



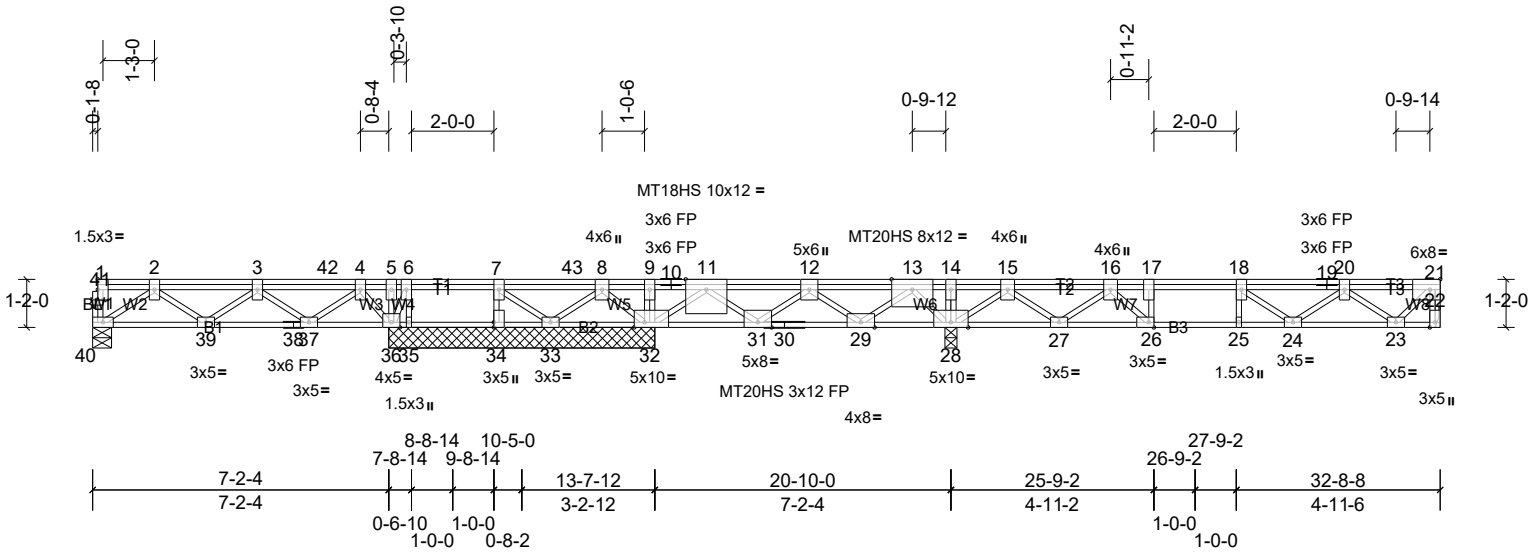
Job 21020141-A	Truss F202	Truss Type Floor Girder	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:56.2

Plate Offsets (X, Y): [21:0-3-0,Edge], [26:0-1-8,Edge], [32:0-3-0,Edge], [34:0-1-8,Edge], [41:0-1-8,0-0-8]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in (loc)	l/defl	L/d	PLATES	GRIP		
TCLL	40.0	Plate Grip DOL	1.00	TC	1.00	Vert(LL)	-0.04	29-31	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.83	Vert(CT)	-0.07	29-31	>999	240	MT18HS	244/190
BCLL	0.0	Rep Stress Incr	NO	WB	1.00	Horz(CT)	0.02	28	n/a	n/a	MT20HS	187/143
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 210 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat) \*Except\* T1:2x4 SP No.1(flat)  
 BOT CHORD 2x4 SP No.1(flat) \*Except\* B1:2x4 SP No.2(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 6-0-0 oc bracing.

**REACTIONS** All bearings 6-5-8, except 40=0-5-8, 22= Mechanical, 28=0-3-8

(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) 33  
 Max Grav All reactions 250 (lb) or less at joint(s) 33 except 22=344 (LC 7), 28=3742 (LC 5), 32=3458 (LC 4), 34=1770 (LC 3), 35=633 (LC 4), 36=2237 (LC 3), 40=328 (LC 6)

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

TOP CHORD 21-22=-339/0, 2-3=-565/0, 3-4=-477/0, 4-42=-477/0, 4-5=0/737, 5-6=0/737, 6-7=0/376, 7-43=0/904, 8-43=0/904, 8-9=0/2772, 9-10=0/2772, 10-11=0/2772, 11-12=-2292/0, 12-13=-2486/0, 13-14=0/2093, 14-15=0/2093, 15-16=0/996, 16-17=-507/384, 17-18=-507/384, 18-19=-605/165, 19-20=-605/165, 20-21=-275/1  
 BOT CHORD 39-40=0/391, 38-39=0/708, 37-38=0/708, 35-36=-376/0, 34-35=-376/0, 33-34=-376/0, 32-33=-1462/0, 31-32=0/697, 30-31=0/3876, 29-30=0/3876, 28-29=0/1088, 27-28=-1321/0, 26-27=-723/0, 25-26=-384/507, 24-25=-384/507, 23-24=-17/626  
 WEBS 6-35=-636/0, 7-34=-1750/0, 9-32=0/295, 14-28=-257/0, 17-26=-508/0, 2-40=-477/0, 3-37=-295/0, 4-37=0/312, 4-36=-1585/0, 6-36=-933/0, 7-33=-746/0, 8-33=0/741, 8-32=-1838/0, 11-32=-4247/0, 11-31=0/2029, 12-31=-2016/0, 12-29=-1910/0, 13-29=0/1918, 13-28=-3940/0, 15-28=-1027/0, 15-27=0/741, 16-27=-758/0, 16-26=0/842, 18-24=0/272, 20-23=-446/21, 21-23=-1/395

**NOTES**

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- All plates are 3x6 MT20 unless otherwise indicated.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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) 33.
- 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.
- Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (lb/ft)  
 Vert: 22-40=-8, 1-42=-80, 42-43=-870, 11-43=-80, 11-14=-870, 14-21=-80

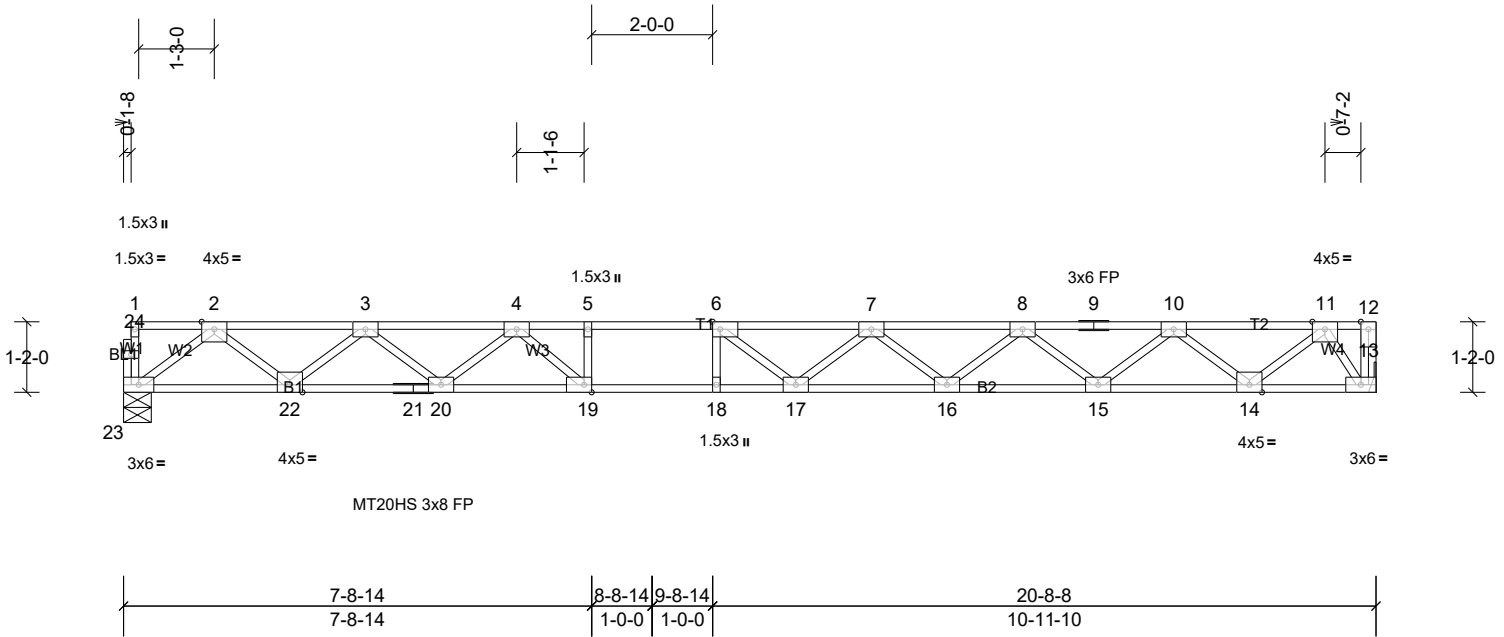
Job 21020141-A	Truss F203	Truss Type Floor	Qty 2	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:38.3

Plate Offsets (X, Y): [6:0-1-8,Edge], [19:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.91	Vert(LL)	-0.43	17-18	>566	360	MT20HS	187/143
TCDL	10.0	Lumber DOL	1.00	BC	0.86	Vert(CT)	-0.59	17-18	>413	240	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.07	13	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH								Weight: 103 lb FT = 20%F, 11%E

LUMBER	BRACING
TOP CHORD	TOP CHORD
BOT CHORD	BOT CHORD
WEBS	
OTHERS	

REACTIONS (lb/size)	FORCES (lb)
13=900/ Mechanical, (min. 0-1-8), 23=895/0-5-8, (min. 0-1-8)	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
	TOP CHORD
	BOT CHORD
	WEBS

- 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 3x5 MT20 unless otherwise indicated.
  - 4) Refer to girder(s) for truss to truss connections.
  - 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 10-00-00 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

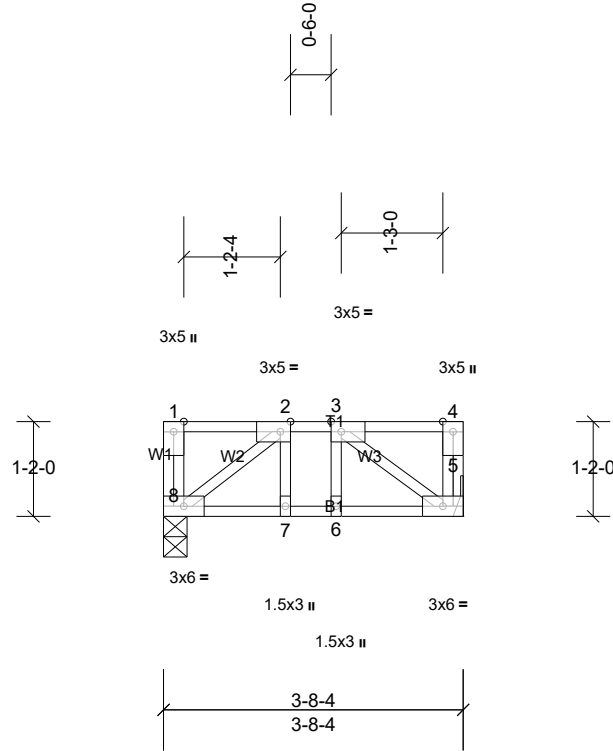
Job 21020141-A	Truss F204	Truss Type Floor	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:28.5

Plate Offsets (X, Y): [2:0-1-8,Edge], [3:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	0.00	5-6	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.06	Vert(CT)	0.00	5-6	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 24 lb	FT = 20%F, 11%E

**LUMBER**

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

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 3-8-4 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 5=151/ Mechanical, (min. 0-1-8), 8=151/0-3-8, (min. 0-1-8)

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

**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 10-00-00 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

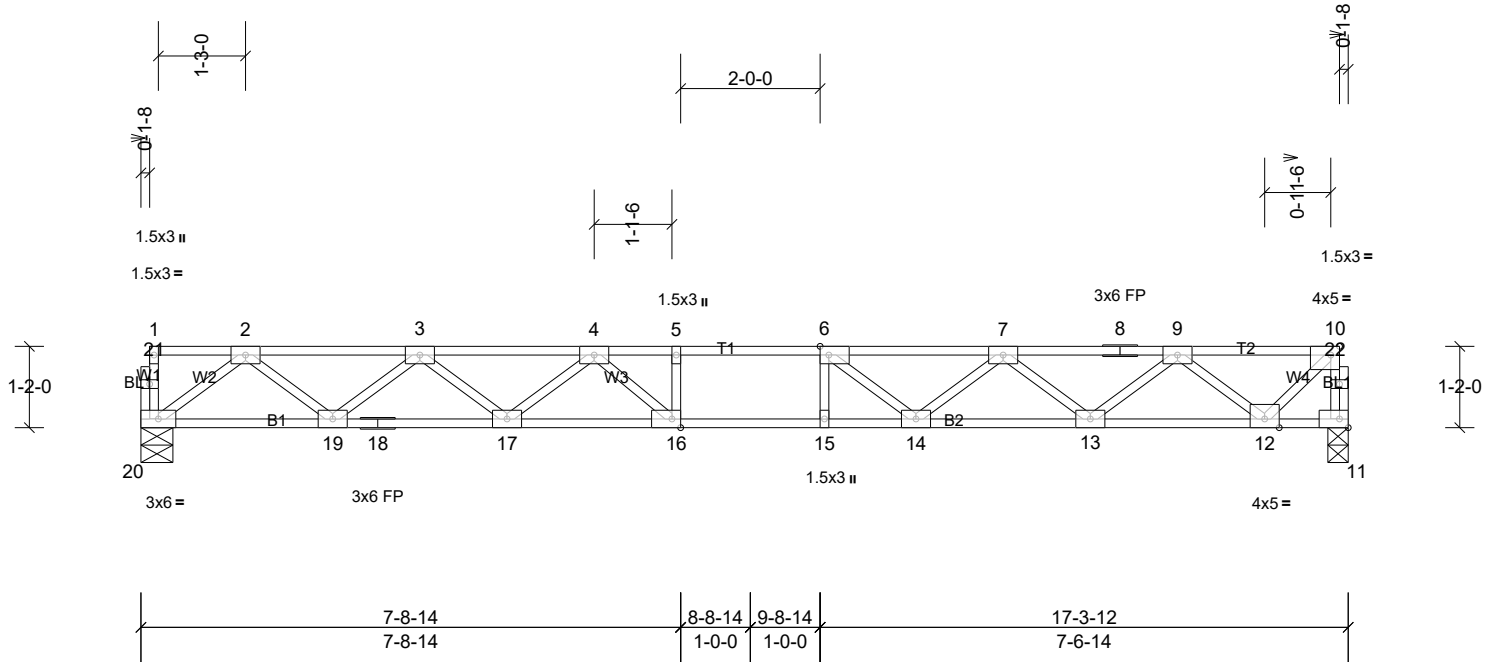
Job 21020141-A	Truss F205	Truss Type Floor	Qty 8	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:33.2

Plate Offsets (X, Y): [6:0-1-8,Edge], [10:0-1-8,Edge], [16:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.60	Vert(LL)	-0.21	15-16	>957	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.29	15-16	>694	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.44	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 86 lb	FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat) \*Except\* B2:2x4 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** (lb/size) 11=746/0-3-8, (min. 0-1-8), 20=746/0-5-8, (min. 0-1-8)

**FORCES**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 11-22=-743/0, 10-22=-742/0, 2-3=-1575/0, 3-4=-2550/0, 4-5=-3040/0, 5-6=-3040/0, 6-7=-2784/0, 7-8=-2012/0, 8-9=-2012/0, 9-10=-695/0  
 BOT CHORD 19-20=0/932, 18-19=0/2191, 17-18=0/2191, 16-17=0/2889, 15-16=0/3040, 14-15=0/3040, 13-14=0/2519, 12-13=0/1480  
 WEBS 2-20=-1166/0, 2-19=0/838, 3-19=-802/0, 3-17=0/467, 4-17=-441/0, 4-16=-82/469, 6-14=-512/0, 7-14=0/416, 7-13=-661/0, 9-13=0/692, 9-12=-1022/0, 10-12=0/934

**NOTES**

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x5 MT20 unless otherwise indicated.
- 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 10-00-00 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

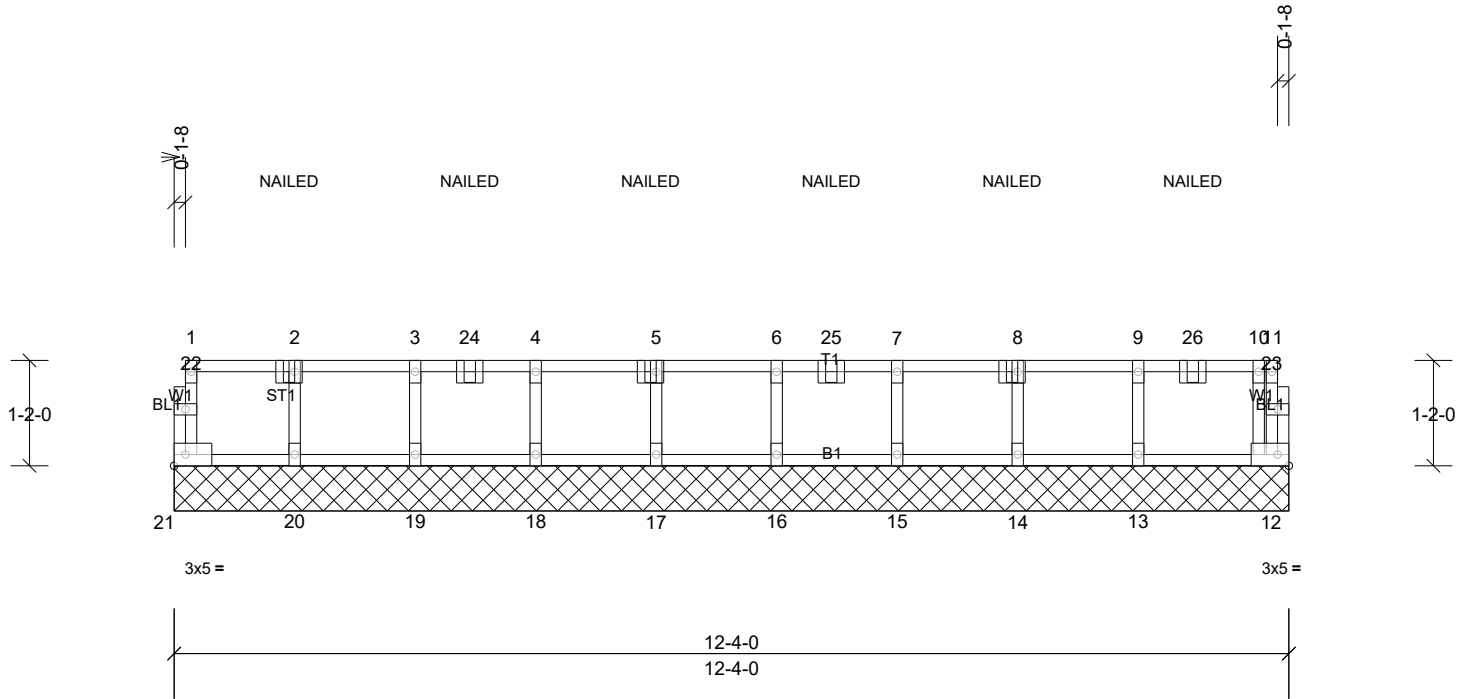
Job 21020141-A	Truss F207	Truss Type Floor Supported Gable	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:25.6

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	0.90	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Plate Metal DOL	0.90	BC	0.04	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Lumber DOL	0.90	WB	0.04	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Rep Stress Incr Code	YES IRC2015/TPI2014	Matrix-MR							Weight: 54 lb	FT = 20%F, 11%E

**LUMBER**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(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 12-4-0.  
(lb) - Max Grav All reactions 250 (lb) or less at joint(s) 12, 13, 14, 15, 16, 17, 18, 19, 20, 21

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

- NOTES**
- Unbalanced floor live loads have been considered for this design.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1-4-0 oc.
  - 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 10-00-00 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.
  - "NAILED" indicates 3-10d (0.148"x3") or 3-12d (0.148"x3.25") toe-nails per NDS guidelines.

**LOAD CASE(S)** Standard  
1) Dead + Snow (balanced): Lumber Increase=0.90, Plate Increase=0.90 Pit. metal=0.90  
Uniform Loads (lb/ft)  
Vert: 12-21=-10, 1-11=-20  
Concentrated Loads (lb)  
Vert: 2=-70, 5=-70, 8=-70, 24=-70, 25=-70, 26=-71



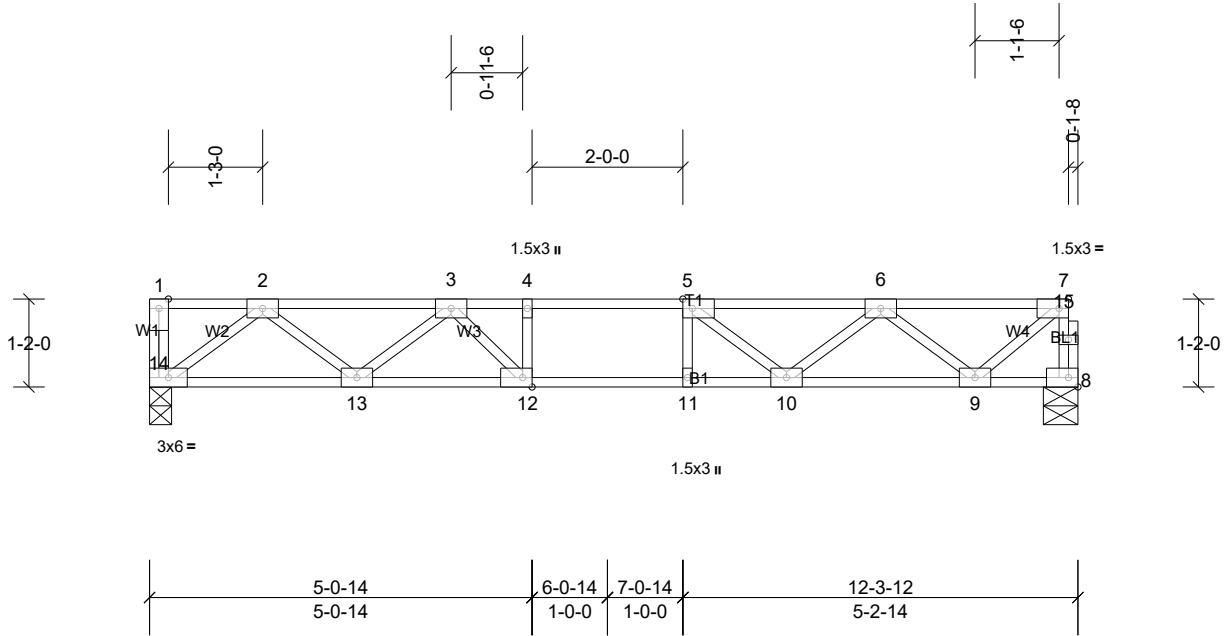
Job 21020141-A	Truss F209	Truss Type Floor	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:30.7

Plate Offsets (X, Y): [5:0-1-8,Edge], [7:0-1-8,Edge], [12:0-1-8,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	0.47	Vert(LL)	-0.10	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.13	10-11	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.40	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 62 lb	FT = 20%F, 11%E

**LUMBER**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(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** (lb/size) 8=657/0-5-8, (min. 0-1-8), 14=663/0-3-8, (min. 0-1-8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 8-15=-653/0, 7-15=-652/0, 2-3=-1270/0, 3-4=-1886/0, 4-5=-1886/0, 5-6=-1613/0, 6-7=-669/0  
BOT CHORD 13-14=0/809, 12-13=0/1706, 11-12=0/1886, 10-11=0/1886, 9-10=0/1314  
WEBS 2-14=-1015/0, 2-13=0/600, 3-13=-567/0, 3-12=0/467, 5-10=-458/0, 6-10=0/409, 6-9=-840/0, 7-9=0/840

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x5 MT20 unless otherwise indicated.
  - 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 10-00-00 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



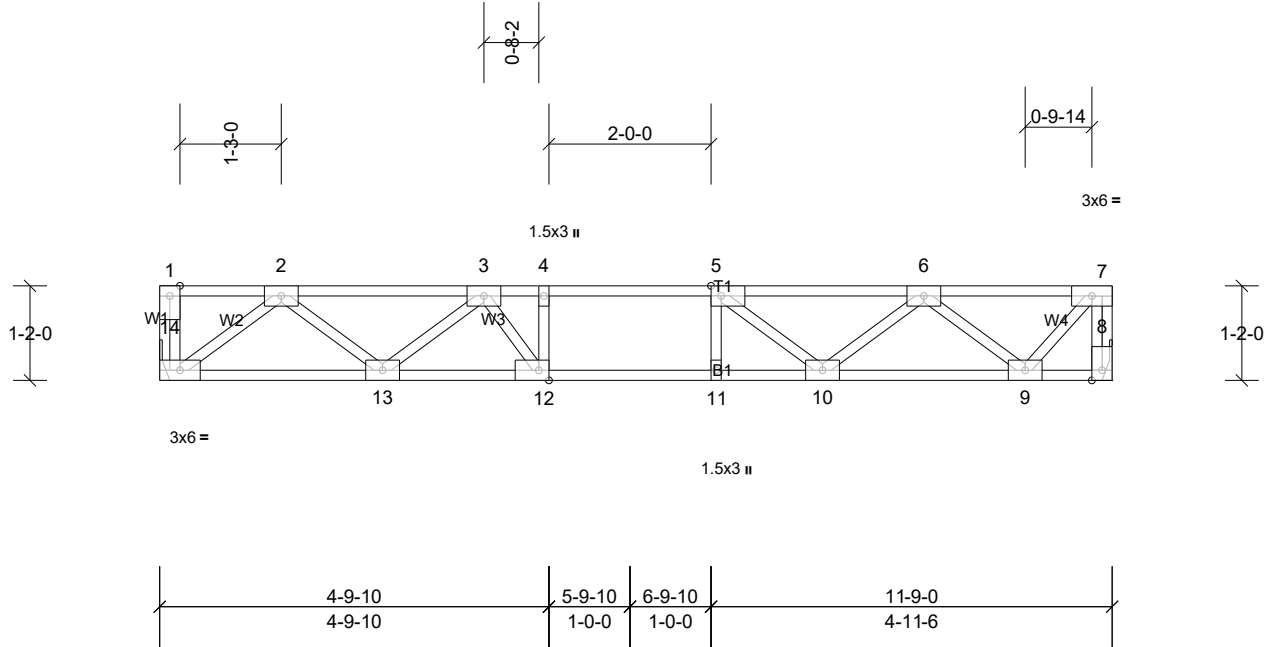
Job 21020141-A	Truss F210	Truss Type Floor	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:28.5

Plate Offsets (X, Y): [5:0-1-8,Edge], [12:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.35	Vert(LL)	-0.07	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.55	Vert(CT)	-0.09	10-11	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.28	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 60 lb	FT = 20%F, 11%E

**LUMBER**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(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** (lb/size) 8=506/ Mechanical, (min. 0-1-8), 14=506/ Mechanical, (min. 0-1-8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 7-8=-504/0, 2-3=-954/0, 3-4=-1371/0, 4-5=-1371/0, 5-6=-1147/0, 6-7=-397/0  
BOT CHORD 13-14=0/614, 12-13=0/1277, 11-12=0/1371, 10-11=0/1371, 9-10=0/904  
WEBS 2-14=-771/0, 2-13=0/443, 3-13=-419/0, 3-12=-16/346, 5-10=-356/0, 6-10=0/321, 6-9=-659/0, 7-9=0/591

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x5 MT20 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 10-00-00 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

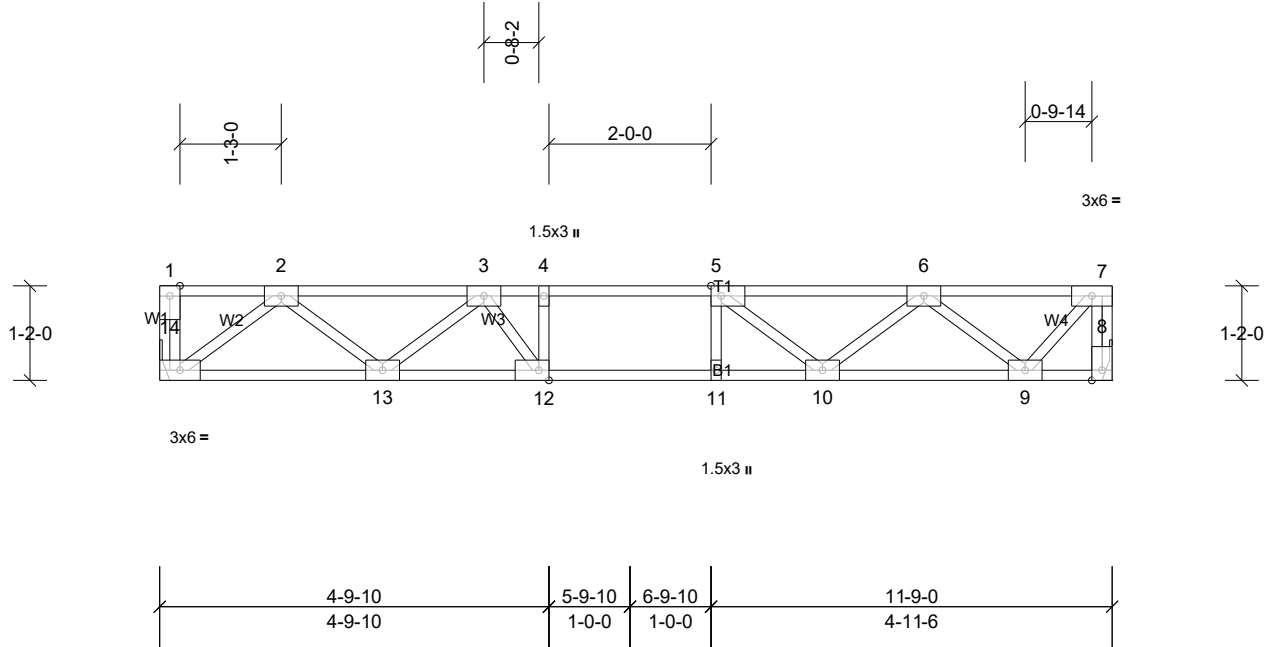
Job 21020141-A	Truss F211	Truss Type Floor	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:28.5

Plate Offsets (X, Y): [5:0-1-8,Edge], [12:0-1-8,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)	-0.09	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.69	Vert(CT)	-0.11	10-11	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 60 lb	FT = 20%F, 11%E

**LUMBER**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(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** (lb/size) 8=633/ Mechanical, (min. 0-1-8), 14=633/ Mechanical, (min. 0-1-8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 7-8=-630/0, 2-3=-1193/0, 3-4=-1714/0, 4-5=-1714/0, 5-6=-1434/0, 6-7=-497/0  
BOT CHORD 13-14=0/768, 12-13=0/1596, 11-12=0/1714, 10-11=0/1714, 9-10=0/1129  
WEBS 4-12=-260/0, 2-14=-964/0, 2-13=0/553, 3-13=-524/0, 3-12=-20/433, 5-10=-444/0, 6-10=0/401, 6-9=-823/0, 7-9=0/738

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x5 MT20 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 10-00-00 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

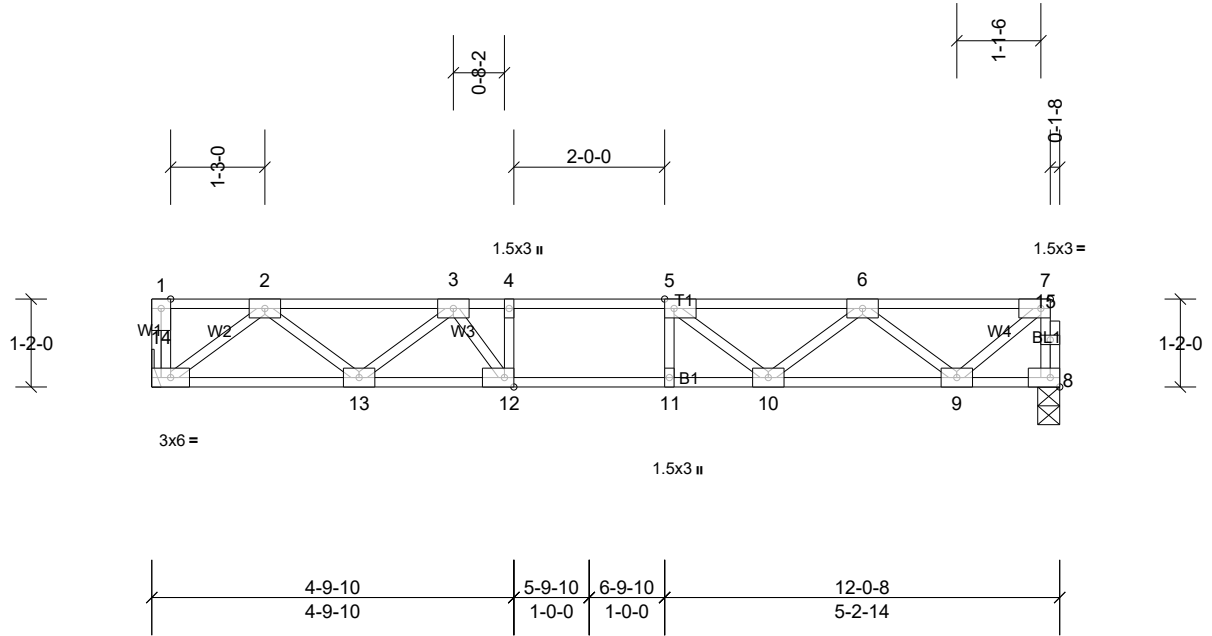
Job 21020141-A	Truss F212	Truss Type Floor	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:30.7

Plate Offsets (X, Y): [5:0-1-8,Edge], [7:0-1-8,Edge], [12:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.39	Vert(LL)	-0.08	10-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.60	Vert(CT)	-0.10	10-11	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.31	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 61 lb	FT = 20%F, 11%E

**LUMBER**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(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** (lb/size) 8=514/0-3-8, (min. 0-1-8), 14=519/ Mechanical, (min. 0-1-8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 8-15=-510/0, 7-15=-509/0, 2-3=-985/0, 3-4=-1441/0, 4-5=-1441/0, 5-6=-1247/0, 6-7=-521/0  
BOT CHORD 13-14=0/631, 12-13=0/1326, 11-12=0/1441, 10-11=0/1441, 9-10=0/1024  
WEBS 2-14=-792/0, 2-13=0/461, 3-13=-444/0, 3-12=0/377, 5-10=-336/0, 6-10=0/308, 6-9=-655/0, 7-9=0/655

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x5 MT20 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 10-00-00 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

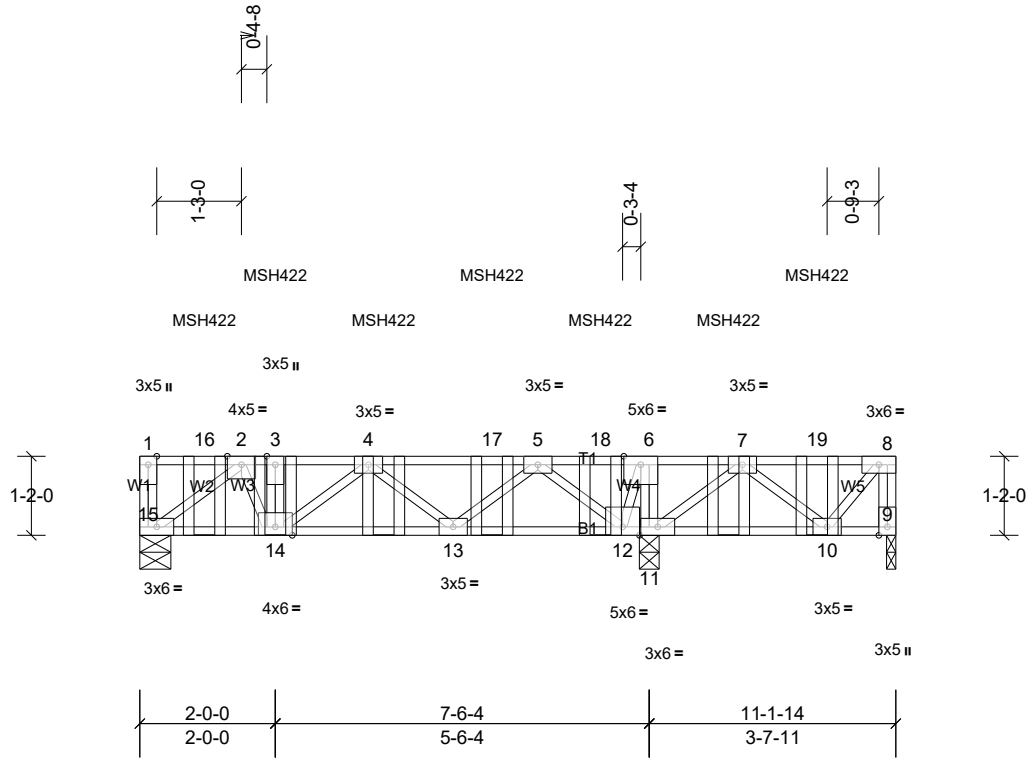
Job 21020141-A	Truss F213	Truss Type Floor Girder	Qty 1	Ply 1	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:34.1

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	0.89	Vert(LL)	-0.03	13-14	>999	360	MT20 244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.52	Vert(CT)	-0.04	13-14	>999	240	
BCLL	0.0	Rep Stress Incr	NO	WB	0.59	Horz(CT)	0.01	9	n/a	n/a	
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 65 lb FT = 20%F, 11%E

**LUMBER**

TOP CHORD 2x4 SP 2400F 2.0E(flat)  
 BOT CHORD 2x4 SP No.2(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, Except: 10-0-0 oc bracing: 9-10.

**REACTIONS** (lb/size) 9=324/0-1-10, (min. 0-1-8), 11=2438/0-3-8, (min. 0-1-8), 15=1057/0-5-8, (min. 0-1-8)  
 Max Uplift 15=-12 (LC 10)  
 Max Grav 9=364 (LC 4), 11=2438 (LC 1), 15=1059 (LC 3)

**FORCES**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 8-9=-356/0, 2-3=-1345/0, 3-4=-1345/0, 4-17=-1117/77, 5-17=-1117/77, 5-18=0/902, 6-18=0/902, 6-7=0/1341  
 BOT CHORD 14-15=-10/1184, 13-14=-72/1649, 12-13=-114/552, 11-12=-1341/0, 10-11=-22/354  
 WEBS 6-11=-1332/58, 2-15=-1485/13, 2-14=0/373, 4-14=-380/117, 4-13=-696/0, 5-13=0/740, 5-12=-1883/62, 6-12=-32/1246, 7-11=-1701/0, 7-10=-257/20

**NOTES**

- Unbalanced floor live loads have been considered for this design.
- All plates are 3x5 MT20 unless otherwise indicated.
- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 9.
- One RT7A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 15. This connection is for uplift only and does not consider lateral forces.
- 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 10-00-00 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.
- Use USP MSH422 (With 10d nails into Girder & 6-10d nails into Truss) or equivalent spaced at 1-10-11 oc max. starting at 0-11-7 from the left end to 9-11-15 to connect truss (es) F201 (1 ply 2x4 SP), F202 (1 ply 2x4 SP), F210 (1 ply 2x4 SP), F211 (1 ply 2x4 SP) to back face of top chord.
- Fill all nail holes where hanger is in contact with lumber.

**LOAD CASE(S)** Standard

- Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
 Uniform Loads (lb/ft)  
 Vert: 9-15=-10, 1-8=-100  
 Concentrated Loads (lb)  
 Vert: 3=-263, 4=-349, 7=-426, 16=-349, 17=-349, 18=-349, 19=-533

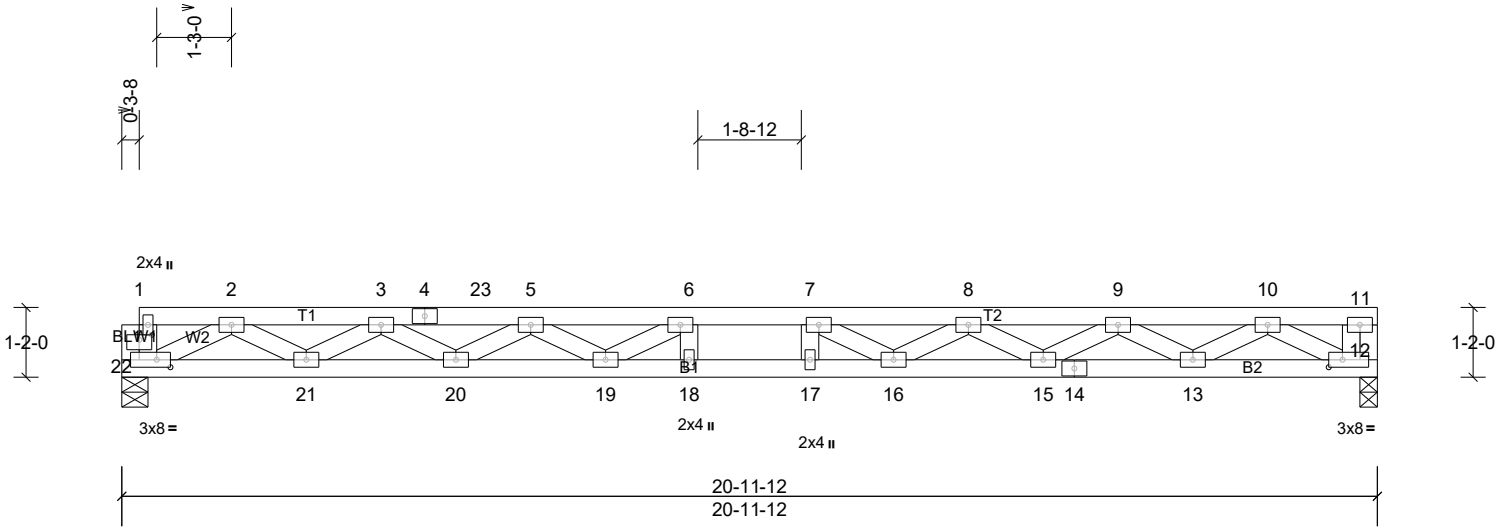
Job 21020141-A	Truss FG201	Truss Type Floor Girder	Qty 1	Ply 4	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:38.7

Plate Offsets (X, Y): [1:0-2-8,0-1-0], [12:0-2-12,0-1-8], [22:0-2-12,0-1-8]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	-0.34	18	>720	360	MT20 244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.60	Vert(CT)	-0.52	18-19	>472	240	
BCLL	0.0	Rep Stress Incr	NO	WB	0.58	Horz(CT)	0.06	12	n/a	n/a	
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 383 lb FT = 11%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP 2400F 2.0E  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**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) 12=1596/0-3-8, (min. 0-1-8), 22=5193/0-5-4, (min. 0-1-8)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-22=-769/0, 1-2=-440/0, 2-3=-11317/0, 3-4=-15116/0, 4-23=-15116/0, 5-23=-15116/0, 5-6=-14412/0, 6-7=-12881/0, 7-8=-10713/0, 8-9=-7927/0, 9-10=-4467/0  
BOT CHORD 21-22=0/7910, 20-21=0/14949, 19-20=0/15286, 18-19=0/12881, 17-18=0/12881, 16-17=0/12881, 15-16=0/9366, 14-15=0/6374, 13-14=0/6374, 12-13=0/2606  
WEBS 10-12=-2834/0, 2-22=-8590/0, 10-13=0/2272, 2-21=0/4158, 9-13=-2328/0, 3-21=-4434/0, 9-15=0/1895, 8-15=-1757/0, 8-16=0/1767, 5-19=-1311/0, 7-16=-2832/0, 6-19=0/2234, 6-18=-904/0, 7-17=0/988

- NOTES**
- 4-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 0-9-0 oc.  
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Attach TC w/ 1/2" diam. bolts (ASTM A-307) in the center of the member w/washers at 4-0-0 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.
  - All plates are 3x5 MT20 unless otherwise indicated.
  - The Fabrication Tolerance at joint 14 = 11%, joint 4 = 11%
  - 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.
  - Load case(s) 1 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
  - Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 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  
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 12-22=-8, 1-23=-955, 11-23=-80

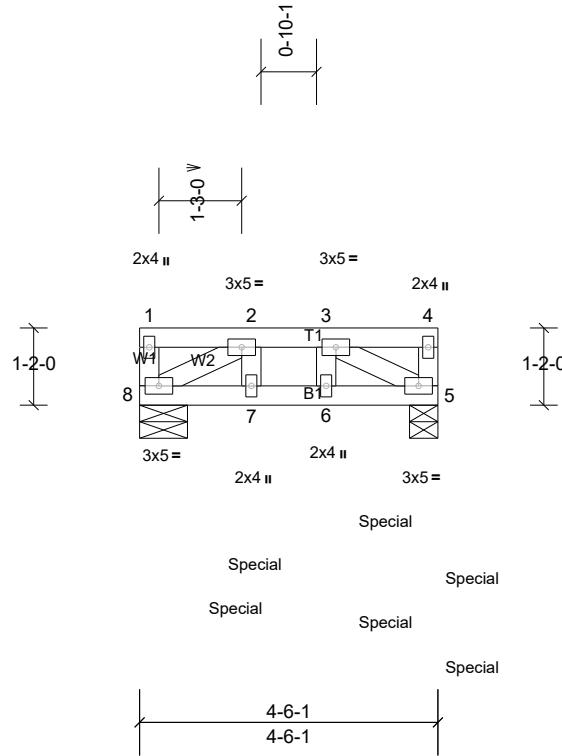
Job 21020141-A	Truss FG202	Truss Type Floor Girder	Qty 1	Ply 2	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:34.9

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	0.20	Vert(LL)	-0.02	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.02	6-7	>999	240		
BCLL	0.0	Rep Stress Incr	NO	WB	0.33	Horz(CT)	0.01	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-MSH							Weight: 42 lb	FT = 11%

**LUMBER**

TOP CHORD 2x4 SP No.2  
 BOT CHORD 2x4 SP No.2  
 WEBS 2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 4-6-1 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 5=2362/0-5-2, (min. 0-1-8), 8=1667/0-8-11, (min. 0-1-8)

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

TOP CHORD 2-3=-2578/0  
 BOT CHORD 7-8=0/2578, 6-7=0/2578, 5-6=0/2578  
 WEBS 3-5=-2784/0, 2-7=0/1347, 3-6=0/1404, 2-8=-2797/0

**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 0-4-0 oc.  
 Web 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.
- 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 10-00-00 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 892 lb down at 1-5-7, 498 lb down at 1-8-15, 623 lb down at 3-0-10, 892 lb down at 3-0-10, and 147 lb down at 4-4-5, and 515 lb down at 4-4-5 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 (lb/ft)  
 Vert: 5-8=-10, 1-4=-100  
 Concentrated Loads (lb)  
 Vert: 5=-661 (F=-515, B=-147), 7=-1390 (F=-498, B=-892), 6=-1515 (F=-623, B=-892)

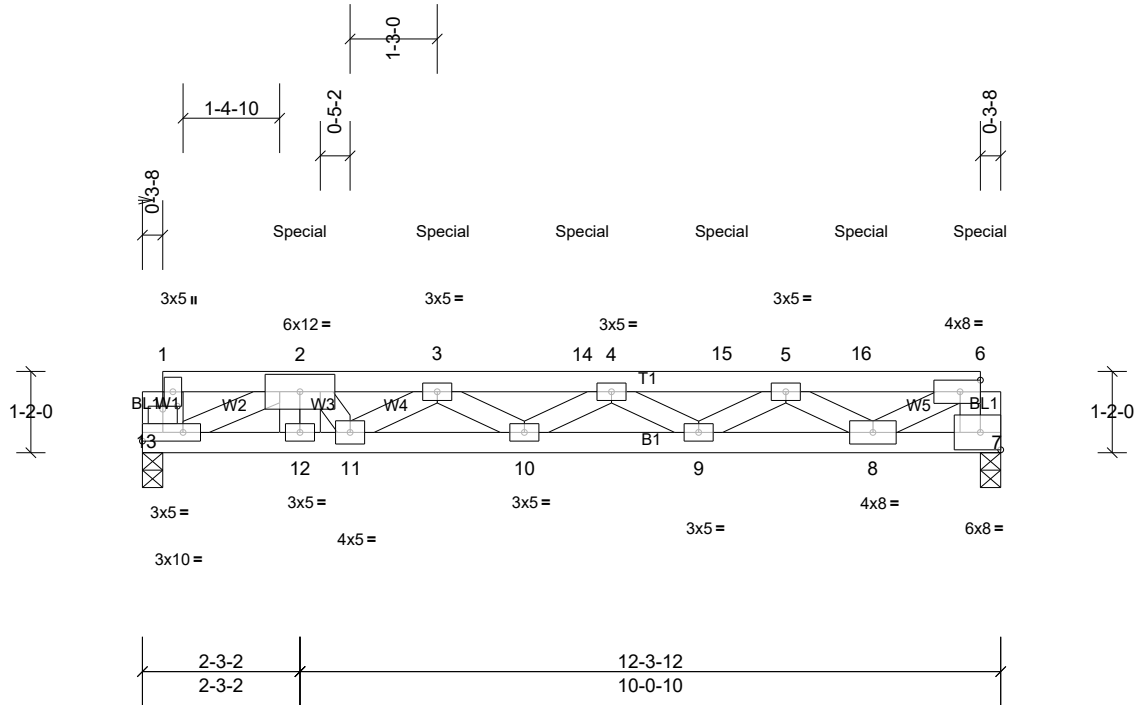
Job 21020141-A	Truss FG203	Truss Type Floor Girder	Qty 1	Ply 2	2854 Norrington-Roof-Marinette Job Reference (optional)
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Scale = 1:33.2

Plate Offsets (X, Y): [1:0-2-8,0-0-8], [13:Edge,0-1-8]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	0.90	TC	Vert(LL)	-0.18	9-10	>799	240	MT20	244/190
TCDL	10.0	Plate Metal DOL	0.90	BC	Vert(CT)	-0.28	9-10	>509	180		
BCLL	0.0	Lumber DOL	0.90	WB	Horz(CT)	0.05	7	n/a	n/a		
BCDL	5.0	Rep Stress Incr Code	NO	Matrix-MSH							
		IRC2015/TPI2014									Weight: 117 lb FT = 11%

**LUMBER**

TOP CHORD 2x4 SP No.1  
 BOT CHORD 2x4 SP 2400F 2.0E  
 WEBS 2x4 SP No.3 \*Except\* W5:2x4 SP No.2  
 OTHERS 2x4 SP No.3

**BRACING**

TOP CHORD Structural wood sheathing directly applied or 2-10-15 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS** (lb/size) 7=3750/0-3-8, (min. 0-1-11), 13=3001/0-3-8, (min. 0-1-8)  
 Max Uplift 7=-810 (LC 6), 13=-732 (LC 6)  
 Max Grav 7=4053 (LC 4), 13=3243 (LC 4)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-13=-278/45, 6-7=-3834/771, 1-2=-495/111, 2-3=-8091/1798, 3-14=-10780/2213, 4-14=-10780/2213, 4-15=-9774/1941, 5-15=-9774/1941, 5-16=-4624/901, 6-16=-4624/901  
 BOT CHORD 12-13=-1502/6458, 11-12=-1502/6458, 10-11=-2196/10382, 9-10=-2264/11235, 8-9=-1633/8277, 7-8=-85/443  
 WEBS 2-12=-626/163, 2-13=-6525/1522, 6-8=-938/4808, 5-8=-4459/894, 5-9=-375/1827, 4-9=-1784/395, 4-10=-556/63, 3-10=-21/485, 3-11=-2797/485, 2-11=-466/2573

**NOTES**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x4 - 2 rows staggered at 0-3-0 oc.  
 Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
 Web 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.
- This truss is not designed to be used as a floor truss.
- All plates are 3x5 MT20 unless otherwise indicated.
- One LUGT2 USP connectors recommended to connect truss to bearing walls due to UPLIFT at j(s) 7 and 13. This connection is for uplift only and does not consider lateral forces.
- 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 10-00-00 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.
- Minimum of a double stud required directly beneath this truss to attach LUGT2 tiedown.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1523 lb down and 516 lb up at 2-3-2, 997 lb down and 240 lb up at 4-3-12, 997 lb down and 240 lb up at 6-3-12, and 997 lb down and 240 lb up at 8-3-12, and 997 lb down and 240 lb up at 10-3-12 on top chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Snow (balanced): Lumber Increase=0.90, Plate Increase=0.90 Plt. metal=0.90  
 Uniform Loads (lb/ft)

Job 21020141-A	Truss FG203	Truss Type Floor Girder	Qty 1	Ply 2	2854 Norrington-Roof-Marinette Job Reference (optional)
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Vert: 7-13=-8, 1-6=-16

Concentrated Loads (lb)

Vert: 2=-1523 (B), 6=-997 (B), 3=-987 (B), 14=-987 (B), 15=-987 (B), 16=-987 (B)