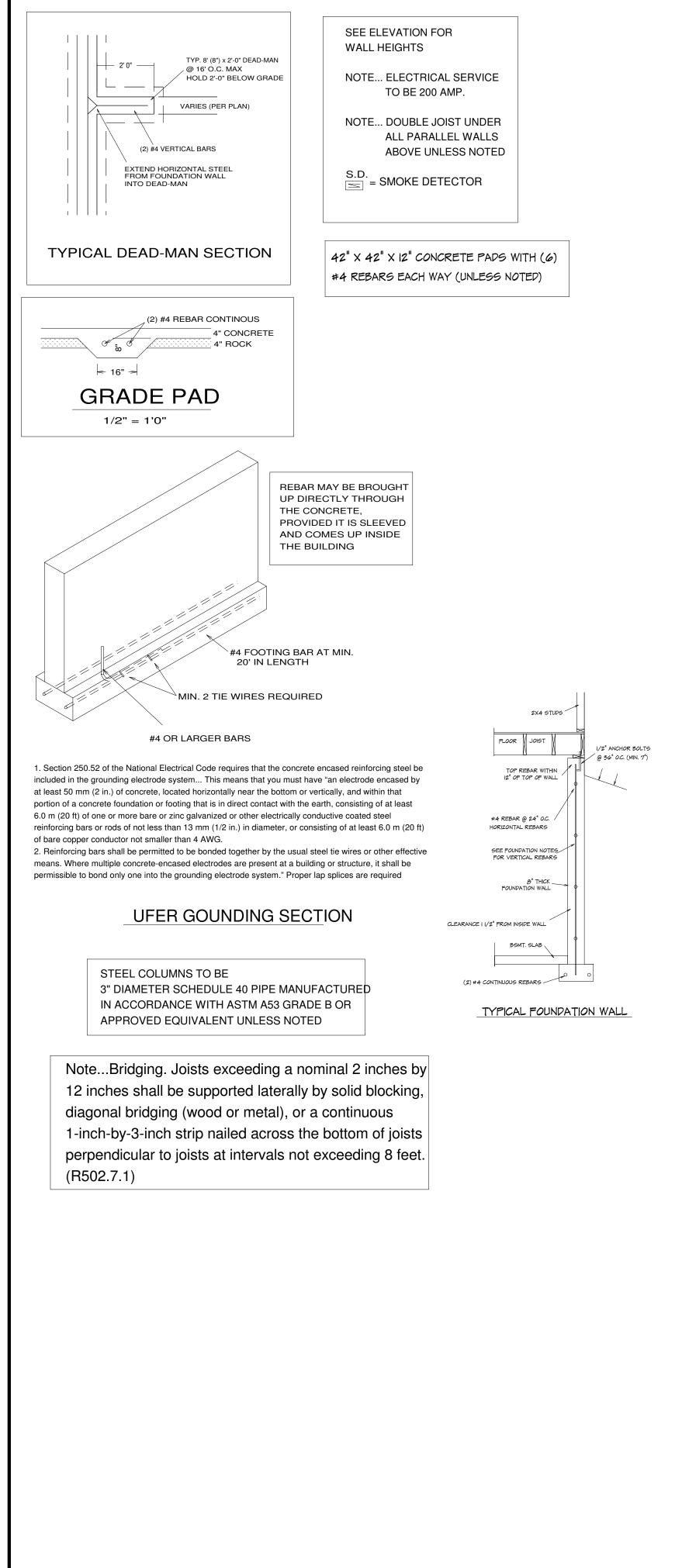
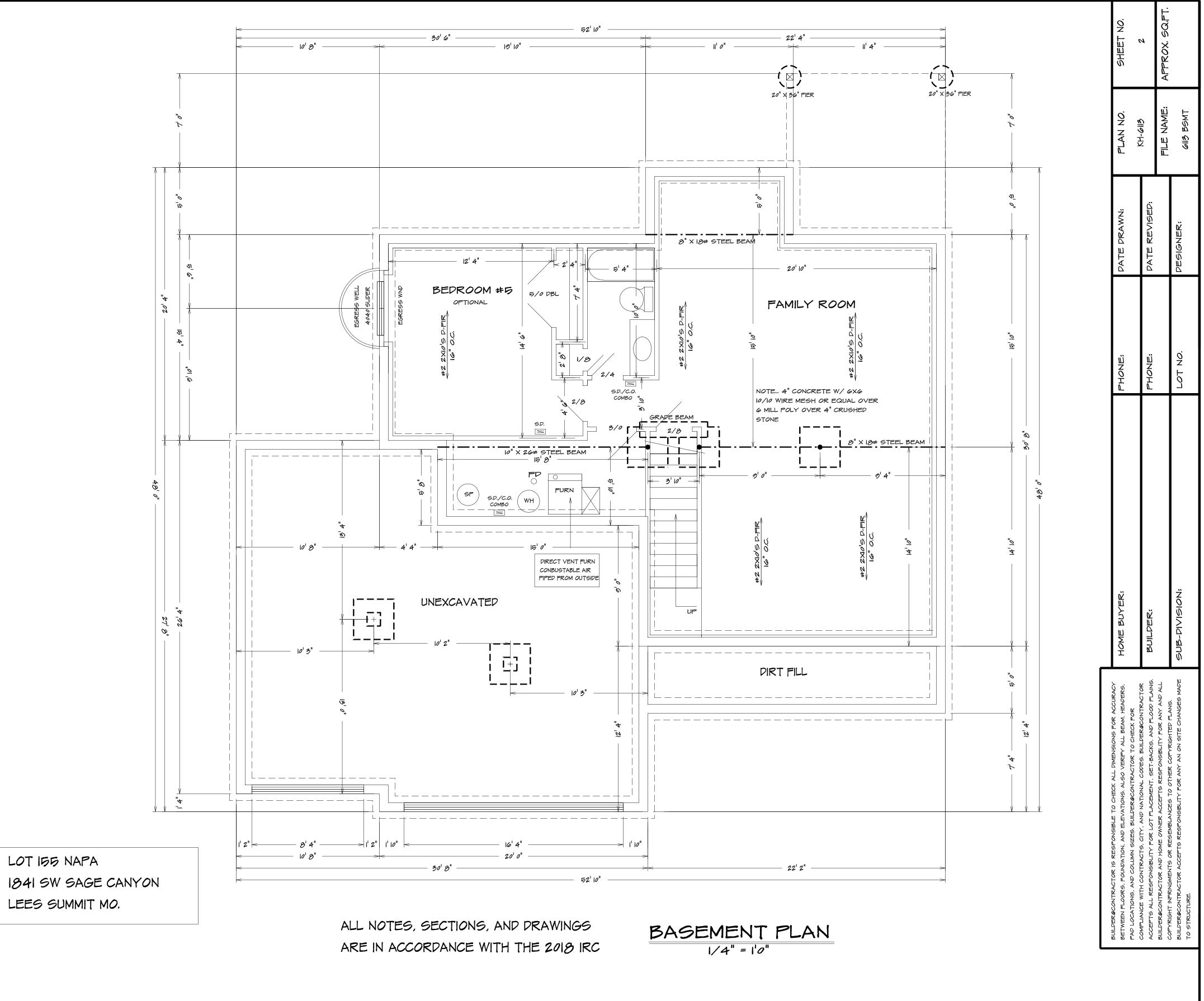


KH-6113 (LOT 155 NAPA)



KH-6113 (LOT 155 NAPA)





SEE ELEVATION FOR WALL HEIGHTS

NOTE ... ELECTRICAL SERVICE TO BE 200 AMP.

NOTE ... DOUBLE JOIST UNDER ALL PARALLEL WALLS ABOVE UNLESS NOTED

S.D. = SMOKE DETECTOR

GENERAL HEADER SPECIFICATIONS:

REQUIRED AREAS NEEDING HEADERS:	HEADER DESCRIPTIONS:
WINDOWS/DOORS UP TO 38" R.O.	(2) #2 D-FIR 2X10'S
WINDOWS/DOORS 38" UP TO 72" R.O.	(2) #2 D-FIR 2X10'S W/1/2" GLUE PLY
WINDOWS/DOORS 72" UP TO 96" R.O.	(2) 9 1/2" L.V.L.
8'0" GARAGE DOORS W/CEILING & ROOF LOAD	(2) 9 1/2" L.V.L.
9'0" GARAGE DOORS W/CEILING & ROOF LOAD	(2) 9 1/2" L.V.L.
8'0" GARAGE DOORS W/SECOND FLOOR	(2) 9 1/2" L.V.L.
9'0" GARAGE DOORS W/SECOND FLOOR	(2) 11 7/8" L.V.L.
16'0" GARAGE DOOR W/NO SECOND FLOOR	(2) 11 7/8" L.V.L.
16'0" GARAGE DOORS W/SECOND FLOOR	(2) 14" L.V.L.

USE HEADERS FOR OPENINGS ABOVE UNLESS SPECIFIED OTHERWISE.

R312.2.1 Window sills.

In dwelling units, where the opening of an operable window is located more than 72 inches (1829 mm) above the finished grade or surface below, the lowest part of the clear opening of the window shall be a minimum of 24 inches (610 mm) above the fininshed floor of the room in which the window is located. Operable sections of windows shall not permit openings that allow passage of a 4-inch-diameter (102 mm) sphere where such openings are located within 24 inches (610 mm) of the finished floor.

Exceptions:

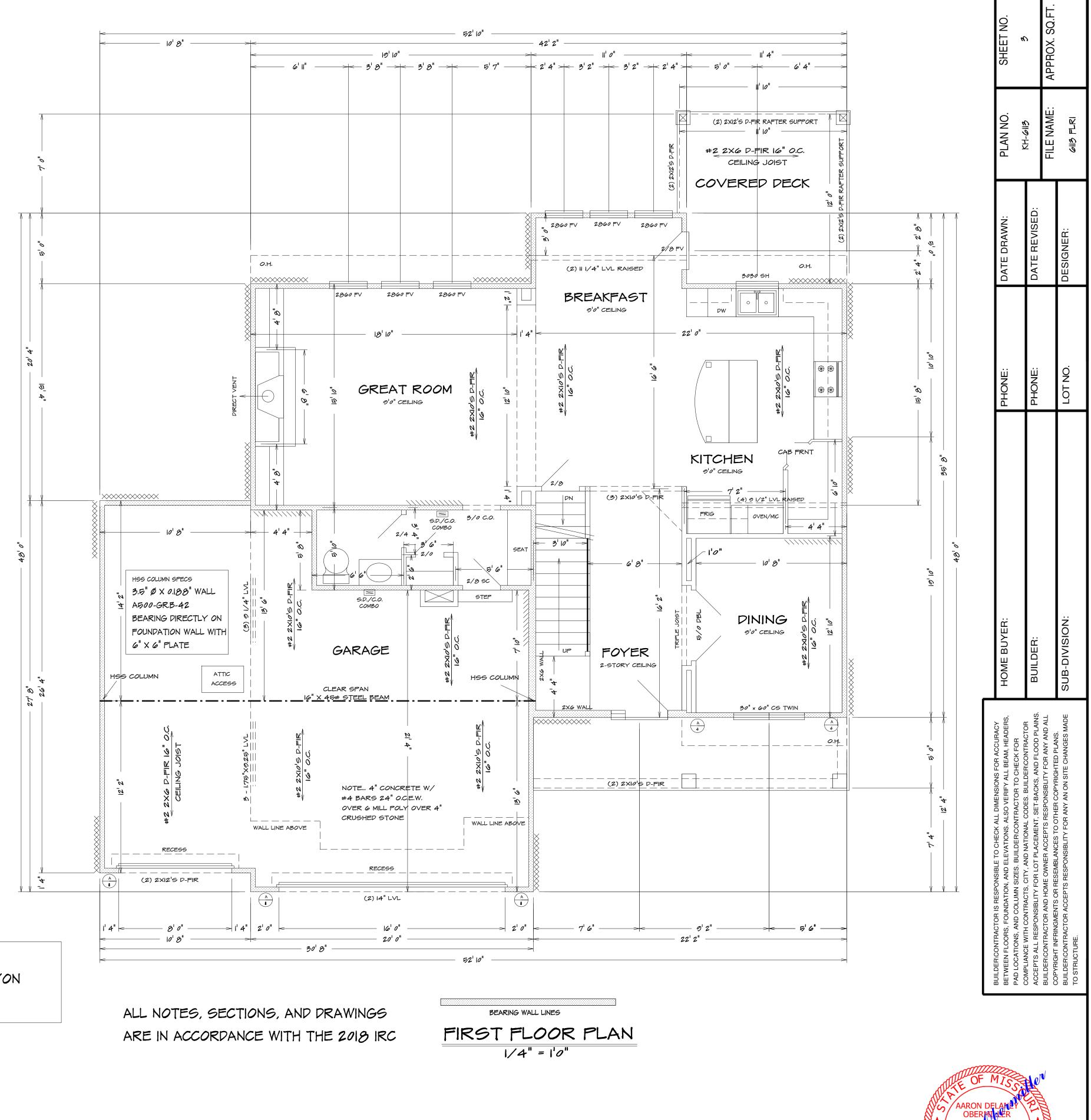
- I. Windows whose openings will not allow a 4-inch-diameter (102 mm) sphere to pass through the opening when the opening is in its largest opened position.
- 2. Openings that are provided with window fall prevention devices that comply with ASTM F 2090.
- 3. Windows that are provided with window opening control devices that comply with Section R312.2.2.

R312.2.2 Window opening control devices.

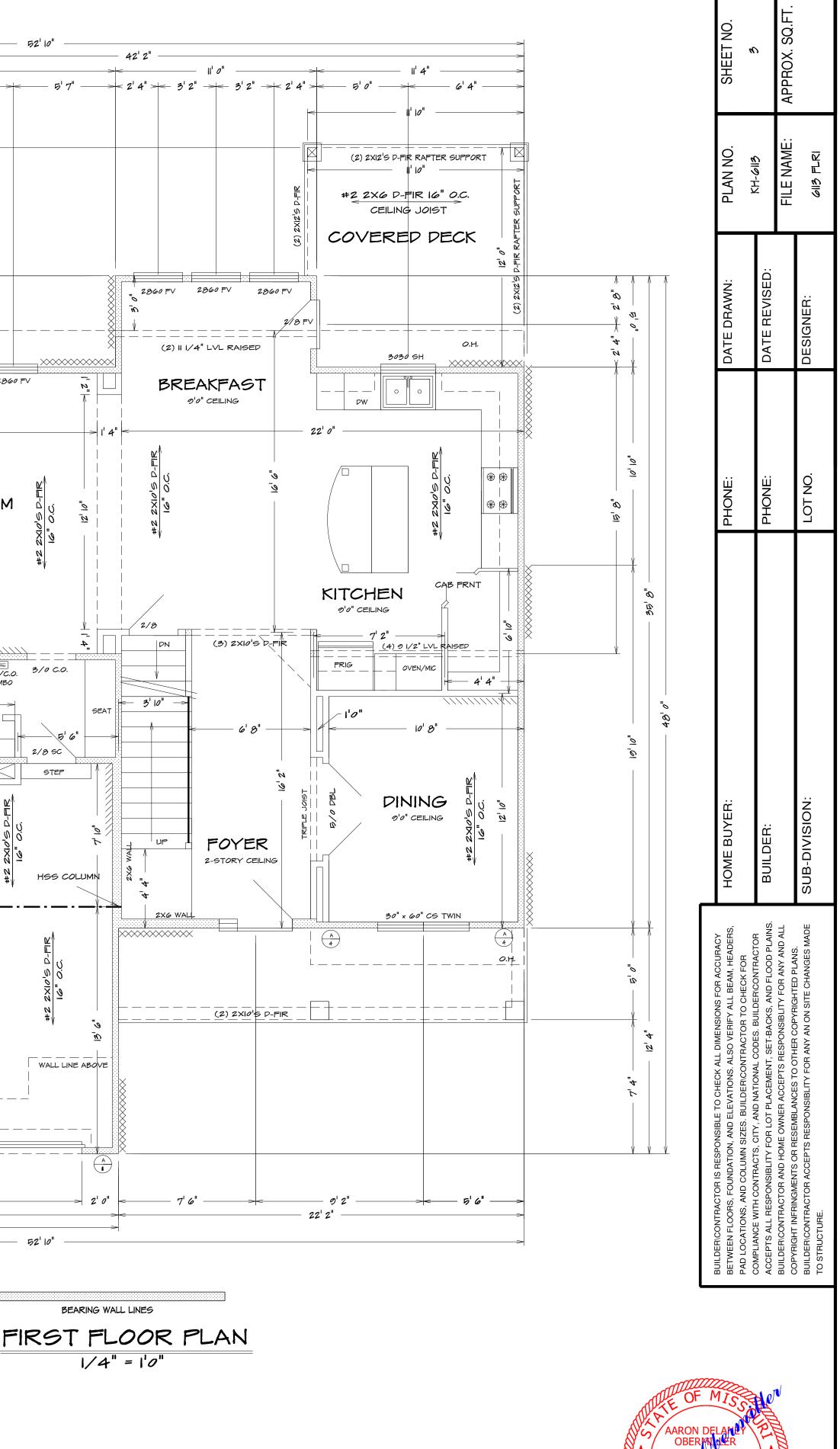
Window opening control devices shall comply with ASTM F 2090. The window opening control device, after operation to release the control device allowing the window to fully open, shall not reduce the minimum net clear opening area of the window unit to less than the area required by Section R310.1.1.

Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than 3 square feet, one-half of which must be openable. Exception: The glazed areas shall not be required where artificial light and a local exhaust system are provided. The minimum local exhaust rates shall be determined in accordance with Section MI507. Exhaust air from the space shall be exhausted directly to the outdoors.

KH-6113 (LOT 155 NAPA)



LOT 155 NAPA 1841 SW SAGE CANYON LEES SUMMIT MO.



SEE ELEVATION FOR WALL HEIGHTS

NOTE ... ELECTRICAL SERVICE TO BE 200 AMP.

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USE HEADERS FOR OPENINGS ABOVE UNLESS SPECIFIED OTHERWISE.

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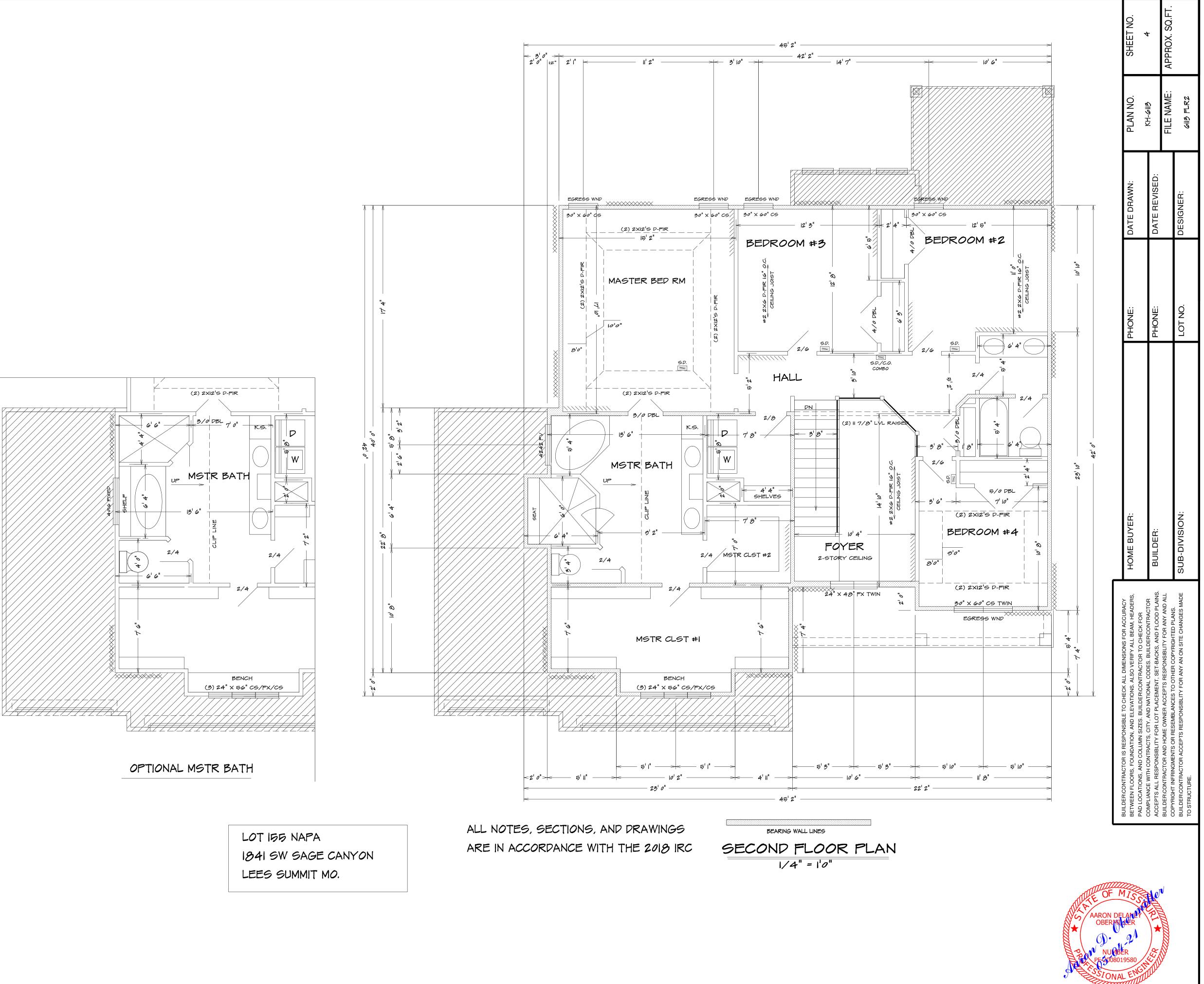
Exceptions:

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- 3. Windows that are provided with window opening control devices that comply with Section R312.2.2.

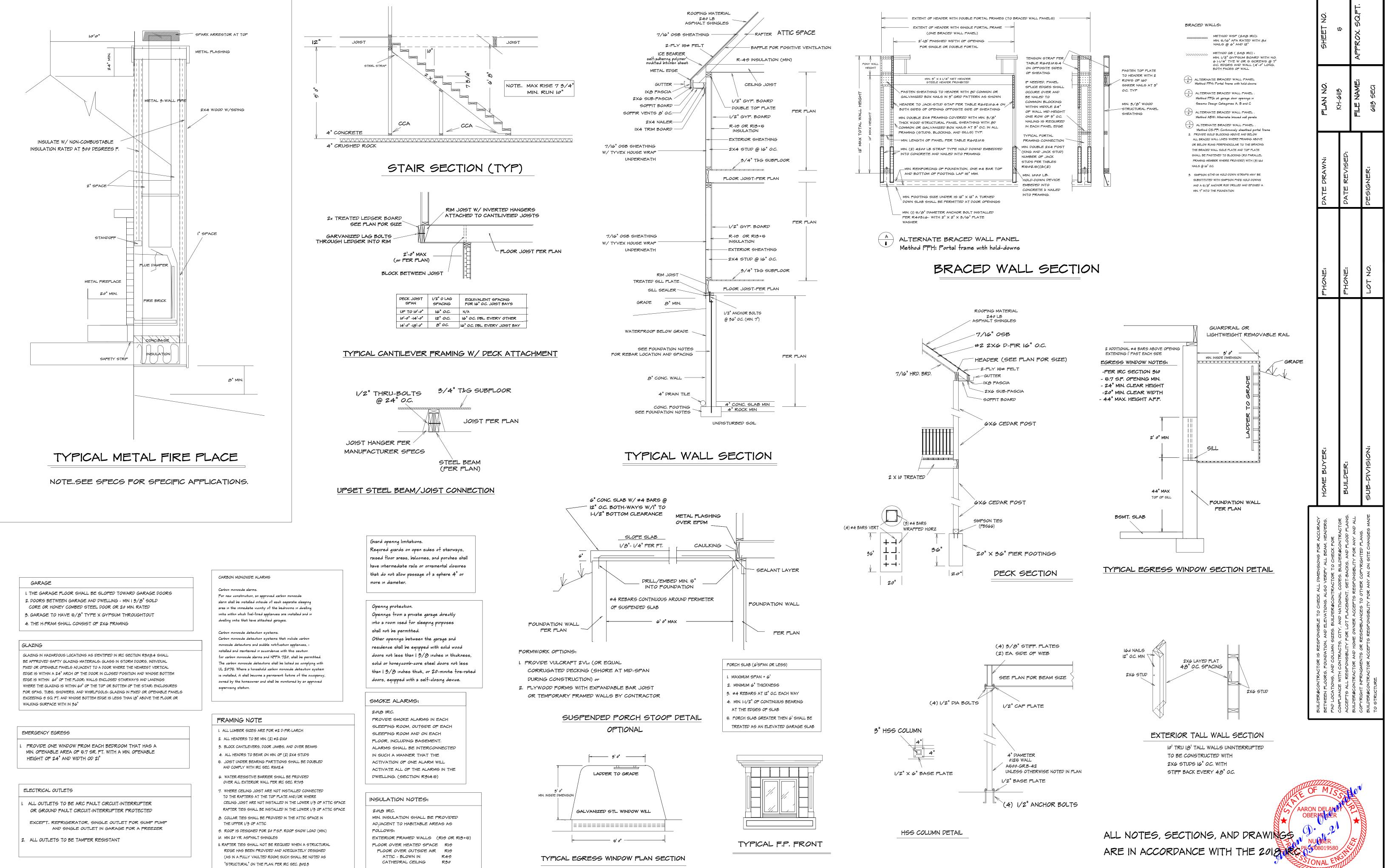
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KH-6113 (LOT 155 NAPA)



Foundation Wall Reinforcement Schedule - Table 2

Vertical reinforcement spacing 60 psf soil

8 inch thick wall			10 inch thick wall		
8'	9'	10'	8'	9'	10'
16	12	NP	24	16	12
16	12	NP	24	24	12
24	16	NP	24	20	16
24	16	NP	24	24	16
- Minim	num Gr	ade 40) steel	#4	bar
4-#4	5-#4	6-#4	4-#4	5-#4	6-#4
	8' 16 16 24 24 - Minim	8' 9' 16 12 16 12 24 16 24 16 - Minimum Gr	8' 9' 10' 16 12 NP 16 12 NP 24 16 NP	8' 9' 10' 8' 16 12 NP 24 16 12 NP 24 24 16 NP 24	8' 9' 10' 8' 9' 16 12 NP 24 16 16 12 NP 24 24 24 16 NP 24 24 24 16 NP 24 20 24 16 NP 24 24 - Minimum Grade 40 steel #4 16

1) Wall height is measured from the top of the wall to the top of the floor slab.

2) Vertical reinforcement for concrete walls that are not full height and for reinforcement spaced 24 inch on center may be placed in the middle of the wall. Other walls shall have vertical reinforcement place as follows:

a) 8-inch wall - Minimum 5 inches from the outside face. b) 10-inch wall – Minimum 6.75 inches from the outside face.

c) Extend bars to within 8 inches of the top of the wall.

3) Reinforcement clearances:

a) Concrete exposed to earth - minimum 1-1/2 inches. b) Not exposed to weather (interior side of walls) - minimum 3/4 inch.

c) Concrete exposed to weather (top clearance in garage and driveway slabs)- 1-1/2 inches. Horizontal reinforcement:

a) One bar shall be placed within 12 inches of the top of the wall. b) Other bars shall be equally spaced with spacing not to exceed 24 inches on center.

- c) Horizontal bars should be as close to the tension face as possible (interior) and behind
- the vertical reinforcement (i.e.2" towards the inside). d) Supplemental reinforcement at corners - Place 1 #4 bar 48 inches long at 45 degree
- angle at corners of openings per Figure 4a. Place reinforcement within 6" of the edge of inside corners

 Reinforcement shall be lapped a minimum 24 inches at ends, splices, and around corners.
At masonry ledges the minimum wall thickness shall be 3-1/2 inches. Ledges shall not exceed a depth of more than 24 inches below the top of the wall. For wall thicknesses less than 4 inches provide #4 bars at maximum 24 inches on center to within 8 inches of the top of the wall.

 Straight walls more than 5 feet tall and more than 16 feet long shall be provided with exterior braced return walls. Wall length shall be measured using inside the shortest dimension between intersecting walls (See 7/S2).

TABLE R602.3(1) FASTENER SCHEDULE FOR STRUCTURAL MEMBERS

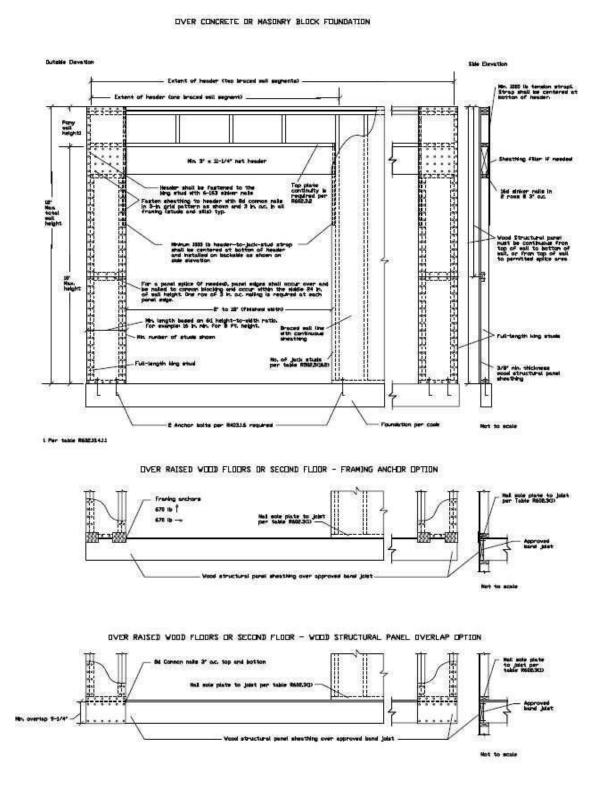
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, c} Roof	SPACING OF FASTENERS
1	Blocking between joists or rafters to top plate, toe nail	3-8d (2 ¹ /2" × 0.113")	10
2	Ceiling joists to plate, toe nail	3-8d (2 ¹ /2" × 0.113")	8-
3	Ceiling joists not attached to parallel rafter, laps over partitions, face nail	3-10d	
4	Collar tie to rafter, face nail or 1 ¹ /4" × 20 gage ridge strap	3-10d (3* × 0.128*)	2-
5	Rafter or roof truss to plate, toe nail	3-16d box nails (3 ¹ / ₂ " × 0.135") or 3-10d common nails (3" × 0.148")	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss ^j
6	Roof rafters to ridge, valley or hip rafters: toe nail face nail	4-16d (3 ¹ /2" × 0.135") 3-16d (3 ¹ /2" × 0.135")	8—
7	Built-up studs-face nail	Wall 10d (3" × 0.128")	24″ o.c.
8	Abutting studs at intersecting wall corners, face nail	16d (3 × 0.128) 16d (3 ¹ / ₂ " × 0.135")	12" o.c.
9	Built-up header, two pieces with $1/2^{r}$ spacer	16d (3 ¹ /2" × 0.135")	16″ o.c. along each edge
10	Continued header, two pieces	16d (3 ¹ /2" × 0.135")	16″ o.c. along each edge
11	Continuous header to stud, toe nail	4-8d (2 ¹ /2" × 0.113")	8—
12	Double studs, face nail	10d (3" × 0.128")	24″ o.c.
13 14	Double top plates, face nail Double top plates, minimum 24-inch offset of end joints, face nail in lapped area	10d (3" × 0.128") 8-16d (3 ¹ /2" × 0.135")	24″ o.c. —
15	Sole plate to joist or blocking, face nail	16d (3 ¹ /2″ × 0.135″)	16″ o.c.
16	Sole plate to joist or blocking at braced wall panels	3-16d (3 ¹ /2" × 0.135")	16″ o.c.
17	Stud to sole plate, toe nail	$3-8d (2^{1}/2'' \times 0.113'')$ or 2-16d $(3^{1}/2'' \times 0.135'')$	
18	Top or sole plate to stud, end nail	2-16d (3 ¹ /2" × 0.135")	25
19	Top plates, laps at corners and intersections, face nail	2-10d (3" × 0.128")	11-
20	1″ brace to each stud and plate, face nail	2-8d (2 ¹ /2" × 0.113") 2 staples 1 ³ /4" ×	91_1926
21	1″ × 6″ sheathing to each bearing, face nail	2-8d (2 ¹ /2" × 0.113") 2 staples 1 ³ /4"	
22	1″ × 8″ sheathing to each bearing, face nail	2-8d (2 ¹ /2" × 0.113") 3 staples 1 ³ / 4	2-0-0
23	Wider than 1″ × 8″ sheathing to each bearing, face nail	3-8d (2 ¹ /2" × 0.113") 4 staples 1 ³ /4"	1_12
Excellence of		Floor	
24	Joist to sill or girder, toe nail	3-8d (2 ¹ /2" × 0.113")	8
25	Rim joist to top plate, toe nail (roof applications also) Rim joist or blocking to sill	8d (2 ¹ /2" × 0.113") 8d (2 ¹ /2" ×	6″ o.c.
26	Rim joist or blocking to sill plate, toe nail	8d (2 ¹ /2" × 0.113") 2-8d (2 ¹ /2" ×	6″ o.c.
27	1" × 6" subfloor or less to each joist, face nail	0.113") 2 staples 1 ³ /4"	200
28	2″ subfloor to joist or girder, blind and face nail	2-16d (3 ¹ /2" × 0.135") —	
29	2″ planks (plank & beam - floor & roof)	2-16d (3 ¹ /2" × 0.135")	at each bearing
30	Built-up girders and beams, 2-inch lumber layers	10d (3″ × 0.128″)	Nail each layer as follows: 32" o.c. at top and bottom and staggered. Two nails at ends and at each splice.
31	Ledger strip supporting joists or rafters	3-16d (3 ¹ /2" ×	At each joist or rafter

25 25 1023

	DESCRIPTION OF BUILDING MATERIALS	DESCRIPTION OF FASTENER ^{b, c, e}	SPACING OF FASTENERS		
ITEM			Edges (inches) ⁱ	Intermediate supports ^{c, e} (inches)	
W	ood structural panels, su	sheathing to fr		framing and particleboard wal	
32	3/8" - 1/2"	6d common (2" × 0.113") nail (subfloor wall) ^j 8d common (2 ¹ /2" × 0.131") nail (roof) ^f	6	129	
33	¹⁹ / ₃₂ " - 1"	8d common nail (2 ¹ /2" × 0.131")	6	12 ⁹	
34	1 ¹ /8" - 1 ¹ /4"	10d common (3" × 0.148") nail or 8d (2 ¹ /2" × 0.131") deformed nail	6	12	
		Other wall she	athing ^h		
35	¹ /2" structural cellulosic fiberboard sheathing	1 ¹ /2" galvanized roofing nail, ⁷ /16" crown or 1" crown staple 16 ga., 1 ¹ /4" long	3	6	
36	²⁵ / ₃₂ " structural cellulosic fiberboard sheathing	1 ³ /4" galvanized roofing nail, ⁷ /16" crown or 1" crown staple 16 ga., 1 ¹ /2" long	3	6	
37	¹ /2" gypsum sheathing ^d	1 ¹ /2" galvanized roofing nail; staple galvanized, 1 ¹ /2" long; 1 ¹ /4 screws, Type W or S	7	7	
38	⁵ /8" gypsum sheathing ^d	1 ³ /4" galvanized roofing nail; staple galvanized, 1 ⁵ /8" long; 1 ⁵ /8" screws, Type W or S	z	7	
Â	Wood str	ctural panels, combination	subfloor unde	rlayment to framing	
39	³ /4" and less	6d deformed (2" × 0.120") nail or 8d common (2 ¹ /2" × 0.131") nail	6	12	
40	7/8" - 1"	8d common (2 ¹ /2" × 0.131") nail or 8d deformed (2 ¹ /2" × 0.120") nail	6	12	
41	1 ¹ /8" - 1 ¹ /4"	10d common (3" × 0.148") nail or 8d deformed (2 ¹ /2" × 0.120") nail	6	12	

For SI: 1 inch = 25.4 mm. 1 foot = 304.8 mm. 1 mile per hour = 0.447 m/s: 1 Ksi = 6.895 MPa.

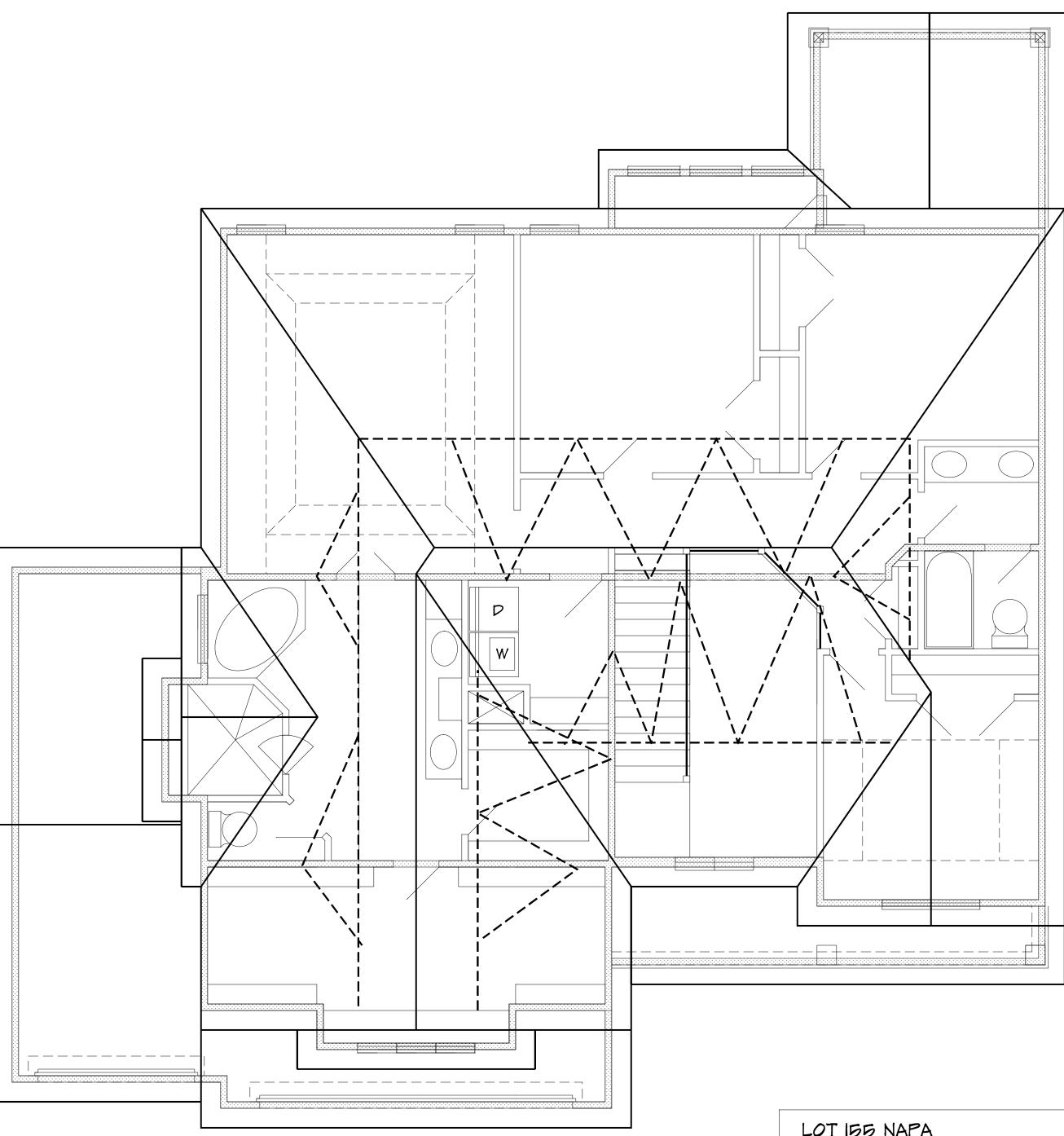
REQUIRED FO	OTING:		
BUILDING HEIGHT	MINIMUM FOOTING	HORIZONTAL REBAR	LOCATION OF REBAR
I OR 2 STY.	8"T × 16"W	2-#4	3" FROM BTM
3 STORY	8"T × 24"W	2-#4	3" FROM BTM
ACC. STR.	8"T x 12"W	2-#4	3" FROM BTM



CF-PF WALL BRACING SECTION

2X8 FOR UNBRACED LENGTH UP TO 9'0" 2X10 FOR UNBRACED LENGTH UP TO 10'0" 2X12 FOR UNBRACED LENGTH UP TO 12'0" ALL RAFTERS TO BE #2 2X6 D-FIR 16" O.C. UNLESS OTHER WISE NOTED PURLING RAFTERS TO BEARING WALL LINES CONNECT RAFTERS TO CEILING JOIST W (4) IGd GALV. NAILS CONNECT RAFTERS TO RIDGE, VALLEY, AND HIP RIDGE WITH (4) IGd GALV. NAILS VERT. RIDGE AND RAFTER SUPPORTS TO BE EQUAL TO OR GREATER THAN THE DEPTH OF RAFTERS

NOTE ... HIP RIDGE FOR THE MAIN ROOF AS:



ROOF DESIGNED WITH: LIVE LOAD = 20 PSF DEAD LOAD = 10 PSF

ROOF ELEVATION 1/4" = 1'0"

BEARING WALL LINES

ALL NOTES, SECTIONS, AND DRAWINGS ARE IN ACCORDANCE WITH THE 2018 IRC



LOT 155 NAPA 1841 SW SAGE CANYON LEES SUMMIT MO.