

BUILDER/CONTRACTOR IS RESPONSIBLE TO
CHECK ALL DIMENSIONS FOR ACCURACY
BETWEEN FLOORS, FOUNDATION, AND ELEVATIONS.
ALSO VERIFY ALL BEAM, HEADERS, PAD LOCATIONS,
AND COLUMN SIZES.

FRONT ELEVATION

1/4" = 1'0"

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

ACTUAL ELEVATIONS MAY VARY FROM ARCHITECTURAL DRAWINGS, DUE TO TERRAIN/BACKFILL PROCESS FRONT ELEVATION IS ARCHITECTURAL DRAWING AND MAY VARY DUE TO MATERIALS AVAILABILITY

STRUCTURAL MEMBER REVIEW AND CERTIFICATION:



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MO 2008019880 IV 8-32337

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 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.

SQUARE FOOTAGE

LIVING AREA

FIRST FLOOR = 2073

SECOND FLOOR = 1048

BASEMENT = 1463

COVERED DECK = 334

UNFINISHED AREA

MECH ROOM = 265

FRONT STOOP = 157

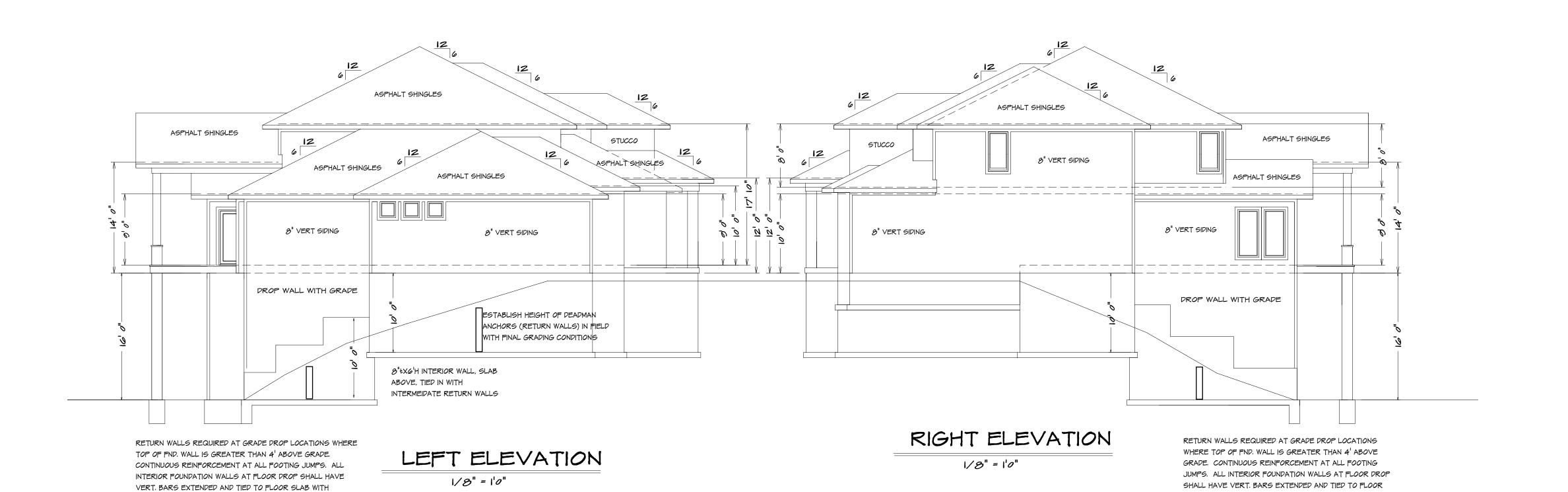
GARAGE = 760

UNDER STOOP = 134

STORAGE = 323

SF-7036

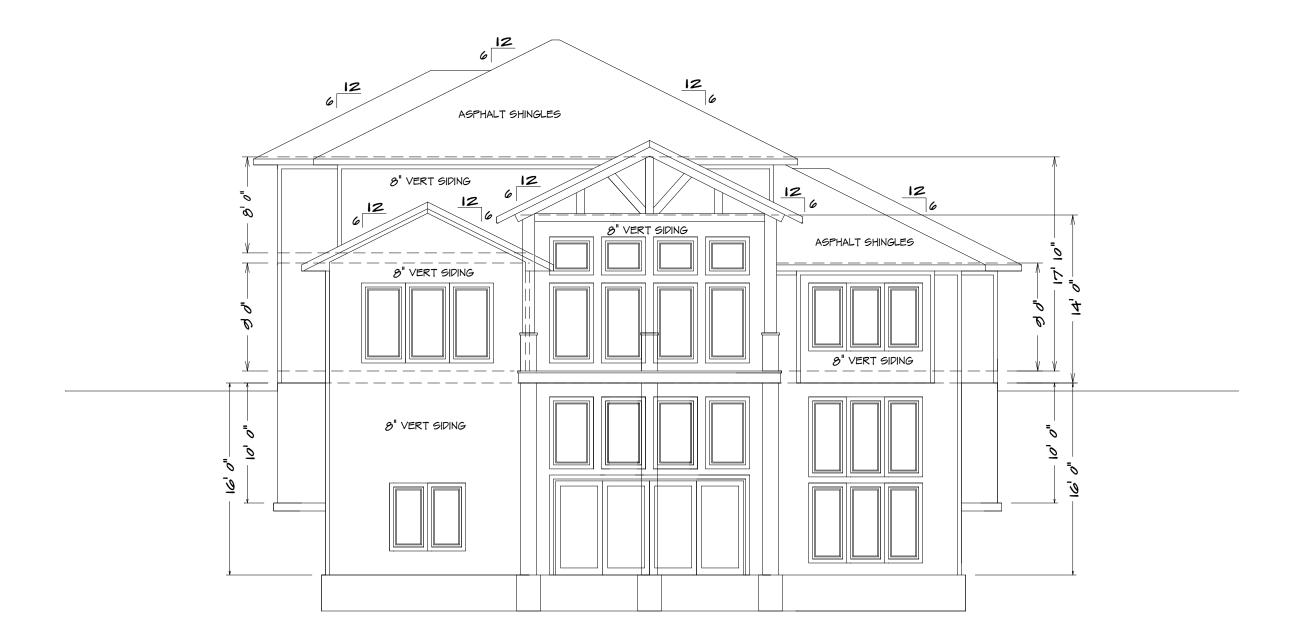
RELEASE FOR CONSTRUCTION
AS NOTED FOR PLAN REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
05/28/2024



SLAB WITH INTERMEDIATE DEADMEN ANCHORS. EXTEND

MAINTAIN A MINIMUM 36 INCHES BELOW ADJACENT GRADE.

FROST DEPTH FOOTING AROUND CORNER AS NECESSARY TO

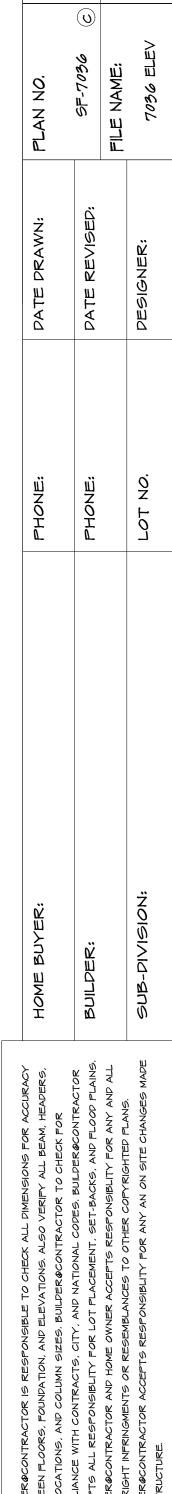


INTERMEDIATE DEADMEN ANCHORS. EXTEND FROST DEPTH

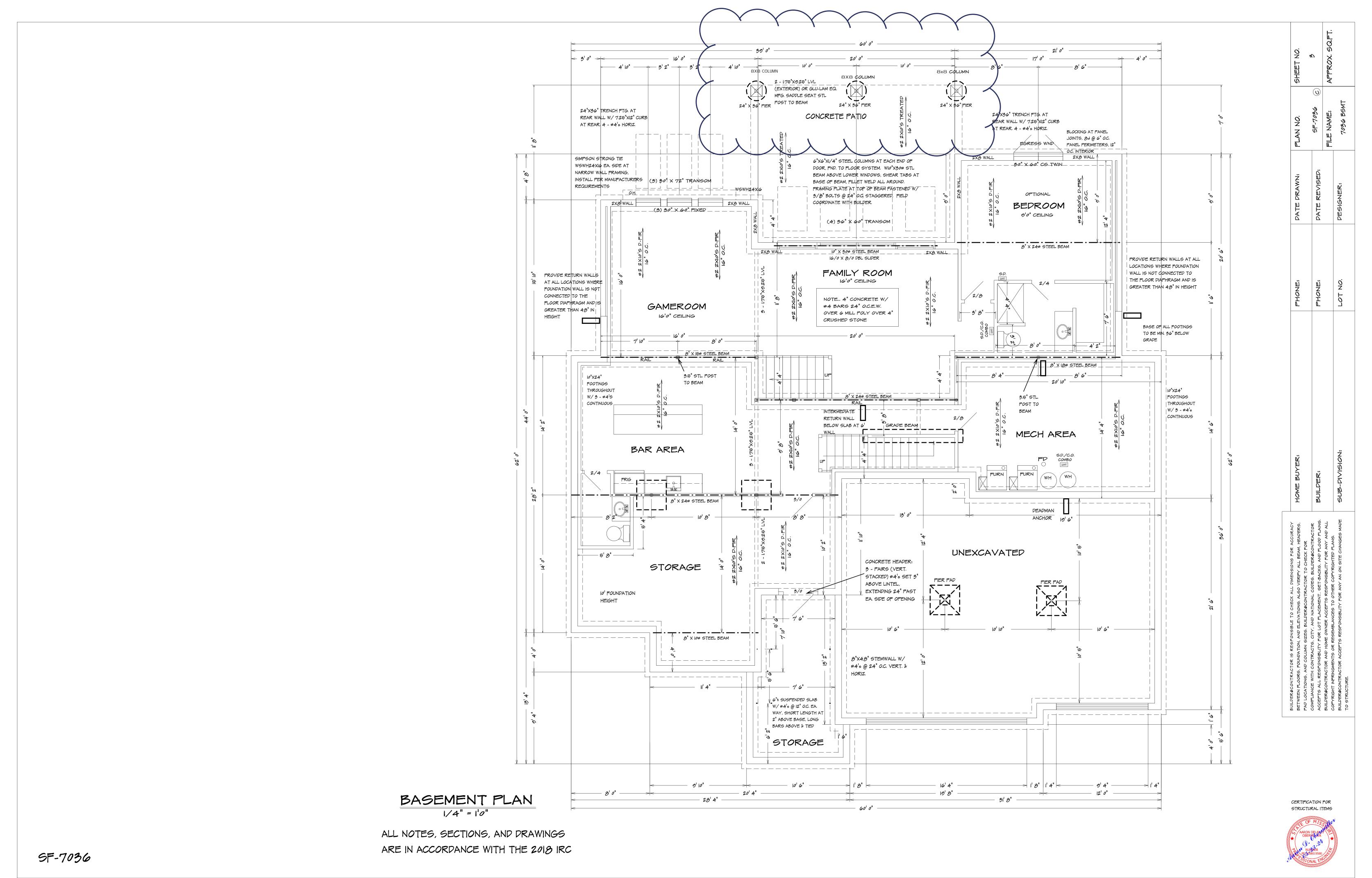
FOOTING AROUND CORNER AS NECESSARY TO MAINTAIN A

MINIMUM 36 INCHES BELOW ADJACENT GRADE.

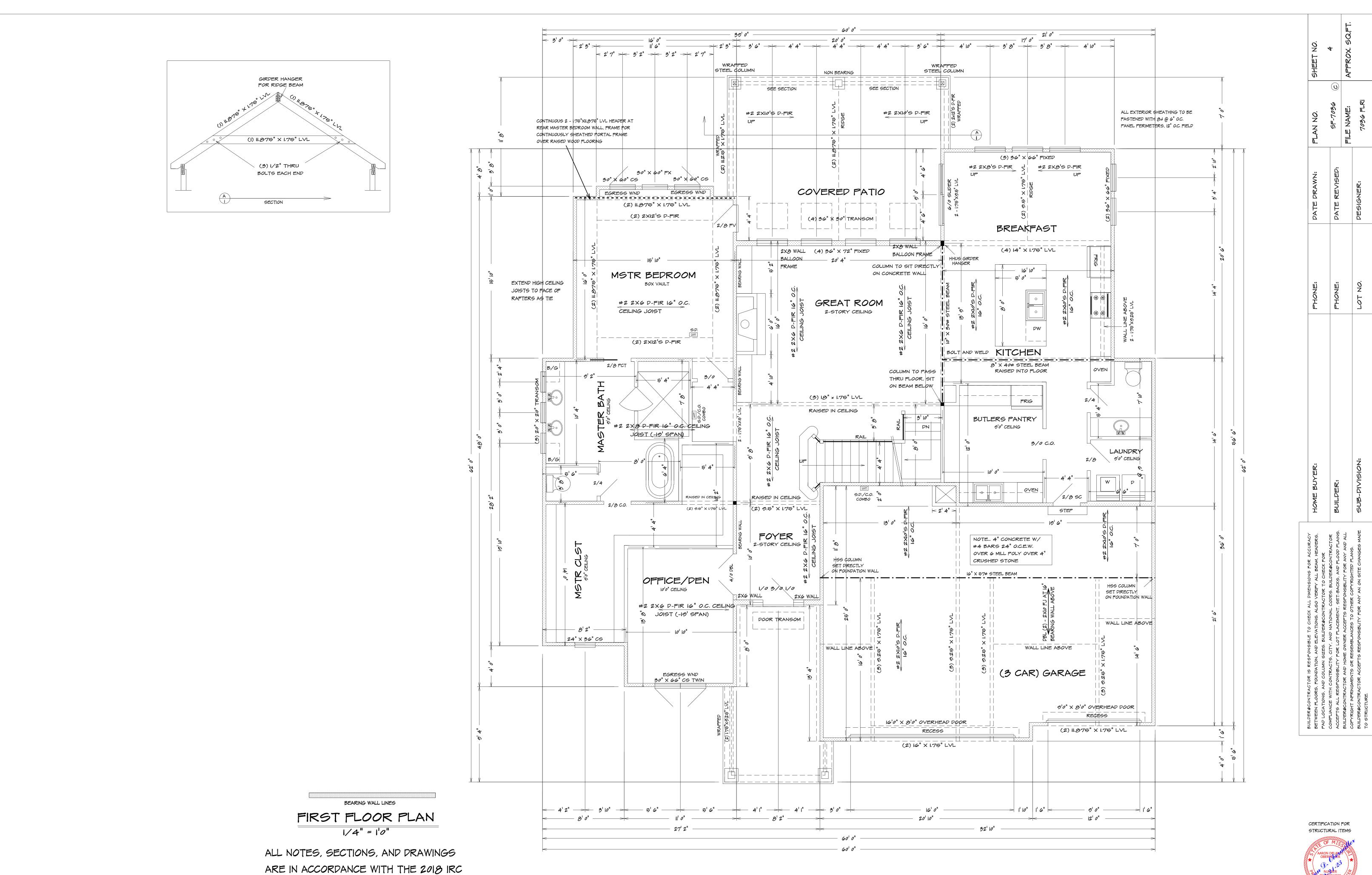
REAR ELEVATION 1/8" = 10"

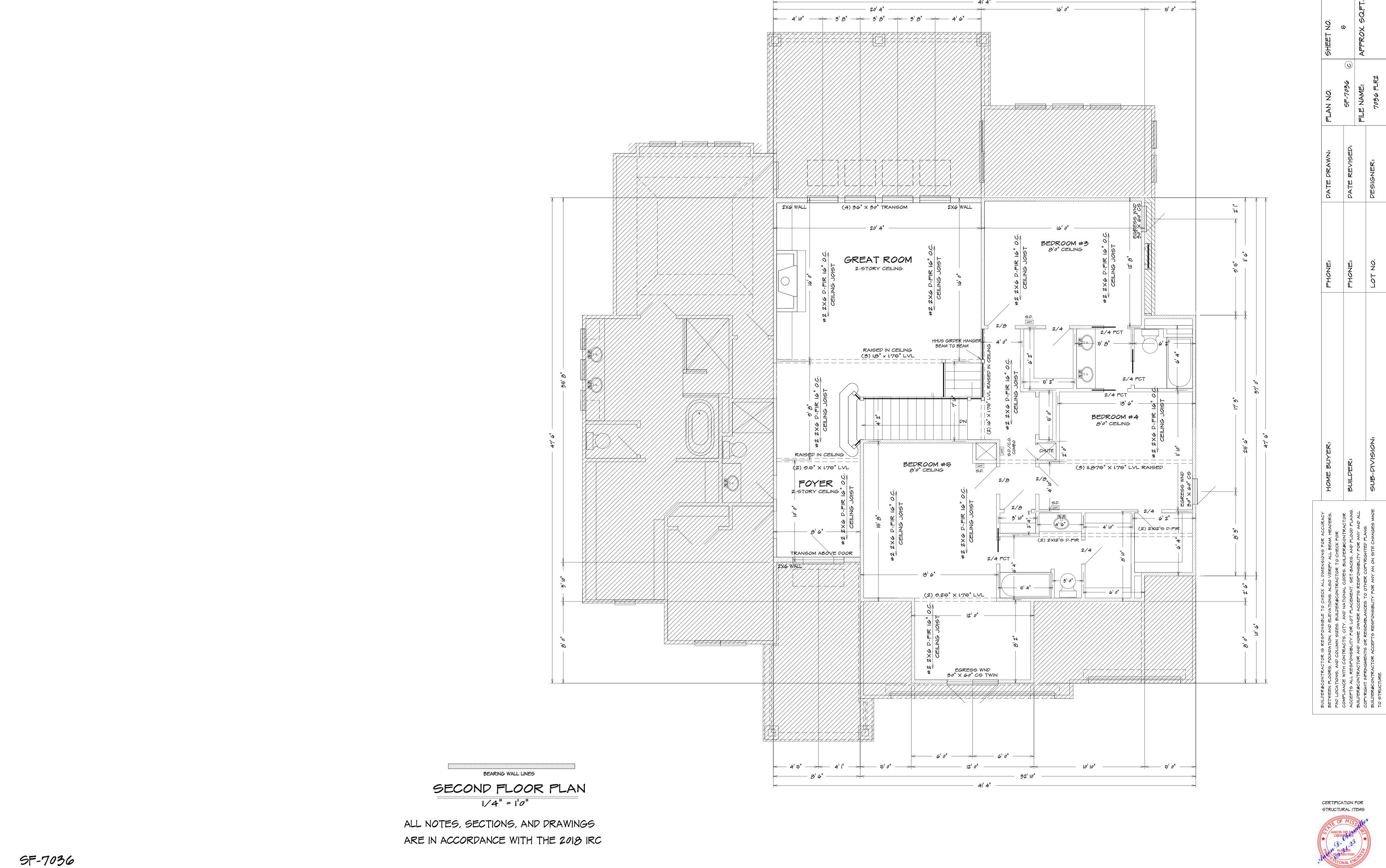


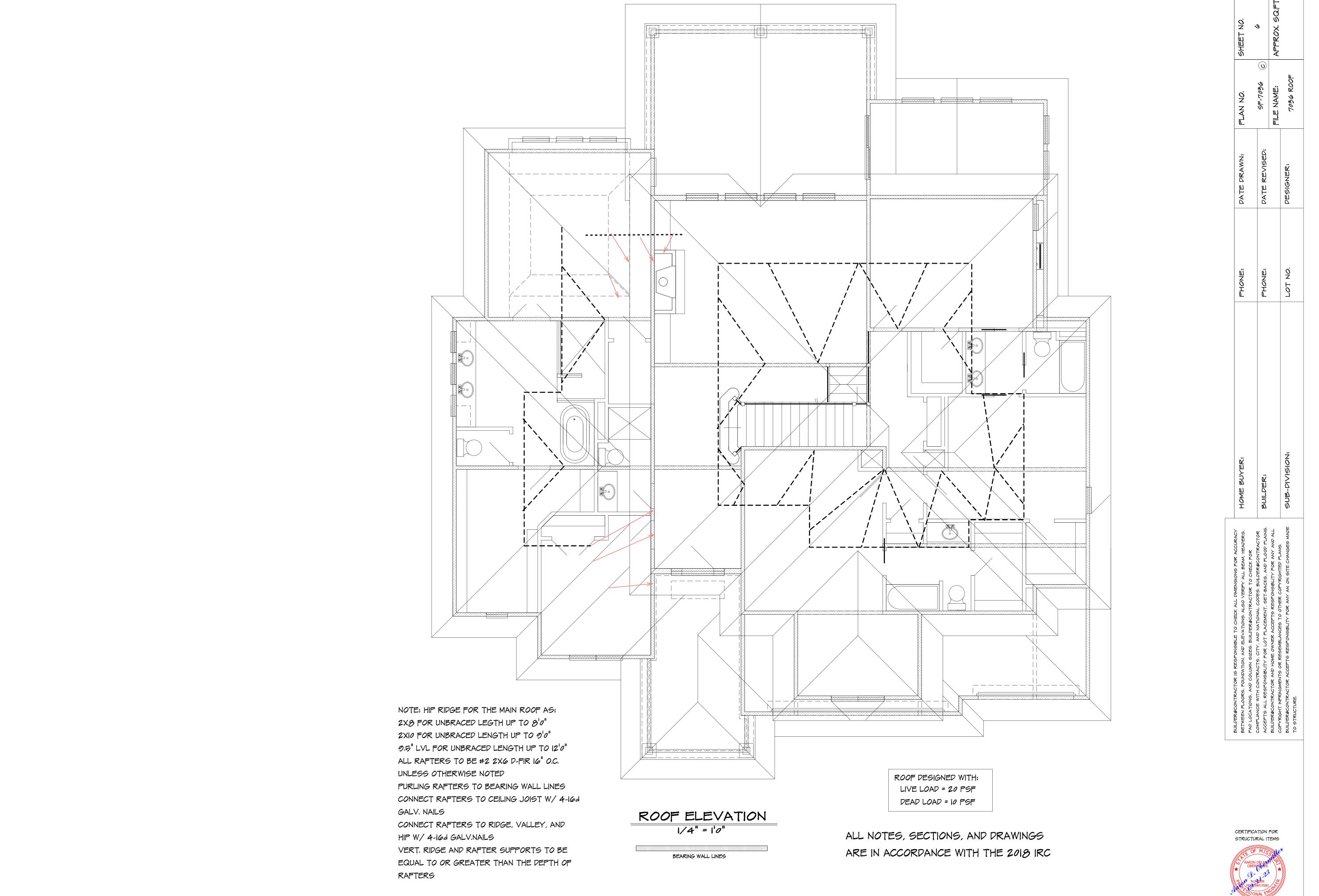


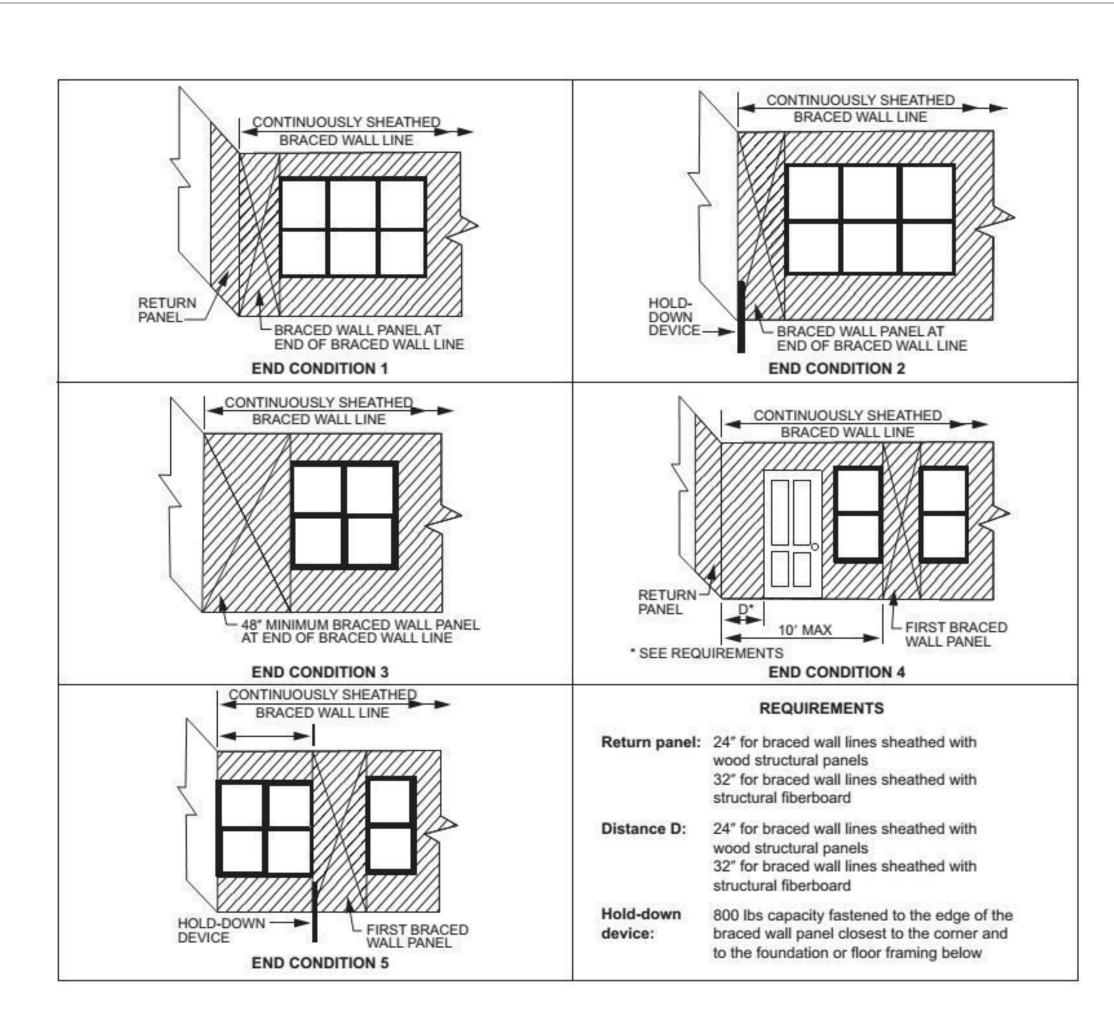


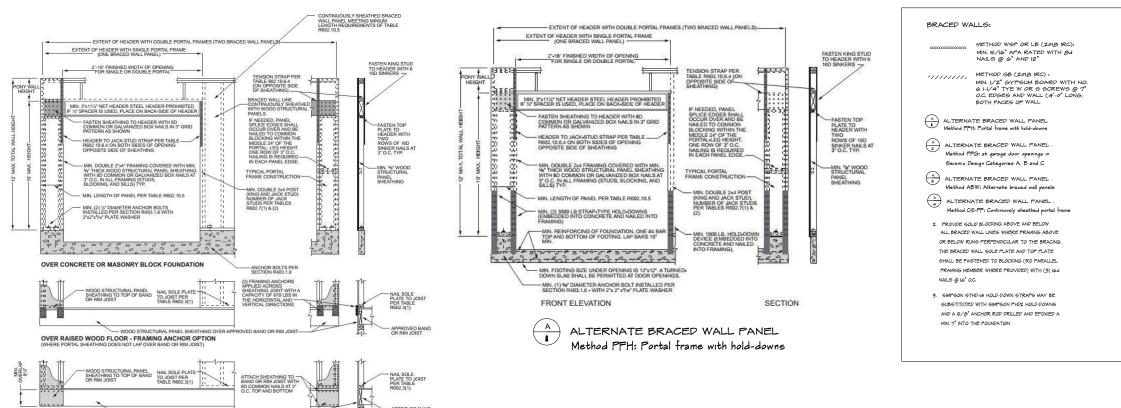
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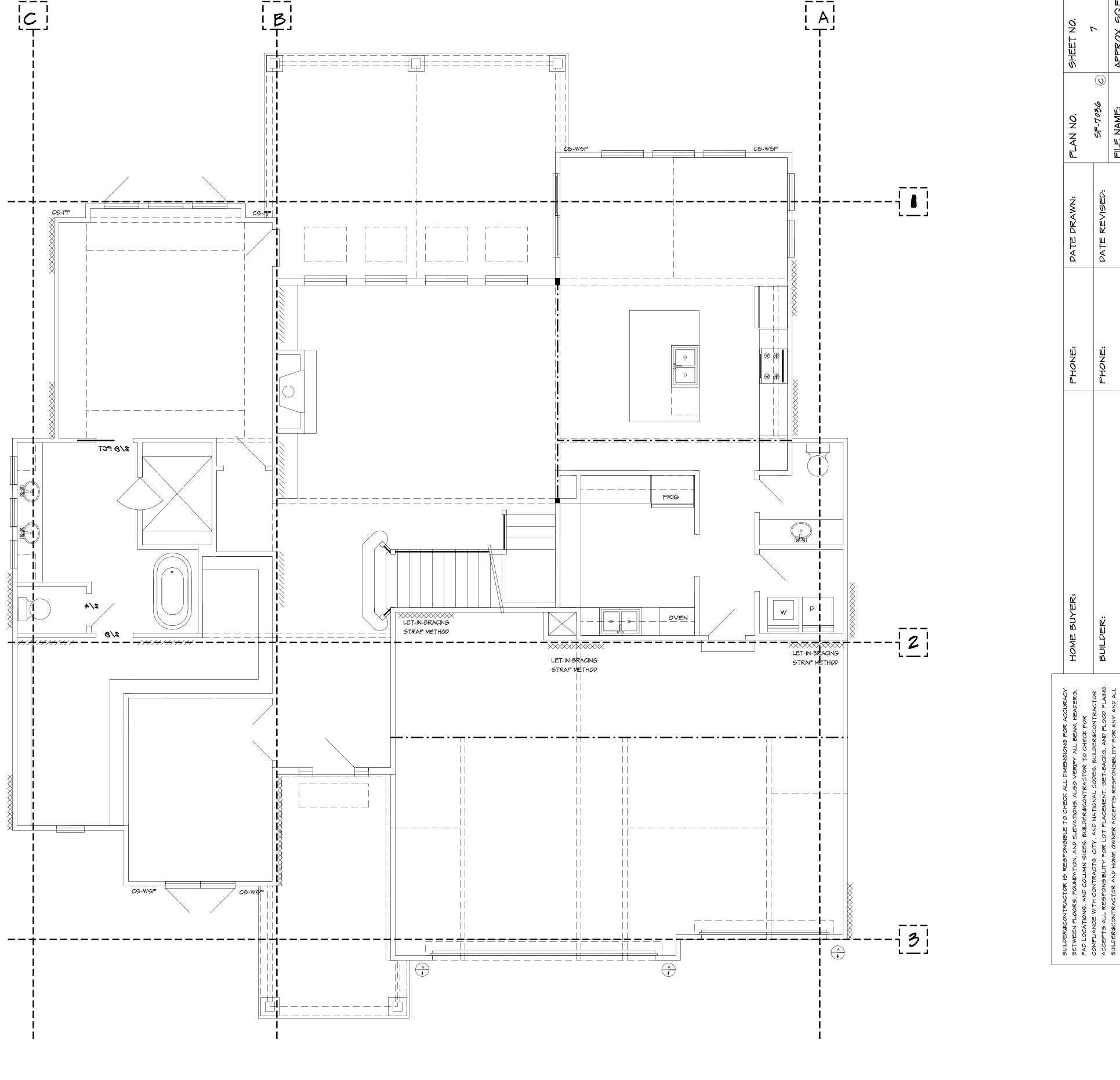








Method CS-PF: Continuously sheathed portal frame	BRACED WALL LINES				
	WALL	SPACING	TYPE	REQ'D	PROVIDED
	ı	17' 0"	CS-PF/WSP	6'6"	16' 0"
	2	24' 6"	LIB/GB	9'6"	16'0"
	3	7'6"	WSP/PFH	3' 6"	19'0"
	Α	17'0"	WSP	6'6"	16'0"
	В	28'0"	WSP/GB	9'6"	24' 0"
	С	11' 0"	WSP	3'6"	16'0"



FIRST FLOOR

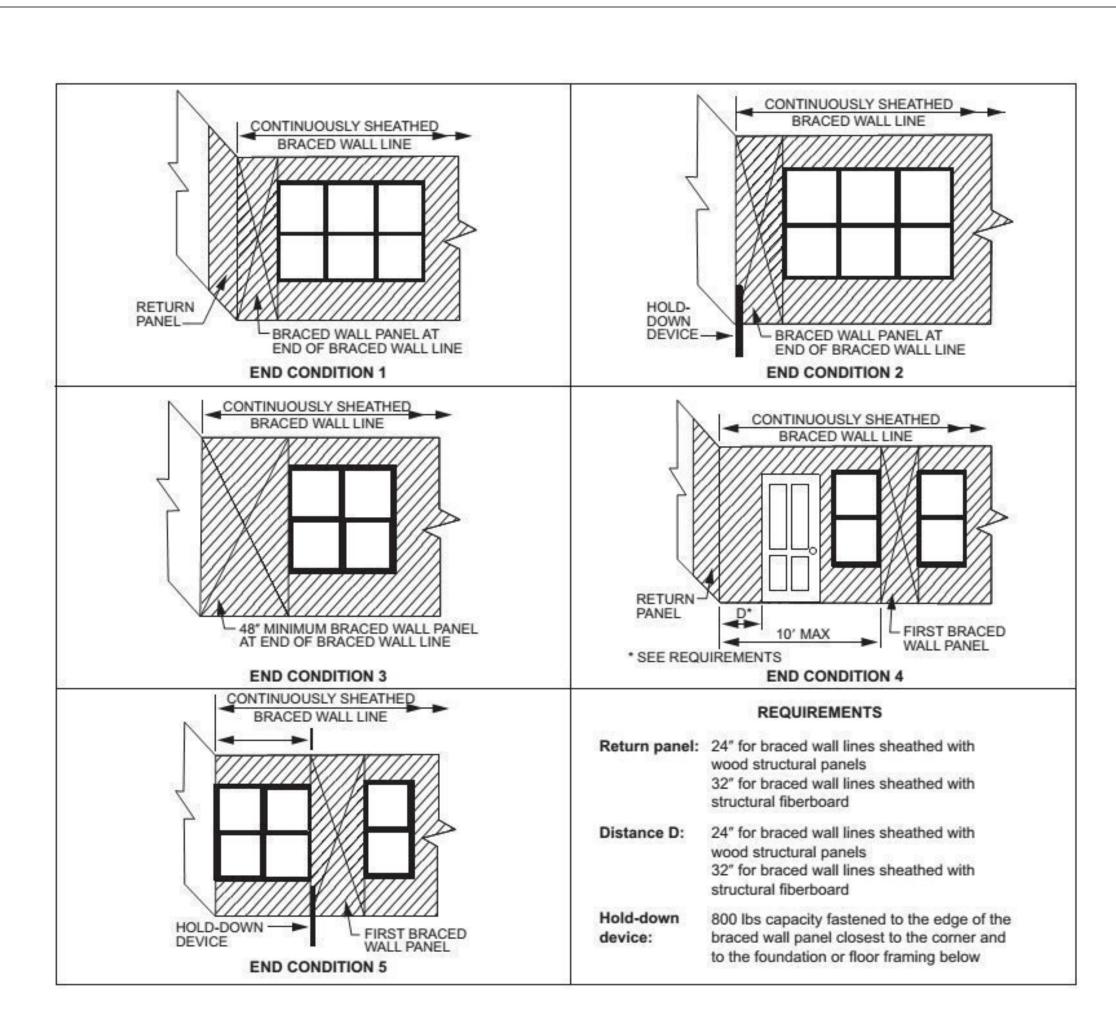
WALL BRACE PLAN

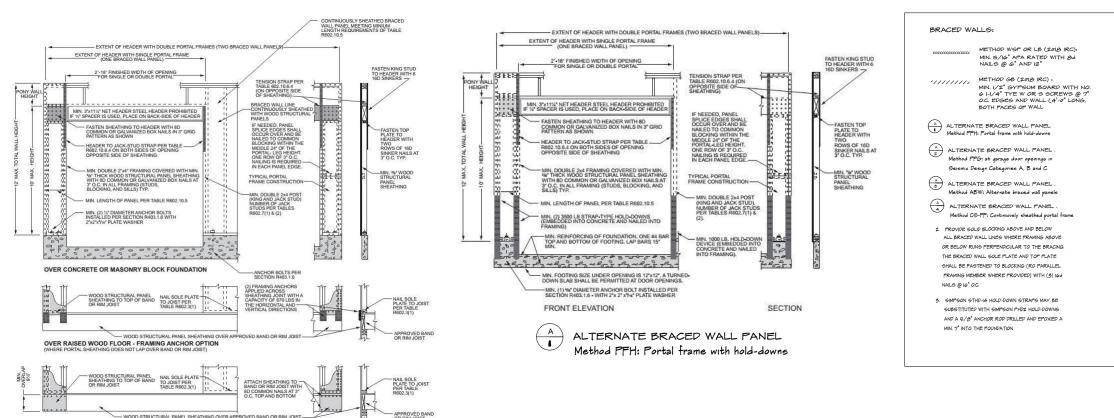
1/4" = 1'0"



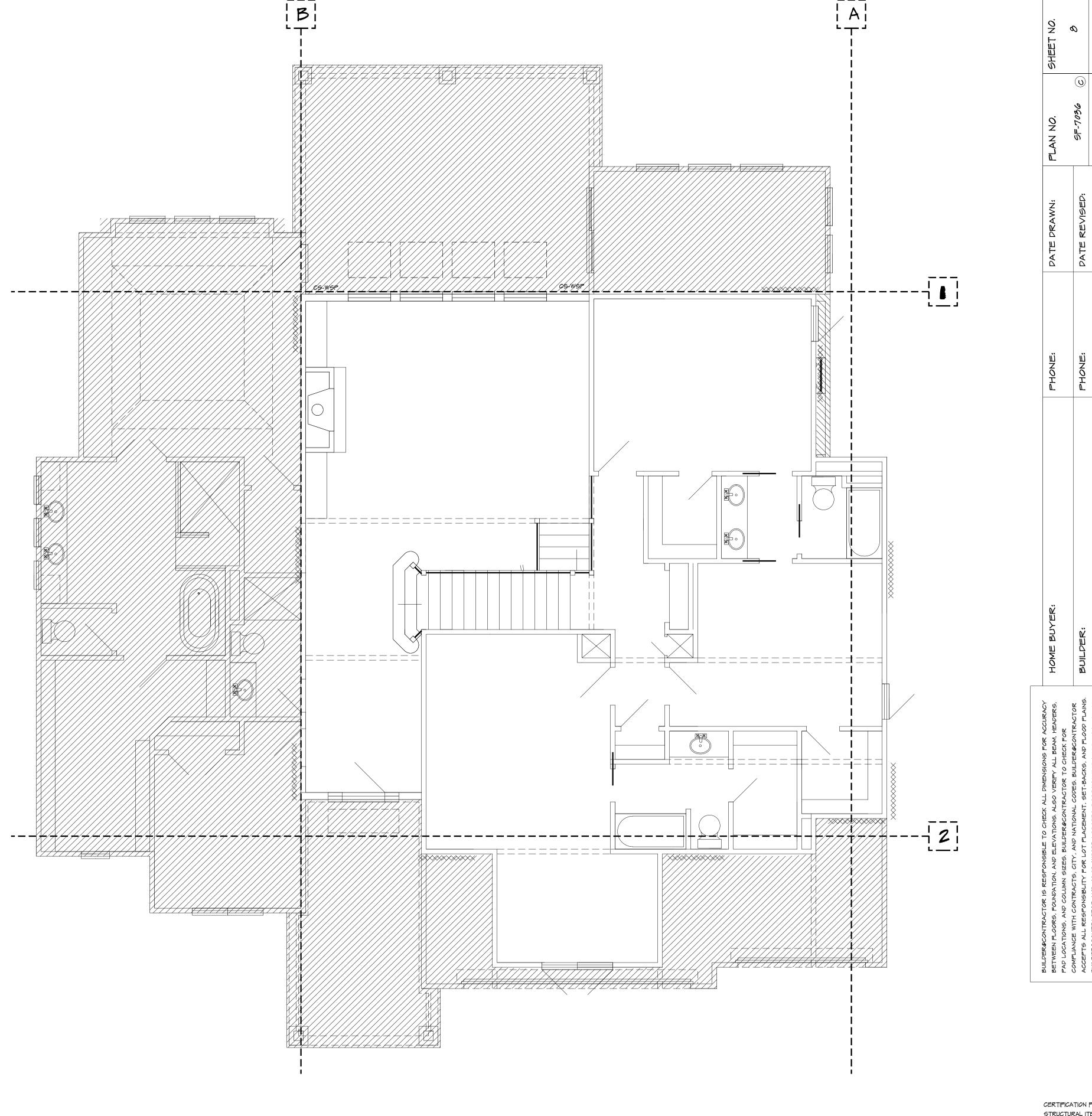
OVER RAISED WOOD FLOOR - OVERLAP OPTION (WHERE PORTAL SHEATHING LAPS OVER BAND OR RIM BOARD)

A ALTERNATE BRACED WALL PANEL .





		BRACED WALL LI	NES	
WALL	SPACING	TYPE	REQ'D	PROVIDED
-	17' 0"	WSP	6'6"	12' 0"
2	24' 6"	WSP/GB	9'6"	12' 0"
Α	17' 0"	WSP	6'6"	12' 0"
В	28' 0"	WSP/GB	9'6"	12' 0"



WALL BRACE PLAN

1/4" = 1'0"



OVER RAISED WOOD FLOOR - OVERLAP OPTION (WHERE PORTAL SHEATHING LAPS OVER BAND OR RIM BOARD)

A ALTERNATE BRACED WALL PANEL .

Method CG-PF: Continuously sheathed portal frame

GENERAL NOTES

WINDOW SIZES SHOWN ARE APPROXIMATE. THE BUILDER SHALL SELECT WINDOWS TO MEET BUILDING CODE REQUIREMENTS AND TO FIT IN THE AVAILABLE SPACE. OVERALL ROUGH OPENINGS FOR MULLED UNITS WILL VARY BY WINDOW/ DOOR MANUFACTURER.

EXTERIOR WALLS ARE 2x4 STUDS AT 16" O.C. UNLESS OTHERWISE

THE GARAGE FLOOR SHALL BE SLOPED TOWARD GARAGE DOORS DOORS BETWEEN GARAGE AND DWELLING - MIN I 3/8" SOILD CORE OR HONEY COMBED STEEL DOOR OR 20 MIN. RATED. GARAGE TO HAVE 5/8" TYPE X GYPSUM THROUGHTOUT THE H-FRAM SHALL CONSIST OF 2X6 FRAMING

GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN 2018 IRC SHALL BE APPROVED SAFTY GLAZING MATERIALS: GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPENABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARCH OF THE DOOR IN CLOSED POSITION AND WHOSE BOTTEM EDGE IS WITHIN 60" OF THE FLOOR: WALLS ENCLOSED STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTEM OF THE STAIR: ENCLOSURES FOR SPAS, TUBS, SHOWERS, AND WHIRLPOOLS: GLAZING IN FIXED OR OPENABLE PANELS EXCEEDING 9 SQ. FT. AND WHOSE BOTTEM EDGE IS LESS THAN 18" ABOVE THE FLOOR OR WALKING SURFACE WITH IN 36"

EMERGENCY EGRESS PROVIDE ONE WINDOW FROM EACH BEDROOM THAT HAS A MIN. OPENABLE AREA OF 5.7 SR. FT. WITH A MIN. OPENABLE HEIGHT OF 24" AND WIDTH OD 21"

ELECTRICAL OUTLETS

ALL OUTLETS TO BE ARC FAULT CIRCUIT-INTERRUPTER OR GROUND FAULT CIRCUIT-INTERRUPTER PROTECTED EXCEPT.. REFRIGERATOR, SINGLE OUTLET FOR SUMP PUMP AND SINGLE OUTLET IN GARAGE FOR A FREEZER ALL OUTLETS TO BE TAMPER RESISTANT

CARBON MONOXIDE ALARMS

CARBON MONOXIDE ALARMS FOR NEW CONSTRUCTION, AN APPROVED CARBON MONOXIDE ALARM SHALL BE INSTALLED OUTSOIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS IN DWELLING UNITS WITHIN WHICH FUEL-FIRED APPLIANCES ARE INSTALLED AND IN DWELLING UNITS THAT HAVE ATTACHED GARAGE.

CARBON MONOXIDE DETECTION SYSTEMS CARBON MONOXIDE DETECTION SYSTEMS THAT INCLUDE CARBON MONOXIDE DETECTORS AND AUDIBLE NOTIFICATION APPLIANCES, INSTALLED AND MAINTAINED IN ACCORDANCE WITH THIS SECTION FOR CARBON MONOXIDE ALAMS AND NFPA 720, SHALL BE PERMITTED. THE CARBON MONOXIDE DETECTORS SHALL BE LISTED AS COMPLYING WITH UL 2075. WHERE A HOUSEHOLD CARBON MONOXIDE DETECTION SYSTEM IS INSTALLED, IT SHALL BECOME A PERMANENT FIXTURE OF THE OCCUPANCY, OWNED BY THE HOMEOWNER AND SHALL BE MONITORED BY AN APPROVED SUPERVISING STATION.

GUARD OPENING LIMITATIONS

REQUIRED GUARDS ON OPEN SIDES OF STAIRWAYS, RAISED FLOOR AREA, BALONIES, AND PORCHES SHALL HAVE INTERMEDIATE RAILS OR ORNAMENTAL CLOSURES THAT DO NOT ALLOW PASSAGE OF A SPHERE 4" OR MORE IN DIAMETER.

OPENING PROTECTION

OPENING FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN I 3/8" IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOOR NOT LESS THAN I 3/8" THICK, OR 20 MINUTE FIRE-RATED DOORS, EQUIPPED WITH A SELF-CLOSING DEVICE.

SMOKE ALARMS

IN THE DWELLING.

PROVIDE SMOKE ALARMS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING ROOM AND ON EACH FLOOR, INCLUDING BASEMENT. ALARMS SHALL BE INTERCONNECTED IN SUCH A MANNER THAT THE ACTIVATION OF ONE ALARM WILL ACTIVATE ALL OF THE ALARMS

WINDOWS/DOORS UP TO 38" R.O.

WINDOWS/DOORS 38" UP TO 72" R.O.

WINDOWS/DOORS 72" UP TO 96" R.O.

8'0" GARAGE DOORS W/CEILING & ROOF LOAD

9'0" GARAGE DOORS W/CEILING & ROOF LOAD

8'0" GARAGE DOORS W/SECOND FLOOR

9'0" GARAGE DOORS W/SECOND FLOOR

16'0" GARAGE DOOR W/NO SECOND FLOOR

16'0" GARAGE DOORS W/SECOND FLOOR

GENERAL HEADER SPECIFICATIONS:

REQUIRED AREAS NEEDING HEADERS: HEADER DESCRIPTIONS:

USE HEADERS FOR OPENINGS ABOVE UNLESS SPECIFIED OTHERWISE.

(2) #2 D-FIR 2X10'S

(2) 9 1/2" L.V.L.

(2) 9 1/2" L.V.L.

(2) 9 1/2" L.V.L.

(2) 9 1/2" L.V.L.

(2) 11 7/8" L.V.L.

(2) 11 7/8" L.V.L.

(2) 14" L.V.L.

(2) #2 D-FIR 2X10'S W/1/2" GLUE PLY

FRAMING NOTE ALL LUMBER SIZES ARE FOR #2 D-FIR-LARCH ALL HEADERS TO BE MIN. (2) #2-2XIO

BLOCK CANTILEVERS, DOOR JAMBS, AND OVER BEAMS ALL HEADRS TO BEAR ON MIN. OF (2) 2X4 STUDS JOIST UNDER BEARING PARTITIONS SHALL BE DOUBLED AND COMPLY WITH 2018 IRC WATER-RESISTIVE BARRIER SHALL BE PROVIDED OVER ALL

EXTERIOR WALLS PER 2018 IRC ROOF PLAN NOTES ALL ROOF RAFTERS NOT CALLED OUT ARE TO BE 2x6 SPF

#1/#2@16"c ALL CEILING JOISTS NOT CALLED OUT ARE TO BE 2x6 SPF

ALL VAULTS TO BE FURRED DOWN w/2x MATERIAL TO PROVIDE FOR R-38 INSULATION

ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x10 D.FIR #2 UNLESS NOTED OTHERWISE ON PLANS ALL RIDGES, HIPS, AND VALLEYS NOT MARKED SHALL BE (I) NOMINAL SIZE LARGER THAN THE INTERSECTING RAFTERS CEILING JOISTS AND RAFTERS SHALL BE NAILED TO EACH OTHER WITH (3) 16d COM (3 1/2"x0.162") NAILS AND THE RAFTER SHALL BE NAILED TO THE TOP WALL PLATE WITH (3) 8d COM (2 1/2"x0.131") NAILS. CEILING JOISTS SHALL BE CONTINUOUS OR SECURELY JOINED WITH (3) 16d COM (3 1/2"x0.162") NAILS WHERE THEY MEET OVER INTERIOR PARTITIONS AND ARE NAILED TO ADJACENT RAFTERS TO PROVIDE A CONTINUOUS TIE ACROSS THE BUILDING WHEN SUCH JOISTS ARE PARALLEL TO THE RAFTERS. WHERE CEILING JOISTS ARE NOT CONNECTED TO THE RAFTERS AT THE TOP WALL PLATE (or AT LOCATIONS WHERE C.J. ARE PERPENDICULAR TO RAFTERS), INSTALL 2x4 RAFTER TIES, IN THE LOWER 1/3 OF ATTIC SPACE @ 16"c WITH (3) 16d COM (3 1/2"x0.162") NAILS EA END. COLLAR TIES SHALL BE PROVIDED IN THE ATTIC SPACE IN THE

UPPER 1/3 OF ATTIC RAFTER CONNECTIONS DESIGNED TO RESIST UPLIFT FORCES PER 2018 IRC TABLE 802.11. ROOF HEADERS DO NOT HAVE NOTABLE UPLIFT TO REQUIRE HOLD DOWNS. PROVIDE METAL FLASHING AT ALL ROOF VALLEYS. ROOF AND SOFFIT VENTS PER LOCAL CODES. WHERE POSSIBLE, PROVIDE ROOF VENTING ON BACK SIDE OF ROOF. EXACT GUTTER AND DOWNSPOUT LOCATION BY GUTTER INSTALLER.

MIN 20 YR. ASPHALT SHINGLES RAFTER TIES SHALL NOT BE REQUIED WHEN A STRUCTURAL RIDGE HAS BEEN PROVIDED AND ADEQUATELY DESIGNED (AS IN A FULLY VAULTED ROOM) SUCH SHALL BE NOTED AS "STRUCTURAL" ON THE PLAN. PER 2018 IRC

ROOF IS DESIGNED FOR 20 P.S.F. ROOF SNOW LOAD (MIN.)

ROOF PURLING TO BE PLACED APPROXIMATELY WHERE SHOWN ON ROOF PURLING, USE 2x6 STUD GRADE PURLIN PLACED PERPENDICULAR TO RAFTERS (UNLESS NOTED OTHERWISE ON

RIDGE, HIP, VALLEY, AND PURLIN BRACE STRUTS TO BE PLACED AS SHOWN ON PLANS. STRUTS TO BE 2x4 STUD GRADE w/ MAXIMUM UNBRACED LENGTH OF 8'-0" AND AT A 45° ANGLE w/ HORIZONTALOR GREATER (VERTICAL WHERE POSSIBLE) BRACES LONGER THAN 8'-0" SHALL BE 2×4 STRONG BACK BRACES

WINDOWS WHOSE OPENING WILL NOT ALLOW A 4" DIAMETER SPHERE TO PASS THROUGH THE OPENING WHEN THE OPENING IS IN ITS LARGEST OPENED POSITION. OPENINGS THAT ARE PROVIDED WITH WINDOW FALL PREVENTION DEVICES, WHICH COMPLY WITH ASTM F 2000. WINDOWS THAT ARE PROVIDED WITH WINDOW OPENING CONTROL DEVICES THAT COMPLY WITH SECTION R312.2.2.

EXHAUST AIR

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 OPERABLE

THE GLAZED AREAS SHALL NOT BE REQUIRED WHERE ARTIFICIAL LIGHT AND A LOCAL EXHAUST SYSTEM ARE PROVIDED. THE MINIMUM LOCAL EXHAUST RATE SHALL BE DETERMINED IN ACCORDANCE WITH SECTION MIGOT. EXHUAST AIR FROM THE SPACE SHALL BE EXHAUSTED DIRECTLY TO THE OUTDOORS

JOISTS EXCEEDING A NOMINAL 2" X 12" SHALL BE SUPPOTED LATERALLY BY SOLID BLOCKING, DIAGONAL BRIDGING (WOOD OR METAL), OR A CONTINUOUS I" X 3" STRIP NAILED ACROSS THE BOTTEM OF THE JOIST PERPENDICULAR TO JOIST AT INTERVALS NOT EXCEEDING 8 FEET

WINDOW AND DOOR NOTES

I. ALL WINDOWS ARE SHOWN IN FEET (I.E. 3050 IS A 3'0"x5'0" WINDOW). ALL DOORS SHOWN IN FEET AND INCHES (I.E. 2868 DOOR IS A 2'-8"x6'-8" DOOR). CONTRACTOR/INSTALLER TO VERIFY R.O. DIMENSIONS WITH BUILDER SUPPLIED CUT SHEET PRIOR TO FRAMING. 2. ALL WINDOWS TO BE LOW-E GLASS TO MEET ALL LOCAL ENERGY CODE REQUIREMENTS. 3. PROVIDE EGRESS WINDOW IN ALL SLEEPING ROOMS. WINDOWS SHALL COMPLY WITH THE FOLLOWING: A. MINIMUM OPEN AREA 5.7 SQ.FT. B. MINIMUM OPENING HEIGHT 24 INCHES C. MINIMUM OPENING WIDTH 20 INCHES D. SILL HEIGHT 44" MAX ABOVE FLOOR 4. ALL WINDOW SILLS ARE TO BE 24" MIN ABOVE FINISH FLOOR, OR SHALL BE FIXED/INOPERABLE 5. ALL WINDOWS AND GLAZED DOORS SHALL COMPLY WITH IRC SECTION R308.4: GLAZING IN HAZARDOUS LOCATIONS SHALL BE OF APPROVED SAFETY GLAZING MATERIALS.

GLASS IN STORM DOORS, INDIVIDUAL FIXED OR OPERABLE PANELS ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24" ARC OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS WITHIN 60" OF THE FLOOR, WALLS ENCLOSING STAIRWAYS AND LANDINGS WHERE THE GLAZING IS WITHIN 60" OF THE TOP OR BOTTOM OF STAIR, ENCLOSURES FOR TUBS, SHOWERS AND WHIRLPOOLS, GLAZING IN FIXED OR OPERABLE PANELS EXCEEDING O SF AND WHOSE BOTTOM EDGE IS LESS THAN IS" ABOVE THE FLOOR OR WALKING SURFACE

6. ALL OPERABLE WINDOWS SHALL HAVE FALL PROTECTION PER 7. ALL GLAZING IN WINDOWS AND DOORS SHALL COMPLY WITH THE TEST CRITERIA FOR CATEGORY II IN ACCORDANCE WITH CPSC

8. WINDOW MANUFACTURER TO CONFIRM EXACT SAFTEY AND EGRESS WINDOW LOCATIONS PER LOCAL CODES.

GENERAL PLAN REQUIREMENTS

I. ALL STUD WALL FRAMING SHALL BE CONTINUOUS FROM THE FLOOR TO ROOF OR CEILING DIAPHRAGM, U.N.O. ALL WALLS OVER 10'-0" ARE TO BE 2x6 @ 16"c U.N.O. 2. PROVIDE WATER-RESISTANT EXTERIOR WALL COVERING ON ALL FRAMED WALLS TO COMPLY WITH IRC SECTION 802.3. 3. PROVIDE GFCI ELECTRICAL OUTLETS ON EXTERIOR, IN UNFINISHED BASEMENT, IN BATHROOMS, ABOVE KITCHEN COUNTERS, IN GARAGE, AND WITHIN 6'-0" OF ANY SINK. 4. ALL EXTERIOR DOORS SERVED BY LANDING. 6. INSTALL CARBON MONOXIDE DETECTORS PER IRC SECTION 315 OUTSIDE OF EACH SLEEPING AREA. 6. INSTALL SMOKE DETECTORS IN EACH SLEEPING ROOM, OUTSIDE OF EACH SLEEPING AREA, WITH A MINIMUM OF ONE ON EACH FLOOR PER IRC SECTION 314. 7. PROVIDE A "UFER" GROUND PER IRC 3608.1. 8. REFER TO WALL BRACE SHEET FOR ALL WALL BRACING DETAILS AND/OR CALCULATIONS. 9. INSTALL BLOCKING FOR TP HOLDERS, TOWEL BARS, AND TRIM BEAMS. 10. GARAGE DOOR H-FRAME: THE H-FRAME FOR ATTACHMENT OF THE GARAGE DOOR TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING:

2x6 VERTICAL JAMBS RUNNING FROM FLOOR TO CELING ATTACHED WITH 3 1/4"x.120 NAILS @ 7" a STAGGERED WITH (7) 3 1/4x.120 NAILS THRU JAMB INTO HEADER, MINIMUM 2x8 HEADER FOR ATTACHMENT OF COUNTER BALANCE SYSTEM. II. OVERHEAD GARAGE DOORS TO MEET 90 MPH WIND LOAD RESISTANCE REQUIREMENTS OF DASMA 108-5 AND ASTM E 330-02 PER IRC SECTION R 612.4. 12. MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED

73/4" MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 7 3/4" AND THE TREADS SHALL PROVIDE A MINIMUM TREAD DEPTH OF 10". 13. ALL EXTERIOR AND LOAD BEARING WINDOW AND DOOR HEADERS TO BE (2) 2x10 D.FIR #2 UNLESS NOTED

OTHERWISE ON PLANS 14. ALL HEADER BEARINGS (OTHER THAN WINDOWS) TO BE (2) 2×4 STUDS UNLESS NOTED OTHERWISE. WINDOW HEADER BEARING TO BE (1) 2x4 EA END UNLESS NOTED OTHERWISE.

GENERAL FOUNDATION REQUIRMENTS

I. ALL FOOTINGS ARE TO BE E.XTENDED TO MIN 36" BELOW FINISHED GRADE. 2. ALL INTERIOR FOOTINGS FOR LOAD BEARING WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB. 3. FOR ALL CONC WALL OPENINGS, FOOTING & WALL STEPS, PROVIDE ONE #4 BAR, 48" LONG DIAGONALLY AS CLOSE AS

PRACTICAL TO CORNER. 4. ALL REINFORCEMENT SHALL BE LAPPED A MIN OF 24" AT ENDS SPLICES AND AROUND CORNERS.

5. ANCHOR BOLTS ARE TO BE SPACED @ 36" WITH 7" MIN EMBED. A BOLT SHALL BE PLACED WITHIN 12" OF THE END OF EACH PLATE SECTION. 6. FASTEN JOISTS TO SILL PLATES WITH (3) 8d COM NAILS.

7. WHERE JOIST IS PARALLEL TO FOUNDATION, PROVIDE SOLID BLOCKING @ 32" o FOR (3) JST SPACES. FASTEN TO SILL PLATE 8. VAPOR BARRIER: 6 MIL PE VAPOR RETARDER WITH JOINTS

LAPPED A MIN OF 6" BETWEEN SLAB & BASE. 9. DAMP PROOFING: ONE COAT (MIN) OF DAMP PROOFING OR EQUIVALENT FOUNDATION MEMBRANE SHALL BE APPLIED TO EXTERIOR WALL SURFACES BELOW GRADE. SEAL TIE HOLES,

10. FOUNDATION DRAIN: INSTALL CONT 4"~ PERFORATED PVC DRAIN TILE. DRAIN TILE TO BE EXTENDED TO SQUARE SUMP PIT WHICH EXTENDS A MIN 24" BELOW BASEMENT FLOOR. II. ALL FRAMING MEMBERS IN CONTACT WITH CONCRETE SHALL BE ACQ TREATED LUMBER.

12. ALL STEEL FASTENERS (INCLUDING FOUND. ANCHOR BOLTS) ON ACQ TO BE (DOUBLE HOT-DIPPED) GALVANIZED.

13. PROVIDE A "UFER" GROUND PER IRC 3608.1 PROVIDE A "UFER" GROUND PER IRC 3608.1 14. EGRESS WELL REQUIREMENTS: A. IF THE VERTICAL DISTANCE FROM THE WINDOW SILL TO ADJACENT GRADE IS GREATER THAN 44", PROVIDE A LADDER.

B. ADD DRAIN TO DAYLIGHT OR SUMP PUMP.

ENERGY REQUIRMENTS

VOIDS BEFORE APPLICATION.

CONTRACTOR TO PROVIDE ENERGY AUDIT USING THE HERS ENERGY RATING SYSTEM. IN LIEU OF AN ENERGY AUDIT, THE FOLLOWING PRESCRIPTIVE REQUIREMENTS MAY BE A. ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING ALL DUCTS, AIR HANDLERS, FILTER BOXES, AND BUILDING CAVITIES TO BE SEALED PER IRC SECTION NII03.2. B. THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED THE BUILDING THERMAL ENVELOPE IS REQUIRED TO BE SEALED PER IRC SECTION NII02.4. C. CONTRACTOR TO SUBMIT "MANUAL J" AND "MANUAL D" CALCULATIONS FOR THE HVAC SYSTEM D. INSULATION TO COMPLY WITH IECC AS FOLLOWS:

CEILING (FLAT) R-40 CEILING (VAULTED)

FLOORS OVER UNCONDITIONED SPACE CRAWL SPACE WALLS BASEMENT WALLS SLABS DUCTWORK

SHGC

WINDOWS U-FACTOR SHGC SKYLIGHTS U-FACTOR U 0.55 (MAX)

INSULATION TO COMPLY WITH IECC AS FOLLOWS:

(NOTE: VAULTED AREA NOT TO 50059 ft OR 20% OF ROOF AREA, WHICHEVER IS LESS)

R-10 R-13 (or R-10 CONTINUOUS) R-13 (or R-10 CONTINUOUS) N/R R-8

0.40 (MAX)

U 0.35 (MAX) 0.40 (MAX)

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

TEM	DESCRIPTION OF BUILDING ELEMENTS	FASTENER ^{a, b, c}	SPACING OF FASTENERS
	Maria Cristala Lateria AM Marita	Roof	Ť
1	Blocking between joists or rafters to top plate, toe nail	3-8d (2 ¹ / ₂ " × 0.113")	NE.
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	9-
4	Collar tie to rafter, face nail or 1 ¹ / ₄ " × 20 gage ridge strap	3-10d (3" × 0.128")	y-
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
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" 0 0
92900	Abutting studs at intersecting	16d (3 ¹ / ₂ " ×	24" o.c.
8	wall corners, face nail Built-up header, two pieces	0.135") 16d (3 ¹ / ₂ " ×	12" o.c. 16" o.c. along each
9	with ¹ / ₂ " spacer	0.135")	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	Double top plates, face nail	10d (3" × 0.128")	24" o.c.
14	Double top plates, minimum 24-inch offset of end joints, face nail in lapped area	8-16d (3 ¹ / ₂ " × 0.135")	8-
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 " × 0.113") or 2-16d (3 ¹ / ₂ " × 0.135")	17-125
18	Top or sole plate to stud, end nail	2-16d (3 ¹ / ₂ " × 0.135")	8-
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 " ×	76 <u>—</u> 7822
21	1" × 6" sheathing to each bearing, face nail	2-8d (2 ¹ / ₂ " × 0.113") 2 staples 1 ³ / ₄ "	9—9 —
22	1" × 8" sheathing to each bearing, face nail	2-8d (2 ¹ / ₂ " × 0.113") 3 staples 1 ³ / ₄	17-15-
23	Wider than 1" × 8" sheathing to each bearing, face nail	3-8d (2 ¹ / ₂ " × 0.113") 4 staples 1 ³ / ₄ "	11-2
		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)	8d (2 ¹ / ₂ " × 0.113")	6″ o.c.
26	Rim joist or blocking to sill plate, toe nail	8d (2 ¹ / ₂ " × 0.113")	6" o.c.
27	1" × 6" subfloor or less to each joist, face nail	2-8d (2 ¹ / ₂ " × 0.113") 2 staples 1 ³ / ₄ "	12—12
28	2" subfloor to joist or girder, blind and face nail	2-16d (3 ¹ / ₂ " × 0.135")	87
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	0.135°) 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 " × 0.135")	At each joist or rafter
		10	

Room Under Stoop GENERAL REQUIREMENTS: FLASHING OR ANOTHER APPROVED WEATHER RESISTIVE BARRIER SHALL BE PLACED BETWEEN THE CONCRETE PORCH STOOP AND THE DWELLING (IRC R319). THE WEATHER RESISTIVE BARRIER SHALL EXTEND UNDER THE WALL COVERING AND DOWN OVER THE EDGE OF THE FOUNDATION WALL TO FORM A CONTINUOUS BARRIER TO PREVENT WATER INTRUSION INTO THE BUILDING (IRC R703.8). PENETRATIONS, SEAMS, AND JOINTS SHALL BE EFFECTIVELY THE FLASHING AND SEALANTS SHALL FORM A PHYSICAL BARRIER TO RESTRICT TERMITE ACCESS (IRC R320.1) NOTE ... DOUBLE JOIST UNDER ALL PARALLEL WALLS

7			SPACING OF FASTENERS			
ITEM	BUILDING MATERIALS FASTENER 5.5.4		Edges (inches) ⁱ	Intermediate supports ^{c, e} (inches)		
W	ood structural panels, su	sheathing to fr		o 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	12 ⁹		
33	19/32" - 1"	8d common nail (2 ¹ / ₂ " × 0.131")	6	129		
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 shea	athing ^h	90		
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	ě		
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	7	7		
Â	Wood stri	uctural panels, combination	subfloor unde	erlayment 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	11/8" - 11/4"	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.

Foundation Wall Reinforcement Schedule - Table 2

Concrete strength/Grade	8 inch thick wall			10 inch thick wall		
Reinforcement #4 bar	8'	9'	10'	8'	9'	10'
3,000 psi / Grade 40	16	12	NP	24	16	12
3,500 psi / Grade 40	16	12	NP	24	24	12
3,000 psi / Grade 60	24	16	NP	24	20	16
3,500 psi / Grade 60	24	16	NP	24	24	16
Horizontal reinforcement -	- Minim	num Gr	ade 40) steel	#4	oar
One bar 12" from top of wall; maximum spacing 24" o.c.	4-#4	5-#4	6-#4	4-#4	5-#4	6-#4

) 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. 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.

between intersecting walls (See 7/S2).

Not exposed to weather (interior side of walls) – minimum 3/4 inch. Concrete exposed to weather (top clearance in garage and driveway slabs)- 1-1/2 inches.

4) 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.

 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

5) Reinforcement shall be lapped a minimum 24 inches at ends, splices, and around corners. 6) 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

7) 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

EPDM membrane flashing SUSPENDED PORCH STOOP DETAIL SEE ELEVATION FOR WALL HEIGHTS NOTE ... ELECTRICAL SERVICE TO BE 200 AMP.

ABOVE UNLESS NOTED

= SMOKE DETECTOR

Slope 1/8-1/4 inch per ft

Ice and water shield (EPDM)

Min. 2x8 - 16" o.c. treated joists

and ledgers or pan deck

or equivalent membrane ·

(one continuous piece

secured in place

per struct. req.



