

RE: J0423-1985 Lot 52 Williams Farms Trenco 818 Soundside Rd Edenton, NC 27932

Site Information:

Customer: Project Name: J0423-1985 Lot/Block: Address: City:

Model: Subdivision: State:

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 6 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	151635712	F01	4/29/2022
2	151635713	F02	4/29/2022
3	151635714	F03	4/29/2022
4	151635715	F04	4/29/2022
5	151635716	FKW1	4/29/2022
6	151635717	FKW2	4/29/2022

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.

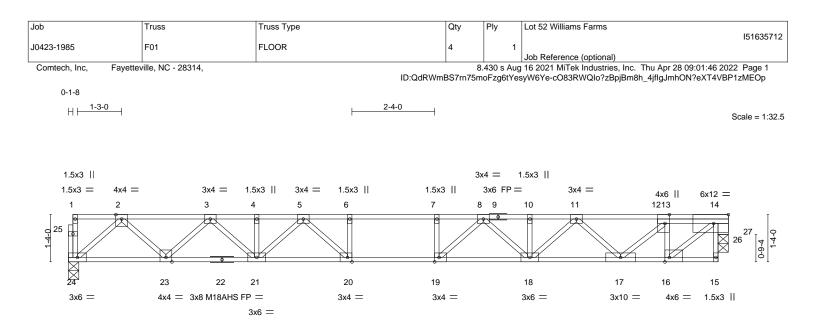
Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2023

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.





L			18-7-8					
	[12:0.2.0.Edge] [14:0.E.0.Edge] [16:0	1 9 Edgo] [10:0 1 9 Edg	18-7-8					1
Plate Offsets (X,Y)	[13:0-3-0,Edge], [14:0-5-0,Edge], [16:0-	1-8,Edgej, [19:0-1-8,Edge	ej, [20:0-1-8,⊏agej ⊺					
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
CLL 40.0	Plate Grip DOL 1.00	TC 0.74	Vert(LL)	-0.26 18-19	>831	480	MT20	244/190
CDL 10.0	Lumber DOL 1.00	BC 0.85	Vert(CT)	-0.36 18-19	>617	360	M18AHS	186/179
BCLL 0.0	Rep Stress Incr YES	WB 0.69	Horz(CT)	0.03 27	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014	Matrix-S					Weight: 100 lb	FT = 20%F, 11%
WEBS 2x4 SF DTHERS 4x4 SF	P No.1(flat) P No.3(flat) P No.2(flat)		BOT CHOR		end vert ceiling dir		or 10-0-0 oc bracing.	
REACTIONS. (siz Max C	e) 24=0-3-8, 27=0-3-8 Srav 24=999(LC 1), 27=991(LC 1)							
TOP CHORD 2-3=	Comp./Max. Ten All forces 250 (lb) ou -1839/0, 3-4=-3087/0, 4-5=-3087/0, 5-6= =-3158/0, 10-11=-3158/0, 11-13=-1955/	-3753/0, 6-7=-3753/0, 7-8						
	A 0/4005 04 00 0/0500 00 04 0/0474	,						

- BOT CHORD 23-24=0/1085, 21-23=0/2562, 20-21=0/3474, 19-20=0/3753, 18-19=0/3517, 17-18=0/2639, 16-17=0/1179
- WEBS 13-16=-907/0, 14-16=0/1440, 2-24=-1442/0, 2-23=0/1048, 3-23=-1006/0, 3-21=0/714, 5-21=-526/0, 5-20=-22/698, 6-20=-353/0, 13-17=0/1031, 11-17=-951/0, 11-18=0/705, 8-18=-489/0, 8-19=-62/658, 7-19=-336/0, 14-27=-1021/0

NOTES-

1) Unbalanced floor live loads have been considered for this design.

- 2) All plates are MT20 plates unless otherwise indicated.
- 3) Plates checked for a plus or minus 1 degree rotation about its center.

4) Bearing at joint(s) 27 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

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.

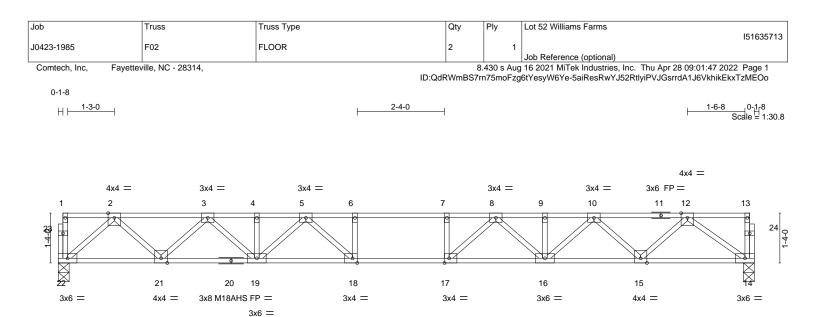
Strongbacks to be attached to walls at their outer ends or restrained by other means.

6) CAUTION, Do not erect truss backwards.



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601





 			<u>18-7-8</u> 18-7-8			
Plate Offsets (X,Y)	[17:0-1-8,Edge], [18:0-1-8,Edge]					
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING- 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2015/TPI2014	CSI. TC 0.77 BC 0.87 WB 0.50 Matrix-S	Vert(LL) -0.27	i (loc) I/defl L/d 16-17 >810 480 16-17 >600 360 14 n/a n/a	PLATES MT20 M18AHS Weight: 97 lb	GRIP 244/190 186/179 FT = 20%F, 11%E
BOT CHORD 2x4 SP	2 No.1(flat) 2 No.1(flat) 2 No.3(flat)	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire except end verticals. Rigid ceiling directly applied o	, ,,,) oc purlins,	
REACTIONS. (size Max G	e) 22=0-3-8, 14=0-3-8 rav 22=1004(LC 1), 14=1004(LC 1)					

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

 TOP CHORD
 2-3=-1851/0, 3-4=-3112/0, 4-5=-3112/0, 5-6=-3796/0, 6-7=-3796/0, 7-8=-3796/0, 8-9=-3216/0, 9-10=-3216/0, 10-12=-2022/0

 BOT CHORD
 21-22=0/1092, 19-21=0/2580, 18-19=0/3505, 17-18=0/3796, 16-17=0/3573, 15-16=0/2718,

 14-15=0/1295

 WEBS
 2-22=-1451/0, 2-21=0/1057, 3-21=-1014/0, 3-19=0/722, 5-19=-535/0, 5-18=-13/712, 6-18=-360/0, 12-14=-1596/0, 12-15=0/1011, 10-15=-969/0, 10-16=0/676, 8-16=-485/0, 8-17=-76/650, 7-17=-332/0

NOTES-

1) Unbalanced floor live loads have been considered for this design.

2) All plates are MT20 plates unless otherwise indicated.

3) All plates are 1.5x3 MT20 unless otherwise indicated.

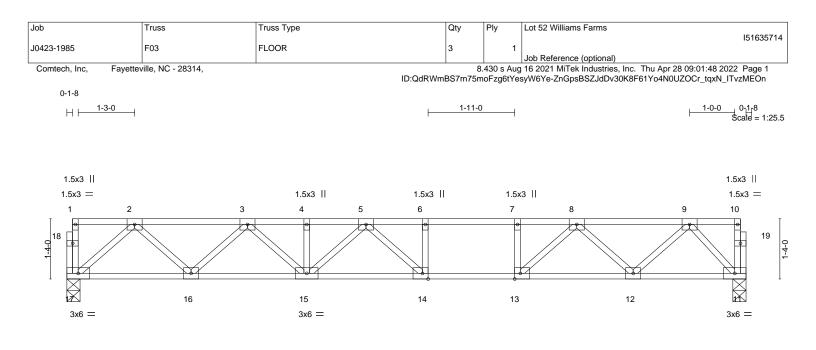
4) Plates checked for a plus or minus 1 degree rotation about its center.

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.

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SEAL 036322 April 29,2022



			15-0-8 15-0-8			
Plate Offsets (X,Y)	[13:0-1-8,Edge], [14:0-1-8,Edge]	r				
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCode IRC2015/TPI2014	CSI. TC 0.76 BC 0.83 WB 0.38 Matrix-S	Vert(LL) -0.20	n (loc) l/defi L/d) 14-15 >896 480 7 14-15 >661 360 4 11 n/a n/a	PLATES MT20 Weight: 79 lb	GRIP 244/190 FT = 20%F, 11%E
BOT CHORD 2x4 SP	P No.1(flat) P No.1(flat) P No.3(flat)	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing dire except end verticals. Rigid ceiling directly applied or	, ,,,	oc purlins,	
REACTIONS. (size Max G	e) 17=0-3-8, 11=0-3-8 irav 17=807(LC 1), 11=807(LC 1)					

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

- TOP CHORD 2-3=-1421/0, 3-4=-2278/0, 4-5=-2278/0, 5-6=-2364/0, 6-7=-2364/0, 7-8=-2364/0, 8-9=-1293/0
- BOT CHORD
 16-17=0/866, 15-16=0/1958, 14-15=0/2452, 13-14=0/2364, 12-13=0/1870, 11-12=0/729

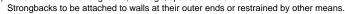
 WEBS
 2-17=-1150/0, 2-16=0/772, 3-16=-746/0, 3-15=0/436, 5-14=-292/251, 9-11=-1069/0, 9-12=0/785, 8-12=-802/0, 8-13=0/803, 7-13=-385/0

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.





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818 Soundside Road Edenton, NC 27932

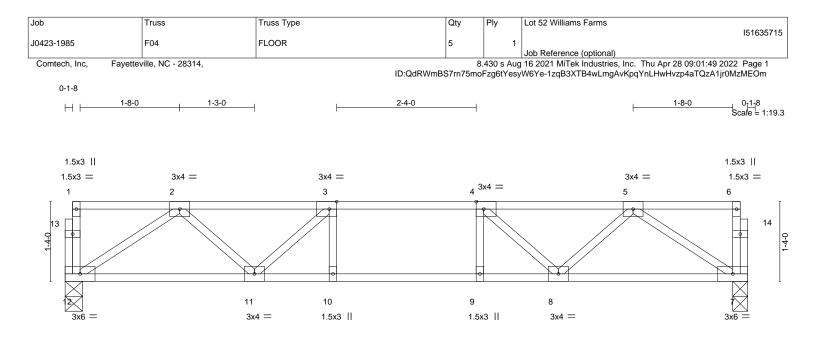


Plate Offsets (X,Y)	[3:0-1-8,Edge], [4:0-1-8,Edge]		<u>11-5-0</u> 11-5-0			
LOADING (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	SPACING-2-0-0Plate Grip DOL1.00Lumber DOL1.00Rep Stress IncrYESCodeIRC2015/TPI2014	CSI. TC 0.33 BC 0.47 WB 0.23 Matrix-S			PLATES MT20 Weight: 58 lb	GRIP 244/190 FT = 20%F. 11%E
LUMBER- TOP CHORD 2x4 SP BOT CHORD 2x4 SP	No.1(flat) No.1(flat) No.3(flat)	BRACING- TOP CHORD BOT CHORD	Structural wood sheathing di except end verticals. Rigid ceiling directly applied	rectly applied or 6-0-0		

REACTIONS. (size) 12=0-3-8, 7=0-3-0 Max Grav 12=608(LC 1), 7=608(LC 1)

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

TOP CHORD 2-3=-1100/0, 3-4=-1391/0, 4-5=-1100/0

BOT CHORD 11-12=0/795, 10-11=0/1391, 9-10=0/1391, 8-9=0/1391, 7-8=0/795

WEBS 2-12=-955/0, 2-11=0/425, 3-11=-459/0, 5-7=-955/0, 5-8=0/425, 4-8=-459/0

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.



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Job	Truss	Г	russ Type		Qty Ply	Lot 52 Williams	Farms	151635716
J0423-1985	FKW1	c	GABLE		1	1		131033710
						Job Reference		
Comtech, Inc,	Fayetteville, NC - 28	314,		ID:QdRV				pr 28 09:01:50 2022 Page 1 VmNGVJzr7OhTOYozMEOI
0 ¹ 18								0 ₁₁ 8
								Scale = 1:19.0
1	2	3	4	5	6	7	8	9 10
•	•	•	•	•	•	•	•	
21								22
-1-4-0								-1-1-0-1-1
20	19	18	17	16	15	14	13	12 11
6x6 =	2x6	2x6	2x6	2x6	2x6	2x6	2x6	2x6 6x6 =

L	1-4-0	2-8-0	4-0-0	5-4-0	6-8-0	1	8-0-0		9-4-0	10-8-0	11-5-0
	1-4-0	1-4-0	1-4-0	1-4-0	1-4-0		1-4-0	1	1-4-0	1-4-0	0-9-0
	NG (psf)	SPACING-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC 0.07	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	NO	WB 0.03	Horz(CT)	0.00	11	n/a	n/a		
BCDL	5.0	Code IRC2015/	TPI2014	Matrix-R						Weight: 67 lb	FT = 20%F, 11%E
-											
LUMBE	R-				BRACING-						

 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 BOT CHORD

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

REACTIONS. All bearings 11-5-0.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 20, 11, 19, 18, 17, 16, 15, 14, 13, 12

FORCES. (Ib) - Max. Comp./Max. Ten. - All forces 250 (Ib) 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.

LOAD CASE(S) Standard

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00

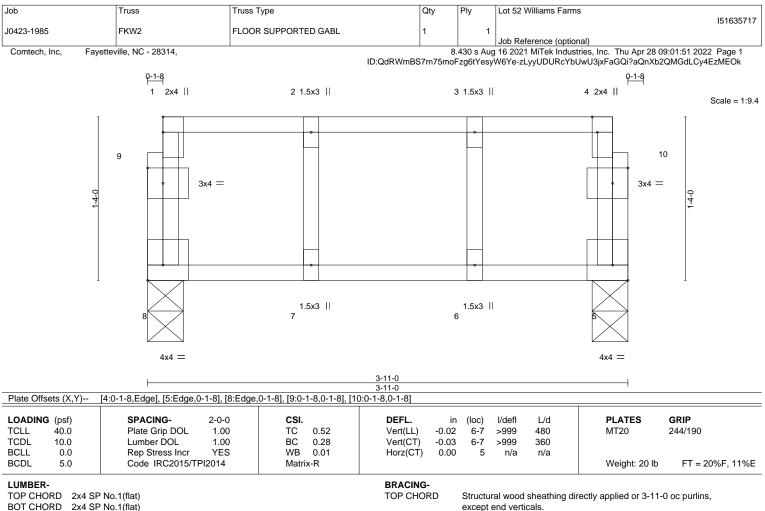
Uniform Loads (plf)

- Vert: 11-20=-10, 1-10=-100
- Concentrated Loads (lb) Vert: 1=-104



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BOT CHORD

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

BOT CHORD2x4 SP No.1(flat)WEBS2x4 SP No.3(flat)OTHERS2x4 SP No.3(flat)

REACTIONS. (size) 8=0-3-8, 5=0-3-8 Max Grav 8=195(LC 1), 5=195(LC 1)

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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).

3) Gable studs spaced at 1-4-0 oc.

 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.



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