019.4	14823.21	1987.287	285.69	0	1393.673
601	37		-22876.816	30334.151	0.549	0.035	0	3533.335
602	38		-19079.452	28822.273	992.331	146.764	0	2973.271
603	39		-20039.733	22833.439	0.561	0.03	0	3041.969
604	40		-12483.694	19808.008	1987.141	288.633	0	1934.79
605	41		-14342.267	21684.18	0.275	0.02	0	2225.368
606	42		-24113.749	28613.651	0.654	0.037	0	3687.425
607	43		-16529.202	25590.142	1986.964	292.302	0	2570.786
608	44		-18907.196	21218.942	0.535	0.028	0	2863.329
609	45		-11358.962	18192.973	1987.185	287.63	0	1758.754
610	46		-13506.224	20487.555	0.256	0.019	0	2094.111
611	47		-23268.348	27417.756	0.635	0.035	0	3553.119
612	48		-15689.79	24393.861	1987.001	291.516	0	2438.459
613	49		-18641.877	20840.231	0.529	0.028	0	2821.53
614	50		-11095.452	17814.128	1987.196	287.408	0	1717.561
615	51		-14289.915	14375.814	0.444	0.021	0	2138.53
616	52		-4873.983	-554.335	0.593	0.023	0	677.867

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
617	53		-2436.813	3482.522	1977.08	278.43	0	374.019
618	54		-8929.823	11832.283	0.22	0.014	0	1362.539
619	55		-9508.232	12669.594	0.233	0.015	0	1452.48
620	56		-6163.691	7515.949	0.176	0.01	0	933.609
621	57		-7122.355	11339.383	1844.667	291.02	0	1098.218
622	58		-7700.544	12176.861	1844.627	291.49	0	1187.969
623	59		-4357.312	7022.226	1844.835	288.805	0	670.221
624	1	N229	5347.884	8077.773	0.766	0.044	0	-825.291
625	2		11768.431	16449.135	2.069	0.118	0	-1830.895
626	3		8546.612	10291.466	1.312	0.075	0	-1321.742
627	4		7888.986	10404.271	1.423	0.081	0	-1220.173
628	5		5985.635	13889.23	0.16	0.02	0	-972.384
629	6		7047.169	10181.293	1245.414	179.835	0	-1089.736
630	7		10665.19	18717.876	1.288	0.082	0	-1695.719
631	8		11444.773	15935.235	936.316	138.075	0	-1779.652
632	9		9668.626	13728.399	1.646	0.094	0	-1500.244
633	10		9082.202	16674.016	0.971	0.064	0	-1445.999
634	11		9868.078	13892.066	935.409	136.821	0	-1531.436
635	12		9185.879	13100.543	1.548	0.088	0	-1424.471
636	13		8719.938	16204.939	0.898	0.06	0	-1388.99
637	14		9507.244	13423.152	935.203	136.543	0	-1474.767
638	15		3495.666	10237.002	-0.21	-0.001	0	-583.997
639	16		-1383.226	1738.806	-0.603	-0.028	0	169.345
640	17		1874.509	2354.249	1235.939	174.177	0	-287.756
641	18		4423.526	8040.003	0.601	0.035	0	-692.961
642	19		6665.116	10687.315	1.053	0.061	0	-1038.938
643	20		1609.524	3859.529	0.181	0.011	0	-257.747
644	21		5636.939	8266.605	1294.732	205.222	0	-870.041
645	22		7576.773	10857.278	972.413	155.513	0	-1172.379
646	23		2820.071	4086.183	1293.158	202.41	0	-433.636
647	31		7480.125	11308.866	1.072	0.061	0	-1153.3
648	32		16638.752	23087.361	3.006	0.171	0	-2583.892
649	33		11504.11	13234.012	1.795	0.103	0	-1775.907
650	34		10456.006	13415.263	1.97	0.113	0	-1614.286
651	35		7403.822	18989.408	-0.048	0.015	0	-1216.316
652	36		9113.509	13058.136	1991.575	285.767	0	-1406.717
653	37		17184.403	27739.167	2.52	0.153	0	-2711.111
654	38		18017.625	24771.424	999.353	146.982	0	-2800.886
655	39		10614.735	23178.29	0.604	0.052	0	-1718.106
656	40		12307.739	17244.946	1993.769	288.775	0	-1904.566
657	41		13292.318	18734.223	2.329	0.133	0	-2058.777
658	42		14363.062	28037.517	1.359	0.096	0	-2307.079
659	43		16036.383	22101.882	1996.367	292.521	0	-2488.861
660	44		9572.35	21821.081	0.392	0.04	0	-1554.928
661	45		11270.765	15888.38	1993.047	287.75	0	-1742.671
662	46		12522.824	17729.662	2.172	0.124	0	-1938.406
663	47		13585.428	27032.149	1.202	0.087	0	-2184.607
664	48		15262.848	21096.975	1995.824	291.719	0	-2367.365
665	49		9328.127	21502.725	0.343	0.038	0	-1516.735
666	50		11027.816	15570.183	1992.881	287.523	0	-1704.779
667	51		5300.742	15936.096	-0.375	-0.004	0	-888.957
668	52		-2500.646	2339.05	-1.005	-0.047	0	314.984
669	53		2710.852	3323.913	1977.379	278.462	0	-416.042
670	54		5084.176	9638.116	0.684	0.041	0	-797.905
671	55		5617.031	10341.587	0.794	0.047	0	-880.356

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
672	56		2508.852	5835.738	0.288	0.018	0	-400.348
673	57		6815.59	9961.834	1848.632	291.201	0	-1050.047
674	58		7348.946	10665.299	1848.995	291.682	0	-1132.697
675	59		4237.982	6159.526	1847.279	288.942	0	-651.529
676	1	N242	-5347.884	8077.773	0.766	0.044	0	825.291
677	2		-11768.431	16448.921	2.069	0.118	0	1830.895
678	3		-8540.531	14234.588	1.524	0.087	0	1325.853
679	4		-7887.765	11680.892	1.481	0.085	0	1221.49
680	5		-11123.732	12115.008	1.862	0.101	0	1679.952
681	6		-7047.167	10181.292	1245.561	179.859	0	1089.735
682	7		-14518.77	17381.15	2.563	0.142	0	2228.099
683	8		-11444.771	15935.074	936.414	138.092	0	1779.652
684	9		-9668.626	13728.255	1.646	0.094	0	1500.244
685	10		-12935.775	15339.753	2.246	0.124	0	1977.678
686	11		-9868.076	13891.957	935.505	136.836	0	1531.435
687	12		-9185.879	13100.415	1.548	0.088	0	1424.471
688	13		-12573.509	14871.238	2.174	0.12	0	1920.508
689	14		-9507.243	13423.054	935.298	136.559	0	1474.767
690	15		-8633.756	8467.775	1.492	0.079	0	1289.963
691	16		-2897.826	492.046	0.893	0.042	0	401.247
692	17		-1874.512	2354.261	1235.79	174.153	0	287.756
693	18		-6641.554	8669.687	0.983	0.055	0	1015.132
694	19		-8328.64	11157.65	1.34	0.076	0	1281.296
695	20		-3827.547	4492.75	0.563	0.031	0	578.467
696	21		-6689.782	8475.366	1293.878	205.143	0	1032.751
697	22		-8366.413	11013.111	971.877	155.456	0	1294.758
698	23		-3872.914	4296.283	1292.322	202.333	0	595.649
699	31		-7480.125	11308.866	1.072	0.061	0	1153.3
700	32		-16638.752	23087.019	3.006	0.171	0	2583.891
701	33		-11494.351	19545.285	2.134	0.121	0	1781.173
702	34		-10454.044	15458.691	2.064	0.118	0	1615.972
703	35		-15624.772	16155.009	2.675	0.144	0	2347.015
704	36		-9113.505	13058.134	1991.804	285.804	0	1406.717
705	37		-21294.877	26314.318	3.881	0.217	0	3278.562
706	38		-18017.623	24771.081	999.435	146.996	0	2800.885
707	39		-18835.705	20337.329	3.325	0.181	0	2850.726
708	40		-12307.736	17244.837	1994.006	288.813	0	1904.565
709	41		-13292.317	18733.992	2.329	0.133	0	2058.776
710	42		-22584.055	25188.852	4.078	0.224	0	3441.923
711	43		-16036.379	22101.649	1996.616	292.561	0	2488.86
712	44		-17793.313	18982.255	3.114	0.169	0	2686.926
713	45		-11270.762	15888.306	1993.281	287.788	0	1742.67
714	46		-12522.824	17729.456	2.172	0.124	0	1938.405
715	47		-21806.416	24185.085	3.923	0.215	0	3318.991
716	48		-15262.844	21096.768	1996.07	291.759	0	2367.364
717	49		-17549.089	18664.398	3.065	0.166	0	2648.587
718	50		-11027.812	15570.117	1993.114	287.561	0	1704.778
719	51		-13521.684	13105.914	2.349	0.125	0	2018.31
720	52		-4349.035	344.697	1.389	0.065	0	597.801
721	53		-2710.857	3323.931	1977.142	278.424	0	416.042
722	54		-8252.783	10540.111	1.23	0.069	0	1257.139
723	55		-8785.639	11242.969	1.339	0.075	0	1339.825
724	56		-5677.455	6740.627	0.833	0.046	0	858.399
725	57		-8319.654	10261.01	1847.514	291.092	0	1282.002
726	58		-8853.012	10964.232	1847.874	291.573	0	1364.765

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
727	59		-5742.046	6459.8	1846.174	288.834	0	882.916
728	1	Totals:	0	124793.053	0			
729	2		0	260522.912	0			
730	3		0	192653.024	0			
731	4		0	169663.751	0			
732	5		-38966.014	204134.37	0			
733	6		445.048	177430.668	17348.05			
734	7		-29224.51	286096.435	0			
735	8		333.786	266068.658	13011.037			
736	9		0	216410.708	0			
737	10		-29224.51	252978.349	0			
738	11		333.786	232950.573	13011.037			
739	12		0	206230.969	0			
740	13		-29224.51	245377.477	0			
741	14		333.786	225349.701	13011.037			
742	15		-38966.014	147430.655	0			
743	16		-32056.256	14644.274	0			
744	17		-496.698	12853.459	17348.05			
745	18		-17128.63	129073.455	0			
746	19		-12846.472	170758.26	0			
747	20		-17128.63	64216.127	0			
748	21		-1057.08	129073.455	18083.383			
749	22		-792.81	170758.26	13562.538			
750	23		-1057.08	64216.127	18083.383			
751	31		0	174710.275	0			
752	32		0	366919.438	0			
753	33		0	258327.617	0			
754	34		0	221544.78	0			
755	35		-62345.622	276697.77	0			
756	36		712.077	233971.847	27756.879			
757	37		-31172.811	430392.491	0			
758	38		356.038	409029.53	13878.44			
759	39		-62345.622	344562.7	0			
760	40		712.077	301836.776	27756.879			
761	41		0	296339.912	0			
762	42		-62345.622	423286.018	0			
763	43		712.077	380560.094	27756.879			
764	44		-62345.622	322574.462	0			
765	45		712.077	279848.539	27756.879			
766	46		0	280052.329	0			
767	47		-62345.622	406998.435	0			
768	48		712.077	364272.511	27756.879			
769	49		-62345.622	317416.728	0			
770	50		712.077	274690.804	27756.879			
771	51		-62345.622	229080.115	0			
772	52		-51290.01	16621.904	0			
773	53		-794.717	13756.601	27756.879			
774	54		-24469.471	155866.524	0			
775	55		-24469.471	167267.832	0			
776	56		-24469.471	96697.798	0			
777	57		-1510.114	155866.524	25833.405			
778	58		-1510.114	167267.832	25833.405			
779	59		-1510.114	96697.798	25833.405			
780	1	COG (ft):	X: 0	Y: 5.77	Z: -46			
781	2		X: 0	Y: 6.544	Z: -46			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
782	3		X: 4.901	Y: 6.293	Z: -46			
783	4		X: 1.753	Y: 6.495	Z: -46			
784	5		X: -3.772	Y: 6.394	Z: -46			
785	6		X: 0.041	Y: 6.349	Z: -42.724			
786	7		X: -2.018	Y: 6.633	Z: -46			
787	8		X: 0.021	Y: 6.628	Z: -44.362			
788	9		X: 0	Y: 6.399	Z: -46			
789	10		X: -2.283	Y: 6.551	Z: -46			
790	11		X: 0.024	Y: 6.539	Z: -44.129			
791	12		X: 0	Y: 6.357	Z: -46			
792	13		X: -2.353	Y: 6.529	Z: -46			
793	14		X: 0.024	Y: 6.514	Z: -44.066			
794	15		X: -5.222	Y: 6.566	Z: -46			
795	16		X: -39.614	Y: -0.762	Z: -46			
796	17		X: -0.637	Y: -3.473	Z: -94.069			
797	18		X: 0	Y: 5.77	Z: -46			
798	19		X: 0	Y: 6.142	Z: -46			
799	20		X: 0	Y: 5.622	Z: -46			
800	21		X: 0	Y: 5.77	Z: -46			
801	22		X: 0	Y: 6.142	Z: -46			
802	23		X: 0	Y: 5.622	Z: -46			
803	31		X: 0	Y: 5.77	Z: -46			
804	32		X: 0	Y: 6.649	Z: -46			
805	33		X: 5.848	Y: 6.394	Z: -46			
806	34		X: 2.147	Y: 6.658	Z: -46			
807	35		X: -4.452	Y: 6.507	Z: -46			
808	36		X: 0.05	Y: 6.472	Z: -42.025			
809	37		X: -1.431	Y: 6.757	Z: -46			
810	38		X: 0.014	Y: 6.76	Z: -44.863			
811	39		X: -3.575	Y: 6.655	Z: -46			
812	40		X: 0.039	Y: 6.648	Z: -42.919			
813	41		X: 0	Y: 6.505	Z: -46			
814	42		X: -2.91	Y: 6.766	Z: -46			
815	43		X: 0.031	Y: 6.774	Z: -43.556			
816	44		X: -3.819	Y: 6.614	Z: -46			
817	45		X: 0.042	Y: 6.6	Z: -42.677			
818	46		X: 0	Y: 6.461	Z: -46			
819	47		X: -3.027	Y: 6.747	Z: -46			
820	48		X: 0.032	Y: 6.752	Z: -43.447			
821	49		X: -3.881	Y: 6.603	Z: -46			
822	50		X: 0.043	Y: 6.588	Z: -42.614			
823	51		X: -5.378	Y: 6.594	Z: -46			
824	52		X: -55.841	Y: -3.376	Z: -46			
825	53		X: -0.952	Y: -7.974	Z: -117.862			
826	54		X: 0	Y: 5.77	Z: -46			
827	55		X: 0	Y: 5.871	Z: -46			
828	56		X: 0	Y: 5.624	Z: -46			
829	57		X: 0	Y: 5.77	Z: -46			
830	58		X: 0	Y: 5.871	Z: -46			
831	59		X: 0	Y: 5.624	Z: -46			

Node Reactions - Overstrength or Capacity Limit

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
0	24*	N1	4145.99	7961.106	-0.551	-0.032	0	-652.674
1	25*		6456.74	10628.178	-1.015	-0.058	0	-1008.586

Node Reactions - Overstrength or Capacity Limit (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
2	26*		1332.093	3780.303	-0.132	-0.008	0	-217.657
3	27*		4995.711	8332.409	1616.53	256.426	0	-771.119
4	28*		7092.319	10904.711	1212.783	194.256	0	-1097.469
5	29*		2184.814	4155.118	1615.494	252.97	0	-335.976
6	60*		4687.73	9525.143	-0.613	-0.036	0	-740.478
7	61*		5220.563	10228.651	-0.723	-0.042	0	-822.896
8	62*		2112.529	5722.516	-0.218	-0.014	0	-343.087
9	63*		5903.713	10058.033	2308.504	363.878	0	-909.611
10	64*		6436.032	10760.945	2308.712	364.466	0	-992.047
11	65*		3330.899	6258.238	2307.694	361.112	0	-512.109
12	24*	N14	-6918.462	8748.177	-1.03	-0.057	0	1055.379
13	25*		-8536.098	11216.14	-1.374	-0.077	0	1311.525
14	26*		-4104.558	4571.79	-0.611	-0.033	0	618.547
15	27*		-4995.696	8332.4	1616.052	256.341	0	771.117
16	28*		-7092.307	10904.681	1212.422	194.19	0	1097.467
17	29*		-2184.799	4155.114	1615.027	252.886	0	335.974
18	60*		-8648.4	10652.593	-1.297	-0.072	0	1314.506
19	61*		-9181.234	11355.349	-1.406	-0.078	0	1397.219
20	62*		-6073.193	6853.569	-0.901	-0.049	0	915.638
21	63*		-5903.692	10058.021	2307.83	363.757	0	909.608
22	64*		-6436.011	10760.926	2308.037	364.344	0	992.043
23	65*		-3330.878	6258.231	2307.029	360.992	0	512.105
24	24*	N39	4367.458	8995.418	0.02	-0.001	0	-687.535
25	25*		6891.696	12163.036	-0.057	-0.005	0	-1077.471
26	26*		1346.976	4262.11	0.066	0.003	0	-220.047
27	27*		5955.568	9429.592	1614.134	256.414	0	-920.251
28	28*		8083.839	12488.107	1210.323	194.252	0	-1252.814
29	29*		2933.346	4697.503	1614.494	252.973	0	-451.318
30	60*		4914.618	10769.928	0.047	0	0	-776.007
31	61*		5493.049	11608.044	0.033	-0.001	0	-865.604
32	62*		2148.459	6449.838	0.091	0.003	0	-348.764
33	63*		7182.066	11391.002	2306.144	363.877	0	-1107.459
34	64*		7760.799	12228.91	2306.063	364.462	0	-1197.302
35	65*		4414.522	7071.94	2306.448	361.121	0	-679.041
36	24*	N52	-7490.319	9819.298	-0.188	-0.011	0	1144.863
37	25*		-9233.837	12778.179	-0.213	-0.013	0	1421.666
38	26*		-4469.846	5091.054	-0.142	-0.008	0	675.077
39	27*		-5955.582	9429.6	1613.656	256.329	0	920.253
40	28*		-8083.851	12488.036	1209.964	194.186	0	1252.816
41	29*		-2933.361	4697.523	1614.027	252.889	0	451.321
42	60*		-9375.854	11950.405	-0.25	-0.015	0	1427.737
43	61*		-9954.283	12787.636	-0.264	-0.016	0	1517.721
44	62*		-6609.702	7634.453	-0.207	-0.012	0	998.618
45	63*		-7182.087	11391.014	2305.471	363.756	0	1107.462
46	64*		-7760.82	12228.901	2305.389	364.341	0	1197.305
47	65*		-4414.543	7071.969	2305.783	361.001	0	679.044
48	24*	N77	4580.226	9240.849	0.107	0.005	0	-720.569
49	25*		7243.041	12543.518	0.126	0.006	0	-1132.321
50	26*		1424.225	4368.11	0.072	0.003	0	-231.952
51	27*		6183.968	9670.931	1613.67	256.416	0	-955.766
52	28*		8445.872	12864.596	1209.768	194.254	0	-1309.399
53	29*		3027.971	4800.941	1614.38	252.978	0	-465.923
54	60*		5160.969	11062.117	0.138	0.006	0	-814.123
55	61*		5773.688	11935.618	0.146	0.007	0	-909.064
56	62*		2268.043	6610.966	0.106	0.005	0	-367.187

Node Reactions - Overstrength or Capacity Limit (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
57	63*		7451.986	11678.424	2305.726	363.883	0	-1149.279
58	64*		8064.709	12551.45	2305.569	364.468	0	-1244.429
59	65*		4559.048	7229.516	2306.313	361.129	0	-701.338
60	24*	N90	-7786.941	10101.015	0.028	0.001	0	1191.037
61	25*		-9648.077	13185.598	0.066	0.003	0	1486.466
62	26*		-4630.939	5233.784	-0.007	-0.001	0	699.967
63	27*		-6183.969	9670.931	1613.193	256.33	0	955.766
64	28*		-8445.872	12864.517	1209.409	194.188	0	1309.399
65	29*		-3027.971	4800.953	1613.913	252.894	0	465.923
66	60*		-9741.99	12294.733	0.024	0.001	0	1484.52
67	61*		-10354.708	13167.262	0.032	0.001	0	1579.877
68	62*		-6849.063	7848.085	-0.008	-0.001	0	1035.581
69	63*		-7451.986	11678.425	2305.054	363.761	0	1149.279
70	64*		-8064.709	12551.429	2304.895	364.346	0	1244.429
71	65*		-4559.048	7229.534	2305.648	361.009	0	701.338
72	24*	N115	4580.118	9240.647	0	0	0	-720.553
73	25*		7242.861	12543.214	-0.001	0	0	-1132.293
74	26*		1424.19	4368.02	0	0	0	-231.946
75	27*		6183.825	9670.719	1613.639	256.416	0	-955.744
76	28*		8445.667	12864.285	1209.704	194.252	0	-1309.367
77	29*		3027.9	4800.839	1614.377	252.978	0	-465.913
78	60*		5160.844	11061.875	0	0	0	-814.104
79	61*		5773.544	11935.349	0	0	0	-909.041
80	62*		2267.987	6610.828	0	0	0	-367.178
81	63*		7451.809	11678.167	2305.692	363.882	0	-1149.251
82	64*		8064.515	12551.165	2305.528	364.467	0	-1244.399
83	65*		4558.942	7229.363	2306.305	361.129	0	-701.322
84	24*	N128	-7786.759	10100.79	-0.001	0	0	1191.008
85	25*		-9647.842	13185.276	-0.001	0	0	1486.429
86	26*		-4630.832	5233.671	-0.001	0	0	699.95
87	27*		-6183.825	9670.719	1613.162	256.329	0	955.744
88	28*		-8445.667	12864.206	1209.347	194.186	0	1309.367
89	29*		-3027.9	4800.851	1613.911	252.894	0	465.913
90	60*		-9741.76	12294.459	-0.001	0	0	1484.484
91	61*		-10354.46	13166.959	-0.001	0	0	1579.839
92	62*		-6848.904	7847.915	-0.001	0	0	1035.557
93	63*		-7451.809	11678.167	2305.022	363.761	0	1149.251
94	64*		-8064.515	12551.143	2304.856	364.345	0	1244.399
95	65*		-4558.942	7229.381	2305.643	361.009	0	701.322
96	24*	N153	4580.226	9240.849	-0.107	-0.004	0	-720.569
97	25*		7243.041	12543.518	-0.126	-0.005	0	-1132.321
98	26*		1424.225	4368.11	-0.072	-0.003	0	-231.952
99	27*		6183.972	9670.932	1613.512	256.41	0	-955.767
100	28*		8445.877	12864.598	1209.559	194.246	0	-1309.4
101	29*		3027.972	4800.942	1614.293	252.974	0	-465.924
102	60*		5160.969	11062.117	-0.138	-0.006	0	-814.123
103	61*		5773.688	11935.618	-0.146	-0.006	0	-909.064
104	62*		2268.043	6610.966	-0.105	-0.004	0	-367.187
105	63*		7451.989	11678.426	2305.532	363.875	0	-1149.279
106	64*		8064.713	12551.451	2305.359	364.459	0	-1244.43
107	65*		4559.05	7229.517	2306.184	361.124	0	-701.339
108	24*	N166	-7786.941	10101.015	-0.029	-0.001	0	1191.037
109	25*		-9648.077	13185.598	-0.068	-0.002	0	1486.466
110	26*		-4630.939	5233.784	0.006	0.001	0	699.967
111	27*		-6183.972	9670.933	1613.041	256.323	0	955.767

Node Reactions - Overstrength or Capacity Limit (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
112	28*		-8445.877	12864.52	1209.207	194.18	0	1309.399
113	29*		-3027.972	4800.954	1613.834	252.89	0	465.924
114	60*		-9741.99	12294.733	-0.027	0	0	1484.52
115	61*		-10354.708	13167.262	-0.035	-0.001	0	1579.877
116	62*		-6849.063	7848.085	0.006	0.001	0	1035.581
117	63*		-7451.989	11678.427	2304.872	363.753	0	1149.279
118	64*		-8064.714	12551.431	2304.697	364.337	0	1244.43
119	65*		-4559.05	7229.535	2305.533	361.004	0	701.339
120	24*	N191	4367.399	8995.364	-0.02	0.001	0	-687.526
121	25*		6891.603	12162.95	0.057	0.006	0	-1077.457
122	26*		1346.953	4262.087	-0.065	-0.002	0	-220.044
123	27*		5902.646	9385.719	1614.393	256.428	0	-912.035
124	28*		8042.036	12453.599	1210.644	194.272	0	-1246.294
125	29*		2883.928	4656.278	1614.654	252.979	0	-443.698
126	60*		4914.549	10769.864	-0.046	0.001	0	-775.996
127	61*		5492.971	11607.971	-0.032	0.002	0	-865.592
128	62*		2148.423	6449.803	-0.09	-0.003	0	-348.758
129	63*		7108.96	11330.208	2306.454	363.893	0	-1096.146
130	64*		7687.091	12167.659	2306.402	364.48	0	-1185.887
131	65*		4344.186	7013.242	2306.664	361.13	0	-668.198
132	24*	N204	-7490.247	9819.236	0.187	0.012	0	1144.851
133	25*		-9233.735	12778.092	0.212	0.014	0	1421.65
134	26*		-4469.808	5091.024	0.142	0.008	0	675.071
135	27*		-5907.947	9388.514	1613.933	256.341	0	912.857
136	28*		-8046.002	12455.627	1210.303	194.206	0	1246.911
137	29*		-2889.229	4659.077	1614.208	252.895	0	444.514
138	60*		-9375.766	11950.33	0.249	0.015	0	1427.724
139	61*		-9954.186	12787.554	0.263	0.016	0	1517.706
140	62*		-6609.645	7634.407	0.205	0.012	0	998.61
141	63*		-7116.528	11334.196	2305.814	363.771	0	1097.316
142	64*		-7694.658	12171.629	2305.761	364.358	0	1187.057
143	65*		-4351.754	7017.241	2306.034	361.011	0	669.364
144	24*	N229	4146.187	7961.294	0.554	0.033	0	-652.705
145	25*		6457.06	10628.512	1.018	0.059	0	-1008.635
146	26*		1332.168	3780.378	0.134	0.009	0	-217.668
147	27*		5662.935	8244.577	1618.284	256.516	0	-874.035
148	28*		7596.71	10840.999	1215.258	194.391	0	-1175.446
149	29*		2845.362	4063.729	1616.422	253.013	0	-437.516
150	60*		4687.96	9525.366	0.616	0.037	0	-740.513
151	61*		5220.823	10228.913	0.726	0.043	0	-822.937
152	62*		2112.645	5722.629	0.22	0.014	0	-343.105
153	63*		6852.24	9930.053	2310.637	363.987	0	-1055.673
154	64*		7385.72	10633.592	2311.063	364.587	0	-1138.344
155	65*		4274.071	6127.407	2309.045	361.176	0	-657.065
156	24*	N242	-6918.721	8748.397	1.031	0.058	0	1055.419
157	25*		-8536.464	11216.453	1.375	0.077	0	1311.582
158	26*		-4104.696	4571.902	0.611	0.034	0	618.568
159	27*		-6978.984	8505.48	1617.031	256.413	0	1077.429
160	28*		-8583.756	11035.778	1214.479	194.316	0	1328.423
161	29*		-4161.411	4326.304	1615.195	252.912	0	640.038
162	60*		-8648.719	10652.861	1.298	0.072	0	1314.555
163	61*		-9181.584	11355.644	1.408	0.078	0	1397.273
164	62*		-6073.398	6853.737	0.902	0.05	0	915.67
165	63*		-8732.315	10303.962	2309.006	363.845	0	1345.625
166	64*		-9265.795	11007.201	2309.428	364.444	0	1428.436

Node Reactions - Overstrength or Capacity Limit (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
167	65*		-6154.144	6502.685	2307.432	361.036	0	946.307
168	24*	Totals:	-21410.787	129073.455	0			
169	25*		-16058.09	170758.26	0			
170	26*		-21410.787	64216.127	0			
171	27*		-1321.35	129073.455	22604.229			
172	28*		-991.012	170758.26	16953.172			
173	29*		-1321.35	64216.127	22604.229			
174	60*		-30586.839	155866.524	0			
175	61*		-30586.839	167267.832	0			
176	62*		-30586.839	96697.798	0			
177	63*		-1887.642	155866.524	32291.756			
178	64*		-1887.642	167267.832	32291.756			
179	65*		-1887.642	96697.798	32291.756			
180	24*	COG (ft):	X: 0	Y: 5.77	Z: -46			
181	25*		X: 0	Y: 6.142	Z: -46			
182	26*		X: 0	Y: 5.622	Z: -46			
183	27*		X: 0	Y: 5.77	Z: -46			
184	28*		X: 0	Y: 6.142	Z: -46			
185	29*		X: 0	Y: 5.622	Z: -46			
186	60*		X: 0	Y: 5.77	Z: -46			
187	61*		X: 0	Y: 5.871	Z: -46			
188	62*		X: 0	Y: 5.624	Z: -46			
189	63*		X: 0	Y: 5.77	Z: -46			
190	64*		X: 0	Y: 5.871	Z: -46			
191	65*		X: 0	Y: 5.624	Z: -46			

Envelope Member Section Forces

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
0	M1	1	max	18750.465	7	1304.413	16	1301.157	21	0	23	0.116	2	157.146	16
1			min	-1151.002	17	-12765.099	8	-2.072	2	0	1	-205.133	21	-1973.694	8
2		2	max	18262.165	7	1013.099	17	1248.071	21	0	23	0.012	16	77.611	17
3			min	-1443.982	17	-12942.594	8	-2.066	2	0	1	-107.679	21	-991.506	8
4		3	max	17773.864	7	1013.099	17	1181.485	21	0	23	0.062	16	0	23
5			min	-1736.963	17	-12942.594	8	-2.066	2	0	1	-14.617	21	0	1
6	M2	1	max	18515.504	8	14568.067	7	1300.774	21	0	23	0.148	7	2218.626	7
7			min	-1150.701	17	-1013.819	17	-2.608	7	0	1	-205.064	21	-155.197	17
8		2	max	18027.204	8	14519.573	7	1247.683	21	0	23	-0.012	20	1107.859	7
9			min	-1443.682	17	-1012.468	17	-2.599	7	0	1	-107.64	21	-77.563	17
10		3	max	17538.903	8	14403.225	7	1181.098	21	0	23	-0.055	20	0	23
11			min	-1736.662	17	-1012.468	17	-2.599	7	0	1	-14.607	21	0	1
12	M3	1	max	22040.058	7	1389.266	16	1300.49	21	0	23	0.016	2	170.182	16
13			min	-1192.377	17	-13805.232	8	-0.246	2	0	1	-205.132	21	-2137.29	8
14		2	max	21551.757	7	1078.741	16	1249.394	21	0	23	0.011	15	76.698	16
15			min	-1485.357	17	-14024.733	8	-0.246	2	0	1	-107.681	21	-1074.407	8
16		3	max	21063.457	7	923.609	16	1182.809	21	0	23	0.047	15	0	23
17			min	-1778.337	17	-14024.733	8	-0.246	2	0	1	-14.518	21	0	1
18	M4	1	max	21015.991	8	15678.37	7	1300.108	21	0	23	0.029	7	2393.268	7
19			min	-1213.618	17	-368.921	17	-0.428	16	0	1	-205.063	21	-56.473	17
20		2	max	20527.69	8	15674.81	7	1249.007	21	0	23	-0.001	1	1196.359	7
21			min	-1506.598	17	-368.411	17	-0.428	16	0	1	-107.642	21	-28.223	17
22		3	max	20039.39	8	15558.462	7	1182.421	21	0	23	-0.007	1	0	23
23			min	-1799.579	17	-368.411	17	-0.428	16	0	1	-14.508	21	0	1
24	M5	1	max	22806.198	7	1507.512	16	1300.384	21	0	23	-0.003	1	188.31	16
25			min	42.032	17	-13778.216	8	0.064	20	0	1	-205.135	21	-2132.457	8
26		2	max	22317.897	7	1197.092	16	1249.738	21	0	23	0.007	7	85.765	16

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
27			min	-250.948	17	-13990.829	8	0.064	20	0	1	-107.681	21	-1071.809	8
28		3	max	21829.597	7	1041.961	16	1183.153	21	0	23	0.035	7	0	23
29			min	-543.928	17	-13990.829	8	0.064	20	0	1	-14.492	21	0	1
30	M6	1	max	20586.217	7	16519.683	7	1300.002	21	0	23	0.013	16	2524.442	7
31			min	-75.57	16	216.587	17	-0.181	16	0	1	-205.066	21	33.175	17
32		2	max	20097.916	7	16538.673	7	1249.35	21	0	23	0.006	7	1262.538	7
33			min	-368.55	16	216.496	17	-0.181	16	0	1	-107.642	21	16.585	17
34		3	max	19609.616	7	16422.325	7	1182.765	21	0	23	0.017	2	0	23
35			min	-661.531	16	216.496	17	-0.181	16	0	1	-14.482	21	0	1
36	M7	1	max	22805.592	7	1507.455	16	1300.346	21	0	23	0	20	188.301	16
37			min	1623.573	17	-13490.138	2	-0.001	2	0	1	-205.134	21	-2087.132	2
38		2	max	22317.291	7	1197.034	16	1249.699	21	0	23	0	20	85.761	16
39			min	1330.593	17	-13690.971	2	-0.001	2	0	1	-107.683	21	-1048.838	2
40		3	max	21828.991	7	1041.903	16	1183.114	21	0	23	0	20	0	23
41			min	1037.612	17	-13690.971	2	-0.001	2	0	1	-14.497	21	0	1
42	M8	1	max	20585.667	7	16519.274	7	1299.965	21	0	23	0.005	16	2524.378	7
43			min	-75.507	16	907.879	17	-0.031	5	0	1	-205.065	21	139.177	17
44		2	max	20097.367	7	16538.251	7	1249.313	21	0	23	0.003	16	1262.506	7
45			min	-368.487	16	908.625	17	-0.031	5	0	1	-107.644	21	69.608	17
46		3	max	19609.066	7	16421.903	7	1182.728	21	0	23	0.001	16	0	23
47			min	-661.467	16	908.625	17	-0.031	5	0	1	-14.487	21	0	1
48	M9	1	max	22806.198	7	1507.512	16	1300.231	21	0	23	0.009	7	188.31	16
49			min	2078.614	16	-13490.468	2	-0.315	7	0	1	-205.129	21	-2087.184	2
50		2	max	22317.897	7	1197.092	16	1249.585	21	0	23	-0.002	20	85.765	16
51			min	1785.633	16	-13691.312	2	-0.311	7	0	1	-107.687	21	-1048.864	2
52		3	max	21829.597	7	1041.961	16	1183	21	0	23	-0.007	20	0	23
53			min	1492.653	16	-13691.312	2	-0.311	7	0	1	-14.509	21	0	1
54	M10	1	max	20586.217	7	16519.683	7	1299.857	21	0	23	0.007	7	2524.442	7
55			min	-75.57	16	1576.652	17	-0.16	2	0	1	-205.06	21	241.782	17
56		2	max	20097.916	7	16538.673	7	1249.205	21	0	23	0.007	16	1262.538	7
57			min	-368.55	16	1578.777	17	-0.158	2	0	1	-107.647	21	120.947	17
58		3	max	19609.616	7	16422.325	7	1182.62	21	0	23	0.017	16	0	23
59			min	-661.531	16	1578.777	17	-0.158	2	0	1	-14.498	21	0	1
60	M11	1	max	22039.763	7	1389.572	16	1300.678	21	0	23	0.013	15	170.229	16
61			min	2123.354	16	-12815.004	2	-0.42	15	0	1	-205.145	21	-1981.979	2
62		2	max	21551.462	7	1079.047	16	1249.518	21	0	23	0.001	2	76.722	16
63			min	1830.374	16	-12998.845	2	-0.417	15	0	1	-107.681	21	-995.816	2
64		3	max	21063.161	7	923.916	16	1182.933	21	0	23	0.02	2	0	23
65			min	1537.393	16	-12998.845	2	-0.417	15	0	1	-14.508	21	0	1
66	M12	1	max	19821.84	7	15678.418	7	1300.318	21	0	23	-0.006	1	2393.275	7
67			min	-36.673	16	1717.463	17	0.081	1	0	1	-205.076	21	263.403	17
68		2	max	19333.539	7	15674.859	7	1249.157	21	0	23	0.014	16	1196.363	7
69			min	-329.653	16	1720.05	17	0.081	1	0	1	-107.64	21	131.77	17
70		3	max	18845.238	7	15558.511	7	1182.571	21	0	23	0.043	16	0	23
71			min	-622.633	16	1720.05	17	0.081	1	0	1	-14.495	21	0	1
72	M13	1	max	18717.876	7	1384.006	16	1302.776	21	0	23	0.028	16	169.345	16
73			min	1738.806	16	-11854.3	2	-0.604	16	0	1	-205.222	21	-1830.895	2
74		2	max	18229.576	7	1073.17	16	1249.559	21	0	23	0.041	2	76.272	16
75			min	1445.826	16	-11999.526	2	-0.603	16	0	1	-107.648	21	-919.26	2
76		3	max	17741.275	7	918.039	16	1182.974	21	0	23	0.2	2	0	23
77			min	1152.845	16	-11999.526	2	-0.603	16	0	1	-14.472	21	0	1
78	M14	1	max	17381.15	7	14629.118	7	1302.127	21	0	23	-0.031	20	2228.099	7
79			min	492.046	16	1876.379	17	0.564	20	0	1	-205.143	21	287.756	17
80		2	max	16892.849	7	14581.804	7	1249.287	21	0	23	0.055	7	1112.626	7
81			min	199.066	16	1879.011	17	0.563	20	0	1	-107.609	21	143.947	17

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
82		3	max	16404.549	7	14465.456	7	1182.701	21	0	23	0.251	7	0	23
83			min	-93.915	16	1879.011	17	0.563	20	0	1	-14.454	21	0	1
84	M29	1	max	0	23	0.016	21	0.007	23	0	23	0	23	0	23
85			min	0	1	-0.075	7	0	8	0	1	0	1	0	1
86		2	max	17498.157	8	5005.231	7	19.655	8	2.517	8	1.517	8	64.495	17
87			min	-1869.993	17	-408.856	17	-2.565	7	-0.276	17	-0.241	2	-762.024	7
88		3	max	16019.501	8	598.16	3	133.3	8	2.619	8	7.333	8	103.634	17
89			min	-2016.726	17	-918.757	15	-14.701	16	-0.272	17	-0.318	16	-1153.978	7
90	M30	1	max	6761.717	8	1851.934	17	129.775	8	7.73	8	1.036	6	103.634	17
91			min	-806.08	17	-14499.709	8	-14.697	16	-0.318	16	-0.074	16	-1153.978	7
92		2	max	6704.26	8	1851.934	17	129.775	8	7.73	8	2.495	8	81.411	17
93			min	-840.555	17	-14499.709	8	-14.697	16	-0.318	16	-0.25	16	-997.982	7
94		3	max	6646.802	8	1851.934	17	129.775	8	7.73	8	4.052	8	59.187	17
95			min	-875.03	17	-14499.709	8	-14.697	16	-0.318	16	-0.426	16	-841.767	7
96	M31	1	max	14692.625	8	396.357	17	13.621	16	0.266	16	7.409	8	56.755	17
97			min	-2149.808	17	-2700.405	7	-51.477	8	-2.101	2	-0.271	16	-827.075	7
98		2	max	13574.651	8	1041.101	17	-6.495	16	0.247	16	4.422	8	34.001	17
99			min	-2393.065	17	-6123.095	7	-107.46	7	-2.17	7	0.139	17	-657.126	7
100		3	max	13464.533	8	908.942	17	-6.495	16	0.247	16	-0.059	16	-16.145	17
101			min	-2459.135	17	-6343.358	7	-107.46	7	-2.17	7	-4.561	7	-369.636	2
102	M32	1	max	0	23	0.016	21	0	8	0	23	0	23	0	23
103			min	0	1	-0.066	7	-0.007	23	0	1	0	1	0	1
104		2	max	17954.397	7	4746.668	8	3.113	7	0.278	17	0.291	7	85.148	16
105			min	-1869.29	17	-408.863	17	-19.679	8	-2.518	8	-1.521	8	-686.834	8
106		3	max	16198.262	7	680.073	16	-1.477	17	0.274	17	-0.081	17	103.643	17
107			min	-2016.023	17	-555.761	6	-133.551	8	-2.62	8	-7.345	8	-1067.545	8
108	M33	1	max	7441.884	7	14499.306	8	130.03	8	0.05	17	1.042	6	1067.545	8
109			min	-805.771	17	-1851.302	17	1.646	17	-7.741	8	0.082	16	-103.643	17
110		2	max	7384.426	7	14499.306	8	130.03	8	0.05	17	2.503	8	893.554	8
111			min	-840.246	17	-1851.302	17	1.646	17	-7.741	8	0.246	16	-81.428	17
112		3	max	7326.969	7	14499.306	8	130.03	8	0.05	17	4.063	8	719.562	8
113			min	-874.72	17	-1851.302	17	1.646	17	-7.741	8	0.321	17	-80.416	16
114	M34	1	max	14830.598	7	1136.374	16	51.821	8	2.49	7	-0.112	17	77.13	16
115			min	-2146.661	17	-2095.466	8	-3.344	17	0.12	21	-7.42	8	-706.912	8
116		2	max	13704.72	7	1812.975	16	96.163	8	2.533	7	0.556	16	34.087	17
117			min	-2391.188	17	-5052.696	8	-13.899	16	0.147	21	-4.419	8	-571.609	8
118		3	max	13594.602	7	1680.816	16	96.163	8	2.533	7	4.379	7	-16.146	17
119			min	-2457.258	17	-5272.96	8	-13.899	16	0.147	21	-0.159	16	-369.636	2
120	M35	1	max	0	23	0.003	17	0	20	0	23	0	23	0	23
121			min	0	1	-0.083	7	-0.007	21	0	1	0	1	0	1
122		2	max	18579.436	8	5491.121	7	21.293	8	2.275	8	1.586	8	74.707	17
123			min	-1956.573	17	-291.246	17	-1.391	7	-0.266	17	-0.179	2	-912.847	7
124		3	max	16237.898	8	576.512	17	68.782	8	2.311	8	6.184	8	76.164	17
125			min	-2609.385	17	-2144.436	5	-5.968	16	-0.264	17	-0.158	16	-1269.695	7
126	M36	1	max	6014.816	8	2591.693	17	63.134	8	6.565	8	0.875	6	76.164	17
127			min	-919.149	16	-15119.681	8	-5.966	16	-0.156	16	-0.043	16	-1269.695	7
128		2	max	5957.358	8	2591.693	17	63.134	8	6.565	8	1.456	8	45.064	17
129			min	-953.623	16	-15119.681	8	-5.966	16	-0.156	16	-0.114	16	-1097.359	7
130		3	max	5899.9	8	2591.693	17	63.134	8	6.565	8	2.214	8	13.963	17
131			min	-988.098	16	-15119.681	8	-5.966	16	-0.156	16	-0.186	16	-925.023	7
132	M37	1	max	15657.733	8	962.202	17	5.827	16	0.858	8	6.14	8	10.891	17
133			min	-2806.544	17	-4487.498	7	-33.185	8	-1.098	7	-0.137	16	-908.744	7
134		2	max	14759.249	8	1424.701	17	-2.403	16	0.84	8	4.318	8	-39.547	17
135			min	-3077.745	17	-7545.143	7	-53.251	7	-1.132	7	-0.032	17	-649.212	7
136		3	max	14649.132	8	1292.542	17	-2.403	16	0.84	8	1.822	8	-42.488	15

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
137			min	-3143.815	17	-7800.335	7	-53.251	7	-1.132	7	-2.333	7	-320.885	2
138	M38	1	max	0	23	0.003	17	0.007	21	0	23	0	23	0	23
139			min	0	1	-0.079	8	0	1	0	1	0	1	0	1
140		2	max	19354.02	7	5154.903	8	1.563	7	0.267	17	0.216	7	121.768	16
141			min	-1841.843	17	-372.288	17	-21.327	8	-2.275	8	-1.589	8	-789.13	8
142		3	max	17012.618	7	1086.91	16	1.524	17	0.265	17	-0.112	17	98.744	17
143			min	-2494.655	17	-1491.643	3	-68.809	8	-2.312	8	-6.193	8	-1162.357	8
144	M39	1	max	6868.676	7	15550.271	7	63.286	8	0.019	17	0.88	6	1162.357	8
145			min	-672.361	17	-2452.727	17	-0.426	17	-6.573	8	0.04	16	-98.744	17
146		2	max	6811.218	7	15532.046	7	63.286	8	0.019	17	1.461	8	981.986	8
147			min	-706.836	17	-2452.727	17	-0.426	17	-6.573	8	0.109	16	-92.105	16
148		3	max	6753.761	7	15513.821	7	63.286	8	0.019	17	2.221	8	801.615	8
149			min	-741.31	17	-2452.727	17	-0.426	17	-6.573	8	0.178	16	-94.072	16
150	M40	1	max	16338.13	7	1584.884	16	33.373	8	1.264	7	-0.106	17	90.4	16
151			min	-2692.203	17	-3456.158	8	1.561	17	-0.855	8	-6.149	8	-786.295	8
152		2	max	15442.407	7	2143.553	16	48.515	8	1.281	7	0.221	16	7.192	16
153			min	-2963.089	17	-6078.59	8	-5.538	16	-0.837	8	-4.319	8	-583.772	8
154		3	max	15332.289	7	2011.395	16	48.515	8	1.281	7	2.259	7	-42.714	15
155			min	-3029.16	17	-6298.854	8	-5.538	16	-0.837	8	-1.824	8	-320.885	2
156	M41	1	max	0	23	0	17	0	20	0	23	0	23	0	23
157			min	0	1	-0.088	7	-0.007	21	0	1	0	1	0	1
158		2	max	18257.688	8	5772.046	7	22.223	8	2.216	8	1.681	8	24.588	17
159			min	-908.049	17	-39.17	17	-0.511	7	-0.264	17	-0.092	2	-946.393	7
160		3	max	15880.659	8	306.414	17	32.813	8	2.218	8	5.259	8	17.884	17
161			min	-1569.141	17	-2055.29	5	-2.146	17	-0.264	17	-0.064	16	-1334.91	7
162	M42	1	max	6157.078	8	1540.55	17	27.902	8	5.696	8	0.66	6	17.884	17
163			min	-992.956	16	-15070.907	7	-2.128	16	-0.062	16	-0.019	16	-1334.91	7
164		2	max	6099.621	8	1540.55	17	27.902	8	5.696	8	0.85	6	-0.602	17
165			min	-1027.431	16	-15070.907	7	-2.128	16	-0.062	16	-0.044	16	-1154.06	7
166		3	max	6042.163	8	1540.55	17	27.902	8	5.696	8	1.041	6	-19.089	17
167			min	-1061.906	16	-15070.907	7	-2.128	16	-0.062	16	-0.07	16	-973.209	7
168	M43	1	max	15186.956	7	559.232	17	2.137	16	1.569	8	5.206	8	-21.2	17
169			min	-1766.804	17	-4436.78	7	-20.992	6	-0.474	7	-0.056	16	-956.211	7
170		2	max	14248.728	7	905.494	17	-0.782	16	1.563	8	4.271	8	-50.017	17
171			min	-2046.419	17	-7797.229	7	-22.217	7	-0.486	7	-0.112	17	-696.877	7
172		3	max	14208.476	7	773.336	17	-0.782	16	1.563	8	3.202	8	-57.734	15
173			min	-2112.49	17	-8052.421	7	-22.217	7	-0.486	7	-0.989	7	-353.342	2
174	M44	1	max	0	23	0.002	16	0.007	21	0	23	0	23	0	23
175			min	0	1	-0.078	8	0	1	0	1	0	1	0	1
176		2	max	20395.622	7	5102.702	8	0.562	7	0.264	17	0.113	7	126.98	16
177			min	-776.315	17	-232.169	16	-22.26	8	-2.216	8	-1.685	8	-763.099	8
178		3	max	18018.57	7	1089.891	16	2.087	17	0.264	17	-0.07	16	97.127	16
179			min	-1437.407	17	-1401.327	3	-32.769	8	-2.218	8	-5.267	8	-1149.7	8
180	M45	1	max	7447.8	7	16379.722	7	28.014	8	0.008	17	0.664	6	1149.7	8
181			min	-451.326	17	-1381.22	17	-1.673	17	-5.703	8	0.016	16	-97.127	16
182		2	max	7390.342	7	16361.497	7	28.014	8	0.008	17	0.857	6	975.265	8
183			min	-485.8	17	-1381.22	17	-1.673	17	-5.703	8	0.041	16	-99.514	16
184		3	max	7332.885	7	16343.272	7	28.014	8	0.008	17	1.05	6	800.83	8
185			min	-520.275	17	-1381.22	17	-1.673	17	-5.703	8	0.066	16	-101.609	16
186	M46	1	max	17210.458	7	1613.186	16	21.149	6	0.533	7	-0.054	16	97.779	16
187			min	-1635.079	17	-3098.7	3	2.76	20	-1.567	8	-5.214	8	-785.705	8
188		2	max	16202.83	7	2251	16	20.818	8	0.54	7	0.117	17	12.532	16
189			min	-1914.729	17	-5706.009	8	-1.939	16	-1.56	8	-4.274	8	-610.213	2
190		3	max	16092.712	7	2118.842	16	20.818	8	0.54	7	0.962	7	-57.991	15
191			min	-1980.799	17	-5926.273	8	-1.939	16	-1.56	8	-3.203	8	-353.342	2

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
192	M47	1	max	0	23	-0.003	17	0	20	0	23	0	23	0	23
193			min	0	1	-0.088	7	-0.007	21	0	1	0	1	0	1
194		2	max	18208.284	7	5771.87	7	22.639	8	2.229	8	1.777	8	-36.274	17
195			min	-887.747	16	255.16	17	0	1	-0.264	17	0	2	-946.363	7
196		3	max	15831.316	7	304.678	3	10.652	8	2.211	8	4.486	8	-48.824	17
197			min	-1548.877	16	-2055.172	5	-1.86	17	-0.265	17	0	20	-1334.872	7
198	M48	1	max	5929.41	8	1235.475	16	6.239	8	5.001	8	0.537	23	-48.824	17
199			min	-992.914	16	-15070.549	7	-2.159	17	0	20	-0.001	2	-1334.872	7
200		2	max	5871.952	8	1235.475	16	6.239	8	5.001	8	0.519	23	-50.274	17
201			min	-1027.388	16	-15070.549	7	-2.159	17	0	20	-0.001	2	-1154.025	7
202		3	max	5814.494	8	1235.475	16	6.239	8	5.001	8	0.511	6	-51.724	17
203			min	-1061.863	16	-15070.549	7	-2.159	17	0	20	-0.001	2	-973.178	7
204	M49	1	max	15186.727	7	94.402	17	0.031	2	2.06	8	4.452	8	-53.27	17
205			min	-1649.073	16	-4436.39	7	-12.604	6	-0.221	17	0	20	-956.182	7
206		2	max	14248.495	7	330.999	17	-0.001	20	2.059	8	4.233	8	-57.342	17
207			min	-1835.487	16	-7796.816	7	-9.015	23	-0.221	17	-0.155	17	-696.868	7
208		3	max	14208.243	7	198.841	17	-0.001	20	2.059	8	4.148	8	-57.737	15
209			min	-1808.404	16	-8052.008	7	-9.015	23	-0.221	17	-0.427	17	-353.349	2
210	M50	1	max	0	23	0.002	16	0.007	21	0	23	0	23	0	23
211			min	0	1	-0.076	7	0	1	0	1	0	1	0	1
212		2	max	20395.095	7	4884.494	2	0.029	15	0.264	17	0.003	5	126.974	16
213			min	553.935	17	-232.15	16	-22.673	8	-2.229	8	-1.781	8	-723.054	8
214		3	max	18018.219	7	1089.853	16	1.861	17	0.266	17	0.006	15	97.121	16
215			min	-107.168	17	-1401.233	3	-10.649	8	-2.211	8	-4.493	8	-1096.958	8
216	M51	1	max	7447.77	7	16379.345	7	6.319	8	0.006	16	0.511	23	1096.958	8
217			min	-162.285	17	-38.576	17	-2.276	17	-5.008	8	-0.003	5	-97.121	16
218		2	max	7390.312	7	16361.12	7	6.319	8	0.006	16	0.493	23	934.696	2
219			min	-196.76	17	-38.576	17	-2.276	17	-5.008	8	-0.003	5	-99.509	16
220		3	max	7332.855	7	16342.895	7	6.319	8	0.006	16	0.518	6	774.552	2
221			min	-231.235	17	-38.576	17	-2.276	17	-5.008	8	-0.003	5	-101.604	16
222	M52	1	max	17210.229	7	1613.127	16	12.708	6	0.218	17	0.005	16	97.774	16
223			min	-304.792	17	-3098.495	3	-0.093	5	-2.058	8	-4.459	8	-762.515	2
224		2	max	16202.592	7	2250.916	16	8.445	23	0.218	17	0.161	17	12.53	16
225			min	-584.428	17	-5455.875	3	-0.05	15	-2.057	8	-4.237	8	-610.205	2
226		3	max	16092.475	7	2118.758	16	8.445	23	0.218	17	0.428	17	-57.994	15
227			min	-650.498	17	-5676.139	3	-0.05	15	-2.057	8	-4.149	8	-353.349	2
228	M53	1	max	0	23	-0.005	17	0	20	0	23	0	23	0	23
229			min	0	1	-0.088	7	-0.007	21	0	1	0	1	0	1
230		2	max	18208.725	7	5772.046	7	22.947	8	2.25	8	1.867	8	-63.282	17
231			min	-887.808	16	510.972	17	-0.021	16	-0.26	17	-0.01	16	-946.393	7
232		3	max	15831.62	7	304.645	3	2.131	16	2.214	8	3.782	8	-108	17
233			min	-1548.955	16	-2055.29	5	-20.412	2	-0.262	17	-0.732	2	-1334.91	7
234	M54	1	max	5695.674	2	1235.541	16	2.13	16	4.372	8	0.481	23	-108	17
235			min	-992.956	16	-15070.907	7	-20.406	2	-0.655	2	-0.335	7	-1334.91	7
236		2	max	5638.217	2	1235.541	16	2.13	16	4.372	8	0.431	23	-101.154	17
237			min	-1027.431	16	-15070.907	7	-20.406	2	-0.655	2	-0.575	7	-1154.06	7
238		3	max	5580.759	2	1235.541	16	2.13	16	4.372	8	0.381	23	-94.308	17
239			min	-1061.906	16	-15070.907	7	-20.406	2	-0.655	2	-0.817	2	-973.209	7
240	M55	1	max	15186.956	7	64.058	17	11.835	2	2.497	8	3.763	8	-94.232	17
241			min	-1649.156	16	-4436.78	7	-9.901	23	-0.227	17	-0.72	2	-956.211	7
242		2	max	14248.728	7	-15.39	17	22.134	7	2.502	8	4.19	8	-94.329	17
243			min	-1835.577	16	-7797.229	7	-6.133	23	-0.226	17	-0.184	17	-696.877	7
244		3	max	14208.476	7	-147.549	17	22.134	7	2.502	8	4.994	8	-57.734	15
245			min	-1808.494	16	-8052.421	7	-6.133	23	-0.226	17	-0.438	17	-353.342	2
246	M56	1	max	0	23	0.002	16	0.007	21	0	23	0	23	0	23

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
247			min	0	1	-0.076	7	0	1	0	1	0	1	0	1
248		2	max	20395.622	7	4884.646	2	0.084	16	0.26	17	-0.007	16	126.98	16
249			min	1443.596	16	-232.169	16	-22.98	8	-2.25	8	-1.871	8	-722.563	2
250		3	max	18018.57	7	1089.891	16	23.655	7	0.261	17	0.841	7	97.127	16
251			min	782.542	16	-1401.327	3	1.857	17	-2.213	8	-3.788	8	-1094.871	2
252	M57	1	max	7447.8	7	16379.722	7	-1.839	17	0.756	7	0.452	23	1094.871	2
253			min	395.722	17	211.078	16	-23.647	7	-4.378	8	-0.37	7	-97.127	16
254		2	max	7390.342	7	16361.497	7	-1.839	17	0.756	7	0.4	23	934.724	2
255			min	361.247	17	186.778	16	-23.647	7	-4.378	8	-0.653	7	-99.514	16
256		3	max	7332.885	7	16343.272	7	-1.839	17	0.756	7	0.348	23	774.577	2
257			min	326.772	17	162.478	16	-23.647	7	-4.378	8	-0.937	7	-101.609	16
258	M58	1	max	17210.458	7	1613.186	16	8.823	23	0.225	17	0.827	7	97.779	16
259			min	464.522	16	-3098.7	3	-13.797	7	-2.496	8	-3.77	8	-762.539	2
260		2	max	16202.83	7	2251	16	5.738	23	0.224	17	0.19	17	12.532	16
261			min	184.858	16	-5456.118	3	-20.148	7	-2.5	8	-4.194	8	-610.213	2
262		3	max	16092.712	7	2118.842	16	5.738	23	0.224	17	0.439	17	-57.991	15
263			min	118.788	16	-5676.382	3	-20.148	7	-2.5	8	-4.995	8	-353.342	2
264	M59	1	max	0	23	-0.005	20	0	20	0	23	0	23	0	23
265			min	0	1	-0.083	7	-0.007	21	0	1	0	1	0	1
266		2	max	17308.998	7	5491.042	7	23.536	8	2.229	8	1.947	8	-66.8	17
267			min	-754.73	16	563.167	17	-0.133	16	-0.252	17	-0.022	16	-912.84	7
268		3	max	14967.52	7	205.505	3	6.011	16	2.168	8	3.066	8	-118.714	17
269			min	-1407.614	16	-2144.489	5	-50.73	2	-0.253	17	-1.54	2	-1269.679	7
270	M60	1	max	5220.409	2	1114.293	16	6.009	16	3.712	8	0.441	23	-118.714	17
271			min	-919.311	16	-14360.913	7	-50.737	2	-1.408	2	-0.636	7	-1269.679	7
272		2	max	5162.951	2	1114.293	16	6.009	16	3.712	8	0.371	23	-108.614	17
273			min	-953.785	16	-14360.913	7	-50.737	2	-1.408	2	-1.237	2	-1097.348	7
274		3	max	5105.493	2	1114.293	16	6.009	16	3.712	8	0.302	23	-98.514	17
275			min	-988.26	16	-14360.913	7	-50.737	2	-1.408	2	-1.845	2	-925.017	7
276	M61	1	max	14422.431	7	73.447	17	24.298	2	3.027	8	3.037	8	-98.125	17
277			min	-1524.23	16	-4487.46	7	-8.871	23	-0.251	17	-1.546	2	-908.738	7
278		2	max	13586.179	7	-62.104	17	53.161	7	3.042	8	4.124	8	-98.293	17
279			min	-1700.217	16	-7545.228	7	-5.363	17	-0.249	17	-0.427	5	-649.208	7
280		3	max	13545.927	7	-194.262	17	53.161	7	3.042	8	6.023	8	-42.484	15
281			min	-1673.133	16	-7800.42	7	-5.363	17	-0.249	17	-0.483	17	-320.877	2
282	M62	1	max	0	23	0.001	16	0.007	21	0	23	0	23	0	23
283			min	0	1	-0.072	7	0	1	0	1	0	1	0	1
284		2	max	19354.05	7	4648.797	2	0.062	16	0.251	17	-0.018	16	121.77	16
285			min	1422.185	16	-206.439	16	-23.563	8	-2.229	8	-1.951	8	-696.481	2
286		3	max	17012.653	7	1086.926	16	59.421	7	0.252	17	1.772	7	89.847	16
287			min	769.388	16	-1491.686	3	0.721	17	-2.168	8	-3.073	8	-1041.341	2
288	M63	1	max	6868.646	7	15550.327	7	-0.409	17	1.626	7	0.408	23	1041.341	2
289			min	607.15	17	200.656	16	-59.43	7	-3.718	8	-0.71	7	-89.847	16
290		2	max	6811.188	7	15532.102	7	-0.409	17	1.626	7	0.331	23	889.135	2
291			min	572.675	17	176.356	16	-59.43	7	-3.718	8	-1.423	7	-92.109	16
292		3	max	6753.731	7	15513.877	7	-0.409	17	1.626	7	0.293	17	736.93	2
293			min	538.2	17	152.056	16	-59.43	7	-3.718	8	-2.137	7	-94.079	16
294	M64	1	max	16338.396	7	1584.818	16	7.042	23	0.249	17	1.777	7	90.408	16
295			min	477.34	16	-3127.51	3	-28.904	7	-3.026	8	-3.044	8	-725.415	2
296		2	max	15442.504	7	2143.738	16	5.49	16	0.248	17	0.213	17	7.201	16
297			min	219.223	16	-5283.856	3	-46.972	7	-3.041	8	-4.129	8	-570.913	2
298		3	max	15332.387	7	2011.58	16	5.49	16	0.248	17	0.483	17	-42.71	15
299			min	153.152	16	-5504.12	3	-46.972	7	-3.041	8	-6.023	8	-320.877	2
300	M65	1	max	0	23	-0.005	20	0	20	0	23	0	23	0	23
301			min	0	1	-0.121	8	-0.019	21	0	1	0	1	0	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
302		2	max	15886.905	7	5001.418	7	24.458	8	2.099	8	2.006	8	-55.754	17
303			min	-795.856	16	546.056	16	-0.365	16	-0.235	17	-0.032	16	-762.209	7
304		3	max	14130.652	7	598.275	3	14.849	16	1.997	8	2.362	6	-120.871	17
305			min	-1312.694	16	-923.358	15	-105.695	2	-0.301	2	-2.488	2	-1153.67	7
306	M66	1	max	5905.526	2	1053.835	16	14.845	16	2.917	8	0.414	23	-120.871	17
307			min	-827.871	16	-12931.66	7	-105.765	2	-2.36	2	-0.844	2	-1153.67	7
308		2	max	5848.068	2	1053.835	16	14.845	16	2.917	8	0.347	17	-115.797	17
309			min	-862.346	16	-12931.66	7	-105.765	2	-2.36	2	-2.113	2	-998.49	7
310		3	max	5790.611	2	1053.835	16	14.845	16	2.917	8	0.435	16	-110.724	17
311			min	-896.821	16	-12931.66	7	-105.765	2	-2.36	2	-3.382	2	-843.31	7
312	M67	1	max	13090.491	7	285.607	17	36.812	2	3.841	8	2.272	6	-110.53	17
313			min	-1279.19	16	-2687.776	7	-13.971	16	-0.299	17	-2.6	2	-828.614	7
314		2	max	12069.595	7	134.185	17	107.35	7	3.877	8	3.978	8	-121.475	17
315			min	-1436.39	16	-6144.752	7	-6.667	17	-0.298	17	-1.044	5	-658.421	7
316		3	max	12029.343	7	2.027	17	107.35	7	3.877	8	7.609	8	-72.516	16
317			min	-1409.306	16	-6399.944	7	-6.667	17	-0.298	17	-0.578	17	-369.661	2
318	M68	1	max	0	23	0.001	16	0.03	21	0	23	0	23	0	23
319			min	0	1	-0.144	22	0	1	0	1	0	1	0	1
320		2	max	18023.516	7	4315.548	7	-0.144	17	0.249	7	-0.029	16	85.441	16
321			min	1525.896	16	-137.198	16	-24.485	8	-2.099	8	-2.011	8	-590.773	2
322		3	max	16267.376	7	685.091	16	125.867	7	0.371	7	2.887	7	68.222	16
323			min	655.15	17	-486.675	3	-1.83	17	-1.997	8	-2.371	6	-954.605	2
324	M69	1	max	7475.709	7	14411.163	7	2.607	17	2.748	7	0.373	23	954.605	2
325			min	618.238	17	422.785	17	-125.97	7	-2.923	8	-0.959	7	-68.222	16
326		2	max	7418.251	7	14392.938	7	2.607	17	2.748	7	0.341	17	813.695	2
327			min	583.763	17	422.785	17	-125.97	7	-2.923	8	-2.471	7	-75.222	16
328		3	max	7360.794	7	14374.713	7	2.607	17	2.748	7	0.372	17	672.786	2
329			min	549.288	17	422.785	17	-125.97	7	-2.923	8	-3.983	7	-81.931	16
330	M70	1	max	14898.334	7	1141.94	16	8.521	17	0.298	17	3.007	7	78.642	16
331			min	546.593	17	-1918.448	3	-45.953	7	-3.841	8	-2.281	6	-662.294	2
332		2	max	13773.111	7	1817.617	16	13.947	16	0.296	17	0.33	2	17.352	16
333			min	270.362	17	-4320.1	3	-91.021	7	-3.876	8	-3.982	8	-569.55	2
334		3	max	13662.993	7	1685.458	16	13.947	16	0.296	17	0.579	17	-72.731	16
335			min	204.291	17	-4540.363	3	-91.021	7	-3.876	8	-7.609	8	-369.661	2
336	M85	1	max	0	23	0	23	0	23	0	23	0	23	0	23
337			min	0	1	0	1	0	1	0	1	0	1	0	1
338		2	max	0	23	66.989	17	-8.997	20	0	23	-0.076	20	2.674	7
339			min	0	1	-314.594	7	-110.227	2	0	1	-0.937	2	-0.569	17
340		3	max	0	23	133.979	17	-17.994	20	0	23	-0.306	20	10.695	7
341			min	0	1	-629.189	7	-220.455	2	0	1	-3.747	2	-2.277	17
342	M86	1	max	1.893	6	1760.8	7	616.948	2	0	23	-0.306	20	10.695	7
343			min	-1.603	17	-374.943	17	50.358	20	0	1	-3.747	2	-2.277	17
344		2	max	1.893	6	58.126	7	20.366	2	0	23	25.569	2	15.539	17
345			min	-1.603	17	-12.377	17	1.662	20	0	1	2.087	20	-72.974	7
346		3	max	1.893	6	350.188	17	-47.033	20	0	23	0	23	0	23
347			min	-1.603	17	-1644.548	7	-576.216	2	0	1	0	1	0	1
348	M87	1	max	2.815	6	1702.785	7	596.621	2	0	23	0	23	0	23
349			min	-3.368	17	-237.947	17	48.699	20	0	1	0	1	0	1
350		2	max	2.815	6	1.13	17	0	23	0	23	27.446	2	9.906	17
351			min	-3.368	17	-1.692	6	0	1	0	1	2.24	20	-78.332	7
352		3	max	2.815	6	214.213	17	-48.699	20	0	23	0	23	0	23
353			min	-3.368	17	-1702.785	7	-596.621	2	0	1	0	1	0	1
354	M88	1	max	2.4	6	1702.674	7	596.582	2	0	23	0	23	0	23
355			min	-4.011	17	-120.688	17	48.695	20	0	1	0	1	0	1
356		2	max	2.4	6	28.903	17	0	23	0	23	27.442	2	2.127	17

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
357			min	-4.011	17	-19.334	6	0	1	0	1	2.24	20	-78.321	7
358		3	max	2.4	6	17.343	17	-48.695	20	0	23	0	23	0	23
359			min	-4.011	17	-1702.674	7	-596.582	2	0	1	0	1	0	1
360	M89	1	max	1.79	6	1702.674	7	596.582	2	0	23	0	23	0	23
361			min	-3.296	17	11.559	17	48.695	20	0	1	0	1	0	1
362		2	max	1.79	6	0	23	0	23	0	23	27.442	2	-0.532	17
363			min	-3.296	17	0	1	0	1	0	1	2.24	20	-78.321	7
364		3	max	1.79	6	-11.559	17	-48.695	20	0	23	0	23	0	23
365			min	-3.296	17	-1702.674	7	-596.582	2	0	1	0	1	0	1
366	M90	1	max	1.772	6	1702.785	7	596.621	2	0	23	0	23	0	23
367			min	-2.248	17	11.56	17	48.699	20	0	1	0	1	0	1
368		2	max	1.772	6	0	23	0	23	0	23	27.446	2	-0.532	17
369			min	-2.248	17	0	1	0	1	0	1	2.24	20	-78.332	7
370		3	max	1.772	6	-11.56	17	-48.699	20	0	23	0	23	0	23
371			min	-2.248	17	-1702.785	7	-596.621	2	0	1	0	1	0	1
372	M91	1	max	2.421	8	1644.548	7	576.216	2	0	23	0	23	0	23
373			min	-1.117	17	11.165	17	47.033	20	0	1	0	1	0	1
374		2	max	2.421	8	-0.395	17	-1.662	20	0	23	25.569	2	-0.495	17
375			min	-1.117	17	-58.126	7	-20.366	2	0	1	2.087	20	-72.974	7
376		3	max	2.421	8	-11.954	17	-50.358	20	0	23	-0.306	20	10.695	7
377			min	-1.117	17	-1760.8	7	-616.948	2	0	1	-3.747	2	0.073	17
378	M92	1	max	0	23	629.189	7	220.455	2	0	23	-0.306	20	10.695	7
379			min	0	1	4.272	17	17.994	20	0	1	-3.747	2	0.073	17
380		2	max	0	23	314.594	7	110.227	2	0	23	-0.076	20	2.674	7
381			min	0	1	2.136	17	8.997	20	0	1	-0.937	2	0.018	17
382		3	max	0	23	0	23	0	23	0	23	0	23	0	23
383			min	0	1	0	1	0	1	0	1	0	1	0	1
384	M93	1	max	0	23	0	23	0	23	0	23	0	23	0	23
385			min	0	1	0	1	0	1	0	1	0	1	0	1
386		2	max	0	23	94.646	17	-11.508	20	0	23	-0.098	20	3.564	7
387			min	0	1	-419.313	7	-147.566	2	0	1	-1.254	2	-0.804	17
388		3	max	0	23	189.292	17	-23.016	20	0	23	-0.391	20	14.255	7
389			min	0	1	-838.627	7	-295.131	2	0	1	-5.017	2	-3.218	17
390	M94	1	max	0.429	16	2347.218	7	826.132	2	0	23	-0.391	20	14.255	7
391			min	-2.958	8	-529.759	17	64.401	20	0	1	-5.017	2	-3.218	17
392		2	max	0.429	16	77.474	7	27.265	2	0	23	34.239	2	21.955	17
393			min	-2.958	8	-17.487	17	2.126	20	0	1	2.669	20	-97.278	7
394		3	max	0.429	16	494.784	17	-60.148	20	0	23	0	23	0	23
395			min	-2.958	8	-2192.269	7	-771.602	2	0	1	0	1	0	1
396	M95	1	max	0.501	16	2269.891	7	798.919	2	0	23	0	23	0	23
397			min	-2.38	8	-342.279	17	62.279	20	0	1	0	1	0	1
398		2	max	0.501	16	1.541	17	0	23	0	23	36.752	2	14.327	17
399			min	-2.38	8	-2.312	6	0	1	0	1	2.865	20	-104.42	7
400		3	max	0.501	16	309.904	17	-62.279	20	0	23	0	23	0	23
401			min	-2.38	8	-2269.891	7	-798.919	2	0	1	0	1	0	1
402	M96	1	max	0.478	16	2269.743	7	798.867	2	0	23	0	23	0	23
403			min	-1.623	17	-182.541	17	62.275	20	0	1	0	1	0	1
404		2	max	0.478	16	39.359	17	0	23	0	23	36.747	2	3.734	17
405			min	-1.623	17	-26.239	6	0	1	0	1	2.865	20	-104.406	7
406		3	max	0.478	16	41.808	17	-62.275	20	0	23	0	23	0	23
407			min	-1.623	17	-2269.743	7	-798.867	2	0	1	0	1	0	1
408	M97	1	max	0.48	16	2269.743	7	798.867	2	0	23	0	23	0	23
409			min	-1.509	7	-2.449	17	62.275	20	0	1	0	1	0	1
410		2	max	0.48	16	0	23	0	23	0	23	36.747	2	0.113	17
411			min	-1.509	7	0	1	0	1	0	1	2.865	20	-104.406	7

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
412		3	max	0.48	16	2.449	17	-62.275	20	0	23	0	23	0	23
413			min	-1.509	7	-2269.743	7	-798.867	2	0	1	0	1	0	1
414	M98	1	max	0.505	16	2269.891	7	798.919	2	0	23	0	23	0	23
415			min	-1.82	7	-2.45	17	62.279	20	0	1	0	1	0	1
416		2	max	0.505	16	0	23	0	23	0	23	36.752	2	0.113	17
417			min	-1.82	7	0	1	0	1	0	1	2.865	20	-104.42	7
418		3	max	0.505	16	2.45	17	-62.279	20	0	23	0	23	0	23
419			min	-1.82	7	-2269.891	7	-798.919	2	0	1	0	1	0	1
420	M99	1	max	0.434	16	2192.259	7	771.595	2	0	23	0	23	0	23
421			min	-1.787	2	-2.366	17	60.149	20	0	1	0	1	0	1
422		2	max	0.434	16	0.084	17	-2.126	20	0	23	34.238	2	0.105	17
423			min	-1.787	2	-77.485	7	-27.272	2	0	1	2.669	20	-97.277	7
424		3	max	0.434	16	2.533	17	-64.4	20	0	23	-0.391	20	14.257	7
425			min	-1.787	2	-2347.228	7	-826.139	2	0	1	-5.018	2	-0.015	17
426	M100	1	max	0	23	838.738	7	295.205	2	0	23	-0.391	20	14.257	7
427			min	0	1	-0.905	17	23.012	20	0	1	-5.018	2	-0.015	17
428		2	max	0	23	419.369	7	147.603	2	0	23	-0.098	20	3.564	7
429			min	0	1	-0.453	17	11.506	20	0	1	-1.254	2	-0.004	17
430		3	max	0	23	0	23	0	23	0	23	0	23	0	23
431			min	0	1	0	1	0	1	0	1	0	1	0	1
432	M101	1	max	0	23	0	23	0	23	0	23	0	23	0	23
433			min	0	1	0	1	0	1	0	1	0	1	0	1
434		2	max	0	23	84.335	17	-10.563	20	0	23	-0.09	20	3.222	7
435			min	0	1	-379.122	7	-133.666	2	0	1	-1.136	2	-0.717	17
436		3	max	0	23	168.671	17	-21.126	20	0	23	-0.359	20	12.889	7
437			min	0	1	-758.244	7	-267.332	2	0	1	-4.544	2	-2.867	17
438	M102	1	max	31.193	8	2121.965	7	748.136	2	0	23	-0.359	20	12.889	7
439			min	-3.855	16	-472.029	17	59.121	20	0	1	-4.544	2	-2.867	17
440		2	max	31.193	8	70.048	7	24.697	2	0	23	31.005	2	19.563	17
441			min	-3.855	16	-15.582	17	1.952	20	0	1	2.45	20	-87.942	7
442		3	max	31.193	8	440.864	17	-55.218	20	0	23	0	23	0	23
443			min	-3.855	16	-1981.868	7	-698.742	2	0	1	0	1	0	1
444	M103	1	max	51.411	8	2052.051	7	723.486	2	0	23	0	23	0	23
445			min	-6.049	16	-303.709	17	57.173	20	0	1	0	1	0	1
446		2	max	51.411	8	1.385	17	0	23	0	23	33.282	2	12.697	17
447			min	-6.049	16	-2.08	6	0	1	0	1	2.63	20	-94.398	7
448		3	max	51.411	8	274.62	17	-57.173	20	0	23	0	23	0	23
449			min	-6.049	16	-2052.051	7	-723.486	2	0	1	0	1	0	1
450	M104	1	max	60.231	8	2051.917	7	723.439	2	0	23	0	23	0	23
451			min	-7.037	16	-159.712	17	57.169	20	0	1	0	1	0	1
452		2	max	60.231	8	35.512	17	0	23	0	23	33.277	2	3.139	17
453			min	-7.037	16	-23.674	6	0	1	0	1	2.63	20	-94.386	7
454		3	max	60.231	8	32.735	17	-57.169	20	0	23	0	23	0	23
455			min	-7.037	16	-2051.917	7	-723.439	2	0	1	0	1	0	1
456	M105	1	max	58.869	2	2051.917	7	723.439	2	0	23	0	23	0	23
457			min	-7.046	16	2.777	17	57.169	20	0	1	0	1	0	1
458		2	max	58.869	2	0	23	0	23	0	23	33.277	2	-0.128	17
459			min	-7.046	16	0	1	0	1	0	1	2.63	20	-94.386	7
460		3	max	58.869	2	-2.777	17	-57.169	20	0	23	0	23	0	23
461			min	-7.046	16	-2051.917	7	-723.439	2	0	1	0	1	0	1
462	M106	1	max	49.114	2	2052.051	7	723.486	2	0	23	0	23	0	23
463			min	-6.073	16	2.777	17	57.173	20	0	1	0	1	0	1
464		2	max	49.114	2	0	23	0	23	0	23	33.282	2	-0.128	17
465			min	-6.073	16	0	1	0	1	0	1	2.63	20	-94.398	7
466		3	max	49.114	2	-2.777	17	-57.173	20	0	23	0	23	0	23

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
467			min	-6.073	16	-2052.051	7	-723.486	2	0	1	0	1	0	1
468	M107	1	max	29.228	2	1981.868	7	698.742	2	0	23	0	23	0	23
469			min	-3.881	16	2.682	17	55.218	20	0	1	0	1	0	1
470		2	max	29.228	2	-0.095	17	-1.952	20	0	23	31.005	2	-0.119	17
471			min	-3.881	16	-70.048	7	-24.697	2	0	1	2.45	20	-87.942	7
472		3	max	29.228	2	-2.871	17	-59.121	20	0	23	-0.359	20	12.889	7
473			min	-3.881	16	-2121.965	7	-748.136	2	0	1	-4.544	2	0.017	17
474	M108	1	max	0	23	758.244	7	267.332	2	0	23	-0.359	20	12.889	7
475			min	0	1	1.026	17	21.126	20	0	1	-4.544	2	0.017	17
476		2	max	0	23	379.122	7	133.666	2	0	23	-0.09	20	3.222	7
477			min	0	1	0.513	17	10.563	20	0	1	-1.136	2	0.004	17
478		3	max	0	23	0	23	0	23	0	23	0	23	0	23
479			min	0	1	0	1	0	1	0	1	0	1	0	1
480	M109	1	max	0	23	0	23	0	23	0	23	0	23	0	23
481			min	0	1	0	1	0	1	0	1	0	1	0	1
482		2	max	0	23	54.879	17	-7.922	20	0	23	-0.067	20	2.248	7
483			min	0	1	-264.448	7	-93.947	2	0	1	-0.798	2	-0.466	17
484		3	max	0	23	109.758	17	-15.844	20	0	23	-0.269	20	8.99	7
485			min	0	1	-528.895	7	-187.894	2	0	1	-3.194	2	-1.866	17
486	M110	1	max	86.308	8	1480.127	7	525.826	2	0	23	-0.269	20	8.99	7
487			min	-11.262	16	-307.161	17	44.339	20	0	1	-3.194	2	-1.866	17
488		2	max	86.308	8	48.861	7	17.358	2	0	23	21.792	2	12.73	17
489			min	-11.262	16	-10.14	17	1.464	20	0	1	1.838	20	-61.342	7
490		3	max	86.308	8	286.881	17	-41.412	20	0	23	0	23	0	23
491			min	-11.262	16	-1382.405	7	-491.11	2	0	1	0	1	0	1
492	M111	1	max	118.557	8	1431.359	7	508.501	2	0	23	0	23	0	23
493			min	-15.224	16	-192.213	17	42.878	20	0	1	0	1	0	1
494		2	max	118.557	8	0.95	17	0	23	0	23	23.392	2	7.968	17
495			min	-15.224	16	-1.425	6	0	1	0	1	1.972	20	-65.845	7
496		3	max	118.557	8	172.252	17	-42.878	20	0	23	0	23	0	23
497			min	-15.224	16	-1431.359	7	-508.501	2	0	1	0	1	0	1
498	M112	1	max	125.276	8	1431.266	7	508.468	2	0	23	0	23	0	23
499			min	-16.441	16	-93.728	17	42.875	20	0	1	0	1	0	1
500		2	max	125.276	8	24.266	17	0	23	0	23	23.389	2	1.436	17
501			min	-16.441	16	-16.178	6	0	1	0	1	1.972	20	-65.837	7
502		3	max	125.276	8	6.961	17	-42.875	20	0	23	0	23	0	23
503			min	-16.441	16	-1431.266	7	-508.468	2	0	1	0	1	0	1
504	M113	1	max	122.243	2	1431.266	7	508.468	2	0	23	0	23	0	23
505			min	-16.463	16	17.305	17	42.875	20	0	1	0	1	0	1
506		2	max	122.243	2	0	23	0	23	0	23	23.389	2	-0.796	17
507			min	-16.463	16	0	1	0	1	0	1	1.972	20	-65.837	7
508		3	max	122.243	2	-17.305	17	-42.875	20	0	23	0	23	0	23
509			min	-16.463	16	-1431.266	7	-508.468	2	0	1	0	1	0	1
510	M114	1	max	111.133	2	1431.359	7	508.501	2	0	23	0	23	0	23
511			min	-15.285	16	17.307	17	42.878	20	0	1	0	1	0	1
512		2	max	111.133	2	0	23	0	23	0	23	23.392	2	-0.796	17
513			min	-15.285	16	0	1	0	1	0	1	1.972	20	-65.845	7
514		3	max	111.133	2	-17.307	17	-42.878	20	0	23	0	23	0	23
515			min	-15.285	16	-1431.359	7	-508.501	2	0	1	0	1	0	1
516	M115	1	max	79.012	2	1382.405	7	491.11	2	0	23	0	23	0	23
517			min	-11.333	16	16.715	17	41.412	20	0	1	0	1	0	1
518		2	max	79.012	2	-0.591	17	-1.464	20	0	23	21.792	2	-0.742	17
519			min	-11.333	16	-48.861	7	-17.358	2	0	1	1.838	20	-61.342	7
520		3	max	79.012	2	-17.896	17	-44.339	20	0	23	-0.269	20	8.99	7
521			min	-11.333	16	-1480.127	7	-525.826	2	0	1	-3.194	2	0.109	17

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
522	M116	1	max	0	23	528.895	7	187.894	2	0	23	-0.269	20	8.99	7
523			min	0	1	6.395	17	15.844	20	0	1	-3.194	2	0.109	17
524		2	max	0	23	264.448	7	93.947	2	0	23	-0.067	20	2.248	7
525			min	0	1	3.197	17	7.922	20	0	1	-0.798	2	0.027	17
526		3	max	0	23	0	23	0	23	0	23	0	23	0	23
527			min	0	1	0	1	0	1	0	1	0	1	0	1
528	M117	1	max	459.492	8	17.692	17	94.152	16	0	23	0	23	0	23
529			min	-69.31	16	-257.443	7	-683.958	8	0	1	0	1	0	1
530		2	max	459.492	8	61.101	17	87.74	16	0	23	1.546	16	6.166	7
531			min	-69.31	16	-468.109	7	-745.534	8	0	1	-12.149	8	-0.67	17
532		3	max	459.492	8	104.51	17	81.328	16	0	23	2.983	16	15.914	7
533			min	-69.31	16	-678.776	7	-807.11	8	0	1	-25.345	8	-2.077	17
534	M118	1	max	278.056	8	1226.677	7	507.695	2	0	23	2.983	16	15.914	7
535			min	-40.982	16	-246.233	17	18.494	16	0	1	-25.345	8	-2.077	17
536		2	max	278.056	8	86.49	7	137.749	8	0	23	7.326	2	9.769	17
537			min	-40.982	16	-11.289	17	-16.211	16	0	1	-1.45	6	-44.491	7
538		3	max	278.056	8	223.654	17	-9.887	15	0	23	0	23	0	23
539			min	-40.982	16	-1053.697	7	-275.414	2	0	1	0	1	0	1
540	M119	1	max	178.311	8	1140.261	7	391.58	2	0	23	0	23	0	23
541			min	-29.184	16	-224.275	17	34.707	15	0	1	0	1	0	1
542		2	max	178.311	8	10.683	17	0	23	0	23	18.013	2	9.826	17
543			min	-29.184	16	-16.066	6	0	1	0	1	1.597	15	-52.454	7
544		3	max	178.311	8	180.129	17	-34.707	16	0	23	0	23	0	23
545			min	-29.184	16	-1140.261	7	-391.58	2	0	1	0	1	0	1
546	M120	1	max	129.836	8	1140.187	7	391.555	2	0	23	0	23	0	23
547			min	-24.917	16	-134.512	17	34.705	15	0	1	0	1	0	1
548		2	max	129.836	8	0	23	0	23	0	23	18.011	2	6.187	17
549			min	-24.917	16	0	1	0	1	0	1	1.596	15	-52.447	7
550		3	max	129.836	8	134.512	17	-34.705	16	0	23	0	23	0	23
551			min	-24.917	16	-1140.187	7	-391.555	2	0	1	0	1	0	1
552	M121	1	max	121.409	2	1140.187	7	391.555	2	0	23	0	23	0	23
553			min	-24.978	16	-101.691	17	34.705	15	0	1	0	1	0	1
554		2	max	121.409	2	32.821	17	0	23	0	23	18.011	2	3.168	17
555			min	-24.978	16	-21.769	6	0	1	0	1	1.596	15	-52.447	7
556		3	max	121.409	2	26.88	17	-34.705	16	0	23	0	23	0	23
557			min	-24.978	16	-1140.187	7	-391.555	2	0	1	0	1	0	1
558	M122	1	max	153.496	2	1140.261	7	391.58	2	0	23	0	23	0	23
559			min	-29.393	16	15.752	17	34.707	15	0	1	0	1	0	1
560		2	max	153.496	2	0	23	0	23	0	23	18.013	2	-0.725	17
561			min	-29.393	16	0	1	0	1	0	1	1.597	15	-52.454	7
562		3	max	153.496	2	-15.752	17	-34.707	16	0	23	0	23	0	23
563			min	-29.393	16	-1140.261	7	-391.58	2	0	1	0	1	0	1
564	M123	1	max	228.193	2	1053.598	7	275.367	2	0	23	0	23	0	23
565			min	-41.439	16	16.05	17	10.076	15	0	1	0	1	0	1
566		2	max	228.193	2	0.298	17	16.418	16	0	23	7.322	2	-0.752	17
567			min	-41.439	16	-86.589	7	-116.187	2	0	1	-0.669	15	-44.481	7
568		3	max	228.193	2	-15.453	17	-18.287	16	0	23	3.021	16	15.932	7
569			min	-41.439	16	-1226.776	7	-507.742	2	0	1	-21.378	2	-0.055	17
570	M124	1	max	370.177	2	679.31	7	701.184	2	0	23	3.021	16	15.932	7
571			min	-70.266	16	1.296	17	-82.444	16	0	1	-21.378	2	-0.055	17
572		2	max	370.177	2	468.643	7	628.838	2	0	23	1.565	16	6.176	7
573			min	-70.266	16	-1.614	17	-88.857	16	0	1	-10.074	2	-0.052	17
574		3	max	370.177	2	257.977	7	556.493	2	0	23	0	23	0	23
575			min	-70.266	16	-4.525	17	-95.269	16	0	1	0	1	0	1
576	M125	1	max	68.983	15	111.618	17	13.864	17	0	23	0	23	0	23

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
577			min	-29.086	8	-275.916	7	-136.273	8	0	1	0	1	0	1
578		2	max	68.983	15	210.051	17	-20.197	17	0	23	-0.072	17	17.534	7
579			min	-29.086	8	-739.625	7	-291.559	2	0	1	-7.336	2	-5.585	17
580		3	max	68.983	15	345.635	17	-46.202	20	0	23	-1.55	17	54.925	7
581			min	-29.086	8	-1339.047	7	-498.892	2	0	1	-21.555	2	-15.581	17
582	M126	1	max	10.594	17	1832.013	7	647.558	2	0	23	-1.55	17	54.925	7
583			min	-71.762	8	-431.59	17	55.999	20	0	1	-21.555	2	-15.581	17
584		2	max	10.594	17	298.513	7	117.147	2	0	23	13.621	2	8.167	17
585			min	-71.762	8	-84.682	17	8.422	17	0	1	0.993	20	-43.077	7
586		3	max	10.594	17	262.226	17	-33.061	20	0	23	0	23	0	23
587			min	-71.762	8	-1234.987	7	-413.264	2	0	1	0	1	0	1
588	M127	1	max	3.478	17	1533.6	7	530.446	2	0	23	0	23	0	23
589			min	-85.156	8	-332.089	17	44.533	20	0	1	0	1	0	1
590		2	max	3.478	17	14.842	17	0	23	0	23	24.402	2	14.594	17
591			min	-85.156	8	-22.345	6	0	1	0	1	2.049	20	-70.549	7
592		3	max	3.478	17	270.755	17	-44.533	20	0	23	0	23	0	23
593			min	-85.156	8	-1533.6	7	-530.446	2	0	1	0	1	0	1
594	M128	1	max	1.044	17	1533.5	7	530.411	2	0	23	0	23	0	23
595			min	-93.48	7	-207.378	17	44.53	20	0	1	0	1	0	1
596		2	max	1.044	17	0	23	0	23	0	23	24.398	2	9.539	17
597			min	-93.48	7	0	1	0	1	0	1	2.048	20	-70.539	7
598		3	max	1.044	17	207.378	17	-44.53	20	0	23	0	23	0	23
599			min	-93.48	7	-1533.5	7	-530.411	2	0	1	0	1	0	1
600	M129	1	max	0.96	17	1533.5	7	530.411	2	0	23	0	23	0	23
601			min	-93.503	7	-161.328	17	44.53	20	0	1	0	1	0	1
602		2	max	0.96	17	46.05	17	0	23	0	23	24.398	2	5.303	17
603			min	-93.503	7	-30.644	6	0	1	0	1	2.048	20	-70.539	7
604		3	max	0.96	17	56.363	17	-44.53	20	0	23	0	23	0	23
605			min	-93.503	7	-1533.5	7	-530.411	2	0	1	0	1	0	1
606	M130	1	max	2.17	17	1533.6	7	530.446	2	0	23	0	23	0	23
607			min	-80.566	7	3.451	17	44.533	20	0	1	0	1	0	1
608		2	max	2.17	17	0	23	0	23	0	23	24.402	2	-0.159	17
609			min	-80.566	7	0	1	0	1	0	1	2.049	20	-70.549	7
610		3	max	2.17	17	-3.451	17	-44.533	20	0	23	0	23	0	23
611			min	-80.566	7	-1533.6	7	-530.446	2	0	1	0	1	0	1
612	M131	1	max	4.028	17	1235.11	7	413.26	2	0	23	0	23	0	23
613			min	-56.814	2	-0.402	17	33.061	20	0	1	0	1	0	1
614		2	max	4.028	17	-3.853	17	-10.435	16	0	23	13.621	2	0.196	17
615			min	-56.814	2	-298.39	7	-117.151	2	0	1	0.993	20	-43.088	7
616		3	max	4.028	17	-7.304	17	-55.999	20	0	23	-1.92	16	54.903	7
617			min	-56.814	2	-1831.891	7	-647.562	2	0	1	-21.555	2	0.709	17
618	M132	1	max	69.341	15	1338.619	7	498.846	2	0	23	-1.92	16	54.903	7
619			min	-7.563	2	11.652	17	46.194	20	0	1	-21.555	2	0.709	17
620		2	max	69.341	15	738.903	7	291.412	2	0	23	-0.257	16	17.513	7
621			min	-7.563	2	10.295	17	25.33	16	0	1	-7.333	2	0.314	17
622		3	max	69.341	15	275.017	7	129.776	2	0	23	0	23	0	23
623			min	-7.563	2	2.677	16	-8.746	16	0	1	0	1	0	1
624	M133	1	max	14.889	16	110.449	17	0.562	17	0	3	0	15	0	5
625			min	-861.24	8	-19.02	7	-9.836	20	0	15	0	3	0	16
626		2	max	14.889	16	165.917	17	42.656	5	0	3	0.652	5	10.942	7
627			min	-861.24	8	-473.404	7	-5.794	3	0	15	-0.337	3	-7.175	17
628		3	max	14.889	16	280.39	17	120.248	5	0	3	5.389	5	58.419	7
629			min	-861.24	8	-1163.222	8	-5.794	3	0	15	-0.674	3	-20.154	17
630	M134	1	max	7.483	16	1424.338	8	3.662	3	0	23	5.389	5	58.419	7
631			min	-641.164	8	-290.355	17	-151.954	5	0	1	-0.674	3	-20.154	17

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
632		2	max	7.483	16	317.504	7	3.662	3	0	23	0.033	17	-0.828	16
633			min	-641.164	8	-109.537	17	-29.29	5	0	1	-2.948	15	-23.098	8
634		3	max	7.483	16	71.282	17	93.377	15	0	23	0	23	0	23
635			min	-641.164	8	-809.538	8	-0.355	17	0	1	0	1	0	1
636	M135	1	max	4.346	16	1105.328	8	0	23	0	23	0	23	0	23
637			min	-513.453	8	-170.474	17	-122.672	5	0	1	0	1	0	1
638		2	max	4.346	16	10.357	17	0	23	0	23	0	23	7.366	17
639			min	-513.453	8	-15.576	6	0	1	0	1	-5.643	5	-50.31	8
640		3	max	4.346	16	127.675	17	122.672	15	0	23	0	23	0	23
641			min	-513.453	8	-1083.659	7	0	1	0	1	0	1	0	1
642	M136	1	max	3.189	16	1083.588	7	0	23	0	23	0	23	0	23
643			min	-465.438	7	-83.454	17	-122.664	5	0	1	0	1	0	1
644		2	max	3.189	16	0	23	0	23	0	23	0	23	3.839	17
645			min	-465.438	7	0	1	0	1	0	1	-5.642	5	-49.844	7
646		3	max	3.189	16	83.454	17	122.664	15	0	23	0	23	0	23
647			min	-465.438	7	-1083.588	7	0	1	0	1	0	1	0	1
648	M137	1	max	3.188	16	1083.588	7	0	23	0	23	0	23	0	23
649			min	-465.43	7	-51.303	17	-122.664	5	0	1	0	1	0	1
650		2	max	3.188	16	32.151	17	0	23	0	23	0	23	1.053	16
651			min	-465.43	7	-21.434	6	0	1	0	1	-5.642	5	-49.844	7
652		3	max	3.188	16	22.889	16	122.664	15	0	23	0	23	0	23
653			min	-465.43	7	-1083.588	7	0	1	0	1	0	1	0	1
654	M138	1	max	9.328	17	1083.659	7	0	23	0	23	0	23	0	23
655			min	-507.245	7	-22.89	16	-122.672	5	0	1	0	1	0	1
656		2	max	9.328	17	0	23	0	23	0	23	0	23	1.053	16
657			min	-507.245	7	0	1	0	1	0	1	-5.643	5	-49.85	7
658		3	max	9.328	17	22.89	16	122.672	15	0	23	0	23	0	23
659			min	-507.245	7	-1083.659	7	0	1	0	1	0	1	0	1
660	M139	1	max	21.239	17	766.016	7	0.002	17	0	23	0	23	0	23
661			min	-606.427	7	-2.444	16	-93.822	15	0	1	0	1	0	1
662		2	max	21.239	17	20.444	16	28.843	5	0	23	0	17	-0.008	17
663			min	-606.427	7	-317.573	7	-3.66	3	0	1	-2.989	15	-20.628	7
664		3	max	21.239	17	43.333	16	151.507	5	0	23	5.307	5	58.432	7
665			min	-606.427	7	-1401.161	7	-3.66	3	0	1	-0.673	3	-3.762	16
666	M140	1	max	35.043	17	1159.129	7	5.784	3	0.002	15	5.307	5	58.432	7
667			min	-803.362	7	-44.186	16	-119.531	5	-0.001	3	-0.673	3	-3.762	16
668		2	max	35.043	17	473.478	7	5.784	3	0.002	15	0.611	5	11.563	8
669			min	-803.362	7	-29.659	16	-41.939	5	-0.001	3	-0.337	3	-1.614	16
670		3	max	35.043	17	50.289	8	9.835	20	0.002	15	0.001	15	0.004	7
671			min	-803.362	7	-36.559	16	-0.003	17	-0.001	3	-0.001	3	0	17
672	M141	1	max	0	23	0	23	0	23	0	23	0	23	0	23
673			min	0	1	0	1	0	1	0	1	0	1	0	1
674		2	max	0	23	77.854	16	110.227	3	0	23	0.937	3	2.288	8
675			min	0	1	-269.176	8	20.515	23	0	1	0.174	23	-0.662	16
676		3	max	0	23	155.709	16	220.455	3	0	23	3.747	3	9.151	8
677			min	0	1	-538.352	8	41.03	23	0	1	0.697	23	-2.647	16
678	M142	1	max	1.819	6	1506.592	8	-114.824	23	0	23	3.747	3	9.151	8
679			min	-1.537	17	-435.754	16	-616.948	3	0	1	0.697	23	-2.647	16
680		2	max	1.819	6	49.734	8	-3.79	23	0	23	-4.759	23	18.059	16
681			min	-1.537	17	-14.385	16	-20.366	3	0	1	-25.569	2	-62.439	8
682		3	max	1.819	6	406.985	16	576.216	2	0	23	0	23	0	23
683			min	-1.537	17	-1407.123	8	107.243	23	0	1	0	1	0	1
684	M143	1	max	2.817	6	1316.969	8	-111.041	23	0	23	0	23	0	23
685			min	-3.379	17	-421.397	16	-596.621	2	0	1	0	1	0	1
686		2	max	2.817	6	1.13	17	0	23	0	23	-5.108	23	19.385	16

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
687			min	-3.379	17	-1.692	6	0	1	0	1	-27.446	2	-59.415	8
688		3	max	2.817	6	421.397	16	596.621	3	0	23	0	23	0	23
689			min	-3.379	17	-1290.314	8	111.041	23	0	1	0	1	0	1
690	M144	1	max	2.515	6	1242.613	8	-111.034	23	0	23	0	23	0	23
691			min	-4.119	17	-421.37	16	-596.582	2	0	1	0	1	0	1
692		2	max	2.515	6	28.903	17	0	23	0	23	-5.107	23	19.383	16
693			min	-4.119	17	-19.334	6	0	1	0	1	-27.442	2	-55.441	8
694		3	max	2.515	6	421.37	16	596.582	3	0	23	0	23	0	23
695			min	-4.119	17	-1193.167	2	111.034	23	0	1	0	1	0	1
696	M145	1	max	1.921	6	1193.167	3	-111.034	23	0	23	0	23	0	23
697			min	-3.413	17	-421.37	16	-596.582	2	0	1	0	1	0	1
698		2	max	1.921	6	0	23	0	23	0	23	-5.107	23	19.383	16
699			min	-3.413	17	0	1	0	1	0	1	-27.442	2	-54.884	2
700		3	max	1.921	6	421.37	16	596.582	3	0	23	0	23	0	23
701			min	-3.413	17	-1193.167	2	111.034	23	0	1	0	1	0	1
702	M146	1	max	1.948	6	1193.245	3	-111.041	23	0	23	0	23	0	23
703			min	-2.412	17	-421.397	16	-596.621	2	0	1	0	1	0	1
704		2	max	1.948	6	0	23	0	23	0	23	-5.108	23	19.385	16
705			min	-2.412	17	0	1	0	1	0	1	-27.446	2	-54.892	2
706		3	max	1.948	6	421.397	16	596.621	3	0	23	0	23	0	23
707			min	-2.412	17	-1193.245	2	111.041	23	0	1	0	1	0	1
708	M147	1	max	2.478	8	1152.435	3	-107.243	23	0	23	0	23	0	23
709			min	-1.199	17	-406.985	16	-576.216	3	0	1	0	1	0	1
710		2	max	2.478	8	14.385	16	20.366	2	0	23	-4.759	23	18.059	16
711			min	-1.199	17	-40.732	2	3.79	23	0	1	-25.569	3	-51.137	2
712		3	max	2.478	8	435.754	16	616.948	2	0	23	3.747	2	7.495	3
713			min	-1.199	17	-1233.9	2	114.824	23	0	1	0.697	23	-2.647	16
714	M148	1	max	0	23	440.911	3	-41.03	23	0	23	3.747	2	7.495	2
715			min	0	1	-155.709	16	-220.455	3	0	1	0.697	23	-2.647	16
716		2	max	0	23	220.455	3	-20.515	23	0	23	0.937	2	1.874	2
717			min	0	1	-77.854	16	-110.227	3	0	1	0.174	23	-0.662	16
718		3	max	0	23	0	23	0	23	0	23	0	23	0	23
719			min	0	1	0	1	0	1	0	1	0	1	0	1
720	M149	1	max	0	23	0	23	0	23	0	23	0	23	0	23
721			min	0	1	0	1	0	1	0	1	0	1	0	1
722		2	max	0	23	104.849	16	147.603	3	0	23	1.254	3	3.074	8
723			min	0	1	-361.682	8	26.443	23	0	1	0.225	23	-0.891	16
724		3	max	0	23	209.697	16	295.205	3	0	23	5.018	3	12.296	8
725			min	0	1	-723.364	8	52.887	23	0	1	0.899	23	-3.564	16
726	M150	1	max	-0.304	16	2024.351	8	-148.005	23	0	23	5.018	3	12.296	8
727			min	-2.976	8	-586.843	16	-826.139	3	0	1	0.899	23	-3.564	16
728		2	max	-0.304	16	66.826	8	-4.886	23	0	23	-6.134	23	24.321	16
729			min	-2.976	8	-19.372	16	-27.272	3	0	1	-34.238	2	-83.896	8
730		3	max	-0.304	16	548.098	16	771.595	2	0	23	0	23	0	23
731			min	-2.976	8	-1890.699	8	138.234	23	0	1	0	1	0	1
732	M151	1	max	-0.201	16	1766.374	8	-143.129	23	0	23	0	23	0	23
733			min	-2.518	7	-567.507	16	-798.919	2	0	1	0	1	0	1
734		2	max	-0.201	16	1.541	17	0	23	0	23	-6.584	23	26.106	16
735			min	-2.518	7	-2.312	6	0	1	0	1	-36.752	2	-79.661	8
736		3	max	-0.201	16	567.507	16	798.919	3	0	23	0	23	0	23
737			min	-2.518	7	-1729.951	8	143.129	23	0	1	0	1	0	1
738	M152	1	max	-0.078	16	1665.204	8	-143.12	23	0	23	0	23	0	23
739			min	-2.114	7	-567.47	16	-798.867	2	0	1	0	1	0	1
740		2	max	-0.078	16	39.359	17	0	23	0	23	-6.583	23	26.103	16
741			min	-2.114	7	-26.239	6	0	1	0	1	-36.747	2	-74.266	8

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
742		3	max	-0.078	16	567.47	16	798.867	3	0	23	0	23	0	23
743			min	-2.114	7	-1597.738	2	143.12	23	0	1	0	1	0	1
744	M153	1	max	0.181	6	1597.738	3	-143.12	23	0	23	0	23	0	23
745			min	-2.115	7	-567.47	16	-798.867	2	0	1	0	1	0	1
746		2	max	0.181	6	0	23	0	23	0	23	-6.583	23	26.103	16
747			min	-2.115	7	0	1	0	1	0	1	-36.747	2	-73.494	2
748		3	max	0.181	6	567.47	16	798.867	3	0	23	0	23	0	23
749			min	-2.115	7	-1597.738	2	143.12	23	0	1	0	1	0	1
750	M154	1	max	0.211	6	1597.842	3	-143.129	23	0	23	0	23	0	23
751			min	-2.523	7	-567.507	16	-798.919	2	0	1	0	1	0	1
752		2	max	0.211	6	0	23	0	23	0	23	-6.584	23	26.106	16
753			min	-2.523	7	0	1	0	1	0	1	-36.752	2	-73.504	2
754		3	max	0.211	6	567.507	16	798.919	3	0	23	0	23	0	23
755			min	-2.523	7	-1597.842	2	143.129	23	0	1	0	1	0	1
756	M155	1	max	0.016	6	1543.194	3	-138.234	23	0	23	0	23	0	23
757			min	-2.381	7	-548.098	16	-771.595	3	0	1	0	1	0	1
758		2	max	0.016	6	19.372	16	27.272	2	0	23	-6.134	23	24.321	16
759			min	-2.381	7	-54.544	2	4.886	23	0	1	-34.238	3	-68.476	3
760		3	max	0.016	6	586.843	16	826.139	2	0	23	5.018	2	10.036	2
761			min	-2.381	7	-1652.281	2	148.005	23	0	1	0.899	23	-3.564	16
762	M156	1	max	0	23	590.412	3	-52.887	23	0	23	5.018	3	10.036	3
763			min	0	1	-209.697	16	-295.205	3	0	1	0.899	23	-3.564	16
764		2	max	0	23	295.206	3	-26.443	23	0	23	1.254	2	2.509	3
765			min	0	1	-104.849	16	-147.603	3	0	1	0.225	23	-0.891	16
766		3	max	0	23	0	23	0	23	0	23	0	23	0	23
767			min	0	1	0	1	0	1	0	1	0	1	0	1
768	M157	1	max	0	23	0	23	0	23	0	23	0	23	0	23
769			min	0	1	0	1	0	1	0	1	0	1	0	1
770		2	max	0	23	93.543	16	133.666	3	0	23	1.136	3	2.781	8
771			min	0	1	-327.172	8	24.226	23	0	1	0.206	23	-0.795	16
772		3	max	0	23	187.085	16	267.332	3	0	23	4.544	3	11.123	8
773			min	0	1	-654.344	8	48.453	23	0	1	0.824	23	-3.18	16
774	M158	1	max	33.88	7	1831.198	8	-135.596	23	0	23	4.544	3	11.123	8
775			min	-1.134	17	-523.562	16	-748.136	3	0	1	0.824	23	-3.18	16
776		2	max	33.88	7	60.45	8	-4.476	23	0	23	-5.62	23	21.698	16
777			min	-1.134	17	-17.283	16	-24.697	3	0	1	-31.005	2	-75.891	8
778		3	max	33.88	7	488.996	16	698.742	2	0	23	0	23	0	23
779			min	-1.134	17	-1710.298	8	126.644	23	0	1	0	1	0	1
780	M159	1	max	56.954	7	1598.76	8	-131.128	23	0	23	0	23	0	23
781			min	-1.106	17	-506.312	16	-723.486	2	0	1	0	1	0	1
782		2	max	56.954	7	1.385	17	0	23	0	23	-6.032	23	23.291	16
783			min	-1.106	17	-2.08	6	0	1	0	1	-33.282	2	-72.11	8
784		3	max	56.954	7	506.312	16	723.486	3	0	23	0	23	0	23
785			min	-1.106	17	-1565.989	8	131.128	23	0	1	0	1	0	1
786	M160	1	max	68.282	7	1507.575	8	-131.12	23	0	23	0	23	0	23
787			min	-1.096	17	-506.279	16	-723.439	2	0	1	0	1	0	1
788		2	max	68.282	7	35.512	17	0	23	0	23	-6.031	23	23.288	16
789			min	-1.096	17	-23.674	6	0	1	0	1	-33.277	2	-67.243	8
790		3	max	68.282	7	506.279	16	723.439	3	0	23	0	23	0	23
791			min	-1.096	17	-1446.881	2	131.12	23	0	1	0	1	0	1
792	M161	1	max	68.297	7	1446.881	3	-131.12	23	0	23	0	23	0	23
793			min	-1.216	17	-506.279	16	-723.439	2	0	1	0	1	0	1
794		2	max	68.297	7	0	23	0	23	0	23	-6.031	23	23.288	16
795			min	-1.216	17	0	1	0	1	0	1	-33.277	2	-66.555	2
796		3	max	68.297	7	506.279	16	723.439	3	0	23	0	23	0	23

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
797			min	-1.216	17	-1446.881	2	131.12	23	0	1	0	1	0	1
798	M162	1	max	56.993	7	1446.975	3	-131.128	23	0	23	0	23	0	23
799			min	-1.248	17	-506.312	16	-723.486	2	0	1	0	1	0	1
800		2	max	56.993	7	0	23	0	23	0	23	-6.032	23	23.291	16
801			min	-1.248	17	0	1	0	1	0	1	-33.282	2	-66.564	2
802		3	max	56.993	7	506.312	16	723.486	3	0	23	0	23	0	23
803			min	-1.248	17	-1446.975	2	131.128	23	0	1	0	1	0	1
804	M163	1	max	33.925	7	1397.487	2	-126.644	23	0	23	0	23	0	23
805			min	-1	17	-488.996	16	-698.742	3	0	1	0	1	0	1
806		2	max	33.925	7	17.283	16	24.697	2	0	23	-5.62	23	21.698	16
807			min	-1	17	-49.394	3	4.476	23	0	1	-31.005	3	-62.011	2
808		3	max	33.925	7	523.562	16	748.136	2	0	23	4.544	2	9.088	3
809			min	-1	17	-1496.275	3	135.596	23	0	1	0.824	23	-3.18	16
810	M164	1	max	0	23	534.666	3	-48.453	23	0	23	4.544	3	9.088	3
811			min	0	1	-187.085	16	-267.332	3	0	1	0.824	23	-3.18	16
812		2	max	0	23	267.333	3	-24.226	23	0	23	1.136	3	2.272	3
813			min	0	1	-93.543	16	-133.666	3	0	1	0.206	23	-0.795	16
814		3	max	0	23	0	23	0	23	0	23	0	23	0	23
815			min	0	1	0	1	0	1	0	1	0	1	0	1
816	M165	1	max	0	23	0	23	0	23	0	23	0	23	0	23
817			min	0	1	0	1	0	1	0	1	0	1	0	1
818		2	max	0	23	61.253	16	93.947	3	0	23	0.798	3	1.945	8
819			min	0	1	-228.858	8	17.942	23	0	1	0.152	23	-0.521	16
820		3	max	0	23	122.507	16	187.894	3	0	23	3.194	3	7.78	8
821			min	0	1	-457.716	8	35.885	23	0	1	0.61	23	-2.082	16
822	M166	1	max	95.058	7	1280.93	8	-100.424	23	0	23	3.194	3	7.78	8
823			min	2.985	17	-342.838	16	-525.826	3	0	1	0.61	23	-2.082	16
824		2	max	95.058	7	42.285	8	-3.315	23	0	23	-4.162	23	14.208	16
825			min	2.985	17	-11.317	16	-17.358	3	0	1	-21.792	2	-53.086	8
826		3	max	95.058	7	320.203	16	491.11	2	0	23	0	23	0	23
827			min	2.985	17	-1196.36	8	93.794	23	0	1	0	1	0	1
828	M167	1	max	133.027	7	1120.795	8	-97.115	23	0	23	0	23	0	23
829			min	2.354	17	-331.542	16	-508.501	2	0	1	0	1	0	1
830		2	max	133.027	7	0.95	17	0	23	0	23	-4.468	23	15.252	16
831			min	2.354	17	-1.425	6	0	1	0	1	-23.392	2	-50.575	8
832		3	max	133.027	7	331.542	16	508.501	3	0	23	0	23	0	23
833			min	2.354	17	-1098.339	8	97.115	23	0	1	0	1	0	1
834	M168	1	max	145.98	7	1058.417	8	-97.109	23	0	23	0	23	0	23
835			min	1.039	17	-331.52	16	-508.468	2	0	1	0	1	0	1
836		2	max	145.98	7	24.266	17	0	23	0	23	-4.467	23	15.25	16
837			min	1.039	17	-16.178	6	0	1	0	1	-23.389	2	-47.249	8
838		3	max	145.98	7	331.52	16	508.468	3	0	23	0	23	0	23
839			min	1.039	17	-1016.939	2	97.109	23	0	1	0	1	0	1
840	M169	1	max	145.993	7	1016.939	3	-97.109	23	0	23	0	23	0	23
841			min	-0.062	17	-331.52	16	-508.468	2	0	1	0	1	0	1
842		2	max	145.993	7	0	23	0	23	0	23	-4.467	23	15.25	16
843			min	-0.062	17	0	1	0	1	0	1	-23.389	2	-46.778	2
844		3	max	145.993	7	331.52	16	508.468	3	0	23	0	23	0	23
845			min	-0.062	17	-1016.939	2	97.109	23	0	1	0	1	0	1
846	M170	1	max	133.062	7	1017.005	3	-97.115	23	0	23	0	23	0	23
847			min	-1.302	17	-331.542	16	-508.501	2	0	1	0	1	0	1
848		2	max	133.062	7	0	23	0	23	0	23	-4.468	23	15.252	16
849			min	-1.302	17	0	1	0	1	0	1	-23.392	2	-46.784	2
850		3	max	133.062	7	331.542	16	508.501	3	0	23	0	23	0	23
851			min	-1.302	17	-1017.005	2	97.115	23	0	1	0	1	0	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
852	M171	1	max	95.095	7	982.223	3	-93.794	23	0	23	0	23	0	23
853			min	-1.703	17	-320.203	16	-491.11	3	0	1	0	1	0	1
854		2	max	95.095	7	11.317	16	17.358	2	0	23	-4.162	23	14.208	16
855			min	-1.703	17	-34.716	2	3.315	23	0	1	-21.792	3	-43.584	2
856		3	max	95.095	7	342.838	16	525.826	2	0	23	3.194	2	6.388	3
857			min	-1.703	17	-1051.655	2	100.424	23	0	1	0.61	23	-2.082	16
858	M172	1	max	0	23	375.789	2	-35.885	23	0	23	3.194	2	6.388	2
859			min	0	1	-122.507	16	-187.894	2	0	1	0.61	23	-2.082	16
860		2	max	0	23	187.895	2	-17.942	23	0	23	0.798	3	1.597	3
861			min	0	1	-61.253	16	-93.947	2	0	1	0.152	23	-0.521	16
862		3	max	0	23	0	23	0	23	0	23	0	23	0	23
863			min	0	1	0	1	0	1	0	1	0	1	0	1
864	M173	1	max	460.614	8	85.136	16	685.352	8	0	23	0	23	0	23
865			min	-2.665	17	-188.956	8	-14.576	17	0	1	0	1	0	1
866		2	max	460.614	8	137.193	16	746.928	8	0	23	12.173	8	4.732	8
867			min	-2.665	17	-367.778	8	0.832	17	0	1	-0.117	17	-1.89	16
868		3	max	460.614	8	189.249	16	808.505	8	0	23	25.393	8	12.503	8
869			min	-2.665	17	-546.6	8	16.239	17	0	1	0.028	17	-4.664	16
870	M174	1	max	278.587	8	1035.786	8	-83.544	17	0	23	25.393	8	12.503	8
871			min	-0.617	17	-307.091	16	-507.703	2	0	1	0.028	17	-4.664	16
872		2	max	278.587	8	67.952	8	-0.154	17	0	23	1.481	6	10.628	16
873			min	-0.617	17	-25.348	16	-138.006	8	0	1	-9.531	3	-38.268	8
874		3	max	278.587	8	256.394	16	299.38	3	0	23	0	23	0	23
875			min	-0.617	17	-899.881	8	41.588	23	0	1	0	1	0	1
876	M175	1	max	187.567	7	1155.929	8	-78.662	23	0	23	0	23	0	23
877			min	-0.376	17	-536.272	17	-391.58	2	0	1	0	1	0	1
878		2	max	187.567	7	0	23	0	23	0	23	-3.619	23	24.67	17
879			min	-0.376	17	0	1	0	1	0	1	-18.013	2	-53.175	8
880		3	max	187.567	7	536.272	17	391.58	3	0	23	0	23	0	23
881			min	-0.376	17	-1155.929	8	78.662	23	0	1	0	1	0	1
882	M176	1	max	150.54	7	854.561	8	-78.656	23	0	23	0	23	0	23
883			min	-1.66	17	-281.743	16	-391.555	2	0	1	0	1	0	1
884		2	max	150.54	7	0	23	0	23	0	23	-3.618	23	12.96	16
885			min	-1.66	17	0	1	0	1	0	1	-18.011	2	-39.309	8
886		3	max	150.54	7	281.743	16	391.555	3	0	23	0	23	0	23
887			min	-1.66	17	-854.561	8	78.656	23	0	1	0	1	0	1
888	M177	1	max	150.618	7	967.833	8	-78.656	23	0	23	0	23	0	23
889			min	-4.261	17	-285.542	17	-391.555	2	0	1	0	1	0	1
890		2	max	150.618	7	0	23	0	23	0	23	-3.618	23	13.135	17
891			min	-4.261	17	0	1	0	1	0	1	-18.011	2	-44.519	8
892		3	max	150.618	7	285.542	17	391.555	3	0	23	0	23	0	23
893			min	-4.261	17	-967.833	8	78.656	23	0	1	0	1	0	1
894	M178	1	max	187.838	7	783.162	3	-78.662	23	0	23	0	23	0	23
895			min	-7.829	17	-281.761	16	-391.58	2	0	1	0	1	0	1
896		2	max	187.838	7	0	23	0	23	0	23	-3.619	23	12.962	16
897			min	-7.829	17	0	1	0	1	0	1	-18.013	2	-36.027	2
898		3	max	187.838	7	281.761	16	391.58	3	0	23	0	23	0	23
899			min	-7.829	17	-783.162	2	78.662	23	0	1	0	1	0	1
900	M179	1	max	275.682	7	726.879	8	-51.433	15	0	23	0	23	0	23
901			min	-13.648	17	-256.314	16	-299.344	3	0	1	0	1	0	1
902		2	max	275.682	7	25.429	16	133.836	7	0	23	0.871	15	10.62	16
903			min	-13.648	17	-58.764	3	-3.285	17	0	1	-9.528	3	-31.001	8
904		3	max	275.682	7	307.171	16	507.75	2	0	23	24.625	7	10.812	3
905			min	-13.648	17	-841.875	3	80.106	17	0	1	-0.604	17	-4.679	16
906	M180	1	max	446.74	7	462.741	3	2.371	17	0	23	24.625	7	10.812	3

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
907			min	-23.808	17	-189.684	16	-791.258	7	0	1	-0.604	17	-4.679	16
908		2	max	446.74	7	318.05	3	17.779	17	0	23	11.744	7	4.176	3
909			min	-23.808	17	-137.628	16	-724.36	7	0	1	-0.433	17	-1.897	16
910		3	max	446.74	7	173.358	3	33.187	17	0	23	0	23	0	23
911			min	-23.808	17	-85.572	16	-657.463	7	0	1	0	1	0	1
912	M181	1	max	28.91	17	113.957	17	142.27	7	0	23	0	23	0	23
913			min	-49.242	16	-221.796	8	-12.974	17	0	1	0	1	0	1
914		2	max	28.91	17	212.383	17	291.415	2	0	23	7.383	7	14.543	8
915			min	-49.242	16	-621.395	8	21.091	17	0	1	0.104	17	-5.67	17
916		3	max	28.91	17	347.954	17	498.614	2	0	23	21.543	2	46.165	8
917			min	-49.242	16	-1136.56	8	62.832	17	0	1	1.614	17	-15.749	17
918	M182	1	max	10.956	17	1568.841	8	-115.545	17	0	23	21.543	2	46.165	8
919			min	-72.008	8	-464.395	16	-647.154	2	0	1	1.614	17	-15.749	17
920		2	max	10.956	17	250.9	8	-8.771	17	0	23	-1.205	15	10.434	16
921			min	-72.008	8	-85.594	17	-117.086	2	0	1	-14.585	3	-37.542	8
922		3	max	10.956	17	306.018	16	423.571	3	0	23	0	23	0	23
923			min	-72.008	8	-1067.04	8	66.489	15	0	1	0	1	0	1
924	M183	1	max	3.545	17	1301.268	8	-100.722	23	0	23	0	23	0	23
925			min	-85.21	8	-385.232	16	-530.103	2	0	1	0	1	0	1
926		2	max	3.545	17	14.842	17	0	23	0	23	-4.633	23	17.721	16
927			min	-85.21	8	-22.345	6	0	1	0	1	-24.386	2	-59.09	8
928		3	max	3.545	17	385.232	16	530.103	3	0	23	0	23	0	23
929			min	-85.21	8	-1232.015	8	100.722	23	0	1	0	1	0	1
930	M184	1	max	6.267	16	1160.394	8	-100.715	23	0	23	0	23	0	23
931			min	-86.126	8	-385.207	16	-530.068	2	0	1	0	1	0	1
932		2	max	6.267	16	0	23	0	23	0	23	-4.633	23	17.719	16
933			min	-86.126	8	0	1	0	1	0	1	-24.383	2	-53.377	8
934		3	max	6.267	16	385.207	16	530.068	3	0	23	0	23	0	23
935			min	-86.126	8	-1160.394	8	100.715	23	0	1	0	1	0	1
936	M185	1	max	6.248	16	1137.411	8	-100.715	23	0	23	0	23	0	23
937			min	-83.381	2	-385.207	16	-530.068	2	0	1	0	1	0	1
938		2	max	6.248	16	46.05	17	0	23	0	23	-4.633	23	17.719	16
939			min	-83.381	2	-30.644	6	0	1	0	1	-24.383	2	-51.263	8
940		3	max	6.248	16	385.207	16	530.068	3	0	23	0	23	0	23
941			min	-83.381	2	-1085.024	8	100.715	23	0	1	0	1	0	1
942	M186	1	max	2.077	17	1060.208	3	-100.722	23	0	23	0	23	0	23
943			min	-76.501	2	-385.232	16	-530.103	2	0	1	0	1	0	1
944		2	max	2.077	17	0	23	0	23	0	23	-4.633	23	17.721	16
945			min	-76.501	2	0	1	0	1	0	1	-24.386	2	-48.772	2
946		3	max	2.077	17	385.232	16	530.103	3	0	23	0	23	0	23
947			min	-76.501	2	-1060.208	2	100.722	23	0	1	0	1	0	1
948	M187	1	max	3.974	17	860.786	3	-66.711	15	0	23	0	23	0	23
949			min	-56.832	2	-306.27	16	-423.565	3	0	1	0	1	0	1
950		2	max	3.974	17	78.937	16	117.09	2	0	23	-1.226	15	10.457	16
951			min	-56.832	2	-213.134	8	17.708	17	0	1	-14.585	3	-30.425	3
952		3	max	3.974	17	464.143	16	647.158	2	0	23	21.544	2	39.216	8
953			min	-56.832	2	-1268.305	8	121.135	23	0	1	3.258	17	-14.524	16
954	M188	1	max	6.282	17	941.718	8	-85.678	17	0	23	21.544	2	39.216	8
955			min	-49.909	16	-344.029	16	-498.568	2	0	1	3.258	17	-14.524	16
956		2	max	6.282	17	529.055	8	-43.917	17	0	23	7.365	7	12.746	8
957			min	-49.909	16	-193.421	16	-291.267	2	0	1	0.926	17	-4.852	16
958		3	max	6.282	17	206.103	8	-9.838	17	0	23	0	23	0	23
959			min	-49.909	16	-90.528	16	-141.641	7	0	1	0	1	0	1
960	M189	1	max	821.154	8	261.2	7	48.38	5	0	23	0	23	0	23
961			min	-117.014	16	-18.881	17	1.386	17	0	1	0	1	0	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
962		2	max	760.89	8	67.474	7	20.28	8	0	23	0.917	7	-0.041	17
963			min	-108.84	16	5.212	4	1.386	17	0	1	0.044	17	-5.093	7
964		3	max	717.216	8	47.893	17	20.28	8	0	23	1.289	8	-0.495	4
965			min	-99.088	16	-76.598	7	-37.905	15	0	1	0.088	17	-4.816	7
966	M190	1	max	809.201	8	196.574	7	51.223	15	0	5	1.289	8	-0.495	4
967			min	-93.307	16	-67.878	17	-17.369	8	0	4	0.088	17	-4.816	7
968		2	max	722.62	8	-10.828	20	-1.187	17	0	5	1.221	5	0.283	17
969			min	-85.865	16	-79.928	7	-17.369	8	0	4	0.044	17	-6.702	7
970		3	max	666.229	8	24.235	17	-1.187	17	0	5	0	23	0	23
971			min	-75.622	16	-266.149	7	-60.193	5	0	4	0	1	0	1
972	M191	1	max	666.759	2	261.72	7	0.533	17	0	23	0	23	0	23
973			min	-118.486	16	-4.602	17	-48.511	5	0	1	0	1	0	1
974		2	max	615.542	2	67.92	7	0.533	17	0	23	0.017	17	0.137	17
975			min	-110.313	16	-4.024	17	-14.519	2	0	1	-0.92	7	-5.11	7
976		3	max	578.477	2	8.381	16	37.851	15	0	23	0.034	17	0.258	17
977			min	-100.561	16	-76.204	7	-14.519	2	0	1	-0.923	2	-4.846	7
978	M192	1	max	678.073	2	196.06	7	12.432	2	0	17	0.034	17	0.258	17
979			min	-93.957	16	2.741	17	-51.116	15	-0.004	7	-0.923	2	-4.847	7
980		2	max	604.545	2	3.515	17	12.432	2	0	17	0.017	17	0.141	17
981			min	-86.515	16	-80.352	7	-0.456	17	-0.004	7	-1.222	5	-6.714	7
982		3	max	578.295	7	4.034	17	60.217	5	0	17	0	23	0	23
983			min	-76.271	16	-266.516	7	-0.456	17	-0.004	7	0	1	0	1
984	M193	1	max	822.906	8	198.761	8	28.673	16	0	23	0	23	0	23
985			min	-13.288	17	-80.476	16	-20.155	8	0	1	0	1	0	1
986		2	max	762.642	8	46.008	3	-1.593	17	0	23	0.419	16	1.637	16
987			min	1.55	17	-24.465	16	-20.155	8	0	1	-0.641	8	-3.712	8
988		3	max	718.969	8	49.148	17	-1.593	17	0	23	-0.101	17	1.678	16
989			min	12.379	17	-71.636	8	-33.359	16	0	1	-1.281	8	-3.315	3
990	M194	1	max	810.028	8	170.086	8	42.174	16	0	16	-0.101	17	1.678	16
991			min	19.268	17	-68.954	17	1.364	17	0	17	-1.281	8	-3.315	3
992		2	max	733.087	7	26.177	16	17.262	8	0	16	0.671	16	2.105	16
993			min	40.667	17	-55.802	3	1.364	17	0	17	-0.641	8	-5.015	8
994		3	max	682.899	7	83.69	16	17.262	8	0	16	0	23	0	23
995			min	37.101	16	-201.953	8	-38.16	16	0	17	0	1	0	1
996	M195	1	max	792.629	7	179.409	3	15.151	3	0	23	0	23	0	23
997			min	-40.869	17	-80.898	16	-28.778	16	0	1	0	1	0	1
998		2	max	739.51	7	46.114	3	15.151	3	0	23	0.482	3	1.651	16
999			min	-40.647	17	-24.873	16	-0.66	23	0	1	-0.422	16	-3.488	3
1000		3	max	699.424	7	19.56	16	33.309	16	0	23	0.964	3	1.705	16
1001			min	-40.488	17	-70.163	8	-0.66	23	0	1	-0.042	23	-3.323	3
1002	M196	1	max	807.353	7	152.155	4	0.564	23	0.003	3	0.963	3	1.705	16
1003			min	-28.844	17	-52.367	16	-42.085	16	-0.001	16	-0.042	23	-3.324	3
1004		2	max	733.503	7	26.54	16	0.564	23	0.003	3	0.481	3	2.118	16
1005			min	-28.546	17	-55.922	3	-12.971	3	-0.001	16	-0.672	16	-4.591	3
1006		3	max	683.317	7	84.043	16	38.188	16	0.003	3	0	23	0	23
1007			min	-28.347	17	-192.023	4	-12.971	3	-0.001	16	0	1	0	1

Envelope Member Section Deflections - Service

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
0	M1	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
1			min	0	1	0	1	0	1	0	1	NC	1	NC	1
2		2	max	0	17	0.371	8	0	2	0	23	5392.742	16	NC	20
3			min	-0.003	7	-0.029	17	-0.065	21	0	1	412.754	8	2354.22	21
4		3	max	0	17	1.18	8	0	2	0	23	1736.89	16	NC	20
5			min	-0.006	7	-0.093	17	-0.21	21	0	1	129.859	8	728.63	21

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
6	M2	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
7			min	0	1	0	1	0	1	0	1	NC	1	NC	1
8		2	max	0	17	0.029	17	0	7	0	23	5258.314	17	NC	20
9			min	-0.003	8	-0.416	7	-0.065	21	0	1	367.956	7	2355.023	21
10		3	max	0	17	0.093	17	0	7	0	23	1656.062	17	NC	20
11			min	-0.006	8	-1.322	7	-0.21	21	0	1	115.905	7	728.885	21
12	M3	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
13			min	0	1	0	1	0	1	0	1	NC	1	NC	1
14		2	max	0	17	0.402	8	0	2	0	23	NC	17	NC	20
15			min	-0.003	7	-0.031	16	-0.065	21	0	1	381.075	8	2354.027	21
16		3	max	0	17	1.278	8	0	2	0	23	3306.785	17	NC	20
17			min	-0.007	7	-0.096	16	-0.21	21	0	1	119.876	8	728.604	21
18	M4	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
19			min	0	1	0	1	0	1	0	1	NC	1	NC	1
20		2	max	0	17	0.011	17	0	7	0	23	NC	17	NC	20
21			min	-0.003	8	-0.449	7	-0.065	21	0	1	340.98	7	2354.831	21
22		3	max	0	17	0.034	17	0	7	0	23	4551.157	17	NC	20
23			min	-0.006	8	-1.427	7	-0.21	21	0	1	107.384	7	728.859	21
24	M5	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
25			min	0	1	0	1	0	1	0	1	NC	1	NC	1
26		2	max	0	17	0.401	8	0	1	0	23	NC	17	NC	20
27			min	-0.004	7	-0.034	16	-0.065	21	0	1	381.959	8	2353.954	21
28		3	max	0	17	1.275	8	0	4	0	23	NC	17	NC	20
29			min	-0.007	7	-0.107	16	-0.21	21	0	1	120.158	8	728.593	21
30	M6	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
31			min	0	1	0	1	0	1	0	1	NC	1	NC	1
32		2	max	0	16	-0.006	17	0	16	0	23	NC	17	NC	20
33			min	-0.003	7	-0.474	7	-0.065	21	0	1	323.208	7	2354.76	21
34		3	max	0	16	-0.02	17	0	5	0	23	7745.901	17	NC	20
35			min	-0.006	7	-1.505	7	-0.21	21	0	1	101.778	7	728.849	21
36	M7	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
37			min	0	1	0	1	0	1	0	1	NC	1	NC	1
38		2	max	0	17	0.393	2	0	20	0	23	6446.249	17	NC	20
39			min	-0.004	7	-0.034	16	-0.065	21	0	1	390.277	2	2353.954	21
40		3	max	0	17	1.248	2	0	20	0	23	2029.891	17	NC	20
41			min	-0.007	7	-0.107	16	-0.21	21	0	1	122.78	2	728.588	21
42	M8	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
43			min	0	1	0	1	0	1	0	1	NC	1	NC	1
44		2	max	0	16	-0.026	17	0	16	0	23	5862.134	17	NC	20
45			min	-0.003	7	-0.474	7	-0.065	21	0	1	323.217	7	2354.763	21
46		3	max	0	16	-0.083	17	0	16	0	23	1845.958	17	NC	20
47			min	-0.006	7	-1.505	7	-0.21	21	0	1	101.78	7	728.845	21
48	M9	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
49			min	0	1	0	1	0	1	0	1	NC	1	NC	1
50		2	max	0	16	0.393	2	0	4	0	23	4471.515	16	NC	20
51			min	-0.004	7	-0.034	16	-0.065	21	0	1	390.268	2	2353.988	21
52		3	max	-0.001	16	1.248	2	0	20	0	23	1434.566	16	NC	20
53			min	-0.007	7	-0.107	16	-0.21	21	0	1	122.776	2	728.585	21
54	M10	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
55			min	0	1	0	1	0	1	0	1	NC	1	NC	1
56		2	max	0	16	-0.045	17	0	5	0	23	3374.204	17	NC	20
57			min	-0.003	7	-0.474	7	-0.065	21	0	1	323.208	7	2354.799	21
58		3	max	0	16	-0.144	17	0	16	0	23	1062.482	17	NC	20
59			min	-0.006	7	-1.505	7	-0.21	21	0	1	101.778	7	728.844	21
60	M11	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
61			min	0	1	0	1	0	1	0	1	NC	1	NC	1
62		2	max	0	16	0.373	2	0	15	0	23	4963.364	16	NC	20
63			min	-0.003	7	-0.031	16	-0.065	21	0	1	411.008	2	2353.913	21
64		3	max	-0.001	16	1.185	2	0	20	0	23	1595.668	16	NC	20
65			min	-0.007	7	-0.096	16	-0.21	21	0	1	129.306	2	728.582	21
66	M12	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
67			min	0	1	0	1	0	1	0	1	NC	1	NC	1
68		2	max	0	16	-0.049	17	0	20	0	23	3097.181	17	NC	20
69			min	-0.003	7	-0.449	7	-0.065	21	0	1	340.979	7	2354.723	21
70		3	max	0	16	-0.157	17	0	16	0	23	975.242	17	NC	20
71			min	-0.006	7	-1.427	7	-0.21	21	0	1	107.384	7	728.843	21
72	M13	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
73			min	0	1	0	1	0	1	0	1	NC	1	NC	1
74		2	max	0	16	0.344	2	0	16	0	23	4990.369	16	NC	20
75			min	-0.003	7	-0.031	16	-0.065	21	0	1	445.031	2	2353.517	21
76		3	max	0	16	1.094	2	0	20	0	23	1604.565	16	NC	20
77			min	-0.006	7	-0.095	16	-0.21	21	0	1	140.029	2	728.574	21
78	M14	1	max	0	23	0	23	0	23	0	23	NC	23	NC	23
79			min	0	1	0	1	0	1	0	1	NC	1	NC	1
80		2	max	0	16	-0.054	17	0	20	0	23	2835.099	17	NC	20
81			min	-0.003	7	-0.418	7	-0.065	21	0	1	366.388	7	2354.376	21
82		3	max	0	16	-0.172	17	0	16	0	23	892.723	17	NC	20
83			min	-0.005	7	-1.328	7	-0.21	21	0	1	115.41	7	728.841	21
84	M29	1	max	0.09	16	0.645	8	0	15	0	16	NC	23	NC	23
85			min	-0.952	8	-0.051	17	-0.217	21	-0.002	21	NC	1	NC	1
86		2	max	0.091	16	0.07	17	0	20	0	16	2267.191	17	NC	20
87			min	-0.957	8	-0.907	7	-0.364	21	-0.002	21	185.414	7	1878.697	21
88		3	max	0.091	16	0.14	17	0	16	0	16	1440.073	17	NC	20
89			min	-0.962	8	-1.795	7	-0.507	21	-0.002	21	116.137	7	951.224	21
90	M30	1	max	0.159	17	0.127	3	0	16	0	8	NC	20	NC	23
91			min	-1.97	7	-0.201	15	-0.507	21	0	2	359.979	8	NC	1
92		2	max	0.159	17	0.096	3	0	16	0	8	NC	20	NC	23
93			min	-1.97	7	-0.212	15	-0.532	21	0	2	780.277	2	NC	1
94		3	max	0.159	17	0.067	3	0	16	0	8	NC	23	NC	23
95			min	-1.97	7	-0.218	15	-0.558	21	0	2	NC	1	NC	1
96	M31	1	max	0.089	16	0.142	17	0	16	0	16	NC	23	NC	23
97			min	-0.903	8	-1.821	7	-0.558	21	-0.002	21	1908.564	16	NC	1
98		2	max	0.089	16	0.145	17	0.001	7	0	7	NC	17	NC	20
99			min	-0.904	8	-1.881	7	-0.608	21	-0.002	21	1012.416	3	2064.042	21
100		3	max	0.089	16	0.145	17	0.002	7	0	7	NC	17	NC	20
101			min	-0.906	8	-1.865	7	-0.657	21	-0.002	21	621.837	3	1044.252	21
102	M32	1	max	0.074	17	0.699	7	0.217	21	0.002	21	NC	23	NC	23
103			min	-1.088	7	-0.051	17	0	15	0	20	6770.911	16	NC	1
104		2	max	0.074	17	0.112	16	0.363	21	0.002	21	5145.593	16	NC	20
105			min	-1.093	7	-0.785	8	0	16	0	20	192.893	8	1879.923	21
106		3	max	0.075	17	0.14	17	0.507	21	0.002	21	NC	16	NC	20
107			min	-1.098	7	-1.674	8	0	16	0	20	118.926	8	951.484	21
108	M33	1	max	0.159	17	0.004	17	0	16	0	7	NC	16	NC	23
109			min	-1.928	8	-0.323	5	-0.507	21	0	8	308.559	7	NC	1
110		2	max	0.159	17	0.002	17	0	16	0	7	NC	17	NC	23
111			min	-1.928	8	-0.293	5	-0.532	21	0	8	658.268	7	NC	1
112		3	max	0.159	17	0.001	17	0	16	0	7	NC	23	NC	23
113			min	-1.928	8	-0.266	5	-0.558	21	0	8	NC	1	NC	1
114	M34	1	max	0.072	17	0.142	17	0.558	21	0.002	21	NC	23	NC	23
115			min	-1.029	7	-1.705	8	0	16	0	20	1231.711	16	NC	1

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
116		2	max	0.072	17	0.145	17	0.608	21	0.002	21	NC	17	NC	20
117			min	-1.03	7	-1.791	8	-0.001	7	0	7	858.701	7	2061.174	21
118		3	max	0.072	17	0.145	17	0.657	21	0.002	21	NC	17	NC	20
119			min	-1.032	7	-1.812	8	-0.002	7	0	7	570.013	7	1042.628	21
120	M35	1	max	0.1	16	0.7	8	0	15	0	15	NC	23	NC	23
121			min	-1.03	8	-0.028	17	-0.217	21	-0.002	21	NC	1	NC	1
122		2	max	0.1	16	0.054	17	0	20	0	15	3395.708	17	NC	20
123			min	-1.036	8	-1.029	7	-0.364	21	-0.002	21	167.232	7	1878.647	21
124		3	max	0.1	16	0.077	17	0	16	0	15	2629.704	17	NC	20
125			min	-1.041	8	-1.964	7	-0.507	21	-0.002	21	106.707	7	951.476	21
126	M36	1	max	0.086	17	0.137	3	0	16	0	8	NC	20	NC	23
127			min	-2.141	7	-0.252	15	-0.507	21	0	17	346.689	8	NC	1
128		2	max	0.086	17	0.104	3	0	16	0	8	NC	20	NC	23
129			min	-2.141	7	-0.26	15	-0.532	21	0	2	760.436	8	NC	1
130		3	max	0.086	17	0.073	3	0	16	0	8	NC	23	NC	23
131			min	-2.141	7	-0.263	15	-0.558	21	0	2	NC	1	NC	1
132	M37	1	max	0.097	16	0.076	17	0	16	0	5	NC	23	NC	23
133			min	-0.979	8	-1.989	7	-0.558	21	-0.002	21	1300.461	15	NC	1
134		2	max	0.098	16	0.069	17	0	7	0	7	NC	17	NC	20
135			min	-0.981	8	-2.034	7	-0.608	21	-0.002	21	931.802	3	2050.948	21
136		3	max	0.098	16	0.066	17	0.001	7	0	7	NC	17	NC	20
137			min	-0.982	8	-2.005	7	-0.657	21	-0.002	21	557.4	3	1037.176	21
138	M38	1	max	0.023	17	0.755	7	0.217	21	0.002	21	NC	23	NC	23
139			min	-1.173	7	-0.023	17	0	15	0	1	6388.754	16	NC	1
140		2	max	0.024	17	0.14	16	0.363	21	0.002	21	4021.697	16	NC	20
141			min	-1.179	7	-0.875	8	0	16	0	1	175.527	8	1879.87	21
142		3	max	0.024	17	0.095	17	0.507	21	0.002	21	NC	16	NC	20
143			min	-1.184	7	-1.828	8	0	16	0	1	109.263	8	951.737	21
144	M39	1	max	0.096	17	-0.021	17	0	16	0	7	NC	17	NC	23
145			min	-2.097	8	-0.36	5	-0.507	21	0	8	301.783	7	NC	1
146		2	max	0.096	17	-0.008	3	0	16	0	7	NC	17	NC	23
147			min	-2.097	8	-0.329	5	-0.532	21	0	8	645.443	7	NC	1
148		3	max	0.096	17	0.006	3	0	16	0	7	NC	23	NC	23
149			min	-2.097	8	-0.302	5	-0.558	21	0	8	NC	1	NC	1
150	M40	1	max	0.028	17	0.093	17	0.558	21	0.002	21	NC	23	NC	23
151			min	-1.113	7	-1.859	8	0	16	0	4	966.49	16	NC	1
152		2	max	0.029	17	0.081	17	0.608	21	0.002	21	NC	17	NC	20
153			min	-1.115	7	-1.943	8	0	7	0	7	844.555	7	2048.102	21
154		3	max	0.029	17	0.072	17	0.657	21	0.002	21	NC	17	NC	20
155			min	-1.117	7	-1.96	8	-0.001	7	0	7	547.069	7	1035.567	21
156	M41	1	max	0.109	16	0.697	8	0	18	0	5	NC	23	NC	23
157			min	-1.029	8	-0.032	16	-0.217	21	-0.002	21	NC	1	NC	1
158		2	max	0.11	16	0.007	17	0	20	0	5	NC	17	NC	20
159			min	-1.034	8	-1.077	7	-0.364	21	-0.002	21	159.25	7	1878.692	21
160		3	max	0.11	16	-0.006	17	0	16	0	5	NC	17	NC	20
161			min	-1.04	8	-2.068	7	-0.507	21	-0.002	21	101.294	7	951.802	21
162	M42	1	max	-0.007	17	0.145	3	0	16	0	8	NC	20	NC	23
163			min	-2.256	7	-0.26	15	-0.507	21	0	17	332.163	2	NC	1
164		2	max	-0.007	17	0.109	3	0	16	0	8	NC	20	NC	23
165			min	-2.256	7	-0.269	15	-0.532	21	0	17	723.455	2	NC	1
166		3	max	-0.007	17	0.077	3	0	16	0	8	NC	23	NC	23
167			min	-2.256	7	-0.273	15	-0.558	21	0	17	NC	1	NC	1
168	M43	1	max	0.107	16	-0.008	17	0	16	0	7	NC	23	NC	23
169			min	-0.976	8	-2.094	7	-0.558	21	-0.002	21	1310.288	15	NC	1
170		2	max	0.107	16	-0.015	17	0	7	0	7	NC	17	NC	20

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
171			min	-0.978	8	-2.145	7	-0.608	21	-0.002	21	884.772	3	2041.444	21
172		3	max	0.107	16	-0.017	17	0.001	7	0	7	NC	17	NC	20
173			min	-0.979	8	-2.116	7	-0.657	21	-0.002	21	531.016	3	1032.14	21
174	M44	1	max	-0.019	17	0.797	7	0.217	21	0.002	21	NC	23	NC	23
175			min	-1.238	7	0.007	17	0	5	0	2	8081.833	16	NC	1
176		2	max	-0.019	17	0.149	16	0.363	21	0.002	21	NC	17	NC	20
177			min	-1.244	7	-0.86	8	0	16	0	2	177.625	8	1879.91	21
178		3	max	-0.019	17	0.083	16	0.506	21	0.002	21	NC	17	NC	20
179			min	-1.25	7	-1.814	8	0	16	0	2	109.661	7	952.066	21
180	M45	1	max	0.004	17	-0.023	17	0	16	0	17	NC	17	NC	23
181			min	-2.096	7	-0.377	5	-0.506	21	0	8	283.004	7	NC	1
182		2	max	0.004	17	-0.01	3	0	16	0	17	NC	17	NC	23
183			min	-2.096	7	-0.345	5	-0.532	21	0	8	604.918	7	NC	1
184		3	max	0.004	17	0.005	3	0	16	0	7	NC	23	NC	23
185			min	-2.096	7	-0.316	5	-0.558	21	0	8	NC	1	NC	1
186	M46	1	max	-0.013	17	0.073	16	0.558	21	0.002	21	NC	23	NC	23
187			min	-1.174	7	-1.845	8	0	16	0	2	943.594	16	NC	1
188		2	max	-0.013	17	0.019	16	0.608	21	0.002	21	NC	17	NC	20
189			min	-1.176	7	-1.933	8	0	2	0	7	790.614	7	2038.59	21
190		3	max	-0.013	17	-0.01	17	0.657	21	0.002	21	NC	17	NC	20
191			min	-1.178	7	-1.957	7	-0.001	7	0	7	514.156	7	1030.533	21
192	M47	1	max	0.109	16	0.681	2	0	20	0	20	NC	23	NC	23
193			min	-1.008	2	-0.032	16	-0.217	21	-0.002	21	NC	1	NC	1
194		2	max	0.11	16	-0.046	17	0	20	0	20	3158.721	17	NC	20
195			min	-1.013	2	-1.076	7	-0.364	21	-0.002	21	159.255	7	1878.805	21
196		3	max	0.11	16	-0.106	17	0	20	0	20	1876.123	17	NC	20
197			min	-1.018	2	-2.067	7	-0.506	21	-0.002	21	101.296	7	952.129	21
198	M48	1	max	-0.123	17	0.145	3	0	20	0	8	NC	20	NC	23
199			min	-2.256	7	-0.26	15	-0.506	21	0	17	332.168	2	NC	1
200		2	max	-0.123	17	0.109	3	0	20	0	8	NC	20	NC	23
201			min	-2.256	7	-0.269	15	-0.532	21	0	17	723.466	2	NC	1
202		3	max	-0.122	17	0.077	3	0	20	0	8	NC	23	NC	23
203			min	-2.256	7	-0.273	15	-0.558	21	0	17	NC	1	NC	1
204	M49	1	max	0.107	16	-0.109	17	0	20	0	20	NC	23	NC	23
205			min	-0.953	2	-2.094	7	-0.558	21	-0.002	21	1310.34	15	NC	1
206		2	max	0.107	16	-0.118	17	0	20	0	20	NC	17	NC	20
207			min	-0.954	2	-2.145	7	-0.608	21	-0.002	21	884.793	3	2034.136	21
208		3	max	0.107	16	-0.12	17	0	16	0	20	NC	16	NC	20
209			min	-0.956	2	-2.116	7	-0.658	21	-0.002	21	531.029	3	1028.286	21
210	M50	1	max	-0.069	17	0.797	7	0.217	21	0.002	21	NC	23	NC	23
211			min	-1.238	7	0.044	17	0	16	0	5	8080.896	16	NC	1
212		2	max	-0.069	17	0.149	16	0.363	21	0.002	21	4170.231	16	NC	20
213			min	-1.244	7	-0.824	2	0	16	0	16	181.091	7	1880.014	21
214		3	max	-0.069	17	0.082	16	0.506	21	0.002	21	NC	16	NC	20
215			min	-1.25	7	-1.762	2	0	16	0	16	109.664	7	952.396	21
216	M51	1	max	-0.036	16	-0.019	17	0	16	0	17	NC	16	NC	23
217			min	-2.096	7	-0.377	5	-0.506	21	0	8	283.009	7	NC	1
218		2	max	-0.036	16	-0.01	3	0	16	0	17	NC	16	NC	23
219			min	-2.096	7	-0.345	5	-0.532	21	0	8	604.927	7	NC	1
220		3	max	-0.036	16	0.005	3	0	16	0	17	NC	23	NC	23
221			min	-2.096	7	-0.316	5	-0.558	21	0	8	NC	1	NC	1
222	M52	1	max	-0.063	17	0.073	16	0.558	21	0.002	21	NC	23	NC	23
223			min	-1.174	7	-1.795	2	0	16	0	16	943.623	16	NC	1
224		2	max	-0.063	17	0.019	16	0.608	21	0.002	21	8754.365	17	NC	20
225			min	-1.176	7	-1.889	2	0	16	0	16	790.622	7	2031.237	21

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
226		3	max	-0.062	17	-0.036	16	0.658	21	0.002	21	NC	16	NC	20
227			min	-1.178	7	-1.957	7	0	16	0	16	514.161	7	1026.668	21
228	M53	1	max	0.109	16	0.681	2	0	1	0	1	NC	23	NC	23
229			min	-1.008	2	-0.032	16	-0.217	21	-0.002	21	NC	1	NC	1
230		2	max	0.11	16	-0.084	17	0	2	0	1	1759.345	17	NC	20
231			min	-1.013	2	-1.077	7	-0.364	21	-0.002	21	159.25	7	1878.93	21
232		3	max	0.11	16	-0.191	17	0	2	0	1	1140.316	16	NC	20
233			min	-1.018	2	-2.068	7	-0.506	21	-0.002	21	101.294	7	952.423	21
234	M54	1	max	-0.196	16	0.145	3	0	2	0	8	NC	20	NC	23
235			min	-2.256	7	-0.26	15	-0.506	21	0	17	332.163	2	NC	1
236		2	max	-0.196	16	0.109	3	0	2	0	8	NC	20	NC	23
237			min	-2.256	7	-0.269	15	-0.532	21	0	17	723.455	2	1214.987	22
238		3	max	-0.196	16	0.077	3	0	2	0	8	NC	23	NC	23
239			min	-2.256	7	-0.273	15	-0.558	21	0	17	NC	1	607.398	22
240	M55	1	max	0.107	16	-0.196	17	0	2	0	20	NC	23	NC	23
241			min	-0.953	2	-2.094	7	-0.558	21	-0.002	21	1310.288	15	NC	1
242		2	max	0.107	16	-0.209	17	0	16	0	16	7566.644	17	NC	20
243			min	-0.955	2	-2.145	7	-0.608	21	-0.002	21	884.772	3	2028.084	21
244		3	max	0.107	16	-0.203	16	0	16	0	16	NC	16	NC	20
245			min	-0.956	2	-2.116	7	-0.658	21	-0.002	21	531.016	3	1025.078	21
246	M56	1	max	-0.119	17	0.797	7	0.217	21	0.002	21	NC	23	NC	23
247			min	-1.238	7	0.076	17	0	16	0	16	8081.833	16	NC	1
248		2	max	-0.119	17	0.149	16	0.363	21	0.002	21	4170.214	16	NC	20
249			min	-1.244	7	-0.824	2	0	7	0	16	181.086	7	1880.124	21
250		3	max	-0.119	17	0.083	16	0.506	21	0.002	21	NC	16	NC	20
251			min	-1.25	7	-1.762	2	0	7	0	16	109.661	7	952.695	21
252	M57	1	max	-0.036	16	-0.027	23	0	7	0	17	NC	16	NC	23
253			min	-2.096	7	-0.377	5	-0.506	21	0	8	283.004	7	NC	1
254		2	max	-0.036	16	-0.01	3	0	7	0	17	NC	16	NC	23
255			min	-2.096	7	-0.345	5	-0.532	21	0	8	604.918	7	1215.16	22
256		3	max	-0.036	16	0.005	3	0	7	0	17	NC	23	NC	23
257			min	-2.096	7	-0.316	5	-0.557	21	0	8	NC	1	607.475	22
258	M58	1	max	-0.109	17	0.073	16	0.557	21	0.002	21	NC	23	NC	23
259			min	-1.174	7	-1.795	2	0	7	0	16	943.594	16	NC	1
260		2	max	-0.109	17	0.019	16	0.608	21	0.002	21	5817.362	17	NC	20
261			min	-1.176	7	-1.889	2	0	16	0	16	790.614	7	2025.076	21
262		3	max	-0.109	17	-0.036	16	0.658	21	0.002	21	NC	16	NC	20
263			min	-1.178	7	-1.957	7	0	16	0	16	514.156	7	1023.436	21
264	M59	1	max	0.1	16	0.647	2	0	9	0	2	NC	23	NC	23
265			min	-0.956	2	-0.027	16	-0.217	21	-0.002	21	NC	1	NC	1
266		2	max	0.1	16	-0.089	17	0	2	0	2	1588.595	17	NC	20
267			min	-0.961	2	-1.029	7	-0.364	21	-0.002	21	167.233	7	1879.01	21
268		3	max	0.1	16	-0.21	17	0	2	0	2	1128.067	16	NC	20
269			min	-0.966	2	-1.964	7	-0.506	21	-0.002	21	106.708	7	952.663	21
270	M60	1	max	-0.198	16	0.137	3	0	2	0	8	NC	20	NC	23
271			min	-2.141	7	-0.252	15	-0.506	21	0	17	354.03	2	NC	1
272		2	max	-0.198	16	0.104	3	0	2	0	8	NC	20	NC	23
273			min	-2.141	7	-0.26	15	-0.532	21	0	17	772.033	2	936.489	21
274		3	max	-0.198	16	0.073	3	0	2	0	8	NC	23	NC	23
275			min	-2.141	7	-0.263	15	-0.558	21	0	17	NC	1	468.218	21
276	M61	1	max	0.097	16	-0.215	17	0	2	0	1	NC	23	NC	23
277			min	-0.905	2	-1.989	7	-0.558	21	-0.002	21	1300.412	15	NC	1
278		2	max	0.098	16	-0.232	17	0	16	0	16	7424.271	20	NC	20
279			min	-0.907	2	-2.034	7	-0.608	21	-0.002	21	931.814	3	2022.573	21
280		3	max	0.098	16	-0.204	16	0	16	0	16	NC	16	NC	20

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
281			min	-0.908	2	-2.005	7	-0.658	21	-0.002	21	557.406	3	1022.111	21
282	M62	1	max	-0.128	17	0.755	7	0.217	21	0.002	21	NC	23	NC	23
283			min	-1.173	7	0.084	17	0	16	0	7	6388.995	16	NC	1
284		2	max	-0.129	17	0.14	16	0.363	21	0.002	21	4021.702	16	NC	20
285			min	-1.179	7	-0.788	2	0	7	0	16	190.676	7	1880.183	21
286		3	max	-0.129	17	0.072	16	0.506	21	0.002	21	NC	16	NC	20
287			min	-1.184	7	-1.677	2	-0.001	7	0	7	115.719	7	952.939	21
288	M63	1	max	-0.044	16	-0.022	17	0.001	7	0	17	NC	16	NC	23
289			min	-1.986	7	-0.36	5	-0.506	21	0	8	301.789	7	NC	1
290		2	max	-0.044	16	-0.008	3	0.001	7	0	17	NC	16	NC	23
291			min	-1.986	7	-0.329	5	-0.532	21	0	8	645.454	7	936.68	21
292		3	max	-0.044	16	0.006	3	0.001	7	0	17	NC	23	NC	23
293			min	-1.986	7	-0.302	5	-0.557	21	0	8	NC	1	468.303	21
294	M64	1	max	-0.119	17	0.062	16	0.557	21	0.002	21	NC	23	NC	23
295			min	-1.113	7	-1.707	2	-0.001	7	0	16	966.468	16	NC	1
296		2	max	-0.119	17	0.009	16	0.608	21	0.002	21	6113.492	17	NC	20
297			min	-1.115	7	-1.795	2	0	16	0	16	844.567	7	2019.335	21
298		3	max	-0.119	17	-0.044	16	0.658	21	0.002	21	NC	16	NC	20
299			min	-1.117	7	-1.852	7	0	16	0	16	547.073	7	1020.428	21
300	M65	1	max	0.097	16	0.595	2	0	2	0	2	NC	23	NC	23
301			min	-0.886	2	-0.03	16	-0.217	21	-0.002	21	NC	1	NC	1
302		2	max	0.097	16	-0.088	17	0	2	0	2	1889.716	16	NC	20
303			min	-0.89	2	-0.91	7	-0.364	21	-0.002	21	185.377	7	1879.009	21
304		3	max	0.097	16	-0.223	17	0.001	2	0	2	1369.906	16	NC	20
305			min	-0.894	2	-1.797	7	-0.506	21	-0.002	21	116.115	7	952.826	21
306	M66	1	max	-0.163	16	0.127	3	0.001	2	0	8	NC	23	NC	23
307			min	-1.97	7	-0.209	15	-0.506	21	0	17	360.032	2	NC	1
308		2	max	-0.163	16	0.096	3	0.001	2	0	8	NC	23	NC	23
309			min	-1.971	7	-0.219	15	-0.532	21	0	17	780.236	2	937.175	21
310		3	max	-0.163	16	0.067	3	0.001	2	0	8	NC	23	NC	23
311			min	-1.971	7	-0.226	15	-0.557	21	0	17	NC	1	468.509	21
312	M67	1	max	0.095	16	-0.229	17	0.001	2	0	2	NC	23	NC	23
313			min	-0.835	2	-1.824	7	-0.557	21	-0.002	21	1895.754	16	NC	1
314		2	max	0.095	16	-0.21	16	0	16	0	16	6732.499	20	NC	20
315			min	-0.836	2	-1.884	7	-0.608	21	-0.002	21	1012.366	3	2017.027	21
316		3	max	0.095	16	-0.176	16	0	16	0	16	NC	16	NC	20
317			min	-0.837	2	-1.867	7	-0.658	21	-0.002	21	621.807	3	1018.975	21
318	M68	1	max	-0.141	17	0.702	7	0.217	21	0.002	21	NC	23	NC	23
319			min	-1.093	7	0.091	17	0	16	0	7	6835.401	16	NC	1
320		2	max	-0.141	17	0.116	16	0.363	21	0.002	21	5152.562	16	NC	20
321			min	-1.098	7	-0.701	2	0	7	0	7	207.493	7	1880.148	21
322		3	max	-0.142	17	0.062	16	0.506	21	0.002	21	NC	16	NC	20
323			min	-1.103	7	-1.531	2	-0.001	7	0	7	124.506	7	953.105	21
324	M69	1	max	-0.039	16	-0.027	17	0.001	7	0	17	NC	16	NC	23
325			min	-1.847	7	-0.331	5	-0.506	21	0	8	308.673	7	NC	1
326		2	max	-0.04	16	-0.018	3	0.001	7	0	17	NC	16	NC	23
327			min	-1.848	7	-0.301	5	-0.532	21	0	8	658.507	7	937.482	21
328		3	max	-0.04	16	-0.002	3	0.001	7	0	17	NC	23	NC	23
329			min	-1.848	7	-0.274	5	-0.557	21	0	8	NC	1	468.648	21
330	M70	1	max	-0.129	17	0.055	16	0.557	21	0.002	21	NC	23	NC	23
331			min	-1.034	7	-1.561	2	-0.001	7	0	7	1227.83	16	NC	1
332		2	max	-0.129	17	0.014	16	0.608	21	0.002	21	4822.236	17	NC	20
333			min	-1.035	7	-1.669	7	0	16	0	16	858.428	7	2013.299	21
334		3	max	-0.129	17	-0.029	16	0.658	21	0.002	21	NC	16	NC	20
335			min	-1.037	7	-1.73	7	0	16	0	16	569.456	7	1017.222	21

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
336	M85	1	max	0.223	21	0.837	8	0.118	17	0.011	7	NC	23	NC	23
337			min	0	15	-0.113	17	-0.767	8	-0.001	17	NC	1	NC	1
338		2	max	0.223	21	0.718	8	0.102	16	0.011	7	NC	23	NC	23
339			min	0	15	-0.081	17	-0.854	8	-0.001	17	NC	1	NC	1
340		3	max	0.223	21	0.598	8	0.092	16	0.011	7	NC	23	NC	23
341			min	0	15	-0.047	17	-0.942	8	-0.001	17	NC	1	NC	1
342	M86	1	max	0.223	21	0.598	8	0.092	16	0.011	7	NC	23	NC	23
343			min	0	15	-0.047	17	-0.942	8	-0.001	17	NC	1	NC	1
344		2	max	0.223	21	0.267	3	0.054	16	0.011	7	3212.363	16	6445.459	20
345			min	0	15	-0.162	15	-1.276	8	-0.001	17	345.104	7	526.103	2
346		3	max	0.223	21	0.648	8	0.101	16	0.011	7	NC	23	NC	23
347			min	0	5	-0.034	16	-1.019	8	-0.001	17	NC	1	NC	1
348	M87	1	max	0.223	21	0.648	8	0.101	16	0.013	7	NC	23	NC	23
349			min	0	5	-0.034	16	-1.019	8	0	17	NC	1	NC	1
350		2	max	0.223	21	0.281	3	0.06	16	0.013	7	2948.593	16	5916.216	20
351			min	0	18	-0.187	15	-1.353	2	0	17	316.767	7	482.905	2
352		3	max	0.223	21	0.646	8	0.111	16	0.013	7	NC	23	NC	23
353			min	0	4	-0.038	16	-1.018	8	0	17	NC	1	NC	1
354	M88	1	max	0.223	21	0.646	8	0.111	16	0.013	7	NC	23	NC	23
355			min	0	4	-0.038	16	-1.018	8	0.001	17	NC	1	NC	1
356		2	max	0.223	21	0.291	3	0.065	16	0.013	7	NC	17	5917.374	20
357			min	0	4	-0.181	15	-1.378	2	0.001	17	316.829	7	482.999	2
358		3	max	0.223	21	0.632	2	0.111	16	0.013	7	NC	23	NC	23
359			min	0	20	-0.038	16	-0.997	2	0.001	17	NC	1	NC	1
360	M89	1	max	0.223	21	0.632	2	0.111	16	0.013	7	NC	23	NC	23
361			min	0	20	-0.038	16	-0.997	2	0.001	17	NC	1	NC	1
362		2	max	0.223	21	0.291	3	0.065	16	0.013	7	NC	17	5917.374	20
363			min	0	1	-0.181	15	-1.378	2	0.001	17	316.829	7	482.999	2
364		3	max	0.223	21	0.632	2	0.111	16	0.013	7	NC	23	NC	23
365			min	0	1	-0.038	16	-0.997	2	0.001	17	NC	1	NC	1
366	M90	1	max	0.223	21	0.632	2	0.111	16	0.012	7	NC	23	NC	23
367			min	0	1	-0.038	16	-0.997	2	0.001	17	NC	1	NC	1
368		2	max	0.223	21	0.281	3	0.06	16	0.012	7	NC	17	5916.216	20
369			min	0	1	-0.187	15	-1.353	2	0.001	17	316.767	7	482.905	2
370		3	max	0.223	21	0.6	2	0.101	16	0.012	7	NC	23	NC	23
371			min	0	1	-0.034	16	-0.946	2	0.001	17	NC	1	NC	1
372	M91	1	max	0.223	21	0.6	2	0.101	16	0.011	7	NC	23	NC	23
373			min	0	1	-0.034	16	-0.946	2	0.001	16	NC	1	NC	1
374		2	max	0.223	21	0.267	3	0.057	16	0.011	7	NC	17	6445.459	20
375			min	0	1	-0.163	15	-1.261	2	0.001	16	345.104	7	526.103	2
376		3	max	0.223	21	0.553	2	0.098	16	0.011	7	NC	23	NC	23
377			min	0	2	-0.035	16	-0.877	2	0.001	16	NC	1	NC	1
378	M92	1	max	0.223	21	0.553	2	0.098	16	0.011	7	NC	23	NC	23
379			min	0	2	-0.035	16	-0.877	2	0.001	16	NC	1	NC	1
380		2	max	0.223	21	0.671	7	0.109	16	0.011	7	NC	23	NC	23
381			min	0	2	-0.019	16	-0.774	2	0.001	16	NC	1	NC	1
382		3	max	0.223	21	0.812	7	0.121	16	0.011	7	NC	23	NC	23
383			min	0	2	-0.004	16	-0.684	8	0.001	16	NC	1	NC	1
384	M93	1	max	0.325	21	-0.035	23	0.138	16	0.01	7	NC	23	NC	23
385			min	0	4	-0.132	7	-0.717	8	-0.001	17	NC	1	NC	1
386		2	max	0.325	21	-0.004	17	0.115	16	0.01	7	NC	23	NC	23
387			min	0	4	-0.332	7	-0.831	8	-0.001	17	NC	1	NC	1
388		3	max	0.325	21	0.04	17	0.091	16	0.01	7	NC	23	NC	23
389			min	0	4	-0.535	7	-0.946	8	-0.001	17	NC	1	NC	1
390	M94	1	max	0.325	21	0.04	17	0.091	16	0.01	7	NC	23	NC	23

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
391			min	0	4	-0.535	7	-0.946	8	-0.001	17	NC	1	NC	1
392		2	max	0.325	21	0.198	17	0.007	16	0.01	7	2916.447	16	5040.073	20
393			min	0	4	-1.288	7	-1.383	2	-0.001	17	258.88	7	392.878	2
394		3	max	0.325	21	0.035	17	0.101	16	0.01	7	NC	23	NC	23
395			min	0	4	-0.62	7	-1.024	8	-0.001	17	NC	1	NC	1
396	M95	1	max	0.325	21	0.035	17	0.101	16	0.012	7	NC	23	NC	23
397			min	0	4	-0.62	7	-1.024	8	0	17	NC	1	NC	1
398		2	max	0.325	21	0.128	17	0.009	16	0.012	7	2676.951	16	4626.166	20
399			min	0	4	-1.408	7	-1.486	2	0	17	237.626	7	360.626	2
400		3	max	0.325	21	0.007	17	0.111	16	0.012	7	NC	23	NC	23
401			min	0	20	-0.646	7	-1.023	8	0	17	NC	1	NC	1
402	M96	1	max	0.325	21	0.007	17	0.111	16	0.012	7	NC	23	NC	23
403			min	0	20	-0.646	7	-1.023	8	0.001	17	NC	1	NC	1
404		2	max	0.325	21	0.022	17	0.014	16	0.012	7	6074.439	17	4627.071	20
405			min	0	20	-1.421	7	-1.511	2	0.001	17	237.673	7	360.697	2
406		3	max	0.325	21	-0.024	17	0.111	16	0.012	7	NC	23	NC	23
407			min	0	20	-0.646	7	-1.001	2	0.001	17	NC	1	NC	1
408	M97	1	max	0.325	21	-0.024	17	0.111	16	0.012	7	NC	23	NC	23
409			min	0	20	-0.646	7	-1.001	2	0.001	17	NC	1	NC	1
410		2	max	0.325	21	-0.033	17	0.014	16	0.012	7	NC	17	4627.071	20
411			min	0	20	-1.421	7	-1.511	2	0.001	17	237.673	7	360.697	2
412		3	max	0.325	21	-0.044	17	0.111	16	0.012	7	NC	23	NC	23
413			min	0	20	-0.646	7	-1.001	2	0.001	17	NC	1	NC	1
414	M98	1	max	0.325	21	-0.044	17	0.111	16	0.012	7	NC	23	NC	23
415			min	0	20	-0.646	7	-1.001	2	0.001	16	NC	1	NC	1
416		2	max	0.325	21	-0.043	17	0.009	16	0.012	7	NC	17	4626.166	20
417			min	0	20	-1.408	7	-1.486	2	0.001	16	237.626	7	360.626	2
418		3	max	0.325	21	-0.044	17	0.101	16	0.012	7	NC	23	NC	23
419			min	0	20	-0.62	7	-0.95	2	0.001	16	NC	1	NC	1
420	M99	1	max	0.325	21	-0.044	17	0.101	16	0.01	7	NC	23	NC	23
421			min	0	20	-0.62	7	-0.95	2	0.001	16	NC	1	NC	1
422		2	max	0.325	21	-0.042	17	0.011	16	0.01	7	NC	17	5040.005	20
423			min	0	20	-1.289	7	-1.383	2	0.001	16	258.884	7	392.886	2
424		3	max	0.325	21	-0.041	17	0.098	16	0.01	7	NC	23	NC	23
425			min	0	20	-0.537	7	-0.88	2	0.001	16	NC	1	NC	1
426	M100	1	max	0.325	21	-0.041	17	0.098	16	0.01	7	NC	23	NC	23
427			min	0	20	-0.537	7	-0.88	2	0.001	16	NC	1	NC	1
428		2	max	0.325	21	-0.041	17	0.122	16	0.01	7	NC	23	NC	23
429			min	0	20	-0.335	7	-0.745	2	0.001	16	NC	1	NC	1
430		3	max	0.325	21	-0.041	17	0.146	16	0.01	7	NC	23	NC	23
431			min	0	20	-0.135	7	-0.634	8	0.001	16	NC	1	NC	1
432	M101	1	max	0.427	21	0.038	17	0.134	16	0.007	7	NC	23	NC	23
433			min	0	16	-1.011	7	-0.744	8	-0.001	17	NC	1	NC	1
434		2	max	0.427	21	0.074	17	0.113	16	0.007	7	NC	23	NC	23
435			min	0	16	-1.199	7	-0.848	8	-0.001	17	NC	1	NC	1
436		3	max	0.427	21	0.109	17	0.091	16	0.007	7	NC	23	NC	23
437			min	0	16	-1.39	7	-0.953	8	-0.001	17	NC	1	NC	1
438	M102	1	max	0.427	21	0.109	17	0.091	16	0.007	7	NC	23	NC	23
439			min	0	16	-1.39	7	-0.953	8	-0.001	17	NC	1	NC	1
440		2	max	0.427	21	0.234	17	0.014	16	0.007	7	3159.033	16	5490.073	20
441			min	0	16	-2.112	7	-1.349	8	-0.001	17	286.366	7	433.85	2
442		3	max	0.427	21	0.073	17	0.101	16	0.007	7	NC	23	NC	23
443			min	0	16	-1.549	7	-1.031	8	-0.001	17	NC	1	NC	1
444	M103	1	max	0.427	21	0.073	17	0.101	16	0.008	7	NC	23	NC	23
445			min	0	16	-1.549	7	-1.031	8	0	17	NC	1	NC	1

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
446		2	max	0.427	21	0.133	17	0.017	16	0.008	7	2899.642	16	5039.278	20
447			min	0	16	-2.287	7	-1.444	2	0	17	262.852	7	398.226	2
448		3	max	0.427	21	0.005	17	0.11	16	0.008	7	NC	23	NC	23
449			min	0	16	-1.625	7	-1.03	8	0	17	NC	1	NC	1
450	M104	1	max	0.427	21	0.005	17	0.11	16	0.008	7	NC	23	NC	23
451			min	0	16	-1.625	7	-1.03	8	0	17	NC	1	NC	1
452		2	max	0.427	21	-0.01	17	0.022	16	0.008	7	7179.3	17	5040.264	20
453			min	0	16	-2.325	7	-1.47	2	0	17	262.904	7	398.304	2
454		3	max	0.427	21	-0.077	17	0.11	16	0.008	7	NC	23	NC	23
455			min	0	20	-1.625	7	-1.008	2	0	17	NC	1	NC	1
456	M105	1	max	0.427	21	-0.077	17	0.11	16	0.008	7	NC	23	NC	23
457			min	0	20	-1.625	7	-1.008	2	0.001	16	NC	1	NC	1
458		2	max	0.427	21	-0.109	17	0.022	16	0.008	7	NC	17	5040.264	20
459			min	0	2	-2.325	7	-1.47	2	0.001	16	262.904	7	398.304	2
460		3	max	0.427	21	-0.139	17	0.11	16	0.008	7	NC	23	NC	23
461			min	0	2	-1.625	7	-1.008	2	0.001	16	NC	1	NC	1
462	M106	1	max	0.427	21	-0.139	17	0.11	16	0.007	7	NC	23	NC	23
463			min	0	2	-1.625	7	-1.008	2	0.001	16	NC	1	NC	1
464		2	max	0.427	21	-0.146	17	0.017	16	0.007	7	NC	17	5039.278	20
465			min	0	2	-2.287	7	-1.444	2	0.001	16	262.852	7	398.226	2
466		3	max	0.427	21	-0.15	17	0.101	16	0.007	7	NC	23	NC	23
467			min	0	2	-1.549	7	-0.957	2	0.001	16	NC	1	NC	1
468	M107	1	max	0.427	21	-0.15	17	0.101	16	0.007	7	NC	23	NC	23
469			min	0	2	-1.549	7	-0.957	2	0	16	NC	1	NC	1
470		2	max	0.427	21	-0.153	17	0.018	16	0.007	7	NC	17	5490.073	20
471			min	0	2	-2.113	7	-1.345	2	0	16	286.366	7	433.85	2
472		3	max	0.427	21	-0.155	17	0.098	16	0.007	7	NC	23	NC	23
473			min	0	2	-1.393	7	-0.886	2	0	16	NC	1	NC	1
474	M108	1	max	0.427	21	-0.155	17	0.098	16	0.007	7	NC	23	NC	23
475			min	0	2	-1.393	7	-0.886	2	0	16	NC	1	NC	1
476		2	max	0.427	21	-0.155	17	0.12	16	0.007	7	NC	23	NC	23
477			min	0	2	-1.202	7	-0.763	2	0	16	NC	1	NC	1
478		3	max	0.427	21	-0.155	17	0.141	16	0.007	7	NC	23	NC	23
479			min	0	2	-1.014	7	-0.659	8	0	16	NC	1	NC	1
480	M109	1	max	0.499	21	0.098	17	0.122	16	0.004	8	NC	23	NC	23
481			min	0	16	-1.488	7	-0.806	8	0	17	NC	1	NC	1
482		2	max	0.499	21	0.118	17	0.106	16	0.004	8	NC	23	NC	23
483			min	0	16	-1.625	7	-0.882	8	0	17	NC	1	NC	1
484		3	max	0.499	21	0.138	17	0.091	16	0.004	8	NC	23	NC	23
485			min	0	16	-1.763	7	-0.958	8	0	17	NC	1	NC	1
486	M110	1	max	0.499	21	0.138	17	0.091	16	0.004	8	NC	23	NC	23
487			min	0	16	-1.763	7	-0.958	8	0	17	NC	1	NC	1
488		2	max	0.499	21	0.201	17	0.035	16	0.004	8	4108.051	16	7320.409	20
489			min	0	16	-2.297	7	-1.25	8	0	17	410.545	7	617.273	2
490		3	max	0.499	21	0.078	17	0.1	16	0.004	8	NC	23	NC	23
491			min	0	16	-1.934	7	-1.037	8	0	17	NC	1	NC	1
492	M111	1	max	0.499	21	0.078	17	0.1	16	0.004	8	NC	23	NC	23
493			min	0	16	-1.934	7	-1.037	8	0	16	NC	1	NC	1
494		2	max	0.499	21	0.096	17	0.039	16	0.004	8	3770.735	16	6719.323	20
495			min	0	16	-2.472	7	-1.312	2	0	16	376.835	7	566.588	2
496		3	max	0.499	21	-0.004	17	0.11	16	0.004	8	NC	23	NC	23
497			min	0	16	-2.035	7	-1.035	8	0	16	NC	1	NC	1
498	M112	1	max	0.499	21	-0.004	17	0.11	16	0.004	2	NC	23	NC	23
499			min	0	16	-2.035	7	-1.035	8	0	16	NC	1	NC	1
500		2	max	0.499	21	-0.042	17	0.044	16	0.004	2	NC	17	6720.638	20

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
501			min	0	16	-2.523	7	-1.338	2	0	16	376.908	7	566.699	2
502		3	max	0.499	21	-0.103	17	0.11	16	0.004	2	NC	23	NC	23
503			min	0	20	-2.034	7	-1.013	2	0	16	NC	1	NC	1
504	M113	1	max	0.499	21	-0.103	17	0.11	16	0.004	2	NC	23	NC	23
505			min	0	20	-2.034	7	-1.013	2	0	16	NC	1	NC	1
506		2	max	0.499	21	-0.151	17	0.044	16	0.004	2	NC	17	6720.638	20
507			min	0	2	-2.523	7	-1.338	2	0	16	376.908	7	566.699	2
508		3	max	0.499	21	-0.187	17	0.11	16	0.004	2	NC	23	NC	23
509			min	0	2	-2.035	7	-1.013	2	0	16	NC	1	NC	1
510	M114	1	max	0.499	21	-0.187	17	0.11	16	0.004	2	NC	23	NC	23
511			min	0	2	-2.035	7	-1.013	2	0	16	NC	1	NC	1
512		2	max	0.499	21	-0.202	17	0.039	16	0.004	2	NC	17	6719.323	20
513			min	0	2	-2.472	7	-1.312	2	0	16	376.835	7	566.588	2
514		3	max	0.499	21	-0.205	17	0.1	16	0.004	2	NC	23	NC	23
515			min	0	2	-1.934	7	-0.962	2	0	16	NC	1	NC	1
516	M115	1	max	0.499	21	-0.205	17	0.1	16	0.004	2	NC	23	NC	23
517			min	0	2	-1.934	7	-0.962	2	0	16	NC	1	NC	1
518		2	max	0.499	21	-0.216	17	0.038	16	0.004	2	NC	17	7320.409	20
519			min	-0.001	2	-2.298	7	-1.224	2	0	16	410.545	7	617.273	2
520		3	max	0.498	21	-0.216	17	0.097	16	0.004	2	NC	23	NC	23
521			min	-0.001	2	-1.766	7	-0.89	2	0	16	NC	1	NC	1
522	M116	1	max	0.498	21	-0.216	17	0.097	16	0.004	2	NC	23	NC	23
523			min	-0.001	2	-1.766	7	-0.89	2	0	16	NC	1	NC	1
524		2	max	0.498	21	-0.215	16	0.114	16	0.004	2	NC	23	NC	23
525			min	-0.001	2	-1.628	7	-0.802	2	0	16	NC	1	NC	1
526		3	max	0.498	21	-0.199	16	0.13	16	0.004	2	NC	23	NC	23
527			min	-0.001	2	-1.491	7	-0.721	8	0	16	NC	1	NC	1
528	M117	1	max	0.553	21	0.116	17	0.129	16	0.002	2	NC	23	NC	23
529			min	0	16	-1.627	7	-1.009	8	0	16	NC	1	NC	1
530		2	max	0.553	21	0.128	17	0.108	16	0.002	2	NC	23	NC	23
531			min	0	16	-1.715	7	-0.948	8	0	16	NC	1	4885.489	8
532		3	max	0.553	21	0.141	17	0.088	16	0.002	2	NC	23	NC	23
533			min	0	16	-1.806	7	-0.901	8	0	16	NC	1	NC	1
534	M118	1	max	0.553	21	0.141	17	0.088	16	0.002	2	NC	23	NC	23
535			min	0	16	-1.806	7	-0.901	8	0	16	NC	1	NC	1
536		2	max	0.553	21	0.18	17	0.046	16	0.002	2	4941.733	16	NC	23
537			min	0	16	-2.209	7	-0.94	8	0	16	578.437	7	2554.097	2
538		3	max	0.553	21	0.077	17	0.097	16	0.002	2	NC	23	NC	23
539			min	0	16	-1.976	7	-0.977	8	0	16	NC	1	NC	1
540	M119	1	max	0.553	21	0.077	17	0.097	16	0.003	3	NC	23	NC	23
541			min	0	16	-1.976	7	-0.977	8	0	16	NC	1	NC	1
542		2	max	0.552	21	0.107	17	0.08	16	0.003	3	3817.281	16	8301.202	15
543			min	0	16	-2.417	7	-1.188	8	0	16	473.037	7	735.765	2
544		3	max	0.552	21	-0.007	17	0.107	16	0.003	3	NC	23	NC	23
545			min	0	16	-2.08	7	-0.974	8	0	16	NC	1	NC	1
546	M120	1	max	0.552	21	-0.007	17	0.107	16	0.003	3	NC	23	NC	23
547			min	0	16	-2.08	7	-0.974	8	0	16	NC	1	NC	1
548		2	max	0.552	21	-0.011	17	0.084	16	0.003	3	4010.468	17	8302.826	15
549			min	0	16	-2.469	7	-1.201	2	0	16	473.13	7	735.909	2
550		3	max	0.552	21	-0.107	17	0.107	16	0.003	3	NC	23	NC	23
551			min	0	20	-2.08	7	-0.951	2	0	16	NC	1	NC	1
552	M121	1	max	0.552	21	-0.107	17	0.107	16	0.003	3	NC	23	NC	23
553			min	0	20	-2.08	7	-0.951	2	0	16	NC	1	NC	1
554		2	max	0.552	21	-0.127	17	0.084	16	0.003	3	8026.22	17	8302.826	15
555			min	0	2	-2.469	7	-1.201	2	0	16	473.13	7	735.909	2

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
556		3	max	0.552	21	-0.193	17	0.107	16	0.003	3	NC	23	NC	23
557			min	0	2	-2.08	7	-0.951	2	0	16	NC	1	NC	1
558	M122	1	max	0.552	21	-0.193	17	0.107	16	0.003	3	NC	23	NC	23
559			min	0	2	-2.08	7	-0.951	2	0	16	NC	1	NC	1
560		2	max	0.552	21	-0.208	17	0.08	16	0.003	3	NC	17	8301.202	16
561			min	0	2	-2.417	7	-1.177	2	0	16	473.037	7	735.765	2
562		3	max	0.552	21	-0.212	17	0.097	16	0.003	3	NC	23	NC	23
563			min	-0.001	2	-1.976	7	-0.903	2	0	16	NC	1	NC	1
564	M123	1	max	0.552	21	-0.212	17	0.097	16	0.002	2	NC	23	NC	23
565			min	-0.001	2	-1.976	7	-0.903	2	0	16	NC	1	NC	1
566		2	max	0.552	21	-0.224	17	0.049	16	0.002	2	NC	17	NC	20
567			min	-0.001	2	-2.211	7	-0.94	2	0	16	578.584	7	2556.658	2
568		3	max	0.552	21	-0.225	17	0.095	16	0.002	2	NC	23	NC	23
569			min	-0.001	2	-1.809	7	-0.832	2	0	16	NC	1	NC	1
570	M124	1	max	0.552	21	-0.225	17	0.095	16	0.002	2	NC	23	NC	23
571			min	-0.001	2	-1.809	7	-0.832	2	0	16	NC	1	NC	1
572		2	max	0.552	21	-0.22	16	0.115	16	0.002	2	NC	23	NC	23
573			min	-0.001	2	-1.718	7	-0.851	2	0	16	NC	1	5874.371	2
574		3	max	0.552	21	-0.208	16	0.137	16	0.002	2	NC	23	NC	23
575			min	-0.001	2	-1.63	7	-0.88	2	0	16	NC	1	NC	1
576	M125	1	max	0.602	21	0.22	17	0.137	17	0.002	3	NC	23	NC	23
577			min	0	2	-1.837	7	-0.983	8	0	16	NC	1	NC	1
578		2	max	0.602	21	0.174	17	0.11	16	0.002	3	NC	23	NC	23
579			min	0	2	-1.831	7	-0.924	8	0	16	2748.415	7	3563.296	2
580		3	max	0.602	21	0.145	17	0.088	16	0.002	3	NC	23	NC	23
581			min	0	2	-1.878	7	-0.903	8	0	16	NC	1	NC	1
582	M126	1	max	0.602	21	0.145	17	0.088	16	0.002	3	NC	23	NC	23
583			min	0	2	-1.878	7	-0.903	8	0	16	NC	1	NC	1
584		2	max	0.602	21	0.156	17	0.04	16	0.002	3	5697.771	16	NC	20
585			min	0	7	-2.234	7	-1.06	8	0	16	660.233	7	1156.023	2
586		3	max	0.602	21	0.07	17	0.097	16	0.002	3	NC	23	NC	23
587			min	0	7	-2.033	7	-0.979	8	0	16	NC	1	NC	1
588	M127	1	max	0.602	21	0.07	17	0.097	16	0.002	3	NC	23	NC	23
589			min	0	7	-2.033	7	-0.979	8	-0.001	15	NC	1	NC	1
590		2	max	0.603	21	0.135	17	0.033	16	0.002	3	3752.069	16	6469.62	20
591			min	0	7	-2.612	7	-1.268	2	-0.001	15	351.712	7	543.149	2
592		3	max	0.603	21	-0.014	17	0.106	16	0.002	3	NC	23	NC	23
593			min	0	7	-2.144	7	-0.976	8	-0.001	15	NC	1	NC	1
594	M128	1	max	0.603	21	-0.014	17	0.106	16	0.002	3	NC	23	NC	23
595			min	0	7	-2.144	7	-0.976	8	-0.001	15	NC	1	NC	1
596		2	max	0.603	21	0.005	17	0.038	16	0.002	3	3752.803	16	6470.886	20
597			min	0	2	-2.667	7	-1.292	2	-0.001	15	351.781	7	543.255	2
598		3	max	0.603	21	-0.117	17	0.106	16	0.002	3	NC	23	NC	23
599			min	0	20	-2.144	7	-0.953	2	-0.001	15	NC	1	NC	1
600	M129	1	max	0.603	21	-0.117	17	0.106	16	0.002	3	NC	23	NC	23
601			min	0	20	-2.144	7	-0.953	2	-0.001	15	NC	1	NC	1
602		2	max	0.603	21	-0.124	17	0.038	16	0.002	3	4775.992	17	6470.886	20
603			min	0	16	-2.667	7	-1.292	2	-0.001	15	351.781	7	543.255	2
604		3	max	0.603	21	-0.208	17	0.106	16	0.002	3	NC	23	NC	23
605			min	0	16	-2.144	7	-0.953	2	-0.001	15	NC	1	NC	1
606	M130	1	max	0.603	21	-0.208	17	0.106	16	0.002	3	NC	23	NC	23
607			min	0	16	-2.144	7	-0.953	2	-0.001	15	NC	1	NC	1
608		2	max	0.603	21	-0.22	17	0.033	16	0.002	3	NC	17	6469.62	20
609			min	0	16	-2.612	7	-1.268	2	-0.001	15	351.712	7	543.149	2
610		3	max	0.603	21	-0.23	17	0.097	16	0.002	3	NC	23	NC	23

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
611			min	0	16	-2.033	7	-0.905	2	-0.001	15	NC	1	NC	1
612	M131	1	max	0.603	21	-0.23	17	0.097	16	0.002	3	NC	23	NC	23
613			min	0	16	-2.033	7	-0.905	2	0	16	NC	1	NC	1
614		2	max	0.603	21	-0.237	17	0.044	16	0.002	3	NC	17	NC	20
615			min	0	16	-2.236	7	-1.029	2	0	16	659.995	7	1156.072	2
616		3	max	0.603	21	-0.214	16	0.095	16	0.002	3	NC	23	NC	23
617			min	0	16	-1.88	7	-0.835	2	0	16	NC	1	NC	1
618	M132	1	max	0.603	21	-0.214	16	0.095	16	0.002	3	NC	23	NC	23
619			min	0	16	-1.88	7	-0.835	2	0	16	NC	1	NC	1
620		2	max	0.603	21	-0.197	16	0.117	16	0.002	3	NC	23	NC	23
621			min	0	16	-1.834	7	-0.838	2	0	16	2749.745	7	3562.523	2
622		3	max	0.603	21	-0.183	16	0.138	16	0.002	3	NC	23	NC	23
623			min	0	16	-1.84	7	-0.882	2	0	16	NC	1	NC	1
624	M133	1	max	0.658	21	0.385	17	0.218	5	0.001	3	NC	23	NC	23
625			min	-0.003	7	-2.173	7	-0.02	3	-0.001	5	NC	1	NC	1
626		2	max	0.659	21	0.26	17	0.202	5	0.001	3	NC	23	NC	23
627			min	-0.003	7	-2.067	7	-0.005	3	-0.001	5	4657.695	7	NC	1
628		3	max	0.659	21	0.162	17	0.196	5	0.001	3	NC	23	NC	23
629			min	-0.002	7	-2.026	8	0	6	-0.001	5	NC	1	NC	1
630	M134	1	max	0.659	21	0.162	17	0.196	5	0.001	3	NC	23	NC	23
631			min	-0.002	7	-2.026	8	0	6	-0.001	5	NC	1	NC	1
632		2	max	0.659	21	0.106	17	0.237	5	0.001	3	NC	20	NC	23
633			min	-0.002	7	-2.171	8	-0.002	6	-0.001	5	2871.424	8	7096.909	15
634		3	max	0.659	21	0.077	17	0.225	5	0.001	3	NC	23	NC	23
635			min	-0.002	7	-2.189	8	-0.005	6	-0.001	5	NC	1	NC	1
636	M135	1	max	0.659	21	0.077	17	0.225	5	0.001	3	NC	23	NC	23
637			min	-0.002	7	-2.189	8	-0.005	6	-0.001	5	NC	1	NC	1
638		2	max	0.659	21	0.058	17	0.291	5	0.001	3	NC	16	NC	23
639			min	-0.001	7	-2.4	7	-0.006	6	-0.001	5	997.871	8	3029.625	5
640		3	max	0.66	21	-0.015	17	0.235	5	0.001	3	NC	23	NC	23
641			min	-0.001	7	-2.277	7	-0.007	6	-0.001	5	NC	1	NC	1
642	M136	1	max	0.66	21	-0.015	17	0.235	5	0.001	3	NC	23	NC	23
643			min	-0.001	7	-2.277	7	-0.007	6	-0.001	5	NC	1	NC	1
644		2	max	0.66	21	-0.059	17	0.296	5	0.001	3	NC	17	NC	23
645			min	0	7	-2.46	7	-0.005	6	-0.001	5	1004.792	7	3030.217	15
646		3	max	0.66	21	-0.132	17	0.235	5	0.001	3	NC	23	NC	23
647			min	0	16	-2.277	7	-0.003	6	-0.001	5	NC	1	NC	1
648	M137	1	max	0.66	21	-0.132	17	0.235	5	0.001	3	NC	23	NC	23
649			min	0	16	-2.277	7	-0.003	6	-0.001	5	NC	1	NC	1
650		2	max	0.66	21	-0.13	16	0.296	5	0.001	3	NC	17	NC	23
651			min	0	16	-2.46	7	-0.004	6	-0.001	5	1004.792	7	3030.217	5
652		3	max	0.66	21	-0.134	16	0.235	5	0.001	3	NC	23	NC	23
653			min	0	16	-2.277	7	-0.004	6	-0.001	5	NC	1	NC	1
654	M138	1	max	0.66	21	-0.134	16	0.235	5	0.001	3	NC	23	NC	23
655			min	0	16	-2.277	7	-0.004	6	-0.001	5	NC	1	NC	1
656		2	max	0.66	21	-0.133	16	0.291	5	0.001	3	NC	17	NC	23
657			min	0	16	-2.4	7	-0.002	6	-0.001	5	1004.595	7	3029.625	5
658		3	max	0.66	21	-0.139	16	0.225	5	0.001	3	NC	23	NC	23
659			min	0	16	-2.156	7	0	2	-0.001	5	NC	1	NC	1
660	M139	1	max	0.66	21	-0.139	16	0.225	5	0.001	3	NC	23	NC	23
661			min	0	16	-2.156	7	0	2	-0.001	5	NC	1	NC	1
662		2	max	0.661	21	-0.131	16	0.241	5	0.001	3	NC	23	NC	23
663			min	0	16	-2.138	7	0	17	-0.001	5	3387.474	7	6955.144	15
664		3	max	0.661	21	-0.115	16	0.204	5	0.001	3	NC	23	NC	23
665			min	0	16	-2.011	7	0	2	-0.001	5	NC	1	NC	1

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
666	M140	1	max	0.661	21	-0.115	16	0.204	5	0.001	3	NC	23	NC	23
667			min	0	16	-2.011	7	0	2	-0.001	5	NC	1	NC	1
668		2	max	0.661	21	-0.091	16	0.211	5	0.001	3	NC	23	NC	23
669			min	0	16	-2.067	7	-0.005	3	-0.001	5	4601.028	8	NC	1
670		3	max	0.661	21	-0.062	16	0.228	5	0.001	3	NC	23	NC	23
671			min	0	16	-2.173	7	-0.02	3	-0.001	5	NC	1	NC	1
672	M141	1	max	0.223	21	0.837	8	0.894	7	0.001	17	NC	23	NC	23
673			min	0	15	-0.114	17	-0.12	17	-0.011	8	NC	1	NC	1
674		2	max	0.223	21	0.746	7	0.986	7	0.001	17	NC	23	NC	23
675			min	0	15	-0.081	17	-0.097	17	-0.011	8	NC	1	NC	1
676		3	max	0.223	21	0.656	7	1.079	7	0.001	17	NC	23	NC	23
677			min	0	15	-0.047	17	-0.073	17	-0.011	8	NC	1	NC	1
678	M142	1	max	0.223	21	0.656	7	1.079	7	0.001	17	NC	23	NC	23
679			min	0	15	-0.047	17	-0.073	17	-0.011	8	NC	1	NC	1
680		2	max	0.223	21	0.334	7	1.432	7	0.001	17	3078.068	20	2826.747	23
681			min	0	15	0.049	3	0.021	17	-0.011	8	403.333	8	526.103	2
682		3	max	0.223	21	0.708	7	1.163	7	0.001	17	NC	23	NC	23
683			min	0	5	-0.02	17	-0.022	17	-0.011	8	NC	1	NC	1
684	M143	1	max	0.223	21	0.708	7	1.163	7	0	16	NC	23	NC	23
685			min	0	5	-0.02	17	-0.022	17	-0.012	8	NC	1	NC	1
686		2	max	0.223	21	0.349	7	1.535	7	0	16	2825.325	20	2594.64	23
687			min	0	5	0.043	3	0.074	17	-0.012	8	417.457	8	482.905	2
688		3	max	0.223	21	0.747	7	1.227	7	0	16	NC	23	NC	23
689			min	0	5	0.008	17	0.019	17	-0.012	8	NC	1	NC	1
690	M144	1	max	0.223	21	0.747	7	1.227	7	0	16	NC	23	NC	23
691			min	0	5	0.008	17	0.019	17	-0.011	7	NC	1	NC	1
692		2	max	0.223	21	0.368	7	1.567	7	0	16	NC	17	2595.148	23
693			min	0	5	0.042	17	0.119	17	-0.011	7	446.54	8	482.999	2
694		3	max	0.223	21	0.747	7	1.227	7	0	16	NC	23	NC	23
695			min	0	16	0.041	17	0.068	17	-0.011	7	NC	1	NC	1
696	M145	1	max	0.223	21	0.747	7	1.227	7	0	16	NC	23	NC	23
697			min	0	16	0.041	17	0.068	17	-0.011	7	NC	1	NC	1
698		2	max	0.223	21	0.368	7	1.567	7	0	16	NC	17	2595.148	23
699			min	0	16	0.052	17	0.168	17	-0.011	7	452.121	2	482.999	2
700		3	max	0.223	21	0.747	7	1.227	7	0	16	NC	23	NC	23
701			min	0	16	0.072	17	0.118	17	-0.011	7	NC	1	NC	1
702	M146	1	max	0.223	21	0.747	7	1.227	7	0	16	NC	23	NC	23
703			min	0	16	0.072	17	0.118	17	-0.011	7	NC	1	NC	1
704		2	max	0.223	21	0.349	7	1.535	7	0	16	NC	17	2594.64	23
705			min	0	16	0.043	3	0.197	17	-0.011	7	452.033	3	482.905	2
706		3	max	0.223	21	0.708	7	1.163	7	0	16	NC	23	NC	23
707			min	0	16	0.079	17	0.127	17	-0.011	7	NC	1	NC	1
708	M147	1	max	0.223	21	0.708	7	1.163	7	0	16	NC	23	NC	23
709			min	0	16	0.079	17	0.127	17	-0.01	7	NC	1	NC	1
710		2	max	0.223	21	0.335	7	1.435	7	0	16	NC	17	2826.747	23
711			min	0	16	0.049	3	0.202	17	-0.01	7	492.47	2	526.103	3
712		3	max	0.223	21	0.658	7	1.084	7	0	16	NC	23	NC	23
713			min	0	16	0.085	17	0.14	17	-0.01	7	NC	1	NC	1
714	M148	1	max	0.223	21	0.658	7	1.084	7	0	16	NC	23	NC	23
715			min	0	16	0.085	17	0.14	17	-0.01	7	NC	1	NC	1
716		2	max	0.223	21	0.749	7	0.991	7	0	16	NC	23	NC	23
717			min	0	16	0.066	16	0.122	17	-0.01	7	NC	1	NC	1
718		3	max	0.223	21	0.839	7	0.9	7	0	16	NC	23	NC	23
719			min	0	16	0.029	16	0.104	17	-0.01	7	NC	1	NC	1
720	M149	1	max	0.325	21	0.04	15	0.852	7	0.001	17	NC	23	NC	23

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
721			min	0	5	-0.09	2	-0.131	17	-0.01	8	NC	1	NC	1
722		2	max	0.325	21	0.063	16	0.967	7	0.001	17	NC	23	NC	23
723			min	0	5	-0.251	8	-0.103	17	-0.01	8	NC	1	NC	1
724		3	max	0.325	21	0.114	16	1.083	7	0.001	17	NC	23	NC	23
725			min	0	5	-0.424	8	-0.073	17	-0.01	8	NC	1	NC	1
726	M150	1	max	0.325	21	0.114	16	1.083	7	0.001	17	NC	23	NC	23
727			min	0	5	-0.424	8	-0.073	17	-0.01	8	NC	1	NC	1
728		2	max	0.325	21	0.305	16	1.519	7	0.001	17	2390.388	20	2193.018	23
729			min	0	5	-1.065	8	0.041	17	-0.01	8	300.175	8	392.886	2
730		3	max	0.325	21	0.141	16	1.167	7	0.001	17	NC	23	NC	23
731			min	0	15	-0.48	8	-0.023	17	-0.01	8	NC	1	NC	1
732	M151	1	max	0.325	21	0.141	16	1.167	7	0	16	NC	23	NC	23
733			min	0	15	-0.48	8	-0.023	17	-0.011	8	NC	1	NC	1
734		2	max	0.325	21	0.338	16	1.629	7	0	16	2194.111	20	2012.947	23
735			min	0	15	-1.065	8	0.095	17	-0.011	8	311.359	8	360.626	3
736		3	max	0.325	21	0.148	16	1.232	7	0	16	NC	23	NC	23
737			min	0	16	-0.469	8	0.019	17	-0.011	8	NC	1	NC	1
738	M152	1	max	0.325	21	0.148	16	1.232	7	0	16	NC	23	NC	23
739			min	0	16	-0.469	8	0.019	17	-0.011	7	NC	1	NC	1
740		2	max	0.325	21	0.341	16	1.662	7	0	16	6074.439	17	2013.341	23
741			min	0	16	-1.009	8	0.141	17	-0.011	7	333.34	8	360.697	3
742		3	max	0.325	21	0.148	16	1.232	7	0	16	NC	23	NC	23
743			min	0	16	-0.445	8	0.068	17	-0.011	7	NC	1	NC	1
744	M153	1	max	0.325	21	0.148	16	1.232	7	0	16	NC	23	NC	23
745			min	0	16	-0.445	8	0.068	17	-0.011	7	NC	1	NC	1
746		2	max	0.325	21	0.341	16	1.662	7	0	16	NC	17	2013.341	23
747			min	0	16	-0.989	2	0.19	17	-0.011	7	337.638	2	360.697	3
748		3	max	0.325	21	0.148	16	1.232	7	0	16	NC	23	NC	23
749			min	0	16	-0.444	2	0.118	17	-0.011	7	NC	1	NC	1
750	M154	1	max	0.325	21	0.148	16	1.232	7	0	16	NC	23	NC	23
751			min	0	16	-0.444	2	0.118	17	-0.01	7	NC	1	NC	1
752		2	max	0.325	21	0.338	16	1.629	7	0	16	NC	17	2012.947	23
753			min	0	16	-0.98	2	0.22	17	-0.01	7	337.572	2	360.626	2
754		3	max	0.325	21	0.141	16	1.167	7	0	16	NC	23	NC	23
755			min	0	16	-0.426	2	0.127	17	-0.01	7	NC	1	NC	1
756	M155	1	max	0.325	21	0.141	16	1.167	7	0	16	NC	23	NC	23
757			min	0	16	-0.426	2	0.127	17	-0.009	7	NC	1	NC	1
758		2	max	0.325	21	0.307	16	1.522	7	0	16	NC	17	2193.018	23
759			min	0	16	-0.899	2	0.223	17	-0.009	7	367.769	2	392.886	2
760		3	max	0.325	21	0.117	16	1.088	7	0	16	NC	23	NC	23
761			min	0	16	-0.372	2	0.14	17	-0.009	7	NC	1	NC	1
762	M156	1	max	0.325	21	0.117	16	1.088	7	0	16	NC	23	NC	23
763			min	0	16	-0.372	2	0.14	17	-0.009	7	NC	1	NC	1
764		2	max	0.325	21	0.066	16	0.972	7	0	16	NC	23	NC	23
765			min	0	16	-0.23	2	0.117	17	-0.009	7	NC	1	NC	1
766		3	max	0.325	21	0.044	15	0.858	7	0	16	NC	23	NC	23
767			min	0	16	-0.09	2	0.094	17	-0.009	7	NC	1	NC	1
768	M157	1	max	0.427	21	0.035	17	0.878	7	0.001	17	NC	23	NC	23
769			min	0	16	-0.934	8	-0.128	17	-0.007	8	NC	1	NC	1
770		2	max	0.427	21	0.072	17	0.983	7	0.001	17	NC	23	NC	23
771			min	0	16	-1.096	8	-0.101	17	-0.007	8	NC	1	NC	1
772		3	max	0.427	21	0.109	17	1.089	7	0.001	17	NC	23	NC	23
773			min	0	16	-1.259	8	-0.074	17	-0.007	8	NC	1	NC	1
774	M158	1	max	0.427	21	0.109	17	1.089	7	0.001	17	NC	23	NC	23
775			min	0	16	-1.259	8	-0.074	17	-0.007	8	NC	1	NC	1

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
776		2	max	0.427	21	0.27	16	1.489	7	0.001	17	2608.48	20	2393.72	23
777			min	0	16	-1.878	8	0.033	17	-0.007	8	331.837	8	433.85	2
778		3	max	0.427	21	0.124	16	1.174	7	0.001	17	NC	23	NC	23
779			min	0	16	-1.388	8	-0.023	17	-0.007	8	NC	1	NC	1
780	M159	1	max	0.427	21	0.124	16	1.174	7	0	17	NC	23	NC	23
781			min	0	16	-1.388	8	-0.023	17	-0.008	7	NC	1	NC	1
782		2	max	0.427	21	0.302	16	1.596	7	0	17	2394.295	20	2197.169	23
783			min	0	16	-1.915	8	0.087	17	-0.008	7	343.962	8	398.226	3
784		3	max	0.427	21	0.134	16	1.239	7	0	17	NC	23	NC	23
785			min	0	16	-1.371	8	0.019	17	-0.008	7	NC	1	NC	1
786	M160	1	max	0.427	21	0.134	16	1.239	7	0	16	NC	23	NC	23
787			min	0	16	-1.371	8	0.019	17	-0.008	7	NC	1	NC	1
788		2	max	0.427	21	0.307	16	1.628	7	0	16	7179.3	17	2197.599	23
789			min	0	16	-1.841	8	0.132	17	-0.008	7	368.157	8	398.304	2
790		3	max	0.427	21	0.134	16	1.239	7	0	16	NC	23	NC	23
791			min	0	16	-1.323	2	0.068	17	-0.008	7	NC	1	NC	1
792	M161	1	max	0.427	21	0.134	16	1.239	7	0	16	NC	23	NC	23
793			min	0	16	-1.323	2	0.068	17	-0.008	7	NC	1	NC	1
794		2	max	0.427	21	0.307	16	1.628	7	0	16	NC	17	2197.599	23
795			min	0	7	-1.817	2	0.182	17	-0.008	7	372.841	2	398.304	2
796		3	max	0.427	21	0.134	16	1.239	7	0	16	NC	23	NC	23
797			min	0	7	-1.323	2	0.118	17	-0.008	7	NC	1	NC	1
798	M162	1	max	0.427	21	0.134	16	1.239	7	0	16	NC	23	NC	23
799			min	0	7	-1.323	2	0.118	17	-0.007	7	NC	1	NC	1
800		2	max	0.427	21	0.302	16	1.596	7	0	16	NC	17	2197.169	23
801			min	0	7	-1.786	2	0.212	17	-0.007	7	372.768	2	398.226	2
802		3	max	0.427	21	0.124	16	1.174	7	0	16	NC	23	NC	23
803			min	0	7	-1.262	2	0.128	17	-0.007	7	NC	1	NC	1
804	M163	1	max	0.427	21	0.124	16	1.174	7	0	16	NC	23	NC	23
805			min	0	7	-1.262	2	0.128	17	-0.007	7	NC	1	NC	1
806		2	max	0.426	21	0.272	16	1.492	7	0	16	NC	17	2393.72	23
807			min	0	7	-1.653	2	0.216	17	-0.007	7	406.114	2	433.85	3
808		3	max	0.426	21	0.102	16	1.094	7	0	16	NC	23	NC	23
809			min	0	7	-1.138	2	0.141	17	-0.007	7	NC	1	NC	1
810	M164	1	max	0.426	21	0.102	16	1.094	7	0	16	NC	23	NC	23
811			min	0	7	-1.138	2	0.141	17	-0.007	7	NC	1	NC	1
812		2	max	0.426	21	0.057	16	0.988	7	0	16	NC	23	NC	23
813			min	0	7	-1.003	2	0.119	17	-0.007	7	NC	1	NC	1
814		3	max	0.426	21	0.012	16	0.884	7	0	16	NC	23	NC	23
815			min	0	7	-0.869	2	0.099	17	-0.007	7	NC	1	NC	1
816	M165	1	max	0.499	21	0.095	17	0.941	7	0	17	NC	23	NC	23
817			min	0	16	-1.401	8	-0.117	17	-0.004	7	NC	1	NC	1
818		2	max	0.499	21	0.116	17	1.017	7	0	17	NC	23	NC	23
819			min	0	16	-1.52	8	-0.096	17	-0.004	7	NC	1	NC	1
820		3	max	0.499	21	0.138	17	1.094	7	0	17	NC	23	NC	23
821			min	0	16	-1.64	8	-0.075	17	-0.004	7	NC	1	NC	1
822	M166	1	max	0.499	21	0.138	17	1.094	7	0	17	NC	23	NC	23
823			min	0	16	-1.64	8	-0.075	17	-0.004	7	NC	1	NC	1
824		2	max	0.499	21	0.21	17	1.389	7	0	17	3516.414	20	3232.074	23
825			min	0	16	-2.104	8	0.011	17	-0.004	7	474.389	8	617.273	2
826		3	max	0.499	21	0.096	17	1.18	7	0	17	NC	23	NC	23
827			min	0	16	-1.792	8	-0.024	17	-0.004	7	NC	1	NC	1
828	M167	1	max	0.499	21	0.096	17	1.18	7	0	17	NC	23	NC	23
829			min	0	16	-1.792	8	-0.024	17	-0.005	7	NC	1	NC	1
830		2	max	0.499	21	0.198	16	1.487	7	0	17	3227.678	20	2966.685	23

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
831			min	0	16	-2.16	8	0.063	17	-0.005	7	490.43	8	566.588	3
832		3	max	0.499	21	0.09	16	1.245	7	0	17	NC	23	NC	23
833			min	0	16	-1.778	8	0.019	17	-0.005	7	NC	1	NC	1
834	M168	1	max	0.499	21	0.09	16	1.245	7	0	17	NC	23	NC	23
835			min	0	16	-1.778	8	0.019	17	-0.005	7	NC	1	NC	1
836		2	max	0.499	21	0.203	16	1.52	7	0	17	NC	17	2967.266	23
837			min	0	16	-2.092	8	0.109	17	-0.005	7	523.987	8	566.699	3
838		3	max	0.499	21	0.09	16	1.245	7	0	17	NC	23	NC	23
839			min	0	16	-1.726	2	0.069	17	-0.005	7	NC	1	NC	1
840	M169	1	max	0.499	21	0.09	16	1.245	7	-0.001	17	NC	23	NC	23
841			min	0	16	-1.726	2	0.069	17	-0.005	7	NC	1	NC	1
842		2	max	0.498	21	0.203	16	1.52	7	-0.001	17	NC	17	2967.266	23
843			min	0	7	-2.073	2	0.159	17	-0.005	7	530.471	2	566.699	3
844		3	max	0.498	21	0.09	16	1.245	7	-0.001	17	NC	23	NC	23
845			min	0	7	-1.726	2	0.119	17	-0.005	7	NC	1	NC	1
846	M170	1	max	0.498	21	0.09	16	1.245	7	-0.001	17	NC	23	NC	23
847			min	0	7	-1.726	2	0.119	17	-0.004	7	NC	1	NC	1
848		2	max	0.498	21	0.198	16	1.487	7	-0.001	17	NC	17	2966.685	23
849			min	0	7	-2.031	2	0.189	17	-0.004	7	530.367	2	566.588	2
850		3	max	0.498	21	0.08	16	1.18	7	-0.001	17	NC	23	NC	23
851			min	-0.001	7	-1.643	2	0.129	17	-0.004	7	NC	1	NC	1
852	M171	1	max	0.498	21	0.08	16	1.18	7	-0.001	16	NC	23	NC	23
853			min	-0.001	7	-1.643	2	0.129	17	-0.004	7	NC	1	NC	1
854		2	max	0.498	21	0.178	16	1.392	7	-0.001	16	NC	17	3232.074	23
855			min	-0.001	7	-1.889	2	0.195	17	-0.004	7	577.812	3	617.273	3
856		3	max	0.498	21	0.068	16	1.099	7	-0.001	16	NC	23	NC	23
857			min	-0.001	7	-1.498	2	0.141	17	-0.004	7	NC	1	NC	1
858	M172	1	max	0.498	21	0.068	16	1.099	7	-0.001	16	NC	23	NC	23
859			min	-0.001	7	-1.498	2	0.141	17	-0.004	7	NC	1	NC	1
860		2	max	0.498	21	0.038	16	1.022	7	-0.001	16	NC	23	NC	23
861			min	-0.001	7	-1.398	2	0.126	17	-0.004	7	NC	1	NC	1
862		3	max	0.498	21	0.009	16	0.947	7	-0.001	16	NC	23	NC	23
863			min	-0.001	7	-1.298	2	0.111	17	-0.004	7	NC	1	NC	1
864	M173	1	max	0.553	21	0.113	17	1.114	7	0	17	NC	23	NC	23
865			min	0	16	-1.528	8	-0.111	17	-0.003	7	NC	1	NC	1
866		2	max	0.553	21	0.127	17	1.063	7	0	17	NC	23	NC	23
867			min	0	16	-1.606	8	-0.091	17	-0.003	7	NC	1	4876.045	8
868		3	max	0.553	21	0.141	17	1.026	7	0	17	NC	23	NC	23
869			min	0	16	-1.687	8	-0.072	17	-0.003	7	NC	1	NC	1
870	M174	1	max	0.553	21	0.141	17	1.026	7	0	17	NC	23	NC	23
871			min	0	16	-1.687	8	-0.072	17	-0.003	7	NC	1	NC	1
872		2	max	0.552	21	0.189	17	1.095	7	0	17	4713.312	20	NC	23
873			min	0	16	-2.038	8	0.003	17	-0.003	7	670.343	8	1691.654	3
874		3	max	0.552	21	0.094	17	1.11	7	0	17	NC	23	NC	23
875			min	0	16	-1.841	8	-0.029	17	-0.003	7	NC	1	NC	1
876	M175	1	max	0.552	21	0.094	17	1.11	7	0	17	NC	23	NC	23
877			min	0	16	-1.841	8	-0.029	17	-0.003	7	NC	1	NC	1
878		2	max	0.552	21	0.237	17	1.372	7	0	17	3978.133	20	3662.669	23
879			min	0	16	-2.228	8	0.046	17	-0.003	7	466.625	8	735.765	3
880		3	max	0.552	21	0.08	16	1.171	7	0	17	NC	23	NC	23
881			min	0	16	-1.827	8	0.013	17	-0.003	7	NC	1	NC	1
882	M176	1	max	0.552	21	0.08	16	1.171	7	0	17	NC	23	NC	23
883			min	0	16	-1.827	8	0.013	17	-0.003	7	NC	1	NC	1
884		2	max	0.552	21	0.176	16	1.402	7	0	17	4010.468	17	3663.386	23
885			min	0	16	-2.081	8	0.091	17	-0.003	7	631.268	8	735.909	2

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
886		3	max	0.552	21	0.08	16	1.171	7	0	17	NC	23	NC	23
887			min	0	16	-1.776	2	0.062	17	-0.003	7	NC	1	NC	1
888	M177	1	max	0.552	21	0.08	16	1.171	7	0	17	NC	23	NC	23
889			min	0	16	-1.776	2	0.062	17	-0.003	7	NC	1	NC	1
890		2	max	0.552	21	0.176	16	1.402	7	0	17	3978.911	20	3663.386	23
891			min	0	7	-2.061	8	0.139	17	-0.003	7	557.386	8	735.909	2
892		3	max	0.552	21	0.08	16	1.171	7	0	17	NC	23	NC	23
893			min	0	7	-1.776	2	0.109	17	-0.003	7	NC	1	NC	1
894	M178	1	max	0.552	21	0.08	16	1.171	7	0	17	NC	23	NC	23
895			min	0	7	-1.776	2	0.109	17	-0.003	7	NC	1	NC	1
896		2	max	0.552	21	0.17	16	1.372	7	0	17	NC	17	3662.669	23
897			min	0	7	-2	2	0.167	17	-0.003	7	688.729	2	735.765	2
898		3	max	0.552	21	0.069	16	1.11	7	0	17	NC	23	NC	23
899			min	-0.001	7	-1.69	2	0.118	17	-0.003	7	NC	1	NC	1
900	M179	1	max	0.552	21	0.069	16	1.11	7	-0.001	17	NC	23	NC	23
901			min	-0.001	7	-1.69	2	0.118	17	-0.003	7	NC	1	NC	1
902		2	max	0.552	21	0.14	16	1.097	7	-0.001	17	NC	17	NC	13
903			min	-0.001	7	-1.837	2	0.182	17	-0.003	7	826.409	8	1692.522	3
904		3	max	0.552	21	0.06	16	1.031	7	-0.001	17	NC	23	NC	23
905			min	-0.001	7	-1.544	2	0.128	17	-0.003	7	NC	1	NC	1
906	M180	1	max	0.552	21	0.06	16	1.031	7	-0.001	17	NC	23	NC	23
907			min	-0.001	7	-1.544	2	0.128	17	-0.003	7	NC	1	NC	1
908		2	max	0.552	21	0.042	16	1.069	7	-0.001	17	NC	23	NC	23
909			min	-0.001	7	-1.477	2	0.111	17	-0.003	7	NC	1	5049.563	7
910		3	max	0.552	21	0.026	16	1.121	7	-0.001	17	NC	23	NC	23
911			min	-0.001	7	-1.413	2	0.093	17	-0.003	7	NC	1	NC	1
912	M181	1	max	0.602	21	0.217	17	1.116	7	0	17	NC	23	NC	23
913			min	0	2	-1.727	8	-0.14	17	-0.002	7	NC	1	NC	1
914		2	max	0.602	21	0.173	17	1.052	7	0	17	NC	23	NC	23
915			min	0	2	-1.733	8	-0.107	17	-0.002	7	3303.021	8	3565.103	2
916		3	max	0.602	21	0.145	17	1.028	7	0	17	NC	23	NC	23
917			min	0	2	-1.783	8	-0.072	17	-0.002	7	NC	1	NC	1
918	M182	1	max	0.602	21	0.145	17	1.028	7	0	17	NC	23	NC	23
919			min	0	2	-1.783	8	-0.072	17	-0.002	7	NC	1	NC	1
920		2	max	0.602	21	0.162	17	1.186	7	0	17	5571.413	20	NC	15
921			min	0	2	-2.103	8	0.004	17	-0.002	7	753.662	8	1049.816	3
922		3	max	0.602	21	0.082	17	1.113	7	0	17	NC	23	NC	23
923			min	0	2	-1.935	8	-0.029	17	-0.002	7	NC	1	NC	1
924	M183	1	max	0.602	21	0.082	17	1.113	7	0	3	NC	23	NC	23
925			min	0	2	-1.935	8	-0.029	17	-0.002	7	NC	1	NC	1
926		2	max	0.602	21	0.154	16	1.43	7	0	3	3111.399	20	2860.458	23
927			min	0	2	-2.367	8	0.06	17	-0.002	7	421.179	8	543.5	3
928		3	max	0.602	21	0.027	16	1.174	7	0	3	NC	23	NC	23
929			min	0	2	-1.925	8	0.013	17	-0.002	7	NC	1	NC	1
930	M184	1	max	0.602	21	0.027	16	1.174	7	0	3	NC	23	NC	23
931			min	0	2	-1.925	8	0.013	17	-0.002	7	NC	1	NC	1
932		2	max	0.602	21	0.159	16	1.46	7	0	3	3112.008	20	2861.018	23
933			min	0	2	-2.284	8	0.106	17	-0.002	7	464.891	8	543.607	3
934		3	max	0.603	21	0.027	16	1.174	7	0	3	NC	23	NC	23
935			min	0	16	-1.88	2	0.062	17	-0.002	7	NC	1	NC	1
936	M185	1	max	0.603	21	0.027	16	1.174	7	0	3	NC	23	NC	23
937			min	0	16	-1.88	2	0.062	17	-0.002	7	NC	1	NC	1
938		2	max	0.603	21	0.159	16	1.46	7	0	3	4777.442	17	2861.018	23
939			min	0	16	-2.241	2	0.154	17	-0.002	7	484.571	8	543.607	2
940		3	max	0.603	21	0.027	16	1.174	7	0	3	NC	23	NC	23

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
941			min	0	16	-1.88	2	0.109	17	-0.002	7	NC	1	NC	1
942	M186	1	max	0.603	21	0.027	16	1.174	7	0	3	NC	23	NC	23
943			min	0	16	-1.88	2	0.109	17	-0.002	7	NC	1	NC	1
944		2	max	0.603	21	0.154	16	1.43	7	0	3	NC	17	2860.458	23
945			min	0	16	-2.195	2	0.182	17	-0.002	7	508.755	2	543.5	2
946		3	max	0.603	21	0.017	16	1.113	7	0	3	NC	23	NC	23
947			min	0	16	-1.787	2	0.119	17	-0.002	7	NC	1	NC	1
948	M187	1	max	0.603	21	0.017	16	1.113	7	0	3	NC	23	NC	23
949			min	0	16	-1.787	2	0.119	17	-0.002	7	NC	1	NC	1
950		2	max	0.603	21	0.086	16	1.188	7	0	3	NC	17	NC	15
951			min	0	16	-1.908	2	0.165	17	-0.002	7	927.393	3	1049.874	3
952		3	max	0.603	21	0.02	16	1.033	7	0	3	NC	23	NC	23
953			min	0	16	-1.655	7	0.129	17	-0.002	7	NC	1	NC	1
954	M188	1	max	0.603	21	0.02	16	1.033	7	0	3	NC	23	NC	23
955			min	0	16	-1.655	7	0.129	17	-0.002	7	NC	1	NC	1
956		2	max	0.603	21	0.021	16	1.058	7	0	3	NC	23	NC	23
957			min	0	16	-1.626	7	0.122	17	-0.002	7	3795.89	8	3564.329	2
958		3	max	0.603	21	0.036	16	1.122	7	0	3	NC	23	NC	23
959			min	0	16	-1.632	7	0.121	17	-0.002	7	NC	1	NC	1
960	M189	1	max	0.104	16	0.228	17	0.099	2	0.002	7	NC	23	NC	23
961			min	-1.048	8	-1.699	7	-0.373	23	-0.002	17	NC	1	NC	1
962		2	max	0.104	16	0.285	17	0.074	3	0.002	7	NC	23	NC	23
963			min	-1.048	8	-1.804	7	-0.406	21	-0.002	17	NC	1	NC	1
964		3	max	0.104	16	0.342	17	0.055	3	0.002	7	NC	23	NC	23
965			min	-1.049	8	-1.9	7	-0.438	21	-0.002	17	NC	1	NC	1
966	M190	1	max	0.104	16	0.342	17	0.055	3	0.002	7	NC	23	NC	23
967			min	-1.049	8	-1.9	7	-0.438	21	-0.002	17	NC	1	NC	1
968		2	max	0.104	16	0.41	17	0.034	3	0.002	7	NC	23	NC	23
969			min	-1.049	8	-1.996	7	-0.473	21	-0.002	17	8562.626	7	NC	1
970		3	max	0.104	16	0.478	17	0.014	3	0.002	7	NC	23	NC	23
971			min	-1.049	8	-2.074	7	-0.506	21	-0.002	17	NC	1	NC	1
972	M191	1	max	0.182	17	-0.176	16	0.138	16	0	3	NC	23	NC	23
973			min	-0.707	2	-1.701	7	-0.422	6	-0.002	7	NC	1	NC	1
974		2	max	0.182	17	-0.165	16	0.135	16	0	3	NC	23	NC	23
975			min	-0.707	2	-1.807	7	-0.427	21	-0.002	7	NC	1	NC	1
976		3	max	0.182	17	-0.152	16	0.131	16	0	3	NC	23	NC	23
977			min	-0.707	2	-1.903	7	-0.439	21	-0.002	7	NC	1	NC	1
978	M192	1	max	0.181	17	-0.152	16	0.131	16	0	3	NC	23	NC	23
979			min	-0.707	2	-1.903	7	-0.44	21	-0.002	7	NC	1	NC	1
980		2	max	0.181	17	-0.132	16	0.136	15	0	3	NC	23	NC	23
981			min	-0.708	2	-1.998	7	-0.455	21	-0.002	7	8546.48	7	NC	1
982		3	max	0.181	17	-0.109	16	0.144	15	0	3	NC	23	NC	23
983			min	-0.708	2	-2.077	7	-0.469	21	-0.002	7	NC	1	NC	1
984	M193	1	max	-0.149	16	0.225	17	0.373	23	0.002	17	NC	23	NC	23
985			min	-1.05	8	-1.544	8	-0.238	5	-0.001	3	NC	1	NC	1
986		2	max	-0.149	16	0.282	17	0.406	21	0.002	17	NC	23	NC	23
987			min	-1.05	8	-1.651	7	-0.214	5	-0.001	3	NC	1	NC	1
988		3	max	-0.149	16	0.34	17	0.438	21	0.002	17	NC	23	NC	23
989			min	-1.05	8	-1.758	7	-0.192	5	-0.001	3	NC	1	NC	1
990	M194	1	max	-0.149	16	0.339	17	0.438	21	0.002	17	NC	23	NC	23
991			min	-1.05	8	-1.758	7	-0.192	5	-0.001	3	NC	1	NC	1
992		2	max	-0.149	16	0.408	17	0.473	21	0.002	17	NC	23	NC	23
993			min	-1.05	8	-1.875	7	-0.166	5	-0.001	3	NC	1	NC	1
994		3	max	-0.149	16	0.477	17	0.506	21	0.002	17	NC	23	NC	23
995			min	-1.051	8	-1.984	7	-0.141	5	-0.001	3	NC	1	NC	1

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
996	M195	1	max	0.182	17	-0.009	16	0.497	21	0.002	8	NC	23	NC	23
997			min	-0.899	7	-1.552	8	0.039	1	-0.001	16	NC	1	NC	1
998		2	max	0.182	17	-0.002	16	0.508	21	0.002	8	NC	23	NC	23
999			min	-0.9	7	-1.666	8	0.027	3	-0.001	16	NC	1	NC	1
1000		3	max	0.182	17	0.001	16	0.52	21	0.002	8	NC	23	NC	23
1001			min	-0.9	7	-1.775	8	0.012	3	-0.001	16	NC	1	NC	1
1002	M196	1	max	0.181	17	0.001	16	0.52	21	0.002	8	NC	23	NC	23
1003			min	-0.9	7	-1.774	8	0.012	3	-0.001	16	NC	1	NC	1
1004		2	max	0.181	17	0	16	0.533	21	0.002	8	NC	23	NC	23
1005			min	-0.901	7	-1.894	8	-0.001	3	-0.001	16	NC	1	NC	1
1006		3	max	0.181	17	-0.007	16	0.547	21	0.002	8	NC	23	NC	23
1007			min	-0.901	7	-2.004	8	-0.011	3	-0.001	16	NC	1	NC	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
0	N1	max	0	52	0	53	0	32	0	32	0	59	0	38
1		min	0	38	0	42	0	53	0	43	0	1	0	52
2	N2	max	0.174	53	0.001	53	0	32	3.857e-7	52	4.3e-4	43	1.681e-3	53
3		min	-1.797	38	-0.009	42	-0.298	58	-2.977e-3	58	-9.822e-6	53	-1.691e-2	42
4	N3	max	0.174	52	0.239	42	0	51	6.126e-7	52	4.3e-4	43	1.684e-3	53
5		min	-1.737	38	-0.024	53	-0.308	58	-2.999e-3	58	-9.859e-6	53	-1.694e-2	42
6	N4	max	0.177	52	0.18	42	0	51	6.126e-7	52	4.3e-4	43	1.684e-3	53
7		min	-1.709	38	-0.018	53	-0.314	58	-2.999e-3	58	-9.859e-6	53	-1.694e-2	42
8	N5	max	0.186	52	0.001	53	0	32	6.082e-7	52	4.3e-4	43	1.686e-3	53
9		min	-1.619	38	-0.009	42	-0.332	58	-2.999e-3	58	-9.822e-6	53	-1.696e-2	42
10	N6	max	0.243	52	0.127	53	0	32	2.27e-6	52	4.047e-4	43	1.586e-3	53
11		min	-1.023	38	-1.263	42	-0.472	43	-3.034e-3	43	-9.854e-6	53	-1.568e-2	42
12	N7	max	0.287	52	0.243	53	0	52	4.436e-6	52	3.183e-4	43	1.048e-3	53
13		min	-0.459	38	-2.408	42	-0.635	43	-3.077e-3	43	-9.952e-6	53	-1.068e-2	37
14	N8	max	0.316	51	0.292	53	0	52	5.097e-6	52	2.027e-4	43	4.992e-4	53
15		min	-0.201	38	-2.925	37	-0.749	43	-3.082e-3	43	-8.881e-6	32	-5.97e-3	38
16	N9	max	0.324	51	0.297	53	0	52	4.954e-6	52	1.801e-4	43	4.167e-4	53
17		min	-0.183	33	-2.973	37	-0.764	43	-3.08e-3	43	-1.383e-5	32	-5.269e-3	38
18	N10	max	0.348	51	0.295	53	0	52	8.556e-6	42	1.204e-4	43	3.79e-4	52
19		min	-0.11	33	-2.95	37	-0.827	43	-3.062e-3	43	-2.964e-5	32	-3.839e-3	38
20	N11	max	0.35	51	0.297	53	0	52	8.408e-6	42	1.218e-4	43	3.786e-4	52
21		min	-0.099	33	-2.973	37	-0.838	43	-3.062e-3	43	-2.865e-5	32	-3.842e-3	38
22	N12	max	0.349	51	0.303	53	0.001	37	4.151e-5	42	4.483e-5	43	8.096e-4	52
23		min	-0.043	33	-3.063	37	-0.9	43	-3.024e-3	43	-3.908e-5	37	-2.509e-3	33
24	N13	max	0.316	42	0.304	53	0.004	37	6.292e-5	42	2.776e-7	43	1.621e-3	42
25		min	0	43	-3.083	38	-0.981	43	-3.001e-3	43	-1.335e-6	58	-1.48e-3	33
26	N14	max	0	42	0	53	0	42	0	42	0	59	0	53
27		min	0	53	0	43	0	53	0	43	0	1	0	42
28	N15	max	2.036	42	0.001	53	0	42	-2.37e-7	20	9.788e-6	53	1.61e-2	38
29		min	-0.174	53	-0.009	43	-0.298	58	-2.976e-3	58	-4.299e-4	43	-1.681e-3	53
30	N16	max	1.984	42	0.228	38	0	15	-3.581e-7	20	9.823e-6	53	1.614e-2	38
31		min	-0.168	53	-0.024	53	-0.308	58	-2.998e-3	58	-4.299e-4	43	-1.684e-3	53
32	N17	max	1.96	42	0.171	38	0	51	-3.581e-7	20	9.823e-6	53	1.614e-2	38
33		min	-0.165	53	-0.018	53	-0.314	58	-2.998e-3	58	-4.299e-4	43	-1.684e-3	53
34	N18	max	1.881	42	0.001	53	0	42	-3.563e-7	20	9.788e-6	53	1.615e-2	38
35		min	-0.155	53	-0.009	43	-0.332	58	-2.998e-3	58	-4.299e-4	43	-1.686e-3	53
36	N19	max	1.359	42	0.127	53	0	42	-1.293e-6	20	9.776e-6	53	1.523e-2	38
37		min	-0.093	53	-1.213	38	-0.472	43	-3.035e-3	43	-4.046e-4	43	-1.586e-3	53
38	N20	max	0.846	42	0.243	53	0	16	-2.61e-6	20	9.705e-6	53	1.064e-2	38
39		min	-0.036	53	-2.352	38	-0.635	43	-3.077e-3	43	-3.18e-4	43	-1.048e-3	53

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
40	N21	max	0.592	42	0.292	53	0	16	-2.631e-6	20	1.087e-5	37	6.332e-3	37
41		min	-0.012	53	-2.878	38	-0.749	43	-3.083e-3	43	-2.022e-4	43	-4.992e-4	53
42	N22	max	0.566	42	0.297	53	0	16	-2.407e-6	20	1.694e-5	37	5.712e-3	42
43		min	-0.01	53	-2.928	38	-0.764	43	-3.08e-3	43	-1.796e-4	43	-4.167e-4	53
44	N23	max	0.463	42	0.295	53	0	16	1.598e-6	34	3.662e-5	42	4.594e-3	42
45		min	-0.003	53	-2.902	38	-0.827	43	-3.062e-3	43	-1.198e-4	43	-2.585e-4	53
46	N24	max	0.448	42	0.297	53	0	16	1.457e-6	34	3.533e-5	42	4.596e-3	42
47		min	-0.005	33	-2.928	38	-0.838	43	-3.063e-3	43	-1.212e-4	43	-2.591e-4	53
48	N25	max	0.375	42	0.303	53	0.001	37	3.797e-5	37	4.397e-5	37	3.165e-3	42
49		min	-0.017	33	-3.039	38	-0.9	43	-3.024e-3	43	-4.421e-5	43	-8.164e-5	53
50	N26	max	0.178	52	0.18	42	0	51	2.038e-3	53	4.102e-3	32	1.684e-3	53
51		min	-1.692	38	-0.018	53	-0.317	58	-1.543e-2	42	-3.43e-3	51	-1.694e-2	42
52	N27	max	0.245	52	0.127	53	0	34	2.747e-3	53	4.94e-3	32	1.587e-3	53
53		min	-1.007	38	-1.263	42	-0.476	43	-2.194e-2	42	-3.969e-3	51	-1.568e-2	42
54	N28	max	0.287	52	0.243	53	0	52	2.168e-3	53	4.261e-3	32	1.049e-3	53
55		min	-0.448	38	-2.409	42	-0.639	43	-2.043e-2	42	-3.712e-3	51	-1.068e-2	37
56	N29	max	0.319	51	0.292	53	0	52	1.016e-3	53	2.932e-3	32	4.998e-4	53
57		min	-0.196	33	-2.925	37	-0.752	43	-1.467e-2	42	-2.624e-3	51	-5.97e-3	38
58	N30	max	0.349	51	0.295	53	0	52	4.216e-4	53	2.145e-3	53	3.787e-4	52
59		min	-0.107	33	-2.95	37	-0.83	43	-7.472e-3	42	-7.002e-3	43	-3.838e-3	38
60	N31	max	0.349	51	0.303	53	0.001	37	-5.079e-4	20	1.157e-3	53	8.097e-4	52
61		min	-0.041	33	-3.063	37	-0.903	43	-4.404e-3	42	-1.498e-3	43	-2.509e-3	33
62	N32	max	0.315	42	0.304	53	0.004	37	1.962e-4	51	2.94e-5	43	1.621e-3	42
63		min	0	43	-3.083	38	-0.984	43	-1.932e-3	53	-3.308e-4	42	-1.48e-3	33
64	N33	max	1.945	42	0.171	38	0	51	2.182e-3	52	7.704e-4	36	1.614e-2	38
65		min	-0.163	53	-0.018	53	-0.317	58	-1.374e-2	38	-4.264e-3	37	-1.685e-3	53
66	N34	max	1.344	42	0.127	53	0	42	3.41e-3	52	1.44e-3	36	1.523e-2	38
67		min	-0.091	53	-1.213	38	-0.476	43	-1.933e-2	38	-4.94e-3	32	-1.587e-3	53
68	N35	max	0.836	42	0.243	53	0	16	3.029e-3	52	1.407e-3	36	1.064e-2	38
69		min	-0.034	53	-2.352	38	-0.639	43	-1.81e-2	38	-4.261e-3	32	-1.049e-3	53
70	N36	max	0.585	42	0.292	53	0	16	1.865e-3	52	9.516e-4	36	6.332e-3	37
71		min	-0.011	53	-2.878	38	-0.752	43	-1.317e-2	38	-2.932e-3	32	-4.998e-4	53
72	N37	max	0.459	42	0.295	53	0	16	1.443e-3	52	7.16e-3	43	4.593e-3	42
73		min	-0.003	53	-2.902	38	-0.83	43	-5.533e-3	38	-2.326e-3	53	-2.59e-4	53
74	N38	max	0.371	42	0.303	53	0.001	37	3.688e-4	52	1.583e-3	43	3.165e-3	42
75		min	-0.017	33	-3.039	38	-0.903	43	-4.063e-3	38	-1.254e-3	53	-8.259e-5	53
76	N39	max	0	52	0	53	0	32	0	32	0	59	0	38
77		min	0	38	0	42	0	53	0	43	0	1	0	52
78	N40	max	0.182	52	0.001	53	0	32	3.379e-7	51	4.322e-4	43	1.271e-3	53
79		min	-1.949	38	-0.01	42	-0.298	58	-2.977e-3	58	-1.e-5	53	-1.891e-2	42
80	N41	max	0.19	52	0.267	42	0	51	5.081e-7	51	4.322e-4	43	1.271e-3	53
81		min	-1.883	38	-0.018	53	-0.308	58	-2.998e-3	58	-1.005e-5	53	-1.893e-2	42
82	N42	max	0.193	52	0.201	42	0	35	5.081e-7	51	4.322e-4	43	1.271e-3	53
83		min	-1.852	38	-0.013	53	-0.314	58	-2.998e-3	58	-1.005e-5	53	-1.893e-2	42
84	N43	max	0.204	52	0.001	53	0	32	5.015e-7	51	4.322e-4	43	1.274e-3	53
85		min	-1.752	38	-0.011	42	-0.332	58	-2.998e-3	58	-1.e-5	53	-1.895e-2	42
86	N44	max	0.275	52	0.095	53	0	34	1.417e-6	51	4.083e-4	43	1.113e-3	53
87		min	-1.095	38	-1.408	42	-0.472	43	-3.026e-3	43	-1.006e-5	53	-1.732e-2	42
88	N45	max	0.329	52	0.167	53	0	52	1.963e-6	52	3.229e-4	43	5.096e-4	53
89		min	-0.483	38	-2.653	37	-0.635	43	-3.062e-3	43	-1.033e-5	53	-1.143e-2	38
90	N46	max	0.4	51	0.183	53	0	52	3.602e-6	51	2.129e-4	43	3.955e-5	52
91		min	-0.218	33	-3.192	37	-0.748	43	-3.064e-3	43	-9.538e-6	53	-6.235e-3	38
92	N47	max	0.406	51	0.182	53	0	52	4.257e-6	35	1.929e-4	43	1.525e-4	52
93		min	-0.199	33	-3.24	37	-0.764	43	-3.062e-3	43	-9.303e-6	53	-5.474e-3	38
94	N48	max	0.421	51	0.184	53	0	52	1.214e-5	42	1.418e-4	43	4.503e-4	52

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
95		min	-0.121	33	-3.218	37	-0.826	43	-3.052e-3	43	-1.459e-5	32	-3.921e-3	38
96	N49	max	0.422	51	0.182	53	0	52	1.206e-5	42	1.425e-4	43	4.498e-4	52
97		min	-0.108	33	-3.24	37	-0.837	43	-3.052e-3	43	-1.407e-5	32	-3.925e-3	38
98	N50	max	0.41	51	0.176	53	0	37	2.97e-5	42	6.84e-5	43	1.148e-3	51
99		min	-0.048	33	-3.317	37	-0.9	43	-3.031e-3	43	-2.048e-5	37	-2.796e-3	33
100	N51	max	0.364	42	0.172	53	0.002	37	4.097e-5	37	5.249e-7	51	2.025e-3	42
101		min	-0.009	43	-3.339	38	-0.982	43	-3.019e-3	43	-1.341e-6	58	-1.854e-3	33
102	N52	max	0	42	0	53	0	42	0	42	0	59	0	53
103		min	0	53	0	38	0	53	0	43	0	1	0	42
104	N53	max	2.195	42	0.001	53	0	42	-1.051e-8	1	9.982e-6	53	1.783e-2	38
105		min	-0.082	53	-0.01	38	-0.298	58	-2.975e-3	58	-4.321e-4	43	-1.417e-3	53
106	N54	max	2.139	42	0.252	38	0	51	-2.358e-8	1	1.003e-5	53	1.787e-2	38
107		min	-0.076	53	-0.02	53	-0.308	58	-2.997e-3	58	-4.321e-4	43	-1.417e-3	53
108	N55	max	2.113	42	0.189	38	0	42	-2.358e-8	1	1.003e-5	53	1.787e-2	38
109		min	-0.074	53	-0.015	53	-0.314	58	-2.997e-3	58	-4.321e-4	43	-1.417e-3	53
110	N56	max	2.028	42	0.001	53	0	42	-2.527e-8	1	9.982e-6	53	1.789e-2	38
111		min	-0.066	53	-0.011	38	-0.332	58	-2.997e-3	58	-4.321e-4	43	-1.42e-3	53
112	N57	max	1.462	42	0.105	53	0	35	-3.13e-7	1	9.989e-6	53	1.676e-2	38
113		min	-0.015	53	-1.342	38	-0.473	43	-3.027e-3	43	-4.082e-4	43	-1.231e-3	53
114	N58	max	0.916	42	0.184	53	0	16	-8.612e-7	20	1.01e-5	53	1.144e-2	38
115		min	0.019	17	-2.583	38	-0.635	43	-3.062e-3	43	-3.226e-4	43	-5.446e-4	53
116	N59	max	0.651	42	0.199	53	0	16	-2.859e-7	1	9.085e-6	53	6.545e-3	37
117		min	0.021	17	-3.141	38	-0.748	43	-3.064e-3	43	-2.125e-4	43	5.366e-5	53
118	N60	max	0.624	42	0.198	53	0	16	3.208e-7	34	8.811e-6	53	5.871e-3	42
119		min	0.021	17	-3.192	38	-0.764	43	-3.063e-3	43	-1.924e-4	43	1.348e-4	17
120	N61	max	0.519	42	0.2	53	0	16	8.865e-6	37	1.778e-5	37	4.703e-3	42
121		min	-0.015	33	-3.167	38	-0.826	43	-3.052e-3	43	-1.412e-4	43	2.086e-4	17
122	N62	max	0.503	42	0.198	53	0	16	8.738e-6	37	1.714e-5	37	4.706e-3	42
123		min	-0.019	33	-3.193	38	-0.837	43	-3.052e-3	43	-1.42e-4	43	2.078e-4	17
124	N63	max	0.428	42	0.186	53	0	37	2.862e-5	37	2.292e-5	37	3.307e-3	42
125		min	-0.025	33	-3.301	38	-0.9	43	-3.031e-3	43	-6.781e-5	43	-4.422e-4	33
126	N64	max	0.195	52	0.201	42	0	51	5.045e-7	51	4.322e-4	43	1.272e-3	53
127		min	-1.833	38	-0.013	53	-0.317	58	-2.998e-3	58	-1.005e-5	53	-1.893e-2	42
128	N65	max	0.277	52	0.095	53	0	34	1.417e-6	51	4.083e-4	43	1.115e-3	53
129		min	-1.078	38	-1.408	42	-0.476	43	-3.026e-3	43	-1.006e-5	53	-1.732e-2	42
130	N66	max	0.33	52	0.167	53	0	52	1.954e-6	52	3.229e-4	43	5.107e-4	53
131		min	-0.47	38	-2.653	37	-0.638	43	-3.062e-3	43	-1.033e-5	53	-1.143e-2	38
132	N67	max	0.402	51	0.183	53	0	52	3.644e-6	51	2.129e-4	43	3.966e-5	52
133		min	-0.213	33	-3.192	37	-0.752	43	-3.064e-3	43	-9.538e-6	53	-6.236e-3	38
134	N68	max	0.421	51	0.184	53	0	52	1.195e-5	42	1.418e-4	43	4.502e-4	52
135		min	-0.117	33	-3.218	37	-0.829	43	-3.052e-3	43	-1.459e-5	32	-3.922e-3	38
136	N69	max	0.409	51	0.176	53	0	37	2.956e-5	42	6.84e-5	43	1.146e-3	51
137		min	-0.045	33	-3.317	37	-0.903	43	-3.031e-3	43	-2.048e-5	37	-2.796e-3	33
138	N70	max	0.361	42	0.172	53	0.002	37	4.131e-5	37	5.249e-7	51	2.025e-3	42
139		min	-0.009	43	-3.339	38	-0.985	43	-3.018e-3	43	-1.341e-6	58	-1.854e-3	33
140	N71	max	2.097	42	0.189	38	0	47	-2.451e-8	1	1.003e-5	53	1.787e-2	38
141		min	-0.072	53	-0.015	53	-0.317	58	-2.997e-3	58	-4.321e-4	43	-1.418e-3	53
142	N72	max	1.447	42	0.105	53	0	51	-3.129e-7	1	9.989e-6	53	1.676e-2	38
143		min	-0.013	53	-1.342	38	-0.476	43	-3.027e-3	43	-4.082e-4	43	-1.232e-3	53
144	N73	max	0.904	42	0.184	53	0	16	-8.518e-7	20	1.01e-5	53	1.144e-2	38
145		min	0.02	17	-2.583	38	-0.638	43	-3.062e-3	43	-3.226e-4	43	-5.457e-4	53
146	N74	max	0.644	42	0.199	53	0	16	-2.589e-7	1	9.085e-6	53	6.546e-3	37
147		min	0.021	17	-3.141	38	-0.752	43	-3.064e-3	43	-2.125e-4	43	5.292e-5	53
148	N75	max	0.514	42	0.2	53	0	16	8.57e-6	37	1.778e-5	37	4.704e-3	42
149		min	-0.017	33	-3.167	38	-0.829	43	-3.052e-3	43	-1.412e-4	43	2.08e-4	17

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
150	N76	max	0.425	42	0.186	53	0	37	2.855e-5	37	2.292e-5	37	3.307e-3	42
151		min	-0.024	33	-3.301	38	-0.903	43	-3.031e-3	43	-6.781e-5	43	-4.422e-4	33
152	N77	max	0	52	0	53	0	20	0	1	0	59	0	38
153		min	0	38	0	42	0	53	0	43	0	1	0	52
154	N78	max	0.2	52	0	53	0	34	2.403e-7	42	4.331e-4	43	3.572e-4	53
155		min	-1.981	38	-0.011	42	-0.298	58	-2.976e-3	58	-1.019e-5	53	-1.986e-2	42
156	N79	max	0.208	52	0.28	42	0	55	3.821e-7	42	4.331e-4	43	3.562e-4	53
157		min	-1.914	38	-0.005	53	-0.308	58	-2.998e-3	58	-1.021e-5	53	-1.988e-2	42
158	N80	max	0.211	52	0.211	42	0	34	3.821e-7	42	4.331e-4	43	3.562e-4	53
159		min	-1.883	38	-0.004	53	-0.314	58	-2.998e-3	58	-1.021e-5	53	-1.988e-2	42
160	N81	max	0.223	52	0	53	0	32	3.745e-7	42	4.331e-4	43	3.578e-4	53
161		min	-1.783	38	-0.012	42	-0.332	58	-2.998e-3	58	-1.019e-5	53	-1.99e-2	42
162	N82	max	0.293	52	0.026	53	0	20	9.411e-7	42	4.092e-4	43	2.879e-4	53
163		min	-1.121	38	-1.479	42	-0.472	43	-3.024e-3	43	-1.033e-5	53	-1.822e-2	42
164	N83	max	0.346	52	0.041	53	0	52	1.225e-6	51	3.22e-4	43	3.637e-5	53
165		min	-0.501	38	-2.792	37	-0.635	43	-3.057e-3	43	-1.061e-5	53	-1.205e-2	37
166	N84	max	0.412	51	0.037	53	0	52	3.104e-6	42	2.163e-4	43	7.32e-5	52
167		min	-0.23	33	-3.366	37	-0.748	43	-3.059e-3	43	-1.008e-5	53	-6.441e-3	38
168	N85	max	0.419	51	0.036	53	0	52	3.886e-6	42	1.982e-4	43	1.866e-4	52
169		min	-0.21	33	-3.417	37	-0.763	43	-3.058e-3	43	-9.904e-6	53	-5.676e-3	38
170	N86	max	0.437	51	0.037	53	0	52	7.62e-6	42	1.533e-4	43	4.878e-4	52
171		min	-0.127	33	-3.393	37	-0.825	43	-3.053e-3	43	-9.39e-6	53	-4.109e-3	38
172	N87	max	0.438	51	0.036	53	0	52	7.582e-6	42	1.537e-4	43	4.873e-4	52
173		min	-0.114	33	-3.417	37	-0.837	43	-3.053e-3	43	-9.381e-6	53	-4.112e-3	38
174	N88	max	0.427	51	0.028	53	0	37	1.541e-5	37	8.21e-5	43	1.128e-3	51
175		min	-0.05	33	-3.502	37	-0.9	43	-3.043e-3	43	-8.82e-6	37	-2.937e-3	33
176	N89	max	0.38	42	0.026	53	0.001	37	2.026e-5	37	2.957e-7	43	2.094e-3	42
177		min	-0.011	43	-3.492	37	-0.983	43	-3.037e-3	43	-1.349e-6	58	-1.917e-3	33
178	N90	max	0	42	0	52	0	52	0	52	0	59	0	53
179		min	0	53	0	37	0	53	0	43	0	1	0	42
180	N91	max	2.319	42	0	52	0	42	2.014e-7	42	1.017e-5	53	1.795e-2	38
181		min	0.002	53	-0.01	37	-0.298	58	-2.975e-3	58	-4.331e-4	43	-8.883e-4	52
182	N92	max	2.26	42	0.254	38	0	42	2.456e-7	42	1.02e-5	53	1.799e-2	38
183		min	0.005	53	-0.012	52	-0.308	58	-2.997e-3	58	-4.33e-4	43	-8.727e-4	52
184	N93	max	2.232	42	0.191	38	0	42	2.456e-7	42	1.02e-5	53	1.799e-2	38
185		min	0.005	53	-0.009	52	-0.314	58	-2.997e-3	58	-4.33e-4	43	-8.726e-4	52
186	N94	max	2.142	42	0	52	0	42	2.389e-7	42	1.017e-5	53	1.8e-2	38
187		min	0.008	53	-0.011	37	-0.332	58	-2.997e-3	58	-4.331e-4	43	-8.767e-4	52
188	N95	max	1.546	42	0.055	52	0	52	1.682e-7	34	1.026e-5	53	1.691e-2	38
189		min	0.027	53	-1.351	38	-0.473	43	-3.024e-3	43	-4.09e-4	43	-4.563e-4	52
190	N96	max	0.967	42	0.061	53	0	52	-1.253e-7	1	1.037e-5	53	1.189e-2	37
191		min	0.028	17	-2.608	38	-0.635	43	-3.057e-3	43	-3.217e-4	43	-7.64e-5	53
192	N97	max	0.686	42	0.056	53	0	16	1.279e-6	32	9.646e-6	53	6.972e-3	37
193		min	0.024	17	-3.187	37	-0.748	43	-3.06e-3	43	-2.159e-4	43	2.034e-4	17
194	N98	max	0.657	42	0.054	53	0	16	2.027e-6	37	9.433e-6	53	6.262e-3	42
195		min	0.023	17	-3.246	37	-0.763	43	-3.058e-3	43	-1.978e-4	43	2.229e-4	17
196	N99	max	0.545	42	0.056	53	0	16	6.469e-6	37	8.843e-6	53	5.022e-3	42
197		min	-0.014	33	-3.214	37	-0.825	43	-3.053e-3	43	-1.528e-4	43	2.521e-4	17
198	N100	max	0.528	42	0.054	53	0	16	6.416e-6	37	8.835e-6	53	5.024e-3	42
199		min	-0.018	33	-3.247	37	-0.837	43	-3.053e-3	43	-1.532e-4	43	2.514e-4	17
200	N101	max	0.448	42	0.04	53	0	37	1.505e-5	37	9.745e-6	37	3.52e-3	42
201		min	-0.025	33	-3.394	37	-0.9	43	-3.043e-3	43	-8.153e-5	43	-4.062e-4	33
202	N102	max	0.214	52	0.211	42	0	34	3.78e-7	42	4.331e-4	43	3.569e-4	53
203		min	-1.864	38	-0.004	53	-0.317	58	-2.998e-3	58	-1.021e-5	53	-1.988e-2	42
204	N103	max	0.295	52	0.026	53	0	20	9.42e-7	42	4.092e-4	43	2.888e-4	53

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
205		min	-1.104	38	-1.48	42	-0.476	43	-3.024e-3	43	-1.033e-5	53	-1.822e-2	42
206	N104	max	0.347	52	0.041	53	0	52	1.239e-6	51	3.22e-4	43	3.72e-5	53
207		min	-0.489	38	-2.792	37	-0.638	43	-3.057e-3	43	-1.061e-5	53	-1.205e-2	37
208	N105	max	0.414	51	0.037	53	0	52	3.138e-6	42	2.163e-4	43	7.331e-5	52
209		min	-0.225	33	-3.366	37	-0.751	43	-3.059e-3	43	-1.008e-5	53	-6.442e-3	38
210	N106	max	0.437	51	0.037	53	0	52	7.532e-6	42	1.533e-4	43	4.877e-4	52
211		min	-0.123	33	-3.393	37	-0.828	43	-3.053e-3	43	-9.39e-6	53	-4.109e-3	38
212	N107	max	0.426	51	0.028	53	0	37	1.537e-5	37	8.21e-5	43	1.126e-3	51
213		min	-0.047	33	-3.502	37	-0.904	43	-3.043e-3	43	-8.82e-6	37	-2.937e-3	33
214	N108	max	0.378	42	0.026	53	0.001	37	2.04e-5	37	2.957e-7	43	2.093e-3	42
215		min	-0.011	43	-3.492	37	-0.986	43	-3.037e-3	43	-1.349e-6	58	-1.917e-3	33
216	N109	max	2.215	42	0.191	38	0	42	2.42e-7	42	1.02e-5	53	1.799e-2	38
217		min	0.006	53	-0.009	52	-0.317	58	-2.997e-3	58	-4.33e-4	43	-8.739e-4	52
218	N110	max	1.529	42	0.055	52	0	52	1.692e-7	34	1.026e-5	53	1.691e-2	38
219		min	0.027	17	-1.351	38	-0.476	43	-3.024e-3	43	-4.09e-4	43	-4.577e-4	52
220	N111	max	0.955	42	0.061	53	0	52	-1.171e-7	1	1.037e-5	53	1.189e-2	37
221		min	0.028	17	-2.608	38	-0.638	43	-3.057e-3	43	-3.217e-4	43	-7.723e-5	53
222	N112	max	0.678	42	0.056	53	0	16	1.315e-6	32	9.646e-6	53	6.972e-3	37
223		min	0.024	17	-3.188	37	-0.751	43	-3.06e-3	43	-2.159e-4	43	2.03e-4	17
224	N113	max	0.54	42	0.056	53	0	16	6.344e-6	37	8.843e-6	53	5.022e-3	42
225		min	-0.015	33	-3.214	37	-0.829	43	-3.053e-3	43	-1.528e-4	43	2.516e-4	17
226	N114	max	0.445	42	0.04	53	0	37	1.502e-5	37	9.745e-6	37	3.521e-3	42
227		min	-0.025	33	-3.394	37	-0.904	43	-3.043e-3	43	-8.153e-5	43	-4.062e-4	33
228	N115	max	0	52	0	17	0	32	0	20	0	59	0	38
229		min	0	38	0	42	0	36	0	43	0	1	0	52
230	N116	max	0.2	52	0	17	0	20	0	20	4.336e-4	43	-6.479e-4	17
231		min	-1.929	38	-0.011	42	-0.298	58	-2.977e-3	58	-1.039e-5	53	-1.986e-2	42
232	N117	max	0.208	52	0.28	42	0	20	0	20	4.335e-4	43	-6.5e-4	17
233		min	-1.864	38	0.009	17	-0.308	58	-2.998e-3	58	-1.038e-5	53	-1.988e-2	42
234	N118	max	0.211	52	0.211	42	0	20	0	20	4.335e-4	43	-6.5e-4	17
235		min	-1.834	38	0.007	17	-0.314	58	-2.998e-3	58	-1.038e-5	53	-1.988e-2	42
236	N119	max	0.223	52	0	17	0	20	0	20	4.336e-4	43	-6.502e-4	17
237		min	-1.736	38	-0.012	42	-0.332	58	-2.998e-3	58	-1.039e-5	53	-1.99e-2	42
238	N120	max	0.293	52	-0.049	17	0	20	0	20	4.087e-4	43	-6.167e-4	17
239		min	-1.093	38	-1.479	42	-0.472	43	-3.023e-3	43	-1.06e-5	53	-1.822e-2	42
240	N121	max	0.346	52	-0.096	17	0	20	0	20	3.19e-4	43	-4.579e-4	17
241		min	-0.489	38	-2.792	37	-0.635	43	-3.055e-3	43	-1.08e-5	53	-1.205e-2	37
242	N122	max	0.412	51	-0.12	17	0	20	0	20	2.17e-4	43	7.319e-5	52
243		min	-0.23	33	-3.366	37	-0.748	43	-3.06e-3	43	-1.042e-5	53	-6.311e-3	38
244	N123	max	0.419	51	-0.123	17	0	20	0	20	2.005e-4	43	1.866e-4	52
245		min	-0.21	33	-3.416	37	-0.763	43	-3.06e-3	43	-1.028e-5	53	-5.566e-3	38
246	N124	max	0.437	51	-0.121	17	0	20	-1.016e-8	20	1.603e-4	43	4.878e-4	52
247		min	-0.127	33	-3.393	37	-0.825	43	-3.058e-3	43	-9.882e-6	53	-4.037e-3	38
248	N125	max	0.438	51	-0.122	17	0	20	-1.015e-8	20	1.604e-4	43	4.873e-4	52
249		min	-0.114	33	-3.417	37	-0.836	43	-3.058e-3	43	-9.86e-6	53	-4.04e-3	38
250	N126	max	0.427	51	-0.13	17	0	20	0	16	9.114e-5	43	1.128e-3	51
251		min	-0.05	33	-3.502	37	-0.901	43	-3.055e-3	43	-7.629e-6	53	-2.937e-3	33
252	N127	max	0.38	42	-0.132	17	0	16	0	16	2.941e-7	43	2.094e-3	42
253		min	-0.006	43	-3.492	37	-0.984	43	-3.054e-3	43	-1.357e-6	58	-1.917e-3	33
254	N128	max	0	42	0	52	0	42	0	52	0	59	0	17
255		min	0	17	0	37	0	36	0	43	0	1	0	42
256	N129	max	2.319	42	0	52	0	52	9.555e-8	52	1.038e-5	53	1.759e-2	37
257		min	0.083	17	-0.01	37	-0.298	58	-2.975e-3	58	-4.335e-4	43	-8.882e-4	52
258	N130	max	2.26	42	0.249	37	0	52	9.792e-8	52	1.037e-5	53	1.764e-2	37
259		min	0.081	17	-0.012	52	-0.308	58	-2.997e-3	58	-4.334e-4	43	-8.726e-4	52

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
260	N131	max	2.232	42	0.187	37	0	52	9.792e-8	52	1.037e-5	53	1.764e-2	37
261		min	0.08	17	-0.009	52	-0.314	58	-2.997e-3	58	-4.334e-4	43	-8.726e-4	52
262	N132	max	2.142	42	0	52	0	52	9.793e-8	52	1.038e-5	53	1.765e-2	37
263		min	0.076	17	-0.011	37	-0.332	58	-2.997e-3	58	-4.335e-4	43	-8.767e-4	52
264	N133	max	1.546	42	0.055	52	0	52	9.975e-8	52	1.055e-5	53	1.676e-2	37
265		min	0.054	17	-1.331	37	-0.473	43	-3.024e-3	43	-4.085e-4	43	-4.562e-4	52
266	N134	max	0.967	42	0.055	52	0	52	7.095e-8	52	1.058e-5	53	1.189e-2	37
267		min	0.032	17	-2.591	37	-0.635	43	-3.056e-3	43	-3.187e-4	43	4.194e-4	16
268	N135	max	0.686	42	0.001	52	0	52	3.148e-8	52	1.e-5	53	6.972e-3	37
269		min	0.02	17	-3.187	37	-0.748	43	-3.06e-3	43	-2.166e-4	43	3.284e-4	17
270	N136	max	0.657	42	-0.01	52	0	52	2.502e-8	52	9.829e-6	53	6.261e-3	42
271		min	0.019	17	-3.246	37	-0.763	43	-3.06e-3	43	-2.e-4	43	3.127e-4	17
272	N137	max	0.545	42	0	52	0	52	0	52	9.362e-6	53	5.021e-3	42
273		min	-0.014	33	-3.214	37	-0.825	43	-3.058e-3	43	-1.598e-4	43	2.753e-4	17
274	N138	max	0.528	42	-0.01	52	0	52	0	52	9.341e-6	53	5.024e-3	42
275		min	-0.018	33	-3.247	37	-0.837	43	-3.058e-3	43	-1.599e-4	43	2.749e-4	17
276	N139	max	0.448	42	-0.073	52	0	52	0	16	7.018e-6	53	3.52e-3	42
277		min	-0.025	33	-3.394	37	-0.901	43	-3.056e-3	43	-9.059e-5	43	-4.062e-4	33
278	N140	max	0.214	52	0.211	42	0	20	0	20	4.335e-4	43	-6.497e-4	17
279		min	-1.815	38	0.007	17	-0.317	58	-2.998e-3	58	-1.038e-5	53	-1.988e-2	42
280	N141	max	0.295	52	-0.049	17	0	20	0	20	4.087e-4	43	-6.164e-4	17
281		min	-1.075	38	-1.48	42	-0.476	43	-3.023e-3	43	-1.06e-5	53	-1.822e-2	42
282	N142	max	0.347	52	-0.096	17	0	20	0	20	3.19e-4	43	-4.576e-4	17
283		min	-0.477	38	-2.792	37	-0.638	43	-3.055e-3	43	-1.08e-5	53	-1.205e-2	37
284	N143	max	0.414	51	-0.12	17	0	20	0	20	2.17e-4	43	7.329e-5	52
285		min	-0.225	33	-3.366	37	-0.751	43	-3.06e-3	43	-1.042e-5	53	-6.311e-3	38
286	N144	max	0.437	51	-0.121	17	0	20	-1.015e-8	20	1.603e-4	43	4.877e-4	52
287		min	-0.123	33	-3.393	37	-0.828	43	-3.058e-3	43	-9.882e-6	53	-4.037e-3	38
288	N145	max	0.426	51	-0.13	17	0	20	0	16	9.114e-5	43	1.126e-3	51
289		min	-0.047	33	-3.502	37	-0.904	43	-3.055e-3	43	-7.629e-6	53	-2.937e-3	33
290	N146	max	0.378	42	-0.132	17	0	16	0	16	2.941e-7	43	2.093e-3	42
291		min	-0.006	43	-3.492	37	-0.987	43	-3.054e-3	43	-1.357e-6	58	-1.917e-3	33
292	N147	max	2.215	42	0.187	37	0	52	9.792e-8	52	1.037e-5	53	1.764e-2	37
293		min	0.079	17	-0.009	52	-0.317	58	-2.997e-3	58	-4.334e-4	43	-8.738e-4	52
294	N148	max	1.529	42	0.055	52	0	52	9.975e-8	52	1.055e-5	53	1.676e-2	37
295		min	0.054	17	-1.331	37	-0.476	43	-3.024e-3	43	-4.085e-4	43	-4.577e-4	52
296	N149	max	0.955	42	0.055	52	0	52	7.098e-8	52	1.058e-5	53	1.189e-2	37
297		min	0.032	17	-2.591	37	-0.638	43	-3.056e-3	43	-3.187e-4	43	4.186e-4	16
298	N150	max	0.678	42	0.001	52	0	52	3.156e-8	52	1.e-5	53	6.972e-3	37
299		min	0.02	17	-3.187	37	-0.751	43	-3.06e-3	43	-2.166e-4	43	3.282e-4	17
300	N151	max	0.54	42	0	52	0	52	0	52	9.362e-6	53	5.021e-3	42
301		min	-0.015	33	-3.214	37	-0.828	43	-3.058e-3	43	-1.598e-4	43	2.749e-4	17
302	N152	max	0.445	42	-0.073	52	0	52	0	16	7.018e-6	53	3.521e-3	42
303		min	-0.025	33	-3.394	37	-0.904	43	-3.056e-3	43	-9.059e-5	43	-4.062e-4	33
304	N153	max	0	52	0	16	0	42	0	42	0	59	0	38
305		min	0	38	0	42	0	36	0	43	0	1	0	52
306	N154	max	0.2	52	-0.001	16	0	20	-4.392e-8	20	4.338e-4	43	-1.158e-3	17
307		min	-1.896	38	-0.011	42	-0.298	58	-2.977e-3	58	-1.059e-5	53	-1.986e-2	42
308	N155	max	0.208	52	0.28	42	0	1	-6.013e-8	20	4.338e-4	43	-1.162e-3	17
309		min	-1.832	38	0.016	17	-0.308	58	-2.998e-3	58	-1.058e-5	53	-1.988e-2	42
310	N156	max	0.211	52	0.211	42	0	1	-6.013e-8	20	4.338e-4	43	-1.162e-3	17
311		min	-1.802	38	0.012	17	-0.314	58	-2.998e-3	58	-1.058e-5	53	-1.988e-2	42
312	N157	max	0.223	52	-0.001	16	0	20	-5.928e-8	20	4.338e-4	43	-1.162e-3	17
313		min	-1.706	38	-0.012	42	-0.332	58	-2.998e-3	58	-1.059e-5	53	-1.99e-2	42
314	N158	max	0.293	52	-0.087	17	0	20	-7.582e-8	1	4.079e-4	43	-1.111e-3	17

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
315		min	-1.074	38	-1.479	42	-0.472	43	-3.024e-3	43	-1.082e-5	53	-1.822e-2	42
316	N159	max	0.346	52	-0.173	17	0	32	4.237e-7	32	3.159e-4	43	-5.657e-4	16
317		min	-0.48	38	-2.792	37	-0.635	43	-3.055e-3	43	-1.1e-5	53	-1.205e-2	37
318	N160	max	0.412	51	-0.196	16	0	37	-3.711e-7	20	2.172e-4	43	7.32e-5	52
319		min	-0.23	33	-3.366	37	-0.747	43	-3.062e-3	43	-1.083e-5	53	-6.187e-3	38
320	N161	max	0.419	51	-0.196	16	0	37	-4.607e-7	20	2.021e-4	43	1.866e-4	52
321		min	-0.21	33	-3.417	37	-0.763	43	-3.062e-3	43	-1.074e-5	53	-5.457e-3	38
322	N162	max	0.437	51	-0.198	16	0	32	-3.013e-7	16	1.66e-4	43	4.878e-4	52
323		min	-0.127	33	-3.393	37	-0.825	43	-3.064e-3	43	-1.049e-5	53	-3.958e-3	38
324	N163	max	0.438	51	-0.196	16	0	32	-3.055e-7	16	1.659e-4	43	4.873e-4	52
325		min	-0.114	33	-3.417	37	-0.836	43	-3.064e-3	43	-1.046e-5	53	-3.961e-3	38
326	N164	max	0.427	51	-0.178	16	0	16	2.115e-7	52	9.876e-5	43	1.128e-3	51
327		min	-0.05	33	-3.502	37	-0.901	43	-3.068e-3	43	-8.107e-6	53	-2.937e-3	33
328	N165	max	0.38	42	-0.134	16	0	52	7.09e-7	52	2.915e-7	43	2.094e-3	42
329		min	-0.007	43	-3.492	37	-0.985	43	-3.07e-3	43	-1.359e-6	58	-1.917e-3	33
330	N166	max	0	42	0	52	0	37	0	42	0	59	0	17
331		min	0	17	0	37	0	36	0	43	0	1	0	42
332	N167	max	2.319	42	0	52	0	52	2.346e-7	52	1.059e-5	53	1.759e-2	37
333		min	0.144	17	-0.01	37	-0.298	58	-2.975e-3	58	-4.337e-4	43	-8.883e-4	52
334	N168	max	2.26	42	0.249	37	0	52	2.938e-7	52	1.057e-5	53	1.764e-2	37
335		min	0.14	17	-0.012	52	-0.308	58	-2.997e-3	58	-4.337e-4	43	-8.727e-4	52
336	N169	max	2.232	42	0.187	37	0	52	2.938e-7	52	1.057e-5	53	1.764e-2	37
337		min	0.138	17	-0.009	52	-0.314	58	-2.997e-3	58	-4.337e-4	43	-8.726e-4	52
338	N170	max	2.142	42	0	52	0	52	2.931e-7	52	1.059e-5	53	1.765e-2	37
339		min	0.132	17	-0.011	37	-0.332	58	-2.997e-3	58	-4.337e-4	43	-8.767e-4	52
340	N171	max	1.546	42	0.055	52	0	52	7.469e-7	52	1.076e-5	53	1.676e-2	37
341		min	0.092	17	-1.331	37	-0.473	43	-3.024e-3	43	-4.078e-4	43	-4.563e-4	52
342	N172	max	0.967	42	0.055	52	0	42	1.234e-6	52	1.078e-5	53	1.189e-2	37
343		min	0.051	17	-2.591	37	-0.635	43	-3.055e-3	43	-3.156e-4	43	4.194e-4	16
344	N173	max	0.686	42	0.001	52	0	42	1.304e-6	52	1.042e-5	53	6.972e-3	37
345		min	0.03	17	-3.187	37	-0.747	43	-3.062e-3	43	-2.168e-4	43	5.547e-4	17
346	N174	max	0.657	42	-0.01	52	0	42	1.268e-6	52	1.03e-5	53	6.262e-3	42
347		min	0.025	33	-3.246	37	-0.763	43	-3.062e-3	43	-2.016e-4	43	5.16e-4	17
348	N175	max	0.545	42	0	52	0	42	9.918e-7	52	9.987e-6	53	5.022e-3	42
349		min	-0.014	33	-3.214	37	-0.825	43	-3.064e-3	43	-1.655e-4	43	4.309e-4	17
350	N176	max	0.528	42	-0.01	52	0	42	9.996e-7	52	9.955e-6	53	5.024e-3	42
351		min	-0.018	33	-3.247	37	-0.836	43	-3.064e-3	43	-1.654e-4	43	4.307e-4	17
352	N177	max	0.448	42	-0.073	52	0	52	8.031e-7	52	7.507e-6	53	3.52e-3	42
353		min	-0.025	33	-3.394	37	-0.901	43	-3.068e-3	43	-9.821e-5	43	-4.062e-4	33
354	N178	max	0.214	52	0.211	42	0	1	-5.967e-8	20	4.338e-4	43	-1.162e-3	17
355		min	-1.784	38	0.012	17	-0.317	58	-2.998e-3	58	-1.058e-5	53	-1.988e-2	42
356	N179	max	0.295	52	-0.087	17	0	20	-7.617e-8	1	4.079e-4	43	-1.111e-3	17
357		min	-1.057	38	-1.48	42	-0.476	43	-3.024e-3	43	-1.082e-5	53	-1.822e-2	42
358	N180	max	0.347	52	-0.173	17	0	32	3.927e-7	32	3.159e-4	43	-5.656e-4	16
359		min	-0.468	38	-2.792	37	-0.638	43	-3.055e-3	43	-1.1e-5	53	-1.205e-2	37
360	N181	max	0.414	51	-0.196	16	0	37	-3.75e-7	20	2.172e-4	43	7.331e-5	52
361		min	-0.225	33	-3.366	37	-0.751	43	-3.062e-3	43	-1.083e-5	53	-6.187e-3	38
362	N182	max	0.437	51	-0.198	16	0	32	-3.11e-7	16	1.66e-4	43	4.877e-4	52
363		min	-0.123	33	-3.393	37	-0.828	43	-3.064e-3	43	-1.049e-5	53	-3.958e-3	38
364	N183	max	0.426	51	-0.178	16	0	16	2.217e-7	52	9.876e-5	43	1.126e-3	51
365		min	-0.047	33	-3.502	37	-0.904	43	-3.067e-3	43	-8.107e-6	53	-2.937e-3	33
366	N184	max	0.378	42	-0.134	16	0	52	7.147e-7	52	2.915e-7	43	2.093e-3	42
367		min	-0.007	43	-3.492	37	-0.988	43	-3.07e-3	43	-1.359e-6	58	-1.917e-3	33
368	N185	max	2.215	42	0.187	37	0	52	2.934e-7	52	1.057e-5	53	1.764e-2	37
369		min	0.137	17	-0.009	52	-0.317	58	-2.997e-3	58	-4.337e-4	43	-8.739e-4	52

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
370	N186	max	1.529	42	0.055	52	0	52	7.464e-7	52	1.076e-5	53	1.676e-2	37
371		min	0.091	17	-1.331	37	-0.476	43	-3.024e-3	43	-4.078e-4	43	-4.577e-4	52
372	N187	max	0.955	42	0.055	52	0	42	1.232e-6	52	1.078e-5	53	1.189e-2	37
373		min	0.051	17	-2.591	37	-0.638	43	-3.055e-3	43	-3.156e-4	43	4.186e-4	16
374	N188	max	0.678	42	0.001	52	0	42	1.3e-6	52	1.042e-5	53	6.972e-3	37
375		min	0.03	17	-3.188	37	-0.751	43	-3.062e-3	43	-2.168e-4	43	5.545e-4	17
376	N189	max	0.54	42	0	52	0	42	1.01e-6	52	9.987e-6	53	5.022e-3	42
377		min	-0.015	33	-3.214	37	-0.828	43	-3.064e-3	43	-1.655e-4	43	4.306e-4	17
378	N190	max	0.445	42	-0.073	52	0	52	7.841e-7	52	7.507e-6	53	3.521e-3	42
379		min	-0.025	33	-3.394	37	-0.904	43	-3.068e-3	43	-9.821e-5	43	-4.062e-4	33
380	N191	max	0	52	0	16	0	51	0	51	0	59	0	38
381		min	0	38	0	42	0	36	0	43	0	1	0	52
382	N192	max	0.182	52	-0.001	16	0	20	2.257e-8	32	4.343e-4	43	-1.278e-3	17
383		min	-1.777	38	-0.01	42	-0.298	58	-2.977e-3	58	-1.077e-5	53	-1.891e-2	42
384	N193	max	0.19	52	0.267	42	0	32	7.951e-8	32	4.343e-4	43	-1.282e-3	17
385		min	-1.717	38	0.018	17	-0.308	58	-2.998e-3	58	-1.075e-5	53	-1.893e-2	42
386	N194	max	0.193	52	0.201	42	0	1	7.951e-8	32	4.343e-4	43	-1.282e-3	17
387		min	-1.689	38	0.014	17	-0.314	58	-2.998e-3	58	-1.075e-5	53	-1.893e-2	42
388	N195	max	0.204	52	-0.001	16	0	20	8.566e-8	32	4.343e-4	43	-1.282e-3	17
389		min	-1.598	38	-0.011	42	-0.332	58	-2.998e-3	58	-1.077e-5	53	-1.895e-2	42
390	N196	max	0.275	52	-0.097	17	0	20	1.229e-6	32	4.078e-4	43	-1.191e-3	16
391		min	-1	38	-1.408	42	-0.472	43	-3.023e-3	43	-1.102e-5	53	-1.732e-2	42
392	N197	max	0.329	52	-0.179	16	0	37	3.818e-6	32	3.141e-4	43	-5.795e-4	16
393		min	-0.441	38	-2.653	37	-0.635	43	-3.053e-3	43	-1.123e-5	53	-1.138e-2	37
394	N198	max	0.4	51	-0.198	16	0.001	37	1.156e-6	32	2.185e-4	43	3.955e-5	52
395		min	-0.218	33	-3.192	37	-0.747	43	-3.06e-3	43	-1.132e-5	53	-5.743e-3	38
396	N199	max	0.406	51	-0.198	16	0.001	37	-1.089e-7	1	2.048e-4	43	1.525e-4	52
397		min	-0.199	33	-3.239	37	-0.762	43	-3.061e-3	43	-1.132e-5	53	-5.053e-3	38
398	N200	max	0.421	51	-0.2	16	0.001	37	-7.998e-7	16	1.728e-4	43	4.503e-4	52
399		min	-0.121	33	-3.218	37	-0.824	43	-3.067e-3	43	-1.137e-5	53	-3.637e-3	38
400	N201	max	0.422	51	-0.198	16	0.001	32	-8.112e-7	16	1.725e-4	43	4.498e-4	52
401		min	-0.108	33	-3.24	37	-0.836	43	-3.067e-3	43	-1.132e-5	53	-3.64e-3	38
402	N202	max	0.41	51	-0.182	16	0	16	3.5e-7	52	1.075e-4	43	1.148e-3	51
403		min	-0.048	33	-3.317	37	-0.901	43	-3.078e-3	43	-8.92e-6	53	-2.796e-3	33
404	N203	max	0.364	42	-0.139	16	0	52	1.663e-6	52	5.941e-7	33	2.025e-3	42
405		min	0	32	-3.304	37	-0.986	43	-3.084e-3	43	-1.336e-6	58	-1.854e-3	33
406	N204	max	0	42	0	52	0	1	0	1	0	59	0	17
407		min	0	17	0	37	0	36	0	43	0	1	0	42
408	N205	max	2.195	42	0	52	0	52	4.323e-7	52	1.077e-5	53	1.671e-2	37
409		min	0.157	17	-0.009	37	-0.298	58	-2.975e-3	58	-4.342e-4	43	-7.941e-4	52
410	N206	max	2.139	42	0.236	37	0	52	5.795e-7	52	1.075e-5	53	1.676e-2	37
411		min	0.152	17	-0.011	52	-0.308	58	-2.997e-3	58	-4.342e-4	43	-7.788e-4	52
412	N207	max	2.113	42	0.177	37	0	52	5.795e-7	52	1.075e-5	53	1.676e-2	37
413		min	0.15	17	-0.008	52	-0.314	58	-2.997e-3	58	-4.342e-4	43	-7.788e-4	52
414	N208	max	2.028	42	0	52	0	52	5.773e-7	52	1.077e-5	53	1.677e-2	37
415		min	0.143	17	-0.01	37	-0.332	58	-2.997e-3	58	-4.342e-4	43	-7.828e-4	52
416	N209	max	1.462	42	0.048	52	0	52	2.212e-6	42	1.098e-5	53	1.59e-2	37
417		min	0.095	17	-1.264	37	-0.473	43	-3.023e-3	43	-4.077e-4	43	-3.763e-4	52
418	N210	max	0.916	42	0.043	52	0	42	5.931e-6	42	1.102e-5	53	1.123e-2	37
419		min	0.048	17	-2.458	37	-0.635	43	-3.053e-3	43	-3.139e-4	43	4.407e-4	16
420	N211	max	0.651	42	-0.013	52	0.001	42	3.176e-6	52	1.093e-5	53	6.545e-3	37
421		min	0.024	17	-3.019	37	-0.747	43	-3.061e-3	43	-2.181e-4	43	6.043e-4	17
422	N212	max	0.624	42	-0.024	52	0.001	42	3.099e-6	52	1.091e-5	53	5.871e-3	42
423		min	0.021	33	-3.075	37	-0.762	43	-3.061e-3	43	-2.044e-4	43	5.53e-4	17
424	N213	max	0.519	42	-0.014	52	0.001	42	2.385e-6	52	1.089e-5	53	4.703e-3	42

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
425		min	-0.015	33	-3.045	37	-0.824	43	-3.067e-3	43	-1.724e-4	43	4.386e-4	17
426	N214	max	0.503	42	-0.024	52	0.001	42	2.406e-6	52	1.083e-5	53	4.706e-3	42
427		min	-0.019	33	-3.075	37	-0.836	43	-3.067e-3	43	-1.721e-4	43	4.387e-4	17
428	N215	max	0.428	42	-0.083	16	0	52	1.924e-6	52	8.336e-6	53	3.307e-3	42
429		min	-0.025	33	-3.213	37	-0.901	43	-3.078e-3	43	-1.069e-4	43	-4.422e-4	33
430	N216	max	0.195	52	0.201	42	0	1	8.288e-8	32	4.343e-4	43	-1.282e-3	17
431		min	-1.672	38	0.014	17	-0.317	58	-2.998e-3	58	-1.075e-5	53	-1.893e-2	42
432	N217	max	0.277	52	-0.097	17	0	20	1.229e-6	32	4.078e-4	43	-1.191e-3	16
433		min	-0.984	38	-1.408	42	-0.476	43	-3.023e-3	43	-1.102e-5	53	-1.732e-2	42
434	N218	max	0.33	52	-0.179	16	0	37	3.755e-6	32	3.141e-4	43	-5.794e-4	16
435		min	-0.43	38	-2.653	37	-0.638	43	-3.053e-3	43	-1.123e-5	53	-1.138e-2	37
436	N219	max	0.402	51	-0.198	16	0.001	37	1.054e-6	32	2.185e-4	43	3.965e-5	52
437		min	-0.213	33	-3.192	37	-0.75	43	-3.061e-3	43	-1.132e-5	53	-5.743e-3	38
438	N220	max	0.421	51	-0.2	16	0.001	32	-8.262e-7	16	1.728e-4	43	4.502e-4	52
439		min	-0.117	33	-3.218	37	-0.827	43	-3.067e-3	43	-1.137e-5	53	-3.637e-3	38
440	N221	max	0.409	51	-0.182	16	0	16	3.785e-7	52	1.075e-4	43	1.146e-3	51
441		min	-0.045	33	-3.317	37	-0.904	43	-3.078e-3	43	-8.92e-6	53	-2.796e-3	33
442	N222	max	0.362	42	-0.139	16	0	52	1.678e-6	52	5.941e-7	33	2.025e-3	42
443		min	0	32	-3.304	37	-0.989	43	-3.084e-3	43	-1.336e-6	58	-1.854e-3	33
444	N223	max	2.097	42	0.177	37	0	52	5.783e-7	52	1.075e-5	53	1.676e-2	37
445		min	0.149	17	-0.008	52	-0.317	58	-2.997e-3	58	-4.342e-4	43	-7.8e-4	52
446	N224	max	1.447	42	0.048	52	0	52	2.213e-6	42	1.098e-5	53	1.59e-2	37
447		min	0.094	17	-1.264	37	-0.476	43	-3.023e-3	43	-4.077e-4	43	-3.777e-4	52
448	N225	max	0.904	42	0.043	52	0	42	5.853e-6	42	1.102e-5	53	1.123e-2	37
449		min	0.047	17	-2.458	37	-0.638	43	-3.053e-3	43	-3.139e-4	43	4.399e-4	16
450	N226	max	0.644	42	-0.013	52	0.001	42	3.165e-6	52	1.093e-5	53	6.545e-3	37
451		min	0.023	17	-3.019	37	-0.75	43	-3.061e-3	43	-2.181e-4	43	6.041e-4	17
452	N227	max	0.514	42	-0.014	52	0.001	42	2.434e-6	52	1.089e-5	53	4.703e-3	42
453		min	-0.017	33	-3.045	37	-0.827	43	-3.067e-3	43	-1.724e-4	43	4.384e-4	17
454	N228	max	0.425	42	-0.083	16	0	52	1.871e-6	52	8.336e-6	53	3.307e-3	42
455		min	-0.024	33	-3.213	37	-0.904	43	-3.078e-3	43	-1.069e-4	43	-4.422e-4	33
456	N229	max	0	52	0	16	0	52	0	52	0	59	0	38
457		min	0	38	0	42	0	43	0	43	0	1	0	52
458	N230	max	0.179	52	0	16	0	20	1.152e-6	32	4.354e-4	43	-1.171e-3	16
459		min	-1.674	38	-0.009	42	-0.298	58	-2.976e-3	58	-1.096e-5	53	-1.692e-2	42
460	N231	max	0.186	52	0.24	42	0	32	1.785e-6	32	4.354e-4	43	-1.167e-3	16
461		min	-1.619	38	0.017	16	-0.308	58	-2.998e-3	58	-1.095e-5	53	-1.695e-2	42
462	N232	max	0.188	52	0.18	42	0	1	1.785e-6	32	4.354e-4	43	-1.167e-3	16
463		min	-1.593	38	0.013	16	-0.314	58	-2.998e-3	58	-1.095e-5	53	-1.695e-2	42
464	N233	max	0.198	52	0	16	0	20	1.777e-6	32	4.354e-4	43	-1.168e-3	16
465		min	-1.511	38	-0.009	42	-0.332	58	-2.998e-3	58	-1.096e-5	53	-1.696e-2	42
466	N234	max	0.255	52	-0.083	16	0	20	6.843e-6	32	4.097e-4	43	-9.802e-4	16
467		min	-0.966	38	-1.264	42	-0.472	43	-3.019e-3	43	-1.133e-5	53	-1.568e-2	42
468	N235	max	0.299	52	-0.148	16	0	37	1.433e-5	32	3.157e-4	43	-4.752e-4	16
469		min	-0.445	38	-2.409	42	-0.635	43	-3.045e-3	43	-1.169e-5	53	-1.068e-2	37
470	N236	max	0.328	51	-0.163	16	0.001	37	1.358e-5	32	2.23e-4	43	4.402e-5	52
471		min	-0.201	38	-2.926	37	-0.747	43	-3.052e-3	43	-1.219e-5	53	-5.749e-3	38
472	N237	max	0.337	51	-0.163	16	0.001	37	1.197e-5	32	2.107e-4	43	1.348e-4	52
473		min	-0.183	33	-2.973	37	-0.762	43	-3.053e-3	43	-1.235e-5	53	-5.115e-3	38
474	N238	max	0.36	51	-0.165	16	0.001	37	-5.352e-7	1	1.838e-4	43	3.777e-4	52
475		min	-0.11	33	-2.951	37	-0.824	43	-3.063e-3	43	-1.291e-5	53	-3.8e-3	38
476	N239	max	0.363	51	-0.163	16	0.001	37	-4.844e-7	1	1.831e-4	43	3.773e-4	52
477		min	-0.099	33	-2.974	37	-0.836	43	-3.063e-3	43	-1.281e-5	53	-3.802e-3	38
478	N240	max	0.362	51	-0.149	16	0	16	2.199e-7	52	1.201e-4	43	8.148e-4	52
479		min	-0.043	33	-3.064	37	-0.901	43	-3.084e-3	43	-1.04e-5	53	-2.509e-3	33

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
480	N241	max	0.328	42	-0.115	16	0	52	3.253e-6	52	1.298e-6	33	1.629e-3	42
481		min	0	38	-3.067	37	-0.987	43	-3.098e-3	43	-1.252e-6	58	-1.48e-3	33
482	N242	max	0	42	0	52	0	20	0	20	0	59	0	17
483		min	0	17	0	37	0	43	0	43	0	1	0	42
484	N243	max	2.048	42	0	52	0	52	1.73e-6	42	1.097e-5	53	1.518e-2	37
485		min	0.172	17	-0.008	37	-0.298	58	-2.975e-3	58	-4.354e-4	43	-5.709e-4	52
486	N244	max	1.996	42	0.215	37	0	52	2.608e-6	42	1.095e-5	53	1.523e-2	37
487		min	0.167	17	-0.008	52	-0.308	58	-2.997e-3	58	-4.353e-4	43	-5.582e-4	52
488	N245	max	1.972	42	0.162	37	0	52	2.608e-6	42	1.094e-5	53	1.523e-2	37
489		min	0.165	17	-0.006	52	-0.314	58	-2.997e-3	58	-4.353e-4	43	-5.582e-4	52
490	N246	max	1.893	42	0	52	0	52	2.596e-6	42	1.097e-5	53	1.523e-2	37
491		min	0.157	17	-0.009	37	-0.332	58	-2.997e-3	58	-4.354e-4	43	-5.61e-4	52
492	N247	max	1.371	42	0.034	52	0	52	9.483e-6	42	1.13e-5	53	1.455e-2	37
493		min	0.108	17	-1.15	37	-0.473	43	-3.019e-3	43	-4.096e-4	43	-2.58e-4	52
494	N248	max	0.859	42	0.029	52	0	42	1.955e-5	42	1.148e-5	53	1.054e-2	37
495		min	0.058	17	-2.254	37	-0.635	43	-3.046e-3	43	-3.155e-4	43	3.47e-4	16
496	N249	max	0.604	42	-0.012	52	0.001	42	1.937e-5	42	1.18e-5	53	6.332e-3	37
497		min	0.03	17	-2.789	37	-0.747	43	-3.052e-3	43	-2.227e-4	43	6.094e-4	16
498	N250	max	0.578	42	-0.021	52	0.001	42	1.748e-5	42	1.194e-5	53	5.711e-3	42
499		min	0.027	17	-2.842	37	-0.762	43	-3.054e-3	43	-2.103e-4	43	6.406e-4	16
500	N251	max	0.476	42	-0.013	52	0.002	42	4.932e-6	52	1.242e-5	53	4.593e-3	42
501		min	0	33	-2.813	37	-0.824	43	-3.063e-3	43	-1.833e-4	43	5.426e-4	17
502	N252	max	0.46	42	-0.021	52	0.002	42	4.984e-6	52	1.233e-5	53	4.595e-3	42
503		min	-0.005	33	-2.843	37	-0.836	43	-3.063e-3	43	-1.826e-4	43	5.426e-4	17
504	N253	max	0.387	42	-0.068	52	0	52	3.907e-6	52	9.819e-6	53	3.168e-3	42
505		min	-0.017	33	-2.98	37	-0.901	43	-3.084e-3	43	-1.196e-4	43	-5.321e-5	33
506	N254	max	0.19	52	0.18	42	0	32	1.543e-2	42	3.366e-3	51	-1.167e-3	16
507		min	-1.578	38	0.013	16	-0.317	58	5.608e-4	17	-4.102e-3	32	-1.695e-2	42
508	N255	max	0.257	52	-0.083	16	0	20	2.194e-2	42	3.903e-3	51	-9.801e-4	16
509		min	-0.951	38	-1.264	42	-0.476	43	6.255e-4	17	-4.94e-3	32	-1.568e-2	42
510	N256	max	0.299	52	-0.148	16	0	37	2.043e-2	42	3.646e-3	51	-4.751e-4	16
511		min	-0.435	38	-2.409	42	-0.638	43	5.595e-4	17	-4.261e-3	32	-1.068e-2	37
512	N257	max	0.331	51	-0.163	16	0.001	37	1.466e-2	42	2.558e-3	51	4.409e-5	52
513		min	-0.196	33	-2.926	37	-0.75	43	4.346e-4	17	-2.932e-3	32	-5.749e-3	38
514	N258	max	0.361	51	-0.165	16	0.001	37	7.47e-3	42	5.52e-3	42	3.774e-4	52
515		min	-0.107	33	-2.951	37	-0.827	43	4.817e-4	17	-1.475e-3	53	-3.799e-3	38
516	N259	max	0.361	51	-0.149	16	0	16	4.4e-3	42	1.307e-3	42	8.149e-4	52
517		min	-0.041	33	-3.064	37	-0.904	43	-1.844e-4	59	-6.145e-4	53	-2.509e-3	33
518	N260	max	0.327	42	-0.115	16	0	52	6.508e-4	32	2.895e-4	42	1.628e-3	42
519		min	0	38	-3.067	37	-0.99	43	-1.055e-3	59	-2.339e-4	58	-1.48e-3	33
520	N261	max	1.957	42	0.162	37	0	52	1.238e-2	38	4.231e-3	37	1.523e-2	37
521		min	0.163	17	-0.006	52	-0.317	58	-2.183e-3	52	-4.511e-5	23	-5.591e-4	52
522	N262	max	1.357	42	0.034	52	0	52	1.735e-2	38	4.94e-3	32	1.455e-2	37
523		min	0.107	17	-1.15	37	-0.476	43	-3.409e-3	52	8.627e-5	23	-2.59e-4	52
524	N263	max	0.848	42	0.029	52	0	42	1.617e-2	38	4.261e-3	32	1.054e-2	37
525		min	0.057	17	-2.254	37	-0.638	43	-3.027e-3	52	8.27e-5	23	3.464e-4	16
526	N264	max	0.598	42	-0.012	52	0.001	42	1.169e-2	38	2.932e-3	32	6.332e-3	37
527		min	0.029	17	-2.789	37	-0.75	43	-1.863e-3	52	5.126e-6	23	6.09e-4	16
528	N265	max	0.471	42	-0.013	52	0.002	42	5.388e-3	33	1.475e-3	53	4.592e-3	42
529		min	-0.002	33	-2.813	37	-0.827	43	-1.445e-3	52	-4.998e-3	42	5.425e-4	17
530	N266	max	0.384	42	-0.068	52	0	52	3.703e-3	33	7.999e-4	52	3.168e-3	42
531		min	-0.017	33	-2.98	37	-0.904	43	-3.686e-4	52	-8.919e-4	42	-5.324e-5	33
532	N267	max	0.198	52	0.692	42	0	32	1.497e-2	42	3.269e-3	51	-1.167e-3	16
533		min	-1.459	38	0.033	17	-0.317	58	5.445e-4	17	-4.001e-3	32	-1.695e-2	42
534	N268	max	0.296	52	-0.028	16	0	20	2.132e-2	42	3.798e-3	51	-9.801e-4	16

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
535		min	-0.81	38	-0.554	37	-0.476	43	6.068e-4	17	-4.804e-3	32	-1.568e-2	42
536	N269	max	0.333	52	-0.093	16	0	37	1.987e-2	42	3.552e-3	51	-4.751e-4	16
537		min	-0.318	43	-1.757	37	-0.638	43	5.417e-4	17	-4.138e-3	32	-1.068e-2	37
538	N270	max	0.33	52	-0.12	16	0.001	37	1.428e-2	42	2.494e-3	51	4.409e-5	52
539		min	-0.161	33	-2.455	37	-0.75	43	4.194e-4	17	-2.846e-3	32	-5.749e-3	38
540	N271	max	0.349	52	-0.125	16	0.002	37	6.021e-3	42	6.58e-3	42	3.774e-4	52
541		min	-0.237	38	-2.759	37	-0.827	43	5.078e-4	17	-1.568e-3	53	-3.799e-3	38
542	N272	max	0.33	52	-0.102	16	0	16	2.484e-4	52	6.035e-4	53	8.305e-4	52
543		min	-0.126	33	-3.049	37	-0.904	43	-5.485e-3	43	-2.357e-3	42	-2.564e-3	38
544	N273	max	0.366	42	-0.053	52	0	52	8.428e-4	52	4.171e-4	33	1.629e-3	42
545		min	-0.032	33	-3.306	37	-0.991	43	-4.022e-3	43	-4.626e-4	51	-1.481e-3	33
546	N274	max	1.842	42	0.567	38	0	52	1.202e-2	38	4.13e-3	37	1.523e-2	37
547		min	0.133	17	-0.079	52	-0.317	58	-2.119e-3	52	-5.807e-5	23	-5.591e-4	52
548	N275	max	1.246	42	-0.056	16	0	52	1.686e-2	38	4.804e-3	32	1.455e-2	37
549		min	0.066	17	-0.596	42	-0.476	43	-3.312e-3	52	6.956e-5	23	-2.59e-4	52
550	N276	max	0.753	42	-0.062	16	0	42	1.573e-2	38	4.138e-3	32	1.054e-2	37
551		min	0.019	17	-1.723	37	-0.638	43	-2.941e-3	52	6.739e-5	23	3.464e-4	16
552	N277	max	0.529	42	-0.069	16	0.001	42	1.138e-2	38	2.846e-3	32	6.332e-3	37
553		min	-0.046	33	-2.401	37	-0.75	43	-1.809e-3	52	-6.212e-6	23	6.09e-4	16
554	N278	max	0.69	42	-0.062	52	0.002	42	4.279e-3	33	1.568e-3	53	4.592e-3	42
555		min	-0.031	53	-2.691	37	-0.827	43	-1.435e-3	52	-7.051e-3	42	5.425e-4	17
556	N279	max	0.532	42	-0.044	52	0	16	1.129e-3	52	1.78e-3	42	3.707e-3	42
557		min	-0.016	53	-2.997	37	-0.904	43	-5.485e-3	43	-6.04e-4	53	2.528e-4	17
558	N280	max	0.272	53	0.692	42	0	51	1.979e-3	53	4.001e-3	32	1.684e-3	53
559		min	-1.588	43	-0.086	53	-0.317	58	-1.497e-2	42	-3.333e-3	51	-1.694e-2	42
560	N281	max	0.281	52	0.036	53	0	34	2.662e-3	53	4.805e-3	32	1.587e-3	53
561		min	-0.923	43	-0.571	38	-0.476	43	-2.132e-2	42	-3.863e-3	51	-1.568e-2	42
562	N282	max	0.318	52	0.172	53	0	52	2.092e-3	53	4.138e-3	32	1.049e-3	53
563		min	-0.389	43	-1.756	37	-0.639	43	-1.987e-2	42	-3.618e-3	51	-1.068e-2	37
564	N283	max	0.316	52	0.259	53	0	52	9.685e-4	53	2.846e-3	32	4.998e-4	53
565		min	-0.161	33	-2.455	37	-0.752	43	-1.428e-2	42	-2.561e-3	51	-5.97e-3	38
566	N284	max	0.334	52	0.283	53	0	52	3.19e-4	53	2.134e-3	53	3.787e-4	52
567		min	-0.357	43	-2.759	37	-0.83	43	-6.023e-3	42	-9.045e-3	43	-3.838e-3	38
568	N285	max	0.315	52	0.456	53	0.001	37	4.83e-3	42	2.935e-3	43	8.205e-4	52
569		min	-0.174	43	-3.048	37	-0.903	43	-3.83e-3	53	-5.558e-4	53	-2.639e-3	38
570	N286	max	0.35	42	0.662	53	0.005	37	3.137e-3	42	4.446e-4	51	1.621e-3	42
571		min	-0.032	33	-3.305	37	-0.982	43	-3.554e-3	53	-4.171e-4	33	-1.48e-3	33
572	N287	max	1.828	42	0.627	38	0	51	2.118e-3	52	7.381e-4	36	1.614e-2	38
573		min	-0.276	53	-0.085	53	-0.317	58	-1.334e-2	38	-4.163e-3	37	-1.685e-3	53
574	N288	max	1.232	42	0.034	53	0	42	3.313e-3	52	1.394e-3	36	1.523e-2	38
575		min	-0.235	53	-0.596	42	-0.476	43	-1.879e-2	38	-4.805e-3	32	-1.587e-3	53
576	N289	max	0.738	42	0.169	53	0	16	2.943e-3	52	1.366e-3	36	1.064e-2	38
577		min	-0.163	53	-1.75	38	-0.639	43	-1.761e-2	38	-4.138e-3	32	-1.049e-3	53
578	N290	max	0.514	42	0.256	53	0	16	1.811e-3	52	9.254e-4	36	6.332e-3	37
579		min	-0.101	53	-2.439	38	-0.752	43	-1.283e-2	38	-2.85e-3	52	-4.998e-4	53
580	N291	max	0.675	42	0.28	53	0	16	1.432e-3	52	9.21e-3	43	4.593e-3	42
581		min	-0.082	53	-2.754	38	-0.83	43	-4.282e-3	33	-2.323e-3	53	-2.59e-4	53
582	N292	max	0.517	42	0.454	53	0.001	37	3.754e-3	42	5.78e-4	52	3.699e-3	42
583		min	-0.046	53	-3.022	38	-0.903	43	-3.834e-3	53	-2.936e-3	43	-6.806e-4	53
584	N293	max	0.028	53	0	53	0	32	5.93e-7	32	0	59	9.859e-3	38
585		min	-0.284	38	-0.003	42	-0.046	58	-1.615e-3	58	0	1	-9.559e-4	53
586	N294	max	0.323	42	0	53	0	42	8.468e-7	42	0	59	9.554e-4	53
587		min	-0.028	53	-0.003	43	-0.046	58	-1.615e-3	58	0	1	-1.118e-2	42
588	N295	max	0.03	52	0	53	0	32	9.596e-8	32	0	59	1.069e-2	38
589		min	-0.308	38	-0.004	42	-0.046	58	-1.615e-3	58	0	1	-1.01e-3	52

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
590	N296	max	0.348	42	0	53	0	42	2.074e-7	42	0	59	4.489e-4	53
591		min	-0.013	53	-0.003	38	-0.046	58	-1.615e-3	58	0	1	-1.205e-2	42
592	N297	max	0.033	52	0	53	0	1	0	1	0	59	1.086e-2	38
593		min	-0.313	38	-0.004	42	-0.046	58	-1.616e-3	58	0	1	-1.111e-3	52
594	N298	max	0.368	42	0	52	0	52	8.292e-8	52	0	59	-1.364e-5	53
595		min	0	53	-0.003	37	-0.046	58	-1.615e-3	58	0	1	-1.273e-2	42
596	N299	max	0.033	52	0	17	0	20	0	20	0	59	1.058e-2	38
597		min	-0.305	38	-0.004	42	-0.046	58	-1.616e-3	58	0	1	-1.111e-3	52
598	N300	max	0.368	42	0	52	0	52	4.807e-8	52	0	59	-4.555e-4	17
599		min	0.013	17	-0.003	37	-0.046	58	-1.615e-3	58	0	1	-1.273e-2	42
600	N301	max	0.033	52	0	16	0	42	1.229e-8	34	0	59	1.04e-2	38
601		min	-0.3	38	-0.004	42	-0.046	58	-1.616e-3	58	0	1	-1.111e-3	52
602	N302	max	0.368	42	0	52	0	42	4.277e-8	42	0	59	-7.914e-4	17
603		min	0.023	17	-0.003	37	-0.046	58	-1.615e-3	58	0	1	-1.273e-2	42
604	N303	max	0.03	52	0	16	0	51	2.564e-8	51	0	59	9.748e-3	38
605		min	-0.281	38	-0.004	42	-0.046	58	-1.616e-3	58	0	1	-1.011e-3	52
606	N304	max	0.348	42	0	52	0	1	-2.589e-8	20	0	59	-8.622e-4	17
607		min	0.025	17	-0.003	37	-0.046	58	-1.615e-3	58	0	1	-1.205e-2	42
608	N305	max	0.029	52	0	16	0	52	1.34e-7	52	0	59	9.181e-3	38
609		min	-0.265	38	-0.003	42	-0.046	58	-1.616e-3	58	0	1	-9.958e-4	52
610	N306	max	0.325	42	0	52	0	20	-1.082e-7	20	0	59	-9.419e-4	17
611		min	0.027	17	-0.003	37	-0.046	58	-1.615e-3	58	0	1	-1.125e-2	42

Envelope AISC 13TH (360-05): ASD Member Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [k-in]	Mnzz/om [k-in]	Cb	Eqn
0	M1	HSS14X10X8	0.749	0	8	0.061	12.768	y	8	393472.769	625748.503	2344.651	2958.084	1.656	H1-1b
1	M2	HSS14X10X8	0.772	0	7	0.069	0.521	y	7	393472.769	625748.503	2344.651	2958.084	1.661	H1-1b
2	M3	HSS14X10X8	0.808	0	8	0.067	12.768	y	8	393472.769	625748.503	2344.651	2958.084	1.655	H1-1b
3	M4	HSS14X10X8	0.834	0	7	0.075	4.43	y	7	393472.769	625748.503	2344.651	2958.084	1.66	H1-1b
4	M5	HSS14X10X8	0.806	0	8	0.066	12.768	y	8	393472.769	625748.503	2344.651	2958.084	1.655	H1-1b
5	M6	HSS14X10X8	0.88	0	7	0.079	4.43	y	7	393472.769	625748.503	2344.651	2958.084	1.66	H1-1b
6	M7	HSS14X10X8	0.777	0	8	0.065	12.768	y	2	393472.769	625748.503	2344.651	2958.084	1.655	H1-1b
7	M8	HSS14X10X8	0.88	0	7	0.079	4.43	y	7	393472.769	625748.503	2344.651	2958.084	1.66	H1-1b
8	M9	HSS14X10X8	0.759	0	8	0.065	12.768	y	2	393472.769	625748.503	2344.651	2958.084	1.655	H1-1b
9	M10	HSS14X10X8	0.88	0	7	0.079	4.43	y	7	393472.769	625748.503	2344.651	2958.084	1.66	H1-1b
10	M11	HSS14X10X8	0.714	0	8	0.062	12.768	y	2	393472.769	625748.503	2344.651	2958.084	1.656	H1-1b
11	M12	HSS14X10X8	0.834	0	7	0.075	4.43	y	7	393472.769	625748.503	2344.651	2958.084	1.66	H1-1b
12	M13	HSS14X10X8	0.681	0	8	0.057	12.768	y	2	393472.769	625748.503	2344.651	2958.084	1.656	H1-1b
13	M14	HSS14X10X8	0.775	0	7	0.069	0.521	y	7	393472.769	625748.503	2344.651	2958.084	1.661	H1-1b
14	M29	HSS20X8X5	0.444	22.047	7	0.049	1.407	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
15	M30	HSS20X8X5	0.416	0	7	0.086	2	y	8	171181.936	470059.88	1011.876	2895.56	1.12	H1-1b
16	M31	HSS20X8X5	0.327	0	7	0.037	8.572	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
17	M32	HSS20X8X5	0.424	22.047	8	0.047	1.407	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b
18	M33	HSS20X8X5	0.389	0	8	0.086	2	y	8	171181.936	470059.88	1011.876	2895.56	1.149	H1-1b
19	M34	HSS20X8X5	0.294	0	8	0.03	8.572	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b
20	M35	HSS20X8X5	0.492	22.047	7	0.059	1.407	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
21	M36	HSS20X8X5	0.453	0	7	0.088	2	y	8	171181.936	470059.88	1011.876	2895.56	1.121	H1-1b
22	M37	HSS20X8X5	0.357	0	7	0.044	8.572	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
23	M38	HSS20X8X5	0.46	22.047	8	0.054	1.407	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b
24	M39	HSS20X8X5	0.42	0	8	0.088	2	y	8	171181.936	470059.88	1011.876	2895.56	1.141	H1-1b
25	M40	HSS20X8X5	0.323	0	8	0.036	8.572	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b
26	M41	HSS20X8X5	0.516	22.047	7	0.061	1.407	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
27	M42	HSS20X8X5	0.477	0	7	0.085	2	y	8	171181.936	470059.88	1011.876	2895.56	1.121	H1-1b
28	M43	HSS20X8X5	0.375	0	7	0.045	8.572	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
29	M44	HSS20X8X5	0.453	22.047	8	0.052	1.407	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b

Envelope AISC 13TH (360-05): ASD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [k-in]	Mnzz/om [k-in]	Cb	Eqn
30	M45	HSS20X8X5	0.415	0	8	0.091	0	y	7	171181.936	470059.88	1011.876	2895.56	1.137	H1-1b
31	M46	HSS20X8X5	0.321	0	8	0.034	8.572	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b
32	M47	HSS20X8X5	0.516	22.047	7	0.061	1.407	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
33	M48	HSS20X8X5	0.476	0	7	0.084	2	y	7	171181.936	470059.88	1011.876	2895.56	1.121	H1-1b
34	M49	HSS20X8X5	0.375	0	7	0.045	8.572	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
35	M50	HSS20X8X5	0.431	22.047	8	0.05	1.407	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b
36	M51	HSS20X8X5	0.396	0	8	0.091	0	y	7	171181.936	470059.88	1011.876	2895.56	1.136	H1-1b
37	M52	HSS20X8X5	0.306	0	8	0.032	8.572	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b
38	M53	HSS20X8X5	0.516	22.047	7	0.061	1.407	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
39	M54	HSS20X8X5	0.477	0	7	0.084	2	y	7	171181.936	470059.88	1011.876	2895.56	1.121	H1-1b
40	M55	HSS20X8X5	0.375	0	7	0.045	8.572	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
41	M56	HSS20X8X5	0.426	22.047	2	0.049	1.407	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b
42	M57	HSS20X8X5	0.395	0	2	0.091	0	y	7	171181.936	470059.88	1011.876	2895.56	1.132	H1-1b
43	M58	HSS20X8X5	0.304	0	2	0.032	8.572	y	3	171181.936	470059.88	1011.876	2895.56	1	H1-1b
44	M59	HSS20X8X5	0.492	22.047	7	0.059	1.407	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
45	M60	HSS20X8X5	0.453	0	7	0.081	2	y	7	171181.936	470059.88	1011.876	2895.56	1.121	H1-1b
46	M61	HSS20X8X5	0.357	0	7	0.044	8.572	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
47	M62	HSS20X8X5	0.406	22.047	2	0.047	1.407	y	8	171181.936	470059.88	1011.876	2895.56	1	H1-1b
48	M63	HSS20X8X5	0.376	0	2	0.087	0	y	7	171181.936	470059.88	1011.876	2895.56	1.131	H1-1b
49	M64	HSS20X8X5	0.29	0	2	0.031	8.572	y	3	171181.936	470059.88	1011.876	2895.56	1	H1-1b
50	M65	HSS20X8X5	0.444	22.047	7	0.049	1.407	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
51	M66	HSS20X8X5	0.416	0	7	0.073	2	y	7	171181.936	470059.88	1011.876	2895.56	1.12	H1-1b
52	M67	HSS20X8X5	0.327	0	7	0.037	8.572	y	7	171181.936	470059.88	1011.876	2895.56	1	H1-1b
53	M68	HSS20X8X5	0.376	22.985	7	0.039	1.407	y	2	171181.936	470059.88	1011.876	2895.56	1	H1-1b
54	M69	HSS20X8X5	0.348	0	7	0.082	0	y	7	171181.936	470059.88	1011.876	2895.56	1.171	H1-1b
55	M70	HSS20X8X5	0.266	0	2	0.026	8.572	y	3	171181.936	470059.88	1011.876	2895.56	1	H1-1b
56	M85	HSS6X4X3	0.076	2.833	7	0.018	2.833	y	7	91150.37	98203.593	137.321	197.605	2.339	H1-1b
57	M86	HSS6X4X3	0.517	7.979	7	0.051	0	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
58	M87	HSS6X4X3	0.554	7.667	7	0.05	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
59	M88	HSS6X4X3	0.554	7.666	7	0.05	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
60	M89	HSS6X4X3	0.554	7.666	7	0.05	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
61	M90	HSS6X4X3	0.554	7.667	7	0.05	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
62	M91	HSS6X4X3	0.517	7.354	7	0.051	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
63	M92	HSS6X4X3	0.076	0	7	0.018	0	y	7	91150.37	98203.593	137.321	197.605	2.312	H1-1b
64	M93	HSS6X4X3	0.103	2.833	7	0.024	2.833	y	7	91150.37	98203.593	137.321	197.605	2.339	H1-1b
65	M94	HSS6X4X3	0.703	7.979	7	0.069	0	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
66	M95	HSS6X4X3	0.754	7.667	7	0.066	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
67	M96	HSS6X4X3	0.754	7.666	7	0.066	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
68	M97	HSS6X4X3	0.754	7.666	7	0.066	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
69	M98	HSS6X4X3	0.754	7.667	7	0.066	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
70	M99	HSS6X4X3	0.703	7.354	7	0.069	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
71	M100	HSS6X4X3	0.103	0	7	0.024	0	y	7	91150.37	98203.593	137.321	197.605	2.312	H1-1b
72	M101	HSS6X4X3	0.093	2.833	7	0.022	2.833	y	7	91150.37	98203.593	137.321	197.605	2.339	H1-1b
73	M102	HSS6X4X3	0.636	7.979	7	0.062	0	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
74	M103	HSS6X4X3	0.682	7.667	7	0.06	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
75	M104	HSS6X4X3	0.682	7.666	7	0.06	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
76	M105	HSS6X4X3	0.682	7.666	7	0.06	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
77	M106	HSS6X4X3	0.682	7.667	7	0.06	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
78	M107	HSS6X4X3	0.636	7.354	7	0.062	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
79	M108	HSS6X4X3	0.093	0	7	0.022	0	y	7	91150.37	98203.593	137.321	197.605	2.312	H1-1b
80	M109	HSS6X4X3	0.065	2.833	7	0.015	2.833	y	7	91150.37	98203.593	137.321	197.605	2.339	H1-1b
81	M110	HSS6X4X3	0.446	7.979	7	0.043	0	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
82	M111	HSS6X4X3	0.478	7.667	7	0.042	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
83	M112	HSS6X4X3	0.478	7.666	7	0.042	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
84	M113	HSS6X4X3	0.478	7.666	7	0.042	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b

Envelope AISC 13TH (360-05): ASD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [k-in]	Mnzz/om [k-in]	Cb	Eqn
85	M114	HSS6X4X3	0.478	7.667	7	0.042	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
86	M115	HSS6X4X3	0.446	7.354	7	0.043	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
87	M116	HSS6X4X3	0.065	0	7	0.015	0	y	7	91150.37	98203.593	137.321	197.605	2.312	H1-1b
88	M117	HSS6X4X3	0.251	2.833	8	0.037	2.833	z	8	91150.37	98203.593	137.321	197.605	1.941	H1-1b
89	M118	HSS6X4X3	0.267	8.762	7	0.036	0	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
90	M119	HSS6X4X3	0.366	7.667	7	0.033	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
91	M120	HSS6X4X3	0.366	7.666	7	0.033	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
92	M121	HSS6X4X3	0.366	7.666	7	0.033	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
93	M122	HSS6X4X3	0.366	7.667	7	0.033	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
94	M123	HSS6X4X3	0.267	6.571	7	0.036	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
95	M124	HSS6X4X3	0.216	0	7	0.032	0	z	2	91150.37	98203.593	137.321	197.605	1.901	H1-1b
96	M125	HSS6X4X3	0.415	5.997	7	0.039	5.997	y	7	70320.532	98203.593	137.321	197.605	2.103	H1-1b
97	M126	HSS6X4X3	0.415	0	7	0.053	0	y	7	59857.855	98203.593	137.321	197.605	1.491	H1-1b
98	M127	HSS6X4X3	0.508	7.667	7	0.045	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
99	M128	HSS6X4X3	0.508	7.666	7	0.045	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
100	M129	HSS6X4X3	0.508	7.666	7	0.045	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
101	M130	HSS6X4X3	0.508	7.667	7	0.045	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
102	M131	HSS6X4X3	0.415	15.333	7	0.053	15.333	y	7	59857.855	98203.593	137.321	197.605	1.479	H1-1b
103	M132	HSS6X4X3	0.415	0	7	0.039	0	y	7	70297.032	98203.593	137.321	197.605	2.083	H1-1b
104	M133	HSS8X4X3	0.222	9.691	7	0.025	9.691	y	8	66894.573	119161.677	150.638	305.389	2.577	H1-1b
105	M134	HSS8X4X3	0.221	0	7	0.03	0	y	8	82032.099	119161.677	150.638	305.389	2.287	H1-1b
106	M135	HSS8X4X3	0.193	7.667	7	0.024	0	y	8	82029.233	119161.677	150.638	305.389	1	H1-1b
107	M136	HSS8X4X3	0.193	7.666	7	0.023	15.333	y	7	82032.099	119161.677	150.638	305.389	1	H1-1b
108	M137	HSS8X4X3	0.193	7.666	7	0.023	15.333	y	7	82032.099	119161.677	150.638	305.389	1	H1-1b
109	M138	HSS8X4X3	0.193	7.667	7	0.023	15.334	y	7	82029.233	119161.677	150.638	305.389	1	H1-1b
110	M139	HSS8X4X3	0.22	15.333	7	0.03	15.333	y	7	82032.099	119161.677	150.638	305.389	2.332	H1-1b
111	M140	HSS8X4X3	0.221	0	7	0.025	0	y	7	66894.573	119161.677	150.638	305.389	2.546	H1-1b
112	M141	HSS6X4X3	0.069	2.833	8	0.016	2.833	y	8	91150.37	98203.593	137.321	197.605	2.339	H1-1b
113	M142	HSS6X4X3	0.474	7.979	8	0.044	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
114	M143	HSS6X4X3	0.478	7.667	2	0.038	0	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
115	M144	HSS6X4X3	0.478	7.666	2	0.036	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
116	M145	HSS6X4X3	0.478	7.666	2	0.035	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
117	M146	HSS6X4X3	0.478	7.667	2	0.035	15.334	y	3	59853.99	98203.593	137.321	197.605	1	H1-1b
118	M147	HSS6X4X3	0.446	7.354	2	0.036	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
119	M148	HSS6X4X3	0.065	0	2	0.013	0	y	3	91150.37	98203.593	137.321	197.605	2.312	H1-1b
120	M149	HSS6X4X3	0.093	2.833	8	0.021	2.833	y	8	91150.37	98203.593	137.321	197.605	2.339	H1-1b
121	M150	HSS6X4X3	0.635	7.979	8	0.059	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
122	M151	HSS6X4X3	0.64	7.667	2	0.052	0	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
123	M152	HSS6X4X3	0.64	7.666	2	0.049	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
124	M153	HSS6X4X3	0.64	7.666	2	0.047	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
125	M154	HSS6X4X3	0.64	7.667	2	0.047	15.334	y	3	59853.99	98203.593	137.321	197.605	1	H1-1b
126	M155	HSS6X4X3	0.597	7.354	2	0.048	15.333	y	2	59857.855	98203.593	137.321	197.605	1	H1-1b
127	M156	HSS6X4X3	0.087	0	3	0.017	0	y	3	91150.37	98203.593	137.321	197.605	2.312	H1-1b
128	M157	HSS6X4X3	0.084	2.833	8	0.019	2.833	y	8	91150.37	98203.593	137.321	197.605	2.339	H1-1b
129	M158	HSS6X4X3	0.575	7.979	8	0.053	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
130	M159	HSS6X4X3	0.58	7.667	2	0.047	0	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
131	M160	HSS6X4X3	0.58	7.666	2	0.044	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
132	M161	HSS6X4X3	0.58	7.666	2	0.042	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
133	M162	HSS6X4X3	0.58	7.667	2	0.042	15.334	y	3	59853.99	98203.593	137.321	197.605	1	H1-1b
134	M163	HSS6X4X3	0.54	7.354	2	0.044	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
135	M164	HSS6X4X3	0.079	0	3	0.016	0	y	3	91150.37	98203.593	137.321	197.605	2.312	H1-1b
136	M165	HSS6X4X3	0.059	2.833	8	0.013	2.833	y	8	91150.37	98203.593	137.321	197.605	2.339	H1-1b
137	M166	HSS6X4X3	0.404	7.979	8	0.037	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
138	M167	HSS6X4X3	0.408	7.667	2	0.033	0	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
139	M168	HSS6X4X3	0.408	7.666	2	0.031	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b

Envelope AISC 13TH (360-05): ASD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [k-in]	Mnzz/om [k-in]	Cb	Eqn
140	M169	HSS6X4X3	0.408	7.666	2	0.03	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
141	M170	HSS6X4X3	0.408	7.667	2	0.03	15.334	y	3	59853.99	98203.593	137.321	197.605	1	H1-1b
142	M171	HSS6X4X3	0.38	7.354	2	0.031	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
143	M172	HSS6X4X3	0.056	0	2	0.011	0	y	2	91150.37	98203.593	137.321	197.605	2.312	H1-1b
144	M173	HSS6X4X3	0.251	2.833	8	0.037	2.833	z	8	91150.37	98203.593	137.321	197.605	1.942	H1-1b
145	M174	HSS6X4X3	0.251	0	8	0.03	0	y	8	59857.855	98203.593	137.321	197.605	1.168	H1-1b
146	M175	HSS6X4X3	0.382	7.667	8	0.034	15.334	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
147	M176	HSS6X4X3	0.314	7.666	2	0.025	15.333	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
148	M177	HSS6X4X3	0.338	7.666	8	0.028	15.333	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
149	M178	HSS6X4X3	0.315	7.667	2	0.023	15.334	y	3	59853.99	98203.593	137.321	197.605	1	H1-1b
150	M179	HSS6X4X3	0.232	6.571	3	0.025	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
151	M180	HSS6X4X3	0.228	0	7	0.036	0	z	7	91150.37	98203.593	137.321	197.605	1.937	H1-1b
152	M181	HSS6X4X3	0.38	5.997	8	0.033	5.997	y	8	70320.532	98203.593	137.321	197.605	2.116	H1-1b
153	M182	HSS6X4X3	0.381	0	8	0.046	0	y	8	59857.855	98203.593	137.321	197.605	1.448	H1-1b
154	M183	HSS6X4X3	0.45	7.667	8	0.038	0	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
155	M184	HSS6X4X3	0.425	7.666	2	0.034	15.333	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
156	M185	HSS6X4X3	0.425	7.666	2	0.033	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
157	M186	HSS6X4X3	0.425	7.667	2	0.031	15.334	y	3	59853.99	98203.593	137.321	197.605	1	H1-1b
158	M187	HSS6X4X3	0.348	15.333	2	0.037	15.333	y	8	59857.855	98203.593	137.321	197.605	1.466	H1-1b
159	M188	HSS6X4X3	0.348	0	2	0.027	0	y	8	70297.032	98203.593	137.321	197.605	2.088	H1-1b
160	M189	HSS6X4X3	0.038	3.785	7	0.008	0	y	7	92566.638	98203.593	137.321	197.605	1	H1-1b
161	M190	HSS6X4X3	0.049	2.083	7	0.008	6.186	y	7	90600.914	98203.593	137.321	197.605	1	H1-1b
162	M191	HSS6X4X3	0.038	3.786	7	0.008	0	y	7	92562.935	98203.593	137.321	197.605	1	H1-1b
163	M192	HSS6X4X3	0.049	2.082	7	0.008	6.184	y	7	90605.141	98203.593	137.321	197.605	1	H1-1b
164	M193	HSS6X4X3	0.031	4.163	8	0.006	0	y	8	92566.638	98203.593	137.321	197.605	1	H1-1b
165	M194	HSS6X4X3	0.037	1.831	8	0.006	6.186	y	8	90600.914	98203.593	137.321	197.605	1	H1-1b
166	M195	HSS6X4X3	0.027	4.381	3	0.005	0	y	3	92562.935	98203.593	137.321	197.605	1	H1-1b
167	M196	HSS6X4X3	0.032	1.704	3	0.006	6.184	y	4	90605.141	98203.593	137.321	197.605	1	H1-1b

Connection Design Results

	Label	Member End	Connection Rule	Pass/Fail	Max UC	Gov LC	Limit State
0	M3	I	BP-1	Pass	1	1	Concrete Bearing
1	M4	I	BP-1	Pass	1	1	Concrete Bearing
2	M5	I	BP-1	Pass	1	1	Concrete Bearing
3	M6	I	BP-1	Pass	1	1	Concrete Bearing
4	M7	I	BP-1	Pass	1	1	Concrete Bearing
5	M8	I	BP-1	Pass	1	1	Concrete Bearing
6	M9	I	BP-1	Pass	1	1	Concrete Bearing
7	M10	I	BP-1	Pass	1	1	Concrete Bearing
8	M11	I	BP-1	Pass	1	1	Concrete Bearing
9	M12	I	BP-1	Pass	1	1	Concrete Bearing
10	M1	I	BP-2	Pass	1	1	Concrete Bearing
11	M2	I	BP-2	Pass	1	1	Concrete Bearing
12	M13	I	BP-2	Pass	1	1	Concrete Bearing
13	M14	I	BP-2	Pass	1	1	Concrete Bearing

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5.4 T and X joints with brace(s) subjected to combinations of axial load, in-plane bending and out-of-plane bending moment

The interaction of (brace) axial load and in-plane bending moment on the (brace) out-of-plane bending moment capacity depends on the critical failure mode, resulting in a complex set of interactions. Consequently, it is conservatively proposed that a linear interaction relationship be used:

$$\frac{N_1}{N_1^*} + \frac{M_{ip,1}}{M_{ip,1}^*} + \frac{M_{op,1}}{M_{op,1}^*} \le 1.0 \qquad 5.15$$

5.5 Joint flexibility

In the foregoing, it was shown that unstiffened RHS joints with β = 1.0 and selected b_0/t_0 and t_0/t_1 values could achieve the full moment capacity of the brace member, but it should be noticed that any in-plane bending moment resistance calculated ($M_{ip,1}^*$) must be reduced to take account of the influence of axial load in the brace member (see equation 5.9). Such joints, which still develop a moment resistance exceeding the moment capacity of the brace member, can be considered as fully rigid for the purpose of analysis of a Vierendeel truss. All other joints (which covers most possible joint combinations) should be considered as semi-rigid. To analyse a frame which is connected by semi-rigid joints, one needs the load-deformation characteristics of the joints being used, and these can be obtained by either reliable finite element analysis, from laboratory tests or published databases.

5.6 Knee joints

Research on mitred RHS knee joints (such as illustrated in figure 5.8) has been performed by Mang et al. (1980) at the University of Karlsruhe. Their recommendations have also been included in Eurocode 3 (CEN, 2005b). They cover both stiffened and unstiffened knee joints, and are intended for use in corner joints of frames.

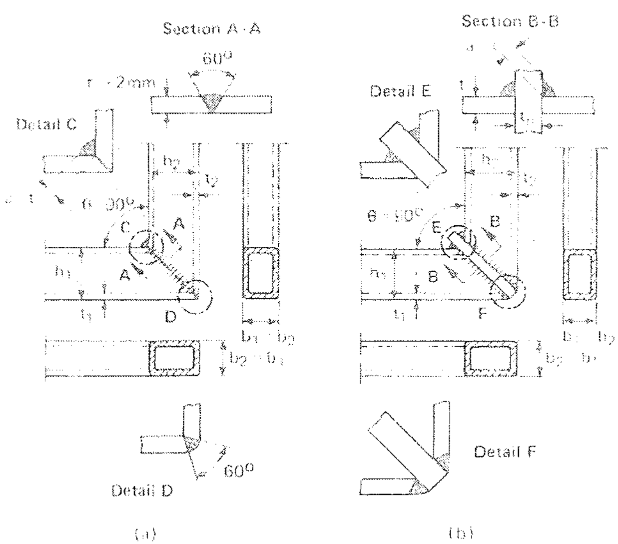

Figure 5.8 – Details of RHS knee joints
(a) Unstiffened
(b) With a transverse stiffening plate

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Mang et al. (1980) recommend that these joints be designed based on the following requirements for both members:

$$\frac{N_i}{N_{pl,i}} + \frac{M_i}{M_{pl,i}} \leq \alpha \qquad \text{(with i = 1 or 2, see figure 5.8)} \qquad 5.16$$

where:
$N_{pl,i}$ = axial yield capacity of a member, either in compression or tension as applicable.
$M_{pl,i}$ = plastic moment capacity of member i.
α = a stress reduction factor, which can be taken as 1.0 for mitred joints with stiffening plates. For the mitred joints without stiffening plates, α is a function of the cross sectional parameters as shown in figures 5.9 and 5.10.

Based on the work of Mang et al. (1980), it is recommended that for joints without stiffening plates, the shear force V_i and the axial force N_i in the members should not exceed:

$$\frac{V_i}{V_{pl,i}} \leq 0.5 \text{ and } \frac{N_i}{N_{pl,i}} \leq 0.2 \qquad 5.17$$

where:
$V_{pl,i}$ = shear yield capacity in the member under consideration. $V_{pl,i}$ can be taken as the yield stress in pure shear ($0.58f_{yi}$) multiplied by the cross sectional area of the RHS webs ($2\,h_i t_i$).
$N_{pl,i}$ = axial yield capacity of the member

For those structural applications where a reasonable strength, stiffness and rotational capacity are required, it is recommended that a stiffened joint with class 1 sections is used. For other structural applications, it is recommended to use unstiffened joints only if the sections satisfy at least the plastic design requirements. Karcher and Puthli (2001) recommended for CHS knee joints, that the stiffening plate thickness should satisfy $t_p > 2t_i$ and not be taken smaller than 10 mm, which is also adopted for RHS knee joints.

The fabrication details with $a = t_i$ shown in figure 5.8 are based on a steel grade S235. The weld size can be considered to be adequate when the throat thickness (a) of the fillet weld is in accordance with the recommendations given in section 3.9.

If mitred knee joints are used with an obtuse angle between the RHS members (i.e. $\theta > 90°$ in figure 5.8), the same design checks can be undertaken as for right-angle joints, since obtuse angle knee joints behave more favourably than right-angle ones (CIDECT, 1984). For unstiffened knee joints with $90° < \theta < 180°$, a strength enhancement can be used by increasing the value of α as follows:

$$\alpha = 1 - (\sqrt{2}\cos\frac{\theta}{2})(1 - \alpha_{\theta=90°}) \qquad 5.18$$

where $\alpha_{\theta=90°}$ is the value obtained from figure 5.9 or figure 5.10.

An alternative form of joint reinforcement (other than a transverse stiffening plate) is a haunch on the inside of the knee. This haunch piece needs to be of the same width as the two main members, and can easily be provided by taking a cutting from one of the RHS sections. Provided the haunch length is sufficient to ensure that the bending moment does not exceed the section yield moment in either member, the joint resistance will be adequate and does not require checking (CIDECT, 1984).

HSS 20 x 8 x 5/16

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h/b = 2.5

b/t = 27.5

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$\alpha_{90} = 0.71$

$\alpha_{1/6.56} = 0.78$

0.78 > 0.516 ✓

HSS 20x8x 5/16 RAFTER OKAY

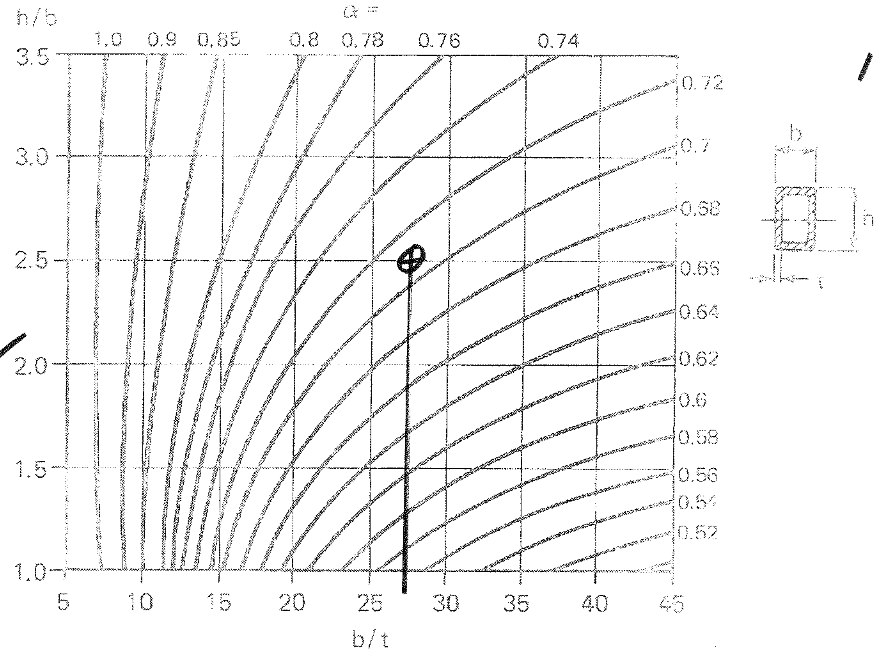


Figure 5.9 – Stress reduction factors α for RHS subjected to bending about the major axis in 90° unstiffened mitred knee joints (Mang et al., 1980)

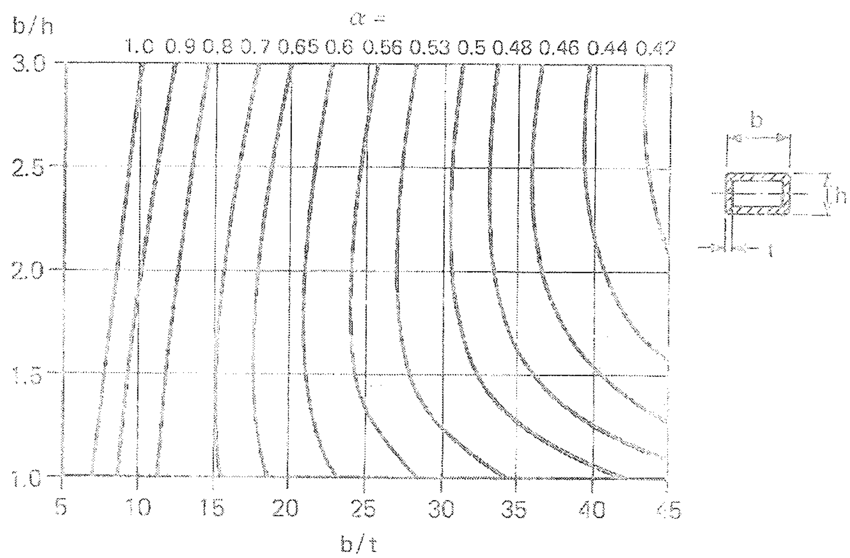
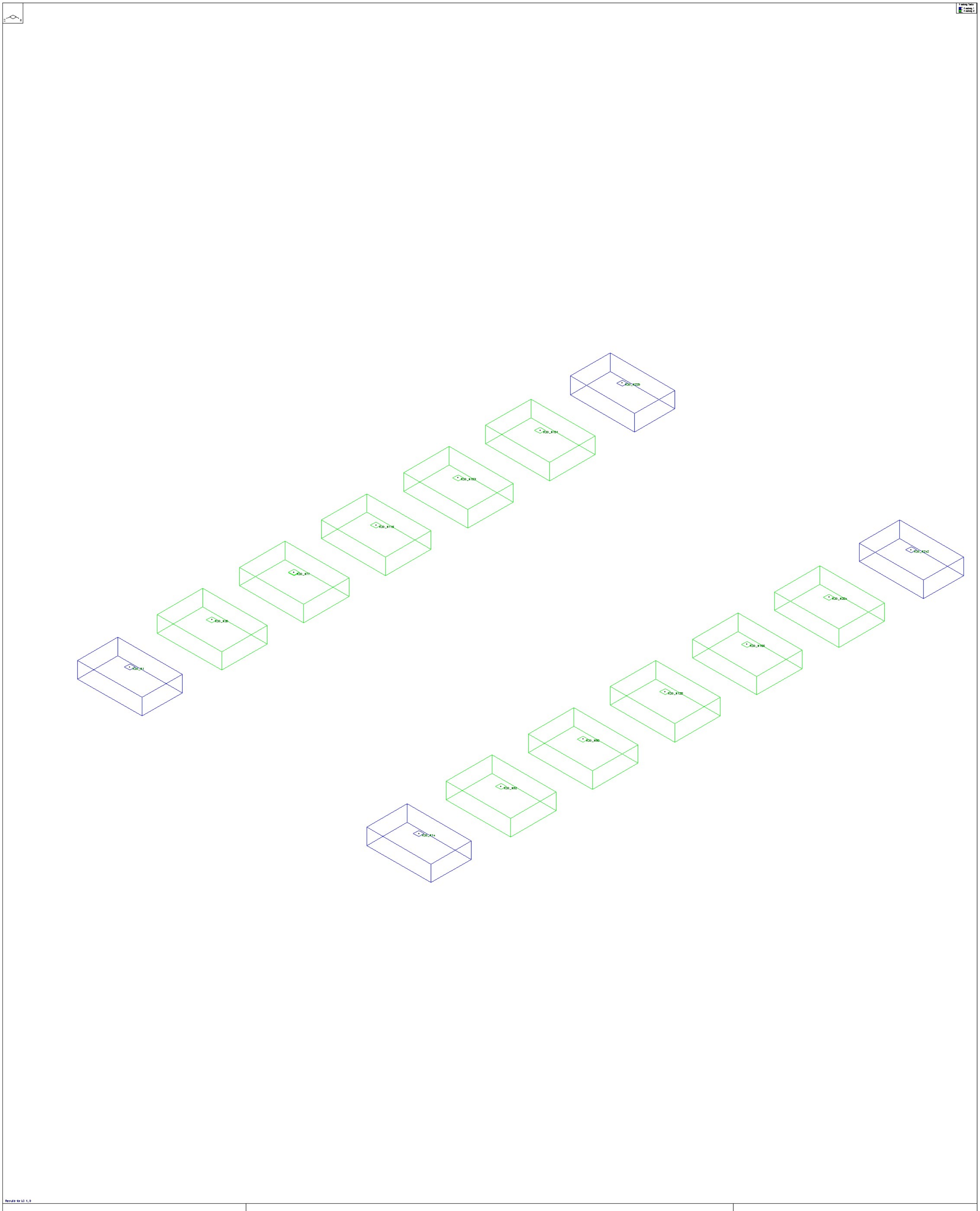


Figure 5.10 – Stress reduction factors α for RHS subjected to bending about the minor axis in 90° unstiffened mitred knee joints (Mang et al., 1980)



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DPS		Dec 7, 2023 at 1:41 PM
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(Global) Model Settings

Display Sections for Member Calcs	3
Max Internal Sections for Member Calcs	100
Mesh Size (in)	12
Max Iterations	10
Merge Tolerance (in)	0.12
Solver	Sparse Accelerated
Coefficient of Friction	0.3
No. of Shear Regions	4
Shear Region Spacing Increment (in)	4
Min 1 Bar Dia Spacing for Beams?	No
Optimize footings for OTM / Sliding?	No
Parme Beta Factor	0.65
Pile Safety Factor	3
Min % Steel for Pedestal	Auto
Concrete Stress Block	Rectangular
Concrete Rebar Set	ASTM A615
Include WWR	No
Concrete Code	ACI 318-14
HR Steel Pile Code	AISC 14th (360-10): ASD
Wood Pile Code	AWC NDS-15 / SDPWS-15 ASD
Mat Slab Design Option	Construction (Design per Integer No. of Bars)

Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/...	Density[k...	f'c[ksi]	Lambda	Flex Steel[ksi]	Shear Steel[ksi]
1	Conc3000NW	3156	1372	0.15	0.6	0.145	3	1	60	60
2	Conc3500NW	3409	1482	0.15	0.6	0.145	3.5	1	60	60
3	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
4	Conc3000LW	2085	907	0.15	0.6	0.11	3	0.75	60	60
5	Conc3500LW	2252	979	0.15	0.6	0.11	3.5	0.75	60	60
6	Conc4000LW	2408	1047	0.15	0.6	0.11	4	0.75	60	60

General Design Parameters

	Label	Max Bending Chk	Max Shear Chk	Top Cover[in]	Bottom Cover[in]
1	Typical	1	1	1.5	3

Footing/Pile Cap Rebar Parameters

	Label	Top Bar	Bottom Bar
1	Typical	#6	#6

Pedestal/Pile Rebar Parameters

	Label	Longitudinal Bar	Shear Tie	Bar Cover[in]
1	Typical	#6	#4	1.5

General Properties

	Label	Min Steel ...	Max Steel...	Material	Design Ru...	Equal Bar Spacing	Group Design	Concrete Bearing	Force Top Bar
1	Footing 1	0.002	0.007	Conc4000...	Typical	Yes	Yes	Yes	Yes
2	Footing 2	0.002	0.007	Conc4000...	Typical	Yes	Yes	Yes	Yes

Footing Geometry

	Label	Max Length[..	Min Length[ft]	Max Width[ft]	Min Width[ft]	L/W Increm...	Max Thickn...	Min Thickne...	Thick Incre...	Force Sq...
1	Footing 1	12	5	12	5	0.5	36	36	1	
2	Footing 2	12	5	12	5	0.5	36	36	1	

Pedestal Properties

	Label	Type	Shape	Height[in]	e/BL	ex[in]	ez[in]	BLx[ft]	BLz[ft]
1	Footing 1	Post	CRECT12X12	0	Use ex,ez	0	0	0	0
2	Footing 2	Post	CRECT12X12	0	Use ex,ez	0	0	0	0

Soil Properties

	Label	Overburden[ksf]	Passive[lb]	Friction Coefficient	Gross/Net
1	Footing 1	0.042	0	0.35	Gross
2	Footing 2	0.042	0	0.35	Gross

Point Coordinates

	Label	Z [ft]	X [ft]
1	R3D_N1	0	-27
2	R3D_N14	0	27
3	R3D_N39	-15.333	-27
4	R3D_N52	-15.333	27
5	R3D_N77	-30.667	-27
6	R3D_N90	-30.667	27
7	R3D_N115	-46	-27
8	R3D_N128	-46	27
9	R3D_N153	-61.333	-27
10	R3D_N166	-61.333	27
11	R3D_N191	-76.667	-27
12	R3D_N204	-76.667	27
13	R3D_N229	-92	-27
14	R3D_N242	-92	27

Soil Definitions

	Label	Subgrade Modulus[k/ft^3]	Allowable Bearing[ksf]	Depth Properties	Default?
1	Default	1e+5	2	None	Yes

All Support Types

	Point Label	Support[k/in]	Footings/Piles/Pile Caps	Support Angle(deg)
1	R3D_N1	Calc'ed	Footing 1	0
2	R3D_N14	Calc'ed	Footing 1	0
3	R3D_N39	Calc'ed	Footing 2	0
4	R3D_N52	Calc'ed	Footing 2	0
5	R3D_N77	Calc'ed	Footing 2	0
6	R3D_N90	Calc'ed	Footing 2	0
7	R3D_N115	Calc'ed	Footing 2	0
8	R3D_N128	Calc'ed	Footing 2	0
9	R3D_N153	Calc'ed	Footing 2	0
10	R3D_N166	Calc'ed	Footing 2	0
11	R3D_N191	Calc'ed	Footing 2	0
12	R3D_N204	Calc'ed	Footing 2	0
13	R3D_N229	Calc'ed	Footing 1	0
14	R3D_N242	Calc'ed	Footing 1	0

Point Loads and Moments (Cat 1 : DL)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	-5308.863
2	R3D_N1	Y	8077.483
3	R3D_N1	MX	0.043
4	R3D_N1	MZ	813.403
5	R3D_N14	X	5308.863
6	R3D_N14	Y	8077.483
7	R3D_N14	MX	0.043
8	R3D_N14	MZ	-813.403
9	R3D_N39	X	-5686.661
10	R3D_N39	Y	9095.48
11	R3D_N39	MX	0.006
12	R3D_N39	MZ	871.287
13	R3D_N52	X	5686.661
14	R3D_N52	Y	9095.48
15	R3D_N52	MX	0.006
16	R3D_N52	MZ	-871.287
17	R3D_N77	X	-5928.744
18	R3D_N77	Y	9350.223
19	R3D_N77	MX	-0.003
20	R3D_N77	MZ	908.378
21	R3D_N90	X	5928.744
22	R3D_N90	Y	9350.223
23	R3D_N90	MX	-0.003
24	R3D_N90	MZ	-908.378
25	R3D_N115	X	-5928.596
26	R3D_N115	Y	9350.013
27	R3D_N115	MZ	908.356
28	R3D_N128	X	5928.596
29	R3D_N128	Y	9350.013
30	R3D_N128	MZ	-908.356
31	R3D_N153	X	-5928.744
32	R3D_N153	Y	9350.223
33	R3D_N153	MX	0.002
34	R3D_N153	MZ	908.378
35	R3D_N166	X	5928.744
36	R3D_N166	Y	9350.223
37	R3D_N166	MX	0.002
38	R3D_N166	MZ	-908.378
39	R3D_N191	X	-5686.598
40	R3D_N191	Y	9095.424
41	R3D_N191	MX	-0.006
42	R3D_N191	MZ	871.278
43	R3D_N204	X	5686.598
44	R3D_N204	Y	9095.424
45	R3D_N204	MX	-0.006
46	R3D_N204	MZ	-871.278
47	R3D_N229	X	-5309.08
48	R3D_N229	Y	8077.68
49	R3D_N229	MX	-0.044
50	R3D_N229	MZ	813.436
51	R3D_N242	X	5309.08
52	R3D_N242	Y	8077.68
53	R3D_N242	MX	-0.044
54	R3D_N242	MZ	-813.436

Point Loads and Moments (Cat 6 : RLL)

Label	Direction	Magnitude[lb,k-in]

Point Loads and Moments (Cat 6 : RLL) (Continued)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	-6267.92
2	R3D_N1	Y	8370.452
3	R3D_N1	Z	1.307
4	R3D_N1	MX	0.073
5	R3D_N1	MZ	960.346
6	R3D_N14	X	6267.92
7	R3D_N14	Y	8370.376
8	R3D_N14	Z	1.307
9	R3D_N14	MX	0.073
10	R3D_N14	MZ	-960.346
11	R3D_N39	X	-6798.9
12	R3D_N39	Y	9972.629
13	R3D_N39	MX	0.011
14	R3D_N39	MZ	1041.7
15	R3D_N52	X	6798.9
16	R3D_N52	Y	9972.382
17	R3D_N52	MX	0.011
18	R3D_N52	MZ	-1041.7
19	R3D_N77	X	-7197.618
20	R3D_N77	Y	10393.172
21	R3D_N77	MX	-0.004
22	R3D_N77	MZ	1102.79
23	R3D_N90	X	7197.618
24	R3D_N90	Y	10392.92
25	R3D_N90	MX	-0.004
26	R3D_N90	MZ	-1102.79
27	R3D_N115	X	-7197.383
28	R3D_N115	Y	10392.833
29	R3D_N115	MZ	1102.754
30	R3D_N128	X	7197.383
31	R3D_N128	Y	10392.581
32	R3D_N128	MZ	-1102.754
33	R3D_N153	X	-7197.618
34	R3D_N153	Y	10393.172
35	R3D_N153	MX	0.003
36	R3D_N153	MZ	1102.79
37	R3D_N166	X	7197.618
38	R3D_N166	Y	10392.92
39	R3D_N166	MX	0.003
40	R3D_N166	MZ	-1102.79
41	R3D_N191	X	-6798.8
42	R3D_N191	Y	9972.529
43	R3D_N191	MX	-0.012
44	R3D_N191	MZ	1041.685
45	R3D_N204	X	6798.801
46	R3D_N204	Y	9972.294
47	R3D_N204	MX	-0.012
48	R3D_N204	MZ	-1041.685
49	R3D_N229	X	-6268.278
50	R3D_N229	Y	8370.906
51	R3D_N229	Z	-1.309
52	R3D_N229	MX	-0.074
53	R3D_N229	MZ	960.4
54	R3D_N242	X	6268.278
55	R3D_N242	Y	8370.691
56	R3D_N242	Z	-1.309
57	R3D_N242	MX	-0.074

Point Loads and Moments (Cat 6 : RLL) (Continued)

	Label	Direction	Magnitude[lb,k-in]
58	R3D_N242	MZ	-960.4

Point Loads and Moments (Cat 16 : ELX)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	1584.262
2	R3D_N1	Y	-454.694
3	R3D_N1	MX	-0.014
4	R3D_N1	MZ	-228.071
5	R3D_N14	X	1584.262
6	R3D_N14	Y	454.694
7	R3D_N14	MX	0.014
8	R3D_N14	MZ	-228.071
9	R3D_N39	X	1784.501
10	R3D_N39	Y	-476.434
11	R3D_N39	MX	-0.006
12	R3D_N39	MZ	-258.75
13	R3D_N52	X	1784.501
14	R3D_N52	Y	476.434
15	R3D_N52	MX	0.006
16	R3D_N52	MZ	-258.75
17	R3D_N77	X	1832.408
18	R3D_N77	Y	-497.652
19	R3D_N77	MX	-0.002
20	R3D_N77	MZ	-266.09
21	R3D_N90	X	1832.408
22	R3D_N90	Y	497.652
23	R3D_N90	MX	0.002
24	R3D_N90	MZ	-266.09
25	R3D_N115	X	1832.366
26	R3D_N115	Y	-497.64
27	R3D_N115	MZ	-266.084
28	R3D_N128	X	1832.366
29	R3D_N128	Y	497.64
30	R3D_N128	MZ	-266.084
31	R3D_N153	X	1832.408
32	R3D_N153	Y	-497.652
33	R3D_N153	MX	0.002
34	R3D_N153	MZ	-266.09
35	R3D_N166	X	1832.408
36	R3D_N166	Y	497.652
37	R3D_N166	MX	-0.002
38	R3D_N166	MZ	-266.09
39	R3D_N191	X	1784.493
40	R3D_N191	Y	-476.43
41	R3D_N191	MX	0.006
42	R3D_N191	MZ	-258.749
43	R3D_N204	X	1784.493
44	R3D_N204	Y	476.43
45	R3D_N204	MX	-0.006
46	R3D_N204	MZ	-258.749
47	R3D_N229	X	1584.298
48	R3D_N229	Y	-454.713
49	R3D_N229	MX	0.014
50	R3D_N229	MZ	-228.076
51	R3D_N242	X	1584.298
52	R3D_N242	Y	454.713

Point Loads and Moments (Cat 16 : ELX) (Continued)

	Label	Direction	Magnitude[lb,k-in]
53	R3D_N242	MX	-0.014
54	R3D_N242	MZ	-228.076

Point Loads and Moments (Cat 18 : ELZ)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	606.937
2	R3D_N1	Y	-22.685
3	R3D_N1	Z	-1845.13
4	R3D_N1	MX	-285.555
5	R3D_N1	MZ	-92.993
6	R3D_N14	X	-606.956
7	R3D_N14	Y	-22.695
8	R3D_N14	Z	-1844.604
9	R3D_N14	MX	-285.458
10	R3D_N14	MZ	92.995
11	R3D_N39	X	-26.43
12	R3D_N39	Y	22.685
13	R3D_N39	Z	-1845.552
14	R3D_N39	MX	-285.578
15	R3D_N39	MZ	4.049
16	R3D_N52	X	26.449
17	R3D_N52	Y	22.695
18	R3D_N52	Z	-1845.028
19	R3D_N52	MX	-285.481
20	R3D_N52	MZ	-4.052
21	R3D_N77	Z	-1845.702
22	R3D_N77	MX	-285.586
23	R3D_N90	Z	-1845.181
24	R3D_N90	MX	-285.489
25	R3D_N115	Z	-1845.731
26	R3D_N115	MX	-285.587
27	R3D_N128	Z	-1845.217
28	R3D_N128	MX	-285.491
29	R3D_N153	Z	-1845.684
30	R3D_N153	MX	-285.585
31	R3D_N166	Z	-1845.186
32	R3D_N166	MX	-285.49
33	R3D_N191	X	26.635
34	R3D_N191	Y	-21.858
35	R3D_N191	Z	-1845.52
36	R3D_N191	MX	-285.576
37	R3D_N191	MZ	-4.081
38	R3D_N204	X	-20.606
39	R3D_N204	Y	-18.678
40	R3D_N204	Z	-1845.06
41	R3D_N204	MX	-285.483
42	R3D_N204	MZ	3.157
43	R3D_N229	X	-141.416
44	R3D_N229	Y	-130.815
45	R3D_N229	Z	-1845.089
46	R3D_N229	MX	-285.553
47	R3D_N229	MZ	21.667
48	R3D_N242	X	1645.501
49	R3D_N242	Y	171.35
50	R3D_N242	Z	-1844.721
51	R3D_N242	MX	-285.465

Point Loads and Moments (Cat 18 : ELZ) (Continued)

	Label	Direction	Magnitude[lb,k-in]
52	R3D_N242	MZ	-252.117

Point Loads and Moments (Cat 22 : WL+X)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	-645.559
2	R3D_N1	Y	5847.41
3	R3D_N1	MX	-0.035
4	R3D_N1	MZ	141.71
5	R3D_N14	X	5624.392
6	R3D_N14	Y	4000.592
7	R3D_N14	Z	1.151
8	R3D_N14	MX	0.067
9	R3D_N14	MZ	-818.947
10	R3D_N39	X	-349.694
11	R3D_N39	Y	7275.778
12	R3D_N39	MX	-0.028
13	R3D_N39	MZ	96.379
14	R3D_N52	X	5989.591
15	R3D_N52	Y	4342.011
16	R3D_N52	MX	0.02
17	R3D_N52	MZ	-874.901
18	R3D_N77	X	-475.422
19	R3D_N77	Y	7534.62
20	R3D_N77	MX	-0.018
21	R3D_N77	MZ	115.643
22	R3D_N90	X	6331.729
23	R3D_N90	Y	4602.004
24	R3D_N90	MX	0.007
25	R3D_N90	MZ	-927.322
26	R3D_N115	X	-475.387
27	R3D_N115	Y	7534.372
28	R3D_N115	MX	-0.006
29	R3D_N115	MZ	115.637
30	R3D_N128	X	6331.542
31	R3D_N128	Y	4601.856
32	R3D_N128	MX	0.005
33	R3D_N128	MZ	-927.293
34	R3D_N153	X	-475.422
35	R3D_N153	Y	7534.62
36	R3D_N153	MX	0.006
37	R3D_N153	MZ	115.643
38	R3D_N166	X	6331.729
39	R3D_N166	Y	4602.004
40	R3D_N166	MX	0.003
41	R3D_N166	MZ	-927.322
42	R3D_N191	X	-349.333
43	R3D_N191	Y	7275.562
44	R3D_N191	MX	0.017
45	R3D_N191	MZ	96.324
46	R3D_N204	X	5989.848
47	R3D_N204	Y	4342.133
48	R3D_N204	MX	-0.01
49	R3D_N204	MZ	-874.94
50	R3D_N229	X	-566.245
51	R3D_N229	Y	5802.198
52	R3D_N229	MX	0.024

Point Loads and Moments (Cat 22 : WL+X) (Continued)

	Label	Direction	Magnitude[lb,k-in]
53	R3D_N229	MZ	129.558
54	R3D_N242	X	5704.244
55	R3D_N242	Y	4046.153
56	R3D_N242	Z	-1.102
57	R3D_N242	MX	-0.057
58	R3D_N242	MZ	-831.181

Point Loads and Moments (Cat 24 : WL+Z)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	-3219.939
2	R3D_N1	Y	5550.867
3	R3D_N1	Z	-1238.084
4	R3D_N1	MX	-173.085
5	R3D_N1	MZ	493.346
6	R3D_N14	X	3219.397
7	R3D_N14	Y	5550.612
8	R3D_N14	Z	-1238.117
9	R3D_N14	MX	-173.093
10	R3D_N14	MZ	-493.263
11	R3D_N39	X	-3487.022
12	R3D_N39	Y	5899.271
13	R3D_N39	Z	-1239.044
14	R3D_N39	MX	-173.136
15	R3D_N39	MZ	534.268
16	R3D_N52	X	3368.258
17	R3D_N52	Y	5917.545
18	R3D_N52	Z	-1239.085
19	R3D_N52	MX	-173.145
20	R3D_N52	MZ	-516.071
21	R3D_N77	X	-2747.226
22	R3D_N77	Y	4365.08
23	R3D_N77	Z	-1239.361
24	R3D_N77	MX	-173.153
25	R3D_N77	MZ	420.919
26	R3D_N90	X	2598.23
27	R3D_N90	Y	4387.583
28	R3D_N90	Z	-1239.406
29	R3D_N90	MX	-173.162
30	R3D_N90	MZ	-398.09
31	R3D_N115	X	-2095.483
32	R3D_N115	Y	3187.379
33	R3D_N115	Z	-1239.405
34	R3D_N115	MX	-173.156
35	R3D_N115	MZ	321.061
36	R3D_N128	X	2018.205
37	R3D_N128	Y	3199.05
38	R3D_N128	Z	-1239.452
39	R3D_N128	MX	-173.165
40	R3D_N128	MZ	-309.221
41	R3D_N153	X	-1674.651
42	R3D_N153	Y	2736.593
43	R3D_N153	Z	-1239.36
44	R3D_N153	MX	-173.154
45	R3D_N153	MZ	256.583
46	R3D_N166	X	1575.182
47	R3D_N166	Y	2751.615

Point Loads and Moments (Cat 24 : WL+Z) (Continued)

	Label	Direction	Magnitude[lb,k-in]
48	R3D_N166	Z	-1239.406
49	R3D_N166	MX	-173.162
50	R3D_N166	MZ	-241.343
51	R3D_N191	X	-1327.581
52	R3D_N191	Y	2445.122
53	R3D_N191	Z	-1239.312
54	R3D_N191	MX	-173.152
55	R3D_N191	MZ	203.407
56	R3D_N204	X	1327.582
57	R3D_N204	Y	2445.123
58	R3D_N204	Z	-1239.359
59	R3D_N204	MX	-173.16
60	R3D_N204	MZ	-203.407
61	R3D_N229	X	-1668.055
62	R3D_N229	Y	2100.888
63	R3D_N229	Z	-1239.305
64	R3D_N229	MX	-173.151
65	R3D_N229	MZ	255.573
66	R3D_N242	X	1668.053
67	R3D_N242	Y	2100.887
68	R3D_N242	Z	-1239.353
69	R3D_N242	MX	-173.16
70	R3D_N242	MZ	-255.572

Point Loads and Moments (Cat 25 : WL-X)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	4175.76
2	R3D_N1	Y	-2644.1
3	R3D_N1	Z	-1.047
4	R3D_N1	MX	-0.06
5	R3D_N1	MZ	-596.993
6	R3D_N14	X	-53.8
7	R3D_N14	Y	-3981.008
8	R3D_N14	MX	0.03
9	R3D_N14	MZ	51.043
10	R3D_N39	X	4460.672
11	R3D_N39	Y	-2835.334
12	R3D_N39	MX	-0.021
13	R3D_N39	MZ	-640.646
14	R3D_N52	X	165.716
15	R3D_N52	Y	-4995.265
16	R3D_N52	MX	0.022
17	R3D_N52	MZ	17.41
18	R3D_N77	X	4704.107
19	R3D_N77	Y	-3012.092
20	R3D_N77	MX	-0.008
21	R3D_N77	MZ	-677.944
22	R3D_N90	X	95.867
23	R3D_N90	Y	-5165.826
24	R3D_N90	MX	0.014
25	R3D_N90	MZ	28.112
26	R3D_N115	X	4703.973
27	R3D_N115	Y	-3011.996
28	R3D_N115	MX	-0.005
29	R3D_N115	MZ	-677.924
30	R3D_N128	X	95.883

Point Loads and Moments (Cat 25 : WL-X) (Continued)

	Label	Direction	Magnitude[lb,k-in]
31	R3D_N128	Y	-5165.655
32	R3D_N128	MX	0.005
33	R3D_N128	MZ	28.11
34	R3D_N153	X	4704.107
35	R3D_N153	Y	-3012.092
36	R3D_N153	MX	-0.002
37	R3D_N153	MZ	-677.944
38	R3D_N166	X	95.867
39	R3D_N166	Y	-5165.826
40	R3D_N166	MX	-0.003
41	R3D_N166	MZ	28.112
42	R3D_N191	X	4460.943
43	R3D_N191	Y	-2835.466
44	R3D_N191	MX	0.011
45	R3D_N191	MZ	-640.688
46	R3D_N204	X	166.071
47	R3D_N204	Y	-4995.057
48	R3D_N204	MX	-0.011
49	R3D_N204	MZ	17.356
50	R3D_N229	X	4255.374
51	R3D_N229	Y	-2689.605
52	R3D_N229	MX	0.05
53	R3D_N229	MZ	-609.191
54	R3D_N242	X	25.719
55	R3D_N242	Y	-3935.744
56	R3D_N242	MX	-0.02
57	R3D_N242	MZ	38.86

Point Loads and Moments (Cat 27 : WL-Z)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	3889.131
2	R3D_N1	Y	-5578.999
3	R3D_N1	Z	-1239.746
4	R3D_N1	MX	-174.151
5	R3D_N1	MZ	-595.877
6	R3D_N14	X	-3888.498
7	R3D_N14	Y	-5578.701
8	R3D_N14	Z	-1239.707
9	R3D_N14	MX	-174.142
10	R3D_N14	MZ	595.78
11	R3D_N39	X	3581.199
12	R3D_N39	Y	-6150.949
13	R3D_N39	Z	-1239.312
14	R3D_N39	MX	-174.128
15	R3D_N39	MZ	-548.697
16	R3D_N52	X	-3442.303
17	R3D_N52	Y	-6172.32
18	R3D_N52	Z	-1239.264
19	R3D_N52	MX	-174.118
20	R3D_N52	MZ	527.416
21	R3D_N77	X	3139.943
22	R3D_N77	Y	-5048.408
23	R3D_N77	Z	-1239.187
24	R3D_N77	MX	-174.121
25	R3D_N77	MZ	-481.089
26	R3D_N90	X	-2980.671

Point Loads and Moments (Cat 27 : WL-Z) (Continued)

	Label	Direction	Magnitude[lb,k-in]
27	R3D_N90	Y	-5072.462
28	R3D_N90	Z	-1239.134
29	R3D_N90	MX	-174.111
30	R3D_N90	MZ	456.687
31	R3D_N115	X	2372.534
32	R3D_N115	Y	-3466.792
33	R3D_N115	Z	-1239.187
34	R3D_N115	MX	-174.121
35	R3D_N115	MZ	-363.51
36	R3D_N128	X	-2290.313
37	R3D_N128	Y	-3479.209
38	R3D_N128	Z	-1239.133
39	R3D_N128	MX	-174.111
40	R3D_N128	MZ	350.913
41	R3D_N153	X	1739.883
42	R3D_N153	Y	-2789.275
43	R3D_N153	Z	-1239.186
44	R3D_N153	MX	-174.12
45	R3D_N153	MZ	-266.578
46	R3D_N166	X	-1624.206
47	R3D_N166	Y	-2806.746
48	R3D_N166	Z	-1239.131
49	R3D_N166	MX	-174.11
50	R3D_N166	MZ	248.854
51	R3D_N191	X	1359.16
52	R3D_N191	Y	-2472.224
53	R3D_N191	Z	-1239.044
54	R3D_N191	MX	-174.113
55	R3D_N191	MZ	-208.245
56	R3D_N204	X	-1359.162
57	R3D_N204	Y	-2472.225
58	R3D_N204	Z	-1238.989
59	R3D_N204	MX	-174.103
60	R3D_N204	MZ	208.245
61	R3D_N229	X	1000.154
62	R3D_N229	Y	-2073.785
63	R3D_N229	Z	-1238.542
64	R3D_N229	MX	-174.086
65	R3D_N229	MZ	-153.24
66	R3D_N242	X	-1000.152
67	R3D_N242	Y	-2073.784
68	R3D_N242	Z	-1238.487
69	R3D_N242	MX	-174.075
70	R3D_N242	MZ	153.239

Point Loads and Moments (Cat 67 : OL1)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	-785.898
2	R3D_N1	Y	626.921
3	R3D_N1	MX	0.019
4	R3D_N1	MZ	120.412
5	R3D_N14	X	786.472
6	R3D_N14	Y	740.604
7	R3D_N14	MX	0.019
8	R3D_N14	MZ	-120.5
9	R3D_N39	X	-535.366

Point Loads and Moments (Cat 67 : OL1) (Continued)

	Label	Direction	Magnitude[lb,k-in]
10	R3D_N39	Y	422.131
11	R3D_N39	MX	0.002
12	R3D_N39	MZ	82.027
13	R3D_N52	X	534.791
14	R3D_N52	Y	508.693
15	R3D_N52	MX	0.002
16	R3D_N52	MZ	-81.939
17	R3D_N77	X	-630.153
18	R3D_N77	Y	498.731
19	R3D_N77	MX	-0.002
20	R3D_N77	MZ	96.55
21	R3D_N90	X	630.153
22	R3D_N90	Y	597.614
23	R3D_N90	MX	-0.002
24	R3D_N90	MZ	-96.55
25	R3D_N115	X	-630.133
26	R3D_N115	Y	498.715
27	R3D_N115	MZ	96.546
28	R3D_N128	X	630.133
29	R3D_N128	Y	597.595
30	R3D_N128	MZ	-96.546
31	R3D_N153	X	-630.153
32	R3D_N153	Y	498.731
33	R3D_N153	MX	0.002
34	R3D_N153	MZ	96.55
35	R3D_N166	X	630.153
36	R3D_N166	Y	597.614
37	R3D_N166	MX	0.002
38	R3D_N166	MZ	-96.55
39	R3D_N191	X	-535.347
40	R3D_N191	Y	422.116
41	R3D_N191	MX	-0.002
42	R3D_N191	MZ	82.024
43	R3D_N204	X	534.773
44	R3D_N204	Y	508.674
45	R3D_N204	MX	-0.002
46	R3D_N204	MZ	-81.936
47	R3D_N229	X	-785.956
48	R3D_N229	Y	626.965
49	R3D_N229	MX	-0.019
50	R3D_N229	MZ	120.421
51	R3D_N242	X	786.531
52	R3D_N242	Y	740.669
53	R3D_N242	MX	-0.019
54	R3D_N242	MZ	-120.509

Load Combinations

	Label	S...	S...	ABIF	SF	Cat..	Fa...	Cat...	Fa...	Cat..	Fa...	Cat...	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...
1	D	Yes	Yes			DL	1																		
2	D+Lr Right	Yes	Yes			DL	1				1														
3	D+UNB S	Yes	Yes			DL	1		0.1...		0.42	OL1	1												
4	D+W LAT1	Yes	Yes			DL	1			WL...	1														
5	D+W Down	Yes	Yes			DL	1			WL...	1														
6	D+Lr (13.5)	Yes	Yes			DL	1	RLL	0.6...																
7	D+3/4(Lr (13.5)+...	Yes	Yes			DL	1	RLL	0.5...	WL...	0.75														
8	D+3/4(Lr (13.5)+...	Yes	Yes			DL	1	RLL	0.5...	WL...	0.75														

Load Combinations (Continued)

	Label	S...	S...	ABIF	SF	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...	Cat...	Fa...
9	D+Lr (12)	Yes	Yes			DL	1	RLL	0.6																
10	D+3/4(Lr (12)+...	Yes	Yes			DL	1	RLL	0.45	WL...	0.75														
11	D+3/4(Lr (12)+...	Yes	Yes			DL	1	RLL	0.45	WL...	0.75														
12	0.6D (5.5 psf)+...	Yes	Yes			DL	0.6	RLL	-0....	WL...	1														
13	0.6D (5.5 psf)+...	Yes	Yes			DL	0.6	RLL	-0....	WL...	1														
14	0.6D (5.5 psf)+...	Yes	Yes			DL	0.6	RLL	-0....	WL...	1														
15	D+0.7E +X	Yes	Yes			DL	1	Sds...	0.14			Rh...	0.7												
16	D+3/4(S+0.7E +...	Yes	Yes			DL	1	Sds...	0.1...	RLL	0.3...	Rh...	0.5...												
17	0.6D (5.5 psf)-0...	Yes	Yes			DL	0.6	Sds...	-0....	RLL	-0....	Rh...	0.7												
18	D+0.7E +Z	Yes	Yes			DL	1	Sds...	0.14			Rh...	0.7												
19	D+3/4(S+0.7E +...	Yes	Yes			DL	1	Sds...	0.1...	RLL	0.3...	Rh...	0.5...												
20	0.6D (5.5 psf)-0...	Yes	Yes			DL	0.6	Sds...	-0....	RLL	-0....	Rh...	0.7												
21	D+Omega*0.7E ...	Yes	Yes			DL	1	Sds...	0.14			O...	0.7												
22	D+3/4(S+Omeg...	Yes	Yes			DL	1	Sds...	0.1...	RLL	0.3...	O...	0.5...												
23	0.6D (5.5 psf)-O...	Yes	Yes			DL	0.6	Sds...	-0....	RLL	-0....	O...	0.7												
24	D+Omega*0.7E ...	Yes	Yes			DL	1	Sds...	0.14			O...	0.7												
25	D+3/4(S+Omeg...	Yes	Yes			DL	1	Sds...	0.1...	RLL	0.3...	O...	0.5...												
26	0.6D (5.5 psf)-O...	Yes	Yes			DL	0.6	Sds...	-0....	RLL	-0....	O...	0.7												
27	LRFD																								
28	1.4D	Yes				DL	1.4																		
29	1.2D+1.6Lr Right	Yes				DL	1.2				1.6														
30	1.2D+1.6UNB S	Yes				DL	1.2		0.2		0.6...	OL1	1.6												
31	1.2D+1.6W LAT1	Yes				DL	1.2			WL...	1.6														
32	1.2D+1.6W Down	Yes				DL	1.2			WL...	1.6														
33	1.2D+1.6Lr (13.5)	Yes				DL	1.2	RLL	1.08																
34	1.2D+1.6Lr (13....	Yes				DL	1.2	RLL	1.08	WL...	1.6														
35	1.2D+1.6Lr (13....	Yes				DL	1.2	RLL	1.08	WL...	1.6														
36	1.2D+0.5Lr (13....	Yes				DL	1.2	RLL	0.3...	WL...	1.6														
37	1.2D+0.5Lr (13....	Yes				DL	1.2	RLL	0.3...	WL...	1.6														
38	1.2D+1.6Lr (12)	Yes				DL	1.2	RLL	0.96																
39	1.2D+1.6Lr (12)...	Yes				DL	1.2	RLL	0.96	WL...	1.6														
40	1.2D+1.6Lr (12)...	Yes				DL	1.2	RLL	0.96	WL...	1.6														
41	1.2D+0.5Lr (12)...	Yes				DL	1.2	RLL	0.3	WL...	1.6														
42	1.2D+0.5Lr (12)...	Yes				DL	1.2	RLL	0.3	WL...	1.6														
43	0.9D (5.5 psf)+1...	Yes				DL	0.9	RLL	-0....	WL...	1.6														
44	0.9D (5.5 psf)+1...	Yes				DL	0.9	RLL	-0....	WL...	1.6														
45	0.9D (5.5 psf)+1...	Yes				DL	0.9	RLL	-0....	WL...	1.6														
46	1.2D+1.0E +X	Yes				DL	1.2	Sds...	0.2			Rh...	1												
47	1.2D+0.2S+1.0E...	Yes				DL	1.2	Sds...	0.2	RLL	0.0...	Rh...	1												
48	0.9D (5.5 psf)-1....	Yes				DL	0.9	Sds...	-0.2	RLL	-0....	Rh...	1												
49	1.2D+1.0E +Z	Yes				DL	1.2	Sds...	0.2			Rh...	1												
50	1.2D+0.2S+1.0E...	Yes				DL	1.2	Sds...	0.2	RLL	0.0...	Rh...	1												
51	0.9D (5.5 psf)-1....	Yes				DL	0.9	Sds...	-0.2	RLL	-0....	Rh...	1												
52	1.2D+Omega*1....	Yes				DL	1.2	Sds...	0.2			O...	1												
53	1.2D+0.2S+Om...	Yes				DL	1.2	Sds...	0.2	RLL	0.0...	O...	1												
54	0.9D (5.5 psf)-O...	Yes				DL	0.9	Sds...	-0.2	RLL	-0....	O...	1												
55	1.2D+Omega*1....	Yes				DL	1.2	Sds...	0.2			O...	1												
56	1.2D+0.2S+Om...	Yes				DL	1.2	Sds...	0.2	RLL	0.0...	O...	1												
57	0.9D (5.5 psf)-O...	Yes				DL	0.9	Sds...	-0.2	RLL	-0....	O...	1												

Footing Soil Pressures

	LC	Label	UC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
1	1	Footing 1 - R3D_N1	0.516	1.032	2	C
2	1	Footing 1 - R3D_N14	0.516	1.032	2	B
3	1	Footing 2 - R3D_N39	0.503	1.006	2	C
4	1	Footing 2 - R3D_N52	0.503	1.006	2	B

Footing Soil Pressures (Continued)

	LC	Label	UC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
5	1	Footing 2 - R3D_N77	0.513	1.027	2	D
6	1	Footing 2 - R3D_N90	0.513	1.027	2	A
7	1	Footing 2 - R3D_N115	0.513	1.027	2	C
8	1	Footing 2 - R3D_N128	0.513	1.027	2	A
9	1	Footing 2 - R3D_N153	0.513	1.027	2	C
10	1	Footing 2 - R3D_N166	0.513	1.027	2	B
11	1	Footing 2 - R3D_N191	0.503	1.006	2	D
12	1	Footing 2 - R3D_N204	0.503	1.006	2	A
13	1	Footing 1 - R3D_N229	0.516	1.032	2	D
14	1	Footing 1 - R3D_N242	0.516	1.032	2	A
15	2	Footing 1 - R3D_N1	0.516	1.032	2	C
16	2	Footing 1 - R3D_N14	0.516	1.032	2	B
17	2	Footing 2 - R3D_N39	0.503	1.006	2	C
18	2	Footing 2 - R3D_N52	0.503	1.006	2	B
19	2	Footing 2 - R3D_N77	0.513	1.027	2	D
20	2	Footing 2 - R3D_N90	0.513	1.027	2	A
21	2	Footing 2 - R3D_N115	0.513	1.027	2	C
22	2	Footing 2 - R3D_N128	0.513	1.027	2	A
23	2	Footing 2 - R3D_N153	0.513	1.027	2	C
24	2	Footing 2 - R3D_N166	0.513	1.027	2	B
25	2	Footing 2 - R3D_N191	0.503	1.006	2	D
26	2	Footing 2 - R3D_N204	0.503	1.006	2	A
27	2	Footing 1 - R3D_N229	0.516	1.032	2	D
28	2	Footing 1 - R3D_N242	0.516	1.032	2	A
29	3	Footing 1 - R3D_N1	0.554	1.108	2	C
30	3	Footing 1 - R3D_N14	0.554	1.109	2	B
31	3	Footing 2 - R3D_N39	0.526	1.051	2	C
32	3	Footing 2 - R3D_N52	0.526	1.052	2	B
33	3	Footing 2 - R3D_N77	0.54	1.081	2	D
34	3	Footing 2 - R3D_N90	0.541	1.081	2	A
35	3	Footing 2 - R3D_N115	0.54	1.081	2	C
36	3	Footing 2 - R3D_N128	0.541	1.081	2	A
37	3	Footing 2 - R3D_N153	0.54	1.081	2	C
38	3	Footing 2 - R3D_N166	0.541	1.081	2	B
39	3	Footing 2 - R3D_N191	0.526	1.051	2	D
40	3	Footing 2 - R3D_N204	0.526	1.052	2	A
41	3	Footing 1 - R3D_N229	0.554	1.108	2	D
42	3	Footing 1 - R3D_N242	0.555	1.109	2	A
43	4	Footing 1 - R3D_N1	0.587	1.173	2	C
44	4	Footing 1 - R3D_N14	0.834	1.668	2	B
45	4	Footing 2 - R3D_N39	0.561	1.122	2	D
46	4	Footing 2 - R3D_N52	0.787	1.575	2	B
47	4	Footing 2 - R3D_N77	0.578	1.155	2	D
48	4	Footing 2 - R3D_N90	0.827	1.654	2	B
49	4	Footing 2 - R3D_N115	0.578	1.155	2	D
50	4	Footing 2 - R3D_N128	0.827	1.654	2	B
51	4	Footing 2 - R3D_N153	0.578	1.155	2	C
52	4	Footing 2 - R3D_N166	0.827	1.654	2	B
53	4	Footing 2 - R3D_N191	0.561	1.122	2	C
54	4	Footing 2 - R3D_N204	0.787	1.575	2	A
55	4	Footing 1 - R3D_N229	0.583	1.166	2	D
56	4	Footing 1 - R3D_N242	0.841	1.682	2	A
57	5	Footing 1 - R3D_N1	0.788	1.575	2	D
58	5	Footing 1 - R3D_N14	0.788	1.575	2	A
59	5	Footing 2 - R3D_N39	0.74	1.479	2	D
60	5	Footing 2 - R3D_N52	0.734	1.468	2	A
61	5	Footing 2 - R3D_N77	0.711	1.422	2	D

Footing Soil Pressures (Continued)

	LC	Label	UC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
62	5	Footing 2 - R3D_N90	0.704	1.409	2	A
63	5	Footing 2 - R3D_N115	0.677	1.354	2	D
64	5	Footing 2 - R3D_N128	0.673	1.347	2	A
65	5	Footing 2 - R3D_N153	0.657	1.313	2	D
66	5	Footing 2 - R3D_N166	0.652	1.305	2	A
67	5	Footing 2 - R3D_N191	0.63	1.259	2	D
68	5	Footing 2 - R3D_N204	0.63	1.259	2	A
69	5	Footing 1 - R3D_N229	0.688	1.375	2	D
70	5	Footing 1 - R3D_N242	0.688	1.375	2	A
71	6	Footing 1 - R3D_N1	0.753	1.506	2	C
72	6	Footing 1 - R3D_N14	0.753	1.506	2	B
73	6	Footing 2 - R3D_N39	0.725	1.45	2	C
74	6	Footing 2 - R3D_N52	0.725	1.45	2	B
75	6	Footing 2 - R3D_N77	0.753	1.507	2	D
76	6	Footing 2 - R3D_N90	0.753	1.507	2	A
77	6	Footing 2 - R3D_N115	0.753	1.507	2	C
78	6	Footing 2 - R3D_N128	0.753	1.507	2	A
79	6	Footing 2 - R3D_N153	0.753	1.507	2	C
80	6	Footing 2 - R3D_N166	0.753	1.507	2	B
81	6	Footing 2 - R3D_N191	0.725	1.45	2	D
82	6	Footing 2 - R3D_N204	0.725	1.45	2	A
83	6	Footing 1 - R3D_N229	0.753	1.506	2	D
84	6	Footing 1 - R3D_N242	0.753	1.506	2	A
85	7	Footing 1 - R3D_N1	0.739	1.479	2	C
86	7	Footing 1 - R3D_N14	0.993	1.985	2	B
87	7	Footing 2 - R3D_N39	0.706	1.412	2	D
88	7	Footing 2 - R3D_N52	0.929	1.857	2	B
89	7	Footing 2 - R3D_N77	0.732	1.465	2	D
90	7	Footing 2 - R3D_N90	0.985	1.97	2	B
91	7	Footing 2 - R3D_N115	0.732	1.465	2	D
92	7	Footing 2 - R3D_N128	0.985	1.97	2	B
93	7	Footing 2 - R3D_N153	0.732	1.465	2	C
94	7	Footing 2 - R3D_N166	0.985	1.97	2	B
95	7	Footing 2 - R3D_N191	0.706	1.412	2	C
96	7	Footing 2 - R3D_N204	0.929	1.857	2	A
97	7	Footing 1 - R3D_N229	0.736	1.472	2	D
98	7	Footing 1 - R3D_N242	0.999	1.997	2	A
99	8	Footing 1 - R3D_N1	0.93	1.86	2	D
100	8	Footing 1 - R3D_N14	0.93	1.86	2	A
101	8	Footing 2 - R3D_N39	0.872	1.744	2	D
102	8	Footing 2 - R3D_N52	0.866	1.733	2	A
103	8	Footing 2 - R3D_N77	0.864	1.728	2	D
104	8	Footing 2 - R3D_N90	0.857	1.714	2	A
105	8	Footing 2 - R3D_N115	0.833	1.666	2	D
106	8	Footing 2 - R3D_N128	0.829	1.659	2	A
107	8	Footing 2 - R3D_N153	0.814	1.627	2	D
108	8	Footing 2 - R3D_N166	0.809	1.619	2	A
109	8	Footing 2 - R3D_N191	0.773	1.546	2	D
110	8	Footing 2 - R3D_N204	0.773	1.546	2	A
111	8	Footing 1 - R3D_N229	0.842	1.683	2	D
112	8	Footing 1 - R3D_N242	0.842	1.683	2	A
113	9	Footing 1 - R3D_N1	0.722	1.445	2	C
114	9	Footing 1 - R3D_N14	0.722	1.445	2	B
115	9	Footing 2 - R3D_N39	0.697	1.395	2	C
116	9	Footing 2 - R3D_N52	0.697	1.395	2	B
117	9	Footing 2 - R3D_N77	0.723	1.446	2	D
118	9	Footing 2 - R3D_N90	0.723	1.446	2	A

Footing Soil Pressures (Continued)

	LC	Label	UC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
119	9	Footing 2 - R3D_N115	0.723	1.446	2	C
120	9	Footing 2 - R3D_N128	0.723	1.446	2	A
121	9	Footing 2 - R3D_N153	0.723	1.446	2	C
122	9	Footing 2 - R3D_N166	0.723	1.446	2	B
123	9	Footing 2 - R3D_N191	0.697	1.395	2	D
124	9	Footing 2 - R3D_N204	0.697	1.395	2	A
125	9	Footing 1 - R3D_N229	0.722	1.445	2	D
126	9	Footing 1 - R3D_N242	0.722	1.445	2	A
127	10	Footing 1 - R3D_N1	0.719	1.437	2	C
128	10	Footing 1 - R3D_N14	0.96	1.919	2	B
129	10	Footing 2 - R3D_N39	0.687	1.375	2	D
130	10	Footing 2 - R3D_N52	0.9	1.8	2	B
131	10	Footing 2 - R3D_N77	0.712	1.424	2	D
132	10	Footing 2 - R3D_N90	0.953	1.905	2	B
133	10	Footing 2 - R3D_N115	0.712	1.424	2	D
134	10	Footing 2 - R3D_N128	0.953	1.905	2	B
135	10	Footing 2 - R3D_N153	0.712	1.424	2	C
136	10	Footing 2 - R3D_N166	0.953	1.905	2	B
137	10	Footing 2 - R3D_N191	0.687	1.375	2	C
138	10	Footing 2 - R3D_N204	0.9	1.8	2	A
139	10	Footing 1 - R3D_N229	0.715	1.431	2	D
140	10	Footing 1 - R3D_N242	0.965	1.931	2	A
141	11	Footing 1 - R3D_N1	0.903	1.806	2	D
142	11	Footing 1 - R3D_N14	0.903	1.806	2	A
143	11	Footing 2 - R3D_N39	0.848	1.695	2	D
144	11	Footing 2 - R3D_N52	0.842	1.685	2	A
145	11	Footing 2 - R3D_N77	0.838	1.677	2	D
146	11	Footing 2 - R3D_N90	0.832	1.664	2	A
147	11	Footing 2 - R3D_N115	0.808	1.616	2	D
148	11	Footing 2 - R3D_N128	0.805	1.609	2	A
149	11	Footing 2 - R3D_N153	0.789	1.579	2	D
150	11	Footing 2 - R3D_N166	0.785	1.571	2	A
151	11	Footing 2 - R3D_N191	0.751	1.502	2	D
152	11	Footing 2 - R3D_N204	0.751	1.502	2	A
153	11	Footing 1 - R3D_N229	0.817	1.633	2	D
154	11	Footing 1 - R3D_N242	0.817	1.633	2	A
155	12	Footing 1 - R3D_N1	0.364	0.728	2	D
156	12	Footing 1 - R3D_N14	0.695	1.391	2	B
157	12	Footing 2 - R3D_N39	0.344	0.688	2	D
158	12	Footing 2 - R3D_N52	0.634	1.268	2	B
159	12	Footing 2 - R3D_N77	0.356	0.711	2	D
160	12	Footing 2 - R3D_N90	0.685	1.369	2	B
161	12	Footing 2 - R3D_N115	0.356	0.711	2	D
162	12	Footing 2 - R3D_N128	0.685	1.369	2	B
163	12	Footing 2 - R3D_N153	0.356	0.711	2	C
164	12	Footing 2 - R3D_N166	0.685	1.369	2	B
165	12	Footing 2 - R3D_N191	0.344	0.688	2	C
166	12	Footing 2 - R3D_N204	0.634	1.268	2	A
167	12	Footing 1 - R3D_N229	0.36	0.721	2	C
168	12	Footing 1 - R3D_N242	0.706	1.413	2	A
169	13	Footing 1 - R3D_N1	0.2	0.4	2	A
170	13	Footing 1 - R3D_N14	0.259	0.518	2	B
171	13	Footing 2 - R3D_N39	0.198	0.397	2	A
172	13	Footing 2 - R3D_N52	0.259	0.519	2	B
173	13	Footing 2 - R3D_N77	0.203	0.406	2	A
174	13	Footing 2 - R3D_N90	0.261	0.523	2	B
175	13	Footing 2 - R3D_N115	0.203	0.406	2	A

Footing Soil Pressures (Continued)

	LC	Label	UC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
176	13	Footing 2 - R3D_N128	0.261	0.523	2	B
177	13	Footing 2 - R3D_N153	0.203	0.406	2	A
178	13	Footing 2 - R3D_N166	0.261	0.523	2	A
179	13	Footing 2 - R3D_N191	0.198	0.397	2	B
180	13	Footing 2 - R3D_N204	0.259	0.519	2	A
181	13	Footing 1 - R3D_N229	0.203	0.407	2	B
182	13	Footing 1 - R3D_N242	0.263	0.526	2	A
183	14	Footing 1 - R3D_N1	0.262	0.525	2	A
184	14	Footing 1 - R3D_N14	0.262	0.525	2	D
185	14	Footing 2 - R3D_N39	0.22	0.44	2	A
186	14	Footing 2 - R3D_N52	0.215	0.429	2	D
187	14	Footing 2 - R3D_N77	0.209	0.417	2	D
188	14	Footing 2 - R3D_N90	0.215	0.429	2	A
189	14	Footing 2 - R3D_N115	0.246	0.492	2	D
190	14	Footing 2 - R3D_N128	0.249	0.498	2	A
191	14	Footing 2 - R3D_N153	0.274	0.548	2	D
192	14	Footing 2 - R3D_N166	0.278	0.556	2	A
193	14	Footing 2 - R3D_N191	0.285	0.569	2	D
194	14	Footing 2 - R3D_N204	0.285	0.569	2	A
195	14	Footing 1 - R3D_N229	0.319	0.638	2	D
196	14	Footing 1 - R3D_N242	0.319	0.638	2	A
197	15	Footing 1 - R3D_N1	0.474	0.949	2	C
198	15	Footing 1 - R3D_N14	0.57	1.14	2	B
199	15	Footing 2 - R3D_N39	0.461	0.922	2	C
200	15	Footing 2 - R3D_N52	0.557	1.114	2	B
201	15	Footing 2 - R3D_N77	0.471	0.941	2	D
202	15	Footing 2 - R3D_N90	0.569	1.138	2	A
203	15	Footing 2 - R3D_N115	0.471	0.941	2	C
204	15	Footing 2 - R3D_N128	0.569	1.138	2	A
205	15	Footing 2 - R3D_N153	0.471	0.941	2	C
206	15	Footing 2 - R3D_N166	0.569	1.138	2	B
207	15	Footing 2 - R3D_N191	0.461	0.922	2	D
208	15	Footing 2 - R3D_N204	0.557	1.114	2	A
209	15	Footing 1 - R3D_N229	0.474	0.949	2	D
210	15	Footing 1 - R3D_N242	0.57	1.141	2	A
211	16	Footing 1 - R3D_N1	0.586	1.172	2	C
212	16	Footing 1 - R3D_N14	0.663	1.326	2	B
213	16	Footing 2 - R3D_N39	0.57	1.14	2	C
214	16	Footing 2 - R3D_N52	0.644	1.288	2	B
215	16	Footing 2 - R3D_N77	0.585	1.17	2	D
216	16	Footing 2 - R3D_N90	0.663	1.327	2	A
217	16	Footing 2 - R3D_N115	0.585	1.17	2	C
218	16	Footing 2 - R3D_N128	0.663	1.327	2	A
219	16	Footing 2 - R3D_N153	0.585	1.17	2	C
220	16	Footing 2 - R3D_N166	0.663	1.327	2	B
221	16	Footing 2 - R3D_N191	0.57	1.14	2	D
222	16	Footing 2 - R3D_N204	0.644	1.288	2	A
223	16	Footing 1 - R3D_N229	0.586	1.172	2	D
224	16	Footing 1 - R3D_N242	0.663	1.326	2	A
225	17	Footing 1 - R3D_N1	0.24	0.48	2	C
226	17	Footing 1 - R3D_N14	0.336	0.672	2	B
227	17	Footing 2 - R3D_N39	0.233	0.466	2	D
228	17	Footing 2 - R3D_N52	0.329	0.657	2	B
229	17	Footing 2 - R3D_N77	0.237	0.474	2	D
230	17	Footing 2 - R3D_N90	0.335	0.671	2	B
231	17	Footing 2 - R3D_N115	0.237	0.474	2	C
232	17	Footing 2 - R3D_N128	0.335	0.671	2	A

Footing Soil Pressures (Continued)

	LC	Label	UC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
233	17	Footing 2 - R3D_N153	0.237	0.474	2	C
234	17	Footing 2 - R3D_N166	0.335	0.671	2	A
235	17	Footing 2 - R3D_N191	0.233	0.466	2	C
236	17	Footing 2 - R3D_N204	0.329	0.657	2	A
237	17	Footing 1 - R3D_N229	0.24	0.48	2	D
238	17	Footing 1 - R3D_N242	0.336	0.672	2	A
239	18	Footing 1 - R3D_N1	0.595	1.19	2	D
240	18	Footing 1 - R3D_N14	0.595	1.19	2	A
241	18	Footing 2 - R3D_N39	0.581	1.162	2	D
242	18	Footing 2 - R3D_N52	0.581	1.162	2	A
243	18	Footing 2 - R3D_N77	0.591	1.182	2	D
244	18	Footing 2 - R3D_N90	0.591	1.182	2	A
245	18	Footing 2 - R3D_N115	0.591	1.182	2	D
246	18	Footing 2 - R3D_N128	0.591	1.182	2	A
247	18	Footing 2 - R3D_N153	0.591	1.182	2	D
248	18	Footing 2 - R3D_N166	0.591	1.182	2	A
249	18	Footing 2 - R3D_N191	0.579	1.159	2	D
250	18	Footing 2 - R3D_N204	0.579	1.159	2	A
251	18	Footing 1 - R3D_N229	0.618	1.236	2	D
252	18	Footing 1 - R3D_N242	0.67	1.341	2	A
253	19	Footing 1 - R3D_N1	0.68	1.36	2	D
254	19	Footing 1 - R3D_N14	0.68	1.36	2	A
255	19	Footing 2 - R3D_N39	0.662	1.324	2	D
256	19	Footing 2 - R3D_N52	0.662	1.324	2	A
257	19	Footing 2 - R3D_N77	0.679	1.358	2	D
258	19	Footing 2 - R3D_N90	0.679	1.358	2	A
259	19	Footing 2 - R3D_N115	0.679	1.358	2	D
260	19	Footing 2 - R3D_N128	0.679	1.358	2	A
261	19	Footing 2 - R3D_N153	0.679	1.358	2	D
262	19	Footing 2 - R3D_N166	0.679	1.358	2	A
263	19	Footing 2 - R3D_N191	0.66	1.321	2	D
264	19	Footing 2 - R3D_N204	0.661	1.321	2	A
265	19	Footing 1 - R3D_N229	0.7	1.401	2	D
266	19	Footing 1 - R3D_N242	0.746	1.491	2	A
267	20	Footing 1 - R3D_N1	0.361	0.723	2	D
268	20	Footing 1 - R3D_N14	0.361	0.723	2	A
269	20	Footing 2 - R3D_N39	0.353	0.706	2	D
270	20	Footing 2 - R3D_N52	0.353	0.706	2	A
271	20	Footing 2 - R3D_N77	0.358	0.716	2	D
272	20	Footing 2 - R3D_N90	0.358	0.716	2	A
273	20	Footing 2 - R3D_N115	0.358	0.716	2	D
274	20	Footing 2 - R3D_N128	0.358	0.716	2	A
275	20	Footing 2 - R3D_N153	0.358	0.716	2	D
276	20	Footing 2 - R3D_N166	0.358	0.716	2	A
277	20	Footing 2 - R3D_N191	0.351	0.703	2	D
278	20	Footing 2 - R3D_N204	0.352	0.703	2	A
279	20	Footing 1 - R3D_N229	0.386	0.773	2	D
280	20	Footing 1 - R3D_N242	0.446	0.892	2	A
281	21*	Footing 1 - R3D_N1	0.462	0.925	2	C
282	21*	Footing 1 - R3D_N14	0.582	1.165	2	B
283	21*	Footing 2 - R3D_N39	0.449	0.899	2	C
284	21*	Footing 2 - R3D_N52	0.569	1.138	2	B
285	21*	Footing 2 - R3D_N77	0.458	0.917	2	D
286	21*	Footing 2 - R3D_N90	0.581	1.163	2	A
287	21*	Footing 2 - R3D_N115	0.458	0.917	2	C
288	21*	Footing 2 - R3D_N128	0.581	1.163	2	A
289	21*	Footing 2 - R3D_N153	0.458	0.917	2	C

Footing Soil Pressures (Continued)

	LC	Label	UC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
290	21*	Footing 2 - R3D_N166	0.581	1.163	2	B
291	21*	Footing 2 - R3D_N191	0.449	0.899	2	D
292	21*	Footing 2 - R3D_N204	0.569	1.138	2	A
293	21*	Footing 1 - R3D_N229	0.462	0.925	2	D
294	21*	Footing 1 - R3D_N242	0.582	1.165	2	A
295	22*	Footing 1 - R3D_N1	0.577	1.154	2	C
296	22*	Footing 1 - R3D_N14	0.674	1.348	2	B
297	22*	Footing 2 - R3D_N39	0.561	1.122	2	C
298	22*	Footing 2 - R3D_N52	0.654	1.308	2	B
299	22*	Footing 2 - R3D_N77	0.576	1.152	2	D
300	22*	Footing 2 - R3D_N90	0.674	1.349	2	A
301	22*	Footing 2 - R3D_N115	0.576	1.152	2	C
302	22*	Footing 2 - R3D_N128	0.674	1.348	2	A
303	22*	Footing 2 - R3D_N153	0.576	1.152	2	C
304	22*	Footing 2 - R3D_N166	0.674	1.349	2	B
305	22*	Footing 2 - R3D_N191	0.561	1.122	2	D
306	22*	Footing 2 - R3D_N204	0.654	1.308	2	A
307	22*	Footing 1 - R3D_N229	0.577	1.154	2	D
308	22*	Footing 1 - R3D_N242	0.674	1.348	2	A
309	23*	Footing 1 - R3D_N1	0.228	0.456	2	C
310	23*	Footing 1 - R3D_N14	0.349	0.698	2	B
311	23*	Footing 2 - R3D_N39	0.221	0.442	2	D
312	23*	Footing 2 - R3D_N52	0.341	0.682	2	B
313	23*	Footing 2 - R3D_N77	0.225	0.45	2	D
314	23*	Footing 2 - R3D_N90	0.348	0.697	2	B
315	23*	Footing 2 - R3D_N115	0.225	0.45	2	C
316	23*	Footing 2 - R3D_N128	0.348	0.697	2	A
317	23*	Footing 2 - R3D_N153	0.225	0.45	2	C
318	23*	Footing 2 - R3D_N166	0.348	0.697	2	A
319	23*	Footing 2 - R3D_N191	0.221	0.442	2	C
320	23*	Footing 2 - R3D_N204	0.341	0.682	2	A
321	23*	Footing 1 - R3D_N229	0.228	0.456	2	D
322	23*	Footing 1 - R3D_N242	0.349	0.698	2	A
323	24*	Footing 1 - R3D_N1	0.613	1.227	2	D
324	24*	Footing 1 - R3D_N14	0.613	1.227	2	A
325	24*	Footing 2 - R3D_N39	0.599	1.198	2	D
326	24*	Footing 2 - R3D_N52	0.599	1.198	2	A
327	24*	Footing 2 - R3D_N77	0.609	1.218	2	D
328	24*	Footing 2 - R3D_N90	0.609	1.218	2	A
329	24*	Footing 2 - R3D_N115	0.609	1.218	2	D
330	24*	Footing 2 - R3D_N128	0.609	1.218	2	A
331	24*	Footing 2 - R3D_N153	0.609	1.218	2	D
332	24*	Footing 2 - R3D_N166	0.609	1.218	2	A
333	24*	Footing 2 - R3D_N191	0.597	1.194	2	D
334	24*	Footing 2 - R3D_N204	0.597	1.194	2	A
335	24*	Footing 1 - R3D_N229	0.644	1.287	2	D
336	24*	Footing 1 - R3D_N242	0.713	1.426	2	A
337	25*	Footing 1 - R3D_N1	0.695	1.391	2	D
338	25*	Footing 1 - R3D_N14	0.695	1.391	2	A
339	25*	Footing 2 - R3D_N39	0.676	1.353	2	D
340	25*	Footing 2 - R3D_N52	0.676	1.353	2	A
341	25*	Footing 2 - R3D_N77	0.694	1.387	2	D
342	25*	Footing 2 - R3D_N90	0.694	1.387	2	A
343	25*	Footing 2 - R3D_N115	0.694	1.387	2	D
344	25*	Footing 2 - R3D_N128	0.694	1.387	2	A
345	25*	Footing 2 - R3D_N153	0.694	1.387	2	D
346	25*	Footing 2 - R3D_N166	0.694	1.387	2	A

Footing Soil Pressures (Continued)

	LC	Label	UC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
347	25*	Footing 2 - R3D_N191	0.675	1.35	2	D
348	25*	Footing 2 - R3D_N204	0.675	1.35	2	A
349	25*	Footing 1 - R3D_N229	0.721	1.442	2	D
350	25*	Footing 1 - R3D_N242	0.78	1.561	2	A
351	26*	Footing 1 - R3D_N1	0.381	0.762	2	D
352	26*	Footing 1 - R3D_N14	0.381	0.762	2	A
353	26*	Footing 2 - R3D_N39	0.372	0.744	2	D
354	26*	Footing 2 - R3D_N52	0.372	0.744	2	A
355	26*	Footing 2 - R3D_N77	0.377	0.754	2	D
356	26*	Footing 2 - R3D_N90	0.377	0.754	2	A
357	26*	Footing 2 - R3D_N115	0.377	0.754	2	D
358	26*	Footing 2 - R3D_N128	0.377	0.754	2	A
359	26*	Footing 2 - R3D_N153	0.377	0.754	2	D
360	26*	Footing 2 - R3D_N166	0.377	0.754	2	A
361	26*	Footing 2 - R3D_N191	0.37	0.74	2	D
362	26*	Footing 2 - R3D_N204	0.37	0.741	2	A
363	26*	Footing 1 - R3D_N229	0.415	0.829	2	D
364	26*	Footing 1 - R3D_N242	0.498	0.997	2	A

Footing Geometry Results

	Joint	Footing	Length[ft]	Width[ft]	Thickness[in]	ex[in]	ez[in]	Pedestal Ht[in]	Ped Xdim[in]	Ped Zdim[in]
1	R3D_N1	Footing 1	7.5	12	36	0	0	0	12	12
2	R3D_N14	Footing 1	7.5	12	36	0	0	0	12	12
3	R3D_N39	Footing 2	8.5	12	36	0	0	0	12	12
4	R3D_N52	Footing 2	8.5	12	36	0	0	0	12	12
5	R3D_N77	Footing 2	8.5	12	36	0	0	0	12	12
6	R3D_N90	Footing 2	8.5	12	36	0	0	0	12	12
7	R3D_N115	Footing 2	8.5	12	36	0	0	0	12	12
8	R3D_N128	Footing 2	8.5	12	36	0	0	0	12	12
9	R3D_N153	Footing 2	8.5	12	36	0	0	0	12	12
10	R3D_N166	Footing 2	8.5	12	36	0	0	0	12	12
11	R3D_N191	Footing 2	8.5	12	36	0	0	0	12	12
12	R3D_N204	Footing 2	8.5	12	36	0	0	0	12	12
13	R3D_N229	Footing 1	7.5	12	36	0	0	0	12	12
14	R3D_N242	Footing 1	7.5	12	36	0	0	0	12	12

Footing Steel

	Joint	Footing	Bot x Steel[in^2]	Bot z Steel[in^2]	Top x Steel[i...	Top z Steel[in^2]	Ped Long	Ped Shear
1	R3D_N1	Footing 1	6.185	9.719	2.651	3.976		
2	R3D_N14	Footing 1	6.185	9.719	2.651	3.976		
3	R3D_N39	Footing 2	6.627	9.719	3.093	3.976		
4	R3D_N52	Footing 2	6.627	9.719	3.093	3.976		
5	R3D_N77	Footing 2	6.627	9.719	3.093	3.976		
6	R3D_N90	Footing 2	6.627	9.719	3.093	3.976		
7	R3D_N115	Footing 2	6.627	9.719	3.093	3.976		
8	R3D_N128	Footing 2	6.627	9.719	3.093	3.976		
9	R3D_N153	Footing 2	6.627	9.719	3.093	3.976		
10	R3D_N166	Footing 2	6.627	9.719	3.093	3.976		
11	R3D_N191	Footing 2	6.627	9.719	3.093	3.976		
12	R3D_N204	Footing 2	6.627	9.719	3.093	3.976		
13	R3D_N229	Footing 1	6.185	9.719	2.651	3.976		
14	R3D_N242	Footing 1	6.185	9.719	2.651	3.976		

Footing Code Check

	Joint	Footing	Bearing R...	Bearing Pressure[ksf]	Gov LC	UC Max	Muxx[k-in]	Gov LC	UC Max	Muzz[k-in]	Gov LC
1	R3D_N1	Footing 1	0.93	1.86	8	0.023	375.875	35	0.212	2237.548	35
2	R3D_N14	Footing 1	0.993	1.985	7	0.023	375.877	35	0.273	2881.497	34
3	R3D_N39	Footing 2	0.872	1.744	8	0.027	454.972	35	0.21	2376.18	35
4	R3D_N52	Footing 2	0.929	1.857	7	0.027	455.266	35	0.266	3020.257	34
5	R3D_N77	Footing 2	0.864	1.728	8	0.026	438.227	35	0.203	2301.043	35
6	R3D_N90	Footing 2	0.985	1.97	7	0.026	438.587	35	0.287	3253.229	34
7	R3D_N115	Footing 2	0.833	1.666	8	0.025	419.57	35	0.189	2138.952	35
8	R3D_N128	Footing 2	0.985	1.97	7	0.025	419.759	35	0.287	3253.096	34
9	R3D_N153	Footing 2	0.814	1.627	8	0.025	412.433	35	0.18	2039.493	35
10	R3D_N166	Footing 2	0.985	1.97	7	0.025	412.676	35	0.287	3253.229	34
11	R3D_N191	Footing 2	0.773	1.546	8	0.024	400.306	35	0.164	1860.282	35
12	R3D_N204	Footing 2	0.929	1.857	7	0.024	400.31	35	0.266	3020.301	34
13	R3D_N229	Footing 1	0.842	1.683	8	0.02	329.701	35	0.174	1840.024	35
14	R3D_N242	Footing 1	0.999	1.997	7	0.02	329.706	35	0.275	2905.353	34

Footing Shear Check

	Joint	Footing	UC Shear	Vux[lb]	Gov LC	UC Shear	Vuz[lb]	Gov LC
1	R3D_N1	Footing 1	0.009	3748.26	35	0.14	38563.548	35
2	R3D_N14	Footing 1	0.009	3748.296	35	0.194	53315.799	34
3	R3D_N39	Footing 2	0.014	6196.247	35	0.13	40628.268	35
4	R3D_N52	Footing 2	0.014	6199.955	35	0.174	54281.858	34
5	R3D_N77	Footing 2	0.014	5986.137	35	0.126	39347.042	35
6	R3D_N90	Footing 2	0.014	5990.688	35	0.191	59613.134	34
7	R3D_N115	Footing 2	0.013	5751.968	35	0.117	36450.533	35
8	R3D_N128	Footing 2	0.013	5754.366	35	0.191	59610.066	34
9	R3D_N153	Footing 2	0.013	5662.378	35	0.111	34656.906	35
10	R3D_N166	Footing 2	0.013	5665.442	35	0.191	59613.134	34
11	R3D_N191	Footing 2	0.013	5510.213	35	0.101	31456.598	35
12	R3D_N204	Footing 2	0.013	5510.295	35	0.174	54282.873	34
13	R3D_N229	Footing 1	0.008	3342.184	35	0.114	31461.738	35
14	R3D_N242	Footing 1	0.008	3342.251	35	0.196	53907.229	34

Footing Pedestal Results

	Joint	Footing	UC Bend	UC Bend LC	UC Shear	UC Shear LC	UC Punch	UC Punch LC
1	R3D_N1	Footing 1	0	1	0	NC	0.027	35
2	R3D_N14	Footing 1	0	1	0	NC	0.03	34
3	R3D_N39	Footing 2	0	1	0	NC	0.029	35
4	R3D_N52	Footing 2	0	1	0	NC	0.032	34
5	R3D_N77	Footing 2	0	1	0	NC	0.028	34
6	R3D_N90	Footing 2	0	1	0	NC	0.034	34
7	R3D_N115	Footing 2	0	1	0	NC	0.028	34
8	R3D_N128	Footing 2	0	1	0	NC	0.034	34
9	R3D_N153	Footing 2	0	1	0	NC	0.028	34
10	R3D_N166	Footing 2	0	1	0	NC	0.034	34
11	R3D_N191	Footing 2	0	1	0	NC	0.027	34
12	R3D_N204	Footing 2	0	1	0	NC	0.032	34
13	R3D_N229	Footing 1	0	1	0	NC	0.023	34
14	R3D_N242	Footing 1	0	1	0	NC	0.03	34

Footing Safety Factors

	Joint	Footing	OSF-xx	LC	OSF-zz	LC	SR-xx	LC	SR-zz	LC
1	R3D_N1	Footing 1	2.818	14	2.075	8	1.907	8	6.403	26*
2	R3D_N14	Footing 1	2.818	14	1.542	12	1.407	12	6.405	26*
3	R3D_N39	Footing 2	3.168	14	2.178	8	2.002	8	7.253	26*
4	R3D_N52	Footing 2	3.162	14	1.621	12	1.486	12	7.255	26*

Footing Safety Factors (Continued)

	Joint	Footing	OSF-xx	LC	OSF-zz	LC	SR-xx	LC	SR-zz	LC
5	R3D_N77	Footing 2	3.531	14	2.177	8	2.001	8	7.276	26*
6	R3D_N90	Footing 2	3.522	14	1.557	12	1.427	12	7.278	26*
7	R3D_N115	Footing 2	4.206	14	2.242	8	2.061	8	7.276	26*
8	R3D_N128	Footing 2	4.199	14	1.557	12	1.427	12	7.278	26*
9	R3D_N153	Footing 2	4.581	14	2.294	6	2.108	6	7.276	26*
10	R3D_N166	Footing 2	4.57	14	1.557	12	1.427	12	7.278	26*
11	R3D_N191	Footing 2	4.773	14	2.388	6	2.195	6	7.245	26*
12	R3D_N204	Footing 2	4.773	14	1.621	12	1.486	12	7.247	26*
13	R3D_N229	Footing 1	4.077	26*	2.222	8	2.042	8	6.383	26*
14	R3D_N242	Footing 1	4.163	14	1.53	12	1.396	12	6.442	26*

Company:	Enterprise Engineering Consultants, Ltd.	Date:	12/7/2023
Engineer:	Daniel P. Seymour	Page:	1/6
Project:	14836 R		
Address:	710 French Street, Peshtigo, WI 54157		
Phone:	715-582-4501		
E-mail:	dps@eecltd.com		

SIMPSON Strong-Tie®

Anchor Designer™
Software
Version 3.1.2209.3

1.Project information

Customer company: RCP Shelters
Customer contact name:
Customer e-mail:
Comment:

Project description:
Location: N166 LC42
Fastening description:

2. Input Data & Anchor Parameters

General
Design method:ACI 318-05
Units: Imperial units

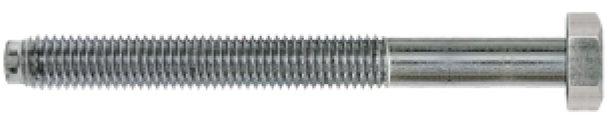
Anchor Information:
Anchor type: Cast-in-place
Material: F1554 Grade 36
Diameter (inch): 1.500
Effective Embedment depth, h_{ef} (inch): 27.500
Anchor category: -
Anchor ductility: Yes
h_{min} (inch): 29.75
C_{min} (inch): 9.00
S_{min} (inch): 9.00

Base Material
Concrete: Normal-weight
Concrete thickness, h (inch): 36.00
State: Cracked
Compressive strength, f'_c (psi): 4000
$\Psi_{c,V}$: 1.0
Reinforcement condition: B tension, B shear
Supplemental edge reinforcement: Not applicable
Reinforcement provided at corners: No
Ignore concrete breakout in tension: No
Ignore concrete breakout in shear: No
Ignore 6do requirement: No
Build-up grout pad: Yes

Base Plate
Length x Width x Thickness (inch): 30.00 x 30.00 x 1.97
Yield stress: 50000 psi

Profile type/size: HSS14X10X1/2

Recommended Anchor
Anchor Name: Heavy Hex Bolt - 1 1/2"Ø Heavy Hex Bolt, F1554 Gr. 36



SIMPSON Strong-Tie®

Anchor Designer™
Software
Version 3.1.2209.3

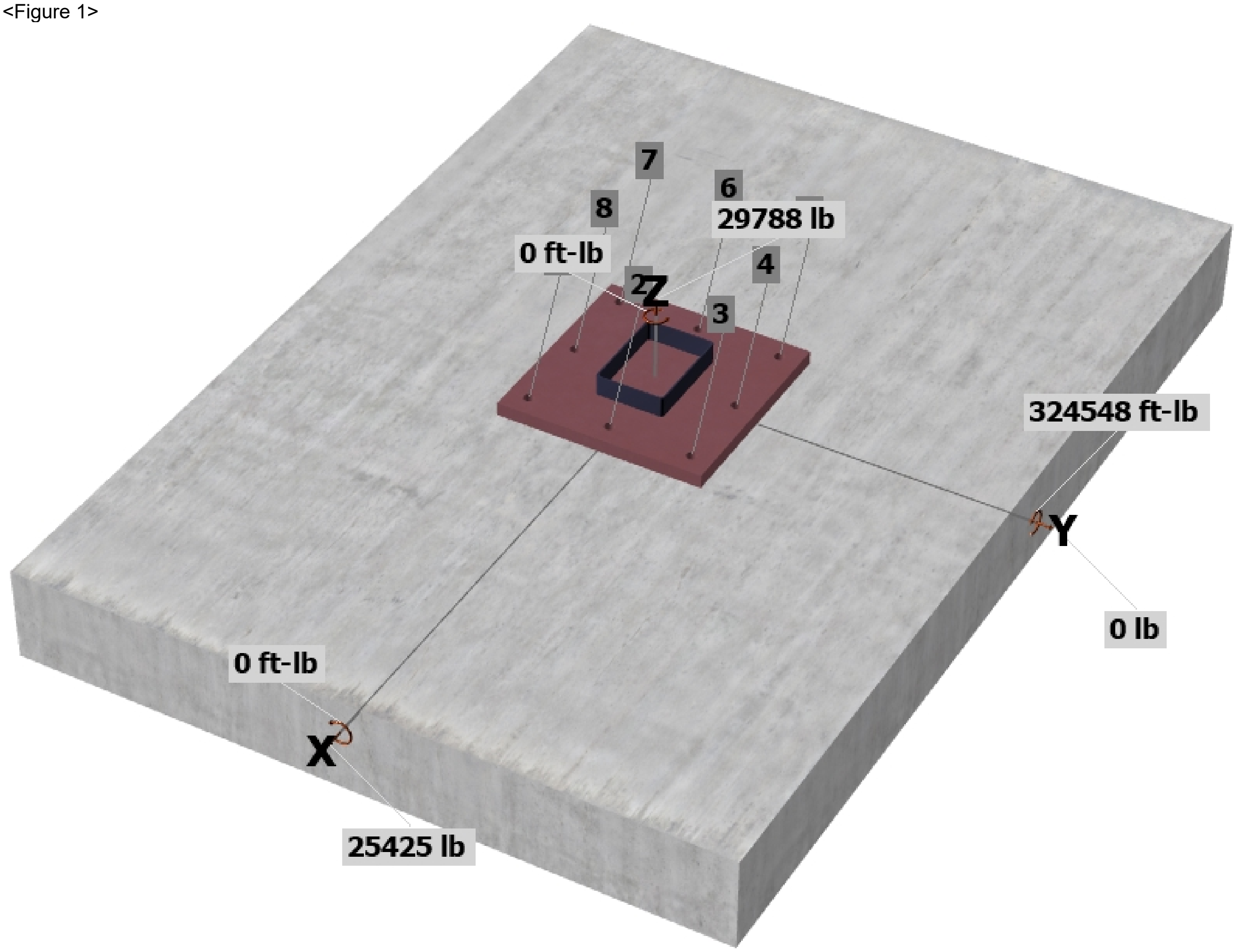
Company:	Enterprise Engineering Consultants, Ltd.	Date:	12/7/2023
Engineer:	Daniel P. Seymour	Page:	2/6
Project:	14836 R		
Address:	710 French Street, Peshtigo, WI 54157		
Phone:	715-582-4501		
E-mail:	dps@eecltd.com		

Load and Geometry
Load factor source: ACI 318 Section 9.2
Load combination: not set
Seismic design: No
Anchors subjected to sustained tension: Not applicable
Apply entire shear load at front row: No
Anchors only resisting wind and/or seismic loads: No

Strength level loads:

N_{ua} [lb]: -29788
V_{uax} [lb]: 25425
V_{uay} [lb]: 0
M_{ux} [ft-lb]: 0
M_{uy} [ft-lb]: 324548
M_{uz} [ft-lb]: 0

<Figure 1>



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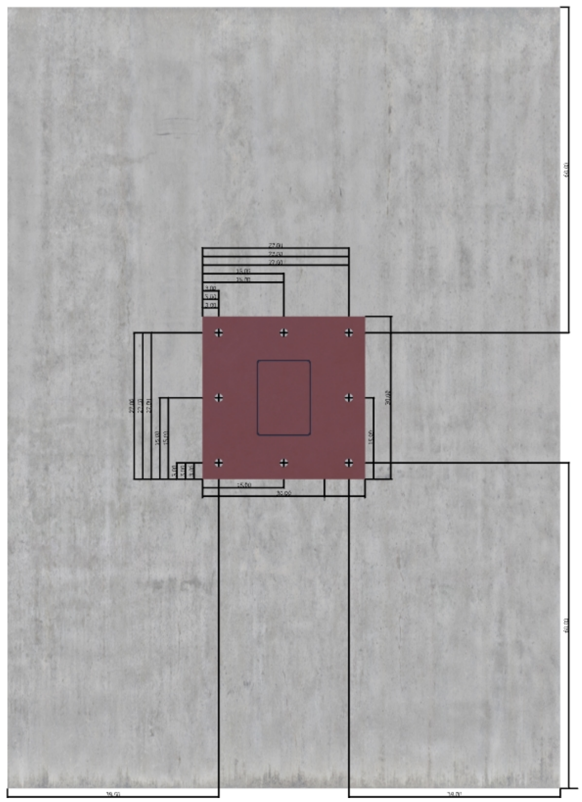
<Figure 2>



Anchor Designer™
Software
Version 3.1.2209.3

Company:	Enterprise Engineering Consultants, Ltd.	Date:	12/7/2023
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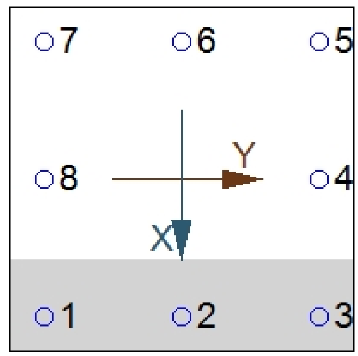
3. Resulting Anchor Forces

Anchor	Tension load, N_{ua} (lb)	Shear load x, V_{uax} (lb)	Shear load y, V_{uay} (lb)	Shear load combined, $\sqrt{(V_{uax})^2+(V_{uay})^2}$ (lb)
1	0.0	3178.1	0.0	3178.1
2	0.0	3178.1	0.0	3178.1
3	0.0	3178.1	0.0	3178.1
4	15857.5	3178.1	0.0	3178.1
5	42933.3	3178.1	0.0	3178.1
6	42933.3	3178.1	0.0	3178.1
7	42933.3	3178.1	0.0	3178.1
8	15857.5	3178.1	0.0	3178.1
Sum	160514.9	25425.0	0.0	25425.0

Maximum concrete compression strain (‰): 0.37
Maximum concrete compression stress (psi): 1591
Resultant tension force (lb): 160515
Resultant compression force (lb): 190303
Eccentricity of resultant tension forces in x-axis, e'_{Nx} (inch): 0.00
Eccentricity of resultant tension forces in y-axis, e'_{Ny} (inch): 2.43
Eccentricity of resultant shear forces in x-axis, e'_{Vx} (inch): 0.00
Eccentricity of resultant shear forces in y-axis, e'_{Vy} (inch): 0.00

<Figure 3>



4. Steel Strength of Anchor in Tension (Sec. D.5.1)

N_{sa} (lb)	ϕ	ϕN_{sa} (lb)
81490	0.75	61118

5. Concrete Breakout Strength of Anchor in Tension (Sec. D.5.2)

$N_b = k_c \lambda \sqrt{f'_c} h_{ef}^{1.5}$ (Eq. D-7)

k_c	λ	f'_c (psi)	h_{ef} (in)	N_b (lb)
24.0	1.00	4000	27.500	218897

$\phi N_{cbg} = \phi\ (A_{Nc} / A_{Nco})\ \Psi_{ec,N} \Psi_{ed,N} \Psi_{c,N} \Psi_{cp,N} N_b$ (Sec. D.4.1 & Eq. D-5)

A_{Nc} (in²)	A_{Nco} (in²)	$c_{a,min}$ (in)	$\Psi_{ec,N}$	$\Psi_{ed,N}$	$\Psi_{c,N}$	$\Psi_{cp,N}$	N_b (lb)	ϕ	ϕN_{cbg} (lb)
9639.00	6806.25	39.00	0.944	0.984	1.00	1.000	218897	0.70	201580

6. Pullout Strength of Anchor in Tension (Sec. D.5.3)

$\phi N_{pn} = \phi \Psi_{c,P} N_p = \phi \Psi_{c,P} 8 A_{brg} f'_c$ (Sec. D.4.1, Eq. D-14 & D-15)

$\Psi_{c,P}$	A_{brg} (in²)	f'_c (psi)	ϕ	ϕN_{pn} (lb)
1.0	3.12	4000	0.70	69843

8. Steel Strength of Anchor in Shear (Sec. D.6.1)

V_{sa} (lb)	ϕ_{grout}	ϕ	$\phi_{grout}\phi V_{sa}$ (lb)
48895	0.8	0.65	25425

9. Concrete Breakout Strength of Anchor in Shear (Sec. D.6.2)

Shear perpendicular to edge in x-direction:

$V_{bx} = 7(l_e / d_a)^{0.2}\sqrt{d_a}\lambda\sqrt{f'_c}c_{a1}^{1.5}$ (Eq. D-24)

l_e (in)	d_a (in)	λ	f'_c (psi)	c_{a1} (in)	V_{bx} (lb)
12.00	1.500	1.00	4000	26.00	108956

$\phi V_{cbgx} = \phi\ (A_{Vc} / A_{Vco})\Psi_{ec,V}\Psi_{ed,V}\Psi_{c,V}\Psi_{h,V}V_{bx}$ (Sec. D.4.1 & Eq. D-22)

A_{Vc} (in^2)	A_{Vco} (in^2)	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{c,V}$	$\Psi_{h,V}$	V_{bx} (lb)	ϕ	ϕV_{cbgx} (lb)
3672.00	3042.00	1.000	1.000	1.000	1.000	108956	0.70	92065

Shear parallel to edge in y-direction:

$V_{bx} = 7(l_e / d_a)^{0.2}\sqrt{d_a}\lambda\sqrt{f'_c}c_{a1}^{1.5}$ (Eq. D-24)

l_e (in)	d_a (in)	λ	f'_c (psi)	c_{a1} (in)	V_{bx} (lb)
12.00	1.500	1.00	4000	39.00	200165

$\phi V_{cbgy} = \phi\ (2)(A_{Vc} / A_{Vco})\Psi_{ec,V}\Psi_{ed,V}\Psi_{c,V}\Psi_{h,V}V_{bx}$ (Sec. D.4.1, D.6.2.1(c) & Eq. D-22)

A_{Vc} (in^2)	A_{Vco} (in^2)	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{c,V}$	$\Psi_{h,V}$	V_{bx} (lb)	ϕ	ϕV_{cbgy} (lb)
5076.00	6844.50	1.000	1.000	1.000	1.000	200165	0.70	207824

10. Concrete Pryout Strength of Anchor in Shear (Sec. D.6.3)

$\phi V_{cpg} = \phi k_{cp}N_{cbg} = \phi k_{cp}(A_{Nc} / A_{Nco})\Psi_{ec,N}\Psi_{ed,N}\Psi_{c,N}\Psi_{cp,N}N_b$ (Eq. D-31)

k_{cp}	A_{Nc} (in^2)	A_{Nco} (in^2)	$\Psi_{ec,N}$	$\Psi_{ed,N}$	$\Psi_{c,N}$	$\Psi_{cp,N}$	N_b (lb)	ϕ	ϕV_{cpg} (lb)
2.0	10863.00	6806.25	1.000	0.984	1.000	1.000	218897	0.70	481110

11. Results

Interaction of Tensile and Shear Forces (Sec. RD.7)

Tension	Factored Load, N_{ua} (lb)	Design Strength, ϕN_n (lb)	Ratio	Status
Steel	42933	61118	0.70	Pass
Concrete breakout	**160515**	**201580**	**0.80**	**Pass (Governs)**
Pullout	42933	69843	0.61	Pass

Shear	Factored Load, V_{ua} (lb)	Design Strength, ϕV_n (lb)	Ratio	Status
Steel	3178	25425	0.12	Pass
T Concrete breakout x+	**25425**	**92065**	**0.28**	**Pass (Governs)**
|| Concrete breakout y+	**9534**	**207824**	**0.05**	**Pass (Governs)**
Pryout	25425	481110	0.05	Pass

Interaction check	$(N_{ua}/\phi N_{ua})^{5/3}$	$(V_{ua}/\phi V_{ua})^{5/3}$	Combined Ratio	Permissible	Status
Sec. RD.7	0.68	0.12	80.1%	1.0	Pass

Company:	Enterprise Engineering Consultants, Ltd.	Date:	12/7/2023
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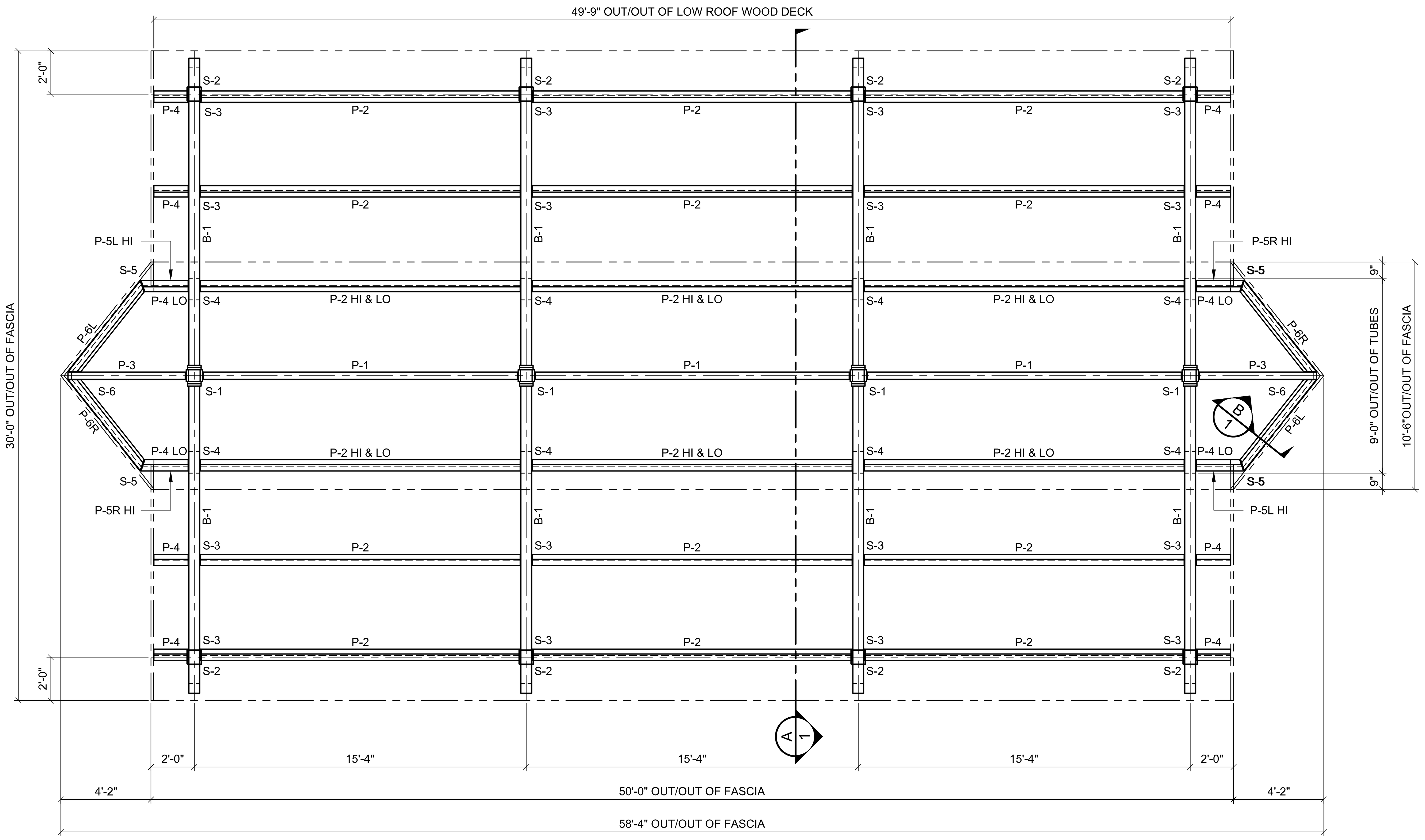
Phone:	715-582-4501		
E-mail:	dps@eecltd.com		

1 1/2"Ø Heavy Hex Bolt, F1554 Gr. 36 with hef = 27.500 inch meets the selected design criteria.

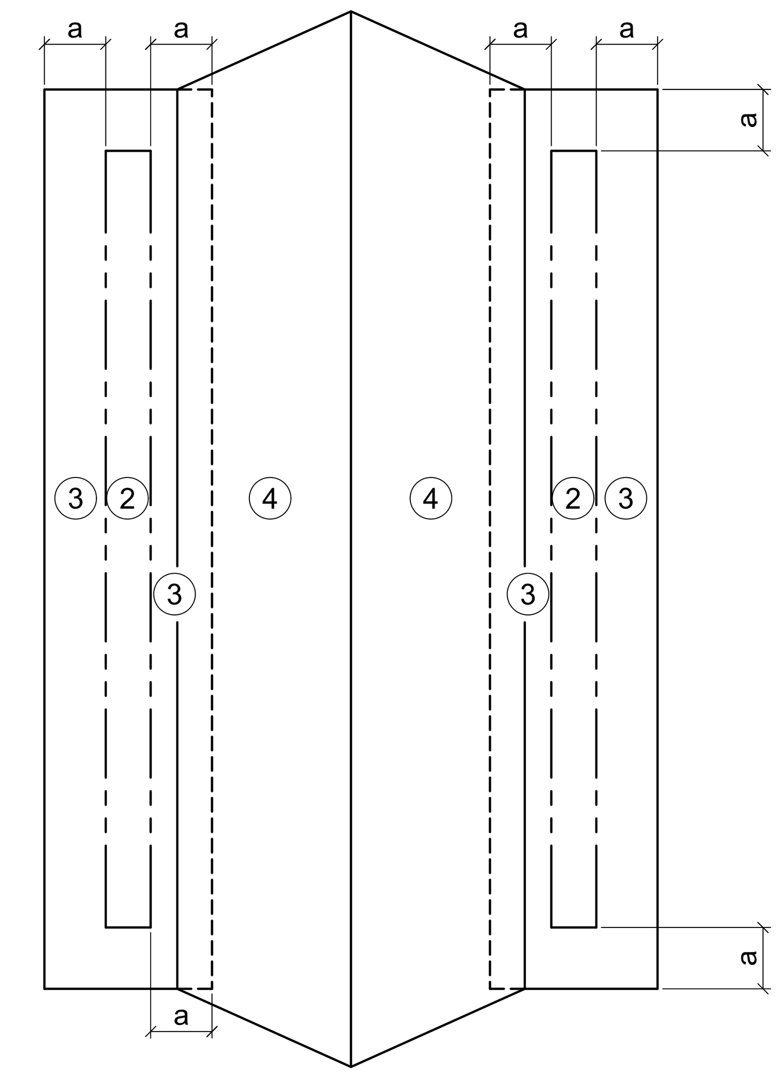
12. Warnings

- Designer must exercise own judgement to determine if this design is suitable.



ROOF FRAMING PLAN

SCALE: 1/4" = 1'-0"

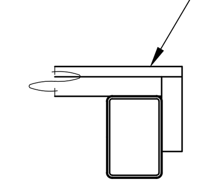


ROOF PLAN

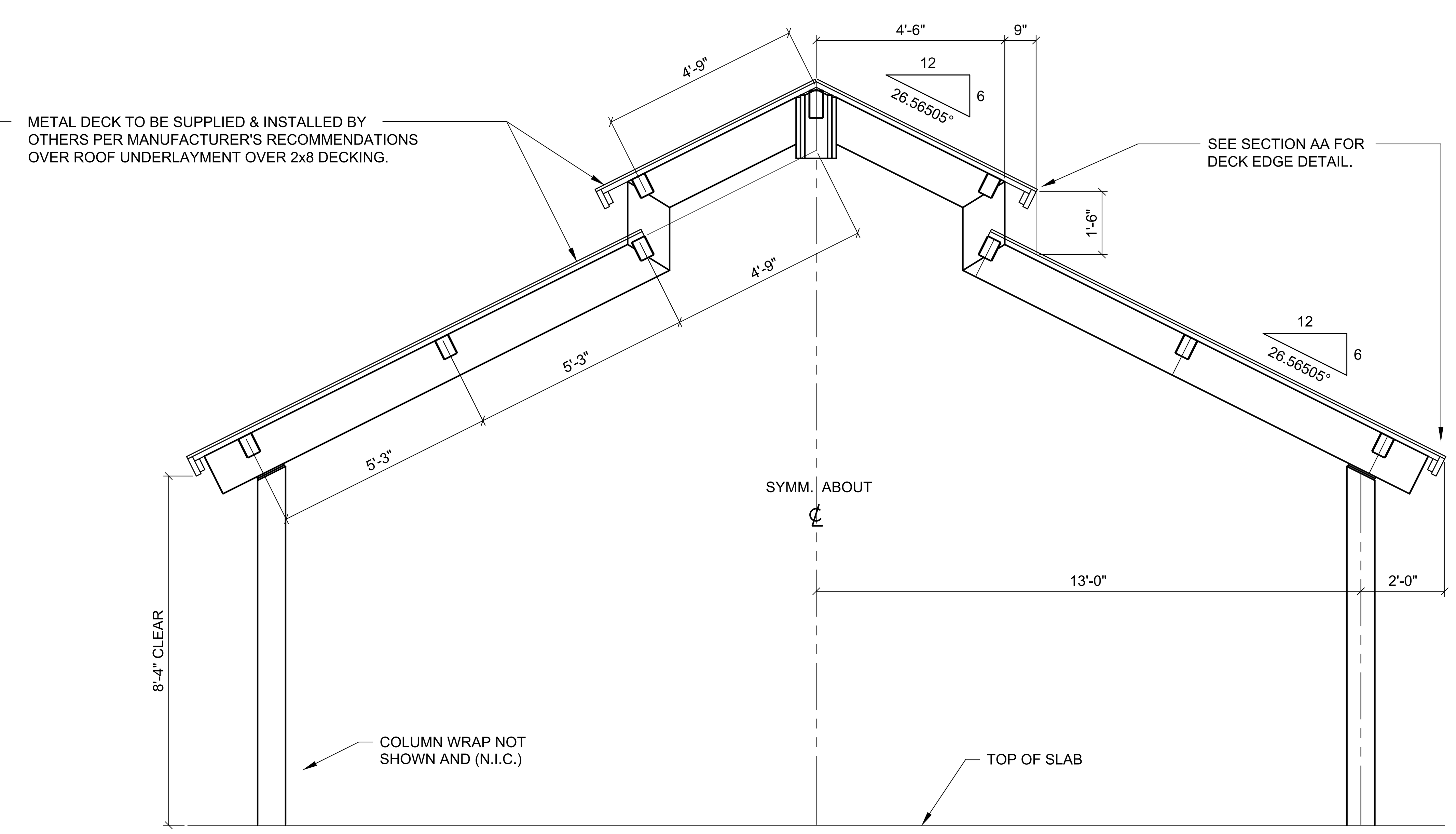
a = 3'-0"

DESIGN PRESSURES FOR COMPONENTS & CLADDING

ZONE	PRESSURE	SUCTION
2	29.8 PSF	22.7 PSF
3	38.7 PSF	29.2 PSF
4	39.5 PSF	29.8 PSF



SECTION B/1



SECTION A/1

SCALE: 3/8" = 1'-0"

CONTRACT NOTE:
Reference accepted proposal and/or executed contract for identification of items furnished. Any item not specifically included shall be provided by owner, installer or others. Some items are specifically noted as N.I.C. (not in contract).

SOLID TIMBER SPECIFICATIONS
2 x 4 Nailer ----------- #1 SYP, S4S, KD, Seal
2 x 6 Fascia ---------- #1 AYC, S4S, KD, Seal.
2 x 8 Roof Deck ----- #1 SYP, T&G, S/L, CM, EV1S, KD, Seal.
Deck furnished in specified lengths (S/L), not precision end trimmed (PET), field cutting required.

ROOF UNDERLAYMENT SPECIFICATIONS:
ONE LAYER OF SYNTHETIC UNDERLAYMENT.
SYNTHETIC UNDERLAYMENT TO CONFORM TO ASTM D226 TYPE II OR ASTM D4869 TYPE IV.
ATTACH UNDERLAYMENT PER MANUFACTURER'S RECOMMENDATIONS OR BUILDING CODE REQUIREMENTS, WHICHEVER IS MORE STRINGENT.

STEEL & HARDWARE SHOP NOTES:
1. All steel plate to be ASTM A572 Grade 50.
2. Steel tubes to be ASTM A500 Grade C.
3. All welding is to be done in accordance with latest AWS standards. If welds are not specified, all welds are to develop full strength of all component parts.
4. All bolts to be ASTM F3125 Grade A325 Type 1. Exception: All bolts smaller than 1/2"Ø to be A307A. Anchor bolts as noted.
5. All nuts to be ASTM A563DH except as noted. At F1554 Gr. 36 anchor bolts and A307A bolts, nuts to be ASTM A563A.
6. All fabricated steel to be powder coated; color selected by owner.
7. Hardware (bolts, nuts, washers, etc.) to be hot-dipped galvanized (HDG). Shop to verify hole tolerances and tolerances of threaded parts for compatibility of the galvanized parts only.

ERECTION NOTES:
All steel members must be properly braced until the complete structural system has been constructed. Correction of minor misfits and a reasonable amount of reaming or alignment with drift pins will be considered a legitimate expense of erection.

In the event of error, defect in materials, and/or workmanship of shop work which prevents proper assembling and fitting up of parts by the moderate use of drift pins, or reaming, immediately report to the seller and obtain seller's approval of the method of correction.

Predrill wood for screws and nails if necessary to avoid splitting.

Bolts to be snug tight. Torque measurement is not required.

NOTE: This building has been designed as a free standing, open structure. If walls are to be added, or if the building is to adjoin another structure, or if other modifications are to be made, the structure must be re-engineered prior to these modifications (by others).

DESIGN CRITERIA:
2006 International Building Code w/ Amendments
Type of Construction: Type III-B
Occupancy Classification: Assembly A-3
Building Occupancy Category II
Mean Roof Height = 13'-3"
Building Area = 1,550 ft^2
Building Volume = 20,200 ft^3
No. of Occupants = 103 (15 ft^2 gross)

ROOF DL
Metal Roofing 1.2 psf
Underlayment 0.1
2" Nom. T&G Deck 4.4
Misc. 1.3
Total = 7 psf + weight of framing

FLOOR LL
L = 100 psf

ROOF LL
L_r = 20 psf

ROOF SL
P_g = 10 psf (Ground Snow)
$P_f = 0.7*P_g*C_e*C_t*I_S$
$C_e = 1.0$, $C_t = 1.2$, $I_S = 1.0$
P_f = 8.4 psf
$P_s = P_f*C_s$
6:12 pitch: $C_s = 1.0$, P_s = 8.4 psf

WIND LOAD
V_{asd} = 90 mph (3 sec. gust)
Exposure 'D', Open Building w/ $GC_{pi} = 0$, $I_W = 1.0$
Component & Cladding Ultimate Wind Pressures: See ROOF PLAN on this sheet.

SEISMIC
$I_E = 1.0$
$S_S = 0.307$, $S_1 = 0.104$
Site Class C
$S_{DS} = 0.245$, $S_{D1} = 0.118$
Seismic Design Category C
Equivalent Lateral Force Procedure
Cantilevered Column Systems - Steel ordinary cantilever column system
$R = 1.25$, $C_S = 0.196$, $\rho = 1.0$, V = 8,000#

DESIGN CERTIFICATION FOR:

BUILDING SIZE: 30' x 59'
BUILDING LOCATION: GUNTERSVILLE, AL

THIS CERTIFICATION OF DRAWINGS IS FOR THE ONE BUILDING ONLY AT THE SITE LISTED ABOVE. IT IS VALID ONLY IF THE MATERIALS SHOWN ON THESE DRAWINGS ARE FURNISHED BY RCP SHELTERS, INC. AND ONLY IF MATERIALS ARE PAID FOR IN FULL.

IF MODIFICATION IS MADE WITHOUT EXPRESSED WRITTEN CONSENT OF RCP SHELTERS, INC., OR IF PAYMENT IS NOT MADE IN FULL, THEN CERTIFICATION BECOMES NULL & VOID.

ALABAMA LICENSED No. 31562 PROFESSIONAL ENGINEER DANIEL P. SEYMOUR
12/4/23

TS-G3059-2T-RE-06-TG

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GUNTERSVILLE, AL

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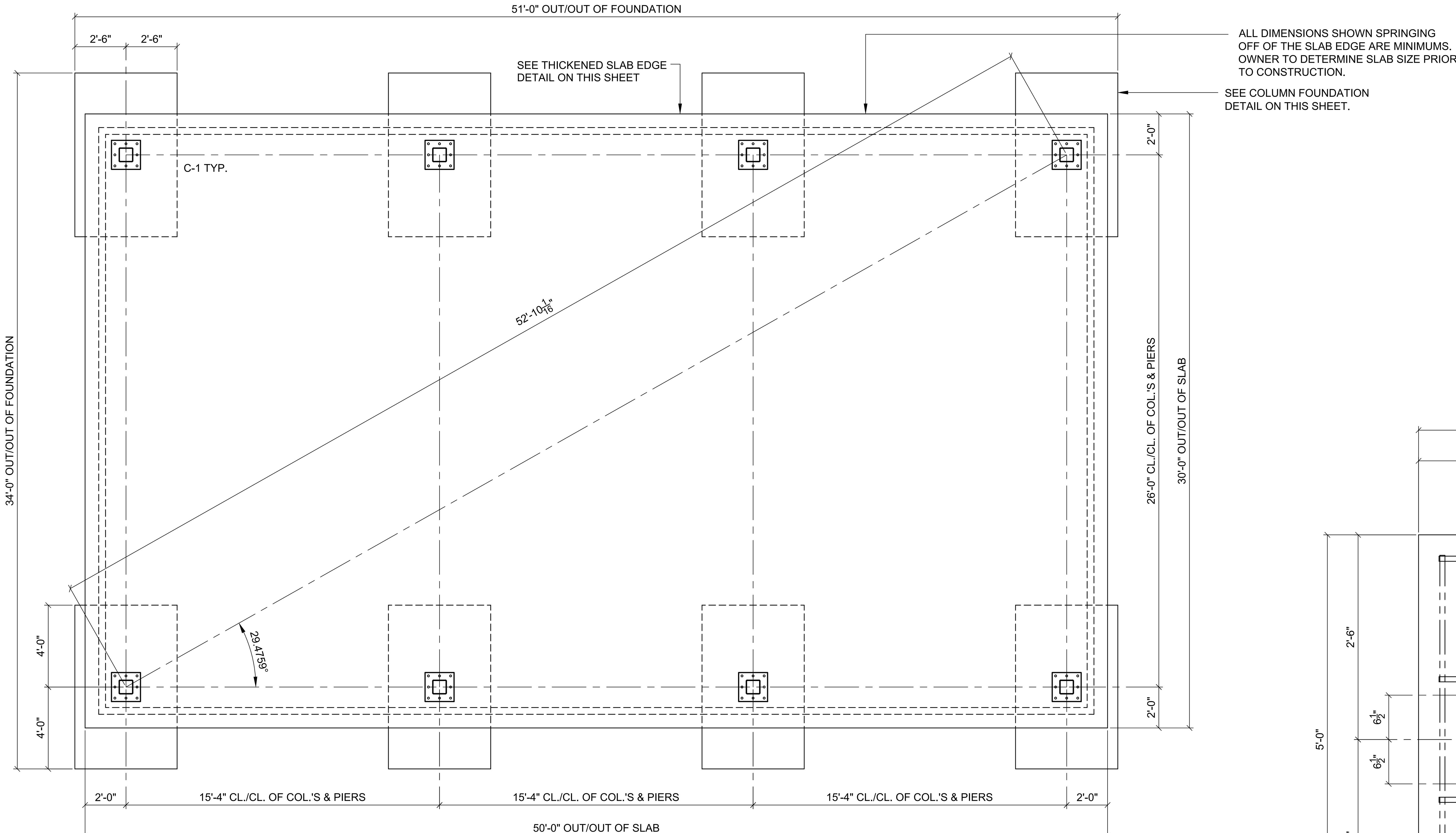
www.rcpshelters.com E-mail - info@rcpshelters.com

PROJ. NO.: 23-199-B

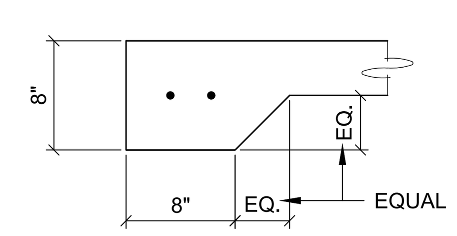
DRAWN:	DPP	10-19-23
CHK'D:	JCS	10-24-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:		14837R1
EEC JOB NO.:		14837 R

SHEET NO.: 1 OF 6



FOUNDATION PLAN

SCALE: 1/4" = 1'-0"



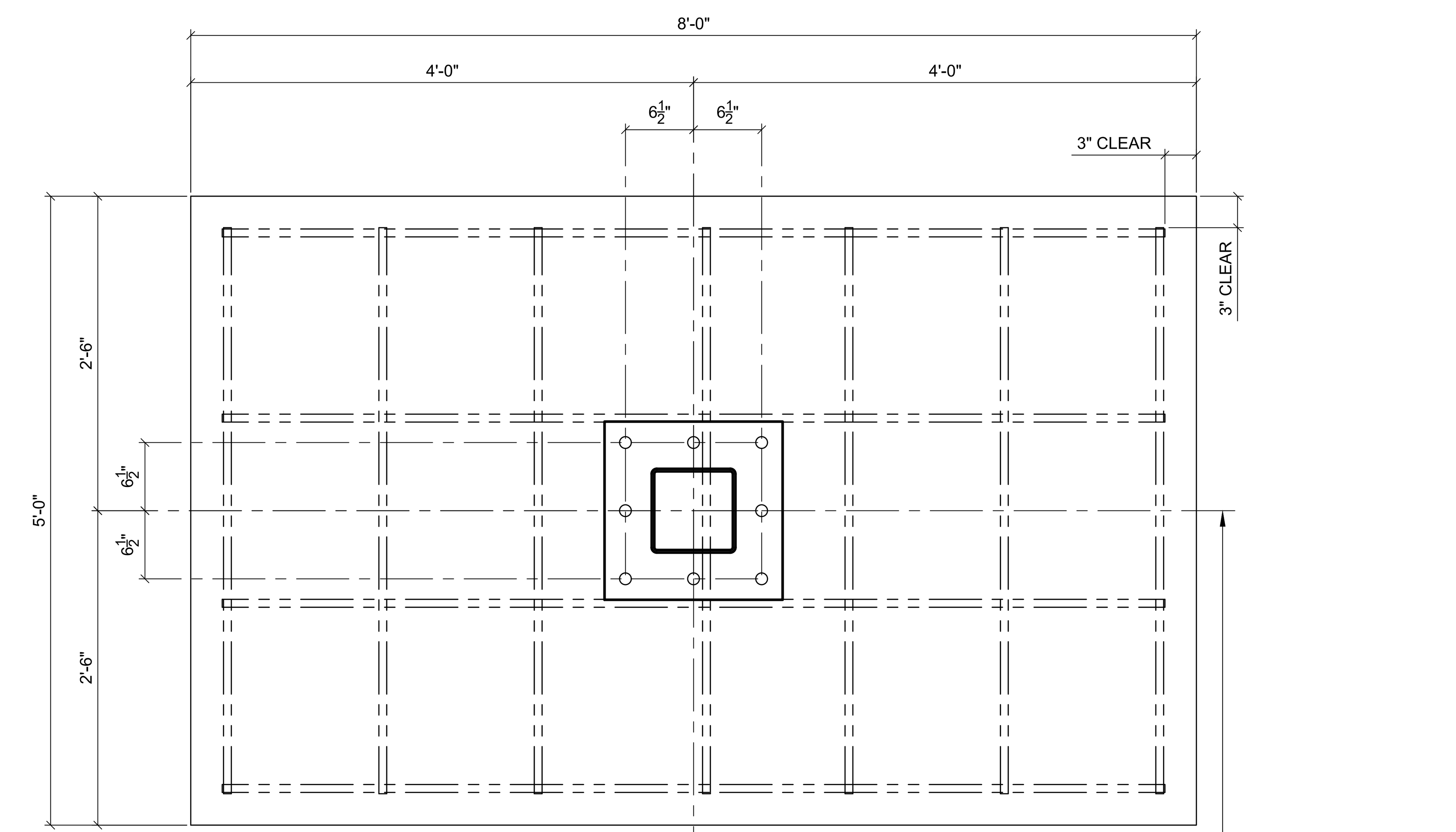
THICKENED SLAB EDGE DETAIL

CONCRETE NOTES:

1. Remove all organic material and topsoil from slab area. Verify suitability of subgrade. Footings are to bear on undisturbed, natural soil or engineered fill. Both are to be compacted to 95% Proctor density.
2. Prepare slab with min. 8" compacted sand, gravel, or crushed rock.
3. Concrete slab to be 4" thick. Reinforce slab with 6x6-w1.4xw1.4 welded wire fabric at mid-depth. Lap splices 8". Alt.: Fiber mesh admixture (min. 1.5#/c.y., fibrillated polypropylene).
4. Edge of slab to be thickened to min. 8" deep x 8" wide reinforced with 2-#4 continuous rebars. Lap splices min. 24".
5. In locations subject to frost, install isolation joint, max. 1/8" wide, around column piers using diamond or circular layout. Wire mesh shall be interrupted at isolation joints.
6. Install crack control joints (3/16" wide x 1" deep) at 8' to 12' o.c.
7. Concrete slabs in open areas are to be sloped for drainage from center to edge and away from columns. Surface is to be lightly broomed or have a wood troweled finish.
8. Concrete slabs in enclosed areas are to have positive drainage to floor drains and have a troweled finish.
9. Concrete slab, foundation, re-bar, wire mesh, leveling nuts, grout & anchor bolts (if required) are N.I.C.
10. All concrete reinforcing steel to be grade 60, deformed bars.
11. F'_c of concrete to be 4000 psi @ 28 days for foundation. F'_c of concrete to be 3500 psi @ 28 days for slab, air-entrained.
12. All concrete work to be in accordance w/ latest ACI code.
13. Assumed allowable soil bearing pressures: 2500 psf vertical bearing (per Geotech Report), 150 pcf passive lateral bearing. It is the Owner's responsibility to verify that the allowable soil bearing values at the site meet or exceed these assumed values. If the actual values are lower than the assumed values, the foundations must be redesigned (N.I.C.).
14. Leveling nuts have been shown under column base plate. Adjust leveling nuts as required to ensure all column bases are at the same elevation. Fill void between column base plate and top of foundation with non-shrink grout.
15. Grout shall be non-shrink, non-metallic, factory pre-mixed grout in accordance with ASTM C1107 with F'_c of not less than 9,000 psi.
16. Reinforcement shall be securely held in place while placing concrete. If required, additional bars, stirrups or chairs shall be provided to furnish support for bars.

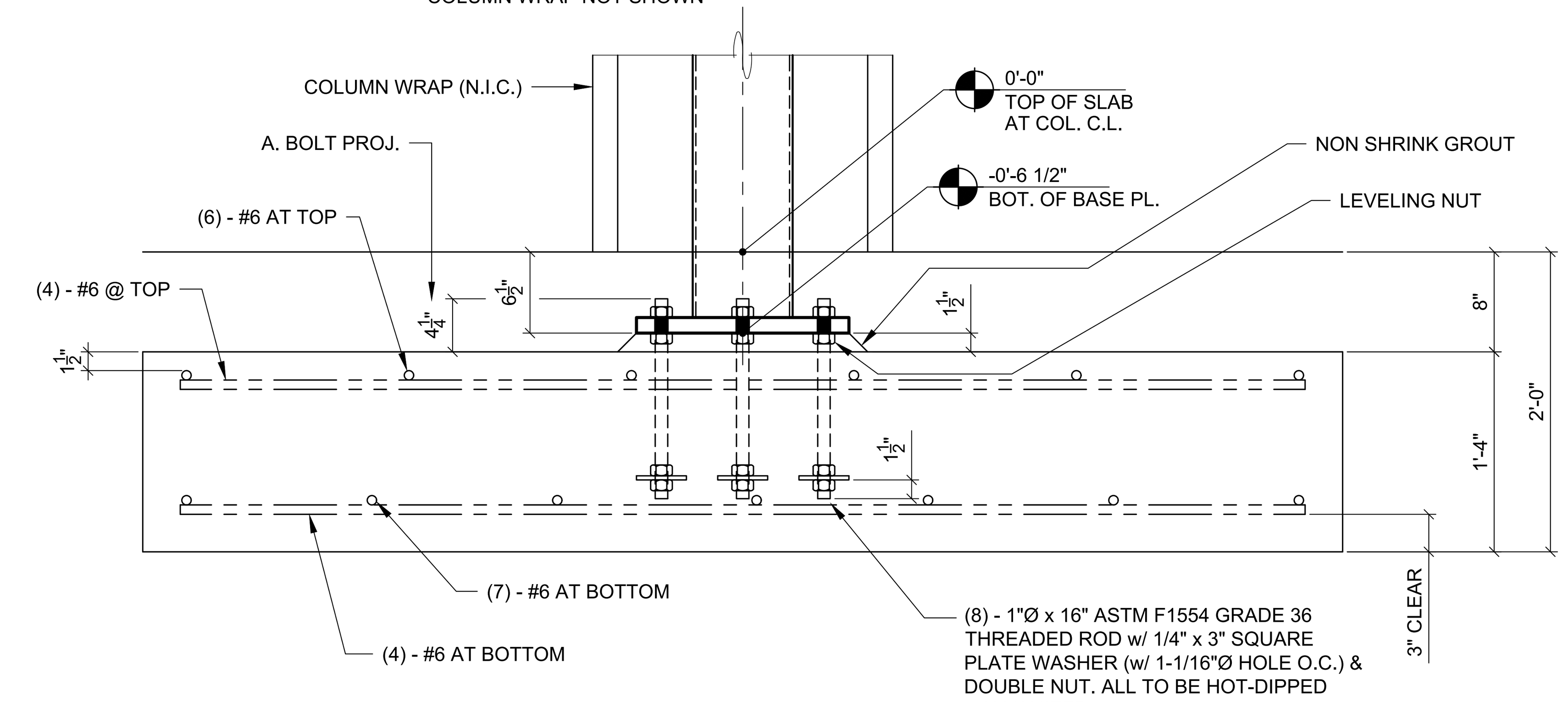
ELECTRICAL CONDUIT NOTE:

If electrical access is required; install conduit in foundation and align with access hole in column base plate. Coordinate with electrical contractor.



PLAN

COLUMN WRAP NOT SHOWN



COLUMN FOUNDATION DETAIL

COLUMN BASE REACTIONS:

$V_{DL+3/4(Lr+WL)}$ = 11,650# (INCLUDES 2,000# COLUMN WRAP WEIGHT)

$V_{0.6*DL+WL\ UPLIFT}$ = -700#

$V_{DL+3/4(Lr+WL)}$ = 3,800#

$M_{O.T.\ DL+3/4(Lr+WL)}$ = 33,700#-ft

ALABAMA LICENSED No. 31562 PROFESSIONAL ENGINEER DANIEL P. SEYMOUR

12/4/23

TS-G3059-2T-RE-06-TG
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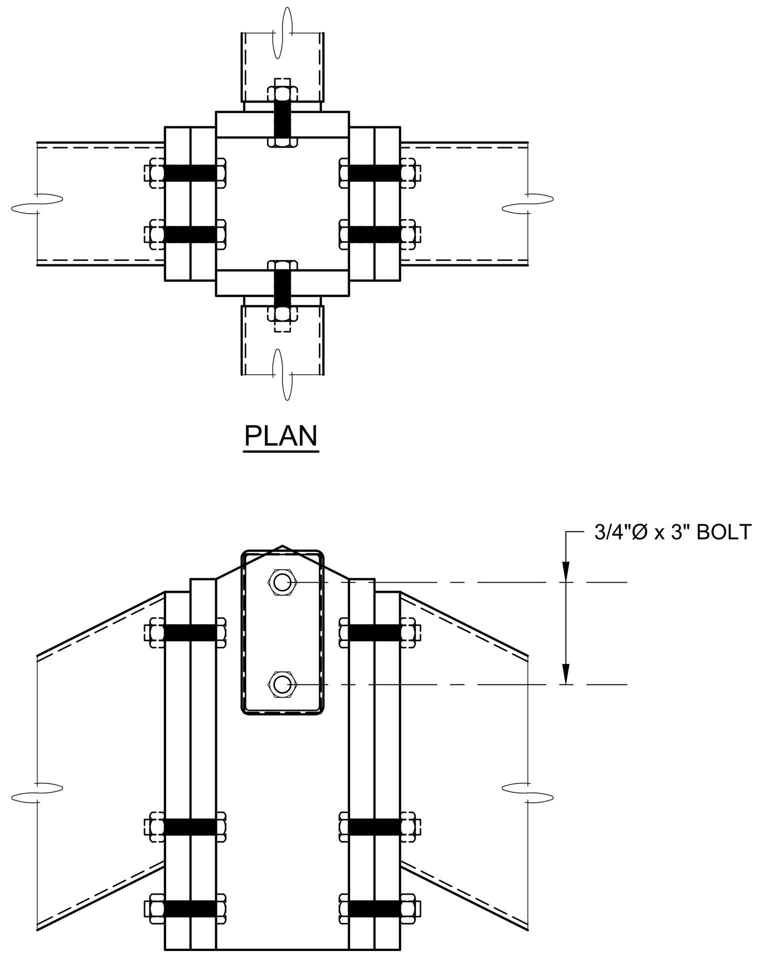
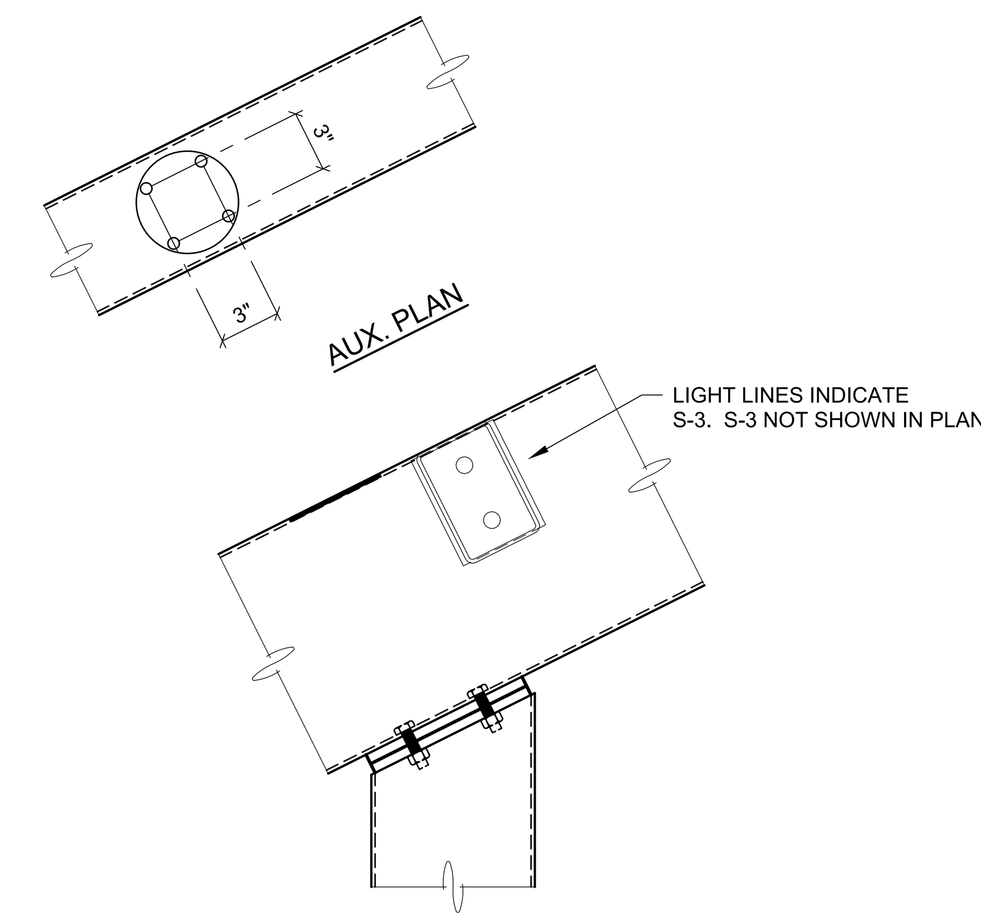
PROJ. NO.:	23-199-B	
DRAWN:	DPP	10-19-23
CHK'D:	JCS	10-24-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14837R2	
EEC JOB NO.:	14837 R	
SHEET NO.:	2 OF	



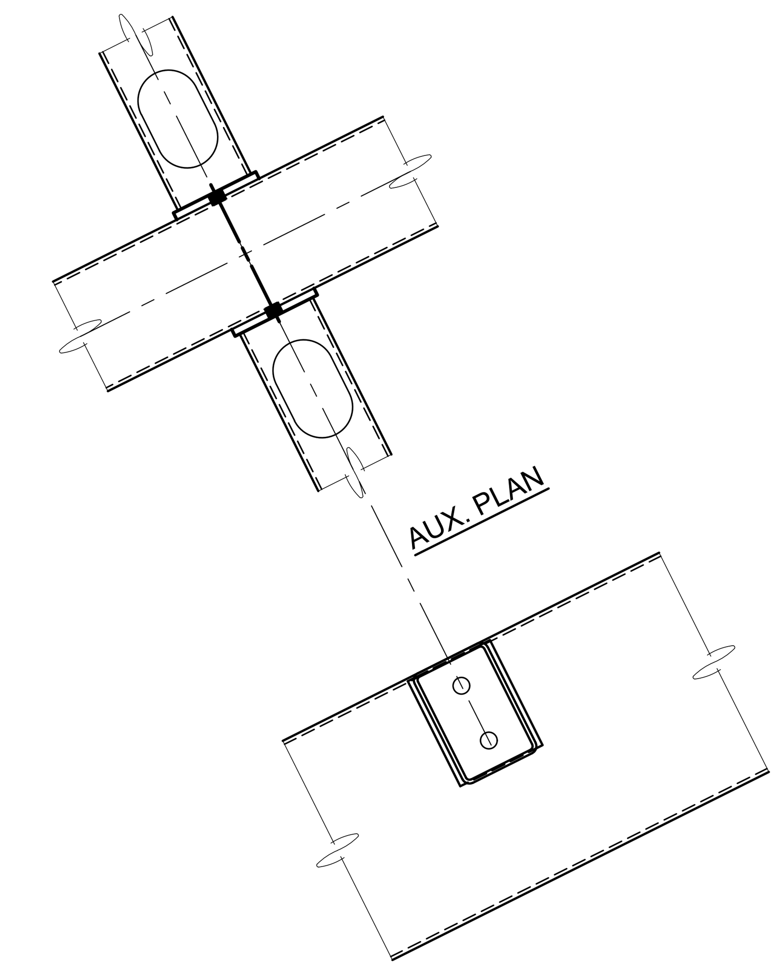
CONN S-1 4-req'd.

- 1 - MK-100 WELDED ASSEMBLY
- 4 - 3/4"Ø x 3" BOLT (WITHOUT NUT)
- 8 - 3/4"Ø x 3 1/2" BOLT (WITHOUT NUT)
- 4 - 3/4"Ø x 3 1/2" BOLT
- 4 - 3/4"Ø HEX NUT



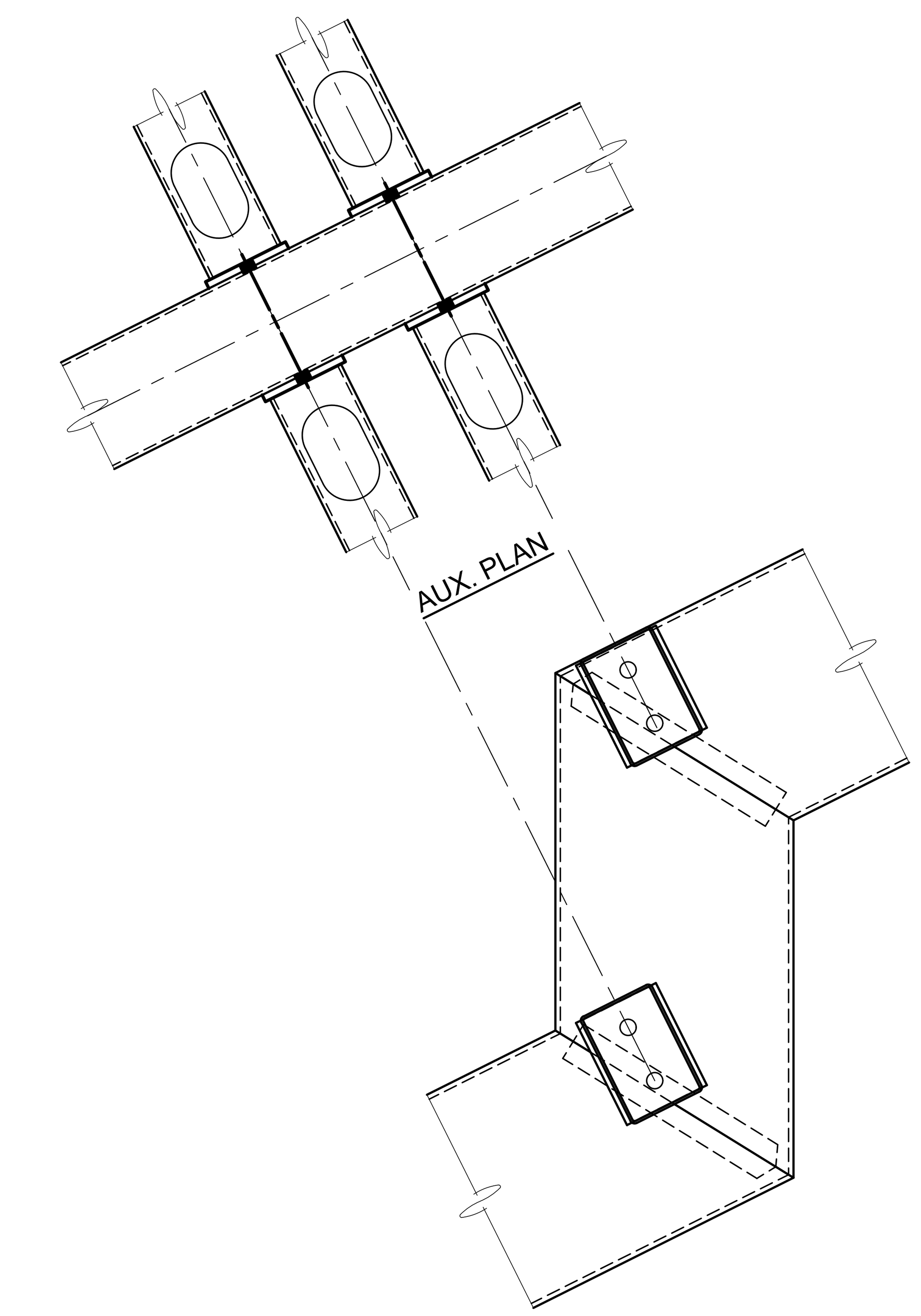
CONN S-2 8-req'd.

- 4 - 1/2"Ø x 2" BOLT (WITHOUT NUT)



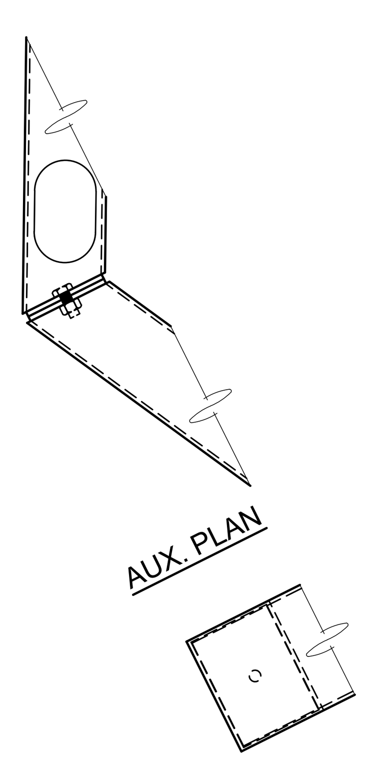
CONN S-3 16-req'd.

- 2 - 3/4"Ø x 8" BOLT
- 2 - 3/4"Ø HEX NUT



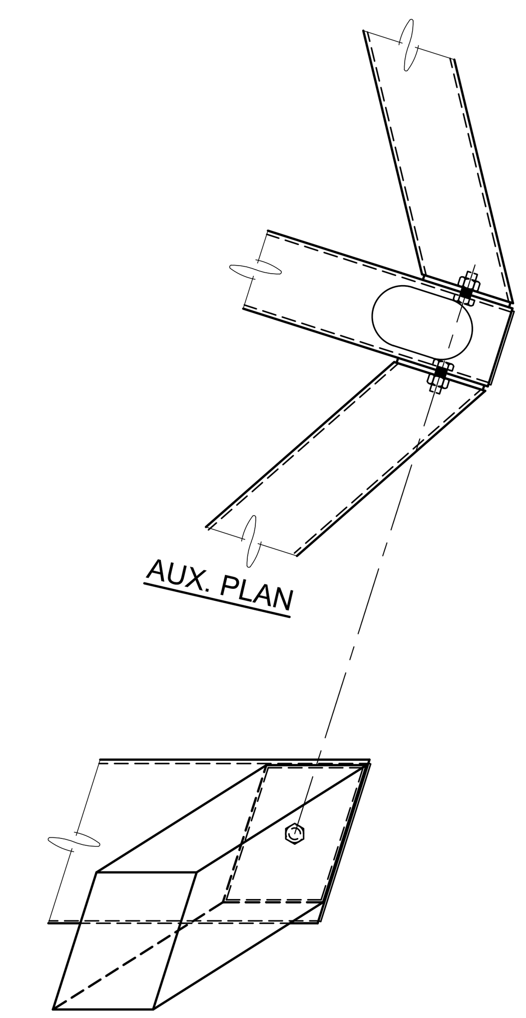
CONN S-4 8-req'd.

- 4 - 3/4"Ø x 8" BOLT
- 4 - 3/4"Ø HEX NUT



CONN S-5 4-req'd.

- 1 - 1/2"Ø x 1 1/4" BOLT (WITHOUT NUT)



CONN S-6 2-req'd.

- 2 - 1/2"Ø x 1 1/4" BOLT (WITHOUT NUT)

HARDWARE PARTS LIST

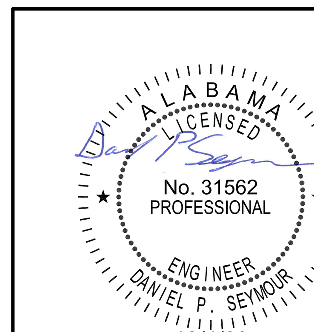
QUANTITY	LOOSE OR ATTACH	HARDWARE DESCRIPTION	PART NO.	REMARKS
8	L	1/2"Ø x 1 1/4" BOLT	H325G 050 0125	
32	L	1/2"Ø x 2" BOLT	H325G 050 0200	
40	A	1/2"Ø HEX NUT	HN325G 050-13	
16	L	3/4"Ø x 3" BOLT	H325G 075 0300	
48	L	3/4"Ø x 3 1/2" BOLT	H325G 075 0350	
64	L	3/4"Ø x 8" BOLT	H325G 075 0800	
48	A	3/4"Ø HEX NUT	HN325G 075-10	
80	L	3/4"Ø HEX NUT	HN325G 075-10	
1916	L	1/4"-20 x 2 3/4" THREAD CUTTING SCREW	HTCSF 025 0275	#1
-	L	10d HDG CASING NAIL (0.128"ø x 3")	-	N.I.C., HDG
-	L	16d SINKER NAIL (0.148"ø x 3 1/4")	-	N.I.C.
64	L	1"Ø x 16" (F1554 GR. 36) THREADED ROD	-	N.I.C., HDG
64	L	1/4" x 3" SQ. WASHER	-	N.I.C., HDG
256	L	1"Ø HEX NUT A563A (ANCHOR & LEVELING)	-	N.I.C., HDG

HARDWARE NOTES:

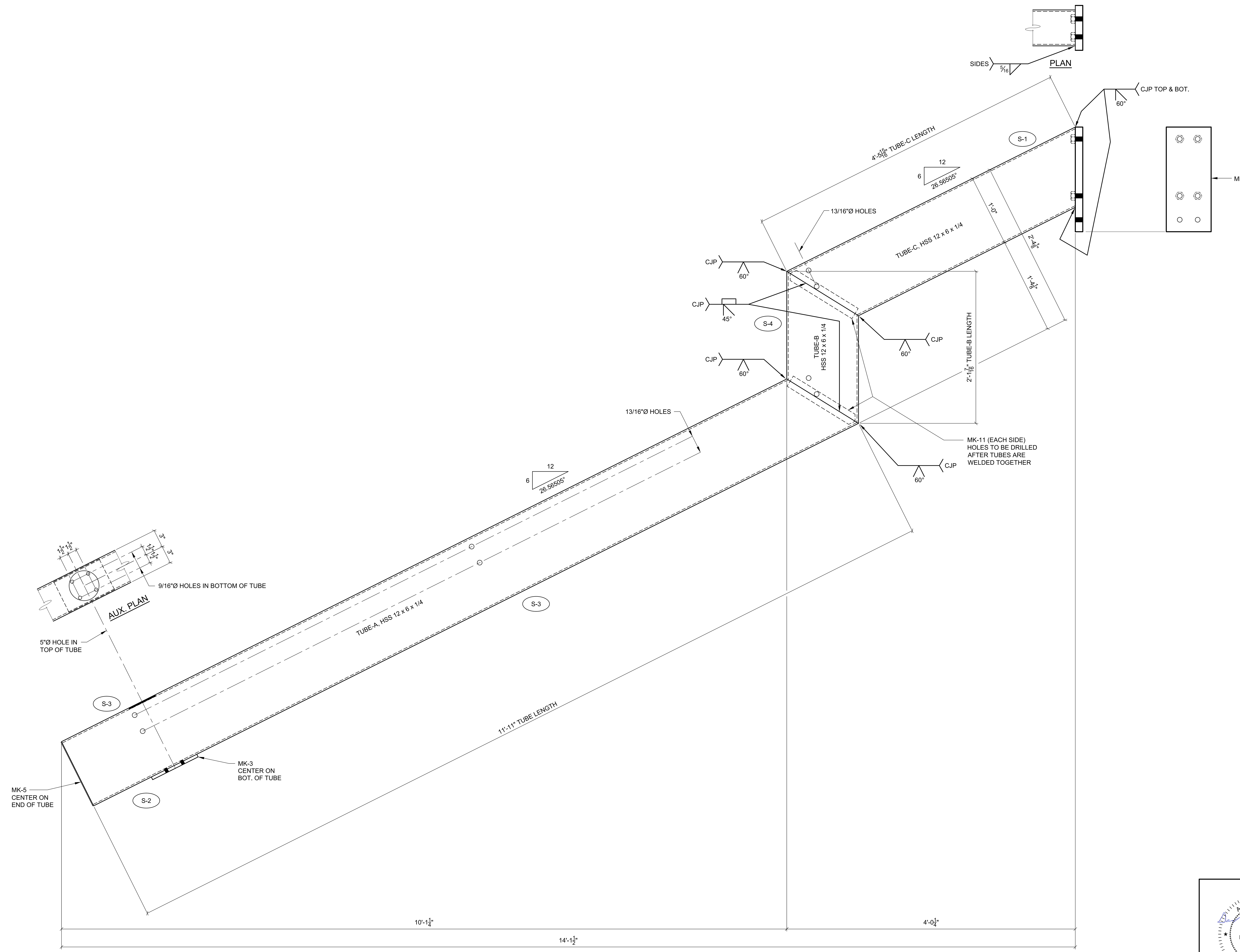
1. ALTERNATE FASTENERS ALLOWED. SEE TYPICAL WOOD DECK ATTACHMENT NOTE ON SHOP DRAWINGS.

TS-G3059-2T-RE-06-TG
GUNTERSVILLE PARK
GUNTERSVILLE, AL

RCP SHELTERS, INC.
2100 SE RAYS WAY, STUART, FL 34994 PO BOX 25, STUART, FL 34995 - 0025
■ SHELTERS ■ PAVILIONS ■ CONCESSIONS ■ KIOSKS ■ FABRIC SHADE
■ RESTROOMS ■ BANDSHELLS ■ MINI-SHELTERS ■ DUGOUTS ■ FABRIC SAIL
Phone 772-288-3600 Fax 772 - 288 - 0207
www.rcpshelters.com E-mail - info@rcpshelters.com



PROJ. NO.:	23-199-B	
DRAWN:	DPP	10-19-23
CHK'D:	JCS	10-24-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14837R3	
EEC JOB NO.:	14837 R	
SHEET NO.:	3 OF	



BEAM B-1 8-req'd.

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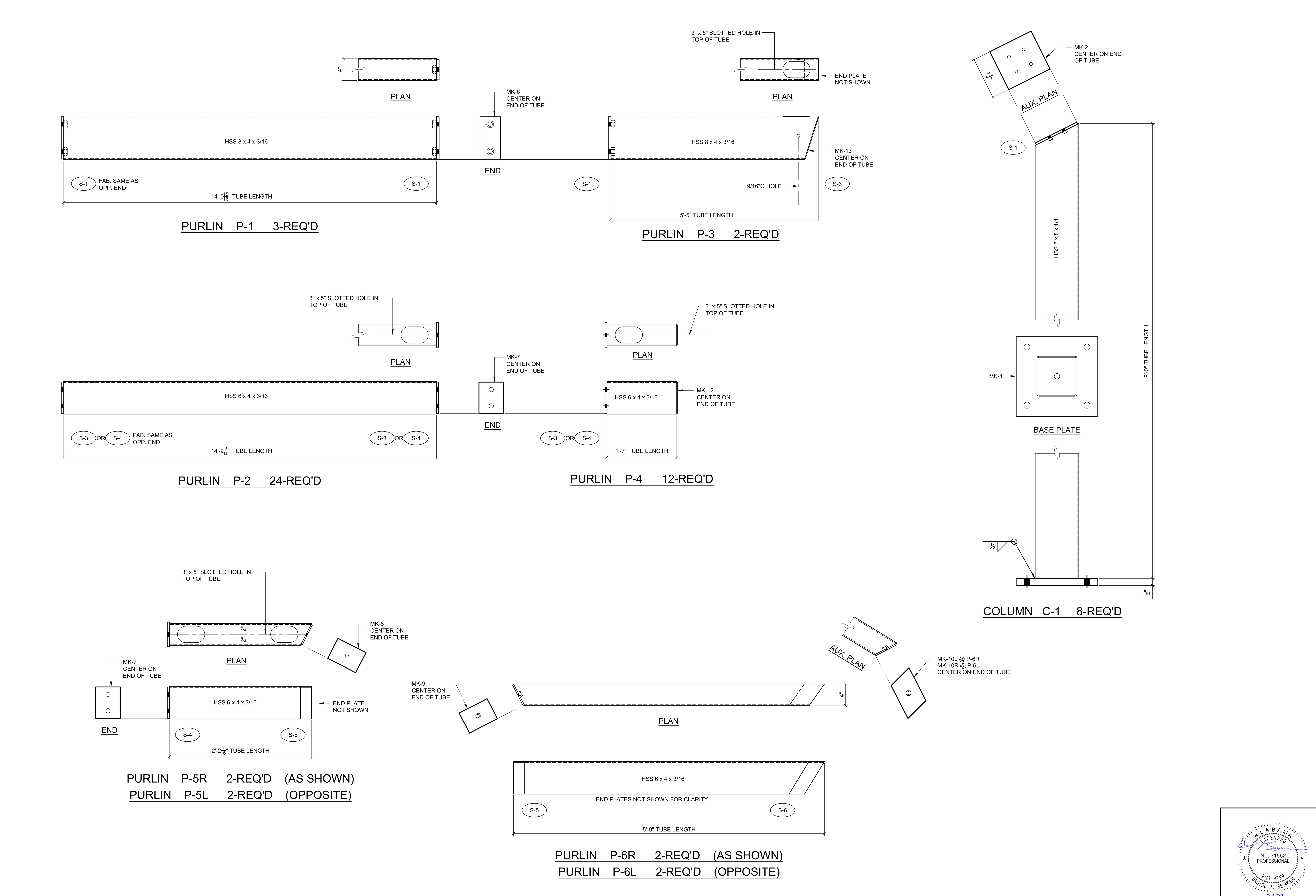
ALABAMA LICENSED No. 31562 PROFESSIONAL ENGINEER DANIEL P. SEYMOUR 12/4/23

PROJ. NO.: 23-199-B		
DRAWN:	DPP	10-19-23
CHK'D:	JCS	10-24-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:		14837R4
EEC JOB NO.:		14837 R
SHEET NO.: 4 OF		



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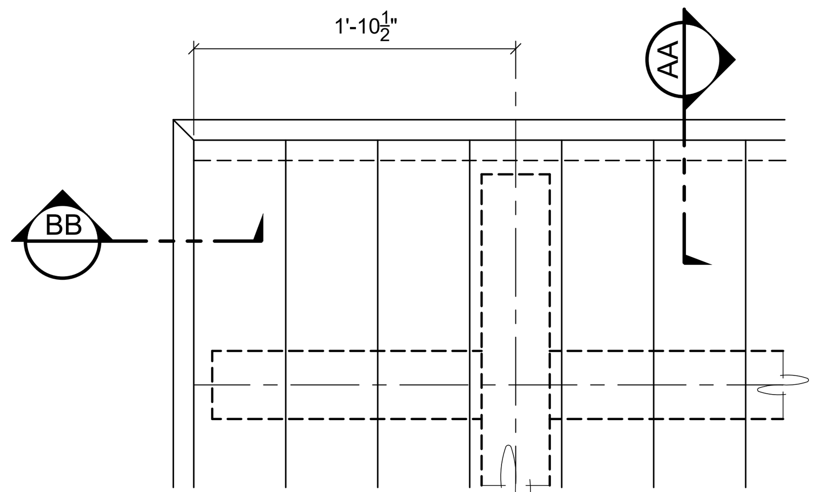
PROJ. NO.: 23-199-B		
DRAWN:	DPP	10-19-23
CHK'D:	JCS	10-24-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:		14837R5
EEC JOB NO.:		14837 R
SHEET NO.:	5 OF	

TYPICAL DECK LAY-UP

1. START LAYING DECK AT RAKE W/ TONGUES OUT.
2. DRIVE COURSES TIGHT W/ BLOCKING.
3. ATTACH DECKING PER DETAILS ON THIS SHEET.
4. SNAP CHALK LINE AT BUILDING EAVE & CUT DECKING STRAIGHT AND SQUARE.
5. DECKING IS FURNISHED IN SPECIFIED LENGTHS.



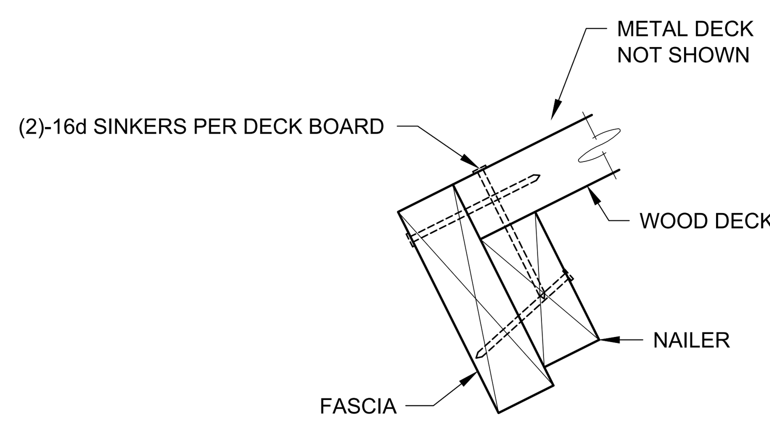
DECK PLAN AT CORNERS

FASCIA NOTES:

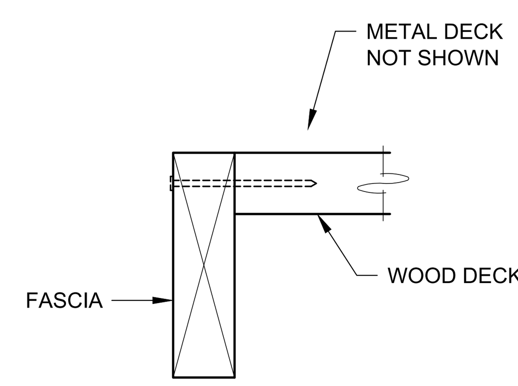
1. ALL FASCIA CORNERS AND SPLICES ARE TO BE MITERED.
2. SEE DETAIL A FOR SPLICE DETAIL, IF SPLICE IS REQUIRED.
3. ATTACH FASCIA WITH 10d HDG CASING NAILS:
   a. TO 2x4 NAILER - 24" O.C.
   b. TO ENDS OF ROOF DECKING - 1 NAIL PER DECK BOARD
   c. AT CORNERS - 2 NAILS EACH DIRECTION
   d. OTHER LOCATIONS - 24" O.C. TO ROOF DECKING

2 x 4 NAILER (IF SPLICE REQ'D)

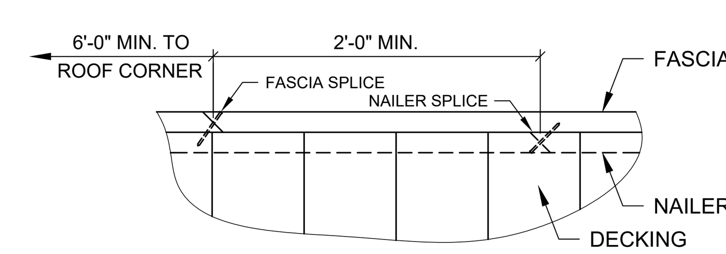
A. MITER ALL SPLICES
B. NAIL SPLICES TOGETHER WITH (2) 10d HDG CASING NAILS, DRIVE NAILS AT AN ANGLE TO AVOID PUNCHING THRU FASCIA.



SECTION AA



SECTION BB

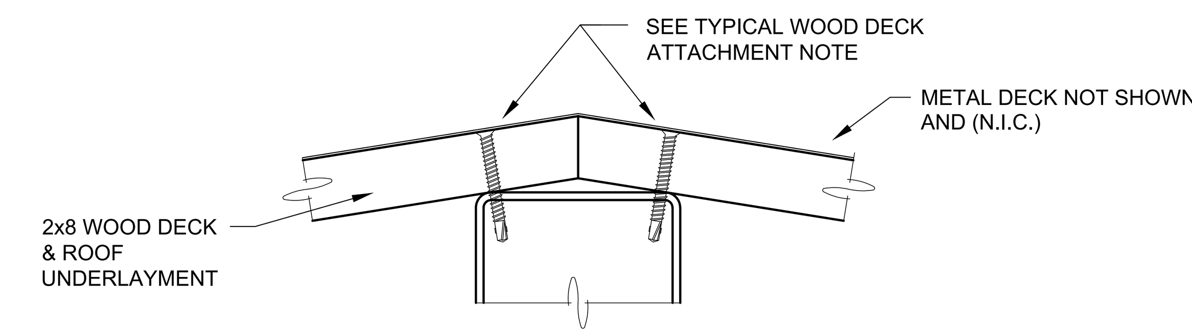


DETAIL A

UNLOADING, HANDLING & STORAGE OF DECKING

DECKING WILL BE DELIVERED IN BANDED BUNDLES, WEIGHING APPROXIMATELY TWO TONS. BUNDLES SHOULD REMAIN BANDED UNTIL DECK IS TO BE INSTALLED. A FORKLIFT OR SMALL CRANE WILL BE REQUIRED FOR UNLOADING. BE SURE TO USE NON-MARRING SLINGS. IF STORED TEMPORARILY, DECK SHOULD BE PLACED ON BLOCKS & LEVELED, WELL OFF OF THE GROUND. IF WOOD DECKING IS WET &/OR STAINED, CONTACT RCP SHELTERS AND DO NOT INSTALL DECK.

IT IS THE ERECTORS RESPONSIBILITY TO TALLY THE DECKING UPON ARRIVAL. NOTIFY "RCP SHELTERS" AT ONCE OF ANY SHORTAGES.



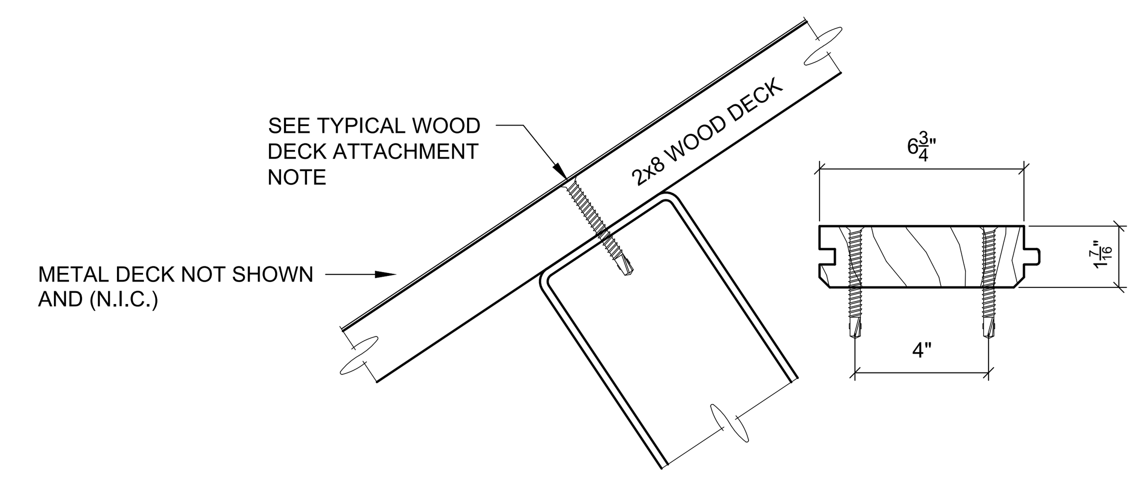
DECK ATTACHMENT @ RIDGE BEAM

SECTION AT RIDGE BEAM

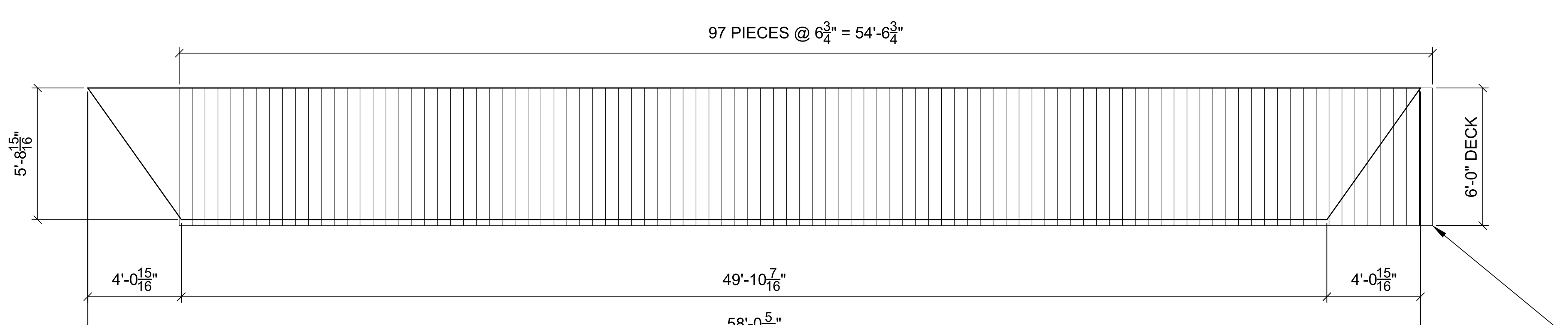
THE ACTUAL ROOF PITCH MAY VARY FROM THIS GENERAL DETAIL.

TYPICAL WOOD DECK ATTACHMENT NOTE

ATTACH EACH PIECE OF DECK TO EACH SUPPORT WITH (2) ¼"-20 x 2¾" SELF-DRILLING SCREWS. DRILL PILOT HOLES AS REQ'D.
ALTERNATE FASTENERS ALLOWED:
1. HILTI X-U 52 (2" LONG) FASTENERS.
2. RAMSET 1514 (2" LONG) FASTENERS.
FASTENERS MUST BE INSTALLED WITH A MANUFACTURER APPROVED FASTENING TOOL.
FASTENERS MUST PENETRATE TOP WALL OF TUBES.

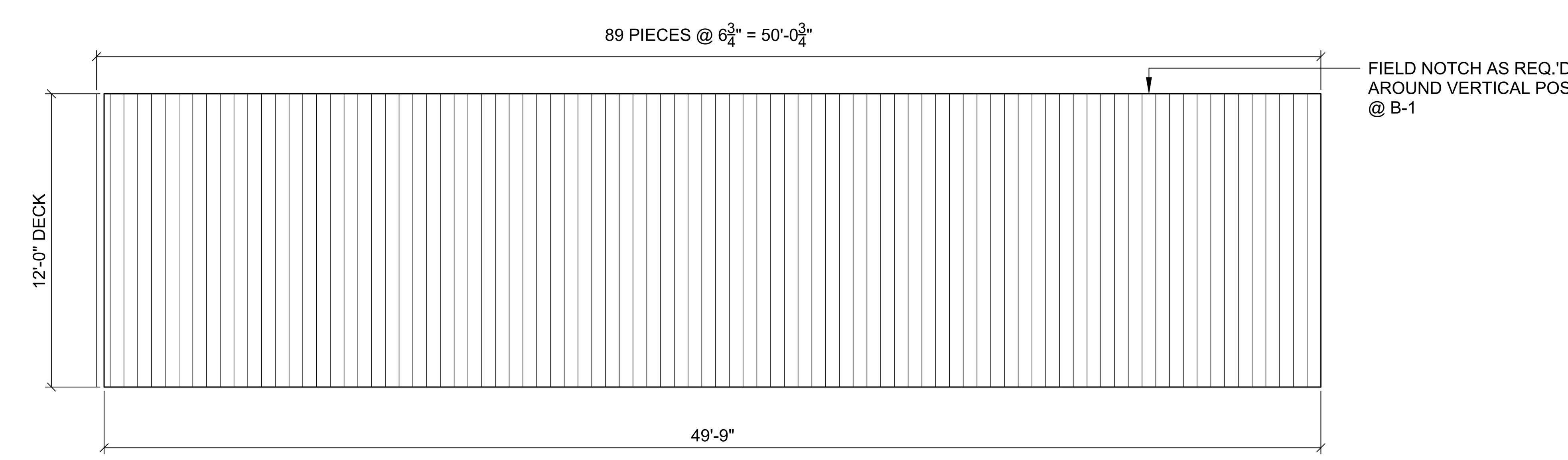


DECK ATTACHMENT DETAIL @ BEAM



TRUE HIGH WOOD ROOF DECK PLAN 2-req'd.

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



TRUE LOW WOOD ROOF DECK PLAN 2-req'd.

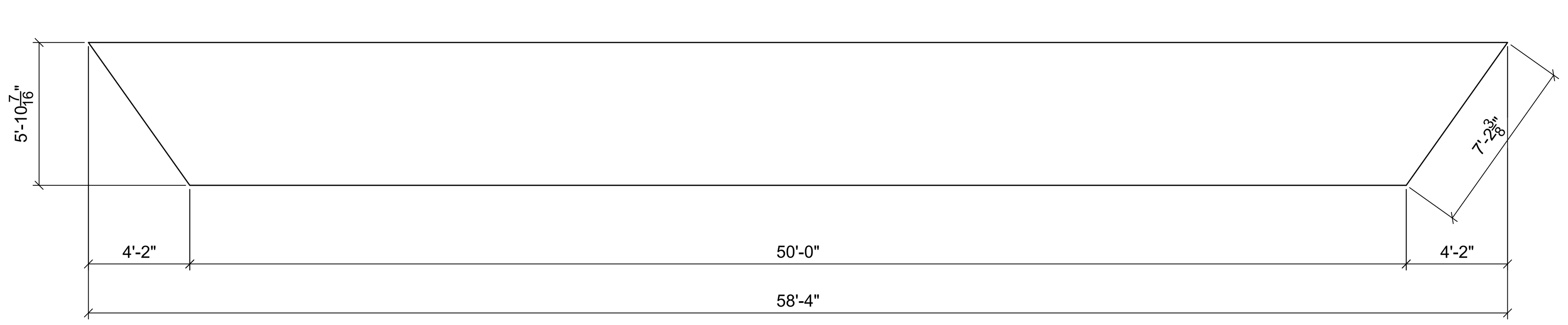
SCALE: 3/16" = 1'-0"

METAL DECK SUPPLIER NOTE:

STANDING SEAM METAL ROOF PLANS HAVE BEEN FIGURED FLUSH WITH EXTERIOR FACE OF FASCIA. INSTALLER OF ROOF PANELS TO DETERMINE NECESSARY OVERHANG IF REQUIRED AND ADD LENGTH TO THE ROOF PANELS AS REQUIRED.

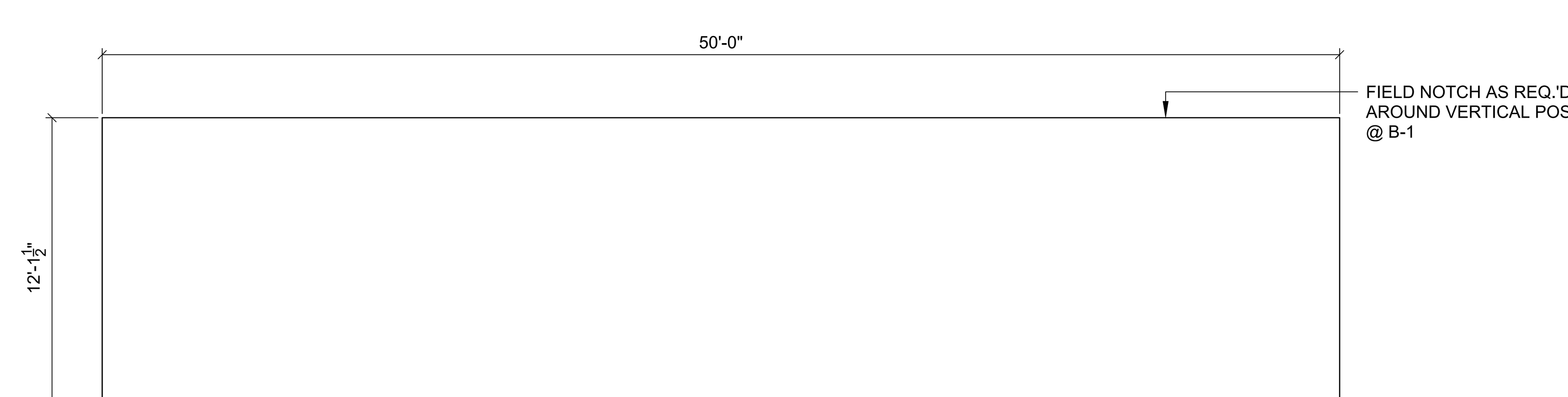
METAL DECK NOTE:

METAL DECK SUPPLIER TO DETERMINE ALL OVERHANGS, REQUIRED FLASHING & ROOFING CAPS.



TRUE HIGH METAL ROOF DECK PLAN 2-req'd.

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



TRUE LOW METAL ROOF DECK PLAN 2-req'd.

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

ALABAMA LICENSED No. 31562 PROFESSIONAL ENGINEER DANIEL P. SEYMOUR
12/4/23

TS-G3059-2T-RE-06-TG
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GUNTERSVILLE, AL

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PROJ. NO.:	23-199-B	
DRAWN:	DPP	10-19-23
CHK'D:	JCS	10-24-23
REV 1:		
REV 2:		
REV 3:		
REV 4:		
SHOP DWG NO.:	14837R6	
EEC JOB NO.:	14837 R	
SHEET NO.:	6 OF 6	

ENTERPRISE ENGINEERING
CONSULTANTS, LTD.
710 French St.
P.O. Box 163
Peshtigo, WI 54157
Ph: 715-582-4501
Fax: 715-582-4975
info@eecltd.com
www.eecltd.com

- Engineering
- Glulam, Heavy Timber Design & Shop Drawings
- Complete Building Design

Project			
TS-G3059-2T-RE-06-TG Guntersville, AL		Sheet 1 of 119	
Job No. 14837 R	Ckd.	Init.	DPS
Client No. 23-199-B	Rev.	Date	12-7-23

CLIENT --- RCP Shelters, Inc.

ARCHITECT-

DESIGN STD. 2005 NDS, AITC 117-2004, AISC 360-05, ACI 318-05

MATERIAL: Tubes - A500 Grade C — T&G Wood Roof Deck - Southern Pine

Plates - ASTM A572 Grade 50 — Bolts - A325 (Except A.B.'s)

Soil Bearing-2500 psf Vert. Bearing (Per Geotech) & 150 pcf Lateral Bearing (Presumed)

Concrete - F'c = 4000 psi @ Foundation; F'c = 3500 psi @ Slab

DESIGN CRITERIA:
2006 International Building Code w/ Amendments
Type of Construction: Type III-B
Occupancy Classification: Assembly A-3
Building Occupancy Category II
Mean Roof Height = 13'-3"
Building Area = 1,550 ft^2
Building Volume = 20,200 ft^3
No. of Occupants = 103 (15 ft^2 gross)

ROOF DL

Metal Roofing	1.2 psf
Underlayment	0.1
2" Nom. T&G Deck	4.4
Misc.	1.3
Total =	7 psf + weight of framing

FLOOR LL
L = 100 psf

ROOF LL
L_r = 20 psf

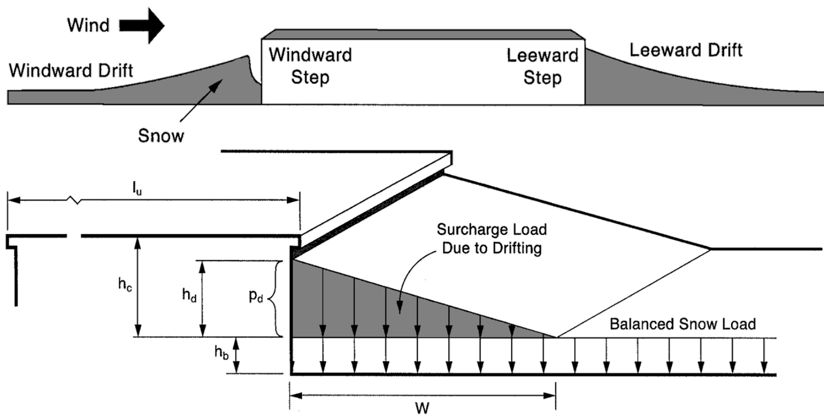
ROOF SL
P_g = 10 psf (Ground Snow)
$P_f = 0.7*P_g*C_e*C_t*I_S$
$C_e = 1.0$, $C_t = 1.2$, $I_S = 1.0$
P_f = 8.4 psf
$P_s = P_f*C_s$
6:12 pitch: $C_s = 1.0$, P_s = 8.4 psf

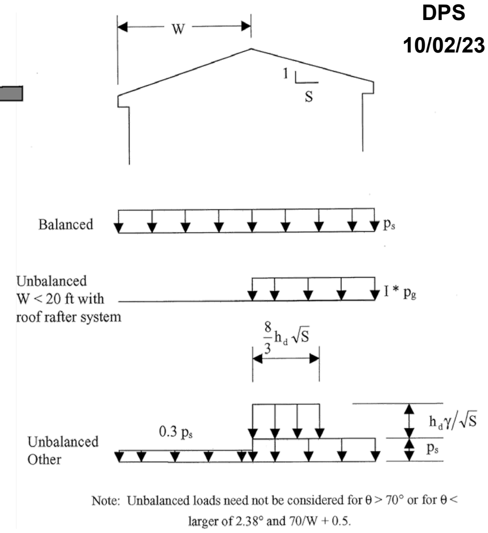
WIND LOAD
V_{asd} = 90 mph (3 sec. gust)
Exposure 'D', Open Building w/ $GC_{pi} = 0$, $I_W = 1.0$
Component & Cladding Ultimate Wind Pressures: See Sheet #7

SEISMIC
$I_E = 1.0$
$S_S = 0.307$, $S_1 = 0.104$
Site Class C
$S_{DS} = 0.245$, $S_{D1} = 0.118$
Seismic Design Category C
Equivalent Lateral Force Procedure
Cantilevered Column Systems - Steel ordinary cantilever column system
R = 1.25, $C_S = 0.196$, $\rho = 1.0$, V = 8,000#

ALABAMA LICENSED No. 31562 PROFESSIONAL ENGINEER DANIEL P. SEYMOUR
12/7/23

ASCE 7-05 SNOW DRIFTING





Enterprise Engineering Consultants, LTD.
710 French Street
Peshtigo, WI 54157

UNBALANCED SL

input GROUND SNOW	**Pg =**	**10**	(psf)	
input IMPORTANCE FACTOR	**I =**	**1.0**		(ASCE 7-05 Table 7-4)
input EXPOSURE FACTOR	**Ce =**	**1.0**		(ASCE 7-05 Table 7-2)
input THERMAL FACTOR	**Ct =**	**1.2**		(ASCE 7-05 Table 7-3)
input LOW ROOF PITCH	**Pitch =**	**6**		
input LEN.OF HIGH ROOF FOR LEEWARD DRIFT	**lu =**		(ft)	(HIGH ROOF LENGTH UPWIND OF LEEWARD DRIFT)
input LEN.OF LOW ROOF FOR WINDWARD DRIFT	**lu =**		(ft)	(LOW ROOF LENGTH UPWIND OF WINDWARD DRIFT)
input DIFFERENTIAL HEIGHT	**hr =**		(ft)	
input ROOF SURFACE TYPE		**TYPICAL**		
LOW ROOF SLOPE	**RS =**	26.57	(deg)	

****

input LEN. OF HIGH ROOF (EAVE TO RIDGE)	**W =**	**15**	(ft)	**(FOR UNBALANCED SNOW & SLIDING SNOW)**
	hd =	1.159	(ft)	**(FOR UNBALANCED SNOW)**
	S =	2		
	Low Slope Roof Angle =	5.17	(deg)	
				(HIP & GABLE ROOFS ONLY)
FLAT LOW ROOF SNOW Pf=0.7(Ce)Ct(I)Pg		**8.4**	(psf)	Pf(min.)=(I)Pg for Pg<=20 OR Pf(min.)=20(I) for Pg>20 when Roof Slope<=5.17
SLOPE ROOF SNOW Ps=Cs(Pf)		**8.40**	(psf)	
	Cs =	**1.000**		(See ASCE 7-05 Figure 7-2)
HEIGHT OF BASE SNOW				
hb=Ps/D		0.549	(ft)	
D=.13(Pg)+14 < 30		15.3	(pcf)	
hc=hr-hb		-0.549	(ft)	

****

"LEEWARD SNOW DRIFT"

HEIGHT OF SNOW DRIFT			WIDTH OF SNOW DRIFT				
0.43*(lu)^1/3*(Pg+10)^1/4-1.5=hd	hd =	0.000	(ft)	w =	0.00	(ft)	**w = 4*(0.43*(lu)^1/3*(Pg+10)^1/4-1.5)^2/(hc)**
(if lu <= 25 THEN lu=25)	lu =	25	(ft)				
(if hc<0.2(hb) then hd=0)							
(also hd<=(hc))	hc =	-0.549		hd =	0.00		

****

"WINDWARD SNOW DRIFT"

HEIGHT OF SNOW DRIFT			WIDTH OF SNOW DRIFT				
(0.43*(lu)^1/3*(Pg+10)^1/4-1.5)*0.75=hd	hd =	0.000	(ft)	w =	0.00	(ft)	**w = 4*((0.43*(lu)^1/3*(Pg+10)^1/4-1.5)*0.75)^2/(hc)**
(if lu <= 25 THEN lu=25)	lu =	25	(ft)				
(if hc<0.2(hb) then hd=0)							
(also hd<=(hc))	hc =	-0.549		hd =	0.00		

****

MAXIMUM INTENSITY

	Pb =	**8.4**	psf	
	Pd =	**0.0**	psf	hd = 0.00
		----------------		wd = **0.00**
Pm=D(hb+hd) BASE + DRIFT:	Pm =	**8.4**	psf	
	Sliding Snow =	**0.0**	psf	w = **15 (ft)**

****

UNBALANCED SNOW LOAD	**WS**	**LS**		
	0.3*Ps = **2.5 psf**	Ps = **8.4 psf**		
		hd*D/S^0.5 = **12.5 psf**	Length = 8/3*hd*S^0.5 =	**4.40** ft

OPEN BUILDING WIND PRESSURE FROM ASCE 7-05 (MWFRS)
(Gable Roof with 7.5º[θ[45º)
(0.25 [h/L [1.0)
$P = q_h*G*C_N$

Wind Flow	CLEAR	
Wind Speed	90	mph
Mean Roof Height (h)	11.5	ft
Roof Length (L)	30	ft
Importance	1.00	------------->
Roof Pitch	6	
Exposure Factor	D	
Kzt	1.00	Refer to 6.5.7
Kd	0.85	Table 6-4
Kz	1.03	
G	0.85	

Category	Non-Hurricane Prone Regions and Hurricane Prone Regions with V = 85-100 mph and Alaska	Hurricane Prone Regions with V > 100 mph
I	0.87	0.77
II	1.00	1.00
III	1.15	1.15
IV	1.15	1.15

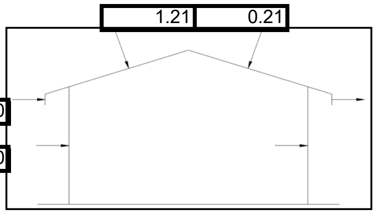
h/L = 0.38

MAIN ROOF

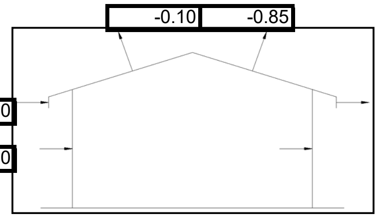
qz = 18.15 psf qz = 0.00256(Kz)Kzt(Kd)I(V)^2
Roof Angle = 26.5651 Degrees

C_N

PERPENDICULAR TO THE RIDGE

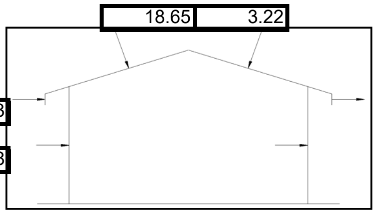
Roof: 1.21 | 0.21
Left: 1.00 / 1.80

Right: -0.80 / -1.80

CASE 'A'

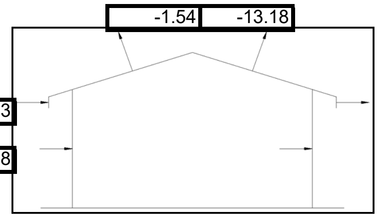
Roof: -0.10 | -0.85
Left: 1.00 / 1.80

Right: -0.80 / -1.80

CASE 'B'

PRESSURES (psf)

Roof: 18.65 | 3.22
Left: 15.43 / 27.78

Right: -12.34 / -27.78

CASE 'A'

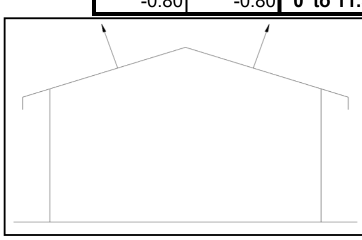
Roof: -1.54 | -13.18
Left: 15.43 / 27.78

Right: -12.34 / -27.78

CASE 'B'

C_N

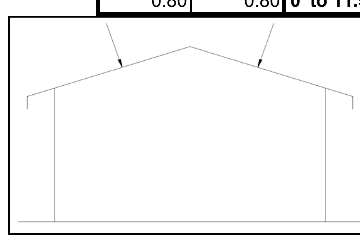
PARALLEL TO THE RIDGE

		Horz. Dist. From Windward Edge
-0.30	-0.30	> 23'
-0.60	-0.60	11.5' to 23'
-0.80	-0.80	0' to 11.5'



CASE 'A'

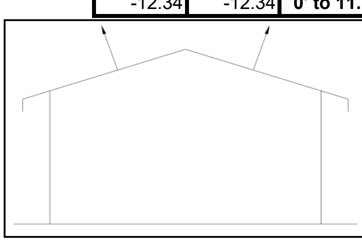
		Horz. Dist. From Windward Edge
0.30	0.30	> 23'
0.50	0.50	1.5' to 23'
0.80	0.80	0' to 11.5'



CASE 'B'

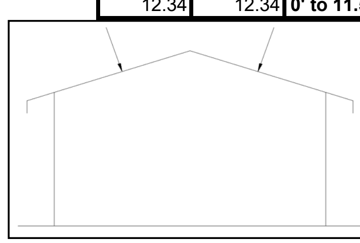
PRESSURES (psf)

		Horz. Dist. From Windward Edge
-4.63	-4.63	> 23'
-9.26	-9.26	11.5' to 23'
-12.34	-12.34	0' to 11.5'



CASE 'A'

		Horz. Dist. From Windward Edge
4.63	4.63	> 23'
7.72	7.72	1.5' to 23'
12.34	12.34	0' to 11.5'



CASE 'B'

OPEN BUILDING WIND PRESSURE FROM ASCE 7-05 (MWFRS)
(Gable Roof with $7.5^\circ \le \theta \le 45^\circ$)
($0.25 \le h/L \le 1.0$)
$P = q_h{*}G{*}C_N$

Wind Flow	**CLEAR**	
Wind Speed	**90**	mph
Mean Roof Height (h)	**16.5**	ft
Roof Length (L)	**16.5**	ft
Importance	**1.00**	------------->
Roof Pitch	**6**	
Exposure Factor	**D**	
Kzt	**1.00**	Refer to 6.5.7
Kd	**0.85**	Table 6-4
Kz	**1.05**	
G	**0.85**	

Category	Non-Hurricane Prone Regions and Hurricane Prone Regions with V = 85-100 mph and Alaska	Hurricane Prone Regions with V > 100 mph
I	0.87	0.77
II	1.00	1.00
III	1.15	1.15
IV	1.15	1.15

h/L = 1.00

HIGH ROOF

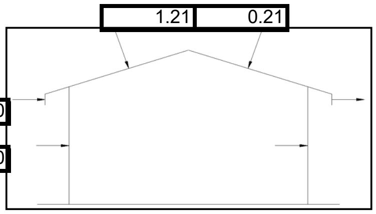
qz = **18.51** psf qz = 0.00256(Kz)Kzt(Kd)I(V)^2
Roof Angle = 26.5651 Degrees

C_N

PERPENDICULAR TO THE RIDGE

1.21 | 0.21

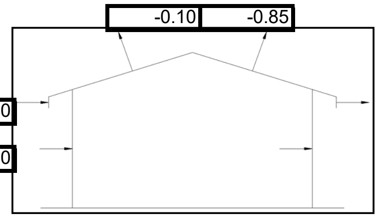
1.00
1.80



-0.80 | 1.00
-1.80 | 1.80

CASE 'A'

-0.10 | -0.85



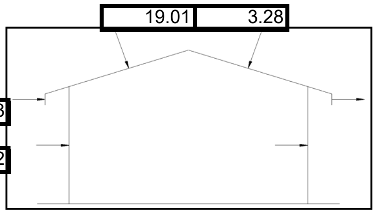
-0.80
-1.80

CASE 'B'

PRESSURES (psf)

19.01 | 3.28

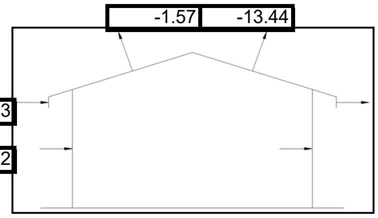
15.73
28.32



-12.58 | 15.73
-28.32 | 28.32

CASE 'A'

-1.57 | -13.44



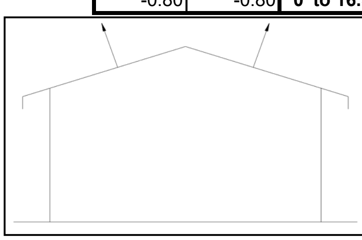
-12.58
-28.32

CASE 'B'

C_N

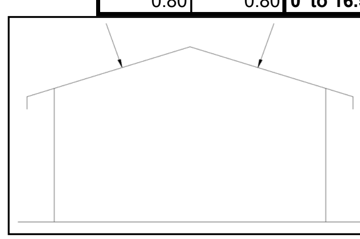
PARALLEL TO THE RIDGE

		Horz. Dist. From Windward Edge
-0.30	-0.30	**> 33'**
-0.60	-0.60	**16.5' to 33'**
-0.80	-0.80	**0' to 16.5'**



CASE 'A'

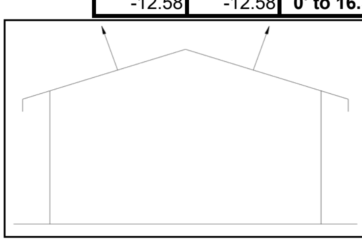
		Horz. Dist. From Windward Edge
0.30	0.30	**> 33'**
0.50	0.50	**6.5' to 33'**
0.80	0.80	**0' to 16.5'**



CASE 'B'

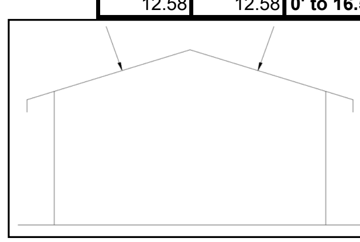
PRESSURES (psf)

		Horz. Dist. From Windward Edge
-4.72	-4.72	**> 33'**
-9.44	-9.44	**16.5' to 33'**
-12.58	-12.58	**0' to 16.5'**



CASE 'A'

		Horz. Dist. From Windward Edge
4.72	4.72	**> 33'**
7.87	7.87	**6.5' to 33'**
12.58	12.58	**0' to 16.5'**



CASE 'B'

OPEN BUILDING COMPONENT & CLADDING PRESSURE FROM ASCE 7-05

(Pitched Roof with θ[45º)
(0.25 [h/L [1.0)
$P = q_h*G*C_N$

Wind Flow	**CLEAR**	
Wind Speed	**90**	mph
Mean Roof Height (h)	**11.5**	ft
Roof Length (L)	**30**	ft
Importance	**1.00**	------------->
Roof Pitch	**6**	
Exposure Factor	**D**	
Kzt	**1.00**	Refer to 6.5.7
Kd	**0.85**	Table 6-4
Kz	**1.03**	
G	**0.85**	

Category	Non-Hurricane Prone Regions and Hurricane Prone Regions with V = 85-100 mph and Alaska	Hurricane Prone Regions with V > 100 mph
I	0.87	0.77
II	1.00	1.00
III	1.15	1.15
IV	1.15	1.15

h/L = 0.38

MAIN ROOF

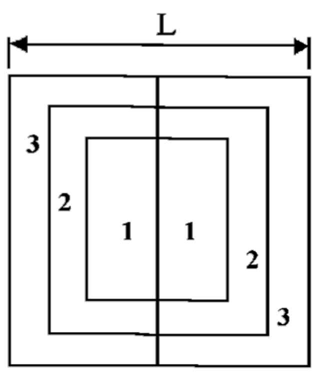
qz = **18.15** psf qz = 0.00256(Kz)Kzt(Kd)I(V)^2
Roof Angle = 26.5651 Degrees

C_N

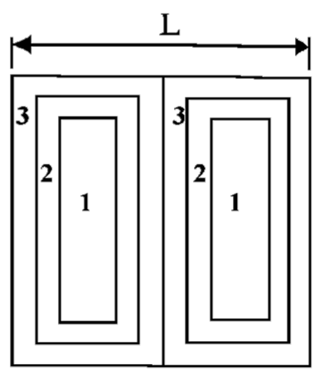
Effective Wind Area	Zone 3	Zone 3	Zone 2	Zone 2	Zone 1	Zone 1
[a^2	2.51	-1.89	1.93	-1.47	1.25	-0.95
> a^2, [$(4.0)a^2$	1.93	-1.47	1.93	-1.47	1.25	-0.95
> $(4.0)a^2$	1.25	-0.95	1.25	-0.95	1.25	-0.95

Pressure (psf)

Effective Wind Area	Zone 3	Zone 3	Zone 2	Zone 2	Zone 1	Zone 1
[a^2	38.7	-29.2	29.8	-22.7	19.4	-14.6
> a^2, [$(4.0)a^2$	29.8	-22.7	29.8	-22.7	19.4	-14.6
> $(4.0)a^2$	19.4	-14.6	19.4	-14.6	19.4	-14.6



$\theta < 10°$



$\theta \geq 10°$

OPEN BUILDING COMPONENT & CLADDING PRESSURE FROM ASCE 7-05

(Pitched Roof with θ[45º)
(0.25 [h/L [1.0)
$P = q_h*G*C_N$

Wind Flow	**CLEAR**	
Wind Speed	**90**	mph
Mean Roof Height (h)	**16.5**	ft
Roof Length (L)	**16.5**	ft
Importance	**1.00**	------------->
Roof Pitch	**6**	
Exposure Factor	**D**	
Kzt	**1.00**	Refer to 6.5.7
Kd	**0.85**	Table 6-4
Kz	**1.05**	
G	**0.85**	

Category	Non-Hurricane Prone Regions and Hurricane Prone Regions with V = 85-100 mph and Alaska	Hurricane Prone Regions with V > 100 mph
I	0.87	0.77
II	1.00	1.00
III	1.15	1.15
IV	1.15	1.15

h/L = **1.00**

HIGH ROOF

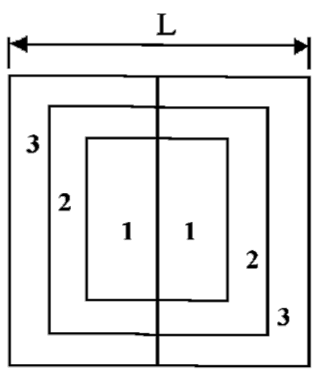
qz = **18.51** psf qz = 0.00256(Kz)Kzt(Kd)I(V)^2
Roof Angle = 26.5651 Degrees

C_N

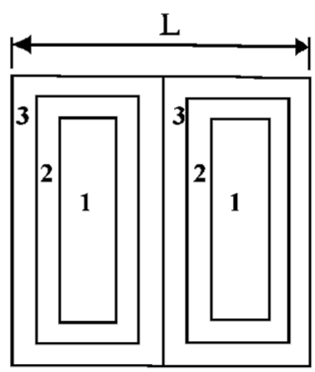
Effective Wind Area	Zone 3	Zone 3	Zone 2	Zone 2	Zone 1	Zone 1
[a^2	2.51	-1.89	1.93	-1.47	1.25	-0.95
> a^2, [$(4.0)a^2$	1.93	-1.47	1.93	-1.47	1.25	-0.95
> $(4.0)a^2$	1.25	-0.95	1.25	-0.95	1.25	-0.95

Pressure (psf)

Effective Wind Area	Zone 3	Zone 3	Zone 2	Zone 2	Zone 1	Zone 1
[a^2	39.5	-29.8	30.4	-23.1	19.7	-14.9
> a^2, [$(4.0)a^2$	30.4	-23.1	30.4	-23.1	19.7	-14.9
> $(4.0)a^2$	19.7	-14.9	19.7	-14.9	19.7	-14.9

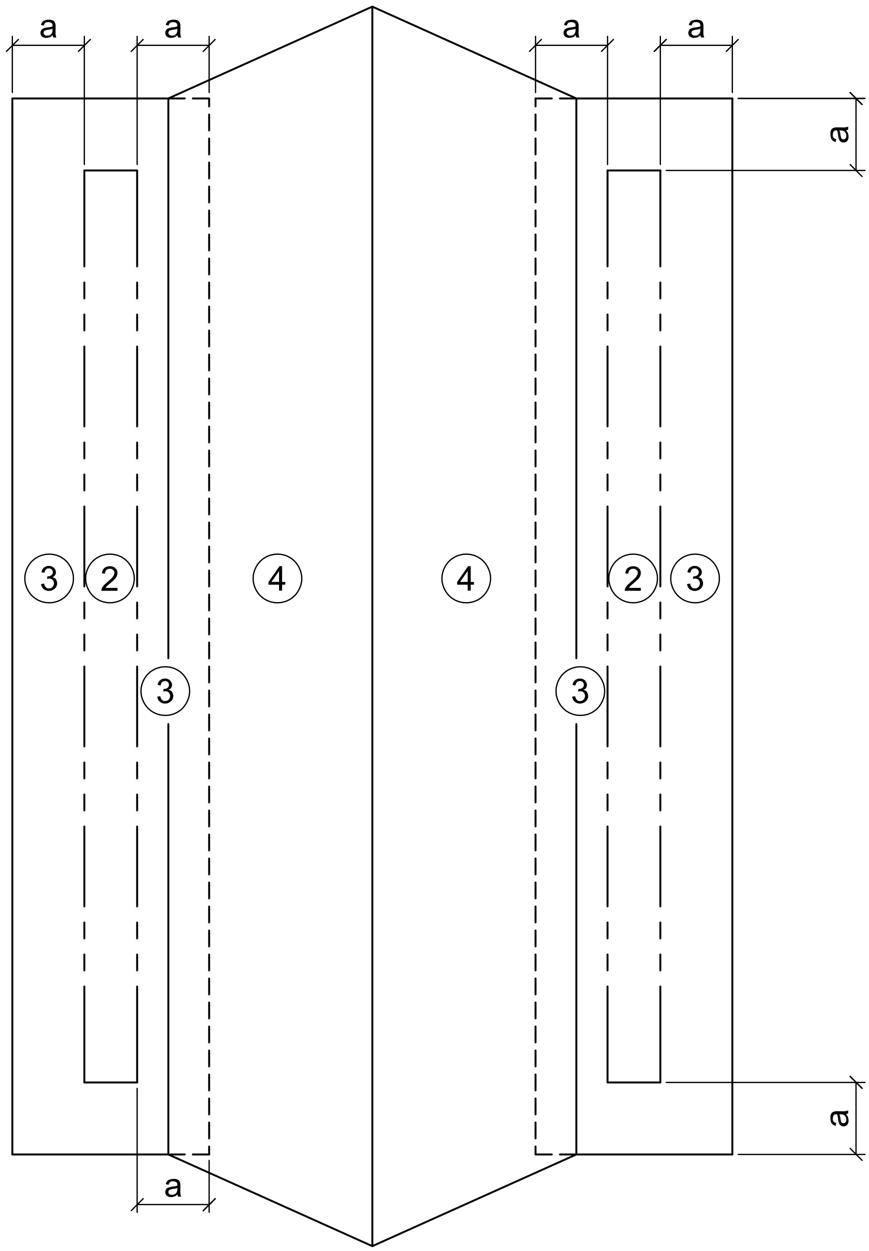


$\theta < 10°$



$\theta \geq 10°$

Project		Sheet 7
		of
Job No. 14837 R	Ckd.	Init. DPS
Cad	Rev.	Date 10-2-23



ROOF PLAN

a = 3'-0"

DESIGN PRESSURES FOR COMPONENTS & CLADDING

ZONE	PRESSURE	SUCTION
2	29.8 PSF	22.7 PSF
3	38.7 PSF	29.2 PSF
4	39.5 PSF	29.8 PSF

	Project		Sheet 8 of
	Job No. 14837 R	Ckd.	Init. DPS
	Client No.	Rev.	Date 10/4/2023

ASCE 7-16 (Section 28.3.5)

Horizontal Wind Loads on Open or Partially Enclosed Buildings with Transverse Frames & Pitched Roofs

q_h = **14.83** psf

A_S = **60.87** ft^2

A_E = **363.82** ft^2

n = **4**

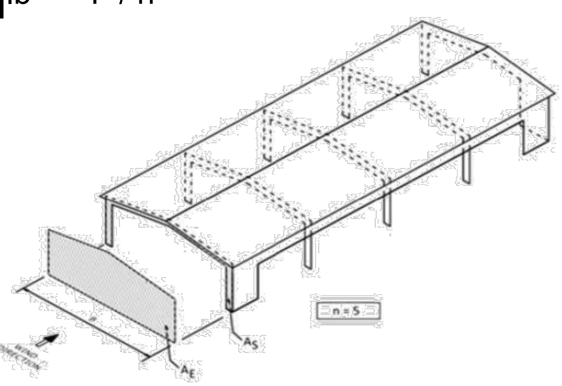
B = **26.667** ft

$(GC_{pf})_{5E}$ = 0.61		A_{5E} = **54.49** ft^2	
$(GC_{pf})_{5}$ = 0.4		A_{5} = **309.33** ft^2	
$(GC_{pf})_{6E}$ = -0.43			
$(GC_{pf})_{6}$ = -0.29			

$(GC_{pf})_{windward}$ = 0.431

$(GC_{pf})_{leeward}$ = -0.311

ϕ =	0.167	$\phi = A_S / A_E$
K_B =	1.533	$K_B = 1.8 - 0.01 * B \geq 0.8$
K_S =	0.723	$K_S = 0.60 + 0.073 * (n - 3) + 1.25 * \phi^{1.8}$
p =	12.21 psf	$p = q_h * [(GC_{pf})_{windward} - (GC_{pf})_{leeward}] * K_B * K_S$
F =	4441 lb	$F = p * A_E$
Force per frame =	$\boxed{1110}$ lb	F / n



Notation

B = Width of the building perpendicular to the ridge, in ft (m)
A_S = Effective solid area of the end wall, i.e., the projected area of any portion of the end wall that would be exposed to the wind
A_E = Total end wall area for an equivalent enclosed building
n = Number of frames but shall not be taken as less than $n = 3$

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

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of

14837 R
DPS
10-4-23

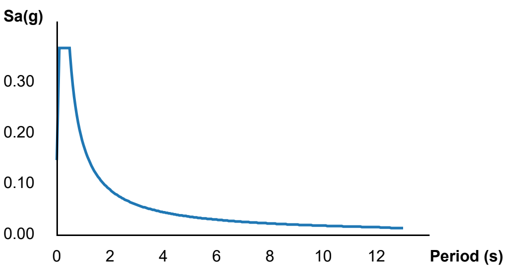
ℹ The ATC Hazards by Location website will not be updated to support ASCE 7-22. Find out why.

ATC Hazards by Location

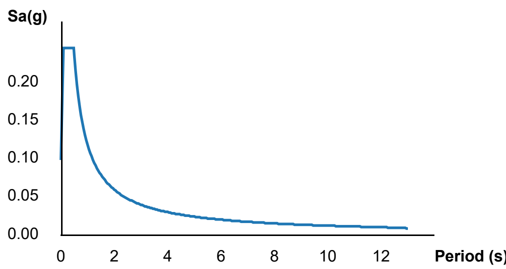
Search Information

Coordinates:	34.3533, -86.3159
Elevation:	604 ft
Timestamp:	2023-10-04T18:21:25.028Z
Hazard Type:	Seismic
Reference Document:	ASCE7-05
Risk Category:	II
Site Class:	C

MCER Horizontal Response Spectrum



Design Horizontal Response Spectrum



Basic Parameters

Name	Value	Description
S_S	0.307	MCE_R ground motion (period=0.2s)
S_1	0.104	MCE_R ground motion (period=1.0s)
S_{MS}	0.368	Site-modified spectral acceleration value
S_{M1}	0.177	Site-modified spectral acceleration value
S_{DS}	0.245	Numeric seismic design value at 0.2s SA
S_{D1}	0.118	Numeric seismic design value at 1.0s SA

▾Additional Information

Name	Value	Description
SDC	B	Seismic design category
F_a	1.2	Site amplification factor at 0.2s
F_v	1.696	Site amplification factor at 1.0s
T_L	12	Long-period transition period (s)

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 provided by the U.S. Geological Survey Seismic Design Web Services.

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Table 4E (Cont.) **Reference Design Values for Visually Graded Decking[1,2]**

(Tabulated design values are for normal load duration and dry service conditions, unless specified otherwise. See NDS 4.3 for a comprehensive description of design value adjustment factors.)

USE WITH TABLE 4E ADJUSTMENT FACTORS

Species and commercial grade	Size classification	Design values in pounds per square inch (psi)					Specific Gravity[3]	Grading Rules Agency
		Bending		Compression perpendicular to grain	Modulus of Elasticity			
		Single Member	Repetitive Member					
		F_b	$(F_b)(C_r)$	$F_{c\perp}$	E	E_{min}	G	
NORTHERN WHITE CEDAR								
Select	2"-4" thick	—	1,100	—	800,000	290,000	0.31	NELMA
Commercial	4"-12"wide	—	950	—	700,000	260,000		
PONDEROSA PINE								
Select	2"-4" thick	1,200	1,400	535	1,300,000	470,000	0.43	NLGA
Commercial	4"& wider	1,000	1,150	535	1,100,000	400,000		
RED PINE								
Select	2"-4" thick	1,150	1,350	440	1,300,000	470,000	0.44	NLGA
Commercial	4"& wider	975	1,100	440	1,200,000	440,000		
REDWOOD								
Select	2" thick	1,450	1,700	—	1,100,000	400,000	0.37	RIS
Commercial	6"& wider	1,200	1,350	—	1,000,000	370,000	0.37	
Deck Heart	2" thick	400	450	420	900,000	330,000	0.37	
and	4" wide							
Deck Common	2" thick	700	800	420	900,000	330,000	0.37	
	6" wide							
SITKA SPRUCE								
Select Dex	2"-4" thick	1,300	1,500	435	1,500,000	550,000	0.43	WCLIB
Commercial Dex	6"-8"wide	1,100	1,250	435	1,300,000	470,000		
SOUTHERN PINE		(Surfaced dry – Used in dry service conditions — 19% or less moisture content)						
Dense Standard		2,000	2,300	660	1,800,000	660,000		
Dense Select	2"-4" thick	1,650	1,900	660	1,600,000	580,000		
Select		1,400	1,650	565	1,600,000	580,000	0.55	SPIB
Dense Commercial	2" & wider	1,650	1,900	660	1,600,000	580,000		
Commercial		1,400	1,650	565	1,600,000	580,000		
SOUTHERN PINE		(Surfaced Green – Used in any service condition)						
Dense Standard		1,600	1,800	440	1,600,000	580,000		
Dense Select	2-1/2"-4" thick	1,350	1,500	440	1,400,000	510,000		
Select		1,150	1,300	375	1,400,000	510,000	0.55	SPIB
Dense Commercial	2" & wider	1,350	1,500	440	1,400,000	510,000		
Commercial		1,150	1,300	375	1,400,000	510,000		
SPRUCE-PINE-FIR								
Select	2"-4" thick	1,200	1,400	425	1,500,000	550,000	0.42	NLGA
Commercial	4"& wider	1,000	1,150	425	1,300,000	470,000		
SPRUCE-PINE-FIR (SOUTH)								
Selected	2"-4" thick	1,150	1,350	335	1,400,000	510,000	0.36	NELMA WWPA
Commercial	4"-12"wide	950	1,100	335	1,200,000	440,000		
WESTERN CEDARS								
Select Dex	2"-4" thick	1,250	1,450	425	1,100,000	400,000	0.36	WCLIB
Commercial Dex	6"-8"wide	1,050	1,200	425	1,000,000	370,000		
Selected	2"-4" thick	1,250	1,450	425	1,100,000	400,000	0.36	WWPA
Commercial	4"-12"wide	1,050	1,200	425	1,000,000	370,000		
WESTERN CEDARS (NORTH)								
Select	2"-4" thick	1,200	1,400	425	1,100,000	400,000	0.35	NLGA
Commercial	4"& wider	1,050	1,200	425	1,000,000	370,000		

4

REFERENCE DESIGN VALUES

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Table 4E Adjustment Factors

Wet Service Factor, C_M

When decking is used where moisture content will exceed 19% for an extended time period, design values shall be multiplied by the appropriate wet service factors from the following table (for surfaced dry Southern Pine decking use tabulated surfaced green design values for wet service conditions without further adjustment):

Wet Service Factors, C_M

F_b	$F_{c\perp}$	E and E_{min}
0.85*	0.67	0.9

* when $(F_b)(C_F) \leq 1{,}150$ psi, $C_M = 1.0$

Flat Use Factor, C_{fu}

Tabulated bending design values, F_b, for decking have already been adjusted for flatwise usage (load applied to wide face).

Size Factor, C_F

Bending design values for all species of decking except Redwood are based on 4" thick decking. When 2" thick or 3" thick decking is used, the bending design values, F_b, for all species except Redwood shall be multiplied by the following size factors:

Size Factors, C_F

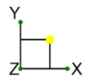
Thickness	C_F
2"	1.10
3"	1.04

Repetitive Member Factor, C_r

Tabulated bending design values for repetitive member uses, $(F_b)(C_r)$, for decking have already been multiplied by the repetitive member factor, C_r.

4

REFERENCE DESIGN VALUES



Nom. 2x8 T+G WOOD DECKING

$t = 1\ 7/16"$ $E = 1{,}600$ ksi

$C_F = 1.1$ $F_b = 1{,}650$ psi

T.A. = 9.0 ft^2
$w_D = 7 * 0.894 = 6.641$ plf
$w_{Lr} = 20 * 0.894^2 = 18.0$ plf
$w_W = 18.65$ plf
$w_{W\ C+C\ D} = 38.7$ plf
$w_{W\ C+C\ UP} = -29.2$ plf

1.519 ft. 5.25 ft. 5.25 ft. 0.167 ft.

$M_{D+Lr} = 843$ #-in
$f_b = 204$ psi
$F_b' = 1650*1.25*1.1 = 2269$ psi OK

$M_{D+C\&C\ WL} = 1{,}117$ #-in
$f_b = 270$ psi
$F_b' = 1650*1.6*1.1 = 2904$ psi OK

$\Delta_{0.5D+Lr} = 0.031" - L/2033 < L/120$ OK
$\Delta_{Lr} = 0.026" - L/2431 < L/180$ OK
$\Delta_{0.7W\ C+C\ D} = 0.026" - L/2393 < L/180$ OK

RISA	EEC	T&G Decking - LOW	SK-4
	DPS		Oct 02, 2023 at 02:47 PM
	14837 R		14837 T+G DECK - LOW.r3d

Model Settings

Number of Reported Sections	3
Number of Internal Sections	100
Member Area Load Mesh Size (in^2)	144
Consider Shear Deformation	No
Consider Torsional Warping	Yes
Approximate Mesh Size (in)	24
Transfer Forces Between Intersecting Wood Walls	Yes
Increase Wood Wall Nailing Capacity for Wind Loads	Yes
Include P-Delta for Walls	Yes
Optimize Masonry and Wood Walls	Yes
Maximum Number of Iterations	3
Single	No
Multiple (Optimum)	Yes
Maximum	No

Global Axis corresponding to vertical direction	Y
Convert Existing Data	Yes
Default Global Plane for z-axis	XZ
Plate Local Axis Orientation	Global

Hot Rolled Steel	None
Stiffness Adjustment	Yes (Iterative)
Notional Annex	None
Connections	None
Cold Formed Steel	None
Stiffness Adjustment	Yes (Iterative)
Wood	AF&PA NDS-05/08: ASD
Temperature	< 100F
Concrete	None
Masonry	None
Aluminum	None
Structure Type	Building
Stiffness Adjustment	Yes (Iterative)
Stainless	None
Stiffness Adjustment	Yes (Iterative)

Compression Stress Block	Rectangular Stress Block
Analyze using Cracked Sections	Yes
Leave room for horizontal rebar splices (2*d bar spacing)	Yes
List forces which were ignored for design in the Detail Report	Yes

Column Min Steel	1
Column Max Steel	8
Rebar Material Spec	ASTM A615
Warn if beam-column framing arrangement is not understood	No
Number of Shear Regions	4
Region 2 & 3 Spacing Increase Increment (in)	4

Code	None
Base Elevation (ft)	
Include the weight of the structure in base shear calcs	Yes

Model Settings (Continued)

T Z (sec)	
T X (sec)	
$C_t Z$	0.02
$C_t X$	0.02
R Z	1.25
R X	1.25

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N1	-16.771	0	0	
2	N2	-15.252	0	0	
3	N3	-10.002	0	0	
4	N4	-4.752	0	0	
5	N5	-4.586	0	0	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]
1	N2	Reaction	Reaction	Reaction	Reaction
2	N3		Reaction	Reaction	
3	N4		Reaction	Reaction	

Wood Properties

	Label	Type	Database	Species	Grade	Cm	Ci	Emod	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]
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	2x8 T+G Deck	Custom	N/A	T+G DECK	na			1	0.3	0.3	0.035

Custom Wood Properties

	Label	Fb	Ft	Fv	Fc	E	E05	Type	Cf
1	LVL_PRL_1.5E_2250F	2.25	1.5	0.22	1.95	1500	0.5	SCL	
2	LVL_PRL_2.0E_2900F	2.9	1.9	0.285	2.75	2000	0.5	SCL	
3	LVL_Microllam_1.9E_2600F	2.6	1.555	0.285	2.51	1900	0.5	SCL	
4	PSL_Parallam_2.0E_2900F	2.9	2.025	0.29	2.9	2000	0.5	SCL	
5	PSL_Parallam_1.8E	2.4	1.755	0.18	2.5	1800	0.5	SCL	
6	LSL_TimberStrand_1.55E_2325F	2.325	1.07	0.31	2.05	1550	0.5	SCL	
7	LSL_TimberStrand_1.3E_1700F	1.7	1.075	0.4	1.4	1300	0.5	SCL	
8	T+G DECK	1.65	0.8	0.175	1.5	1600	580	Visually Graded	1.1

Wood Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Wood Decking	1.4375X12FS	Beam	None	2x8 T+G Deck	Typical	17.25	2.97	207	10.985

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N1	N2	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
2	M2	N2	N3	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
3	M3	N3	N4	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
4	M4	N4	N5	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical

Member Advanced Data

	Label	Physical	Deflection Ratio Options	Seismic DR
1	M1	Yes	OX	None
2	M2	Yes	Default	None
3	M3	Yes	Default	None
4	M4	Yes	Default	None

Wood Design Parameters

	Label	Shape	Length [ft]	le-bend top [ft]	Cr	y sway	z sway
1	M1	Wood Decking	1.519	Lbyy	Yes		
2	M2	Wood Decking	5.25	Lbyy	Yes		
3	M3	Wood Decking	5.25	Lbyy	Yes		
4	M4	Wood Decking	0.166	Lbyy	Yes		

Member Distributed Loads (BLC 1 : D)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-6.261	-6.261	0	%100
2	M2	Y	-6.261	-6.261	0	%100
3	M3	Y	-6.261	-6.261	0	%100

Member Distributed Loads (BLC 2 : Lr)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-16	-16	0	%100
2	M2	Y	-16	-16	0	%100
3	M3	Y	-16	-16	0	%100

Member Distributed Loads (BLC 4 : W Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-18.65	-18.65	0	%100
2	M2	Y	-18.65	-18.65	0	%100
3	M3	Y	-18.65	-18.65	0	%100

Member Distributed Loads (BLC 5 : W C+C Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-38.7	-38.7	0	%100
2	M2	Y	-38.7	-38.7	0	%100
3	M3	Y	-38.7	-38.7	0	%100

Member Distributed Loads (BLC 6 : W C+C UP)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	29.2	29.2	0	%100
2	M2	Y	29.2	29.2	0	%100
3	M3	Y	29.2	29.2	0	%100

Basic Load Cases

	BLC Description	Category	Distributed
1	D	DL	3
2	Lr	RLL	3
4	W Down	WL	3
5	W C+C Down	WL+Z	3
6	W C+C UP	WL-Z	3

Load Combinations

	Description	Solve	BLC	Factor	BLC	Factor	BLC	Factor
1	D	Yes	DL	1				
2	D+Lr	Yes	DL	1	RLL	1		
3	D+W Down	Yes	DL	1			WL	0.6
4	D+3/4(Lr+W Down)	Yes	DL	1	RLL	0.75	WL	0.45
5	D+W C+C Down	Yes	DL	1			WL+Z	0.6
6	0.6D (5.5 psf)+W C+C UP	Yes	DL	0.471			WL-Z	0.6
7	1/2D+Lr	Yes	DL	0.5	RLL	1		
8	Lr	Yes			RLL	1		
9	0.7W C+C DOWN	Yes			WL+Z	0.42		

Load Combination Design

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	D	0.9		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	D+Lr	1.25		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	D+W Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	D+3/4(Lr+W Down)	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	D+W C+C Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	0.6D (5.5 psf)+W C+C UP	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	1/2D+Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	0.7W C+C DOWN	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
1	1	N2	0	23.557	0	0	0	0
2	2		0	83.756	0	0	0	0
3	3		0	65.658	0	0	0	0
4	4		0	100.282	0	0	0	0
5	5		0	110.92	0	0	0	0
6	6		0	-54.823	0	0	0	0
7	7		0	71.977	0	0	0	0
8	8		0	60.199	0	0	0	0
9	9		0	61.155	0	0	0	0
10	1	N3	0	39.024	0	0	0	0
11	2		0	138.75	0	0	0	0
12	3		0	108.77	0	0	0	0
13	4		0	166.128	0	0	0	0
14	5		0	183.751	0	0	0	0
15	6		0	-90.82	0	0	0	0
16	7		0	119.238	0	0	0	0
17	8		0	99.726	0	0	0	0
18	9		0	101.309	0	0	0	0
19	1	N4	0	12.67	0	0	0	0

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
20	2		0	45.049	0	0	0	0
21	3		0	35.315	0	0	0	0
22	4		0	53.938	0	0	0	0
23	5		0	59.66	0	0	0	0
24	6		0	-29.487	0	0	0	0
25	7		0	38.714	0	0	0	0
26	8		0	32.379	0	0	0	0
27	9		0	32.893	0	0	0	0
28	1	Totals:	0	75.251	0			
29	2		0	267.555	0			
30	3		0	209.744	0			
31	4		0	320.348	0			
32	5		0	354.332	0			
33	6		0	-175.13	0			
34	7		0	229.929	0			
35	8		0	192.304	0			
36	9		0	195.357	0			
37	1	COG (ft):	X: -10.762	Y: 0	Z: 0			
38	2		X: -10.761	Y: 0	Z: 0			
39	3		X: -10.761	Y: 0	Z: 0			
40	4		X: -10.762	Y: 0	Z: 0			
41	5		X: -10.762	Y: 0	Z: 0			
42	6		X: -10.762	Y: 0	Z: 0			
43	7		X: -10.762	Y: 0	Z: 0			
44	8		X: -10.761	Y: 0	Z: 0			
45	9		X: -10.761	Y: 0	Z: 0			

Maximum Member Section Forces

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
1	1	M1	max	0	1.519	0	1.519	9.51	1.519	0	1.519	0.087	1.519	0	1.519
2			min	0	0	0	0	0	0	0	0	0	0	0	0
3	2	M1	max	0	1.519	0	1.519	33.814	1.519	0	1.519	0.308	1.519	0	1.519
4			min	0	0	0	0	0	0	0	0	0	0	0	0
5	3	M1	max	0	1.519	0	1.519	26.508	1.519	0	1.519	0.242	1.519	0	1.519
6			min	0	0	0	0	0	0	0	0	0	0	0	0
7	4	M1	max	0	1.519	0	1.519	40.487	1.519	0	1.519	0.369	1.519	0	1.519
8			min	0	0	0	0	0	0	0	0	0	0	0	0
9	5	M1	max	0	1.519	0	1.519	44.782	1.519	0	1.519	0.408	1.519	0	1.519
10			min	0	0	0	0	0	0	0	0	0	0	0	0
11	6	M1	max	0	1.519	0	1.519	0	0	0	1.519	0	0	0	1.519
12			min	0	0	0	0	-22.133	1.519	0	0	-0.202	1.519	0	0
13	7	M1	max	0	1.519	0	1.519	29.059	1.519	0	1.519	0.265	1.519	0	1.519
14			min	0	0	0	0	0	0	0	0	0	0	0	0
15	8	M1	max	0	1.519	0	1.519	24.304	1.519	0	1.519	0.222	1.519	0	1.519
16			min	0	0	0	0	0	0	0	0	0	0	0	0
17	9	M1	max	0	1.519	0	1.519	24.69	1.519	0	1.519	0.225	1.519	0	1.519
18			min	0	0	0	0	0	0	0	0	0	0	0	0
19	1	M2	max	0	5.25	0	5.25	18.824	5.25	0	5.25	0.237	5.25	0	5.25
20			min	0	0	0	0	-14.046	0	0	0	-0.102	2.25	0	0
21	2	M2	max	0	5.25	0	5.25	66.929	5.25	0	5.25	0.843	5.25	0	5.25
22			min	0	0	0	0	-49.941	0	0	0	-0.364	2.25	0	0
23	3	M2	max	0	5.25	0	5.25	52.468	5.25	0	5.25	0.661	5.25	0	5.25
24			min	0	0	0	0	-39.15	0	0	0	-0.285	2.25	0	0
25	4	M2	max	0	5.25	0	5.25	80.135	5.25	0	5.25	1.01	5.25	0	5.25
26			min	0	0	0	0	-59.795	0	0	0	-0.436	2.25	0	0

Maximum Member Section Forces (Continued)

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
27	5	M2	max	0	5.25	0	5.25	88.637	5.25	0	5.25	1.117	5.25	0	5.25
28			min	0	0	0	0	-66.139	0	0	0	-0.482	2.25	0	0
29	6	M2	max	0	5.25	0	5.25	32.689	0	0	5.25	0.238	2.25	0	5.25
30			min	0	0	0	0	-43.809	5.25	0	0	-0.552	5.25	0	0
31	7	M2	max	0	5.25	0	5.25	57.517	5.25	0	5.25	0.725	5.25	0	5.25
32			min	0	0	0	0	-42.918	0	0	0	-0.313	2.25	0	0
33	8	M2	max	0	5.25	0	5.25	48.105	5.25	0	5.25	0.606	5.25	0	5.25
34			min	0	0	0	0	-35.895	0	0	0	-0.262	2.25	0	0
35	9	M2	max	0	5.25	0	5.25	48.869	5.25	0	5.25	0.616	5.25	0	5.25
36			min	0	0	0	0	-36.465	0	0	0	-0.266	2.25	0	0
37	1	M3	max	0	5.25	0	5.25	12.67	5.25	0	5.25	0.237	0	0	5.25
38			min	0	0	0	0	-20.2	0	0	0	-0.154	3.214	0	0
39	2	M3	max	0	5.25	0	5.25	45.049	5.25	0	5.25	0.843	0	0	5.25
40			min	0	0	0	0	-71.821	0	0	0	-0.547	3.214	0	0
41	3	M3	max	0	5.25	0	5.25	35.315	5.25	0	5.25	0.661	0	0	5.25
42			min	0	0	0	0	-56.302	0	0	0	-0.429	3.214	0	0
43	4	M3	max	0	5.25	0	5.25	53.938	5.25	0	5.25	1.01	0	0	5.25
44			min	0	0	0	0	-85.993	0	0	0	-0.655	3.214	0	0
45	5	M3	max	0	5.25	0	5.25	59.66	5.25	0	5.25	1.117	0	0	5.25
46			min	0	0	0	0	-95.115	0	0	0	-0.724	3.214	0	0
47	6	M3	max	0	5.25	0	5.25	47.011	0	0	5.25	0.358	3.214	0	5.25
48			min	0	0	0	0	-29.487	5.25	0	0	-0.552	0	0	0
49	7	M3	max	0	5.25	0	5.25	38.714	5.25	0	5.25	0.725	0	0	5.25
50			min	0	0	0	0	-61.721	0	0	0	-0.47	3.214	0	0
51	8	M3	max	0	5.25	0	5.25	32.379	5.25	0	5.25	0.606	0	0	5.25
52			min	0	0	0	0	-51.621	0	0	0	-0.393	3.214	0	0
53	9	M3	max	0	5.25	0	5.25	32.893	5.25	0	5.25	0.616	0	0	5.25
54			min	0	0	0	0	-52.44	0	0	0	-0.399	3.214	0	0
55	1	M4	max	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166
56			min	0	0	0	0	0	0	0	0	0	0	0	0
57	2	M4	max	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166
58			min	0	0	0	0	0	0	0	0	0	0	0	0
59	3	M4	max	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166
60			min	0	0	0	0	0	0	0	0	0	0	0	0
61	4	M4	max	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166
62			min	0	0	0	0	0	0	0	0	0	0	0	0
63	5	M4	max	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166
64			min	0	0	0	0	0	0	0	0	0	0	0	0
65	6	M4	max	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166
66			min	0	0	0	0	0	0	0	0	0	0	0	0
67	7	M4	max	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166
68			min	0	0	0	0	0	0	0	0	0	0	0	0
69	8	M4	max	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166
70			min	0	0	0	0	0	0	0	0	0	0	0	0
71	9	M4	max	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166	0	0.166
72			min	0	0	0	0	0	0	0	0	0	0	0	0

Member Section Deflections - Service

	LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y' Ratio	(n) L/z' Ratio
1	7	M1	1	0	0	-0.009	0	NC	2130
2			2	0	0	-0.005	0	NC	3679
3			3	0	0	0	0	NC	NC
4	8	M1	1	0	0	-0.007	0	NC	2546
5			2	0	0	-0.004	0	NC	4399
6			3	0	0	0	0	NC	NC

Member Section Deflections - Service (Continued)

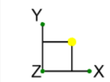
	LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y' Ratio	(n) L/z' Ratio
7	9	M1	1	0	0	-0.007	0	NC	2507
8			2	0	0	-0.004	0	NC	4330
9			3	0	0	0	0	NC	NC
10	7	M2	1	0	0	0	0	NC	NC
11			2	0	0	0.017	0	NC	3672
12			3	0	0	0	0	NC	NC
13	8	M2	1	0	0	0	0	NC	NC
14			2	0	0	0.014	0	NC	4391
15			3	0	0	0	0	NC	NC
16	9	M2	1	0	0	0	0	NC	NC
17			2	0	0	0.015	0	NC	4322
18			3	0	0	0	0	NC	NC
19	7	M3	1	0	0	0	0	NC	NC
20			2	0	0	0.031	0	NC	2033
21			3	0	0	0	0	NC	NC
22	8	M3	1	0	0	0	0	NC	NC
23			2	0	0	0.026	0	NC	2431
24			3	0	0	0	0	NC	NC
25	9	M3	1	0	0	0	0	NC	NC
26			2	0	0	0.026	0	NC	2393
27			3	0	0	0	0	NC	NC
28	7	M4	1	0	0	0	0	NC	NC
29			2	0	0	-0.002	0	NC	1056
30			3	0	0	-0.004	0	NC	528
31	8	M4	1	0	0	0	0	NC	NC
32			2	0	0	-0.002	0	NC	1262
33			3	0	0	-0.003	0	NC	631
34	9	M4	1	0	0	0	0	NC	NC
35			2	0	0	-0.002	0	NC	1243
36			3	0	0	-0.003	0	NC	621

AF&PA NDS-05/08: 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	M1	1.4375X12FS	0.011	1.519	0.005	1.519	z	1.289	0.792	1.608	1.96	0.158	10.289	0.984	0.868	3.9-3
2	2			0.027	1.519	0.013	1.519	z	1.653	1.1	2.213	2.723	0.219	10.289	0.976	0.802	3.9-3
3	3			0.017	1.519	0.008	1.519	z	1.932	1.408	2.801	3.485	0.28	10.289	0.965	0.732	3.9-3
4	4			0.026	1.519	0.013	1.519	z	1.932	1.408	2.801	3.485	0.28	10.289	0.965	0.732	3.9-3
5	5			0.028	1.519	0.014	1.519	z	1.932	1.408	2.801	3.485	0.28	10.289	0.965	0.732	3.9-3
6	6			0.014	1.519	0.007	1.519	z	1.932	1.408	2.801	3.485	0.28	10.289	0.965	0.732	3.9-3
7	7			0.024	1.519	0.012	1.519	z	1.653	1.1	2.213	2.723	0.219	10.289	0.976	0.802	3.9-3
8	8			0.02	1.519	0.01	1.519	z	1.653	1.1	2.213	2.723	0.219	10.289	0.976	0.802	3.9-3
9	9			0.016	1.519	0.008	1.519	z	1.932	1.408	2.801	3.485	0.28	10.289	0.965	0.732	3.9-3
10	1	M2	1.4375X12FS	0.029	5.25	0.01	5.25	z	0.241	0.792	1.426	1.96	0.158	19.127	0.873	0.162	3.9-3
11	2			0.075	5.25	0.027	5.25	z	0.244	1.1	1.678	2.723	0.219	19.127	0.74	0.118	3.9-3
12	3			0.046	5.25	0.016	5.25	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3
13	4			0.07	5.25	0.025	5.25	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3
14	5			0.078	5.25	0.028	5.25	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3
15	6			0.038	5.25	0.014	5.25	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3
16	7			0.064	5.25	0.023	5.25	z	0.244	1.1	1.678	2.723	0.219	19.127	0.74	0.118	3.9-3
17	8			0.054	5.25	0.019	5.25	z	0.244	1.1	1.678	2.723	0.219	19.127	0.74	0.118	3.9-3
18	9			0.043	5.25	0.015	5.25	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3
19	1	M3	1.4375X12FS	0.029	0	0.011	0	z	0.241	0.792	1.426	1.96	0.158	19.127	0.873	0.162	3.9-3
20	2			0.075	0	0.029	0	z	0.244	1.1	1.678	2.723	0.219	19.127	0.74	0.118	3.9-3
21	3			0.046	0	0.017	0	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3
22	4			0.07	0	0.027	0	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3

AF&PA NDS-05/08: 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
23	5			0.078	0	0.03	0	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3
24	6			0.038	0	0.015	0	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3
25	7			0.064	0	0.025	0	z	0.244	1.1	1.678	2.723	0.219	19.127	0.74	0.118	3.9-3
26	8			0.054	0	0.021	0	z	0.244	1.1	1.678	2.723	0.219	19.127	0.74	0.118	3.9-3
27	9			0.043	0	0.016	0	z	0.245	1.408	1.777	3.485	0.28	19.127	0.612	0.093	3.9-3
28	1	M4	1.4375X12FS	0	0.166	0	0.166	z	1.483	0.792	1.631	1.96	0.158	3.401	0.999	0.999	3.9-3
29	2			0	0.166	0	0.166	z	2.059	1.1	2.264	2.723	0.219	3.401	0.998	0.998	3.9-3
30	3			0	0.166	0	0.166	z	2.634	1.408	2.897	3.485	0.28	3.401	0.997	0.998	3.9-3
31	4			0	0.166	0	0.166	z	2.634	1.408	2.897	3.485	0.28	3.401	0.997	0.998	3.9-3
32	5			0	0.166	0	0.166	z	2.634	1.408	2.897	3.485	0.28	3.401	0.997	0.998	3.9-3
33	6			0	0.166	0	0.166	z	2.634	1.408	2.897	3.485	0.28	3.401	0.997	0.998	3.9-3
34	7			0	0.166	0	0.166	z	2.059	1.1	2.264	2.723	0.219	3.401	0.998	0.998	3.9-3
35	8			0	0.166	0	0.166	z	2.059	1.1	2.264	2.723	0.219	3.401	0.998	0.998	3.9-3
36	9			0	0.166	0	0.166	z	2.634	1.408	2.897	3.485	0.28	3.401	0.997	0.998	3.9-3



Nom. 2x8 T+G WOOD DECKING

t = 1 7/16" E = 1,600 ksi

C_F = 1.1 F_b = 1,650 psi

T.A. = 7.5 ft^2
w_D = 7 * 0.894= 6.641 plf
w_{Lr} = 20 * 0.894^2 = 18.0 plf
w_W = 19.01 plf
$w_{W\ C+C\ D}$ = 39.5 plf
$w_{W\ C+C\ UP}$ = -29.8 plf

1.118 ft. 4.752 ft.

$M_{D+UNB\ S}$ = 923 #-in
f_b = 223 psi
F_b' = 1650*1.15*1.1 = 2087 psi OK

$M_{D+C\&C\ WL}$ = 902 #-in
f_b = 218 psi
F_b' = 1650*1.6*1.1 = 2904 psi OK

$\Delta_{0.5D+Lr}$ = 0.040" - L/1424 < L/120 OK
Δ_{Lr} = 0.033" - L/1702 < L/180 OK
$\Delta_{0.7W\ C+C\ D}$ = 0.035" - L/1642 < L/180 OK

RISA	EEC	T&G Decking - HIGH	SK-5
	DPS		Oct 02, 2023 at 02:55 PM
	14837 R		14837 T+G DECK - HIGH.r3d

Model Settings

Number of Reported Sections	3
Number of Internal Sections	100
Member Area Load Mesh Size (in^2)	144
Consider Shear Deformation	No
Consider Torsional Warping	Yes
Approximate Mesh Size (in)	24
Transfer Forces Between Intersecting Wood Walls	Yes
Increase Wood Wall Nailing Capacity for Wind Loads	Yes
Include P-Delta for Walls	Yes
Optimize Masonry and Wood Walls	Yes
Maximum Number of Iterations	3
Single	No
Multiple (Optimum)	Yes
Maximum	No

Global Axis corresponding to vertical direction	Y
Convert Existing Data	Yes
Default Global Plane for z-axis	XZ
Plate Local Axis Orientation	Global

Hot Rolled Steel	None
Stiffness Adjustment	Yes (Iterative)
Notional Annex	None
Connections	None
Cold Formed Steel	None
Stiffness Adjustment	Yes (Iterative)
Wood	AF&PA NDS-05/08: ASD
Temperature	< 100F
Concrete	None
Masonry	None
Aluminum	None
Structure Type	Building
Stiffness Adjustment	Yes (Iterative)
Stainless	None
Stiffness Adjustment	Yes (Iterative)

Compression Stress Block	Rectangular Stress Block
Analyze using Cracked Sections	Yes
Leave room for horizontal rebar splices (2*d bar spacing)	Yes
List forces which were ignored for design in the Detail Report	Yes

Column Min Steel	1
Column Max Steel	8
Rebar Material Spec	ASTM A615
Warn if beam-column framing arrangement is not understood	No
Number of Shear Regions	4
Region 2 & 3 Spacing Increase Increment (in)	4

Code	None
Base Elevation (ft)	
Include the weight of the structure in base shear calcs	Yes

Model Settings (Continued)

T Z (sec)	
T X (sec)	
C_tZ	0.02
C_tX	0.02
R Z	1.25
R X	1.25

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N1	-5.87	0	0	
2	N2	-4.752	0	0	
3	N3	0	0	0	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]
1	N2	Reaction	Reaction	Reaction	Reaction
2	N3		Reaction	Reaction	

Wood Properties

	Label	Type	Database	Species	Grade	Cm	Ci	Emod	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]
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	2x8 T+G Deck	Custom	N/A	T+G DECK	na			1	0.3	0.3	0.035

Custom Wood Properties

	Label	Fb	Ft	Fv	Fc	E	E05	Type	Cf
1	LVL_PRL_1.5E_2250F	2.25	1.5	0.22	1.95	1500	0.5	SCL	
2	LVL_PRL_2.0E_2900F	2.9	1.9	0.285	2.75	2000	0.5	SCL	
3	LVL_Microllam_1.9E_2600F	2.6	1.555	0.285	2.51	1900	0.5	SCL	
4	PSL_Parallam_2.0E_2900F	2.9	2.025	0.29	2.9	2000	0.5	SCL	
5	PSL_Parallam_1.8E	2.4	1.755	0.18	2.5	1800	0.5	SCL	
6	LSL_TimberStrand_1.55E_2325F	2.325	1.07	0.31	2.05	1550	0.5	SCL	
7	LSL_TimberStrand_1.3E_1700F	1.7	1.075	0.4	1.4	1300	0.5	SCL	
8	T+G DECK	1.65	0.8	0.175	1.5	1600	580	Visually Graded	1.1

Wood Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	Wood Decking	1.4375X12FS	Beam	None	2x8 T+G Deck	Typical	17.25	2.97	207	10.985

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N1	N2	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical
2	M2	N2	N3	90	Wood Decking	Beam	None	2x8 T+G Deck	Typical

Member Advanced Data

	Label	Physical	Deflection Ratio Options	Seismic DR
1	M1	Yes	OX	None
2	M2	Yes	Default	None

Wood Design Parameters

	Label	Shape	Length [ft]	le-bend top [ft]	Cr	y sway	z sway
1	M1	Wood Decking	1.118	Lbyy	Yes		
2	M2	Wood Decking	4.752	Lbyy	Yes		

Member Distributed Loads (BLC 1 : D)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-6.261	-6.261	0	%100
2	M2	Y	-6.261	-6.261	0	%100

Member Distributed Loads (BLC 2 : Lr)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-16	-16	0	%100
2	M2	Y	-16	-16	0	%100

Member Distributed Loads (BLC 3 : UNB S)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-6.72	-6.72	0	0.95
2	M2	Y	16.72	16.72	0.95	%100
3	M2	Y	16.72	16.72	0	%100

Member Distributed Loads (BLC 4 : W Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-19.01	-19.01	0	%100
2	M2	Y	-19.01	-19.01	0	%100

Member Distributed Loads (BLC 5 : W C+C Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	-39.5	-39.5	0	%100
2	M2	Y	-39.5	-39.5	0	%100

Member Distributed Loads (BLC 6 : W C+C UP)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Y	29.8	29.8	0	%100
2	M2	Y	29.8	29.8	0	%100

Basic Load Cases

	BLC Description	Category	Distributed
1	D	DL	2
2	Lr	RLL	2
3	UNB S	OL1	3
4	W Down	WL	2
5	W C+C Down	WL+Z	2
6	W C+C UP	WL-Z	2

Load Combinations

	Description	Solve	BLC	Factor	BLC	Factor	BLC	Factor
1	D	Yes	DL	1				
2	D+Lr	Yes	DL	1	RLL	1		
3	D+UNB S	Yes	DL	1	OL1	1		
4	D+W Down	Yes	DL	1			WL	0.6
5	D+3/4(Lr+W Down)	Yes	DL	1	RLL	0.75	WL	0.45
6	D+W C+C Down	Yes	DL	1			WL+Z	0.6
7	0.6D (5.5 psf)+W C+C UP	Yes	DL	0.471			WL-Z	0.6
8	1/2D+Lr	Yes	DL	0.5	RLL	1		
9	Lr	Yes			RLL	1		
10	0.7W C+C DOWN	Yes			WL+Z	0.42		

Load Combination Design

	Description	CD	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	D	0.9		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	D+Lr	1.25		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	D+UNB S	1.15		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	D+W Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	D+3/4(Lr+W Down)	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	D+W C+C Down	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	0.6D (5.5 psf)+W C+C UP	1.6		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	1/2D+Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	Lr	1.25	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	0.7W C+C DOWN	1.6	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
1	1	N2	0	22.699	0	0	0	0
2	2		0	80.708	0	0	0	0
3	3		0	-35.21	0	0	0	0
4	4		0	64.052	0	0	0	0
5	5		0	97.22	0	0	0	0
6	6		0	108.624	0	0	0	0
7	7		0	-54.133	0	0	0	0
8	8		0	69.358	0	0	0	0
9	9		0	58.008	0	0	0	0
10	10		0	60.147	0	0	0	0
11	1	N3	0	14.053	0	0	0	0
12	2		0	49.964	0	0	0	0
13	3		0	-64.677	0	0	0	0
14	4		0	39.653	0	0	0	0
15	5		0	60.187	0	0	0	0
16	6		0	67.247	0	0	0	0
17	7		0	-33.513	0	0	0	0
18	8		0	42.938	0	0	0	0
19	9		0	35.912	0	0	0	0
20	10		0	37.236	0	0	0	0
21	1	Totals:	0	36.752	0			
22	2		0	130.672	0			
23	3		0	-99.887	0			
24	4		0	103.705	0			
25	5		0	157.407	0			
26	6		0	175.871	0			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
27	7		0	-87.645	0			
28	8		0	112.296	0			
29	9		0	93.92	0			
30	10		0	97.383	0			
31	1	COG (ft):	X: -2.935	Y: 0	Z: 0			
32	2		X: -2.935	Y: 0	Z: 0			
33	3		X: -1.675	Y: 0	Z: 0			
34	4		X: -2.935	Y: 0	Z: 0			
35	5		X: -2.935	Y: 0	Z: 0			
36	6		X: -2.935	Y: 0	Z: 0			
37	7		X: -2.935	Y: 0	Z: 0			
38	8		X: -2.935	Y: 0	Z: 0			
39	9		X: -2.935	Y: 0	Z: 0			
40	10		X: -2.935	Y: 0	Z: 0			

Maximum Member Section Forces

	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
1	1	M1	max	0	1.118	0	1.118	7	1.118	0	1.118	0.047	1.118	0	1.118
2			min	0	0	0	0	0	0	0	0	0	0	0	0
3	2	M1	max	0	1.118	0	1.118	24.888	1.118	0	1.118	0.167	1.118	0	1.118
4			min	0	0	0	0	0	0	0	0	0	0	0	0
5	3	M1	max	0	1.118	0	1.118	13.384	1.118	0	1.118	0.096	1.118	0	1.118
6			min	0	0	0	0	0	0	0	0	0	0	0	0
7	4	M1	max	0	1.118	0	1.118	19.752	1.118	0	1.118	0.132	1.118	0	1.118
8			min	0	0	0	0	0	0	0	0	0	0	0	0
9	5	M1	max	0	1.118	0	1.118	29.98	1.118	0	1.118	0.201	1.118	0	1.118
10			min	0	0	0	0	0	0	0	0	0	0	0	0
11	6	M1	max	0	1.118	0	1.118	33.496	1.118	0	1.118	0.225	1.118	0	1.118
12			min	0	0	0	0	0	0	0	0	0	0	0	0
13	7	M1	max	0	1.118	0	1.118	0	0	0	1.118	0	0	0	1.118
14			min	0	0	0	0	-16.693	1.118	0	0	-0.112	1.118	0	0
15	8	M1	max	0	1.118	0	1.118	21.388	1.118	0	1.118	0.143	1.118	0	1.118
16			min	0	0	0	0	0	0	0	0	0	0	0	0
17	9	M1	max	0	1.118	0	1.118	17.888	1.118	0	1.118	0.12	1.118	0	1.118
18			min	0	0	0	0	0	0	0	0	0	0	0	0
19	10	M1	max	0	1.118	0	1.118	18.548	1.118	0	1.118	0.124	1.118	0	1.118
20			min	0	0	0	0	0	0	0	0	0	0	0	0
21	1	M2	max	0	4.752	0	4.752	14.053	4.752	0	4.752	0.047	0	0	4.752
22			min	0	0	0	0	-15.7	0	0	0	-0.189	2.521	0	0
23	2	M2	max	0	4.752	0	4.752	49.964	4.752	0	4.752	0.167	0	0	4.752
24			min	0	0	0	0	-55.82	0	0	0	-0.673	2.521	0	0
25	3	M2	max	0	4.752	0	4.752	48.594	0	0	4.752	0.923	2.376	0	4.752
26			min	0	0	0	0	-64.677	4.752	0	0	0	4.752	0	0
27	4	M2	max	0	4.752	0	4.752	39.653	4.752	0	4.752	0.132	0	0	4.752
28			min	0	0	0	0	-44.3	0	0	0	-0.534	2.521	0	0
29	5	M2	max	0	4.752	0	4.752	60.187	4.752	0	4.752	0.201	0	0	4.752
30			min	0	0	0	0	-67.24	0	0	0	-0.811	2.521	0	0
31	6	M2	max	0	4.752	0	4.752	67.247	4.752	0	4.752	0.225	0	0	4.752
32			min	0	0	0	0	-75.128	0	0	0	-0.906	2.521	0	0
33	7	M2	max	0	4.752	0	4.752	37.44	0	0	4.752	0.451	2.521	0	4.752
34			min	0	0	0	0	-33.513	4.752	0	0	-0.112	0	0	0
35	8	M2	max	0	4.752	0	4.752	42.938	4.752	0	4.752	0.143	0	0	4.752
36			min	0	0	0	0	-47.97	0	0	0	-0.578	2.521	0	0
37	9	M2	max	0	4.752	0	4.752	35.912	4.752	0	4.752	0.12	0	0	4.752
38			min	0	0	0	0	-40.12	0	0	0	-0.484	2.521	0	0

Maximum Member Section Forces (Continued)

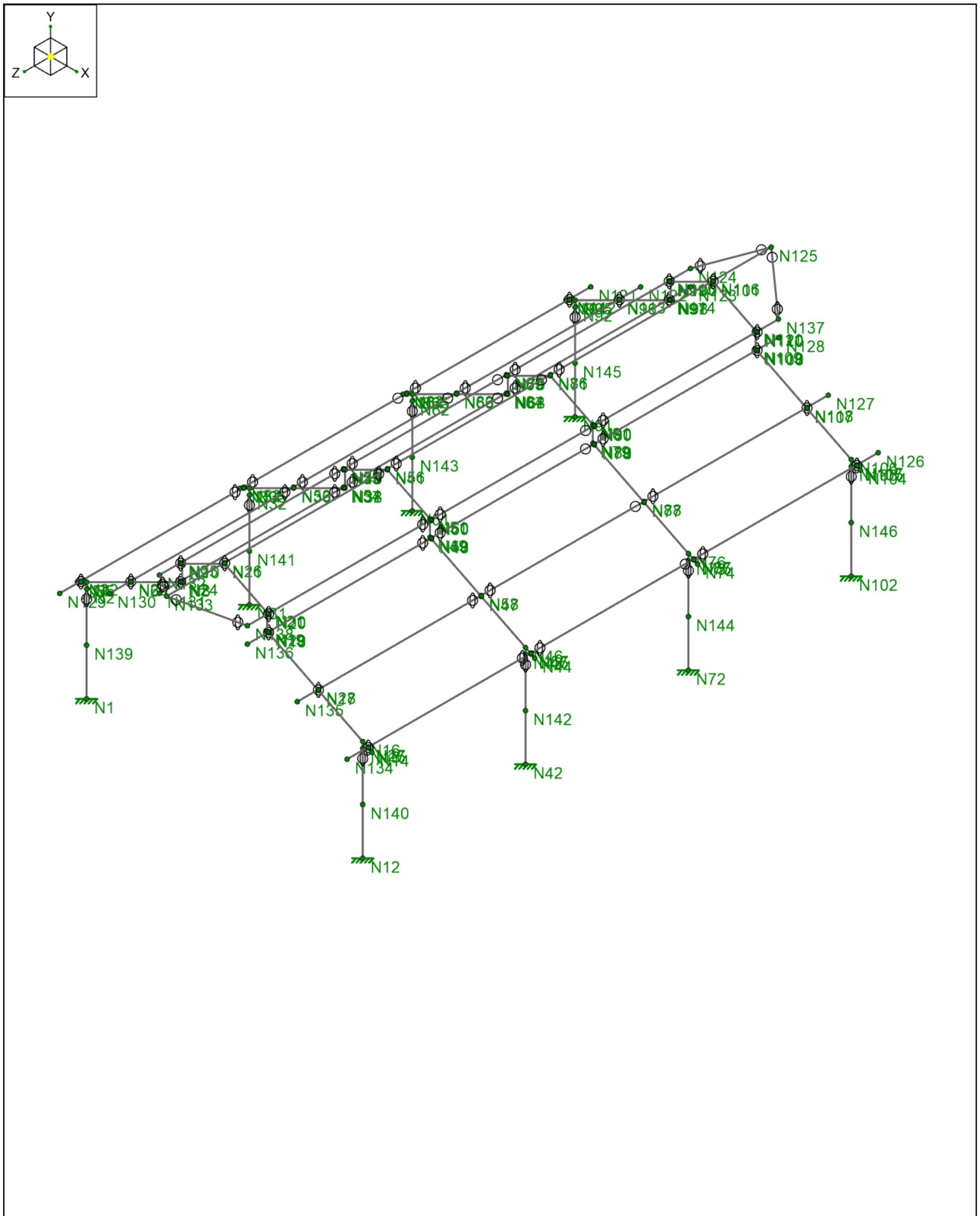
	LC	Member Label		Axial[lb]	Loc[ft]	y Shear[lb]	Loc[ft]	z Shear[lb]	Loc[ft]	Torque[k-in]	Loc[ft]	y-y Moment[k-in]	Loc[ft]	z-z Moment[k-in]	Loc[ft]
39	10	M2	max	0	4.752	0	4.752	37.236	4.752	0	4.752	0.124	0	0	4.752
40			min	0	0	0	0	-41.6	0	0	0	-0.501	2.521	0	0

Member Section Deflections - Service

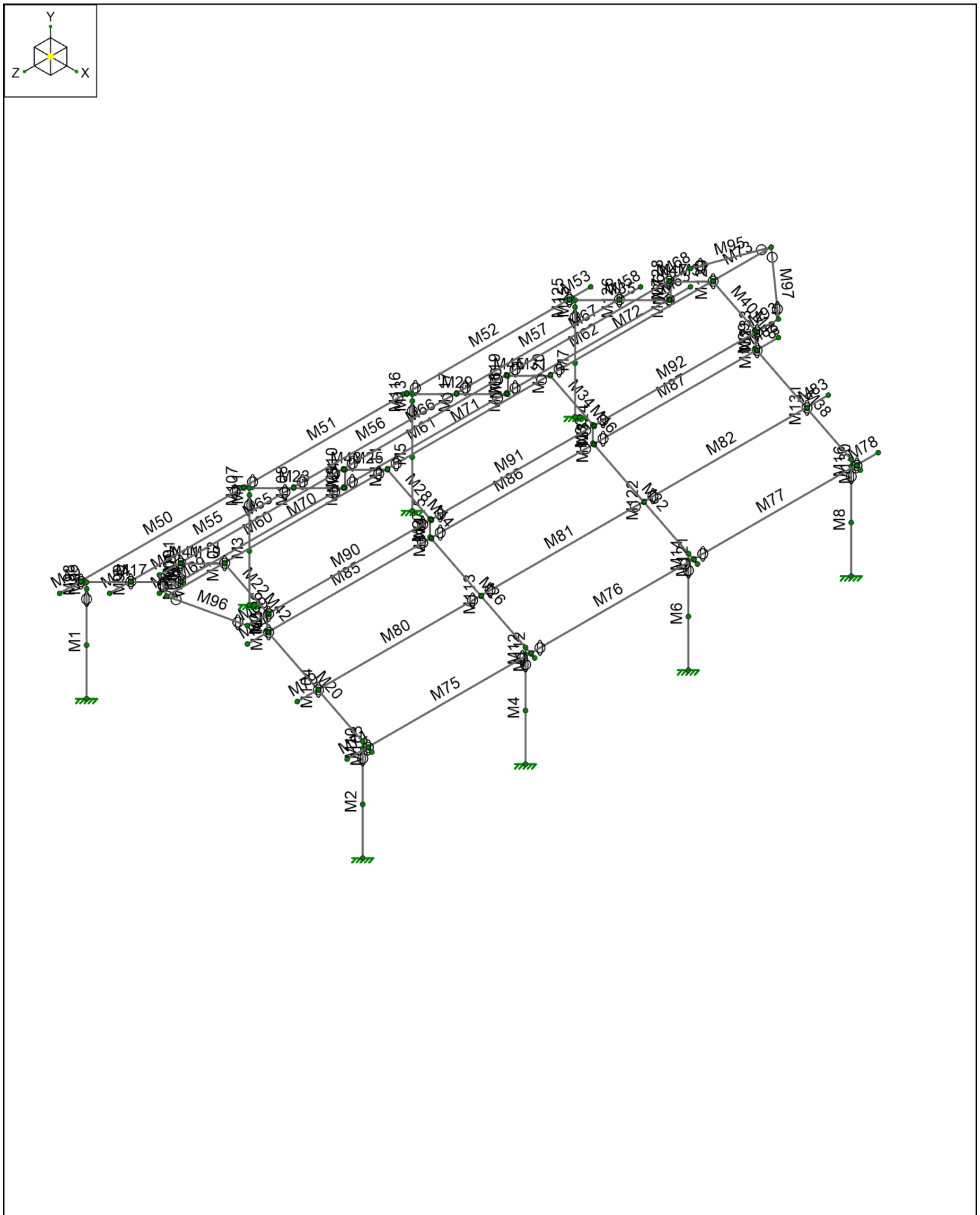
	LC	Member Label	Sec	x [in]	y [in]	z [in]	x Rotate[rad]	(n) L/y' Ratio	(n) L/z' Ratio
1	8	M1	1	0	0	-0.026	0	NC	521
2			2	0	0	-0.013	0	NC	1027
3			3	0	0	0	0	NC	NC
4	9	M1	1	0	0	-0.022	0	NC	623
5			2	0	0	-0.011	0	NC	1228
6			3	0	0	0	0	NC	NC
7	10	M1	1	0	0	-0.022	0	NC	601
8			2	0	0	-0.011	0	NC	1185
9			3	0	0	0	0	NC	NC
10	8	M2	1	0	0	0	0	NC	NC
11			2	0	0	0.04	0	NC	1424
12			3	0	0	0	0	NC	NC
13	9	M2	1	0	0	0	0	NC	NC
14			2	0	0	0.033	0	NC	1702
15			3	0	0	0	0	NC	NC
16	10	M2	1	0	0	0	0	NC	NC
17			2	0	0	0.035	0	NC	1642
18			3	0	0	0	0	NC	NC

AF&PA NDS-05/08: 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	M1	1.4375X12FS	0.006	1.118	0.004	1.118	z	1.391	0.792	1.616	1.96	0.158	8.827	0.989	0.937	3.9-3
2	2			0.015	1.118	0.01	1.118	z	1.871	1.1	2.232	2.723	0.219	8.827	0.984	0.907	3.9-3
3	3			0.009	1.118	0.006	1.118	z	1.738	1.012	2.057	2.505	0.201	8.827	0.985	0.916	3.9-3
4	4			0.009	1.118	0.006	1.118	z	2.308	1.408	2.839	3.485	0.28	8.827	0.977	0.874	3.9-3
5	5			0.014	1.118	0.009	1.118	z	2.308	1.408	2.839	3.485	0.28	8.827	0.977	0.874	3.9-3
6	6			0.016	1.118	0.01	1.118	z	2.308	1.408	2.839	3.485	0.28	8.827	0.977	0.874	3.9-3
7	7			0.008	1.118	0.005	1.118	z	2.308	1.408	2.839	3.485	0.28	8.827	0.977	0.874	3.9-3
8	8			0.013	1.118	0.009	1.118	z	1.871	1.1	2.232	2.723	0.219	8.827	0.984	0.907	3.9-3
9	9			0.011	1.118	0.007	1.118	z	1.871	1.1	2.232	2.723	0.219	8.827	0.984	0.907	3.9-3
10	10			0.009	1.118	0.006	1.118	z	2.308	1.408	2.839	3.485	0.28	8.827	0.977	0.874	3.9-3
11	1	M2	1.4375X12FS	0.023	2.521	0.009	0	z	0.291	0.792	1.468	1.96	0.158	18.197	0.899	0.196	3.9-3
12	2			0.06	2.521	0.022	0	z	0.295	1.1	1.787	2.723	0.219	18.197	0.788	0.143	3.9-3
13	3			0.089	2.376	0.028	4.752	z	0.294	1.012	1.718	2.505	0.201	18.197	0.823	0.155	3.9-3
14	4			0.037	2.521	0.014	0	z	0.298	1.408	1.928	3.485	0.28	18.197	0.664	0.113	3.9-3
15	5			0.056	2.521	0.021	0	z	0.298	1.408	1.928	3.485	0.28	18.197	0.664	0.113	3.9-3
16	6			0.063	2.521	0.023	0	z	0.298	1.408	1.928	3.485	0.28	18.197	0.664	0.113	3.9-3
17	7			0.031	2.521	0.012	0	z	0.298	1.408	1.928	3.485	0.28	18.197	0.664	0.113	3.9-3
18	8			0.051	2.521	0.019	0	z	0.295	1.1	1.787	2.723	0.219	18.197	0.788	0.143	3.9-3
19	9			0.043	2.521	0.016	0	z	0.295	1.1	1.787	2.723	0.219	18.197	0.788	0.143	3.9-3
20	10			0.035	2.521	0.013	0	z	0.298	1.408	1.928	3.485	0.28	18.197	0.664	0.113	3.9-3



RISA	EEC	TS-G3059-2T-RE-06-TG	SK-1
	DPS		Dec 07, 2023 at 11:29 AM
	14837 R		14837 TS-G3059-2T-RE-06-...



RISA	EEC	TS-G3059-2T-RE-06-TG	SK-2
	DPS		Dec 07, 2023 at 11:30 AM
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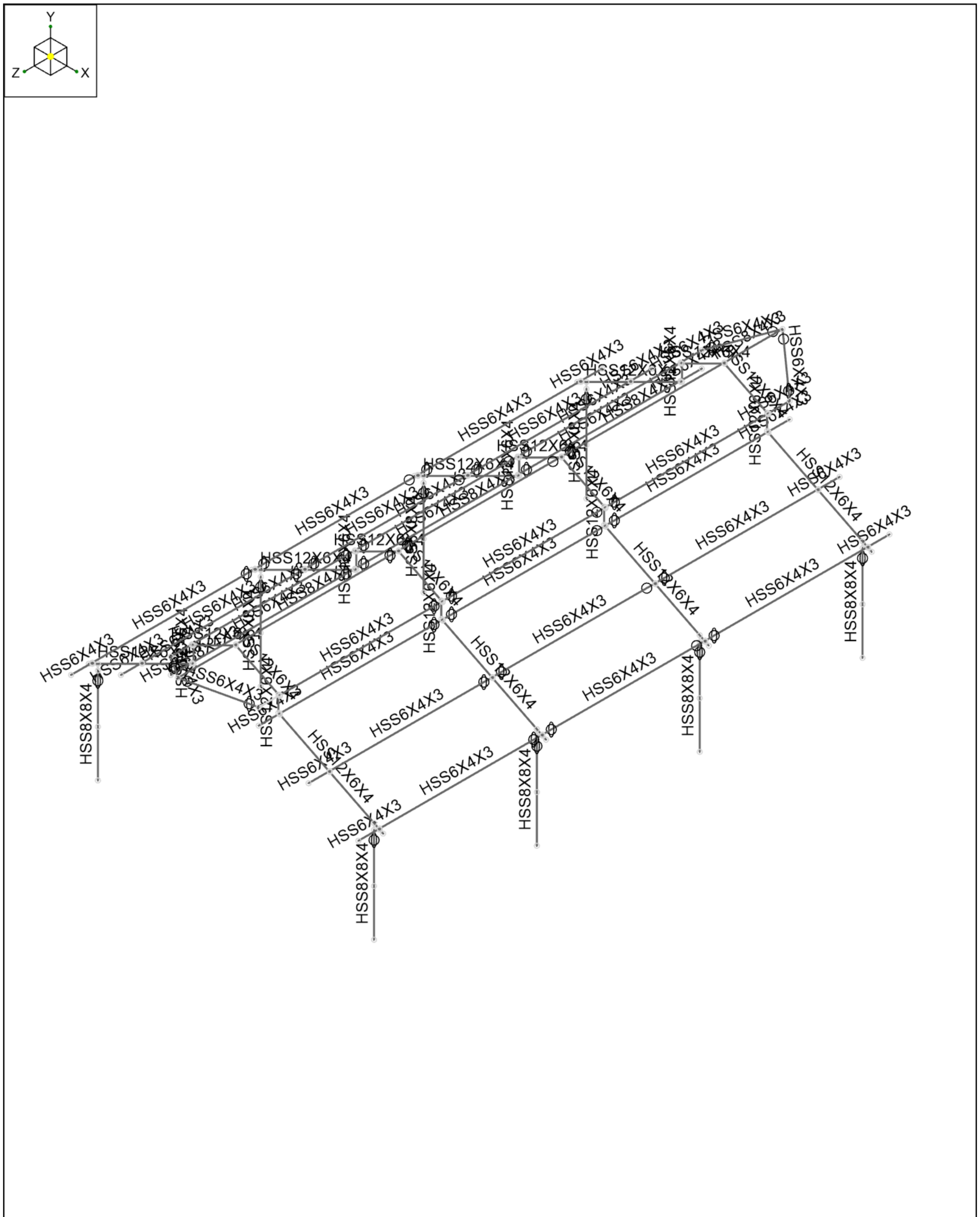
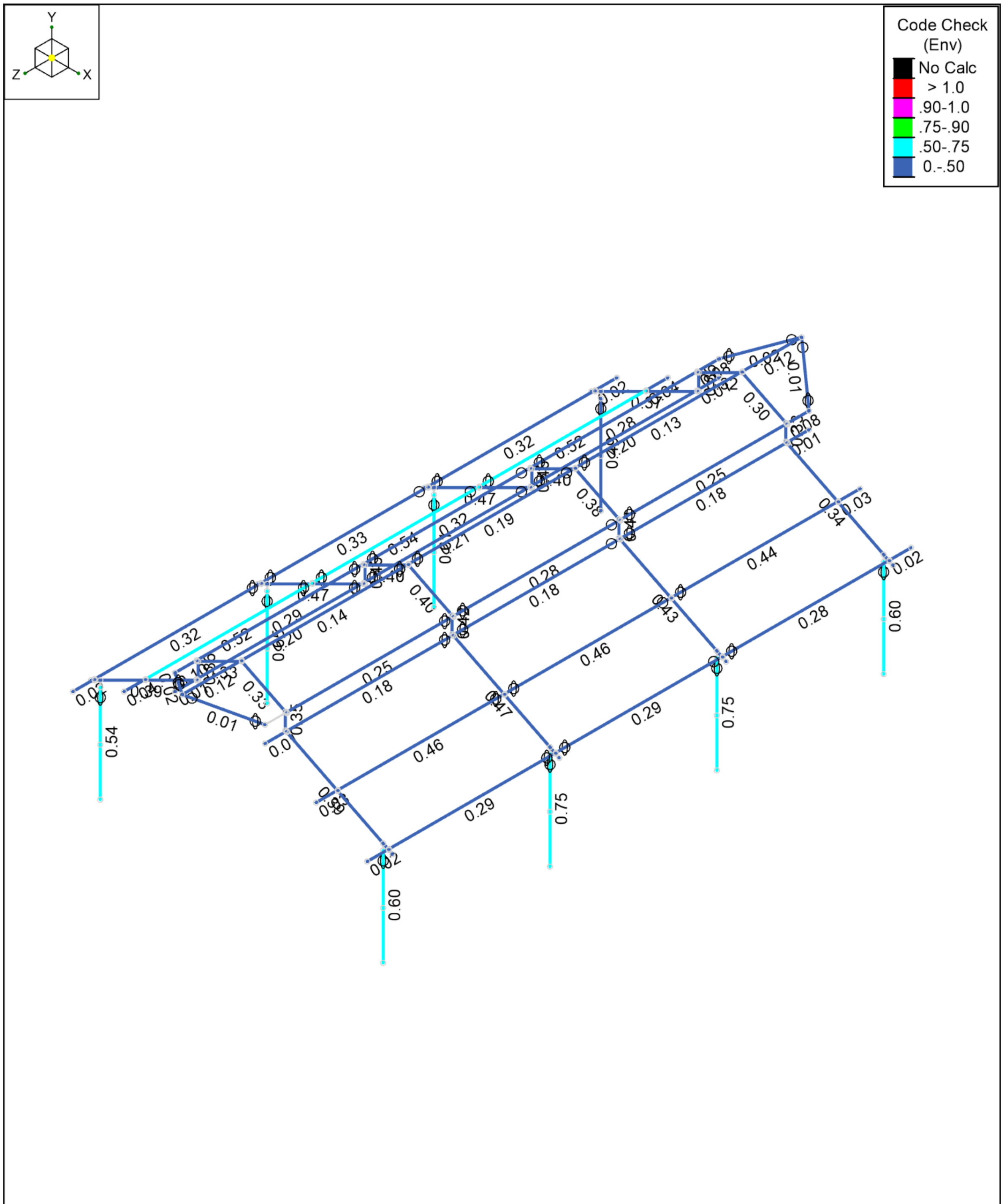


RISA	EEC	TS-G3059-2T-RE-06-TG	SK-3
	DPS		Dec 07, 2023 at 11:32 AM
	14837 R		14837 TS-G3059-2T-RE-06-...



Member Code Checks Displayed (Enveloped)

RISA	EEC	TS-G3059-2T-RE-06-TG	SK-4
	DPS		Dec 07, 2023 at 11:32 AM
	14837 R		14837 TS-G3059-2T-RE-06-...

Model Settings

Number of Reported Sections	3
Number of Internal Sections	100
Member Area Load Mesh Size (in^2)	144
Consider Shear Deformation	Yes
Consider Torsional Warping	Yes
Approximate Mesh Size (in)	24
Transfer Forces Between Intersecting Wood Walls	Yes
Increase Wood Wall Nailing Capacity for Wind Loads	Yes
Include P-Delta for Walls	Yes
Optimize Masonry and Wood Walls	Yes
Maximum Number of Iterations	3
Single	No
Multiple (Optimum)	Yes
Maximum	No

Global Axis corresponding to vertical direction	Y
Convert Existing Data	Yes
Default Global Plane for z-axis	XZ
Plate Local Axis Orientation	Global

Hot Rolled Steel	AISC 13th (360-05): ASD
Stiffness Adjustment	Yes (Iterative)
Notional Annex	None
Connections	AISC 13th (360-05): ASD
Cold Formed Steel	None
Stiffness Adjustment	Yes (Iterative)
Wood	None
Temperature	< 100F
Concrete	ACI 318-05
Masonry	None
Aluminum	None
Structure Type	Building
Stiffness Adjustment	Yes (Iterative)
Stainless	None
Stiffness Adjustment	Yes (Iterative)

Analysis Methodology	Exact Integration Method
Parme Beta Factor	0.65

Compression Stress Block	Rectangular Stress Block
Analyze using Cracked Sections	Yes
Leave room for horizontal rebar splices (2*d bar spacing)	Yes
List forces which were ignored for design in the Detail Report	Yes

Column Min Steel	1
Column Max Steel	8
Rebar Material Spec	ASTM A615
Warn if beam-column framing arrangement is not understood	No
Number of Shear Regions	4
Region 2 & 3 Spacing Increase Increment (in)	4

Code	ASCE 7-05

Model Settings (Continued)

Occupancy Cat	I or II
Drift Cat	Other
Base Elevation (ft)	
Include the weight of the structure in base shear calcs	Yes
S_1 (g)	0.104
SD_1 (g)	0.118
SD_S (g)	0.245
T_L (sec)	12
T Z (sec)	
T X (sec)	
C_tZ	0.02
C_tX	0.02
C_tExp. Z	0.75
C_tExp. X	0.75
R Z	1.25
R X	1.25
Ω_0Z	1.25
Ω_0X	1.25
C_dZ	1.25
C_dX	1.25
ρ Z	1
ρ X	1

Node Coordinates

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
1	N1	-13	-9.52	0	
2	N2	-13	-0.56	0	
3	N3	-13.86	-0.43	0	
4	N4	-13.53	-0.265	0	
5	N5	-13	0	0	
6	N6	-8.835	2.083	0	
7	N7	-4.139	4.431	0	
8	N8	-4	4.5	0	
9	N9	-4.139	5.931	0	
10	N10	-4	6	0	
11	N11	0	8	0	
12	N12	13	-9.52	0	
13	N13	13	-0.56	0	
14	N14	13.86	-0.43	0	
15	N15	13.53	-0.265	0	
16	N16	13	0	0	
17	N17	8.835	2.083	0	
18	N18	4.139	4.431	0	
19	N19	4	4.5	0	
20	N20	4.139	5.931	0	
21	N21	4	6	0	
22	N22	-13.53	-0.177	0	
23	N23	-8.835	2.171	0	
24	N24	-4.139	4.519	0	
25	N25	-4.139	6.019	0	
26	N26	0	8.088	0	
27	N27	13.53	-0.177	0	
28	N28	8.835	2.171	0	
29	N29	4.139	4.519	0	
30	N30	4.139	6.019	0	
31	N31	-13	-9.52	-15.333	
32	N32	-13	-0.56	-15.333	
33	N33	-13.86	-0.43	-15.333	
34	N34	-13.53	-0.265	-15.333	
35	N35	-13	0	-15.333	
36	N36	-8.835	2.083	-15.333	
37	N37	-4.139	4.431	-15.333	
38	N38	-4	4.5	-15.333	
39	N39	-4.139	5.931	-15.333	
40	N40	-4	6	-15.333	
41	N41	0	8	-15.333	
42	N42	13	-9.52	-15.333	
43	N43	13	-0.56	-15.333	
44	N44	13.86	-0.43	-15.333	
45	N45	13.53	-0.265	-15.333	
46	N46	13	0	-15.333	
47	N47	8.835	2.083	-15.333	
48	N48	4.139	4.431	-15.333	
49	N49	4	4.5	-15.333	
50	N50	4.139	5.931	-15.333	
51	N51	4	6	-15.333	
52	N52	-13.53	-0.177	-15.333	
53	N53	-8.835	2.171	-15.333	
54	N54	-4.139	4.519	-15.333	
55	N55	-4.139	6.019	-15.333	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
56	N56	0	8.088	-15.333	
57	N57	13.53	-0.177	-15.333	
58	N58	8.835	2.171	-15.333	
59	N59	4.139	4.519	-15.333	
60	N60	4.139	6.019	-15.333	
61	N61	-13	-9.52	-30.667	
62	N62	-13	-0.56	-30.667	
63	N63	-13.86	-0.43	-30.667	
64	N64	-13.53	-0.265	-30.667	
65	N65	-13	0	-30.667	
66	N66	-8.835	2.083	-30.667	
67	N67	-4.139	4.431	-30.667	
68	N68	-4	4.5	-30.667	
69	N69	-4.139	5.931	-30.667	
70	N70	-4	6	-30.667	
71	N71	0	8	-30.667	
72	N72	13	-9.52	-30.667	
73	N73	13	-0.56	-30.667	
74	N74	13.86	-0.43	-30.667	
75	N75	13.53	-0.265	-30.667	
76	N76	13	0	-30.667	
77	N77	8.835	2.083	-30.667	
78	N78	4.139	4.431	-30.667	
79	N79	4	4.5	-30.667	
80	N80	4.139	5.931	-30.667	
81	N81	4	6	-30.667	
82	N82	-13.53	-0.177	-30.667	
83	N83	-8.835	2.171	-30.667	
84	N84	-4.139	4.519	-30.667	
85	N85	-4.139	6.019	-30.667	
86	N86	0	8.088	-30.667	
87	N87	13.53	-0.177	-30.667	
88	N88	8.835	2.171	-30.667	
89	N89	4.139	4.519	-30.667	
90	N90	4.139	6.019	-30.667	
91	N91	-13	-9.52	-46	
92	N92	-13	-0.56	-46	
93	N93	-13.86	-0.43	-46	
94	N94	-13.53	-0.265	-46	
95	N95	-13	0	-46	
96	N96	-8.835	2.083	-46	
97	N97	-4.139	4.431	-46	
98	N98	-4	4.5	-46	
99	N99	-4.139	5.931	-46	
100	N100	-4	6	-46	
101	N101	0	8	-46	
102	N102	13	-9.52	-46	
103	N103	13	-0.56	-46	
104	N104	13.86	-0.43	-46	
105	N105	13.53	-0.265	-46	
106	N106	13	0	-46	
107	N107	8.835	2.083	-46	
108	N108	4.139	4.431	-46	
109	N109	4	4.5	-46	
110	N110	4.139	5.931	-46	

Node Coordinates (Continued)

	Label	X [ft]	Y [ft]	Z [ft]	Detach From Diaphragm
111	N111	4	6	-46	
112	N112	-13.53	-0.177	-46	
113	N113	-8.835	2.171	-46	
114	N114	-4.139	4.519	-46	
115	N115	-4.139	6.019	-46	
116	N116	0	8.088	-46	
117	N117	13.53	-0.177	-46	
118	N118	8.835	2.171	-46	
119	N119	4.139	4.519	-46	
120	N120	4.139	6.019	-46	
121	N121	-13.53	-0.177	-48	
122	N122	-8.835	2.171	-48	
123	N123	-4.139	4.519	-48	
124	N124	-4.139	6.019	-48	
125	N125	0	8.088	-51.46599	
126	N126	13.53	-0.177	-48	
127	N127	8.835	2.171	-48	
128	N128	4.139	4.519	-48	
129	N129	-13.53	-0.177	2	
130	N130	-8.835	2.171	2	
131	N131	-4.139	4.519	2	
132	N132	-4.139	6.019	2	
133	N133	0	8.088	5.466	
134	N134	13.53	-0.177	2	
135	N135	8.835	2.171	2	
136	N136	4.139	4.519	2	
137	N137	4.139	6.019	-48	
138	N138	4.139	6.019	2	
139	N139	-13	-5.14	0	
140	N140	13	-5.14	0	
141	N141	-13	-5.14	-15.333	
142	N142	13	-5.14	-15.333	
143	N143	-13	-5.14	-30.667	
144	N144	13	-5.14	-30.667	
145	N145	-13	-5.14	-46	
146	N146	13	-5.14	-46	

Node Boundary Conditions

	Node Label	X [k/in]	Y [k/in]	Z [k/in]	X Rot [k-ft/rad]	Y Rot [k-ft/rad]	Z Rot [k-ft/rad]
1	N1	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
2	N12	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
3	N31	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
4	N42	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
5	N61	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
6	N72	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
7	N91	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction
8	N102	Reaction	Reaction	Reaction	Reaction	Reaction	Reaction

Hot Rolled Steel Properties

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	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

Hot Rolled Steel Properties (Continued)

	Label	E [ksi]	G [ksi]	Nu	Therm. Coeff. [1e⁵°F⁻¹]	Density [k/ft³]	Yield [ksi]	Ry	Fu [ksi]	Rt
4	A500 Gr.B RND	29000	11154	0.3	0.65	0.527	42	1.4	58	1.3
5	A500 Gr.C Rect	29000	11154	0.3	0.65	0.527	50	1.4	62	1.3
6	A53 Gr.B	29000	11154	0.3	0.65	0.49	35	1.6	60	1.2
7	A1085	29000	11154	0.3	0.65	0.49	50	1.4	65	1.3
8	A500 Gr.C (Zero)	29000	11154	0.3	0.65	0	50	1.4	62	1.3

Hot Rolled Steel Section Sets

	Label	Shape	Type	Design List	Material	Design Rule	Area [in²]	Iyy [in⁴]	Izz [in⁴]	J [in⁴]
1	COLUMN	HSS8X8X4	Column	Tube	A500 Gr.C Rect	Typical	7.1	70.7	70.7	111
2	Rafter	HSS12X6X4	Beam	Tube	A500 Gr.C Rect	Typical	8.03	51.9	151	124
3	Post	HSS12X6X4	Column	Tube	A500 Gr.C Rect	Typical	8.03	51.9	151	124
4	P-1	HSS6X4X3	Beam	Tube	A500 Gr.C Rect	Typical	3.28	8.76	16.4	18.2
5	P-2	HSS6X4X3	Beam	Tube	A500 Gr.C Rect	Typical	3.28	8.76	16.4	18.2
6	P-3	HSS8X4X3	Beam	Tube	A500 Gr.C Rect	Typical	3.98	11.3	33.1	27.2
7	Rafter2	HSS6X4X3	Beam	Tube	A500 Gr.C Rect	Typical	3.28	8.76	16.4	18.2
8	Link1	HSS12X6X4	None	None	A500 Gr.C (Zero)	Typical	8.03	51.9	151	124
9	Link2	HSS6X4X3	None	None	A500 Gr.C (Zero)	Typical	3.28	8.76	16.4	18.2
10	Link3	HSS6X4X3	None	None	A500 Gr.C (Zero)	Typical	3.28	8.76	16.4	18.2
11	Link4	HSS6X4X3	None	None	A500 Gr.C (Zero)	Typical	3.28	8.76	16.4	18.2

Member Primary Data

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
1	M1	N1	N2		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
2	M2	N12	N13		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
3	M3	N31	N32		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
4	M4	N42	N43		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
5	M5	N61	N62		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
6	M6	N72	N73		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
7	M7	N91	N92		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
8	M8	N102	N103		COLUMN	Column	Tube	A500 Gr.C Rect	Typical
9	M9	N2	N5		Link1	None	None	A500 Gr.C (Zero)	Typical
10	M10	N13	N16		Link1	None	None	A500 Gr.C (Zero)	Typical
11	M11	N32	N35		Link1	None	None	A500 Gr.C (Zero)	Typical
12	M12	N43	N46		Link1	None	None	A500 Gr.C (Zero)	Typical
13	M13	N62	N65		Link1	None	None	A500 Gr.C (Zero)	Typical
14	M14	N73	N76		Link1	None	None	A500 Gr.C (Zero)	Typical
15	M15	N92	N95		Link1	None	None	A500 Gr.C (Zero)	Typical
16	M16	N103	N106		Link1	None	None	A500 Gr.C (Zero)	Typical
17	M17	N3	N8		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
18	M18	N8	N10		Post	Column	Tube	A500 Gr.C Rect	Typical
19	M19	N10	N11		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
20	M20	N14	N19		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
21	M21	N19	N21		Post	Column	Tube	A500 Gr.C Rect	Typical
22	M22	N21	N11		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
23	M23	N33	N38		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
24	M24	N38	N40		Post	Column	Tube	A500 Gr.C Rect	Typical
25	M25	N40	N41		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
26	M26	N44	N49		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
27	M27	N49	N51		Post	Column	Tube	A500 Gr.C Rect	Typical
28	M28	N51	N41		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
29	M29	N63	N68		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
30	M30	N68	N70		Post	Column	Tube	A500 Gr.C Rect	Typical
31	M31	N70	N71		Rafter	Beam	Tube	A500 Gr.C Rect	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
32	M32	N74	N79		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
33	M33	N79	N81		Post	Column	Tube	A500 Gr.C Rect	Typical
34	M34	N81	N71		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
35	M35	N93	N98		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
36	M36	N98	N100		Post	Column	Tube	A500 Gr.C Rect	Typical
37	M37	N100	N101		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
38	M38	N104	N109		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
39	M39	N109	N111		Post	Column	Tube	A500 Gr.C Rect	Typical
40	M40	N111	N101		Rafter	Beam	Tube	A500 Gr.C Rect	Typical
41	M41	N9	N10		Link1	None	None	A500 Gr.C (Zero)	Typical
42	M42	N20	N21		Link1	None	None	A500 Gr.C (Zero)	Typical
43	M43	N39	N40		Link1	None	None	A500 Gr.C (Zero)	Typical
44	M44	N50	N51		Link1	None	None	A500 Gr.C (Zero)	Typical
45	M45	N69	N70		Link1	None	None	A500 Gr.C (Zero)	Typical
46	M46	N80	N81		Link1	None	None	A500 Gr.C (Zero)	Typical
47	M47	N99	N100		Link1	None	None	A500 Gr.C (Zero)	Typical
48	M48	N110	N111		Link1	None	None	A500 Gr.C (Zero)	Typical
49	M49	N129	N22	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
50	M50	N22	N52	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
51	M51	N52	N82	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
52	M52	N82	N112	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
53	M53	N112	N121	333.435	P-1	Beam	Tube	A500 Gr.C Rect	Typical
54	M54	N130	N23	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
55	M55	N23	N53	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
56	M56	N53	N83	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
57	M57	N83	N113	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
58	M58	N113	N122	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
59	M59	N131	N24	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
60	M60	N24	N54	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
61	M61	N54	N84	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
62	M62	N84	N114	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
63	M63	N114	N123	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
64	M64	N132	N25	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
65	M65	N25	N55	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
66	M66	N55	N85	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
67	M67	N85	N115	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
68	M68	N115	N124	333.435	P-2	Beam	Tube	A500 Gr.C Rect	Typical
69	M69	N133	N26		P-3	Beam	Tube	A500 Gr.C Rect	Typical
70	M70	N26	N56		P-3	Beam	Tube	A500 Gr.C Rect	Typical
71	M71	N56	N86		P-3	Beam	Tube	A500 Gr.C Rect	Typical
72	M72	N86	N116		P-3	Beam	Tube	A500 Gr.C Rect	Typical
73	M73	N116	N125		P-3	Beam	Tube	A500 Gr.C Rect	Typical
74	M74	N134	N27	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
75	M75	N27	N57	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
76	M76	N57	N87	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
77	M77	N87	N117	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
78	M78	N117	N126	26.565	P-1	Beam	Tube	A500 Gr.C Rect	Typical
79	M79	N135	N28	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
80	M80	N28	N58	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
81	M81	N58	N88	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
82	M82	N88	N118	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
83	M83	N118	N127	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
84	M84	N136	N29	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
85	M85	N29	N59	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
86	M86	N59	N89	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical

Member Primary Data (Continued)

	Label	I Node	J Node	Rotate(deg)	Section/Shape	Type	Design List	Material	Design Rule
87	M87	N89	N119	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
88	M88	N119	N128	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
89	M89	N138	N30	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
90	M90	N30	N60	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
91	M91	N60	N90	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
92	M92	N90	N120	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
93	M93	N120	N137	26.565	P-2	Beam	Tube	A500 Gr.C Rect	Typical
94	M94	N132	N133		Rafter2	Beam	Tube	A500 Gr.C Rect	Typical
95	M95	N124	N125		Rafter2	Beam	Tube	A500 Gr.C Rect	Typical
96	M96	N138	N133		Rafter2	Beam	Tube	A500 Gr.C Rect	Typical
97	M97	N137	N125		Rafter2	Beam	Tube	A500 Gr.C Rect	Typical
98	M98	N4	N22		Link2	None	None	A500 Gr.C (Zero)	Typical
99	M99	N6	N23		Link3	None	None	A500 Gr.C (Zero)	Typical
100	M100	N7	N24		Link3	None	None	A500 Gr.C (Zero)	Typical
101	M101	N9	N25		Link4	None	None	A500 Gr.C (Zero)	Typical
102	M102	N11	N26		Link4	None	None	A500 Gr.C (Zero)	Typical
103	M103	N15	N27		Link2	None	None	A500 Gr.C (Zero)	Typical
104	M104	N17	N28		Link3	None	None	A500 Gr.C (Zero)	Typical
105	M105	N18	N29		Link3	None	None	A500 Gr.C (Zero)	Typical
106	M106	N20	N30		Link4	None	None	A500 Gr.C (Zero)	Typical
107	M107	N34	N52		Link2	None	None	A500 Gr.C (Zero)	Typical
108	M108	N36	N53		Link3	None	None	A500 Gr.C (Zero)	Typical
109	M109	N37	N54		Link3	None	None	A500 Gr.C (Zero)	Typical
110	M110	N39	N55		Link4	None	None	A500 Gr.C (Zero)	Typical
111	M111	N41	N56		Link4	None	None	A500 Gr.C (Zero)	Typical
112	M112	N45	N57		Link2	None	None	A500 Gr.C (Zero)	Typical
113	M113	N47	N58		Link3	None	None	A500 Gr.C (Zero)	Typical
114	M114	N48	N59		Link3	None	None	A500 Gr.C (Zero)	Typical
115	M115	N50	N60		Link4	None	None	A500 Gr.C (Zero)	Typical
116	M116	N64	N82		Link2	None	None	A500 Gr.C (Zero)	Typical
117	M117	N66	N83		Link3	None	None	A500 Gr.C (Zero)	Typical
118	M118	N67	N84		Link3	None	None	A500 Gr.C (Zero)	Typical
119	M119	N69	N85		Link4	None	None	A500 Gr.C (Zero)	Typical
120	M120	N71	N86		Link4	None	None	A500 Gr.C (Zero)	Typical
121	M121	N75	N87		Link2	None	None	A500 Gr.C (Zero)	Typical
122	M122	N77	N88		Link3	None	None	A500 Gr.C (Zero)	Typical
123	M123	N78	N89		Link3	None	None	A500 Gr.C (Zero)	Typical
124	M124	N80	N90		Link4	None	None	A500 Gr.C (Zero)	Typical
125	M125	N94	N112		Link2	None	None	A500 Gr.C (Zero)	Typical
126	M126	N96	N113		Link3	None	None	A500 Gr.C (Zero)	Typical
127	M127	N97	N114		Link3	None	None	A500 Gr.C (Zero)	Typical
128	M128	N99	N115		Link4	None	None	A500 Gr.C (Zero)	Typical
129	M129	N101	N116		Link4	None	None	A500 Gr.C (Zero)	Typical
130	M130	N105	N117		Link2	None	None	A500 Gr.C (Zero)	Typical
131	M131	N107	N118		Link3	None	None	A500 Gr.C (Zero)	Typical
132	M132	N108	N119		Link3	None	None	A500 Gr.C (Zero)	Typical
133	M133	N110	N120		Link4	None	None	A500 Gr.C (Zero)	Typical

Member Advanced Data

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
1	M1		OOOXOX	Yes	** NA **		None
2	M2		OOOXOX	Yes	** NA **		None
3	M3		OOOXOX	Yes	** NA **		None
4	M4		OOOXOX	Yes	** NA **		None
5	M5		OOOXOX	Yes	** NA **		None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
6	M6		OOOXOX	Yes	** NA **		None
7	M7		OOOXOX	Yes	** NA **		None
8	M8		OOOXOX	Yes	** NA **		None
9	M9			Yes	** NA **	Exclude	None
10	M10			Yes	** NA **	Exclude	None
11	M11			Yes	** NA **	Exclude	None
12	M12			Yes	** NA **	Exclude	None
13	M13			Yes	** NA **	Exclude	None
14	M14			Yes	** NA **	Exclude	None
15	M15			Yes	** NA **	Exclude	None
16	M16			Yes	** NA **	Exclude	None
17	M17			Yes	N/A		None
18	M18			Yes	** NA **		None
19	M19			Yes	N/A		None
20	M20			Yes	N/A		None
21	M21			Yes	** NA **		None
22	M22			Yes	N/A		None
23	M23			Yes	N/A		None
24	M24			Yes	** NA **		None
25	M25			Yes	N/A		None
26	M26			Yes	N/A		None
27	M27			Yes	** NA **		None
28	M28			Yes	N/A		None
29	M29			Yes	N/A		None
30	M30			Yes	** NA **		None
31	M31			Yes	N/A		None
32	M32			Yes	N/A		None
33	M33			Yes	** NA **		None
34	M34			Yes	N/A		None
35	M35			Yes	N/A		None
36	M36			Yes	** NA **		None
37	M37			Yes	N/A		None
38	M38			Yes	N/A		None
39	M39			Yes	** NA **		None
40	M40			Yes	N/A		None
41	M41			Yes	** NA **	Exclude	None
42	M42			Yes	** NA **	Exclude	None
43	M43			Yes	** NA **	Exclude	None
44	M44			Yes	** NA **	Exclude	None
45	M45			Yes	** NA **	Exclude	None
46	M46			Yes	** NA **	Exclude	None
47	M47			Yes	** NA **	Exclude	None
48	M48			Yes	** NA **	Exclude	None
49	M49			Yes	N/A		None
50	M50		AllPIN	Yes	Default		None
51	M51	AllPIN	BenPIN	Yes	Default		None
52	M52	AllPIN		Yes	Default		None
53	M53			Yes	N/A		None
54	M54			Yes	N/A		None
55	M55		AllPIN	Yes	N/A		None
56	M56	AllPIN	BenPIN	Yes	N/A		None
57	M57	AllPIN		Yes	N/A		None
58	M58			Yes	N/A		None
59	M59			Yes	N/A		None
60	M60		AllPIN	Yes	N/A		None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
61	M61	AllPIN	BenPIN	Yes	N/A		None
62	M62	AllPIN		Yes	N/A		None
63	M63			Yes	N/A		None
64	M64			Yes	N/A		None
65	M65		AllPIN	Yes	N/A		None
66	M66	AllPIN	BenPIN	Yes	N/A		None
67	M67	AllPIN		Yes	N/A		None
68	M68			Yes	N/A		None
69	M69			Yes	N/A		None
70	M70		AllPIN	Yes	N/A		None
71	M71	AllPIN	BenPIN	Yes	N/A		None
72	M72	AllPIN		Yes	N/A		None
73	M73			Yes	N/A		None
74	M74			Yes	N/A		None
75	M75		AllPIN	Yes	N/A		None
76	M76	AllPIN	BenPIN	Yes	N/A		None
77	M77	AllPIN		Yes	N/A		None
78	M78			Yes	N/A		None
79	M79			Yes	N/A		None
80	M80		AllPIN	Yes	N/A		None
81	M81	AllPIN	BenPIN	Yes	N/A		None
82	M82	AllPIN		Yes	N/A		None
83	M83			Yes	N/A		None
84	M84			Yes	N/A		None
85	M85		AllPIN	Yes	N/A		None
86	M86	AllPIN	BenPIN	Yes	N/A		None
87	M87	AllPIN		Yes	N/A		None
88	M88			Yes	N/A		None
89	M89			Yes	N/A		None
90	M90		AllPIN	Yes	N/A		None
91	M91	AllPIN	BenPIN	Yes	N/A		None
92	M92	AllPIN		Yes	N/A		None
93	M93			Yes	N/A		None
94	M94	AllPIN	BenPIN	Yes	N/A		None
95	M95	AllPIN	BenPIN	Yes	N/A		None
96	M96	AllPIN	BenPIN	Yes	N/A		None
97	M97	AllPIN	BenPIN	Yes	N/A		None
98	M98		OOOXXO	Yes	** NA **	Exclude	None
99	M99		OOOXXO	Yes	** NA **	Exclude	None
100	M100		OOOXXO	Yes	** NA **	Exclude	None
101	M101		OOOXXO	Yes	** NA **	Exclude	None
102	M102		OOOXXO	Yes	** NA **	Exclude	None
103	M103		OOOXXO	Yes	** NA **	Exclude	None
104	M104		OOOXXO	Yes	** NA **	Exclude	None
105	M105		OOOXXO	Yes	** NA **	Exclude	None
106	M106		OOOXXO	Yes	** NA **	Exclude	None
107	M107			Yes	** NA **	Exclude	None
108	M108			Yes	** NA **	Exclude	None
109	M109			Yes	** NA **	Exclude	None
110	M110			Yes	** NA **	Exclude	None
111	M111			Yes	** NA **	Exclude	None
112	M112			Yes	** NA **	Exclude	None
113	M113			Yes	** NA **	Exclude	None
114	M114			Yes	** NA **	Exclude	None
115	M115			Yes	** NA **	Exclude	None

Member Advanced Data (Continued)

	Label	I Release	J Release	Physical	Deflection Ratio Options	Activation	Seismic DR
116	M116			Yes	** NA **	Exclude	None
117	M117			Yes	** NA **	Exclude	None
118	M118			Yes	** NA **	Exclude	None
119	M119			Yes	** NA **	Exclude	None
120	M120			Yes	** NA **	Exclude	None
121	M121			Yes	** NA **	Exclude	None
122	M122			Yes	** NA **	Exclude	None
123	M123			Yes	** NA **	Exclude	None
124	M124			Yes	** NA **	Exclude	None
125	M125		OOOXXO	Yes	** NA **	Exclude	None
126	M126		OOOXXO	Yes	** NA **	Exclude	None
127	M127		OOOXXO	Yes	** NA **	Exclude	None
128	M128		OOOXXO	Yes	** NA **	Exclude	None
129	M129		OOOXXO	Yes	** NA **	Exclude	None
130	M130		OOOXXO	Yes	** NA **	Exclude	None
131	M131		OOOXXO	Yes	** NA **	Exclude	None
132	M132		OOOXXO	Yes	** NA **	Exclude	None
133	M133		OOOXXO	Yes	** NA **	Exclude	None

Hot Rolled Steel Design Parameters

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	K y-y	K z-z	Channel Conn.	a [ft]	Function
1	M1	COLUMN	8.96			Lbyy	2.1	2.1	N/A	N/A	Lateral
2	M2	COLUMN	8.96			Lbyy	2.1	2.1	N/A	N/A	Lateral
3	M3	COLUMN	8.96			Lbyy	2.1	2.1	N/A	N/A	Lateral
4	M4	COLUMN	8.96			Lbyy	2.1	2.1	N/A	N/A	Lateral
5	M5	COLUMN	8.96			Lbyy	2.1	2.1	N/A	N/A	Lateral
6	M6	COLUMN	8.96			Lbyy	2.1	2.1	N/A	N/A	Lateral
7	M7	COLUMN	8.96			Lbyy	2.1	2.1	N/A	N/A	Lateral
8	M8	COLUMN	8.96			Lbyy	2.1	2.1	N/A	N/A	Lateral
9	M9	Link1	0.56			Lbyy			N/A	N/A	Gravity
10	M10	Link1	0.56			Lbyy			N/A	N/A	Gravity
11	M11	Link1	0.56			Lbyy			N/A	N/A	Gravity
12	M12	Link1	0.56			Lbyy			N/A	N/A	Gravity
13	M13	Link1	0.56			Lbyy			N/A	N/A	Gravity
14	M14	Link1	0.56			Lbyy			N/A	N/A	Gravity
15	M15	Link1	0.56			Lbyy			N/A	N/A	Gravity
16	M16	Link1	0.56			Lbyy			N/A	N/A	Gravity
17	M17	Rafter	11.024	5.25	16.03	Lbyy			N/A	N/A	Gravity
18	M18	Post	1.5		16.03	Lbyy	2.1		N/A	N/A	Gravity
19	M19	Rafter	4.472	5	16.03	Lbyy			N/A	N/A	Gravity
20	M20	Rafter	11.024	5.25	16.03	Lbyy			N/A	N/A	Gravity
21	M21	Post	1.5		16.03	Lbyy	2.1		N/A	N/A	Gravity
22	M22	Rafter	4.472	5	16.03	Lbyy			N/A	N/A	Gravity
23	M23	Rafter	11.024	5.25	16.03	Lbyy			N/A	N/A	Gravity
24	M24	Post	1.5		16.03	Lbyy	2.1		N/A	N/A	Gravity
25	M25	Rafter	4.472	5	16.03	Lbyy			N/A	N/A	Gravity
26	M26	Rafter	11.024	5.25	16.03	Lbyy			N/A	N/A	Gravity
27	M27	Post	1.5		16.03	Lbyy	2.1		N/A	N/A	Gravity
28	M28	Rafter	4.472	5	16.03	Lbyy			N/A	N/A	Gravity
29	M29	Rafter	11.024	5.25	16.03	Lbyy			N/A	N/A	Gravity
30	M30	Post	1.5		16.03	Lbyy	2.1		N/A	N/A	Gravity
31	M31	Rafter	4.472	5	16.03	Lbyy			N/A	N/A	Gravity
32	M32	Rafter	11.024	5.25	16.03	Lbyy			N/A	N/A	Gravity
33	M33	Post	1.5		16.03	Lbyy	2.1		N/A	N/A	Gravity
34	M34	Rafter	4.472	5	16.03	Lbyy			N/A	N/A	Gravity

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	K y-y	K z-z	Channel Conn.	a [ft]	Function
35	M35	Rafter	11.024	5.25	16.03	Lbyy			N/A	N/A	Gravity
36	M36	Post	1.5		16.03	Lbyy	2.1		N/A	N/A	Gravity
37	M37	Rafter	4.472	5	16.03	Lbyy			N/A	N/A	Gravity
38	M38	Rafter	11.024	5.25	16.03	Lbyy			N/A	N/A	Gravity
39	M39	Post	1.5		16.03	Lbyy	2.1		N/A	N/A	Gravity
40	M40	Rafter	4.472	5	16.03	Lbyy			N/A	N/A	Gravity
41	M41	Link1	0.155			Lbyy			N/A	N/A	Gravity
42	M42	Link1	0.155			Lbyy			N/A	N/A	Gravity
43	M43	Link1	0.155			Lbyy			N/A	N/A	Gravity
44	M44	Link1	0.155			Lbyy			N/A	N/A	Gravity
45	M45	Link1	0.155			Lbyy			N/A	N/A	Gravity
46	M46	Link1	0.155			Lbyy			N/A	N/A	Gravity
47	M47	Link1	0.155			Lbyy			N/A	N/A	Gravity
48	M48	Link1	0.155			Lbyy			N/A	N/A	Gravity
49	M49	P-1	2			Lbyy		2.1	N/A	N/A	Gravity
50	M50	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
51	M51	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
52	M52	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
53	M53	P-1	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
54	M54	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
55	M55	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
56	M56	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
57	M57	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
58	M58	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
59	M59	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
60	M60	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
61	M61	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
62	M62	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
63	M63	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
64	M64	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
65	M65	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
66	M66	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
67	M67	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
68	M68	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
69	M69	P-3	5.466	0.6		Lbyy		2.1	N/A	N/A	Gravity
70	M70	P-3	15.333	0.6		Lbyy			N/A	N/A	Gravity
71	M71	P-3	15.334	0.6		Lbyy			N/A	N/A	Gravity
72	M72	P-3	15.333	0.6		Lbyy			N/A	N/A	Gravity
73	M73	P-3	5.466	0.6		Lbyy		2.1	N/A	N/A	Gravity
74	M74	P-1	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
75	M75	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
76	M76	P-1	15.334	0.6		Lbyy			N/A	N/A	Gravity
77	M77	P-1	15.333	0.6		Lbyy			N/A	N/A	Gravity
78	M78	P-1	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
79	M79	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
80	M80	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
81	M81	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
82	M82	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
83	M83	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
84	M84	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
85	M85	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
86	M86	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
87	M87	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
88	M88	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
89	M89	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity

Hot Rolled Steel Design Parameters (Continued)

	Label	Shape	Length [ft]	Lb y-y [ft]	Lb z-z [ft]	Lcomp top [ft]	K y-y	K z-z	Channel Conn.	a [ft]	Function
90	M90	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
91	M91	P-2	15.334	0.6		Lbyy			N/A	N/A	Gravity
92	M92	P-2	15.333	0.6		Lbyy			N/A	N/A	Gravity
93	M93	P-2	2	0.6		Lbyy		2.1	N/A	N/A	Gravity
94	M94	Rafter2	5.781	0.6		Lbyy			N/A	N/A	Gravity
95	M95	Rafter2	5.781	0.6		Lbyy			N/A	N/A	Gravity
96	M96	Rafter2	5.781	0.6		Lbyy			N/A	N/A	Gravity
97	M97	Rafter2	5.781	0.6		Lbyy			N/A	N/A	Gravity
98	M98	Link2	0.088			Lbyy			N/A	N/A	Gravity
99	M99	Link3	0.088			Lbyy			N/A	N/A	Gravity
100	M100	Link3	0.088			Lbyy			N/A	N/A	Gravity
101	M101	Link4	0.088			Lbyy			N/A	N/A	Gravity
102	M102	Link4	0.088			Lbyy			N/A	N/A	Gravity
103	M103	Link2	0.088			Lbyy			N/A	N/A	Gravity
104	M104	Link3	0.088			Lbyy			N/A	N/A	Gravity
105	M105	Link3	0.088			Lbyy			N/A	N/A	Gravity
106	M106	Link4	0.088			Lbyy			N/A	N/A	Gravity
107	M107	Link2	0.088			Lbyy			N/A	N/A	Gravity
108	M108	Link3	0.088			Lbyy			N/A	N/A	Gravity
109	M109	Link3	0.088			Lbyy			N/A	N/A	Gravity
110	M110	Link4	0.088			Lbyy			N/A	N/A	Gravity
111	M111	Link4	0.088			Lbyy			N/A	N/A	Gravity
112	M112	Link2	0.088			Lbyy			N/A	N/A	Gravity
113	M113	Link3	0.088			Lbyy			N/A	N/A	Gravity
114	M114	Link3	0.088			Lbyy			N/A	N/A	Gravity
115	M115	Link4	0.088			Lbyy			N/A	N/A	Gravity
116	M116	Link2	0.088			Lbyy			N/A	N/A	Gravity
117	M117	Link3	0.088			Lbyy			N/A	N/A	Gravity
118	M118	Link3	0.088			Lbyy			N/A	N/A	Gravity
119	M119	Link4	0.088			Lbyy			N/A	N/A	Gravity
120	M120	Link4	0.088			Lbyy			N/A	N/A	Gravity
121	M121	Link2	0.088			Lbyy			N/A	N/A	Gravity
122	M122	Link3	0.088			Lbyy			N/A	N/A	Gravity
123	M123	Link3	0.088			Lbyy			N/A	N/A	Gravity
124	M124	Link4	0.088			Lbyy			N/A	N/A	Gravity
125	M125	Link2	0.088			Lbyy			N/A	N/A	Gravity
126	M126	Link3	0.088			Lbyy			N/A	N/A	Gravity
127	M127	Link3	0.088			Lbyy			N/A	N/A	Gravity
128	M128	Link4	0.088			Lbyy			N/A	N/A	Gravity
129	M129	Link4	0.088			Lbyy			N/A	N/A	Gravity
130	M130	Link2	0.088			Lbyy			N/A	N/A	Gravity
131	M131	Link3	0.088			Lbyy			N/A	N/A	Gravity
132	M132	Link3	0.088			Lbyy			N/A	N/A	Gravity
133	M133	Link4	0.088			Lbyy			N/A	N/A	Gravity

Member RISAConnection Properties

	Label	Shape	Start Conn	End Conn	Start Release	End Release
1	M1	HSS8X8X4	BP-2	None	Fixed	Fixed
2	M2	HSS8X8X4	BP-2	None	Fixed	Fixed
3	M3	HSS8X8X4	BP-1	None	Fixed	Fixed
4	M4	HSS8X8X4	BP-1	None	Fixed	Fixed
5	M5	HSS8X8X4	BP-1	None	Fixed	Fixed
6	M6	HSS8X8X4	BP-1	None	Fixed	Fixed
7	M7	HSS8X8X4	BP-2	None	Fixed	Fixed
8	M8	HSS8X8X4	BP-2	None	Fixed	Fixed

Member RISAConnection Properties (Continued)

	Label	Shape	Start Conn	End Conn	Start Release	End Release
9	M9	HSS12X6X4	None	None	Fixed	Fixed
10	M10	HSS12X6X4	None	None	Fixed	Fixed
11	M11	HSS12X6X4	None	None	Fixed	Fixed
12	M12	HSS12X6X4	None	None	Fixed	Fixed
13	M13	HSS12X6X4	None	None	Fixed	Fixed
14	M14	HSS12X6X4	None	None	Fixed	Fixed
15	M15	HSS12X6X4	None	None	Fixed	Fixed
16	M16	HSS12X6X4	None	None	Fixed	Fixed
17	M17	HSS12X6X4	None	None	Fixed	Fixed
18	M18	HSS12X6X4	None	None	Fixed	Fixed
19	M19	HSS12X6X4	None	None	Fixed	Fixed
20	M20	HSS12X6X4	None	None	Fixed	Fixed
21	M21	HSS12X6X4	None	None	Fixed	Fixed
22	M22	HSS12X6X4	None	None	Fixed	Fixed
23	M23	HSS12X6X4	None	None	Fixed	Fixed
24	M24	HSS12X6X4	None	None	Fixed	Fixed
25	M25	HSS12X6X4	None	None	Fixed	Fixed
26	M26	HSS12X6X4	None	None	Fixed	Fixed
27	M27	HSS12X6X4	None	None	Fixed	Fixed
28	M28	HSS12X6X4	None	None	Fixed	Fixed
29	M29	HSS12X6X4	None	None	Fixed	Fixed
30	M30	HSS12X6X4	None	None	Fixed	Fixed
31	M31	HSS12X6X4	None	None	Fixed	Fixed
32	M32	HSS12X6X4	None	None	Fixed	Fixed
33	M33	HSS12X6X4	None	None	Fixed	Fixed
34	M34	HSS12X6X4	None	None	Fixed	Fixed
35	M35	HSS12X6X4	None	None	Fixed	Fixed
36	M36	HSS12X6X4	None	None	Fixed	Fixed
37	M37	HSS12X6X4	None	None	Fixed	Fixed
38	M38	HSS12X6X4	None	None	Fixed	Fixed
39	M39	HSS12X6X4	None	None	Fixed	Fixed
40	M40	HSS12X6X4	None	None	Fixed	Fixed
41	M41	HSS12X6X4	None	None	Fixed	Fixed
42	M42	HSS12X6X4	None	None	Fixed	Fixed
43	M43	HSS12X6X4	None	None	Fixed	Fixed
44	M44	HSS12X6X4	None	None	Fixed	Fixed
45	M45	HSS12X6X4	None	None	Fixed	Fixed
46	M46	HSS12X6X4	None	None	Fixed	Fixed
47	M47	HSS12X6X4	None	None	Fixed	Fixed
48	M48	HSS12X6X4	None	None	Fixed	Fixed
49	M49	HSS6X4X3	None	None	Fixed	Fixed
50	M50	HSS6X4X3	None	None	Fixed	Pinned
51	M51	HSS6X4X3	None	None	Pinned	Pinned
52	M52	HSS6X4X3	None	None	Pinned	Fixed
53	M53	HSS6X4X3	None	None	Fixed	Fixed
54	M54	HSS6X4X3	None	None	Fixed	Fixed
55	M55	HSS6X4X3	None	None	Fixed	Pinned
56	M56	HSS6X4X3	None	None	Pinned	Pinned
57	M57	HSS6X4X3	None	None	Pinned	Fixed
58	M58	HSS6X4X3	None	None	Fixed	Fixed
59	M59	HSS6X4X3	None	None	Fixed	Fixed
60	M60	HSS6X4X3	None	None	Fixed	Pinned
61	M61	HSS6X4X3	None	None	Pinned	Pinned
62	M62	HSS6X4X3	None	None	Pinned	Fixed
63	M63	HSS6X4X3	None	None	Fixed	Fixed

Member RISAConnection Properties (Continued)

	Label	Shape	Start Conn	End Conn	Start Release	End Release
64	M64	HSS6X4X3	None	None	Fixed	Fixed
65	M65	HSS6X4X3	None	None	Fixed	Pinned
66	M66	HSS6X4X3	None	None	Pinned	Pinned
67	M67	HSS6X4X3	None	None	Pinned	Fixed
68	M68	HSS6X4X3	None	None	Fixed	Fixed
69	M69	HSS8X4X3	None	None	Fixed	Fixed
70	M70	HSS8X4X3	None	None	Fixed	Pinned
71	M71	HSS8X4X3	None	None	Pinned	Pinned
72	M72	HSS8X4X3	None	None	Pinned	Fixed
73	M73	HSS8X4X3	None	None	Fixed	Fixed
74	M74	HSS6X4X3	None	None	Fixed	Fixed
75	M75	HSS6X4X3	None	None	Fixed	Pinned
76	M76	HSS6X4X3	None	None	Pinned	Pinned
77	M77	HSS6X4X3	None	None	Pinned	Fixed
78	M78	HSS6X4X3	None	None	Fixed	Fixed
79	M79	HSS6X4X3	None	None	Fixed	Fixed
80	M80	HSS6X4X3	None	None	Fixed	Pinned
81	M81	HSS6X4X3	None	None	Pinned	Pinned
82	M82	HSS6X4X3	None	None	Pinned	Fixed
83	M83	HSS6X4X3	None	None	Fixed	Fixed
84	M84	HSS6X4X3	None	None	Fixed	Fixed
85	M85	HSS6X4X3	None	None	Fixed	Pinned
86	M86	HSS6X4X3	None	None	Pinned	Pinned
87	M87	HSS6X4X3	None	None	Pinned	Fixed
88	M88	HSS6X4X3	None	None	Fixed	Fixed
89	M89	HSS6X4X3	None	None	Fixed	Fixed
90	M90	HSS6X4X3	None	None	Fixed	Pinned
91	M91	HSS6X4X3	None	None	Pinned	Pinned
92	M92	HSS6X4X3	None	None	Pinned	Fixed
93	M93	HSS6X4X3	None	None	Fixed	Fixed
94	M94	HSS6X4X3	None	None	Pinned	Pinned
95	M95	HSS6X4X3	None	None	Pinned	Pinned
96	M96	HSS6X4X3	None	None	Pinned	Pinned
97	M97	HSS6X4X3	None	None	Pinned	Pinned
98	M98	HSS6X4X3	None	None	Fixed	Pinned
99	M99	HSS6X4X3	None	None	Fixed	Pinned
100	M100	HSS6X4X3	None	None	Fixed	Pinned
101	M101	HSS6X4X3	None	None	Fixed	Pinned
102	M102	HSS6X4X3	None	None	Fixed	Pinned
103	M103	HSS6X4X3	None	None	Fixed	Pinned
104	M104	HSS6X4X3	None	None	Fixed	Pinned
105	M105	HSS6X4X3	None	None	Fixed	Pinned
106	M106	HSS6X4X3	None	None	Fixed	Pinned
107	M107	HSS6X4X3	None	None	Fixed	Fixed
108	M108	HSS6X4X3	None	None	Fixed	Fixed
109	M109	HSS6X4X3	None	None	Fixed	Fixed
110	M110	HSS6X4X3	None	None	Fixed	Fixed
111	M111	HSS6X4X3	None	None	Fixed	Fixed
112	M112	HSS6X4X3	None	None	Fixed	Fixed
113	M113	HSS6X4X3	None	None	Fixed	Fixed
114	M114	HSS6X4X3	None	None	Fixed	Fixed
115	M115	HSS6X4X3	None	None	Fixed	Fixed
116	M116	HSS6X4X3	None	None	Fixed	Fixed
117	M117	HSS6X4X3	None	None	Fixed	Fixed
118	M118	HSS6X4X3	None	None	Fixed	Fixed

Member RISAConnection Properties (Continued)

	Label	Shape	Start Conn	End Conn	Start Release	End Release
119	M119	HSS6X4X3	None	None	Fixed	Fixed
120	M120	HSS6X4X3	None	None	Fixed	Fixed
121	M121	HSS6X4X3	None	None	Fixed	Fixed
122	M122	HSS6X4X3	None	None	Fixed	Fixed
123	M123	HSS6X4X3	None	None	Fixed	Fixed
124	M124	HSS6X4X3	None	None	Fixed	Fixed
125	M125	HSS6X4X3	None	None	Fixed	Pinned
126	M126	HSS6X4X3	None	None	Fixed	Pinned
127	M127	HSS6X4X3	None	None	Fixed	Pinned
128	M128	HSS6X4X3	None	None	Fixed	Pinned
129	M129	HSS6X4X3	None	None	Fixed	Pinned
130	M130	HSS6X4X3	None	None	Fixed	Pinned
131	M131	HSS6X4X3	None	None	Fixed	Pinned
132	M132	HSS6X4X3	None	None	Fixed	Pinned
133	M133	HSS6X4X3	None	None	Fixed	Pinned

Connection Design Rules

	Label	Conn Type	Type	Beam Conn	Col/Girder Conn	Eccentricity
1	Col/Bm Clip Angle	Shear	Column/Beam Clip Double Angle Shear	Welded	Bolted	1.5
2	Col/Bm Shear Tab	Shear	Column/Beam Shear Tab Shear	Bolted	N/A	3
3	Girder/Bm Clip Angle	Shear	Girder/Beam Clip Single Angle Shear	Welded	Bolted	N/A
4	Girder/Bm Shear Tab	Shear	Girder/Beam Shear Tab Shear	Bolted	N/A	N/A
5	Flange Plate Moment	Moment	Column/Beam Flange Plate Moment	Bolted	N/A	N/A
6	End-Plate Moment	Moment	Column/Beam Extended End-Plate Moment	N/A	N/A	N/A
7	Col Shear Splice	Shear	Column Shear Tab Splice	N/A	N/A	N/A
8	Col Moment Splice	Moment	Column Moment Plate Splice	N/A	N/A	N/A
9	Diagonal Brace	Brace	Diagonal Vertical Brace	N/A	N/A	N/A
10	Chevron Brace	Brace	Chevron Vertical Brace	N/A	N/A	N/A
11	BP-1	Baseplate	Single Column Baseplate	N/A	N/A	N/A
12	BP-2	Baseplate	Single Column Baseplate	N/A	N/A	N/A

Node Loads and Enforced Displacements (BLC 1 : D)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N133	L	Y	-7
2	N125	L	Y	-7

Node Loads and Enforced Displacements (BLC 2 : Lr Left)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N133	L	Y	-8
2	N125	L	Y	-8

Node Loads and Enforced Displacements (BLC 3 : Lr Right)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N133	L	Y	-8
2	N125	L	Y	-8

Node Loads and Enforced Displacements (BLC 4 : W LAT1)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N133	L	Y	-9
2	N125	L	Y	-9
3	N133	L	X	3.2
4	N125	L	X	3.2

Node Loads and Enforced Displacements (BLC 5 : W LAT2)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N133	L	Y	6.2
2	N125	L	Y	6.2
3	N133	L	X	2.4
4	N125	L	X	2.4

Node Loads and Enforced Displacements (BLC 9 : W Down)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N133	L	Y	-11
2	N125	L	Y	-4

Node Loads and Enforced Displacements (BLC 10 : W Up)

	Node Label	L, D, M	Direction	Magnitude [(lb, kip-in), (in, rad), (lb*s²/ft, lb*s²*ft)]
1	N133	L	Y	11
2	N125	L	Y	4

Member Distributed Loads (BLC 1 : D)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M49	PY	-26.3	-26.3	0	%100
2	M50	PY	-26.3	-26.3	0	%100
3	M51	PY	-26.3	-26.3	0	%100
4	M52	PY	-26.3	-26.3	0	%100
5	M53	PY	-26.3	-26.3	0	%100
6	M54	PY	-43.6	-43.6	0	%100
7	M55	PY	-43.6	-43.6	0	%100
8	M56	PY	-43.6	-43.6	0	%100
9	M57	PY	-43.6	-43.6	0	%100
10	M58	PY	-43.6	-43.6	0	%100
11	M59	PY	-15.4	-15.4	0	%100
12	M60	PY	-15.4	-15.4	0	%100
13	M61	PY	-15.4	-15.4	0	%100
14	M62	PY	-15.4	-15.4	0	%100
15	M63	PY	-15.4	-15.4	0	%100
16	M64	PY	-25.4	-25.4	0	%100
17	M65	PY	-25.4	-25.4	0	%100
18	M66	PY	-25.4	-25.4	0	%100
19	M67	PY	-25.4	-25.4	0	%100
20	M68	PY	-25.4	-25.4	0	%100
21	M69	PY	0	-31.4	0	3.466
22	M69	PY	-31.4	-31.4	3.466	%100
23	M70	PY	-31.4	-31.4	0	%100
24	M71	PY	-31.4	-31.4	0	%100
25	M72	PY	-31.4	-31.4	0	%100

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

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
26	M73	PY	-31.4	-31.4	0	2
27	M73	PY	-31.4	0	2	%100
28	M74	PY	-26.3	-26.3	0	%100
29	M75	PY	-26.3	-26.3	0	%100
30	M76	PY	-26.3	-26.3	0	%100
31	M77	PY	-26.3	-26.3	0	%100
32	M78	PY	-26.3	-26.3	0	%100
33	M79	PY	-43.6	-43.6	0	%100
34	M80	PY	-43.6	-43.6	0	%100
35	M81	PY	-43.6	-43.6	0	%100
36	M82	PY	-43.6	-43.6	0	%100
37	M83	PY	-43.6	-43.6	0	%100
38	M84	PY	-15.4	-15.4	0	%100
39	M85	PY	-15.4	-15.4	0	%100
40	M86	PY	-15.4	-15.4	0	%100
41	M87	PY	-15.4	-15.4	0	%100
42	M88	PY	-15.4	-15.4	0	%100
43	M89	PY	-25.4	-25.4	0	%100
44	M90	PY	-25.4	-25.4	0	%100
45	M91	PY	-25.4	-25.4	0	%100
46	M92	PY	-25.4	-25.4	0	%100
47	M93	PY	-25.4	-25.4	0	%100
48	M94	PY	-16	-4.9	0	%100
49	M95	PY	-16	-4.9	0	%100
50	M96	PY	-16	-4.9	0	%100
51	M97	PY	-16	-4.9	0	%100

Member Distributed Loads (BLC 2 : Lr Left)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M49	PY	-67.3	-67.3	0	%100
2	M50	PY	-67.3	-67.3	0	%100
3	M51	PY	-67.3	-67.3	0	%100
4	M52	PY	-67.3	-67.3	0	%100
5	M53	PY	-67.3	-67.3	0	%100
6	M54	PY	-111.4	-111.4	0	%100
7	M55	PY	-111.4	-111.4	0	%100
8	M56	PY	-111.4	-111.4	0	%100
9	M57	PY	-111.4	-111.4	0	%100
10	M58	PY	-111.4	-111.4	0	%100
11	M59	PY	-39.2	-39.2	0	%100
12	M60	PY	-39.2	-39.2	0	%100
13	M61	PY	-39.2	-39.2	0	%100
14	M62	PY	-39.2	-39.2	0	%100
15	M63	PY	-39.2	-39.2	0	%100
16	M64	PY	-64.8	-64.8	0	%100
17	M65	PY	-64.8	-64.8	0	%100
18	M66	PY	-64.8	-64.8	0	%100
19	M67	PY	-64.8	-64.8	0	%100
20	M68	PY	-64.8	-64.8	0	%100
21	M69	PY	0	-40.15	0	3.466
22	M69	PY	-40.15	-40.15	3.466	%100
23	M70	PY	-40.15	-40.15	0	%100
24	M71	PY	-40.15	-40.15	0	%100
25	M72	PY	-40.15	-40.15	0	%100
26	M73	PY	-40.15	-40.15	0	2

Member Distributed Loads (BLC 2 : Lr Left) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
27	M73	PY	-40.15	0	2	%100
28	M94	PY	-41	-12.6	0	%100
29	M95	PY	-41	-12.6	0	%100

Member Distributed Loads (BLC 3 : Lr Right)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M69	PY	0	-40.15	0	3.466
2	M69	PY	-40.15	-40.15	3.466	%100
3	M70	PY	-40.15	-40.15	0	%100
4	M71	PY	-40.15	-40.15	0	%100
5	M72	PY	-40.15	-40.15	0	%100
6	M73	PY	-40.15	-40.15	0	2
7	M73	PY	-40.15	0	2	%100
8	M74	PY	-67.3	-67.3	0	%100
9	M75	PY	-67.3	-67.3	0	%100
10	M76	PY	-67.3	-67.3	0	%100
11	M77	PY	-67.3	-67.3	0	%100
12	M78	PY	-67.3	-67.3	0	%100
13	M79	PY	-111.4	-111.4	0	%100
14	M80	PY	-111.4	-111.4	0	%100
15	M81	PY	-111.4	-111.4	0	%100
16	M82	PY	-111.4	-111.4	0	%100
17	M83	PY	-111.4	-111.4	0	%100
18	M84	PY	-39.2	-39.2	0	%100
19	M85	PY	-39.2	-39.2	0	%100
20	M86	PY	-39.2	-39.2	0	%100
21	M87	PY	-39.2	-39.2	0	%100
22	M88	PY	-39.2	-39.2	0	%100
23	M89	PY	-64.8	-64.8	0	%100
24	M90	PY	-64.8	-64.8	0	%100
25	M91	PY	-64.8	-64.8	0	%100
26	M92	PY	-64.8	-64.8	0	%100
27	M93	PY	-64.8	-64.8	0	%100
28	M96	PY	-41	-12.6	0	%100
29	M97	PY	-41	-12.6	0	%100

Member Distributed Loads (BLC 4 : W LAT1)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	X	55.6	55.6	0.54	4.375
2	M2	X	55.6	55.6	0.54	4.375
3	M3	X	55.6	55.6	0.54	4.375
4	M4	X	55.6	55.6	0.54	4.375
5	M5	X	55.6	55.6	0.54	4.375
6	M6	X	55.6	55.6	0.54	4.375
7	M7	X	55.6	55.6	0.54	4.375
8	M8	X	55.6	55.6	0.54	4.375
9	M1	X	18.5	18.5	4.375	%100
10	M2	X	18.5	18.5	4.375	%100
11	M3	X	18.5	18.5	4.375	%100
12	M4	X	18.5	18.5	4.375	%100
13	M5	X	18.5	18.5	4.375	%100
14	M6	X	18.5	18.5	4.375	%100
15	M7	X	18.5	18.5	4.375	%100

Member Distributed Loads (BLC 4 : W LAT1) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
16	M8	X	18.5	18.5	4.375	%100
17	M18	X	13.9	13.9	0	%100
18	M21	X	13.9	13.9	0	%100
19	M24	X	13.9	13.9	0	%100
20	M27	X	13.9	13.9	0	%100
21	M30	X	13.9	13.9	0	%100
22	M36	X	13.9	13.9	0	%100
23	M39	X	13.9	13.9	0	%100
24	M49	X	6.3	6.3	0	%100
25	M50	X	6.3	6.3	0	%100
26	M51	X	6.3	6.3	0	%100
27	M52	X	6.3	6.3	0	%100
28	M53	X	6.3	6.3	0	%100
29	M74	X	5.1	5.1	0	%100
30	M75	X	5.1	5.1	0	%100
31	M76	X	5.1	5.1	0	%100
32	M77	X	5.1	5.1	0	%100
33	M78	X	5.1	5.1	0	%100
34	M64	X	6.5	6.5	0	%100
35	M65	X	6.5	6.5	0	%100
36	M66	X	6.5	6.5	0	%100
37	M67	X	6.5	6.5	0	%100
38	M68	X	6.5	6.5	0	%100
39	M89	X	5.2	5.2	0	%100
40	M90	X	5.2	5.2	0	%100
41	M91	X	5.2	5.2	0	%100
42	M92	X	5.2	5.2	0	%100
43	M93	X	5.2	5.2	0	%100
44	M94	X	7.9	7.9	0	%100
45	M95	X	7.9	7.9	0	%100
46	M96	X	6.3	6.3	0	%100
47	M97	X	6.3	6.3	0	%100
48	M49	y	-70.2	-70.2	0	%100
49	M50	y	-70.2	-70.2	0	%100
50	M51	y	-70.2	-70.2	0	%100
51	M52	y	-70.2	-70.2	0	%100
52	M53	y	-70.2	-70.2	0	%100
53	M54	y	-116.2	-116.2	0	%100
54	M55	y	-116.2	-116.2	0	%100
55	M56	y	-116.2	-116.2	0	%100
56	M57	y	-116.2	-116.2	0	%100
57	M58	y	-116.2	-116.2	0	%100
58	M59	y	-40.9	-40.9	0	%100
59	M60	y	-40.9	-40.9	0	%100
60	M61	y	-40.9	-40.9	0	%100
61	M62	y	-40.9	-40.9	0	%100
62	M63	y	-40.9	-40.9	0	%100
63	M64	y	-68.9	-68.9	0	%100
64	M65	y	-68.9	-68.9	0	%100
65	M66	y	-68.9	-68.9	0	%100
66	M67	y	-68.9	-68.9	0	%100
67	M68	y	-68.9	-68.9	0	%100
68	M69	PY	0	-44.8	0	%100
69	M69	PY	-44.8	-44.8	0	%100
70	M70	PY	-44.8	-44.8	0	%100

Member Distributed Loads (BLC 4 : W LAT1) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
71	M71	PY	-44.8	-44.8	0	%100
72	M72	PY	-44.8	-44.8	0	%100
73	M73	PY	-44.8	-44.8	0	%100
74	M73	PY	-44.8	0	0	%100
75	M69	X	0	15.8	0	%100
76	M69	X	15.8	15.8	0	%100
77	M70	X	15.8	15.8	0	%100
78	M71	X	15.8	15.8	0	%100
79	M72	X	15.8	15.8	0	%100
80	M73	X	15.8	15.8	0	%100
81	M73	X	15.8	0	0	%100
82	M74	y	-12.1	-12.1	0	%100
83	M75	y	-12.1	-12.1	0	%100
84	M76	y	-12.1	-12.1	0	%100
85	M77	y	-12.1	-12.1	0	%100
86	M78	y	-12.1	-12.1	0	%100
87	M79	y	-20.1	-20.1	0	%100
88	M80	y	-20.1	-20.1	0	%100
89	M81	y	-20.1	-20.1	0	%100
90	M82	y	-20.1	-20.1	0	%100
91	M83	y	-20.1	-20.1	0	%100
92	M84	y	-7.1	-7.1	0	%100
93	M85	y	-7.1	-7.1	0	%100
94	M86	y	-7.1	-7.1	0	%100
95	M87	y	-7.1	-7.1	0	%100
96	M88	y	-7.1	-7.1	0	%100
97	M89	y	-11.9	-11.9	0	%100
98	M90	y	-11.9	-11.9	0	%100
99	M91	y	-11.9	-11.9	0	%100
100	M92	y	-11.9	-11.9	0	%100
101	M93	y	-11.9	-11.9	0	%100
102	M94	PY	-40.8	-12	0	%100
103	M95	PY	-40.8	-12	0	%100
104	M96	PY	-6.7	-2.1	0	%100
105	M97	PY	-6.7	-2.1	0	%100
106	M93	X	12.1	12.1	0	%100
107	M94	X	12.1	12.1	0	%100
108	M95	X	-2.1	-2.1	0	%100
109	M96	X	-2.1	-2.1	0	%100

Member Distributed Loads (BLC 5 : W LAT2)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	X	55.6	55.6	0.54	4.375
2	M2	X	55.6	55.6	0.54	4.375
3	M3	X	55.6	55.6	0.54	4.375
4	M4	X	55.6	55.6	0.54	4.375
5	M5	X	55.6	55.6	0.54	4.375
6	M6	X	55.6	55.6	0.54	4.375
7	M7	X	55.6	55.6	0.54	4.375
8	M8	X	55.6	55.6	0.54	4.375
9	M1	X	18.5	18.5	4.375	%100
10	M2	X	18.5	18.5	4.375	%100
11	M3	X	18.5	18.5	4.375	%100
12	M4	X	18.5	18.5	4.375	%100
13	M5	X	18.5	18.5	4.375	%100

Member Distributed Loads (BLC 5 : W LAT2) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
14	M6	X	18.5	18.5	4.375	%100
15	M7	X	18.5	18.5	4.375	%100
16	M8	X	18.5	18.5	4.375	%100
17	M18	X	13.9	13.9	0	%100
18	M21	X	13.9	13.9	0	%100
19	M24	X	13.9	13.9	0	%100
20	M27	X	13.9	13.9	0	%100
21	M30	X	13.9	13.9	0	%100
22	M36	X	13.9	13.9	0	%100
23	M39	X	13.9	13.9	0	%100
24	M49	X	6.3	6.3	0	%100
25	M50	X	6.3	6.3	0	%100
26	M51	X	6.3	6.3	0	%100
27	M52	X	6.3	6.3	0	%100
28	M53	X	6.3	6.3	0	%100
29	M74	X	5.1	5.1	0	%100
30	M75	X	5.1	5.1	0	%100
31	M76	X	5.1	5.1	0	%100
32	M77	X	5.1	5.1	0	%100
33	M78	X	5.1	5.1	0	%100
34	M64	X	6.5	6.5	0	%100
35	M65	X	6.5	6.5	0	%100
36	M66	X	6.5	6.5	0	%100
37	M67	X	6.5	6.5	0	%100
38	M68	X	6.5	6.5	0	%100
39	M89	X	5.2	5.2	0	%100
40	M90	X	5.2	5.2	0	%100
41	M91	X	5.2	5.2	0	%100
42	M92	X	5.2	5.2	0	%100
43	M93	X	5.2	5.2	0	%100
44	M94	X	7.9	7.9	0	%100
45	M95	X	7.9	7.9	0	%100
46	M96	X	6.3	6.3	0	%100
47	M97	X	6.3	6.3	0	%100
48	M49	y	5.8	5.8	0	%100
49	M50	y	5.8	5.8	0	%100
50	M51	y	5.8	5.8	0	%100
51	M52	y	5.8	5.8	0	%100
52	M53	y	5.8	5.8	0	%100
53	M54	y	9.6	9.6	0	%100
54	M55	y	9.6	9.6	0	%100
55	M56	y	9.6	9.6	0	%100
56	M57	y	9.6	9.6	0	%100
57	M58	y	9.6	9.6	0	%100
58	M59	y	3.4	3.4	0	%100
59	M60	y	3.4	3.4	0	%100
60	M61	y	3.4	3.4	0	%100
61	M62	y	3.4	3.4	0	%100
62	M63	y	3.4	3.4	0	%100
63	M64	y	5.7	5.7	0	%100
64	M65	y	5.7	5.7	0	%100
65	M66	y	5.7	5.7	0	%100
66	M67	y	5.7	5.7	0	%100
67	M68	y	5.7	5.7	0	%100
68	M69	PY	0	30.1	0	%100

Member Distributed Loads (BLC 5 : W LAT2) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
69	M69	PY	30.1	30.1	0	%100
70	M70	PY	30.1	30.1	0	%100
71	M71	PY	30.1	30.1	0	%100
72	M72	PY	30.1	30.1	0	%100
73	M73	PY	30.1	30.1	0	%100
74	M73	PY	30.1	0	0	%100
75	M69	X	0	11.9	0	%100
76	M69	X	11.9	11.9	0	%100
77	M70	X	11.9	11.9	0	%100
78	M71	X	11.9	11.9	0	%100
79	M72	X	11.9	11.9	0	%100
80	M73	X	11.9	11.9	0	%100
81	M73	X	11.9	0	0	%100
82	M74	y	49.6	49.6	0	%100
83	M75	y	49.6	49.6	0	%100
84	M76	y	49.6	49.6	0	%100
85	M77	y	49.6	49.6	0	%100
86	M78	y	49.6	49.6	0	%100
87	M79	y	82.1	82.1	0	%100
88	M80	y	82.1	82.1	0	%100
89	M81	y	82.1	82.1	0	%100
90	M82	y	82.1	82.1	0	%100
91	M83	y	82.1	82.1	0	%100
92	M84	y	28.9	28.9	0	%100
93	M85	y	28.9	28.9	0	%100
94	M86	y	28.9	28.9	0	%100
95	M87	y	28.9	28.9	0	%100
96	M88	y	28.9	28.9	0	%100
97	M89	y	48.7	48.7	0	%100
98	M90	y	48.7	48.7	0	%100
99	M91	y	48.7	48.7	0	%100
100	M92	y	48.7	48.7	0	%100
101	M93	y	48.7	48.7	0	%100
102	M94	PY	3.2	1	0	%100
103	M95	PY	3.2	1	0	%100
104	M96	PY	27.6	8.5	0	%100
105	M97	PY	27.6	8.5	0	%100
106	M93	X	-1	-1	0	%100
107	M94	X	-1	-1	0	%100
108	M95	X	8.6	8.6	0	%100
109	M96	X	8.6	8.6	0	%100

Member Distributed Loads (BLC 6 : E +X)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M49	X	5.155	5.155	0	%100
2	M50	X	5.155	5.155	0	%100
3	M51	X	5.155	5.155	0	%100
4	M52	X	5.155	5.155	0	%100
5	M53	X	5.155	5.155	0	%100
6	M54	X	8.546	8.546	0	%100
7	M55	X	8.546	8.546	0	%100
8	M56	X	8.546	8.546	0	%100
9	M57	X	8.546	8.546	0	%100
10	M58	X	8.546	8.546	0	%100
11	M59	X	3.018	3.018	0	%100

Member Distributed Loads (BLC 6 : E +X) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
12	M60	X	3.018	3.018	0	%100
13	M61	X	3.018	3.018	0	%100
14	M62	X	3.018	3.018	0	%100
15	M63	X	3.018	3.018	0	%100
16	M64	X	4.978	4.978	0	%100
17	M65	X	4.978	4.978	0	%100
18	M66	X	4.978	4.978	0	%100
19	M67	X	4.978	4.978	0	%100
20	M68	X	4.978	4.978	0	%100
21	M69	X	0	6.154	0	3.466
22	M69	X	6.154	6.154	3.466	%100
23	M70	X	6.154	6.154	0	%100
24	M71	X	6.154	6.154	0	%100
25	M72	X	6.154	6.154	0	%100
26	M73	X	6.154	6.154	0	2
27	M73	X	6.154	0	2	%100
28	M74	X	5.155	5.155	0	%100
29	M75	X	5.155	5.155	0	%100
30	M76	X	5.155	5.155	0	%100
31	M77	X	5.155	5.155	0	%100
32	M78	X	5.155	5.155	0	%100
33	M79	X	8.546	8.546	0	%100
34	M80	X	8.546	8.546	0	%100
35	M81	X	8.546	8.546	0	%100
36	M82	X	8.546	8.546	0	%100
37	M83	X	8.546	8.546	0	%100
38	M84	X	3.018	3.018	0	%100
39	M85	X	3.018	3.018	0	%100
40	M86	X	3.018	3.018	0	%100
41	M87	X	3.018	3.018	0	%100
42	M88	X	3.018	3.018	0	%100
43	M89	X	4.978	4.978	0	%100
44	M90	X	4.978	4.978	0	%100
45	M91	X	4.978	4.978	0	%100
46	M92	X	4.978	4.978	0	%100
47	M93	X	4.978	4.978	0	%100
48	M94	X	3.136	0.96	0	%100
49	M95	X	3.136	0.96	0	%100
50	M96	X	3.136	0.96	0	%100
51	M97	X	3.136	0.96	0	%100

Member Distributed Loads (BLC 7 : E +Z)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M49	Z	5.155	5.155	0	%100
2	M50	Z	5.155	5.155	0	%100
3	M51	Z	5.155	5.155	0	%100
4	M52	Z	5.155	5.155	0	%100
5	M53	Z	5.155	5.155	0	%100
6	M54	Z	8.546	8.546	0	%100
7	M55	Z	8.546	8.546	0	%100
8	M56	Z	8.546	8.546	0	%100
9	M57	Z	8.546	8.546	0	%100
10	M58	Z	8.546	8.546	0	%100
11	M59	Z	3.018	3.018	0	%100
12	M60	Z	3.018	3.018	0	%100

Member Distributed Loads (BLC 7 : E +Z) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
13	M61	Z	3.018	3.018	0	%100
14	M62	Z	3.018	3.018	0	%100
15	M63	Z	3.018	3.018	0	%100
16	M64	Z	4.978	4.978	0	%100
17	M65	Z	4.978	4.978	0	%100
18	M66	Z	4.978	4.978	0	%100
19	M67	Z	4.978	4.978	0	%100
20	M68	Z	4.978	4.978	0	%100
21	M69	Z	0	6.154	0	3.466
22	M69	Z	6.154	6.154	3.466	%100
23	M70	Z	6.154	6.154	0	%100
24	M71	Z	6.154	6.154	0	%100
25	M72	Z	6.154	6.154	0	%100
26	M73	Z	6.154	6.154	0	2
27	M73	Z	6.154	0	2	%100
28	M74	Z	5.155	5.155	0	%100
29	M75	Z	5.155	5.155	0	%100
30	M76	Z	5.155	5.155	0	%100
31	M77	Z	5.155	5.155	0	%100
32	M78	Z	5.155	5.155	0	%100
33	M79	Z	8.546	8.546	0	%100
34	M80	Z	8.546	8.546	0	%100
35	M81	Z	8.546	8.546	0	%100
36	M82	Z	8.546	8.546	0	%100
37	M83	Z	8.546	8.546	0	%100
38	M84	Z	3.018	3.018	0	%100
39	M85	Z	3.018	3.018	0	%100
40	M86	Z	3.018	3.018	0	%100
41	M87	Z	3.018	3.018	0	%100
42	M88	Z	3.018	3.018	0	%100
43	M89	Z	4.978	4.978	0	%100
44	M90	Z	4.978	4.978	0	%100
45	M91	Z	4.978	4.978	0	%100
46	M92	Z	4.978	4.978	0	%100
47	M93	Z	4.978	4.978	0	%100
48	M94	Z	3.136	0.96	0	%100
49	M95	Z	3.136	0.96	0	%100
50	M96	Z	3.136	0.96	0	%100
51	M97	Z	3.136	0.96	0	%100

Member Distributed Loads (BLC 8 : UNB S)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M69	PY	0	-3.24	0	3.466
2	M69	PY	-3.24	-3.24	3.466	%100
3	M70	PY	-3.24	-3.24	0	%100
4	M71	PY	-3.24	-3.24	0	%100
5	M72	PY	-3.24	-3.24	0	%100
6	M73	PY	-3.24	-3.24	0	2
7	M73	PY	-3.24	0	2	%100
8	M89	PY	9.14	9.14	0	%100
9	M90	PY	9.14	9.14	0	%100
10	M91	PY	9.14	9.14	0	%100
11	M92	PY	9.14	9.14	0	%100
12	M93	PY	9.14	9.14	0	%100
13	M96	PY	-42.9	-13.2	0	%100

Member Distributed Loads (BLC 8 : UNB S) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
14	M97	PY	-42.9	-13.2	0	%100

Member Distributed Loads (BLC 9 : W Down)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Z	-36.5	-36.5	0.54	4.375
2	M2	Z	-36.5	-36.5	0.54	4.375
3	M3	Z	-36.5	-36.5	0.54	4.375
4	M4	Z	-36.5	-36.5	0.54	4.375
5	M5	Z	-36.5	-36.5	0.54	4.375
6	M6	Z	-36.5	-36.5	0.54	4.375
7	M7	Z	-36.5	-36.5	0.54	4.375
8	M8	Z	-36.5	-36.5	0.54	4.375
9	M1	Z	-12.2	-12.2	4.375	%100
10	M2	Z	-12.2	-12.2	4.375	%100
11	M3	Z	-12.2	-12.2	4.375	%100
12	M4	Z	-12.2	-12.2	4.375	%100
13	M5	Z	-12.2	-12.2	4.375	%100
14	M6	Z	-12.2	-12.2	4.375	%100
15	M7	Z	-12.2	-12.2	4.375	%100
16	M8	Z	-12.2	-12.2	4.375	%100
17	M17	Z	-21.1	-21.1	0	%100
18	M18	Z	-21.1	-21.1	0	%100
19	M19	Z	-21.1	-21.1	0	%100
20	M20	Z	-21.1	-21.1	0	%100
21	M21	Z	-21.1	-21.1	0	%100
22	M22	Z	-21.1	-21.1	0	%100
23	M23	Z	-21.1	-21.1	0	%100
24	M24	Z	-21.1	-21.1	0	%100
25	M25	Z	-21.1	-21.1	0	%100
26	M26	Z	-21.1	-21.1	0	%100
27	M27	Z	-21.1	-21.1	0	%100
28	M28	Z	-21.1	-21.1	0	%100
29	M29	Z	-21.1	-21.1	0	%100
30	M30	Z	-21.1	-21.1	0	%100
31	M31	Z	-21.1	-21.1	0	%100
32	M32	Z	-21.1	-21.1	0	%100
33	M33	Z	-21.1	-21.1	0	%100
34	M34	Z	-21.1	-21.1	0	%100
35	M35	Z	-21.1	-21.1	0	%100
36	M36	Z	-21.1	-21.1	0	%100
37	M37	Z	-21.1	-21.1	0	%100
38	M38	Z	-21.1	-21.1	0	%100
39	M39	Z	-21.1	-21.1	0	%100
40	M40	Z	-21.1	-21.1	0	%100
41	M49	y	-46.4	-46.4	0	%100
42	M50	y	-46.4	-46.4	0	9.5
43	M50	y	-29	-29	9.5	%100
44	M51	y	-29	-29	0	5.667
45	M51	y	-17.4	-17.4	5.667	%100
46	M52	y	-17.4	-17.4	0	%100
47	M53	y	-17.4	-17.4	0	%100
48	M54	y	-76.9	-76.9	0	%100
49	M55	y	-76.9	-76.9	0	9.5
50	M55	y	-48.1	-48.1	9.5	%100
51	M56	y	-48.1	-48.1	0	5.667

Member Distributed Loads (BLC 9 : W Down) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
52	M56	y	-28.8	-28.8	5.667	%100
53	M57	y	-28.8	-28.8	0	%100
54	M58	y	-28.8	-28.8	0	%100
55	M59	y	-27.1	-27.1	0	%100
56	M60	y	-27.1	-27.1	0	9.5
57	M60	y	-16.9	-16.9	9.5	%100
58	M61	y	-16.9	-16.9	0	5.667
59	M61	y	-10.2	-10.2	5.667	%100
60	M62	y	-10.2	-10.2	0	%100
61	M63	y	-10.2	-10.2	0	%100
62	M64	y	-45.6	-45.6	0	%100
63	M65	y	-45.6	-45.6	0	%100
64	M66	y	-28.5	-28.5	0	%100
65	M67	y	-17.1	-17.1	0	%100
66	M68	y	-17.1	-17.1	0	%100
67	M69	PY	0	-50.5	0	3.466
68	M69	PY	-50.5	-50.5	3.466	%100
69	M70	PY	-50.5	-50.5	0	%100
70	M71	PY	-31.6	-31.6	0	%100
71	M72	PY	-19	-19	0	%100
72	M73	PY	-19	-19	0	2
73	M73	PY	-19	0	2	%100
74	M74	y	-46.4	-46.4	0	%100
75	M75	y	-46.4	-46.4	0	9.5
76	M75	y	-29	-29	9.5	%100
77	M76	y	-29	-29	0	5.667
78	M76	y	-17.4	-17.4	5.667	%100
79	M77	y	-17.4	-17.4	0	%100
80	M78	y	-17.4	-17.4	0	%100
81	M79	y	-76.9	-76.9	0	%100
82	M80	y	-76.9	-76.9	0	9.5
83	M80	y	-48.1	-48.1	9.5	%100
84	M81	y	-48.1	-48.1	0	5.667
85	M81	y	-28.8	-28.8	5.667	%100
86	M82	y	-28.8	-28.8	0	%100
87	M83	y	-28.8	-28.8	0	%100
88	M84	y	-27.1	-27.1	0	%100
89	M85	y	-27.1	-27.1	0	9.5
90	M85	y	-16.9	-16.9	9.5	%100
91	M86	y	-16.9	-16.9	0	5.667
92	M86	y	-10.2	-10.2	5.667	%100
93	M87	y	-10.2	-10.2	0	%100
94	M88	y	-10.2	-10.2	0	%100
95	M89	y	-45.6	-45.6	0	%100
96	M90	y	-45.6	-45.6	0	%100
97	M91	y	-28.5	-28.5	0	%100
98	M92	y	-17.1	-17.1	0	%100
99	M93	y	-17.1	-17.1	0	%100
100	M94	PY	-25.8	-7.9	0	%100
101	M95	PY	-9.7	-3	0	%100
102	M96	PY	-25.8	-7.9	0	%100
103	M97	PY	-9.7	-3	0	%100

Member Distributed Loads (BLC 10 : W Up)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
1	M1	Z	-36.5	-36.5	0.54	4.375
2	M2	Z	-36.5	-36.5	0.54	4.375
3	M3	Z	-36.5	-36.5	0.54	4.375
4	M4	Z	-36.5	-36.5	0.54	4.375
5	M5	Z	-36.5	-36.5	0.54	4.375
6	M6	Z	-36.5	-36.5	0.54	4.375
7	M7	Z	-36.5	-36.5	0.54	4.375
8	M8	Z	-36.5	-36.5	0.54	4.375
9	M1	Z	-12.2	-12.2	4.375	%100
10	M2	Z	-12.2	-12.2	4.375	%100
11	M3	Z	-12.2	-12.2	4.375	%100
12	M4	Z	-12.2	-12.2	4.375	%100
13	M5	Z	-12.2	-12.2	4.375	%100
14	M6	Z	-12.2	-12.2	4.375	%100
15	M7	Z	-12.2	-12.2	4.375	%100
16	M8	Z	-12.2	-12.2	4.375	%100
17	M17	Z	-21.1	-21.1	0	%100
18	M18	Z	-21.1	-21.1	0	%100
19	M19	Z	-21.1	-21.1	0	%100
20	M20	Z	-21.1	-21.1	0	%100
21	M21	Z	-21.1	-21.1	0	%100
22	M22	Z	-21.1	-21.1	0	%100
23	M23	Z	-21.1	-21.1	0	%100
24	M24	Z	-21.1	-21.1	0	%100
25	M25	Z	-21.1	-21.1	0	%100
26	M26	Z	-21.1	-21.1	0	%100
27	M27	Z	-21.1	-21.1	0	%100
28	M28	Z	-21.1	-21.1	0	%100
29	M29	Z	-21.1	-21.1	0	%100
30	M30	Z	-21.1	-21.1	0	%100
31	M31	Z	-21.1	-21.1	0	%100
32	M32	Z	-21.1	-21.1	0	%100
33	M33	Z	-21.1	-21.1	0	%100
34	M34	Z	-21.1	-21.1	0	%100
35	M35	Z	-21.1	-21.1	0	%100
36	M36	Z	-21.1	-21.1	0	%100
37	M37	Z	-21.1	-21.1	0	%100
38	M38	Z	-21.1	-21.1	0	%100
39	M39	Z	-21.1	-21.1	0	%100
40	M40	Z	-21.1	-21.1	0	%100
41	M49	y	46.4	46.4	0	%100
42	M50	y	46.4	46.4	0	9.5
43	M50	y	34.8	34.8	9.5	%100
44	M51	y	34.8	34.8	0	5.667
45	M51	y	17.4	17.4	5.667	%100
46	M52	y	17.4	17.4	0	%100
47	M53	y	17.4	17.4	0	%100
48	M54	y	76.9	76.9	0	%100
49	M55	y	76.9	76.9	0	9.5
50	M55	y	57.7	57.7	9.5	%100
51	M56	y	57.7	57.7	0	5.667
52	M56	y	28.8	28.8	5.667	%100
53	M57	y	28.8	28.8	0	%100
54	M58	y	28.8	28.8	0	%100
55	M59	y	27.1	27.1	0	%100

Member Distributed Loads (BLC 10 : W Up) (Continued)

	Member Label	Direction	Start Magnitude [lb/ft, F, ksf, kip-in/ft]	End Magnitude [lb/ft, F, ksf, kip-in/ft]	Start Location [(ft, %)]	End Location [(ft, %)]
56	M60	y	27.1	27.1	0	9.5
57	M60	y	20.3	20.3	9.5	%100
58	M61	y	20.3	20.3	0	5.667
59	M61	y	10.2	10.2	5.667	%100
60	M62	y	10.2	10.2	0	%100
61	M63	y	10.2	10.2	0	%100
62	M64	y	45.6	45.6	0	%100
63	M65	y	45.6	45.6	0	%100
64	M66	y	34.2	34.2	0	%100
65	M67	y	17.1	17.1	0	%100
66	M68	y	17.1	17.1	0	%100
67	M69	PY	0	50.5	0	3.466
68	M69	PY	50.5	50.5	3.466	%100
69	M70	PY	50.5	50.5	0	%100
70	M71	PY	37.9	37.9	0	%100
71	M72	PY	19	19	0	%100
72	M73	PY	19	19	0	2
73	M73	PY	19	0	2	%100
74	M74	y	46.4	46.4	0	%100
75	M75	y	46.4	46.4	0	9.5
76	M75	y	34.8	34.8	9.5	%100
77	M76	y	34.8	34.8	0	5.667
78	M76	y	17.4	17.4	5.667	%100
79	M77	y	17.4	17.4	0	%100
80	M78	y	17.4	17.4	0	%100
81	M79	y	76.9	76.9	0	%100
82	M80	y	76.9	76.9	0	9.5
83	M80	y	57.7	57.7	9.5	%100
84	M81	y	57.7	57.7	0	5.667
85	M81	y	28.8	28.8	5.667	%100
86	M82	y	28.8	28.8	0	%100
87	M83	y	28.8	28.8	0	%100
88	M84	y	27.1	27.1	0	%100
89	M85	y	27.1	27.1	0	9.5
90	M85	y	20.3	20.3	9.5	%100
91	M86	y	20.3	20.3	0	5.667
92	M86	y	10.2	10.2	5.667	%100
93	M87	y	10.2	10.2	0	%100
94	M88	y	10.2	10.2	0	%100
95	M89	y	45.6	45.6	0	%100
96	M90	y	45.6	45.6	0	%100
97	M91	y	34.2	34.2	0	%100
98	M92	y	17.1	17.1	0	%100
99	M93	y	17.1	17.1	0	%100
100	M94	PY	25.8	7.9	0	%100
101	M95	PY	9.7	3	0	%100
102	M96	PY	25.8	7.9	0	%100
103	M97	PY	9.7	3	0	%100

Basic Load Cases

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Nodal	Distributed
1	D	DL		-1		2	51
2	Lr Left	RLL				2	29
3	Lr Right	RLL				2	29
4	W LAT1	WL+X				4	109

Basic Load Cases (Continued)

	BLC Description	Category	X Gravity	Y Gravity	Z Gravity	Nodal	Distributed
5	W LAT2	WL-X				4	109
6	E +X	ELX	0.196				51
7	E +Z	ELZ			0.196		51
8	UNB S	OL1					14
9	W Down	WL+Z				2	103
10	W Up	WL-Z				2	103

Load Combinations

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
1	D	Yes	Y	DL	1						
2	D+Lr	Yes	Y	DL	1	RLL	1				
3	D+Lr Right	Yes	Y	DL	1	2		3	1		
4	D+UNB S	Yes	Y	DL	1	2	0.125	3	0.42	OL1	1
5	D+W LAT1	Yes	Y	DL	1			WL+X	1		
6	D+W Down	Yes	Y	DL	1			WL+Z	1		
7	D+3/4(Lr+W LAT1)	Yes	Y	DL	1	RLL	0.75	WL+X	0.75		
8	D+3/4(Lr+W Down)	Yes	Y	DL	1	RLL	0.75	WL+Z	0.75		
9	0.6D (5.5 psf)+W Lat1	Yes	Y	DL	0.6	RLL	-0.05	WL+X	1		
10	0.6D (5.5 psf)+W Lat2	Yes	Y	DL	0.6	RLL	-0.05	WL-X	1		
11	0.6D (5.5 psf)+W UP	Yes	Y	DL	0.6	RLL	-0.05	WL-Z	1		
12	D+0.7E +X	Yes	Y	DL	1	Sds*DL	0.14			Rho*ELX	0.7
13	D+3/4(S+0.7E +X)	Yes	Y	DL	1	Sds*DL	0.105	RLL	0.315	Rho*ELX	0.525
14	0.6D (5.5 psf)-0.7E +X	Yes	Y	DL	0.6	Sds*DL	-0.14	RLL	-0.047	Rho*ELX	0.7
15	D+0.7E +Z	Yes	Y	DL	1	Sds*DL	0.14			Rho*ELZ	0.7
16	D+3/4(S+0.7E +Z)	Yes	Y	DL	1	Sds*DL	0.105	RLL	0.315	Rho*ELZ	0.525
17	0.6D (5.5 psf)-0.7E +Z	Yes	Y	DL	0.6	Sds*DL	-0.14	RLL	-0.047	Rho*ELZ	0.7
18	D+Omega*0.7E +X	Yes	Y	DL	1	Sds*DL	0.14			Om*ELX	0.7
19	D+3/4(S+Omega*0.7E +X)	Yes	Y	DL	1	Sds*DL	0.105	RLL	0.315	Om*ELX	0.525
20	0.6D (5.5 psf)-Omega*0.7E +X	Yes	Y	DL	0.6	Sds*DL	-0.14	RLL	-0.047	Om*ELX	0.7
21	D+Omega*0.7E +Z	Yes	Y	DL	1	Sds*DL	0.14			Om*ELZ	0.7
22	D+3/4(S+Omega*0.7E +Z)	Yes	Y	DL	1	Sds*DL	0.105	RLL	0.315	Om*ELZ	0.525
23	0.6D (5.5 psf)-Omega*0.7E +Z	Yes	Y	DL	0.6	Sds*DL	-0.14	RLL	-0.047	Om*ELZ	0.7
24	LRFD										
25	1.4D	Yes	Y	DL	1.4						
26	1.2D+1.6Lr	Yes	Y	DL	1.2	RLL	1.6				
27	1.2D+1.6Lr Right	Yes	Y	DL	1.2	2		3	1.6		
28	1.2D+1.6UNB S	Yes	Y	DL	1.2	2	0.2	3	0.672	OL1	1.6
29	1.2D+1.6W LAT1	Yes	Y	DL	1.2			WL+X	1.6		
30	1.2D+1.6W Down	Yes	Y	DL	1.2			WL+Z	1.6		
31	1.2D+1.6Lr+0.8W LAT1	Yes	Y	DL	1.2	RLL	1.6	WL+X	0.8		
32	1.2D+1.6Lr+0.8W Down	Yes	Y	DL	1.2	RLL	1.6	WL+Z	0.8		
33	1.2D+0.5Lr+1.6W LAT1	Yes	Y	DL	1.2	RLL	0.5	WL+X	1.6		
34	1.2D+0.5Lr+1.6W Down	Yes	Y	DL	1.2	RLL	0.5	WL+Z	1.6		
35	0.9D (5.5 psf)+1.6W Lat1	Yes	Y	DL	0.9	RLL	-0.075	WL+X	1.6		
36	0.9D (5.5 psf)+1.6W Lat2	Yes	Y	DL	0.9	RLL	-0.075	WL-X	1.6		
37	0.9D (5.5 psf)+1.6W UP	Yes	Y	DL	0.9	RLL	-0.075	WL-Z	1.6		
38	1.2D+1.0E +X	Yes	Y	DL	1.2	Sds*DL	0.2			Rho*ELX	1
39	1.2D+0.2S+1.0E +X	Yes	Y	DL	1.2	Sds*DL	0.2	RLL	0.084	Rho*ELX	1
40	0.9D (5.5 psf)-1.0E +X	Yes	Y	DL	0.9	Sds*DL	-0.2	RLL	-0.07	Rho*ELX	1
41	1.2D+1.0E +Z	Yes	Y	DL	1.2	Sds*DL	0.2			Rho*ELZ	1
42	1.2D+0.2S+1.0E +Z	Yes	Y	DL	1.2	Sds*DL	0.2	RLL	0.084	Rho*ELZ	1
43	0.9D (5.5 psf)-1.0E +Z	Yes	Y	DL	0.9	Sds*DL	-0.2	RLL	-0.07	Rho*ELZ	1
44	1.2D+Omega*1.0E +X	Yes	Y	DL	1.2	Sds*DL	0.2			Om*ELX	1
45	1.2D+0.2S+Omega*1.0E +X	Yes	Y	DL	1.2	Sds*DL	0.2	RLL	0.084	Om*ELX	1
46	0.9D (5.5 psf)-Omega*1.0E +X	Yes	Y	DL	0.9	Sds*DL	-0.2	RLL	-0.07	Om*ELX	1

Load Combinations (Continued)

	Description	Solve	P-Delta	BLC	Factor	BLC	Factor	BLC	Factor	BLC	Factor
47	1.2D+Omega*1.0E +Z	Yes	Y	DL	1.2	Sds*DL	0.2			Om*ELZ	1
48	1.2D+0.2S+Omega*1.0E +Z	Yes	Y	DL	1.2	Sds*DL	0.2	RLL	0.084	Om*ELZ	1
49	0.9D (5.5 psf)-Omega*1.0E +Z	Yes	Y	DL	0.9	Sds*DL	-0.2	RLL	-0.07	Om*ELZ	1

Load Combination Design

	Description	Service	Hot Rolled	Cold Formed	Wood	Concrete	Masonry	Aluminum	Stainless	Connection
1	D	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	D+Lr	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
3	D+Lr Right	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
4	D+UNB S	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
5	D+W LAT1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
6	D+W Down	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
7	D+3/4(Lr+W LAT1)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
8	D+3/4(Lr+W Down)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
9	0.6D (5.5 psf)+W Lat1	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
10	0.6D (5.5 psf)+W Lat2	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
11	0.6D (5.5 psf)+W UP	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
12	D+0.7E +X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
13	D+3/4(S+0.7E +X)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
14	0.6D (5.5 psf)-0.7E +X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
15	D+0.7E +Z	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
16	D+3/4(S+0.7E +Z)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
17	0.6D (5.5 psf)-0.7E +Z	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
18	D+Omega*0.7E +X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
19	D+3/4(S+Omega*0.7E +X)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
20	0.6D (5.5 psf)-Omega*0.7E +X	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
21	D+Omega*0.7E +Z	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
22	D+3/4(S+Omega*0.7E +Z)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
23	0.6D (5.5 psf)-Omega*0.7E +Z	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
24	LRFD									
25	1.4D									
26	1.2D+1.6Lr									
27	1.2D+1.6Lr Right									
28	1.2D+1.6UNB S									
29	1.2D+1.6W LAT1									
30	1.2D+1.6W Down									
31	1.2D+1.6Lr+0.8W LAT1									
32	1.2D+1.6Lr+0.8W Down									
33	1.2D+0.5Lr+1.6W LAT1									
34	1.2D+0.5Lr+1.6W Down									
35	0.9D (5.5 psf)+1.6W Lat1									
36	0.9D (5.5 psf)+1.6W Lat2									
37	0.9D (5.5 psf)+1.6W UP									
38	1.2D+1.0E +X									
39	1.2D+0.2S+1.0E +X									
40	0.9D (5.5 psf)-1.0E +X									
41	1.2D+1.0E +Z									
42	1.2D+0.2S+1.0E +Z									
43	0.9D (5.5 psf)-1.0E +Z									
44	1.2D+Omega*1.0E +X									
45	1.2D+0.2S+Omega*1.0E +X									
46	0.9D (5.5 psf)-Omega*1.0E +X									
47	1.2D+Omega*1.0E +Z									
48	1.2D+0.2S+Omega*1.0E +Z									
49	0.9D (5.5 psf)-Omega*1.0E +Z									

Node Reactions

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
0	1	N1	886.939	2729.112	-0.469	-0.018	0	-96.314
1	2		2051.047	6157.53	-0.865	-0.033	0	-225.71
2	3		1471.947	3554.774	-0.55	-0.021	0	-160.351
3	4		1242.344	3464.453	-0.675	-0.026	0	-135.291
4	5		272.396	5116.457	-1.385	-0.196	0	-49.281
5	6		1438.952	4787.98	553.388	65.284	0	-157.508
6	7		1298.817	7092.289	-1.455	-0.166	0	-158.166
7	8		2173.466	6843.983	416.117	50.034	0	-239.83
8	9		-140.253	3852.359	-1.175	-0.187	0	-4.014
9	10		-926.323	377.291	0.205	0.065	0	80.712
10	11		-109.97	-660.352	555.437	62.849	0	11.791
11	12		542.137	2705.661	-0.465	-0.018	0	-60.603
12	13		995.371	3791.756	-0.593	-0.023	0	-109.842
13	14		71.936	1265.112	-0.226	-0.009	0	-9.497
14	15		933.292	2849.105	-425.524	-63.209	0	-101.392
15	16		1288.9	3899.297	-319.919	-47.932	0	-140.596
16	17		462.803	1408.649	-424.673	-62.382	0	-50.014
17	25		1241.872	3820.747	-0.656	-0.025	0	-134.689
18	26		2928.141	8760.304	-1.2	-0.046	0	-321.416
19	27		2001.1	4595.621	-0.694	-0.027	0	-217.451
20	28		1633.507	4451.356	-0.893	-0.034	0	-177.445
21	29		81.542	7093.783	-2.027	-0.306	0	-39.9
22	30		1948.289	6569.432	885.19	103.846	0	-212.724
23	31		2435.644	10671.498	-1.931	-0.191	0	-284.272
24	32		3368.819	10406.84	443.988	53.302	0	-371.285
25	33		664.085	8809.384	-2.232	-0.316	0	-104.05
26	34		2530.382	8282.985	886.034	104.926	0	-277.434
27	35		-271.757	6017.051	-1.854	-0.297	0	-1.254
28	36		-1529.517	456.971	0.354	0.105	0	134.2
29	37		-223.34	-1203.128	888.672	100.485	0	23.938
30	38		572.065	3241.039	-0.558	-0.021	0	-64.437
31	39		670.018	3529.111	-0.592	-0.023	0	-75.098
32	40		137.5	1914.424	-0.342	-0.013	0	-17.314
33	41		1130.644	3446.01	-607.399	-89.736	0	-122.521
34	42		1228.655	3734.071	-607.595	-89.899	0	-133.234
35	43		695.84	2119.471	-606.665	-89.055	0	-75.175
36	1	N12	-886.939	2729.112	-0.469	-0.018	0	96.314
37	2		-2051.047	6157.53	-0.865	-0.033	0	225.71
38	3		-1466.967	5331.779	-0.788	-0.03	0	160.916
39	4		-1242.326	3993.318	-0.676	-0.026	0	135.567
40	5		-2647.321	4366.956	0.269	0.037	0	269.947
41	6		-1438.952	4787.98	553.388	65.284	0	157.508
42	7		-3080.036	6527.547	-0.208	0.012	0	324.773
43	8		-2173.466	6843.983	416.117	50.034	0	239.83
44	9		-2234.659	3104.845	0.472	0.046	0	223.824
45	10		-1099.987	-148.958	-0.579	0.019	0	99.216
46	11		109.97	-660.352	555.437	62.849	0	-11.791
47	12		-1292.285	2939.785	-0.504	-0.019	0	138.702
48	13		-1557.993	3966.717	-0.622	-0.024	0	168.681
49	14		-822.072	1500.331	-0.266	-0.01	0	87.141
50	15		-933.292	2849.105	-425.524	-63.209	0	101.392
51	16		-1288.9	3899.297	-319.919	-47.932	0	140.596
52	17		-462.803	1408.649	-424.673	-62.382	0	50.014
53	25		-1241.872	3820.747	-0.656	-0.025	0	134.689
54	26		-2928.141	8760.304	-1.2	-0.046	0	321.416

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
55	27		-1993.116	7439.458	-1.076	-0.041	0	218.08
56	28		-1633.474	5297.723	-0.895	-0.034	0	177.804
57	29		-3881.411	5896.292	0.613	0.067	0	392.229
58	30		-1948.289	6569.432	885.19	103.846	0	212.724
59	31		-4335.608	10069.448	-0.605	-0.002	0	461.809
60	32		-3368.819	10406.84	443.988	53.302	0	371.285
61	33		-4463.985	7609.084	0.419	0.059	0	457.601
62	34		-2530.382	8282.985	886.034	104.926	0	277.434
63	35		-3528.1	4821.256	0.781	0.074	0	352.852
64	36		-1712.578	-384.845	-0.9	0.031	0	153.605
65	37		223.34	-1203.128	888.672	100.485	0	-23.938
66	38		-1643.698	3576.252	-0.614	-0.023	0	175.695
67	39		-1741.654	3864.12	-0.648	-0.025	0	186.442
68	40		-1209.121	2250.539	-0.399	-0.015	0	128.199
69	41		-1130.644	3446.01	-607.399	-89.736	0	122.521
70	42		-1228.655	3734.071	-607.595	-89.899	0	133.234
71	43		-695.84	2119.471	-606.665	-89.055	0	75.175
72	1	N31	1070.485	3459.687	-0.11	-0.004	0	-116.574
73	2		2619.971	8324.78	-0.203	-0.008	0	-290.784
74	3		1843.911	4535.24	-0.122	-0.005	0	-201.637
75	4		1463.494	4348.539	-0.159	-0.006	0	-159.921
76	5		269.508	6831.012	-1.112	-0.186	0	-49.325
77	6		1628.314	5581.776	552.248	65.295	0	-178.789
78	7		1630.993	9638.774	-0.929	-0.146	0	-196.866
79	8		2651.13	8700.664	413.133	50.017	0	-294.69
80	9		-235.368	5202.698	-1.064	-0.183	0	6.371
81	10		-1056.506	565.295	0.136	0.063	0	94.79
82	11		-14.179	-461.001	556.192	62.89	0	1.521
83	12		632.859	3440.797	-0.108	-0.004	0	-70.655
84	13		1231.257	4978.577	-0.138	-0.005	0	-136.19
85	14		58.601	1590.117	-0.052	-0.002	0	-8.067
86	15		1091.683	3551.97	-424.229	-63.215	0	-118.922
87	16		1575.179	5061.165	-317.699	-47.914	0	-172.601
88	17		517.689	1702.56	-424.787	-62.414	0	-56.008
89	25		1499.004	4843.571	-0.154	-0.006	0	-162.977
90	26		3766.612	11935.873	-0.282	-0.011	0	-416.681
91	27		2523.752	5871.984	-0.151	-0.006	0	-275.092
92	28		1914.554	5573.679	-0.21	-0.008	0	-208.538
93	29		4.153	9544.754	-1.736	-0.295	0	-31.671
94	30		2177.922	7546.66	884.099	103.871	0	-238.361
95	31		3123.459	14634.67	-1.08	-0.158	0	-363.706
96	32		4212.06	13634.098	440.712	53.289	0	-467.928
97	33		779.978	11979.196	-1.782	-0.3	0	-117.741
98	34		2954.323	9979.861	882.94	104.924	0	-325.261
99	35		-432.961	8140.93	-1.696	-0.292	0	16.372
100	36		-1746.909	721.108	0.224	0.101	0	157.687
101	37		-79.216	-920.898	889.963	100.553	0	8.496
102	38		660.028	4124.106	-0.129	-0.005	0	-74.122
103	39		790.623	4532.956	-0.137	-0.005	0	-88.385
104	40		125.249	2405.906	-0.079	-0.003	0	-16.01
105	41		1315.652	4283.801	-606.404	-89.76	0	-142.857
106	42		1446.193	4692.394	-606.25	-89.917	0	-157.186
107	43		781.09	2566.651	-606.873	-89.101	0	-84.475
108	1	N42	-1070.485	3459.687	-0.11	-0.004	0	116.574
109	2		-2619.971	8324.78	-0.203	-0.008	0	290.784

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
110	3		-1848.892	7249.317	-0.193	-0.007	0	204.34
111	4		-1463.513	5100.796	-0.159	-0.006	0	160.392
112	5		-3122.911	5404.266	0.887	0.061	0	323.205
113	6		-1628.314	5581.776	552.248	65.295	0	178.789
114	7		-3771.021	8565.075	0.569	0.042	0	404.132
115	8		-2651.13	8700.664	413.133	50.017	0	294.69
116	9		-2618.048	3778.4	0.934	0.063	0	266.206
117	10		-1336.105	-478.421	-0.25	0.031	0	124.431
118	11		14.179	-461.001	556.192	62.89	0	-1.521
119	12		-1581.055	3715.906	-0.12	-0.005	0	170.594
120	13		-1942.393	5183.874	-0.147	-0.006	0	211.62
121	14		-1006.809	1866.857	-0.064	-0.002	0	107.262
122	15		-1091.683	3551.97	-424.229	-63.215	0	118.922
123	16		-1575.179	5061.165	-317.699	-47.914	0	172.601
124	17		-517.689	1702.56	-424.787	-62.414	0	56.008
125	25		-1499.004	4843.571	-0.154	-0.006	0	162.977
126	26		-3766.612	11935.873	-0.282	-0.011	0	416.681
127	27		-2531.736	10215.672	-0.265	-0.01	0	278.897
128	28		-1914.587	6777.572	-0.211	-0.008	0	209.151
129	29		-4569.609	7264.039	1.462	0.1	0	468.776
130	30		-2177.922	7546.66	884.099	103.871	0	238.361
131	31		-5406.158	13489.613	0.516	0.041	0	584.574
132	32		-4212.06	13634.098	440.712	53.289	0	467.928
133	33		-5345.403	9694.716	1.417	0.097	0	556.872
134	34		-2954.323	9979.861	882.94	104.924	0	325.261
135	35		-4132.506	5862.325	1.5	0.101	0	419.608
136	36		-2081.269	-948.624	-0.394	0.05	0	192.95
137	37		79.216	-920.898	889.963	100.553	0	-8.496
138	38		-2014.601	4518.222	-0.146	-0.006	0	216.389
139	39		-2145.193	4926.742	-0.154	-0.006	0	230.803
140	40		-1479.833	2801.375	-0.096	-0.004	0	157.661
141	41		-1315.652	4283.801	-606.404	-89.76	0	142.857
142	42		-1446.193	4692.394	-606.25	-89.917	0	157.186
143	43		-781.09	2566.651	-606.873	-89.101	0	84.475
144	1	N61	1070.485	3459.687	0.11	0.004	0	-116.574
145	2		2619.971	8324.78	0.203	0.008	0	-290.784
146	3		1843.911	4535.24	0.122	0.005	0	-201.637
147	4		1463.494	4348.539	0.159	0.006	0	-159.922
148	5		274.27	6831.905	-0.979	-0.181	0	-49.85
149	6		1394.325	4725.324	554.913	65.339	0	-152.586
150	7		1634.57	9639.427	-0.635	-0.135	0	-197.265
151	8		2475.337	8057.139	414.891	50.051	0	-274.449
152	9		-230.609	5203.601	-1.027	-0.181	0	5.849
153	10		-1045.681	571.195	0.058	0.06	0	93.626
154	11		177.284	437.866	553.883	62.86	0	-19.087
155	12		632.859	3440.797	0.108	0.004	0	-70.655
156	13		1231.257	4978.577	0.138	0.005	0	-136.19
157	14		58.601	1590.117	0.052	0.002	0	-8.067
158	15		1122.488	3604.538	-423.846	-63.204	0	-122.303
159	16		1598.611	5101.171	-317.323	-47.901	0	-175.196
160	17		547.979	1754.224	-424.52	-62.407	0	-59.297
161	25		1499.005	4843.572	0.154	0.006	0	-162.977
162	26		3766.612	11935.873	0.282	0.011	0	-416.681
163	27		2523.752	5871.985	0.151	0.006	0	-275.092
164	28		1914.554	5573.679	0.21	0.008	0	-208.538

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
165	29		11.77	9546.191	-1.61	-0.29	0	-32.509
166	30		1803.759	6177.026	888.239	103.937	0	-196.757
167	31		3127.274	14635.368	-0.586	-0.139	0	-364.132
168	32		4024.645	12947.775	442.242	53.324	0	-446.349
169	33		787.599	11980.617	-1.562	-0.291	0	-118.585
170	34		2579.779	8608.993	887.235	104.995	0	-283.075
171	35		-425.347	8142.376	-1.65	-0.29	0	15.537
172	36		-1729.589	730.552	0.087	0.096	0	155.825
173	37		227.196	517.369	886.259	100.504	0	-24.451
174	38		660.028	4124.106	0.129	0.005	0	-74.122
175	39		790.623	4532.957	0.137	0.005	0	-88.385
176	40		125.249	2405.906	0.079	0.003	0	-16.01
177	41		1359.308	4358.282	-605.933	-89.746	0	-147.623
178	42		1489.952	4767.057	-605.763	-89.903	0	-161.971
179	43		824.322	2640.388	-606.507	-89.092	0	-89.166
180	1	N72	-1070.485	3459.687	0.11	0.004	0	116.574
181	2		-2619.971	8324.78	0.203	0.008	0	290.784
182	3		-1848.892	7249.317	0.193	0.007	0	204.34
183	4		-1463.513	5100.796	0.159	0.006	0	160.392
184	5		-3115.266	5401.068	1.264	0.075	0	322.362
185	6		-1394.325	4725.324	554.913	65.339	0	152.586
186	7		-3765.289	8562.696	1.045	0.06	0	403.492
187	8		-2475.337	8057.139	414.891	50.051	0	274.449
188	9		-2610.401	3775.188	1.215	0.074	0	265.369
189	10		-1325.505	-482.176	0.013	0.041	0	123.292
190	11		-177.284	437.866	553.883	62.86	0	19.087
191	12		-1581.055	3715.906	0.12	0.005	0	170.594
192	13		-1942.394	5183.874	0.147	0.006	0	211.62
193	14		-1006.809	1866.857	0.064	0.002	0	107.262
194	15		-1122.488	3604.538	-423.846	-63.204	0	122.303
195	16		-1598.611	5101.171	-317.323	-47.901	0	175.196
196	17		-547.979	1754.224	-424.52	-62.407	0	59.297
197	25		-1499.005	4843.572	0.154	0.006	0	162.977
198	26		-3766.612	11935.873	0.282	0.011	0	416.681
199	27		-2531.736	10215.673	0.265	0.01	0	278.897
200	28		-1914.587	6777.573	0.211	0.008	0	209.151
201	29		-4557.374	7258.91	1.978	0.119	0	467.432
202	30		-1803.759	6177.026	888.239	103.937	0	196.757
203	31		-5400.044	13487.073	1.203	0.067	0	583.891
204	32		-4024.645	12947.775	442.242	53.324	0	446.349
205	33		-5333.17	9689.608	2.027	0.121	0	555.52
206	34		-2579.779	8608.993	887.235	104.995	0	283.075
207	35		-4120.271	5857.184	1.937	0.118	0	418.269
208	36		-2064.309	-954.636	0.015	0.066	0	191.129
209	37		-227.196	517.369	886.259	100.504	0	24.451
210	38		-2014.602	4518.223	0.146	0.006	0	216.389
211	39		-2145.193	4926.742	0.154	0.006	0	230.803
212	40		-1479.833	2801.375	0.096	0.004	0	157.661
213	41		-1359.308	4358.282	-605.933	-89.746	0	147.623
214	42		-1489.952	4767.057	-605.763	-89.903	0	161.971
215	43		-824.322	2640.388	-606.507	-89.092	0	89.166
216	1	N91	886.939	2729.112	0.469	0.018	0	-96.314
217	2		2051.047	6157.529	0.865	0.033	0	-225.71
218	3		1471.947	3554.773	0.55	0.021	0	-160.351
219	4		1242.344	3464.453	0.675	0.026	0	-135.291

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
220	5		301.543	5134.308	-0.709	-0.17	0	-52.479
221	6		1118.407	3558.924	557.567	65.361	0	-121.839
222	7		1320.669	7105.59	-0.123	-0.114	0	-160.588
223	8		1934.125	5923.383	419.446	50.113	0	-212.65
224	9		-111.103	3870.276	-0.911	-0.176	0	-7.195
225	10		-930.191	374.857	0.026	0.059	0	81.128
226	11		271.612	684.434	552.604	62.827	0	-29.271
227	12		542.137	2705.661	0.465	0.018	0	-60.603
228	13		995.371	3791.756	0.593	0.023	0	-109.842
229	14		71.936	1265.112	0.226	0.009	0	-9.497
230	15		901.376	2796.536	-424.728	-63.175	0	-97.905
231	16		1264.602	3859.29	-318.805	-47.888	0	-137.924
232	17		431.45	1356.983	-424.348	-62.366	0	-46.616
233	25		1241.871	3820.746	0.656	0.025	0	-134.689
234	26		2928.14	8760.303	1.2	0.046	0	-321.416
235	27		2001.099	4595.62	0.694	0.027	0	-217.451
236	28		1633.507	4451.355	0.893	0.034	0	-177.445
237	29		128.179	7122.401	-1.317	-0.278	0	-45.002
238	30		1434.822	4602.25	891.457	103.954	0	-155.918
239	31		2458.949	10685.698	0.251	-0.107	0	-286.853
240	32		3113.492	9424.765	447.551	53.404	0	-342.32
241	33		710.717	8837.908	-1.124	-0.273	0	-109.177
242	34		2017.959	6317.04	892.777	105.051	0	-220.197
243	35		-225.117	6045.725	-1.484	-0.283	0	-6.341
244	36		-1535.707	453.076	0.016	0.093	0	134.865
245	37		387.162	948.451	884.092	100.449	0	-41.709
246	38		572.065	3241.039	0.558	0.021	0	-64.437
247	39		670.018	3529.11	0.592	0.023	0	-75.098
248	40		137.499	1914.424	0.342	0.013	0	-17.314
249	41		1085.432	3371.527	-606.446	-89.695	0	-117.601
250	42		1183.33	3659.406	-606.574	-89.856	0	-128.296
251	43		651.092	2045.733	-606.137	-89.031	0	-70.328
252	1	N102	-886.939	2729.112	0.469	0.018	0	96.314
253	2		-2051.047	6157.529	0.865	0.033	0	225.71
254	3		-1466.966	5331.778	0.788	0.03	0	160.916
255	4		-1242.326	3993.317	0.676	0.026	0	135.567
256	5		-2622.269	4351.41	1.765	0.094	0	267.193
257	6		-1118.407	3558.924	557.567	65.361	0	121.839
258	7		-3061.241	6515.97	1.736	0.086	0	322.687
259	8		-1934.125	5923.383	419.446	50.113	0	212.65
260	9		-2209.609	3089.236	1.558	0.087	0	221.086
261	10		-1100.475	-148.668	0.391	0.055	0	99.268
262	11		-271.612	684.434	552.604	62.827	0	29.271
263	12		-1292.285	2939.784	0.504	0.019	0	138.702
264	13		-1557.993	3966.716	0.622	0.024	0	168.681
265	14		-822.072	1500.331	0.266	0.01	0	87.141
266	15		-901.376	2796.536	-424.728	-63.175	0	97.905
267	16		-1264.602	3859.29	-318.805	-47.888	0	137.924
268	17		-431.45	1356.983	-424.348	-62.366	0	46.616
269	25		-1241.871	3820.746	0.656	0.025	0	134.689
270	26		-2928.14	8760.303	1.2	0.046	0	321.416
271	27		-1993.115	7439.457	1.076	0.041	0	218.079
272	28		-1633.474	5297.722	0.895	0.034	0	177.804
273	29		-3841.329	5871.364	2.637	0.144	0	387.837
274	30		-1434.822	4602.25	891.457	103.954	0	155.918

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
275	31		-4315.557	10057.088	2.231	0.106	0	459.588
276	32		-3113.492	9424.765	447.551	53.404	0	342.32
277	33		-4423.901	7584.244	2.837	0.151	0	453.187
278	34		-2017.959	6317.04	892.777	105.051	0	220.197
279	35		-3488.021	4796.275	2.466	0.138	0	348.473
280	36		-1713.358	-384.381	0.599	0.088	0	153.689
281	37		-387.162	948.451	884.092	100.449	0	41.709
282	38		-1643.698	3576.251	0.614	0.023	0	175.695
283	39		-1741.654	3864.119	0.648	0.025	0	186.442
284	40		-1209.121	2250.539	0.399	0.015	0	128.199
285	41		-1085.432	3371.527	-606.446	-89.695	0	117.601
286	42		-1183.33	3659.406	-606.574	-89.856	0	128.296
287	43		-651.092	2045.733	-606.137	-89.031	0	70.328
288	1	Totals:	0	24755.194	0			
289	2		0	57929.239	0			
290	3		0	41342.217	0			
291	4		0	33814.21	0			
292	5		-10390.05	43437.382	0			
293	6		0	37308.008	4436.233			
294	7		-7792.537	63647.369	0			
295	8		0	59050.338	3327.174			
296	9		-10390.05	31876.602	0			
297	10		-8820.773	630.414	0			
298	11		0	1.893	4436.233			
299	12		-3396.688	25604.297	0			
300	13		-2547.516	35841.846	0			
301	14		-3396.688	12444.833	0			
302	15		0	25604.297	-3396.655			
303	16		0	35841.846	-2547.492			
304	17		0	12444.833	-3396.655			
305	25		0	34657.272	0			
306	26		0	82784.705	0			
307	27		0	56245.469	0			
308	28		0	44200.659	0			
309	29		-16624.08	59597.734	0			
310	30		0	49790.735	7097.972			
311	31		-8312.04	97730.455	0			
312	32		0	92826.956	3548.986			
313	33		-16624.08	76184.757	0			
314	34		0	66377.757	7097.972			
315	35		-16624.08	49683.122	0			
316	36		-14113.237	-310.778	0			
317	37		0	-1316.413	7097.972			
318	38		-4852.411	30919.237	0			
319	39		-4852.411	33705.857	0			
320	40		-4852.411	18744.487	0			
321	41		0	30919.237	-4852.365			
322	42		0	33705.857	-4852.365			
323	43		0	18744.487	-4852.365			
324	1	COG (ft):	X: 0	Y: 3.042	Z: -23			
325	2		X: 0	Y: 3.348	Z: -23			
326	3		X: 2.829	Y: 3.257	Z: -23			
327	4		X: 0.986	Y: 3.205	Z: -23			
328	5		X: -2.084	Y: 3.324	Z: -23			
329	6		X: 0	Y: 3.288	Z: -21.092			

Node Reactions (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
330	7		X: -1.067	Y: 3.395	Z: -23			
331	8		X: 0	Y: 3.384	Z: -22.096			
332	9		X: -2.84	Y: 3.398	Z: -23			
333	10		X: -108.257	Y: -11.385	Z: -23			
334	11		X: 0	Y: -5590.545	Z: -39213.967			
335	12		X: 0	Y: 3.042	Z: -23			
336	13		X: 0	Y: 3.198	Z: -23			
337	14		X: 0	Y: 2.975	Z: -23			
338	15		X: 0	Y: 3.042	Z: -23			
339	16		X: 0	Y: 3.198	Z: -23			
340	17		X: 0	Y: 2.975	Z: -23			
341	25		X: 0	Y: 3.042	Z: -23			
342	26		X: 0	Y: 3.385	Z: -23			
343	27		X: 3.327	Y: 3.294	Z: -23			
344	28		X: 1.207	Y: 3.241	Z: -23			
345	29		X: -2.43	Y: 3.37	Z: -23			
346	30		X: 0	Y: 3.337	Z: -20.712			
347	31		X: -0.741	Y: 3.433	Z: -23			
348	32		X: 0	Y: 3.427	Z: -22.386			
349	33		X: -1.901	Y: 3.415	Z: -23			
350	34		X: 0	Y: 3.397	Z: -21.284			
351	35		X: -2.915	Y: 3.409	Z: -23			
352	36		X: 351.361	Y: 49.578	Z: -23			
353	37		X: 0	Y: 15.844	Z: 67.174			
354	38		X: 0	Y: 3.042	Z: -23			
355	39		X: 0	Y: 3.086	Z: -23			
356	40		X: 0	Y: 2.975	Z: -23			
357	41		X: 0	Y: 3.042	Z: -23			
358	42		X: 0	Y: 3.086	Z: -23			
359	43		X: 0	Y: 2.975	Z: -23			

Node Reactions - Overstrength or Capacity Limit

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
0	18*	N1	448.302	2676.396	-0.46	-0.018	0	-50.844
1	19*		925.006	3769.886	-0.589	-0.023	0	-102.489
2	20*		-21.897	1235.71	-0.221	-0.008	0	0.206
3	21*		937.285	2855.733	-531.756	-79.006	0	-101.829
4	22*		1291.938	3904.327	-399.729	-59.905	0	-140.929
5	23*		466.725	1415.161	-530.753	-77.975	0	-50.439
6	44*		438.027	3199.138	-0.55	-0.021	0	-50.532
7	45*		535.979	3487.235	-0.585	-0.022	0	-61.183
8	46*		3.462	1872.41	-0.335	-0.013	0	-3.456
9	47*		1136.299	3455.39	-759.068	-112.164	0	-123.137
10	48*		1234.324	3743.475	-759.304	-112.368	0	-133.852
11	49*		701.437	2128.757	-758.205	-111.315	0	-75.781
12	18*	N12	-1385.987	2969.05	-0.509	-0.019	0	148.467
13	19*		-1628.283	3988.587	-0.625	-0.024	0	176.038
14	20*		-915.773	1529.734	-0.271	-0.01	0	96.85
15	21*		-937.285	2855.733	-531.756	-79.006	0	101.829
16	22*		-1291.938	3904.327	-399.729	-59.905	0	140.929
17	23*		-466.725	1415.161	-530.753	-77.975	0	50.439
18	44*		-1777.567	3618.154	-0.621	-0.024	0	189.606
19	45*		-1875.524	3905.996	-0.655	-0.025	0	200.363
20	46*		-1342.99	2292.553	-0.407	-0.016	0	142.063
21	47*		-1136.299	3455.39	-759.068	-112.164	0	123.137

Node Reactions - Overstrength or Capacity Limit (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
22	48*		-1234.324	3743.475	-759.304	-112.368	0	133.852
23	49*		-701.437	2128.757	-758.205	-111.315	0	75.781
24	18*	N31	514.233	3406.408	-0.107	-0.004	0	-58.167
25	19*		1142.308	4952.914	-0.137	-0.005	0	-126.763
26	20*		-60.026	1555.524	-0.05	-0.002	0	4.329
27	21*		1087.803	3545.343	-530.283	-79.018	0	-118.497
28	22*		1572.237	5056.135	-397.104	-59.887	0	-172.274
29	23*		513.874	1696.048	-530.993	-78.017	0	-55.594
30	44*		490.578	4074.841	-0.127	-0.005	0	-56.344
31	45*		621.173	4483.733	-0.135	-0.005	0	-70.587
32	46*		-44.202	2356.472	-0.077	-0.003	0	1.691
33	47*		1310.158	4274.42	-758.002	-112.199	0	-142.257
34	48*		1440.686	4682.991	-757.807	-112.396	0	-156.584
35	49*		775.65	2557.366	-758.6	-111.376	0	-83.885
36	18*	N42	-1699.477	3750.294	-0.121	-0.005	0	183.091
37	19*		-2031.228	5209.536	-0.148	-0.006	0	221.051
38	20*		-1125.234	1901.449	-0.065	-0.002	0	119.666
39	21*		-1087.803	3545.343	-530.283	-79.018	0	118.497
40	22*		-1572.237	5056.135	-397.104	-59.887	0	172.274
41	23*		-513.874	1696.048	-530.993	-78.017	0	55.594
42	44*		-2183.795	4567.487	-0.148	-0.006	0	234.177
43	45*		-2314.385	4975.965	-0.156	-0.006	0	248.61
44	46*		-1649.027	2850.808	-0.098	-0.004	0	175.372
45	47*		-1310.158	4274.42	-758.002	-112.199	0	142.257
46	48*		-1440.686	4682.991	-757.807	-112.396	0	156.584
47	49*		-775.65	2557.366	-758.6	-111.376	0	83.885
48	18*	N61	514.233	3406.408	0.107	0.004	0	-58.167
49	19*		1142.308	4952.915	0.137	0.005	0	-126.763
50	20*		-60.026	1555.524	0.05	0.002	0	4.329
51	21*		1126.31	3611.054	-529.812	-79.005	0	-122.722
52	22*		1601.524	5106.138	-396.679	-59.874	0	-175.517
53	23*		551.738	1760.63	-530.641	-78.009	0	-59.705
54	44*		490.578	4074.841	0.127	0.005	0	-56.344
55	45*		621.173	4483.733	0.135	0.005	0	-70.587
56	46*		-44.202	2356.472	0.077	0.003	0	1.691
57	47*		1364.729	4367.523	-757.421	-112.184	0	-148.216
58	48*		1495.385	4776.321	-757.209	-112.38	0	-162.565
59	49*		829.691	2649.538	-758.126	-111.365	0	-89.749
60	18*	N72	-1699.477	3750.294	0.121	0.005	0	183.091
61	19*		-2031.228	5209.536	0.148	0.006	0	221.051
62	20*		-1125.234	1901.449	0.065	0.002	0	119.666
63	21*		-1126.31	3611.054	-529.812	-79.005	0	122.722
64	22*		-1601.524	5106.138	-396.679	-59.874	0	175.517
65	23*		-551.738	1760.63	-530.641	-78.009	0	59.705
66	44*		-2183.795	4567.487	0.148	0.006	0	234.177
67	45*		-2314.385	4975.965	0.156	0.006	0	248.61
68	46*		-1649.027	2850.808	0.098	0.004	0	175.372
69	47*		-1364.729	4367.523	-757.421	-112.184	0	148.216
70	48*		-1495.385	4776.321	-757.209	-112.38	0	162.565
71	49*		-829.691	2649.538	-758.126	-111.365	0	89.749
72	18*	N91	448.302	2676.396	0.46	0.018	0	-50.844
73	19*		925.006	3769.886	0.589	0.023	0	-102.489
74	20*		-21.897	1235.71	0.221	0.008	0	0.206
75	21*		897.389	2790.019	-531.058	-78.973	0	-97.47
76	22*		1261.568	3854.323	-398.671	-59.862	0	-137.59

Node Reactions - Overstrength or Capacity Limit (Continued)

	LC	Node Label	X [lb]	Y [lb]	Z [lb]	MX [k-in]	MY [k-in]	MZ [k-in]
77	23*		427.533	1350.578	-530.523	-77.961	0	-46.192
78	44*		438.027	3199.138	0.55	0.021	0	-50.532
79	45*		535.979	3487.235	0.585	0.022	0	-61.183
80	46*		3.462	1872.41	0.335	0.013	0	-3.456
81	47*		1079.784	3362.285	-758.237	-112.125	0	-116.986
82	48*		1177.668	3650.142	-758.407	-112.327	0	-127.679
83	49*		645.502	2036.583	-757.798	-111.293	0	-69.723
84	18*	N102	-1385.987	2969.05	0.509	0.019	0	148.467
85	19*		-1628.283	3988.586	0.625	0.024	0	176.038
86	20*		-915.773	1529.734	0.271	0.01	0	96.85
87	21*		-897.389	2790.019	-531.058	-78.973	0	97.47
88	22*		-1261.568	3854.323	-398.671	-59.862	0	137.59
89	23*		-427.533	1350.578	-530.523	-77.961	0	46.192
90	44*		-1777.567	3618.153	0.621	0.024	0	189.606
91	45*		-1875.523	3905.996	0.655	0.025	0	200.363
92	46*		-1342.989	2292.553	0.407	0.016	0	142.063
93	47*		-1079.784	3362.285	-758.237	-112.125	0	116.986
94	48*		-1177.668	3650.142	-758.407	-112.327	0	127.679
95	49*		-645.502	2036.583	-757.798	-111.293	0	69.723
96	18*	Totals:	-4245.86	25604.297	0			
97	19*		-3184.395	35841.846	0			
98	20*		-4245.86	12444.833	0			
99	21*		0	25604.297	-4245.819			
100	22*		0	35841.846	-3184.365			
101	23*		0	12444.833	-4245.819			
102	44*		-6065.514	30919.237	0			
103	45*		-6065.514	33705.857	0			
104	46*		-6065.514	18744.487	0			
105	47*		0	30919.237	-6065.456			
106	48*		0	33705.857	-6065.456			
107	49*		0	18744.487	-6065.456			
108	18*	COG (ft):	X: 0	Y: 3.042	Z: -23			
109	19*		X: 0	Y: 3.198	Z: -23			
110	20*		X: 0	Y: 2.975	Z: -23			
111	21*		X: 0	Y: 3.042	Z: -23			
112	22*		X: 0	Y: 3.198	Z: -23			
113	23*		X: 0	Y: 2.975	Z: -23			
114	44*		X: 0	Y: 3.042	Z: -23			
115	45*		X: 0	Y: 3.086	Z: -23			
116	46*		X: 0	Y: 2.975	Z: -23			
117	47*		X: 0	Y: 3.042	Z: -23			
118	48*		X: 0	Y: 3.086	Z: -23			
119	49*		X: 0	Y: 2.975	Z: -23			

Envelope Member Section Forces

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
0	M1	1	max	7092.289	7	926.909	10	560.27	6	0	17	63.209	15	80.712	10
1			min	-660.352	11	-2209.127	8	-429.561	15	0	1	-65.284	6	-239.83	8
2		2	max	6975.881	7	712.15	10	428.287	6	0	17	40.538	15	36.057	10
3			min	-730.197	11	-2251.051	8	-419.112	15	0	1	-38.551	6	-121.017	8
4		3	max	6859.472	7	629.27	10	373.631	6	0	17	18.436	15	0	17
5			min	-800.042	11	-2251.051	8	-403.14	15	0	1	-16.995	6	0	1
6	M2	1	max	6843.983	8	3125.783	7	560.27	6	0	17	63.209	15	324.773	7
7			min	-660.352	11	-109.791	11	-429.561	15	0	1	-65.284	6	-11.791	11
8		2	max	6727.574	8	3017.49	7	428.287	6	0	17	40.538	15	160.549	7

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
9			min	-730.197	11	-109.535	11	-419.112	15	0	1	-38.551	6	-5.889	11
10		3	max	6611.166	8	2955.33	7	373.631	6	0	17	18.436	15	0	17
11			min	-800.042	11	-109.535	11	-403.14	15	0	1	-16.995	6	0	1
12	M3	1	max	9638.774	7	1057.575	10	560.286	6	0	17	63.215	15	94.79	10
13			min	-461.001	11	-2706.963	8	-429.285	15	0	1	-65.295	6	-294.69	8
14		2	max	9522.365	7	843.331	10	429.926	6	0	17	40.557	15	43.11	10
15			min	-530.846	11	-2773.147	8	-420.336	15	0	1	-38.559	6	-149.084	8
16		3	max	9405.957	7	760.451	10	375.27	6	0	17	18.389	15	0	17
17			min	-600.691	11	-2773.147	8	-404.365	15	0	1	-16.915	6	0	1
18	M4	1	max	8700.664	8	3846.002	7	560.286	6	0	17	63.215	15	404.132	7
19			min	-478.421	10	-14.162	11	-429.285	15	0	1	-65.295	6	-1.521	11
20		2	max	8584.256	8	3772.669	7	429.926	6	0	17	40.557	15	201.148	7
21			min	-548.266	10	-14.137	11	-420.336	15	0	1	-38.559	6	-0.76	11
22		3	max	8467.847	8	3710.509	7	375.27	6	0	17	18.389	15	0	17
23			min	-618.111	10	-14.137	11	-404.365	15	0	1	-16.915	6	0	1
24	M5	1	max	9639.427	7	1046.749	10	561.708	6	0	17	63.204	15	93.626	10
25			min	437.866	11	-2672.619	2	-428.977	15	0	1	-65.339	6	-290.784	2
26		2	max	9523.019	7	832.505	10	429.591	6	0	17	40.563	15	42.528	10
27			min	368.021	11	-2734.927	2	-420.141	15	0	1	-38.528	6	-147.03	2
28		3	max	9406.61	7	749.625	10	374.935	6	0	17	18.405	15	0	17
29			min	298.176	11	-2734.927	2	-404.17	15	0	1	-16.903	6	0	1
30	M6	1	max	8562.696	7	3840.129	7	561.708	6	0	17	63.204	15	403.492	7
31			min	-482.176	10	177.453	11	-428.977	15	0	1	-65.339	6	19.087	11
32		2	max	8446.288	7	3766.63	7	429.591	6	0	17	40.563	15	200.823	7
33			min	-552.021	10	177.592	11	-420.141	15	0	1	-38.528	6	9.547	11
34		3	max	8329.879	7	3704.47	7	374.935	6	0	17	18.405	15	0	17
35			min	-621.867	10	177.592	11	-404.17	15	0	1	-16.903	6	0	1
36	M7	1	max	7105.59	7	930.776	10	562.665	6	0	17	63.175	15	81.128	10
37			min	374.857	10	-2081.194	2	-428.688	15	0	1	-65.361	6	-225.71	2
38		2	max	6989.182	7	716.015	10	428.16	6	0	17	40.551	15	36.265	10
39			min	305.012	10	-2116.484	2	-418.128	15	0	1	-38.502	6	-113.782	2
40		3	max	6872.773	7	633.135	10	373.504	6	0	17	18.502	15	0	17
41			min	235.167	10	-2116.484	2	-402.157	15	0	1	-16.953	6	0	1
42	M8	1	max	6515.97	7	3106.611	7	562.665	6	0	17	63.175	15	322.687	7
43			min	-148.668	10	272.028	11	-428.688	15	0	1	-65.361	6	29.271	11
44		2	max	6399.562	7	2997.873	7	428.16	6	0	17	40.551	15	159.495	7
45			min	-218.513	10	272.433	11	-418.128	15	0	1	-38.502	6	14.646	11
46		3	max	6283.153	7	2935.713	7	373.504	6	0	17	18.502	15	0	17
47			min	-288.358	10	272.433	11	-402.157	15	0	1	-16.953	6	0	1
48	M17	1	max	0	17	0.001	11	0.014	15	0	17	0	17	0	17
49			min	0	1	-0.037	7	-0.013	6	0	1	0	1	0	1
50		2	max	4439.201	8	4054.922	7	258.605	6	12.934	6	10.152	6	22.047	11
51			min	-585.563	11	-482.998	11	-316.067	15	-13.992	15	-10.268	15	-205.939	7
52		3	max	3508.227	8	1139.159	2	153.878	6	12.943	6	23.397	6	25.413	11
53			min	-814.242	11	-66.253	10	-147.204	17	-13.851	15	-23.96	15	-332.349	7
54	M18	1	max	2551.242	8	750.299	11	151.987	6	26.715	6	1.673	15	25.413	11
55			min	-398.391	10	-2631.778	8	-147.185	17	-27.625	15	-1.113	6	-332.349	7
56		2	max	2529.202	8	750.299	11	136.162	6	26.715	6	0.416	11	18.66	11
57			min	-411.616	10	-2631.778	8	-144.161	17	-27.625	15	-0.003	10	-311.589	7
58		3	max	2507.161	8	750.299	11	120.337	6	26.715	6	1.545	11	11.908	11
59			min	-424.84	10	-2631.778	8	-141.137	17	-27.625	15	-0.993	17	-290.758	7
60	M19	1	max	2698.269	8	528.725	3	31.802	17	10.629	6	24.321	6	11.906	11
61			min	-1255.213	11	-775.694	9	-19.454	2	-11.425	15	-24.869	15	-288.188	7
62		2	max	2668.881	8	469.95	3	40.818	17	10.629	6	23.544	6	3.788	11
63			min	-1272.846	11	-813.974	5	-60.845	11	-11.425	15	-24.034	15	-272.318	7

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
64		3	max	2639.494	8	411.175	3	49.834	17	10.629	6	21.501	6	-3.382	11
65			min	-1290.478	11	-872.749	5	-108.026	11	-11.425	15	-22.958	15	-254.872	7
66	M20	1	max	0	17	0.001	11	0.013	6	0	17	0	17	0	17
67			min	0	1	-0.036	8	-0.014	15	0	1	0	1	0	1
68		2	max	4875.094	7	3755.855	8	316.067	15	13.992	15	10.268	15	22.047	11
69			min	-585.563	11	-482.998	11	-258.605	6	-12.934	6	-10.152	6	-186.53	8
70		3	max	3944.133	7	1324.91	7	147.204	17	13.851	15	23.96	15	25.413	11
71			min	-814.242	11	49.321	11	-153.878	6	-12.943	6	-23.397	6	-313.437	8
72	M21	1	max	2922.981	7	2930.161	7	151.987	6	27.625	15	1.673	15	313.437	8
73			min	-320.177	11	-750.299	11	-147.185	17	-26.715	6	-1.113	6	-25.413	11
74		2	max	2900.94	7	2922.343	7	136.162	6	27.625	15	0.416	11	289.751	8
75			min	-333.401	11	-750.299	11	-144.161	17	-26.715	6	0.021	10	-18.66	11
76		3	max	2878.899	7	2914.524	7	120.337	6	27.625	15	1.545	11	266.065	8
77			min	-346.625	11	-750.299	11	-141.137	17	-26.715	6	-0.993	17	-13.161	10
78	M22	1	max	3241.179	7	622.744	10	22.067	7	11.425	15	24.869	15	12.855	10
79			min	-1255.213	11	-445.488	3	-31.802	17	-10.629	6	-24.321	6	-263.561	8
80		2	max	3211.792	7	587.479	10	60.845	11	11.425	15	24.034	15	3.788	11
81			min	-1272.846	11	-504.263	3	-40.818	17	-10.629	6	-23.544	6	-257.505	8
82		3	max	3182.404	7	552.214	10	108.026	11	11.425	15	22.958	15	-3.382	11
83			min	-1290.478	11	-563.038	3	-49.834	17	-10.629	6	-21.501	6	-255.107	7
84	M23	1	max	0	17	0.001	11	0.014	15	0	17	0	17	0	17
85			min	0	1	-0.047	7	-0.013	6	0	1	0	1	0	1
86		2	max	5482.129	8	5498.054	7	258.913	6	12.847	6	10.202	6	17.071	11
87			min	-579.224	10	-375.787	11	-316.355	15	-13.939	15	-10.303	15	-278.018	7
88		3	max	4077.339	8	1193.893	2	127.933	6	12.83	6	23.14	6	14.984	11
89			min	-910.113	10	-52.885	10	-131.607	15	-13.784	15	-23.853	15	-423.936	7
90	M24	1	max	2826.751	8	790.42	10	125.474	6	26.435	6	1.662	15	14.984	11
91			min	-454.078	10	-3125.038	8	-131.001	15	-27.5	15	-1.127	6	-423.936	7
92		2	max	2804.71	8	779.995	10	109.649	6	26.435	6	0.496	15	8.22	11
93			min	-467.303	10	-3125.038	8	-127.977	15	-27.5	15	-0.069	6	-396.281	7
94		3	max	2782.669	8	769.57	10	93.824	6	26.435	6	0.984	11	1.457	11
95			min	-480.527	10	-3125.038	8	-124.953	15	-27.5	15	-0.686	17	-368.556	7
96	M25	1	max	3520.463	8	551.103	3	19.297	17	10.986	6	23.916	6	1.067	11
97			min	-946.403	10	-1416.192	5	-5.756	2	-11.588	15	-24.688	15	-365.362	7
98		2	max	3491.075	8	492.328	3	28.312	17	10.986	6	23.677	6	-9.771	11
99			min	-964.035	10	-1474.967	5	-38.017	11	-11.588	15	-24.097	15	-332.267	7
100		3	max	3461.688	8	433.553	3	37.328	17	10.986	6	22.171	6	-19.663	11
101			min	-981.668	10	-1533.742	5	-85.198	11	-11.588	15	-23.264	15	-306.904	2
102	M26	1	max	0	17	0.001	11	0.013	6	0	17	0	17	0	17
103			min	0	1	-0.044	8	-0.014	15	0	1	0	1	0	1
104		2	max	6171.203	7	4792.795	8	316.355	15	13.939	15	10.303	15	33.611	10
105			min	-458.162	11	-582.029	10	-258.913	6	-12.847	6	-10.202	6	-237.15	8
106		3	max	4766.407	7	1325.567	7	131.607	15	13.784	15	23.853	15	18.872	10
107			min	-789.049	11	102.296	11	-127.933	6	-12.83	6	-23.14	6	-385.921	8
108	M27	1	max	3278.583	7	3664.774	7	125.474	6	27.5	15	1.662	15	385.921	8
109			min	-261.284	11	-751.49	11	-131.001	15	-26.435	6	-1.127	6	-18.872	10
110		2	max	3256.543	7	3656.955	7	109.649	6	27.5	15	0.496	15	357.796	8
111			min	-274.509	11	-751.49	11	-127.977	15	-26.435	6	-0.069	6	-17.638	10
112		3	max	3234.502	7	3649.137	7	93.824	6	27.5	15	0.984	11	329.671	8
113			min	-287.733	11	-751.49	11	-124.953	15	-26.435	6	-0.686	17	-16.312	10
114	M28	1	max	4124.6	7	938.944	10	8.681	7	11.588	15	24.688	15	15.785	10
115			min	-891.575	11	-863.069	3	-19.297	17	-10.986	6	-23.916	6	-326.981	8
116		2	max	4095.213	7	903.679	10	38.017	11	11.588	15	24.097	15	-8.937	10
117			min	-909.208	11	-921.844	3	-28.312	17	-10.986	6	-23.677	6	-315.695	2
118		3	max	4065.825	7	868.414	10	85.198	11	11.588	15	23.264	15	-19.663	11

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
119			min	-926.84	11	-980.619	3	-37.328	17	-10.986	6	-22.171	6	-306.904	2
120	M29	1	max	0	17	-0.001	11	0.014	15	0	17	0	17	0	17
121			min	0	1	-0.047	7	-0.013	6	0	1	0	1	0	1
122		2	max	5256.905	7	5497.067	7	258.986	6	12.843	6	10.213	6	-7.029	11
123			min	-566.903	10	116.614	11	-316.105	15	-13.954	15	-10.281	15	-277.939	7
124		3	max	3852.131	7	1193.893	2	123.638	6	12.823	6	23.087	6	-17.347	11
125			min	-897.793	10	-52.446	10	-138.887	15	-13.806	15	-23.951	15	-423.791	7
126	M30	1	max	2610.901	2	779.596	10	121.88	6	26.384	6	1.638	15	-17.347	11
127			min	-448.178	10	-3072.395	7	-138.351	15	-27.597	15	-1.144	6	-423.791	7
128		2	max	2588.861	2	769.171	10	106.055	6	26.384	6	0.406	15	-19.44	11
129			min	-461.403	10	-3080.214	7	-135.327	15	-27.597	15	-0.159	8	-396.105	7
130		3	max	2566.82	2	758.746	10	90.23	6	26.384	6	0.82	11	-21.533	11
131			min	-474.627	10	-3088.032	7	-132.303	15	-27.597	15	-0.798	15	-368.348	7
132	M31	1	max	3353.008	7	551.103	3	23.896	15	11.044	6	23.844	6	-21.574	11
133			min	-936.16	10	-1419.921	5	1.632	14	-11.479	15	-24.827	15	-365.155	7
134		2	max	3323.62	7	492.328	3	32.912	15	11.044	6	23.693	6	-26.375	11
135			min	-953.793	10	-1478.696	5	-31.33	11	-11.479	15	-24.064	15	-331.985	7
136		3	max	3294.233	7	433.553	3	41.928	15	11.044	6	22.277	6	-30.231	11
137			min	-971.425	10	-1537.471	5	-78.511	11	-11.479	15	-23.06	15	-306.904	2
138	M32	1	max	0	17	0	10	0.013	6	0	17	0	17	0	17
139			min	0	1	-0.043	7	-0.014	15	0	1	0	1	0	1
140		2	max	6165.012	7	4574.99	2	316.105	15	13.954	15	10.281	15	33.464	10
141			min	115.073	11	-580.646	10	-258.986	6	-12.843	6	-10.213	6	-226.019	2
142		3	max	4760.218	7	1325.923	7	138.887	15	13.806	15	23.951	15	18.634	10
143			min	-215.821	11	88.313	11	-123.638	6	-12.823	6	-23.087	6	-372.271	2
144	M33	1	max	3276.206	7	3659.08	7	121.88	6	27.597	15	1.638	15	372.271	2
145			min	-17.403	11	-232.576	11	-138.351	15	-26.384	6	-1.144	6	-18.634	10
146		2	max	3254.165	7	3659.08	7	106.055	6	27.597	15	0.406	15	348.86	2
147			min	-30.628	11	-232.576	11	-135.327	15	-26.384	6	-0.159	8	-17.352	10
148		3	max	3232.125	7	3659.08	7	90.23	6	27.597	15	0.82	11	325.449	2
149			min	-43.852	11	-232.576	11	-132.303	15	-26.384	6	-0.798	15	-16.071	10
150	M34	1	max	4131.186	7	932.52	10	1.872	9	11.479	15	24.827	15	15.543	10
151			min	-377.622	11	-863.069	3	-23.896	15	-11.044	6	-23.844	6	-322.909	2
152		2	max	4101.799	7	897.255	10	31.33	11	11.479	15	24.064	15	-9.006	10
153			min	-395.255	11	-921.844	3	-32.912	15	-11.044	6	-23.693	6	-315.695	2
154		3	max	4072.411	7	861.99	10	78.511	11	11.479	15	23.06	15	-30.231	11
155			min	-412.887	11	-980.619	3	-41.928	15	-11.044	6	-22.277	6	-306.904	2
156	M35	1	max	0	17	-0.001	10	0.014	15	0	17	0	17	0	17
157			min	0	1	-0.037	7	-0.013	6	0	1	0	1	0	1
158		2	max	4034.77	7	4057.45	7	258.869	6	12.904	6	10.187	6	-15.142	11
159			min	-534.445	10	262.996	10	-315.378	15	-14.058	15	-10.2	15	-205.931	7
160		3	max	3103.786	7	1139.159	2	139.143	6	12.9	6	23.228	6	-24.105	10
161			min	-763.129	10	-66.695	10	-170.272	15	-13.942	15	-24.272	15	-332.502	7
162	M36	1	max	2277.556	2	652.758	10	138.336	6	26.545	6	1.615	15	-24.105	10
163			min	-400.825	10	-2324.56	7	-170.159	15	-27.944	15	-1.15	6	-332.502	7
164		2	max	2255.516	2	642.333	10	122.511	6	26.545	6	0.143	17	-29.933	10
165			min	-414.049	10	-2332.379	7	-167.135	15	-27.944	15	-0.265	2	-311.546	7
166		3	max	2233.475	2	631.908	10	106.686	6	26.545	6	1.055	6	-32.47	11
167			min	-427.274	10	-2340.197	7	-164.111	15	-27.944	15	-1.393	15	-290.519	7
168	M37	1	max	2546.41	7	528.724	3	48.147	15	10.831	6	24.078	6	-32.525	11
169			min	-757.331	10	-751.923	9	5.523	14	-11.049	15	-25.325	15	-287.935	7
170		2	max	2517.023	7	469.949	3	57.163	15	10.831	6	23.61	6	-27.02	10
171			min	-774.964	10	-790.256	5	-41.042	6	-11.049	15	-23.912	15	-272.541	7
172		3	max	2487.635	7	411.174	3	66.178	15	10.831	6	21.875	6	-17.7	10
173			min	-792.596	10	-849.031	5	-88.223	6	-11.049	15	-22.257	15	-255.57	7

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
174	M38	1	max	0	17	0	10	0.013	6	0	17	0	17	0	17
175			min	0	1	-0.035	7	-0.014	15	0	1	0	1	0	1
176		2	max	4853.106	7	3423.877	7	315.378	15	14.058	15	10.2	15	21.469	10
177			min	357.14	11	-367.34	10	-258.869	6	-12.904	6	-10.187	6	-166.991	2
178		3	max	3922.145	7	1322.829	7	170.272	15	13.942	15	24.272	15	12.48	10
179			min	128.456	11	202.238	11	-139.143	6	-12.9	6	-23.228	6	-296.023	7
180	M39	1	max	2911.402	7	2911.414	7	138.336	6	27.944	15	1.615	15	296.023	7
181			min	238.226	11	24.322	11	-170.159	15	-26.545	6	-1.15	6	-12.48	10
182		2	max	2889.361	7	2903.595	7	122.511	6	27.944	15	0.143	17	269.855	7
183			min	225.002	11	24.322	11	-167.135	15	-26.545	6	-0.265	2	-12.871	10
184		3	max	2867.321	7	2895.776	7	106.686	6	27.944	15	1.055	6	250.627	2
185			min	211.777	11	24.322	11	-164.111	15	-26.545	6	-1.393	15	-13.168	10
186	M40	1	max	3221.686	7	609.251	10	-3.239	9	11.049	15	25.325	15	12.868	10
187			min	-56.434	10	-445.488	3	-48.147	15	-10.831	6	-24.078	6	-248.522	2
188		2	max	3192.299	7	573.986	10	41.042	6	11.049	15	23.912	15	-3.006	10
189			min	-74.066	10	-504.263	3	-57.163	15	-10.831	6	-23.61	6	-249.59	7
190		3	max	3162.911	7	538.721	10	88.223	6	11.049	15	22.257	15	-17.935	10
191			min	-91.699	10	-563.038	3	-66.178	15	-10.831	6	-21.875	6	-255.801	7
192	M49	1	max	0	17	0	14	0	14	0	17	0	17	0	17
193			min	0	1	-0.013	16	-0.016	16	0	1	0	1	0	1
194		2	max	0	14	28.854	11	-3.138	10	0	17	-0.019	10	0.805	7
195			min	-5.255	15	-134.169	7	-47.227	2	0	1	-0.283	2	-0.173	11
196		3	max	0	14	57.707	11	-6.276	10	0	17	-0.075	10	3.22	7
197			min	-10.511	15	-268.339	7	-94.455	2	0	1	-1.133	2	-0.692	11
198	M50	1	max	55.001	15	1046.11	7	368.229	2	0	17	-0.075	10	3.22	7
199			min	-0.263	10	-212.1	11	24.469	10	0	1	-1.133	2	-0.692	11
200		2	max	14.71	15	17.501	7	6.16	2	0	17	16.088	2	8.645	11
201			min	-0.263	10	-8.784	6	0.409	10	0	1	1.069	9	-45.705	7
202		3	max	0.927	11	162.651	11	-23.65	9	0	17	0	17	0	17
203			min	-25.632	17	-1011.109	7	-355.909	2	0	1	0	1	0	1
204	M51	1	max	40.416	15	1028.677	7	362.093	2	0	17	0	17	0	17
205			min	-0.72	6	-79.263	11	24.061	9	0	1	0	1	0	1
206		2	max	0.843	11	18.221	11	0	17	0	17	16.657	2	1.625	11
207			min	-0.72	6	-12.147	6	0	1	0	1	1.107	9	-47.321	7
208		3	max	0.843	11	17.099	11	-24.061	10	0	17	0	17	0	17
209			min	-40.232	17	-1028.677	7	-362.093	2	0	1	0	1	0	1
210	M52	1	max	25.984	15	1011.109	7	355.909	2	0	17	0	17	0	17
211			min	-0.855	6	1.102	11	23.65	9	0	1	0	1	0	1
212		2	max	0.368	11	-0.019	11	-0.409	10	0	17	16.088	2	-0.05	11
213			min	-14.403	17	-17.501	7	-6.16	2	0	1	1.069	9	-45.705	7
214		3	max	0.368	11	-1.141	11	-24.469	10	0	17	-0.075	10	3.22	7
215			min	-54.693	17	-1046.11	7	-368.229	2	0	1	-1.133	2	0.004	11
216	M53	1	max	10.511	17	268.339	7	94.455	2	0	17	-0.075	9	3.22	7
217			min	0	1	0.293	11	6.276	10	0	1	-1.133	2	0.004	11
218		2	max	5.255	17	134.169	7	47.227	2	0	17	-0.019	9	0.805	7
219			min	0	1	0.146	11	3.138	10	0	1	-0.283	2	0.001	11
220		3	max	0	17	0	14	0	14	0	17	0	17	0	17
221			min	0	1	-0.013	16	-0.016	16	0	1	0	1	0	1
222	M54	1	max	0	17	0	14	0	14	0	17	0	17	0	17
223			min	0	1	-0.034	16	-0.033	16	0	1	0	1	0	1
224		2	max	0	14	52.042	11	-4.902	14	0	17	-0.029	14	1.27	7
225			min	-7.629	15	-211.613	7	-74.686	2	0	1	-0.448	2	-0.312	11
226		3	max	0	14	104.084	11	-9.804	14	0	17	-0.118	14	5.079	7
227			min	-15.258	15	-423.226	7	-149.373	2	0	1	-1.792	2	-1.249	11
228	M55	1	max	81.48	15	1649.934	7	582.324	2	0	17	-0.118	14	5.079	7

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
229			min	1.015	10	-384.464	11	38.222	14	0	1	-1.792	2	-1.249	11
230		2	max	22.991	15	27.602	7	9.742	2	0	17	25.442	2	15.768	11
231			min	1.015	10	-15.436	6	0.639	14	0	1	1.67	14	-72.086	7
232		3	max	5.524	2	301.499	11	-36.943	14	0	17	0	17	0	17
233			min	-37.234	17	-1594.729	7	-562.84	2	0	1	0	1	0	1
234	M56	1	max	62.571	15	1622.437	7	572.62	2	0	17	0	17	0	17
235			min	1.37	10	-163.734	11	37.585	14	0	1	0	1	0	1
236		2	max	7.349	2	30.263	11	0	17	0	17	26.342	2	4.175	11
237			min	1.37	10	-20.211	6	0	1	0	1	1.729	14	-74.635	7
238		3	max	7.349	2	60.485	11	-37.585	14	0	17	0	17	0	17
239			min	-56.439	17	-1622.437	7	-572.62	2	0	1	0	1	0	1
240	M57	1	max	41.619	15	1594.729	7	562.84	2	0	17	0	17	0	17
241			min	0.616	6	-29.705	11	36.943	14	0	1	0	1	0	1
242		2	max	5.524	2	0.514	11	-0.639	14	0	17	25.442	2	1.343	11
243			min	-18.176	17	-27.602	7	-9.742	2	0	1	1.67	14	-72.086	7
244		3	max	5.524	2	30.734	11	-38.222	14	0	17	-0.118	14	5.079	7
245			min	-76.665	17	-1649.934	7	-582.324	2	0	1	-1.792	2	-0.095	11
246	M58	1	max	15.258	17	423.226	7	149.373	2	0	17	-0.118	14	5.079	7
247			min	0	1	-7.884	11	9.804	14	0	1	-1.792	2	-0.095	11
248		2	max	7.629	17	211.613	7	74.686	2	0	17	-0.029	14	1.27	7
249			min	0	1	-3.942	11	4.902	14	0	1	-0.448	2	-0.024	11
250		3	max	0	17	0	14	0	14	0	17	0	17	0	17
251			min	0	1	-0.034	16	-0.033	16	0	1	0	1	0	1
252	M59	1	max	0	17	0	14	0	14	0	17	0	17	0	17
253			min	0	1	-0.009	16	-0.008	16	0	1	0	1	0	1
254		2	max	0	14	14.147	11	-2.746	14	0	17	-0.016	14	0.489	7
255			min	-3.76	15	-81.482	7	-29.786	2	0	1	-0.179	2	-0.085	11
256		3	max	0	14	28.293	11	-5.492	14	0	17	-0.066	14	1.956	7
257			min	-7.519	15	-162.964	7	-59.572	2	0	1	-0.715	2	-0.34	11
258	M60	1	max	41.041	15	635.31	7	232.24	2	0	17	-0.066	14	1.956	7
259			min	0.677	10	-102.756	11	21.411	14	0	1	-0.715	2	-0.34	11
260		2	max	19.799	8	10.628	7	3.885	2	0	17	10.147	2	4.125	11
261			min	0.677	10	-4.585	6	0.358	14	0	1	0.935	14	-27.757	7
262		3	max	19.799	8	74.49	11	-20.694	14	0	17	0	17	0	17
263			min	-21.747	17	-614.053	7	-224.47	2	0	1	0	1	0	1
264	M61	1	max	41.967	15	624.722	7	228.37	2	0	17	0	17	0	17
265			min	1.022	10	-25.55	11	21.054	14	0	1	0	1	0	1
266		2	max	23.752	2	10.577	11	0	17	0	17	10.505	2	0.002	11
267			min	1.022	10	-7.016	6	0	1	0	1	0.969	14	-28.738	7
268		3	max	23.752	2	-10.534	11	-21.054	14	0	17	0	17	0	17
269			min	-22.223	17	-624.722	7	-228.37	2	0	1	0	1	0	1
270	M62	1	max	37.325	15	614.053	7	224.47	2	0	17	0	17	0	17
271			min	-2.224	6	20.75	11	20.694	14	0	1	0	1	0	1
272		2	max	18.677	2	-0.359	11	-0.358	14	0	17	10.147	2	-0.938	11
273			min	-2.224	6	-10.628	7	-3.885	2	0	1	0.935	14	-27.757	7
274		3	max	18.677	2	-21.468	11	-21.411	14	0	17	-0.066	14	1.956	7
275			min	-25.467	17	-635.31	7	-232.24	2	0	1	-0.715	2	0.066	11
276	M63	1	max	7.519	17	162.964	7	59.572	2	0	17	-0.066	14	1.956	7
277			min	0	1	5.507	11	5.492	14	0	1	-0.715	2	0.066	11
278		2	max	3.76	17	81.482	7	29.786	2	0	17	-0.016	14	0.489	7
279			min	0	1	2.753	11	2.746	14	0	1	-0.179	2	0.017	11
280		3	max	0	17	0	14	0	14	0	17	0	17	0	17
281			min	0	1	-0.01	16	-0.008	16	0	1	0	1	0	1
282	M64	1	max	232.925	11	13.942	11	201.169	17	0	17	0	17	0	17
283			min	-173.337	17	-192.564	7	-365.462	8	0	1	0	1	0	1

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
284		2	max	232.925	11	42.367	11	193.068	17	0	17	2.365	17	3.095	7
285			min	-178.469	17	-323.343	7	-403.925	8	0	1	-4.616	8	-0.338	11
286		3	max	232.925	11	70.792	11	184.968	17	0	17	4.634	17	7.76	7
287			min	-183.6	17	-454.123	7	-442.387	8	0	1	-9.694	8	-1.017	11
288	M65	1	max	103.646	11	1044.796	7	383.182	2	0	17	4.634	17	7.76	7
289			min	-11.06	17	-223.446	11	20.688	10	0	1	-9.694	8	-1.017	11
290		2	max	103.646	11	42.176	7	52.687	8	0	17	13.104	2	9.516	11
291			min	-50.401	17	-5.526	11	-25.183	17	0	1	-0.742	11	-42.239	7
292		3	max	103.646	11	212.393	11	-16.761	9	0	17	0	17	0	17
293			min	-89.742	17	-960.444	7	-317.642	2	0	1	0	1	0	1
294	M66	1	max	65.659	15	1002.686	7	350.435	2	0	17	0	17	0	17
295			min	-6.176	10	-130.53	11	21.266	9	0	1	0	1	0	1
296		2	max	47.623	2	0	17	0	17	0	17	16.121	2	6.005	11
297			min	-6.176	10	0	1	0	1	0	1	0.978	9	-46.126	7
298		3	max	47.623	2	130.53	11	-21.266	10	0	17	0	17	0	17
299			min	-26.139	17	-1002.686	7	-350.435	2	0	1	0	1	0	1
300	M67	1	max	140.999	15	962.248	7	317.642	2	0	17	0	17	0	17
301			min	-55.033	6	-1.382	11	11.208	9	0	1	0	1	0	1
302		2	max	101.658	15	-1.958	11	19.267	6	0	17	13.439	8	0.154	11
303			min	-55.033	6	-40.372	7	-50.438	15	0	1	-0.969	17	-42.405	7
304		3	max	64.553	16	-2.534	11	-18.609	10	0	17	3.545	6	7.428	7
305			min	-55.033	6	-1042.993	7	-383.182	2	0	1	-9.28	15	0.36	11
306	M68	1	max	271.115	15	440.294	7	403.986	15	0	17	3.545	6	7.428	7
307			min	-154.115	6	15.084	11	-131.575	11	0	1	-9.28	15	0.36	11
308		2	max	265.983	15	309.515	7	386.685	15	0	17	1.873	6	2.93	7
309			min	-154.115	6	15.009	11	-147.709	6	0	1	-4.536	15	0.18	11
310		3	max	260.852	15	178.735	7	369.384	15	0	17	0	17	0	17
311			min	-154.115	6	14.934	11	-164.437	6	0	1	0	1	0	1
312	M69	1	max	311.055	17	299.293	11	19.646	5	0	17	0	17	0	17
313			min	-465.85	11	-290.884	15	-22.055	3	0	1	0	1	0	1
314		2	max	300.951	17	313.849	11	73.622	5	0	17	1.47	5	10.598	15
315			min	-465.85	11	-416.331	7	-22.055	3	0	1	-0.723	3	-9.844	11
316		3	max	284.05	17	384.699	11	149.19	5	0	17	5.065	5	29.545	7
317			min	-465.85	11	-860.148	7	-22.055	3	0	1	-1.447	3	-21.262	11
318	M70	1	max	179.619	17	1232.282	7	7.862	3	0	17	5.065	5	29.545	7
319			min	-256.935	11	-322.057	11	-148.659	5	0	1	-1.447	3	-21.262	11
320		2	max	131.272	17	160.577	7	7.862	3	0	17	0	17	1.946	17
321			min	-256.935	11	-115.555	11	-27.528	5	0	1	-3.043	9	-42.624	8
322		3	max	82.926	17	90.946	11	93.642	9	0	17	0	17	0	17
323			min	-256.935	11	-1015.552	8	0	1	0	1	0	1	0	1
324	M71	1	max	5.1	17	1071.775	7	0	17	0	17	0	17	0	17
325			min	-155.757	2	-109.911	11	-121.139	5	0	1	0	1	0	1
326		2	max	-35.678	10	0	17	0	17	0	17	0	17	5.056	11
327			min	-155.757	2	0	1	0	1	0	1	-5.573	5	-49.304	7
328		3	max	-35.678	10	109.911	11	121.139	9	0	17	0	17	0	17
329			min	-155.757	2	-1071.775	7	0	1	0	1	0	1	0	1
330	M72	1	max	121.066	6	908.411	7	0	17	0	17	0	17	0	17
331			min	-226.18	15	-33.632	11	-95.053	9	0	1	0	1	0	1
332		2	max	121.066	6	56.578	17	26.119	5	0	17	0	17	4.704	11
333			min	-274.526	15	-184.041	8	-7.862	3	0	1	-3.173	9	-34.275	7
334		3	max	121.066	6	79.54	10	147.25	5	0	17	4.806	5	33.863	8
335			min	-322.873	15	-1235	7	-7.862	3	0	1	-1.447	3	-10.41	17
336	M73	1	max	308.23	6	867.772	7	22.055	3	0	17	4.806	5	33.863	8
337			min	-459.079	15	-160.705	10	-145.237	5	0	1	-1.447	3	-10.41	17
338		2	max	308.23	6	485.691	8	22.055	3	0	17	1.341	5	12.782	8

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
339			min	-475.98	15	-162.751	17	-69.669	5	0	1	-0.723	3	-6.036	17
340		3	max	308.23	6	336.828	6	22.055	3	0	17	0	17	0	17
341			min	-486.084	15	-200.343	17	-15.693	5	0	1	0	1	0	1
342	M74	1	max	0	17	0	14	0.016	16	0	17	0	17	0	17
343			min	0	1	-0.013	16	0	1	0	1	0	1	0	1
344		2	max	0	14	34.335	10	47.227	2	0	17	0.283	3	0.685	8
345			min	-5.255	15	-114.206	8	8.282	17	0	1	0.05	17	-0.206	10
346		3	max	0	14	68.669	10	94.455	2	0	17	1.133	3	2.741	8
347			min	-10.511	15	-228.413	8	16.558	17	0	1	0.199	17	-0.824	10
348	M75	1	max	55.001	15	875.98	8	-64.527	17	0	17	1.133	3	2.741	8
349			min	0.096	14	-267.704	10	-368.229	3	0	1	0.199	17	-0.824	10
350		2	max	14.71	15	12.32	2	-1.08	17	0	17	-2.819	17	11.696	10
351			min	0.096	14	-8.784	6	-6.16	3	0	1	-16.088	2	-37.572	8
352		3	max	0.927	11	258.747	10	355.909	2	0	17	0	17	0	17
353			min	-25.632	17	-799.024	8	62.367	17	0	1	0	1	0	1
354	M76	1	max	40.416	15	749.055	8	-63.451	17	0	17	0	17	0	17
355			min	-0.72	6	-263.243	10	-362.093	2	0	1	0	1	0	1
356		2	max	0.843	11	18.221	11	0	17	0	17	-2.919	17	12.11	10
357			min	-0.72	6	-12.147	6	0	1	0	1	-16.657	2	-33.447	8
358		3	max	0.843	11	263.243	10	362.093	3	0	17	0	17	0	17
359			min	-40.232	17	-724.187	2	63.451	17	0	1	0	1	0	1
360	M77	1	max	25.984	15	711.819	3	-62.368	17	0	17	0	17	0	17
361			min	-0.855	6	-258.747	10	-355.909	2	0	1	0	1	0	1
362		2	max	0.391	7	4.479	10	6.16	3	0	17	-2.819	17	11.696	10
363			min	-14.403	17	-12.32	2	1.079	17	0	1	-16.088	2	-32.176	2
364		3	max	0.391	7	267.704	10	368.229	3	0	17	1.133	3	2.267	3
365			min	-54.693	17	-736.46	2	64.525	17	0	1	0.198	17	-0.824	10
366	M78	1	max	10.511	17	188.91	2	-16.545	17	0	17	1.133	3	2.267	2
367			min	0	1	-68.669	10	-94.455	2	0	1	0.198	17	-0.824	10
368		2	max	5.255	17	94.455	2	-8.269	17	0	17	0.283	3	0.567	2
369			min	0	1	-34.335	10	-47.227	2	0	1	0.05	17	-0.206	10
370		3	max	0	17	0	14	0.016	16	0	17	0	17	0	17
371			min	0	1	-0.013	16	0	1	0	1	0	1	0	1
372	M79	1	max	0	17	0	14	0.033	16	0	17	0	17	0	17
373			min	0	1	-0.034	16	0	1	0	1	0	1	0	1
374		2	max	0	14	57.242	10	74.686	2	0	17	0.448	2	1.093	8
375			min	-7.629	15	-182.138	8	11.738	17	0	1	0.07	17	-0.343	10
376		3	max	0	14	114.484	10	149.373	2	0	17	1.792	2	4.371	8
377			min	-15.258	15	-364.276	8	23.463	17	0	1	0.282	17	-1.374	10
378	M80	1	max	81.48	15	1396.154	8	-91.425	17	0	17	1.792	3	4.371	8
379			min	1.441	10	-446.311	10	-582.324	3	0	1	0.282	17	-1.374	10
380		2	max	22.991	15	19.484	2	-1.531	17	0	17	-3.994	17	19.499	10
381			min	1.441	10	-15.436	6	-9.742	3	0	1	-25.442	2	-59.841	8
382		3	max	5.524	2	431.378	10	562.84	2	0	17	0	17	0	17
383			min	-37.234	17	-1270.576	8	88.363	17	0	1	0	1	0	1
384	M81	1	max	62.571	15	1186.738	8	-89.9	17	0	17	0	17	0	17
385			min	1.998	10	-438.873	10	-572.62	2	0	1	0	1	0	1
386		2	max	7.349	2	30.263	11	0	17	0	17	-4.136	17	20.189	10
387			min	1.998	10	-20.211	6	0	1	0	1	-26.342	2	-52.911	8
388		3	max	7.349	2	438.873	10	572.62	3	0	17	0	17	0	17
389			min	-56.439	17	-1145.242	2	89.9	17	0	1	0	1	0	1
390	M82	1	max	41.619	15	1125.683	3	-88.367	17	0	17	0	17	0	17
391			min	0.616	6	-431.378	10	-562.84	2	0	1	0	1	0	1
392		2	max	5.524	2	7.466	10	9.742	3	0	17	-3.995	17	19.499	10
393			min	-18.176	17	-19.484	2	1.528	17	0	1	-25.442	2	-50.884	3

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
394		3	max	5.524	2	446.311	10	582.324	3	0	17	1.792	3	3.585	2
395			min	-76.665	17	-1164.651	2	91.422	17	0	1	0.281	17	-1.374	10
396	M83	1	max	15.258	17	298.746	2	-23.438	17	0	17	1.792	3	3.585	2
397			min	0	1	-114.484	10	-149.373	3	0	1	0.281	17	-1.374	10
398		2	max	7.629	17	149.373	2	-11.713	17	0	17	0.448	3	0.896	2
399			min	0	1	-57.242	10	-74.686	3	0	1	0.07	17	-0.343	10
400		3	max	0	17	0	14	0.033	16	0	17	0	17	0	17
401			min	0	1	-0.034	16	0	1	0	1	0	1	0	1
402	M84	1	max	0	17	0	14	0.008	16	0	17	0	17	0	17
403			min	0	1	-0.009	16	0	1	0	1	0	1	0	1
404		2	max	0	14	15.947	10	29.786	2	0	17	0.179	2	0.427	8
405			min	-3.76	17	-71.132	8	6.112	17	0	1	0.037	17	-0.096	10
406		3	max	0	14	31.893	10	59.572	2	0	17	0.715	2	1.707	8
407			min	-7.519	17	-142.264	8	12.221	17	0	1	0.147	17	-0.383	10
408	M85	1	max	41.041	15	546.124	8	-47.631	17	0	17	0.715	2	1.707	8
409			min	5.567	14	-124.335	10	-232.24	2	0	1	0.147	17	-0.383	10
410		2	max	19.846	7	7.77	2	-0.797	17	0	17	-2.081	17	5.432	10
411			min	5.567	14	-4.585	6	-3.885	2	0	1	-10.147	3	-23.45	8
412		3	max	19.846	7	120.175	10	224.47	3	0	17	0	17	0	17
413			min	-21.747	17	-499.92	8	46.037	17	0	1	0	1	0	1
414	M86	1	max	41.967	15	471.404	8	-46.837	17	0	17	0	17	0	17
415			min	7.082	14	-122.263	10	-228.37	2	0	1	0	1	0	1
416		2	max	24.837	7	10.577	11	0	17	0	17	-2.155	17	5.624	10
417			min	6.601	17	-7.016	6	0	1	0	1	-10.505	2	-21.102	8
418		3	max	24.837	7	122.263	10	228.37	3	0	17	0	17	0	17
419			min	-22.223	17	-456.741	2	46.837	17	0	1	0	1	0	1
420	M87	1	max	37.325	15	448.941	3	-46.038	17	0	17	0	17	0	17
421			min	-2.224	6	-120.175	10	-224.47	3	0	1	0	1	0	1
422		2	max	19.171	7	2.08	10	3.885	2	0	17	-2.081	17	5.432	10
423			min	-2.224	6	-7.77	2	0.796	17	0	1	-10.147	3	-20.293	3
424		3	max	19.171	7	124.335	10	232.24	2	0	17	0.715	2	1.43	2
425			min	-25.467	17	-464.482	2	47.63	17	0	1	0.147	17	-0.383	10
426	M88	1	max	7.519	15	119.145	3	-12.214	17	0	17	0.715	3	1.43	3
427			min	0	1	-31.893	10	-59.572	3	0	1	0.147	17	-0.383	10
428		2	max	3.76	15	59.572	3	-6.105	17	0	17	0.179	3	0.357	3
429			min	0	1	-15.947	10	-29.786	3	0	1	0.037	17	-0.096	10
430		3	max	0	17	0	14	0.008	16	0	17	0	17	0	17
431			min	0	1	-0.01	16	0	1	0	1	0	1	0	1
432	M89	1	max	232.925	11	37.767	10	365.462	8	0	17	0	17	0	17
433			min	-173.337	17	-171.976	4	-201.169	17	0	1	0	1	0	1
434		2	max	232.925	11	71.617	10	403.925	8	0	17	4.616	8	2.487	8
435			min	-178.469	17	-262.853	8	-193.068	17	0	1	-2.365	17	-0.656	10
436		3	max	232.925	11	105.468	10	442.387	8	0	17	9.694	8	6.308	8
437			min	-183.6	17	-373.978	8	-184.968	17	0	1	-4.634	17	-1.719	10
438	M90	1	max	103.646	11	886.22	8	-36.921	17	0	17	9.694	8	6.308	8
439			min	-11.06	17	-268.856	10	-383.182	2	0	1	-4.634	17	-1.719	10
440		2	max	103.646	11	34.286	8	25.183	17	0	17	0.742	11	11.078	10
441			min	-50.401	17	-9.342	10	-52.687	8	0	1	-13.328	3	-36.034	8
442		3	max	103.646	11	250.173	10	320.079	3	0	17	0	17	0	17
443			min	-89.742	17	-817.648	8	24.85	11	0	1	0	1	0	1
444	M91	1	max	65.659	15	753.66	8	-62.108	17	0	17	0	17	0	17
445			min	14.764	14	-259.531	10	-350.435	2	0	1	0	1	0	1
446		2	max	54.194	7	0	17	0	17	0	17	-2.857	17	11.939	10
447			min	13.204	17	0	1	0	1	0	1	-16.121	2	-34.67	8
448		3	max	54.194	7	259.531	10	350.435	3	0	17	0	17	0	17

Envelope Member Section Forces (Continued)

	Member	Sec		Axial[lb]	LC	y Shear[lb]	LC	z Shear[lb]	LC	Torque[k-in]	LC	y-y Moment[k-in]	LC	z-z Moment[k-in]	LC
449			min	-26.139	17	-753.66	8	62.108	17	0	1	0	1	0	1
450	M92	1	max	140.999	15	671.174	2	-20.523	17	0	17	0	17	0	17
451			min	-55.033	6	-251.686	10	-320.079	3	0	1	0	1	0	1
452		2	max	101.658	15	7.828	10	50.438	15	0	17	0.969	17	11.217	10
453			min	-55.033	6	-29.671	3	-19.267	6	0	1	-13.439	8	-29.509	2
454		3	max	64.553	16	267.342	10	383.182	2	0	17	9.28	15	5.459	3
455			min	-55.033	6	-730.496	3	47.554	11	0	1	-3.545	6	-1.44	10
456	M93	1	max	271.115	15	318.886	3	131.575	11	0	17	9.28	15	5.459	3
457			min	-154.115	6	-93.415	10	-403.986	15	0	1	-3.545	6	-1.44	10
458		2	max	265.983	15	227.472	3	147.709	6	0	17	4.536	15	2.361	4
459			min	-154.115	6	-60.012	10	-386.685	15	0	1	-1.873	6	-0.52	10
460		3	max	260.852	15	171.976	4	164.437	6	0	17	0	17	0	17
461			min	-154.115	6	-26.609	10	-369.384	15	0	1	0	1	0	1
462	M94	1	max	421.923	8	193.891	7	37.118	5	0	17	0	17	0	17
463			min	-265.392	17	-15.922	11	-7.39	17	0	1	0	1	0	1
464		2	max	391.004	11	2.659	11	0.281	15	0	17	0.644	5	0.184	11
465			min	-272.107	17	-11.342	7	-0.236	14	0	1	-0.118	17	-2.969	7
466		3	max	392.01	11	5.285	11	6.265	15	0	17	0	17	0	17
467			min	-277.752	17	-148.522	7	-37.118	9	0	1	0	1	0	1
468	M95	1	max	451.726	15	185.444	7	0	11	0	17	0	17	0	17
469			min	-224.54	6	15.249	11	-30.622	10	0	1	0	1	0	1
470		2	max	419.67	15	0.307	11	0.281	17	0	17	0	11	-0.275	11
471			min	-257.486	6	-11.342	7	0	1	0	1	-0.531	10	-2.823	7
472		3	max	394.479	15	-16.475	11	30.622	10	0	17	0	17	0	17
473			min	-281.834	6	-140.075	7	0	1	0	1	0	1	0	1
474	M96	1	max	421.923	8	179.963	4	27.653	10	0	17	0	17	0	17
475			min	-265.392	17	-31.268	10	0	1	0	1	0	1	0	1
476		2	max	391.004	11	2.911	10	0	11	0	17	0.48	10	0.441	10
477			min	-272.107	17	-11.075	4	-0.281	15	0	1	0	1	-2.737	4
478		3	max	392.01	11	19.623	10	0	11	0	17	0	17	0	17
479			min	-277.752	17	-135.662	4	-27.653	10	0	1	0	1	0	1
480	M97	1	max	451.726	15	179.963	4	7.39	15	0	17	0	17	0	17
481			min	-224.54	6	-24.447	10	-11.692	10	0	1	0	1	0	1
482		2	max	419.67	15	2.911	10	0.236	12	0	17	0.118	15	0.323	10
483			min	-257.486	6	-11.075	4	-0.281	17	0	1	-0.203	10	-2.737	4
484		3	max	394.479	15	12.802	10	11.692	5	0	17	0	17	0	17
485			min	-281.834	6	-135.662	4	-6.265	17	0	1	0	1	0	1

Envelope Member Section Deflections - Service

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
0	M1	1	max	0	17	0	17	0	17	0	17	NC	17	NC	17
1			min	0	1	0	1	0	1	0	1	NC	1	NC	1
2		2	max	0	11	0.18	8	0.05	15	0	17	NC	14	NC	14
3			min	-0.002	7	-0.058	10	-0.05	6	0	1	598.244	8	2158.948	6
4		3	max	0	11	0.572	8	0.171	15	0	17	5283.981	9	NC	14
5			min	-0.005	7	-0.181	10	-0.168	6	0	1	187.931	8	630.032	15
6	M2	1	max	0	17	0	17	0	17	0	17	NC	17	NC	17
7			min	0	1	0	1	0	1	0	1	NC	1	NC	1
8		2	max	0	11	0.009	11	0.05	15	0	17	NC	11	NC	14
9			min	-0.002	8	-0.242	7	-0.05	6	0	1	444.671	7	2158.948	6
10		3	max	0	11	0.028	11	0.171	15	0	17	3837.713	11	NC	14
11			min	-0.004	8	-0.767	7	-0.168	6	0	1	140.27	7	630.032	15
12	M3	1	max	0	17	0	17	0	17	0	17	NC	17	NC	17
13			min	0	1	0	1	0	1	0	1	NC	1	NC	1
14		2	max	0	11	0.221	8	0.05	15	0	17	NC	14	NC	14

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
15			min	-0.003	7	-0.069	10	-0.05	6	0	1	486.636	8	2158.545	6
16		3	max	0	11	0.704	8	0.171	15	0	17	NC	11	NC	14
17			min	-0.006	7	-0.215	10	-0.168	6	0	1	152.793	8	629.91	15
18	M4	1	max	0	17	0	17	0	17	0	17	NC	17	NC	17
19			min	0	1	0	1	0	1	0	1	NC	1	NC	1
20		2	max	0	10	0.001	11	0.05	15	0	17	NC	11	NC	14
21			min	-0.003	8	-0.301	7	-0.05	6	0	1	356.708	7	2158.545	6
22		3	max	0	10	0.004	11	0.171	15	0	17	NC	11	NC	14
23			min	-0.006	8	-0.957	7	-0.168	6	0	1	112.369	7	629.91	15
24	M5	1	max	0	17	0	17	0	17	0	17	NC	17	NC	17
25			min	0	1	0	1	0	1	0	1	NC	1	NC	1
26		2	max	0	11	0.218	2	0.05	15	0	17	NC	14	NC	14
27			min	-0.003	7	-0.068	10	-0.05	6	0	1	493.222	2	2157.751	6
28		3	max	0	11	0.694	2	0.171	15	0	17	NC	9	NC	14
29			min	-0.006	7	-0.212	10	-0.168	6	0	1	154.877	2	629.92	15
30	M6	1	max	0	17	0	17	0	17	0	17	NC	17	NC	17
31			min	0	1	0	1	0	1	0	1	NC	1	NC	1
32		2	max	0	10	-0.014	11	0.05	15	0	17	7529.188	11	NC	14
33			min	-0.003	7	-0.301	7	-0.05	6	0	1	357.278	7	2157.751	6
34		3	max	0	10	-0.045	11	0.171	15	0	17	2369.253	11	NC	14
35			min	-0.006	7	-0.955	7	-0.168	6	0	1	112.549	7	629.92	15
36	M7	1	max	0	17	0	17	0	17	0	17	NC	17	NC	17
37			min	0	1	0	1	0	1	0	1	NC	1	NC	1
38		2	max	0	10	0.169	2	0.05	15	0	17	NC	14	NC	14
39			min	-0.002	7	-0.059	10	-0.05	6	0	1	635.784	2	2157.502	6
40		3	max	0	10	0.538	2	0.171	15	0	17	4555.618	14	NC	14
41			min	-0.005	7	-0.182	10	-0.168	6	0	1	199.761	2	630.07	15
42	M8	1	max	0	17	0	17	0	17	0	17	NC	17	NC	17
43			min	0	1	0	1	0	1	0	1	NC	1	NC	1
44		2	max	0	10	-0.022	11	0.05	15	0	17	4909.454	11	NC	14
45			min	-0.002	7	-0.24	7	-0.05	6	0	1	447.565	7	2157.502	6
46		3	max	0	10	-0.07	11	0.171	15	0	17	1544.783	11	NC	14
47			min	-0.004	7	-0.762	7	-0.168	6	0	1	141.187	7	630.07	15
48	M17	1	max	0.166	10	0.33	8	0.148	15	0.001	15	NC	17	NC	17
49			min	-0.459	8	-0.076	10	-0.146	6	-0.001	6	NC	1	NC	1
50		2	max	0.166	10	0.021	11	0.385	15	0.002	15	3673.313	10	NC	14
51			min	-0.46	8	-0.367	7	-0.376	6	-0.002	6	214.697	7	558.448	15
52		3	max	0.166	10	0.042	11	0.595	15	0.003	15	2429.659	10	NC	14
53			min	-0.461	8	-0.797	7	-0.577	6	-0.002	6	126.355	7	296.156	15
54	M18	1	max	0.047	11	0.103	8	0.595	15	0.001	6	NC	14	NC	17
55			min	-0.844	7	-0.217	9	-0.577	6	-0.001	15	271.266	8	NC	1
56		2	max	0.047	11	0.067	8	0.626	15	0.001	6	NC	14	NC	14
57			min	-0.844	7	-0.232	9	-0.607	6	-0.001	15	590.205	8	576.052	15
58		3	max	0.047	11	0.037	8	0.657	15	0.001	6	NC	17	NC	14
59			min	-0.844	7	-0.244	9	-0.637	6	-0.001	15	NC	1	287.929	15
60	M19	1	max	0.167	10	0.042	11	0.657	15	0.003	15	NC	17	NC	17
61			min	-0.402	8	-0.826	7	-0.637	6	-0.003	6	4751.457	10	NC	1
62		2	max	0.167	10	0.043	11	0.716	15	0.003	15	NC	11	NC	14
63			min	-0.402	8	-0.883	7	-0.693	6	-0.003	6	852.354	8	912.78	15
64		3	max	0.167	10	0.042	11	0.763	15	0.003	15	NC	11	NC	14
65			min	-0.402	8	-0.895	7	-0.737	6	-0.003	6	641.89	8	505.805	15
66	M20	1	max	0.022	11	0.415	7	0.146	6	0.001	6	NC	17	NC	17
67			min	-0.634	7	-0.017	11	-0.148	15	-0.001	15	202.038	5	NC	1
68		2	max	0.022	11	0.102	10	0.376	6	0.002	6	8816.41	10	NC	14
69			min	-0.635	7	-0.265	8	-0.385	15	-0.002	15	222.308	8	558.448	15

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
70		3	max	0.022	11	0.087	10	0.577	6	0.002	6	NC	14	NC	14
71			min	-0.637	7	-0.691	8	-0.595	15	-0.003	15	129.54	8	296.156	15
72	M21	1	max	0.047	11	0.001	11	0.595	15	0.001	15	NC	11	NC	17
73			min	-0.824	8	-0.333	5	-0.577	6	-0.001	6	257.528	7	NC	1
74		2	max	0.047	11	0	11	0.626	15	0.001	15	NC	11	NC	14
75			min	-0.824	8	-0.307	5	-0.607	6	-0.001	6	554.665	7	576.052	15
76		3	max	0.047	11	0	11	0.657	15	0.001	15	NC	17	NC	14
77			min	-0.824	8	-0.285	5	-0.637	6	-0.001	6	NC	1	287.929	15
78	M22	1	max	0.021	11	0.084	10	0.637	6	0.003	6	NC	17	NC	17
79			min	-0.574	7	-0.721	8	-0.657	15	-0.003	15	2400.47	10	NC	1
80		2	max	0.021	11	0.073	10	0.693	6	0.003	6	NC	11	NC	14
81			min	-0.575	7	-0.784	8	-0.716	15	-0.003	15	753.855	7	912.78	15
82		3	max	0.021	11	0.062	10	0.737	6	0.003	6	NC	11	NC	14
83			min	-0.575	7	-0.805	8	-0.763	15	-0.003	15	529.063	7	505.805	15
84	M23	1	max	0.197	10	0.406	8	0.148	15	0.001	15	NC	17	NC	17
85			min	-0.564	8	-0.089	10	-0.146	6	-0.001	6	NC	1	NC	1
86		2	max	0.197	10	0.012	11	0.385	15	0.002	15	8570.958	11	NC	14
87			min	-0.565	8	-0.47	7	-0.376	6	-0.002	6	169.238	7	558.397	15
88		3	max	0.198	10	0.014	11	0.595	15	0.002	15	7514.04	11	NC	14
89			min	-0.567	8	-1.005	7	-0.577	6	-0.002	6	100.46	7	296.155	15
90	M24	1	max	0.014	11	0.127	2	0.595	15	0.001	6	NC	14	NC	17
91			min	-1.06	7	-0.283	9	-0.577	6	-0.001	15	221.154	2	NC	1
92		2	max	0.014	11	0.083	2	0.626	15	0.001	6	NC	14	NC	14
93			min	-1.061	7	-0.298	9	-0.607	6	-0.001	15	480.395	2	576.875	15
94		3	max	0.014	11	0.045	2	0.657	15	0.001	6	NC	17	NC	14
95			min	-1.061	7	-0.31	9	-0.637	6	-0.001	15	NC	1	288.314	15
96	M25	1	max	0.199	10	0.013	11	0.657	15	0.003	15	NC	17	NC	17
97			min	-0.494	8	-1.04	7	-0.637	6	-0.003	6	3521.72	10	NC	1
98		2	max	0.199	10	0.01	11	0.716	15	0.003	15	NC	11	NC	14
99			min	-0.495	8	-1.106	7	-0.693	6	-0.003	6	694.884	2	911.044	15
100		3	max	0.199	10	0.009	11	0.763	15	0.003	15	NC	11	NC	14
101			min	-0.495	8	-1.117	7	-0.737	6	-0.003	6	521.974	3	504.881	15
102	M26	1	max	0.002	11	0.518	7	0.146	6	0.001	6	NC	17	NC	17
103			min	-0.792	7	-0.003	11	-0.148	15	-0.001	15	172.997	5	NC	1
104		2	max	0.002	11	0.128	10	0.376	6	0.002	6	8570.958	11	NC	14
105			min	-0.793	7	-0.33	8	-0.385	15	-0.002	15	179.747	8	558.397	15
106		3	max	0.002	11	0.104	10	0.577	6	0.002	6	NC	14	NC	14
107			min	-0.794	7	-0.853	8	-0.595	15	-0.002	15	105.061	8	296.155	15
108	M27	1	max	0.014	11	-0.004	11	0.595	15	0.001	15	NC	11	NC	17
109			min	-1.017	7	-0.409	5	-0.577	6	-0.001	6	208.917	7	NC	1
110		2	max	0.014	11	-0.003	11	0.626	15	0.001	15	NC	11	NC	14
111			min	-1.017	7	-0.38	5	-0.607	6	-0.001	6	450.318	7	576.875	15
112		3	max	0.014	11	-0.002	11	0.657	15	0.001	15	NC	17	NC	14
113			min	-1.017	7	-0.355	5	-0.637	6	-0.001	6	NC	1	288.314	15
114	M28	1	max	0.004	11	0.099	10	0.637	6	0.003	6	NC	17	NC	17
115			min	-0.718	7	-0.889	8	-0.657	15	-0.003	15	1574.575	10	NC	1
116		2	max	0.004	11	0.081	10	0.693	6	0.003	6	NC	11	NC	14
117			min	-0.718	7	-0.965	8	-0.716	15	-0.003	15	613.589	7	911.044	15
118		3	max	0.004	11	0.065	10	0.737	6	0.003	6	NC	11	NC	14
119			min	-0.718	7	-0.99	8	-0.763	15	-0.003	15	427.246	7	504.881	15
120	M29	1	max	0.195	10	0.4	2	0.148	15	0.001	15	NC	17	NC	17
121			min	-0.557	2	-0.088	10	-0.146	6	-0.001	6	NC	1	NC	1
122		2	max	0.195	10	-0.016	11	0.385	15	0.002	15	3206.474	11	NC	14
123			min	-0.558	2	-0.469	7	-0.376	6	-0.002	6	169.303	7	558.382	15
124		3	max	0.195	10	-0.05	11	0.595	15	0.003	15	1760.279	11	NC	14

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
125			min	-0.559	2	-1.004	7	-0.577	6	-0.002	6	100.5	7	296.14	15
126	M30	1	max	-0.061	11	0.127	2	0.595	15	0.001	6	NC	14	NC	17
127			min	-1.06	7	-0.281	9	-0.577	6	-0.001	15	221.154	2	NC	1
128		2	max	-0.061	11	0.083	2	0.626	15	0.001	6	NC	14	NC	14
129			min	-1.06	7	-0.297	9	-0.607	6	-0.001	15	480.395	2	576.645	15
130		3	max	-0.061	11	0.045	2	0.657	15	0.001	6	NC	17	NC	14
131			min	-1.06	7	-0.308	9	-0.637	6	-0.001	15	NC	1	288.221	15
132	M31	1	max	0.197	10	-0.053	11	0.657	15	0.003	15	NC	17	NC	17
133			min	-0.487	2	-1.039	7	-0.637	6	-0.003	6	3544.441	10	NC	1
134		2	max	0.197	10	-0.059	11	0.716	15	0.003	15	7909.99	11	NC	14
135			min	-0.487	2	-1.105	7	-0.693	6	-0.003	6	694.884	2	912.532	15
136		3	max	0.197	10	-0.062	11	0.763	15	0.003	15	NC	10	NC	14
137			min	-0.487	2	-1.116	7	-0.738	6	-0.003	6	521.974	3	505.721	15
138	M32	1	max	-0.037	11	0.518	7	0.146	6	0.001	6	NC	17	NC	17
139			min	-0.79	7	0.025	11	-0.148	15	-0.001	15	173.091	5	NC	1
140		2	max	-0.037	11	0.127	10	0.376	6	0.002	6	5336.484	10	NC	14
141			min	-0.792	7	-0.319	2	-0.385	15	-0.002	15	182.013	7	558.382	15
142		3	max	-0.037	11	0.102	10	0.577	6	0.002	6	NC	14	NC	14
143			min	-0.793	7	-0.835	2	-0.595	15	-0.003	15	105.19	7	296.14	15
144	M33	1	max	-0.022	10	-0.011	11	0.595	15	0.001	15	NC	10	NC	17
145			min	-1.017	7	-0.408	5	-0.577	6	-0.001	6	209.073	7	NC	1
146		2	max	-0.022	10	-0.007	11	0.626	15	0.001	15	NC	10	NC	14
147			min	-1.017	7	-0.379	5	-0.607	6	-0.001	6	450.691	7	576.645	15
148		3	max	-0.022	10	-0.004	11	0.657	15	0.001	15	NC	17	NC	14
149			min	-1.017	7	-0.353	5	-0.637	6	-0.001	6	NC	1	288.221	15
150	M34	1	max	-0.031	11	0.098	10	0.637	6	0.003	6	NC	17	NC	17
151			min	-0.716	7	-0.872	2	-0.657	15	-0.003	15	1581.251	10	NC	1
152		2	max	-0.031	11	0.08	10	0.693	6	0.003	6	7909.99	11	NC	14
153			min	-0.717	7	-0.949	2	-0.716	15	-0.003	15	614.295	7	912.532	15
154		3	max	-0.031	11	0.064	10	0.738	6	0.003	6	NC	10	NC	14
155			min	-0.717	7	-0.974	2	-0.763	15	-0.003	15	427.84	7	505.721	15
156	M35	1	max	0.166	10	0.31	2	0.148	15	0.001	15	NC	17	NC	17
157			min	-0.432	2	-0.077	10	-0.146	6	-0.001	6	NC	1	NC	1
158		2	max	0.167	10	-0.028	11	0.385	15	0.002	15	3703.623	10	NC	14
159			min	-0.433	2	-0.364	7	-0.376	6	-0.002	6	214.608	7	558.419	15
160		3	max	0.167	10	-0.08	11	0.595	15	0.003	15	2456.308	10	NC	14
161			min	-0.434	2	-0.795	7	-0.577	6	-0.002	6	126.293	7	296.119	15
162	M36	1	max	-0.042	10	0.1	2	0.595	15	0.001	6	NC	14	NC	17
163			min	-0.844	7	-0.21	9	-0.577	6	-0.001	15	281.721	2	NC	1
164		2	max	-0.042	10	0.066	2	0.626	15	0.001	6	NC	14	NC	14
165			min	-0.844	7	-0.225	9	-0.607	6	-0.001	15	611.022	2	575.031	15
166		3	max	-0.042	10	0.036	2	0.657	15	0.001	6	NC	17	NC	14
167			min	-0.844	7	-0.236	9	-0.637	6	-0.001	15	NC	1	287.491	15
168	M37	1	max	0.168	10	-0.084	11	0.657	15	0.003	15	NC	17	NC	17
169			min	-0.377	2	-0.824	7	-0.637	6	-0.003	6	4678.876	10	NC	1
170		2	max	0.168	10	-0.093	11	0.716	15	0.003	15	6750.591	10	NC	14
171			min	-0.377	2	-0.881	7	-0.693	6	-0.003	6	876.361	2	917.713	15
172		3	max	0.168	10	-0.096	11	0.763	15	0.003	15	NC	10	NC	14
173			min	-0.377	2	-0.893	7	-0.737	6	-0.003	6	657.626	2	508.553	15
174	M38	1	max	-0.056	11	0.413	7	0.146	6	0.001	6	NC	17	NC	17
175			min	-0.63	7	0.04	11	-0.148	15	-0.001	15	286.143	9	NC	1
176		2	max	-0.056	11	0.102	10	0.376	6	0.002	6	8996.106	10	NC	14
177			min	-0.631	7	-0.243	2	-0.385	15	-0.002	15	228.294	7	558.419	15
178		3	max	-0.056	11	0.088	10	0.577	6	0.002	6	NC	14	NC	14
179			min	-0.632	7	-0.645	2	-0.595	15	-0.003	15	131.33	7	296.119	15

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
180	M39	1	max	-0.012	10	-0.015	11	0.595	15	0.001	15	NC	10	NC	17
181			min	-0.814	7	-0.326	5	-0.577	6	-0.001	6	257.164	7	NC	1
182		2	max	-0.012	10	-0.01	11	0.626	15	0.001	15	NC	10	NC	14
183			min	-0.815	7	-0.3	5	-0.607	6	-0.001	6	553.824	7	575.031	15
184		3	max	-0.012	10	-0.006	11	0.657	15	0.001	15	NC	17	NC	14
185			min	-0.815	7	-0.278	5	-0.637	6	-0.001	6	NC	1	287.491	15
186	M40	1	max	-0.048	11	0.085	10	0.637	6	0.003	6	NC	17	NC	17
187			min	-0.57	7	-0.673	2	-0.657	15	-0.003	15	2419.012	10	NC	1
188		2	max	-0.048	11	0.073	10	0.693	6	0.003	6	5845.754	11	NC	14
189			min	-0.57	7	-0.735	2	-0.716	15	-0.003	15	752.65	7	917.713	15
190		3	max	-0.048	11	0.062	10	0.737	6	0.003	6	NC	10	NC	14
191			min	-0.57	7	-0.755	2	-0.763	15	-0.003	15	528.266	7	508.553	15
192	M49	1	max	0.164	6	0.388	8	0.168	10	0.01	7	NC	17	NC	17
193			min	-0.167	15	-0.063	10	-0.362	8	-0.001	11	NC	1	NC	1
194		2	max	0.164	6	0.337	8	0.167	10	0.01	7	NC	17	NC	17
195			min	-0.167	15	-0.071	10	-0.406	8	-0.001	11	NC	1	NC	1
196		3	max	0.164	6	0.285	8	0.166	10	0.01	7	NC	17	NC	17
197			min	-0.167	15	-0.079	10	-0.45	8	-0.001	11	NC	1	NC	1
198	M50	1	max	0.164	6	0.285	8	0.166	10	0.01	7	NC	17	NC	17
199			min	-0.167	15	-0.079	10	-0.45	8	-0.001	11	NC	1	NC	1
200		2	max	0.164	6	0.128	3	0.167	10	0.01	7	5037.241	10	NC	14
201			min	-0.167	15	-0.207	9	-0.707	2	-0.001	11	546.779	7	829.72	2
202		3	max	0.164	6	0.351	8	0.198	10	0.01	7	NC	17	NC	17
203			min	-0.167	15	-0.093	10	-0.553	8	-0.001	11	NC	1	NC	1
204	M51	1	max	0.164	6	0.351	8	0.198	10	0.012	7	NC	17	NC	17
205			min	-0.167	15	-0.093	10	-0.553	8	0.001	11	NC	1	NC	1
206		2	max	0.164	6	0.149	3	0.181	10	0.012	7	NC	11	NC	14
207			min	-0.167	15	-0.221	9	-0.778	2	0.001	11	524.349	7	795.683	2
208		3	max	0.164	6	0.346	2	0.196	10	0.012	7	NC	17	NC	17
209			min	-0.167	15	-0.092	10	-0.546	2	0.001	11	NC	1	NC	1
210	M52	1	max	0.164	6	0.346	2	0.196	10	0.01	7	NC	17	NC	17
211			min	-0.167	15	-0.092	10	-0.546	2	0.001	10	NC	1	NC	1
212		2	max	0.164	6	0.128	3	0.166	10	0.01	7	NC	11	NC	14
213			min	-0.167	15	-0.205	9	-0.707	2	0.001	10	546.779	7	829.72	2
214		3	max	0.164	6	0.268	2	0.167	10	0.01	7	NC	17	NC	17
215			min	-0.167	15	-0.08	10	-0.424	2	0.001	10	NC	1	NC	1
216	M53	1	max	0.164	6	0.268	2	0.167	10	0.01	7	NC	17	NC	17
217			min	-0.167	15	-0.08	10	-0.424	2	0.001	10	NC	1	NC	1
218		2	max	0.164	6	0.311	2	0.168	10	0.01	7	NC	17	NC	17
219			min	-0.167	15	-0.071	10	-0.371	2	0.001	10	NC	1	NC	1
220		3	max	0.164	6	0.353	2	0.169	10	0.01	7	NC	17	NC	17
221			min	-0.167	15	-0.063	10	-0.319	2	0.001	10	NC	1	NC	1
222	M54	1	max	0.383	6	-0.024	11	0.185	10	0.008	7	NC	17	NC	17
223			min	-0.393	15	-0.153	7	-0.321	8	0	11	NC	1	NC	1
224		2	max	0.383	6	-0.001	11	0.176	10	0.008	7	NC	17	NC	17
225			min	-0.393	15	-0.267	7	-0.386	8	0	11	NC	1	NC	1
226		3	max	0.383	6	0.022	11	0.166	10	0.008	7	NC	17	NC	17
227			min	-0.393	15	-0.381	7	-0.452	8	0	11	NC	1	NC	1
228	M55	1	max	0.383	6	0.022	11	0.166	10	0.008	7	NC	17	NC	17
229			min	-0.393	15	-0.381	7	-0.452	8	0	11	NC	1	NC	1
230		2	max	0.383	6	0.132	11	0.124	10	0.008	7	4807.962	10	7993.521	14
231			min	-0.393	15	-0.966	7	-0.838	2	0	11	346.675	7	524.668	2
232		3	max	0.383	6	0.012	11	0.198	10	0.008	7	NC	17	NC	17
233			min	-0.393	15	-0.489	7	-0.556	8	0	11	NC	1	NC	1
234	M56	1	max	0.383	6	0.012	11	0.198	10	0.01	7	NC	17	NC	17

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
235			min	-0.393	15	-0.489	7	-0.556	8	0.001	11	NC	1	NC	1
236		2	max	0.383	6	0.031	11	0.136	10	0.01	7	5604.572	11	7665.617	14
237			min	-0.393	15	-1.042	7	-0.915	2	0.001	11	332.454	7	503.146	2
238		3	max	0.383	6	-0.017	11	0.195	10	0.01	7	NC	17	NC	17
239			min	-0.393	15	-0.488	7	-0.549	2	0.001	11	NC	1	NC	1
240	M57	1	max	0.383	6	-0.017	11	0.195	10	0.008	7	NC	17	NC	17
241			min	-0.393	15	-0.488	7	-0.549	2	0	10	NC	1	NC	1
242		2	max	0.383	6	-0.013	11	0.123	10	0.008	7	NC	11	7993.521	14
243			min	-0.393	15	-0.964	7	-0.838	2	0	10	346.675	7	524.668	2
244		3	max	0.383	6	-0.029	11	0.167	10	0.008	7	NC	17	NC	17
245			min	-0.393	15	-0.379	7	-0.426	2	0	10	NC	1	NC	1
246	M58	1	max	0.383	6	-0.029	11	0.167	10	0.008	7	NC	17	NC	17
247			min	-0.393	15	-0.379	7	-0.426	2	0	10	NC	1	NC	1
248		2	max	0.383	6	-0.032	11	0.177	10	0.008	7	NC	17	NC	17
249			min	-0.393	15	-0.265	7	-0.347	2	0	10	NC	1	NC	1
250		3	max	0.383	6	-0.027	17	0.187	10	0.008	7	NC	17	NC	17
251			min	-0.393	15	-0.151	7	-0.269	2	0	10	NC	1	NC	1
252	M59	1	max	0.576	6	0.033	11	0.174	10	0.004	8	NC	17	NC	17
253			min	-0.593	15	-0.682	7	-0.395	8	0	11	NC	1	NC	1
254		2	max	0.576	6	0.037	11	0.17	10	0.004	8	NC	17	NC	17
255			min	-0.593	15	-0.737	7	-0.426	8	0	11	NC	1	NC	1
256		3	max	0.576	6	0.041	11	0.166	10	0.004	8	NC	17	NC	17
257			min	-0.593	15	-0.791	7	-0.457	8	0	11	NC	1	NC	1
258	M60	1	max	0.576	6	0.041	11	0.166	10	0.004	8	NC	17	NC	17
259			min	-0.593	15	-0.791	7	-0.457	8	0	11	NC	1	NC	1
260		2	max	0.576	6	0.058	11	0.151	10	0.004	8	7679.046	10	NC	14
261			min	-0.593	15	-1.099	7	-0.632	2	0	11	900.334	7	1315.563	2
262		3	max	0.576	6	0.014	11	0.198	10	0.004	8	NC	17	NC	17
263			min	-0.593	15	-0.998	7	-0.561	8	0	11	NC	1	NC	1
264	M61	1	max	0.576	6	0.014	11	0.198	10	0.005	2	NC	17	NC	17
265			min	-0.593	15	-0.998	7	-0.561	8	0	10	NC	1	NC	1
266		2	max	0.576	6	-0.017	11	0.165	10	0.005	2	NC	11	NC	14
267			min	-0.593	15	-1.211	7	-0.7	2	0	10	863.401	7	1261.597	2
268		3	max	0.576	6	-0.049	11	0.195	10	0.005	2	NC	17	NC	17
269			min	-0.593	15	-0.997	7	-0.554	2	0	10	NC	1	NC	1
270	M62	1	max	0.576	6	-0.049	11	0.195	10	0.004	7	NC	17	NC	17
271			min	-0.593	15	-0.997	7	-0.554	2	0	10	NC	1	NC	1
272		2	max	0.576	6	-0.071	11	0.151	10	0.004	7	NC	11	NC	14
273			min	-0.593	15	-1.098	7	-0.632	2	0	10	900.334	7	1315.563	2
274		3	max	0.576	6	-0.079	11	0.167	10	0.004	7	NC	17	NC	17
275			min	-0.593	15	-0.789	7	-0.43	2	0	10	NC	1	NC	1
276	M63	1	max	0.576	6	-0.079	11	0.167	10	0.004	7	NC	17	NC	17
277			min	-0.593	15	-0.789	7	-0.43	2	0	10	NC	1	NC	1
278		2	max	0.576	6	-0.08	11	0.171	10	0.004	7	NC	17	NC	17
279			min	-0.593	15	-0.735	7	-0.394	2	0	10	NC	1	NC	1
280		3	max	0.576	6	-0.08	11	0.175	10	0.004	7	NC	17	NC	17
281			min	-0.593	15	-0.68	7	-0.357	2	0	10	NC	1	NC	1
282	M64	1	max	0.636	6	0.018	11	0.169	10	0.003	8	NC	17	NC	17
283			min	-0.656	15	-0.679	7	-0.372	8	0	11	NC	1	NC	1
284		2	max	0.636	6	0.03	11	0.168	10	0.003	8	NC	17	NC	17
285			min	-0.656	15	-0.75	7	-0.384	8	0	11	NC	1	NC	1
286		3	max	0.636	6	0.042	11	0.167	10	0.003	8	NC	17	NC	17
287			min	-0.656	15	-0.822	7	-0.399	8	0	11	NC	1	NC	1
288	M65	1	max	0.636	6	0.042	11	0.167	10	0.003	8	NC	17	NC	17
289			min	-0.656	15	-0.822	7	-0.399	8	0	11	NC	1	NC	1

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
290		2	max	0.636	6	0.098	11	0.169	10	0.003	8	5701.724	10	NC	14
291			min	-0.656	15	-1.236	7	-0.602	2	0	11	598.467	7	1060.293	2
292		3	max	0.636	6	0.013	11	0.199	10	0.003	8	NC	17	NC	17
293			min	-0.656	15	-1.035	7	-0.491	8	0	11	NC	1	NC	1
294	M66	1	max	0.636	6	0.013	11	0.199	10	0.004	2	NC	17	NC	17
295			min	-0.656	15	-1.035	7	-0.491	8	0	10	NC	1	NC	1
296		2	max	0.636	6	0.025	11	0.184	10	0.004	2	4891.652	10	NC	14
297			min	-0.656	15	-1.377	7	-0.707	2	0	10	537.941	7	822.153	2
298		3	max	0.636	6	-0.052	11	0.197	10	0.004	2	NC	17	NC	17
299			min	-0.656	15	-1.034	7	-0.483	2	0	10	NC	1	NC	1
300	M67	1	max	0.636	6	-0.052	11	0.197	10	0.003	2	NC	17	NC	17
301			min	-0.656	15	-1.034	7	-0.483	2	0	10	NC	1	NC	1
302		2	max	0.636	6	-0.066	11	0.164	10	0.003	2	NC	11	NC	15
303			min	-0.657	15	-1.236	7	-0.602	2	0	10	595.606	7	988.084	8
304		3	max	0.636	6	-0.083	11	0.168	10	0.003	2	NC	17	NC	17
305			min	-0.657	15	-0.82	7	-0.374	2	0	10	NC	1	NC	1
306	M68	1	max	0.636	6	-0.083	11	0.168	10	0.003	2	NC	17	NC	17
307			min	-0.657	15	-0.82	7	-0.374	2	0	10	NC	1	NC	1
308		2	max	0.636	6	-0.086	11	0.17	10	0.003	2	NC	17	NC	17
309			min	-0.657	15	-0.747	7	-0.339	2	0	10	NC	1	NC	1
310		3	max	0.636	6	-0.089	11	0.173	10	0.003	2	NC	17	NC	17
311			min	-0.657	15	-0.675	7	-0.306	2	0	10	NC	1	NC	1
312	M69	1	max	0.74	6	0.142	11	0.241	5	0	3	NC	17	NC	17
313			min	-0.767	15	-0.778	7	-0.022	3	0	9	NC	1	NC	1
314		2	max	0.74	6	0.089	11	0.243	5	0	3	NC	17	NC	17
315			min	-0.767	15	-0.836	7	-0.008	3	0	9	NC	1	NC	1
316		3	max	0.741	6	0.047	11	0.251	5	0	3	NC	17	NC	17
317			min	-0.767	15	-0.905	7	0	1	0	9	NC	1	NC	1
318	M70	1	max	0.741	6	0.047	11	0.251	5	0	3	NC	17	NC	17
319			min	-0.767	15	-0.905	7	0	1	0	9	NC	1	NC	1
320		2	max	0.741	6	0.017	11	0.31	5	0	3	NC	17	NC	17
321			min	-0.767	15	-1.154	8	0	1	0	9	1221.903	8	6738.917	9
322		3	max	0.741	6	0.01	11	0.314	5	0	3	NC	17	NC	17
323			min	-0.767	15	-1.13	7	0	1	0	9	NC	1	NC	1
324	M71	1	max	0.741	6	0.01	11	0.314	5	0.001	3	NC	17	NC	17
325			min	-0.767	15	-1.13	7	0	1	-0.001	5	NC	1	NC	1
326		2	max	0.741	6	-0.011	11	0.373	5	0.001	3	NC	10	NC	17
327			min	-0.767	15	-1.311	7	0	1	-0.001	5	1015.734	7	3067.974	9
328		3	max	0.741	6	-0.052	10	0.312	5	0.001	3	NC	17	NC	17
329			min	-0.767	15	-1.129	7	0	1	-0.001	5	NC	1	NC	1
330	M72	1	max	0.741	6	-0.052	10	0.312	5	0	3	NC	17	NC	17
331			min	-0.767	15	-1.129	7	0	1	0	9	NC	1	NC	1
332		2	max	0.741	6	-0.045	10	0.307	5	0	3	NC	10	NC	17
333			min	-0.767	15	-1.133	7	0	1	0	9	1584.99	2	6349.081	9
334		3	max	0.741	6	-0.032	10	0.244	5	0	3	NC	17	NC	17
335			min	-0.767	15	-0.906	7	0	1	0	9	NC	1	NC	1
336	M73	1	max	0.741	6	-0.032	10	0.244	5	0	3	NC	17	NC	17
337			min	-0.767	15	-0.906	7	0	1	0	9	NC	1	NC	1
338		2	max	0.741	6	-0.019	10	0.233	5	0	3	NC	17	NC	17
339			min	-0.766	15	-0.838	7	-0.008	3	0	9	8671.663	8	NC	1
340		3	max	0.741	6	-0.005	10	0.227	5	0	3	NC	17	NC	17
341			min	-0.766	15	-0.782	7	-0.022	3	0	9	NC	1	NC	1
342	M74	1	max	0.164	6	0.447	7	0.524	7	0.001	11	NC	17	NC	17
343			min	-0.167	15	-0.042	11	-0.04	11	-0.009	8	NC	1	NC	1
344		2	max	0.164	6	0.409	7	0.575	7	0.001	11	NC	17	NC	17

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
345			min	-0.167	15	-0.028	11	-0.031	11	-0.009	8	NC	1	NC	1
346		3	max	0.164	6	0.371	7	0.626	7	0.001	11	NC	17	NC	17
347			min	-0.167	15	-0.014	11	-0.021	11	-0.009	8	NC	1	NC	1
348	M75	1	max	0.164	6	0.371	7	0.626	7	0.001	11	NC	17	NC	17
349			min	-0.167	15	-0.014	11	-0.021	11	-0.009	8	NC	1	NC	1
350		2	max	0.164	6	0.22	5	0.906	7	0.001	11	5165.716	14	4735.064	17
351			min	-0.167	15	-0.019	3	0.03	11	-0.009	8	667.303	8	829.72	2
352		3	max	0.164	6	0.463	7	0.781	7	0.001	11	NC	17	NC	17
353			min	-0.167	15	-0.002	11	-0.002	11	-0.009	8	NC	1	NC	1
354	M76	1	max	0.164	6	0.463	7	0.781	7	0	10	NC	17	NC	17
355			min	-0.167	15	-0.002	11	-0.002	11	-0.011	7	NC	1	NC	1
356		2	max	0.164	6	0.245	5	0.991	7	0	10	NC	11	4540.687	17
357			min	-0.167	15	-0.003	3	0.06	11	-0.011	7	740.166	8	795.683	2
358		3	max	0.164	6	0.463	7	0.78	7	0	10	NC	17	NC	17
359			min	-0.167	15	0.022	11	0.036	11	-0.011	7	NC	1	NC	1
360	M77	1	max	0.164	6	0.463	7	0.78	7	0	10	NC	17	NC	17
361			min	-0.167	15	0.022	11	0.036	11	-0.009	7	NC	1	NC	1
362		2	max	0.164	6	0.219	5	0.903	7	0	10	NC	11	4734.758	17
363			min	-0.167	15	-0.019	3	0.087	11	-0.009	7	776.676	2	829.72	2
364		3	max	0.164	6	0.369	7	0.621	7	0	10	NC	17	NC	17
365			min	-0.167	15	0.035	11	0.055	11	-0.009	7	NC	1	NC	1
366	M78	1	max	0.164	6	0.369	7	0.621	7	0	10	NC	17	NC	17
367			min	-0.167	15	0.035	11	0.055	11	-0.009	7	NC	1	NC	1
368		2	max	0.164	6	0.407	7	0.57	7	0	10	NC	17	NC	17
369			min	-0.167	15	0.035	11	0.048	11	-0.009	7	NC	1	NC	1
370		3	max	0.164	6	0.445	7	0.519	7	0	10	NC	17	NC	17
371			min	-0.167	15	0.036	11	0.041	11	-0.009	7	NC	1	NC	1
372	M79	1	max	0.383	6	0.042	9	0.49	7	0	11	NC	17	NC	17
373			min	-0.393	15	-0.095	2	-0.047	11	-0.008	8	NC	1	NC	1
374		2	max	0.383	6	0.071	10	0.559	7	0	11	NC	17	NC	17
375			min	-0.393	15	-0.186	8	-0.034	11	-0.008	8	NC	1	NC	1
376		3	max	0.383	6	0.102	10	0.628	7	0	11	NC	17	NC	17
377			min	-0.393	15	-0.279	8	-0.021	11	-0.008	8	NC	1	NC	1
378	M80	1	max	0.383	6	0.102	10	0.628	7	0	11	NC	17	NC	17
379			min	-0.393	15	-0.279	8	-0.021	11	-0.008	8	NC	1	NC	1
380		2	max	0.383	6	0.259	10	0.998	7	0	11	3660.808	14	3342.018	17
381			min	-0.393	15	-0.752	8	0.047	11	-0.008	8	419.036	8	524.668	2
382		3	max	0.383	6	0.128	10	0.784	7	0	11	NC	17	NC	17
383			min	-0.393	15	-0.347	8	-0.002	11	-0.008	8	NC	1	NC	1
384	M81	1	max	0.383	6	0.128	10	0.784	7	0	10	NC	17	NC	17
385			min	-0.393	15	-0.347	8	-0.002	11	-0.01	7	NC	1	NC	1
386		2	max	0.383	6	0.277	10	1.088	7	0	10	5604.572	11	3204.784	17
387			min	-0.393	15	-0.728	8	0.078	11	-0.01	7	467.838	8	503.146	2
388		3	max	0.383	6	0.127	10	0.782	7	0	10	NC	17	NC	17
389			min	-0.393	15	-0.337	2	0.036	11	-0.01	7	NC	1	NC	1
390	M82	1	max	0.383	6	0.127	10	0.782	7	0	10	NC	17	NC	17
391			min	-0.393	15	-0.337	2	0.036	11	-0.008	7	NC	1	NC	1
392		2	max	0.383	6	0.258	10	0.995	7	0	10	NC	11	3341.716	17
393			min	-0.393	15	-0.671	2	0.104	11	-0.008	7	491.127	3	524.668	2
394		3	max	0.383	6	0.102	10	0.623	7	0	10	NC	17	NC	17
395			min	-0.393	15	-0.257	2	0.055	11	-0.008	7	NC	1	NC	1
396	M83	1	max	0.383	6	0.102	10	0.623	7	0	10	NC	17	NC	17
397			min	-0.393	15	-0.257	2	0.055	11	-0.008	7	NC	1	NC	1
398		2	max	0.383	6	0.072	10	0.554	7	0	10	NC	17	NC	17
399			min	-0.393	15	-0.176	2	0.045	11	-0.008	7	NC	1	NC	1

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
400		3	max	0.383	6	0.041	10	0.485	7	0	10	NC	17	NC	17
401			min	-0.393	15	-0.095	2	0.034	11	-0.008	7	NC	1	NC	1
402	M84	1	max	0.576	6	0.069	10	0.564	7	0	11	NC	17	NC	17
403			min	-0.593	15	-0.594	8	-0.037	11	-0.005	7	NC	1	NC	1
404		2	max	0.576	6	0.078	10	0.598	7	0	11	NC	17	NC	17
405			min	-0.593	15	-0.64	8	-0.029	11	-0.005	7	NC	1	NC	1
406		3	max	0.576	6	0.087	10	0.632	7	0	11	NC	17	NC	17
407			min	-0.593	15	-0.685	8	-0.022	11	-0.005	7	NC	1	NC	1
408	M85	1	max	0.576	6	0.087	10	0.632	7	0	11	NC	17	NC	17
409			min	-0.593	15	-0.685	8	-0.022	11	-0.005	7	NC	1	NC	1
410		2	max	0.576	6	0.136	10	0.83	7	0	11	6962.606	14	6414.622	17
411			min	-0.593	15	-0.937	8	0.018	11	-0.005	7	1068.949	8	1315.563	3
412		3	max	0.576	6	0.105	10	0.789	7	0	11	NC	17	NC	17
413			min	-0.593	15	-0.845	8	-0.002	11	-0.005	7	NC	1	NC	1
414	M86	1	max	0.576	6	0.105	10	0.789	7	0	11	NC	17	NC	17
415			min	-0.593	15	-0.845	8	-0.002	11	-0.006	7	NC	1	NC	1
416		2	max	0.576	6	0.146	10	0.913	7	0	11	NC	11	6151.346	17
417			min	-0.593	15	-0.984	2	0.049	11	-0.006	7	1173.424	8	1261.597	2
418		3	max	0.576	6	0.103	10	0.788	7	0	11	NC	17	NC	17
419			min	-0.593	15	-0.828	2	0.037	11	-0.006	7	NC	1	NC	1
420	M87	1	max	0.576	6	0.103	10	0.788	7	0	10	NC	17	NC	17
421			min	-0.593	15	-0.828	2	0.037	11	-0.005	7	NC	1	NC	1
422		2	max	0.576	6	0.136	10	0.827	7	0	10	NC	11	6414.311	17
423			min	-0.593	15	-0.883	2	0.077	11	-0.005	7	1231.46	3	1315.563	3
424		3	max	0.576	6	0.088	10	0.628	7	0	10	NC	17	NC	17
425			min	-0.593	15	-0.639	2	0.056	11	-0.005	7	NC	1	NC	1
426	M88	1	max	0.576	6	0.088	10	0.628	7	0	10	NC	17	NC	17
427			min	-0.593	15	-0.639	2	0.056	11	-0.005	7	NC	1	NC	1
428		2	max	0.576	6	0.079	10	0.593	7	0	10	NC	17	NC	17
429			min	-0.593	15	-0.596	2	0.051	11	-0.005	7	NC	1	NC	1
430		3	max	0.576	6	0.07	10	0.559	7	0	10	NC	17	NC	17
431			min	-0.593	15	-0.554	2	0.046	11	-0.005	7	NC	1	NC	1
432	M89	1	max	0.636	6	0.052	10	0.509	7	0	11	NC	17	NC	17
433			min	-0.656	15	-0.595	8	0.009	11	-0.003	7	NC	1	NC	1
434		2	max	0.636	6	0.068	10	0.539	7	0	11	NC	17	NC	17
435			min	-0.656	15	-0.656	8	-0.007	11	-0.003	7	NC	1	NC	1
436		3	max	0.636	6	0.085	10	0.571	7	0	11	NC	17	NC	17
437			min	-0.656	15	-0.717	8	-0.021	11	-0.003	7	NC	1	NC	1
438	M90	1	max	0.636	6	0.085	10	0.571	7	0	11	NC	17	NC	17
439			min	-0.656	15	-0.717	8	-0.021	11	-0.003	7	NC	1	NC	1
440		2	max	0.636	6	0.173	10	0.794	7	0	11	5739.319	14	NC	6
441			min	-0.656	15	-1.063	8	-0.033	11	-0.003	7	700.913	8	1037.951	3
442		3	max	0.636	6	0.1	10	0.714	7	0	11	NC	17	NC	17
443			min	-0.656	15	-0.884	8	-0.004	11	-0.003	7	NC	1	NC	1
444	M91	1	max	0.636	6	0.1	10	0.714	7	0	11	NC	17	NC	17
445			min	-0.656	15	-0.884	8	-0.004	11	-0.004	7	NC	1	NC	1
446		2	max	0.636	6	0.188	10	0.918	7	0	11	5058.921	14	4638.859	17
447			min	-0.656	15	-1.11	8	0.055	11	-0.004	7	715.688	8	822.153	2
448		3	max	0.636	6	0.098	10	0.712	7	0	11	NC	17	NC	17
449			min	-0.656	15	-0.867	2	0.031	11	-0.004	7	NC	1	NC	1
450	M92	1	max	0.636	6	0.098	10	0.712	7	0	10	NC	17	NC	17
451			min	-0.656	15	-0.867	2	0.031	11	-0.003	7	NC	1	NC	1
452		2	max	0.636	6	0.174	10	0.793	7	0	10	NC	11	NC	15
453			min	-0.657	15	-0.983	2	0.064	17	-0.003	7	856.739	2	988.084	8
454		3	max	0.636	6	0.085	10	0.566	7	0	10	NC	17	NC	17

Envelope Member Section Deflections - Service (Continued)

	Member	Sec		x [in]	LC	y [in]	LC	z [in]	LC	x Rotate [rad]	LC	(n) L/y' Ratio	LC	(n) L/z' Ratio	LC
455			min	-0.657	15	-0.669	2	0.048	11	-0.003	7	NC	1	NC	1
456	M93	1	max	0.636	6	0.085	10	0.566	7	0	10	NC	17	NC	17
457			min	-0.657	15	-0.669	2	0.048	11	-0.003	7	NC	1	NC	1
458		2	max	0.636	6	0.068	10	0.534	7	0	10	NC	17	NC	17
459			min	-0.657	15	-0.615	2	0.029	11	-0.003	7	NC	1	NC	1
460		3	max	0.636	6	0.052	10	0.503	7	0	10	NC	17	NC	17
461			min	-0.657	15	-0.563	2	0.01	11	-0.003	7	NC	1	NC	1
462	M94	1	max	0.36	17	0.154	11	0.489	15	0.001	17	NC	17	NC	17
463			min	-0.606	6	-0.682	7	-0.45	11	-0.002	8	NC	1	NC	1
464		2	max	0.36	17	0.223	11	0.539	15	0.001	17	NC	17	NC	17
465			min	-0.606	6	-0.733	7	-0.504	6	-0.002	8	NC	1	NC	1
466		3	max	0.36	17	0.293	11	0.588	15	0.001	17	NC	17	NC	17
467			min	-0.606	6	-0.777	7	-0.568	6	-0.002	8	NC	1	NC	1
468	M95	1	max	0.352	11	0.015	17	0.47	15	0.002	16	NC	17	NC	17
469			min	-0.54	15	-0.68	7	-0.478	6	-0.001	11	NC	1	NC	1
470		2	max	0.352	11	0.064	17	0.529	15	0.002	16	NC	17	NC	17
471			min	-0.54	15	-0.737	8	-0.523	6	-0.001	11	NC	1	NC	1
472		3	max	0.352	11	0.114	17	0.587	15	0.002	16	NC	17	NC	17
473			min	-0.54	15	-0.806	8	-0.568	6	-0.001	11	NC	1	NC	1
474	M96	1	max	0.36	17	0.154	11	0.45	11	0.002	8	NC	17	NC	17
475			min	-0.606	6	-0.591	2	-0.489	15	-0.001	17	NC	1	NC	1
476		2	max	0.36	17	0.223	11	0.504	6	0.002	8	NC	17	NC	17
477			min	-0.606	6	-0.635	7	-0.539	15	-0.001	17	NC	1	NC	1
478		3	max	0.36	17	0.293	11	0.568	6	0.002	8	NC	17	NC	17
479			min	-0.606	6	-0.677	7	-0.588	15	-0.001	17	NC	1	NC	1
480	M97	1	max	0.352	11	0.019	10	0.478	6	0.001	11	NC	17	NC	17
481			min	-0.54	15	-0.664	8	-0.47	15	-0.002	16	NC	1	NC	1
482		2	max	0.352	11	0.064	17	0.523	6	0.001	11	NC	17	NC	17
483			min	-0.54	15	-0.737	8	-0.529	15	-0.002	16	NC	1	NC	1
484		3	max	0.352	11	0.114	17	0.568	6	0.001	11	NC	17	NC	17
485			min	-0.54	15	-0.806	8	-0.587	15	-0.002	16	NC	1	NC	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
0	N1	max	0	36	0	37	0	42	0	42	0	43	0	32
1		min	0	32	0	31	0	37	0	34	0	1	0	36
2	N2	max	0.302	36	0.001	37	0.243	42	3.783e-3	42	4.088e-3	34	1.154e-3	37
3		min	-0.886	32	-0.007	31	-0.27	34	-4.153e-3	34	-3.686e-3	42	-1.455e-2	31
4	N3	max	0.303	36	0.143	31	0.21	42	3.891e-3	42	4.088e-3	34	1.154e-3	37
5		min	-0.864	32	-0.011	37	-0.235	34	-4.267e-3	34	-3.684e-3	42	-1.455e-2	31
6	N4	max	0.305	36	0.085	31	0.233	42	3.891e-3	42	4.088e-3	34	1.154e-3	37
7		min	-0.836	32	-0.006	37	-0.259	34	-4.267e-3	34	-3.684e-3	42	-1.455e-2	31
8	N5	max	0.307	36	0.001	37	0.269	42	3.891e-3	42	4.088e-3	34	1.155e-3	37
9		min	-0.791	32	-0.007	31	-0.299	34	-4.267e-3	34	-3.686e-3	42	-1.456e-2	31
10	N6	max	0.324	36	0.056	37	0.553	42	4.569e-3	42	3.583e-3	34	9.339e-4	37
11		min	-0.447	32	-0.714	31	-0.612	34	-4.957e-3	34	-3.248e-3	42	-1.274e-2	31
12	N7	max	0.347	35	0.092	37	0.837	42	4.912e-3	42	2.11e-3	34	3.133e-4	37
13		min	-0.167	32	-1.283	31	-0.922	34	-5.282e-3	34	-1.926e-3	42	-6.957e-3	32
14	N8	max	0.349	35	0.093	37	0.845	42	4.917e-3	42	2.056e-3	34	2.932e-4	37
15		min	-0.161	32	-1.294	31	-0.93	34	-5.287e-3	34	-1.877e-3	42	-6.753e-3	32
16	N9	max	0.389	35	0.092	37	0.927	42	4.924e-3	42	1.496e-3	34	1.459e-4	37
17		min	-0.062	32	-1.287	31	-1.018	34	-5.284e-3	34	-1.366e-3	42	-4.916e-3	32
18	N10	max	0.391	35	0.093	37	0.933	42	4.923e-3	42	1.496e-3	34	1.457e-4	37
19		min	-0.058	32	-1.295	31	-1.025	34	-5.284e-3	34	-1.366e-3	42	-4.916e-3	32
20	N11	max	0.403	33	0.095	37	1.084	42	4.942e-3	42	1.544e-5	33	7.411e-4	35

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
21		min	0	32	-1.397	31	-1.187	34	-5.279e-3	34	0	34	-7.06e-4	27
22	N12	max	0	33	0	37	0	42	0	42	0	43	0	37
23		min	0	37	0	32	0	37	0	34	0	1	0	31
24	N13	max	1.093	31	0.001	37	0.243	42	3.783e-3	42	3.686e-3	42	1.416e-2	32
25		min	-0.057	37	-0.007	32	-0.27	34	-4.153e-3	34	-4.088e-3	34	-1.154e-3	37
26	N14	max	1.072	31	0.139	32	0.21	42	3.891e-3	42	3.684e-3	42	1.417e-2	32
27		min	-0.055	37	-0.011	37	-0.235	34	-4.267e-3	34	-4.088e-3	34	-1.154e-3	37
28	N15	max	1.044	31	0.083	32	0.233	42	3.891e-3	42	3.684e-3	42	1.417e-2	32
29		min	-0.053	37	-0.006	37	-0.259	34	-4.267e-3	34	-4.088e-3	34	-1.154e-3	37
30	N16	max	1.006	33	0.001	37	0.269	42	3.891e-3	42	3.686e-3	42	1.418e-2	32
31		min	-0.049	37	-0.007	32	-0.299	34	-4.267e-3	34	-4.088e-3	34	-1.155e-3	37
32	N17	max	0.759	33	0.056	37	0.553	42	4.569e-3	42	3.248e-3	42	1.252e-2	32
33		min	-0.022	37	-0.697	32	-0.612	34	-4.957e-3	34	-3.583e-3	34	-9.339e-4	37
34	N18	max	0.548	33	0.092	37	0.837	42	4.912e-3	42	1.926e-3	42	7.122e-3	31
35		min	-0.004	37	-1.262	32	-0.922	34	-5.282e-3	34	-2.11e-3	34	-3.133e-4	37
36	N19	max	0.544	33	0.093	37	0.845	42	4.917e-3	42	1.877e-3	42	6.926e-3	31
37		min	-0.004	37	-1.273	32	-0.93	34	-5.287e-3	34	-2.056e-3	34	-2.932e-4	37
38	N20	max	0.465	33	0.092	37	0.927	42	4.924e-3	42	1.366e-3	42	5.177e-3	31
39		min	-0.001	37	-1.266	32	-1.018	34	-5.284e-3	34	-1.496e-3	34	-1.459e-4	37
40	N21	max	0.461	33	0.093	37	0.933	42	4.923e-3	42	1.366e-3	42	5.177e-3	31
41		min	-0.001	37	-1.274	32	-1.025	34	-5.284e-3	34	-1.496e-3	34	-1.457e-4	37
42	N22	max	0.305	36	0.085	31	0.237	42	1.166e-3	37	3.422e-3	26	1.154e-3	37
43		min	-0.821	32	-0.006	37	-0.264	34	-9.589e-3	31	-2.69e-3	35	-1.455e-2	31
44	N23	max	0.324	36	0.056	37	0.558	42	2.117e-3	37	4.219e-3	26	9.345e-4	37
45		min	-0.434	32	-0.714	31	-0.617	34	-1.688e-2	31	-3.393e-3	35	-1.275e-2	31
46	N24	max	0.35	35	0.092	37	0.843	42	1.757e-4	37	1.626e-3	26	3.135e-4	37
47		min	-0.159	32	-1.283	31	-0.927	34	-7.973e-3	31	-1.494e-3	35	-6.957e-3	32
48	N25	max	0.391	35	0.092	37	0.932	42	2.248e-3	37	2.099e-3	42	1.469e-4	37
49		min	-0.057	32	-1.287	31	-1.024	34	-9.944e-3	31	-3.119e-3	30	-4.915e-3	32
50	N26	max	0.403	33	0.095	37	1.089	42	8.653e-4	43	0	43	7.405e-4	35
51		min	0	32	-1.397	31	-1.192	34	-5.214e-3	32	-6.979e-4	33	-7.06e-4	27
52	N27	max	1.029	31	0.083	32	0.237	42	1.426e-3	36	2.699e-4	30	1.417e-2	32
53		min	-0.052	37	-0.006	37	-0.264	34	-8.8e-3	32	-3.888e-3	31	-1.154e-3	37
54	N28	max	0.749	33	0.056	37	0.558	42	2.918e-3	36	9.432e-4	30	1.252e-2	32
55		min	-0.021	37	-0.697	32	-0.617	34	-1.532e-2	32	-4.242e-3	31	-9.345e-4	37
56	N29	max	0.543	33	0.092	37	0.843	42	6.166e-4	36	1.962e-4	30	7.122e-3	31
57		min	-0.004	37	-1.262	32	-0.927	34	-7.319e-3	32	-1.826e-3	31	-3.135e-4	37
58	N30	max	0.46	33	0.092	37	0.932	42	2.248e-3	37	3.119e-3	30	5.176e-3	31
59		min	0	37	-1.266	32	-1.024	34	-8.721e-3	32	-2.193e-3	36	-1.469e-4	37
60	N31	max	0	36	0	37	0	43	0	42	0	43	0	32
61		min	0	32	0	31	0	37	0	34	0	1	0	36
62	N32	max	0.358	36	0.001	37	0.243	42	3.783e-3	42	4.09e-3	34	6.321e-4	37
63		min	-1.117	32	-0.009	31	-0.27	34	-4.152e-3	34	-3.687e-3	42	-1.881e-2	31
64	N33	max	0.36	36	0.184	31	0.211	42	3.89e-3	42	4.09e-3	34	6.308e-4	37
65		min	-1.09	32	-0.006	37	-0.235	34	-4.265e-3	34	-3.686e-3	42	-1.881e-2	31
66	N34	max	0.362	36	0.109	31	0.233	42	3.89e-3	42	4.09e-3	34	6.308e-4	37
67		min	-1.054	32	-0.003	37	-0.259	34	-4.265e-3	34	-3.686e-3	42	-1.881e-2	31
68	N35	max	0.366	36	0.001	37	0.269	42	3.891e-3	42	4.09e-3	34	6.325e-4	37
69		min	-0.997	32	-0.01	31	-0.299	34	-4.265e-3	34	-3.687e-3	42	-1.882e-2	31
70	N36	max	0.393	36	0.03	37	0.553	42	4.565e-3	42	3.586e-3	34	4.489e-4	37
71		min	-0.561	32	-0.922	31	-0.612	34	-4.948e-3	34	-3.249e-3	42	-1.635e-2	31
72	N37	max	0.452	35	0.043	37	0.837	42	4.906e-3	42	2.121e-3	34	-1.065e-5	37
73		min	-0.208	32	-1.644	31	-0.922	34	-5.271e-3	34	-1.931e-3	42	-8.714e-3	32
74	N38	max	0.455	35	0.043	37	0.845	42	4.91e-3	42	2.067e-3	34	-2.421e-5	37
75		min	-0.201	32	-1.658	31	-0.93	34	-5.275e-3	34	-1.882e-3	42	-8.456e-3	32

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
76	N39	max	0.495	35	0.043	37	0.927	42	4.919e-3	42	1.513e-3	34	8.639e-5	36
77		min	-0.076	32	-1.649	31	-1.018	34	-5.277e-3	34	-1.373e-3	42	-6.13e-3	32
78	N40	max	0.497	35	0.043	37	0.933	42	4.919e-3	42	1.513e-3	34	8.63e-5	36
79		min	-0.071	32	-1.658	31	-1.025	34	-5.277e-3	34	-1.374e-3	42	-6.13e-3	32
80	N41	max	0.504	33	0.038	37	1.084	42	4.945e-3	42	1.398e-5	33	1.083e-3	33
81		min	0	37	-1.781	31	-1.187	34	-5.289e-3	34	-5.677e-7	36	-1.037e-3	27
82	N42	max	0	31	0	36	0	43	0	42	0	43	0	37
83		min	0	37	0	32	0	37	0	34	0	1	0	31
84	N43	max	1.387	31	0.001	36	0.243	42	3.783e-3	42	3.687e-3	42	1.799e-2	32
85		min	-0.02	37	-0.009	32	-0.27	34	-4.152e-3	34	-4.09e-3	34	-6.321e-4	37
86	N44	max	1.36	31	0.176	32	0.211	42	3.89e-3	42	3.686e-3	42	1.8e-2	32
87		min	-0.019	37	-0.006	37	-0.235	34	-4.265e-3	34	-4.09e-3	34	-6.308e-4	37
88	N45	max	1.325	31	0.105	32	0.233	42	3.89e-3	42	3.686e-3	42	1.8e-2	32
89		min	-0.018	37	-0.003	37	-0.259	34	-4.265e-3	34	-4.09e-3	34	-6.308e-4	37
90	N46	max	1.268	31	0.001	36	0.269	42	3.891e-3	42	3.687e-3	42	1.801e-2	32
91		min	-0.016	37	-0.009	32	-0.299	34	-4.265e-3	34	-4.09e-3	34	-6.325e-4	37
92	N47	max	0.93	33	0.03	37	0.553	42	4.565e-3	42	3.249e-3	42	1.584e-2	32
93		min	-0.001	37	-0.885	32	-0.612	34	-4.948e-3	34	-3.586e-3	34	-4.489e-4	37
94	N48	max	0.679	33	0.043	37	0.837	42	4.906e-3	42	1.931e-3	42	8.979e-3	31
95		min	0.004	37	-1.597	31	-0.922	34	-5.271e-3	34	-2.121e-3	34	1.065e-5	37
96	N49	max	0.673	33	0.043	37	0.845	42	4.91e-3	42	1.882e-3	42	8.729e-3	31
97		min	0.004	11	-1.612	31	-0.93	34	-5.275e-3	34	-2.067e-3	34	2.421e-5	37
98	N50	max	0.579	33	0.043	37	0.927	42	4.919e-3	42	1.373e-3	42	6.498e-3	31
99		min	0.002	11	-1.601	31	-1.018	34	-5.277e-3	34	-1.513e-3	34	1.082e-4	37
100	N51	max	0.575	33	0.043	37	0.933	42	4.919e-3	42	1.374e-3	42	6.499e-3	31
101		min	0.002	11	-1.612	31	-1.025	34	-5.277e-3	34	-1.513e-3	34	1.082e-4	37
102	N52	max	0.363	36	0.109	31	0.237	42	3.891e-3	42	4.09e-3	34	6.312e-4	37
103		min	-1.035	32	-0.003	37	-0.264	34	-4.265e-3	34	-3.686e-3	42	-1.881e-2	31
104	N53	max	0.393	36	0.03	37	0.558	42	4.565e-3	42	3.586e-3	34	4.496e-4	37
105		min	-0.544	32	-0.922	31	-0.617	34	-4.949e-3	34	-3.249e-3	42	-1.635e-2	31
106	N54	max	0.456	35	0.043	37	0.843	42	4.906e-3	42	2.121e-3	34	-1.04e-5	37
107		min	-0.198	32	-1.644	31	-0.927	34	-5.271e-3	34	-1.931e-3	42	-8.714e-3	32
108	N55	max	0.497	35	0.043	37	0.932	42	4.919e-3	42	1.513e-3	34	8.628e-5	36
109		min	-0.07	32	-1.649	31	-1.024	34	-5.277e-3	34	-1.373e-3	42	-6.13e-3	32
110	N56	max	0.503	33	0.038	37	1.089	42	4.944e-3	42	1.398e-5	33	1.082e-3	33
111		min	0	37	-1.781	31	-1.193	34	-5.288e-3	34	-5.677e-7	36	-1.037e-3	27
112	N57	max	1.306	31	0.105	32	0.237	42	3.891e-3	42	3.686e-3	42	1.8e-2	32
113		min	-0.017	37	-0.003	37	-0.264	34	-4.265e-3	34	-4.09e-3	34	-6.312e-4	37
114	N58	max	0.919	33	0.03	37	0.558	42	4.565e-3	42	3.249e-3	42	1.584e-2	32
115		min	-0.001	37	-0.885	32	-0.617	34	-4.949e-3	34	-3.586e-3	34	-4.496e-4	37
116	N59	max	0.672	33	0.043	37	0.843	42	4.906e-3	42	1.931e-3	42	8.979e-3	31
117		min	0.004	11	-1.597	31	-0.927	34	-5.271e-3	34	-2.121e-3	34	1.04e-5	37
118	N60	max	0.574	33	0.043	37	0.932	42	4.919e-3	42	1.373e-3	42	6.498e-3	31
119		min	0.002	11	-1.601	31	-1.024	34	-5.277e-3	34	-1.513e-3	34	1.078e-4	37
120	N61	max	0	36	0	11	0	43	0	42	0	43	0	32
121		min	0	32	0	31	0	30	0	34	0	1	0	36
122	N62	max	0.353	36	0	11	0.243	42	3.783e-3	42	4.091e-3	34	-6.3e-4	11
123		min	-1.066	32	-0.009	31	-0.27	34	-4.151e-3	34	-3.687e-3	42	-1.88e-2	31
124	N63	max	0.355	36	0.184	31	0.211	42	3.891e-3	42	4.09e-3	34	-6.307e-4	11
125		min	-1.039	32	0.006	11	-0.235	34	-4.264e-3	34	-3.685e-3	42	-1.88e-2	31
126	N64	max	0.358	36	0.109	31	0.233	42	3.891e-3	42	4.09e-3	34	-6.307e-4	11
127		min	-1.005	32	0.004	11	-0.259	34	-4.264e-3	34	-3.685e-3	42	-1.88e-2	31
128	N65	max	0.361	36	0	11	0.269	42	3.891e-3	42	4.091e-3	34	-6.309e-4	11
129		min	-0.951	32	-0.01	31	-0.299	34	-4.264e-3	34	-3.687e-3	42	-1.882e-2	31
130	N66	max	0.388	36	-0.031	11	0.553	42	4.566e-3	42	3.586e-3	34	-5.89e-4	11

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
131		min	-0.536	32	-0.922	31	-0.612	34	-4.947e-3	34	-3.249e-3	42	-1.634e-2	31
132	N67	max	0.45	35	-0.06	11	0.837	42	4.907e-3	42	2.122e-3	34	-1.925e-4	10
133		min	-0.199	32	-1.644	31	-0.922	34	-5.269e-3	34	-1.929e-3	42	-8.604e-3	31
134	N68	max	0.452	35	-0.061	11	0.845	42	4.912e-3	42	2.069e-3	34	-1.724e-4	36
135		min	-0.192	32	-1.658	31	-0.93	34	-5.274e-3	34	-1.879e-3	42	-8.329e-3	31
136	N69	max	0.493	35	-0.06	11	0.927	42	4.919e-3	42	1.516e-3	34	8.526e-5	36
137		min	-0.073	32	-1.648	31	-1.018	34	-5.277e-3	34	-1.37e-3	42	-5.871e-3	32
138	N70	max	0.494	35	-0.061	11	0.933	42	4.919e-3	42	1.516e-3	34	8.518e-5	36
139		min	-0.068	32	-1.658	31	-1.025	34	-5.277e-3	34	-1.37e-3	42	-5.872e-3	32
140	N71	max	0.502	33	-0.052	10	1.084	42	4.941e-3	42	1.289e-5	33	1.079e-3	33
141		min	0	32	-1.78	31	-1.188	34	-5.291e-3	34	-2.092e-6	36	-1.037e-3	27
142	N72	max	0	31	0	36	0	43	0	42	0	43	0	11
143		min	0	11	0	31	0	30	0	34	0	1	0	31
144	N73	max	1.385	31	0.001	36	0.243	42	3.783e-3	42	3.687e-3	42	1.779e-2	31
145		min	0.045	11	-0.009	31	-0.27	34	-4.151e-3	34	-4.091e-3	34	-3.633e-4	36
146	N74	max	1.358	31	0.174	31	0.211	42	3.891e-3	42	3.685e-3	42	1.78e-2	31
147		min	0.044	11	-0.003	36	-0.235	34	-4.264e-3	34	-4.09e-3	34	-3.514e-4	36
148	N75	max	1.323	31	0.104	31	0.233	42	3.891e-3	42	3.685e-3	42	1.78e-2	31
149		min	0.043	11	-0.001	36	-0.259	34	-4.264e-3	34	-4.09e-3	34	-3.513e-4	36
150	N76	max	1.266	31	0.001	36	0.269	42	3.891e-3	42	3.687e-3	42	1.782e-2	31
151		min	0.041	11	-0.009	31	-0.299	34	-4.264e-3	34	-4.091e-3	34	-3.551e-4	36
152	N77	max	0.927	33	0.012	36	0.553	42	4.566e-3	42	3.249e-3	42	1.581e-2	31
153		min	0.026	11	-0.879	31	-0.612	34	-4.947e-3	34	-3.586e-3	34	5.176e-5	36
154	N78	max	0.676	33	-0.013	36	0.837	42	4.907e-3	42	1.929e-3	42	8.975e-3	31
155		min	0.011	11	-1.597	31	-0.922	34	-5.269e-3	34	-2.122e-3	34	4.086e-4	11
156	N79	max	0.671	33	-0.014	36	0.845	42	4.912e-3	42	1.879e-3	42	8.725e-3	31
157		min	0.011	11	-1.611	31	-0.93	34	-5.274e-3	34	-2.069e-3	34	4.012e-4	11
158	N80	max	0.576	33	-0.012	36	0.927	42	4.919e-3	42	1.37e-3	42	6.494e-3	31
159		min	0.004	11	-1.601	31	-1.018	34	-5.277e-3	34	-1.516e-3	34	3.213e-4	11
160	N81	max	0.572	33	-0.014	36	0.933	42	4.919e-3	42	1.37e-3	42	6.495e-3	31
161		min	0.004	11	-1.612	31	-1.025	34	-5.277e-3	34	-1.516e-3	34	3.213e-4	11
162	N82	max	0.359	36	0.109	31	0.237	42	3.891e-3	42	4.09e-3	34	-6.305e-4	11
163		min	-0.987	32	0.004	11	-0.264	34	-4.264e-3	34	-3.685e-3	42	-1.88e-2	31
164	N83	max	0.389	36	-0.031	11	0.558	42	4.567e-3	42	3.586e-3	34	-5.888e-4	11
165		min	-0.52	32	-0.922	31	-0.617	34	-4.947e-3	34	-3.249e-3	42	-1.635e-2	31
166	N84	max	0.453	35	-0.06	11	0.843	42	4.907e-3	42	2.122e-3	34	-1.925e-4	10
167		min	-0.19	32	-1.644	31	-0.927	34	-5.27e-3	34	-1.929e-3	42	-8.604e-3	31
168	N85	max	0.495	35	-0.06	11	0.932	42	4.92e-3	42	1.516e-3	34	8.516e-5	36
169		min	-0.067	32	-1.648	31	-1.024	34	-5.277e-3	34	-1.37e-3	42	-5.871e-3	32
170	N86	max	0.501	33	-0.052	10	1.089	42	4.94e-3	42	1.289e-5	33	1.079e-3	33
171		min	0	32	-1.78	31	-1.193	34	-5.291e-3	34	-2.092e-6	36	-1.037e-3	27
172	N87	max	1.304	31	0.104	31	0.237	42	3.891e-3	42	3.685e-3	42	1.78e-2	31
173		min	0.043	11	-0.001	36	-0.264	34	-4.264e-3	34	-4.09e-3	34	-3.521e-4	36
174	N88	max	0.916	33	0.012	36	0.558	42	4.567e-3	42	3.249e-3	42	1.581e-2	31
175		min	0.025	11	-0.879	31	-0.617	34	-4.947e-3	34	-3.586e-3	34	5.072e-5	36
176	N89	max	0.669	33	-0.013	36	0.843	42	4.907e-3	42	1.929e-3	42	8.975e-3	31
177		min	0.011	11	-1.597	31	-0.927	34	-5.27e-3	34	-2.122e-3	34	4.085e-4	11
178	N90	max	0.571	33	-0.012	36	0.932	42	4.92e-3	42	1.37e-3	42	6.494e-3	31
179		min	0.004	11	-1.601	31	-1.024	34	-5.277e-3	34	-1.516e-3	34	3.21e-4	11
180	N91	max	0	36	0	10	0	42	0	42	0	43	0	32
181		min	0	32	0	31	0	34	0	34	0	1	0	36
182	N92	max	0.303	36	0	10	0.243	42	3.784e-3	42	4.09e-3	34	-5.855e-4	10
183		min	-0.816	32	-0.007	31	-0.27	34	-4.152e-3	34	-3.684e-3	42	-1.455e-2	31
184	N93	max	0.305	36	0.143	31	0.21	42	3.892e-3	42	4.089e-3	34	-5.814e-4	10
185		min	-0.796	32	0.006	10	-0.235	34	-4.264e-3	34	-3.683e-3	42	-1.456e-2	31

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
186	N94	max	0.306	36	0.085	31	0.233	42	3.892e-3	42	4.089e-3	34	-5.814e-4	10
187		min	-0.771	32	0.003	10	-0.259	34	-4.264e-3	34	-3.683e-3	42	-1.456e-2	31
188	N95	max	0.309	36	0	10	0.269	42	3.893e-3	42	4.09e-3	34	-5.822e-4	10
189		min	-0.729	32	-0.007	31	-0.299	34	-4.265e-3	34	-3.684e-3	42	-1.457e-2	31
190	N96	max	0.325	36	-0.027	10	0.553	42	4.575e-3	42	3.584e-3	34	-4.31e-4	10
191		min	-0.414	32	-0.714	31	-0.612	34	-4.952e-3	34	-3.247e-3	42	-1.275e-2	31
192	N97	max	0.335	35	-0.042	10	0.837	42	4.919e-3	42	2.116e-3	34	-7.615e-5	36
193		min	-0.156	32	-1.283	31	-0.922	34	-5.277e-3	34	-1.918e-3	42	-6.888e-3	31
194	N98	max	0.338	35	-0.042	10	0.845	42	4.924e-3	42	2.062e-3	34	-6.246e-5	36
195		min	-0.15	32	-1.295	31	-0.93	34	-5.282e-3	34	-1.869e-3	42	-6.675e-3	31
196	N99	max	0.378	35	-0.042	10	0.927	42	4.926e-3	42	1.505e-3	34	1.094e-4	36
197		min	-0.058	32	-1.287	31	-1.018	34	-5.282e-3	34	-1.353e-3	42	-4.743e-3	31
198	N100	max	0.379	35	-0.042	10	0.934	42	4.926e-3	42	1.505e-3	34	1.094e-4	36
199		min	-0.054	32	-1.295	31	-1.025	34	-5.282e-3	34	-1.353e-3	42	-4.744e-3	31
200	N101	max	0.392	33	-0.032	10	1.083	42	4.93e-3	42	1.199e-5	33	7.397e-4	35
201		min	0	37	-1.398	31	-1.187	34	-5.287e-3	34	-3.779e-6	36	-7.06e-4	27
202	N102	max	0	33	0	36	0	42	0	42	0	43	0	11
203		min	0	11	0	31	0	34	0	34	0	1	0	31
204	N103	max	1.087	31	0	36	0.243	42	3.784e-3	42	3.684e-3	42	1.386e-2	31
205		min	0.07	11	-0.006	31	-0.27	34	-4.152e-3	34	-4.09e-3	34	-3.144e-4	36
206	N104	max	1.066	31	0.136	31	0.21	42	3.892e-3	42	3.683e-3	42	1.388e-2	31
207		min	0.068	11	-0.003	36	-0.235	34	-4.264e-3	34	-4.089e-3	34	-3.056e-4	36
208	N105	max	1.039	31	0.081	31	0.233	42	3.892e-3	42	3.683e-3	42	1.388e-2	31
209		min	0.066	11	-0.002	36	-0.259	34	-4.264e-3	34	-4.089e-3	34	-3.056e-4	36
210	N106	max	0.995	33	0	36	0.269	42	3.893e-3	42	3.684e-3	42	1.388e-2	31
211		min	0.063	11	-0.007	31	-0.299	34	-4.265e-3	34	-4.09e-3	34	-3.08e-4	36
212	N107	max	0.748	33	0.011	36	0.553	42	4.575e-3	42	3.247e-3	42	1.239e-2	31
213		min	0.037	11	-0.685	31	-0.612	34	-4.952e-3	34	-3.584e-3	34	-3.512e-5	36
214	N108	max	0.537	33	-0.001	36	0.837	42	4.919e-3	42	1.918e-3	42	7.128e-3	31
215		min	0.015	11	-1.251	31	-0.922	34	-5.277e-3	34	-2.116e-3	34	3.312e-4	10
216	N109	max	0.533	33	-0.002	36	0.845	42	4.924e-3	42	1.869e-3	42	6.932e-3	31
217		min	0.015	11	-1.263	31	-0.93	34	-5.282e-3	34	-2.062e-3	34	3.366e-4	10
218	N110	max	0.453	33	-0.001	36	0.927	42	4.926e-3	42	1.353e-3	42	5.182e-3	31
219		min	0.006	11	-1.255	31	-1.018	34	-5.282e-3	34	-1.505e-3	34	3.895e-4	10
220	N111	max	0.45	33	-0.002	36	0.934	42	4.926e-3	42	1.353e-3	42	5.183e-3	31
221		min	0.006	11	-1.263	31	-1.025	34	-5.282e-3	34	-1.505e-3	34	3.895e-4	10
222	N112	max	0.307	36	0.085	31	0.237	42	9.589e-3	31	2.745e-3	35	-5.815e-4	10
223		min	-0.757	32	0.003	10	-0.264	34	3.304e-4	11	-3.422e-3	26	-1.456e-2	31
224	N113	max	0.326	36	-0.027	10	0.558	42	1.688e-2	31	3.445e-3	35	-4.309e-4	10
225		min	-0.402	32	-0.714	31	-0.617	34	1.47e-4	37	-4.219e-3	26	-1.275e-2	31
226	N114	max	0.338	35	-0.042	10	0.843	42	7.968e-3	31	1.544e-3	35	-7.613e-5	36
227		min	-0.149	32	-1.283	31	-0.927	34	1.368e-4	37	-1.626e-3	26	-6.888e-3	31
228	N115	max	0.38	35	-0.042	10	0.933	42	9.891e-3	31	3.378e-3	35	1.093e-4	36
229		min	-0.053	32	-1.287	31	-1.024	34	2.465e-4	17	-2.227e-3	37	-4.743e-3	31
230	N116	max	0.391	33	-0.032	10	1.089	42	4.271e-3	31	8.239e-4	33	7.391e-4	35
231		min	0	37	-1.398	31	-1.193	34	-1.507e-3	37	0	32	-7.06e-4	27
232	N117	max	1.024	31	0.081	31	0.237	42	8.062e-3	32	3.908e-3	31	1.388e-2	31
233		min	0.065	11	-0.002	36	-0.264	34	-1.427e-3	36	4.261e-4	17	-3.061e-4	36
234	N118	max	0.738	33	0.011	36	0.558	42	1.42e-2	32	4.263e-3	31	1.239e-2	31
235		min	0.036	11	-0.685	31	-0.617	34	-2.915e-3	36	3.536e-4	30	-3.58e-5	36
236	N119	max	0.531	33	-0.001	36	0.843	42	7.038e-3	32	1.848e-3	31	7.128e-3	31
237		min	0.015	11	-1.251	31	-0.927	34	-6.107e-4	36	2.312e-4	17	3.311e-4	10
238	N120	max	0.449	33	-0.001	36	0.933	42	9.143e-3	32	2.28e-3	36	5.182e-3	31
239		min	0.005	11	-1.255	31	-1.024	34	-1.503e-3	36	-1.841e-3	43	3.891e-4	10
240	N121	max	0.297	36	0.313	31	0.237	42	9.497e-3	31	2.722e-3	35	-5.815e-4	10

Envelope Node Displacements (Continued)

	Node Label		X [in]	LC	Y [in]	LC	Z [in]	LC	X Rotation [rad]	LC	Y Rotation [rad]	LC	Z Rotation [rad]	LC
241		min	-0.679	32	0.014	11	-0.264	34	3.274e-4	11	-3.4e-3	26	-1.456e-2	31
242	N122	max	0.339	36	0.005	36	0.558	42	1.673e-2	31	3.417e-3	35	-4.309e-4	10
243		min	-0.311	32	-0.312	31	-0.617	34	1.438e-4	37	-4.184e-3	26	-1.275e-2	31
244	N123	max	0.335	36	-0.025	36	0.843	42	7.911e-3	31	1.535e-3	35	-7.613e-5	36
245		min	-0.113	32	-1.093	31	-0.927	34	1.323e-4	37	-1.613e-3	26	-6.888e-3	31
246	N124	max	0.33	36	-0.026	10	0.933	42	9.509e-3	31	3.421e-3	35	1.093e-4	36
247		min	-0.071	42	-1.057	31	-1.024	34	6.357e-5	17	-2.49e-3	34	-4.743e-3	31
248	N125	max	0.364	33	0.009	36	1.088	42	3.361e-3	26	6.988e-4	27	7.391e-4	35
249		min	-0.036	27	-1.171	31	-1.192	34	-2.165e-3	37	0	32	-7.06e-4	27
250	N126	max	0.953	33	0.271	31	0.237	42	7.984e-3	32	3.885e-3	31	1.388e-2	31
251		min	0.053	11	-0.036	36	-0.264	34	-1.413e-3	36	4.235e-4	17	-3.061e-4	36
252	N127	max	0.686	33	-0.04	10	0.558	42	1.407e-2	32	4.232e-3	31	1.239e-2	31
253		min	0.015	11	-0.355	31	-0.617	34	-2.887e-3	36	3.525e-4	30	-3.58e-5	36
254	N128	max	0.5	33	-0.016	36	0.843	42	6.99e-3	32	1.836e-3	31	7.128e-3	31
255		min	0.005	11	-1.088	31	-0.927	34	-6.043e-4	36	2.293e-4	17	3.311e-4	10
256	N129	max	0.295	36	0.313	31	0.237	42	1.153e-3	37	3.4e-3	26	1.154e-3	37
257		min	-0.754	32	-0.034	37	-0.264	34	-9.497e-3	31	-2.667e-3	35	-1.455e-2	31
258	N130	max	0.337	36	0.006	37	0.558	42	2.092e-3	37	4.184e-3	26	9.345e-4	37
259		min	-0.358	32	-0.332	32	-0.617	34	-1.673e-2	31	-3.365e-3	35	-1.275e-2	31
260	N131	max	0.333	36	0.088	37	0.843	42	1.703e-4	37	1.613e-3	26	3.135e-4	37
261		min	-0.129	32	-1.093	31	-0.927	34	-7.916e-3	31	-1.486e-3	35	-6.957e-3	32
262	N132	max	0.324	36	0.035	37	0.932	42	2.466e-3	37	2.348e-3	42	1.469e-4	37
263		min	-0.118	34	-1.065	32	-1.024	34	-9.571e-3	31	-3.584e-3	30	-4.915e-3	32
264	N133	max	0.385	33	0.243	37	1.089	42	1.775e-3	43	0	43	7.405e-4	35
265		min	-0.036	27	-1.166	31	-1.192	34	-4.579e-3	32	-6.988e-4	27	-7.06e-4	27
266	N134	max	0.964	33	0.292	32	0.237	42	1.413e-3	36	2.63e-4	30	1.417e-2	32
267		min	-0.098	37	-0.035	36	-0.264	34	-8.714e-3	32	-3.865e-3	31	-1.154e-3	37
268	N135	max	0.698	33	0.006	37	0.558	42	2.89e-3	36	9.304e-4	30	1.252e-2	32
269		min	-0.09	37	-0.354	31	-0.617	34	-1.519e-2	32	-4.21e-3	31	-9.345e-4	37
270	N136	max	0.512	33	0.088	37	0.843	42	6.102e-4	36	1.93e-4	30	7.122e-3	31
271		min	-0.031	37	-1.087	32	-0.927	34	-7.266e-3	32	-1.813e-3	31	-3.135e-4	37
272	N137	max	0.433	33	-0.033	10	0.933	42	8.922e-3	32	2.49e-3	34	5.182e-3	31
273		min	-0.05	37	-1.061	31	-1.024	34	-1.522e-3	36	-2.286e-3	43	3.891e-4	10
274	N138	max	0.448	33	0.035	37	0.932	42	2.466e-3	37	3.584e-3	30	5.176e-3	31
275		min	-0.04	43	-1.065	32	-1.024	34	-8.267e-3	32	-2.348e-3	42	-1.469e-4	37
276	N139	max	0.093	36	0	37	0.068	42	2.371e-3	42	0	43	9.016e-3	32
277		min	-0.267	32	-0.003	31	-0.077	34	-2.654e-3	34	0	1	-3.085e-3	36
278	N140	max	0.331	31	0	37	0.068	42	2.371e-3	42	0	43	5.793e-4	37
279		min	-0.017	37	-0.003	32	-0.077	34	-2.654e-3	34	0	1	-1.113e-2	31
280	N141	max	0.11	36	0	37	0.068	42	2.372e-3	42	0	43	1.137e-2	32
281		min	-0.337	32	-0.005	31	-0.077	34	-2.655e-3	34	0	1	-3.654e-3	36
282	N142	max	0.419	31	0	36	0.068	42	2.372e-3	42	0	43	2.056e-4	37
283		min	-0.006	37	-0.004	32	-0.077	34	-2.655e-3	34	0	1	-1.413e-2	31
284	N143	max	0.109	36	0	11	0.068	42	2.372e-3	42	0	43	1.085e-2	32
285		min	-0.321	32	-0.005	31	-0.077	34	-2.655e-3	34	0	1	-3.609e-3	36
286	N144	max	0.419	31	0	36	0.068	42	2.372e-3	42	0	43	-4.622e-4	11
287		min	0.014	11	-0.004	31	-0.077	34	-2.655e-3	34	0	1	-1.411e-2	31
288	N145	max	0.094	36	0	10	0.068	42	2.371e-3	42	0	43	8.31e-3	32
289		min	-0.246	32	-0.003	31	-0.077	34	-2.655e-3	34	0	1	-3.101e-3	36
290	N146	max	0.329	31	0	36	0.068	42	2.371e-3	42	0	43	-7.089e-4	11
291		min	0.021	11	-0.003	31	-0.077	34	-2.655e-3	34	0	1	-1.108e-2	31

Envelope AISC 13TH (360-05): ASD Member Steel Code Checks

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [k-in]	Mnzz/om [k-in]	Cb	Eqn
0	M1	HSS8X8X4	0.542	0	8	0.037	8.96	y	8	146195.643	212574.85	559.222	559.222	1.653	H1-1b
1	M2	HSS8X8X4	0.603	0	7	0.051	0.457	y	7	146195.643	212574.85	559.222	559.222	1.672	H1-1b
2	M3	HSS8X8X4	0.646	0	8	0.045	8.96	y	8	146195.643	212574.85	559.222	559.222	1.651	H1-1b
3	M4	HSS8X8X4	0.752	0	7	0.063	0.457	y	7	146195.643	212574.85	559.222	559.222	1.666	H1-1b
4	M5	HSS8X8X4	0.608	0	8	0.045	8.96	y	2	146195.643	212574.85	559.222	559.222	1.651	H1-1b
5	M6	HSS8X8X4	0.751	0	7	0.063	0.457	y	7	146195.643	212574.85	559.222	559.222	1.666	H1-1b
6	M7	HSS8X8X4	0.49	0	8	0.035	8.96	y	2	146195.643	212574.85	559.222	559.222	1.654	H1-1b
7	M8	HSS8X8X4	0.599	0	7	0.051	0.457	y	7	146195.643	212574.85	559.222	559.222	1.672	H1-1b
8	M17	HSS12X6X4	0.388	11.024	8	0.059	1.012	y	8	181100.589	240419.162	434.899	931.138	1	H1-1b
9	M18	HSS12X6X4	0.363	0	7	0.069	1.5	y	6	181100.589	240419.162	434.899	931.138	1.052	H1-1b
10	M19	HSS12X6X4	0.334	0	8	0.023	4.472	y	6	181100.589	240419.162	434.899	931.138	1	H1-1b
11	M20	HSS12X6X4	0.388	11.024	8	0.059	1.012	y	8	181100.589	240419.162	434.899	931.138	1	H1-1b
12	M21	HSS12X6X4	0.346	0	8	0.069	1.5	y	6	181100.589	240419.162	434.899	931.138	1.064	H1-1b
13	M22	HSS12X6X4	0.334	0	8	0.023	4.472	y	6	181100.589	240419.162	434.899	931.138	1	H1-1b
14	M23	HSS12X6X4	0.467	11.024	8	0.07	1.012	y	8	181100.589	240419.162	434.899	931.138	1	H1-1b
15	M24	HSS12X6X4	0.462	0	7	0.071	1.5	y	6	181100.589	240419.162	434.899	931.138	1.055	H1-1b
16	M25	HSS12X6X4	0.404	0	8	0.025	4.472	y	6	181100.589	240419.162	434.899	931.138	1	H1-1b
17	M26	HSS12X6X4	0.467	11.024	8	0.07	1.012	y	8	181100.589	240419.162	434.899	931.138	1	H1-1b
18	M27	HSS12X6X4	0.424	0	8	0.071	1.5	y	6	181100.589	240419.162	434.899	931.138	1.062	H1-1b
19	M28	HSS12X6X4	0.404	0	8	0.025	4.472	y	6	181100.589	240419.162	434.899	931.138	1	H1-1b
20	M29	HSS12X6X4	0.466	11.024	7	0.066	1.012	y	8	181100.589	240419.162	434.899	931.138	1	H1-1b
21	M30	HSS12X6X4	0.462	0	7	0.065	1.5	y	6	181100.589	240419.162	434.899	931.138	1.055	H1-1b
22	M31	HSS12X6X4	0.402	0	7	0.024	4.472	y	6	181100.589	240419.162	434.899	931.138	1	H1-1b
23	M32	HSS12X6X4	0.434	11.024	8	0.066	1.012	y	8	181100.589	240419.162	434.899	931.138	1	H1-1b
24	M33	HSS12X6X4	0.407	0	2	0.065	1.5	y	6	181100.589	240419.162	434.899	931.138	1.053	H1-1b
25	M34	HSS12X6X4	0.378	0	8	0.024	4.472	y	6	181100.589	240419.162	434.899	931.138	1	H1-1b
26	M35	HSS12X6X4	0.366	11.024	7	0.053	1.012	y	8	181100.589	240419.162	434.899	931.138	1	H1-1b
27	M36	HSS12X6X4	0.363	0	7	0.061	1.5	y	6	181100.589	240419.162	434.899	931.138	1.053	H1-1b
28	M37	HSS12X6X4	0.317	0	7	0.021	4.472	z	6	181100.589	240419.162	434.899	931.138	1	H1-1b
29	M38	HSS12X6X4	0.343	11.024	8	0.053	1.012	y	8	181100.589	240419.162	434.899	931.138	1	H1-1b
30	M39	HSS12X6X4	0.326	0	7	0.061	1.5	y	6	181100.589	240419.162	434.899	931.138	1.076	H1-1b
31	M40	HSS12X6X4	0.301	0	8	0.021	4.472	z	6	181100.589	240419.162	434.899	931.138	1	H1-1b
32	M49	HSS6X4X3	0.022	2	7	0.008	2	y	7	94622.651	98203.593	137.321	197.605	2.339	H1-1b
33	M50	HSS6X4X3	0.319	7.823	7	0.031	0	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
34	M51	HSS6X4X3	0.331	7.667	7	0.03	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
35	M52	HSS6X4X3	0.319	7.51	7	0.031	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
36	M53	HSS6X4X3	0.022	0	7	0.008	0	y	7	94622.651	98203.593	137.321	197.605	2.312	H1-1b
37	M54	HSS6X4X3	0.037	2	7	0.012	2	y	7	94622.651	98203.593	137.321	197.605	2.339	H1-1b
38	M55	HSS6X4X3	0.519	7.823	7	0.048	0	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
39	M56	HSS6X4X3	0.538	7.667	7	0.047	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
40	M57	HSS6X4X3	0.519	7.51	7	0.048	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
41	M58	HSS6X4X3	0.037	0	7	0.012	0	y	7	94622.651	98203.593	137.321	197.605	2.312	H1-1b
42	M59	HSS6X4X3	0.014	2	7	0.005	2	y	7	94622.651	98203.593	137.321	197.605	2.339	H1-1b
43	M60	HSS6X4X3	0.204	7.823	7	0.019	0	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
44	M61	HSS6X4X3	0.211	7.667	7	0.018	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
45	M62	HSS6X4X3	0.204	7.51	7	0.019	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
46	M63	HSS6X4X3	0.014	0	7	0.005	0	y	7	94622.651	98203.593	137.321	197.605	2.312	H1-1b
47	M64	HSS6X4X3	0.104	2	8	0.02	2	z	8	94622.651	98203.593	137.321	197.605	1.902	H1-1b
48	M65	HSS6X4X3	0.286	8.136	7	0.031	0	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
49	M66	HSS6X4X3	0.321	7.667	7	0.029	15.334	y	7	59853.99	98203.593	137.321	197.605	1	H1-1b
50	M67	HSS6X4X3	0.284	7.197	7	0.03	15.333	y	7	59857.855	98203.593	137.321	197.605	1	H1-1b
51	M68	HSS6X4X3	0.082	0	16	0.019	0	z	15	94622.651	98203.593	137.321	197.605	1.86	H1-1b
52	M69	HSS8X4X3	0.123	5.466	7	0.018	5.466	y	7	92281.043	119161.677	150.638	305.389	2.166	H1-1b
53	M70	HSS8X4X3	0.142	8.292	8	0.026	0	y	7	82032.099	119161.677	150.638	305.389	1	H1-1b
54	M71	HSS8X4X3	0.19	7.667	7	0.023	15.334	y	7	82029.233	119161.677	150.638	305.389	1	H1-1b

Envelope AISC 13TH (360-05): ASD Member Steel Code Checks (Continued)

	Member	Shape	Code Check	Loc[ft]	LC	Shear Check	Loc[ft]	Dir	LC	Pnc/om [lb]	Pnt/om [lb]	Mnyy/om [k-in]	Mnzz/om [k-in]	Cb	Eqn
55	M72	HSS8X4X3	0.134	6.415	7	0.026	15.333	y	7	82032.099	119161.677	150.638	305.389	1	H1-1b
56	M73	HSS8X4X3	0.123	0	7	0.019	0	y	7	92281.094	119161.677	150.638	305.389	2.133	H1-1b
57	M74	HSS6X4X3	0.021	2	8	0.007	2	y	8	94622.651	98203.593	137.321	197.605	2.339	H1-1b
58	M75	HSS6X4X3	0.289	7.667	8	0.026	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
59	M76	HSS6X4X3	0.29	7.667	3	0.022	0	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
60	M77	HSS6X4X3	0.28	7.51	3	0.022	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
61	M78	HSS6X4X3	0.02	0	2	0.006	0	y	2	94622.651	98203.593	137.321	197.605	2.312	H1-1b
62	M79	HSS6X4X3	0.033	2	8	0.011	2	y	8	94622.651	98203.593	137.321	197.605	2.339	H1-1b
63	M80	HSS6X4X3	0.457	7.667	8	0.041	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
64	M81	HSS6X4X3	0.458	7.667	2	0.035	0	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
65	M82	HSS6X4X3	0.443	7.51	2	0.034	15.333	y	2	59857.855	98203.593	137.321	197.605	1	H1-1b
66	M83	HSS6X4X3	0.031	0	2	0.009	0	y	2	94622.651	98203.593	137.321	197.605	2.312	H1-1b
67	M84	HSS6X4X3	0.013	2	8	0.004	2	y	8	94622.651	98203.593	137.321	197.605	2.339	H1-1b
68	M85	HSS6X4X3	0.182	7.667	8	0.016	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
69	M86	HSS6X4X3	0.183	7.667	2	0.014	0	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
70	M87	HSS6X4X3	0.177	7.51	2	0.014	15.333	y	2	59857.855	98203.593	137.321	197.605	1	H1-1b
71	M88	HSS6X4X3	0.012	0	3	0.003	0	y	3	94622.651	98203.593	137.321	197.605	2.312	H1-1b
72	M89	HSS6X4X3	0.104	2	8	0.02	2	z	8	94622.651	98203.593	137.321	197.605	1.902	H1-1b
73	M90	HSS6X4X3	0.249	8.292	8	0.026	0	y	8	59857.855	98203.593	137.321	197.605	1	H1-1b
74	M91	HSS6X4X3	0.281	7.667	2	0.022	15.334	y	8	59853.99	98203.593	137.321	197.605	1	H1-1b
75	M92	HSS6X4X3	0.248	7.197	3	0.021	15.333	y	3	59857.855	98203.593	137.321	197.605	1	H1-1b
76	M93	HSS6X4X3	0.082	0	16	0.019	0	z	15	94622.651	98203.593	137.321	197.605	1.86	H1-1b
77	M94	HSS6X4X3	0.019	2.714	7	0.006	0	y	7	91529.076	98203.593	137.321	197.605	1	H1-1b
78	M95	HSS6X4X3	0.016	2.655	7	0.005	0	y	7	91529.089	98203.593	137.321	197.605	1	H1-1b
79	M96	HSS6X4X3	0.015	2.655	4	0.005	0	y	4	91529.076	98203.593	137.321	197.605	1	H1-1b
80	M97	HSS6X4X3	0.015	2.655	4	0.005	0	y	4	91529.089	98203.593	137.321	197.605	1	H1-1b

Connection Design Results

	Label	Member End	Connection Rule	Pass/Fail	Max UC	Gov LC	Limit State
0	M3	I	BP-1	Pass	1	1	Concrete Bearing
1	M4	I	BP-1	Pass	1	1	Concrete Bearing
2	M5	I	BP-1	Pass	1	1	Concrete Bearing
3	M6	I	BP-1	Pass	1	1	Concrete Bearing
4	M1	I	BP-2	Pass	1	1	Concrete Bearing
5	M2	I	BP-2	Pass	1	1	Concrete Bearing
6	M7	I	BP-2	Pass	1	1	Concrete Bearing
7	M8	I	BP-2	Pass	1	1	Concrete Bearing

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5.4 T and X joints with brace(s) subjected to combinations of axial load, in-plane bending and out-of-plane bending moment

The interaction of (brace) axial load and in-plane bending moment on the (brace) out-of-plane bending moment capacity depends on the critical failure mode, resulting in a complex set of interactions. Consequently, it is conservatively proposed that a linear interaction relationship be used:

$$\frac{N_1}{N_1^*} + \frac{M_{ip,1}}{M_{ip,1}^*} + \frac{M_{op,1}}{M_{op,1}^*} \leq 1.0 \qquad 5.15$$

5.5 Joint flexibility

In the foregoing, it was shown that unstiffened RHS joints with $\beta = 1.0$ and selected b_0/t_0 and t_0/t_1 values could achieve the full moment capacity of the brace member, but it should be noticed that any in-plane bending moment resistance calculated ($M_{ip,1}^*$) must be reduced to take account of the influence of axial load in the brace member (see equation 5.9). Such joints, which still develop a moment resistance exceeding the moment capacity of the brace member, can be considered as fully rigid for the purpose of analysis of a Vierendeel truss. All other joints (which covers most possible joint combinations) should be considered as semi-rigid. To analyse a frame which is connected by semi-rigid joints, one needs the load-deformation characteristics of the joints being used, and these can be obtained by either reliable finite element analysis, from laboratory tests or published databases.

5.6 Knee joints

Research on mitred RHS knee joints (such as illustrated in figure 5.8) has been performed by Mang et al. (1980) at the University of Karlsruhe. Their recommendations have also been included in Eurocode 3 (CEN, 2005b). They cover both stiffened and unstiffened knee joints, and are intended for use in corner joints of frames.

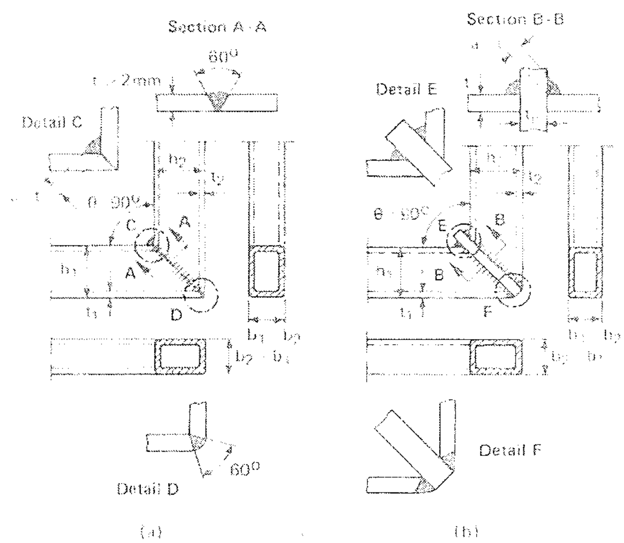

Figure 5.8 – Details of RHS knee joints
(a) Unstiffened
(b) With a transverse stiffening plate

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Mang et al. (1980) recommend that these joints be designed based on the following requirements for both members:

$$\frac{N_i}{N_{pl,i}} + \frac{M_i}{M_{pl,i}} \leq \alpha \qquad \text{(with i = 1 or 2, see figure 5.8)} \qquad 5.16$$

where:
$N_{pl,i}$ = axial yield capacity of a member, either in compression or tension as applicable.
$M_{pl,i}$ = plastic moment capacity of member i.
α = a stress reduction factor, which can be taken as 1.0 for mitred joints with stiffening plates. For the mitred joints without stiffening plates, α is a function of the cross sectional parameters as shown in figures 5.9 and 5.10.

Based on the work of Mang et al. (1980), it is recommended that for joints without stiffening plates, the shear force V_i and the axial force N_i in the members should not exceed:

$$\frac{V_i}{V_{pl,i}} \leq 0.5 \text{ and } \frac{N_i}{N_{pl,i}} \leq 0.2 \qquad 5.17$$

where:
$V_{pl,i}$ = shear yield capacity in the member under consideration. $V_{pl,i}$ can be taken as the yield stress in pure shear ($0.58f_{yi}$) multiplied by the cross sectional area of the RHS webs ($2\,h_i\,t_i$).
$N_{pl,i}$ = axial yield capacity of the member

For those structural applications where a reasonable strength, stiffness and rotational capacity are required, it is recommended that a stiffened joint with class 1 sections is used. For other structural applications, it is recommended to use unstiffened joints only if the sections satisfy at least the plastic design requirements. Karcher and Puthli (2001) recommended for CHS knee joints, that the stiffening plate thickness should satisfy $t_p > 2t_i$ and not be taken smaller than 10 mm, which is also adopted for RHS knee joints.

The fabrication details with $a = t_i$ shown in figure 5.8 are based on a steel grade S235. The weld size can be considered to be adequate when the throat thickness (a) of the fillet weld is in accordance with the recommendations given in section 3.9.

If mitred knee joints are used with an obtuse angle between the RHS members (i.e. $\theta > 90°$ in figure 5.8), the same design checks can be undertaken as for right-angle joints, since obtuse angle knee joints behave more favourably than right-angle ones (CIDECT, 1984). For unstiffened knee joints with $90° < \theta < 180°$, a strength enhancement can be used by increasing the value of α as follows:

$$\boxed{\alpha = 1 - (\sqrt{2}\cos\frac{\theta}{2})(1 - \alpha_{\theta=90°})} \qquad 5.18$$

where $\alpha_{\theta=90°}$ is the value obtained from figure 5.9 or figure 5.10.

An alternative form of joint reinforcement (other than a transverse stiffening plate) is a haunch on the inside of the knee. This haunch piece needs to be of the same width as the two main members, and can easily be provided by taking a cutting from one of the RHS sections. Provided the haunch length is sufficient to ensure that the bending moment does not exceed the section yield moment in either member, the joint resistance will be adequate and does not require checking (CIDECT, 1984).

HSS 12×6×1/4

$h/b = 2.0$

$b/t = 25.8$

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$\alpha_{90} = 0.68$

$\alpha = 0.762$
116.56

$0.762 > 0.467$ ✓

RAFTER SIZE
OKAY

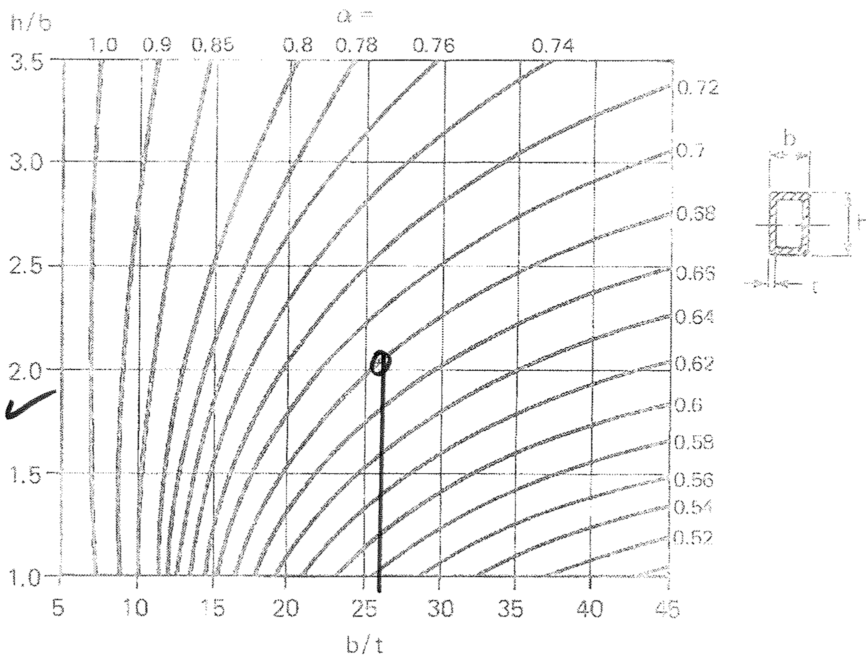


Figure 5.9 – Stress reduction factors α for RHS subjected to bending about the major axis in 90° unstiffened mitred knee joints (Mang et al., 1980)

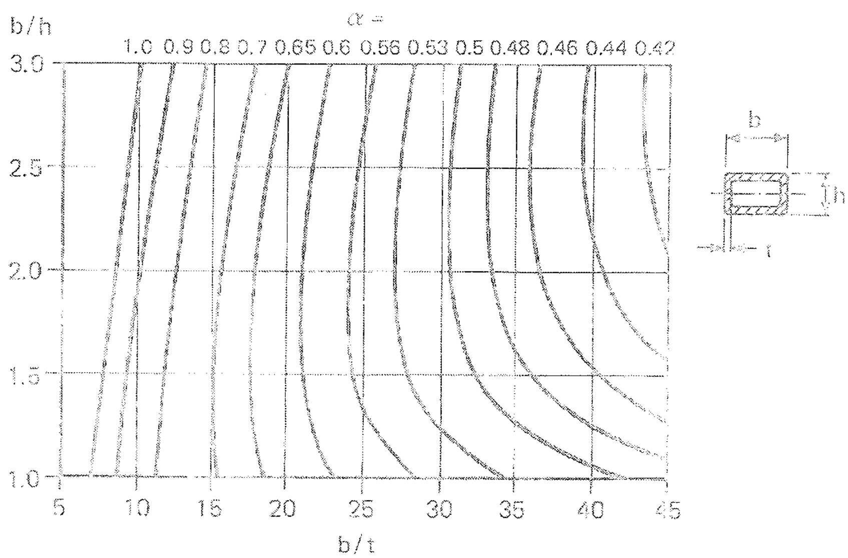
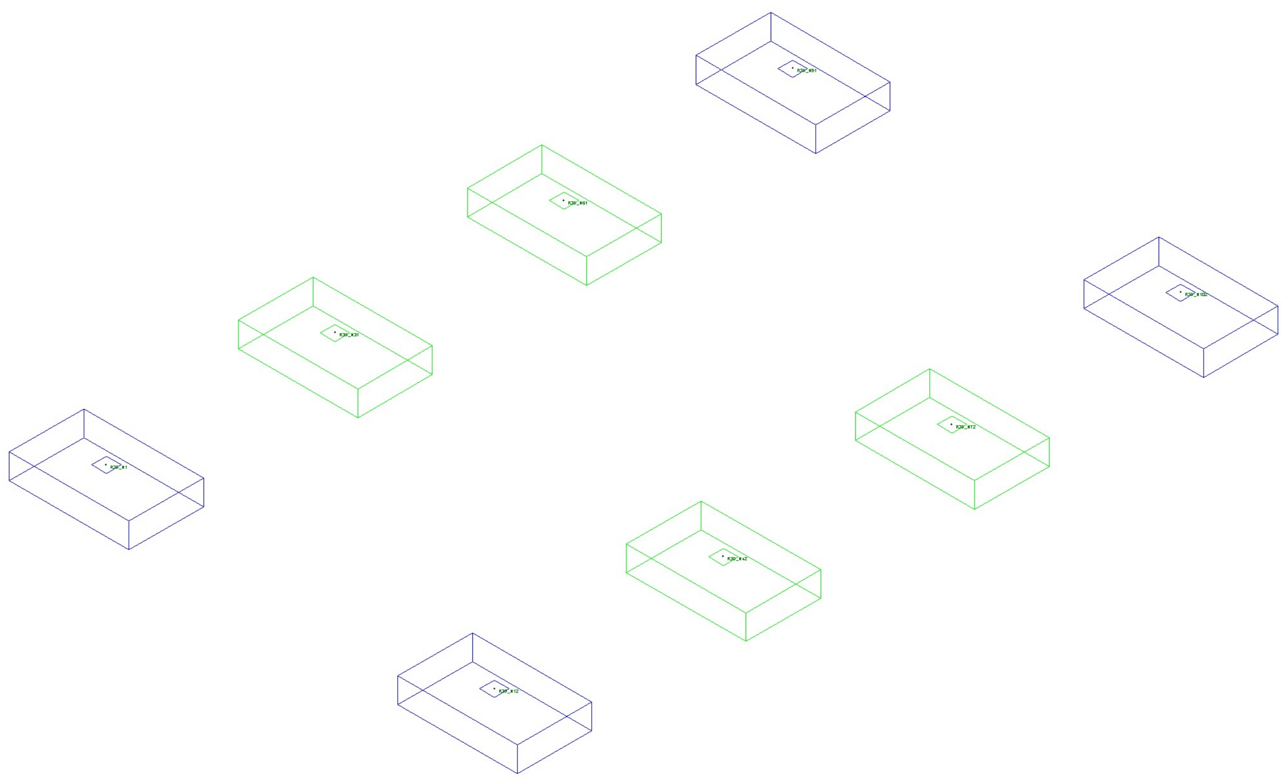


Figure 5.10 – Stress reduction factors α for RHS subjected to bending about the minor axis in 90° unstiffened mitred knee joints (Mang et al., 1980)



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DPS		Dec 7, 2023 at 11:52 AM
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(Global) Model Settings

Display Sections for Member Calcs	3
Max Internal Sections for Member Calcs	100
Mesh Size (in)	12
Max Iterations	10
Merge Tolerance (in)	0.12
Solver	Sparse Accelerated
Coefficient of Friction	0.3
No. of Shear Regions	4
Shear Region Spacing Increment (in)	4
Min 1 Bar Dia Spacing for Beams?	No
Optimize footings for OTM / Sliding?	No
Parme Beta Factor	0.65
Pile Safety Factor	3
Min % Steel for Pedestal	Auto
Concrete Stress Block	Rectangular
Concrete Rebar Set	ASTM A615
Include WWR	No
Concrete Code	ACI 318-05
HR Steel Pile Code	AISC 13th (360-05): ASD
Wood Pile Code	AF&PA NDS-05/08: ASD
Mat Slab Design Option	Construction (Design per Integer No. of Bars)

Concrete Properties

	Label	E [ksi]	G [ksi]	Nu	Therm (/...	Density[k...	f'c[ksi]	Lambda	Flex Steel[ksi]	Shear Steel[ksi]
1	Conc3000NW	3156	1372	0.15	0.6	0.145	3	1	60	60
2	Conc3500NW	3409	1482	0.15	0.6	0.145	3.5	1	60	60
3	Conc4000NW	3644	1584	0.15	0.6	0.145	4	1	60	60
4	Conc3000LW	2085	907	0.15	0.6	0.11	3	0.75	60	60
5	Conc3500LW	2252	979	0.15	0.6	0.11	3.5	0.75	60	60
6	Conc4000LW	2408	1047	0.15	0.6	0.11	4	0.75	60	60

General Design Parameters

	Label	Max Bending Chk	Max Shear Chk	Top Cover[in]	Bottom Cover[in]
1	Typical	1	1	1.5	3

Footing/Pile Cap Rebar Parameters

	Label	Top Bar	Bottom Bar
1	Typical	#6	#6

Pedestal/Pile Rebar Parameters

	Label	Longitudinal Bar	Shear Tie	Bar Cover[in]
1	Typical	#6	#4	1.5

General Properties

	Label	Min Steel ...	Max Steel...	Material	Design Ru...	Equal Bar Spacing	Group Design	Concrete Bearing	Force Top Bar
1	Footing 1	0.002	0.007	Conc3000...	Typical	Yes	Yes	Yes	Yes
2	Footing 2	0.002	0.007	Conc3000...	Typical	Yes	Yes	Yes	Yes

Footing Geometry

	Label	Max Length[...	Min Length[ft]	Max Width[ft]	Min Width[ft]	L/W Increm...	Max Thickn...	Min Thickne...	Thick Incre...	Force Sq...
1	Footing 1	5	5	8	8	0.5	24	16	1	
2	Footing 2	5	5	8	8	0.5	24	16	1	

Pedestal Properties

	Label	Type	Shape	Height[in]	e/BL	ex[in]	ez[in]	BLx[ft]	BLz[ft]
1	Footing 1	Post	CRECT12X12	0	Use ex,ez	0	0	0	0
2	Footing 2	Post	CRECT12X12	0	Use ex,ez	0	0	0	0

Soil Properties

	Label	Overburden[ksf]	Passive[lb]	Friction Coefficient	Gross/Net
1	Footing 1	0.042	0	0.35	Gross
2	Footing 2	0.042	0	0.35	Gross

Point Coordinates

	Label	Z [ft]	X [ft]
1	R3D_N1	0	-13
2	R3D_N12	0	13
3	R3D_N31	-15.333	-13
4	R3D_N42	-15.333	13
5	R3D_N61	-30.667	-13
6	R3D_N72	-30.667	13
7	R3D_N91	-46	-13
8	R3D_N102	-46	13

Soil Definitions

	Label	Subgrade Modulus[k/ft^3]	Allowable Bearing[ksf]	Depth Properties	Default?
1	Default	1e+5	2.5	None	Yes

All Support Types

	Point Label	Support[k/in]	Footings/Piles/Pile Caps	Support Angle(deg)
1	R3D_N1	Calc'ed	Footing 1	0
2	R3D_N12	Calc'ed	Footing 1	0
3	R3D_N31	Calc'ed	Footing 2	0
4	R3D_N42	Calc'ed	Footing 2	0
5	R3D_N61	Calc'ed	Footing 2	0
6	R3D_N72	Calc'ed	Footing 2	0
7	R3D_N91	Calc'ed	Footing 1	0
8	R3D_N102	Calc'ed	Footing 1	0

Point Loads and Moments (Cat 1 : DL)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	Y	-2000
2	R3D_N12	Y	-2000
3	R3D_N31	Y	-2000
4	R3D_N42	Y	-2000
5	R3D_N61	Y	-2000
6	R3D_N72	Y	-2000
7	R3D_N91	Y	-2000
8	R3D_N102	Y	-2000
9	R3D_N1	X	-887.823
10	R3D_N1	Y	2729.055
11	R3D_N1	MX	0.018
12	R3D_N1	MZ	95.459
13	R3D_N12	X	887.823

Point Loads and Moments (Cat 1 : DL) (Continued)

	Label	Direction	Magnitude[lb,k-in]
14	R3D_N12	Y	2729.055
15	R3D_N12	MX	0.018
16	R3D_N12	MZ	-95.459
17	R3D_N31	X	-1072.315
18	R3D_N31	Y	3459.743
19	R3D_N31	MX	0.004
20	R3D_N31	MZ	115.295
21	R3D_N42	X	1072.315
22	R3D_N42	Y	3459.743
23	R3D_N42	MX	0.004
24	R3D_N42	MZ	-115.295
25	R3D_N61	X	-1072.315
26	R3D_N61	Y	3459.743
27	R3D_N61	MX	-0.004
28	R3D_N61	MZ	115.295
29	R3D_N72	X	1072.315
30	R3D_N72	Y	3459.743
31	R3D_N72	MX	-0.004
32	R3D_N72	MZ	-115.295
33	R3D_N91	X	-887.823
34	R3D_N91	Y	2729.055
35	R3D_N91	MX	-0.018
36	R3D_N91	MZ	95.459
37	R3D_N102	X	887.823
38	R3D_N102	Y	2729.055
39	R3D_N102	MX	-0.018
40	R3D_N102	MZ	-95.459

Point Loads and Moments (Cat 6 : RLL)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	-1168.011
2	R3D_N1	Y	3428.053
3	R3D_N1	MX	0.016
4	R3D_N1	MZ	125.585
5	R3D_N12	X	1168.011
6	R3D_N12	Y	3428.053
7	R3D_N12	MX	0.016
8	R3D_N12	MZ	-125.585
9	R3D_N31	X	-1559.091
10	R3D_N31	Y	4865.459
11	R3D_N31	MX	0.004
12	R3D_N31	MZ	167.633
13	R3D_N42	X	1559.091
14	R3D_N42	Y	4865.459
15	R3D_N42	MX	0.004
16	R3D_N42	MZ	-167.633
17	R3D_N61	X	-1559.091
18	R3D_N61	Y	4865.459
19	R3D_N61	MX	-0.004
20	R3D_N61	MZ	167.633
21	R3D_N72	X	1559.091
22	R3D_N72	Y	4865.459
23	R3D_N72	MX	-0.004
24	R3D_N72	MZ	-167.633
25	R3D_N91	X	-1168.011
26	R3D_N91	Y	3428.052

Point Loads and Moments (Cat 6 : RLL) (Continued)

	Label	Direction	Magnitude[lb,k-in]
27	R3D_N91	MX	-0.016
28	R3D_N91	MZ	125.585
29	R3D_N102	X	1168.011
30	R3D_N102	Y	3428.052
31	R3D_N102	MX	-0.016
32	R3D_N102	MZ	-125.585

Point Loads and Moments (Cat 16 : ELX)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	535.804
2	R3D_N1	Y	-168.752
3	R3D_N1	MX	-0.001
4	R3D_N1	MZ	-55.156
5	R3D_N12	X	535.804
6	R3D_N12	Y	168.752
7	R3D_N12	MX	0.001
8	R3D_N12	MZ	-55.156
9	R3D_N31	X	677.299
10	R3D_N31	Y	-198.739
11	R3D_N31	MZ	-70.37
12	R3D_N42	X	677.299
13	R3D_N42	Y	198.739
14	R3D_N42	MZ	-70.37
15	R3D_N61	X	677.299
16	R3D_N61	Y	-198.739
17	R3D_N61	MZ	-70.37
18	R3D_N72	X	677.299
19	R3D_N72	Y	198.739
20	R3D_N72	MZ	-70.37
21	R3D_N91	X	535.804
22	R3D_N91	Y	-168.752
23	R3D_N91	MX	0.001
24	R3D_N91	MZ	-55.156
25	R3D_N102	X	535.804
26	R3D_N102	Y	168.752
27	R3D_N102	MX	-0.001
28	R3D_N102	MZ	-55.156

Point Loads and Moments (Cat 18 : ELZ)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	-22.033
2	R3D_N1	Y	36.32
3	R3D_N1	Z	605.723
4	R3D_N1	MX	88.048
5	R3D_N1	MZ	2.369
6	R3D_N12	X	22.033
7	R3D_N12	Y	36.32
8	R3D_N12	Z	605.723
9	R3D_N12	MX	88.048
10	R3D_N12	MZ	-2.369
11	R3D_N31	X	21.303
12	R3D_N31	Y	-36.32
13	R3D_N31	Z	607.368
14	R3D_N31	MX	88.122
15	R3D_N31	MZ	-2.291
16	R3D_N42	X	-21.303

Point Loads and Moments (Cat 18 : ELZ) (Continued)

	Label	Direction	Magnitude[lb,k-in]
17	R3D_N42	Y	-36.32
18	R3D_N42	Z	607.368
19	R3D_N42	MX	88.122
20	R3D_N42	MZ	2.291
21	R3D_N61	X	-21.303
22	R3D_N61	Y	36.32
23	R3D_N61	Z	607.368
24	R3D_N61	MX	88.122
25	R3D_N61	MZ	2.291
26	R3D_N72	X	21.303
27	R3D_N72	Y	36.32
28	R3D_N72	Z	607.368
29	R3D_N72	MX	88.122
30	R3D_N72	MZ	-2.291
31	R3D_N91	X	22.033
32	R3D_N91	Y	-36.32
33	R3D_N91	Z	605.723
34	R3D_N91	MX	88.048
35	R3D_N91	MZ	-2.369
36	R3D_N102	X	-22.033
37	R3D_N102	Y	-36.32
38	R3D_N102	Z	605.723
39	R3D_N102	MX	88.048
40	R3D_N102	MZ	2.369

Point Loads and Moments (Cat 22 : WL+X)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	614.944
2	R3D_N1	Y	2383.656
3	R3D_N1	MX	0.17
4	R3D_N1	MZ	-47.147
5	R3D_N12	X	1759.905
6	R3D_N12	Y	1641.34
7	R3D_N12	MX	-0.056
8	R3D_N12	MZ	-170.253
9	R3D_N31	X	801.686
10	R3D_N31	Y	3367.21
11	R3D_N31	MX	0.174
12	R3D_N31	MZ	-67.226
13	R3D_N42	X	2051.793
14	R3D_N42	Y	1948.888
15	R3D_N42	MX	-0.066
16	R3D_N42	MZ	-201.637
17	R3D_N61	X	796.93
18	R3D_N61	Y	3368.135
19	R3D_N61	Z	1.084
20	R3D_N61	MX	0.177
21	R3D_N61	MZ	-66.714
22	R3D_N72	X	2044.144
23	R3D_N72	Y	1945.637
24	R3D_N72	Z	-1.144
25	R3D_N72	MX	-0.072
26	R3D_N72	MZ	-200.815
27	R3D_N91	X	585.807
28	R3D_N91	Y	2401.751
29	R3D_N91	Z	1.155

Point Loads and Moments (Cat 22 : WL+X) (Continued)

	Label	Direction	Magnitude[lb,k-in]
30	R3D_N91	MX	0.179
31	R3D_N91	MZ	-44.014
32	R3D_N102	X	1734.842
33	R3D_N102	Y	1625.57
34	R3D_N102	Z	-1.288
35	R3D_N102	MX	-0.078
36	R3D_N102	MZ	-167.559

Point Loads and Moments (Cat 24 : WL+Z)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	-553.482
2	R3D_N1	Y	2060.129
3	R3D_N1	Z	-554.257
4	R3D_N1	MX	-63.003
5	R3D_N1	MZ	59.51
6	R3D_N12	X	553.482
7	R3D_N12	Y	2060.129
8	R3D_N12	Z	-554.257
9	R3D_N12	MX	-63.003
10	R3D_N12	MZ	-59.51
11	R3D_N31	X	-558.196
12	R3D_N31	Y	2120.828
13	R3D_N31	Z	-555.045
14	R3D_N31	MX	-63.034
15	R3D_N31	MZ	60.017
16	R3D_N42	X	558.196
17	R3D_N42	Y	2120.828
18	R3D_N42	Z	-555.045
19	R3D_N42	MX	-63.034
20	R3D_N42	MZ	-60.017
21	R3D_N61	X	-325.375
22	R3D_N61	Y	1267.167
23	R3D_N61	Z	-554.952
24	R3D_N61	MX	-63.03
25	R3D_N61	MZ	34.984
26	R3D_N72	X	325.375
27	R3D_N72	Y	1267.167
28	R3D_N72	Z	-554.952
29	R3D_N72	MX	-63.03
30	R3D_N72	MZ	-34.984
31	R3D_N91	X	-230.845
32	R3D_N91	Y	828.284
33	R3D_N91	Z	-553.861
34	R3D_N91	MX	-62.988
35	R3D_N91	MZ	24.82
36	R3D_N102	X	230.845
37	R3D_N102	Y	828.284
38	R3D_N102	Z	-553.861
39	R3D_N102	MX	-62.988
40	R3D_N102	MZ	-24.82

Point Loads and Moments (Cat 25 : WL-X)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	1401.092
2	R3D_N1	Y	-1088.842
3	R3D_N1	MX	-0.075

Point Loads and Moments (Cat 25 : WL-X) (Continued)

	Label	Direction	Magnitude[lb,k-in]
4	R3D_N1	MZ	-131.674
5	R3D_N12	X	625.237
6	R3D_N12	Y	-1614.883
7	R3D_N12	MX	-0.029
8	R3D_N12	MZ	-48.254
9	R3D_N31	X	1623.163
10	R3D_N31	Y	-1267.455
11	R3D_N31	MX	-0.065
12	R3D_N31	MZ	-155.551
13	R3D_N42	X	769.43
14	R3D_N42	Y	-2310.82
15	R3D_N42	MX	-0.034
16	R3D_N42	MZ	-63.758
17	R3D_N61	X	1612.337
18	R3D_N61	Y	-1261.551
19	R3D_N61	MX	-0.057
20	R3D_N61	MZ	-154.387
21	R3D_N72	X	758.828
22	R3D_N72	Y	-2314.579
23	R3D_N72	MX	-0.039
24	R3D_N72	MZ	-62.618
25	R3D_N91	X	1404.959
26	R3D_N91	Y	-1091.274
27	R3D_N91	MX	-0.049
28	R3D_N91	MZ	-132.09
29	R3D_N102	X	625.728
30	R3D_N102	Y	-1614.596
31	R3D_N102	MX	-0.046
32	R3D_N102	MZ	-48.307

Point Loads and Moments (Cat 27 : WL-Z)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	584.399
2	R3D_N1	Y	-2126.631
3	R3D_N1	Z	-553.82
4	R3D_N1	MX	-62.951
5	R3D_N1	MZ	-62.835
6	R3D_N12	X	-584.399
7	R3D_N12	Y	-2126.631
8	R3D_N12	Z	-553.82
9	R3D_N12	MX	-62.951
10	R3D_N12	MZ	62.835
11	R3D_N31	X	579.52
12	R3D_N31	Y	-2293.331
13	R3D_N31	Z	-554.952
14	R3D_N31	MX	-62.994
15	R3D_N31	MZ	-62.31
16	R3D_N42	X	-579.52
17	R3D_N42	Y	-2293.331
18	R3D_N42	Z	-554.952
19	R3D_N42	MX	-62.994
20	R3D_N42	MZ	62.31
21	R3D_N61	X	388.047
22	R3D_N61	Y	-1394.783
23	R3D_N61	Z	-555.061
24	R3D_N61	MX	-62.998

Point Loads and Moments (Cat 27 : WL-Z) (Continued)

	Label	Direction	Magnitude[lb,k-in]
25	R3D_N61	MZ	-41.723
26	R3D_N72	X	-388.047
27	R3D_N72	Y	-1394.783
28	R3D_N72	Z	-555.061
29	R3D_N72	MX	-62.998
30	R3D_N72	MZ	41.723
31	R3D_N91	X	202.473
32	R3D_N91	Y	-781.515
33	R3D_N91	Z	-554.283
34	R3D_N91	MX	-62.969
35	R3D_N91	MZ	-21.77
36	R3D_N102	X	-202.473
37	R3D_N102	Y	-781.515
38	R3D_N102	Z	-554.283
39	R3D_N102	MX	-62.969
40	R3D_N102	MZ	21.77

Point Loads and Moments (Cat 67 : OL1)

	Label	Direction	Magnitude[lb,k-in]
1	R3D_N1	X	-37.131
2	R3D_N1	Y	63.325
3	R3D_N1	MX	0.005
4	R3D_N1	MZ	3.992
5	R3D_N12	X	38.588
6	R3D_N12	Y	67.844
7	R3D_N12	MX	0.002
8	R3D_N12	MZ	-4.149
9	R3D_N31	X	29.359
10	R3D_N31	Y	-36.357
11	R3D_N31	MX	0.001
12	R3D_N31	MZ	-3.157
13	R3D_N42	X	-30.816
14	R3D_N42	Y	-85.267
15	R3D_N42	MZ	3.313
16	R3D_N61	X	29.359
17	R3D_N61	Y	-36.357
18	R3D_N61	MX	-0.001
19	R3D_N61	MZ	-3.157
20	R3D_N72	X	-30.816
21	R3D_N72	Y	-85.267
22	R3D_N72	MZ	3.313
23	R3D_N91	X	-37.131
24	R3D_N91	Y	63.325
25	R3D_N91	MX	-0.005
26	R3D_N91	MZ	3.992
27	R3D_N102	X	38.588
28	R3D_N102	Y	67.844
29	R3D_N102	MX	-0.002
30	R3D_N102	MZ	-4.149

Load Combinations

	Label	S...	S...	ABIF	SF	Cat..	Fa...	Cat...	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...
1	D	Yes	Yes			DL	1																
2	D+Lr	Yes	Yes			DL	1	RLL	1														
3	D+Lr Right	Yes	Yes			DL	1				1												
4	D+UNB S	Yes	Yes			DL	1		0.1...		0.42	OL1	1										

Load Combinations (Continued)

	Label	S...	S...	ABIF	SF	Cat..	Fa...	Cat...	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...	Cat..	Fa...
5	D+W LAT1	Yes	Yes			DL	1			WL...	1														
6	D+W Down	Yes	Yes			DL	1			WL...	1														
7	D+3/4(Lr+W LA...	Yes	Yes			DL	1	RLL	0.75	WL...	0.75														
8	D+3/4(Lr+W Do...	Yes	Yes			DL	1	RLL	0.75	WL...	0.75														
9	0.6D (5.5 psf)+...	Yes	Yes			DL	0.6	RLL	-0....	WL...	1														
10	0.6D (5.5 psf)+...	Yes	Yes			DL	0.6	RLL	-0....	WL...	1														
11	0.6D (5.5 psf)+...	Yes	Yes			DL	0.6	RLL	-0....	WL...	1														
12	D+0.7E +X	Yes	Yes			DL	1	Sds...	0.14			Rh...	0.7												
13	D+3/4(S+0.7E +...	Yes	Yes			DL	1	Sds...	0.1...	RLL	0.3...	Rh...	0.5...												
14	0.6D (5.5 psf)-0....	Yes	Yes			DL	0.6	Sds...	-0....	RLL	-0....	Rh...	0.7												
15	D+0.7E +Z	Yes	Yes			DL	1	Sds...	0.14			Rh...	0.7												
16	D+3/4(S+0.7E +...	Yes	Yes			DL	1	Sds...	0.1...	RLL	0.3...	Rh...	0.5...												
17	0.6D (5.5 psf)-0....	Yes	Yes			DL	0.6	Sds...	-0....	RLL	-0....	Rh...	0.7												
18	D+Omega*0.7E ...	Yes				DL	1	Sds...	0.14			O...	0.7												
19	D+3/4(S+Omeg...	Yes				DL	1	Sds...	0.1...	RLL	0.3...	O...	0.5...												
20	0.6D (5.5 psf)-O...	Yes				DL	0.6	Sds...	-0....	RLL	-0....	O...	0.7												
21	D+Omega*0.7E ...	Yes				DL	1	Sds...	0.14			O...	0.7												
22	D+3/4(S+Omeg...	Yes				DL	1	Sds...	0.1...	RLL	0.3...	O...	0.5...												
23	0.6D (5.5 psf)-O...	Yes				DL	0.6	Sds...	-0....	RLL	-0....	O...	0.7												
24	LRFD																								
25	1.4D	Yes				DL	1.4																		
26	1.2D+1.6Lr	Yes				DL	1.2	RLL	1.6																
27	1.2D+1.6Lr Right	Yes				DL	1.2				1.6														
28	1.2D+1.6UNB S	Yes				DL	1.2		0.2		0.6...	OL1	1.6												
29	1.2D+1.6W LAT1	Yes				DL	1.2			WL...	1.6														
30	1.2D+1.6W Down	Yes				DL	1.2			WL...	1.6														
31	1.2D+1.6Lr+0.8...	Yes				DL	1.2	RLL	1.6	WL...	0.8														
32	1.2D+1.6Lr+0.8...	Yes				DL	1.2	RLL	1.6	WL...	0.8														
33	1.2D+0.5Lr+1.6...	Yes				DL	1.2	RLL	0.5	WL...	1.6														
34	1.2D+0.5Lr+1.6...	Yes				DL	1.2	RLL	0.5	WL...	1.6														
35	0.9D (5.5 psf)+1...	Yes				DL	0.9	RLL	-0....	WL...	1.6														
36	0.9D (5.5 psf)+1...	Yes				DL	0.9	RLL	-0....	WL...	1.6														
37	0.9D (5.5 psf)+1...	Yes				DL	0.9	RLL	-0....	WL...	1.6														
38	1.2D+1.0E +X	Yes				DL	1.2	Sds...	0.2			Rh...	1												
39	1.2D+0.2S+1.0E...	Yes				DL	1.2	Sds...	0.2	RLL	0.0...	Rh...	1												
40	0.9D (5.5 psf)-1....	Yes				DL	0.9	Sds...	-0.2	RLL	-0....	Rh...	1												
41	1.2D+1.0E +Z	Yes				DL	1.2	Sds...	0.2			Rh...	1												
42	1.2D+0.2S+1.0E...	Yes				DL	1.2	Sds...	0.2	RLL	0.0...	Rh...	1												
43	0.9D (5.5 psf)-1....	Yes				DL	0.9	Sds...	-0.2	RLL	-0....	Rh...	1												
44	1.2D+Omega*1....	Yes				DL	1.2	Sds...	0.2			O...	1												
45	1.2D+0.2S+Om...	Yes				DL	1.2	Sds...	0.2	RLL	0.0...	O...	1												
46	0.9D (5.5 psf)-O...	Yes				DL	0.9	Sds...	-0.2	RLL	-0....	O...	1												
47	1.2D+Omega*1....	Yes				DL	1.2	Sds...	0.2			O...	1												
48	1.2D+0.2S+Om...	Yes				DL	1.2	Sds...	0.2	RLL	0.0...	O...	1												
49	0.9D (5.5 psf)-O...	Yes				DL	0.9	Sds...	-0.2	RLL	-0....	O...	1												

Envelope Footing Soil Pressures

	Label	Max UC	Max LC	Soil Pressure[ksf]	Allowable Bearing[ksf]	Point
1	Footing 1 - R3D...	0.378	8	0.944	2.5	D
2	Footing 1 - R3D...	0.411	7	1.028	2.5	A
3	Footing 2 - R3D...	0.441	8	1.102	2.5	D
4	Footing 2 - R3D...	0.52	7	1.3	2.5	A
5	Footing 2 - R3D...	0.418	8	1.044	2.5	D
6	Footing 2 - R3D...	0.519	7	1.297	2.5	A
7	Footing 1 - R3D...	0.347	8	0.867	2.5	D
8	Footing 1 - R3D...	0.408	7	1.021	2.5	A

Footing Geometry Results

	Joint	Footing	Length[ft]	Width[ft]	Thickness[in]	ex[in]	ez[in]	Pedestal Ht[in]	Ped Xdim[in]	Ped Zdim[in]
1	R3D_N1	Footing 1	5	8	16	0	0	0	12	12
2	R3D_N12	Footing 1	5	8	16	0	0	0	12	12
3	R3D_N31	Footing 2	5	8	16	0	0	0	12	12
4	R3D_N42	Footing 2	5	8	16	0	0	0	12	12
5	R3D_N61	Footing 2	5	8	16	0	0	0	12	12
6	R3D_N72	Footing 2	5	8	16	0	0	0	12	12
7	R3D_N91	Footing 1	5	8	16	0	0	0	12	12
8	R3D_N102	Footing 1	5	8	16	0	0	0	12	12

Footing Steel

	Joint	Footing	Bot x Steel[in^2]	Bot z Steel[in^2]	Top x Steel[i...	Top z Steel[in^2]	Ped Long	Ped Shear
1	R3D_N1	Footing 1	1.767	3.093	1.767	2.651		
2	R3D_N12	Footing 1	1.767	3.093	1.767	2.651		
3	R3D_N31	Footing 2	1.767	3.093	1.767	2.651		
4	R3D_N42	Footing 2	1.767	3.093	1.767	2.651		
5	R3D_N61	Footing 2	1.767	3.093	1.767	2.651		
6	R3D_N72	Footing 2	1.767	3.093	1.767	2.651		
7	R3D_N91	Footing 1	1.767	3.093	1.767	2.651		
8	R3D_N102	Footing 1	1.767	3.093	1.767	2.651		

Footing Code Check

	Joint	Footing	Bearing R...	Bearing Pressure[ksf]	Gov LC	UC Max	Muxx[k-in]	Gov LC	UC Max	Muzz[k-in]	Gov LC
1	R3D_N1	Footing 1	0.378	0.944	8	0.036	70.702	34	0.222	251.709	32
2	R3D_N12	Footing 1	0.411	1.028	7	0.036	70.702	34	0.281	319.225	33
3	R3D_N31	Footing 2	0.441	1.102	8	0.04	78.839	34	0.291	330.835	32
4	R3D_N42	Footing 2	0.52	1.3	7	0.04	78.839	34	0.373	423.386	31
5	R3D_N61	Footing 2	0.418	1.044	8	0.036	72.273	34	0.276	313.506	32
6	R3D_N72	Footing 2	0.519	1.297	7	0.036	72.273	34	0.372	422.755	31
7	R3D_N91	Footing 1	0.347	0.867	8	0.031	61.141	34	0.201	228.032	32
8	R3D_N102	Footing 1	0.408	1.021	7	0.031	61.141	34	0.277	314.689	33

Footing Shear Check

	Joint	Footing	UC Shear	Vux[lb]	Gov LC	UC Shear	Vuz[lb]	Gov LC
1	R3D_N1	Footing 1	0.032	3070.296	34	0.138	8326.298	32
2	R3D_N12	Footing 1	0.032	3070.296	34	0.172	10413.861	33
3	R3D_N31	Footing 2	0.035	3404.654	34	0.181	10944.08	32
4	R3D_N42	Footing 2	0.035	3404.654	34	0.23	13912.997	31
5	R3D_N61	Footing 2	0.032	3134.156	34	0.172	10371.3	32
6	R3D_N72	Footing 2	0.032	3134.156	34	0.23	13892.93	31
7	R3D_N91	Footing 1	0.028	2675.317	34	0.125	7542.243	32
8	R3D_N102	Footing 1	0.028	2675.317	34	0.171	10339.973	31

Footing Pedestal Results

	Joint	Footing	UC Bend	UC Bend LC	UC Shear	UC Shear LC	UC Punch	UC Punch LC
1	R3D_N1	Footing 1	0	1	0	NC	0.038	31
2	R3D_N12	Footing 1	0	1	0	NC	0.038	31
3	R3D_N31	Footing 2	0	1	0	NC	0.056	31
4	R3D_N42	Footing 2	0	1	0	NC	0.057	31
5	R3D_N61	Footing 2	0	1	0	NC	0.056	31
6	R3D_N72	Footing 2	0	1	0	NC	0.057	31
7	R3D_N91	Footing 1	0	1	0	NC	0.038	31
8	R3D_N102	Footing 1	0	1	0	NC	0.038	31

Footing Safety Factors

	Joint	Footing	OSF-xx	LC	OSF-zz	LC	SR-xx	LC	SR-zz	LC
1	R3D_N1	Footing 1	1.297	11	1.614	10	1.813	10	2.378	11
2	R3D_N12	Footing 1	1.297	11	1.388	9	1.18	9	2.378	11
3	R3D_N31	Footing 2	1.323	11	1.489	10	1.65	10	2.499	11
4	R3D_N42	Footing 2	1.323	11	1.16	10	1.034	10	2.499	11
5	R3D_N61	Footing 2	1.617	11	1.498	10	1.67	10	3.065	11
6	R3D_N72	Footing 2	1.617	11	1.165	10	1.042	10	3.065	11
7	R3D_N91	Footing 1	1.818	11	1.609	10	1.804	10	3.225	11
8	R3D_N102	Footing 1	1.818	11	1.401	9	1.191	9	3.225	11

SIMPSON Strong-Tie®

Anchor Designer™
Software
Version 3.1.2209.3

Company:	Enterprise Engineering Consultants, Ltd.	Date:	12/7/2023
Engineer:	Daniel P. Seymour	Page:	1/6
Project:	14837 R		
Address:	710 French Street, Peshtigo, WI 54157		
Phone:	715-582-4501		
E-mail:	dps@eecltd.com		

1.Project information

Customer company: RCP Shelters
Customer contact name:
Customer e-mail:
Comment:

Project description:
Location: N42 LC31
Fastening description:

2. Input Data & Anchor Parameters

General
Design method:ACI 318-19
Units: Imperial units

Anchor Information:
Anchor type: Cast-in-place
Material: AB
Diameter (inch): 1.000
Effective Embedment depth, h_{ef} (inch): 10.250
Anchor category: -
Anchor ductility: Yes
h_{min} (inch): 12.88
C_{min} (inch): 6.00
S_{min} (inch): 6.00

Base Material
Concrete: Normal-weight
Concrete thickness, h (inch): 16.00
State: Cracked
Compressive strength, f'_c (psi): 4000
$\Psi_{c,V}$: 1.0
Reinforcement condition: Supplementary reinforcement not present
Supplemental edge reinforcement: Not applicable
Reinforcement provided at corners: No
Ignore concrete breakout in tension: No
Ignore concrete breakout in shear: No
Ignore 6do requirement: No
Build-up grout pad: Yes

Base Plate
Length x Width x Thickness (inch): 17.00 x 17.00 x 1.25
Yield stress: 50000 psi

Profile type/size: HSS8X8X1/4

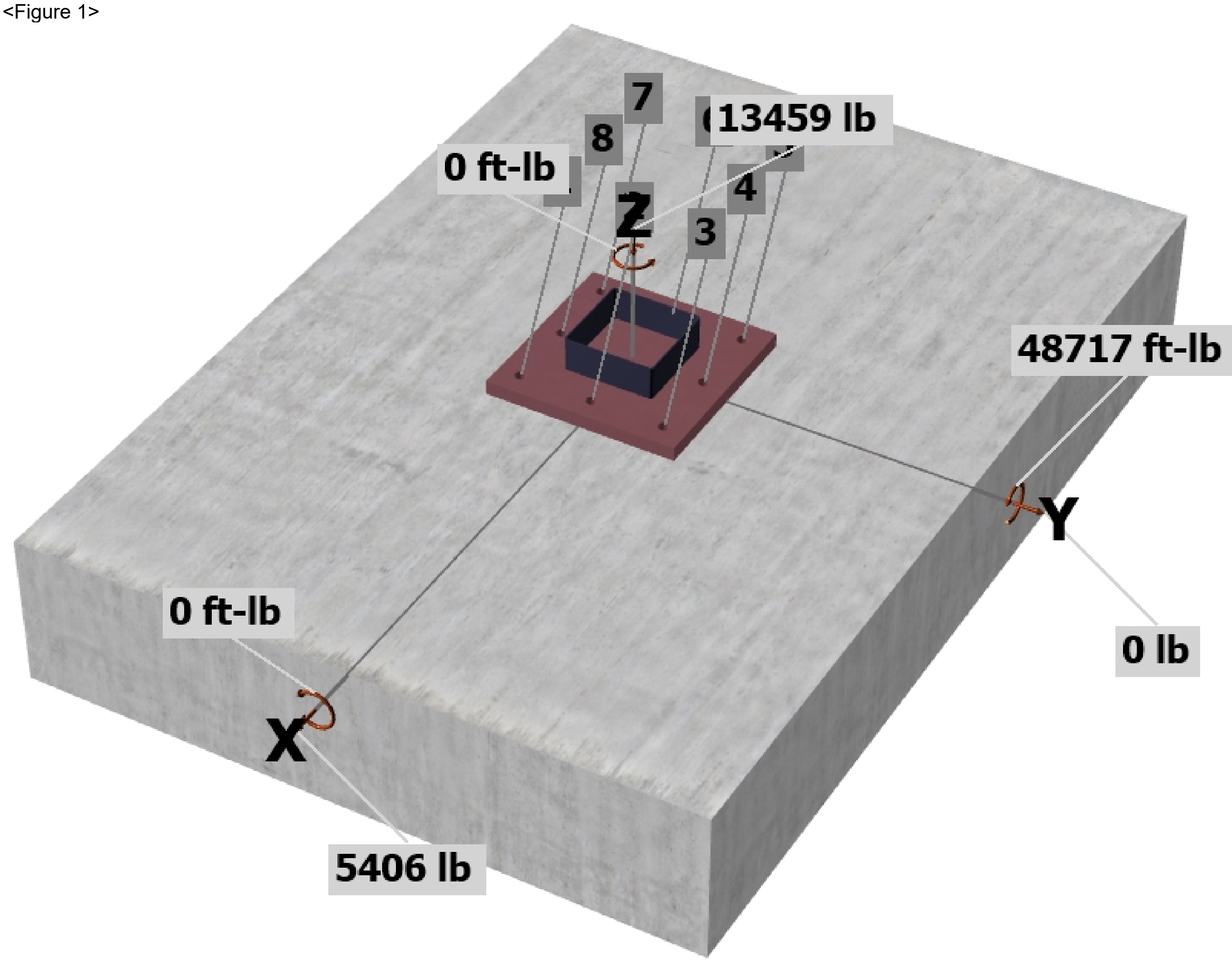
Recommended Anchor
Anchor Name: PAB Pre-Assembled Anchor Bolt - PAB8 (1"Ø)

Load and Geometry
Load factor source: ACI 318 Section 5.3
Load combination: not set
Seismic design: No
Anchors subjected to sustained tension: Not applicable
Apply entire shear load at front row: No
Anchors only resisting wind and/or seismic loads: No

Strength level loads:

N_{ua} [lb]: -13459
V_{uax} [lb]: 5406
V_{uay} [lb]: 0
M_{ux} [ft-lb]: 0
M_{uy} [ft-lb]: 48717
M_{uz} [ft-lb]: 0

<Figure 1>

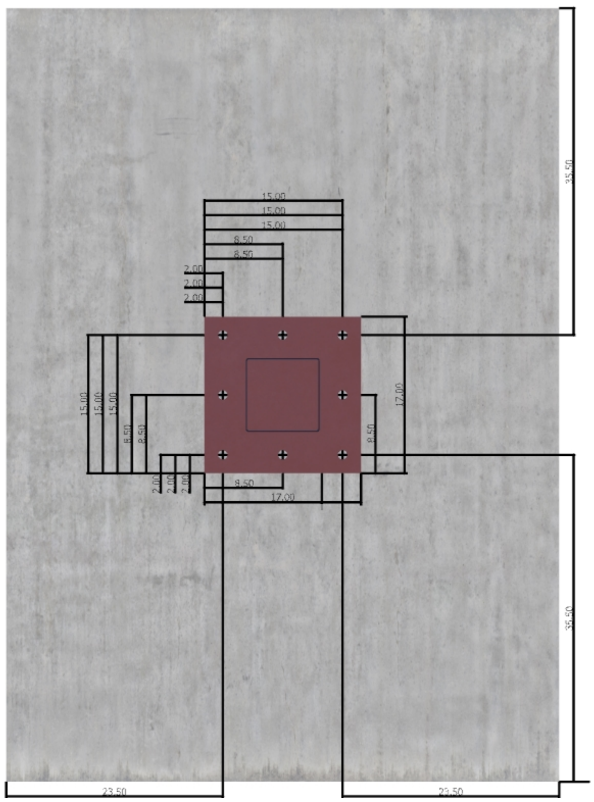


SIMPSON Strong-Tie®

Anchor Designer™
Software
Version 3.1.2209.3

Company:	Enterprise Engineering Consultants, Ltd.	Date:	12/7/2023
Engineer:	Daniel P. Seymour	Page:	3/6
Project:	14837 R		
Address:	710 French Street, Peshtigo, WI 54157		
Phone:	715-582-4501		
E-mail:	dps@eecltd.com		

<Figure 2>

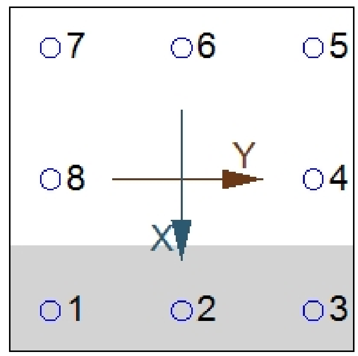


3. Resulting Anchor Forces

Anchor	Tension load, N_{ua} (lb)	Shear load x, V_{uax} (lb)	Shear load y, V_{uay} (lb)	Shear load combined, $\sqrt{(V_{uax})^2+(V_{uay})^2}$ (lb)
1	0.0	675.8	0.0	675.8
2	0.0	675.8	0.0	675.8
3	0.0	675.8	0.0	675.8
4	3731.3	675.8	0.0	675.8
5	11144.1	675.8	0.0	675.8
6	11144.1	675.8	0.0	675.8
7	11144.1	675.8	0.0	675.8
8	3731.3	675.8	0.0	675.8
Sum	40894.8	5406.0	0.0	5406.0

Maximum concrete compression strain (‰): 0.28
Maximum concrete compression stress (psi): 1223
Resultant tension force (lb): 40895
Resultant compression force (lb): 54354
Eccentricity of resultant tension forces in x-axis, e'_{Nx} (inch): 0.00
Eccentricity of resultant tension forces in y-axis, e'_{Ny} (inch): 1.41
Eccentricity of resultant shear forces in x-axis, e'_{Vx} (inch): 0.00
Eccentricity of resultant shear forces in y-axis, e'_{Vy} (inch): 0.00

<Figure 3>



4. Steel Strength of Anchor in Tension (Sec. 17.6.1)

N_{sa} (lb)	ϕ	ϕN_{sa} (lb)
35150	0.75	26363

5. Concrete Breakout Strength of Anchor in Tension (Sec. 17.6.2)

$N_b = k_c \lambda_a \sqrt{f'_c} h_{ef}^{1.5}$ (Eq. 17.6.2.2.1)

k_c	λ_a	f'_c (psi)	h_{ef} (in)	N_b (lb)
24.0	1.00	4000	10.250	49811

$\phi N_{cbg} = \phi\ (A_{Nc} / A_{Nco})\ \Psi_{ec,N}\ \Psi_{ed,N}\ \Psi_{c,N}\ \Psi_{cp,N} N_b$ (Sec. 17.5.1.2 & Eq. 17.6.2.1a)

A_{Nc} (in^2)	A_{Nco} (in^2)	$c_{a,min}$ (in)	$\Psi_{ec,N}$	$\Psi_{ed,N}$	$\Psi_{c,N}$	$\Psi_{cp,N}$	N_b (lb)	ϕ	ϕN_{cbg} (lb)
1860.00	945.56	23.50	0.916	1.000	1.00	1.000	49811	0.70	62812

6. Pullout Strength of Anchor in Tension (Sec. 17.6.3)

$\phi N_{pn} = \phi \Psi_{c,P} N_p = \phi \Psi_{c,P} 8 A_{brg} f'_c$ (Sec. 17.5.1.2, Eq. 17.6.3.1 & 17.6.3.2.2a)

$\Psi_{c,P}$	A_{brg} (in^2)	f'_c (psi)	ϕ	ϕN_{pn} (lb)
1.0	5.15	4000	0.70	115450

SIMPSON Strong-Tie®

Anchor Designer™ Software
Version 3.1.2209.3

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8. Steel Strength of Anchor in Shear (Sec. 17.7.1)

V_{sa} (lb)	ϕ_{grout}	ϕ	$\phi_{grout}\phi V_{sa}$ (lb)
21090	0.8	0.65	10967

9. Concrete Breakout Strength of Anchor in Shear (Sec. 17.7.2)

Shear perpendicular to edge in x-direction:

$V_{bx} = \min|7(l_e/d_a)^{0.2}\sqrt{d_a}\lambda_a\sqrt{f'_c}c_{a1}^{1.5}; 9\lambda_a\sqrt{f'_c}c_{a1}^{1.5}|$ (Eq. 17.7.2.2.1a & Eq. 17.7.2.2.1b)

l_e (in)	d_a (in)	λ_a	f'_c (psi)	c_{a1} (in)	V_{bx} (lb)
8.00	1.000	1.00	4000	15.67	35297

$\phi V_{cbgx} = \phi\,(A_{Vc}/A_{Vco})\Psi_{ec,V}\Psi_{ed,V}\Psi_{c,V}\Psi_{h,V}V_{bx}$ (Sec. 17.5.1.2 & Eq. 17.7.2.1b)

A_{Vc} (in^2)	A_{Vco} (in^2)	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{c,V}$	$\Psi_{h,V}$	V_{bx} (lb)	ϕ	ϕV_{cbgx} (lb)
960.00	1104.50	1.000	1.000	1.000	1.212	35297	0.70	26026

Shear parallel to edge in y-direction:

$V_{bx} = \min|7(l_e/d_a)^{0.2}\sqrt{d_a}\lambda_a\sqrt{f'_c}c_{a1}^{1.5}; 9\lambda_a\sqrt{f'_c}c_{a1}^{1.5}|$ (Eq. 17.7.2.2.1a & Eq. 17.7.2.2.1b)

l_e (in)	d_a (in)	λ_a	f'_c (psi)	c_{a1} (in)	V_{bx} (lb)
8.00	1.000	1.00	4000	23.50	64845

$\phi V_{cbgy} = \phi\,(2)(A_{Vc}/A_{Vco})\Psi_{ec,V}\Psi_{ed,V}\Psi_{c,V}\Psi_{h,V}V_{bx}$ (Sec. 17.5.1.2, 17.7.2.1(c) & Eq. 17.7.2.1b)

A_{Vc} (in^2)	A_{Vco} (in^2)	$\Psi_{ec,V}$	$\Psi_{ed,V}$	$\Psi_{c,V}$	$\Psi_{h,V}$	V_{bx} (lb)	ϕ	ϕV_{cbgy} (lb)
1336.00	2485.13	1.000	1.000	1.000	1.484	64845	0.70	72440

10. Concrete Pryout Strength of Anchor in Shear (Sec. 17.7.3)

$\phi V_{cpg} = \phi k_{cp}N_{cbg} = \phi k_{cp}(A_{Nc}/A_{Nco})\Psi_{ec,N}\Psi_{ed,N}\Psi_{c,N}\Psi_{cp,N}N_b$ (Sec. 17.5.1.2 & Eq. 17.7.3.1b)

k_{cp}	A_{Nc} (in^2)	A_{Nco} (in^2)	$\Psi_{ec,N}$	$\Psi_{ed,N}$	$\Psi_{c,N}$	$\Psi_{cp,N}$	N_b (lb)	ϕ	ϕV_{cpg} (lb)
2.0	2162.25	945.56	1.000	1.000	1.000	1.000	49811	0.70	159467

11. Results

Interaction of Tensile and Shear Forces (Sec. 17.8)

Tension	Factored Load, N_{ua} (lb)	Design Strength, $øN_n$ (lb)	Ratio	Status
Steel	11144	26363	0.42	Pass
Concrete breakout	**40895**	**62812**	**0.65**	**Pass (Governs)**
Pullout	11144	115450	0.10	Pass

Shear	Factored Load, V_{ua} (lb)	Design Strength, $øV_n$ (lb)	Ratio	Status
Steel	676	10967	0.06	Pass
T Concrete breakout x+	**5406**	**26026**	**0.21**	**Pass (Governs)**
|| Concrete breakout y+	**2027**	**72440**	**0.03**	**Pass (Governs)**
Pryout	5406	159467	0.03	Pass

Interaction check	$N_{ua}/\phi N_n$	$V_{ua}/\phi V_n$	Combined Ratio	Permissible	Status
Sec. 17.8.1	0.65	0.00	65.1%	1.0	Pass

PAB8 (1"Ø) with hef = 10.250 inch meets the selected design criteria.

Base Plate Thickness

Required base plate thickness: 1.173 inch

12. Warnings

- Designer must exercise own judgement to determine if this design is suitable.

MCELROY
METAL

Architectural Colors

STANDARD COLORS

REGAL WHITE

BONE WHITE

SURREY BEIGE

SANDSTONE

ALMOND

BUCKSKIN

ASH GRAY

SLATE GRAY

CHARCOAL

MATTE BLACK

MEDIUM BRONZE

DARK BRONZE

PATINA GREEN

EVERGREEN

MANSARD BROWN

COLONIAL RED

ROMAN BLUE

PATRICIAN BRONZE

TERRA COTTA

ALL COLORS ARE ENERGY STAR COMPLIANT

ENERGY STAR PARTNER

MCELROY METAL

Architectural Colors

DEEP-TONE PREMIUM COLORS

ADDITIONAL COST WILL APPLY.

REGAL BLUE

BRITE RED

HARTFORD GREEN

BRANDYWINE

* Colors are representative of colors offered and are not intended for matching purposes. Before placing an order, please request an actual color sample from McElroy Metal.

COLOR	*INVENTORY				
	Sunnyvale	Clinton	Peachtree	Adelanto	Houston
Almond		√			
Ash Gray	√	√	√	√	√
Bone White	√		√		√
Brandywine	√	√	√		√
Brite Red	√	√	√	√	√
Buckskin					√
Champagne Metallic					√
Charcoal	√	√	√	√	√
Colonial Red	√	√	√	√	√
Copper Penny Metallic	√		√	√	√
Dark Bronze	√	√	√	√	√
Evergreen	√	√	√	√	√
Hartford Green	√		√	√	√
Leadcoat					√
Mansard Brown	√		√	√	√
Matte Black	√	√	√	√	√
Medium Bronze	√	√	√	√	√
Patina Green	√	√	√	√	√
Patrician Bronze	√	√	√	√	√
Preweathered Galvalume					√
Regal Blue	√	√	√	√	√
Regal White	√	√	√	√	√
Roman Blue	√	√	√	√	√
Sandstone	√	√	√	√	√
Silver Metallic		√	√		
Slate Gray	√	√	√	√	√
Surrey Beige	√	√	√	√	√
Terra Cotta					√
Texas Silver Metallic	√				√

*Inventory shown is 24 gauge Galvalume Master Coil. Other gauges and substrates are available and inventory varies by location. Please inquire for specific inventory availability and freight rates.

METALLIC COLORS

ADDITIONAL COST WILL APPLY.

PREWEATHERED GALVALUME

LEADCOAT

SILVER METALLIC

COPPER PENNY METALLIC

TEXAS SILVER METALLIC

CHAMPAGNE METALLIC

ENERGY STAR PARTNER

ALL COLORS ARE ENERGY STAR COMPLIANT

McELROY METAL
Architectural Colors

Paint Specifications

COLOR	REFLECTANCE	EMISSIVITY	SRI
ALMOND	0.60	0.84	70
ASH GRAY	0.39	0.84	41
BONE WHITE	0.71	0.85	86
BRANDYWINE	0.26	0.85	24
BRITE RED	0.42	0.84	45
BUCKSKIN	0.38	0.86	41
CHAMPAGNE METALLIC	0.38	0.80	38
CHARCOAL	0.32	0.85	32
COLONIAL RED	0.33	0.85	34
COPPER PENNY	0.49	0.85	55
DARK BRONZE	0.26	0.84	24
EVERGREEN	0.26	0.84	24
*GALVALUME PLUS	0.69	0.25	65
HARTFORD GREEN	0.25	0.85	23
LEADCOAT	0.37	0.82	38
MANSARD BROWN	0.30	0.85	30
MATTE BLACK	0.27	0.86	26
MEDIUM BRONZE	0.30	0.87	31
PATINA GREEN	0.46	0.85	51
PATRICIAN BRONZE	0.27	0.86	26
PREWEATHERED GALVALUME	0.30	0.79	27
REGAL BLUE	0.26	0.85	24
REGAL WHITE	0.68	0.86	82
ROMAN BLUE	0.26	0.85	24
SANDSTONE	0.54	0.86	63
SILVER METALLIC	0.57	0.78	64
SLATE GRAY	0.43	0.85	47
SURREY BEIGE	0.40	0.86	43
TERRA COTTA	0.35	0.85	36
TEXAS SILVER METALLIC	0.58	0.78	66

*Bare Acrylic Coated Galvalume

Notes:
- Solar Reflectance is a measure of the amount of solar energy that is immediately reflected from the surface.
- Solar Emissivity is the ability of a material to emit the residual heat back into the surrounding atmosphere.
- The Solar Reflectance Index (SRI) is a measure of the roof's ability to reject solar heat, considering reflectance, emissivity and convection across the surface.

General Notes:
- Inventory and color offering can change without notice. Please contact your McElroy representative to confirm availability.
- Other widths and gauges are available on some items.
- Galvalume® is McElroy's standard substrate. G90 is available upon request.
- McElroy Metal features a Kynar 500® coating on all products.

McELROY METAL
CORPORATE OFFICE
1500 HAMILTON RD. • BOSSIER CITY, LA 71111
For more information:
800-562-3576
Website: www.mcelroymetal.com
E-mail: info@mcelroymetal.com

Powder Coating Colors

RCP Shelters, Inc.
info@rcpshelters.com
772-288-3600
www.rcpshelters.com

Sky White	Sky White II	Antique White	AG Off White	Enclosure Beige	ANSI 70 Gray
ANSI 61 Gray	ANSI 49 Gray	Crane Gray	AG Yellow	Traffic Yellow	Safety Yellow
Industrial Yellow	Construction Yellow	Safety Orange	Bright Red	Tractor Red	Tractor Green
Shaker Green	Evergreen	Booth Light Blue	Safety Blue	Border Blue	Tractor Blue
Building Brown	Jet Black				

**Colors shown are internet representations and can only approximate the actual color.
To accurately view color, contact us to request a color chart

SECTION 10 73 46
PRE-FABRICATED SITE SHELTERS

PART 1 GENERAL

1.1 SUMMARY

A. Design, fabrication, finishing, and delivery of pre-engineered, factory-fabricated site shelters.

B. Site work related to installation, by Contractor or Owner, including:
   1. Unloading and temporary storage, if any.
   2. Soil testing, if necessary.
   3. Site preparation.
   4. Column foundations, rebar, anchor bolts, and anchor embedment.
   5. Concrete slab and embedment.
   6. Erection.
   7. Field touch up painting of factory finishes, if necessary.

C. Site access for delivery vehicles to be provided by Owner.

D. Related Sections: Section 033000 - Cast-In-Place Concrete: Concrete footings and slabs.

1.2 SYSTEM DESCRIPTION

A. Design shall meet or exceed applicable building code.

B. Pre-fabricated package shall include structural steel framing members, T&G wood roof deck, wood fascia, and fasteners. Roofing may be supplied by manufacturer or others.

C. All bolts shall be hidden, concealed inside the steel tubes.

D. Field labor required to install the pre-fabricated parts. Onsite welding shall not be required or permitted.

1.3 REFERENCES

A. American Society of Testing Material (ASTM)
   1. ASTM A307 - Standard Specification for Carbon Steel Bolts and Studs
   2. ASTM A325 - Standard Specification for Structural Bolts, Steel, Heat Treated
   3. ASTM A500 - Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes
   4. ASTM A563 - Standard Specification for Carbons and Alloy Steel Nuts
   5. ASTM A572 - Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel

B. American Institute of Steel Construction (AISC)

C. American Welding Society (AWS)

D. Steel Structures Painting Council (SSPC); SSPC-SP10 - Near-White Blast Cleaning

E. American Institute of Timber Construction (AITC)

F. Leadership in Energy and Environmental Design (LEED)

G. OSHA Standards 29 CFR, Part 1926, Subpart R (Steel Erection), Standard Number 1926.755: Compliance requires a minimum of four anchor bolts per column.

1.4 QUALITY ASSURANCE

A. Designer Qualifications: Design under direct supervision of a Professional Engineer experienced in design of this type of work and licensed in the State where the Project is located.

B. Manufacturer Qualifications: Company experienced in design and manufacture of shelters of the type specified, and having the following:
   1. Minimum five years of experience in design and fabrication of pre-fabricated steel shelters.
   2. Three references of similar shelters completed within the past year.
   3. Fabricator membership in American Institute of Steel Construction (AISC), requiring quality control documentation and procedures. Provide current AISC shop certification upon request.
   4. All welding to be performed to AWS standards by AWS certified welders. Provide welding certification upon request.

C. Perform the work in accordance with applicable federal, State, and local building and safety codes and regulations.

1.5 SUBMITTALS

A. Minimum 5 sets of shop drawings, showing all details of construction, including foundation sizes, reinforcement, and locations.
   1. Provide the licensed professional engineer’s AL state stamp or seal on the shop drawings.
   2. Provide the licensed professional engineer’s AL state stamp or seal on the structural calculations.

B. Selection Samples: For each finish product specified, color charts representing manufacturer's full range of available colors.

C. Warranty
   1. Provide minimum ten year frame warranty against manufacturer defects.
   2. Provide roofing manufacturer’s limited warranty.

1.6 DELIVERY, STORAGE, AND PROTECTION

A. Package factory-finished steel components in foam, cardboard, and stretch wrap to protect the finish during transit.

B. Wood roof deck load wrapped and banded together in bundles.

C. Shipped knocked down for minimal shipping charges.

D. Deliver products to project site in manufacturer's protective packaging.

E. Follow shelter manufacturer's recommendations and instructions, including those printed on the shop drawings. To minimize damage during unloading, use only padded forks or non-marring slings.

F. Store products in manufacturer's unopened packaging well off the ground and covered out of weather until ready for installation.

PART 2 PRODUCTS

2.1 GENERAL

A. Model: TS-G60114-2T-06-RE-TG as manufactured by RCP Shelters, Inc.

B. Size and dimensions
   1. Shape: Rectangular
   2. Dimensions: reference preliminary drawings
   3. Roof Style: Two Tiered Gable
   4. Roof Pitch: 6:12
   5. Eave Height: minimum 14'-0"
   6. Quantity: 1

C. Approved Manufacturer: RCP Shelters, Inc.
   1. 2100 SE Rays Way, Stuart, FL 34994.
   2. Toll Free: 800-525-0207
   3. Fax: 772-288-0207
   4. Website: www.rcpshelters.com
   5. Email: info@rcpshelters.com

D. Substitutions: Products other than specified must request and receive approval in writing by addendum at least ten (10) days prior to the bid date. See Instructions to Bidders for further instructions.

2.2 STRUCTURAL COMPONENTS

A. Structural Framing: fabricated for field assembly using bolted connections with no welding required or permitted; cold-formed shapes prohibited.
   1. Columns & Beams: ASTM A500 Grade C structural steel tube. The following shapes are prohibited: I-beams, wide-flange beams, C-channels, Z-shapes.
   2. Plates: ASTM A572 Grade 50.
   3. Compression Ring: steel plate, ASTM A572 Grade 50.
   4. Fasteners
      a. Bolts: ASTM A325 high strength bolts.

b. Nuts: ASTM A563 high strength nuts.

5. Column Anchors: ASTM F1554 Grade 36, provided by Contractor or Owner, attached to top of foundation, recessed below slab on grade.

6. Finish: Powder Coat
   a. Pre-blast inspection to catch and remove oil, grease, and other coatings impeding contaminants
   b. Steel grit blasted to near white condition in accordance with SSPC-SP10, removing all oil residue, mil scale, weld spatter, and slag
   c. Five stage phosphate wash (includes detergent, phosphate, rust protectant sealant)
   d. Epoxy powder coat primer
   e. Double topcoat TGIC polyester powder coat; color to be selected from manufacturer's standard color chart by Owner.
   f. Primer plus finish coats shall be 7-12 mils thick
   g. All materials inspected to meet 100% coating, proper cure, film thickness, and impact resistance
   h. Wet-coat alternatives shall not be acceptable.

B. Structural Wood Deck
   1. Species: #1 grade Southern Yellow Pine, kiln dried
   2. Treatment: none
   3. Size: nominal 2" x 8"
   4. Pattern: center matched, tongue and groove, with veed edges 1 side (EV1S)

C. Fascia
   1. Species: C or Better Clear Alaskan Yellow Cedar
   2. Size: nominal 2" x 6"

D. (Optional) Metal Roof System: Galvalume® metal roof panels with exposed fasteners.
   1. Profile: Medallion-Lok
   2. Panel Gauge: minimum 24-gauge
   3. Panel Width: 12" – 16"
   4. Panel Length: Precut to the length from the eave to the ridge
   5. Panel Orientation: Ribs shall run with the pitch of the roof for proper drainage
   6. Trim: Matching roof trim and fasteners
   7. Finish: Factory pre-finished with Kynar 500® paint system; color to be selected by Owner from standard color chart
   8. Underlayment: HydraShell MAX

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that site earthwork has been performed as required for satisfactory installation.

3.2 PREPARATION

A. Install footings and column anchors of size, design, and location as specified by shelter manufacturer on approved shop drawings.

3.3 INSTALLATION

A. Perform installation in accordance with applicable federal, State, and local building and safety codes.

B. Structural special inspections, if required, are to be arranged and paid for by the Contractor or Owner.

C. Install shelter in accordance with manufacturer's approved shop drawing and good construction practices.

D. Install slab in accordance with shelter manufacturer's shop drawings. Slab perimeter dimensions determined by Owner.

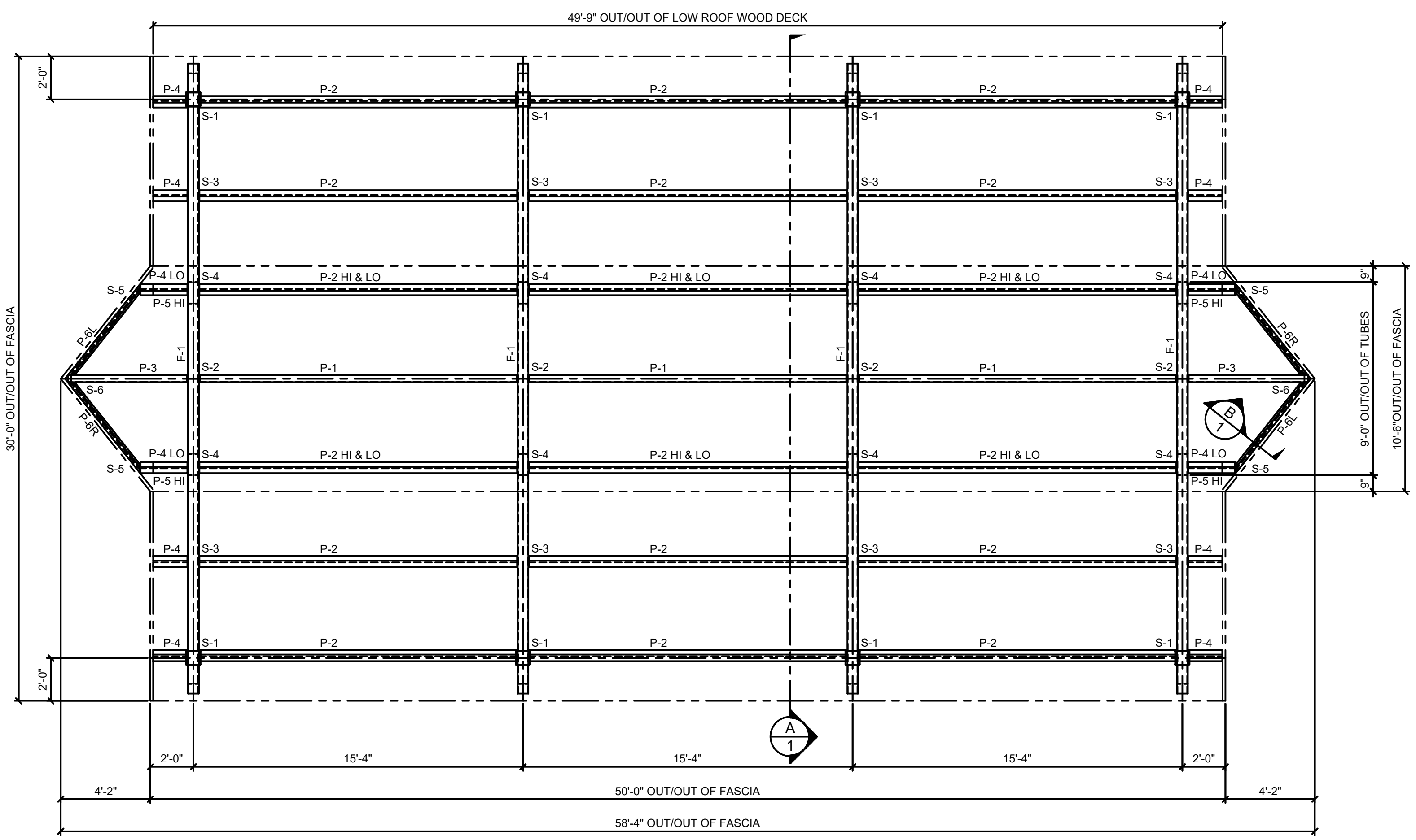
3.4 CLEANING AND PROTECTION

A. Clean installed work to like-new condition.

B. Protect installed products until completion of project.

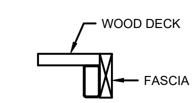
C. Touch-up, repair, or replace damaged finishes before Substantial Completion. Touch up paint provided by manufacturer.

END OF SECTION

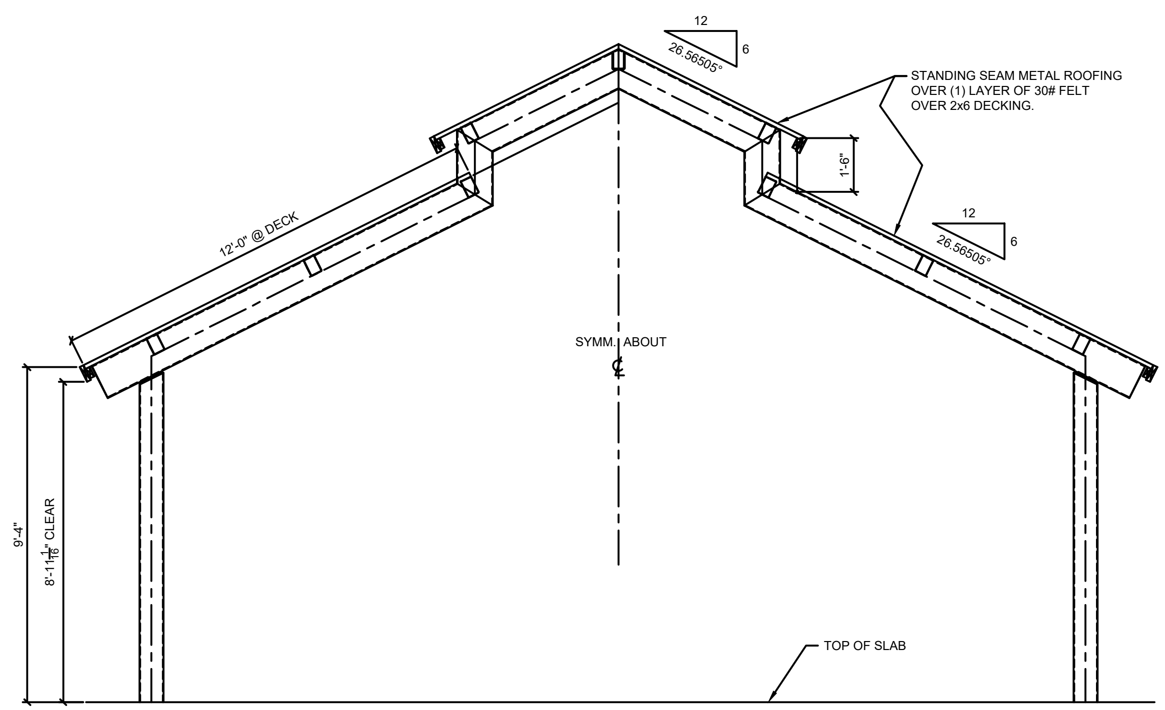


ROOF FRAMING PLAN

SCALE: 1/4" = 1'-0"



SECTION B/1



SECTION A/1

SCALE: 3/8" = 1'-0"

TS-G3058-2T-06-RE

RCP SHELTERS, INC.

2100 SE RAYS WAY, STUART, FL 34994 PO BOX 25, STUART, FL 34995 - 0025

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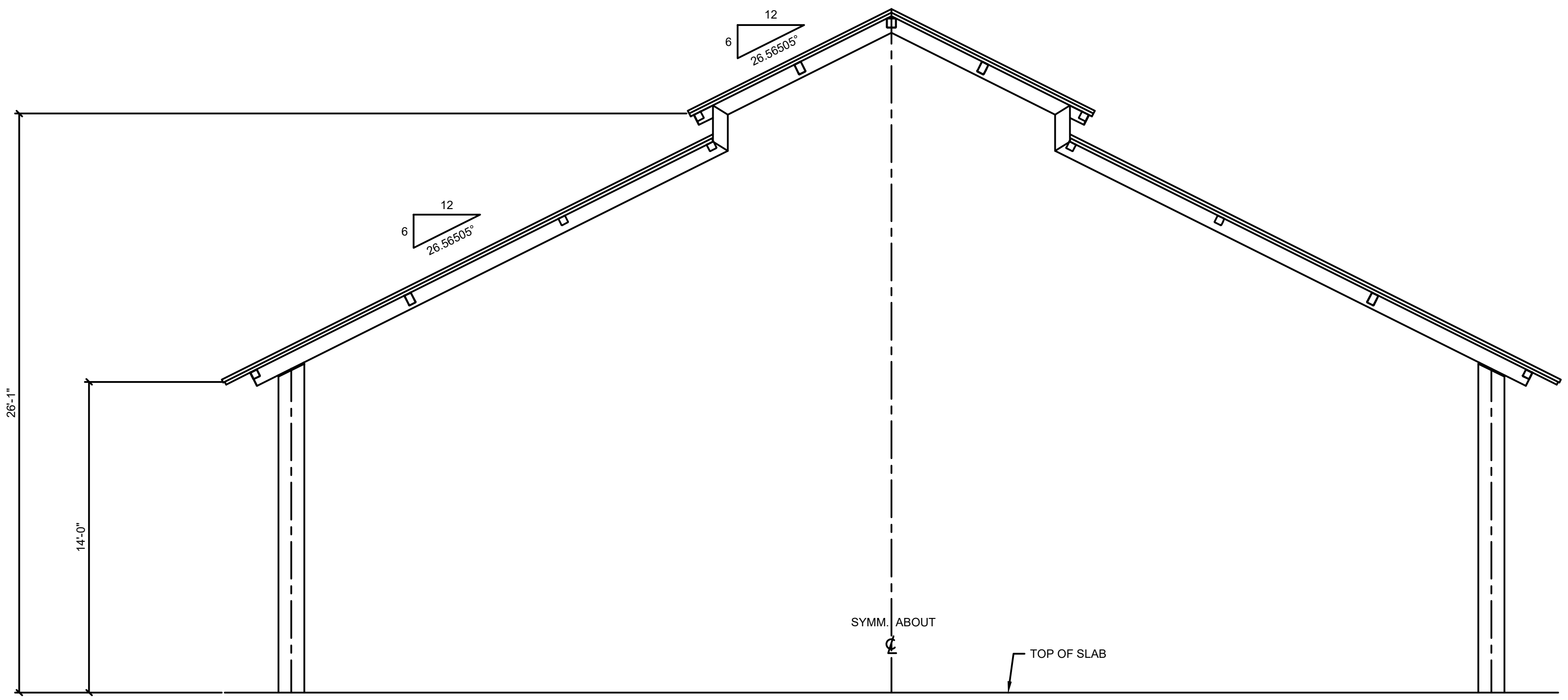
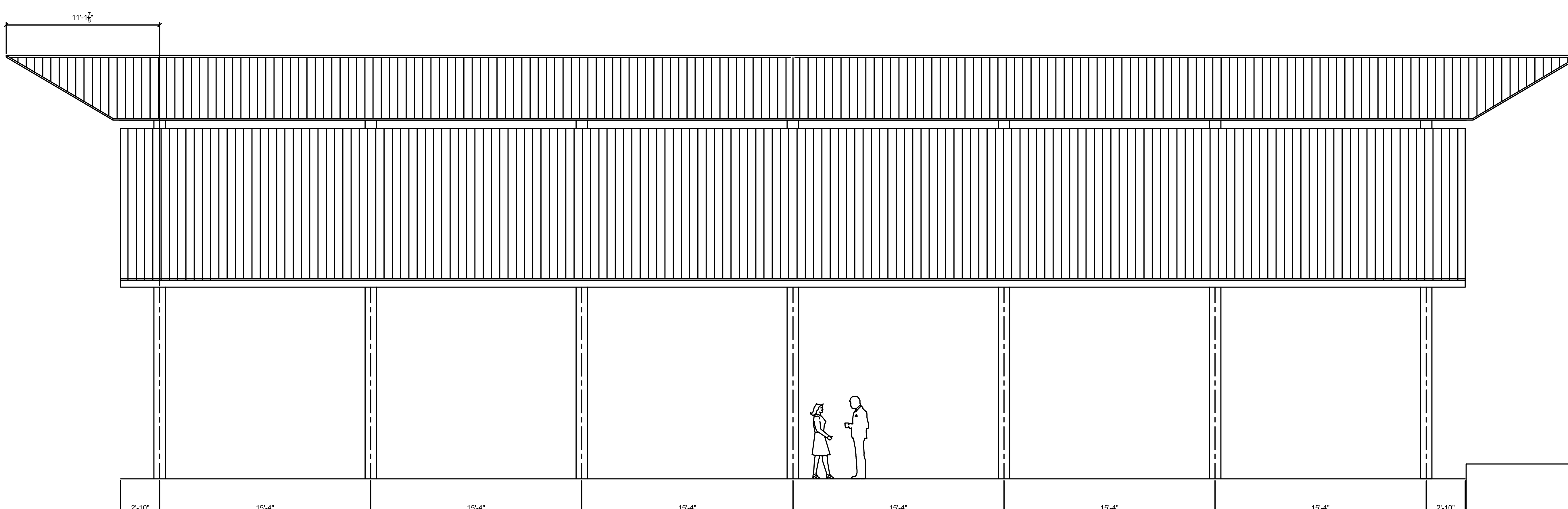
PROJ. NO.:	
DRAWN:	RAR
CHK'D:	
REV 1:	
REV 2:	
REV 3:	
REV 4:	
SHOP DWG NO.:	
EEC JOB NO.:	
SHEET NO.:	1 OF 1



SECTION A/1
SCALE: 1/4" = 1'-0"



ELEVATION

TS-G60114-2T-06-RE-TG

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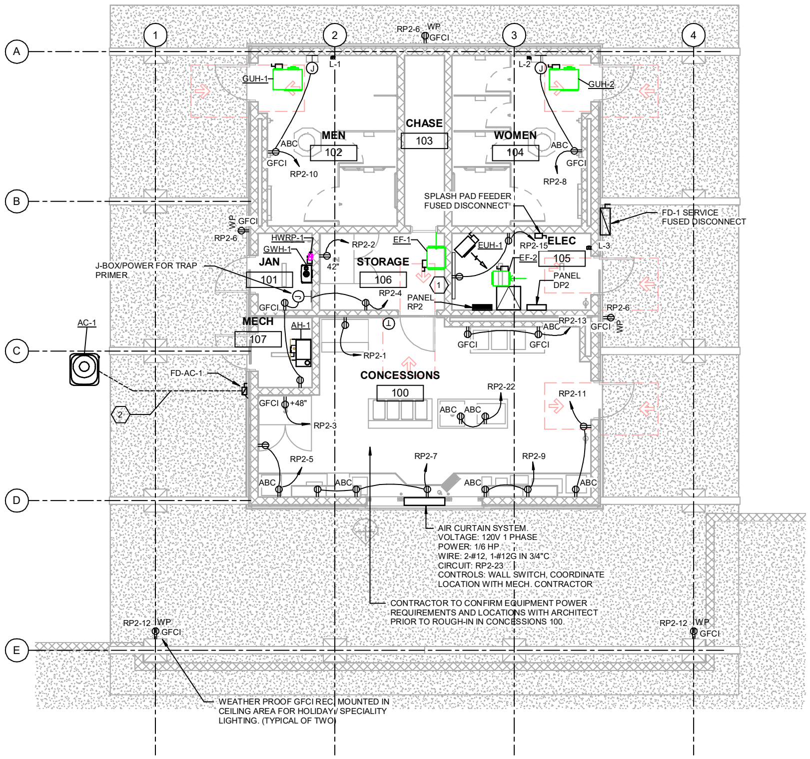
PROJ. NO.:	
DRAWN:	RAR 2-1-21
CHK'D:	
REV 1:	
REV 2:	
REV 3:	
REV 4:	
SHOP DWG NO.:	
EEC JOB NO.:	
SHEET NO.:	1 OF 1

ELECTRICAL UNREFERENCED NOTES

1. FOR LEGEND AND GENERAL NOTES, SEE SHEET E0.01.
2. PROVIDE SINGLE GANG BOX WITH 3/4" CONDUIT UP TO MECHANICALLY PROVIDED T'STAT WITH PULL WIRE/STRING IN CONDUIT. COORDINATE EXACT LOCATIONS/REQUIREMENTS AND ELEVATIONS WITH MECHANICAL PLANS.
3. COORDINATE ALL CONCESSION STAND EQUIPMENT REQUIREING POWER WITH ARCHITECT/OWNER PRIOR TO ROUGH-IN. RECEPTACLES PROVIDED ARE CONVIENCE LOCATIONS ONLY.
4. COORDINATE LOCATION AND WIRING WITH MECHANICAL CONTRACTOR ON EXHAUST FANS OPERATED BY LINE-VOLTAGE THERMOSTATS.

ELECTRICAL REFERENCED NOTES

1. INSTALL A 4'X8'X3/4" CLASS C OR BETTER PLYWOOD FOR COMMUNICATION BACKBOARD. PROVIDE 2 - 3"C FROM COMMUNICATION PEDESTAL WITH PULL STRINGS TO THIS GENERAL LOCATION. COORDINATE PEDESTAL LOCATION WITH LOCAL PROVIDER.
2. RUN CONDUIT UNDERGROUND AND STUB UP THEN USE FLEX CONDUIT WITHIN 24" OF UNIT.

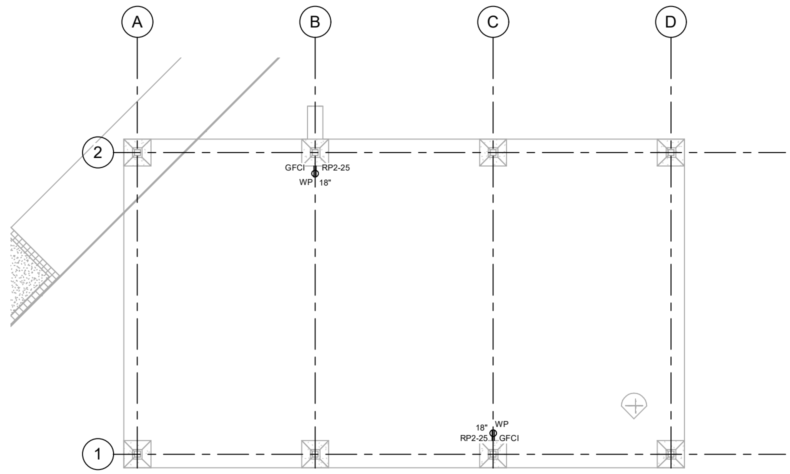


N
PLAN NORTH

1
E1.01

CONCESSIONS BUILDING POWER PLAN - PHASE II

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



N
PLAN NORTH

2
E1.01

PAVILION BUILDING POWER PLAN - PHASE II

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

BARGE DESIGN SOLUTIONS

ALABAMA LICENSED PROFESSIONAL ENGINEER JAMES NICHOLAS EATON 50120

CONCESSIONS/PAVILION POWER PLANS

CITY OF GUNTERSVILLE

GUNTERSVILLE PARK - PHASE 2

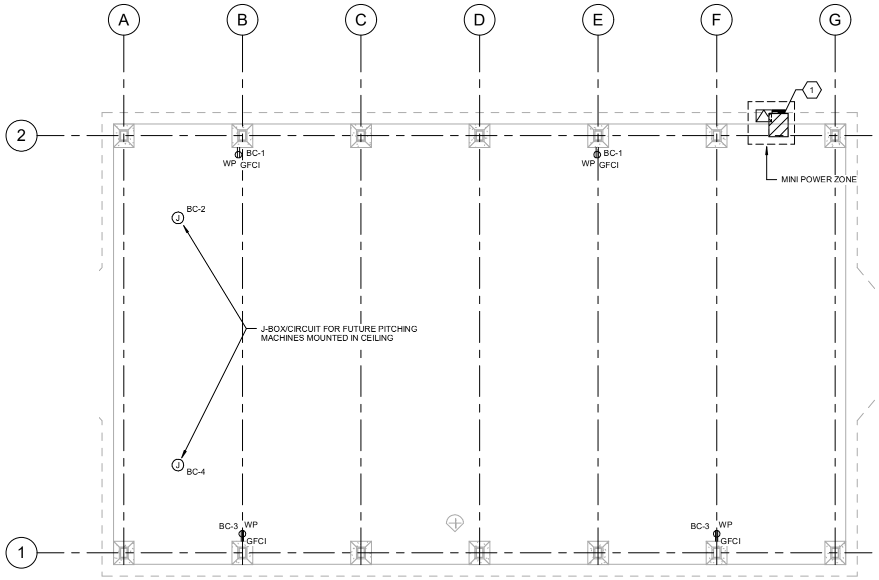
GUNTERSVILLE, ALABAMA

REVISION INFORMATION

REV.	DR	CHK	DATE	DESCRIPTION
0	JNE	BWL	04/21/2023	ISSUED FOR BID

E1.01

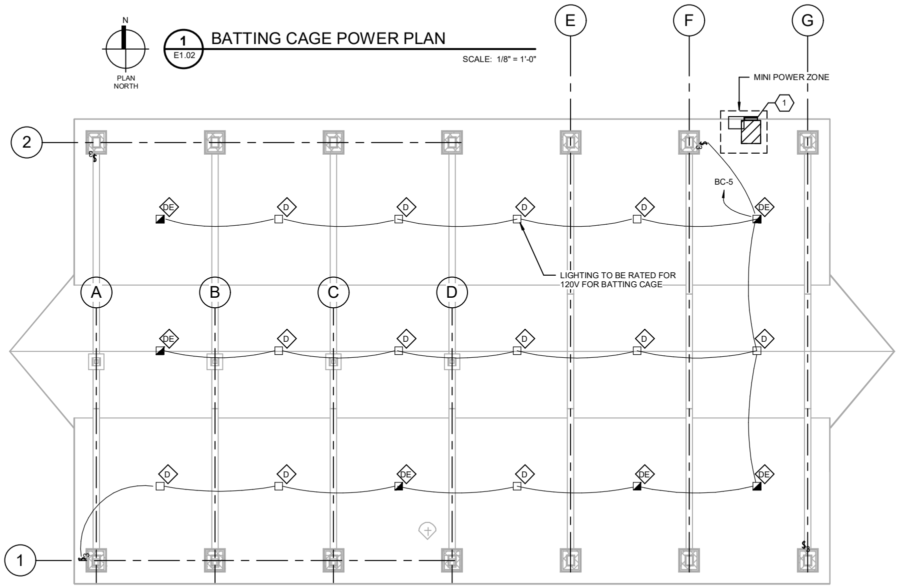
FILE NO. 3710605



1 E1.02 BATTING CAGE POWER PLAN

SCALE: 1/8" = 1'-0"

PLAN NORTH



2 E1.02 BATTING CAGE LIGHTING PLAN

SCALE: 1/8" = 1'-0"

PLAN NORTH

ELECTRICAL UNREFERENCED NOTES

1. FOR LEGEND AND GENERAL NOTES, SEE SHEET E0.01.
2. BATTING CAGE LIGHTING SHALL BE CONTROLLED VIA WALL SWITCH. LIGHTS TO BE ROUTED THROUGH TIMECLOCK SO THAT THEY SHUT OFF DURING UNOCCUPIED TIMES.

KEYED NOTES X

1. MINI POWER ZONE SHALL BE PROVIDED WITH SERVICE RATED MAIN BREAKER

BARGE
DESIGN SOLUTIONS

BATTING CAGE POWER AND LIGHTING

CITY OF GUNTERSVILLE

GUNTERSVILLE PARK

GUNTERSVILLE, ALABAMA

REVISION INFORMATION

REV.	DR	CHK	DATE:	DESCRIPTION:
0	ECH	JNE	04/21/2023	ISSUED FOR BID

E1.02

FILE NO. 3710605

OMI, Inc.

SUBSURFACE EXPLORATION AND
GEOTECHNICAL ENGINEERING STUDY
Proposed
Guntersville Park Improvements
Sunset Drive
Guntersville, Alabama

OMI Job No. 8883

January 17, 2020

5151 Research Drive, N.W., Suite A   Huntsville, AL 35805   Tel: (256) 837-7664   Fax: (256) 837-7677   E-mail: omi@omi-eng.com

OMI, Inc.

January 17, 2020

Barge Design Solutions
200 Clinton Avenue, Suite 800
Huntsville, Alabama 35801

ATTN: Mr. Garett Younanian, P. E.

SUBJECT: Report of Geotechnical Engineering Study
Proposed Guntersville Park Improvements
Guntersville, Alabama
OMI Job No. 8883

Ladies & Gentlemen:

OMI, Inc., has completed a subsurface exploration and geotechnical engineering study for the referenced project. Enclosed is the report of the findings as well as recommendations for foundation design and construction, site preparation, and other geotechnically related site activities. This work was authorized on September 18, 2019, by Mr. Garett Younanian, P. E. of Barge Design Solutions.

OMI, Inc., appreciates the opportunity to be of service to Barge Design Solutions and looks forward to continued involvement with the construction monitoring phase of this project. Please direct any questions concerning this report to the undersigned.

Respectfully submitted,

OMI, Inc.

Tyler A. White, E. I.
Staff Engineer

ALABAMA LICENSED No.29582 PROFESSIONAL

Jeremy C. Moss, P. E.
Senior Engineer

Distribution via email to: Garett.Younanian@bargedesign.com

TABLE OF CONTENTS

APPENDICES

1.0 EXECUTIVE SUMMARY

The subject site is suitable for the support of the proposed structures. Soft to firm soils were encountered in proposed building and pavement areas and will require undercutting. OMI estimates that up to 4-ft of undercutting will be required to remove the poor soils in the building areas and up to 3-ft of undercutting will be required in proposed pavement areas. OMI recommends a contingency of 750 cubic yards of soil be included in the contract to be paid to the contractor on an in-place volume as required and recommended by OMI. Undercut quantities may be significantly reduced if earthwork activities proceed during the drier summer months. OMI has prepared passive pressure diagrams based on unconfined compressive strength tests performed on select split spoon samples. The passive pressure diagrams are included in the appendix of this report. OMI understands these diagrams will be used by others to design the foundations for the light poles. Auger refusal was encountered in 25 of the 31 light pole borings. Five of the light pole borings were terminated at 15-ft deep. The depth to auger refusal, where encountered, ranged from 7.5 to 13.5-ft deep. Specific recommendations for foundation design and site earthwork are given in the body of this report.

2.0 INTRODUCTION

OMI, Inc., has completed a design geotechnical engineering study for the proposed Guntersville Park Improvements. This report outlines the scope of services provided and presents comments and recommendations based on professional opinions formed during the course of this study. This work was authorized on September 18, 2019, by Mr. Garett Younanian, P. E. of Barge Design Solutions. The work was performed in general accordance with OMI Proposal No. P-5664A. Foundation recommendations for the pedestrian culvert beneath Highway 69 are addressed in a separate report.

Assessment of the environmental aspects of this site, including previous land use or the determination of the presence of any chemical, industrial, or hazardous waste is beyond the scope of this study. However, OMI can provide these services if desired.

3.0 EXPLORATION METHODS

The procedures used by OMI for field and laboratory testing are in general accordance with ASTM procedures and established engineering practice. Brief descriptions of the procedures used in this exploration are contained in the Appendix of this report.

Forty-two soil test borings were performed during this study. Boring locations are shown on the appended Boring Location Plan. Drilling and standard penetration testing was performed using track-mounted and truck-mounted drill rigs, each equipped with automatic hammers. A member of the OMI professional staff directed the drilling and logged the soils in the field. Subsequently, each sample was sealed and transported to the office. Selected samples were tested to determine the natural moisture content and Atterberg limits of the soil. These tests assist in confirming the visual classifications as well as provide an index of certain engineering properties. Unconfined compressive strength tests were also performed on select split spoon samples to assist in understanding the in-place soil strength properties. Particle size distribution tests were performed to assist with soil classifications. The soil classifications, field testing data, and the results of the laboratory tests are provided on the Soil Boring Records and in the Appendix of this report.

4.0 SITE CONDITIONS

Guntersville Park is bordered to the east and west by Sunset Drive and Guntersville Lake, respectively. Guntersville Park borders Ogletree Park to the north. The southern end of Guntersville Park tapers to a point as Sunset Drive approaches the bank of Guntersville Lake. Highway 69 traverses the northern half of the subject property in an east to west alignment. Guntersville Park covers an area of about 47 acres with a maximum length and width of about 3,300-ft and 1,000-ft, respectively. Guntersville Park is currently occupied by several buildings including a senior center, gym, clubhouse with two swimming pools, tennis courts, seven athletic fields with associated field houses, dugouts, and restrooms, five parking lots, a boat dock, and a boat ramp just north of Highway 69.

The following topographic information is based on the Marshall County Interactive Maps website. Topographically, the site is relatively flat with an average ground surface slope of about one percent. Ground surface elevations range from about 607-ft MSL near the intersection of Highway 69 and Sunset Drive to 595-ft MSL along the bank of Guntersville Lake. The site is poorly drained. Standing water was observed in several areas of the site during this study. Surface drainage across the site generally flows to various grass lined swales or discharges as sheet flow to Guntersville Lake.

5.0 SUBSURFACE CONDITIONS

Borings encountered topsoil, asphalt pavement, fill soil, alluvial soil, and residual soil deposits. The thickness of the topsoil layer, where encountered, was found to range from about 4 to 12-in with an average of about 7-in. Generally, the topsoil was underlain by fill soil and/or alluvial soil. Residual soil was encountered in each boring beneath the topsoil, fill, or alluvium. The residual soil extended to boring termination or auger refusal in each boring. Auger refusal was encountered in 31 of the 42 borings. Auger refusal was encountered as shallow as 7-ft below the ground surface.

Fill soil or possible fill soil was encountered in 23 of the 42 boring and extended to a maximum depth of about 5-ft below the ground surface. On average, the fill extended to about 2-ft below the surface. The fill soils' plasticity, consistency, color, and constituents varied widely across the site. Generally, the fill soil consisted of a low to high plasticity tan or brown sandy silty clay with trace organics. Standard penetration test (SPT) values in the fill soil ranged from 2 to 12 blows per foot (bpf) with an average of 5 bpf. Pocket Penetrometer values ranged from 1.25 to 4.5 tons per square foot (tsf) with an average of 3.0 tsf. Moisture contents ranged from 13 to 24 percent with an average of 20 percent.

Alluvial soil or possible alluvial soil was encountered in 5 of the 42 borings and extended to depths ranging from 2 to 7-ft below the ground surface with an average depth of about 4-ft. The alluvium was overlain by topsoil or fill and was underlain by residual soil. Generally, the alluvial soil consisted of a low plastic to non-plastic tannish gray sandy silty clay or clayey gravel with up to 40 percent gravel and up to 40 percent coarse to fine sand. SPT values in the alluvium ranged from 2 to 11 bpf with an average of 4 bpf. Pocket Penetrometer values ranged from 0.5 to 4.25 tsf with an average of 1.75 tsf. Moisture contents ranged from 19 to 47 percent with an average of 33 percent.

Residuals soil was encountered beneath the topsoil, pavement, alluvium, and/or fill in each boring. Residual soil extended to boring termination or auger refusal at each boring location. Generally, the residual soil consisted of a low to high plasticity tan or tannish-orange sandy silty clay with trace oxides and up to 10 percent gravel size chert. Thin bedded residual limestone fragments were noted in several borings at depths near auger refusal. Generally, strength values in the residual soil increased with increasing depth. SPT values in the residual soil ranged from 3 to over 30 bpf with an average of 12 bpf. Pocket penetrometer values ranged from 1.25 to 4.5 tsf with an average of 3.75 tsf. Moisture contents ranged from 12 to 36 percent with an average of 22 percent.

Atterberg limits tests were performed on 10 samples collected from the residual, alluvial, and fill soil deposits. Wash 200 sieve tests were also performed to assist with soil classification. Atterberg limits test results are tabulated below along with their respective boring number, depth of sample interval, depositional method, percentage by weight finer than a #200 sieve, and USCS soil classification.

Boring No.	Sample Interval Depth (ft)	Plastic Limit (percent)	Liquid Limit (percent)	Plasticity Index (percent)	Deposition Method	Percent Passing No. 200	USCS Classification
B-1	3.5 – 5.0	21	68	47	Residuum	-	CH
B-3	3.5 – 5.0	15	52	37	Residuum	-	CH
B-4	1.5 – 3.0	16	39	23	Alluvium	75.7	CL
B-4	6.0 – 7.5	15	49	34	Residuum	86.0	CL
B-5	1.5 – 3.0	14	51	37	Residuum	91.3	CH
B-6	1.5 – 3.0	19	41	22	Fill	58.3	CL
B-6	6.0 – 7.5	23	76	53	Residuum	86.2	CH
B-7	1.5 – 3.0	22	53	31	Residuum	-	CH
AP-4	1.5 – 3.0	18	50	32	Residuum	-	CH
LP-25	1.5 – 3.0	20	55	35	Residuum	-	CH

The results tabulated above indicates that the majority of the residual soil is high plastic while the fill soil and residual soil samples indicated a low plasticity. Atterberg limits test results for residual soil samples indicate an increasing plasticity with increasing depth.

Unconfined compressive strength tests were performed on select split spoon samples collected from the fill, alluvial, and residual soil deposits. The unconfined compression test results are provided in the appendix of this report. Test results indicate an undrained shear strength of alluvial and fill soils of 240 psf and 660 psf, respectively. Undrained shear strength values for the residual soils ranged from 580 to 4090 psf with an average of 1920 psf.

Groundwater was observed between 0.5-ft below the ground surface in boring B-4 and 9-ft in boring LP-22 during drilling. Accurate extended water table measurements were difficult to ascertain due to heavy precipitation a short time after drilling and due to poor surface drainage throughout the site. The elevation of the stabilized groundwater table is believed to be generally dependent on the water surface elevation of Guntersville Lake. Based on USGS quadrangle maps, OMI understands the normal pool elevation of Guntersville Lake is 595-ft MSL. Because of the geology of this region, the groundwater levels are also dependent upon seasonal precipitation and locally heavy rainfall events. Consequently, the groundwater levels can and do fluctuate with time.

6.0 SITE GEOLOGY

The subject site is located within the Sequatchie Valley of the Appalachian Plateaus physiographic province. Published geologic information indicates the site is underlain by both the Inman Formation and the Undifferentiated Nashville and Stones River Group. Brief descriptions of these formations are provided below.

Inman Formation

The Inman Formation is of Ordovician age (440-490 million years old) and is composed of interbedded greenish-gray or moderate to dusky-red shale and light-gray peloidal limestone. The Inman Formation is mapped in the Sequatchie Valley.

Nashville and Stones River Groups Undifferentiated

The undifferentiated Nashville and Stones River Group is of the Ordovician age (310-345 million years). In the vicinity of the site, the limestone is composed of medium to dark gray, fine to coarse grained, fossiliferous limestone which is argillaceous in part. Typically, the formation contains yellowish-gray laminated silty limestone near the top. One or more thin beds of bentonite and bentonitic shale are usually present in this formation.

Sinkhole Activity

Sinkholes have occurred in this formation within the vicinity of this site. However, surface observations and the subsurface exploration did not disclose evidence of sinkhole activity on this site. This exploration does not, nor was it intended to, address the possibility of future sinkhole development.

7.0 PROJECT INFORMATION

The following project information is based on site layout drawings and a site master plan provided by Barge Design Solutions. OMI understands the planned construction will consist of ten separate one-story or two-story structures including pavilions, batting cages, restrooms, concession buildings, and a maintenance building. Nine new athletic fields with high mast lighting will also be included. A splash pad will be located just west of the existing gym. Two new parking lots are planned along the west side of Sunset Drive, north of Highway 69 and near the southern end of the site. The existing parking lots located east of the tennis courts and east of the existing gym will be expanded for additional parking. A new deceleration lane and paved entrance to the existing boat ramp and trailer parking area will be located on the north side of Highway 69. A box culvert type pedestrian underpass is also planned under Highway 69. Recommendations for the Highway 69 deceleration lane and pedestrian underpass will be provided in a separate report.

OMI anticipates the maintenance building and restrooms/concession buildings will have CMU walls with a concrete slab on grade. Column and wall loads are expected to be less than 50 kips and 2 kips per linear foot, respectively. Floor loads will be less than 100 psf. The open-air pavilions may use structural steel or wood framing with a concrete slab on grade. Pavilion column loads are expected to be less than 20 kips. Wind loads on the pavilions may result in uplift forces of up to 20 kips. Grading plans were not provided to OMI, but relatively little (<2-ft) of cut or fill is expected in pavement and building areas.

8.0 BASIS FOR RECOMMENDATIONS

The following recommendations are based in part on the preceding project information. This study has utilized the subsurface data, historical information regarding the structural performance of similar structures, and past experience with similar geologic environments to develop professional opinions on which the recommendations are based. Because the structural elements of the design greatly influence the design recommendations, OMI must be provided the opportunity to review the following comments and recommendations in light of changes in building location, elevation, or structural loading.

Standard practice in geotechnical engineering is that all but a few special structures will tolerate 1-in of settlement. Therefore, 1-in is assumed acceptable. Unless otherwise stated, the recommendations in this report are intended to keep post-construction settlement to less than 1-in.

9.0 DESIGN RECOMMENDATIONS

9.1 Overview

Borings for the proposed building areas such as concession stands, restrooms, the splash pad, and the maintenance building encountered soft to firm soils in the upper 4-ft from the existing surface. Firm soils were also encountered in proposed pavement areas. OMI recommends these soils be removed and replaced with compacted fill. Undercutting should extend at least 5-ft outside the horizontal limits of each building area or parking area. OMI anticipates that undercut depths of up to 3 to 4-ft from the existing surface will be required to remove the low-strength soils underneath the building areas. About 2-ft of undercut from the existing will be required in parking areas. This undercut and replacement should be funded with a contingency fund to be paid as needed. OMI should be retained by the owner during construction to authorize undercutting, to observe the excavations, and to record the volume of the undercut excavation before fill is placed. Once the unsuitable soils have been replaced, a typical shallow foundation system may be used to support the proposed buildings. Undercut quantities in parking areas may be significantly reduced if earthwork is performed during the drier summer months. OMI recommends a contingency of 750 cubic yards of soil removal and replacement be included in the contract to be paid to the contractor on an in-place volume as required and recommended by OMI. Positive drainage and dewatering of excavations may be required.

9.2 Foundation Design – High Mast Light Poles

OMI understands high mast light pole foundations will be designed by others. OMI has prepared passive pressure diagrams based on unconfined compressive strength tests performed on select split spoon samples. The passive pressure diagrams are included in the appendix of this report. OMI understands these diagrams will be used by others to design the foundations for the light poles. Appropriate factors of safety must be applied. Due to the relatively shallow depth to bedrock encountered across the site, some high mast light pole foundations may need to be socketed into the bedrock, anchored, or otherwise modified in order to provide adequate passive resistance.

9.3 Foundation Design – Buildings

The following foundation design recommendations are intended to address the concession stands, restrooms, splash pad, and maintenance building. Provided the site is prepared in accordance with the recommendations contained in this text, the proposed structure may be supported by a conventional shallow foundation system bearing on stiff to very stiff residual soil or engineered fill. Footings should be designed based on a maximum allowable bearing pressure of 2,500 psf for individual column footings and 2,000 psf for continuous footings. These pressures include a factor of safety of at least three against general shear failure. To allow for minor inconsistencies in the soil subgrade, individual and continuous footings should have minimum widths of 24-in and 18-in, respectively, regardless of loading. Perimeter footings, and those within unheated areas, should bear at least 2-ft below finished exterior grade to provide adequate confinement and protection against frost and movement due to moisture fluctuations. Interior footings should bear at least 1-ft below the soil subgrade. The ground surface around the building area should be graded to provide positive drainage away from the building.

9.4 Uplift Resistance

The columns for concession stands and pavilions are may have uplift loads due to wind forces. For columns with slight to moderate net uplift loads, OMI recommends that the uplift be resisted by the weight of the concrete in the footings and by extending the footings deeper into the ground. If necessary, stone fill may be placed on top of the footings. Groundwater is expected to be near the bearing depth of the footings at some locations. Also, unusual conditions can occur from time to time allowing perched water to be trapped in footing excavations thus resulting in submerged or buoyant forces on the foundations. Buoyant forces should be considered. Assuming the footings are above the water table and perched conditions are not present, a unit weight of 150 pcf for concrete can be used and a unit weight of 110 pcf for compacted soil fill above the footings can be used. If desired, dense graded base stone, ALDOT no 825 B, can be used and compacted on top of the footings. For design purposes a unit weight of 145 pcf can be used for the dense graded base. If large uplift loads are present OMI can provide additional recommendations for the cohesion and friction forces between the face of the footings and the soil.

9.5 Seismic Classification

OMI has reviewed the soils at the site with respect to the criteria for seismic classification. In accordance with Section 1615.1, Table 1615.1.1 of the 2003 International Building Code, OMI judges the soil to be Site Class C.

9.6 On-Grade Slabs

The slab thickness, reinforcing, and stone base thickness are all a function of the traffic weight, loading frequency, and the soil subgrade strength. A typically loaded maintenance building or concession stand floor slab, where the design loads are less than 100 psf, should be placed on a 4-in thick layer of open-graded compacted gravel. The aggregate layer will distribute the load from the slab to the soil and provide protection against the migration of moisture upward through the floor slab. For enclosed structures, a vapor barrier may be placed beneath the floor slab stone to provide additional protection against moisture migration.

9.7 Fill Soils

Fill soils should be clayey soils free of organics, deleterious debris, or rocks larger than 3-in in diameter. The soil should have a plasticity index (PI) of less than 30 and a maximum dry density of at least 95 pcf as determined by the standard Proctor (ASTM D698). The fill should be compacted to at least 95 percent of the soil's standard Proctor maximum dry density, SPMDD. The top 1-ft beneath the building and pavement areas should be compacted to 100 percent SPMDD.

High plastic soils were encountered at this site. For economic considerations, these soils may be used as fill provided that the Owner realizes that the risk of movement due to shrink/swell will be present. These risks can be greatly reduced by placing the highly plastic soil near the base of the fill and limiting the upper 3-ft of fill to moderate and low plasticity clays. The highly plastic clay will be difficult to work when it is wet.

9.8 Pavement Areas

Surface parking and entrance drive areas should be prepared in accordance with the general recommendations for stripping and fill placement stated elsewhere in this text, except the upper 1-ft must be compacted to at least 100 percent of the standard Proctor maximum dry density. Topsoil stripping depths may be reduced within flexible pavement areas to leave some slightly organic soil in place. Close monitoring will be required to achieve this cost savings. Specific traffic frequency and loading information has not been provided; however, assuming that the paved areas can be broken into two categories with the listed frequencies and loading being acceptable, the following pavement sections may be used.

AUTOMOBILE PARKING -	Maximum 1000 vehicles per day (VPD) consisting of automobile traffic and less than 5 percent medium truck traffic. No heavy trucks.
TRUCK PARKING/DOCKS -	Maximum 3000 VPD including not more than 2 heavy trucks per day.

FLEXIBLE PAVEMENT DESIGN

PAVEMENT MATERIAL	AUTOMOBILE	TRUCK
ASPHALT SURFACE COURSE (Hot Mix) ALDOT No. 424A, 1/2-in Max. Agg. Size, ESAL Range A/B	2.0 inches	1.5 inches
ASPHALT BINDER COURSE ALDOT No. 424B, ¾-in Max. Agg. Size, ESAL Range A/B	—	3.0 inches
STONE BASE COURSE ALDOT No. 825 B (Compacted to 100% Standard Proctor as per AASHTO T-99)	6.0 inches	6.0 inches
TOTAL THICKNESS	8.0 inches	10.5 inches

All pavement materials and construction methods should conform to the guidelines and requirements of the Alabama Department of Transportation. During placement of the aggregate base and asphalt courses, density tests and thickness measurements should be performed to compare the design section to the constructed section. The soil subgrade should be graded to provide a smooth transition from one pavement section to another. It is imperative that truck traffic be limited to areas specifically designed to carry those vehicles.

Immediately prior to placement of the aggregate base, the subgrade must be proofrolled to judge the stability of the soil. The soil may require recompaction. The stone base course should only be applied to a stable, compact soil subgrade. Asphalt paving should proceed closely after stone placement. If lengthy delays between stone and asphalt paving occur, the stability of the stone and soil subgrade should be checked prior to paving.

Rigid pavement should be specified for areas that will be used for the storage of refuse bins and the operation of waste removal vehicles.

10.0 CONSTRUCTION CONSIDERATIONS

10.1 Site Preparation

To prepare the site for construction, the construction area should be stripped of trees, topsoil, large root zones, and other organic or soft soil. Undercutting should be performed as described in Section 9.1 of this report. Stripping and undercutting should extend at least 5-ft beyond the limits of construction cut and fill. Subsequently, the areas approximately at grade or to receive fill should be proofrolled in the presence of a geotechnical engineer. Proofrolling is performed by repeated passes of a heavy rubber-tired vehicle, such as a loaded dump truck. Any areas judged to deflect excessively during proofrolling should be undercut to a stable soil horizon. Such over-excavation must be backfilled with structural fill placed as described below. Upon reaching subgrade elevation in cut areas, the exposed soil subgrade should be similarly proofrolled and repaired.

10.2 Estimated Topsoil Removal

The presence and depth of topsoil varies across the site. OMI believes that the stripping depth to remove the topsoil in the grassed areas will average about 7-in. Close observation by OMI personnel during construction can allow the disturbed but only slightly organic soils to be compacted in-place or to be used as engineered fill.

10.3 Fill Placement

After proofrolling is complete, placement of structural fill may begin, as necessary. Specific requirements of the soil properties are discussed previously. The soil should be placed in loose lifts, not exceeding 8-in in thickness, and systematically compacted to at least 95 percent of the soil's standard Proctor maximum dry density (ASTM D698) except the top 1-ft should be compacted to 100 percent SPMDD.

10.4 Density Testing

Field density testing should be performed on each lift prior to placement of additional lifts. Test locations should be evenly distributed throughout the fill area and should be performed at the frequencies shown on the following table.

AREA	METHOD OF PLACEMENT AND COMPACTION	INITIAL TEST FREQUENCY	RETEST FREQUENCY
General Site	Large self-propelled equipment	1 test per 5000-ft^2, minimum 3 tests per lift	1 test per failed test
Isolated Areas	Hand-guided equipment	1 test per lift	1 test per failed test
Trench backfill and behind retaining walls	Hand-guided equipment	1 test per 50 linear feet per 6-in of fill	1 test per failed test

Test frequencies may be increased during the early stages of earthwork construction. Compaction requirements should apply to all excavation/backfill operations conducted on the proposed development property.

10.5 Footing Observations

The footing excavation process generates a disturbed layer of soft soil in the excavation bottoms. This soft compressible layer should be removed prior to placement of concrete. Each foundation excavation should be observed by a member of OMI's professional staff to check for local variations in the soil strength as well as the removal of the disturbed layer.

10.6 Foundation Construction

The deeper soils at this site are moderately to highly plastic. Exposing the soils to excessive wetting or drying during construction can cause problems such as heaving or settlement due to shrinking and swelling of the clay. The foundations should be excavated, hand cleaned, checked, and concrete placed as expeditiously as possible. Footing excavations that will be left open for more than 8 hours should be covered for protection.

10.7 Construction Monitoring

The foundation and site preparation recommendations contained in this report are based on the conditions encountered during the subsurface exploration and past experience in this geologic setting. Because subsurface conditions may vary from the anticipated, it is important to have a well-rounded quality control program. Construction monitoring on a project of this nature can serve as an economical means to achieve the best possible foundation system and reduce the potential for future problems. The involvement in the subsurface exploration portion of this project uniquely qualifies OMI, Inc., to provide these services as a party responsible to the Owner. OMI, Inc., strongly recommends that all construction monitoring be performed under contract with the Owner or the Owner's representative.

JOB NAME: GUNTERSVILLE PARK IMPROVEMENTS 1500 SUNSET DRIVE GUNTERSVILLE, ALABAMA	OMI, Inc. 5151 Research Dr. NW Huntsville, AL 35805 Ph: (256) 837-7664 Fax: (256) 837-7677	BORING LOCATION PLAN	JOB NO.: 8883 DATE: 01-17-2020 SCALE: 1" = 200' DRAWN BY: DAH DWG NO: 8883 - 1

OMI, Inc.

5151 Research Drive, N.W., Suite A   Huntsville, AL 35805

Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: B-1

Driller: South Bros.   Drill Model: Mobile B-47   Hammer Type: Auto   Hammer Efficiency: 96%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	4	20	3.5						
				RED CLAYEY SAND FILL	5	24	2.5						
5				SANDY SILTY CLAY with trace organics, 20% fine sand, 80% fines, low plasticity, brown, firm, moist, FILL, CL	5	32	2.5	68	21				
				SANDY SILTY CLAY, 15% fine sand, 85% fines, high plasticity, tannish yellow, firm to stiff, moist, residuum, CH	7	26	3.75						
					100+	26	4.5						
10				CLAY WITH LIMESTONE FRAGMENTS									
				AUGER REFUSAL @ 11.5-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 11.5   DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19   DEPTH TO EXTENDED WATER: Backfilled on 12/12/19

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5151 Research Drive, N.W., Suite A Huntsville, AL 35805

Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: B-2

Driller: South Bros. Drill Model: CME 45 Hammer Type: Auto Hammer Efficiency: 88%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				ASPHALT									
				SANDY SILTY CLAY with trace oxides, 20% fine sand, 80% fines, high plasticity, tannish gray, firm to stiff, moist, residuum, CH	3	20	2.0						
					7	24	4.0						
5													
					9	22	4.5						
					18	26	3.5						
10				CLAY WITH LIMESTONE LENSES									
				AUGER REFUSAL @ 10.5-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 10.5 DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19 DEPTH TO EXTENDED WATER: 1-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: B-3

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	4	20	2.5						
				SANDY SILTY CLAY with trace organics, 20% fine sand, 80% fines, low plasticity, dark tan, firm, moist, FILL, CL	8	19	3.5						
5				SANDY SILTY CLAY with trace organics and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high plasticity, tannish orange, stiff to very stiff, moist, residuum, CH	15	22	4.25	52	15				
					18	23	4.5						
10				Tan Sandy Silty Clay	15	23	4.5						
					12	21	4.5						
15				BORING TERMINATED @ 15-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 15   DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19   DEPTH TO EXTENDED WATER: 0.25-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: B-4

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	2	46	0.75						
				SANDY SILTY CLAY with organics, 25% fine sand, 75% fines, low plasticity, tannish gray, soft, wet, alluvium, CL	2	28	0.5	39	16				
					3	28	2.0						
5				SANDY SILTY CLAY, 15% fine sand, 85% fines, low plasticity, yellowish tan, firm, moist, residuum, CL	5	26	3.0	49	15				
				AUGER REFUSAL @ 8-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 8   DEPTH TO INITIAL WATER: 0.5-ft

DATE: 12/4/19   DEPTH TO EXTENDED WATER: 0.5-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: B-5

Driller: South Bros. Drill Model: CME 45 Hammer Type: Auto Hammer Efficiency: 88%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	4	24	1.5						
				SANDY SILTY CLAY, 10% fine sand, 90% fines, high plasticity, gray, firm to very stiff, moist, residuum, CH	6	25	3.0	51	14				
				Grey Sandy Silty Clay w/ red traces	9		--						
5													
					11	22	3.5						
				AUGER REFUSAL @ 8.5-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 8.5 DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19 DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: B-6

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	6	13	4.0						
				SANDY SILTY CLAY with gravel size chert, 10% gravel, 30% coarse to fine sand, 60% fines, low plasticity, reddish orange, stiff to very stiff, moist, FILL, CL	12	23	4.5	41	19				
					11	41	4.25						
5				SANDY SILTY CLAY, 25% fine sand, 75% fines, low plasticity, tannish gray, very stiff, moist, possible alluvium, CL	10	24	3.5	76	23				
10				SANDY SILTY CLAY with trace oxides, 15% fine sand, 85% fines, high plasticity, tannish orange, stiff to very stiff, moist, residuum, CH	9	24	4.0						
15				AUGER REFUSAL @ 13-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 13 DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19 DEPTH TO EXTENDED WATER: on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: B-7

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	5	20	4.0						
				SANDY SILTY CLAY with trace oxides, 20% fine sand, 80% fines, low plasticity, tan, firm, moist, residuum, CL	9	22	4.5	53	22				
5				SANDY SILTY CLAY with gravel size chert, 10% gravel 15% coarse to fine sand, 75% fines, high plasticity, tannish orange, stiff, moist, residuum, CH	9	24	4.25						
					100+		--						
				AUGER REFUSAL @ 7-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 7 DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19 DEPTH TO EXTENDED WATER: 1.0-ft on 1/10/20

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: AP-1

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY, 20% fine sand, 80% fines, high plasticitiy, tannish orange, firm to very stiff, moist, residuum, CH	4	16	4.0						
					6	30	4.0						
					10	24	4.0						
5				BORING TERMINATED @ 5-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 5 DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19 DEPTH TO EXTENDED WATER: 0.5-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: AP-2

Driller: South Bros. Drill Model: CME 45 Hammer Type: Auto Hammer Efficiency: 88%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				ASPHALT									
				SANDY SILTY CLAY, 15% fine sand, 85% fines, high plasticity, tan, stiff, moist, residuum, CH	8	24	4.0						
					7	29	3.5						
5				BORING TERMINATED @ 5-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 5 DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19 DEPTH TO EXTENDED WATER: Backfilled on 12/4/19

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: AP-3

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				ASPHALT									
				CRUSHED LIMESTONE									
				SANDY SILTY CLAY with gravel size chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, stiff, moist, residuum, CH	7	12	4.5						
					9	21	4.5						
5				BORING TERMINATED @ 5-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 5 DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19 DEPTH TO EXTENDED WATER: Backfilled on 12/4/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: AP-4

Driller: South Bros.   Drill Model: Mobile B-47   Hammer Type: Auto   Hammer Efficiency: 96%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY, 25% fine sand, 75% fines, low plasticity, tannish yellow, firm, moist, FILL, CL	4	22	4.0						
					12	20	4.5	50	18				
				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high plasticity, tannish orange, very stiff, moist, residuum, CH	18	18	4.5						
5				BORING TERMINATED @ 5-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 5   DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19   DEPTH TO EXTENDED WATER: Backfilled on 12/4/19

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-1

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	8		3.0						
				SANDY SILTY CLAY with trace oxides and trace chert, 15% coarse to fine sand, 65% fines, high plasticity, tannish orange, stiff to very stiff, moist, residuum, CH	9	28	4.5						
5					10	29	4.5						
					14		4.5						
10				SANDY SILTY CLAY with gravel size chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, orange, very stiff, moist, residuum, CH	13	23	4.5						
				AUGER REFUSAL @ 12.5-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 12.5 DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19 DEPTH TO EXTENDED WATER: 1.0-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-2

Driller: South Bros.   Drill Model: Mobile B-47   Hammer Type: Auto   Hammer Efficiency: 96%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY with trace organics and trace chert, 20% fine sand, 80% fines, low plasticity, dark brown and red, stiff, moist, FILL, CL	9		3.0						
					9	13	--						
					5		2.25						
5				SANDY SILTY CLAY with gravel size chert, 10% gravel, 10% fine sand, 80% fines, high plasticity, orange, firm to stiff, moist, residuum, CH	7	36	2.75						
				AUGER REFUSAL @ 8-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 8   DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19   DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-3

Driller: South Bros. Drill Model: CME 45 Hammer Type: Auto Hammer Efficiency: 88%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	7		2.0						
				SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, tan, firm, moist, FILL, CL	3	20	1.5						
					5	21	2.0						
5				SANDY SILTY CLAY with gravel size chert, 10% gravel, 20% coarse to fine sand, 70% fines, high plasticity, tan, very stiff, moist, residuum, CH	14	20	4.0						
					15	22	4.5						
10													
				AUGER REFUSAL @ 13.5-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 13.5 DEPTH TO INITIAL WATER: 5-ft

DATE: 12/4/19 DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-4

Driller: South Bros. Drill Model: CME 45 Hammer Type: Auto Hammer Efficiency: 88%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	7	21	4.0						
				SANDY SILTY CLAY with trace organics, 25% fine sand, 75% fines, low plasticity, brown, stiff, moist, FILL, CH	9	21	3.5						
5				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 15% coarse to fine sand, 25% fines, high plasticity, light tannish gray, stiff to very stiff, moist, residuum, CH	10		3.0						
					13	25	4.5						
10				AUGER REFUSAL @ 8-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 8 DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19 DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-5

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY with trace organics, 20% fine sand, 80% fines, low plasticity, brown, soft to stiff, moist, FILL, CL	6		3.5						
					2	23	1.5						
					2		2.0						
5				SANDY SILTY CLAY with trace oxides and trace chert, 15% coarse to fine sand, 85% fines, high plasticity, mottled tan and gray, stiff, moist, residuum, CH	6	26	3.0						
				AUGER REFUSAL @ 7.5-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 7.5   DEPTH TO INITIAL WATER: 3-ft

DATE: 12/3/19   DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-6

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				RED SANDY CLAY FILL	8		3.75						
				SANDY SILTY CLAY with trace oxides, 15% fine sand, 85% fines, high plasticity, tan, firm to stiff, moist, residuum, CH	3	26	2.0						
					4		2.0						
5				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, tannish orange, stiff to very stiff, moist, residuum, CH	8	23	4.5						
					12	20	4.5						
10													
				AUGER REFUSAL @ 13.5-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 13.5   DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19   DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-7

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	4	17	3.0						
				SANDY SILTY CLAY with trace organics, 25% fine sand, 75% fines, low plasticity, brown and red, firm, moist, FILL, CL	6		2.5						
5				SANDY SILTY CLAY with trace chert, 15% fine sand, 85% fines, high plasticity, tannish yellow, stiff, moist, residuum, CH	6	23	2.5						
					7	28	2.75						
10				CLAY WITH LIMESTONE LENSES	100+	19	--						
				AUGER REFUSAL @ 11.5-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 11.5 DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19 DEPTH TO EXTENDED WATER: 1.0-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-8

Driller: South Bros.   Drill Model: Mobile B-47   Hammer Type: Auto   Hammer Efficiency: 96%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	4		2.5						
				SANDY SILTY CLAY with gravel size chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, tannish yellow, firm to very stiff, moist, residuum, CH	100+	23	4.5						
5													
10													
				AUGER REFUSAL @ 13-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 13   DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19   DEPTH TO EXTENDED WATER: 0.5-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-9

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				ASPHALT									
				SANDY SILTY CLAY with gravel size chert, 10% gravel, 20% coarse to fine sand, 70% fines, low plasticity, dark brown, firm, moist, FILL, CL	4		--						
					5		3.5						
5				SANDY SILTY CLAY with trace oxides, 15% fine sand, 85% fines, high plasticity, tannish gray, firm to stiff, moist, residuum, CH	100+	21	4.0						
				AUGER REFUSAL @ 7.5-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 7.5   DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19   DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-10

Driller: South Bros. Drill Model: CME 45 Hammer Type: Auto Hammer Efficiency: 88%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY with trace oxides, 15% fine sand, 85% fines, high plasticity, tan, firm to very stiff, moist, residuum, CH	4		2.5						
					13	19	4.5						
					14	17	4.5						
5													
					13		4.5						
					16	23	4.5						
10													
					12	34	4.0						
15				BORING TERMINATED @ 15-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 15 DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19 DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-11

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				ASPHALT									
				SANDY SILTY CLAY with trace oxides and trace chert, 15% coarse to fine sand, 85% fines, high plasticity, light tannish orange, stiff to very stiff, moist, residuum, CH	7	24	4.0						
5					9	23	4.25						
					10	25	4.5						
10				AUGER REFUSAL @ 8.5-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 8.5   DEPTH TO INITIAL WATER: Dry   OMI,Inc.

DATE: 12/3/19   DEPTH TO EXTENDED WATER: 3.5-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-12

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	3		1.75						
				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, tan, stiff to very stiff, moist, residuum, CH	7	31	4.5						
5					8	20	4.0						
					14	22	4.0						
10				AUGER REFUSAL @ 8-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 8   DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19   DEPTH TO EXTENDED WATER: 0.25-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-13

Driller: South Bros. Drill Model: CME 45 Hammer Type: Auto Hammer Efficiency: 88%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high plasticity, tannish orange, firm to very stiff, moist, residuum, CH	5		3.0						
					13	20	4.0						
5					14		4.5						
					16	20	4.5						
10					11	20	4.5						
					100+		--						
15				BORING TERMINATED @ 15-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 15 DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19 DEPTH TO EXTENDED WATER: 0.5-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-14

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	2		1.25						
				SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, brown, soft, wet, FILL, CL	9	29	4.5						
5				SANDY SILTY CLAY with trace oxides, 15% fine sand, 85% fines, high plasticity, tan, stiff, moist, residuum, CH	9	26	4.5						
				CLAY WITH LIMESTONE FRAGMENTS	22		--						
					100+		--						
10				AUGER REFUSAL @ 10-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 10   DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19   DEPTH TO EXTENDED WATER: 0.5-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-15

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	2	17	2.0						
				SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, brown, soft, moist, FILL, CL	6		4.0						
5				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, tan, stiff to very stiff, moist, residuum, CH	6		--						
					11	20	4.0						
10					24	26	4.5						
				AUGER REFUSAL @ 12-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 12   DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19   DEPTH TO EXTENDED WATER: 0.5-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-16

Driller: South Bros.   Drill Model: CME 45   Hammer Type: Auto   Hammer Efficiency: 88%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	5		2.0						
				SANDY SILTY CLAY with trace oxides, 20% fine sand, 80% fines, low plasticity, brown, firm, moist, FILL, CL	9	20	3.0						
5				SANDY SILTY CLAY with trace oxides, 20% coarse to fine sand, 80% fines, high plasticity, tan, stiff to very stiff, moist, residuum, CH	13		3.5						
					16	20	4.0						
10				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, tannish orange, stiff to very stiff, moist, residuum, CH	15	21	4.5						
					6	31	3.5						
15				BORING TERMINATED @ 15-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 15   DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19   DEPTH TO EXTENDED WATER: 4.0-ft on 12/12/19

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-17

Driller: South Bros. Drill Model: CME 45 Hammer Type: Auto Hammer Efficiency: 88%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				CLAYEY GRAVEL, 40% gravel, 40% coarse to fine sand, 20% fines, non plastic, very loose, wet, alluvium, GC	2	47	--						
					5	27	3.5						
5				SANDY SILTY CLAY, 15% fine sand, 85% fines, high plasticity, tan, firm to very stiff, moist, residuum, CH	8	22	4.0						
					11		3.75						
				AUGER REFUSAL @ 8-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 8 DEPTH TO INITIAL WATER: 1-ft

DATE: 12/4/19 DEPTH TO EXTENDED WATER: on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-18

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY, 25% fine sand, 75% fines, low plasticity, red, firm, moist, FILL, CL	4	24	3.5						
					4	23	3.0						
5				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high plasticity, tannish orange, very stiff, moist, residuum, CH	10	18	3.5						
					11	22	4.5						
				AUGER REFUSAL @ 8-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 8 DEPTH TO INITIAL WATER: 6-ft

DATE: 12/3/19 DEPTH TO EXTENDED WATER: on

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-19

Driller: South Bros.   Drill Model: Mobile B-47   Hammer Type: Auto   Hammer Efficiency: 96%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	6		4.0						
				SANDY SILTY CLAY, 35% fine sand, 65% fines, low plasticity, red, stiff, moist, FILL, CL	3	23	1.5						
5				SANDY SILTY CLAY, 20% fine sand, 80% fines, high plasticity, dark tan and gray, firm, moist, possible FILL, CH	11		4.5						
				SANDY SILTY CLAY with trace chert, 20% coarse to fine sand, 80% fines, high plasticity, yellowish tan, very stiff, moist, residuum, CH	18	23	4.5						
					25	20	4.5						
10				CLAY WITH LIMESTONE LENSES									
				AUGER REFUSAL @ 12.5-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 12.5   DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19   DEPTH TO EXTENDED WATER: Dry to 1.0-ft on 1/10/20

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-20

Driller: South Bros. Drill Model: CME 45 Hammer Type: Auto Hammer Efficiency: 88%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	2	39	1.25						
				SANDY SILTY CLAY with organics, 20% fine sand, 80% fines, low plasticity, tannish gray, soft to stiff, moist, alluvium, CL	7	25	2.0						
5				SANDY SILTY CLAY, 20% fine sand, 80% fines, high plasticity, tannish yellow, stiff to very stiff, moist, residuum, CH	9	25	3.5						
					11	25	4.0						
10				SANDY SILTY CLAY with gravel size chert, 15% gravel, 15% coarse to fine sand, 70% fines, high plasticity, very stiff, moist, residuum, CH	20	30	2.5						
				AUGER REFUSAL @ 11-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 11 DEPTH TO INITIAL WATER: 9-ft

DATE: 12/4/19 DEPTH TO EXTENDED WATER: on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-21

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	3		--						
				SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, brown, firm, moist, FILL, CL	5	21	3.0						
				SANDY SILTY CLAY with trace oxides and chert, 20% coarse to fine sand, 80% fines, high plasticity, tannish orange, very stiff, moist, residuum, CH	13	20	4.5						
5					12	22	4.0						
					12	21	4.5						
10													
				AUGER REFUSAL @ 12.5-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 12.5 DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19 DEPTH TO EXTENDED WATER: Dry to 1.0-ft on 1/10/20

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-22

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	4	23	2.25						
				SANDY SILTY CLAY with organics and trace chert, 25% fine sand, 75% fines, low plasticity, brown, firm to stiff, moist, FILL, CL	6	18	4.0						
					3	19	2.5						
5				SANDY SILTY CLAY, 25% fine sand, 75% fines, low plasticity, tannish gray, firm, moist, alluvium, CL	4	26	1.5						
10				CLAYEY GRAVEL, 35% gravel size chert, 35% coarse to fine sand, 30% fines, high plasticity, yellowish tan, stiff, wet, residuum, GC	9	17	4.5						
					100+		2.0						
15				BORING TERMINATED @ 15-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 15 DEPTH TO INITIAL WATER: 9-ft

DATE: 12/4/19 DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-23

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				RED CLAYEY SAND	6		4.5						
				SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, brown, stiff, moist, FILL, CL	8	14	4.5						
5				SANDY SILTY CLAY, 20% fine sand, 80% fines, high plasticity, tan, firm to stiff, moist, residuum, CH	5	21	1.25						
					7	19	4.0						
				AUGER REFUSAL @ 8-ft									
10													
15													
20													
25													
30													
35													

COMPLETION DEPTH: 8 DEPTH TO INITIAL WATER: Dry

DATE: 12/4/19 DEPTH TO EXTENDED WATER: Dry to 1.0-ft on 1/10/20

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-24

Driller: South Bros.   Drill Model: Mobile B-47   Hammer Type: Auto   Hammer Efficiency: 96%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, tan, firm, moist, FILL, CL	3	18	2.0						
					4	20	3.0						
5				SANDY SILTY CLAY with trace oxides and gravel size chert, 10% gravel, 20% coarse to fine sand, 70% fines, high plasticity, tannish orange, stiff to very stiff, moist, residuum, CH	16	18	4.5						
					18	21	4.5						
10					10	21	4.5						
					9	25	3.5						
15				BORING TERMINATED @ 15-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 15   DEPTH TO INITIAL WATER: Dry   OMI,Inc.

DATE: 12/3/19   DEPTH TO EXTENDED WATER: Backfilled on

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-25

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL	7	18	4.5						
				SANDY SILTY CLAY with gravel size chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, tannish orange, stiff to very stiff, moist, CH	7	19	4.5	55	20				
					13	18	4.5						
5													
					20	22	4.5						
					100+		--						
10				AUGER REFUSAL @ 10-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 10 DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19 DEPTH TO EXTENDED WATER: on

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-26

Driller: South Bros.   Drill Model: Mobile B-47   Hammer Type: Auto   Hammer Efficiency: 96%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, tan, firm to stiff, moist, FILL, CL	4	22	3.0						
					6	23	4.0						
5				SANDY SILTY CLAY with trace oxides and chert, 10% gravel 20% coarse to fine sand, 70% fines, high plasticity, tannish orange, firm to very stiff, moist, residuum, CH	5	25	3.5						
					7	26	4.0						
					18	23	4.5						
10				AUGER REFUSAL @ 10-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 10   DEPTH TO INITIAL WATER: 8-ft

DATE: 12/3/19   DEPTH TO EXTENDED WATER: 2.2-ft on 1/10/20

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-27

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY, 25% fine sand, 75% fines, low plasticity, tan, firm to very stiff, moist, FILL, CL	4	19	2.0						
					10	19	3.0						
5				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high plasticity, tannish orange, very stiff, moist, residuum, CH	12	20	4.5						
					22	19	4.5						
10					17	19	4.5						
15				SANDY SILTY CLAY with gravel size chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, brown, very stiff, moist, residuum, CH	11	31	4.5						
				BORING TERMINATED @ 15-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 15 DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19 DEPTH TO EXTENDED WATER: Dry to 4.0-ft on 1/10/20

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-28

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY with trace oxides and chert, 10% gravel ,20% coarse to fine sand, 70% fines, high plasticity, tannish orange, stiff to very stiff, moist, residuum, CH	8	20	4.5						
					11	19	4.5						
5					13	17	4.5						
					14		--						
10					18	20	4.5						
				AUGER REFUSAL @ 11-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 11 DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19 DEPTH TO EXTENDED WATER: Dry to 2.0-ft on 1/10/20

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Soil Boring Record

JOB NO.: 8883   JOB: Guntersville Park Improvements   LOG OF BORING: LP-29

Driller: South Bros.   Drill Model: Mobile B-47   Hammer Type: Auto   Hammer Efficiency: 96%

Logged By: Tyler White   Boring Location:

City: Guntersville   County: Marshall   State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, yellowish tan, firm, moist, FILL, CL	4	21	2.5						
					8	21	4.5						
5				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 15% coarse to fine sand, 75% fines, high plasticity, tannish orange, stiff to very stiff, moist, residuum, CH	10	20	4.5						
					14	21	4.5						
10					12	21	4.5						
15				AUGER REFUSAL @ 12-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 12   DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19   DEPTH TO EXTENDED WATER: 3.5-ft on 1/10/20

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-30

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				TOPSOIL									
				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high plasticity, tannish orange, stiff to very stiff, moist, residuum, CH	6	19	4.5						
					9	17	4.0						
5					11	19	4.5						
					12	23	4.5						
				CLAY WITH LIMESTONE FRAGMENTS	21		--						
10				AUGER REFUSAL @ 10-ft									
15													
20													
25													
30													
35													

COMPLETION DEPTH: 10 DEPTH TO INITIAL WATER: Dry

DATE: 12/3/19 DEPTH TO EXTENDED WATER: 2.0-ft on 1/10/20

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Soil Boring Record

JOB NO.: 8883 JOB: Guntersville Park Improvements LOG OF BORING: LP-31

Driller: South Bros. Drill Model: Mobile B-47 Hammer Type: Auto Hammer Efficiency: 96%

Logged By: Tyler White Boring Location:

City: Guntersville County: Marshall State: Alabama

DEPTH, FT	ELEVATION	SAMPLES	GRAPHIC	DESCRIPTION	N-VALUE (Uncorrected)	NATURAL MOISTURE	POCKET PENETROMETER TSF	LIQUID LIMIT	Plastic Limit	Percent Passing No. 200	Rock Core Recovery (in/%)	Rock Quality Designation (%)	Fractures per Foot
0				ASPHALT									
				SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, yellowish tan, firm, moist, FILL, CL	4	20	2.0						
5				SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high plasticity, tannish orange, firm to stiff, moist, residuum, CH	4	20	2.75						
					8		--						
10					9		4.5						
15				AUGER REFUSAL @ 13-ft									
20													
25													
30													
35													

COMPLETION DEPTH: 13 DEPTH TO INITIAL WATER: 6-ft

DATE: 12/3/19 DEPTH TO EXTENDED WATER: 4.0-ft on 1/10/20

OMI,Inc.

BORING LEGEND

SOIL SYMBOLS

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES
COARSE GRAIN SOILS MORE THAN 50% RETAINED ON NO. 200 SIEVE	GRAVELS 50% OR MORE OF COARSE FRACTION RETAINED ON #4 SIEVE	CLEAN GRAVELS	GW	WELL-GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
			GP	POORLY GRADED GRAVELS AND GRAVEL-SAND MIXTURES, LITTLE OR NO FINES
		GRAVELS WITH FINES	GM	SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVELS, GRAVEL-SAND-CLAY MIXTURES
	SANDS MORE THAN 50% OF COARSE FRACTION PASSES #4 SIEVE	CLEAN SANDS	SW	WELL-GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
			SP	POORLY GRADED SANDS AND GRAVELLY SANDS, LITTLE OR NO FINES
		SANDS WITH FINES	SM	SILTY SANDS, SAND-SILT MIXTURES
			SC	CLAYEY SANDS, SAND-CLAY MIXTURES
FINE GRAIN SOILS 50% OR MORE PASSES NO. 200 SIEVE	SILTS AND CLAYS	LIQUID LIMIT 50% OR LESS	ML	INORGANIC SILTS, VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS
			CL	INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL	ORGANIC SILTS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS	LIQUID LIMIT GREATER THAN 50%	MH	INORGANIC SILTS, MICACEOUS OR DIATOMACEOUS FINE SANDS OR SILTS, ELASTIC SILTS
			CH	INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY
HIGHLY ORGANIC SOILS			PT	PEAT, MUCK AND OTHER HIGHLY ORGANIC SOILS

ABBREVIATIONS:

SS- SPLIT SPOON SAMPLE

UD- UNDISTURBED SAMPLE

REC-SAMPLE RECOVERY

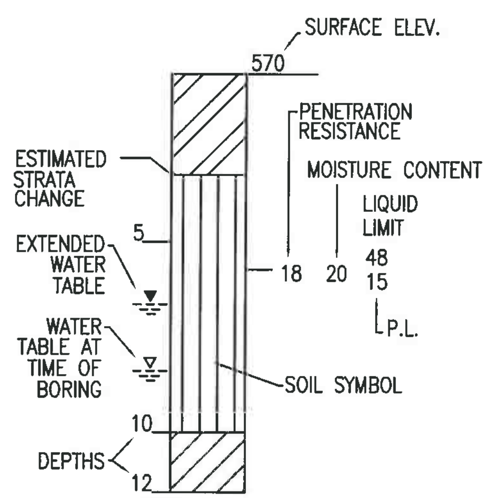
USC-VISUAL UNIFIED SOIL CLASSIFICATION

POCKET PENET- POCKET PENETROMETER READING, TSF

RQD-ROCK QUALITY DESIGNATION

FF- FRACTURE FREQUENCY PER FOOT OF CORE

KEY TO BORING RECORDS OR PROFILES



ROCK SYMBOLS

SANDSTONE

SHALE

GNEISS OR SCHIST

CONGLOMERATE

LIMESTONE OR DOLOMITE

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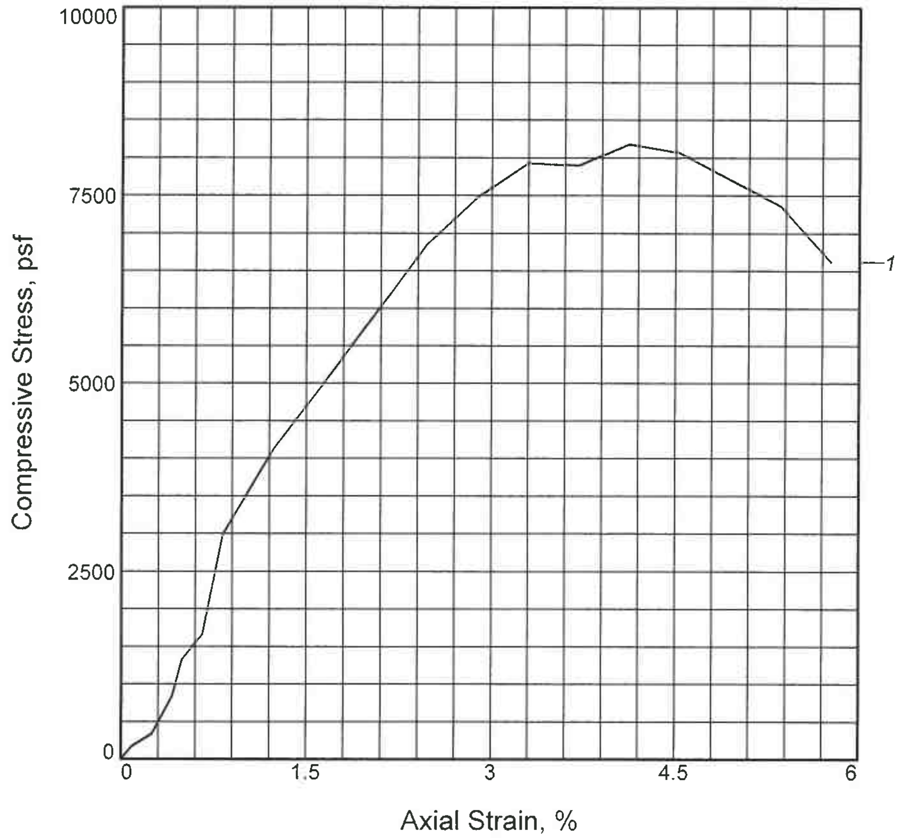

Sample No.	1			
Unconfined strength, psf	8183			
Undrained shear strength, psf	4092			
Failure strain, %	4.1			
Strain rate, in./min.	0.030			
Water content, %	21.6			
Wet density, pcf	129.1			
Dry density, pcf	106.2			
Saturation, %	99.2			
Void ratio	0.5876			
Specimen diameter, in.	1.48			
Specimen height, in.	3.64			
Height/diameter ratio	2.46			

Description: SANDY SILTY CLAY with gravel size chert, 10% gravel, 15% coarse to fine sand, 75% fines, high

LL =	**PL =**	**PI =**	**Assumed GS=** 2.7	**Type:** Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure _______

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-1 **Depth:** 8.5

UNCONFINED COMPRESSION TEST
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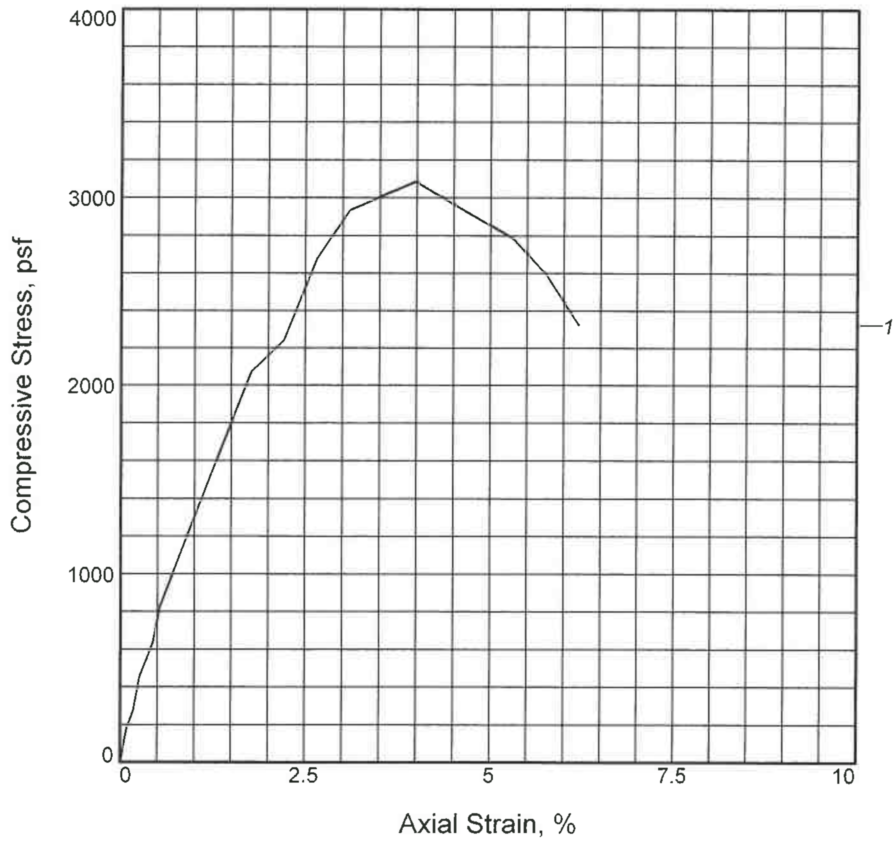
Huntsville, AL

Tested By: JRC & NJW **Checked By:** TW

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	3086			
Undrained shear strength, psf	1543			
Failure strain, %	4.0			
Strain rate, in./min.	0.030			
Water content, %	27.2			
Wet density, pcf	127.7			
Dry density, pcf	100.4			
Saturation, %	108.2			
Void ratio	0.6781			
Specimen diameter, in.	1.41			
Specimen height, in.	3.38			
Height/diameter ratio	2.40			

Description: SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 15% coarse to fine sand, 25% fines, high

LL =	**PL =**	**PI =**	**Assumed GS=** 2.7	**Type:** Split spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure _______

Client: Barge Design Solutions

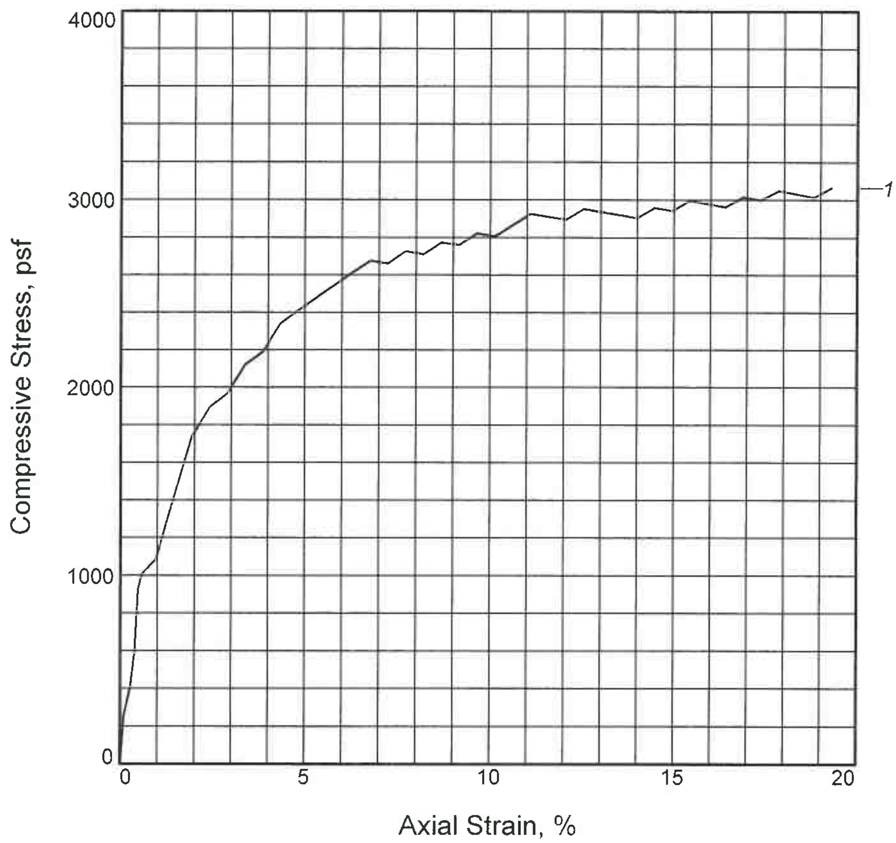
Project: Guntersville Park Improvements

Source of Sample: LP-4 **Depth:** 6

UNCONFINED COMPRESSION TEST
OMI, Inc.
Huntsville, AL

Tested By: JRC & NJW **Checked By:** TW

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	3065			
Undrained shear strength, psf	1532			
Failure strain, %	19.3			
Strain rate, in./min.	0.030			
Water content, %	22.3			
Wet density, pcf	129.5			
Dry density, pcf	105.8			
Saturation, %	101.8			
Void ratio	0.5926			
Specimen diameter, in.	1.47			
Specimen height, in.	3.11			
Height/diameter ratio	2.11			

Description: SANDY SILTY CLAY with trace oxides and trace chert, 15% coarse to fine sand, 85% fines, high

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883

Date Sampled:

Remarks:

Figure _______

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-5 **Depth:** 6

UNCONFINED COMPRESSION TEST
OMI, Inc.
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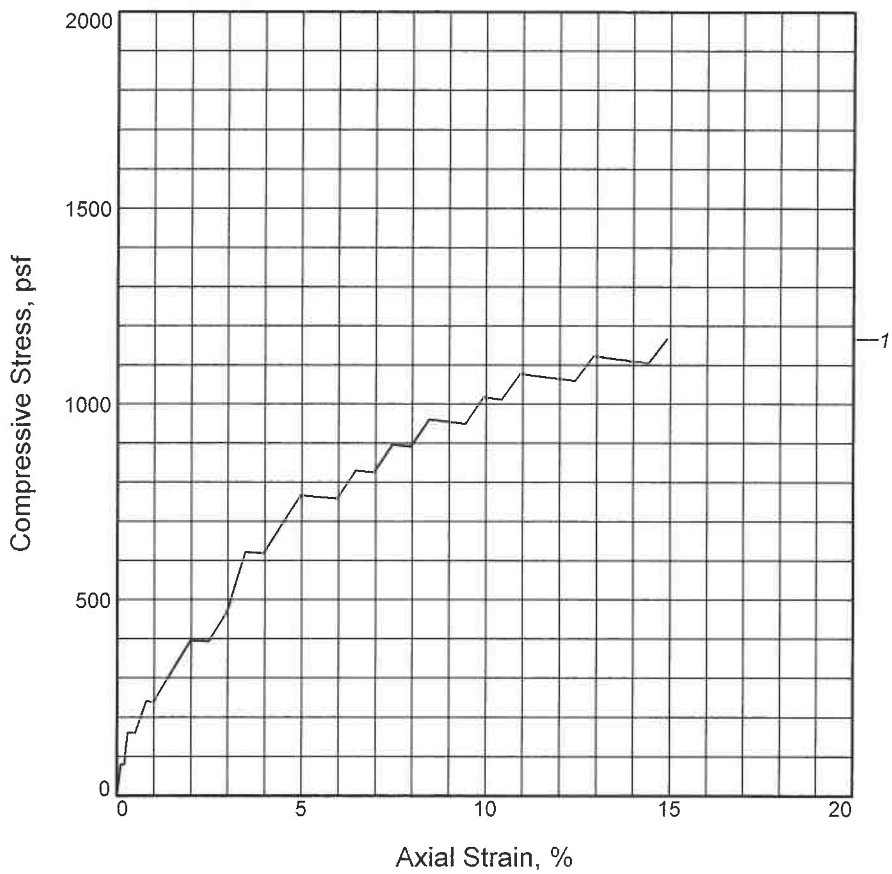
Tested By: JRC

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	1166			
Undrained shear strength, psf	583			
Failure strain, %	14.9			
Strain rate, in./min.	0.030			
Water content, %	22.7			
Wet density, pcf	113.1			
Dry density, pcf	92.1			
Saturation, %	74.0			
Void ratio	0.8291			
Specimen diameter, in.	1.51			
Specimen height, in.	3.02			
Height/diameter ratio	2.00			

Description: SANDY SILTY CLAY with trace chert, 15% fine sand, 85% fines, high plasticity, tannish yellow, stiff,

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-7 **Depth:** 3.5

UNCONFINED COMPRESSION TEST
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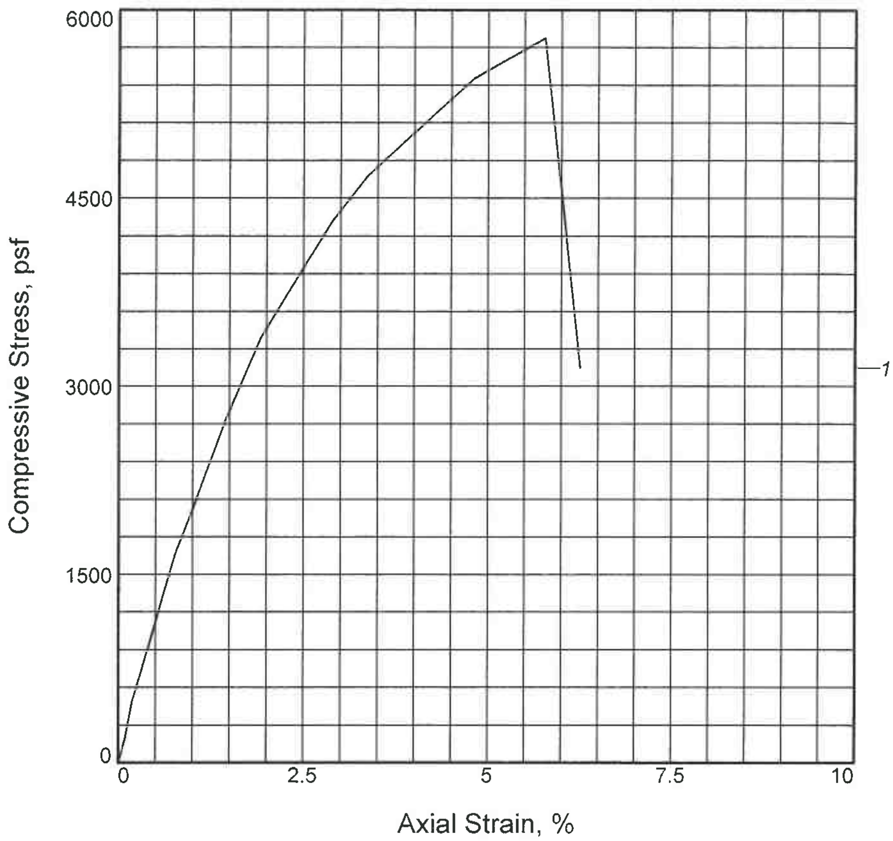
Figure _______

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	5774			
Undrained shear strength, psf	2887			
Failure strain, %	5.8			
Strain rate, in./min.	0.030			
Water content, %	22.0			
Wet density, pcf	130.5			
Dry density, pcf	106.9			
Saturation, %	103.1			
Void ratio	0.5762			
Specimen diameter, in.	1.36			
Specimen height, in.	3.12			
Height/diameter ratio	2.29			

Description: SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883

Date Sampled:

Remarks:

Figure _______

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-13 **Depth:** 8.5

UNCONFINED COMPRESSION TEST
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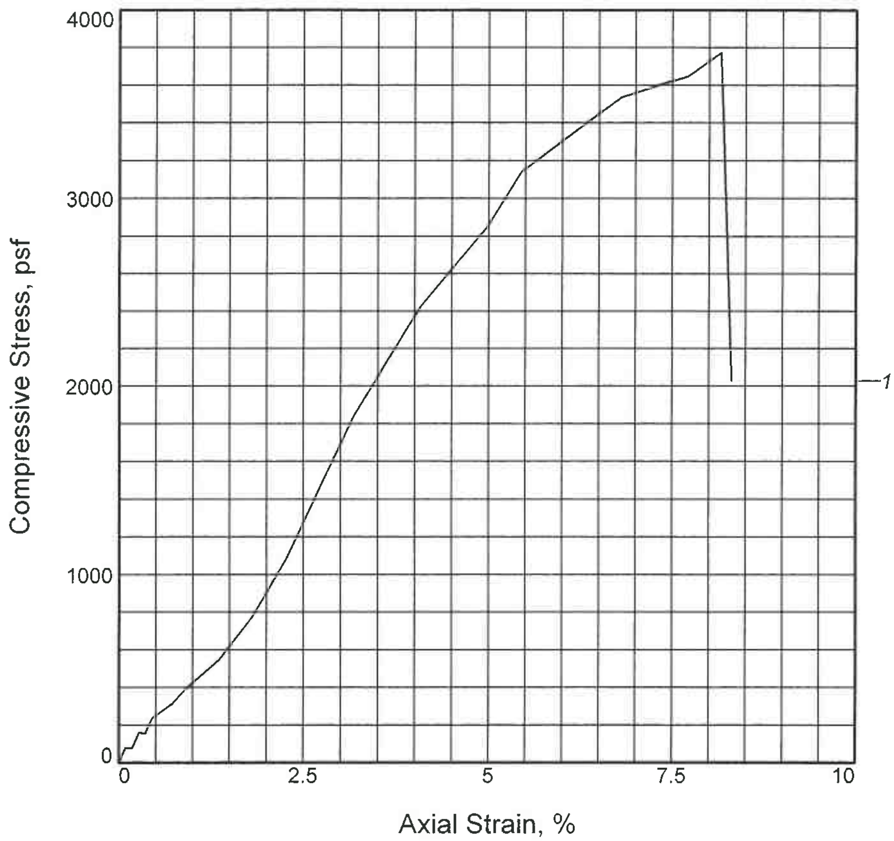
Tested By: JRC

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	3775			
Undrained shear strength, psf	1887			
Failure strain, %	8.2			
Strain rate, in./min.	0.030			
Water content, %	21.3			
Wet density, pcf	132.0			
Dry density, pcf	108.8			
Saturation, %	104.8			
Void ratio	0.5496			
Specimen diameter, in.	1.52			
Specimen height, in.	3.31			
Height/diameter ratio	2.17			

Description: SANDY SILTY CLAY with trace oxides, 20% coarse to fine sand, 80% fines, high plasticity, tan, very stiff,

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure ________

Client: Barge Design Solutions

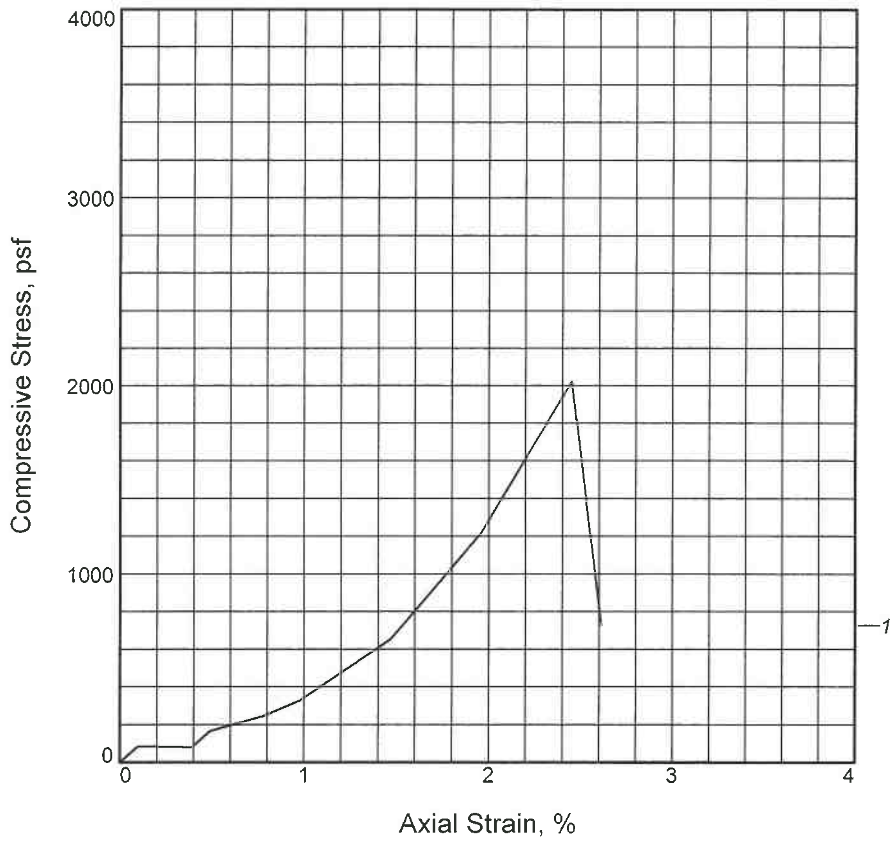
Project: Guntersville Park Improvements

Source of Sample: LP-16 **Depth:** 3.5

UNCONFINED COMPRESSION TEST
OMI, Inc.
Huntsville, AL

Tested By: JRC

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	2022			
Undrained shear strength, psf	1011			
Failure strain, %	2.5			
Strain rate, in./min.	0.030			
Water content, %	23.4			
Wet density, pcf	129.3			
Dry density, pcf	104.7			
Saturation, %	103.9			
Void ratio	0.6096			
Specimen diameter, in.	1.49			
Specimen height, in.	3.06			
Height/diameter ratio	2.06			

Description: SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure ______

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-18 **Depth:** 3.5

UNCONFINED COMPRESSION TEST
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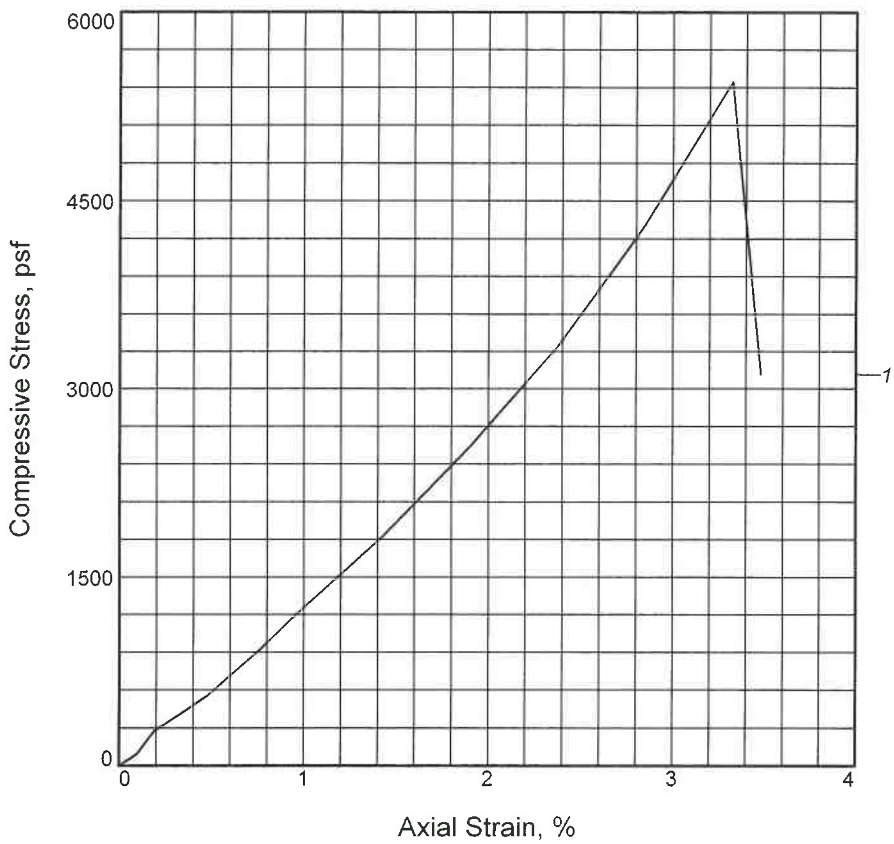
Tested By: JRC

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	5446			
Undrained shear strength, psf	2723			
Failure strain, %	3.3			
Strain rate, in./min.	0.030			
Water content, %	19.3			
Wet density, pcf	126.4			
Dry density, pcf	105.9			
Saturation, %	88.3			
Void ratio	0.5911			
Specimen diameter, in.	1.41			
Specimen height, in.	3.16			
Height/diameter ratio	2.24			

Description: SANDY SILTY CLAY with trace chert, 20% coarse to fine sand, 80% fines, high plasticity, yellowish tan,

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883

Date Sampled:

Remarks:

Figure _______

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-19 **Depth:** 3.5

UNCONFINED COMPRESSION TEST
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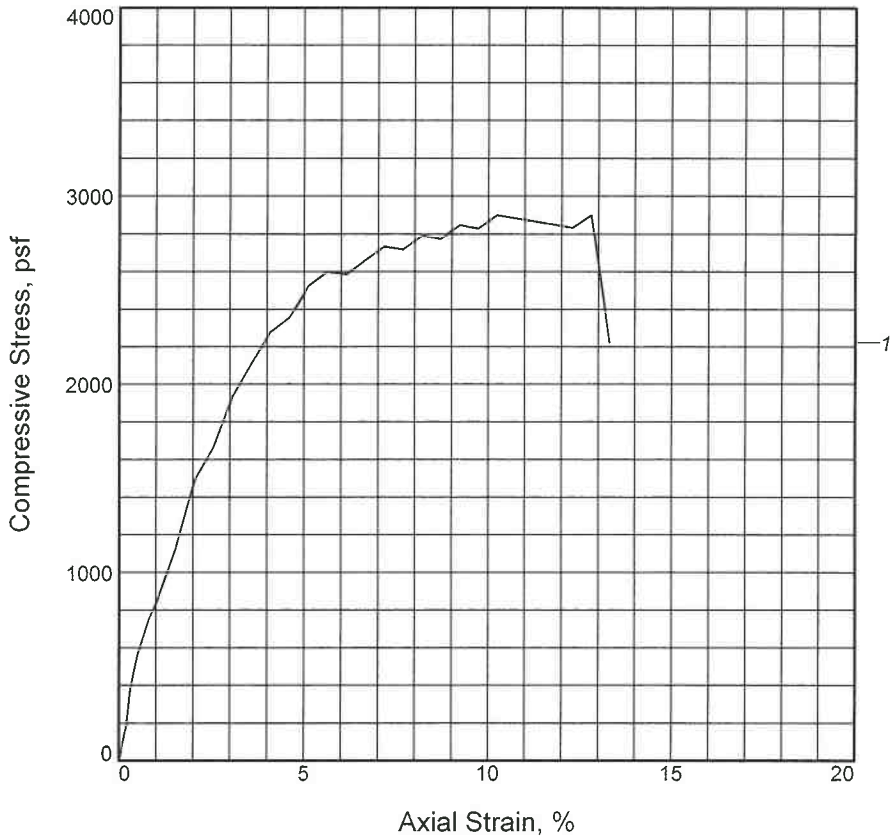
Tested By: JRC

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	2900			
Undrained shear strength, psf	1450			
Failure strain, %	12.8			
Strain rate, in./min.	0.030			
Water content, %	23.6			
Wet density, pcf	126.4			
Dry density, pcf	102.3			
Saturation, %	98.4			
Void ratio	0.6477			
Specimen diameter, in.	1.39			
Specimen height, in.	2.93			
Height/diameter ratio	2.11			

Description: SANDY SILTY CLAY, 20% fine sand, 80% fines, high plasticity, tannish yellow, stiff to very stiff, moist,

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883

Date Sampled:

Remarks:

Figure _______

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-20 **Depth:** 3.5

UNCONFINED COMPRESSION TEST
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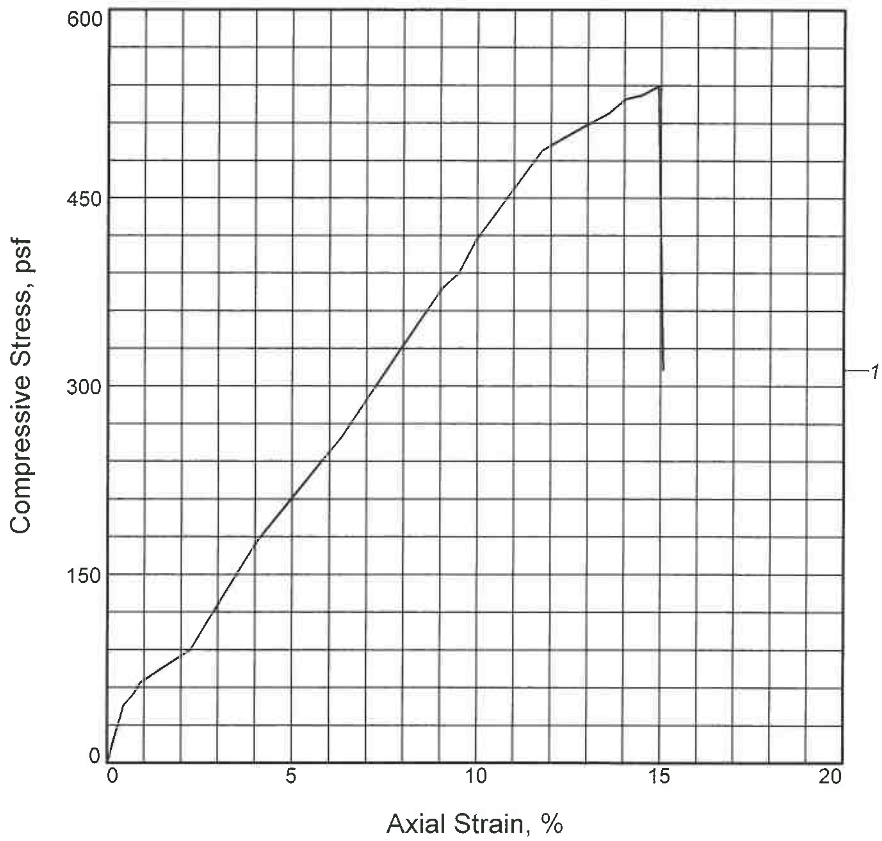
Tested By: JRC

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	539			
Undrained shear strength, psf	270			
Failure strain, %	14.9			
Strain rate, in./min.	0.030			
Water content, %	29.6			
Wet density, pcf	119.6			
Dry density, pcf	92.3			
Saturation, %	96.7			
Void ratio	0.8269			
Specimen diameter, in.	1.41			
Specimen height, in.	3.32			
Height/diameter ratio	2.35			

Description: SANDY SILTY CLAY, 25% fine sand, 75% fines, low plasticity, tannish gray, firm, moist, possible

LL =	**PL =**	**PI =**	**Assumed GS=** 2.7	**Type:** Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure _______

Client: Barge Design Solutions

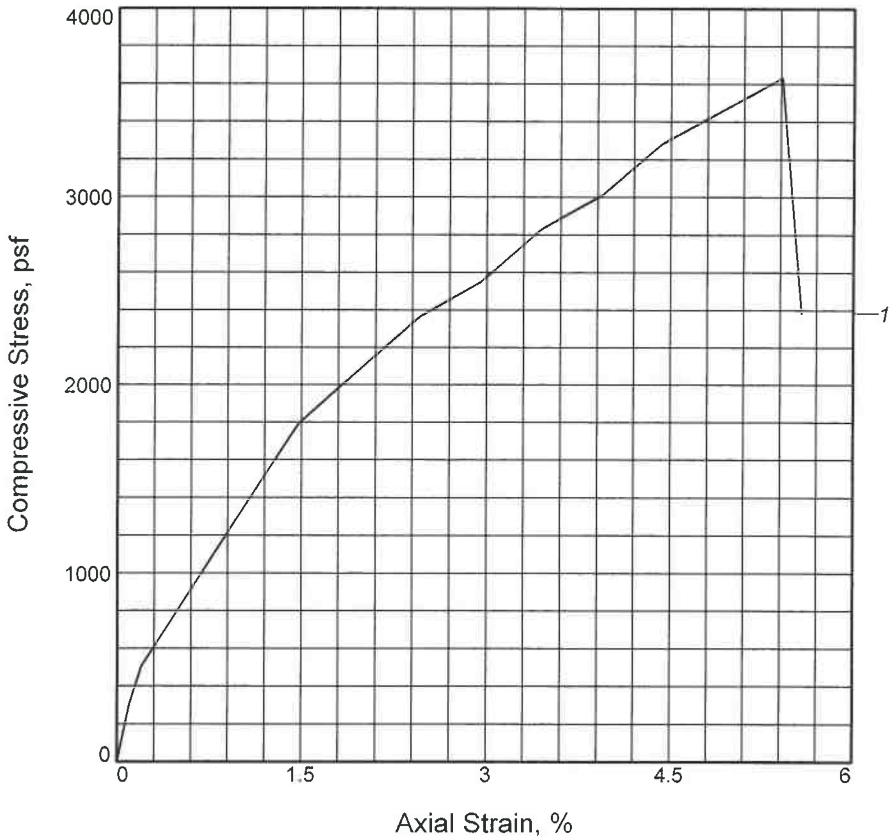
Project: Guntersville Park Improvements

Source of Sample: LP-22 **Depth:** 3.5

UNCONFINED COMPRESSION TEST
OMI, Inc.
Huntsville, AL

Tested By: JRC **Checked By:** TW

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	3632			
Undrained shear strength, psf	1816			
Failure strain, %	5.4			
Strain rate, in./min.	0.030			
Water content, %	22.7			
Wet density, pcf	129.1			
Dry density, pcf	105.2			
Saturation, %	101.6			
Void ratio	0.6021			
Specimen diameter, in.	1.35			
Specimen height, in.	3.05			
Height/diameter ratio	2.26			

Description: SANDY SILTY CLAY with trace oxides and gravel size chert, 10% gravel, 20% coarse to fine sand, 70%

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure ________

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-24 **Depth:** 8.5

UNCONFINED COMPRESSION TEST
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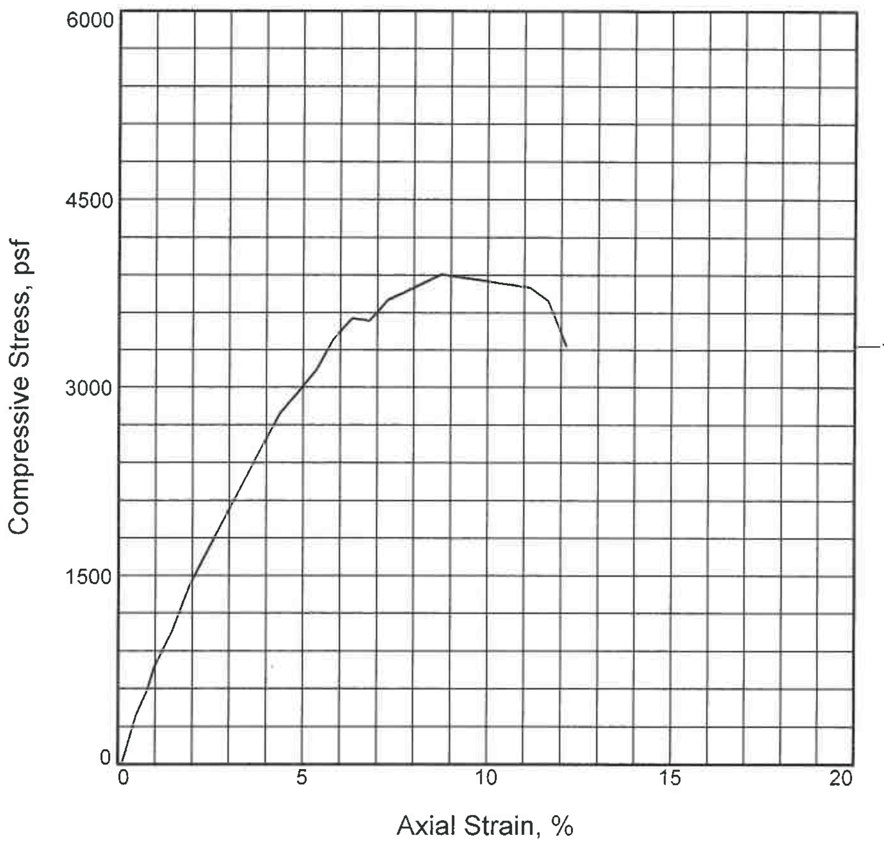
Tested By: JRC

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	3905			
Undrained shear strength, psf	1953			
Failure strain, %	8.7			
Strain rate, in./min.	0.030			
Water content, %	23.8			
Wet density, pcf	128.9			
Dry density, pcf	104.1			
Saturation, %	103.7			
Void ratio	0.6195			
Specimen diameter, in.	1.37			
Specimen height, in.	3.09			
Height/diameter ratio	2.25			

Description: SANDY SILTY CLAY with trace oxides and gravel size chert, 10% gravel, 20% coarse to fine sand, 70%

LL =	**PL =**	**PI =**	**Assumed GS=** 2.7	**Type:** Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure _______

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-24 **Depth:** 13.5

UNCONFINED COMPRESSION TEST
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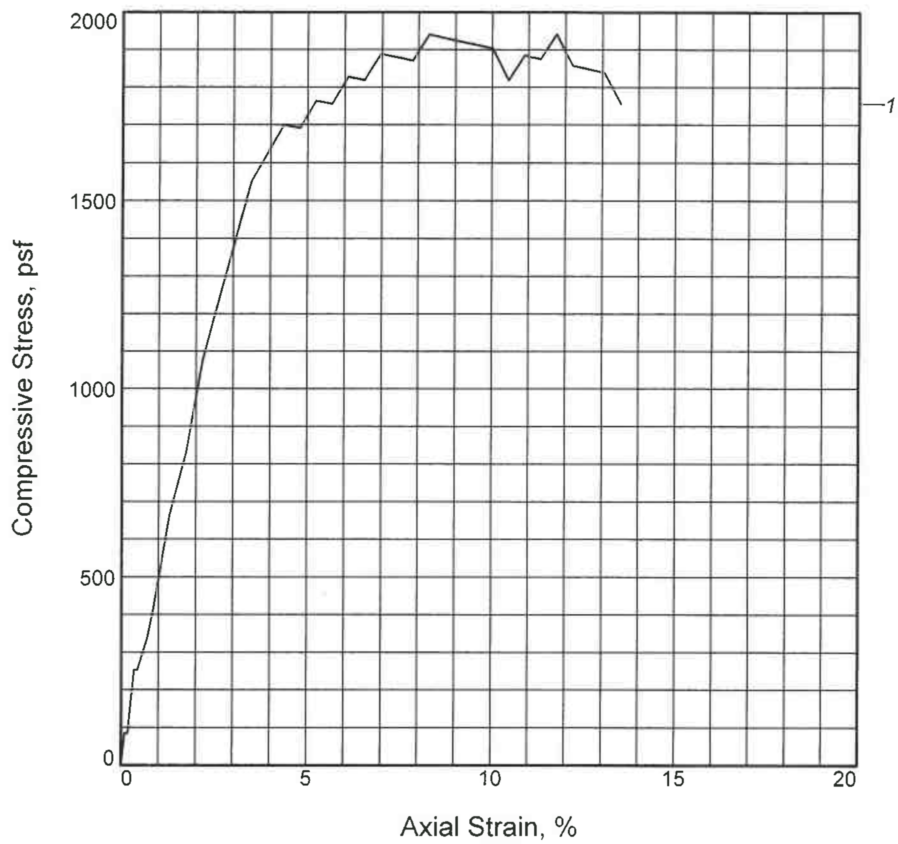
Huntsville, AL

Tested By: JRC **Checked By:** TW

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	1941			
Undrained shear strength, psf	971			
Failure strain, %	11.8			
Strain rate, in./min.	0.030			
Water content, %	32.8			
Wet density, pcf	113.9			
Dry density, pcf	85.7			
Saturation, %	91.7			
Void ratio	0.9657			
Specimen diameter, in.	1.47			
Specimen height, in.	3.44			
Height/diameter ratio	2.34			

Description: SANDY SILTY CLAY with gravel size chert, 10% gravel, 15% coarse to fine sand, 75% fines, high

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure _______

Client: Barge Design Solutions

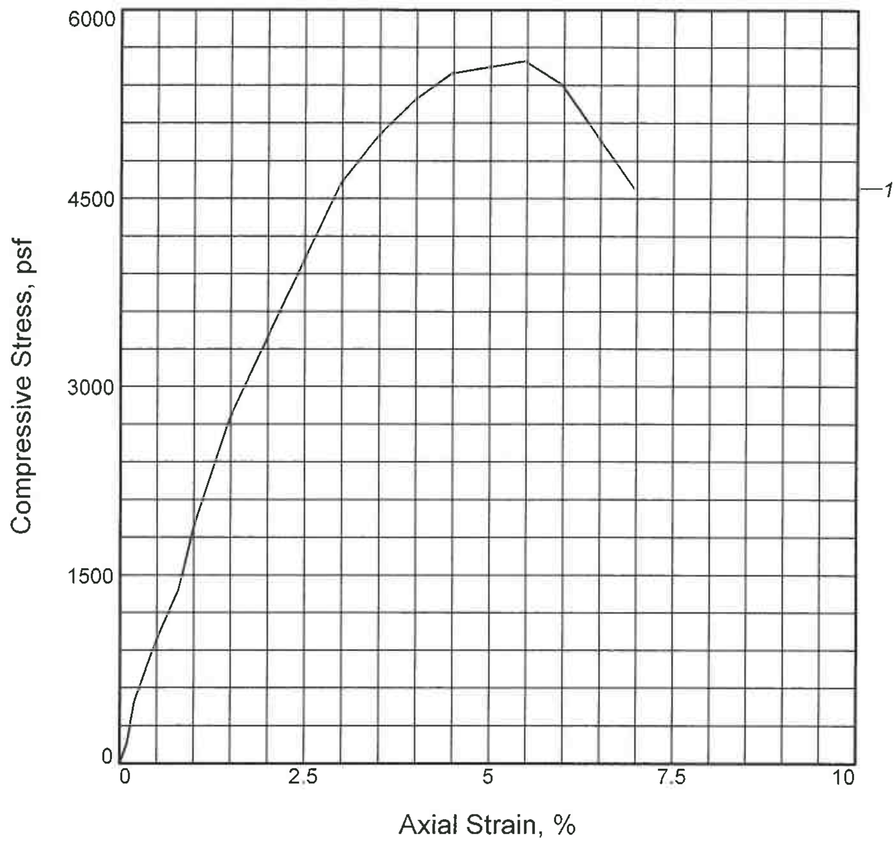
Project: Guntersville Park Improvements

Source of Sample: LP-27 **Depth:** 13.5

UNCONFINED COMPRESSION TEST
OMI, Inc.
Huntsville, AL

Tested By: JRC

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	5591			
Undrained shear strength, psf	2795			
Failure strain, %	5.5			
Strain rate, in./min.	0.030			
Water content, %	20.3			
Wet density, pcf	129.4			
Dry density, pcf	107.6			
Saturation, %	96.7			
Void ratio	0.5671			
Specimen diameter, in.	1.49			
Specimen height, in.	3.02			
Height/diameter ratio	2.02			

Description: SANDY SILTY CLAY with trace oxides and chert, 20% coarse to fine sand, 70% fines, high plasticity,

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure _______

Client: Barge Design Solutions

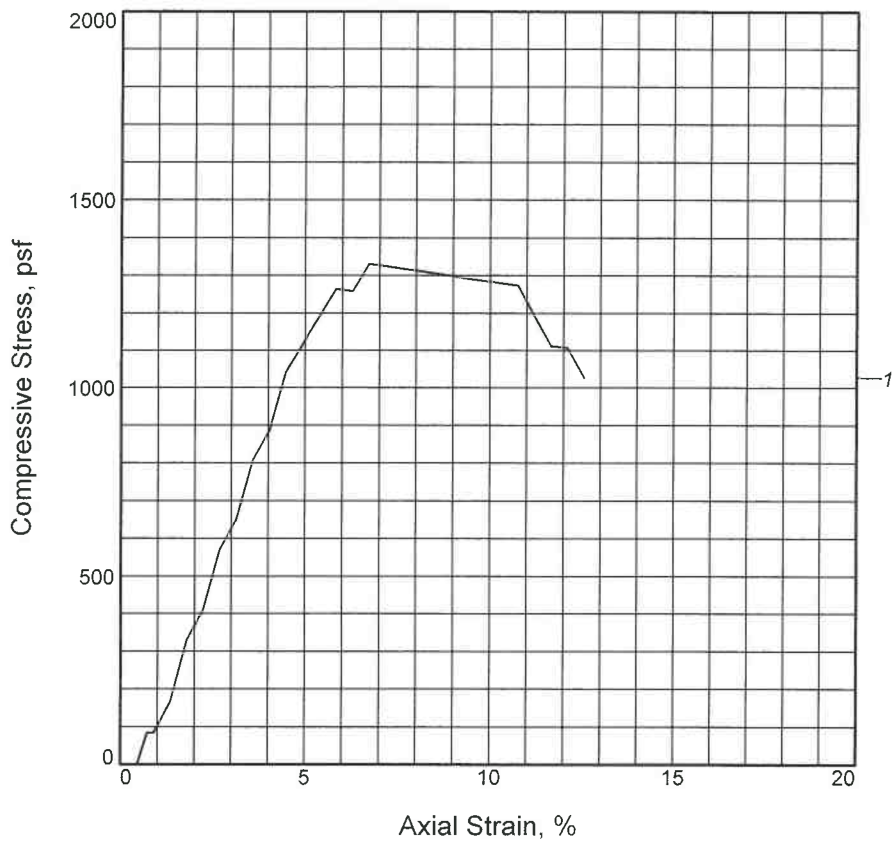
Project: Guntersville Park Improvements

Source of Sample: LP-28 **Depth:** 3.5

UNCONFINED COMPRESSION TEST
OMI, Inc.
Huntsville, AL

Tested By: JRC **Checked By:** TW

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	1331			
Undrained shear strength, psf	665			
Failure strain, %	6.7			
Strain rate, in./min.	0.030			
Water content, %	19.0			
Wet density, pcf	133.9			
Dry density, pcf	112.5			
Saturation, %	102.9			
Void ratio	0.4983			
Specimen diameter, in.	1.48			
Specimen height, in.	3.35			
Height/diameter ratio	2.26			

Description: SANDY SILTY CLAY, 20% fine sand, 80% fines, low plasticity, yellowish tan, firm, mosit, FILL, CL

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883

Date Sampled:

Remarks:

Figure _______

Client: Barge Design Solutions

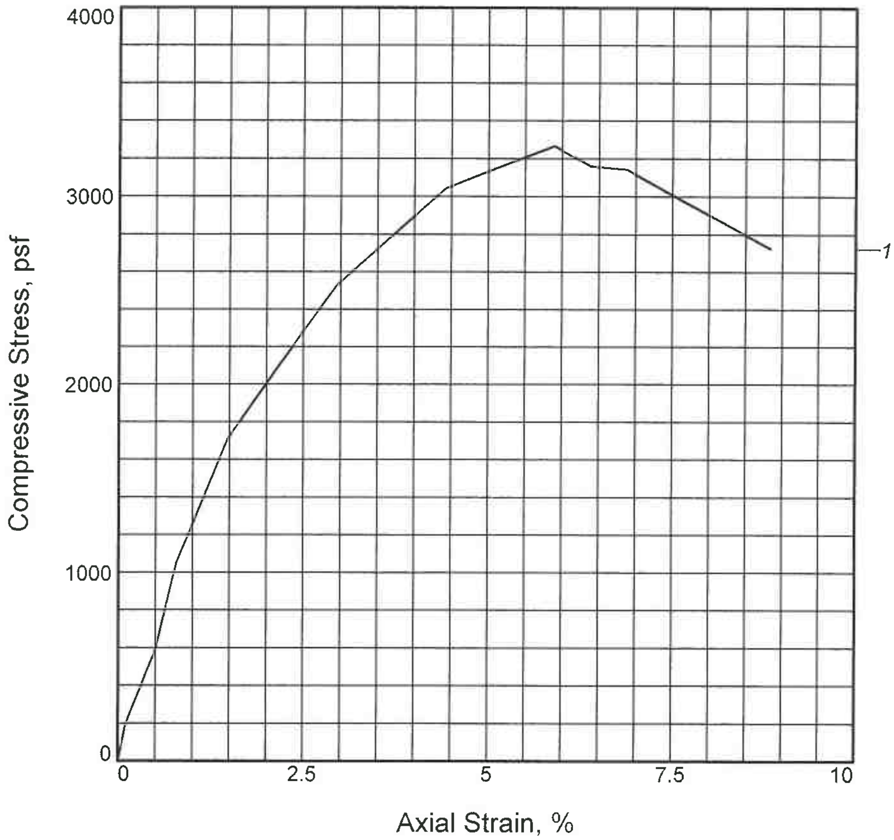
Project: Guntersville Park Improvements

Source of Sample: LP-31 **Depth:** 1.5

UNCONFINED COMPRESSION TEST
OMI, Inc.
Huntsville, AL

Tested By: JRC

UNCONFINED COMPRESSION TEST



Sample No.	1			
Unconfined strength, psf	3266			
Undrained shear strength, psf	1633			
Failure strain, %	5.9			
Strain rate, in./min.	0.030			
Water content, %	28.4			
Wet density, pcf	119.3			
Dry density, pcf	92.9			
Saturation, %	94.1			
Void ratio	0.8143			
Specimen diameter, in.	1.38			
Specimen height, in.	3.05			
Height/diameter ratio	2.21			

Description: SANDY SILTY CLAY with trace oxides and chert, 10% gravel, 20% coarse to fine sand, 70% fines, high

LL =	PL =	PI =	Assumed GS= 2.7	Type: Split Spoon

Project No.: 8883
Date Sampled:
Remarks:

Figure _______

Client: Barge Design Solutions

Project: Guntersville Park Improvements

Source of Sample: LP-31 **Depth:** 8.5

UNCONFINED COMPRESSION TEST
OMI, Inc.
Huntsville, AL

Tested By: JRC

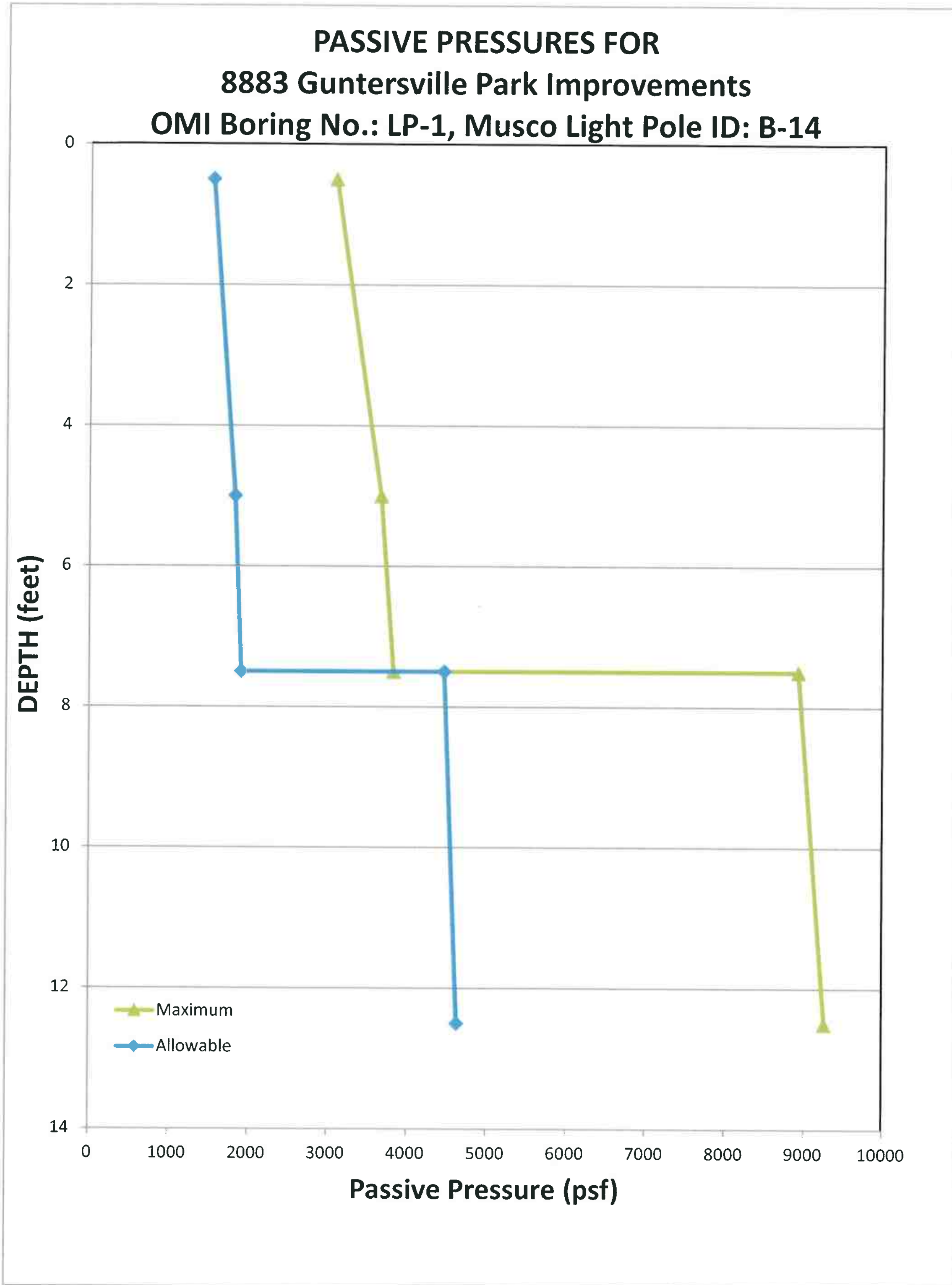
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-1
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 127.7 , c = 1543 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 3086 psf maximum and 1543 psf allowable.
At 5 feet the passive pressures are 3660 psf maximum and 1830 psf allowable.

Layer 2 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 65.3 , c = 1543 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 3660 psf maximum and 1830 psf allowable.
At 7.5 feet the passive pressures are 3823 psf maximum and 1911 psf allowable.

Layer 3 is best described as: Moist Very Stiff Orange Sandy Silty Clay
Layer values were: ë = 66.7 , c = 4092 , Í = 0 NÍ = 1
At 7.5 feet the passive pressures are 8921 psf maximum and 4460 psf allowable.
At 12.5 feet the passive pressures are 9255 psf maximum and 4627 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-1, Musco Light Pole ID: B-14
DEPTH (feet)
0
2
4
6
8
10
12
14
0
1000
2000
3000
4000
5000
6000
7000
8000
9000
10000
Passive Pressure (psf)
Maximum
Allowable

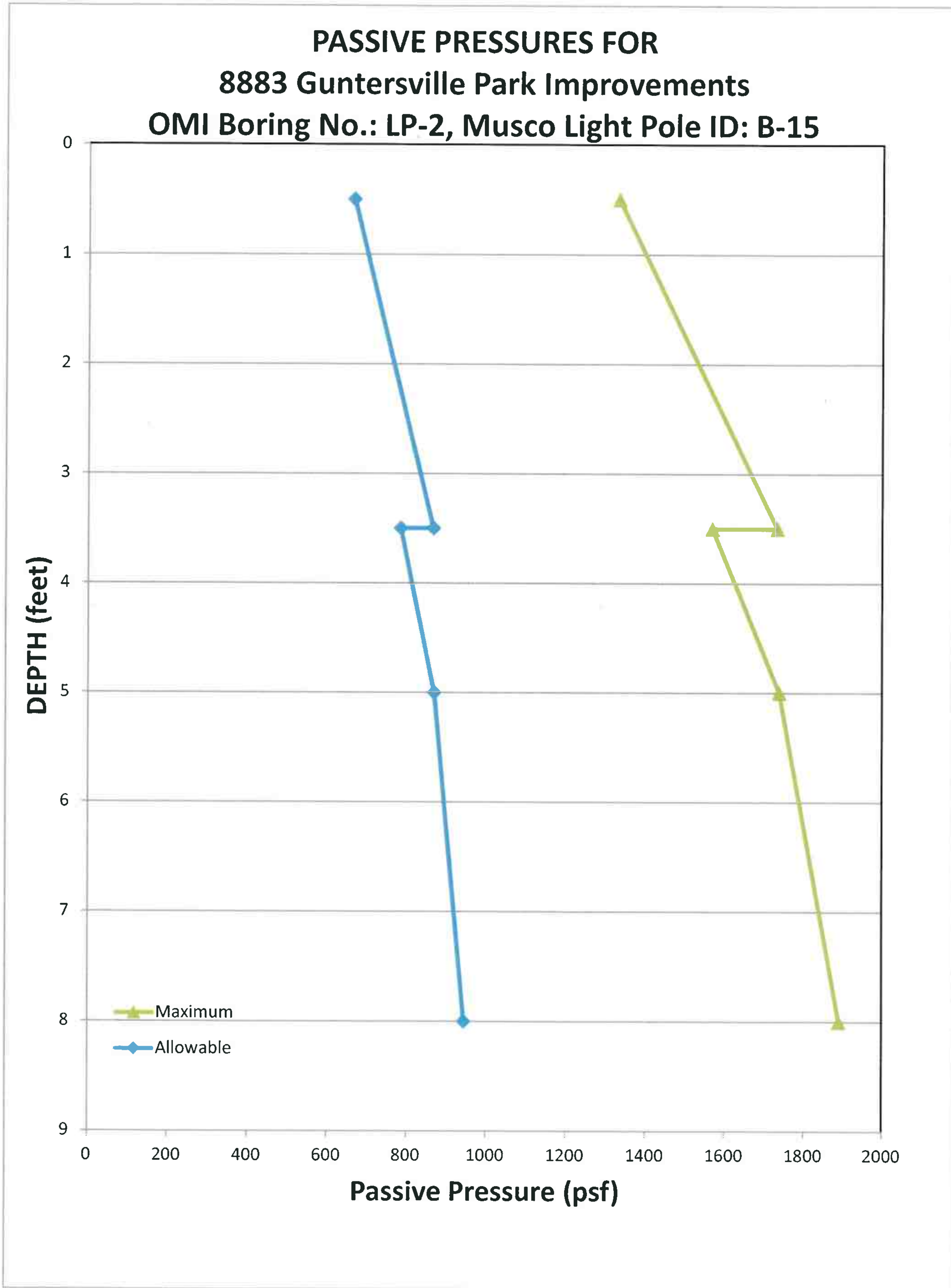
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-2
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Stiff Dark Brown Sandy Silty Clay Fill with organics
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 3.5 feet the passive pressures are 1731 psf maximum and 865 psf allowable.

Layer 2 is best described as: Moist Firm to Stiff Orange Sandy Silty Clay
Layer values were: ë = 113.1 , c = 583 , Í = 0 NÍ = 1
At 3.5 feet the passive pressures are 1567 psf maximum and 783 psf allowable.
At 5 feet the passive pressures are 1737 psf maximum and 868 psf allowable.

Layer 3 is best described as: Moist Firm to Stiff Orange Sandy Silty Clay
Layer values were: ë = 50.7 , c = 583 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 1737 psf maximum and 868 psf allowable.
At 8 feet the passive pressures are 1889 psf maximum and 944 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-2, Musco Light Pole ID: B-15
DEPTH (feet)
0
1
2
3
4
5
6
7
8
9
0
200
400
600
800
1000
1200
1400
1600
1800
2000
Passive Pressure (psf)
Maximum
Allowable

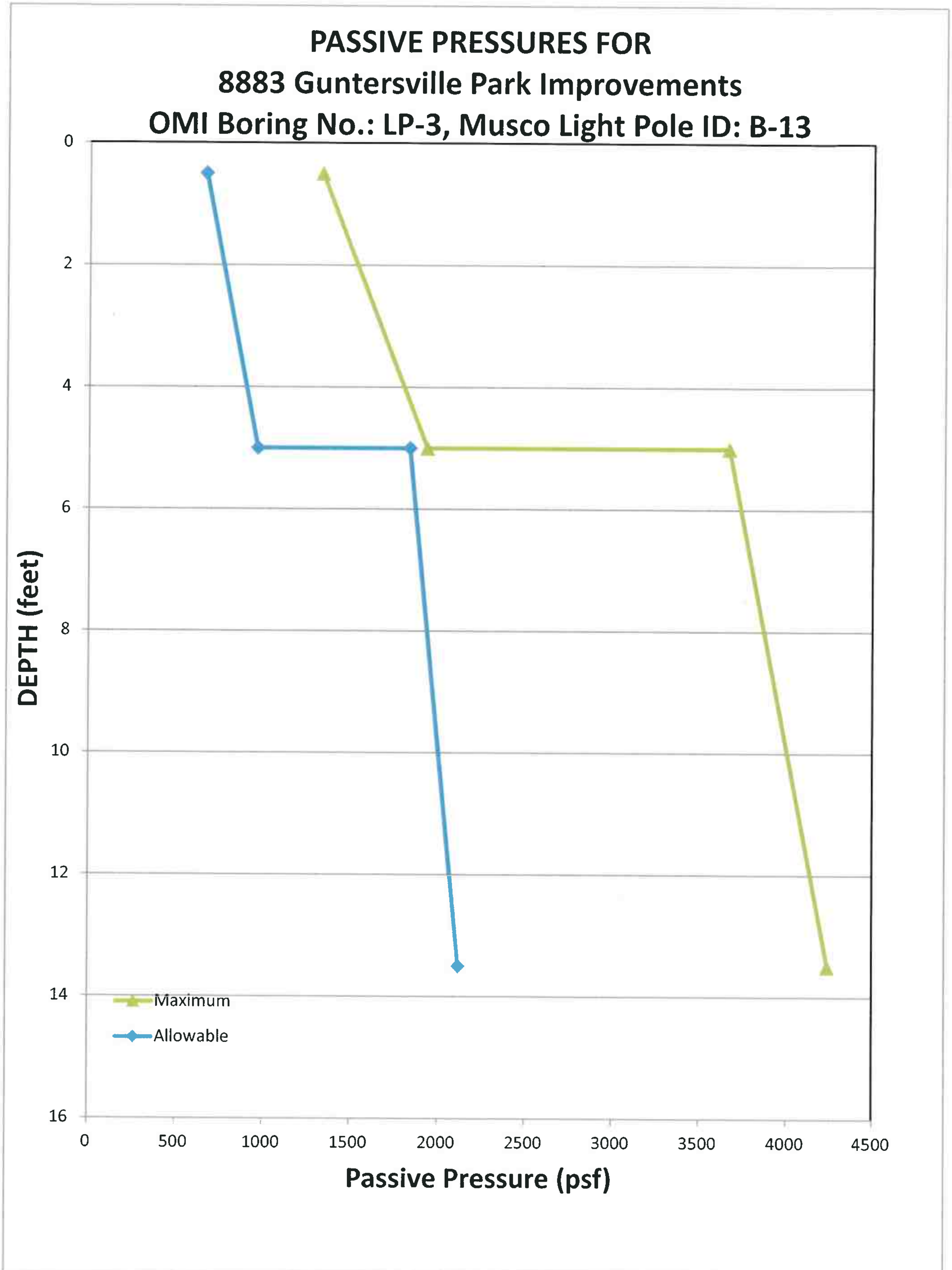
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-3
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm to Stiff Tan Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 5 feet the passive pressures are 1932 psf maximum and 966 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tan Sandy Silty Clay
Layer values were: ë = 67.1 , c = 1532 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 3666 psf maximum and 1833 psf allowable.
At 13.5 feet the passive pressures are 4236 psf maximum and 2118 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###



PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-3, Musco Light Pole ID: B-13
DEPTH (feet)
0
2
4
6
8
10
12
14
16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
Passive Pressure (psf)
Maximum
Allowable

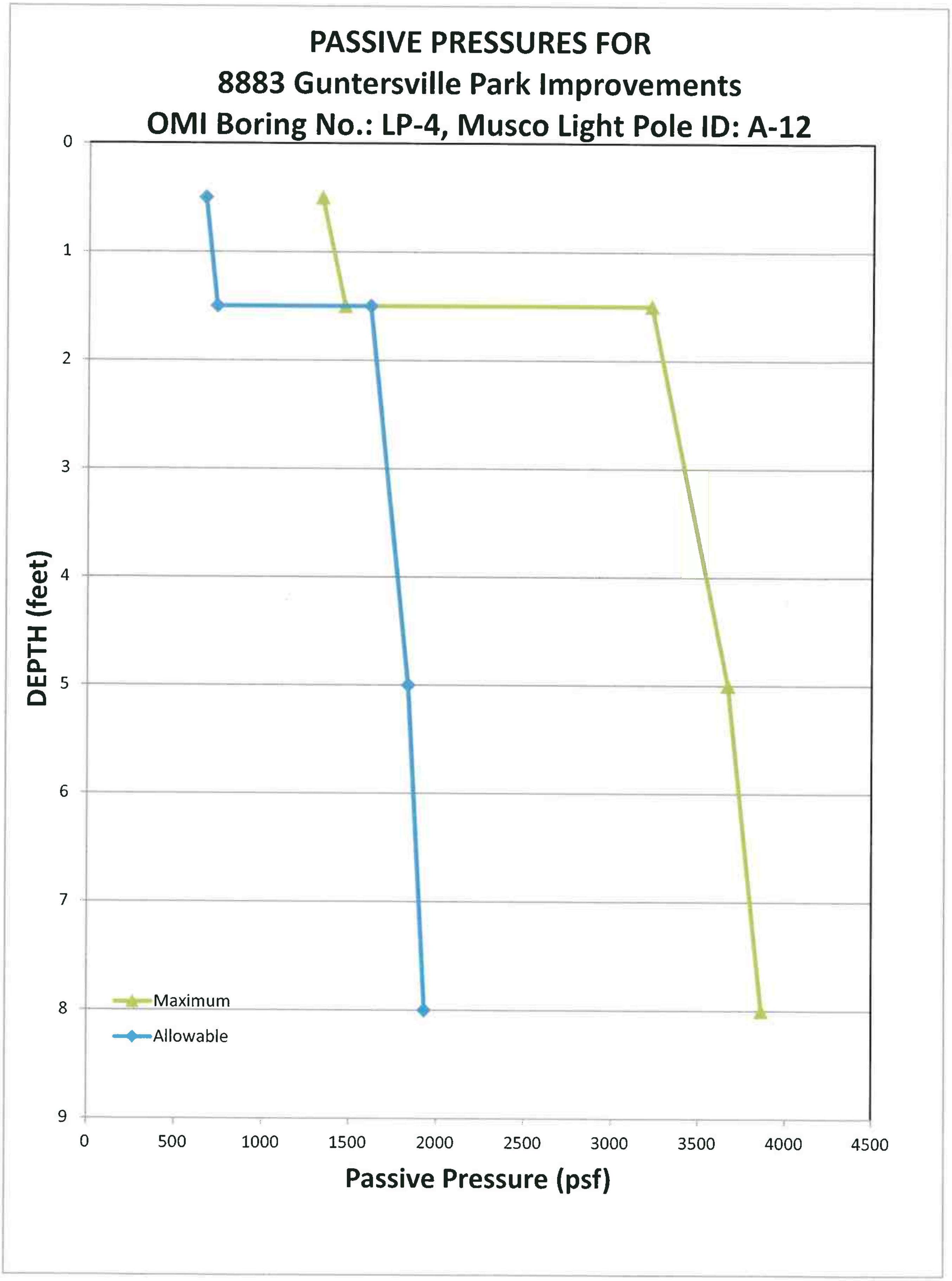
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-4
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Stiff Brown Sandy Silty Clay Fill with Organics
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 1.5 feet the passive pressures are 1463 psf maximum and 731 psf allowable.

Layer 2 is best described as: Moist Stiff to Very Stiff Light Tannish Gray Sandy Silty Clay
Layer values were: ë = 127.7 , c = 1543 , Í = 0 NÍ = 1
At 1.5 feet the passive pressures are 3219 psf maximum and 1609 psf allowable.
At 5 feet the passive pressures are 3666 psf maximum and 1833 psf allowable.

Layer 3 is best described as: Moist Stiff to Very Stiff Light Tannish Gray Sandy Silty Clay
Layer values were: ë = 65.3 , c = 1543 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 3666 psf maximum and 1833 psf allowable.
At 8 feet the passive pressures are 3862 psf maximum and 1931 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-4, Musco Light Pole ID: A-12
DEPTH (feet)
0
1
2
3
4
5
6
7
8
9
Maximum
Allowable
0
500
1000
1500
2000
2500
3000
3500
4000
4500
Passive Pressure (psf)

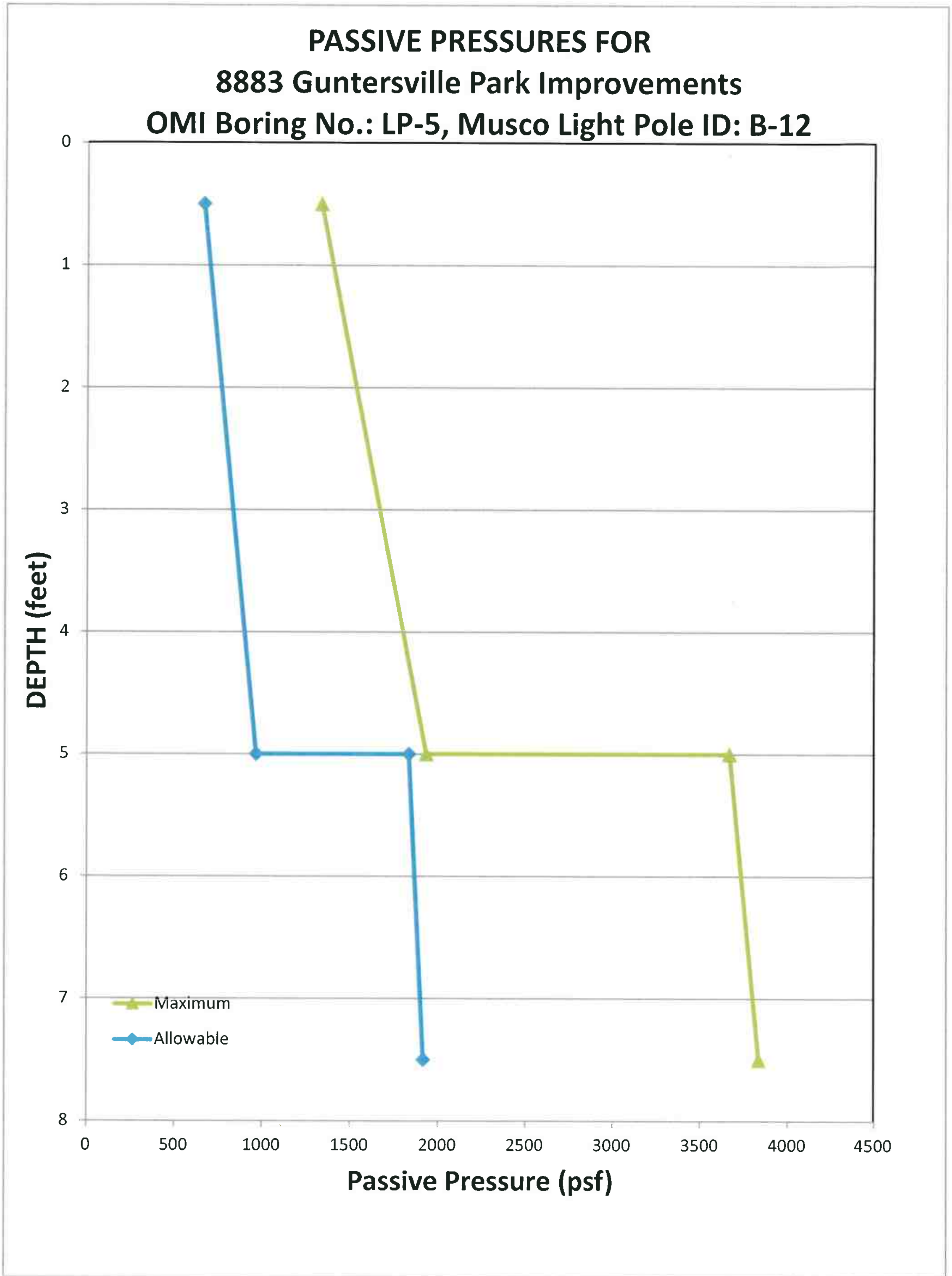
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-5
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Soft to Stiff Brown Sandy Silty Clay Fill with Organics
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 5 feet the passive pressures are 1932 psf maximum and 966 psf allowable.

Layer 2 is best described as: Moist Stiff Mottled Tan and Gray Sandy Silty Clay
Layer values were: ë = 67.1 , c = 1532 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 3666 psf maximum and 1833 psf allowable.
At 7.5 feet the passive pressures are 3834 psf maximum and 1917 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-5, Musco Light Pole ID: B-12
DEPTH (feet)
0
1
2
3
4
5
6
7
8
0
500
1000
1500
2000
2500
3000
3500
4000
4500
Passive Pressure (psf)
Maximum
Allowable

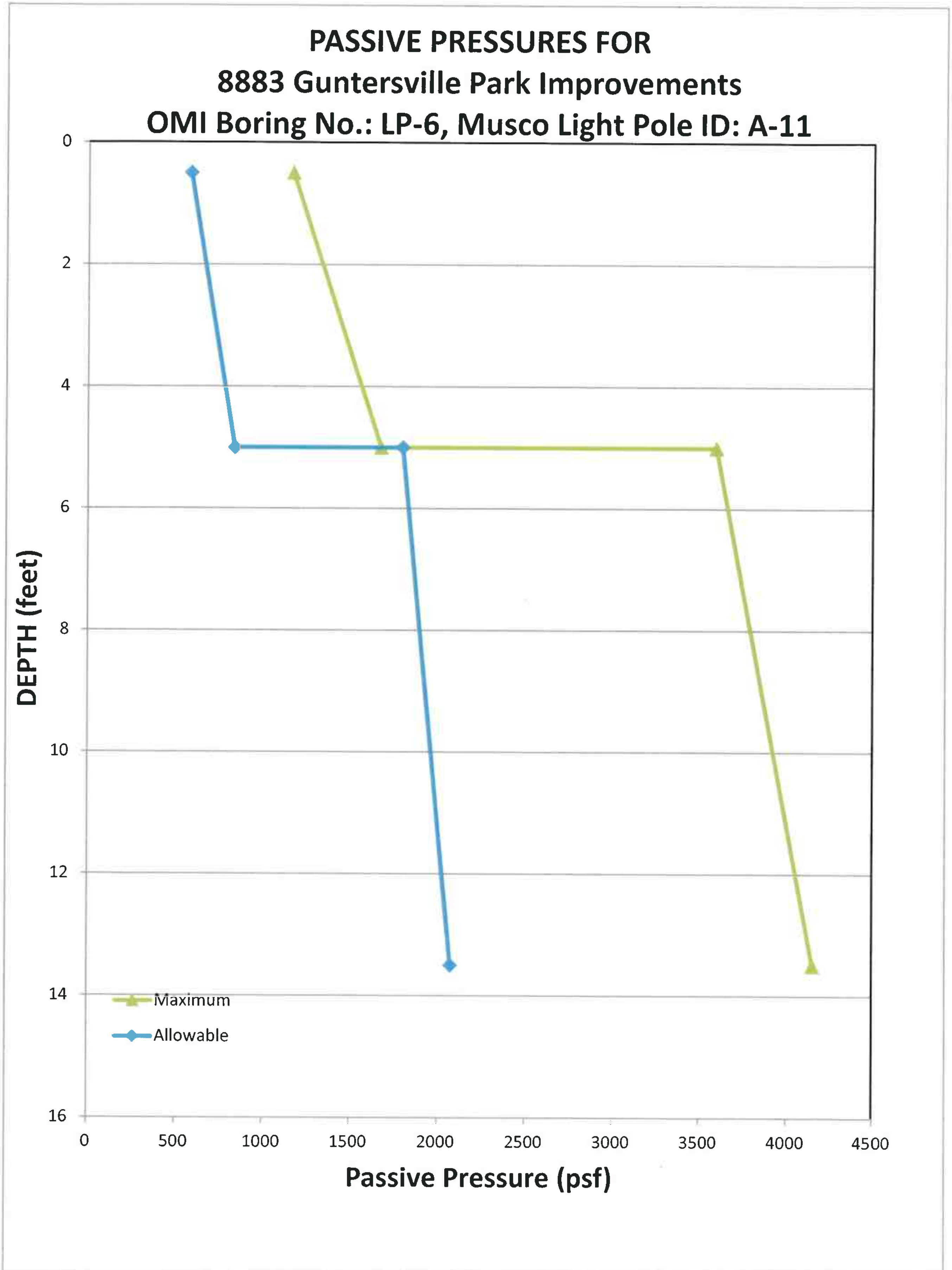
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-6
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm Tan Sandy Silty Clay
Layer values were: ë = 113.1 , c = 583 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1166 psf maximum and 583 psf allowable.
At 5 feet the passive pressures are 1674 psf maximum and 837 psf allowable.

Layer 2 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 65.3 , c = 1543 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 3594 psf maximum and 1797 psf allowable.
At 13.5 feet the passive pressures are 4150 psf maximum and 2075 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###



PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-6, Musco Light Pole ID: A-11
DEPTH (feet)
0
2
4
6
8
10
12
14
16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
Passive Pressure (psf)
Maximum
Allowable

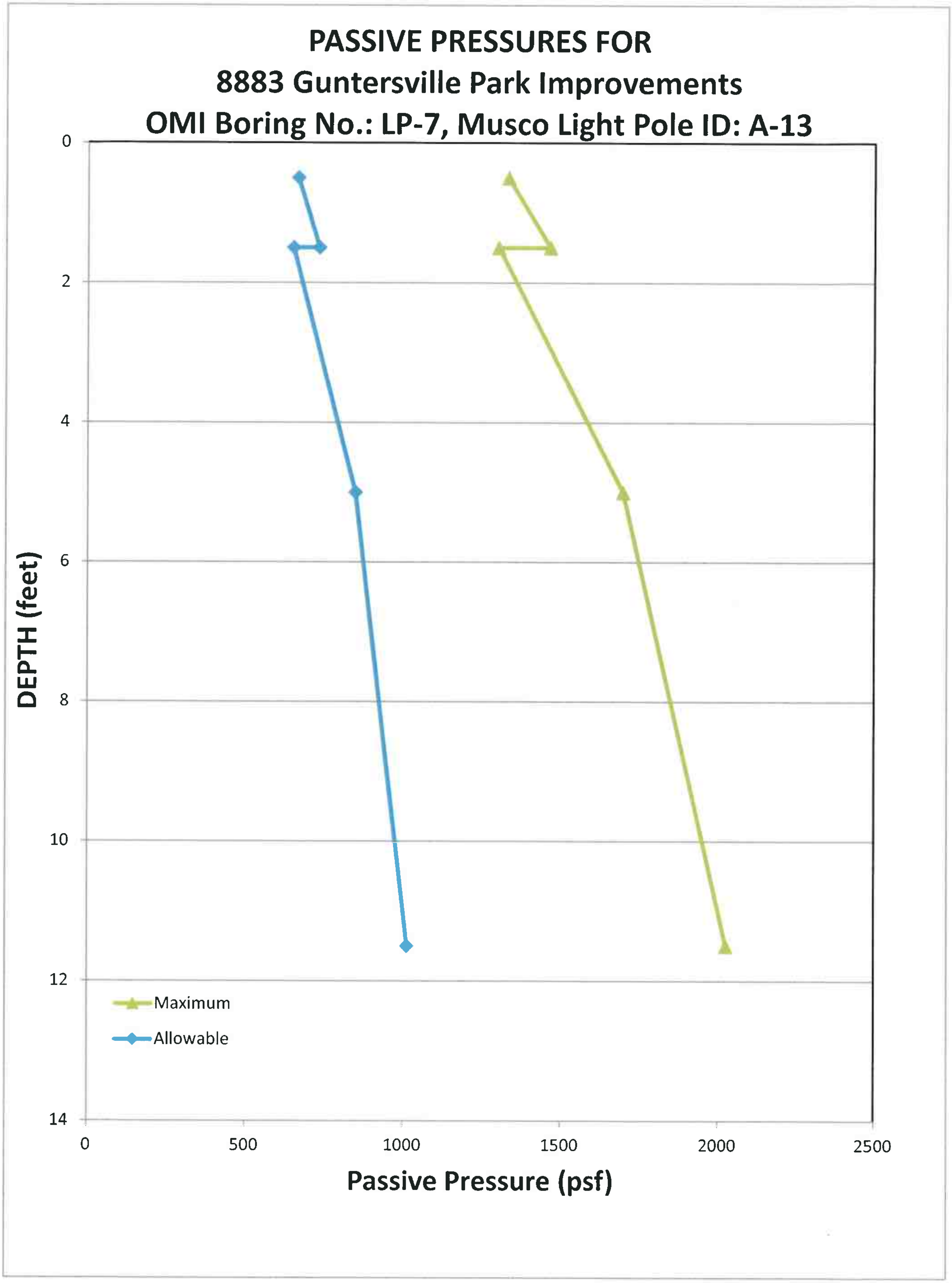
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-7
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm Brown and Red Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 1.5 feet the passive pressures are 1463 psf maximum and 731 psf allowable.

Layer 2 is best described as: Moist Stiff Tannish Yellow Sandy Silty Clay
Layer values were: ë = 113.1 , c = 583 , Í = 0 NÍ = 1
At 1.5 feet the passive pressures are 1299 psf maximum and 649 psf allowable.
At 5 feet the passive pressures are 1695 psf maximum and 847 psf allowable.

Layer 3 is best described as: Moist Stiff to Very Stiff Tannish Yellow Sandy Silty Clay
Layer values were: ë = 50.7 , c = 583 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 1695 psf maximum and 847 psf allowable.
At 11.5 feet the passive pressures are 2025 psf maximum and 1012 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-7, Musco Light Pole ID: A-13
DEPTH (feet)
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
2500
Passive Pressure (psf)
Maximum
Allowable

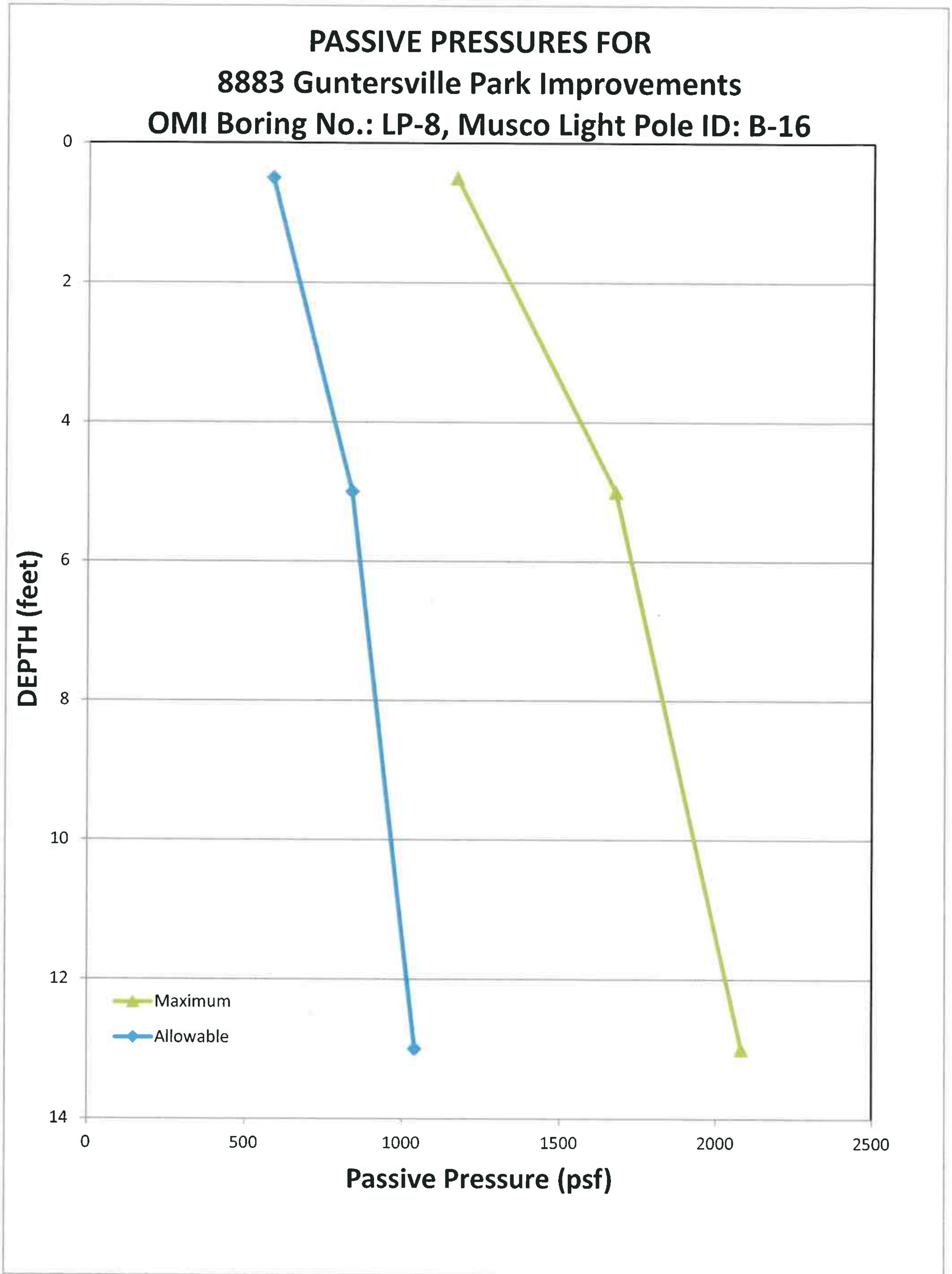
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-8
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm to Very Stiff Tannish Yellow Sandy Silty Clay
Layer values were: ë = 113.1 , c = 583 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1166 psf maximum and 583 psf allowable.
At 5 feet the passive pressures are 1674 psf maximum and 837 psf allowable.

Layer 2 is best described as: Moist Firm to Very Stiff Tannish Yellow Sandy Silty Clay
Layer values were: ë = 50.7 , c = 583 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 1674 psf maximum and 837 psf allowable.
At 13 feet the passive pressures are 2080 psf maximum and 1040 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-8, Musco Light Pole ID: B-16
DEPTH (feet)
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
2500
Passive Pressure (psf)
Maximum
Allowable

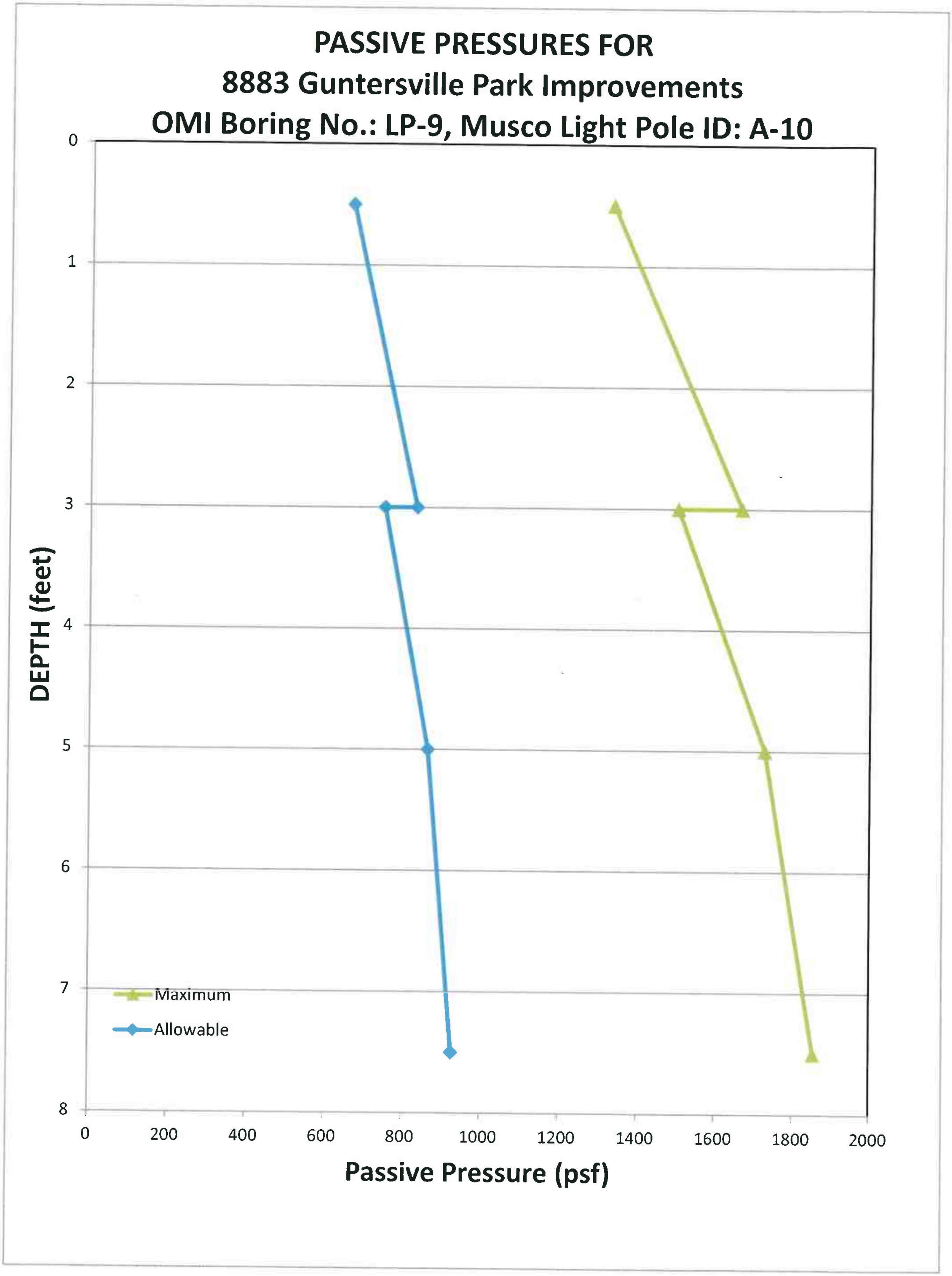
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-9
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm Dark Brown Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 3 feet the passive pressures are 1664 psf maximum and 832 psf allowable.

Layer 2 is best described as: Moist Firm Tannish Gray Sandy Silty Clay
Layer values were: ë = 113.1 , c = 583 , Í = 0 NÍ = 1
At 3 feet the passive pressures are 1500 psf maximum and 750 psf allowable.
At 5 feet the passive pressures are 1726 psf maximum and 863 psf allowable.

Layer 3 is best described as: Moist Firm to Very Stiff Tannish Gray Sandy Silty Clay
Layer values were: ë = 50.7 , c = 583 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 1726 psf maximum and 863 psf allowable.
At 7.5 feet the passive pressures are 1853 psf maximum and 926 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-9, Musco Light Pole ID: A-10
0
1
2
3
4
5
6
7
8
DEPTH (feet)
Maximum
Allowable
0
200
400
600
800
1000
1200
1400
1600
1800
2000
Passive Pressure (psf)

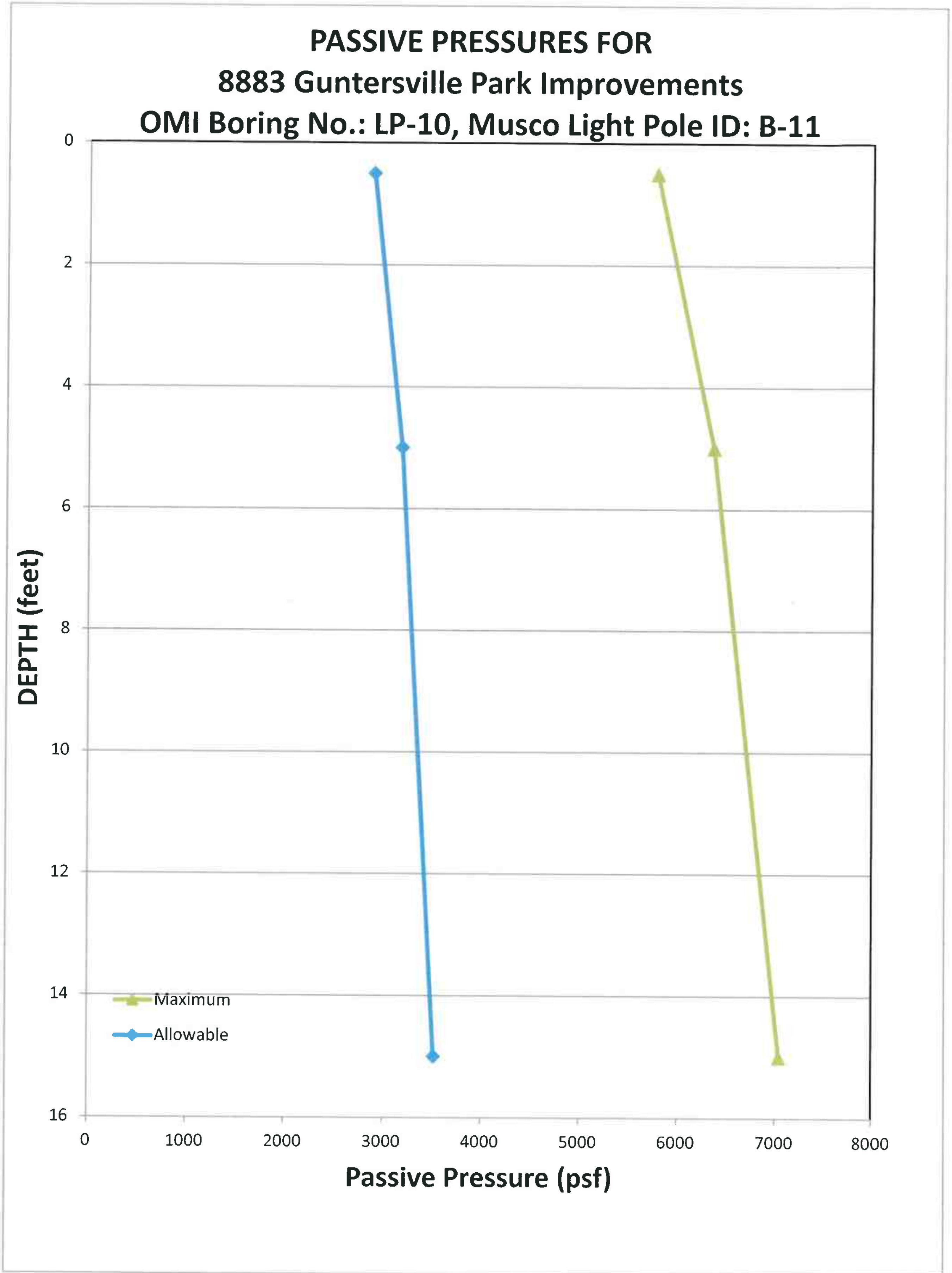
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-10
P = (ë)(z)(Ní) + (2)©*((ûNí)^0.5)

Layer 1 is best described as: Moist Firm to Very Stiff Tan Sandy Silty Clay Fill
Layer values were: ë = 130.5 , c = 2887 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 5774 psf maximum and 2887 psf allowable.
At 5 feet the passive pressures are 6361 psf maximum and 3180 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tan Sandy Silty Clay
Layer values were: ë = 68.1 , c = 2887 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 6361 psf maximum and 3180 psf allowable.
At 15 feet the passive pressures are 7042 psf maximum and 3521 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-10, Musco Light Pole ID: B-11
DEPTH (feet)
0
2
4
6
8
10
12
14
16
Maximum
Allowable
0
1000
2000
3000
4000
5000
6000
7000
8000
Passive Pressure (psf)

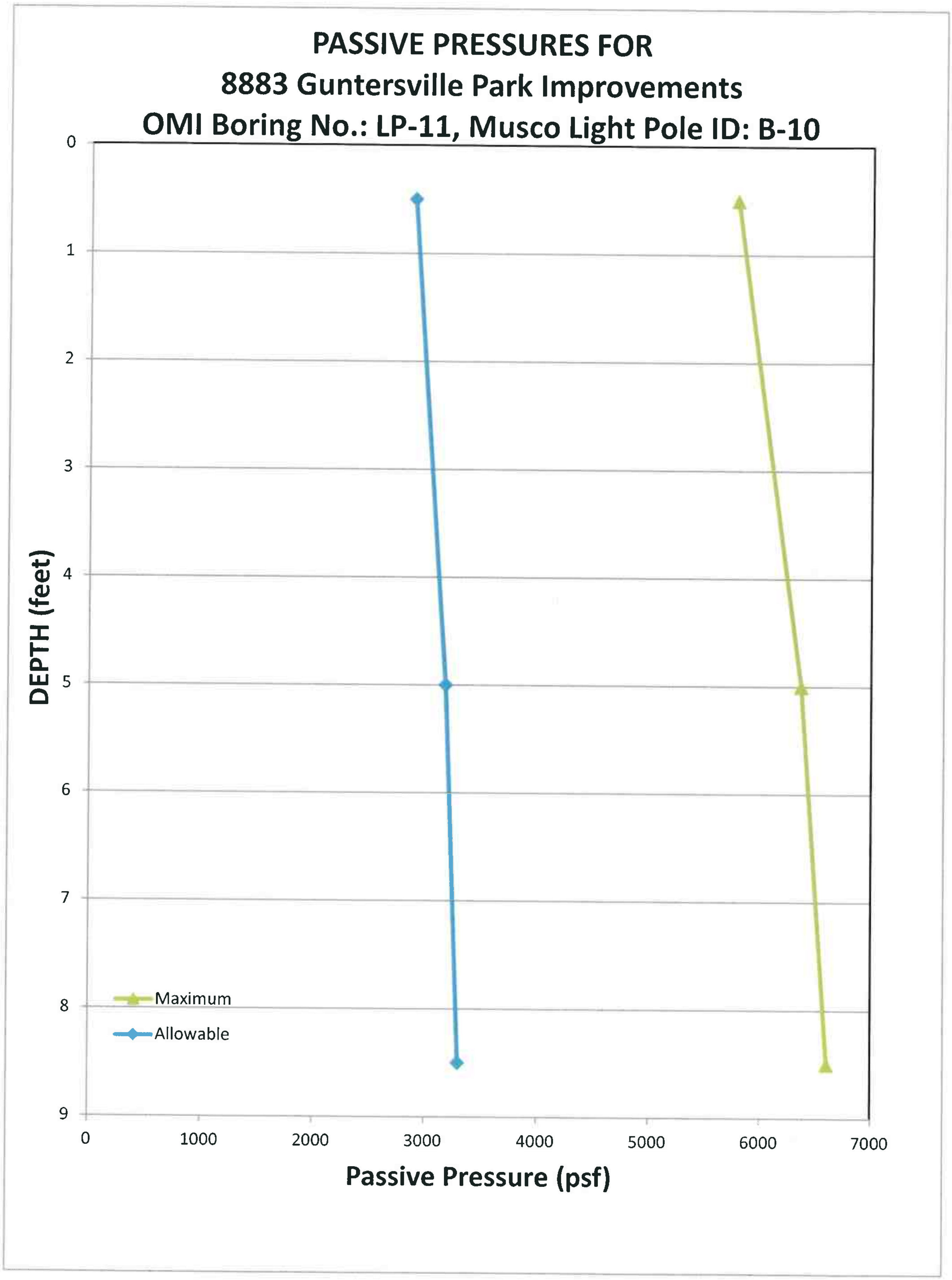
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-11
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Stiff Tannish Orange Sandy Silty Clay Fill
Layer values were: ë = 130.5 , c = 2887 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 5774 psf maximum and 2887 psf allowable.
At 5 feet the passive pressures are 6361 psf maximum and 3180 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 68.1 , c = 2887 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 6361 psf maximum and 3180 psf allowable.
At 8.5 feet the passive pressures are 6599 psf maximum and 3299 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-11, Musco Light Pole ID: B-10
DEPTH (feet)
0
1
2
3
4
5
6
7
8
9
0
1000
2000
3000
4000
5000
6000
7000
Passive Pressure (psf)
Maximum
Allowable

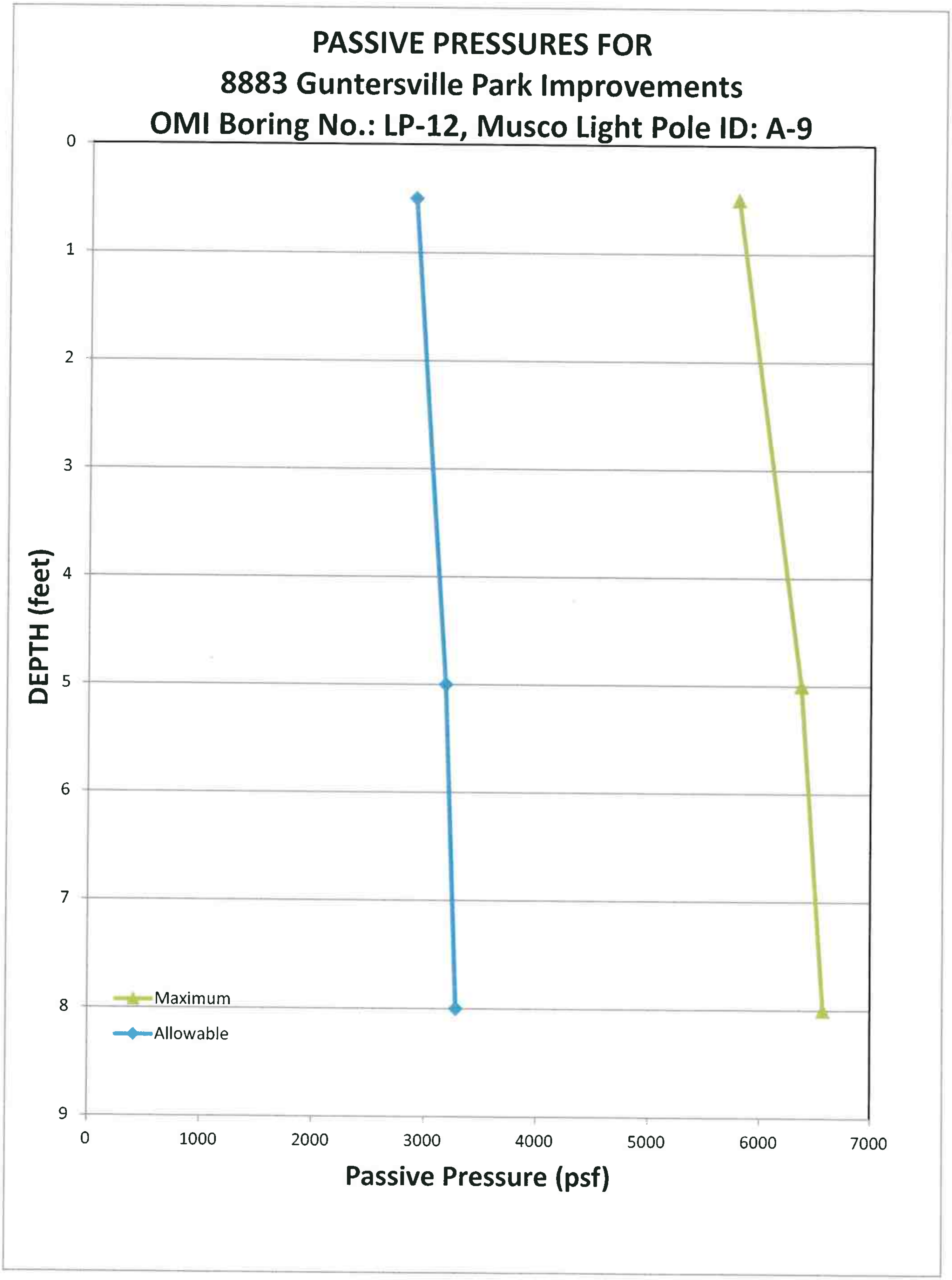
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-12
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Stiff Tan Sandy Silty Clay
Layer values were: ë = 130.5 , c = 2887 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 5774 psf maximum and 2887 psf allowable.
At 5 feet the passive pressures are 6361 psf maximum and 3180 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tan Sandy Silty Clay
Layer values were: ë = 68.1 , c = 2887 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 6361 psf maximum and 3180 psf allowable.
At 8 feet the passive pressures are 6565 psf maximum and 3282 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-12, Musco Light Pole ID: A-9
DEPTH (feet)
0
1
2
3
4
5
6
7
8
9
Maximum
Allowable
0
1000
2000
3000
4000
5000
6000
7000
Passive Pressure (psf)

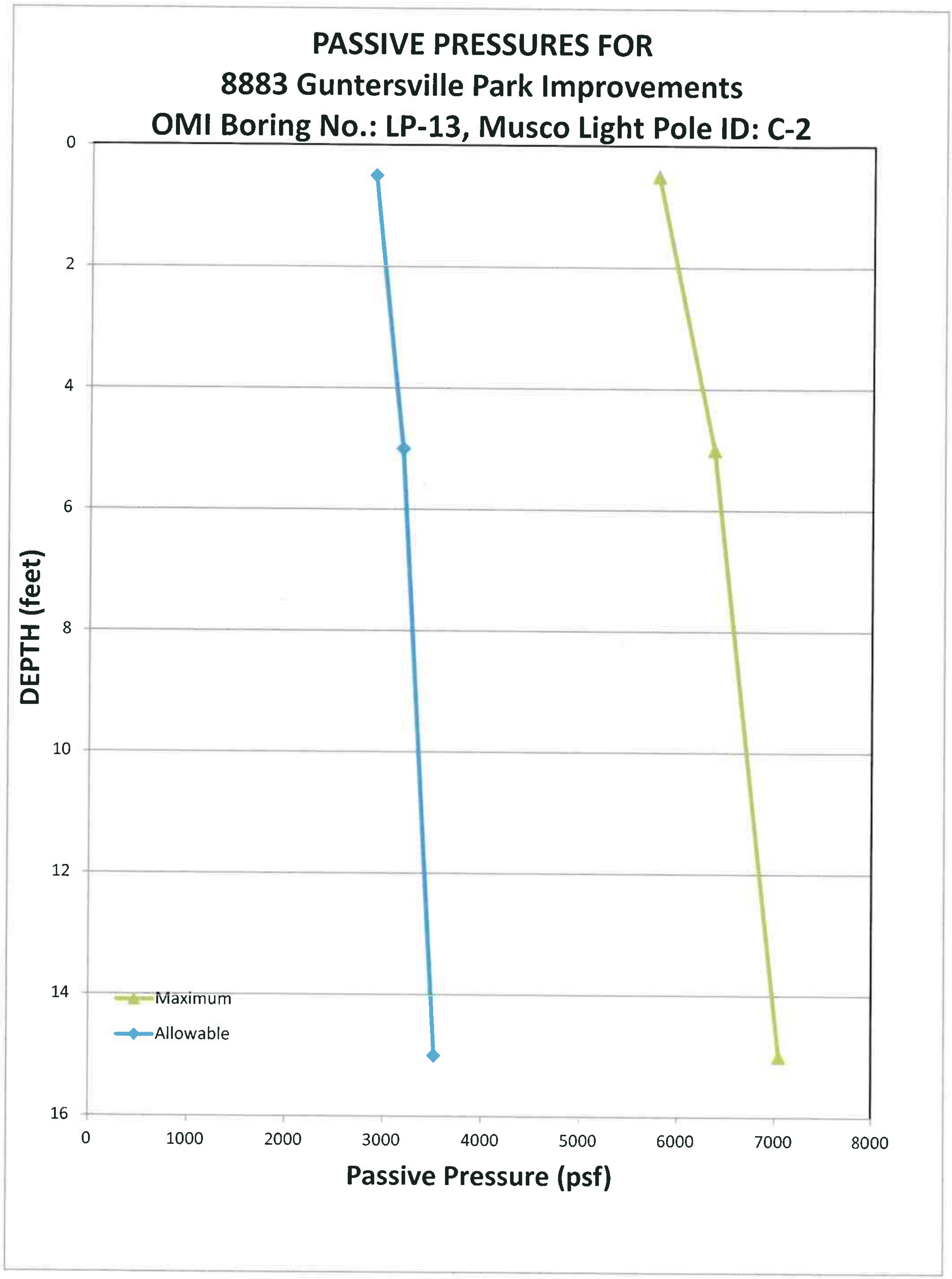
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-13
P = (ë)(z)(Ní) + (2)©*((ûNí)^0.5)

Layer 1 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 130.5 , c = 2887 , Í = 0 Ní = 1
At 0.5 feet the passive pressures are 5774 psf maximum and 2887 psf allowable.
At 5 feet the passive pressures are 6361 psf maximum and 3180 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 68.1 , c = 2887 , Í = 0 Ní = 1
At 5 feet the passive pressures are 6361 psf maximum and 3180 psf allowable.
At 15 feet the passive pressures are 7042 psf maximum and 3521 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 Ní = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-13, Musco Light Pole ID: C-2
DEPTH (feet)
0
2
4
6
8
10
12
14
16
0
1000
2000
3000
4000
5000
6000
7000
8000
Passive Pressure (psf)
Maximum
Allowable

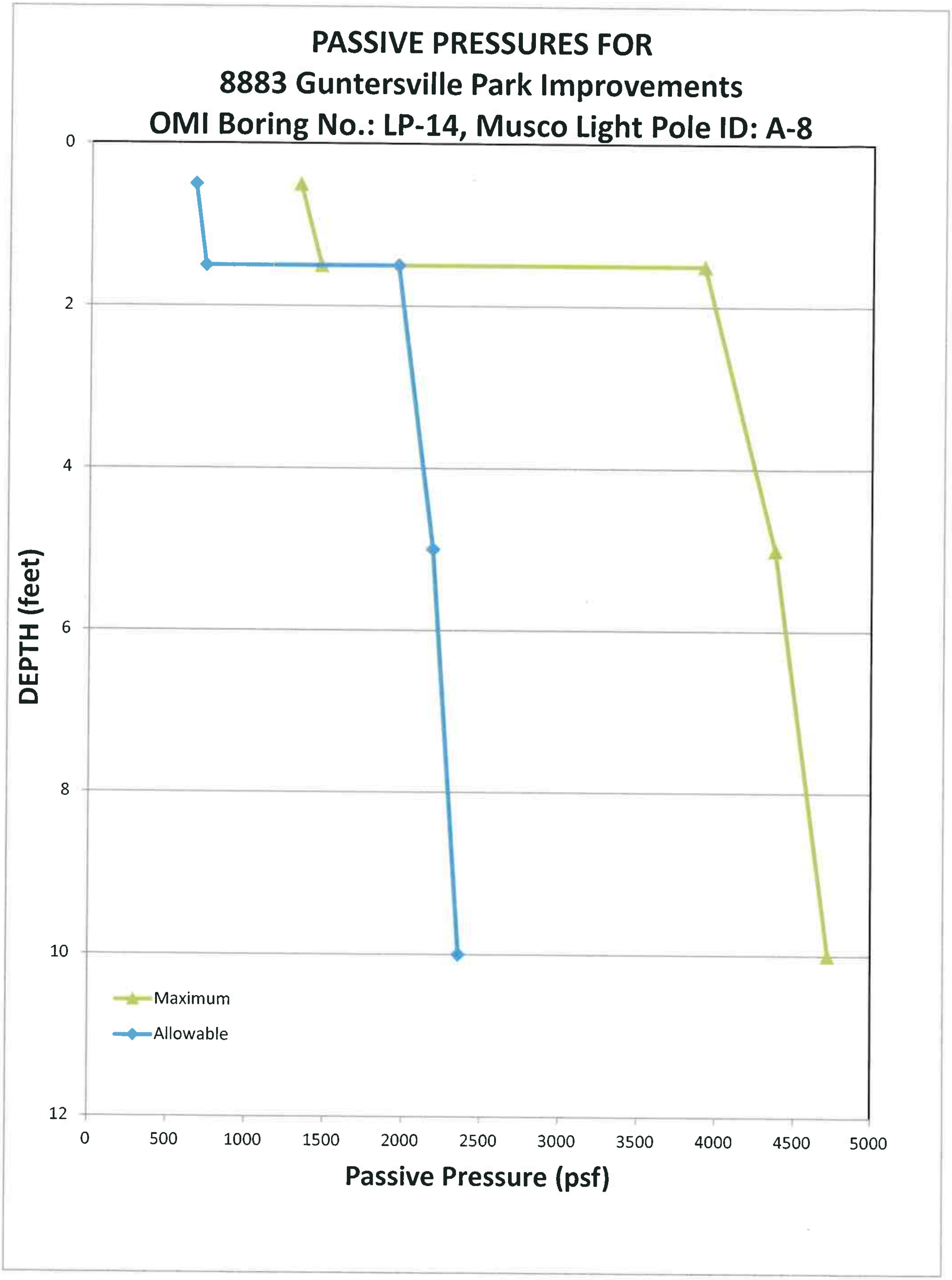
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-14
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Soft Brown Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 1.5 feet the passive pressures are 1463 psf maximum and 731 psf allowable.

Layer 2 is best described as: Moist Stiff Tan Sandy Silty Clay
Layer values were: ë = 132.0 , c = 1887 , Í = 0 NÍ = 1
At 1.5 feet the passive pressures are 3907 psf maximum and 1953 psf allowable.
At 5 feet the passive pressures are 4369 psf maximum and 2184 psf allowable.

Layer 3 is best described as: Moist Very Stiff Tan Sandy Silty Clay
Layer values were: ë = 69.6 , c = 1887 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 4369 psf maximum and 2184 psf allowable.
At 10 feet the passive pressures are 4717 psf maximum and 2358 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-14, Musco Light Pole ID: A-8
DEPTH (feet)
0
2
4
6
8
10
12
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
Passive Pressure (psf)
Maximum
Allowable

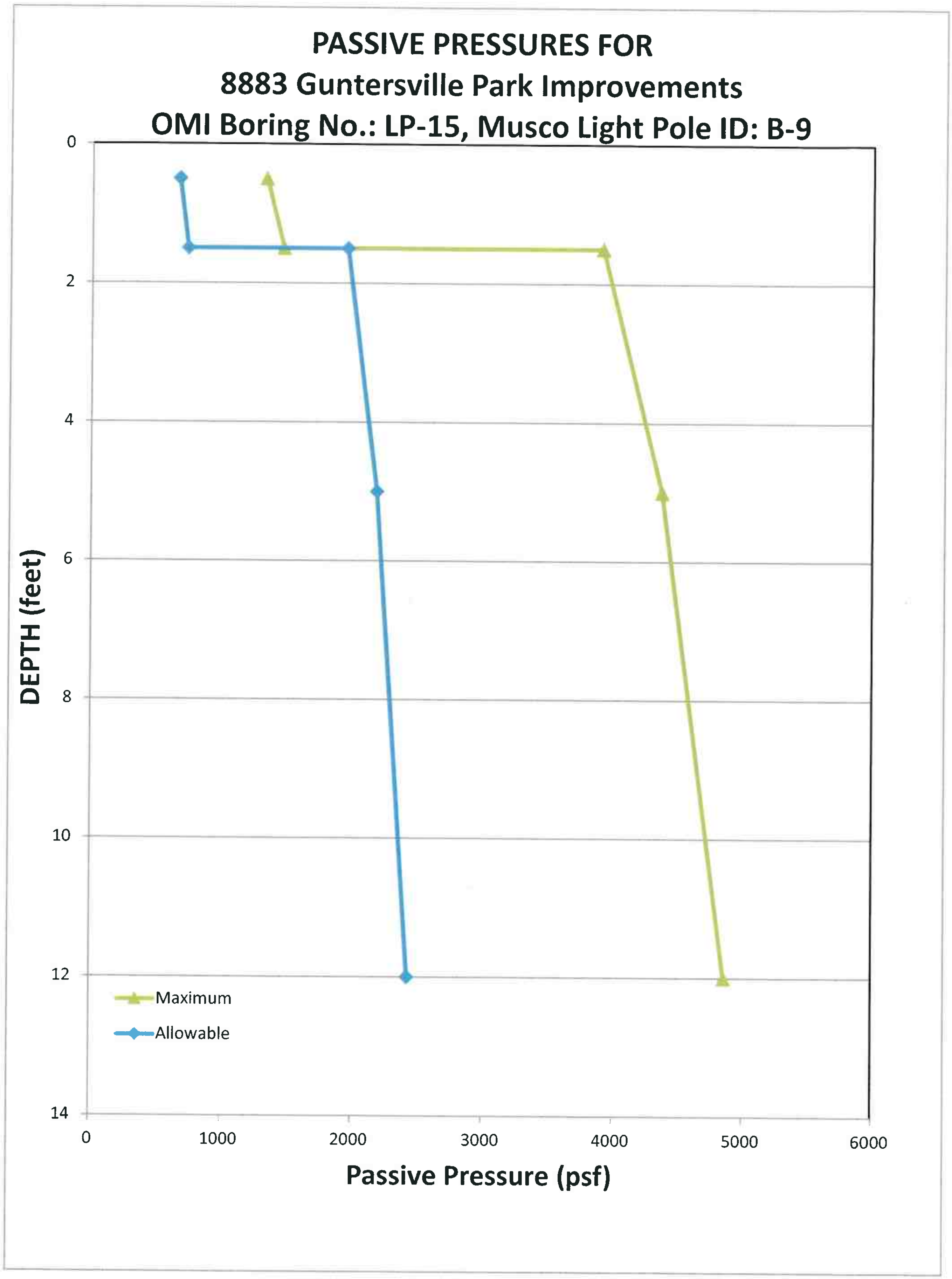
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-15
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Soft Brown Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 1.5 feet the passive pressures are 1463 psf maximum and 731 psf allowable.

Layer 2 is best described as: Moist Stiff Tan Sandy Silty Clay
Layer values were: ë = 132.0 , c = 1887 , Í = 0 NÍ = 1
At 1.5 feet the passive pressures are 3907 psf maximum and 1953 psf allowable.
At 5 feet the passive pressures are 4369 psf maximum and 2184 psf allowable.

Layer 3 is best described as: Moist Very Stiff Tan Sandy Silty Clay
Layer values were: ë = 69.6 , c = 1887 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 4369 psf maximum and 2184 psf allowable.
At 12 feet the passive pressures are 4857 psf maximum and 2428 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-15, Musco Light Pole ID: B-9
DEPTH (feet)
0
2
4
6
8
10
12
14
0
1000
2000
3000
4000
5000
6000
Passive Pressure (psf)
Maximum
Allowable

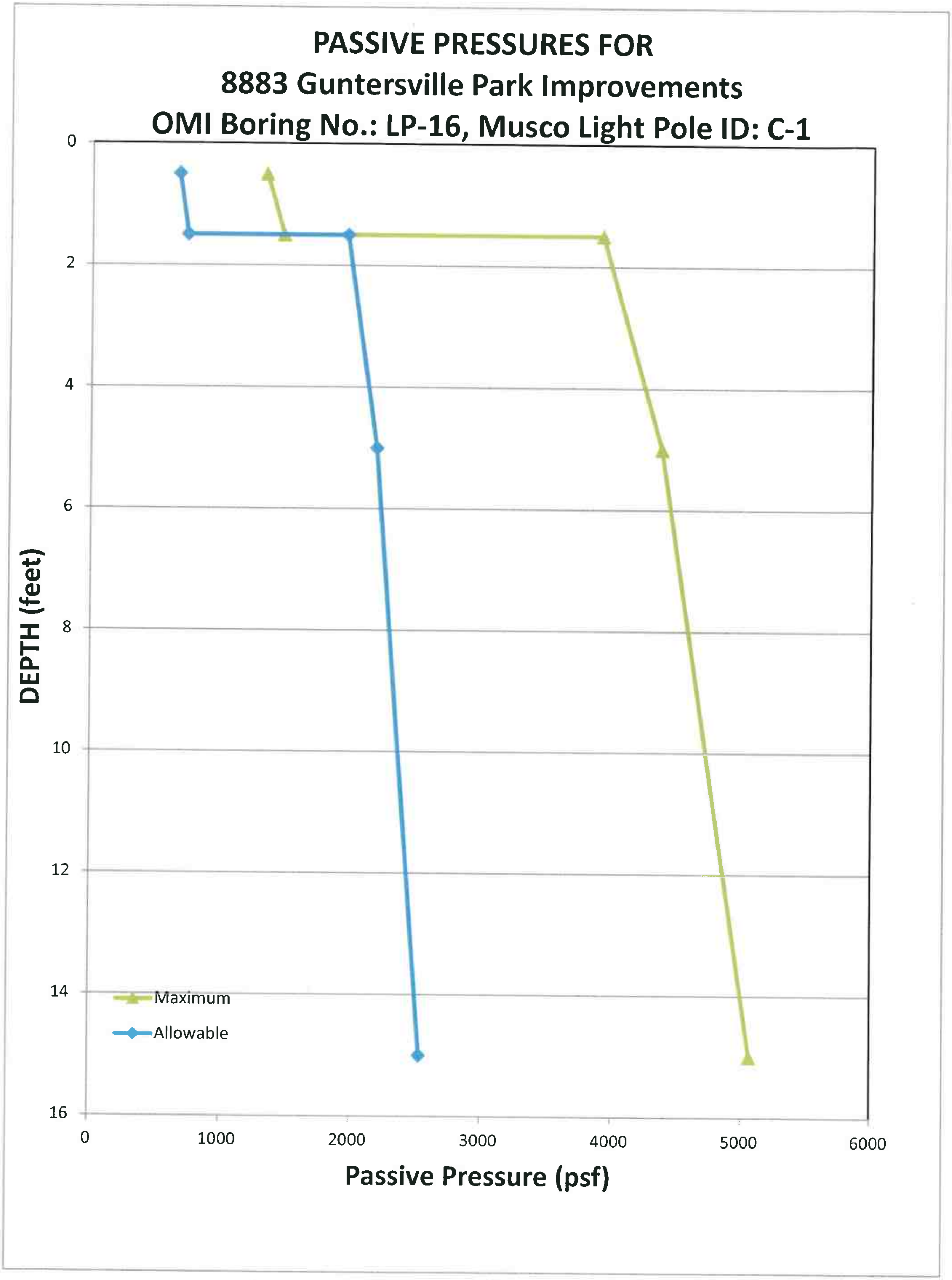
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-16
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm Brown Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 1.5 feet the passive pressures are 1463 psf maximum and 731 psf allowable.

Layer 2 is best described as: Moist Stiff to Very Stiff Tan Sandy Silty Clay
Layer values were: ë = 132.0 , c = 1887 , Í = 0 NÍ = 1
At 1.5 feet the passive pressures are 3907 psf maximum and 1953 psf allowable.
At 5 feet the passive pressures are 4369 psf maximum and 2184 psf allowable.

Layer 3 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 69.6 , c = 1887 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 4369 psf maximum and 2184 psf allowable.
At 15 feet the passive pressures are 5065 psf maximum and 2532 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-16, Musco Light Pole ID: C-1
DEPTH (feet)
0
2
4
6
8
10
12
14
16
0
1000
2000
3000
4000
5000
6000
Passive Pressure (psf)
Maximum
Allowable

Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-17
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Wet Very Loose Brown Clayey Gravel
Layer values were: ë = 57.2 , c = 244 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 488 psf maximum and 244 psf allowable.
At 2 feet the passive pressures are 573 psf maximum and 286 psf allowable.

Layer 2 is best described as: Moist Firm to Very Stiff Tan Sandy Silty Clay
Layer values were: ë = 64.0 , c = 1450 , Í = 0 NÍ = 1
At 2 feet the passive pressures are 2985 psf maximum and 1492 psf allowable.
At 8 feet the passive pressures are 3369 psf maximum and 1684 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
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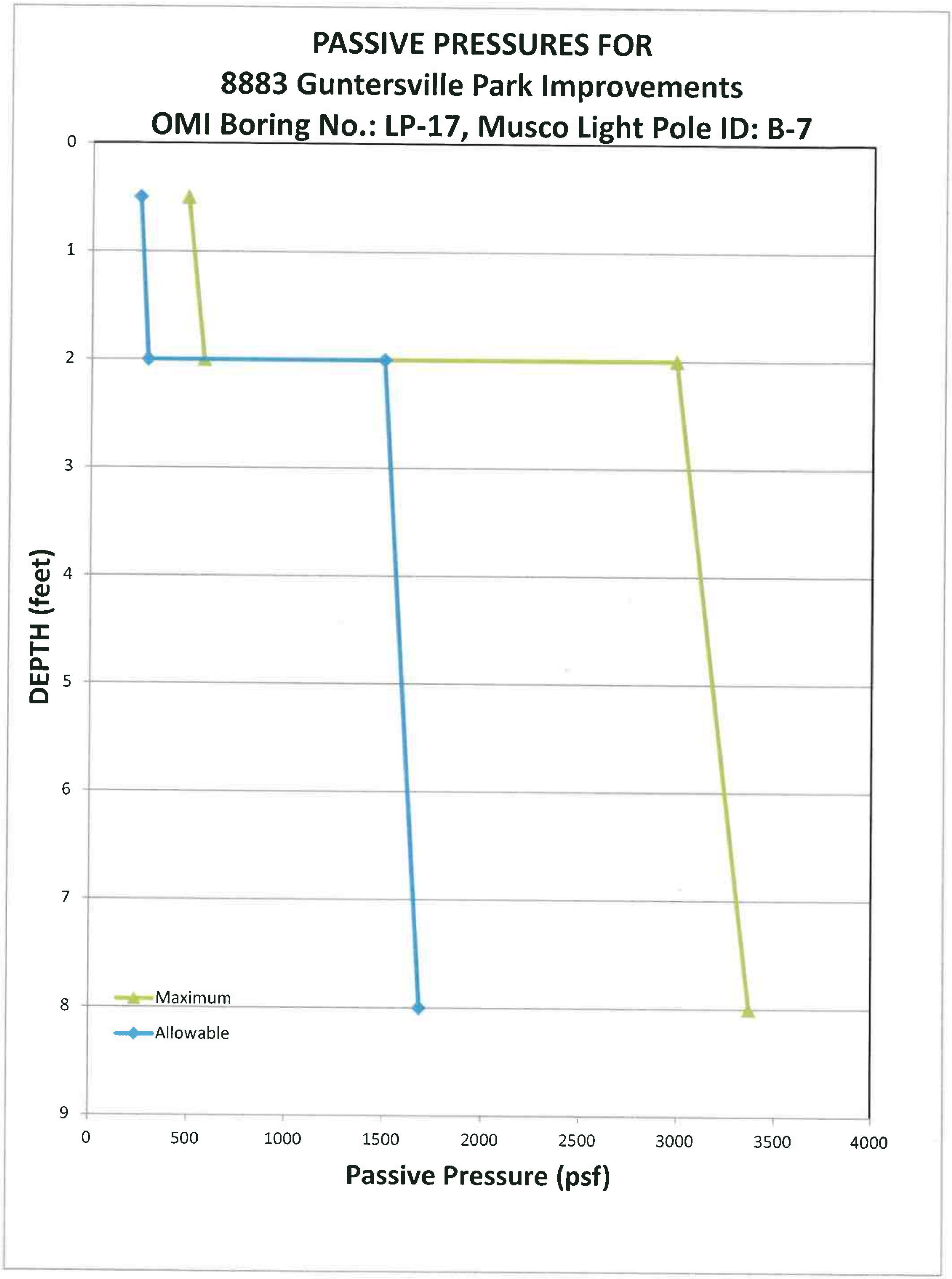
###



PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-17, Musco Light Pole ID: B-7
DEPTH (feet)
0
1
2
3
4
5
6
7
8
9
0
500
1000
1500
2000
2500
3000
3500
4000
Passive Pressure (psf)
Maximum
Allowable

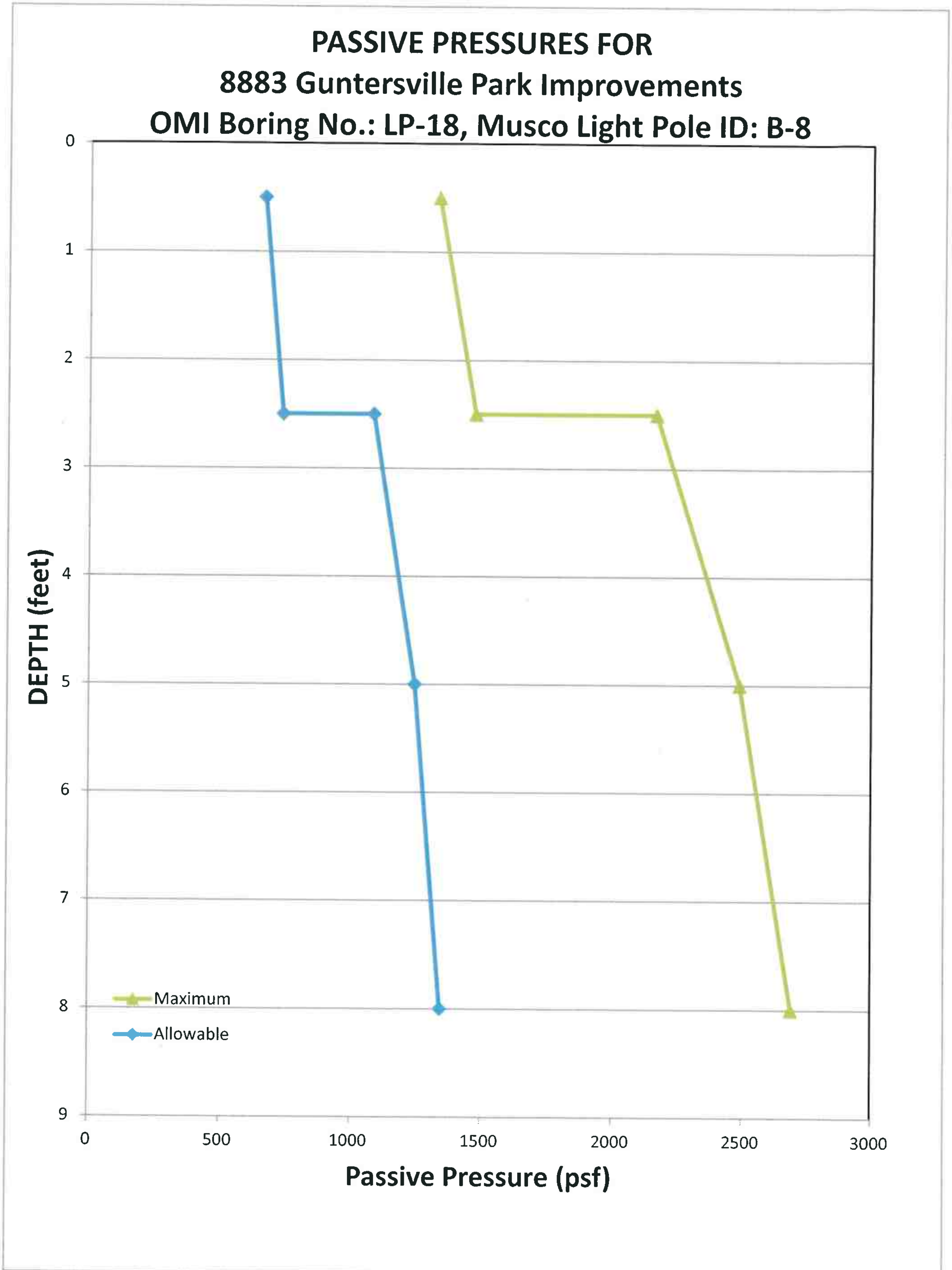
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-18
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm Red Sandy Silty Clay Fill
Layer values were: ë = 71.5 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 2.5 feet the passive pressures are 1473 psf maximum and 736 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 129.3 , c = 1011 , Í = 0 NÍ = 1
At 2.5 feet the passive pressures are 2165 psf maximum and 1082 psf allowable.
At 5 feet the passive pressures are 2488 psf maximum and 1244 psf allowable.

Layer 3 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 66.9 , c = 1011 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 2488 psf maximum and 1244 psf allowable.
At 8 feet the passive pressures are 2688 psf maximum and 1344 psf allowable.



PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-18, Musco Light Pole ID: B-8
DEPTH (feet)
0
1
2
3
4
5
6
7
8
9
0
500
1000
1500
2000
2500
3000
Passive Pressure (psf)
Maximum
Allowable

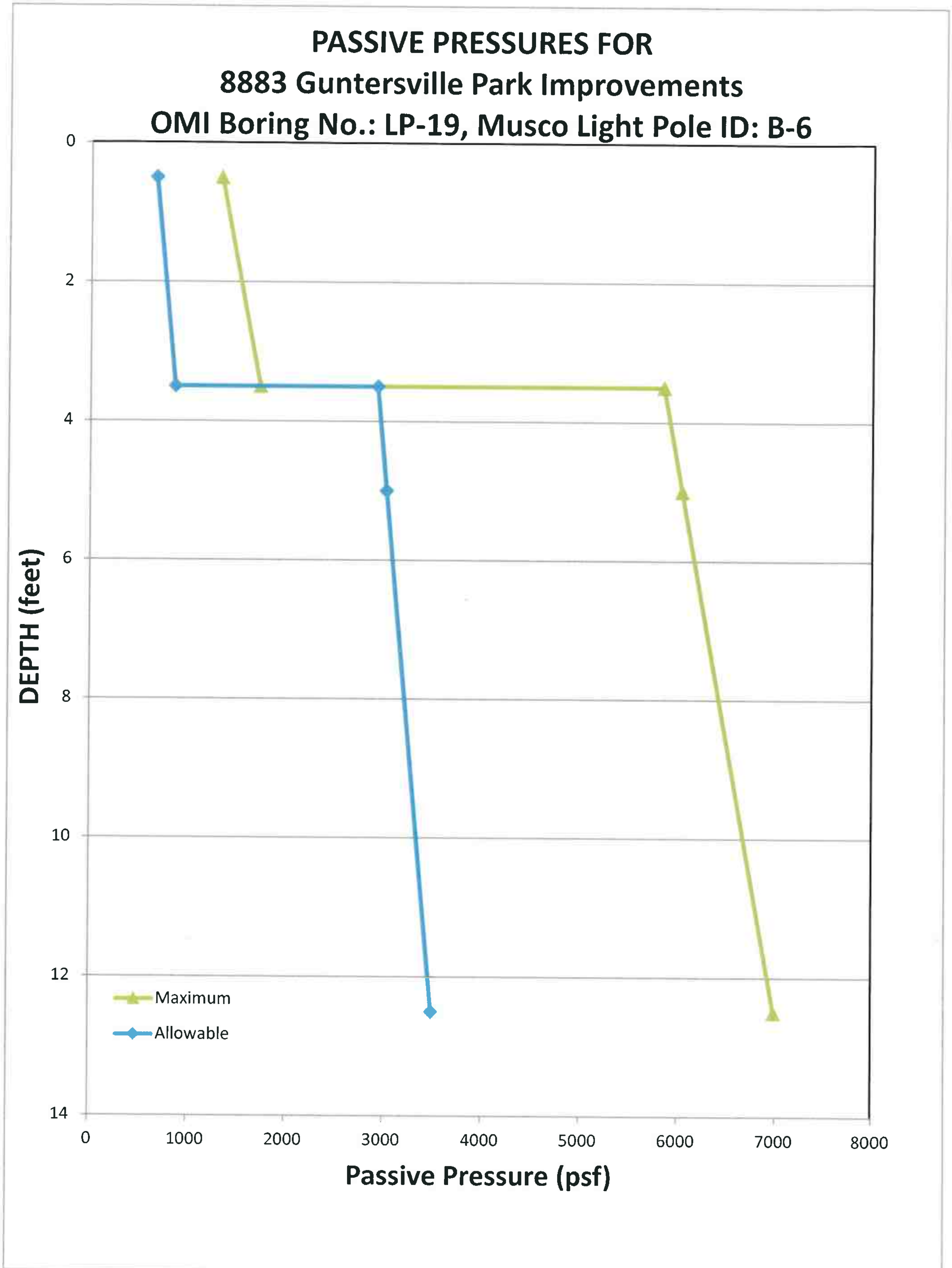
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-19
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm to Stiff Red, Brown, and Gray Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 3.5 feet the passive pressures are 1731 psf maximum and 865 psf allowable.

Layer 2 is best described as: Moist Very Stiff Yellowish Tan Sandy Silty Clay
Layer values were: ë = 126.4 , c = 2723 , Í = 0 NÍ = 1
At 3.5 feet the passive pressures are 5847 psf maximum and 2923 psf allowable.
At 5 feet the passive pressures are 6037 psf maximum and 3018 psf allowable.

Layer 3 is best described as: Moist Very Stiff Yellowish Tan Sandy Silty Clay
Layer values were: ë = 126.4 , c = 2723 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 6037 psf maximum and 3018 psf allowable.
At 12.5 feet the passive pressures are 6985 psf maximum and 3492 psf allowable.



PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-19, Musco Light Pole ID: B-6
DEPTH (feet)
0
2
4
6
8
10
12
14
0
1000
2000
3000
4000
5000
6000
7000
8000
Passive Pressure (psf)
Maximum
Allowable

Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-20
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Soft to Stiff Tannish Gray Sandy Silty Clay
Layer values were: ë = 57.2 , c = 244 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 488 psf maximum and 244 psf allowable.
At 3.5 feet the passive pressures are 659 psf maximum and 329 psf allowable.

Layer 2 is best described as: Moist Stiff to Very Stiff Tannish Yellow Sandy Silty Clay
Layer values were: ë = 64.0 , c = 1450 , Í = 0 NÍ = 1
At 3.5 feet the passive pressures are 3071 psf maximum and 1535 psf allowable.
At 11 feet the passive pressures are 3551 psf maximum and 1775 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
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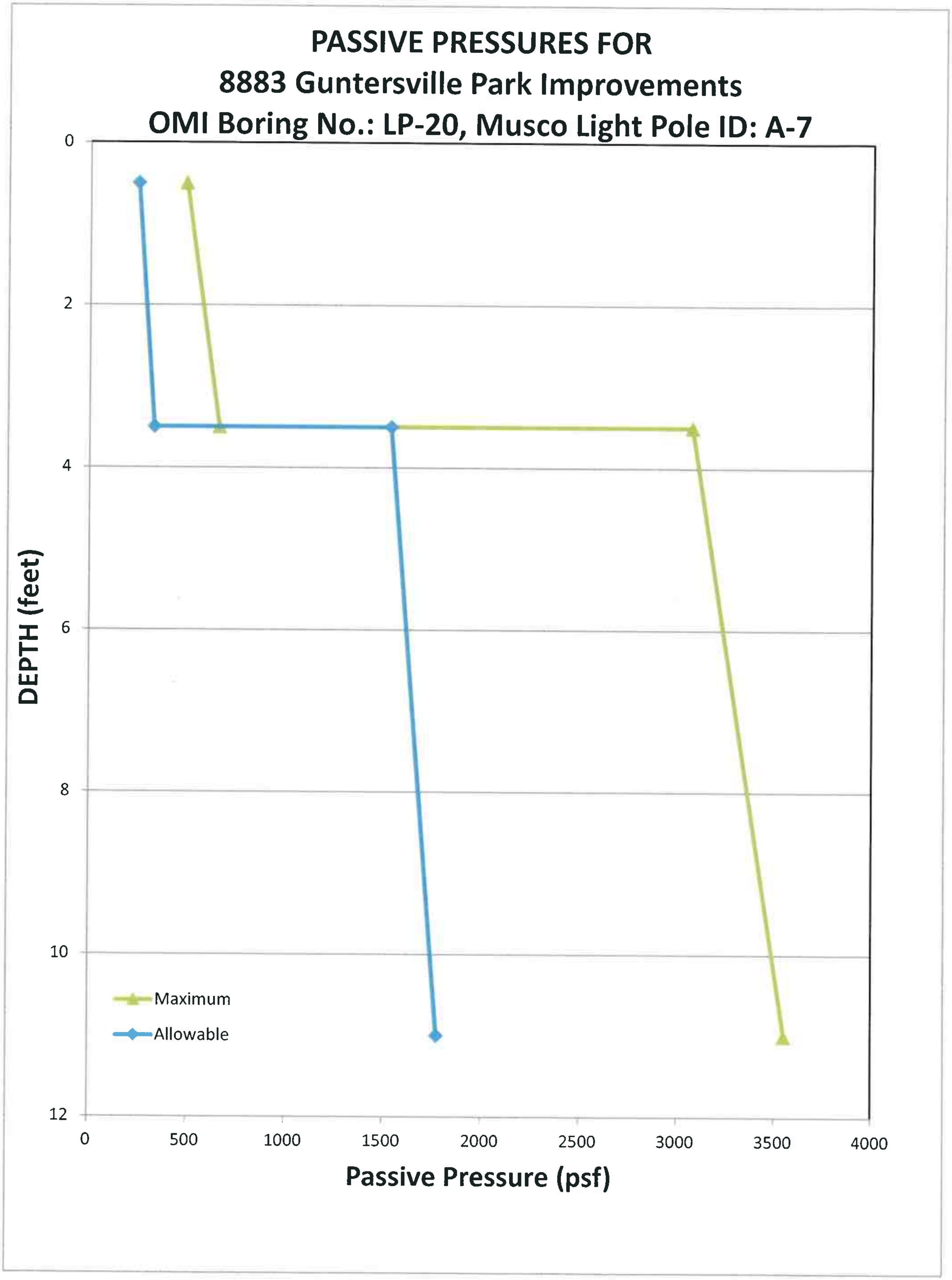

PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-20, Musco Light Pole ID: A-7
DEPTH (feet)
0
2
4
6
8
10
12
0
500
1000
1500
2000
2500
3000
3500
4000
Passive Pressure (psf)
Maximum
Allowable

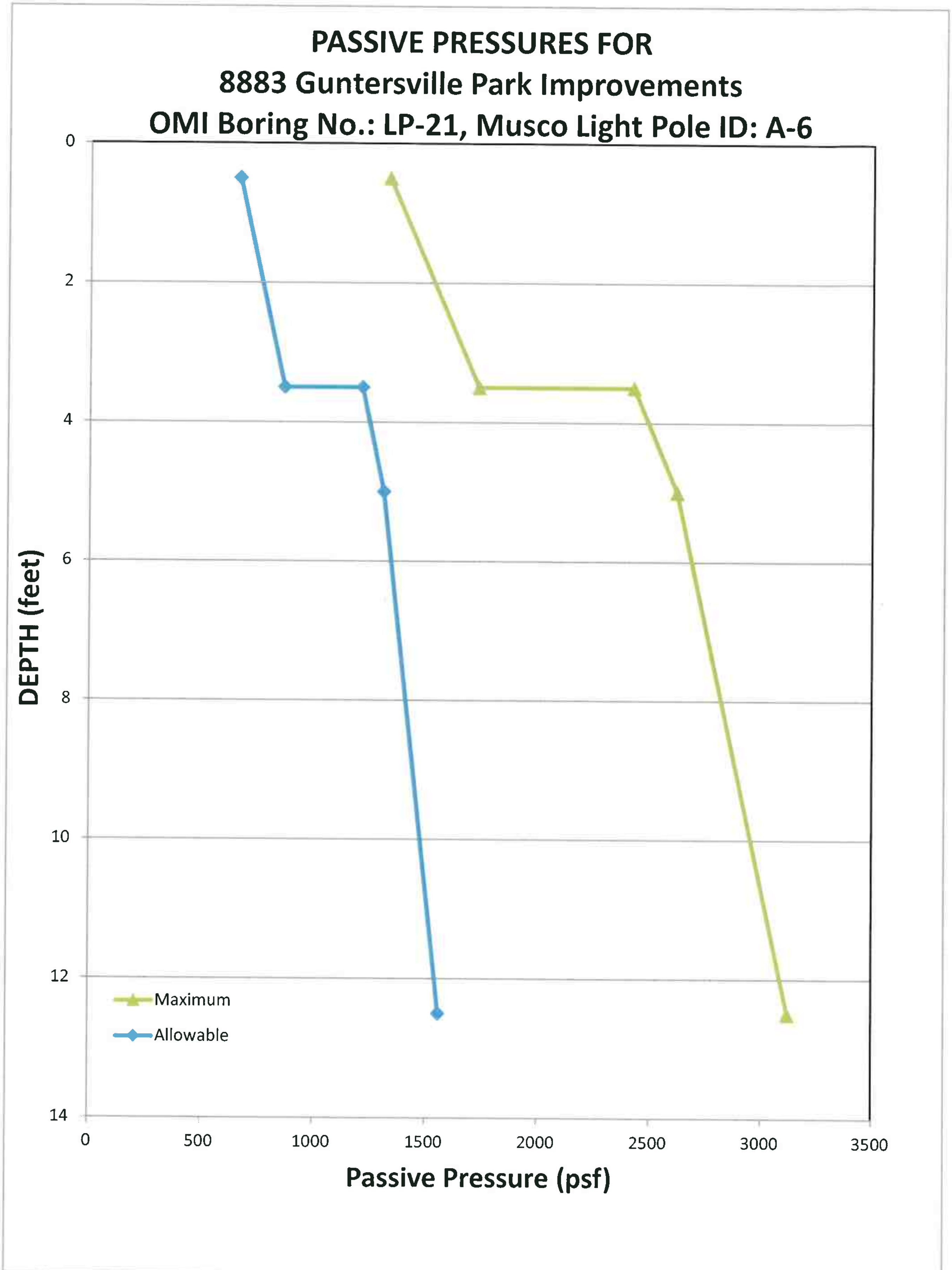
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-21
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm Brown Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 3.5 feet the passive pressures are 1731 psf maximum and 865 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 129.3 , c = 1011 , Í = 0 NÍ = 1
At 3.5 feet the passive pressures are 2423 psf maximum and 1211 psf allowable.
At 5 feet the passive pressures are 2617 psf maximum and 1308 psf allowable.

Layer 3 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 66.8 , c = 1011 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 2617 psf maximum and 1308 psf allowable.
At 12.5 feet the passive pressures are 3118 psf maximum and 1559 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-21, Musco Light Pole ID: A-6
DEPTH (feet)
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
2500
3000
3500
Passive Pressure (psf)
Maximum
Allowable

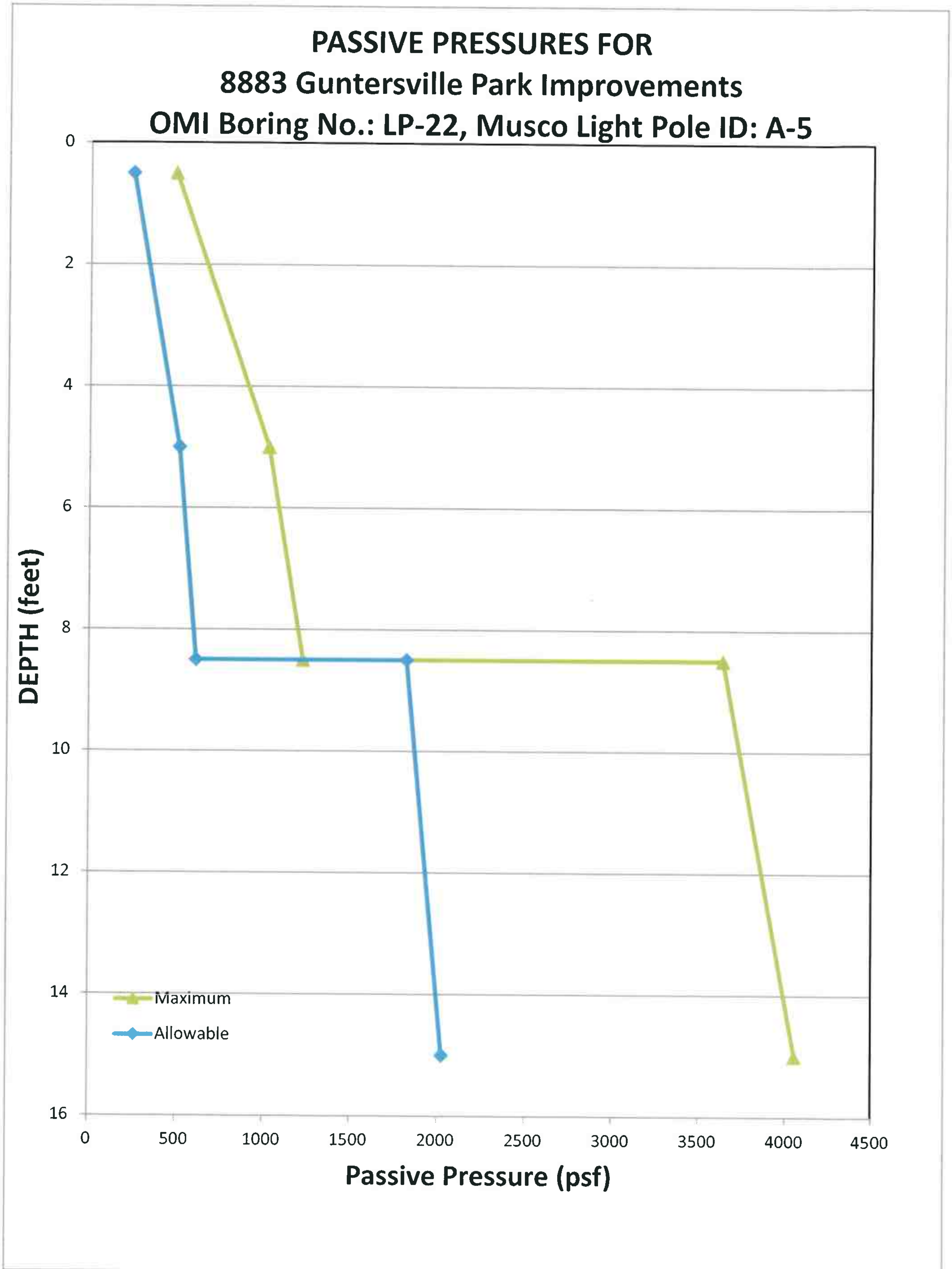
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-22
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm to Stiff Tannish Gray Sandy Silty Clay
Layer values were: ë = 119.6 , c = 244 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 488 psf maximum and 244 psf allowable.
At 5 feet the passive pressures are 1026 psf maximum and 513 psf allowable.

Layer 2 is best described as: Moist Firm Tannish Gray Sandy Silty Clay
Layer values were: ë = 57.2 , c = 244 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 1026 psf maximum and 513 psf allowable.
At 8.5 feet the passive pressures are 1226 psf maximum and 613 psf allowable.

Layer 3 is best described as: Moist Stiff to Very Stiff Yellowish Tan Clayey Gravel
Layer values were: ë = 64 , c = 1450 , Í = 0 NÍ = 1
At 8.5 feet the passive pressures are 3638 psf maximum and 1819 psf allowable.
At 15 feet the passive pressures are 4054 psf maximum and 2027 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-22, Musco Light Pole ID: A-5
DEPTH (feet)
0
2
4
6
8
10
12
14
16
0
500
1000
1500
2000
2500
3000
3500
4000
4500
Passive Pressure (psf)
Maximum
Allowable

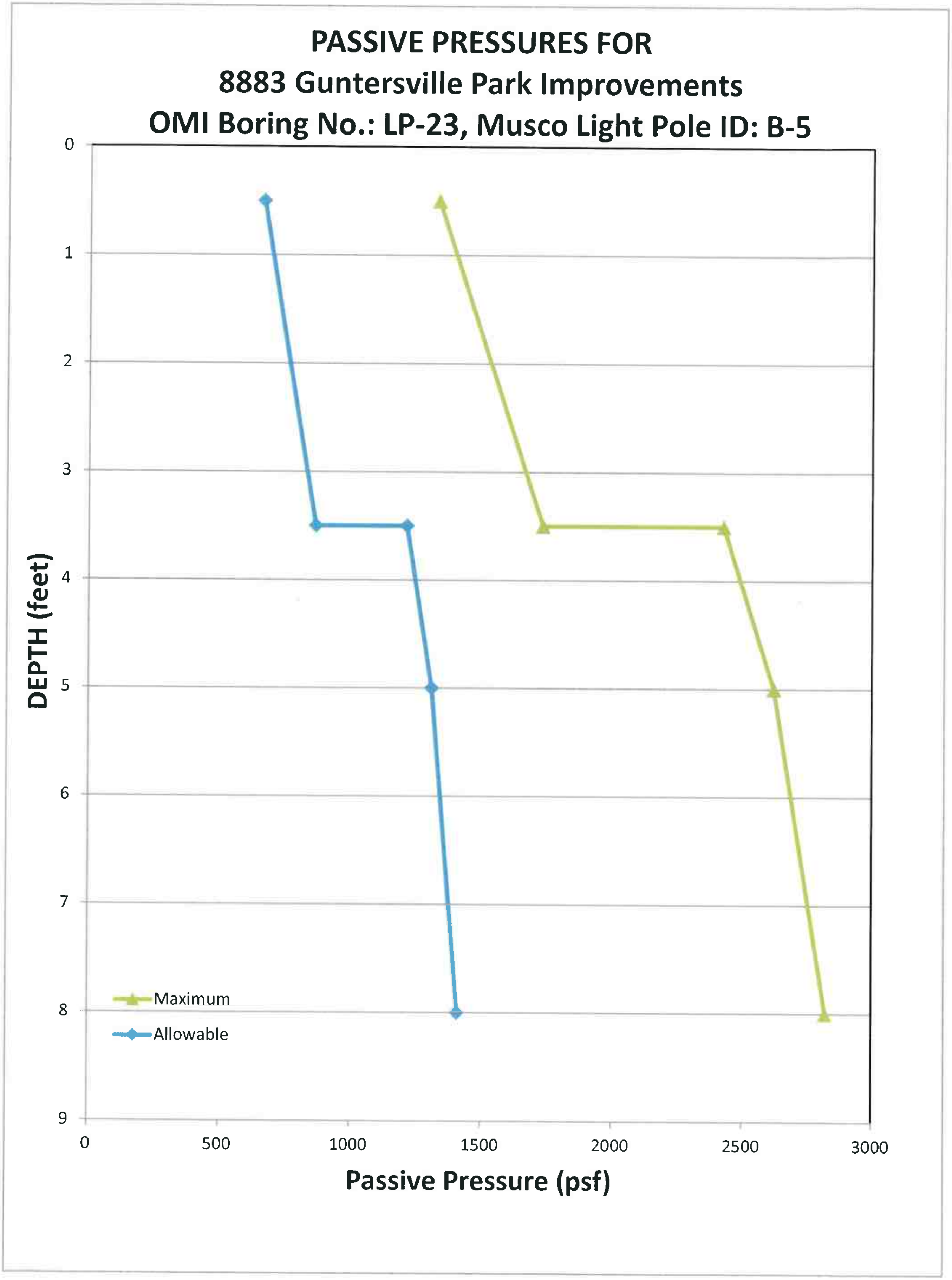
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-23
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Stiff Brown Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 3.5 feet the passive pressures are 1731 psf maximum and 865 psf allowable.

Layer 2 is best described as: Moist Firm Tan Sandy Silty Clay
Layer values were: ë = 129.3 , c = 1011 , Í = 0 NÍ = 1
At 3.5 feet the passive pressures are 2423 psf maximum and 1211 psf allowable.
At 5 feet the passive pressures are 2617 psf maximum and 1308 psf allowable.

Layer 3 is best described as: Moist Stiff Tan Sandy Silty Clay
Layer values were: ë = 66.9 , c = 1011 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 2617 psf maximum and 1308 psf allowable.
At 8 feet the passive pressures are 2818 psf maximum and 1409 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-23, Musco Light Pole ID: B-5
DEPTH (feet)
0
1
2
3
4
5
6
7
8
9
0
500
1000
1500
2000
2500
3000
Passive Pressure (psf)
Maximum
Allowable

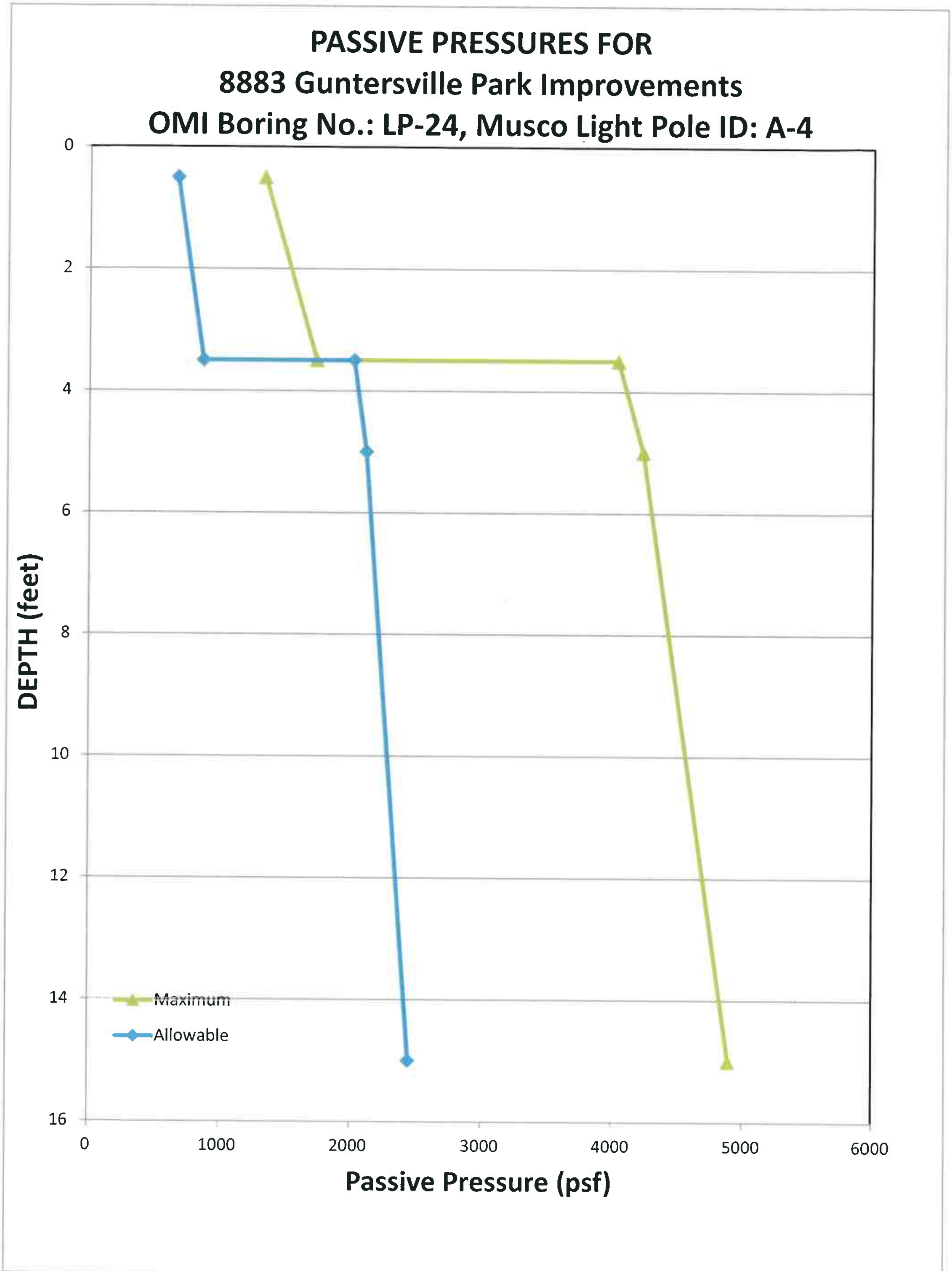
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-24
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm Tan Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 3.5 feet the passive pressures are 1731 psf maximum and 865 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 129.1 , c = 1816 , Í = 0 NÍ = 1
At 3.5 feet the passive pressures are 4033 psf maximum and 2016 psf allowable.
At 5 feet the passive pressures are 4227 psf maximum and 2113 psf allowable.

Layer 3 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 66.7 , c = 1816 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 4227 psf maximum and 2113 psf allowable.
At 15 feet the passive pressures are 4894 psf maximum and 2447 psf allowable.


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-24, Musco Light Pole ID: A-4
DEPTH (feet)
0
2
4
6
8
10
12
14
16
Maximum
Allowable
0
1000
2000
3000
4000
5000
6000
Passive Pressure (psf)

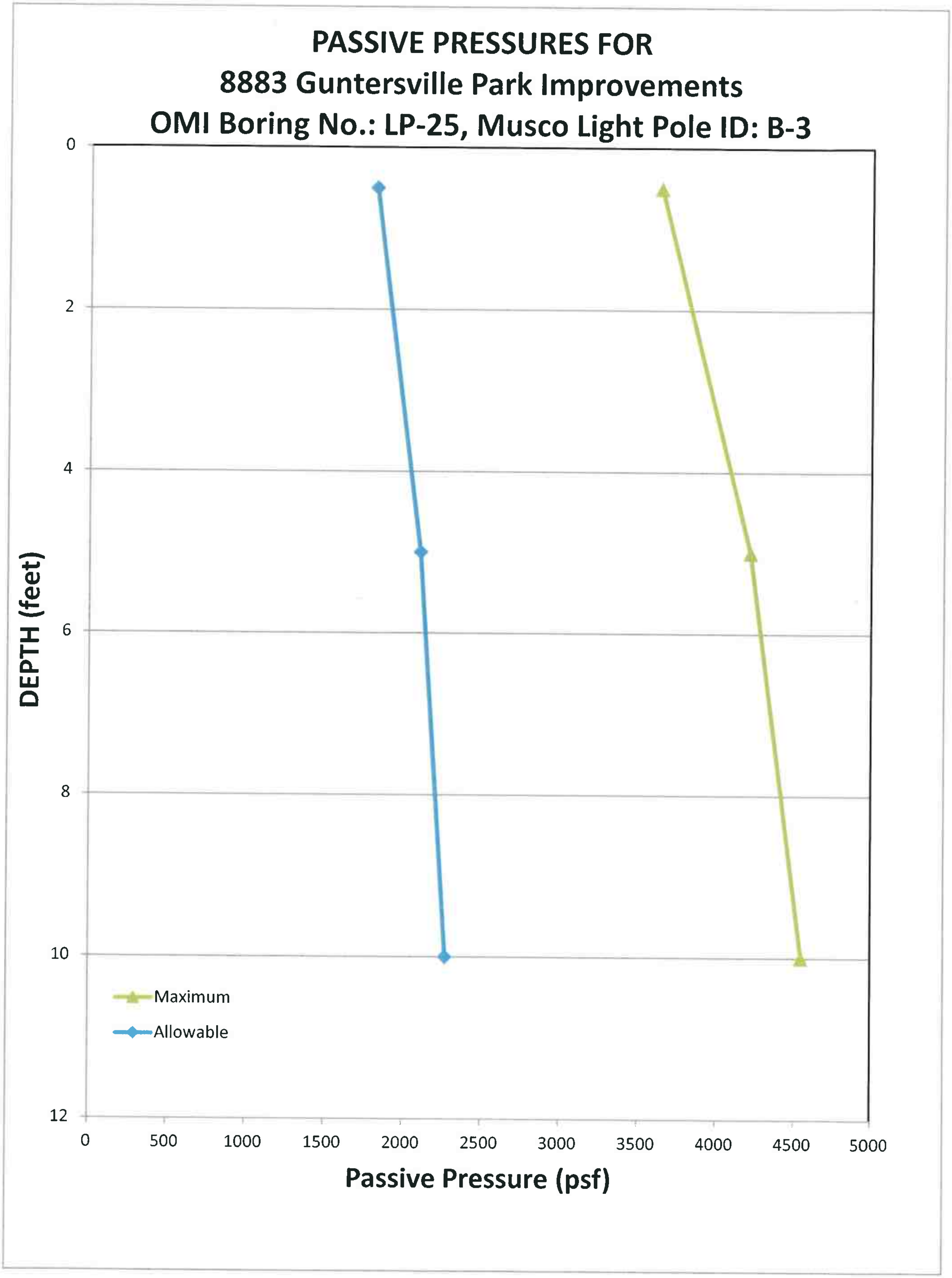
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-25
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 129.1 , c = 1816 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 3632 psf maximum and 1816 psf allowable.
At 5 feet the passive pressures are 4212 psf maximum and 2106 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 66.7 , c = 1816 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 4212 psf maximum and 2106 psf allowable.
At 10 feet the passive pressures are 4546 psf maximum and 2273 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-25, Musco Light Pole ID: B-3
DEPTH (feet)
0
2
4
6
8
10
12
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
Passive Pressure (psf)
Maximum
Allowable

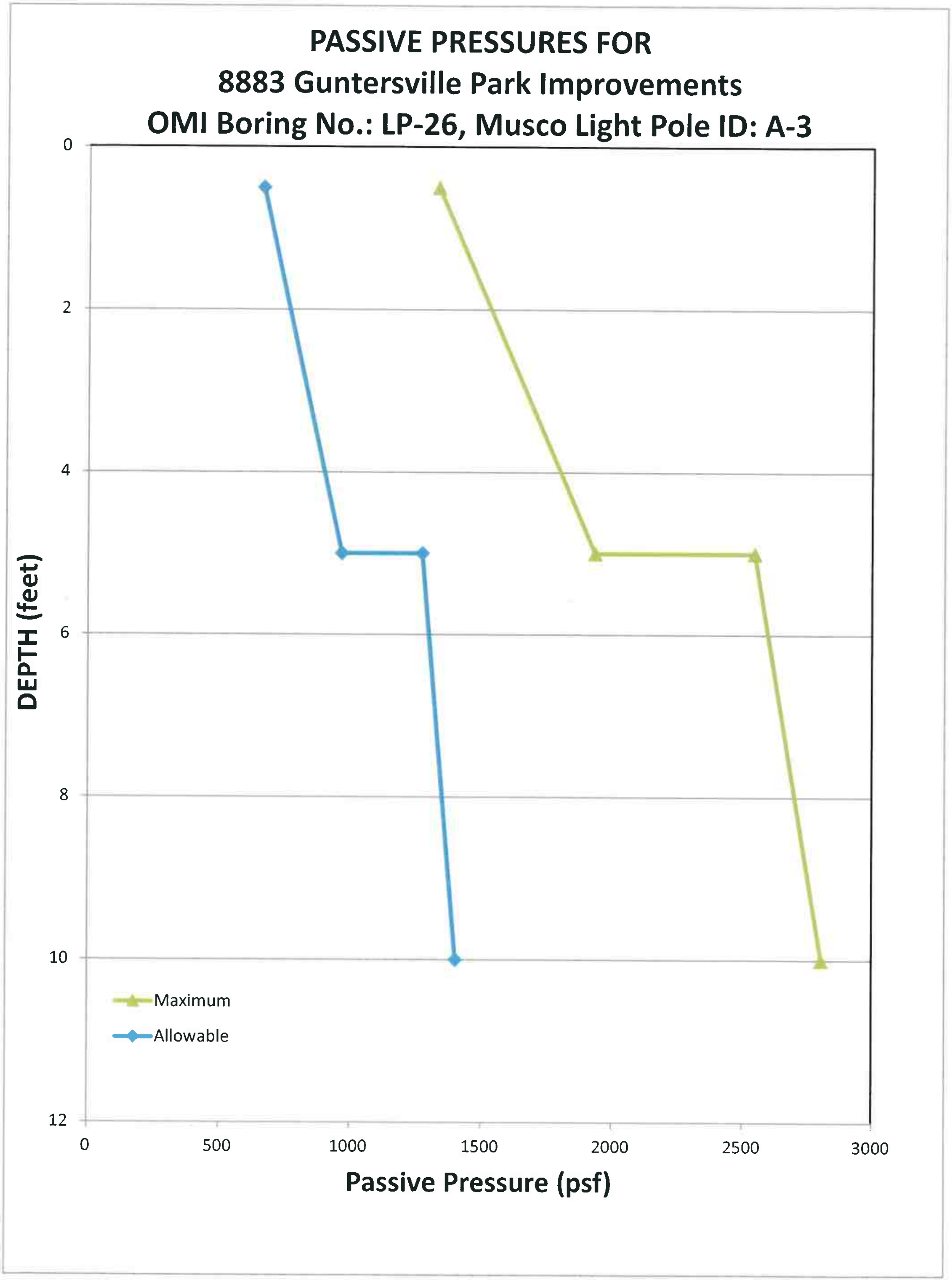
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-26
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm to Stiff Tan Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 5 feet the passive pressures are 1932 psf maximum and 966 psf allowable.

Layer 2 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 51.5 , c = 971 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 2544 psf maximum and 1272 psf allowable.
At 10 feet the passive pressures are 2802 psf maximum and 1401 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-26, Musco Light Pole ID: A-3
DEPTH (feet)
0
2
4
6
8
10
12
0
500
1000
1500
2000
2500
3000
Passive Pressure (psf)
Maximum
Allowable

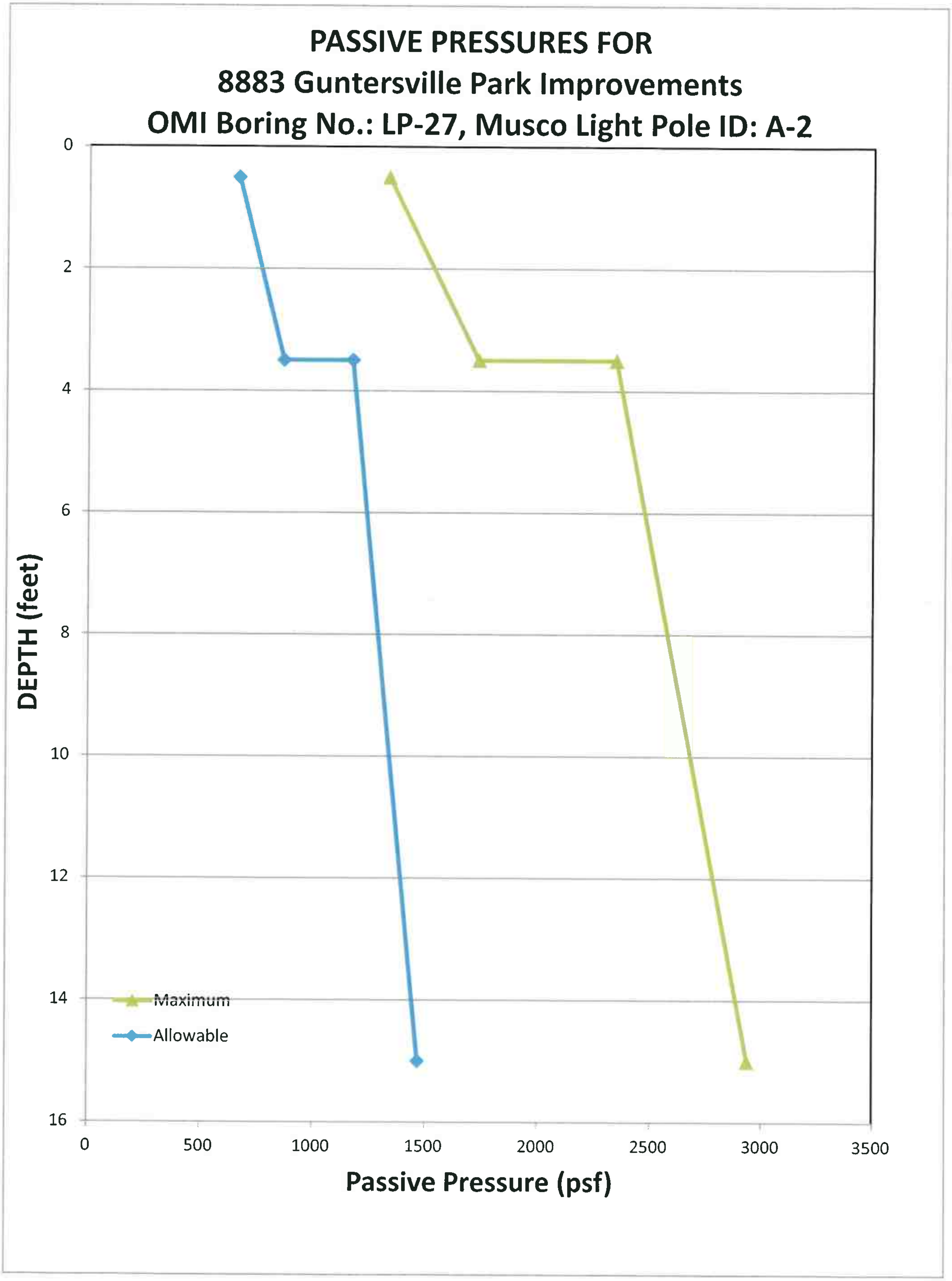
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-27
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm to Very Stiff Tan Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 3.5 feet the passive pressures are 1731 psf maximum and 865 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 51.5 , c = 971 , Í = 0 NÍ = 1
At 3.5 feet the passive pressures are 2343 psf maximum and 1171 psf allowable.
At 15 feet the passive pressures are 2935 psf maximum and 1467 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-27, Musco Light Pole ID: A-2
DEPTH (feet)
0
2
4
6
8
10
12
14
16
0
500
1000
1500
2000
2500
3000
3500
Passive Pressure (psf)
Maximum
Allowable

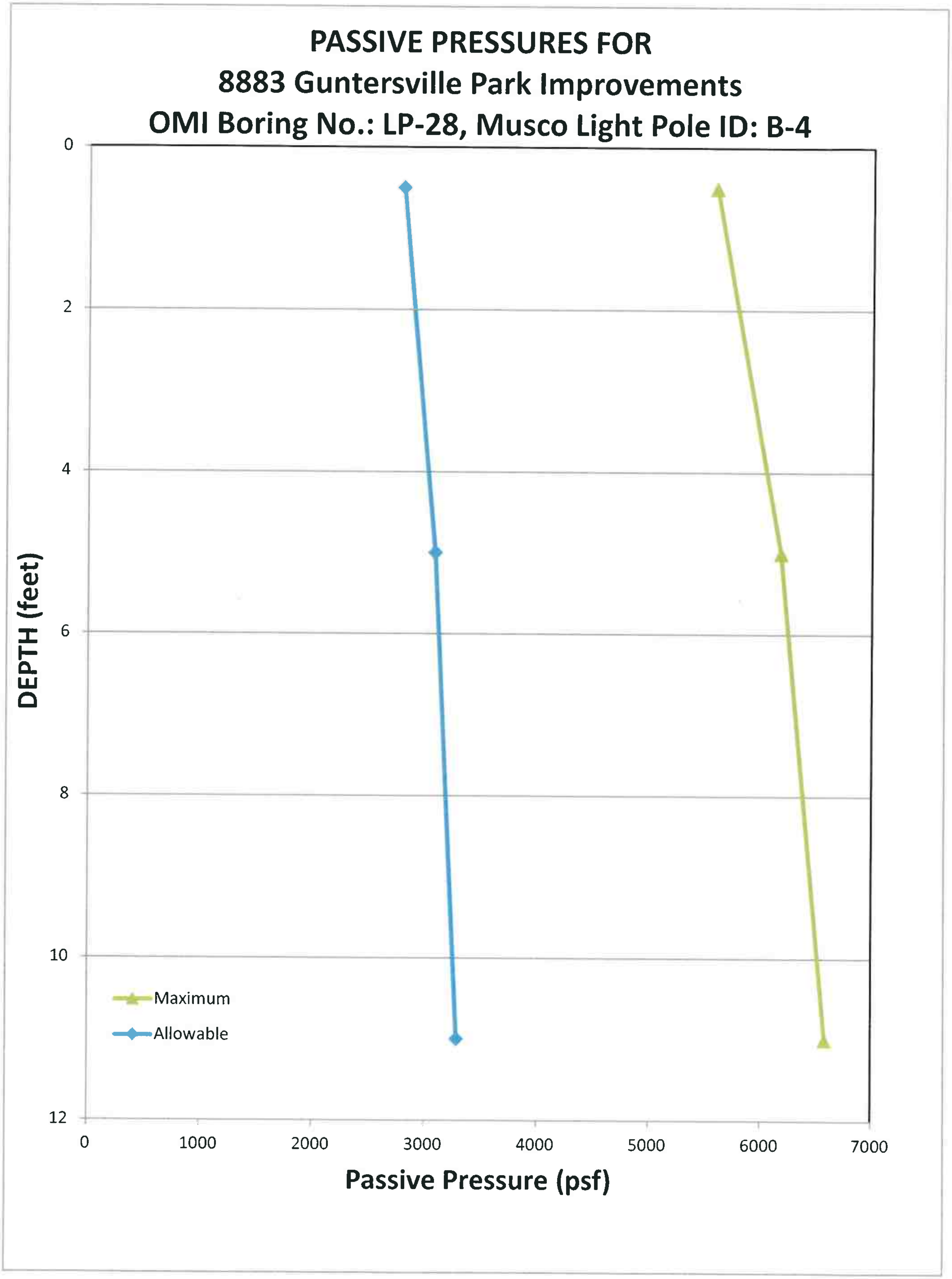
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-28
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 129.4 , c = 2795 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 5590 psf maximum and 2795 psf allowable.
At 5 feet the passive pressures are 6172 psf maximum and 3086 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 67.0 , c = 2795 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 6172 psf maximum and 3086 psf allowable.
At 11 feet the passive pressures are 6574 psf maximum and 3287 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-28, Musco Light Pole ID: B-4
0
2
4
6
8
10
12
DEPTH (feet)
Maximum
Allowable
0
1000
2000
3000
4000
5000
6000
7000
Passive Pressure (psf)

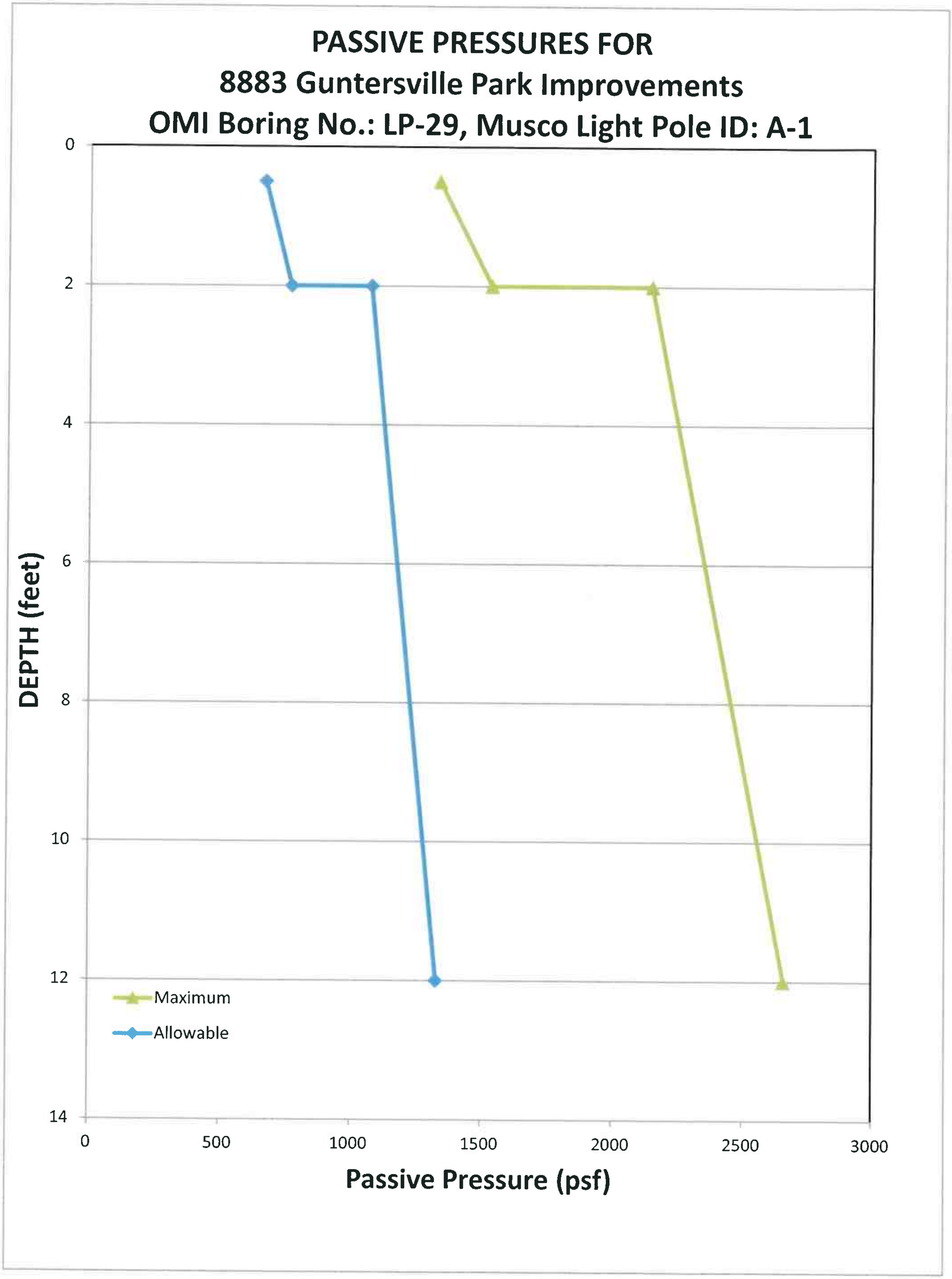
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-29
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm Yellowish Tan Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 2 feet the passive pressures are 1530 psf maximum and 765 psf allowable.

Layer 2 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 51.5 , c = 971 , Í = 0 NÍ = 1
At 2 feet the passive pressures are 2142 psf maximum and 1071 psf allowable.
At 12 feet the passive pressures are 2657 psf maximum and 1328 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###



PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-29, Musco Light Pole ID: A-1
DEPTH (feet)
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
2500
3000
Passive Pressure (psf)
Maximum
Allowable

Passive Pressure Analysis

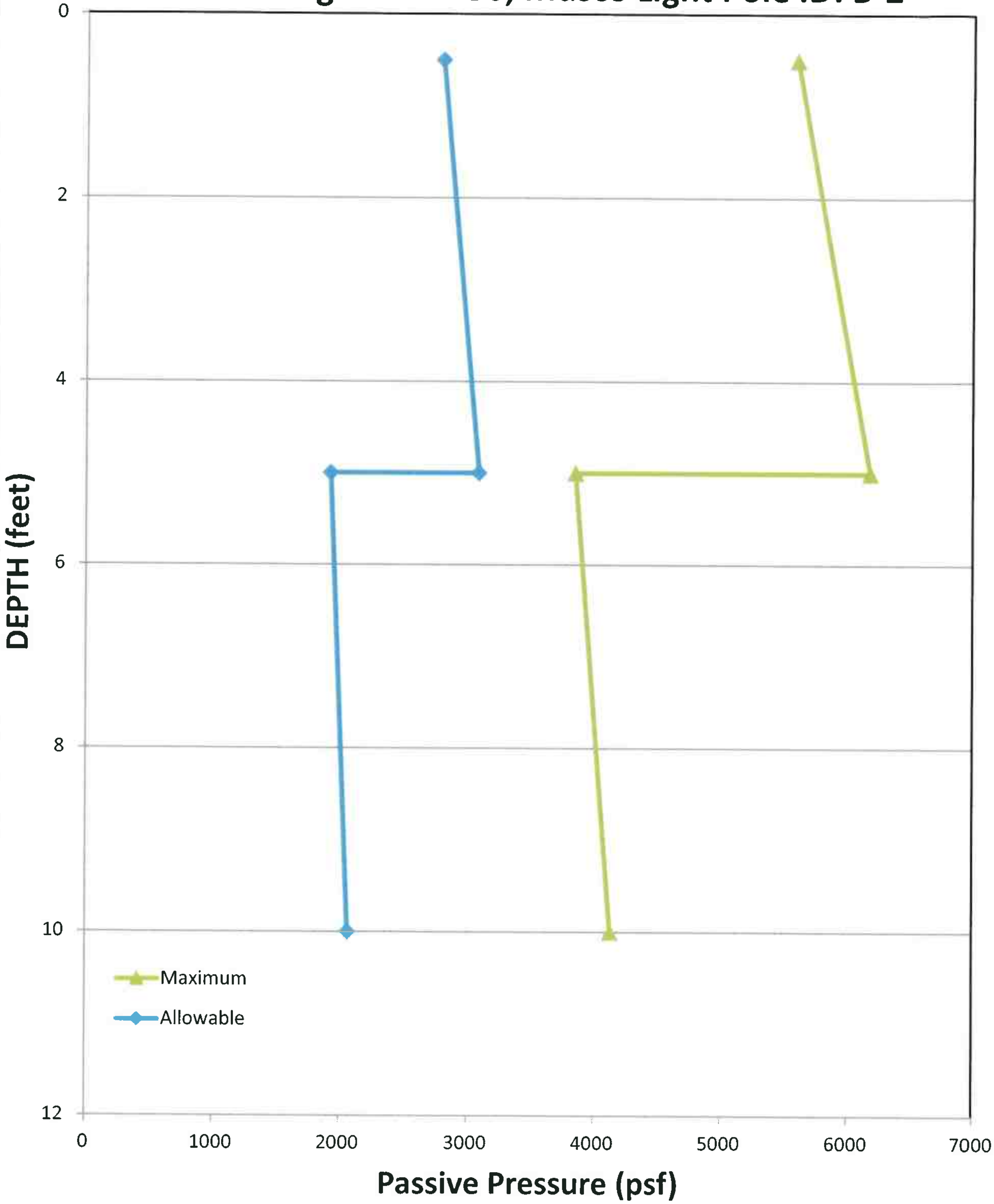
Project number: 8883
County: Marshall
Description: LP-30
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Stiff to Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 129.4 , c = 2795 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 5590 psf maximum and 2795 psf allowable.
At 5 feet the passive pressures are 6172 psf maximum and 3086 psf allowable.

Layer 2 is best described as: Moist Very Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 56.9 , c = 1633 , Í = 0 NÍ = 1
At 5 feet the passive pressures are 3848 psf maximum and 1924 psf allowable.
At 10 feet the passive pressures are 4132 psf maximum and 2066 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###

PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-30, Musco Light Pole ID: B-2



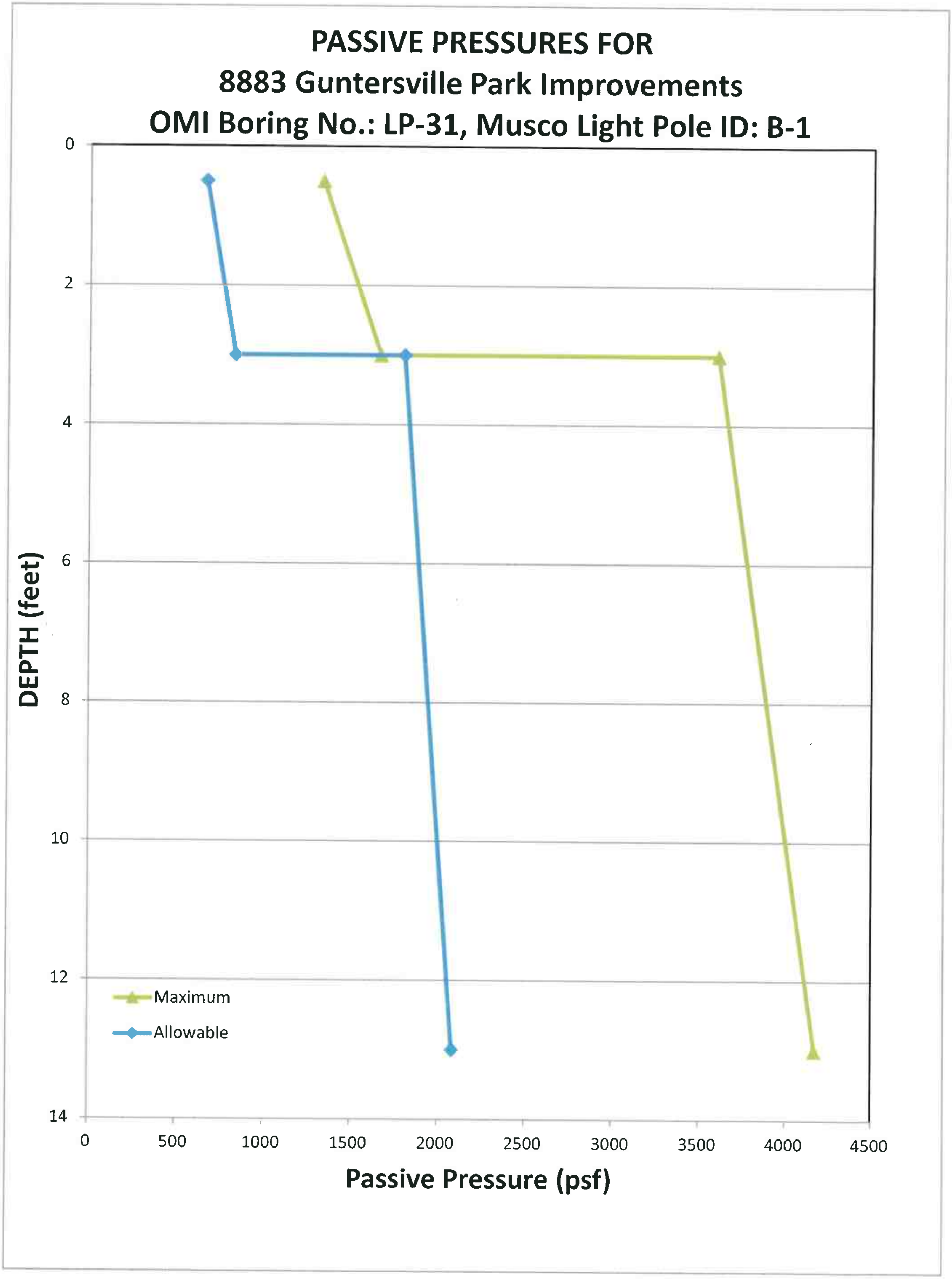
Passive Pressure Analysis

Project number: 8883
County: Marshall
Description: LP-31
P = (ë)(z)(NÍ) + (2)©*((ûNÍ)^0.5)

Layer 1 is best described as: Moist Firm Yellowish Tan Sandy Silty Clay Fill
Layer values were: ë = 133.9 , c = 665 , Í = 0 NÍ = 1
At 0.5 feet the passive pressures are 1330 psf maximum and 665 psf allowable.
At 3 feet the passive pressures are 1664 psf maximum and 832 psf allowable.

Layer 2 is best described as: Moist Firm to Stiff Tannish Orange Sandy Silty Clay
Layer values were: ë = 56.9 , c = 1633 , Í = 0 NÍ = 1
At 3 feet the passive pressures are 3600 psf maximum and 1800 psf allowable.
At 13 feet the passive pressures are 4169 psf maximum and 2084 psf allowable.

Layer 3 is best described as:
Layer values were: ë = 0 , c = 0 , Í = 0 NÍ = 1
###
###


PASSIVE PRESSURES FOR
8883 Guntersville Park Improvements
OMI Boring No.: LP-31, Musco Light Pole ID: B-1
DEPTH (feet)
0
2
4
6
8
10
12
14
0
500
1000
1500
2000
2500
3000
3500
4000
4500
Passive Pressure (psf)
Maximum
Allowable

FIELD TEST PROCEDURES

OMI, Inc., generally follows field and laboratory testing procedures as outlined by the American Society for Testing and Materials (ASTM) and the U. S. Army Corps of Engineers. Field procedures are outlined and an overview description is provided in ASTM Standard D-420, "Standard Guide to Site Characterization for Engineering, Design, and Construction Purposes." This document is a guide to the selection of various standards for investigating soil, rock, and ground water for earth related construction. Applicable procedures include geophysical, in-situ, and boring methods. A summary of each procedure used during this study is presented below.

SOIL DRILLING PROCEDURES

Several techniques are used to advance borings for collection of soil, rock, or ground water samples. Different techniques are used, depending on the samples desired and the soil and water conditions. Depths for sample intervals, strata changes, and boring termination or refusal are recorded to the nearest 1/10 of a foot. The techniques include the following.

Soil Borings

A) Solid stem continuous flight augers (ASTM D-1452)

B) Hollow stem continuous flight augers (ASTM D-1452)

C) Rotary drilling techniques using roller cone bits or drag bits and water with or without drilling mud or other additives to flush the hole

D) Hand augers

E) Backhoes or other excavating equipment.

Rock Borings

A) Core borings with diamond bits with double or triple core barrels (ASTM D-2113)

B) Rock borings with roller cone bit

C) Rotary hammer drilling.

Hollow and Solid Stem Auger: An auger is a center post with a continuous spiral flange wrapped around it. The post is called the stem. Augers are usually constructed in 5-foot long sections that can be coupled together. As the auger is turned and advanced into the ground; the soil "cuttings" are brought to the surface. Solid stem augers have a solid core and have to be removed from the boring to allow access for sampling tools. Hollow stem augers have the spiral flange connected to a hollow tube (stem). Sampling tools can access the bottom of the boring without removing the augers from the hole.

Rotary Borings: Rotary drilling involves the use of roller cone or drag type drill bits attached to the end of hollow drill rods. A flushing medium, normally water or bentonite slurry, is pumped through the rods to clear the cuttings from the bit face and flush them to the surface. Casing is sometimes set behind the advancing bit to prevent the hole from collapsing and to restrict the penetration of the drilling fluid into the surrounding soils. Cuttings returned to the surface by the drilling fluid are usually collected in a settling tank to allow the fluid to be re-circulated.

Hand Auger Borings: Hand auger borings are advanced by manually twisting a 4-inch diameter steel bucket auger into the ground and withdrawing it when filled to observe the sample collected. Other equipment such as post-hole diggers is sometimes used in lieu of augers to obtain shallow soil samples. Occasionally, these hand auger borings are used for driving 3-inch diameter steel tubes to obtain intact soil samples.

Test Pits: A backhoe or other construction equipment is sometimes used to excavate into soils to observe the soil and collect samples.

Core Drilling: Soil drilling methods are not normally capable of penetrating through hard cemented soil, weathered rock, coarse gravel or boulders, thin rock seams, or sound continuous rock. Material which cannot be penetrated by auger or rotary soil drilling methods at a reasonable rate is designated as "refusal material." Core drilling procedures are required to penetrate and sample refusal materials.

Prior to coring, casing may be set in the drilled hole through the overburden soils to keep the hole from caving and to prevent excessive water loss. The refusal materials are then cored according to ASTM D-2113 using a diamond bit fastened to the end of a hollow, double, or triple tube core barrel. This device is rotated at high speeds and the cuttings are brought to the surface by circulating water. Core samples of the material penetrated are protected and retained in the swivel-mounted inner tube. Upon completion of each drill run, the core is brought to the surface, recovery is measured, and the core is sequentially placed in boxes and transported to our laboratory for review and storage.

SAMPLING AND TESTING IN BOREHOLES

Several techniques are used to obtain samples and data in soils; however, the most common methods in this area are:

- A) Standard Penetration Testing
- B) Undisturbed Sampling
- C) Dynamic Cone Penetration Testing
- D) Hand-Held Static Cone Penetrometer
- E) Water Level Readings.

These procedures are presented below. Any additional testing techniques employed during this exploration are contained in other sections of the Appendix.

Standard Penetration Testing: At regular intervals, the drilling tools are removed and soil samples are obtained with a standard 2-inch diameter split tube or "split spoon" sampler connected to a drill rod. The sampler is first seated 6 inches to penetrate any loose cuttings then driven an additional 12 inches with blows of a 140 pound safety hammer falling 30 inches. Generally, the number of hammer blows required to drive the sampler the final 12 inches is designated the "penetration resistance" or "N" value, defined in blows per foot (bpf). The split spoon sampler is designed to retain the soil penetrated so it may be returned to the surface for observation. Representative portions of the soil samples obtained from each split spoon sample are placed in jars, sealed, and transported to the laboratory.

The standard penetration test, when properly evaluated, provides an indication of the soil strength and compressibility. The tests are conducted according to ASTM Standard D-1586. The depths and N-values of standard penetration tests are shown on the Boring Records. Split spoon samples are suitable for visual observation and classification tests, but generally are not sufficiently intact for quantitative laboratory testing.

Undisturbed Sampling: Relatively undisturbed samples are obtained by pushing 3 inch outside diameter (OD), 30 inch long steel tubes with hydraulic pressure supplied by the drill rig into the soil at the desired sampling levels (ASTM Standard D-1587). These tubes are also known as Shelby tubes. Each tube, together with the encased soil, is removed from the ground, sealed, and transported to the laboratory. Locations and depths of undisturbed samples are shown on the Boring Records.

Dynamic Cone Penetrometer: The dynamic cone is a hand-operated penetrometer used in hand auger borings and observation pits. This test is intended to provide data that can be correlated to the standard penetration test. A 1.5-inch OD cone is seated to penetrate any loose cuttings, and then driven for 3 intervals of 1.75 inch with blows from a 15-pound weight falling 20 inches. The average number of blows required to drive the cone over 1 increment is an index to soil strength and compressibility.

Water Level Readings: Water table readings are normally taken in the borings and are recorded on the Boring Records. In sandy soils, these readings indicate the approximate location of the hydrostatic water table at the time of the field exploration. In clayey soils, the rate of water seepage into the borings is low and it is generally not possible to establish the location of the hydrostatic water table through short-term water level readings. Also, fluctuation in the water table should be expected with variations in precipitation, surface run-off, evaporation, and other factors. For long-term monitoring of water levels, it is necessary to install piezometers.

The water level reported on the Boring Records is determined by field crews immediately after the drilling tools are removed, and again several hours after the borings are completed, if possible. The time lag is intended to permit stabilization of the ground water table which may have been disrupted by the drilling operation.

Occasionally, the borings will cave in, preventing water level readings from being obtained or trapping drilling water above the cave-in zone. The cave-in depth is measured and recorded on the Boring Records.

BORING RECORDS

The subsurface conditions encountered during drilling are reported on a Boring Record. The record contains information concerning the boring method, samples attempted and recovered, indications of the presence of coarse gravel, cobbles, etc., and observations of ground water. It also contains the driller's and the geotechnical engineer's interpretation of soil conditions between samples. Therefore, these boring records contain both factual and interpretative information. A geotechnical engineer visually classifies the soil samples and prepares the Boring Records which are the basis for all evaluations and recommendations.

ELECTRICAL RESISTIVITY

Electrical resistivity is a non-destructive, non-intrusive method of searching for the presence of sinkholes. The process includes driving a series of electrical probes into the ground at set spacings and along a line. Electrical current is then pushed between two probes and the resistivity of the soil is measured at intermediate probes. The depth of the area studies increases as the distance between the electrical probes increases. As soil materials change in consistency, which may be a result of mineralogy, moisture content, or density, the electrical resistivity or conductivity changes. Therefore, if a sinkhole is present near the resistivity profile, a change in resistivity will show up due to the changed conditions in the sinkhole. This methodology assists in looking for sinkholes in an area such as this.

OMI uses a multiple probe resistivity meter that allows 56 probes to be placed in the ground and attached to the machine at one time. A computer systematically switches between the probes sending current between two probes and measuring the resistivity between two additional probes. The computer switches through the combinations of probes to collect approximately 750 separate readings during each setup. Mathematical modeling techniques are then used to evaluate the data and the resulting resistivity is plotted using a graphical contouring program.

LABORATORY TEST PROCEDURES

OMI, Inc., generally follows laboratory testing procedures as outlined by the American Society for Testing and Materials (ASTM), the U. S. Army Corps of Engineers, and other applicable procedures. All work is initiated and supervised by qualified engineers. Laboratory tests are performed by technicians trained to perform the work according to the appropriate procedures. The equipment is well maintained and inspected and calibrated annually or as specified by ASTM.

A description of the procedures used during this exploration or study are included in this Appendix.

SOIL CLASSIFICATION

Classification of soils provides a record and general guide to the engineering properties of the soils encountered during this study. Samples obtained during the field testing (drilling) operations are visually examined and classified by the geotechnical engineer. OMI, Inc., generally follows ASTM procedure No. D-2488 "Visual-Manual Procedure for Classifying Soils." Soil consistency and relative density is based on the number of blows from the standard penetration test. Representative or special samples are then selected for laboratory testing. Soil Boring Records are developed which present the data from the field testing as well as the soil description, water level information, and other data.

MOISTURE CONTENT

Moisture content values, when used in conjunction with other data, can be a useful and inexpensive tool to the engineer as an indicator of the engineering characteristics and parameters of the soil when compared to other data. Moisture content is performed by weighing a moist sample, drying, then re-weighing the dry sample. The moisture content is expressed as a percent of the dry weight of the soil. ASTM Method D-2216 is used to determine the moisture content of soil.

ATTERBERG LIMITS

Atterberg limits include the liquid limit (LL), plastic limit (PL), and shrinkage limit (SL) tests. These tests are performed to aid in the classification of soils and to determine the plasticity and volume change characteristics of the soil. The liquid limit is the minimum moisture content at which the soil will flow as a heavy viscous fluid. The plastic limit is the minimum moisture content at which the soil behaves as a plastic material. The shrinkage limit is the moisture content below which no further volume change will occur with continued drying. The plasticity index (PI) is the difference between the liquid limit and the plastic limit. The PI is the range of moisture at which the soil remains plastic. Many engineering characteristics have been correlated to the Atterberg limits. These are ASTM procedures D-4318, D-4943, and D-427.

STANDARD PROCTOR COMPACTION TEST

This test is used to establish a curve that predicts the effect of moisture and compactive effort on the dry density of the soil sample. It is useful as a comparative value in monitoring contractors' efforts during fill placement and compaction during construction. Also, correlations of engineering parameters such as strength, compressibility, and permeability are related to the percent compaction and soil type.

A representative sample of the proposed fill material (soil or stone) is collected. The sample is divided into four or more samples. Each sample is then brought to a different moisture content about 2% apart. Each sample is then placed in a standard 4-inch diameter mold in 3 equal layers with each layer being compacted with 25 blows from a 5.5-pound hammer falling 12 inches. The sample is trimmed to a known volume of 1/30 cubic foot then weighed. The moisture content of the sample is determined and the dry density is calculated. A graph of dry density (pcf) versus moisture content is developed. The maximum density and its corresponding moisture content known as the optimum moisture content are derived from the curve. A graph of the moisture-density relationship is given in the Appendix. ASTM D-698 describes the procedure.

UNCONFINED COMPRESSION TESTS - ROCK CORES

The strength of rock is important in many engineering applications. This strength is usually desired and reported as the unconfined or simple shear strength. Selected samples of rock cores are cut using a diamond saw. The cores are usually cut to a length equal to about twice the core diameter. The capped length and diameter of each core is measured and recorded. The cores are then loaded to failure in a compression machine. The unconfined compressive strength is calculated by dividing the cross-sectional area of the core into the maximum load required to crush the sample. If the length to diameter ratio is less than 2.0, then the maximum strength is adjusted mathematically. The results are reported in psi. This procedure is similar to ASTM D-2938.

CONSOLIDATION TESTING

The consolidation test provides data for estimating the settlement and time rate of settlement of the soil in response to the applied loads. Representative soil samples are collected from undisturbed samples, trimmed into a disk about 2.5 inches in diameter and 1 inch thick, then placed in the consolidometer. The disk is confined in a brass ring and sandwiched by porous stones on the top and bottom. The sample ring and stones are placed in a testing device, inundated, then loaded in increments. The sample height is measured as each load caused it to compress. The resulting loads and deformations are reduced to a graph which is presented in the Appendix. These results may be presented in load versus percent strain or load versus void ration. This procedure is described in ASTM D-2435.