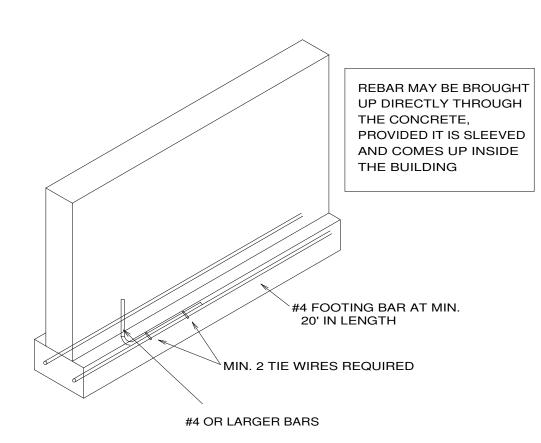


RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
11/23/2021 4:00:34



1. Section 250.52 of the National Electrical Code requires that the concrete encased reinforcing steel be included in the grounding electrode system... This means that you must have "an electrode encased by at least 50 mm (2 in.) of concrete, located horizontally near the bottom or vertically, and within that portion of a concrete foundation or footing that is in direct contact with the earth, consisting of at least 6.0 m (20 ft) of one or more bare or zinc galvanized or other electrically conductive coated steel reinforcing bars or rods of not less than 13 mm (1/2 in.) in diameter, or consisting of at least 6.0 m (20 ft) of bare copper conductor not smaller than 4 AWG.

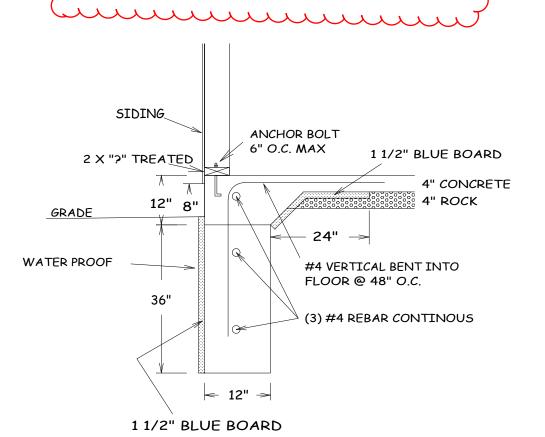
2. Reinforcing bars shall be permitted to be bonded together by the usual steel tie wires or other effective means. Where multiple concrete-encased electrodes are present at a building or structure, it shall be permissible to bond only one into the grounding electrode system." Proper lap splices are required

UFER GOUNDING SECTION

STEEL COLUMNS TO BE
3" DIAMETER SCHEDULE 40 PIPE MANUFACTURED
IN ACCORDANCE WITH ASTM A53 GRADE B OR
APPROVED EQUIVALENT UNLESS NOTED

42" X 42" X I2" CONCRETE PADS WITH (6) #4 REBARS EACH WAY (UNLESS NOTED)

BUILDING	MINIMUM	HORIZONTAL	
HEIGHT	FOOTING	REBAR	OF REBAR
1 OR 2 STY.	8"T × 16"W	2-#4	3" FROM BTM.
3 STORY	8"T × 24"W	2-#4	3" FROM BTM.
CC. STR.	8"T × 12"W	2-#4	3" FROM BTM.

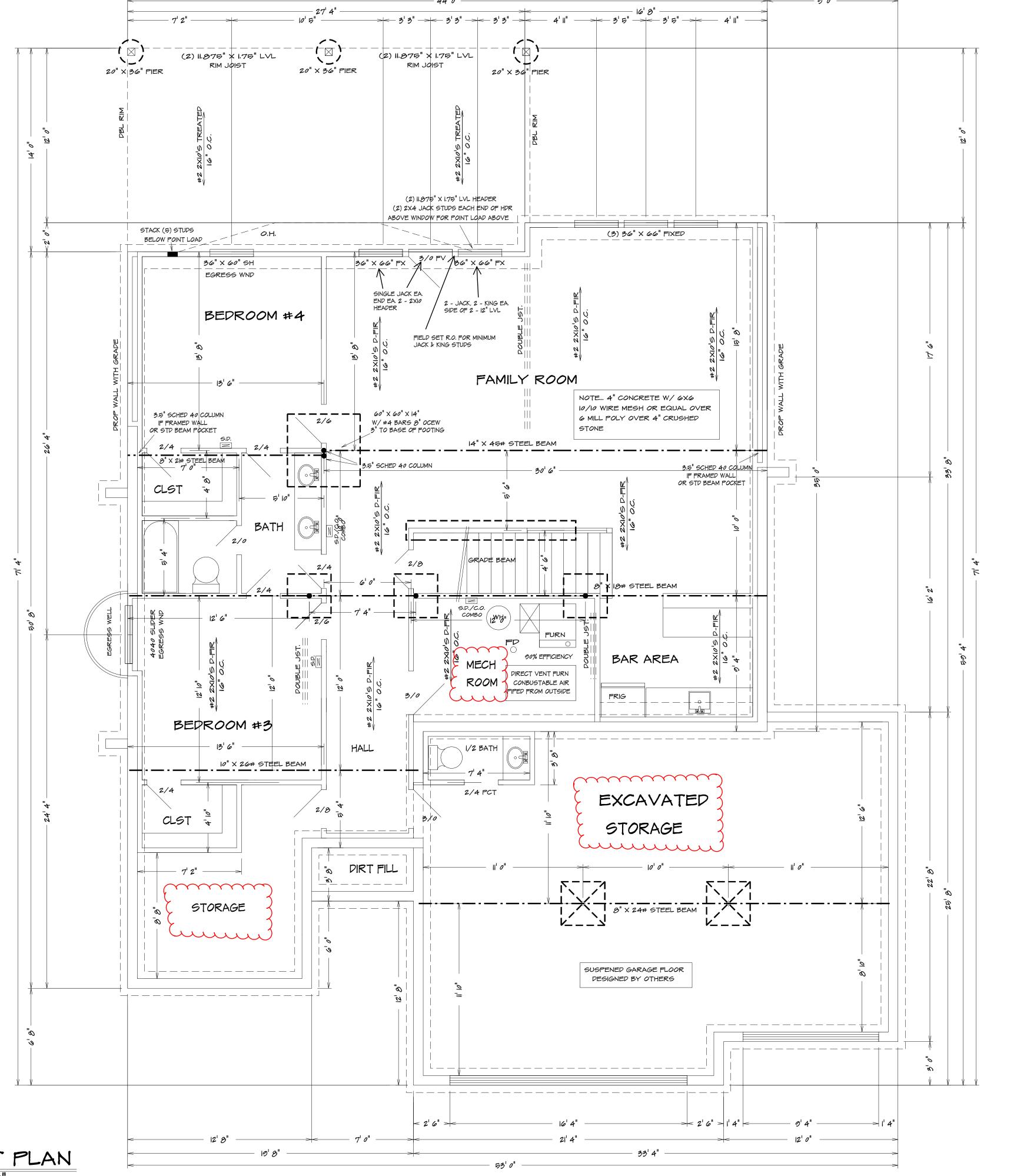


FROST FOOTING

LOT 104 THE RESERVE AT WOODSIDE RIDGE

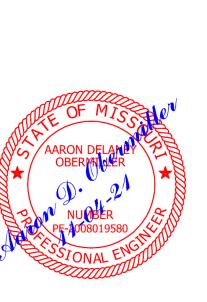
110 NW AMBERSHAM DR

LEES SUMMIT MO 64081



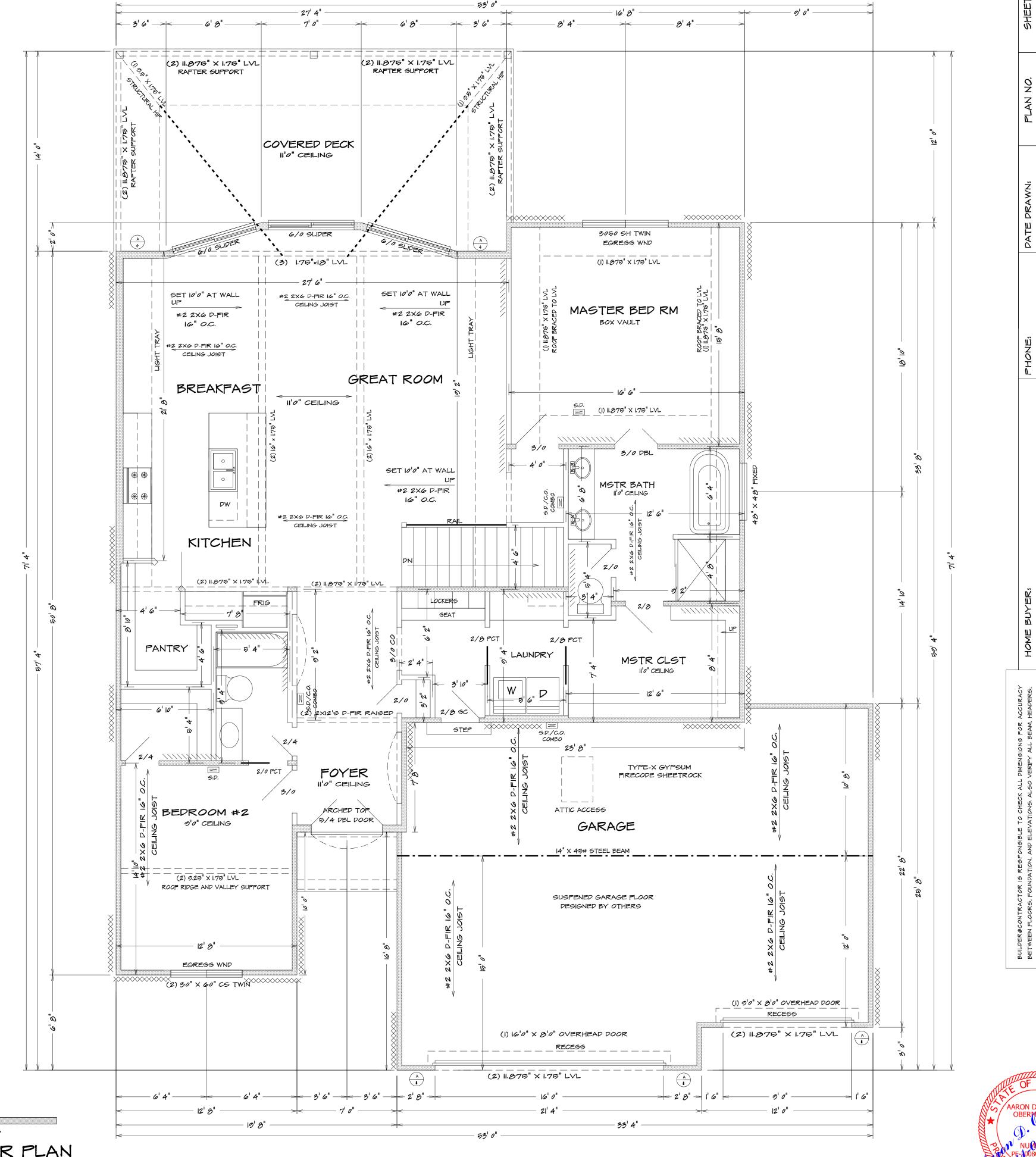
ALL NOTES, SECTIONS, AND DRAWINGS ARE IN ACCORDANCE WITH THE 2018 IRC





RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/23/2021 4:00:34

IIO NW AMBERSHAM DR
LEES SUMMIT MO 64081
LOT IO4 THE RESERVE AT
WOODSIDE RIDGE



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

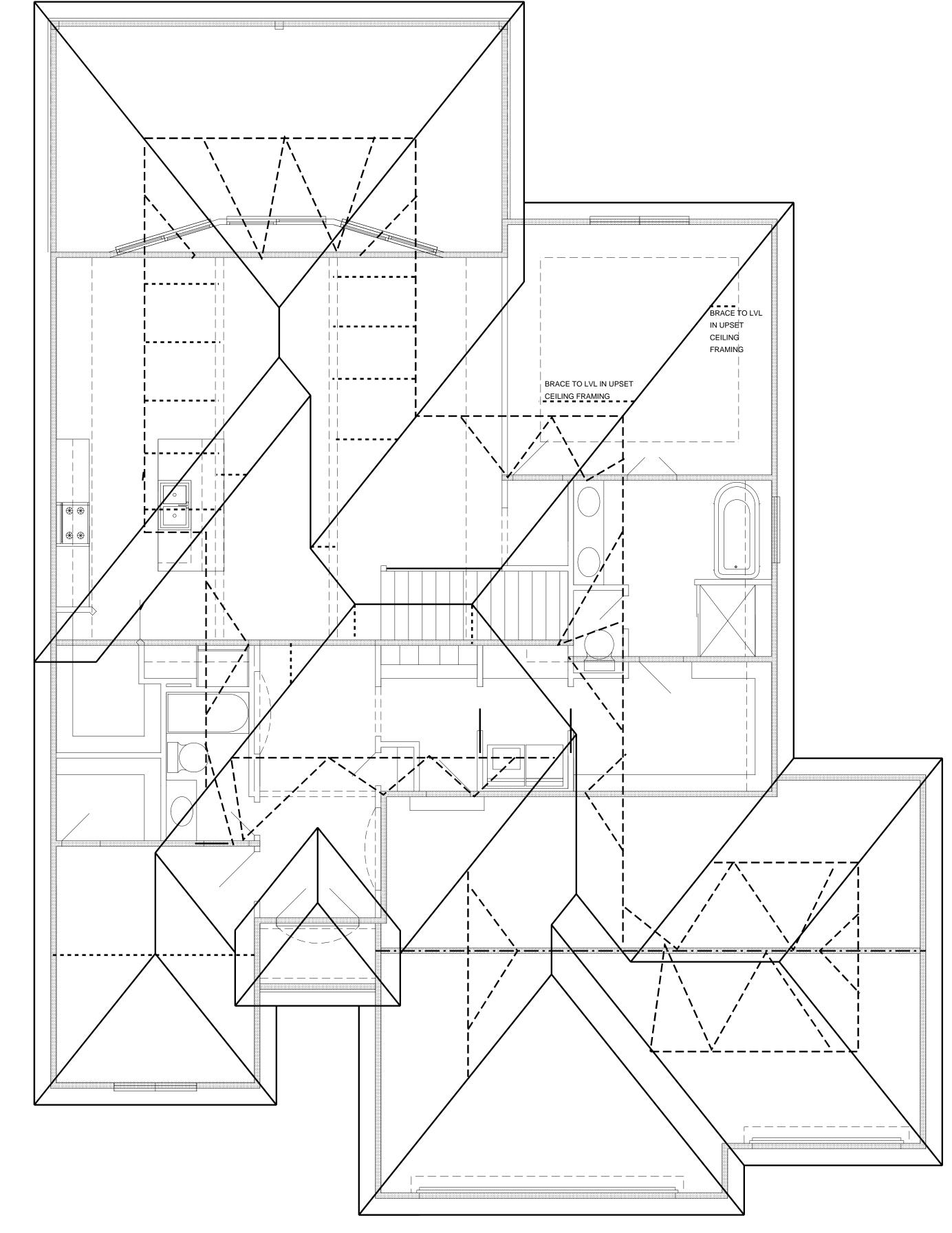
FIRST FLOOR PLAN

1/4" = 1'0"



RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 11/23/2021 4:00:34

110 NW AMBERSHAM DR LEES SUMMIT MO 64081 LOT 104 THE RESERVE AT WOODSIDE RIDGE



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

BEARING WALL LINES

ROOF ELEVATION 1/4" = 10"

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

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

2X8 FOR UNBRACED LENGTH UP TO 9'0" 2XIO FOR UNBRACED LENGTH UP TO 10'0" 2XI2 FOR UNBRACED LENGTH UP TO 12'0"

ALL RAFTERS TO BE #2 2X6 D-FIR 16" O.C. UNLESS OTHER WISE NOTED

CONNECT RAFTERS TO CEILING JOIST W (4) 16d GALV. NAILS CONNECT RAFTERS TO RIDGE, VALLEY, AND HIP RIDGE WITH (4) 16d GALV. NAILS

PURLING RAFTERS TO BEARING WALL LINES

VERT. RIDGE AND RAFTER SUPPORTS TO BE EQUAL TO OR GREATER THAN THE DEPTH OF RAFTERS

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

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 2×4 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. ROOF IS DESIGNED FOR 20 P.S.F. ROOF SNOW LOAD (MIN.)

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 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 2x4 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

THE TEST CRITERIA FOR CATEGORY II IN ACCORDANCE WITH CPSC 8. WINDOW MANUFACTURER TO CONFIRM EXACT SAFTEY AND

7. ALL GLAZING IN WINDOWS AND DOORS SHALL COMPLY WITH

GENERAL PLAN REQUIREMENTS

EGRESS WINDOW LOCATIONS PER LOCAL CODES.

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. 5. 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 7 3/4" MAXIMUM RISER HEIGHT OF STAIRWAYS SHALL NOT EXCEED 7 3/4" AND THE TREADS SHALL PROVIDE A MINIMUM

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

TREAD DEPTH OF 10".

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: INSULATION TO COMPLY WITH IECC AS FOLLOWS:

R-13 CEILING (FLAT) R-40 CEILING (VAULTED) (NOTE: VAULTED AREA NOT TO 50059 ft OR 20% OF ROOF AREA, WHICHEVER IS LESS)

R-10

N/R

R-8

0.40 (MAX)

R-13 (or R-10 CONTINUOUS)

R-13 (or R-10 CONTINUOUS)

FLOORS OVER UNCONDITIONED SPACE CRAWL SPACE WALLS BASEMENT WALLS SLABS DUCTWORK WINDOWS

SHGC

U-FACTOR U 0.35 (MAX) SHGC 0.40 (MAX) SKYLIGHTS U-FACTOR U 0.55 (MAX)

NUMBER AND

EM	ELEMENTS	NUMBER AND TYPE OF FASTENER ^{a, b, c} Roof	SPACING OF FASTENERS
i	Blocking between joists or rafters to top plate, toe nail	3-8d (2 ¹ / ₂ " × 0.113")	85
2	Ceiling joists to plate, toe nail	3-8d (2 ¹ / ₂ " × 0.113")	n -
3	Ceiling joists not attached to parallel rafter, laps over partitions, face nail	3-10d	s -
ı	Collar tie to rafter, face nail or 1 ¹ / ₄ " × 20 gage ridge strap	3-10d (3" × 0.128")	18 -
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 trussi
50	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-
	Name and the same	Wall	
7	Built-up studs-face nail	10d (3" × 0.128") 16d (3 ¹ / ₂ " ×	24" o.c.
3	Abutting studs at intersecting wall corners, face nail	0.135″)	12" o.c.
9	Built-up header, two pieces with ¹ / ₂ " spacer	16d (3 ¹ / ₂ " × 0.135")	16" o.c. along each edge
0	Continued header, two pieces	16d (3 ¹ / ₂ " × 0.135")	16" o.c. along each edge
1	Continuous header to stud, toe nail	4-8d (2 ¹ / ₂ " × 0.113")	10-
2	Double studs, face nail	10d (3" × 0.128")	24" o.c.
3	Double top plates, face nail Double top plates, minimum	10d (3" × 0.128")	24" o.c.
4	24-inch offset of end joints, face nail in lapped area	8-16d (3 ¹ / ₂ " × 0.135")	W—
5	Sole plate to joist or blocking, face nail	16d (3 ¹ / ₂ " × 0.135")	16" o.c.
6	Sole plate to joist or blocking at braced wall panels	3-16d (3 ¹ / ₂ " × 0.135")	16" o.c.
7	Stud to sole plate, toe nail	3-8d (2 ¹ / ₂ " × 0.113") or 2-16d (3 ¹ / ₂ " × 0.135")	97-cm
8	Top or sole plate to stud, end nail	2-16d (3 ¹ / ₂ " × 0.135")	8-
9	Top plates, laps at corners and intersections, face nail	2-10d (3" × 0.128")	8-
0	1" brace to each stud and plate, face nail	2-8d (2 ¹ / ₂ " × 0.113") 2 staples 1 ³ / ₄ " ×	9 <u>_</u> 585
	1" × 6" sheathing to each bearing, face nail	2-8d (2 ¹ / ₂ " × 0.113") 2 staples 1 ³ / ₄ "	19 -1522
2	1" × 8" sheathing to each bearing, face nail	2-8d (2 ¹ / ₂ " × 0.113") 3 staples 1 ³ / ₄	97-25
3	Wider than 1" × 8" sheathing to each bearing, face nail	3-8d (2 ¹ / ₂ " × 0.113") 4 staples 1 ³ / ₄ "	11-12
TV.	(I)	Floor	
4	Joist to sill or girder, toe nail	3-8d (2 ¹ / ₂ " × 0.113")	# -
5	Rim joist to top plate, toe nail (roof applications also)	8d (2 ¹ / ₂ " × 0.113")	6" o.c.
6	Rim joist or blocking to sill plate, toe nail	8d (2 ¹ / ₂ " × 0.113")	6" o.c.
7	1" × 6" subfloor or less to each joist, face nail	2-8d (2 ¹ / ₂ " × 0.113") 2 staples 1 ³ / ₄ "	3-34
8	2" subfloor to joist or girder, blind and face nail	2-16d (3 ¹ / ₂ " × 0.135")	885
9	2" planks (plank & beam - floor & roof)	2-16d (3 ¹ / ₂ " × 0.135")	at each bearing
0	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.
1	Ledger strip supporting joists or rafters	3-16d (3 ¹ / ₂ " × 0.135")	At each joist or rafter
_	10	70 C	

Collar tie to rafter, face nail or	3-10d (3" × 0.128")	19
T 14 v so gade Hade so ab	Control Control Control	9000 30 1000
5 6 6 L		2 toe nails on one side
		and 1 toe nail on opposite side of each
coc IIan	nails	rafter or truss
	(3" × 0.148")	
Western Control of the Control of th	4-16d (3 ¹ / ₂ " ×	
Roof rafters to ridge, valley or		86—
nip raπers: toe naii race naii		
	The second secon	1 120000000
216 5230 10 10 10 10 100	7239 T. SANTON SC. S. SAN	24" o.c.
Abutting stude at intersecting		12" o.c.
Section and the section of the secti		135 E 100 E 1 E 100
	16d (3 ¹ / ₂ " ×	16" o.c. along each
with 1/2" spacer	0.135")	edge
Continued header two nieces	16d (31/2" ×	16" o.c. along each
continued neddel, two pieces	0.135")	edge
Continuous header to stud, toe	4-8d (21/2" ×	
nail	0.113″)	80-
Double studs, face nail	10d (3" × 0.128")	24" o.c.
Double top plates, face nail	10d (3" × 0.128")	24" o.c.
Double top plates, minimum	8-164 (31/-* -	
		80-
2 77 77 77 77 77 77 77 77 77 77 77 77 77	(A)	
		16" o.c.
race nall		
Sole plate to joist or blocking	3-16d (3 ¹ / ₂ " ×	16" o.c.
at braced wall panels	0.135")	
	3-8d (2 ¹ / ₂ " ×	
Stud to sole plate, toe nail	0.113") or 2-16d	H-150
	$(3^1/2" \times 0.135")$	
Top or sole plate to stud, end	2-16d (3 ¹ / ₂ " ×	VE.
nail	0.135")	·-
Top plates, laps at corners and	2-10d (3" ×	88-
intersections, face nail	0.128")	15—
401	2-8d (2 ¹ /2" ×	
	0.113")	74_7825
prace, race rian	2 staples 1 ³ /4" ×	
1" × 6" sheathing to each	0.113")	90 -1559
pearing, face nail		
codus pectro ter zantendes ere ter-	The state of the Auto-State of the State of	
1" × 8" sheathing to each		
bearing, face nail		R 220
Wider than 1" × 8" sheathing		86 - 20
to each bearing, face nail		8-1-2
NS NS	The state of the state of the state of	
	700	
Joist to sill or girder, toe nail		8 -
3.000	0.113")	
Rim joist to top plate, toe nail	8d (2 ¹ / ₂ " ×	6" o.c.
(roof applications also)	0.113")	0.00
Rim joist or blocking to sill	8d (21/2" ×	6" o.c.
plate, toe nail	0.113")	6 0.6.
E CONTROL DE LA	2-8d (2 ¹ / ₂ " ×	
	0.113")	N-34
eden joist, race fidir	2 staples 1 ³ / ₄ "	
2" subfloor to joist or girder	Table 1990 None and the State of the State o	
blind and face nail		85.
		93 37/0 NF
floor & roof)		at each bearing
	0.1230.7	Nail each layer as
		follows: 32" o.c. at top
EXPROVED A CONTRACTOR OF THE PARTY OF THE CONTRACTOR OF T	10d (3" × 0.128")	and bottom and
Built-up girders and beams,	Tando VOITED)	staggered.
Built-up girders and beams, 2-inch lumber layers	PROPERTY OF THE PROPERTY OF STREET	Time paid at and and
	Process service consectivities 5	Two nails at ends and at each splice.
	3-16d (3 ¹ /2" ×	Two nails at ends and at each splice. At each joist or rafter
	Rafter or roof truss to plate, toe nail Roof rafters to ridge, valley or hip rafters: toe nail face nail Built-up studs-face nail Abutting studs at intersecting wall corners, face nail Built-up header, two pieces with 1/2" spacer Continued header, two pieces Continuous header to stud, toe nail Double studs, face nail Double top plates, minimum 24-inch offset of end joints, face nail in lapped area Sole plate to joist or blocking, face nail Sole plate to joist or blocking at braced wall panels Stud to sole plate, toe nail Top or sole plate, toe nail Top plates, laps at corners and intersections, face nail 1" brace to each stud and plate, face nail 1" brace to each stud and plate, face nail 1" x 6" sheathing to each bearing, face nail Wider than 1" x 8" sheathing to each bearing, face nail Rim joist to top plate, toe nail Rim joist to rolocking to sill plate, toe nail 2" subfloor to joist or girder, blind and face nail 2" subfloor to joist or girder, blind and face nail 2" subfloor to joist or girder, blind and face nail 2" planks (plank & beam -	11/4" × 20 gage ridge strap Rafter or roof truss to plate, toe nail Rafter o

FASTENER^{b, c, e}

19/32" - 1"

11/8" - 11/4"

/2" structural cellulosi fiberboard sheathing

/32" structural cellul

/2" gypsum sheathin

5/8" gypsum sheathing

3/4" and less

⁷/8" - 1"

11/8" - 11/4"

3,000 psi / Grade 40

3,500 psi / Grade 40 3,000 psi / Grade 60

maximum spacing 24" o.c.

reinforcement place as follows:

between intersecting walls (See 7/S2).

3) Reinforcement clearances:

4) Horizontal reinforcement:

mon nail $(2^1/2" \times$

nmon (3" × 0.148")

 $^{7}/_{16}$ " crown or 1" crown

e 16 ga., 1¹/4" long

l, ⁷/₁₆" crown or 1" crown

aple 16 ga., 1¹/2" long

2" long; 11/4 screws.

4" galvanized roofing

5/8" long; 1⁵/8" screws

rmed (2¹/₂" ×

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.

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

Not exposed to weather (interior side of walls) – minimum 3/4 inch.

a) One bar shall be placed within 12 inches of the top of the wall.

 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.

a) Concrete exposed to earth - minimum 1-1/2 inches.

the vertical reinforcement (i.e.2" towards the inside)

Vertical reinforcement spacing 60 psf soil

MMM MANNE MA

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'

3,500 psi / Grade 60 24 16 NP 24 24 16 Horizontal reinforcement – Minimum Grade 40 steel #4 bar One bar 12" from top of wall; 4-#4 5-#4 6-#4 4-#4 5-#4 6-#4

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

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

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

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

non $(2^1/2" \times 0.131")$

Other wall sheathing^h

129

129

yment to framing

NP 24 24 12 NP 24 20 16

Ice and water shield (EPDM) or equivalent membrane · (one continuous piece per struct. req. secured in place Min. 2x8 - 16" o.c. treated joists and ledgers or pan deck Room Under Stoop Wall bracing GENERAL REQUIREMENTS: FLASHING OR ANOTHER APPROVED WEATHER RESISTIVE Slope 1/8-1/4 inch per ft 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 EPDM membrane flashing 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)

SUSPENDED PORCH STOOP DETAIL

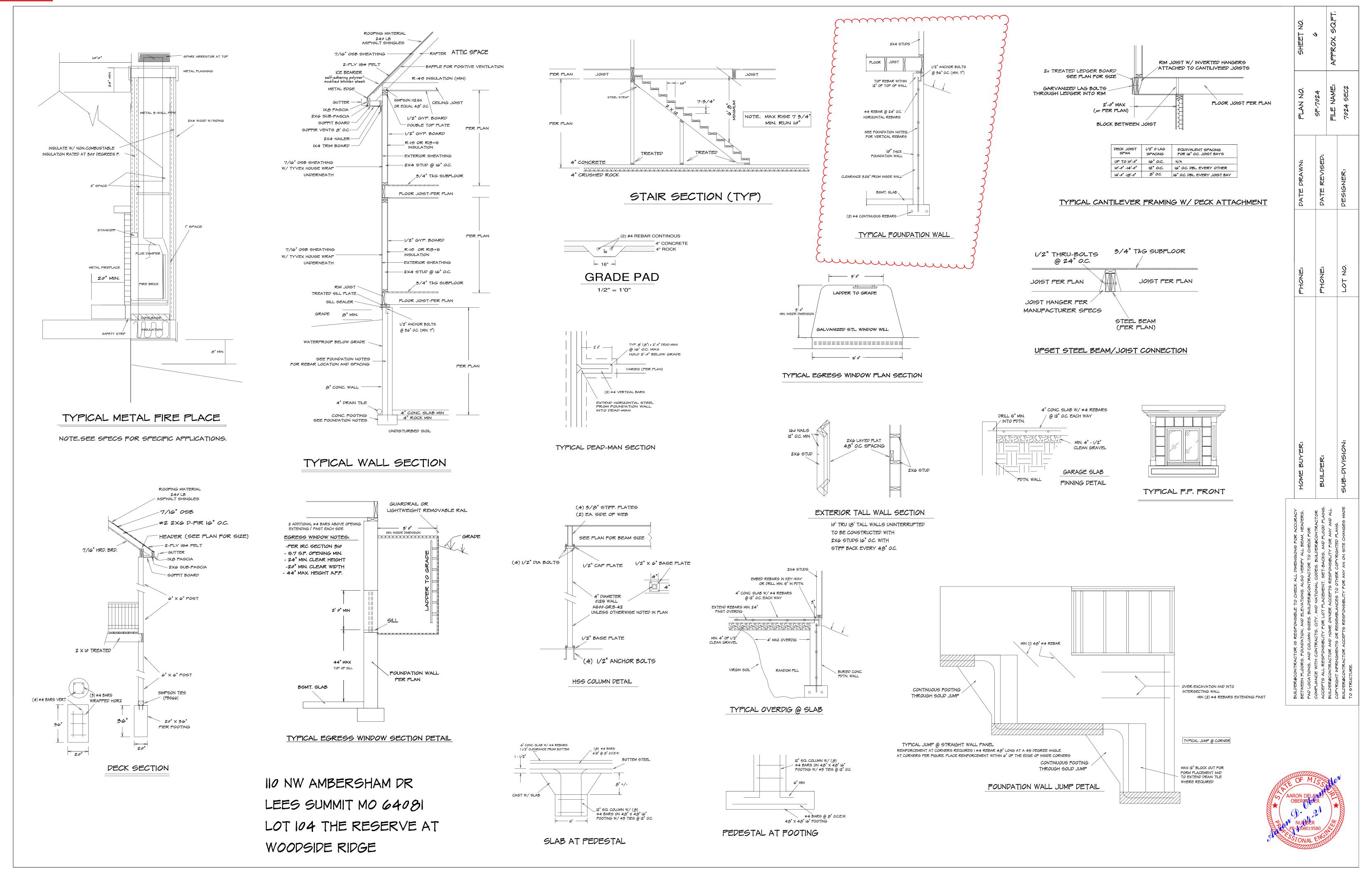
SEE ELEVATION FOR WALL HEIGHTS NOTE ... ELECTRICAL SERVICE TO BE 200 AMP. NOTE ... DOUBLE JOIST UNDER ALL PARALLEL WALLS ABOVE UNLESS NOTED S.D. = SMOKE DETECTOR

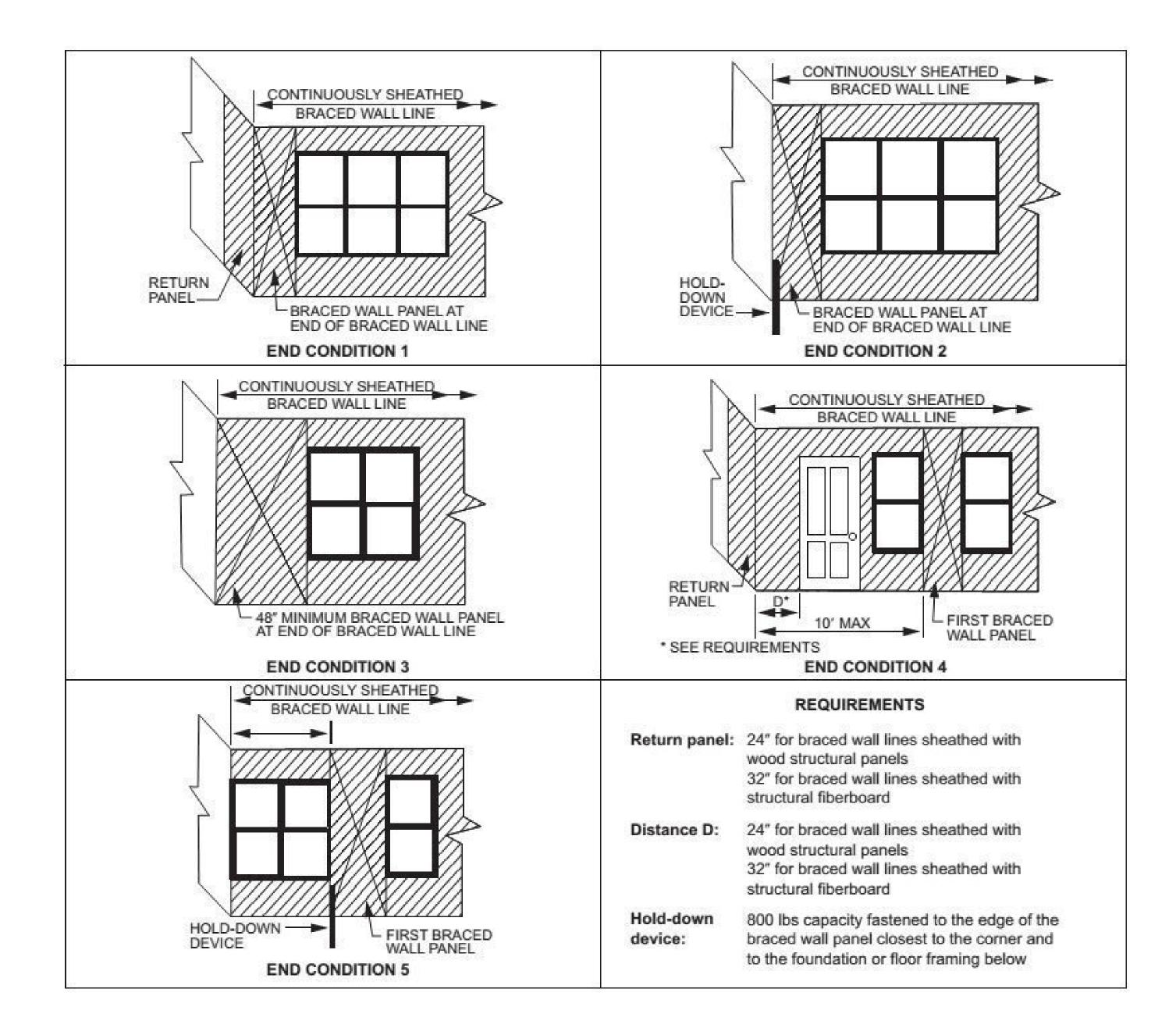
IIO NW AMBERSHAM DR LEES SUMMIT MO 64081

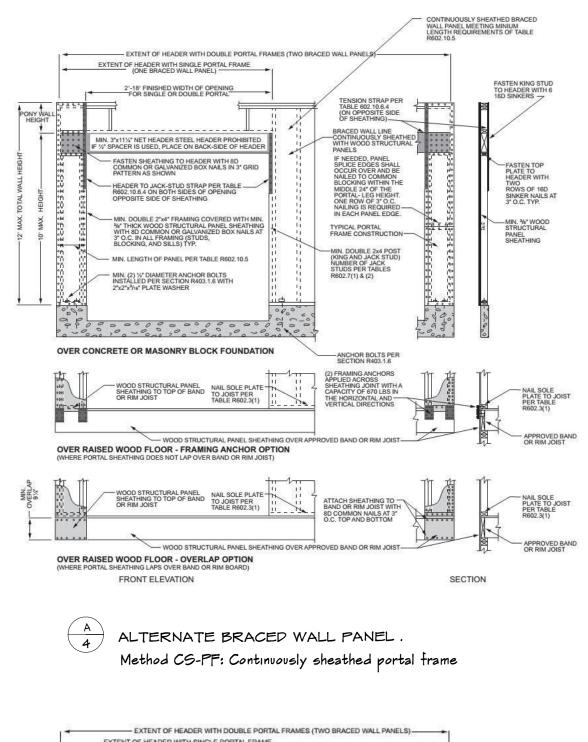
LOT 104 THE RESERVE AT WOODSIDE RIDGE



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.







BRACED WALLS:

METHOD WSP OR LB (2018 IRC): MIN. 5/16" APA RATED WITH 84 NAILS @ 6" AND 12"

MIN. I/2" GYPSUM BOARD WITH NO. 6 I-I/4" TYE W OR S SCREWS @ 7" OC. EDGES AND WALL (4'-0" LONG,

METHOD GB (2018 IRC):

BOTH FACES OF WALL

Method CS-PF: Continuously sheathed portal frame

ALTERNATE BRACED WALL PANEL
Method PFH: Portal frame with hold-downs

Seismic Pesign Categories A, B and C

A

ALTERNATE BRACED WALL PANEL.

Method ABW: Alternate braced wall panels

ALTERNATE BRACED WALL PANEL.

Method PFG: at garage door openings in

(A) ALTERNATE BRACED WALL PANEL .

2. PROVIDE SOLID BLOCKING ABOVE AND BELOW
ALL BRACED WALL LINES WHERE FRAMING ABOVE
OR BELOW RUNS PERPENDICULAR TO THE BRACING.
THE BRACED WALL SOLE PLATE AND TOP PLATE
SHALL BE PASTENED TO BLOCKING (RO PARALLEL

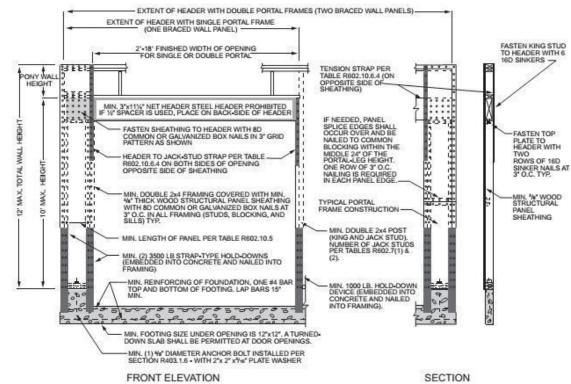
FRAMING MEMBER WHERE PROVIDED) WITH (3) 16d

3. SIMPSON STHD-14 HOLD-DOWN STRAPS MAY BE

MIN. 7" INTO THE FOUNDATION

SUBSTITUTED WITH SIMPSON PHD2 HOLD-DOWNS

AND A 5/8" ANCHOR ROD DRILLED AND EPOXIED A



ALTERNATE BRACED WALL PANEL
Method PFH: Portal frame with hold-downs

IIO NW AMBERSHAM DR
LEES SUMMIT MO 64081
LOT 104 THE RESERVE AT
WOODSIDE RIDGE

			Γ		
> .	HOME BUYER:	PHONE:	DATE DRAWN:	PLAN NO.	9HEE'
v <u>Ř</u>	BUILDER;	PHONE:	DATE REVISED:	SF-7024	
4				FILE NAME:	APPROX.
딢	SUB-PIVISION:	LOT NO.	DESIGNER:	7024 SEC3	

BUILDER&CONTRACTOR IS RESPONSIBLE TO CHECK ALL DIMENSIONS FOR ACCURA BETWEEN FLOORS, FOUNDATION, AND ELEVATIONS, ALSO VERIFY ALL BEAM, HEADER PAP LOCATIONS, AND COLUMN SIZES, BUILDER&CONTRACTOR TO CHECK FOR COMPLIANCE WITH CONTRACTS, CITY, AND NATIONAL CODES, BUILDER&CONTRACTC ACCEPTS ALL RESPONSIBLITY FOR LOT PLACEMENT, SET-BACKS, AND FLOOP PLA BUILDER&CONTRACTOR AND HOME OWNER ACCEPTS RESPONSIBLITY FOR ANY AND ACCEPTS RESPONSIBLITY FOR ANY AN ON SITE CHANGES M.

