

SUBMITTAL TRANSMITAL

July 12, 2011 WGC Submittal No: 06100-001

- PROJECT: Harold Thompson Regional WRF Birdsall Rd. Fountain, CO 80817 Job No. 2908
- ENGINEER: GMS, Inc. 611 No. Weber St., #300 Colorado Springs, CO 80903 719-475-2935 Roger Sams
- OWNER: Lower Fountain Metropolitan Sewage Disposal District 901 S. Santa Fe Ave. Fountain, CO 80817 719-382-5303 James Heckman
- CONTRACTOR: Lam-Wood Systems, Inc. 1580 W 47th Ave. Denver, CO 80211 303-458-1736

SUBJECT: Roof Truss Drawings and Configurations

SPEC SECTION: 06100- Carpentry (3.3 D)

PREVIOUS SUBMISSION DATES: None

DEVIATIONS FROM SPEC: ____YES X__NO

CONTRACTOR'S STAMP: This submittal has been reviewed by Weaver General Construction and approved with respect to the means, methods, techniques, & safety precautions & programs incidental thereto. Weaver General Construction also warrants that this submittal complies with contracted documents and comprises on deviations thereto:

Contractor's Stamp:	Engineer's Stamp:
Date: 7/12/11 Reviewed by: H.C. Myers (X) Reviewed Without Comments () Reviewed With Comments	
ENGINEER'S COMMENTS:	

					LETTER OF TRANSMITTAL
	- FP				DATE: 7/12/11 JOB NO.: 10609ML
		т лъл	TAT		ATTENTION: John Jacobs
		LIAUVI	<u>- </u>		RE: Harold D Thompson Reg WRF
		i / κγ	ŚTEMŚ IN	d' / I	Fountain, CO 80817
	<u>Ra</u>	am <u>' z'</u>			
		1580 W 47th A	VF. DENVER	. CO 80211	john@weavergc.com & leslie@weavergc.com
	-	(303) 458-173	36, FAX (303	3) 458-1739	
то	14/	<u> </u>	Constant		We are sending you:
10:	wea	over General	CONSTRUCT	10N, CO.	
	<u>507</u>	9 5 HUIUII SI	00110	4	
	303	- 789- <i>4111</i>	50110		Via: <i>e-mail, see above</i>
	505	707 4 111			
Ine	τοιιον	ving items:			
X	Shop	Drawings		Prints	Plans Specifications
	Сору	of Letter		Change order	Samples
CO	PIES	DATE	NO.		DESCRIPTION
-	L			Roof Truss shop dra	wings
					EOR ARPROVAL ONLY
					FOR APPROVAL ONLY
IHE.	SE AK	KE TRANSMIT	IED as che	ckea below:	
X	For a	pproval		Approved as submitte	ed Resubmit copies for approval
	For y	our use		Approved as noted	submitcopies for distribution
	As re	equested		Returned for correctio	ons X Return <u>1</u> corrected prints
	For R	eview and Con	nment		
	Fo	or Bids due :		20	Prints returned after loan to Lam-Wood
	DVC				
REMA	RKS:				
COP	Y TO:	File			
COP	Y TO:	File			SIGNED:



THIS IS A TRUSS PLACEMENT DIAGRAM ONLY. These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, bearns, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult "Bracing of wood trusses" available from the Truss Plate Institute, 583 D'Onifrio Drive; Madison, WI 53179.



Job	Truss	Truss Type	Qty	Ply	B1104093-Harold H. Thompson
B1104093	CJ01	DIAGONAL HIP GIRDER	4	1	
					Job Reference (optional)
Foxworth Galbraith Truss Co, C	olorado Springs, CO 80907, Chris	Larimore			7.240 s Jun 18 2010 MiTek Industries, Inc. Wed Jun 29 09:05:39 2011 Page 2
	· · ·		ID:clgkl4	T?60W901	JOkW7q9Lykgz3-KrjuOanSs2nkzKDMy5kVelQq_sEhvVW7okuM6Ez1ŠYw

LOAD CASE(S) Standard 1) Snow: Lumber Increase=1.15, Plate Increase=1.15 Uniform Loads (plf) Vert: 1-6=-37, 2-7=-15 Concentrated Loads (lb) Vert: 4=-442(F=-221, B=-221) 9=-158(F=-79, B=-79) 12=-215(F=-108, B=-108) 13=-98(F=-49, B=-49) 14=-921(F=-460, B=-460) 15=-1198(F=-599, B=-599) 16=-887(F=-444, B=-444)



10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 711 lb uplift at joint 2 and 711 lb uplift at joint 10.

11) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 706 lb uplift at joint 2 and 706 lb uplift at joint 9.

10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.







9-1-2							9-1-2
8-1	-12 16-0-0	25-4-0	34-8-0		42-6-4	50-8	3-0
8-1	-12 7-10-4	9-4-0	9-4-0	1	7-10-4	8-1-	·12
Plate Offsets (X,Y): [2:0-	-0-3,0-0-13], [4:0-3-0,0-4-0], [5:0-3-8,0	-4-8], [7:0-3-0,0-4-0], [9:0-0-	3,0-0-13], [12:0-2-12	.,0-5-0], [13:0-4-0),0-4-8], [14:0-2-12	,0-5-0]	
LOADING (psf) TCLL 33.0 (Roof Snow=33.0) TCDL 4.0 BCLL 0.0 * BCDL 15.0	SPACING 1-4-0 Plates Increase 1.15 Lumber Increase 1.15 Rep Stress Incr YES Code IBC2006/TPI2002	CSI TC 0.79 BC 0.72 WB 0.63 (Matrix)	DEFL in Vert(LL) -0.51 Vert(TL) -0.95 Horz(TL) 0.23	i (loc) l/defl 13 >999 513-14 >635 5 9 n/a	L/d 360 240 n/a	PLATES MT20 Weight: 242 lb	GRIP 169/123 FT = 0%
LUMBER TOP CHORD 2 X 6 SPF BOT CHORD 2 X 6 SPF WEBS 2 X 4 WW	2100F 1.8E 2100F 1.8E Stud/Std		BRACING TOP CHORD BOT CHORD WEBS	Structural wood Rigid ceiling dire 1 Row at midpt MiTek recomm installed during Installation gui	sheathing directly ctly applied or 7-9- 3-14, 5-1 nends that Stabilize truss erection, in a de.	applied or 4-0-2 -8 oc bracing. 14, 6-12, 8-12 rs and required accordance with	oc purlins. cross bracing be Stabilizer

REACTIONS (lb/size) 2=1848/0-8-0 (min. 0-3-7), 9=1848/0-8-0 (min. 0-3-7) Max Horz 2=58(LC 5) Max Uplift2=-701(LC 5), 9=-701(LC 6) Max Grav2=2082(LC 17), 9=2082(LC 17)

- TOP CHORD 2-3=-5260/1669, 3-16=-4595/1524, 4-16=-4567/1529, 4-5=-4452/1515, 5-6=-5321/1635, 6-7=-4452/1515, 7-17=-4567/1528, 8-17=-4595/1524, 8-9=-5260/1670
- BOT CHORD 2-15=-1601/4945, 14-15=-1601/4945, 13-14=-1579/5260, 12-13=-1538/5260, 11-12=-1544/4945, 9-11=-1544/4945
- WEBS 3-14=-879/211, 4-14=-154/758, 5-14=-987/322, 5-13=-46/263, 6-13=-46/263, 6-12=-987/322, 7-12=-154/758, 8-12=-879/212

NOTES

- 1) Wind: ASCE 7-05; 100mph; TCDL=2.4psf; BCDL=4.5psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1, Lu=50-0-0
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 701 lb uplift at joint 2 and 701 lb uplift at joint 9.

10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

FORCES (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.



8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 695 lb uplift at joint 2 and 695 lb uplift at joint 12.
 10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



- BOT CHORD 2-20=-1550/5393, 19-20=-1497/5198, 18-19=-1497/5198, 18-27=-1309/4524, 27-29=-1309/4524, 17-29=-1309/4524, 17-30=-1309/4524, 28-30=-1309/4524, 16-28=-1309/4524, 15-16=-1431/5198, 14-15=-1431/5198, 12-14=-1485/5393 3-20=-98/276, 5-20=0/295, 5-18=-921/270, 6-18=-141/764, 7-18=-688/208, 7-16=-688/207,
- WEBS
 3-20=-98/276, 5-20=0/295, 5-18=-921/270, 6-18=-141/764, 7-18=-688/208, 7-16=-688/207, 8-16=-141/764, 9-16=-921/270, 9-14=0/295, 11-14=-98/276

NOTES

- 1) Wind: ASCE 7-05; 100mph; TCDL=2.4psf; BCDL=4.5psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1, Lu=50-0-0
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 689 lb uplift at joint 2 and 689 lb uplift at joint 12.
- 10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



17

2x4 ||

31

30-8-0

5-4-0

DEFL

Vert(LL)

Vert(TL)

Horz(TL)

BRACING

WFBS

TOP CHORD

BOT CHORD

18 30

5x6 =

25-4-0

5-4-0

R2

CSI

тс

BC

WB

(Matrix)

0.99

0.82

0.81

19

4x8 =

Ш

20

6x6 =

20-0-0

9-10-4

1-4-0

1.15

1.15

YES

B3

16

4x8 =

in (loc)

17 >999

17 >666

12

1 Row at midpt

-0.54

-0.90

0.25

15

6x6 =

40-6-4

9-10-4

I/d

360

240

n/a

l/defl

n/a

28

ΗŴ

ø

5x12 =

9-1-2

ļσ

₩6

14

4x4 =

Structural wood sheathing directly applied or 3-9-13 oc purlins.

5-19, 9-16

MiTek recommends that Stabilizers and required cross bracing be

Rigid ceiling directly applied or 7-10-14 oc bracing.

B1

50-8-0

10-1-12

GRIP

169/123

FT = 0%

PLATES

Weight: 252 lb

MT20

Left: 2 X 4 WW Stud/Std, Right: 2 X 4 WW Stud/Std REACTIONS (lb/size) 2=1893/0-8-0 (min. 0-3-14), 12=1893/0-8-0 (min. 0-3-14) Max Horz 2=70(LC 5) Max Uplift2=-683(LC 6) Max Grav2=2366(LC 17), 12=2366(LC 17)

- FORCES (Ib) Max. Comp./Max. Ten. All forces 250 (Ib) or less except when shown.
- TOP CHORD 2-23=-6076/1603, 3-23=-5997/1609, 3-4=-5848/1523, 4-24=-5788/1524, 5-24=-5780/1527, 5-25=-4713/1315, 6-25=-4650/1318, 6-7=-4490/1301, 7-8=-4490/1301, 8-26=-4650/1318, 9-26=-4713/1315, 9-27=-5780/1527, 10-27=-5788/1524, 10-11=-5848/1523, 11-28=-5997/1610, 12-28=-6076/1604 BOT CHORD 2-21=-1553/5712, 20-21=-1456/5404, 19-20=-1456/5404, 18-19=-1186/4538, 18-30=-1186/4538, 17-30=-1186/4538, 17-31=-1186/4538, 16-31=-1186/4538, 15-16=-1386/5404, 14-15=-1386/5404
- 17-30=-1186/4538, 17-31=-1186/4538, 16-31=-1186/4538, 15-16=-1386/5404, 14-15=-1386/5404, 12-14=-1484/5712

 WEBS
 5-21=-10/361, 5-19=-1033/315, 6-19=-140/762, 7-19=-525/201, 7-16=-525/201, 8-16=-140/762,
- WEBS
 5-21=-10/301, 5-19=-103/315, 6-19=-140/762, 7-19=-525/201, 7-16=-525/201, 8-16=-140/762

 9-16=-1033/315, 9-14=-10/361

NOTES

- 1) Wind: ASCE 7-05; 100mph; TCDL=2.4psf; BCDL=4.5psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1, Lu=50-0-0
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.
- 6) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 683 lb uplift at joint 2 and 683 lb uplift at joint 12.
 This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard

2 22 23

TW1

5x12 =

8

9-1-2

33.0

4.0

0.0

15.0

TOP CHORD 2 X 6 SPF 2100F 1.8E BOT CHORD 2 X 6 SPF 2100F 1.8E

2 X 4 WW Stud/Std

LOADING (psf)

(Roof Snow=33.0)

TCLL

TCDL

BCLL

BCDL

LUMBER

WFBS

WEDGE

0-9-13

W6

21

4x4 =

Plate Offsets (X,Y): [2:0-0-3,0-1-9], [6:0-3-0,0-4-0], [8:0-3-0,0-4-0], [12:0-0-3,0-1-9]

Plates Increase

Rep Stress Incr

Lumber Increase

Code IBC2006/TPI2002

SPACING

B1

10-1-12

10-1-12



Scale = 1:87.1



9-1-2						9-1-2
7-3-1	1 14-3-13 1 7-0-3	21-4-0	29-4-0	36-4-3	43-4-5	50-8-0
Plate Offsets (X,Y): [2:0-	0-3,0-1-9], [6:0-3-4,0-3-4], [7:0-3-4,	0-4-0], [11:0-0-3,0-1-9], [18	:0-1-8,0-2-0]			
LOADING (psf) TCLL 33.0 (Roof Snow=33.0) TCDL 4.0 BCLL 0.0 * BCDL 15.0	SPACING 1-4-0 Plates Increase 1.15 Lumber Increase 1.15 Rep Stress Incr YES Code IBC2006/TPI2002	CSI TC 0.93 BC 0.91 WB 0.70 (Matrix)	DEFL Vert(LL) Vert(TL) Horz(TL)	in (loc) l/defl -0.57 16-18 >999 -0.95 16-18 >633 0.26 11 n/a	L/d 360 240 n/a	PLATES GRIP MT20 169/123 Weight: 252 lb FT = 0%
LUMBER TOP CHORD 2 X 6 SPF BOT CHORD 2 X 6 SPF WEBS 2 X 4 WW WEDGE Left: 2 X 4 WW Stud/Std,	2100F 1.8E 2100F 1.8E Stud/Std Right: 2 X 4 WW Stud/Std		BRACING TOP CHORI BOT CHORI WEBS	D Structural wood Rigid ceiling dire 1 Row at midpt MiTek recomm installed during Installation guid	sheathing directly a ctly applied or 8-0- 5-18, 6-1 ends that Stabilizer truss erection, in a de.	pplied or 3-7-6 oc purlins.) oc bracing. 6, 8-16 s and required cross bracing be ccordance with Stabilizer

REACTIONS (lb/size) 2=1886/0-8-0 (min. 0-3-15), 11=1878/0-8-0 (min. 0-3-15) Max Horz 2=74(LC 5) Max Uplift2=-676(LC 5), 11=-676(LC 6) Max Grav2=2408(LC 17), 11=2400(LC 17)

FORCES (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD 2-23=-6420/1563, 3-23=-6335/1567, 3-4=-5855/1478, 4-24=-5801/1478, 5-24=-5795/1481, 5-6=-4769/1246, 6-7=-4512/1236, 7-8=-4743/1246, 8-25=-5765/1482, 9-25=-5772/1478, 9-10=-5825/1478, 10-26=-6311/1568, 11-26=-6395/1565 BOT CHORD 2-21=-1519/6047, 20-21=-1519/6047, 19-20=-1398/5622, 18-19=-1398/5622, 18-28=-1106/4535, 17-28=-1106/4535, 16-17=-1106/4535, 15-16=-1324/5593, 14-15=-1324/5593, 13-14=-1447/6023,

11-13=-1447/6023 WEBS 3-20=-477/157, 5-20=-13/286, 5-18=-1228/333, 6-18=-119/832, 6-16=-458/396, 7-16=-87/801, 8-16=-1222/333, 8-14=-13/287, 10-14=-480/158

NOTES

- 1) Wind: ASCE 7-05; 100mph; TCDL=2.4psf; BCDL=4.5psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1, Lu=50-0-0
- 3) Unbalanced snow loads have been considered for this design.

4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.

- 5) Provide adequate drainage to prevent water ponding.
- 6) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
- 7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 676 lb uplift at joint 2 and 676 lb uplift at joint 11.
 10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Scale = 1:87.1



9-1-2						9-1-2
7-9	0 15-2-8	22-8-0	28-0-0	35-5-8	42-11-0	50-8-0
Plate Offsets (X,Y): [2:0-	0-3,0-1-5], [7:0-3-0,0-4-0], [11:0-0-3,0)-1-5], [18:0-1-8,0-2-0]	0 + 0	100		
LOADING (psf) TCLL 33.0 (Roof Snow=33.0) TCDL 4.0 BCLL 0.0 * BCDL 15.0	SPACING1-4-0Plates Increase1.15Lumber Increase1.15Rep Stress IncrYESCode IBC2006/TPI2002	CSI TC 0.95 BC 0.91 WB 0.94 (Matrix)	DEFL ir Vert(LL) -0.6 Vert(TL) -0.9 Horz(TL) 0.2	n (loc) l/defl 1 18 >990 7 18-19 >618 7 11 n/a	L/d 360 240 n/a	PLATES GRIP MT20 169/123 MT18H 197/144 Weight: 253 lb FT = 0%
LUMBER TOP CHORD 2 X 6 SPF BOT CHORD 2 X 6 SPF WEBS 2 X 4 WW WEDGE Left: 2 X 4 WW Stud/Std,	2100F 1.8E 2100F 1.8E Stud/Std Right: 2 X 4 WW Stud/Std		BRACING TOP CHORD BOT CHORD WEBS	Structural wood Rigid ceiling dire 1 Row at midpt MiTek recomm installed during Installation guid	sheathing directly applied or 5-18 ends that Stab truss erection de.	tly applied or 3-5-13 oc purlins. 8-0-6 oc bracing. 8-16 ilizers and required cross bracing be in accordance with Stabilizer

REACTIONS (lb/size) 2=1879/0-8-0 (min. 0-4-0), 11=1875/0-8-0 (min. 0-4-0) Max Horz2=78(LC 5) Max Uplift2=-668(LC 5), 11=-668(LC 6)

Max Grav2=2444(LC 17), 11=2440(LC 17)

FORCES (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD 2-23--6708/1548, 3-23--6585/1552, 3-4--6027/1427, 4-24--5982/1427, 24-25--5962/1428, 5-25--5931/1431, 5-6-4821/1160, 6-7--4577/1153, 7-8--4814/1161, 8-26--5914/1431,

26-27=-5944/1428, 9-27=-5964/1427, 9-10=-6009/1427, 10-28=-6573/1553, 11-28=-6696/1550

BOT CHORD 2-21=-1509/6326, 20-21=-1509/6326, 19-20=-1509/6326, 18-19=-1348/5784, 17-18=-1014/4582,

16-17=-1014/4582, 15-16=-1270/5767, 14-15=-1432/6315, 13-14=-1432/6315, 11-13=-1432/6315

WEBS 3-19=-567/185, 5-19=-14/331, 5-18=-1360/380, 6-18=-149/846, 6-16=-396/374, 7-16=-123/822,

8-16=-1345/378, 8-15=-13/328, 10-15=-573/186

NOTES

1) Wind: ASCE 7-05; 100mph; TCDL=2.4psf; BCDL=4.5psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33

2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1, Lu=50-0-0

3) Unbalanced snow loads have been considered for this design.

- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.
- 5) Provide adequate drainage to prevent water ponding.

6) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.

7) All plates are MT20 plates unless otherwise indicated.

8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 668 lb uplift at joint 2 and 668 lb uplift at joint 11.

11) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.







9-1-2						9-1-2
8-2	2-5 16-1-3 2-5 7-10-13	<u>24-0-0</u> 7-10-13	+ <u>26-8-0</u> + <u>34-6</u> 2-8-0 7-10	<u>)-13</u>	42-5-11 7-10-13	50-8-0 8-2-5
Plate Offsets (X,Y): [2:0-	-3-2,1-0-12], [2:0-0-3,0-1-5], [7:0-3-0,0	-4-0], [11:0-3-2,1-0-12], [[*]	11:0-0-3,0-1-5], [17:0-2	-12,Edge]		
LOADING (psf) TCLL 33.0 (Roof Snow=33.0) TCDL 4.0 BCLL 0.0 * BCDL 15.0	SPACING 1-4-0 Plates Increase 1.15 Lumber Increase 1.15 Rep Stress Incr YES Code IBC2006/TPI2002	CSI TC 0.82 BC 0.86 WB 0.89 (Matrix)	DEFL ir Vert(LL) -0.6 Vert(TL) -1.02 Horz(TL) 0.24	n (loc) l/defl 4 17-18 >940 2 17-18 >588 8 11 n/a	L/d 360 240 n/a	PLATES GRIP MT20 169/123 MT18H 197/144 Weight: 256 lb FT = 0%
LUMBER TOP CHORD 2 X 6 SPF BOT CHORD 2 X 6 SPF WEBS 2 X 4 WW WEDGE Left: 2 X 4 WW Stud/Std,	2100F 1.8E 2100F 1.8E / Stud/Std Right: 2 X 4 WW Stud/Std		BRACING TOP CHORD BOT CHORD WEBS	Structural wood Rigid ceiling dire 1 Row at midpt MiTek recomm installed during Installation guid	sheathing directl ectly applied or 8- 3-18, 5 nends that Stabiliz g truss erection, in de.	y applied or 3-5-5 oc purlins. 0-13 oc bracing. 5-17, 8-16, 10-15 zers and required cross bracing be n accordance with Stabilizer

REACTIONS (lb/size) 2=1848/0-8-0 (min. 0-4-1), 11=1848/0-8-0 (min. 0-4-1) Max Horz 2=-82(LC 6) Max Uplift2=-660(LC 5), 11=-660(LC 6) Max Grav2=2452(LC 17), 11=2452(LC 17)

FORCES (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD 2-21=-6876/1526, 21-22=-6797/1532, 3-22=-6708/1533, 3-23=-6092/1371, 4-23=-6048/1371, 4-24=-6039/1372, 5-24=-6022/1376, 5-6=-4765/1071, 6-7=-4565/1073, 7-8=-4802/1078, 8-25=-6015/1375, 9-25=-6032/1371, 9-26=-6041/1371, 10-26=-6085/1371, 10-27=-6711/1534,

- 27-28=-6800/1533, 11-28=-6879/1528 BOT CHORD 2-20=-1494/6500, 19-20=-1494/6500, 18-19=-1494/6500, 17-18=-1292/5842, 16-17=-925/4545, 15-16=-1209/5835, 14-15=-1414/6503, 13-14=-1414/6503, 11-13=-1414/6503 WEBS 3-20=0/254, 3-18=-688/212, 5-18=-18/381, 5-17=-1483/419, 6-17=-166/802, 6-16=-344/409,
- 7-16=-156/797, 8-16=-1437/412, 8-15=-17/370, 10-15=-698/214, 10-13=0/256

NOTES

- 1) Wind: ASCE 7-05; 100mph; TCDL=2.4psf; BCDL=4.5psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1, Lu=50-0-0
- 3) Unbalanced snow loads have been considered for this design.

4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.

- 5) Provide adequate drainage to prevent water ponding.
- 6) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify
- adequacy of top chord dead load.

7) All plates are MT20 plates unless otherwise indicated.

8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.

10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 660 lb uplift at joint 2 and 660 lb uplift at joint 11. 11) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Job	Truss	Truss Type	Qty	Ply	B1104093-Harold H. Thompson
B1104093	HG01	HIP TRUSS	2	4	Job Reference (optional)
Foxworth Galbraith Truss Co, Co	lorado Springs, CO 80907, Chris	Larimore			7.240 s Jun 18 2010 MiTek Industries, Inc. Wed Jun 29 09:06:10 2011 Page 2
			ID:clgkl4T?	'60W901J	OkW7q9Lykgz3-wp5cuA9uZahLB54KG5nmPrCGEMoVfZmhw2uVixz1SYR

NOTES

8) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load. 9) All plates are MT20 plates unless otherwise indicated.

- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.

12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 3109 lb uplift at joint 2 and 3109 lb uplift at joint 14.
13) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

14) Use Simpson Strong-Tie HUS26 (14-10d Girder, 4-10d Truss, Single Ply Girder) or equivalent spaced at 2-0-0 oc max. starting at 14-0-12 from the left end to 36-7-4 to connect truss(es) J12 (1 ply 2 X 4 SPF) to front face of bottom chord.

15) Fill all nail holes where hanger is in contact with lumber.

16) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 4082 lb down and 1186 lb up at 12-0-0, and 4082 lb down and 1186 lb up at 38-7-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

1) Snow: Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (plf)

Vert: 1-5=-37, 5-11=-37, 11-15=-37, 2-14=-15 Concentrated Loads (lb)

Vert: 25=-4082(F) 18=-4082(F) 30=-722(F) 31=-722(F) 32=-722(F) 33=-722(F) 34=-722(F) 35=-722(F) 36=-722(F) 37=-722(F) 38=-722(F) 39=-722(F) 40=-722(F) 41=-722(F) 40=-722(F) 40= 42=-722(F)



TOP CHORD 2 X 4 SPF 1650F 1.5E BOT CHORD 2 X 4 SPF 1650F 1.5E Left 2 X 6 SPF 2100F 1.8E 2-0-14 SLIDER

TOP CHORD BOT CHORD

Rigid ceiling directly applied or 10-0-0 oc bracing.

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide

REACTIONS (lb/size) 4=100/Mechanical, 2=383/0-8-0 (min. 0-1-8), 5=56/Mechanical Max Horz 2=74(LC 5) Max Uplift4=-67(LC 5), 2=-226(LC 5)

Max Grav4=126(LC 2), 2=409(LC 2), 5=94(LC 4)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

NOTES

- 1) Wind: ASCE 7-05; 100mph; TCDL=2.4psf; BCDL=4.5psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and
- right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33 2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1
- Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.
- 5) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 4 and 226 lb uplift at joint 2.

10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Tidle Onsets (7, 1). [2.0	2 0,0 4 1]				
LOADING (psf) TCLL 33.0 (Roof Snow=33.0) TCDL 4.0 BCLL 0.0 * BCDL 15.0	SPACING2-0-0Plates Increase1.15Lumber Increase1.15Rep Stress IncrYESCode IBC2006/TPI2002	CSI TC 0.56 BC 0.36 WB 0.00 (Matrix)	DEFL ir Vert(LL) -0.06 Vert(TL) -0.20 Horz(TL) 0.02	n (loc) l/defl L/d 5 2-5 >999 360 0 2-5 >344 240 2 4 n/a n/a	PLATES GRIP MT20 197/144 Weight: 22 lb FT = 0%
LUMBER TOP CHORD 2 X 4 SPF BOT CHORD 2 X 4 SPF SLIDER Left 2 X 6	1650F 1.5E 1650F 1.5E SPF 2100F 1.8E 3-1-3		BRACING TOP CHORD BOT CHORD	Structural wood sheathing di Rigid ceiling directly applied o	rectly applied or 5-10-15 oc purlins. or 10-0-0 oc bracing. abilizers and required cross bracing be

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

REACTIONS (lb/size) 4=188/Mechanical, 2=473/0-8-0 (min. 0-1-8), 5=86/Mechanical Max Horz 2=99(LC 5) Max Uplift4=-128(LC 5), 2=-249(LC 5)

Max Grav4=240(LC 2), 2=510(LC 2), 5=144(LC 4)

FORCES (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

NOTES

- 1) Wind: ASCE 7-05; 100mph; TCDL=2.4psf; BCDL=4.5psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and
- right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33 2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1
- Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.
- 5) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 128 lb uplift at joint 4 and 249 lb uplift at joint 2.

10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



3) Unbalanced snow loads have been considered for this design.

4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.

5) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.

8) Refer to girder(s) for truss to truss connections.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 288 lb uplift at joint 2 and 138 lb uplift at joint 6. 10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



- right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.
- 5) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.
- 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- 8) Refer to girder(s) for truss to truss connections.
- 9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 321 lb uplift at joint 2 and 181 lb uplift at joint 6.
 10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.

5) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.

6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.

8) Refer to girder(s) for truss to truss connections.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 134 lb uplift at joint 6 and 225 lb uplift at joint 2.
 10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.

8) Refer to girder(s) for truss to truss connections.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 211 lb uplift at joint 5 and 379 lb uplift at joint 2.

10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.



Scale = 1:87.1



9-1-2						9-1-2
L	8-8-8	17-0-4	25-4-0	33-7-12	41-11-8	50-8-0
	8-8-8	8-3-12	8-3-12	8-3-12	8-3-12	8-8-8
Plate Offsets (X,	Y): [2:0-0-8,0-3-8], [3:0	<u>)-1-4,0-2-0], [4:0-4-0,0-4-8]</u>], [6:0-3-0,0-3-4], [8:0-4-0,0	<u>-4-8], [9:0-1-4,0-2-0], [10:0-</u>	<u>-0-8,0-3-8], [15:0-4-0,0-4-1</u>	12]
LOADING (psf) TCLL 33. (Roof Snow=33.0 TCDL 4. BCLL 0. BCDL 15.	0 SPACIN 0 Plates In 0 Lumber 0 * Code IE	IG 2-0-0 ncrease 1.15 Increase 1.15 ess Incr YES 3C2006/TPI2002	CSI TC 0.37 BC 0.56 WB 0.94 (Matrix)	DEFL in (loc) Vert(LL) -0.61 14-15 Vert(TL) -1.13 14-15 Horz(TL) 0.32 10	l/defi L/d >983 360 >529 240 n/a n/a	PLATES GRIP MT20 169/123 MT18H 197/144 Weight: 264 lb FT = 0%
LUMBER TOP CHORD 2 2 BOT CHORD 2 2 WEBS 2 2 W SLIDER Le REACTIONS (Ib	X 6 SPF 2100F 1.8E X 6 SPF 2100F 1.8E X 4 WW Stud/Std *Exce (1: 2 X 4 SPF 1650F 1.5 eft 2 X 4 SPF 1650F 1.5 (xize) 2=2838/0-8-0 (ept* SE SE 6-5-0, Right 2 X 4 SPF ⁻ min. 0-4-11), 10=2838/0-8	-0 (min. 0-4-11)	BRACING TOP CHORD BOT CHORD WEBS 1 Row a MiTek installe Installa	ral wood sheathing directly eiling directly applied or 6-8 at midpt 7-15, 5- recommends that Stabiliz ed during truss erection, in ation guide.	/ applied or 3-3-0 oc purlins. 3-0 oc bracing. -15 ers and required cross bracing be accordance with Stabilizer
Ma	ax Horz 2 = -129(I C 6)		- (

Max Uplift2=-978(LC 5), 10=-978(LC 6)

Max Grav2=2864(LC 2), 10=2864(LC 3)

FORCES (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) or less except when shown.

TOP CHORD	2-3=-7577/2236, 3-19=-7519/2159, 4-19=-7464/2163, 4-20=-6778/1926, 5-20=-6700/1933,
	5-6=-5312/1491, 6-7=-5312/1491, 7-21=-6700/1933, 8-21=-6778/1927, 8-22=-7464/2165,
	9-22=-7520/2161, 9-10=-7577/2238
BOT CHORD	2-18=-2184/7139, 17-18=-2072/7131, 16-17=-2072/7131, 16-23=-1687/6159, 23-24=-1687/6159,
	15-24=-1687/6159, 15-25=-1559/6159, 25-26=-1559/6159, 14-26=-1559/6159, 13-14=-1943/7131
	12-1310/3/7131 10-122058/7130

WEBS 6-15=-465/2018, 7-15=-1800/571, 7-14=-207/908, 8-14=-831/404, 8-12=-42/352, 9-12=0/324, 5-15=-1800/571, 5-16=-207/907, 4-16=-831/404, 4-18=-41/352, 3-18=0/324

NOTES

1) Wind: ASCE 7-05; 100mph; TCDL=2.4psf; BCDL=4.5psf; h=25ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33

2) TCLL: ASCE 7-05; Pf=33.0 psf (flat roof snow); Category II; Exp C; Fully Exp.; Ct= 1

3) Unbalanced snow loads have been considered for this design.

4) This truss has been designed for greater of min roof live load of 20.0 psf or 1.00 times flat roof load of 33.0 psf on overhangs non-concurrent with other live loads.

5) Dead loads shown include weight of truss. Top chord dead load of 5.0 psf (or less) is not adequate for a shingle roof. Architect to verify adequacy of top chord dead load.

6) All plates are MT20 plates unless otherwise indicated.

7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members, with BCDL = 15.0psf.

9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 978 lb uplift at joint 2 and 978 lb uplift at joint 10.
 10) This truss is designed in accordance with the 2006 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.