## TEAGLE METAL

The truss designs referenced below have been prepared by me or under my direct supervision based on the truss design criteria and requirements ("design criteria") provided by **Quality Line Truss**.

These truss designs are intended for the fabrication of individual building components that will perform to the design criteria provided. Any variance from the design criteria will render the affected truss designs inapplicable.

Listed below are the truss designs included in this package and covered by this seal.

Job: QU02699\_RESERVE BLDG G\_REFRESHED\_11252024 - 1224837 GE01, GE02, T01, T02, T05, T06, T07

Any location identification is for file reference only. No determination of the appropriateness of design criteria for any specific project has been made in preparing the truss designs.

Please refer to individual truss designs for specific design criteria.



Arturo A. Hernandez (MO, 2006000095)

My license expiration date for the state of MO is 12/31/2024.

IMPORTANT NOTE: The responsibility of the engineer sealing this package, as a Truss Engineer, is solely for design of individual trusses as individual building components based upon design criteria provided by others and set forth in the referenced truss drawings. The truss design criteria for the components have not been verified as appropriate for any particular building, project or use. Adequacy and suitability of design criteria and requirements for the truss designs for any specific project are the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

**Empowering great component manufacturers.** 

# **DESIGN NOTES**

- The Truss Design Drawing(s) provided with these Design Notes have been prepared under and are subject to ANSI / TPI 1 published by the Truss Plate Institute, www.tpinst.org.
   Capitalized terms have the meanings provided in ANSI / TPI 1.
- Copies of each Truss Design Drawing shall be furnished to the installation contractor, Building Designer, Owner and all persons fabricating, handling, installing, bracing, or erecting the trusses.

## **DESIGN LIMITATIONS**

- 3. The Truss Design Drawing is based upon specifications provided by the Building Designer in accordance with ANS1 / TPI 1. Neither the Truss Designer, Eagle, nor an engineer who seals this design (if any) assumes any responsibility for the adequacy or accuracy of specifications provided by the Building Designer.
- 4. The Building Designer is solely responsible for the suitability based upon the Truss Design Drawing and shall be responsible for reviewing and verifying that the information shown is in general conformance with the design of the Building.
- 5. Each Truss Design Drawing is for the individual building component (a truss). A seal on the Truss Design Drawing indicates acceptance of professional engineering responsibility solely for the individual truss.
- **6.** Each Truss Design Drawing assumes trusses will be suitably protected from the environment.

## HANDLING, INSTALLING, & BRACING

- Refer to Building Component Safety Information (BCSI) for handling, installing, restraining and bracing trusses. Copies can be obtained from the Structural Building Components Association, www.sbcindustry.com.
- 8. Bracing shown on each Truss Design Drawing is for lateral support of individual truss components only to reduce buckling lengths. All temporary and permanent bracing, including lateral load and diagonal or cross bracing, are the responsibility, respectively, of the erector and Building Designer.
- Eagle is not responsible for improper truss fabrication, handling, erection or bracing.
- 10. Compression chords shall be laterally braced by the roof or floor sheathing, directly attached, or have purlins provided at spacing shown, unless noted otherwise.

- Bottom chord required bracing shall be at 10ft spacing or less, if no structural rated ceiling is installed, unless noted otherwise.
- **12.** Strongbacking shall be installed on all parallel chord trusses, including flooring systems, to limit deflection and reduce vibration. Refer to BCSI-B7.
- Never exceed the design loading shown. Never stack building or other materials on inadequately braced truss; refer to BCSI.
- **14.** Concentration of construction loads greater than the design loads shall not be applied to the trusses at any time; refer to BCSI.
- Trusses shall be handled with care prior to erection to avoid damage.
   Refer to BCSI for recommended truss handling and erection.

## **MATERIALS & FABRICATION**

- **16.** Lumber moisture content shall be 19% or less at the time of fabrication unless noted otherwise.
- 17. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
- Unless expressly noted, the truss designs are not applicable for use with fire retardant or preservative treated lumber.
- 19. Plates shall be applied on both faces of truss at each joint and embedded fully. Knots and wane at joint locations shall be regulated in accordance with ANSI / TPI 1.
- **20.** For a specified plate gauge and grade, the specified size is a minimum.
- 21. Connections not shown are the responsibility of others.
- Adequate support shall be provided to resist gravity, lateral and uplift loads.
- 23. For 4X2 truss orientation, locate plates 0 1/16" from outside the edge of the truss.
- 24. Fabrication of truss shall be in accordance with ANSI / TPI 1.

## **OTHER NOTES**

- Camber is a non-structural consideration and is the responsibility of truss fabricator.
- **26.** Do not cut or alter any truss member or plate without prior approval from a professional engineer.
- Lumber design values are in accordance with ANSI / TPI 1; lumber design values are by others.
- 28. Install specified hangers per manufacturer recommendations.

# **SYMBOLS**

#### PLATE SIZE

**3X4** - The first dimension is the width perpendicular to slots. Second dimension is the length parallel to slots.

-, /, I, Indicates required direction of slots; Reference "Joint Details" for more information.

20 Ga Gr40 connectors required

3X10-20HS - 20 Ga Gr60 connectors required

8X10-18HS - 18 Ga Gr60 connectors required

#### LATERAL BRACING

When this symbol shown, continuous lateral bracing is required on the member of the truss.



Indicates location where bearings (supports) occur.

#### **PLATE LOCATION & ORIENTATION**

The plate shall be centered on joint and/or placed in accordance with the design drawing/QC full scale details.



# **REFERENCES**

- •ANSI / TPI 1: National Design Standard for Metal Plate Connected Wood Trusses
- •BCSI: Building Component & Safety Information - Guide to Good Practice for Handling, Installing, Restraining, & Bracing of Metal Plate Connected Wood Trusses.
- •NDS: National Design Specification for Wood Construction
- •ESR: 1082 published by the International Code Council. www.icc-es.org



## Quality Line Truss Co., LLC 34593 S 4350 RD

Address 2 Adair, OK 74330 Truss:GE01

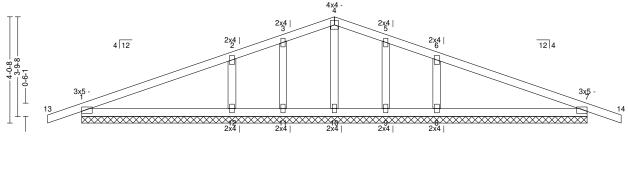
Job: QU02699\_RESERVE BLDG G\_REFRE

Date: 11/25/24 14:38:45

Page: 1 of 1

					1 10				
19-8-12	4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	79 lbs
19-8-12	4./10	-1	1.40	1.40	0.00	0.00	1	24:	70.11
SPAN	РПСП	QII	OHL	OHR	CANIL	CANTR	PLYS	SPACING	WG1/PLI
	DELYTH						DIVC		WGT/PLY

224-12 1-4-0 9-10-6 9-10-6 1-4-0 9-10-6 19-8-12



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf) Ger	neral	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20 Bldg	Code: IBC 2018/	TC: 0.33 (6-7)	Vert TL: 0.02 i	L/999	(7-8)	L/240
TCDL: 10	TPI 1-2014	BC: 0.16 (7-8)	Vert LL: 0 in	L/999	7	L/360
BCLL: 0 Rep	Mbr: No	Web: 0.04 (6-8)	Horz TL: 0 in			
BCDL: 10 Lum	ber D.O.L.: 115 %	` ′				

#### Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Up	olift Max C&C Uplift	Max Uplift	Max Horiz
1		1,020 lbs	173 plf	-673 lbs	-120 lbs	-294 lbs	-673 lbs	587 lbs

## Material

TC: SYP#1 2x 4 BC: SYP#1 2x 4 Web: SYP#2 2x 4

## Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others. BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

#### I nads

1) This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.

2) This truss has been designed to account for the effects of ice dams forming at the eaves.

3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposur

C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60

Men	nber	Forces	Table	e indicates: Me	ember ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.
TC	1-2	0.331	852 lbs	(-277 lbs)	
	6-7	0.331	852 lbs	(-277 lbs)	
BC					
Web					
					•

## Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Gable requires continuous bottom chord bearing.
- 3) Gable webs placed at 24 "OC, U.N.O.
- 4) Attach gable webs with 2x4 20ga plates, U.N.O.
- 5) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
- 6) The fabrication tolerance for this roof truss is 20% (Cq = 0.80).
- 7) A creep factor of 1.00 has been applied for this truss analysis.
- 8) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 7, 1 may need to be considered.
- 10) Listed wind uplift reactions based on MWFRS & C&C loading.



ALL PERSONS FABRICATING, HANDLING, ERECTING OR INSTALLING ANYTRUSS BASED UPON THIS TRUSS DESIGN DRAWINGARE INSTRUCTED TO REFER TO ALL OF THE INSTRUCTIONS, LIMITATIONS AND QUALIFICATIONS SET FORTH IN THE EAGLE METAL PRODUCTS DESIGN NOTES ISSUED WITH THIS DESIGN AND AVAILABLE FROM EAGLE UPON REQUEST. DESIGN VALID ONLY WHEN EAGLE METAL CONNECTORS ARE USED.

## Quality Line Truss Co., LLC 34593 S 4350 RD

Address 2 Adair, OK 74330 Truss:GE02

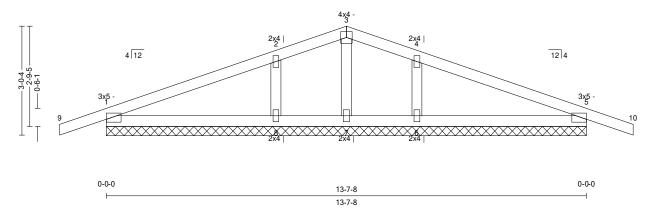
Job: QU02699\_RESERVE BLDG G\_REFRE

Date: 11/25/24 14:38:46

Page: 1 of 1

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
13-7-8	4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	51 lbs
				16	-3-8				

16-3-8 1-4-0 6-9-12 1-4-0 6-9-12 13-7-8



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI	Deflection	1	L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC 2018/	TC: 0.24 (4-5)	Vert TL:	0.01 in	L/999	(5-6)	L/240
TCDL: 10	_	TPI 1-2014	BC: 0.11 (5-6)	Vert LL:	0 in	L/999	5	L/360
BCLL: 0	Rep Mbr:	No	Web: 0.04 (4-6)	Horz TL:	0 in			
BCDL: 10	Lumber D.O.L.:	115 %	` '					

#### Reaction

Brg Combo	Brg Width	Max React	Ave React	Max Grav Uplift	Max MWFRS Uplif	t Max C&C Uplift	Max Uplift	Max Horiz
1		743 lbs	173 plf	-454 lbs	-118 lbs	-247 lbs	-454 lbs	416 lbs

## Material

TC: SYP#1 2 x 4 BC: SYP#1 2 x 4 Web: SYP#2 2 x 4

## Bracing

TC: Sheathed or Purlins at 6-3-0, Purlin design by Others. BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

#### Loads

1) This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.

2) This truss has been designed to account for the effects of ice dams forming at the eaves.

3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL=1.60

Men	nber	Forces	Table	indicates: Me	mber ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.
TC	1-2	0.240	593 lbs	(-218 lbs)	1
	4-5	0.240	593 lbs	(-218 lbs)	
BC					
Web					

#### **Notes**

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- Gable requires continuous bottom chord bearing.
- 3) Gable webs placed at 24 "OC, U.N.O.
- 4) Attach gable webs with 2x4 20ga plates, U.N.O.
- 5) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
- 6) The fabrication tolerance for this roof truss is 20% (Cq = 0.80).
- 7) A creep factor of 1.00 has been applied for this truss analysis.
- 8) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joints 5, 1 may need to be considered.
- 10) Listed wind uplift reactions based on MWFRS & C&C loading.



ALL PERSONS FABRICATING, HANDLING, ERECTING OR INSTALLING ANYTRUSS BASED UPON THIS TRUSS DESIGN DRAWINGARE INSTRUCTED TO REFER TO ALL OF THE INSTRUCTIONS, LIMITATIONS AND QUALIFICATIONS SET FORTH IN THE EAGLE METAL PRODUCTS DESIGN NOTES ISSUED WITH THIS DESIGN AND AVAILABLE FROM EAGLE UPON REQUEST. DESIGN VALID ONLY WHEN EAGLE METAL CONNECTORS ARE USED.

34593 S 4350 RD Address 2 Adair, OK 74330

OHR

OHL

Truss:T01

Job: QU02699\_RESERVE BLDG G\_REFRE

WGT/PLY

801bs

Date: 11/25/24 14:38:48

SPACING

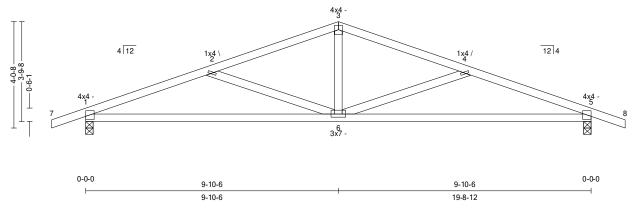
Page: 1 of 1

PLYS

CANT R

19-8-12	4	1/12	8 1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	
	1				22-4-12			1	
	1-4-0	4-11-3	1	4-11-3	4-11-3	1	4-11-3	1-4-0	
	1	4-11-3		9-10-6	14-9-9	1	19-8-12	1	

CANT L



All plates shown to be Eagle 20 unless otherwise noted.

PITCH

QTY

SPAN

Loading (psf)	General		CSI		Deflection	n	L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC 2018/	TC:	0.27 (4-5)	Vert TL:	0.31 in	L/747	(5-6)	L/240
TCDL: 10		TPI 1-2014	BC:	0.88 (6-1)	Vert LL:	0.13 in	L/999	(5-6)	L/360
BCLL: 0	Rep Mbr:	Yes	Web:	0.21 (2-6)	Horz TL:	0.05 in		5	
BCDL: 10	Lumber D.O.L.:	115 %		` /					

#### Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Upli	ft Max C&C Uplift	Max Uplift	Max Horiz
1	1	3.5 in	1.50 in	1,066 lbs		-88 lbs	-354 lbs	-354 lbs	-7 lbs
5	1	3.5 in	150 in	1.066 lbs		-88 lbs	-354 lbs	-354 lbs	

#### Material

TC: SYP#1 2x 4 BC: SYP#1 2x 4 Web: SYP#1 2x 4

### **Bracing**

TC: Sheathed or Purlins at 4-4-0, Purlin design by Others. BC: Sheathed or Purlins at 9-1-0, Purlin design by Others.

#### Loads

- 1) This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 3) This truss has been designed for the effects of wind loads in accordance with ASCE7 16 with the following user defined input: 115 mph (Factored), Exposure
- C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- 4) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces	Table indicates: Member ID, max CSI, m	ax axial force, (max compr. force if different from ma	x axial force). Only forces greater than 300lbs are shown in th	is table.

TC	1-2	0.267	-2,060 lbs		3-4	0.262	-1,634 lbs	1				Ī
	2-3	0.262	-1,634 lbs		4-5	0.267	-2,060 lbs					
BC	5-6	0.883	1,913 lbs	(482 lbs)	6-1	0.883	1,913 lbs	(482 lbs)				
Web	2-6	0.210	-482 lbs		3-6	0.110	667 lbs	(-17 lbs)	46	0.210	-482 lbs	

## Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) The fabrication tolerance for this roof truss is 20% (Cq = 0.80).
- 3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- 4) A creep factor of 1.00 has been applied for this truss analysis.
- 5) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 6) Listed wind uplift reactions based on MWFRS & C&C loading.



34593 S 4350 RD Address 2 Adair, OK 74330

13-3-12

Truss:T02

Job: QU02699\_RESERVE BLDG G\_REFRE

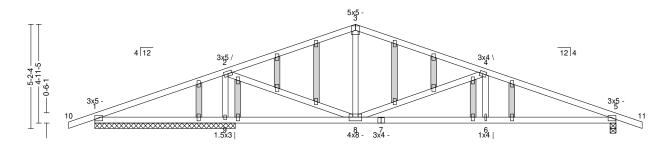
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26-7-8

SPAN 26-7-8	PITCH 4/12	QTY 1	OHL 1-4-0	OHR 1-4-0	CANT L 0-0-0	CANT R 0-0-0	PLYS 1	SPACING 24 in	WGT/PLY 137 lbs
1				29	-3-8				1
Г	1.4.0	6-7-14	6.7	1/	671	4	6714	1.4.1	

19-11-10





All plates shown to be Eagle 20 unless otherwise noted.

6-7-14

Loading (psf)	General		CSI		Deflection	n	L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC 2018/	TC:	0.63 (1-2)	Vert TL:	0.17 in	L/999	(6-7)	L/240
TCDL: 10		TPI 1-2014	BC:	0.62 (6-8)	Vert LL:	0.05 in	L/999	(6-7)	L/360
BCLL: 0	Rep Mbr:	No	Web:	0.74 (4-8)	Horz TL:	0.03 in		5	
BCDL: 10	Lumber D.O.L.	: 115 %							

#### Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
5	1	3.5 in	1.50 in	1,003 lbs		-87 lbs	-264 lbs	-264 lbs	
9	1	86.25 in	N/A	1,570 lbs	•	-93 lbs	-275 lbs	-275 lbs	497 lbs
1	1	86.25 in	N/A	89 lbs	-1,675 lbs	-176 lbs		-1,675 lbs	-1,161 lbs
1	1	86.25 in	N/A	1,925 lbs		-131 lbs	-186 lbs	-186 lbs	683 lbs

### Material

TC: SYP#1 2 x 4 BC: SYP#1 2 x 4 Web: SYP#1 2 x 4

## Bracing

TC: Sheathed or Purlins at 4-2-0, Purlin design by Others. BC: Sheathed or Purlins at 8-6-0, Purlin design by Others.

#### Loads

- 1) This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 3) This truss has been designed for the effects of wind loads in accordance with ASCE7 16 with the following user defined input: 115 mph (Factored), Exposure
- C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL= 1.60
- 4) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Men	nber	Forces	Table	e indicates: M	ember	ID, max CSI, 1	nax axial force	, (max compr.	force if	different from r	nax axial force	. Only forces	greater than 300lbs are shown in this table.
TC	1-2	0.634	1,911 lbs	(-200 lbs)	3-4	0.450	-912 lbs	-	l				ĺ
	2-3	0.457	-914 lbs		4-5	0.395	-1,882 lbs						
BC	5-6	0.555	1,727 lbs	(-219 lbs)	6-8	0.616	1,727 lbs	(-219 lbs)	8-9	0.288	-497 lbs		
Web	2-9	0.165	-1,297 lbs		4-8	0.741	-979 lbs						
	2-8	0.227	1,368 lbs	(-241 lbs)	l								

## Notes

- $1) \, Unless \, noted \, otherwise, do \, not \, cut \, or \, alter \, any \, truss \, member \, or \, plate \, \, without \, prior \, approval \, from \, a \, Professional \, Engineer.$
- 2) Gable webs placed at 24 "OC, U.N.O.
- 3) Attach structural gable blocks with 2x4 20ga plates, U.N.O.
- 4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
- 5) The fabrication tolerance for this roof truss is 20% (Cq = 0.80).
- 6) A creep factor of 1.00 has been applied for this truss analysis.
- 7) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 8) Indicates non-structural members.
- 9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
- 10) Listed wind uplift reactions based on MWFRS & C&C loading.



ALL PERSONS FABRICATING, HANDLING, ERECTING OR INSTALLING ANYTRUSS BASED UPON THIS TRUSS DESIGN DRAWING ARE INSTRUCTED TO REFER TO ALL OF THE INSTRUCTIONS, LIMITATIONS AND QUALIFICATIONS SET FORTH IN THE EAGLE METAL PRODUCTS DESIGN NOTES ISSUED WITH THIS DESIGN AND AVAILABLE FROM EAGLE UPON REQUEST. DESIGN VALID ONLY WHEN EAGLE METAL CONNECTORS ARE USED.

34593 S 4350 RD Address 2 Adair, OK 74330

OHR

Truss:T05

Job: QU02699\_RESERVE BLDG G\_REFRE

WGT/PLY

Date: 11/25/24 14:38:51

SPACING

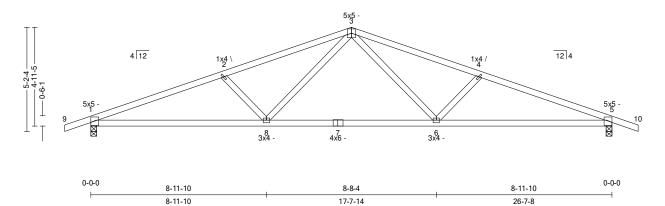
Page: 1 of 1

PLYS

26-7-8		4/12	24	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	107 lbs
	1				29-3-8				1	
	1-4-0	6-9-	9	6-6-3		6-6-3	1	6-9-9	1-4-0	
	1	6-9-	9	13-3-12	!	19-9-15	•	26-7-8	1	

CANT L

CANT R



All plates shown to be Eagle 20 unless otherwise noted.

PITCH

QTY

OHL

Loading (psf)	General		CSI		Deflection	1	L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC 2018/	TC:	0.52 (2-3)	Vert TL:	0.47 in	L/667	(6-7)	L/240
TCDL: 10		TPI 1-2014	BC:	0.86 (8-1)	Vert LL:	0.16 in	L/999	(6-7)	L/360
BCLL: 0	Rep Mbr:	Yes	Web:	0.14 (3-8)	Horz TL:	0.09 in		5	
BCDL: 10	Lumber D.O.L.:	115 %							

#### Reaction

SPAN

_	JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Upl	ift Max C&C Uplift	Max Uplift	Max Horiz
	1	1	3.5 in	1.67 in	1,411 lbs		-111 lbs	-334 lbs	-334 lbs	-6 lbs
	5	1	3.5 in	1.67 in	1 411 lbs		-111 lbs	-334 lbs	-334 lbs	

#### Material

TC: SYP#1 2 x 4 BC: SYP#1 2 x 4 Web: SYP#1 2 x 4

## **Bracing**

TC: Sheathed or Purlins at 3-5-0, Purlin design by Others. BC: Sheathed or Purlins at 9-8-0, Purlin design by Others.

#### Loads

- 1) This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 3) This truss has been designed for the effects of wind loads in accordance with ASCE7 16 with the following user defined input: 115 mph (Factored), Exposure
- C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- 4) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Mer	nber	Forces	Table indicates: N	/lember ID	), max CSI,	max axial force, (max	compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.
TC	1-2	0.478	-2,975 lbs	3-4	0.517	-2,693 lbs	i f
	2-3	0.517	-2,693 lbs	4-5	0.478	-2,975 lbs	

IC	1-2	0.478	-2,975 IDS		3-4	0.517	-2,093 IDS							
	2-3	0.517	-2,693 lbs		4-5	0.478	-2,975 lbs							
BC	5-6	0.863	2,760 lbs	(430 lbs)	6-8	0.736	1,918 lbs	(-288 lbs) 8-1	0.863	2,760 lbs	(430 lbs)			
Web	2-8	0.077	-411 lbs		3-8	0.141	851 lbs	(-27 lbs) 3-6	0.141	851 lbs	(-27 lbs) 4-	6 0.077	-411 lbs	

### **Notes**

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) The fabrication tolerance for this roof truss is 20% (Cq = 0.80).
- 3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- 4) A creep factor of 1.00 has been applied for this truss analysis.
- 5) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 6) Listed wind uplift reactions based on MWFRS & C&C loading.



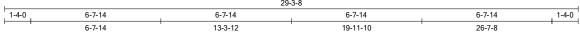
34593 S 4350 RD Address 2 Adair, OK 74330 Truss:T06

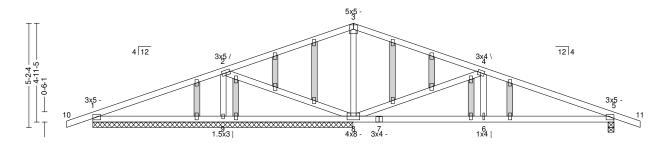
Job: QU02699\_RESERVE BLDG G\_REFRE

Date: 11/25/24 14:38:53

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SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
26-7-8	4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	24 in	137 lbs
1				29	-3-8				1







All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General		CSI		Deflection	1	L/	(loc)	Allowed
TCLL: 20	Bldg Code:	IBC 2018/	TC:	0.63 (1-2)	Vert TL:	0.17 in	L/934	(6-7)	L/240
TCDL: 10	_	TPI 1-2014	BC:	0.62 (6-8)	Vert LL:	0.05 in	L/999	(6-7)	L/360
BCLL: 0	Rep Mbr:	No	Web:	0.74 (4-8)	Horz TL:	0.03 in		5	
BCDL: 10	Lumber D.O.L.:	115 %							

Reaction	

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
5	1	3.5 in	1.50 in	1,003 lbs		-87 lbs	-264 lbs	-264 lbs	•
9	1	159.5 in	N/A	1,570 lbs	•	-93 lbs	-275 lbs	-275 lbs	497 lbs
1	1	159.5 in	N/A	89 lbs	-1,675 lbs	-176 lbs		-1,675 lbs	-1,161 lbs
1	1	159.5 in	N/A	1,925 lbs	•	-131 lbs	-186 lbs	-186 lbs	683 lbs

#### Material

TC: SYP#1 2x 4 BC: SYP#1 2x 4 Web: SYP#1 2x 4

## Bracing

TC: Sheathed or Purlins at 4-2-0, Purlin design by Others. BC: Sheathed or Purlins at 8-6-0, Purlin design by Others.

#### Loads

1) This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.

2) This truss has been designed to account for the effects of ice dams forming at the eaves.

3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 16 with the following user defined input: 115 mph (Factored), Exposure

C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL= 1.60

4) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Men	ıber	Forces	Table	e indicates: M	ember	ID, max CSI, 1	max axial force	, (max compr.	force if	different from r	nax axial force	e). Only forces	greater than 300lbs are shown in this table.
TC	1-2	0.634	1,911 lbs	(-200 lbs)	3-4	0.450	-912 lbs		l				
	2-3	0.457	-914 lbs		4-5	0.395	-1,882 lbs						
BC	5-6	0.555	1,727 lbs	(-219 lbs)	6-8	0.616	1,727 lbs	(-219 lbs)	8-9	0.288	-497 lbs		
Web	2-9	0.165	-1,297 lbs		4-8	0.741	-979 lbs						
	2-8	0.227	1,368 lbs	(-241 lbs)					l				

## Notes

- $1) \, Unless \, noted \, otherwise, do \, not \, cut \, or \, alter \, any \, truss \, member \, or \, plate \, \, without \, prior \, approval \, from \, a \, Professional \, Engineer.$
- 2) Gable webs placed at 24 "OC, U.N.O.
- 3) Attach structural gable blocks with 2x4 20ga plates, U.N.O.
- 4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
- 5) The fabrication tolerance for this roof truss is 20% (Cq = 0.80).
- 6) A creep factor of 1.00 has been applied for this truss analysis.
- 7) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 8) Indicates non-structural members.
- 9) Due to negative reactions in gravity load cases, special connections to the bearing surface at joint 1 may need to be considered.
- 10) Listed wind uplift reactions based on MWFRS & C&C loading.



ALL PERSONS FABRICATING, HANDLING, ERECTING OR INSTALLING ANYTRUSS BASED UPON THIS TRUSS DESIGN DRAWINGARE INSTRUCTED TO REFER TO ALL OF THE INSTRUCTIONS, LIMITATIONS AND QUALIFICATIONS SET FORTH IN THE EAGLE METAL PRODUCTS DESIGN NOTES ISSUED WITH THIS DESIGN AND AVAILABLE FROM EAGLE UPON REQUEST. DESIGN VALID ONLY WHEN EAGLE METAL CONNECTORS ARE USED.

## Quality Line Truss Co., LLC 34593 S 4350 RD

Address 2 Adair, OK 74330

6-9-12

Truss:T07

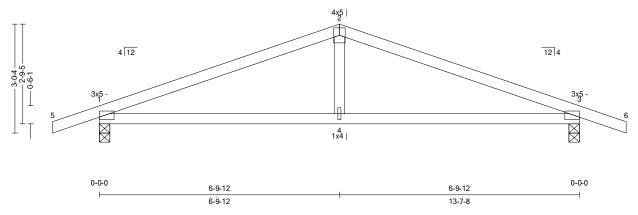
Job: QU02699\_RESERVE BLDG G\_REFRE

Date: 11/25/24 14:38:55

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13-7-8

N 8	PITCH 4/12	QTY 3	OHL 1-4-0	OHR 1-4-0	CANT L 0-0-0	CANT R 0-0-0	PLYS 1	SPACING 24 in	WGT/PLY 46 lbs
-				16	-3-8				ı
	1-4-0		6-9-12			6-9-12		. 1-4-0	1



All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)   Ger	neral	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20 Bldg	Code: IBC 2018/	TC: 0.45 (1-2)	Vert TL: 0.13 in	L/999	(3-4)	L/240
TCDL: 10	TPI 1-2014	BC: 0.50 (4-1)	Vert LL: 0.05 in	L/999	(3-4)	L/360
BCLL: 0 Rep	Mbr: Yes	Web: 0.05 (2-4)	Horz TL: 0.02 in		3	
BCDL: 10 Lum	ber D.O.L.: 115 %	<b>\</b>				

## Reaction

SPAN

13-7-8

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Upl	ift Max C&C Uplift	Max Uplift	Max Horiz
1	1	3.5 in	1.50 in	761 lbs		-69 lbs	-385 lbs	-385 lbs	8 lbs
3	1	3.5 in	1.50 in	761 lbs		-69 lbs	-385 lbs	-385 lbs	

### Material

TC: SYP#1 2 x 4 BC: SYP#1 2 x 4 Web: SYP#1 2 x 4

#### **Bracing**

TC: Sheathed or Purlins at 5-5-0, Purlin design by Others. BC: Sheathed or Purlins at 10-0-0, Purlin design by Others.

#### Loads

1) This truss has been designed for the effects of balanced (14 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 16 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Thermal (Ct = 1.00), DOL = 1.15. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.

- 2) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 3) This truss has been designed for the effects of wind loads in accordance with ASCE7 16 with the following user defined input: 115 mph (Factored), Exposure
- C, Enclosed, Gable/Hip, Risk Category II, Overall Bldg Dims 25 ft x 60 ft, h = 15 ft, End Zone Truss, Both end webs considered. DOL = 1.60
- 4) Concurrent minimum storage attic loading has been applied in accordance with IBC 1607.1

Member Forces Table indicates: Member ID, max CSI, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.447	-1,200 lbs		2-3	0.447	-1,200 lbs		
BC	3-4	0.499	1,083 lbs	(-325 lbs)	4-1	0.499	1,083 lbs	(-325 lbs)	
Web									

#### **Notes**

- $1) \, Unless \, noted \, otherwise, do \, not \, cut \, or \, alter \, any \, truss \, member \, or \, plate \, without \, prior \, approval \, from \, a \, Professional \, Engineer.$
- 2) The fabrication tolerance for this roof truss is 20% (Cq = 0.80).
- 3) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- 4) A creep factor of 1.00 has been applied for this truss analysis.
- 5) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 6) Listed wind uplift reactions based on MWFRS & C&C loading.



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