

February 23, 2024

Lee's Summit Development Services 220 SE Green Lee's Summit, MO 64063

Summit Homes
Winfield Farmhouse

#### RE: CITY COMMENTS FOR 1617 SW BUCKTHORNE ST, LEE'S SUMMIT, MO 64082

Everstead Engineering & Design, LLC has updated the above-mentioned property construction documents per city comments as follows:

#### **Residential Plan Review**

City Comment #1. "ADDRESS FROM PAGE A1.0 TO S000 NEED TO HAVE ST INSTEAD OF DR. ADDRESS IN ADDRESS BLOCK FROM PAGE S000 ON SHOULD BE 1617 SW BUCKTHORN ST."

Engineer's Response – Address in title blocks corrected.

City Comment #2. "Size, height, spacing of studs. (IRC Section R602.3.1)."

Engineer's Response – All studs in bearing walls are spaced at 16" on center unless noted otherwise, see general plan notes in bottom right-hand corner of sheets A4.0 and A5.0. Wall heights and member depths are specified on plans, see sheets A4.0 and A5.0.

City Comment #3. "Provide details for any walls over 10 feet in height. Include stud grade, size, spacing and actual, uninterrupted height. (IRC Section 602.3.1 and Table 602.3(5) & 602.3.1)."

Engineer's Response – The only wall that exceeds 10' is the full height wall adjacent to the stairs which is 18'-1". It is Douglas Fir #2 or better with 2x6 studs spaced 16" on center, see sheets A3.0 and A4.0.

Please feel free to contact us with any further questions on this matter.

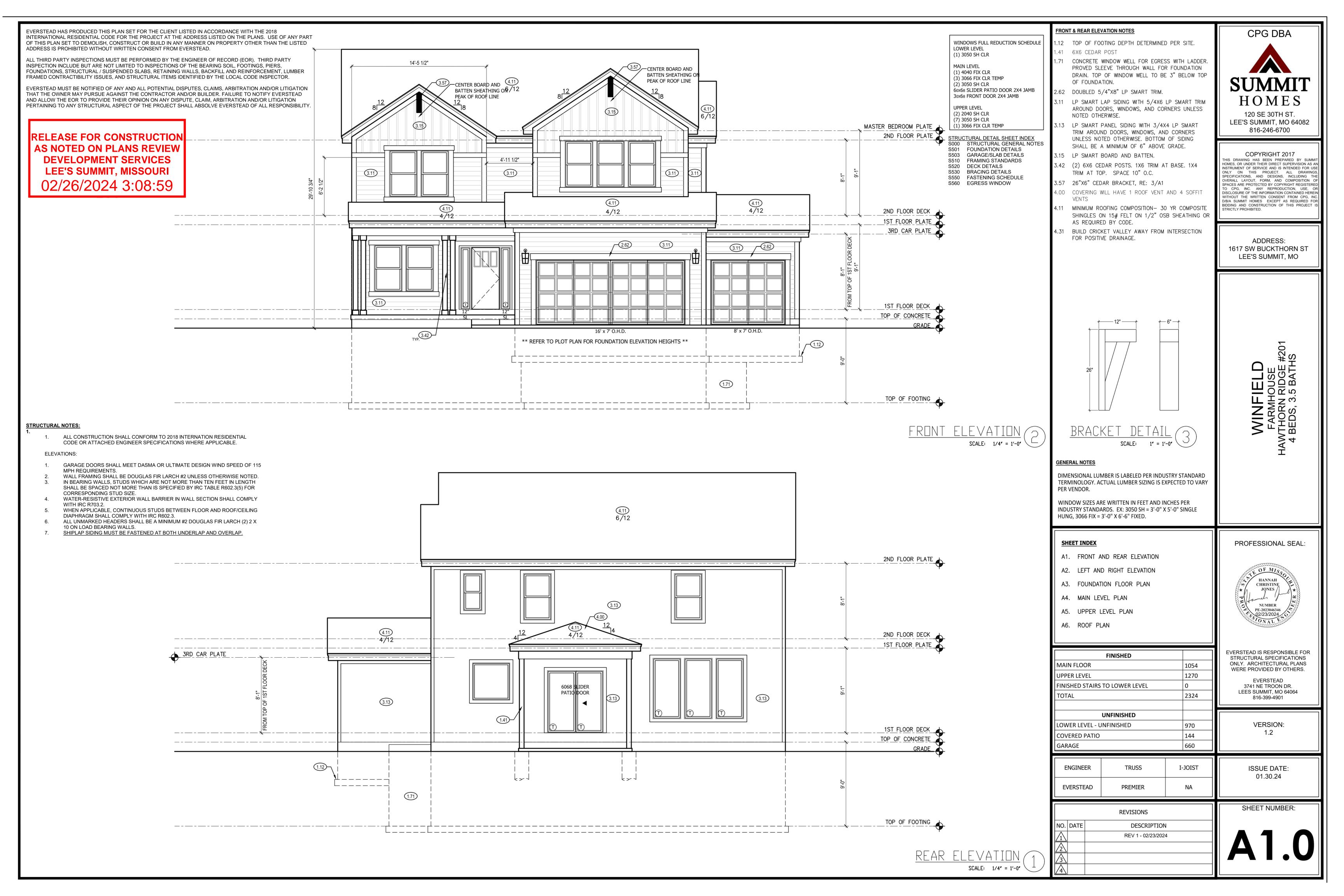
Sincerely.

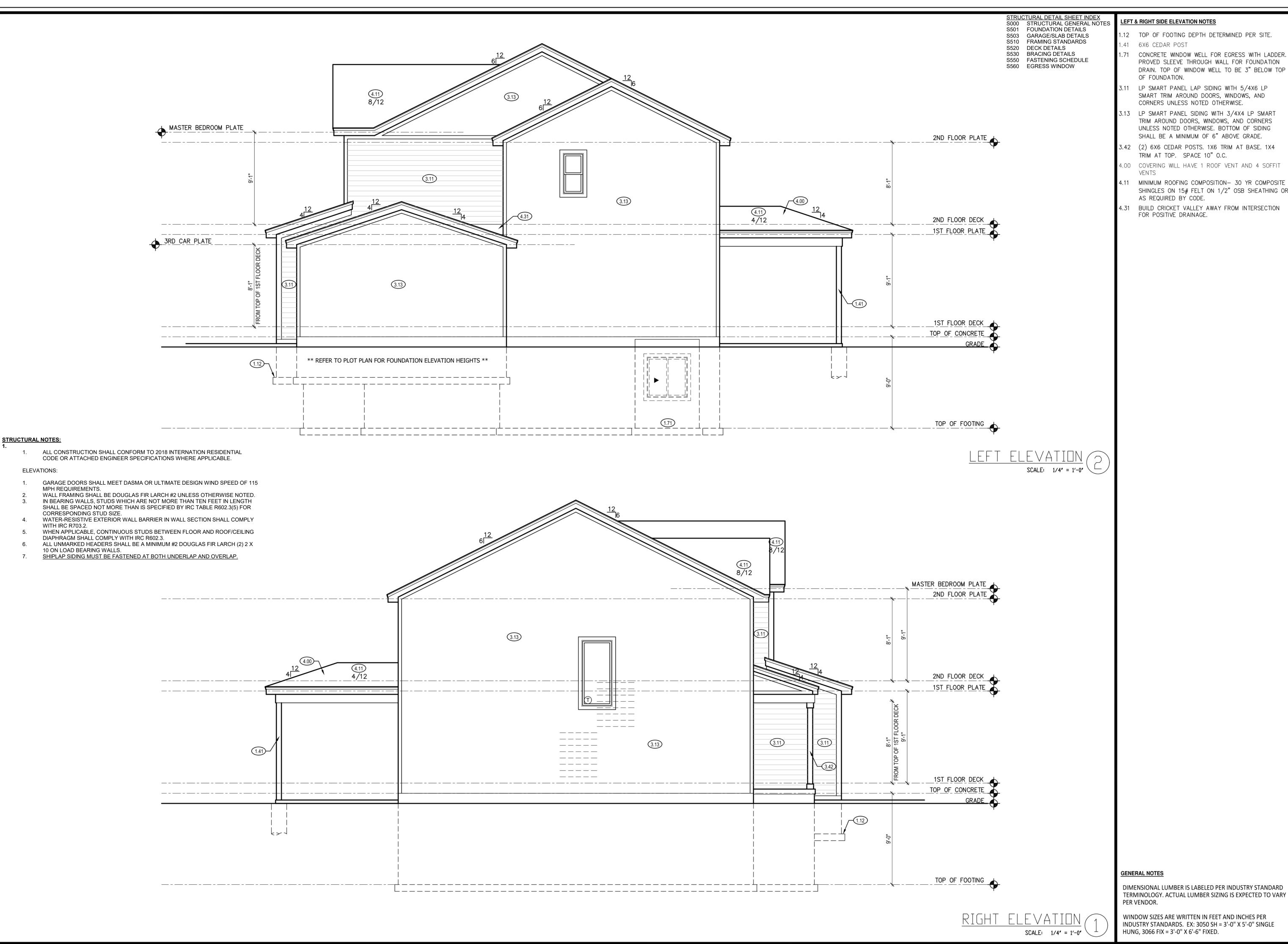
Hannah Jones, PE

HANNAH CHRISTINE JONES

NUMBER
PE-2023046346
02/23/2024
03/0NAL

RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW DEVELOPMENT SERVICES LEE'S SUMMIT, MISSOURI 02/26/2024 3:08:59





LEFT & RIGHT SIDE ELEVATION NOTES

1.12 TOP OF FOOTING DEPTH DETERMINED PER SITE.

1.71 CONCRETE WINDOW WELL FOR EGRESS WITH LADDER. PROVED SLEEVE THROUGH WALL FOR FOUNDATION DRAIN. TOP OF WINDOW WELL TO BE 3" BELOW TOP

.11 LP SMART PANEL LAP SIDING WITH 5/4X6 LP SMART TRIM AROUND DOORS, WINDOWS, AND

3.13 LP SMART PANEL SIDING WITH 3/4X4 LP SMART TRIM AROUND DOORS, WINDOWS, AND CORNERS UNLESS NOTED OTHERWISE. BOTTOM OF SIDING SHALL BE A MINIMUM OF 6" ABOVE GRADE.

3.42 (2) 6X6 CEDAR POSTS. 1X6 TRIM AT BASE. 1X4 TRIM AT TOP. SPACE 10" O.C.

4.00 COVERING WILL HAVE 1 ROOF VENT AND 4 SOFFIT

4.11 MINIMUM ROOFING COMPOSITION— 30 YR COMPOSITE SHINGLES ON 15# FELT ON 1/2" OSB SHEATHING OR

4.31 BUILD CRICKET VALLEY AWAY FROM INTERSECTION FOR POSITIVE DRAINAGE.

CPG DBA

**SUMMIT** HOMES

120 SE 30TH ST. LEE'S SUMMIT, MO 64082 816-246-6700

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ADDRESS: 1617 SW BUCKTHORN ST LEE'S SUMMIT, MO

PROFESSIONAL SEAL:



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> **EVERSTEAD** 3741 NE TROON DR. LEES SUMMIT, MO 64064 816-399-4901

> > VERSION:

ISSUE DATE: 01.30.24

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WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

#### **STRUCTURAL NOTES:**

1. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATION RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APLLICABLE.

#### FOUNDATION NOTES:

ALL FOOTINGS MEET OR EXCEED MINIMUM FROST DEPTH OF 36".

- SOIL BEARING CAPACITY SHALL BE 1500 PSF.
- COMPRESSSIVE STRENGTH OF CONCRETE FC COMPRESSIVE STRENGTH SHALL BE DAMPPROOFED. DAMPPROOFING SHALL EXTEND FROM THE EDGE OF THE FOOTING TO THE FINISHED GRADE (R-406.1). METHOD OF DAMPPROOFING OR WATERPROOFING SHALL BE A MINIMUM 6-MIL. THICK MOISTURED BARRIER OVER POROUS GRAVEL BASE UNDER BASEMENT FLOOR SLAB PER R405.2.2. LAP JOINTS SHALL BE MINIMUM 6".
- FOUNDATION WALLS SHALL BE DAMPPROOFED PER IRC SECTION R406. FOUNDATION DRAINAGE WILL BVE IN ACCORDANCE WITH IRC SECTION R405.
- BASEMENT EGRESS OPENINGS SHALL BE IN ACCORDANCE WITH IRC SECTION R310.1. ALL INTERIOR FOOTINGS OF LOAD BEARINGS WALLS AND COLUMNS SHALL BE
- ISOLATED FROM THE BASEMENT FLOOR SLAB. ALL ANCHOR BOLTS SHALL NOT BE SPACED MORE THAN 3' O.C. AND BE EMBEDDED
- INTO THE CONCRETE A MINIMUM OF 7". IF BASEMENT SLAB ELEVATION IS ABOVE GRADE CONSULT ENGINEER.

### DEAD MAN SPACING:

- ALL DEAD MAN SHALL BE SPACED NO MORE THAN 16' FROM EGRESS WELL, REAR GARAGE WALL, 24" RETURN ON FOUNDATION WALL OR ANOTHER DEAD MAN.
- DEAD MEN ARE NOT REQUIRED ON EXTERIOR GARAGE WALLS OR FOUNDATION WALLS THAT ARE 5' OR LESS.
- WALL TRANSITIONING FROM ELSS THAN 5' TALL TO MORE THAN 5' TALL WITH STEP DOWNS: A DEAD MAN IS REQUIRED WITHIN 8' OF STEP DOWN (tRANSITIONING FROM LESS THAN 5' TALL TO MORE THAN 5' TALL WALL LOCATION) ON WALL 5' TALL OR

	ISC	OLATED	FOOTINGS AND COLUMN PA	ADS
SYM	PIER PAD SIZE	DEPTH	MINIMUM REINFORCEMENT GRADE 40 KSI STEEL	SCHEDULE 40 STEEL COLUMN, MIN FY = 35 KSI
À	30"x30"	1'-0"	(5) #4 BAR E.W.	3" DIAMETER
B	36"x36"	1'-0"	(6) #4 BAR E.W.	3" DIAMETER
c	42"x42"	1'-2"	(7) #4 BAR E.W.	3" DIAMETER
D	48"x48"	1'-4"	(8) #4 BAR E.W.	3" DIAMETER
É	54"x54"	1'-4"	(9) #4 BAR E.W.	3.5" DIAMETER
F	60"x60"	1'-6"	(10) #4 BAR E.W.	3.5" DIAMETER

ISOLATED FOOTINGS AND	<b>COLUMN PAI</b>	

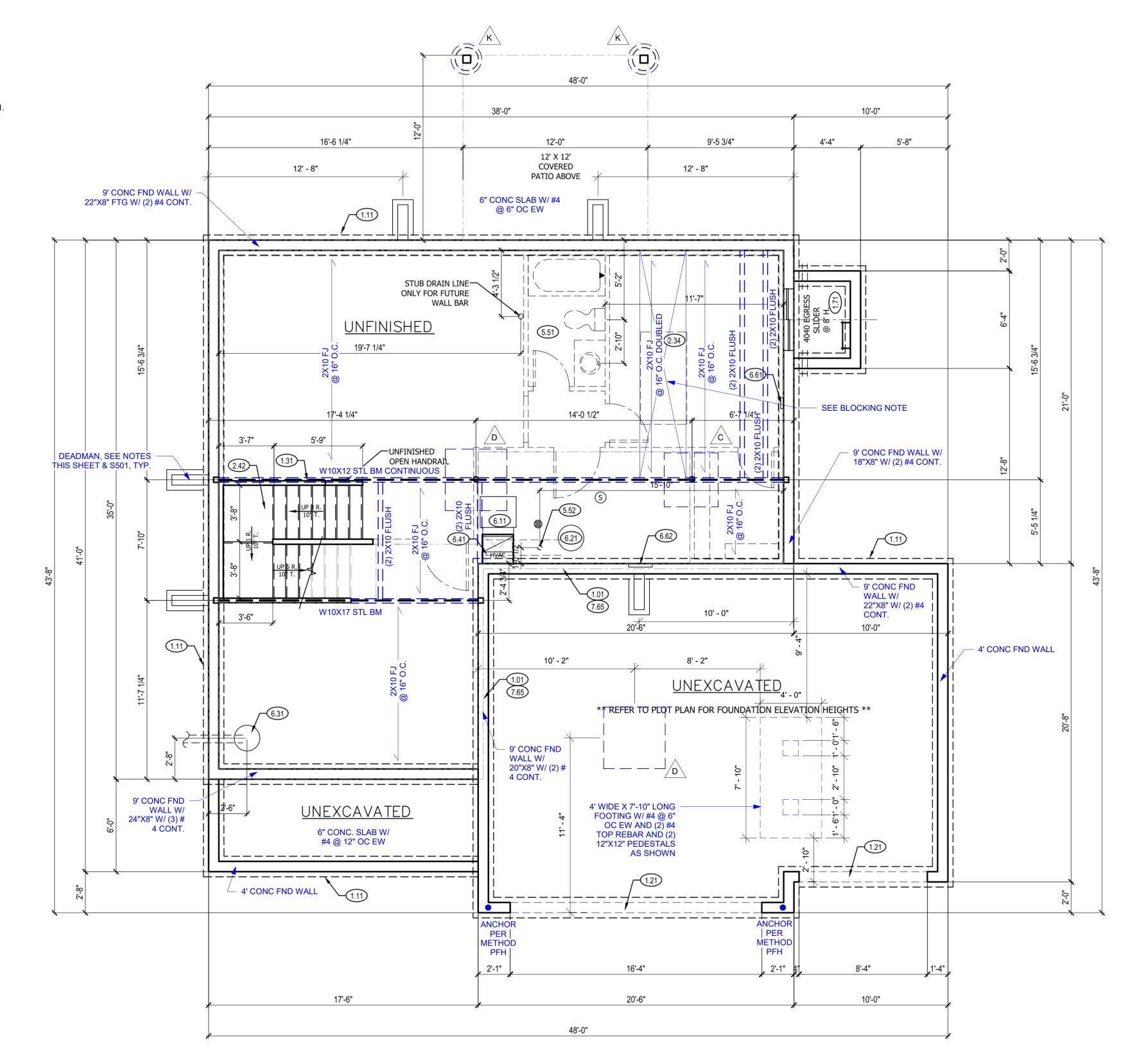
SYM	PIER DIAMETER	DEPTH	MINIMUM REINFORCEMENT GRADE 40 KSI STEEL
G	12"	3'-0"	(4) VERTICAL #4
H	16"	3'-0"	(4) VERTICAL #4
J	18"	3'-0"	(4) VERTICAL #4
K	24"	3'-0"	(4) VERTICAL #4
Ĺ	28"	3'-0"	(4) VERTICAL #4

\*DENOTES STEEL COLUMN NOT REQUIRED COLUMN AND PAD SIZES ARE FOR A MAXIMUM COLUMN HEIGHT OF 10'. COLUMNS GREATER THAN 10' REQUIRE A SEPARATE ENGINEERED DESIGN. FOOTINGS A-F SPACING OF 6" O.C. WITH 3" CLEAR COVER.

FOUNDATION		NG TABLE (3000 PSI C FROM INSIDE TENSIC	CONCRETE AND 40 KSI RE ON FACE)	EBAR PLACED 2"
WALL TYPE	NOMINAL WALL THICKNESS	VERTICAL SPACING AND SIZE	HORIZONTAL SPACING AND SIZE	FOOTING SPECIFICATION U.N.O. ON PLANS
3'-6" TRENCH FOOTING	16"	#4 BARS @18" O.C.	(2) #4 BARS TOP & BOT. CONT.	
< 6'-0" WALL		#4 BARS @36" O.C.		
8'-0" WALL	8"	#4 BARS @16" O.C.		16" x 8" CONC. FTG. W/ (2) #4 BARS CONT.
9'-0" WALL	O	#4 BARS @12" O.C.	#4 BARS @ 24" O.C.	
10'-0" WALL		#4 BARS @8" O.C.		
11'-0" WALL	10"	#4 BARS @9" O.C.		24" x 12" CONC. FTG.
12'-0" WALL	10"	#4 BARS @6" O.C.		W/ (3) #4 BARS CONT.

### **BLOCKING NOTE:**

- SOLID BLOCKING BETWEEN JOISTS AT 48" O.C.
  - EXTEND BLOCKING ONE JOIST BAY PAST EACH SIDE OF ISLAND ABOVE



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

#### FOUNDATION PLAN NOTES

- 1.01 HOLD SILL PLATE BACK 4"
- 1.11 CONTINUOUS CONCRETE FOOTING
- 1.21 RECESS TOP OF FOUNDATION WALL
- 1.31 2X4 STUD WALL WITH TREATED SILL PLATE 1.71 CONCRETE WINDOW WELL FOR EGRESS WITH LADDER PROVED SLEEVE THROUGH WALL FOR FOUNDATION DRAIN. TOP OF WINDOW WELL TO BE 3" BELOW TOP OF FOUNDATION.
- 2.32 INSULATE CANTILEVER AS REQUIRED PRIOR TO BLOCKING
- 2.34 PROVIDE ADDITIONAL BRACING FOR ISLAND ABOVE.
- 2.41 CURB STAIR SYSTEM WITH OPEN HANDRAILS
- 2.42 FIRE RATED SHEETROCK UNDER STAIRS
- 5.51 DRAIN LINE ONLY FOR FUTURE USE. LOCATION TO BE MARKED WITH REBAR AND CUT FLUSH TO FLOOR
- 5.52 PLUMBING FLANGE ABOVE. HEADER ACROSS JOISTS AS NEEDED.
- 6.11 DIRECT FURNACE. FUEL BURNING APPLIANCES SHALI BE DIRECT VENTED TO EXTERIOR FOR COMBUSTION
- 6.21 HOT WATER HEATER WITH THERMAL EXPANSION CONTROL DEVICE
- 6.31 SUMP PIT AND PUMP. PROVIDE ELECTRICAL GFCI PROTECTION. PROVIDE SLEEVE THROUGH FOOTING.
- 6.41 HVAC CHASE ABOVE
- 6.61 200 AMP ELECTRICAL PANEL. LOCATION TO BE DETERMINED ON SITE.
- 6.62 UFER GROUND- VERIFY LOCATION WITH PROJECT MANAGER.
- 7.65 LINE OF FLOOR ABOVE

**GENERAL NOTES** 

PER VENDOR.

REQUIREMENTS.

CAUSED BY THERMAL EXPANSION.

SHALL BE OF DECAY-RESISTANT MATERIALS.

ALL INTERIOR NON-LOAD BEARING, NON-BRACED, NON-CABINET WALLS ARE ALLOWED AT 24" O.C.

PLACEMENT IS TO BE DETERMINED BY MUNICIPAL

ACCORDING TO MUNICIPALITY CODE REQUIREMENTS.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE

HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

BACK WATER VALVES REQUIRED ON ALL BASEMENT PLUMBING

ALL SILLS & SLEEPERS SUPPORTED ON CONCRETE OR MASONRY

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY

SMOKE AND CARBON MONOXIDE DETECTORS SHOW ON PLANS ARE TO BE CONSIDERED RECOMMENDATIONS ONLY. FINAL

SMOKE AND CARBON MONOXIDE DETECTORS TO BE INSTALLED

FIXTURES. PROVIDE MEANS OF CONTROLLING PRESSURE

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VERSION:

ISSUE DATE:

01.30.24

SHEET NUMBER:

### **GENERAL PLAN NOTES**

- ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL
   RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE
- APPLICABLE.
- ALL DIMENSIONS ARE FROM FACE OF STUD U.N.O.
   MINIMUM DOUBLE JOIST UNDER INTERIOR NON-LOAD BEARING WALLS.
- CANTILEVERS, OVER BEAMS, AND DOOR JAMBS SHALL BE BLOCKED.
   CEILING JOISTS SHALL BE 2x6 @ 16" O.C. U.N.O.
   WALL CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL
- LOADS IMPOSED ACCORDING TO IRC R301.

  7. EXTERIOR WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IRC
- 602 & FIGURES R602.3(1) AND R602.3(2).

  8. ANY WOOD MEMBERS IN CONTACT WITH CONCRETE OR MASONRY (OR THE FURRING THEY ARE ATTACHED TO) SHALL BE OF DECAY RESISTANT
- MATERIAL.

  9. INTERIOR NON-LOAD BEARING WALLS SHALL BE ISOLATED FROM THE FLOOR FRAMING ABOVE UNLESS THE INTERIOR NON-LOAD BEARING
- WALL RESTS DIRECTLY ON A FOOTING.

  10. SOLID BLOCKING BETWEEN JOISTS AT 48" O.C. AND EXTEND BLOCKING
- ONE JOIST BAY PAST EACH SIDE OF KITCHEN ISLAND
- 11. DOUBLE JOIST UNDER KITCHEN ISLAND AND TUBS12. ALL JOIST HANGERS TO BE SIMPSON LUS HANGERS UNO

INTERIOR LOAD BEARING WALL

### WALL BRACING NOTES:

- 1. WALL BRACING IS DESIGNED IN ACCORDANCE WITH IRC R602.10
- 2. BRACING METHODS SHALL BE PER PLAN AND SHALL BE CONSTRUCTED IN CONFORMANCE WITH 2018 IRC R602.10.4 AND R602.10.5
- 3. FOR METHOD CS-WSP STRUCTURAL PANEL SHEATHING SHALL BE INSTALLED ON ALL SHEATHABLE SURFACES ON ONE SIDE OF THE BRACED WALL LINE INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS. END
- CONDITIONS SHALL MEET THE REQUIREMENTS OF R602.10.7 AND DETAIL 9-S400.

  4. ALL HORIZONTAL PANEL JOINTS SHALL OCCUR OVER AND BE
  NAILED TO COMMON FRAMING OR BLOCKING WITH AN
- APPROPRIATE PANEL EDGE-NAILING SCHEDULE IN ACCORDANCE WITH IRC R602.10.4.4

  5. INTERIOR FINISH OF EXTERIOR WALLS SHALL BE MINIMUM 1/2"

GYPSUM BOARD INSTALLED ON THE INTERIOR SIDE.

### BRACING METHODS

BRACING CS-WSP PER IRC R602.10

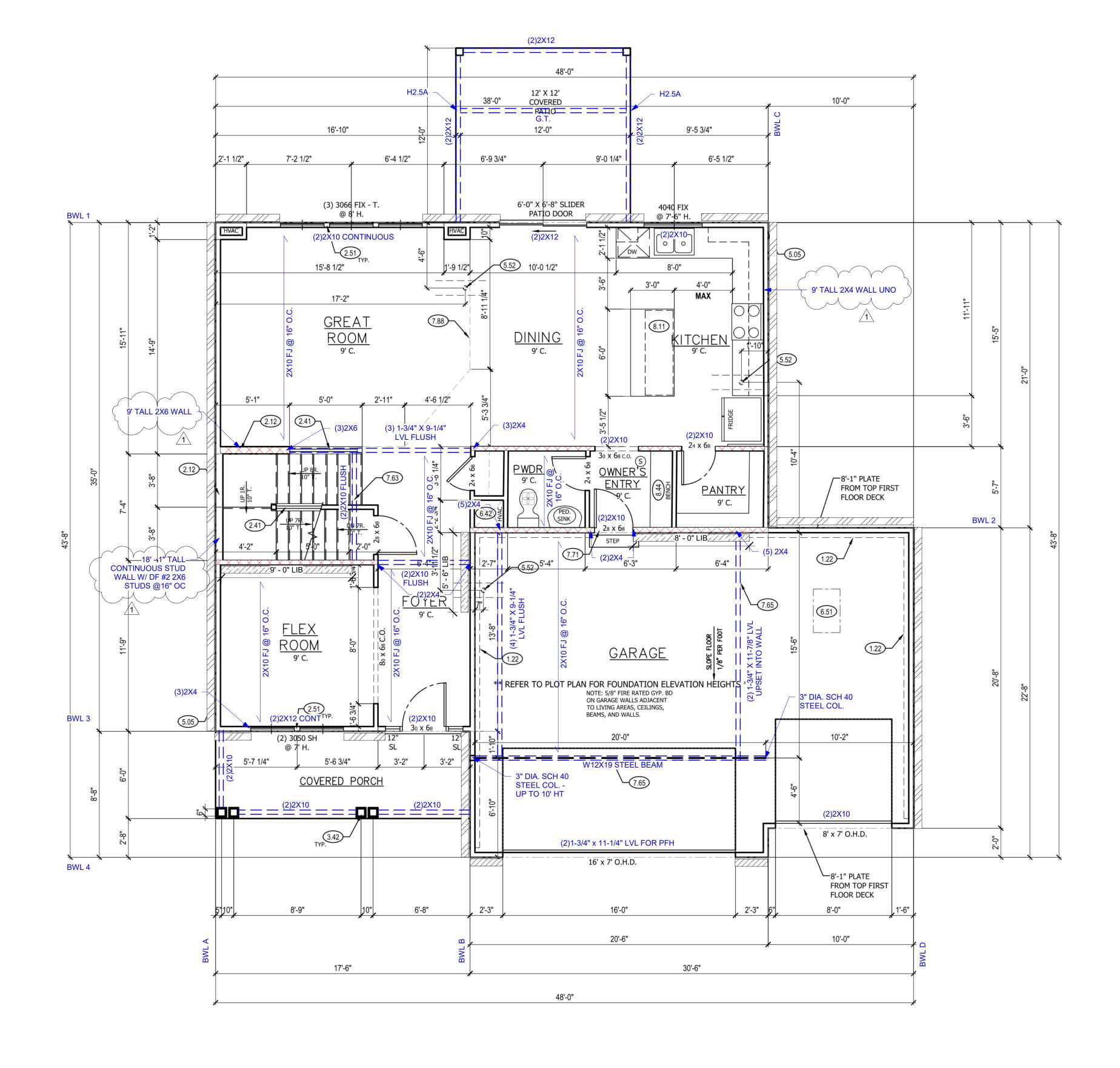
BRACING LIB PER IRC R602.10

MINIMUM LIB LENGTH PER 2018 IRC TABLE R602.10.5:

• 55" - 8' TALL WALL HEIGHT

62" - 9' TALL WALL HEIGHT
69" - 10' TALL WALL HEIGHT

BRACING PFH PER IRC R602.10.6.2



#### IRC TABLE N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (PARTIAL) AND ENERGY CONSERVATION CODE COMPLIANCE CEILING AND VAULTS WOOD FRAME CLIMATE | FENESTRATION | SKYLIGHT U-FACTOR U-FACTOR FENESTRATION ATTICS FLOOR BASEMENT | SLAB R-VALUE | CRAWL SPACE | DUCTWORK WALL R-VALUE | WALL R-VALUE | & DEPTH | WALL R-VALUE | R-VALUE R-VALUE SHGC R-VALUE R-VALUE 4 EXCEPT 20 OR 13+5H 10, 2 FT 10/13 MARINE

MAIN FLOOR PLAN

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

### MAIN FLOOR PLAN NOTES

- 1.22 EXPOSED TOP OF FOUNDATION WALL.
- 2.12 2X6 STUD WALL
- 2.32 INSULATE CANTILEVER AS REQUIRED PRIOR TO BLOCKING
- 2.41 CURB STAIR SYSTEM WITH OPEN HANDRAILS
- 2.51 3 STUDS BETWEEN WINDOW UNITS
- 3.42 (2) 6X6 CEDAR POSTS. 1X6 TRIM AT BASE. 1X4 TRIM AT TOP. SPACE 10" O.C.
- 5.05 HOSE BIBB
- 5.52 PLUMBING FLANGE ABOVE. HEADER ACROSS JOISTS AS NEEDED.
- 6.42 HVAC FLOOR OPENING. HEADER OFF FLOOR JOISTS
  AS REQUIRED. BUMP TRUSSES AS NECESSARY FOR
  HVAC ACCESS.
- 6.51 1'-10"X3'-0" MINIMUM ATTIC ACCESS WITH 3/4" BACKER BOARD AND 2 LATCHES. BUMP TRUSSES FOR ATTIC ACCESS.
- 7.63 CLIP CEILING FOR STAIRS ABOVE
- 7.65 LINE OF FLOOR ABOVE
- 7.71 20 MINUTE FIRE RATED SOLID CORE WITH SELF-CLOSING HINGES
- 7.88 CHANGE IN FLOORING MATERIAL
- 8.11 24" CABINET + 12" OVERHANG FLAT ISLAND. VERIFY LOCATION WITH PERSONAL BUILDER.
- 8.44 BENCH WITH COAT HOOKS

GENERAL NOTES

PROTECTION.

PER VENDOR.

REQUIREMENTS.

WINDOWS TO COMPLY WITH IRC R312.2 FOR FALL

ALL INTERIOR NON-LOAD BEARING, NON-BRACED,

NON-CABINET WALLS ARE ALLOWED AT 24" O.C.

TRUSSES UNLESS NOTED OTHERWISE.

ALL EXTERIOR WALLS, INTERIOR BEARING WALLS, AND INTERIOR BRACED WALLS ARE AT 16" O.C. UNLESS NOTED

ROOF AND CEILING FRAMING ARE PRE-ENGINEERED WOOD

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY

PROVIDE BLOCKING AT ALL CEILING JUMPS FOR INSULATION.

SMOKE AND CARBON MONOXIDE DETECTORS SHOW ON PLANS ARE TO BE CONSIDERED RECOMMENDATIONS ONLY. FINAL

SMOKE AND CARBON MONOXIDE DETECTORS TO BE INSTALLED

2X6 EXTERIOR WALL OVER 12' SHALL BE DOUGLAS FIR #2.

PLACEMENT IS TO BE DETERMINED BY MUNICIPAL

ACCORDING TO MUNICIPALITY CODE REQUIREMENTS.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER

HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE

SUMMIT HOMES

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ADDRESS: 1617 SW BUCKTHORN ST LEE'S SUMMIT, MO

WINFIELD
FARMHOUSE
HAWTHORN RIDGE #20
4 BEDS, 3.5 BATHS

PROFESSIONAL SEAL:



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EVERSTEAD 3741 NE TROON DR. LEES SUMMIT, MO 64064 816-399-4901

VERSION:

ISSUE DATE:

01.30.24

SHEET NUMBER:

**A4.0** 

RELEASE FOR CONSTITUCTION
AS NOTED ON PLANS
PEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/26/2024 3:08:59

### **GENERAL PLAN NOTES**

- ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE.
- ALL DIMENSIONS ARE FROM FACE OF STUD U.N.O. MINIMUM DOUBLE JOIST UNDER INTERIOR NON-LOAD BEARING WALLS.
- CANTILEVERS, OVER BEAMS, AND DOOR JAMBS SHALL BE BLOCKED. CEILING JOISTS SHALL BE 2x6 @ 16" O.C. U.N.O.
- WALL CONSTRUCTION SHALL BE CAPABLE OF ACCOMMODATING ALL LOADS IMPOSED ACCORDING TO IRC R301.
- EXTERIOR WALLS SHALL BE CONSTRUCTED IN ACCORDANCE WITH IRC 602 & FIGURES R602.3(1) AND R602.3(2).
- ANY WOOD MEMBERS IN CONTACT WITH CONCRETE OR MASONRY (OR THE FURRING THEY ARE ATTACHED TO) SHALL BE OF DECAY RESISTANT MATERIAL
- INTERIOR NON-LOAD BEARING WALLS SHALL BE ISOLATED FROM THE FLOOR FRAMING ABOVE UNLESS THE INTERIOR NON-LOAD BEARING WALL RESTS DIRECTLY ON A FOOTING.
- SOLID BLOCKING BETWEEN JOISTS AT 48" O.C. AND EXTEND BLOCKING ONE JOIST BAY PAST EACH SIDE OF KITCHEN ISLAND
- DOUBLE JOIST UNDER KITCHEN ISLAND AND TUBS ALL JOIST HANGERS TO BE SIMPSON LUS HANGERS UNO

INTERIOR LOAD BEARING WALL

### **WALL BRACING NOTES:**

- WALL BRACING IS DESIGNED IN ACCORDANCE WITH IRC R602.10
- BRACING METHODS SHALL BE PER PLAN AND SHALL BE
- CONSTRUCTED IN CONFORMANCE WITH 2018 IRC R602.10.4 AND R602.10.5 FOR METHOD CS-WSP STRUCTURAL PANEL SHEATHING SHALL BE INSTALLED ON ALL SHEATHABLE SURFACES ON ONE SIDE OF THE BRACED WALL LINE INCLUDING AREAS ABOVE AND BELOW OPENINGS AND GABLE END WALLS. END

CONDITIONS SHALL MEET THE REQUIREMENTS OF R602.10.7 AND DETAIL 9-S400.

- ALL HORIZONTAL PANEL JOINTS SHALL OCCUR OVER AND BE NAILED TO COMMON FRAMING OR BLOCKING WITH AN
- APPROPRIATE PANEL EDGE-NAILING SCHEDULE IN ACCORDANCE WITH IRC R602.10.4.4
- INTERIOR FINISH OF EXTERIOR WALLS SHALL BE MINIMUM 1/2" GYPSUM BOARD INSTALLED ON THE INTERIOR SIDE.

### **BRACING METHODS**

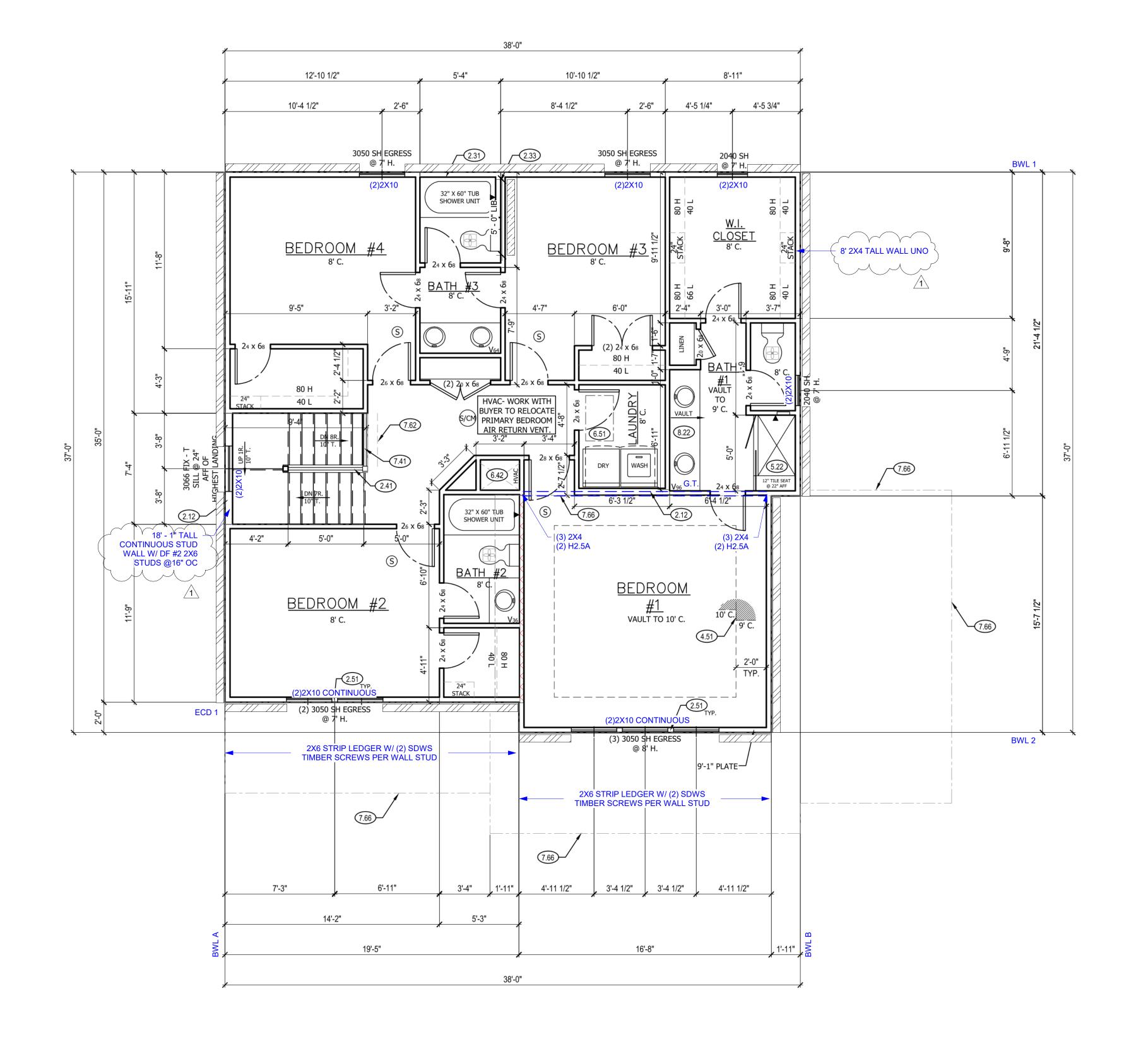
BRACING CS-WSP PER IRC R602.10

BRACING LIB PER IRC R602.10 MINIMUM LIB LENGTH PER 2018 IRC TABLE R602.10.5:

55" - 8' TALL WALL HEIGHT 62" - 9' TALL WALL HEIGHT

69" - 10' TALL WALL HEIGHT

BRACING PFH PER IRC R602.10.6.2



#### IRC TABLE N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (PARTIAL) AND ENERGY CONSERVATION CODE COMPLIANCE GLAZED CEILING AND VAULTS WOOD FRAME FLOOR BASEMENT SLAB R-VALUE CRAWL SPACE DUCTWORK CLIMATE FENESTRATION SKYLIGHT FENESTRATION ATTICS U-FACTOR U-FACTOR SHCC WALL R-VALUE WALL R-VALUE & DEPTH WALL R-VALUE R-VALUE ZONE R-VALUE SHGC R-VALUE 4 EXCEPT 20 OR 13+5H MARINE

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

UPPER FLOOR PLAN NOTES

- 2.12 2X6 STUD WALL
- 2.31 SIX SIDED TUB ASSEMBLY INCLUDING THERMOPLY ON EXTERIOR WALL TO 2" ABOVE TOP OF TUB DECK OR TUB/SHOWER UNIT
- 2.33 INSTALL FULL WALL HEIGHT THERMOPLY INSULATION BEFORE FRAMING SECONDARY 2X4 WALL FOR PLUMBING.
- 2.41 CURB STAIR SYSTEM WITH OPEN HANDRAILS
- 2.51 3 STUDS BETWEEN WINDOW UNITS
- 4.51 SINGLE BOX VAULT
- 5.22 TILE BASE WITH TILE WALLS. SEE DETAIL.
- 6.42 HVAC FLOOR OPENING. HEADER OFF FLOOR JOISTS AS REQUIRED. BUMP TRUSSES AS NECESSARY FOR HVAC ACCESS.
- 6.51 1'-10"X3'-0" MINIMUM ATTIC ACCESS WITH 3/4" BACKER BOARD AND 2 LATCHES. BUMP TRUSSES FOR ATTIC ACCESS.
- 7.41 OPEN HANDRAILS
- 7.62 DASHED LINE REPRESENTS STAIRS BELOW
- 7.66 LINE OF FLOOR BELOW
- 8.22 CONTINUOUS FLAT VANITY

CPG DBA

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**VERSION:** 

WINDOWS TO COMPLY WITH IRC R312.2 FOR FALL

GENERAL NOTES

PROTECTION.

ALL EXTERIOR WALLS, INTERIOR BEARING WALLS, AND INTERIOR BRACED WALLS ARE AT 16" O.C. UNLESS NOTED

ALL INTERIOR NON-LOAD BEARING, NON-BRACED, NON-CABINET WALLS ARE ALLOWED AT 24" O.C.

ROOF AND CEILING FRAMING ARE PRE-ENGINEERED WOOD TRUSSES UNLESS NOTED OTHERWISE.

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY PER VENDOR.

PROVIDE BLOCKING AT ALL CEILING JUMPS FOR INSULATION.

2X6 EXTERIOR WALL OVER 12' SHALL BE DOUGLAS FIR #2.

SMOKE AND CARBON MONOXIDE DETECTORS SHOW ON PLANS ARE TO BE CONSIDERED RECOMMENDATIONS ONLY. FINAL PLACEMENT IS TO BE DETERMINED BY MUNICIPAL REQUIREMENTS.

SMOKE AND CARBON MONOXIDE DETECTORS TO BE INSTALLED ACCORDING TO MUNICIPALITY CODE REQUIREMENTS.

WINDOW SIZES ARE WRITTEN IN FEET AND INCHES PER INDUSTRY STANDARDS. EX: 3050 SH = 3'-0" X 5'-0" SINGLE

HUNG, 3066 FIX = 3'-0" X 6'-6" FIXED.

ISSUE DATE: 01.30.24

SHEET NUMBER:

TRUSS FRAMED ROOF NOTES

I. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE.

DESIGNED FOR LIGHT ROOF COVERING, UNO. SEE GOOD FOR MINIMUM LOADING.

ALL EXTERIOR AND/OR LOAD BEARING WALL HEADERS SHALL BE MIN. (2) #2 2X10 UNO.
 CONSULT ENGINEER IF TRUSSES BEAR ON INTERIOR WALLS SHOWN AS NON-LOAD

5. PROVIDE 2X SOLID BLOCKING SUPPORT BELOW ALL POINT LOADS CONTINUOUS TO BEARING STRUCTURE AND/OR FOUNDATION BELOW.

6. WOOD TRUSSES SHALL BE IN ACCORDANCE WITH IRC 802.10.

 CONSULT ENGINEER IF TRUSSES BEAR ON INTERIOR WALLS SHOWN AS NON-LOAD BEARING ON APPROVED PRINTS.

 GIRDER TRUSSES MUST HAVE LOAD CARRIED DOWN TO THE FOUNDATION OR LOAD SUPPORTING MEMBER. STUD PACK / COLUMN SHOWN ON PLANS.
 ROOF COVERING SHALL BE ASPHALT SHINGLES AND SHALL COMPLY WITH IRC 2018

10. MINIMUM ROOF SLOPE FOR ASPHALT SHINGLES SHALL BE 2:12.
 11. ROOF SLOPES IN BETWEEN 4:12 AND 2:12 SHALL REQUIRE DOUBLE UNDERLAYMENT IN

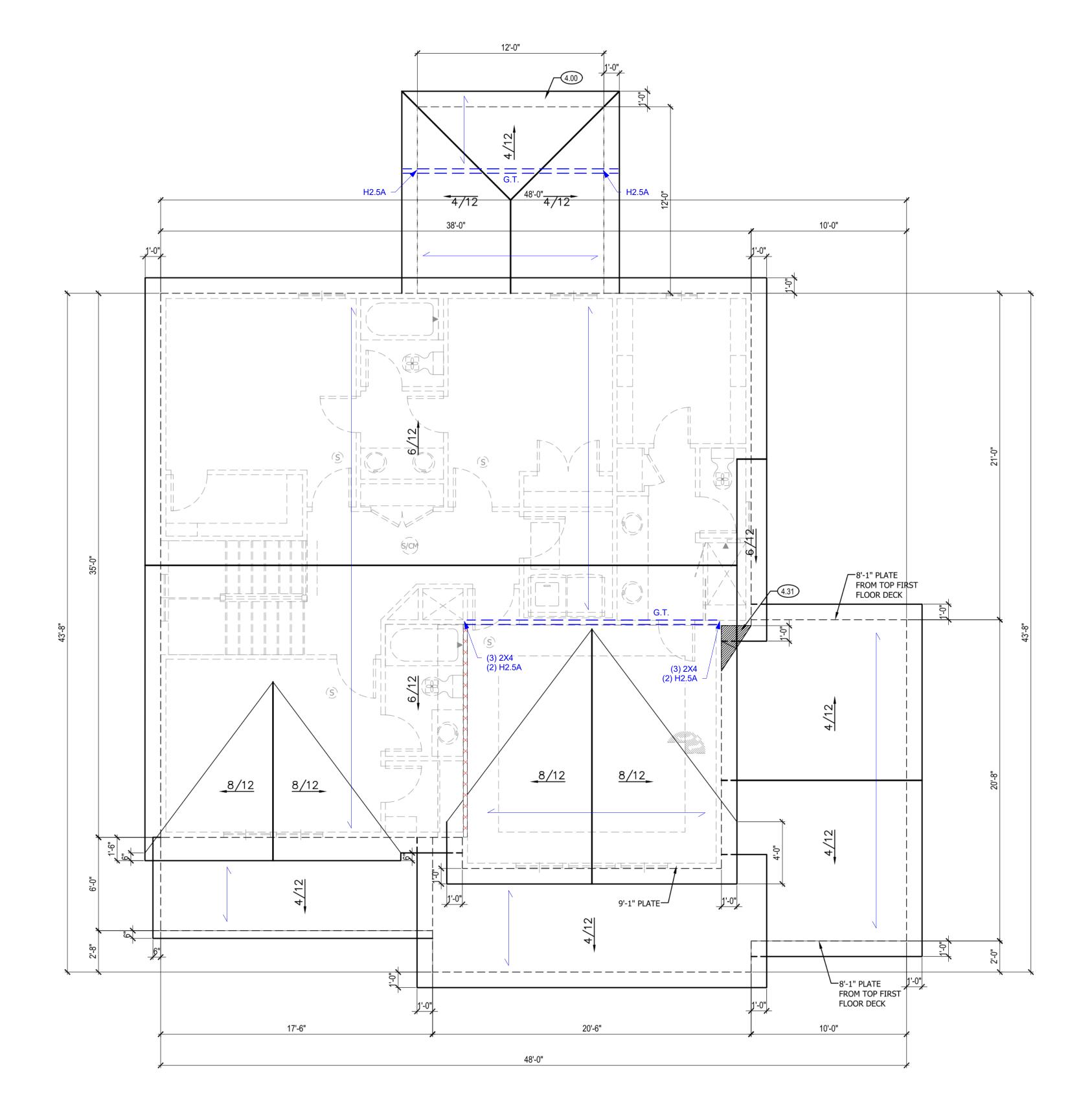
ACCORDANCE WITH IRC 2018 TABLE R905.1.1(2).

12. EVERSTEAD STRUCTURAL SCOPE ENDS AT TOP PLATE FOR ROOF TRUSSES.

TRUSS DIRECTION

GIRDER TRUSS LOCATION

INTERIOR LOAD BEARING WALL



### **ROOF PLAN NOTES**

- 4.00 COVERING WILL HAVE 1 ROOF VENT AND 4 SOFFIT VENTS
- 4.11 MINIMUM ROOFING COMPOSITION— 30 YR COMPOSITE SHINGLES ON 15# FELT ON 1/2" OSB SHEATHING OR AS REQUIRED BY CODE.
- 4.31 BUILD CRICKET VALLEY AWAY FROM INTERSECTION FOR POSITIVE DRAINAGE.



120 SE 30TH ST. LEE'S SUMMIT, MO 64082 816-246-6700

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ADDRESS: 1617 SW BUCKTHORN ST LEE'S SUMMIT, MO

WINFIELD
FARMHOUSE
HAWTHORN RIDGE #20
4 BEDS, 3.5 BATHS

PROFESSIONAL SEAL:



EVERSTEAD IS RESPONSIBLE FOR STRUCTURAL SPECIFICATIONS ONLY. ARCHITECTURAL PLANS WERE PROVIDED BY OTHERS.

EVERSTEAD 3741 NE TROON DR. LEES SUMMIT, MO 64064 816-399-4901

VERSION:

ISSUE DATE:

01.30.24

SHEET NUMBER:

A6.0

 $\frac{\text{RDF} \text{PLAN}}{\text{SCALE:} 1/4' = 1'-0'}$ 

PROVIDE FOAM INSULATION AT EXTERIOR WHERE MAIN LEVEL ROOF LINE MEETS UPPER LEVEL WALLS.

ROOF AND CEILING FRAMING ARE PRE-ENGINEERED ROOF

ASPHALT SHINGLES MIN 2/12. FLASH ALL PENETRATIONS AND

ENCLOSED ATTICS SHALL HAVE CROSS VENTILATION FOR EACH

SEPARATE SPACE BY VENTILATING OPENING PROTECTED AGAINST THE ENTRANCE OF RAIN OR SNOW. VENTILATING OPENINGS SHALL BE PROVIDED WITH CORROSION RESISTANT WIRE MESH, WITH  $\frac{1}{8}$ " TO  $\frac{1}{4}$ " OPENINGS. THE TOTAL FREE

VENTILATING AREAS SHALL NOT BE LESS THAN  $\frac{1}{150}$  OF THE AREAD OF SPACE VENTILATED, EXCEPT WHERE THE

BUILD CRICKET VALLEY AWAY FROM INTERSECTION FOR

POSITIVE DRAINAGE. SEE FRAMING SPECIFICATIONS FOR

DIMENSIONAL LUMBER IS LABELED PER INDUSTRY STANDARD TERMINOLOGY. ACTUAL LUMBER SIZING IS EXPECTED TO VARY

HVAC DUCTWORK RUNNING THROUGH ATTIC SHALL BE HUNG FROM ABOVE TO ALLOW COMPLETE INSULATION SURROUND.

PROVIDE BLOCKING AT ALL CEILING JUMPS FOR INSULATION.

VENTILATORS ARE LOCATED IN THE UPPER PORTION OF THE SPACE TO VENTILATED THE REQUIRED AREA MAY BE REDUCED

GENERAL NOTES

INTERSECTIONS.

TRUSSES.

TO 1/300.

DETAILS.

RELEASE FOR CONSTRUCTION
AS NOTED ON PLANS
REVIEW
DEVELOPMENT SERVICES
LEE'S SUMMIT, MISSOURI
02/26/2024 3:08:59

#### **GENERAL NOTES IRC 2018**

PLANS SHALL COMPLY WITH 2018 INTERNATIONAL RESIDENTIAL CODE (IRC) WITH AMENDMENTS AS ADOPTED BY THE APPROPRIATE GOVERNING JURISDICTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IF ANY CHANGES OR DEVIATIONS FROM THE PLAN ARE MADE DURING CONSTRUCTION. THE ENGINEER OF RECORD MAY REQUIRE REVISED DRAWING OR CALCULATIONS AT ITS DISCRETION. IF DISCREPANCIES ARE IDENTIFIED THE MOST CONSERVATIVE SPECIFICATION SHALL APPLY.

### A.2 LOADING ASSUMPTIONS

ROOF + CEILING (NO STORAGE) 15 PSF ROOF + CEILING (STORAGE) 20 PSF 10 PSF CEILING JOISTS (STORAGE) EXTERIOR BALCONY / DECK 10 PSF INTERIOR FLOOR (MAIN FLOOR) 15 PSF INTERIOR FLOOR (UPPER FLOORS) 10 PSF 8" THICK MASONRY WALL 96 PSF 6" THICK MASONRY WALL 72 PSF 15 PSF EXTERIOR LIGHT FRAMED WOOD WALLS INTERIOR LIGHT FRAMED WOOD WALLS 10 PSF (INTERIOR WALLS INCLUDED IN 15 PSF DEAD LOAD)

ROOF LIVE LOAD

FLOOR LIVE LOAD 40 PSF (HABITABLE) GARAGE 50 PSF WITH 2000 LB POINT LOAD STORAGE 20 PSF (UNINHABITABLE) GUARDRAIL

CONTINUOUS LINEAR MAXIMUM POINT 200 LBS

GROUND SNOW LOAD 20 PSF

VELOCITY 115 MPH **EXPOSURE CATEGORY** 

### SOIL AND SITE ASSUMPTIONS

FOUNDATION DESIGN ASSUMES MINIMUM SOIL BEARING FOR THE SITE OF 1,500 PSF (2,000 PSF FOR KANSAS CITY, MO) UNLESS OTHERWISE NOTED. CONTRACTOR TO VISUALLY INSPECT THE SITE OR PROVIDE GEOTECHNICAL INVESTIGATION TO VERIFY MINIMUM ACCEPTABLE SOIL CONDITIONS FOR CL (SILTY CLAY) AS DEFINED BY 2018 IRC. THE CONTRACTOR IS RESPONSIBLE FOR ANY SOIL CONDITION THAT DOES NOT MEET THE MINIMUM REQUIREMENTS AND FOR CONTACTING THE ENGINEER OF

ACCESSORY STRUCTURES WITH AN EAVE HEIGHT LESS THAN 10'-0" AND AN AREA LESS THAN 600 FT MAT PROVIDE A MINIMUM SOIL COVER OF 12 INCHES MEASURED FROM THE BOTTOM OF CONCRETE.

LATERAL SOIL PRESSURES UNLESS OTHERWISE NOTED

**ACTIVE** AT REST 100 PSF

SITE GRADING SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM THE STRUCTURE AT A MINIMUM OF 0.5% (6" IN THE FIRST 10'-0"). ALTERNATE APPROACHES MAY BE APPROVED IF THE ALTERNATE DESIGN IS EQUIVALENT IN EFFECTIVENESS AND PERFORMANCE, AND PROVIDES FOR POSITIVE SITE DRAINAGE.

### **FOUNDATION NOTES**

### FOUNDATION ANCHORAGE (IRC R403.1.6)

- SILL PLATES SHALL BE BOLTED TO THE FOUNDATION WALL WITH A MINIMUM 1/2" DIAMETER ANCHOR BOLTS EMBEDDED AT LEAST 7" INTO THE CONCRETE.
- BOLTS SHALL BE SPACED NO GREATER THAN 6'-0" O.C.
- THERE SHALL BE A MINIMUM OF TWO BOLTS PER PLATE SECTION, WITH A BOLT PLACED WITHIN 12" AND NOT CLOSER THAN 7 BOLT DIAMETERS OF THE END OF EACH PLATE SECTION
- A PROPERLY SIZED NUT AND WASHER SHALL BE TIGHTENED ON EACH BOLT TO THE PLATE, (NOTE: 7" EMBEDMENT + 1-1/2" SILL PLATE + 3/4" FOR NUT AND WASHER EQUALS A 9-1/4" LONG
- WALL BRACING METHODS (IRC R602) MAY REQUIRE ADDITIONAL ANCHORAGE.

# C.2 CONCRETE SLABS

- CONCRETE SLABS PLACED ON FILL MATERIAL WHICH SHALL BE COMPARED TO ENSURE UNIFORM SUPPORT OF THE SLAB AND SHALL NOT EXCEED 24" OF COMPACTED GRANULATED MATERIAL (SAND OR GRAVEL) OR 8" OF EARTH:
  - THIS MAY OCCUR AT GARAGE FLOOR FILLS, OR OVER EXCAVATED AREAS UNDER FLOOR SLABS.
  - THE DESIGN AND INSTALLATION DETAILS IN THIS DOCUMENT (WHERE APPLICABLE BASED ON SIZE AND SPACING LIMITATIONS) MAY BE USED IN LIEU OF PROVIDING A SEPARATE DESIGN.
    - STRUCTURAL SLABS EXCEEDING THE SPANS AND CONDITIONS OF THE APPROVED DETAILS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER.
- SLABS AT MAX 4'-0" OVER-DIG ADJACENT TO FOUNDATION WALL:
  - WHERE SOIL IS EXCAVATED FOR A MAXIMUM DIMENSION OF 4'-0" HORIZONTALLY ADJACENT TO A FOUNDATION WALL. THE STANDARD OVER-DIG DETAIL MAY BE USED IN LIEU OF A COMPLETE STRUCTURAL SLAB.
  - SEE "TYPICAL FOOTING/FOUNDATION WALL/STANDARD SLAB AT MAX 4'-0" OVER-DIG" DETAIL.

## VAPOR RETARDER / BARRIER (IRC R506.2.3)

A 6 MILLIMETER POLYETHYLENE OR APPROVED VAPOR RETARDER WITH JOINTS LAPPED A MINIMUM OF 6" IS REQUIRED BETWEEN THE CONCRETE FLOOR SLAB AND THE BASE COURSE OR PREPARED SUBGRADE, (NOT REQUIRED FOR GARAGE SLABS OR DETACHED UNHEATED ACCESSORY BUILDINGS).

## C.4 FOOTINGS

- THE BOTTOM OF ALL FOOTINGS SHALL EXTEND NOT LESS THAN 36" BELOW GRADE FOR FROST PROTECTION (IRC R403.1.4).
- FOOTINGS FOR FREESTANDING ACCESSORY STRUCTURES WITH AN AREA OF 600 SQ. FT. OR LESS AND AN EAVE HEIGHT OF 10'-0" OR LESS SHALL EXTEND BELOW GRADE A MINIMUM OF
- EXTERIOR WALLS, BEARING WALLS, COLUMNS AND PIERS SHALL BE SUPPORTED ON CONTINUOUS SOLID MASONRY OR CONCRETE FOOTINGS, OR APPROVED STRUCTURAL SYSTEM TO SAFELY SUPPORT THE IMPOSED LOADS AND SHALL BE SIZED AND REINFORCED IN ACCORDANCE WITH THIS STANDARD OR SHALL BE ENGINEERED DESIGN.
- FOOTINGS UNDER FOUNDATION WALLS SHALL BE CONTINUOUS AROUND THE STRUCTURE AND FROM ONE LEVEL TO THE NEXT.
- THE CONTINUOUS TRANSITIONS BETWEEN FOOTINGS AT DIFFERENT LEVELS ENCLOSING USABLE SPACE SHALL BE MADE BY APPROVED SOLID JUMPS OR SUPPORT SYSTEMS TO PROVIDE SAFE SUPPORT OF THE STRUCTURE.
- SEE "TYPICAL FOOTING/FOUNDATION WALLS/STANDARD SLAB AT MAXIMUM 4" OVER-DIG" AND "FOOTING JUMP" DETAILS.

# C.5 CONCRETE

- ALL CONCRETE CONSTRUCTION SHOULD CONFORM TO ACI 318-14 (OR ACI 332) OR 2018 IRC.
- THE MINIMUM CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE AS SPECIFIED IN IRC TABLE R402.2.

### C.5 CONCRETE (CONT.)

- CONCRETE MIX TO UTILIZE A MAXIMUM WATER-CEMENT MATERIALS RATIO OF 0.45 FOR ALL APPLICATIONS. ADMIXTURES SHALL NOT CONTAIN ANY CHLORIDES.
- CONCRETE POURED AGAINST AN EXISTING SURFACE SHOULD BE ROUGHENED TO A MINIMUM
- REBAR PLACEMENT SHALL BE AS FOLLOWS:

BEAMS, COLUMNS

- CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3.0 IN CLR CONCRETE EXPOSED TO EARTH OR WEATHER 1.5 IN CLR NOT EXPOSED TO WEATHER OR GROUND 3/4 IN CLR SLABS, WALLS, JOISTS
- CONCRETE MIX DESIGN SHALL BE 6% (±1%) AIR-ENTRAINED FOR GARAGE SLABS, FOOTINGS, WALLS, OR FLATWORK EXPOSED TO WEATHER
- SHORING AND SUPPORTING FORMWORK SHALL NOT BE REMOVED FROM HORIZONTAL MEMBERS BEFORE CONCRETE STRENGTH REACHES 70% OF STRENGTH DETERMINED BY CYLINDERS OR 28 DAYS.
- ALL FOUNDATION WALLS ENCLOSING BELOW GRADE SPACE SHALL BE DAMPPROOFED. THE DAMPPROOFING SHALL EXTEND FROM THE EDGE OF THE FOOTING TO THE FINISHED GRADE. (IRC R406.1)

#### C.6 CONCRETE WALLS WITH REINFORCEMENT STEEL

- REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 40.
- SMOOTH BARS OR WELDED WIRE FABRIC SHALL CONFORM TO ASTM 185.
- 90 DEG. HOOK SHOWN IN DRAWINGS SHALL BE STANDARD PER ACI 318-14.
- STRAIGHT EXTENSION LENGTH = 12X BAR DIA BEND DIAMETER = 12X BAR DIA.

### HOOKED DOWELS:

- HOOKED DOWELS FROM FOUNDATIONS TO WALL SHALL BE PROVIDED TO MATCH VERTICAL WALL REINFORCING AND EXTENDED TO 3" CLEAR FROM BOTTOM OF
- HOOKED DOWELS MATCH SLAB REINFORCING FROM SLAB TO WALLS OR SLAB TO
- PROVIDE (2) #5 BARS AROUND PERIMETER OF ALL SUSPENDED SLABS.
- WHERE SPLICES ARE NECESSARY IN REINFORCEMENT, THE LENGTH OF LAP SPLICE SHALL BE IN ACCORDANCE WITH TABLE R608.5.4(1) AND FIGURE R608.5.4(1). THE MAXIMUM GAP BETWEEN NONCONTACT PARALLEL BARS AT A LAP SPLICE SHALL NOT EXCEED THE SMALLER OF ONE-FIFTH THE REQUIRED LAP LENGTH AND 6 INCHES (152MM) [SEE FIGURE R608.5.4.(1)].
- TOP HORIZONTAL REINFORCEMENT SHALL BE PLACED WITHIN 12" FROM THE TOP OF THE
- HORIZONTAL WALL REINFORCEMENT SHALL TERMINATE AT THE END OF THE WALL WITH A STANDARD HOOK

#### C.7 COLD WEATHER CONCRETE

- COLD WEATHER IS DEFINED AS THREE CONSECUTIVE DAYS WHERE THE AVERAGE DAILY TEMPERATURE DROPS BELOW 40 DEGREES FAHRENHEIT AND NOT ABOVE 50 DEGREES FAHRENHEIT FOR MORE THAN HALF OF ANY ONE OF THOSE THREE DAYS.
- COLD WEATHER CONCRETE WORK SHALL CONFORM TO ACI 306.
- ALL MATERIALS AND EQUIPMENT REQUIRED FOR PROTECTION SHALL BE AVAILABLE AT THE PROJECT SITE BEFORE COLD WEATHER CONCRETING BEGINS.
- THE CONCRETE MIX DESIGN PROVIDED BY THE SUPPLIER SHALL AT A MINIMUM REACH THE AVERAGE 28 DAY MIX DESIGN COMPRESSIVE STRENGTH IN MINIMUM 72 HOURS OR 2000 PSI -WHICHEVER IS GREATER.
- THE TEMPERATURE OF CONCRETE AT PLACEMENT SHALL BE A MINIMUM OF 55 DEGREES
- THE MINIMUM CONCRETE TEMPERATURE AT THE TIME OF MIXING SHALL NOT BE BELOW 65
- ALL SNOW, ICE AND FROST MUST BE REMOVED PRIOR TO PLACING CONCRETE.
- THE CONTRACTOR SHALL PROVIDE ADEQUATE PROTECTION FOR CONCRETE AGAINST FREEZING AND MAINTAIN A CONCRETE TEMPERATURE OF 55 DEGREES FAHRENHEIT FOR A 72 HOUR PERIOD AFTER CONCRETE PLACEMENT. THIS MAY BE ACHIEVED WITH THE USE OF INSULATING BLANKETS AND/OR THE USE OF TEMPORARY HEATERS.
- GROUND TEMPERATURE AT THE TIME OF PLACEMENT OF SLAB OR FOOTINGS SHALL NOT BE LESS THAN 35 DEGREES FAHRENHEIT.
- INSULATION, FORMS AND HEATERS MAY BE REMOVED AFTER 72 HOURS.
- MAINTAIN ADEQUATE PROTECTION OF SUB GRADE AND ADEQUATE DRAINAGE AWAY FROM EXPOSED CONCRETE ELEMENT TO PREVENT FREEZING.

## C.8 FOOTNOTES

SUSPENDED SLABS

- VERTICAL REINFORCEMENT FOR CONCRETE WALLS THAT ARE NOT FULL HEIGHT AND FOR REINFORCEMENT SPACED 24" O.C. MAY BE PLACED IN THE MIDDLE OF THE WALL. OTHER WALLS SHALL HAVE VERTICAL REINFORCEMENT PLACED AS FOLLOWS:
  - 8" WALL MINIMUM 2" FROM TENSION FACE
  - 10" WALL MINIMUM 6-3/4" FROM THE OUTSIDE FACE
- EXTEND BARS TO WITHIN 8" OF THE TOP OF THE WALL
- HORIZONTAL REINFORCEMENT:
- ONE BAR SHALL BE PLACED WITHIN 12" OF THE TOP OF THE WALL
- OTHER BARS SHALL BE EQUALLY SPACED WITH SPACING NOT TO EXCEED 24" O.C. HORIZONTAL BARS SHOULD BE AS CLOSE TO THE TENSION FACE AS POSSIBLE
- (INTERIOR); AND BEHIND THE VERTICAL REINFORCEMENT (I.E. 2" FROM INSIDE FACE) SUPPLEMENTAL REINFORCEMENT AT CORNERS - PLACE 1 #4 REBAR 48" LONG AT 45 DEGREE ANGLE AT CORNERS OF OPENINGS. PLACE REINFORCEMENT WITHIN 6" OF THE EDGE OF INSIDE CORNERS.
- AT MASONRY LEDGES THE MINIMUM WALL THICKNESS SHALL BE 3-1/2". LEDGES SHALL NOT EXCEED A DEPTH OF MORE THAN 24" BELOW THE TOP OF THE WALL FOR WALL THICKNESS LESS THAN 4". PROVIDE #4 BARS AT MAXIMUM 24" O.C. TO WITHIN 8" OF THE TOP OF THE WALL.

MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE

STRAIGHT WALLS MORE THAN 5'-0" TALL AND MORE THAN 16-0" LONG SHALL BE PROVIDED WITH EXTERIOR BRACED RETURN WALLS. WALL LENGTH SHALL BE MEASURED USING INSIDE THE SHORTEST DIMENSION BETWEEN INTERSECTING WALLS (SEE TYPICAL DEAD MAN SECTION).

#### PER TABLE R402.2 MINIMUM SPECIFIED COMPRESSIVE STRENGTH (f'c) TYPE OR LOCATION OF CONCRETE FOR SEVER WEATHERING POTENTIAL CONSTRUCTION BASEMENT WALLS, FOUNDATIONS AND OTHER CONCRETE NOT 2,500 EXPOSED TO THE WEATHER BASEMENT SLABS AND INTERIOR SLABS ON 2,500 GRADE, EXCEPT GARAGE FLOOR SLABS BASEMENT WALLS, FOUNDATION WALLS, EXTERIOR WALLS AND OTHER VERTICAL CONCRETE WORK 3,000 EXPOSED TO THE WEATHER PORCHES, CARPORT SLABS AND STEPS EXPOSED TO THE WEATHER, AND GARAGE 3,500 FLOOR SLABS

4,000

### D. FRAMING/STRUCTURE

### D.1 FRAMING NOTES

1.5 IN CLR

- ALL TREATED LUMBER SIZES ARE DOUGLAS FIR-LARCH #2 UNLESS OTHERWISE NOTED
- ALL NON TREATED LUMBER OR ROT RESISTANT SIZES ARE #2 TREATED SOUTHERN YELLOW PINE UNLESS OTHERWISE NOTED.
  - ALL UNMARKED HEADERS SHALL BE A MINIMUM #2 DOUGLAS FIR-LARCH (2) 2X10 ON LOAD BEARING WALLS.
  - ALL HEADERS/BEAMS TO BEAR ON A MINIMUM OF (2) 2X4 JACK STUDS UNO. KING STUDS
  - SHALL BE PROVIDED AT ALL HEADERS IN ACCORDANCE WITH IRC TABLE R602.7.5.
- DOUBLE JOIST UNDER PARALLEL INTERIOR NON-LOAD BEARING WALLS.

CANTILEVERS, OVER BEAMS AND DOOR JAMBS SHALL BE BLOCKED.

- ANY WOOD MEMBER IN CONTACT WITH CONCRETE OR MASONRY (OR THE FURRING THEY ARE ATTACHED TO) SHALL BE OF DECAY RESISTANT MATERIAL.
- IN BEARING WALLS, STUDS WHICH ARE NOT MORE THAN 10'-0" FEET IN LENGTH SHALL BE SPACED NOT MORE THAN IS SPECIFIED IN IRC TABLE R602.3(5) FOR THE CORRESPONDING STUD SIZE. THOSE STUDS GREATER THAN 10'-0" FEET IN LENGTH SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT.
- ALL WOOD STRUCTUAL PANELS SHALL CONFORM TO THE MOST CURRENT APPLICABLE SPECIFICATION AND SUPPLEMENTS OF THE APA OR EQUIVALENT. ALL PANEL END JOINTS SHALL OCCUR OVER SUPPORTS AND SHALL BE STAGGERED ONE HALF PANEL LENGTH FROM ADJACENT PANELS. PROVIDE 1/8" INCH SPACE AT PANEL ENDS. WOOD STRUCTURAL PANEL MOISTURE CONTENT SHALL BE LESS THEN OR EQUAL TO 16%.
- ALL STRUCTURAL FRAMING MEMBERS SHALL BE AS FOLLOWS UNO:
- 2X4 OR 2X6 EXTERIOR WALLS AS PERMITTED BY CODE: DOUGLAS FIR-LARCH #2 (DF-L #2) EXTERIOR WALLS TO BE CONTINUOUSLY SHEATHED WITH MIN. 7/16" OSB
- EXTERIOR OSB SHEATHING TO BE FASTENED WITH 8D COMMON NAILS; 6" O. C. AT PANEL EDGES, 12" O. C. IN THE FIELD.
- 2X4 OR 2X6 INTERIOR LOAD BEARING WALLS DF-L #2 OR BETTER. LOAD BEARING, BRACED, AND SHEAR WALLS, REQUIRE A DOUBLE TOP PLATE. THE TOP PLY BEING FIELD APPLIED WITH A MIN. 24" LAP SPLICE
- FIELD APPLIED LAP SPLICED TOP PLATE: DF-L #2 OR BETTER LOAD BEARING HEADERS PER HEADER SCHEDULE OR AS SHOWN ON FRAMING PLANS.
- LOAD BEARING HEADERS TO BE FABRICATED WITH THE HEADER AT THE UNDER SIDE OF THE TOP PLATE WITH CRIPPLE FRAMING BELOW AS NEEDED UNO.
- INTERIOR NON LOAD BEARING WALLS: DF-L #2 STUD GRADE OR BETTER DOUBLE TOP PLATE IS NOT REQUIRED FOR INTERIOR NON LOAD BEARING WALLS HEADER CRIPPLE SPACING CAN BE 24" O. C. REGARDLESS OF WALL STUD SPACING FOR NON LOAD BEARING WALLS
- CRIPPLE FRAMING NOT REQUIRED ABOVE OR BELOW OPENINGS WHERE THE VERTICAL CLEAR HEIGHT IS 22" OR LESS FOR NON-LOAD BEARING WALLS.

ALL LUMBER IN CONTACT WITH MASONRY OR OTHERWISE EXPOSED TO WEATHERING TO BE

- PRESSURE TREATED (PT). FIELD APPLIED SILL PLATE: PT DF-L #2
- BOTTOM (SOLE) PLATE IN CONTACT WITH MASONRY: PT DF-L #2
- ALL PRESSURE TREATED WOOD SHALL BE PRESSURE TREATED WITH WATER-BORNE PRESERVATIVES. PRESSURE TREATMENT SHALL COMPLY WITH THE REQUIREMENTS OF AWPB, C2, LP-22, AND IRC SECTION R317. ALL LUMBER < 8" ABOVE THE FINISHED GRADE SHALL BE PRESSURE TREATED.
- FASTENERS, INCLUDING NUTS AND WASHERS, FOR PRESSURE TREATED WOOD SHALL BE HOT-DIPPED, ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER. COATING TYPES AND WEIGHTS FOR CONNECTORS IN CONTACT WITH PRESSURE TREATED WOOD SHALL BE IN ACCORDANCE WITH THE CONNECTOR MANUFACTURER'S RECOMMENDATIONS. IN THE ABSENCE OF MANUFACTURER'S RECOMMENDATIONS, A MIN. OF ASTM A653 TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED. FOR EXCEPTIONS, REFER TO R317.3.1.

ENGINEERED LUMBER MIIMUM DESIGN REQUIREMENTS				
	F <sub>b</sub> (PSI)	E (PSI)	F <sub>v</sub> (PSI)	
LVL	3100	1.9X10 <sup>6</sup>	285	
DOUGLAS FIR-LARCH	900	1.6X10 <sup>6</sup>	180	
GLU-LAM	2400	1.8X10 <sup>6</sup>	230	

## D.2 STRUCTURAL STEEL

- STEEL DESIGN, FABRICATION, AND ERECTION SHALL CONFORM WITH AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- STEEL PIPE COLUMNS SHALL BE A MINIMUM OF SCHEDULE 40.
- STEEL GRADE AND SPECIFICATION SHALL BE AS FOLLOWS: **HOLLOW STRUCTURAL SECTIONS:** CHANNELS, PLATES, ANGLES, AND COLUMNS:
  - WIDE FLANGES: STEEL PIPE COLUMN ANCHOR RODS:
- ASTM A500 ( $F_Y = 46 \text{ KSI}$ ) ASTM A36 ( $F_Y = 36 \text{ KSI}$ ) ASTM A992 ( $F_Y = 50 \text{ KSI}$ ) ASTM A53 GR.B ( $F_Y = 35$  KSI) ASTM F1554 (F<sub>Y</sub> = 36 KSI)
- BOLTS SHALL CONFORM TO ASTM A307
- WELDING SHALL CONFORM TO THE AWS CODES FOR BUILDING CONSTRUCTION, WELDING SHALL BE PERFORMED IN ACCORDANCE TO WELDING PROCEDURE SPECIFICATIONS (WPS) AS REQUIRED IN AWS D1.1. THE WPS VARIABLES SHALL BE WITHIN THE PARAMETERS ESTABLISHED BY THE FILLER-METAL MANUFACTURER.
- WELDS SHALL USE E70XX ELECTRODES AND A MINIMUM OF 3/16" SIZE UNLESS NOTED
- ALL WELDS SPECIFIED AS FIELD WELDS MAY BE SHOP WELDED AT THE CONTRACTOR'S OPTION IF ERECTION CAN STILL BE EXECUTED.

## E. <u>GLAZING</u>

- GLAZING IN HAZARDOUS LOCATIONS AS IDENTIFIED IN IRC R308.4 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 OF THE GLAZING IS WITHIN A 24" ARC OF EITHER VERTICAL EDGE OF THE DOOR IN A CLOSED POSITION AND WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60" ABOVE THE FLOOR.
  - GLAZING ADJACENT TO THE LANDING AT THE BOTTOM OF THE STAIRWAY WHERE THE GLAZING IS LESS THAN 36 INCHES ABOVE THE LANDING AND WITHIN A 60 IN HORIZONTAL ARC LESS THAN 180 DEGREES FROM THE BOTTOM TREAD NOSING SHALL BE CONSIDERED A HAZARDOUS LOCATION.

WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, SHOWERS, AND INDOOR OR

GLAZING IN WALLS, ENCLOSURES OR FENCES CONTAINING OR FACING HOT TUBS, SPAS,

OUTDOOR SWIMMING POOLS WHERE THE BOTTOM EXPOSED EDGE OF THE GLAZING IS

LESS THAN 60" MEASURED VERTICALLY ABOVE ANY STANDING OR WALKING SURFACE. WINDOW FALL PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH IRC R312.2.

### F. <u>STAIRWAYS</u>

STAIRWAYS SHALL PROVIDE A MAXIMUM 7-3/4" RISE AND A MINIMUM 10" RUN.

EDGES OF THE TREADS.

- REQUIRED GUARD RAILS AT OPEN-SIDED WALKING SURFACES, INCLUDING STAIRS, PORCHES, BALCONIES, OR LANDINGS, SHALL NOT BE LESS THAN 36" HIGH MEASURED VERTICALLY ABOVE THE ADJACENT WALKING SURFACE.
  - EXCEPTION (1): GUARD RAILS ON THE OPEN SIDES OF STAIRS SHALL HAVE A HEIGHT NOT LESS THAN 34" MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING
  - EXCEPTION (2): WHERE THE TOP OF THE GUARD ALSO SERVES AS A HANDRAIL ON THE OPEN SIDES OF STAIRS, THE TOP OF THE GUARD SHALL NOT BE LESS THAN 34" AND NOT MORE THAN 38" MEASURED VERTICALLY FROM A LINE CONNECTING THE LEADING EDGES OF THE TREADS.
- GUARD RAIL ENCLOSURES SHALL HAVE INTERMEDIATE RAILS OF ORNAMENTAL PATTERNS THAT DO NOT ALLOW PASSAGE OF A SPHERE 4" IN DIAMETER.
- EACH STAIRWAY OF FOUR OR MORE RISERS SHALL PROVIDE A CONTINUOUS HANDRAIL ON AT LEAST ONE SIDE BETWEEN 34" AND 38" ABOVE THE NOSING OF THE TREADS.
- HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION OF 1-1/4" TO 2" OR OTHER APPROVED GRASPABLE SHAPE PER IRC R311.7.8.5.
- MINIMUM 6'-8" OF HEADROOM CLEARANCE IS REQUIRED IN STAIRWAYS.
- ENCLOSED ACCESSIBLE SPACE UNDER STAIRWAYS SHALL HAVE WALLS AND THE UNDERSIDE OF THE STAIR AND LANDING PROTECTED WITH 1/2" GYPSUM BOARD ON ENCLOSURE PER IRC

#### **GARAGES**

- THE GARAGE FLOOR SHALL SLOPE 1/8" PER 12" TO DRAIN OR VEHICLE ENTRY DOORWAYS.
- DOORS BETWEEN THE GARAGE AND THE DWELLING TO BE: SELF CLOSING, MINIMUM 1-3/8" SOLID CORE OR HONEYCOMBED STEEL DOOR, AND AT LEAST 20 MINUTE FIRE RATED.
- THE GARAGE SHALL BE SEPARATED FROM THE DWELLING AND ITS ATTIC AREAS BY A MINIMUM 1/2" GYPSUM BOARD APPLIED TO THE GARAGE SIDE WHERE A FLOOR/CEILING SPACE IS
- THE GARAGE COLUMNS AND BEAMS SUPPORTING THE SEPARATION SHALL ALSO BE PROTECTED WITH 1/2" GYPSUM BOARD OR EQUIVALENT.
- WHERE HABITABLE SPACE OCCURS ABOVE THE GARAGE FLOOR/CEILING ASSEMBLY SHALL BE PROTECTED WITH A MINIMUM 5/8" TYPE "X" GYPSUM BOARD ON THE GARAGE CEILING.
- GARAGE DOOR AND FRAME THE "H" FRAME FOR THE ATTACHMENT OF THE TRACK AND COUNTER BALANCE SHALL CONSIST OF THE FOLLOWING: 2X6 VERTICAL JAMBS RUNNING FROM THE FLOOR TO CEILINGS, ATTACHED WITH 1-3/4" X 0.120" NAILS AT 7" O.C. STAGGERED WITH (7) 3-1/4" X 0.120" NAILS THROUGH THE JAMB INTO THE HEADER, 2X8 HEADER (MINIMUM) FOR ATTACHMENT OF COUNTER BALANCE SYSTEM.
- GARAGE VEHICLE DOORS AND FRAMES SHALL BE DESIGNED AND INSTALLED TO MEET THE 115 MPH WIND LOAD REQUIREMENT OF DASMA 108 AND ASTM E330-96 (IRC R301.2.1).

- THE ROOF IS DESIGNED FOR 20 PSF GROUND SNOW LOAD (MINIMUM)
- PROVIDE 2X SOLID BLOCKING SUPPORT BELOW ALL POINT LOADS CONTINUOUS TO BEARING STRUCTURE AND/OR FOUNDATION BELOW.
- ROOF IS ENGINEERED TO COMPLY WITH IRC R802.
- ROOF TO BE ASPHALT SHINGLES UNO AND SHALL COMPLY WITH IRC 2018 SECT. R905.2
- MINIMUM ROOF SLOPE FOR ASPHALT SHINGLES SHALL BE 2:12.
- ROOF SLOPES IN BETWEEN 2:12 AND 4:12 SHALL REQUIRE DOUBLE UNDERLAYMENT IN ACCORDANCE WITH IRC 2018 SECTION R905.2.2: "APPLY A 19-INCH (483MM) STRIP OF UNDERLAYMENT FELT PARALLEL TO AND STARTING AT THE EAVES, FASTENED SUFFICIENTLY TO HOLD IN PLACE. STARTING AT THE EAVE, APPLY 36-INCH-WIDE (914 MM) SHEETS OF UNDERLAYMENT, OVERLAPPING SUCCESSIVE SHEETS 19

INCHES (483MM), AND FASTENED SUFFICIENTLY TO HOLD IN PLACE, END LAPS SHALL BE 4-INCH

(102MM) AND SHALL BE OFFSET BY 6 FEET (1829 MM). DISTORTIONS IN THE UNDERLAYMENT

# SHALL NOT INTERFERE WITH THE ABILITY OF THE SHINGLES TO SEAL."

### SAFETY REQUIREMENTS I.1 EMERGENCY EGRESS AND RESCUE

- PROVIDE ONE WINDOW FROM EACH BEDROOM THAT HAS A MINIMUM OPENABLE AREA OF 5.7
- SQ. FT. WITH A MINIMUM OPENABLE HEIGHT OF 24" AND WIDTH OF 20". BASEMENT EGRESS TO MEET THE REQUIREMENTS OF IRC R310.

# I.2 SMOKE AND CARBON MONOXIDE SAFETY (PER IRC R314)

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

## CARBON MONOXIDE DETECTORS SHALL BE INSTALLED AS REQUIRED PER IRC R315.

- J. <u>ENERGY REQUIREMENTS</u> LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE SHALL BE IC-RATED, LEAKAGE
  - PROGRAMMABLE THERMOSTATS SHALL BE INSTALLED AS REQUIRED PER IRC N1103.1.1.

RATED AND SEALED TO THE GYPSUM WALLBOARD AS REQUIRED PER IRC N1102.4.5.

- AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2% AIR LEAKAGE RATE PER IRC N1103.3.2.1.
- BUILDING FRAMING CAVITIES SHALL NOT BE USED AS DUCTS OR PLENUMS.
- HOT WATER PIPES SHALL BE INSULATED AS REQUIRED PER IRC N1103.4. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR AS REQUIRED PER IRC
- CFM AS REQUIRED PER IRC M1503.6. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING SPACE AND THE GARAGE PER

MAKEUP AIR SYSTEMS SHALL BE INSTALLED FOR KITCHEN EXHAUST HOODS THAT EXCEED 400

# IRC M1601.6 ENERGY CONSERVATION.

- **ABBREVIATIONS** AFF: ABOVE FINISHED FLOOR
- CLR: CLEAR EFF: EFFECTIVE **EFP: EQUIV FLUID PRESSURE**
- EOR: ENGINEER OF RECORD **EQUIV: EQUIVALENT** MAX: MAXIMUM

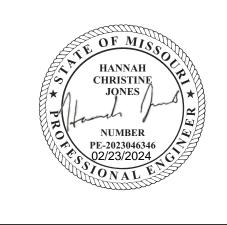
O.C.: ON CENTER

- MIN: MINIMUM NTS: NOT TO SCALE
- PCF: POUNDS PER CUBIC FOOT PLF: POUNDS PER LINER FOOT PSF: POUNDS PER SQUARE FOOT

PSI: POUNDS PER SQUARE INCH

UNO: UNLESS NOTED OTHERWISE FV: FIELD VERIFY





3741 NE TROON DRIVE, SUITE 200 LEE'S SUMMIT, MO 64064 everstead.com (816)399-490°

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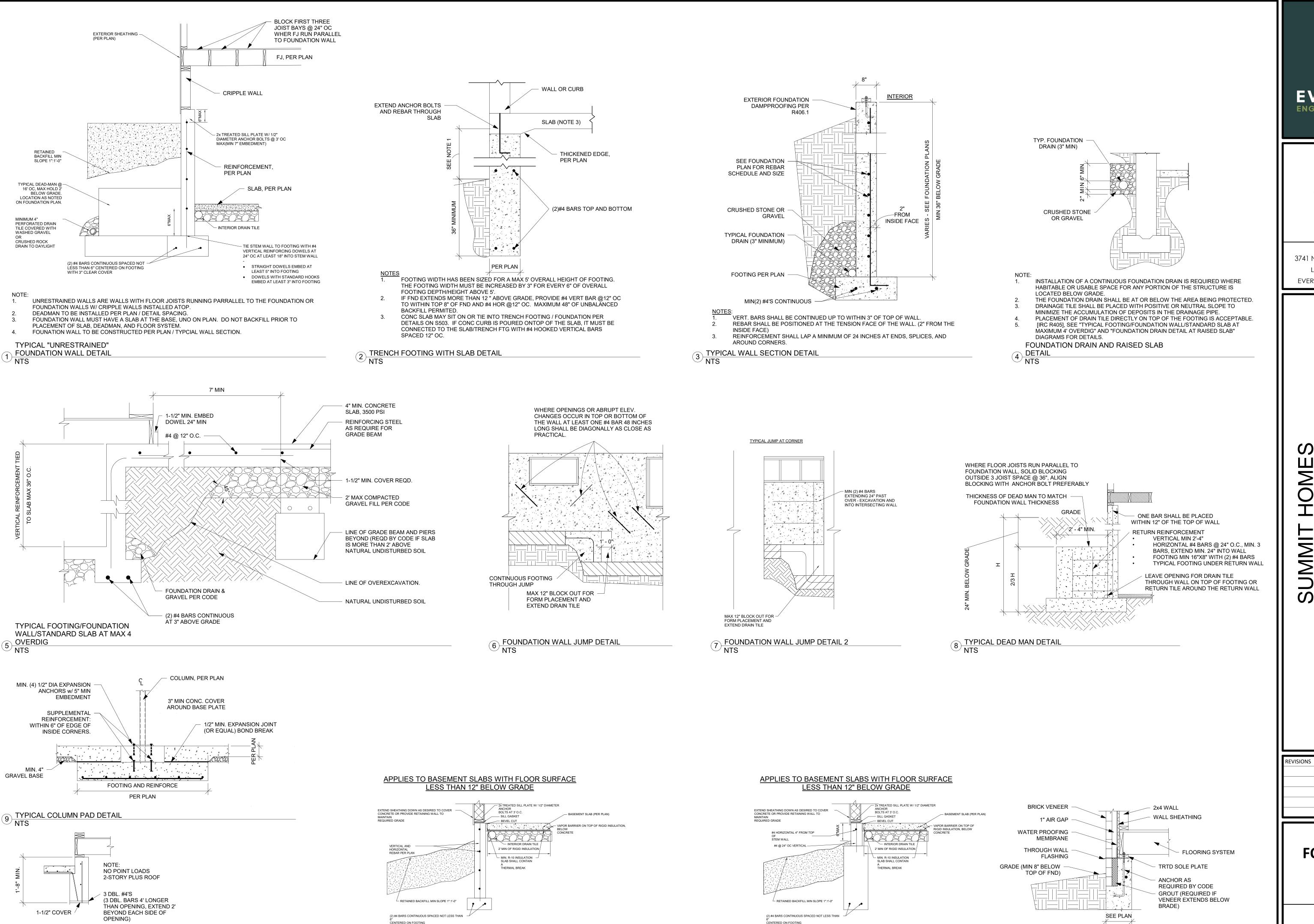
REVISIONS

**STRUCTURAL GENERAL NOTES** 

SCALE

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SLAB INSULATION DETAIL FOR TRENCH

12 FOOTING WITH STEM WALL NTS

13 BRICK VENEER DETAIL NTS

SLAB INSULATION DETAIL FOR STEM

11 WALL AND FOOTING NTS

6' MAXIMUM OPENING HEADER DETAIL NTS

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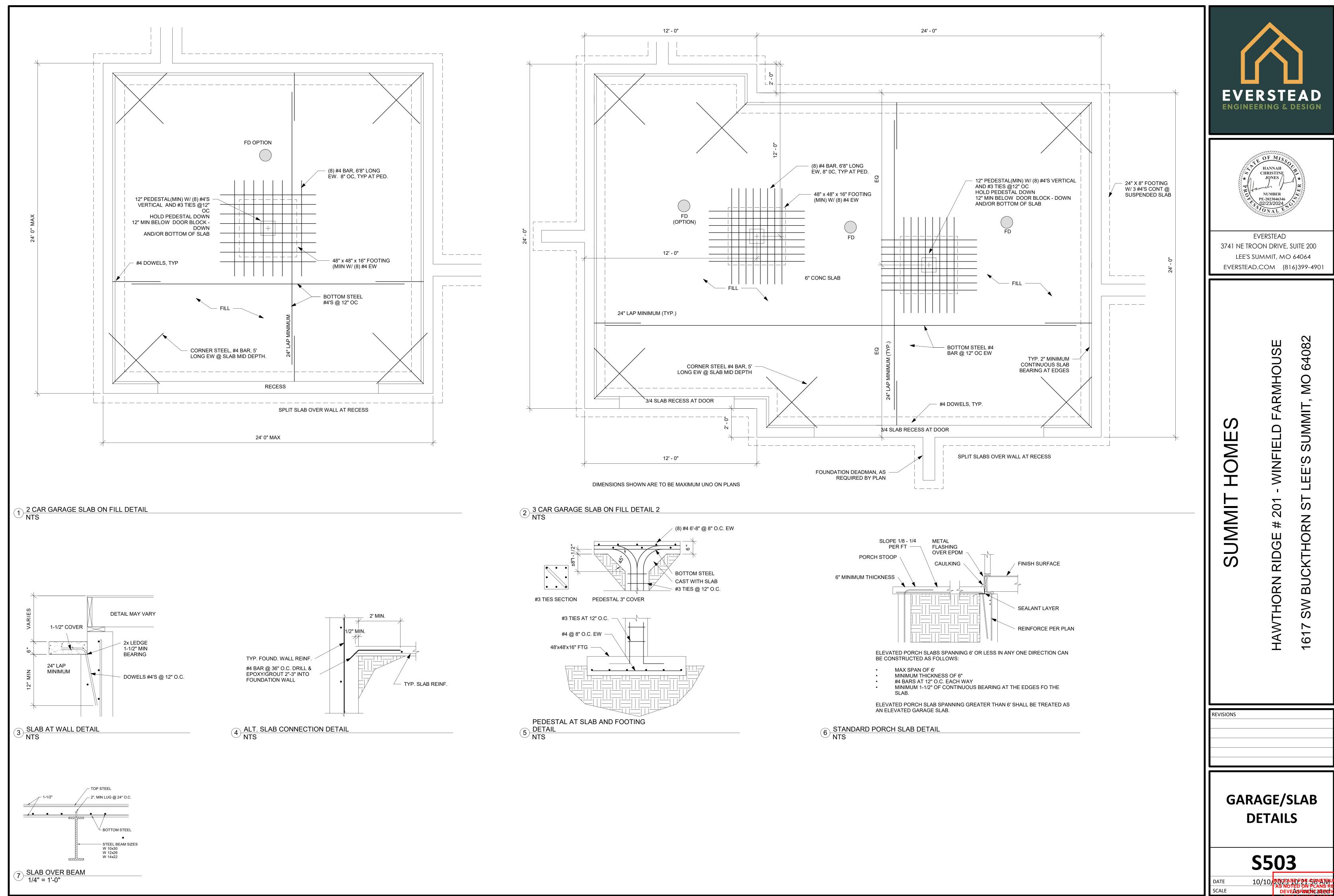
64082

**FOUNDATION** 

**DETAILS** 

**S501** 

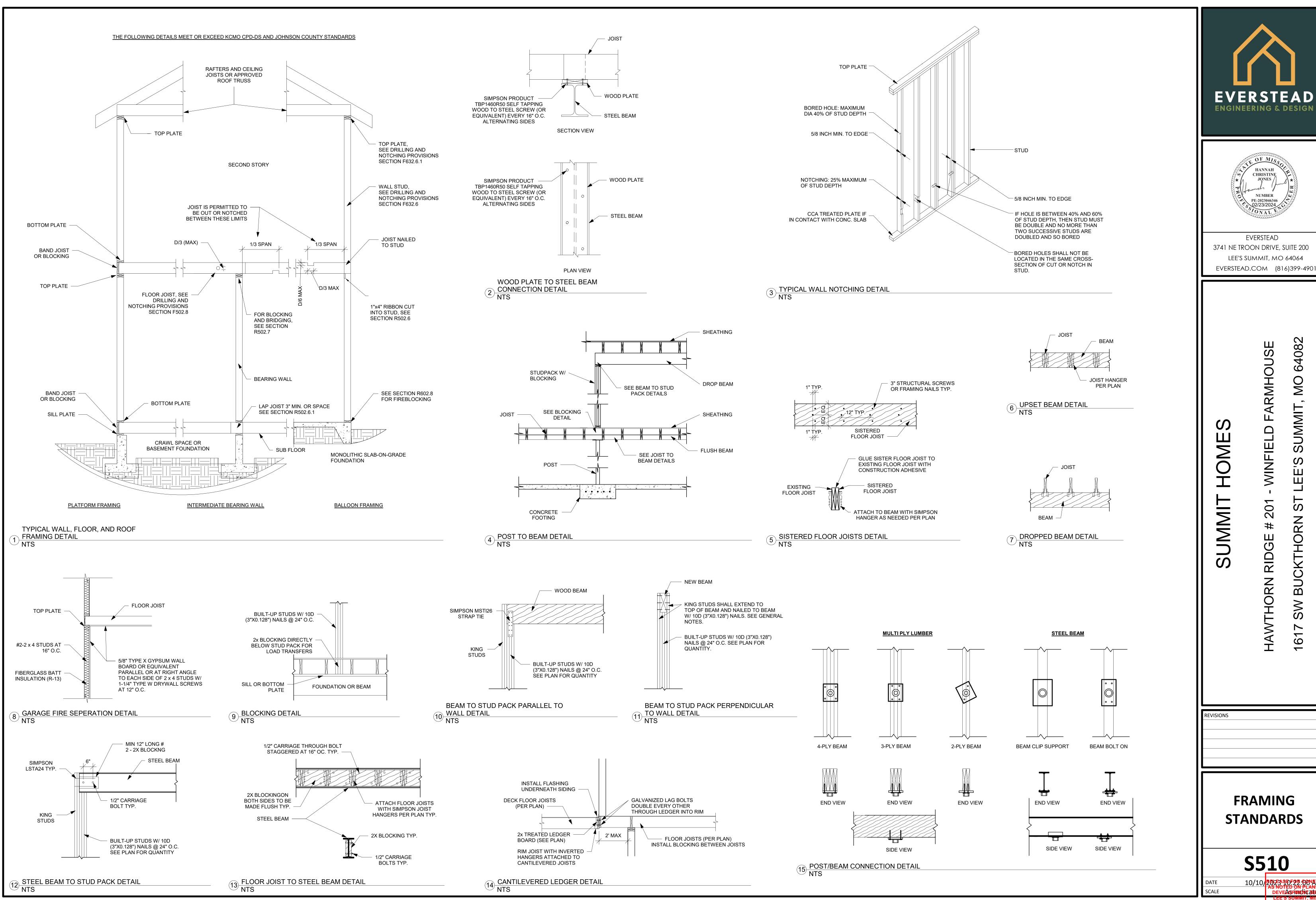
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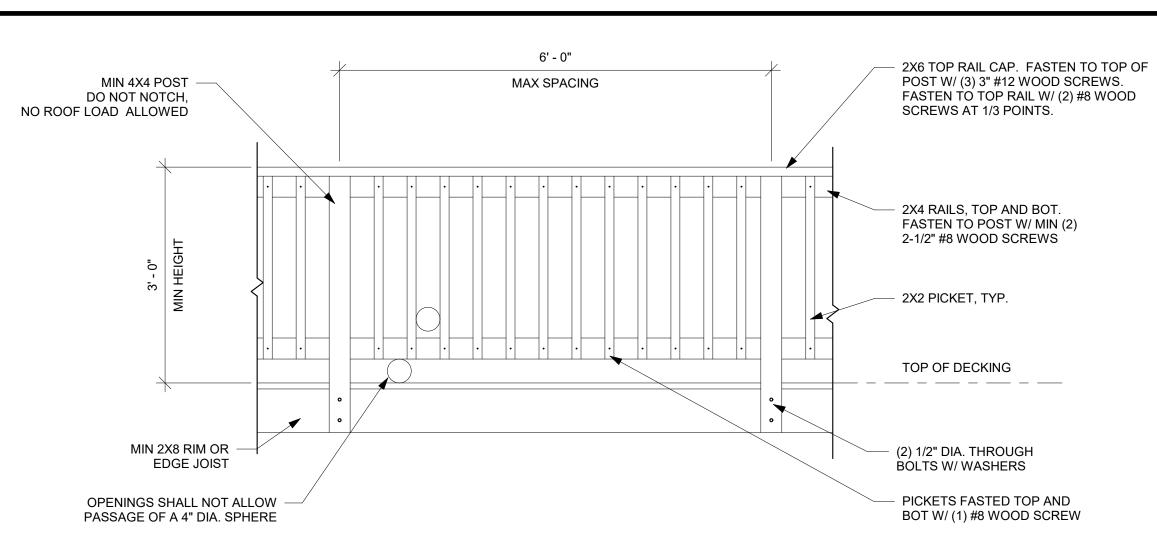
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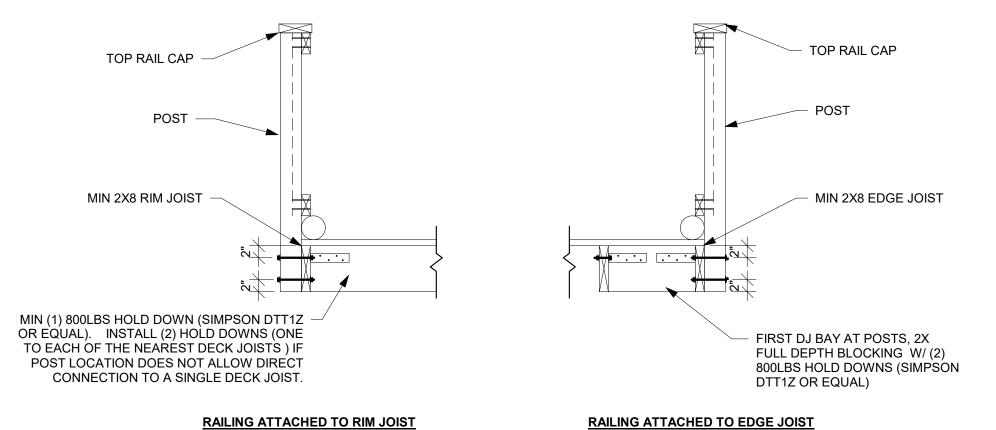
**FRAMING STANDARDS** 

**S510** 

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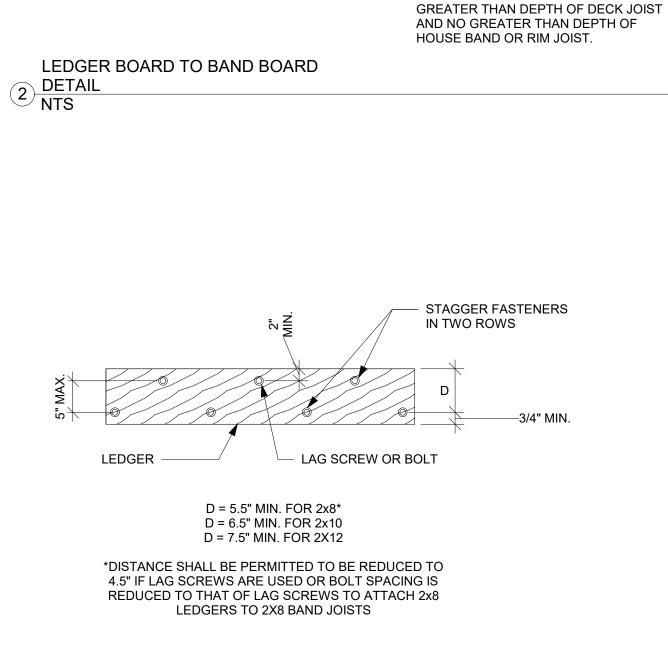
DECK RAILING DETAIL DRAWN TO MEET THE INTENT OF R312 OF THE 2018 IRC AND A CONCENTRATED LOAD OF 200 LBS PER 1607.8.1 OF THE 2018 IBC.



DECK RAILING

NTS

4 DECK LEDGER DIMENSION DETAIL NTS



EXIST. STUD WALL

EXIST. 2X BAND JOIST OR 1" MINIMUM EWP RIM JOIST

2X FLOOR JOIST OR I-JOIST

EXIST. FOUNDATION WALL

EXTERIOR SHEATHING

REMOVE SIDING AT LEDGER PRIOR TO INSTALLATION

LEDGER AND JOIST FLUSH ON

DECK JOIST

WITH WASHERS

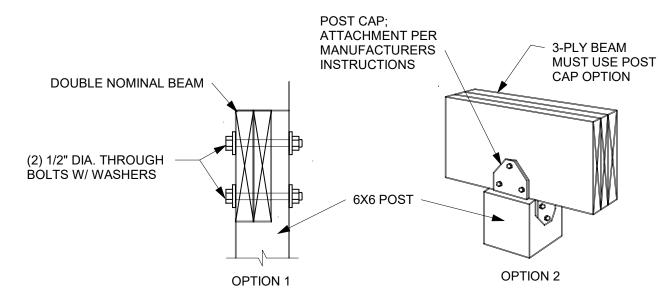
JOIST HANGER

2X LEDGER BOARD EQUAL TO OR

CONTINUOUS FLASHING

1/2" DIA. LAG SCREWS OR THROUGH-BOLTS

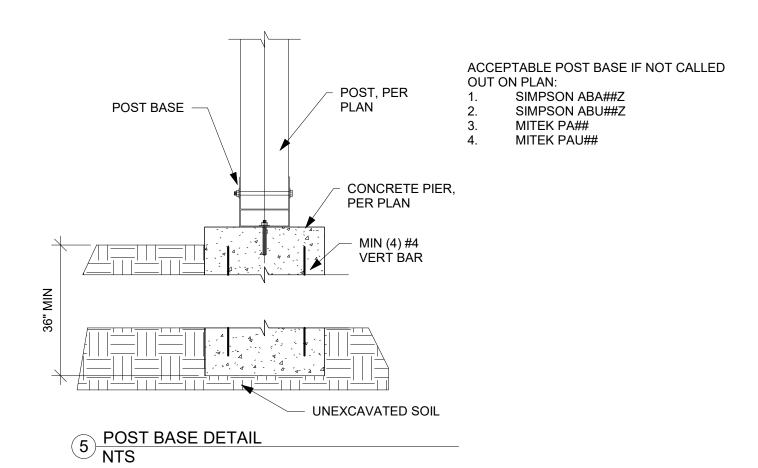
EXTENDING PAST JOIST HANGER



TYPICAL POST TO BEAM ATTACHMENT

DETAIL

NTS



REVISIONS

DECK DETAILS

**S520** 

DATE SCALE

10/10/202390F22:03NATMUCTION AS NOTED ON PLANS REVIEW DEVEASIMENCATERONICES
LEE'S SUMMIT, MISSOURI
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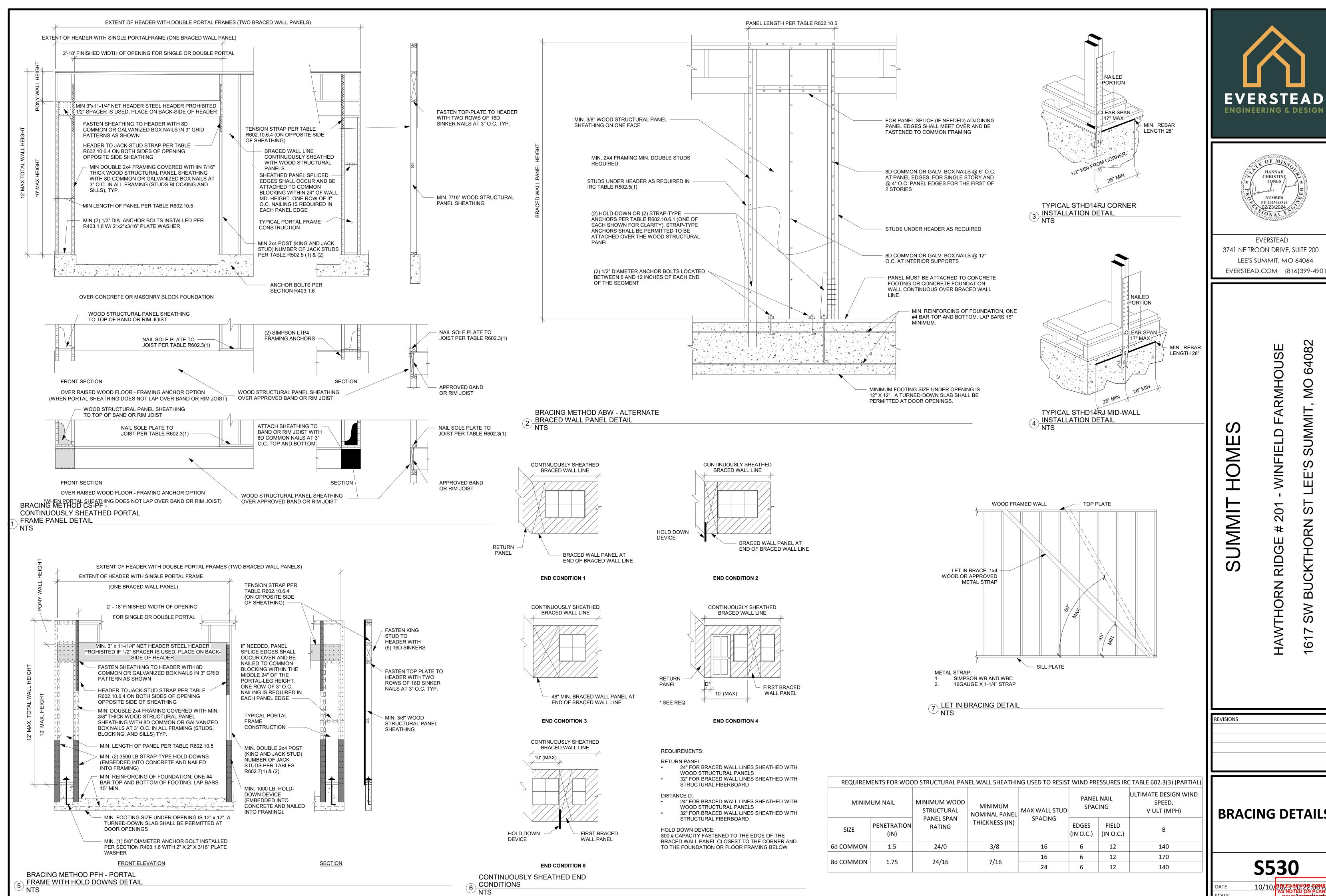
TABLE R507/2 FASTENER SPACING FOR A SOUTHERN PINE OR HEM-FIR DECK LEDGER 2" NOMINAL SOLID SAWN SPRUCE-PINE-FIR BAND JOIST (DECK LIVE LOAD = DECK DEAD LOAD = 10 PSF) JOIST SPAN 6' AND LESS 6'1 TO 8' 8'1 TO 10' 10'1 TO 12' 12'1 TO 14' 14'1 TO 16' 16'1 TO 18' ON CENTER SPACING OF FASTENERS CONNECTION DETAILS 1/2" DIAMETER LAG SCREW WITH 18 15 10 23 13 11 15/32" MAX SHEATHING 1/2" DIAMETER BOLT WITH 15/32" 36 36 34 21 29 24 19 MAX SHEATHING 1/2" DIAMETER BOLT WITH 15/32" MAX SHEATHING AND 1/2" STACKED 16 29 24 21 18 WASHERS

SUMMI

1AWTHORN RIDGE # 201 - WINFIELD FARMHOUSE 617 SW BUCKTHORN ST LEE'S SUMMIT, MO 64082

EVERSTEAD
3741 NE TROON DRIVE, SUITE 200

LEE'S SUMMIT, MO 64064 EVERSTEAD.COM (816)399-4901



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64082

CHRISTINE

NUMBER

**EVERSTEAD** 

**BRACING DETAILS** 

DEVEASHINENCATER

02/26/2024 3:09:00

SCALE

	BRACING METHODS TABLE R602.	10.4 (PARTIAL)		
METHODS MATERIAL	MINIMUM	CONNECTION CRITERIA		
METHODS, MATERIAL	THICKNESS	FASTENERS	SPACING	
WSP - WOOD STRUCTURAL PANEL AND CS-WSP CONTINUOUSLY SHEATHED	3/8" PANEL W/ MINIMUM 24/0 STRUCTURAL PANEL SPAN RATING	6d COMMON NAILS (2.0" x .113") W/ MINIMUM 1.5" PENETRATION	6" EDGES, 12" FIELD	
WOOD STRUCTURAL PANEL	7/16" PANEL W/ MINIMUM 24/16 STRUCTURAL PANEL SPAN RATING	8d COMMON NAILS (2.5" x .131") W/ MINIMUM 1.75" PENETRATION	6" EDGES, 12" FIELD	
PFH - PORTAL FRAME WITH HOLD-DOWNS	3/8"	SEE DETAIL ON THIS PAGE	SEE DETAIL ON THIS PAGE	
PFG - PORTAL FRAME AT GARAGE	3/8"	SEE IRC SECTION R602.10.6.3	SEE IRC SECTION R602.10.6.3	
LIB LET-IN-BRACING	1x4 WOOD OR APPROVED METAL	WOOD: 2-8d COMMON NAILS OR 3-8d (2-1/2" LONG x .113" DIA.) NAILS	WOOD: PER STUD AND TOP AND BOTTOM PLATES	
	STRAPS AT 45 TO 60 DEGREE ANGLES FOR MAX 16" STUD SPACING	SIMPSON WB/WBC INSTALLED IN "X" PAIRS OR IN OPPOSING "V" FASHION AND FASTENED W/ (2) 16d COMMON NAILS FOR PLATE AND (1) 8d COMMON NAIL FOR STUDS	METAL: PER STUD AND TOP AND BOTTOM PLATES	
		1/2" INTERIOR SHEATHING W/ STUDS AT 16" O.C.: 13 GAGE, 1-3/8" LONG, 19/64" HEAD; .098" DIA., 1-1/4" LONG, ANNULAR-RINGED; 5d COOLER NAIL, .086" DIA., 1-5/8" LONG, 15/64" HEAD; OR GYPSUM BOARD NAIL, .086" DIA. 1-5/8" LONG, 9/32" HEAD PER TABLE R702.3.5 (SEE TABLE FOR OTHER PANEL THICKNESS OPTIONS)	FOR ALL BRACED WALL PANEL	
GB-GYPSUM BOARD	1/2"	EXTERIOR 1/2" SHEATHING: 1-1/2" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1-1/2" LONG; 1-1/4" SCREWS, TYPE W OR S PER TABLE R602.3(1)	LOCATIONS: 7" EDGES (INCLUDING TOP AND BOTTOM PLATES) 7" FIELD	
		EXTERIOR 5/8" SHEATHING: 1-3/4" GALVANIZED ROOFING NAIL; STAPLE GALVANIZED, 1-5/8" LONG; 1-5/8" SCREWS, TYPE W OR S PER TABLE R602.3(1)		

DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION OF FASTENERS
1	ROOF	
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	4-8d BOX (2-1/2"x0.113") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	TOE NAIL
CEILING JOISTS TO PLATE	4-8d BOX (2-1/2"x0.131") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10 BOX (3"x0.128") OR 3-3"x0.131" NAILS	TOE NAIL
CEILING JOISTS NOT ATTACHED TO PARALLEL RAFTER LAPS OVER PARTITIONS	4-10d BOX (3"x0.128") OR 3-16d COMMON (3-1/2"x0.162") OR 4-3"x0.131" NAILS	FACE NAIL
COLLAR TIE TO RAFTER, FACE NAIL OR 1-1/4"x20 GAGE RIDGE STRAP	4-10d BOX (3"x0.128") OR 3-10d COMMON (3"x0.148") OR 4-3"x0.131" NAILS	FACE NAIL EACH RAFTER
RAFTER OR ROOF TRUSS TO TOP PLATE, TOE NAIL	4-16d BOX (3-1/2"x0.135") OR 3-10d COMMON (3"x0.148") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS	2 TOE NAILS ON ONE SIDE AND 1 TOE NAIL ON OPPOSITE SIDE OF EACH RAFTER OR TRUSS
ROOF RAFTERS TO	4-16d BOX (3-1/2"x0.135") OR 3-10d COMMON (3"x0.148") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS	TOE NAIL
RIDGE, VALLEY OR HIP RAFTERS	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	END NAIL
	WALL	
STUD TO STUD (NOT	16d COMMON (3-1/2"x0.162")	24" O.C. FACE NAIL
AT BRACED WALL PANELS)	10d BOX (3"x0.128") OR 3"x0.131" NAIL	16" O.C. FACE NAIL
STUD TO STUD AND ABUTTING STUDS AT	16d BOX (3-1/2"x0.135") OR	12" O.C. FACE NAIL
INTERSECTION WALL CORNERS (AT BRACED WALL PANELS)	3"x0.131" NAIL 16d COMMON (3-1/2"x0.162")	16" O.C. FACE NAIL
	16d COMMON (3-1/2"x0.162")	16" O.C. EACH EDGE FACE NAIL
BUILT-UP HEADER, TWO PIECES WITH 1/2" SPACER	16d BOX (3-1/2"x0.135")	12" O.C. EACH EDGE FACE NAIL
CONTINUOUS HEADER TO STUD	5-8d BOX (2-1/2"x0.113") OR 4-8d COMMON (2-1/2"x0.131") OR 4-10d BOX (3"x0.128")	TOE NAIL
	16d COMMON (3-1/2"x0.162")	16" O.C. FACE NAIL
TOP PLATE TO TOP PLATE	10d BOX (3"x0.128") OR 3"x0.131" NAIL	12" O.C. FACE NAIL
DOUBLE TOP PLATE SPLICE	8-16d COMMON (3-1/2"x0.162") OR 12-16d BOX (3-1/2"x0.135") OR 12-10d BOX (3"x0.128") OR 12-3"x0.131" NAILS	FACE NAIL ON EACH SIDE OF END JOINT (MINIMUM 24" LAP SPLICE LENGTH EACH SIDE OF END JOINT)
BOTTOM PLATE TO JOIST, RIM JOIST,	16d COMMON (3-1/2"x0.162")	16" O.C. FACE NAIL
BAND JOIST, OR BLOCKING (NOT BRACED WALL PANELS)	-16d BOX (3-1/2"x0.135") OR 3"x0.131" NAIL	12" O.C. FACE NAIL
BOTTOM PLATE TO JOIST, RIM JOIST, BAND JOIST, OR BLOCKING (AT BRACED WALL PANELS)	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162") OR 4-3"x0.131" NAILS	3 EACH 16" O.C. FACE NAIL 2 EACH 16" O.C. FACE NAIL 4 EACH 16" O.C. FACE NAIL
TOP OR BOTTOM PLATE TO STUD	4-8d BOX (2-1/2"x0.113") OR 3-16d BOX (3-1/2"x0.135") OR 4-8d COMMON (2-1/2"x0.131") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS	TOE NAIL
TOP OR BOTTOM PLATE TO STUD	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	END NAIL
TOP PLATES, LAPS AT CORNERS AND INTERSECTIONS	3-10d BOX (3"x0.128") OR 2-16d COMMON (3-1/2"x0.162") OR 3-3"x0.131" NAILS	FACE NAIL
1" BRACE TO EACH STUD AND PLATE	3-8d BOX (2-1/2"x0.113") OR 2-8d COMMON (2-1/2"x0.131") OR 2-10d BOX (3"x0.128") OR 2 STAPLES 1-3/4"	FACE NAIL
1"x6" SHEATHING TO EACH BEARING	3-8d BOX (2-1/2"x0.113") OR 2-8d COMMON (2-1/2"x0.131") OR 2-10d BOX (3"x0.128") OR 2 STAPLES, 1" CROWN, 16 GA., 1-3/4" LONG	FACE NAIL
1"x8" AND WIDER SHEATHINGTO EACH BEARING	3-8d BOX (2-1/2"x0.113") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 3 STAPLES, 1" CROWN, 16 GA., 1-3/4" LONG  WIDER THAN 1"x8": 4-8d BOX (2-1/2"x0.113") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 4 STAPLES, 1" CROWN, 16 GA., 1-3/4" LONG	FACE NAIL

	FLOOR		
JOIST TO SILL, TOP PLATE, OR GIRDER	4-8d BOX (2-1/2"x0.113") OR 3-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	TOE	E NAIL
RIM JOIST, BAND JOIST OR	8d BOX (2-1/2"x0.113")	4" O.C.	TOE NAIL
BLOCKING TO SILL OR TOP PLATE (ROOF APPLICATIONS ALSO)	8d COMMON (2-1/2"x0.131") OR 10d BOX (3"x0.128") OR 3"x0.131" NAIL	6" O.C.	TOE NAIL
1"x6" SUBFLOOR OR LESS TO EACH JOIST	3-8d BOX (2-1/2"x0.113") OR 2-8d COMMON (2-1/2"x0.131") OR 3-10d BOX (3"x0.128") OR 2 STAPLES, 1" CROWN, 16 GA., 1-3/4" LONG	FACE NAIL	
2" SUBFLOOR TO JOIST OR GIRDER	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162")	BLIND AND FACE NAIL	
2" PLANKS (PLANK & BEAM-FLOOR & ROOF)	3-16d BOX (3-1/2"x0.135") OR 2-16d COMMON (3-1/2"x0.162")	AT EACH BEARING FACE NAIL	
BAND OR RIM JOIST TO JOIST	3-16d COMMON (3-1/2"x0.162") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS OR 4 3"x14 GA. STAPLES, 7/16" CROWN	END	) NAIL
	20d COMMON (3"x0.128")	O.C AT TOP END	ER AS FOLLOWS: 32 D AND BOTTOM AND GGERED.
BUILT-UP GIRDERS AND BEAMS, 2" LUMBER LAYERS	10d BOX (3"x0.128") OR 3"x0.131" NAIL	BOTTOM STAGE	NAIL AT TOP AND ERED ON OPPOSITI SIDES
	AND: 2-20d COMMON (4"x0.192") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS		ENDS AND AT EACH PLICE
LEDGER STRIP SUPPORTING JOISTS OR RAFTERS	4-16d BOX (3-1/2"x0.135") OR 3-16d COMMON (3-1/2"x0.162") OR 4-10d BOX (3"x0.128") OR 4-3"x0.131" NAILS	AT EACH JOIST OR RAFTER, I NAIL	
BRIDGING OR BLOCKING TO JOIST	2-10d BOX (3"x0.128") OR 2-8d COMMON (2-1/2"x0.131") OR 2-3"x0.131" NAILS	EACH END, TOE NAIL	
DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENER	EDGES (IN)	INTERMEDIATE SUPPORTS (IN)
	LS, SUBFLOOR, ROOF AND INTERIOR WALL SH PARTICLEBOARD WALL SHEATHING TO FRAMIN		IING AND
	OOD STRUCTURAL PANEL EXTERIOR WALL SE		FRAMING]
3/8" - 1/2"	6d COMMON (2"x0.113") NAIL (SUBFLOOR, WALL) OR 8d COMMON (2-1/2"x0.131") NAILS (ROOF) OR RSRS-01 (2-3/8"x0.113") NAIL (ROOF)	6	12
19/32" - 1"	8d COMMON NAIL (2-1/2"x0.131") OR RSRS-01 (2-3/8"x0.113") NAIL (ROOF)	6	12
1-1/8" - 1-1.4"	10d COMMON (3"x0.148") NAIL OR 8d (2-1/2"x0.131") DEFORMED NAIL	6	12
	OTHER WALL SHEATHING		
1/2" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1-1/2" GALVANIZED ROOFING NAIL, 7/16" HEAD DIAMETER OR 1-1/4" LONG 16 GA. STAPLE WITH 7/16" OR 1" CROWN	3	6
25/32" STRUCTURAL CELLULOSIC FIBERBOARD SHEATHING	1-3/4" GALVANIZED ROOFING NAIL, 7/16" HEAD DIAMETER OR 1-1/2" LONG 16 GA. STAPLE WITH 7/16" OR 1" CROWN	3	6
1/2" GYPSUM INTERIOR COVERING (R702.3.5)	1-1/2" GALVANIZED ROOFING NAIL: STAPLE GALVANIZED, 1-1/2" LONG; 1-1/4" SCREWS, TYPE "W" OR "S"	7	7
5/8" GYPSUM INTERIOR COVERING (R702.3.5)	1-3/4" GALVANIZED ROOFING NAIL: STAPLE GALVANIZED, 1-5/8" LONG; 1-5/8" SCREWS, TYPE "W" OR "S"	7	7
WOOD STRUCTURAL	PANELS, COMBINATION SUBFLOOR UNDERLA	YMENT TO FRAMIN	G
3/4" AND LESS	6d DEFORMED (2"x0.120") NAIL OR 8d COMMON (2-1/2"x0.131") NAIL	6	12
·	, in the second of the second		
7/8" - 1"	8d COMMON (2-1/2"x0.131") NAIL OR 8d DEFORMED (2-1/2"x0.120") NAIL	6	12

TABLE R507.9.1.3(2) PLACEMENT OF LAG SCREWS AND BOLTS IN DECK LEDGERS AND BAND JOISTS

MINIMUM END AND EDGE DISTANCES AND SPACING BETWEEN ROWS (INCHES)

TOP EDGE

LEDGER

BAND JOIST

BOTTOM EDGE

3/4

ROW SPACING

1-5/8 MIN. 5 MAX

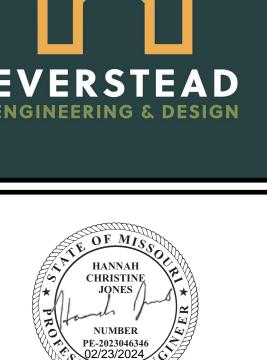
1-5/8 MIN 5 MAX

NUMBER AND TYPE OF FASTENER

DESCRIPTION OF BUILDING MATERIALS



SPACING AND LOCATION OF FASTENERS



**EVERSTEAD** 3741 NE TROON DRIVE, SUITE 200

LEE'S SUMMIT, MO 64064 EVERSTEAD.COM (816)399-4901

ARMHOUSE

201

64082

M

SUMMIT,

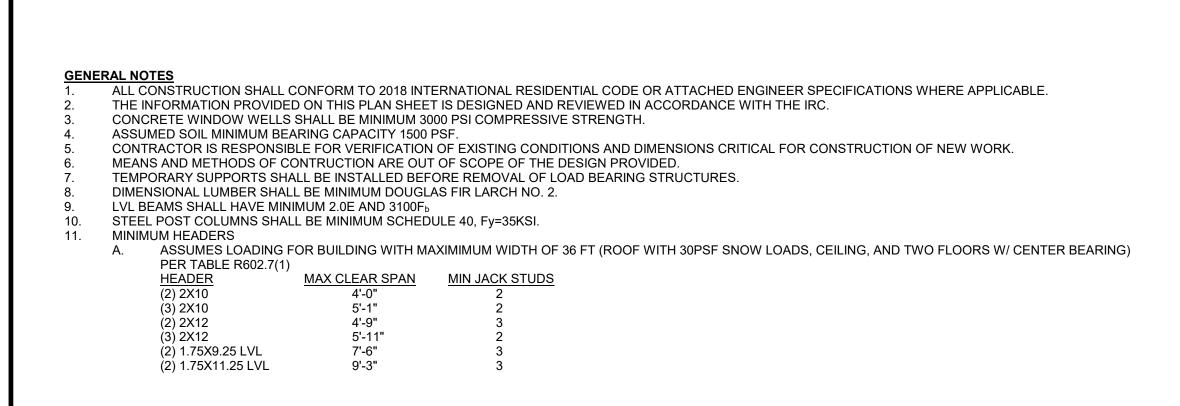
BUCKTHORN

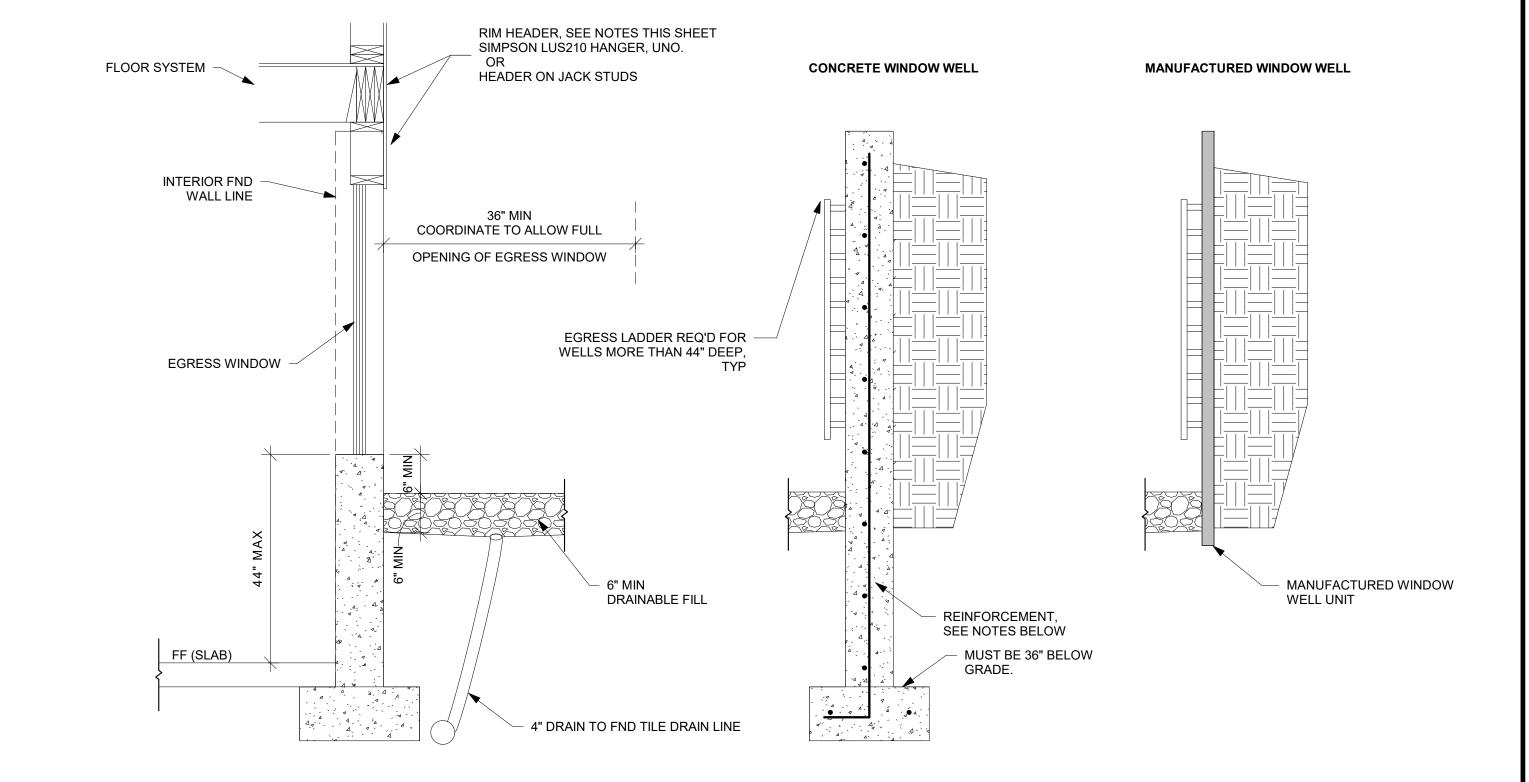
**FASTENING SCHEDULE** 

S5<u>50</u>

REVISIONS

10/10/202390F22:00NSTRUCTION
AS NOTED ON PLANS REVIEW
DEVELD/4/MENTISEBVICES
LEE'S SUMMIT, MISSOURI
02/26/2024 3:09:00





#### MANUFACTURED WINDOW WELL A. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS COORDINATE DEPTH OF WELL WITH WINDOW AND MANUFACTURER REQUIREMENTS.

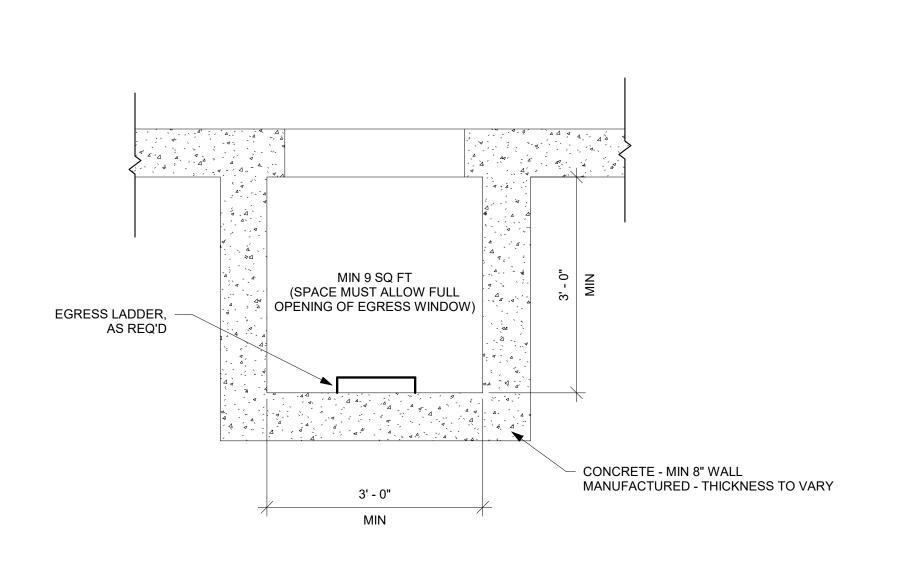
SECTION

CONCRETE WINDOW WELL

INTALLED WITH NEW FOUNDATION

REINFORCEMENT

B. INSTALLED TO EXISTING FOUNDATION a. REINFORCEMENT



WINDOW WELL MUST MEET REQUIREMENT IN R310.2.6 OF THE IRC AND LOCALLY ADOPTED CODE

POUR WINDOW WELL MONOLITHICALLY WITH ADJACENT FND WALL.

MATCH ADJACENT WALL REINFORCEMENT, SEE PLANS

(2) #4 BAR CONT IN WALL FTG.

DRILL AND EXPOY HOR BAR INTO EX FND, MIN 6" EMBEDMENT INTO EX FND WALL.

b. SEAL WHERE NEW CONCRETE IS POURED AGAINST EX FND WITH MASTIC STRIPS OR OTHER WATER STOP MATERIAL.

PLAN

**EGRESS WINDOWS** 

**EVERSTEAD** 3741 NE TROON DRIVE, SUITE 200

LEE'S SUMMIT, MO 64064

EVERSTEAD.COM (816)399-4901

64082

Щ

BUCKTHORN

20

**S560** 

WINDOW WELL FOR EGRESS (NTS)

OPEN VARIES (SEE TABLE) 1' - 8" 1' - 8" MIN CLEAR **CASEMENT WINDOW SLIDER WINDOW** SINGLE HUNG WINDOW EGRESS WINDOWS MUST CONFORM TO R310 OF THE 2018 IRC MIN CLEAR OPENING ABOVE GRADE FLOOR NOT LESS THAN 5.7 SQ FT PER R310.2.1 AT OR BELOW GRADE NOT LESS THAN 5.0 SF FT PER 310.2.1 MIN NET CLEAR HEIGHT SHALL BE NOT LESS THAN 2 FT MIN NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCH MINIMUM WINDOW SIZES SHOWN BELOW ARE SPECIFIC TO THE MANUFACTURER AND VINYL WINDOW MODEL NUMBER LISTED. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF WINDOW SIZES WITH THE SELECTED MANUFACTURER, WINDOW FRAMING MATERIAL, AND STYLE. MANUFACTURER ANDERSON 200 SERIES ANDERSON 400 SERIES 48X40 36X40 JELD-WEN V-2500 48X48 FF ELEV

36X48

36X42

48X48

V-4500

250 SERIES

150 SERIES

36X60

JELD-WEN

PELLA

PELLA

WINDOW EGRESS (NTS)

02/26/2024 3:09:00

SCALE

REVISIONS