

GENERAL NOTES:

- CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION
- THE DESIGN & CONSTRUCTION OF THIS STRUCTURE MUST FULLY COMPLY WITH THE 2020 FLORIDA BUILDING CODE (7TH EDITION), LATEST EDITIONS OF ACI 318, NCMA, NATIONAL FOREST PRODUCT ASSOC., NDS, TPI, AND ANY OTHER NATIONALLY RECOGNIZED ORGANIZATIONS THAT GOVERN THIS BODY OF WORK.
- ALL WORK SHALL COMPLY WITH ALL LOCAL AND REGIONAL ORDINANCES.

DESIGN PARAMETERS FOR WIND LOAD COMPLIANCE

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| 1. RISK CATEGORY: | II |
| 2. CODE REFERENCE: | 2020 FLORIDA BUILDING CODE-R (7TH EDITION) & ASCE 7-16 |
| 3. BUILDING DESIGN: | 2020 EXISTING FLORIDA BUILDING CODE (7TH EDITION) |
| 4. MEAN ROOF HEIGHT: | PARTIALLY ENCLOSED |
| 5. ROOF PITCH: | <=15.0° |
| 6. GCFL: | 3/12 DEGREES (COVERED PORCH ONLY) |
| 7. WIDTH OF END ZONE: | ± 0.18 |
| 8. WIND SPEED: | A = 4.0' |
| 9. WIND EXPOSURE: | 160 MPH (Vult) 3-SECOND GUST |
| 10. ADJUSTMENT FACTOR: | 124 MPH (Vascd) 3-SECOND GUST "USED FOR ANALYSIS" |
| 11. SUPERIMPOSED LOADS: | D |
| FLOOR (DEAD) | 1.47 |
| FLOOR (LIVE) | 20 PSF |
| ROOF (TOP CHORD DEAD) | 40 PSF |
| ROOF (TOP CHORD LIVE) | 15 PSF |
| ROOF (BOT. CHORD DEAD) | 20 PSF |
| WALL | 5 PSF |
| | 18 PSF |
- SHEAR WALLS WERE CONSIDERED
 - A CONTINUOUS LOAD PATH WAS PROVIDED
 - COMPONENT & CLADDING DETAILED
 - MINIMUM SOIL BEARING PRESSURE IS 2,000 PSF PRESUMPTIVE

CONCRETE NOTES:

- CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF ACI 301 "SPECIFICATION FOR STRUCTURAL CONCRETE FOR BUILDINGS" AND ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- STRUCTURAL CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 AND SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS OF 3,000 PSI, UNLESS NOTED OTHERWISE.
- CONCRETE, WHEN PLACED, SHALL HAVE A SLUMP OF 4 INCHES PLUS OR MINUS ONE INCH.
- PROVIDE A MINIMUM OF 6 MIL VAPOR BARRIER AT ALL AIR CONDITIONED SPACES & GARAGES. HOLES IN VAPOR BARRIER ARE NOT PERMITTED. TAPE AROUND ALL SEAMS AND CUT-OUTS.
- ALL REINFORCING SHALL CONFORM TO ASTM A615 FOR GRADE 60 STEEL/WELDED WIRE MESH TO CONFORM TO ASTM A-185
- PROVIDE CHAIRS AND BOLSTERS
- 1.1. BOLSTERS TO HAVE PLASTIC COATED LEGS AND FEET (IF EXPOSED TO EXTERIOR ELEMENTS)
2. ENSURE MESH IS EMBEDDED 1" FROM THE TOP OF THE SLAB. LAP JOINTS AT 8" & TIE.
3. WELDED WIRE FABRIC SHALL BE IN ACCORDANCE WITH ASTM A-185 AND SHALL BE ADEQUATELY SUPPORTED @ 3'-0" O.C. EACH WAY
4. THE MINIMUM CONCRETE COVERAGE SHALL BE AS FOLLOWS:
- 7.1. CAST AGAINST EARTH: 3"
- 7.2. EXPOSED TO EXTERIOR ELEMENTS: 1"
- 7.3. FORMED SURFACES: 1"
8. CONSTRUCTION JOINTS DESIGN AND LOCATION SHALL CONFORM STRICTLY TO THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS. ANY CONSTRUCTION OR CONTROL DESIRED OR PREFERRED BY THE CONTRACTOR SHALL BE APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION OF THOSE AREAS INVOLVED.
9. CHECK ALL DRAWINGS AND APPLICABLE MANUFACTURER'S SHOP DRAWINGS FOR LOCATION OF ALL EMBEDDED ITEMS, SUCH AS PIPE SLEEVES, ANCHOR BOLTS, ETC PRIOR TO PLACING CONCRETE.
10. REINFORCEMENT FOR CONTINUOUS FOOTINGS SHALL BE CONTINUOUS AND SPLICED WITH A FULL 0 INCH LAP. PROVIDE CORNER BARS.
11. CONTRACTOR SHALL PROVIDE SAWCUTS IN SLAB @ A MAX. SPACING OF 20 FEET ON CENTER EACH WAY OR 400 S.F. AND AT ALL RE-ENTRANT CORNERS. SAW CUT SHALL BE 1/4 OF THE SLAB DEPTH AND SHALL BE PERFORMED AS SOON AS THE CONCRETE HAS HARDENED SUFFICIENTLY ENOUGH TO CONTROL THE STRESSES, AN INHERENT PROPERTY OF CONCRETE WHICH SOMETIMES RESULTS IN CRACKS (WHICH IS NOT UNCOMMON)
12. CONCRETE FOR SLABS ON GRADE AND ELEVATED SLABS SHALL HAVE 3/4" LARGE AGGREGATE. "PEAROCK" IS NOT PERMITTED FOR SLABS.
13. CONCRETE PORCH OUTRIGGERS, EXTERIOR FORMED AND POURED COLUMNS, AND REINFORCED EXTERIOR SLABS SHALL CONTAIN W.R.GRACE DCI-S CORROSION INHIBITOR AT THE RATE OF 2-1/2 GALLONS PER YARD. CONCRETE SHALL HAVE A MAX. W/C RATIO OF 0.04 AND A MIN. DESIGN STRENGTH OF 5000 PSI @ 28 DAYS.
- 13.1. ELEVATED SLABS SHALL BE TEMPORARILY SHORED UNTIL FULLY CURED.
14. ALL CONCRETE THAT IS ALTERED (WATER, ADDITIVES, ETC) SHALL BE TESTED TO ENSURE STRENGTH REQUIREMENTS ARE MET.
15. TERMINATE ALL VERTICAL REINFORCING AT THE TOP AND BOTTOM WITH 10" ACI HOOKS.
16. SOILS SHALL BE TREATED.

FOUNDATION NOTES:

- SOIL TO BE COMPACTED TO AT LEAST 95% OF MAX. DRY DENSITY AS DETERMINED BY ASTM-1557 (MODIFIED PROCTOR).
- FOUNDATIONS ARE DESIGNED BASED ON PRESUMPTIVE SAFE MINIMUM SOIL BEARING PRESSURE OF 2,000 PSF.
- FOOTINGS SHALL BE PLACED ON COMPACTED SOIL FREE OF ORGANIC DEBRIS.

TIMBER NOTES:

- ROOF SHEATHING SHALL BE A MIN. OF 5/8" CDX SPAN RATED STRUCTURAL PLYWOOD, INSTALLED WITH FACE GRAIN PERPENDICULAR TO ROOF FRAMING WITH 10d RING SHANK NAILS 6" O.C. AT PANEL EDGES AND 6" O.C. IN THE FIELD. PROVIDE 2" X 4" BLOCKING AT HIPS AND VALLEYS. SPACE NAILS AT 4" O.C. AT BLOCKING.
- EXTERIOR FRAME WALL SHEATHING TO BE A MIN. OF 1/2" APA SHEATHING, SPECIES GROUP 1, SPAN RATING OF 24/0 OR BETTER. UNLESS OTHERWISE NOTED, INSTALL WITH FACE GRAIN HORIZONTAL. PLYWOOD SHALL BE 4 PLY MINIMUM. NAIL TO STUDS USING 10d NAILS @ 4" O.C. AT PANEL EDGES AND 10" O.C. IN THE FIELD. DECREASE SPACING PER PLAN. AT SHEAR WALLS, NAIL TO EACH STUD AT THE END OF THE WALLS FOLLOWING THE EDGE SPACING. BACK OUT AND REMOVE ALL NAILS THAT DO NOT FULLY PENETRATE/MISS FRAMING MEMBERS.
- THE MINIMUM LUMBER GRADES SHALL BE AS SUCH: INT. & EXT. BEARING WALLS, TOP PLATES, WINDOW BUCKS, & HEADERS: SOUTHERN YELLOW PINE #2 OR BETTER
- BOTTOM PLATES AGAINST CONCRETE: PRESSURE TREATED SOUTHERN YELLOW PINE #2 OR BETTER
- ALL TIMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED OR HAVE AN APPROVED SEPARATING MATERIAL.
- ALL NAILS AND METAL HARDWARE EXPOSED TO THE ELEMENTS SHALL BE GALVANIZED. ALL NAILS SHALL BE COMMON WIRE NAILS. SPACE NAILS AT STRAPS AS TO NOT SPLIT THE WOOD.

WIND LOAD DESIGN CRITERIA:

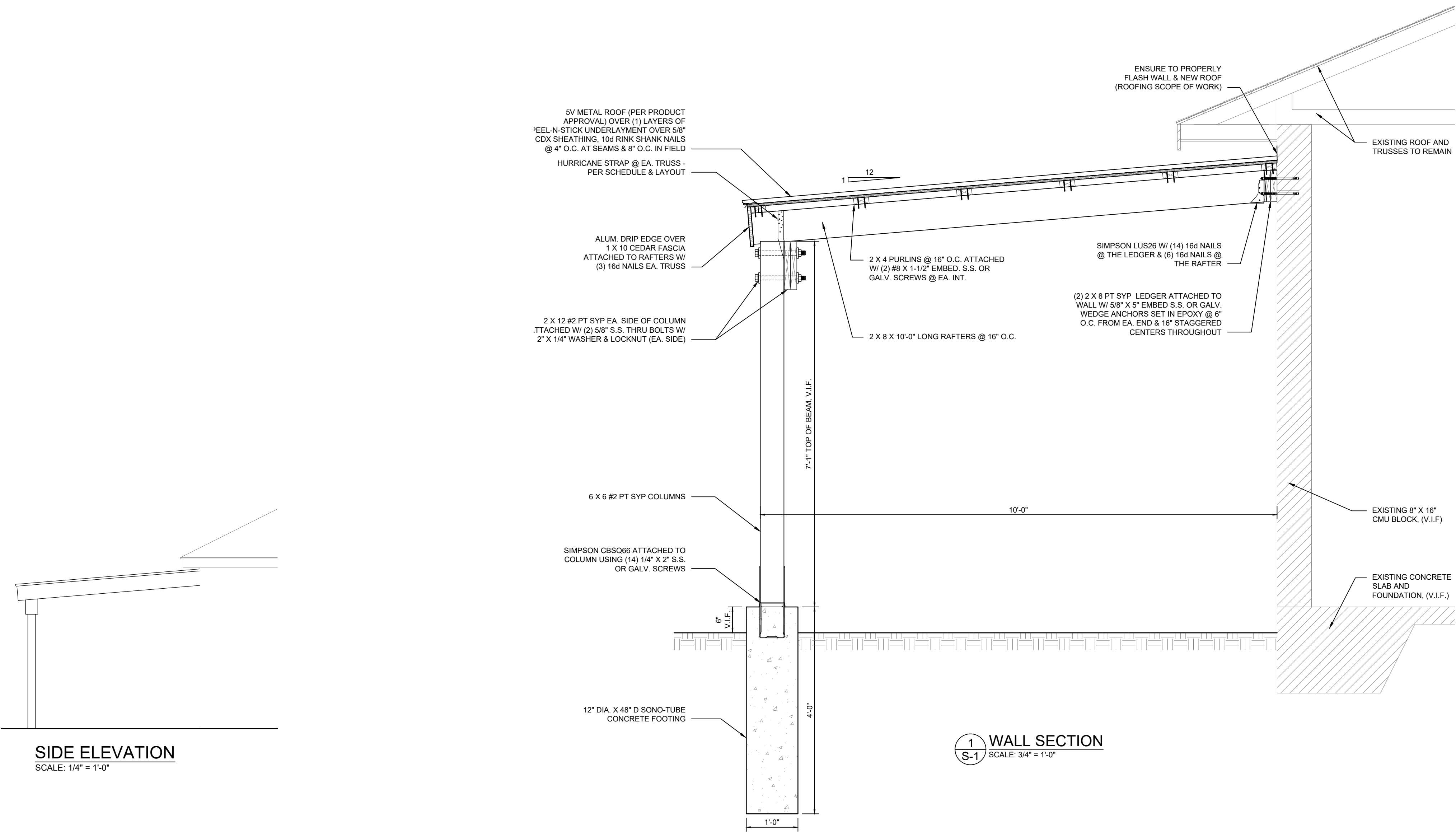
- DESIGN WIND LOAD ON INDIVIDUAL ROOF TRUSSES BASE UPON TRIBUTARY AREA SHALL BE AS FOLLOWS.
- SEE ROOF PLAN FOR ZONE LOCATIONS.
- OVERHANGS SHALL INCLUDE PORCHES, BALCONY ROOFS, ETC.
- MAXIMUM DEADLOAD RESISTING UPLIFT SHOWN BELOW SHALL BE 8 PSF.

FOR 3:12 AND LESS ROOF PITCH				
ZONE	AREA	NEGATIVE PRESSURE	POSITIVE PRESSURE	OVERHANG
2	10	88	26	68
2	20	83	26	64
2	50	76	24	59
2	100	71	23	55
3	10	115	26	109
3	20	105	26	100
3	50	93	24	89
3	100	83	23	81

ROOFING NOTES:

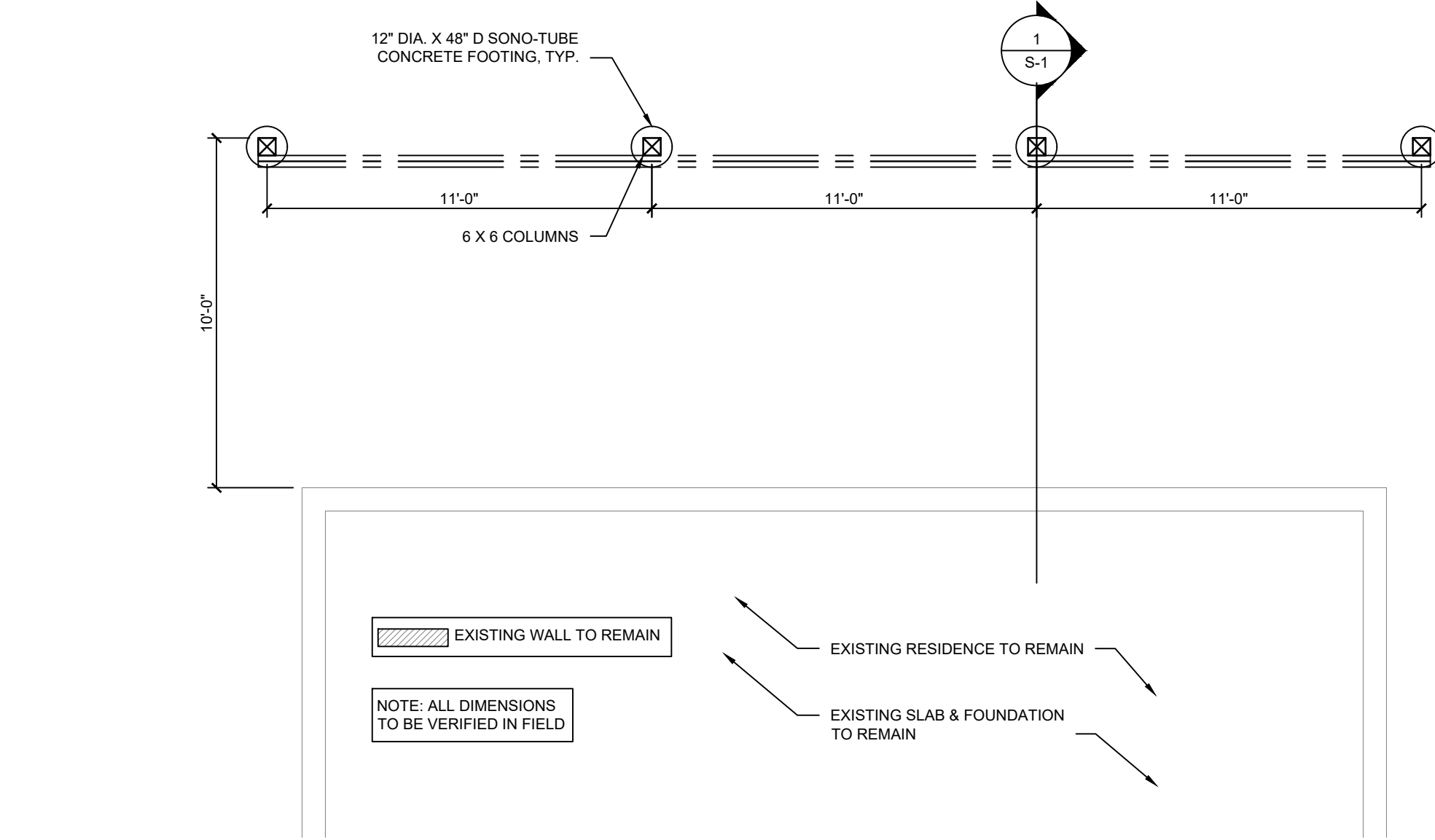
- ROOFING MATERIALS SHALL BE ATTACHED PER MANUFACTURES SPECIFICATIONS TO MEET THE DESIGN CRITERIA IN THESE PLANS.
- ASPHALT SHINGLES SHALL CONFORM TO ASTM D-3161 CLASS "F", ASTM D-7158 CLASS "H" OR TAS 107.

OVER ENCLOSED AREAS		
ROOF ZONE	ROOF SLOPE 3:12 OR LESS	ROOF SLOPE 7:12 OR MORE
2	84 PSF	N.A.
3	109 PSF	N.A.



SIDE ELEVATION
SCALE: 1/4" = 1'-0"

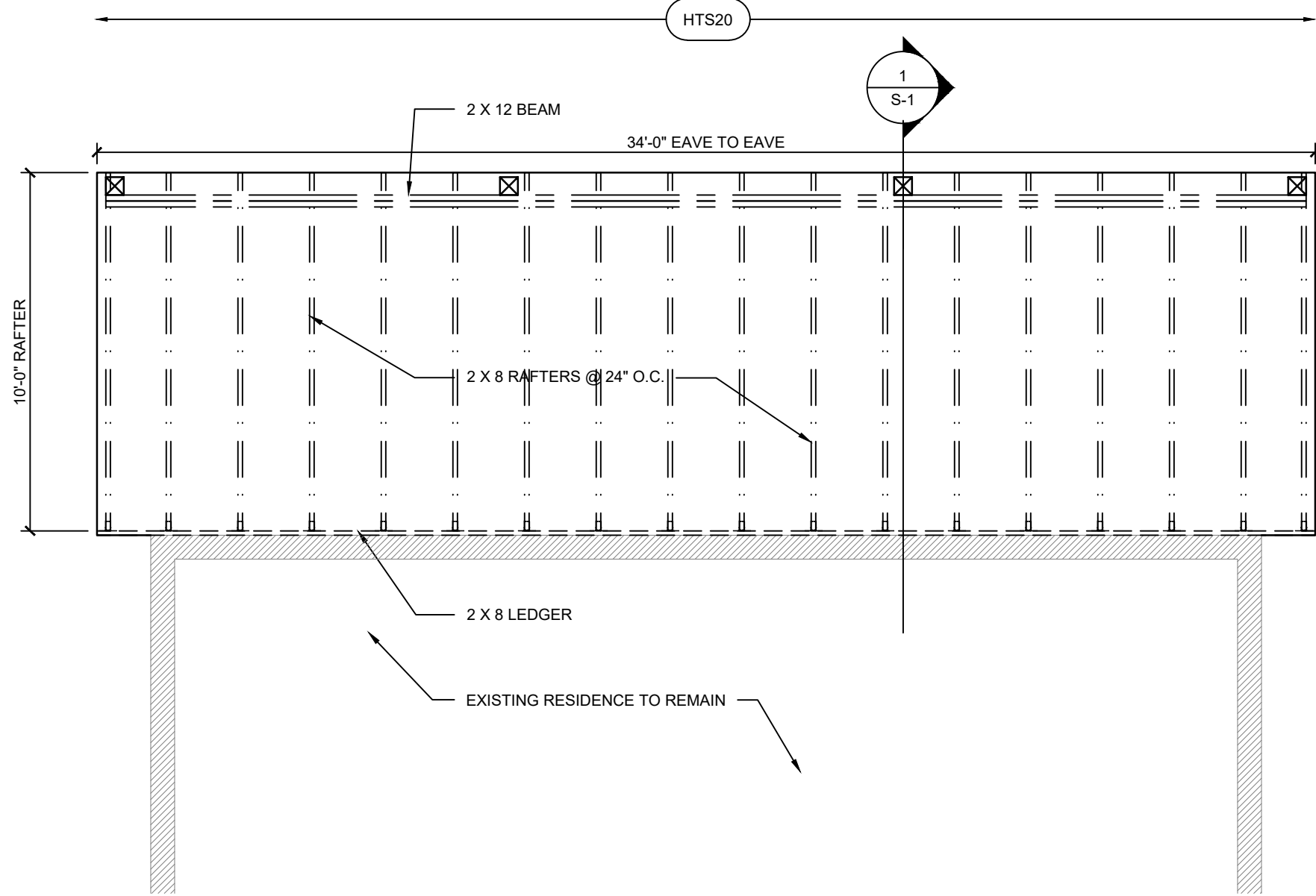
1 WALL SECTION
SCALE: 3/4" = 1'-0"



STRUCTURAL PLAN
SCALE: 1/4" = 1'-0"

TRUSS CONNECTION SCHEDULE				
UPLIFT	MAX. UPLIFT	HARDWARE	CONNECTION NOTES	FASTENER SPECIFICATION
694	1310	HTS20	COMMON TRUSS TO WOOD STUD WALL (U.N.O.)	(24) 10d X 1 1/2" NAILS

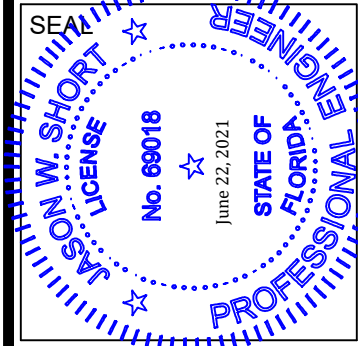
NOTE:
1. ALL TRUSS CONNECTORS ARE SIMPSON STRONG-TIE Z-MAX. (WHERE AVAILABLE) (TYP.) INSTALLED WITH MAXIMUM NAILS. SCREWS, BOLTS AS PER MANUFACTURERS SPECIFICATIONS.
2. ALL TRUSS TO TRUSS CONNECTIONS ARE BY TRUSS ENGINEER (INCLUDING PIGGYBACK STRAPPING/TIE-IN).



STRUCTURAL ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"

THIS ITEM HAS BEEN DIGITALLY SIGNED & SEALED BY JASON W. SHORT, P.E., M.ASCE F.E. 40802 (ON 09/10/2021) USING A DIGITAL SIGNATURE.
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To the best of my knowledge, this structural plan complies with the requirements of the 2020 Florida Building Code, and I am not providing this plan in violation of any applicable laws or regulations. No other certifications are expressed or implied.

REV	ISSUE	DATE
1	PERMIT	06-22-2021

Greenberg Residence - Solar Roof 702 SW ADOBE AVE, PORT ST. LUCIE, FLORIDA 34953	APPROVED BY JWS	CHECKED BY JWS	DRAWN BY TLA	SCALE: SEE SHEET
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PROJ. NO.	21-1940
DATE	06/22/2021
SHEET NO.	