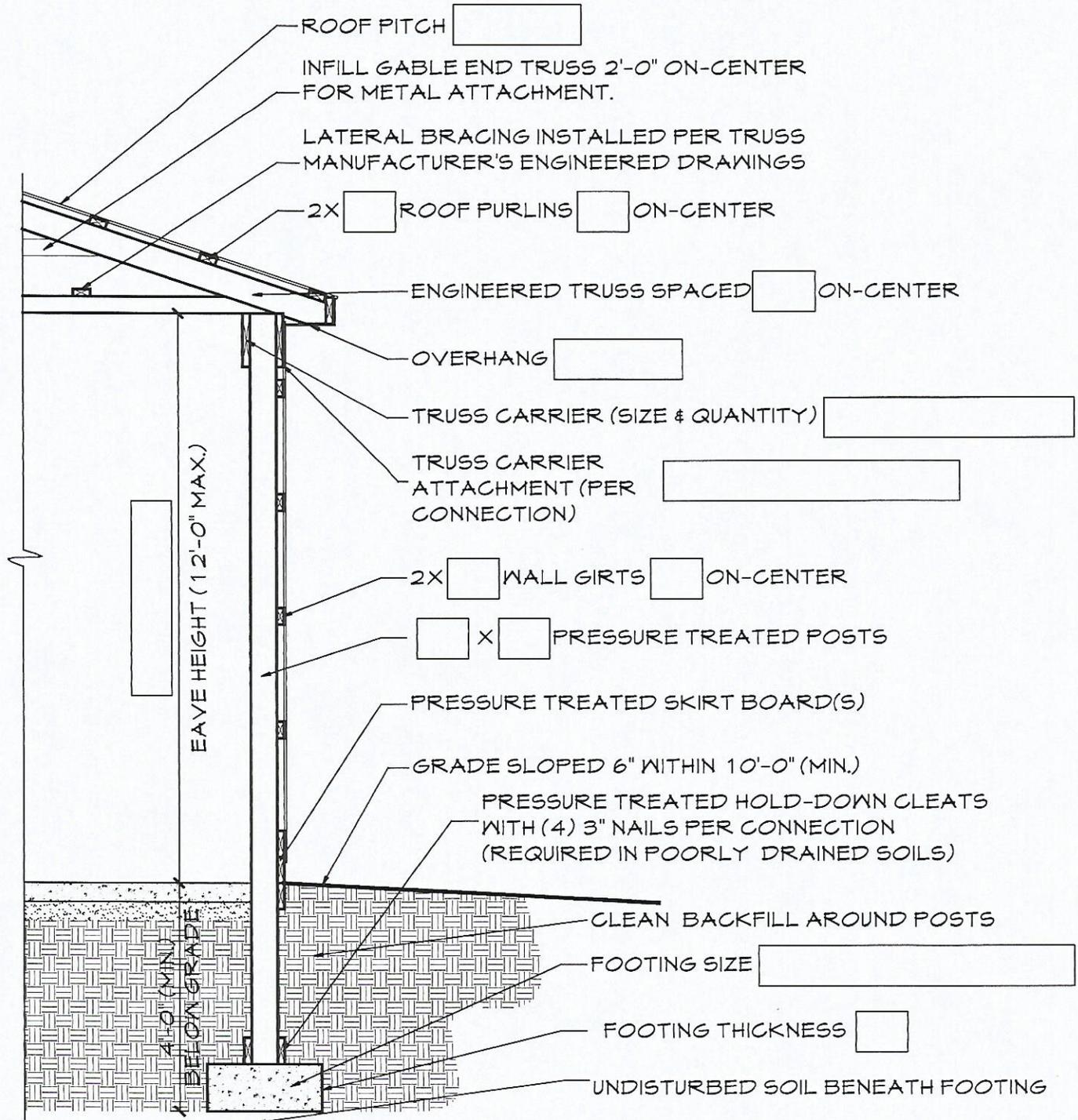


# CHEBOYGAN COUNTY POST FRAME BUILDING SPECIFICATIONS

REVISED FEBRUARY 8, 2016.

**INSTRUCTIONS:** PLEASE ENSURE THAT YOU HAVE COMPLETED THIS SPECIFICATION SHEET BY FILLING ALL BLANK BOXES ON BOTH THE FRONT AND THE BACK. BE CERTAIN TO READ THIS SPECIFICATION SHEET IN ITS ENTIRETY, INCLUDING ALL NOTES ON WIND BRACING, FASTENERS AND PERMANENT ROOF BRACING. THIS SPECIFICATION SHEET IS FOR TYPICAL POST-FRAME BUILDING CONSTRUCTION UP TO A **MAXIMUM EAVE HEIGHT OF 12'-0"**. DO NOT USE THIS SHEET IF THE SECTION AND FLOOR PLAN DEPICTED IN THIS SHEET DOES NOT ACCURATELY REFLECT THE PROJECT YOU INTEND TO BUILD. **IF THE PROJECT YOU INTEND TO CONSTRUCT IS NOT ACCURATELY REPRESENTED BY THIS SHEET, PLEASE SUPPLY THIS OFFICE WITH AN ACCURATE FLOOR PLAN AND SECTION IN LIEU OF COMPLETING AND SUBMITTING THIS SPECIFICATION SHEET.**



## TYPICAL SECTION

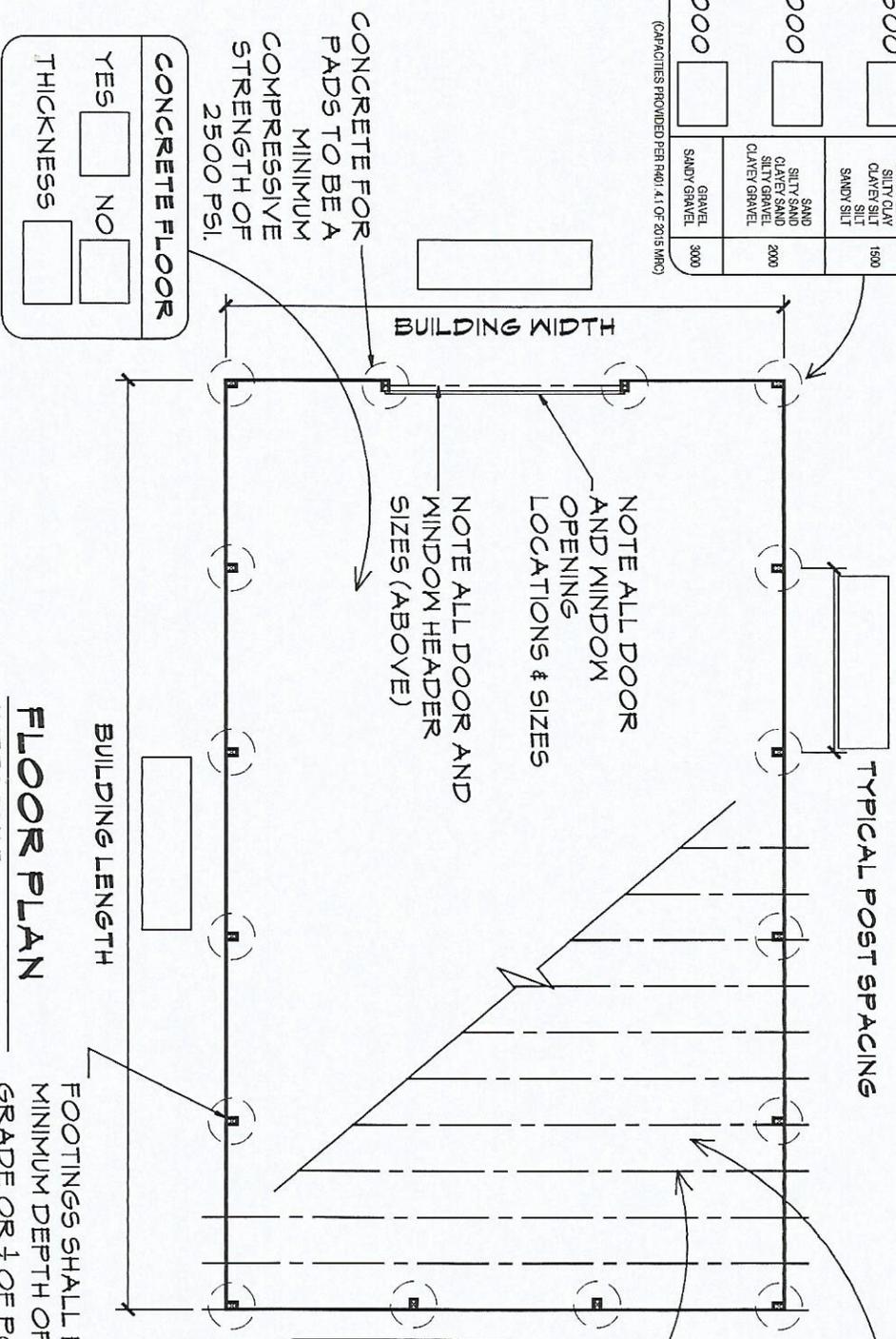
SCALE: 3/8" = 1'-0"

| SOIL BEARING CAPACITY (PSF) |  |
|-----------------------------|--|
| 1500                        | CLAYS<br>SANDY CLAY<br>SILTY CLAY<br>CLAYEY SILT<br>SANDY SILT |
| 2000                        | SAND<br>SILTY SAND<br>SANDY SILT<br>CLAYEY GRAVEL              |
| 3000                        | GRAVEL<br>SANDY GRAVEL   |

(CAPACITIES PROVIDED PER RAO 1.41 OF 2015 MRC)

| GROUND SNOW LOAD (Pg) |   |
|-----------------------|---|
| 70                    | ALL (EXCEPT):<br>CITY OF GERRYSMAN<br>VILLAGE OF ALTON<br>VILLAGE OF HOLMERS<br>TOWNSHIP OF BERTON<br>TOWNSHIP OF ELIAS<br>TOWNSHIP OF GRANF<br>TOWNSHIP OF KOEHLER<br>TOWNSHIP OF NUNDA<br>TOWNSHIP OF WALKER<br>TOWNSHIP OF WAWERLY<br>TOWNSHIP OF WILMOT |
| 80                    |   |
| 50                    | TOWNSHIP OF FOREST  |

(LOADS PROVIDED PER R301.2(5) OF 2015 MRC)



**ROOF FRAMING**

TRUSSES: YES  NO

RAFTERS: SIZE

SPACING

NOTE: ENGINEERED TRUSS DRAWINGS MUST BE PROVIDED WHEN PREMANUFACTURED TRUSSES ARE USED

**PERMANENT ROOF BRACING**

IN ORDER TO PROVIDE LATERAL SUPPORT OF ENGINEERED TRUSSES, PERMANENT ROOF BRACING MUST BE APPLIED TO ALL TRUSS CHORDS PER TRUSS MANUFACTURER'S ENGINEERED TRUSS DRAWINGS.

**FASTENERS**

FASTENERS FOR PRESERVATIVE TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, SILICON BRONZE OR COPPER.

**MIND BRACING**

MIND BRACING IS REQUIRED FOR BUILDINGS WITH A SIDE WALL HEIGHT OF 10'-0" OR HIGHER. THE BRACE MUST BE A MINIMUM OF A 2X4 IN SIZE AND 12'-0" IN LENGTH. BRACES SHALL BE INSTALLED AT ALL CORNERS AND EVERY 25'-0" THEREAFTER. BRACES MUST EXTEND ON AN ANGLE FROM THE BOTTOM OF THE POLE TO THE RAFTER.

## POST FRAME CONSTRUCTION SAMPLE DESIGN CRITERIA FOR 70# SNOW LOAD

The following design criteria is provided expressly for informational purposes only. Every post-frame project is unique and presents differing load conditions. **The following information is not prescriptive.**

| <b>CARRIER BEAMS FOR 8'-0" ON CENTER POST SPACING</b><br>(DL=10psf, P <sub>g</sub> =70psf, C <sub>e</sub> =1.2, C <sub>t</sub> 1.2, I=.8) |                               |                               |                 |
|---|-------------------------------|-------------------------------|-----------------|
| <b>WIDTH</b>  | <b>N<sup>o</sup>2 HEM-FIR</b> | <b>N<sup>o</sup>2 HEM-FIR</b> | <b>2.0E LVL</b> |
| 20'   | (3) 2X10                      | (2) 2X12                      | (1) 1.75X9.25   |
| 24'   | (4) 2X10                      | (3) 2X12                      | (1) 1.75X9.25   |
| 28'   | -                             | (3) 2X12                      | (1) 1.75X11.25  |
| 30'   | -                             | (3) 2X12                      | (1) 1.75X11.25  |
| 32'   | -                             | (4) 2X12                      | (1) 1.75X11.875 |
| 36'   | -                             | (4) 2X12                      | (2) 1.75X9.25   |
| 40'   | -                             | -                             | (2) 1.75X9.25   |
| 50'   | -                             | -                             | (2) 1.75X11.25  |

| <b>CARRIER BEAM CONNECTION REQUIREMENTS</b><br>(PER CONNECTION, 8'-0" COLUMN SPAN) |   |   |                     |
|--|---|---|---------------------|
| <b>BEAM</b>  | <b>20D<sup>1</sup> (4" X 0.177" R.S.)</b> | <b>40D<sup>1</sup> (5" X 0.200" R.S.)</b> | <b>5/16"X4" RSS</b> |
| HEM-FIR 2X10   | 5   | 5   | 1*                  |
| HEM-FIR 2X12   | 7   | 7   | 2*                  |
| 1.75X9.25 2.0E LVL   | 16  | 15  | 3                   |
| 1.75X9.5 2.0E LVL  | 17  | 16  | 3                   |
| 1.75X11.25 2.0E LVL  | 22  | 21  | 5                   |
| 1.75X11.875 2.0E LVL   | 25  | 23  | 5                   |

1. Fasteners for preservative treated wood shall be hot-dipped, zinc-coated galvanized steel.  
 2. Shear design values for 20d and 40d r.s. nails based upon 2015 National Design Standard.  
 3. Shear design values for RSS based ICC Evaluation Report ESR-2442 (October 2014-October 2015)  
 \*A minimum of (3) fasteners are required for each beam to post connection.

**FOOTING PADS FOR 8'-0" ON CENTER POST SPACING**

(DL=10psf, P<sub>g</sub>=70psf, C<sub>e</sub>=1.2, C<sub>t</sub>1.2, l=8)

| WIDTH | 1500 psf    |       |                     | 2000 psf    |       |                     | 3000 psf    |       |                     |
|-------|-------------|-------|---------------------|-------------|-------|---------------------|-------------|-------|---------------------|
|       | SQUARE SIDE | ROUND | THICK. <sup>1</sup> | SQUARE SIDE | ROUND | THICK. <sup>1</sup> | SQUARE SIDE | ROUND | THICK. <sup>1</sup> |
| 20'   | 1'-3"       | 17"   | 8"                  | 1'-3"       | 15"   | 8"                  | 1'-0"       | 12"   | 8"                  |
| 24'   | 1'-6"       | 19"   | 8"                  | 1'-3"       | 17"   | 8"                  | 1'-0"       | 14"   | 8"                  |
| 28'   | 1'-6"       | 21"   | 8"                  | 1'-6"       | 18"   | 8"                  | 1'-3"       | 15"   | 8"                  |
| 30'   | 1'-9"       | 21"   | 8"                  | 1'-6"       | 18"   | 8"                  | 1'-3"       | 15"   | 8"                  |
| 32'   | 1'-9"       | 22"   | 8"                  | 1'-6"       | 19"   | 8"                  | 1'-3"       | 16"   | 8"                  |
| 36'   | 1'-9"       | 23"   | 8"                  | 1'-6"       | 20"   | 8"                  | 1'-3"       | 17"   | 8"                  |
| 40'   | 2'-0"       | 27"   | 8"                  | 1'-9"       | 23"   | 8"                  | 1'-6"       | 19"   | 8"                  |
| 50'   | 2'-3"       | 30"   | 10"                 | 2'-0"       | 26"   | 10"                 | 1'-9"       | 21"   | 8"                  |

1. Concrete must be a minimum of 2500 psi in strength.
2. Dry mix will not be approved for column footings.
3. Square sided pads are rounded to the nearest 3" while round pads are rounded to the nearest inch.

**SUPPORT POST REQUIREMENTS**

(8'-0" COLUMN SPAN)

| EAVE HEIGHT | POST SIZE | MAXIMUM BUILDING LENGTH |
|-------------|-----------|-------------------------|
| 8'-0"       | 4X4       | 24'-0"                  |
| 10'-0"      | 4X6       | 40'-0"                  |
| 10'-0"      | 6X6       | 60'-0"                  |
| 12'-0"      | 6X6       | 50'-0"                  |

Column values are for spruce-pine-fir. No. 2, dimensions based on the 2012 NDS, with a load duration of 1 and no wet service conditions.