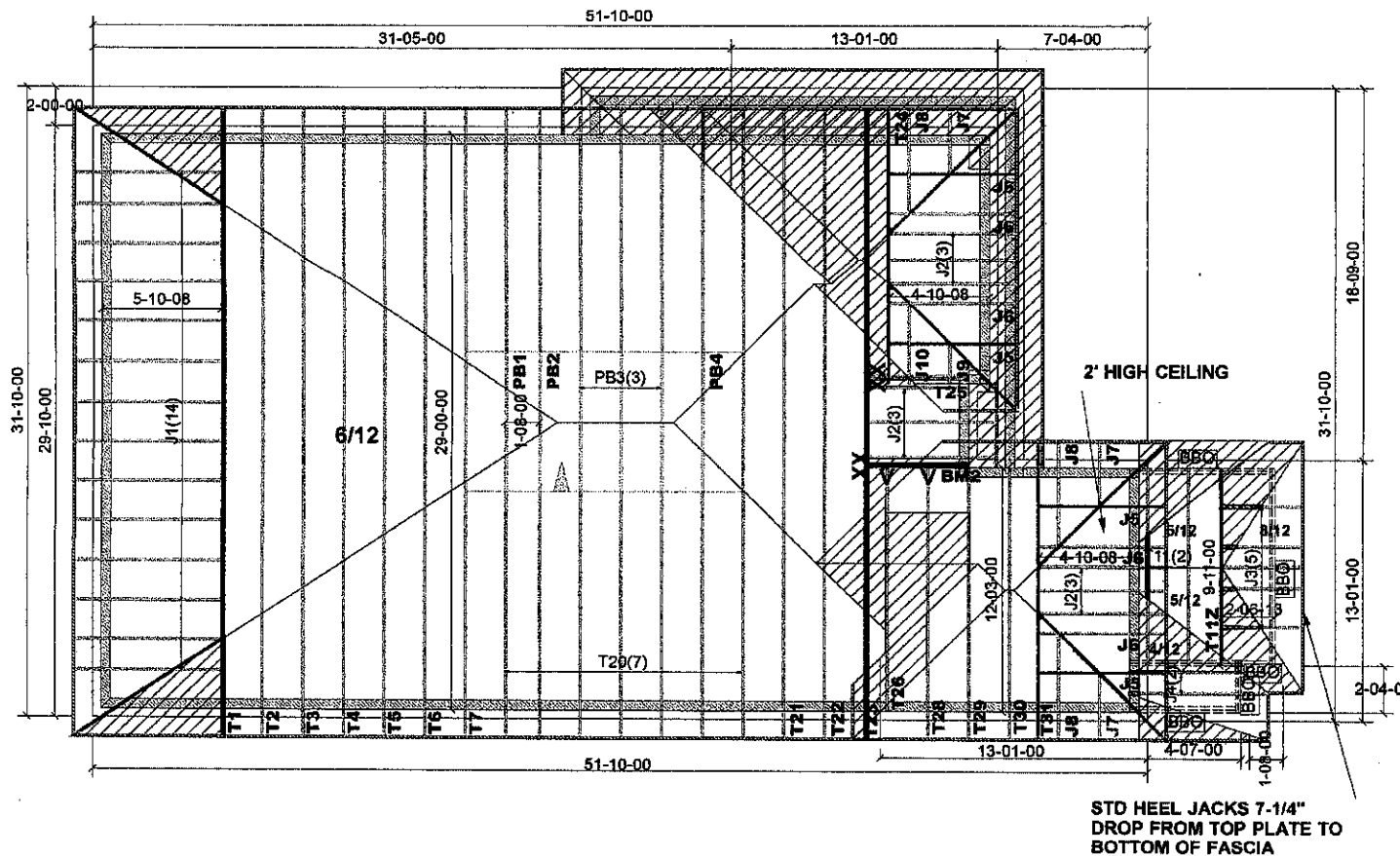


THIS STRUCTURE MUST BE  
CONSTRUCTED TO MEET OR  
EXCEED THE PROVISIONS OF  
THE ONTARIO BUILDING CODE

RECEIVED  
JUN 13 2019

TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.



# TRUSS PROFILES TO BE VERIFIED BY BUILDING DESIGNER

ALL CONVENTIONAL ROOF FRAMING TO  
CONFORM WITH PART 9 OF THE OBC.  
ROOF RAFTERS THAT MEET OR CROSS OVER  
TRUSSES ARE TO BE 2"x4"SPF@24"O.C.  
WITH 2"x4"SPF VERTICAL POST TO THE  
TRUSS UNDER AT EACH CROSS POINT.  
POSTS LONGER THAN 6' TO BE LATERALLY  
BRACED SO THAT THE DISTANCE  
BETWEEN END POINTS AND BETWEEN ROWS  
OF BRACING DOES NOT EXCEED 6'.

TRUSSES DESIGNED CONFORM WITH:  
ONTARIO BUILDING CODE (2012)  
OCCUPANCY: RESIDENTIAL | PART: 9

## DESIGN LOADS:

CITY: CALEDON  
G.S.L.= 37.6 psf  
TC DL= 6 psf  
BC LL= 10.50 psf  
BC DL= 7.00 psf

## NOTES:

FIN. OH.: 12"  
HEEL TYPE: R.T.M. CANT.  
EXT. WALLS: 2X6  
CLAD. TYPE 1: BRICK/5"  
CLAD. TYPE 2: SIDING/0"  
FSC SIZE: 2X6  
SHEATHING: ASPHALT SHINGLE

IF DESIGNED COMMERCIAL, REFER TO  
SEALED TRUSS DOCS FOR UPLIFT DESIGN

## HARDWARE:

LJS26DS (V) 2pcs  
HGUS26-2 (XX) 2pcs

CONV FRM BY OTHERS

T- 180737

## COMMENTS:

BM2: 2-2"x10" SPF #2  
9/12 PITCH UNLESS  
STATED OTHERWISE



Job Track: 50120  
Plan Log: 200168  
Layout ID: 400366

Builder / Location:

Greenpark / Caledon

Project: Lamberts Lane Home Corp.

Date: 2019-01-30 Designer: Brian

Model / Elevation:

Preston 1 / Elv. 2

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TAMARACK ROOF TRUSSES INC AND WILL BE RETRACTED BY TAMARACK ROOF TRUSSES INC IF UTILIZED FOR ANY OTHER  
PURPOSE.  
Milek ver 8.2.3.229



## DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER  
 Builder: Greenpark  
 Project: Lamberts Lane Home Corp.  
 Location: Caledon  
 Model: Preston 1  
 Lot #:   
 Elevation: 2

Job Track: 50120  
 PlanLog: 200168  
 Layout ID: 400366  
 Ref #  
 Page: 1 of 3  
 Date: 01-30-2019  
 Designer: Brian Faneca  
 Sales Rep: Mario DiCano

### Roof Trusses

| PROFILE | QTY<br>PLY | MARK<br>TYPE             | PITCH | SPAN     | HEIGHT   | LUMBER         | OVERHANG<br>LEFT<br>RIGHT | HEEL HEIGHT<br>LEFT<br>RIGHT | LBS.<br>BFT.     | BUNDLE #<br>STACK # | LOAD BY<br>REMARKS |
|---------|------------|--------------------------|-------|----------|----------|----------------|---------------------------|------------------------------|------------------|---------------------|--------------------|
|         | 1<br>2-ply | T1<br>Hip Girder         | 9/12  | 29-00-00 | 4-01-04  | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 277.77<br>176.00 |                     |                    |
|         | 1          | T2<br>Hip                | 9/12  | 29-00-00 | 5-01-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 128.51<br>81.33  |                     |                    |
|         | 1          | T3<br>Hip                | 9/12  | 29-00-00 | 6-01-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 127.01<br>81.33  |                     |                    |
|         | 1          | T4<br>Hip                | 9/12  | 29-00-00 | 7-01-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 124.95<br>83.17  |                     |                    |
|         | 1          | T5<br>Hip                | 9/12  | 29-00-00 | 8-01-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 142.21<br>91.67  |                     |                    |
|         | 1          | T6<br>Hip                | 9/12  | 29-00-00 | 9-01-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 141.68<br>90.50  |                     |                    |
|         | 1          | T7<br>Hip                | 9/12  | 29-00-00 | 10-01-04 | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 137.62<br>90.00  |                     |                    |
|         | 2          | T11<br>Common            | 5/12  | 9-11-00  | 2-06-02  | 2 x 4<br>2 x 6 |                           | 5-06<br>5-06                 | 63.43<br>38.00   |                     |                    |
|         | 1          | T11Z<br>Common<br>Girder | 5/12  | 9-11-00  | 2-06-02  | 2 x 4<br>2 x 6 |                           | 5-06<br>5-06                 | 31.71<br>19.00   |                     |                    |
|         | 7          | T20<br>Hip               | 9/12  | 29-00-00 | 9-09-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 982.24<br>627.67 |                     |                    |
|         | 1          | T21<br>Hip               | 9/12  | 29-00-00 | 8-03-04  | 2 x 4          | 1-03-08<br>1-05-00        | 1-06-04<br>1-06-04           | 143.64<br>91.67  |                     |                    |
|         | 1          | T22<br>Hip               | 9/12  | 29-00-00 | 6-09-04  | 2 x 4          | 1-03-08<br>1-03-08        | 1-06-04<br>3-06-04           | 130.91<br>84.17  |                     |                    |
|         | 1<br>2-ply | T23<br>Hip Girder        | 9/12  | 29-00-00 | 5-02-02  | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08        | 1-06-04<br>3-06-04           | 297.22<br>185.33 |                     |                    |
|         | 1          | T24<br>Hip Girder        | 9/12  | 12-06-00 | 5-02-02  | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 66.02<br>43.67   |                     |                    |



## DELIVERY SHIPLIST

Lumber Yard: TAMARACK LUMBER  
 Builder: Greenpark  
 Project: Lamberts Lane Home Corp.  
 Location: Caledon  
 Model: Preston 1  
 Lot #:   
 Elevation: 2

Job Track: 50120  
 PlanLog: 200168  
 Layout ID: 400366  
 Ref #  
 Page: 2 of 3  
 Date: 01-30-2019  
 Designer: Brian Faneca  
 Sales Rep: Mario DiCano

### Roof Trusses

| PROFILE | QTY<br>PLY | MARK<br>TYPE      | PITCH  | SPAN     | HEIGHT  | LUMBER         | OVERHANG<br>LEFT<br>RIGHT | HEEL HEIGHT<br>LEFT<br>RIGHT | LBS.<br>BFT.     | BUNDLE #<br>STACK # | LOAD BY<br>REMARKS |
|---------|------------|-------------------|--------|----------|---------|----------------|---------------------------|------------------------------|------------------|---------------------|--------------------|
|         | 1<br>2-ply | T25<br>Flat       | 0 / 12 | 4-10-08  | 2-00-00 | 2 x 6          |                           | 2-00-00<br>2-00-00           | 47.71<br>31.33   |                     |                    |
|         | 1          | T26<br>Common     | 9 / 12 | 12-03-00 | 7-01-06 | 2 x 4          |                           | 3-06-04<br>1-06-04           | 54.62<br>36.50   |                     |                    |
|         | 1          | T28<br>Hip        | 9 / 12 | 12-03-00 | 5-02-11 | 2 x 4          | 1-03-08                   | 3-06-04<br>3-06-04           | 61.76<br>40.33   |                     |                    |
|         | 1          | T29<br>Hip        | 9 / 12 | 12-03-00 | 6-08-11 | 2 x 4          | 1-03-08                   | 3-06-04<br>3-06-04           | 63.62<br>42.50   |                     |                    |
|         | 1          | T30<br>Common     | 9 / 12 | 12-03-00 | 8-01-06 | 2 x 4          | 1-03-08<br>1-03-08        | 3-06-04<br>3-06-04           | 68.04<br>43.33   |                     |                    |
|         | 1          | T31<br>Hip Girder | 9 / 12 | 12-03-00 | 5-02-02 | 2 x 4<br>2 x 6 | 1-03-08<br>1-03-08        | 1-06-04<br>1-06-04           | 63.78<br>40.50   |                     |                    |
|         | 1          | PB1<br>Piggyback  | 9 / 12 | 7-00-00  | 1-04-00 | 2 x 4          |                           |                              | 16.44<br>11.67   |                     |                    |
|         | 1          | PB2<br>Piggyback  | 9 / 12 | 7-00-00  | 2-02-00 | 2 x 4          |                           |                              | 18.43<br>12.67   |                     |                    |
|         | 3          | PB3<br>Piggyback  | 9 / 12 | 7-00-00  | 2-07-08 | 2 x 4          |                           |                              | 49.22<br>32.00   |                     |                    |
|         | 1          | PB4<br>Piggyback  | 9 / 12 | 7-00-00  | 1-06-00 | 2 x 4          |                           |                              | 16.84<br>11.00   |                     |                    |
|         | 14         | J1<br>Jack-Open   | 6 / 12 | 5-10-08  | 4-01-04 | 2 x 4          | 1-03-08                   | 1-02-00<br>4-01-04           | 235.12<br>149.33 |                     |                    |
|         | 9          | J2<br>Jack-Open   | 9 / 12 | 4-10-08  | 5-02-02 | 2 x 4          | 1-03-08                   | 1-06-04<br>5-02-02           | 157.31<br>103.50 |                     |                    |
|         | 5          | J3<br>Jack-Open   | 8 / 12 | 2-06-13  | 2-11-01 | 2 x 4          | 1-03-08                   | 9-10<br>2-06-02              | 44.21<br>30.00   |                     |                    |
|         | 2          | J4<br>Jack-Open   | 4 / 12 | 5-05-08  | 2-07-03 | 2 x 4          | 1-05-00                   | 3-15<br>2-01-12              | 29.2<br>18.67    |                     |                    |

# DELIVERY SHIPLIST



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Job Track: 50120  
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## Roof Trusses

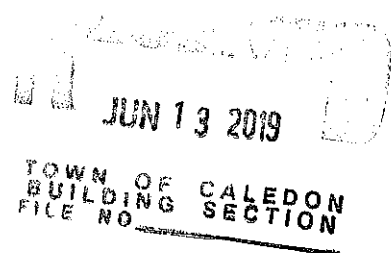
| PROFILE | QTY<br>PLY | MARK<br>TYPE              | PITCH  | SPAN    | HEIGHT  | LUMBER | OVERHANG<br>LEFT<br>RIGHT | HEEL HEIGHT<br>LEFT<br>RIGHT | LBS.<br>BFT.   | BUNDLE #<br>STACK # | LOAD BY<br>REMARKS |
|---------|------------|---------------------------|--------|---------|---------|--------|---------------------------|------------------------------|----------------|---------------------|--------------------|
|         | 4          | J5<br>Jack-Open<br>Girder | 9 / 12 | 1-09-07 | 2-10-05 | 2 x 4  | 1-03-08<br>3-01-01        | 1-06-04<br>2-10-05           | 52.31<br>38.00 |                     |                    |
|         | 4          | J6<br>Jack-Open           | 9 / 12 | 3-09-07 | 4-04-05 | 2 x 4  | 1-03-08<br>1-01-01        | 1-06-04<br>4-04-05           | 63.71<br>43.33 |                     |                    |
|         | 3          | J7<br>Jack-Open           | 9 / 12 | 1-09-07 | 2-10-05 | 2 x 4  | 1-03-08<br>1-01           | 1-06-04<br>2-10-05           | 28.72<br>21.00 |                     |                    |
|         | 3          | J8<br>Jack-Open           | 9 / 12 | 1-10-08 | 4-04-05 | 2 x 4  | 1-03-08<br>1-10-15        | 1-06-04<br>2-11-02           | 37.27<br>25.00 |                     |                    |
|         | 1          | J9<br>Jack-Open           | 9 / 12 | 1-10-08 | 2-10-05 | 2 x 4  |                           | 1-06-04<br>2-11-02           | 7.73<br>5.67   |                     |                    |
|         | 1          | J10<br>Jack-Open          | 9 / 12 | 1-10-08 | 4-04-05 | 2 x 4  | 1-10-15                   | 1-06-04<br>2-11-02           | 10.58<br>7.00  |                     |                    |

TOTAL # TRUSS= 82 TOTAL BFT OF ALL TRUSSES= 2526.84 BFT. TOTAL WEIGHT OF ALL TRSSES 3921.55 LBS

## HARDWARE

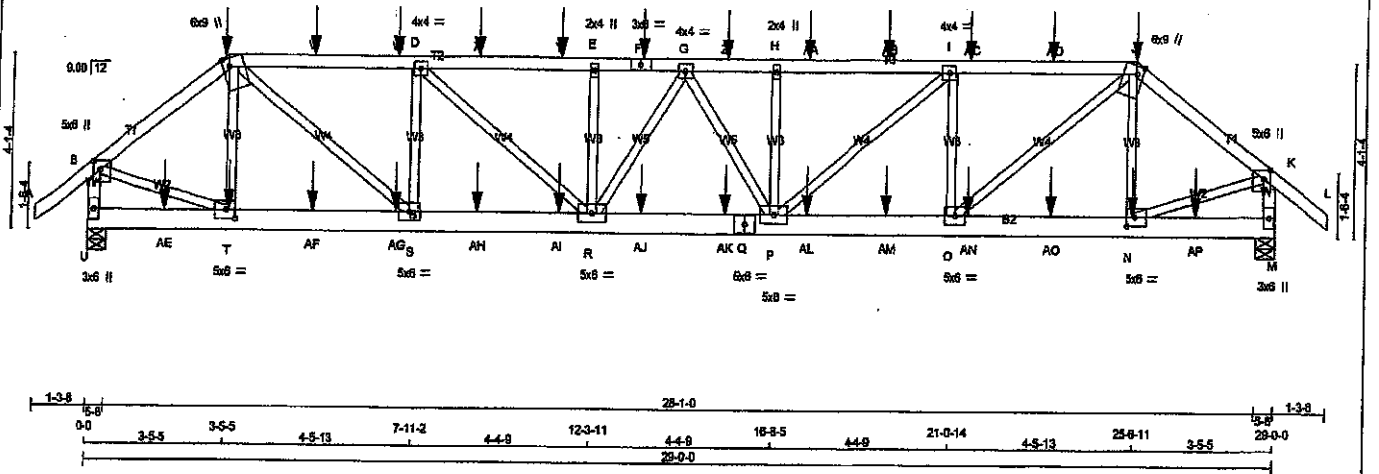
| QTY | TYPE     | MODEL    | LENGTH |
|-----|----------|----------|--------|
| 2   | Hardware | LJS26DS  |        |
| 2   | Hardware | HGUS26-2 |        |

TOTAL NUMBER OF ITEMS= 4



|                                  |                         |                      |                 |                               |          |
|----------------------------------|-------------------------|----------------------|-----------------|-------------------------------|----------|
| JOB NAME<br><b>200168-400364</b> | TRUSS NAME<br><b>T1</b> | QUANTITY<br><b>1</b> | PLY<br><b>2</b> | JOB DESC.<br><b>Preston 1</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                         |                      |                 | TRUSS DESC.                   |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Tue Feb 5 20:42:02 2019 Page 1  
ID:IFxHFXe38FX8N?VhzQQIYyQBwW-y3Li3e65Ho6YZZ77JQ5CsLDbz7qDH5NqYNWu5zo56J  
1-3-8 0-0 3-5-5 3-5-5 4-5-13 7-11-2 4-4-9 12-3-11 2-2-5 14-6-9 2-2-5 16-8-5 4-4-9 21-0-14 4-5-13 25-6-11 3-5-5 29-0-0 30-3-8 1-3-8  
Scale = 1/32.0



TOTAL WEIGHT = 2 X 139 = 278 lb

| CHORDS | SIZE | LUMBER   | DESCR. |
|--------|------|----------|--------|
| A - C  | 2x4  | DRY No.2 | SPF    |
| C - F  | 2x4  | DRY No.2 | SPF    |
| F - J  | 2x4  | DRY No.2 | SPF    |
| J - L  | 2x4  | DRY No.2 | SPF    |
| U - B  | 2x4  | DRY No.2 | SPF    |
| M - K  | 2x4  | DRY No.2 | SPF    |
| U - Q  | 2x6  | DRY No.2 | SPF    |
| Q - M  | 2x6  | DRY No.2 | SPF    |

ALL WEBS 2x3 DRY No.2 SPF  
EXCEPT  
DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS #ROWS                             | SURFACE SPACING (IN) | LOAD(PLF)   |
|------------------------------------------|----------------------|-------------|
| TOP CHORDS : (0.122"x3") SPIRAL NAILS    |                      |             |
| A-C                                      | 12                   | SIDE(81.0)  |
| C-F                                      | 12                   | SIDE(81.0)  |
| F-J                                      | 12                   | SIDE(81.0)  |
| J-L                                      | 12                   | SIDE(81.0)  |
| U-B                                      | 12                   | TOP         |
| M-K                                      | 12                   | TOP         |
| BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS |                      |             |
| U-Q                                      | 12                   | SIDE(183.1) |
| Q-M                                      | 12                   | SIDE(183.1) |
| WEBS : (0.122"x3") SPIRAL NAILS          |                      |             |
| 2x3                                      | 6                    |             |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UCL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

| PLATES (table in inches) | PLATES  | W    | LEN | Y   | X         |
|--------------------------|---------|------|-----|-----|-----------|
| JT TYPE                  |         |      |     |     |           |
| B                        | TMVW+p  | MT20 | 5.0 | 6.0 | 2.50 2.00 |
| C                        | TTWW+m  | MT20 | 6.0 | 9.0 | Edge 2.00 |
| D, G, I                  |         |      |     |     |           |
| D                        | TMVW+m  | MT20 | 4.0 | 4.0 |           |
| E                        | TMVW+w  | MT20 | 2.0 | 4.0 |           |
| F                        | TS-t    | MT20 | 3.0 | 6.0 |           |
| H                        | TMVW+w  | MT20 | 2.0 | 4.0 |           |
| J                        | TTWW+m  | MT20 | 6.0 | 9.0 | Edge 2.00 |
| K                        | TMVW+p  | MT20 | 5.0 | 6.0 | 2.50 2.00 |
| M                        | BMVW+p  | MT20 | 3.0 | 6.0 |           |
| N                        | BMVW+t  | MT20 | 5.0 | 6.0 | 2.50 2.50 |
| O                        | BMVW+t  | MT20 | 5.0 | 6.0 |           |
| P                        | BMVWV+t | MT20 | 5.0 | 6.0 |           |
| Q                        | BS-t    | MT20 | 5.0 | 6.0 |           |
| R                        | BMVWV+t | MT20 | 5.0 | 6.0 |           |
| S                        | BMVW+t  | MT20 | 5.0 | 6.0 | 2.50 2.50 |
| T                        | BMVW+t  | MT20 | 5.0 | 6.0 |           |
| U                        | BMVW+p  | MT20 | 3.0 | 6.0 |           |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS       |      |      |                  |      |        |       |       |  |
|----------------|------|------|------------------|------|--------|-------|-------|--|
| FACTORED       |      |      | MAXIMUM FACTORED |      |        | INPUT | REQRD |  |
| GROSS REACTION |      |      | GROSS REACTION   |      |        | BRG   | BRG   |  |
| JT             | VERT | HORZ | DOWN             | HORZ | UPLIFT | IN-SX | IN-SX |  |
| U              | 3644 | 0    | 3644             | 0    | 0      | 5-8   | 5-8   |  |
| M              | 3643 | 0    | 3643             | 0    | 0      | 5-8   | 5-8   |  |

| UNFACTORED REACTIONS |      | 1ST LCASE |          | MAX./MIN. COMPONENT REACTIONS |       | WIND      |         | DEAD  |       | SOIL  |       |
|----------------------|------|-----------|----------|-------------------------------|-------|-----------|---------|-------|-------|-------|-------|
|                      |      | JT        | COMBINED | SNOW                          | LIVE  | PERM/LIVE |         |       |       |       |       |
| U                    | 2712 | 1532 / 0  | 514 / 0  | 0 / 0                         | 0 / 0 | 0 / 0     | 666 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 |
| M                    | 2711 | 1531 / 0  | 514 / 0  | 0 / 0                         | 0 / 0 | 0 / 0     | 666 / 0 | 0 / 0 | 0 / 0 | 0 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) U, M

BRACING  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.43 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING  
TOTAL LOAD CASES: (4)

| CHORDS |                           |                     |           | WEBS          |                    |       |                           |               |
|--------|---------------------------|---------------------|-----------|---------------|--------------------|-------|---------------------------|---------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD | LC1 (PLF) | MAX. CSI (LC) | MAX. UNBRAC LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) |
| FR-TO  |                           | FROM                | TO        |               |                    | FR-TO |                           |               |
| A-B    | 0 / 42                    | -102.1              | -102.1    | 0.08 (1)      | 10.00              | T-C   | -633 / 0                  | 0.08 (1)      |
| B-C    | -3827 / 0                 | -102.1              | -102.1    | 0.18 (1)      | 4.88               | C-S   | 0 / 3202                  | 0.40 (1)      |
| C-V    | -5903 / 0                 | -102.1              | -102.1    | 0.40 (1)      | 3.79               | S-D   | -1768 / 0                 | 0.22 (1)      |
| V-W    | -5903 / 0                 | -102.1              | -102.1    | 0.40 (1)      | 3.79               | D-R   | 0 / 1473                  | 0.18 (1)      |
| W-D    | -5903 / 0                 | -102.1              | -102.1    | 0.40 (1)      | 3.79               | R-E   | -548 / 0                  | 0.07 (1)      |
| D-X    | -8624 / 0                 | -102.1              | -102.1    | 0.48 (1)      | 3.43               | P-H   | -543 / 0                  | 0.07 (1)      |
| X-Y    | -8624 / 0                 | -102.1              | -102.1    | 0.48 (1)      | 3.43               | P-I   | 0 / 1472                  | 0.18 (1)      |
| Y-E    | -8624 / 0                 | -102.1              | -102.1    | 0.48 (1)      | 3.43               | O-I   | -1768 / 0                 | 0.22 (1)      |
| E-F    | -8624 / 0                 | -102.1              | -102.1    | 0.28 (1)      | 3.82               | O-J   | 0 / 3201                  | 0.40 (1)      |
| F-G    | -8624 / 0                 | -102.1              | -102.1    | 0.28 (1)      | 3.82               | N-J   | -633 / 0                  | 0.08 (1)      |
| G-Z    | -8622 / 0                 | -102.1              | -102.1    | 0.28 (1)      | 3.82               | B-T   | 0 / 3200                  | 0.40 (1)      |
| Z-H    | -8622 / 0                 | -102.1              | -102.1    | 0.28 (1)      | 3.82               | N-K   | 0 / 3199                  | 0.40 (1)      |
| H-AA   | -8622 / 0                 | -102.1              | -102.1    | 0.48 (1)      | 3.43               | R-G   | -145 / 0                  | 0.02 (1)      |
| AA-AB  | -8622 / 0                 | -102.1              | -102.1    | 0.48 (1)      | 3.43               | G-P   | -150 / 0                  | 0.02 (1)      |
| AB-I   | -8622 / 0                 | -102.1              | -102.1    | 0.48 (1)      | 3.43               |       |                           |               |
| I-AC   | -5501 / 0                 | -102.1              | -102.1    | 0.40 (1)      | 3.79               |       |                           |               |
| AC-AD  | -5501 / 0                 | -102.1              | -102.1    | 0.40 (1)      | 3.79               |       |                           |               |
| AD-J   | -5501 / 0                 | -102.1              | -102.1    | 0.40 (1)      | 3.79               |       |                           |               |
| J-K    | -3828 / 0                 | -102.1              | -102.1    | 0.18 (1)      | 4.69               |       |                           |               |
| K-L    | 0 / 42                    | -102.1              | -102.1    | 0.08 (1)      | 10.00              |       |                           |               |
| U-B    | -3578 / 0                 | 0.0                 | 0.0       | 0.20 (1)      | 8.20               |       |                           |               |
| M-K    | -3577 / 0                 | 0.0                 | 0.0       | 0.20 (1)      | 8.20               |       |                           |               |
| U-AE   | 0 / 0                     | -38.5               | -38.5     | 0.05 (3)      | 10.69              |       |                           |               |
| AE-T   | 0 / 0                     | -38.5               | -38.5     | 0.05 (3)      | 10.69              |       |                           |               |
| T-AF   | 0 / 3036                  | -38.5               | -38.5     | 0.24 (1)      | 10.69              |       |                           |               |
| AF-AG  | 0 / 3036                  | -38.5               | -38.5     | 0.24 (1)      | 10.69              |       |                           |               |
| AG-S   | 0 / 3036                  | -38.5               | -38.5     | 0.24 (1)      | 10.69              |       |                           |               |
| S-AH   | 0 / 5503                  | -38.5               | -38.5     | 0.42 (1)      | 10.69              |       |                           |               |
| AH-AI  | 0 / 5503                  | -38.5               | -38.5     | 0.42 (1)      | 10.69              |       |                           |               |
| AI-R   | 0 / 5503                  | -38.5               | -38.5     | 0.42 (1)      | 10.69              |       |                           |               |
| R-AJ   | 0 / 6898                  | -38.5               | -38.5     | 0.50 (1)      | 10.69              |       |                           |               |
| AJ-AK  | 0 / 6898                  | -38.5               | -38.5     | 0.50 (1)      | 10.69              |       |                           |               |
| AK-Q   | 0 / 6898                  | -38.5               | -38.5     | 0.50 (1)      | 10.69              |       |                           |               |
| Q-P    | 0 / 6898                  | -38.5               | -38.5     | 0.50 (1)      | 10.69              |       |                           |               |
| P-AL   | 0 / 5501                  | -38.5               | -38.5     | 0.42 (1)      | 10.69              |       |                           |               |
| AL-AM  | 0 / 5501                  | -38.5               | -38.5     | 0.42 (1)      | 10.69              |       |                           |               |
| AM-O   | 0 / 5501                  | -38.5               | -38.5     | 0.42 (1)      | 10.69              |       |                           |               |
| O-AN   | 0 / 3035                  | -38.5               | -38.5     | 0.24 (1)      | 10.69              |       |                           |               |
| AN-AO  | 0 / 3035                  | -38.5               | -38.5     | 0.24 (1)      | 10.69              |       |                           |               |

02/05/14

H. J. G. ALVES

100009024

PROVINCE OF ONTARIO

DWG NO: 1190 2

STRUCTURAL

COMPONENT ONLY

DESIGN CRITERIA  
\*\*\* SPECIAL LOADS ANALYSIS \*\*\*  
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.  
LOADS WERE DERIVED FROM USER INPUT  
NO FURTHER MODIFICATIONS WERE MADE

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.9 IN. CG

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

\*\*\* NON STANDARD GIRDER \*\*\*  
ADD'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/860 (0.97")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.18")  
ALLOWABLE DEFL.(TL) = L/860 (0.97")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.26")

CSI: TC=0.46/1.00 (D-E:1), BC=0.50/1.00 (P-R:1), WB=0.40/1.00 (C-S:1), SS=0.20/1.00 (I-J:1)

DOL LUMBER=1.00 NAIL=1.00 LBS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

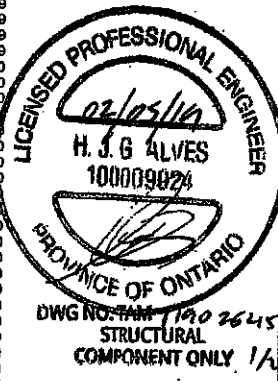
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 778 1987 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP=0.88 (J) (INPUT = 0.90)  
JSI METAL=0.62 (C) (INPUT = 1.00)



|                                 |                  |               |          |                                                                                                                                                              |             |          |
|---------------------------------|------------------|---------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|----------|
| JOB NAME<br>200168-400364       | TRUSS NAME<br>T1 | QUANTITY<br>1 | PLY<br>2 | JOB DESC.<br>Preston 1                                                                                                                                       | TRUSS DESC. | DRWG NO. |
| Tamarack Roof Truss, Burlington |                  |               |          | Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Tue Feb 5 20:42:02 2019 Page 2<br>ID:IFxHXfe38FX8N7VhzQQIYyQBwWV-y3L3s65Hc6YZ77IQ5CsLDbz7qDHSNgYNWu5zo56J |             |          |

Edge - INDICATES REFERENCE CORNER OF PLATE  
TOUCHES EDGE OF CHORD.

#### LOADING

TOTAL LOAD CASES: (4)

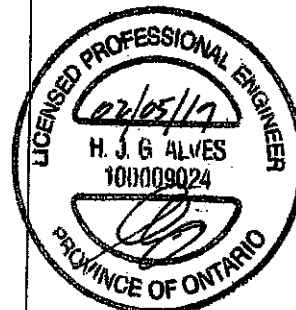
| CHORDS |                           |                           |                  | WEBS                    |       |                           |              |
|--------|---------------------------|---------------------------|------------------|-------------------------|-------|---------------------------|--------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX CS1 (LC) | MAX UNBRAC LENGTH FR-TO | MEMB. | MAX. FACTORED FORCE (LBS) | MAX CS1 (LC) |
| FR-TO  |                           | FROM                      | TO               |                         |       |                           |              |
| AD-N   | 0/3035                    | -38.5                     | -38.5            | 0.24 (1)                | 10.00 |                           |              |
| N-AP   | 0/0                       | -38.5                     | -38.5            | 0.05 (3)                | 10.00 |                           |              |
| AP-M   | 0/0                       | -38.5                     | -38.5            | 0.05 (3)                | 10.00 |                           |              |

#### FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.    | LC1  | MAX- | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|----|---------|------|------|------|-------|------|-------|------|-------|
| C  | 3-6-5   | -50  | -55  | -    | FRONT | VERT | DEAD  | -    | -     |
| C  | 3-6-5   | -130 | -130 | -    | FRONT | VERT | TOTAL | -    | -     |
| C  | 3-6-5   | -285 | -285 | -    | FRONT | VERT | SNOW  | -    | -     |
| F  | 13-6-1  | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| J  | 25-6-11 | -50  | -55  | -    | FRONT | VERT | DEAD  | -    | -     |
| J  | 25-6-11 | -130 | -130 | -    | FRONT | VERT | TOTAL | -    | -     |
| J  | 25-6-11 | -285 | -285 | -    | FRONT | VERT | SNOW  | -    | -     |
| N  | 25-5-15 | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| T  | 3-6-1   | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| V  | 5-6-1   | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| W  | 7-6-1   | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| X  | 9-6-1   | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| Y  | 11-6-1  | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| Z  | 15-5-15 | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| AA | 17-5-15 | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| AB | 19-5-15 | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| AC | 21-5-15 | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| AD | 23-5-15 | -123 | -123 | -    | FRONT | VERT | TOTAL | -    | -     |
| AE | 1-11-4  | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AF | 5-8-1   | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AG | 7-8-1   | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AH | 9-8-1   | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AI | 11-8-1  | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AJ | 13-6-1  | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AK | 15-5-15 | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AL | 17-5-15 | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AM | 19-5-15 | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AN | 21-5-15 | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AO | 23-5-15 | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |
| AP | 27-0-12 | -55  | -70  | -    | FRONT | VERT | TOTAL | -    | -     |

RECEIVED  
JUN 13 2019

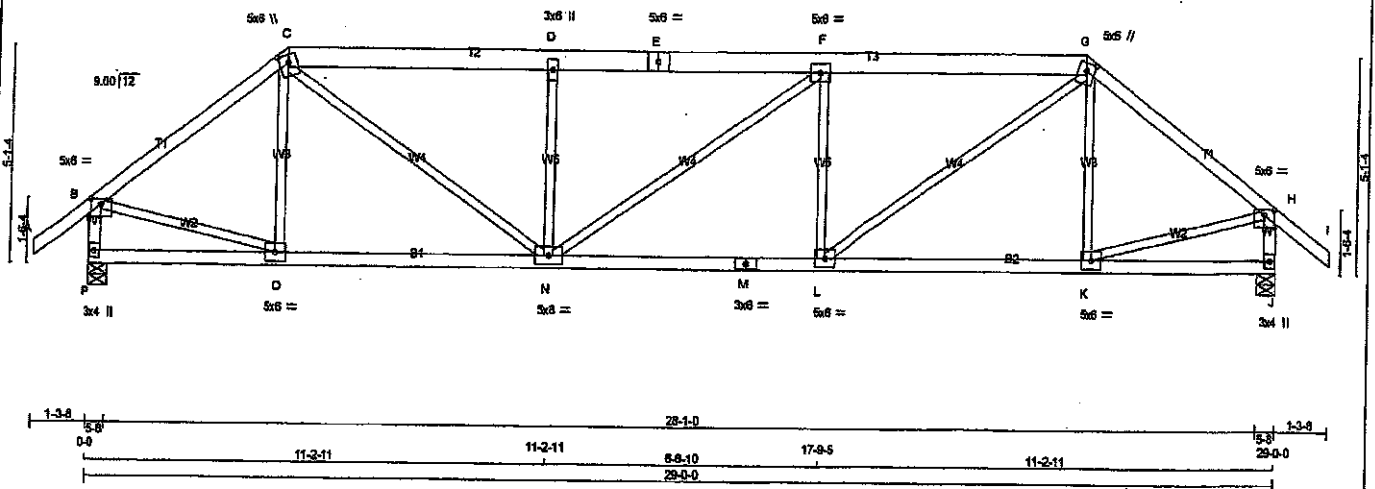
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO



DWG NO. TAM T1902605  
STRUCTURAL  
COMPONENT ONLY 7/2

|                                  |                         |                      |                 |                               |          |
|----------------------------------|-------------------------|----------------------|-----------------|-------------------------------|----------|
| JOB NAME<br><b>200168-400364</b> | TRUSS NAME<br><b>T2</b> | QUANTITY<br><b>2</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Preston 1</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                         |                      |                 | TRUSS DESC.                   |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Tue Feb 5 20:42:04 2019 Page 1  
ID:IFxPHXfe38FX8N7VhzQQYyQBwW-uRSSUX8LoPMGoiH8qr7gxmlw8SmjhAWglasy\_zo56H  
28-0-0 30-3-8  
Scale = 1:50.0



| LUMBERS                   |        |      |        |        |
|---------------------------|--------|------|--------|--------|
| N. L. G. A. RULES         | CHORDS | SIZE | LUMBER | DESCR. |
| A - C                     | 2x4    | DRY  | No.2   | SPF    |
| C - E                     | 2x6    | DRY  | No.2   | SPF    |
| E - G                     | 2x6    | DRY  | No.2   | SPF    |
| G - I                     | 2x4    | DRY  | No.2   | SPF    |
| I - B                     | 2x4    | DRY  | No.2   | SPF    |
| B - H                     | 2x4    | DRY  | No.2   | SPF    |
| H - M                     | 2x4    | DRY  | No.2   | SPF    |
| M - J                     | 2x4    | DRY  | No.2   | SPF    |
| ALL WEBS 2x3 DRY No.2 SPF |        |      |        |        |
| EXCEPT                    |        |      |        |        |
| DRY: SEASONED LUMBER.     |        |      |        |        |

#### PLATES (table in inches)

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| B  | TMVVV-p | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| C  | TTVVV+m | MT20   | 5.0 | 8.0 | 2.25 | 2.50 |
| D  | TMVVV-w | MT20   | 3.0 | 6.0 |      |      |
| E  | TS-1    | MT20   | 5.0 | 6.0 |      |      |
| F  | TMVVV-l | MT20   | 5.0 | 6.0 |      |      |
| G  | TTVVV+m | MT20   | 5.0 | 8.0 | 2.25 | 2.50 |
| H  | TMVVV-p | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| J  | BMVVV-p | MT20   | 3.0 | 4.0 |      |      |
| K  | BS-1    | MT20   | 5.0 | 6.0 |      |      |
| M  | BS-1    | MT20   | 3.0 | 6.0 |      |      |
| N  | BMVVV-l | MT20   | 5.0 | 6.0 |      |      |
| P  | BMVVV-p | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

|    | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | RECORD BRG |
|----|-------------------------|---------------------------------|-----------|------------|
| JT | VERT                    | HORZ                            | DOWN      | HORZ       |
| P  | 2180                    | 0                               | 2180      | 0          |
| J  | 2180                    | 0                               | 2180      | 0          |

##### UNFACTORED REACTIONS

|   | 1ST LOASE | MAX/MIN. COMPONENT REACTIONS |       |           |      |       |      |
|---|-----------|------------------------------|-------|-----------|------|-------|------|
|   |           | SNOW                         | LIVE  | PERM.LIVE | WIND | DEAD  | SOIL |
| P | 1620      | 922/0                        | 305/0 | 0/0       | 0/0  | 394/0 | 0/0  |
| J | 1620      | 922/0                        | 305/0 | 0/0       | 0/0  | 394/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) P, J

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.06 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.01 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |               | WEBS     |                           |                           |               |
|--------|---------------------------|---------------------------|---------------|----------|---------------------------|---------------------------|---------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. LC1 (LC) | MEMB.    | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. LC1 (LC) |
| FR-TO  |                           | FROM                      | TO            | FR-TO    |                           | FROM                      | TO            |
| A-B    | 0/42                      | -102.1                    | -102.1        | 0.14 (1) | 10.00                     | O-C                       | -201/98       |
| B-C    | -2157/0                   | -102.1                    | -102.1        | 0.54 (1) | 4.06                      | K-G                       | -201/98       |
| C-D    | -3071/0                   | -102.1                    | -102.1        | 0.32 (1) | 4.52                      | B-O                       | 0/1785        |
| D-E    | -3071/0                   | -102.1                    | -102.1        | 0.32 (1) | 4.52                      | K-H                       | 0/1785        |
| E-F    | -3071/0                   | -102.1                    | -102.1        | 0.32 (1) | 4.52                      | L-G                       | 0/1681        |
| F-G    | -3071/0                   | -102.1                    | -102.1        | 0.32 (1) | 4.52                      | C-N                       | 0/1681        |
| G-H    | -2157/0                   | -102.1                    | -102.1        | 0.54 (1) | 4.06                      | L-F                       | -732/0        |
| H-I    | 0/42                      | -102.1                    | -102.1        | 0.14 (1) | 10.00                     | N-D                       | -732/0        |
| P-B    | -2115/0                   | 0.0                       | 0.0           | 0.22 (1) | 5.83                      | N-F                       | 0/1           |
| J-H    | -2115/0                   | 0.0                       | 0.0           | 0.22 (1) | 5.83                      |                           |               |
| P-O    | 0/0                       | -38.5                     | -38.5         | 0.22 (3) | 10.00                     |                           |               |
| O-N    | 0/1734                    | -38.5                     | -38.5         | 0.47 (2) | 10.00                     |                           |               |
| N-M    | 0/3071                    | -38.5                     | -38.5         | 0.67 (1) | 10.00                     |                           |               |
| M-L    | 0/3071                    | -38.5                     | -38.5         | 0.67 (1) | 10.00                     |                           |               |
| L-K    | 0/1734                    | -38.5                     | -38.5         | 0.47 (2) | 10.00                     |                           |               |
| K-J    | 0/0                       | -38.5                     | -38.5         | 0.22 (3) | 10.00                     |                           |               |

TOTAL WEIGHT = 2 X 120 = 257 lb

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|                       |               |
|-----------------------|---------------|
| TOP CH.               | LL = 20.0 PSF |
| DL = 8.0 PSF          |               |
| BOT CH.               | LL = 10.5 PSF |
| DL = 7.0 PSF          |               |
| TOTAL LOAD = 52.5 PSF |               |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

##### THIS DESIGN COMPLIES WITH:

- PART 9 OF NBCC 2010, OBC 2012
- CSA 086-09, CSA 086-14
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/260 (0.97")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.14")  
ALLOWABLE DEFL.(TL) = L/360 (0.97")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.23")

CSI: TC=0.54/1.00 (B-C:1), BC=0.67/1.00 (L-N:1),  
WB=0.40/1.00 (H-K:1), SS=0.23/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LB BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

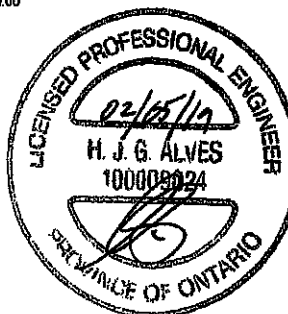
##### NAIL VALUES

| PLATE GRIP(DRY) SHEAR | SECTION                    |
|-----------------------|----------------------------|
| (PSI)                 | (PLI)                      |
| MAX MIN               | MAX MIN                    |
| MT20                  | 818 354 1887 788 1987 1856 |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP = 0.90 (K) (INPUT = 0.90)  
JSI METAL = 0.96 (M) (INPUT = 1.00)



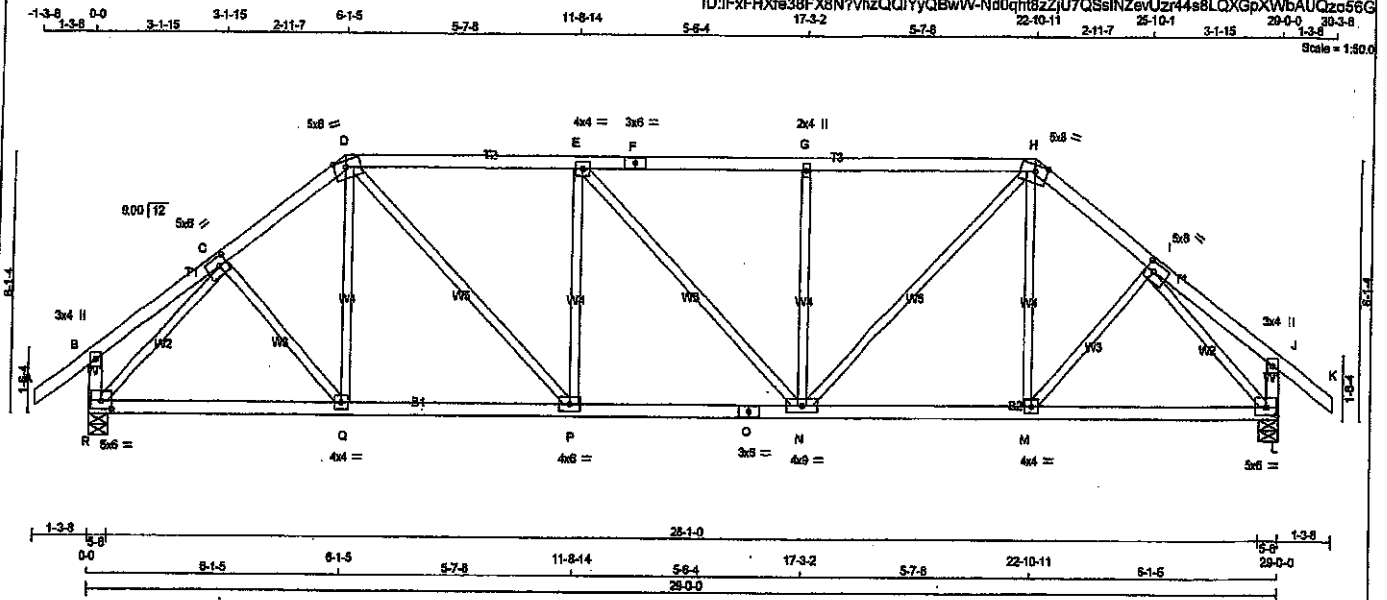
DWG NO. TAM 1100 2647  
STRUCTURAL  
COMPONENT ONLY

| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | DRWG NO. |
|---------------------------------|------------|----------|-----|-------------|----------|
| 200168-400364                   | T3         | 2        | 1   | Preston 1   |          |
| Tamarack Roof Truss, Burlington |            |          |     | TRUSS DESC. |          |

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Scale = 1:50.0



TOTAL WEIGHT = 2 X 127 = 254 LB

| LUMBER                | N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-----------------------|-------------------|--------|------|--------|--------|
| A - D                 | 2x4               | DRY    | No.2 | SPF    |        |
| D - F                 | 2x4               | DRY    | No.2 | SPF    |        |
| F - H                 | 2x4               | DRY    | No.2 | SPF    |        |
| H - K                 | 2x4               | DRY    | No.2 | SPF    |        |
| R - B                 | 2x4               | DRY    | No.2 | SPF    |        |
| L - J                 | 2x4               | DRY    | No.2 | SPF    |        |
| R - O                 | 2x4               | DRY    | No.2 | SPF    |        |
| O - L                 | 2x4               | DRY    | No.2 | SPF    |        |
| ALL WEBS              | 2x3               | DRY    | No.2 | SPF    |        |
| EXCEPT                |                   |        |      |        |        |
| DRY: SEASONED LUMBER. |                   |        |      |        |        |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED       | MAXIMUM FACTORED | INPUT  | REQD  |
|----------|----------------|------------------|--------|-------|
|          | GROSS REACTION | GROSS REACTION   | BRG    | BRG   |
| JT       | VERT           | DOWN             | UPLIFT | IN-SX |
| R        | 2180           | 0                | 0      | 5-8   |
| L        | 2180           | 0                | 0      | 5-8   |

| UNFACTORED REACTIONS | 1ST CASE | MAX. MIN. COMPONENT REACTIONS |
|----------------------|----------|-------------------------------|
| JT                   | COMBINED | SNOW                          |
| R                    | 1620     | 922 / 0                       |
| L                    | 1620     | 922 / 0                       |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) R, L

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.74 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**  
TOTAL LOAD CASES: (4)

| CHORDS | MEMB.     | MAX. FACTORED | FORCE  | VERT. LOAD | LC1   | MAX | CS1 (LC)  | UNBRAC   | LENGTH | FR-TO | WEBS | MEMB. | MAX. FACTORED | FORCE | MAX | CS1 (LC) |
|--------|-----------|---------------|--------|------------|-------|-----|-----------|----------|--------|-------|------|-------|---------------|-------|-----|----------|
| A-B    | 0 / 42    | -102.1        | -102.1 | 0.14 (1)   | 10.00 | C-Q | 0 / 212   | 0.05 (2) |        |       |      |       |               |       |     |          |
| B-C    | 0 / 18    | -102.1        | -102.1 | 0.12 (1)   | 10.00 | Q-D | 0 / 202   | 0.05 (3) |        |       |      |       |               |       |     |          |
| C-D    | -2175 / 0 | -102.1        | -102.1 | 0.18 (1)   | 4.46  | D-P | 0 / 1140  | 0.28 (1) |        |       |      |       |               |       |     |          |
| D-E    | -2517 / 0 | -102.1        | -102.1 | 0.58 (1)   | 3.74  | P-E | -815 / 0  | 0.38 (1) |        |       |      |       |               |       |     |          |
| E-F    | -2516 / 0 | -102.1        | -102.1 | 0.58 (1)   | 3.74  | E-N | -2 / 0    | 0.00 (1) |        |       |      |       |               |       |     |          |
| F-G    | -2516 / 0 | -102.1        | -102.1 | 0.58 (1)   | 3.74  | N-G | -814 / 0  | 0.38 (1) |        |       |      |       |               |       |     |          |
| G-H    | -2515 / 0 | -102.1        | -102.1 | 0.58 (1)   | 3.75  | M-H | 0 / 1137  | 0.28 (1) |        |       |      |       |               |       |     |          |
| H-I    | -2175 / 0 | -102.1        | -102.1 | 0.18 (1)   | 4.46  | M-H | 0 / 202   | 0.05 (3) |        |       |      |       |               |       |     |          |
| I-J    | 0 / 18    | -102.1        | -102.1 | 0.12 (1)   | 10.00 | M-I | 0 / 212   | 0.05 (2) |        |       |      |       |               |       |     |          |
| J-K    | 0 / 42    | -102.1        | -102.1 | 0.14 (1)   | 7.81  | R-C | -2413 / 0 | 0.82 (1) |        |       |      |       |               |       |     |          |
| R-B    | -265 / 0  | 0.0           | 0.0    | 0.03 (1)   | 7.81  | I-L | -2413 / 0 | 0.82 (1) |        |       |      |       |               |       |     |          |
| L-J    | -265 / 0  | 0.0           | 0.0    | 0.03 (1)   | 7.81  |     |           |          |        |       |      |       |               |       |     |          |
| R-Q    | 0 / 1588  | -38.5         | -38.5  | 0.48 (2)   | 10.00 |     |           |          |        |       |      |       |               |       |     |          |
| Q-P    | 0 / 1723  | -38.5         | -38.5  | 0.49 (2)   | 10.00 |     |           |          |        |       |      |       |               |       |     |          |
| P-O    | 0 / 2517  | -38.5         | -38.5  | 0.51 (1)   | 10.00 |     |           |          |        |       |      |       |               |       |     |          |
| O-N    | 0 / 2517  | -38.5         | -38.5  | 0.51 (1)   | 10.00 |     |           |          |        |       |      |       |               |       |     |          |
| N-M    | 0 / 1723  | -38.5         | -38.5  | 0.49 (2)   | 10.00 |     |           |          |        |       |      |       |               |       |     |          |
| M-L    | 0 / 1588  | -38.5         | -38.5  | 0.48 (2)   | 10.00 |     |           |          |        |       |      |       |               |       |     |          |

#### DESIGN CRITERIA

**SPECIFIED LOADS:**  
TOP CH. LL = 29.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 086-08, CSA 088-14  
- TPIC 2011, TPIC 2014

(55% OF 37.5 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.97")  
CALCULATED VERT. DEFL. (LL) = 1 / 899 (0.11")  
ALLOWABLE DEFL. (TL) = L/360 (0.97")  
CALCULATED VERT. DEFL. (TL) = 1 / 899 (0.20")

CS1: TC=0.58/1.00 (D-E-1), BC=0.51/1.00 (N-P-1), WB=0.82/1.00 (I-L-1), SS=0.27/1.00 (D-E-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

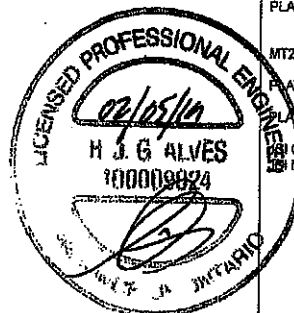
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1987 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

GRIP=0.87 (L) (INPUT = 0.90)  
METAL=0.76 (O) (INPUT = 1.00)



DWG NO. TAM T1902648  
STRUCTURAL  
COMPONENT ONLY

RECEIVED  
JUN 13 2019  
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.

DWG NO. TAM T1902646  
STRUCTURAL  
COMPONENT ONLY

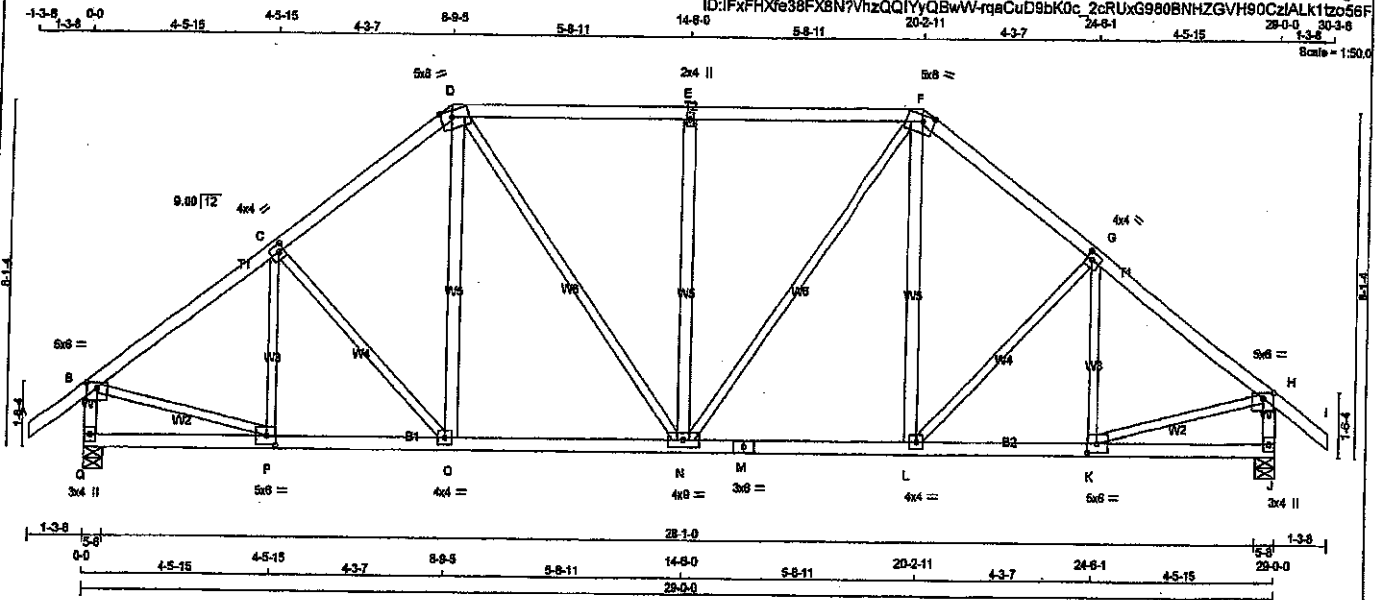
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC. | TRUSS DESC. | DRWG NO. |
|---------------|------------|----------|-----|-----------|-------------|----------|
| 200168-400364 | T5         | 2        | 1   | Preston 1 |             |          |

Tamarack Roof Truss, Burlington

Version 8.290 3 Nov 17 2018 Mitek Industries, Inc. Tue Feb 5 20:42:08 2019 Page 1

ID:IFxHXfe38FX8N7VhzQQIYyQBwV-rqaCuD9bK0c 2cRUxG980BNHZGVH90CziALK1tzo56F

Scale = 1:50.0



TOTAL WEIGHT = 2 X 142 = 284 lb

| LUMBER          |      |        |        |
|-----------------|------|--------|--------|
| N.L.G.A. RULES  | SIZE | LUMBER | DESCR. |
| CHORDS          |      |        |        |
| A - D           | 2x4  | DRY    | No.2   |
| D - F           | 2x4  | DRY    | No.2   |
| F - I           | 2x4  | DRY    | No.2   |
| Q - B           | 2x4  | DRY    | No.2   |
| J - H           | 2x4  | DRY    | No.2   |
| Q - M           | 2x4  | DRY    | No.2   |
| M - J           | 2x4  | DRY    | No.2   |
| ALL WEBS EXCEPT | 2x3  | DRY    | No.2   |
| O - D           | 2x4  | DRY    | No.2   |
| N - E           | 2x4  | DRY    | No.2   |
| L - F           | 2x4  | DRY    | No.2   |

DRY: SEASONED LUMBER.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY

BUILDING DESIGNER

BEARINGS

|    | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----|-------------------------|---------------------------------|-----------|----------|
| JT | VERT                    | DOWN                            | IN-SX     | IN-SX    |
| Q  | 2180                    | 0                               | 0         | 5-8      |
| J  | 2180                    | 0                               | 0         | 5-8      |

UNFACTORED REACTIONS

|    | 1ST LCASE | MAX./MIN. COMPONENT REACTIONS | DEAD    | SOIL      |
|----|-----------|-------------------------------|---------|-----------|
| JT | COMBINED  | SNOW                          | LIVE    | PERM.LIVE |
| Q  | 1820      | 822 / 0                       | 305 / 0 | 0 / 0     |
| J  | 1820      | 822 / 0                       | 305 / 0 | 0 / 0     |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, J

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.28 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                        | WEBS  |                           |                        |  |
|--------|---------------------------|---------------------------|------------------------|-------|---------------------------|------------------------|--|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED CS1 (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CS1 (LC) |  |
| FR-TO  |                           | FROM TO                   |                        | FR-TO |                           |                        |  |
| A-B    | 0 / 42                    | -102.1 -102.1             | 0.14 (1)               | P-C   | -288 / 24                 | 0.10 (1)               |  |
| B-C    | -2168 / 0                 | -102.1 -102.1             | 0.31 (1)               | C-O   | -219 / 0                  | 0.16 (1)               |  |
| C-D    | -2045 / 0                 | -102.1 -102.1             | 0.30 (1)               | O-D   | 0 / 376                   | 0.06 (2)               |  |
| D-E    | -1956 / 0                 | -102.1 -102.1             | 0.48 (1)               | D-N   | 0 / 579                   | 0.13 (1)               |  |
| E-F    | -1858 / 0                 | -102.1 -102.1             | 0.48 (1)               | N-E   | -713 / 0                  | 0.84 (1)               |  |
| F-G    | -2045 / 0                 | -102.1 -102.1             | 0.30 (1)               | N-F   | 0 / 579                   | 0.13 (1)               |  |
| G-H    | -2168 / 0                 | -102.1 -102.1             | 0.31 (1)               | L-F   | 0 / 376                   | 0.08 (2)               |  |
| H-I    | 0 / 42                    | -102.1 -102.1             | 0.14 (1)               | L-G   | -219 / 0                  | 0.16 (1)               |  |
| Q-B    | -2106 / 0                 | 0.0 0.0                   | 0.22 (1)               | K-G   | -288 / 24                 | 0.10 (1)               |  |
| J-H    | -2106 / 0                 | 0.0 0.0                   | 0.22 (1)               | B-P   | 0 / 1820                  | 0.41 (1)               |  |
| Q-P    |                           |                           |                        | K-H   | 0 / 1820                  | 0.41 (1)               |  |
| J-H    | 0 / 0                     | -38.5 -38.5               | 0.13 (3)               |       |                           |                        |  |
| P-O    | 0 / 1759                  | -38.5 -38.5               | 0.39 (1)               |       |                           |                        |  |
| O-N    | 0 / 1613                  | -38.5 -38.5               | 0.40 (2)               |       |                           |                        |  |
| N-M    | 0 / 1613                  | -38.5 -38.5               | 0.40 (2)               |       |                           |                        |  |
| M-L    | 0 / 1613                  | -38.5 -38.5               | 0.40 (2)               |       |                           |                        |  |
| L-K    | 0 / 1759                  | -38.5 -38.5               | 0.39 (1)               |       |                           |                        |  |
| K-J    | 0 / 0                     | -38.5 -38.5               | 0.13 (3)               |       |                           |                        |  |

PROFESSIONAL

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA 088-09, CSA 088-14  
- TPC 2011, TPC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.97")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")  
ALLOWABLE DEFL.(TL) = L/360 (0.97")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CS1: TC=0.48/1.00 (D-E:1), BC=0.40/1.00 (N-O:2), WB=0.84/1.00 (E-N:1), SG=0.28/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

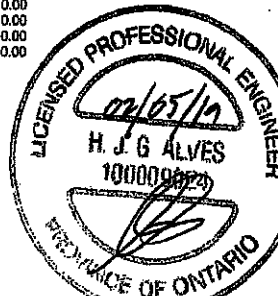
NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1687 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

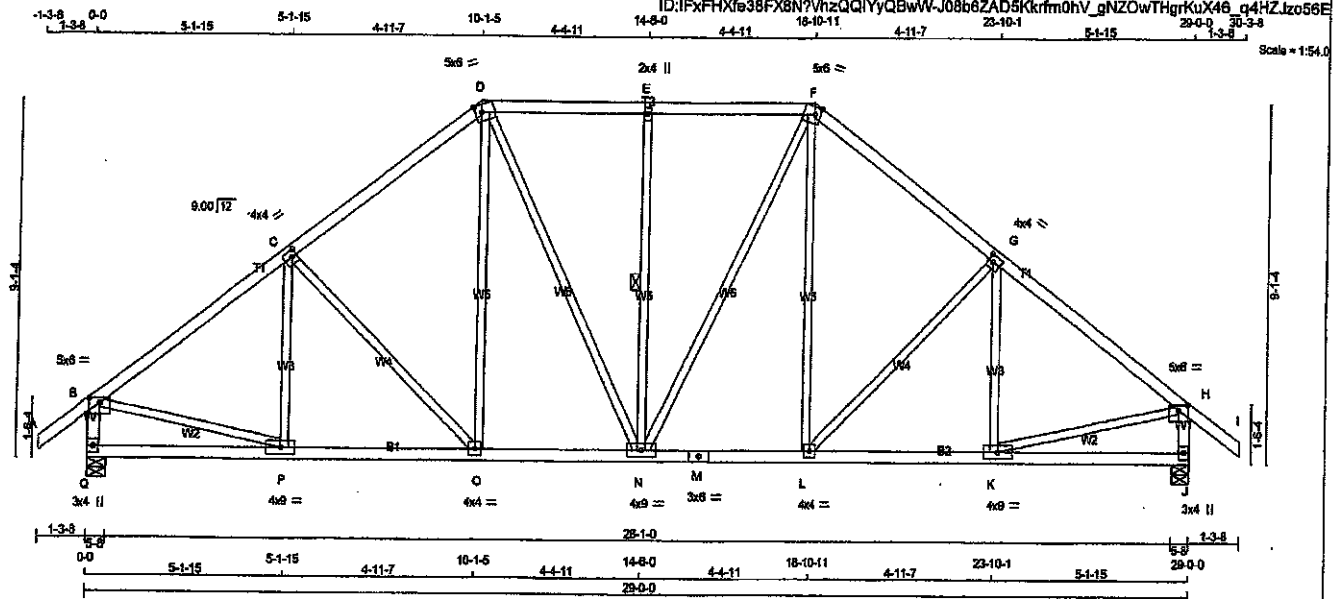
PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.88 (J) (INPUT = 0.80)  
JSI METAL= 0.51 (M) (INPUT = 1.00)



DRWG NO. TAM T5102650  
STRUCTURAL  
COMPONENT ONLY

|                                  |                         |                      |                 |                               |          |
|----------------------------------|-------------------------|----------------------|-----------------|-------------------------------|----------|
| JOB NAME<br><b>200168-400364</b> | TRUSS NAME<br><b>T6</b> | QUANTITY<br><b>2</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Preston 1</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                         |                      |                 | TRUSS DESC.                   |          |



TOTAL WEIGHT = 2 X 142 = 283 lb  
(MIF)

| LUMBER | N.L.G.A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|--------|----------------|--------|------|--------|--------|
| A - D  | 2x4 DRY        | No.2   | SPF  |        |        |
| D - F  | 2x4 DRY        | No.2   | SPF  |        |        |
| F - I  | 2x4 DRY        | No.2   | SPF  |        |        |
| Q - B  | 2x4 DRY        | No.2   | SPF  |        |        |
| J - H  | 2x4 DRY        | No.2   | SPF  |        |        |
| Q - M  | 2x4 DRY        | No.2   | SPF  |        |        |
| M - J  | 2x4 DRY        | No.2   | SPF  |        |        |

ALL WEBS 2x3 DRY No.2 SPF  
EXCEPT  
DRY: SEASONED LUMBER.

| PLATES (table in inches) | JT TYPE | PLATES | W   | LEN | Y    | X    |
|--------------------------|---------|--------|-----|-----|------|------|
| B                        | TMWV-p  | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| C                        | TMWV-l  | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| D                        | TTWV-m  | MT20   | 5.0 | 6.0 | Edge | 2.00 |
| E                        | TMWV-w  | MT20   | 2.0 | 4.0 |      |      |
| F                        | TTWV-m  | MT20   | 5.0 | 6.0 | Edge | 2.00 |
| G                        | TMWV-l  | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| H                        | TMWV-p  | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| J                        | BMV1-p  | MT20   | 3.0 | 4.0 |      |      |
| K                        | BMWV-l  | MT20   | 4.0 | 9.0 |      |      |
| L                        | BMWV-l  | MT20   | 4.0 | 4.0 |      |      |
| M                        | BS-l    | MT20   | 3.0 | 6.0 |      |      |
| N                        | BMWVW-l | MT20   | 4.0 | 9.0 |      |      |
| O                        | BMWV-l  | MT20   | 4.0 | 4.0 |      |      |
| P                        | BMWV-l  | MT20   | 4.0 | 9.0 |      |      |
| Q                        | BMV1-p  | MT20   | 3.0 | 4.0 |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |      | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |        | INPUT BRG |       | REORD BRG |       |
|----------|------|-------------------------|------|---------------------------------|--------|-----------|-------|-----------|-------|
| JT       | VERT | HORZ                    | DOWN | HORZ                            | UPLIFT | IN-SX     | IN-SX | IN-SX     | IN-SX |
| Q        | 2180 | 0                       | 2180 | 0                               | 0      | 5-8       | 5-8   |           |       |
| J        | 2180 | 0                       | 2180 | 0                               | 0      | 5-8       | 5-8   |           |       |

| UNFACTORED REACTIONS |          | 1ST CASE |       | MAX./MIN. COMPONENT REACTIONS |      | LIVE  |      | PERM. LIVE |      | WIND |      | DEAD |      | SOIL |      |
|----------------------|----------|----------|-------|-------------------------------|------|-------|------|------------|------|------|------|------|------|------|------|
| JT                   | COMBINED | SNOW     | VERT  | SNOW                          | VERT | SNOW  | VERT | SNOW       | VERT | SNOW | VERT | SNOW | VERT | SNOW | VERT |
| Q                    | 1620     | 822/0    | 305/0 | 0/0                           | 0/0  | 394/0 | 0/0  |            |      |      |      |      |      |      |      |
| J                    | 1620     | 822/0    | 305/0 | 0/0                           | 0/0  | 394/0 | 0/0  |            |      |      |      |      |      |      |      |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, J

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.21 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

1 LATERAL BRACE(S) AT 1/2 LENGTH OF E-N.

END VERTICAL(S) MUST BE SHEATHED OR HAVE BRACES AS INDICATED IN THE MAX. UNBRACED LENGTH COLUMN OF THE TABLE BELOW

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |             | FACTORED         |          | MAX. FACTORED |       | WEBS        |               | MAX. FACTORED |             |
|--------|-------------|------------------|----------|---------------|-------|-------------|---------------|---------------|-------------|
| MEMB.  | FORCE (LBS) | VERT. LOAD (PLF) | LC1 (LC) | MAX. UNBRAC   | MEMB. | FORCE (LBS) | MAX. CS1 (LC) | MEMB.         | FORCE (LBS) |
| FR-TO  |             |                  |          |               | FR-TO |             |               |               |             |
| A-B    | 0/42        | -102.1           | -102.1   | 0.14 (1)      | 10.00 | P-C         | -194/98       | 0.08 (1)      |             |
| B-C    | -2198/0     | -102.1           | -102.1   | 0.42 (1)      | 4.21  | C-D         | -364/0        | 0.36 (1)      |             |
| C-D    | -1954/0     | -102.1           | -102.1   | 0.39 (1)      | 4.44  | D-E         | 0/444         | 0.10 (2)      |             |
| D-E    | -1709/0     | -102.1           | -102.1   | 0.28 (1)      | 4.82  | E-F         | 0/389         | 0.08 (1)      |             |
| E-F    | -1709/0     | -102.1           | -102.1   | 0.28 (1)      | 4.82  | F-G         | -538/0        | 0.29 (1)      |             |
| F-G    | -1954/0     | -102.1           | -102.1   | 0.39 (1)      | 4.44  | G-H         | 0/389         | 0.08 (1)      |             |
| G-H    | -2198/0     | -102.1           | -102.1   | 0.42 (1)      | 4.21  | H-I         | 0/444         | 0.10 (2)      |             |
| H-I    | 0/42        | -102.1           | -102.1   | 0.14 (1)      | 10.00 | I-J         | -364/0        | 0.36 (1)      |             |
| I-J    | -2098/0     | 0.0              | 0.0      | 0.22 (1)      | 5.84  | J-K         | -194/98       | 0.08 (1)      |             |
| J-K    | -2098/0     | 0.0              | 0.0      | 0.22 (1)      | 5.84  | K-L         | 0/1834        | 0.41 (1)      |             |
| K-L    | 0/0         | -38.5            | -38.5    | 0.19 (3)      | 10.00 | L-M         | 0/1834        | 0.41 (1)      |             |
| L-M    | 0/1787      | -38.5            | -38.5    | 0.42 (2)      | 10.00 | M-N         | 0/1595        | 0.34 (1)      |             |
| M-N    | 0/1595      | -38.5            | -38.5    | 0.34 (1)      | 10.00 | N-O         | 0/1595        | 0.34 (1)      |             |
| N-O    | 0/1595      | -38.5            | -38.5    | 0.34 (1)      | 10.00 | O-P         | -38.5         | -38.5         | 0.42 (2)    |
| O-P    | -38.5       | -38.5            | -38.5    | 0.42 (2)      | 10.00 | P-Q         | -38.5         | -38.5         | 0.19 (3)    |
| P-Q    | 0/0         | -38.5            | -38.5    | 0.19 (3)      | 10.00 | Q-R         | -38.5         | -38.5         | 0.19 (3)    |

#### DESIGN CRITERIA

**SPECIFIED LOADS:**  
TOP CH. LL = 28.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN. GIC**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.87")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.07")  
ALLOWABLE DEFL.(TL) = L/360 (0.87")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.12")

CSI: TC=0.42/1.00 (B-C:1), BC=0.42/1.00 (D-P:2), WB=0.41/1.00 (B-P:1), CSI=0.22/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LBS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

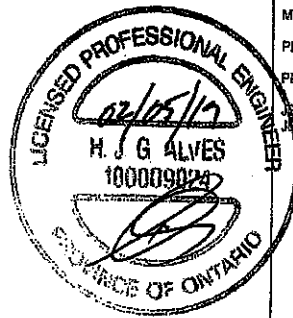
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1987 1659

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

GRIP=0.89 (P) (INPUT = 0.80)  
METAL=0.50 (M) (INPUT = 1.00)



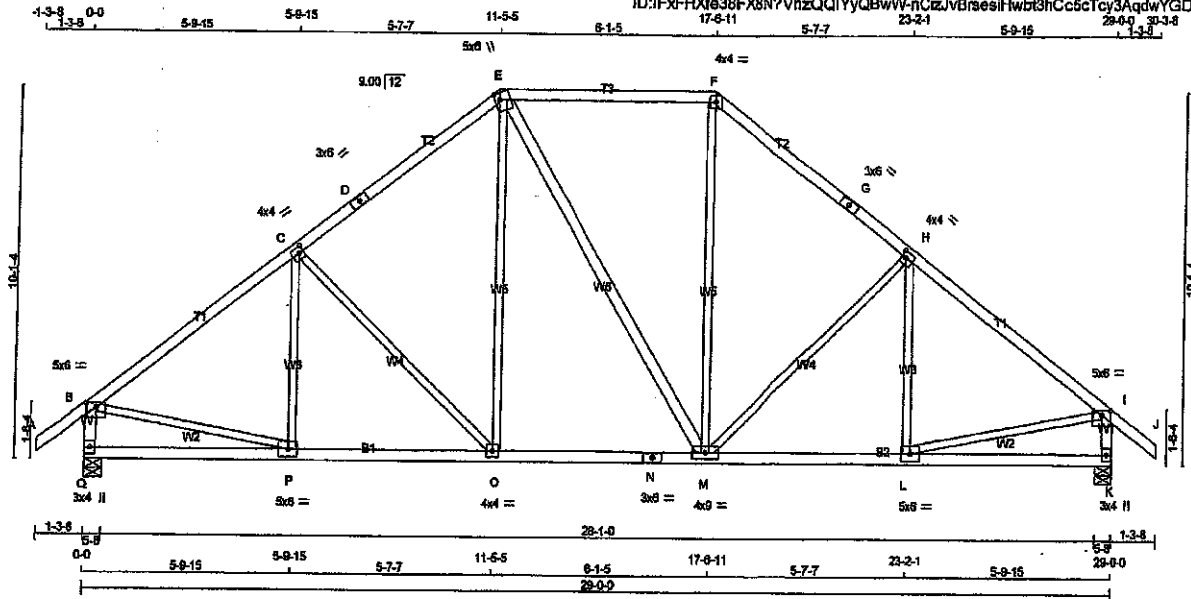
DWG NO. TAM T1902651  
STRUCTURAL  
COMPONENT ONLY

RECEIVED  
JUN 13 2019  
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.

|                                 |            |          |     |           |          |
|---------------------------------|------------|----------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400364                   | T7         | 2        | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            |          |     |           |          |

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ID:IFxPHDXe36FX8N?VhzQQIYyQBwW-nCzJvBrsesitwb3hCc5cTcy3AgdwYGDUqq5Izo56D



TOTAL WEIGHT = 2 X 138 = 275 lb

#### LUMBER

##### N. L. G. A. RULES

##### CHORDS SIZE

A - D 2x4 DRY No.2

D - E 2x4 DRY No.2

E - F 2x4 DRY No.2

F - G 2x4 DRY No.2

G - J 2x4 DRY No.2

K - B 2x4 DRY No.2

K - I 2x4 DRY No.2

Q - N 2x4 DRY No.2

N - K 2x4 DRY No.2

ALL WEBS 2x3 DRY No.2

EXCEPT

E - M 2x4 DRY No.2

SPF

SPF

SPF

SPF

SPF

SPF

SPF

SPF

SPF

SPF

SPF

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SPF

SPF

SPF

SPF

SPF

SPF

DRY: SEASONED LUMBER.

#### PLATES (table in inches)

| JT TYPE  | PLATES | W   | LEN | Y    | X    |
|----------|--------|-----|-----|------|------|
| B TMVW-p | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| C TMVW-t | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| D TS-t   | MT20   | 3.0 | 6.0 |      |      |
| E TTVW+m | MT20   | 5.0 | 6.0 | 2.25 | 1.50 |
| F TTV-t  | MT20   | 4.0 | 4.0 |      |      |
| G TS-t   | MT20   | 3.0 | 6.0 |      |      |
| H TMVW-t | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| I TMVW-p | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| K BMV1+p | MT20   | 3.0 | 4.0 |      |      |
| L BMVW-t | MT20   | 5.0 | 6.0 |      |      |
| M BMVW-t | MT20   | 4.0 | 4.0 |      |      |
| N BS-t   | MT20   | 3.0 | 6.0 |      |      |
| O BMVW-t | MT20   | 4.0 | 4.0 |      |      |
| P BMVW-t | MT20   | 5.0 | 6.0 |      |      |
| Q BMV1+p | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

|    | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT | REQD |
|----|-------------------------|---------------------------------|-------|------|
| JT | VERT                    | HORZ                            | DOWN  | HORZ |
| Q  | 2180                    | 0                               | 2180  | 0    |
| K  | 2180                    | 0                               | 2180  | 0    |

##### UNFACTORED REACTIONS

|    | 1ST LCASE | MAX/MIN | COMPONENT REACTIONS |
|----|-----------|---------|---------------------|
| JT | COMBINED  | SNOW    | LIVE                |
| Q  | 1620      | 922 / 0 | 305 / 0             |
| K  | 1620      | 922 / 0 | 305 / 0             |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, K

##### BRACING

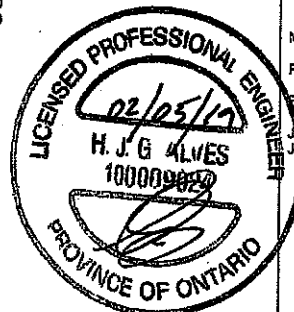
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.04 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED | FACTORED   | WEBS  | MAX. FACTORED |
|--------|---------------|------------|-------|---------------|
| MEMB.  | FORCE         | VERT. LOAD | MEMB. | FORCE         |
| (LBS)  | (PLF)         | LC1        | (LBS) | (LBS)         |
| FR-TO  |               |            | FR-TO |               |
| A-B    | 0 / 42        | -102.1     | P-C   | -123 / 150    |
| B-C    | -2209 / 0     | -102.1     | C-O   | -492 / 0      |
| C-D    | -1855 / 0     | -102.1     | O-E   | 0 / 571       |
| D-E    | -1855 / 0     | -102.1     | E-M   | 0 / 1         |
| E-F    | -1454 / 0     | -102.1     | M-F   | 0 / 573       |
| F-G    | -1859 / 0     | -102.1     | M-H   | -481 / 0      |
| G-H    | -1859 / 0     | -102.1     | H-I   | -125 / 148    |
| H-I    | -2209 / 0     | -102.1     | I-J   | 0 / 1838      |
| I-J    | 0 / 42        | -102.1     | J-K   | 0 / 1838      |
| Q-B    | -2088 / 0     | 0.0        |       |               |
| K-I    | -2087 / 0     | 0.0        |       |               |
| Q-P    | 0 / 0         | -38.5      |       |               |
| P-O    | 0 / 1801      | -38.5      |       |               |
| O-N    | 0 / 1453      | -38.5      |       |               |
| N-M    | 0 / 1453      | -38.5      |       |               |
| M-L    | 0 / 1800      | -38.5      |       |               |
| L-K    | 0 / 0         | -38.5      |       |               |



#### DESIGN CRITERIA

##### SPECIFIED LOADS:

TOP CH. LL = 28.0 PSF

DL = 6.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.0 PSF

TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. G/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF NBCC 2010, CBC 2012

- CSA 086-08, CSA 086-14

- TPIC 2011, TPIC 2014

(55% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.97")

CALCULATED VERT. DEFL.(LL) = L/999 (0.08")

ALLOWABLE DEFL.(TL) = L/360 (0.97")

CALCULATED VERT. DEFL.(TL) = L/999 (0.14")

CSI TC=0.55/1.00 (B-C:1), BC=0.48/1.00 (O-P:2),

WB=0.65/1.00 (C-O:1), GS=0.24/1.00 (E-F:1)

DOL LUMBER=1.00 NAIL=1.00 LB BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

##### NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR | SECTION |
|-------|-----------|-------|---------|
| (PSI) | (PLI)     | (PLI) | (PLI)   |
| MAX   | MIN       | MAX   | MIN     |
| MT20  | 618       | 354   | 1887    |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

CSI GRIP= 0.88 (F) (INPUT = 0.90)

CSI METAL= 0.46 (N) (INPUT = 1.00)

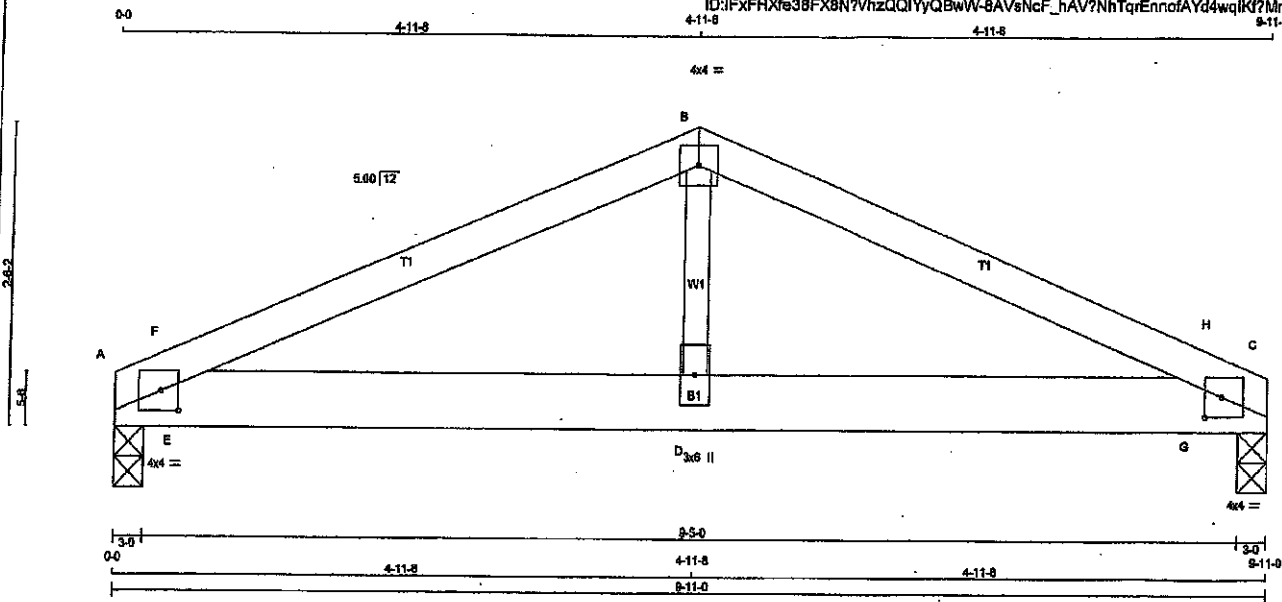
DWG NO. TAM 71902652  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |             |     |           |          |
|---------------------------------|------------|-------------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC. | DRWG NO. |
| 200168-400364                   | T11        | 2           | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |           |          |

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Scale = 1:17.7



TOTAL WEIGHT = 2 X 32 = 63 lb

| LUMBER                | CHORDS | SIZE | DRY  | LUMBER | DESCR. |
|-----------------------|--------|------|------|--------|--------|
| A - B                 | 2x4    | DRY  | No.2 | SPF    |        |
| B - C                 | 2x4    | DRY  | No.2 | SPF    |        |
| A - C                 | 2x6    | DRY  | No.2 | SPF    |        |
| ALL WEBS              | 2x3    | DRY  | No.2 | SPF    |        |
| DRY: SEASONED LUMBER. |        |      |      |        |        |

| PLATES (table in inches) | W    | LEN | Y   | X         |
|--------------------------|------|-----|-----|-----------|
| A - TMB1-J               | MT20 | 4.0 | 4.0 | 2.00 1.75 |
| B - TTW-p                | MT20 | 4.0 | 4.0 |           |
| C - TMB1-J               | MT20 | 4.0 | 4.0 | 2.00 1.75 |
| D - BMW+w                | MT20 | 3.0 | 6.0 |           |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BUILDING DESIGNER |                |      |                  |      |        |       |       |
|-------------------|----------------|------|------------------|------|--------|-------|-------|
| <u>BEARINGS</u>   |                |      |                  |      |        |       |       |
|                   | FACTORED       |      | MAXIMUM FACTORED |      |        | INPUT | REQD  |
|                   | GROSS REACTION |      | GROSS REACTION   |      |        | BRG   | BRG   |
| JT                | VERT           | HORZ | DOWN             | HORZ | UPLIFT | IN-SX | IN-SX |
| A                 | 897            | 0    | 897              | 0    | 0      | 3-0   | 3-0   |
| C                 | 897            | 0    | 897              | 0    | 0      | 3-0   | 3-0   |

#### UNFACTORED REACTIONS

| 1ST LCASE |          | MAX/MIN COMPONENT REACTIONS |         |           |       |         |       |
|-----------|----------|-----------------------------|---------|-----------|-------|---------|-------|
| JT        | COMBINED | SNOW                        | LIVE    | PERM.LIVE | WIND  | DEAD    | SOIL  |
| A         | 521      | 288 / 0                     | 104 / 0 | 0 / 0     | 0 / 0 | 129 / 0 | 0 / 0 |
| C         | 521      | 288 / 0                     | 104 / 0 | 0 / 0     | 0 / 0 | 129 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) A, C

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.99 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MEMB.    | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | FACTORED LC1 MAX (LC) | MAX. MEMB. UNBRAC LENGTH | WEBS | MEMB.    | MAX. FACTORED FORCE (LBS) | FACTORED LC1 MAX (LC) |
|--------|----------|---------------------------|---------------------------|-----------------------|--------------------------|------|----------|---------------------------|-----------------------|
| A-F    | -897 / 0 | -102.1                    | -102.1                    | 0.17 (1)              | 6.25                     | D-B  | 0 / 385  | 0.08 (2)                  |                       |
| F-B    | -899 / 0 | -102.1                    | -102.1                    | 0.24 (1)              | 5.99                     | E-F  | -452 / 0 | 0.00 (1)                  |                       |
| B-H    | -899 / 0 | -102.1                    | -102.1                    | 0.24 (1)              | 5.99                     | G-H  | -452 / 0 | 0.00 (1)                  |                       |
| H-C    | -897 / 0 | -102.1                    | -102.1                    | 0.17 (1)              | 6.25                     |      |          |                           |                       |
| A-E    | 0 / 901  | -38.5                     | -38.5                     | 0.28 (1)              | 10.00                    |      |          |                           |                       |
| E-D    | 0 / 901  | -38.5                     | -38.5                     | 0.28 (1)              | 10.00                    |      |          |                           |                       |
| D-G    | 0 / 901  | -38.5                     | -38.5                     | 0.28 (1)              | 10.00                    |      |          |                           |                       |
| G-C    | 0 / 901  | -38.5                     | -38.5                     | 0.28 (1)              | 10.00                    |      |          |                           |                       |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.33")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")  
ALLOWABLE DEFL.(TL) = L/360 (0.33")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.24/1.00 (B-F:1), BC=0.28/1.00 (A-E:1), WB=0.09/1.00 (B-D:2), SS=0.27/1.00 (A-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

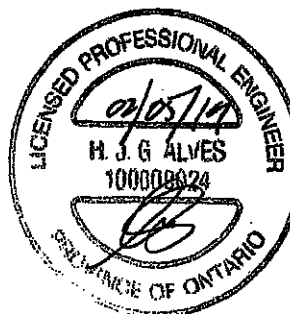
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1687 788 1987 1656

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.45 (A) (INPUT = 0.90)  
JSI METAL= 0.40 (C) (INPUT = 1.00)



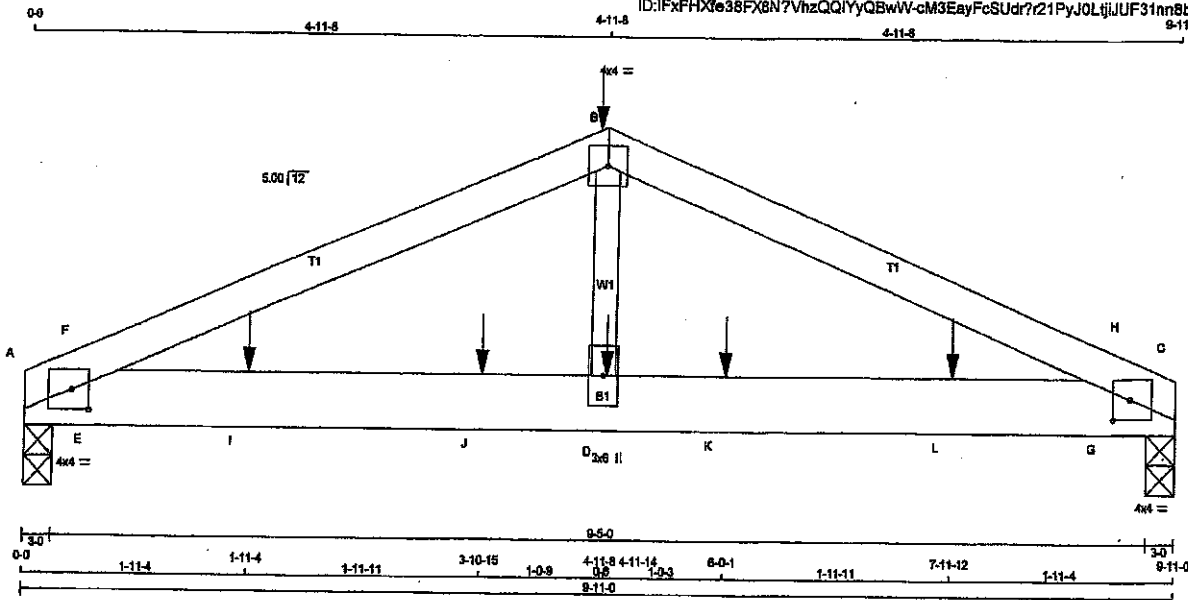
DRWG NO. TAM T1102654  
STRUCTURAL  
COMPONENT ONLY

| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC. | DRWG NO. |
|---------------------------------|------------|-------------|-----|-----------|----------|
| 200168-400364                   | T11Z       | 1           | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |           |          |

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ID:IFxPHX6e38FX8N7VhzQQIYYQBwV-cM3EayFcSudr7z21PyJOLijJUF31nn8bPH9JPzo567 9-11-0

Scale = 1:17.7



TOTAL WEIGHT = 32 lb

#### LUMBER

##### N.L.G.A. RULES

| CHORDS                | SIZE | DRY | No.2 |
|-----------------------|------|-----|------|
| A - B                 | 2x4  | DRY | No.2 |
| B - C                 | 2x4  | DRY | No.2 |
| A - C                 | 2x6  | DRY | No.2 |
| ALL WEBS              | 2x3  | DRY | No.2 |
| DRY: SEASONED LUMBER. |      |     |      |

#### PLATES (table in inches)

| JT TYPE | PLATES | W    | LEN | Y   | X         |
|---------|--------|------|-----|-----|-----------|
| A       | TMB1-J | MT20 | 4.0 | 4.0 | 2.00 1.75 |
| B       | TTW-p  | MT20 | 4.0 | 4.0 |           |
| C       | TMB1-I | MT20 | 4.0 | 4.0 | 2.00 1.75 |
| D       | BNW-w  | MT20 | 3.0 | 6.0 |           |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

| BEARINGS |                |      |                  |      |        |       |       |
|----------|----------------|------|------------------|------|--------|-------|-------|
|          | FACTORED       |      | MAXIMUM FACTORED |      |        | INPUT | REQRD |
|          | GROSS REACTION |      | GROSS REACTION   |      |        | BRG   | BRG   |
| JT       | VERT           | HORZ | DOWN             | HORZ | UPLIFT | IN-SX | IN-SX |
| A        | 857            | 0    | 857              | 0    | 0      | 3-0   | 3-0   |
| C        | 857            | 0    | 857              | 0    | 0      | 3-0   | 3-0   |

##### UNFACTORED REACTIONS

| JT | 1ST CASE | MAX/MIN COMPONENT REACTIONS | SNOW    | LIVE  | PERM.LIVE | WIND    | DEAD  | SOIL  |
|----|----------|-----------------------------|---------|-------|-----------|---------|-------|-------|
| A  | 631      | 379 / 0                     | 108 / 0 | 0 / 0 | 0 / 0     | 144 / 0 | 0 / 0 | 0 / 0 |
| C  | 631      | 379 / 0                     | 108 / 0 | 0 / 0 | 0 / 0     | 144 / 0 | 0 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) A, C

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 5.16 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS                    |                           |               | WEBS                       |                           |               |
|-------|---------------------------|---------------------------|---------------|----------------------------|---------------------------|---------------|
|       | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. CSI (LC) | MAX. UNBRACED LENGTH FR-TO | MAX. FACTORED FORCE (LBS) | MAX. CSI (LC) |
| FR-TO |                           | FROM TO                   |               |                            |                           |               |
| A-F   | -1294 / 0                 | -102.1 -102.1             | 0.24 (1)      | 5.34                       | D-E                       | 0 / 363       |
| F-B   | -1370 / 0                 | -102.1 -102.1             | 0.31 (1)      | 5.16                       | E-F                       | -415 / 0      |
| B-H   | -1370 / 0                 | -102.1 -102.1             | 0.31 (1)      | 5.16                       | G-H                       | -415 / 0      |
| H-C   | -1294 / 0                 | -102.1 -102.1             | 0.24 (1)      | 5.34                       |                           |               |
| A-E   | 0 / 1253                  | -38.5 -38.5               | 0.35 (1)      | 10.00                      |                           |               |
| E-I   | 0 / 1253                  | -38.5 -38.5               | 0.35 (1)      | 10.00                      |                           |               |
| I-J   | 0 / 1253                  | -38.5 -38.5               | 0.35 (1)      | 10.00                      |                           |               |
| J-D   | 0 / 1253                  | -38.5 -38.5               | 0.35 (1)      | 10.00                      |                           |               |
| D-K   | 0 / 1253                  | -38.5 -38.5               | 0.35 (1)      | 10.00                      |                           |               |
| K-L   | 0 / 1253                  | -38.5 -38.5               | 0.35 (1)      | 10.00                      |                           |               |
| L-G   | 0 / 1253                  | -38.5 -38.5               | 0.35 (1)      | 10.00                      |                           |               |
| G-C   | 0 / 1253                  | -38.5 -38.5               | 0.35 (1)      | 10.00                      |                           |               |

##### FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.    | LC1  | MAX. | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|----|---------|------|------|------|-------|------|-------|------|-------|
| B  | 4-11-8  | -25  | -28  |      | FRONT | VERT | DEAD  |      |       |
| B  | 4-11-8  | -7   | -7   |      | FRONT | VERT | TOTAL |      |       |
| B  | 4-11-8  | -273 | -273 |      | FRONT | VERT | SNOW  |      |       |
| D  | 4-11-14 | -3   | -4   |      | FRONT | VERT | TOTAL |      |       |
| I  | 1-11-4  | -3   | -4   |      | FRONT | VERT | TOTAL |      |       |
| J  | 3-10-15 | -3   | -4   |      | FRONT | VERT | TOTAL |      |       |
| K  | 6-0-1   | -3   | -4   |      | FRONT | VERT | TOTAL |      |       |
| L  | 7-11-12 | -3   | -4   |      | FRONT | VERT | TOTAL |      |       |

#### DESIGN CRITERIA

\*\*\* SPECIAL LOADS ANALYSIS \*\*\*  
GEOMETRY AND/OR BASIC LOADS CHANGED BY USER.  
LOADS WERE DERIVED FROM USER INPUT  
NO FURTHER MODIFICATIONS WERE MADE

##### SPECIFIED LOADS:

|            |    |   |      |            |
|------------|----|---|------|------------|
| TOP CH.    | LL | = | 29.0 | PSF        |
|            | DL | = | 6.0  | PSF        |
| BOT CH.    | LL | = | 10.5 | PSF        |
|            | DL | = | 7.0  | PSF        |
| TOTAL LOAD |    |   |      | = 52.5 PSF |

SPACING = 24.0 IN./C

##### \*\*\* NON STANDARD GIRDER \*\*\*

ADDT'L USER-DEFINED LOADS APPLIED TO ALL LOAD CASES.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

##### THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, CBC 2012
- CSA 086-08, CSA 088-14
- TPC 2011, TPC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) =  $L/360$  (0.33')  
CALCULATED VERT. DEFL.(LL) =  $L/999$  (0.02')  
ALLOWABLE DEFL.(TL) =  $L/360$  (0.33')  
CALCULATED VERT. DEFL.(TL) =  $L/999$  (0.04')

CSI: TC=0.31/1.00 (B-H-1), BC=0.35/1.00 (D-G-1), WB=0.09/1.00 (B-D-2), SS=0.29/1.00 (C-G-1)

DCL LUMBER=1.00 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

##### NAIL VALUES

| PLATE GRIP(DRY) | SHEAR (PS) | SECTION (PL) | (PL)               |
|-----------------|------------|--------------|--------------------|
| MT20            | 618        | 354          | 1667 788 1987 1856 |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.59 (A) (INPUT = 0.80)  
JSI METAL= 0.54 (C) (INPUT = 1.00)

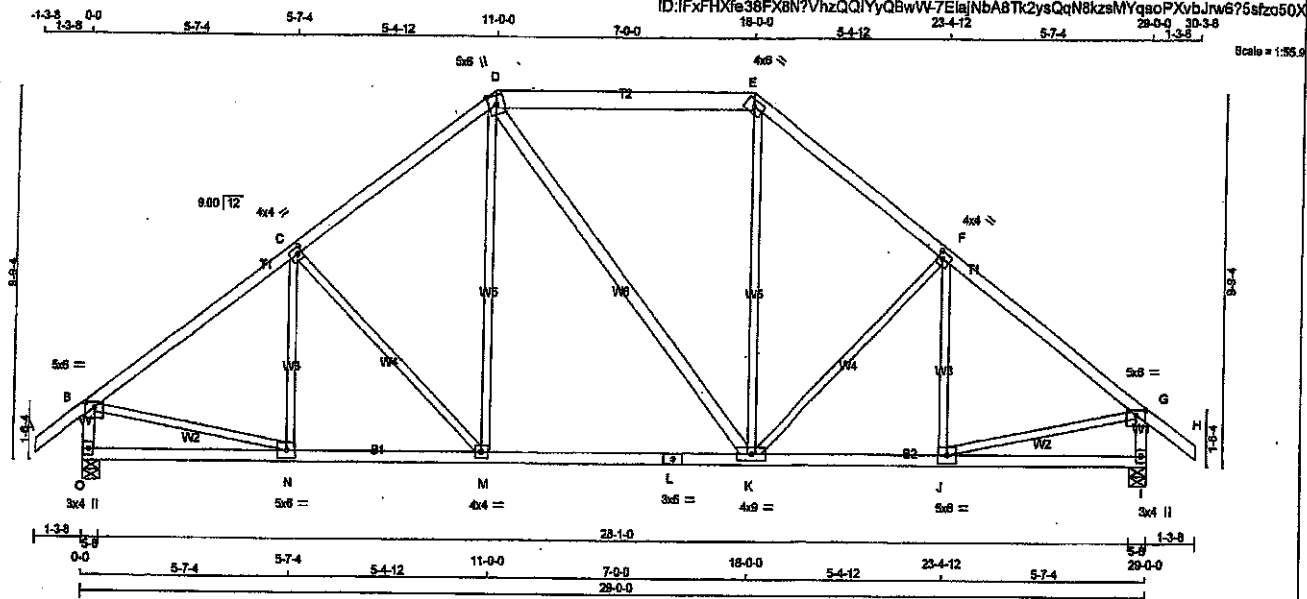
DWG NO. TAM 1790 2660  
STRUCTURAL  
COMPONENT ONLY

TOWN OF CALEDON  
BUILDING SECTION  
FILE NO



JUN 13 2019

|                                 |            |          |     |           |          |
|---------------------------------|------------|----------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | T20        | 7        | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            |          |     |           |          |



TOTAL WEIGHT = 7 X 140 = 982 lb

#### LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-------------------|--------|------|--------|--------|
| A - D             | 2x4    | DRY  | No.2   | SPF    |
| D - E             | 2x6    | DRY  | No.2   | SPF    |
| E - H             | 2x4    | DRY  | No.2   | SPF    |
| O - B             | 2x4    | DRY  | No.2   | SPF    |
| I - G             | 2x4    | DRY  | No.2   | SPF    |
| O - L             | 2x4    | DRY  | No.2   | SPF    |
| L - I             | 2x4    | DRY  | No.2   | SPF    |
| ALL WEBS          | 2x3    | DRY  | No.2   | SPF    |
| EXCEPT            |        |      |        |        |
| D - K             | 2x4    | DRY  | No.2   | SPF    |

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE     | PLATES | W   | LEN | Y    | X    |
|----|----------|--------|-----|-----|------|------|
| B  | TMVV-p   | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| C  | TMVV-w   | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| D  | TTVV-w+m | MT20   | 5.0 | 6.0 | Edge |      |
| E  | TTVV-h   | MT20   | 4.0 | 6.0 |      |      |
| F  | TMVV-v   | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| G  | TMVV-p   | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| I  | BMV1+p   | MT20   | 3.0 | 4.0 |      |      |
| J  | BMVV-w   | MT20   | 5.0 | 6.0 |      |      |
| K  | BMVV-w   | MT20   | 4.0 | 9.0 |      |      |
| L  | BS-1     | MT20   | 3.0 | 6.0 |      |      |
| M  | BMVV-w   | MT20   | 4.0 | 4.0 |      |      |
| N  | BMVV-w   | MT20   | 5.0 | 6.0 |      |      |
| O  | BMV1+p   | MT20   | 3.0 | 4.0 |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED       |                | MAXIMUM FACTORED |       | INPUT |     | REQD  |       |
|----------|----------------|----------------|------------------|-------|-------|-----|-------|-------|
|          | GROSS REACTION | GROSS REACTION | DOWN             | HORIZ | BRG   | BRG | IN-SX | IN-SX |
| JT       | VERT           | HORIZ          |                  |       |       |     |       |       |
| O        | 2180           | 0              | 2180             | 0     | 0     | 5-8 | 5-8   | 5-8   |
| I        | 2180           | 0              | 2180             | 0     | 0     | 5-8 | 5-8   | 5-8   |

#### UNFACTORED REACTIONS

| 1ST CASE | MAX/MIN COMPONENT REACTIONS |       |       |           |      |       |      |
|----------|-----------------------------|-------|-------|-----------|------|-------|------|
|          | COMBINED                    | SNOW  | LIVE  | PERM.LIVE | WIND | DEAD  | SOIL |
| JT       | 1620                        | 922/0 | 305/0 | 0/0       | 0/0  | 394/0 | 0/0  |
| O        | 1620                        | 922/0 | 305/0 | 0/0       | 0/0  | 394/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) O, I

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.10 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED |        | FACTORED   |          | WEBS   |       | MAX. FACTORED |          |
|--------|---------------|--------|------------|----------|--------|-------|---------------|----------|
|        | MEMB.         | FORCE  | VERT. LOAD | LC1      | MAX.   | MEMB. | FORCE         | MAX.     |
|        |               | (LBS)  | (PLF)      | (LC)     | UNBRAC |       | (LBS)         | (LC)     |
| FR-TO  |               |        | FROM       | TO       | LENGTH | FR-TO |               |          |
| A-B    | 0/42          | -102.1 | -102.1     | 0.14 (1) | 10.00  | N-C   | -164/110      | 0.08 (1) |
| B-C    | -2203/0       | -102.1 | -102.1     | 0.51 (1) | 4.10   | C-M   | -425/0        | 0.48 (1) |
| C-D    | -1908/0       | -102.1 | -102.1     | 0.46 (1) | 4.39   | M-D   | 0/568         | 0.13 (2) |
| D-E    | -1481/0       | -102.1 | -102.1     | 0.33 (1) | 5.95   | D-K   | 0/1           | 0.00 (2) |
| E-F    | -1909/0       | -102.1 | -102.1     | 0.46 (1) | 4.39   | K-E   | 0/570         | 0.13 (2) |
| F-G    | -2202/0       | -102.1 | -102.1     | 0.51 (1) | 4.11   | K-F   | -423/0        | 0.48 (1) |
| G-H    | 0/42          | -102.1 | -102.1     | 0.14 (1) | 10.00  | J-F   | -165/109      | 0.08 (1) |
| O-B    | -2088/0       | 0.0    | 0.0        | 0.22 (1) | 5.86   | B-N   | 0/1834        | 0.41 (1) |
| I-G    | -2088/0       | 0.0    | 0.0        | 0.22 (1) | 5.86   | J-G   | 0/1834        | 0.41 (1) |
| O-N    | 0/0           | -38.5  | -38.5      | 0.19 (3) | 10.00  |       |               |          |
| N-M    | 0/1794        | -38.5  | -38.5      | 0.46 (2) | 10.00  |       |               |          |
| M-L    | 0/1481        | -38.5  | -38.5      | 0.45 (2) | 10.00  |       |               |          |
| L-K    | 0/1481        | -38.5  | -38.5      | 0.45 (2) | 10.00  |       |               |          |
| K-J    | 0/1794        | -38.5  | -38.5      | 0.46 (2) | 10.00  |       |               |          |
| J-I    | 0/0           | -38.5  | -38.5      | 0.19 (3) | 10.00  |       |               |          |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 5.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBCC 2010, NBC 2012  
- CSA 086-08, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.97")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")  
ALLOWABLE DEFL.(TL) = L/360 (0.97")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.18")

CSI: TC=0.51/1.00 (B-C:1), BC=0.48/1.00 (J-K:2), WB=0.48/1.00 (C-M:1), SS=0.22/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION  
(PS) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 788 1987 1668

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

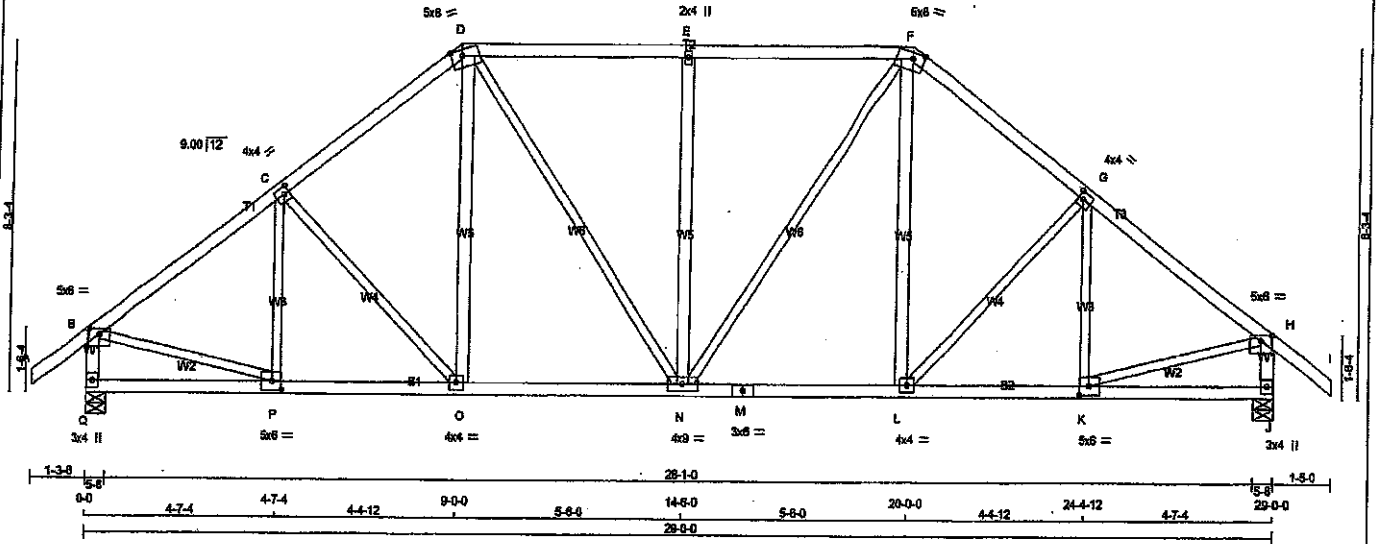
JSI GRIP= 0.88 (N) (INPUT = 0.90)  
JSI METAL= 0.60 (L) (INPUT = 1.00)



DWG NO. TAM 17100 2666  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |          |     |           |          |
|---------------------------------|------------|----------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | T21        | 1        | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            |          |     |           |          |

Version 8.230 8 Nov 17 2018 Mitek Industries, Inc. Tue Feb 5 20:48:13 2019 Page 1  
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Scale = 1:50.2



| LUMBER   | N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR |
|----------|-------------------|--------|------|--------|-------|
| A - D    | 2x4               | DRY    | No.2 | SPF    |       |
| D - F    | 2x4               | DRY    | No.2 | SPF    |       |
| F - I    | 2x4               | DRY    | No.2 | SPF    |       |
| Q - B    | 2x4               | DRY    | No.2 | SPF    |       |
| J - H    | 2x4               | DRY    | No.2 | SPF    |       |
| Q - M    | 2x4               | DRY    | No.2 | SPF    |       |
| M - J    | 2x4               | DRY    | No.2 | SPF    |       |
| ALL WEBS | 2x3               | DRY    | No.2 | SPF    |       |
| EXCEPT   |                   |        |      |        |       |
| O - D    | 2x4               | DRY    | No.2 | SPF    |       |
| N - E    | 2x4               | DRY    | No.2 | SPF    |       |
| L - F    | 2x4               | DRY    | No.2 | SPF    |       |

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT TYPE  | PLATES | W   | LEN | Y    | X    |
|----------|--------|-----|-----|------|------|
| B TMVW-p | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| C TMVW-t | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| D TTWW-m | MT20   | 5.0 | 8.0 | 1.75 | 3.25 |
| E TMVW-w | MT20   | 2.0 | 4.0 |      |      |
| F TTWW-m | MT20   | 5.0 | 8.0 | 1.75 | 3.25 |
| G TMVW-l | MT20   | 4.0 | 4.0 | 2.00 | 1.50 |
| H TMVW-p | MT20   | 5.0 | 6.0 | 1.50 | 3.00 |
| J BMV1+p | MT20   | 3.0 | 4.0 |      |      |
| K BMVW-t | MT20   | 5.0 | 6.0 | 2.50 | 2.75 |
| L BMVW-t | MT20   | 4.0 | 4.0 |      |      |
| M BS-1   | MT20   | 3.0 | 6.0 |      |      |
| N BMVW-t | MT20   | 4.0 | 4.0 |      |      |
| O BMVW-t | MT20   | 4.0 | 4.0 |      |      |
| P BMVW-t | MT20   | 5.0 | 6.0 | 2.50 | 2.75 |
| Q BMV1+p | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |      | FACTORED       | MAXIMUM FACTORED | INPUT | REQD   |       |       |
|----------|------|----------------|------------------|-------|--------|-------|-------|
|          |      | GROSS REACTION | GROSS REACTION   | BRG   | BRG    |       |       |
| JT       | VERT | HORZ           | DOWN             | HORZ  | UPLIFT | IN-SX | IN-SX |
| Q        | 2180 | 0              | 2180             | 0     | 0      | 5-8   | 5-8   |
| J        | 2182 | 0              | 2182             | 0     | 0      | 5-8   | 5-8   |

| UNFACTORED REACTIONS | 1ST LCASE | MAX/MIN COMPONENT REACTIONS |
|----------------------|-----------|-----------------------------|
| JT COMBINED          | 1620      | 922 / 0                     |
| Q COMBINED           | 1629      | 929 / 0                     |
| JT SNOW              | 305 / 0   |                             |
| Q SNOW               | 305 / 0   |                             |
| JT LIVE              | 0 / 0     |                             |
| Q LIVE               | 0 / 0     |                             |
| JT WIND              | 384 / 0   |                             |
| Q WIND               | 385 / 0   |                             |
| JT DEAD              | 0 / 0     |                             |
| Q DEAD               | 0 / 0     |                             |
| JT SOIL              | 0 / 0     |                             |
| Q SOIL               | 0 / 0     |                             |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, J

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.33 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

| CHORDS | MEMB. | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | FACTORED HORZ. LOAD (PLF) | MAX. UNBRACED LENGTH (FT) | WEBS  | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH (FT) |
|--------|-------|---------------------------|---------------------------|---------------------------|---------------------------|-------|-------|---------------------------|---------------------------|
| FR-TO  | A-B   | 0 / 42                    | -102.1                    | -102.1                    | 0.14 (1)                  | 10.00 | P-C   | -271 / 37                 | 0.10 (1)                  |
|        | B-C   | -2175 / 0                 | -102.1                    | -102.1                    | 0.33 (1)                  | 4.33  | C-O   | -244 / 0                  | 0.18 (1)                  |
|        | C-D   | -2030 / 0                 | -102.1                    | -102.1                    | 0.32 (1)                  | 4.46  | D-N   | 0 / 387                   | 0.06 (2)                  |
|        | D-E   | -1910 / 0                 | -102.1                    | -102.1                    | 0.44 (1)                  | 4.39  | N-F   | 0 / 544                   | 0.12 (1)                  |
|        | E-F   | -1910 / 0                 | -102.1                    | -102.1                    | 0.44 (1)                  | 4.39  | F-G   | -694 / 0                  | 0.66 (1)                  |
|        | F-G   | -2030 / 0                 | -102.1                    | -102.1                    | 0.32 (1)                  | 4.46  | G-H   | 0 / 544                   | 0.12 (1)                  |
|        | G-H   | -2175 / 0                 | -102.1                    | -102.1                    | 0.33 (1)                  | 4.33  | H-I   | 0 / 387                   | 0.06 (2)                  |
|        | H-I   | 0 / 46                    | -102.1                    | -102.1                    | 0.18 (1)                  | 10.00 | I-J   | -244 / 0                  | 0.18 (1)                  |
|        | J-K   | -2104 / 0                 | 0.0                       | 0.0                       | 0.22 (1)                  | 5.84  | K-L   | -271 / 37                 | 0.10 (1)                  |
|        | K-L   | -2117 / 0                 | 0.0                       | 0.0                       | 0.22 (1)                  | 5.83  | L-M   | 0 / 1823                  | 0.41 (1)                  |
|        | M-N   | 0 / 0                     | -38.5                     | -38.5                     | 0.14 (3)                  | 10.00 | N-O   | 0 / 1823                  | 0.41 (1)                  |
|        | N-O   | 0 / 1765                  | -38.5                     | -38.5                     | 0.39 (1)                  | 10.00 | O-P   | 0 / 1823                  | 0.41 (1)                  |
|        | O-P   | 0 / 1601                  | -38.5                     | -38.5                     | 0.39 (2)                  | 10.00 | P-Q   | 0 / 1823                  | 0.41 (1)                  |
|        | P-Q   | 0 / 1601                  | -38.5                     | -38.5                     | 0.39 (2)                  | 10.00 | Q-R   | 0 / 1823                  | 0.41 (1)                  |
|        | Q-R   | 0 / 1601                  | -38.5                     | -38.5                     | 0.39 (2)                  | 10.00 | R-S   | 0 / 1823                  | 0.41 (1)                  |
|        | R-S   | 0 / 1765                  | -38.5                     | -38.5                     | 0.39 (1)                  | 10.00 | S-T   | 0 / 1823                  | 0.41 (1)                  |
|        | S-T   | 0 / 0                     | -38.5                     | -38.5                     | 0.14 (3)                  | 10.00 | T-U   | 0 / 1823                  | 0.41 (1)                  |

#### DESIGN CRITERIA

**SPECIFIED LOADS:**  
TOP CH. LL = 29.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2015, NBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.97")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.08")  
ALLOWABLE DEFL.(TL) = L/360 (0.97")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.13")

CSI: TC=0.44/1.00 (D-E:1), BC=0.39/1.00 (K-L:1), WB=0.88/1.00 (E-N:1), SS=0.27/1.00 (D-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

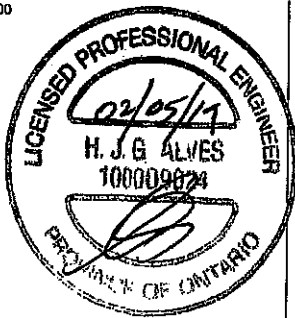
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 818 354 1987 788 1987 1655

PLATE PLACEMENT TOL. = 0.250 inches

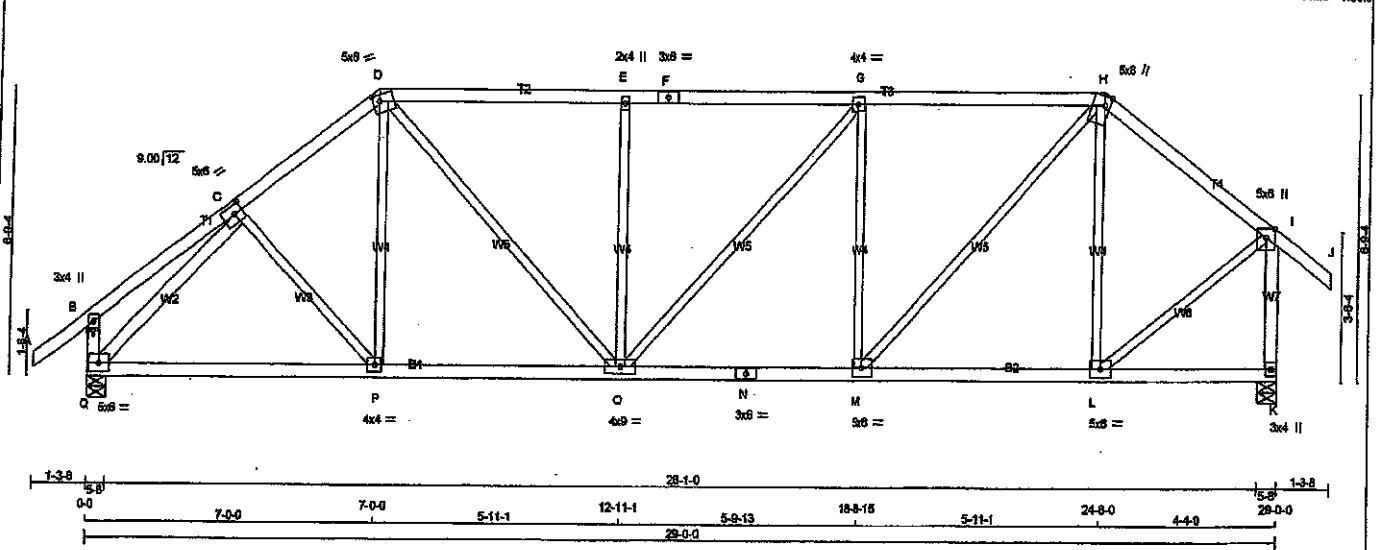
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.88 (J) (INPUT = 0.90)  
JSI METAL= 0.51 (M) (INPUT = 1.00)



DWG NO. TAM 77902667  
STRUCTURAL  
COMPONENT ONLY

|                                  |                          |                                                                                   |                 |                               |          |
|----------------------------------|--------------------------|-----------------------------------------------------------------------------------|-----------------|-------------------------------|----------|
| JOB NAME<br><b>200168-400366</b> | TRUSS NAME<br><b>T22</b> | QUANTITY<br><b>1</b>                                                              | PLY<br><b>1</b> | JOB DESC.<br><b>Preston 1</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                          | Version 6.230 S Nov 17 2018 Mitek Industries, Inc. Tue Feb 5 20:48:13 2019 Page 1 |                 |                               |          |
|                                  |                          | ID: IFxHXfe38FX8N7VhzQQIYyQBwW-bQFywibovnsVZ0_1xFOCa4zVCkme_c_8mkfP5zo50W         |                 |                               |          |
|                                  |                          | Scale = 1:50.0                                                                    |                 |                               |          |



| LUMBER         |      |        |        |
|----------------|------|--------|--------|
| N.L.G.A. RULES | SIZE | LUMBER | DESCR. |
| CHORDS         |      |        |        |
| A - D          | 2x4  | DRY    | No.2   |
| D - F          | 2x4  | DRY    | No.2   |
| F - H          | 2x4  | DRY    | No.2   |
| H - J          | 2x4  | DRY    | No.2   |
| Q - B          | 2x4  | DRY    | No.2   |
| K - I          | 2x4  | DRY    | No.2   |
| Q - N          | 2x4  | DRY    | No.2   |
| N - K          | 2x4  | DRY    | No.2   |
| ALL WEBS       | 2x3  | DRY    | No.2   |
| EXCEPT         |      |        |        |
| Q - C          | 2x4  | DRY    | No.2   |

DRY: SEASONED LUMBER.

| PLATES (table in inches) |        |      |     |               |
|--------------------------|--------|------|-----|---------------|
| JT TYPE                  | PLATES | W    | LEN | Y X           |
| B                        | TMW+p  | MT20 | 3.0 | 4.0           |
| C                        | TMWW-t | MT20 | 5.0 | 6.0 2.50 2.50 |
| D                        | TTWW-m | MT20 | 5.0 | 6.0 1.75 2.00 |
| E                        | TMW-w  | MT20 | 2.0 | 4.0           |
| F                        | TS-t   | MT20 | 3.0 | 6.0           |
| G                        | TMWW-t | MT20 | 4.0 | 4.0           |
| H                        | TTWW-m | MT20 | 5.0 | 6.0 Edge 1.50 |
| I                        | TMW-w  | MT20 | 5.0 | 6.0 Edge      |
| K                        | BMW+p  | MT20 | 3.0 | 4.0           |
| L                        | BMWW-t | MT20 | 5.0 | 6.0           |
| M                        | BMWW-t | MT20 | 5.0 | 6.0           |
| N                        | BS-t   | MT20 | 3.0 | 6.0           |
| O                        | BMWW-w | MT20 | 4.0 | 9.0           |
| P                        | BMWW-t | MT20 | 4.0 | 4.0           |
| Q                        | BMWV-t | MT20 | 5.0 | 6.0           |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |                |                  |       |
|----------|----------------|------------------|-------|
| FACTORED | CROSS REACTION | MAXIMUM FACTORED | INPUT |
| JT       | VERT           | DOWN             | BRG   |
| Q        | 2180           | 0                | 0     |
| K        | 2180           | 0                | 0     |

| UNFACTORED REACTIONS |          |       |           |
|----------------------|----------|-------|-----------|
| 1ST LCASE            | SNOW     | LIVE  | PERM.LIVE |
| JT                   | COMBINED | SNOW  | LIVE      |
| Q                    | 1620     | 922/0 | 305/0     |
| K                    | 1620     | 922/0 | 305/0     |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) Q, K

BRACING  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.80 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |               |            |                 |
|--------|---------------|------------|-----------------|
| MEMB.  | MAX. FACTORED | FACTORED   | MAX.            |
| FR-TO  | FORCE         | VERT. LOAD | LC1 MAX         |
| (LBS)  | (LBS)         | (LBS)      | CSI (LC)        |
| A-B    | 0/42          | -102.1     | -102.1 0.14 (1) |
| B-C    | 0/23          | -102.1     | -102.1 0.18 (1) |
| C-D    | -2158/0       | -102.1     | -102.1 0.25 (1) |
| D-E    | -2318/0       | -102.1     | -102.1 0.84 (1) |
| E-F    | -2318/0       | -102.1     | -102.1 0.84 (1) |
| F-G    | -2318/0       | -102.1     | -102.1 0.84 (1) |
| G-H    | -2155/0       | -102.1     | -102.1 0.83 (1) |
| H-I    | -1492/0       | -102.1     | -102.1 0.39 (1) |
| I-J    | 0/42          | -102.1     | -102.1 0.14 (1) |
| J-K    | -280/0        | 0.0        | 0.0 0.03 (1)    |
| K-L    | -2117/0       | 0.0        | 0.0 0.44 (1)    |
| Q-P    | 0/1638        | -38.5      | -38.5 0.54 (2)  |
| P-O    | 0/1706        | -38.5      | -38.5 0.56 (2)  |
| O-N    | 0/2155        | -38.5      | -38.5 0.49 (1)  |
| N-M    | 0/2155        | -38.5      | -38.5 0.49 (1)  |
| M-L    | 0/1181        | -38.5      | -38.5 0.35 (2)  |
| L-K    | 0/0           | -38.5      | -38.5 0.19 (3)  |

| WEBS  |               |            |          |
|-------|---------------|------------|----------|
| MEMB. | MAX. FACTORED | FACTORED   | MAX.     |
| FR-TO | FORCE         | VERT. LOAD | LC1 MAX  |
| (LBS) | (LBS)         | (LBS)      | CSI (LC) |
| C-P   | 0/142         | 0.03       | 0.03 (3) |
| P-D   | 0/278         | 0.06       | 0.06 (3) |
| D-O   | 0/906         | 0.20       | 0.20 (1) |
| O-E   | -849/0        | 0.50       | 0.50 (1) |
| E-G   | 0/244         | 0.05       | 0.05 (1) |
| G-H   | -833/0        | 0.84       | 0.84 (1) |
| H-I   | 0/1442        | 0.32       | 0.32 (1) |
| I-H   | -637/0        | 0.49       | 0.49 (1) |
| H-G   | -2424/0       | 0.74       | 0.74 (1) |
| L-I   | 0/1467        | 0.33       | 0.33 (1) |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN.C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 8.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2010, NBC 2012  
- CSA 088-08, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.97")  
CALCULATED VERT. DEFL.(LL) = 1/999 (0.11")  
ALLOWABLE DEFL.(TL) = L/360 (0.97")  
CALCULATED VERT. DEFL.(TL) = 1/999 (0.19")

CSI: TC=0.64/1.00 (E-G-1), BC=0.58/1.00 (O-P-2), WB=0.74/1.00 (C-Q-1), SB=0.28/1.00 (G-H-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

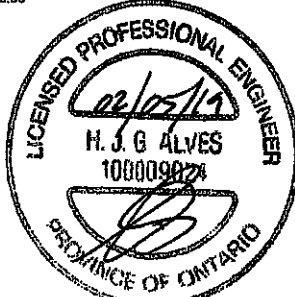
NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 785 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.89 (K) (INPUT = 0.90 )  
JSI METAL= 0.80 (N) (INPUT = 1.00 )

THIS STRUCTURE MUST BE CONSTRUCTED TO MEET OR EXCEED THE PROVISIONS OF THE ONTARIO BUILDING CODE



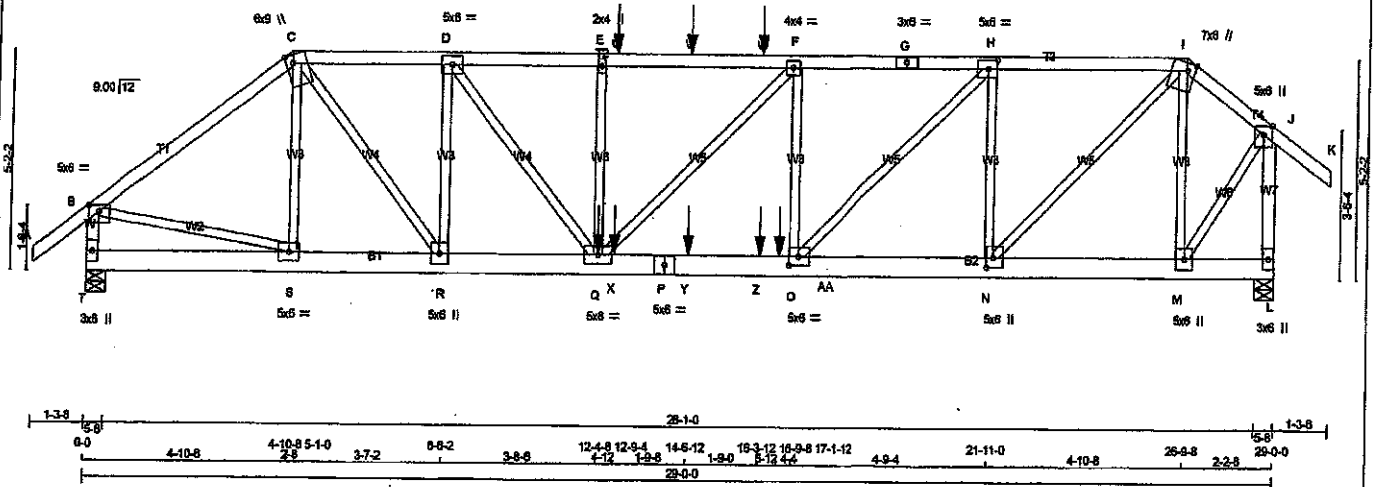
DWG NO: TAM 17902668  
STRUCTURAL COMPONENT ONLY

|                                  |                          |                      |                 |                               |          |
|----------------------------------|--------------------------|----------------------|-----------------|-------------------------------|----------|
| JOB NAME<br><b>200168-400366</b> | TRUSS NAME<br><b>T23</b> | QUANTITY<br><b>1</b> | PLY<br><b>2</b> | JOB DESC.<br><b>Preston 1</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                          |                      |                 | TRUSS DESC.                   |          |

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ID:1FxFHXf38FX8N7VhzQQIYYQBWW-3dpK82cQg5\_mB9ZDVZmRxd9xc2PNT08NQUcXxZo50V

Scale = 1:50.0



TOTAL WEIGHT = 2 X 149 = 297 lb

| LUMBER   | N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. | SPF |
|----------|-------------------|--------|------|--------|--------|-----|
| A - C    | 2x4               | DRY    | No.2 |        |        |     |
| C - G    | 2x4               | DRY    | No.2 |        |        |     |
| G - I    | 2x4               | DRY    | No.2 |        |        |     |
| I - K    | 2x4               | DRY    | No.2 |        |        |     |
| T - B    | 2x4               | DRY    | No.2 |        |        |     |
| L - J    | 2x4               | DRY    | No.2 |        |        |     |
| T - P    | 2x6               | DRY    | No.2 |        |        |     |
| P - L    | 2x6               | DRY    | No.2 |        |        |     |
| ALL WEBS | 2x3               | DRY    | No.2 |        |        |     |
| EXCEPT   |                   |        |      |        |        |     |

DRY: SEASONED LUMBER.

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS                                  | ROWS | SURFACE SPACING (IN) | LOAD (PLF)  |
|-----------------------------------------|------|----------------------|-------------|
| TOP CHORDS: (0.122'X3') SPIRAL NAILS    |      |                      |             |
| A-C                                     | 1    | 12                   | TOP         |
| C-G                                     | 1    | 12                   | SIDE(0.0)   |
| G-I                                     | 1    | 12                   | TOP         |
| I-K                                     | 1    | 12                   | TOP         |
| T-B                                     | 1    | 12                   | TOP         |
| L-J                                     | 1    | 12                   | TOP         |
| BOTTOM CHORDS: (0.122'X3') SPIRAL NAILS |      |                      |             |
| T-P                                     | 2    | 12                   | SIDE(183.1) |
| P-L                                     | 2    | 12                   | SIDE(183.1) |
| WEBS: (0.122'X3') SPIRAL NAILS          |      |                      |             |
| Q-E                                     | 1    | 8                    | SIDE(100.9) |
| O-F                                     | 1    | 6                    | SIDE(257.1) |
| 2x3                                     | 1    | 6                    |             |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

GIRDER NAILING ASSUMES NAILED HANGERS ARE FASTENED WITH MIN. 3-0 INCH NAILS.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

SIDE - PLF SHOWN IS THE EQUIVALENT UDL APPLIED TO ONE SIDE THAT THE CORRESPONDING NAILING PATTERN SHALL BE CAPABLE OF TRANSFERRING. REMAINING PLF MUST BE APPLIED ON THE OPPOSITE SIDE OR ON THE TOP.

PLATES (table is in inches)

| JT | TYPE   | PLATES | W   | LEN | Y    | X    |
|----|--------|--------|-----|-----|------|------|
| B  | TMVW-p | MT20   | 5.0 | 6.0 | 1.75 | 3.00 |
| C  | TTWV+m | MT20   | 6.0 | 9.0 | Edge | 2.00 |
| D  | TMVW-v | MT20   | 5.0 | 6.0 |      |      |
| E  | TMVW-w | MT20   | 2.0 | 4.0 |      |      |
| F  | TMVW-v | MT20   | 4.0 | 4.0 |      |      |
| G  | TS-4   | MT20   | 3.0 | 6.0 |      |      |
| H  | TMVW-t | MT20   | 5.0 | 6.0 | 2.50 | 2.75 |
| I  | TTWV+m | MT20   | 7.0 | 8.0 | Edge | 2.50 |
| J  | TMVW-p | MT20   | 5.0 | 6.0 | Edge |      |
| L  | BMVW-t | MT20   | 5.0 | 6.0 |      |      |
| M  | BMVW-t | MT20   | 5.0 | 6.0 | 2.75 | 2.00 |
| N  | BMVW-t | MT20   | 5.0 | 6.0 | 2.50 | 2.75 |
| O  | BS-1   | MT20   | 5.0 | 6.0 |      |      |
| Q  | BMVW-t | MT20   | 5.0 | 6.0 |      |      |
| R  | BMVW-t | MT20   | 5.0 | 6.0 |      |      |
| S  | BMVW-t | MT20   | 5.0 | 6.0 |      |      |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----------|-------------------------|---------------------------------|-----------|----------|
| JT       | VERT                    | DOWN                            | IN-SX     | IN-SX    |
| T        | 3948                    | 0                               | 5-8       | 5-8      |
| L        | 4023                    | 0                               | 5-8       | 5-8      |

UNFACTORED REACTIONS

| 1ST LOASE | MAX. MIN. COMPONENT REACTIONS |          |         |            |       |         |       |
|-----------|-------------------------------|----------|---------|------------|-------|---------|-------|
| JT        | COMBINED                      | SNOW     | LIVE    | PERM. LIVE | WIND  | DEAD    | SOIL  |
| T         | 2331                          | 1878 / 0 | 543 / 0 | 0 / 0      | 0 / 0 | 711 / 0 | 0 / 0 |
| L         | 2989                          | 1706 / 0 | 557 / 0 | 0 / 0      | 0 / 0 | 728 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) T, L

BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 3.16 FT. MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MEMB.     | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) | MAX. FACTORED HORZ. LOAD LC1 (LBS) | WEBS  | MEMB.     | MAX. FACTORED FORCE (LBS) | MAX. FACTORED HORZ. LOAD LC1 (LBS) |
|--------|-----------|---------------------------|-------------------------------|------------------------------------|-------|-----------|---------------------------|------------------------------------|
| FR-TO  |           |                           |                               |                                    | FR-TO |           |                           |                                    |
| A-B    | 0 / 42    | -102.1                    | -102.1                        | 0.08 (1)                           | S-C   | -590 / 0  | 0.11 (1)                  | 0.42 (1)                           |
| B-C    | -4458 / 0 | -102.1                    | -102.1                        | 0.37 (1)                           | M-I   | -2174 / 0 | 0.42 (1)                  | 0.42 (1)                           |
| C-D    | -5784 / 0 | -102.1                    | -102.1                        | 0.25 (1)                           | B-S   | 0 / 3848  | 0.45 (1)                  | 0.45 (1)                           |
| D-E    | -7611 / 0 | -102.1                    | -102.1                        | 0.41 (1)                           | M-J   | 0 / 3023  | 0.37 (1)                  | 0.37 (1)                           |
| E-U    | -7811 / 0 | -102.1                    | -102.1                        | 0.53 (1)                           | D-Q   | -702 / 0  | 0.13 (1)                  | 0.13 (1)                           |
| U-V    | -7811 / 0 | -102.1                    | -102.1                        | 0.53 (1)                           | Q-E   | 0 / 2879  | 0.37 (1)                  | 0.37 (1)                           |
| V-W    | -7811 / 0 | -102.1                    | -102.1                        | 0.53 (1)                           | C-R   | 0 / 3810  | 0.45 (1)                  | 0.45 (1)                           |
| W-F    | -7611 / 0 | -102.1                    | -102.1                        | 0.53 (1)                           | R-D   | -2702 / 0 | 0.52 (1)                  | 0.52 (1)                           |
| F-G    | -7826 / 0 | -102.1                    | -102.1                        | 0.48 (1)                           | N-I   | 0 / 4573  | 0.57 (1)                  | 0.57 (1)                           |
| G-H    | -7626 / 0 | -102.1                    | -102.1                        | 0.48 (1)                           | Q-F   | -32 / 0   | 0.01 (3)                  | 0.01 (3)                           |
| H-I    | -5021 / 0 | -102.1                    | -102.1                        | 0.29 (1)                           | N-H   | -3126 / 0 | 0.60 (1)                  | 0.60 (1)                           |
| I-J    | -2264 / 0 | -102.1                    | -102.1                        | 0.08 (1)                           | O-F   | -891 / 0  | 0.13 (1)                  | 0.13 (1)                           |
| J-K    | 0 / 42    | -102.1                    | -102.1                        | 0.08 (1)                           | O-H   | 0 / 3888  | 0.46 (1)                  | 0.46 (1)                           |
| T-B    | -3888 / 0 | 0.0                       | 0.0                           | 0.22 (1)                           |       |           |                           |                                    |
| L-J    | -4047 / 0 | 0.0                       | 0.0                           | 0.41 (1)                           |       |           |                           |                                    |
| T-S    | 0 / 0     | -38.5                     | -38.5                         | 0.04 (3)                           |       |           |                           |                                    |
| S-R    | 0 / 3547  | -38.5                     | -38.5                         | 0.26 (1)                           |       |           |                           |                                    |
| R-Q    | 0 / 5794  | -38.5                     | -38.5                         | 0.41 (1)                           |       |           |                           |                                    |
| Q-X    | 0 / 7826  | -38.5                     | -38.5                         | 0.66 (1)                           |       |           |                           |                                    |
| X-P    | 0 / 7826  | -38.5                     | -38.5                         | 0.66 (1)                           |       |           |                           |                                    |
| P-Y    | 0 / 7826  | -38.5                     | -38.5                         | 0.66 (1)                           |       |           |                           |                                    |
| Y-Z    | 0 / 7826  | -38.5                     | -38.5                         | 0.66 (1)                           |       |           |                           |                                    |
| Z-AA   | 0 / 7826  | -38.5                     | -38.5                         | 0.66 (1)                           |       |           |                           |                                    |
| AA-O   | 0 / 7826  | -38.5                     | -38.5                         | 0.66 (1)                           |       |           |                           |                                    |
| O-N    | 0 / 5021  | -38.5                     | -38.5                         | 0.41 (1)                           |       |           |                           |                                    |
| N-M    | 0 / 1757  | -38.5                     | -38.5                         | 0.17 (1)                           |       |           |                           |                                    |
| M-L    | 0 / 0     | -38.5                     | -38.5                         | 0.06 (2)                           |       |           |                           |                                    |

FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.    | LC1   | MAX.  | MAX+ | FACE  | DIR. | TYPE  | HEEL | CONN. |
|----|---------|-------|-------|------|-------|------|-------|------|-------|
| Q  | 12-4-8  | -1319 | -1319 | -    | FRONT | VERT | TOTAL | -    | -     |
| U  | 12-9-4  | -147  | -147  | -    | FRONT | VERT | TOTAL | -    | -     |
| V  | 14-8-12 | -147  | -147  | -    | FRONT | VERT | TOTAL | -    | -     |
| W  | 16-3-12 | -147  | -147  | -    | FRONT | VERT | TOTAL | -    | -     |
| X  | 12-9-4  | -55   | -70   | -    | FRONT | VERT | TOTAL | -    | -     |
| Y  | 14-8-12 | -55   | -70   | -    | FRONT | VERT | TOTAL | -    | -     |
| Z  | 16-3-12 | -55   | -70   | -    | FRONT | VERT | TOTAL | -    | -     |
| AA | 16-9-8  | -1887 | -1887 | -    | FRONT | VERT | TOTAL | -    | -     |

DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.8 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA 089-09, CSA 088-14  
- TPC 2011, TPC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.97')  
CALCULATED VERT. DEFL. (LL) = L/999 (0.17')  
ALLOWABLE DEFL. (TL) = L/360 (0.97')  
CALCULATED VERT. DEFL. (TL) = L/999 (0.28')

CS: TC=0.53/1.00 (E-F:1), BC=0.66/1.00 (O-Q:1), WB=0.60/1.00 (H-N:1), SS=0.59/1.00 (O-Q:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00

COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES

| PLATE GRIP (DRY) SHEAR (PSI) | SECTION (PLI)    | MAX MIN MAX MIN |
|------------------------------|------------------|-----------------|
| MT20                         | 618 354 1667 786 | 1987 1856       |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.90 (B) (INPUT = 0.90 )  
JSI METAL= 0.80 (P) (INPUT = 1.00 )

DRWG NO. TAM 7902660  
STRUCTURAL  
COMPONENT ONLY

CONTINUED ON PAGE 2

|                                 |            |          |     |             |          |
|---------------------------------|------------|----------|-----|-------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | DRWG NO. |
| 200168-400366                   | T23        | 1        | 2   | Preston 1   |          |
| Tamarack Roof Truss, Burlington |            |          |     | TRUSS DESC. |          |

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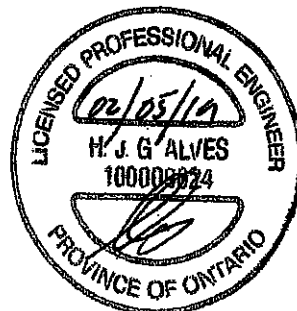
**PLATES (table is in inches)**

| JT TYPE | PLATES | W    | LEN | Y   | X |
|---------|--------|------|-----|-----|---|
| T       | BMV1+p | MT20 | 3.0 | 8.0 |   |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

RECEIVED  
JUN 13 2019

TOWN OF CALEDON  
BUILDING SECTION  
FILE NO. \_\_\_\_\_



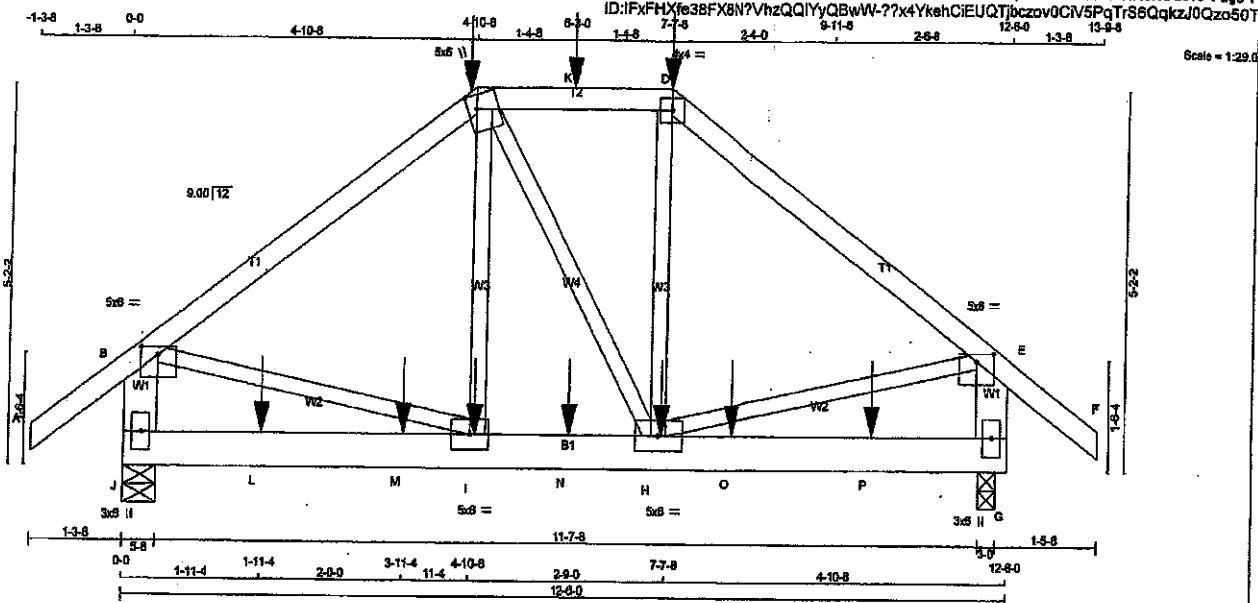
DWG NO. TAM 974026601  
STRUCTURAL  
COMPONENT ONLY 7/2

|               |            |          |     |             |           |          |
|---------------|------------|----------|-----|-------------|-----------|----------|
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | Presion 1 | DRWG NO. |
| 200168-400366 | T24        | 1        | 1   | TRUSS DESC. |           |          |

Tamarack Roof Truss, Burlington

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TOTAL WEIGHT = 66 lb

| <u>LUMBER</u>     |     |      |        |       |
|-------------------|-----|------|--------|-------|
| N. L. G. A. RULES |     |      |        |       |
| CHORDS            |     | SIZE | LUMBER | DESCR |
| A - C             | 2x4 | DRY  | No.2   | SPF   |
| C - D             | 2x4 | DRY  | No.2   | SPF   |
| D - F             | 2x4 | DRY  | No.2   | SPF   |
| J - B             | 2x6 | DRY  | No.2   | SPF   |
| G - E             | 2x6 | DRY  | No.2   | SPF   |
| J - G             | 2x6 | DRY  | No.2   | SPF   |
| ALL WEBS          | 2x3 | DRY  | No.2   | SPF   |
| EXCEPT            |     |      |        |       |

DRY: SEASONED LUMBER.

PLATES (table is in inches)

| JT TYPE   | PLATES | W   | LEN | Y    | X    |
|-----------|--------|-----|-----|------|------|
| B TMVW-p  | MT20   | 5.0 | 6.0 | 1.25 | 3.00 |
| C TTWV+m  | MT20   | 5.0 | 6.0 | 2.25 | 1.50 |
| D TTW-l   | MT20   | 4.0 | 4.0 |      |      |
| E TMVW-p  | MT20   | 5.0 | 6.0 | 1.25 | 3.00 |
| G BMV1+p  | MT20   | 3.0 | 6.0 |      |      |
| H BMVWV-l | MT20   | 5.0 | 6.0 |      |      |
| I BMVWV-l | MT20   | 5.0 | 6.0 |      |      |
| J BMV1+p  | MT20   | 3.0 | 6.0 |      |      |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS |  |                |      |                  |      |        |       |      |       |
|----------|--|----------------|------|------------------|------|--------|-------|------|-------|
|          |  | FACTORED       |      | MAXIMUM FACTORED |      | INPUT  |       | REQD |       |
|          |  | GROSS REACTION |      | GROSS REACTION   |      | BRG    |       | BRG  |       |
| JT       |  | VERT           | HORZ | DOWN             | HORZ | UPLIFT | IN-SX |      | IN-SX |
| J        |  | 1688           | 0    | 1688             | 0    | 0      | 5-8   |      |       |
| G        |  | 1688           | 0    | 1688             | 0    | 0      | 3-0   |      | 3-0   |

| UNFACTORED REACTIONS |          |                               |         |           |       |         |       |
|----------------------|----------|-------------------------------|---------|-----------|-------|---------|-------|
| 1ST LC CASE          |          | MAX./MIN. COMPONENT REACTIONS |         |           |       |         |       |
| JT                   | COMBINED | SNOW                          | LIVE    | PERM.LIVE | WIND  | DEAD    | SOIL  |
| J                    | 1258     | 709 / 0                       | 237 / 0 | 0 / 0     | 0 / 0 | 310 / 0 | 0 / 0 |
| G                    | 1258     | 709 / 0                       | 237 / 0 | 0 / 0     | 0 / 0 | 310 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINTS (J, G)

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 4.61 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**  
TOTAL LOAD CASES: (4)

| CHORDS |             | MAX. FACTORED |        | FACTORED |       | WEBS  |             | MAX. FACTORED |     |
|--------|-------------|---------------|--------|----------|-------|-------|-------------|---------------|-----|
| MEMB.  | FORCE (LBS) | VERT.         | LC1    | MAX.     | MAX.  | MEMB. | FORCE (LBS) | VERT.         | LC1 |
| FR-TO  |             | FROM          | TO     |          |       | FR-TO |             | FROM          | TO  |
| A-B    | 0 / 42      | -102.1        | -102.1 | 0.15 (1) | 10.00 | I-C   | 0 / 268     | 0.07 (3)      |     |
| B-C    | -1506 / 0   | -102.1        | -102.1 | 0.55 (1) | 4.61  | C-H   | 0 / 13      | 0.00 (3)      |     |
| C-K    | -1205 / 0   | -102.1        | -102.1 | 0.32 (1) | 5.38  | H-D   | 0 / 281     | 0.07 (3)      |     |
| K-D    | -1205 / 0   | -102.1        | -102.1 | 0.82 (1) | 5.38  | H-E   | 0 / 1233    | 0.31 (1)      |     |
| D-E    | -1506 / 0   | -102.1        | -102.1 | 0.55 (1) | 4.61  | B-I   | 0 / 1232    | 0.30 (1)      |     |
| E-F    | 0 / 42      | -102.1        | -102.1 | 0.15 (1) | 10.00 |       |             |               |     |
| J-B    | -1564 / 0   | 0.0           | 0.0    | 0.11 (1) | 7.80  |       |             |               |     |
| G-E    | -1562 / 0   | 0.0           | 0.0    | 0.11 (1) | 7.80  |       |             |               |     |
| J-L    | 0 / 0       | -38.5         | -38.5  | 0.16 (3) | 10.00 |       |             |               |     |
| L-M    | 0 / 0       | -38.5         | -38.5  | 0.16 (3) | 10.00 |       |             |               |     |
| M-I    | 0 / 0       | -38.5         | -38.5  | 0.16 (3) | 10.00 |       |             |               |     |
| I-N    | 0 / 1203    | -38.5         | -38.5  | 0.24 (2) | 10.00 |       |             |               |     |
| N-H    | 0 / 1203    | -38.5         | -38.5  | 0.24 (2) | 10.00 |       |             |               |     |
| H-O    | 0 / 0       | -38.5         | -38.5  | 0.15 (2) | 10.00 |       |             |               |     |
| O-P    | 0 / 0       | -38.5         | -38.5  | 0.15 (2) | 10.00 |       |             |               |     |
| P-G    | 0 / 0       | -38.5         | -38.5  | 0.15 (2) | 10.00 |       |             |               |     |

| FACTORED CONCENTRATED LOADS (LBS) |         |      |      |      |      |      |       |      |       |  |  |  |  |
|-----------------------------------|---------|------|------|------|------|------|-------|------|-------|--|--|--|--|
| JT                                | LOC.    | LC1  | MAX- | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |  |  |  |  |
| C                                 | 4-10-8  | -401 | -401 | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |
| D                                 | 7-7-8   | -401 | -401 | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |
| H                                 | 7-6-12  | -55  | -70  | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |
| I                                 | 4-11-4  | -55  | -70  | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |
| K                                 | 6-3-0   | -147 | -147 | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |
| L                                 | 1-11-4  | -55  | -70  | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |
| M                                 | 3-11-4  | -55  | -70  | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |
| N                                 | 6-3-0   | -55  | -70  | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |
| O                                 | 8-6-12  | -55  | -70  | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |
| P                                 | 10-8-12 | -55  | -70  | —    | BACK | VERT | TOTAL | —    | —     |  |  |  |  |

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN. C/C**

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 088-08, CSA 088-14  
- TPC 2011, TPC 2014

(65 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.42")  
CALCULATED VERT. DEFL.(LL) = L/989 (0.02")  
ALLOWABLE DEFL.(TL) = L/360 (0.42")  
CALCULATED VERT. DEFL.(TL) = L/989 (0.04")

CSI: TC=0.55/1.00 (D-E:1), BC=0.24/1.00 (H-I:2),  
WB=0.31/1.00 (E-H:1), GS=0.18/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00  
COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE HEELS OFF

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

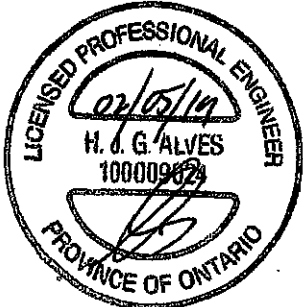
**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1687 788 1987 1659

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

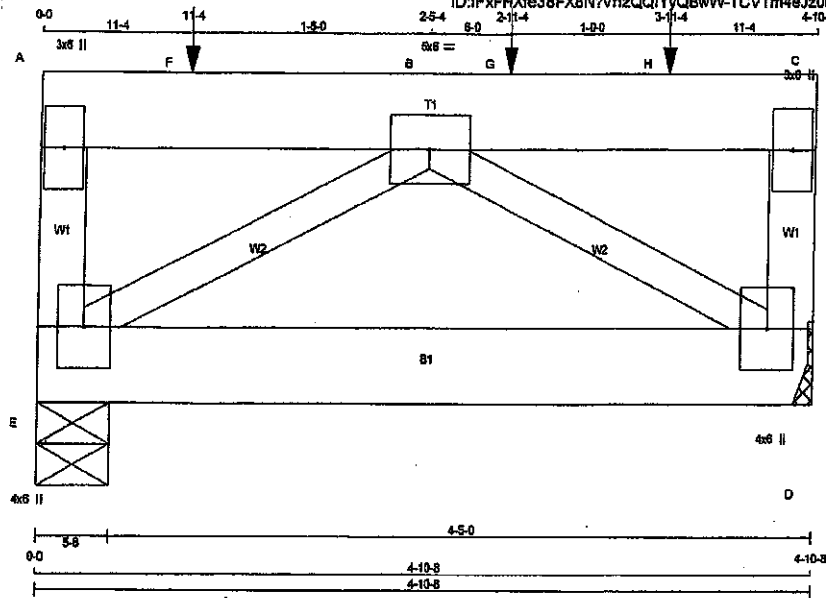
JSI GRIP= 0.90 (D) (INPUT = 0.90)  
JSI METAL= 0.34 (E) (INPUT = 1.00)

DRWG NO. TAM 17902670  
STRUCTURAL  
COMPONENT ONLY



|                                 |            |          |     |           |             |          |
|---------------------------------|------------|----------|-----|-----------|-------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC. | TRUSS DESC. | DRWG NO. |
| 200168-400366                   | T25        | 1        | 2   | Preston 1 |             |          |
| Tamarack Roof Truss, Burlington |            |          |     |           |             |          |

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Scale = 1:12.5

TOTAL WEIGHT = 2 X 24 = 48 lb

| LUMBER                | CHORDS | SIZE | LUMBER | DESCR. |
|-----------------------|--------|------|--------|--------|
| N. L. G. A. RULES     |        |      |        |        |
| E - A                 | 2x4    | DRY  | No.2   | SPF    |
| A - C                 | 2x6    | DRY  | No.2   | SPF    |
| D - C                 | 2x4    | DRY  | No.2   | SPF    |
| E - D                 | 2x6    | DRY  | No.2   | SPF    |
| ALL WEBS              | 2x3    | DRY  | No.2   | SPF    |
| DRY: SEASONED LUMBER. |        |      |        |        |

DESIGN CONSISTS OF 2 TRUSSES BUILT SEPARATELY THEN FASTENED TOGETHER AS FOLLOWS:

| CHORDS #ROWS                             | SURFACE SPACING (IN) | LOAD(PLF) |
|------------------------------------------|----------------------|-----------|
| TOP CHORDS : (0.122"x3") SPIRAL NAILS    |                      |           |
| E-A 1 12                                 |                      | TOP       |
| C-D 1 12                                 |                      | TOP       |
| A-C 2 12                                 |                      | TOP       |
| BOTTOM CHORDS : (0.122"x3") SPIRAL NAILS |                      |           |
| E-D 2 12                                 |                      | TOP       |
| WEBS : (0.122"x3") SPIRAL NAILS          |                      |           |
| 2x3 1 8                                  |                      |           |

NAILS TO BE DRIVEN FROM ONE SIDE ONLY.

TOP - COMPONENTS ARE LOADED FROM THE TOP AND MUST BE PLACED ON TOP EDGE OF ALL PLIES FOR THE LOAD TO BE TRANSFERRED TO EACH PLY.

#### PLATES (table in inches)

| JT TYPE   | PLATES | W   | LEN | Y | X |
|-----------|--------|-----|-----|---|---|
| A TMV+p   | MT20   | 3.0 | 6.0 |   |   |
| B TMVW+L  | MT20   | 5.0 | 6.0 |   |   |
| C TMV+p   | MT20   | 3.0 | 6.0 |   |   |
| D BMVW1+p | MT20   | 4.0 | 6.0 |   |   |
| E BMVW1+p | MT20   | 4.0 | 6.0 |   |   |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----------|-------------------------|---------------------------------|-----------|----------|
| JT       | VERT                    | DOWN                            | IN-SX     | IN-SX    |
| E        | 749                     | 0                               | 749       | 0        |
| D        | 1728                    | 0                               | 1728      | 0        |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT D. MINIMUM BEARING LENGTH AT JOINT D = 1-8.

#### UNFACTORED REACTIONS

| JT | COMBINED | SNOW  | LIVE  | PERM.LIVE | WIND | DEAD  | SOIL |
|----|----------|-------|-------|-----------|------|-------|------|
| E  | 553      | 301/0 | 119/0 | 0/0       | 0/0  | 143/0 | 0/0  |
| D  | 1280     | 710/0 | 257/0 | 0/0       | 0/0  | 323/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LOC. FROM TO | MAX. UNBRACED LENGTH (FT) | WEBS  | MAX. FACTORED FORCE (LBS) | MAX. UNBRACED LENGTH (FT) |
|--------|---------------------------|---------------------------|--------------|---------------------------|-------|---------------------------|---------------------------|
| FR-TO  |                           |                           |              |                           | FR-TO |                           |                           |
| E-A    | -38/3                     | 0.0                       | 0.0          | 0.00 (1)                  | E-B   | -1154/0                   | 0.10 (1)                  |
| A-F    | 0/0                       | -102.1                    | -102.1       | 0.10 (1)                  | B-D   | -1154/0                   | 0.10 (1)                  |
| F-B    | 0/0                       | -102.1                    | -102.1       | 0.10 (1)                  |       |                           |                           |
| B-G    | 0/0                       | -102.1                    | -102.1       | 0.30 (1)                  |       |                           |                           |
| G-H    | 0/0                       | -102.1                    | -102.1       | 0.30 (1)                  |       |                           |                           |
| H-C    | 0/0                       | -102.1                    | -102.1       | 0.30 (1)                  |       |                           |                           |
| D-C    | -1015/0                   | 0.0                       | 0.0          | 0.05 (1)                  |       |                           |                           |
| E-D    | 0/976                     | -38.5                     | -38.5        | 0.10 (2)                  |       |                           |                           |

#### FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.   | LC1   | MAX.  | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |
|----|--------|-------|-------|------|------|------|-------|------|-------|
| F  | 11-4   | -80   | -55   | -    | TOP  | VERT | TOTAL | -    | -     |
| G  | 2-11-4 | -150  | -150  | -    | TOP  | VERT | TOTAL | -    | -     |
| H  | 3-11-4 | -1589 | -1589 | -    | TOP  | VERT | TOTAL | -    | -     |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. OC

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBCC 2010, OBC 2012  
- CSA 088-08, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/888 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.01")

CSI: TC=0.30/1.00 (B-C:1), SC=0.10/1.00 (D-E:2), WB=0.10/1.00 (B-E:1), SS=0.31/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

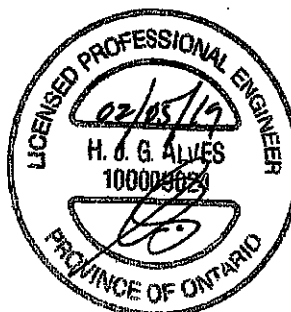
#### NAIL VALUES

| PLATE | GRIP(DRY) | SHEAR (PSI) | SECTION (PLI) |
|-------|-----------|-------------|---------------|
| MT20  | 818       | 354         | 1687          |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

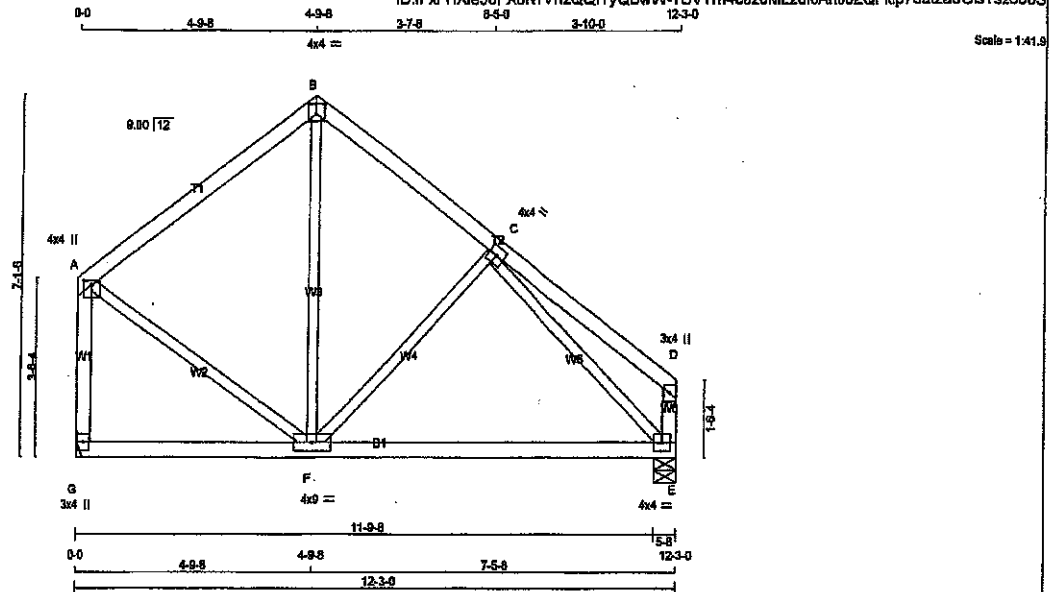
JSI GRIP= 0.63 (E) (INPUT = 0.90)  
JSI METAL= 0.22 (D) (INPUT = 1.00)



DRWG NO. TAM 17902671  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |          |     |           |          |
|---------------------------------|------------|----------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | T26        | 1        | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            |          |     |           |          |

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TOTAL WEIGHT = 55 lb  
[M/F]

| LUMBER | N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|--------|-------------------|--------|------|--------|--------|
| A - B  | 2x4 DRY           | No.2   | SPF  |        |        |
| B - D  | 2x4 DRY           | No.2   | SPF  |        |        |
| G - A  | 2x4 DRY           | No.2   | SPF  |        |        |
| E - D  | 2x4 DRY           | No.2   | SPF  |        |        |
| G - E  | 2x4 DRY           | No.2   | SPF  |        |        |

ALL WEBS 2x3 DRY No.2 SPF  
EXCEPT

DRY, SEASONED LUMBER.

#### PLATES (table in inches)

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| A  | TMVW+p  | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| B  | TTW-p   | MT20   | 4.0 | 4.0 | 2.25 | 2.00 |
| C  | TMVW-t  | MT20   | 4.0 | 4.0 |      |      |
| D  | TMV+p   | MT20   | 3.0 | 4.0 |      |      |
| E  | BMVW-t  | MT20   | 4.0 | 4.0 |      |      |
| F  | BMVW-t  | MT20   | 4.0 | 4.0 |      |      |
| G  | BMV-t+p | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED       | MAXIMUM FACTORED | INPUT | REQD   |
|----------|----------------|------------------|-------|--------|
|          | GROSS REACTION | GROSS REACTION   | BRG   | BRG    |
| JT       | VERT           | DOWN             | HORIZ | UPLIFT |
| G        | 861            | 0                | 861   | 0      |
| E        | 861            | 0                | 861   | 0      |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT G. MINIMUM BEARING LENGTH AT JOINT G = 1-8.

#### UNFACTORED REACTIONS

| JT | COMBINED | SNOW    | LIVE    | PERM.LIVE | WIND  | DEAD    | SOIL  |
|----|----------|---------|---------|-----------|-------|---------|-------|
| G  | 844      | 358 / 0 | 129 / 0 | 0 / 0     | 0 / 0 | 159 / 0 | 0 / 0 |
| E  | 844      | 358 / 0 | 129 / 0 | 0 / 0     | 0 / 0 | 159 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED | FACTORED   | FACTORED | FACTORED | FACTORED | FACTORED | FACTORED | FACTORED | FACTORED |
|--------|---------------|------------|----------|----------|----------|----------|----------|----------|----------|
| MEMB.  | FORCE         | VERT. LOAD | LC1      | MAX      | MAX      | MEMB.    | FORCE    | MAX      | MAX      |
|        | (LBS)         | (PLF)      | CSI (LC) | UNBRAC   | LENGTH   |          | (LBS)    | CSI (LC) | UNBRAC   |
| FR-TO  |               | FROM       | TO       |          |          | FR-TO    |          |          |          |
| A-B    | -498 / 0      | -102.1     | -102.1   | 0.30 (1) | 6.25     | F-B      | 0 / 258  | 0.06 (3) |          |
| B-C    | -528 / 0      | -102.1     | -102.1   | 0.18 (1) | 6.25     | F-C      | -233 / 0 | 0.12 (1) |          |
| C-D    | 0 / 27        | -102.1     | -102.1   | 0.23 (1) | 10.00    | A-F      | 0 / 480  | 0.11 (1) |          |
| G-A    | -810 / 0      | 0.0        | 0.0      | 0.17 (1) | 7.81     | C-E      | -820 / 0 | 0.39 (1) |          |
| E-D    | -145 / 0      | 0.0        | 0.0      | 0.02 (1) | 7.81     |          |          |          |          |
| G-F    | 0 / 0         | -38.5      | -38.5    | 0.37 (3) | 10.00    |          |          |          |          |
| F-E    | 0 / 580       | -38.5      | -38.5    | 0.42 (2) | 10.00    |          |          |          |          |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 28.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. G.C.

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.5 P.S.F. G.S.L. PLUS 6.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.41")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.11")  
ALLOWABLE DEFL.(TL) = L/360 (0.41")  
CALCULATED VERT. DEFL.(TL) = L/775 (0.19")

CSL TO=0.30/1.00 (A-B:1), BC=0.42/1.00 (E-F:2),  
WB=0.39/1.00 (C-E:1), SS=0.18/1.00 (E-F:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PL) (PL)  
MAX MIN MAX MIN MAX MIN  
MT20 618 364 1667 788 1987 1858

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.79 (C) (INPUT = 0.90)  
JSI METAL= 0.29 (C) (INPUT = 1.00)

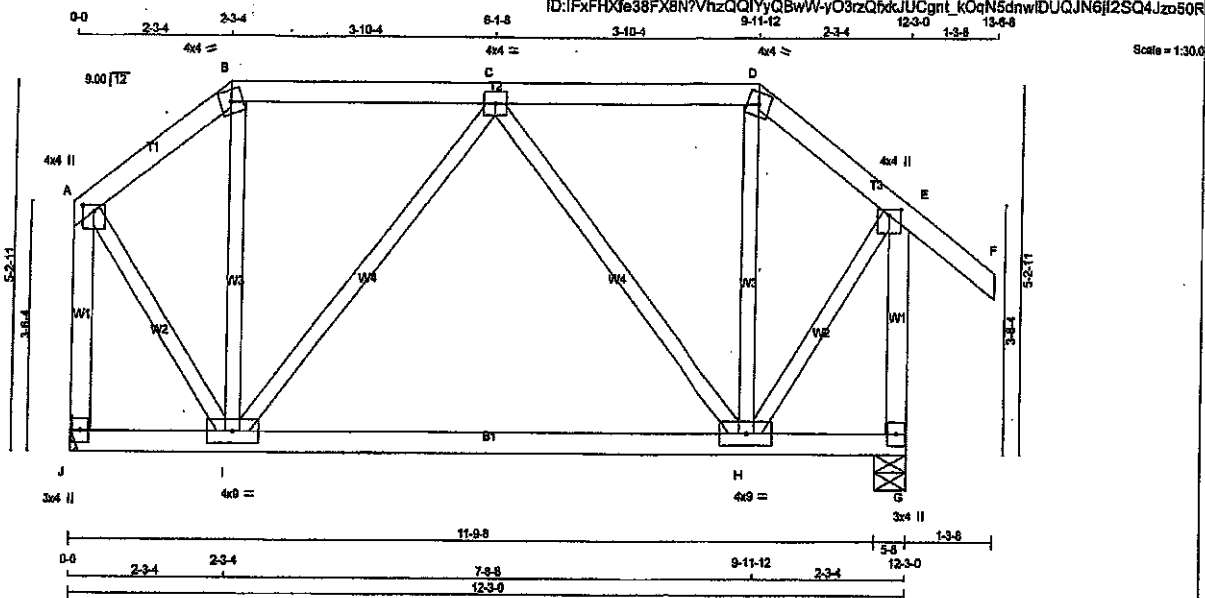


DRWG NO. TAM 17902672  
STRUCTURAL  
COMPONENT ONLY

|               |            |          |     |           |          |
|---------------|------------|----------|-----|-----------|----------|
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400366 | T28        | 1        | 1   | Preston 1 |          |

Tamarack Roof Truss, Burlington

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TOTAL WEIGHT = 62 lb

#### LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | DRY  | LUMBER | DESCR. |
|-------------------|--------|------|------|--------|--------|
| A - B             | 2x4    | DRY  | No.2 | SPF    |        |
| B - D             | 2x4    | DRY  | No.2 | SPF    |        |
| D - F             | 2x4    | DRY  | No.2 | SPF    |        |
| J - A             | 2x4    | DRY  | No.2 | SPF    |        |
| G - E             | 2x4    | DRY  | No.2 | SPF    |        |
| J - G             | 2x4    | DRY  | No.2 | SPF    |        |

ALL WEBS 2x3 DRY No.2 SPF EXCEPT

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE   | PLATES | W   | LEN | Y    | X    |
|----|--------|--------|-----|-----|------|------|
| A  | TMVW+p | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| B  | TTW-m  | MT20   | 4.0 | 4.0 |      |      |
| C  | TMVW-t | MT20   | 4.0 | 4.0 |      |      |
| D  | TTW-m  | MT20   | 4.0 | 4.0 |      |      |
| E  | TMVW+p | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| G  | BMV1+p | MT20   | 3.0 | 4.0 |      |      |
| H  | BMVW+t | MT20   | 4.0 | 9.0 |      |      |
| I  | BMVW+t | MT20   | 4.0 | 9.0 |      |      |
| J  | BMV1+p | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

|    | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQ'D BRG |
|----|-------------------------|---------------------------------|-----------|-----------|
| JT | VERT                    | HORZ                            | DOWN      | HORZ      |
| J  | 861                     | 0                               | 861       | 0         |
| G  | 1002                    | 0                               | 1002      | 0         |

A SUITABLE HANGER/MECHANICAL CONNECTION IS REQUIRED AT JOINT J. MINIMUM BEARING LENGTH AT JOINT J = 1-8.

##### UNFACTORED REACTIONS

| 1ST LCASE | MAX/MIN. COMPONENT REACTIONS                  |
|-----------|-----------------------------------------------|
| JT        | COMBINED                                      |
| J         | 844 356 / 0 129 / 0 0 / 0 0 / 0 159 / 0 0 / 0 |
| G         | 740 436 / 0 129 / 0 0 / 0 0 / 0 175 / 0 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) G

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED MEMB. FORCE (LBS) | FACTORED VERT. LOAD (PLF) | FACTORED LC1 MAX CSI (LC) | WEBS     | MAX. FACTORED MEMB. FORCE (LBS) | MAX. FACTORED VERT. LOAD (PLF) | FACTORED LC1 MAX CSI (LC) |
|--------|---------------------------------|---------------------------|---------------------------|----------|---------------------------------|--------------------------------|---------------------------|
| FR-TO  |                                 | FROM                      | TO                        | FR-TO    |                                 | FROM                           | TO                        |
| A-B    | -455 / 0                        | -102.1                    | -102.1                    | 0.09 (1) | 6.25                            | I-B                            | 0 / 103                   |
| B-C    | -382 / 0                        | -102.1                    | -102.1                    | 0.25 (1) | 6.25                            | H-D                            | 0 / 103                   |
| C-D    | -382 / 0                        | -102.1                    | -102.1                    | 0.25 (1) | 6.25                            | A-I                            | 0 / 607                   |
| D-E    | -455 / 0                        | -102.1                    | -102.1                    | 0.09 (1) | 6.25                            | H-E                            | 0 / 607                   |
| E-F    | 0 / 42                          | -102.1                    | -102.1                    | 0.14 (1) | 10.00                           | I-C                            | -304 / 0                  |
| J-A    | -878 / 0                        | 0.0                       | 0.0                       | 0.18 (1) | 7.81                            | C-H                            | -305 / 0                  |
| G-E    | -1019 / 0                       | 0.0                       | 0.0                       | 0.21 (1) | 7.77                            |                                |                           |
| J-I    | 0 / 0                           | -38.5                     | -38.5                     | 0.28 (3) | 10.00                           |                                |                           |
| I-H    | 0 / 547                         | -38.5                     | -38.5                     | 0.33 (2) | 10.00                           |                                |                           |
| H-G    | 0 / 0                           | -38.5                     | -38.5                     | 0.28 (3) | 10.00                           |                                |                           |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|              |               |
|--------------|---------------|
| TOP CH.      | LL = 29.0 PSF |
| DL = 6.0 PSF |               |
| BOT CH.      | LL = 10.5 PSF |
| DL = 7.0 PSF |               |
| TOTAL LOAD   | = 52.5 PSF    |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, CBC 2012
- CSA 066-08, CSA 066-14
- TPC 2011, TPC 2014

(5% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.41")  
CALCULATED VERT. DEFL. (LL) = L/999 (0.07")  
ALLOWABLE DEFL. (TL) = L/360 (0.41")  
CALCULATED VERT. DEFL. (TL) = L/999 (0.12")

CSI: TC=0.25/1.00 (B-C:1), BC=0.33/1.00 (H-I:2),  
WB=0.21/1.00 (C-H:1), SS=0.19/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LBS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

##### NAIL VALUES

| PLATE GRIP (DRY) | SHEAR (PSI) | SECTION (PL) |
|------------------|-------------|--------------|
| MT20             | 618         | 354          |
| MT20             | 1687        | 788          |
| MT20             | 1987        | 1658         |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.66 (A) (INPUT = 0.99)  
JSI METAL= 0.20 (A) (INPUT = 1.00)

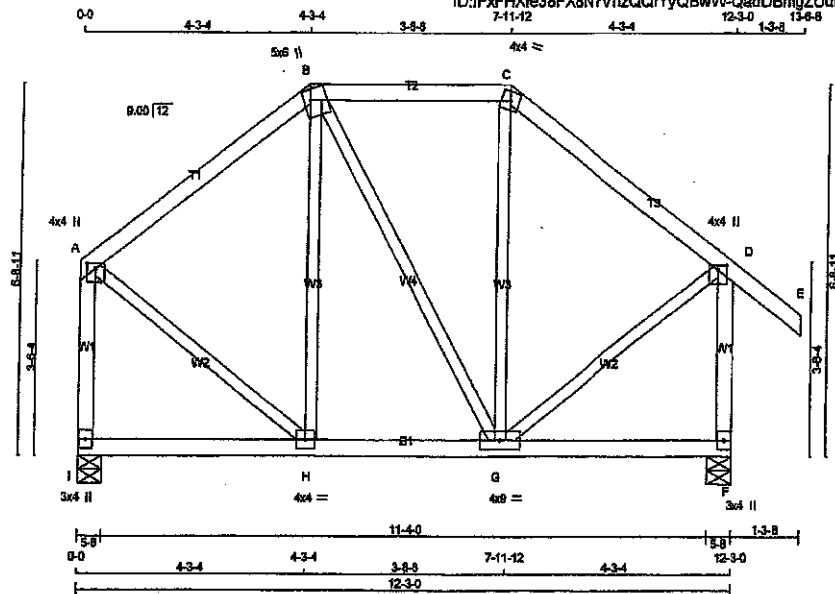


DWG NO. TAM 71902672  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |             |     |           |          |
|---------------------------------|------------|-------------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | T29        | 1           | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |           |          |

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Scale = 1:38.5

TOTAL WEIGHT = 64 lb (NIP)

#### LUMBER

N. L. G. A. RULES

| CHORDS | SIZE | LUMBER   |
|--------|------|----------|
| A - B  | 2x4  | DRY No.2 |
| B - C  | 2x4  | DRY No.2 |
| C - E  | 2x4  | DRY No.2 |
| I - A  | 2x4  | DRY No.2 |
| F - D  | 2x4  | DRY No.2 |
| I - F  | 2x4  | DRY No.2 |

ALL WEBS 2x3 DRY No.2  
EXCEPT

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| A  | TMVW+p  | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| B  | TTVW+m  | MT20   | 5.0 | 6.0 | 2.25 | 1.50 |
| C  | TTW-m   | MT20   | 4.0 | 4.0 |      |      |
| D  | TMVW+p  | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| F  | BMV1+p  | MT20   | 3.0 | 4.0 |      |      |
| G  | BMVWW+1 | MT20   | 4.0 | 9.0 |      |      |
| H  | BMVWW+1 | MT20   | 4.0 | 4.0 |      |      |
| I  | BMV1+p  | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

| FACTORED       | MAXIMUM FACTORED | INPUT | REQD   |
|----------------|------------------|-------|--------|
| GROSS REACTION | GROSS REACTION   | BRG   | BRG    |
| JT VERT        | DOWN             | HORZ  | UPLIFT |
| I 861 0        | 861 0            | 0 0   | 5-8    |
| F 1002 0       | 1002 0           | 0 0   | 5-8    |

##### UNFACTORED REACTIONS

| 1ST LCASE   | MAX/MIN COMPONENT REACTIONS               |
|-------------|-------------------------------------------|
| JT COMBINED | SNOW LIVE PERM.LIVE WIND DEAD SOIL        |
| I 644       | 356 / 0 129 / 0 0 / 0 0 / 0 159 / 0 0 / 0 |
| F 740       | 438 / 0 129 / 0 0 / 0 0 / 0 178 / 0 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) I, F

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |              | WEBS               |       |                           |               |
|--------|---------------------------|---------------------------|--------------|--------------------|-------|---------------------------|---------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX (LC) | MAX. UNBRAC LENGTH | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. CST (LC) |
| FR-TO  |                           | FROM TO                   |              |                    | FR-TO |                           |               |
| A-B    | -483 / 0                  | -102.1                    | -102.1       | 0.24 (1)           | 6.25  | H-B                       | -116 / 77     |
| B-C    | -384 / 0                  | -102.1                    | -102.1       | 0.18 (1)           | 6.25  | B-G                       | 0 / 0         |
| C-D    | -483 / 0                  | -102.1                    | -102.1       | 0.24 (1)           | 6.25  | G-C                       | -117 / 78     |
| D-E    | 0 / 42                    | -102.1                    | -102.1       | 0.14 (1)           | 10.00 | A-H                       | 6 / 478       |
| I-A    | -791 / 0                  | 0.0                       | 0.0          | 0.16 (1)           | 7.81  | G-D                       | 0 / 477       |
| F-D    | -831 / 0                  | 0.0                       | 0.0          | 0.19 (1)           | 7.81  |                           |               |
| I-H    | 0 / 0                     | -38.5                     | -38.5        | 0.12 (3)           | 10.00 |                           |               |
| H-G    | 0 / 384                   | -38.5                     | -38.5        | 0.16 (2)           | 10.00 |                           |               |
| G-F    | 0 / 0                     | -38.5                     | -38.5        | 0.12 (3)           | 10.00 |                           |               |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA 086-08, CSA 086-14  
- TPIC 2011, TPIC 2014

(55% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.41")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.02")  
ALLOWABLE DEFL.(TL) = L/360 (0.41")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.03")

CSI: TC=0.24/1.00 (A-B-1), BC=0.16/1.00 (G-H-2),  
WB=0.11/1.00 (A-H-1), SS=0.15/1.00 (B-C-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(ORY) SHEAR SECTION  
(PS) (PL) (PL)  
MAX MIN MAX MIN MAX MIN  
MT20 610 354 1667 789 1997 1656

PLATE PLACEMENT TOL. = 0.250 inches

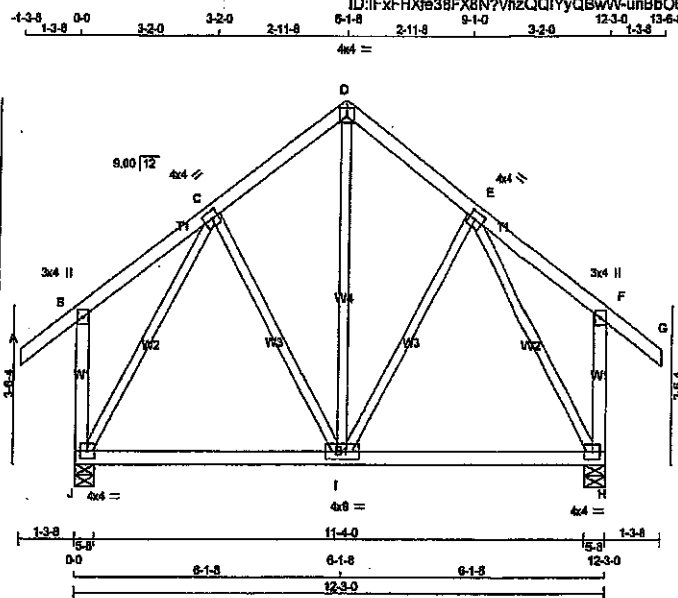
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.71 (C) (INPUT = 0.80)  
JSI METAL= 0.19 (D) (INPUT = 1.00)



DWG NO. TAM 17602674  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |          |     |           |          |
|---------------------------------|------------|----------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | T30        | 1        | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            |          |     |           |          |



TOTAL WEIGHT = 68 lb

| CHORDS   | SIZE | DRY | SPF  |
|----------|------|-----|------|
| A - D    | 2x4  | DRY | No.2 |
| D - B    | 2x4  | DRY | No.2 |
| J - H    | 2x4  | DRY | No.2 |
| J - F    | 2x4  | DRY | No.2 |
| J - H    | 2x4  | DRY | No.2 |
| ALL WEBS | 2x3  | DRY | No.2 |
| EXCEPT   |      |     |      |

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE   | PLATES | W   | LEN | Y    | X    |
|----|--------|--------|-----|-----|------|------|
| B  | TMV+p  | MT20   | 3.0 | 4.0 |      |      |
| C  | TMVW+4 | MT20   | 4.0 | 4.0 | 2.00 | 1.75 |
| D  | TTV+p  | MT20   | 4.0 | 4.0 | 2.25 | 2.00 |
| E  | TMVW+4 | MT20   | 4.0 | 4.0 | 2.00 | 1.75 |
| F  | TMV+p  | MT20   | 3.0 | 4.0 |      |      |
| H  | BMVW+4 | MT20   | 4.0 | 4.0 |      |      |
| I  | BMVW+4 | MT20   | 4.0 | 9.0 |      |      |
| J  | BMVW+4 | MT20   | 4.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED       | MAXIMUM FACTORED | INPUT | REQRD |
|----------|----------------|------------------|-------|-------|
| JT       | GROSS REACTION | GROSS REACTION   | BRG   | BRG   |
| J        | 1002 0         | 1002 0           | 5-8   | 5-8   |
| H        | 1002 0         | 1002 0           | 5-8   | 5-8   |

| UNFACTORED REACTIONS | 1ST LCASE | MAX/MIN. COMPONENT REACTIONS              |
|----------------------|-----------|-------------------------------------------|
| JT                   | COMBINED  | SNOW LIVE PERM.LIVE WIND DEAD SOIL        |
| J                    | 740       | 436 / 0 129 / 0 0 / 0 0 / 0 176 / 0 0 / 0 |
| H                    | 740       | 436 / 0 129 / 0 0 / 0 0 / 0 176 / 0 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J, H

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MEMB.    | MAX. FACTORED | FACTORED | VERT. LOAD | LC1   | MAX  | MEMB. | MAX. FACTORED | WEBS     | MEMB. | MAX. FACTORED |
|--------|----------|---------------|----------|------------|-------|------|-------|---------------|----------|-------|---------------|
|        |          | (LBS)         | (PLF)    |            |       | (LC) |       |               |          |       | (LBS)         |
| FR-TO  |          |               | FROM TO  |            |       |      |       |               |          |       |               |
| A-B    | 0 / 42   | -102.1        | -102.1   | 0.14 (1)   | 10.00 |      | I-D   | 0 / 313       | 0.07 (2) |       |               |
| B-C    | 0 / 21   | -102.1        | -102.1   | 0.15 (1)   | 10.00 |      | I-E   | -7 / 178      | 0.02 (3) |       |               |
| C-D    | -473 / 0 | -102.1        | -102.1   | 0.12 (1)   | 6.25  |      | C-I   | -7 / 178      | 0.02 (3) |       |               |
| D-E    | -473 / 0 | -102.1        | -102.1   | 0.12 (1)   | 6.25  |      | J-C   | -744 / 0      | 0.50 (1) |       |               |
| E-F    | 0 / 21   | -102.1        | -102.1   | 0.15 (1)   | 10.00 |      | E-H   | -744 / 0      | 0.50 (1) |       |               |
| F-G    | 0 / 42   | -102.1        | -102.1   | 0.14 (1)   | 10.00 |      |       |               |          |       |               |
| J-B    | -264 / 0 | 0.0           | 0.0      | 0.05 (1)   | 7.81  |      |       |               |          |       |               |
| H-F    | -264 / 0 | 0.0           | 0.0      | 0.05 (1)   | 7.81  |      |       |               |          |       |               |
| J-I    | 0 / 364  | -38.5         | -38.5    | 0.36 (3)   | 10.00 |      |       |               |          |       |               |
| I-H    | 0 / 364  | -38.5         | -38.5    | 0.36 (3)   | 10.00 |      |       |               |          |       |               |

#### DESIGN CRITERIA

**SPECIFIED LOADS:**  
TOP CH. LL = 29.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN. C/C**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA 088-08, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.41")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")  
ALLOWABLE DEFL.(TL) = L/360 (0.41")  
CALCULATED VERT. DEFL.(TL) = L/999 (0.07")

CSI: TC=0.15/1.00 (B-C:1), BC=0.36/1.00 (I-J:3), WS=0.50/1.00 (E-H:1), SS=0.16/1.00 (I-J:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION (PSI) (PL) (PL)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1667 798 1987 1656

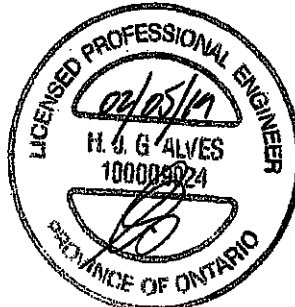
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.65 (C) (INPUT = 0.90 )  
JSI METAL = 0.28 (E) (INPUT = 1.00 )

RECEIVED  
JUN 13 2015

TOWN OF SALEM  
BUILDING DEPARTMENT

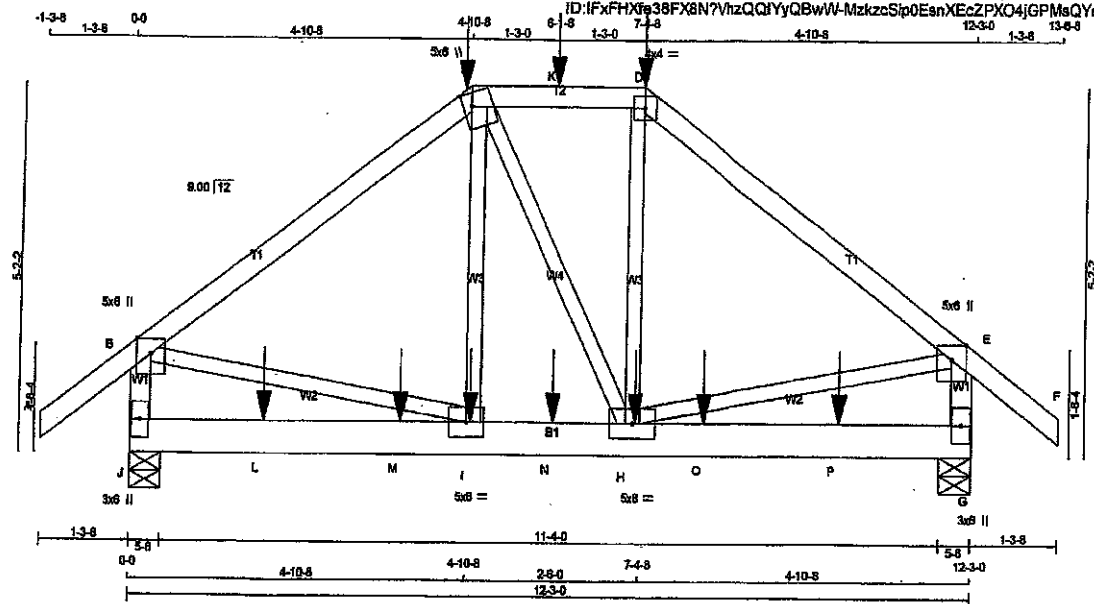


DWG NO. TAM 170675  
STRUCTURAL  
COMPONENT ONLY

|               |            |          |     |           |          |
|---------------|------------|----------|-----|-----------|----------|
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400366 | T31        | 1        | 1   | Preston 1 |          |

Tamarack Roof Truss, Burlington

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Scale = 1/2" = 1'-0"

TOTAL WEIGHT = 84 lb

| LUMBER | N. L. G. A. RULES | CHORDS | SIZE | DRY | LUMBER | DESCR. |
|--------|-------------------|--------|------|-----|--------|--------|
| A - C  | 2x4               | DRY    | No.2 | SPF |        |        |
| C - D  | 2x4               | DRY    | No.2 | SPF |        |        |
| D - F  | 2x4               | DRY    | No.2 | SPF |        |        |
| J - B  | 2x4               | DRY    | No.2 | SPF |        |        |
| G - E  | 2x4               | DRY    | No.2 | SPF |        |        |
| J - G  | 2x6               | DRY    | No.2 | SPF |        |        |

ALL WEBS 2x4 DRY No.2 SPF  
EXCEPT  
DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| B  | TMVW+p  | MT20   | 5.0 | 6.0 | Edge |      |
| C  | TTWW+m  | MT20   | 5.0 | 6.0 | 2.25 | 1.50 |
| D  | TTW+    | MT20   | 4.0 | 4.0 |      |      |
| E  | TMVV+p  | MT20   | 5.0 | 6.0 | Edge |      |
| G  | BMVt+p  | MT20   | 3.0 | 6.0 |      |      |
| H  | BMVWW+t | MT20   | 5.0 | 8.0 |      |      |
| I  | BMVWW+t | MT20   | 5.0 | 6.0 |      |      |
| J  | BMVt+p  | MT20   | 3.0 | 8.0 |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY

| BUILDING DESIGNER |                |                  |       |        |        |       |       |
|-------------------|----------------|------------------|-------|--------|--------|-------|-------|
| BEARINGS          |                |                  |       |        |        |       |       |
|                   | FACTORED       | MAXIMUM FACTORED | INPUT | RECORD |        |       |       |
|                   | GROSS REACTION | GROSS REACTION   | BRG   | BRG    |        |       |       |
| JT                | VERT           | HORZ             | DOWN  | HORZ   | UPLIFT | IN-SX | IN-SX |
| J                 | 1878           | 0                | 1678  | 0      | 0      | 5-8   | 5-8   |
| G                 | 1873           | 0                | 1673  | 0      | 0      | 5-8   | 5-8   |

| UNFACTORED REACTIONS |           |         |           |           |       |         |       |
|----------------------|-----------|---------|-----------|-----------|-------|---------|-------|
|                      | 1ST LCASE | MAX/MIN | COMPONENT | REACTIONS |       |         |       |
| JT                   | COMBINED  | SNOW    | LIVE      | PERM.LIVE | WIND  | DEAD    | SOIL  |
| J                    | 1248      | 708 / 0 | 234 / 0   | 0 / 0     | 0 / 0 | 308 / 0 | 0 / 0 |
| G                    | 1244      | 703 / 0 | 234 / 0   | 0 / 0     | 0 / 0 | 307 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) J, G

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. FURLIN SPACING = 4.83 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**  
TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                               | WEBS     |                           |                        |          |
|--------|---------------------------|---------------------------|-------------------------------|----------|---------------------------|------------------------|----------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED CSI (LC) UNBRAC | MEMB.    | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CSI (LC) |          |
| FR-TO  |                           | FROM TO                   | LENGTH                        | FR-TO    |                           |                        |          |
| A-B    | 0 / 42                    | -102.1                    | 0.15 (1)                      | 10.00    | I-C                       | 0 / 261                | 0.07 (3) |
| B-C    | -1493 / 0                 | -102.1                    | 0.55 (1)                      | 4.83     | C-H                       | -5 / 13                | 0.00 (3) |
| C-K    | -1190 / 0                 | -102.1                    | 0.28 (1)                      | 5.47     | H-D                       | 0 / 278                | 0.07 (3) |
| K-D    | -1190 / 0                 | -102.1                    | 0.28 (1)                      | 5.47     | B-I                       | 0 / 1221               | 0.30 (1) |
| D-E    | -1489 / 0                 | -102.1                    | 0.55 (1)                      | 4.84     | H-E                       | 0 / 1217               | 0.30 (1) |
| E-F    | 0 / 42                    | -102.1                    | 0.15 (1)                      | 10.00    |                           |                        |          |
| J-B    | -1554 / 0                 | 0.0                       | 0.0                           | 0.18 (1) | 8.57                      |                        |          |
| G-E    | -1548 / 0                 | 0.0                       | 0.0                           | 0.17 (1) | 8.58                      |                        |          |
| J-L    | 0 / 0                     | -38.5                     | -38.5                         | 0.16 (3) | 10.00                     |                        |          |
| L-M    | 0 / 0                     | -38.5                     | -38.5                         | 0.16 (3) | 10.00                     |                        |          |
| M-I    | 0 / 0                     | -38.5                     | -38.5                         | 0.16 (3) | 10.00                     |                        |          |
| I-N    | 0 / 1193                  | -38.5                     | -38.5                         | 0.24 (2) | 10.00                     |                        |          |
| N-H    | 0 / 1193                  | -38.5                     | -38.5                         | 0.24 (2) | 10.00                     |                        |          |
| H-O    | 0 / 0                     | -38.5                     | -38.5                         | 0.15 (2) | 10.00                     |                        |          |
| O-P    | 0 / 0                     | -38.5                     | -38.5                         | 0.15 (2) | 10.00                     |                        |          |
| P-G    | 0 / 0                     | -38.5                     | -38.5                         | 0.15 (2) | 10.00                     |                        |          |

| FACTORED CONCENTRATED LOADS (LBS) |         |      |      |       |      |       |      |
|-----------------------------------|---------|------|------|-------|------|-------|------|
| JT                                | LOC.    | LC1  | MAX. | FACE  | DIR. | TYPE  | HEEL |
| C                                 | 4-10-8  | -418 | -418 | FRONT | VERT | TOTAL | ---  |
| D                                 | 7-4-8   | -395 | -395 | FRONT | VERT | TOTAL | ---  |
| H                                 | 7-3-12  | -55  | -70  | FRONT | VERT | TOTAL | ---  |
| I                                 | 4-11-4  | -55  | -70  | FRONT | VERT | TOTAL | ---  |
| K                                 | 6-1-8   | -147 | -147 | FRONT | VERT | TOTAL | ---  |
| L                                 | 1-11-4  | -55  | -70  | FRONT | VERT | TOTAL | ---  |
| M                                 | 3-11-4  | -55  | -70  | FRONT | VERT | TOTAL | ---  |
| N                                 | 6-1-8   | -55  | -70  | FRONT | VERT | TOTAL | ---  |
| O                                 | 8-3-12  | -55  | -70  | FRONT | VERT | TOTAL | ---  |
| P                                 | 10-3-12 | -55  | -70  | FRONT | VERT | TOTAL | ---  |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, DEC 2012  
- CSA 086-08, CSA 086-14  
- TFC 2011, TFC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.41")  
CALCULATED VERT. DEFL.(LL) = L/899 (0.02")  
ALLOWABLE DEFL.(TL) = L/360 (0.41")  
CALCULATED VERT. DEFL.(TL) = L/998 (0.04")

CSI: TC=0.55/1.00 (B-C:1), BC=0.24/1.00 (H-I:2), WB=0.30/1.00 (B-I:1), SS=0.17/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00 COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

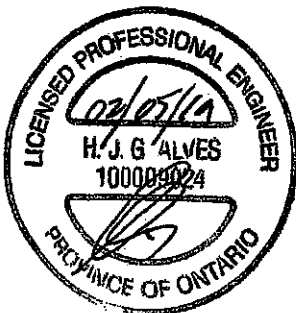
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

| NAIL VALUES | PLATE GRIP(DRY) | SHEAR (PS) | SECTION (PL) |
|-------------|-----------------|------------|--------------|
|             | MAX             | MIN        | MAX          |
| MT20        | 818             | 354        | 1887         |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.88 (B) (INPUT = 0.90)  
JSI METAL= 0.61 (B) (INPUT = 1.00)

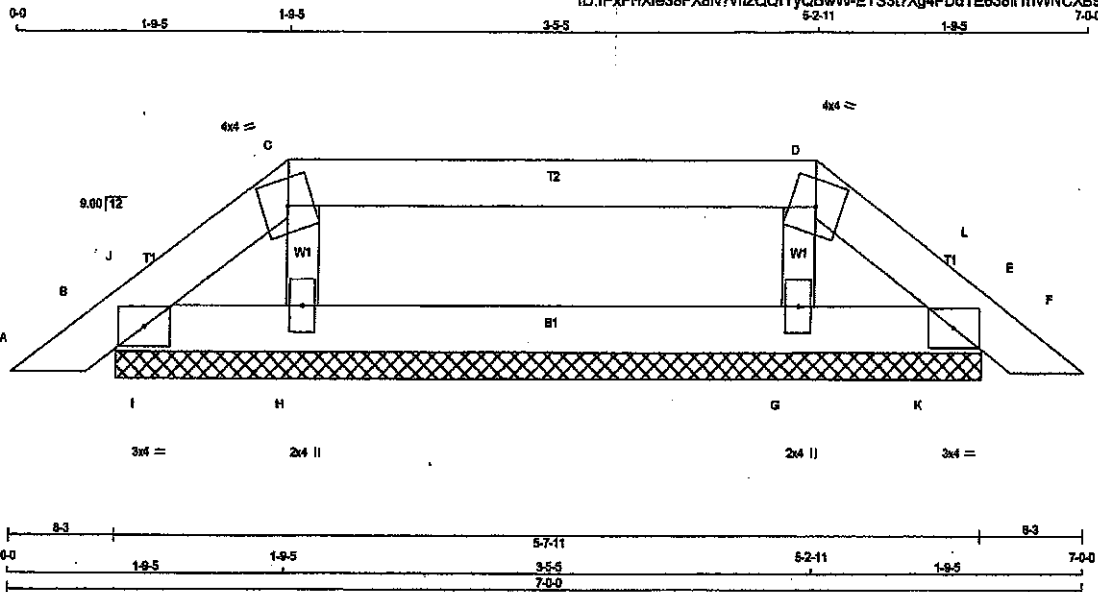


DRWG NO. TAM 17902676  
STRUCTURAL  
COMPONENT QM1Y

|               |            |          |     |           |          |
|---------------|------------|----------|-----|-----------|----------|
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400366 | PB1        | 1        | 1   | Preston 1 |          |

Tamarack Roof Truss, Burlington

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TOTAL WEIGHT = 16 lb

#### LUMBER

##### N. L. G. A. RULES

| CHORDS | SIZE | LUMBER | DESCR. |
|--------|------|--------|--------|
| A - C  | 2x4  | DRY    | No.2   |
| C - D  | 2x4  | DRY    | No.2   |
| D - F  | 2x4  | DRY    | No.2   |
| B - E  | 2x4  | DRY    | No.2   |

ALL WEBS 2x3 DRY No.2  
DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE   | PLATES | W   | LEN | Y | X |
|----|--------|--------|-----|-----|---|---|
| B  | TMB1-I | MT20   | 3.0 | 4.0 |   |   |
| C  | TTW-m  | MT20   | 4.0 | 4.0 |   |   |
| D  | TTW-m  | MT20   | 4.0 | 4.0 |   |   |
| E  | TMB1-I | MT20   | 3.0 | 4.0 |   |   |
| G  | BMW1+w | MT20   | 2.0 | 4.0 |   |   |
| H  | BMW1+w | MT20   | 2.0 | 4.0 |   |   |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG | REQD BRG |
|----|-------------------------|------|---------------------------------|------|-----------|----------|
|    | VERT                    | HORZ | DOWN                            | HORZ |           |          |
| B  | 147                     | 0    | 147                             | 0    | 5-7-11    | 5-7-11   |
| E  | 147                     | 0    | 147                             | 0    | 5-7-11    | 5-7-11   |
| H  | 310                     | 0    | 310                             | 0    | 5-7-11    | 5-7-11   |
| G  | 310                     | 0    | 310                             | 0    | 5-7-11    | 5-7-11   |

#### UNFACTORED REACTIONS

| 1ST LOOSE |          | MAX./MIN. COMPONENT REACTIONS |      |           |      |      |      |
|-----------|----------|-------------------------------|------|-----------|------|------|------|
| JT        | COMBINED | SNOW                          | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| B         | 101      | 85/0                          | 0/-1 | 0/0       | 0/0  | 17/0 | 0/0  |
| E         | 101      | 85/0                          | 0/-1 | 0/0       | 0/0  | 17/0 | 0/0  |
| H         | 237      | 113/0                         | 80/0 | 0/0       | 0/0  | 84/0 | 0/0  |
| G         | 237      | 113/0                         | 80/0 | 0/0       | 0/0  | 84/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS                    |                  | FACTORED         |          | MAX. UNBRACED LENGTH | MEMB. | WEBS                      |               |
|-------|---------------------------|------------------|------------------|----------|----------------------|-------|---------------------------|---------------|
|       | MAX. FACTORED FORCE (LBS) | VERT. LOAD (PLF) | VERT. LOAD (PLF) | CS1 (LC) |                      |       | MAX. FACTORED FORCE (LBS) | MAX. CS1 (LC) |
| FR-TO |                           |                  |                  |          |                      | FR-TO |                           |               |
| A-B   | 0/17                      | -102.1           | -102.1           | 0.03 (1) | 10.00                | H-C   | -184/0                    | 0.03 (1)      |
| B-J   | -40/8                     | -102.1           | -102.1           | 0.01 (3) | 6.25                 | G-D   | -184/0                    | 0.03 (1)      |
| J-C   | -52/0                     | -102.1           | -102.1           | 0.01 (1) | 8.25                 | I-J   | -73/0                     | 0.00 (1)      |
| C-D   | -17/0                     | -102.1           | -102.1           | 0.21 (1) | 6.25                 | K-L   | -73/0                     | 0.00 (1)      |
| D-L   | -52/0                     | -102.1           | -102.1           | 0.01 (1) | 6.25                 |       |                           |               |
| L-E   | -40/8                     | -102.1           | -102.1           | 0.01 (3) | 8.25                 |       |                           |               |
| E-F   | 0/17                      | -102.1           | -102.1           | 0.03 (1) | 10.00                |       |                           |               |
| B-I   | 0/38                      | -38.5            | -38.5            | 0.02 (1) | 10.00                |       |                           |               |
| I-H   | 0/38                      | -38.5            | -38.5            | 0.06 (2) | 10.00                |       |                           |               |
| H-G   | 0/17                      | -38.5            | -38.5            | 0.05 (3) | 10.00                |       |                           |               |
| G-K   | 0/38                      | -38.5            | -38.5            | 0.06 (2) | 10.00                |       |                           |               |
| K-E   | 0/38                      | -38.5            | -38.5            | 0.02 (1) | 10.00                |       |                           |               |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 28.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 086-08, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CS1: TO=0.21/1.00 (C-D-1), BC=0.06/1.00 (G-K-2), WB=0.03/1.00 (D-G-1), SS=0.14/1.00 (C-D-1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

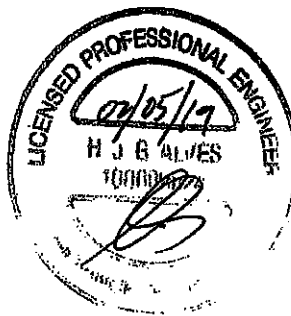
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

NAIL VALUES  
PLATE GRIP(DRY) SHEAR SECTION (PS) (PL) (PL)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1867 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.15 (D) (INPUT = 0.90)  
JSI METAL= 0.04 (H) (INPUT = 1.00)



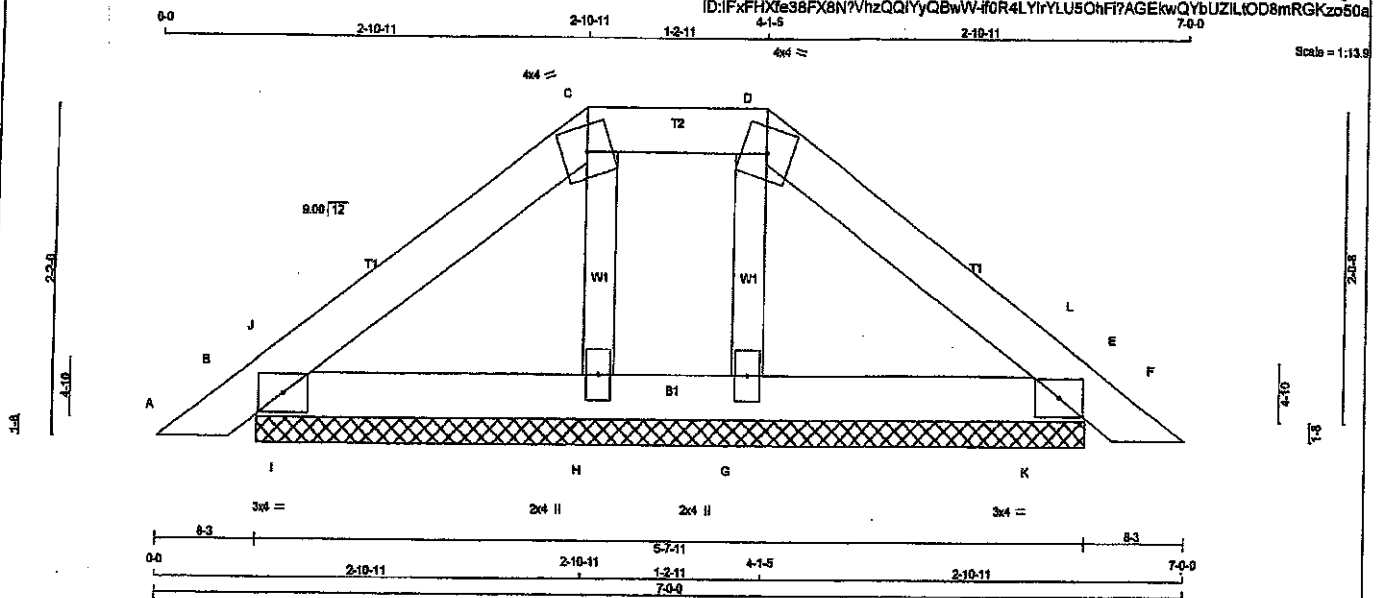
DWG NO. TAM 0902677  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |          |     |           |          |
|---------------------------------|------------|----------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | PB2        | 1        | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            |          |     |           |          |

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Scale = 1:13.9



TOTAL WEIGHT = 18 lb

#### LUMBER

N. L. G. A. RULES

| CHORDS                | SIZE | DRY | LUMBER | DESCR. |
|-----------------------|------|-----|--------|--------|
| A - C                 | 2x4  | DRY | No.2   | SPF    |
| C - D                 | 2x4  | DRY | No.2   | SPF    |
| D - F                 | 2x4  | DRY | No.2   | SPF    |
| B - E                 | 2x4  | DRY | No.2   | SPF    |
| ALL WEBS              | 2x3  | DRY | No.2   | SPF    |
| DRY: SEASONED LUMBER. |      |     |        |        |

#### PLATES (table is in inches)

| JT | TYPE   | PLATES | W   | LEN | Y | X |
|----|--------|--------|-----|-----|---|---|
| B  | TMB1-J | MT20   | 3.0 | 4.0 |   |   |
| C  | TTW-m  | MT20   | 4.0 | 4.0 |   |   |
| D  | TTW-m  | MT20   | 4.0 | 4.0 |   |   |
| E  | TMB1-J | MT20   | 3.0 | 4.0 |   |   |
| G  | BMW1-w | MT20   | 2.0 | 4.0 |   |   |
| H  | BMW1-w | MT20   | 2.0 | 4.0 |   |   |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED       |      | MAXIMUM FACTORED |      | INPUT  | REQD   |
|----------|----------------|------|------------------|------|--------|--------|
|          | GROSS REACTION | DOWN | GROSS REACTION   | UP   |        |        |
| JT       | VERT           | HORZ | DOWN             | HORZ | BRG    | IN-SX  |
| B        | 251            | 0    | 251              | 0    | 5-7-11 | 5-7-11 |
| E        | 251            | 0    | 251              | 0    | 5-7-11 | 5-7-11 |
| H        | 205            | 0    | 205              | 0    | 5-7-11 | 5-7-11 |
| G        | 205            | 0    | 205              | 0    | 5-7-11 | 5-7-11 |

#### UNFACTORED REACTIONS

| 1ST CASE |          | MAX./MIN. COMPONENT REACTIONS |      |            |      |      |      |
|----------|----------|-------------------------------|------|------------|------|------|------|
| JT       | COMBINED | SNOW                          | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
| B        | 182      | 118/0                         | 24/0 | 0/0        | 0/0  | 40/0 | 0/0  |
| E        | 182      | 118/0                         | 24/0 | 0/0        | 0/0  | 40/0 | 0/0  |
| H        | 155      | 80/0                          | 35/0 | 0/0        | 0/0  | 40/0 | 0/0  |
| G        | 155      | 80/0                          | 35/0 | 0/0        | 0/0  | 40/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED        |               | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CSI (LC) |
|-------|--------|---------------------------|-----------------|---------------|---------------------------|------------------------|
|       |        |                           | VERT. LOAD (PL) | LC1 MAX. (LC) |                           |                        |
| FR-TO |        |                           | FROM            | TO            |                           |                        |
| A-B   | 0/17   |                           | -102.1          | -102.1        | 0.03 (1)                  | 10.00                  |
| B-J   | -64/0  |                           | -102.1          | -102.1        | 0.01 (3)                  | 6.25                   |
| J-C   | -73/0  |                           | -102.1          | -102.1        | 0.06 (1)                  | 6.25                   |
| C-D   | -50/0  |                           | -102.1          | -102.1        | 0.03 (1)                  | 6.25                   |
| D-L   | -73/0  |                           | -102.1          | -102.1        | 0.06 (1)                  | 6.25                   |
| L-E   | -64/0  |                           | -102.1          | -102.1        | 0.01 (3)                  | 6.25                   |
| E-F   | 0/17   |                           | -102.1          | -102.1        | 0.03 (1)                  | 10.00                  |
| B-I   | 0/57   |                           | -38.5           | -38.5         | 0.06 (1)                  | 10.00                  |
| I-H   | 0/57   |                           | -38.5           | -38.5         | 0.06 (1)                  | 10.00                  |
| H-G   | 0/50   |                           | -38.5           | -38.5         | 0.04 (1)                  | 10.00                  |
| G-K   | 0/57   |                           | -38.5           | -38.5         | 0.06 (1)                  | 10.00                  |
| K-E   | 0/57   |                           | -38.5           | -38.5         | 0.06 (1)                  | 10.00                  |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN./C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.08/1.00 (D-L:1), BC=0.06/1.00 (G-K:1), WB=0.02/1.00 (D-G:1), SS=0.11/1.00 (E-K:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

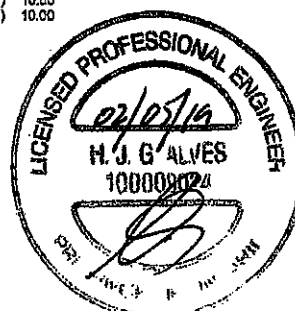
#### NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1687 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

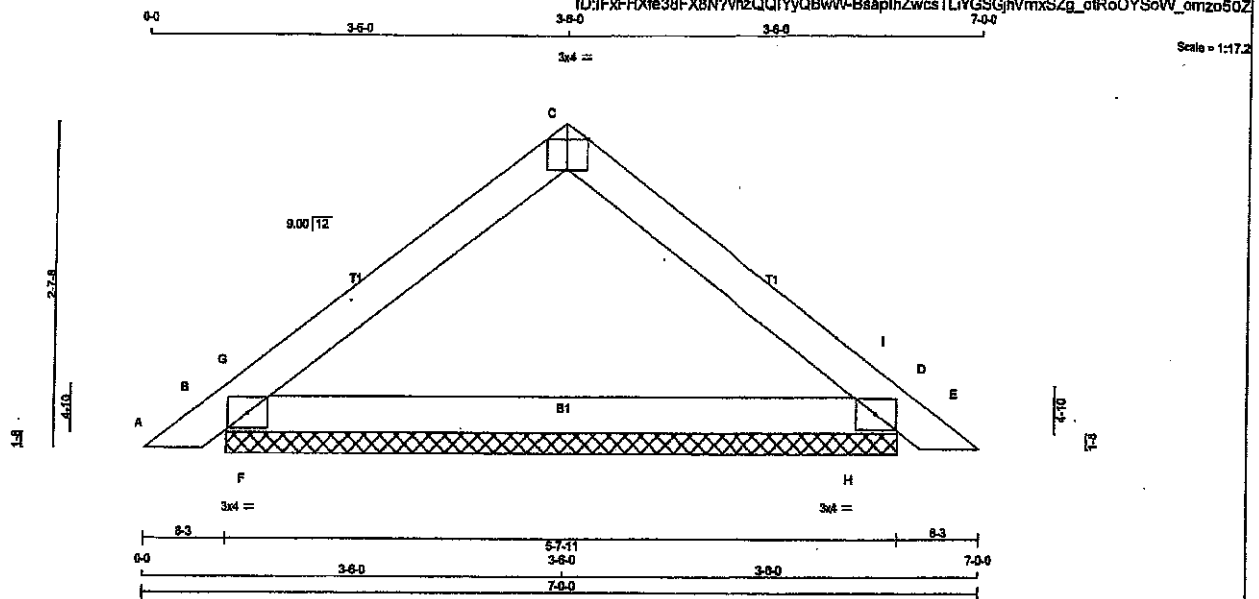
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.18 (E) (INPUT = 0.80)  
JSI METAL = 0.04 (B) (INPUT = 1.00)



DRWG NO. TAM 77007678  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |                                                                                   |     |                                                                           |          |
|---------------------------------|------------|-----------------------------------------------------------------------------------|-----|---------------------------------------------------------------------------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY                                                                          | PLY | JOB DESC.                                                                 | DRWG NO. |
| 200168-400366                   | PB3        | 3                                                                                 | 1   | Preston 1                                                                 |          |
| Tamarack Roof Truss, Burlington |            | Version 8.230 S Nov 17 2016 Mitek Industries, Inc. Tue Feb 5 20:48:10 2019 Page 1 |     | ID: FxHFXfe38FX8N7VhzQQIYyQBwW-BsaplhZwcsTLiYGSghVmxSZg_ctRoOYSoW_omzo50Z |          |
|                                 |            | TRUSS DESC.                                                                       |     | Scale = 1:17.2                                                            |          |



TOTAL WEIGHT = 3 X 18 = 49 lb

#### LUMBER

| N. L. G. A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-------------------|--------|------|--------|--------|
| A - C             | 2x4    | DRY  | No.2   | SPF    |
| C - E             | 2x4    | DRY  | No.2   | SPF    |
| B - D             | 2x4    | DRY  | No.2   | SPF    |

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT | TYPE   | PLATES | W   | LEN | Y    | X    |
|----|--------|--------|-----|-----|------|------|
| B  | TMB1-I | MT20   | 3.0 | 4.0 |      |      |
| C  | TT-p   | MT20   | 3.0 | 4.0 | Edge | 2.00 |
| D  | TMB1-I | MT20   | 3.0 | 4.0 |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BUILDING DESIGNER |                            |      |                                    |      |              |              |
|-------------------|----------------------------|------|------------------------------------|------|--------------|--------------|
| <u>BEARINGS</u>   |                            |      |                                    |      |              |              |
|                   | FACTORED<br>GROSS REACTION |      | MAXIMUM FACTORED<br>GROSS REACTION |      | INPUT<br>BRG | REQRD<br>BRG |
| JT                | VERT                       | HORZ | DOWN                               | HORZ | UPLIFT       | IN-SX        |
| B                 | 457                        | 0    | 457                                | 0    | 0            | 5-7-11       |
| D                 | 457                        | 0    | 457                                | 0    | 0            | 5-7-11       |

#### UNFACTORED REACTIONS

| 1ST LCASE |          | MAX/MIN. COMPONENT REACTIONS |      |          |      |      |      |
|-----------|----------|------------------------------|------|----------|------|------|------|
| JT        | COMBINED | SNOW                         | LIVE | PERMLIVE | WIND | DEAD | SOIL |
| B         | 338      | 188/0                        | 59/0 | 0/0      | 0/0  | 80/0 | 0/0  |
| D         | 338      | 188/0                        | 59/0 | 0/0      | 0/0  | 80/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                 | WEBS  |                           |                    |          |
|--------|---------------------------|---------------------------|-----------------|-------|---------------------------|--------------------|----------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1 MAX (LC)    | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. FACTORED (LC) |          |
| FR-TO  |                           | FROM                      | TO              | FR-TO |                           |                    |          |
| A-B    | 0/17                      | -102.1                    | -102.1 0.03 (1) | 10.00 | F-G                       | 0/386              | 0.00 (1) |
| B-G    | -465/0                    | -102.1                    | -102.1 0.13 (3) | 6.25  | H-I                       | 0/386              | 0.00 (1) |
| G-C    | -245/0                    | -102.1                    | -102.1 0.17 (1) | 6.25  |                           |                    |          |
| C-I    | -245/0                    | -102.1                    | -102.1 0.17 (1) | 6.25  |                           |                    |          |
| I-D    | -465/0                    | -102.1                    | -102.1 0.13 (3) | 6.25  |                           |                    |          |
| D-E    | 0/17                      | -102.1                    | -102.1 0.03 (1) | 10.00 |                           |                    |          |
| B-F    | 0/209                     | -38.5                     | -38.5 0.10 (3)  | 10.00 |                           |                    |          |
| F-H    | 0/209                     | -38.5                     | -38.5 0.18 (2)  | 10.00 |                           |                    |          |
| H-D    | 0/209                     | -38.5                     | -38.5 0.10 (3)  | 10.00 |                           |                    |          |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 28.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.9 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBC 2010, NBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CSI: TC=0.17/1.00 (C-I), BC=0.18/1.00 (F-H), WB=0.00/1.00 (F-G), SSI=0.20/1.00 (B-G:3)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

#### NAIL VALUES

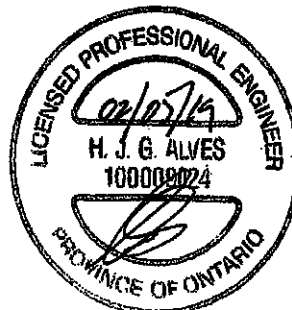
| PLATE GRIP(DRY) | SHEAR (PSI) | SECTION (PLI) |
|-----------------|-------------|---------------|
| MAX             | MIN         | MAX           |
| MT20            | 618         | 354           |
|                 | 1657        | 788           |
|                 | 1987        | 1656          |

PLATE PLACEMENT TOL. = 0.250 Inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.29 (D) (INPUT = 0.90)  
JSI METAL= 0.08 (B) (INPUT = 1.00)

JUN 13 2019  
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.

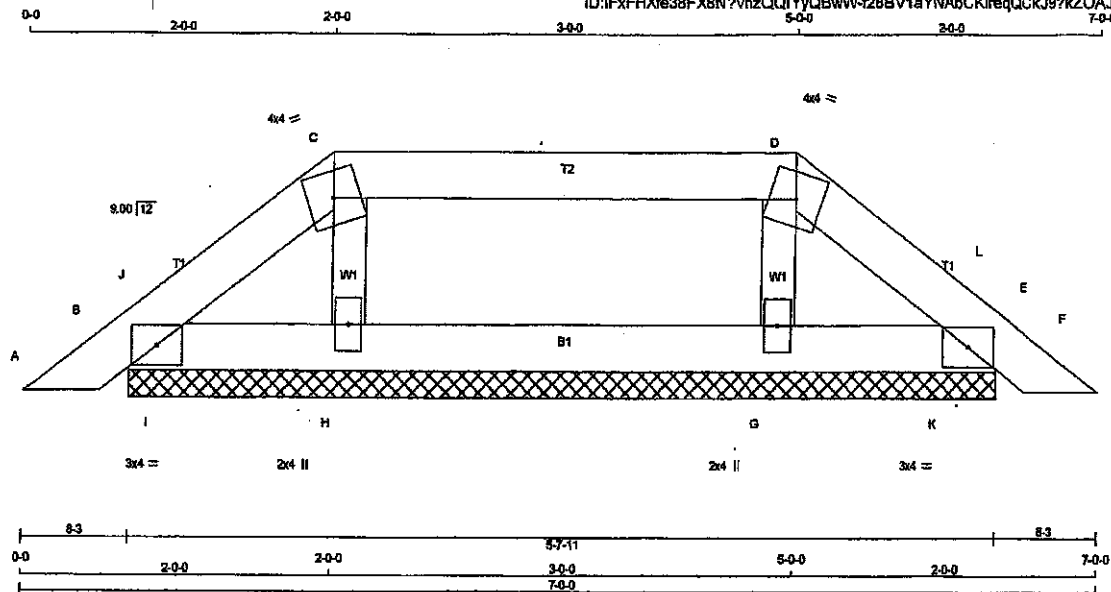


DWG NO. TAM 17502619  
STRUCTURAL  
COMPONENT ONLY

|                                  |                          |                      |                 |                               |          |
|----------------------------------|--------------------------|----------------------|-----------------|-------------------------------|----------|
| JOB NAME<br><b>200168-400366</b> | TRUSS NAME<br><b>PB4</b> | QUANTITY<br><b>1</b> | PLY<br><b>1</b> | JOB DESC.<br><b>Preston 1</b> | DRWG NO. |
| Tamarack Roof Truss, Burlington  |                          |                      |                 | TRUSS DESC.                   |          |

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Scale = 1/4" = 1'-0"

TOTAL WEIGHT = 17 lb

#### LUMBER

##### N. L. G. A. RULES

| CHORDS               | SIZE | LUMBER | DESCR. |
|----------------------|------|--------|--------|
| A - C                | 2x4  | DRY    | No.2   |
| C - D                | 2x4  | DRY    | No.2   |
| D - F                | 2x4  | DRY    | No.2   |
| B - E                | 2x4  | DRY    | No.2   |
| ALL WEBS             | 2x3  | DRY    | No.2   |
| DRY: SEASONED LUMBER |      |        |        |

#### PLATES (table in inches)

| JT TYPE | PLATES | W    | LEN | Y   | X |
|---------|--------|------|-----|-----|---|
| B       | TMB1-J | MT20 | 3.0 | 4.0 |   |
| C       | TTW-m  | MT20 | 4.0 | 4.0 |   |
| D       | TTW-m  | MT20 | 4.0 | 4.0 |   |
| E       | TMB1-J | MT20 | 3.0 | 4.0 |   |
| G       | BMW1-w | MT20 | 2.0 | 4.0 |   |
| H       | BMW1-w | MT20 | 2.0 | 4.0 |   |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

|    | FACTORED GROSS REACTION | FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----|-------------------------|-------------------------|-----------|----------|
| JT | VERT                    | HORZ                    | DOWN      | HORZ     |
| B  | 172                     | 0                       | 172       | 0        |
| E  | 172                     | 0                       | 172       | 0        |
| H  | 285                     | 0                       | 285       | 0        |
| G  | 285                     | 0                       | 285       | 0        |

##### UNFACTORED REACTIONS

| JT | 1ST LCASE | SNOW  | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|----|-----------|-------|------|-----------|------|------|------|
| B  | 121       | 91/0  | 7/0  | 0/0       | 0/0  | 23/0 | 0/0  |
| E  | 121       | 91/0  | 7/0  | 0/0       | 0/0  | 23/0 | 0/0  |
| H  | 217       | 107/0 | 53/0 | 0/0       | 0/0  | 57/0 | 0/0  |
| G  | 217       | 107/0 | 53/0 | 0/0       | 0/0  | 57/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, E, H, G

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                        | WEBS  |                           |                        |          |
|--------|---------------------------|---------------------------|------------------------|-------|---------------------------|------------------------|----------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED CS1 (LC) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CS1 (LC) |          |
| FR-TO  |                           |                           |                        | FR-TO |                           |                        |          |
| A-B    | 0/17                      | -102.1                    | -102.1 0.03 (1)        | 10.00 | H-C                       | -175/0                 | 0.02 (1) |
| B-J    | -50/0                     | -102.1                    | -102.1 0.00 (1)        | 6.25  | G-D                       | -175/0                 | 0.02 (1) |
| J-C    | -52/0                     | -102.1                    | -102.1 0.02 (1)        | 6.25  | I-J                       | -70/0                  | 0.00 (1) |
| C-D    | -23/0                     | -102.1                    | -102.1 0.16 (1)        | 6.25  | K-L                       | -70/0                  | 0.00 (1) |
| D-L    | -52/0                     | -102.1                    | -102.1 0.02 (1)        | 6.25  |                           |                        |          |
| L-E    | -50/0                     | -102.1                    | -102.1 0.00 (1)        | 6.25  |                           |                        |          |
| E-F    | 0/17                      | -102.1                    | -102.1 0.03 (1)        | 10.00 |                           |                        |          |
| B-I    | 0/40                      | -38.5                     | -38.5 0.03 (1)         | 10.00 |                           |                        |          |
| F-H    | 0/40                      | -38.5                     | -38.5 0.04 (2)         | 10.00 |                           |                        |          |
| H-G    | 0/23                      | -38.5                     | -38.5 0.04 (2)         | 10.00 |                           |                        |          |
| G-K    | 0/40                      | -38.5                     | -38.5 0.04 (2)         | 10.00 |                           |                        |          |
| K-E    | 0/40                      | -38.5                     | -38.5 0.03 (1)         | 10.00 |                           |                        |          |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |               |
|------------|---------------|
| TOP CH.    | LL = 28.0 PSF |
|            | DL = 6.0 PSF  |
| BOT CH.    | LL = 10.5 PSF |
|            | DL = 7.0 PSF  |
| TOTAL LOAD | = 52.5 PSF    |

SPACING = 24.0 IN. C/C

LOADING IN FLAT SECTION BASED ON A SLOPE OF 6.00/12

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF CBC 2018, CBC 2012  
- CSA 088-08, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

CS1: TC=0.16/1.00 (C-D:1), BC=0.04/1.00 (H-I:2), WB=0.02/1.00 (D-G:1), SS=0.12/1.00 (C-D:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

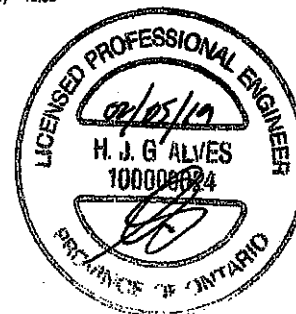
##### NAIL VALUES

| PLATE GRIP (DRY) | SHEAR (PSI) | SECTION (PLI) |
|------------------|-------------|---------------|
|                  |             |               |
| MAX MIN          | MAX MIN     | MAX MIN       |
| MT20             | 618 354     | 1687 788      |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP=0.13 (E) (INPUT = 0.80)  
JSI METAL=0.04 (H) (INPUT = 1.00)

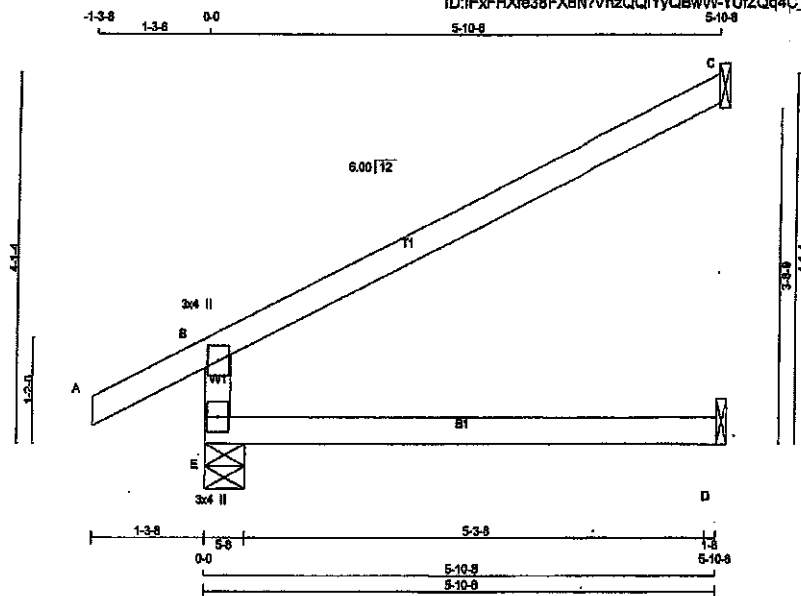


DRWG NO. TAM 17902680  
STRUCTURAL  
COMPONENT ONLY

|               |            |          |     |           |          |
|---------------|------------|----------|-----|-----------|----------|
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400364 | J1-Cond1   | 22       | 1   | Preston 1 |          |

Tamarack Roof Truss, Burlington

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TOTAL WEIGHT = 22 X 17 = 369 lb

#### LUMBER

N. L. G. A. RULES

CHORDS SIZE

E - B 2x4 DRY  
A - C 2x4 DRY  
E - D 2x4 DRY

LUMBER

No.2

No.2

No.2

DESCR.

SPF

SPF

SPF

DRY, SEASONED LUMBER.

#### PLATES (table in inches)

| JT | TYPE   | PLATES | W   | LEN | Y | X |
|----|--------|--------|-----|-----|---|---|
| B  | TMV+p  | MT20   | 3.0 | 4.0 |   |   |
| E  | EMV1+p | MT20   | 3.0 | 4.0 |   |   |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY

BUILDING DESIGNER

#### BEARINGS

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG |       | REQD BRG |       |
|----|-------------------------|------|---------------------------------|------|-----------|-------|----------|-------|
|    | VERT                    | HORZ | DOWN                            | HORZ | IN-SX     | IN-SX | IN-SX    | IN-SX |
| E  | 646                     | 0    | 646                             | 0    | 5-8       | 5-8   |          |       |
| C  | 225                     | 0    | 225                             | 0    | 1-8       | 1-8   |          |       |
| D  | 93                      | 0    | 119                             | 0    | 1-8       | 1-8   |          |       |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| JT | 1ST LCASE |         | MAX / MIN. COMPONENT REACTIONS |            |       |         |       |
|----|-----------|---------|--------------------------------|------------|-------|---------|-------|
|    | COMBINED  | SNOW    | LIVE                           | PERM. LIVE | WIND  | DEAD    | SOIL  |
| E  | 473       | 282 / 0 | 72 / 0                         | 0 / 0      | 0 / 0 | 108 / 0 | 0 / 0 |
| C  | 154       | 128 / 0 | 0 / 0                          | 0 / 0      | 0 / 0 | 28 / 0  | 0 / 0 |
| D  | 85        | 0 / 0   | 51 / 0                         | 0 / 0      | 0 / 0 | 34 / 0  | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS                    |                               | WEBS                                    |                                         |
|-------|---------------------------|-------------------------------|-----------------------------------------|-----------------------------------------|
|       | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) | MAX. FACTORED MAX. UNBRACED LENGTH (LC) | MAX. FACTORED MAX. UNBRACED LENGTH (LC) |
| FR-TO |                           | FROM TO                       |                                         |                                         |
| E-B   | -513 / 0                  | 0.0 0.0 0.22 (3)              | 7.81                                    |                                         |
| A-B   | 0 / 31                    | -102.1 -102.1 0.13 (1)        | 10.00                                   |                                         |
| B-C   | -34 / 0                   | -102.1 -102.1 0.60 (1)        | 6.25                                    |                                         |
| E-D   | 0 / 0                     | -38.5 -38.5 0.22 (3)          | 10.00                                   |                                         |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

TOP CH. LL = 28.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBCC 2015, CBC 2012  
- CSA 086-06, CSA 086-14  
- TPIC 2011, TPIC 2014

##### DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(58% OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 28.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.20")  
CALCULATED VERT. DEFL. (LL) = L/989 (0.04")  
ALLOWABLE DEFL. (TL) = L/360 (0.20")  
CALCULATED VERT. DEFL. (TL) = L/942 (0.07")

CSI: TC=0.80/1.00 (B-C:1), BC=0.22/1.00 (D-E:3),  
WB=0.00/1.00 (n/a:0), SB=0.28/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

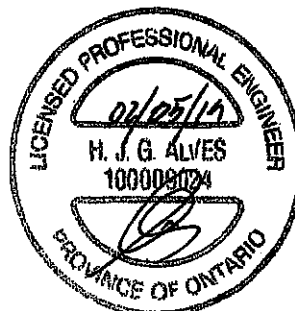
##### NAIL VALUES

| PLATE GRIP (DRY) | SHEAR (PSI) | SECTION (PLI) |
|------------------|-------------|---------------|
| MAX MIN          | MAX MIN     | MAX MIN       |
| MT20 618 354     | 1667 788    | 1987 1636     |

PLATE PLACEMENT TOL. = 0.250 inches

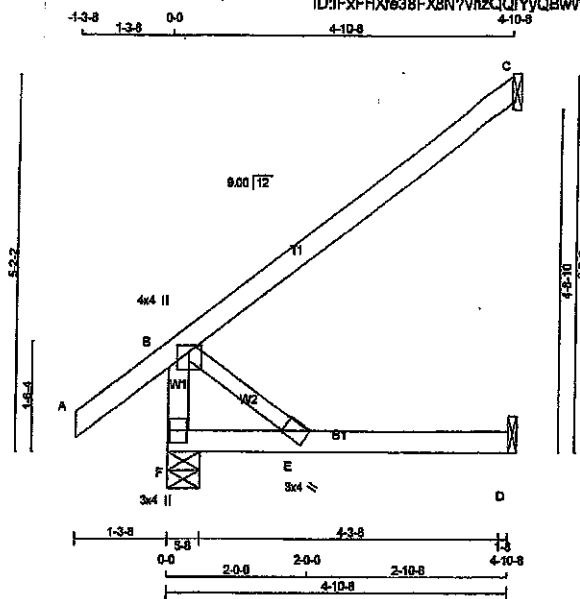
PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP = 0.21 (E) (INPUT = 0.90)  
JSI METAL = 0.14 (B) (INPUT = 1.00)



DRWG NO. TAM 77902661  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |                                                                                   |     |           |          |
|---------------------------------|------------|-----------------------------------------------------------------------------------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY                                                                          | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | J2         | 9                                                                                 | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            | Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Tue Feb 5 20:48:02 2019 Page 1 |     |           |          |
|                                 |            | ID:JFxFHXFe38FX8N7VhzQQIYyQBwW-QJ5ocyTVVPTTJfvo1YdSG78qm3ZZBPMcZaZWExo50h         |     |           |          |



Scale = 1/28.3

TOTAL WEIGHT = 9 X 17 = 157 lb

| LUMBER                | N.L.G.A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-----------------------|----------------|--------|------|--------|--------|
| F - B                 | 2x4            | DRY    | No.2 | SPF    |        |
| A - C                 | 2x4            | DRY    | No.2 | SPF    |        |
| F - D                 | 2x4            | DRY    | No.2 | SPF    |        |
| ALL WEBS              | 2x3            | DRY    | No.2 | SPF    |        |
| DRY: SEASONED LUMBER. |                |        |      |        |        |

#### PLATES (table in inches)

| JT TYPE  | PLATES | W   | LEN | Y    | X    |
|----------|--------|-----|-----|------|------|
| B TMVW+p | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| E BMVW+w | MT20   | 3.0 | 4.0 |      |      |
| F BMV1+p | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----------|-------------------------|---------------------------------|-----------|----------|
| JT       | VERT                    | HORZ                            | UP/LIFT   | IN-SX    |
| F        | 484                     | 0                               | 0         | 5-6      |
| C        | 249                     | 0                               | 0         | 1-8      |
| D        | 94                      | 0                               | 0         | 1-8      |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| 1ST LCASE | SNOW     | LIVE    | PERM.LIVE | WIND  | DEAD  | SOIL   |
|-----------|----------|---------|-----------|-------|-------|--------|
| JT        | COMBINED | VERT.   | LOAD      | LC1   | MAX   | MAX    |
| F         | 353      | 222 / 0 | 51 / 0    | 0 / 0 | 0 / 0 | 80 / 0 |
| C         | 171      | 142 / 0 | 0 / 0     | 0 / 0 | 0 / 0 | 29 / 0 |
| D         | 85       | 0 / 0   | 51 / 0    | 0 / 0 | 0 / 0 | 34 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. FURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED CS1 (LC) | MAX. UNBRACED LENGTH | WEBS  | MAX. FACTORED FORCE (LBS) | MAX. FACTORED CS1 (LC) |
|--------|---------------------------|---------------------------|------------------------|----------------------|-------|---------------------------|------------------------|
| MEMB.  | FR-TO                     | FROM TO                   | FR-TO                  | FR-TO                | MEMB. | FR-TO                     | FR-TO                  |
| F-B    | -380 / 0                  | 0.0                       | 0.0                    | 0.04 (1)             | 7.81  | 0 / 0                     | 0.00 (1)               |
| A-B    | 0 / 42                    | -102.1                    | -102.1                 | 0.14 (1)             | 10.00 |                           |                        |
| B-C    | 0 / 0                     | -102.1                    | -102.1                 | 0.41 (1)             | 10.00 |                           |                        |
| F-E    | 0 / 0                     | -38.5                     | -38.5                  | 0.20 (3)             | 10.00 |                           |                        |
| E-D    | 0 / 0                     | -38.5                     | -38.5                  | 0.21 (3)             | 10.00 |                           |                        |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2015, CBC 2012  
- CSA 088-09, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/999 (0.04")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/971 (0.06")

CSI: TC=0.41/1.00 (B-C:1), BC=0.21/1.00 (D-E:3), WB=0.00/1.00 (B-E:1), SS=0.16/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

#### NAIL VALUES

| PLATE GRIP (DRY) | SHEAR (PSI) | SECTION (PLI) |
|------------------|-------------|---------------|
| MAX MIN          | MAX MIN     | MAX MIN       |
| MT20             | 618 354     | 1867 788      |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.31 (B) (INPUT = 0.80)  
JSI METAL= 0.08 (B) (INPUT = 1.00)



RECEIVED  
JUN 13 2019  
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.

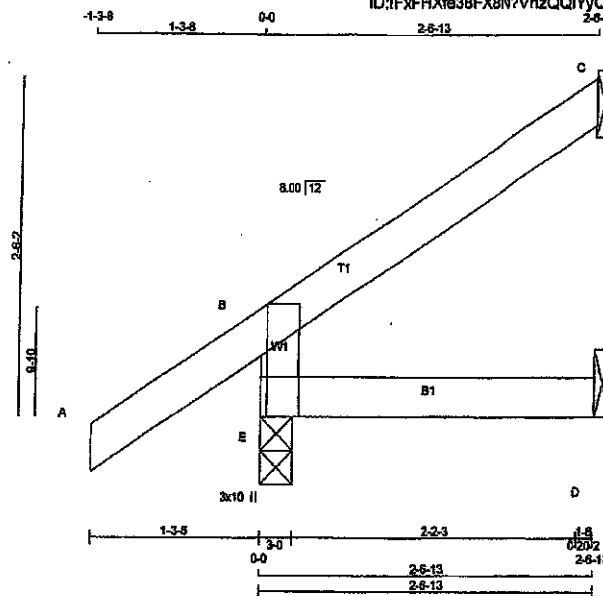
DWGNO. TAM 17902681  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |             |     |           |          |
|---------------------------------|------------|-------------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC. | DRWG NO. |
| 200168-400364                   | J3         | 5           | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |           |          |

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ID:IFxHXfe38FX8N?VhzQQiVYQBwW-YUfZQq4C\_k\_iXP81IXVEibAkRC100Yx8a8sHnzo58M

Scale = 1:15.0



TOTAL WEIGHT = 5 X 9 = 44 lb

#### LUMBER

N.L.G.A. RULES

CHORDS SIZE

E - B 2x4 DRY

A - C 2x4 DRY

E - D 2x4 DRY

LUMBER

No.2

No.2

No.2

DESCR.

SPF

SPF

SPF

DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

JT TYPE PLATES

W LEN Y X

B

E

E TMBMV1+p MT20

3.0

10.0

Edge 0.50

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

| JT | FACTORED GROSS REACTION |      | MAXIMUM FACTORED GROSS REACTION |      | INPUT BRG IN-SX | REQD BRG IN-SX |
|----|-------------------------|------|---------------------------------|------|-----------------|----------------|
|    | VERT                    | HORZ | DOWN                            | HORZ |                 |                |
| E  | 361                     | 0    | 361                             | 0    | 3-0             | 3-0            |
| C  | 98                      | 0    | 98                              | 0    | 1-8             | 1-8            |
| D  | 42                      | 0    | 53                              | 0    | 1-8             | 1-8            |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

##### UNFACTORED REACTIONS

| JT | 1ST LCASE COMBINED | MAX/MIN COMPONENT REACTIONS |      |           |      |      |      |
|----|--------------------|-----------------------------|------|-----------|------|------|------|
|    |                    | SNOW                        | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| E  | 261                | 173/0                       | 31/0 | 0/0       | 0/0  | 57/0 | 0/0  |
| C  | 68                 | 56/0                        | 0/0  | 0/0       | 0/0  | 12/0 | 0/0  |
| D  | 38                 | 0/0                         | 23/0 | 0/0       | 0/0  | 15/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (5)

| MEMB. | FORCE (LBS) | CHORDS                         |                |               | WEBS                   |                     |               |
|-------|-------------|--------------------------------|----------------|---------------|------------------------|---------------------|---------------|
|       |             | MAX. FACTORED VERT. LOAD (LBS) | FACTORED (PLF) | MAX. CS1 (LC) | MAX. MEMB. FORCE (LBS) | MAX. FACTORED (LBS) | MAX. CS1 (LC) |
| FR-TO |             |                                | FROM           | TO            |                        | FR-TO               |               |
| E-B   | -304/0      | 0.0                            | 0.0            | 0.04 (3)      | 7.81                   |                     |               |
| A-B   | 0/39        | -102.1                         | -102.1         | 0.14 (1)      | 10.00                  |                     |               |
| B-C   | -18/0       | -102.1                         | -102.1         | 0.11 (1)      | 6.25                   |                     |               |
| E-D   | 0/0         | -36.5                          | -36.5          | 0.04 (3)      | 10.00                  |                     |               |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

#### DESIGN CRITERIA

SPECIFIED LOADS:

TOP CH. LL = 28.0 PSF

DL = 6.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.0 PSF

TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, OBC 2012

- CSA 088-09, CSA 088-14

- TPIC 2011, TPIC 2014

##### DESIGN ASSUMPTIONS

OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55% OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")

CALCULATED VERT. DEFL.(LL) = L/989 (0.00")

ALLOWABLE DEFL.(TL) = L/360 (0.19")

CALCULATED VERT. DEFL.(TL) = L/989 (0.00")

CS1: TO=0.14/1.00 (A-B:1), SC=0.04/1.00 (D-E:3),

WB=0.00/1.00 (A-B:0), SS1=0.11/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

##### NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

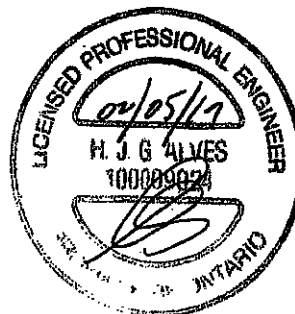
MT20 618 354 1887 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.08 (E) (INPUT = 0.80)

JSI METAL= 0.10 (E) (INPUT = 1.00)



DRWG NO. TAM 17902663  
STRUCTURAL  
COMPONENT ONLY

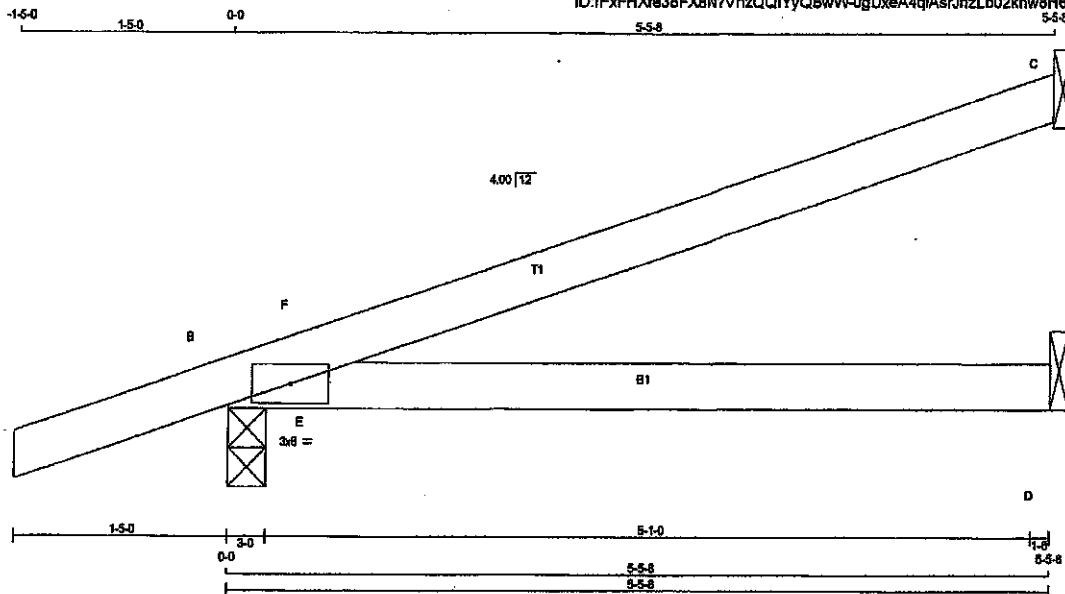
RECEIVED  
JUN 13 2019  
TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.

|               |            |          |     |             |                                                                                  |          |
|---------------|------------|----------|-----|-------------|----------------------------------------------------------------------------------|----------|
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC.   | Version 8.230 S Nov 17 2018 MTEK Industries, Inc. Tue Feb 5 20:42:00 2019 Page 1 | DRWG NO. |
| 200168-400364 | J4         | 2        | 1   | TRUSS DESC. | ID:IFxHXfe38FX8N7VhzQQIYyQBwW-0gDxeA4qAsrJhzLb02knw8H6rUHITn4NEUPpDzo58L         |          |

Tamareck Roof Truss, Burlington

Version 8.230 S Nov 17 2018 MTEK Industries, Inc. Tue Feb 5 20:42:00 2019 Page 1

ID:IFxHXfe38FX8N7VhzQQIYyQBwW-0gDxeA4qAsrJhzLb02knw8H6rUHITn4NEUPpDzo58L



Scale = 1:13.6

TOTAL WEIGHT = 2 X 15 = 29 lb

#### LUMBER

N. L. G. A. RULES

CHORDS SIZE

A - C 2x4 DRY

B - D 2x4 DRY

LUMBER

No.2

DESCR.

SPF

DRY, SEASONED LUMBER.

#### PLATES (table in inches)

| JT TYPE | PLATES | W    | LEN | Y   | X |
|---------|--------|------|-----|-----|---|
| B       | TMB1-1 | MT20 | 3.0 | 6.0 |   |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY

##### BUILDING DESIGNER

##### BEARINGS

|    | FACTORED       | MAXIMUM FACTORED | INPUT | REQD   |
|----|----------------|------------------|-------|--------|
|    | GROSS REACTION | GROSS REACTION   | BRG   | BRG    |
| JT | VERT           | DOWN             | HORIZ | UPLIFT |
| C  | 250            | 0                | 0     | 0      |
| B  | 533            | 0                | 0     | 0      |
| D  | 133            | 0                | 0     | 0      |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

##### UNFACTORED REACTIONS

| JT | 1ST CASE | SNOW    | LIVE   | PERM. LIVE | WIND  | DEAD   | SOIL  |
|----|----------|---------|--------|------------|-------|--------|-------|
| C  | 175      | 133 / 0 | 9 / 0  | 0 / 0      | 0 / 0 | 33 / 0 | 0 / 0 |
| B  | 389      | 243 / 0 | 57 / 0 | 0 / 0      | 0 / 0 | 88 / 0 | 0 / 0 |
| D  | 111      | 25 / 0  | 49 / 0 | 0 / 0      | 0 / 0 | 38 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) B, D

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.

MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS        | WEBS          |
|-------|---------------|---------------|
|       | MAX. FACTORED | MAX. FACTORED |
|       | FORCE         | FORCE         |
|       | (LBS)         | (LBS)         |
|       | VERT. LOAD    | VERT. LOAD    |
|       | (PLF)         | (PLF)         |
|       | CS1 (LC)      | CS1 (LC)      |
|       | MAX           | MAX           |
|       | UNBRAC        | UNBRAC        |
|       | LENGTH        | LENGTH        |
|       | FR-TO         | FR-TO         |
|       | 0.15 (1)      | 0.15 (1)      |
|       | 0.13 (8)      | 0.13 (8)      |
|       | 0.42 (1)      | 0.42 (1)      |
|       | 0.28 (1)      | 0.28 (1)      |
|       | 0.31 (1)      | 0.31 (1)      |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

TOP CH. LL = 28.0 PSF

DL = 6.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.0 PSF

TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2010, CBC 2012

- CSA 086-08, CSA 086-14

- TPIC 2011, TPIC 2014

(56 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.19")

CALCULATED VERT. DEFL. (LL) = L/842 (0.08")

ALLOWABLE DEFL. (TL) = L/360 (0.19")

CALCULATED VERT. DEFL. (TL) = L/489 (0.13")

CS1: TC=0.42/1.00 (C-F:1), BC=0.31/1.00 (D-E:1),

WB=0.00/1.00 (E-F:1), SS=0.28/1.00 (B-E:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10

COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

##### NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

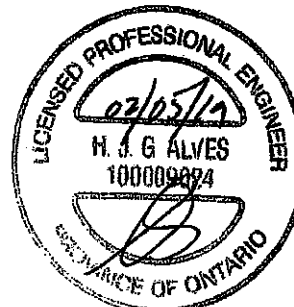
MT20 618 354 1667 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.21 (B) (INPUT = 0.90)

JSI METAL= 0.08 (B) (INPUT = 1.00)



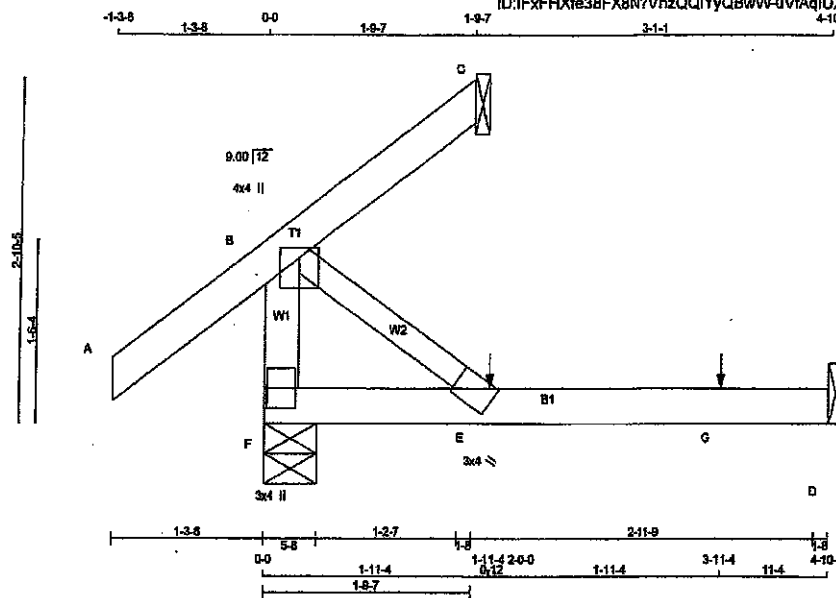
DRWG NO. TAM 77902664  
STRUCTURAL  
COMPONENT ONLY

|                                 |            |             |     |           |          |
|---------------------------------|------------|-------------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | J5         | 4           | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |           |          |

Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Tue Feb 5 20:48:03 2019 Page 1

ID:IFxHFXfe38FX8N7VhzQQIYyQBwW-uVfAqIUXGjbKNTD6MI3s\_TgNeAOJleFVrDj72gzo50g

Scale = 1:17.7



TOTAL WEIGHT = 4 X 13 = 52 lb

#### LUMBER

N. L. G. A. RULES

CHORDS SIZE

F - B 2x4 DRY

A - C 2x4 DRY

F - D 2x4 DRY

ALL WEBS 2x3 DRY

DRY: SEASONED LUMBER.

LUMBER

No.2

No.2

No.2

No.2

No.2

DESOR.

SPF

SPF

SPF

SPF

SPF

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

#### BEARINGS

| JT   | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | RECORD BRG |
|------|-------------------------|---------------------------------|-----------|------------|
| VERT | HORZ                    | DOWN                            | HORZ      | UPLIFT     |
| F    | 380                     | 0                               | 380       | 0          |
| C    | 37                      | 0                               | 37        | 0          |
| D    | 94                      | 0                               | 119       | 0          |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

#### UNFACTORED REACTIONS

| JT | 1ST CASE | SNOW  | LIVE | PERM | LIVE | WIND | DEAD | SOIL |
|----|----------|-------|------|------|------|------|------|------|
| F  | 282      | 163/0 | 51/0 | 0/0  | 0/0  | 0/0  | 68/0 | 0/0  |
| C  | 25       | 21/0  | 0/0  | 0/0  | 0/0  | 0/0  | 4/0  | 0/0  |
| D  | 85       | 0/0   | 51/0 | 0/0  | 0/0  | 0/0  | 34/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

#### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 8.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

#### LOADING

TOTAL LOAD CASES: (4)

| MEMB. | CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. LC1 | MAX. LC2 | MAX. UNBRACED LENGTH | WEBS | MAX. FACTORED FORCE (LBS) | MAX. LC1 | MAX. LC2 |
|-------|--------|---------------------------|---------------------------|----------|----------|----------------------|------|---------------------------|----------|----------|
| FR-TO |        |                           |                           |          |          |                      |      |                           |          |          |
| F-B   |        | -288/0                    | 0.0                       | 0.0      | 0.03 (1) | 7.81                 | B-E  | 0/0                       | 0.00 (1) |          |
| A-B   |        | 0/42                      | -102.1                    | -102.1   | 0.15 (1) | 10.00                |      |                           |          |          |
| B-C   |        | -33/0                     | -102.1                    | -102.1   | 0.15 (1) | 6.25                 |      |                           |          |          |
| F-E   |        | 0/0                       | -38.5                     | -38.5    | 0.20 (2) | 10.00                |      |                           |          |          |
| E-G   |        | 0/0                       | -38.5                     | -38.5    | 0.22 (2) | 10.00                |      |                           |          |          |
| G-D   |        | 0/0                       | -38.5                     | -38.5    | 0.22 (2) | 10.00                |      |                           |          |          |

#### FACTORED CONCENTRATED LOADS (LBS)

| JT | LOC.   | LC1 | MAX. | MAX+ | FACE | DIR. | TYPE  | HEEL | CONN. |
|----|--------|-----|------|------|------|------|-------|------|-------|
| E  | 1-11-4 | 1   | 1    | 1    | BACK | VERT | TOTAL | —    | —     |
| G  | 3-11-4 | 1   | 1    | 1    | BACK | VERT | TOTAL | —    | —     |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

TOP CH. LL = 29.0 PSF

DL = 8.0 PSF

BOT CH. LL = 10.5 PSF

DL = 7.0 PSF

TOTAL LOAD = 52.5 PSF

##### SPACING = 24.0 IN. G/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF CBC 2018, CBC 2012

- CSA C88-08, CSA C88-14

- TPIC 2011, TPIC 2014

##### DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")

CALCULATED VERT. DEFL.(LL) = L/999 (0.04")

ALLOWABLE DEFL.(TL) = L/360 (0.19")

CALCULATED VERT. DEFL.(TL) = L/971 (0.08")

CSI: TC=0.15/1.00 (A-B:1), BC=0.22/1.00 (D-E:2),

WB=0.00/1.00 (B-E:1), SSI=0.10/1.00 (E-F:2)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.00

COMP=1.00 SHEAR=1.00 TENS=1.00

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

##### NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION

(PSI) (PLI) (PLI)

MAX MIN MAX MIN MAX MIN

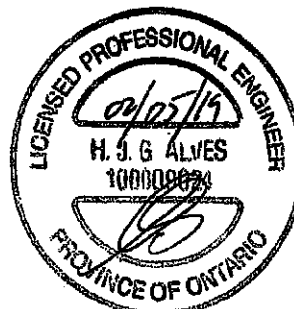
MT20 618 354 1667 788 1987 1658

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

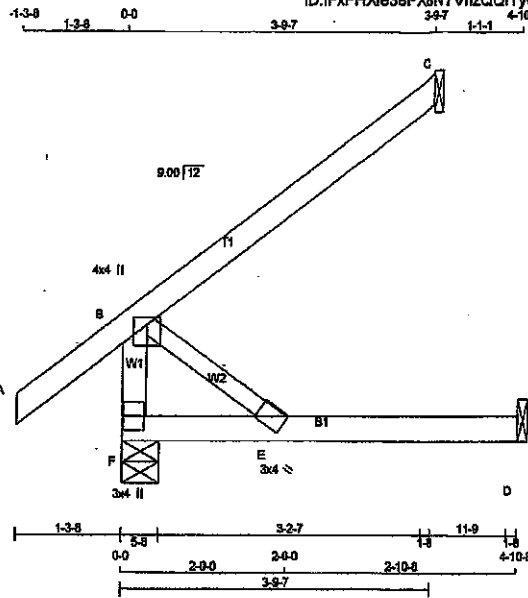
JSI GRIP= 0.23 (B) (INPUT = 0.90)

JSI METAL= 0.08 (B) (INPUT = 1.00)



DRWG NO. TAM T90282  
STRUCTURAL  
COMPONENT ONLY

|                                                                                   |            |          |     |           |          |
|-----------------------------------------------------------------------------------|------------|----------|-----|-----------|----------|
| JOB NAME                                                                          | TRUSS NAME | QUANTITY | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                                                                     | J6         | 4        | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington                                                   |            |          |     |           |          |
| Version 8.230 S Nov 17 2018 Mitek Industries, Inc. Tue Feb 5 20:48:04 2019 Page 1 |            |          |     |           |          |
| ID: IFxHMXe38FX8N7VhzQQIYyQBwW-MIDY1dU910JB_dohSa5XgCXuak515v4s3ga7zc50f          |            |          |     |           |          |
| TRUSS DESC.                                                                       |            |          |     |           |          |



Scale = 1/25.3

TOTAL WEIGHT = 4 X 16 = 64 lb

| LUMBER                | N.L.G.A. RULES | CHORDS | SIZE | LUMBER | DESCR. |
|-----------------------|----------------|--------|------|--------|--------|
| F - B                 | 2x4            | DRY    | No.2 | SPF    |        |
| A - C                 | 2x4            | DRY    | No.2 | SPF    |        |
| F - D                 | 2x4            | DRY    | No.2 | SPF    |        |
| ALL WEBS              | 2x3            | DRY    | No.2 | SPF    |        |
| DRY: SEASONED LUMBER. |                |        |      |        |        |

| PLATES (table is in inches) | W    | LEN | Y   | X         |
|-----------------------------|------|-----|-----|-----------|
| JT TYPE PLATES              |      |     |     |           |
| B TMVW+p                    | MT20 | 4.0 | 4.0 | 1.00 2.00 |
| E BMVW+p                    | MT20 | 3.0 | 4.0 |           |
| F BMV1+p                    | MT20 | 3.0 | 4.0 |           |

DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

| BEARINGS | FACTORED       | MAXIMUM FACTORED | INPUT | REQD |
|----------|----------------|------------------|-------|------|
|          | GROSS REACTION | GROSS REACTION   | BRG   | BRG  |
| JT       | VERT           | HORZ             | DOWN  | HORZ |
| F        | 428            | 0                | 428   | 0    |
| C        | 193            | 0                | 193   | 0    |
| D        | 94             | 0                | 119   | 0    |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

| UNFACTORED REACTIONS | 1ST LCASE | MAX/MIN | COMPONENT REACTIONS |
|----------------------|-----------|---------|---------------------|
| JT                   | COMBINED  | SNOW    | LIVE                |
| F                    | 315       | 180/0   | 51/0                |
| C                    | 133       | 110/0   | 0/0                 |
| D                    | 85        | 0/0     | 51/0                |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) F, C

**BRACING**  
TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

**LOADING**

TOTAL LOAD CASES: (4)

| CHORDS | MEMB.  | FACTORED | VERT. LOAD | LC1      | MAX    | MAX   | MEMB. | FACTORED | VERT. LOAD | LC1 | MAX    |
|--------|--------|----------|------------|----------|--------|-------|-------|----------|------------|-----|--------|
|        |        | FORCE    |            |          |        |       |       | FORCE    |            |     |        |
|        |        | (LBS)    |            |          |        |       |       | (LBS)    |            |     |        |
| FR-TO  |        |          | FROM       | TO       | LENGTH | FR-TO |       |          | FROM       | TO  | LENGTH |
| F-B    | -334/0 | 0.0      | 0.0        | 0.03 (1) | 7.81   | B-E   | 0/0   | 0.00 (1) |            |     |        |
| A-B    | 0/42   | -102.1   | -102.1     | 0.14 (1) | 10.00  |       |       |          |            |     |        |
| B-C    | 0/0    | -102.1   | -102.1     | 0.25 (1) | 10.00  |       |       |          |            |     |        |
| F-E    | 0/0    | -38.5    | -38.5      | 0.20 (3) | 10.00  |       |       |          |            |     |        |
| E-D    | 0/0    | -38.5    | -38.5      | 0.21 (3) | 10.00  |       |       |          |            |     |        |

**DESIGN CRITERIA**

**SPECIFIED LOADS:**  
TOP CH. LL = 29.0 PSF  
DL = 8.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

**SPACING = 24.0 IN. O.C.**

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF NBCC 2018, OBC 2012  
- CSA 088-08, CSA 088-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = 1/689 (0.04")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = 1/571 (0.08")

CSI: TO=0.25/1.00 (B-C:1), BC=0.21/1.00 (D-E:3), WB=0.00/1.00 (B-E:1), SS=0.12/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

AUTOSOLVE RIGHT HEEL ONLY

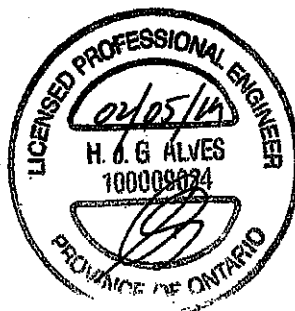
TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

**NAIL VALUES**  
PLATE GRIP(DRY) SHEAR SECTION  
(PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1687 788 1987 1686

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.80)  
JSI METAL= 0.07 (B) (INPUT = 1.00)



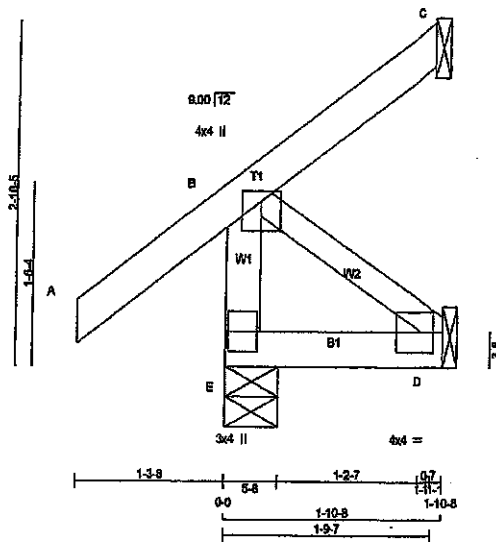
DWG NO. TAM 17902683  
STRUCTURAL  
COMPONENT ONLY

|               |            |          |     |           |                                                                                   |          |
|---------------|------------|----------|-----|-----------|-----------------------------------------------------------------------------------|----------|
| JOB NAME      | TRUSS NAME | QUANTITY | PLY | JOB DESC. | Version 8.230 S Nov 17 2016 Mitek Industries, Inc. Tue Feb 5 20:48:05 2019 Page 1 | DRWG NO. |
| 200168-400366 | J7         | 3        | 1   | Preston 1 | TRUSS DESC.                                                                       |          |

Tamarack Roof Truss, Burlington

ID:IFxHXfe38FX8N?VhzQQIYyQBwW-qumwFzVnnKr2cnNUTa8K4uljMz77mY8pJWoE7Zzo50e  
1-9-7 1-10-8

Scale = 1:17.7



TOTAL WEIGHT = 3 X 10 = 29 lb

#### LUMBER

##### N.L.G.A. RULES

| CHORDS | SIZE    | LUMBER | DESCR. |
|--------|---------|--------|--------|
| E - B  | 2x4 DRY | No.2   | SPF    |
| A - C  | 2x4 DRY | No.2   | SPF    |
| E - D  | 2x4 DRY | No.2   | SPF    |

ALL WEBS 2x3 DRY  
DRY: SEASONED LUMBER.

#### PLATES (table is in inches)

| JT TYPE  | PLATES | W   | LEN | Y    | X    |
|----------|--------|-----|-----|------|------|
| B TMVW+p | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| D BMV1-t | MT20   | 4.0 | 4.0 | 2.00 | 1.25 |
| E BMV1+p | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

|    | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | RECORD BRG |
|----|-------------------------|---------------------------------|-----------|------------|
| JT | VERT                    | HORZ                            | DOWN      | HORZ       |
| E  | 321                     | 0                               | 321       | 0          |
| C  | 37                      | 0                               | 37        | 0          |
| D  | 34                      | 0                               | 44        | 0          |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

PROVIDE ANCHORAGE AT BEARING JOINT C FOR 150 LBS. FACTORED UPLIFT

##### UNFACTORED REACTIONS

| JT | 1ST LCASE | SNOW     | MAX/MIN. COMPONENT REACTIONS | LIVE  | PERM. LIVE | WIND  | DEAD   | SOIL  |
|----|-----------|----------|------------------------------|-------|------------|-------|--------|-------|
| E  | 228       | 163 / 0  | 19 / 0                       | 0 / 0 | 0 / 0      | 0 / 0 | 46 / 0 | 0 / 0 |
| C  | 25        | 21 / -31 | 0 / 0                        | 0 / 0 | 0 / 0      | 0 / 0 | 4 / 0  | 0 / 0 |
| D  | 31        | 0 / 0    | 19 / 0                       | 0 / 0 | 0 / 0      | 0 / 0 | 12 / 0 | 0 / 0 |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E, C

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 6.25 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (5)

| CHORDS | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | LC1    | MAX      | MAX   | WEBS  | MAX. FACTORED FORCE (LBS) | MAX      |
|--------|---------------------------|---------------------------|--------|----------|-------|-------|---------------------------|----------|
| FR-TO  |                           | FROM TO                   |        |          |       | FR-TO |                           |          |
| E-B    | -266 / 0                  | 0.0                       | 0.0    | 0.03 (1) | 7.81  | B-D   | 0 / 0                     | 0.00 (1) |
| A-B    | 0 / 42                    | -102.1                    | -102.1 | 0.14 (1) | 10.00 |       |                           |          |
| B-C    | -33 / 0                   | -102.1                    | -102.1 | 0.13 (1) | 6.25  |       |                           |          |
| E-D    | 0 / 0                     | -38.5                     | -38.5  | 0.03 (3) | 10.00 |       |                           |          |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |               |
|------------|---------------|
| TOP CH.    | LL = 29.0 PSF |
|            | DL = 6.0 PSF  |
| BOT CH.    | LL = 10.5 PSF |
|            | DL = 7.0 PSF  |
| TOTAL LOAD | = 52.5 PSF    |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

##### DESIGN ASSUMPTIONS

- OVERHANG NOT TO BE ALTERED OR CUT OFF.

(55 % OF 37.6 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL. (LL) = L/360 (0.19")  
CALCULATED VERT. DEFL. (LL) = 1/999 (0.00")  
ALLOWABLE DEFL. (TL) = L/360 (0.19")  
CALCULATED VERT. DEFL. (TL) = 1/999 (0.00")

CSI: TC=0.14/1.00 (A-B:1), BC=0.03/1.00 (D-E:3), WB=0.00/1.00 (B-D:1), SS=0.09/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

##### NAIL VALUES

| PLATE GRIP (DRY) | SHEAR (PSI) | SECTION (PLI) |
|------------------|-------------|---------------|
| MAX MIN          | MAX MIN     | MAX MIN       |
| MT20             | 618 354     | 1667 788      |

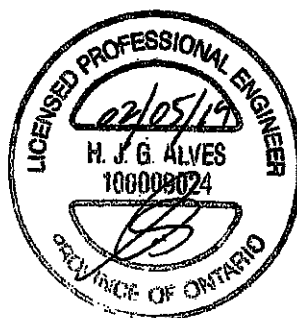
PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.23 (B) (INPUT = 0.90)  
JSI METAL= 0.06 (B) (INPUT = 1.00)

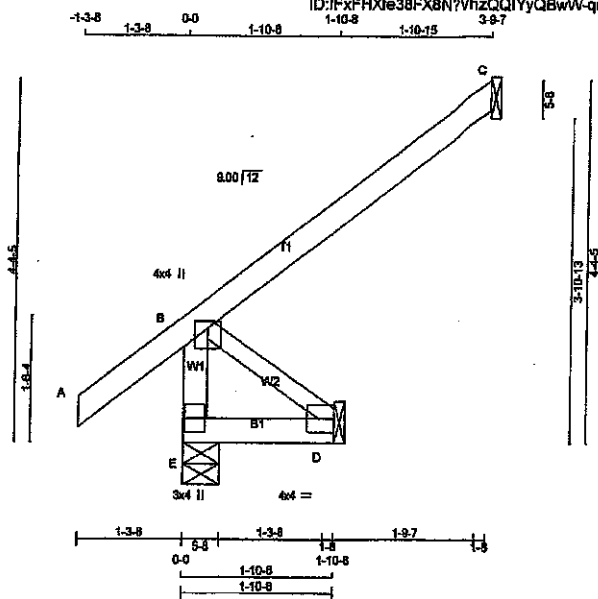
RECEIVED  
JUN 13 2019

TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.



DWG NO. TAM 17902684  
STRUCTURAL  
COMPONENTS

Version 8.230 S Nov 17 2018 MiTek Industries, Inc. Tue Feb 5 20:48:05 2019 Page 1  
ID:IFxFHXfe38FX8N?VhzQQIYyQBwW-gumwFzVnnKr2cpNUTA6K4ullej74mY8pJWoE7Zzo50



Scale = 1:25.8

TOTAL WEIGHT =  $3 \times 12 = 37 \text{ lb}$

| LUMBER                |      |        |          |
|-----------------------|------|--------|----------|
| N. L. G. A. RULES     |      |        |          |
| CHORDS                | SIZE | LUMBER | DESCR.   |
| E - B                 | 2x4  | DRY    | No.2 SPF |
| A - C                 | 2x4  | DRY    | No.2 SPF |
| E - D                 | 2x4  | DRY    | No.2 SPF |
| ALL WEBS              | 2x3  | DRY    | No.2 SPF |
| DRY: SEASONED LUMBER. |      |        |          |

| PLATES (table is in inches) |        |        |     |     |           |
|-----------------------------|--------|--------|-----|-----|-----------|
| JT                          | TYPE   | PLATES | W   | LEN | Y X       |
| B                           | TMVW+p | MT20   | 4.0 | 4.0 | 1.00 2.00 |
| D                           | BMW1-t | MT20   | 4.0 | 4.0 | 2.00 Edge |
| E                           | BMV1+p | MT20   | 3.0 | 4.0 |           |

Edge - INDICATES REFERENCE CORNER OF PLATE  
TOUCHES EDGE OF CHORD.

**DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER**

## COILS & BEARINGS

| JT | FACTORED<br>GROSS REACTION |      | MAXIMUM FACTORED<br>GROSS REACTION |      | INPUT<br>BRG | REQRD<br>BRG |
|----|----------------------------|------|------------------------------------|------|--------------|--------------|
|    | VERT                       | HORZ | DOWN                               | HORZ | UPLIFT       | IN-SX        |
| E  | 368                        | 0    | 368                                | 0    | 0            | 5-8          |
| C  | 193                        | 0    | 193                                | 0    | 0            | 1-8          |
| D  | 34                         | 0    | 44                                 | 0    | 0            | 1-8          |

SEE MITEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) C, D

### UNFACTORED REACTIONS

| 1ST LCASE |          | MAX/MIN. COMPONENT REACTIONS |      |           |      |      |      |
|-----------|----------|------------------------------|------|-----------|------|------|------|
| JT        | COMBINED | SNOW                         | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
| E         | 250      | 190/0                        | 19/0 | 0/0       | 0/0  | 52/0 | 0/0  |
| C         | 133      | 110/0                        | 0/0  | 0/0       | 0/0  | 23/0 | 0/0  |
| D         | 31       | 0/0                          | 19/0 | 0/0       | 0/0  | 12/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) E

## BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY  
APPLIED.

**ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED**

## LOADING

**TOTAL LOAD CASES: (5)**

| CHORDS |      |          |            |        | WEBBS    |       |        |          |         |
|--------|------|----------|------------|--------|----------|-------|--------|----------|---------|
| MEMB.  | MAX. | FACTORED | FACTORED   |        |          | MEMB. | MAX.   | FACTORED |         |
|        |      | FORCE    | VERT. LOAD | LC1    | MAX      |       |        | FORCE    | MAX     |
|        |      | (LBS)    | (PLF)      | CS1    | (L)      |       | UNERAC |          | CS1 (L) |
| FR-TO  |      |          | FROM       | TO     |          | FR-TO |        |          |         |
| E-B    | -334 | 0        | 0.0        | 0.0    | 0.03 (1) | 7.81  |        |          |         |
| A-B    | 0    | 0.42     | -102.1     | -102.1 | 0.14 (1) | 10.00 |        |          |         |
| B-C    | 0    | 0        | -102.1     | -102.1 | 0.25 (1) | 10.00 |        |          |         |
| E-D    | 0    | 0        | -38.5      | -38.5  | 0.03 (3) | 10.00 |        |          |         |

CANTILEVER ANALYSIS HAS BEEN CONSIDERED IN THIS DESIGN

## DESIGN CRITERIA

**SPECIFIED LOADS:**

|            |      |      |          |
|------------|------|------|----------|
| TOP CH.    | LL = | 29.0 | PSF      |
|            | DL = | 6.0  | PSF      |
| BOT CH.    | LL = | 10.5 | PSF      |
|            | DL = | 7.0  | PSF      |
| TOTAL LOAD |      | =    | 52.5 PSF |

SPACING = 24.0 IN. C/C

THIS TRUSS IS DESIGNED FOR RESIDENTIAL  
OR SMALL BUILDING REQUIREMENTS OF  
PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, OBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.6 P.S.F. G.S.L PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/888 (0.00")  
ALLOWABLE DEFL.(TL)= L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/888 (0.00")

CSI: TC=0.25/1.00 (B-C:1), BC=0.03/1.00 (D-E:3),  
WB=0.00/1.00 (B-D:1), SSI=0.12/1.00 (B-C:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
COMP=1.10 SHEAR=1.10 TENS= 1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

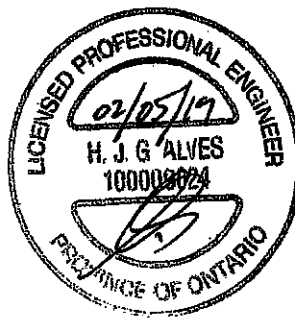
### NAIL VALUES

| PLATE | GRIP(DRY) |     | SHEAR |     | SECTION |      |
|-------|-----------|-----|-------|-----|---------|------|
|       | (FSI)     |     | (PLI) |     | (PLI)   |      |
|       | MAX       | MIN | MAX   | MIN | MAX     | MIN  |
| MT20  | 618       | 354 | 1667  | 788 | 1987    | 1656 |

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.27 (B) (INPUT = 0.90 )  
JSI METAL= 0.07 (B) (INPUT = 1.00 )



DWG NO. TAM 179026 B5  
STRUCTURAL  
COMPONENT ONLY

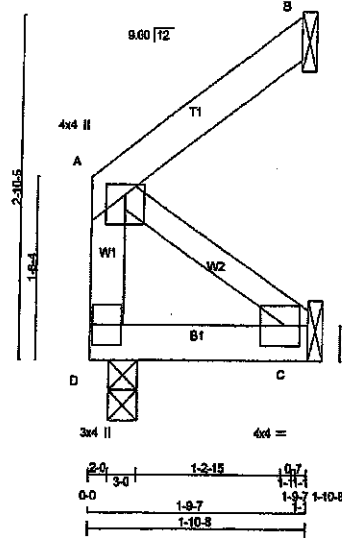
|                                 |            |             |     |           |          |
|---------------------------------|------------|-------------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | J9         | 1           | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |           |          |

Version 8.230 S Nov 17 2018 MITek Industries, Inc. Tue Feb 5 20:48:08 2019 Page 1

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0-0 1-9.7 1-9.7 1-10.8

Scale = 1:17.7



TOTAL WEIGHT = 8 lb

#### LUMBER

N. L. G. A. RULES

| CHORDS                | SIZE    | LUMBER | DESCR. |
|-----------------------|---------|--------|--------|
| D - A                 | 2x4 DRY | No.2   | SPF    |
| A - B                 | 2x4 DRY | No.2   | SPF    |
| D - C                 | 2x4 DRY | No.2   | SPF    |
| ALL WEBS              | 2x3 DRY | No.2   | SPF    |
| DRY: SEASONED LUMBER. |         |        |        |

#### PLATES (table ts in inches)

| JT | TYPE    | PLATES | W   | LEN | Y    | X    |
|----|---------|--------|-----|-----|------|------|
| A  | TW/VW+p | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| C  | BM/V1-t | MT20   | 4.0 | 4.0 | 2.00 | 1.25 |
| D  | BM/V1+p | MT20   | 3.0 | 4.0 |      |      |

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

|    | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----|-------------------------|---------------------------------|-----------|----------|
| JT | VERT                    | HORZ                            | DOWN      | HORZ     |
| D  | 128                     | 0                               | 128       | 0        |
| B  | 91                      | 0                               | 91        | 0        |
| C  | 34                      | 0                               | 44        | 0        |

SEE MITEK STANDARD DETAIL 837821H FOR CONNECTION TO JOINT(S) B, C

##### UNFACTORED REACTIONS

| JT | 1ST LCASE | MAX MIN COMPONENT REACTIONS | SNOW | LIVE | PERM. LIVE | WIND | DEAD | SOIL |
|----|-----------|-----------------------------|------|------|------------|------|------|------|
| D  | 94        | 52/0                        | 19/0 | 0/0  | 0/0        | 23/0 | 0/0  | 0/0  |
| B  | 63        | 52/0                        | 0/0  | 0/0  | 0/0        | 11/0 | 0/0  | 0/0  |
| C  | 31        | 0/0                         | 19/0 | 0/0  | 0/0        | 12/0 | 0/0  | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D, B

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT. OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE Laterally RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           |                           |                                | WEBS                           |       |                           |                                |
|--------|---------------------------|---------------------------|--------------------------------|--------------------------------|-------|---------------------------|--------------------------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD (PLF) | MAX. FACTORED VERT. LOAD (LC1) | MAX. FACTORED HORZ. LOAD (LC2) | MEMB. | MAX. FACTORED FORCE (LBS) | MAX. FACTORED HORZ. LOAD (LC2) |
| FR-TO  |                           | FROM TO                   |                                |                                | FR-TO |                           |                                |
| D-A    | -91/0                     | 0.0                       | 0.0                            | 0.01 (1)                       | 7.81  | A-C                       | 0/0                            |
| A-B    | 0/0                       | -102.1                    | -102.1                         | 0.08 (1)                       | 10.00 |                           | 0.00 (1)                       |
| D-C    | 0/0                       | -38.5                     | -38.5                          | 0.03 (3)                       | 10.00 |                           |                                |

#### DESIGN CRITERIA

SPECIFIED LOADS:  
TOP CH. LL = 29.0 PSF  
DL = 6.0 PSF  
BOT CH. LL = 10.5 PSF  
DL = 7.0 PSF  
TOTAL LOAD = 52.5 PSF

SPACING = 24.0 IN. CG

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBC 2010, NBC 2015

THIS DESIGN COMPLIES WITH:

- PART 9 OF BCBC 2018, OBC 2012  
- CSA 086-08, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(LL) = L/989 (0.00")  
ALLOWABLE DEFL.(TL) = L/360 (0.19")  
CALCULATED VERT. DEFL.(TL) = L/989 (0.00")

CSI: TC=0.08/1.00 (A-B:1), BC=0.03/1.00 (C-D:3),  
WB=0.00/1.00 (A-C:1), SS=0.06/1.00 (A-B:1)

DOL LUMBER=1.00 NAIL=1.00 LS BEND=1.10  
CONF=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

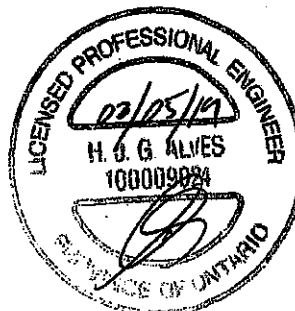
##### NAIL VALUES

PLATE GRIP(DRY) SHEAR SECTION (PSI) (PLI) (PLI)  
MAX MIN MAX MIN MAX MIN  
MT20 618 354 1657 788 1987 1656

PLATE PLACEMENT TOL. = 0.250 inches

PLATE ROTATION TOL. = 5.0 Deg.

JSI GRIP= 0.07 (A) (INPUT = 0.80)  
JSI METAL= 0.02 (A) (INPUT = 1.00)



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TOWN OF CALEDON  
BUILDING SECTION  
FILE NO.

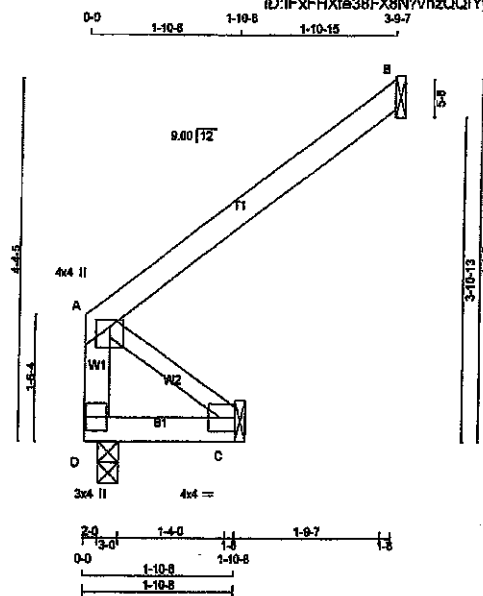
DRWG NO. TAM 17902686  
STRUCTURAL  
COMPANION FILE

|                                 |            |             |     |           |          |
|---------------------------------|------------|-------------|-----|-----------|----------|
| JOB NAME                        | TRUSS NAME | QUANTITY    | PLY | JOB DESC. | DRWG NO. |
| 200168-400366                   | J10        | 1           | 1   | Preston 1 |          |
| Tamarack Roof Truss, Burlington |            | TRUSS DESC. |     |           |          |

Version 8.230 S Nov 17 2018 MTEK Industries, Inc. Tue Feb 5 20:48:07 2019 Page 1

ID:IFxHXfa38FX8N?VhzQQIYyQBwV-mHuhgfX1Jx5mr5Xtb8a9Jq17npaESe6mqHKBRzo50c

Scale = 1:25.0



TOTAL WEIGHT = 11 lb

#### LUMBER

##### N. L. G. A. RULES

| CHORDS                | SIZE | DRY | LUMBER | DESCR. |
|-----------------------|------|-----|--------|--------|
| D - A                 | 2x4  | DRY | No.2   | SPF    |
| A - B                 | 2x4  | DRY | No.2   | SPF    |
| D - C                 | 2x4  | DRY | No.2   | SPF    |
| ALL WEBS              | 2x3  | DRY | No.2   | SPF    |
| DRY: SEASONED LUMBER. |      |     |        |        |

#### PLATES (table is in inches)

| JT TYPE     | PLATES | W   | LEN | Y    | X    |
|-------------|--------|-----|-----|------|------|
| A - TM/VV+p | MT20   | 4.0 | 4.0 | 1.00 | 2.00 |
| C - BM/V1+p | MT20   | 4.0 | 4.0 | 2.00 | Edge |
| D - BM/V1+p | MT20   | 3.0 | 4.0 |      |      |

Edge - INDICATES REFERENCE CORNER OF PLATE TOUCHES EDGE OF CHORD.

#### DIMENSIONS, SUPPORTS AND LOADINGS SPECIFIED BY FABRICATOR TO BE VERIFIED BY BUILDING DESIGNER

##### BEARINGS

| JT | FACTORED GROSS REACTION | MAXIMUM FACTORED GROSS REACTION | INPUT BRG | REQD BRG |
|----|-------------------------|---------------------------------|-----------|----------|
| D  | 228                     | 228                             | 0         | 0        |
| B  | 193                     | 193                             | 0         | 0        |
| C  | 34                      | 44                              | 0         | 0        |

SEE MTEK STANDARD DETAIL B37821H FOR CONNECTION TO JOINT(S) B, C

##### UNFACTORED REACTIONS

| JT | 1ST LCASE | MAX/MIN COMPONENT REACTIONS | SNOW | LIVE | PERM.LIVE | WIND | DEAD | SOIL |
|----|-----------|-----------------------------|------|------|-----------|------|------|------|
| D  | COMBINED  | 110/0                       | 19/0 | 0/0  | 0/0       | 0/0  | 35/0 | 0/0  |
| B  | COMBINED  | 110/0                       | 0/0  | 0/0  | 0/0       | 0/0  | 23/0 | 0/0  |
| C  | COMBINED  | 0/0                         | 19/0 | 0/0  | 0/0       | 0/0  | 12/0 | 0/0  |

BEARING MATERIAL TO BE SPF NO.2 OR BETTER AT JOINT(S) D

##### BRACING

TOP CHORD TO BE SHEATHED OR MAX. PURLIN SPACING = 10.00 FT.  
MAX. UNBRACED BOTTOM CHORD LENGTH = 10.00 FT OR RIGID CEILING DIRECTLY APPLIED.

ALL PITCH BREAKS AND PERIMETER CORNER JOINTS MUST BE LATERALLY RESTRAINED.

##### LOADING

TOTAL LOAD CASES: (4)

| CHORDS |                           |                               | WEBS          |                    |                                 |                |
|--------|---------------------------|-------------------------------|---------------|--------------------|---------------------------------|----------------|
| MEMB.  | MAX. FACTORED FORCE (LBS) | FACTORED VERT. LOAD LC1 (PLF) | MAX. CS1 (LC) | MAX. UNBRAC LENGTH | MEMB. MAX. FACTORED FORCE (LBS) | MAX. CS1 (LC)  |
| FR-TO  |                           | FROM TO                       |               |                    | FR-TO                           |                |
| D-A    | -193 / 0                  | 0.0 0.0 0.02 (1)              |               | 7.81               | A-C                             | 0 / 0 0.00 (1) |
| A-B    | 0 / 0                     | -102.1 -102.1 0.25 (1)        |               | 10.00              |                                 |                |
| D-C    | 0 / 0                     | -38.5 -38.5 0.03 (3)          |               | 10.00              |                                 |                |

#### DESIGN CRITERIA

##### SPECIFIED LOADS:

|            |               |
|------------|---------------|
| TOP CH.    | LL = 29.0 PSF |
|            | DL = 6.0 PSF  |
| BOT CH.    | LL = 10.5 PSF |
|            | DL = 7.0 PSF  |
| TOTAL LOAD | = 52.5 PSF    |

SPACING = 24.0 IN. CC

THIS TRUSS IS DESIGNED FOR RESIDENTIAL OR SMALL BUILDING REQUIREMENTS OF PART 9, NBCC 2010, NBCC 2015

THIS DESIGN COMPLIES WITH:  
- PART 9 OF BCBC 2018, CBC 2012  
- CSA 086-09, CSA 086-14  
- TPIC 2011, TPIC 2014

(55 % OF 37.8 P.S.F. G.S.L. PLUS 8.4 P.S.F. RAIN LOAD) EQUALS 29.0 P.S.F. SPECIFIED ROOF LIVE LOAD

ALLOWABLE DEFL.(LL) =  $L/360$  (0.19")  
CALCULATED VERT. DEFL.(LL) =  $L/999$  (0.00")  
ALLOWABLE DEFL.(TL) =  $L/360$  (0.19")  
CALCULATED VERT. DEFL.(TL) =  $L/999$  (0.00")

CSI: TC=0.25/1.00 (A-B:1), BC=0.03/1.00 (C-D:3), WB=0.00/1.00 (A-C:1), SSI=0.12/1.00 (A-B:1)

DCL LUMBER=1.00 NAIL=1.00 LS BEND=1.10 COMP=1.10 SHEAR=1.10 TENS=1.10

COMPANION LIVE LOAD FACTOR = 1.00

TRUSS PLATE MANUFACTURER IS NOT RESPONSIBLE FOR QUALITY CONTROL IN THE TRUSS MANUFACTURING PLANT.

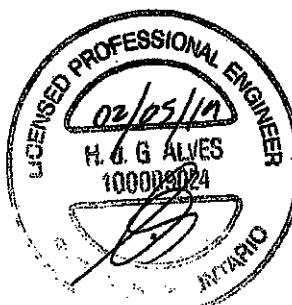
##### NAIL VALUES

| PLATE GRIP(DRY) | SHEAR | SECTION |
|-----------------|-------|---------|
| (PSI)           | (PL)  | (PL)    |
| MAX             | MIN   | MAX     |
| MT20            | 618   | 354     |
|                 | 1067  | 788     |
|                 | 1967  | 1866    |

PLATE PLACEMENT TOL = 0.250 inches

PLATE ROTATION TOL = 5.0 Deg.

JSI GRIP= 0.15 (A) (INPUT = 0.90)  
JSI METAL= 0.04 (A) (INPUT = 1.00)



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TOWN OF CALEDON  
BUILDING DEPARTMENT  
FILE NO.

DWG NO. TAM 17702687  
STRUCTURAL  
COMPONENT ONLY



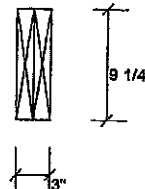
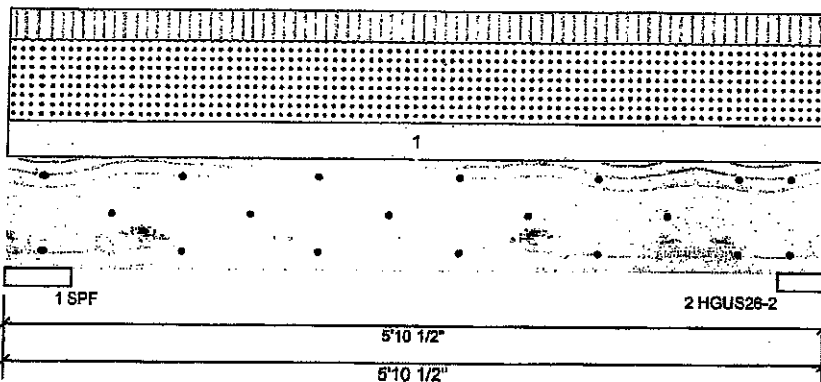
isDesign™

Client: Greenpark Homes  
 Project: Preston 1  
 Address: Caledon

Date: 2019-02-05  
 Designer: Brian  
 Job Name: Lamberts Lane Homes Corp.  
 Project #: 200188

**B2 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level



### Member Information

Type: Girder  
 Piles: 2  
 Moisture Condition: Dry  
 Deflection LL: 360  
 Deflection TL: 360  
 Importance: Normal

Application: Floor (Residential)  
 Design Method: LSD  
 Building Code: NBCC 2015 / OBC 2012  
 Load Sharing: No  
 Deck: Not Checked  
 Vibration: Not Checked

### Unfactored Reactions UNPATTERNED lb (Uplift)

| Brg | Live | Dead | Snow | Wind |
|-----|------|------|------|------|
| 1   | 231  | 273  | 609  | 0    |
| 2   | 221  | 262  | 584  | 0    |

### Bearings and Factored Reactions

| Bearing     | Length | Cap. React | D/L lb     | Total | Ld. Case | Ld. Comb.        |
|-------------|--------|------------|------------|-------|----------|------------------|
| 1 - SPF     | 5.500" | 15%        | 341 / 1145 | 1486  | L        | 1.25D+1.5S<br>+L |
| 2 - HGUS... | 4.000" | 19%        | 327 / 1097 | 1424  | L        | 1.25D+1.5S<br>+L |

### Analysis Results

| Analysis                   | Actual         | Location | Allowed       | Capacity    | Comb.            | Case    |
|----------------------------|----------------|----------|---------------|-------------|------------------|---------|
| Moment                     | 1679 ft-lb     | 3'       | 6039 ft-lb    | 0.278 (28%) | 1.25D+1.5S<br>+L | L       |
| Unbraced                   | 1679 ft-lb     | 3'       | 5236 ft-lb    | 0.321 (32%) | 1.25D+1.5S<br>+L | L       |
| Shear                      | 1290 lb        | 1'2"     | 3984 lb       | 0.324 (32%) | 1.25D+1.5S<br>+L | L       |
| Perm Defl in.<br>(L/11306) | 0.006          | 3'       | 0.174 (L/360) | 0.030 (3%)  | D                | Uniform |
| LL Defl inch               | 0.015 (L/4260) | 3'       | 0.174 (L/360) | 0.080 (8%)  | S+0.5L           | L       |
| TL Defl inch               | 0.020 (L/3094) | 3'       | 0.174 (L/360) | 0.120 (12%) | D+S+0.5L         | L       |



DWG NO. TAM TMD 2680  
 STRUCTURAL  
 COMPONENT 1/2

### Design Notes

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

| ID | Load Type | Location | Trib Width | Side      | Dead   | Live   | Snow   | Wind  | Comments |
|----|-----------|----------|------------|-----------|--------|--------|--------|-------|----------|
| 1  | Uniform   |          | 7'-0"      | Near Face | 13 PSF | 11 PSF | 29 PSF | 0 PSF |          |

**THIS STRUCTURE MUST BE  
 CONSTRUCTED TO MEET OR  
 EXCEED THE PROVISIONS OF  
 THE ONTARIO BUILDING CODE**

This design is valid until 2021-12-11

### Manufacturer Info

TAMARACK LUMBER  
 3255 NORTH SERVICE RD, ON  
 CANADA  
 (905) 335-1115





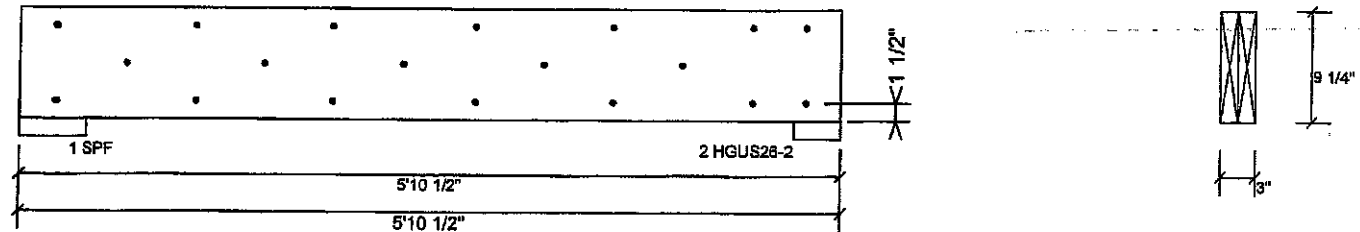
isDesign™

Client: Greenpark Homes  
Project: Preston 1  
Address: Caledon

Date: 2019-02-05  
Designer: Brian  
Job Name: Lamberts Lane Homes Corp.  
Project #: 200168

**B2 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level



### Multi-Ply Analysis

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

|                          |              |
|--------------------------|--------------|
| Capacity                 | 64.6 %       |
| Load                     | 247.6 PLF    |
| Yield Limit per Foot     | 383.4 PLF    |
| Yield Limit per Fastener | 127.8 lb.    |
| Yield Mode               | 9            |
| Edge Distance            | 1 1/2"       |
| Min. End Distance        | 3"           |
| Load Combination         | 1.25D+1.5S+L |
| Duration Factor          | 1.00         |



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TOWN OF CALEDON  
BUILDING SECTION  
FILE NO. \_\_\_\_\_

DWG NO. TAM 77902688  
STRUCTURAL  
COMPONENT ONLY

|                    |                                                                          |
|--------------------|--------------------------------------------------------------------------|
| Manufacturer Info. | TAMARACK LUMBER<br>3255 NORTH SERVICE RD, ON<br>CANADA<br>(905) 335-1115 |
|                    | <b>TAMARACK</b><br>LUMBER INC<br>ALPHA LUMBER GROUP                      |

This design is valid until 2021-12-11



# LUL/LUS/LJS/HUS/HHUS/HGUS

**SIMPSON**  
**Strong-Tie**

## Standard and Double-Shear Joist Hangers



This product is preferable to similar connectors because of a) easier installation, b) higher capacities, c) lower installed cost, or a combination of these features.

Most hangers in this series have double-shear nailing — an innovation that distributes the load through two points on each joist nail for greater strength. This allows for fewer nails, faster installation, and the use of all common nails for the same connection. (Do not bend or remove tabs)

Double-shear hangers range from the light capacity LUS hangers to the highest capacity HGUS hangers. For medium load truss applications, the HUS offers a lower cost alternative and easier installation than the HGUS hangers, while providing greater load capacity and bearing than the LUS.

Material: See table on pp. 258-259.

Finish: Galvanized. Some products available in stainless steel or ZMAX® coating; see Corrosion Information, pp. 20-24.

### Installation:

- Use all specified fasteners; see General Notes.
- Nails must be driven at an angle through the joist or truss into the header to achieve the tabulated resistances (except LUL).
- Where 16d commons are specified, 10d commons may be used at 0.83 of the tabulated factored resistance.
- Not designed for welded or nailer applications.
- With single ply 2x carrying members, use 10d x 1 1/2" nails into the header and 10d commons into the joist, and reduce the resistance to 0.84 of the table value where 16d nails are specified and 0.77 where 10d nails are specified.

### Options:

- LUS, LJS, LUL and HUS hangers cannot be modified.
- Other sizes available; consult your Simpson Strong-Tie representative.
- See Hanger Options information on p. 126.



Double-Shear Nailing Top View



Double-Shear Nailing Side View; Do not bend tab



Double-Shear Nailing Side View (available on some models) U.S. Patent 5,603,580



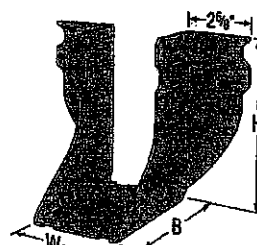
LUS26L



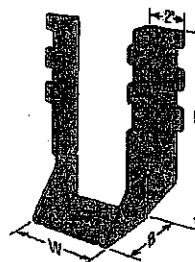
LU26L



HUS210 (HUS26, HUS28, and HHUS similar)

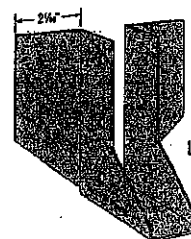
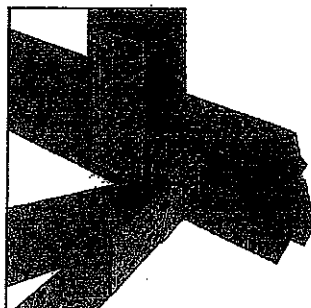


HGUS28-2



HHUS210-2

Typical HUS26 Installation with Reduced Heel Height (Truss Designer to provide fastener quantity for connecting multiple members together)



LJS26DS

Plated Truss Connectors

# LUL/LUS/LJS/HUS/HHUS/HGUS

**SIMPSON**  
**Strong-Tie**

## HHUS/HGUS

See Hanger Options Information on pp. 125–127.

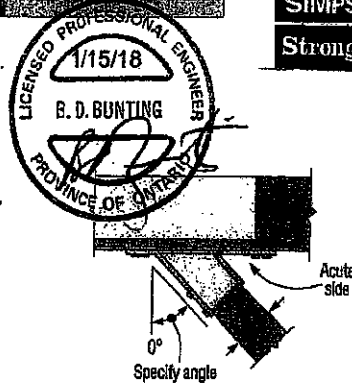
### HHUS — Sloped and/or Skewed Seat

- HHUS hangers can be skewed to a maximum of 45° and/or sloped to a maximum of 45°
- For skew only, maximum factored down resistance is 0.85 of the table value
- For sloped only or sloped and skewed hangers, the maximum factored down resistance is 0.72 of the table value
- Uplift resistances for sloped/skewed conditions are 0.82 of the table value
- The joist must be bevel-cut to allow for double-shear nailing

### HGUS — Skewed Seat

- HGUS hangers can be skewed only to a maximum of 45°. Factored resistances are:

| HGUS Seat Width | Joist               | Down Resistance     | Uplift              |
|-----------------|---------------------|---------------------|---------------------|
| W < 2"          | Bevel or square cut | 0.62 of table value | 0.46 of table value |
| 2" < W < 6"     | Bevel cut           | 0.67 of table value | 0.41 of table value |
| 2" < W < 6"     | Square cut          | 0.46 of table value | 0.41 of table value |
| W > 6"          | Bevel cut           | 0.75 of table value | 0.41 of table value |



**Top View HHUS Hanger Skewed Right**  
(joist must be bevel cut)  
All joist nails installed on the outside angle (non-acute side).

## Standard and Double-Shear Joist Hangers (cont.)

These products are available with additional corrosion protection. For more information, see p. 24.

These products are approved for installation with the Strong-Drive® SD Connector screw. See pp. 32–34 for more information.

Plated Truss Connectors

| Model No.       | Ga. | Dimensions (in.) |       |       |                | Fasteners |                  | Factored Resistance     |                         |                         |                         |
|-----------------|-----|------------------|-------|-------|----------------|-----------|------------------|-------------------------|-------------------------|-------------------------|-------------------------|
|                 |     | W                | H     | B     | d <sub>a</sub> | Header    | Joist            | S-P-F                   |                         | S-P-F                   |                         |
|                 |     |                  |       |       |                |           |                  | Uplift                  | Normal                  | Uplift                  | Normal                  |
|                 |     |                  |       |       |                |           |                  | (K <sub>a</sub> = 1.15) | (K <sub>a</sub> = 1.00) | (K <sub>a</sub> = 1.15) | (K <sub>a</sub> = 1.00) |
| lb.             | lb. | lb.              | lb.   | kN    | kN             |           |                  |                         |                         |                         |                         |
| Single 2x Sizes |     |                  |       |       |                |           |                  |                         |                         |                         |                         |
| LUS24           | 18  | 1 1/8            | 3 1/4 | 1 1/4 | 2 1/4          | (4) 10d   | (2) 10d          | 710                     | 1825                    | 645                     | 1155                    |
| LU24L           | 22  | 1 1/8            | 3     | 1 1/4 | 2 1/8          | (4) 10d   | (2) 10d x 1 1/2" | 360                     | 1020                    | 320                     | 725                     |
| LU28L           | 22  | 1 1/8            | 5     | 1 1/4 | 4 1/4          | (6) 10d   | (4) 10d x 1 1/2" | 720                     | 1805                    | 645                     | 1140                    |
| LUS26           | 18  | 1 1/8            | 4 1/4 | 1 1/4 | 3 3/4          | (4) 10d   | (4) 10d          | 1420                    | 2170                    | 1290                    | 1630                    |
| HUS26           | 16  | 1 1/8            | 5 1/4 | 3     | 3 1/8          | (14) 16d  | (6) 16d          | 2705                    | 4940                    | 2066                    | 3875                    |
| LJS26DS         | 18  | 1 1/8            | 5     | 3 1/4 | 4 1/4          | (16) 16d  | (6) 16d          | 2055                    | 4265                    | 1460                    | 4115                    |
| HGUS26          | 12  | 1 1/8            | 5 1/4 | 5     | 4 1/4          | (20) 16d  | (8) 16d          | 2885                    | 6625                    | 2685                    | 5700                    |
| LU28L           | 20  | 1 1/8            | 6 1/4 | 1 1/4 | 5 1/4          | (8) 10d   | (6) 10d x 1 1/2" | 1140                    | 2185                    | 1020                    | 1650                    |
| LUS28           | 18  | 1 1/8            | 6 1/4 | 1 1/4 | 3 3/4          | (8) 10d   | (4) 10d          | 1420                    | 2520                    | 1290                    | 1790                    |
| HUS28           | 16  | 1 1/8            | 7 1/4 | 3     | 6 1/8          | (22) 16d  | (8) 16d          | 3605                    | 5365                    | 2675                    | 4345                    |
| HGUS28          | 12  | 1 1/8            | 7 1/4 | 5     | 6 1/4          | (36) 16d  | (12) 16d         | 3310                    | 7875                    | 3310                    | 6900                    |
| LU210L          | 20  | 1 1/8            | 8     | 1 1/4 | 7 1/4          | (10) 10d  | (6) 10d x 1 1/2" | 1140                    | 2495                    | 1020                    | 1770                    |
| LJS210          | 18  | 1 1/8            | 7 1/4 | 1 1/4 | 3 3/4          | (8) 10d   | (4) 10d          | 1420                    | 2785                    | 1290                    | 2210                    |

1. Factored uplift resistances have been increased 15% for wind or earthquake loading; no further increase is allowed.
2. Designer must ensure that hanger is compatible with truss when reduced heel height is used.
3. d<sub>a</sub> is the distance from the bearing seat to the top joist nail.
4. Resistances shown require a minimum 2-ply girder truss. For fastening to single-ply truss request technical bulletin T-C-N10TRSSCN and/or see installation notes.
5. Nails: 16d = 0.162" dia. x 3 1/2" long. See pp. 27–28 for other nail sizes and information.

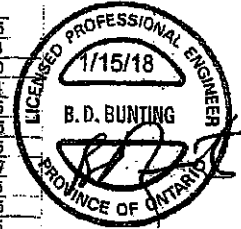
## Face-Mount Hangers

**SIMPSON**  
**Strong-Tie**

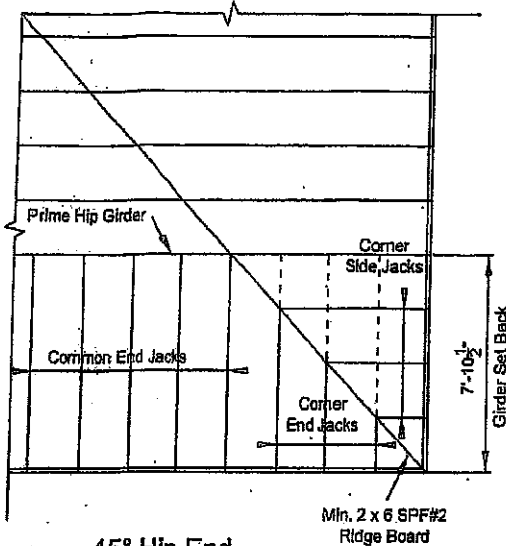
These products are available with additional corrosion protection. For more information, see p. 24.

These products are approved for installation with the Strong-Drive® SD Connector screw. See pp. 32-34 for more information.

| Model No.                 | Ga. | Dimensions (in.) |        |   |                | Fasteners |          | Factored Resistance               |                                   |                                   |                                   |
|---------------------------|-----|------------------|--------|---|----------------|-----------|----------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------------|
|                           |     | W                | H      | B | d <sub>h</sub> | Header    | Joist    | D-F                               |                                   | S-P-F                             |                                   |
|                           |     |                  |        |   |                |           |          | Uplift<br>(K <sub>u</sub> = 1.10) | Normal<br>(K <sub>u</sub> = 1.80) | Uplift<br>(K <sub>u</sub> = 1.10) | Normal<br>(K <sub>u</sub> = 1.80) |
|                           |     |                  |        |   |                |           |          | lb.                               | lb.                               | lb.                               | lb.                               |
|                           |     |                  |        |   |                |           |          | kN                                | kN                                | kN                                | kN                                |
| <b>Double 2x Sizes</b>    |     |                  |        |   |                |           |          |                                   |                                   |                                   |                                   |
| LUS24-2                   | 18  | 3 1/4            | 3 1/4  | 2 | 1 1/4          | (4) 16d   | (2) 16d  | 835                               | 2020                              | 590                               | 1435                              |
| LUS26-2                   | 18  | 3 1/4            | 4 1/4  | 2 | 1 1/4          | (4) 16d   | (4) 16d  | 1720                              | 2595                              | 1545                              | 1920                              |
| HHUS26-2                  | 14  | 3 1/4            | 5 1/4  | 3 | 3 1/4          | (14) 16d  | (6) 16d  | 2850                              | 7335                              | 2065                              | 5205                              |
| HGUS26-2                  | 12  | 3 1/4            | 5 1/4  | 4 | 4 1/4          | (20) 16d  | (8) 16d  | 4385                              | 8950                              | 3110                              | 6355                              |
| LUS28-2                   | 18  | 3 1/4            | 7      | 2 | 1 1/4          | (8) 16d   | (4) 16d  | 1720                              | 3325                              | 1545                              | 2575                              |
| HHUS28-2                  | 14  | 3 1/4            | 7 1/4  | 3 | 3 1/4          | (22) 16d  | (8) 16d  | 3785                              | 8940                              | 2875                              | 6345                              |
| HGUS28-2                  | 12  | 3 1/4            | 7 1/4  | 4 | 4 1/4          | (30) 16d  | (12) 16d | 6070                              | 12980                             | 4310                              | 9215                              |
| LUS210-2                  | 18  | 3 1/4            | 9      | 2 | 1 1/4          | (8) 16d   | (6) 16d  | 2580                              | 4500                              | 2320                              | 3185                              |
| HHUS210-2                 | 14  | 3 1/4            | 9 1/4  | 3 | 3 1/4          | (30) 16d  | (10) 16d | 4870                              | 9660                              | 4235                              | 7000                              |
| HGUS210-2                 | 12  | 3 1/4            | 9 1/4  | 4 | 4 1/4          | (46) 16d  | (16) 16d | 6840                              | 14015                             | 4855                              | 10270                             |
| <b>Triple 2x Sizes</b>    |     |                  |        |   |                |           |          |                                   |                                   |                                   |                                   |
| HGUS26-3                  | 12  | 4 1/4            | 5 1/4  | 4 | 4 1/4          | (20) 16d  | (8) 16d  | 4385                              | 8950                              | 3110                              | 6355                              |
| HGUS28-3                  | 12  | 4 1/4            | 7 1/4  | 4 | 4 1/4          | (30) 16d  | (12) 16d | 6070                              | 12980                             | 4310                              | 9215                              |
| HHUS210-3                 | 14  | 4 1/4            | 9      | 3 | 3 1/4          | (30) 16d  | (10) 16d | 4870                              | 9660                              | 4235                              | 6865                              |
| HGUS210-3                 | 12  | 4 1/4            | 9 1/4  | 4 | 4 1/4          | (46) 16d  | (16) 16d | 6840                              | 14015                             | 4855                              | 10400                             |
| <b>Quadruple 2x Sizes</b> |     |                  |        |   |                |           |          |                                   |                                   |                                   |                                   |
| HGUS26-4                  | 12  | 6 1/4            | 5 1/4  | 4 | 4 1/4          | (20) 16d  | (8) 16d  | 4385                              | 8950                              | 3110                              | 6355                              |
| HGUS28-4                  | 12  | 6 1/4            | 7 1/4  | 4 | 4 1/4          | (30) 16d  | (12) 16d | 6070                              | 12980                             | 4310                              | 9215                              |
| HHUS210-4                 | 14  | 6 1/4            | 9      | 3 | 3 1/4          | (30) 16d  | (10) 16d | 4870                              | 10155                             | 4235                              | 7210                              |
| HGUS210-4                 | 12  | 6 1/4            | 9 1/4  | 4 | 4 1/4          | (46) 16d  | (16) 16d | 6840                              | 14645                             | 4855                              | 10400                             |
| HGUS212-4                 | 12  | 6 1/4            | 10 1/4 | 4 | 4 1/4          | (50) 16d  | (20) 16d | 7640                              | 14895                             | 5425                              | 10645                             |
| HGUS214-4                 | 12  | 6 1/4            | 12 1/4 | 4 | 4 1/4          | (60) 16d  | (22) 16d | 10130                             | 16400                             | 7195                              | 11645                             |
| <b>4x Sizes</b>           |     |                  |        |   |                |           |          |                                   |                                   |                                   |                                   |
| LUS46                     | 18  | 3 1/4            | 4 1/4  | 2 | 1 1/4          | (4) 16d   | (4) 16d  | 1720                              | 2595                              | 1545                              | 1920                              |
| HHUS46                    | 14  | 3 1/4            | 5 1/4  | 3 | 3 1/4          | (14) 16d  | (6) 16d  | 2850                              | 7335                              | 2065                              | 5205                              |
| HGUS46                    | 12  | 3 1/4            | 5 1/4  | 4 | 4 1/4          | (20) 16d  | (8) 16d  | 4385                              | 8950                              | 3110                              | 6355                              |
| LUS48                     | 18  | 3 1/4            | 6 1/4  | 2 | 1 1/4          | (8) 16d   | (4) 16d  | 1720                              | 3325                              | 1545                              | 2575                              |
| HHUS48                    | 14  | 3 1/4            | 7 1/4  | 3 | 3 1/4          | (22) 16d  | (8) 16d  | 3785                              | 8940                              | 2875                              | 6345                              |
| HGUS48                    | 12  | 3 1/4            | 7 1/4  | 4 | 4 1/4          | (30) 16d  | (12) 16d | 6070                              | 12980                             | 4310                              | 9215                              |
| LUS410                    | 18  | 3 1/4            | 8 1/4  | 2 | 1 1/4          | (8) 16d   | (6) 16d  | 2580                              | 4500                              | 2320                              | 3185                              |
| HGUS410                   | 12  | 3 1/4            | 9      | 4 | 4 1/4          | (46) 16d  | (16) 16d | 6840                              | 14015                             | 4855                              | 10270                             |
| HGUS412                   | 12  | 3 1/4            | 10 1/4 | 4 | 4 1/4          | (50) 16d  | (20) 16d | 7640                              | 14895                             | 5425                              | 10645                             |
| HGUS414                   | 12  | 3 1/4            | 12 1/4 | 4 | 4 1/4          | (60) 16d  | (22) 16d | 10130                             | 16400                             | 7195                              | 11645                             |



Plated Truss Connectors



**45° Hip End**

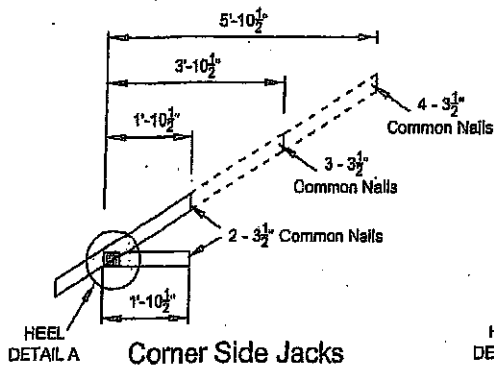
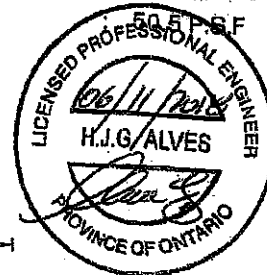
**LUMBER SPECIFICATION**

TOP CHORD : 2 x 4 SPF#2  
 BOTTOM CHORD : 2 x 4 SPF#2  
 WEBS : 2 x 3 SPF#2  
 UNLESS OTHERWISE SHOWN

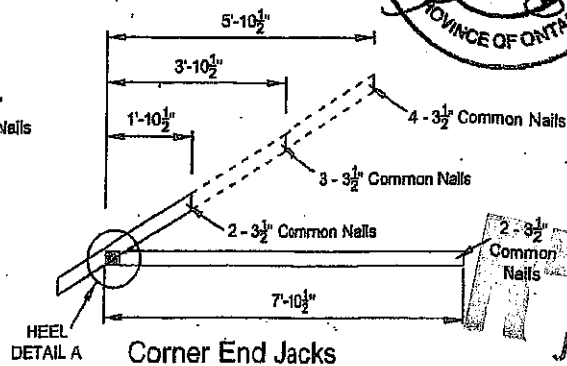
**DESIGN LOAD**

TOP CHORD SNOW LOAD : 40.5 P.S.F.  
 TOP CHORD DEAD LOAD : 3.0 P.S.F.  
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.  
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

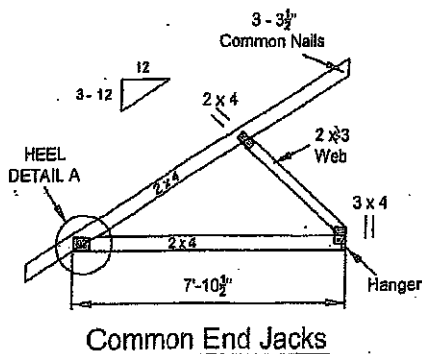
**TOTAL LOAD**



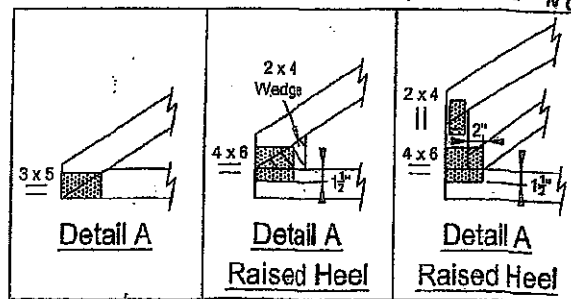
**Corner Side Jacks**



**Corner End Jacks**



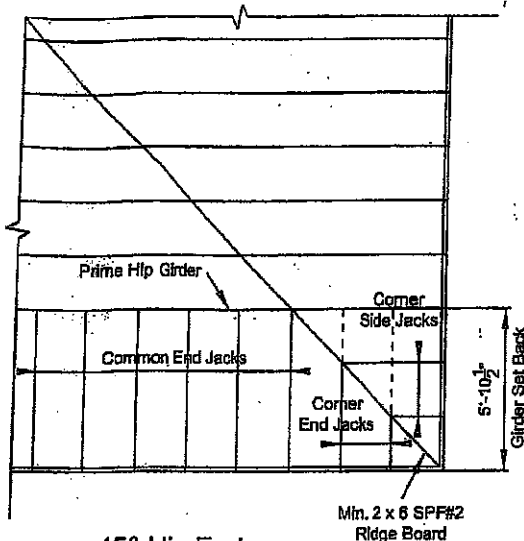
**Common End Jacks**



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

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 BUILDING SECTION  
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**45° Hip End**

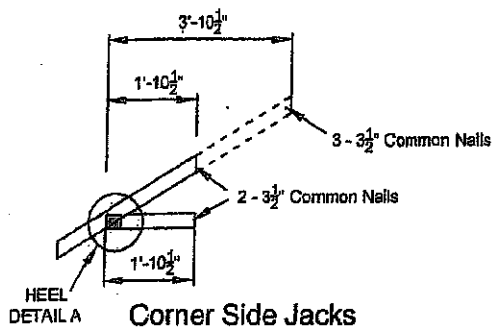
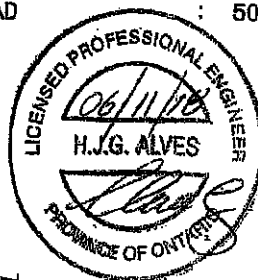
### LUMBER SPECIFICATION

TOP CHORD : 2 x 4 SPF#2  
 BOTTOM CHORD : 2 x 4 SPF#2  
 WEBS : 2 x 3 SPF#2  
 UNLESS OTHERWISE SHOWN

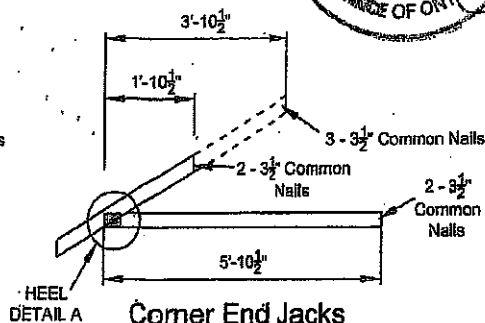
### DESIGN LOAD

TOP CHORD SNOW LOAD : 40.5 P.S.F.  
 TOP CHORD DEAD LOAD : 3.0 P.S.F.  
 BOTTOM CHORD LIVE LOAD : 0.0 P.S.F.  
 BOTTOM CHORD DEAD LOAD : 7.0 P.S.F.

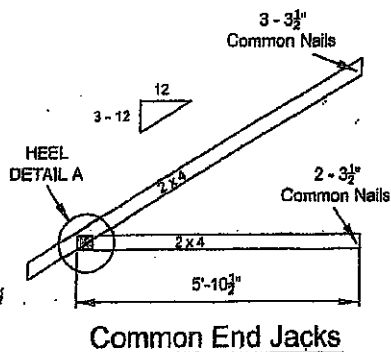
TOTAL LOAD : 50.5 P.S.F



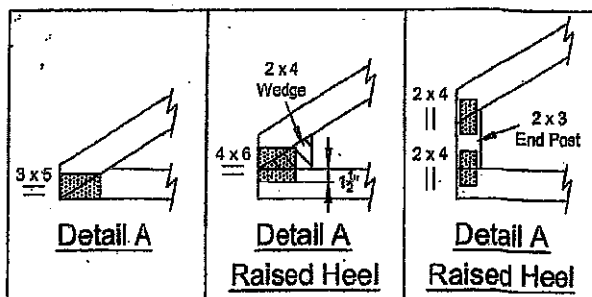
**Corner Side Jacks**



**Corner End Jacks**



**Common End Jacks**



NOTE: DESIGN CONFORMS TO PART 9, O.B.C. 2012 (L.S.D. DESIGN)

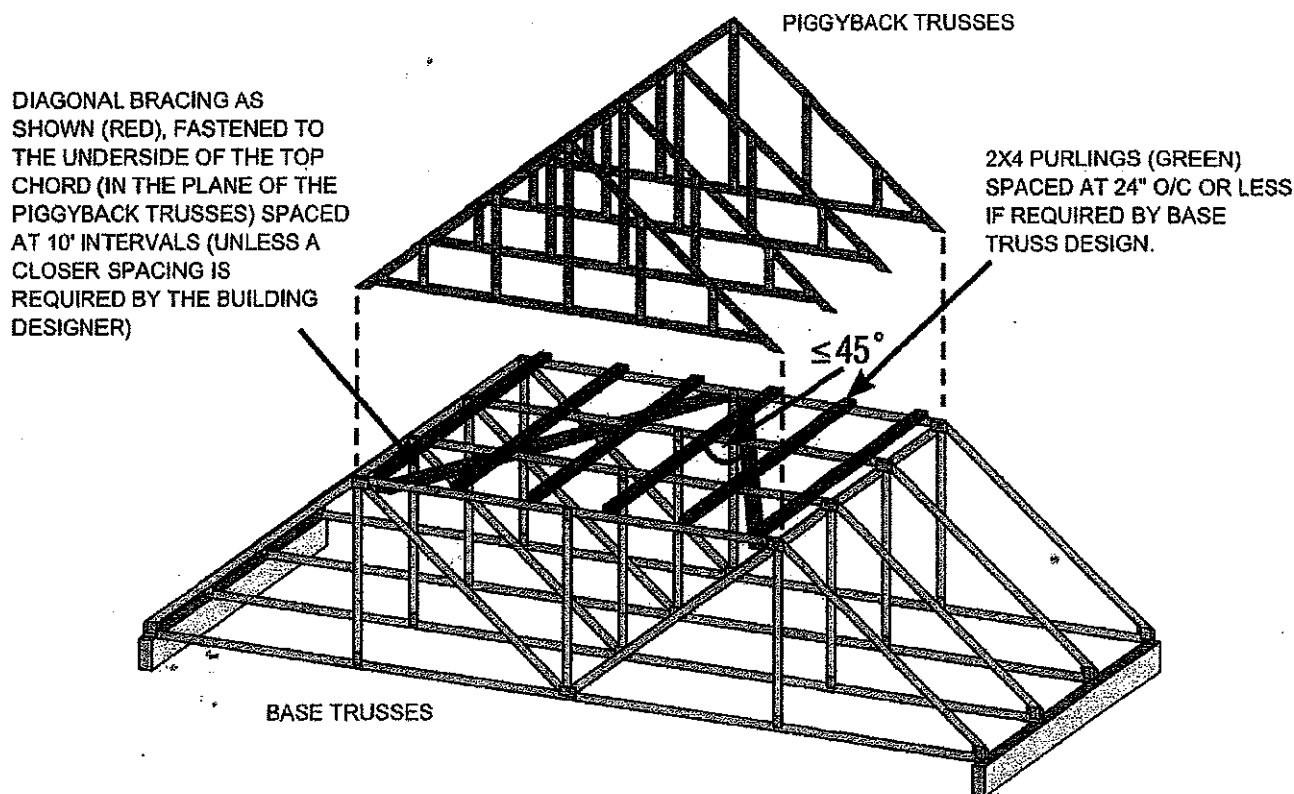
T-1800216

Overview:

Where piggybacks are connected ovetop of base trusses, 2x4 purlins must be first added to the flat portion of the base truss at a spacing no more than 24" o/c. These purlins not only provide support for the piggyback trusses above, but are required to laterally support the top chord of the base truss which will not have the sheathing directly connected to the flat portion of the base truss. This ensures the top chord, most often in compression, will not buckle laterally.

Further, the purlins in the plane of the flat portion require diagonal bracing to prevent lateral displacement of the purlins themselves where under certain conditions, the trusses may in fact all buckle in the same direction if this additional bracing is not added in the plane of the purlins.

Detail:



NOTE: THE SLOPED PORTION OF THE TOP CHORD OF THE BASE TRUSS AND PIGGYBACK TRUSS IN THIS SKETCH IS ASSUMED TO BE SHEATHED IN ACCORDANCE WITH THE OBC.

SKETCH FROM BCSI-CANADA 2013

Disclaimer:

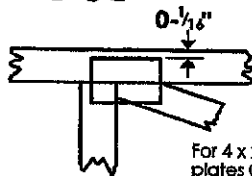
OWTFA Tech Notes are intended to provide guidance to the design community both within the membership as well as to third party designers who might benefit from the information. The details have been developed by the OWTFA technical committee and although there may be professional engineers involved in development, the information contained in the tech-note are not intended to be used without having a professional engineer review the information for a specific application. The OWTFA takes no responsibility with respect to the information provided but has developed this tech-note to offer guidance where it is not currently readily available.

## Symbols

### PLATE LOCATION AND ORIENTATION



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



For 4 x 2 orientation, locate plates 0-1/8" from outside edge of truss.



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

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

### PLATE SIZE

4 x 4

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

### LATERAL BRACING LOCATION



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

### BEARING

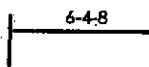


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur.

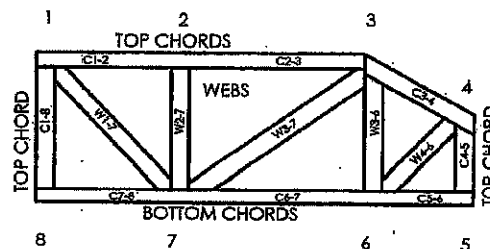
### Industry Standards:

- TPIC: Truss Design Procedures and Specifications for Light Metal Plate Connected Wood Trusses
- DSB-89: Design Standard for Bracing
- BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

## Numbering System



dimensions shown in ft-in-sixteenths or mm (Drawings not to scale)



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

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

### PRODUCT CODE APPROVALS

CCMC Reports:

11996-L, 10319-L, 13270-L, 12691-R

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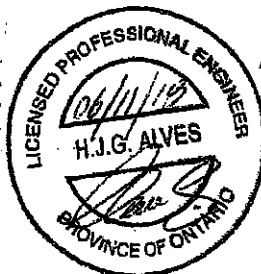
**MiTek**  
POWER TO PERFORM.™

MiTek Engineering Reference Sheet: MIL-7473C rev. 10-'08

## General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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



## Alves Engineering Services Inc.

5208 Easton road  
Burlington, Ontario L7L 6N6  
(289) 259 5455

### RESPONSABILITIES

- 1-Alves Engineering Services Inc. is responsible for the design of trusses as individual components
- 2-It is the responsibility of others to ascertain that the design loads utilized on this drawing meet or exceed the actual dead load imposed by the structure and the live load imposed by the local building code or the authorities having jurisdictions.
- 3- All dimensions are to be verified by owner, contractor, architect or other authority before manufacture.
- 4- Alves Engineering Services Inc. bears no responsibility for the erection of the trusses. Persons erecting trusses are cautioned to seek professional advice regarding temporary and permanent bracing system. Bracing shown on Alves Engineering Services Inc. drawings is specified for the truss as a single component and forms an integral part of the truss design, but is not meant to represent the only required bracing for that truss when trusses are installed in a series of trusses forming a roof truss system.
- 5- It is the manufactures responsibility to ensure that the trusses are manufactured in conformance with Alves Engineering Services Inc. specifications outlined below.

### SPECIFICATIONS

- 1-Truss components sealed by Alves Engineering Services Inc. conform to the relevant sections of the current Building Code of Ontario and Canada (part 4 or part 9) or the current Canadian code for Farm Buildings in accordance with the application specified on the sealed truss component drawing. All truss component design procedures must conform to the current design standard issued by the truss plate institute of Canada (TPIC). All lumber and nailing stresses to conform to the current CSA wood design standard identified on the current Building Code and TPIC.
- 2- Lumber is to be the sizes and grade specified on the truss drawing.
- 3- Moist content of lumber is not to exceed 19% in service unless otherwise specified.
- 4- Plates shall be applied to both faces of the each truss joint and shall be positioned as shown on the truss drawings
- 5- Lumber used on manufacture of trusses is not to be treated with chemicals unless otherwise specified on the truss drawings.
- 6- The top chord is assumed to be continuously laterally braced by the roof sheathing or purlins at intervals specified on the truss drawing but not exceeding 24" c/c for (part 9) and not exceeding 48" for (part 4 or farm design)
- 7- When rigid ceiling is not attached directly to the bottom chord, lateral bracing is required and it should not exceed more than 3m or 10' intervals.
- 8-Refer to Mitek sheet MII7473C REV.10-08 attached for information on symbols, numbering system and General Safety notes.

T-1900218

Feb 09, 2018

THIS STRUCTURE MUST BE  
CONSTRUCTED TO MEET OR  
EXCEED THE PROVISIONS OF  
THE ONTARIO BUILDING CODE