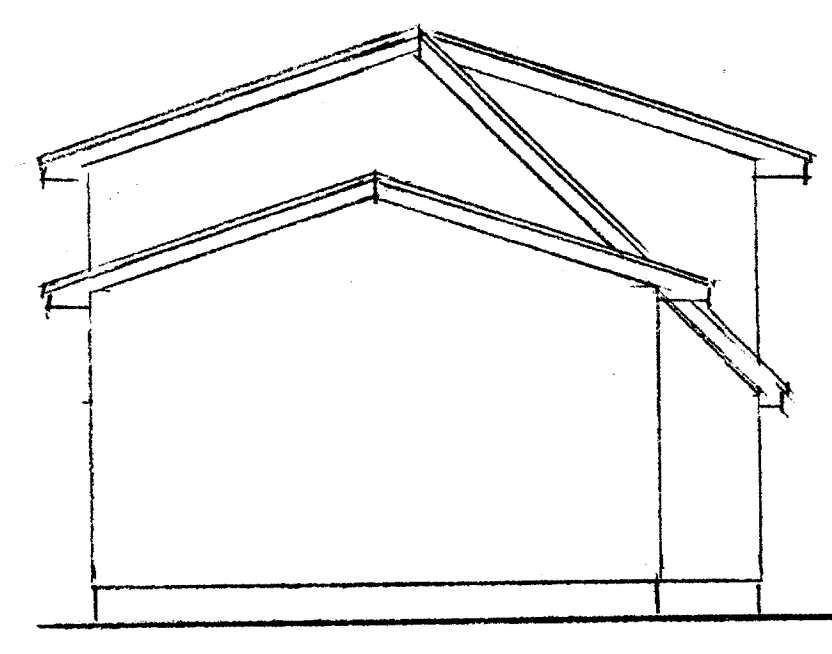
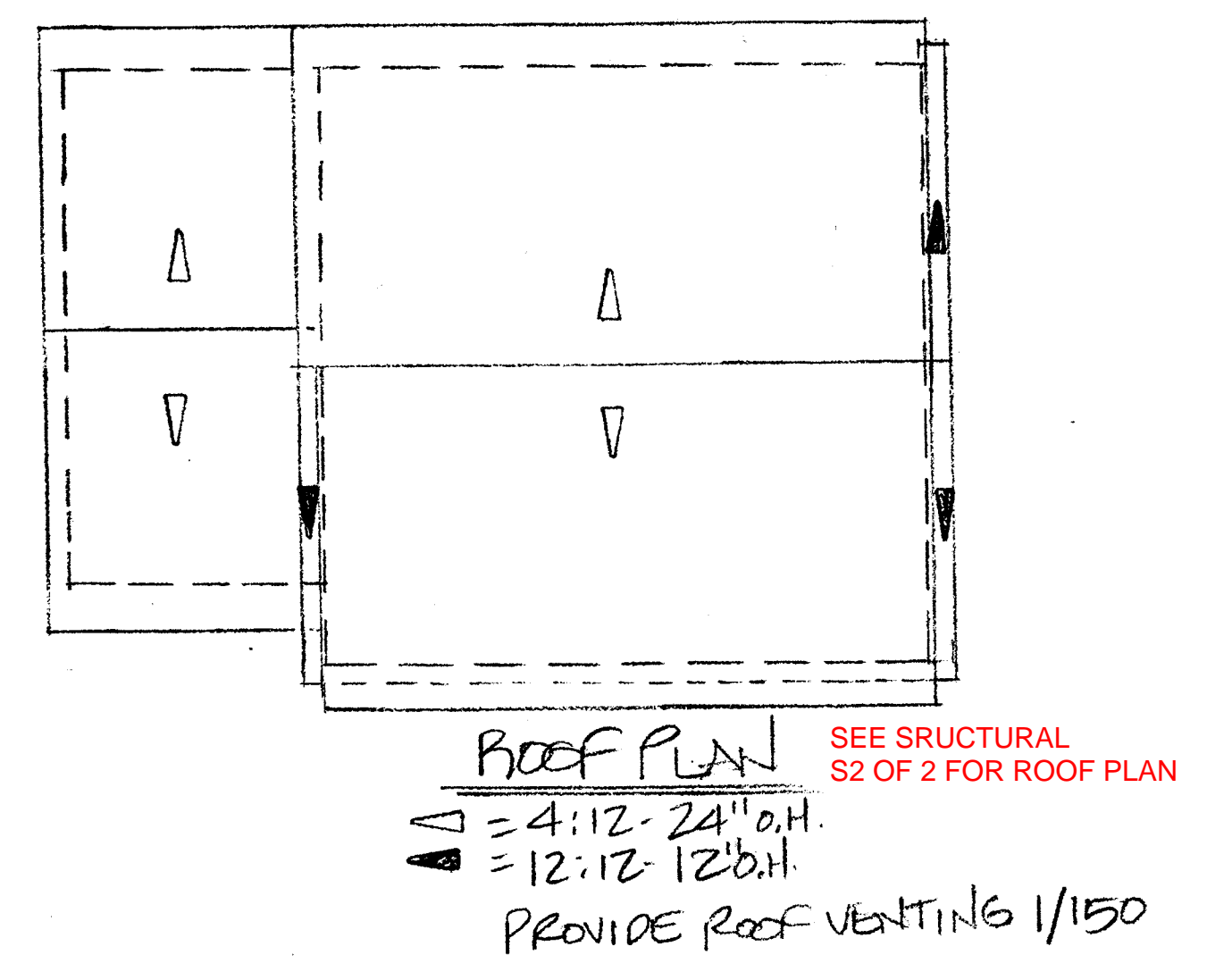
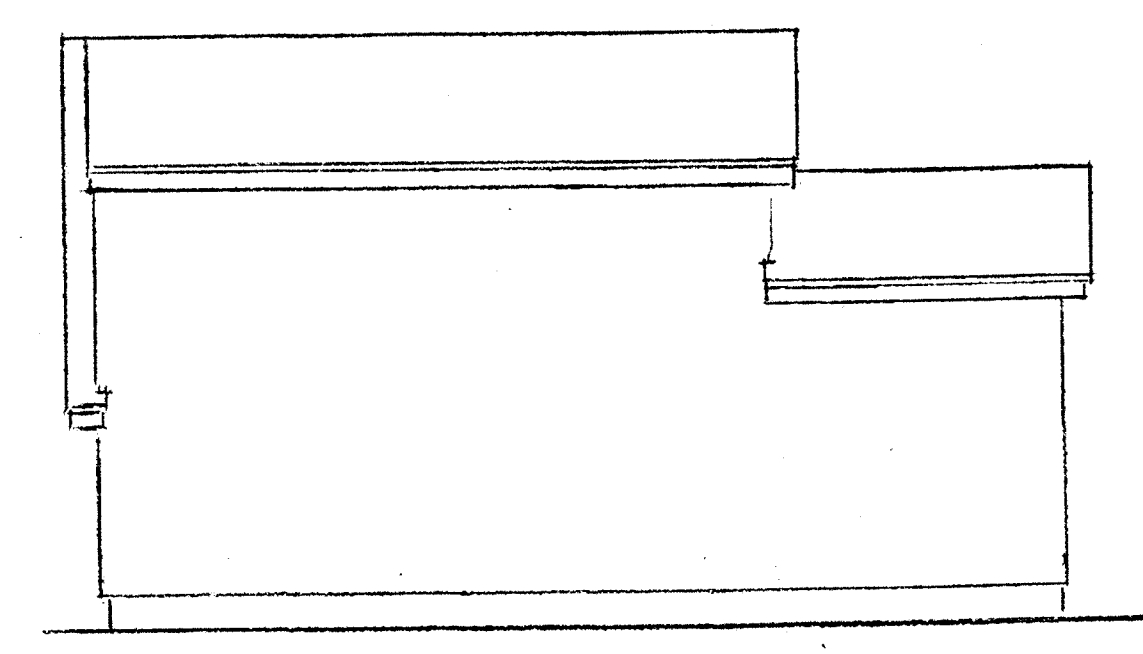


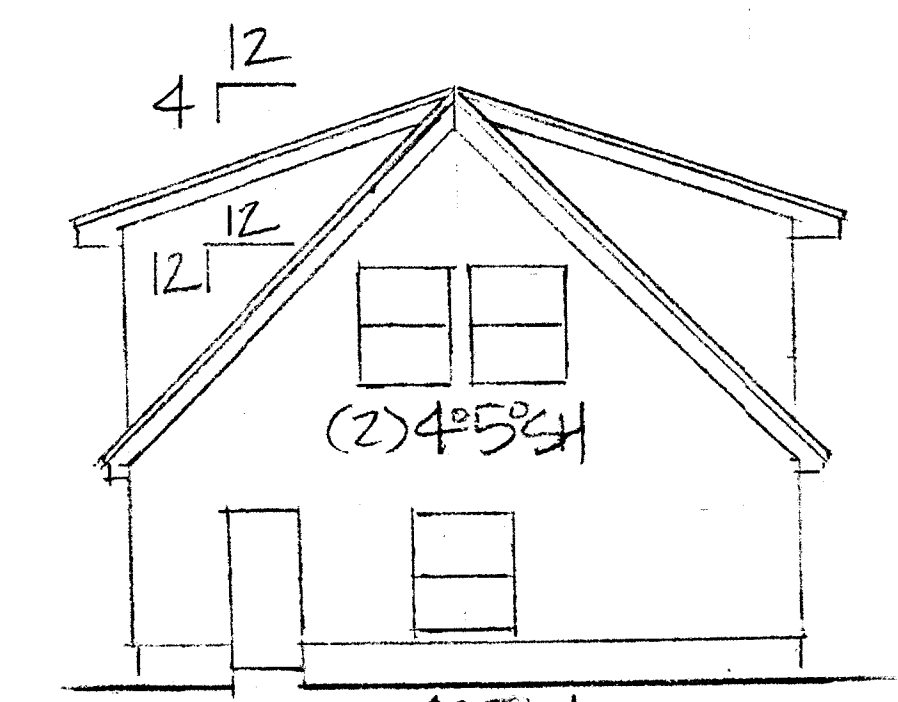
**B-21-0712  
CITY OF PULLUP  
DETACH GARAGE/LOFT**



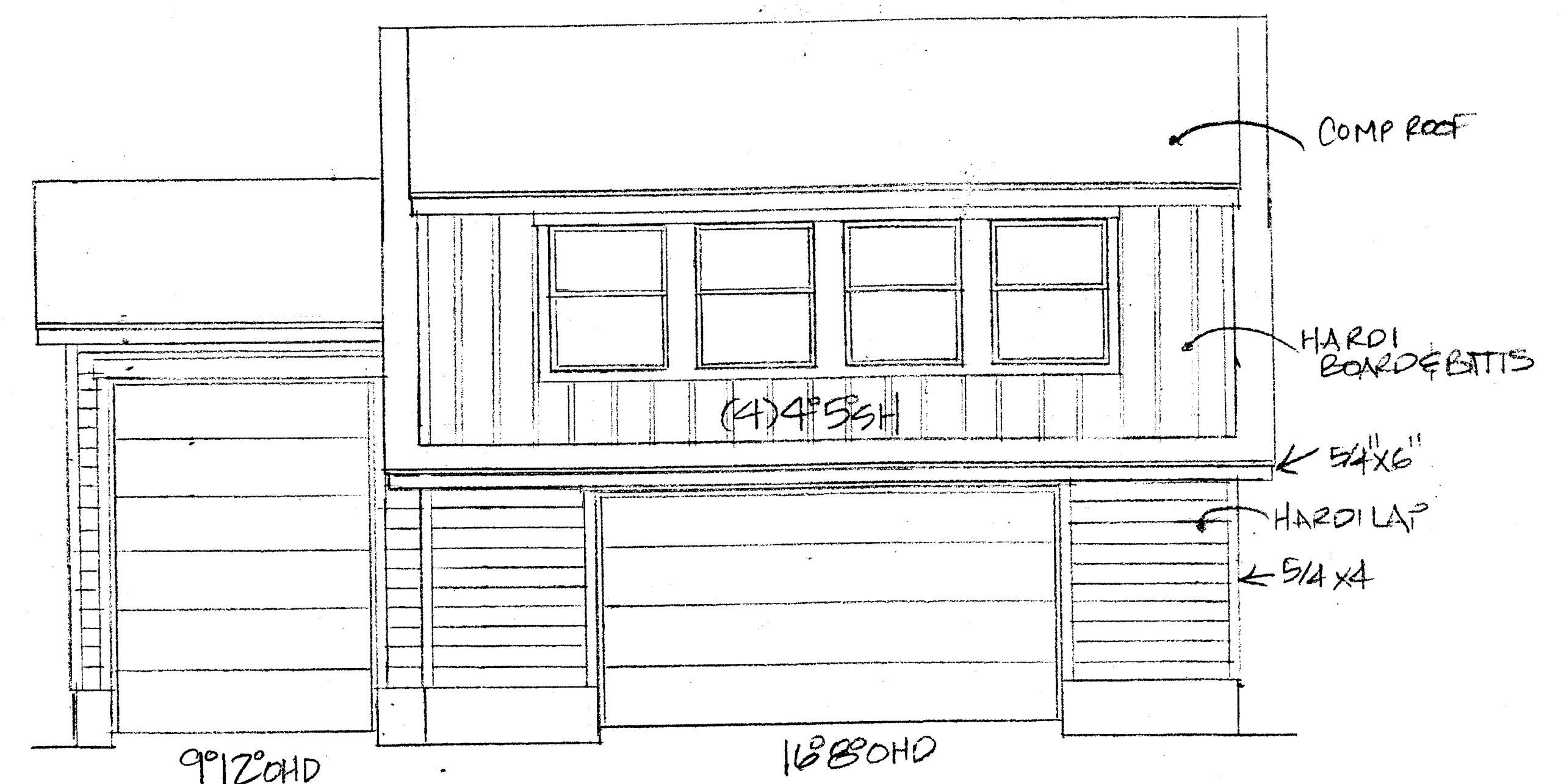
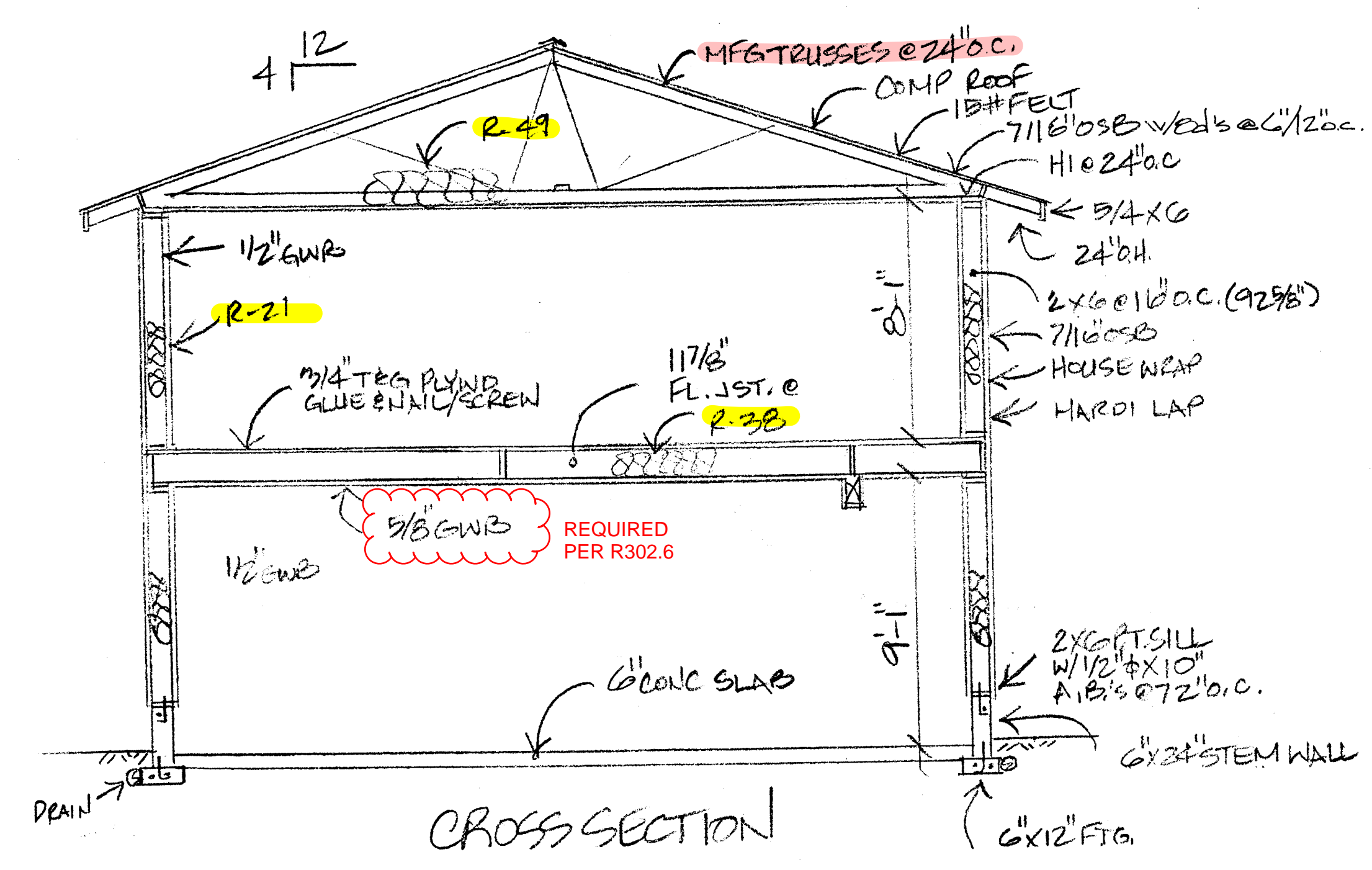
LEFT ELEV



REAR ELEV



RIGHT ELEV



FRONT ELEVATION

**City of Puyallup**  
Development & Permitting Services  
**ISSUED PERMIT**

Building	Planning
Engineering	Public Works
Fire	Traffic

BUILDING, MECHANICAL & PLUMBING -

**Reviewed for Compliance  
Approved for Construction**

By Janelle Montgomery ✓

B-21-0712

Date of Review 11/22/2021

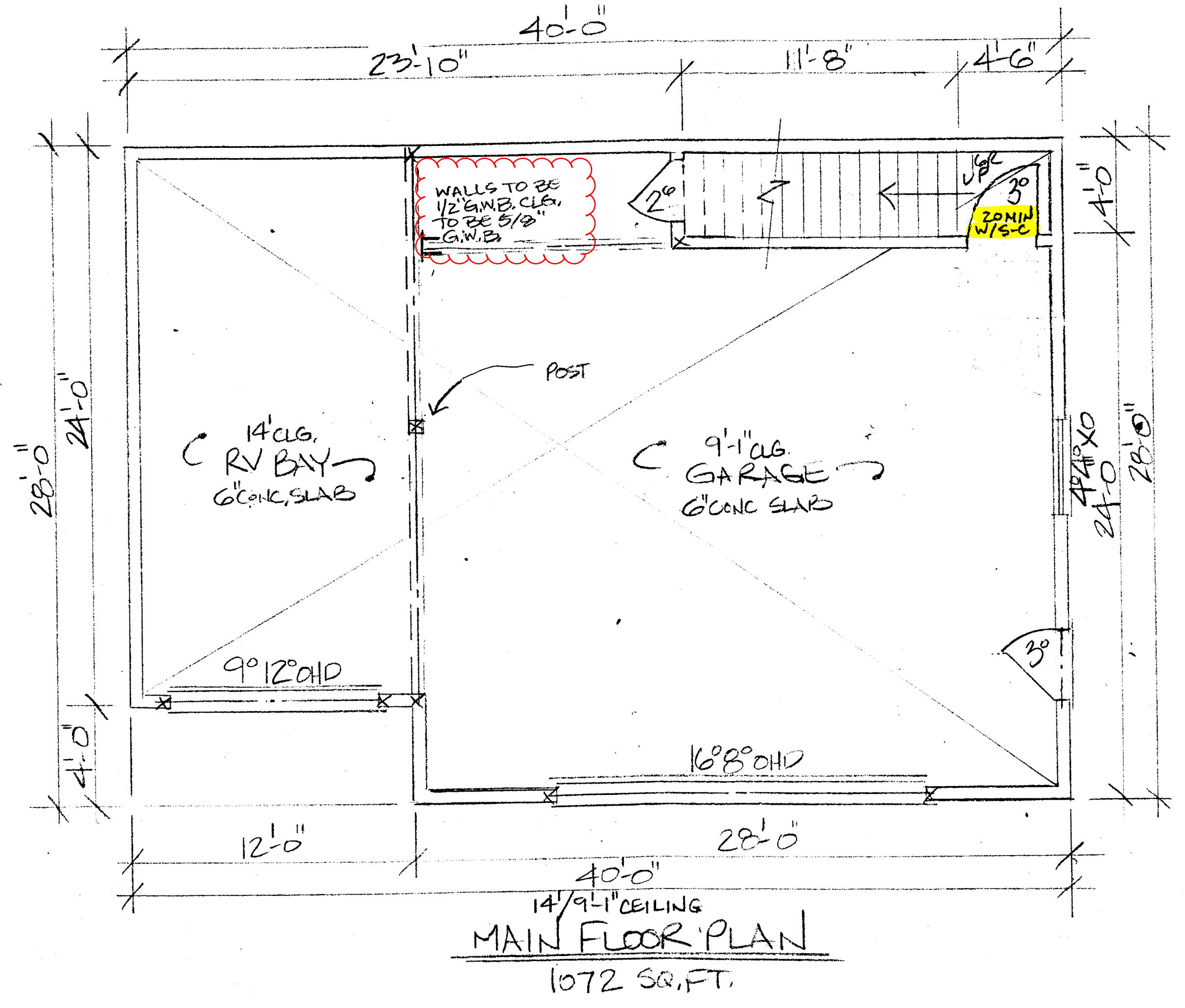
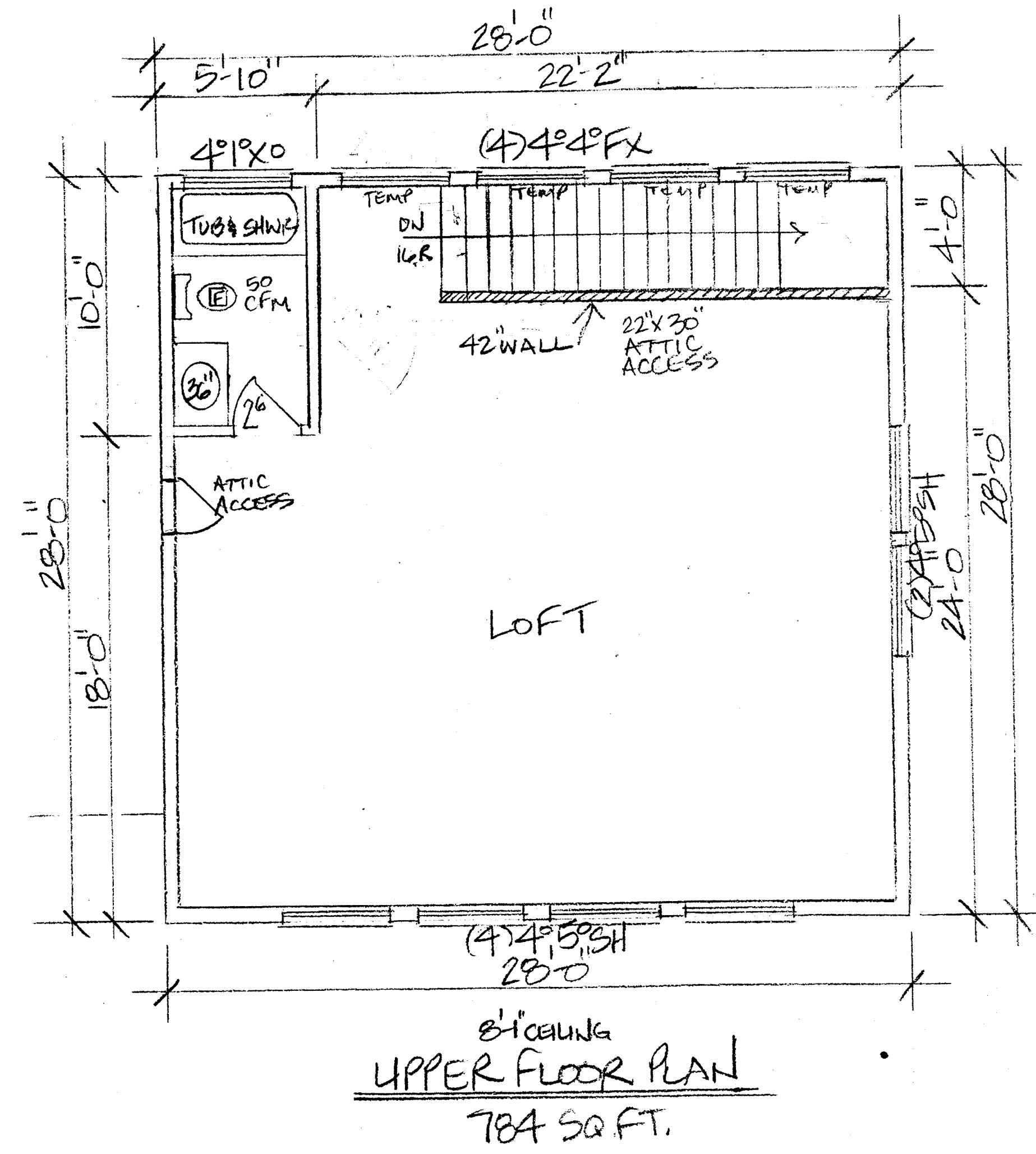
Approval of submitted plans is not an approval of omissions or oversight by this office or noncompliance with any applicable regulations of local government. The contractor is responsible for making sure that the building complies with all applicable building codes and regulations of the local government.

THE APPROVED CONSTRUCTION PLANS, DOCUMENTS AND ALL ENGINEERING MUST BE POSTED ON THE JOB AT ALL INSPECTIONS IN A VISIBLE AND READILY ACCESSIBLE LOCATION.

FULL SIZED LEDGIBLE COLOR PLANS ARE REQUIRED TO BE PROVIDED BY THE PERMITEE ON SITE FOR INSPECTION

*Brunitt* Design Drafting  
Bruce G. Brunitt 5365495

SCALE	1/2" = 1'-0" (784 sq. ft.)
1/4" = 1'-0" (784 sq. ft.)	
THE STROBL GARAGE	
1/2	40 x 28



FLOOR AREA  
MAIN FLOOR 1072 SQ. FT.  
UPPER FLOOR 784 SQ. FT.

SEE SHEETS S1-S2 FOR STRUCTURAL PLANS, NOTES AND DETAILS

City of Puyallup  
Development & Permitting Services  
ISSUED PERMIT

Building	Planning
Engineering	Public Works
Fire	Traffic

Design Drafting  
B. Bennett  
5365445

SCALE	1072 SQ. FT.
	1/4"=1'-0" 784 SQ. FT.
THE STROBL GARAGE	
2/2	40x28

B-21-0712  
CITY OF PUALLUP

STRUCTURAL NOTES

CONTRACTOR, OWNER, AND FRAMER ARE TO THOROUGHLY REVIEW THESE DOCUMENTS AND THEIR RELATIONSHIP TO THE ARCHITECTURAL PLANS. IF THERE ARE ANY QUESTIONS, OR DISCREPANCIES ABOUT THE NOTES, DETAILS, OR PLANS, CONTACT THE ENGINEER OF RECORD AT THOMPSON ENGINEERING (509) 987-1599.

These structural notes supplement the drawings. Any discrepancy found among the drawings, these notes, and the site conditions shall be reported to the Engineer, who shall correct such discrepancy in writing. Any work done by the Contractor after discovery of such discrepancy shall be done at the Contractor's risk. The Contractor shall verify and coordinate the dimensions among all drawings prior to proceeding with any work or fabrication. The Contractor is responsible for all bracing and shoring during construction. All construction shall conform to the applicable portions of the latest edition of the 2018 International Building Code except where noted.

Construction Stability:

The design, adequacy and safety of erection bracing, shoring and all temporary supports is the sole responsibility of the Contractor, and has not been considered by the Engineer of Record. The Contractor shall provide the bracing necessary to provide stability to the structure prior to the completed application of the lateral resisting system. During construction, the Contractor shall keep loads within the design roof and floor load limits indicated below.

Design Criteria:

- Live Load = 25 PSF (Snow)  
40 PSF (Floors)  
15 PSF (Roofs)
- Dead Load = 12 PSF (Floors)  
10 PSF (Wood Walls)  
10 PSF (Partition Load)  
150 PCF (Concrete)
- Wind: 2018 IBC
  - Basic wind speed = 110 mph
  - V-ass wind speed = 85 mph
  - Risk category = "II"
  - Exposure category = "B"
  - Internal pressure coefficient = +0.55/-0.55
- Earthquake: 2018 IBC
  - Risk category = "II"
  - Importance factor "I" = 1.0
  - Spectral response acceleration parameter  $S_s = 1.277$
  - Spectral response acceleration parameter  $S_1 = 0.440$
  - Site classification = "D"
  - Spectral response acceleration parameter  $S_d = 1.021$
  - Spectral response acceleration parameter  $S_d1 = \text{null}$
  - Seismic design category "D2"
  - Seismic response coefficient  $C_S = 0.127$
  - Response modification factor = 6.5
  - Basic force resisting system = bearing walls-"K"
  - Design procedure = Simplified analysis
- Soil: 1500 PSF, Assumed Bearing Capacity

Foundation

- All footings shall be founded on native undisturbed soil.
- Optional: A continuous 4" diameter perforated footing drain shall be placed around the entire perimeter of the foundation and installed as shown on the drawings. The footing drain shall be sloped and terminated at an approved location down hill of the structure.
- Pressure-treated Mud-sills: Use 1/2" diameter x 10" ASTM A307 anchor bolts at 72" on center with pressure treated 2x nominal thickness plates, unless otherwise noted on the foundation plan.
- All anchor bolts shall use 3" square x 1/4" thick steel plate washers.

Concrete & Reinforcing Steel:

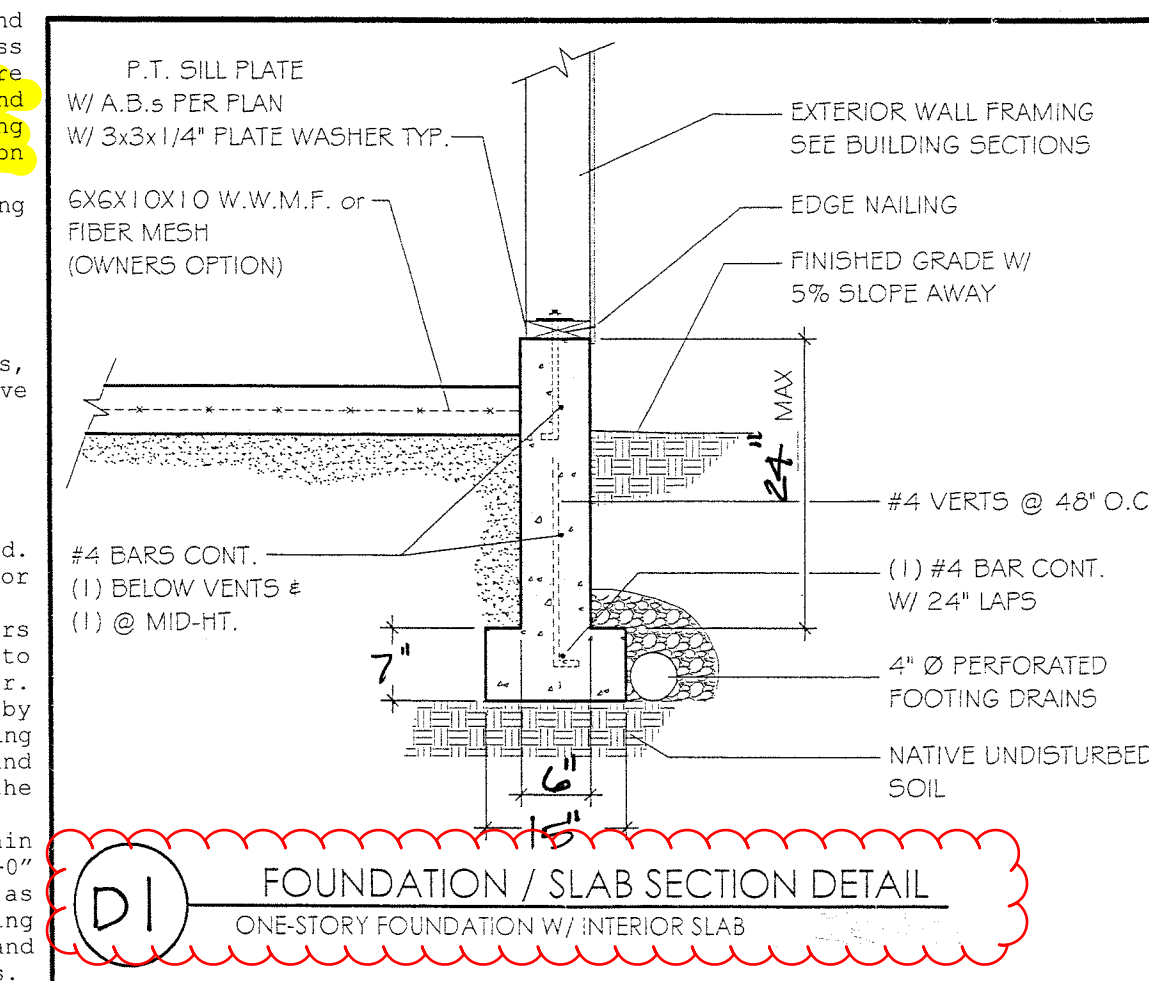
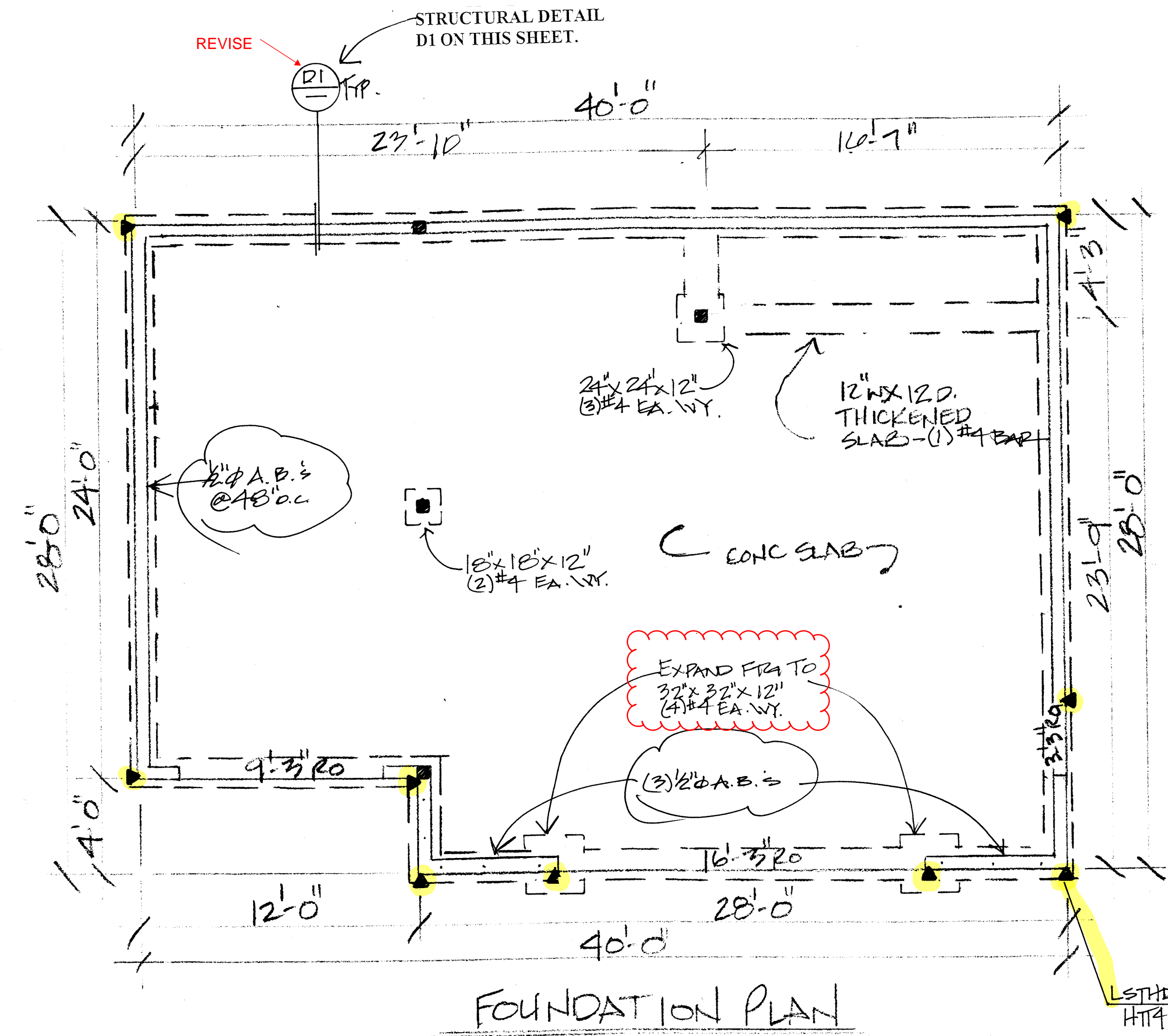
- All concrete work shall be per the 2018 IBC Chapter 19. Tolerances shall be per IBC Chapter 19, Section 07. Mixing, placement, and inspection shall be per Sections 03, 04, 05, and 06.
- Cement: ASTM C150, normal-type I or I-II.
- Coarse or fine aggregate: ASTM C33.
- All reinforcing shall be ASTM A615 Grade 40 for #4 bars or smaller and Grade 60 for #5 bars or larger.
- Use 24" elbow bars at all footing and stemwall corners and intersections at horizontal continuous reinforcement.
- Admixtures: Water reducers-ASTM C494, Type A. Air entrainment-ASTM C260 and ASTM C494, with no chlorides.
- Concrete shall be in accordance with ASTM 150. Do not use calcium chloride, fly ash or related materials.  
 $f'c = 2500 \text{ PSI @ 28 day-5-1/2 sack mix-3/4"} \text{ maximum size aggregate. Slump = 5" maximum, 63 max Air entrained.}$

Carpentry:

- Structural 2X & 4X framing shall be #2 Doug-Fir.
- 6X columns/beams/headers shall be #1 Doug-Fir.
- 2X rafters/joists shall be #2 Douglas-fir, kiln dried, and stored in a dry area prior to installation.
- Floor joists shall be by Trus-joist, Boise Cascade, Louisiana Pacific, or other approved manufacturer.
- Roof trusses shall be by a pre-approved manufacturer and constructed according to the specifications of the Truss Plate Institute. Contractor and Truss Manufacturer are responsible for all bracing of the trusses including end wall bracing and all other bracing between the building and the trusses unless specifically shown otherwise on the drawings.
- Manufactured beams/columns (LSL) shall have the following properties:  
( $F_b = 1,730 \text{ psi}$ )  
( $F_v = 410 \text{ psi}$ )  
( $E = 1,350,000 \text{ psi}$ )
- Glue laminated beams shall be 24F-V4 for simple spans, and 24F-V8 for cantilevered or continuous beams and have the following properties:  
( $F_b = 2,400 \text{ psi}$ )  
( $F_v = 240 \text{ psi}$ )  
( $E = 1,800,000 \text{ psi}$ )  
( $F_{cl} = 650 \text{ psi}$ )
- Continuous and cantilevered beams shall not be cambered. All other Glu-laminated beams shall be cambered for L/480. See framing plans for any exceptions.
- Floor sheathing shall be 5/8" T&G. Sheathing at floors shall be laid with the face grain perpendicular to supports and end joints staggered 4'-0" on center. Provide 1/8" space between panel edges as required by sheathing manufacturer's specifications. Floor sheathing shall be nailed with 8d box nails at 6" o.c. edges and 12" o.c. in the field unless otherwise noted on the drawings.
- Sheathing at roofs shall be laid with face grain perpendicular to supports and end joints staggered 4'-0" on center. Provide 1/8" space between panel edges as required by sheathing manufacturer's. Roof sheathing shall be nailed with 8d box nails at 6" o.c. edges and 12" o.c. in the field unless otherwise noted on plans.

CAUTION

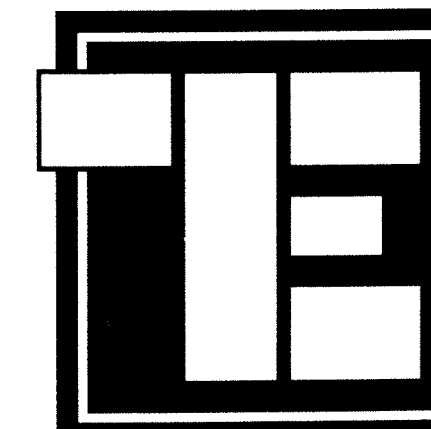
PLACE TRUSSES PER MANUFACTURER'S RECOMMENDATIONS. BRACE PER RECOMMENDATIONS. NOT PROVIDED ON TRUSS LAYOUT - PROVIDE CALCULATIONS AND ATTACHMENTS TO SUPPORT LAYOUT.  
CONTRACTOR IS RESPONSIBLE FOR ALL TEMPORARY BRACING AND SHORING REQUIRED DURING PLACEMENT OF TRUSSES.  
CONTRACTOR IS REQUIRED TO FIELD VERIFY ALL CONDITIONS AND ALL ELEVATIONS.



**ATTENTION:**  
ALL ENGINEERING CALLOUTS ON THESE PLANS MUST BE STRICTLY FOLLOWED! NO EXCEPTIONS! ANY CHANGES OR MODIFICATIONS MUST BE PRE-APPROVED BY THE ENGINEER OF RECORD!

City of Puyallup  
Development & Permitting Services  
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**THOMPSON ENGINEERING, INC.**  
541 JORDAN LN RICHLAND, WA 99352  
PHONE: (509) 987-1599 email: rthompsonengineering@yahoo.com

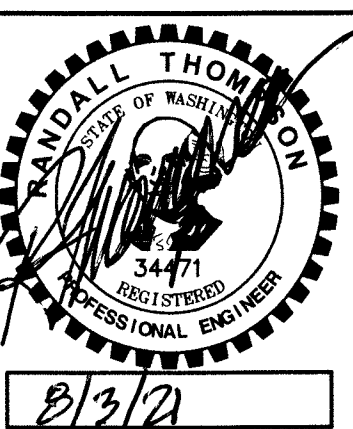
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DATE: REVISED:

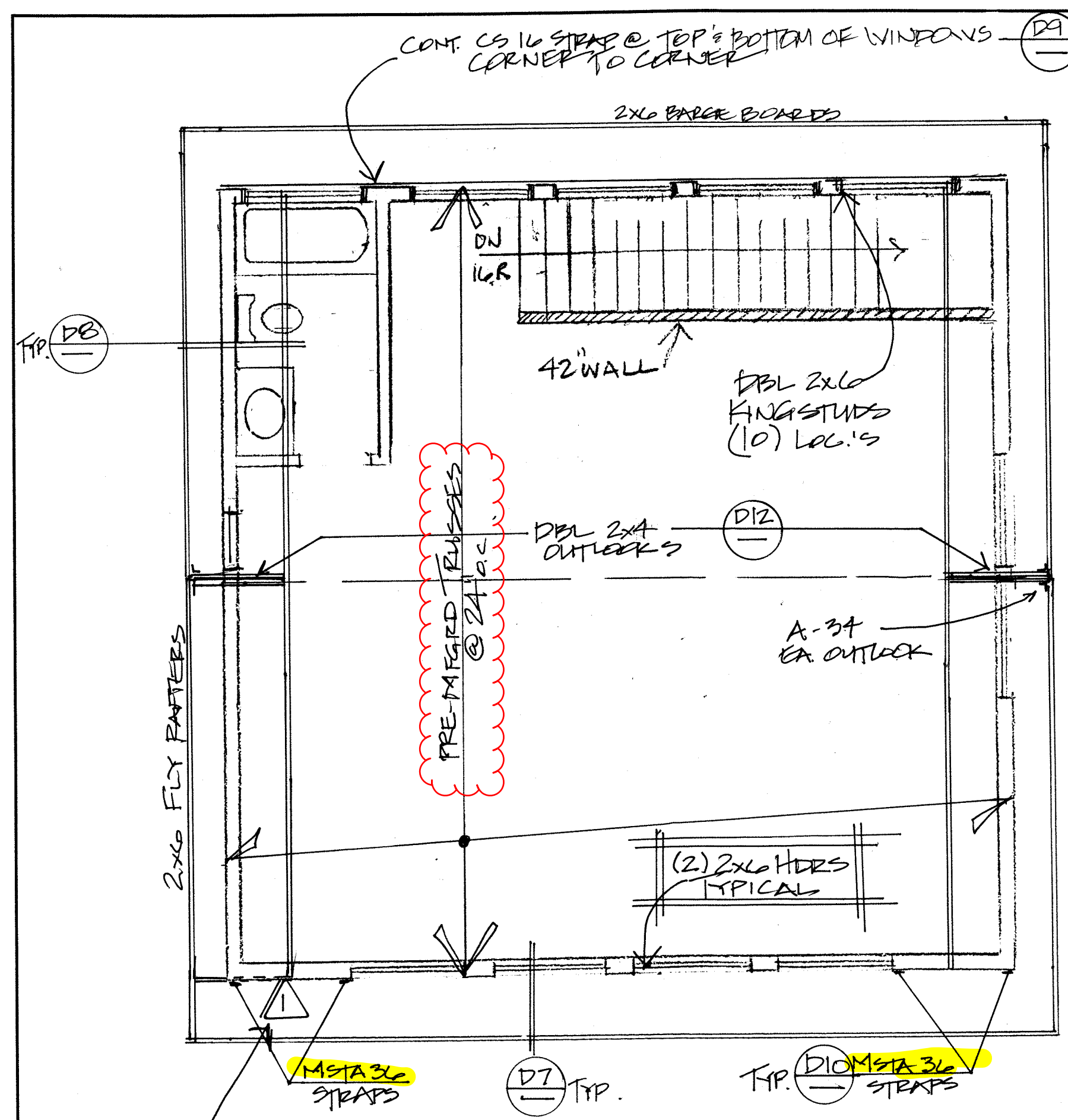
STROBL GARAGE/RV

FOUNDATION PLAN, NOTES & DETAILS

DRAWING NUMBER: SHEET S1 OF 2

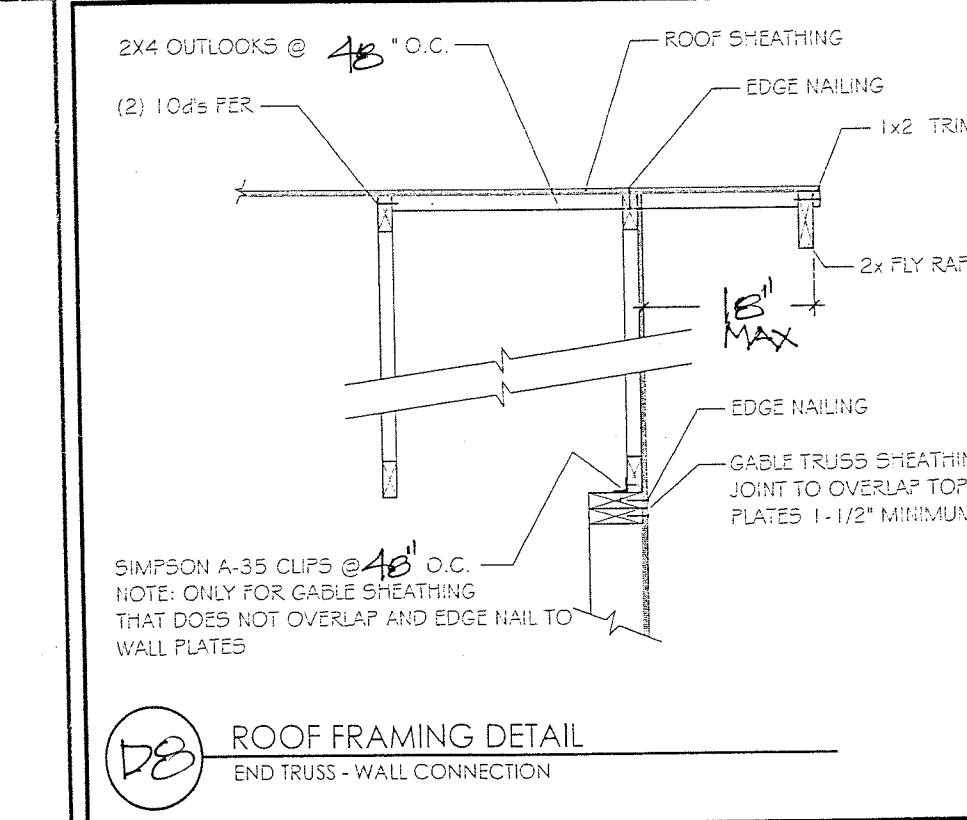
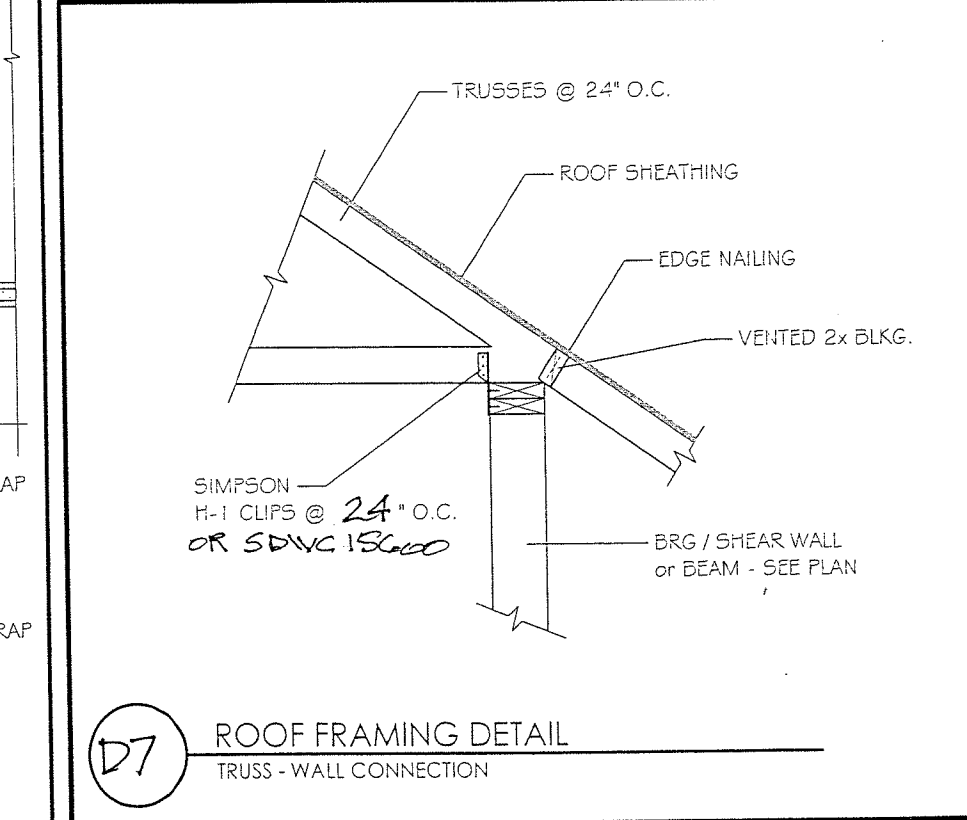
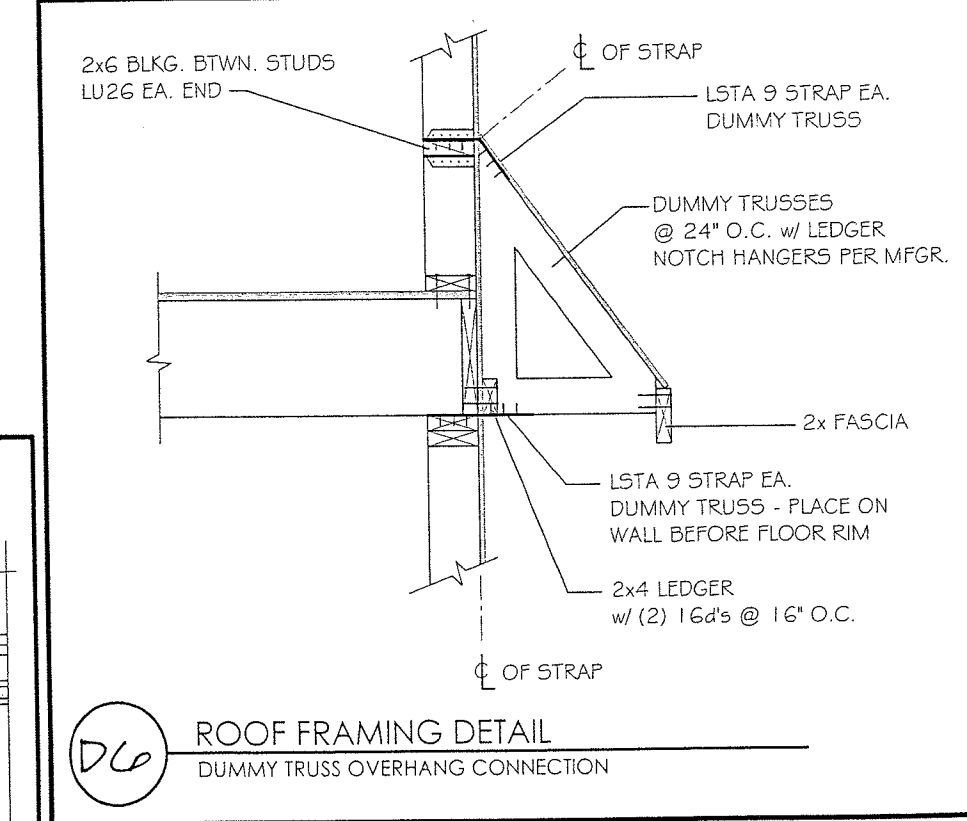
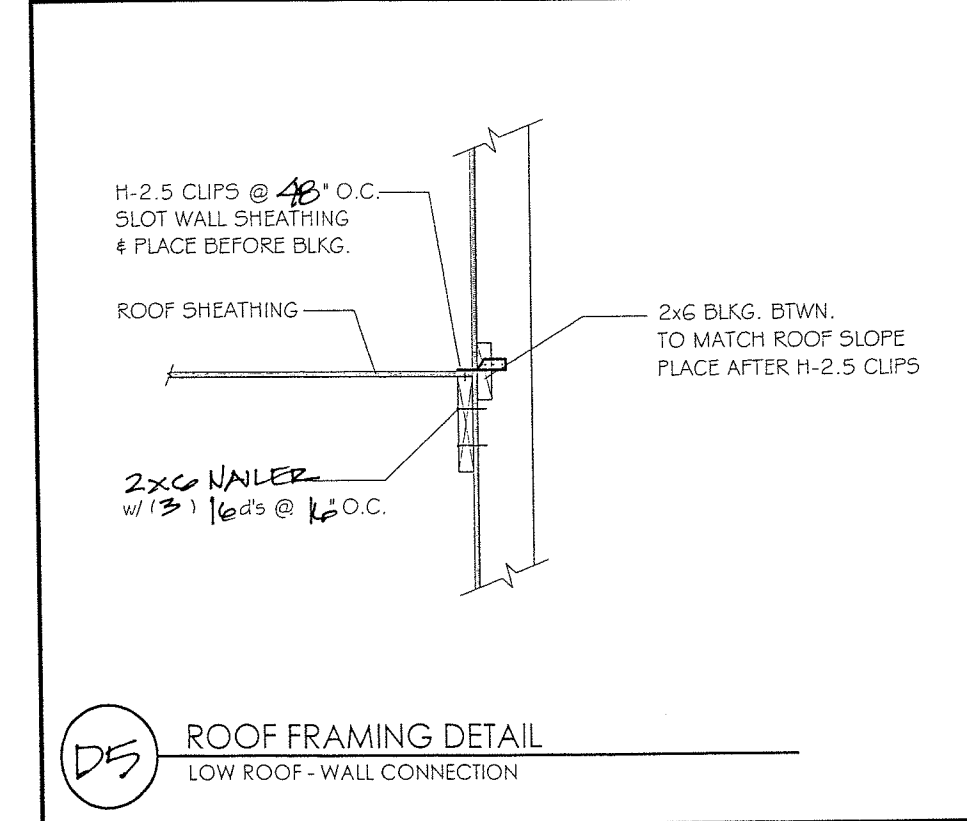
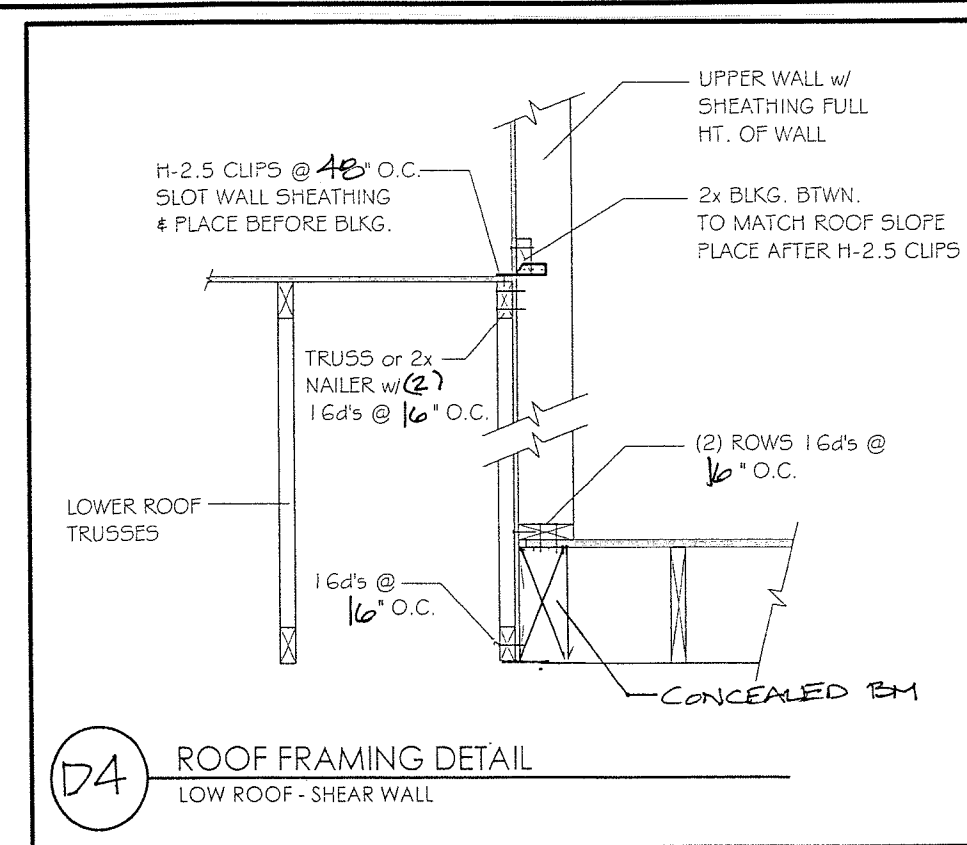
8/3/22





**UPPER ROOF FRAMING PLAN  
SHEARWALL & HOLDOWN PLAN**

TYPICAL AT ALL EXTERIOR WALLS UNLESS OTHERWISE NOTED!



**TYPICAL SHEAR-WALL NOTES**

All wall sheathing shall be 15/32" CDX plywood, 7/16" OSB (with studs at 16" o.c.), or as called out below, with exterior exposure glue and span rated "SR 24/0" or better. (5/8" r1-11 siding is an acceptable substitution except where 5/8" or thicker sheathing is specifically called out in the schedule below). Sheathing may be installed either horizontally or vertically.

All nails shall be per table below. Nail size and spacing at all sheathing edges shall be as required in shear-wall schedule below.

Nail Type	Diameter (inches)	Length (inches)
8d box	0.113	2-1/2
10d box	0.128	3
16d sinker	0.148	3-1/4
8d common	0.131	2-1/2
10d common	0.148	3

ALL SHEARWALL FRAMING LUMBER SHALL BE #2 DOUG-FIR SPECIES MATERIAL.

**SHEAR-WALL SCHEDULE**

1 sheathing nailed with 8d box at 6" on center all edges = 260 plf.

2 sheathing nailed with 8d box at 4" on center all edges = 380 plf.

**ADDITIONAL SHEAR WALL NOTES:**

- Blocking is required at all horizontal edges of sheathing. Sheathing edge nailing is required at all holddown posts.
- Intermediate framing is to be minimum 2x members with nailing at 12" on center.
- Double 2x studs nailed together with (2) rows of 10d's at 4" o.c. may be used in place of a single 3x stud, unless otherwise required in holddown schedule below.

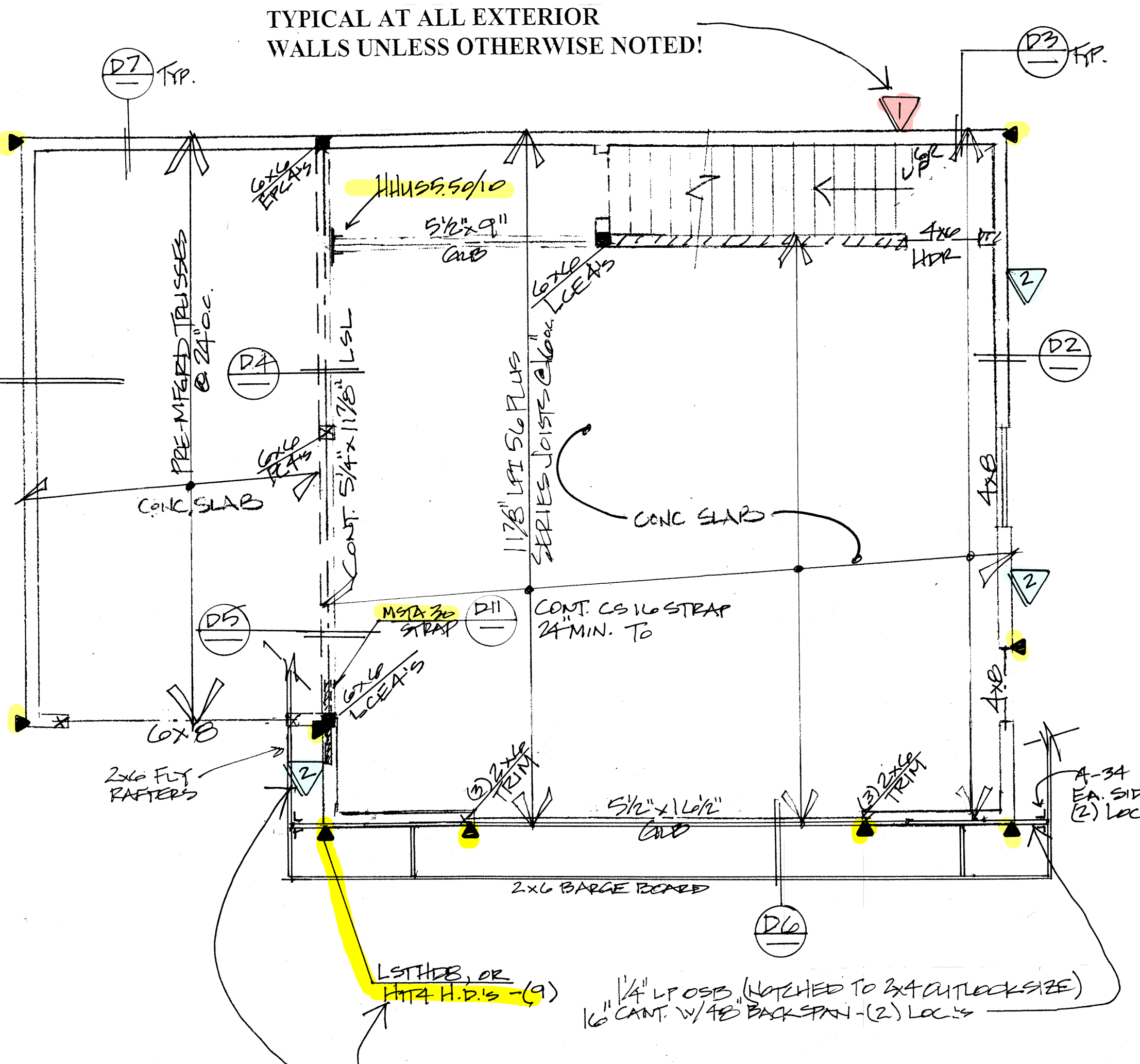
**HOLDOWN SCHEDULE**

Hold-downs shall be Simpson "Strong Tie" and shall be installed per the manufacturer's recommendation.

All double OR triple studs (ALLOWED PER HOLDOWN SCHEDULE BELOW) shall be nailed together with (2) rows 10d's staggered at 4" on center each row for each layer.

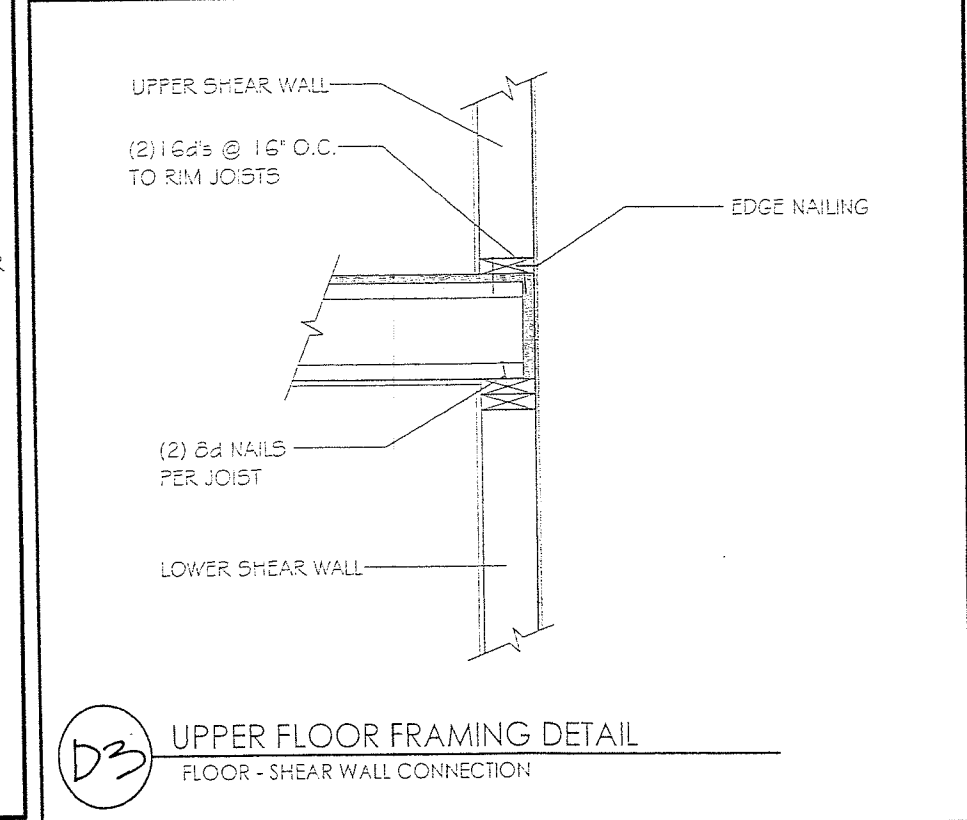
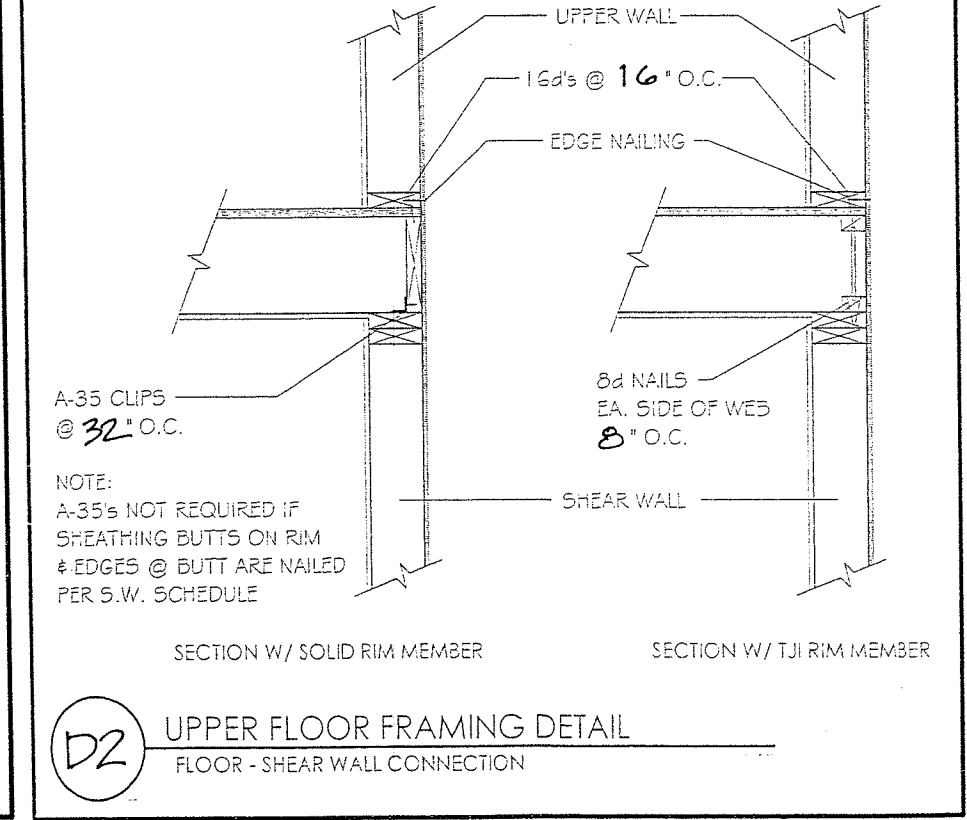
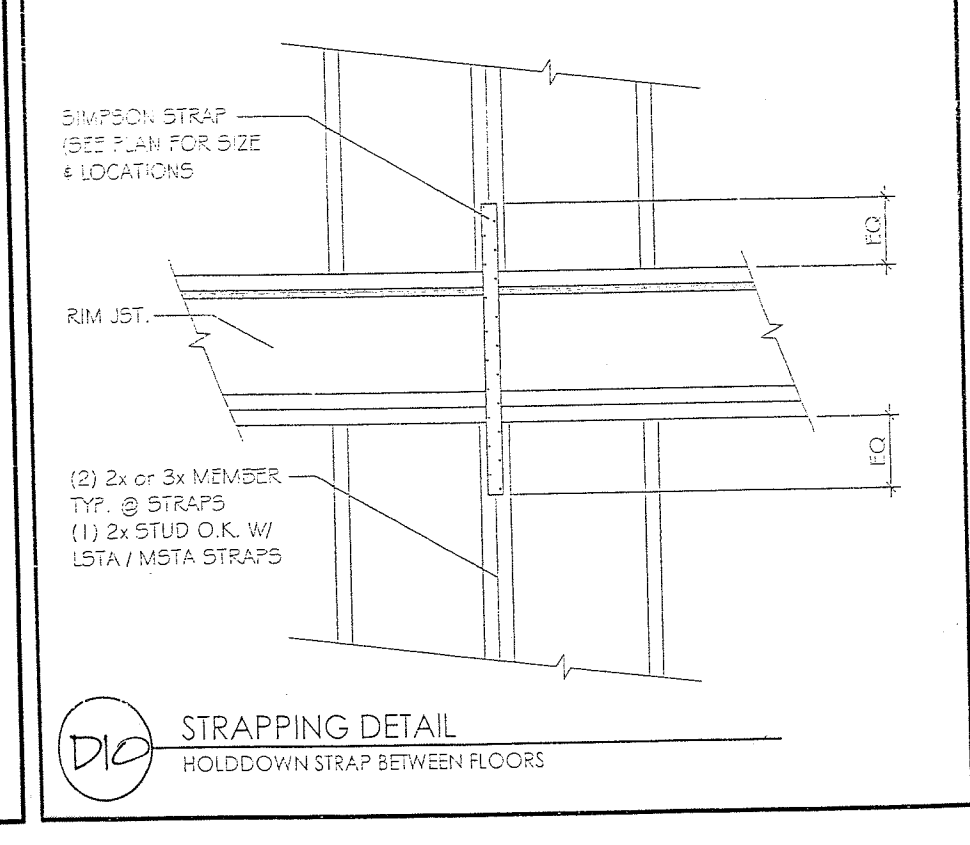
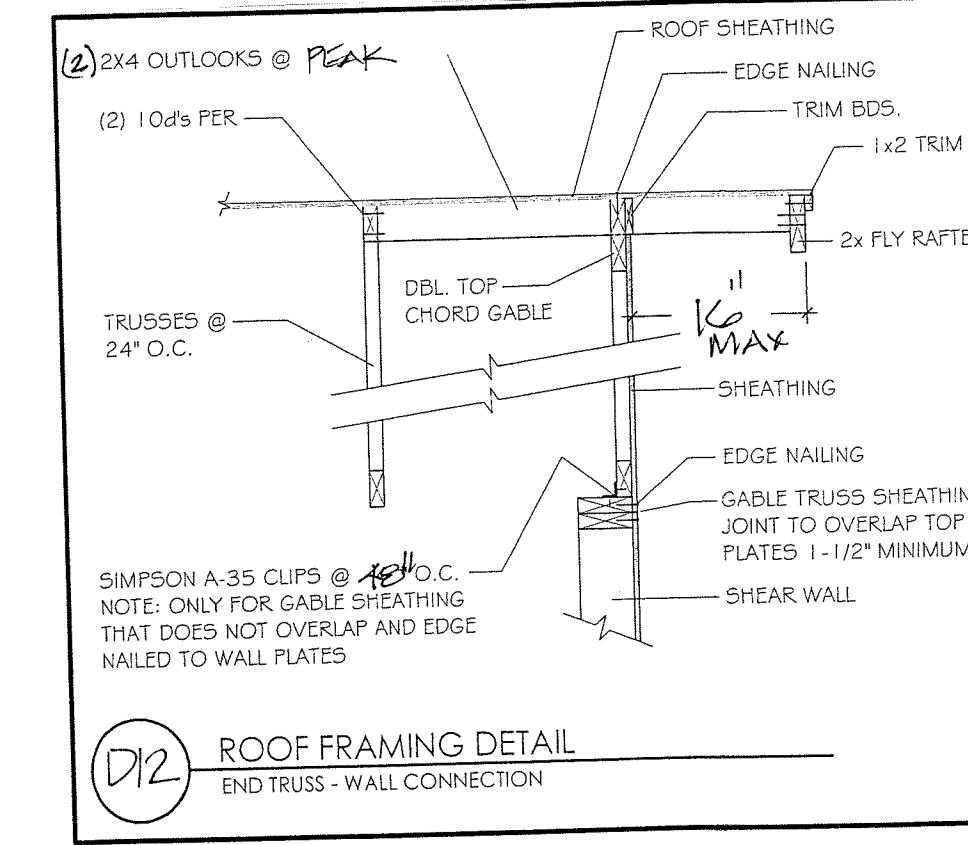
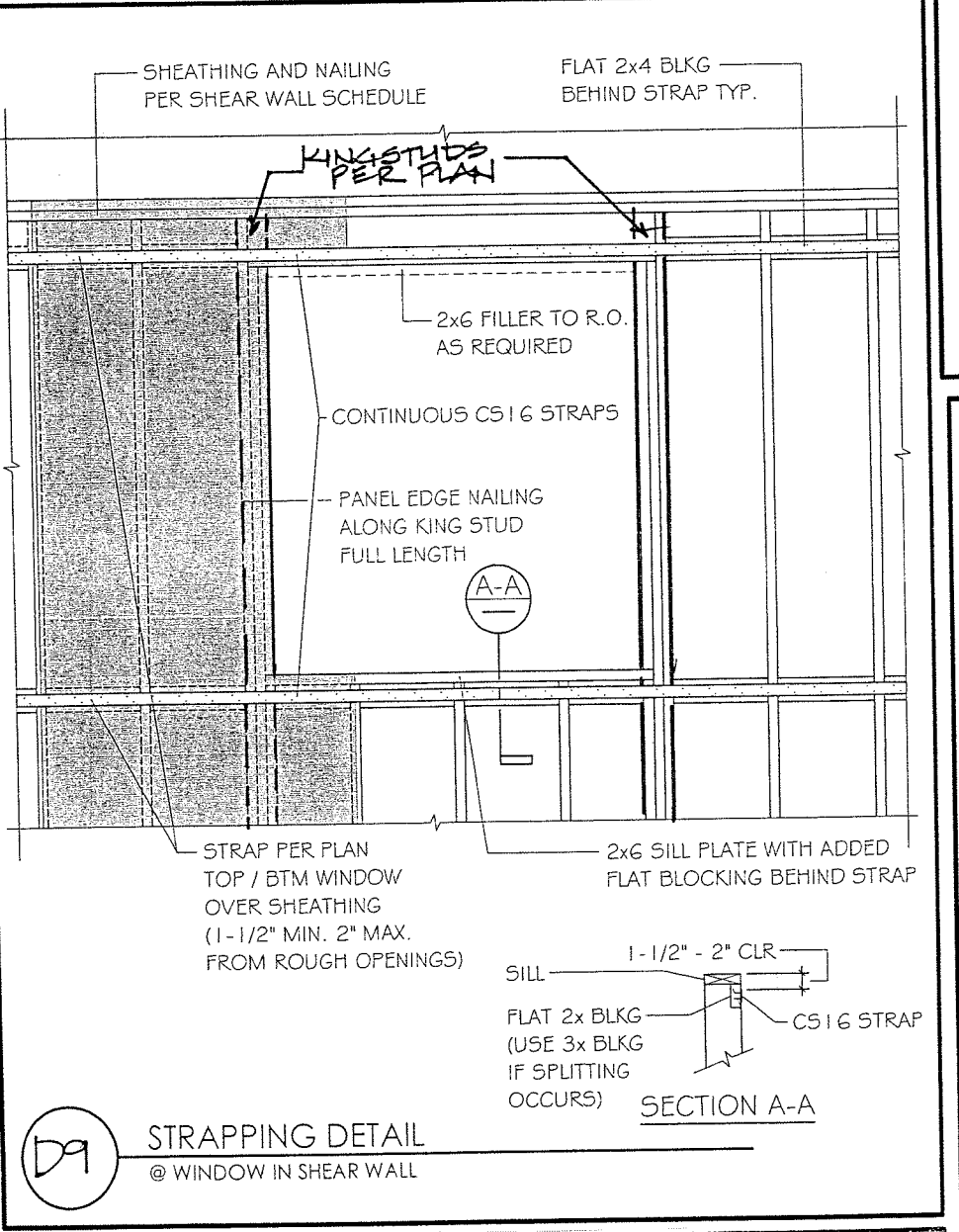
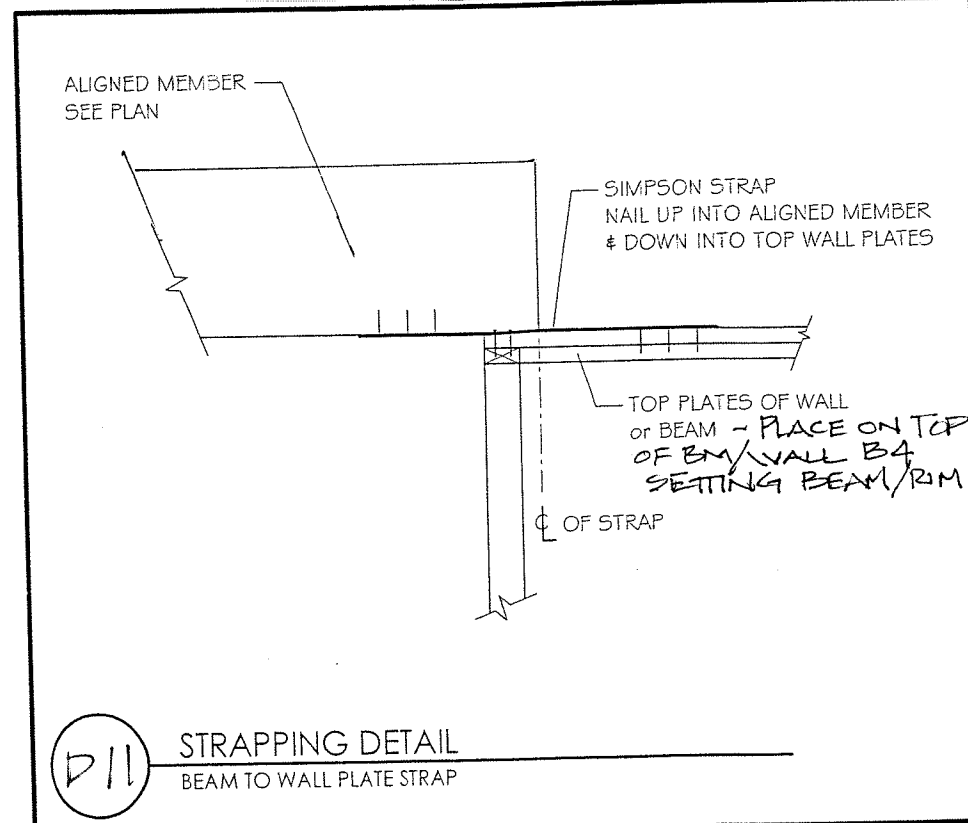
LSTHD6/LSTHD8J--embeds a minimum of 8 inches into concrete foundation and to a double 2x6 stud with (16) 16d sinker nails in wall above.

HT4 attaches to concrete foundation with a Simpson SSTA16 bolt 12" minimum into concrete. HT4 attaches to double 2x studs with (18) 16d SINKER nails in wall above.



TYPICAL SHEARWALL NAILING AND HOLDOWN CALLOUTS. SEE THIS SHEET FOR NOTES/SCHEDULES.

**LOW ROOF FRAMING PLAN  
UPPER FLOOR FRAMING PLAN  
SHEARWALL & HOLDOWN PLAN**



B-21-0712  
CITY OF PULLUP

City of Puyallup  
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SCALE: PROJECT #21-107 DRAWN BY:  
DATE: REVISED:

**STROBL GARAGE/RV**

FRAMING/SW& HD PLANS, NOTES & DETAILS DRAWING NUMBER: SHEET S2 OF 2

3/12/21