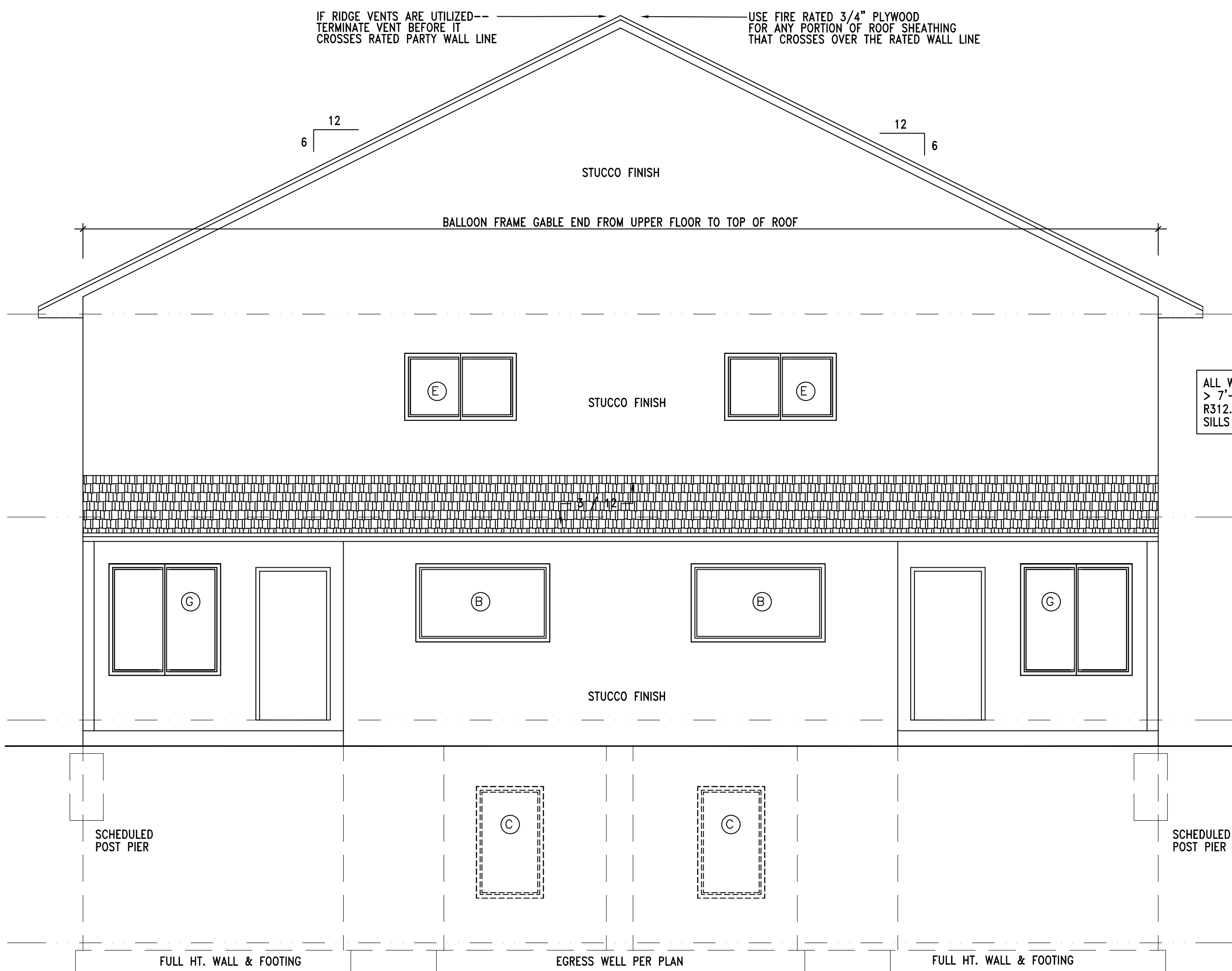


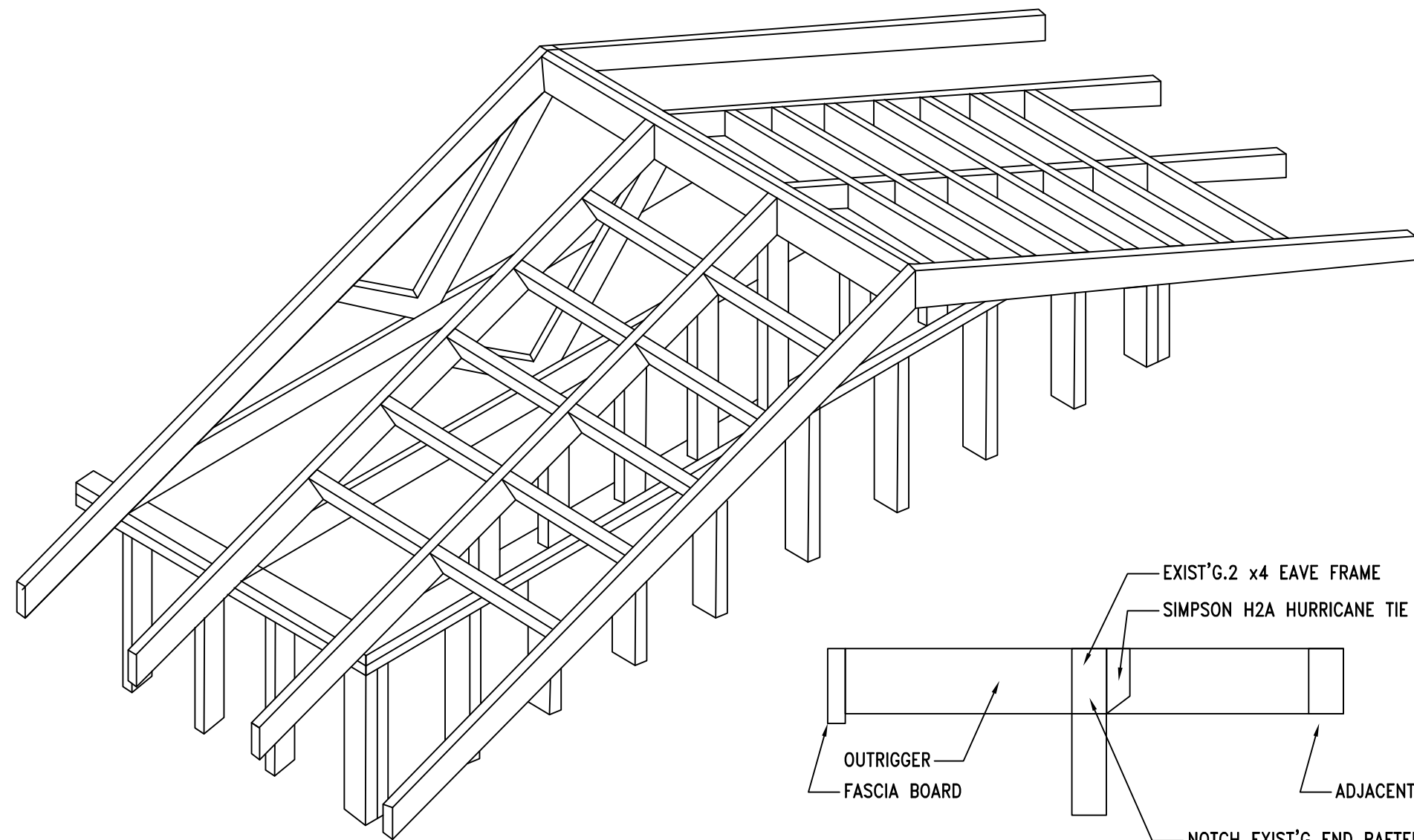
D GABLE END WALL BRACING

N.T.S.



B REAR ELEVATION

1/4" = 1'-0"



C LADDER FRAMING SOFFIT EXTENSIONS

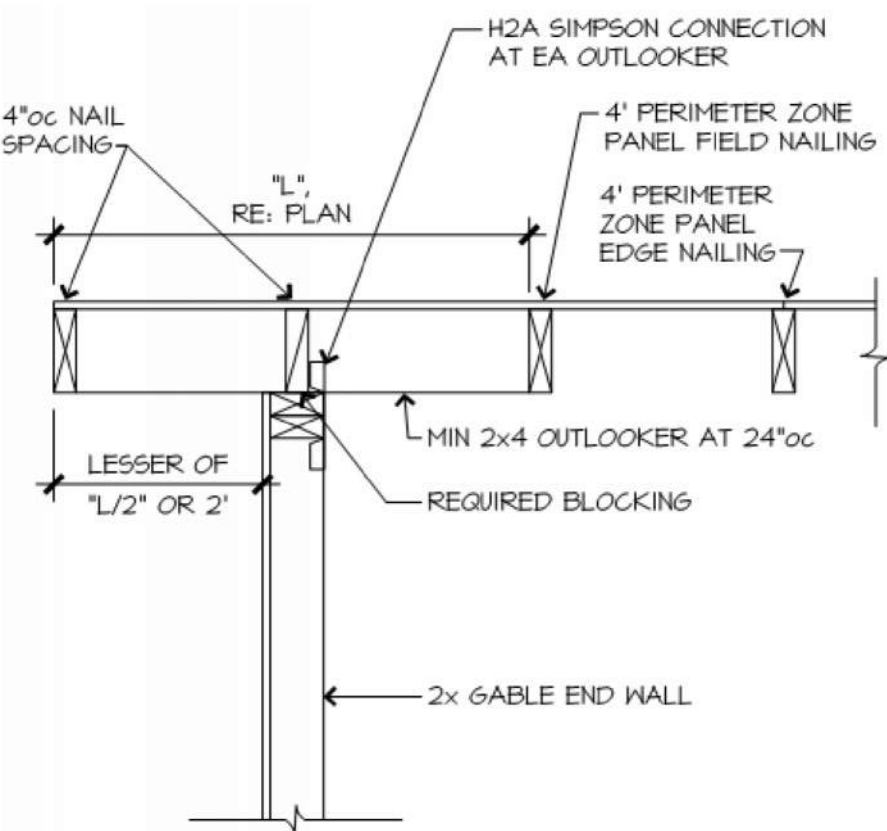
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STRUCTURAL MEMBER REVIEW AND CERTIFICATION:



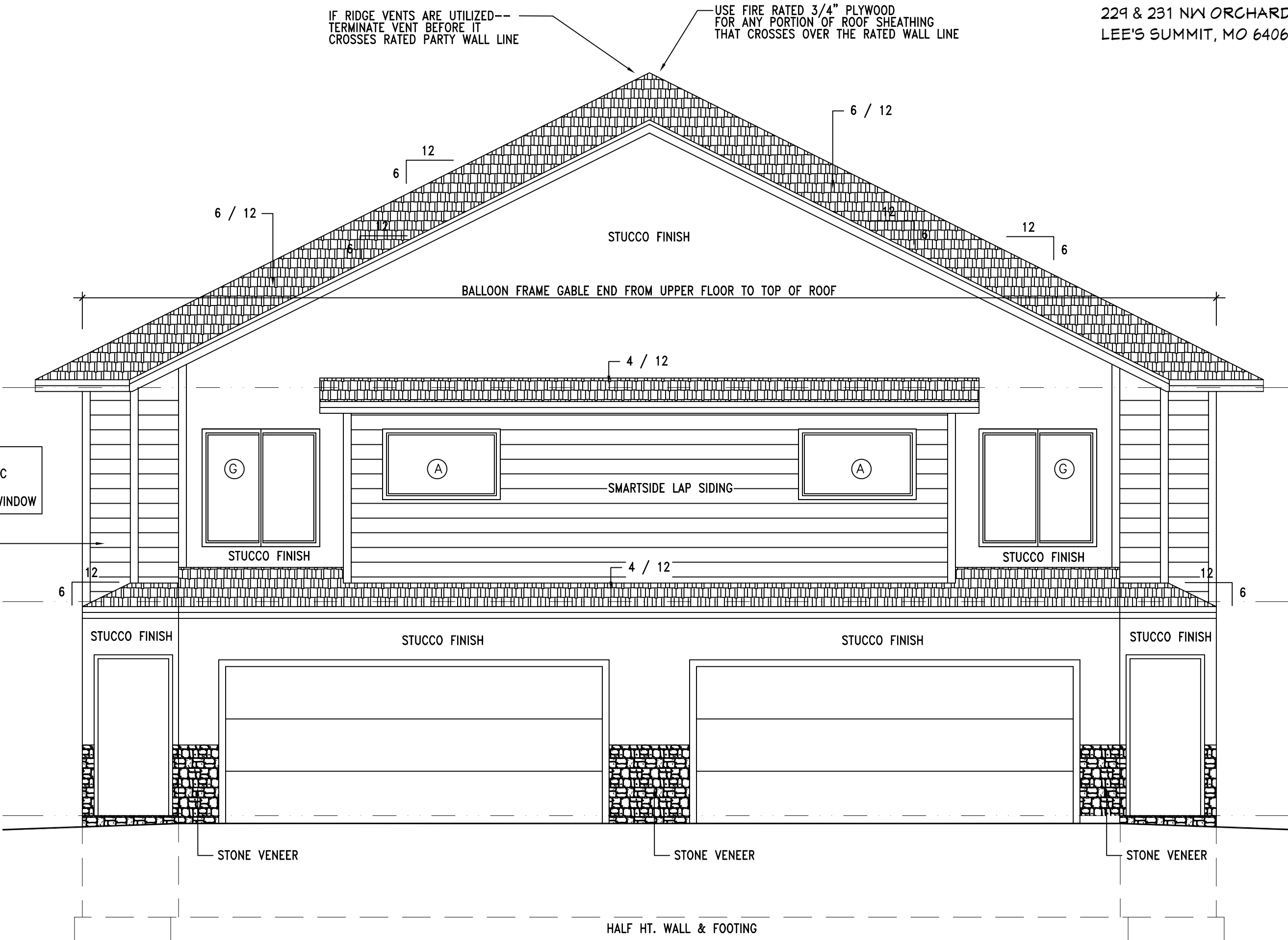
**ENGINEERING, P.C.**  
CIVIL ENGINEERING CONSULTANTS  
1805 WATERS ROAD, HARRISONVILLE, MISSOURI 64701  
PH: (816) 380-5180 FAX: (816) 884-3280 EMAIL: [AR@REDEENGINEERING.COM](mailto:AR@REDEENGINEERING.COM)  
MO. CERTIFICATE OF AUTHORITY #000002187

AARON D. OBERMILLER, P.E.  
NO. 0000019580 / 01-02-2027  
CERTIFICATION IS PROVIDED HEREON FOR STRUCTURAL ITEMS NOT OTHERWISE ADDRESSED IN THE REQUIREMENTS OF THE 2018 INTERNATIONAL RESIDENTIAL CODE, ALL CONSTRUCTION, MATERIALS, FASTENING NOT SPECIFICALLY DENOTED SHALL COMPLY WITH THE REQUIREMENTS OF THE 2018 IRC AND THEREIN REFERENCED STANDARDS. ANY REQUIRED CLARIFICATION OR MODIFICATIONS TO STRUCTURAL ITEMS SHALL BE APPROVED BY THE ENGINEER OF RECORD OR OTHER LICENSED PROFESSIONAL CAPABLE OF CERTIFYING COMPLIANCE WITH THE MINIMUM STANDARDS OF THE APPLICABLE CODE. ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR DRAWING ERRORS AND OMISSIONS IN PLAN OR ELEVATION OF PROVIDED PLANS.



BUILDING ADDRESS:  
LOT 5 - SEQUOIA  
229 & 231 NW ORCHARD CT.  
LEE'S SUMMIT, MO 64063

ALL WINDOW HEADS ON THIS LEVEL TO BE  
> 7'-0" U.N.O. FALL PROTECTION MEETING IRC  
R312.2 SHALL BE PROVIDED FOR WINDOWS W/  
SILLS < 24" AFF & EXT. GRADE > 72" BELOW WINDOW



A FRONT ELEVATION

1/4" = 1'-0"

RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
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09/11/2025 2:06:04



AOR: AARON BROWN  
MO # A-7215  
4334 QUARTER HORSE LANE  
BATES CITY, MO 64011  
816-588-1178

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DATE: 08-21-2025  
SUBDIVISION:  
PLOT #:

REVISION	DATE

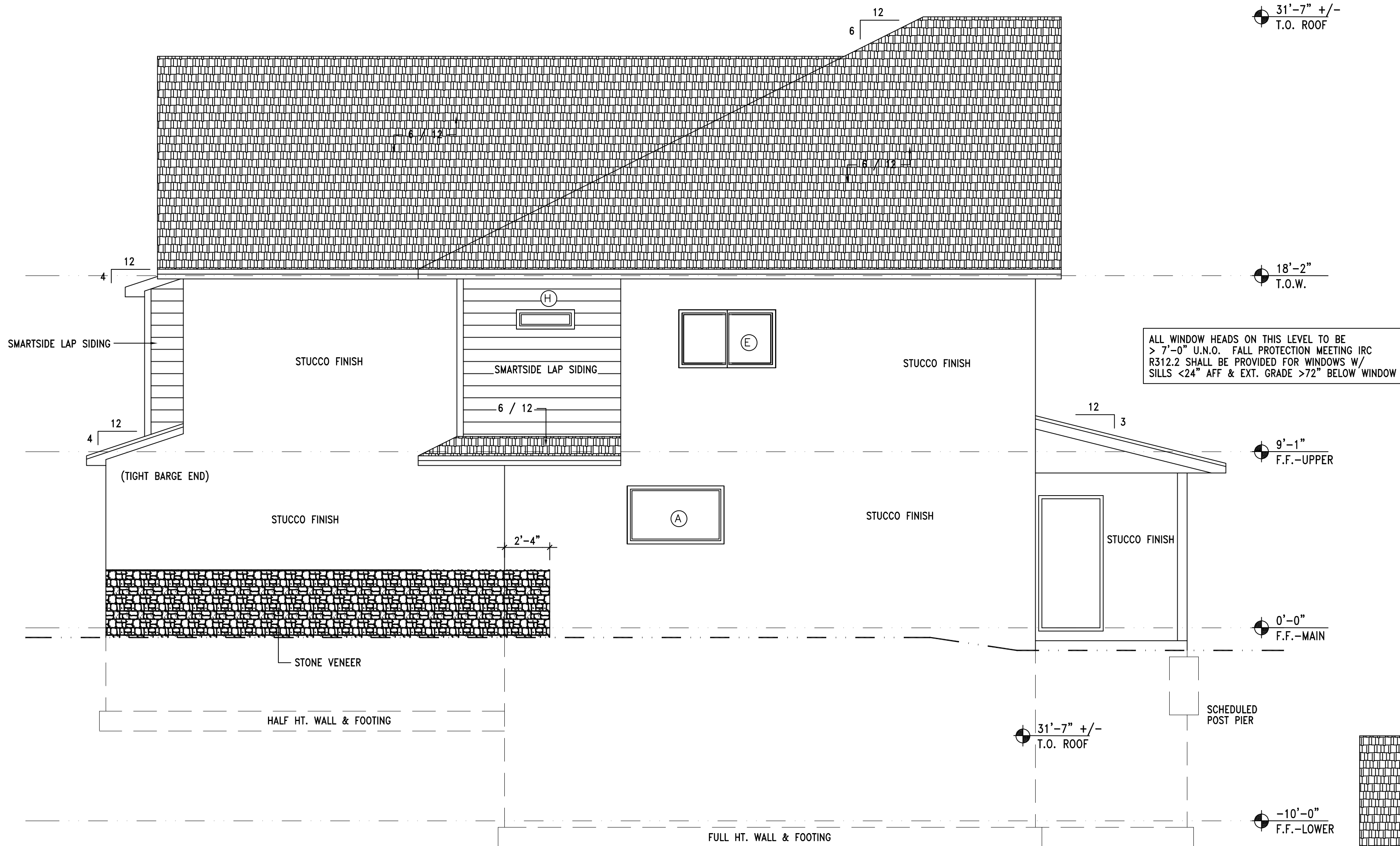
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A1

SHEET 1 OF 11

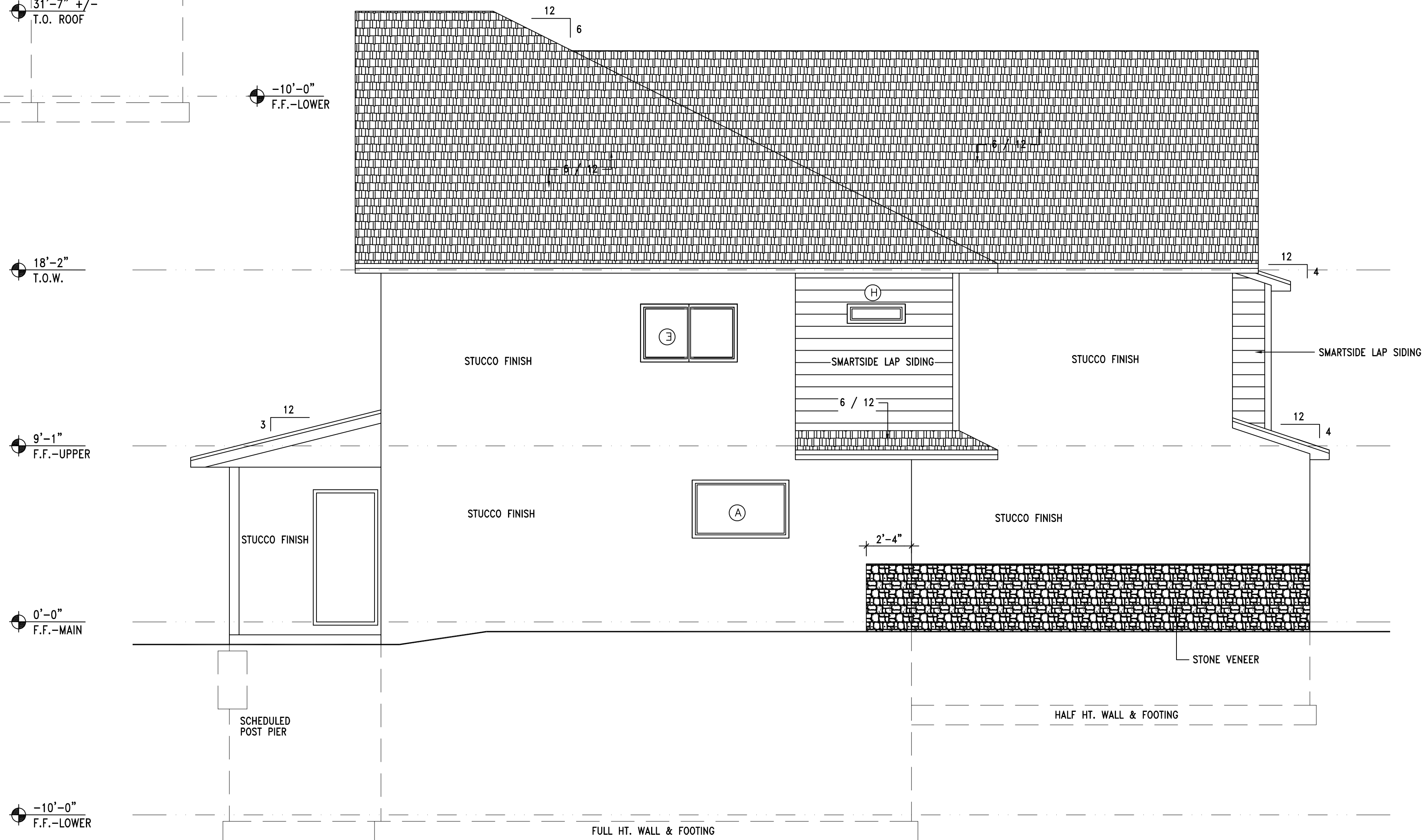
SEQUOIA DUPLEX, MISSOURI  
LEE'S SUMMIT, MISSOURI





B SIDE ELEVATION

1/4" = 1'-0"



A SIDE ELEVATION

1/4" = 1'-0"

STRUCTURAL MEMBER REVIEW AND CERTIFICATION:



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MO. CERTIFICATE OF AUTHORITY #000002187

AARON D. OBERMILLER, P.E.  
NO. 0000019560 / 01-01-2027  
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MO #: A-7215  
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BATES CITY, MO 64011  
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LEE'S SUMMIT, MO 64063

SEQUOIA DUPLEX, MISSOURI  
LEE'S SUMMIT

DATE: 08-21-2025  
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PLOT #:

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A2

SHEET 2 OF 11



A circular professional seal for Aaron A. Brown, a Registered Architect in the State of Missouri. The seal features the text "STATE OF MISSOURI" at the top, "AARON A. BROWN" in the center, "NUMBER 1A-T215" below the name, and "REGISTERED ARCHITECT" at the bottom. A stylized signature is written over the seal.

**2018 IRC CODE COMPLIANCE**  
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**INTERIOR DOOR SCHEDULE**  
**\*ALL DOORS ARE 8'6" HEIGHT**  
**UNLESS ALL DOORS REQUIRE**  
**4" R.O.(WIDTH) & 2" R.O.(HT.)**  
**BEYOND THE SCHEDULED SIZE**

- ① 3'-0" HC
- ② 2'-6" ATRIUM
- ③ 3'-0" SC (1-3/8")  
(20 MIN) W/ CLOSER
- ④ 3'-0" ENTRY-THERMAL
- ⑤ 2'-0" HC
- ⑥ 3'-0" BARN SLIDER
- ⑦ 2'-6" HC
- ⑧ PR. 2'-6" HC
- ⑨

1. EGRESS WINDOWS SHALL COMPLY WITH SECTION 310 OF THE IRC.
2. WINDOWS SHALL HAVE FALL PROTECTION PER IRC 312.2 WHERE NEEDED.
3. WINDOWS, DOORS, AND OTHER GLAZING WILL COMPLY WITH THE REQUIREMENTS OF SECTION 308 OF THE IRC FOR SAFETY GLAZING.

MANUFACTURER: MANUFACTURER:  
PRODUCT LINE: BUILDER'S VINYL W/ LOW-E  
U-FACTOR: 0.32  
SHGC: 0.35

N.T.S.

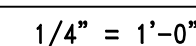


- A. R VALUES ARE MINIMUMS AND U-FACTORS ARE MAXIMUMS.
- B. INSULATION INSTALLED IN A CAVITY WHICH IS LESS THAN THE LABEL OR DESIGN THICKNESS OF DESIGN INSULATION, THE INSTALLED R-VALUE SHALL NOT BE LESS THAN SPECIFIED IN THE TABLE
- C. TOTAL R-VALUES OF A COMPLETE ASSEMBLY SHALL COUNT TOWARD COMPLIANCE OF THE MIN. REQUIRED PER TABLE. FOR EXAMPLE: CAVITY INSULATION + STUD + SHEATHING AND/OR GYPSUM BOARD + AIR GAP, ETC.

2018 INTL. ENERGY CONSERVATION CODE (2018-CH. 11)	
DOORS & WINDOWS:	U=0.35 MAX (HEAT GAIN MAX 0.25)
SKYLIGHTS:	U=0.55 MAX
ATTIC CEILINGS:	R=49 MIN
WOOD FRAME WALLS:	20 OR 13 & 5 MIN.
FLOOR (OVER UNHEATED):	R=19 MIN
SLAB ON GRADE:	R=8 OR 12" IN
VAULTED CEILINGS:	R=38 (SEE DETAIL)
CRAWL SPACE:	R=10
BASEMENT WALLS:	R=10 CONT OR R=13 CAVITY
DUCTWORK:	R=8
FUEL FIRED FURNACE:	90% AFUE MIN.
ELECTRIC FURNACE:	100% MINIMUM
COOLING SYSTEM:	13 SEER MIN
WATER HEATER:	
GAS FIRED STORAGE:	0.67 EF MIN
GAS FIRED INSTANT:	0.62 EF MIN
ELECTRIC STORAGE:	0.61 EF MIN
ELECTRIC INSTANT:	0.93 EF MIN

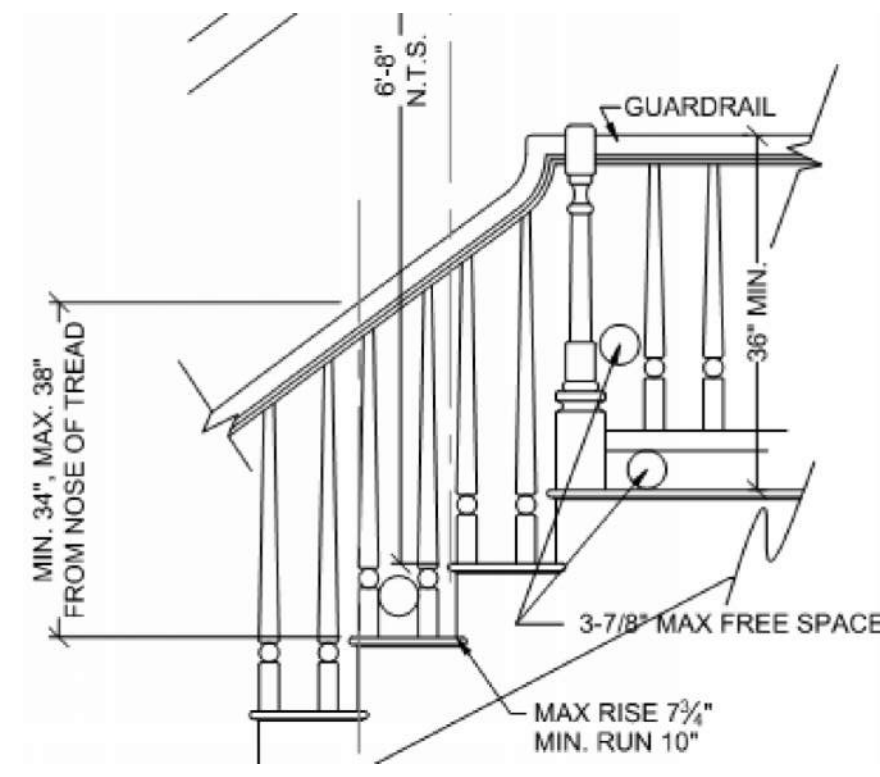
AN ENERGY EFFICIENT CERTIFICATE IS REQUIRED TO BE POSTED IN OR ON THE ELECTRICAL PANEL BEFORE FINAL INSPECTION. THE CERTIFICATE WILL BE PROVIDED WITH ALL NEW RESIDENTIAL PERMITS. IT IS THE PERMIT HOLDER/CONTRACTOR'S RESPONSIBILITY TO ENSURE THE CERTIFICATE HAS ACCURATE INFORMATION & IS POSTED BEFORE FINAL INSPECTION. OWNER/CONTRACTOR IS RESPONSIBLE FOR MEETING THE PRESCRIPTIVE REQUIREMENTS OF IRC CHAPTER 11 UNLESS A HERS INDEX ANALYSIS FOR PERFORMANCE COMPLIANCE BASED ON THE PLANS IS SUBMITTED TO THE AHJ FOR APPROVAL.

N.T.S



BUILDING ADDRESS:  
LOT 5 - SEQUOIA  
229 & 231 NW ORCHARD CT.  
LEE'S SUMMIT, MO 64063



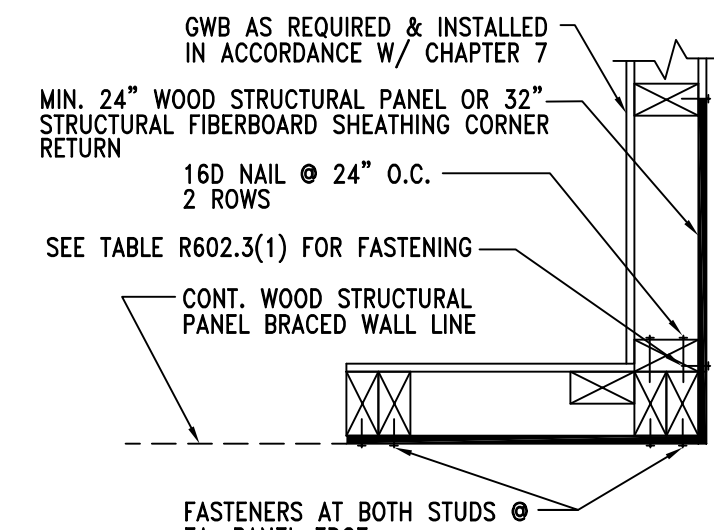


## G HAND/GUARD RAIL REQ'S. PER IRC

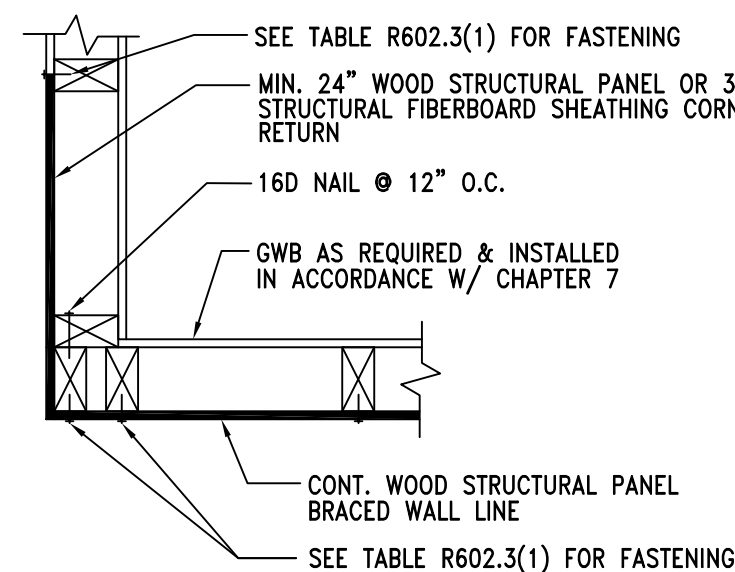
- Smoke alarms shall be listed in accordance with UL 2034 and comply with Section R314. Combination smoke/carbon monoxide alarms shall be in accordance w/ UL 217 & UL 2034.
- Smoke alarms shall be installed in the following locations:
  - In each sleeping room.
  - Outside each separate sleeping area in the immediate vicinity of the bedrooms.
  - On each additional story of the dwelling, including basements and habitable attics but not including crawl spaces and uninhabitable attics.
- Where more than one smoke alarm is required to be installed w/in an individual dwelling unit in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all alarms in the individual unit.

## E SMOKE & CARBON MON. DETECTOR REQ'S.

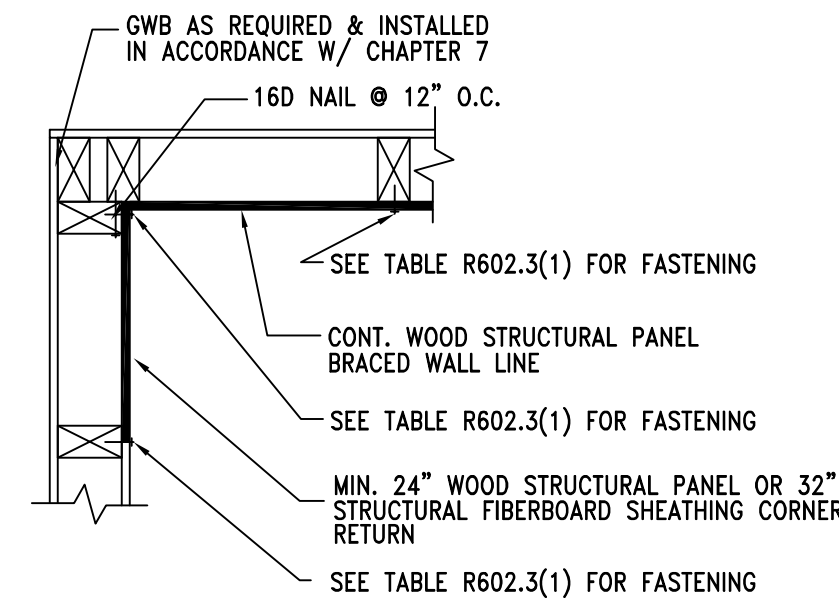
- WIND SPEED = 115 MPH, EXPOSURE B
- ALL BWP MEETS <20'-0" APART CRITERIA
- CS-WSP PANELS: DISTANCE FROM END OF BRACED WALL LINE TO FIRST BRACED WALL PANEL CANNOT EXCEED A COMBINED TOTAL OF 10' PER R602.10.2.2
- WOOD STRUCTURAL PANELS: MIN. 48" AND COVER 3 STUDS FOR FRAMING AT 16" O.C. OR 2 STUDS FOR 24" O.C.
- CS-WSP PANELS: MIN. 2" PANELS AT BOTH CORNERS WITHOUT USING HOLD DOWNS PER R602.10.4.4 AND MAX. 12'-6" FROM CORNER
- CS-WSP PANELS: MIN PANELS LENGTH ADJACENT TO AN OPENING FOR 9" PLATE = 27" PER R602.10.4.2
- METHOD GB IS BOTH SIDES OF WALL AND FASTENED W/ MIN 5d COOLER NAILS OR #6 SCREWS-7" O.C. EDGES AND FIELD



### GARAGE DOOR CORNER



### OUTSIDE CORNER DETAIL

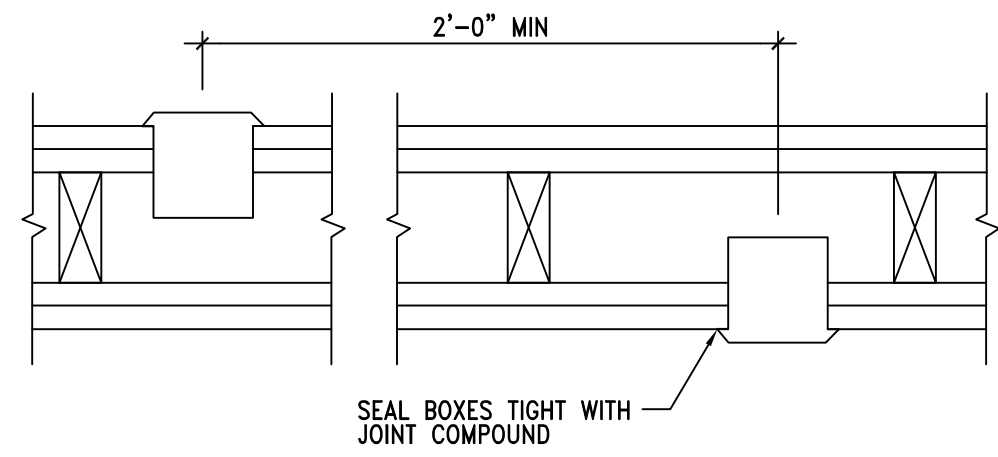


### INSIDE CORNER DETAIL

## C CS-WSP CORNER FRAMING DETAILS

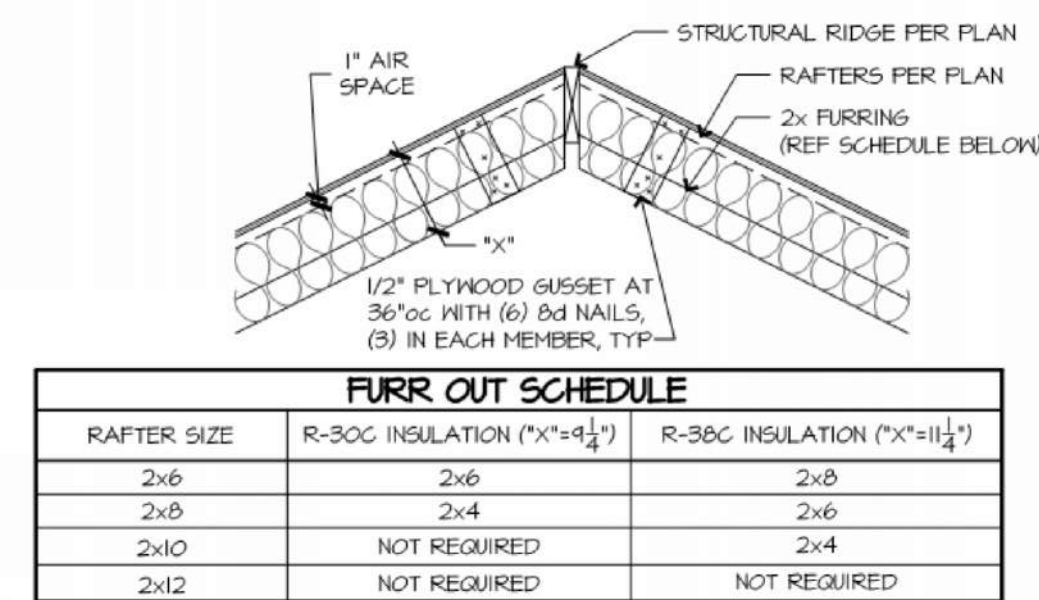
- NO MECHANICAL PENETRATIONS OCCUR ALONG THE PARTY WALL (I.E. DUCTS, DIFFUSERS, ETC.)
- NO PLUMBING LINES TO BE LOCATED WITHIN THE RATED PARTY WALL ASSEMBLY
- ALL COMPONENTS OF THE RATED PARTY WALL MUST BE INSTALLED PRIOR TO SETTING ANY TUBS OR SHOWER UNITS ALONG THIS WALL
- ELECTRICAL BOXES SHALL BE UL TYPE COMPLETE WITH FIRE CAULKING ALONG THE PARTY WALL

## F DEMISING WALL PENETRATION REQUIREMENTS



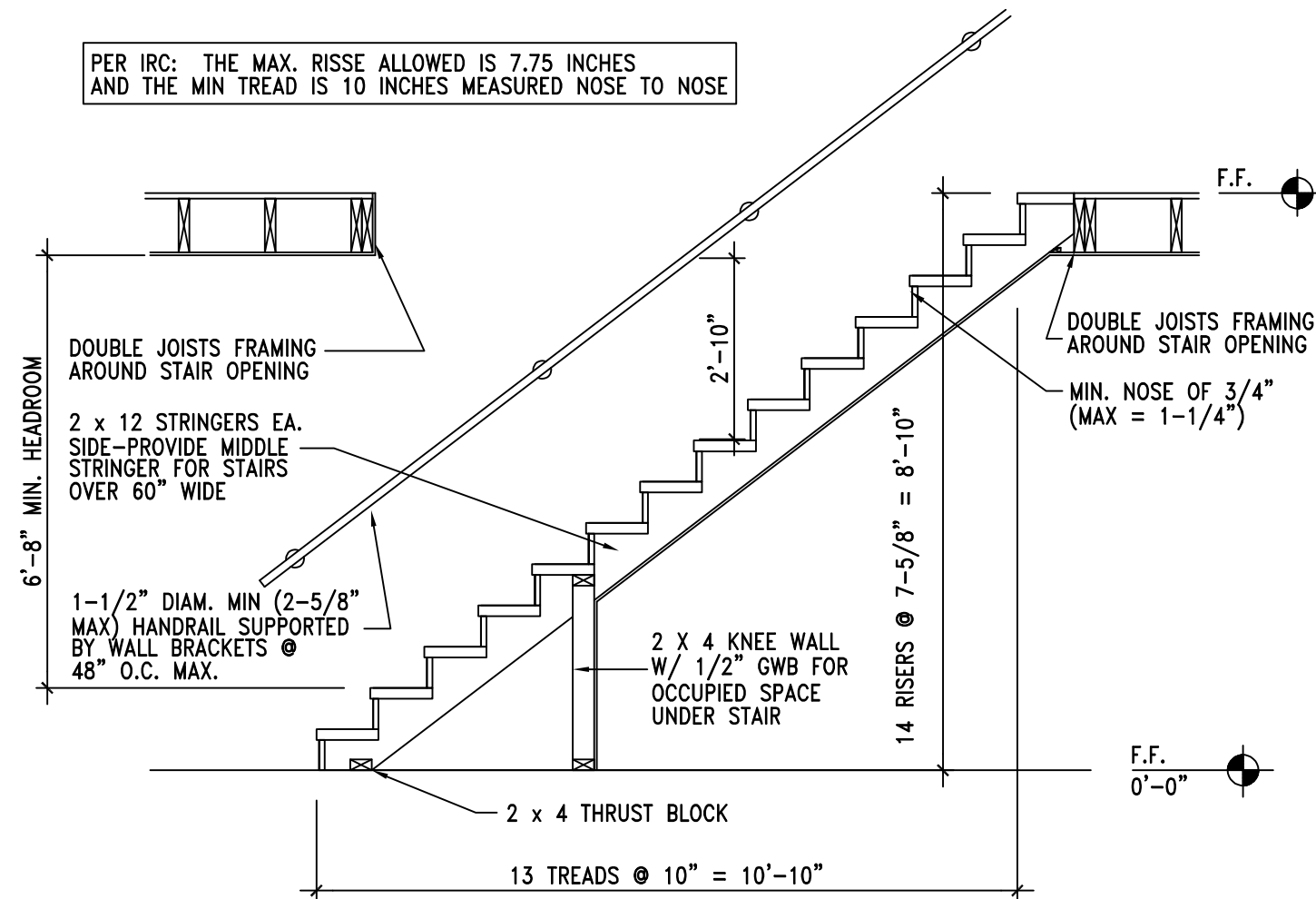
- FIRESTOPPING PER DETAIL E/A8 IS REQUIRED-NO EXCEPTIONS
- RECESSED ELECTRICAL FIXTURES INSTALLED IN THE WALL PER:
  - ANY STEEL ELECTRICAL BOX NOT EXCEEDING 16 SQUARE INCHES IN AREA SHALL BE PERMITTED
  - THE AGGREGATE AREA OF THE PERMITTED BOXES CANNOT EXCEED 100 SQUARE INCHES IN ANY 100 SQUARE FOOT WALL AREA
- WHERE OUTLETS ARE INSTALLED ON OPPOSITE SIDES OF THE WALL, THE BOXES SHALL BE SEPARATED BY ONE OF THE FOLLOWING MEASURES:
  - A HORIZONTAL DISTANCE NOT LESS THAN 24 INCHES
  - HORIZONTAL DISTANCE NOT LESS THAN THE DEPTH OF THE WALL CAVITY WHERE THE CAVITY IS FILLED WITH CELLULOSE LOOSE-FILL, ROCK WOOL, OR SLAG WOOL INSULATION
  - SOLID FIRE RETARDANT BLOCKING OR OTHER LISTED KNOWN AND TESTED FIRE RESISTANT MATERIAL
- UL LISTED AND TESTED BOXES ONLY ALLOWED IN PARTY WALL
- USE OF UL LISTED MEMBRANES OR PUTTY PACKS SHALL BE USED TO FILL ANY ANNULAR SPACE OR VOID IN THE RATED ASSEMBLY
- PENETRATIONS BY ANY DUCTS SHALL BE EQUIPPED WITH FIRE DAMPERS IN ACCORDANCE WITH SECTION 714.1.1 OF THE IBC

## D ELECTRICAL RECEPT. @ DEMISING WALL

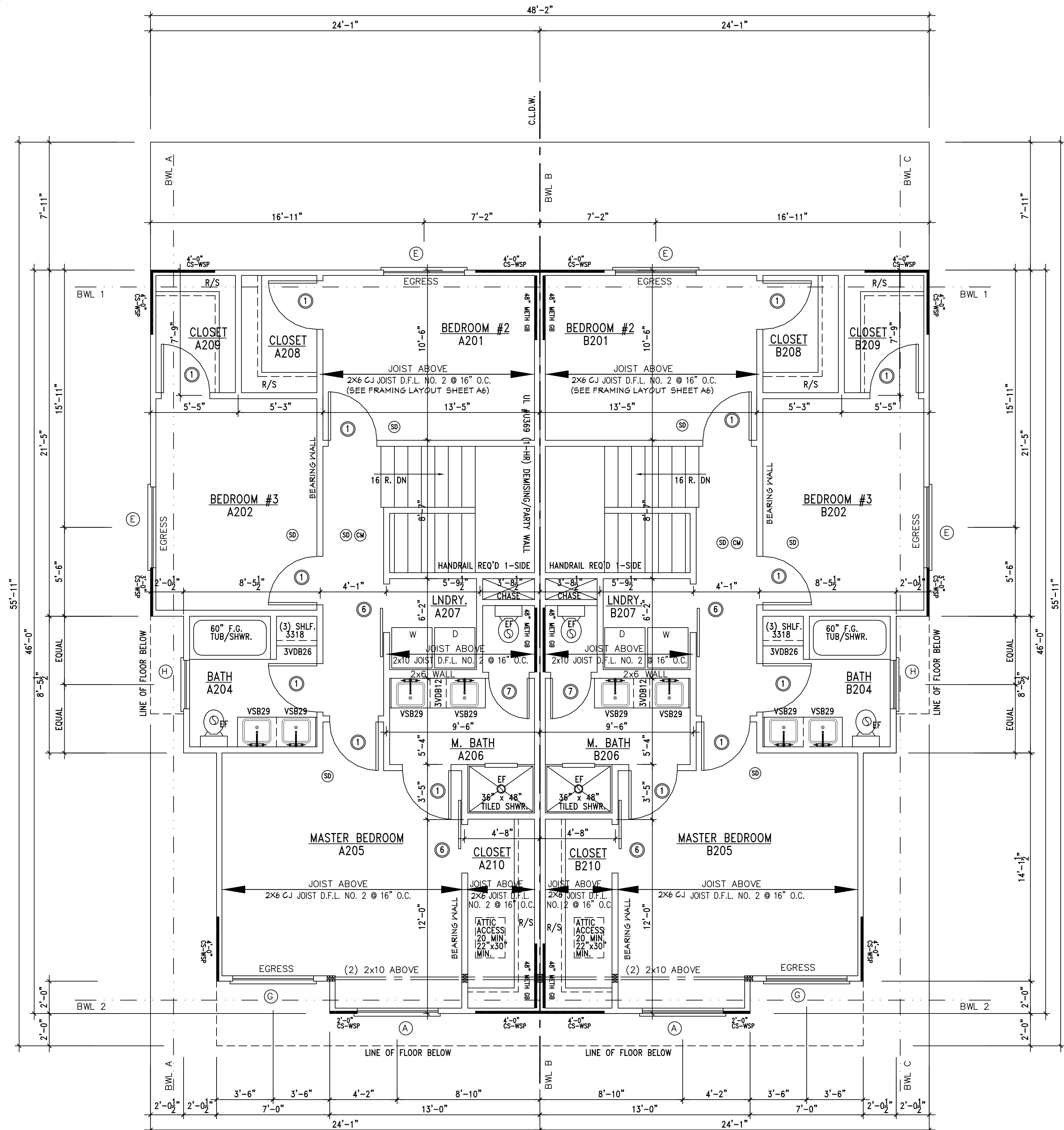


## C FUR DOWN RAFTER REQUIREMENTS

PER IRC: THE MAX. RISSE ALLOWED IS 7.75 INCHES AND THE MIN TREAD IS 10 INCHES MEASURED NOSE TO NOSE



## B TYP. STAIR SECTION/REQUIREMENTS



## A UPPER LEVEL FLOOR PLAN

STRUCTURAL MEMBER REVIEW AND CERTIFICATION:



**ENGINEERING, P.C.**  
CIVIL ENGINEERING CONSULTANTS  
1805 WATERS ROAD, HARRISONVILLE, MISSOURI 64701  
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AARON D. OBERMILLER, P.E.  
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SUBVISION: PLOT #:

REVISION DATE

REVISION	DATE

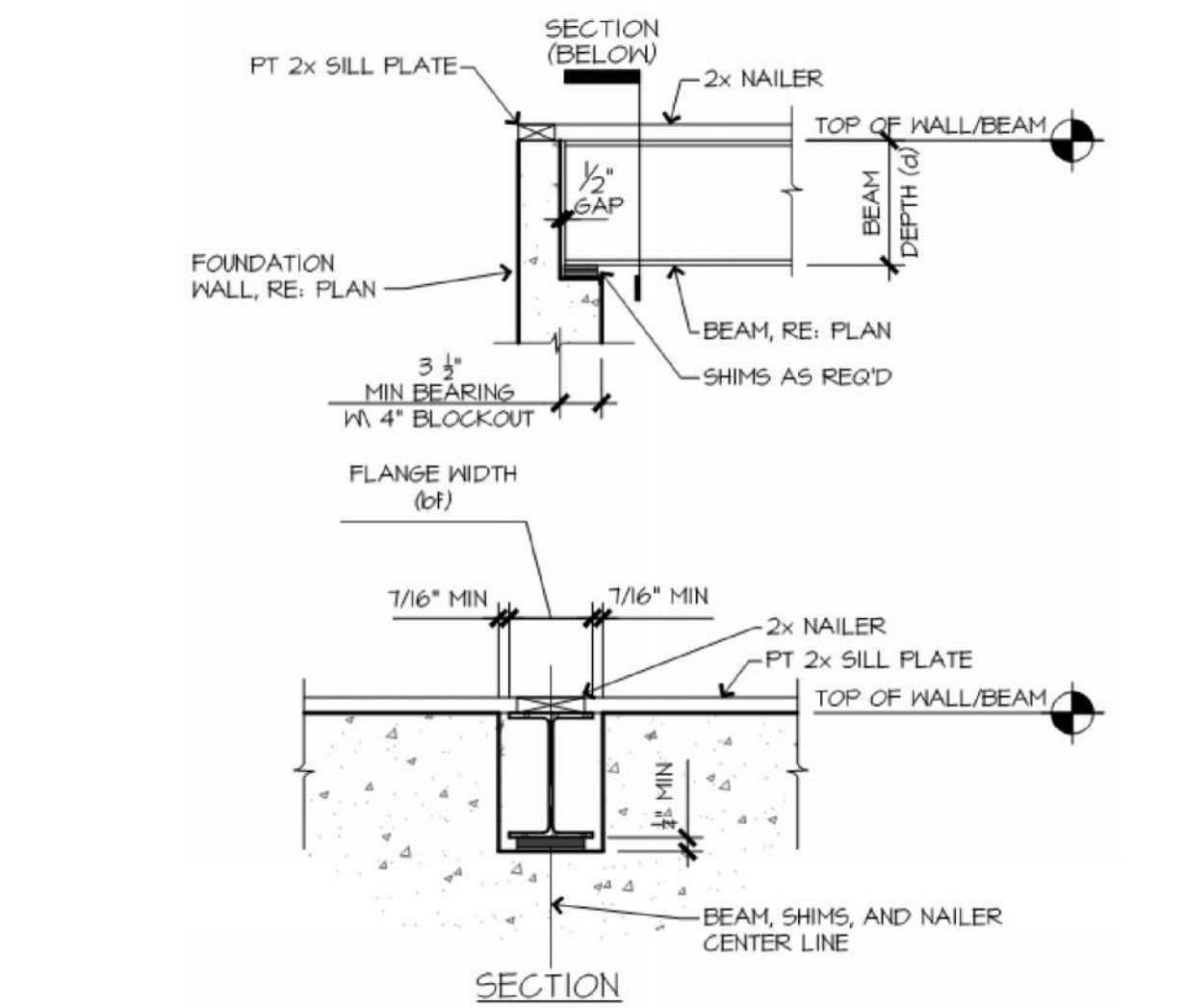
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A4  
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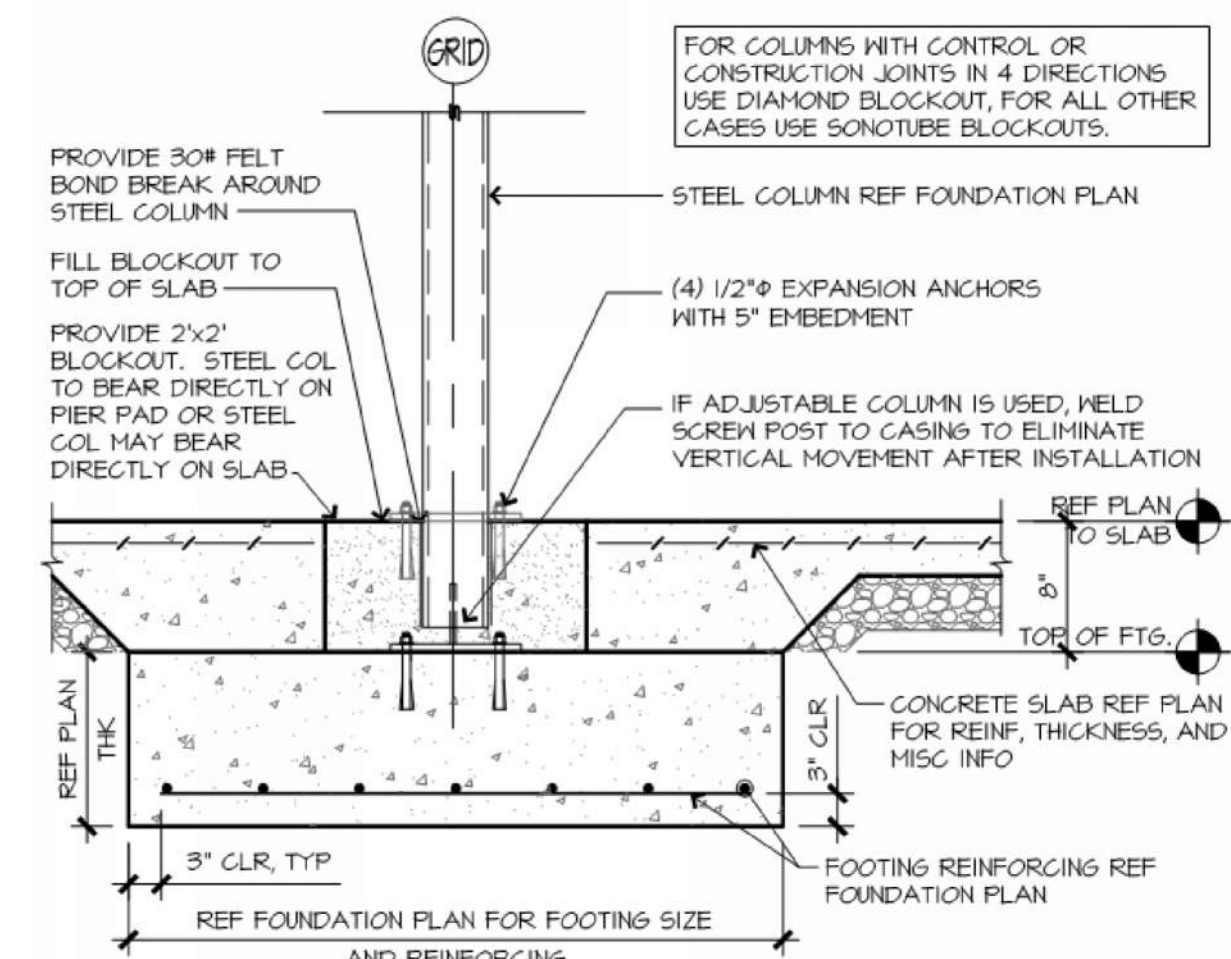
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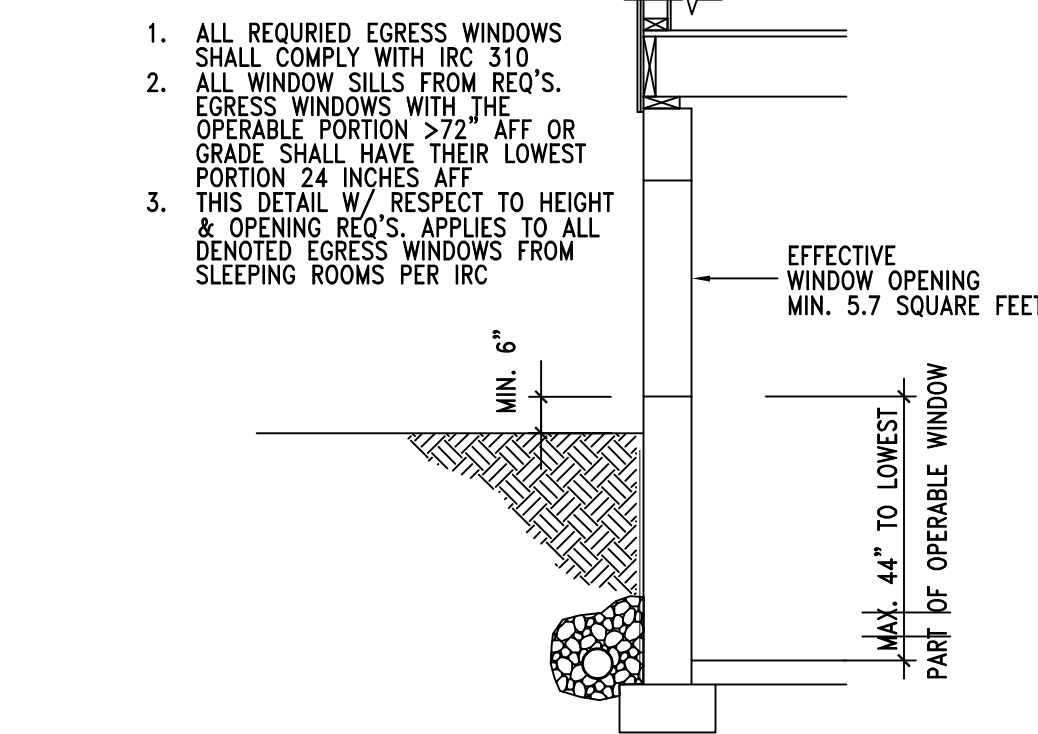
**G BEAM POCKET DETAIL**

N.T.S.



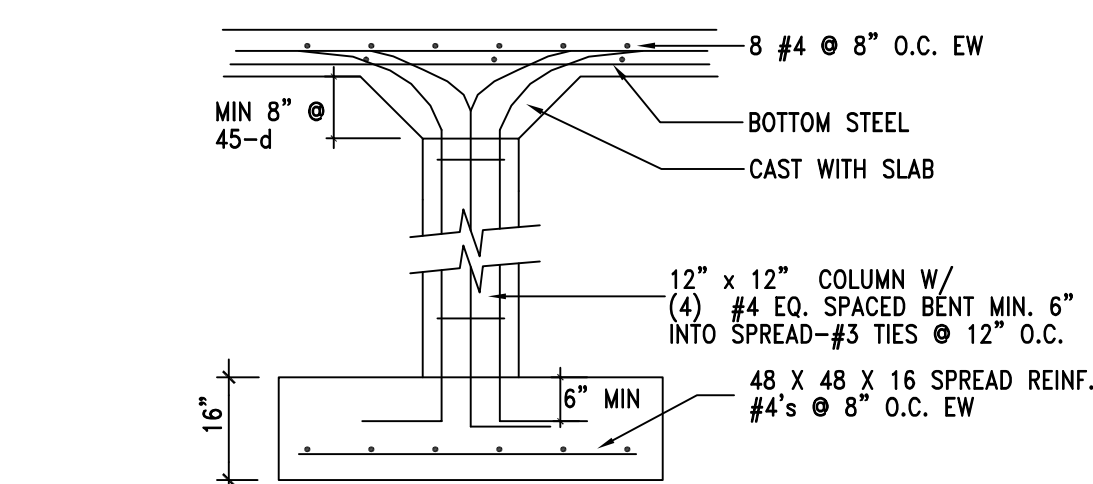
**F COLUMN/PAD DETAIL**

N.T.S.



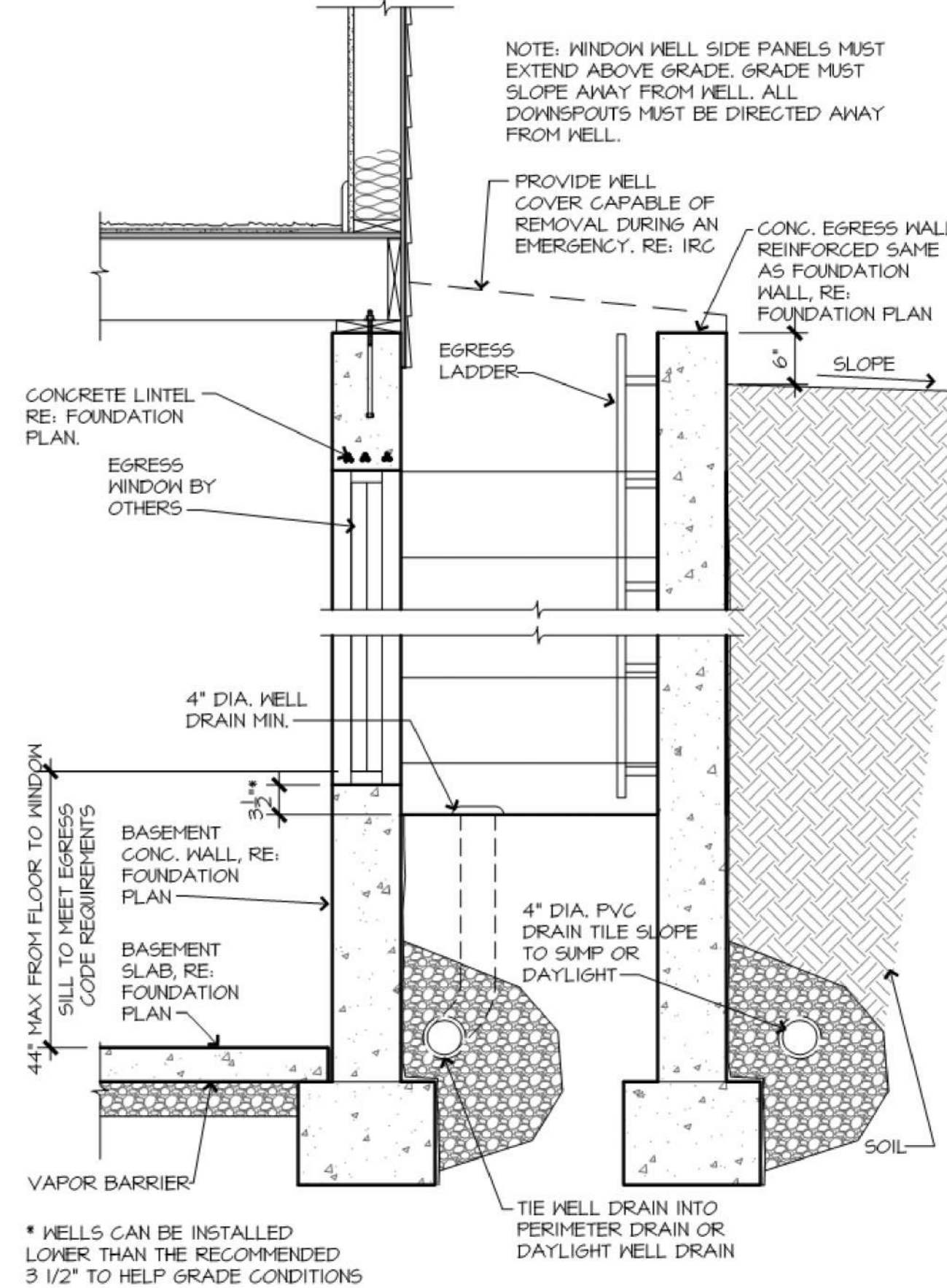
**D EGRESS WINDOW CRITERIA-BELOW GRADE**

N.T.S.



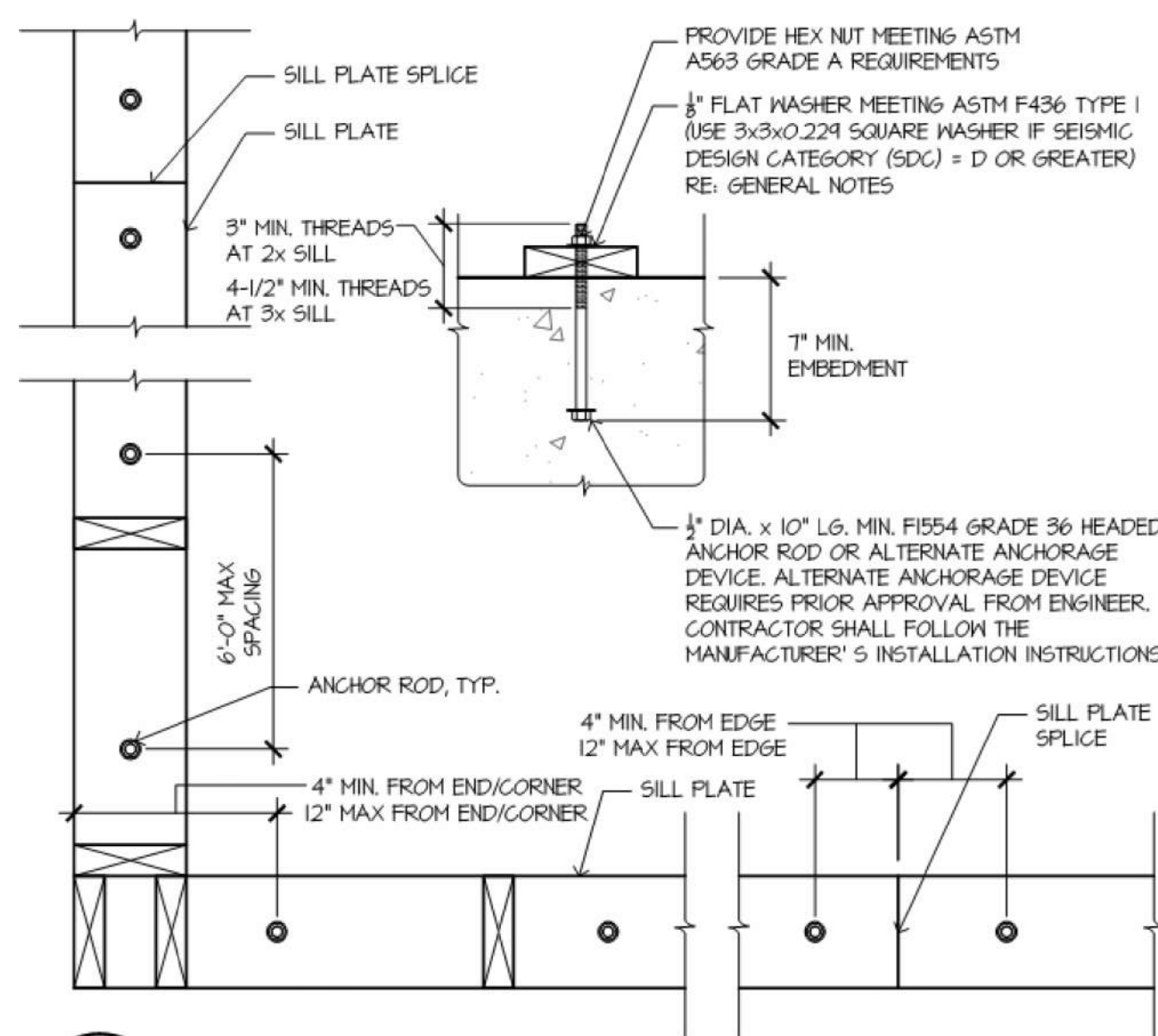
**C PEDESTAL FOOTING DETAIL**

N.T.S.



**E EGRESS WELL CONSTRUCTION/DETAIL**

N.T.S.



**B ANCHOR BOLT LAYOUT REQUIREMENTS**

N.T.S.

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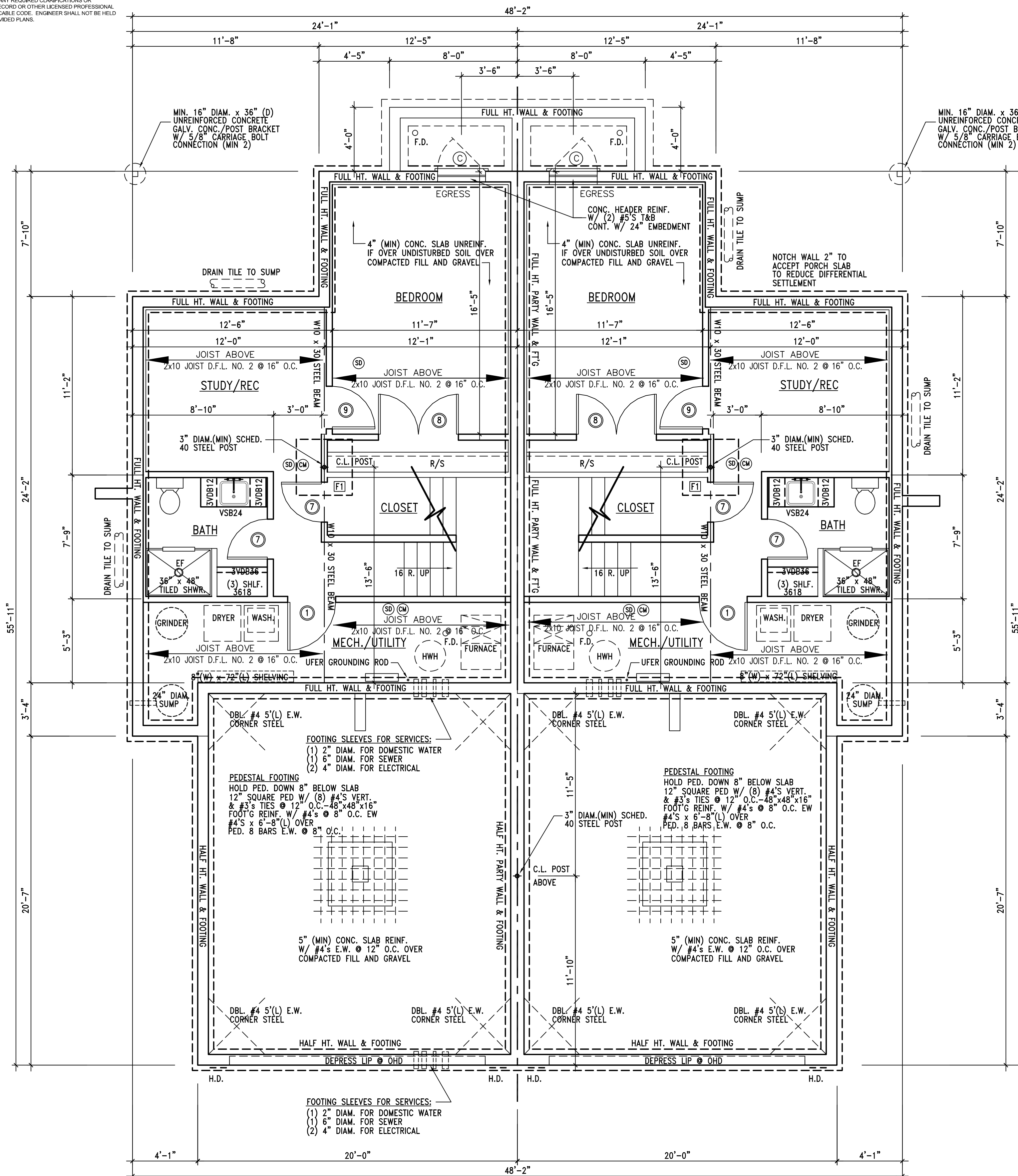
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**HALF HT. FOUND. WALL (TYPICAL FOR ALL U.N.O.)**  
4'-0" (H) X 8" (W) CONC. FOUNDATION WALLS  
REINF. W/ (1) #4 VERT. @ 24" O.C. / (1) #4 HOR. @ 24" O.C.  
**FULL HT. FOUND. WALL (TYPICAL FOR ALL U.N.O.)**  
9'-0" (H) X 8" (W) CONC. FOUNDATION WALLS  
REINF. W/ (1) #4 VERT. @ 12" O.C. / (1) #4 HOR. @ 24" O.C.

**FOOTING (TYPICAL FOR ALL U.N.O.)**  
16" (W) X 8" (D) O.C. W/ WALL ABOVE-REINF.  
W/ (2) #4 BOT. EQ. SPACED-DOWEL INTO WALL  
W/ (1) #4 TURNED UP @ 12" O.C.  
**HALF & FULL HT. PARTY WALL (TYPICAL)**  
4'-0" OR 9'-0" (H) X 10" (W) CONC. WALLS  
REINF. W/ (1) #4 VERT. @ 24" O.C. / (1) #4 HOR. @ 24" O.C.

**PARTY WALL FOOTING (TYPICAL)**  
20" (W) X 12" (D) O.C. W/ WALL ABOVE-REINF.  
W/ (2) #4 BOT. EQ. SPACED-DOWEL INTO WALL  
W/ (1) #4 TURNED UP @ 12" O.C.

**STEEL POST FOOTING SCHEDULE**  
F1 42"x42"x12" W/ (6) #4'S 12" DEPTH  
REBAR COUNT IS EACH WAY, EQUAL CENTERS



**A LOWER LEVEL/BASEMENT FLOOR PLAN**

1/4" = 1'-0"

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PLOT #:

REVISION	DATE

ISSUED: PERMIT/CONSTRUCTION

**A5**  
SHEET 5 OF 11

RELEASE FOR CONSTRUCTION  
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## FLOOR JOIST SCHEDULE

MARK	TYPE	SUB-TYPE	SIZE	SPACING	MAX. SPAN
FJ-1	"1" Joist	TJL PRO 130	9 1/2"	12" O.C.	17'
FJ-2	"1" Joist	TJL PRO 130	9 1/2"	16" O.C.	16'
FJ-3	"1" Joist	TJL PRO 130	9 1/2"	19.2" O.C.	15'
FJ-4	"1" Joist	TJL PRO 130	11 7/8"	12" O.C.	21'
FJ-5	"1" Joist	TJL PRO 130	11 7/8"	16" O.C.	19'
FJ-6	"1" Joist	TJL PRO 130	11 7/8"	19.2" O.C.	18'
FJ-7	"1" Joist	TJL PRO 250	11 7/8"	12" O.C.	22'
FJ-8	"1" Joist	TJL PRO 250	11 7/8"	16" O.C.	20'
FJ-9	"1" Joist	TJL PRO 250	11 7/8"	19.2" O.C.	19'
FJ-20	Lumber	Treated#2 or BTR	2x6	12" O.C.	10'-9"
FJ-21	Lumber	Treated#2 or BTR	2x6	16" O.C.	9'-9"
FJ-22	Lumber	Treated#2 or BTR	2x8	12" O.C.	14'-2"
FJ-23	Lumber	Treated#2 or BTR	2x8	16" O.C.	12'-7"
FJ-24	Lumber	Treated#2 or BTR	2x10	12" O.C.	17'-9"
FJ-25	Lumber	Treated#2 or BTR	2x10	16" O.C.	15'-5"
FJ-26	Lumber		2-2x10	19.2" O.C.	
FJ-27	Lumber		2x12		
FJ-28	Lumber		2x12		

Note: "1" Joists Listed Above Are Manufactured By Trus Joist Macmillan And Spans Are Based On L / 480 Live Load Deflection

## HEADER SCHEDULE

MARK	SIZE	NO. OF STUDS AT EACH END
A	2-2x10s	2
B	2-2x10s	2
C	2-1 3/4" x 7 1/4" L.V.L.'S	2
D	2-1 3/4" x 9 1/2" L.V.L.'S	3
E	2-1 3/4" x 11 7/8" L.V.L.'S	3
F	2-1 3/4" x 14" L.V.L.'S	4
G	2-1 3/4" x 16" L.V.L.'S	4
H	2-1 3/4" x 18" L.V.L.'S	4
I	3-1 3/4" x 9 1/2" L.V.L.'S	4
J	3-1 3/4" x 11 7/8" L.V.L.'S	4
K	3-1 3/4" x 14" L.V.L.'S	5
L	3-1 3/4" x 16" L.V.L.'S	5
M	3-1 3/4" x 18" L.V.L.'S	5
N	1-1 3/4" x 9 1/2" L.V.L.'S	2
O	1-1 3/4" x 11 7/8" L.V.L.'S	2

Note: "U" Indicates Header Is Upset

## CEILING JOISTS SCHEDULE

MARK	SIZE	SPACING	MAXIMUM SPAN
CJ-1	2X6	12"	14'-10"
CJ-2	2X6	16"	12'-10"
CJ-3	2X8	12"	18'-9"
CJ-4	2X8	16"	16'-3"
CJ-5	2X10	12"	22'-11"
CJ-6	2X10	16"	19'-10"

## ROOF RAFTER SCHEDULE

MARK	SIZE	SPACING	MAXIMUM SPAN FLAT CEILING	VAULTED CEILING
RJ-1	2 X 6	12"	16'-7"	16'-6"
RJ-2	2 X 6	16"	14'-4"	11'-11"
RJ-3	2 X 6	24"	11'-9"	9'-9"
RJ-4	2 X 8	12"	21'-0"	17'-5"
RJ-5	2 X 8	16"	18'-2"	15'-1"
RJ-6	2 X 8	24"	14'-10"	12'-4"
RJ-7	2 X 10	12"	25'-8"	21'-4"
RJ-8	2 X 10	16"	22'-3"	18'-5"
RJ-9	2 X 10	24"	18'-2"	15'-1"
RJ-10	2 X 12	16"	25'-9"	21'-5"
RJ-11	2 X 12	24"	18'-2"	17'-6"

Note:  
All Spans Figured Using #2 Douglas Fir And Tables 2308.7.2(1) And 2308.7.2(2) Respectively Of The 2018 IBC, Where Dead Load = 10 PSF

LVL REQUIRED BEARING (PARALLEL W/ BEARING WALL)  
MIN. 50% OF TOTAL LVL THICKNESS (I.E. 9-1/4" LVL = 4.6")

### LVL REQUIRED FASTENING

2 PLY LVL CONNECTED WITH SIMPSON ASSEMBLY A STRONG-DRIVE SCREWS (2) 1-3/4" SDS x 1/4" x 3-1/2" W/ (2) ROWS NAILING PATTERN AT 12" O.C.

### LVL TO LVL BEAM CONNECTION

SIMPSON STRONG TIE HUS410 OR EQ. W. LVL REQ. FASTENING

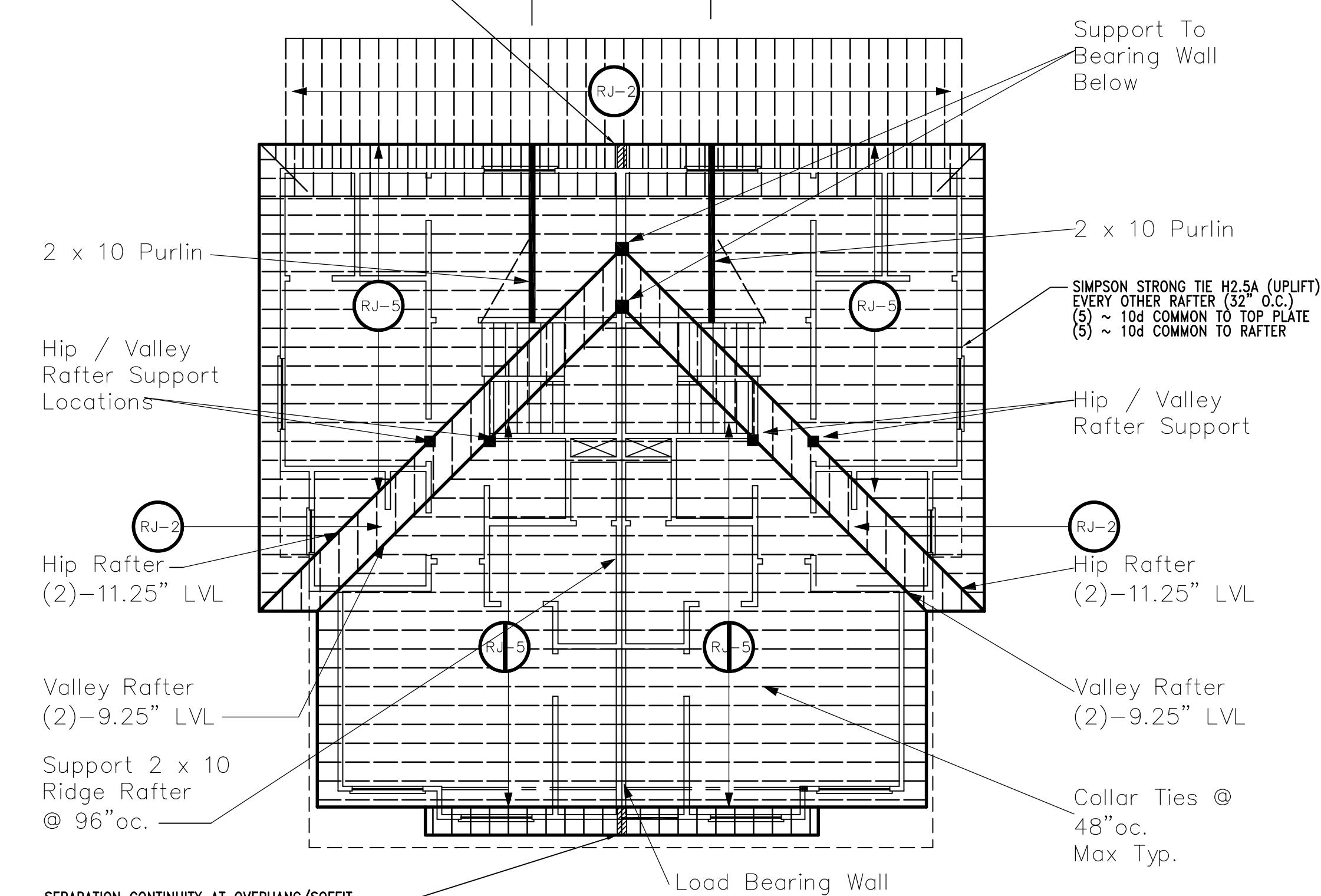
BEARING WALL HEADERS	INTERIOR WALL (1 FLOOR) 1/2			EXTERIOR WALL (ROOF ONLY) 1/2		
	SPAN	SIZE	NO. JS.	SPAN	SIZE	NO. JS.
INTERIOR WALL (2 FLOORS) 1/2	0'-0" - 4'-5"	(2) 2x8	2	0'-0" - 5'-4"	(2) 2x8	2
	4'-6" - 5'-5"	(2) 2x10	2	5'-5" - 6'-6"	(2) 2x10	2
	5'-6" - 6'-3"	(2) 2x12	2	6'-7" - 7'-6"	(2) 2x12	2
EXTERIOR WALL (ROOF + FLOOR) 1/2	0'-0" - 3'-2"	(2) 2x8	2	0'-0" - 4'-6"	(2) 2x8	2
	3'-3" - 3'-10"	(2) 2x10	3	4'-7" - 5'-6"	(2) 2x10	2
	3'-11" - 4'-5"	(2) 2x12	3	5'-7" - 6'-5"	(2) 2x12	2
EXTERIOR WALL (ROOF + 2 FLOORS) 1/2	0'-0" - 3'-4"	(2) 2x8	2	3'-10" - 4'-7"	(2) 2x10	2
	4'-8" - 5'-3"	(2) 2x12	2			

NOTES:  
1. NOT FOR OPEN WEB FLOOR TRUSS SYSTEMS  
2. BASED ON A MAXIMUM JOIST SPAN OF 18FT  
3. HEADERS SUPPORT FLOOR LOADS ONLY. RE: PLANS OR CONTACT ENGINEER IF ROOF LOADS NEED TO BE SUPPORTED.  
4. FRAMER SHOULD CONSULT IRC TABLE R502.5(1) FOR LOAD BEARING HEADERS USING 30PSF GROUND SNOW LOAD AND THE MAX. BUILDING WIDTH. FRAMER SHALL PROVIDE THE MORE STRINGENT CHOICE BETWEEN THE IRC TABLE AND THIS DETAIL.  
5. FRAMER SHALL CONTACT ENGINEER IF ENGINEERED LUMBER IS TO BE UTILIZED.

## C BEARING WALL HEADER SCHEDULE

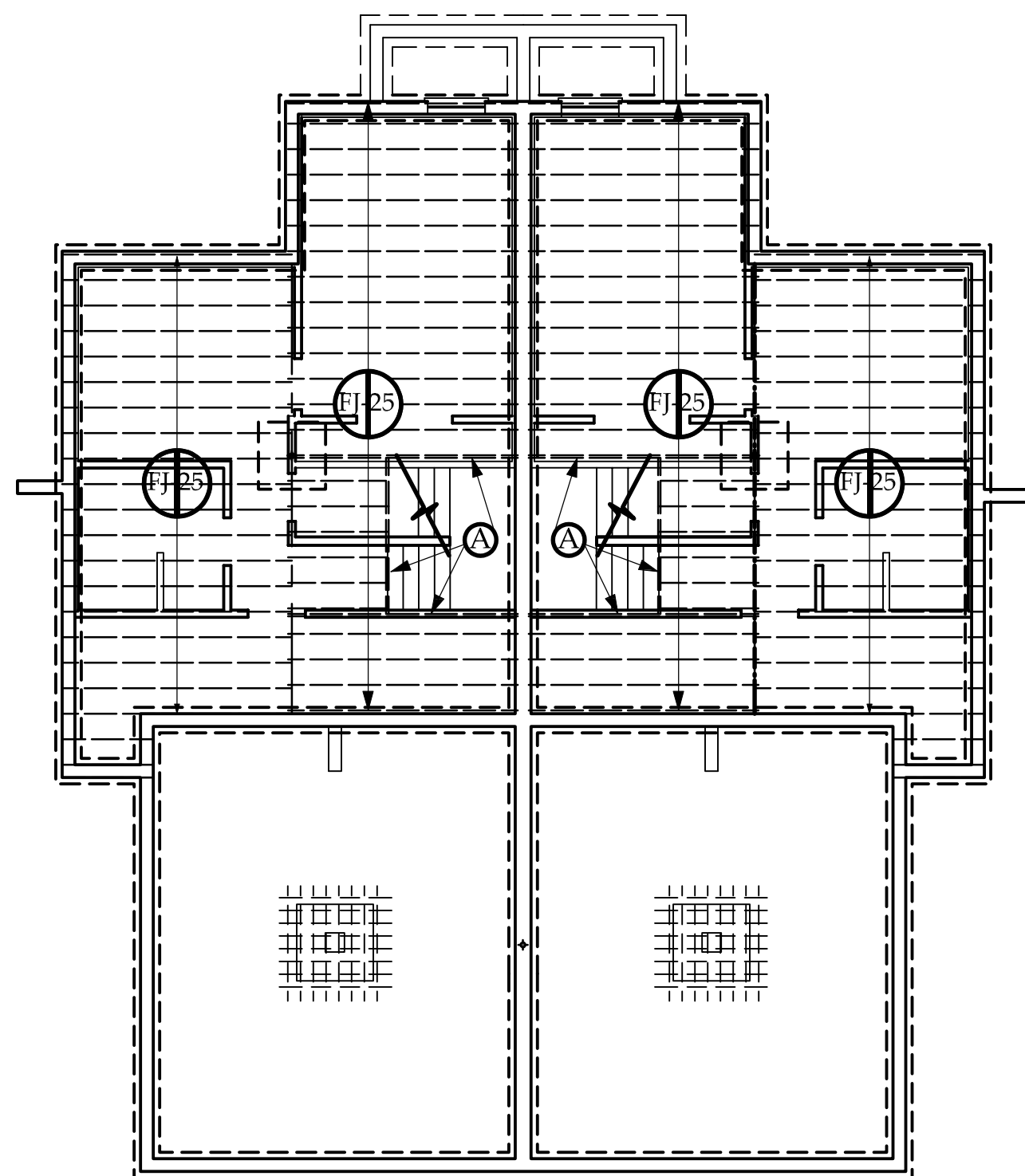
N.T.S.

SEPARATION CONTINUITY AT OVERHANG/SOFFIT  
PROVIDE BLOCKING FROM WALL TOP OF PLATE TO UNDERSIDE OF ROOF SHEATHING IN ACCORDANCE W. SECTION R302.1(1) Item a



## E ROOF LEVEL FRAMING PLAN

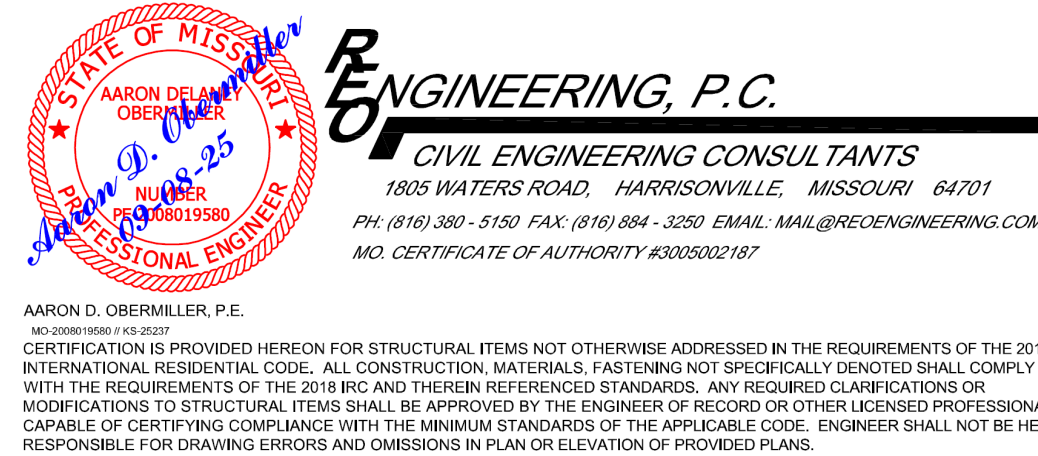
1/8" = 1'-0"



## B MAIN LEVEL FRAMING PLAN

1/8" = 1'-0"

STRUCTURAL MEMBER REVIEW AND CERTIFICATION:



## NOTE:

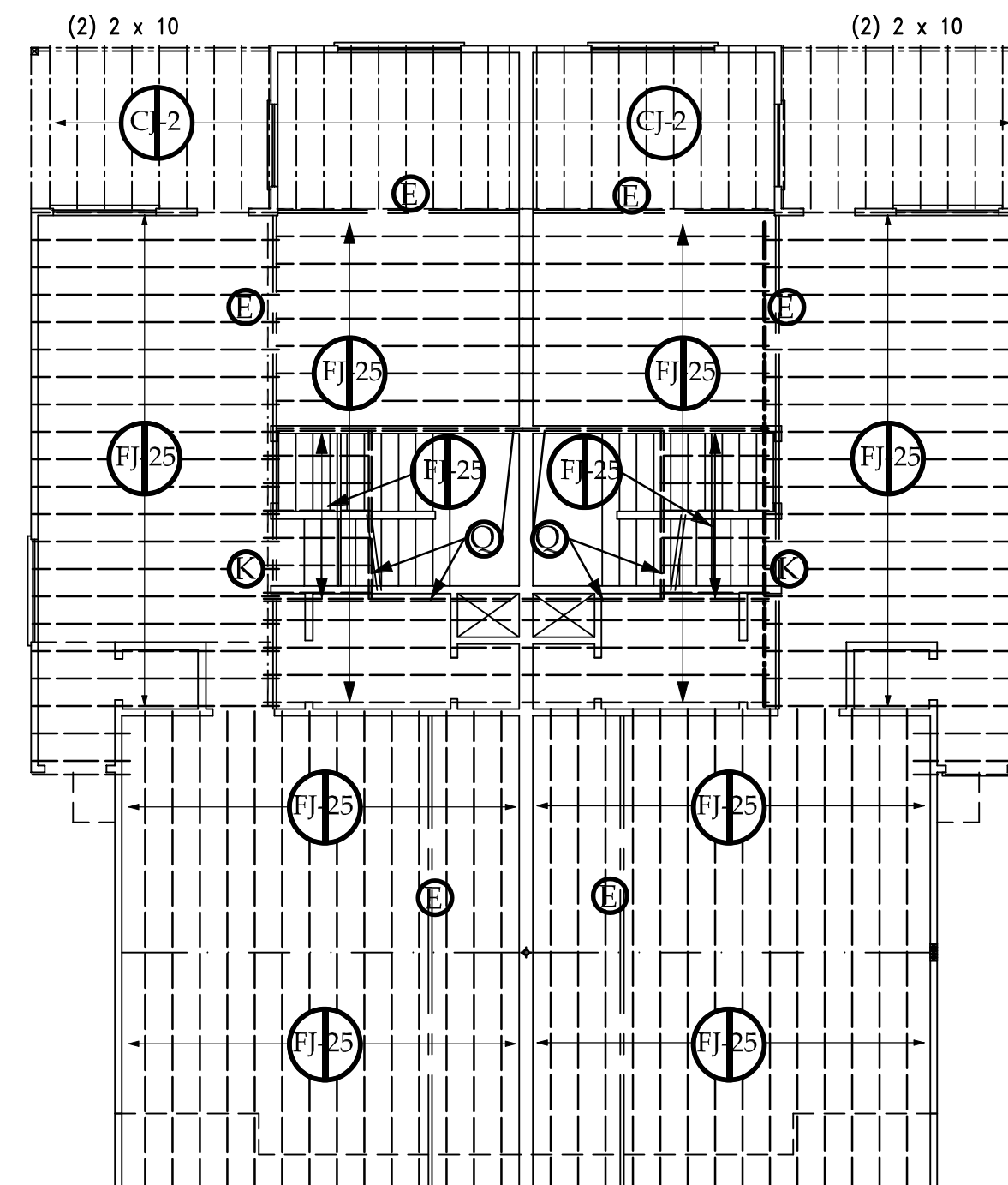
all wood shall be douglas fir larch #2 or better,  
all parallel beams shall be screwed and glued for their entire length,  
metal clip angles shall be provided for all roof, rafter and ridge beams, in addition metal clip angles shall be provided for all floor joists to supporting beams and stringers.

### LOADS & ROOF DESIGN

Wind Load =115 MPH  
Snow Load=20 LBS  
Floor Loads  
Dead Load = 15 LBS  
Live Load = 40 LBS  
Soil Bearing Capacity Assumed To Be 2000 PSF  
Snow Load Importance Factor Category "1" 1.0  
Snow Exposure Factor Terrain "B" 1.0  
Thermal Factor 1.0  
Wind Importance Factor Exposure "B"  
Seismic Use Importance Category "1" 1.0

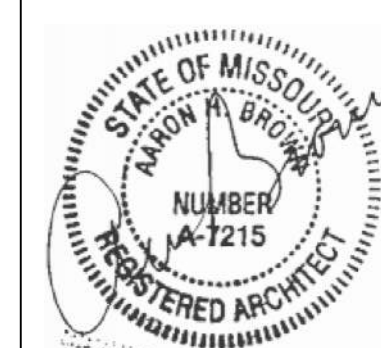
## D UPPER LEVEL CEIL'G. FRAMING PLAN

1/8" = 1'-0"



## A UPPER LEVEL FRAMING PLAN

1/8" = 1'-0"



AOR: AARON BROWN  
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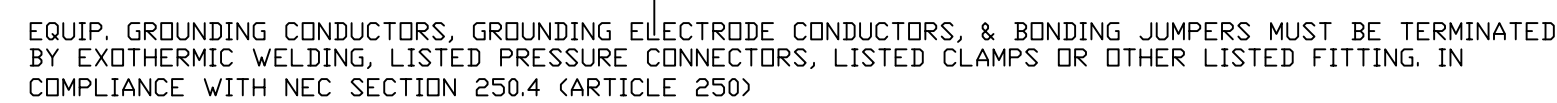
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ROOF RAFTER SCHEDULE						
GRADE	MEMBER SIZE / SPACING	MAX SPAN CROSS AT TOP PLATE	MAX SPAN R <sub>1</sub> /R <sub>2</sub> =0.16	MAX SPAN R <sub>1</sub> /R <sub>2</sub> =0.20	MAX SPAN R <sub>1</sub> /R <sub>2</sub> =0.25	MAX SPAN R <sub>1</sub> /R <sub>2</sub> =0.33
#2 DFL	2x6 / 16"OC	14'-1"	12'-8"	11'-8"	10'-4"	9'-5"
#2 DFL	2x6 / 16"OC	18'-2"	16'-4"	15'-1"	13'-4"	12'-2"
#2 DFL	2x10 / 16"OC	22'-3"	20'-0"	18'-5"	16'-8"	14'-8"
#2 DFL	2x12 / 16"OC	25'-4"	23'-2"	21'-4"	19'-1"	17'-3"

**CEILING JOISTS AND RAFTER CONNECTIONS**

CEILING JOISTS AND RAFTERS SHALL BE TIED TO ONE ANOTHER PER TABLE R602.3(1) AND R802.5.1(9) AND THE ASSEMBLY SHALL BE NAILED TO THE TOP PLATE PER R602.3(1)

CEILING JOIST NOT PARALLEL TO RAFTERS USE SUBFLOORING OR METAL STRAPS ATTACHED TO END OF THE RAFTERS TO PROVIDE A CONT. TIE ACROSS THE STRUCTURE

**TIE DOWN REQUIREMENTS (R802.11)**

FOR RAFTER SPANS OVER 20'-0" INTERPOLATING TABLE 802.11 PROVIDE RATER TIE-DOWNS CAPABLE OF RESISTING OVER 226 POUNDS AT EACH RAFTER

PER TABLE R802.5.1(2) THE MAX RAFTER SPAN FOR D.F.L. 2 x 6 RAFTERS #2 GRADE = 14'-1". AND IS THE BASIS OF DESIGN FOR PURLIN PLACEMENT

**ROOF FRAMING CONNECTION TO BEAMS**  
WHERE LVL IS BE INSTALLED IN PLANE, PROVIDE SIMPSON STRONG TIE LRU28Z RAFTER HANGERS EA. RAFTER TO LVL. EACH END OF LVL TO BE SECURED TO SUPPORTING CONSTRUCTION WITH SST LSTA15 OR EQUIVALENT STRAP W/ 1100 LBS. CAPACITY. STRAPPING SHALL BE REQUIRED AT ALL NON-CONT. MEMBERS BETWEEN BEAM & TOP OF FLOOR

CEILING JOIST/ATTIC LOADS  
CEILING JOIST ALLOWABLE SPANS ARE BASED  
ON IRC TABLE R802.4(1) FOR UNHABITABLE  
ATTICS WITH NO STORAGE UTILIZING L.L. = 10  
PSF AND D.L. = 5 PSF

**RAFTER/CEILING JOIST HEEL CONNECTIONS**  
 PROVIDE (5) 16D NAILS AT EACH HEEL JOINT  
 (RAFTER-JOIST, RAFTER-TIE) CONNECTION.  
 ALSO DENOTED IN DETAIL FOR TYP. ROOF/  
 RAFTER FRAMING. THIS MEETS/EXCEEDS TABLE  
 802.5.1(9) FOR ROOF SPANS UP TO 28'-0"  
 MAX. 9/12 PITCH AND RAFTERS 16" O.C.

ALL RIDGE BEAMS TO BE 2 x 12 OR 2 x 10  
RAFTER TIES/COLLARS REQUIRED AT ALL LOCATIONS

**FOR FULL VAULT**  
WHERE NO COLLAR TIES CAN BE INSTALLED,  
PROVIDE AT EA. RAFTER A SIMPSON STRONG TIE  
LRU2BZ HANGER OR EQUIVALENT TO RIDGE BEAM  
W/ (6) 10D NAILS TO RIDGE & (5) 10D NAILS  
TO EACH RAFTER

**PURLINS:**

1. PURLINS NO SMALLER THAN THE RAFTERS THEY SUPPORT
2. PURLINS TO BE CONTINUOUS
3. BRACES SPACED NO MORE THAN 4'-0" O.C.
4. UNBRACED LENGTH OF BRACES SHALL NOT > 8'-0"

Diagram illustrating the connection of a rafter to a joist. The rafter is labeled "RAFTER TIE SAME SIZE AS JOIST ATOP". The joist is labeled "PER TABLE R802.5.1(9) REQUIRES 3 16d NAILS".

JOISTS PERP. TO RAFTERS

RAFTER TIES:

1. REQUIRED AT ALL RAFTERS
2. MIN. OF 2 x 4 AND SPACED NO GREATER THAN 48" O.C.

1/2 RAFTER SPAN      1/2 RAFTER SPAN

RIDGE BEAM

COLLAR TIE EVERY 3RD RAFTER @ 48" O.C.

2 x 4 COLLAR TIE

2 x 4 BRACE @ 48" O.C.  
MAX LENGTH = 8'-0"

RAFTER TIE REQUIRED AT EVERY RAFTER

CEIL'G JOISTS

OR METAL STRAPS

45°-d

TOENAIL BRACE TO PLATE  
W/ 16d-ONE PER SIDE

DOUBLE TOP PLATES

1'-4"

CONT. PURLIN BETWEEN BRACES-NOTCH BRACE  
3/4" MIN-ATTACHED W/ (5) 16d

MIN. (3) 10d NAILS

**CORNER PLAN**

PLACE INSIDE CORNER BAR IF INSIDE HORIZ. BARS DO NOT EXTEND A MINIMUM OF  $L_d$  INTO JOINT AREA

OUTSIDE CORNER BARS SAME SIZE AND SPACING AS HORIZ. REINF.

**INTERSECTION PLAN**

2x4 KEY

**FOOTING STEP ELEV.**

Z BARS SAME SIZE AND NUMBER AS FTG. REINFORCEMENT

CONT. BOTTOM REINF.

BAR SIZE	$L_h$	$L_d$	$L_s$
3	6"	14"	18"
4	8"	18"	25"
5	10"	23"	30"
6	1'-0"	28"	31"
7	1'-2"	42"	54"

NOTCH DEPTH SHALL NOT EXCEED  $D/3$  FOR RAFTER OR CEILING JOISTS

NO NOTCHES PERMITTED

NOTCHES NOT PERMITTED IN MIDDLE THIRD OF JOIST LENGTH AND BORED HOLES ARE PERMITTED THE ENTIRE LENGTH OF JOIST

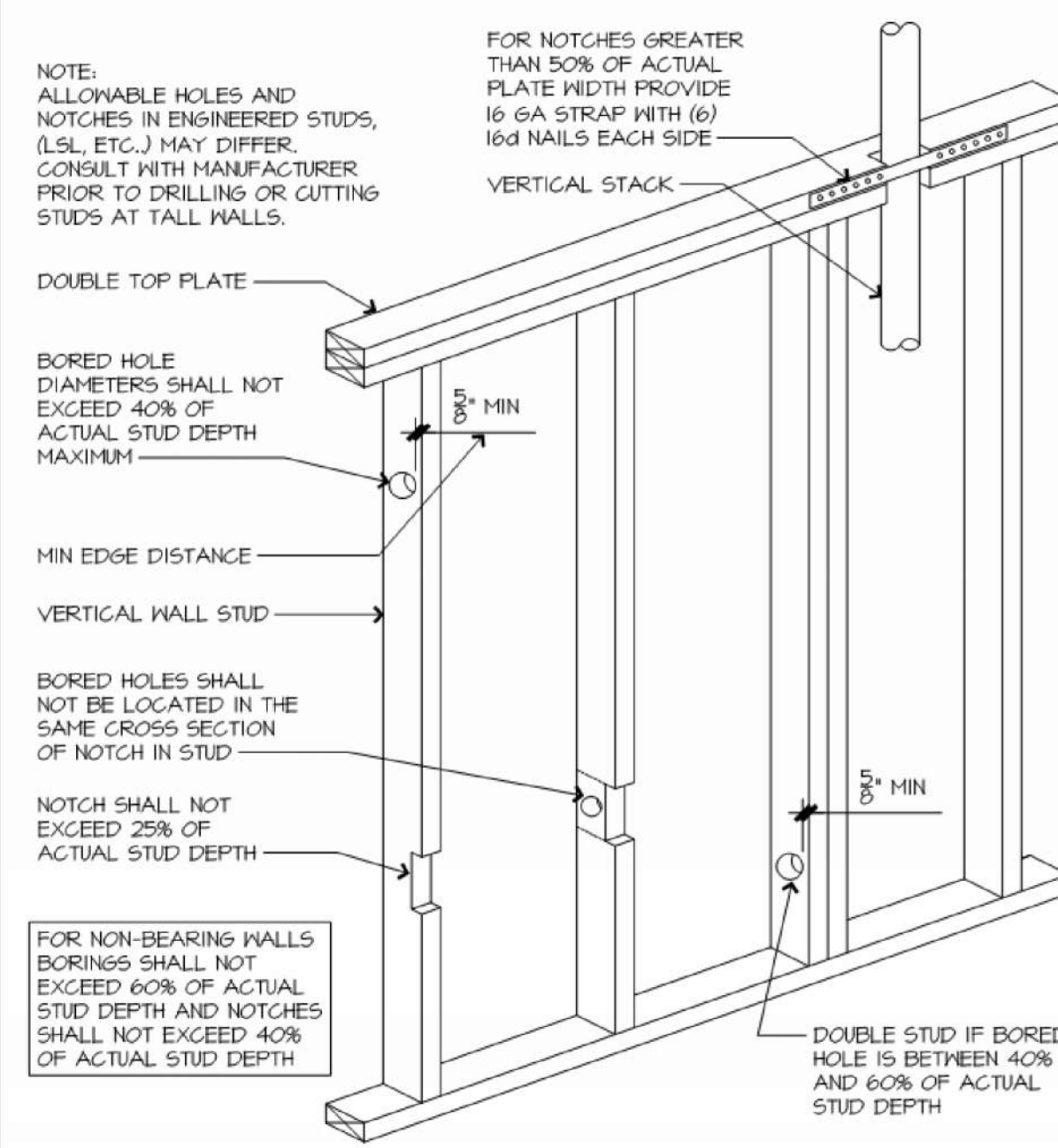
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STRUCTURAL MEMBER REVIEW AND CERTIFICATION:



AARON D. OSER MILLER, P.E.  
MS 200510109 / 1-15-2017

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ROOF PENETRATIONS CANNOT BE WITHIN THE 48" RATED PLYWOOD EXTENT ABOUT THE CENTERLINE OF THE RATED SEPARATION WALL/LINE

FIRE RATED

PLYWOOD ROOF DECKING  
4'-0" FROM RATED PARTITION  
(4'-6" TO EDGE OF RIDGE VENT)

FIRE RATED

PLYWOOD ROOF DECKING  
4'-0" FROM RATED PARTITION  
(4'-6" TO EDGE OF RIDGE VENT)

PRE-ENGINEERED WOOD TRUSSES  
AT 24" o.c.

R-49 ATTIC INSULATION

EXTEND FIRE RATED SEPARATION WALL TO UNDERSIDE ROOF DECK. FIRE CAULK 5/8" TYPE "X" GYP BD. TO UNDERSIDE OF ROOF DECK.

PRE-ENGINEERED WOOD TRUSSES  
AT 24" o.c.

R-49 ATTIC INSULATION

CONT. 2X WOOD BLOCKING FOR GYP. BD. (WHERE REQ'D)

(1) LAYER 5/8" TYPE "X" GYP. BD. AT CEILING

CONT. FIRESTOPPING MATERIAL (BOTH SIDES)

DOUBLE ROW OF WOOD STUDS AT 16" o.c. (24" o.c. MAX.) WITH TWO (2) LAYERS OF 5/8" TYPE "X" GYP. BD EACH SIDE, PER U/L DESIGN

10 1/4"

UL DESIGN

1" AIR SPACE

PRESSURE TREATED 2x4 SILL PLATE. SECURE TO CONC. SLAB WITH ANCHOR BOLT OR APPROVED EPOXY ANCHOR BOLT. REFER TO S/LC SHEET FOR ADDITIONAL ANCHOR BOLT INFORMATION

REFER TO S/LC SHEET FOR SLAB AND FOUNDATION INFORMATION

NOTE, PROVIDE MOISTURE RESISTANT RATED GYP. BD. WHERE BATHROOMS OCCUR

NOTE, (2) HOUR FIRE RATED ASSEMBLY SHALL EXTEND HORIZONTALLY TO INSIDE FACE OF EXTERIOR WALL SHEATHING & VERTICALLY TO FULLY SEPARATE ATTIC SPACES FROM EACH SOFFIT OVERHANG (INCLUDING GABLE SPACES).

NOTE, 5/8" TYPE "X" GYP. BD. SHALL BE FASTENED WITH 1-5/8" STEEL SCREWS (TYPE "W" OR "S"), 4" o.c. EDGE/PERIMETER AND 16" o.c. FIELD

A circular professional seal for Aaron A. Brown, a Registered Architect in the State of Missouri. The seal features the text "STATE OF MISSOURI" at the top, "AARON A. BROWN" in the center, "NUMBER JA-7215" below the name, and "REGISTERED ARCHITECT" at the bottom. A stylized signature is written over the seal.

AOR: AARON BROWN  
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4334 QUARTER HORSE LANE  
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SEQUOIA DUPLEX  
LEE, SUMMIT, MISSOURI

DATE: 08-25-2025

SUBDIVISION: \_\_\_\_\_  
PLOT #: \_\_\_\_\_

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SHEET 7 OF 11





**ENGINEERING, P.C.**  
CIVIL ENGINEERING CONSULTANTS  
1805 WATERS ROAD, HARRISONVILLE, MISSOURI 64701  
PH: (816) 380-5150 FAX: (816) 884-3250 EMAIL: MAIL@REENGINEERING.COM  
MO. CERTIFICATE OF AUTHORITY #000002187



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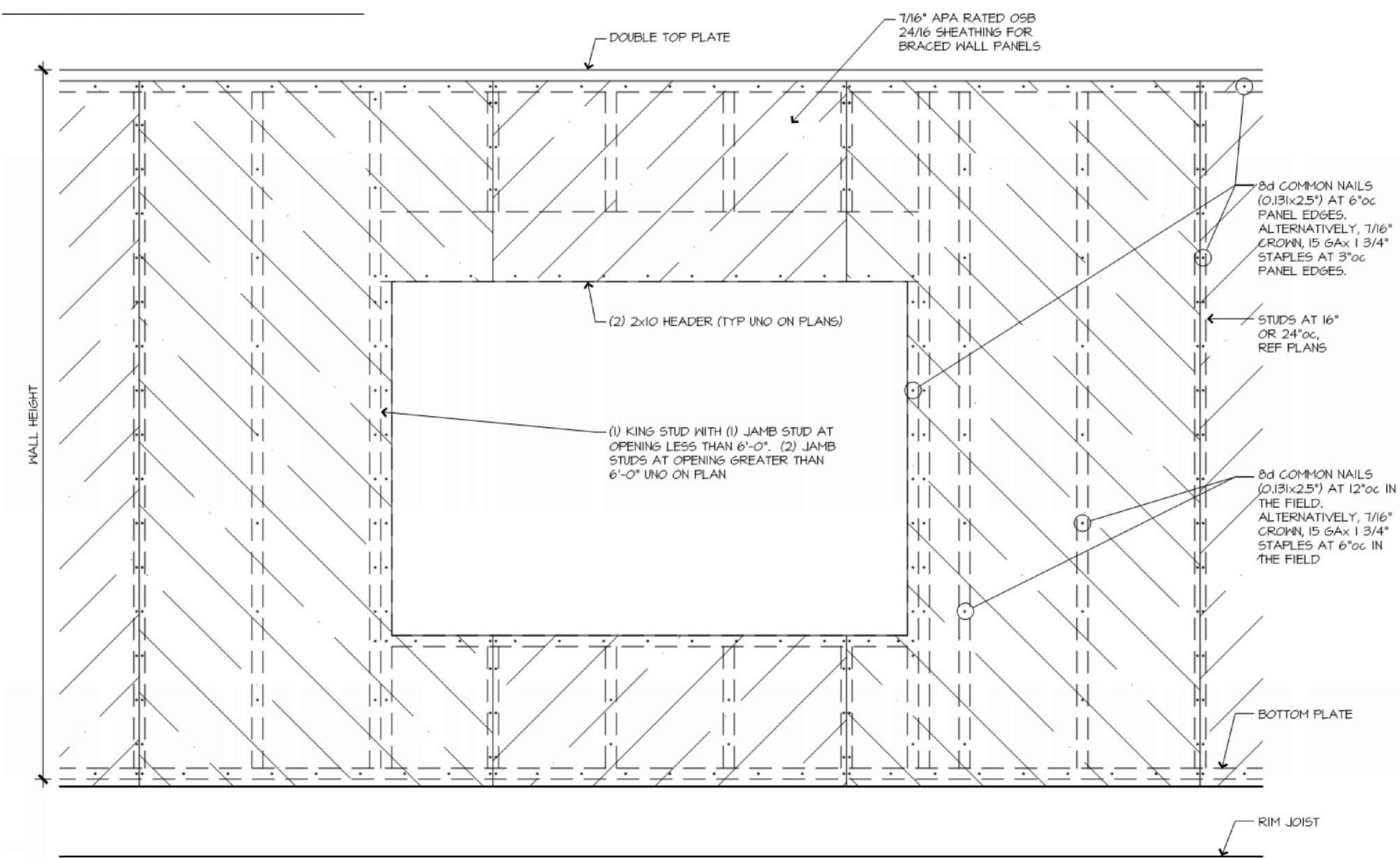
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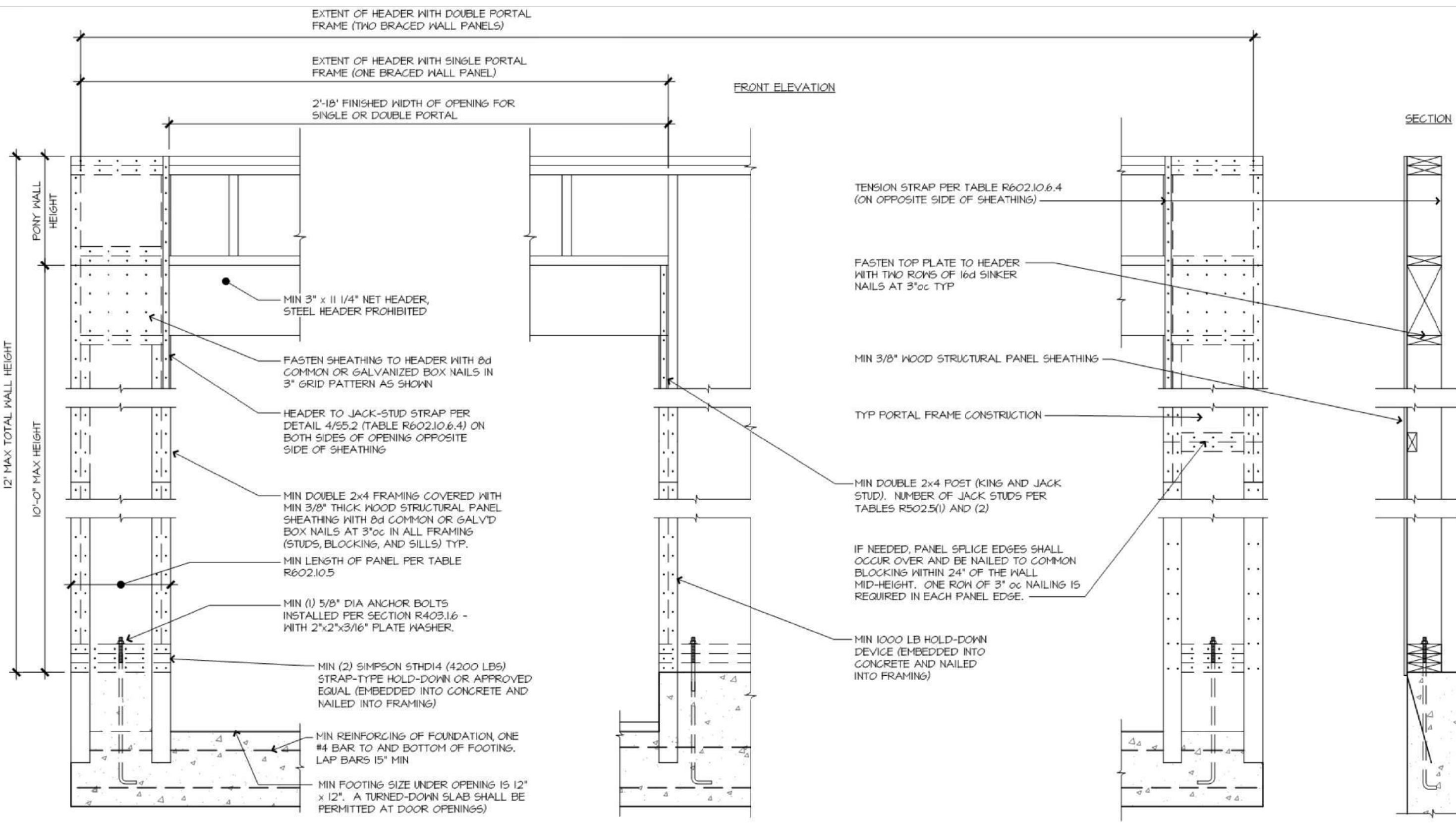
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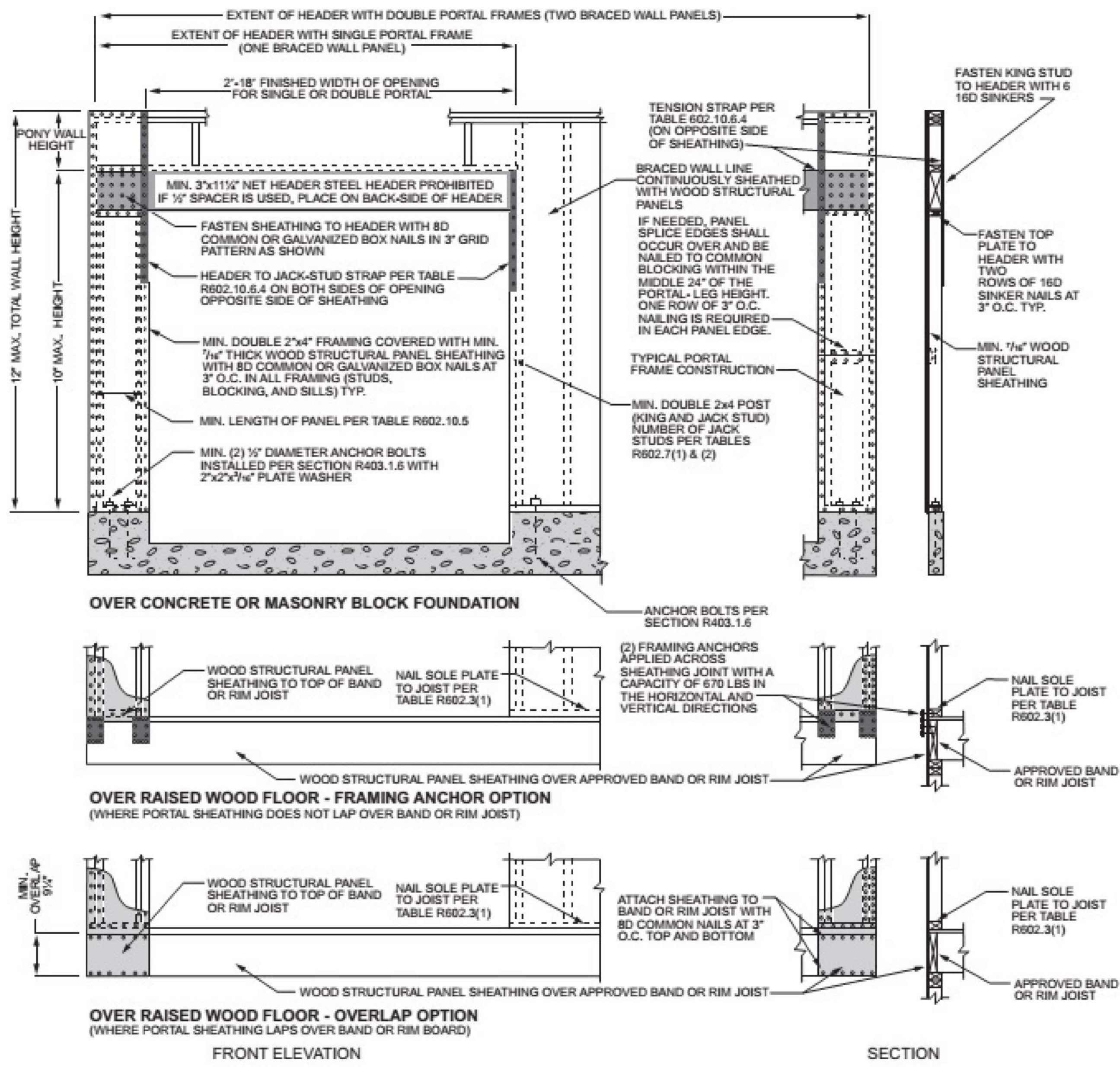
**C** METHOD CS-WSP CRITERIA

N.T.S.



**B** PORTAL FRAME W/ HOLD-DOWN (PFH)

PER 2018 IRC FIGURE R602.10.6.2



**A** PORTAL FRAME CS-PF

N.T.S.



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**ENGINEERING, P.C.**  
CIVIL ENGINEERING CONSULTANTS  
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MO. CERTIFICATE OF AUTHORITY #000002187

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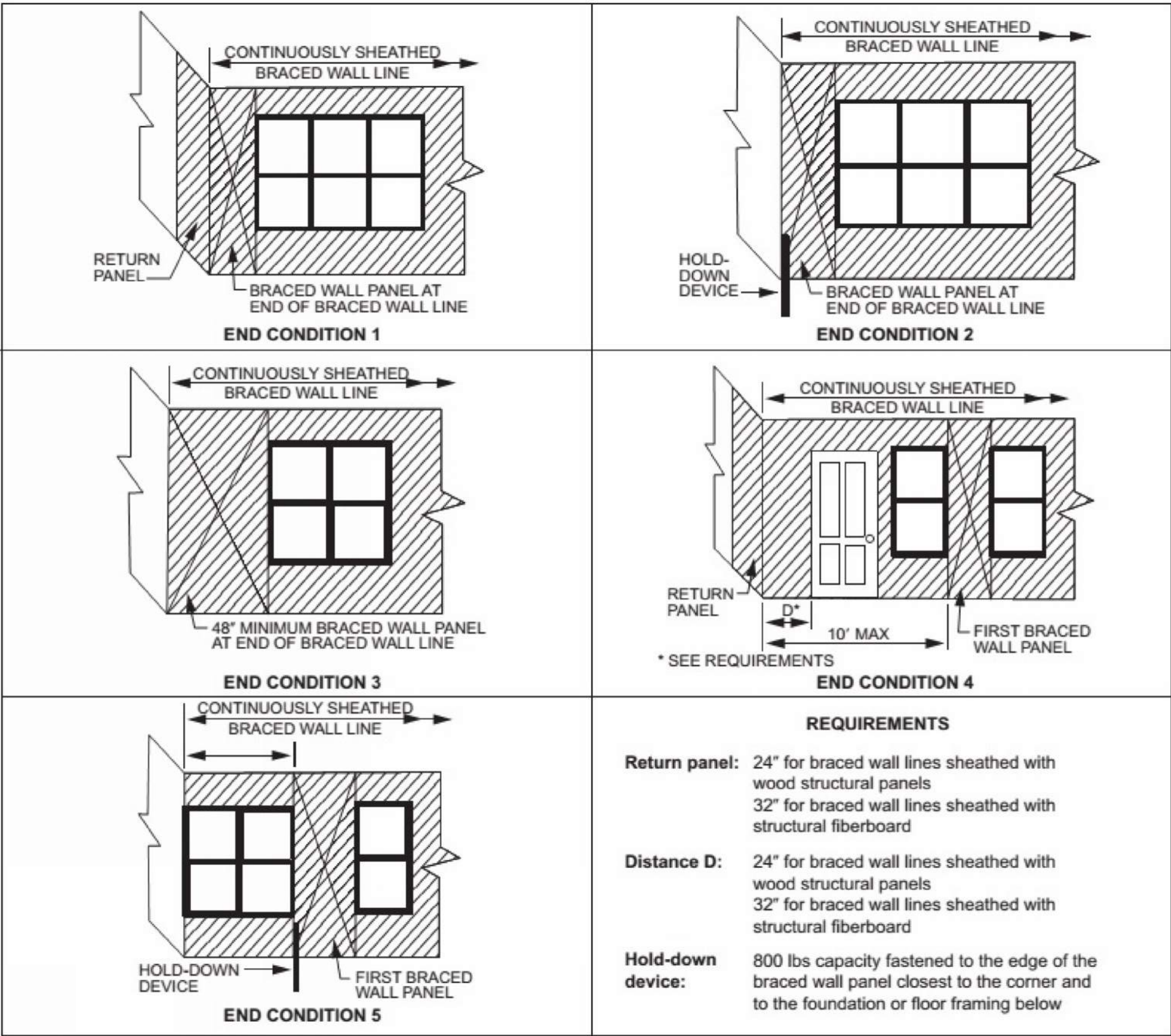


AOR: AARON BROWN  
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**C** BRACED WALL END CONDITIONS  
FIGURE R602.10.7  
N.T.S.

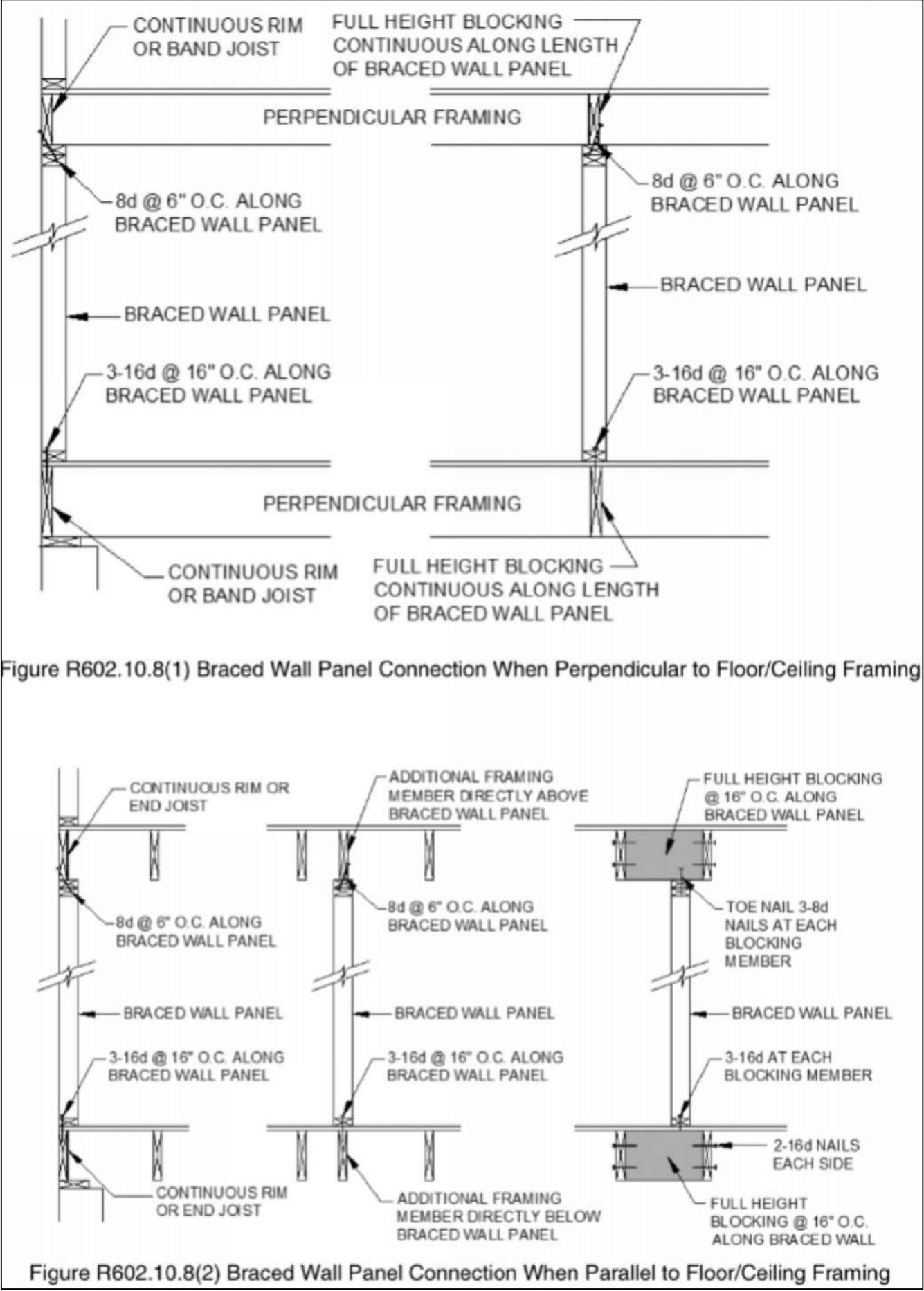


Figure R602.10.8(1) Braced Wall Panel Connection When Perpendicular to Floor/Ceiling Framing

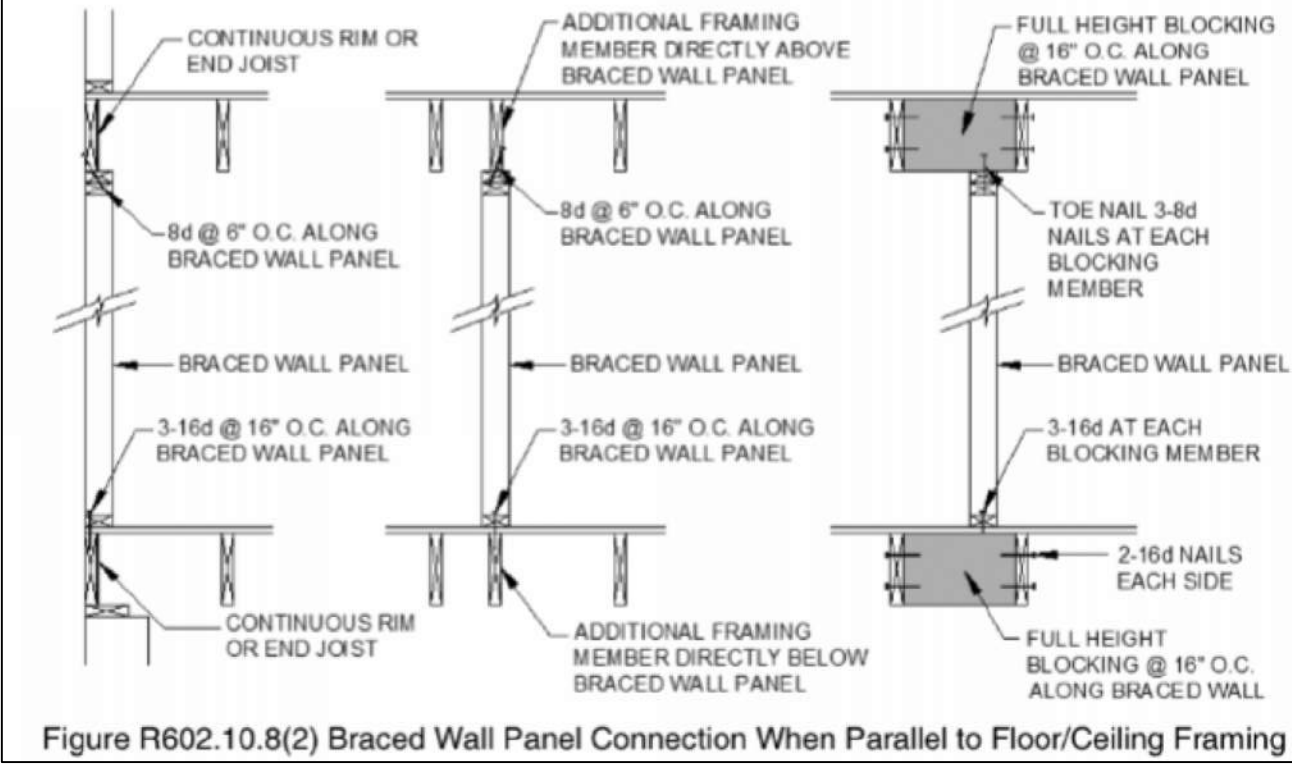
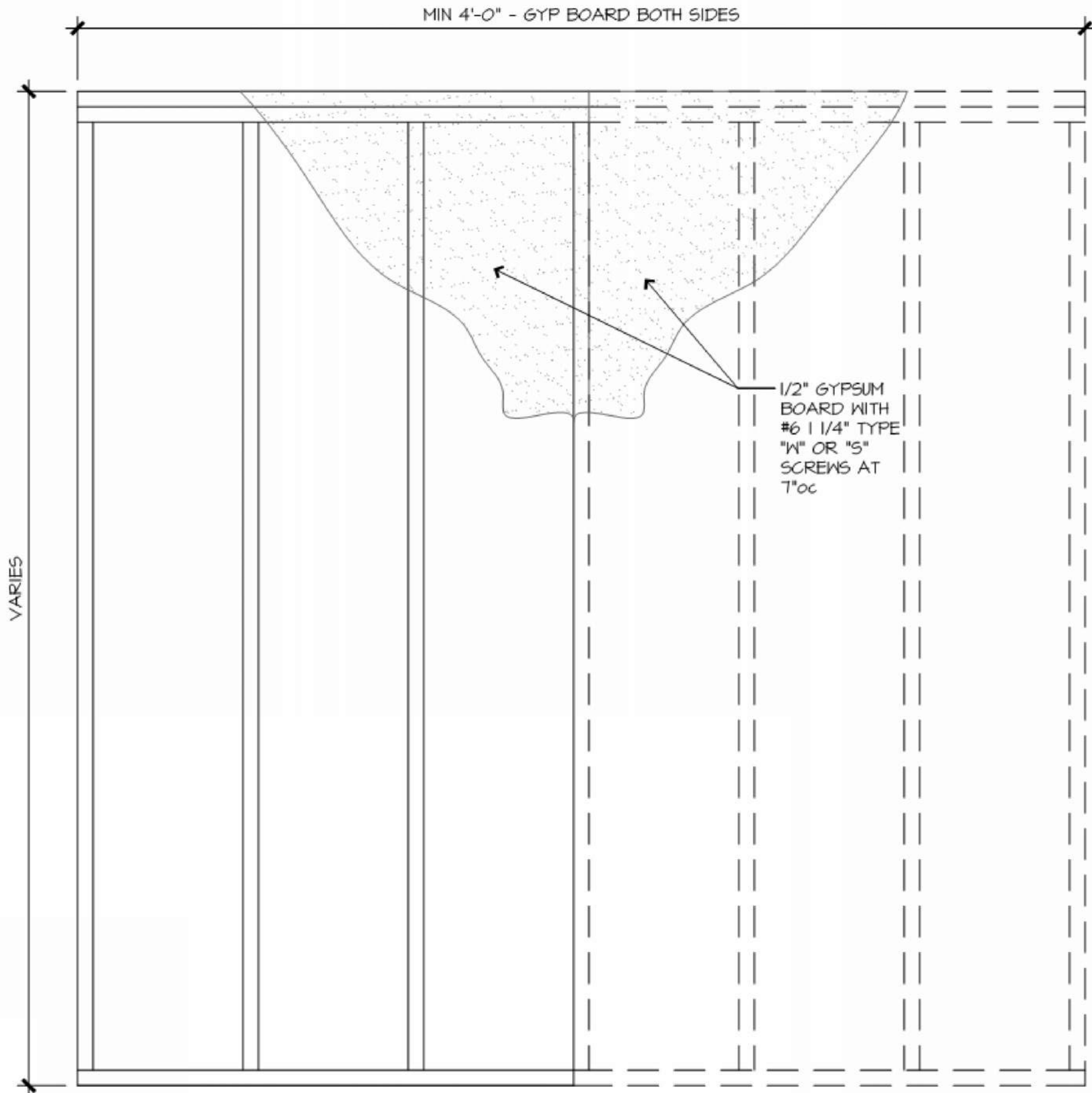


Figure R602.10.8(2) Braced Wall Panel Connection When Parallel to Floor/Ceiling Framing

**B** BRACED WALL SEGMENT ATTACHMENT CEILING/FLOOR  
2012 IRC SECTION R602.10.8  
N.T.S.



**A** METHOD GB CRITERIA  
N.T.S.

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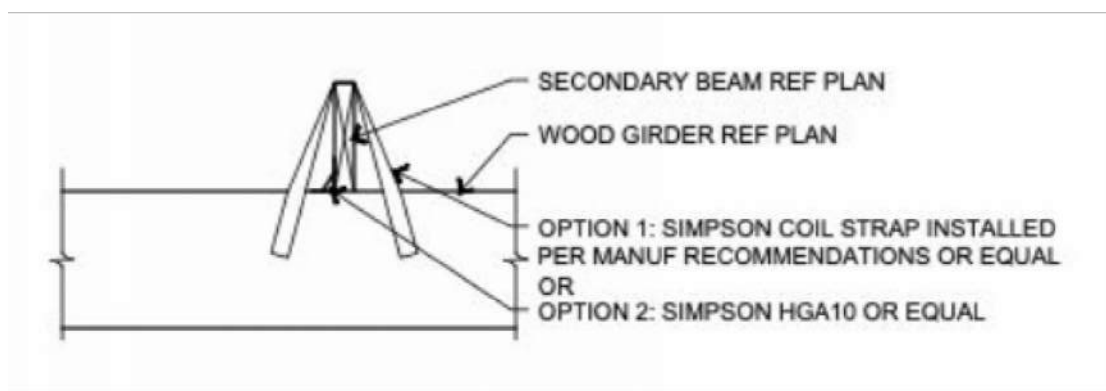
AARON D. OBERMILLER, P.E.  
NO. 000019580 / 01-01-2027  
CERTIFICATION IS PROVIDED HEREON FOR STRUCTURAL ITEMS NOT OTHERWISE ADDRESSED IN THE REQUIREMENTS OF THE 2018 INTERNATIONAL RESIDENTIAL CODE. ALL CONSTRUCTION, MATERIALS, FASTENING NOT SPECIFICALLY DENOTED SHALL COMPLY WITH THE REQUIREMENTS OF THE 2018 IRC AND THEREIN REFERENCED STANDARDS. ANY REQUIRED CLARIFICATION OR MODIFICATIONS TO STRUCTURAL ITEMS SHALL BE APPROVED BY THE ENGINEER OF RECORD OR OTHER LICENSED PROFESSIONAL CAPABLE OF CERTIFYING COMPLIANCE WITH THE MINIMUM STANDARDS OF THE APPLICABLE CODE. ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR DRAWING ERRORS AND OMISSIONS IN PLAN OR ELEVATION OF PROVIDED PLANS.



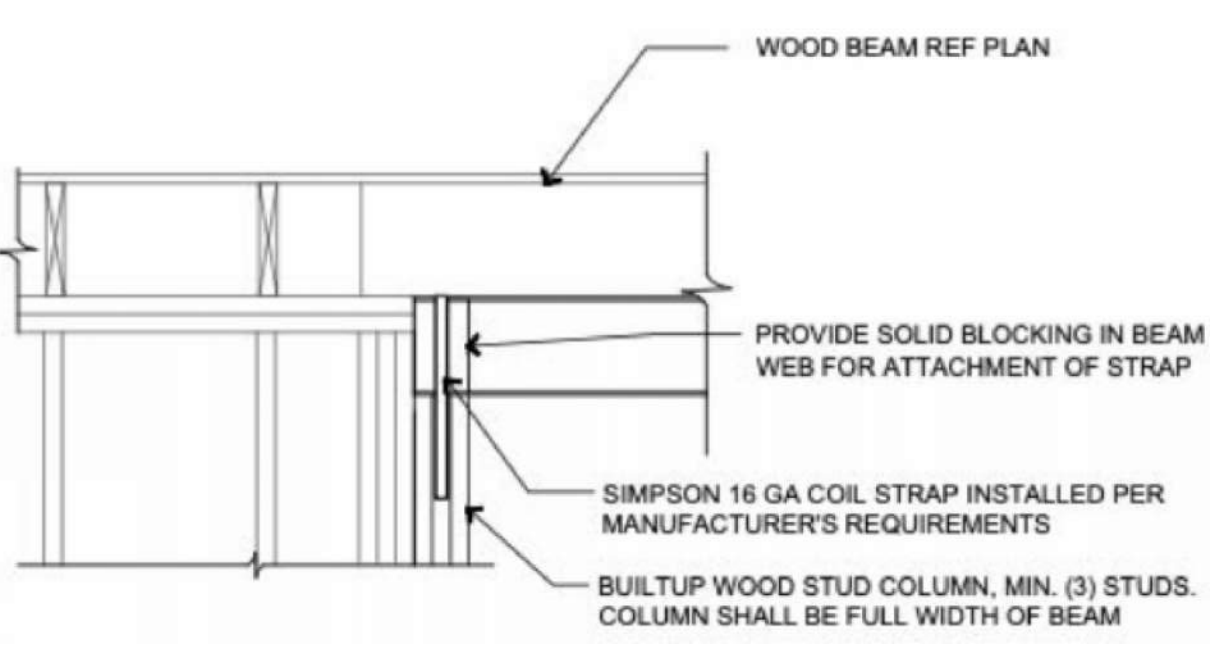
AOR: AARON BROWN  
MO # A-7215  
4334 QUARTER HORSE LANE  
BATES CITY, MO 64011  
816-588-1178

2018 IRC CODE COMPLIANCE  
THESE DRAWINGS HAVE BEEN PREPARED WITH RESPECT TO COMPLIANCE OF THE 2018 IRC AND NEC 2017-ANY REFERENCE FOUND NOT CORRECTLY OR MISTAKINGLY IDENTIFIED TO THESE CODES SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL

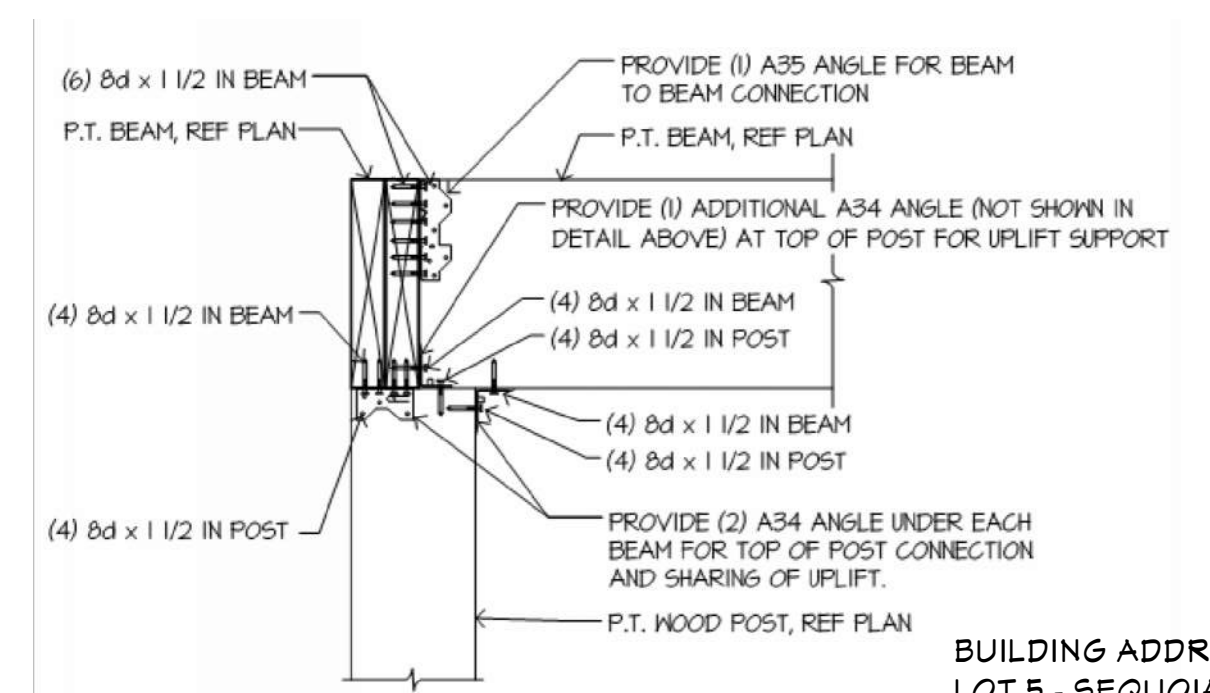
LEE'S SEQUOIA DUPLEX, MISSOURI



**L** WOOD BEAM BEARING ON WOOD BEAM N.T.S.

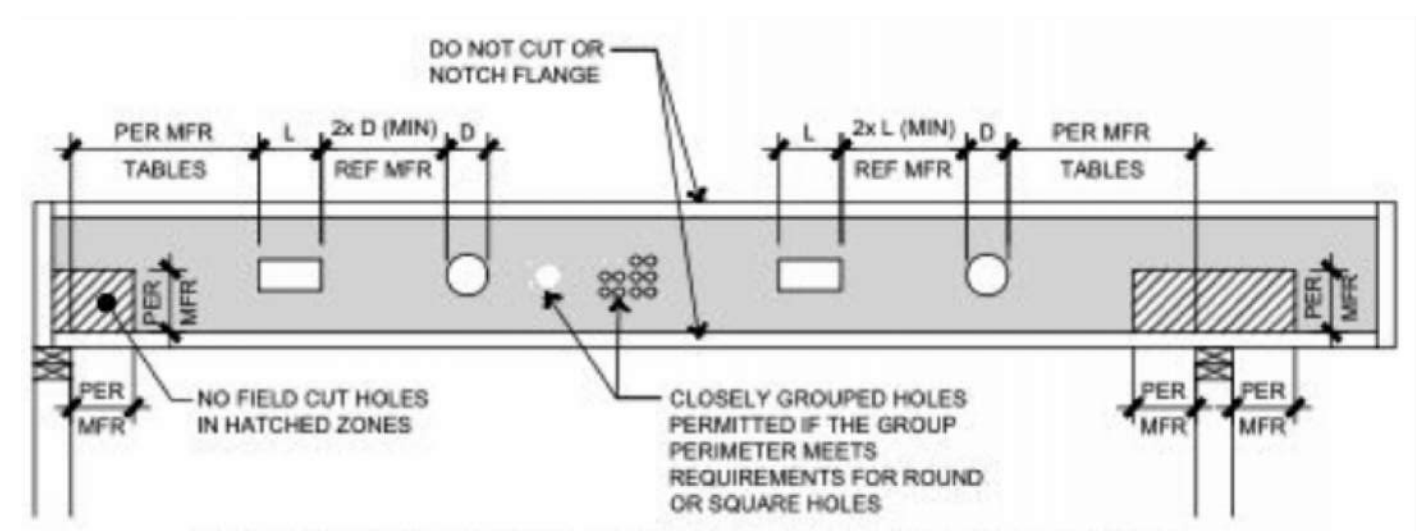


**K** BEAM PARALLEL TO WALL FRAMING N.T.S.

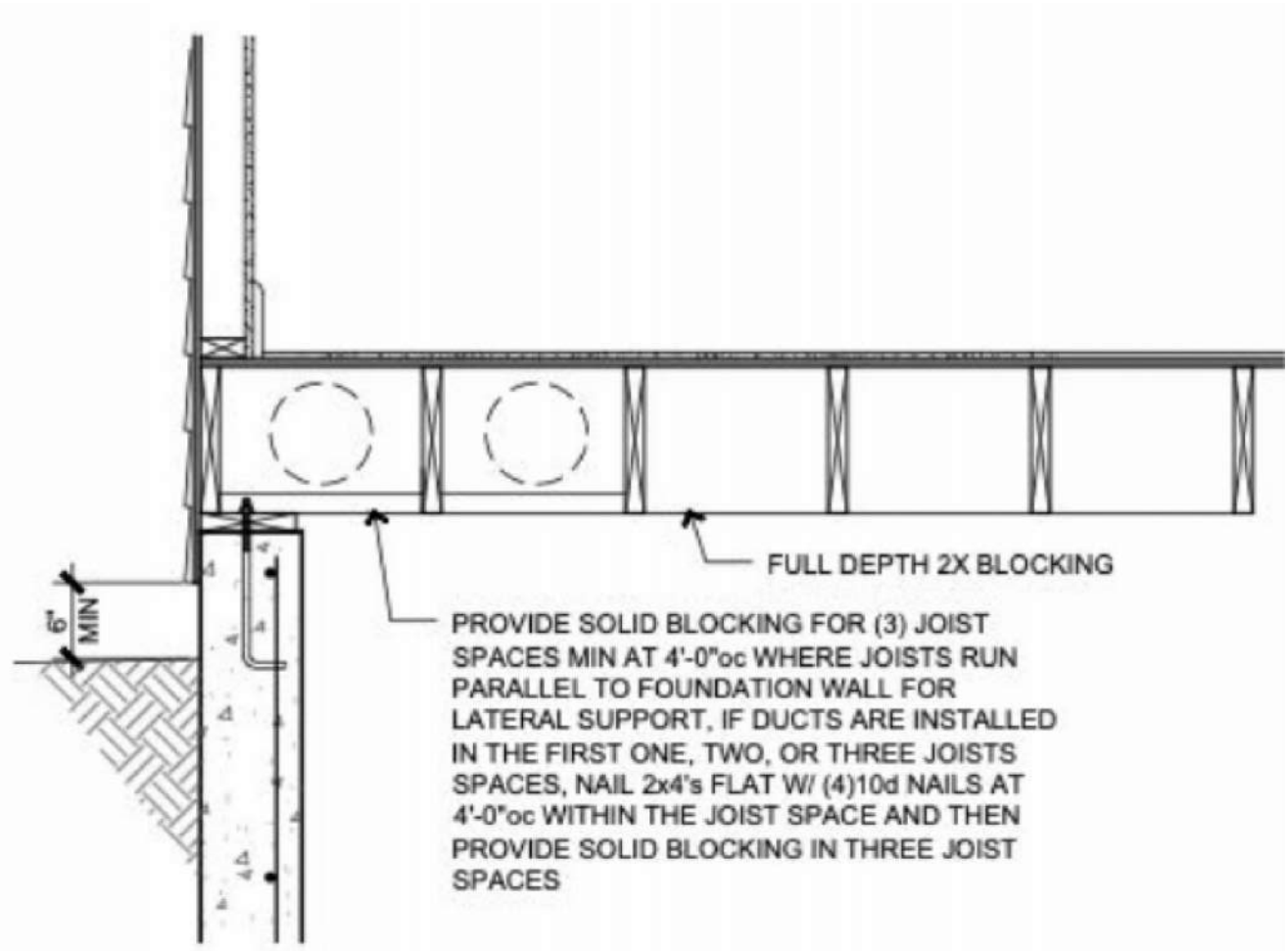


**J** POST TO BEAM CONNECTION N.T.S.

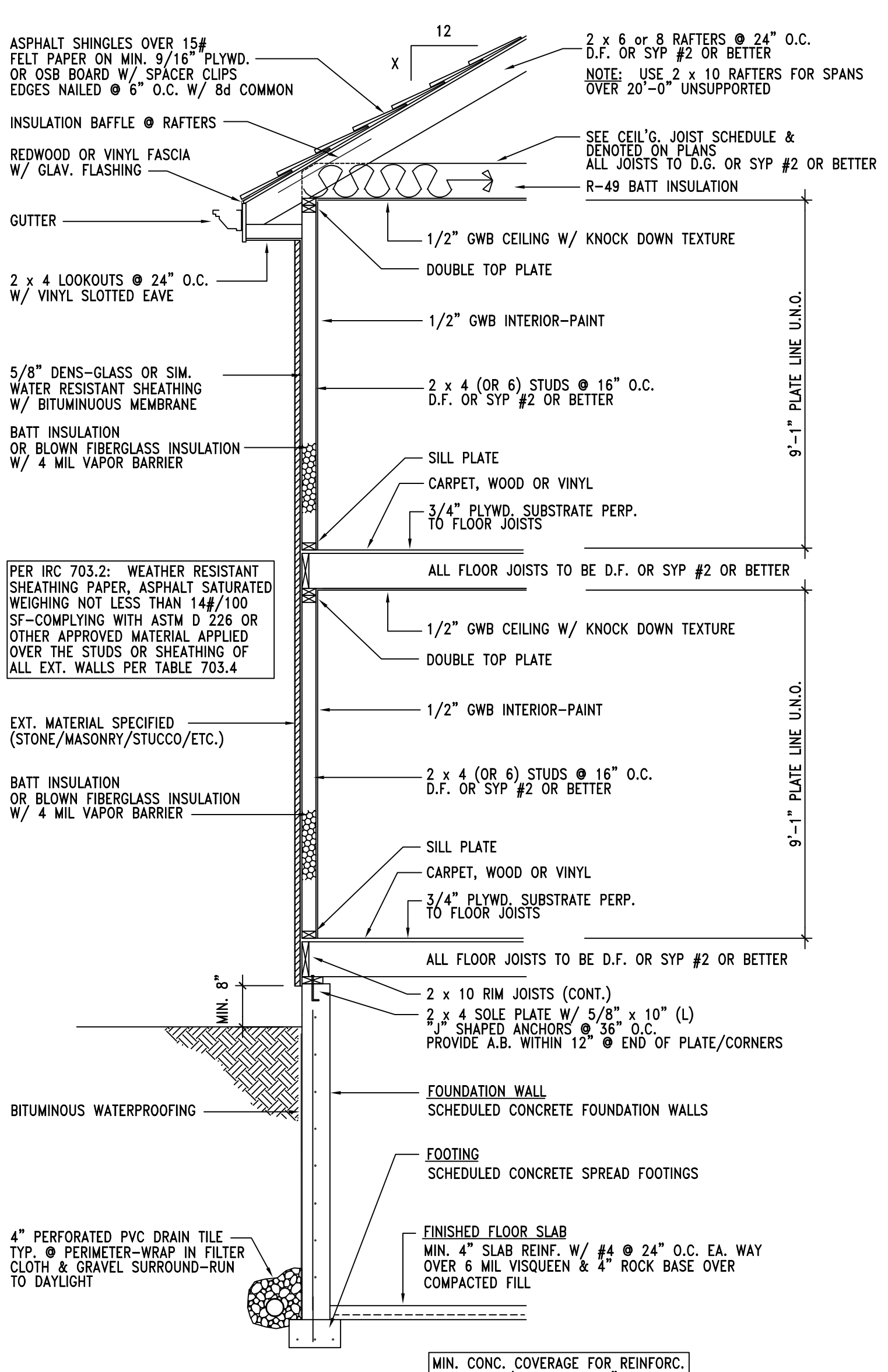
BUILDING ADDRESS:  
LOT 5 - SEQUOIA  
229 & 231 NW ORCHARD CT.  
LEE'S SUMMIT, MO 64063



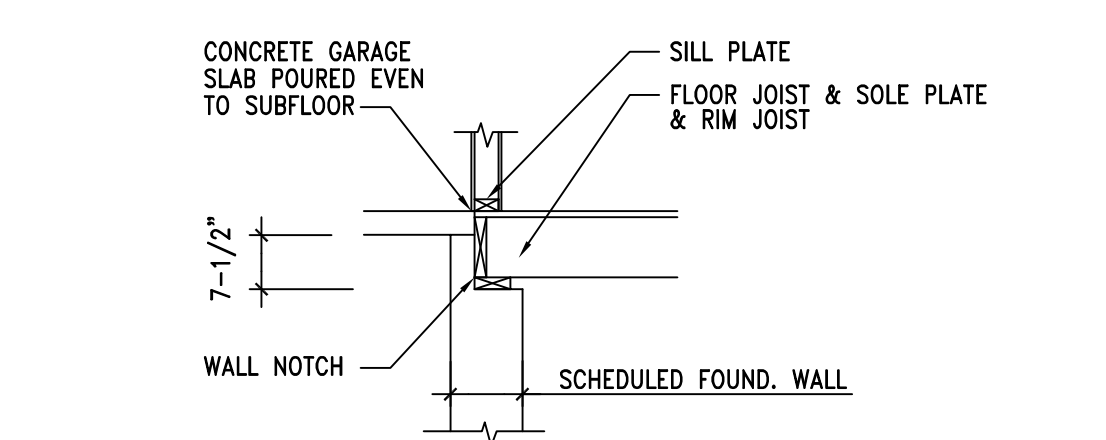
**H** ALLOWABLE HOLES FOR PRE-FAB JOISTS N.T.S.



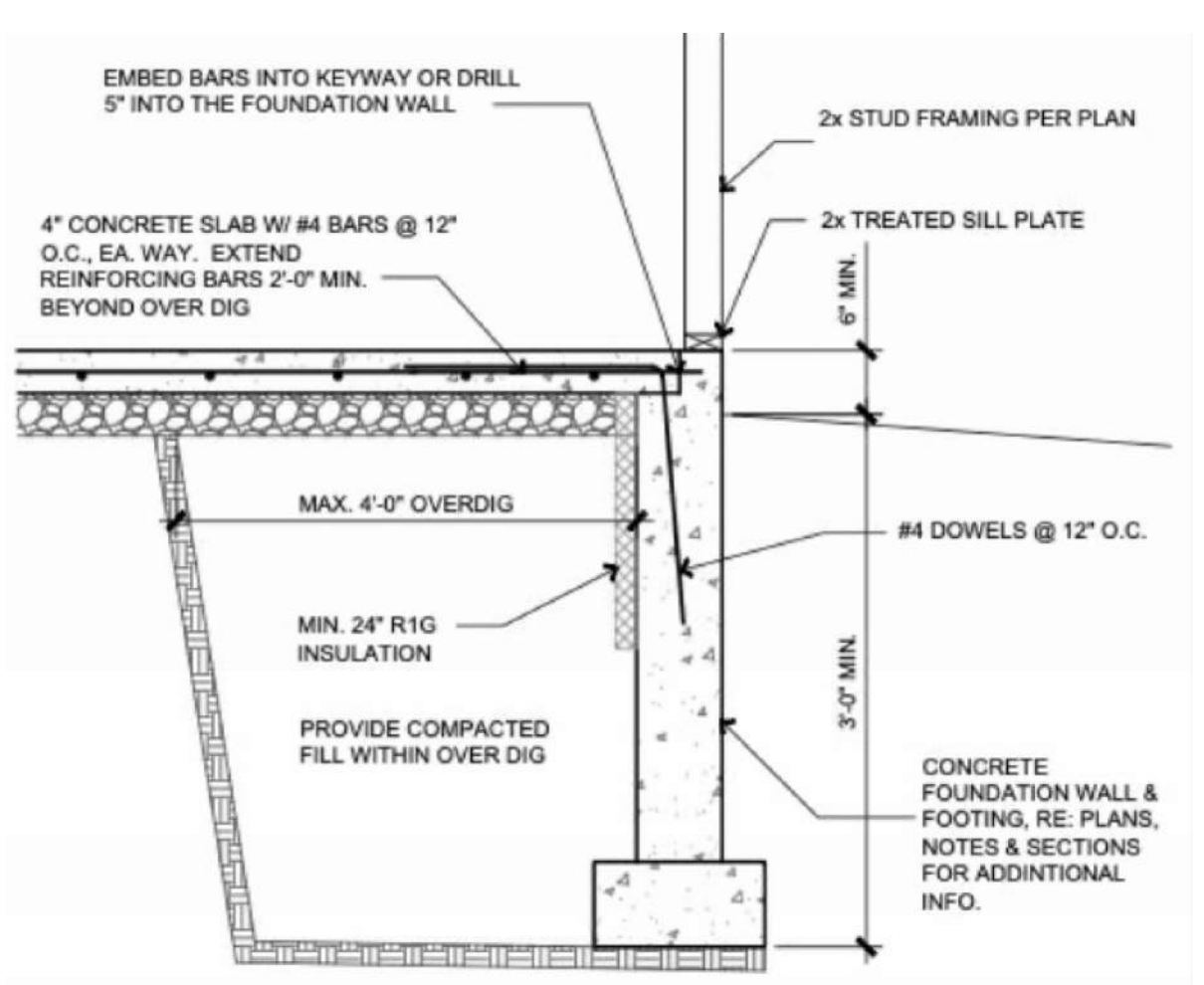
**E** FL. JOISTS PARALLEL TO CON. FOUNDATION N.T.S.



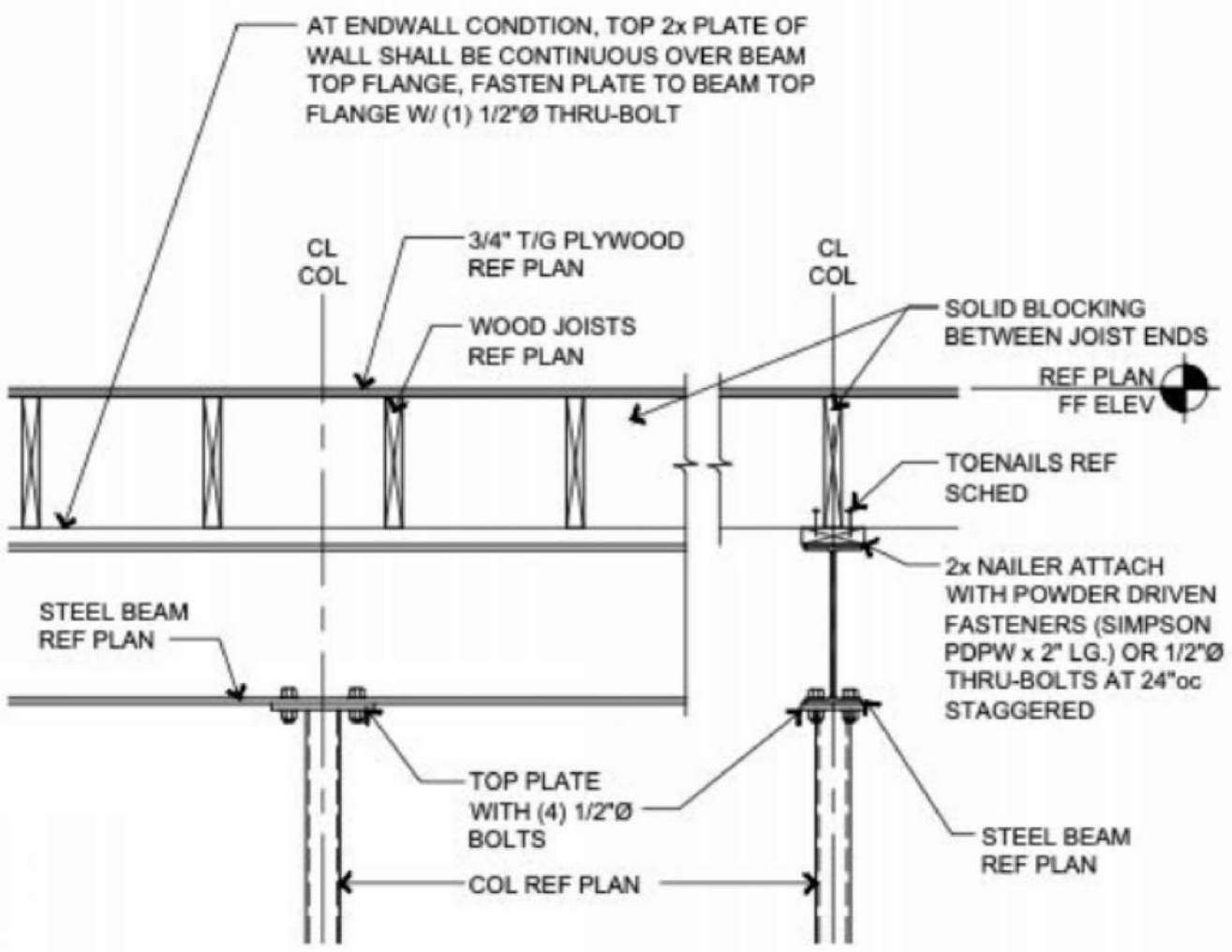
**A** TYP. WALL FRAMING SECTION N.T.S.



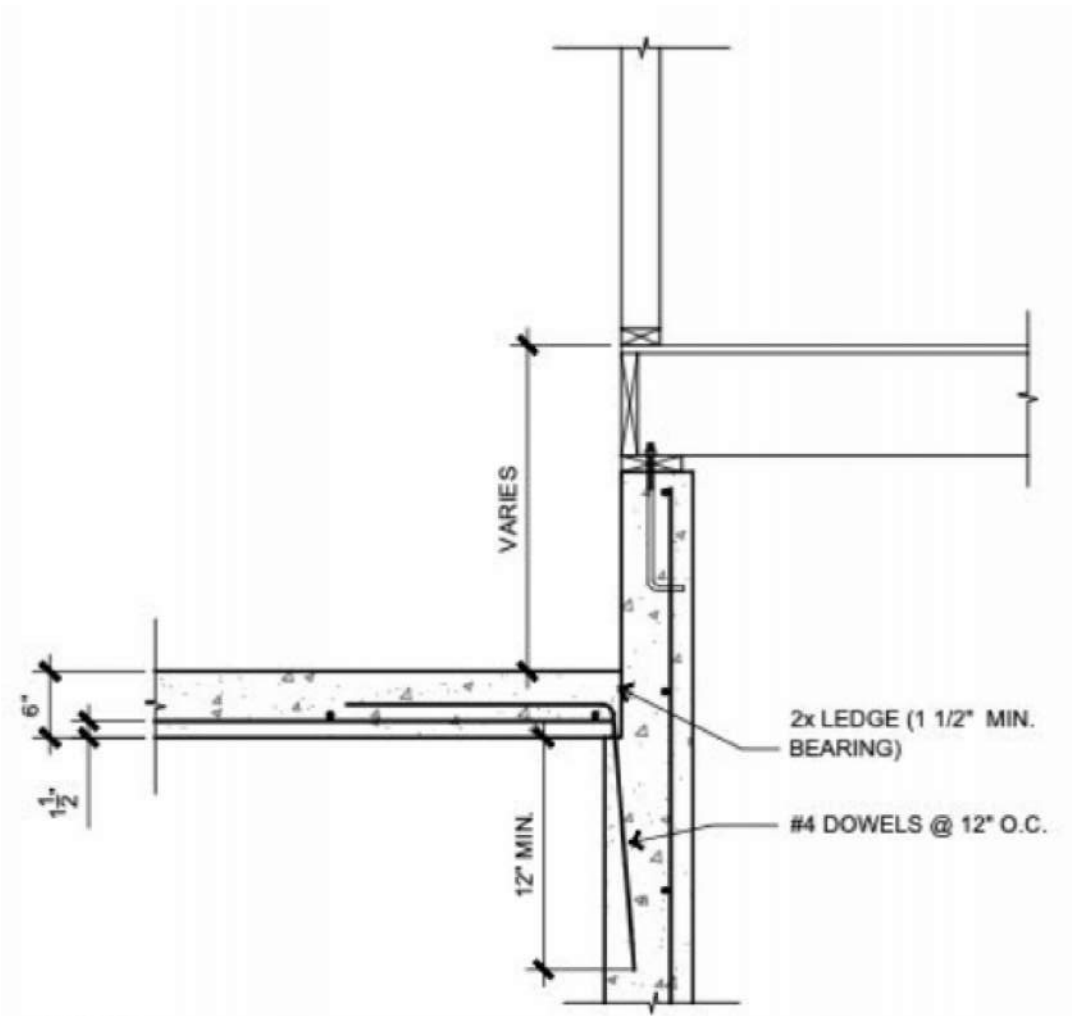
**G** ZERO CLEARANCE GARAGE SLAB OPTION N.T.S.



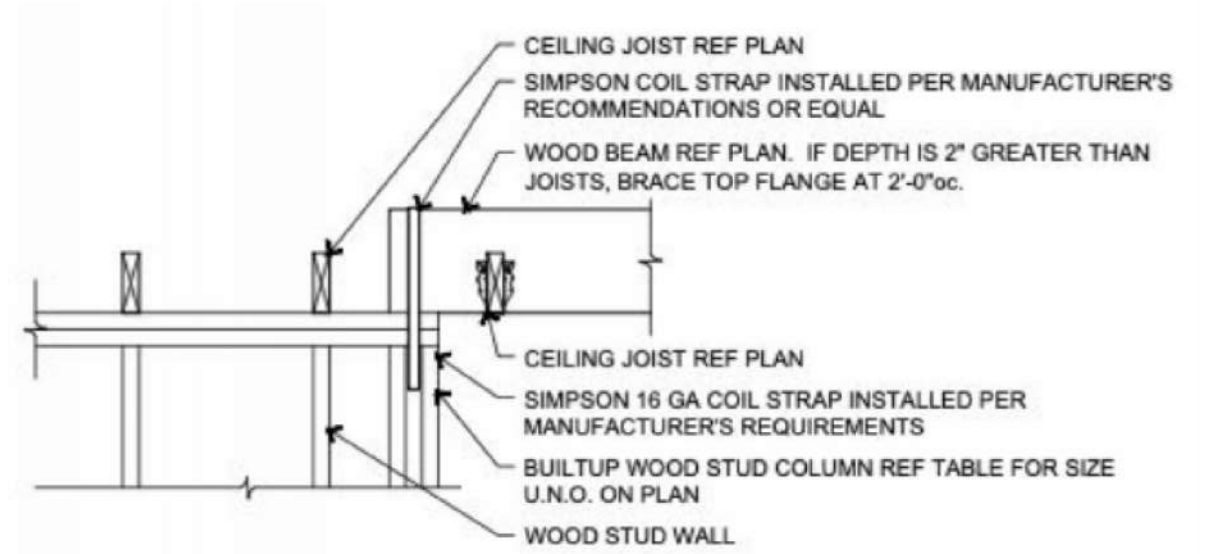
**F** OVERDUG SECTIONS OF GARAGE AREA N.T.S.



**B** TYP. STEEL BEAM AT COLUMN N.T.S.



**D** DROPPED GARAGE SLAB OPTION N.T.S.



**C** UPSET HEADER BEAM PARALLEL TO WALL N.T.S.

DATE: 08-25-2025  
SUBDIVISION: \_\_\_\_\_  
PLOT #: \_\_\_\_\_

REVISION	DATE

ISSUED: PERMIT/CONSTRUCTION

**A10**  
SHEET 10 OF 11

RELEASE FOR CONSTRUCTION  
AS NOTED ON PLANS REVIEW  
DEVELOPMENT SERVICES  
LEE'S SUMMIT, MISSOURI  
09/11/2025 2:06:05



GENERAL NOTES AND REQUIREMENTS

GENERAL CONTRACTOR RESPONSIBILITIES

- TEMPORARY STABILITY, INCLUDING GROUND SUPPORTS FOR ALL STRUCTURAL FRAMING SHALL BE THE RESPONSIBILITY OF THE FRAMING SUB AND THE GC PER THE KNOWN INDUSTRY BEST PRACTICES AND STANDARDS OF CARE AND/OR PER SPECIFIC INFORMATION ON THE DRAWINGS OR PER MANUFACTURER'S RECOMMENDATIONS.
- ALL WINDOWS & DOORS FLASHED INCLUDING ONES THAT FALL WITHIN STUCCO AREAS
- CAULK ALL WINDOWS AND DOORS WHILE BEING SET
- TAPE ALL WINDOW PERIMETERS (SILL, JAMB, HEAD)
- ALL EXTERIOR MAIN LEVEL DOORS NOT INCLUDING PATIO DOORS TO BE SET 3/4" OFF THE SUB FLOORING TO ACCOMMODATE FLOOR FINISHES
- ALL EXTERIOR DOORS WITH BRICK MOULD ATTACHED W/ FLUSH CASING NAILS
- ALL NAILS TO BE PULLED FROM STEEL BEAM TOP AND BOTOM PLATES
- USE STEEL SHIMS ONLY WHEN BEAM SHIMMING IS REQUIRED AT FOUNDATION
- OVER DRIVEN SIDING NAILS WILL BE CAULKED FLUSH BY THE FRAMER
- ALL PLUGS IN FULL VIEW GLASS DOOR MOLDINGS WILL BE INSTALLED BY THE FRAMER
- WHEN COVERED PORCH ROOFS ARE REQUIRED, THE FRAMER WILL INSTALL POSTS DOWN TO PIERS PROVIDED BY THE BUILDER, DECK RIMS & JOISTS ONLY WILL ALSO BE INSTALLED
- WHEN A NON-COVERED DECK IS REQUIRED, THE FRAMER WILL INSTALL POSTS THE BUILDER PROVIDED PIERS, DECK RIMS AND JOISTS ONLY WILL ALSO BE INSTALLED
- ALL SUBFLOOR WILL BE SCREWED DOWN BY FRAMER W/ BUILDER PROVIDED SCREWS
- ALL TRASH FROM THE PROCESS FROM FRAMING WILL BE CLEANED UP ON A DAILY BASIS BY FRAMER. COLLECT TRASH IN TWO PILES. AT THE COMPLETION OF FRAMING, FLOORS TO BE SWEEP BY FRAMER AND SITE COMPLETELY CLEANED
- ALL PORCH POSTS WILL BE BUILT AND INSTALLED BY THE FRAMER
- ALL SHUTTERS AND BRACKETS TO BE INSTALLED BY THE FRAMER
- ALL KNEE WALLS IN ATTIC THAT HAVE EXPOSED BATT INSULATION WILL REQUIRE OSB TO BE NAILED TO THE ATTIC SIDE. INSULATION MUST BE NAILED TO SIX SIDES
- BEHIND WHIRLPOOL TUBS WILL BE REQUIRED TO BE PRE-INSULATED BY THE INSULATION SUBCONTRACTOR AND THEN OSB INSTALLED OVER BY THE FRAMER BEFORE THE TUB DECK IS BUILT AND TUB INSTALLED
- PUNCH LIST WILL BE COMPLETED BY THE FRAMER TO MEET BUILDERS LEVEL OF QUALITY AND EXPECTATIONS
- IF ANY CONFUSION ON MEASUREMENTS OR INFO PROVIDED IN THE PLANS, THE FRAMER WILL CONSULT W/ THE PROJECT SUPERINTENDENT OR ARCHITECT BEFORE WORK IS PERFORMED AND ACCEPTED.
- GC IS RESPONSIBLE FOR COORDINATING THE ROUGH-IN EXTERIOR WINDOW AND DOOR OPENINGS PROVIDED BY THE SUPPLIER WITH THE FRAMING SUBCONTRACTOR
- GC IS RESPONSIBLE THE CONCRETE SUBCONTRACTOR HAS LAID OUT THE FOUNDATION PER THE PLAN DIMENSIONS AND ANGLES AND THAT ALL FOUNDATIONS ARE TRUE IN GEOMETRY WITH RELATED ANGLES, AND THAT ALL FOUNDATIONS ARE TRUE, SQUARE, PERPENDICULAR TO THE DRAWING INFO.
- GC IS RESPONSIBLE FOR MISC. CAULKING NOT SPECIFICALLY ATTRIBUTED TO SPECIFIC SUBCONTRACTORS SCOPE SUCH AS BUT NOT LIMITED TO SILL PLATES TO SLABS, TUB & SHOWER UNITS & OTHER PLUMBING FIXTURES, EXTERIOR WINDOWS AND DOORS, CELL G GYP. BD. AND WALL PLATES, THRESHOLDS, ETC.

GENERAL CONTRACTOR DESIGN ASSIST RESPONSIBILITIES

- COORDINATE WITH HOMEOWNER ALL MILLWORK AND CASEWORK GOODS TO ENSURE PROPER COORDINATION AND INSTALLATION TO ACCOMMODATE APPLIANCES, SINKS AND OTHER SPECIALTY ITEMS
- GC SHALL EMPLOY A QUALIFIED HVAC CONTRACTOR THAT WILL DESIGN THE MOST EFFICIENT HEATING AND COOLING SYSTEM PER THE OWNER'S DIRECTION. HVAC SUBCONTRACTOR SHALL DEVELOP THE UNIT LOCATIONS, DUCTWORK PATHWAYS, CONTROLS, ACCESS, ETC. OF THE COMPLETE SYSTEM WITH APPROVAL OF THE HOMEOWNER. DUCTWORK SHALL NOT BE EXPOSED UNLESS SPECIFICALLY NOTED BY THE HOMEOWNER. EXPOSED DUCTWORK SHALL UTILIZE ROUND SPIRAL DUCT WITH CONTROLLABLE DISCHARGE DAMPERS.
- GC SHALL EMPLOY A QUALIFIED ELECTRICIAN THAT WILL DESIGN THE ELECTRICAL POWER & LIGHTING SYSTEM PER THE OWNER'S DIRECTION. SERVICE ENTRY LOCATION AND LOGISTICS WORKING WITH THE ENERGY SUPPLIER SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL SUB. ELECTRICAL SUB SHALL HOLD A WALK-THROUGH WITH THE HOMEOWNER AFTER FRAMING ROUGH-IN AND PRIOR TO ELECTRICAL ROUGH-IN TO LOCATE ALL RECEPTACLES, LIGHTS, SWITCHES AND OTHER ITEMS.
- GC SHALL COORDINATE EXTERIOR MEP ITEMS WITH THE HOMEOWNER SUCH AS EXTERIOR RECEPTACLES, HOSE BIBS AND HVAC UNIT PLACEMENT. CONCRETE PADS SHALL BE PROVIDED FOR ALL OUTSIDE CONDENSER UNITS THAT EXTENDS MIN. 12" PAST THE EXTENTS OF THE UNIT SIZE
- GC OR HIS APPOINTED STEEL SUPPLIER SUB SHALL PROVIDE AN ENGINEERING CHECK ON THE STRUCTURAL STEEL MEMBERS (BEAMS, COLUMNS, BASE PLATES, CONNECTIONS, ETC.) THAT ARE ON THE DRAWINGS, THE RESPONSIBILITY OF THE FINAL STRUCTURAL MEMBERS USED IN THE PROJECT IS THE STEEL SUB CONTRACTORS AND GC.

GENERAL WOOD FRAMING, FLOORS AND ROOF NOTES

- ALL STRUCTURAL LUMBER (RAFTERS, CEILING JOISTS, FLOOR JOISTS, PURLINS, HEADERS AND STUD WALL FRAMING) SHALL BE DOUGLAS FIR #2 GRADE OR BETTER LVL ON DRAWINGS. ALL LOADBEARING STUDS CAN ALSO BE SPRUCE-PINE-FIR STUD GRADE OR #2 EXCEPT FOR BUILT-UP COLUMNS OVER 10'-0" HIGH WHICH SHALL UTILIZE STRUCTURAL SELECT GRADE.
- PROVIDE SEASONED LUMBER WITH 19% MAXIMUM MOISTURE CONTENT AT TIME OF DRESSING. RIPPING OF STRUCTURAL NOMINAL LUMBER FOR LOAD BEARING/CARRYING IS NOT ALLOWED.
- ALL SAWN LUMBER EXPOSED TO WEATHER OR IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED OR NATURALLY RESISTANT LUMBER SUCH AS WESTERN CEDAR. FASTENERS AND FRAMING ACCESSORIES FOR TREATED LUMBER SHALL BE HOT DIPPED GALV. PER ASTM A153 OR A658.
- ALL NAILING NOT INDICATED ON DRAWINGS SHALL CONFORM TO THE NAILING SCHEDULE OF THE BUILDING CODE. ALL NAILS SHALL BE BOX NAILS, U.N.O.
- ALL EXTERIOR FASTENERS, NAILS, SCREWS, BOLTS, WASHERS, NUTS AND METAL ACCESSORIES SUCH AS BACK SHOES, POST CAPS, ETC. SHALL BE COATED, PLATED OR OTHERWISE PROTECTED AGAINST CORROSION, RUST AND DETERIORATION.
- PREFABRICATED WOOD I-JOISTS SHALL MEET THE PROVISIONS OF ASTM5055S, AHSI/AWC/ WFCM 2012 AND THE CURRENT BUILDING CODE. I-JOISTS MUST BE INSTALLED PER THE MANUFACTURER'S INSTALLATION GUIDELINES OR PER DRAWING FROM A CERTIFIED ENGINEER.
- LAMINATED VENEER LUMBER, STRAND LUMBER PRODUCTS, ETC. SHALL BE OF THE DIMENSION NOTED ON THE DRAWINGS AND HAVE THE FOLLOWING PROPERTIES:  
Fb = 2,600 psi  
Fc = 2,310 psi (PARALLEL)  
Fc = 750 psi (PERPENDICULAR)  
Fv = 285 psi  
E = 1.9 x 10 psi
- ALL MULTIPLE LVL MEMBERS SHALL BE NAILED TOGETHER WITH TWO (2) ROWS (T & B) 16d NAILS AT 12" O.C. OVER THE FULL LENGTH OF THE MEMBERS. ENDS OF ALL LVL HEADERS SHALL BE SUPPORTED BY TWO (2) JACK/TRIMMER STUDS MINIMUM PER MANUFACTURERS. FOR CONTINUOUS LVL MEMBERS FIVE (5) STUDS (7-1/2" BEARINGS) MIN SHALL BE REQUIRED UNLESS THE BEARING STUD PACK IS SHOWN OTHER IN DRAWINGS.
- ALL SHEATHING PANELS SHALL BE IDENTIFIED WITH THE APPROPRIATE GRADE TRADEMARK OF THE AMERICAN PLYWOOD ASSOC. (APA) AND SHALL MEET THE PRODUCTS REQ'D PSI SHEATHING PANELS SHALL BE SET WITH FACE GRAIN PERPENDICULAR TO THE SUPPORTING MEMBERS AND STAGGERED ENDS AT 4'-0".
- SOLID BLOCKING BETWEEN FLOOR JOISTS SHALL BE INSTALLED AT BEAM AND HEADER LOCATIONS, AT WALLS SUPPORTING CANTILEVERS AND BELOW POINT LOADS. ALL SOLID BLOCKING AND RIM JOIST MATERIAL SHALL BE 2x OR TIMBERSTRAND OR APPROVED EQUAL
- ALL FLOOR AND CEILING JOISTS THAT BUTT INTO THE SIDE OF A HEADER OR BEAM SHALL BE ANCHORED TO THE MEMBER WITH STANDARD JOIST HANGERS, U.N.O.
- ALL RIDGE AND VALLEY POINTS IN A HIP ROOF (IF APPLICABLE) OR VALLEYS IN A GABLE ROOF (IF APPLICABLE) SHALL BE BRACED TO A ROOF BEARING WALL OR HEADER BELOW W/ A 2 x 4 "T BRACE", U.N.O. ON DRAWINGS
- ALL SUPPORTS FOR RAFTERS AND PURLINS, U.N.O. ON DRAWINGS, SHALL BEAR ON LOAD-BEARING WALLS LOCATED IN PROXIMITY DIRECTLY BELOW A BEAM LOAD BEARING LINE OR SPECIFIC LOAD BEARING CONDITION. ALL CONCENTRATED LOADS SHALL BE CARRIED THROUGH THE FLOOR SYSTEM THICKNESS WITH SOLID BLOCKING TO TRANSFER THE LOAD.
- ALL LARGE AND ANTICIPATED HEAVY MILLWORK (INCLUDING STONE COUNTERTOPS) SHALL BE ACCOUNTED FOR IN THE FRAMING SCHEME. ANY DEVIATIONS OF THE CASEGOODS BY THE OWNER FROM THE DRAWINGS SHALL BE SUBMITTED BACK TO THE ARCHITECT FOR APPROVAL OR REVISIONS TO THE FLOOR JOIST AND/OR OTHER LOAD BEARING ADJUSTMENTS.
- ALL LARGE AND ANTICIPATED HEAVY MILLWORK (INCLUDING STONE COUNTERTOPS) SHALL BE ACCOUNTED FOR IN THE FRAMING SCHEME. ANY DEVIATIONS OF THE CASEGOODS BY THE OWNER FROM THE DRAWINGS SHALL BE SUBMITTED BACK TO THE ARCHITECT FOR APPROVAL OR REVISIONS TO THE FLOOR JOIST AND/OR OTHER LOAD BEARING ADJUSTMENTS.
- ROOF SHEATHING TO BE 7/16" OSB NAILED W/ 8d @ 6" O.C. PANEL INDEX 24/0; PROVIDE CLIPS AT UNSUPPORTED PANEL EDGES. SHEATHING LAID PERPENDICULAR TO EAVE LINE & STAGGERED. SECURE SHEATHING W/ 8d common NAILS TO RAFTERS WITH 6" ON CENTER NAILING PATTERN AT ROOF EDGES
- EXT. WALL STUDS & LOAD BEARING WALLS TO BE CONTINUOUS FROM FLOOR TO ROOF/CLG. DIAPHRAGM PER IRC 602.3
- HEADERS: PROVIDE SPECIFIED LUMBER (SIZE AND QUANTITY) PER ATTACHED HEADER SCHEDULE, U.N.O.—CONSTRUCT HEADERS W/ 7/16" OSB BETWEEN W/ (2) ROWS OF 16d @ 16" O.C.
- RAFTERS/JOISTS SHALL BEAR ON DOUBLE PLATE IN ALIGNMENT WITH WALL FRAMING STUDS
- SILL PLATES SHALL BEAR MINIMUM 6" ABOVE FINISHED GRADE

GENERAL CONCRETE & FOUNDATION NOTES

- ALL FOOTINGS AND PIERS SHALL BEAR CONSISTENTLY ON ORIGINAL AND UNDISTURBED SOIL AND SHALL BE CAPABLE OF SUPPORTING 1,500 PSF WITHOUT UNDEE SETTLEMENT OR HEAVING. IF FILL IS UTILIZED IT SHALL BE "STRUCTURAL SOIL" GRADE, COMPACTED AND TESTED AND APPROVED BY A LICENSE GEOTECHNICAL/STRUCTURAL ENGINEER.
- ALL CONCRETE AND REINFORCING SHALL TO CONFORM TO THE LATEST EDITION OF THE AMERICAN CONCRETE INSTITUTES' STANDARD BUILDING CODE REQUIREMENTS OF REINFORCED CONCRETE (ACI 318), "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS" (ACI 301) AND "GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION" (ACI 302) AND THE "RESIDENTIAL CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" (ACI 332)
- THE CONCRETE FOR THE FOOTINGS AND FOUNDATION WALLS SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 3,000 PSI WITH A MAXIMUM SLUMP OF 4". THE CONCRETE FOR THE FLOOR SLABS SHALL HAVE A MINIMUM 29-DAY STRENGTH OF 4,000 PSI WITH A MAXIMUM SLUMP OF 4". ANY CONCRETE EXPOSED TO WEATHER SHALL HAVE A 6% +/-1% AIR ENTRAINMENT.
- NO WATER SHALL BE ADDED TO THE CONCRETE MIX AT THE SITE
- THE USE OF FLY ASH OR ALUMINUM MIXTURE IS FORBIDDEN
- REINFORCING SHALL COMPLY WITH THE FOLLOWING:
  - REINFORCING STEEL #5 OR LARGER, ASTM A615, GRADE 60
  - REINFORCING STEEL #3 OR #4, ASTM A615, GRADE 40
  - WELDED WIRE FABRIC, ASTM A185, COLD DRAWN WIRE
  - WIRE TIE ALL BARS, NO WELDING OF REINFORCING IS ALLOWED
- WHERE NOT SPECIFICALLY SCHEDULED, ALL REINFORCING SHALL BE CONTINUOUS AND LAPPED A MINIMUM OF 48 BAR DIAMETERS. LAPS SHALL OVERLAP MINIMUM OF 6"
- STANDARD CONCRETE COVERAGE IS AS FOLLOWS:
  - EARTH FORMED = 3"
  - WALLS AND SLABS NOT EXPOSED TO EARTH = 3/4"
  - WALLS AND SLABS EXPOSED TO EARTH = 2"
  - ANY OTHER SITUATION = 2"
- NO EXTERIOR WALL FOOTING SHALL BE LESS THAN 36" TO THE BOTTOM OF THE FOOTING MEASURED FROM THE POINT OF FINAL EXCAVATION OR NATURAL GRADE
- AT CORNERS OF ALL WALLS AND FOOTINGS, SUPPLY CORNER BARS 4'-0" LONG (2'-0" IN EACH DIRECTION) IN WALL AND/OR FOOTING MATCHING SIZE AND SPACING OF HORIZONTAL BARS. WHERE THERE ARE NO VERTICAL BARS IN FACE OF WALL SUPPLY (3) #4 SUPPORT BARS FOR THE CORNER BARS.
- FOOTINGS SHALL BE POURED CONTINUOUS, INCLUDING JUMPS
- PROVIDE CONTROL AND EXPANSION JOINTS FOR SALBS ON GRADE PER DRAWINGS
- FOUNDATION WALLS SHALL BE BACKFILLED WITH GRANULAR OR CLEAN LEAN CLAY, LOW VOLUME (LOW EXPANSION) CHANGE MATERIAL. BACKFILLING SHALL NOT OCCUR SOONER THAN 7 DAYS AFTER CONCRETE HAS BEEN CAST. FOUNDATION WALLS SHALL BE BRACED PRIOR TO BACKFILLING AND ALL DEADMAN PLACED.
- DURING HOT WEATHER (80 DEGREES AND ABOVE) COMPLY WITH RECOMMENDATIONS OF ACI-305. DURING COLD WEATHER (40 DEGREES AND BELOW) COMPLY WITH THE RECOMMENDATIONS OF ACI-306.
- PROVIDE ANCHOR BOLTS IN ACCORDANCE W/ ASTM A307 AND PER THE DETAIL ON DRAWINGS
- ANCHOR PRESSURE TREATED PLATE @ INT. BEARING WALLS W/ 1/2" x 4-1/2" HILTI WEDGE BOLTS @ 72" O.C. MAX. 12" FROM ENDS
- INSTALL HOLDOWN BOLT ANCHORAGE AS INDICATED ON PLAN
- PROVIDE BITUMINOUS DAMP-PROOFING AT FOUNDATION WALLS

EROSION CONTROL

- EROSION CONTROL MEASURES SHALL BE IN PLACE & IN GOOD WORKING ORDER AT ALL TIMES DURING INSPECTIONS. IN THE EVENT THAT THEY ARE NOT, THE INSPECTOR MAY CANCEL THE INSPECTION UNTIL SUCH TIME THE EROSION CONTROL MEASURES ARE IN PLACE. A FINE, RE-INSPECTION FEE & STOP-WORK ORDER MAY BE ISSUED IF EROSION CONTROL IS NOT ADDRESSED. MINIMUMS INCLUDE:

SILT FENCE OR STRAW WATTLE AROUND ALL DISTURBED SOIL, SHALL BE IN PLACE BEFORE ANY EXCAVATION BEGINS

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE, THIS ENTRANCE SHOULD BE THE ONLY ENTRANCE & EXIT USED FOR VEHICLES INTO & OUT OF THE SITE

STREETS SHALL BE MAINTAINED FREE OF ALL SOIL & GRAVEL IN A BROOM CLEAN CONDITION AT ALL TIMES

ELECTRICAL SYSTEMS NOTES

- PROVIDE OVER GROUND ENCASED IN CONCRETE FOOTING IN ACCORDANCE WITH IRC 3608.1
- ALL ELECTRICAL CONDUCTORS SHALL BE COPPER
- RECEPT. IN THE FOLLOWING LOCATIONS SHALL BE GFCI PROTECTED:
  - BEDROOM, KITCHEN (W/IN 6 FEET OF SINK, GARAGE, SHED, EXTERIOR, UNFINISHED BASEMENT & HEATED FLOORS)
- ALL BRANCH CIRCUITS THAT SUPPLY 120-V, SINGLE PHASE, 15 & 20 AMP OUTLETS TO BE INSTALLED IN:
  - FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, REC ROOMS, CLOSETS, HALLWAYS & SIM. ROOMS SHALL BE PROTECTED BY A COMBINATION TYPE ARC-FAULT CIRCUIT INTERRUPTER INSTALLED TO PROVIDE PROTECTION OF THE BRANCH CIRCUIT
- ALL 15 & 20-A RECEPT. SHALL BE LISTED TAMPER-RESISTANT. EXCEPTION IS RECEPTACLES IN THE FOLLOWING LOCATIONS SHALL NOT BE REQUIRED TAMPER-RESISTANT:
  - RECEPTACLES LOCATED MORE THAN 5.5 FEET AFF
  - WHERE SUCH RECEPTACLES ARE LOCATED IN SPACES DEDICATED FOR THE APPLIANCE SERVED & UNDER CONDITIONS OF NORMAL USE, THE APPLIANCES ARE NOT EASILY MOVED. APPLIANCES TO BE CORD-N-PLUG CONNECTED TO RECEPT.
- RECEPTACLE OUTLETS-SPACINGS-RECEPTACLES SHALL BE INSTALLED SO THAT NO POINT IS MEASURED HOR. ALONG THE FLOOR OF ANY WALL SPACE MORE THAN 6- FEET FROM RECEPT.
- TAMPER RESISTANT RECEPTACLES SHALL BE LOCATED NO MORE THAN 5.5- FEET AFF
- ARC-FAULT CIRCUIT INTERRUPTER PROTECTION: BRANCH CIRCUITS THAT SUPPLY 12-VOLT, SINGLE PHASE, 15 AND 20-AMPERE OUTLETS INSTALLED IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, DENS, BEDROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS AND SIMILAR ROOMS/AREAS SHALL BE PROTECTED
- LOCATION OF GROUND FAULT CIRCUIT INTERRUPTERS: GROUND FAULT CIRCUIT PROTECTORS SHALL BE INSTALLED IN A READILY ACCESSIBLE LOCATION.
  - BATHROOMS (125-VOLT, 15 & 20-AMPERES)
  - OUTDOOR RECEPTACLES (125-VOLT, 15 & 20-AMPERES)
  - UNFINISHED BASEMENT RECEPTACLES (125-VOLT, 15 & 20-AMPERES)
  - KITCHEN (125 VOLT, 15 & 20-AMPERES)
  - SINK (125 VOLT, 15 & 20-AMPERES)

MECHANICAL SYSTEMS

- FURNACE & WATER HEATER SHALL BE ON 18" PLATFORMS IF PLACED IN A GARAGE OR ROOM W/ DIRECT ACCESS TO A GARAGE
- PROVIDE MIN. 78% AFUE FOR WEATHERIZED GAS HEATING EQUIP. BOX NON-WEATHERIZED
- PROVIDE MIN. 13 SEER FOR AIR CONDITIONING EQUIPMENT
- SUPPLY AND RETURN DUCTS SHALL BE INSULATED TO MIN. R-8
- MECHANICAL VENTILATION, RECIRCULATION OF AIR-EXHAUST AIR FROM BATHROOMS & TOILET ROOMS SHALL NOT BE RECIRCULATED WITHIN A RESIDENCE OR CIRCULATED TO ANOTHER DWELLING UNIT & SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS. EXHAUST AIR FROM BATHROOMS, TOILET ROOMS & KITCHENS SHALL NOT DISCHARGE INTO AN ATTIC, CRAWL SPACE OR OTHER AREA INSIDE THE BUILDING.
- MECHANICAL VENTILATION, LOCAL EXHAUST RATES-BATHROOMS, TOILET ROOMS MECHANICAL EXHAUST CAPACITY OF 50 CFM INTERMITTENT OR 20 CFM CONTINUOUS

LIGHT AND VENTILATION:

- PROVIDE STAIRWAY ILLUMINATION PER R303.7.9
- GABLE VENT & MUSHROOM VENTS TO PROVIDE A MIN. OF 10 S.F. NET-FREE OF ATTIC VENT.
- FURNACES ENCLOSED IN A ROOM LESS THAN 100 S.F. SHALL BE PROVIDED W/ A MEANS OF COMBUSTION MAKE-UP AIR AS DETERMINED/CALCULATED BY MECHANICAL CONTRACTOR
- VENTILATE KITCHENS AND LAUNDRY ROOMS PER R303.3
- PROVIDE MIN. 16" x 10" SOFFIT VENTS ALONG EAVE SPACED EVENELY W/ NO MORE THAN 8'-0" O.C.

UNSUITABLE FILL OR SOIL CONDITIONS LESS THAN DESIGNED

- ANY FOOTING, SLAB OR OTHER LOAD BEARING CONDITION IDENTIFIED ON THESE DRAWINGS THAT DOES NOT BEAR ON UNDISTURBED/ORIGINAL/VIRGIN SOIL OR ROCK OR SIMILAR SHALL VOID THIS DESIGN AND THE RESPONSIBILITY OF THE DESIGN PROFESSIONAL FROM ANY SUBSEQUENT AND RELATED STRUCTURAL AND/OR SLAB FAILURES
- IT IS THE OWNER AND/OR CONTRACTOR'S RESPONSIBILITY TO BRING TO THE ATTENTION OF THE DESIGN PROFESSIONAL ANY DISCOVERIES OF UNKNOWN GEO-TECHNICAL CONDITIONS THAT WOULD NEGATE THE INTENDED DESIGN PARAMETERS OF 1,500 PSI SUITABLE BEARING CONDITIONS FROM BEING ACHIEVED.

GYPSUM BOARD:

- G.B. APPLIED TO CEILING SHALL BE 16" WHEN FRAMING MEMBERS ARE 16" O.C. OR 5/8" WHEN MEMBERS ARE 24" O.C. OR USE 1/2" SAG-RESISTANT GYPSUM CEILING BOARD

CODE REQUIREMENTS FOR DOORS AND WINDOWS:

- ALL GLAZING WITHIN 12" OF THE FINISHED FLOOR, ADJACENT TO DOORS <24" AND WITHIN DOORS, ABOVE BATHTUBS TO BE SAFETY TYPE GLASS AND LABELED SUCH & IN COMPLIANCE W/ SECTION 308 OF THE IRC
- SHOWER DOORS SHALL BE SAFETY GLAZING. HINGED SHWR. DRS. SHALL SWING OUTWARD

GARAGES:

- GARAGE SEPARATION WALL TO BE 1-HR CONST. W/ MIN. 5/8" TYPE X GWB, EXTEND TO BOT. OF ROOF. DOOR TO BE 20-MIN RATED, 1-3/8" SOLID CORE & EQUIPPED WITH A CLOSER & LATCH
- 15 & 20-AMP RECEPTACLES SHALL HAVE GFCI PROTECTION
- TYPE-X 5/8" GB REQUIRED ON GARAGE CEILING BELOW LIVING AREAS

STEEL COLUMNS & OTHER BASEMENT/FOUNDATION NOTES

- ALL STEEL PIPE COLUMNS TO BE 3" (OR 3-1/2") SCHEDULE 40 GRADE
- ALL STEEL POSTS ARE 3" OR 3-1/2" DIAM. SCHEDULE 40 U.N.O.
- STEEL SUPPLIER/INSTALLER SHALL PROVIDE A PROPER BEARING PLATE FOR ANY STEEL BEAM TO BEAR ON WOOD STUD PACKS SO THAT THE WEIGHT IS EVENLY DISTRIBUTED ON THE PACK

PHYSICAL SECURITY ORDINANCE

- OWNER/BUILDER IS RESPONSIBLE FOR COMPLIANCE OF PHYSICAL SECURITY ORDINANCE FOR THEIR LOCAL JURISDICTION

PROJECT SPECIFIC SPECIFICATIONS

- ALL FINISHED FLOOR SLABS SHALL POWER POWER SCREEDED AND HAND TRIMMED WITH A STEEL TROWEL, SMOOTH FINISH
- ALL WINDOWS SHALL BE TRIPLE PANE, WIND BORNE DEBRIS RESISTANT TO 115 MPH GUST THERMALLY BROKEN FRAMES W/ LOW-E GLASS. METAL VINYL OR WOOD FRAME TYPE SHALL BE A DECISION BY THE HOMEOWNER WITH COST COMPARISONS PROVIDED BY THE GC
- ALL INTERIOR AND EXTERIOR DOOR STYLES, ACCESSORIES, TRIM, ETC. SHALL BE SELECTED BY THE HOMEOWNER WITH COST COMPARISON INFORMATION PROVIDED BY THE GC
- INSULATION VALUES, THICKNESSES AND/OR TYPES SHOWN ON THE DRAWINGS ARE THE CODE MINIMUM. THE OWNER MAY ELECT TO EXCEED THESE VALUES AT HIS DISCRETION. COST COMPARISON INFORMATION SHALL BE PROVIDED TO THE OWNER.
- UTILIZE CONTINUOUS RIDGE VENTS IN ALL AREA WHERE FULL VAULTING OF THE INTERIOR SPACE BELOW IS NOT USED.
- ALL INTERIOR FINISHES ARE SELECTED BY THE OWNER INCLUDING BUT NOT LIMITED TO:
  - PAINTING
  - FLOORING
  - BASE
  - CEILING
  - MILLWORK/CASE GOODS INCLUDING COUNTERTOPS
  - APPLIANCES
  - DOOR AND WINDOW STYLES INCLUDING ACTION AND TRIM AND HARDWARE
  - PLUMBING FIXTURES INCLUDING FAUCETS AND ACCESSORIES
  - MISC. TRIMWORK, FIREPLACE MANTELS, HEARTHES, ETC.
  - LIGHT FIXTURE SELECTIONS

- SMARTSIDE FIBER CEMENT SIDING BASIS OF DESIGN IS 76 SERIES SMART LOCK CEDAR TEXTURE. 7.84-INCH WIDTH x .375-INCH THICKNESS, PRIMED FINISH
- SMARTSIDE CEDAR TEXTURE SHAKE SIDING BASIS OF DESIGN, 11.69-INCH WIDTH x .375-INCH THICKNESS, PRIMED FINISH
- SMARTSIDE TRIMS AND FASCIA BASIS OF DESIGN IS 440 SERIES CEDAR TEXTURED, SPECIFIED WIDTHS PER DRAWINGS x .625-INCH THICKNESS, PRIMED
- SMARTSIDE SOFFIT BOARD BASIS OF DESIGN IS 38 SERIES TEXTURED SURFACE, 23.94 INCH WIDTH x .315-INCH THICKNESS, PRIMED
- ASPHALT COMPOSITION SHINGLES BASIS OF DESIGN IS CERTANTEED, LANDMARK SERIES, COLOR DETERMINED BY OWNER, 228-POUNDS PER SQUARE, MINIMUM 15-YEAR WARRANTY

DRAWING COORDINATION & DESIGN INTENT & REVISIONS

- NOTIFY ARCHITECT IF ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE LAYOUT OF WORK INCLUDING FOUNDATIONS, FRAMING, STRUCTURAL MEMBERS, ETC. THE BUILDER ASSUMES RESPONSIBILITY FOR PROCEEDING WITHOUT NOTIFYING THE ARCHITECT FOR ALL CONSTRUCTIBLE ELEMENTS IF THE DESIGN INTENT OF THE DRAWINGS CANNOT BE MET OR KNOWINGLY PROCEEDS WITH KNOWLEDGE THAT CERTAIN ASPECTS OF THE DRAWINGS ARE NOT FULLY COORDINATED, DIMENSIONED OR IN ERROR.
- IF ANY DISCREPANCIES, AMBIGUITIES OR IRREGULARITIES ARE FOUND IN THE DESIGN DOCUMENTS THE "DESIGN INTENT" SHALL GOVERN—CONTRACTOR SHALL NOT DEViate FROM THE DESIGN INTENT WITHOUT THE EXPRESS CONSENT OF THE OWNER
- ANY SUBSTITUTION TO A SCHEDULED MEMBER AND/OR SYSTEM OF FRAMING MADE BY THE OWNER AND/OR CONTRACTOR SHALL HOLD HARMLESS THE DESIGN PROFESSIONAL UNLESS EXPRESSLY GRANTED AND APPROVED PERMISSION FOR SUCH CHANGE BY THE ARCHITECT
- IF ANY REVISIONS TO THE PLANS ARE REQUIRED DUE TO FIELD COORDINATION OR CHANGES OR EXCLUSIONS/ERRORS OR OMISSIONS BY THE CONTRACTOR, THE ARCHITECT WILL ATTEMPT TO MODIFY THE DRAWINGS IN ACCORDANCE WITH THOSE CHANGES BUT WILL NOT BE HELD RESPONSIBLE FOR ANY RELATED ISSUES THAT MAY OCCUR DUE TO DESIGN REVISIONS THAT ARE DOCUMENTED TO ATTEMPT TO REMEDY CONTRACTOR/INSTALLATION RELATED ISSUES
- ARCHITECT WILL ABSORB COST OF REVISIONS FOR ANY PERMIT REVIEW ISSUES THAT ARE CONSIDERED NORMALLY RELATED TO INDUSTRY STANDARDS FOR CONSTRUCTION DOCUMENTS AND SHOULD HAVE BEEN INCLUDED IN THE ORIGINAL PERMIT DRAWINGS. REVISIONS REQUESTED BY THE OWNER/CONTRACTOR OR REVISIONS NEEDED AS A RESULT OF FIELD INSTALLATION, CONTRACTOR ERRORS AND OMISSIONS, ETC. THE ARCHITECT IS ENTITLED TO COMPENSATION

FRAME FASTENING SCHEDULE

BUILDING COMPONENT	FASTEN TO	FASTEN WITH
RAFTERS	RIDGE / VALLEY / HIP	TOENAIL W/ (4) 16d, FACENAIL W/ (3) 16d
	PLATE	TOENAIL W/ (3) 10d
	LEDGER STRIPS SUPPORTING JOISTS OR RAFTERS	FACENAIL W/ (3) 16d
	COLLAR TIE TO RAFTERS	FACENAIL W/ (3) 10d
CEILING JOISTS	TOP PLATE	TOENAIL W/ (3) 8D @ EACH END
	WHERE CLG JST RUN PARALLEL TO RAFTERS FACENAIL TO RAFTERS W/ (3) 10D MINIMUM	
	LAPS OVER PARTITIONS	FACENAIL W/ (3) 10D
	BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	TOENAIL W/ (3) 8D
BEAMS	BUILT-UP BEAMS, 2" LUMBER LAYERS, FACENAIL OPPOSITE SIDES, (2) @ EACH END PLUS	10d @ 32" OC STAGGERED, TOP & BOTTOM, OPPOSITE SIDES
	BUILT-UP BEAMS OF ENGINEERED LUMBER, FACE NAIL OPPOSITE SIDES	(2) ROWS @ 12" OC
	BUILT-UP HEADER, TWO PIECES W/ 1/2" SPACER	16d @16" OC ALONG EDGES
	BUILT-UP HEADER, TWO PIECES, NO 1/2" SPACER	3" x 0.131" NAILS @ 12" OC ALONG EDGES
FLOOR JOISTS	BEARING	TOENAIL W/ (2) 18d @ EACH END
	RIM JOIST TO SILL OR TOP PLATE	TOENAIL W/ 8D COMMON OR 10D BOX NAILS @ 6" OC
	JOIST TO SILL OR GIRDER	TOENAIL W/ (3) 8D
	JOIST TO RIM JOIST	FACENAIL W/ (3) 16D
	BRIDGING TO JOIST	TOENAIL W/ (2) 8D
	I-JOIST TO BEARING PLATE	TOENAIL W/ (2) 8D - ONE INTO EACH SIDE AT LEAST 1 1/2" FROM THE END
	RIM JOIST TO I-JOIST	FACENAIL W/ (2) 10D BOX NAILS - ONE INTO EACH FLANGE
	SOLE PLATE TO LSL RIM BOARD	16D BOX NAILS @ 12" OC
	SINGLE JOIST HANGERS *	10D FACENAILS AND TOENAILS
	DOUBLE JOIST HANGERS *	16D FACENAILS AND TOENAILS
WALLS	TOP & SOLE PLATE TO STUD	END NAIL W/ (2) 16d
	STUD TO SOLE AND TOP PLATE	TOENAIL W/ (4) 8D
	DOUBLE TOP PLATES	FACENAIL W/ 16d @ 16" OC
	DOUBLE TOP PLATE LAP SPLICE	FACENAIL W/ (8) 16d
	TOP PLATE LAPS & INTERSECTIONS	FACENAIL W/ (2) 16d
	DOUBLE STUDS	FACENAIL W/ 16d @ 24" OC
	BUILT-UP CORNER STUDS	FACENAIL W/ 16d - 2 ROWS @ 24" OC
	STEEL "X" BRACING	FACENAIL W/ (2) 16d IN EACH TOP & BOTTOM PLATE & (1) 8D PER STUD
	SOLE PLATE TO JOIST OR BLOCKING	FACENAIL W/ 16d @ 16" OC
	SOLE PLATES TO JOIST OR BLOCKING AT BRACED WALL LINES, PERPENDICULAR TO FRAMING	FACENAIL W/ (3) 16d @ 16" OC ALONG BRACED WALL PANEL
	TOP PLATE TO JOIST OR BLOCKING AT BW LINES, PERPENDICULAR TO FRAMING	TOENAIL W/ 8D @ 6" OC ALONG BRACED WALL PANEL
	SOLE PLATES TO JOIST OR BLOCKING AT BW LINES PARALLEL TO FRAMING, BLOCKING @ 16" OC	FACENAIL W/ (3) 16d @ 16" OC ALONG BW PANEL & AT EACH BLOCK
	TOP PLATE TO JOIST OR BLOCKING AT BW LINES, PARALLEL TO FRAMING, BLOCKING @ 16" OC	TOENAIL W/ 8D @ 6" OC ALONG BW PANEL & AT EACH BLOCK
	NON-STRUCT. SIDING OVER STRUCT. SHEATHING	(1) 6D BOX NAIL IN EACH STUD
	FIBER CEMENT PLANK SIDING	(1) 6D GALVANIZED NAIL IN EACH STUD
	WINDOW INSTALLATION NAILING	1 3/4" - 2" ROOFING NAILS @ 12" OC MAX.

BUILDING ADDRESS:  
LOT 5 - SEQUOIA  
229 & 231 NW ORCHARD CT.  
LEE'S SUMMIT, MO 64063

STRUCTURAL MEMBER REVIEW AND CERTIFICATION:



AARON D. ORMILLER, P.E.  
#000019580-FC-0207  
CERTIFICATION IS PROVIDED HEREON FOR STRUCTURAL ITEMS NOT OTHERWISE ADDRESSED IN THE REQUIREMENTS OF THE 2018 INTERNATIONAL RESIDENTIAL CODE. ALL CONSTRUCTION MATERIALS FASTENING NOT SPECIALLY DENOTED SHALL COMPLY WITH THE REQUIREMENTS OF THE 2018 IRC AND THEREIN REFERENCED STANDARDS. ANY REQUIRED CLARIFICATIONS OR MODIFICATIONS TO STRUCTURAL ITEMS SHALL BE APPROVED BY THE ENGINEER OF RECORD OR OTHER LICENSED PROFESSIONAL CAPABLE OF CERTIFYING COMPLIANCE WITH THE MINIMUM STANDARDS OF THE APPLICABLE CODE. ENGINEER SHALL NOT BE HELD RESPONSIBLE FOR DRAWING ERRORS AND OMISSIONS IN PLAN OR ELEVATION OF PROVIDED PLANS.



AOR: AARON BROWN  
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4334 QUARTER HORSE LANE  
BATES CITY, MO 64011  
816-588-1178

2018 IRC CODE COMPLIANCE  
THESE DRAWINGS HAVE BEEN PREPARED WITH RESPECT TO COMPLIANCE OF THE 2018 IRC AND NEC 2018—ANY REFERENCE FOUND NOT CORRECTLY OR MISTAKINGLY IDENTIFIED TO THESE CODES SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL

LEE'S SUMMIT, MISSOURI  
SEQUOIA DUPLEX

DATE: 08-25-2025  
SUBDIVISION:  
PLOT #:

REVISION	DATE

ISSUED: PERMIT/CONSTRUCTION

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