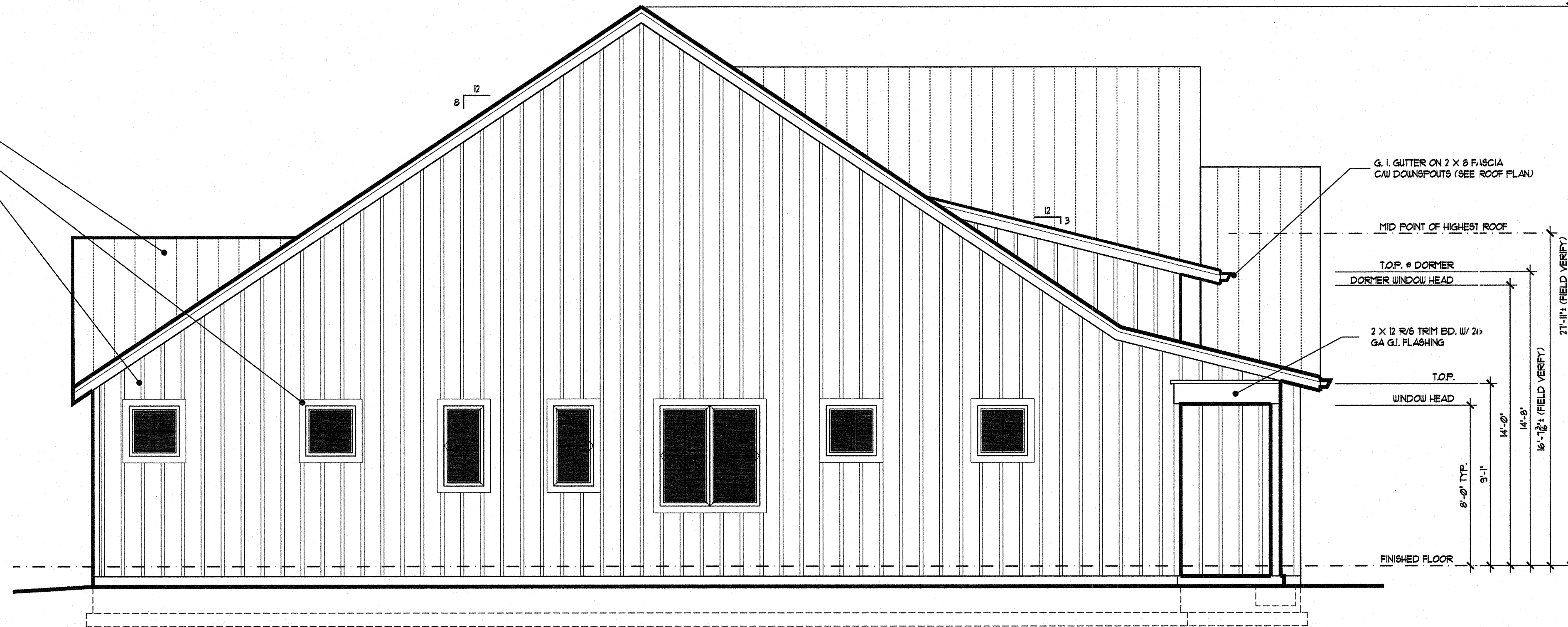


STANDING SEAM METAL ROOFING (SEE ROOF PLAN)
 5/4 X CEDAR TRIM BDS.
 1 X 2 CEDAR BATTENS @ 12" O.C. OVER 1/2" ACX FLYWOOD

THE TYPE OF EXTERIOR FINISH, THE INSTALLATION AND THE WATERPROOFING DETAILS ARE ALL TO BE THE FULL RESPONSIBILITY OF THE OWNER/BUILDER. THIS DESIGNER ASSUMES NO RESPONSIBILITY FOR THE INTEGRITY OF THE BLDG ENVELOPE



G. I. GUTTER ON 2 X 8 FASCIA
 CAU DOWNSPOUTS (SEE ROOF PLAN)

MID POINT OF HIGHEST ROOF

T.O.P. OF DORMER
 DORMER WINDOW HEAD

2 X 12 R/S TRIM BD. W/ 2x GA. G.I. FLASHING

T.O.P. WINDOW HEAD

8'-0" TYP.

14'-0"

16'-3/4" (FIELD VERIFY)

21'-11" (FIELD VERIFY)

FINISHED FLOOR

LEFT SIDE ELEVATION

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



FRONT ELEVATION

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

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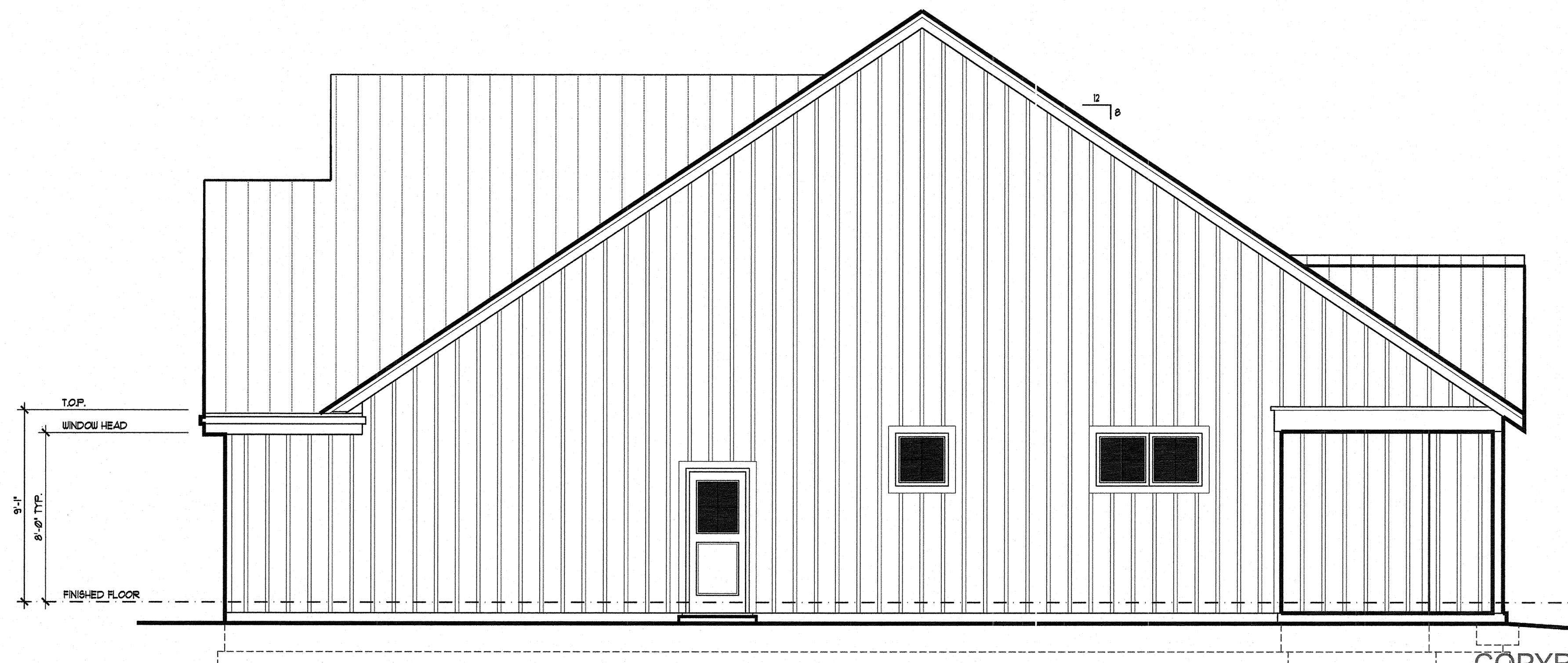
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REAR ELEVATION
SCALE: 1/4" = 1'-0"



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

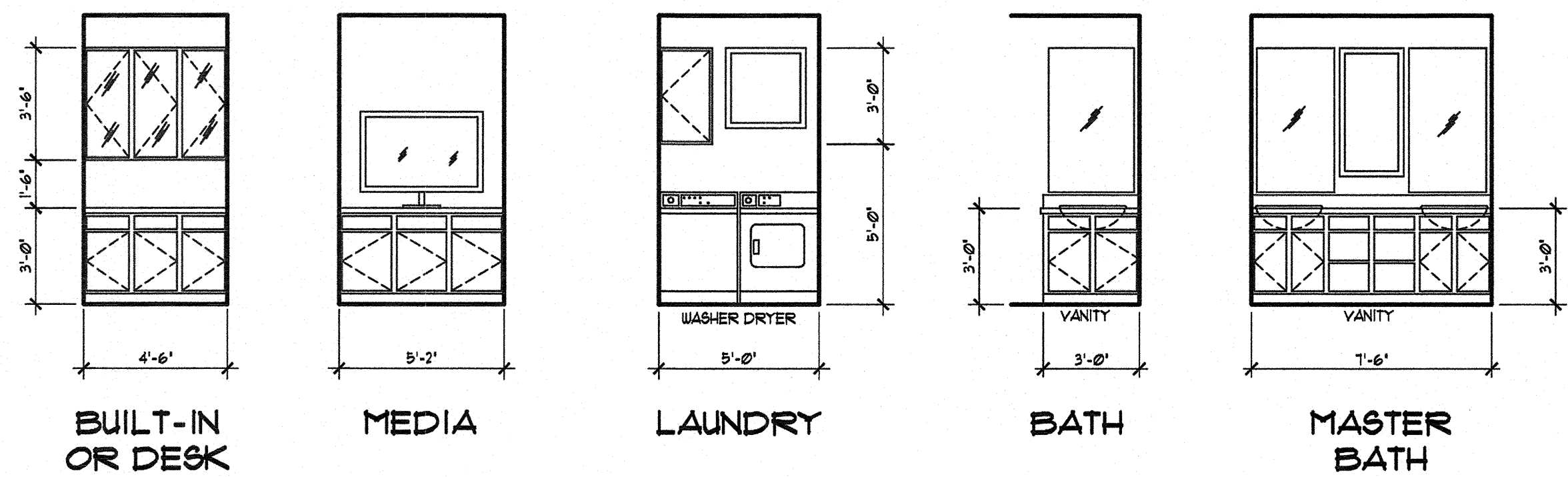
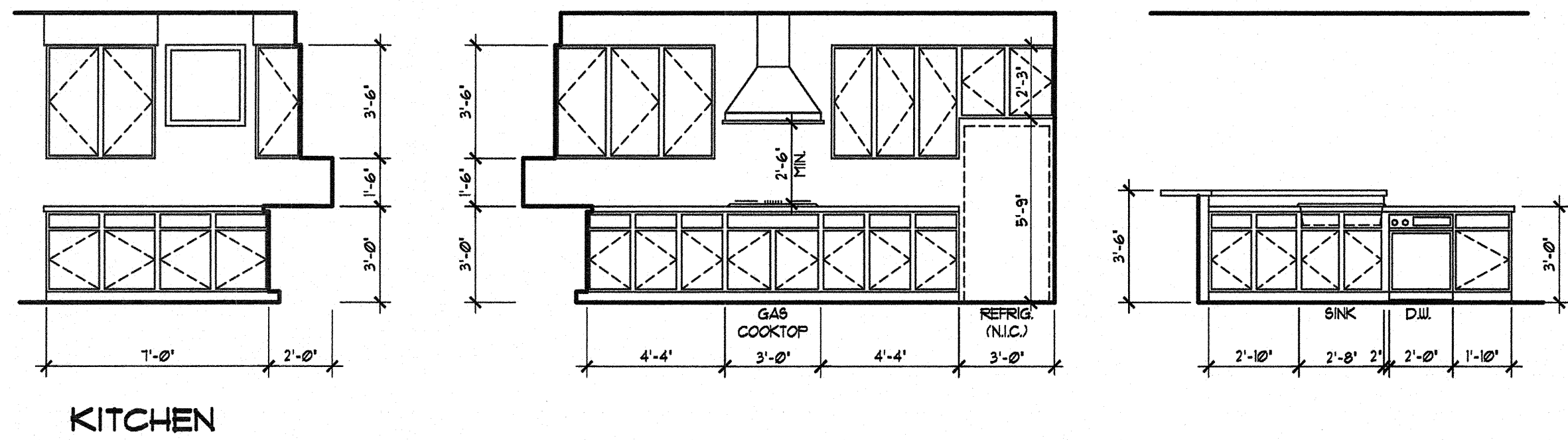
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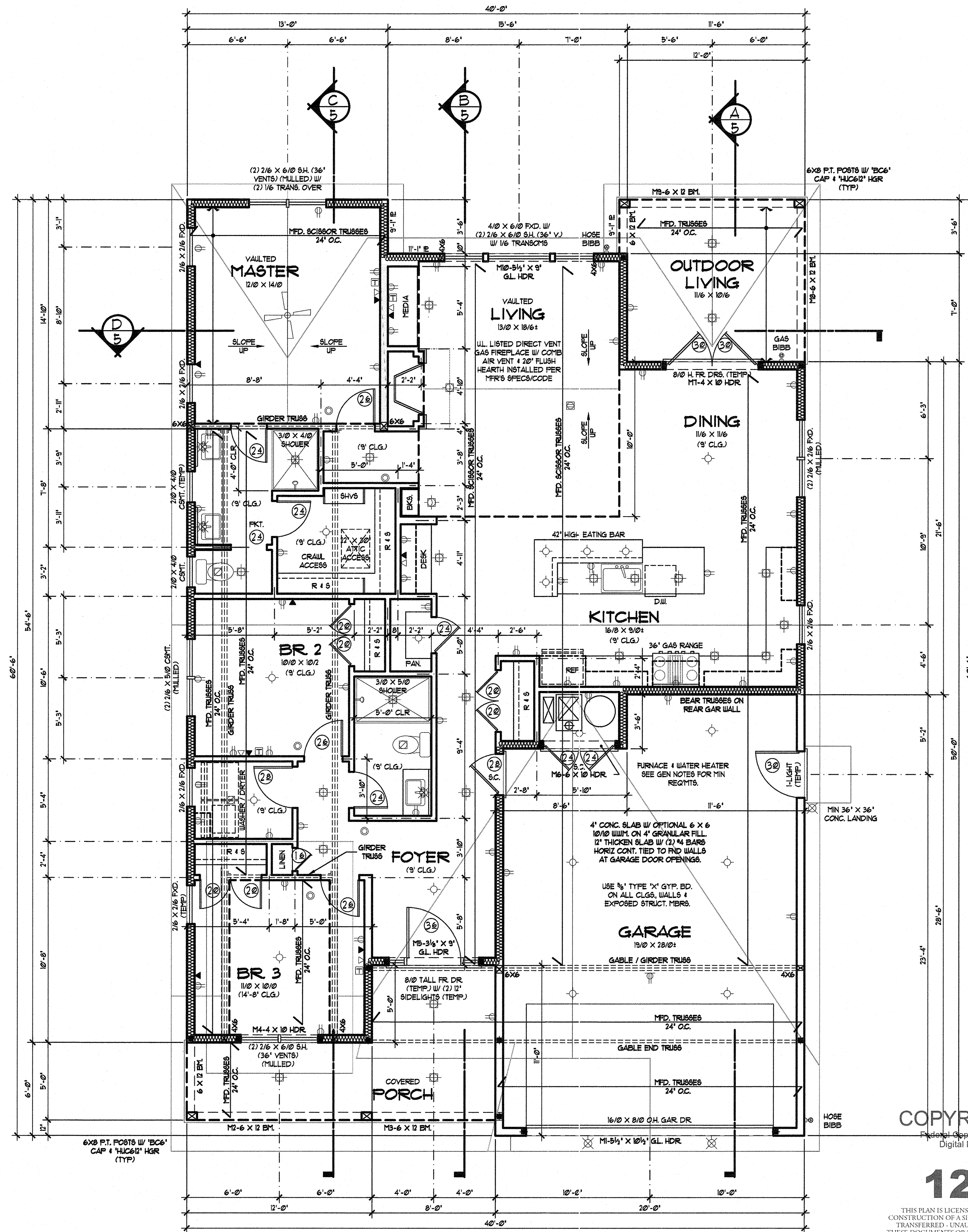
CABINET ELEVATIONS

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

- LEGEND**
- ⊙ RECESSED LIGHT
 - ⊙ RECESSED DIRECTIONAL LIGHT FIXTURE
 - ⊙ WALL-MOUNT LIGHT
 - ⊙ SURFACE-MOUNT LIGHT
 - ⊙ FLOOD LIGHT
 - ⊙ SURFACE MOUNTED FLUORESCENT
 - ⊙ RECESSED EXHAUST FAN VENTED TO THE EXTERIOR
 - ⊙ CEILING FAN
 - ⊙ DUPLEX OUTLET
 - ⊙ CEILING MOUNTED DUPLEX OUTLET
 - ⊙ 220V OUTLET
 - ⊙ FLUSH FLOOR MOUNTED OUTLET (VERIFY LOC.)
 - ⊙ TELEPHONE OUTLET
 - ⊙ DATA OUTLET
 - ⊙ TELEVISION OUTLET
 - ⊙ SPEAKER LOCATION
 - ⊙ SMOKE / CO DETECTOR (SEE 'GENERAL NOTES' FOR OTHER SPECS)
 - BEARING POINT LOCATION (PROVIDE SOLID BEARING - MIN. OF MEMBER WIDTH UNO.)
 - ⊙ POINT LOAD FROM ABOVE
 - ⊙ 4 x 4 POST FROM ROOF HIP, VALLEY OR RIDGE DOWN TO BEARING POINT ON WALL BELOW (MAX. OF 45' FROM VERT.)
 - ⊙ BEARING WALL SUPPORTING STRUCTURE ABOVE
 - ⊙ 4 x 10 HDR. ● BEARING WALL INT. DOOR & OPENINGS W/ MIN (2) 2 x SUPPORT EA END (UNO.)
 - ⊙ DROPPED STRUCT. MEMBER BEARING ● WALL
- S-FLOOR/07/18/16

- ENERGY ENVELOPE KEY**
- ▨ WALL/FLR/CLG. INSUL.
 - ▨ FOUNDATION INSUL.
- (SEE SHEET 'G' FOR INSULATION VALUES)

- CO. DET LOCATION**
- CARBON MONOXIDE ALARMS SHALL BE LOCATED IN EA. BEDROOM OR WITHIN 5 FEET OUTSIDE OF EA. BEDROOM DOOR, AT EVERY FLOOR LEVEL W/ BEDROOMS (SEE SHEET 'G' FOR ADD'L INFO)



MAIN FLOOR PLAN

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

IF LATERAL ENGINEERING IS REQUIRED, REFER TO ENGINEERING SHEETS FOR LATERAL SPECIFICATIONS

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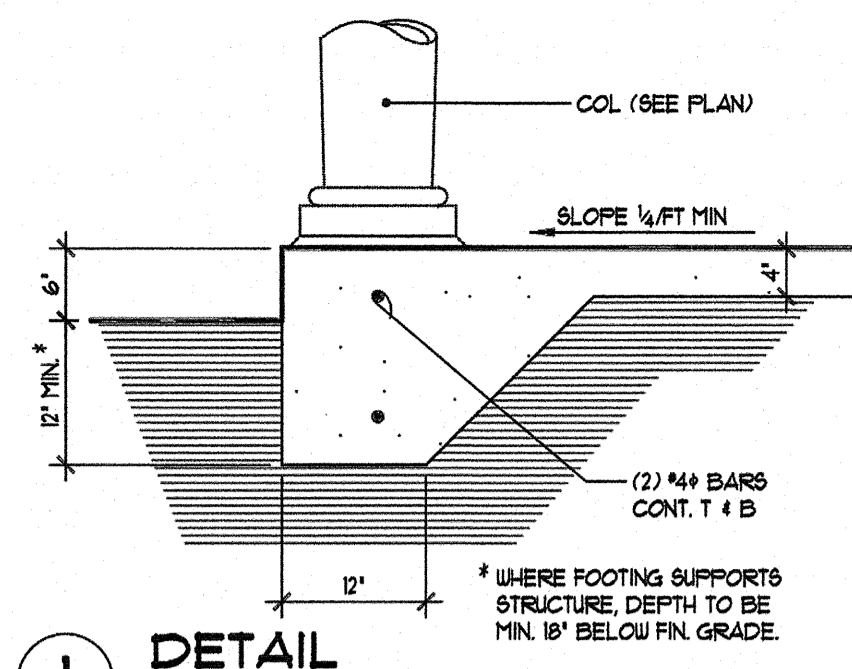
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25# SNOW LOAD

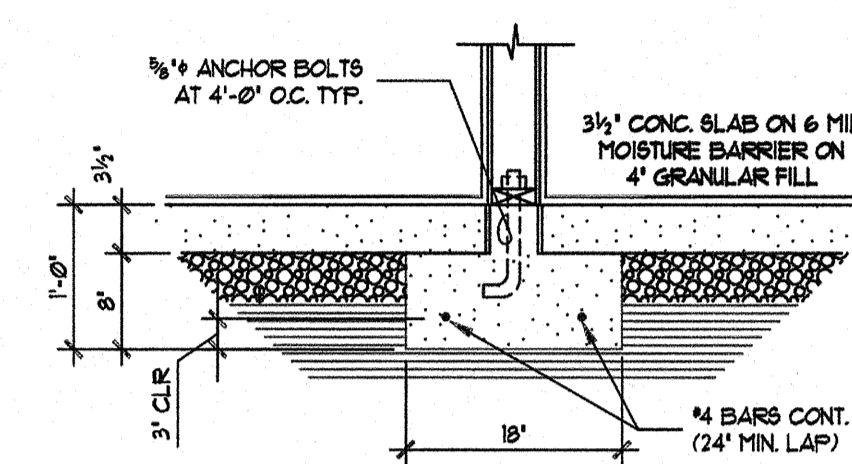
MAIN FLOOR 1552 SQ. FT.
 GARAGE AREA 533 SQ. FT.

1168D

3



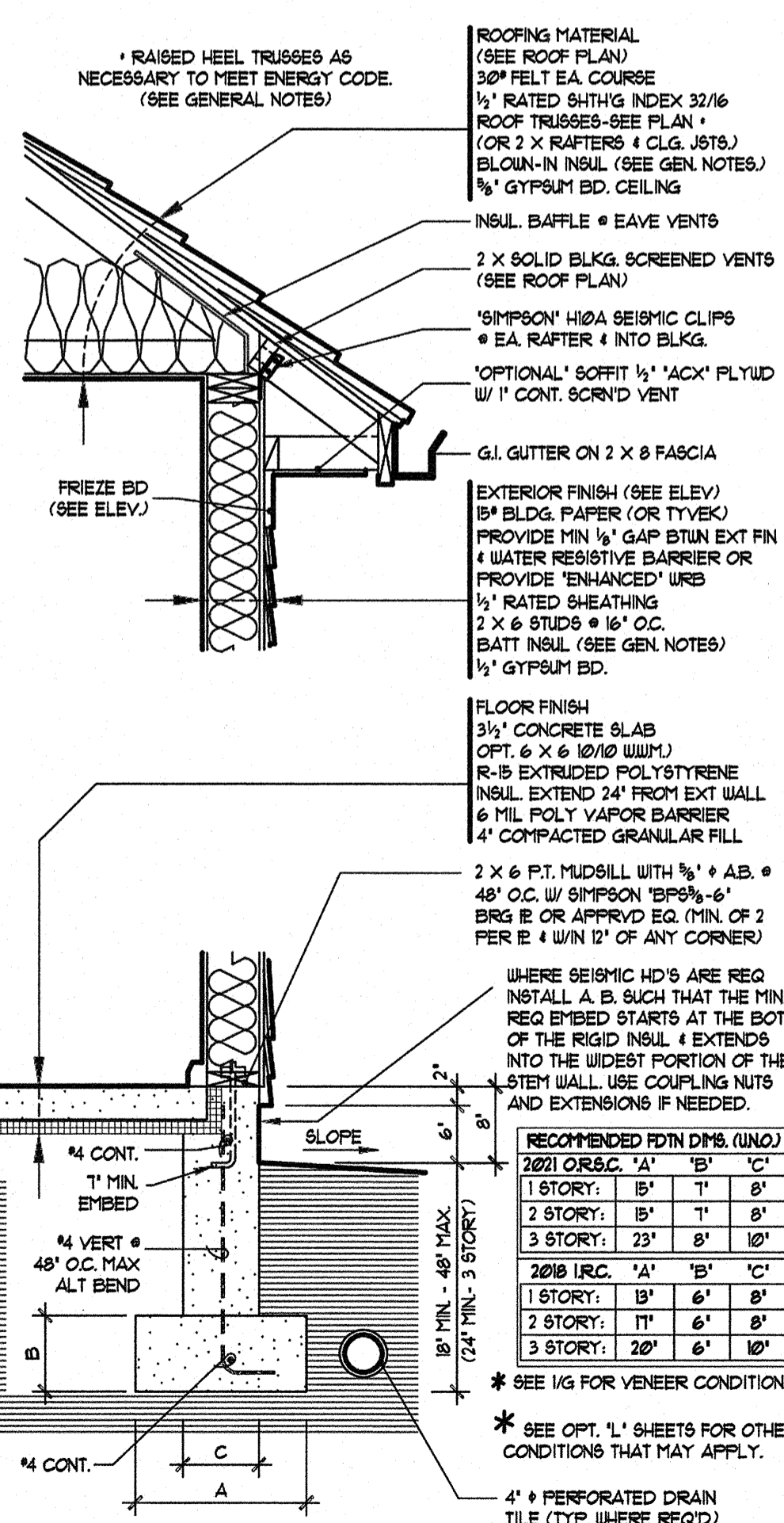
1 DETAIL
SCALE: 3/4" = 1'-0"



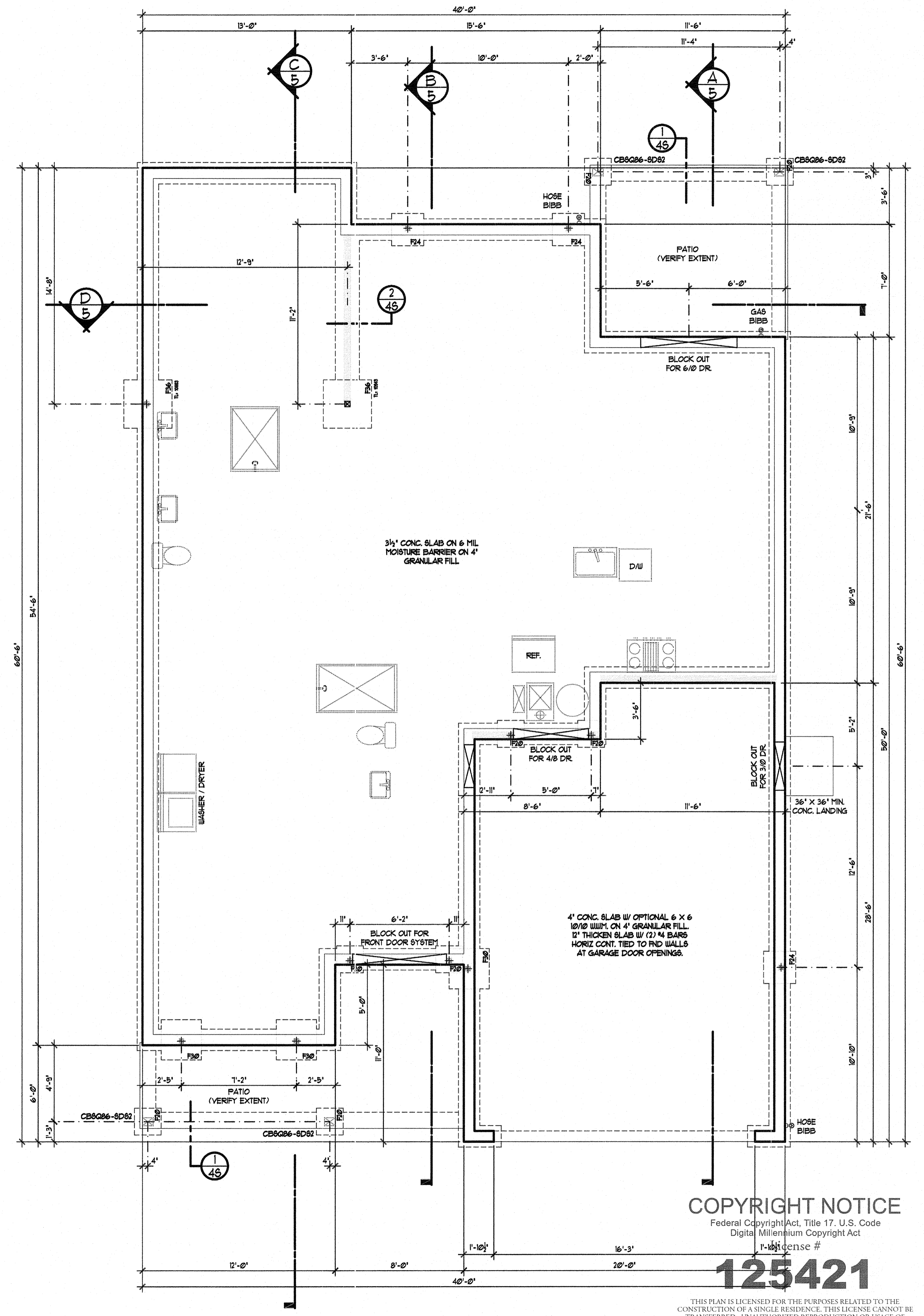
2 DETAIL
SCALE: 3/4" = 1'-0"

TAG	FOOTING SIZE	REINFORCING	MAX. BRG.
-	18" DIA. x 1'	N.A.	2,414 #
F20	20"x20"x10"	N.A.	3,819 #
F24	24"x24"x12"	N.A.	5,400 #
F28	28"x28"x14"	N.A.	7,211 #
F30	30"x30"x15"	N.A.	8,203 #
F36	36"x36"x18"	(4) #4 BARS @ 1' O.C. E/W	12,871 #
F42	42"x42"x21"	(5) #4 BARS @ 9' O.C. E/W	16,531 #
F48	48"x48"x24"	(6) #4 BARS @ 9' O.C. E/W	21,600 #
F54	54"x54"x27"	(6) #4 BARS @ 9' O.C. E/W	27,331 #
F60	60"x60"x30"	(7) #4 BARS @ 9' O.C. E/W	33,750 #

ASSUMED MIN. 4x4 #2 DF. COLUMN (UNCL. - SEE PLANS)
 #6x6 #2 DF. COLUMN FOR MAX. BRG.
 #3x3x3/4" PSL COLUMN FOR MAX. BRG. (OR #6x6 TO 10,521 #)
 #1/2"x1/2" PSL COLUMN FOR MAX. BRG. (SEE POST-CONN. DETAIL) SOIL B.F. = 1,500 PSF



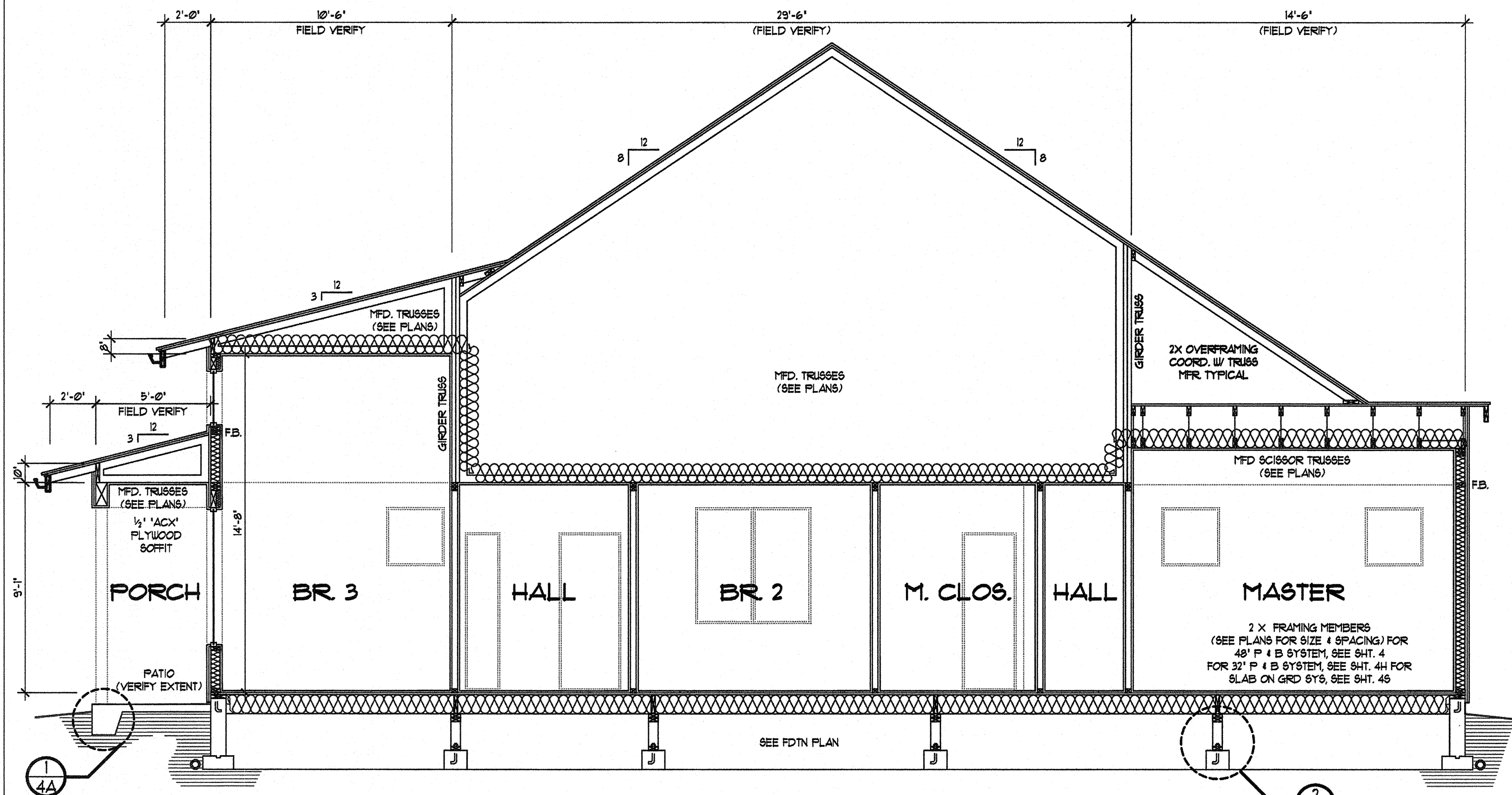
TYP. WALL SECTION
SCALE: 3/4" = 1'-0"



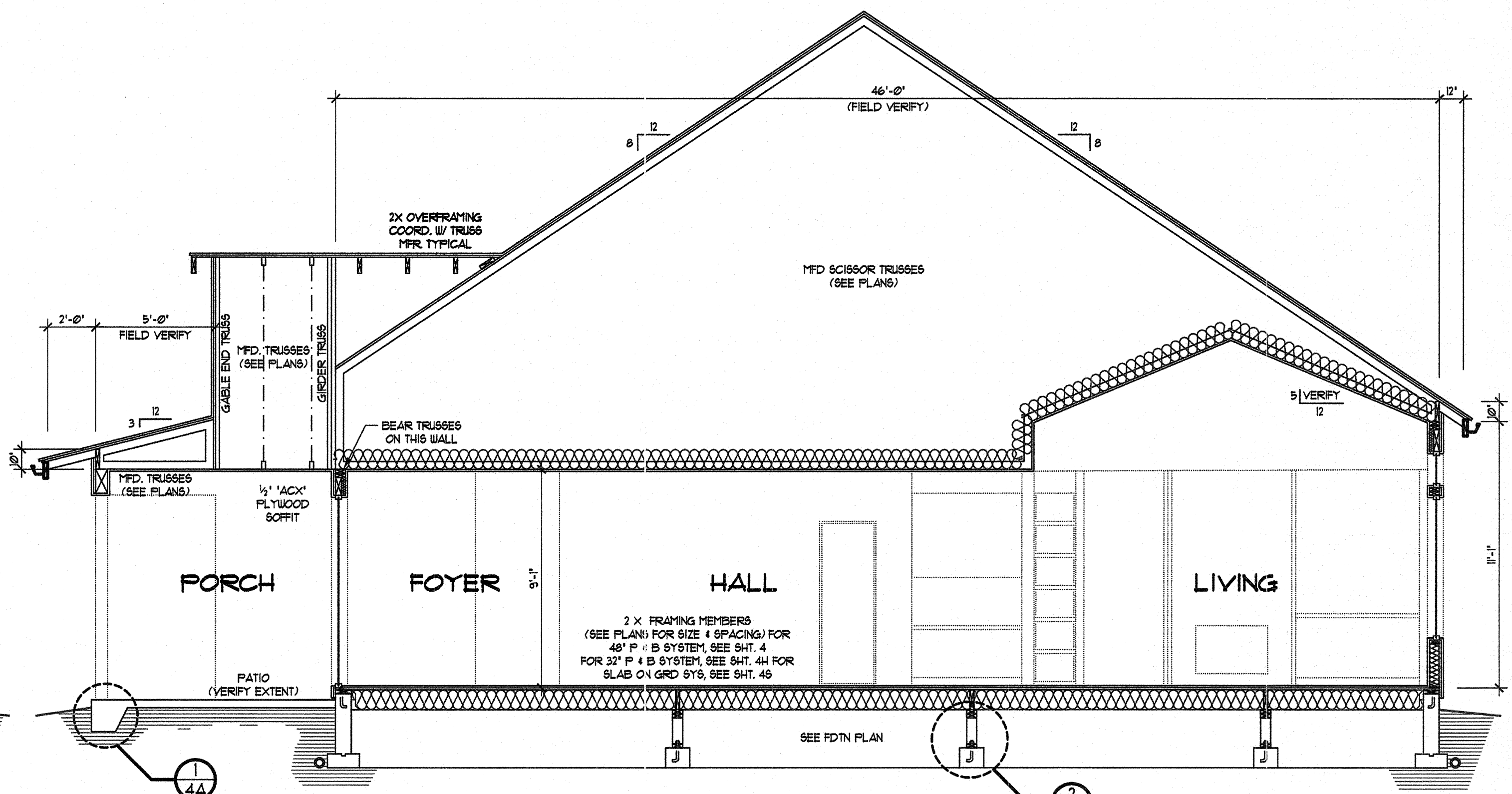
FOUNDATION PLAN
SCALE: 1/4" = 1'-0"

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C BUILDING SECTION
SCALE: 1/4" = 1'-0"

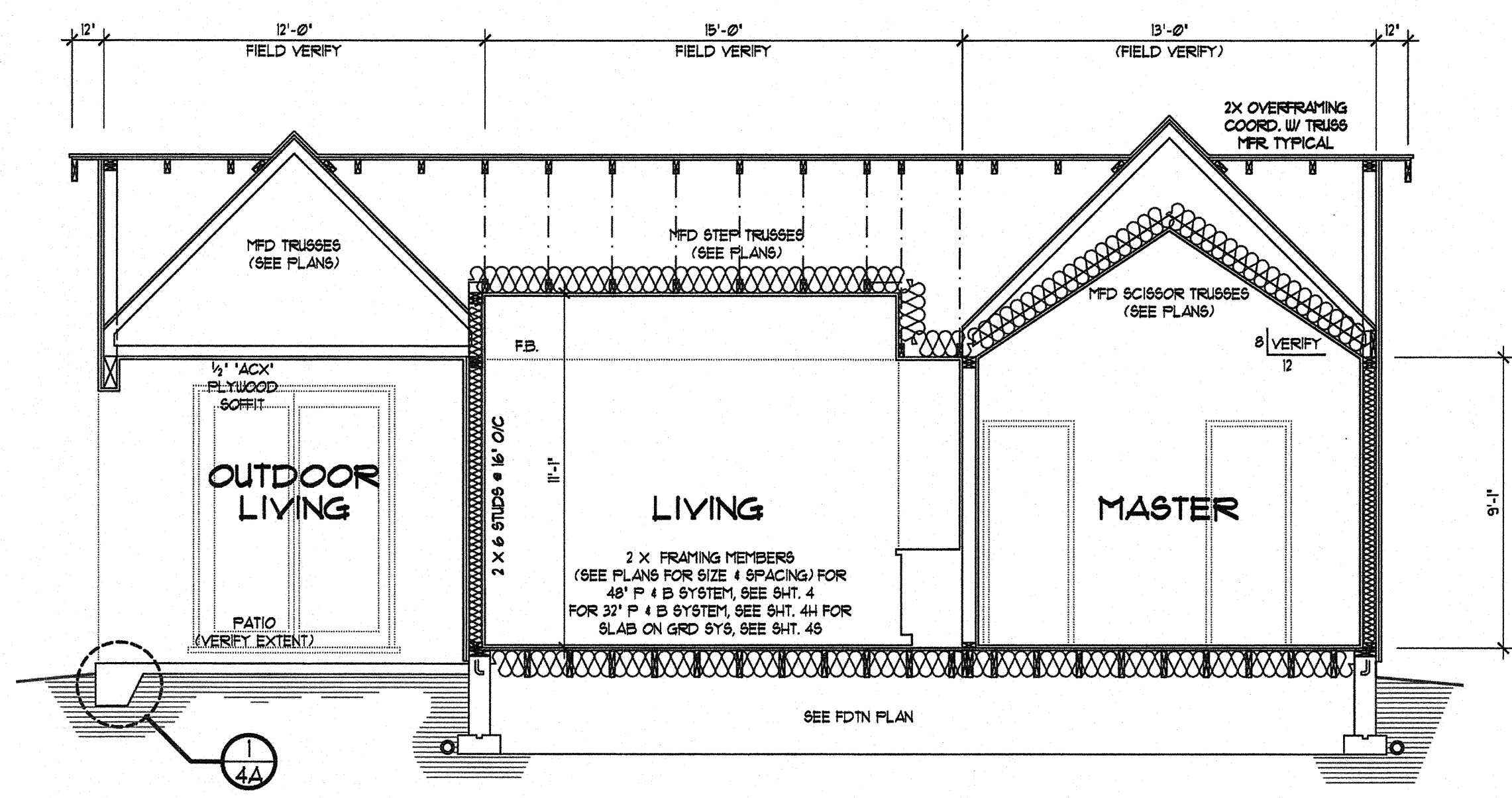


B BUILDING SECTION
SCALE: 1/4" = 1'-0"

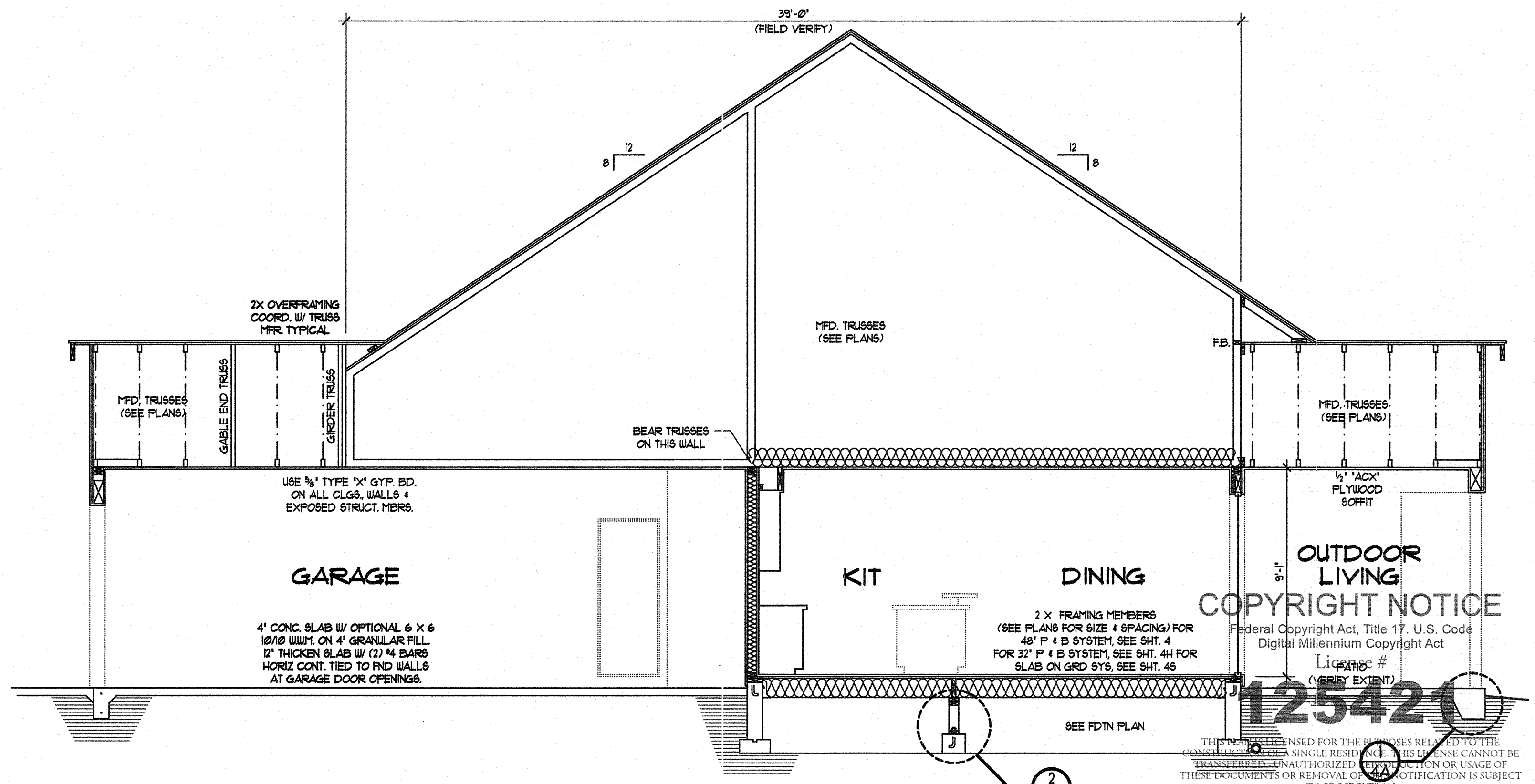
ENERGY ENVELOPE KEY

	WALL/ROOF/CLG. INSUL.
	FOUNDATION INSUL.
(SEE SHEET 'G' FOR INSULATION VALUES)	

C.O. DET. LOCATION
CARBON MONOXIDE ALARMS SHALL BE LOCATED IN EA. BEDROOM OR WITHIN 15 FEET OUTSIDE OF EA. BEDROOM DOOR AT EVERY FLOOR LEVEL W/ BEDROOMS (SEE SHEET 'G' FOR ADD'L. INFO)



D BUILDING SECTION
SCALE: 1/4" = 1'-0"



A BUILDING SECTION
SCALE: 1/4" = 1'-0"

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25# SNOW LOAD

1502 SQ. FT.	533 SQ. FT.
MAIN FLOOR	GARAGE AREA

ROOF DESIGN NOTES

THIS ROOF HAS BEEN DESIGNED TO SUPPORT CEDAR SHAKE ROOFING MATERIALS AND COMPOSITION ROOFING OF VARIOUS TYPES. THE TABLE BELOW DESCRIBES IN DETAIL THE ASSUMPTIONS MADE IN THE DESIGN OF THE ROOF STRUCTURE OF THIS BUILDING.

ROOF LIVE LOAD (SNOW)	25.0 PSF	3.25 PSF	AVE/(WET)
FRAMING MATERIALS:	2.0 PSF	33.25 PSF	ACTUAL REQ'D
SHEATHING MATERIALS:	1.5 PSF	6.75 PSF	SAFETY FACTOR
MISC. MATERIALS:	1.5 PSF		
ROOFING TYPE	DRY / WET	40.0	PSF TL
MED SHAKES	2.0 / 3.25 PSF		
HVY SHAKES	3.0 / 4.0 PSF		
SHINGLES	2.0 / 3.25 PSF		
COMPOSITION	2.5 / 3.0 PSF		

GYPSUM MATERIALS: ADD 2.0 PSF FOR VAULTED AREAS (COVERED IN SAFETY FACTOR)

NOTE: HIP, VALLEYS & RIDGES SHALL NOT BE LESS IN DEPTH THAN THE END CUT OF THE RAFTERS (FIELD VERIFY ALL CONDITIONS)

LEGEND

- 4 X 4 WOOD POST FROM RIDGE (HIP OR VALLEY) TO WALL BELOW (MIN. 2" X 4 REQ'D AT WALL BEARING POINT) NOTE: SPLICES IN HIPS & VALLEYS CAN ONLY OCCUR @ POST DOWN LOCATIONS
- 49 SQ. IN. ROOF VENTS (SEE VENT TABLE FOR QTY. - 50%/50% SHOWN)
- 2X4 FURLIN WALL TO BM OR WALL BELOW (FRAM'G AT 24" O.C.)
- SHADED AREA DENOTES ROOF FRAMED OVER RAFTERS BELOW
- DOWNSPOUTS

COMP/SHAKE ROOF

MAXIMUM SPANS PER 2004 IBC/A. TEL. RR-28 2 DF. L/240 25" LL & 15" DL

SIZE	SPACING	SPAN
2X6	12" O.C.	14'-0"
	16" O.C.	12'-1"
	24" O.C.	9'-10"
2X8	12" O.C.	17'-8"
	16" O.C.	15'-4"
	24" O.C.	12'-6"
2X10	12" O.C.	21'-1"
	16" O.C.	18'-9"
	24" O.C.	15'-3"
2X12	12" O.C.	25'-1"
	16" O.C.	21'-8"
	24" O.C.	17'-9"

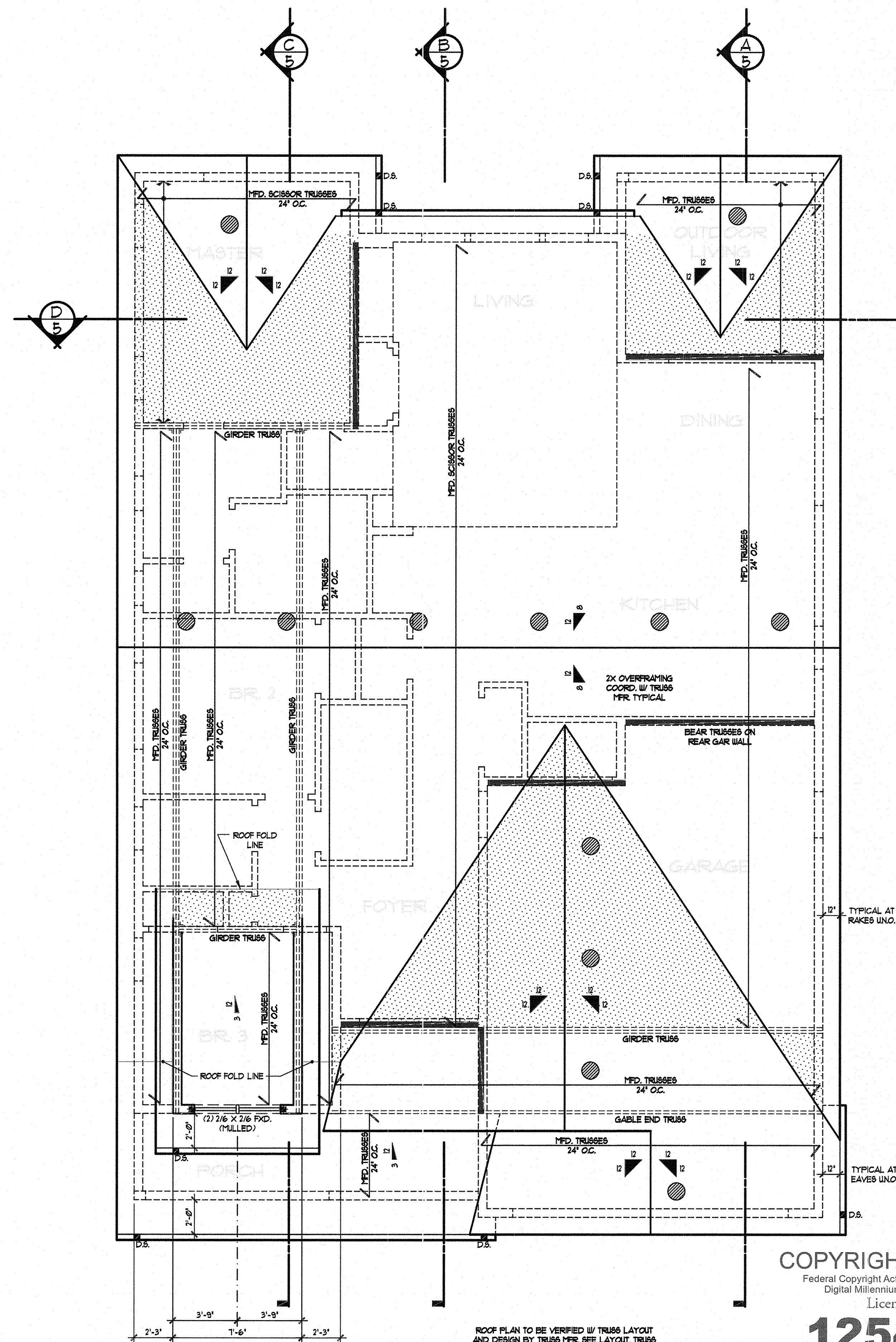
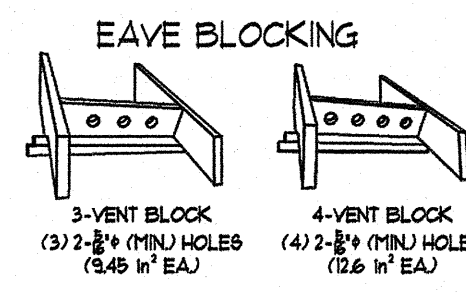
ROOF VENTS

ROOF AREA (ft ²) = 2348		EAVE-BLOCK'G		ROOF VENTS	
% EAVE	AREA (ft ²)	% ROOF	AREA (ft ²)	3-VENT	4-VENT
6.0	676.2	4.0	450.8	12	5
56.7	639.0	43.3	488.0	68	51
53.3	620.1	46.1	526.3	64	48
5.0	563.5	5.0	563.5	6.0	4.5

PER 2018 IBC - 1502.2 THE MIN. NET FREE VENTILATING AREA SHALL BE 1/60 OF THE AREA OF THE VENTED SPACE.

EXCEPTION: THE MIN. NET FREE VENTILATING AREA SHALL BE 1/300 OF THE VENTED SPACE PROVIDED BOTH OF THE FOLLOWING CONDITIONS ARE MET:

IN CLIMATE ZONES 1, 2 AND 3 A CLASS 1 OR 2 VAPOR RETARDER IS INSTALLED ON THE WARMER INTERIOR SIDE OF THE CEILING. NOT LESS THAN 40 PERCENT AND NOT MORE THAN 50 PERCENT OF THE REQUIRED VENTILATING AREA IS PROVIDED BY VENTS LOCATED IN THE UPPER PORTION OF THE ATTIC OR RAFTER SPACE. UPPER VENTILATORS SHALL BE LOCATED NOT MORE THAN 18" ON TOP BELOW THE ROOF OR HIGHEST POINT OF THE SPACE. TRUSSES VERTICALLY. THE BALANCE OF THE REQUIRED VENTILATING AREA SHALL BE LOCATED IN THE LOWER PORTION OF THE ATTIC SPACE. THE LOCATION OF WALL OR ROOF FRAMING MEMBERS SHALL BE SUCH THAT THE LOCATION OF UPPER VENTILATORS, INSTALLATION FROM THIS 18" FREE SPACE BELOW THE ROOF OR HIGHEST POINT OF THE SPACE SHALL BE PERMITTED.



ROOF FRAMING PLAN

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

ROOF PLAN TO BE VERIFIED W/ TRUSS LAYOUT AND DESIGN BY TRUSS MFR. SEE LAYOUT, TRUSS DRAWINGS AND ENGINEERING BY MFR. FOR ADDITIONAL SPECIFICATIONS AND INSTALLATION REQUIREMENTS.

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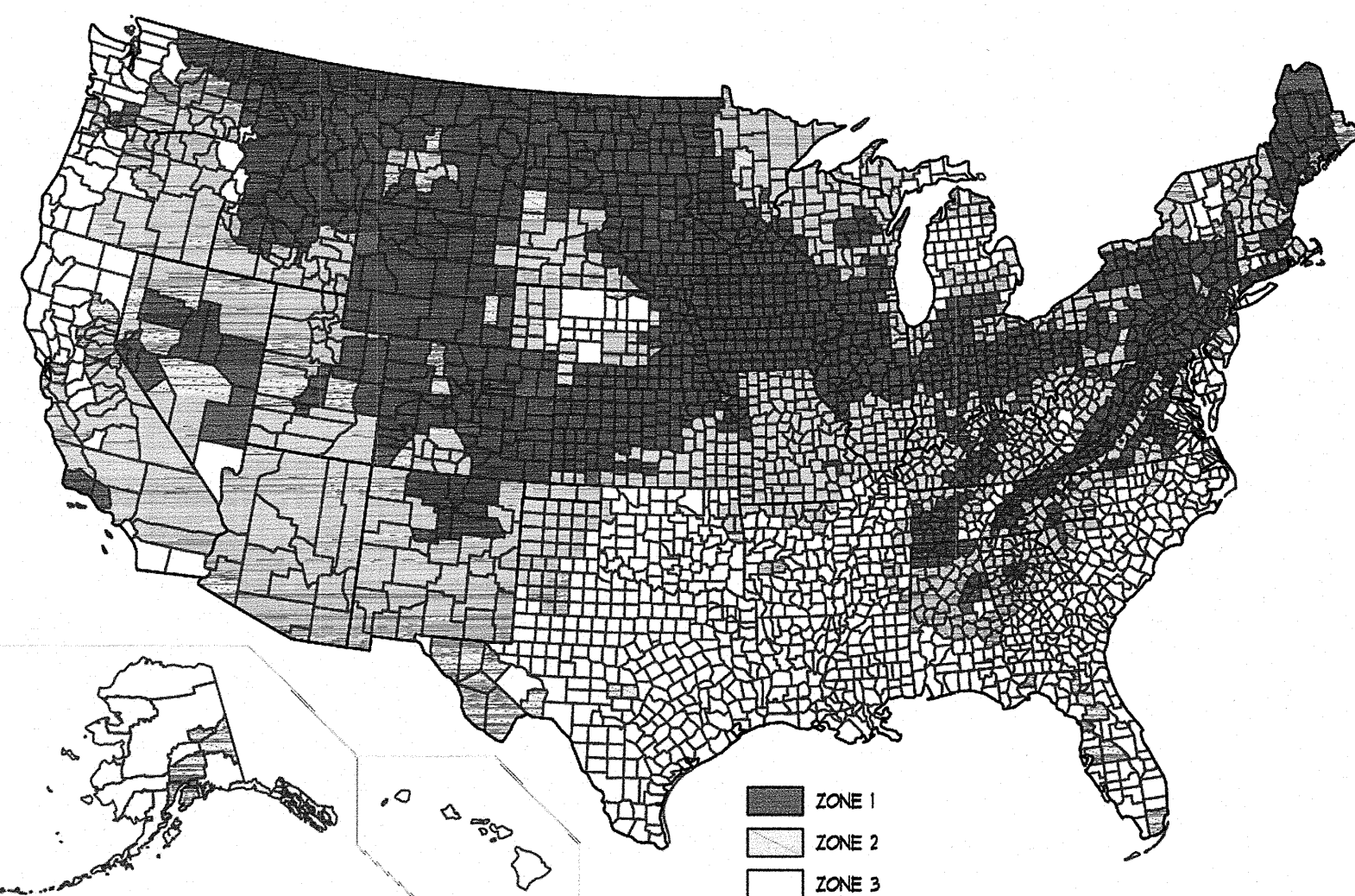
1168D-65 PROJECT MANAGER/EAAS DRAWN 07/28/20 LAW

25# SNOW LOAD

1552 SQ. FT. MAIN FLOOR
633 SQ. FT. GARAGE AREA

1168D
6

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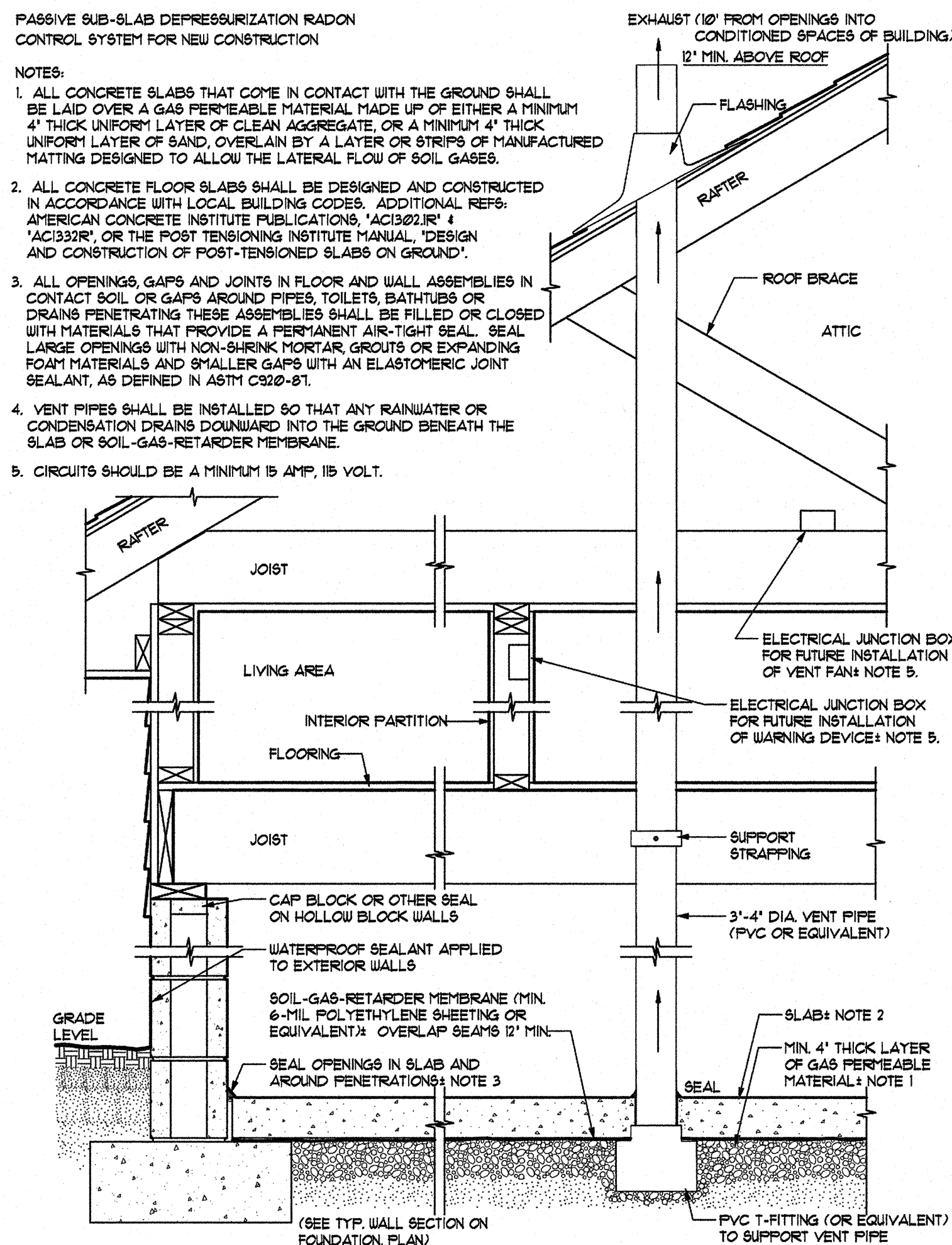
EPA RADON ZONES

DISCLAIMER: THE PURPOSE OF THIS MAP IS TO ASSIST NATIONAL, STATE AND LOCAL ORGANIZATIONS TO TARGET THEIR RESOURCES AND TO IMPLEMENT RADON-RESISTANT BUILDING CODES. ALL HOMES SHOULD BE TESTED REGARDLESS OF GEOGRAPHIC LOCATION. EPA RECOMMENDS THAT THIS MAP BE SUPPLEMENTED WITH ANY AVAILABLE LOCAL DATA IN ORDER TO FURTHER UNDERSTAND AND PREDICT THE RADON POTENTIAL FOR A SPECIFIC AREA.

PASSIVE SUB-SLAB DEPRESSURIZATION RADON CONTROL SYSTEM FOR NEW CONSTRUCTION

NOTES:

1. ALL CONCRETE SLABS THAT COME IN CONTACT WITH THE GROUND SHALL BE LAID OVER A GAS PERMEABLE MATERIAL MADE UP OF EITHER A MINIMUM 4" THICK UNIFORM LAYER OF CLEAN AGGREGATE, OR A MINIMUM 4" THICK UNIFORM LAYER OF SAND, OVERLAIN BY A LAYER OR STRIPS OF MANUFACTURED MATTING DESIGNED TO ALLOW THE LATERAL FLOW OF SOIL GASES.
2. ALL CONCRETE FLOOR SLABS SHALL BE DESIGNED AND CONSTRUCTED IN ACCORDANCE WITH LOCAL BUILDING CODES. ADDITIONAL REFS: AMERICAN CONCRETE INSTITUTE PUBLICATIONS, 'ACI302.1R' & 'ACI308.2R', OR THE POST-TENSIONING INSTITUTE MANUAL, 'DESIGN AND CONSTRUCTION OF POST-TENSIONED SLABS ON GROUND'.
3. ALL OPENINGS, GAPS AND JOINTS IN FLOOR AND WALL ASSEMBLIES IN CONTACT WITH SOIL OR GAPS AROUND PIPES, TOILETS, BATHUBS OR DRAINS PENETRATING THESE ASSEMBLIES SHALL BE FILLED OR CLOSED WITH MATERIALS THAT PROVIDE A PERMANENT AIR-TIGHT SEAL. SEAL LARGE OPENINGS WITH NON-SHRINK MORTAR, GROUTS OR EXPANDING FOAM MATERIALS AND SMALLER GAPS WITH AN ELASTOMERIC JOINT SEALANT, AS DEFINED IN ASTM C920-01.
4. VENT PIPES SHALL BE INSTALLED SO THAT ANY RAINWATER OR CONDENSATION DRAINS DOWNWARD INTO THE GROUND BENEATH THE SLAB OR SOIL-GAS-RETARDER MEMBRANE.
5. CIRCUITS SHOULD BE A MINIMUM 15 AMP, 120 VOLT.

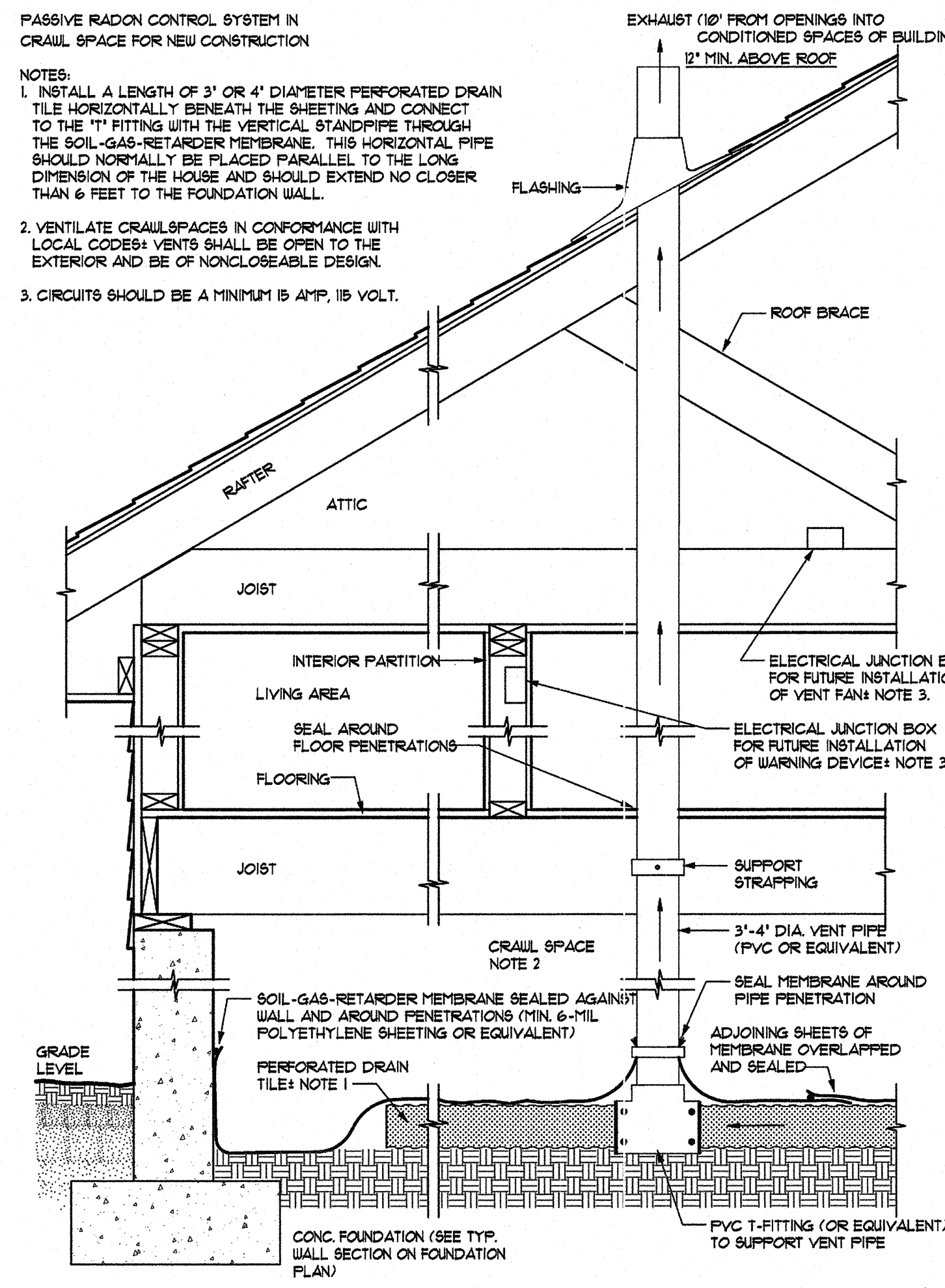


SLAB ON-GRADE/BELOW-GRADE (BASEMENTS) SUB-MEMBRANE DEPRESSURIZATION SYSTEM

PASSIVE RADON CONTROL SYSTEM IN CRAWLSPACE FOR NEW CONSTRUCTION

NOTES:

1. INSTALL A LENGTH OF 3" OR 4" DIAMETER PERFORATED DRAIN TILE HORIZONTALLY BENEATH THE SHEETING AND CONNECT TO THE 1" FITTING WITH THE VERTICAL STANDPIPE THROUGH THE SOIL-GAS-RETARDER MEMBRANE. THIS HORIZONTAL PIPE SHOULD NORMALLY BE PLACED PARALLEL TO THE LONG DIMENSION OF THE HOUSE AND SHOULD EXTEND NO CLOSER THAN 6 FEET TO THE FOUNDATION WALL.
2. VENTILATE CRAWLSPACES IN CONFORMANCE WITH LOCAL CODES. VENTS SHALL BE OPEN TO THE EXTERIOR AND BE OF NON-CLOSABLE DESIGN.
3. CIRCUITS SHOULD BE A MINIMUM 15 AMP, 120 VOLT.



CRAWLSPACE SUB-MEMBRANE DEPRESSURIZATION SYSTEM

RADON MITIGATION

THE FOLLOWING CONSTRUCTION TECHNIQUES AND MEASURES ARE INTENDED TO MITIGATE RADON ENTRY IN NEW CONSTRUCTION. THESE TECHNIQUES MAY BE REQUIRED ON A JURISDICTION BY JURISDICTION BASIS. FOR EXAMPLE, IN THE STATE OF OREGON, PER 2014 ORS.C., THE COUNTIES OF MULTNOMAH, WASHINGTON, CLATSOP, FOLK, TAPPELL, MOOD RIVER AND BAKER REQUIRE RADON MITIGATION, AS DO THE COUNTIES OF CLATSOP, FERRY, OKANOGAN, PEND OREILLE, SKAMANIA, SPOKANE AND STEVENS, IN THE STATE OF WASHINGTON, PER 2015 I.R.C.A.WAC 51-51-600(1) (AF101 & AF103).

FOLLOWING THE U.S. EPA 'MODEL STANDARDS AND TECHNIQUES FOR CONTROL OF RADON IN NEW RESIDENTIAL BUILDINGS', THESE SPECIFICATIONS MEET MOST NATIONAL CODES. THE BUILDER AND HOME OWNER SHOULD CHECK FOR ANY LOCAL VARIANTS TO THESE GUIDELINES.

BUILDING TIGHTNESS MEASURES

THE FOLLOWING ARE POINTS OF ENTRY TO PROTECT FROM PASSAGE OF RADON GAS INTO LIVING SPACE - PROVIDE POLYURETHANE CAULK OR EQUIVALENT SEALANT AT THE FOLLOWING CRITICAL POINTS:

SLAB ON-GRADE AND BASEMENT WALLS

- CRACKS IN SUBFLOORING AND FLOORING
- GAPS BEHIND STUD WALLS AND BRICK VENEER WALLS THAT REST ON UNCAFFERED HOLLOW-BLOCK FOUNDATION
- ELECTRICAL PENETRATIONS
- LOOSE-FITTING PIPE PENETRATIONS
- OPEN TOPS OF BLOCK WALLS
- WATER FROM SUMP WELLS
- HEATING DUCT REGISTER PENETRATIONS
- COLD-AIR RETURN DUCTS IN CRAWL SPACE

CRAWL SPACE

- CRACKS IN SUBFLOORING AND FLOORING
- GAPS BEHIND STUD WALLS AND BRICK VENEER WALLS THAT REST ON UNCAFFERED HOLLOW-BLOCK FOUNDATION
- ELECTRICAL PENETRATIONS
- LOOSE-FITTING PIPE PENETRATIONS
- OPEN TOPS OF BLOCK WALLS
- WATER FROM SUMP WELLS
- HEATING DUCT REGISTER PENETRATIONS
- COLD-AIR RETURN DUCTS IN CRAWL SPACE

CONDENSATE DRAINS SHALL BE RUN TO THE EXTERIOR USING NON PERFORATED PIPE OR SHALL BE PROVIDED WITH AN APPROVED TRAP.

SUMP PITS THAT SERVE AS END POINT FOR A SUB-SLAB OR EXTERIOR DRAIN TILE LOOP SYSTEM AND SUMP PITS WHICH ARE NOT SEALED FROM THE SOIL, SHALL BE FITTED WITH A GASKETED OR SEALED LID. WHERE THE SUMP IS USED AS THE SUCTION POINT IN A SUB-SLAB DECOMPRESSION SYSTEM, THE LID MUST BE DESIGNED TO ACCOMMODATE THE VENT PIPE. WHERE USED AS A FLOOR DRAINING, THE SUMP PIT LID SHALL HAVE A TRAPPED INLET.

DUCTWORK WHICH PASSES THROUGH OR BENEATH A CONCRETE FLOOR SLAB SHALL BE FREE OF SEAMS AND MUST BE PERFORMANCE TESTED.

DUCTWORK PASSING THROUGH A CRAWLSPACE MUST HAVE ALL SEAMS AND JOINTS SEALED (PER M6013). ALL JOINTS OF DUCT SYSTEMS USED IN THE HEATING OR COOLING OF A CONDITIONED SPACE SHALL BE SEALED BY MEANS OF TAPES, MASTIC, AEROSOL SEALANT, GASKETING OR OTHER APPROVED CLOSURE SYSTEMS. WHERE MASTIC IS USED TO SEAL OPENINGS GREATER THAN 1/4", A COMBINATION OF MASTIC AND MESH SHALL BE USED.

CRAWLSPACE ACCESS OR UNDER-FLOOR MECHANICAL EQUIPMENT ACCESS, OR ANY OTHER ACCESS POINT FROM THE HABITABLE SPACE INTO THE CRAWL SPACE, SUCH AS DOORS OR PANELS, MUST BE CLOSED AND GASKETED TO CREATE AN AIRTIGHT SEPARATION.

AIR HANDLING UNITS IN CRAWL SPACES SHALL BE SEALED TO PREVENT AIR FROM BEING DRAIN INTO THE UNIT.

CRAWL SPACE RADON MITIGATION

IN ADDITION TO THE CRAWL SPACE SEALING REQUIREMENTS, ONE OF THREE RADON MITIGATION METHODS SHALL BE IMPLEMENTED:

METHOD 1 - MECHANICAL VENTILATION (AF103), EXCEPTION)

- PROVIDE AN APPROVED MECHANICAL CRAWL SPACE VENTILATION SYSTEM OR OTHER EQUIVALENT SYSTEM.

METHOD 2 - PASSIVE SUB-MEMBRANE DEPRESSURIZATION SYSTEM (AF103.1)

- PROVIDE FOUNDATION VENTILATION SYSTEM (SEE FOUNDATION NOTES FOR CRAWLSPACE VENTING)
- PROVIDE A SOIL-GAS RETARDER, SUCH AS 6 MIL POLYETHYLENE OR EQUIVALENT (SEE GAS-RETARDER NOTES)
- PROVIDE A VENT STACK (SEE VENT STACK NOTES)

METHOD 3 - CRAWLSPACE VENTILATION AND BUILDING TIGHTNESS

- PROVIDE NO LESS THAN ONE NET 80 FT. OF CRAWLSPACE FOUNDATION VENT AREA PER EACH 100 SQ. FT. OF UNDER-FLOOR AREA (SEE FOUNDATION NOTES FOR CRAWLSPACE VENTING LOCATION REQUIREMENTS).
- OPERABLE LOUVERS, DAMPERS, OR OTHER MEANS TO TEMPORARILY CLOSE OFF VENT OPENINGS ARE NOT ALLOWED TO MEET THE REQUIREMENTS OF THIS RADON MITIGATION METHOD.
- DUELLINGS SHALL BE TESTED WITH A BLOWER DOOR, DEPRESSURIZING THE DUELLING TO 50 PASCALS FROM AMBIENT CONDITIONS AND FOUND TO EXHIBIT NO MORE THAN 5.0 AIR CHANGES PER HOUR.
- INSTALL A MECHANICAL EXHAUST, SUPPLY, OR COMBINATION VENTILATION SYSTEM PROVIDING WHOLE-BUILDING VENTILATION RATES AS PER TABLE N101(3).

VENTILATION AIR REQUIREMENTS (cfm)

FLOOR AREA (FT ²)	0-1	2-3	4-5	6-7	>7
<1500	30	45	60	75	90
1501-3000	45	60	75	90	105
3001-4500	60	75	90	105	120
4501-6000	75	90	105	120	135
6001-15000	90	105	120	135	150
>15000	105	120	135	150	165

TABLE N101(3.1)

SLAB ON-GRADE/BASEMENT RADON MITIGATION

A PASSIVE SUB-SLAB DEPRESSURIZATION SYSTEM SHALL BE INSTALLED DURING CONSTRUCTION IN BASEMENT OR SLAB-ON-GRADE BUILDINGS. FOLLOW THE NOTES HERE REGARDING BUILDING TIGHTNESS MEASURES AND ASSEMBLE THE FOLLOWING ELEMENTS OF THIS MITIGATION SYSTEM:

- PROVIDE A RADON VENT PIPE EXTENDING FROM A GAS PERMEABLE LAYER BENEATH THE SLAB FLOOR SYSTEM, THROUGH THE FLOORS OF THE DUELLING AND TERMINATING AT THE ROOF.
- SEE NOTES REGARDING VENT PIPE, SOIL-GAS-RETARDER AND SLAB SUBFLOOR PREPARATION.

SLAB SUB-FLOOR PREPARATION

- A LAYER OF GAS-PERMEABLE MATERIAL SHALL BE PLACED UNDER ALL CONCRETE SLABS AND OTHER FLOOR SYSTEMS THAT DIRECTLY CONTACT THE GROUND, AND ARE WITHIN THE WALLS OF THE LIVING SPACES OF THE BUILDING. THE GAS-PERMEABLE LAYER SHALL CONSIST OF ONE OF THE FOLLOWING:

1. A UNIFORM LAYER OF CLEAN AGGREGATE, A MINIMUM OF 4 INCHES THICK. THE AGGREGATE SHALL CONSIST OF MATERIAL SMALL ENOUGH TO PASS THROUGH A 2" SIEVE AND BE RETAINED BY A 1/4" SIEVE.
2. A UNIFORM LAYER OF SAND (NATIVE OR FILL), A MINIMUM OF 4 INCHES THICK, OVERLAIN BY A LAYER OR STRIPS OF GEO-TEXTILE DRAINAGE MATTING DESIGNED TO ALLOW THE LATERAL FLOW OF SOIL GASES.

SOIL-GAS-RETARDER

- THE SOIL IN CRAWLSPACES SHALL BE COVERED WITH A CONTINUOUS LAYER OF MINIMUM 6-MIL POLYETHYLENE SOIL-GAS-RETARDER. THE GROUND COVER SHALL BE LAPPED A MINIMUM OF 12 INCHES AT JOINTS AND SHALL EXTEND TO ALL FOUNDATION WALLS ENCLOSING THE CRAWL SPACE AREA.
- THE SHEETING SHALL FIT CLOSELY AROUND ANY PIPE, WIRE OR OTHER PENETRATIONS OF THE MATERIAL.
- ALL PUNCTURES OR TEARS IN THE MATERIAL SHALL BE SEALED OR COVERED WITH ADDITIONAL SHEETING.

VENT PIPE (RADON)

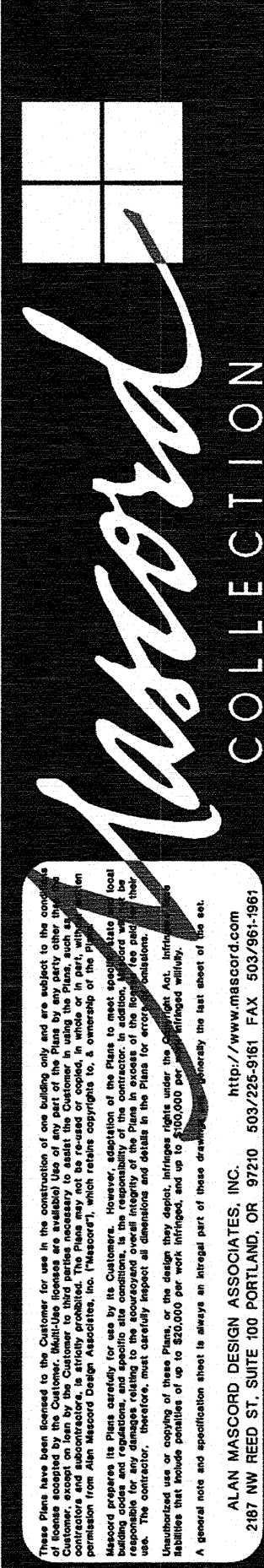
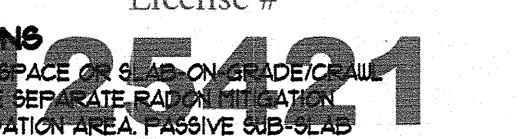
- A PLUMBING TEE OR OTHER APPROVED CONNECTION SHALL BE INSTALLED HORIZONTALLY BENEATH THE SOIL-GAS-RETARDER SHEETING AND CONNECTED TO A 3" OR 4" DIAMETER FITTING WITH A 3" OR 4" VENT PIPE INSTALLED THROUGH THE SHEETING.
- THE VENT PIPE SHALL BE EXTENDED UP THROUGH THE BUILDING FLOORS TO TERMINATE AT LEAST 12 INCHES ABOVE THE ROOF SURFACE IN A LOCATION AT LEAST 10 FEET AWAY FROM ANY WINDOW OR OTHER OPENING INTO THE CONDITIONED SPACES OF THE BUILDING THAT IS LESS THAN 2 FEET BELOW THE EXHAUST POINT, AND 10 FEET FROM ANY WINDOW OR OTHER OPENING IN ADJOINING OR ADJACENT BUILDINGS.
- IN BUILDINGS WHERE INTERIOR FOOTINGS OR OTHER BARRIERS SEPARATE THE SUB-SLAB AGGREGATE OR OTHER GAS-PERMEABLE MATERIAL, EACH AREA SHALL BE FITTED WITH AN INDIVIDUAL VENT PIPE.
- MULTIPLE VENT PIPES SHALL CONNECT TO A SINGLE VENT THAT TERMINATES ABOVE THE ROOF OR EACH INDIVIDUAL VENT PIPE SHALL TERMINATE ABOVE THE ROOF.
- ALL COMPONENTS OF THE RADON VENT PIPE SYSTEM SHALL BE INSTALLED TO PROVIDE POSITIVE DRAINAGE TO THE GROUND BENEATH THE SLAB OR SOIL-GAS-RETARDER.
- RADON VENT PIPES SHALL BE ACCESSIBLE FOR FUTURE FAN INSTALLATION THROUGH AN ATTIC OR OTHER AREA OUTSIDE THE HABITABLE SPACE OR AN APPROVED ROOF TOP ELECTRICAL SUPPLY MAY BE PROVIDED FOR FUTURE USE FOR A POWERED RADON VENT FAN.
- ALL EXPOSED AND VISIBLE INTERIOR RADON VENT PIPES SHALL BE IDENTIFIED WITH AT LEAST ONE LABEL ON EACH FLOOR AND IN ACCESSIBLE ATTIC. THE LABEL SHALL READ: 'RADON REDUCTION SYSTEM'.

POWER SOURCE REQUIREMENT

- TO ACCOMMODATE FUTURE INSTALLATION OF AN ACTIVE SUB-MEMBRANE OR SUB-SLAB DEPRESSURIZATION SYSTEM, AN ELECTRICAL CIRCUIT TERMINATED IN AN APPROVED BOX SHALL BE INSTALLED DURING CONSTRUCTION. THE VENT PIPE ATTACHED TO ANTICIPATED LOCATION OF VENT PIPE FAN, AN ELECTRICAL SUPPLY SHALL ALSO BE ACCESSIBLE IN ANTICIPATED LOCATION OF SYSTEMS. Code FAILURE ALARMS. Digital Millennium Copyright Act License #

COMBINATION FOUNDATIONS

- COMBINATION BASEMENT/CRAWLSPACE OR SLAB ON-GRADE/BELOW-GRADE FOUNDATIONS SHALL HAVE SEPARATE SUB-MEMBRANE DEPRESSURIZATION SYSTEMS IN EACH TYPE OF FOUNDATION AREA. PASSIVE SUB-SLAB AND PASSIVE SUB-MEMBRANE RADON VENT PIPES MAY BE CONNECTED TO A SINGLE VENT TERMINATING ABOVE THE ROOF OF EACH VENT MAY BE INDIVIDUALLY IDENTIFIED TO TERMINATE ABOVE THE ROOF OR USAGE OF ROOF (SEE VENT PIPE NOTES) AND/OR REMOVAL OF THIS NOTIFICATION IS SUBJECT TO PROSECUTION.



PROJECT MANAGER: BRR
DRAWN: 07/28/20 LAW

25# SNOW LOAD

1500 SQ. FT. MAIN FLOOR
600 SQ. FT. GARAGE AREA

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