

BID #1903888F  
Designed in Burlington, WA

ENVISION NW Floors

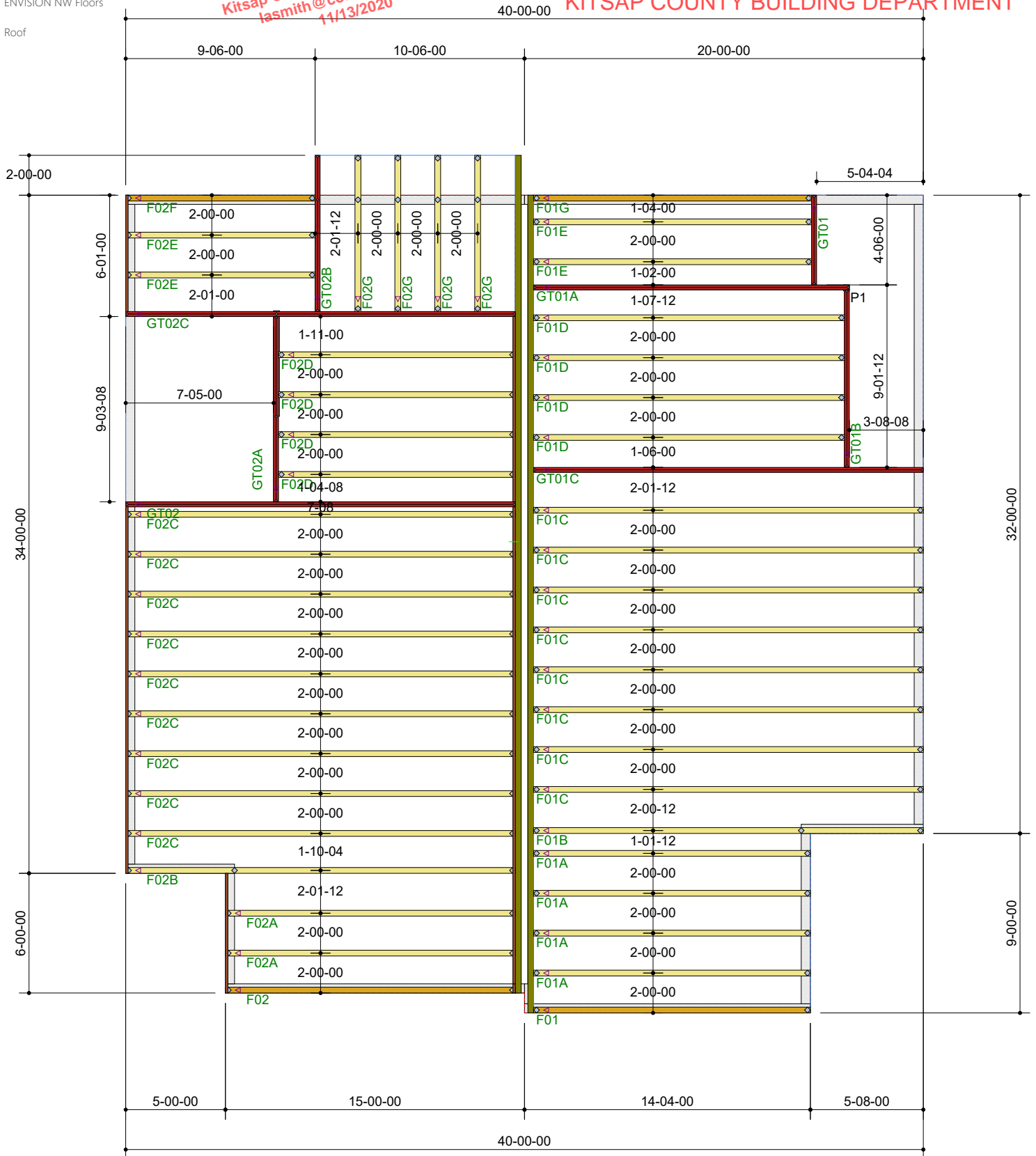
Roof

Reviewed for code compliance  
with IRC 2015  
Kitsap County Building Department  
lasmith@co.kitsap.wa.us  
11/13/2020

BASIC PERMIT PACKAGE  
REVIEWED FOR CODE COMPLIANCE  
WITH IRC 2015

7/12/2019

KITSAP COUNTY BUILDING DEPARTMENT



BID #1903888F  
ENVISION NW  
Established Basic Permit #  
19-03650

Sales:

Matthew Murphy



Depth: 16-00 Spacing: 24"

Permit Number: 20-04898

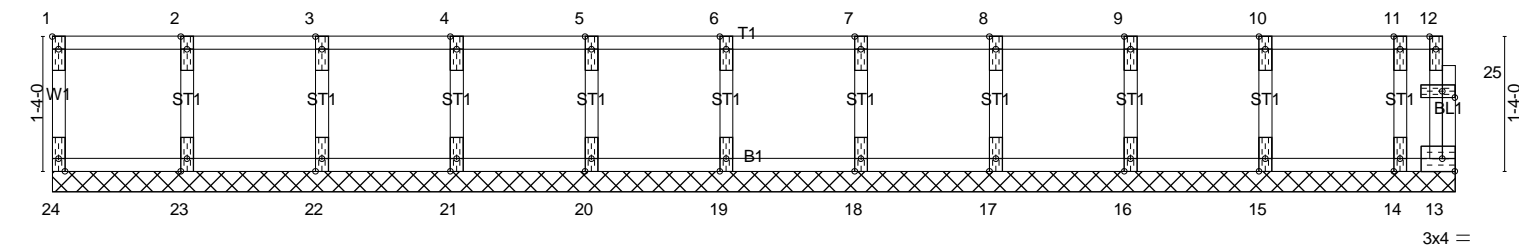
Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F01	Floor Supported Gable	1	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:11 2019 Page 1  
ID:t9rACx?uLBINQU\_rXimwnty1pO-OMIKyWL63EqW0d66?uRr3HDFpdiuEjdN1mHkYayynK6

0-1-8

Scale = 1:22.8



0-3-8	13-7-0	13-10-8
0-3-8	13-3-8	0-3-8
Plate Offsets (X,Y)-- [1:Edge,0-0-12], [25:0-1-8,0-0-12]		
<b>LOADING</b> (psf) TCLL 40.0 TCDL 10.0 BCLL 0.0 BCDL 5.0	<b>SPACING-</b> 2-0-0 Plate Grip DOL 1.00 Lumber DOL 1.00 Rep Stress Incr YES Code IRC2015/TPI2014	<b>CSL</b> TC 0.07 BC 0.02 WB 0.02 Matrix-R
<b>DEFL.</b> in (loc) l/defl L/d Vert(LL) n/a - n/a 999 Vert(CT) n/a - n/a 999 Horz(CT) 0.00 13 n/a n/a	<b>PLATES</b> MT20 <b>GRIP</b> 220/195  Weight: 56 lb FT = 20%F, 11%E	

<b>LUMBER-</b> TOP CHORD 2x4 DF No.2(flat) BOT CHORD 2x4 DF No.2(flat) WEBS 2x4 DF No.2(flat) OTHERS 2x4 DF No.2(flat)	<b>BRACING-</b> 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.
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**REACTIONS.** All bearings 13-10-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

- NOTES-**
- 1) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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.
  - 7) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Established Basic Permit #

19-03650

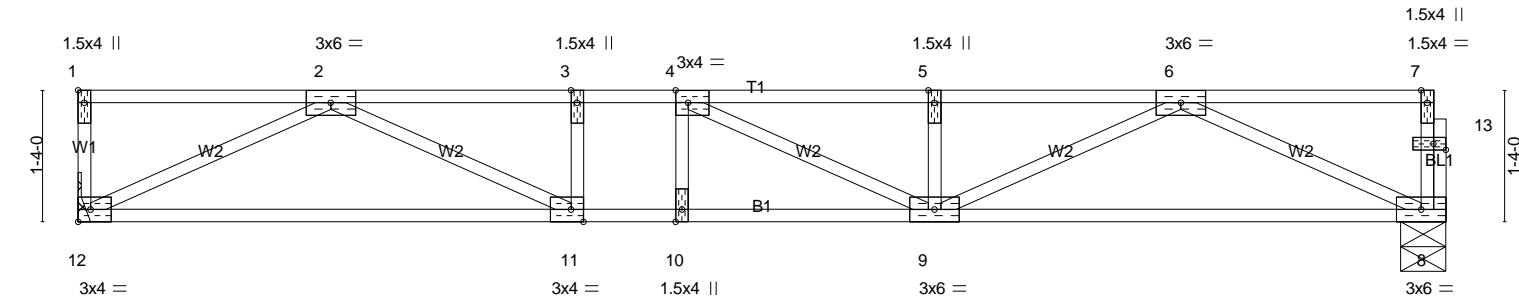
Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F01A	Floor	4	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:13 2019 Page 1

ID:t9rACx?uLBINQU\_rXimwntyZ1pO-Kkt4NCMMbr4EGxGV6JUJ8ilVuRDViaRgV4mrcTyynK4



0-3-8 0-3-8	5-1-8 4-10-0	5-7-2, 6-0-12 0-5-10 0-5-10	13-7-0 7-6-4	13-10-8 0-3-8
Plate Offsets (X,Y)-- [1:Edge,0-0-12], [4:0-1-8,Edge], [11:0-1-8,Edge], [13:0-1-8,0-0-12]				

<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>		<b>GRIP</b>	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.48	Vert(LL)	-0.12 9-10 >999 480	MT20		220/195	
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.16 9-10 >999 360				
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.03 8 n/a n/a				
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH							
										Weight: 64 lb	FT = 20%F, 11%E

<b>LUMBER-</b>				<b>BRACING-</b>			
TOP CHORD	2x4 DF No.2(flat)			TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.		
BOT CHORD	2x4 DF No.2(flat)			BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.		
WEBS	2x4 DF No.2(flat)						

**REACTIONS.** (lb/size) 8=747/0-5-8 (min. 0-1-8), 12=753/Mechanical

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

TOP CHORD 2-3=-2062/0, 3-4=-2062/0, 4-5=-2056/0, 5-6=-2056/0

BOT CHORD 11-12=0/1312, 10-11=0/2062, 9-10=0/2062, 8-9=0/1329

WEBS 6-8=-1464/0, 2-12=-1457/0, 6-9=0/808, 2-11=0/844, 5-9=-295/0, 4-9=-305/223

**NOTES-**

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

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

3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

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.

5) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Established Basic Permit #

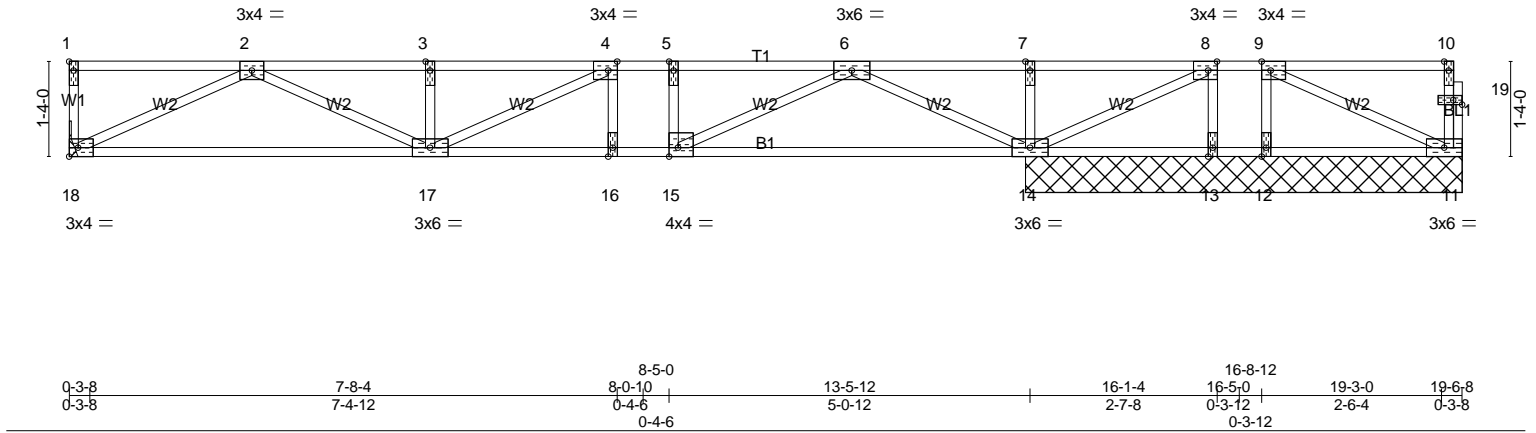
19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F01B	Floor	1	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:16 2019 Page 1  
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LOADING (psf)	SPACING-	CSL	DEFL.	PLATES	GRIP
TCLL 40.0	2-0-0	TC 0.49	in (loc) l/defl L/d	MT20	220/195
TCDL 10.0	Plate Grip DOL 1.00	BC 0.62	Vert(LL) -0.10 16-17 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.27	Vert(CT) -0.13 16-17 >999 360		
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.02 14 n/a n/a		
	Code IRC2015/TPI2014			Weight: 91 lb	FT = 20%F, 11%E

#### LUMBER-

TOP CHORD 2x4 DF No.2(flat)  
BOT CHORD 2x4 DF No.2(flat)  
WEBS 2x4 DF No.2(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.

All bearings 6-1-8 except (jt=length) 18=Mechanical.  
(lb) - Max Uplift All uplift 100 lb or less at joint(s) 11 except 13=350(LC 3)  
Max Grav All reactions 250 lb or less at joint(s) 11, 13 except 14=1342(LC 1), 18=644(LC 3), 12=368(LC 1)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1603/0, 3-4=-1603/0, 4-5=-1370/0, 5-6=-1370/0, 6-7=0/990, 7-8=0/990, 8-9=0/258  
BOT CHORD 17-18=0/1082, 16-17=0/1370, 15-16=0/1370, 14-15=0/432, 13-14=-258/0, 12-13=-258/0, 11-12=-258/0  
WEBS 7-14=-281/0, 2-18=-1202/0, 6-14=-1580/0, 2-17=0/579, 6-15=0/1052, 3-17=-295/0, 5-15=-304/0, 4-17=-82/384, 9-11=0/286, 8-14=-817/0, 8-13=-43/354, 9-12=-341/0

#### NOTES-

- Unbalanced floor live loads have been considered for this design.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11 except (jt=lb) 13=350.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

Established Basic Permit #

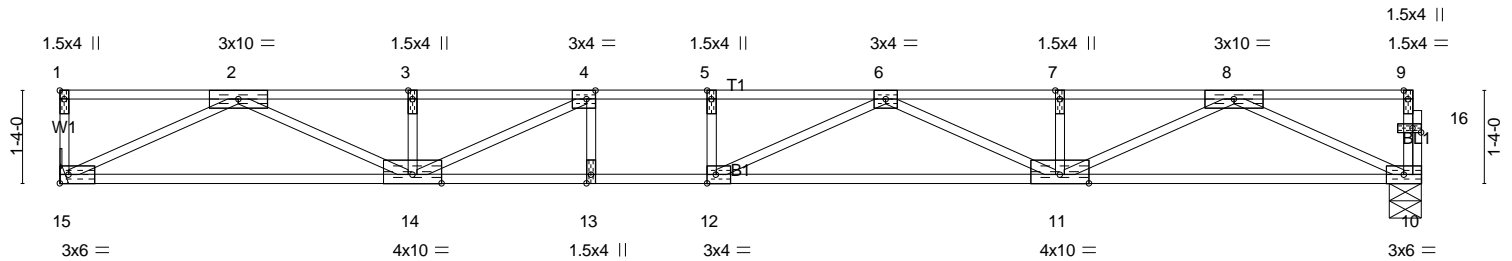
19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F01C	Floor	8	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:18 2019 Page 1  
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0-3-8	7-8-4	8-5-14, 9-3-8	19-3-0	19-6-8
0-3-8	7-4-12	0-9-10, 0-9-10	9-11-8	0-3-8
Plate Offsets (X,Y)-- [1:Edge,0-0-12], [4:0-1-8,Edge], [12:0-1-8,Edge], [16:0-1-8,0-0-12]				

LOADING (psf)	SPACING-		CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	2-0-0	TC 0.87	Vert(LL) -0.37	11-12	>619	480	MT20	220/195
TCDL 10.0	Lumber DOL 1.00		BC 0.67	Vert(CT) -0.53	11-12	>438	360		
BCLL 0.0	Rep Stress Incr YES		WB 0.38	Horz(CT) 0.07	10	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-SH						
								Weight: 88 lb	FT = 20%F, 11%E

#### LUMBER-

TOP CHORD 2x4 DF No.2(flat)  
BOT CHORD 2x4 DF 2400F 2.0E(flat)  
WEBS 2x4 DF No.2(flat)

#### BRACING-

TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 10=1058/0-5-8 (min. 0-1-8), 15=1064/Mechanical

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

TOP CHORD 2-3=-3291/0, 3-4=-3291/0, 4-5=-4185/0, 5-6=-4185/0, 6-7=-3345/0, 7-8=-3345/0  
BOT CHORD 14-15=0/1946, 13-14=0/4185, 12-13=0/4185, 11-12=0/4082, 10-11=0/1997  
WEBS 8-10=-2202/0, 2-15=-2162/0, 8-11=0/1498, 2-14=0/1494, 3-14=-271/31, 6-11=-818/0, 4-14=-1179/0, 6-12=-248/548

#### NOTES-

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Established Basic Permit #

19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F01D	Floor	4	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:21 2019 Page 1  
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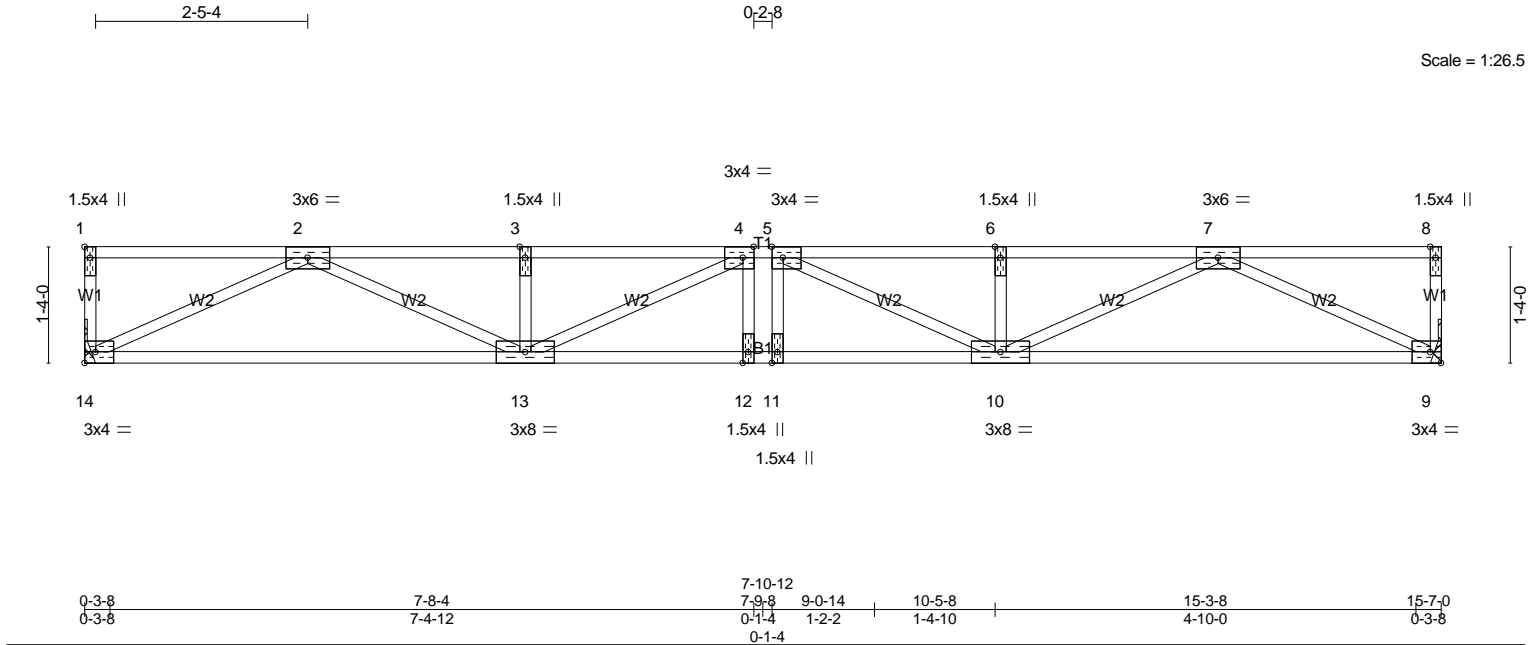


Plate Offsets (X,Y)-- [1:Edge,0-0-12], [4:0-1-8,Edge], [5:0-1-8,Edge]									
<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	-0.14 12 >999 480	MT20	GRIP 220/195
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.19 12 >956 360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.04 9 n/a n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH					
						Weight: 73 lb		FT = 20%F, 11%E	

#### LUMBER-

TOP CHORD 2x4 DF No.2(flat)  
BOT CHORD 2x4 DF No.2(flat)  
WEBS 2x4 DF No.2(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.** (lb/size) 9=850/Mechanical, 14=850/Mechanical

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

TOP CHORD 2-3=-2432/0, 3-4=-2432/0, 4-5=-2743/0, 5-6=-2432/0, 6-7=-2432/0  
BOT CHORD 13-14=0/1506, 12-13=0/2743, 11-12=0/2743, 10-11=0/2743, 9-10=0/1506  
WEBS 7-9=-1673/0, 2-14=-1673/0, 7-10=0/1028, 2-13=0/1028, 6-10=-262/0, 3-13=-262/0, 5-10=-501/49, 4-13=-501/49

#### NOTES-

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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

Established Basic Permit #

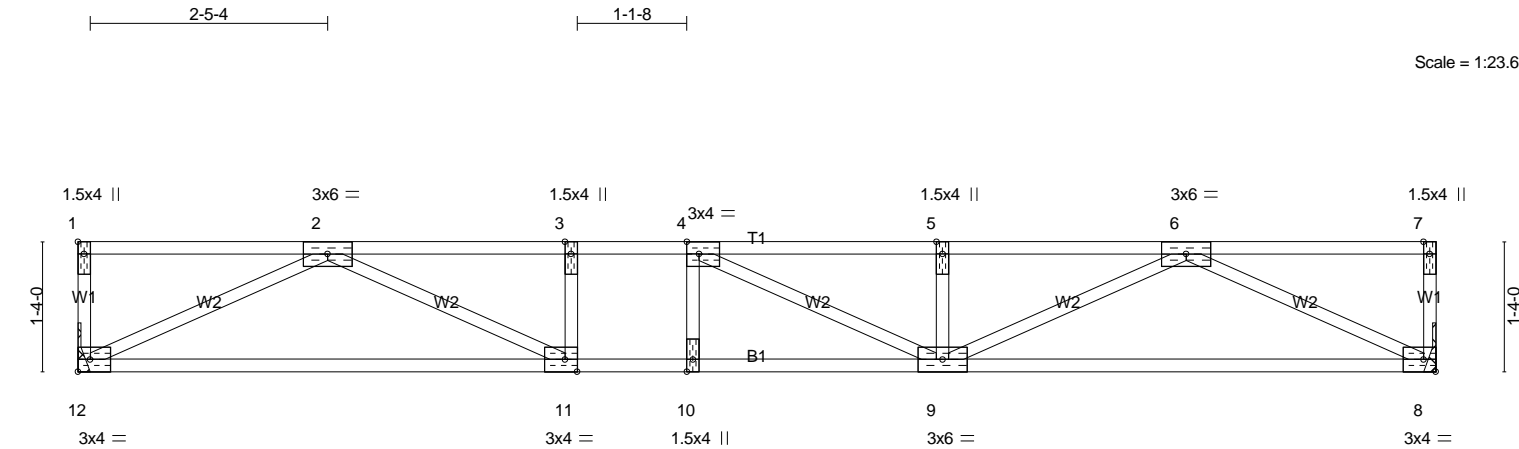
19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F01E	Floor	2	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:24 2019 Page 1  
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0-3-8	5-1-8	5-8-4 , 6-3-0	13-7-12	13-11-4
0-3-8	4-10-0	0-6-12 0-6-12	7-4-12	0-3-8
Plate Offsets (X,Y)-- [1:Edge,0-0-12], [4:0-1-8,Edge], [11:0-1-8,Edge]				

<b>LOADING</b> (psf)		<b>SPACING-</b>		<b>CSI.</b>		<b>DEFL.</b>		<b>PLATES</b>		<b>GRIP</b>
TCLL	40.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	-0.14 9-10 >999 480	MT20		220/195
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.18 9-10 >919 360			
BCLL	0.0	Rep Stress Incr	YES	WB	0.25	Horz(CT)	0.03 8 n/a n/a			
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH					Weight: 63 lb	FT = 20%F, 11%E

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 DF No.2(flat)	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 DF No.2(flat)	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 DF No.2(flat)		

**REACTIONS.** (lb/size) 8=760/Mechanical, 12=760/Mechanical

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-2099/0, 3-4=-2099/0, 4-5=-2076/0, 5-6=-2076/0  
BOT CHORD 11-12=0/1326, 10-11=0/2099, 9-10=0/2099, 8-9=0/1319  
WEBS 6-8=-1465/0, 2-12=-1473/0, 6-9=0/840, 2-11=0/874, 5-9=-301/0, 3-11=-257/0, 4-9=-330/210

- NOTES-**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) Refer to girder(s) for truss to truss connections.
  - 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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

Established Basic Permit #

19-03650

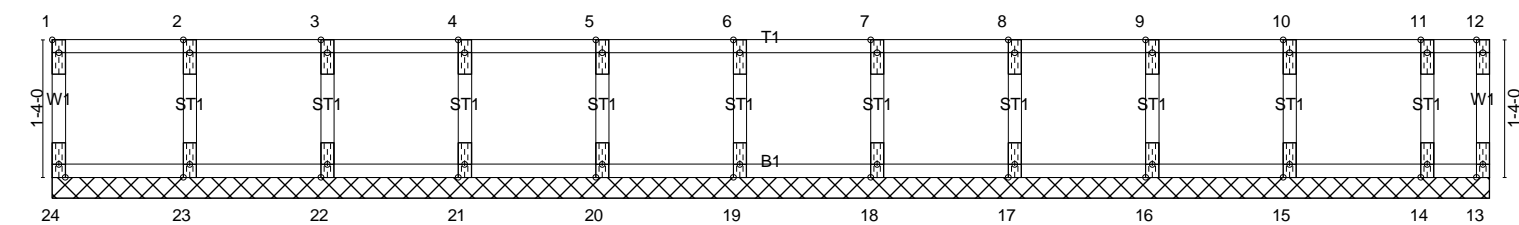
Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F01G	Floor Supported Gable	1	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248
 8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:26 2019 Page 1

ID:t9rACx?uLBINQU\_rXimwnty1pO-SE9?5fWWXrjOJwm\_NYDMARKp0gqTFVLbUbQ1YDdynJt

Scale = 1:22.3



0-3-8	13-7-12	13-11-4
0-3-8	13-4-4	0-3-8

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

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.07	Vert(LL)	n/a	-	n/a	999	MT20	220/195
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 0.02	Horz(CT)	0.00	13	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R						Weight: 55 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 DF No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 DF No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 DF No.2(flat)	
OTHERS 2x4 DF No.2(flat)	

**REACTIONS.** All bearings 13-11-4.

(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

- NOTES-**
- 1) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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

Established Basic Permit #

19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F02	Floor Supported Gable	1	1	Job Reference (optional)

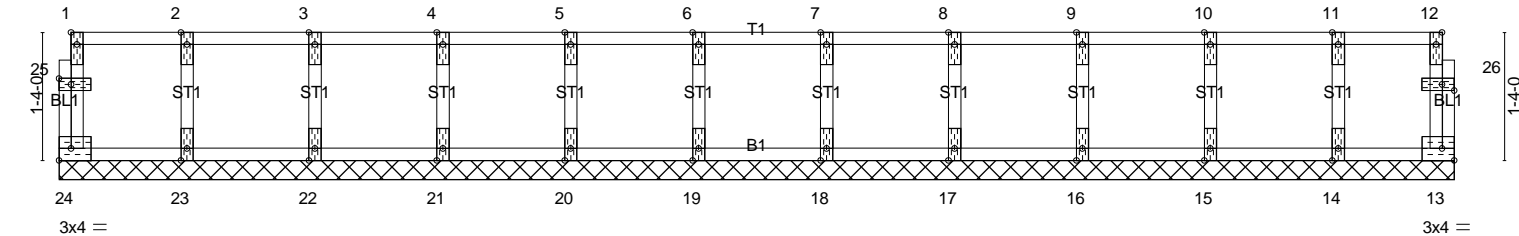
Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:29 2019 Page 1  
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0-1-8

0-1-8

Scale: 1/2"=1'



0-3-8	14-3-0	14-6-8
0-3-8	13-11-8	0-3-8
Plate Offsets (X,Y)-- [1:Edge,0-0-12], [25:0-1-8,0-0-12], [26:0-1-8,0-0-12]		

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>2-0-0</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.06	Vert(LL)	n/a	-	n/a	999	MT20	220/195
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 0.02	Horz(CT)	0.00	13	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-R							
										Weight: 59 lb FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 DF No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 DF No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 DF No.2(flat)	
OTHERS 2x4 DF No.2(flat)	

**REACTIONS.** All bearings 14-6-8.  
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

- NOTES-**
- 1) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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

Established Basic Permit #  
**19-03650**

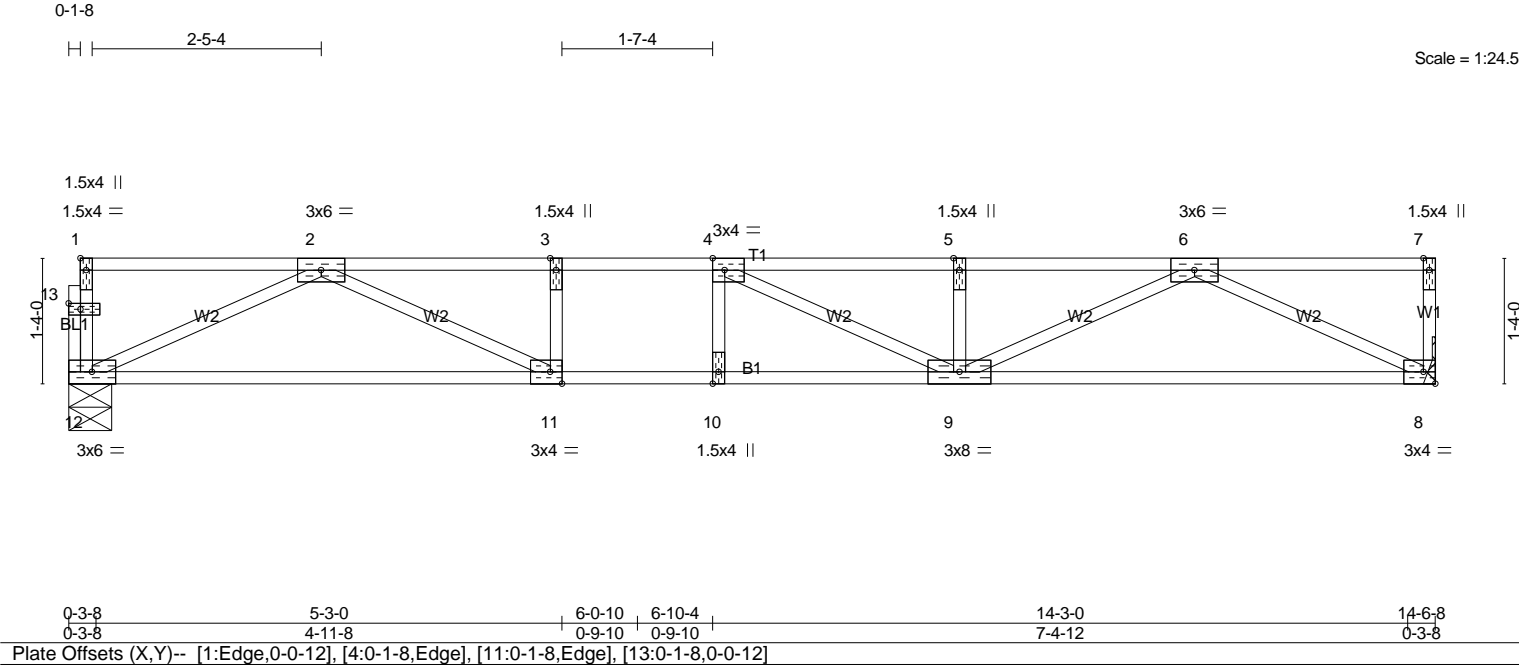
**Permit Number: 20-04898**

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F02A	Floor	2	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:31 2019 Page 1

ID:t9rACx?uLBINQU\_rXimwnty1pO-oCyu8MafLNLgQiey95oXtV2YshJPwieKdt7oEQyynJo



LOADING (psf)	SPACING-		CSI.	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	2-0-0	TC 0.64	Vert(LL) -0.20	9-10	>865	480		MT20	220/195
TCDL 10.0	Lumber DOL 1.00		BC 0.92	Vert(CT) -0.25	9-10	>682	360			
BCLL 0.0	Rep Stress Incr YES		WB 0.27	Horz(CT) 0.03	8	n/a	n/a			
BCDL 5.0	Code IRC2015/TPI2014		Matrix-SH							
									Weight: 66 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 DF No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 DF No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 9-10.
WEBS 2x4 DF No.2(flat)	
<b>REACTIONS.</b> (lb/size) 12=783/0-5-8 (min. 0-1-8), 8=789/Mechanical	
<b>FORCES.</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-2260/0, 3-4=-2260/0, 4-5=-2204/0, 5-6=-2204/0	
BOT CHORD 11-12=0/1413, 10-11=0/2260, 9-10=0/2260, 8-9=0/1381	
WEBS 6-8=-1534/0, 2-12=-1556/0, 6-9=0/914, 2-11=0/969, 5-9=-315/0, 3-11=-295/0, 4-9=-395/188	

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Refer to girder(s) for truss to truss connections.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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.
  - CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Established Basic Permit #

19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F02B	Floor	1	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:34 2019 Page 1  
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0-1-8



Scale = 1:32.3

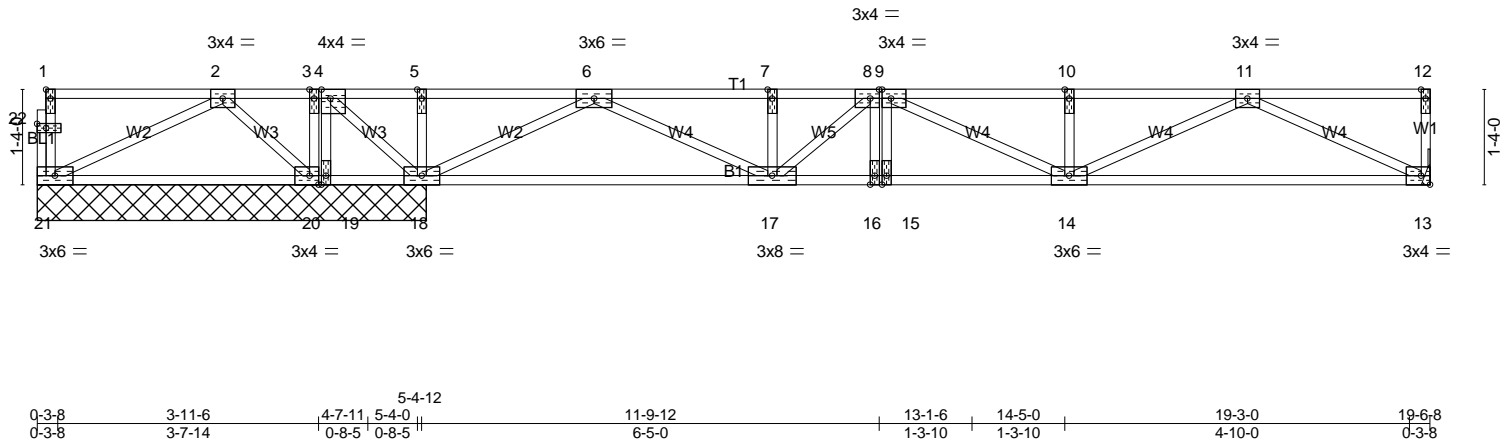


Plate Offsets (X,Y)-- [1:Edge,0-0-12], [4:0-1-8,Edge], [8:0-1-8,Edge], [9:0-1-8,Edge], [20:0-1-8,Edge], [22:0-1-8,0-0-12]									
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	Plate Grip DOL	1.00	TC 0.53	Vert(LL)	-0.07 14-15	>999	480	MT20	220/195
TCDL 10.0	Lumber DOL	1.00	BC 0.40	Vert(CT)	-0.10 13-14	>999	360		
BCLL 0.0	Rep Stress Incr	YES	WB 0.29	Horz(CT)	0.01 13	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-SH						
								Weight: 95 lb	FT = 20%F, 11%E

#### LUMBER-

TOP CHORD 2x4 DF No.2(flat)  
BOT CHORD 2x4 DF No.2(flat)  
WEBS 2x4 DF No.2(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.

All bearings 5-5-8 except (jt=length) 13=Mechanical.

(lb) - Max Uplift All uplift 100 lb or less at joint(s) except 21=135(LC 4), 19=910(LC 4)  
Max Grav All reactions 250 lb or less at joint(s) 21 except 18=1813(LC 1), 20=437(LC 1), 13=643(LC 4)

#### FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=0/633, 3-4=0/633, 4-5=0/1492, 5-6=0/1492, 6-7=-1083/0, 7-8=-1083/0, 8-9=-1431/0, 9-10=-1581/0, 10-11=-1581/0  
BOT CHORD 20-21=-342/42, 19-20=-633/0, 18-19=-633/0, 16-17=0/1431, 15-16=0/1431, 14-15=0/1431, 13-14=0/1079  
WEBS 2-21=-41/382, 4-18=-1187/0, 2-20=-555/0, 4-19=0/711, 11-13=-1198/0, 6-18=-1705/0, 11-14=0/558, 6-17=0/1154, 10-14=-258/0, 9-14=-107/336, 8-17=-511/0, 8-16=0/255

#### NOTES-

- Unbalanced floor live loads have been considered for this design.
- All plates are 1.5x4 MT20 unless otherwise indicated.
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 135 lb uplift at joint 21 and 910 lb uplift at joint 19.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Established Basic Permit #

19-03650

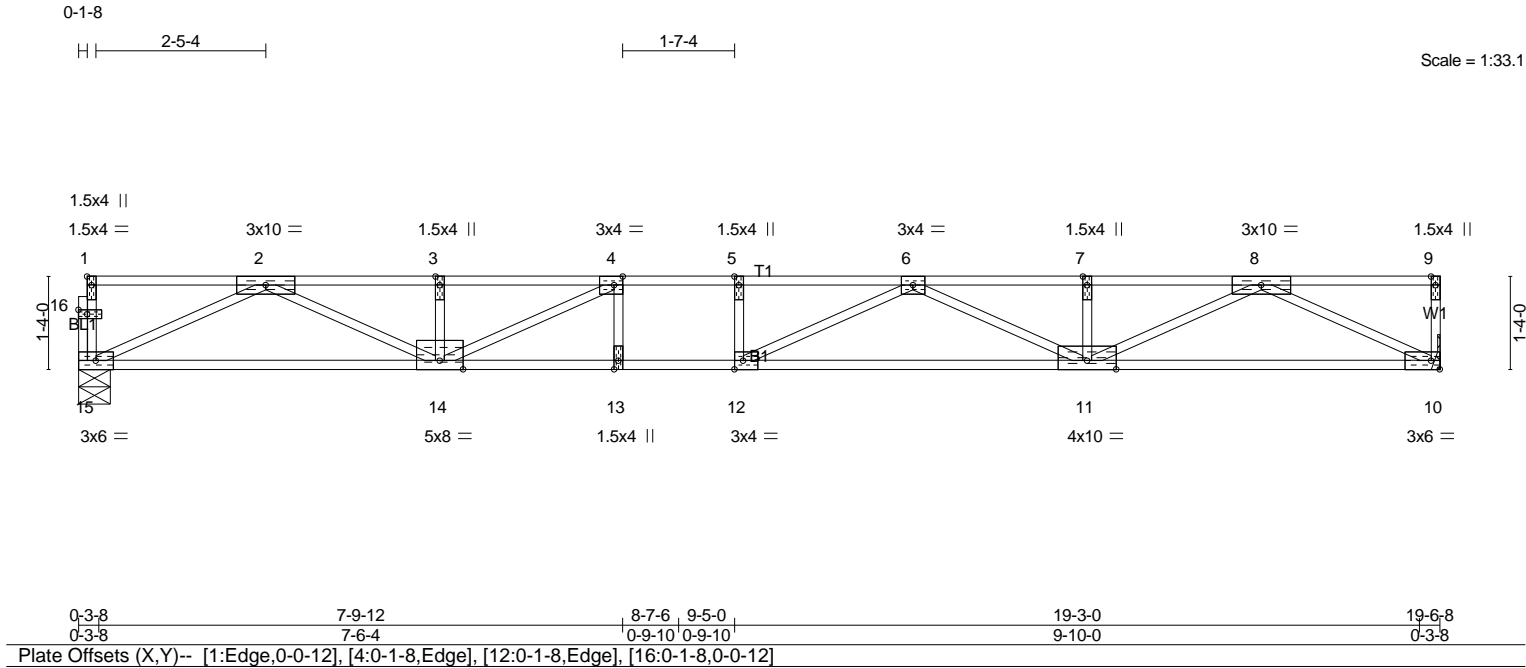
Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F02C	Floor	9	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:37 2019 Page 1

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LOADING (psf)	SPACING-		CSL	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 40.0	Plate Grip DOL 1.00	2-0-0	TC 0.86	Vert(LL) -0.37	11-12	>627	480	MT20	220/195
TCDL 10.0	Lumber DOL 1.00		BC 0.67	Vert(CT) -0.52	11-12	>443	360		
BCLL 0.0	Rep Stress Incr YES		WB 0.38	Horz(CT) 0.07	10	n/a	n/a		
BCDL 5.0	Code IRC2015/TPI2014		Matrix-SH						
								Weight: 88 lb	FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 DF No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD 2x4 DF 2400F 2.0E(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 DF No.2(flat)	
<b>REACTIONS.</b> (lb/size) 15=1058/0-5-8 (min. 0-1-8), 10=1064/Mechanical	
<b>FORCES.</b> (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-3319/0, 3-4=-3319/0, 4-5=-4191/0, 5-6=-4191/0, 6-7=-3318/0, 7-8=-3318/0	
BOT CHORD 14-15=0/1986, 13-14=0/4191, 12-13=0/4191, 11-12=0/4070, 10-11=0/1957	
WEBS 8-10=-2173/0, 2-15=-2190/0, 8-11=0/1512, 2-14=0/1481, 3-14=-272/30, 6-11=-835/0, 4-14=-1161/0, 6-12=-233/561	

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Refer to girder(s) for truss to truss connections.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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.
  - CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Established Basic Permit #

19-03650

Permit Number: 20-04898

Louws Truss, Inc., Ferndale, WA 98248

2-5-4

1-7-8

Scale = 1:20.1

1.5x4 ||

3x4 =

1.5x4 ||

1.5x4 ||

3x4 =

1.5x4 ||

1

2

3

4

5

6

W1

W2

T1

B1

W2

W2

W1

10

9

8

7

3x4 =

3x4 =

3x4 =

3x4 =

1-4-0

1-4-0

<b>LUMBER-</b>	
TOP CHORD	2x4 DF No.2(flat)
BOT CHORD	2x4 DF No.2(flat)
WEBS	2x4 DF No.2(flat)
<b>BRACING-</b>	
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.

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1574/0, 3-4=-1574/0, 4-5=-1574/0  
 BOT CHORD 9-10=0/1088, 8-9=0/1574, 7-8=0/1088  
 WEBS 5-7=-1208/0, 2-10=-1208/0, 5-8=0/618, 2-9=0/618

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.

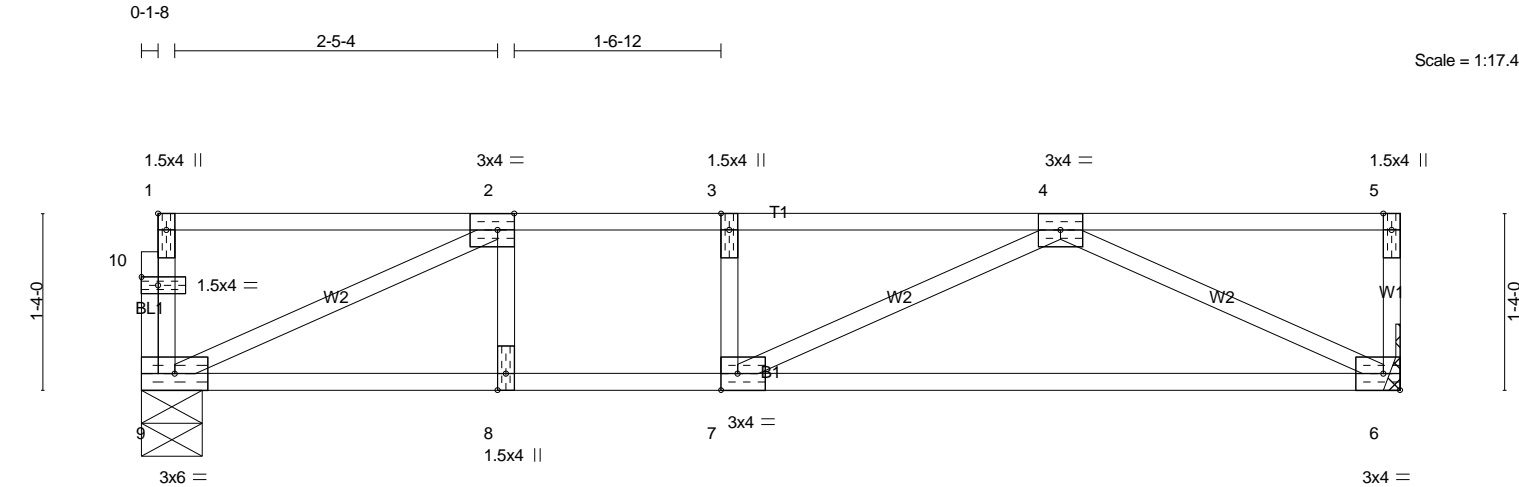
Established Basic Permit #  
**19-03650**

**Permit Number: 20-04898**

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F02E	Floor	2	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:42 2019 Page 1  
ID:t9rACx?uLBINQU\_rXimwntyz1pO-\_J72S7jYlmk7EO\_3JvV6pp?R279F?iox94It7HyynJd



0-3-8	2-9-12	3-7-2	4-4-8	9-2-8	9-6-0
0-3-8	2-6-4	0-9-6	0-9-6	4-10-0	0-3-8
Plate Offsets (X,Y)-- [1:Edge,0-0-12], [2:0-1-8,Edge], [7:0-1-8,Edge], [10:0-1-8,0-0-12]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>		<b>PLATES</b>
TCLL 40.0	2-0-0	TC 0.57	in (loc) l/defl L/d		MT20
TCDL 10.0	Plate Grip DOL 1.00	BC 0.59	Vert(LL) -0.14 6-7 >827 480		GRIP
BCLL 0.0	Lumber DOL 1.00	WB 0.18	Vert(CT) -0.22 6-7 >511 360		220/195
BCDL 5.0	Rep Stress Incr YES	Matrix-SH	Horz(CT) 0.01 6 n/a n/a		
	Code IRC2015/TPI2014				Weight: 44 lb FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 DF No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 DF No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 DF No.2(flat)	

**REACTIONS.** (lb/size) 9=506/0-5-8 (min. 0-1-8), 6=512/Mechanical

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-936/0, 3-4=-936/0  
BOT CHORD 8-9=0/936, 7-8=0/936, 6-7=0/812  
WEBS 4-6=-902/0, 2-9=-1025/0, 4-7=0/274

- NOTES-**
- Unbalanced floor live loads have been considered for this design.
  - Refer to girder(s) for truss to truss connections.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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.
  - CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

Established Basic Permit #

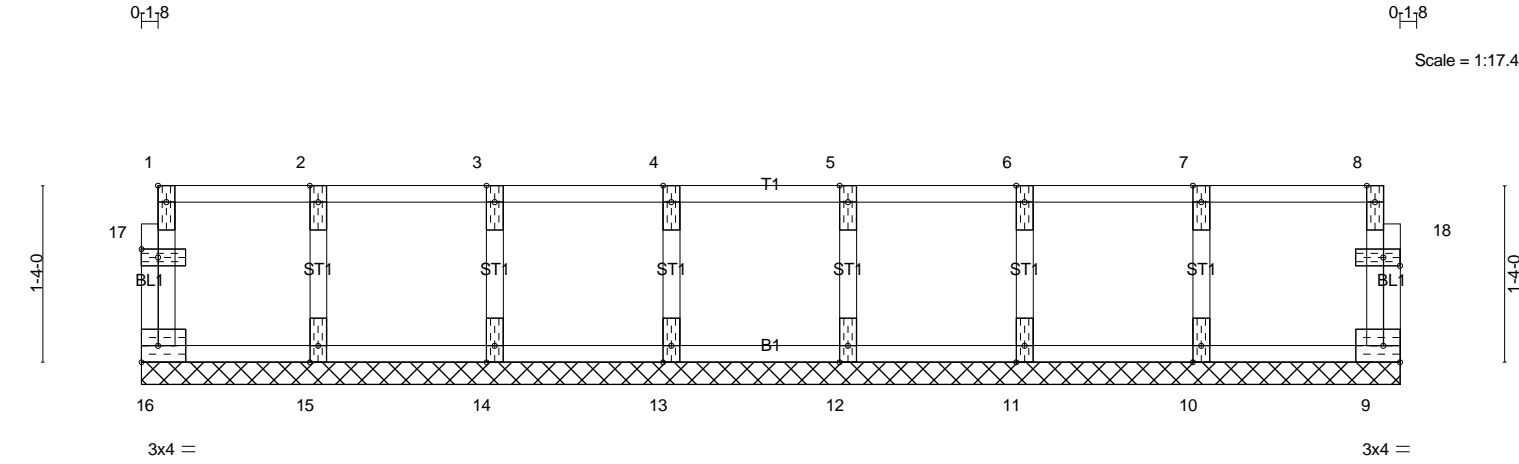
19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F02F	Floor Supported Gable	1	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:44 2019 Page 1  
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0-3-8	9-2-8	9-6-0
0-3-8	8-11-0	0-3-8
Plate Offsets (X,Y)-- [1:Edge,0-0-12], [17:0-1-8,0-0-12], [18:0-1-8,0-0-12]		
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>
TCLL 40.0	Plate Grip DOL 2-0-0	TC 0.07
TCDL 10.0	Lumber DOL 1.00	BC 0.01
BCLL 0.0	Rep Stress Incr YES	WB 0.02
BCDL 5.0	Code IRC2015/TPI2014	Matrix-R
<b>DEFL.</b>	<b>DEFL.</b>	<b>DEFL.</b>
Vert(LL) n/a	in (loc) l/defl L/d	MT20 220/195
Vert(CT) n/a	- n/a 999	
Horz(CT) 0.00	n/a 9 n/a n/a	
Weight: 40 lb		FT = 20%F, 11%E

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 DF No.2(flat)	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 DF No.2(flat)	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 DF No.2(flat)	
OTHERS 2x4 DF No.2(flat)	

**REACTIONS.** All bearings 9-6-0.  
(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) All plates are 1.5x4 MT20 unless otherwise indicated.
  - 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) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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

Established Basic Permit #

19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	F02G	Floor	4	1	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:47 2019 Page 1  
ID:t9rACx?uLBINQU\_rXimwntyZ1pO-KHwxVqnhaIMPL9s15S5HWtiLP8y1g\_VhJM?eoVyyjnJY

2-5-4 0-5-8 1-9-0 0-1-8

Scale = 1:14.5

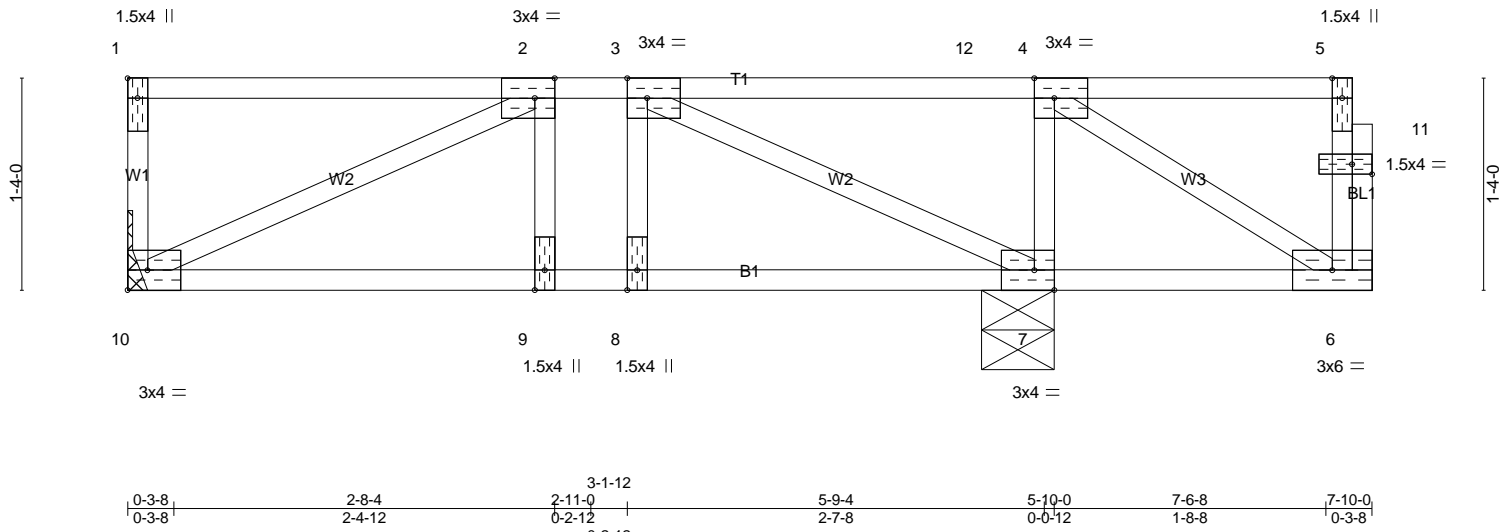


Plate Offsets (X,Y)-- [1:Edge,0-0-12], [2:0-1-8,Edge], [3:0-1-8,Edge], [4:0-1-8,Edge], [7:0-1-8,Edge], [11:0-1-8,0-0-12]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSI.</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	40.0	Plate Grip DOL	1.00	TC	0.34	Vert(LL)	-0.02 9-10 >999 480	MT20	220/195
TCDL	10.0	Lumber DOL	1.00	BC	0.23	Vert(CT)	-0.02 9-10 >999 360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00 7 n/a n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH				Weight: 40 lb	FT = 20%F, 11%E

#### LUMBER-

TOP CHORD 2x4 DF No.2(flat)  
BOT CHORD 2x4 DF No.2(flat)  
WEBS 2x4 DF No.2(flat)

**REACTIONS.** (lb/size) 7=555/0-5-8 (min. 0-1-8), 10=280/Mechanical  
Max Grav 7=555(LC 1), 10=303(LC 3)

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

TOP CHORD 2-3=-387/0  
BOT CHORD 9-10=0/387, 8-9=0/387, 7-8=0/387  
WEBS 4-7=-324/0, 2-10=-428/0, 3-7=-490/0

#### NOTES-

- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard

#### BRACING-

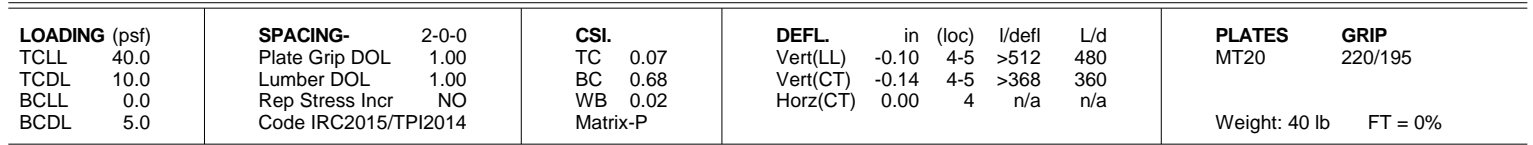
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 6-7.

Established Basic Permit #

19-03650

Permit Number: 20-04898

Louws Truss, Inc., Ferndale, WA 98248 8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:49 2019 Page 1  
ID:t9rACx?uLBINQU\_rXimwntyz1pO-Gf2hwWox6vd7aT0PDt7lbnl5xWT8v?zmgUitNyyNJW



TOP CHORD 2x4 DF No.2  
BOT CHORD 2x4 DF 2400F 2.0E  
WEBS 2x4 DF No.2

TOP CHORD	Structural wood sheathing directly applied or 4-6-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
**BOT CHORD** 5-6=0/252, 6-7=0/252, 4-7=0/252  
**WEBS** 2-4=272/0, 2-5=300/0

- 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.  
Bottom chords connected as follows: 2x4 - 1 row at 0-5-0 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) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 750 lb down at 1-4-0, and 750 lb down at 3-4-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

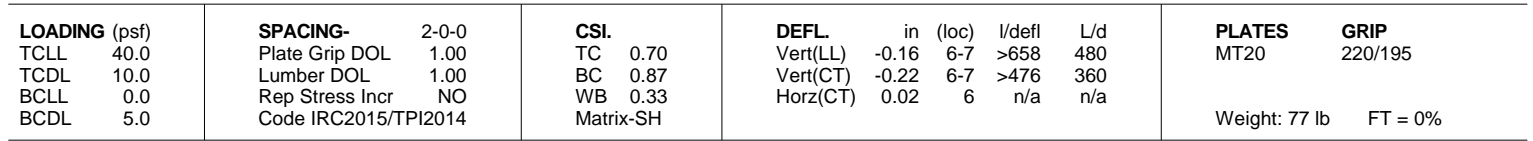
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 4-5=-10, 1-3=-100  
Concentrated Loads (lb)  
Vert: 6=-750(F) 7=-750(F)

19-03650

**Permit Number: 20-04898**

Louws Truss, Inc., Ferndale, WA 98248 8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:54 2019 Page 1  
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Scale = 1:16.4



1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 6-9=-10, 1-5=-100  
Concentrated Loads (lb)  
Vert: 7=-840(B) 10=-840(B) 11=-840(B) 12=-840(B)

**Permit Number: 20-04898**

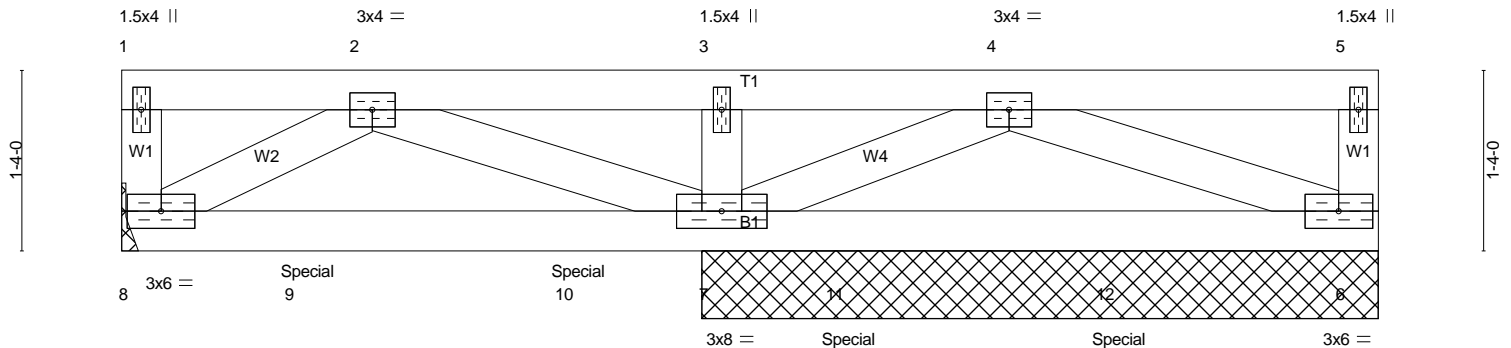
Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	GT02A	Floor Girder	1	2	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:34:02 2019 Page 1  
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Scale = 1:17.0



0-3-8 0-3-8	4-5-4 4-1-12	4-7-0 0-1-12	9-0-0 4-5-0	9-3-8 0-3-8
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>
TCLL 40.0	2-0-0	TC 0.26	in (loc) l/defl L/d	<b>GRIP</b>
TCDL 10.0	Plate Grip DOL 1.00	BC 0.91	Vert(LL) -0.05 6-7 >999 480	MT20 220/195
BCLL 0.0	Lumber DOL 1.00	WB 0.03	Vert(CT) -0.07 6-7 >771 360	
BCDL 5.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.00 6 n/a n/a	
	Code IRC2015/TPI2014			Weight: 81 lb FT = 0%

#### LUMBER-

TOP CHORD 2x4 DF No.2  
BOT CHORD 2x4 DF No.2  
WEBS 2x4 DF 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.** (lb/size) 7=2313/5-0-0 (min. 0-1-9), 8=634/Mechanical, 6=588/5-0-0 (min. 0-1-9)  
Max Grav 7=2313(LC 1), 8=655(LC 3), 6=596(LC 4)

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

TOP CHORD 4-5=-264/0  
BOT CHORD 8-9=0/336, 9-10=0/336, 7-10=0/336, 7-11=0/349, 11-12=0/349, 6-12=0/349  
WEBS 3-7=-267/0, 2-7=-393/0, 4-7=-454/0

#### NOTES-

- 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.  
Bottom chords connected as follows: 2x4 - 1 row at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 636 lb down at 1-4-8, 636 lb down at 3-4-8, and 636 lb down at 5-4-8, and 636 lb down at 7-4-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 6-8=-10, 1-5=-100  
Concentrated Loads (lb)  
Vert: 9=-636(F) 10=-636(F) 11=-636(F) 12=-636(F)

Established Basic Permit #

19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	GT02B	Floor Girder	1	2	Job Reference (optional)

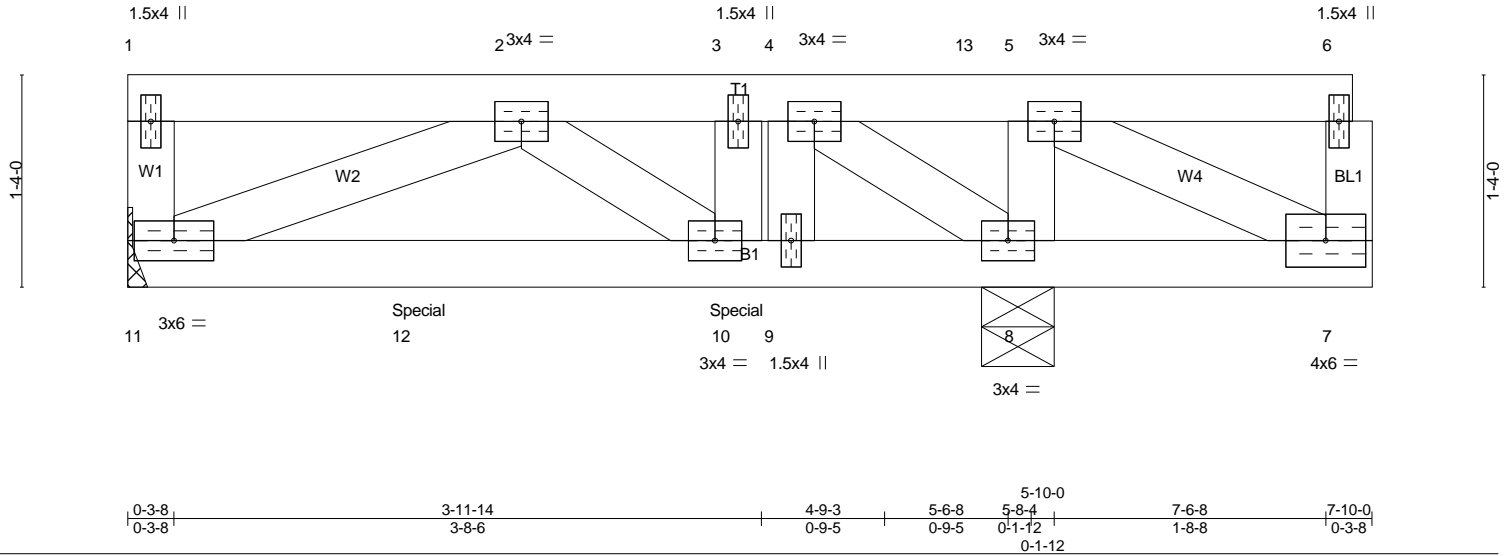
Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:34:04 2019 Page 1

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Scale = 1:14.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	2-0-0	TC 0.20	in (loc) l/defl L/d	MT20	220/195
TCDL 10.0	Plate Grip DOL 1.00	BC 0.56	Vert(LL) -0.03 10-11 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.10	Vert(CT) -0.04 10-11 >999 360		
BCDL 5.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.00 8 n/a n/a		
	Code IRC2015/TPI2014			Weight: 71 lb	FT = 0%

#### LUMBER-

TOP CHORD 2x4 DF No.2  
BOT CHORD 2x4 DF No.2  
WEBS 2x4 DF 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, Except: 6-0-0 oc bracing: 7-8.

**REACTIONS.** (lb/size) 8=1052/0-5-8 (min. 0-1-8), 11=781/Mechanical  
Max Grav 8=1052(LC 1), 11=810(LC 3)

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

TOP CHORD 2-3=-1170/0, 3-4=-1170/0  
BOT CHORD 11-12=0/1066, 10-12=0/1066, 9-10=0/1170, 8-9=0/1170  
WEBS 2-11=-983/0, 4-8=-1492/0, 2-10=0/257, 3-10=0/866

#### NOTES-

- 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.  
Bottom chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 10-3 2x4 - 1 row at 0-5-0 oc, member 9-4 2x4 - 1 row at 0-5-0 oc.
- 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.
- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 502 lb down at 1-10-0, and 502 lb down at 3-10-0 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 7-11=-10, 1-6=-100  
Concentrated Loads (lb)  
Vert: 10=-502(B) 12=-502(B)

Established Basic Permit #

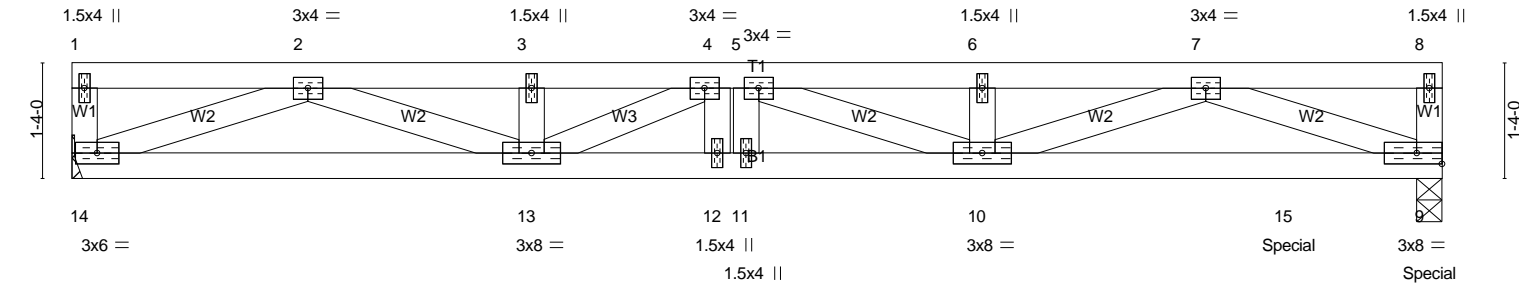
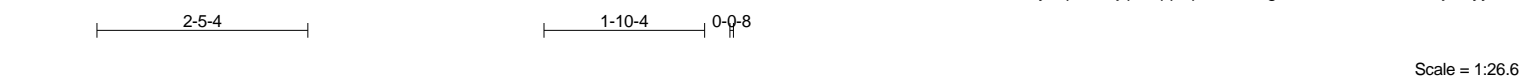
19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	GT01A	Floor Girder	1	2	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

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0-3-8	7-7-4	8-11-14	10-4-8	15-6-8	15-10-0
0-3-8	7-3-12	1-4-10	1-4-10	5-2-0	0-3-8
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 40.0	2-0-0	TC 0.42	in (loc) l/defl L/d	MT20	220/195
TCDL 10.0	Plate Grip DOL 1.00	BC 0.75	Vert(LL) -0.13 9-10 >999 480		
BCLL 0.0	Lumber DOL 1.00	WB 0.18	Vert(CT) -0.18 9-10 >999 360		
BCDL 5.0	Rep Stress Incr NO	Matrix-SH	Horz(CT) 0.03 9 n/a n/a		
	Code IRC2015/TPI2014			Weight: 138 lb	FT = 0%

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 DF No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 DF 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 DF No.2	

**REACTIONS.** (lb/size) 9=3928/0-3-8 (min. 0-2-2), 14=959/Mechanical

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-3284/0, 3-4=-3284/0, 4-5=-3824/0, 5-6=-4127/0, 6-7=-4127/0, 7-8=-440/0  
BOT CHORD 13-14=0/2016, 12-13=0/3824, 11-12=0/3824, 10-11=0/3824, 10-15=0/2604, 9-15=0/2604  
WEBS 7-9=-2333/0, 2-14=-2089/0, 7-10=0/1642, 2-13=0/1367, 5-10=0/739, 4-13=-752/0, 4-12=0/402, 5-11=-561/0

- NOTES-**
- 1) Special connection required to distribute bottom chord loads equally between all plies.
  - 2) 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.  
Bottom chords connected as follows: 2x4 - 1 row at 0-4-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - 3) 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.
  - 4) Unbalanced floor live loads have been considered for this design.
  - 5) Refer to girder(s) for truss to truss connections.
  - 6) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 7) 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.
  - 8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1001 lb down at 14-0-12, and 2177 lb down at 15-8-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 9-14=-10, 1-8=-100  
Concentrated Loads (lb)  
Vert: 9=-2177(F) 15=-1001(B)

Established Basic Permit #

19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	GT01C	Floor Girder	1	2	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:33:57 2019 Page 1  
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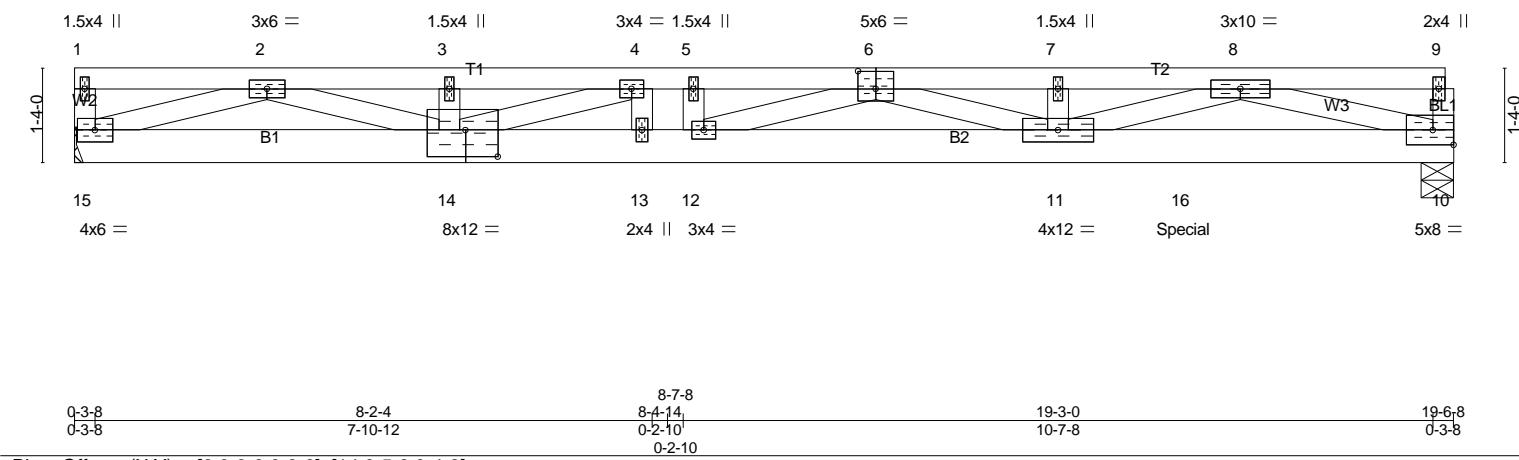
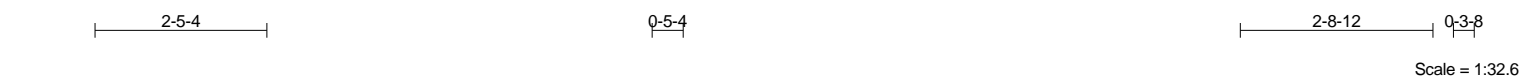


Plate Offsets (X,Y)-- [6:0-3-0,0-3-0], [14:0-5-8,0-4-8]									
<b>LOADING</b> (psf)		<b>SPACING-</b> 2-0-0		<b>CSL</b>		<b>DEFL.</b> in (loc) l/defl L/d		<b>PLATES</b>	<b>GRIP</b>
TCLL	40.0	Plate Grip DOL	1.00	TC	0.71	Vert(LL)	-0.34 11-12 >688 480	MT20	220/195
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.46 11-12 >503 360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.47	Horz(CT)	0.05 10 n/a n/a		
BCDL	5.0	Code IRC2015/TPI2014		Matrix-SH				Weight: 194 lb	FT = 0%

<b>LUMBER-</b>		<b>BRACING-</b>	
TOP CHORD	2x4 DF No.2	TOP CHORD	Structural wood sheathing directly applied or 3-3-7 oc purlins, except end verticals.
BOT CHORD	2x6 DF No.2 *Except*	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
	B2: 2x6 DF 2400F 2.0E		
WEBS	2x4 DF No.2		

REACTIONS. (lb/size) 10=2769/0-5-8 (min. 0-1-8), 15=1464/Mechanical

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

TOP CHORD 2-3=-5891/0, 3-4=-5891/0, 4-5=-8052/0, 5-6=-8052/0, 6-7=-10151/0, 7-8=-10151/0, 8-9=-709/0

BOT CHORD 14-15=0/3392, 13-14=0/8052, 12-13=0/8052, 11-12=0/9657, 11-16=0/6142, 10-16=0/6142

WEBS 8-10=-5727/0, 2-15=-3422/0, 8-11=0/4276, 2-14=0/2666, 6-11=0/919, 4-14=-2372/0, 6-12=-2097/0, 4-13=0/626

- NOTES-
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-4-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - 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.
  - Unbalanced floor live loads have been considered for this design.
  - Refer to girder(s) for truss to truss connections.
  - This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
  - 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.
  - CAUTION, Do not erect truss backwards.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2115 lb down at 15-8-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 10-15=-10, 1-9=-100

Concentrated Loads (lb)

Vert: 16=-2115(B)

Established Basic Permit #

19-03650

Permit Number: 20-04898

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	GT02	Floor Girder	1	2	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

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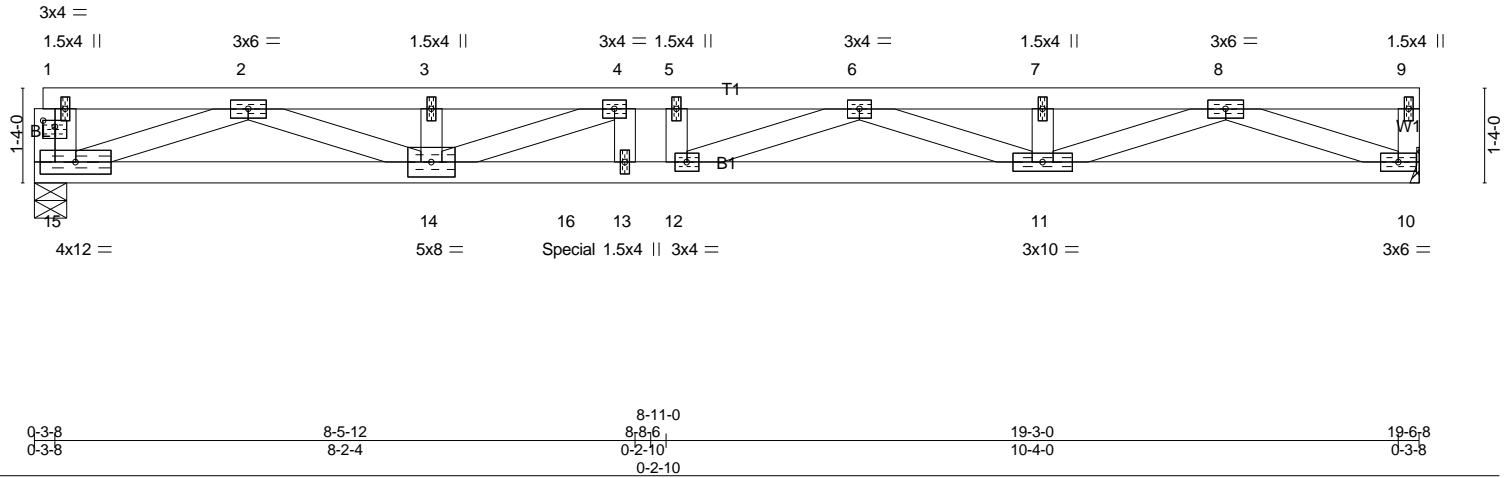


Plate Offsets (X,Y)-- [1:0-2-0,0-1-0]					
<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI</b>	<b>DEFL.</b> in (loc)	L/defl L/d
TCLL 40.0	Plate Grip DOL	1.00	TC 0.37	Vert(LL) -0.27 13	>851 480
TCDL 10.0	Lumber DOL	1.00	BC 0.63	Vert(CT) -0.37 13	>627 360
BCLL 0.0	Rep Stress Incr	NO	WB 0.30	Horz(CT) 0.05 10	n/a n/a
BCDL 5.0	Code IRC2015/TPI2014		Matrix-SH		
			Weight: 168 lb FT = 0%		

<b>LUMBER-</b>	<b>BRACING-</b>
TOP CHORD 2x4 DF No.2	TOP CHORD Structural wood sheathing directly applied or 4-8-9 oc purlins, except end verticals.
BOT CHORD 2x4 DF 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 DF No.2	

**REACTIONS.** (lb/size) 15=1451/0-5-8 (min. 0-1-8), 10=1295/Mechanical

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-5855/0, 3-4=-5855/0, 4-5=-7164/0, 5-6=-7164/0, 6-7=-4910/0, 7-8=-4910/0  
BOT CHORD 14-15=0/3373, 14-16=0/7164, 13-16=0/7164, 12-13=0/7164, 11-12=0/6350, 10-11=0/2828  
WEBS 8-10=-2943/0, 2-15=-3478/0, 8-11=0/2245, 2-14=0/2676, 3-14=-328/0, 6-11=-1552/0, 4-14=-1546/0, 6-12=0/1297, 4-13=0/658, 5-12=-379/0

#### NOTES-

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-7-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-5-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- 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.
- Unbalanced floor live loads have been considered for this design.
- Refer to girder(s) for truss to truss connections.
- This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 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.
- CAUTION, Do not erect truss backwards.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 645 lb down at 7-6-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

#### LOAD CASE(S) Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 10-15=-10, 1-9=-100  
Concentrated Loads (lb)  
Vert: 16=-645(B)

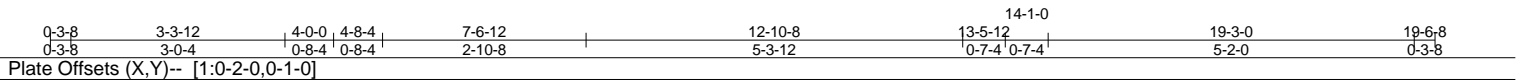
Established Basic Permit #

19-03650

Permit Number: 20-04898

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:34:07 2019 Page 1  
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Scale = 1:32.5



Weight: 163 lb    FT = 0%

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (plf)  
Vert: 10-16=-10, 1-9=-100

**Permit Number: 20-04898**

Job	Truss	Truss Type	Qty	Ply	ENVISION NW
1903888F	GT02C	Floor Girder	1	2	Job Reference (optional)

Louws Truss, Inc., Ferndale, WA 98248

8.310 s Jun 26 2019 MiTek Industries, Inc. Fri Jul 12 12:34:07 2019 Page 2  
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**LOAD CASE(S)** Standard  
Concentrated Loads (lb)  
Vert: 17=-800(B) 18=-293(B) 19=-293(B) 20=-293(B) 21=-293(B)

Established Basic Permit #

19-03650

Permit Number: 20-04898