

**PROJECT INFO:**

TAX ID # - 936570-0383  
 Site Address: 4345 ISLAND CREST WAY, MERCER IS. 98040  
 Owners: May Kuo  
 Zone: R-9.6, City of Mercer Island  
 Site Area: 10,476 SF  
 House originally built: 1981

**LOT SLOPE CALCULATION**

Highest Elevation Point of Lot: 270'  
 Lowest Elevation Point of Lot: 254'  
 Elevation Difference: 16'  
 Horizontal Distance between high and low: 110'  
 LOT SLOPE: 14.5 %

**LOT COVERAGE CALCULATION**

Gross Lot Area: 10,476 SF  
 Net Lot Area: 10,476 SF  
 Allowable Lot Coverage Area: 4,190 SF  
 Allowable Lot Coverage %: 40%

Existing Roof Area: 1,379 SF  
 Existing Driveway: 1,704 SF  
 Total Existing Lot Coverage Area: 3,083 SF  
 New Roof Area: 493 SF  
 Total Project Lot Coverage: 3,576 SF  
 Proposed Lot Coverage Area: 34.1 %

**HARDSCAPE CALCULATION**

Gross Lot Area: 10,476 SF  
 Net Lot Area: 10,476 SF  
 Allowable Hardscape Area: 942 SF  
 Existing/Total Hardscape Area: 300 SF  
 Total Hardscape Area %: 2%

**GROSS FLOOR AREA (GFA) CALCULATION**

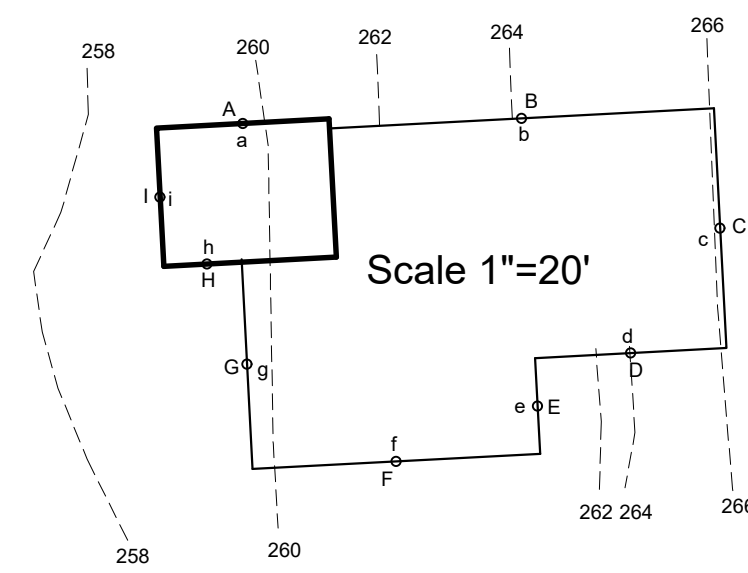
Building Area	Existing Area	New/Addition	Total
Main Floor:	1,150 SF	380 SF	1,530 SF
Gross Basement Area:	740 SF	261 SF	1,001 SF
Garage:	660 SF	0 SF	660 SF
<b>Total Building Area:</b>	<b>2,550 SF</b>	<b>641 SF</b>	<b>3,191 SF</b>

Gross Lot Area: 10,476 SF  
 ZONE: R-9.6  
 Allowable % GFA Area: 40 %  
 Proposed Gross Floor Area: 3,191 SF  
 Proposed GFA %: 30.4 %

**GRADING:**

GRADING: LESS THAN 10 C.Y.

○ EX EXISTING DOWNSPOUT LOCATION (DS) TO BE REUSED.  
 DS EX. DOWNSPOUTS ARE TIGHTLINED TO DRAIN LINE.  
 REPLACE EX. DOWNSPOUTS THAT ARE RUSTED OR DENTED.



**AVERAGE GRADE CALCS:**

Midpoint Elevation (FT)	Wall Length Segment (FT)
A = 259.5	a = 18
B = 264.1	b = 40
C = 266.0	c = 25
D = 264.0	d = 20
E = 260.3	e = 10
F = 260.1	f = 30
G = 259.8	g = 21
H = 259.6	h = 8
I = 259.4	i = 15

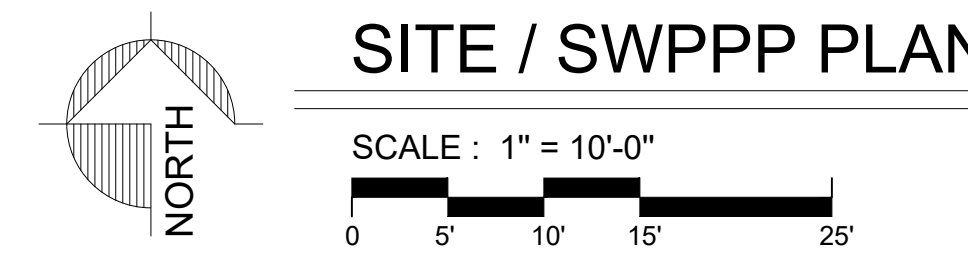
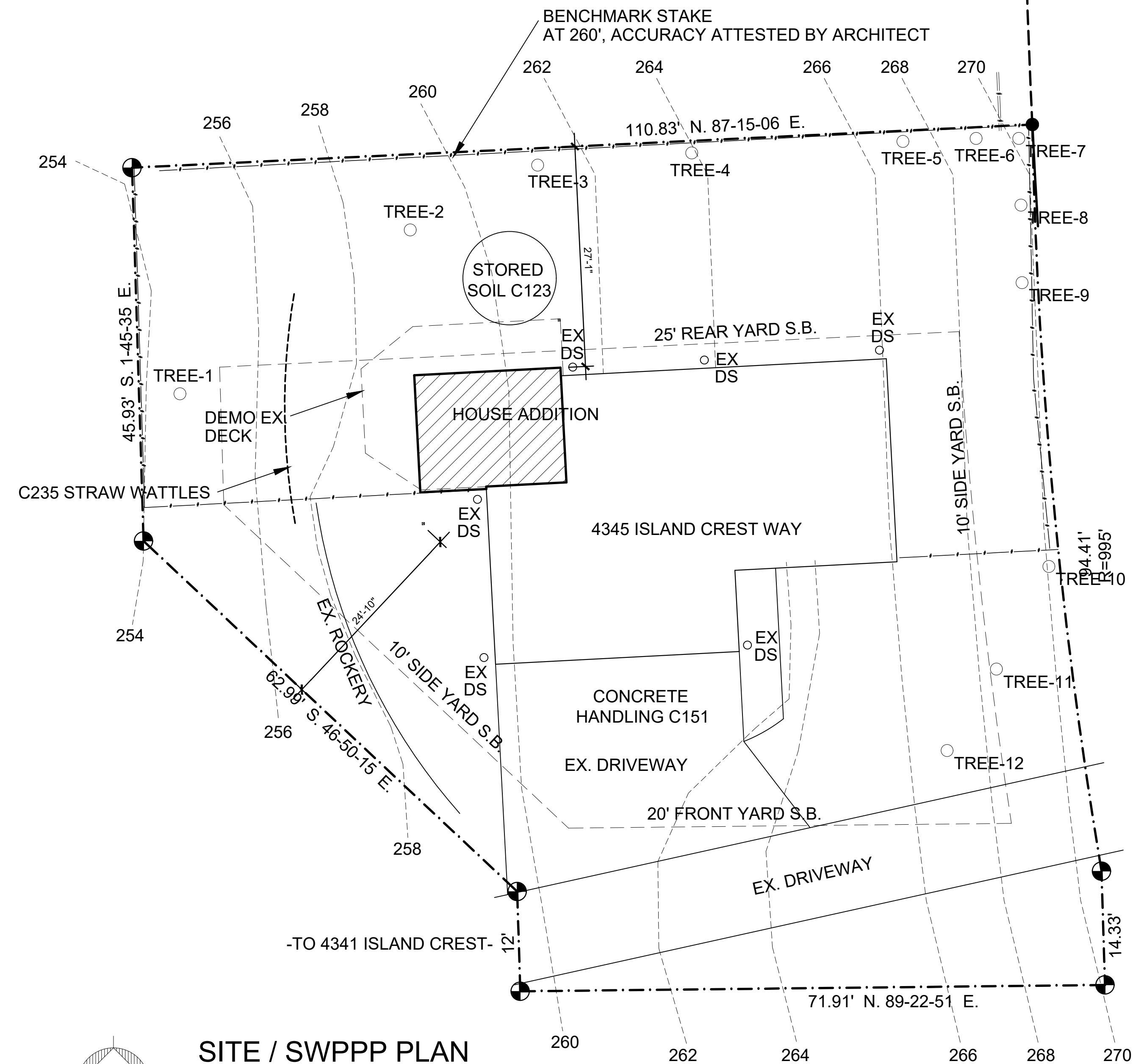
$$\frac{(259.5)(18) + (264.1)(40) + (266.0)(25) + (264.0)(20) + (260.3)(10) + (260.1)(30) + (259.8)(21) + (259.6)(8) + (259.4)(15)}{18 + 40 + 25 + 20 + 10 + 30 + 21 + 8 + 15}$$

$$\frac{49,109}{187} = 262.6' = \text{Average Building Elevation (ABE)}$$

BENCHMARK ELEVATION = 260', at stake at fence.

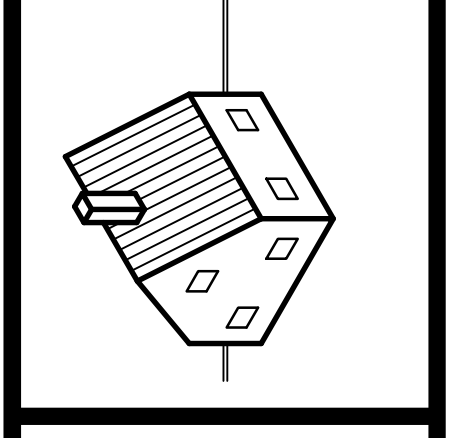
**TREE INVENTORY**

	INCHES	ACTION
1-ALDER	16	REMAIN
2-CEDAR	24	REMAIN
3-DOUG FIR	16	REMAIN
4-CEDAR	10	REMAIN
5-DOUG FIR	16	REMAIN
6-CEDAR	12	REMAIN
7-DOUG FIR	10	REMAIN
8-DOUG FIR	20	REMAIN
9-DOUG FIR	24	REMAIN
10-ALDER	12	REMAIN
11-DOUG FIR	10	REMAIN
12-DOUG FIR	18	REMAIN
<b>TOTAL INCHES:</b>	<b>177</b>	
<b>PERCENTAGE RETAINED:</b>	<b>100 %</b>	



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GENERAL NOTES

- ALL CONSTRUCTION PER APPLICABLE CODES AND ORDINANCES. 2018 INT'L RESIDENTIAL CODE (IRC), 2018 WASHINGTON STATE ENERGY CODE
- VERIFY ALL DIMENSIONS ON JOB SITE. BRING DISCREPANCIES TO THE ATTENTION OF ARCHITECT
- ALL MATERIALS, SUPPLIES AND EQUIPMENT TO BE INSTALLED AS PER MANUFACTURE'S SPECIFICATIONS AND AS PER LOCAL CODES AND REQUIREMENTS.
- PREFABRICATED FIREPLACES AND FLUES ARE TO BE U.L. APPROVED AND INSTALLED AS PER MANUFACTURE'S SPECIFICATIONS.
- SHOP DRAWINGS FOR PRE-ENGINEERED FLOOR OR ROOF TRUSSES MUST BE ONSITE AT TIME OF FRAMING AND HAVE AN ORIGINAL WASHINGTON SEAL AND SIGNATURE OF THE DESIGNER.
- SEPERATE PERMITS ARE REQUIRED FOR PLUMBING, MECHANICAL AND ELECTRICAL.
- 1/2-INCH WATER RESISTANT GWB AROUND SHOWERS, TUBS AND WHIRLPOOLS.
- PROVIDE FIRE BLOCKING AT ALL PLUMBING OPENINGS.
- HOUSE ADDRESS NUMBERS SHALL BE MINIMUM 4-INCH HIGH WITH A MIN. STROKE WIDTH OF 1/2-INCH AND BE ON A CONTRASTING BACKGROUND. IRC 319.
- ALL WOOD EXPOSED TO WEATHER SHALL BE PRESSURE TREATED OR CEDAR.
- PROTECTION FROM DECAY IS REQUIRED FOR ALL WOOD SIDING AND WALL FRAMING LESS THAN 2-INCHES ABOVE CONCRETE STEPS, PORCH SLABS, PATIO SLABS, AND SIMILAR HORIZONTAL SURFACES EXPOSED TO WEATHER.

WINDOWS AND DOORS

- VERIFY WINDOW ROUGH OPENING SIZES WITH WINDOW MANUFACTURE
- ONE WINDOW PER BEDROOM SHALL MEET EGRESS CODE.
- CAULK AND SEAL ALL WINDOW/DOOR AND EXTERIOR ENVELOPE PENETRATIONS.
- S.G. = SAFETY GLASS.
- SKYLIGHT GLAZING PER 2018 IBC.

FLASHING NOTES

APPROVED CORROSION-RESISTANT FLASHING SHALL BE APPLIED SHINGLE FASHION IN SUCH A MANNER TO PREVENT ENTRY OF WATER INTO THE WALL CAVITY OR PENETRATION OF WATER INTO THE BUILDING STRUCTURAL FRAMING COMPONENTS. THE FLASHING SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH. APPROVED CORROSION RESISTANT FLASHING SHALL BE INSTALLED AT THE FOLLOWING LOCATIONS:

- EXTERIOR WINDOW AND DOOR OPENINGS. FLASHING AT EXTERIOR WINDOW AND DOOR OPENINGS SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL FINISH OR TO THE WATER RESISTIVE BARRIER FOR SUBSEQUENT DRAINAGE.
- AT THE INTERSECTION OF CHIMNEYS OR OTHER MASONRY CONSTRUCTION WITH FRAME OR STUCCO WALLS
- UNDER AND AT THE ENDS OF MASONRY, WOOD, OR METAL COPINGS AND SILLS.
- CONTINUOUSLY ABOVE ALL PROJECTING WOOD TRIM.
- WHERE EXTERIOR PORCHES, DECKS, OR STAIRS ATTACHED TO A WALL OR FLOOR ASSEMBLY OF WOOD FRAME CONSTRUCTION.
- AT WALL AND ROOF INTERSECTIONS
- AT BUILT IN GUTTER.

HANDRAIL NOTES

- HANDRAILS ARE REQUIRED ON ONE SIDE OF EACH CONTINUOUS RUN OF TREADS OR FLIGHT WITH 4 OR MORE RISERS PER IRC R311.7.7.
- HANDRAILS MUST BE LOCATED 34-38" ABOVE THE SLOPED PLANE ADJOINING THE TREAD NOSING PER IRC R311.7.7.1
- HANDRAIL ENDS MUST BE RETURNED OR SHALL TERMINATE IN NEWEL POSTS OR SAFETY TERMINALS AND HAVE A SPACE OF NOT LESS THAN 1-1/2" BETWEEN THE WALL AND THE HANDRAILS PER IRC R311.7.7.2
- HANDRAILS MUST MEET THE GRIP DIMENSIONS OF AT LEAST 1-1/4" AND NOT GREATER THAN 2" IN DIAMETER

2018 WASHINGTON STATE ENERGY CODE  
 PRESCRIPTIVE COMPLIANCE: ZONE 4 MARINE R402.1.1

% Floor Area	Openings U-Values		Ceiling Insulation		Walls		Below Grade Walls		Floors	Slab on Grade
	Vertical	Overhead	attic	vaulted	Above Grade	Interior	exterior	interior		
Unlimited	0.22	0.50	R-49	R-38 R-49	R-21 + R-12 ci	R-10 thermal break	R-10	R-10	R-38	R-10

ENERGY CREDIT OPTIONS - 3.0 CREDITS REQUIRED

OPTION 1.5 - Efficient Building Envelope 2.0 POINTS

- Vertical fenestration U = .22
- Ceiling and single-rafter or joist-vaulted R-49 advanced
- Wood frame wall R-21 interior plus R-12 ci
- Floor R-38

OPTION 5.3 - Efficient Water Heating 1.0 POINTS

- Energy Star rated gas or propane water heater with a minimum UEF of 0.91.

SMOKE DETECTORS <sup>SD</sup>

A SMOKE DETECTOR SHALL BE INSTALLED IN EACH HABITABLE ROOM. A SMOKE DETECTOR SHALL BE CENTRALLY LOCATED ON EACH FLOOR. AN ADDITIONAL SMOKE DETECTOR SHALL BE INSTALLED IN EACH LOCATION WHERE THERE IS A CEILING HEIGHT CHANGE GREATER THAN 24". SMOKE DETECTORS TO BE 110v HARDWIRED, INTERCONNECTED WITH BATTERY BACKUP PER SRC R314.

CARBON MONOXIDE DETECTORS <sup>CO</sup>

FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED IN DWELLING UNITS AND IN SLEEPING UNITS WITHIN WHICH FUEL-BURNING APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGES PER SRC 315.

VENTILATION SCHEDULE

- 1 100 CFM ON SWITCH
- 2 50 CFM ON SWITCH
- 3 WHOLE HOUSE FAN PER IRC M1507.3.3 : MIN. 210 CFM EXHAUST FAN ON 24 HOUR TIMER THAT RUNS FAN 2 HOURS IN EVERY 4 HOUR SEGMENT OF THE DAY. NOTE THAT WHOLE HOUSE FAN SERVES WHOLE HOUSE.

MECHANICAL VENTILATING SYSTEMS IN BATHROOMS, LAUNDRY ROOMS AND SIMILAR ROOMS SHOULD EXHAUST DIRECTLY TO THE OUTSIDE. THE POINT OF DISCHARGE OF EXHAUST AIR SHALL BE AT LEAST 3 FEET FROM ANY OPENING INTO THE BUILDING.

SHEET INDEX

- A1 BASEMENT FLOOR PLAN, GENERAL NOTES
- A2 FIRST FLOOR PLAN
- A3 FOUNDATION PLAN
- A4 ROOF PLAN
- A5 EXTERIOR ELEVATIONS
- A6 BUILDING SECTION, TYP WALL SECTION
- S1 STRUCTURAL NOTES
- S2 STRUCTURAL DETAILS
- S3 STRUCTURAL DETAILS
- S4 STRUCTURAL DETAILS
- S5 STRUCTURAL DETAILS

PROJECT NARRATIVE

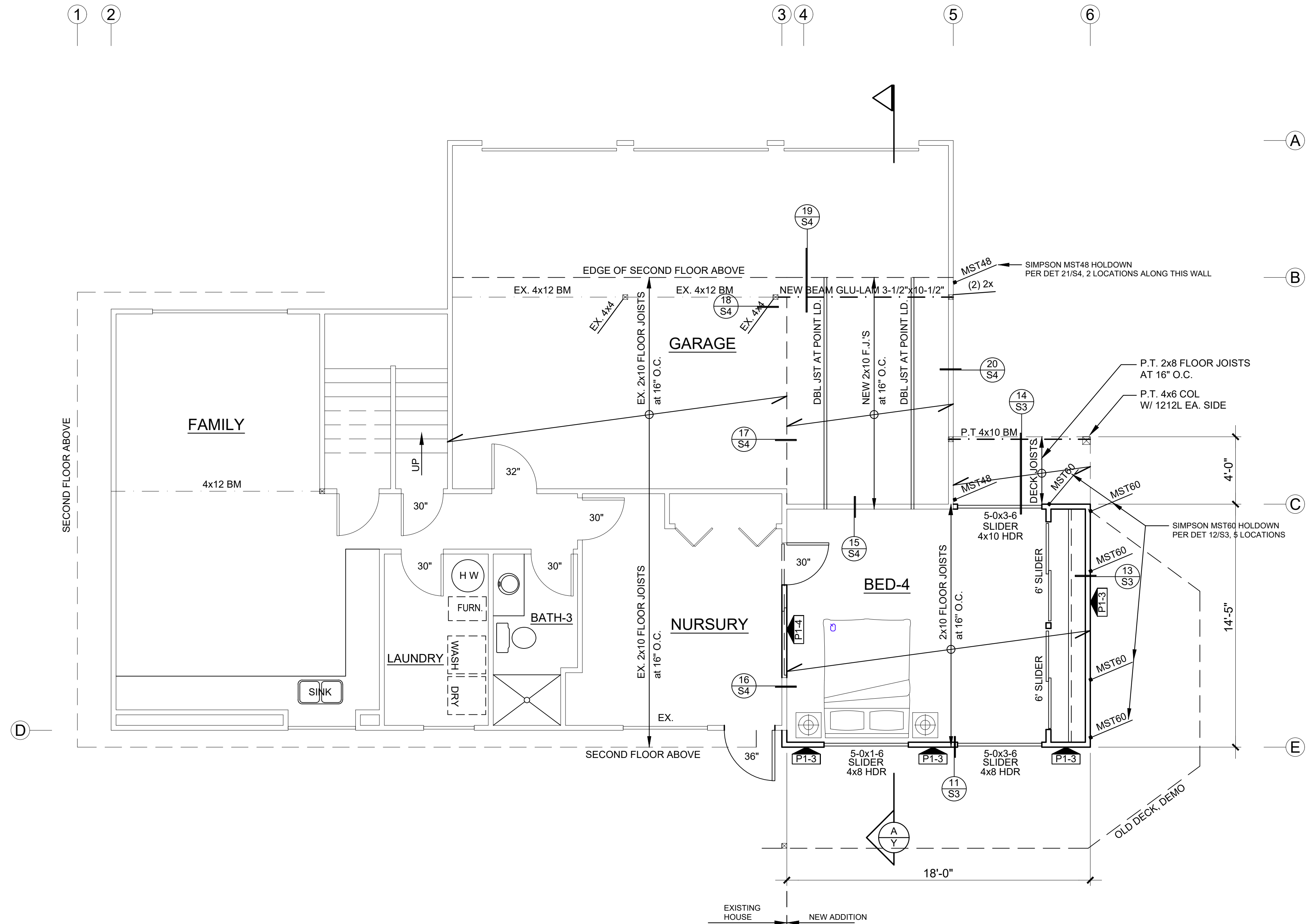
- BEDROOM ADDITION AT BASEMENT LEVEL.
- ENLARGE BED-1 ON FIRST FLOOR.
- ENLARGE BED-4 ON FIRST FLOOR.
- DEMO EXISTING EXTERIOR DECK.

DEMOLITION NOTE:

THIS DRAWING DOES NOT CLAIM TO INDICATE ALL OF THE DEMOLITION THAT WILL BE REQUIRED, BUT IS INTENDED TO ASSIST THE CONTRACTOR IN DETERMINING THE EXTENT OF WORK INVOLVED.

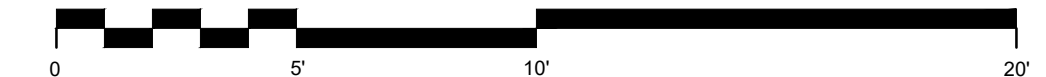
AREAS OF WORK

BASEMENT ADDITION: 261 S.F.  
 FIRST FLOOR ADDITION: 380 S.F.  
 DECK ADDITION: 32 S.F.



BASEMENT FLOOR PLAN

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

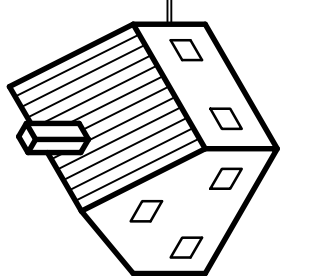


WALL SCHEDULE

- THICK BLACK: NEW WALL
- THIN: EXISTING WALL
- DASHED: DEMOLITION

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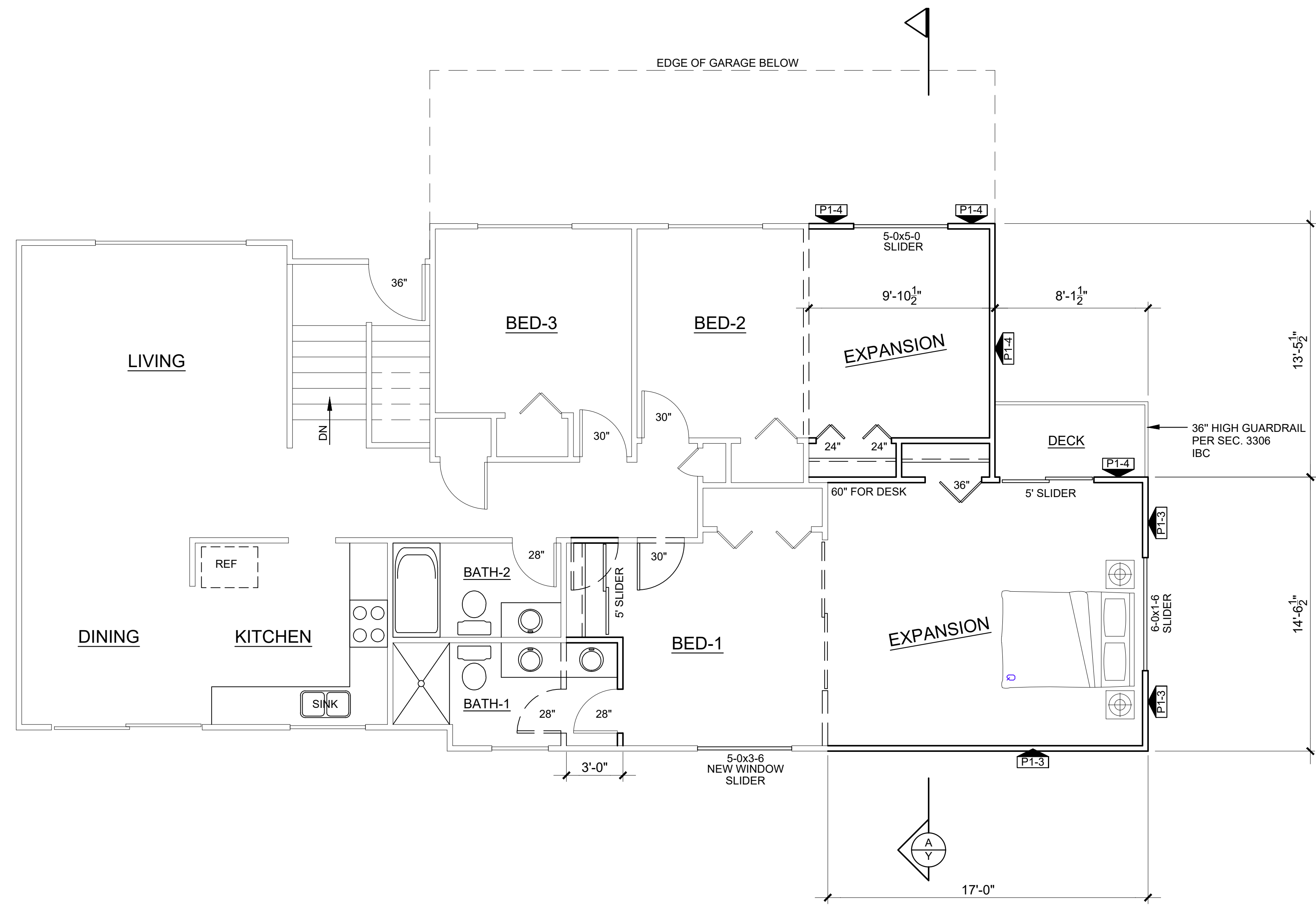
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**FIRST FLOOR PLAN**

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



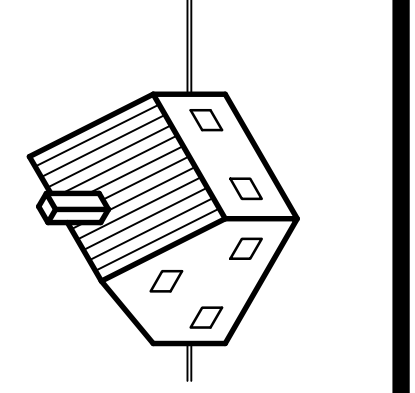
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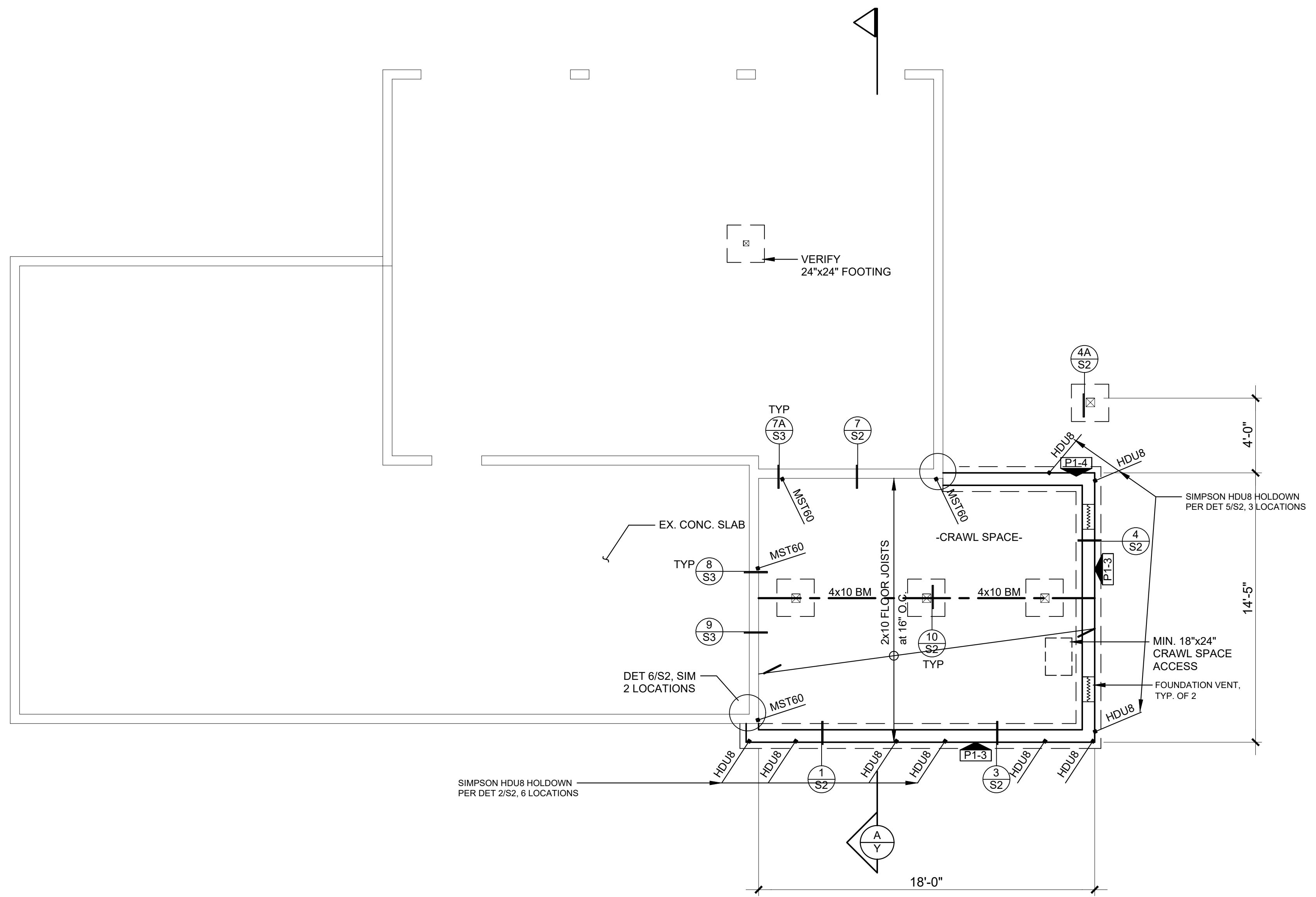


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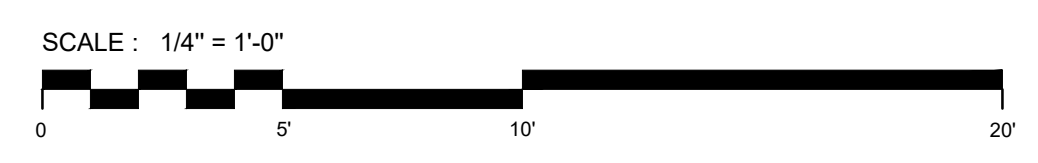
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**FOUNDATION VENT CALCS:**  
 CRAWL SPACE: 261 S.F.  
 NEED 1 S.F. OF VENT PER 1500 S.F. OF CRAWL SPACE  
 USING CLASS 1 VAPOR RETARDER  
 REQUIRED: 1 S.F. OF VENTING, EVENLY DISTRIBUTED  
 (1) 8x16 FOUNDATION VENT = .68 S.F.  
 REQUIRED: (2) 8x16 FOUNDATION VENTS, EVENLY DISTRIBUTED

**FOUNDATION PLAN**



**WALL SCHEDULE**

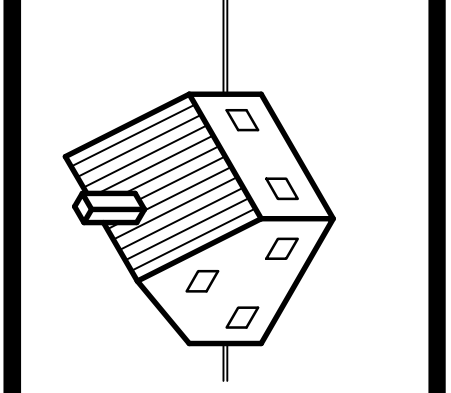
- THICK BLACK: NEW WALL
- THIN: EXISTING WALL
- DASHED: DEMOLITION

**NEW MUD SILL:**  
 P.T. 3x6 W/ 3/4" DIA BY 12" LONG  
 ANCHOR BOLTS AT 24" O.C. (12" O.C. AT GRID 6)  
 W/ GALV. 3x3x1/4" PLATE WASHERS

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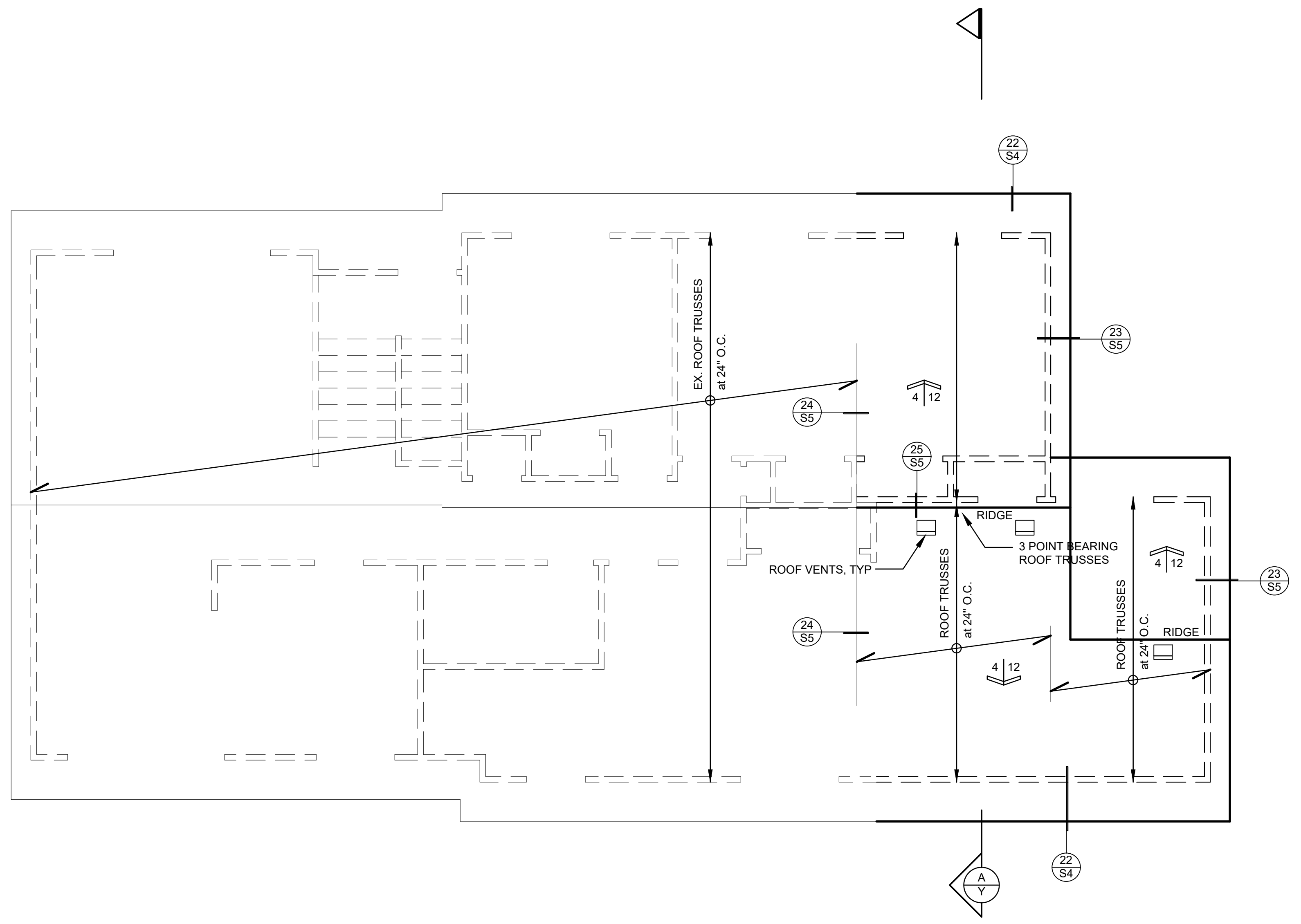


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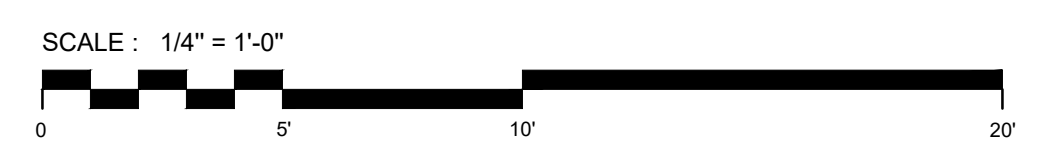
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**ROOF PLAN**



**WALL SCHEDULE**

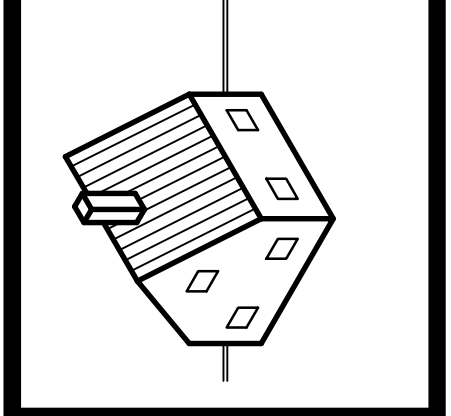
- == THICK BLACK: NEW WALL
- == THIN: EXISTING WALL

ATTIC VENTILATION CALCS	
RV51 W/8" DIA. = .35 SQ. FT. VENT AT 80% EFF.	
(3) 2" DIA. HOLES = .065 SQ. FT. AT 80% EFF. = .052 S.F.	
CLG. AREA = 394 SF	= 1.31 S.F. VENTING REQ'D
1.31 SQ. FT. REQ'D/2 = .65 AT EAVE'S & ABOVE 36" (IF 300 USED)	
.65/.35 = 2 OF ROOF JACKS REQ'D	
.65/.052 = 13 OF VENTED BLOCKS REQ'D	
VENTING REQ'D = 1.31 S.F.	
VENTING PROVIDED = 1.35 S.F.	

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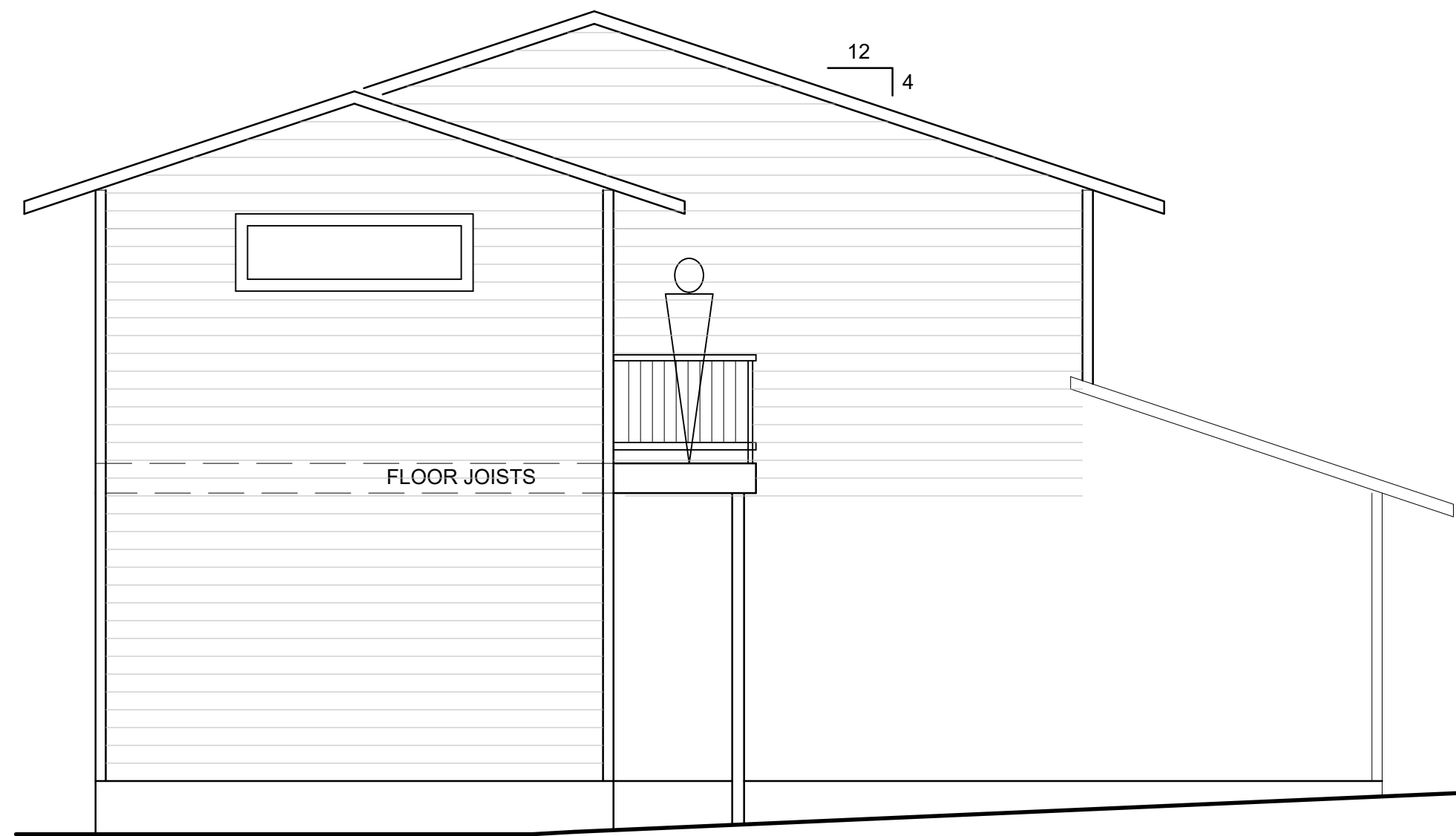
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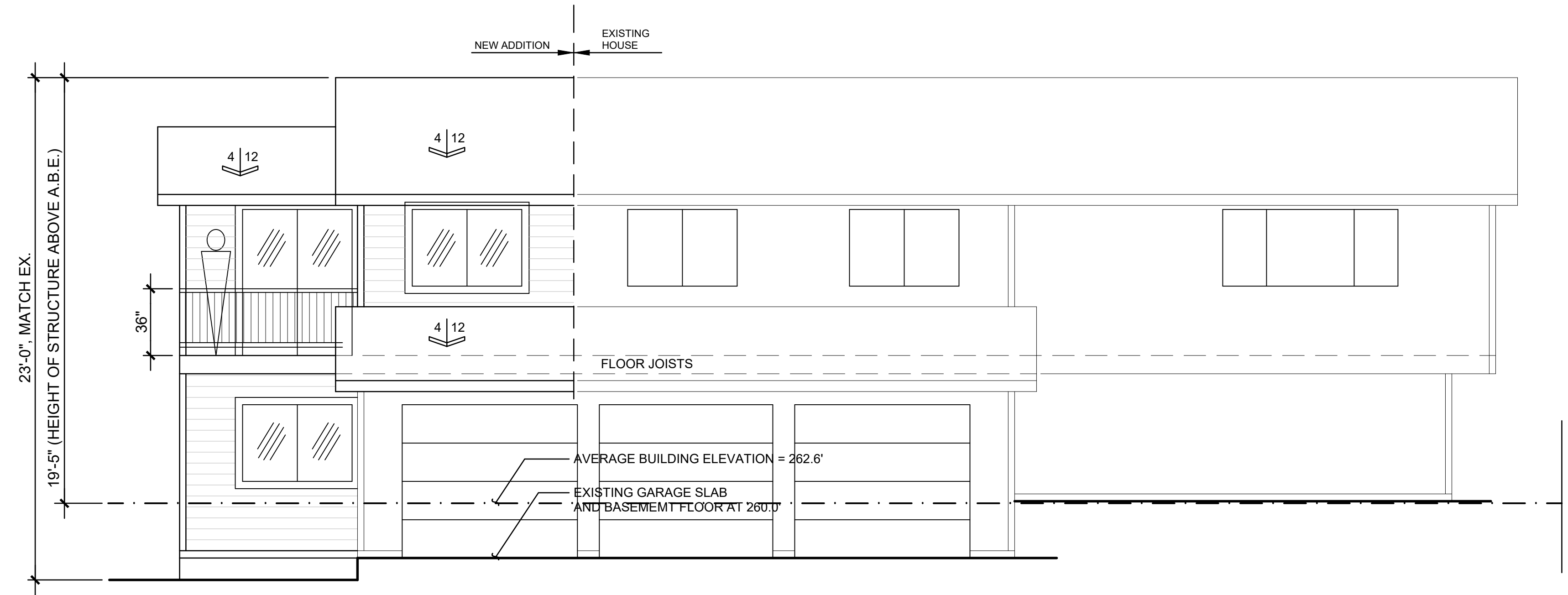
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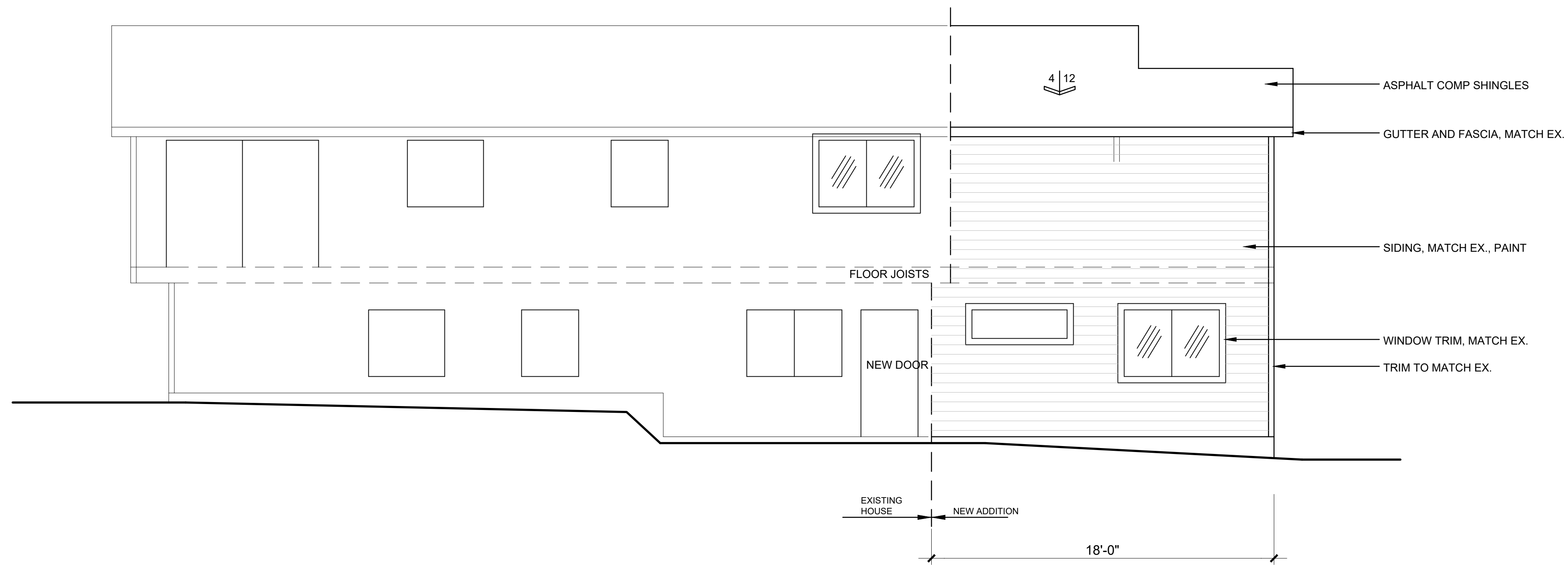
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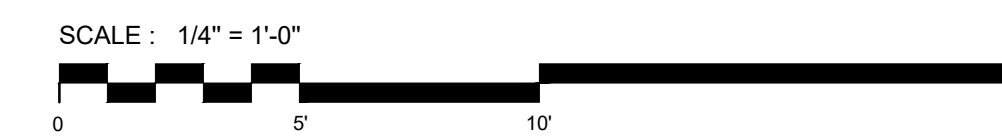
WEST ELEVATION



SOUTH ELEVATION



NORTH ELEVATION



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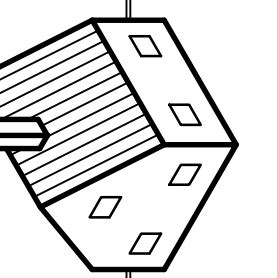
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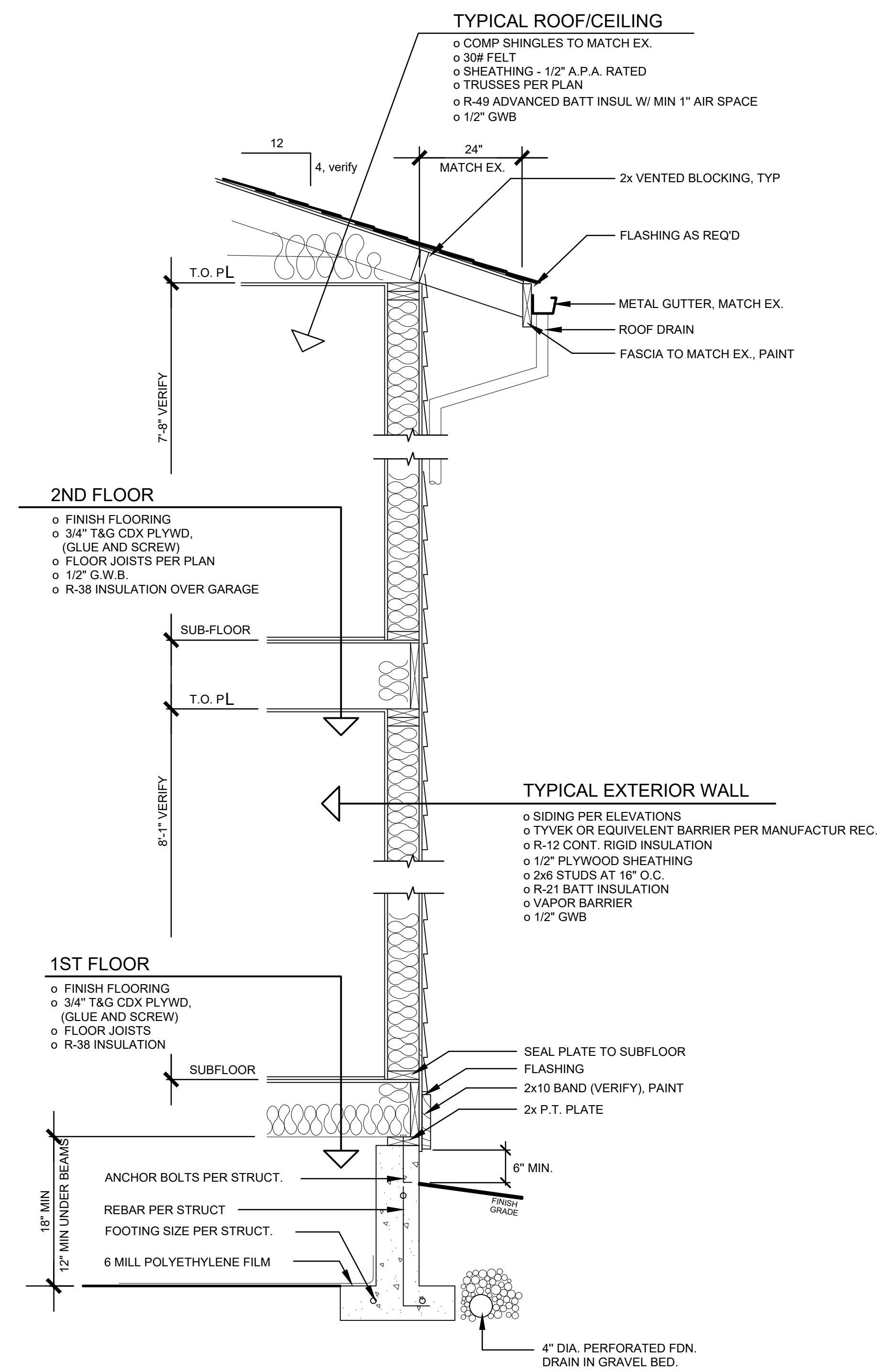


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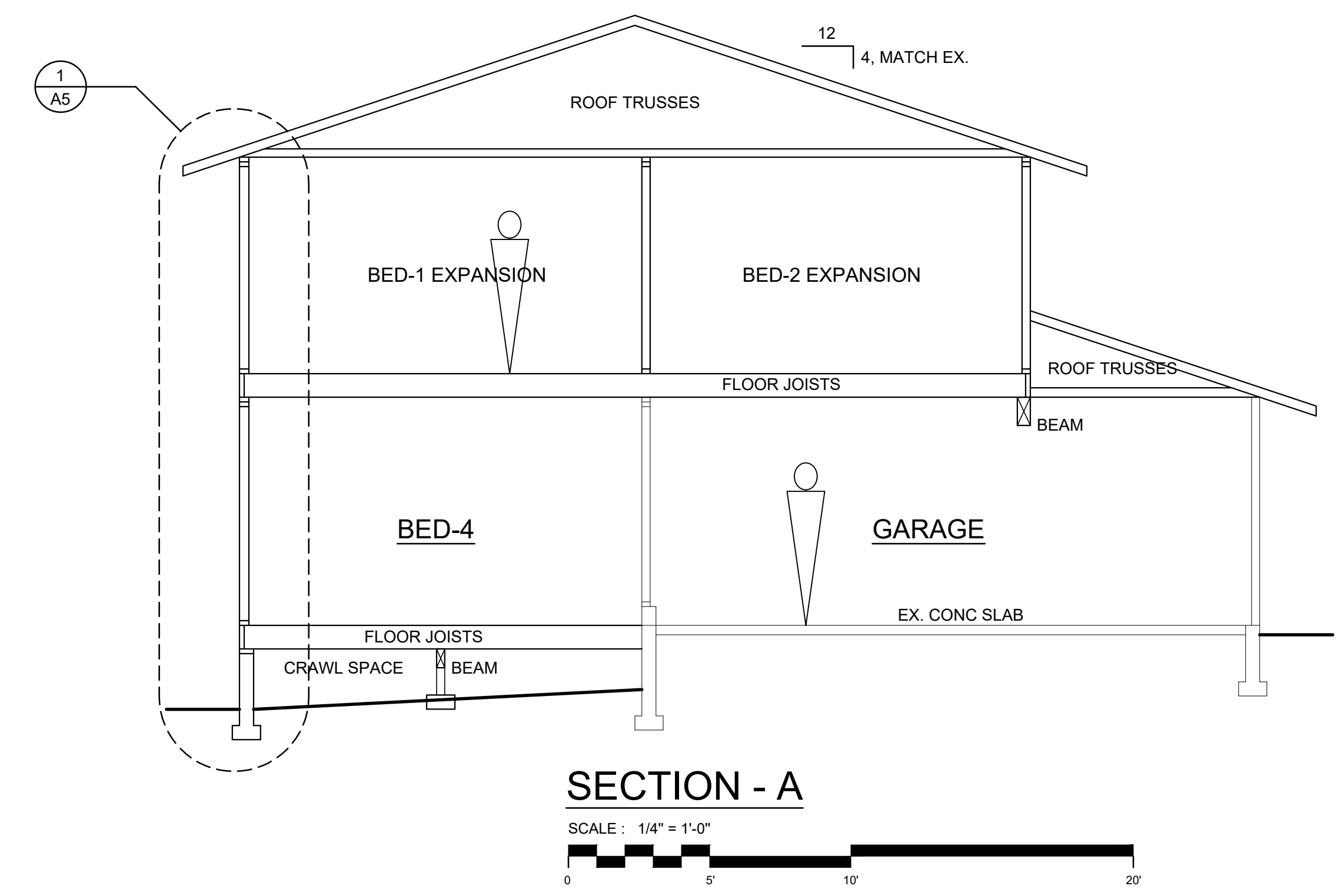
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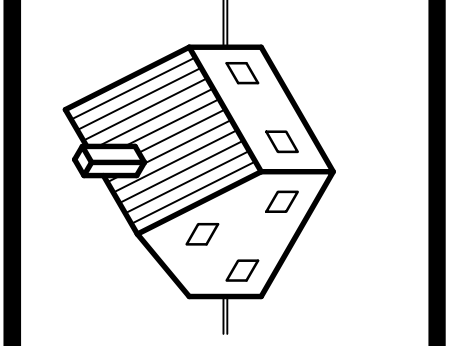
1 WALL SECTION - TYPICAL  
SCALE : 3/4" = 1'-0"



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**STRUCTURAL NOTES**

**CODE:**  
DESIGN IS IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE (I.B.C.) AS AMENDED BY THE LOCAL BUILDING DEPARTMENT.

**LIVE LOADS:**  
ROOF-----25PSF  
FLOOR-----40PSF  
DECK-----60PSF

**LATERAL**  
WIND-----EXPOSURE C, 85MPH/110MPH(ULT)/ WIND PER ASCE 7-18, SECTION 28.5.3  
SEISMIC-----SITE CLASS D, SEISMIC PER ASCE 7-18, SIMPLIFIED LATERAL FORCE SYSTEM, SECTION 12.14.8.1

**FOUNDATIONS:**  
EXTEND FOOTINGS TO FIRM UNDISTURBED SOIL, BEARING CAPACITY OF 2000PSF. ALL EXTERIOR FOOTINGS SHALL EXTEND A MINIMUM OF 1'-6" BELOW ADJACENT EXTERIOR GRADE. FOUNDATION DESIGN IS IN ACCORDANCE WITH THE GEOTECHNICAL REPORT PREPARED BY MARK DODDS DATED FEBRUARY 25, 2021

**CAST-IN-PLACE CONCRETE:**  
F<sub>c</sub>=3000 PSI @ 28 DAYS. MINIMUM 5-1/2 SACKS OF CEMENT PER CUBIC YARD OF CONCRETE AND MAXIMUM OF 6-3/4 GALLONS OF WATER PER 94# SACK OF CEMENT. NO SPECIAL INSPECTION REQUIRED. CONCRETE SHALL COMPLY WITH ACI 318-14 SECTION 26.4.2.1. MAXIMUM SLUMP IS 4 INCHES. ALL PHASES OF WORK PERTAINING TO THE CONCRETE CONSTRUCTION SHALL CONFORM TO BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE. ALL REINFORCING STEEL, DOWELS, ANCHOR BOLTS, AND OTHER INSERTS SHALL BE SECURED IN POSITION PRIOR TO POURING CONCRETE. ANCHOR BOLTS FOR PRESSURE TREATED SILL PLATES TO FOUNDATION WALLS TO BE 5/8 INCH DIAMETER WITH 7 INCH MINIMUM EMBEDMENT INTO CONCRETE AND MAXIMUM SPACING OF 2 FEET ON CENTER. MINIMUM 2 BOLTS PER SILL PLATE PIECE. ONE BOLT TO BE PLACED WITHIN 6 INCHES OF EACH END OF THE SILL PLATE. DIPPED GALVANIZED CONNECTORS SHALL CONFORM TO ASTM STANDARD 153 AND HOT DIPPED GALVANIZED CONNECTORS SHALL CONFORM TO ASTM A653M CLASS G-185. STAINLESS STEEL FASTENERS AND CONNECTORS SHALL BE TYPE 304 OR 316. SIMPSON PRODUCT FINISHES CORRESPONDING TO THESE REQUIREMENTS ARE ZMAX (HOT DIPPED GALVANIZED) AND SST 300 (STAINLESS STEEL). FASTNERS FOR PRESSURE TREATED AND FIRE-RETARDANT TREATED WOOD SHALL BE ZMAX HOT DIPPED GALVANIZED (G185).

**REINFORCING STEEL:**  
ALL REINFORCING STEEL SHALL BE PLACED IN CONFORMANCE WITH THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE AND THE MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION BY CRSI. DEFORMED REINFORCING STEEL BARS SHALL CONFORM TO ASTM A-615 GRADE 40 FOR #5 AND SMALLER REINFORCEMENT AND GRADE 60 FOR #6 AND LARGER. ALL REINFORCING BAR BENDS SHALL BE MADE COLD WITH A MINIMUM RADIUS OF 6 BAR DIAMETERS (1'-7" MINIMUM). CORNER BARS (2'-0" BEND) SHALL BE PROVIDED FOR ALL HORIZONTAL REINFORCEMENT. LAP ALL BARS A MINIMUM OF 48 BAR DIAMETERS UNLESS NOTED OTHERWISE. UNLESS NOTE OTHERWISE ON THE DRAWINGS REINFORCING STEEL SHALL HAVE THE FOLLOWING MINIMUM COVER:

CONCRETE CAST AGAINST EARTH 3 INCHES  
CONCRETE EXPOSED TO EARTH OR WEATHER:  
#6 THROUGH #18 BARS 2 INCHES  
#5 BAR AND SMALLER 1-1/2 INCHES

**STRUCTURAL TIMBER:**  
ALL LUMBER SHALL CONFORM TO WPPA GRADING RULES FOR WESTERN LUMBER, LATEST EDITION. PROVIDE CUT WASHERS UNDER ALL NUTS AND BOLTS BEARING AGAINST WOOD. ALL WOOD IN CONTACT WITH CONCRETE SHALL BE PRESSURE TREATED IN ACCORDANCE WITH AWPA U1 AND M4 STANDARDS. ALL STRUCTURAL LUMBER SHALL BE AS NOTED BELOW:

2X FLOOR/DECK JOIST HEM-FIR#2-----Fb=850 PSI  
4X BEAMS DOUG-FIR/LARCH #2----Fb=850PSI  
6X BEAMS DOUG-FIR/LARCH #2----Fb=850PSI  
LUMBER NOT NOTED HEM-FIR #2-----Fb=850 PSI

**MISCELLANEOUS HANGERS TO BE SIMPSON OR APPROVED EQUAL.** ALL HANGERS SHALL BE FASTENED TO WOOD WITH PROPER NAILS. ALL HOLES SHALL BE NAILED. MACHINE BOLTS TO BE A-307. ANCHOR BOLTS INTO CONCRETE SHALL BE 5/8 INCH DIAMETER WITH 7 INCHES OF EMBEDMENT INTO CONCRETE UNLESS NOTED OTHERWISE ON THE PLANS. ALL NAILS SHALL BE COMMON WIRE NAILS. NAILING SHALL BE IN ACCORDANCE WITH THE CURRENT I.B.C. SCHEDULE.

**FLOOR SHEATHING:**  
SHEATHING SHALL BE 3/4 INCH TONGUE AND GROOVE A.P.A. RATED SHEATHING. SPAN RATING 48/24 WITH LONG DIMENSION PERPENDICULAR TO SUPPORTS. UNLESS NOTED OTHERWISE NAIL WITH 8d COMMON NAILS AT 6 INCHES ON CENTER AT SUPPORTED PANEL EDGES AND 10 INCHES ON CENTER AT INTERMEDIATE SUPPORTS. THE FLOOR SHEATHING SHALL BE GLUED TO THE JOIST AND THE TONGUE AND GROOVE JOINTS WITH AN APPROVED ADHESIVE.

**WALL SHEATHING:**  
SHEATHING SHALL BE 7/16 INCH A.P.A. RATED SHEATHING, SPAN RATING 24/0. PANEL END JOINTS SHALL OCCUR AT SUPPORTS. NAIL PANEL EDGES WITH 10d NAILS AT 6 INCHES ON CENTER AND 10 INCHES ON CENTER AT INTERMEDIATE SUPPORTS UNLESS NOTED OTHERWISE ON THE DRAWINGS.

**GLU-LAMINATED TIMBER:**  
LAMINATED TIMBER SHALL BE DOUGLAS-FIR/LARCH KILM DRYED. STRESS GRADE COMBINATION OF 24F-V4 FOR SIMPLE SPANS AND 24F-V8 FOR CANTILEVER AND CONTINUOUS BEAMS.

**ROOF SHEATHING:**  
SHEATHING SHALL BE 7/16 INCH A.P.A. RATED SHEATHING. SPAN RATING 32/16, INSTALLED WITH LONG DIMENSION ACROSS SUPPORT. PANEL END JOINTS SHALL OCCUR AT SUPPORTS. NAIL PANEL EDGES WITH 8d NAILS SPACED AT 4 INCHES ON CENTER AND 10 INCHES ON CENTER AT INTERMEDIATE SUPPORTS.

**FLOOR FRAMING:**  
PROVIDE FULL DEPTH BLOCKING FOR JOIST AT THE SUPPORTS. FLUSH BEAMS (FB) AND HEADERS NOT CALLED OUT ON THE PLANS SHALL BE (2)2X8. ALL VERTICALLY LAMINATED COLUMNS AND HEADERS SHALL BE SPIKED TOGETHER WITH 12d NAILS SPACED AT 12 INCHES ON CENTER.

**BEARING WALL FRAMING:**  
ALL DOOR AND WINDOW HEADERS NOT CALLED OUT ON THE PLANS SHALL BE (2) 2X8 HEM-FIR#2 WITH ONE CRIPPLE AND ONE STUD AT EACH END FOR OPENINGS 4 FEET WIDE OR LESS. ALL COLUMNS NOT CALLED OUT ON THE PLANS SHALL BE (2) STUDS SPIKED TOGETHER WITH 12d NAILS AT 12 INCHES ON CENTER. PROVIDE 2 LAYERS OF BUILDING PAPER BETWEEN WOOD AND CONCRETE. WALLS SHALL HAVE A SINGLE BOTTOM PLATE AND DOUBLE TOP PLATE. END NAIL TOP PLATES AND BOTTOM PLATES TO EACH STUD WITH 2-16d NAILS. FACE NAIL DOUBLE TOP PLATE WITH 10d NAILS AT 10 INCHES ON CENTER. LAP AND FACE NAIL PLATES WITH 2-10d NAILS AT EACH SPLICE, CORNER INTERSECTION. STAGGER SPLICES A MINIMUM OF 48 INCHES.

**ROOF TRUSSES:**  
TRUSSES SHALL BE PLANT FABRICATED DOUGLAS-FIR/LARCH OR HEM-FIR. TRUSS MANUFACTURER SHALL SUBMIT SHOP DRAWING AND CALCULATIONS STAMPED, SIGNED AND DATED BY A WASHINGTON STATE LICENSED STRUCTURAL ENGINEER. SUBMIT TRUSS DRAWING TO THE ENGINEER OF RECORD AND BUILDING DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. ROOF TRUSSES SHALL BE DESIGNED AS ATTIC TRUSSES WITHOUT STORAGE. MANUFACTURERS INSTALLATION INSTRUCTIONS SHALL BE AVAILABLE ON THE JOB SITE AT THE TIME OF INSPECTION, FOR THE INSPECTORS USE AND REFERENCE.

**SHEAR WALL SCHEDULE**

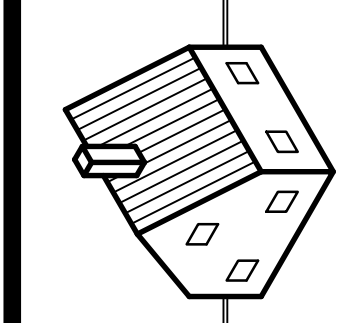
Shear Wall Designation	Nail Size	Nail Spacing				Blocking Req'd.	ALLOWABLE SHEAR Hem-Fir #2 #/Ft
		Edges	Studs	Top/Btm. Plate			
P1-6	8d	6"	12"	6"	Yes	210	
P1-4	8d	4"	12"	4"	Yes	310	
P1-3	8d	3"	12"	3"	Yes	400	
P1-2	8d	2"	12"	2"	Yes	525	
P2-3	8d	3"	12"	3"	Yes	800	
P2-2	8d	2"	12"	2"	Yes	1050	

Shear Wall Notes:

- P1 - 7/16 A.P.A. rated Plywood or Orientated Strand Board (O.S.B.) on one side of wall. P2 - 7/16 A.P.A. rated Plywood or Orientated Strand Board (O.S.B.) on each side of wall.
- For P1-3, P1-2, P2-3, & P2-2 shear walls use 3x studs at adjoining panel edges. Nailing shall be staggered.
- Nails shall be 8d common. (d = .131 inch)
- Where plywood is installed on both sides of wall plywood joints shall fall on separate studs each side.
- All panel edges backed with 2-inch nominal framing for P1-6 & P1-4 shear wall. All panels edges backed with 3x framing at P1-3, P1-2, P2-3, & P2-2 shear walls. Install panels either horizontally or vertically. Space nails @ 12 inches on center @ intermediate supports.
- All anchor bolts shall be installed with hot dipped galvanized plate washers.
- Refer to foundation plan for anchor bolt size, spacing and mudsill/rim connections.

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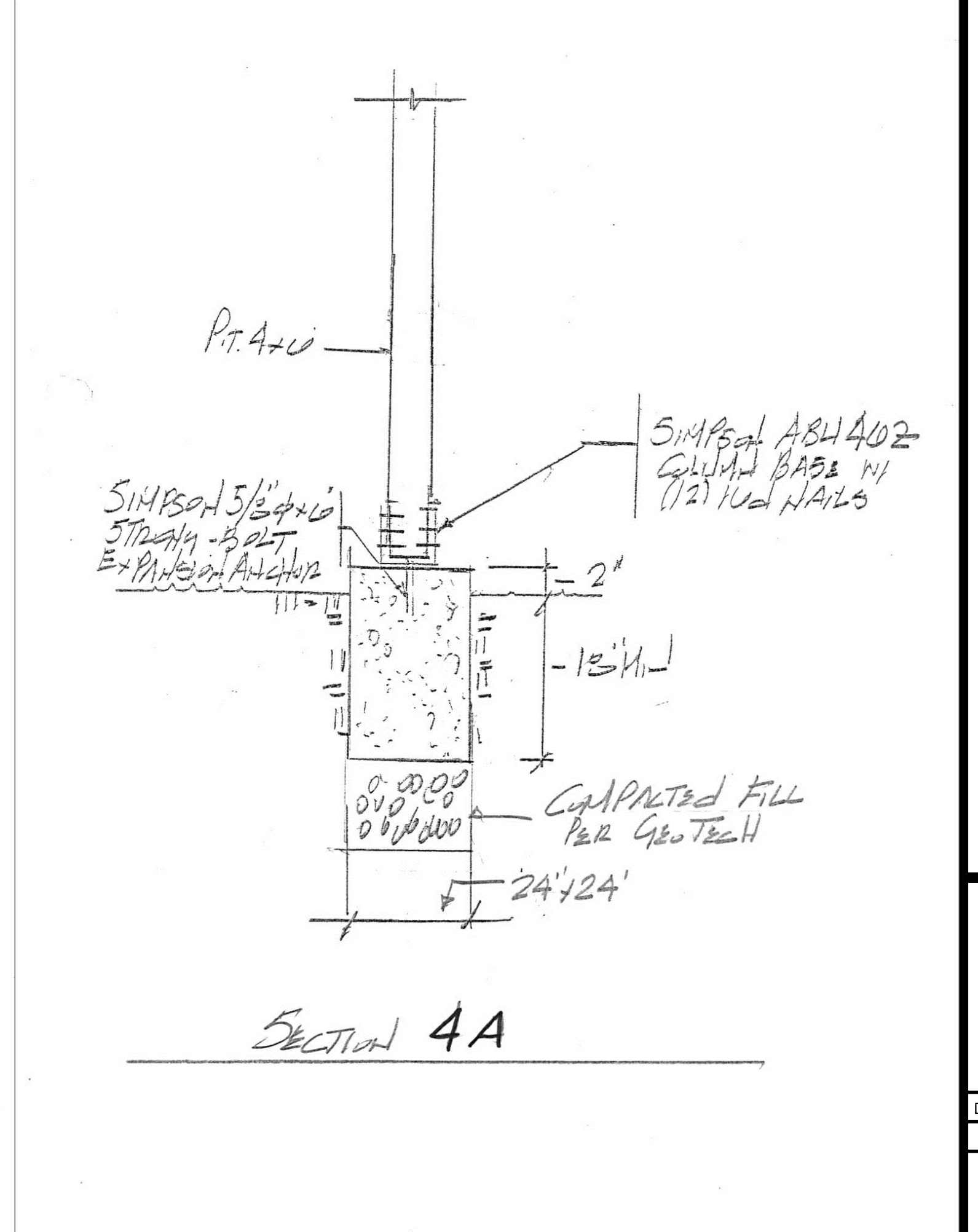
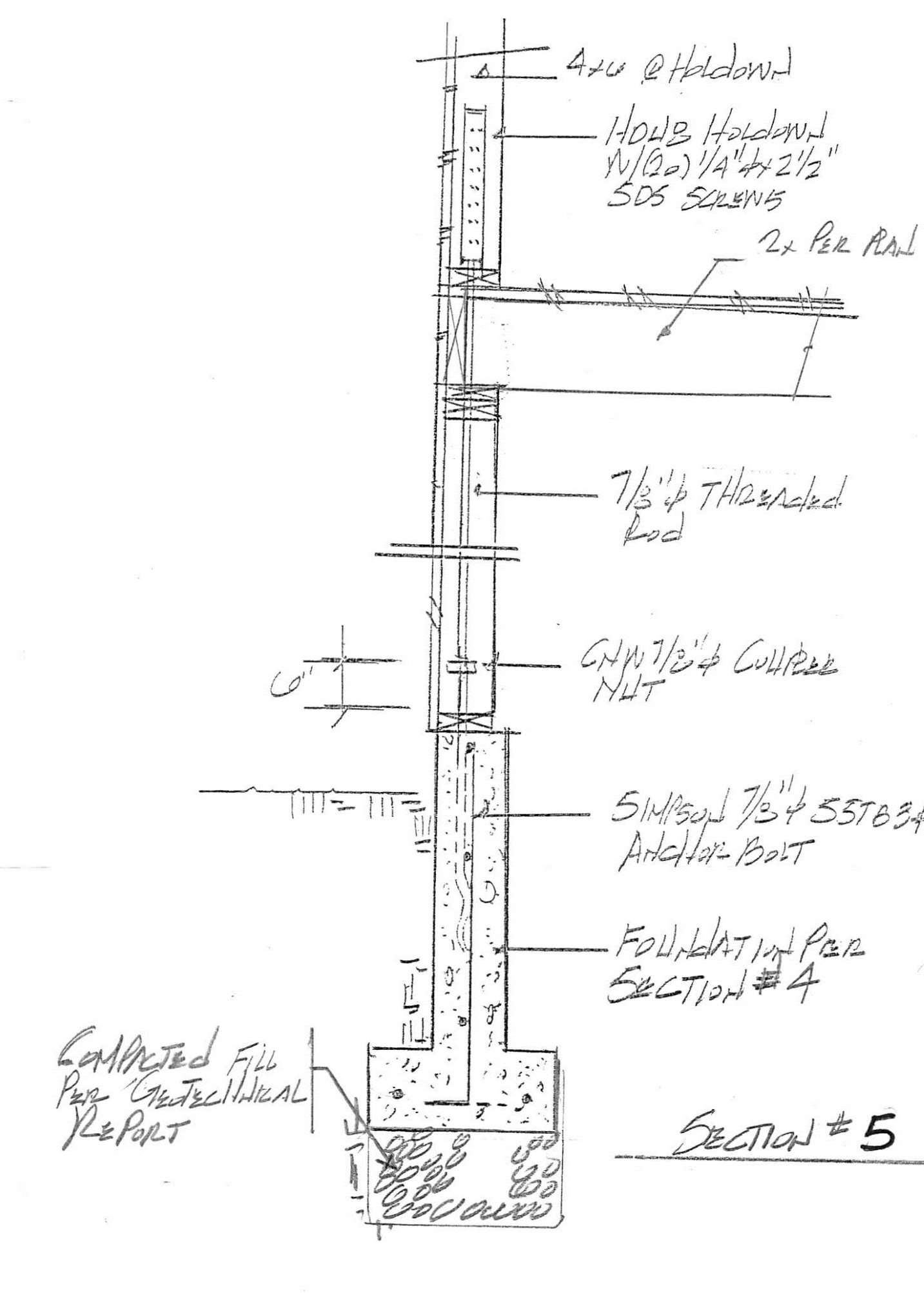
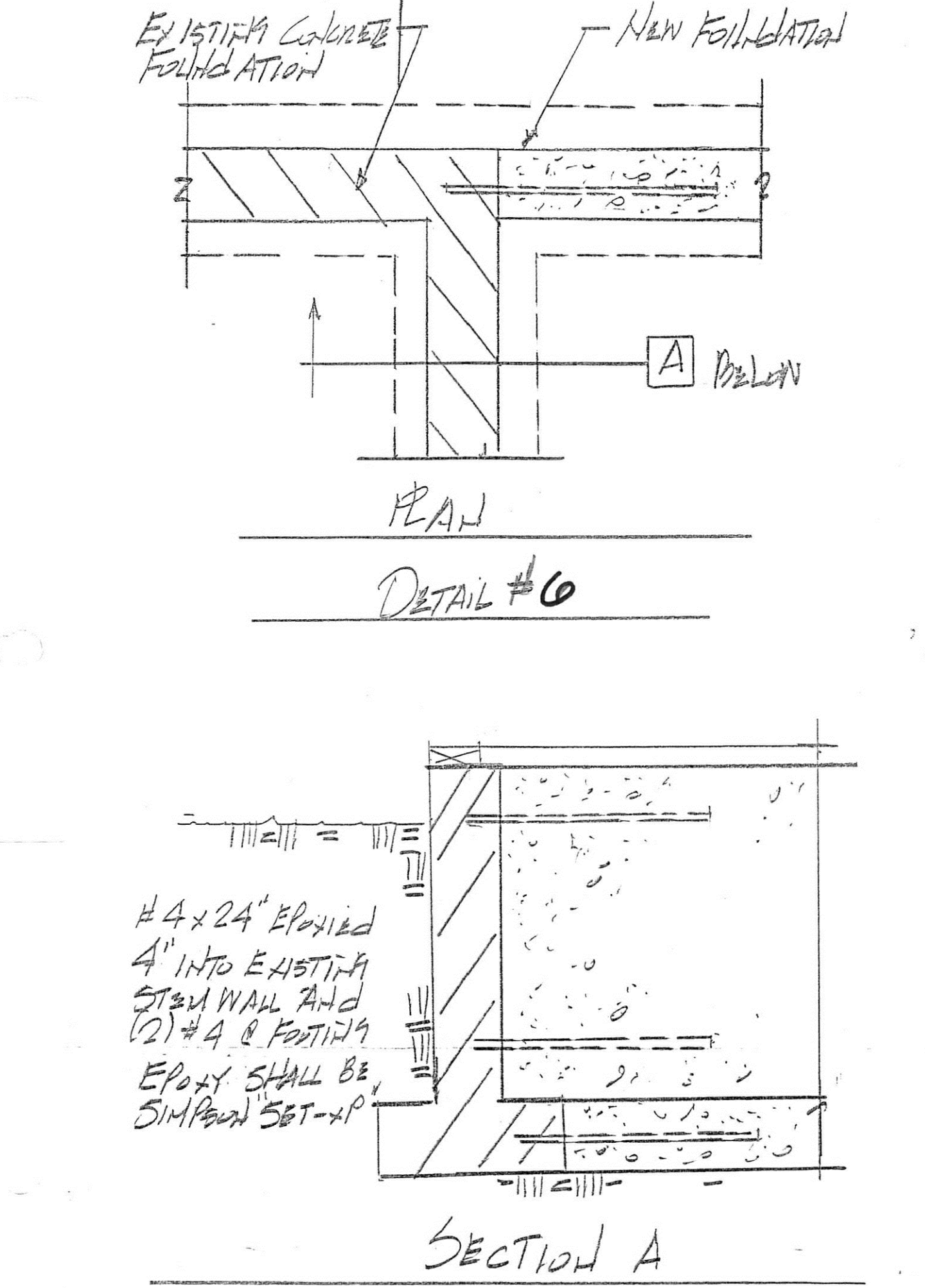
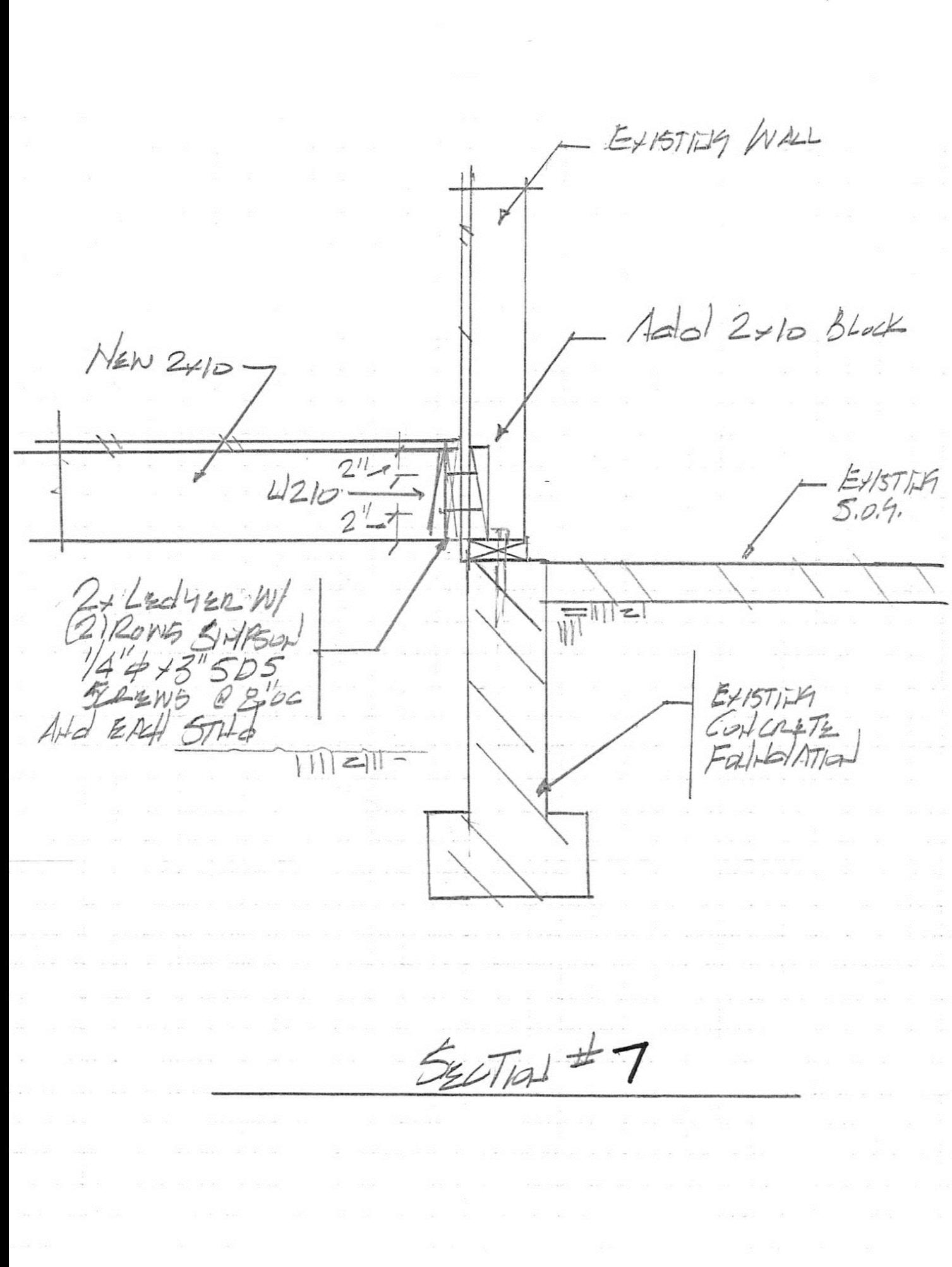
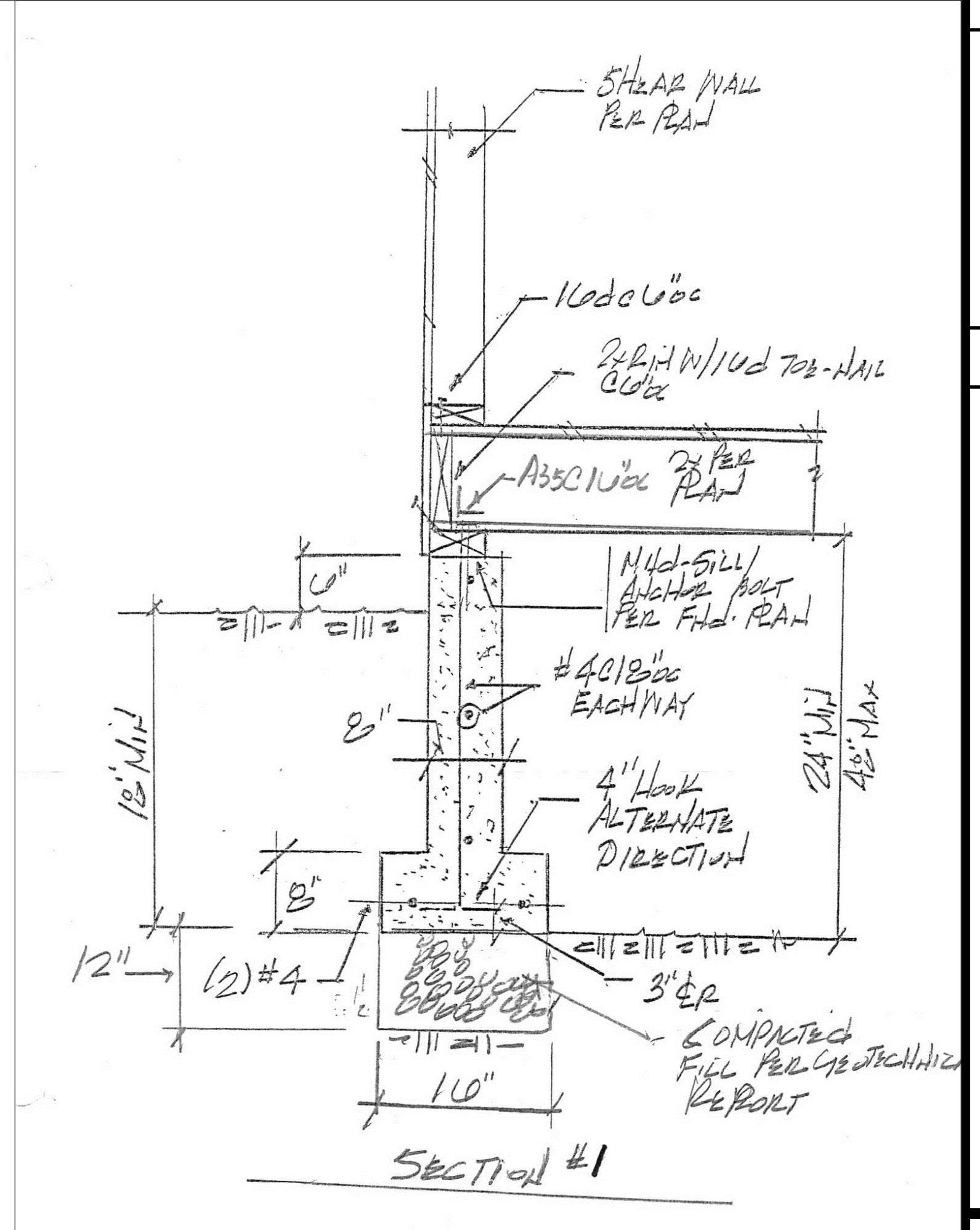
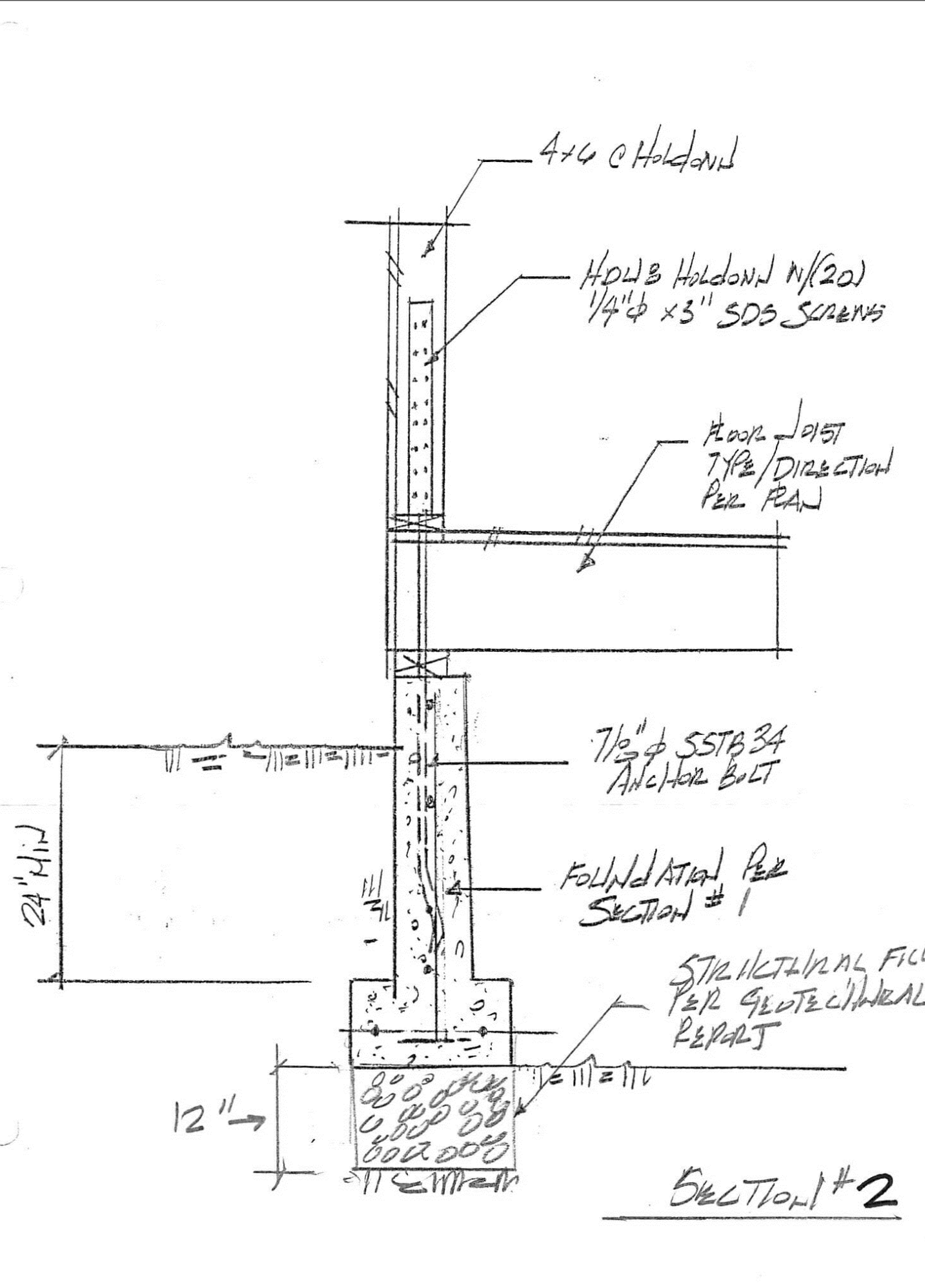
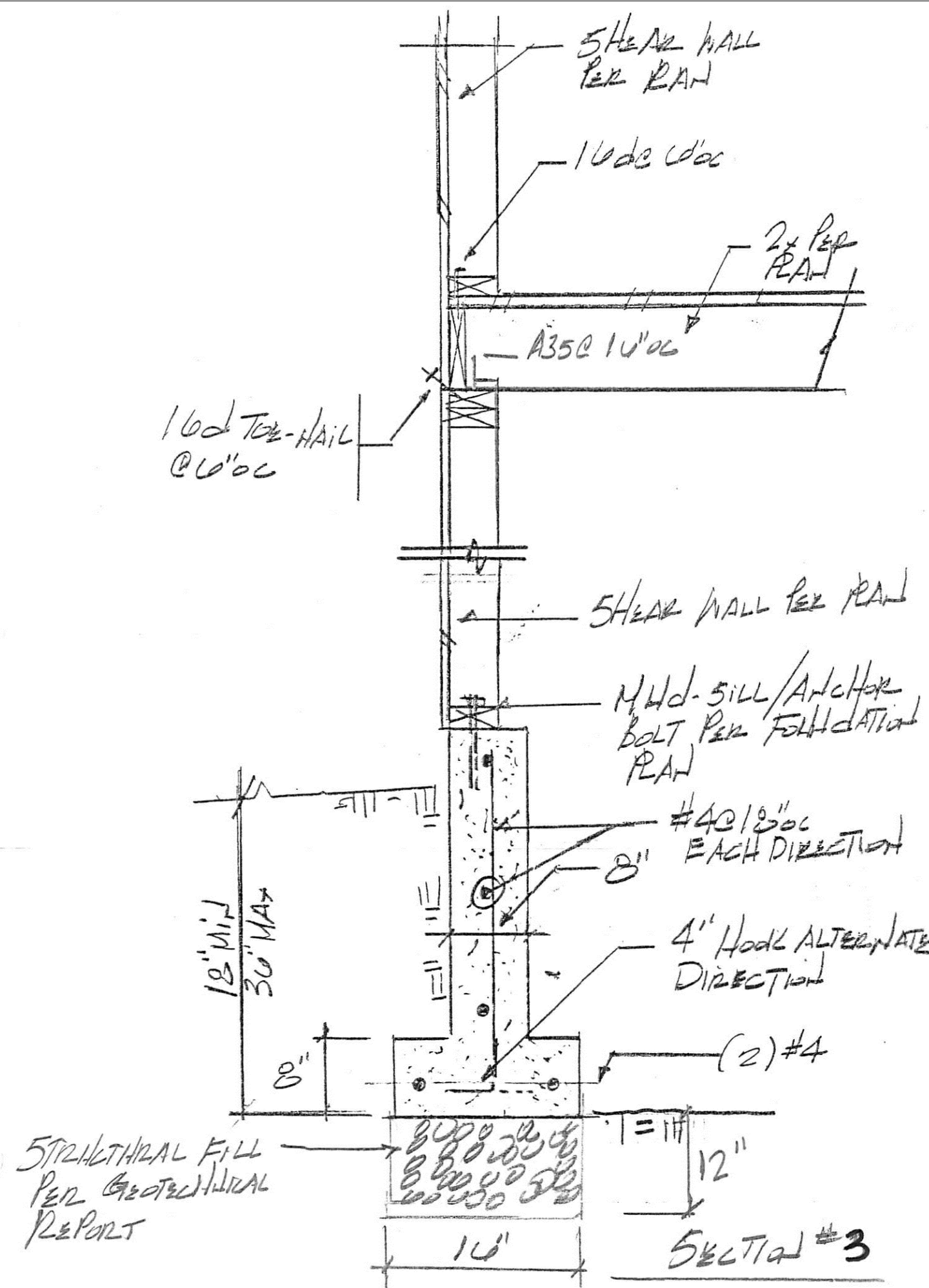
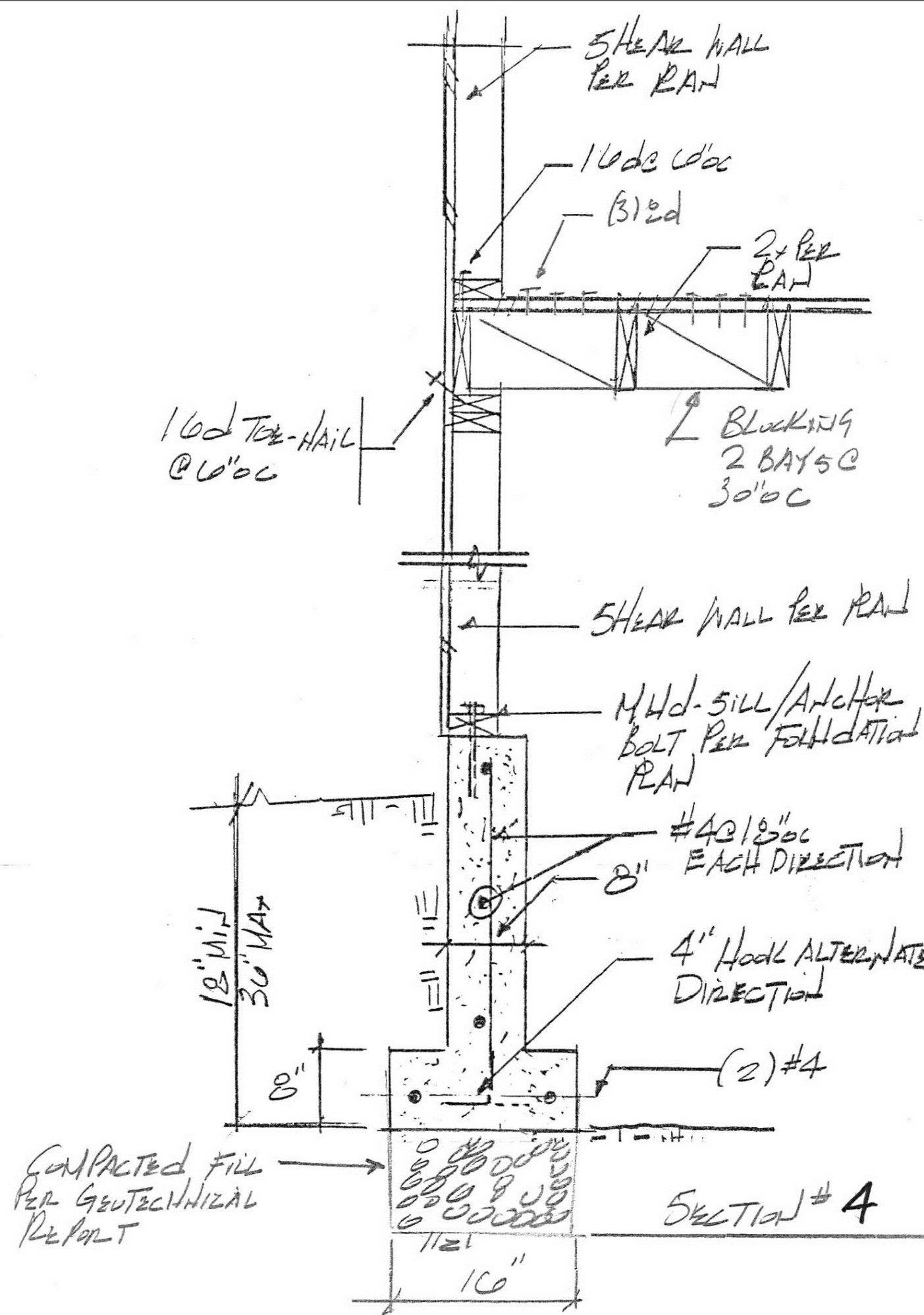
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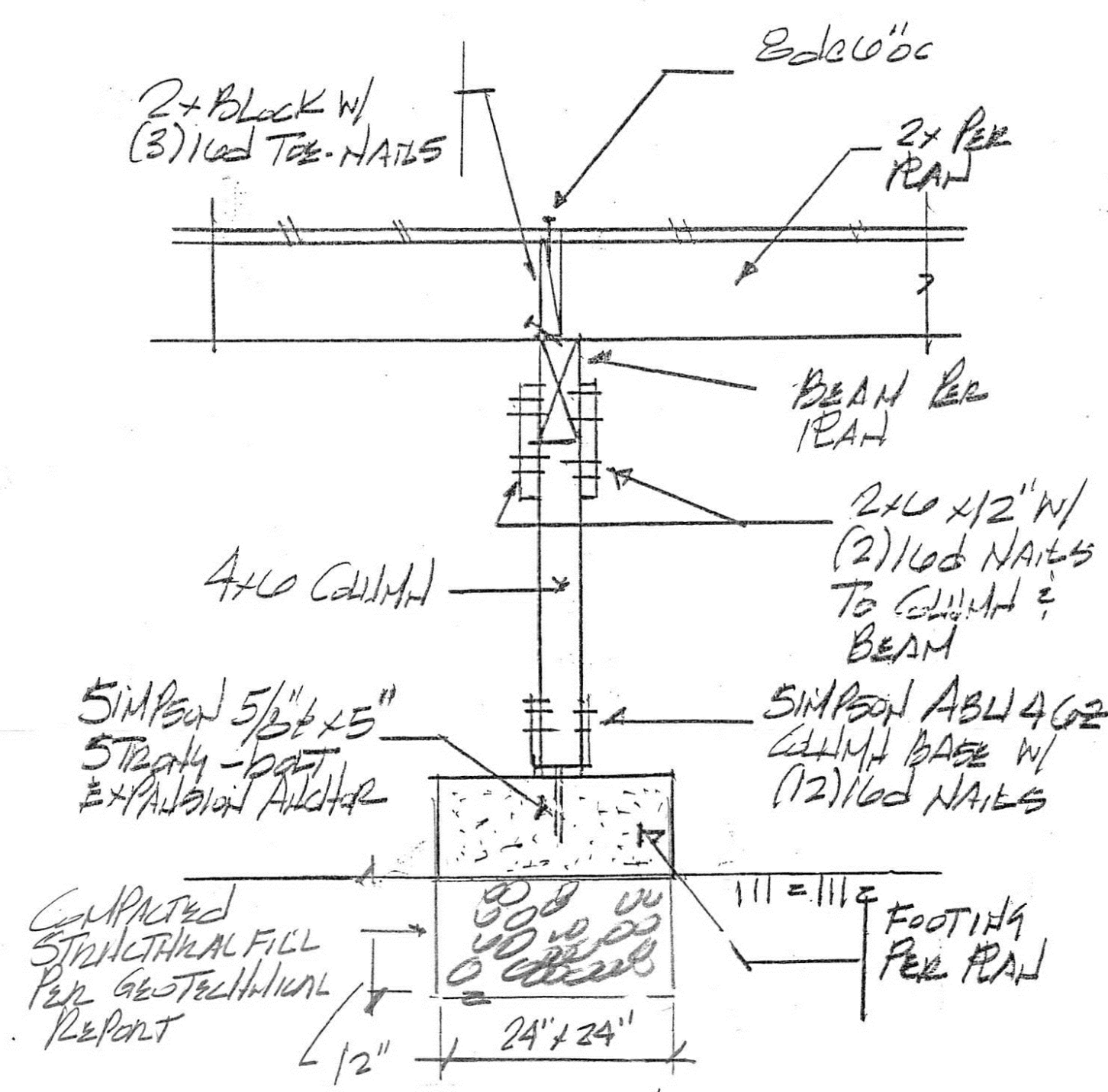
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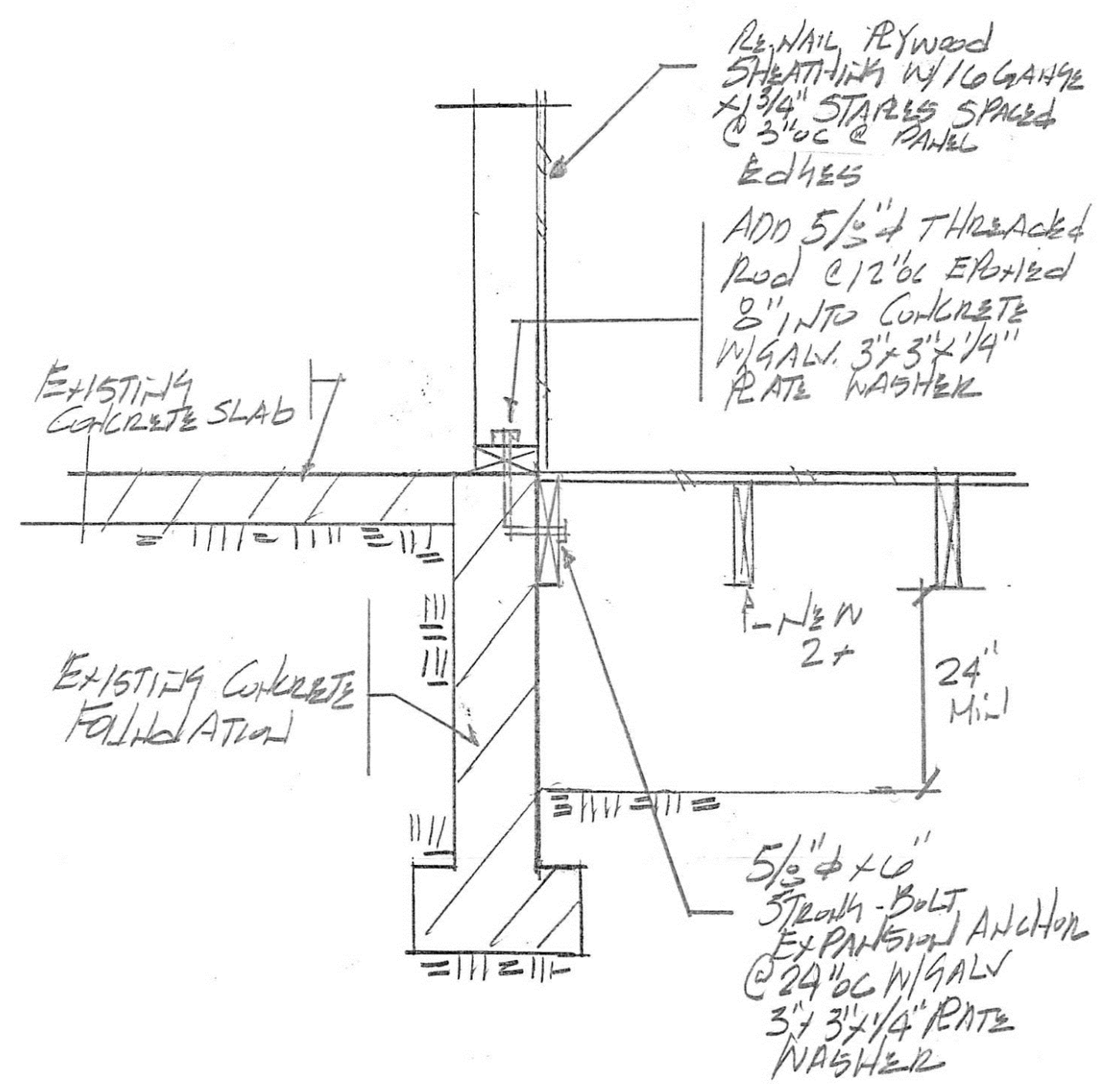
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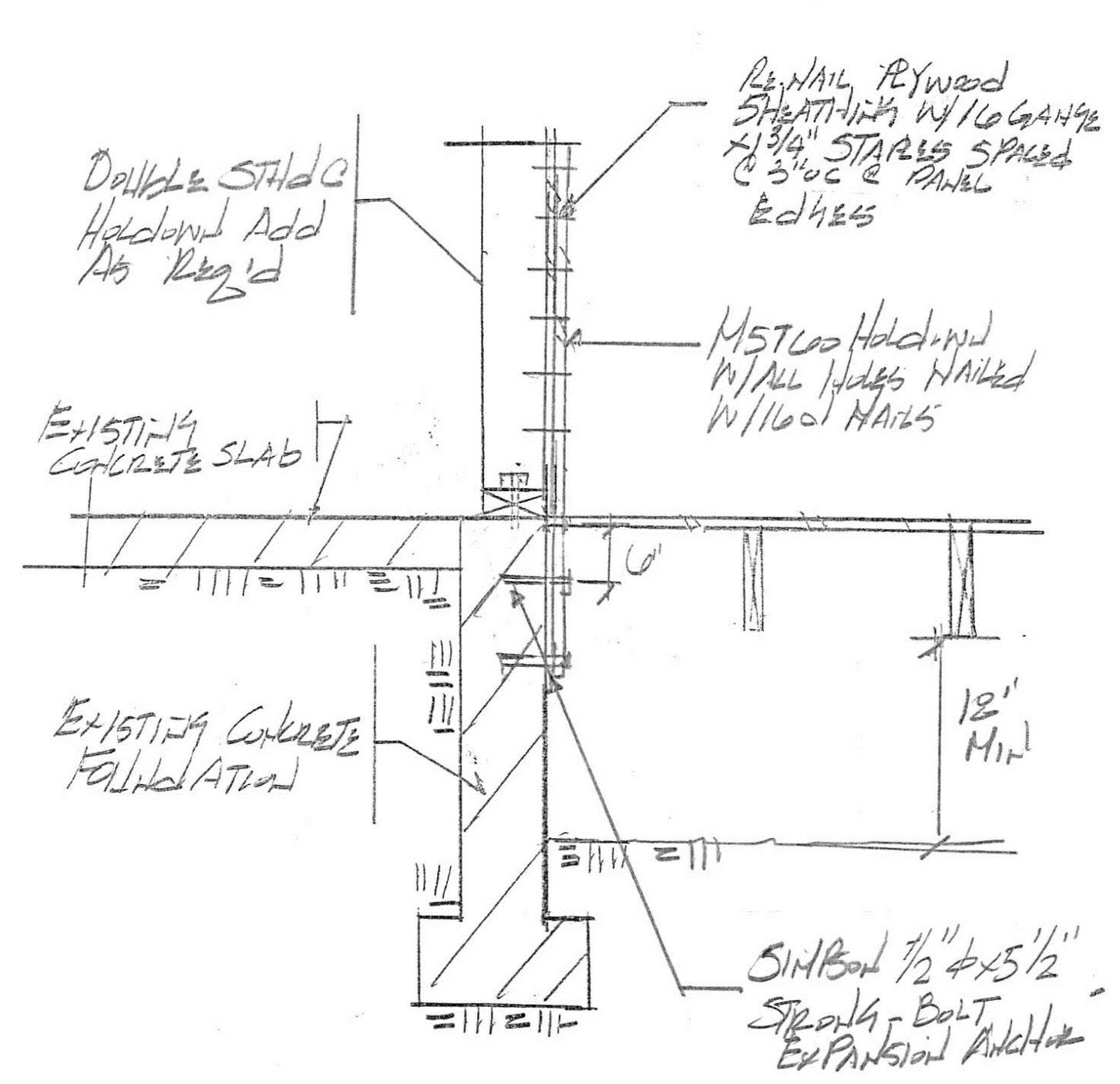
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ALTERNATE COLUMN BASE CAN BE USED WITH APPROVAL OF BUILDING OFFICIAL

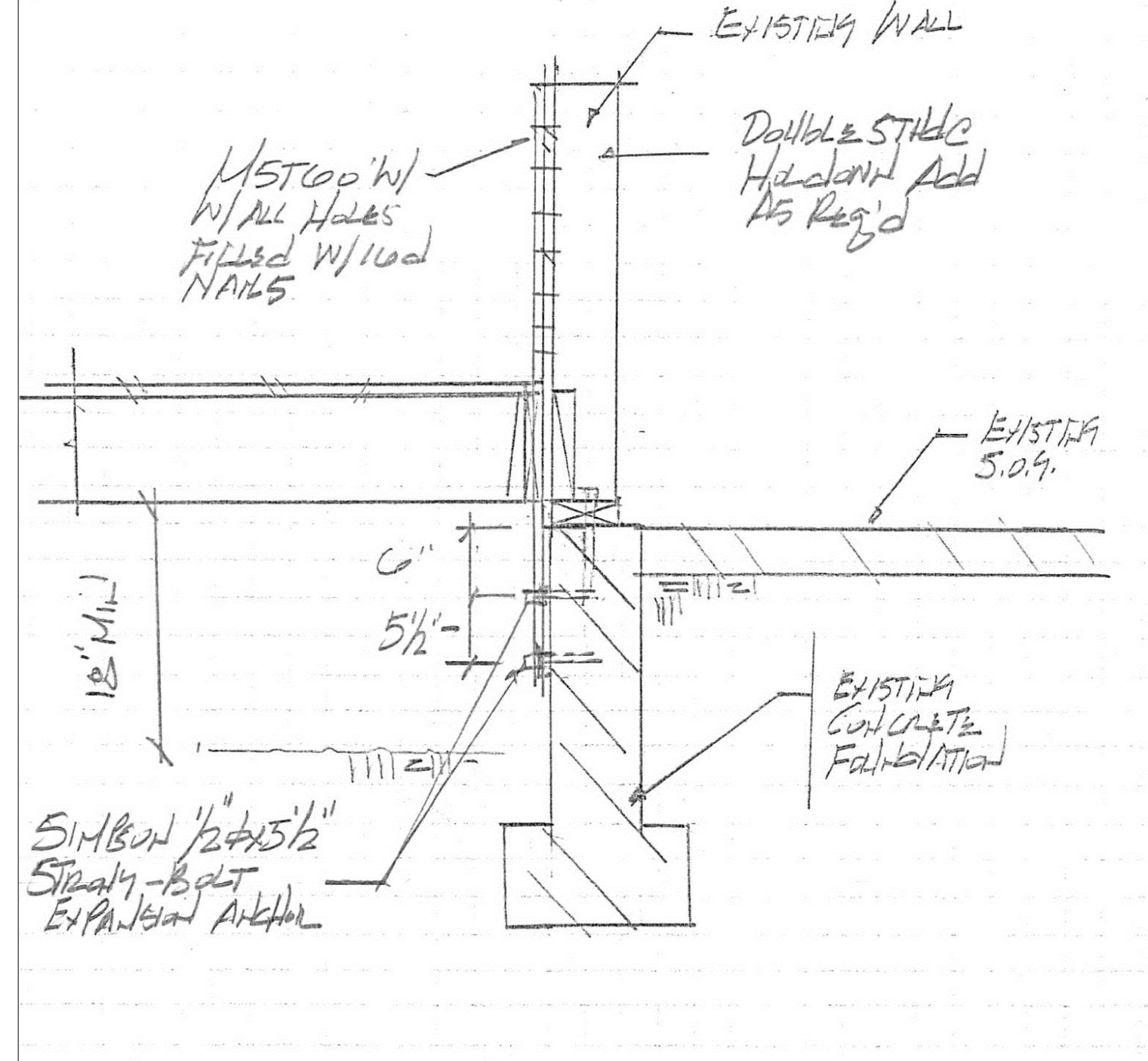


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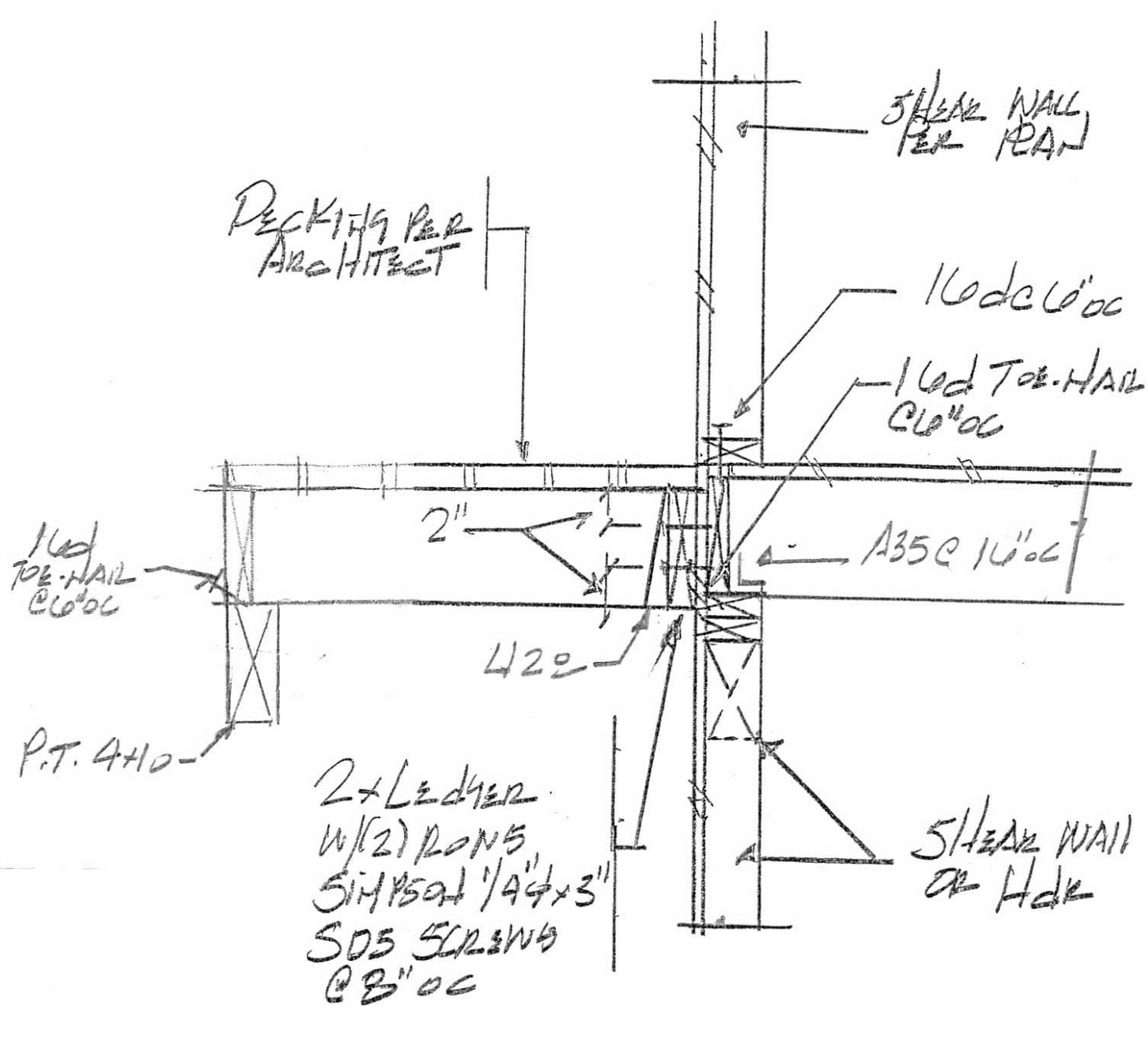
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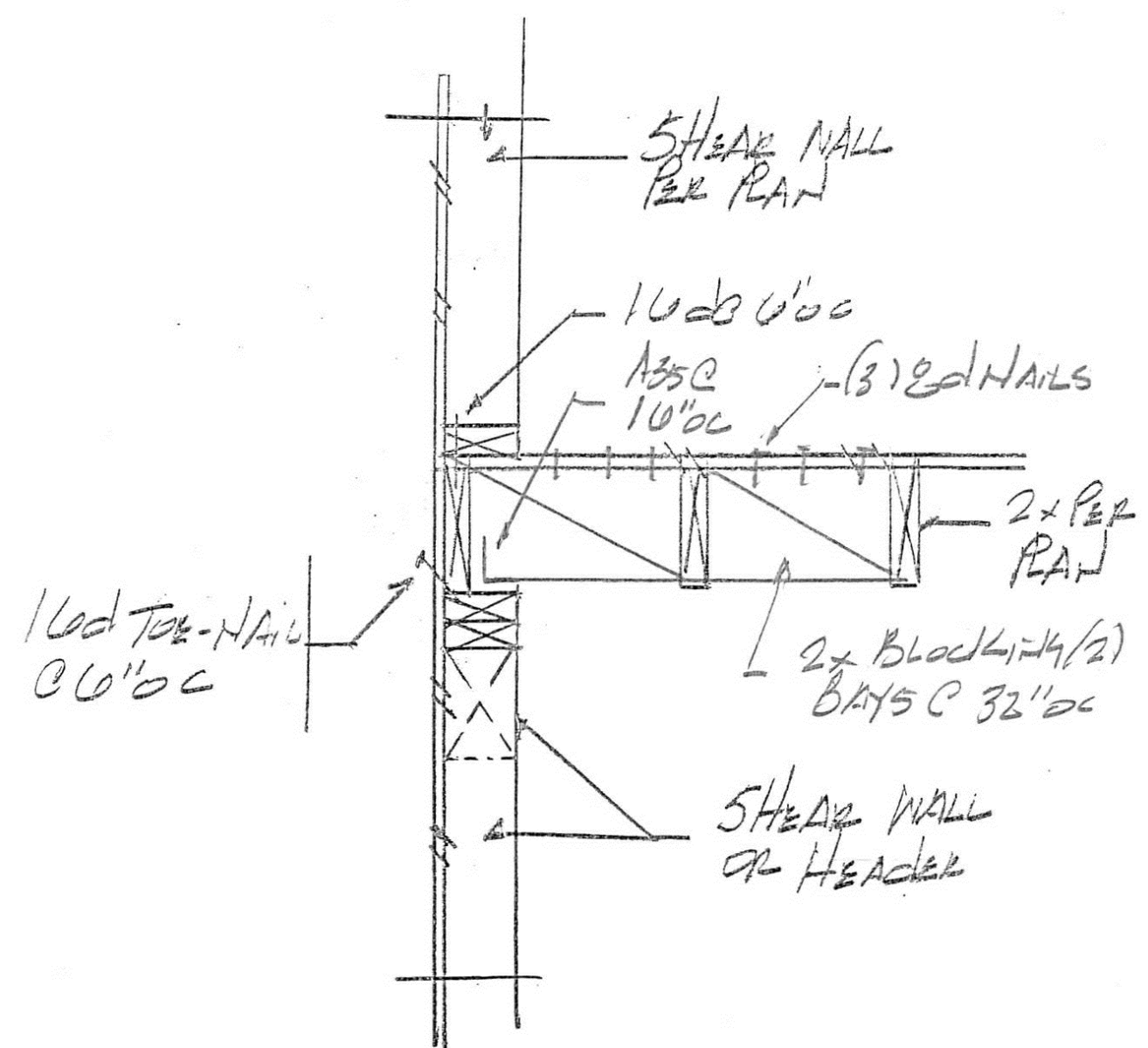
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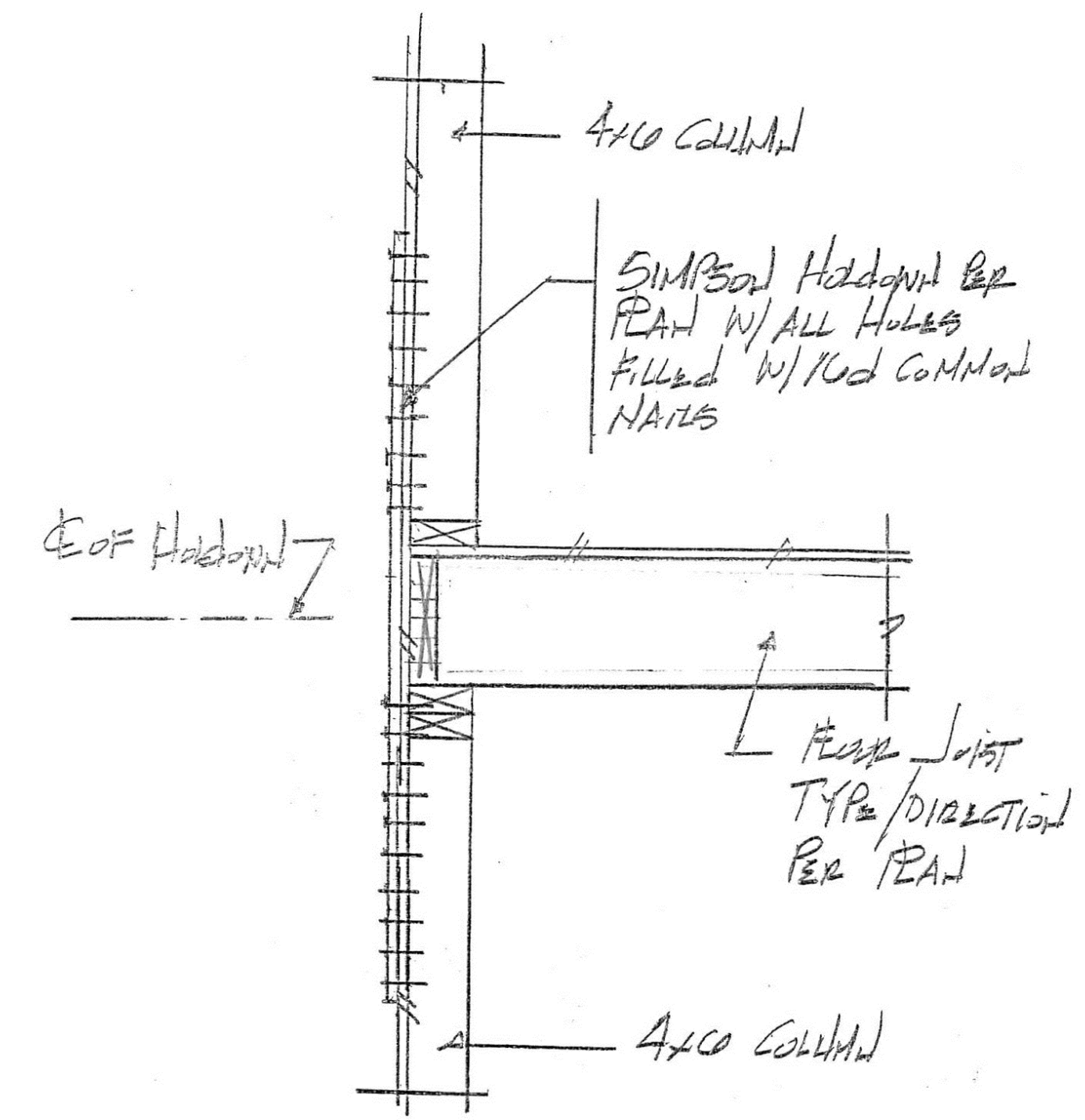
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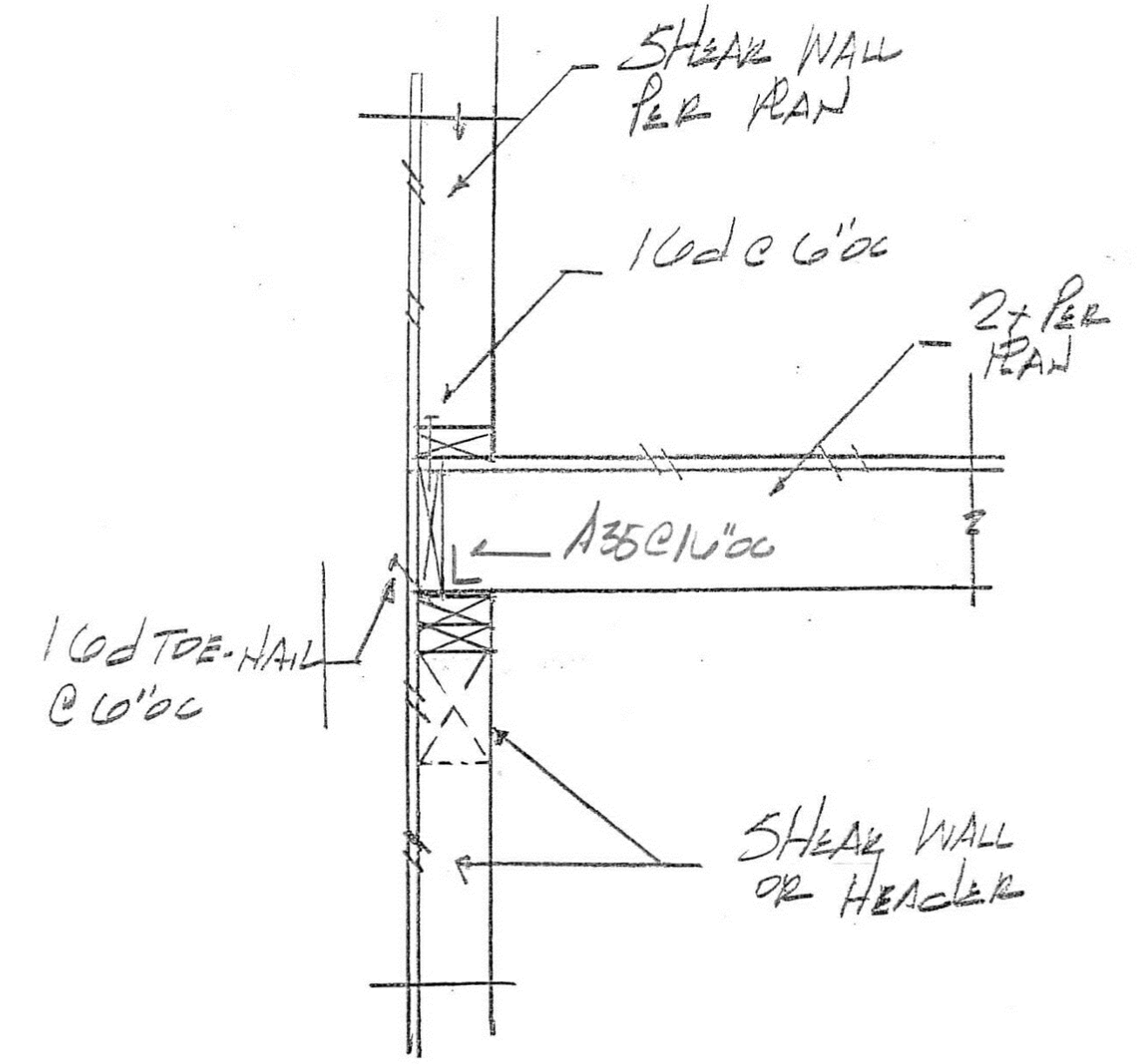
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SECTION #12

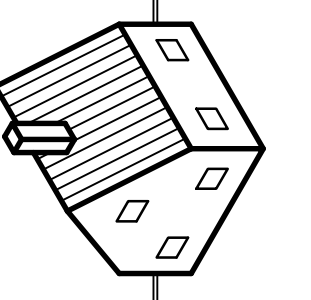


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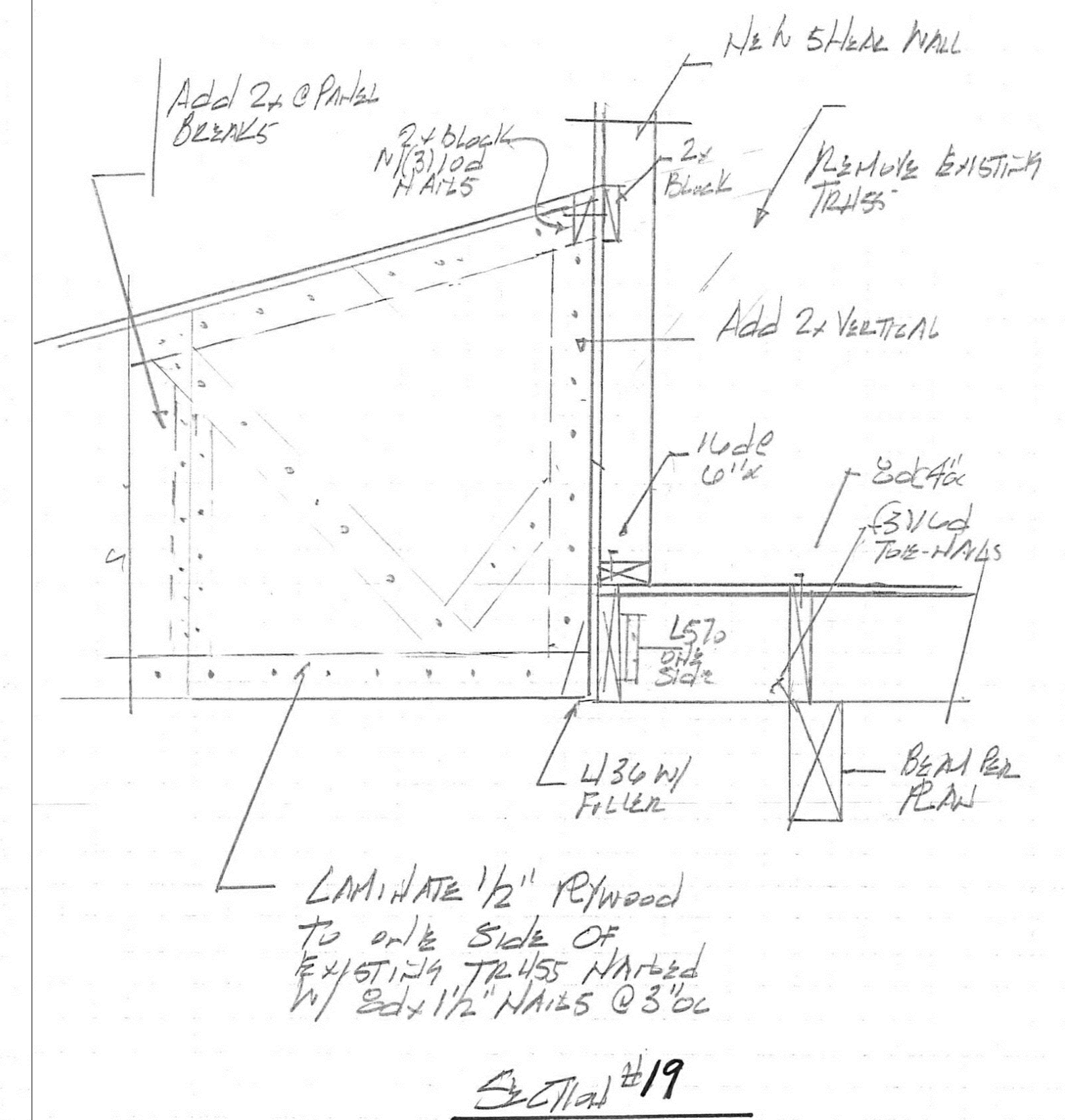
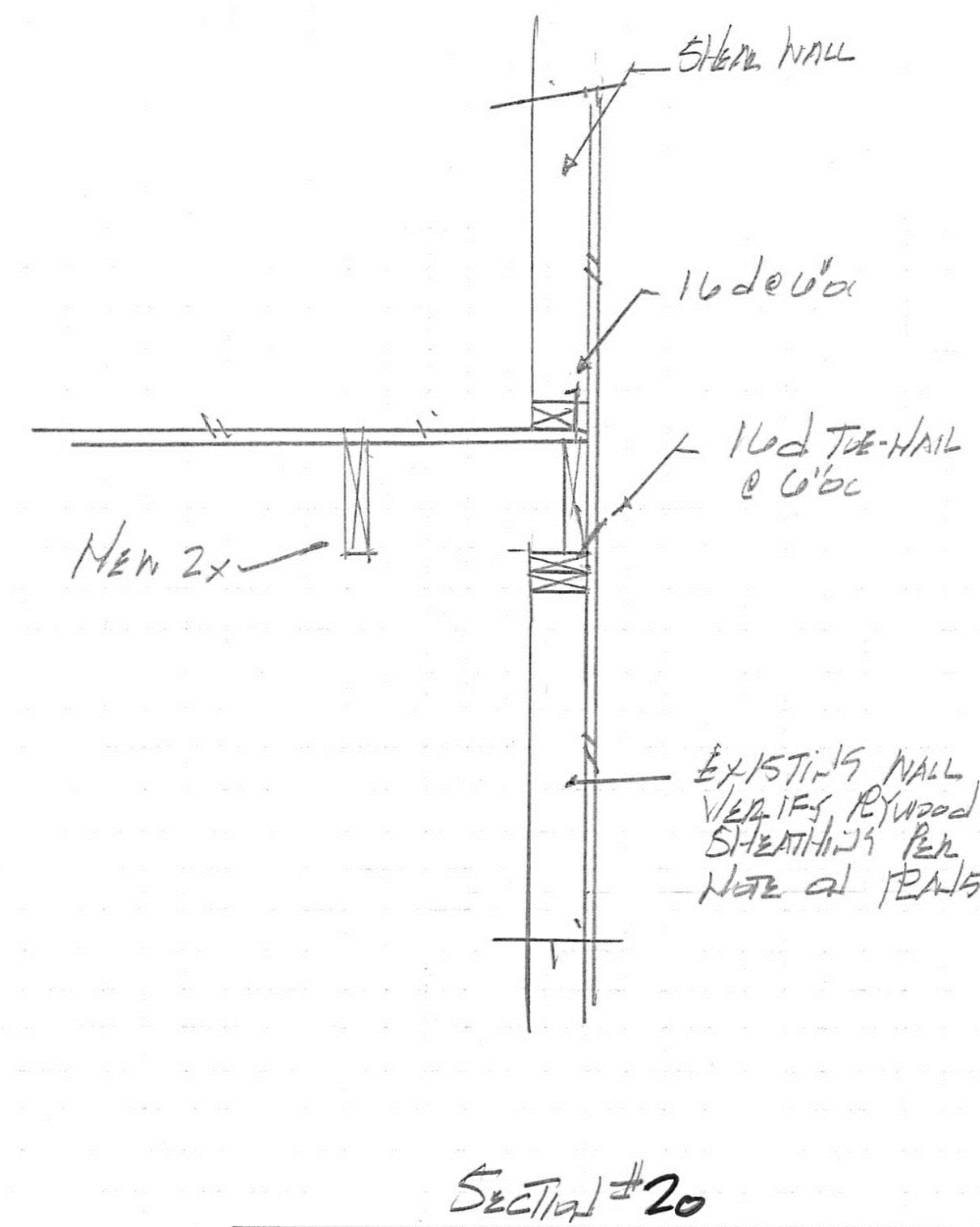
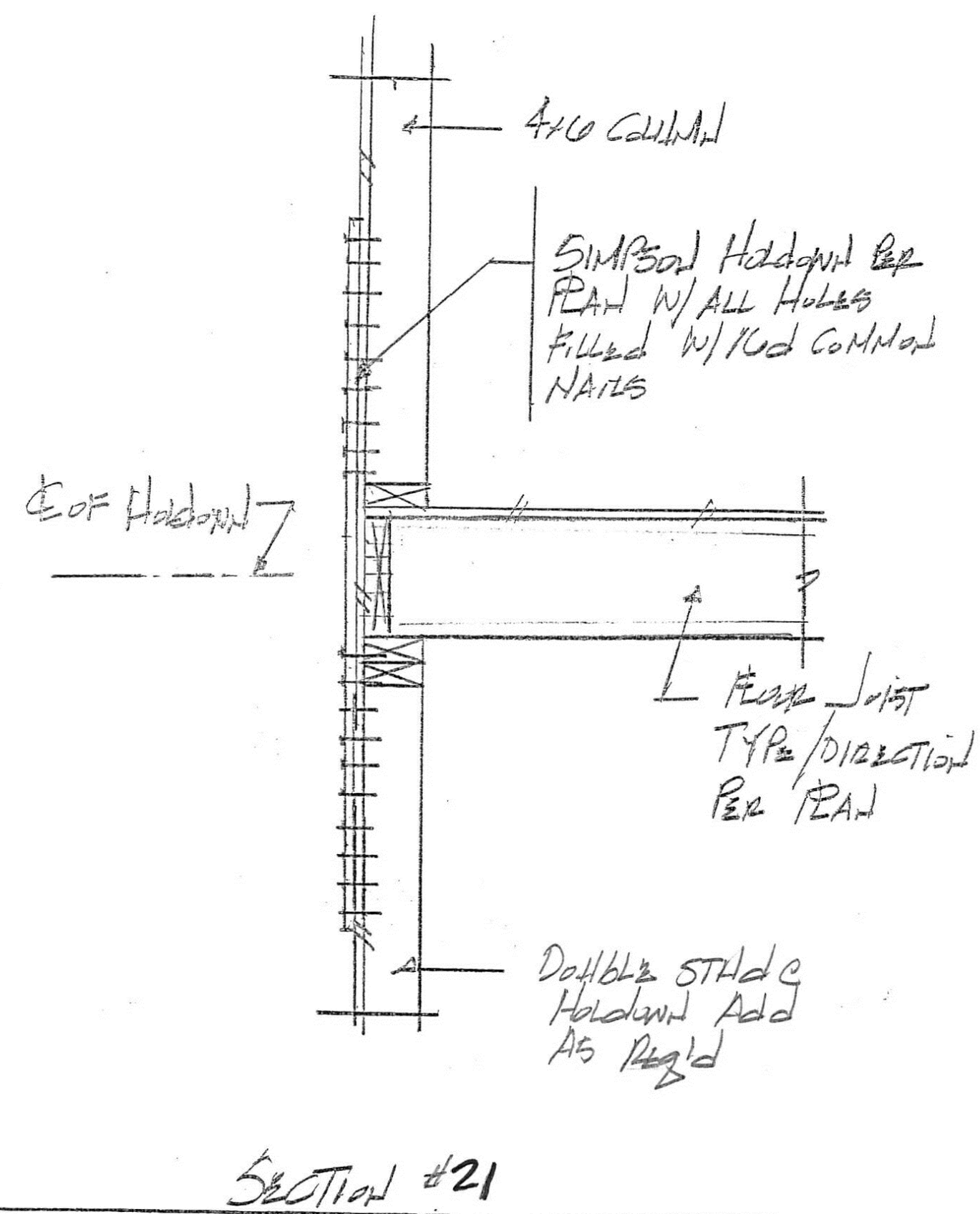
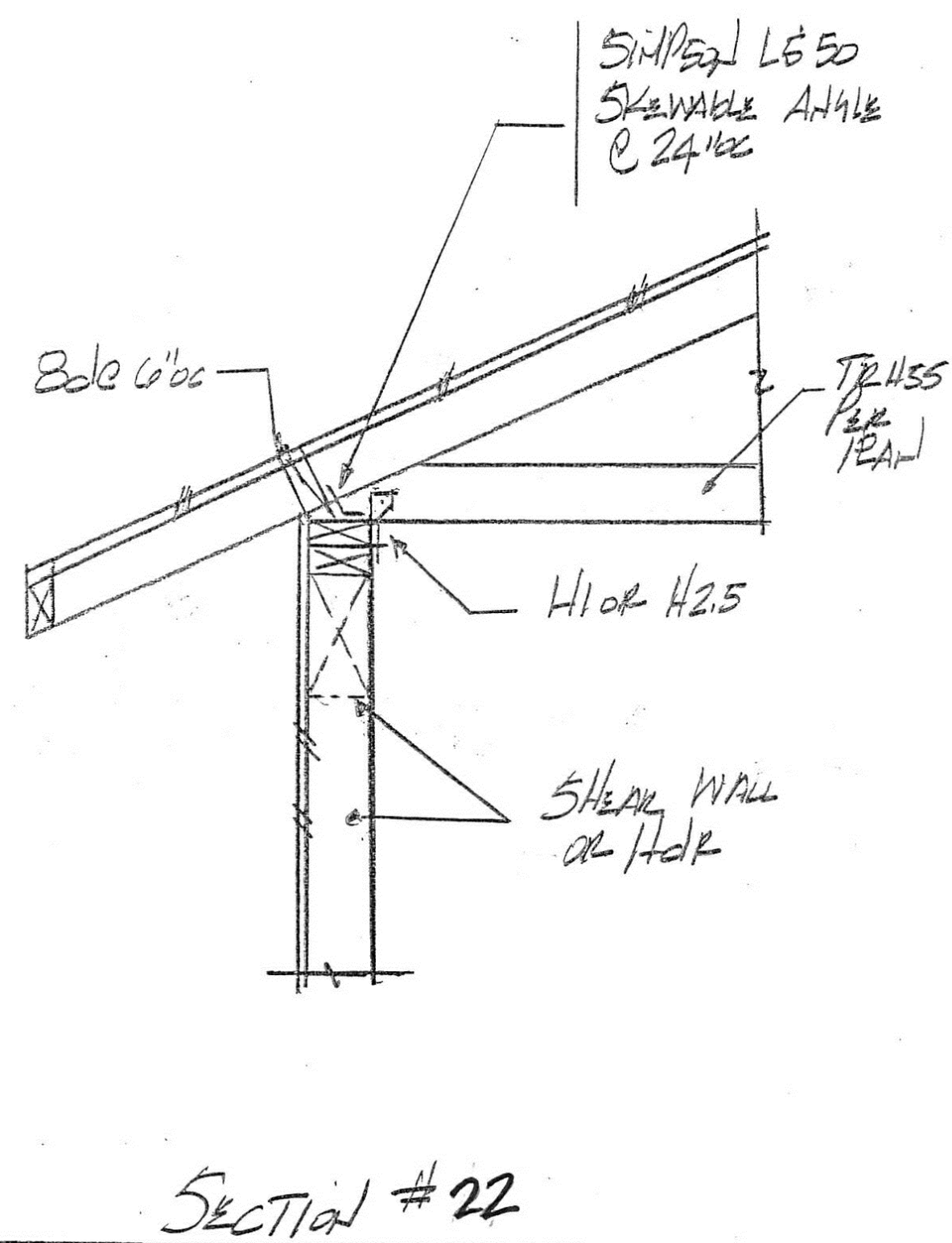
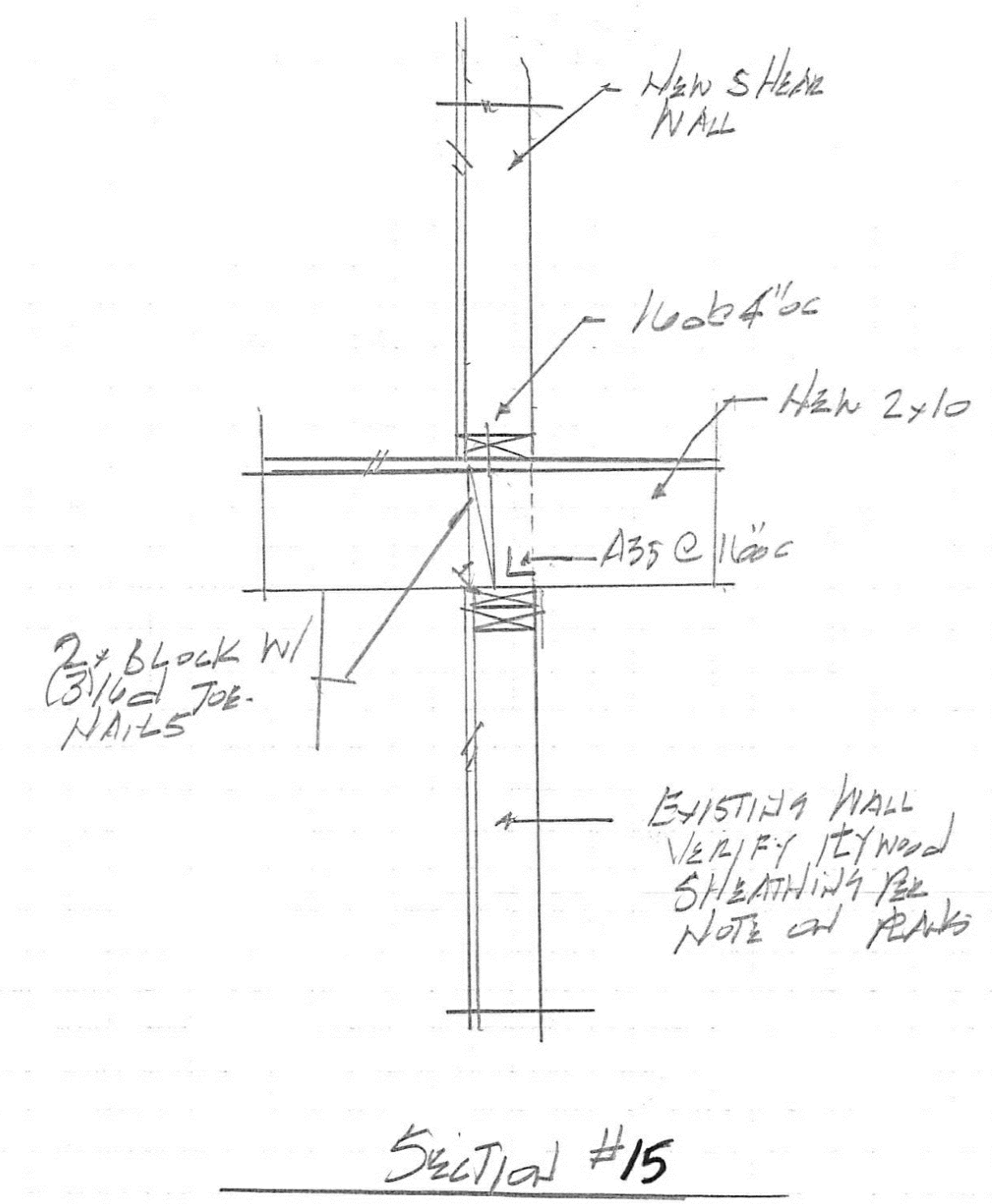
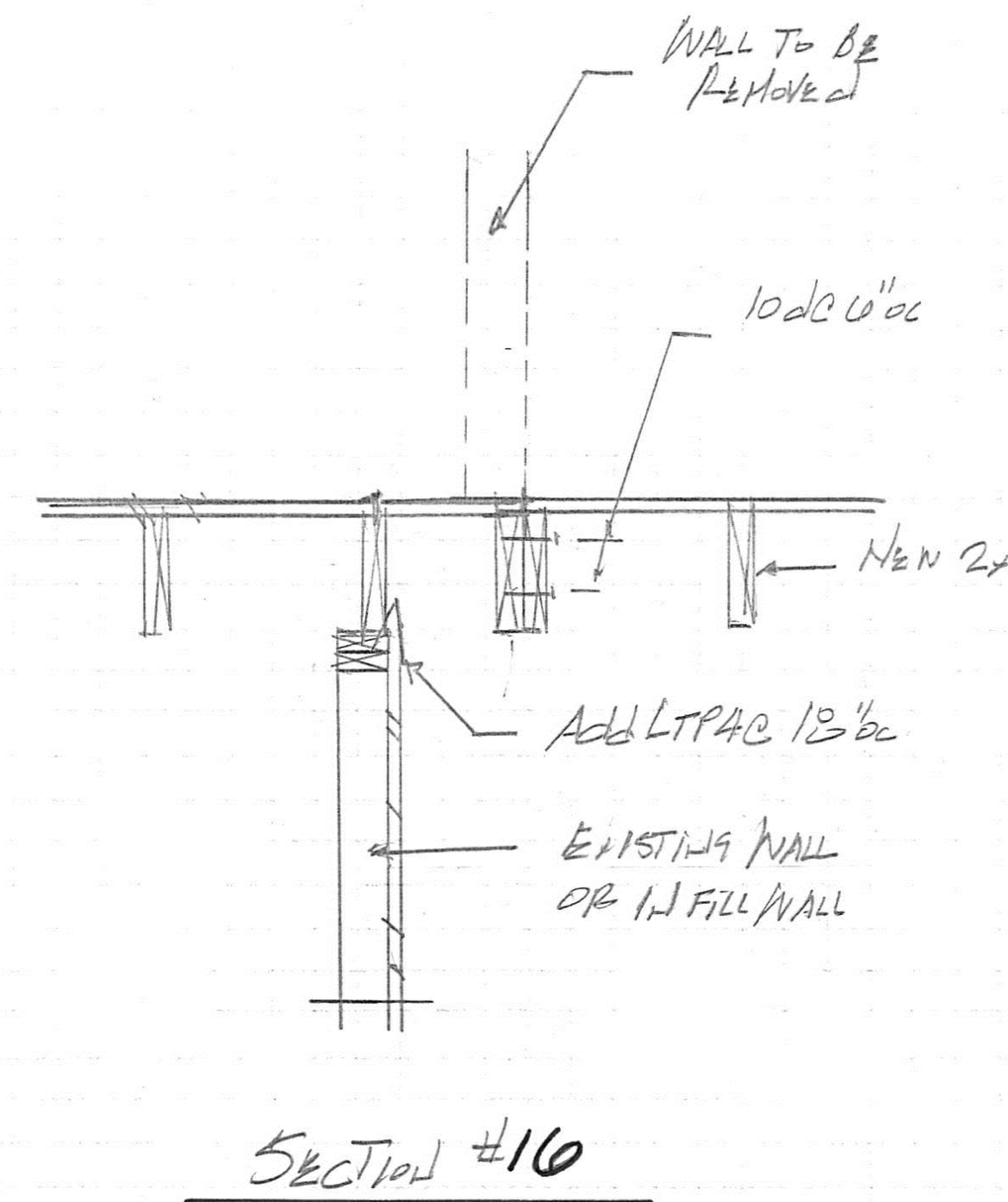
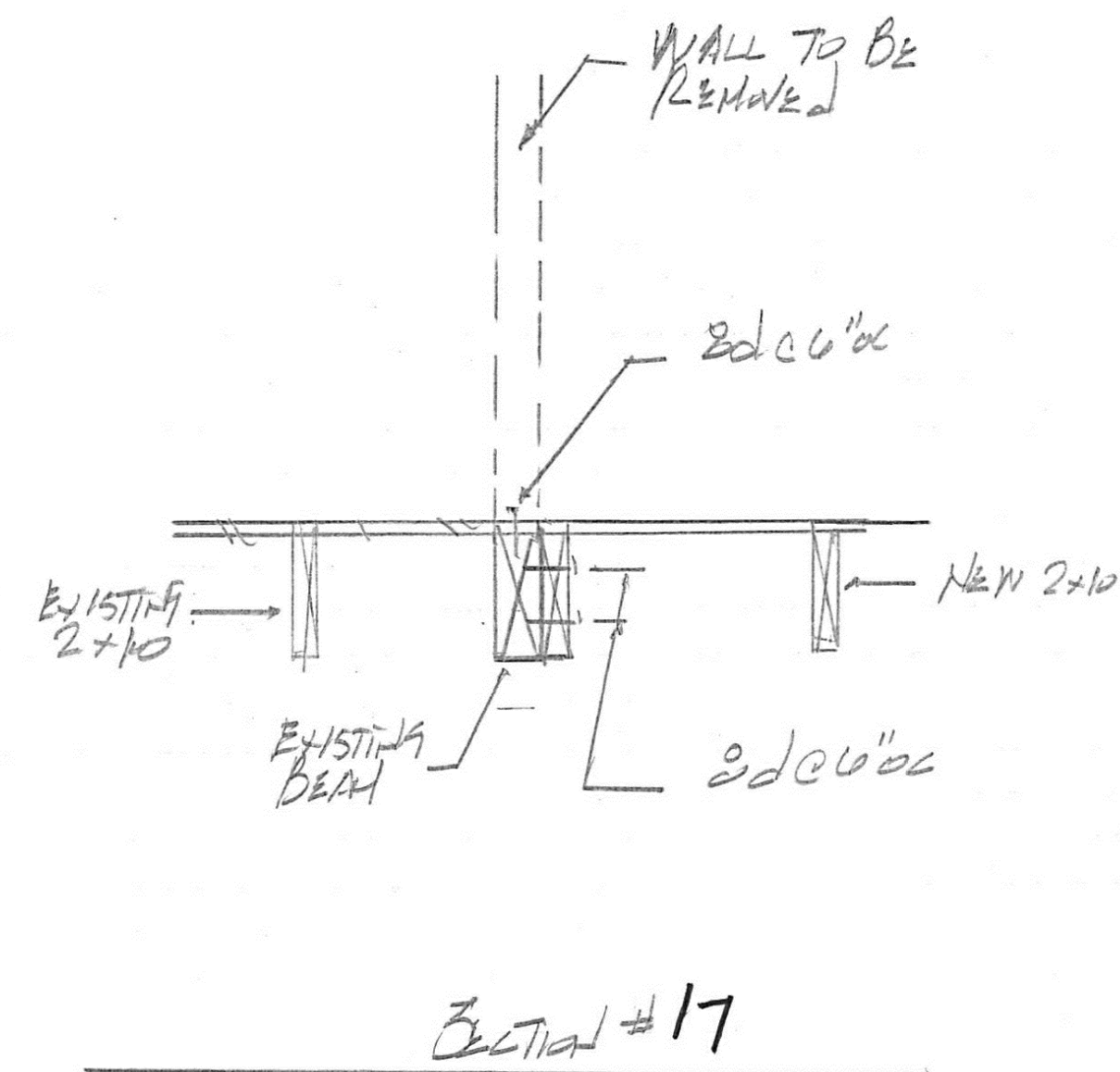
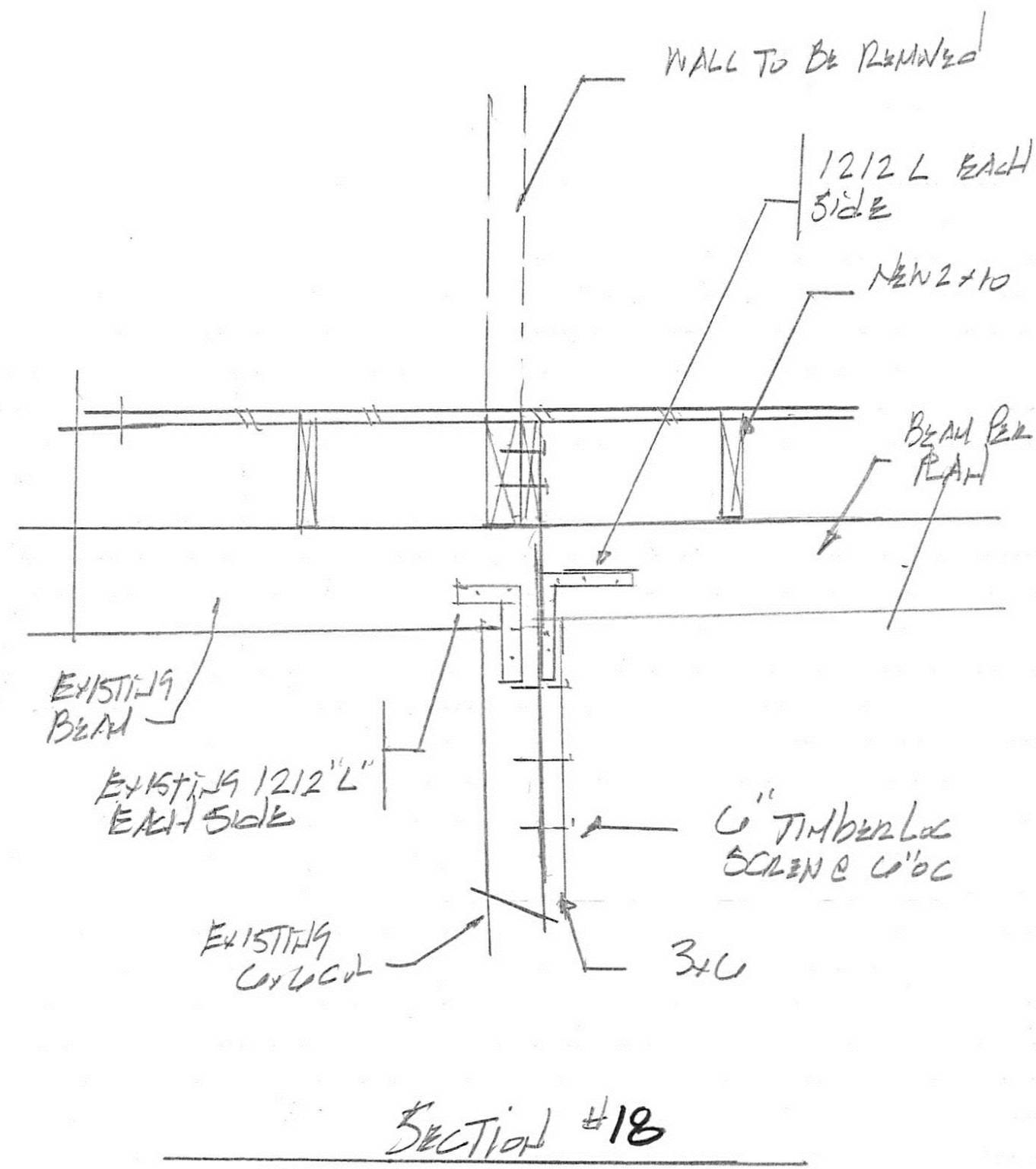
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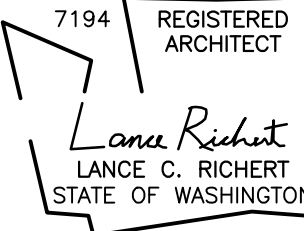
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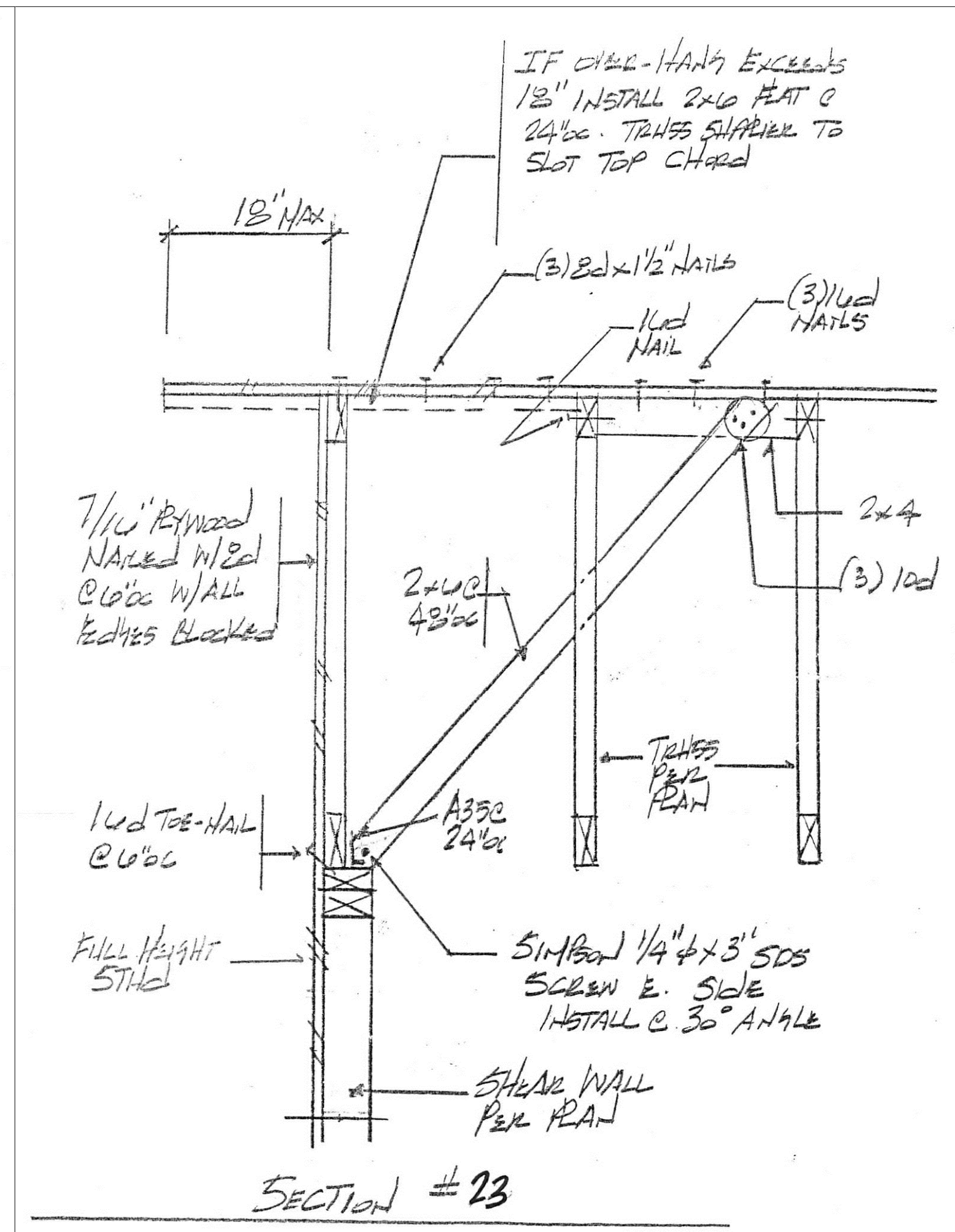
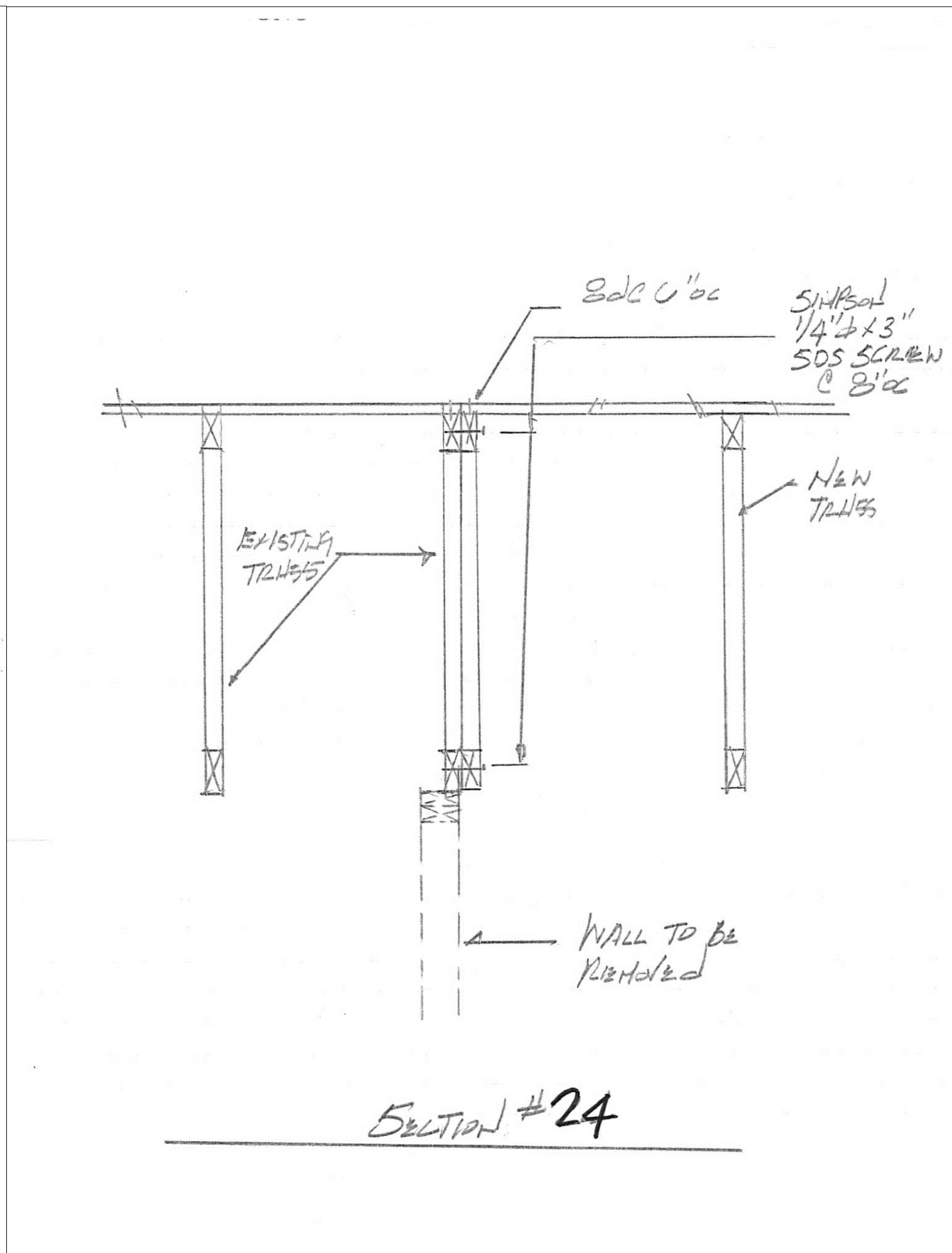
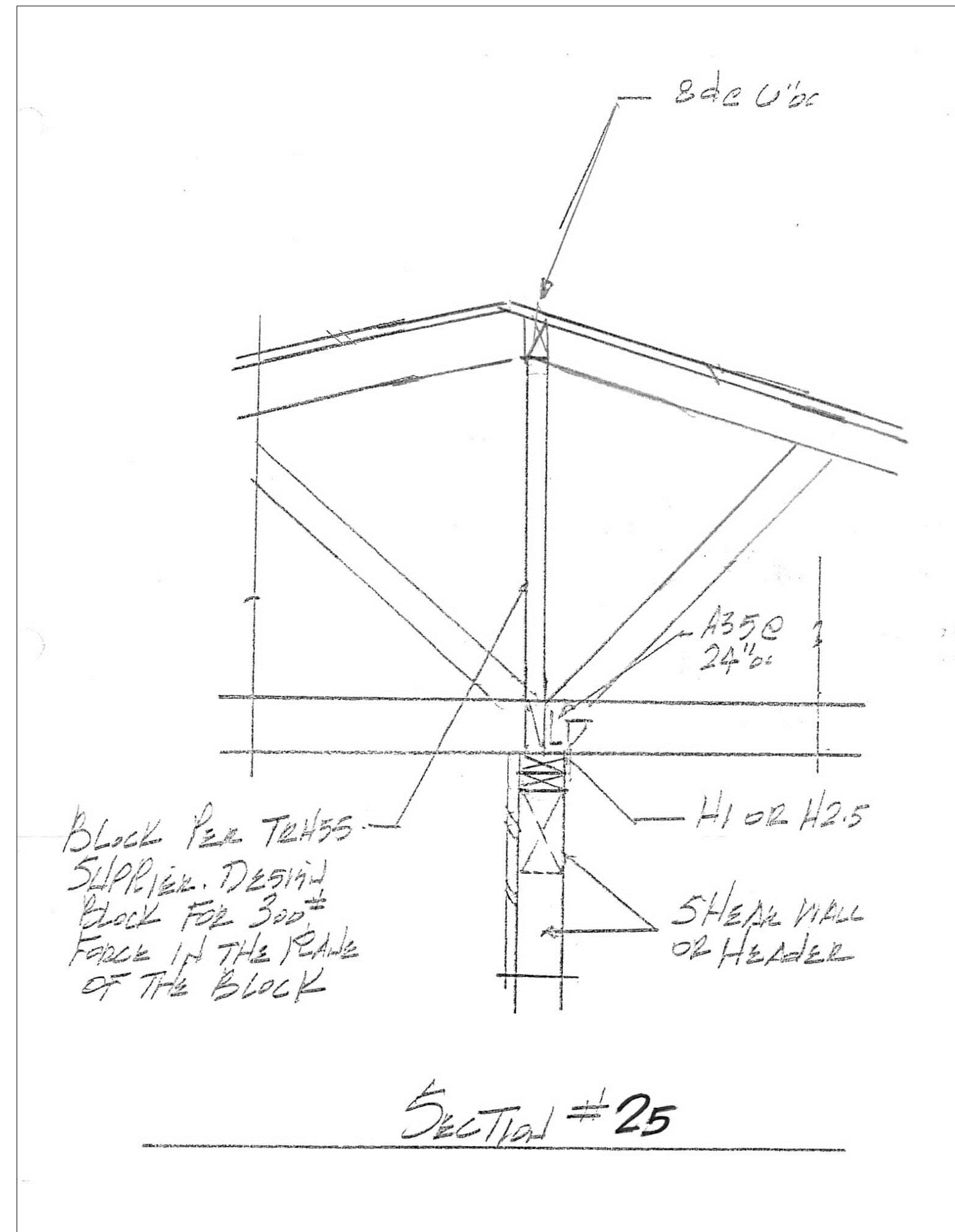
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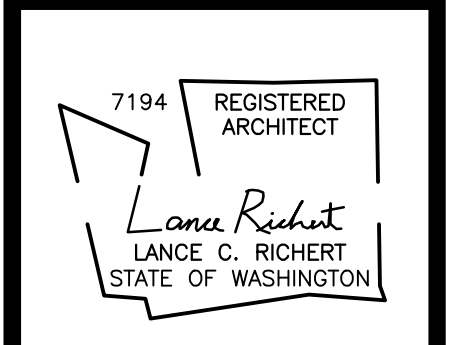


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