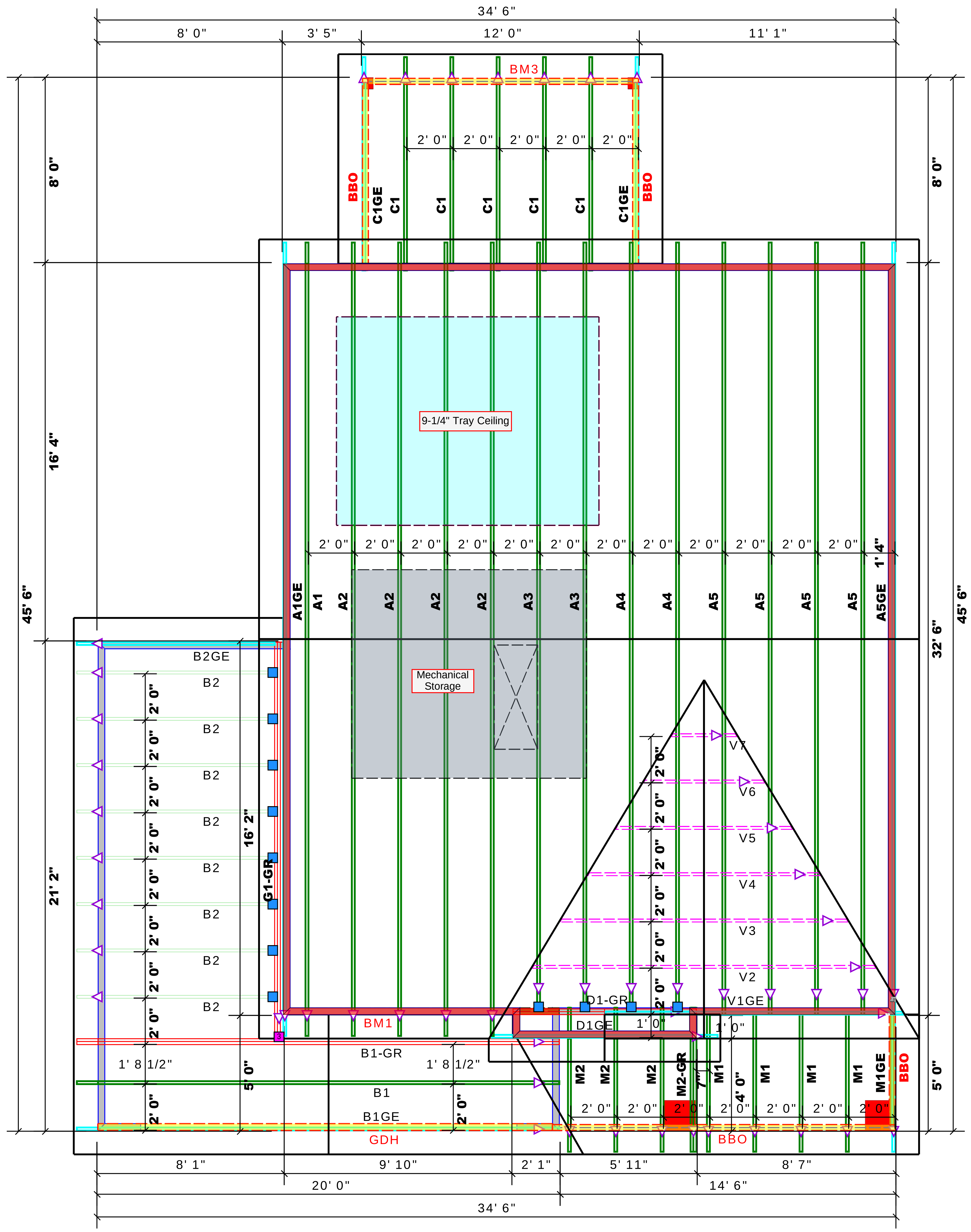


Dimension Notes

1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
2. All interior wall dimensions are to face of frame wall unless noted otherwise
3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

All Walls Shown Are Considered Load Bearing

Roof Area = 1692.08 sq.ft.
Ridge Line = 52.07 ft.
Hip Line = 0 ft.
Horiz. OH = 115.69 ft.
Raked OH = 175.3 ft.
Decking = 58 sheets

Hatch Legend

- Padded HVAC
- 2nd Floor Walls
- Tray Ceiling
- Drop Beam

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
(blue)	HUS26	USP	12	NA	16d/3-1/2"	16d/3-1/2"
3	THDH210-3	USP	1	Varies	16d/3-1/2"	16d/3-1/2"

Products

PlotID	Length	Product	Plies	Net Qty	Fab Type
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM3	12' 0"	2x10 SPF No.2	2	2	FF
GDH	20' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF

1 Truss Placement Plan
Scale: 1/4"=1'

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature David Landry

David Landry

LOAD CHART FOR JACK STUDS

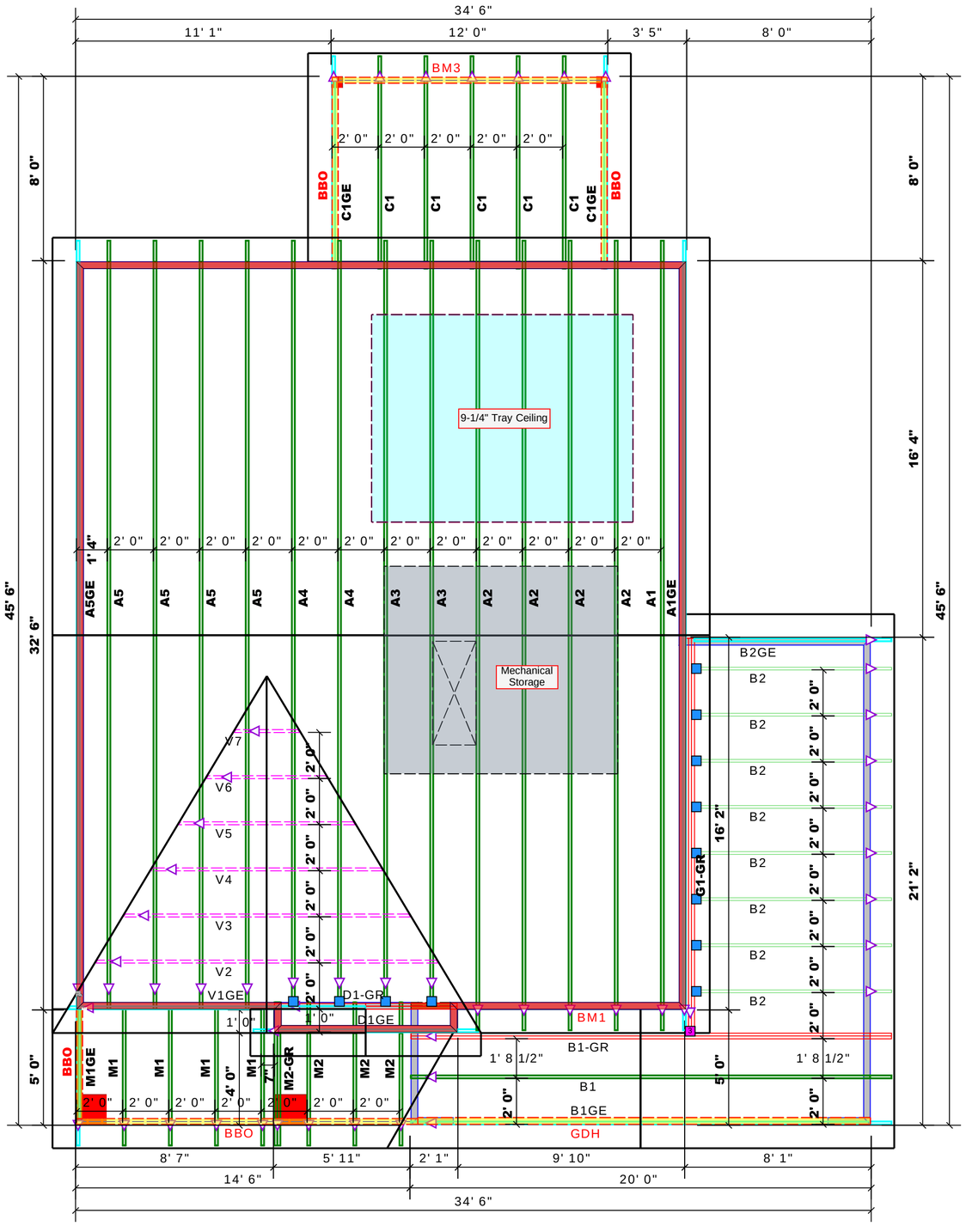
(BASED ON TABLES R502.5(1) & (b))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

CITY / CO.	Spring Lake / Harnett
ADDRESS	Hayes Road
MODEL	Roof
DATE REV.	04/14/22
DRAWN BY	David Landry
SALES REP.	Lenny Norris
BUILDER	Weaver Development Co. Inc.
JOB NAME	Lot 5 McPhail Farm
PLAN	Hickory II "C" / 2GLF, CP
SEAL DATE	N/A
QUOTE #	
JOB #	J0422-1797

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, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



1 Truss Placement Plan
Scale: 1/4"=1'

Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise 2. All interior wall dimensions are to face of frame wall unless noted otherwise 3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

All Walls Shown Are Considered Load Bearing

Roof Area = 1692.08 sq.ft.
Ridge Line = 52.07 ft.
Hip Line = 0 ft.
Horiz. OH = 115.69 ft.
Raked OH = 175.3 ft.
Decking = 58 sheets

Hatch Legend
Padded HVAC
2nd Floor Walls
Tray Ceiling
Drop Beam

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS26	USP	12	NA	16d/3-1/2"	16d/3-1/2"
3	THDH210-3	USP	1	Varies	16d/3-1/2"	16d/3-1/2"

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM3	12' 0"	2x10 SPF No.2	2	2	FF
GDH	20' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature David Landry
David Landry

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (2))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (lbs)	JACK STUDS FOR (2) 2"+ HEADER	END REACTION (lbs)	JACK STUDS FOR (3) 2"+ HEADER	END REACTION (lbs)	JACK STUDS FOR (4) 2"+ HEADER
1700	1	2550	1	3400	1
3100	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13500	8				
15300	9				

BUILDER	Weaver Development Co. Inc.
JOB NAME	Lot 5 McPhail Farm
PLAN	Hickory II "C" / 26LF, CP
SEAL DATE	N/A
QUOTE #	
JOB #	J0422-1797
CITY / CO.	Spring Lake / Harnett
ADDRESS	Hayes Road
MODEL	Roof
DATE REV.	04/14/22
DRAWN BY	David Landry
SALES REP.	Lenny Norris

RE: J0422-1797
Lot 5 McPhail Farm

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Weaver Development Co. Inc.
Lot/Block: 5
Address: Hayes Road
City: Spring Lake
Project Name: J0422-1797
Model: Hickory II
Subdivision: McPhail Farm
State: NC

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014
Wind Code: ASCE 7-10
Roof Load: 40.0 psf
Design Program: MiTek 20/20 8.4
Wind Speed: 130 mph
Floor Load: N/A psf

This package includes 28 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E16492049	A1	12/20/2021	21	E16492069	M2-GR	12/20/2021
2	E16492050	A1GE	12/20/2021	22	E16492070	V1GE	12/20/2021
3	E16492051	A2	12/20/2021	23	E16492071	V2	12/20/2021
4	E16492052	A3	12/20/2021	24	E16492072	V3	12/20/2021
5	E16492053	A4	12/20/2021	25	E16492073	V4	12/20/2021
6	E16492054	A5	12/20/2021	26	E16492074	V5	12/20/2021
7	E16492055	A5GE	12/20/2021	27	E16492075	V6	12/20/2021
8	E16492056	B1	12/20/2021	28	E16492076	V7	12/20/2021
9	E16492057	B1-GR	12/20/2021				
10	E16492058	B1GE	12/20/2021				
11	E16492059	B2	12/20/2021				
12	E16492060	B2GE	12/20/2021				
13	E16492061	C1	12/20/2021				
14	E16492062	C1GE	12/20/2021				
15	E16492063	D1-GR	12/20/2021				
16	E16492064	D1GE	12/20/2021				
17	E16492065	G1-GR	12/20/2021				
18	E16492066	M1	12/20/2021				
19	E16492067	M1GE	12/20/2021				
20	E16492068	M2	12/20/2021				

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Strzyzewski, Marvin

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

December 20, 2021

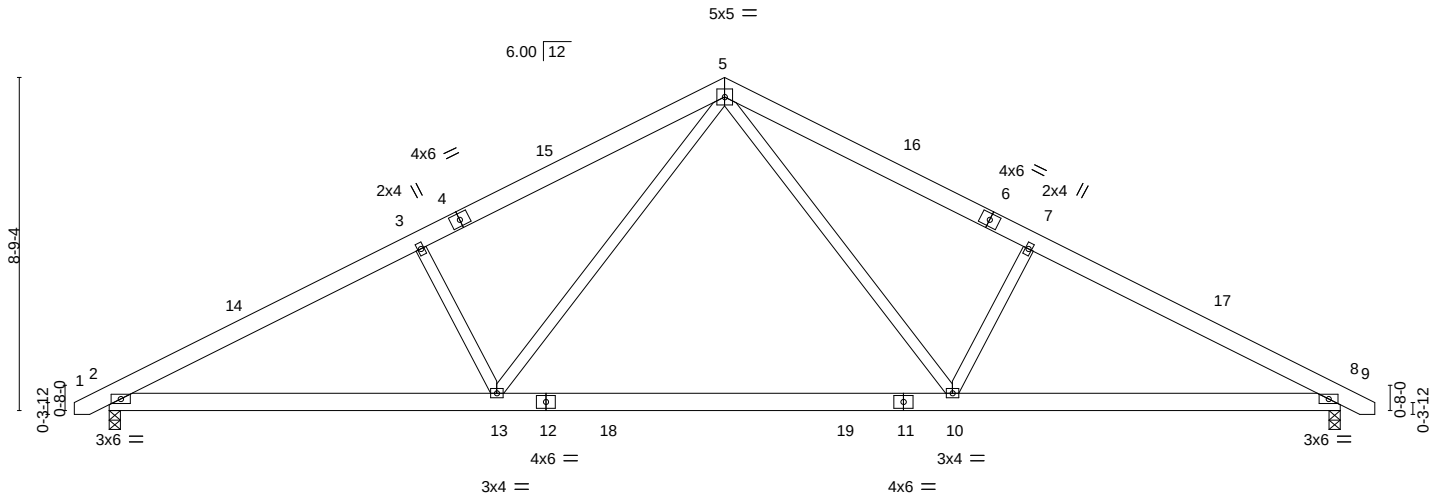
Strzyzewski, Marvin

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	A1	COMMON	1	1	E16492049
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:46 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-cOokM7e_U9uBJpmwi?x?s48ibor5qAAQYoEz__y74yN

-0-11-0	8-2-8	16-2-8	24-2-8	32-5-0	33-4-0
0-11-0	8-2-8	8-0-0	8-0-0	8-2-8	0-11-0

Scale = 1:60.7



10-2-8	22-2-8	32-5-0
10-2-8	12-0-0	10-2-8

LOADING (psf)		**SPACING-**	2-0-0	**CSI.**		**DEFL.**	in	(loc)	l/defl	L/d	**PLATES**	**GRIP**
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.34	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.47	10-13	>824	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.05	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	2-13	>999	240	Weight: 208 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-7 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=-110(LC 10)
Max Uplift 2=-89(LC 12), 8=-89(LC 13)
Max Grav 2=1337(LC 1), 8=1337(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2307/486, 3-5=-2125/534, 5-7=-2125/534, 7-8=-2307/486
BOT CHORD 2-13=-316/2007, 10-13=-106/1303, 8-10=-320/1964
WEBS 5-10=-147/921, 7-10=-454/288, 5-13=-147/921, 3-13=-454/288

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-2-8, Exterior(2) 16-2-8 to 20-7-5, Interior(1) 20-7-5 to 33-1-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

December 20,2021

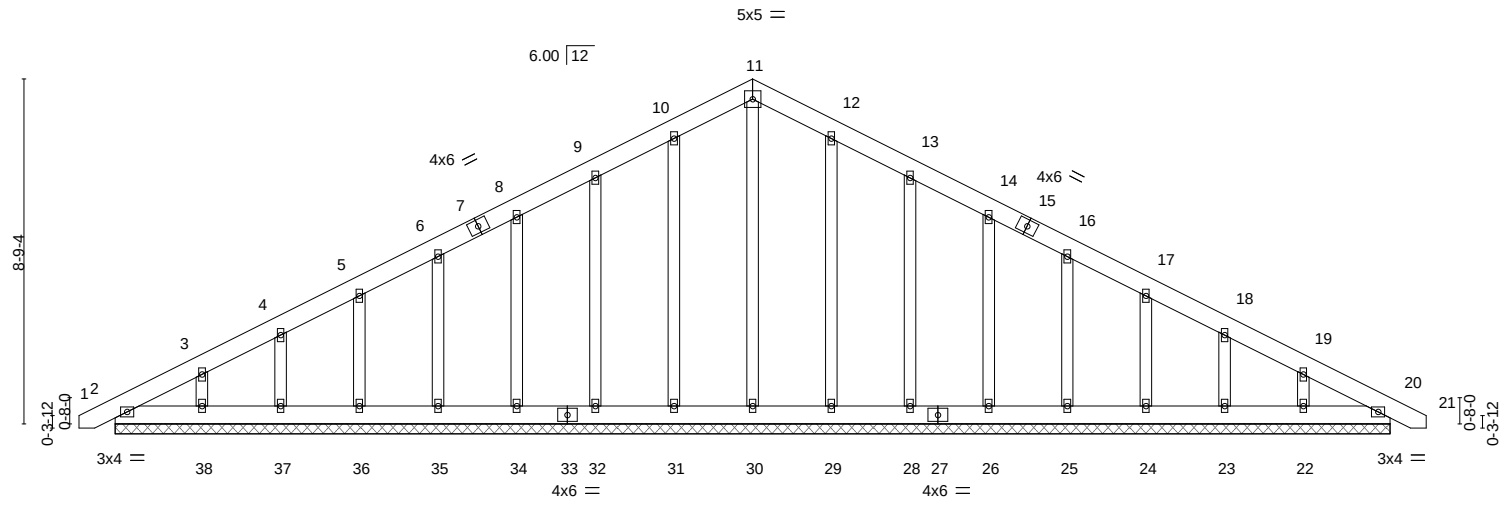
TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	A1GE	COMMON SUPPORTED GAB	1	1	E16492050
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:49 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-1zUs?9gsn4GmAGVUN8UiUjmGc00b1ZbsEmTdbJy74yK

-0-11-0 17-1-8 33-4-0 34-3-0
0-11-0 16-2-8 16-2-8 0-11-0

Scale = 1:58.6



-0-11-0 33-4-0 34-3-0
0-11-0 32-5-0 0-11-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	20	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	20	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	20	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 258 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 32-5-0.
(lb) - Max Horz 2=-171(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22
Max Grav All reactions 250 lb or less at joint(s) 2, 30, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22, 20

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 10-11=-114/284, 11-12=-114/284

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 2, 31, 32, 34, 35, 36, 37, 38, 29, 28, 26, 25, 24, 23, 22.
10) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

December 20,2021

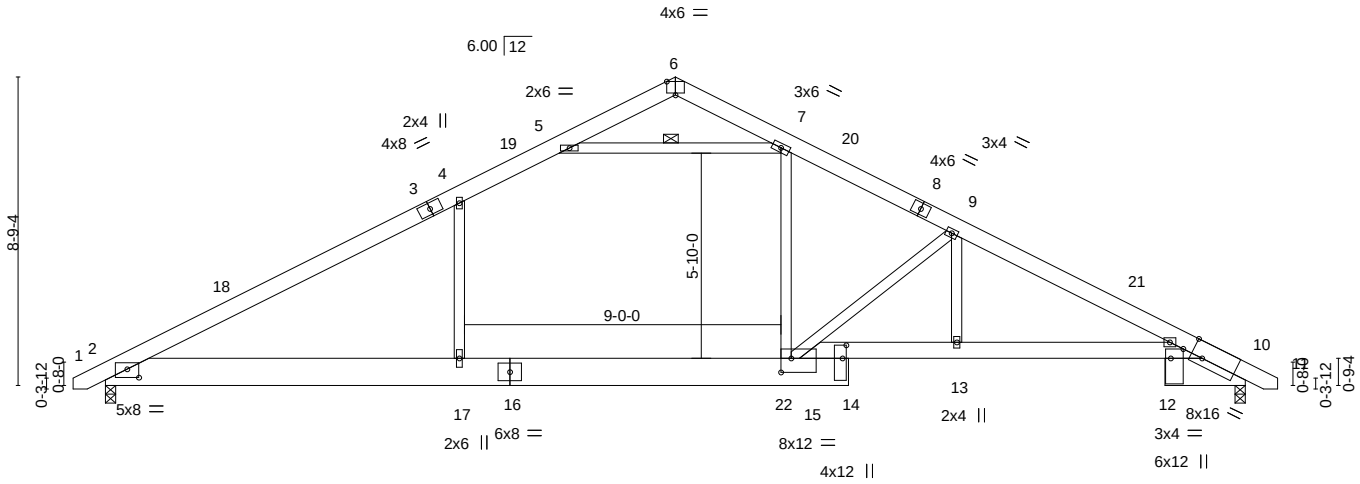
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	A2	ROOF SPECIAL	4	1	E16492051
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:51 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-zMcdQri7IiWUPaftUYWAZ8sR3pYxVLf9h4ykfCy74yI

-0-11-0	10-2-8	16-2-8	19-2-8	24-2-8	30-1-8	32-5-0	33-4-0
0-11-0	10-2-8	6-0-0	3-0-0	5-0-0	5-11-0	2-3-8	0-11-0

Scale = 1:65.5



10-2-8	16-2-8	19-2-8	21-1-8	24-2-8	30-1-8	32-5-0
10-2-8	6-0-0	3-0-0	1-11-0	3-1-0	5-11-0	2-3-8

Plate Offsets (X,Y)-- [2:0-4-0,0-2-14], [6:0-3-0,Edge], [10:0-4-0,Edge], [12:0-3-4,Edge], [14:0-4-8,0-1-4], [15:0-3-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.75	Vert(LL)	-0.21	17	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.67	Vert(CT)	-0.38	17	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.09	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.17	2-17	>999	240	Weight: 247 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
10-15: 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 5-7

REACTIONS. (size) 2=0-3-8, 10=0-3-8
Max Horz 2=110(LC 11)
Max Uplift 2=-90(LC 12), 10=-90(LC 13)
Max Grav 2=1393(LC 2), 10=1353(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-2217/403, 4-5=-1870/483, 7-9=-2258/519, 9-10=-2889/551
BOT CHORD 2-17=-193/1848, 15-17=-195/1860, 13-15=-371/2525, 10-13=-380/2525
WEBS 4-17=-29/402, 7-15=-114/967, 9-15=-1075/232, 9-13=0/616, 5-7=-1955/459

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-10 to 3-8-3, Interior(1) 3-8-3 to 16-2-8, Exterior(2) 16-2-8 to 20-7-5, Interior(1) 20-7-5 to 33-1-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10.
6) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

December 20,2021

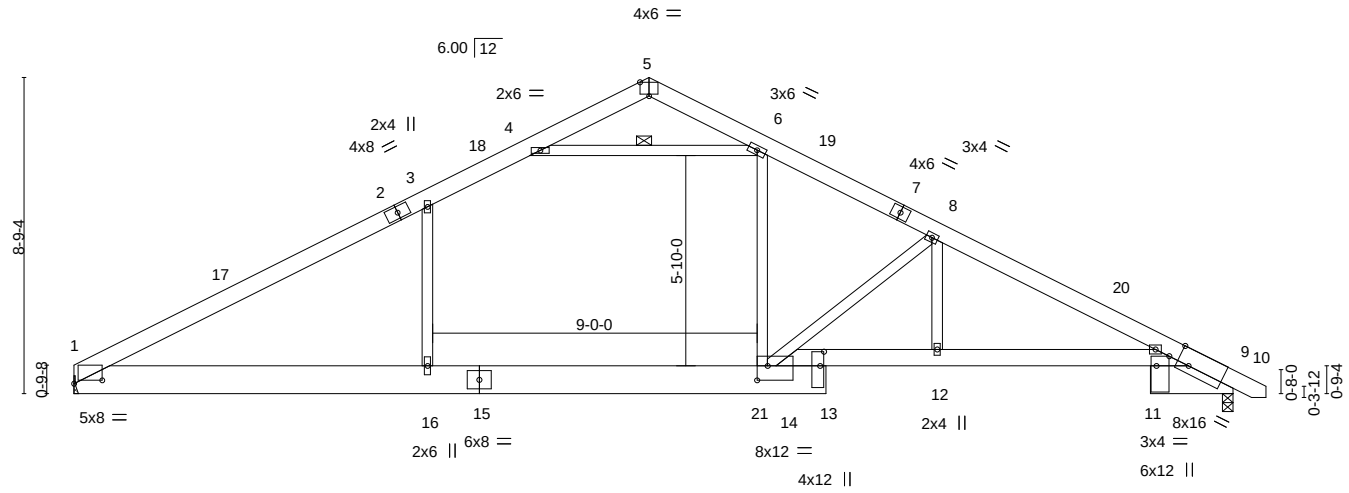
TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	A3	ROOF SPECIAL	2	1	E16492052
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:52 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-RY9?dAjl3?eL1kE32G2P6LOcfDuEEorJwkhHBey74yH

9-11-8	15-11-8	18-11-8	23-11-8	29-10-8	32-2-0	33-1-0
9-11-8	6-0-0	3-0-0	5-0-0	5-11-0	2-3-8	0-11-0

Scale: 3/16"=1'



9-11-8	18-11-8	20-10-8	23-11-8	29-10-8	32-2-0
9-11-8	9-0-0	1-11-0	3-1-0	5-11-0	2-3-8

Plate Offsets (X,Y)-- [1:0-9-6,0-1-2], [5:0-3-0,Edge], [9:0-4-0,Edge], [11:0-3-4,Edge], [13:0-4-12,0-1-4], [14:0-3-8,0-4-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.76	Vert(LL)	-0.21	16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.66	Vert(CT)	-0.36	16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.70	Horz(CT)	0.09	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.16	1-16	>999	240	Weight: 243 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1 *Except*
9-14: 2x6 SP 2400F 2.0E
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-6

REACTIONS. (size) 1=Mechanical, 9=0-3-8
Max Horz 1=-111(LC 8)
Max Uplift 1=-76(LC 12), 9=-90(LC 13)
Max Grav 1=1345(LC 2), 9=1347(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-2189/401, 3-4=-1853/491, 6-8=-2237/517, 8-9=-2874/549
BOT CHORD 1-16=-198/1827, 14-16=-200/1839, 12-14=-375/2511, 9-12=-384/2511
WEBS 6-14=-117/966, 3-16=-53/392, 4-6=-1931/474, 8-14=-1081/228, 8-12=0/620

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 15-11-8, Exterior(2) 15-11-8 to 20-4-5, Interior(1) 20-4-5 to 32-10-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 9.

December 20,2021

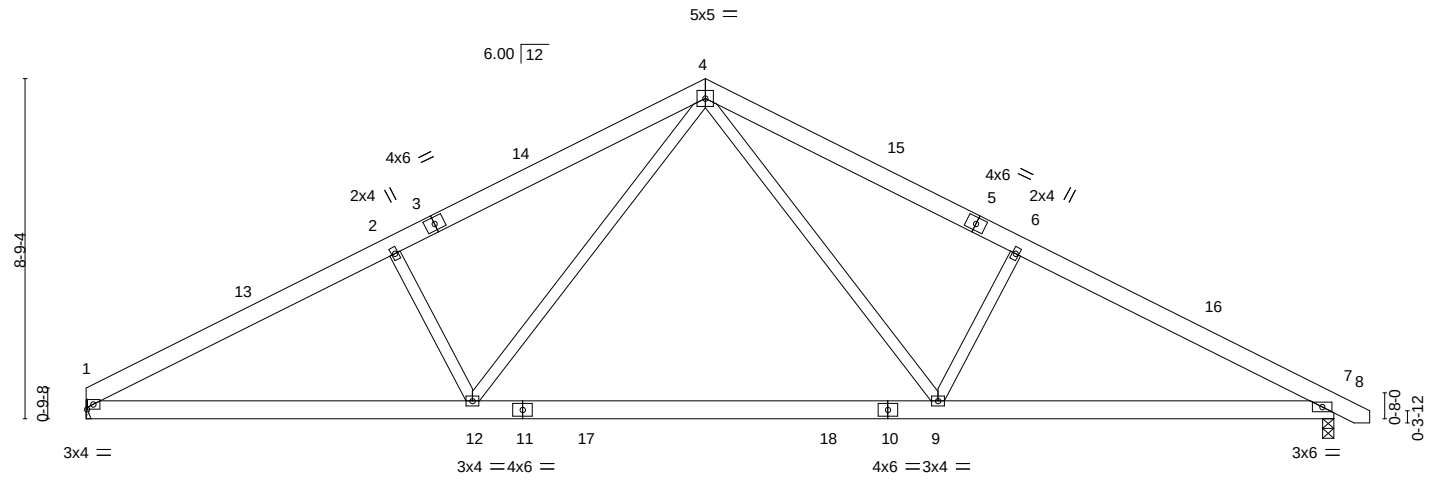
TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	A4	COMMON	2	1	E16492053
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:53 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-vkjNqWkNqJmCfupGczZefZxupdEkzLtS9ORrk4y74yG

7-11-8	15-11-8	23-11-8	32-2-0	33-1-0
7-11-8	8-0-0	8-0-0	8-2-8	0-11-0

Scale = 1:59.4



9-11-8	21-11-8	32-2-0
9-11-8	12-0-0	10-2-8

Plate Offsets (X,Y)-- [1:0-1-14,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.34	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.64	Vert(CT)	-0.47	9-12	>822	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.05	12	>999	240	Weight: 204 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=Mechanical, 7=0-3-8
Max Horz 1=-111(LC 8)
Max Uplift 1=-76(LC 12), 7=-89(LC 13)
Max Grav 1=1278(LC 1), 7=1331(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2276/496, 2-4=-2096/546, 4-6=-2113/532, 6-7=-2294/484
BOT CHORD 1-12=-319/1973, 9-12=-109/1291, 7-9=-324/1953
WEBS 4-9=-147/922, 6-9=-454/288, 4-12=-144/897, 2-12=-437/286

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-12 to 4-5-9, Interior(1) 4-5-9 to 15-11-8, Exterior(2) 15-11-8 to 20-4-5, Interior(1) 20-4-5 to 32-10-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

December 20,2021

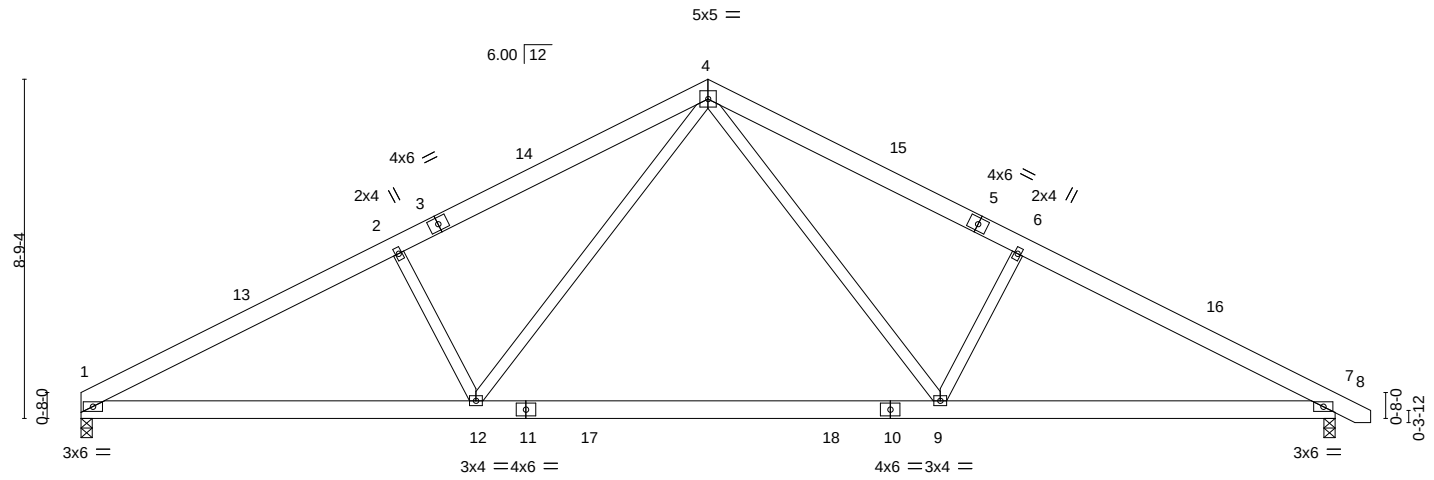
TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	A5	COMMON	4	1	E16492054
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:54 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-NxHl2sk?bdu3G2OSAh4tBmU3V1ayio3cN2AOGXy74yF

8-2-8	16-2-8	24-2-8	32-5-0	33-4-0
8-2-8	8-0-0	8-0-0	8-2-8	0-11-0

Scale = 1:59.6



10-2-8	22-2-8	32-5-0
10-2-8	12-0-0	10-2-8

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.34	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.47	9-12	>822	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	12	>999	240	Weight: 206 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 7=0-3-8
Max Horz 1=-111(LC 10)
Max Uplift 1=-77(LC 12), 7=-89(LC 13)
Max Grav 1=1284(LC 1), 7=1337(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2310/503, 2-4=-2129/551, 4-6=-2126/535, 6-7=-2308/487
BOT CHORD 1-12=-327/2012, 9-12=-111/1304, 7-9=-326/1966
WEBS 4-9=-147/921, 6-9=-454/288, 4-12=-149/924, 2-12=-458/292

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 16-2-8, Exterior(2) 16-2-8 to 20-7-5, Interior(1) 20-7-5 to 33-1-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.

December 20,2021

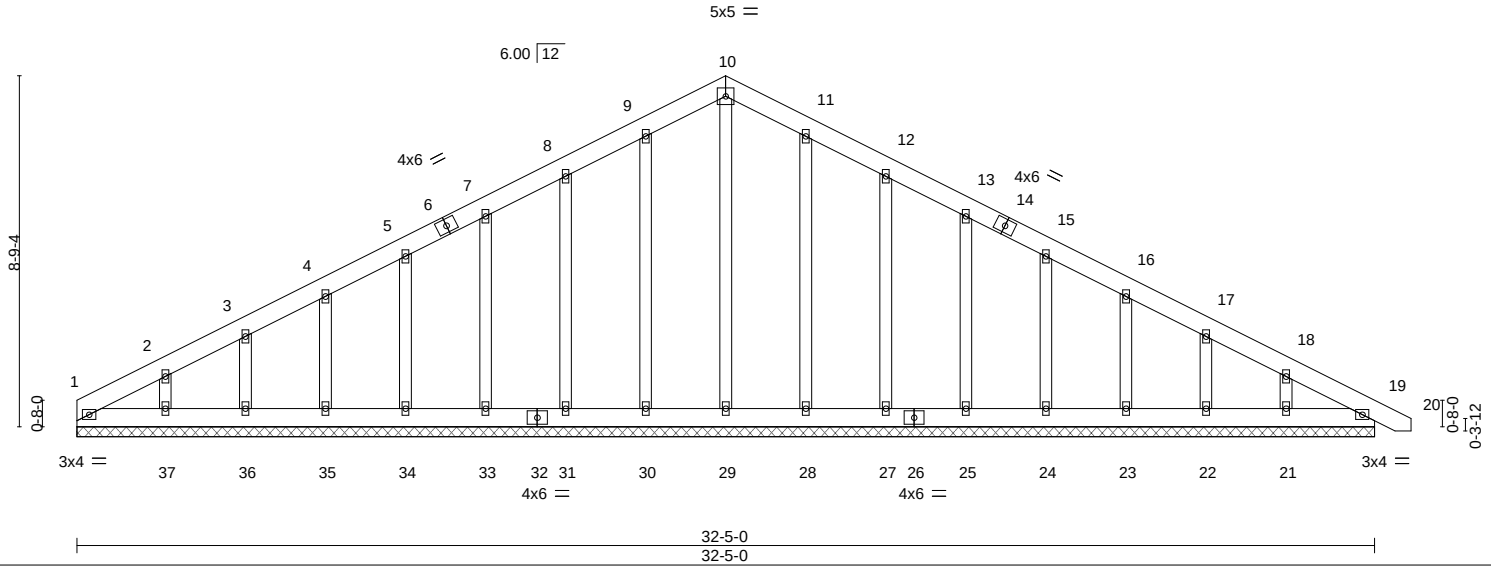
TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	A5GE	COMMON SUPPORTED GAB	1	1	E16492055
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:55 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-r7r7FCldMw0vuByejOb6k_0I5Q4?RG4lchwyozy74yE

16-2-8 | 32-5-0 | 33-4-0
16-2-8 | 16-2-8 | 0-11-0

Scale = 1:57.6



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.04	Vert(LL)	0.00	19	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	19	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.00	19	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S							Weight: 256 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 32-5-0.
(lb) - Max Horz 1=-175(LC 17)
Max Uplift All uplift 100 lb or less at joint(s) 1, 30, 31, 33, 34, 35, 36, 28, 27, 25, 24, 23, 22, 21 except 37=-101(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 1, 29, 30, 31, 33, 34, 35, 36, 37, 28, 27, 25, 24, 23, 22, 21, 19

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 9-10=-114/284, 10-11=-114/284

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 1, 30, 31, 33, 34, 35, 36, 28, 27, 25, 24, 23, 22, 21 except (jt=lb) 37=101.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	B1	COMMON	1	1	E16492056
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:57 2021 Page 1
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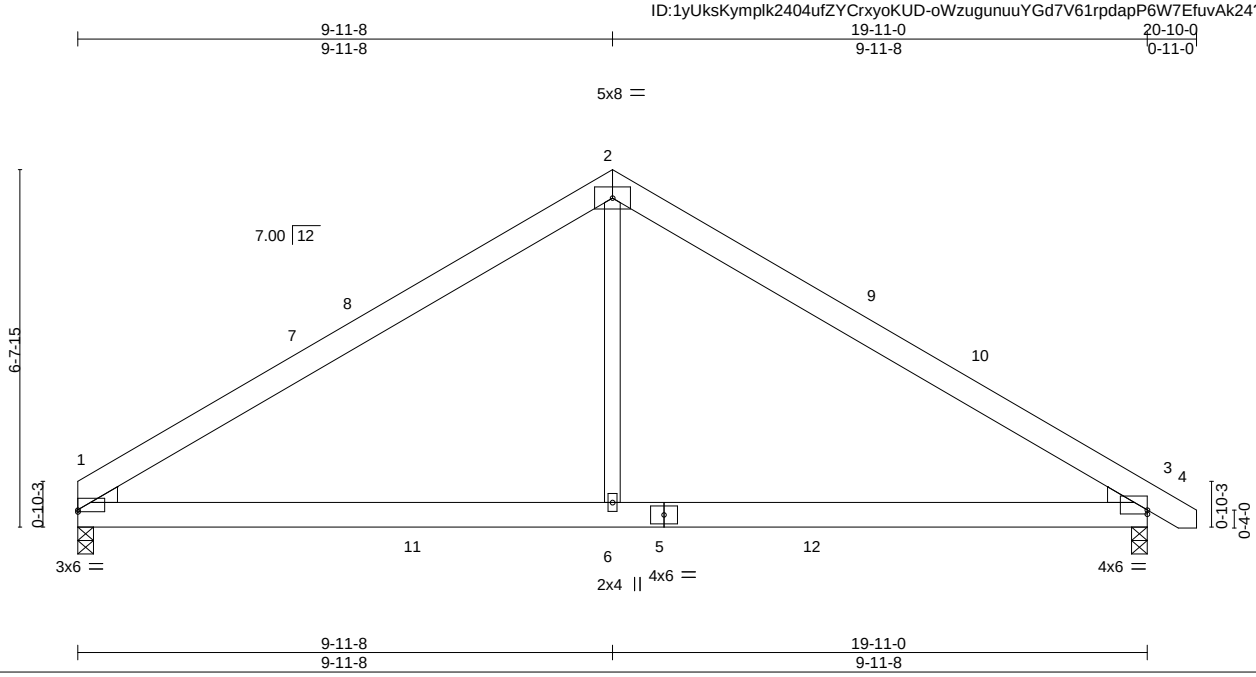

Plate Offsets (X,Y)-- [1:0-0-0,0-0-7], [3:0-0-0,0-0-15]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.52	Vert(LL)	-0.06	3-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.13	3-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.04	3-6	>999	240	Weight: 114 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-11-11 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=-149(LC 8)
Max Uplift 1=-43(LC 12), 3=-56(LC 13)
Max Grav 1=900(LC 19), 3=951(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1193/217, 2-3=-1221/216
BOT CHORD 1-6=-30/956, 3-6=-30/956
WEBS 2-6=0/660

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-12 to 4-6-9, Interior(1) 4-6-9 to 9-11-8, Exterior(2) 9-11-8 to 14-4-5, Interior(1) 14-4-5 to 20-8-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	B1-GR	COMMON GIRDER	1	2	E16492057
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:59 2021 Page 1
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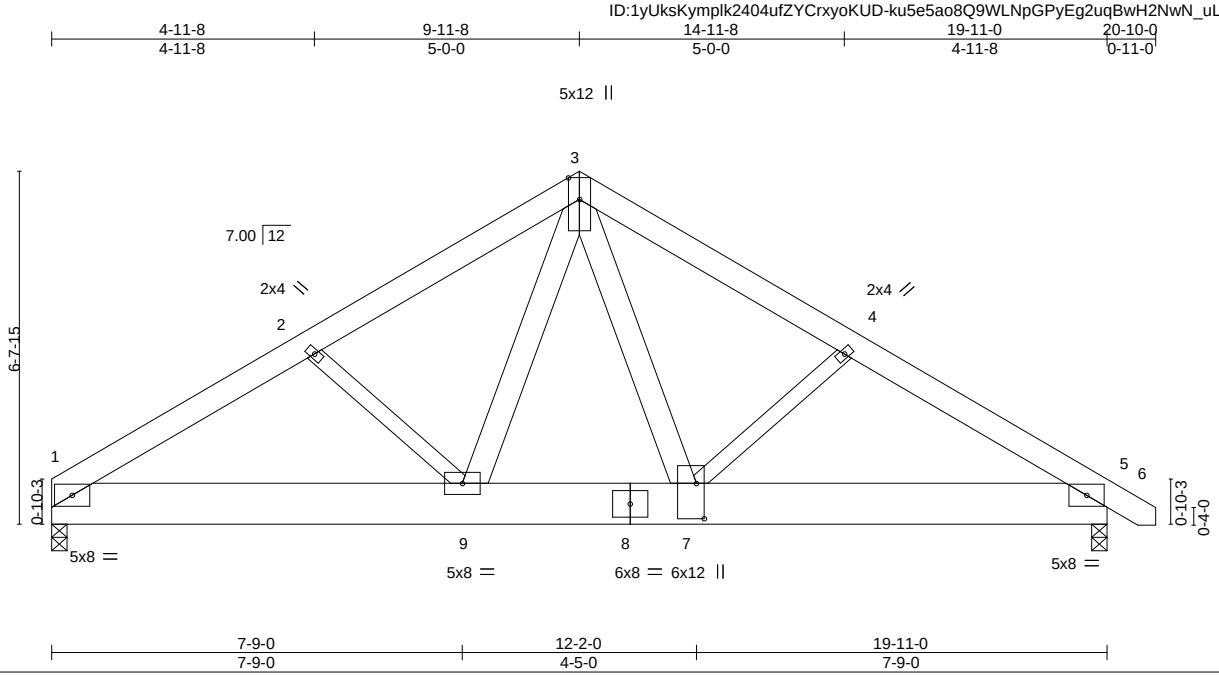

Plate Offsets (X,Y)-- [7:0-8-0,0-1-12]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.07	7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.27	Vert(CT)	-0.14	7	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.55	Horz(CT)	0.03	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S		Wind(LL)	0.05	7	>999	240	Weight: 348 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x6 SP No.1 *Except*
4-7,2-9: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-11-12 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=-148(LC 4)
Max Uplift 1=-423(LC 8), 5=-642(LC 9)
Max Grav 1=4234(LC 2), 5=6219(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-7519/795, 2-3=-7422/798, 3-4=-10665/1144, 4-5=-10716/1136
BOT CHORD 1-9=-679/6256, 7-9=-581/6251, 5-7=-887/8935
WEBS 3-7=-953/8888, 4-7=-281/487, 3-9=-44/404, 2-9=-284/309

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 4 rows staggered at 0-2-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=423, 5=642.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 9034 lb down and 972 lb up at 12-1-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-6=-60, 1-5=-20
Concentrated Loads (lb)
Vert: 7=-7520(B)

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	B1GE	COMMON SUPPORTED GAB	1	1	E16492058
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:22:58 2021 Page 1
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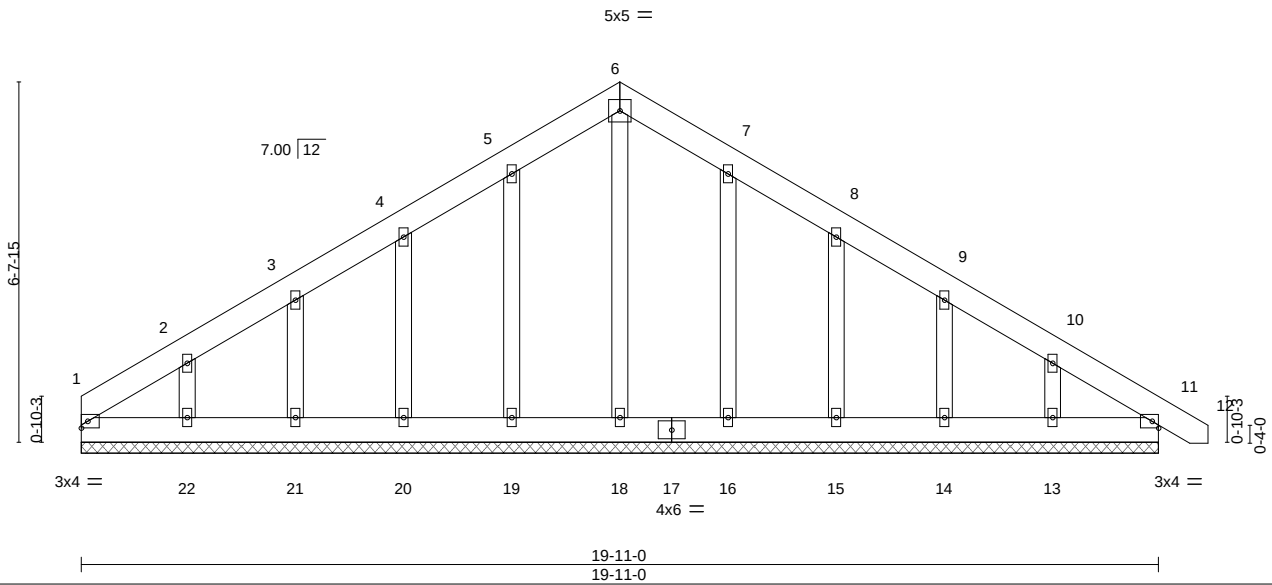
9-11-8 / 9-11-8 | 19-11-0 / 9-11-8 | 20-10-0 / 0-11-0

Scale = 1:42.6



19-11-0 / 19-11-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	0.00	11	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	11	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 146 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 19-11-0.
(lb) - Max Horz 1=-186(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 19, 20, 21, 16, 15, 14, 11 except 22=-116(LC 12), 13=-103(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 18, 19, 20, 21, 22, 16, 15, 14, 13, 11

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 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 100 lb uplift at joint(s) 1, 19, 20, 21, 16, 15, 14, 11 except (jt=lb) 22=116, 13=103.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	B2	JACK-CLOSED	8	1	E16492059
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:00 2021 Page 1
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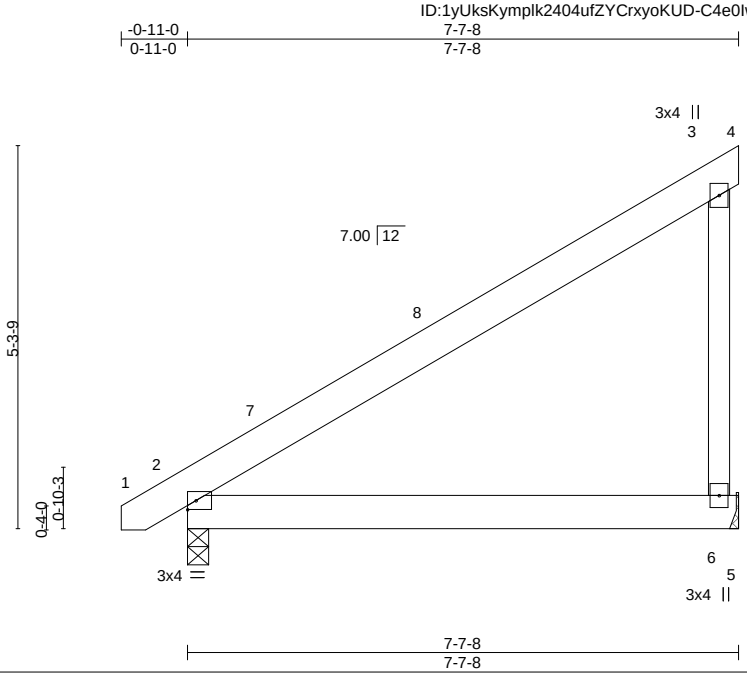

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.04	2-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.07	2-6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.00	2	****	240	Weight: 48 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=158(LC 12)
Max Uplift 6=-82(LC 12)
Max Grav 6=318(LC 19), 2=345(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 3-6=-288/220

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-0 to 3-7-13, Interior(1) 3-7-13 to 7-7-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	B2GE	MONOPITCH SUPPORTED	1	1	E16492060
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:00 2021 Page 1
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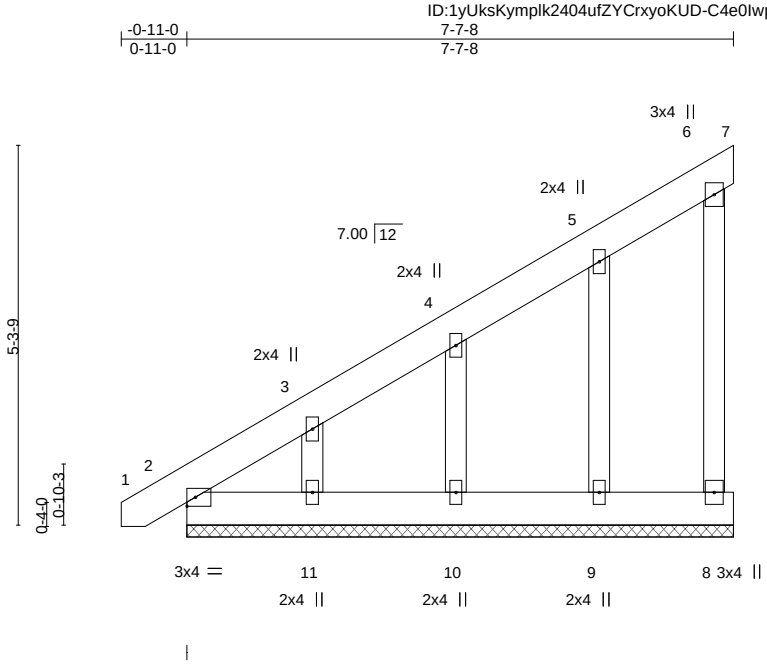

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 57 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 7-7-8.
(lb) - Max Horz 2=228(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 7, 8, 9, 10 except 11=-117(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 7, 8, 2, 9, 10, 11

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-269/227

NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 8, 9, 10 except (jt=lb) 11=117.

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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	C1	Monopitch	5	1	E16492061
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:01 2021 Page 1
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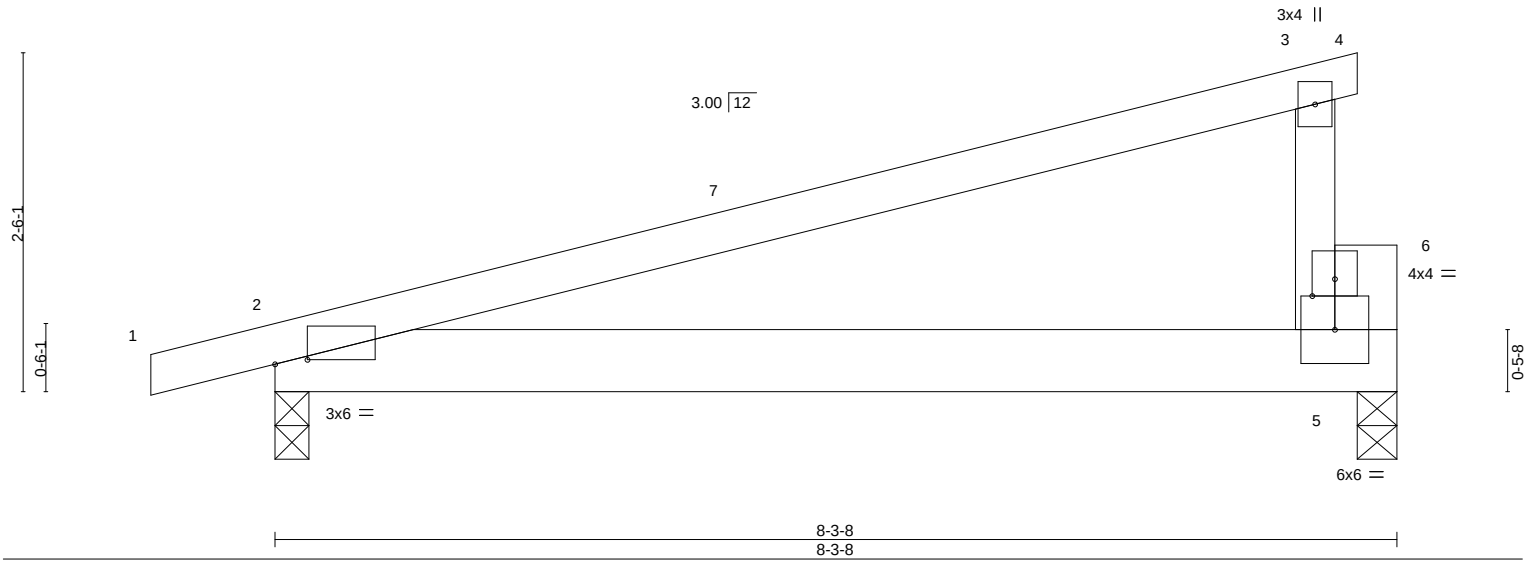


Plate Offsets (X,Y)-- [2:0-2-14,0-0-6], [6:0-2-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.84	Vert(LL)	-0.05	2-5	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.10	2-5	>969	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.10	2-5	>886	240	Weight: 37 lb	FT = 20%

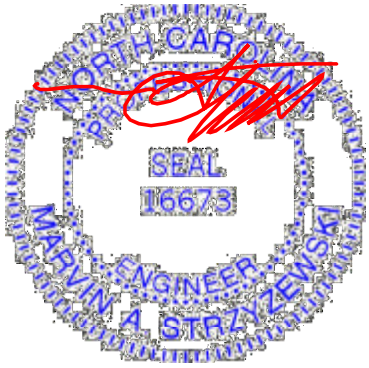
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 5=0-3-8
Max Horz 2=74(LC 8)
Max Uplift 2=-150(LC 8), 5=-127(LC 8)
Max Grav 2=375(LC 1), 5=314(LC 1)

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

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 8-0-0 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=150, 5=127.



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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	C1GE	GABLE	2	1	E16492062
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:02 2021 Page 1
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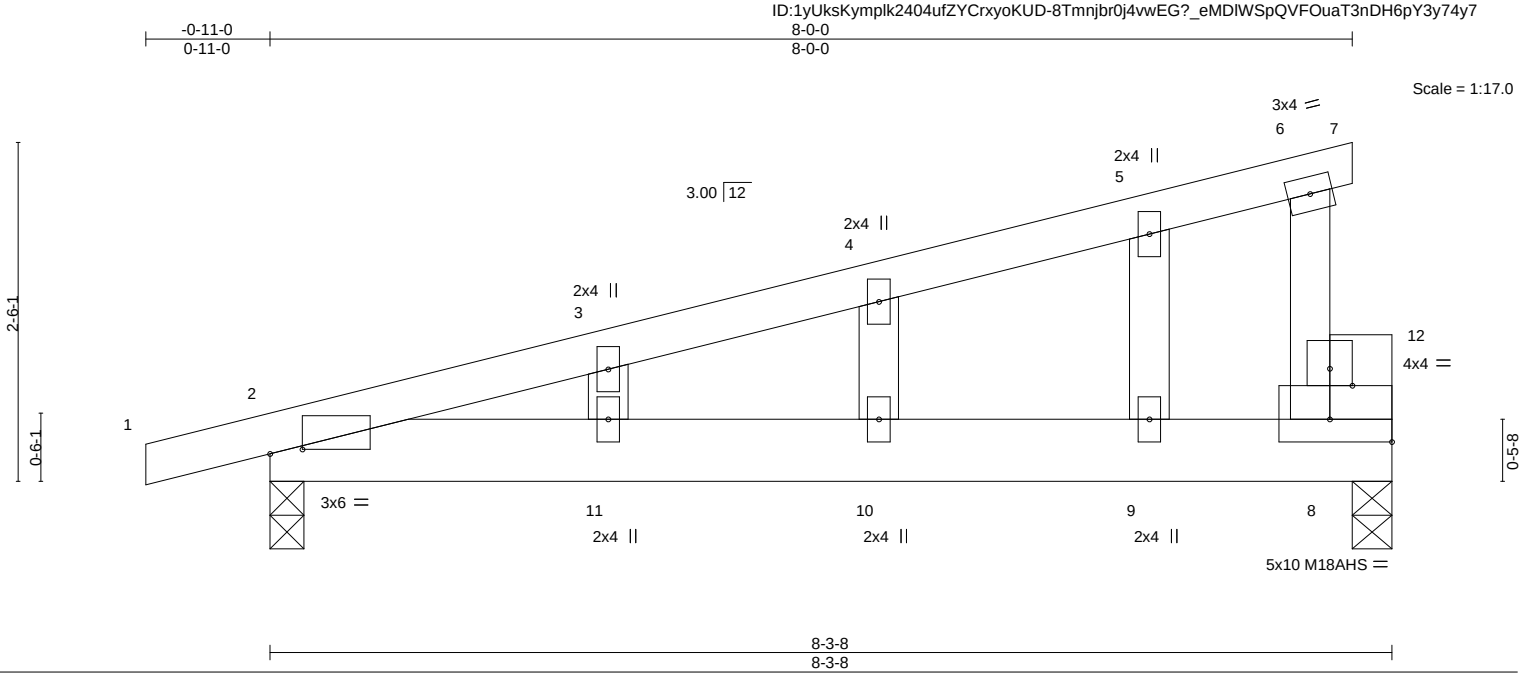

Plate Offsets (X,Y)-- [2:0-2-14,0-0-6], [8:Edge,0-2-0], [12:0-2-0,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.35	Vert(LL)	0.09	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.26	Vert(CT)	-0.08	10-11	>999	240	M18AHS	186/179
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	-0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 41 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2 *Except*
8-12: 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 8=0-3-8
Max Horz 2=105(LC 8)
Max Uplift 2=-216(LC 8), 8=-188(LC 8)
Max Grav 2=375(LC 1), 8=314(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-11=-284/207, 10-11=-284/207, 9-10=-284/207, 8-9=-284/207

NOTES-
1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are MT20 plates unless otherwise indicated.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=216, 8=188.

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TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	D1-GR	Common Girder	1	2	E16492063
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:04 2021 Page 1
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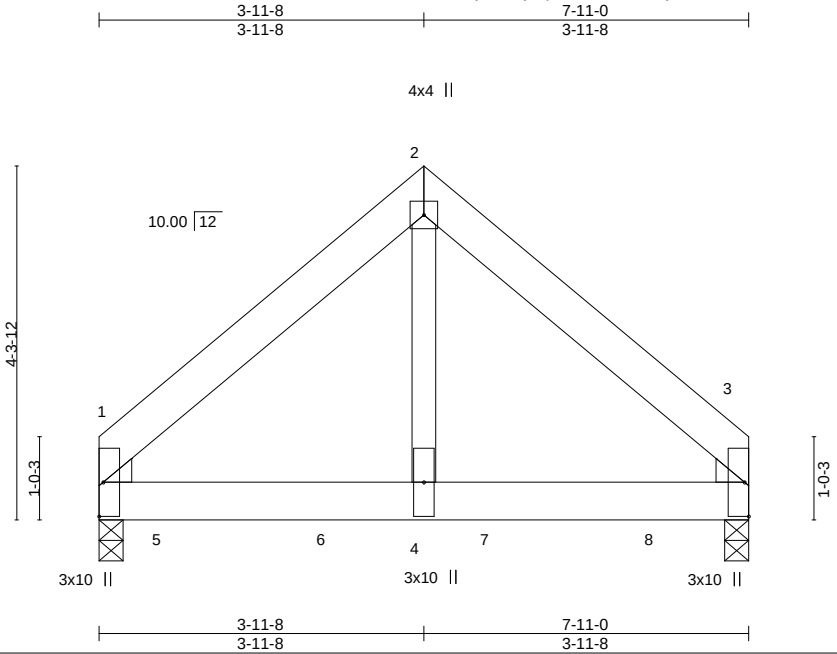

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	-0.02	3-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.57	Vert(CT)	-0.04	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.39	Horz(CT)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.01	3-4	>999	240	Weight: 100 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=0-3-8, 3=0-3-8
Max Horz 1=91(LC 24)
Max Uplift 1=-191(LC 8), 3=-180(LC 9)
Max Grav 1=2919(LC 1), 3=2779(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2418/177, 2-3=-2418/177
BOT CHORD 1-4=-100/1678, 3-4=-100/1678
WEBS 2-4=-154/3142

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=191, 3=180.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1261 lb down and 93 lb up at 0-9-12, 1258 lb down and 96 lb up at 2-9-12, and 1325 lb down and 96 lb up at 4-9-12, and 1325 lb down and 96 lb up at 6-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 1-3=-20

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Continued on page 2

TRENCO
818 Soundside Road
Edenton, NC 27932

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 5=-1261(B) 6=-1258(B) 7=-1258(B) 8=-1258(B)

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	D1GE	COMMON SUPPORTED GAB	1	1	E16492064
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:03 2021 Page 1
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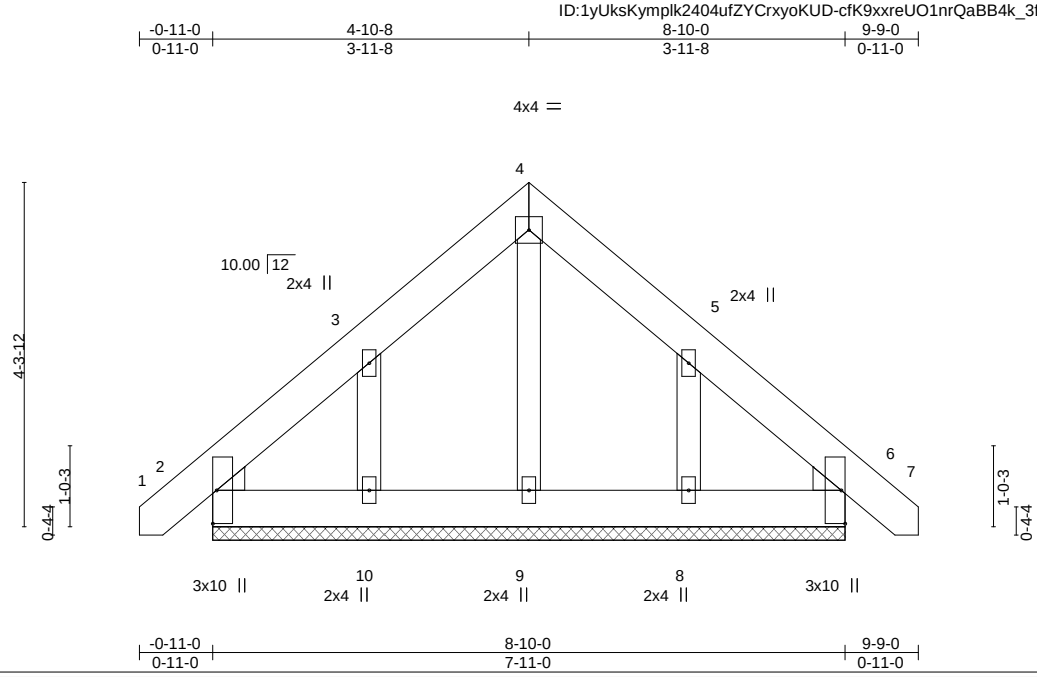

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	0.00	6	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(CT)	0.00	6	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 60 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.2 , Right: 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 7-11-0.
(lb) - Max Horz 2=-118(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 2, 6 except 10=-152(LC 12), 8=-148(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 6, 9, 10, 8

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6 except (jt=lb) 10=152, 8=148.
9) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	G1-GR	FLAT GIRDER	1	3	E16492065
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:06 2021 Page 1
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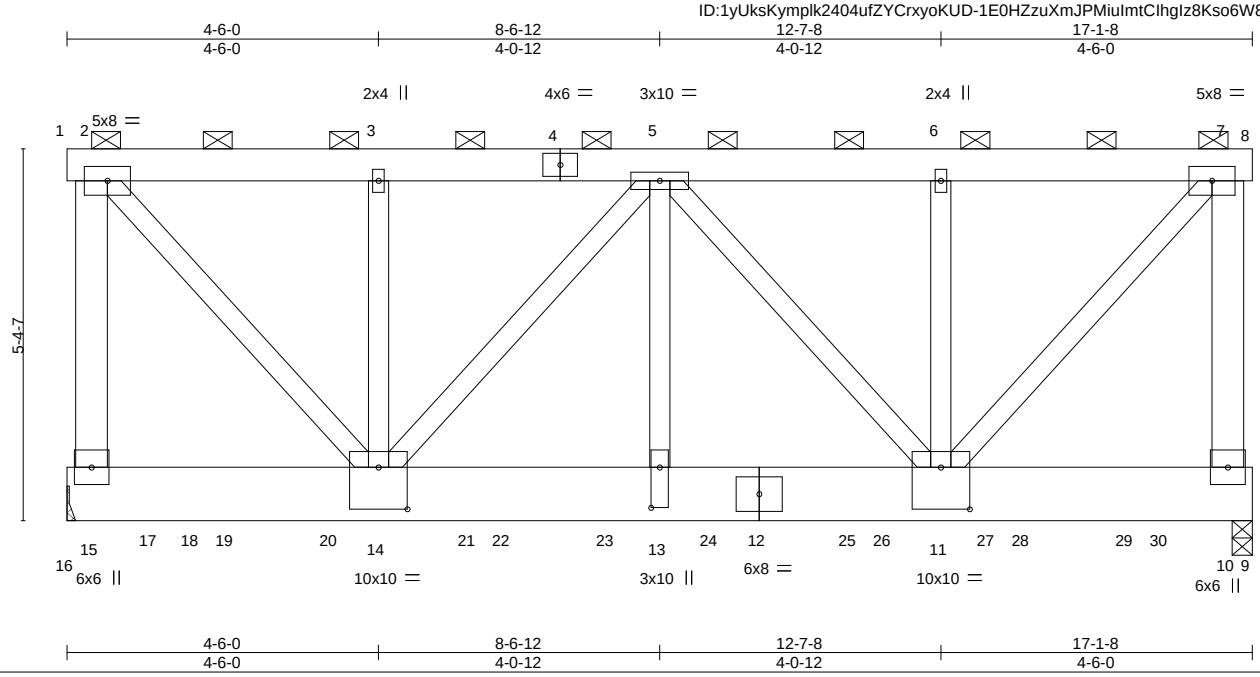

Plate Offsets (X,Y)-- [11:0-5-0,0-7-4], [13:0-7-0,0-1-8], [14:0-5-0,0-7-4]

LOADING (psf)		SPACING- 2-0-0		CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	-0.04	13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.06	13	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.64	Horz(CT)	0.01	10	n/a	n/a		
BCDL	10.0	Code IRC2015/TPI2014		Matrix-S		Wind(LL)	0.01	13	>999	240	Weight: 535 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP 2400F 2.0E
WEBS 2x4 SP No.2 *Except*
2-15,7-10: 2x6 SP No.1

BRACING-
TOP CHORD 2-0-0 oc purlins (6-0-0 max.): 1-8, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 15=Mechanical, 10=0-3-8
Max Uplift 15=-952(LC 4), 10=-496(LC 5)
Max Grav 15=9044(LC 2), 10=5622(LC 14)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-15=-4967/485, 2-3=-4297/388, 3-5=-4297/388, 5-6=-4012/329, 6-7=-4012/329, 7-10=-4613/423
BOT CHORD 13-14=-445/5318, 11-13=-445/5318
WEBS 2-14=-563/6307, 5-14=-1816/442, 7-11=-484/5953, 5-13=-233/2760, 5-11=-2053/179

NOTES-
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 5 rows staggered at 0-4-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
4) Provide adequate drainage to prevent water ponding.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 15=952, 10=496.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
10) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5000 lb down and 537 lb up at 1-2-8, 276 lb down and 102 lb up at 1-9-12, 1043 lb down at 2-3-12, 276 lb down and 102 lb up at 3-9-12, 1043 lb down at 4-3-12, 276 lb down and 102 lb up at 5-9-12, 1043 lb down at 6-3-12, 276 lb down and 102 lb up at 7-9-12, 1122 lb down at 8-3-12, 1122 lb down at 9-3-12, 276 lb down and 102 lb up at 9-9-12, 1122 lb down at 11-3-12, 276 lb down and 102 lb up at 11-9-12, 1122 lb down at 13-3-12, 276 lb down and 102 lb up at 13-9-12, and 1122 lb down at 15-3-12, and 276 lb down and 102 lb up at 15-9-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

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LOAD CASE(S) Standard

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LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-2=-60, 2-7=-60, 7-8=-60, 9-16=-20
   Concentrated Loads (lb)
   Vert: 12=-276(F) 14=-255(B) 13=-291(B) 17=-5000(B) 18=-276(F) 19=-255(B) 20=-276(F) 21=-276(F) 22=-255(B) 23=-276(F) 24=-291(B) 25=-291(B) 26=-276(F) 27=-291(B) 28=-276(F) 29=-291(B) 30=-276(F)

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Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	M1	MONOPITCH	4	1	E16492066
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:07 2021 Page 1
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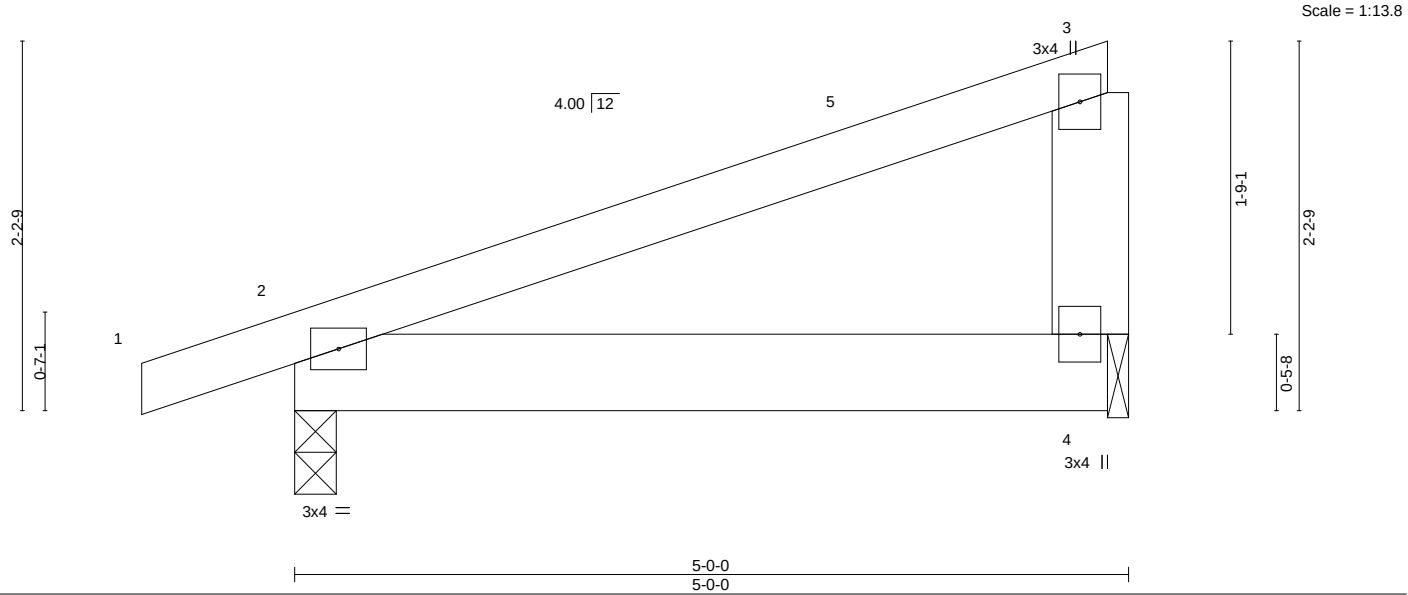

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.28	Vert(LL)	-0.01	2-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	2-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P		Wind(LL)	0.01	2-4	>999	240	Weight: 24 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x6 SP No.1

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 4=0-1-8
Max Horz 2=63(LC 8)
Max Uplift 2=-102(LC 8), 4=-79(LC 8)
Max Grav 2=255(LC 1), 4=179(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 4-9-4 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 4 except (jt=lb) 2=102.

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Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	M1GE	GABLE	1	1	E16492067
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:07 2021 Page 1
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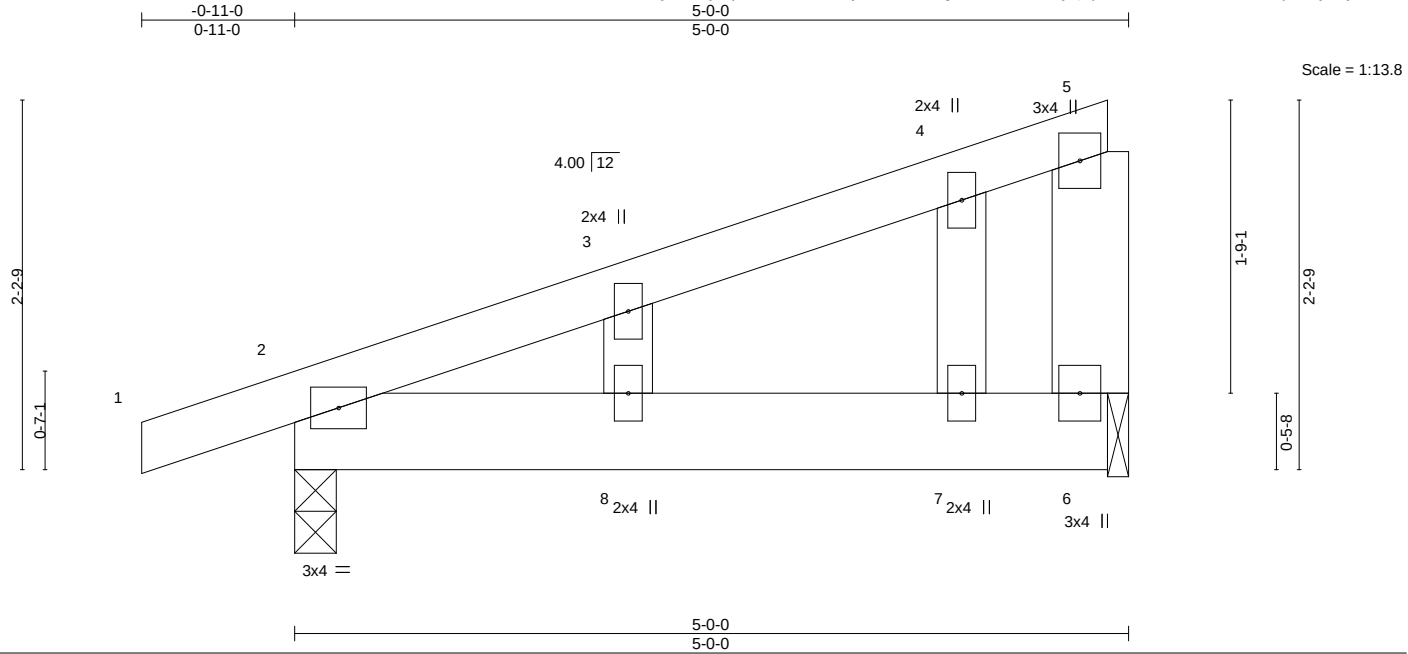

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.01	8	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	-0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 27 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x6 SP No.1
OTHERS	2x4 SP No.2

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-0, 6=0-1-8
Max Horz 2=90(LC 8)
Max Uplift 2=-147(LC 8), 6=-115(LC 8)
Max Grav 2=255(LC 1), 6=179(LC 1)

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

NOTES-

1) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 6.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=147, 6=115.

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Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm	
J0422-1797	M2	Half Hip	3	1	Job Reference (optional)	E16492068

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:08 2021 Page 1
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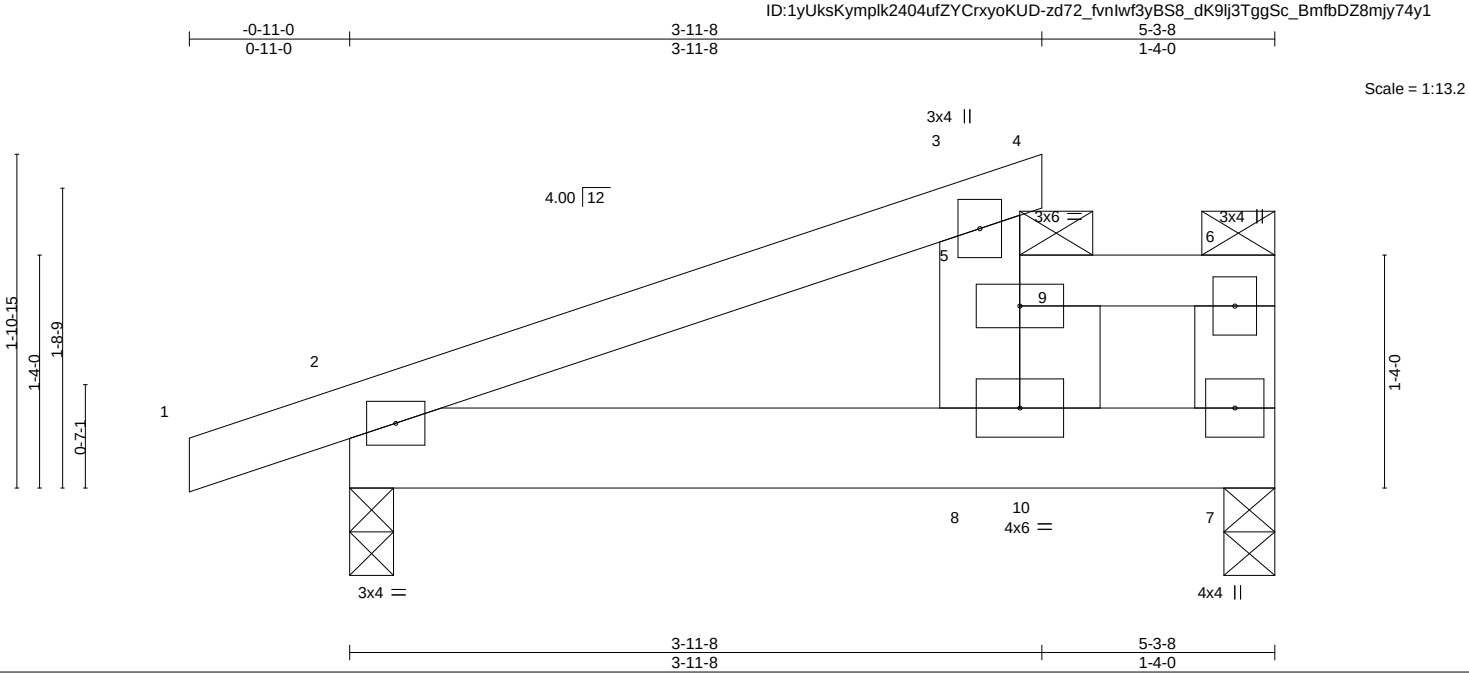

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.00	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.01	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R		Wind(LL)	0.02	8	>999	240	Weight: 28 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-8, 5-6. Except: 10-0-0 oc bracing: 3-5
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 2=0-3-0
Max Horz 2=69(LC 12)
Max Uplift 7=-173(LC 8), 2=-138(LC 8)
Max Grav 7=561(LC 19), 2=349(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-425/505, 5-8=-279/265, 5-6=-233/338, 6-7=-292/309
BOT CHORD 2-8=-546/359, 7-8=-338/233

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-7-4, Interior(1) 3-7-4 to 5-0-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=173, 2=138.
7) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-9=-40, 6-9=-80, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400
2) Dead + 0.75 Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-50, 5-9=-100, 6-9=-130, 2-7=-20

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LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 9=-350

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-6=-40, 2-7=-40
Concentrated Loads (lb)
Vert: 9=-300

4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=70, 2-3=58, 3-4=153, 5-6=12, 2-8=52, 8-10=115, 7-10=52
Horz: 1-2=-82, 2-3=-70, 3-4=-165, 3-5=-55
Concentrated Loads (lb)
Vert: 9=548

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=51, 2-3=58, 3-4=51, 5-6=42, 2-8=52, 8-10=115, 7-10=52
Horz: 1-2=-63, 2-3=-70, 3-4=-63, 3-5=-55
Concentrated Loads (lb)
Vert: 9=566

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-1, 2-3=-45, 3-4=17, 5-6=-58, 2-8=-9, 8-10=2, 7-10=-9
Horz: 1-2=-19, 2-3=25, 3-4=-37, 3-5=51
Concentrated Loads (lb)
Vert: 9=-420

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-3=-45, 3-4=-39, 5-6=-58, 2-8=-9, 8-10=2, 7-10=-9
Horz: 1-2=19, 2-3=25, 3-4=19, 3-5=51
Concentrated Loads (lb)
Vert: 9=-420

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=36, 2-3=21, 3-4=14, 5-6=-11, 2-8=10, 8-10=33, 7-10=10
Horz: 1-2=-48, 2-3=-33, 3-4=-26, 3-5=7
Concentrated Loads (lb)
Vert: 9=154

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=12, 3-4=28, 5-6=1, 2-7=-12
Horz: 1-2=-18, 2-3=-24, 3-4=-40, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-33, 2-8=2, 8-10=25, 7-10=2
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=34
Concentrated Loads (lb)
Vert: 9=-339

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-2, 2-3=-9, 3-4=-2, 5-6=-21, 2-7=-20
Horz: 1-2=-18, 2-3=-11, 3-4=-18, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-234

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-11, 2-7=-12
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39
Concentrated Loads (lb)
Vert: 9=43

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=1, 2-7=-12
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-11, 2-7=-12
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39
Concentrated Loads (lb)
Vert: 9=43

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60

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LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=1, 2-7=-12
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-33, 2-7=-20
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=-12
Concentrated Loads (lb)
Vert: 9=-234

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-6, 2-3=-13, 3-4=-6, 5-6=-21, 2-7=-20
Horz: 1-2=-14, 2-3=-7, 3-4=-14, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-234

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-6=-120, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-200

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-95, 6-9=-125, 2-8=-3, 8-10=13, 7-10=-3
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=26
Concentrated Loads (lb)
Vert: 9=-454

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-37, 2-3=-42, 3-4=-37, 5-9=-86, 6-9=-116, 2-7=-20
Horz: 1-2=-13, 2-3=-8, 3-4=-13, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-375

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-95, 6-9=-125, 2-7=-20
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=-9
Concentrated Loads (lb)
Vert: 9=-375

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-40, 2-3=-45, 3-4=-40, 5-9=-86, 6-9=-116, 2-7=-20
Horz: 1-2=-10, 2-3=-5, 3-4=-10, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-375

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-6=-40, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-9=-40, 6-9=-80, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400

25) 3rd Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-50, 5-6=-100, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

26) 4th Dead + 0.75 Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-9=-100, 6-9=-130, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

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Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	M2-GR	HALF HIP	1	2	E16492069
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:09 2021 Page 1
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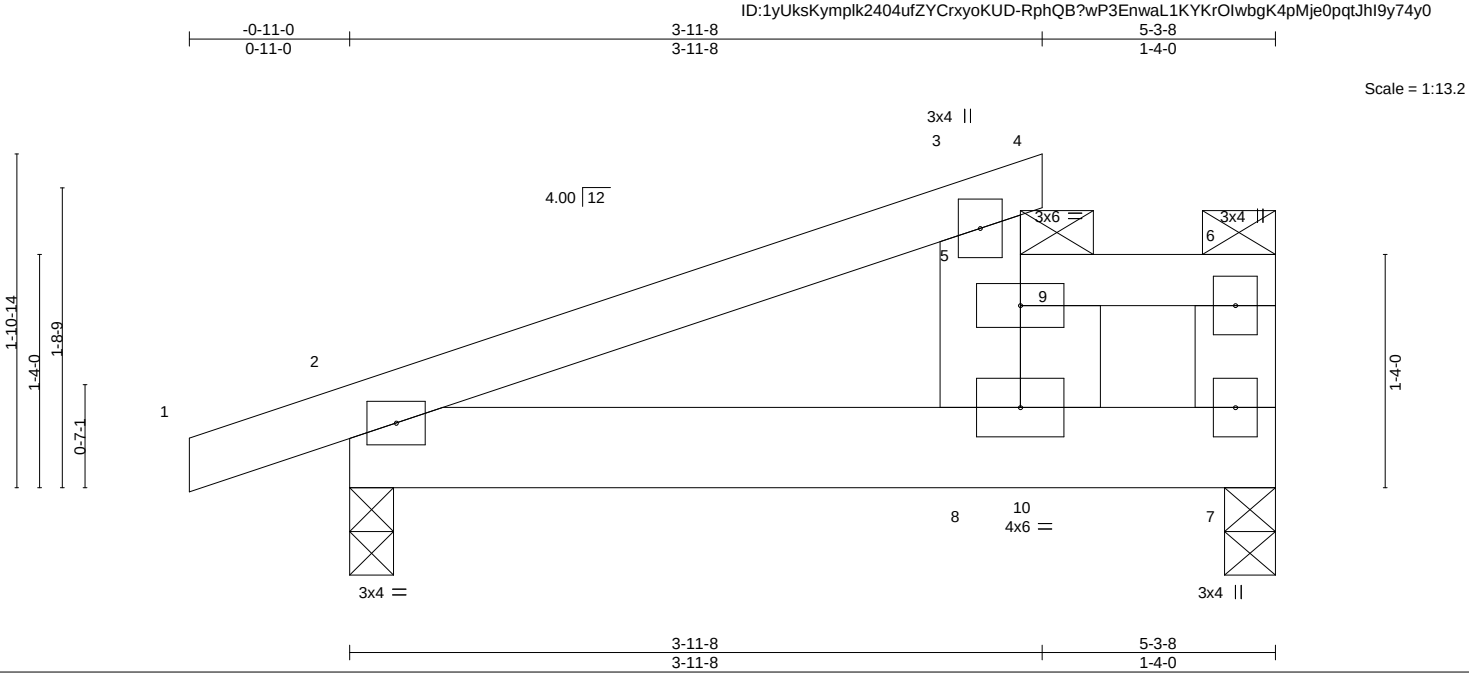

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	-0.00	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	-0.01	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.00	Horz(CT)	-0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-R		Wind(LL)	0.01	8	>999	240	Weight: 55 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals, and 2-0-0 oc purlins: 3-8, 5-6. Except: 10-0-0 oc bracing: 3-5
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 7=0-3-8, 2=0-3-0
Max Horz 2=69(LC 12)
Max Uplift 7=-24(LC 8), 2=-112(LC 8)
Max Grav 7=710(LC 19), 2=375(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-484/446, 5-8=-334/210, 5-6=-280/291, 6-7=-390/210
BOT CHORD 2-8=-491/415, 7-8=-291/280

NOTES-
1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-11-0 to 3-7-4, Interior(1) 3-7-4 to 5-0-12 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=112.
9) Load case(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) . The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-9=-160, 6-9=-200, 2-7=-20

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LOAD CASE(S) Standard

Concentrated Loads (lb)
Vert: 9=-400

2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-50, 5-9=-220, 6-9=-250, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

3) Dead + Uninhabitable Attic Without Storage: Lumber Increase=1.25, Plate Increase=1.25
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-6=-160, 2-7=-40
Concentrated Loads (lb)
Vert: 9=-300

4) Dead + 0.6 C-C Wind (Pos. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=70, 2-3=58, 3-4=153, 5-6=-108, 2-8=52, 8-10=115, 7-10=52
Horz: 1-2=-82, 2-3=-70, 3-4=-165, 3-5=-55
Concentrated Loads (lb)
Vert: 9=548

5) Dead + 0.6 C-C Wind (Pos. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=51, 2-3=58, 3-4=51, 5-6=-78, 2-8=52, 8-10=115, 7-10=52
Horz: 1-2=-63, 2-3=-70, 3-4=-63, 3-5=-55
Concentrated Loads (lb)
Vert: 9=566

6) Dead + 0.6 C-C Wind (Neg. Internal) Case 1: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-1, 2-3=-45, 3-4=17, 5-6=-178, 2-8=-9, 8-10=2, 7-10=-9
Horz: 1-2=-19, 2-3=25, 3-4=-37, 3-5=51
Concentrated Loads (lb)
Vert: 9=-420

7) Dead + 0.6 C-C Wind (Neg. Internal) Case 2: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-39, 2-3=-45, 3-4=-39, 5-6=-178, 2-8=-9, 8-10=2, 7-10=-9
Horz: 1-2=19, 2-3=25, 3-4=19, 3-5=51
Concentrated Loads (lb)
Vert: 9=-420

8) Dead + 0.6 MWFRS Wind (Pos. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=36, 2-3=21, 3-4=14, 5-6=-131, 2-8=10, 8-10=33, 7-10=10
Horz: 1-2=-48, 2-3=-33, 3-4=-26, 3-5=7
Concentrated Loads (lb)
Vert: 9=154

9) Dead + 0.6 MWFRS Wind (Pos. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=12, 3-4=28, 5-6=-119, 2-7=-12
Horz: 1-2=-18, 2-3=-24, 3-4=-40, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

10) Dead + 0.6 MWFRS Wind (Neg. Internal) Left: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-153, 2-8=2, 8-10=25, 7-10=2
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=34
Concentrated Loads (lb)
Vert: 9=-339

11) Dead + 0.6 MWFRS Wind (Neg. Internal) Right: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-2, 2-3=-9, 3-4=-2, 5-6=-141, 2-7=-20
Horz: 1-2=-18, 2-3=-11, 3-4=-18, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-234

12) Dead + 0.6 MWFRS Wind (Pos. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-131, 2-7=-12
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39
Concentrated Loads (lb)
Vert: 9=43

13) Dead + 0.6 MWFRS Wind (Pos. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=-119, 2-7=-12
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

14) Dead + 0.6 MWFRS Wind (Pos. Internal) 3rd Parallel: Lumber Increase=1.60, Plate Increase=1.60

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LOAD CASE(S) Standard

Uniform Loads (plf)
Vert: 1-2=14, 2-3=21, 3-4=14, 5-6=-131, 2-7=-12
Horz: 1-2=-26, 2-3=-33, 3-4=-26, 3-5=-39
Concentrated Loads (lb)
Vert: 9=43

15) Dead + 0.6 MWFRS Wind (Pos. Internal) 4th Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=2, 2-3=9, 3-4=2, 5-6=-119, 2-7=-12
Horz: 1-2=-14, 2-3=-21, 3-4=-14, 3-5=-27
Concentrated Loads (lb)
Vert: 9=43

16) Dead + 0.6 MWFRS Wind (Neg. Internal) 1st Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=6, 2-3=-1, 3-4=6, 5-6=-153, 2-7=-20
Horz: 1-2=-26, 2-3=-19, 3-4=-26, 3-5=-12
Concentrated Loads (lb)
Vert: 9=-234

17) Dead + 0.6 MWFRS Wind (Neg. Internal) 2nd Parallel: Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-6, 2-3=-13, 3-4=-6, 5-6=-141, 2-7=-20
Horz: 1-2=-14, 2-3=-7, 3-4=-14, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-234

18) Dead: Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-6=-240, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-200

19) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Left): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-215, 6-9=-245, 2-8=-3, 8-10=13, 7-10=-3
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=26
Concentrated Loads (lb)
Vert: 9=-454

20) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) Right): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-37, 2-3=-42, 3-4=-37, 5-9=-206, 6-9=-236, 2-7=-20
Horz: 1-2=-13, 2-3=-8, 3-4=-13, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-375

21) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 1st Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-31, 2-3=-36, 3-4=-31, 5-9=-215, 6-9=-245, 2-7=-20
Horz: 1-2=-19, 2-3=-14, 3-4=-19, 3-5=-9
Concentrated Loads (lb)
Vert: 9=-375

22) Dead + 0.75 Roof Live (bal.) + 0.75 Attic Floor + 0.75(0.6 MWFRS Wind (Neg. Int) 2nd Parallel): Lumber Increase=1.60, Plate Increase=1.60
Uniform Loads (plf)
Vert: 1-2=-40, 2-3=-45, 3-4=-40, 5-9=-206, 6-9=-236, 2-7=-20
Horz: 1-2=-10, 2-3=-5, 3-4=-10, 3-5=-0
Concentrated Loads (lb)
Vert: 9=-375

23) 1st Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-60, 3-4=-60, 5-6=-160, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400

24) 2nd Dead + Roof Live (unbalanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-9=-160, 6-9=-200, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-400

25) 3rd Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-50, 3-4=-50, 5-6=-220, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

26) 4th Dead + 0.75 Roof Live (unbalanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-3=-20, 3-4=-20, 5-9=-220, 6-9=-250, 2-7=-20
Concentrated Loads (lb)
Vert: 9=-350

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Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	V1GE	ROOF SPECIAL STRUCTU	1	1	E16492070
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:10 2021 Page 1
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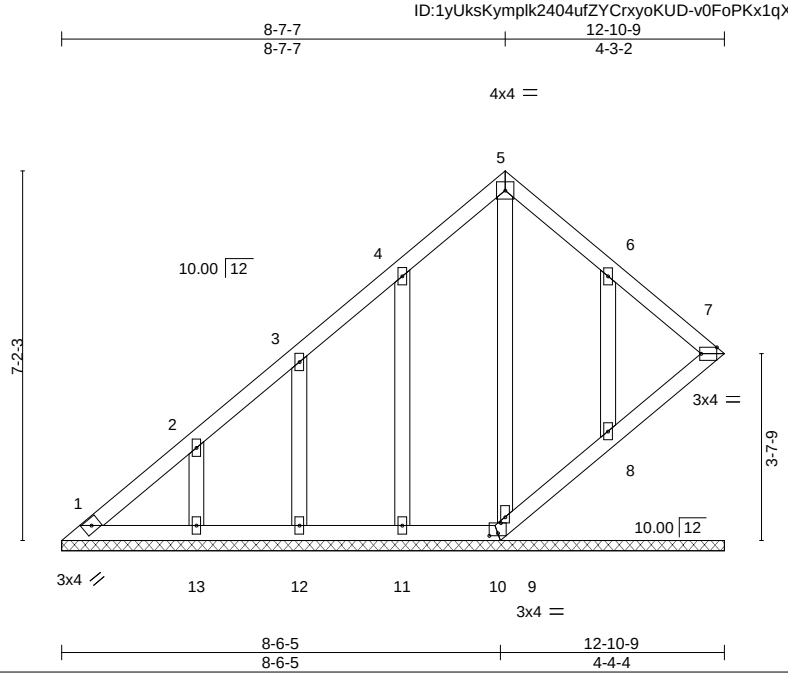

Plate Offsets (X,Y)-- [7:0-3-11,Edge], [9:0-1-6,0-1-0], [10:0-2-0,0-0-10]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 75 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-10-9.
(lb) - Max Horz 1=231(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 10 except 11=-112(LC 12), 12=-107(LC 12), 13=-133(LC 12), 8=-126(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7, 10, 9, 11, 12, 13, 8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-295/189

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
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 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
9) Bearing at joint(s) 7, 9, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 10 except (jt=lb) 11=112, 12=107, 13=133, 8=126.
11) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 7, 9, 8.

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Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	V2	VALLEY	1	1	E16492071
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:11 2021 Page 1
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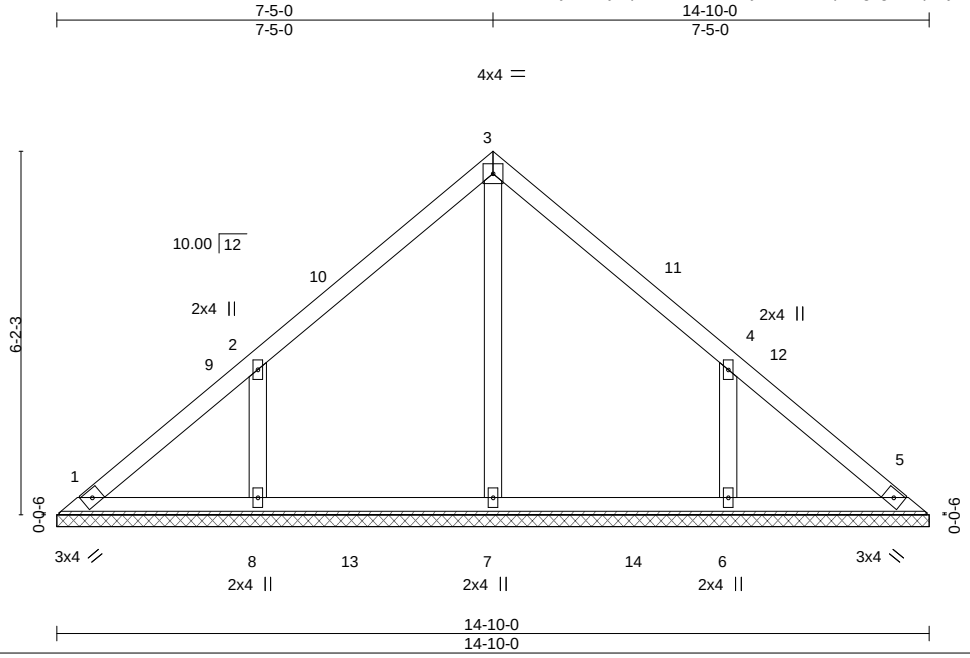

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 64 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 14-10-0.
(lb) - Max Horz 1=-140(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 8=-135(LC 12), 6=-135(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=400(LC 19), 8=393(LC 19), 6=393(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-338/247, 4-6=-338/247

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 7-5-0, Exterior(2) 7-5-0 to 11-9-13, Interior(1) 11-9-13 to 14-5-3 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 8=135, 6=135.

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Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	V3	VALLEY	1	1	E16492072
					Job Reference (optional)

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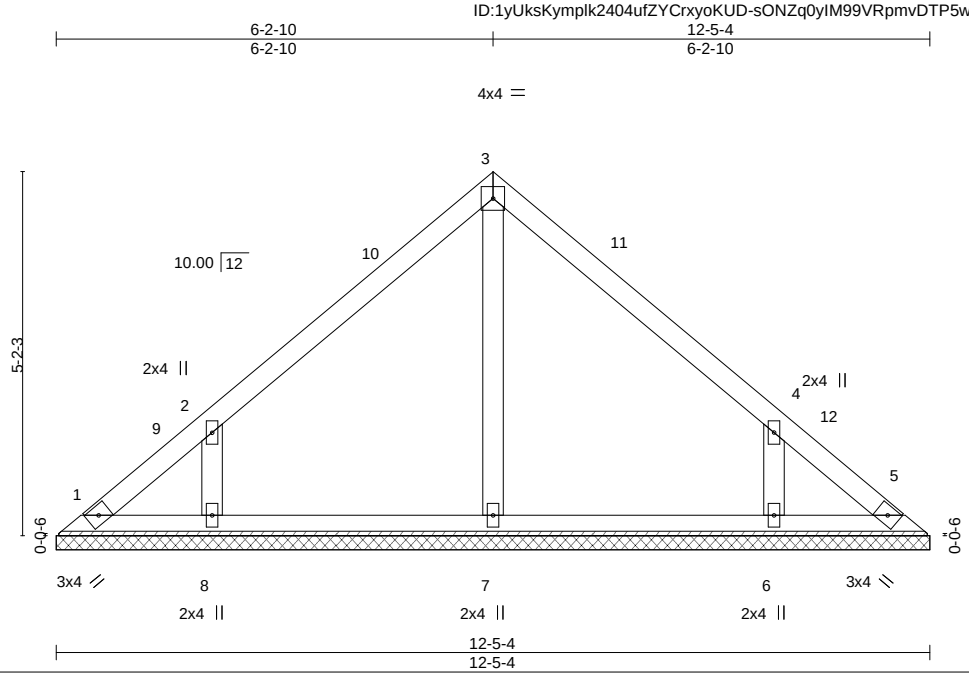

Plate Offsets (X,Y)-- [4:0-0-0,0-0-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.13	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 52 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-5-4.
(lb) - Max Horz 1=-116(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=-123(LC 12), 6=-123(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=326(LC 19), 6=326(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-312/241, 4-6=-312/241

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-13 to 4-9-10, Interior(1) 4-9-10 to 6-2-10, Exterior(2) 6-2-10 to 10-7-7, Interior(1) 10-7-7 to 12-0-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=123, 6=123.

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	V4	VALLEY	1	1	E16492073
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:14 2021 Page 1
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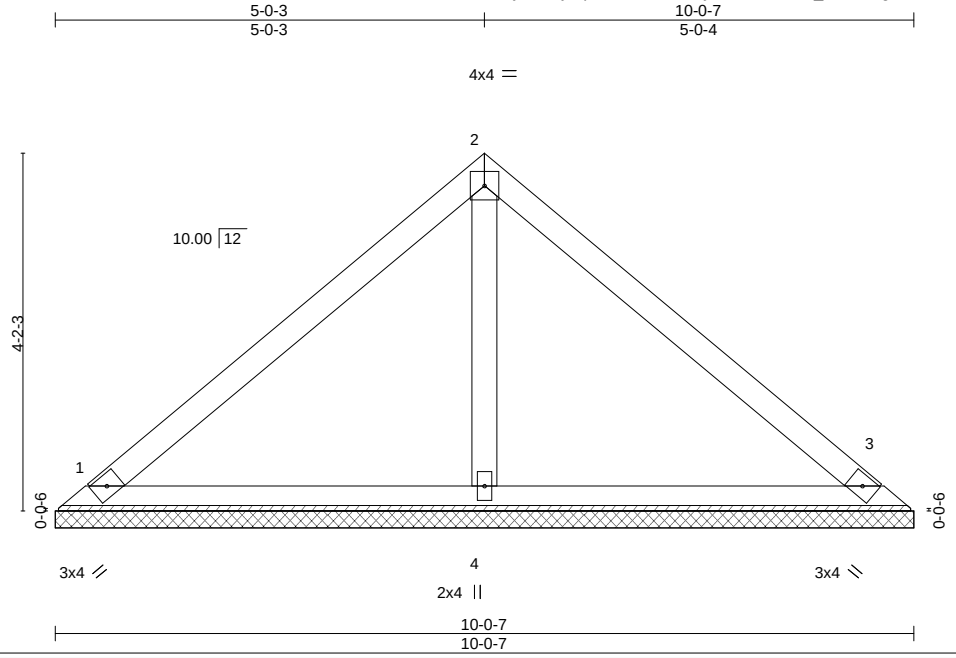

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.16	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 38 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=10-0-7, 3=10-0-7, 4=10-0-7
Max Horz 1=-92(LC 8)
Max Uplift 1=-22(LC 13), 3=-30(LC 13)
Max Grav 1=197(LC 1), 3=197(LC 1), 4=344(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	V5	VALLEY	1	1	E16492074
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:15 2021 Page 1
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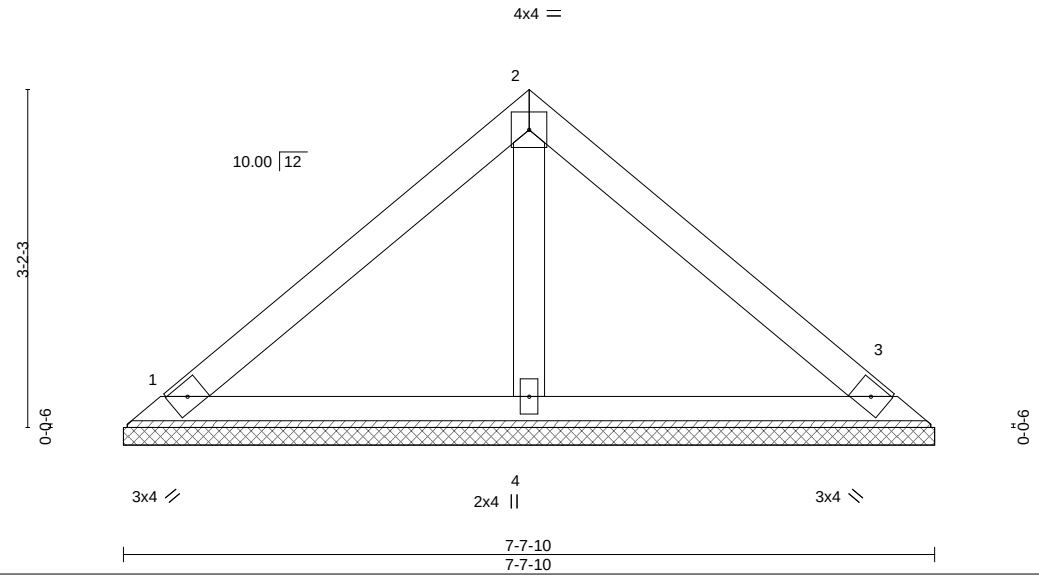
3-9-13 / 3-9-13 | 7-7-10 / 3-9-13

Scale = 1:21.7



7-7-10 / 7-7-10

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 28 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=7-7-10, 3=7-7-10, 4=7-7-10
Max Horz 1=68(LC 9)
Max Uplift 1=-24(LC 13), 3=-30(LC 13)
Max Grav 1=158(LC 1), 3=158(LC 1), 4=230(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	V6	VALLEY	1	1	E16492075
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:15 2021 Page 1
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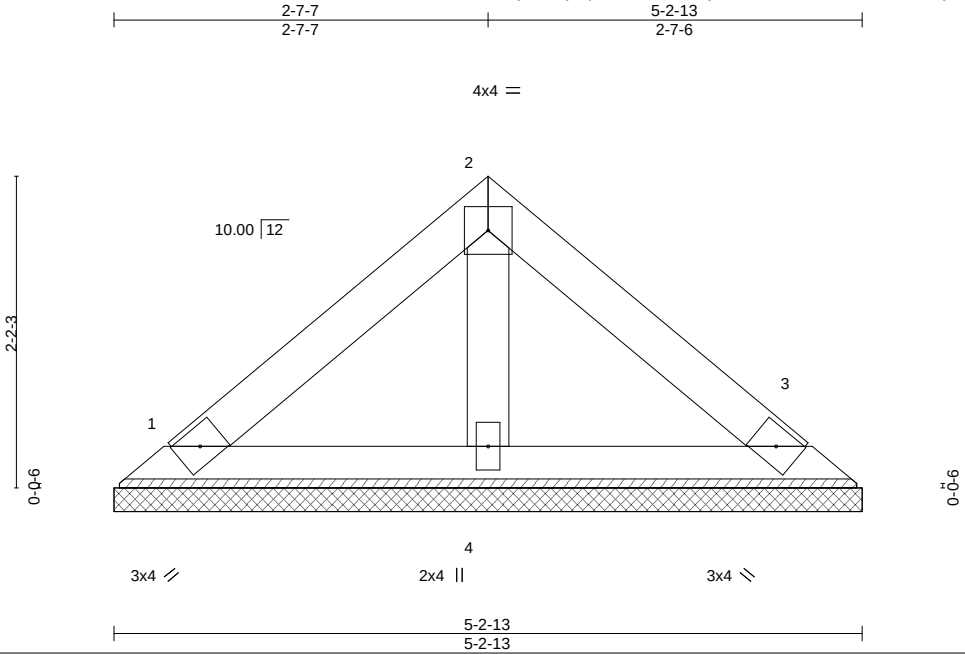

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 19 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied or 5-2-13 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-2-13, 3=5-2-13, 4=5-2-13
Max Horz 1=-44(LC 8)
Max Uplift 1=-15(LC 13), 3=-19(LC 13)
Max Grav 1=102(LC 1), 3=102(LC 1), 4=149(LC 1)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1797	V7	VALLEY	1	1	E16492076
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:16 2021 Page 1
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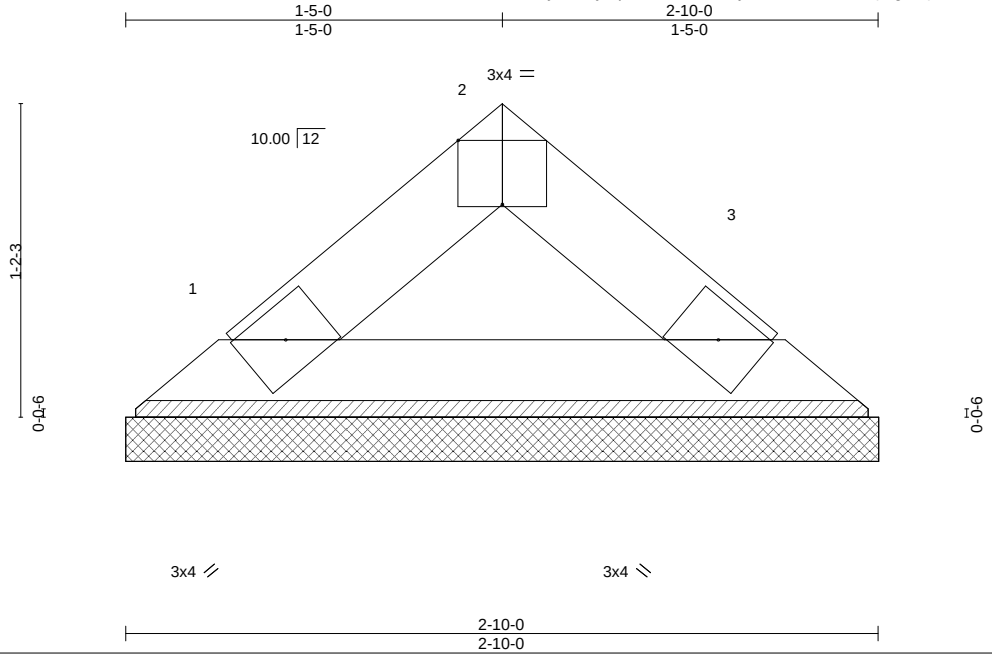


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 8 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-10-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-10-0, 3=2-10-0
Max Horz 1=-20(LC 8)
Max Uplift 1=-4(LC 12), 3=-4(LC 13)
Max Grav 1=81(LC 1), 3=81(LC 1)

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

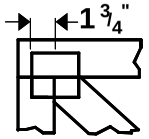
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=130mph Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

December 20,2021

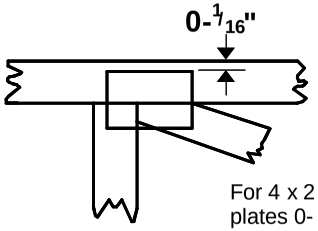
TRENCO
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

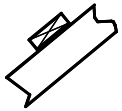
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

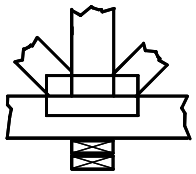
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

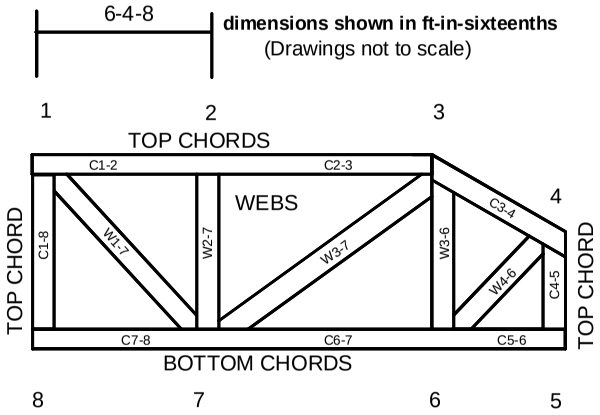


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

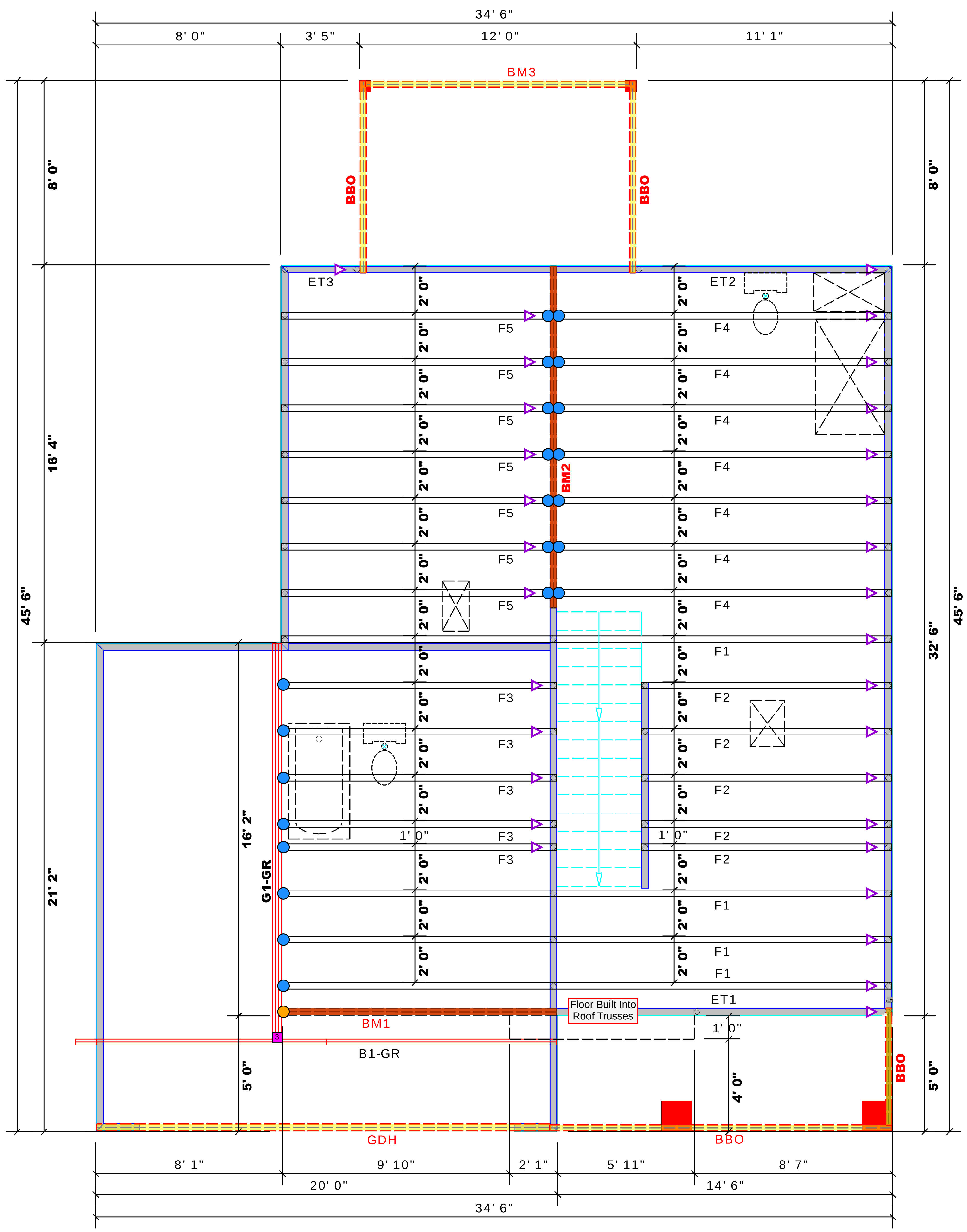
Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.



Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise 2. All interior wall dimensions are to face of frame wall unless noted otherwise 3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

All Walls Shown Are Considered Load Bearing

Plumbing Drop Notes
1. Plumbing drop locations shown are NOT exact. 2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses. 3. Adjust spacing as needed not to exceed 24"oc.

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
(blue)	HUS410	USP	22	NA	16d/3-1/2"	16d/3-1/2"
(orange)	THDH412	USP	1	NA	16d /3-1/2"	16d /3-1/2"

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM3	12' 0"	2x10 SPF No.2	2	2	FF
GDH	20' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF

1 Truss Placement Plan
Scale: 1/4"=1'

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

comtech
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature David Landry

David Landry

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))

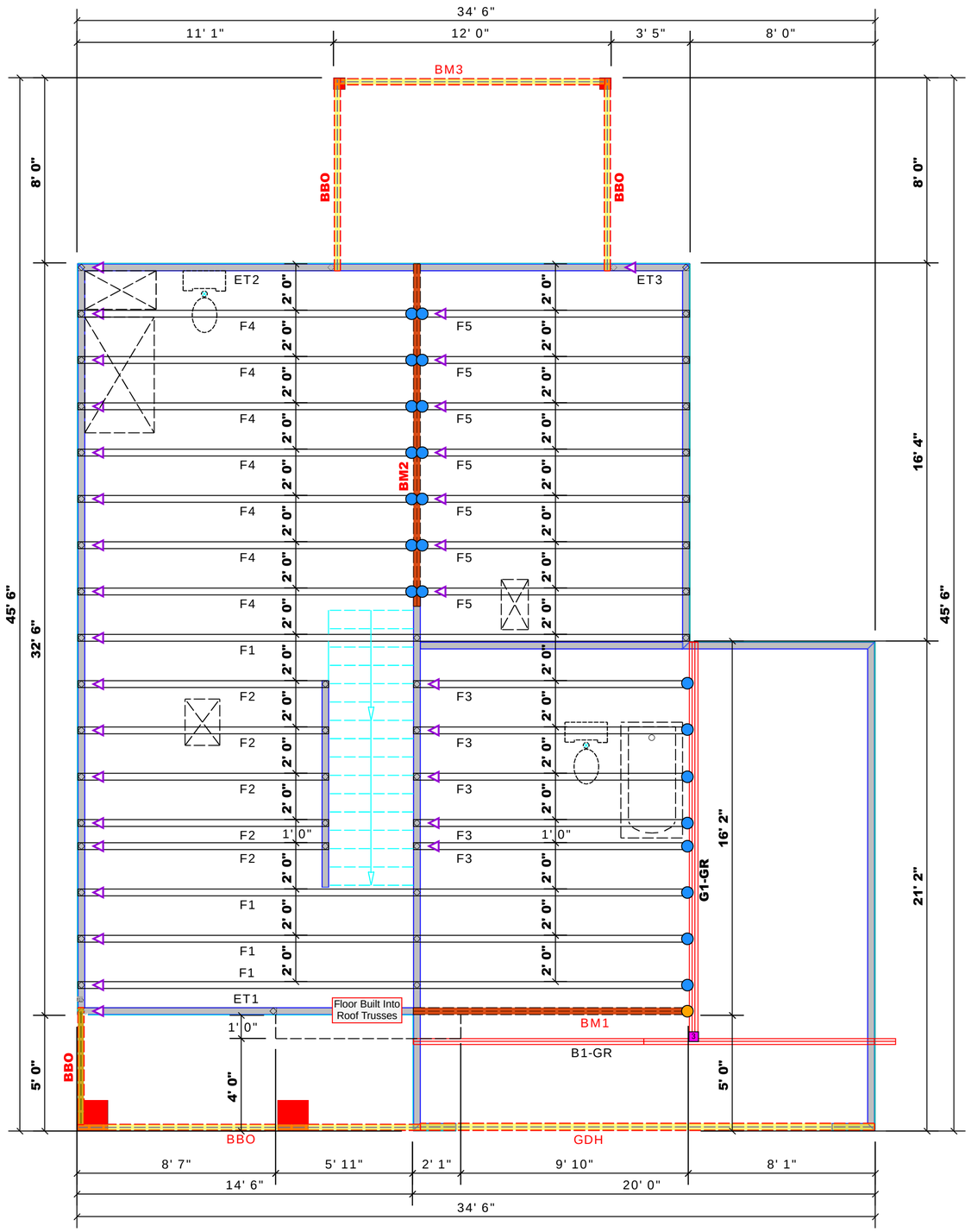
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

CITY / CO.	Spring Lake / Harnett
ADDRESS	Hayes Road
MODEL	Floor
DATE REV.	04/14/22
DRAWN BY	David Landry
SALES REP.	Lenny Norris
BUILDER	Weaver Development Co. Inc.
JOB NAME	Lot 5 McPhail Farm
PLAN	Hickory II "C" / 2GLF, CP
SEAL DATE	N/A
QUOTE #	
JOB #	J0422-1798

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, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com



Dimension Notes
1. All exterior wall to wall dimensions are to face of sheathing unless noted otherwise 2. All interior wall dimensions are to face of frame wall unless noted otherwise 3. All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

All Walls Shown Are Considered Load Bearing

Plumbing Drop Notes
1. Plumbing drop locations shown are NOT exact. 2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses. 3. Adjust spacing as needed not to exceed 24"oc.

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
●	HUS410	USP	22	NA	16d/3-1/2"	16d/3-1/2"
●	THDH412	USP	1	NA	16d /3-1/2"	16d /3-1/2"

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
BM1	12' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM2	15' 0"	1-3/4"x 16" LVL Kerto-S	2	2	FF
BM3	12' 0"	2x10 SPF No.2	2	2	FF
GDH	20' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF

1 Truss Placement Plan
Scale: 1/4"=1'

= Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature David Landry

David Landry

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (2))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

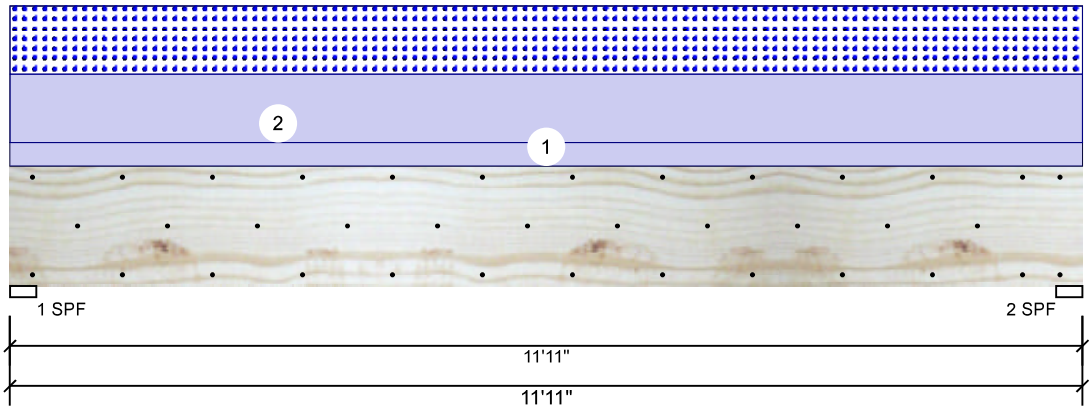
END REACTION (LBS)	REQ'D STUDS FOR (2) 2"+ HEADER	END REACTION (LBS)	REQ'D STUDS FOR (3) 2"+ HEADER	END REACTION (LBS)	REQ'D STUDS FOR (4) 2"+ HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13500	8				
15300	9				

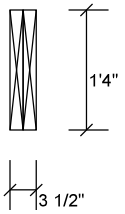
BUILDER	Weaver Development Co. Inc.
JOB NAME	Lot 5 McPhail Farm
PLAN	Hickory II "C" / 26LF, CP
SEAL DATE	N/A
QUOTE #	
JOB #	J0422-1798
CITY / CO.	Spring Lake / Harnett
ADDRESS	Hayes Road
MODEL	Floor
DATE REV.	04/14/22
DRAWN BY	David Landry
SALES REP.	Lenny Norris

Client:	Weaver Development	Date:	4/14/2022
Project:	Hickory II	Input by:	David Landry
Address:	Hayes Road Spring Lake, NC 28390	Job Name:	Lot 5 McPhail Farm
		Project #:	J0422-1798

BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	2869	2079	0	0
2	0	2869	2079	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	95%	2869 / 2079	4948	L	D+S
2 - SPF	3.500"	95%	2869 / 2079	4948	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13679 ft-lb	5'11 1/2"	39750 ft-lb	0.344 (34%)	D+S	L
Unbraced	13679 ft-lb	5'11 1/2"	13695 ft-lb	0.999 (100%)	D+S	L
Shear	3659 lb	1'6 5/8"	13739 lb	0.266 (27%)	D+S	L
LL Defl inch	0.069 (L/2000)	5'11 1/2"	0.287 (L/480)	0.240 (24%)	S	L
TL Defl inch	0.164 (L/840)	5'11 1/2"	0.383 (L/360)	0.430 (43%)	D+S	L

Design Notes

1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top must be laterally braced at a maximum of 8'8 1/4" o.c.
6 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	120 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	349 PLF	0 PLF	349 PLF	0 PLF	0 PLF	A2
	Self Weight				12 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

Manufacturer Info

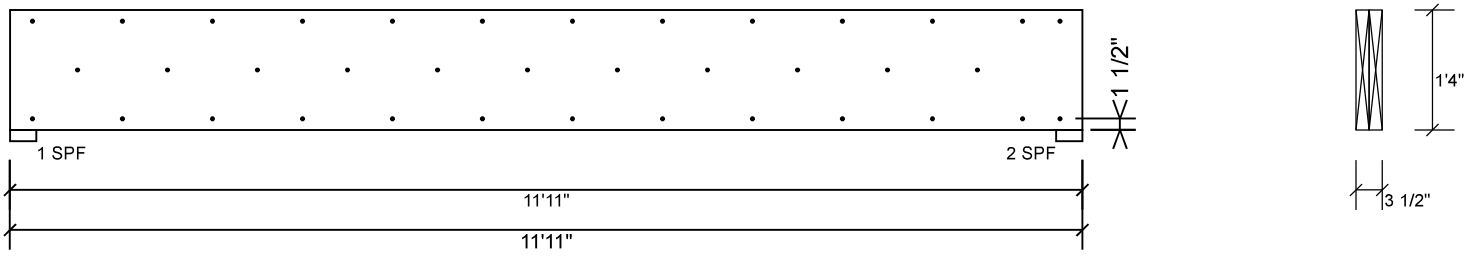
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

Comtech, Inc.
Lot 35 Briarwood Bluff
Broadway, NC
USA
28314
910-864-TRUS

Client:	Weaver Development	Date:	4/14/2022
Project:	Hickory II	Input by:	David Landry
Address:	Hayes Road Spring Lake, NC 28390	Job Name:	Lot 5 McPhail Farm
		Project #:	J0422-1798

BM1 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

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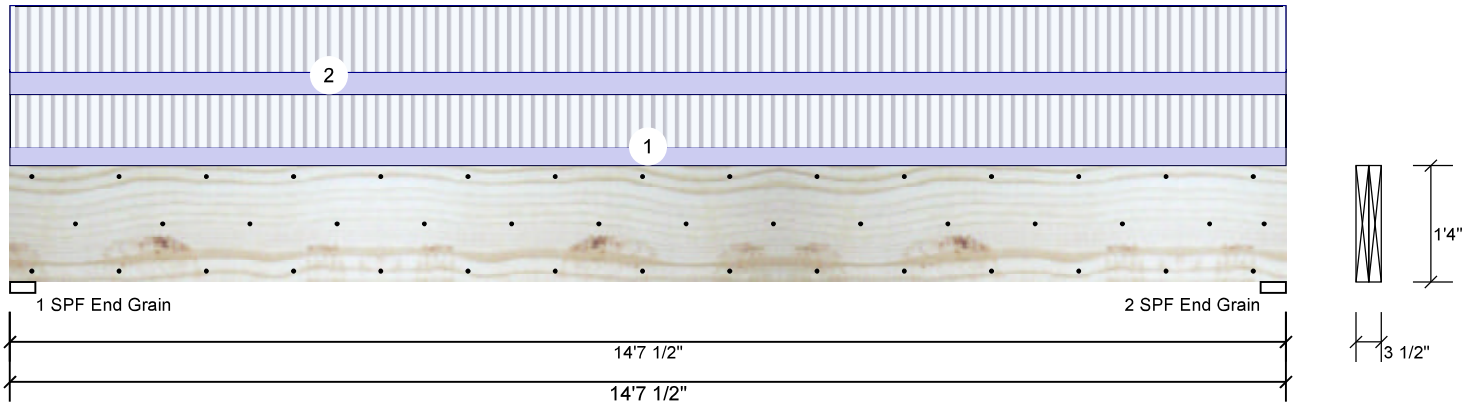
Client:	Weaver Development	Date:	4/14/2022
Project:	Hickory II	Input by:	David Landry
Address:	Hayes Road Spring Lake, NC 28390	Job Name:	Lot 5 McPhail Farm
		Project #:	J0422-1798

BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	3868	1385	0	0	0
2	3868	1385	0	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	49%	1385 / 3868	5254	L	D+L
2 - SPF End Grain	3.500"	49%	1385 / 3868	5254	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	18077 ft-lb	7'3 3/4"	34565 ft-lb	0.523 (52%)	D+L	L
Unbraced	18077 ft-lb	7'3 3/4"	18150 ft-lb	0.996 (100%)	D+L	L
Shear	5080 lb	13' 7/8"	11947 lb	0.425 (43%)	D+L	L
LL Defl inch	0.229 (L/743)	7'3 13/16"	0.355 (L/480)	0.650 (65%)	L	L
TL Defl inch	0.311 (L/547)	7'3 13/16"	0.473 (L/360)	0.660 (66%)	D+L	L

Design Notes

1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top must be laterally braced at a maximum of 6'4 1/2" o.c.
5 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Near Face	79 PLF	235 PLF	0 PLF	0 PLF	0 PLF	F5
2	Uniform			Far Face	98 PLF	294 PLF	0 PLF	0 PLF	0 PLF	F4
	Self Weight				12 PLF					

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

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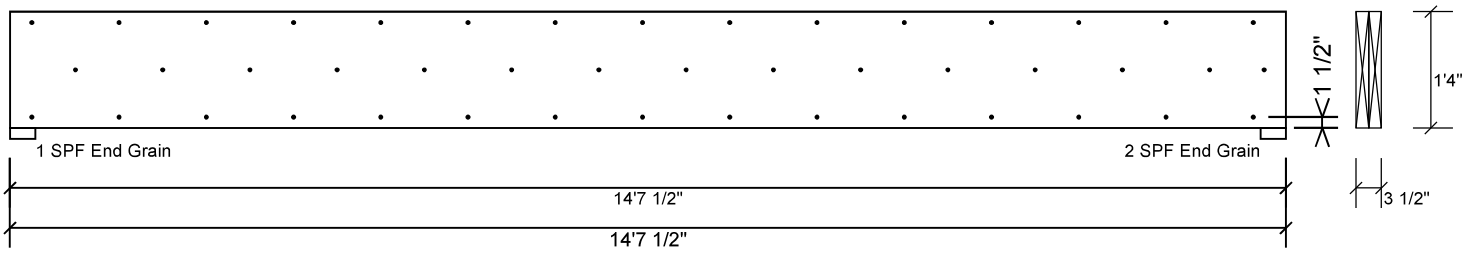
Client:	Weaver Development	Date:	4/14/2022
Project:	Hickory II	Input by:	David Landry
Address:	Hayes Road Spring Lake, NC 28390	Job Name:	Lot 5 McPhail Farm
		Project #:	J0422-1798

BM2 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	79.8 %
Load	196.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	D+L
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 4/24/2023

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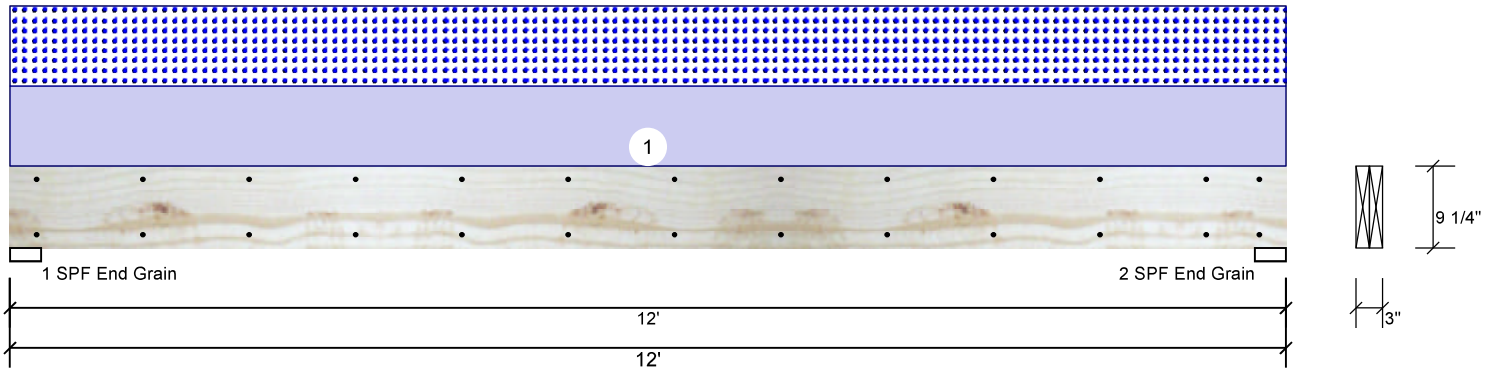
Client:	Weaver Development	Date:	4/14/2022
Project:	Hickory II	Input by:	David Landry
Address:	Hayes Road Spring Lake, NC 28390	Job Name:	Lot 5 McPhail Farm
		Project #:	J0422-1798

BM3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	564	564	0	0
2	0	564	564	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	25%	564 / 564	1128	L	D+S
2 - SPF End Grain	3.500"	25%	564 / 564	1128	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3130 ft-lb	6'	3946 ft-lb	0.793 (79%)	D+S	L
Unbraced	3130 ft-lb	6'	3132 ft-lb	1.000 (100%)	D+S	L
Shear	940 lb	11'	2872 lb	0.327 (33%)	D+S	L
LL Defl inch	0.135 (L/1022)	6'	0.289 (L/480)	0.470 (47%)	S	L
TL Defl inch	0.271 (L/511)	6'	0.385 (L/360)	0.700 (70%)	D+S	L

Design Notes

1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top must be laterally braced at a maximum of 8'8 5/8" o.c.
6 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	94 PLF	0 PLF	94 PLF	0 PLF	0 PLF	C1

This design is valid until 4/24/2023

Manufacturer Info

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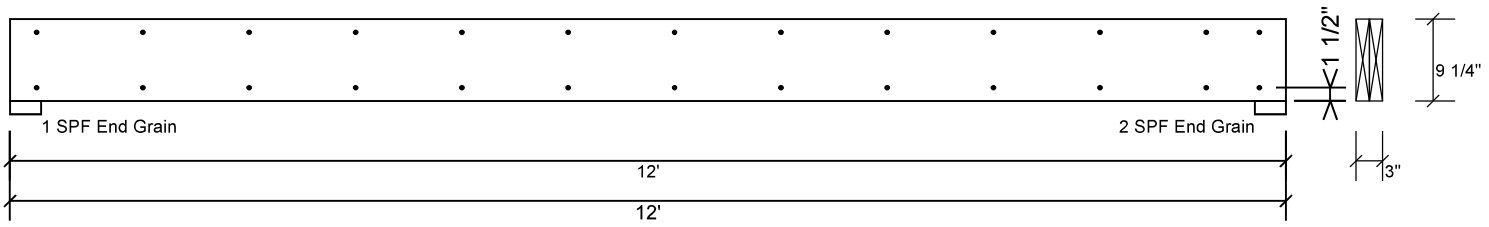
910-864-TRUS

Client:	Weaver Development	Date:	4/14/2022
Project:	Hickory II	Input by:	David Landry
Address:	Hayes Road Spring Lake, NC 28390	Job Name:	Lot 5 McPhail Farm
		Project #:	J0422-1798

BM3 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

This design is valid until 4/24/2023

Manufacturer Info

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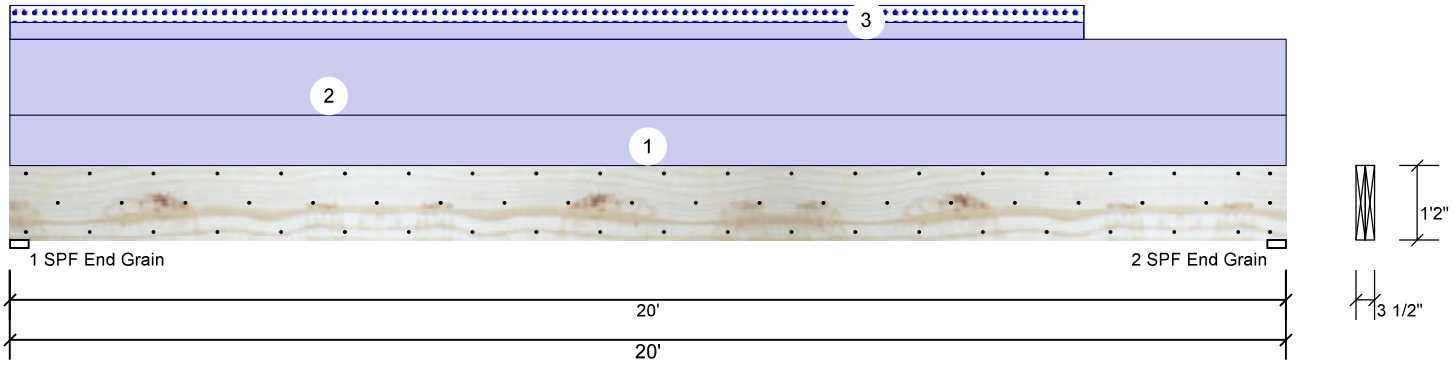
28314
910-864-TRUS

Client:	Weaver Development	Date:	4/14/2022
Project:	Hickory II	Input by:	David Landry
Address:	Hayes Road Spring Lake, NC 28390	Job Name:	Lot 5 McPhail Farm
		Project #:	J0422-1798

GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	1804	196	0	0
2	0	1750	141	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	19%	1804 / 196	2000	L	D+S
2 - SPF End Grain	3.500"	18%	1750 / 141	1891	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	8592 ft-lb	9'11 11/16"	24299 ft-lb	0.354 (35%)	D	Uniform
Unbraced	9503 ft-lb	9'11 1/2"	9506 ft-lb	1.000 (100%)	D+S	L
Shear	1552 lb	1'4 3/4"	9408 lb	0.165 (16%)	D	Uniform
LL Defl inch	0.041 (L/5726)	9'11 1/16"	0.489 (L/480)	0.080 (8%)	S	L
TL Defl inch	0.430 (L/546)	9'11 7/8"	0.651 (L/360)	0.660 (66%)	D+S	L

Design Notes

1 Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
2 Refer to last page of calculations for fasteners required for specified loads.
3 Girders are designed to be supported on the bottom edge only.
4 Top loads must be supported equally by all plies.
5 Top must be laterally braced at a maximum of 11'9" o.c.
6 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	90 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1GE
3	Tie-In	0-0-0 to 16-10-0	1-0-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof Load
	Self Weight				11 PLF					

Notes

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Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation
6. For flat roofs provide proper drainage to prevent ponding

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Address:	Hayes Road Spring Lake, NC 28390	Job Name:	Lot 5 McPhail Farm
		Project #:	J0422-1798

GDH Kerto-S LVL 1.750" X 14.000" 2-Ply - PASSED

Level: Level

Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

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Comtech, Inc.
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Broadway, NC
USA
28314
910-864-TRUS

RE: J0422-1798
Lot 5 McPhail Farm

Trenco
818 Soundside Rd
Edenton, NC 27932

Site Information:

Customer: Weaver Development Co. Inc.
Lot/Block: 5
Address: Hayes Road
City: Spring Lake
Project Name: J0422-1798
Model: Hickory II
Subdivision: McPhail Farm
State: NC

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014
Wind Code: N/A
Roof Load: N/A psf
Design Program: MiTek 20/20 8.4
Wind Speed: N/A mph
Floor Load: 55.0 psf

This package includes 8 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E16492077	ET1	12/20/2021
2	E16492078	ET2	12/20/2021
3	E16492079	ET3	12/20/2021
4	E16492080	F1	12/20/2021
5	E16492081	F2	12/20/2021
6	E16492082	F3	12/20/2021
7	E16492083	F4	12/20/2021
8	E16492084	F5	12/20/2021

The truss drawing(s) referenced above have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Truss Design Engineer's Name: Strzyzewski, Marvin

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

December 20, 2021

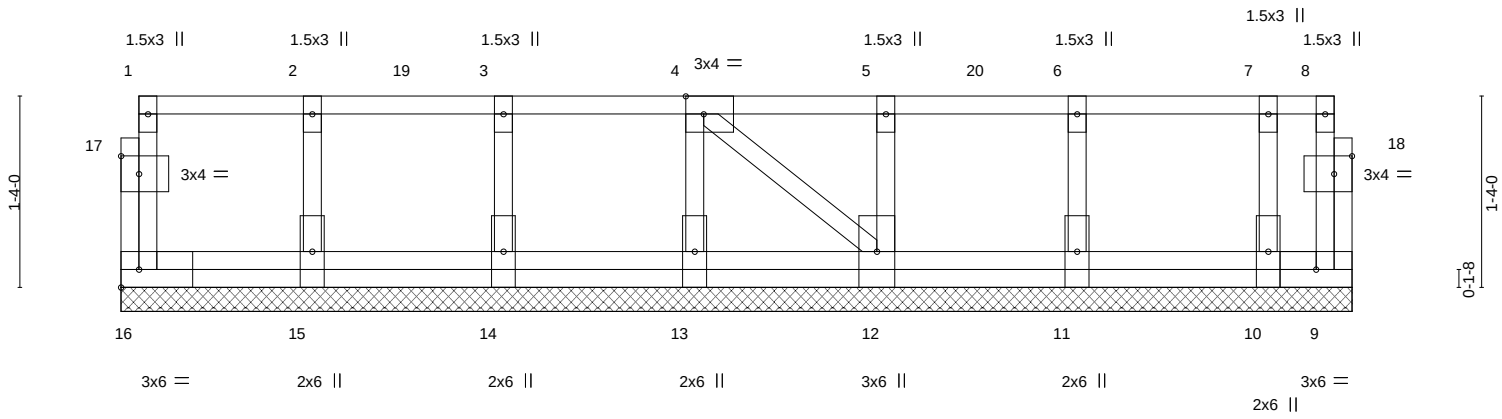
Strzyzewski, Marvin

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1798	ET1	GABLE	1	1	E16492077
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:32 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-ztld3Ofsex34VCHpSApf8n2cuLiuc12C7yNPbKy74xf

0-1-8 0-1-8

Scale: 3/4"=1'



1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	8-7-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-7-0

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [17:0-1-8,0-1-8], [18:0-1-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.00	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 54 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 8-7-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 16, 9, 15, 14, 13, 12, 11, 10

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

NOTES-
1) Plates checked for a plus or minus 1 degree rotation about its center.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 9-16=-10, 1-8=-100
Concentrated Loads (lb)
Vert: 4=-71 7=-77 19=-71 20=-71

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1798	ET2	GABLE	1	1	E16492078
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:33 2021 Page 1
ID:1yUksKymplk2404ufZYCrxyoKUD-R4J?HkgUPEBx7Ms00uKug_boBl2_LURLLc7y7my74xe

0-1-8 0-1-8

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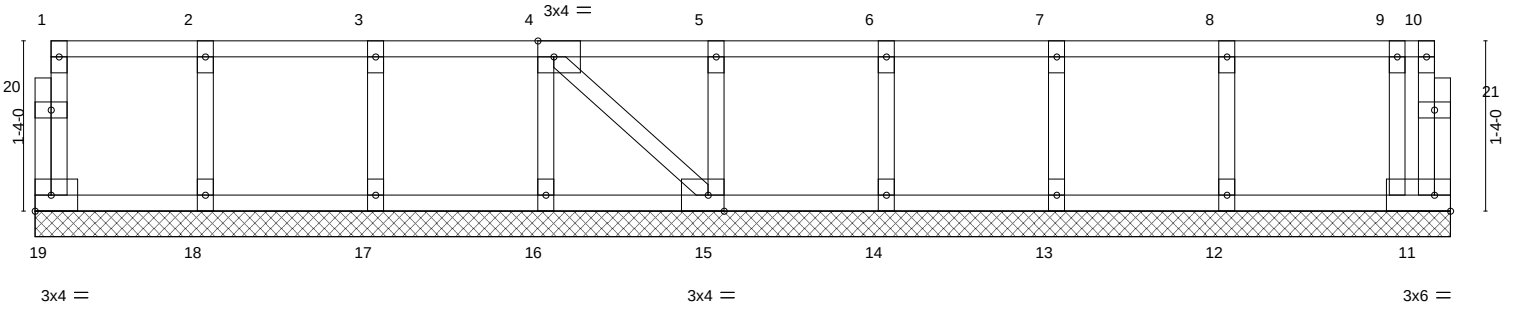

1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	8-0-0	9-4-0	10-8-0	11-1-0
1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0	0-5-0

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [15:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 54 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 11-1-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 19, 11, 18, 17, 16, 15, 14, 13, 12

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1798	ET3	GABLE	1	1	E16492079
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:33 2021 Page 1
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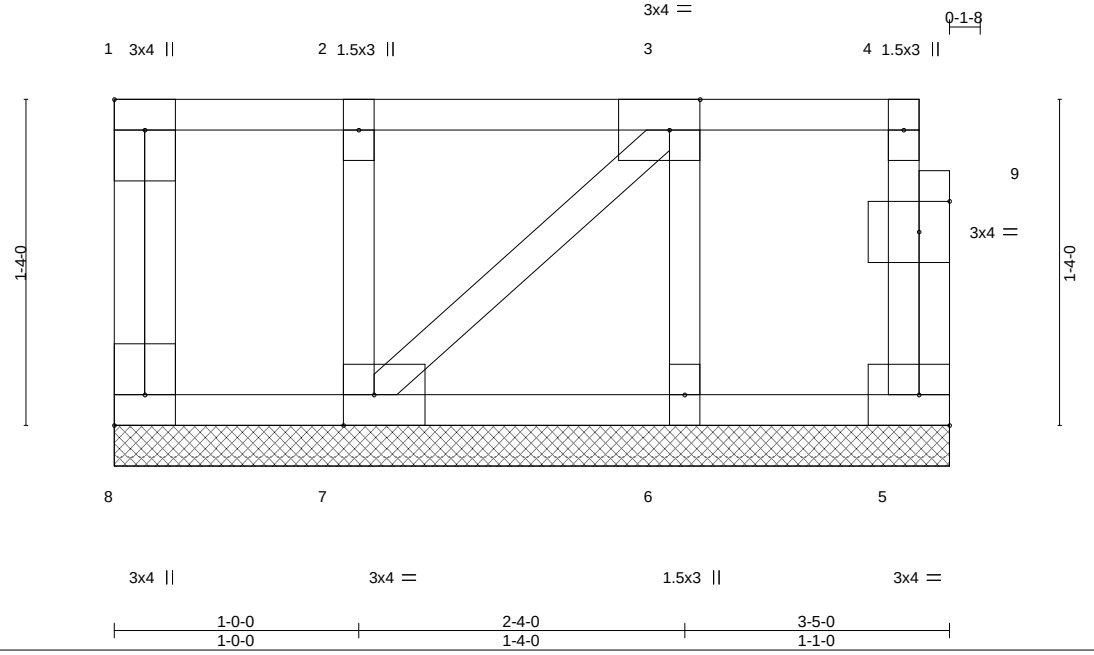

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-1-8,Edge], [7:0-1-8,Edge], [8:Edge,0-1-8], [9:0-1-8,0-1-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 22 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-5-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 3-5-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 8, 5, 7, 6

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

NOTES-
1) Plates checked for a plus or minus 1 degree rotation about its center.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1798	F1	Floor	4	1	E16492080
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:34 2021 Page 1
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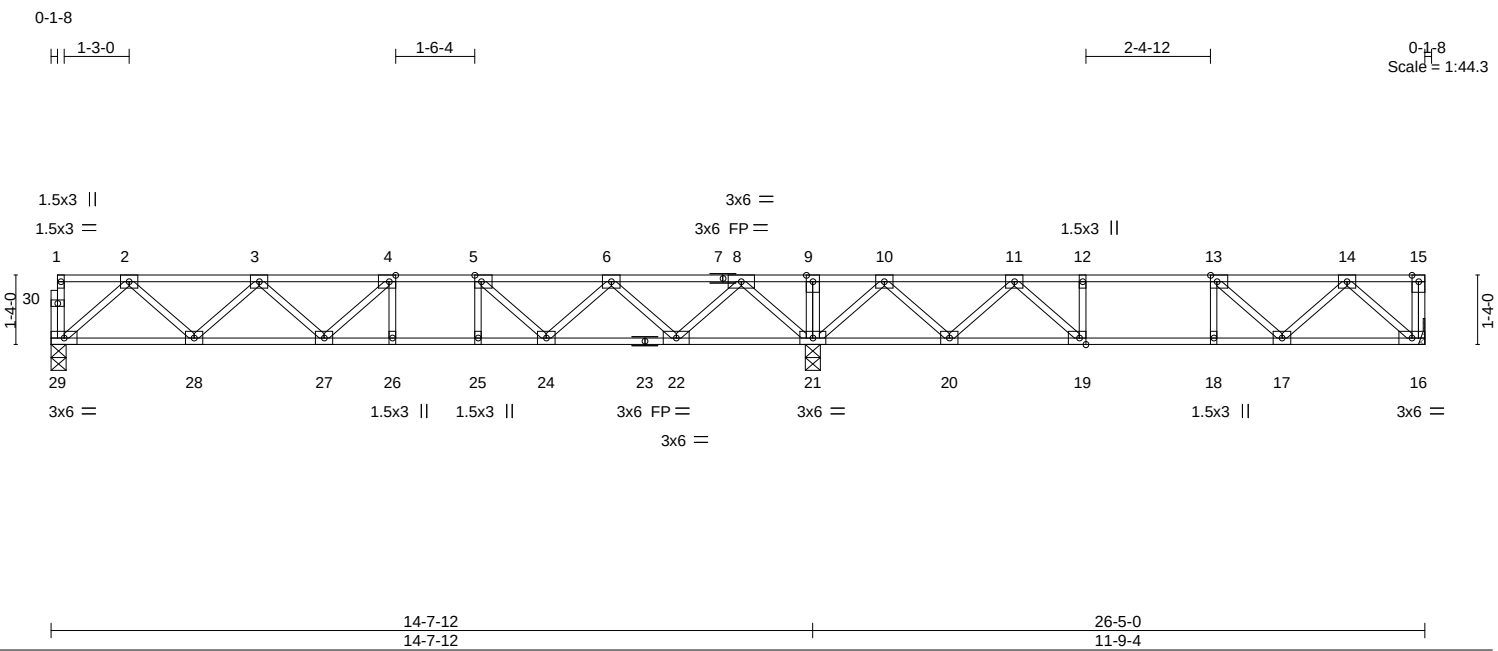

Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [13:0-1-8,Edge], [19:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.55	Vert(LL)	-0.10	26-27	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.13	26-27	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.03	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 136 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (size) 29=0-3-8, 16=Mechanical, 21=0-3-8
Max Grav 29=727(LC 10), 16=1063(LC 4), 21=1671(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 15-16=-537/0, 2-3=-1257/0, 3-4=-1883/0, 4-5=-2002/0, 5-6=-1658/0, 6-8=-756/225, 8-9=0/1401, 9-10=0/1401, 10-11=-468/367, 11-12=-1158/0, 12-13=-1158/0, 13-14=-884/0
BOT CHORD 28-29=0/771, 27-28=0/1717, 26-27=0/2002, 25-26=0/2002, 24-25=0/2002, 22-24=-34/1340, 21-22=-444/147, 20-21=-637/19, 19-20=-175/900, 18-19=0/1158, 17-18=0/1158, 16-17=0/586
WEBS 2-29=-1023/0, 2-28=0/677, 3-28=-640/0, 8-21=-1289/0, 14-16=-780/0, 14-17=0/415, 13-17=-372/90, 10-21=-1064/0, 8-22=0/923, 6-22=-882/0, 6-24=0/527, 5-24=-633/0, 10-20=0/687, 11-20=-690/0, 11-19=0/582, 12-19=-278/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 16-29=-10, 1-15=-100
Concentrated Loads (lb)
Vert: 15=-500

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1798	F2	Floor	5	1	E16492081
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:35 2021 Page 1
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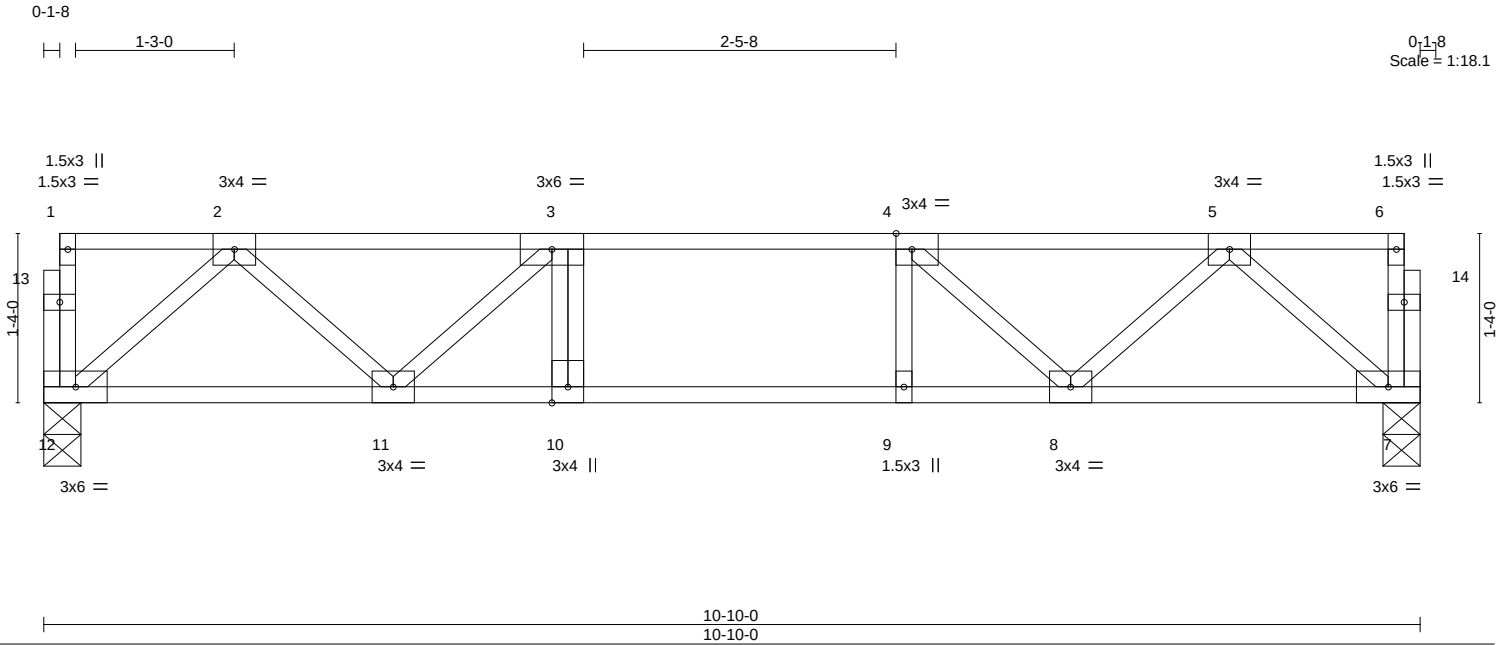

Plate Offsets (X,Y)-- [4:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.36	Vert(LL)	-0.07	10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.46	Vert(CT)	-0.09	10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.01	7	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 57 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 12=0-3-8, 7=0-3-8
Max Grav 12=576(LC 1), 7=576(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-923/0, 3-4=-1242/0, 4-5=-925/0
BOT CHORD 11-12=0/606, 10-11=0/1242, 9-10=0/1242, 8-9=0/1242, 7-8=0/603
WEBS 2-12=-805/0, 2-11=0/441, 3-11=-469/0, 5-7=-800/0, 5-8=0/449, 4-8=-475/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1798	F3	Floor	5	1	E16492082
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:36 2021 Page 1
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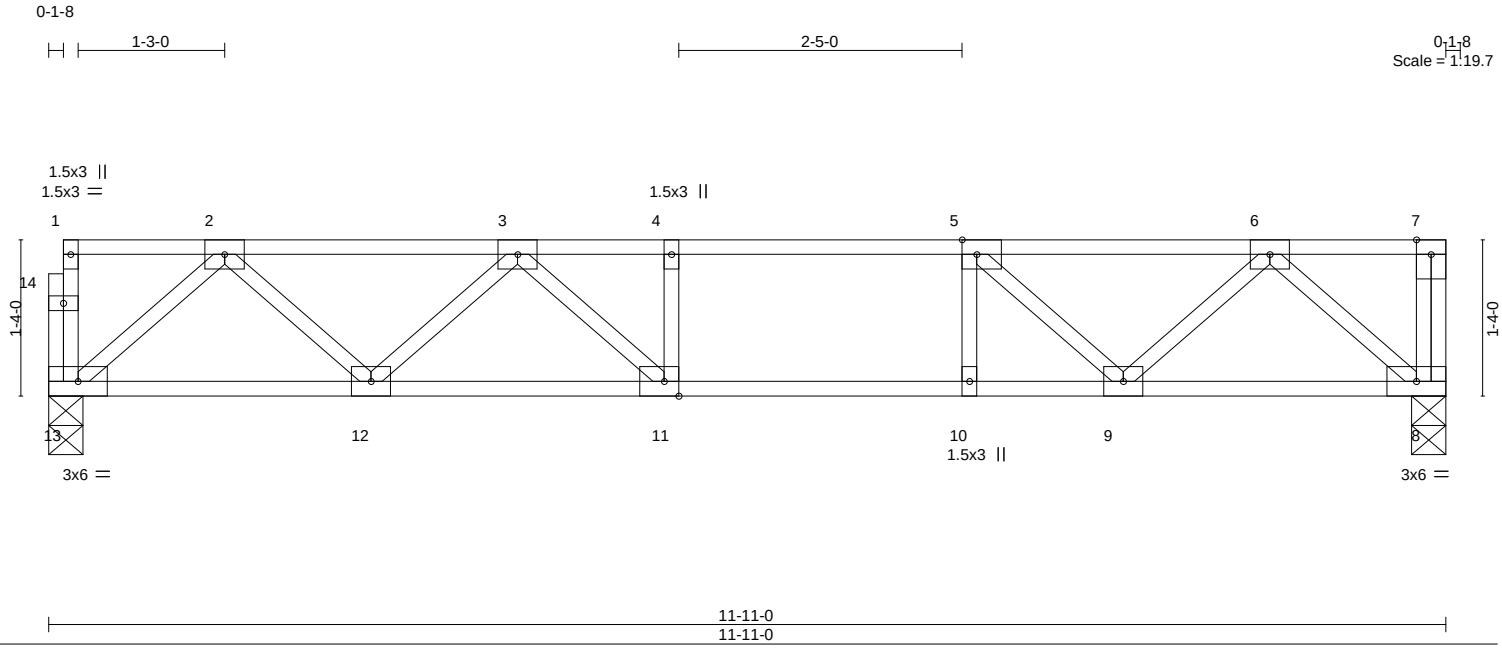

Plate Offsets (X,Y)-- [5:0-1-8,Edge], [11:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.13	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.70	Vert(CT)	-0.16	11-12	>894	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.27	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 62 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 13=0-3-8, 8=0-3-8
Max Grav 13=635(LC 1), 8=1142(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-548/0, 2-3=-1060/0, 3-4=-1495/0, 4-5=-1495/0, 5-6=-1059/0
BOT CHORD 12-13=0/676, 11-12=0/1395, 10-11=0/1495, 9-10=0/1495, 8-9=0/659
WEBS 2-13=-898/0, 2-12=0/534, 3-12=-466/0, 3-11=-19/356, 6-8=-877/0, 6-9=0/557, 5-9=-616/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 8-13=-10, 1-7=-100
Concentrated Loads (lb)
Vert: 7=-500

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1798	F4	Floor	7	1	E16492083
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:36 2021 Page 1
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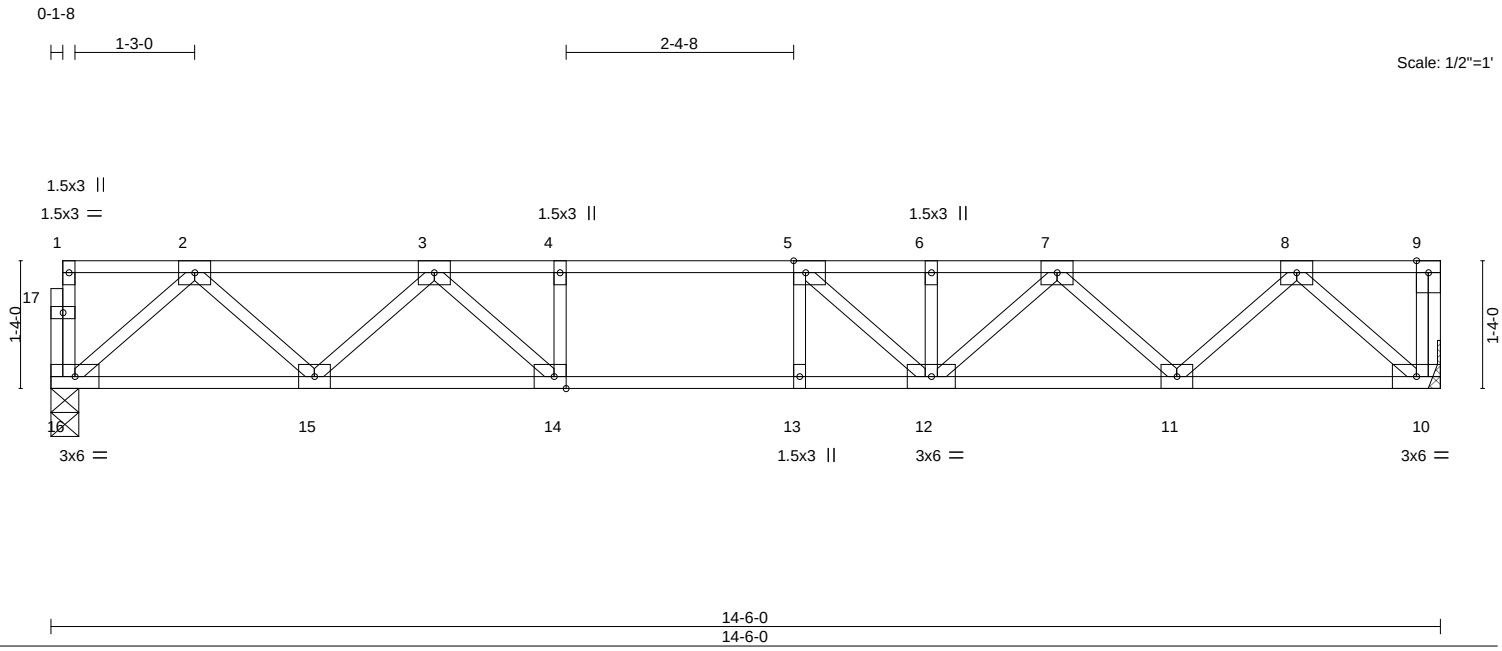

Plate Offsets (X,Y)-- [5:0-1-8,Edge], [14:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.62	Vert(LL)	-0.17	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.78	Vert(CT)	-0.22	12-13	>790	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 76 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 16=0-3-8, 10=Mechanical
Max Grav 16=778(LC 1), 10=784(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1348/0, 3-4=-2244/0, 4-5=-2244/0, 5-6=-2152/0, 6-7=-2152/0, 7-8=-1359/0
BOT CHORD 15-16=0/834, 14-15=0/1856, 13-14=0/2244, 12-13=0/2244, 11-12=0/1857, 10-11=0/835
WEBS 2-16=-1109/0, 2-15=0/714, 3-15=-707/0, 3-14=0/697, 4-14=-339/0, 8-10=-1111/0, 8-11=0/729, 7-11=-693/0, 7-12=0/401, 5-12=-438/123

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

December 20,2021

TRENCO
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 5 McPhail Farm
J0422-1798	F5	Floor	7	1	E16492084
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.430 s Aug 16 2021 MiTek Industries, Inc. Mon Dec 20 11:23:37 2021 Page 1
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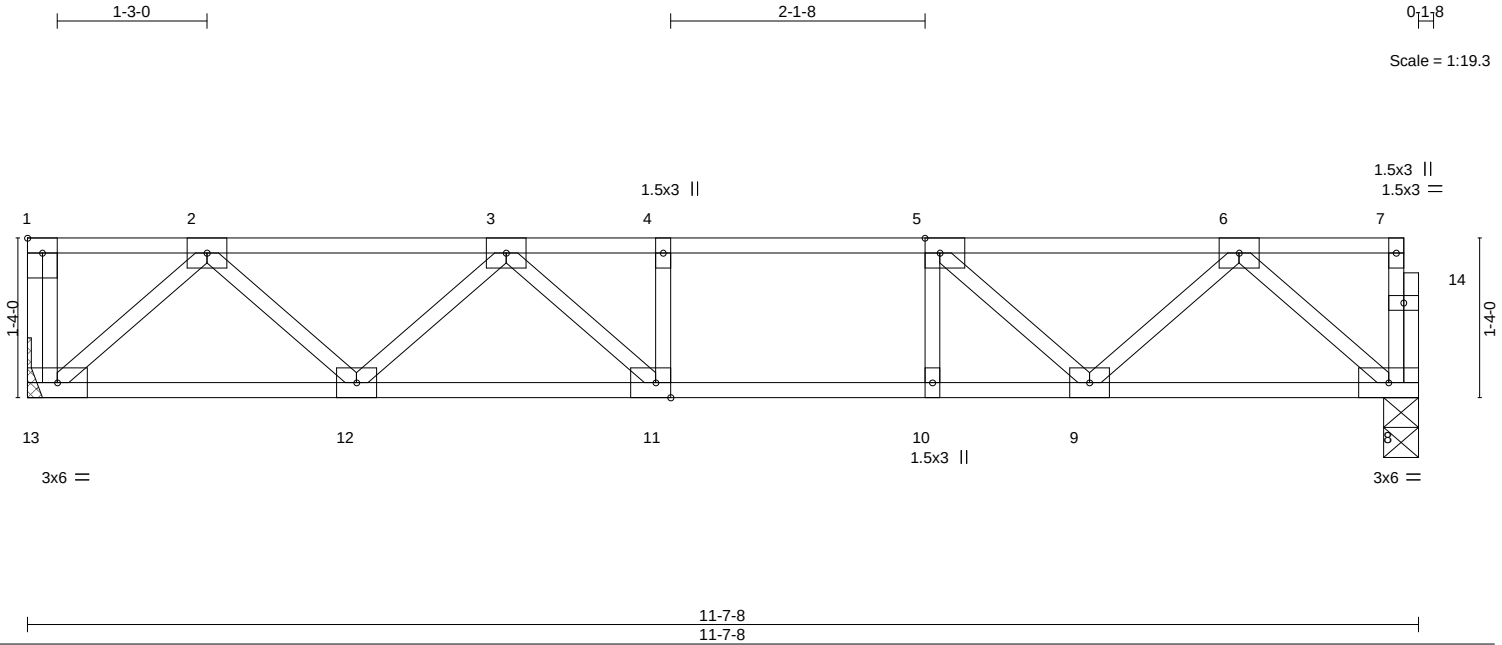


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [5:0-1-8,Edge], [11:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.44	Vert(LL)	-0.10	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.13	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 61 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 13=Mechanical, 8=0-3-8
Max Grav 13=626(LC 1), 8=619(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1025/0, 3-4=-1427/0, 4-5=-1427/0, 5-6=-1022/0
BOT CHORD 12-13=0/658, 11-12=0/1345, 10-11=0/1427, 9-10=0/1427, 8-9=0/644
WEBS 2-13=-876/0, 2-12=0/510, 3-12=-446/0, 3-11=-41/323, 6-8=-854/0, 6-9=0/526, 5-9=-570/0

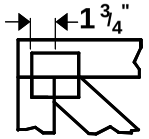
NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

December 20,2021

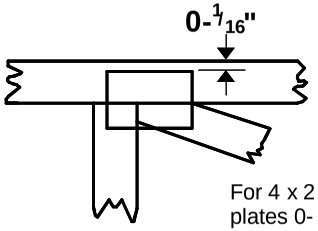
TRENCO
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.

This symbol indicates the required direction of slots in connector plates.

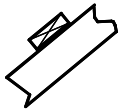
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

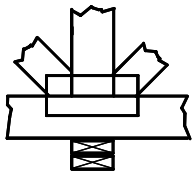
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

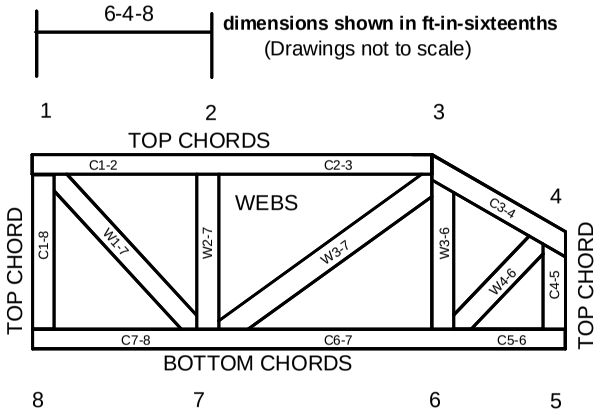


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.