



Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 27202
David Johnson/Smith

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by C & R Truss.

Pages or sheets covered by this seal: I57134066 thru I57134066

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

North Carolina COA: C-0844



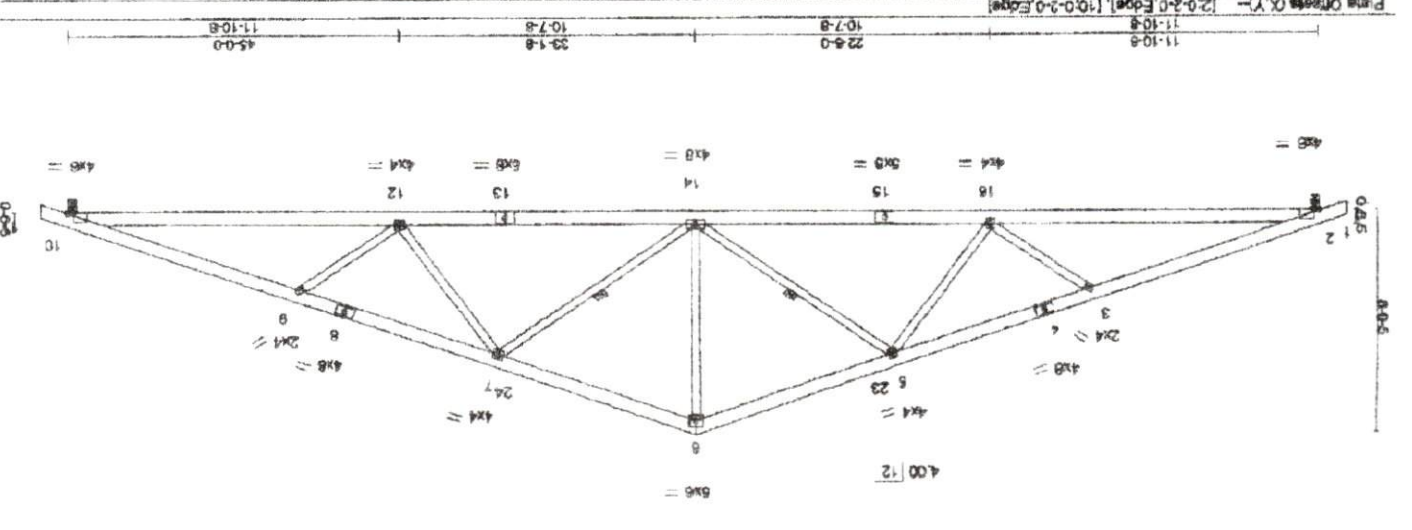
March 13, 2023

Gilbert, Eric

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

| | | | | | | | | | |
|-----|-----------|------------|-----|------------|------------|-----|----|--------------------------|---------------------|
| Job | 27202 | Truss Type | TR1 | Truss Type | MOD. QUEEN | Qty | 28 | Job Reference (Optional) | David Johnson/Smith |
| Job | 157134068 | Truss Type | | Truss Type | | Qty | 1 | Job Reference (Optional) | |

| | | | | | | | | | |
|--------------------------------|------|------|--------|-------|-------|-------|-------|-------|-------|
| CAR Truss, Ayrault, NC - 2818, | 1-00 | 8-40 | 22-9-0 | 1-1-0 | 1-1-0 | 1-1-0 | 1-1-0 | 1-0-0 | 1-0-0 |
| | 1-00 | 8-40 | 22-9-0 | 1-1-0 | 1-1-0 | 1-1-0 | 1-1-0 | 1-0-0 | 1-0-0 |



| LOADING (psf) | TOLL (roof) | Snow (ParFg) | TOLL (parFg) | SPACING | CEL | DMPL | in (occ) | UddL | Ld | PLATES | QRP | Weight: 288 lb | FT = 20% |
|---------------|-------------|--------------|--------------|---------|---------|------|----------|------|-----|--------|---------|----------------|----------|
| 20.0 | 15/20.0 | 10.0 | 10.0 | 2-0-0 | TC 0.33 | 0.15 | 0.15 | 0.15 | 240 | MT20 | 244/190 | | |

| LUMBER | TOP CHORD | BOT CHORD | WEBS | BRACING |
|-------------|-------------|-------------|-------------|-------------|
| 2x8 SP No.1 | 2x8 SP No.1 | 2x6 SP No.3 | 2x4 SP No.3 | 2x4 SP No.3 |

REACTIONS (kips) 2x0-3-8, 10x0-3-8
 Max Horz 2x=87(LC 10)
 Max GNV 2=1850(LC 2), 10=1850(LC 2)

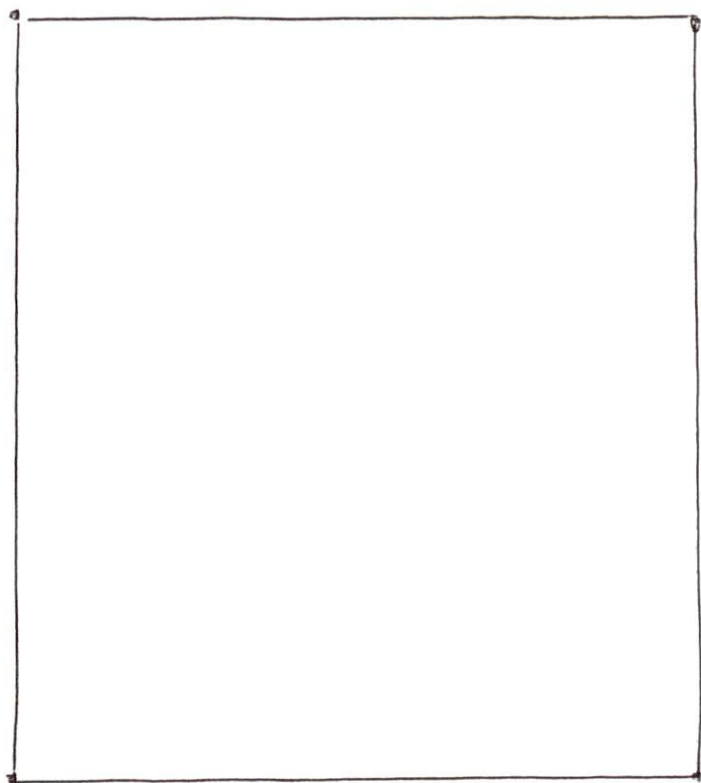
NOTES:
 1) Unbraced roof live loads have been considered for this design.
 2) Wind: ASCE 7-16; Valt=20mph (2-second gust); Vasd=55mph; TC DL=6 psf; BC DL=6 psf; h=20ft; B=50ft; L=45ft; g=0.8; Cal. Exp. B; Endocd; MWFRS (directional); centerline left and right exposed; end vertical left and right exposed; Lumber DOL=1.50
 3) TOLL: ASCE 7-16; P=20.0 psf (roof); L=1.15 Plate DOL=1.15; P=15.4 psf (Lum DOL=1.15 Plate gfp DOL=1.50)
 4) Roof design snow load has been reduced to account for slope.
 5) Unbraced snow loads have been considered for this design.
 6) This truss has been designed for greater or min roof live load of 12.0 psf or 1.00 times flat roof load of 15.4 psf on overhangs not concurrent with other live loads.
 7) This truss has been designed for a live load of 20 psf on the bottom chord nonconcurrent with any other live loads.
 8) The truss has been designed for a live load of 20 psf on the bottom chord and any other members.
 9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
 10) This truss is designed in accordance with the 2016 International Building Code section 2308.1 and referenced standard ANSI/TPI-1.



March 13, 2023

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED LITERATURE REFERENCE PAGE NUMBER(S) BEFORE USE. This document is the property of the design engineer and is not to be reproduced or distributed without the design engineer's written consent.

* FRONT SHELFER HAS 6x6
POST 10' oc. + 2-9/4 LVL S.
* SHELFER RAFTERS ARE 2x8 2'-oc.



45x50
STORAGE
BUILDING
WITH
10x50
SHELFER

29 GA.
METAL ROOFING
AND SIDING

2X4 PURLINS
2'-O.C.

2-2X10
HEADERS

2.5
HURICANE

PRE-ENGINEERED
TRUSS 2'-OC

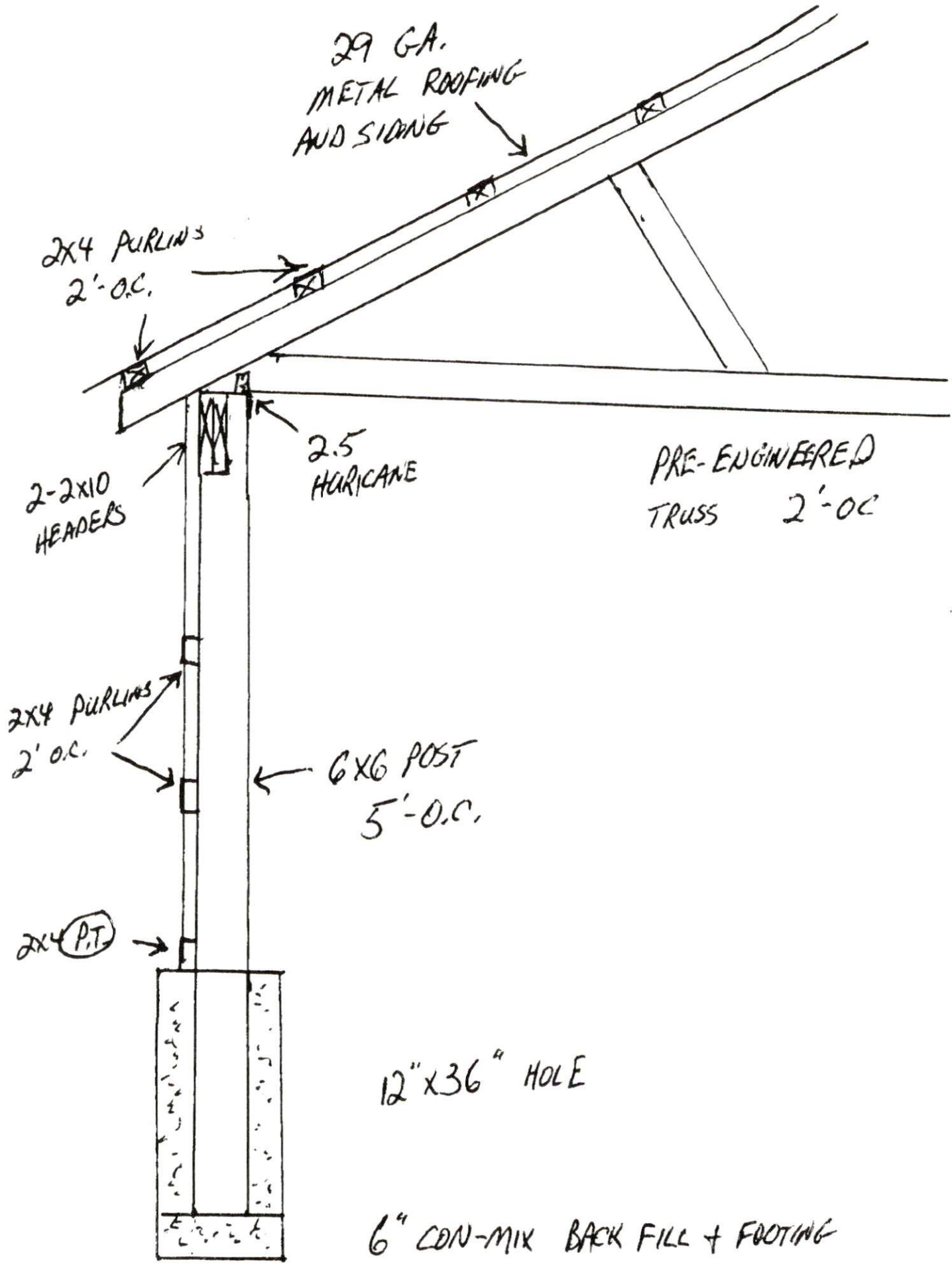
2X4 PURLINS
2' O.C.

6X6 POST
5'-O.C.

2X4 P.T.

12" X 36" HOLE

6" CON-MIX BACK FILL + FOOTING



The building will be a pole barn storage building 45x50 with a 10 foot lean to.

It will be a concrete floor with no plumbing and wired for lights and receptacles.