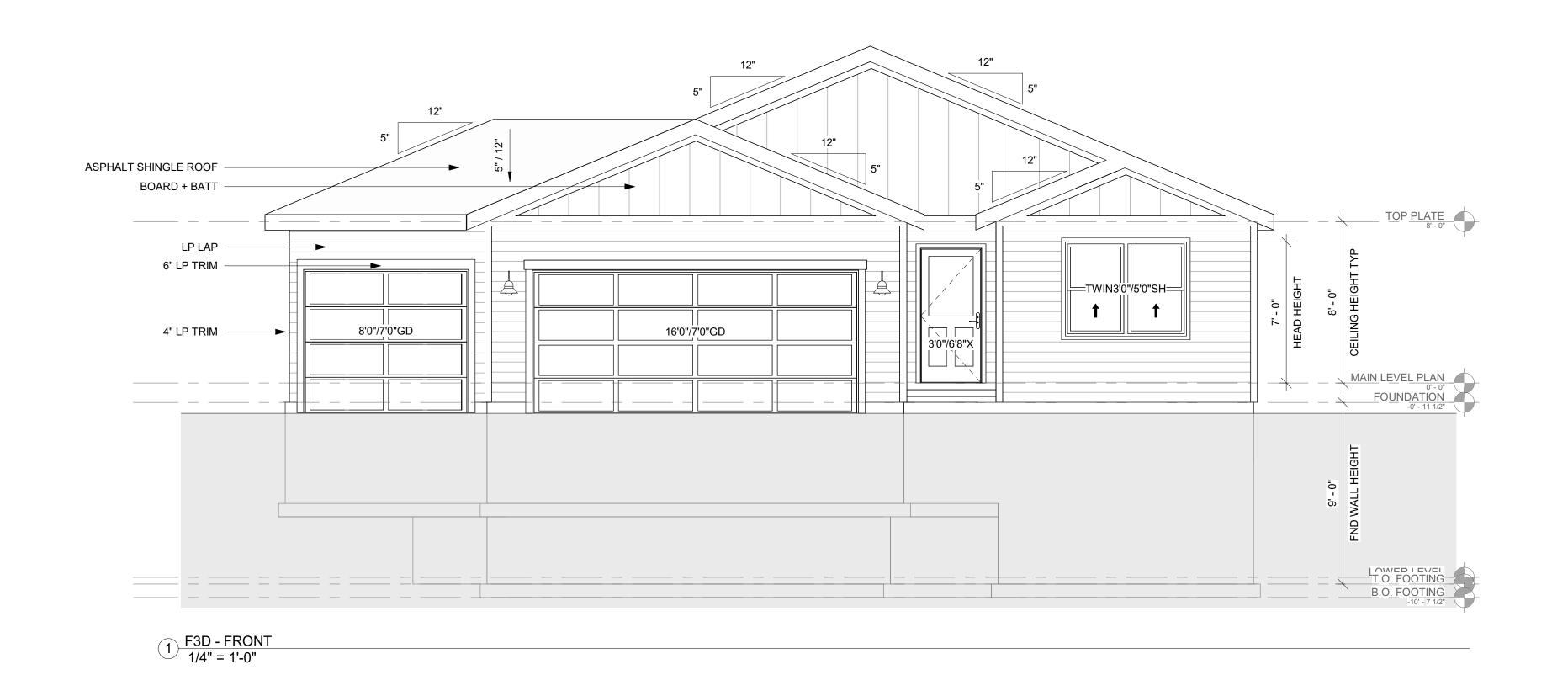
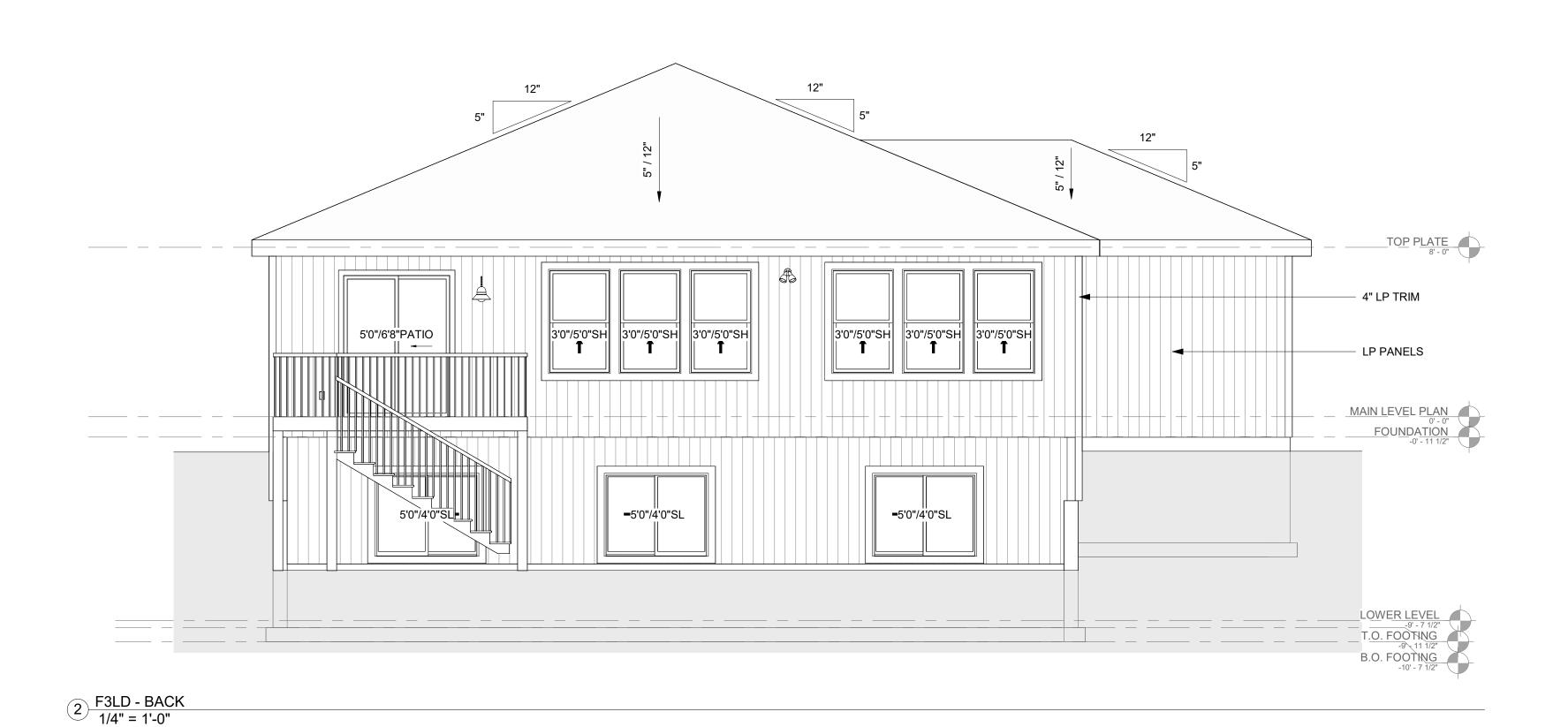
#### **ELEVATION NOTES**

GRADE IS APPROXIMATE AND SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY SITE CONDITIONS.





RELEASE FOR CONSTRUCTION AS NOTED ON PLANS REVIEW **DEVELOPMENT SERVICES** LEE'S SUMMIT, MISSOURI 06/19/2024 4:38:43

	TABLE OF CONTENTS C
SHEET NUMBER	SHEET NAME
0000	00/50
G000	COVER
G101	LOWER LEVEL/ FOUNDATION PLAN
G102	MAIN LEVEL PLAN
G104	LIGHTING/OUTLET PLAN
G105	ROOF PLAN
G200	ELEVATIONS
S000	STRUCTURAL GENERAL NOTES
S501	FOUNDATION DETAILS
S503	GARAGE/SLAB DETAILS
S510	FRAMING STANDARDS
S520	DECK DETAILS
S530	BRACING DETAILS
S550	FASTENING SCHEDULE
S560	EGRESS WINDOWS
	•

T)
1571
1571
1507
678
2185

EVERSTEAD HAS PRODUCED THIS PLAN SET FOR THE CLIENT LISTED IN ACCORDANCE WITH THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR THE PROJECT AT THE ADDRESS LISTED ON THE PLANS. USE OF ANY PART OF THIS PLAN SET TO DEMOLISH, CONSTRUCT OR BUILD IN ANY MANNER ON PROPERTY OTHER THAN THE LISTED ADDRESS IS PROHIBITED WITHOUT WRITTEN CONSENT FROM EVERSTEAD.

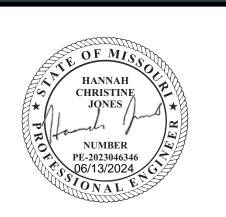
ALL THIRD PARTY INSPECTIONS MUST BE PERFORMED BY THE ENGINEER OF RECORD (EOR). THIRD PARTY INSPECTIONS INCLUDE BUT ARE NOT LIMITED TO INSPECTIONS OF THE BEARING SOIL, FOOTINGS, PIERS, FOUNDATIONS, STRUCTURAL / SUSPENDED SLABS, RETAINING WALLS BACKFILL AND REINFORCEMENT), LUMBER FRAMED CONSTRUCTIBILITY ISSUES, AND STRUCTURAL ITEMS IDENTIFIED BY THE LOCAL CODE INSPECTOR.

EVERSTEAD MUST BE NOTIFIED OF ANY AND ALL POTENTIAL DISPUTES, CLAIMS, ARBITRATION AND/OR LITIGATION THAT THE OWNER MAY PURSUE AGAINST THE CONTRACTOR AND/OR BUILDER. FAILURE TO NOTIFY EVERSTEAD AND ALLOW THE EOR TO PROVIDE THEIR OPINION ON ANY DISPUTE, CLAIM, ARBITRATION AND/OR LITIGATION PERTAINING TO ANY STRUCTURAL ASPECT OF THE PROJECT SHALL ABSOLVE EVERSTEAD OF ALL RESPONSIBILITY. ALL PATHS LEAD HOME

(816)914-7128 AVITAL HOMES

THIS DESIGN AND DETAILS DISCLOSED ARE THE **EXCLUSIVE PROPERTY OF AVITAL HOMES AND SHALL** NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT ITS PRIOR WRITTEN CONSENT.





**EVERSTEAD** 3741 NE TROON DRIVE, SUITE 200 LEE'S SUMMIT, MO 64064

EVERSTEAD.COM (816)399-4901

7

DRIVE

1	
	REVISIONS
	1 - 06/13/2024

**COVER** 

**G000** 

6/13/2024 10:57:17 AM SCALE

As indicated

12'-0" WALL

- ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE (IRC). FOOTING ELEVATION TO BE DETERMINED BASED ON FINAL GRADE: ALL FOOTINGS MEET OR EXCEED
- MINIMUM FROST DEPTH OF 36". SOIL BEARING CAPACITY SHALL BE MINIMUM 1500 PSF.
- REFER TO SHEET S000 FOR MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE.
- REQUIRED AIR ENTRAINMENT SHALL BE 5-7% AS SPECIFIED IN IRC TABLE R402.2.
- FOUNDATION WALLS SHALL BE DAMPPROOFED PER IRC R406. FOUNDATION DRAINAGE WILL BE IN ACCORDANCE WITH IRC R405.
- ALL INTERIOR FOOTINGS OF LOAD BEARING WALLS AND COLUMNS SHALL BE ISOLATED FROM THE BASEMENT FLOOR SLAB.
- STEEL COLUMNS SHALL BE A MINIMUM OF SCHEDULE 40. ALL ANCHOR BOLTS SHALL NOT BE SPACED MORE THAN 3' O.C. AND BE EMBEDDED INTO THE CONCRETE A
- MINIMUM OF 7". BASEMENT EGRESS SHALL COMPLY WITH IRC R310.
- FOR NEW CONSTRUCTION. AN ACCESSIBLE CONNECTION POINT TO BE PROVIDED TO A 20 FOOT CONCRETE ENCASED ELECTRODE (FOOTING REBAR) FOR THE ELECTRICAL SERVICE GROUNDING ELECTRODE CONDUCTOR (UFER GROUND).

FOUNDATION		NG TABLE (3000 PSI C FROM INSIDE TENSIC	CONCRETE AND 40 KSI RI 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	0	#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.
401.011.14/41.1	40"	#4 DADC @C" O C		W/ (3) #4 BARS CONT.

#4 BARS @6" O.C.

ISOLATED FOOTINGS AND COLUMN PADS						
SYM	PIER PAD SIZE	DEPTH	MINIMUM REINFORCEMENT GRADE 40 KSI STEEL	SCHEDULE 40 STEEL COLUMN MIN FY = 35 KSI		
Â	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 COLUMN PADS						
SYM	PIER DIAMETER	DEPTH	MINIMUM REINFORCEMENT GRADE 40 KSI STEEL			
G	12"	3'-0"	(4) VERTICAL #4			
H	16"	3'-0"	(4) VERTICAL #4			
<u></u>	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.

#### **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-PF PER IRC R602.10.6.4

BRACING CS-WSP PER IRC R602.10

BRACING WSP PER IRC R602.10 (INCLUDES PARTIAL PANELS PER IRC R602.10.5.2)

BRACING LIB PER IRC R602.10

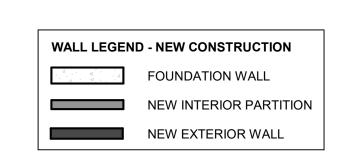
MINIMUM LIB LENGTH PER 2018 IRC TABLE R602.10.5: 55" - 8' TALL WALL HEIGHT

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

BRACING PFH PER IRC R602.10.6.2

#### **CONSTRUCTION NOTES - NEW CONSTRUCTION**

- ALL WALL DIMENSIONS ARE MEASURED TO THE FACE OF STUD U.N.O.
- ALL STRUCTURAL BEAMS ARE MEASURED TO
- THE CENTER OF THE MEMBER. DOORS AND WINDOWS ARE TAGGED IN FEET
- AND INCHES
- ALL CRITICAL DIMENSIONS TO BE FIELD
- VERIFIED BY CONTRACTOR. ALL TOILETS TO BE INSTALLED WITH A MINIMUM
- OF 15" O.C. CLEARANCE ON EACH SIDE OF TOILET.
- ALL TOILETS TO HAVE 21" CLEARANCE AT FRONT OF TOILET.
- ALL SINKS TO HAVE 21" CLEARANCE AT FRONT
- OF SINK. ALL SHOWERS TO HAVE 24" CLEARANCE AT
- OPENING.



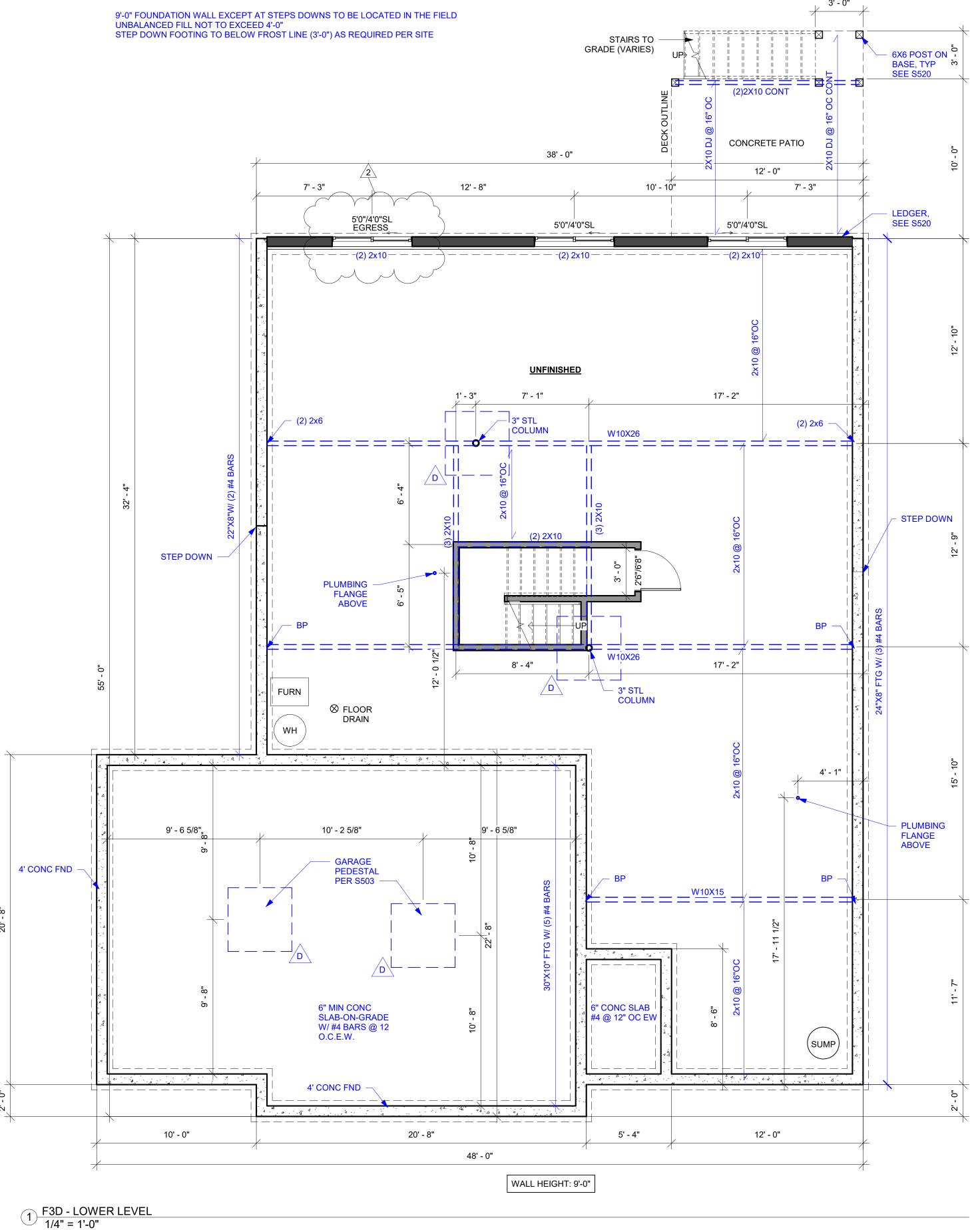
LOWER LEVEL WINDOW SCHEDULE				
Count	Type Mark	Head Height		

3	5'0"/4'0"SL	7' - 0"

2'6"/6'8"

LOWER	LEVEL DOOR S	SCHEDULE
Count	Door Type	Locations

IRC TABLE N1102.1.2 (R402.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT (PARTIAL) AND ENERGY CONSERVATION CODE COMPLIANCE											
MATE ONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC	CEILING AND ATTICS R-VALUE	VAULTS R-VALUE	WOOD FRAME WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE	DUCTWORK R-VALUE
CEPT RINE	.32	.55	.40	49	49	20 OR 13+5H	19	10/13	10, 2 FT	10/13	8



ALL PATHS LEAD HOME

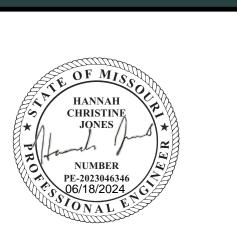
**AVITAL HOMES** 

THIS DESIGN AND DETAILS DISCLOSED ARE THE **EXCLUSIVE PROPERTY OF AVITAL HOMES AND SHALL** NOT BE COPIED OR REPRODUCED IN WHOLE OR IN

PART WITHOUT ITS PRIOR WRITTEN CONSENT.

(816)914-7128





EVERSTEAD 3741 NE TROON DRIVE, SUITE 200 LEE'S SUMMIT, MO 64064 EVERSTEAD.COM (816)399-4901

LOWER LEVEL/ **FOUNDATION PLAN** 

REVISIONS

2 - 06/18/2024

**G101** 

06/19/2024 4:38:43

#### **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
- 12. 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**

(2) 2X4 J  $\neg$ 

(2) 2X4 K

BRACING CS-PF PER IRC R602.10.6.4

BRACING CS-WSP PER IRC R602.10

BRACING WSP PER IRC R602.10 (INCLUDES PARTIAL PANELS PER IRC R602.10.5.2)

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



\_\_ (2) 2X4 J

2 TYP 3 - MAIN LEVEL - WINDOW FRAMING
3/8" = 1'-0"

### OF 15" O.C. CLEARANCE ON EACH SIDE OF ALL TOILETS TO HAVE 21" CLEARANCE AT FRONT OF TOILET.

**CONSTRUCTION NOTES - NEW CONSTRUCTION** 

THE CENTER OF THE MEMBER.

THE FACE OF STUD U.N.O.

VERIFIED BY CONTRACTOR.

AND INCHES

ALL WALL DIMENSIONS ARE MEASURED TO

ALL STRUCTURAL BEAMS ARE MEASURED TO

DOORS AND WINDOWS ARE TAGGED IN FEET

ALL TOILETS TO BE INSTALLED WITH A MINIMUM

ALL CRITICAL DIMENSIONS TO BE FIELD

- ALL SINKS TO HAVE 21" CLEARANCE AT FRONT
- ALL SHOWERS TO HAVE 24" CLEARANCE AT OPENING.

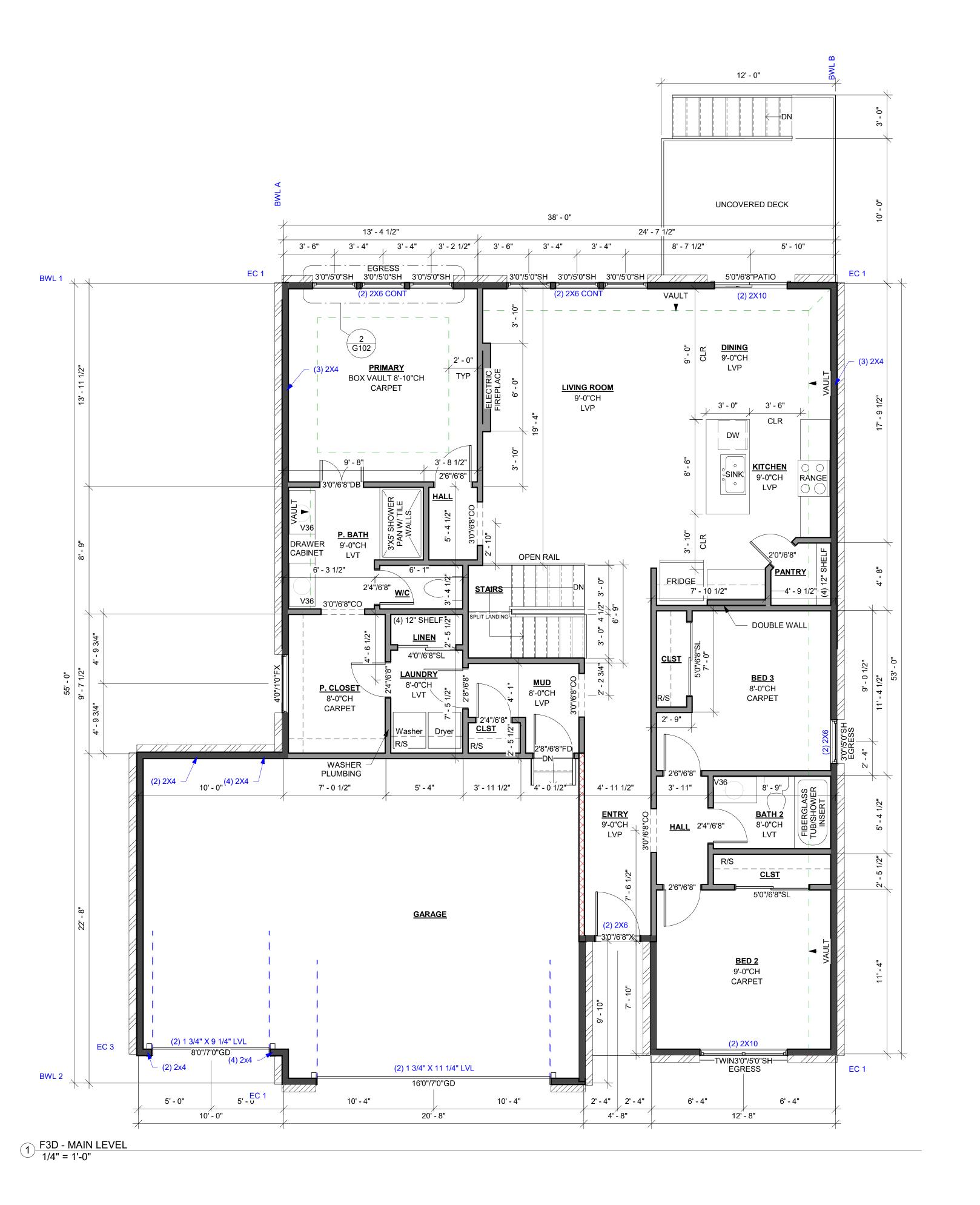
WALL LEGEN	D - NEW CONSTRUCTION	
4 4 4	FOUNDATION WALL	

 1 OUNDATION WALL
NEW INTERIOR PARTITION
NEW EXTERIOR WALL

MAIN LEVEL WINDOW SCHEDULE				
Count	Type Mark	Head Height		
7	3'0"/5'0"SH	7' - 0"		
1	4'0"/1'0"FX	7' - 0"		
1	TWIN3'0"/5'0"SH	7' - 0"		

MAIN LEVEL DOOR SCHEDULE					
Count	Door Type	Locations			
1	2'0"/6'8"	Pantry			
4	2'4"/6'8"	Bathrooms			
3	2'6"/6'8"	Bedrooms			
1	2'8"/6'8"	Laundry			
1	2'8"/6'8"FD	Garage Entry			
4	3'0"/6'8"CO	Casements			
1	3'0"/6'8"DB	P. Bath			
2	3'0"/6'8"X	Front Entry			
1	4'0"/6'8"SL	Linen			
1	5'0"/6'8"PATIO	Dining Door			
2	5'0"/6'8"SL	Closets			
1	16'0"/7'0"GD	Garage Door			

IF	RC TABLE N1102.1.	2 (R402.1.2) II	NSULATION AND F	ENESTRATION	REQUIREM	ENTS BY COMPO	NENT (PAR	TIAL) AND ENERG	GY CONSERVATION	ON CODE COMPLIA	NCE
CLIMATE ZONE	FENESTRATION U-FACTOR	SKYLIGHT U-FACTOR	GLAZED FENESTRATION SHGC	CEILING AND ATTICS R-VALUE	VAULTS R-VALUE	WOOD FRAME WALL R-VALUE	FLOOR R-VALUE	BASEMENT WALL R-VALUE	SLAB R-VALUE & DEPTH	CRAWL SPACE WALL R-VALUE	DUCTWORK R-VALUE
4 EXCEPT MARINE	.32	.55	.40	49	49	20 OR 13+5H	19	10/13	10, 2 FT	10/13	8



ALL PATHS LEAD HOME

**AVITAL HOMES** 

(816)914-7128

THIS DESIGN AND DETAILS DISCLOSED ARE THE EXCLUSIVE PROPERTY OF AVITAL HOMES AND SHALL NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT ITS PRIOR WRITTEN CONSENT.



CHRISTINE NUMBER

EVERSTEAD 3741 NE TROON DRIVE, SUITE 200 LEE'S SUMMIT, MO 64064 EVERSTEAD.COM (816)399-4901

DRIVE

1800

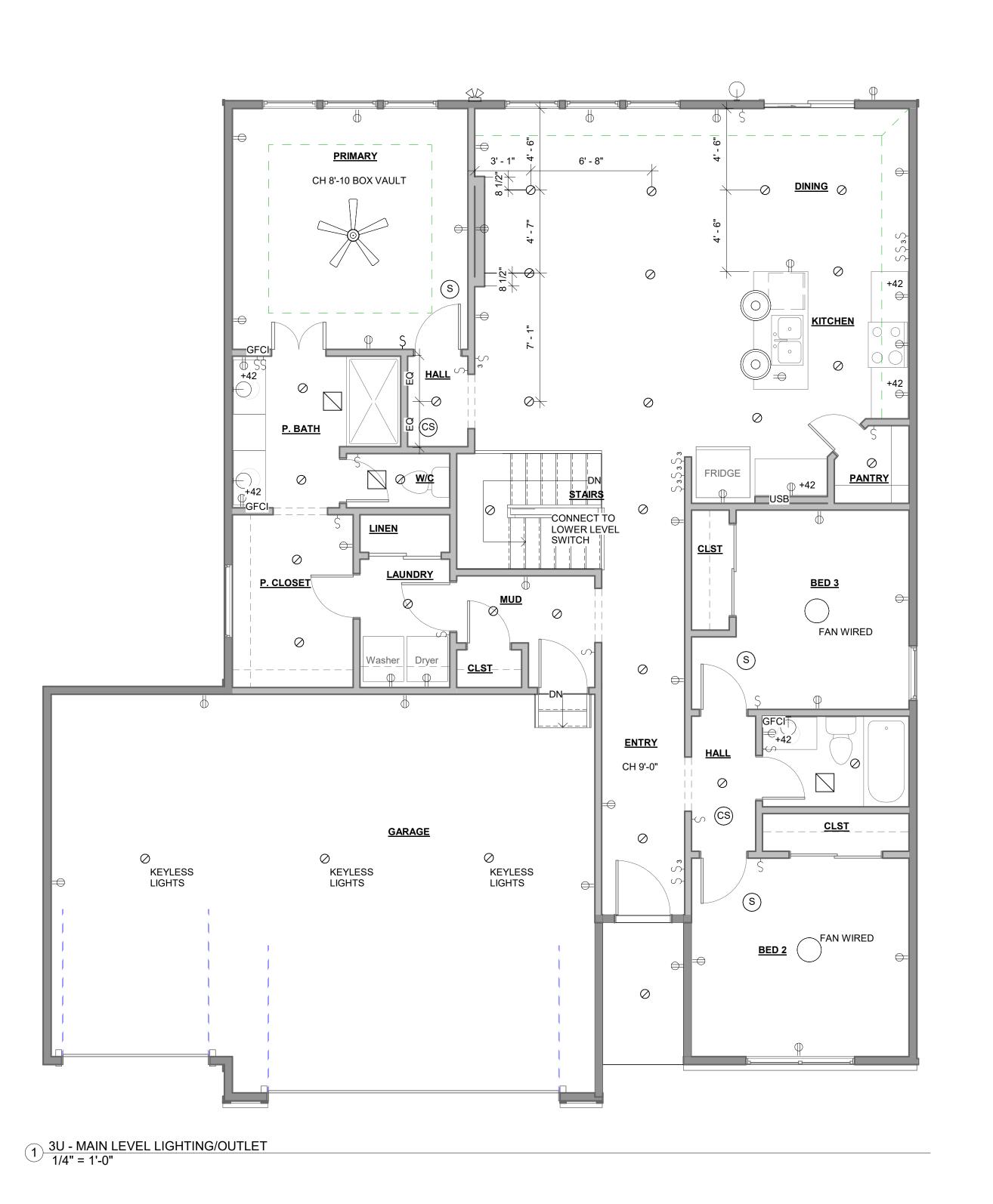
REVISIONS

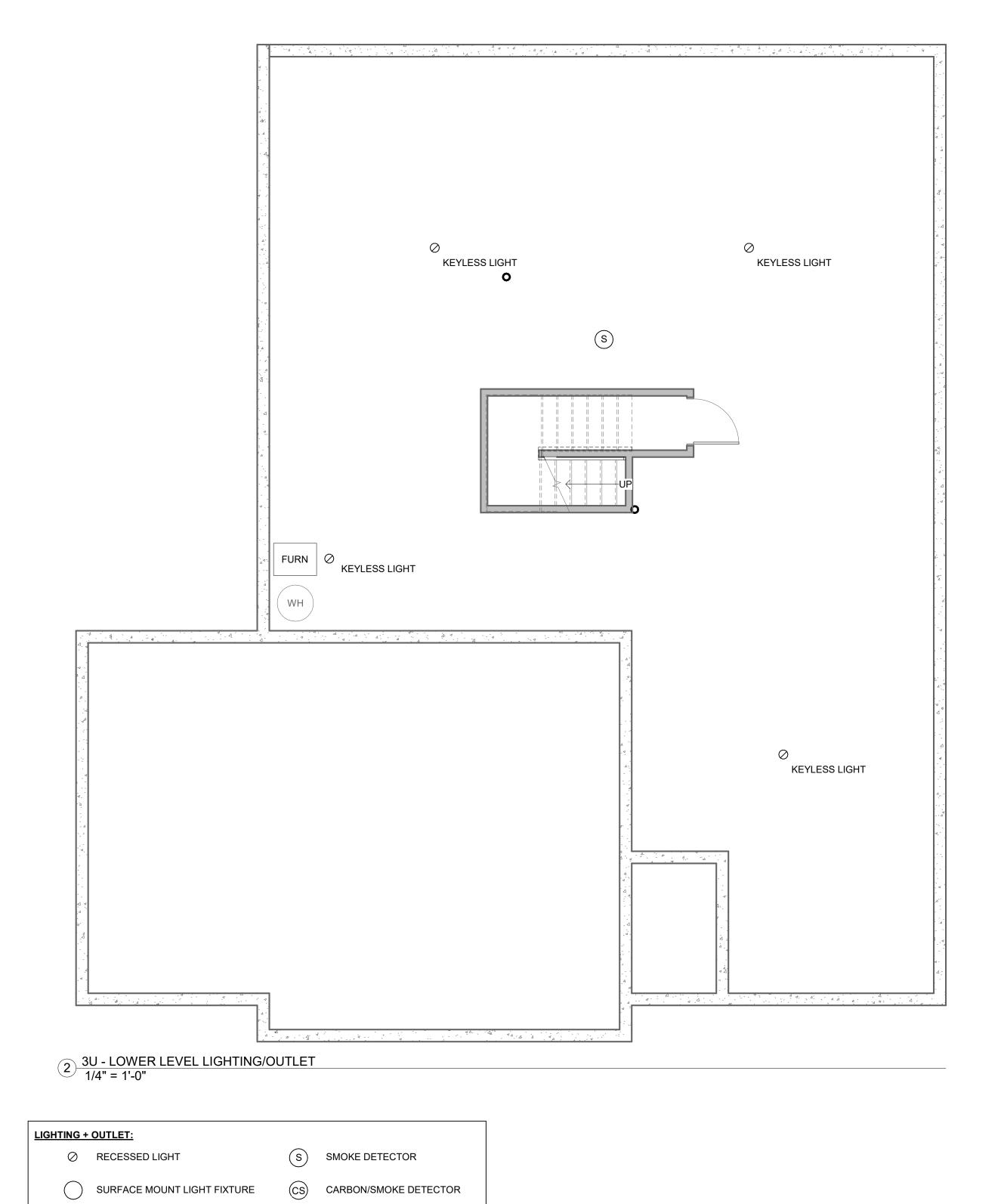
MAIN LEVEL PLAN

**G102** 

6/3/<mark>2022499 FOR OONATRIU</mark> AS NOTED ON PLANS RE DEVEASTIMENICATER ON 06/19/2024 4:38:43

SCALE





EXHAUST FAN

PENDANT LIGHT

CEILING FAN

DUPLEX RECPTICAL

SINGLE WAY SWITCH

 $S_3$  TWO WAY SWITCH

3741 NE TROON DRIVE, SUITE 200 LEE'S SUMMIT, MO 64064 \_\_everstead.com (816)399-4901\_

**EVERSTEAD** 

ALL PATHS LEAD HOME

THIS DESIGN AND DETAILS DISCLOSED ARE THE **EXCLUSIVE PROPERTY OF AVITAL HOMES AND SHALL** NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT ITS PRIOR WRITTEN CONSENT.

EVERSTEAD ENGINEERING & DESIGN

(816)914-7128

AVITAL HOMES

DRIVE

||LIGHTING/OUTLET **PLAN** 

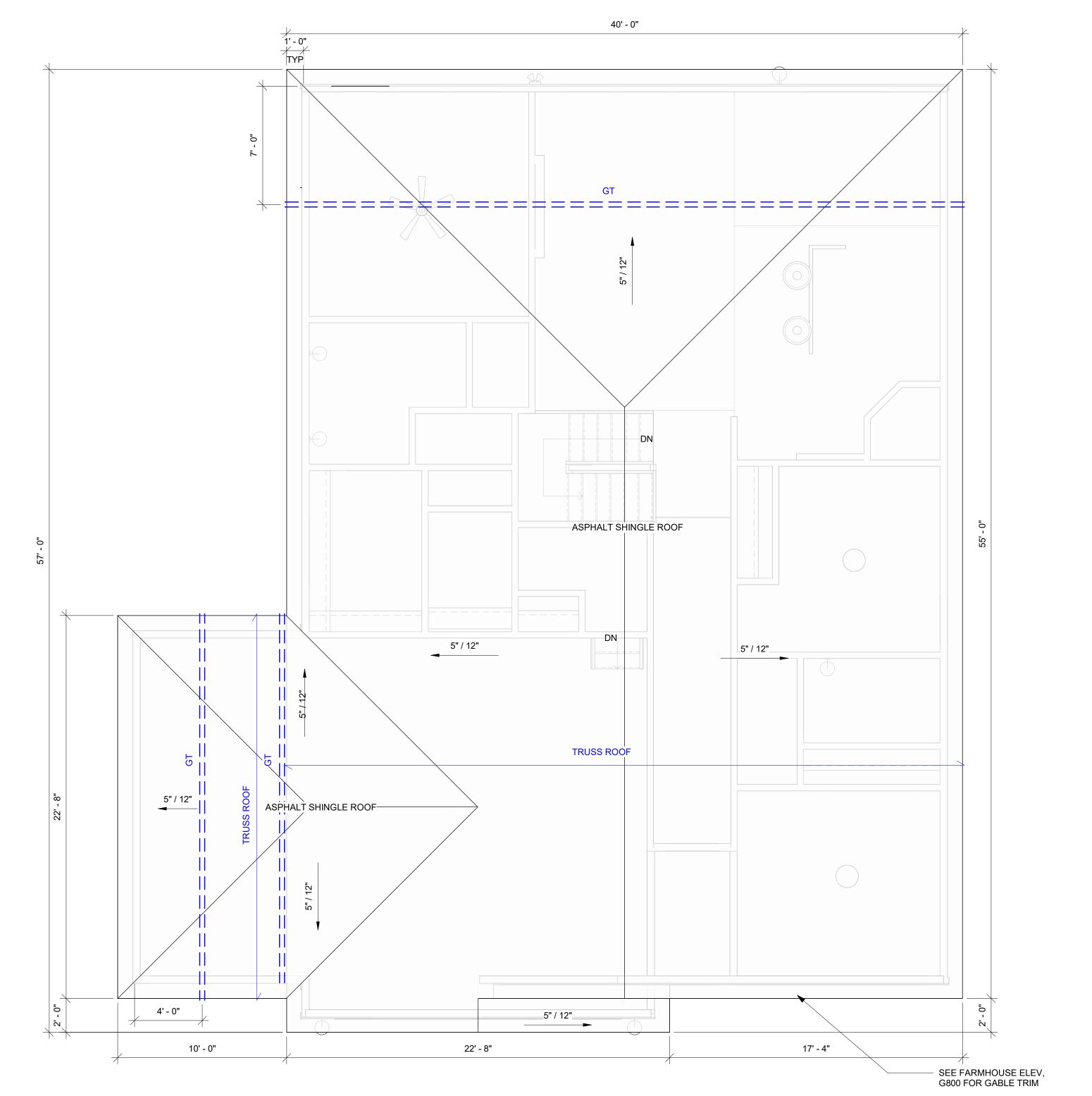
REVISIONS

**G104** 

06/19/2024 4:38:44

#### TRUSS FRAMED ROOF NOTES 1. ALL CONSTRUCTION SHALL CONFORM TO 2018 INTERNATIONAL RESIDENTIAL CODE OR ATTACHED ENGINEER SPECIFICATIONS WHERE APPLICABLE. DESIGNED FOR LIGHT ROOF COVERING, UNO. SEE G000 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 BEARING ON APPROVED POINTS. PROVIDE 2X SOLID BLOCKING SUPPORT BELOW ALL POINT LOADS CONTINUOUS TO BEARING STRUCTURE AND/OR FOUNDATION BELOW. 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 MINIMUM ROOF SLOPE FOR ASPHALT SHINGLES SHALL BE 2:12. 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 SCREWS 1. TRUSS SCREWS MAY BE USED INSTEAD OF THE FASTENING NOTED IN TABLE R602.3(1) TRUSS SCREWS MAY BE USED INSTEAD OF THE FASTENING NOTED IN TABLE R602.3(1) TRUSS SCREWS MUST BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS. BASIS OF DESIGN SHOWN ON PLANS: SIMPSON STRONG DRIVE SDWC TRUSS SCREW LENGTH: 6" FASTENED THROUGH THE BOTTOM SIDE OF A #2 DOUGLAS FIR - LARCH DOUBLE TOP PLATE INTO THE BEARING END OF A TRUSS a. (1) 6" SCREW - MIN 835 LBS UPLIFT WHEN INSTALLED IN THE CENTER OF THE TOP PLATE ON A MAX 20 DEG. ANGLE FROM VERTICAL (INSTALLATION TYPE 1) (2) 6" SCREWS - MIN 1195 LBS UPLIFT WHEN BOTH SCREWS ARE INSTALLED VERTIALLY INTO TRUSS. (INSTALLATION CONF. B) TRUSS BEARING WITH UPLIFT THAT EXCEEDS THE TRUSS SCREW CAPACITY LISTED ABOVE MUST HAVE ADDITIONAL FASTENING, AS SHOWN ON PLAN. TRUSS DIRECTION

GIRDER TRUSS LOCATION INTERIOR LOAD BEARING WALL

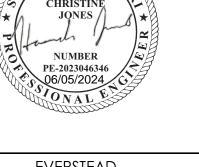




AVITAL HOMES

THIS DESIGN AND DETAILS DISCLOSED ARE THE EXCLUSIVE PROPERTY OF AVITAL HOMES AND SHALL NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT ITS PRIOR WRITTEN CONSENT.





EVERSTEAD 3741 NE TROON DRIVE, SUITE 200 LEE'S SUMMIT, MO 64064

EVERSTEAD.COM (816)399-4901

HIGHTOWN DRIVE AIT, MISSOURI 6408

REVISIONS

**ROOF PLAN** 

**G105** 

1 F3 - ROOF PLAN 1/4" = 1'-0"

TOP PLATE 8' - 0" 4'0"/1'0"FX - 4" LP TRIM - LP PANELS MAIN LEVEL PLAN FOUNDATION -0' - 11 1/2" LOWER LEVEL -9' - 7 1/12" B.O. FOOTING -10' - 7 1/2" 2 F3D - LEFT 1/4" = 1'-0" - 4" LP TRIM - LP PANELS MAIN LEVEL PLAN
0'-0"
FOUNDATION
-0'-11 1/2" LOWER LEVEL -9' -7'1/2" - T.O. FOOTING -9' - 11 1/2" B.O. FOOTING -10' - 7 1/2" 1 F3D - RIGHT 1/4" = 1'-0"

**ELEVATION NOTES** 

GRADE IS APPROXIMATE AND SHOWN FOR REFERENCE ONLY. CONTRACTOR TO VERIFY SITE CONDITIONS.

**ELEVATIONS** 

DATE SCALE

9'-0" FOUNDATION WALL EXCEPT AT STEP DOWNS TO BE LOCATED IN THE FIELD UNBALANCED FILL NOT TO EXCEED 4'-0" STEP DOWN FOOTING TO BE BELOW FROST LINE (3'-0") AS REQUIRED PER SITE

REVISIONS

ALL PATHS LEAD HOME

THIS DESIGN AND DETAILS DISCLOSED ARE THE EXCLUSIVE PROPERTY OF AVITAL HOMES AND SHALL NOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART WITHOUT ITS PRIOR WRITTEN CONSENT.

EVERSTEAD

ENGINEERING & DESIGN

**EVERSTEAD** 3741 NE TROON DRIVE, SUITE 200 LEE'S SUMMIT, MO 64064

EVERSTEAD.COM (816)399-4901

HTOWN DRIVE MISSOURI 64082

(816)914-7128

AVITAL HOMES

**G200** 

#### **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

<u>DEAD</u>	
ROOF	

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 EXTERIOR LIGHT FRAMED WOOD WALLS 15 PSF INTERIOR LIGHT FRAMED WOOD WALLS 10 PSF (INTERIOR WALLS INCLUDED IN 15 PSF DEAD LOAD)

LIVE 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** 60 PSF 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"

### 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:
  - 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 1.5 IN CLR BEAMS, COLUMNS
- 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
- 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.

MEMBERS BEFORE CONCRETE STRENGTH REACHES 70% OF STRENGTH DETERMINED BY

#### 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:

(IRC R406.1)

- 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

- 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.
- 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).

#### MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF CONCRETE 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 SUSPENDED SLABS 4,000

#### D. <u>FRAMING/STRUCTURE</u>

#### D.1 FRAMING NOTES

- ALL NON TREATED LUMBER SIZES ARE DOUGLAS FIR-LARCH #2 UNLESS OTHERWISE NOTED
- ALL TREATED/ROT RESISTANT LUMBER 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., UNLESS BRACING IS SHOWN ON PLANS 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: TREATED LUMBER
- BOTTOM (SOLE) PLATE IN CONTACT WITH MASONRY: TREATED LUMBER
- 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
- 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.

ENGINEE	ERED LUMBER MIIMUM [	DESIGN REQUIREMENT	S		
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

PRESSURE TREATED.

- 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:
- 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.

ASTM A500 ( $F_Y = 46 \text{ KSI}$ )

ASTM A992 (F<sub>Y</sub> = 50 KSI)

ASTM F1554 ( $F_Y = 36 \text{ KSI}$ )

ASTM A53 GR.B ( $F_Y = 35$  KSI)

ASTM A36 ( $F_Y = 36 \text{ KSI}$ )

- 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.

### <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 PROVIDED ABOVE.
- 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. 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.

## (THE FOLLOIWNG SHALL APPLY UNLESS "ECA" SHEETS HAVE BEEN INCLUDED IN THE PLAN SET)

- LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE SHALL BE IC-RATED, LEAKAGE RATED AND SEALED TO THE GYPSUM WALLBOARD AS REQUIRED PER IRC N1102.4.5.
- PROGRAMMABLE THERMOSTATS SHALL BE INSTALLED AS REQUIRED PER IRC N1103.1.1.
- 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

EX

FV

FJ

PSI

#### IRC M1601.6 ENERGY CONSERVATION. **ABBREVIATIONS**

AΒ ANCHOR BOLT BM BEARING BELOW FINISHED FLOOR BFF BOT BOTTOM BRACED WALL LINE CJ CEILING JOIST

ABOVE FINISHED FLOOR

COL COLUMN CONC CONCRETE CONCRETE MASONRY UNIT CXN CONNECTION CONT CONTINUOUS DOUBLE

CLEAR

CLR

DIAMETER DIA EW **EACH WAY** EFF **EFFECTIVE** FI EVATION END CONDITION

ENGINEER OF RECORD FΩ FQUAL **EQUIV EQUIVALENT** EFP EQUIVALENT FLUID PRESSURE FTG FOOTING FND FOUNDATION HDR HEADER HORZ HORIZONTAL MAX MAXIMUM MINIMUM MIN NTS NOT TO SCALE OC ON CENTER PED PEDESTAL PCF POUNDS PER CUBIC FOOT POUNDS PER LINEAR FOOT POUNDS PER SQUARE FOOT

EXISTING

FIELD VERIFY

FLOOR JOIST

FINISHED FLOOR

PRESSURE TREATED PT RAF RAFTER STRUCTURAL INSULATED PANEL SIP STL STEEL TYP TYPICAL

VERT VERTICAL

UNO UNLESS NOTED OTHERWISE

POUNDS PER SQURE INCH

HANNAH

06/05/2024 EVERSTEAD 3741 NE TROON DRIVE, SUITE 200

LEE'S SUMMIT, MO 64064

everstead.com (816)399-490°

CHRISTINE

NUMBER

PE-2023046346

JONES /

0 Ŏ

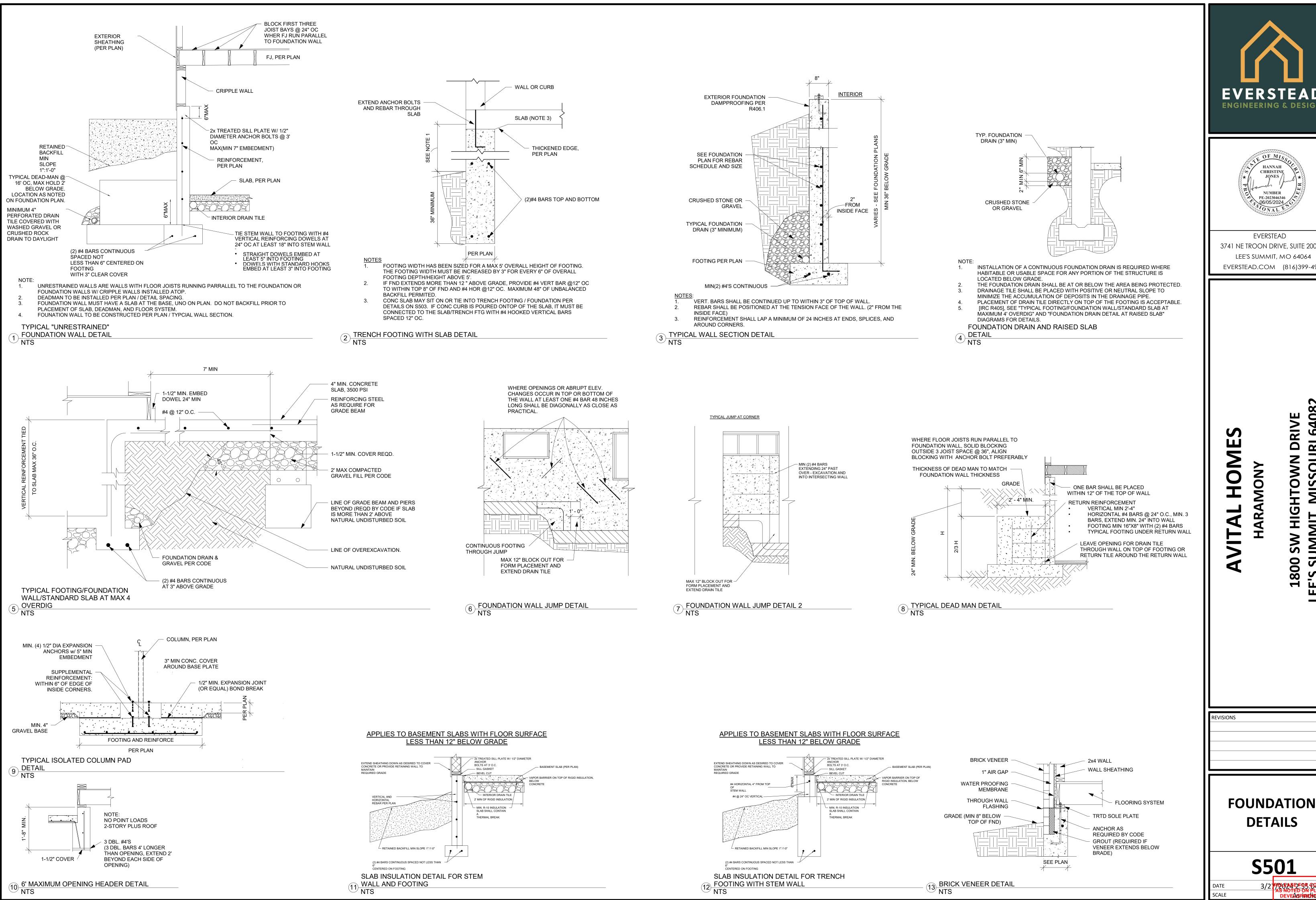
REVISIONS

**STRUCTURAL** 

/2 REIGENAEDFOR GONDTRIU DEVE**ASTIMENICASTER**O 06/19/2024 4:38:44

**GENERAL NOTES** 

SCALE



**ENGINEERING & DESIGN** 

00

TO

**EVERSTEAD** EVERSTEAD.COM (816)399-4901

3741 NE TROON DRIVE, SUITE 200 LEE'S SUMMIT, MO 64064

NUMBER

PE-2023046346

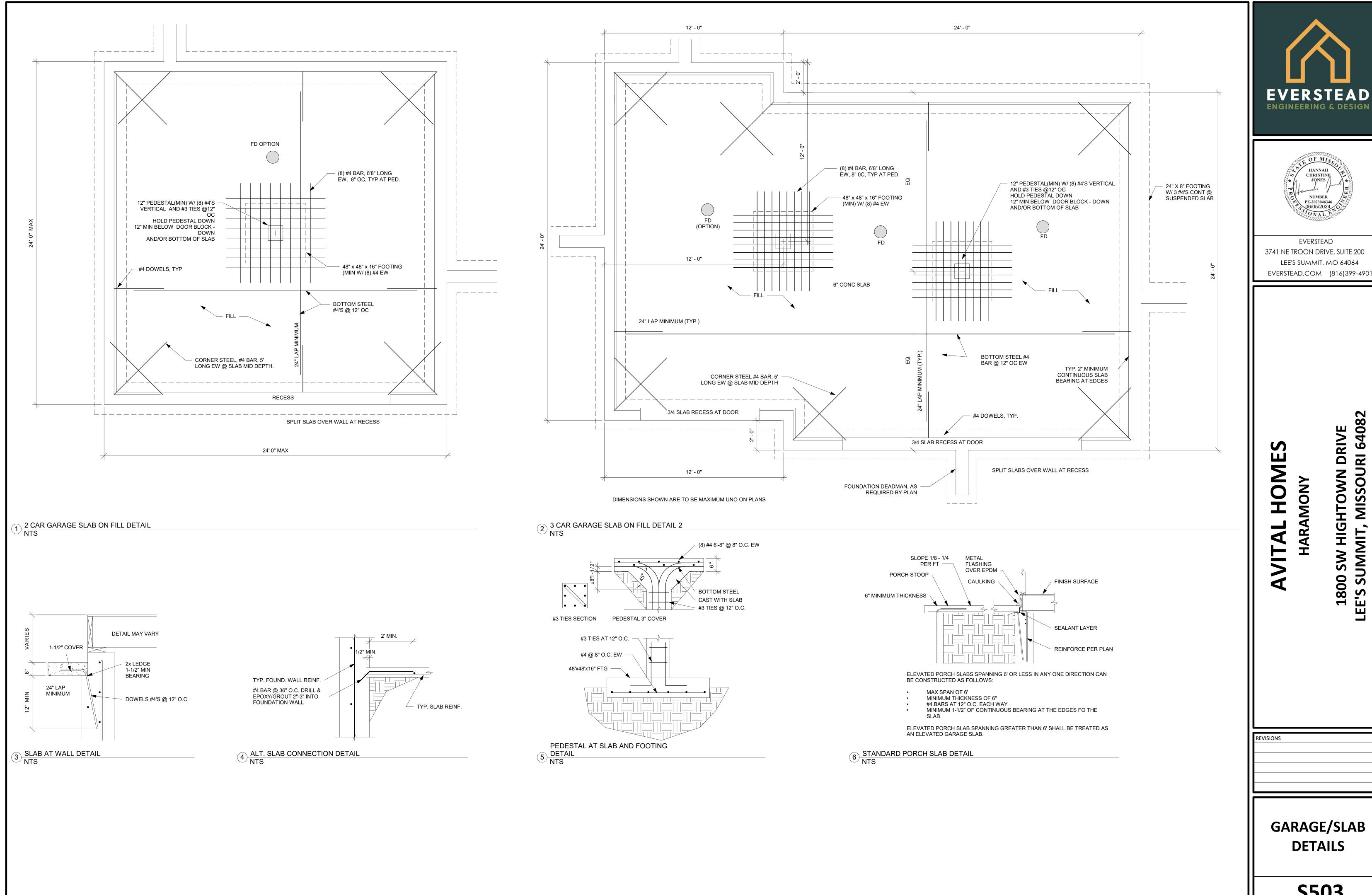
CHRISTINE

**S501** 

**DETAILS** 

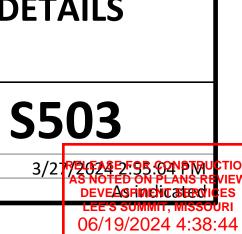
3/27/9/6/24EDF.98 602NPTRIU AS NOTED ON PLANS RE DEVEASRINENICATERON

06/19/2024 4:38:44

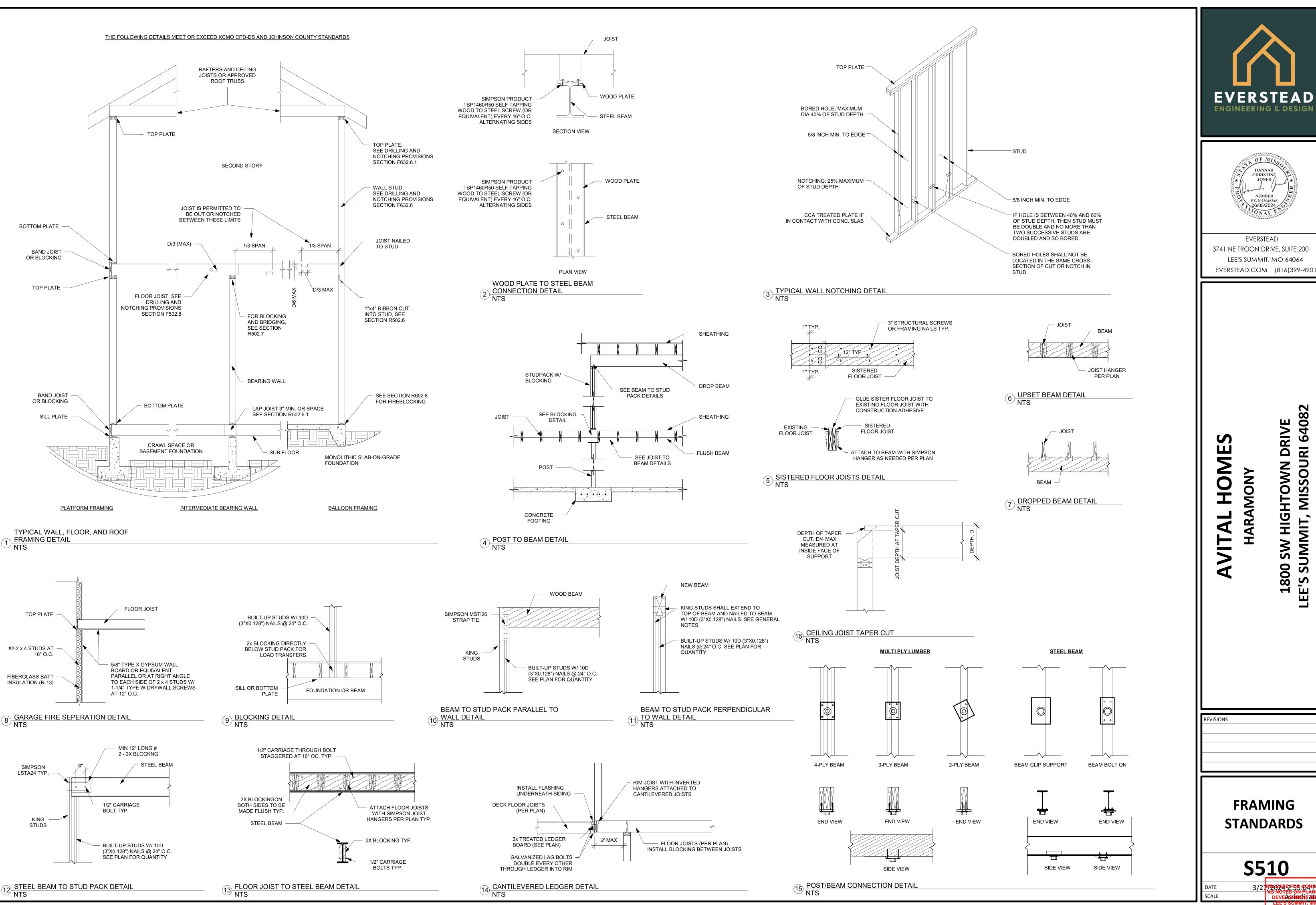


OW ISSC 1800





SCALE





NUMBER

PE-2023046346

**EVERSTEAD** 

LEE'S SUMMIT, MO 64064

DRIVE

1800

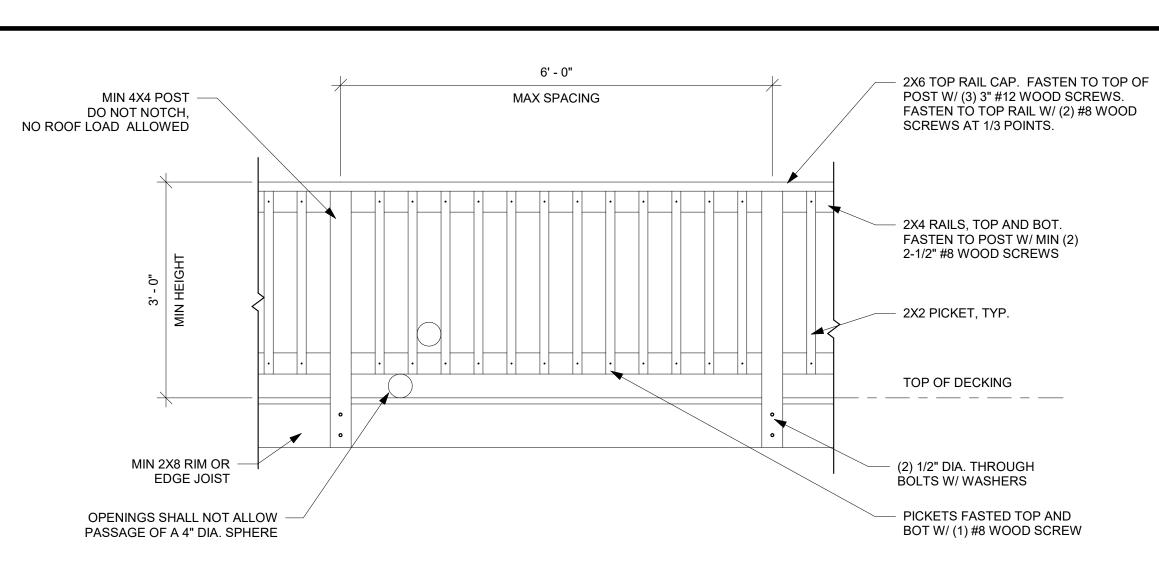
ON

**FRAMING** 

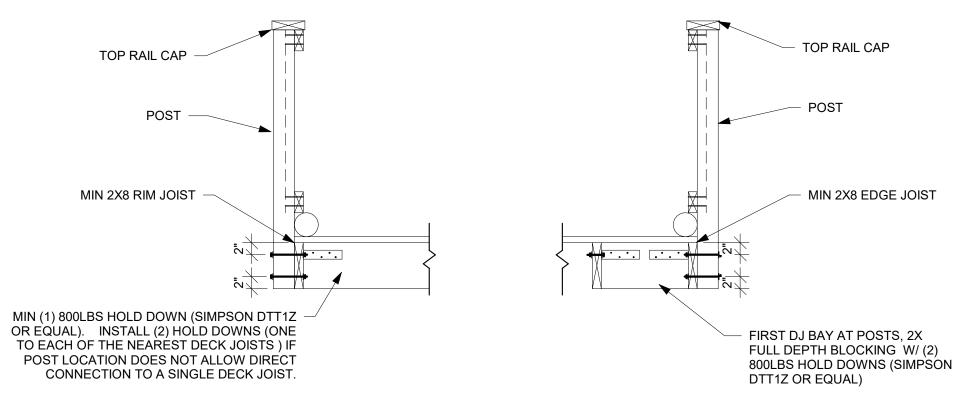
06/19/2024 4:38:44

**STANDARDS** 

**S510** 3/27/9/6/24PPF98 602NPTMU AS NOTED ON PLANS RE DEVEASHINENICATERON



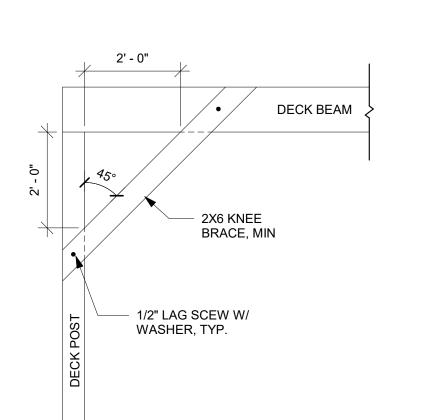
DECK RAILING DETAIL DRAWN TO MEET THE INTENT OF R312 OF THE 2018 IRC AND A CONCENTRATED LOAD OF 200 LBS PER 1607.8.1 OF THE 2018 IBC.



RAILING ATTACHED TO RIM JOIST

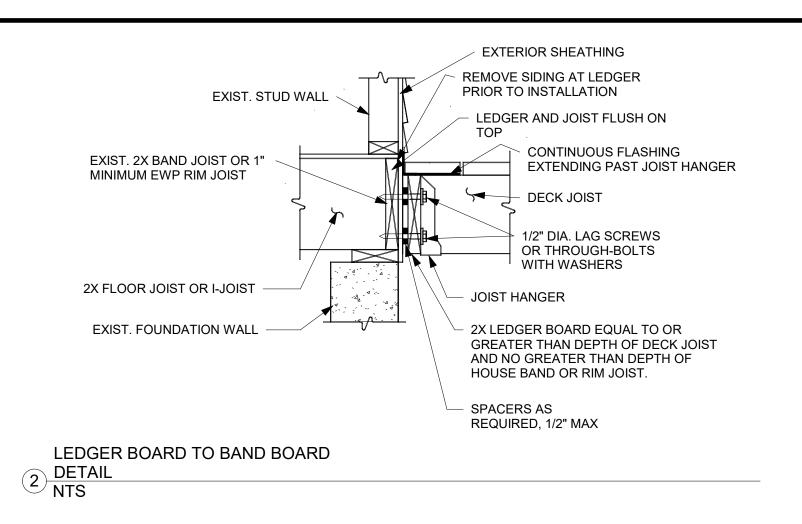
RAILING ATTACHED TO EDGE JOIST

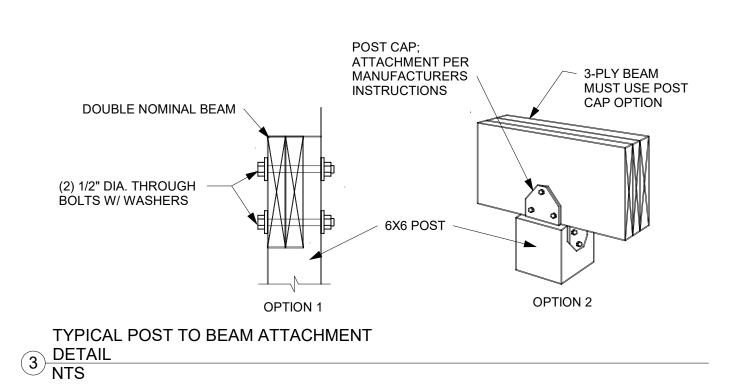
DECK RAILING NTS



KNEE BRACING DETAIL

TABLE R507/2 FASTENER SPACING F	OR A SOUTHERN P		ECK LEDGER 2" NO 40PSF, DEAD LOAD = 10 P		N SPRUCE-PINE-FII	R BAND JOIST (DEC	K LIVE LOAD =
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'
CONNECTION DETAILS			ON CENT	TER SPACING OF FA	STENERS		
1/2" DIAMETER LAG SCREW WITH 15/32" MAX SHEATHING	30	23	18	15	13	11	10
1/2" DIAMETER BOLT WITH 15/32" MAX SHEATHING	36	36	34	29	24	21	19
1/2" DIAMETER BOLT WITH 15/32" MAX SHEATHING AND 1/2" STACKED WASHERS	36	36	29	24	21	18	16

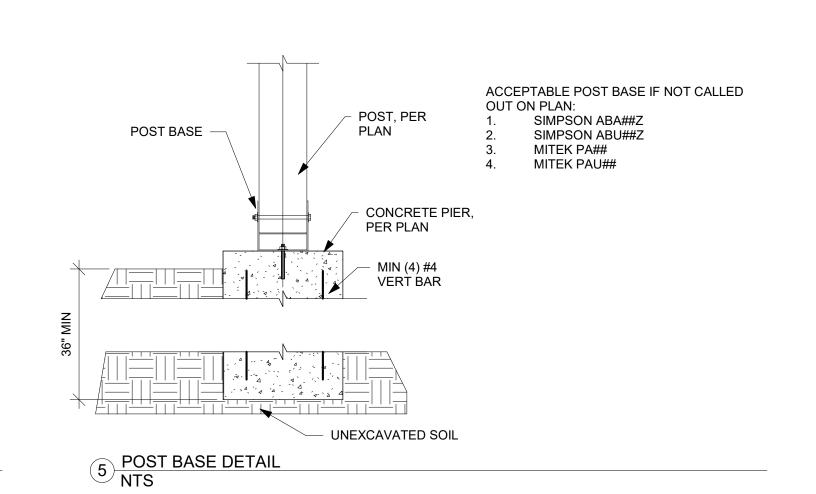




- STAGGER FASTENERS IN TWO ROWS LEDGER LAG SCREW OR BOLT D = 5.5" MIN. FOR 2x8\* D = 6.5" MIN. FOR 2x10 D = 7.5" MIN. FOR 2X12 \*DISTANCE SHALL BE PERMITTED TO BE REDUCED TO

4.5" IF LAG SCREWS ARE USED OR BOLT SPACING IS REDUCED TO THAT OF LAG SCREWS TO ATTACH 2x8 LEDGERS TO 2X8 BAND JOISTS

4 DECK LEDGER DIMENSION DETAIL NTS



**ENGINEERING & DESIGN** 

HANNAH CHRISTINE

NUMBER NUMBER PE-2023046346 06/05/2024

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

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

> HIGHTOWN | WIT, MISSOUI 1800

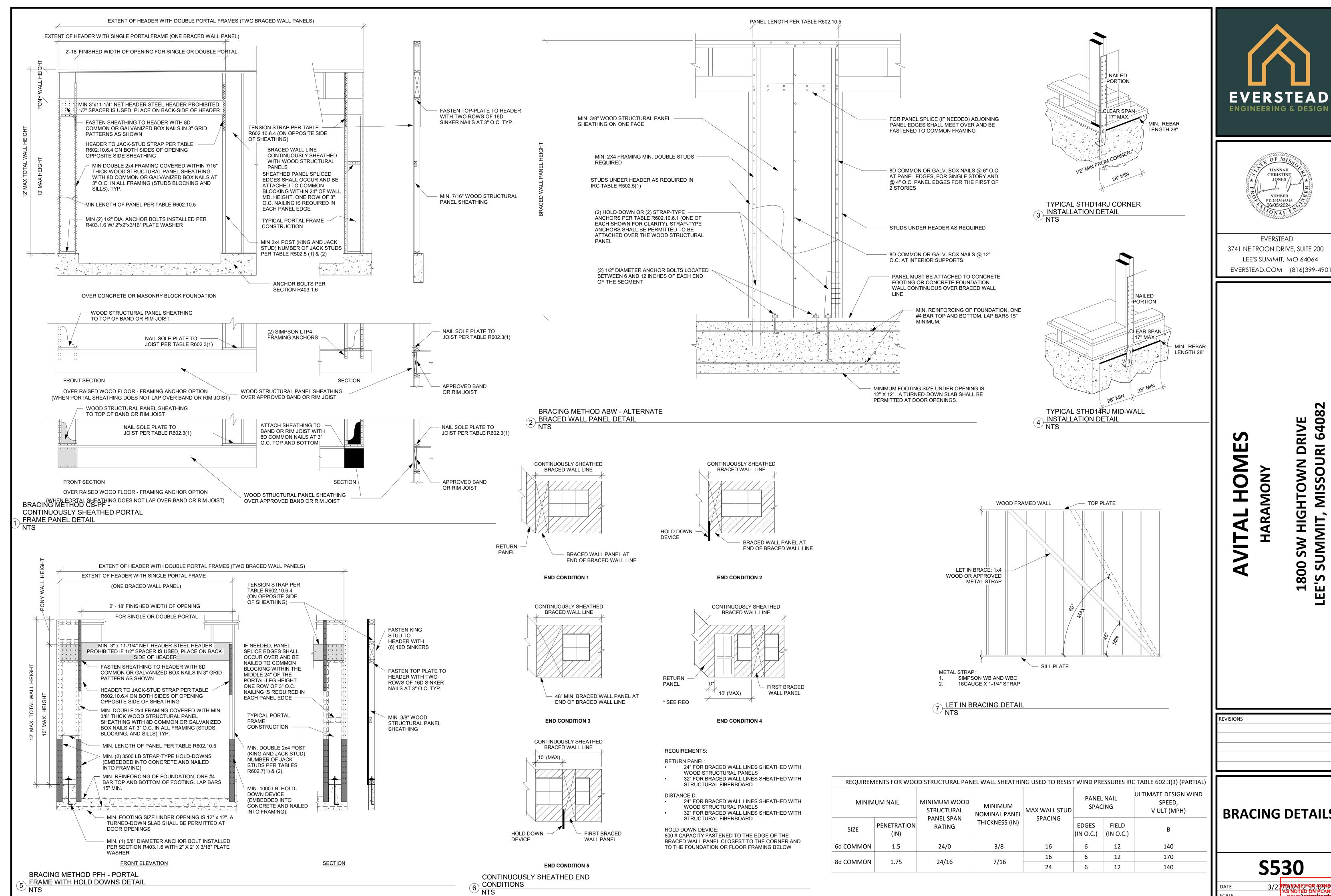
DRIV

REVISIONS

**DECK DETAILS** 

**S5**20

DATE SCALE





HANNAH

CHRISTINE

NUMBER

PE-2023046346

0 00

**BRACING DETAILS** 

**S530** 

06/19/2024 4:38:44

3/27/9/6/4EPF98 OGN PTOL AS NOTED ON PLANS RI DEVEAS PINENTE SERVE 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
	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 WÀLL PANELS)	10d BOX (3"x0.128") OR 3"x0.131" NAIL	16" O.C. FACE NAIL
STUD TO STUD AND ABUTTING STUDS AT INTERSECTION WALL CORNERS	16d BOX (3-1/2"x0.135") OR 3"x0.131" NAIL	12" O.C. FACE NAIL
(AT BRACED WALL PANELS)	16d COMMON (3-1/2"x0.162")	16" O.C. FACE NAIL
BUILT-UP HEADER, TWO PIECES	16d COMMON (3-1/2"x0.162")	16" O.C. EACH EDGE FACE NAIL
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
TOL STUDITIONIFLATE 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	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	
EACH BEARING	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

DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENER		ND LOCATION STENERS
	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	ТОІ	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 AN	D 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 BEA	RING 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	ENI	D NAIL
	20d COMMON (3"x0.128")	O.C AT TOP EN	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	E NAIL AT TOP AND GERED ON OPPOSIT SIDES
	AND: 2-20d COMMON (4"x0.192") OR 3-10d BOX (3"x0.128") OR 3-3"x0.131" NAILS	FACE NAIL AT ENDS AND AT EAC SPLICE	
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, FA	
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 E	ND, TOE NAIL
DESCRIPTION OF BUILDING MATERIALS	NUMBER AND TYPE OF FASTENER	EDGES (IN)	INTERMEDIATE SUPPORTS (IN)
F	LS, SUBFLOOR, ROOF AND INTERIOR WALL SP PARTICLEBOARD WALL SHEATHING TO FRAMIN OOD STRUCTURAL PANEL EXTERIOR WALL SP	IG	
	6d COMMON (2"x0.113") NAIL (SUBFLOOR,		
3/8" - 1/2"	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
		6 12	
3/4" AND LESS	6d DEFORMED (2"x0.120") NAIL OR 8d COMMON (2-1/2"x0.131") NAIL	6	12
3/4" AND LESS 7/8" - 1"		6	12



EVERSTEAD 3741 NE TROON DRIVE, SUITE 200 LEE'S SUMMIT, MO 64064 EVERSTEAD.COM (816)399-4901

1800 SW HIGHTOWN DRIVE LEE'S SUMMIT, MISSOURI 64082

**FASTENING SCHEDULE** 

S5<u>50</u>

REVISIONS

3/27 POLEASEDFOR COUNTINUES
AS NOTED ON PLANS REVIL
DEVELD/4/IENTISEQVICES
LEE'S SUMMIT, MISSOURI
06/19/2024 4:38:44

VARIES (SEE TABLE)

**SINGLE HUNG WINDOW** 

EGRESS WINDOWS MUST CONFORM TO R310 OF THE 2018 IRC

200 SERIES

400 SERIES

250 SERIES

150 SERIES

V-2500

V-4500

MIN NET CLEAR HEIGHT SHALL BE NOT LESS THAN 2 FT MIN NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCH

MIN CLEAR OPENING

MATERIAL, AND STYLE.

**MANUFACTURER** 

ANDERSON

ANDERSON

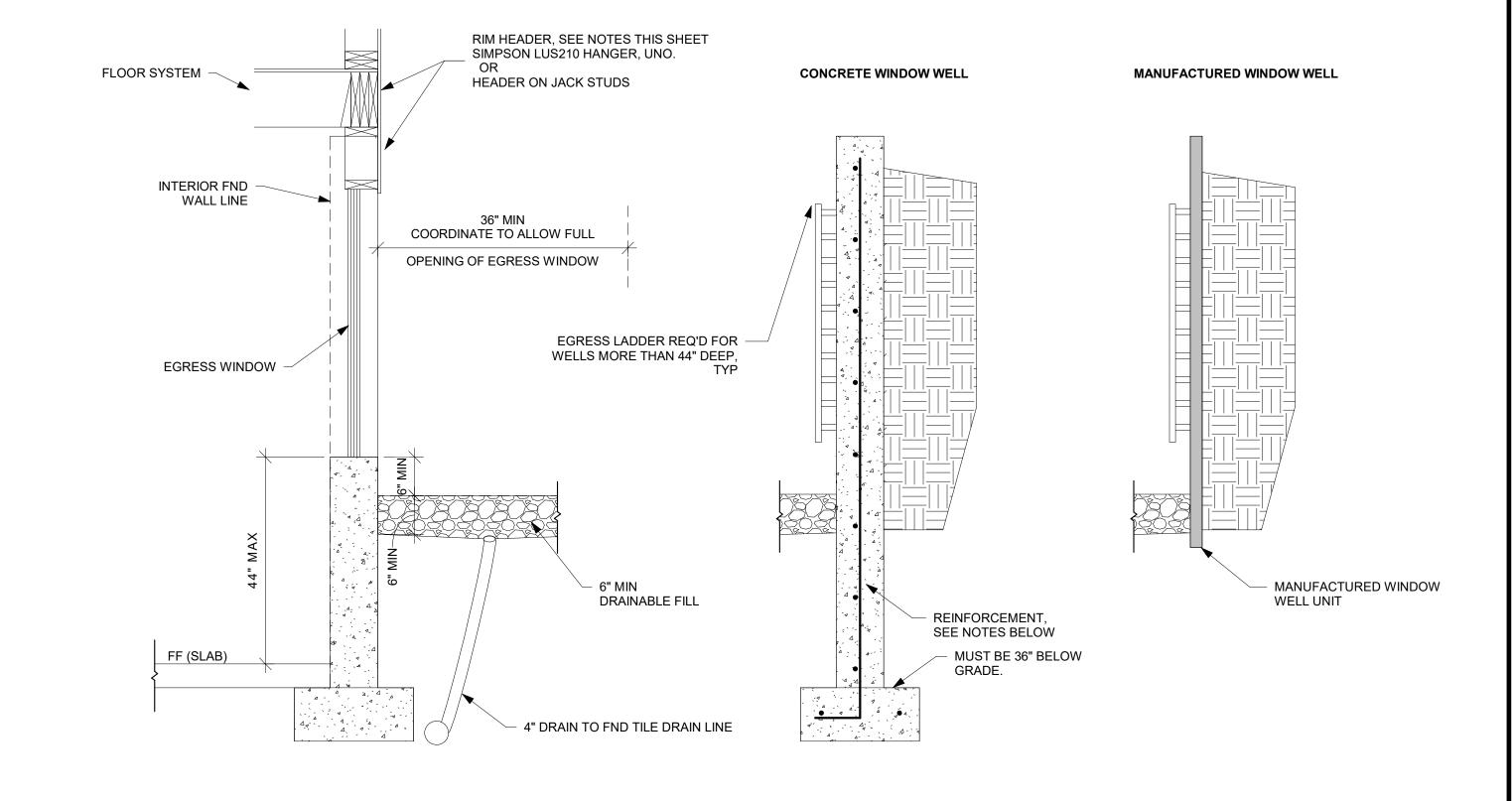
JELD-WEN

JELD-WEN

PELLA

PELLA

FF ELEV



# SECTION

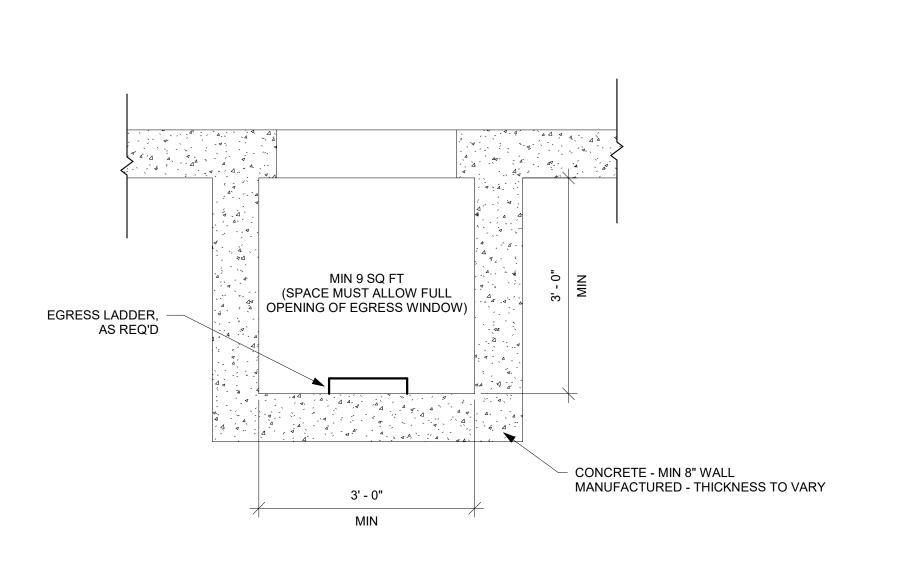
CONCRETE WINDOW WELL

MANUFACTURED 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

COORDINATE DEPTH OF WELL WITH WINDOW AND MANUFACTURER REQUIREMENTS.

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.

#4 BAR @ 12" OC EW IN WALLS

(2) #4 BAR CONT IN WALL FTG.

A. INSTALL PER MANUFACTURER'S WRITTEN INSTRUCTIONS

PLAN

WINDOW WELL FOR EGRESS (NTS)

AVITA

REVISIONS

SCALE

NUMBER PE-2023046346

EVERSTEAD

3741 NE TROON DRIVE, SUITE 200

LEE'S SUMMIT, MO 64064

EVERSTEAD.COM (816)399-4901

HIGHTOW MIT, MISSC

EGRESS WINDOWS

**S560** 

3/27/9/67/4F2F95.6 AS NOTED ON P DEVEASIMEN

06/19/2024 4:38:44

WINDOW EGRESS (NTS)

48X40

48X48

48X48

1' - 8"

**SLIDER WINDOW** 

1' - 8"

MIN CLEAR

**CASEMENT WINDOW** 

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

36X40

36X48

36X42

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

36X60